

Appendix C

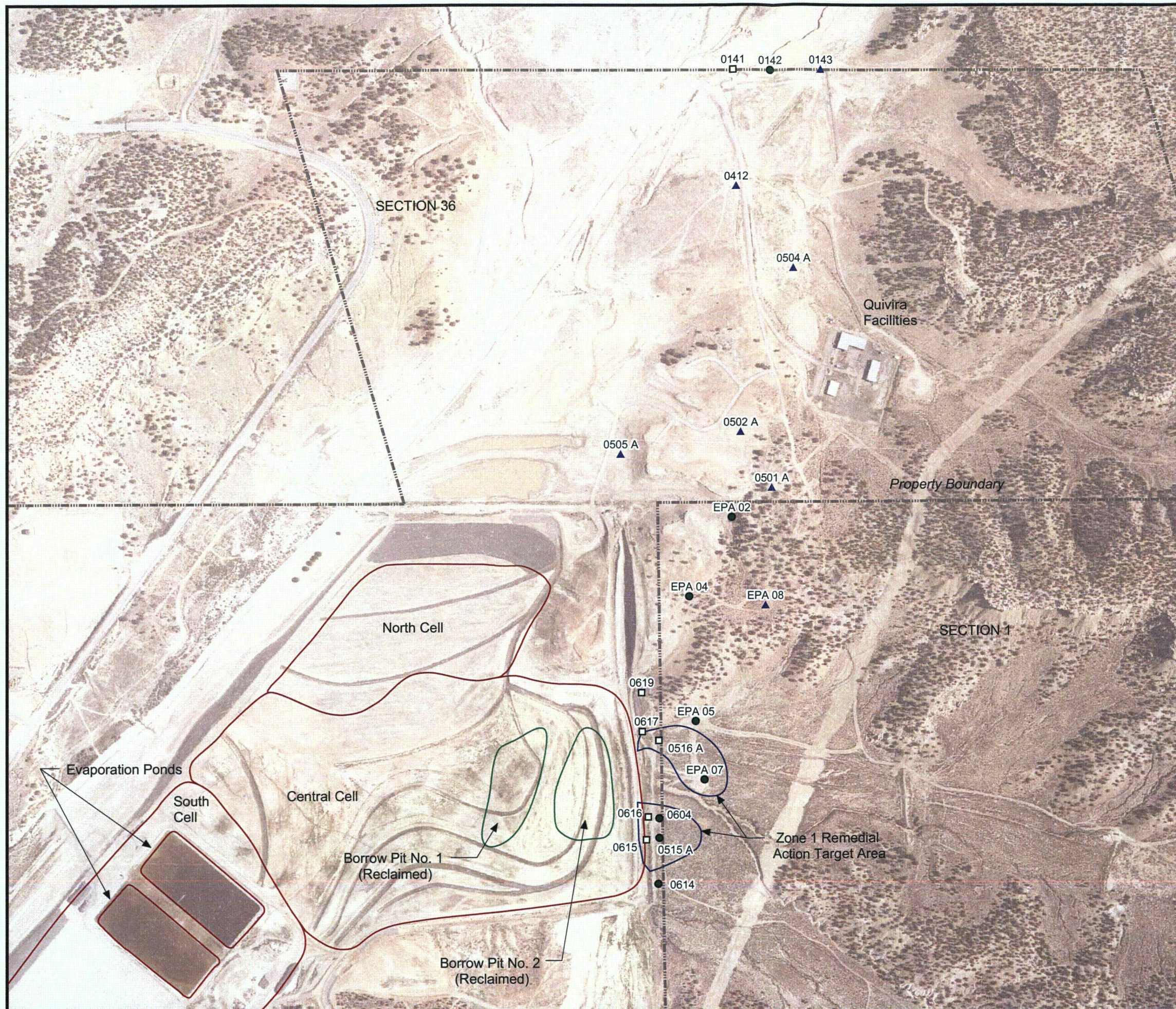
Zone 1 Monitoring Data

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

Remedial action has been monitored by measurement of groundwater levels and groundwater sampling and analyses at thirteen Zone 1 monitoring wells (Wells 515A, 516A, 604, 614, 619, EPA 2, EPA 4, EPA 5, EPA 7, EPA 8, 141, 142, and 143). This program was modified beginning in the second quarter of 2000 when the revised monitoring program was implemented. The wells included in the monitoring program for Zone 1 are listed in Table 15 of this 2011 Annual Review Report. See enclosed Figure C-1 for the current layout of the wells.

Table C.1 presents the quarterly water level and water quality data for the monitoring wells from the second quarter 1989, when the borrow pit was dewatered, through the fourth quarter 2011. Monitoring Well EPA 7 was used as an extraction well from September 1990 until October 1994; consequently, water level data for this well are available only for the time prior to its conversion to an extraction well, during times when the pump was shut off for maintenance, and after October 1994. The 2011 laboratory analytical data for the Zone 1 Monitoring Wells are presented at the end of this appendix.

Figure C-1



Legend

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

Aerial photo taken on August 1, 1996.

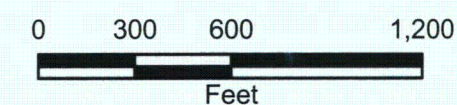


FIGURE C-1

Zone 1 2011 Monitoring Locations

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



*Notes for Table C.1**Zone 1 Data Summary, 1989 - 2011**General Notes:*

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

The changes are summarized as follows:

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

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

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

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

Specific Notes:

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

Table C.1

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As	Be
			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	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0141	N	7/22/1989	6,765.10	7.90	7.90	938	21	8	316	3.74	244	540	17.1	0.42	0.06	< 1	< 0.1	0.003	< 0.05
0141	N	10/12/1989	6,765.50	7.70	8.00	938	19.1	8.4	306	4.6	257	482	21	0.37	0.1	< 1	< 0.1	0.003	< 0.05
0141	N	1/3/1990	6,765.20	7.90	7.60	994	23.9	11	306	3.4	262	497	24.8	0.72	0.42	< 1	< 0.1	0.002	< 0.05
0141	N	4/3/1990	6,765.20	7.90	7.80	1024	24	9.8	304	3.6	262	458	32.9	0.76	0.44	< 1	< 0.1	0.003	< 0.05
0141	N	7/2/1990	6,764.90	7.60	7.72	1036	25.2	11	321	3.9	257	487	37.2	0.1	0.26	< 1	< 0.1	0.007	< 0.05
0141	N	10/2/1990	6,764.90	7.60	7.65	1023	21.5	10.1	305	3.7	243	509	42	0.21	0.29	< 1	< 0.1	0.006	< 0.05
0141	N	1/16/1991	6,764.90	7.50	7.89	1051	25.6	11.9	337	5.8	248	534	65.7	0.3	0.35	< 1	< 0.1	0.002	< 0.01
0141	N	4/3/1991	6,764.90	7.70	8.10	1070	23.3	10.6	311	3.1	254	530	41	0.32	0.18	< 1	< 0.1	0.003	< 0.01
0141	N	7/16/1991	6,764.60	7.60	7.54	1059	23.1	10.1	305	3.4	248	550	43.5	0.4	0.17	< 1	< 0.1	0.003	< 0.01
0141	N	10/14/1991	6,766.70	7.50	7.99	1133	22.7	11.3	325	3.2	195	539	105	0.61	0.26	< 1	< 0.1	< 0.001	< 0.01
0141	N	1/14/1992	6,770.80	7.40	7.62	1042	25.7	13.1	321	3.5	249	525	88.2	1.87	< 0.01	< 1	< 0.1	< 0.001	< 0.01
0141	N	4/7/1992	6,772.10	7.40	7.46	1123	25.8	13.9	379	3.8	326	511	116	0.46	< 0.1	< 1	< 0.1	0.002	< 0.01
0141	N	7/7/1992	6,772.80	7.50	7.80	1175	26.3	13.6	414	4.69	239	506	118	0.68	< 0.1	< 1	< 0.1	0.002	< 0.01
0141	N	10/6/1992	6,774.20	7.60	7.61	1141	31.7	13.6	360	3.4	246	525	108	0.23	< 0.1	< 1	< 0.1	0.002	< 0.01
0141	N	1/5/1993	6,775.10	7.70	7.93	1370	34.1	14.3	420	4.6	248	638	68.9	0.13	< 0.1	< 1	< 0.1	0.001	< 0.01
0141	N	4/6/1993	6,775.90	7.80	8.18	1100	23.4	10	371	2.5	244	495	91.3	0.4	< 0.1	< 1	< 0.1	0.002	< 0.01
0141	N	7/13/1993	6,776.50	7.70	7.12	1071	23.8	11.1	343	2.9	257	575	79.1	< 0.05	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0141	N	10/6/1993	6,776.80	7.80	7.31	1105	27.2	12	304	2.7	257	541	64	0.47	0.16	< 1	< 0.1	< 0.001	< 0.01
0141	N	1/5/1994	6,775.70	7.70	7.78	1101	28.7	12.8	313	2.9	237	550	71	0.39	0.73	< 1	< 0.1	< 0.001	< 0.01
0141	N	4/13/1994	6,778.30	7.70	7.76	1017	35.1	11.7	301	2.4	234	499	49.4	0.18	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0141	N	7/20/1994	6,778.70	7.70	7.34	1010	33.3	10.7	312	2.9	240	548	42.8	0.34	0.13	< 1	< 0.1	< 0.001	< 0.01
0141	N	10/4/1994	6,779.20	7.60	8.02	1076	25.9	11.5	342	3.4	260	537	43.2	0.15	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0141	N	1/4/1995	6,779.60	7.50	7.93	995	26	11	321	3.3	257	493	39.8	0.42	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0141	N	4/6/1995	no data	7.60	8.15	1038	25	12.6	291	3.1	254	507	28.2	0.62	5.19	< 1	< 0.1	< 0.001	< 0.01
0141	N	7/6/1995	6,780.30	7.60	8.21	1073	28.5	13.8	306	3.2	256	528	30.4	0.24	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0141	N	10/3/1995	6,780.50	7.20	8.30	1038	22.8	10	297	3	261	485	25.9	0.46	< 0.1	< 1	< 0.1	0.004	< 0.01
0141	N	1/3/1996	6,781.00	7.20	8.24	1097	26.6	12.1	319	3.2	255	554	15.4	0.08	0.32	< 1	< 0.1	0.002	< 0.01
0141	N	4/2/1996	6,781.30	7.20	8.36	1008	25.5	11.4	283	3.3	259	526	29.1	0.39	0.16	< 1	< 0.1	< 0.001	< 0.01
0141	N	7/7/1996	6,781.50	8.40	7.75	1034	26.2	11.1	288	3	254	481	23.2	0.36	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0141	N	10/1/1996	6,781.60	7.30	8.07	1010	25.1	11.7	300	3.1	254	498	25.4	0.31	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0141	N	1/21/1997	6,782.30	6.70	7.93	903	23.9	10.6	303	3.17	256	500	22.5	0.3	< 0.1	< 1	< 0.1	0.002	< 0.01
0141	N	4/8/1997	6,782.30	7.00	8.25	962	21.5	9.6	293	3.1	256	479	22.4	0.26	0.14	< 1	< 0.1	< 0.001	< 0.01
0141	N	7/8/1997	6,782.20	7.90	8.33	977	25.2	11.3	304	3.2	251	516	24.4	1.33	0.13	< 1	< 0.1	< 0.001	< 0.01
0141	N	10/7/1997	6,782.50	7.10	8.13	997	26.2	12	277	2.94	256	504	22.8	0.2	0.19	< 1	< 0.1	< 0.001	< 0.01
0141	N	1/15/1998	6,782.90	7.80	8.29	1000	27	12.1	292	3.3	259	541	26.3	0.17	0.25	< 1	< 0.1	< 0.001	< 0.01
0141	N	4/7/1998	6,783.20	7.50	8.22	999	21.8	9.9	285	2.9	259	490	20.3	0.19	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0141	N	7/7/1998	6,783.20	8.00	8.28	976	23	10.6	302	3.2	259	469	20.9	0.39	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0141	N	10/6/1998	6,783.20	7.40	8.17	1030	28	12.4	296	3.7	261	545	22.9	3.48	0.34	< 1	< 0.1	0.009	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0141	N	7/22/1989	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0069	< 0.2	2.9	2.9	0.6	< 1	2
0141	N	10/12/1989	< 0.01	< 0.01	< 0.05	0.05	0.02	< 0.05	0.001	< 0.1	0.019	6.5	< 1	6.5	< 0.2	1.2	7.1
0141	N	1/3/1990	< 0.01	< 0.01	< 0.05	0.07	0.02	< 0.05	< 0.001	< 0.1	0.014	0.6	< 1	0.6	< 0.2	2	1.7
0141	N	4/3/1990	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.001	< 0.1	0.008	0.6	< 1	0.6	1.6	< 1	2.5
0141	N	7/2/1990	< 0.01	< 0.01	< 0.05	0.18	< 0.1	< 0.05	0.001	< 0.1	0.0078	0.5	< 1	0.5	< 0.2	< 1	< 1
0141	N	10/2/1990	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	0.001	< 0.1	0.007	0.5	< 1	0.5	< 0.2	< 1	< 1
0141	N	1/16/1991	< 0.01	0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0065	0.2	< 1	0.2	< 0.2	< 1	< 1
0141	N	4/3/1991	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.005	0.4	< 1	0.4	< 0.2	< 1	< 1
0141	N	7/16/1991	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	2	< 1
0141	N	10/14/1991	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.001	< 0.1	0.022	0.8	< 1	0.8	< 0.2	< 1	< 1
0141	N	1/14/1992	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.002	< 0.1	0.005	8.4	3.7	12.1	< 0.2	< 1	9
0141	N	4/7/1992	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	7/7/1992	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.005	2.3	1.5	3.8	< 0.2	< 1	2.5
0141	N	10/6/1992	< 0.01	< 0.01	< 0.05	0.2	< 0.1	< 0.05	0.001	< 0.1	0.01	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	1/5/1993	< 0.01	< 0.01	< 0.05	0.41	< 0.1	< 0.05	0.007	< 0.1	0.011	0.4	< 1	0.4	< 0.2	< 1	< 1
0141	N	4/6/1993	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	< 1	< 1
0141	N	7/13/1993	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	< 0.001	< 0.1	0.005	< 0.2	2.5	2.5	< 0.2	1	< 1
0141	N	10/6/1993	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.6	< 1	0.6	< 0.2	< 1	< 1
0141	N	1/5/1994	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.005	0.4	< 1	0.4	< 0.2	6.2	< 1
0141	N	4/13/1994	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.008	0.5	< 1	0.5	< 0.2	1.7	< 1
0141	N	7/20/1994	< 0.01	< 0.01	< 0.05	0.2	< 0.1	< 0.05	0.001	< 0.1	0.004	1.5	< 1	1.5	< 0.2	< 1	1.7
0141	N	10/4/1994	< 0.01	< 0.01	< 0.05	0.26	< 0.1	< 0.05	< 0.001	< 0.1	0.003	0.5	< 1	0.5	< 0.2	< 1	< 1
0141	N	1/4/1995	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	< 0.001	< 0.1	0.016	0.7	< 1	0.7	< 0.2	< 1	< 1
0141	N	4/6/1995	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.004	0.4	< 1	0.4	< 0.2	< 1	< 1
0141	N	7/6/1995	< 0.01	< 0.01	< 0.05	0.3	< 0.1	< 0.05	0.001	< 0.1	0.0033	1	< 1	1	< 0.2	< 1	< 1
0141	N	10/3/1995	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0034	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	1/3/1996	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	0.3	1.4	1.7	0.6	< 1	1.1
0141	N	4/2/1996	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0016	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	7/7/1996	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.0039	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	10/1/1996	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.007	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	1/21/1997	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	4/8/1997	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	7/8/1997	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	28	< 1
0141	N	10/7/1997	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.005	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	1/15/1998	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0031	< 0.2	< 1	0	< 0.2	< 1	2.8
0141	N	4/7/1998	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0029	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	7/7/1998	< 0.005	< 0.01	< 0.05	0.09	< 0.1	0.05	< 0.001	< 0.1	0.0027	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	10/6/1998	< 0.005	< 0.01	< 0.05	0.37	< 0.1	< 0.05	< 0.001	< 0.1	0.334	1.5	< 1	1.5	< 0.2	< 1	< 1

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As	Be
			ft amsl	SU	SU	mg/l	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	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0141	N	1/5/1999	6,783.60	7.80	8.06	1070	30.5	13.1	273	3.7	253	514	25.2	0.07	< 0.1	< 1	< 0.1	0.007	< 0.01
0141	N	4/6/1999	6,782.90	7.60	8.13	1070	31.9	16.3	299	3.4	249	516	25.2	0.23	0.21	< 1	< 0.1	0.002	< 0.01
0141	N	7/13/1999	6,783.54	6.80	8.28	968	29.7	14.2	285	7.5	258	507	30.2	0.37	< 0.1	< 1	< 0.1	0.004	< 0.01
0141	N	1/4/2000	6,780.50	7.00	8.38	2280	19.7	6.4	665	7	228	1150	176	< 0.05	0.28	< 1	< 0.1	< 0.001	< 0.01
0142	N	10/12/1989	6,759.80	7.70	7.87	1096	27.9	13.4	333	5.1	247	580	19.2	0.2	0.38	< 1	< 0.1	0.001	< 0.05
0142	N	1/3/1990	6,759.80	7.60	7.72	1130	30.6	13.9	332	3.9	245	579	20.6	0.34	0.4	< 1	0.1	0.002	< 0.05
0142	N	4/3/1990	6,759.60	7.80	7.92	1265	47.4	23.1	318	4.4	281	648	18.5	0.71	0.34	< 1	< 0.1	0.001	< 0.05
0142	N	7/2/1990	6,759.40	7.60	8.00	1106	32.2	13.6	317	4	253	564	18.1	0.17	0.31	< 1	0.1	0.001	< 0.05
0142	N	10/2/1990	6,759.60	7.70	7.85	1116	22.8	11	310	3.4	234	590	18.8	0.09	0.33	< 1	0.1	0.001	< 0.05
0142	N	1/3/1991	6,759.50	7.70	7.10	1113	29	14.3	318	11.9	244	607	18	0.36	0.33	< 1	< 0.1	0.001	< 0.01
0142	N	4/9/1991	6,759.80	7.70	8.22	1015	31.1	13.7	308	3.9	250	588	17.4	0.21	0.25	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/16/1991	6,759.60	7.70	7.88	1085	35.2	16.8	286	3.7	271	643	17.2	0.34	0.21	< 1	< 0.1	< 0.001	< 0.01
0142	N	10/14/1991	6,761.00	7.60	8.07	1110	31.6	14.8	297	3.4	271	590	15.3	0.3	0.14	< 1	< 0.1	< 0.001	< 0.01
0142	N	1/14/1992	6,764.10	7.40	7.85	1071	27.6	13.8	296	3.3	259	595	16.4	0.95	0.37	< 1	< 0.1	< 0.001	< 0.01
0142	N	4/7/1992	6,765.70	7.50	8.19	1023	28.8	15.6	335	4.5	256	579	17	0.25	< 0.1	< 1	< 0.1	0.001	< 0.01
0142	N	7/7/1992	no data	7.60	8.17	1101	35.5	19	355	4.84	263	588	16	0.99	< 0.1	< 1	< 0.1	0.001	< 0.01
0142	N	10/6/1992	6,767.90	7.80	8.06	1100	37	17.8	332	3.2	260	588	16.8	0.08	< 0.1	< 1	< 0.1	0.001	< 0.01
0142	N	1/5/1993	6,769.00	7.80	8.14	1019	27.1	11.9	279	3.9	256	542	17.4	0.31	< 0.1	< 1	< 0.1	0.002	< 0.01
0142	N	4/6/1993	6,770.00	7.80	8.08	1084	31.8	14.8	326	2.6	254	560	16.1	0.31	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/13/1993	6,770.50	7.80	7.09	1066	33.5	15.4	293	2.9	264	597	17.2	< 0.05	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	10/6/1993	6,771.00	7.80	7.60	1074	32.3	13.9	295	2.6	255	566	15.9	0.13	0.17	< 1	< 0.1	< 0.001	< 0.01
0142	N	1/5/1994	6,770.70	7.80	8.03	1056	33.7	15.4	307	2.8	246	563	16.4	0.31	0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	4/13/1994	6,772.60	7.90	7.84	989	31	13.5	287	2.5	234	531	16.5	0.06	0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/20/1994	6,773.00	7.70	8.05	1088	34.2	14.1	286	2.8	242	538	15.8	0.08	0.45	7.09	< 0.1	< 0.001	< 0.01
0142	N	10/4/1994	6,773.80	7.70	8.15	1032	31.2	14	322	3.4	256	589	16.9	0.07	0.32	< 1	< 0.1	< 0.001	< 0.01
0142	N	1/4/1995	6,774.30	7.70	8.01	1036	29	12.2	325	3.3	251	550	17.4	0.14	0.2	< 1	< 0.1	< 0.001	< 0.01
0142	N	4/6/1995	6,774.70	7.80	8.11	1327	59	31	319	4.2	277	714	13.4	0.34	0.38	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/6/1995	6,774.80	7.70	8.32	1230	43	20.2	318	3.6	260	625	16.5	0.08	0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	10/3/1995	6,775.30	7.30	8.30	1222	45.5	21.9	309	3.7	275	617	15.3	0.12	0.2	< 1	< 0.1	0.003	< 0.01
0142	N	1/3/1996	6,775.50	7.80	8.05	1018	23.2	11.9	302	3	253	492	25.3	0.2	0.19	< 1	< 0.1	0.001	< 0.01
0142	N	4/2/1996	6,776.10	7.10	8.42	1074	28.3	12.7	298	3.2	250	593	17.7	0.19	0.25	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/7/1996	6,776.10	7.90	7.72	1075	26.1	11.4	300	3.1	243	481	23.2	0.26	0.44	< 1	< 0.1	< 0.001	< 0.01
0142	N	10/1/1996	6,776.20	7.50	8.12	1060	25.2	11.3	318	3.2	245	540	21.3	0.19	0.2	< 1	< 0.1	< 0.001	< 0.01
0142	N	1/21/1997	6,777.10	6.50	7.86	1020	32.8	15.3	322	3.5	240	567	15.9	0.17	0.15	< 1	< 0.1	0.002	< 0.01
0142	N	4/8/1997	6,777.20	6.60	8.28	1040	26.8	12	312	3.3	249	551	16.6	0.15	0.29	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/8/1997	6,777.20	8.10	8.32	1030	27	12	322	3.4	240	575	18.6	0.25	0.12	< 1	< 0.1	< 0.001	< 0.01
0142	N	10/7/1997	6,773.00	7.40	8.19	1070	27.6	12.1	299	3.06	248	572	16.1	0.21	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	1/15/1998	6,774.00	7.80	8.32	1170	39.6	17.9	330	3.8	261	673	20.9	0.35	0.2	< 1	< 0.1	< 0.001	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha	
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l		pci/l
			NRC Standard		0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4		5
EPA Standard		0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15		
0141	N	1/5/1999	< 0.005	< 0.01	< 0.05	0.43	0.14	< 0.05	< 0.001	< 0.1	0.014	1.5	< 1	1.5	< 0.2	< 1	< 1	
0141	N	4/6/1999	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.0059	1	< 1	1	< 0.2	< 1	< 1	
0141	N	7/13/1999	< 0.005	< 0.01	< 0.05	0.27	< 0.1	< 0.05	0.001	< 0.1	0.0541	1.1	< 1	1.1	< 0.2	< 1	< 1	
0141	N	1/4/2000	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.001	< 0.1	0.0183	< 0.2	< 1	0	< 0.2	< 1	< 1	
0142	N	10/12/1989	< 0.01	< 0.01	< 0.05	0.02	0.03	< 0.05	< 0.001	< 0.1	0.005	0.3	< 1	0.3	< 0.2	3.1	1.1	
0142	N	1/3/1990	< 0.01	< 0.01	< 0.05	0.03	0.02	< 0.05	0.001	< 0.1	0.006	1.3	1.1	2.4	< 0.2	2.9	1.9	
0142	N	4/3/1990	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.003	< 0.1	0.008	1.3	< 1	1.3	< 0.2	< 1	2.1	
0142	N	7/2/1990	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0019	0.5	< 1	0.5	< 0.2	< 1	< 1	
0142	N	10/2/1990	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.003	< 0.2	< 1	0	< 0.2	< 1	< 1	
0142	N	1/3/1991	0.02	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0032	< 0.2	< 1	0	< 0.2	< 1	< 1	
0142	N	4/9/1991	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.001	< 0.1	0.0029	< 0.2	< 1	0	< 0.2	< 1	< 1	
0142	N	7/16/1991	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.003	1.3	< 1	1.3	< 0.2	1.6	< 1	
0142	N	10/14/1991	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.015	1.5	< 1	1.5	< 0.2	< 1	< 1	
0142	N	1/14/1992	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.002	0.2	< 1	0.2	< 0.2	< 1	< 1	
0142	N	4/7/1992	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	< 0.2	< 1	0	< 0.2	< 1	< 1	
0142	N	7/7/1992	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.003	0.6	3.1	3.7	< 0.2	< 1	< 1	
0142	N	10/6/1992	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	< 0.0003	0.4	1.1	1.5	< 0.2	1.4	< 1	
0142	N	1/5/1993	< 0.01	0.01	< 0.05	0.01	< 0.1	< 0.05	0.007	< 0.1	0.01	1.5	< 1	1.5	< 0.2	< 1	1.6	
0142	N	4/6/1993	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.8	< 1	0.8	< 0.2	2.6	< 1	
0142	N	7/13/1993	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1	
0142	N	10/6/1993	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.1	< 1	1.1	< 0.2	2.9	< 1	
0142	N	1/5/1994	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.7	< 1	0.7	< 0.2	< 1	1.4	
0142	N	4/13/1994	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	1.9	2.4	< 0.2	1.6	3.5	
0142	N	7/20/1994	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.8	< 1	0.8	< 0.2	1.2	< 1	
0142	N	10/4/1994	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	< 1	< 1	
0142	N	1/4/1995	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.4	1.8	2.2	< 0.2	< 1	3.3	
0142	N	4/6/1995	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.6	2.5	3.1	< 0.2	< 1	4.5	
0142	N	7/6/1995	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	< 0.0003	1.2	< 1	1.2	0.4	< 1	< 1	
0142	N	10/3/1995	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.9	3.4	4.3	< 0.2	< 1	< 1	
0142	N	1/3/1996	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0034	0.4	< 1	0.4	0.6	< 1	< 1	
0142	N	4/2/1996	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	< 0.2	< 1	0	< 0.2	< 1	< 1	
0142	N	7/7/1996	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0007	0.5	< 1	0.5	< 0.2	< 1	< 1	
0142	N	10/1/1996	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.003	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1	
0142	N	1/21/1997	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1	
0142	N	4/8/1997	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1	
0142	N	7/8/1997	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1	
0142	N	10/7/1997	< 0.01	< 0.01	0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.001	< 0.2	< 1	0	< 0.2	< 1	< 1	
0142	N	1/15/1998	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	1.8	< 1	1.8	< 0.2	< 1	< 1	

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Cl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As	Be
			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	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0142	N	4/7/1998	6,773.40	7.80	8.26	1100	26	11.6	314	3.2	245	546	18	0.13	0.14	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/7/1998	6,773.70	8.10	8.27	1070	25.8	11.7	325	3.4	245	533	17	0.18	0.22	< 1	< 0.1	0.001	< 0.01
0142	N	10/6/1998	6,774.20	7.27	8.29	1170	36	17.9	325	4	267	640	18.1	2.04	0.31	< 1	< 0.1	0.002	< 0.01
0142	N	1/5/1999	6,774.00	8.00	8.21	1210	37.7	17.9	309	3.6	273	628	18.2	0.12	0.24	< 1	< 0.1	0.002	< 0.01
0142	N	4/6/1999	6,774.20	8.00	8.15	1120	33	15.8	313	3.5	250	562	22.7	0.21	0.25	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/13/1999	6,774.40	6.80	8.27	1030	32.4	15.8	299	6.7	262	498	24.5	0.26	0.16	< 1	< 0.1	0.001	< 0.01
0142	N	10/5/1999	6,775.00	7.60	8.11	1130	29.6	14.6	308	3.7	251	557	21.4	0.26	0.13	< 1	< 0.1	< 0.001	< 0.01
0142	N	1/4/2000	6,774.40	7.20	8.36	1500	82.2	41.7	319	7.8	309	797	26.6	1.51	0.11	< 1	< 0.1	< 0.001	< 0.01
0142	N	5/10/2000	6,780.70	8.40	8.27	1080	27.2	12.6	306	3.25	242	613	19.1	0.24	< 0.1	< 1	1.18	< 0.001	< 0.01
0142	Dup	5/10/2000	no data	8.32	8.26	1110	26.5	12.2	307	3.1	239	611	18.5	0.25	< 0.1	< 1	0.7	< 0.001	< 0.01
0142	N	7/10/2000	6,780.50	8.13	7.99	1060	25.8	11.8	318	3.1	242	543	19.9	0.28	< 0.1	< 1	0.75	< 0.001	< 0.01
0142	Dup	7/10/2000	no data	8.13	8.06	1060	24.3	11.2	314	3.01	240	537	19.3	0.29	< 0.1	< 1	0.39	< 0.001	< 0.01
0142	N	10/2/2000	6,780.60	8.08	7.84	1310	52.7	46.8	314	4.9	220	676	17.7	0.3	< 0.1	< 1	0.18	0.003	< 0.01
0142	N	1/16/2001	6,781.20	8.23	7.97	1060	20.7	9	309	3.6	242	594	21.6	0.27	< 0.1	< 1	0.2	0.001	< 0.01
0142	N	4/2/2001	6,781.30	8.10	8.01	1050	19.4	8.8	314	2.6	234	544	18.8	0.37	< 0.1	< 1	0.1	0.002	< 0.01
0142	N	7/16/2001	6,781.05	7.96	8.01	1080	19.9	9	297	3.7	233	550	24.7	0.27	< 0.1	< 1	0.1	0.001	< 0.01
0142	N	10/3/2001	6,781.20	7.80	8.10	1060	18.2	8.5	272	3.5	240	555	24.7	0.19	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	1/7/2002	6,781.15	8.23	7.90	1060	19.8	8.7	294	3.4	236	560	21.3	0.2	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	4/8/2002	6,781.69	7.59	7.59	1070	19.4	8.5	307	2.9	239	556	21.5	0.26	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/15/2002	6,781.60	7.11	8.06	1060	18.6	8.5	313	4.5	239	607	18.6	0.15	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	10/14/2002	6,781.53	7.09	8.00	998	20.4	8.7	308	3.1	237	536	17.7	0.11	< 0.1	< 1	< 0.1	0.004	< 0.01
0142	N	1/13/2003	6,781.66	7.48	7.93	1060	24.1	8.6	313	3.3	255	526	21.3	< 0.05	< 0.1	< 1	1.1	0.003	< 0.01
0142	N	4/14/2003	6,781.98	7.89	7.76	1080	22.5	8.7	315	5.6	245	555	18.4	< 0.05	0.2	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/15/2003	6,781.85	7.63	7.99	1100	23.1	8.7	315	4.3	245	517	20.8	0.17	0.2	< 1	0.4	< 0.001	< 0.01
0142	N	10/13/2003	6,782.14	7.85	8.04	1070	24.5	10	319	3.1	235	553	21.6	< 0.05	< 0.1	< 1	0.4	< 0.001	< 0.01
0142	N	1/13/2004	6,782.00	7.80	7.97	1070	24.8	10.8	329	5.1	245	579	18	< 0.05	< 0.10	< 1.0	< 0.1	0.002	< 0.01
0142	N	4/12/2004	6,782.40	7.76	7.28	1030	23.5	9.5	308	4.2	255	532	20.6	< 0.05	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0142	N	7/19/2004	6,782.17	8.32	7.75	1070	22.4	9.4	330	2.9	237	549	19	0.19	< 0.10	< 1.0	< 0.1	< 0.001	< 0.01
0142	N	10/11/2004	6,782.35	8.02	7.99	1090	21	9.5	308	3.8	233	527	19	0.09	< 0.10	< 1.0	< 0.1	< 0.001	< 0.01
0142	N	1/10/2005	6,782.41	7.72	7.89	1070	22.4	9.7	326	3	241	540	19	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001	< 0.01
0142	N	4/12/2005	6,782.45	7.55	7.82	1070	23.6	10.1	335	3.2	235	568	16	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001	< 0.01
0142	N	7/18/2005	6,782.40	7.29	7.93	1060	22.5	9.9	326	2.8	239	535	15	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001	< 0.01
0142	N	10/10/2005	6,782.69	7.53	7.94	1050	22.8	10.3	322	3.2	250	562	19	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001	< 0.01
0142	N	1/16/2006	6,782.66	7.46	8.29	1040	22	9.9	312	3.1	250	521	17	< 0.05	1.4	< 1.0	< 0.1	< 0.001	< 0.01
0142	N	4/10/2006	6,782.62	7.55	7.68	1030	24.3	11.2	310	3	247	546	18	< 0.05	< 0.1	< 1.0	< 0.1	< 0.001	< 0.01
0142	N	7/24/2006	6,782.43	7.63	7.45	998	27.4	12.6	343	3.5	249	583	19	0.08	< 0.1	< 1.0	< 0.1	0.001	< 0.01
0142	N	10/9/2006	6,782.55	7.62	7.79	986	29.1	13.9	322	3.5	249	578	18	0.2	< 0.1	< 0.5	< 0.1	0.001	< 0.01
0142	N	1/15/2007	6,782.42	7.79	7.92	1070	31	15.4	315	3.9	251	599	19	0.14	0.1	< 0.5	< 0.1	< 0.001	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0142	N	4/7/1998	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	0.9	< 1	0.9	< 0.2	< 1	< 1
0142	N	7/7/1998	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	10/6/1998	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0051	1.1	< 1	1.1	< 0.2	< 1	< 1
0142	N	1/5/1999	< 0.005	< 0.01	< 0.05	0.21	0.14	< 0.05	< 0.001	< 0.1	0.004	2.1	3	5.1	< 0.2	< 1	< 1
0142	N	4/6/1999	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/13/1999	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	0.0009	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	10/5/1999	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	0.7	< 1	0.7	< 0.2	< 1	< 1
0142	N	1/4/2000	< 0.005	< 0.01	< 0.05	0.1	0.14	< 0.05	< 0.001	< 0.1	0.0077	2.4	1.5	3.9	< 0.2	< 1	2.5
0142	N	5/10/2000	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	Dup	5/10/2000	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	0.7	< 1	0.7	< 0.2	< 1	< 1
0142	N	7/10/2000	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	0.9	< 1	0.9	< 0.2	< 1	1.4
0142	Dup	7/10/2000	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0024	0.7	< 1	0.7	< 0.2	< 1	1.4
0142	N	10/2/2000	< 0.005	< 0.01	< 0.05	0.39	0.76	< 0.05	< 0.001	< 0.1	0.0019	0.9	< 1	0.9	< 0.2	< 1	< 1
0142	N	1/16/2001	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	0.4	3	3.4	< 0.2	< 1	< 1
0142	N	4/2/2001	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/16/2001	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142	N	10/3/2001	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0142	N	1/7/2002	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.6	1.9	2.5	< 0.2	< 1	< 1
0142	N	4/8/2002	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142	N	7/15/2002	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142	N	10/14/2002	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0003	0.8	< 1	0.8	< 0.2	< 1	< 1
0142	N	1/13/2003	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1	< 1	1	< 0.2	< 1	1.9
0142	N	4/14/2003	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0003	< 0.2	< 1	0	< 0.2	< 1	1.1
0142	N	7/15/2003	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1.0
0142	N	10/13/2003	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0061	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0142	N	1/13/2004	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0005 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142	N	4/12/2004	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/19/2004	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
0142	N	10/11/2004	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142	N	1/10/2005	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1.0	0.5	< 0.2	< 1.0	< 1.0
0142	N	4/12/2005	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142	N	7/18/2005	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142	N	10/10/2005	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142	N	1/16/2006	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	< 0.2	2.3	2.3	< 0.2	< 1.0	< 1.0
0142	N	4/10/2006	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	2.8	2.8	< 0.2	< 1.0	< 1.0
0142	N	7/24/2006	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	2.8	2.8	< 0.2	< 1.0	< 1.0
0142	N	10/9/2006	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.002	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	1/15/2007	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water	Field	Lab	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4	NO3	TTHMs	Al	As	Be	
			Elevation	pH	pH												(Chloroform)			
			ft amsl	SU	SU	mg/l	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	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05	0.05	
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017	
0142	N	4/16/2007	6,782.60	7.66	7.79	1070	32.4	17	325	4.1	257	644	21	0.23	<0.1	<0.5	<0.1	<0.001	<0.01	
0142	N	7/17/2007	6,782.30	7.51	7.42	1070	33.7	16.9	322	3.5	259	603	17	0.17	0.2	<0.5	<0.1	0.002	<0.01	
0142	N	10/9/2007	6,782.23	7.14	7.53	1090	33.9	17	305	3.5	250	570	16	0.15	0.3	<0.5	<0.1	0.001	<0.01	
0142	N	1/22/2008	6,781.90	7.62	7.56	1080	34.9	16.7	320	3.9	257	563 D	23 D	0.14	0.3	< 0.5	< 0.1	< 0.001	< 0.01	
0142	N	4/16/2008	6,782.55	7.53	7.5	1060	38.9	19	346 D	3.5	250	617 D	15	0.18	0.1	< 0.5	< 0.1	0.002	< 0.01	
0142	N	7/15/2008	6,782.15	7.42	7.76	1100	40	20	341 D	4	266	638 D	16	0.23	< 0.1	< 0.5	< 0.1	< 0.003	< 0.01	
0142	N	10/14/2008	6,782.20	7.50	7.78	1130	40	20	338 D	3	261	629 D	15	0.3	< 0.1	< 0.5	< 0.1	0.001	< 0.01	
0142	N	1/20/2009	6,782.10	7.75	7.33	1200	42	23	328	4	261	714 D	12	0.18	<0.1	<0.5	0.1	<0.001	<0.01	
0142	N	4/14/2009	6,782.50	7.68	7.26	1180	41	21	302	3	272	642 D	16	0.29	0.2	<0.50	<0.1	<0.001	<0.01	
0142	N	7/14/2009	6,782.20	7.88	7.48	1160 H	44	22	336	4	271	657 D	15	0.36	<0.1	<0.50	<0.1	<0.001	<0.01	
0142	N	10/13/2009	6,782.30	7.76	7.81	1180 H	43	22	335	4	281	624 D	19	0.28	<0.1	<0.50	<0.1	<0.001	<0.01	
0142	N	1/12/2010	6,782.10	7.78	7.82	1180	44	22	319	4	280	650 D	15	0.33	<0.10	<0.50	0.2	<0.001	<0.01	
0142	N	4/13/2010	6,782.40	7.96	7.6	1220	46	23	334	4	302	686 D	22	0.44	<0.1	<0.50	0.4	<0.001	<0.01	
0142	N	7/20/2010	6,782.15	7.67	7.2	1210 H	47	25	317	4	294	659 D	16	0.38	<0.1	<0.50	<0.1	<0.001	<0.01	
0142	N	10/12/2010	6,782.20	7.76	7.74	1260	48	24	344	4	298	695 D	15	0.32	0.1	<0.50	0.3	<0.001	<0.01	
0142	N	1/12/2011	6,782.10	7.84	7.86	1160	49	25	326	4	285	664 D	17	0.46	<0.1	<0.50	<0.1	<0.001	<0.01	
0142	N	4/12/2011	6,782.30	7.87	7.68	1230	51	26	353	4	285	669 D	17	0.46	<0.1	<0.50	<0.1	<0.001	<0.01	
0142	N	7/19/2011	6,782.05	7.93	7.98	1220	51	25	337	4	288	665 D	17	0.5 D	<0.1	<0.50	0.1	<0.001	<0.01	
0142	N	10/11/2011	6,782.10	7.9	8.01	1220	51	26	332	4	266	684 D	17	0.4 D	<0.1	<0.50	0.1	<0.001	<0.01	
0143	N	7/22/1989	6,759.40	7.90	7.86	1000	34	17	297	3.74	207	596	16.7	0.44	0.39	< 1	< 0.1	0.002	< 0.05	
0143	N	10/11/1989	6,759.70	7.80	7.98	1022	31.3	16.6	285	4.8	220	541	16.8	0.37	0.29	< 1	< 0.1	0.001	< 0.05	
0143	N	1/3/1990	6,759.60	7.50	7.65	1002	32.5	16.1	291	3.6	220	542	17.3	0.48	0.22	< 1	< 0.1	0.001	< 0.05	
0143	N	4/3/1990	6,759.50	7.70	7.80	1042	33.8	17	280	3.7	232	503	19.7	0.57	0.37	< 1	< 0.1	0.002	< 0.05	
0143	N	7/2/1990	6,759.30	7.40	7.90	1033	34.5	16.6	292	3.9	226	528	17.2	0.12	1.05	< 1	< 0.1	0.002	< 0.05	
0143	N	10/2/1990	6,759.30	7.50	7.77	1051	31.5	19.9	281	4	212	591	17.4	0.1	2.08	< 1	< 0.1	0.002	< 0.05	
0143	N	1/3/1991	6,759.40	7.50	7.15	1023	31.2	18.7	286	5.2	220	571	15.2	0.36	0.64	< 1	< 0.1	0.001	< 0.01	
0143	N	4/9/1991	6,759.40	7.50	8.26	944	29.4	16.2	270	3.7	223	558	16.7	0.3	0.25	< 1	< 0.1	0.001	< 0.01	
0143	N	7/16/1991	6,759.20	7.60	7.73	975	29.1	15.1	264	3.4	228	620	16.6	0.28	0.25	< 1	< 0.1	0.001	< 0.01	
0143	N	10/14/1991	6,760.90	7.50	7.90	1007	25.1	13.1	279	3.1	230	533	23.4	0.11	0.06	< 1	< 0.1	0.001	< 0.01	
0143	N	1/14/1992	6,764.70	7.40	7.54	1005	28.9	15.8	267	3.2	237	565	17.2	0.78	0.18	< 1	< 0.1	< 0.001	< 0.01	
0143	N	4/7/1992	6,766.60	7.50	7.18	964	26.6	16	321	3.7	237	523	16.9	0.31	< 0.1	< 1	< 0.1	0.003	< 0.01	
0143	N	7/7/1992	6,766.90	7.60	7.56	1019	27.5	15.7	334	3.89	238	543	16.2	0.53	< 0.1	< 1	< 0.1	0.001	< 0.01	
0143	N	10/6/1992	6,768.00	7.80	7.86	999	31.2	15.9	284	1.7	236	524	15.5	0.23	< 0.1	< 1	< 0.1	0.001	< 0.01	
0143	N	1/5/1993	6,769.00	7.80	8.14	1098	29.8	14.7	281	2.5	239	558	9.5	0.34	< 0.1	< 1	< 0.1	0.004	< 0.01	
0143	N	4/6/1993	6,769.80	7.70	8.07	965	25.5	12.8	299	2.2	239	495	16.1	0.28	< 0.1	< 1	< 0.1	< 0.001	< 0.01	
0143	N	7/13/1993	6,770.30	7.70	7.07	932	29.2	14.2	278	2.7	243	494	16.5	< 0.05	< 0.1	< 1	< 0.1	< 0.001	< 0.01	
0143	N	10/6/1993	6,770.70	7.60	7.62	978	28.2	14.2	271	2.3	243	525	15.6	0.2	0.18	< 1	< 0.1	< 0.001	< 0.01	
0143	N	1/5/1994	6,771.40	7.70	7.73	953	28.3	14.3	274	2.5	224	517	18.6	0.32	0.1	< 1	< 0.1	< 0.001	< 0.01	

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha	
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l	pci/l
			NRC Standard		0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15	
0142	N	4/16/2007	<0.005	<0.01	<0.05	<0.01	<0.1	<0.05	<0.001	<0.1	<0.0003	<0.2	<1	0	<0.2	<1	<1	
0142	N	7/17/2007	<0.005	<0.01	<0.05	0.02	<0.1	<0.05	<0.001	<0.1	<0.0003	<0.2	<1	0	<0.2	<1	<1	
0142	N	10/9/2007	<0.005	<0.01	<0.05	0.03	<0.1	<0.05	<0.001	<0.1	<0.0003	<0.2	<1	0	<0.2	<1	<1	
0142	N	1/22/2008	<0.005	<0.01	<0.05	0.05	<0.1	<0.05	<0.001	<0.1	0.0005	0.9	<1	0.9	<0.2	6.1	3.6	
0142	N	4/16/2008	<0.005	<0.01	<0.05	0.05	<0.1	<0.05	<0.001	<0.1	0.0004	0.1 U	0.7 U	0.8	0.3	-0.8 U	1.5	
0142	N	7/15/2008	<0.005	<0.01	<0.05	0.04	<0.1	<0.05	<0.001	<0.1	<0.0006	0.54	0.71 U	1.25	0 U	0.3 U	0.7 U	
0142	N	10/14/2008	<0.005	<0.01	<0.05	0.05	<0.1	<0.05	<0.001	<0.1	<0.0003	0.08 U	0.57 U	0.65	0.3	-0.1 U	1.5	
0142	N	1/20/2009	<0.005	<0.01	<0.05	0.05	<0.1	<0.05	<0.001	<0.1	<0.0003	0.45	1.4	1.85	-0.2 U	0.2 U	0.6 U	
0142	N	4/14/2009	<0.005	<0.01	<0.05	0.04	<0.1	<0.05	<0.001	<0.1	<0.0003	0.67	0.24 U	0.91	-0.02 U	-2 U	0.7	
0142	N	7/14/2009	<0.005	<0.01	<0.05	0.05	<0.1	<0.05	<0.001	<0.1	<0.0003	0.73	0.70 U	1.43	0.05 U	0.4 U	1.7	
0142	N	10/13/2009	<0.005	<0.01	<0.05	0.06	<0.1	<0.05	<0.001	<0.1	<0.0003	0.28	0.95 U	1.23	0.2 U	1.0 U	0.9	
0142	N	1/12/2010	<0.005	<0.01	<0.05	0.06	<0.1	<0.05	<0.001	<0.1	<0.0003	0.36	1.7	2.06	0.06 U	1.1 U	1.1	
0142	N	4/13/2010	<0.005	<0.01	<0.05	0.06	<0.1	<0.05	<0.001	<0.1	<0.0003	0.51	1.5	2.01	0.02 U	-0.5 U	0.7	
0142	N	7/20/2010	<0.005	<0.01	<0.05	0.02	<0.1	<0.05	<0.001	<0.1	<0.0003	0.48	0.59 U	1.07	0.06 U	-0.4 U	2	
0142	N	10/12/2010	<0.005	<0.01	<0.05	0.03	<0.1	<0.05	<0.001	<0.1	<0.0003	0.83	1.1 U	1.93	0.04 U	0.9 U	0.6 U	
0142	N	1/12/2011	<0.005	<0.01	<0.05	0.05	<0.1	<0.05	<0.001	<0.1	<0.0003	1.1	0.78 U	1.88	0.002 U	0.3 U	1.7	
0142	N	4/12/2011	<0.005	<0.01	<0.05	0.04	<0.1	<0.05	0.001	<0.1	<0.0003	0.25	0.71 U	0.96	-0.02 U	0.3 U	1.2	
0142	N	7/19/2011	<0.005	<0.01	<0.05	0.02	<0.1	<0.05	<0.001	<0.1	<0.0003	0.53	1.1 U	1.63	0.04 U	-0.7 U	1.1	
0142	N	10/11/2011	<0.005	<0.01	<0.05	0.02	<0.1	<0.05	<0.001	<0.1	<0.0003	0.78	1.1 U	1.88	-0.007 U	0.7 U	1 U	
0143	N	7/22/1989	<0.01	<0.01	<0.05	0.04	<0.1	<0.05	0.001	<0.1	0.0034	0.7	<1	0.7	3	<1	1.4	
0143	N	10/11/1989	<0.01	<0.01	<0.05	0.04	0.11	<0.05	0.001	<0.1	0.006	1.2	1.5	2.7	0.9	<1	3.2	
0143	N	1/3/1990	<0.01	<0.01	<0.05	0.04	0.01	<0.05	0.001	<0.1	0.006	1.4	<1	1.4	<0.2	2.1	4	
0143	N	4/3/1990	<0.01	0.01	<0.05	0.06	<0.1	<0.05	<0.001	<0.1	0.0681	0.8	<1	0.8	<0.2	<1	1.3	
0143	N	7/2/1990	<0.01	<0.01	<0.05	0.04	<0.1	<0.05	<0.001	<0.1	0.0068	0.6	<1	0.6	<0.2	<1	<1	
0143	N	10/2/1990	<0.01	<0.01	<0.05	0.04	<0.1	<0.05	<0.001	<0.1	0.006	0.3	<1	0.3	<0.2	<1	<1	
0143	N	1/3/1991	0.01	<0.01	<0.05	0.04	<0.1	<0.05	<0.001	<0.1	0.0057	0.9	<1	0.9	<0.2	<1	<1	
0143	N	4/9/1991	<0.01	<0.01	<0.05	0.02	<0.1	<0.05	<0.001	<0.1	0.002	<0.2	1.7	1.7	<0.2	<1	<1	
0143	N	7/16/1991	<0.01	<0.01	<0.05	0.03	<0.1	<0.05	<0.001	<0.1	<0.0003	<0.2	<1	0	<0.2	<1	<1	
0143	N	10/14/1991	<0.01	<0.01	<0.05	0.03	<0.1	<0.05	<0.001	<0.1	0.003	<0.2	<1	0	<0.2	<1	<1	
0143	N	1/14/1992	<0.01	<0.01	<0.05	0.01	0.1	<0.05	<0.001	<0.1	0.007	0.2	<1	0.2	<0.2	<1	<1	
0143	N	4/7/1992	<0.01	<0.01	<0.05	0.02	0.1	<0.05	<0.001	<0.1	0.006	<0.2	1.8	1.8	<0.2	<1	<1	
0143	N	7/7/1992	<0.01	<0.01	<0.05	0.02	<0.1	<0.05	0.001	<0.1	0.008	<0.2	<1	0	<0.2	<1	<1	
0143	N	10/6/1992	<0.01	<0.01	<0.05	0.02	<0.1	<0.05	0.001	<0.1	0.017	0.3	3.7	4	<0.2	<1	<1	
0143	N	1/5/1993	<0.01	<0.01	<0.05	0.02	<0.1	<0.05	0.007	<0.1	0.006	0.4	<1	0.4	<0.2	<1	<1	
0143	N	4/6/1993	<0.01	<0.01	<0.05	0.03	<0.1	<0.05	<0.001	<0.1	0.004	0.4	1.6	2	<0.2	2.2	<1	
0143	N	7/13/1993	<0.01	<0.01	<0.05	0.03	<0.1	<0.05	<0.001	<0.1	0.003	0.8	1.2	2	<0.2	<1	<1	
0143	N	10/6/1993	<0.01	<0.01	<0.05	0.02	<0.1	<0.05	<0.001	<0.1	0.001	0.7	<1	0.7	<0.2	<1	<1	
0143	N	1/5/1994	<0.01	<0.01	<0.05	0.03	<0.1	<0.05	<0.001	<0.1	0.001	0.3	<1	0.3	<0.2	1.4	<1	

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As	Be
			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	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0143	N	4/13/1994	6,772.30	7.80	7.81	940	29.4	14.5	261	2.3	223	484	15.8	0.12	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0143	N	7/20/1994	6,772.60	7.60	8.07	950	38.9	15.4	256	2.5	223	509	14.5	0.23	0.19	< 1	< 0.1	< 0.001	< 0.01
0143	N	10/4/1994	6,773.20	7.60	8.09	927	33.3	16.4	285	3.1	245	525	16.2	0.23	0.16	< 1	< 0.1	< 0.001	< 0.01
0143	N	1/4/1995	6,773.80	7.50	8.05	959	33	15.4	283	3.2	243	498	15.2	0.23	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0143	N	4/6/1995	6,774.20	7.70	7.93	990	32	17	267	3.1	249	519	11.6	0.27	0.24	< 1	< 0.1	< 0.001	< 0.01
0143	N	7/6/1995	6,774.40	7.60	8.32	995	30.9	15.6	269	3.1	238	495	15.5	0.14	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0143	N	10/3/1995	6,774.90	7.30	8.35	994	30.8	15.8	266	3.1	241	486	14.2	0.22	0.11	< 1	< 0.1	0.004	< 0.01
0143	N	1/3/1996	6,775.50	8.00	8.05	971	29.1	15.3	272	3	244	489	13.9	0.2	0.13	< 1	< 0.1	0.001	< 0.01
0143	N	4/2/1996	6,775.80	7.50	8.41	958	32.5	16.7	257	3.3	244	519	16.9	0.33	0.14	< 1	< 0.1	< 0.001	< 0.01
0143	N	7/7/1996	6,776.00	7.50	7.77	964	30.2	15.3	260	3.1	240	468	14.3	0.37	0.21	< 1	< 0.1	< 0.001	< 0.01
0143	N	10/1/1996	6,776.30	7.20	8.13	975	30.7	15.9	275	3.2	240	488	17.8	0.36	0.1	< 1	< 0.1	< 0.001	< 0.01
0143	N	1/21/1997	6,777.00	6.50	7.89	994	32.4	16.5	283	3.3	244	498	14.4	0.32	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0143	N	4/8/1997	6,777.00	6.80	8.24	938	30	15.3	265	3.1	244	484	14.4	0.24	0.15	< 1	< 0.1	< 0.001	< 0.01
0143	N	7/8/1997	6,777.00	8.00	8.32	943	32.7	16.6	278	3.3	238	517	16.9	0.27	0.11	< 1	< 0.1	< 0.001	< 0.01
0143	N	10/7/1997	6,777.30	7.60	8.15	975	32.7	16.8	266	3.2	246	505	12.6	0.21	0.11	< 1	< 0.1	< 0.001	< 0.01
0143	N	1/15/1998	6,776.90	7.80	8.30	974	36.3	18	272	3.5	245	542	17.8	0.16	0.27	< 1	< 0.1	< 0.001	< 0.01
0143	N	4/7/1998	6,778.00	7.80	8.21	980	30	15.6	263	3.1	243	486	14.8	0.14	0.15	< 1	< 0.1	0.001	< 0.01
0143	N	7/7/1998	6,778.10	8.00	8.23	953	32.3	16.9	276	3.4	226	460	14.5	0.29	0.11	< 1	< 0.1	0.001	< 0.01
0143	N	10/6/1998	6,778.40	7.51	8.41	986	30.7	15.7	276	3.7	245	526	16	1	0.35	< 1	< 0.1	0.006	< 0.01
0143	N	1/5/1999	6,778.50	7.90	8.20	979	30.6	14.5	268	3.8	254	509	16.1	0.13	0.13	< 1	< 0.1	0.004	< 0.01
0143	N	4/6/1999	6,779.10	8.00	8.09	975	31.4	16.5	267	3.3	240	477	18.5	0.28	0.15	< 1	< 0.1	< 0.001	< 0.01
0143	N	7/13/1999	6,778.79	6.80	8.24	857	33.3	18	284	4	247	517	13.9	0.33	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0143	N	10/5/1999	6,779.00	7.52	8.08	953	28.1	15.6	257	3	235	457	16.4	0.32	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0143	N	1/4/2000	6,779.90	7.80	8.41	998	36.1	19.4	272	5.4	242	528	22.8	0.33	0.24	< 1	< 0.1	0.001	< 0.01
0604	N	7/23/1989	6,919.20	3.90	4.04	6697	454	707	251	11.6	0	3891	21.4	6.39	31	< 1	60	< 0.001	< 0.05
0604	N	10/12/1989	6,919.10	3.90	4.11	6728	428	644	235	14.6	0	4407	33.7	6.05	39	< 1	66	< 0.001	< 0.05
0604	N	1/10/1990	6,917.80	3.90	4.06	6602	444	691	291	13.7	< 1	4325	23.1	6.7	33	< 1	58	< 0.001	< 0.05
0604	N	4/5/1990	6,917.20	4.20	4.20	6806	455	670	240	11.6	< 1	4352	33.4	6.8	43	< 1	59	< 0.001	< 0.05
0604	N	7/3/1990	6,916.40	4.00	4.24	6824	461	662	240	9.6	< 1	4321	26.8	5.38	50.9	< 1	60	< 0.001	< 0.05
0604	N	10/3/1990	6,915.80	4.10	4.11	6616	453	628	264	13.3	< 1	4290	31.1	3.27	44	< 1	77.2	< 0.001	< 0.05
0604	N	1/15/1991	6,914.90	4.10	4.21	6802	475	710	265	15.2	< 1	4627	31.6	5.48	52	< 1	61.8	< 0.001	0.02
0604	N	4/2/1991	6,914.60	4.20	4.51	6380	432	659	215	11.1	< 1	4923	33	4.6	56.5	< 1	45.3	< 0.001	0.016
0604	N	7/17/1991	6,914.80	4.00	4.46	6949	408	624	218	11.1	< 1	5307	28.4	5.34	51.4	< 1	70.95	< 0.001	0.03
0604	N	9/4/1991	no data	no data	3.98	7438	444	715	251	11.4	< 1	5494	31	7.1	31.3	< 1	70.4	< 0.001	< 0.01
0604	N	10/15/1991	6,914.30	3.90	4.26	6909	432	570	275	12.5	< 1	4502	34.7	7.86	47.3	< 1	58.6	< 0.001	0.03
0604	N	11/4/1991	no data	no data	4.09	7177	460	593	231	11.3	< 1	4396	50	5.4	13.3	< 1	0.13	< 0.001	0.02
0604	N	12/2/1991	no data	no data	4.30	7047	439	564	256	12.6	< 1	4052	52.8	4.12	30.5	< 1	62.5	< 0.001	< 0.01
0604	N	1/15/1992	6,914.50	3.80	4.11	6837	414	702	222	10	< 1	4554	31.6	3.7	35.4	< 1	57.1	< 0.001	0.02

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0143	N	4/13/1994	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.8	2.5	3.3	< 0.2	< 1	4.7
0143	N	7/20/1994	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.002	1	< 1	1	< 0.2	< 1	1.2
0143	N	10/4/1994	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.7	< 1	0.7	< 0.2	< 1	< 1
0143	N	1/4/1995	< 0.01	< 0.01	< 0.05	< 0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.8	< 1	0.8	< 0.2	< 1	< 1
0143	N	4/6/1995	< 0.01	< 0.01	< 0.05	< 0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.2	< 1	0.2	< 0.2	1.5	< 1
0143	N	7/6/1995	< 0.01	< 0.01	< 0.05	< 0.03	< 0.1	< 0.05	0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0143	N	10/3/1995	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0018	0.3	1.3	1.6	< 0.2	< 1	< 1
0143	N	1/3/1996	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	1	2.5	3.5	0.4	1	2.1
0143	N	4/2/1996	< 0.01	< 0.01	< 0.05	0.02	< 0.1	0.19	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0143	N	7/7/1996	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	3.8
0143	N	10/1/1996	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.003	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0143	N	1/21/1997	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.6	< 1	0.6	< 0.2	< 1	< 1
0143	N	4/8/1997	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	7/8/1997	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	10/7/1997	< 0.01	0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	1/15/1998	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	4/7/1998	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0015	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	7/7/1998	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	10/6/1998	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0081	0.6	< 1	0.6	< 0.2	< 1	< 1
0143	N	1/5/1999	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0148	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	4/6/1999	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	< 0.2	1.7	1.7	< 0.2	< 1	< 1
0143	N	7/13/1999	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	10/5/1999	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	< 1	< 1
0143	N	1/4/2000	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.001	< 0.1	0.0047	2	< 1	2	< 0.2	< 1	3.1
0604	N	7/23/1989	< 0.01	0.31	< 0.05	22	< 0.1	0.39	< 0.001	< 0.1	0.004	14.1	16.8	30.9	3.5	1.7	60.2
0604	N	10/12/1989	0.01	0.31	< 0.05	22	< 0.1	0.34	0.006	< 0.1	0.006	4.5	11	15.5	33.9	< 1	41.7
0604	N	1/10/1990	< 0.01	0.33	< 0.05	22	< 0.1	0.38	< 0.001	< 0.1	0.005	5.1	8.5	13.6	1.7	2.8	6.5
0604	N	4/5/1990	< 0.01	0.31	< 0.05	19	< 0.1	0.38	< 0.001	< 0.1	0.0006	5	9	14	< 0.2	2.6	6
0604	N	7/3/1990	< 0.01	0.21	< 0.05	18.2	< 0.1	0.34	< 0.001	< 0.1	0.0029	7.6	6.5	14.1	0.4	< 1	8
0604	N	10/3/1990	< 0.01	0.35	< 0.05	22.7	< 0.1	0.4	< 0.001	< 0.1	0.003	5.8	20.3	26.1	< 0.2	< 1	6
0604	N	1/15/1991	< 0.01	0.39	< 0.05	20.1	< 0.1	0.44	< 0.001	< 0.1	0.007	8.2	13.8	22	< 0.2	2.3	9.1
0604	N	4/2/1991	< 0.01	0.23	< 0.05	14.6	< 0.1	0.38	< 0.001	< 0.1	0.005	9.1	24.3	33.4	< 0.2	1.3	15
0604	N	7/17/1991	< 0.01	0.3	< 0.05	20.5	< 0.1	0.41	< 0.001	< 0.1	0.006	4.3	12.5	16.8	< 0.2	2.1	4
0604	N	9/4/1991	< 0.01	0.39	< 0.05	21	< 0.1	0.45	0.001	< 0.1	0.005	3.8	14.3	18.1	< 0.2	< 1	4
0604	N	10/15/1991	< 0.01	0.36	< 0.05	21.3	< 0.1	0.41	< 0.001	< 0.1	0.06	3.9	20.6	24.5	< 0.2	< 1	4
0604	N	11/4/1991	< 0.01	0.39	< 0.05	15.1	< 0.1	0.55	< 0.001	< 0.1	0.0059	4.1	16.9	21	< 0.2	< 1	4
0604	N	12/2/1991	< 0.01	0.35	< 0.05	19.6	< 0.1	0.42	< 0.001	< 0.1	0.004	6.2	22.7	28.9	< 0.2	< 1	6
0604	N	1/15/1992	< 0.01	0.34	< 0.05	20.5	< 0.1	0.41	0.013	< 0.1	0.0601	3.9	20.6	24.5	< 0.2	< 1	4

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As	Be
			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	mg/l
			NRC Standard			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	0.017
0604	N	4/8/1992	6,914.40	3.80	4.24	7106	454	654	252	12.2	< 1	4691	40.8	3.75	41.4	< 1	52.4	0.003	0.02
0604	N	7/8/1992	6,914.40	3.70	4.22	6654	495	610	285	12.3	< 1	4669	33.3	3.94	49.2	< 1	73.2	0.001	0.029
0604	N	10/7/1992	6,914.20	4.10	4.04	7185	447	702	273	15.1	< 1	4860	35.5	3.8	15.7	< 1	66.2	< 0.001	< 0.01
0604	N	1/6/1993	6,914.10	4.30	4.45	5855	411	642	236	12	< 1	4042	56.3	2.09	88.6	1.2	45.1	0.002	0.01
0604	N	4/6/1993	6,914.00	4.40	4.36	7409	414	687	284	10.2	< 1	4639	62	1.83	89.1	< 1	45.5	< 0.001	0.022
0604	N	7/13/1993	6,913.50	4.40	4.30	7711	449	816	265	11.9	< 1	4973	62.7	1.45	84.4	1	39.1	< 0.001	< 0.01
0604	N	10/6/1993	6,913.30	4.50	4.24	6891	475	785	250	10.8	< 1	4744	47.6	1.07	91.8	< 1	30	< 0.001	0.017
0604	N	1/6/1994	6,913.10	4.30	4.32	7520	450	691	243	10.3	< 1	4543	52.6	1.19	97.6	1.8	47.8	< 0.001	0.02
0604	N	4/12/1994	6,912.80	4.40	4.39	7215	423	729	254	10.2	< 1	4838	51.6	2.7	90.7	< 1	39.4	< 0.001	0.02
0604	N	7/20/1994	6,912.30	4.50	4.33	7069	491	856	232	11.2	< 1	4790	60.6	1.02	89.2	< 1	27.2	< 0.001	< 0.01
0604	N	10/4/1994	6,912.40	4.50	4.38	7504	493	837	280	11.6	< 1	4935	60	1.61	92.5	< 1	41.8	< 0.001	< 0.01
0604	N	1/4/1995	6,912.10	4.40	4.50	7621	490	835	256	12.5	< 1	5023	62.6	1.67	86.9	< 1	26.1	< 0.001	0.01
0604	N	4/5/1995	6,911.90	4.50	4.50	7614	475	850	260	12	0.5	4870	53	1.97	92.5	< 1	30.5	< 0.001	< 0.01
0604	N	7/6/1995	6,911.40	4.50	4.42	6741	455	760	260	11.5	< 1	4650	60.2	1.83	87.7	< 1	32	< 0.001	0.02
0604	N	10/3/1995	6,911.50	4.60	4.49	7616	496	877	279	11.5	< 1	5010	58	1.19	87.6	< 1	25.1	0.002	< 0.01
0604	N	1/3/1996	6,911.20	4.70	4.43	7223	440	827	277	11.8	< 1	4760	54.5	0.2	96.1	< 1	26.2	< 0.001	< 0.01
0604	N	4/2/1996	6,911.30	4.70	4.58	7638	497	920	260	12	2.5	5180	64.2	0.15	100	< 1	22	< 0.001	< 0.01
0604	N	7/7/1996	6,910.60	4.40	4.48	7742	452	816	262	12.4	< 1	4610	64.3	0.24	83.2	< 1	26.3	< 0.001	< 0.01
0604	N	10/1/1996	6,910.30	4.80	4.52	7690	464	850	265	12.3	0.9	4708	57.9	0.36	88.7	< 1	24.9	< 0.001	< 0.01
0604	N	1/22/1997	6,910.20	4.80	4.61	7560	441	897	262	12.4	3.9	4830	57	0.21	74.9	< 1	21.1	0.002	0.01
0604	N	4/8/1997	6,909.90	4.60	4.56	7650	539	458	170	8	3	3370	45	0.19	87.9	< 1	< 0.1	< 0.001	< 0.01
0604	N	7/8/1997	6,910.00	5.50	4.60	7740	496	904	275	12.9	3.4	5050	69.2	0.21	83.8	< 1	21.4	< 0.001	0.01
0604	N	10/7/1997	6,909.60	4.50	4.63	7590	489	868	261	12.4	5.1	4790	62.1	0.38	77.3	< 1	21.9	< 0.001	0.01
0604	N	1/15/1998	6,910.40	4.70	4.61	7530	474	847	271	13	2.9	5100	75.1	0.79	89.8	< 1	18.1	< 0.001	0.01
0604	N	4/7/1998	6,909.70	4.50	4.73	7570	489	773	255	11.8	7.4	4300	60.9	0.35	87.4	< 1	16.9	< 0.001	0.01
0604	N	7/7/1998	6,908.90	4.90	4.64	7600	471	860	274	12.5	4.1	4600	61.5	0.46	80.7	< 1	20.8	< 0.001	0.01
0604	N	10/6/1998	6,908.90	4.55	4.63	7760	463	874	287	13.7	3.7	4860	61.6	0.78	89.3	< 1	18.7	< 0.001	0.01
0604	N	1/5/1999	6,908.90	4.70	4.60	7830	420	851	257	12.7	3	5100	64.9	0.45	70.7	< 1	20.2	< 0.001	0.01
0604	N	4/6/1999	6,908.40	4.60	4.69	7980	446	893	259	12.2	5	4740	62.7	0.83	92.4	< 1	20.4	< 0.001	0.01
0604	N	7/13/1999	6,907.80	4.60	4.61	8030	479	964	292	16.3	3	5120	55.3	0.57	73.2	< 1	15.7	< 0.001	0.01
0604	N	10/5/1999	6,908.60	4.42	4.64	8150	523	1120	280	12.5	4	6000	50.9	0.53	58.6	< 1	27	< 0.001	< 0.01
0604	N	1/4/2000	6,908.20	4.60	4.64	8180	397	883	231	12.8	4	4500	41.9	0.24	67.9	< 1	20	< 0.001	0.01
0604	N	5/3/2000	6,909.00	4.60	4.75	7500	416	808	264	14.2	6	4300	56.5	0.13	84.6	1.4	6.5	< 0.001	< 0.01
0604	N	7/11/2000	6,908.80	4.57	4.67	7380	460	837	258	11.9	5	4470	53.7	0.33	90.2	2.4	14.5	< 0.001	0.01
0604	N	10/3/2000	6,908.90	4.68	4.69	7220	455	830	247	13	6	4250	48.3	0.23	84.9	4.2	10.5	< 0.001	< 0.01
0604	N	1/10/2001	6,909.00	4.94	4.74	7280	450	790	222	11.6	7	4390	61.7	0.23	75.9	2.5	14	< 0.001	< 0.01
0604	N	4/3/2001	6,908.90	4.80	4.77	7260	533	916	229	11.3	8	4730	57.9	0.28	75.8	4.1	12.8	< 0.001	< 0.01
0604	N	7/17/2001	6,908.45	4.89	4.73	7470	424	782	246	12.5	7	4270	66.9	0.47	73.1	2.8	14.1	< 0.001	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0604	N	4/8/1992	< 0.01	0.36	< 0.05	17.8	< 0.1	0.4	< 0.001	< 0.1	0.003	3.6	15.3	18.9	< 0.2	1.2	3.8
0604	N	7/8/1992	< 0.01	0.37	< 0.05	21.8	< 0.1	0.5	< 0.001	< 0.1	0.005	5.6	11.7	17.3	< 0.2	3.4	3.8
0604	N	10/7/1992	< 0.01	0.37	< 0.05	19.9	< 0.1	0.42	< 0.001	< 0.1	0.004	6.8	11.6	18.4	< 0.2	1.9	6.9
0604	N	1/6/1993	< 0.01	0.36	< 0.05	14.5	< 0.1	0.44	0.006	< 0.1	0.009	5.7	7.6	13.3	< 0.2	< 1	6.1
0604	N	4/6/1993	< 0.01	0.37	< 0.05	14.5	< 0.1	0.49	0.002	< 0.1	0.006	3.3	12	15.3	< 0.2	1.7	3.8
0604	N	7/13/1993	< 0.01	0.35	< 0.05	14.2	< 0.1	0.62	0.002	< 0.1	< 0.0003	2.4	6.9	9.3	< 0.2	3.1	3.2
0604	N	10/6/1993	< 0.01	0.36	< 0.05	13.5	< 0.1	0.43	< 0.001	< 0.1	0.0059	5.6	2.3	7.9	< 0.2	< 1	9
0604	N	1/6/1994	< 0.01	0.37	< 0.05	13	< 0.1	0.43	< 0.001	< 0.1	0.003	5.7	8.2	13.9	< 0.2	2.3	18.9
0604	N	4/12/1994	< 0.01	0.28	< 0.05	14.1	< 0.1	0.41	< 0.001	< 0.1	0.004	7.7	8	15.7	< 0.2	2.3	24.9
0604	N	7/20/1994	< 0.01	0.3	< 0.05	9.63	< 0.1	0.39	< 0.001	< 0.1	0.003	10	13	23	< 0.2	< 1	29.7
0604	N	10/4/1994	< 0.01	0.4	< 0.05	12.9	< 0.1	0.57	< 0.001	< 0.1	0.006	5.2	5.4	10.6	< 0.2	3.8	13.5
0604	N	1/4/1995	< 0.01	0.32	< 0.05	10.4	< 0.1	0.42	< 0.001	< 0.1	0.004	5.1	7.7	12.8	< 0.2	< 1	16.8
0604	N	4/5/1995	< 0.01	< 0.01	< 0.05	12	< 0.1	0.5	< 0.001	< 0.1	0.004	5	7.6	12.6	< 0.2	4	16.6
0604	N	7/6/1995	< 0.01	0.35	< 0.05	2.61	< 0.1	0.4	< 0.001	< 0.1	0.0035	3.8	5.7	9.5	< 0.2	< 1	15.3
0604	N	10/3/1995	< 0.01	0.32	< 0.05	11.1	< 0.1	0.38	0.031	< 0.1	0.0046	5.3	17.1	22.4	< 0.2	< 1	15.5
0604	N	1/3/1996	< 0.01	0.04	< 0.05	12	< 0.1	< 0.05	0.031	< 0.1	0.0034	3.1	2.2	5.3	< 0.2	2.8	9
0604	N	4/2/1996	< 0.01	0.32	< 0.05	10.8	< 0.1	0.36	< 0.001	< 0.1	< 0.0003	2.1	6.9	9	< 0.2	< 1	5.3
0604	N	7/7/1996	< 0.01	0.36	< 0.05	12.7	< 0.1	0.41	< 0.001	< 0.1	0.0034	2.5	< 1	2.5	< 0.2	< 1	3.1
0604	N	10/1/1996	< 0.01	0.35	< 0.05	11.4	< 0.1	0.42	0.002	< 0.1	0.0011	2.3	7.4	9.7	< 0.2	< 1	3.3
0604	N	1/22/1997	< 0.01	0.36	< 0.05	11.4	< 0.1	0.4	< 0.001	< 0.1	0.004	2.5	8.8	11.3	< 0.2	< 1	4.7
0604	N	4/8/1997	< 0.01	< 0.01	< 0.05	1.87	< 0.1	< 0.05	0.038	< 0.1	0.003	5.2	6.8	12	< 0.2	< 1	19.8
0604	N	7/8/1997	< 0.01	0.35	< 0.05	12.4	< 0.1	0.38	< 0.001	< 0.1	0.003	2.3	7.2	9.5	< 0.2	< 1	4
0604	N	10/7/1997	< 0.01	0.4	< 0.05	12.6	< 0.1	0.43	< 0.001	< 0.1	0.004	2.3	3.8	6.1	< 0.2	< 1	4.6
0604	N	1/15/1998	0.006	0.37	< 0.05	11.8	< 0.1	0.41	< 0.001	< 0.1	0.0032	2.1	6	8.1	< 0.2	< 1	3.1
0604	N	4/7/1998	0.007	0.34	< 0.05	10.7	< 0.1	0.39	< 0.001	< 0.1	0.0031	3.3	7	10.3	< 0.2	< 1	4.6
0604	N	7/7/1998	0.006	0.36	< 0.05	12.5	< 0.1	0.41	< 0.001	< 0.1	0.0031	1.6	4.3	5.9	< 0.2	< 1	3.7
0604	N	10/6/1998	0.006	0.37	< 0.05	12	< 0.1	0.45	< 0.001	< 0.1	0.0078	2.4	4.1	6.5	< 0.2	3.4	3.4
0604	N	1/5/1999	0.011	0.37	< 0.05	12.8	< 0.1	0.4	< 0.001	< 0.1	0.0033	2.4	7.4	9.8	< 0.2	4.3	4.3
0604	N	4/6/1999	0.015	0.41	< 0.05	12.6	< 0.1	0.44	< 0.001	< 0.1	0.0034	4	7.8	11.8	< 0.2	3.2	3.2
0604	N	7/13/1999	0.009	0.42	< 0.05	14	< 0.1	0.62	< 0.001	< 0.1	0.0071	3	5.2	8.2	< 0.2	3.7	3.7
0604	N	10/5/1999	0.015	0.53	< 0.05	16.1	< 0.1	0.46	< 0.001	< 0.1	0.0033	2.5	2.9	5.4	< 0.2	< 1	4.3
0604	N	1/4/2000	0.01	0.38	< 0.05	11.2	< 0.1	0.46	< 0.001	< 0.1	0.0032	2.3	6	8.3	< 0.2	< 1	4.7
0604	N	5/3/2000	0.022	0.23	< 0.05	8.81	< 0.1	0.26	< 0.001	< 0.1	0.0027	4.3	6.6	10.9	< 0.2	< 1	4.8
0604	N	7/11/2000	0.011	0.31	< 0.05	10.1	< 0.1	0.31	< 0.001	< 0.1	0.0022	2.5	6	8.5	< 0.2	< 1	4.2
0604	N	10/3/2000	0.005	0.26	< 0.05	8.17	0.23	0.25	< 0.001	< 0.1	0.002	1.9	7.5	9.4	< 0.2	< 1	4.3
0604	N	1/10/2001	< 0.005	0.29	< 0.05	9.38	< 0.1	0.35	< 0.001	< 0.1	0.0019	2.1	7.6	9.7	< 0.2	< 1	3.2
0604	N	4/3/2001	< 0.005	0.32	< 0.05	9.52	< 0.1	0.39	< 0.001	< 0.1	0.0018	1.9	7.1	9	< 0.2	< 1	3.9
0604	N	7/17/2001	< 0.005	0.29	< 0.05	9.9	< 0.1	0.36	< 0.001	< 0.1	0.002	2.2	6	8.2	< 0.2	< 1	4.1

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water	Field	Lab	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs	Al	As	Be
			Elevation	pH	pH											(Chloroform)			
		ft amsl	SU	SU	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l	mg/l			
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0604	N	10/2/2001	6,908.50	4.78	4.70	7420	440	820	217	12.8	4.9	4100	77.8	0.27	70	3	12.5	< 0.001	< 0.01
0604	N	1/14/2002	6,908.40	4.86	4.80	7390	516	882	235	13.6	6.7	4540	67.5	0.13	66	3	15.3	< 0.001	0.01
0604	N	4/9/2002	6,908.10	4.70	4.73	7500	446	790	261	12.2	6.7	4390	58.1	0.23	70.1	< 1	13.2	< 0.001	< 0.01
0604	N	7/16/2002	6,908.02	4.84	4.78	7500	439	805	271	13.5	6.7	4460	65	0.66	71.7	< 1	11.4	< 0.001	< 0.01
0604	N	10/9/2002	6,907.87	5.36	4.79	5790	431	775	258	11.4	7.3	4380	56.5	0.64	68.6	3.2	14.6	< 0.001	< 0.01
0604	N	1/8/2003	6,908.03	5.20	4.76	7440	423	783	230	10.7	6.7	4250	48.4	0.88	61	3.8	12.9	< 0.001	< 0.01
0604	N	4/14/2003	6,908.00	4.73	4.64	7360	454	860	293	15.3	6.7	4690	55.8	0.78	71	< 1	11.8	< 0.001	< 0.01
0604	N	7/9/2003	6,907.72	4.63	4.75	7470	440	794	261	13.3	6.7	4500	57.7	1.08	66	2.4	11.7	< 0.001	< 0.01
0604	N	10/8/2003	6,907.76	4.72	4.79	7450	427	714	268	10.6	8.5	4320	50.5	0.74	68	2.8	13.7	< 0.001	< 0.01
0604	N	1/7/2004	6,907.70	4.77	4.81	7290	495	873	283	12.8	7.9	4770	62.6	0.75	69.8 D	2.3	14.1	< 0.001	< 0.01
0604	N	4/7/2004	6,907.50	5.01	4.91	7340	469	830	287	12.2	3.2	4550 D	59.8	0.98	72.6 D	3.4	13.2	< 0.001	< 0.01
0604	N	7/14/2004	6,907.05	4.72	4.56	7320	455	796	282	12.6	9	4580 D	61.8	0.54	65.9 D	2.2	12.2	< 0.001	< 0.01
0604	N	10/6/2004	6,907.05	4.74	4.77	7350	440 D	802 D	292	12.2	10	4390 D	59	0.45	65.8 D	2.7	11.3	< 0.001	< 0.01
0604	N	1/5/2005	6,907.04	4.95	4.66	7480	475 D	856 D	284	12.3	7	4770 D	58	0.62	66 D	7	11.1	< 0.001	< 0.01
0604	N	4/6/2005	6,906.60	4.96	4.65	7050	454	803	296	12	6	4550	58	0.49	54	3.8	11.2	< 0.001	< 0.01
0604	N	7/13/2005	6,906.40	4.94	4.76	7220	472 D	824 D	278	11.3	2	4630 D	57	0.49	60 D	3	11.1	< 0.001	< 0.01
0604	N	10/5/2005	6,906.50	4.93	4.85	7260	450 D	854 D	286	12.4	12	4600 D	58	0.46	60 D	2.8	9.5	< 0.001	< 0.01
0604	N	1/11/2006	6,906.34	5.02	5.07	7160	430 D	813 D	283	12.2	76	4600 D	58	1.01	75 D	3.2	9.3	< 0.001	< 0.01
0604	N	4/5/2006	6,906.40	4.89	5.33	7150	452 D	827 D	264	12.3	3	4320 D	61	2.4	74 D	3	10	< 0.001	< 0.01
0604	N	7/19/2006	6,905.70	4.95	4.91	7170	469 D	810 D	292	12.6	10	4400 D	60	0.41	69 D	2.5	8	< 0.001	< 0.01
0604	N	10/4/2006	6,905.67	4.88	5.06	7170	437 D	792 D	277	12.1	4	4230 D	57	0.54	74 D	3.03	8.1	< 0.001	< 0.01
0604	N	1/10/2007	6,905.69	5.00	4.99	7270	417 D	779 D	256	11.6	20	4460 D	58	0.32	68 D	5.24	5.8	< 0.001	< 0.01
0604	N	4/11/2007	6,905.64	5.02	5.00	7240	447 D	833 D	271	13.4	12	4600 D	62	0.1	76 D	5.92	6.3	< 0.001	< 0.01
0604	N	7/11/2007	6,905.10	4.94	4.89	6900	470 D	853 D	280	12.1	5	4770 D	61	0.31	78 D	4.08	4.6	< 0.001	< 0.01
0604	N	10/3/2007	6,905.13	4.86	5.11	7160	418 D	794 D	287 D	13.7	5	4410 D	82 D	0.24	75 D	7.68	5.7	< 0.001	< 0.01
0604	N	1/16/2008	6,905.15	5.1	5.35	6880	435 D	801 D	286 D	16.3	5	4160 D	84 D	0.13	76 D	6.44	5.1	< 0.001	< 0.01
0604	N	4/9/2008	6,905.15	5.18	5.02	6880	480 D	903 D	332 D	13.6 D	3	4780 D	57	< 0.05	113 D	6.64	5.4	0.002	< 0.01
0604	N	7/9/2008	6,904.60	4.95	5.24	6880	466 D	850 D	308 D	12.5	3	4790 D	62	< 0.05	118 D	7.64	3.3	< 0.003	< 0.01
0604	N	10/13/2008	6,904.48	4.98	5.19	7060 H	487	880	310 D	13	5	4800 D	53	0.2	95.8 D	5.36	3.6	< 0.001	< 0.01
0604	N	1/14/2009	6,904.30	5.11	5.34	7330	440	823	311	12	<1	4220 D	49	<0.05	104 D	9.44	3.8	< 0.001	< 0.01
0604	N	4/8/2009	6,904.40	5.05	5.19	6980	426 D	788 D	296 D	12	23	4620 D	62	<0.05	74.9 D	7.76	4.2	< 0.001	< 0.01
0604	N	7/8/2009	6,904.00	5.01	5.19	7160	473 D	798	294 D	12	23 B	4810 D	53	0.19	68 D	5.4	3.3	< 0.001	< 0.01
0604	N	10/6/2009	6,904.05	5.12	5.79	7090	436 D	808	286 D	12	10	4360 D	60	0.14	72 D	6.8	2.8	< 0.001	< 0.01
0604	N	1/6/2010	6,903.80	6.46	5.6	7370 D	440 D	806	305	12	8	4970 D	55	0.24	67 D	6.44	2.8	< 0.001	< 0.01
0604	N	4/7/2010	6,903.60	5.32	5.34	7120 D	462 D	820	322 D	13	11	4850 D	59	0.16	70 D	3.2	2.9	< 0.001	< 0.01
0604	N	7/14/2010	6,903.45	5.37	5.43	7270 D	463 D	836	306 D	12	7	4780 D	56 D	0.29	63 D	1.78	2.3	< 0.001	< 0.01
0604	N	10/6/2010	6,903.35	5.24	5.67	6520 D	452	799	307	12	26	4590 D	55 D	0.35	67 D	9	2.4	< 0.001	< 0.01
0604	N	1/5/2011	6,903.25	6.4	5.53	6880 D	444 D	794	292 D	12	14	4620 D	59 D	0.37	65 D	5.48	1.9	< 0.001	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
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Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0604	N	10/2/2001	< 0.005	0.26	< 0.05	9.45	< 0.1	0.35	< 0.001	< 0.1	0.0014	3.9	7.6	11.5	< 0.2	< 1	4.3
0604	N	1/14/2002	0.006	0.32	< 0.05	11	< 0.1	0.4	< 0.001	< 0.1	0.0016	2.9	9.3	12.2	< 0.2	< 1	4.5
0604	N	4/9/2002	0.007	0.33	< 0.05	11.2	< 0.1	0.4	< 0.001	< 0.1	0.0016	2.6	4.5	7.1	< 0.2	< 1	3.3
0604	N	7/16/2002	< 0.005	0.28	< 0.05	10.4	< 0.1	0.28	< 0.001	< 0.1	< 0.0003	2.9	3.5	6.4	< 0.2	< 1	5.3
0604	N	10/9/2002	< 0.005	0.26	< 0.05	9.67	< 0.1	0.3	< 0.001	< 0.1	0.0018	3.3	5.6	8.9	< 0.2	< 1	9.6
0604	N	1/8/2003	0.006	0.29	< 0.05	10.9	< 0.1	0.32	< 0.001	< 0.1	0.0019	3.6	6.8	10.4	< 0.2	< 1	4.7
0604	N	4/14/2003	< 0.005	0.26	< 0.05	9.91	< 0.1	0.28	< 0.001	< 0.1	0.0019	2.8	15.3	18.1	< 0.2	< 1	8.4
0604	N	7/9/2003	0.006	0.29	< 0.05	11.9	< 0.1	0.32	< 0.001	< 0.1	0.0008	1.8	8.2	10	< 0.2	< 1	4
0604	N	10/8/2003	< 0.005	0.31	< 0.05	11.3	< 0.1	0.34	< 0.001	< 0.1	0.0023	1.4	3.5	4.9	< 0.2	< 1	5.8
0604	N	1/7/2004	< 0.005	0.32	< 0.05	13.5	< 0.1	0.33	< 0.001	< 0.1	0.0018 D	1.9	4.9	6.8	< 0.2	< 1.0	5.8
0604	N	4/7/2004	0.005	0.3	< 0.05	12.1	< 0.1	0.35	0.007	< 0.1	0.0018 D	1.5	4.7	6.2	< 0.2	< 1	5.8
0604	N	7/14/2004	0.007	0.3	< 0.05	11.1	< 0.1	0.3	< 0.001	< 0.1	0.0017 D	2.4	1.9	4.3	< 0.2	< 1.0	3.3
0604	N	10/6/2004	< 0.005	0.27	< 0.05	11	< 0.1	0.18	< 0.001	< 0.1	0.0017 D	2	5.1	7.1	< 0.2	< 1.0	3.4
0604	N	1/5/2005	< 0.005	0.31	< 0.05	11.1	< 0.1	0.35	< 0.001	< 0.1	0.0017	4	3.9	7.9	< 0.2	< 1.0	13.4
0604	N	4/6/2005	< 0.005	0.24	< 0.05	11.9	< 0.1	0.33	< 0.001	< 0.1	0.0018	4.3	5.6	9.9	< 0.2	< 1.0	1.7
0604	N	7/13/2005	< 0.005	0.28	< 0.05	11.7	< 0.1	0.34	< 0.001	< 0.1	0.0015	4	5.6	9.6	< 0.2	< 1.0	3.3
0604	N	10/5/2005	< 0.005	0.27	< 0.05	11.1	< 0.1	0.34	< 0.001	< 0.1	0.0015	2.2	5.7	7.9	< 0.2	< 1.0	4
0604	N	1/11/2006	< 0.005	0.26	< 0.05	11.2	< 0.1	0.31	0.004	< 0.1	0.0013	1.8	3.5	5.3	< 0.2	< 1.0	4.6
0604	N	4/5/2006	< 0.005	0.28	< 0.05	11.7	< 0.1	0.33	0.004	< 0.1	0.0014 D	1.1	< 1.0	1.1	< 0.2	< 1.0	2.9
0604	N	7/19/2006	< 0.005	0.25	< 0.05	10.3	< 0.1	0.29	< 0.001	< 0.1	0.0013	1.4	4.7	6.1	< 0.2	< 1.0	1.7
0604	N	10/4/2006	< 0.005	0.26	< 0.05	10.8	< 0.1	0.32	< 0.001	< 0.1	0.0019	1.5	7.3	8.8	< 0.2	< 1	2.2
0604	N	1/10/2007	< 0.005	0.23	< 0.05	10.4	< 0.1	0.28	< 0.001	< 0.1	0.0011	2.7	4.2	6.9	< 0.2	< 1	1.9
0604	N	4/11/2007	< 0.005	0.26	< 0.05	10.2	< 0.1	0.3	< 0.001	< 0.1	0.001	1.7	6	7.7	< 0.2	< 1	4.2
0604	N	7/11/2007	< 0.005	0.25	< 0.05	10.2	< 0.1	0.31	< 0.001	< 0.1	0.001	2.8	4.4	7.2	< 0.2	< 1	1.8
0604	N	10/3/2007	< 0.005	0.26	< 0.05	10.8	< 0.1	0.29	< 0.001	< 0.1	0.0008	1.7	2.9	4.6	< 0.2	< 1	6.1
0604	N	1/16/2008	< 0.005	0.24	< 0.05	9.73	< 0.1	0.29	< 0.001	< 0.1	0.0009	2.9	4.3	7.2	< 0.2	< 1	2.9
0604	N	4/9/2008	< 0.005	0.23	< 0.05	10.3	< 0.1	0.29	< 0.001	< 0.1	0.0009	1.5	5.4	6.9	1.1	-1.3 U	12
0604	N	7/9/2008	< 0.005	0.23	< 0.05	10.6	< 0.1	0.29	< 0.001	< 0.1	0.0008	1.2	5.7	6.9	-0.1 U	1.8 U	1.9
0604	N	10/13/2008	< 0.005	0.22	< 0.05	9.12	< 0.1	0.27	< 0.001	< 0.1	0.0014	0.93	5	5.93	1	-3 U	3.7
0604	N	1/14/2009	< 0.005	0.24	< 0.05	9.8	< 0.1	0.28	< 0.001	< 0.1	0.0007	1.4	5.8	7.2	-0.2 U	-1 U	2.1
0604	N	4/8/2009	< 0.005	0.22	< 0.05	9.68	< 0.1	0.29	< 0.001	< 0.1	0.0006 D	1.2	4.4	5.6	-0.4 U	-1 U	2.6
0604	N	7/8/2009	< 0.005	0.22	< 0.05	9.56 D	< 0.1	0.26	< 0.001	< 0.1	0.0007	1.9	6.2	8.1	0.2 U	2.2 U	3.6
0604	N	10/6/2009	< 0.005	0.19	< 0.05	8.55	< 0.1	0.26	< 0.001	< 0.1	0.0009	1.3	4.8	6.1	0.08 U	-1 U	2.6
0604	N	1/6/2010	< 0.005	0.23	< 0.05	9.4	< 0.1	0.28	< 0.001	< 0.1	0.0006	1.1	5.1	6.2	0.1 U	0.7 U	2.4
0604	N	4/7/2010	< 0.005	0.2	< 0.05	8.44	< 0.1	0.26	0.002	< 0.1	0.0006	2.1	5	7.1	-0.02 U	-1 U	2.2
0604	N	7/14/2010	< 0.005	0.2	< 0.05	8.2	< 0.1	0.26	< 0.001	< 0.1	0.0004	1.8	4.1	5.9	0.04 U	1.5 U	2.4
0604	N	10/6/2010	< 0.005	0.19	< 0.05	7.52	< 0.1	0.27	< 0.001	< 0.1	0.0007	1.3	5	6.3	0.05 U	1.0 U	2.3
0604	N	1/5/2011	< 0.005	0.2	< 0.05	8.2	< 0.1	0.25	< 0.001	< 0.1	0.0005	1.4	5.5	6.9	-0.03 U	-0.3 U	2.1

TABLE C.1
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United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water	Field	Lab	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4	NO3	TTHMs	Al	As	Be	
			Elevation	pH	pH													(Chloroform)		
			ft amsl	SU	SU	mg/l	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	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05	0.05	
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017	
0604	N	4/5/2011	6,903.32	5.56	5.5	7190 D	456	809	314 D	13	9	4830 D	56 D	0.11	72 D	4.56	1.7	<0.001	<0.01	
0604	N	7/13/2011	6,903.08	5.48	5.39	6990 D	456	825	324	12	17	4690 D	55 D	<0.1	69 D	1.98	2.3	<0.001	<0.01	
0604	N	10/5/2011	6,903.10	5.35	5.62	6980 D	440	786	306	12	17	4590 D	57 D	<0.1	70 D	5.24	1.2	0.003	<0.01	
0614	N	7/23/1989	6,929.30	6.60	6.84	6868	697	672	491	9.8	1501	3485	381	51	99	82	< 0.1	< 0.001	< 0.05	
0614	N	10/12/1989	6,929.00	6.50	6.98	6734	624	612	479	11.6	1540	3002	377	38.6	126	59	0.18	< 0.001	< 0.05	
0614	N	1/10/1990	6,928.00	6.40	6.80	6892	609	640	491	10.6	1586	3121	359	69	108	100	< 0.1	< 0.001	< 0.05	
0614	N	4/5/1990	6,927.50	6.40	7.06	6877	622	680	492	11.2	1632	3277	350	94	107	164	< 0.1	< 0.001	< 0.05	
0614	N	7/3/1990	6,926.60	6.30	6.86	6754	640	619	429	10.9	1492	2996	341	111	151	152	0.13	< 0.001	< 0.05	
0614	N	10/3/1990	6,926.30	6.30	7.23	6567	585	577	507	14.1	1362	2894	334	76.6	106	176	0.1	0.005	< 0.05	
0614	N	1/15/1991	6,926.40	6.40	6.96	6633	647	623	478	9.6	1412	3253	322	68	125	170	0.2	< 0.001	< 0.01	
0614	N	4/2/1991	6,926.20	6.40	7.18	6539	619	495	420	10.1	1257	3165	322	78.3	131	254	0.11	< 0.001	< 0.01	
0614	N	7/17/1991	6,925.90	6.40	7.49	6970	573	551	443	9.7	1680	3645	327	69.4	169	380	< 0.1	< 0.001	< 0.01	
0614	N	9/4/1991	no data	no data	6.94	7610	624	634	446	10.3	1629	4105	303	116	83.2	486	0.22	< 0.001	< 0.01	
0614	N	10/15/1991	6,925.30	6.30	7.15	7145	664	526	418	10	1515	3239	313	53.8	119	361	< 0.1	0.001	< 0.01	
0614	N	11/4/1991	no data	no data	6.97	7026	614	490	436	10.5	1516	3449	308	87.3	97.6	464	0.32	< 0.001	< 0.01	
0614	N	12/2/1991	no data	no data	7.38	7264	610	559	425	10.7	1577	3197	287	79.5	133	400	0.42	< 0.001	< 0.01	
0614	N	1/15/1992	6,925.20	6.30	7.34	7026	584	645	449	10.1	1268	3376	287	94.9	123	525	< 0.1	< 0.001	< 0.01	
0614	N	4/8/1992	6,925.10	6.30	7.48	7207	691	601	486	10.8	1568	3603	279	101	70.2	471	< 0.1	0.003	< 0.01	
0614	N	7/8/1992	6,924.80	6.20	7.51	6583	697	496	640	11.3	1512	3249	274	79.8	116	303	< 0.1	0.001	< 0.01	
0614	N	10/7/1992	6,924.70	6.40	8.08	6914	661	577	566	12.9	803	3248	273	48.6	15.8	426	0.1	< 0.001	< 0.01	
0614	N	1/6/1993	6,924.50	6.40	7.04	6464	626	563	487	10.8	1459	3008	270	86.1	117	527	< 0.1	< 0.001	< 0.01	
0614	N	4/6/1993	6,924.40	6.50	7.26	7340	616	607	521	10.1	1620	3518	288	97.4	47.5	400	< 0.1	< 0.001	< 0.01	
0614	N	7/13/1993	6,923.90	6.50	7.11	7485	651	607	506	10.7	1454	3370	262	103	146	553	< 0.1	< 0.001	< 0.01	
0614	N	10/6/1993	6,923.60	6.70	6.95	7439	642	660	476	10.8	1431	3505	244	105	166	667	< 0.1	< 0.001	< 0.01	
0614	N	1/6/1994	6,923.40	6.70	7.14	7380	594	565	485	10	1221	3435	242	91.4	192	617	< 0.1	< 0.001	< 0.01	
0614	N	4/12/1994	6,923.10	6.60	6.96	7496	576	650	446	11.5	1174	3743	242	142	170	866	< 0.1	< 0.001	< 0.01	
0614	N	7/20/1994	6,922.70	6.50	7.28	7490	641	748	425	13.5	1322	4076	231	140	140	799	< 0.1	< 0.001	< 0.01	
0614	N	10/4/1994	6,922.60	6.60	7.54	7700	642	750	519	14.4	1465	4430	246	170	149	829	< 0.1	< 0.001	< 0.01	
0614	N	1/4/1995	6,922.30	6.50	7.38	7528	606	636	446	15.2	1330	4176	237	213	155	520	< 0.1	< 0.001	< 0.01	
0614	N	4/4/1995	6,922.00	6.50	6.90	7731	604	654	451	15	1370	4048	277	183	171	756	< 0.1	< 0.001	< 0.01	
0614	N	7/6/1995	6,922.40	6.50	7.93	7816	565	685	440	15.4	1331	4000	241	227	154	585	< 0.1	< 0.001	< 0.01	
0614	N	10/3/1995	6,921.30	6.50	7.71	7857	560	690	445	16	1357	4040	205	222	179	638	< 0.1	0.003	< 0.01	
0614	N	1/3/1996	6,921.10	6.60	7.20	7886	543	750	470	17.7	1352	4260	204	234	179	583	< 0.1	0.002	< 0.01	
0614	N	4/2/1996	6,920.60	6.50	7.92	7896	605	852	442	17.2	1286	4780	221	262	182	624	< 0.1	0.003	< 0.01	
0614	N	7/7/1996	6,920.30	6.30	6.99	8045	537	750	432	18.5	1313	4210	238	243	181	587	< 0.1	< 0.001	< 0.01	
0614	N	10/1/1996	6,919.70	6.50	6.89	8120	574	805	436	18.4	1320	4394	223	288	189	598	0.6	< 0.001	< 0.01	
0614	N	1/21/1997	6,919.80	6.00	7.01	7850	555	800	437	18.8	1272	4355	201	290	188	635	< 0.1	< 0.001	< 0.01	
0614	N	4/8/1997	6,919.00	6.60	7.79	7970	531	760	428	18.7	1280	4360	218	271	226	482	< 0.1	< 0.001	< 0.01	

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	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	pci/l	pci/l	pci/l	pci/l	pci/l	pci/l
		NRC Standard	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
		EPA Standard	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0604	N	4/5/2011	<0.005	0.2	<0.05	8.09	<0.1	0.26	<0.001	<0.1	0.0005 B	1.1	4.5	5.6	0.09 U	-0.03 U	1.7
0604	N	7/13/2011	<0.005	0.19	<0.05	7.6	<0.1	0.28	<0.001	<0.1	0.0007	0.96	4.1	5.06	0.07 U	0.007 U	1.7
0604	N	10/5/2011	<0.005	0.17	<0.05	7.03	<0.1	0.23	<0.001	<0.1	0.0004	1.6	6.3	7.9	0.07 U	-0.8 U	1.6
0614	N	7/23/1989	<0.01	<0.01	<0.05	0.13	<0.1	<0.05	0.003	<0.1	0.0624	2.9	3.4	6.3	0.6	<1	8.9
0614	N	10/12/1989	<0.01	<0.01	<0.05	0.08	<0.01	<0.05	0.02	<0.1	0.064	0.6	4.9	5.5	<0.2	2.1	1.5
0614	N	1/10/1990	0.01	<0.01	<0.05	0.06	<0.1	<0.05	0.002	<0.1	0.064	0.6	<1	0.6	<0.2	<1	0.9
0614	N	4/5/1990	<0.01	<0.01	<0.05	0.09	<0.1	<0.05	0.003	<0.1	0.045	1	<1	1	<0.2	<1	1.7
0614	N	7/3/1990	<0.01	<0.01	<0.05	0.07	<0.1	<0.05	0.002	<0.1	0.0611	0.9	1.6	2.5	<0.2	<1	<1
0614	N	10/3/1990	<0.01	<0.01	<0.05	0.08	<0.1	<0.05	<0.001	<0.1	0.036	0.4	3	3.4	<0.2	<1	<1
0614	N	1/15/1991	<0.01	<0.01	<0.05	0.09	<0.1	<0.05	0.001	<0.1	0.0425	1.9	<1	1.9	<0.2	1.3	2.3
0614	N	4/2/1991	<0.01	<0.02	<0.05	0.08	<0.1	<0.05	<0.002	<0.1	0.0589	2.7	1.8	4.5	2.2	1.3	3
0614	N	7/17/1991	<0.01	<0.01	<0.05	0.1	<0.1	<0.05	0.002	<0.1	0.064	0.5	<1	0.5	<0.2	<1	<1
0614	N	9/4/1991	<0.01	0.03	<0.05	0.17	<0.1	<0.05	0.002	<0.1	0.0631	0.5	5.4	5.9	<0.2	<1	<1
0614	N	10/15/1991	<0.01	<0.01	<0.05	0.11	<0.1	<0.05	0.003	<0.1	0.076	0.6	5.5	6.1	<0.2	<1	<1
0614	N	11/4/1991	<0.01	0.04	<0.05	0.18	<0.1	<0.1	0.002	<0.1	0.0472	0.9	3.7	4.6	<0.2	<1	<1
0614	N	12/2/1991	<0.01	0.02	<0.05	0.15	<0.1	0.06	0.002	<0.1	0.05	1.2	1.3	2.5	<0.2	<1	1
0614	N	1/15/1992	<0.01	<0.01	<0.05	0.12	<0.1	<0.05	0.059	<0.1	0.039	0.4	<1	0.4	<0.2	<1	<1
0614	N	4/8/1992	<0.01	<0.01	<0.05	0.14	<0.1	<0.05	0.004	<0.1	0.051	0.8	4	4.8	<0.2	<1	<1
0614	N	7/8/1992	<0.01	<0.01	<0.05	0.17	<0.1	<0.05	0.003	<0.1	0.05	1	3.4	4.4	<0.2	<1	1.1
0614	N	10/7/1992	<0.01	<0.01	<0.05	0.15	<0.1	<0.05	0.005	<0.1	0.078	1.5	4.1	5.6	<0.2	1.9	1.8
0614	N	1/6/1993	<0.01	<0.01	<0.05	0.19	<0.1	<0.05	0.012	<0.1	0.082	3.7	1.4	5.1	<0.2	<1	3.9
0614	N	4/6/1993	<0.01	<0.01	<0.05	0.24	<0.1	<0.05	0.003	<0.1	0.072	1.9	5.1	7	<0.2	<1	2.1
0614	N	7/13/1993	<0.01	<0.01	<0.05	0.16	<0.1	<0.05	0.008	<0.1	0.066	1.6	3.2	4.8	<0.2	2.3	1.9
0614	N	10/6/1993	<0.01	0.02	<0.05	0.17	<0.1	<0.05	0.002	<0.1	0.037	2.8	<1	2.8	<0.2	1.8	2.9
0614	N	1/6/1994	<0.01	<0.01	<0.05	0.17	<0.1	<0.05	<0.001	<0.1	0.048	1.6	<1	1.6	<0.2	<1	2.6
0614	N	4/12/1994	<0.01	<0.01	<0.05	0.21	<0.1	<0.05	0.004	<0.1	0.052	1.5	<1	1.5	<0.2	5.2	1.7
0614	N	7/20/1994	<0.01	<0.01	<0.05	0.24	<0.1	<0.05	0.001	<0.1	0.054	2.8	1.9	4.7	<0.2	<1	3.8
0614	N	10/4/1994	<0.01	<0.01	<0.05	0.41	<0.1	<0.05	<0.001	<0.1	0.059	1.2	1.8	3	<0.2	<1	4.1
0614	N	1/4/1995	<0.01	<0.01	<0.05	0.23	<0.1	<0.05	<0.001	<0.1	0.04	1.8	2.4	4.2	<0.2	<1	5.6
0614	N	4/4/1995	<0.01	<0.01	<0.05	0.33	<0.1	<0.05	0.001	<0.1	0.044	1.2	2.9	4.1	<0.2	<1	5.7
0614	N	7/6/1995	<0.01	<0.01	<0.05	0.3	<0.1	<0.05	0.003	<0.1	0.052	7.2	8.4	15.6	0.5	<1	22.8
0614	N	10/3/1995	<0.01	<0.01	<0.05	0.31	<0.1	<0.05	<0.001	<0.1	0.045	0.9	1.1	2	<0.2	1.7	6.2
0614	N	1/3/1996	<0.01	<0.01	<0.05	0.35	<0.1	<0.05	<0.001	<0.1	0.047	6	1.2	7.2	0.7	1.5	12
0614	N	4/2/1996	<0.01	<0.01	<0.05	0.32	<0.1	<0.05	<0.001	<0.1	0.05	1.2	3.4	4.6	<0.2	<1	3.5
0614	N	7/7/1996	<0.01	<0.01	<0.05	0.37	<0.1	<0.05	<0.001	<0.1	0.053	4.9	<1	4.9	<0.2	<1	5.3
0614	N	10/1/1996	<0.01	<0.01	<0.05	0.41	<0.1	<0.05	0.002	<0.1	0.044	1.6	<1	1.6	<0.2	<1	2.1
0614	N	1/21/1997	<0.01	<0.01	<0.05	0.41	<0.1	<0.05	<0.001	<0.1	0.038	1.1	3.6	4.7	<0.2	<1	<1
0614	N	4/8/1997	<0.01	<0.01	<0.05	0.39	<0.1	<0.05	0.074	<0.1	0.049	8.2	3.2	11.4	<0.2	<1	20.4

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As	Be
			ft amsl	SU	SU	mg/l	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	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0614	N	7/8/1997	6,918.60	6.80	7.81	8100	594	841	449	18.6	1290	4520	233	264	223	444	< 0.1	< 0.001	< 0.01
0614	N	10/7/1997	6,918.30	6.40	7.62	7930	602	816	420	16.9	1320	4170	252	253	200	461	< 0.1	< 0.001	< 0.01
0614	N	1/15/1998	6,917.80	6.90	8.01	7980	558	775	446	17	1330	4200	267	225	214	289	< 0.1	< 0.001	< 0.01
0614	N	4/7/1998	6,917.70	6.80	7.72	7930	516	739	447	14	1440	3740	218	170	162	377	< 0.1	< 0.001	< 0.01
0614	N	7/7/1998	6,917.10	6.80	7.96	7990	579	823	466	14	1490	3800	261	171	202	392	< 0.1	< 0.001	< 0.01
0614	N	10/6/1998	6,916.90	7.16	7.87	7730	563	822	496	12.2	1380	4050	261	100	115	176	< 0.1	< 0.001	< 0.01
0614	N	1/5/1999	6,916.20	6.90	7.86	7900	551	786	434	9.9	1520	4000	262	81.2	85.5	255	< 0.1	< 0.001	< 0.01
0614	N	4/6/1999	6,916.20	6.70	7.90	7910	552	844	436	10.2	1590	3780	261	71.5	81.3	258	< 0.1	< 0.001	< 0.01
0614	N	7/13/1999	6,915.51	7.00	7.73	7680	605	891	439	12.7	1280	4000	239	58.1	90.7	188	< 0.1	< 0.001	< 0.01
0614	N	10/5/1999	6,915.30	6.80	7.84	7710	632	961	430	10.8	1362	4410	248	58	83	278	< 0.1	< 0.001	< 0.01
0614	N	1/4/2000	6,915.10	6.80	8.07	7650	510	770	358	11.5	1470	3430	217	65.1	97.4	226	< 0.1	< 0.001	< 0.01
0614	N	5/2/2000	6,914.60	6.50	7.56	7600	514	784	405	15.7	1450	3620	236	87	114	383	< 0.1	< 0.001	< 0.01
0614	N	7/11/2000	6,914.40	6.53	7.53	7600	560	830	426	13.8	1430	3760	229	93.1	109	215	< 0.1	< 0.001	< 0.01
0614	N	10/3/2000	6,914.15	6.55	7.04	7420	548	849	421	17.9	1420	4250	241	98.4	104	174	< 0.1	0.001	< 0.01
0614	N	1/10/2001	6,914.00	7.10	7.38	7380	531	762	349	14.7	1440	3720	268	107	93.3	199	< 0.1	< 0.001	< 0.01
0614	N	4/2/2001	6,913.70	6.64	7.28	7350	615	855	354	14.3	1420	3880	248	118	101	258	< 0.1	< 0.001	< 0.01
0614	N	7/16/2001	6,913.35	6.73	7.02	7330	507	722	415	17.3	1430	3300	320	116	96.9	260	< 0.1	< 0.001	< 0.01
0614	N	10/2/2001	6,913.20	6.61	7.50	7270	520	720	330	16.2	1500	3300	357	118	93.5	183	< 0.1	< 0.001	< 0.01
0614	N	1/14/2002	6,913.00	6.64	7.30	7110	602	751	356	16.7	1490	3460	332	123	86.7	230	< 0.1	< 0.001	< 0.01
0614	N	4/2/2002	6,912.90	6.56	7.60	7120	603	730	427	16.8	1460	3780	312	119	82.7	222	< 0.1	< 0.001	< 0.01
0614	N	7/10/2002	6,912.40	6.45	7.31	6980	577	599	413	14	1430	3360	286	100	82	222	< 0.1	< 0.001	< 0.01
0614	N	10/9/2002	6,912.30	6.05	7.66	5220	520	621	400	12.4	1440	3080	286	87	79.2	228	< 0.1	< 0.001	< 0.01
0614	N	1/8/2003	6,912.06	7.23	7.60	6680	519	598	465	12.1	1470	3020	247	81	74	222	< 0.1	< 0.001	< 0.01
0614	N	4/9/2003	6,911.76	6.44	7.13	6840	559	640	434	16.5	1450	2918	334	76	72	248	< 0.1	< 0.001	< 0.01
0614	N	7/9/2003	6,911.61	6.29	7.38	6430	559	609	467	12	1430	3060	314	58	73	285	< 0.1	< 0.001	< 0.01
0614	N	10/8/2003	6,911.63	6.28	7.32	6670	579	576	460	9.8	1330	3060	312	50	71	192	< 0.1	< 0.001	< 0.01
0614	N	1/7/2004	6,911.41	6.40	6.97	6500	620	655	458	10.8	1390	3160	369	53 D	71.7 D	142 D	0.3	< 0.001	< 0.01
0614	N	4/7/2004	6,911.37	6.55	6.72	6590	597	635	450	10.6	1390	3020 D	347	47 D	72.8 D	140 D	< 0.1	< 0.001	< 0.01
0614	N	7/14/2004	6,911.01	6.28	6.49	6960	591	630	456	10.3	1430	3130 D	346	40 D	70.4 D	128 D	< 0.1	< 0.001	< 0.01
0614	N	10/6/2004	6,911.04	6.32	7.03	6850	600 D	665 D	481	9.9	1450	3230 D	343	45 D	76.5 D	165 D	< 0.1	< 0.001	< 0.01
0614	N	1/5/2005	6,911.01	6.48	6.87	6860	609 D	667 D	494 D	10	1240	3260 D	356	42 D	69 D	27.9 D	< 0.1	< 0.001	< 0.01
0614	N	4/6/2005	6,910.60	6.57	7.23	6500	592	637	478	9.8	1400	3120	346	37	63	157	< 0.1	< 0.001	< 0.01
0614	N	7/13/2005	6,910.51	6.47	7.28	6570	615 D	647 D	437	9.2	1360	3150 D	360	44 D	56 D	178 D	< 0.1	< 0.001	< 0.01
0614	N	10/5/2005	6,910.58	6.48	7.05	6550	584 D	659 D	460	10.5	1440	2910 D	324	50 D	61 D	202 D	< 0.1	0.001	< 0.01
0614	N	1/11/2006	6,910.48	6.58	7.30	6460	550 D	604 D	401	9.8	1370	3090 D	315	58 D	74 D	84.0 D	< 0.1	< 0.001	< 0.01
0614	N	4/4/2006	6,910.28	6.45	7.36	6450	602 D	639 D	417	10.2	1460	2950 D	376 D	139 D	77 D	108 D	< 0.1	< 0.001	< 0.01
0614	N	7/19/2006	6,910.01	6.45	6.83	6240	618	610 D	467	10.3	1350	3040 D	350	46 D	69 D	62.8 D	< 0.1	< 0.001	< 0.01
0614	N	10/4/2006	6,909.93	6.41	6.86	6360	577 D	592 D	439	10.5	1240	2850 D	332	55 D	73 D	125 D	0.1	< 0.001	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pCi/l	pCi/l	pCi/l	pCi/l	pCi/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0614	N	7/8/1997	< 0.01	< 0.01	< 0.05	0.42	< 0.1	< 0.05	< 0.001	< 0.1	0.043	1.5	< 1	1.5	< 0.2	< 1	< 1
0614	N	10/7/1997	< 0.01	< 0.01	< 0.05	0.47	< 0.1	< 0.05	< 0.001	< 0.1	0.051	4.3	3.8	8.1	< 0.2	< 1	7.8
0614	N	1/15/1998	< 0.005	< 0.01	< 0.05	0.44	< 0.1	< 0.05	< 0.001	< 0.1	0.059	1.4	< 1	1.4	< 0.2	< 1	< 1
0614	N	4/7/1998	< 0.005	< 0.01	< 0.05	0.32	< 0.1	< 0.05	< 0.001	< 0.1	0.06	2.2	< 1	2.2	< 0.2	< 1	< 1
0614	N	7/7/1998	< 0.005	< 0.01	< 0.05	0.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0631	2.3	< 1	2.3	< 0.2	< 1	2.3
0614	N	10/6/1998	< 0.005	< 0.01	< 0.05	0.26	< 0.1	< 0.05	< 0.001	< 0.1	0.0732	0.6	< 1	0.6	< 0.2	< 1	< 1
0614	N	1/5/1999	< 0.005	< 0.01	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0682	0.9	2.2	3.1	< 0.2	< 1	< 1
0614	N	4/6/1999	< 0.005	< 0.01	< 0.05	0.26	< 0.1	< 0.05	0.001	< 0.1	0.0641	2.9	3.6	6.5	< 0.2	3.3	3.3
0614	N	7/13/1999	< 0.005	< 0.01	< 0.05	0.23	< 0.1	< 0.05	0.001	< 0.1	0.0672	0.9	1.2	2.1	< 0.2	< 1	< 1
0614	N	10/5/1999	< 0.005	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.001	4.8	< 1	4.8	< 0.2	< 1	6.8
0614	N	1/4/2000	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.0579	3.8	1.1	4.9	< 0.2	< 1	4.3
0614	N	5/2/2000	< 0.005	< 0.01	< 0.05	0.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0678	1.1	5.7	6.8	< 0.2	< 1	7
0614	N	7/11/2000	< 0.005	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.0542	0.6	3.5	4.1	< 0.2	< 1	< 1
0614	N	10/3/2000	< 0.005	< 0.01	< 0.05	0.2	< 0.1	< 0.05	< 0.001	< 0.1	0.053	0.7	3.7	4.4	< 0.2	< 1	< 1
0614	N	1/10/2001	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.051	1.2	3.9	5.1	< 0.2	< 1	< 1
0614	N	4/2/2001	< 0.005	< 0.01	< 0.05	0.27	< 0.1	< 0.05	0.001	< 0.1	0.056	0.8	< 1	0.8	< 0.2	< 1	< 1
0614	N	7/16/2001	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.052	0.6	2.4	3	< 0.2	< 1	< 1
0614	N	10/2/2001	< 0.005	< 0.01	< 0.05	0.22	< 0.1	< 0.05	0.001	< 0.1	0.0478	0.9	3.9	4.8	< 0.2	< 1	< 1
0614	N	1/14/2002	< 0.005	< 0.01	< 0.05	0.28	< 0.1	< 0.05	0.003	< 0.1	0.0501	1.1	5.4	6.5	< 0.2	< 1	< 1
0614	N	4/2/2002	< 0.005	< 0.01	< 0.05	0.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0467	< 0.2	< 1	0	< 0.2	< 1	1.5
0614	N	7/10/2002	< 0.005	< 0.01	< 0.05	0.23	< 0.1	< 0.05	< 0.001	< 0.1	0.0508	1.1	2.3	3.4	< 0.2	< 1	2.2
0614	N	10/9/2002	< 0.005	< 0.01	< 0.05	0.32	< 0.1	< 0.05	< 0.001	< 0.1	0.0439	0.9	< 1	0.9	< 0.2	< 1	1.3
0614	N	1/8/2003	< 0.005	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.0573	1.2	< 1	1.2	< 0.2	< 1	2.1
0614	N	4/9/2003	< 0.005	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.0536	< 0.2	4	4	< 0.2	< 1	1.6
0614	N	7/9/2003	< 0.005	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.0403	0.5	< 1	0.5	< 0.2	< 1	< 1.0
0614	N	10/8/2003	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	< 0.001	< 0.1	0.0468	0.6	2.9	3.5	< 0.2	< 1	2
0614	N	1/7/2004	< 0.005	< 0.01	< 0.05	0.28	< 0.1	< 0.05	< 0.001	< 0.1	0.0509 D	0.8	< 1.0	0.8	< 0.2	< 1.0	1.9
0614	N	4/7/2004	< 0.005	< 0.01	< 0.05	0.26	< 0.1	< 0.05	0.01	< 0.1	0.0506 D	0.7	3.1	3.8	< 0.2	< 1	2.1
0614	N	7/14/2004	< 0.005	< 0.01	< 0.05	0.2	< 0.1	< 0.05	< 0.001	< 0.1	0.0506 D	0.6	< 1.0	0.6	< 0.2	< 1.0	< 1.0
0614	N	10/6/2004	< 0.005	< 0.01	< 0.05	0.23	< 0.1	< 0.05	0.001	< 0.1	0.0516 D	< 0.2	1.7	1.7	< 0.2	< 1.0	< 1.0
0614	N	1/5/2005	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.004	< 0.1	0.0532	1.4	< 1.0	1.4	< 0.2	< 1.0	4.4
0614	N	4/6/2005	< 0.005	< 0.01	< 0.05	0.25	< 0.1	< 0.05	< 0.001	< 0.1	0.05	1.1	4.3	5.4	< 0.2	< 1.0	< 1.0
0614	N	7/13/2005	< 0.005	< 0.01	< 0.05	0.27	< 0.1	< 0.05	< 0.001	< 0.1	0.0489	1.3	< 1.0	1.3	< 0.2	< 1.0	1.3
0614	N	10/5/2005	< 0.005	< 0.01	< 0.05	0.3	< 0.1	< 0.05	< 0.001	< 0.1	0.0498 D	0.6	1.6	2.2	< 0.2	< 1.0	< 1.0
0614	N	1/11/2006	< 0.005	< 0.01	< 0.05	0.38	< 0.1	< 0.05	0.009	< 0.1	0.0512	0.7	1.2	1.9	< 0.2	< 1.0	1.3
0614	N	4/4/2006	< 0.005	< 0.01	< 0.05	0.37	< 0.1	< 0.05	0.01	< 0.1	0.0488 D	0.7	< 1.0	0.7	< 0.2	< 1.0	1
0614	N	7/19/2006	< 0.005	< 0.01	< 0.05	0.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0507	0.5	1.8	2.3	< 0.2	< 1.0	< 1.0
0614	N	10/4/2006	< 0.005	< 0.01	< 0.05	0.36	< 0.1	< 0.05	< 0.001	< 0.1	0.0462 D	0.5	3.4	3.9	< 0.2	< 1	< 1

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water	Field	Lab	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs	Al	As	Be
			Elevation	pH	pH											(Chloroform)			
			ft amsl	SU	SU											ug/l			
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0614	N	1/10/2007	6,909.94	6.49	6.89	6510	559 D	589 D	432	11.2	1340	3040 D	366	50 D	71 D	114	0.1	<0.001	<0.01
0614	N	4/11/2007	6,909.94	6.59	6.19	6480	580 D	615 D	424	11.1	1340	3060 D	348	57 D	80 D	113	<0.1	<0.001	<0.01
0614	N	7/11/2007	6,909.56	6.43	6.98	6280	605 D	626 D	436	10.6	1450	3150 D	310	52 D	82 D	83.2	<0.1	0.005	<0.01
0614	N	10/3/2007	6,909.49	6.43	6.87	6490	540 D	582 D	455 D	11.9	1520	2910 D	378 D	72.3 D	78 D	182	<0.1	<0.001	<0.01
0614	N	1/16/2008	6,909.66	6.61	6.54	6220	584 D	622 D	492 D	12.2	1440	3010 D	354 D	67 D	87 D	137	< 0.1	< 0.001	< 0.01
0614	N	4/9/2008	6,909.61	6.65	7.18	6430	619 D	678 D	517 D	12.0 D	1380	3360 D	309	68.6 D	147 D	210	< 0.1	< 0.001	< 0.01
0614	N	7/9/2008	6,909.11	7.49	7.07	6150	608 D	643 D	513 D	11.3	1290	3190 D	355	72.6 D	121 D	63.6	< 0.1	< 0.003	< 0.01
0614	N	10/8/2008	6,908.91	6.48	6.76	6500	577	612	468 D	10	1580	3510 D	320	72.1 D	111 D	146	< 0.1	< 0.001	< 0.01
0614	N	1/14/2009	6,908.81	7.34	7.09	6870	529	599	493	10 D	1290	2980 D	296	122 D	124 D	42	0.2	<0.001	<0.01
0614	N	4/8/2009	6,908.91	6.55	6.8	6570	550 D	616 D	485 D	11	1470	3190 D	325	70.2 D	98.7 D	52	<0.1	<0.001	<0.01
0614	N	7/8/2009	6,908.61	6.41	6.72	6800	615 D	655	490 D	12	1580	3290 D	335	85 D	94 D	141	0.3	<0.001	<0.01
0614	N	10/7/2009	6,908.71	6.94	7.6	6650	576 D	652	477 D	12	1410	2980 D	343	76 D	101 D	92	<0.1	<0.001	<0.01
0614	N	1/6/2010	6,908.46	7.18	7.5	7060 D	597 D	664	482 D	12	1230	3430 D	318	61.4 D	110 D	39	<0.1	<0.001	<0.01
0614	N	4/7/2010	6,908.21	7.15	7.12	7080 D	605 D	735	502 D	14	1570	3630 D	306	87 D	116 D	184	<0.1	<0.001	<0.01
0614	N	7/14/2010	6,908.06	7.06	6.75	7100 D	583 D	699	492 D	13	1450	3400 D	288 D	93 D	112 D	167	<0.1	<0.001	<0.01
0614	N	10/6/2010	6,908.06	7.21	7.22	6910 D	567 D	673	487 D	13	1440	3330 D	279 D	95 D	113 D	38	<0.1	<0.001	<0.01
0614	N	1/10/2011	6,908.30	6.62	7.26	6830 D	564 D	694	474 D	14	1400	3450 D	295 D	102 D	97 D	154	<0.1	<0.001	<0.01
0614	N	4/11/2011	6,907.96	7.14	6.99	7030 D	584	702	489	14	1210	3580 D	287 D	50 D	<0.1	44	0.9	0.003	<0.01
0614	N	7/13/2011	6,907.51	7.41	7.25	7060 D	577	720	510 D	15	1270	3570 D	283 D	110 D	130 D	32.7	0.6	<0.001	<0.01
0614	N	10/5/2011	6,907.85	6.57	7.02	7040 D	556	700	488 D	15	1220	3620 D	278 D	131 D	129 D	49.2	<0.1	0.002	<0.01
0619	N	7/23/1989	6,888.10	6.60	6.50	5513	593	596	184	8.43	176	3852	35	0.61	0.34	< 1	< 0.1	< 0.001	< 0.05
0619	N	10/12/1989	6,888.20	6.70	7.28	5086	486	491	158	11.1	229	3251	36.6	0.44	1.56	< 1	< 0.1	< 0.001	< 0.05
0619	N	1/10/1990	6,887.60	6.50	7.08	5278	505	539	168	8.75	206	3360	40.5	0.74	1.01	< 1	< 0.1	< 0.001	< 0.05
0619	N	4/6/1990	6,887.60	6.80	6.92	4840	527	512	150	8.8	251	2966	38.5	0.69	0.22	< 1	< 0.1	< 0.001	< 0.05
0619	N	7/3/1990	6,887.00	6.50	7.32	5020	527	478	151	7.8	234	3160	34.2	0.27	0.09	< 1	< 0.1	< 0.001	< 0.05
0619	N	10/3/1990	6,886.90	6.70	7.21	4526	487	392	147	10.1	254	2738	36.6	0.13	< 0.01	< 1	< 0.1	< 0.001	< 0.05
0619	N	1/15/1991	6,887.20	6.50	6.59	5538	572	611	185	12.1	176	3616	41.4	0.54	0.18	< 1	< 0.1	< 0.001	< 0.01
0619	N	4/2/1991	6,887.60	6.40	6.50	5610	479	459	172	8	184	3589	43.1	0.63	1	< 1	0.12	< 0.001	< 0.01
0619	N	7/17/1991	6,888.10	6.40	7.15	5446	452	471	168	7.9	195	3882	43.7	0.68	0.17	< 1	< 0.1	< 0.001	< 0.01
0619	N	10/15/1991	6,888.50	6.40	7.02	5399	540	508	189	7.6	165	3520	44.8	0.63	0.17	< 1	0.27	0.001	< 0.01
0619	N	1/15/1992	6,888.60	6.40	7.34	5182	455	544	177	7.8	231	3398	53.5	1.2	0.87	< 1	< 0.1	< 0.001	< 0.01
0619	N	4/8/1992	6,888.60	6.40	6.52	5323	537	466	204	9.4	180	3504	41.8	0.82	< 0.1	< 1	< 0.1	0.002	< 0.01
0619	N	7/8/1992	6,888.70	6.30	7.64	5017	500	548	302	12.9	175	3863	41.7	1.04	3.7	< 1	0.14	< 0.001	< 0.01
0619	N	10/7/1992	6,889.00	6.50	7.26	5257	538	499	222	10.2	168	3427	39.5	0.59	5.2	< 1	< 0.1	0.002	< 0.01
0619	N	1/6/1993	6,889.30	6.50	7.06	5176	563	507	315	12.6	166	3487	252	0.13	51.8	< 1	< 0.1	0.003	< 0.01
0619	N	4/6/1993	6,889.70	6.60	7.14	5314	487	439	213	7	272	3359	46.6	0.68	0.6	< 1	< 0.1	< 0.001	< 0.01
0619	N	7/13/1993	6,889.60	6.60	6.66	5057	531	471	200	8.1	190	3310	46.2	0.66	0.29	< 1	< 0.1	< 0.001	< 0.01
0619	N	10/7/1993	6,889.50	6.50	6.57	4615	512	460	188	7.4	165	3207	43.5	0.5	< 0.1	< 1	0.32	0.002	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	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	pci/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0614	N	1/10/2007	<0.005	<0.01	<0.05	0.39	<0.1	<0.05	<0.001	<0.1	0.0452	1.2	1.9	3.1	<0.2	<1	<1
0614	N	4/11/2007	<0.005	<0.01	<0.05	0.38	<0.1	<0.05	<0.001	<0.1	0.0461	0.7	2.4	3.1	<0.2	<1	1.5
0614	N	7/11/2007	<0.005	<0.01	<0.05	0.43	<0.1	<0.05	<0.001	<0.1	0.0492	1.3	<1	1.3	<0.2	<1	<1
0614	N	10/3/2007	<0.005	<0.01	<0.05	0.49	<0.1	<0.05	<0.001	<0.1	0.0508	0.7	2	2.7	<0.2	<1	2.1
0614	N	1/16/2008	<0.005	<0.01	<0.05	0.48	<0.1	<0.05	0.002	<0.1	0.054	1.6	2.3	3.9	<0.2	<1	3.8
0614	N	4/9/2008	<0.005	<0.01	<0.05	0.48	<0.1	<0.05	<0.001	<0.1	0.0512	1.1	2.2	3.3	-0.5 U	0 U	5.6
0614	N	7/9/2008	<0.005	<0.01	<0.05	0.5	<0.1	<0.05	<0.001	<0.1	0.0539	0.41	0.72 U	1.13	-0.3 U	5.3 U	0.6 U
0614	N	10/8/2008	<0.005	<0.01	<0.05	0.5	<0.1	<0.05	<0.001	<0.1	0.052	0.25	2.3	2.55	0.3	-2 U	2.4
0614	N	1/14/2009	<0.005	<0.01	<0.05	0.46	<0.1	<0.05	0.001	<0.1	0.0624	0.54	4	4.54	0 U	-1 U	3.3
0614	N	4/8/2009	<0.005	<0.01	<0.05	0.49	<0.1	<0.05	0.001	<0.1	0.0520 D	0.21	2.6	2.81	-0.1 U	-1 U	1
0614	N	7/8/2009	<0.005	<0.01	<0.05	0.54	<0.1	<0.05	0.001	<0.1	0.0524	0.57	3.2	3.77	0.4 U	3	1.7
0614	N	10/7/2009	<0.005	<0.01	<0.05	0.57	<0.1	<0.05	<0.001	<0.1	0.0512	0.37	2.4	2.77	0.0009 U	-1 U	1.3
0614	N	1/6/2010	<0.005	<0.01	<0.05	0.61	<0.1	<0.05	0.002	<0.1	0.0512	0.5	3.7	4.2	0.03 U	0.9 U	1.1
0614	N	4/7/2010	<0.005	<0.01	<0.05	0.6	<0.1	<0.05	0.001	<0.1	0.0481	0.68	3.4	4.08	-0.07 U	0.01 U	0.7
0614	N	7/14/2010	<0.005	<0.01	<0.05	0.54	<0.1	<0.05	0.001	<0.1	0.0492	0.99	3.1	4.09	0.05 U	-1 U	0.9
0614	N	10/6/2010	<0.005	<0.01	<0.05	0.72	<0.1	<0.05	<0.001	<0.1	0.0516	0.47	3.5	3.97	0.01 U	2.3	0.9
0614	N	1/10/2011	<0.005	<0.01	<0.05	0.69	<0.1	<0.05	<0.001	<0.1	0.0502	0.73	3.4	4.13	0.2 U	1.3 U	0.8
0614	N	4/11/2011	<0.005	0.01	<0.05	0.65	<0.1	<0.05	0.001	<0.1	0.0494	0.44	3.9	4.34	-0.003 U	1.2 U	1
0614	N	7/13/2011	<0.005	<0.01	<0.05	0.75	<0.1	<0.05	0.001	<0.1	0.0493	0.46	4.2	4.66	0.06 U	0.2 U	1.5
0614	N	10/5/2011	<0.005	<0.01	<0.05	0.77	<0.1	<0.05	0.001	<0.1	0.0455	0.83	4	4.83	0.06 U	-0.8 U	0.8
0619	N	7/23/1989	<0.01	<0.01	<0.05	2	<0.1	<0.05	<0.001	<0.1	0.0034	2.5	3.7	6.2	4.9	<1	9.1
0619	N	10/12/1989	<0.01	0.02	<0.05	1.3	<0.1	<0.05	<0.001	<0.1	0.011	1.3	2	3.3	<0.2	<1	1.7
0619	N	1/10/1990	<0.01	0.03	<0.05	1.4	<0.1	<0.05	<0.001	<0.1	0.009	1.1	2	3.1	<0.2	<1	1.5
0619	N	4/6/1990	<0.01	<0.01	<0.05	1	<0.1	<0.05	0.001	<0.1	0.009	1.7	2	3.7	<0.2	<1	2.5
0619	N	7/3/1990	<0.01	0.01	<0.05	1.23	<0.1	<0.05	<0.001	<0.1	0.0068	1.7	<1	1.7	0.5	<1	2
0619	N	10/3/1990	<0.01	0.03	<0.05	0.89	<0.1	<0.05	<0.001	<0.1	0.008	0.9	3.1	4	<0.2	<1	<1
0619	N	1/15/1991	0.01	<0.01	<0.05	2.5	<0.1	<0.05	<0.001	<0.1	0.005	3	4.3	7.3	<0.2	2.5	3.1
0619	N	4/2/1991	<0.01	0.01	<0.05	2.01	<0.1	<0.05	<0.001	<0.1	0.005	2.3	2.7	5	<0.2	<1	2
0619	N	7/17/1991	<0.01	0.01	<0.05	<0.01	<0.1	<0.05	<0.001	<0.1	0.004	1.1	1	2.1	0.2	1.6	1
0619	N	10/15/1991	<0.01	<0.01	<0.05	2.22	<0.1	<0.05	<0.001	<0.1	0.009	0.6	4.6	5.2	<0.2	<1	<1
0619	N	1/15/1992	<0.01	<0.01	<0.05	1.82	<0.1	<0.05	0.003	<0.1	0.007	1.2	1.2	2.4	<0.2	<1	1
0619	N	4/8/1992	<0.01	<0.01	<0.05	1.92	<0.1	<0.05	<0.001	<0.1	0.006	0.7	1.8	2.5	<0.2	<1	<1
0619	N	7/8/1992	<0.01	<0.01	<0.05	1.91	<0.1	<0.05	0.001	<0.1	0.003	1	5.2	6.2	<0.2	1.1	1.5
0619	N	10/7/1992	<0.01	<0.01	<0.05	2.04	<0.1	<0.05	<0.001	<0.1	<0.0003	1.7	3.2	4.9	<0.02	<1	1.9
0619	N	1/6/1993	<0.01	0.01	<0.05	0.66	<0.1	<0.05	0.003	<0.1	0.975	0.5	1.6	2.1	<0.2	<1	<1
0619	N	4/6/1993	<0.01	<0.01	<0.05	1.9	<0.1	<0.05	<0.001	<0.1	0.007	0.8	7.1	7.9	<0.2	1.9	<1
0619	N	7/13/1993	<0.01	<0.01	<0.05	1.8	<0.1	<0.05	<0.001	<0.1	0.006	1.4	3.5	4.9	<0.2	2.7	1.8
0619	N	10/7/1993	<0.01	0.01	<0.05	1.75	<0.1	<0.05	0.002	<0.1	0.005	1.3	9	10.3	<0.2	<1	1.4

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As	Be
			ft amsl	SU	SU	mg/l	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	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0619	N	1/6/1994	6,889.80	6.60	7.01	5111	505	416	179	7	171	3192	50.5	2.23	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0619	N	4/12/1994	6,889.70	6.60	7.03	4764	502	432	177	7	173	3035	45.8	1.64	39.8	< 1	0.21	< 0.001	< 0.01
0619	N	7/20/1994	6,889.50	6.60	6.66	5111	565	427	158	7.5	177	3424	45.5	0.6	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0619	N	10/4/1994	6,889.70	6.70	7.56	5045	573	453	187	8.1	200	3658	46	0.62	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0619	N	1/4/1995	6,889.50	6.50	7.21	5078	580	432	172	8.8	203	3349	44.8	1.19	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0619	N	4/5/1995	6,889.40	6.70	6.94	5148	540	500	174	7.67	212	3405	47	1.3	0.13	< 1	< 0.1	< 0.001	< 0.01
0619	N	7/6/1995	6,888.00	6.70	7.66	4288	515	410	153	7.2	216	2963	40	0.74	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0619	N	10/3/1995	6,888.90	6.30	7.78	4677	530	457	175	7.5	192	3255	41	0.74	0.17	< 1	< 0.1	0.002	< 0.01
0619	N	1/3/1996	6,888.80	6.70	7.31	4731	505	445	182	7.8	179	3260	39.5	0.62	0.12	< 1	< 0.1	< 0.001	< 0.01
0619	N	4/2/1996	6,888.60	6.80	7.90	5039	545	473	164	7.9	204	3395	47	0.52	0.11	< 1	< 0.1	< 0.001	< 0.01
0619	N	7/7/1996	6,888.30	6.40	7.15	5207	515	450	180	8.6	179	3195	50	0.69	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0619	N	10/1/1996	6,888.10	6.40	6.95	5140	547	478	182	8.1	190	3232	47.1	0.46	< 0.1	< 1	0.1	< 0.001	< 0.01
0619	N	1/22/1997	6,888.50	6.20	7.53	5060	540	490	177	8.09	182	3350	44	0.42	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0619	N	4/8/1997	6,887.80	6.50	7.82	5110	539	458	170	8	193	3370	45	0.2	0.17	< 1	< 0.1	< 0.001	< 0.01
0619	N	7/8/1997	6,887.40	7.10	7.73	5130	586	514	182	8.3	190	3510	49.2	0.5	0.21	< 1	< 0.1	< 0.001	< 0.01
0619	N	10/7/1997	6,887.30	6.20	7.78	5080	569	483	178	8.15	217	3190	47.1	0.46	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0619	N	1/15/1998	6,887.20	6.90	8.09	5310	521	484	187	8.8	190	3300	55	0.67	0.13	< 1	< 0.1	< 0.001	< 0.01
0619	N	4/7/1998	6,887.10	6.60	7.42	5280	504	469	176	7.9	188	3120	41.1	0.42	0.26	< 1	< 0.1	< 0.001	< 0.01
0619	N	7/7/1998	6,886.70	6.90	7.61	5210	505	478	181	8.4	195	3200	40.7	0.63	< 0.1	< 1	< 0.1	< 0.001	< 0.01
0619	N	10/6/1998	6,887.00	6.83	7.88	5390	535	532	197	9.4	191	3480	44.8	0.42	0.42	< 1	< 0.1	< 0.001	< 0.01
0619	N	1/5/1999	6,886.20	6.80	7.72	5350	523	497	175	8.5	186	3500	44.3	0.33	0.17	< 1	< 0.1	< 0.001	< 0.01
0619	N	4/6/1999	6,886.40	6.70	7.79	5430	528	534	167	8.1	181	3440	54.4	0.57	0.21	< 1	< 0.1	< 0.001	< 0.01
0619	N	7/13/1999	6,885.69	6.60	7.96	5400	551	565	195	11.4	194	3460	50.3	0.49	0.29	< 1	< 0.1	< 0.001	< 0.01
0619	N	10/5/1999	6,885.60	6.86	7.86	5220	581	606	169	8.4	188	3790	48.3	0.51	0.28	< 1	< 0.1	< 0.001	< 0.01
0619	N	1/4/2000	6,885.60	6.70	7.67	5330	467	497	151	8.9	188	3000	44.4	< 0.05	0.18	< 1	< 0.1	< 0.001	< 0.01
0515 A	N	7/23/1989	6,920.50	4.50	4.63	7411	482	871	340	12.6	18	4982	52.5	0.39	86	14	12	< 0.001	< 0.05
0515 A	N	10/12/1989	6,920.80	4.70	4.60	7650	439	861	328	15.8	4.1	4583	77.8	0.39	84	12	15	< 0.001	< 0.05
0515 A	N	1/10/1990	6,919.60	4.00	3.94	9350	449	1017	335	13.7	< 1	6227	36.8	3.79	52	8.4	110	< 0.001	< 0.05
0515 A	N	4/5/1990	6,918.80	3.90	3.98	9405	451	1073	331	13.3	< 1	6237	30.8	3.25	55	11.8	150	< 0.001	< 0.05
0515 A	N	7/3/1990	6,918.10	4.00	4.18	9187	435	941	320	12.7	< 1	6084	59.4	0.67	54.2	22.4	110	< 0.001	< 0.05
0515 A	N	10/3/1990	6,917.80	4.40	4.32	9021	440	992	390	15.7	< 1	5728	82.6	0.17	51.6	25.4	75.6	< 0.001	< 0.05
0515 A	N	1/15/1991	6,916.90	4.40	4.31	9290	523	1146	407	16.7	< 1	6476	68.5	0.65	58.5	42	48.4	< 0.001	0.01
0515 A	N	4/3/1991	6,916.60	4.60	4.88	9254	459	1159	387	12.9	16	5627	83	0.31	41.4	75.3	60.7	< 0.001	< 0.01
0515 A	N	7/17/1991	6,916.50	4.50	4.60	8966	486	940	342	13.2	12	6653	83.5	0.79	38.6	38.4	45.8	< 0.001	0.02
0515 A	N	9/4/1991	no data	no data	4.62	9792	429	768	385	13.6	5	6955	52.2	0.66	18.1	36.4	9.6	< 0.001	< 0.01
0515 A	N	10/15/1991	6,916.20	4.80	4.92	9118	410	749	453	15	9.5	5832	108	< 0.05	19.9	102	3.3	< 0.001	< 0.01
0515 A	N	11/4/1991	no data	no data	4.33	9001	426	759	377	12.9	< 1	5750	103	0.53	65.7	28	23.19	< 0.001	0.02
0515 A	N	12/2/1991	no data	no data	4.59	9153	425	831	376	13.4	7.2	5298	102	0.9	36	55.9	35.4	< 0.001	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0619	N	1/6/1994	< 0.01	< 0.01	< 0.05	1.8	< 0.1	< 0.05	< 0.001	< 0.1	0.004	2.1	2.9	5	< 0.2	1.4	7.4
0619	N	4/12/1994	< 0.01	0.02	< 0.05	1.75	< 0.1	< 0.05	< 0.001	< 0.1	0.005	2	7.9	9.9	< 0.2	5.8	14
0619	N	7/20/1994	< 0.01	< 0.01	< 0.05	1.57	< 0.1	< 0.05	< 0.001	< 0.1	0.01	1.5	1.3	2.8	< 0.2	< 1	3.6
0619	N	10/4/1994	< 0.01	< 0.01	< 0.05	1.85	< 0.1	< 0.05	< 0.001	< 0.1	0.012	1.3	1.9	3.2	< 0.2	2.5	4.3
0619	N	1/4/1995	< 0.01	< 0.01	< 0.05	1.45	< 0.1	0.07	< 0.001	< 0.1	0.01	1.3	3.9	5.2	< 0.2	< 1	7.3
0619	N	4/5/1995	< 0.01	< 0.01	< 0.05	1.78	< 0.1	< 0.05	< 0.001	< 0.1	0.008	1.6	2.8	4.4	< 0.2	3.7	5.9
0619	N	7/6/1995	< 0.01	< 0.01	< 0.05	1.65	< 0.1	< 0.05	< 0.001	< 0.1	0.0065	1.1	3.1	4.2	0.6	< 1	2.7
0619	N	10/3/1995	< 0.01	< 0.01	< 0.05	1.79	< 0.1	< 0.05	< 0.001	< 0.1	0.0101	1.3	< 1	1.3	< 0.2	< 1	3.1
0619	N	1/3/1996	< 0.01	< 0.01	< 0.05	1.78	< 0.1	< 0.05	< 0.001	< 0.1	0.0067	1.5	< 1	1.5	1	< 1	2.5
0619	N	4/2/1996	< 0.01	< 0.01	< 0.05	1.71	< 0.1	< 0.05	< 0.001	< 0.1	0.018	1.7	4.8	6.5	< 0.2	4.1	3.5
0619	N	7/7/1996	< 0.01	< 0.01	< 0.05	1.9	< 0.1	< 0.05	< 0.001	< 0.1	0.008	1.7	< 1	1.7	< 0.2	< 1	1.1
0619	N	10/1/1996	< 0.01	< 0.01	< 0.05	1.86	< 0.1	< 0.05	0.001	< 0.1	0.0036	1.5	< 1	1.5	< 0.2	< 1	2
0619	N	1/22/1997	< 0.01	< 0.01	< 0.05	1.84	< 0.1	< 0.05	< 0.001	< 0.1	0.008	1.3	< 1	1.3	< 0.2	< 1	< 1
0619	N	4/8/1997	< 0.01	< 0.01	< 0.05	1.87	< 0.1	< 0.05	0.004	< 0.1	0.0056	2	4.2	6.2	< 0.2	< 1	4.7
0619	N	7/8/1997	< 0.01	< 0.01	< 0.05	1.94	< 0.1	< 0.05	< 0.001	< 0.1	0.005	1.6	4.2	5.8	< 0.2	< 1	< 1
0619	N	10/7/1997	< 0.01	< 0.01	< 0.05	2.05	< 0.1	< 0.05	< 0.001	< 0.1	0.007	2	< 1	2	< 0.2	< 1	< 1
0619	N	1/15/1998	< 0.005	< 0.01	< 0.05	2.26	< 0.1	< 0.05	< 0.001	< 0.1	0.0099	4.3	3.6	7.9	< 0.2	< 1	7.5
0619	N	4/7/1998	< 0.005	< 0.01	< 0.05	1.94	< 0.1	< 0.05	< 0.001	< 0.1	0.0062	3.6	4.7	8.3	< 0.2	< 1	2.3
0619	N	7/7/1998	< 0.005	< 0.01	< 0.05	1.97	< 0.1	< 0.05	< 0.001	< 0.1	0.0051	1.2	3.6	4.8	< 0.2	< 1	< 1
0619	N	10/6/1998	< 0.005	0.01	< 0.05	2.04	< 0.1	< 0.05	< 0.001	< 0.1	0.016	1.4	3.2	4.6	< 0.2	< 1	< 1
0619	N	1/5/1999	< 0.005	< 0.01	< 0.05	2.17	< 0.1	< 0.05	< 0.001	< 0.1	0.0072	1.3	4.1	5.4	< 0.2	2.4	2.4
0619	N	4/6/1999	0.005	< 0.01	< 0.05	2.19	< 0.1	< 0.05	< 0.001	< 0.1	0.0053	2.5	4.8	7.3	< 0.2	2	2
0619	N	7/13/1999	< 0.005	< 0.01	< 0.05	2.34	< 0.1	< 0.05	< 0.001	< 0.1	0.0072	1.4	3	4.4	< 0.2	< 1	< 1
0619	N	10/5/1999	< 0.005	0.01	< 0.05	2.77	< 0.1	< 0.05	< 0.001	< 0.1	0.0066	1.7	3	4.7	< 0.2	< 1	3.9
0619	N	1/4/2000	< 0.005	< 0.01	< 0.05	2.43	< 0.1	< 0.05	< 0.001	< 0.1	0.0067	1.4	1.8	3.2	< 0.2	< 1	1.5
0515 A	N	7/23/1989	< 0.01	0.07	< 0.05	7.7	< 0.1	0.26	< 0.001	< 0.1	0.0029	6.3	9.4	15.7	< 0.2	3	23.1
0515 A	N	10/12/1989	< 0.01	0.09	< 0.05	8.5	< 0.01	0.26	0.019	< 0.1	0.004	3.2	< 1	3.2	< 0.2	1.6	3.9
0515 A	N	1/10/1990	< 0.01	0.26	< 0.05	23	< 0.1	0.37	< 0.001	< 0.1	0.01	5.2	9.7	14.9	1.7	3.5	9.7
0515 A	N	4/5/1990	< 0.01	0.31	< 0.05	24	< 0.1	0.46	< 0.001	< 0.1	0.008	4.9	5.5	10.4	1.8	2.2	7.3
0515 A	N	7/3/1990	< 0.01	0.18	< 0.05	17.6	< 0.1	0.35	< 0.001	< 0.1	0.0107	6.9	6.2	13.1	< 0.2	< 1	7
0515 A	N	10/3/1990	< 0.01	0.17	< 0.05	12.8	< 0.1	0.31	< 0.001	< 0.1	0.005	3.3	8.3	11.6	< 0.2	< 1	4
0515 A	N	1/15/1991	0.01	0.16	< 0.05	11.6	< 0.1	0.32	< 0.001	< 0.1	0.007	5.3	7.1	12.4	< 0.2	< 1	5.7
0515 A	N	4/3/1991	< 0.01	0.11	< 0.05	7.1	< 0.1	0.2	< 0.001	< 0.1	0.003	6.1	7.2	13.3	< 0.2	2	6
0515 A	N	7/17/1991	< 0.01	0.24	< 0.05	14.7	< 0.1	0.3	< 0.001	< 0.1	0.011	2.7	3.5	6.2	< 0.2	< 1	3
0515 A	N	9/4/1991	< 0.01	0.15	< 0.05	11.6	< 0.1	0.28	< 0.001	< 0.1	0.008	2.1	6.3	8.4	< 0.2	< 1	2
0515 A	N	10/15/1991	< 0.01	0.22	< 0.05	14.4	< 0.1	0.19	< 0.001	< 0.1	0.02	2.4	9	11.4	< 0.2	< 1	3
0515 A	N	11/4/1991	< 0.01	0.17	< 0.05	15.2	< 0.1	0.33	< 0.001	< 0.1	0.0138	3.5	12	15.5	< 0.2	6.9	4
0515 A	N	12/2/1991	< 0.01	0.24	< 0.05	14.1	< 0.1	0.32	< 0.001	< 0.1	0.01	5.4	10.4	15.8	< 0.2	< 1	5

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Cl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As	Be
			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	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0515 A	N	1/15/1992	6,916.10	4.50	4.61	9035	409	814	396	12.6	16.8	5854	90.3	0.18	26.5	19	26.6	< 0.001	0.02
0515 A	N	4/8/1992	6,916.20	4.30	5.30	9087	430	723	416	14.5	19.8	5710	130	1.23	19.2	24	16.2	0.003	0.01
0515 A	N	7/8/1992	6,915.80	4.30	4.78	8447	438	687	511	17.7	5.3	5892	109	1.78	31	63	21	0.001	< 0.01
0515 A	N	10/7/1992	6,915.70	4.60	4.10	8989	450	953	470	19.4	< 1	6028	78.2	0.43	15.1	48.2	48.8	< 0.001	< 0.01
0515 A	N	1/6/1993	6,915.60	5.30	4.98	7144	415	776	384	13	19.3	4980	145	0.71	21.8	102	10.2	< 0.001	0.01
0515 A	N	4/6/1993	6,915.60	4.70	4.55	8962	389	863	471	12.5	2.5	5942	150	0.35	27.1	89	35.6	< 0.001	0.013
0515 A	N	7/13/1993	6,915.00	5.00	4.60	8790	449	1088	458	14	7.1	5755	195	1.14	29.3	133	5.73	< 0.001	< 0.01
0515 A	N	10/6/1993	6,914.80	6.00	6.22	8235	454	1038	479	12.6	554	5500	225	0.94	38	255	1.87	< 0.001	< 0.01
0515 A	N	1/6/1994	6,914.70	5.50	6.13	8633	436	862	478	11.3	373	5042	227	2.18	45.7	315	2.92	< 0.001	< 0.01
0515 A	N	4/12/1994	6,914.40	5.70	5.98	8306	433	868	440	11.3	183	5305	223	2.17	51.9	277	1.51	< 0.001	< 0.01
0515 A	N	7/20/1994	6,913.90	5.60	6.91	8197	483	902	419	12.5	206	5157	195	0.97	45.6	271	1.42	< 0.001	< 0.01
0515 A	N	10/4/1994	6,914.00	5.60	6.62	8173	496	924	493	12.6	260	5276	236	1.64	51.8	241	2.45	< 0.001	< 0.01
0515 A	N	1/4/1995	6,913.70	5.50	6.69	8234	485	945	443	14.1	266	5293	212	1.42	49	213	1.7	< 0.001	< 0.01
0515 A	N	4/4/1995	6,913.40	5.60	5.91	7657	488	802	488	14.1	185	5196	240	2	58.5	182	2.04	< 0.001	< 0.01
0515 A	N	7/6/1995	6,912.90	5.80	7.09	8297	475	926	449	13.1	315	5060	236	3.99	49.7	181	0.25	< 0.001	< 0.01
0515 A	N	10/3/1995	6,912.90	5.80	7.16	8311	490	928	477	13	421	5042	253	6.81	53.3	0.264	0.65	0.002	< 0.01
0515 A	N	1/3/1996	6,912.70	5.80	6.43	8017	450	876	468	13.5	475	4830	252	5.6	56.9	236	< 0.1	< 0.001	< 0.01
0515 A	N	4/2/1996	6,912.40	6.00	7.53	8300	506	997	457	14	392	5360	279	6.57	61	0.247	0.6	< 0.001	< 0.01
0515 A	N	7/7/1996	6,912.20	5.30	5.94	8117	447	853	426	13.6	210	4670	250	1.76	54.7	0.211	1.42	< 0.001	< 0.01
0515 A	N	10/1/1996	6,912.00	5.70	6.58	8270	441	910	457	14.5	342	4834	268	6.97	53.5	238	0.85	< 0.001	< 0.01
0515 A	N	1/21/1997	6,911.90	5.60	6.77	8110	449	979	455	15	428	5140	253	8.03	46.8	239	0.97	< 0.001	< 0.01
0515 A	N	4/8/1997	6,911.70	5.50	7.37	8220	456	865	449	15	331	4388	294	6.41	58.5	230	0.75	< 0.001	< 0.01
0515 A	N	7/8/1997	6,911.20	6.40	6.75	8260	502	950	466	15.1	296	5130	300	5.39	57.9	238	1.27	< 0.001	< 0.01
0515 A	N	10/7/1997	6,911.20	5.50	6.71	8200	490	906	450	14.6	254	4790	255	6.04	56.4	242	0.98	< 0.001	< 0.01
0515 A	N	1/15/1998	6,911.00	5.70	6.80	8040	455	860	439	14.7	228	4800	287	10.4	64.8	262	2	< 0.001	< 0.01
0515 A	N	4/7/1998	6,911.00	5.50	7.14	8190	429	821	444	14.1	276	4420	257	6.47	58.9	236	0.78	< 0.001	< 0.01
0515 A	N	7/7/1998	6,910.90	5.80	7.61	8170	481	912	456	14.5	291	4500	291	6.9	63.9	270	0.87	< 0.001	< 0.01
0515 A	N	10/6/1998	6,910.50	5.69	7.32	8170	465	910	468	15.5	317	5000	286	3.89	70.5	no data	0.51	< 0.001	< 0.01
0515 A	N	1/5/1999	6,910.00	5.70	7.18	8200	412	867	410	14.2	306	4900	287	6.47	57.4	210	0.69	< 0.001	< 0.01
0515 A	N	4/6/1999	6,910.10	5.50	6.59	8130	444	889	404	13.7	292	4600	286	6.52	57.8	190	0.86	< 0.001	< 0.01
0515 A	N	7/13/1999	6,909.88	5.70	7.42	7930	486	938	440	18	272	4800	254	4.52	62.6	172	0.4	< 0.001	< 0.01
0515 A	N	10/5/1999	6,910.00	5.36	7.27	7950	526	1040	423	14.6	253	5440	272	6.64	55.6	183	1.02	< 0.001	< 0.01
0515 A	N	1/4/2000	6,910.40	5.50	7.14	7720	414	810	338	13.7	222	4150	221	3.59	65.1	171	1.22	< 0.001	< 0.01
0515 A	N	5/10/2000	6,910.60	5.50	7.01	8080	437	871	437	13.6	356	4440	261	9.79	62.8	198	2.44	< 0.001	< 0.01
0515 A	N	7/11/2000	6,910.30	5.45	6.50	7740	458	866	428	13.4	242	4460	239	4.19	86.5	154	2.11	< 0.001	< 0.01
0515 A	N	10/3/2000	6,910.40	5.47	6.70	7550	456	906	432	16.2	228	5060	236	2.56	70.1	181	2.08	< 0.001	< 0.01
0515 A	N	1/10/2001	6,910.40	5.62	6.61	7610	440	816	364	12.9	222	4410	258	2.76	66.4	141	2.7	< 0.001	< 0.01
0515 A	N	4/3/2001	6,910.30	5.85	6.54	7580	512	929	373	12.3	225	4640	247	2.85	68.5	148	2.9	< 0.001	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0515 A	N	1/15/1992	< 0.01	0.02	< 0.05	15.5	< 0.1	0.31	0.01	< 0.1	0.012	2.6	4.4	7	< 0.2	4.2	3
0515 A	N	4/8/1992	< 0.01	0.19	< 0.05	13.6	< 0.1	0.27	0.01	< 0.1	0.013	3.4	6.4	9.8	< 0.2	< 1	3.6
0515 A	N	7/8/1992	< 0.01	0.19	< 0.05	15.7	< 0.1	0.26	0.001	< 0.1	0.02	3.4	10.8	14.2	< 0.2	1.6	3.7
0515 A	N	10/7/1992	< 0.01	0.28	< 0.05	18.7	< 0.1	0.38	< 0.001	< 0.1	0.02	5.6	7	12.6	< 0.2	< 1	5.9
0515 A	N	1/6/1993	< 0.01	0.21	< 0.05	14.2	< 0.1	0.34	0.004	< 0.1	0.015	5.7	6.7	12.4	< 0.2	< 1	5.9
0515 A	N	4/6/1993	< 0.01	0.26	< 0.05	18.8	< 0.1	0.37	0.001	< 0.1	0.015	2.9	9.5	12.4	< 0.2	4.4	3.6
0515 A	N	7/13/1993	< 0.01	0.2	< 0.05	14	< 0.1	0.28	< 0.001	< 0.1	0.012	2.6	6.5	9.1	< 0.2	2.9	3.4
0515 A	N	10/6/1993	< 0.01	0.13	< 0.05	9.81	< 0.1	0.27	< 0.001	< 0.1	0.004	3.5	7	10.5	< 0.2	2.6	3.9
0515 A	N	1/6/1994	< 0.01	0.15	< 0.05	12.1	< 0.1	0.26	< 0.001	< 0.1	0.004	5.4	2.8	8.2	< 0.2	< 1	10.6
0515 A	N	4/12/1994	< 0.01	< 0.01	< 0.05	10.6	< 0.1	0.21	0.001	< 0.1	0.03	4.8	< 1	4.8	< 0.2	3.9	5
0515 A	N	7/20/1994	< 0.01	0.18	< 0.05	11.4	< 0.1	0.25	0.001	< 0.1	0.002	4.2	9.3	13.5	< 0.2	< 1	24.2
0515 A	N	10/4/1994	< 0.01	0.16	< 0.05	15.3	< 0.1	0.31	< 0.001	< 0.1	0.003	6.6	3.7	10.3	< 0.2	1	12.3
0515 A	N	1/4/1995	< 0.01	0.11	< 0.05	10.2	< 0.1	0.42	< 0.001	< 0.1	0.004	6.2	4.7	10.9	< 0.2	< 1	13.4
0515 A	N	4/4/1995	< 0.01	0.13	< 0.05	11	< 0.1	0.15	< 0.001	< 0.1	0.002	4.7	7.5	12.2	< 0.2	2.9	16.1
0515 A	N	7/6/1995	< 0.01	0.02	< 0.05	2.52	< 0.1	< 0.05	0.002	< 0.1	0.0044	3	4.2	7.2	0.3	< 1	16.1
0515 A	N	10/3/1995	< 0.01	0.07	< 0.05	11.1	< 0.1	0.13	< 0.001	< 0.1	0.0057	3.6	< 1	3.6	< 0.2	< 1	13.6
0515 A	N	1/3/1996	< 0.01	< 0.01	< 0.05	11.4	< 0.1	0.14	< 0.001	< 0.1	0.0038	3.4	3.1	6.5	0.8	< 1	7.4
0515 A	N	4/2/1996	< 0.01	0.08	< 0.05	11.8	< 0.1	0.14	< 0.001	< 0.1	< 0.0003	2.4	3.9	6.3	< 0.2	< 1	5.4
0515 A	N	7/7/1996	< 0.01	0.11	< 0.05	12.9	< 0.1	0.17	< 0.001	< 0.1	0.0023	2.6	< 1	2.6	< 0.2	< 1	3.4
0515 A	N	10/1/1996	< 0.01	0.08	< 0.05	13.2	< 0.1	0.15	0.002	< 0.1	0.0028	2.1	5.4	7.5	< 0.2	< 1	3.8
0515 A	N	1/21/1997	< 0.01	0.07	< 0.05	12.2	< 0.1	0.14	< 0.001	< 0.1	0.004	2.9	3.6	6.5	< 0.2	< 1	2.5
0515 A	N	4/8/1997	< 0.01	0.07	< 0.05	12.1	< 0.1	0.15	0.069	< 0.1	0.0019	4.9	4.5	9.4	< 0.2	< 1	13
0515 A	N	7/8/1997	< 0.01	0.09	< 0.05	14.6	< 0.1	0.15	< 0.001	< 0.1	0.003	1.6	3.7	5.3	< 0.2	< 1	2.2
0515 A	N	10/7/1997	< 0.01	0.08	< 0.05	12.9	< 0.1	0.17	< 0.001	< 0.1	0.003	2.1	< 1	2.1	< 0.2	< 1	3.2
0515 A	N	1/15/1998	< 0.005	0.1	< 0.05	15.6	< 0.1	0.19	< 0.001	< 0.1	0.0025	2.3	4.8	7.1	< 0.2	< 1	2.4
0515 A	N	4/7/1998	< 0.005	0.08	< 0.05	12.1	< 0.1	0.17	< 0.001	< 0.1	0.0034	2.5	3.7	6.2	< 0.2	< 1	4.1
0515 A	N	7/7/1998	< 0.005	0.07	< 0.05	13.9	< 0.1	0.15	< 0.001	< 0.1	0.0031	2.9	4.2	7.1	< 0.2	< 1	3.8
0515 A	N	10/6/1998	< 0.005	0.06	< 0.05	11.8	< 0.1	0.15	< 0.001	< 0.1	0.0049	2.3	1.2	3.5	< 0.2	2.8	210
0515 A	N	1/5/1999	0.011	0.05	< 0.05	12.3	< 0.1	0.12	< 0.001	< 0.1	0.0035	2.2	3.9	6.1	< 0.2	2.5	2.5
0515 A	N	4/6/1999	0.006	0.07	< 0.05	13.6	< 0.1	0.15	< 0.001	< 0.1	0.0029	3.4	4.8	8.2	< 0.2	3.1	3.1
0515 A	N	7/13/1999	0.006	0.05	< 0.05	13.6	< 0.1	0.13	< 0.001	< 0.1	0.0036	2.3	2.9	5.2	< 0.2	2	2
0515 A	N	10/5/1999	0.008	0.07	< 0.05	16.6	< 0.1	0.15	< 0.001	< 0.1	0.0023	2.4	< 1	2.4	< 0.2	< 1	4.7
0515 A	N	1/4/2000	0.006	0.08	< 0.05	14	< 0.1	0.22	< 0.001	< 0.1	0.0025	3.2	4.2	7.4	< 0.2	< 1	3.7
0515 A	N	5/10/2000	< 0.005	0.06	< 0.05	11.8	< 0.1	0.18	< 0.001	< 0.1	0.0036	4.1	2.1	6.2	< 0.2	< 1	12
0515 A	N	7/11/2000	< 0.005	0.09	< 0.05	14.6	< 0.1	0.19	< 0.001	< 0.1	0.0021	2	3.6	5.6	< 0.2	< 1	4.6
0515 A	N	10/3/2000	< 0.005	0.07	< 0.05	11.6	< 0.1	0.15	< 0.001	< 0.1	0.0019	2.8	5.9	8.7	< 0.2	< 1	5.1
0515 A	N	1/10/2001	< 0.005	0.08	< 0.05	12.5	< 0.1	0.22	< 0.001	< 0.1	0.0017	2.6	6.3	8.9	< 0.2	< 1	3.4
0515 A	N	4/3/2001	< 0.005	0.1	< 0.05	13.3	< 0.1	0.25	< 0.001	< 0.1	0.0011	2.7	< 1	2.7	< 0.2	< 1	3.1

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As	Be
			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	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05	0.017
0515 A	N	7/17/2001	6,909.90	5.94	5.96	7770	420	810	421	14.1	225	4010	260	2.62	70.9	160	2.89	< 0.001	< 0.01
0515 A	N	10/2/2001	6,910.00	5.44	6.60	7780	430	820	351	14	217	4000	327	2	66.5	165	2.29	< 0.001	< 0.01
0515 A	N	1/14/2002	6,909.85	6.56	6.30	7680	501	887	349	14.6	212	4410	305	2.07	60.5	149	3	0.002	< 0.01
0515 A	N	4/2/2002	6,910.00	5.41	6.57	7670	492	855	412	15.2	214	4790	279	1.75	61.9	162	2.9	< 0.001	< 0.01
0515 A	N	7/10/2002	6,909.30	7.25	6.33	7750	470	850	401	13.4	211	4420	250	2.39	61.5	162	2.4	< 0.001	< 0.01
0515 A	N	10/9/2002	6,910.87	6.54	6.61	6900	428	778	386	12.5	210	4270	228	2.95	63	203	3.1	< 0.001	< 0.01
0515 A	N	1/8/2003	6,909.16	7.08	6.74	7640	385	720	392	13.1	209	3810	223	3.16	57	162	2.4	< 0.001	< 0.01
0515 A	N	4/9/2003	6,908.81	5.31	6.37	7680	443	816	402	18.9	198	4050	270	2.81	58	166	2.4	< 0.001	< 0.01
0515 A	N	7/9/2003	6,908.68	5.25	6.41	6250	450	814	450	14.5	203	4500	246	3.11	61	237	2.6	< 0.001	< 0.01
0515 A	N	10/8/2003	6,908.80	5.24	6.20	7800	453	843	427	12.4	190	4470	232	2.98	59	148	2.6	< 0.001	< 0.01
0515 A	N	1/7/2004	6,909.85	5.38	7.38	7680	512	916	445	14.3	193	4850	275	3.24	60.2 D	124 D	3	< 0.001	< 0.01
0515 A	N	4/7/2004	6,908.45	5.62	5.65	7720	476	847	431	13.6	202	4540 D	253	3.6	60.9 D	167 D	2.8	< 0.001	< 0.01
0515 A	N	7/14/2004	6,908.21	5.22	5.91	8010	470	815	426	14.3	200	4590 D	262	2.88	57.4 D	147 D	2.1	< 0.001	< 0.01
0515 A	N	10/6/2004	6,908.21	5.33	5.92	8000	473 D	857 D	440	13.9	199	4700 D	253	2.94	58 D	110 D	2	< 0.001	< 0.01
0515 A	N	1/5/2005	6,908.03	5.52	5.83	7910	486 D	871 D	432	14	213	4770 D	256	3.22	57 D	41.6 D	2.2	< 0.001	< 0.01
0515 A	N	4/6/2005	6,907.60	5.59	6.17	7530	483	849	436	13.8	207	4490	255	3.45	45	102	1.7	< 0.001	< 0.01
0515 A	N	7/13/2005	6,907.49	5.55	6.33	7690	500 D	845 D	425 D	12.7	199	4640 D	235	3.63	65.3 D	228 D	1.2	< 0.001	< 0.01
0515 A	N	10/5/2005	6,907.48	5.53	6.10	7710	455 D	875 D	427	14.3	209	4540 D	242	4.15	52 D	161 D	1.3	< 0.001	< 0.01
0515 A	N	1/11/2006	6,907.55	5.65	6.42	7560	477 D	872 D	403	13.5	214	4930 D	237	4.94	63 D	142 D	0.9	< 0.001	< 0.01
0515 A	N	4/5/2006	6,907.45	5.53	6.34	7620	489 D	861 D	397	14.1	211	4410 D	253	8.01	63 D	114 D	1.1	< 0.001	< 0.01
0515 A	N	7/19/2006	6,906.83	5.54	5.97	7460	494 D	825 D	436	14.1	215	4540 D	253	4.61	62 D	173 D	0.7	< 0.001	< 0.01
0515 A	N	10/4/2006	6,907.00	5.61	5.86	7710	461 D	813 D	423	14.4	202	4280 D	238	5.84	61 D	176 D	0.9	< 0.001	< 0.01
0515 A	N	1/10/2007	6,906.88	5.57	5.86	7850	448 D	807 D	388	14	220	4640 D	245	5.2 D	58 D	105	0.4	< 0.001	< 0.01
0515 A	N	4/11/2007	6,906.77	5.61	6.12	7770	475 D	874 D	424	16	<1	4800 D	246	5.87	63 D	134	0.8	< 0.001	< 0.01
0515 A	N	7/11/2007	6,906.38	5.54	6.02	7590	492 D	876 D	419	14.6	216	4880 D	240	8 D	68 D	157	0.2	0.003	< 0.01
0515 A	N	10/3/2007	6,906.33	5.40	5.96	7880	436 D	823 D	445 D	15.9	217	4440 D	255 D	6.2 D	61 D	168	0.5	< 0.001	< 0.01
0515 A	N	1/16/2008	6,906.43	5.1	6.37	7470	454 D	819 D	444 D	16.1	202	4340 D	266 D	6.8 D	64 D	227	0.7	< 0.001	< 0.01
0515 A	N	4/9/2008	6,906.43	5.64	6.37	7450	493 D	926 D	485 D	15.8 D	190	5050 D	235	7.7 D	78.6	22.6	1.1	< 0.001	< 0.01
0515 A	N	7/9/2008	6,905.93	5.44	6.1	7460	493 D	897 D	484 D	15.3	212	4960 D	266	4.99	91.8 D	107	0.4	< 0.003	< 0.01
0515 A	N	10/8/2008	6,905.73	5.64	5.75	7770	460	832	430 D	14	202	5200 D	242	9.9	73.8	128	0.6	< 0.001	< 0.01
0515 A	N	1/14/2009	6,905.73	5.73	6.19	8190	420	825	478	13 D	219	5080 D	248	12.6 D	86 D	76.8	0.9	< 0.001	< 0.01
0515 A	N	4/8/2009	6,905.68	5.66	6.31	7750	438 D	845 D	462 D	15	297	4980 D	275	12.2 D	59.2 D	64.4	0.7	< 0.001	< 0.01
0515 A	N	7/8/2009	6,905.33	5.61	6	7760	480 D	840	451 D	15	219	4960 D	258	13.6 D	58 D	72.4	1.2	< 0.001	< 0.01
0515 A	N	10/7/2009	6,905.43	6.32	6.9	7800	471 D	831	434 D	15	200	4960 D	258	10.0 D	64 D	46.4	0.6	< 0.001	< 0.01
0515 A	N	1/6/2010	6,905.13	6.44	7.4	8110 D	475 D	865	471 D	16	198	5230 D	256	14.4 D	89 D	30.4	0.3	< 0.001	< 0.01
0515 A	N	4/7/2010	6,904.88	6.26	6.82	7790 D	467 D	822	465 D	16	218	4930 D	240	15.7 D	62 D	168	0.9	< 0.001	< 0.01
0515 A	N	7/14/2010	6,904.43	6.3	6.15	8160 D	463 D	997	525 D	17	231	5010 D	255 D	34 D	50 D	156	0.9	< 0.001	< 0.01
0515 A	N	10/6/2010	6,904.58	7.13	6.35	7880 D	463 D	975	540 D	18	365	5370 D	286 D	41.5 D	52 D	158	0.6	< 0.001	< 0.01

TABLE C.1
Zone 1 Data Summary, 1989-2011
United Nuclear Corporation, Church Rock Site, Church Rock, New Mexico

Location ID	Desc	Sample Date	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0515 A	N	7/17/2001	< 0.005	0.09	< 0.05	13.9	< 0.1	0.24	< 0.001	< 0.1	0.001	3.1	6	9.1	< 0.2	< 1	4.1
0515 A	N	10/2/2001	< 0.005	0.07	< 0.05	13.4	< 0.1	0.11	< 0.001	< 0.1	0.0009	3.1	4.5	7.6	< 0.2	< 1	6.3
0515 A	N	1/14/2002	< 0.005	0.1	< 0.05	15.8	< 0.1	0.26	< 0.001	< 0.1	0.0011	3.2	6.6	9.8	< 0.2	< 1	3.5
0515 A	N	4/2/2002	< 0.005	0.09	< 0.05	15.3	< 0.1	0.23	< 0.001	< 0.1	0.0009	3.4	2.9	6.3	< 0.2	< 1	6
0515 A	N	7/10/2002	< 0.005	0.09	< 0.05	12.4	< 0.1	0.18	< 0.001	< 0.1	0.0013	3.6	6.8	10.4	< 0.2	< 1	8
0515 A	N	10/9/2002	< 0.005	0.08	< 0.05	13.3	< 0.1	0.2	< 0.001	< 0.1	0.002	3.5	3.1	6.6	< 0.2	< 1	9.3
0515 A	N	1/8/2003	< 0.005	0.09	< 0.05	14.8	< 0.1	0.21	< 0.001	< 0.1	0.0012	4	5.4	9.4	< 0.2	< 1	5
0515 A	N	4/9/2003	< 0.005	0.09	< 0.05	13.8	< 0.1	0.22	< 0.001	< 0.1	0.0011	3.3	7	10.3	< 0.2	< 1	3.5
0515 A	N	7/9/2003	< 0.005	0.09	< 0.05	15.7	< 0.1	0.26	< 0.001	< 0.1	0.0008	2.4	6.3	8.7	< 0.2	< 1	3.9
0515 A	N	10/8/2003	< 0.005	0.09	< 0.05	14.8	< 0.1	0.25	< 0.001	< 0.1	0.0014	2.2	2.5	4.7	< 0.2	< 1	5.3
0515 A	N	1/7/2004	< 0.005	0.09	< 0.05	17.4	< 0.1	0.24	< 0.001	< 0.1	0.0012 D	2.3	< 1.0	2.3	< 0.2	< 1.0	7.5
0515 A	N	4/7/2004	< 0.005	0.09	< 0.05	16.3	< 0.1	0.25	0.007	< 0.1	0.0011 D	1.4	4.2	5.6	< 0.2	< 1	7.3
0515 A	N	7/14/2004	< 0.005	0.08	< 0.05	14.6	< 0.1	0.2	< 0.001	< 0.1	0.0011 D	1.7	< 1.0	1.7	< 0.2	< 1.0	4.6
0515 A	N	10/6/2004	< 0.005	0.08	< 0.05	14.8	< 0.1	0.11	< 0.001	< 0.1	0.0009 D	2.3	2.5	4.8	< 0.2	< 1.0	3.5
0515 A	N	1/5/2005	0.006	0.09	< 0.05	15	< 0.1	0.25	0.002	< 0.1	0.001	4.2	1.8	6	< 0.2	< 1.0	10.9
0515 A	N	4/6/2005	< 0.005	0.06	< 0.05	16	< 0.1	0.25	< 0.001	< 0.1	0.001	3.3	1.1	4.4	< 0.2	< 1.0	1.9
0515 A	N	7/13/2005	< 0.005	0.06	< 0.05	15.6	< 0.1	0.24	< 0.001	< 0.1	0.0008	2.6	1.5	4.1	< 0.2	< 1.0	2.8
0515 A	N	10/5/2005	< 0.005	0.07	< 0.05	15.4	< 0.1	0.25	< 0.001	< 0.1	0.0009 D	1.9	1.3	3.2	< 0.2	< 1.0	3.1
0515 A	N	1/11/2006	< 0.005	0.05	< 0.05	15.3	< 0.1	0.23	0.008	< 0.1	0.0009	1.5	1.1	2.6	< 0.2	< 1.0	2.8
0515 A	N	4/5/2006	< 0.005	0.06	< 0.05	16.7	< 0.1	0.25	0.008	< 0.1	0.0008 D	1.3	< 1.0	1.3	< 0.2	< 1.0	2.6
0515 A	N	7/19/2006	< 0.005	0.05	< 0.05	14.7	< 0.1	0.22	< 0.001	< 0.1	0.0007	1.6	1.8	3.4	< 0.2	< 1.0	1.7
0515 A	N	10/4/2006	< 0.005	0.05	< 0.05	16.1	< 0.1	0.24	< 0.001	< 0.1	0.0021 D	1.3	4	5.3	< 0.2	< 1	1.2
0515 A	N	1/10/2007	< 0.005	0.04	< 0.05	15.1	< 0.1	0.2	< 0.001	< 0.1	0.0006	2	< 1	2	< 0.2	< 1	1.4
0515 A	N	4/11/2007	< 0.005	0.06	< 0.05	15.5	< 0.1	0.24	< 0.001	< 0.1	0.0009	1.3	3.4	4.7	< 0.2	< 1	2.3
0515 A	N	7/11/2007	< 0.005	0.05	< 0.05	16.2	< 0.1	0.24	< 0.001	< 0.1	0.0007	2.5	< 1	2.5	< 0.2	< 1	1.7
0515 A	N	10/3/2007	< 0.005	0.04	< 0.05	16.8	< 0.1	0.21	< 0.001	< 0.1	0.0006	1.3	< 1	1.3	< 0.2	< 1	4.5
0515 A	N	1/16/2008	< 0.005	0.05	< 0.05	15.9	< 0.1	0.24	< 0.001	< 0.1	0.0007	2	2.7	4.7	< 0.2	< 1	6.6
0515 A	N	4/9/2008	< 0.005	0.06	< 0.05	18	< 0.1	0.27	< 0.001	< 0.1	0.0009	0.5	3	3.5	1.4	0 U	8.1
0515 A	N	7/9/2008	< 0.005	0.04	< 0.05	18.6	< 0.1	0.25	< 0.001	< 0.1	0.0011	1	3.1	4.1	-0.1 U	8.5 U	2.2
0515 A	N	10/8/2008	< 0.005	0.04	< 0.05	17.6	< 0.1	0.24	< 0.001	< 0.1	0.0011	0.64	3.4	4.04	0.3	1 U	3
0515 A	N	1/14/2009	< 0.005	0.03	< 0.05	17.6	< 0.1	0.21	< 0.001	< 0.1	0.0009 D	1.3	3.5	4.8	-0.3 U	-3 U	2.4
0515 A	N	4/8/2009	< 0.005	0.03	< 0.05	17	< 0.1	0.22	< 0.001	< 0.1	0.0008 D	1.1	3.2	4.3	0.2 U	-3 U	2.5
0515 A	N	7/8/2009	< 0.005	0.03	< 0.05	17.5	< 0.1	0.22	< 0.001	< 0.1	0.0009	1.9	4.2	6.1	0.04 U	1.9 U	2.9
0515 A	N	10/7/2009	< 0.005	0.04	< 0.05	18.4	< 0.1	0.29	< 0.001	< 0.1	0.0008	0.91	2.9	3.81	0.1 U	-2 U	2.6
0515 A	N	1/6/2010	< 0.005	0.03	< 0.05	17.8	< 0.1	0.21	< 0.001	< 0.1	0.0009	1.2	3.5	4.7	0.04 U	0.0 U	2.5
0515 A	N	4/7/2010	< 0.005	0.03	< 0.05	16.8	< 0.1	0.23	< 0.001	< 0.1	0.001	2.5	2.9	5.4	0.04 U	-2 U	2.6
0515 A	N	7/14/2010	< 0.005	0.03	< 0.05	16.1	< 0.1	0.2	< 0.001	< 0.1	0.0011	2.8	3.8	6.6	0.07 U	3.1	2.9
0515 A	N	10/6/2010	< 0.005	0.02	< 0.05	16.6	< 0.1	0.17	< 0.001	< 0.1	0.0027	2.5	3.4	5.9	0.02 U	0.8 U	1.6