

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 2010 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. Subsequent monitoring has shown water-level variations to approximately 1 ft in Z3-M2 and 0.4 ft in Z3-M1. These piezometers 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 2010, 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. Due to critical loss of saturated thickness and yield, NW 1 was shut off during May 2012 and, to help compensate, the pumping rate at NW 2 was increased from 0.5 to 1 gpm in June 2012.

During May and June 2010, three new wells were installed in the northern area of Zone 3. The injection well, IW-A, was installed as part of a remedial enhancement program proposed in the Remedial Design Report (Chester Engineers, 2010c). The pilot study program started in April 2011 and involves injection of water amended with alkalinity. Two new nearby monitoring wells, MW-6 and MW-7, were installed to provide additional locations for monitoring water level changes associated with the injection and monitoring the groundwater quality.

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 2012. 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 2012 are provided in Figure 37 of this 2012 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 2012 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.

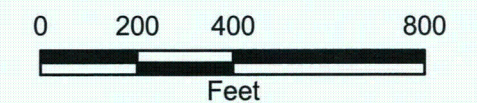


FIGURE B-1

Zone 3 2012 Monitoring Well Locations

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



Notes for Table B.1**Zone 3 Data Summary, 1989 - 2012****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.

15. At the request of EPA, UNC had the laboratory reduce the reporting limits for beryllium and lead. The new reporting limits are lower than the action levels. Beryllium's former reporting limit of 10 ug/L has been reduced to 1 ug/L (using lab method E200.7), and lead's former reporting limit of 50 ug/L has been reduced to 1 ug/L (using lab method E200.8). These changes were implemented during the July 2012 sampling event.

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.
- Well 504 B contained insufficient water for sampling, 1st quarter 2011.
- At the request of EPA, UNC started quarterly sampling of MW 6 and MW 7 during the July 2012 sampling event.
- At the request of EPA, UNC made turbidity measurements during the July and October 2012 sampling events.

Table B.1

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0411	N	7/23/1989	6866.20	6.20	6.45	2458	454	125	107	6.4	246	1563	17.9	0.41	0.04	< 1	< 0.1	0.02
0411	N	10/11/1989	6864.90	6.30	6.90	2628	470	128	110	9.5	243	1688	20	0.55	0.09	< 1	< 0.1	0.031
0411	N	1/3/1990	6863.70	6.00	6.50	2534	440	116	112	6.8	256	1509	19.8	0.39	0.08	< 1	< 0.1	0.018
0411	N	4/3/1990	6862.30	6.00	6.60	2545	431	117	109	6.6	270	1444	19.7	0.33	0.08	< 1	< 0.1	0.018
0411	N	7/2/1990	6861.20	5.80	6.60	2602	475	114	102	6	267	1483	19	0.2	0.08	< 1	< 0.1	0.009
0411	N	10/2/1990	6860.30	6.20	6.85	2527	406	110	109	6.5	266	1607	20.1	0.11	0.05	< 1	< 0.1	0.018
0411	N	1/3/1991	6859.50	6.20	6.49	2746	468	126	117	15.7	262	1492	19.4	0.45	0.23	< 1	< 0.1	0.029
0411	N	4/10/1991	6859.20	6.00	7.23	2600	467	118	111	7.8	277	1453	22.3	0.19	0.05	< 1	< 0.1	0.029
0411	N	7/16/1991	6858.20	6.10	6.63	2705	419	110	113	6.3	278	1742	22.3	0.38	0.02	< 1	< 0.1	0.035
0411	N	10/14/1991	6855.30	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	N	1/14/1992	6854.70	5.80	7.78	2939	467	128	119	6.5	255	1765	23.1	0.8	< 0.01	< 1	< 0.1	0.088
0411	N	4/7/1992	6854.90	5.90	7.82	3064	475	144	140	8.4	401	1847	26.1	0.37	< 0.1	< 1	< 0.1	0.087
0411	N	7/7/1992	6853.30	5.60	8.09	3340	473	170	144	9.6	244	2034	28.7	0.49	0.1	< 1	< 0.1	0.044
0411	N	10/6/1992	6850.90	6.00	8.15	3860	634	239	139	9.2	259	2352	27.4	0.44	6.05	< 1	0.2	0.022
0411	N	1/6/1993	6851.20	6.00	6.79	3091	530	208	127	10.6	246	2137	30.4	1.13	4.1	< 1	< 0.1	0.022
0411	N	4/6/1993	6851.30	6.70	6.65	3306	510	200	140	8	245	2257	35.1	0.84	1.8	< 1	< 0.1	0.011
0411	N	7/16/1993	6846.90	6.60	6.25	3412	586	242	166	12.2	321	2420	39.6	0.68	4.4	< 1	0.14	0.017
0411	N	10/6/1993	6848.00	7.10	6.81	4026	614	285	149	9.3	340	2591	41.3	0.33	14.3	< 1	< 0.1	0.013
0411	N	1/5/1994	6841.60	6.80	6.69	4298	557	276	149	9.3	303	2540	45.8	0.55	12.5	< 1	< 0.1	0.011
0411	N	4/14/1994	6847.40	7.10	6.51	4006	620	274	146	9.8	294	2634	42.1	1.06	8.8	< 1	< 0.1	0.01
0411	N	7/21/1994	6846.40	6.80	6.79	4253	645	287	141	9.6	293	2883	38.1	0.43	10.8	< 1	< 0.1	0.008
0411	N	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	N	10/5/1994	6846.20	6.80	7.36	4053	636	286	141	9.9	274	2509	36.9	0.99	5.17	< 1	< 0.1	0.009
0411	N	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	N	1/10/1995	6845.40	6.60	7.65	4276	675	213	139	11	295	2754	40.5	0.71	5.55	< 1	< 0.1	0.009
0411	N	4/11/1995	6842.90	6.60	6.35	4320	645	283	152	9.5	182	2862	50	0.64	5.86	< 1	< 0.1	0.004
0411	N	7/11/1995	6844.40	6.90	7.67	4038	605	315	147	9.4	379	2471	49.4	1.4	26.4	< 1	< 0.1	0.012
0411	N	10/3/1995	6842.90	6.80	8.06	4526	645	322	162	9.1	383	2684	47	0.46	27.3	< 1	< 0.1	0.014
0411	N	1/4/1996	6845.40	7.10	6.69	4445	630	310	173	9.5	382	2655	45.3	0.06	29.2	< 1	< 0.1	0.006
0411	N	4/2/1996	6844.50	7.00	7.67	4338	604	300	146	9.8	366	2666	40	0.2	8.92	< 1	< 0.1	0.014
0411	N	7/17/1996	6844.10	7.00	6.80	4459	580	290	168	10.1	410	2730	52.1	0.25	28.1	< 1	< 0.1	0.007
0411	N	10/8/1996	6844.20	6.90	7.61	4370	611	318	151	10.1	429	2542	45.6	0.3	45.4	< 1	< 0.1	0.012
0411	N	1/28/1997	6844.30	6.80	7.83	4350	610	315	144	10.1	468	2726	56	0.63	13.2	< 1	< 0.1	0.013
0411	N	4/15/1997	6844.20	7.10	7.77	4470	671	358	159	10.7	451	2610	51	0.22	29.1	< 1	< 0.1	0.013
0411	N	7/15/1997	6844.10	6.90	7.83	4510	659	342	159	9.6	437	2750	54.8	0.2	33.9	< 1	< 0.1	0.014
0411	N	10/15/1997	6844.00	6.80	7.93	4490	685	350	154	10.2	433	2620	62.3	0.32	30.3	< 1	< 0.1	0.01
0411	N	1/20/1998	6844.00	6.70	7.95	4390	634	323	178	10.4	439	2700	57.5	0.46	31.2	< 1	< 0.1	0.007
0420	N	7/23/1989	6882.00	6.30	6.52	2239	438	110	99	5.8	285	1293	16.5	0.56	60	< 1	< 0.1	0.012
0420	N	10/11/1989	6879.70	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	N	1/3/1990	6878.30	5.90	6.20	2680	431	141	99.5	7.1	196	1602	19.1	1.43	2.1	< 1	< 0.1	0.055

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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
0411	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
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	Cl	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	N	4/3/1990	6876.80	5.90	6.40	2725	439	149	97	7.1	209	1532	18.4	1.29	0.15	< 1	< 0.1	0.058
0420	N	7/2/1990	6875.70	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	N	10/2/1990	6874.60	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	N	1/3/1991	6874.00	6.20	7.30	2729	478	135	105	27	248	1574	18	0.82	6.8	< 1	< 0.1	0.024
0420	N	4/10/1991	6874.00	6.00	6.99	2635	483	143	102	7.9	269	1480	19.1	0.54	5.7	< 1	< 0.1	0.027
0420	N	7/16/1991	6872.40	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	N	10/14/1991	6866.70	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	N	1/14/1992	6868.50	5.90	8.17	2806	426	148	93.1	6.4	243	1831	17.8	1.3	2	< 1	< 0.1	0.053
0420	N	4/7/1992	6868.70	5.80	7.89	2962	453	164	99.2	8.3	265	1890	16.2	1.4	< 0.1	< 1	< 0.1	0.032
0420	N	7/7/1992	6862.80	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	N	10/6/1992	6861.90	6.00	6.83	3098	537	180	100	7.8	114	1991	23.2	1.2	< 0.1	< 1	0.3	0.111
0420	N	1/6/1993	6864.30	5.90	6.58	2512	455	152	86	6.7	119	1675	19.3	1.29	< 0.1	< 1	< 0.1	0.104
0420	N	4/6/1993	6864.60	6.10	6.83	2505	413	118	111	5.4	222	1658	24.4	0.42	1.9	< 1	< 0.1	0.044
0420	N	7/13/1993	6859.60	6.00	6.26	2704	435	169	100	7.2	143	1818	21.1	0.83	0.7	< 1	< 0.1	0.1
0420	N	10/6/1993	6858.40	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	N	1/5/1994	6859.80	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	N	4/13/1994	6859.70	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	N	7/20/1994	6857.10	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	N	10/4/1994	6857.40	6.00	7.18	3297	593	186	111	7.6	133	2245	25.3	1.19	2.26	< 1	< 0.1	0.006
0420	N	1/4/1995	6856.90	6.00	6.70	3434	593	188	105	7.6	116	2204	25.3	1.48	1.13	< 1	< 0.1	< 0.001
0420	N	4/4/1995	6856.50	6.10	6.36	3395	579	179	107	7.1	145	2237	31	1.09	2.09	< 1	< 0.1	0.007
0420	N	7/7/1995	6855.10	6.20	7.57	3074	530	135	108	6.5	207	1882	25.7	0.46	6.35	< 1	< 0.1	0.002
0420	N	10/3/1995	6854.30	6.40	7.61	3117	544	142	118	6.5	305	1821	28	0.24	7.17	< 1	< 0.1	0.005
0420	N	1/3/1996	6853.70	6.70	7.14	3084	545	162	115	6.1	322	1856	26.4	< 0.05	8.66	< 1	< 0.1	0.001
0420	N	4/2/1996	6852.90	6.90	7.85	3165	588	140	122	6.2	344	1890	30.2	0.1	18.4	< 1	< 0.1	0.003
0420	N	7/7/1996	6852.20	6.70	7.40	3225	586	134	127	6.6	332	1816	30.2	0.24	16.7	< 1	< 0.1	< 0.001
0420	N	10/1/1996	6851.60	6.50	6.97	3250	614	146	131	6.6	339	1821	30.4	< 0.05	22.8	< 1	< 0.1	< 0.001
0420	N	1/21/1997	6851.80	5.90	7.83	3120	620	150	123	6.3	377	1926	36.2	0.07	24.3	< 1	< 0.1	< 0.001
0420	N	4/8/1997	6851.50	6.80	7.96	3250	659	159	126	6.3	359	1944	34.6	0.06	23.8	< 1	< 0.1	< 0.001
0420	N	7/8/1997	6850.60	7.30	7.92	3360	614	165	136	6.5	364	1940	36	0.06	25.6	< 1	< 0.1	< 0.001
0420	N	10/7/1997	6850.00	6.60	7.78	3450	683	149	131	6.2	388	1900	38.8	0.06	31.5	< 1	< 0.1	< 0.001
0420	N	1/16/1998	6850.00	7.00	7.83	3500	664	141	142	6.6	388	2000	39.2	0.32	43.5	< 1	< 0.1	< 0.001
0420	N	4/7/1998	6849.60	6.50	7.45	3510	659	149	135	6	340	1800	34.9	0.08	36.5	< 1	< 0.1	< 0.001
0420	N	7/7/1998	6850.20	6.90	7.58	3420	660	149	144	6.1	415	1900	35.5	0.16	34.7	< 1	< 0.1	< 0.001
0420	N	10/6/1998	6849.10	6.78	7.88	3530	657	123	148	6.9	415	2000	36.3	1.77	37.3	< 1	< 0.1	< 0.001
0420	N	1/5/1999	6848.40	6.80	7.82	3600	672	123	136	5.5	422	1830	34.1	< 0.05	32.2	< 1	< 0.1	< 0.001
0420	N	4/6/1999	6848.10	6.50	7.96	3640	672	144	137	6.4	388	1870	39.5	0.11	28.5	< 1	< 0.1	< 0.001
0420	N	7/13/1999	6847.68	6.40	8.07	3560	708	111	123	7	411	1840	34.6	0.09	39.8	< 1	< 0.1	< 0.001
0420	N	10/5/1999	6847.20	6.72	7.63	3630	731	130	146	6.1	392	2100	38.9	0.07	47.7	< 1	< 0.1	< 0.001
0420	N	1/4/2000	6846.20	6.60	7.97	3550	676	157	126	7	414	1870	34.6	< 0.05	50.7	< 1	< 0.1	< 0.001

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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
0420	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
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	Cl	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	N	5/1/2000	6847.30	6.70	7.69	3500	616	139	127	6.5	452	1840	33.5	0.19	31.3	< 1	0.2	0.008
0420	N	7/10/2000	6847.30	7.35	7.47	3500	664	151	141	5.86	456	1740	35	< 0.05	33.2	< 1	< 0.1	< 0.001
0420	N	10/2/2000	6848.20	7.03	7.24	3350	661	147	138	6.97	467	1750	38.6	0.07	18.7	< 1	< 0.1	0.007
0420	N	1/15/2001	6848.75	6.61	7.23	3200	617	123	119	6.9	474	1920	42	< 0.05	12.7	< 1	< 0.1	0.023
0420	N	4/2/2001	6848.70	6.59	7.39	3290	695	139	126	5.7	467	1800	39.7	0.1	12.5	< 1	< 0.1	0.006
0420	N	7/16/2001	6848.50	6.20	7.55	3330	592	126	162	11.4	474	1580	54.1	0.18	13.6	< 1	< 0.1	0.06
0420	N	10/8/2001	6848.50	6.45	7.20	3360	600	130	115	6.3	516	1680	53.1	0.09	14	< 1	< 0.1	0.008
0420	N	1/17/2002	6849.45	6.20	7.20	3360	661	140	113	8	508	1700	62	0.07	13.3	< 1	0.13	0.003
0420	N	4/8/2002	6848.22	6.53	7.20	3410	644	140	130	6.9	565	1750	56.8	0.12	13.3	< 1	< 0.1	0.003
0420	N	7/15/2002	6848.10	6.36	7.51	3480	642	161	118	6.1	515	2015	39.1	0.19	14.6	< 1	< 0.1	0.001
0420	N	10/14/2002	6847.60	5.88	7.65	3080	680	151	123	6	569	1870	52.4	0.26	11.4	< 1	< 0.1	0.002
0420	N	1/13/2003	6847.13	7.22	7.22	3410	671	146	124	6.3	562	1700	44.8	0.27	14.4	< 1	< 0.1	0.003
0420	N	4/15/2003	6847.25	6.44	7.41	3440	657	152	144	8.6	566	1790	63.6	0.28	13.7	< 1	< 0.1	0.002
0420	N	7/14/2003	6846.66	6.35	7.64	3490	653	140	133	7.1	556	1630	57.7	0.3	13.4	< 1	< 0.1	0.002
0420	N	10/13/2003	6846.74	6.38	7.39	3440	712	158	138	6.8	576	1880	62.9	0.23	13	< 1	0.4	0.002
0420	N	1/12/2004	6845.82	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	N	4/12/2004	6845.52	6.33	6.92	3480	662	147	129	8	537	1840	73.7	0.26	11.4 D	< 1	< 0.1	0.002
0420	N	7/19/2004	6845.11	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	N	10/11/2004	6844.85	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	N	1/10/2005	6844.33	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	N	4/11/2005	6843.48	6.65	7.06	3410	724	157	160	7	551	1860	72	0.09	15.4	< 1.0	< 0.1	0.002
0420	N	7/18/2005	6842.76	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	N	10/10/2005	6842.13	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	N	1/16/2006	6841.56	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	N	4/10/2006	6841.11	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	N	7/24/2006	6840.48	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	N	10/9/2006	6840.03	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	N	1/16/2007	6840.28	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	N	4/17/2007	6838.60	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	N	7/17/2007	6837.18	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	N	10/9/2007	6837.33	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	N	1/22/2008	6836.90	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	N	4/15/2008	6836.58	6.69	7.1	3240	694	138	139 D	6.5	436	2110 D	39	0.05	< 0.1	< 0.50	0.1	0.006
0420	N	7/15/2008	6836.03	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	N	10/14/2008	6835.49	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	N	1/20/2009	6835.03	6.59	7.1	3450	664	143	145	7	458	1860 D	39	< 0.05	< 0.1	< 0.5	0.8	0.005
0420	N	4/14/2009	6834.98	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	N	7/14/2009	6834.38	6.45	7.25	3390	640	133	136	7	451	2060 D	43	< 0.05	< 0.1	< 0.50	0.2	< 0.001
0420	N	10/13/2009	6834.08	6.48	7.69	3390 H	654	137	136	7	467	2030 D	46	0.1	< 0.1	< 0.50	< 0.1	< 0.001
0420	N	1/12/2010	6833.53	6.48	6.8	3270	669	133	141	7	478	2050 D	41	< 0.05	< 0.10	< 0.50	0.2	< 0.001

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	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	N	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	N	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	N	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
0420	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	10/13/2009	< 0.01	< 0.005	0.02	< 0.05	2	0.3	< 0.05	< 0.001	< 0.1	0.298	3.3	5	8.3	0.05 U	1.3 U	4.1
0420	N	1/12/2010	< 0.01	< 0.005	0.02	< 0.05	1.8	0.4	< 0.05	< 0.001	< 0.1	0.362	2.5	8.9	11.4	< 0.02 U	0.4 U	3.5

TABLE B.1
Zone 3 Data Summary, 1989-2012
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Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0420	N	4/13/2010	6833.38	6.69	6.86	3420	672	136	142	6	520	2070 D	46	0.16	<0.1	<0.50	0.3	0.004
0420	N	7/20/2010	6833.03	6.47	7	3410 H	642	134	137	6	500	2010 D	45 D	0.14	<0.1	<0.50	0.2	0.003
0420	N	10/12/2010	6832.88	6.54	7.42	3540	668	133	150	7	547	1960 D	47 D	0.14	<0.1	<0.50	<0.1	0.001
0420	N	1/11/2011	6832.65	6.68	7.62	3370	651	135	138	6	530	1990 D	52 D	0.05	<0.1	<0.50	<0.1	0.005
0420	N	4/12/2011	6832.08	6.63	7.2	3330	701	140	153	7	521	2010 D	51 D	0.11	<0.1	<0.50	0.3	0.008
0420	N	7/19/2011	6831.48	6.65	7.77	3340	664	137	151	7	500	1980 D	53 D	<0.2	<0.5	<0.50	0.3	0.003
0420	N	10/11/2011	6831.38	6.58	7.55	3410	670	140	151	7	481	2070 D	54 D	<0.2	<0.5	<0.50	0.2	<0.001
0420	N	1/10/2012	6830.93	6.71	6.51 H	3430	700	128	135	6	477	1980 D	50 D	0.09	<0.1	<0.50	0.1	0.01
0420	N	4/10/2012	6830.43	6.73	6.93 H	3510	643	137	141	6	483	1960 D	50 D	0.08	<0.1	<0.50	0.6	<0.01
0420	N	7/17/2012	6830.13	6.53	6.86 H	3530	695	146	170	8	499	2040 D	52 D	0.06	<0.1	<0.50	0.4	0.002
0420	N	10/16/2012	6829.88	6.72	7.14 H	3550	718	144	156	7	503	2070 D	52 D	0.1	<0.1	<0.50	0.2	<0.001
0517	N	7/23/1989	6899.70	6.00	6.51	3617	543	291	111	4.5	303	2079	20.9	0.53	39	1.1	< 0.1	< 0.001
0517	N	10/11/1989	6893.20	6.10	6.50	3738	507	290	117	6.8	298	2199	21.8	0.31	43	< 1	< 0.1	< 0.001
0517	N	1/3/1990	6894.80	5.40	5.90	4096	523	318	138	8.1	168	2434	27.9	0.74	45	< 1	0.11	< 0.001
0517	N	4/3/1990	6892.60	5.60	6.24	4306	515	360	140	8.1	220	2556	28.3	0.9	44	< 1	0.11	< 0.001
0517	N	7/2/1990	6892.90	5.60	6.20	4318	526	387	127	7	231	2456	26.1	0.26	47.8	< 1	0.1	< 0.001
0517	N	10/16/1990	6892.60	5.50	6.30	4083	440	532	131	7.2	170	2574	22.8	0.36	27.1	< 1	< 0.1	< 0.001
0517	N	1/16/1991	6893.60	5.70	6.42	4235	554	385	157	8.1	227	2706	27.5	0.25	49.3	< 1	< 0.1	< 0.001
0517	N	4/10/1991	6894.50	5.70	6.80	4204	541	376	136	6.2	284	2370	31.4	0.27	61	< 1	< 0.1	< 0.001
0517	N	7/16/1991	6891.60	5.60	6.42	4550	546	353	136	6.8	215	3014	50.3	0.25	67	2.6	< 0.1	< 0.001
0517	N	10/14/1991	6887.60	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	N	1/14/1992	6888.80	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	N	4/7/1992	6888.80	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	N	7/7/1992	6884.70	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	N	10/6/1992	6882.60	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	N	1/6/1993	6883.20	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	N	4/6/1993	6884.20	5.30	6.08	4493	458	438	183	6.1	71	3066	74.1	3.76	34.5	7	< 0.1	< 0.001
0517	N	7/13/1993	6882.10	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	N	10/6/1993	6880.10	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	N	1/5/1994	6880.00	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	N	4/13/1994	6879.70	4.30	4.29	5770	515	479	204	12	< 1	3883	108	7.25	27.8	8.5	96	< 0.001
0517	N	7/20/1994	6878.60	5.10	4.36	6115	604	516	177	11.7	< 1	4308	85.9	34.2	32.9	< 1	22.9	< 0.001
0517	N	10/4/1994	6878.00	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	N	1/4/1995	6877.20	4.70	4.46	5507	517	465	178	11	< 1	3665	66.2	40.4	40.3	3.2	42.4	< 0.001
0517	N	4/4/1995	6876.80	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	N	7/6/1995	6875.90	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	N	10/3/1995	6875.10	4.60	4.39	5058	465	469	185	11	< 1	3745	12.7	41.4	7.29	4.25	47	0.004
0517	N	1/3/1996	6874.40	4.50	4.10	5807	510	530	174	10.1	< 1	4100	61.2	28.6	1.51	5.05	40	0.001
0517	N	4/2/1996	6874.00	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	N	7/7/1996	6873.80	4.50	4.33	5635	460	485	175	10.6	< 1	3590	67	24.9	1.44	5.26	21.2	< 0.001

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	4/13/2010	<0.01	<0.005	0.02	<0.05	1.71	0.5	<0.05	<0.001	<0.1	0.362	3.5	6.1	9.6	<0.01 U	0.5 U	3.2
0420	N	7/20/2010	<0.01	<0.005	0.02	<0.05	1.71	0.6	<0.05	<0.001	<0.1	0.424	4.3	10	14.3	0.04 U	<1 U	4.2
0420	N	10/12/2010	<0.01	<0.005	0.02	<0.05	1.5	0.6	<0.05	<0.001	<0.1	0.425	3.8	12	15.8	0.02 U	0.1 U	4.4
0420	N	1/11/2011	<0.01	<0.005	0.02	<0.05	1.87	0.7	<0.05	<0.001	<0.1	0.439	4.7	6.4	11.1	0.05 U	1.6	5
0420	N	4/12/2011	<0.01	<0.005	0.02	<0.05	1.72	0.7	<0.05	<0.001	<0.1	0.448	4.6	6.3	10.9	0.03 U	1.7	5.3
0420	N	7/19/2011	<0.01	<0.005	0.02	<0.05	1.71	0.8	<0.05	<0.001	<0.1	0.4	4.8	5.9	10.7	0.05 U	<0.4 U	4.5
0420	N	10/11/2011	<0.01	<0.005	0.01	<0.05	1.5	0.7	<0.05	<0.001	<0.1	0.354	4.9	6.8	11.7	0.1 U	0.2 U	5.9
0420	N	1/10/2012	<0.01	<0.005	0.02	<0.05	1.5	1.2	<0.05	0.002	<0.1	0.406	4.7	6.2	17.1	0.04 U	0.8 U	5.3
0420	N	4/10/2012	<0.01	<0.005	0.02	<0.05	1.21	1	<0.05	<0.001	<0.1	0.39	5.3	8.4	22.1	0.01 U	0.9 U	4.7
0420	N	7/17/2012	<0.001	<0.005	0.02	0.001	0.88	0.8	<0.05	0.002	<0.1	0.4 D	4.7	7.1	18.9	0.08 U	1.2	6.6
0420	N	10/16/2012	<0.001	<0.005	0.02	<0.001	1.43	0.9	<0.05	<0.001	<0.1	0.388	4.4	8.1	12.5	0.09 U	0.3 U	5.2
0517	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0517	N	10/1/1996	6873.60	4.80	4.30	5520	477	518	182	10.5	< 1	3578	66	22.5	1.35	4.39	16.6	< 0.001
0517	N	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	N	1/22/1997	6873.50	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	N	4/8/1997	6873.30	5.10	4.69	5260	485	526	169	9.9	4	3710	69.5	18.8	1.11	4.22	11.2	< 0.001
0517	N	7/8/1997	6872.70	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	N	10/7/1997	6872.60	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	N	1/15/1998	6872.40	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	N	4/7/1998	6872.50	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	N	7/7/1998	6872.40	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	N	10/6/1998	6872.20	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	N	1/5/1999	6871.80	4.60	4.60	5220	433	477	158	9	2	3500	57.8	17	4.12	4.5	12.3	< 0.001
0517	N	4/6/1999	6870.90	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	N	7/13/1999	6871.32	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	N	10/5/1999	6869.10	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	N	1/4/2000	6870.80	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	N	5/1/2000	6871.60	4.50	4.67	4750	436	415	146	9.5	5	3000	54.6	13	3.77	5.4	11.6	< 0.001
0517	N	7/18/2000	6871.30	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	N	10/2/2000	6871.55	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	N	1/15/2001	6871.75	4.80	4.60	4640	447	396	145	9	3	3220	53.2	12	3.62	3.6	9	< 0.001
0517	N	4/9/2001	6871.75	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	N	7/10/2001	6871.45	4.36	4.65	4670	462	430	145	8.5	3	2900	45	9.95	2.61	7	8.9	< 0.001
0517	N	10/8/2001	6871.45	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	N	1/9/2002	6871.35	5.65	4.60	4620	478	416	120	10	1.2	3000	69	9.8	2.6	2.8	10.1	< 0.001
0517	N	4/3/2002	6871.40	4.46	4.48	4660	517	436	146	10	1	3230	56.4	10.1	2.89	6.8	11	< 0.001
0517	N	7/15/2002	6871.45	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	N	10/14/2002	6871.20	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	N	1/7/2003	6870.77	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	N	4/8/2003	6870.68	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	N	7/8/2003	6870.55	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	N	10/13/2003	6870.44	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	N	1/6/2004	6870.25	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	N	4/6/2004	6870.23	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	N	7/13/2004	6869.94	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	N	10/11/2004	6870.03	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	N	1/10/2005	6869.86	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	N	4/12/2005	6869.62	4.39	4.07	4590	514	444	156	9.8	< 1	3370	47	9.6	0.3	4.6	5.6	< 0.001
0517	N	7/12/2005	6869.32	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	N	10/10/2005	6869.52	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	N	1/16/2006	6869.38	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
0517	N	4/10/2006	6869.43	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	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	N	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	N	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	N	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
0517	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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
0517	N	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Chl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0517	N	7/24/2006	6869.04	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	N	4/18/2007	6869.18	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	N	7/10/2007	6869.02	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	N	10/8/2007	6868.92	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	N	1/21/2008	6869.25	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	N	4/15/2008	6868.97	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	N	7/15/2008	6868.62	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	N	10/13/2008	6869.02	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	N	1/19/2009	6868.49	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	N	4/13/2009	6868.84	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	N	7/13/2009	6868.49	3.65	3.23 H	5320 H	465	450	145	12	<1	3690 D	45	5.6 D	<0.1	5.08	5	<0.001
0517	N	10/12/2009	6868.69	3.7	3.59	5320	442	437	142	12	<1	3360 D	35	10.7 D	0.1	4.72	6.1	<0.001
0517	N	1/11/2010	6868.29	3.59	3.74	5380 D	465 D	460	144 D	13	<5	3680 D	35	9.8 D	0.16	3.96	5.9	<0.001
0517	N	4/6/2010	6868.44	2.78	3.42	5400 D	448 D	437	145 D	12	<5	3870 D	37	11.9 D	0.2	4.56	6.3	<0.001
0517	N	7/19/2010	6868.09	3.7	3.1	5260 D	442	458	139	11	<5	3700 D	40 D	11.7 D	0.1	5.16	6.4	<0.001
0517	N	10/11/2010	6868.24	3.72	2.97	5270 D	462	458	155	12	<5	3930 D	35 D	11.5 D	<0.1	4.16	6.8	<0.001
0517	N	1/5/2011	6868.043	2.8	3.57	5270 D	442	452	148	12	<5	3770 D	44 D	13.0 D	<0.1	6.08	7	<0.001
0517	N	4/6/2011	6868.083	2.9	3.39	5580 D	456	464	151	13	<5	3930 D	43 D	10.7 D	<0.1	5.16	8.2	<0.001
0517	N	7/18/2011	6867.593	2.96	3.21	5240 D	454	458	151	12	<5	3720 D	42 D	10.5 D	<0.5	1.8	9.7	<0.001
0517	N	10/10/2011	6867.763	3.58	3.14	5120 D	450	459	151	12	<5	3960 D	43 D	10.5 D	<0.2	1.3	9.3	<0.001
0517	N	1/9/2012	6867.49	3.67	3.07 H	5350 D	475	463	146	13	<5	3770 D	42 D	10.9 D	<0.5	3.84	10.8	<0.001
0517	N	4/9/2012	6867.39	3.7	3.25 H	5580 D	435	479	147	12	<5	3980 D	49 D	10.8 D	<0.5	4.8	10.9	<0.01
0517	N	7/16/2012	6867.29	3.5	3.17 H	5560	495	527	151	12	<5	3940 D	45 D	10.7 D	<0.1	4.44	11.7	<0.001
0517	N	10/15/2012	6867.14	3.56	3.09 H	5470	456	480	151 D	12	<5	3770 D	43 D	10.4 D	<1	7.52	12.9	<0.001
0518	N	7/23/1989	6897.20	3.30	3.44	9675	443	764	236	35.8	0	6727	64.6	123	22	43	420	0.001
0518	N	10/11/1989	6892.90	3.20	3.32	10260	417	770	223	46.8	0	6908	133	77.2	29	42	500	< 0.001
0518	N	1/3/1990	6890.20	3.00	3.00	10370	440	748	228	30	< 1	6962	108	40.4	18.7	23.7	410	0.001
0518	N	4/3/1990	6888.20	2.90	3.26	10524	431	850	223	29.2	< 1	6989	84	52	28	15.6	430	0.001
0518	N	7/10/1990	6886.80	3.30	2.95	9505	415	768	198	22.3	< 1	6226	67	34.4	16	26.1	299	< 0.001
0518	N	10/9/1990	6885.60	3.10	3.30	11417	439	900	248	27.5	< 1	7573	87.9	45.2	20.6	17.2	406	0.002
0518	N	1/4/1991	6885.10	3.40	3.62	7402	476	168	158	33.5	< 1	4846	85.7	12.6	0.58	18.9	128	< 0.001
0518	N	4/10/1991	6887.30	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	N	7/16/1991	6885.60	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	N	10/14/1991	6883.90	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	N	1/14/1992	6884.10	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	N	4/7/1992	6885.10	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	N	7/7/1992	6881.60	3.40	3.07	8076	428	574	244	25.5	< 1	5279	47.8	17	< 0.1	16	161	< 0.001
0518	N	10/13/1992	6879.70	3.50	2.99	8062	447	613	168	17.8	< 1	5260	48.2	17.3	< 0.1	16	123	< 0.001
0518	N	1/21/1993	6882.50	3.70	2.97	5822	447	613	168	14.7	< 1	4456	51.6	4.6	< 0.1	16	32.5	0.001
0518	N	4/14/1993	6883.50	4.20	3.00	5276	448	530	100	14	< 1	3993	53.7	15	< 0.1	14.5	39.1	0.001

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha	
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l	pci/l
			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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	4/13/2009	< 0.01	0.009	0.8	< 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	
0517	N	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	N	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	
0517	N	1/11/2010	< 0.01	0.008	0.83	< 0.05	9.53	< 0.1	0.9	< 0.001	< 0.1	0.0539	6.4	16	22.4	0.9	2.1 U	15.1	
0517	N	4/6/2010	< 0.01	0.009	0.82	< 0.05	9.25	< 0.1	0.86	0.004	< 0.1	0.0597	8.2	11	19.2	1.5	< 2 U	13.4	
0517	N	7/19/2010	< 0.01	0.009	0.89	< 0.05	10.3	< 0.1	0.88	< 0.001	< 0.1	0.0616	10	15	25	1.1	0.6 U	14.7	
0517	N	10/11/2010	< 0.01	0.009	0.91	< 0.05	10.3	< 0.1	0.9	< 0.001	< 0.1	0.0636	7.6	11	18.6	1.3	0.8 U	15.9	
0517	N	1/5/2011	< 0.01	0.01	0.92	< 0.05	10.4	< 0.1	0.97	0.004	< 0.1	0.0722	7.7	13	20.7	1.5	1.5	22.3	
0517	N	4/6/2011	< 0.01	0.011	0.99	< 0.05	11.1	< 0.1	1.04	< 0.001	< 0.1	0.082	4.6	14	18.6	1.7	1.3 U	9.1	
0517	N	7/18/2011	< 0.01	0.009	0.94	< 0.05	11.1	< 0.1	0.98	< 0.001	< 0.1	0.0932	9.5	12	21.5	1.9	< 0.2 U	12.6	
0517	N	10/10/2011	< 0.01	0.012	0.89	< 0.05	10.9	< 0.1	0.98	< 0.001	< 0.1	0.0841	6.3	12	18.3	2.4	1.3 U	13.8	
0517	N	1/9/2012	0.01	0.01	0.92	< 0.05	11.2	< 0.1	1.01	< 0.001	< 0.1	0.117	5.1	12	29.1	3	2.3	13.7	
0517	N	4/9/2012	0.01	0.011	0.98	< 0.05	11.9	< 0.1	1.04	< 0.001	< 0.1	0.107	7.3	14	35.3	4	1.7	12.4	
0517	N	7/16/2012	0.01	0.009	0.9	0.014	11.6	< 0.1	1.02	< 0.001	< 0.1	0.117	10	11	32	9	1.2	41.5	
0517	N	10/15/2012	0.011	0.008	0.85	0.014	10.7	< 0.1	1.07	< 0.001	< 0.1	0.124	6.6	14	20.6	7.3	1.9	7	
0518	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Chl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0518	N	7/15/1993	6879.80	3.60	3.06	5485	433	569	146	14	< 1	3940	34.1	6.4	< 0.1	17.4	51	< 0.001
0518	N	10/6/1993	6876.00	3.70	3.03	5631	438	651	131	12.5	< 1	4358	38.2	8.3	< 0.1	14.2	68	0.003
0518	N	1/5/1994	6880.40	3.60	2.79	6074	499	619	138	11.3	< 1	4350	36.3	7.93	0.13	< 1	65.6	< 0.001
0518	N	4/13/1994	6881.30	3.80	3.08	5991	510	618	122	13.1	< 1	4246	32	10.8	< 0.1	16.1	56.7	0.001
0518	N	7/21/1994	6881.30	4.00	3.17	5944	481	609	126	13.7	< 1	4218	24.6	7.69	< 0.1	14	53.4	< 0.001
0518	N	10/5/1994	6881.40	4.00	3.84	5869	463	652	138	14.5	< 1	4296	31.3	10.7	< 0.1	10	37.9	0.001
0518	N	1/5/1995	6880.90	3.90	3.84	5872	476	623	128	15	< 1	4462	33.6	14.4	< 0.1	14.1	62.2	< 0.001
0518	N	4/5/1995	6880.90	3.90	3.30	7021	628	718	140	14.2	< 1	5113	29.6	12.8	< 0.1	11.5	64	0.001
0518	N	7/6/1995	6880.30	4.40	3.10	6818	622	595	133	12.6	< 1	4765	34.2	16.5	< 0.1	13.7	85	0.002
0518	N	10/4/1995	6880.20	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	N	1/4/1996	6880.10	3.20	3.11	7039	670	660	145	10.5	< 1	5245	33.4	9	< 0.1	15.3	98.5	0.001
0518	N	4/2/1996	6880.20	3.40	3.50	7408	661	700	141	11.6	< 1	5180	37.3	9.2	0.13	14.7	97	< 0.001
0518	N	7/7/1996	6879.50	3.50	3.24	5648	453	691	155	12.5	< 1	5139	42.8	13	1.2	15.6	122	< 0.001
0518	N	10/1/1996	6879.20	3.80	3.31	7580	448	688	144	12.9	< 1	4928	35.8	8.95	0.25	13.2	100	< 0.001
0518	N	1/21/1997	6879.70	4.00	3.26	7340	440	680	147	13.8	< 1	4920	34.3	9.21	2.28	13.9	100	0.002
0518	N	4/8/1997	6878.80	3.30	3.55	7480	469	720	138	13.3	< 1	5250	38.7	8.4	1.75	12.2	104	< 0.001
0518	N	7/8/1997	6878.40	3.70	3.56	7630	488	742	148	14.6	< 1	5370	41	8.29	2.46	10.6	106	< 0.001
0518	N	10/8/1997	6878.40	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	N	1/16/1998	6878.30	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	N	4/7/1998	6878.30	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	N	7/7/1998	6877.90	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	N	10/6/1998	6877.80	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	N	1/6/1999	6877.76	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	N	4/6/1999	6877.86	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	N	7/13/1999	6877.28	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	N	10/5/1999	6877.26	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	N	1/4/2000	6877.36	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	N	5/2/2000	6884.60	3.02	3.11	13900	415	646	323	2	< 0.1	9150	177	474	22.8	91.2	666	< 0.001
0613	N	7/11/2000	6883.70	2.96	3.16	13700	426	656	328	< 0.1	< 0.1	8770	166	445	16.8	68.6	662	< 0.001
0613	N	10/2/2000	6885.00	3.03	3.08	13800	451	709	350	1.5	< 0.1	8870	175	400	18	49	694	0.001
0613	N	1/15/2001	6883.50	3.10	3.08	13800	425	622	334	1	< 0.1	10400	183	423	17.2	46.4	810	< 0.001
0613	N	4/9/2001	6883.65	2.96	3.16	13100	411	623	313	0.6	< 0.1	8510	174	425	18	41	738	< 0.001
0613	N	7/10/2001	6883.50	2.98	3.12	13900	459	726	322	< 0.1	< 0.1	9400	147	370	16.5	96	753	< 0.001
0613	N	10/2/2001	6883.50	3.24	3.00	13600	430	640	300	< 1	< 0.1	8400	160	392	17.3	87.5	673	< 0.001
0613	N	1/14/2002	6883.45	3.12	3.00	13800	470	701	342	< 1	< 0.1	9090	172	394	16	109	670	< 0.001
0613	N	4/2/2002	6883.40	2.92	3.02	13800	461	678	311	1.6	< 0.1	9810	189	389	15.4	39.7	718	< 0.001
0613	N	7/9/2002	6883.23	2.95	3.07	13300	437	672	316	< 1	< 0.1	8810	167	359	15.5	39.7	725	< 0.001
0613	N	10/8/2002	6883.30	2.85	3.04	11800	398	625	284	< 1	< 0.1	8490	165	357	14.2	166	592	< 0.001
0613	N	1/7/2003	6882.69	2.96	3.02	13100	377	611	264	< 1	< 0.1	7870	158	341	12.6	137	475	< 0.001
0613	N	4/8/2003	6882.54	2.87	3.05	13200	398	649	290	< 1	< 0.1	8020	148	341	13.8	142	473	< 0.001

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha	
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l	pci/l
			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	N	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	N	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	N	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	N	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	N	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	N	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	
0518	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0613	N	7/8/2003	6882.75	2.78	2.98	12100	438	684	292	< 1	< 0.1	8910	172	327	13	134	726	< 0.001
0613	N	10/8/2003	6882.97	3.11	3.04	13200	429	705	297	< 1	< 0.1	9510	175	321	12.5	138	810	< 0.001
0613	N	1/6/2004	6882.61	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	N	4/6/2004	6882.66	2.94	2.99	13200	446	716	300	< 1	< 1	8950 D	166	297 D	12 D	126 D	738 D	< 0.001
0613	N	7/13/2004	6882.67	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	N	10/5/2004	6882.21	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	N	1/4/2005	6882.66	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	N	4/5/2005	6881.78	2.97	2.97	13000	452	748	293	< 0.5	< 1	9100	164	289	8.2	141	630	< 0.001
0613	N	7/12/2005	6882.27	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	N	10/5/2005	6882.39	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	N	1/10/2006	6882.16	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	N	4/3/2006	6882.14	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	N	7/19/2006	6882.19	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	N	10/3/2006	6882.14	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	N	1/9/2007	6882.04	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	N	4/10/2007	6882.04	3.02	3.12	12900	444	756	278	2	< 1	9040 D	147	250 D	9.5 D	114	611	< 0.001
0613	N	7/10/2007	6882.04	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	N	10/8/2007	6881.72	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	N	1/15/2008	6882.40	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	N	4/8/2008	6881.94	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	N	7/8/2008	6881.79	2.80	3.05	12000	414	700	261 D	< 1	< 1	9300 D	188	264 D	7.1	98	711 D	< 0.003
0613	N	10/7/2008	6881.74	2.78	3.07	12500	411	680	250 D	< 1	< 1	9300 DH	119	242 D	7.6	87.6	787	0.001
0613	N	1/12/2009	6881.79	2.86	3.09	13000	402	680	270	< 1	< 1	8180 D	102	353 D	8.1	94.8	682 D	< 0.001
0613	N	4/7/2009	6881.84	2.85	3.07	12600	407 D	674 D	271 D	< 1	< 1	9360 D	81	228 D	4	89.6	660 D	< 0.001
0613	N	7/7/2009	6881.99	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	N	10/7/2009	6881.74	3	3.06	12400	433 D	691	262 D	< 1	< 1	8690 D	212	241 D	7.5	99.2	635 D	< 0.001
0613	N	1/5/2010	6881.79	2.94	3.1	13200 D	416 D	671	272	< 1	< 5	9530 D	136	185 D	7.1	82	715 D	< 0.001
0613	N	4/6/2010	6881.89	2.87	3.02	12500 D	432 D	722	266 D	< 1	< 5	8850 D	142	222 D	6.9 D	94.4	681	< 0.001
0613	N	7/13/2010	6881.79	2.84	3.14	12600 D	439 D	721	268 D	< 1	< 5	9210 D	131 D	230 D	6.3 D	110	684	< 0.001
0613	N	10/5/2010	6881.84	2.93	3.06	12300 D	433 D	706	270 D	< 1	< 5	9330 D	128 D	219 D	5.3 D	85.6	646	< 0.001
0613	N	1/11/2011	6881.44	2.9	3.09	11900 D	425 D	706	247 D	< 1	< 5	9150 D	144 D	210 D	3.7 D	100	600 D	< 0.001
0613	N	4/11/2011	6881.59	2.93	3.09	12300 D	424	689	269 D	< 1	< 5	9410 D	139 D	196 D	5.2 D	88	678 D	< 0.001
0613	N	7/12/2011	6881.59	2.99	3.12	11700 D	423	706	273 D	< 1	< 5	9140 D	140 D	179 D	2.2 D	86.4	624	< 0.001
0613	N	10/4/2011	6881.58	3.05	3.14	11600 D	420	682	256 D	< 1	< 5	9300 D	135 D	208 D	5.2 D	122	582	< 0.001
0613	N	1/3/2012	6881.49	2.96	3.03 H	12100 D	467	714	262	2	< 5	9270 D	137 D	199 D	4.5 D	106	590	< 0.001
0613	N	4/3/2012	6881.39	2.87	2.99 H	12200 D	430	639	207	< 1	< 5	9200 D	136 D	166 D	5.3 D	73.6	604	< 0.001
0613	N	7/10/2012	6881.39	2.87	2.98 H	12200	422	697	249 D	< 1	< 5	8850 D	144 D	202 D	5.2 D	79.2	616	< 0.001
0613	N	10/9/2012	6881.34	2.88	2.97 H	11900	442	693	248 D	1	< 5	8630 D	142 D	206 D	3.4 D	88.8	566 D	< 0.001
0708	N	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	N	4/2/2001	6864.20	2.82	3.20	5520	515	578	101	10.7	< 0.1	3750	31.3	1.81	< 0.1	< 1	0.61	0.004

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	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
0613	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	4/8/2008	0.2	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	N	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	N	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	N	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	N	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	N	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	N	10/7/2009	0.19 D	0.03	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
0613	N	1/5/2010	0.16	0.034	1.85	< 0.05	53.4	< 0.1	1.79	0.002	2.3	1.08 D	12	2.6	14.6	573	0.3 U	46.2
0613	N	4/6/2010	0.15	0.037	1.56	< 0.05	57.4	< 0.1	1.63	0.006	1.9	1.11	9	0.67 U	9.67	542	< 0.3 U	61.6
0613	N	7/13/2010	0.16	0.038	1.77	< 0.05	57.6	< 0.1	1.75	< 0.001	2	1.07 D	7.8	1.2 U	9	328	0.7 U	71.7
0613	N	10/5/2010	0.13	0.037	1.94	< 0.05	52.8	< 0.1	1.89	0.001	2.1	1.2	12	0.43 U	12.43	946	2.1	120
0613	N	1/11/2011	0.16	0.034	1.98	< 0.05	54.1	< 0.1	1.9	< 0.001	2.3	1.07 D	18	1.8	19.8	976	0.7 U	56.8
0613	N	4/11/2011	0.15	0.037	1.96	< 0.05	53.7	< 0.1	1.73	< 0.001	2.3	1.04 D	13	1.2 U	14.2	645	2.9	22.9
0613	N	7/12/2011	0.17	0.034	1.9	< 0.05	51.4	< 0.1	1.82	0.003	2	1.02 D	5	0.39 U	5.39	942	0.7 U	77
0613	N	10/4/2011	0.18	0.033	1.86	< 0.05	53.1	< 0.1	1.76	< 0.001	1.9	0.942	8.9	1.2 U	10.1	710	1.9	33.1
0613	N	1/3/2012	0.18	0.036	1.92	< 0.05	53.9	< 0.1	1.6	< 0.001	1.8	0.979	27	0.62 U	28.24	971	0.7 U	28.4
0613	N	4/3/2012	0.18	0.034	1.87	< 0.05	53.8	< 0.1	1.9	< 0.001	2	1.03	3.6	2.3 U	8.2	805	0.5 U	29
0613	N	7/10/2012	0.178	0.041	1.94	0.006	52.2	< 0.1	1.78	< 0.001	1.9	1.04	8.6	22	52.6	788	0.6 U	13.5
0613	N	10/9/2012	0.144	0.036	1.89	0.007	51.1	< 0.1	1.9	< 0.001	1.8	0.989	13	2.0 U	13	690	2.4	14.5
0708	N	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	N	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0708	N	7/16/2001	6863.90	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	N	10/8/2001	6864.25	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	N	1/14/2002	6864.40	2.83	3.80	5670	520	582	119	12.6	< 0.1	3650	28.6	1.11	< 0.1	< 1	1	0.002
0708	N	4/8/2002	6864.30	2.82	3.29	5670	453	528	108	11.8	< 0.1	3600	33.4	1.22	< 0.1	< 1	1	0.001
0708	N	7/16/2002	6864.10	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	N	10/14/2002	6863.93	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	N	1/13/2003	6863.61	2.77	2.98	5740	529	632	98	9.6	< 0.1	4020	14.9	2.03	< 0.1	< 1	1	0.003
0708	N	4/15/2003	6863.88	3.31	2.92	5860	460	574	113	13.5	< 0.1	3800	30	2.17	< 0.1	< 1	1	< 0.001
0708	N	7/14/2003	6863.48	3.78	2.99	5910	448	529	111	12.3	< 0.1	3500	22	1.65	< 0.1	< 1	1.1	0.002
0708	N	10/15/2003	6851.39	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	N	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	N	1/13/2004	6863.13	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	N	4/12/2004	6863.37	3.75	2.90	5820	452	552	113	12.4	< 1	3980	33	2.14	< 0.1	< 1	1.5	< 0.001
0708	N	7/19/2004	6863.06	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	N	10/12/2004	6863.04	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	N	1/10/2005	6863.00	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	N	4/12/2005	6862.73	3.98	3.73	5630	484	588	124	12.5	< 1	4050	29	1.96	< 0.1	< 1.0	2.7	< 0.001
0708	N	7/19/2005	6862.34	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	N	10/11/2005	6862.36	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	N	1/17/2006	6861.91	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	N	4/11/2006	6861.90	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	N	7/25/2006	6861.66	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	N	10/10/2006	6861.45	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	N	1/17/2007	6861.30	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	N	4/16/2007	6861.13	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	N	7/17/2007	6860.73	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	N	10/8/2007	6860.48	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	N	1/21/2008	6860.60	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	N	4/15/2008	6860.28	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	N	7/14/2008	6861.55	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	N	10/13/2008	6861.50	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	N	1/19/2009	6859.18	3.57	3	6130 H	450	594	119	13	< 1	4190 D	21	0.46	< 0.1	< 0.5	11.3	< 0.001
0708	N	4/13/2009	6859.33	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	N	7/13/2009	6858.98	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	N	10/12/2009	6859.08	3.58	3.74	4880	420 D	563	112 D	13	< 1	3770 D	25	1.6	0.2	< 0.50	11.6	< 0.001
0708	N	1/11/2010	6858.48	3.41	3.57	5990 D	472 D	559	114	14	< 5	4280 D	26	1.74	0.13	< 0.50	21.3	< 0.001
0708	N	4/12/2010	6858.53	3.77	3.26	6060 D	464	534	119	7	< 5	4260 D	31	2.68	0.1	< 0.50	29.3	0.003
0708	N	7/19/2010	6858.18	3.58	3.09	6110 D	434	580	119	13	< 5	4240 D	27 D	3.14	0.1	< 0.50	19	< 0.001
0708	N	10/11/2010	6858.38	3.57	2.95	6090 D	434	566	124	14	< 5	4110 D	22 D	2.86	< 0.1	< 0.50	24.4	< 0.001
0708	N	1/10/2011	6857.801	3.54	3.14	6010 D	437	556	115	14	< 5	4320 D	30 D	1.15	< 0.1	< 0.50	20.9	< 0.001

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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
0708	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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
0708	N	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	N	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
0708	N	1/11/2010	0.02	< 0.005	0.41	< 0.05	11.5	< 0.1	0.45	< 0.001	< 0.1	0.0646	6.7	7.7	14.4	< 0.01 U	1.6 U	15.1
0708	N	4/12/2010	0.03	< 0.005	0.43	< 0.05	11.4	< 0.1	0.49	0.007	< 0.1	0.0921	9.7	5.3	15	0.1 U	2.0 U	19.1
0708	N	7/19/2010	0.02	< 0.005	0.51	< 0.05	13	< 0.1	0.54	< 0.001	< 0.1	0.0558	11	5.1	16.1	0.03 U	2.5 U	14.5
0708	N	10/11/2010	0.02	< 0.005	0.47	< 0.05	12	< 0.1	0.52	< 0.001	< 0.1	0.0706	8.8	4.2	13	0.3 U	< 0.05 U	15.5
0708	N	1/10/2011	0.02	< 0.005	0.54	< 0.05	12.9	< 0.1	0.63	0.002	< 0.1	0.0708	11	5.7	16.7	< 0.5 U	1.2 U	17.7

TABLE B.1
Zone 3 Data Summary, 1989-2012
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	Cl	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	N	4/11/2011	6857.631	3.38	3.01	5970 DH	444	532	121	15	<5	4410 D	29 D	2.02	<0.1	<0.50	24.2	<0.001
0708	N	7/18/2011	6857.431	3.6	3.11	5800 D	432	552	122	14	<5	4570 D	28 D	1.3 D	<0.5	<0.50	27	<0.001
0708	N	10/10/2011	6857.421	3.54	3.14	5910 D	427	578	124	14	<5	4700 D	30 D	1.0 D	<0.5	<0.50	35	<0.001
0708	N	1/9/2012	6857.08	3.61	2.98 H	6380 D	455	543	120	15	<5	4640 D	30 D	1.4 D	<0.5	<0.50	26.4	<0.001
0708	N	4/9/2012	6856.83	3.52	3.03 H	6420 D	419	579	117	13	<5	4530 D	51 D	1.6	<0.5	<0.50	34.6	<0.01
0708	N	7/16/2012	6856.63	3.56	2.89 H	6250 D	446	602	130	15	<5	4320 D	30 D	1.44	<0.1	<0.50	34.4	<0.001
0708	N	10/15/2012	6856.43	3.54	2.91 H	6270 D	460	604	130 D	15	<5	4500 D	30 D	1.3 D	<1	<0.50	36.7	<0.001
0711	N	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	N	5/1/2000	6863.55	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	N	7/10/2000	6863.50	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	N	10/2/2000	6863.65	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	N	1/15/2001	6863.85	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
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	N	4/2/2001	6863.85	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	N	7/11/2001	6863.50	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	N	10/8/2001	6863.65	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	N	1/15/2002	6863.75	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	N	4/8/2002	6863.55	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	N	7/16/2002	6863.46	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	N	10/14/2002	6863.49	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	N	1/13/2003	6863.10	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	N	4/15/2003	6863.46	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	N	7/14/2003	6863.13	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	N	10/14/2003	6863.08	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	N	1/13/2004	6862.83	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	4/11/2011	0.03	<0.005	0.52	<0.05	12.8	<0.1	0.59	0.002	<0.1	0.0901	10	5.2	15.2	<1 U	3.1	9.7
0708	N	7/18/2011	0.03	<0.005	0.56	<0.05	12.9	<0.1	0.67	<0.001	<0.1	0.0798	9.2	4.2	13.4	0.8 U	0.02 U	10.8
0708	N	10/10/2011	0.04	<0.005	0.55	<0.05	13	<0.1	0.67	<0.001	<0.1	0.0863	7.9	4	11.9	0.6 U	<0.1 U	12.4
0708	N	1/9/2012	0.03	<0.005	0.59	<0.05	13.2	<0.1	0.66	<0.001	<0.1	0.089	6.8	5.6	18	0.5 U	1.6	13
0708	N	4/9/2012	0.04	<0.005	0.54	<0.05	12	<0.1	0.72	<0.001	<0.1	0.0864	9.8	4.7	19.2	1.2	1.5	13.7
0708	N	7/16/2012	0.037	<0.005	0.6	0.004	13	<0.1	0.69	<0.001	<0.1	0.0958	8.8	4.9	18.6	0.2 U	1.2	29.8
0708	N	10/15/2012	0.043	<0.005	0.6	0.004	13.8	<0.1	0.82	<0.001	<0.1	0.108	7.6	6	13.6	0.3 U	1.2	11.2
0711	N	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	N	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	N	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	N	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	N	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
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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Chl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0711	N	4/13/2004	6862.97	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	N	7/20/2004	6862.93	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	N	10/12/2004	6862.94	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	N	1/11/2005	6863.14	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	N	4/12/2005	6862.81	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
0711	N	7/19/2005	6862.60	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	N	10/11/2005	6862.66	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	N	1/17/2006	6862.43	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	N	4/11/2006	6862.40	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	N	7/25/2006	6862.34	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	N	10/11/2006	6862.28	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	N	1/17/2007	6862.15	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	6861.54	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	N	4/16/2007	6862.14	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	6861.60	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	N	7/16/2007	6861.85	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	6861.35	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	N	10/8/2007	6861.68	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	6861.05	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	N	1/21/2008	6862.05	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	6861.45	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	N	4/14/2008	6861.50	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	6860.70	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	N	7/14/2008	6861.55	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	6860.70	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	N	10/13/2008	6861.50	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	6860.65	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	N	1/19/2009	6861.15	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	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	N	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	N	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	N	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	N	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
0711	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Chl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0711	N	4/13/2009	6861.30	4.53	3.2	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	0.3	<0.1	<0.50	0.3	0.013
0711	N	7/13/2009	6861.20	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	N	10/12/2009	6861.30	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
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
0711	N	1/11/2010	6860.85	4.43	4.27	4760 D	491 D	469	95	11	<5	3510 D	21	0.55	0.13	<0.50	0.2	0.001 H
0711	Dup	1/11/2010	6859.80	4.64	4.89	4880 D	501 D	484	101	11	5	3550 D	16	0.41	0.11	<0.50	0.2	0.002 H
0711	N	4/12/2010	6861.00	4.7	3.65	4960 D	479	472	99	10	<5	3360 D	17	0.67	0.1	<0.50	0.2	0.004
0711	Dup	4/12/2010	6860.05	4.88	4.9	5000 D	488	484	102	10	<5	3460 D	16	0.57	0.1	<0.50	0.2	0.007
0711	N	7/19/2010	6860.75	4.45	3.41	4880 D	462	464	96	10	<5	3470 D	16 D	0.77	0.1	<0.50	0.2	0.006
0711	Dup	7/19/2010	6859.70	4.7	4.6	5030 D	475	474	97	10	<5	3420 D	16 D	0.72	<0.1	<0.50	0.2	0.004
0711	N	10/11/2010	6860.90	3.05	3.23	4850 D	472	447	102	10	<5	3610 D	13 D	0.79	<0.1	<0.50	0.2	0.004
0711	Dup	10/11/2010	6860.05	3.05	4.19	4500 D	476	441	99	10	<5	3640 D	13 D	0.74	<0.1	<0.50	0.2	0.009
0711	N	1/17/2011	6860.75	5.09	4.87	4760 D	468	452	100	11	6	3390 D	17 D	0.36	<0.1	<0.50	0.3	0.024 D
0711	N	4/12/2011	6860.6	4.83	5.12	4960 D	475	448	101	11	9	3420 D	17 D	0.38	<0.1	<0.50	0.2	0.005
0711	N	7/18/2011	6860.4	4.71	4.55	4770 D	457	428	98	10	<5	3380 D	16 D	0.4 D	<0.5	<0.50	0.3	<0.01
0711	DUP	7/18/2011	6859.2	4.87	5.02	4790 D	473	450	103	11	<5	3340 D	16 D	0.4 D	<0.5	<0.50	0.2	<0.01
0711	N	10/11/2011	6860.57	4.81	4.26	4840 D	480	449	101	11	<5	3490 D	17 D	0.4 D	<0.5	<0.50	0.5	0.037
0711	DUP	10/11/2011	6859.3	4.84	5.27	4940 D	471	450	98	11	7	3420 D	16 D	0.4 D	<0.5	<0.50	0.2	0.015
0711	N	1/9/2012	6860.29	4.83	3.27 H	4730 D	485	422	95	10	<5	3400 D	17 D	0.34	<0.1	<0.50	0.2	0.004
0711	Dup	1/9/2012	6859.40	5.06	4.07 H	4810 D	454	428	94	10	<5	3360 D	17 D	0.34	<0.1	<0.50	0.2	0.006
0711	N	4/9/2012	6860.09	4.75	3.25 H	4860 D	450	449	97	10	<5	3650 D	18 D	0.39	<0.2	<0.50	0.2	<0.01
0711	Dup	4/9/2012	6859.00	4.91	4.77 H	4940 D	449	451	94	10	<5	3370 D	17 D	0.39	<0.1	<0.50	0.2	<0.01
0711	N	7/17/2012	6860.00	4.72	3.30 H	5020	482	460	117	12	<5	3400 D	18 D	0.38	<0.1	<0.50	0.2	0.002
0711	Dup	7/17/2012	6858.90	4.83	4.73 H	4850	486	461	113	12	<5	3420 D	18 D	0.4	<0.1	<0.50	0.2	0.004
0711	N	10/15/2012	6860.05	5.07	3.78 H	4520	500	462	103 D	11	<5	3280 D	16 D	0.42	<0.2	<0.50	0.3	0.004
0717	N	4/9/2001	6855.40	5.65	7.30	3300	631	137	118	6.4	498	1650	54.2	0.11	12.3	< 1	< 0.1	0.002
0717	N	7/16/2001	6855.30	6.32	7.35	3350	591	127	124	6.7	539	1630	61.7	0.13	12.4	< 1	< 0.1	0.001
0717	N	10/8/2001	6855.30	7.01	7.20	3300	600	130	105	6.1	588	1600	66.7	0.05	10.6	< 1	< 0.1	< 0.001
0717	N	1/9/2002	6855.20	7.76	7.10	3230	669	128	107	8	656	1530	75	0.07	10.2	< 1	< 0.1	< 0.001
0717	N	4/9/2002	6854.75	7.34	7.39	3320	660	124	129	6.6	654	1700	64.4	0.1	12.2	< 1	< 0.1	< 0.001
0717	N	7/15/2002	6854.73	6.67	7.52	3420	791	147	125	5.9	740	1886	48.4	0.22	16.2	< 1	< 0.1	< 0.001
0717	N	10/14/2002	6854.47	6.65	7.61	3130	720	144	125	6.3	704	1780	68.3	0.21	15.6	< 1	< 0.1	< 0.001
0717	N	1/13/2003	6854.02	7.46	7.05	3530	621	130	104	6.2	731	1440	47.2	0.24	21.5	< 1	< 0.1	0.002
0717	N	4/8/2003	6853.75	6.44	7.19	3620	697	147	143	9.9	705	1615	71.2	0.27	22.9	< 1	< 0.1	< 0.001
0717	N	7/8/2003	6853.63	6.28	7.47	3790	735	175	128	7.7	737	1880	60.9	0.29	23	< 1	< 0.1	< 0.001
0717	N	10/13/2003	6853.24	6.37	7.43	3840	765	206	135	7.2	705	2080	75.3	0.37	25.1	< 1	0.3	< 0.001
0717	N	1/12/2004	6852.78	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	N	4/12/2004	6852.40	6.31	6.75	4000	695	218	135	9.3	650	2100	77.1	0.83	23.8 D	< 1	< 0.1	< 0.001

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	4/13/2009	<0.01	<0.005	0.33	<0.05	5.78	0.1	0.3	<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	N	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	0.015	3.9	12	15.9	<0.08 U	<0.2 U	7.2
0711	N	10/12/2009	<0.01	<0.005	0.32	<0.05	5.77	0.2	0.3	<0.001	<0.1	0.0167	4	12	16	0.04 U	1.5 U	7
0711	Dup	10/12/2009	<0.01	<0.005	0.32	<0.05	5.7	0.2	0.29	<0.001	<0.1	0.0161	4.8	11	15.8	0.05 U	1.9 U	8.2
0711	N	1/11/2010	<0.01	<0.005	0.32	<0.05	5.42	0.1	0.29	<0.001	<0.1	0.0154	3.9	15	18.9	<0.03 U	1.6 U	5.8
0711	Dup	1/11/2010	<0.01	<0.005	0.31	<0.05	5.36	0.1	0.29	<0.001	<0.1	0.0149	3.7	13	16.7	0.02 U	1.3 U	5.2
0711	N	4/12/2010	<0.01	<0.005	0.32	<0.05	5.66	<0.1	0.3	<0.001	<0.1	0.0161	4.5	9.8	14.3	0.06 U	1.3 U	6.4
0711	Dup	4/12/2010	<0.01	<0.005	0.3	<0.05	5.5	<0.1	0.28	<0.001	<0.1	0.0159	4.5	9.8	14.3	0.3	1.3 U	5.6
0711	N	7/19/2010	<0.01	<0.005	0.32	<0.05	5.54	0.2	0.27	<0.001	<0.1	0.0167	5.4	8.2	13.6	<0.005 U	0.4 U	5.4
0711	Dup	7/19/2010	<0.01	<0.005	0.32	<0.05	5.5	<0.1	0.26	<0.001	<0.1	0.0154	5.7	7.4	13.1	<0.07 U	1.8 U	5.5
0711	N	10/11/2010	<0.01	<0.005	0.31	<0.05	5.41	<0.1	0.28	<0.001	<0.1	0.0189	4.7	8.3	13	0.1 U	<0.5 U	4.6
0711	Dup	10/11/2010	<0.01	<0.005	0.31	<0.05	5.33	0.2	0.27	<0.001	<0.1	0.0131	5.9	8.6	14.5	0.05 U	<0.6 U	5.4
0711	N	1/17/2011	<0.01	<0.005	0.35	<0.05	5.52	0.5	0.28	0.003	<0.1	0.0201	3.5	7.7	11.2	<0.004 U	1.7	5.7
0711	N	4/12/2011	<0.01	<0.005	0.3	<0.05	5.46	0.1	0.27	<0.001	<0.1	0.0155	4.6	9.5	14.1	0.1 U	2.1	5.9
0711	N	7/18/2011	<0.01	<0.005	0.25	<0.05	4.16	0.1	0.27	<0.001	<0.1	0.013	4.5	6.9	11.4	0.03 U	<0.7 U	4.9
0711	DUP	7/18/2011	<0.01	<0.005	0.24	<0.05	4	<0.1	0.27	<0.001	<0.1	0.0123	4.3	7.9	12.2	0.1 U	<0.7 U	4
0711	N	10/11/2011	<0.01	<0.005	<0.01	<0.05	4.71	0.1	0.27	<0.001	<0.1	0.0163	4	6.3	10.3	0.04 U	<0.1 U	4.9
0711	DUP	10/11/2011	<0.01	<0.005	0.28	<0.05	5.02	0.1	0.26	<0.001	<0.1	0.0157	3.7	6.5	10.2	0.1 U	0.1 U	4.4
0711	N	1/9/2012	<0.01	<0.005	0.33	<0.05	5.36	<0.1	0.29	<0.001	<0.1	0.0185	3.1	6.4	15.9	0.07 U	0.7 U	5
0711	Dup	1/9/2012	<0.01	<0.005	0.36	<0.05	5.66	<0.1	0.29	<0.001	<0.1	0.016	3.1	6	15.1	0.1 U	0.1 U	4.3
0711	N	4/9/2012	<0.01	<0.005	0.29	<0.05	5.36	<0.1	0.26	<0.001	<0.1	0.0203	4.6	7.7	20	0.1 U	0.3 U	4.6
0711	Dup	4/9/2012	<0.01	<0.005	0.28	<0.05	5.17	0.1	0.26	<0.001	<0.1	0.0188	4	7.9	19.8	0.05 U	0.7 U	5.3
0711	N	7/17/2012	0.002	<0.005	0.28	0.004	5.12	<0.1	0.26	<0.001	<0.1	0.0177	4.2	5.8	15.8	0.06 U	0.4 U	5.5
0711	Dup	7/17/2012	0.002	<0.005	0.27	<0.001	5.02	0.1	0.26	<0.001	<0.1	0.0162	3.5	6.7	16.9	0.07 U	1.6	5.4
0711	N	10/15/2012	0.002	<0.005	0.29	0.003	5.02	0.2	0.27	<0.001	<0.1	0.0169	3.4	9.6	13	0.09 U	1.1	4.3
0717	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Chl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0717	N	7/19/2004	6852.07	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	N	10/11/2004	6851.80	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	N	1/10/2005	6851.37	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	N	4/18/2005	6850.62	6.38	7.09	4210	649	253	151	11.5	512	2410	128	4.69	27.1	< 1.0	< 0.1	< 0.001
0717	N	7/18/2005	6849.32	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	N	10/10/2005	6848.82	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	N	1/16/2006	6848.64	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	N	4/10/2006	6848.37	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	N	7/24/2006	6847.93	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	N	10/9/2006	6847.59	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	N	1/16/2007	6846.80	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	N	4/10/2007	6846.65	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	N	7/16/2007	6846.22	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	N	10/9/2007	6845.78	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	N	1/22/2008	6845.20	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	N	4/15/2008	6845.22	5.59	5.8	5560	597	473	186 D	21.5	58	3950 D	72	71.0 D	44.8	< 0.50	7.6	< 0.001
0717	N	7/15/2008	6860.70	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	N	10/14/2008	6860.65	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	N	1/19/2009	6843.92	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	N	4/14/2009	6843.82	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	N	7/14/2009	6843.47	3.65	4.23	6480	454	532	179	14	<1	4440 D	68	76.7 D	27.6	1.24	149 D	< 0.001
0717	N	10/13/2009	6843.17	4.14	4.3	6570 H	475 D	548	181 D	14	<1	4520 D	74	77 D	26.2	0.55	145	< 0.001
0717	N	1/12/2010	6842.87	3.96	4.28	6370 D	488 D	562	184 D	15	<5	4880 D	67	34 D	30 D	0.77	136	< 0.001
0717	N	4/12/2010	6842.82	4.2	4.14	6490 D	472	569	181	13	<5	4690 D	67	64 D	24.1 D	< 0.50	138	< 0.001
0717	N	7/20/2010	6842.32	3.95	4.13	6560 D	458	542	169	12	<5	4730 D	67 D	62 D	26 D	< 0.50	127	< 0.001
0717	N	10/12/2010	6842.17	4.23	4.33	6220 D	473	522	178	13	<5	4440 D	62 D	66 D	24 D	0.68	120	< 0.001
0717	N	1/11/2011	6841.765	4.28	4.29	6250 D	450	520	166	12	<5	4690 D	69 D	64 D	20 D	3.38	143	< 0.001
0717	N	4/6/2011	6841.645	4.36	4.4	6570 D	471	520	180	12	<5	4860 D	63 D	62 D	22 D	4.08	129	0.001
0717	N	7/19/2011	6841.365	3.97	4.21	6140 D	470	532	182	13	<5	4900 D	66 D	56 D	27 D	4.52	126	< 0.001
0717	N	10/11/2011	6841.155	4.14	4.39	6200 D	460	516	184	13	<5	4720 D	71 D	61 D	32 D	4.16	125	0.004
0717	N	1/10/2012	6840.92	4.31	4.14 H	6310 D	456	499	174	13	<5	4650 D	68 D	65 D	30 D	2.88	124	< 0.001
0717	N	4/10/2012	6840.62	4.25	4.12 H	6240 D	438	500	170	12	<5	4570 D	66 D	62 D	31 D	2.01	130	< 0.01
0717	N	7/17/2012	6840.37	4.11	4.16 H	6190	474	517	189	14	<5	4390 D	69 D	61 D	30 D	4.4	134	< 0.001
0717	N	10/16/2012	6840.24	4.22	4.07 H	6120	486	508	186 D	14	<5	4430 D	67 D	59 D	30 D	3.48	122	< 0.001
0717	Dup	10/16/2012	6840.07	4.21	4.06 H	6090	504	510	181 D	14	<5	4410 D	67 D	58 D	30 D	6.4	120	< 0.001
0719	N	4/9/2001	6845.30	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	N	7/11/2001	6845.30	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	N	10/8/2001	6846.70	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	N	1/7/2002	6846.50	3.00	2.80	5680	496	463	115	6	< 0.1	3760	57	2.9	< 0.1	< 1	47.4	0.01
0719	N	4/8/2002	6845.79	2.90	2.99	5520	470	440	129	5.7	< 0.1	3470	39.9	3.42	< 0.1	< 1	51	0.005

TABLE B.1
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Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha												
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l	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	5	NA	NA	15
0717	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	7/14/2009	0.1	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												
0717	N	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												
0717	N	1/12/2010	0.1	0.012	0.99	< 0.05	22.2	< 0.1	0.92	< 0.001	< 0.1	0.0293	15	34	49	< 0.03 U	1.7 U	28												
0717	N	4/12/2010	0.09	0.013	1.02	< 0.05	23.4	< 0.1	0.96	< 0.001	< 0.1	0.0294	16	25	41	0.1 U	2.3 U	34.3												
0717	N	7/20/2010	0.1	0.016	1.01	< 0.05	21	< 0.1	0.86	< 0.001	< 0.1	0.0108	18	21	39	0.6 U	3.6 U	23.3												
0717	N	10/12/2010	0.09	0.017	0.94	< 0.05	19.2	< 0.1	0.83	< 0.001	< 0.1	0.0168	18	24	42	0.7 U	4.6	27.9												
0717	N	1/11/2011	0.09	0.011	1.02	< 0.05	20.8	< 0.1	0.91	< 0.001	< 0.1	0.0482	20	23	43	0.5 U	2.9	23.5												
0717	N	4/6/2011	0.1	0.014	1	< 0.05	20.6	< 0.1	0.87	< 0.001	< 0.1	0.0423	12	25	37	0.8 U	2.9	21.1												
0717	N	7/19/2011	0.09	0.018	0.98	< 0.05	20.2	< 0.1	0.92	< 0.001	< 0.1	0.188	15	24	39	1.5 U	1.2 U	19.4												
0717	N	10/11/2011	0.1	0.015	0.96	< 0.05	21.2	< 0.1	0.89	< 0.001	< 0.1	0.0261	13	22	35	1.4	2.3	18.8												
0717	N	1/10/2012	0.11	0.015	1.07	< 0.05	22.3	< 0.1	0.91	0.002	< 0.1	0.0348	12	21	54	0.1 U	2.7	22.1												
0717	N	4/10/2012	0.1	0.016	1	< 0.05	22.4	< 0.1	0.86	< 0.001	< 0.1	0.0247	15	30	75	0.2 U	3.4	21.5												
0717	N	7/17/2012	0.095	0.011	0.95	0.011	21.8	< 0.1	0.9	0.002	< 0.1	0.0229	15	22	59	0.3 U	3.4	35.7												
0717	N	10/16/2012	0.102	0.016	0.89	0.01	22.1	< 0.1	0.88	< 0.001	< 0.1	0.0194	12	34	46	0.6 U	2.4	13.2												
0717	Dup	10/16/2012	0.104	0.016	0.9	0.01	21.2	< 0.1	0.9	< 0.001	< 0.1	0.0192	12	35	47	0.04 U	2.7	14.5												
0719	N	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	N	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	N	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	N	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	N	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												

TABLE B.1
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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	N	7/15/2002	6845.38	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	N	10/14/2002	6845.95	2.85	3.06	4630	514	491	134	10.5	< 0.1	3720	33.4	3.76	< 0.1	< 1	25	0.005
0719	N	1/13/2003	6845.26	2.96	3.05	5340	531	509	120	11	< 0.1	3610	25.2	3.4	< 0.1	< 1	26.9	0.004
0719	N	4/15/2003	6845.54	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	N	7/14/2003	6844.64	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	N	10/13/2003	6844.38	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	N	1/12/2004	6844.00	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	N	4/12/2004	6843.88	3.05	3.08	5060	482	438	126	11.4	< 1	3440	40.8	3.31	< 0.1	< 1	23.6	< 0.001
0719	N	7/19/2004	6843.59	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	N	10/11/2004	6843.62	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	N	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	N	4/11/2005	6842.19	3.51	3.37	4580	531	423	136	9.8	< 1	3280	33	1.5	< 0.1	< 1.0	19.3	< 0.001
0719	N	7/18/2005	6841.57	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	N	10/10/2005	6840.91	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	N	1/16/2006	6840.44	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	N	4/10/2006	6839.92	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	N	7/24/2006	6839.44	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	N	10/9/2006	6839.21	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	N	1/15/2007	6838.61	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	N	4/17/2007	6838.11	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	N	7/17/2007	6837.96	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	N	10/9/2007	6837.50	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	N	1/22/2008	6837.80	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	N	4/15/2008	6837.56	3.84	3.59	4420	510	426	138 D	12	< 1	3490 D	27	0.5	< 0.1	< 0.50	1.7	< 0.001
0719	N	7/15/2008	6837.36	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	N	10/13/2008	6837.08	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	N	1/19/2009	6836.28	3.67	3.46	4850 H	493	419	142	13	< 1	3230 D	31	0.14	0.2	< 0.5	22	< 0.001
0719	N	4/14/2009	6836.18	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	N	7/14/2009	6835.58	3.64	3.57	5090	483	454	134	12	< 1	3620 D	33	0.44	< 0.1	< 0.50	14.2	< 0.001
0719	N	10/13/2009	6835.23	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
0719	N	1/12/2010	6834.58	3.77	3.93	5230 D	515 D	574	146 D	14	< 5	3970 D	26	0.8	< 0.10	< 0.50	5.7	< 0.001
0719	N	4/13/2010	6834.48	4.51	4	5590 D	477	582	137	12	< 5	4060 D	32	1.07	< 0.1	< 0.50	8.8	< 0.001
0719	N	7/20/2010	6834.03	4.59	3.65	5770 DH	488	638	138	13	< 5	3920 D	29 D	1.19	< 0.1	< 0.50	3.6	< 0.001
0719	N	10/12/2010	6833.88	4.62	3.71	5470 D	496	614	149	13	< 5	3890 D	28 D	1.17	< 0.1	< 0.50	1.5	< 0.001
0719	N	1/11/2011	6833.684	4.97	3.99	5530 D	489	616	136	13	< 5	4020 D	32 D	0.86	< 0.1	< 0.50	0.6	< 0.001
0719	N	4/12/2011	6833.334	3.78	3.74	5780 D	493	631	147	14	< 5	3970 D	30 D	0.85	< 0.1	< 0.50	0.2	< 0.001
0719	N	7/19/2011	6832.984	3.89	3.92	5520 D	480	598	145	14	< 5	3900 D	30 D	0.9 D	< 0.5	< 0.50	0.4	< 0.001
0719	N	10/11/2011	6832.974	4.53	4.14	5530 D	474	610	145	14	< 5	3960 D	31 D	1.2 D	< 0.5	< 0.50	0.3	< 0.001
0719	N	1/10/2012	6832.63	3.94	3.90 H	5490 D	497	588	135	13	< 5	3970 D	30 D	0.76	< 0.1	< 0.50	0.3	< 0.001
0719	N	4/10/2012	6832.43	5.16	3.97 H	5990 D	481	664	138	13	< 5	4010 D	31 D	0.81	< 0.1	< 0.50	0.3	< 0.01

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	4/15/2008	< 0.01	< 0.005	0.56 D	< 0.05	5.74	< 0.1	0.6	< 0.001	< 0.1	0.0184	2.5	11.7	14.2	0.4	< 0.7 U	5.1
0719	N	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	N	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	N	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	N	4/14/2009	< 0.01	< 0.005	0.7	< 0.05	6.43	< 0.1	0.75	< 0.001	< 0.1	0.077	2.7	11	13.7	0.1 U	< 2 U	7.6
0719	N	7/14/2009	< 0.01	< 0.005	0.77	< 0.05	7.08	< 0.1	0.8	< 0.001	< 0.1	0.0966	3.3	12	15.3	< 0.04 U	1.0 U	6.9
0719	N	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
0719	N	1/12/2010	< 0.01	< 0.005	0.61	< 0.05	6.48	< 0.1	0.68	< 0.001	< 0.1	0.0365	3.1	14	17.1	0.2 U	< 0.2 U	5.1
0719	N	4/13/2010	< 0.01	< 0.005	0.69	< 0.05	7.06	< 0.1	0.8	< 0.001	< 0.1	0.0584	4.1	8.4	12.5	0.05 U	0.5 U	5.2
0719	N	7/20/2010	< 0.01	< 0.005	0.53	< 0.05	6.28	< 0.1	0.55	< 0.001	< 0.1	0.0204	6	5.1	11.1	0.1 U	0.5 U	5.9
0719	N	10/12/2010	< 0.01	< 0.005	0.42	< 0.05	5.6	< 0.1	0.47	< 0.001	< 0.1	0.0114	5.9	8.3	14.2	0.1 U	< 1 U	5.4
0719	N	1/11/2011	< 0.01	< 0.005	0.4	< 0.05	5.75	< 0.1	0.46	< 0.001	< 0.1	0.0061	5.4	10	15.4	< 0.02 U	0.7 U	5.9
0719	N	4/12/2011	< 0.01	< 0.005	0.38	< 0.05	5.92	< 0.1	0.41	< 0.001	< 0.1	0.004	5.4	13	18.4	< 0.03 U	1.3 U	6.1
0719	N	7/19/2011	< 0.01	< 0.005	0.4	< 0.05	5.5	< 0.1	0.53	< 0.001	< 0.1	0.0059	5.2	14	19.2	0.06 U	< 0.6 U	6
0719	N	10/11/2011	< 0.01	< 0.005	0.36	< 0.05	5.56	< 0.1	0.45	< 0.001	< 0.1	0.0058	4.9	12	16.9	0.04 U	< 0.3 U	3.9
0719	N	1/10/2012	< 0.01	< 0.005	0.38	< 0.05	5.68	< 0.1	0.46	0.001	< 0.1	0.0067	3.3	11	25.3	0.07 U	0.01 U	5
0719	N	4/10/2012	< 0.01	< 0.005	0.25	< 0.05	5.16	0.3	0.34	< 0.001	< 0.1	0.0048	4.3	9.7	23.7	0.9	0.9 U	4.1

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0719	N	7/17/2012	6832.18	5.59	5.29 H	6120	524	686	163	16	11	4070 D	32 D	0.78	<0.1	<0.50	0.2	<0.001
0719	N	10/16/2012	6832.18	5.76	5.18 H	5900	536	674	149 D	14	14	4180 D	30 D	0.7	<0.1	<0.50	0.1	<0.001
0009 D	N	7/18/1989	6910.50	4.60	4.56	7365	465	963	158	10.7	1	5061	100	0.79	2.5	< 1	43	< 0.001
0009 D	N	10/12/1989	6908.00	4.40	4.10	8276	439	1013	159	13.4	0	5508	108	0.87	2.4	< 1	90	< 0.001
0009 D	N	1/4/1990	6902.30	4.40	4.04	8330	431	940	160	10	< 1	5597	94.4	0.6	0.55	< 1	96	< 0.001
0009 D	N	4/10/1990	6910.00	4.40	4.41	7222	447	856	160	9.1	< 1	4688	99.1	1.08	6.3	< 1	46	< 0.001
0009 D	N	7/10/1990	6904.10	4.40	4.14	8932	473	1012	153	9.5	< 1	6126	101	0.37	0.26	< 1	155	< 0.001
0009 D	N	10/9/1990	6903.70	4.30	4.21	9372	435	1094	172	9.7	< 1	6551	124	0.24	0.1	< 1	153	< 0.001
0009 D	N	1/15/1991	6902.30	4.50	4.37	7769	469	887	159	11.6	< 1	5383	113	0.65	0.12	< 1	50.4	< 0.001
0009 D	N	4/9/1991	6903.70	4.20	4.18	9518	485	1106	163	10.7	< 1	6305	80.2	1.04	0.39	< 1	115	< 0.001
0009 D	N	7/9/1991	6899.40	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	N	10/14/1991	6899.30	4.10	4.35	8946	363	717	160	8.3	< 1	5904	191	2.3	< 0.01	< 1	128	< 0.001
0009 D	N	1/21/1992	6898.60	4.30	4.31	8112	444	1028	153	10.2	< 1	5648	108	1.11	1.24	< 1	55.1	0.001
0009 D	N	4/7/1992	6897.80	4.30	4.09	8533	426	767	185	11.5	< 1	5628	124	1.31	< 0.1	< 1	150	< 0.001
0106 D	N	7/18/1989	6909.10	4.20	4.66	4068	476	425	113	17.3	2	2928	45.7	1.12	67	< 1	8	< 0.001
0106 D	N	10/11/1989	6906.80	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	N	1/4/1990	6905.90	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	N	4/10/1990	6904.20	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	N	7/10/1990	6903.20	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	N	10/9/1990	6902.30	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	N	1/15/1991	6902.40	4.80	6.35	4121	545	383	112	13.3	65	2563	56	0.12	57.5	10	0.77	< 0.001
0106 D	N	4/9/1991	6903.00	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	N	7/9/1991	6901.90	4.90	5.89	4247	575	360	99	13.7	20	2770	156	0.49	44.3	6.22	0.9	< 0.001
0501 B	N	7/20/1989	6889.00	3.10	3.13	5722	443	492	106	17.5	0	4074	24.2	1.36	0.21	< 1	100	0.244
0501 B	N	10/8/1989	6887.90	3.20	3.29	5594	454	540	110	20.2	0	3758	36.2	1.06	0.2	< 1	70	0.046
0501 B	N	1/10/1990	6885.30	3.70	2.98	5622	449	529	115	14.9	< 1	3570	26.6	1.01	0.42	< 1	29	0.03
0501 B	N	4/10/1990	6884.60	4.40	2.86	5716	447	576	110	14.3	< 1	3592	30	1.02	0.23	< 1	22	0.026
0501 B	N	7/10/1990	6883.30	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	N	10/9/1990	6882.30	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	N	1/11/1991	6881.40	3.80	3.45	5791	484	592	105	16	< 1	3862	28.2	0.84	< 0.01	< 1	24.7	0.02
0501 B	N	4/10/1991	6880.70	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	N	7/9/1991	6879.90	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	N	10/17/1991	6879.40	3.60	3.81	6099	476	483	117	17.9	< 1	3822	37.9	1.3	< 0.01	< 1	52	0.022
0501 B	N	1/21/1992	6878.80	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	N	4/14/1992	6878.40	3.30	3.62	6113	417	472	100	17.8	< 1	3824	28	1.17	< 0.1	< 1	37.1	0.021
0501 B	N	7/14/1992	6877.90	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	N	10/13/1992	6877.50	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	N	1/21/1993	6877.10	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	N	4/14/1993	6876.90	3.40	3.01	5140	439	532	108	13.7	< 1	3936	29.7	0.99	< 0.1	< 1	42	0.04
0501 B	N	7/15/1993	6876.20	3.50	3.02	4976	492	544	105	15.8	< 1	3778	28	0.85	< 0.1	< 1	40.4	0.018

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	7/17/2012	<0.001	<0.005	0.28	0.002	5.63	0.2	0.33	0.001	<0.1	0.0034	3.9	7.7	19.3	0.3	0.3 U	5.7
0719	N	10/16/2012	<0.001	<0.005	0.31	<0.001	6.04	0.1	0.39	<0.001	<0.1	0.0029	3.4	15	18.4	0.3	0.7 U	4.5
0009 D	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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
0501 B	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation ft amsl	Field pH SU	Lab pH SU	Lab TDS mg/l	Ca mg/l	Mg mg/l	Na mg/l	K mg/l	HCO3 mg/l	SO4 mg/l	Cl mg/l	NH4 as N mg/l	NO3 as N mg/l	TTHMs (Chloroform) ug/l	Al mg/l	As mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0502 B	N	7/23/1989	6892.40	5.30	5.64	5131	559	501	186	13.7	63	3298	51	2.94	30	< 1	2.2	0.001
0502 B	N	10/11/1989	6888.10	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	N	1/3/1990	6885.70	4.90	5.38	5364	501	495	184	16.1	33.9	3347	52	2.8	39	< 1	16	0.009
0502 B	N	4/3/1990	6883.90	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	N	7/2/1990	6882.70	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	N	10/2/1990	6881.40	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	N	1/4/1991	6880.60	4.80	4.50	5193	457	469	165	23.7	< 1	3214	53	3.54	12.4	< 1	22.4	0.024
0502 B	N	4/9/1991	6880.00	4.40	4.57	5227	527	508	158	20	5	3410	36.3	4	14	< 1	15.7	0.003
0502 B	N	7/16/1991	6879.20	4.30	4.72	5129	520	526	138	25.8	5	3760	54.4	5.63	12.6	< 1	1	0.009
0502 B	N	10/14/1991	6878.10	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	N	1/14/1992	6876.70	3.70	4.03	4850	420	382	110	15.3	< 1	3470	114	6.3	2.4	< 1	74.7	0.023
0502 B	N	4/7/1992	6875.70	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	N	7/7/1992	6874.50	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	N	10/6/1992	6873.10	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	N	1/6/1993	6870.10	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	N	4/6/1993	6870.20	3.70	3.24	4837	409	367	111	19	< 1	3579	43	7.2	< 0.1	< 1	101	0.696
0502 B	N	7/13/1993	6869.30	4.10	4.11	4892	464	456	119	19.9	< 1	3741	51.1	6.97	< 0.1	< 1	87	0.018
0502 B	N	10/6/1993	6865.40	4.20	3.94	4832	450	432	121	16.1	< 1	3706	35.9	6.69	0.1	< 1	57.8	0.004
0502 B	N	1/5/1994	6867.20	4.10	2.89	5012	475	435	128	14.6	< 1	3674	45	6.63	18.2	< 1	57.1	0.007
0502 B	N	4/13/1994	6867.20	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	N	7/21/1994	6867.20	4.30	3.59	5603	552	501	116	14.2	< 1	4100	29	6.23	< 0.1	< 1	44.2	0.003
0502 B	N	10/5/1994	6867.20	4.30	4.23	5017	470	489	129	14	< 1	3739	29.4	5.86	< 0.1	< 1	26.7	0.004
0502 B	N	1/5/1995	6866.50	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	N	4/5/1995	6866.40	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	N	7/6/1995	6866.10	4.40	4.18	5090	455	478	118	13.1	< 1	3615	31	6.46	< 0.1	< 1	16.9	0.005
0502 B	N	10/4/1995	6866.10	4.50	4.42	4852	445	470	123	12.8	< 1	3555	29	5.39	0.3	< 1	13.3	0.001
0502 B	N	1/4/1996	6866.10	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	N	4/2/1996	6865.70	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	N	7/7/1996	6865.40	4.50	3.40	5317	460	475	120	14.2	< 1	3550	34	3.83	0.11	< 1	16.9	0.002
0502 B	N	10/1/1996	6865.50	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	N	1/21/1997	6865.70	4.80	4.01	5570	485	525	116	14	< 1	3755	32.1	4.54	< 0.1	< 1	18.3	0.002
0502 B	N	4/8/1997	6864.80	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	N	7/8/1997	6864.40	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	N	10/8/1997	6865.00	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	N	1/16/1998	6864.20	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	N	4/7/1998	6864.30	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	N	7/7/1998	6864.90	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	N	10/6/1998	6865.10	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	N	1/6/1999	6863.90	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	N	4/6/1999	6864.00	4.50	4.79	5880	472	545	108	13.2	4	3730	34.7	3.54	< 0.1	< 1	6.86	< 0.001

TABLE B.1
Zone 3 Data Summary, 1989-2012
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	5	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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
0502 B	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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	N	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