

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		EPA-13	EPA-13	EPA-13	EPA-13
Collection Date:		10/15/2012	7/16/2012	4/9/2012	1/10/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/25/2012	3/5/2012
Analyte	RUnits	C12100835-004	C12070713-003	C12040738-005	C12010437-005
Bicarbonate as HCO ₃	mg/L	57	44	58	51
Calcium	mg/L	532	511	466	500
Chloride	mg/L	43	45	42	41
Magnesium	mg/L	896	911	862	790
Nitrogen, Ammonia as N	mg/L	0.26	0.25	0.26	0.26
Nitrogen, Nitrate+Nitrite as N	mg/L	0.1	ND(0.1)	ND(0.1)	0.2
Potassium	mg/L	14	13	13	13
Sodium	mg/L	171	164	153	151
Sulfate	mg/L	5030	4890	4770	4850
pH	s.u.	6.35	6.35	6.12	6.12
Solids, Total Dissolved TDS @ 180 C	mg/L	7160	7110	7110	6780
Aluminum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Beryllium	mg/L	0.002	0.001	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	0.09	0.07	0.08	0.09
Lead	mg/L	ND(0.001)	ND(0.001)	ND(0.05)	ND(0.05)
Manganese	mg/L	7.68	6.89	7.46	7.18
Molybdenum	mg/L	0.2	0.2	0.2	0.2
Nickel	mg/L	0.23	0.21	0.21	0.22
Uranium	mg/L	0.0115	0.0172	0.0174	0.0118
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.015	0.007	ND(0.01)	0.019
Selenium-IV	mg/L	0.001	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	5.2	8.3	6.7	6.6
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.6	1.4	0.9	0.9
Gross Alpha minus Rn & U MDC	pCi/L	0.2	0.9	0.5	0.4
Lead 210	pCi/L	-0.2	1.1	1.9	0.5
Lead 210 precision (±)	pCi/L	0.6	0.7	0.8	0.5
Lead 210 MDC	pCi/L	1.0	1.2	1.3	0.9
Radium 226	pCi/L	4.1	5.6	6.9	5.1
Radium 226 precision (±)	pCi/L	0.39	0.44	0.57	0.35
Radium 226 MDC	pCi/L	0.15	0.14	0.18	0.14
Radium 228	pCi/L	9.7	6.3	8.7	7.6
Radium 228 precision (±)	pCi/L	1.1	0.93	1.0	1.2
Radium 228 MDC	pCi/L	1.2	1.1	1.1	1.4
Thorium 230	pCi/L	0.1	0.002	0.05	0.02
Thorium 230 precision (±)	pCi/L	0.3	0.2	0.2	0.2
Thorium 230 MDC	pCi/L	0.6	0.5	0.4	0.5
A/C Balance (± 5)	%	0.567	2.02	-0.0623	-3.05
Anions	meq/L	107	104	101	103
Cations	meq/L	108	108	101	97.0
Solids, Total Dissolved Calculated	mg/L	6800	6600	6360	6400
TDS Balance (0.80 - 1.20)		1.06	1.08	1.11	1.06
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		719	719	719	719
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/10/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/25/2012	3/5/2012
Analyte	RUunits	C12100835-005	C12070713-006	C12040738-006	C12010437-006
Bicarbonate as HCO3	mg/L	14	11	ND(5)	ND(5)
Calcium	mg/L	536	524	481	497
Chloride	mg/L	30	32	31	30
Magnesium	mg/L	674	686	664	588
Nitrogen, Ammonia as N	mg/L	0.70	0.78	0.81	0.76
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	14	16	13	13
Sodium	mg/L	149	163	138	135
Sulfate	mg/L	4180	4070	4010	3970
pH	s.u.	5.18	5.29	3.97	3.90
Solids, Total Dissolved TDS @ 180 C	mg/L	5900	6120	5990	5490
Aluminum	mg/L	0.1	0.2	0.3	0.3
Beryllium	mg/L	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	0.31	0.28	0.25	0.38
Lead	mg/L	ND(0.001)	0.002	ND(0.05)	ND(0.05)
Manganese	mg/L	6.04	5.63	5.16	5.68
Molybdenum	mg/L	0.1	0.2	0.3	ND(0.1)
Nickel	mg/L	0.39	0.33	0.34	0.46
Uranium	mg/L	0.0029	0.0034	0.0048	0.0067
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	0.001	ND(0.001)	0.001
Gross Alpha minus Rn & U	pCi/L	4.5	5.7	4.1	5.0
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	1.2	0.7	0.8
Gross Alpha minus Rn & U MDC	pCi/L	0.2	0.9	0.5	0.4
Lead 210	pCi/L	0.7	0.3	0.9	0.01
Lead 210 precision (±)	pCi/L	0.7	0.7	0.8	0.5
Lead 210 MDC	pCi/L	1.0	1.2	1.3	0.9
Radium 226	pCi/L	3.4	3.9	4.3	3.3
Radium 226 precision (±)	pCi/L	0.38	0.37	0.44	0.24
Radium 226 MDC	pCi/L	0.17	0.14	0.18	0.11
Radium 228	pCi/L	15	7.7	9.7	11
Radium 228 precision (±)	pCi/L	1.4	0.97	1.0	1.1
Radium 228 MDC	pCi/L	1.3	1.1	1.1	1.1
Thorium 230	pCi/L	0.3	0.3	0.9	0.07
Thorium 230 precision (±)	pCi/L	0.2	0.2	0.4	0.1
Thorium 230 MDC	pCi/L	0.3	0.3	0.4	0.2
A/C Balance (± 5)	%	0.570	2.47	-0.260	-2.13
Anions	meq/L	88.1	85.8	86.0	83.6
Cations	meq/L	89.1	90.1	85.5	80.1
Solids, Total Dissolved Calculated	mg/L	5600	5500	5340	5250
TDS Balance (0.80 - 1.20)		1.05	1.11	1.11	1.05
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		420	420	420	420
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/10/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/25/2012	3/5/2012
Analyte	RUnits	C12100835-006	C12070713-007	C12040738-007	C12010437-007
Bicarbonate as HCO3	mg/L	503	499	483	477
Calcium	mg/L	718	695	643	700
Chloride	mg/L	52	52	50	50
Magnesium	mg/L	144	146	137	128
Nitrogen, Ammonia as N	mg/L	0.10	0.06	0.08	0.09
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Potassium	mg/L	7	8	6	6
Sodium	mg/L	156	170	141	135
Sulfate	mg/L	2070	2040	1960	1980
pH	s.u.	7.14	6.86	6.93	6.51
Solids, Total Dissolved TDS @ 180 C	mg/L	3550	3530	3510	3430
Aluminum	mg/L	0.2	0.4	0.6	0.1
Beryllium	mg/L	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	0.02	0.02	0.02	0.02
Lead	mg/L	ND(0.001)	0.001	ND(0.05)	ND(0.05)
Manganese	mg/L	1.43	0.88	1.21	1.50
Molybdenum	mg/L	0.9	0.8	1.0	1.2
Nickel	mg/L	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.05)
Uranium	mg/L	0.388	0.4	0.390	0.406
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	0.002	ND(0.01)	0.010
Selenium-IV	mg/L	ND(0.001)	0.002	ND(0.001)	0.002
Gross Alpha minus Rn & U	pCi/L	5.2	6.6	4.7	5.3
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.6	1.3	0.8	0.8
Gross Alpha minus Rn & U MDC	pCi/L	0.3	0.9	0.5	0.4
Lead 210	pCi/L	0.3	1.2	0.9	0.8
Lead 210 precision (±)	pCi/L	0.6	0.7	0.8	0.5
Lead 210 MDC	pCi/L	1.0	1.2	1.3	0.9
Radium 226	pCi/L	4.4	4.7	5.3	4.7
Radium 226 precision (±)	pCi/L	0.39	0.42	0.50	0.31
Radium 226 MDC	pCi/L	0.14	0.15	0.18	0.12
Radium 228	pCi/L	8.1	7.1	8.4	6.2
Radium 228 precision (±)	pCi/L	1.0	1.0	1.0	0.99
Radium 228 MDC	pCi/L	1.1	1.2	1.1	1.2
Thorium 230	pCi/L	0.09	0.08	0.01	0.04
Thorium 230 precision (±)	pCi/L	0.09	0.09	0.05	0.06
Thorium 230 MDC	pCi/L	0.2	0.2	0.1	0.1
A/C Balance (± 5)	%	1.72	1.97	-0.405	0.945
Anions	meq/L	52.9	52.2	50.1	50.5
Cations	meq/L	54.7	54.3	49.6	51.5
Solids, Total Dissolved Calculated	mg/L	3400	3400	3190	3250
TDS Balance (0.80 - 1.20)		1.04	1.04	1.10	1.06
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	0.80

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		717	717	717	717
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/10/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/25/2012	3/5/2012
Analyte	RUnits	C12100835-007	C12070713-008	C12040738-008	C12010437-008
Bicarbonate as HCO ₃	mg/L	ND(5)	ND(5)	ND(5)	ND(5)
Calcium	mg/L	486	474	438	456
Chloride	mg/L	67	69	66	68
Magnesium	mg/L	508	517	500	499
Nitrogen, Ammonia as N	mg/L	59	61	62	65
Nitrogen, Nitrate+Nitrite as N	mg/L	30	30	31	30
Potassium	mg/L	14	14	12	13
Sodium	mg/L	186	189	170	174
Sulfate	mg/L	4430	4390	4570	4650
pH	s.u.	4.07	4.16	4.12	4.14
Solids, Total Dissolved TDS @ 180 C	mg/L	6120	6190	6240	6310
Aluminum	mg/L	122	134	130	124
Beryllium	mg/L	0.102	0.095	0.10	0.11
Cadmium	mg/L	0.016	0.011	0.016	0.015
Cobalt	mg/L	0.89	0.95	1.00	1.07
Lead	mg/L	0.010	0.011	ND(0.05)	ND(0.05)
Manganese	mg/L	22.1	21.8	22.4	22.3
Molybdenum	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Nickel	mg/L	0.88	0.90	0.86	0.91
Uranium	mg/L	0.0194	0.0229	0.0247	0.0348
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	ND(0.001)	ND(0.01)	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	0.002	ND(0.001)	0.002
Gross Alpha minus Rn & U	pCi/L	13.2	35.7	21.5	22.1
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.9	2.8	1.6	1.6
Gross Alpha minus Rn & U MDC	pCi/L	0.3	0.9	0.5	0.4
Lead 210	pCi/L	2.4	3.4	3.4	2.7
Lead 210 precision (±)	pCi/L	0.7	0.8	0.8	0.6
Lead 210 MDC	pCi/L	1.0	1.2	1.3	0.9
Radium 226	pCi/L	12	15	15	12
Radium 226 precision (±)	pCi/L	0.66	0.73	0.84	0.56
Radium 226 MDC	pCi/L	0.15	0.14	0.19	0.16
Radium 228	pCi/L	34	22	30	21
Radium 228 precision (±)	pCi/L	1.8	1.6	1.6	1.7
Radium 228 MDC	pCi/L	1.2	1.3	1.2	1.6
Thorium 230	pCi/L	0.6	0.3	0.2	0.1
Thorium 230 precision (±)	pCi/L	0.6	0.6	0.4	0.5
Thorium 230 MDC	pCi/L	1.0	1.3	0.7	1.3
A/C Balance (± 5)	%	-1.07	2.24	-6.72	-5.89
Anions	meq/L	96.9	96.2	103	102
Cations	meq/L	94.9	101	89.7	91.0
Solids, Total Dissolved Calculated	mg/L	5900	5800	5950	6040
TDS Balance (0.80 - 1.20)		1.04	1.06	1.05	1.04
Trihalomethanes, Total	ug/L	3.48	4.40	2.01	2.88

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		NBL-2	NBL-2	NBL-2	NBL-2
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/10/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100835-009	C12070713-014	C12040742-001	C12010443-001
Bicarbonate as HCO3	mg/L	399	389	381	391
Calcium	mg/L	654			
Chloride	mg/L	51	50	49	52
Magnesium	mg/L	190			
Nitrogen, Ammonia as N	mg/L	ND(0.05)			
Nitrogen, Nitrate+Nitrite as N	mg/L	9			
Potassium	mg/L	8			
Sodium	mg/L	157			
Sulfate	mg/L	2170			
pH	s.u.	6.71	6.90	6.71	7.44
Solids, Total Dissolved TDS @ 180 C	mg/L	3580	3610	3610	3580
Aluminum	mg/L	ND(0.1)			
Beryllium	mg/L	ND(0.001)			
Cadmium	mg/L	ND(0.005)			
Cobalt	mg/L	0.03			
Lead	mg/L	ND(0.001)			
Manganese	mg/L	1.66			
Molybdenum	mg/L	0.2			
Nickel	mg/L	ND(0.05)			
Uranium	mg/L	0.195			
Vanadium	mg/L	ND(0.1)			
Arsenic-III	mg/L	ND(0.001)			
Selenium-IV	mg/L	ND(0.001)			
Gross Alpha minus Rn & U	pCi/L	5.7			
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.6			
Gross Alpha minus Rn & U MDC	pCi/L	0.3			
Lead 210	pCi/L	0.3			
Lead 210 precision (±)	pCi/L	0.6			
Lead 210 MDC	pCi/L	1.0			
Radium 226	pCi/L	6.2			
Radium 226 precision (±)	pCi/L	0.66			
Radium 226 MDC	pCi/L	0.29			
Radium 228	pCi/L	12			
Radium 228 precision (±)	pCi/L	2.1			
Radium 228 MDC	pCi/L	2.7			
Thorium 230	pCi/L	0.0008			
Thorium 230 precision (±)	pCi/L	0.08			
Thorium 230 MDC	pCi/L	0.2			
A/C Balance (± 5)	%	1.28			
Anions	meq/L	53.9			
Cations	meq/L	55.3			
Solids, Total Dissolved Calculated	mg/L	3500			
TDS Balance (0.80 - 1.20)		1.03			
Trihalomethanes, Total	ug/L	ND(0.50)			

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		NBL-1	NBL-1	NBL-1	NBL-1
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/10/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/25/2012	3/5/2012
Analyte	RUnits	C12100835-010	C12070713-009	C12040738-009	C12010437-009
Bicarbonate as HCO3	mg/L	ND(5)	ND(5)	ND(5)	ND(5)
Calcium	mg/L	531	526	504	586
Chloride	mg/L	30	31	30	33
Magnesium	mg/L	368	376	365	319
Nitrogen, Ammonia as N	mg/L	0.7	1.3	2.16	2.8
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(1)	ND(1)	ND(0.5)	ND(0.5)
Potassium	mg/L	13	14	12	11
Sodium	mg/L	138	142	130	130
Sulfate	mg/L	4260	4150	3500	3350
pH	s.u.	2.73	2.76	2.80	2.93
Solids, Total Dissolved TDS @ 180 C	mg/L	5530	5660	5020	4320
Aluminum	mg/L	43.4	30.1	13.3	5.9
Beryllium	mg/L	0.039	0.034	0.03	0.03
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	0.94	1.00	0.79	0.91
Lead	mg/L	0.074	0.092	0.11	ND(0.05)
Manganese	mg/L	6.61	8.08	6.28	7.47
Molybdenum	mg/L	ND(0.1)	1.3	0.5	ND(0.1)
Nickel	mg/L	1.23	1.26	1.00	0.97
Uranium	mg/L	0.189	0.134	0.0717	0.0568
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	0.032	0.014	0.03	0.028
Selenium-IV	mg/L	ND(0.001)	0.002	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	5.1	34.5	22.7	20.8
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.6	2.8	1.6	1.5
Gross Alpha minus Rn & U MDC	pCi/L	0.3	0.9	0.5	0.4
Lead 210	pCi/L	3.4	6.5	9.8	1.6
Lead 210 precision (±)	pCi/L	0.8	1	0.9	0.6
Lead 210 MDC	pCi/L	1.1	1.2	1.3	0.9
Radium 226	pCi/L	6.0	18	23	17
Radium 226 precision (±)	pCi/L	0.45	0.77	1.1	0.51
Radium 226 MDC	pCi/L	0.15	0.14	0.19	0.1
Radium 228	pCi/L	5.5	16	21	17
Radium 228 precision (±)	pCi/L	1.1	1.4	1.4	1.4
Radium 228 MDC	pCi/L	1.4	1.3	1.2	1.2
Thorium 230	pCi/L	4.9	7.0	4.6	3.0
Thorium 230 precision (±)	pCi/L	1.1	1.6	1.0	0.7
Thorium 230 MDC	pCi/L	0.4	0.4	0.3	0.3
A/C Balance (± 5)	%	-1.34	3.21	-1.12	-2.18
Anions	meq/L	89.6	87.4	74.5	70.7
Cations	meq/L	87.3	93.2	72.8	67.7
Solids, Total Dissolved Calculated	mg/L	5500	5400	4650	4480
TDS Balance (0.80 - 1.20)		1.01	1.06	1.08	0.960
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		PB-3	PB-3	PB-3	PB-3
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/10/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100835-011	C12070713-015	C12040742-002	C12010443-002
Bicarbonate as HCO ₃	mg/L	217	202	229	211
Calcium	mg/L	596			
Chloride	mg/L	27	28	27	28
Magnesium	mg/L	288			
Nitrogen, Ammonia as N	mg/L	0.9			
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)			
Potassium	mg/L	11			
Sodium	mg/L	135			
Sulfate	mg/L	2600			
pH	s.u.	6.89	7.11	6.64	7.61
Solids, Total Dissolved TDS @ 180 C	mg/L	4020	3930	3760	3640
Aluminum	mg/L	0.2			
Beryllium	mg/L	ND(0.001)			
Cadmium	mg/L	ND(0.005)			
Cobalt	mg/L	0.12			
Lead	mg/L	ND(0.001)			
Manganese	mg/L	4.19			
Molybdenum	mg/L	0.4			
Nickel	mg/L	0.17			
Uranium	mg/L	0.136			
Vanadium	mg/L	ND(0.1)			
Arsenic-III	mg/L	ND(0.001)			
Selenium-IV	mg/L	ND(0.001)			
Gross Alpha minus Rn & U	pCi/L	7.6			
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.7			
Gross Alpha minus Rn & U MDC	pCi/L	0.2			
Lead 210	pCi/L	0.6			
Lead 210 precision (±)	pCi/L	0.6			
Lead 210 MDC	pCi/L	1.0			
Radium 226	pCi/L	7.1			
Radium 226 precision (±)	pCi/L	0.59			
Radium 226 MDC	pCi/L	0.21			
Radium 228	pCi/L	9.5			
Radium 228 precision (±)	pCi/L	1.6			
Radium 228 MDC	pCi/L	1.9			
Thorium 230	pCi/L	0.02			
Thorium 230 precision (±)	pCi/L	0.1			
Thorium 230 MDC	pCi/L	0.3			
A/C Balance (± 5)	%	1.06			
Anions	meq/L	58.4			
Cations	meq/L	59.7			
Solids, Total Dissolved Calculated	mg/L	3800			
TDS Balance (0.80 - 1.20)		1.06			
Trihalomethanes, Total	ug/L	ND(0.50)			

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

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		PB-4	PB-4	PB-4	PB-4
Collection Date:		10/16/2012	7/17/2012	4/10/2012	10/11/2011
Receive Date:		10/19/2012	7/20/2012	4/13/2012	10/14/2011
Report Date:		11/20/2012	9/7/2012	5/24/2012	11/30/2011
Analyte	RUunits	C12100835-012	C12070713-016	C12040742-003	C11100573-015
Bicarbonate as HCO ₃	mg/L	ND(5)	ND(5)	ND(5)	ND(5)
Calcium	mg/L	504			507
Chloride	mg/L	30	29	30	31
Magnesium	mg/L	457			375
Nitrogen, Ammonia as N	mg/L	0.27			0.6
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(2)			ND(0.5)
Potassium	mg/L	3			12
Sodium	mg/L	140			141
Sulfate	mg/L	6400			5440
pH	s.u.	2.50	2.60	2.64	2.79
Solids, Total Dissolved TDS @ 180 C	mg/L	8300	6570	6020	6630
Aluminum	mg/L	132			29.2
Beryllium	mg/L	0.033			ND(0.01)
Cadmium	mg/L	ND(0.005)			ND(0.005)
Cobalt	mg/L	1.33			0.65
Lead	mg/L	0.022			0.63
Manganese	mg/L	9.80			6.06
Molybdenum	mg/L	0.4			0.5
Nickel	mg/L	2.00			0.91
Uranium	mg/L	0.453			0.239
Vanadium	mg/L	ND(0.1)			ND(0.1)
Arsenic-III	mg/L	0.011			0.007
Selenium-IV	mg/L	ND(0.001)			0.002
Gross Alpha minus Rn & U	pCi/L	3.3			31.3
Gross Alpha minus Rn & U MDC	pCi/L	0.3			0.4
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5			1.7
Lead 210	pCi/L	0.8			12.7
Lead 210 MDC	pCi/L	1.0			1.2
Lead 210 precision (±)	pCi/L	0.6			0.9
Radium 226	pCi/L	6.8			13
Radium 226 MDC	pCi/L	0.15			0.14
Radium 226 precision (±)	pCi/L	0.49			0.67
Radium 228	pCi/L	-0.002			9.5
Radium 228 MDC	pCi/L	1.4			1.3
Radium 228 precision (±)	pCi/L	0.83			1.1
Thorium 230	pCi/L	34.5			25.7
Thorium 230 MDC	pCi/L	2.5			0.5
Thorium 230 precision (±)	pCi/L	8.4			4.7
A/C Balance (± 5)	%	0.782			-8.98
Anions	meq/L	134			114
Cations	meq/L	136			95.4
Solids, Total Dissolved Calculated	mg/L	7800			6590
TDS Balance (0.80 - 1.20)		1.06			1.01
Trihalomethanes, Total	ug/L	ND(0.50)			ND(0.50)

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

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		MW-7	MW-7	MW-7	MW-7
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/10/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100835-013	C12070713-013	C12040742-005	C12010443-004
Bicarbonate as HCO3	mg/L	348	337	409	445
Calcium	mg/L	673	650		
Chloride	mg/L	41	42	43	49
Magnesium	mg/L	229	195		
Nitrogen, Ammonia as N	mg/L	1.1	2.11		
Nitrogen, Nitrate+Nitrite as N	mg/L	0.7	0.5		
Potassium	mg/L	9	9.1		
Sodium	mg/L	150	139		
Sulfate	mg/L	2490	2390		
pH	s.u.	6.73	6.64	6.71	7.17
Solids, Total Dissolved TDS @ 180 C	mg/L	3900	3990	3800	3670
Aluminum	mg/L	ND(0.1)	ND(0.1)		
Beryllium	mg/L	ND(0.001)	ND(0.001)		
Cadmium	mg/L	ND(0.005)	ND(0.005)		
Cobalt	mg/L	0.06	0.09		
Lead	mg/L	ND(0.001)	ND(0.001)		
Manganese	mg/L	3.77	4.32		
Molybdenum	mg/L	0.8	2.0		
Nickel	mg/L	0.10	0.09		
Uranium	mg/L	0.165	0.0976		
Vanadium	mg/L	ND(0.1)	ND(0.1)		
Arsenic-III	mg/L	ND(0.001)	0.002		
Selenium-IV	mg/L	ND(0.001)	0.002		
Gross Alpha minus Rn & U	pCi/L	7.7	7.9		
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.7	0.8		
Gross Alpha minus Rn & U MDC	pCi/L	0.2	0.3		
Lead 210	pCi/L	0.5	0.7		
Lead 210 precision (±)	pCi/L	0.6	0.7		
Lead 210 MDC	pCi/L	1.0	1.2		
Radium 226	pCi/L	7.5	7.8		
Radium 226 precision (±)	pCi/L	0.61	0.51		
Radium 226 MDC	pCi/L	0.21	0.14		
Radium 228	pCi/L	14	7.1		
Radium 228 precision (±)	pCi/L	1.8	1.1		
Radium 228 MDC	pCi/L	1.9	1.3		
Thorium 230	pCi/L	0.005	-0.007		
Thorium 230 precision (±)	pCi/L	0.07	0.06		
Thorium 230 MDC	pCi/L	0.2	0.2		
A/C Balance (± 5)	%	0.436	-1.50		
Anions	meq/L	58.8	56.6		
Cations	meq/L	59.3	54.9		
Solids, Total Dissolved Calculated	mg/L	3800	3600		
TDS Balance (0.80 - 1.20)		1.03	1.11		
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)		

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

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		PB-2	PB-2	PB-2	PB-2
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/11/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100835-014	C12070713-023	C12040742-011	C12010443-005
Bicarbonate as HCO3	mg/L	57	75	76	55
Calcium	mg/L	555			
Chloride	mg/L	29	32	29	30
Magnesium	mg/L	508			
Nitrogen, Ammonia as N	mg/L	0.67			
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.2)			
Potassium	mg/L	13			
Sodium	mg/L	150			
Sulfate	mg/L	3470			
pH	s.u.	5.76	5.91	5.93	5.95
Solids, Total Dissolved TDS @ 180 C	mg/L	5140	5260	5320	5280
Aluminum	mg/L	0.4			
Beryllium	mg/L	ND(0.001)			
Cadmium	mg/L	ND(0.005)			
Cobalt	mg/L	0.49			
Lead	mg/L	ND(0.001)			
Manganese	mg/L	6.21			
Molybdenum	mg/L	0.1			
Nickel	mg/L	0.62			
Uranium	mg/L	0.0212			
Vanadium	mg/L	ND(0.1)			
Arsenic-III	mg/L	ND(0.001)			
Selenium-IV	mg/L	ND(0.001)			
Gross Alpha minus Rn & U	pCi/L	14.2			
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.9			
Gross Alpha minus Rn & U MDC	pCi/L	0.3			
Lead 210	pCi/L	0.6			
Lead 210 precision (±)	pCi/L	0.7			
Lead 210 MDC	pCi/L	1.0			
Radium 226	pCi/L	12			
Radium 226 precision (±)	pCi/L	0.63			
Radium 226 MDC	pCi/L	0.14			
Radium 228	pCi/L	20			
Radium 228 precision (±)	pCi/L	1.5			
Radium 228 MDC	pCi/L	1.3			
Thorium 230	pCi/L	0.3			
Thorium 230 precision (±)	pCi/L	0.2			
Thorium 230 MDC	pCi/L	0.3			
A/C Balance (± 5)	%	1.59			
Anions	meq/L	74.0			
Cations	meq/L	76.4			
Solids, Total Dissolved Calculated	mg/L	4800			
TDS Balance (0.80 - 1.20)		1.08			
Trihalomethanes, Total	ug/L	ND(0.50)			

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

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		RW-A	RW-A	RW-A	RW-A
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/11/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100835-015	C12070713-020	C12040742-012	C12010443-011
Bicarbonate as HCO3	mg/L	227	227	229	221
Calcium	mg/L	595			
Chloride	mg/L	36	39	36	36
Magnesium	mg/L	346			
Nitrogen, Ammonia as N	mg/L	2.5			
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)			
Potassium	mg/L	11			
Sodium	mg/L	149			
Sulfate	mg/L	2780			
pH	s.u.	6.43	6.45	6.42	6.94
Solids, Total Dissolved TDS @ 180 C	mg/L	4460	4300	4320	4200
Aluminum	mg/L	ND(0.1)			
Beryllium	mg/L	ND(0.001)			
Cadmium	mg/L	ND(0.005)			
Cobalt	mg/L	0.27			
Lead	mg/L	ND(0.001)			
Manganese	mg/L	4.91			
Molybdenum	mg/L	0.1			
Nickel	mg/L	0.31			
Uranium	mg/L	0.0936			
Vanadium	mg/L	ND(0.1)			
Arsenic-III	mg/L	ND(0.001)			
Selenium-IV	mg/L	ND(0.001)			
Gross Alpha minus Rn & U	pCi/L	10.7			
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.8			
Gross Alpha minus Rn & U MDC	pCi/L	0.2			
Lead 210	pCi/L	0.6			
Lead 210 precision (±)	pCi/L	0.6			
Lead 210 MDC	pCi/L	1.0			
Radium 226	pCi/L	12			
Radium 226 precision (±)	pCi/L	0.76			
Radium 226 MDC	pCi/L	0.20			
Radium 228	pCi/L	21			
Radium 228 precision (±)	pCi/L	2.0			
Radium 228 MDC	pCi/L	1.9			
Thorium 230	pCi/L	0.01			
Thorium 230 precision (±)	pCi/L	0.1			
Thorium 230 MDC	pCi/L	0.4			
A/C Balance (± 5)	%	1.99			
Anions	meq/L	62.5			
Cations	meq/L	65.1			
Solids, Total Dissolved Calculated	mg/L	4000			
TDS Balance (0.80 - 1.20)		1.10			
Trihalomethanes, Total	ug/L	ND(0.50)			

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UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		RW-11	RW-11	RW-11	RW-11
Collection Date:		10/16/2012	10/11/2011	10/12/2010	10/13/2009
Receive Date:		10/19/2012	10/14/2011	10/15/2010	10/15/2009
Report Date:		11/20/2012	11/30/2011	11/23/2010	11/30/2009
Analyte	RUnits	C12100835-016	C11100573-013	C10100652-014	C09100637-012
Bicarbonate as HCO3	mg/L	220	209	242	238
Calcium	mg/L	594	556	561	547
Chloride	mg/L	38	38	35	32
Magnesium	mg/L	373	308	278	259
Nitrogen, Ammonia as N	mg/L	1.9	1.8	2.45	2.99
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.5)	ND(0.1)	ND(0.1)
Potassium	mg/L	11	11	10	10
Sodium	mg/L	145	144	144	130
Sulfate	mg/L	2880	2800	2630	2530
pH	s.u.	6.22	7.34	6.56	7.45
Solids, Total Dissolved TDS @ 180 C	mg/L	4540	4130	3970	3800
Aluminum	mg/L	ND(0.1)	ND(0.1)	0.3	ND(0.1)
Beryllium	mg/L	ND(0.001)	ND(0.01)	ND(0.01)	ND(0.01)
Cadmium	mg/L	ND(0.005)	ND(0.005)	ND(0.005)	ND(0.005)
Cobalt	mg/L	0.25	0.21	0.18	0.16
Lead	mg/L	ND(0.001)	ND(0.05)	ND(0.05)	ND(0.05)
Manganese	mg/L	5.12	4.68	3.93	4.27
Molybdenum	mg/L	0.2	0.1	0.8	0.2
Nickel	mg/L	0.29	0.24	0.20	0.18
Uranium	mg/L	0.140	0.134	0.246	0.134
Vanadium	mg/L	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Arsenic-III	mg/L	ND(0.001)	0.006	0.001	ND(0.001)
Selenium-IV	mg/L	ND(0.001)	ND(0.001)	ND(0.001)	ND(0.001)
Gross Alpha minus Rn & U	pCi/L	9.8	10.1	12.4	10
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.8	1	1.2	1.4
Gross Alpha minus Rn & U MDC	pCi/L	0.2	0.4	0.5	0.9
Lead 210	pCi/L	0.5	0.5	0.3	0.4
Lead 210 precision (±)	pCi/L	0.6	0.8	1	2.2
Lead 210 MDC	pCi/L	1	1.3	1.6	3.7
Radium 226	pCi/L	9.7	9.6	10	9.3
Radium 226 precision (±)	pCi/L	0.63	0.56	0.62	0.53
Radium 226 MDC	pCi/L	0.18	0.13	0.15	0.10
Radium 228	pCi/L	20	13	17	13
Radium 228 precision (±)	pCi/L	1.8	1.2	1.1	1.1
Radium 228 MDC	pCi/L	1.6	1.2	0.89	1.0
Thorium 230	pCi/L	0.2	0.03	0.4	-0.004
Thorium 230 precision (±)	pCi/L	0.2	0.2	0.3	0.09
Thorium 230 MDC	pCi/L	0.4	0.4	0.4	0.2
A/C Balance (± 5)	%	1.81	-2.56	-1.96	-2.61
Anions	meq/L	64.7	62.9	59.6	57.4
Cations	meq/L	67.1	59.7	57.3	54.5
Solids, Total Dissolved Calculated	mg/L	4200	3980	3770	3640
TDS Balance (0.80 - 1.20)		1.09	1.04	1.05	1.04
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)

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

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		MW-6	MW-6	MW-6	MW-6
Collection Date:		10/17/2012	7/17/2012	4/10/2012	1/10/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/20/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100835-022	C12070713-012	C12040742-004	C12010443-003
Bicarbonate as HCO3	mg/L	281	454	235	206
Calcium	mg/L	508	378		
Chloride	mg/L	38	122	38	37
Magnesium	mg/L	383	274		
Nitrogen, Ammonia as N	mg/L	0.42	0.72		
Nitrogen, Nitrate+Nitrite as N	mg/L	ND(0.1)	ND(0.1)		
Potassium	mg/L	10	11		
Sodium	mg/L	213	338		
Sulfate	mg/L	2840	2290		
pH	s.u.	6.61	6.77	6.45	7.04
Solids, Total Dissolved TDS @ 180 C	mg/L	4680	3880	3970	3920
Aluminum	mg/L	ND(0.1)	ND(0.1)		
Beryllium	mg/L	ND(0.001)	ND(0.001)		
Cadmium	mg/L	ND(0.005)	0.009		
Cobalt	mg/L	0.11	0.06		
Lead	mg/L	ND(0.001)	ND(0.001)		
Manganese	mg/L	3.83	2.86		
Molybdenum	mg/L	4.6	11.8		
Nickel	mg/L	0.15	0.08		
Uranium	mg/L	0.129	0.321		
Vanadium	mg/L	ND(0.1)	ND(0.1)		
Arsenic-III	mg/L	ND(0.001)	ND(0.001)		
Selenium-IV	mg/L	ND(0.001)	ND(0.001)		
Gross Alpha minus Rn & U	pCi/L	3.5	2.4		
Gross Alpha minus Rn & U Precision (±)	pCi/L	0.5	0.5		
Gross Alpha minus Rn & U MDC	pCi/L	0.2	0.3		
Lead 210	pCi/L	-0.04	0.3		
Lead 210 precision (±)	pCi/L	0.6	0.7		
Lead 210 MDC	pCi/L	1.0	1.2		
Radium 226	pCi/L	2.6	2.5		
Radium 226 precision (±)	pCi/L	0.21	0.29		
Radium 226 MDC	pCi/L	0.10	0.13		
Radium 228	pCi/L	5.7	3.4		
Radium 228 precision (±)	pCi/L	1.0	0.91		
Radium 228 MDC	pCi/L	1.3	1.2		
Thorium 230	pCi/L	0.07	0.005		
Thorium 230 precision (±)	pCi/L	0.09	0.07		
Thorium 230 MDC	pCi/L	0.2	0.2		
A/C Balance (± 5)	%	1.25	-1.84		
Anions	meq/L	64.8	58.6		
Cations	meq/L	66.4	56.4		
Solids, Total Dissolved Calculated	mg/L	4200	3700		
TDS Balance (0.80 - 1.20)		1.13	1.06		
Trihalomethanes, Total	ug/L	ND(0.50)	ND(0.50)		

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

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		NW-1	NW-1	NW-1	NW-1
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/11/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/19/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100871-001	C12070713-021	C12040742-006	C12010443-007
Bicarbonate as HCO ₃	mg/L	242	175	125	124
Chloride	mg/L	26	27	25	24
pH	s.u.	7.20	6.77	6.73	7.29
Solids, Total Dissolved TDS @ 180 C	mg/L	4190	4560	4680	4600

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

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		NW-4	NW-4	NW-4	NW-4
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/11/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/19/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100871-002	C12070713-017	C12040742-007	C12010443-006
Bicarbonate as HCO ₃	mg/L	112	101	146	137
Chloride	mg/L	30	29	28	28
pH	s.u.	6.12	6.17	6.27	6.73
Solids, Total Dissolved TDS @ 180 C	mg/L	4830	4900	4860	4730

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

UNC Mining and Milling ChurchRock Operations

GroundWater Monitoring Summary: Zone 3 Monitor Wells

Well ID:	NW-2	NW-2	NW-2	NW-2	
Collection Date:	10/16/2012	7/17/2012	4/10/2012	1/11/2012	
Receive Date:	10/19/2012	7/20/2012	4/13/2012	1/13/2012	
Report Date:	11/19/2012	9/7/2012	5/24/2012	3/1/2012	
Analyte	RUnits	C12100871-003	C12070713-018	C12040742-008	C12010443-008
Bicarbonate as HCO ₃	mg/L	243	220	331	323
Chloride	mg/L	41	39	40	40
pH	s.u.	6.25	6.50	6.52	7.31
Solids, Total Dissolved TDS @ 180 C	mg/L	4100	4040	4000	3900

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

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		NW-5	NW-5	NW-5	NW-5
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/11/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/19/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100871-004	C12070713-019	C12040742-009	C12010443-009
Bicarbonate as HCO ₃	mg/L	415	422	511	475
Chloride	mg/L	43	45	49	47
pH	s.u.	6.98	7.02	7.08	7.61
Solids, Total Dissolved TDS @ 180 C	mg/L	4060	4050	3830	3380

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

UNC Mining and Milling ChurchRock Operations					
GroundWater Monitoring Summary: Zone 3 Monitor Wells					
Well ID:		NW-3	NW-3	NW-3	NW-3
Collection Date:		10/16/2012	7/17/2012	4/10/2012	1/11/2012
Receive Date:		10/19/2012	7/20/2012	4/13/2012	1/13/2012
Report Date:		11/19/2012	9/7/2012	5/24/2012	3/1/2012
Analyte	RUnits	C12100871-005	C12070713-022	C12040742-010	C12010443-010
Bicarbonate as HCO3	mg/L	402	361	390	379
Chloride	mg/L	41	41	40	42
pH	s.u.	6.74	6.79	6.82	7.60
Solids, Total Dissolved TDS @ 180 C	mg/L	3960	3760	3880	3860

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

Appendix C

Zone 1 Monitoring Data

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

Remedial action has been monitored by measurement of groundwater levels and groundwater sampling and analyses at thirteen Zone 1 monitoring wells (Wells 515A, 516A, 604, 614, 619, EPA 2, EPA 4, EPA 5, EPA 7, EPA 8, 141, 142, and 143). This program was modified beginning in the second quarter of 2000 when the revised monitoring program was implemented. The wells included in the monitoring program for Zone 1 are listed in Table 15 of this 2012 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 2012 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.

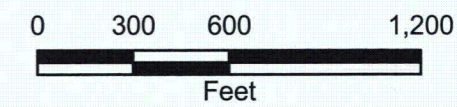


FIGURE C-1

Zone 1 2012 Monitoring Locations

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



*Notes for Table C.1**Zone 1 Data Summary, 1989 - 2012**General Notes:*

1. NRC standard as listed in License Condition 30, Part B.
2. EPA standard as listed in Table 2, "Contaminant-Specific Groundwater ARARs" of the ROD (EPA, 1988).
3. Standards for TDS, sulfate, and nitrate changed to reflect revised standards recommended in the NRC's 1996 evaluation of background water quality and documented in the January 6, 1998, letter from NMED to EPA.
4. NA - Not applicable.
5. "ND" for combined Ra-226 and Ra-228 indicates that both constituents were less than the laboratory reporting limits, which are 0.2 and 1.0 pCi/L, respectively.
6. All values that exceed the NRC and/or EPA standards are shaded.
7. Gross alpha value excludes contribution from radon and uranium.
8. "*" (Asterisk) indicates a Point of Compliance well.
9. Reporting limit for bicarbonate changed from 0.0 mg/L to 0.1 mg/L in fourth quarter 1997.
10. Reporting limit for cadmium changed from 0.01 mg/L to 0.005 mg/L after fourth quarter 1997. The analytical method changed from EPA 200.7 (ICP) to 200.8 (ICP.MS).
11. 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.

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

Specific Notes:

- Well 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.
- At the request of EPA, for the first time since January 2000 Well 619 was sampled in October 2012 (analyzed for the full laboratory analyte list; both filtered and unfiltered

samples were collected. During that same sampling event, Well 617 was sampled for the first time (this is a decommissioned pumping well).

- At the request of EPA, UNC made turbidity measurements during the July and October 2012 sampling events.

Table C.1

TABLE C.1

Zone 1 Data Summary, 1989-2012

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

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As
			ft amsl	SU	SU	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0141	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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



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

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0141	N	7/22/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0069	< 0.2	2.9	2.9	0.6	< 1	2
0141	N	10/12/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.05	0.02	< 0.05	0.001	< 0.1	0.019	6.5	< 1	6.5	< 0.2	1.2	7.1
0141	N	1/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.07	0.02	< 0.05	< 0.001	< 0.1	0.014	0.6	< 1	0.6	< 0.2	2	1.7
0141	N	4/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.001	< 0.1	0.008	0.6	< 1	0.6	1.6	< 1	2.5
0141	N	7/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.18	< 0.1	< 0.05	0.001	< 0.1	0.0078	0.5	< 1	0.5	< 0.2	< 1	< 1
0141	N	10/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	0.001	< 0.1	0.007	0.5	< 1	0.5	< 0.2	< 1	< 1
0141	N	1/16/1991	< 0.01	< 0.01	0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0065	0.2	< 1	0.2	< 0.2	< 1	< 1
0141	N	4/3/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.005	0.4	< 1	0.4	< 0.2	< 1	< 1
0141	N	7/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	2	< 1
0141	N	10/14/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	0.001	< 0.1	0.022	0.8	< 1	0.8	< 0.2	< 1	< 1
0141	N	1/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.002	< 0.1	0.005	8.4	3.7	12.1	< 0.2	< 1	9
0141	N	4/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	7/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.001	< 0.1	0.005	2.3	1.5	3.8	< 0.2	< 1	2.5
0141	N	10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.2	< 0.1	< 0.05	0.001	< 0.1	0.01	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	1/5/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.41	< 0.1	< 0.05	0.007	< 0.1	0.011	0.4	< 1	0.4	< 0.2	< 1	< 1
0141	N	4/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	< 1	< 1
0141	N	7/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.16	< 0.1	< 0.05	< 0.001	< 0.1	0.005	< 0.2	2.5	2.5	< 0.2	1	< 1
0141	N	10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.22	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.6	< 1	0.6	< 0.2	< 1	< 1
0141	N	1/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.19	< 0.1	< 0.05	< 0.001	< 0.1	0.005	0.4	< 1	0.4	< 0.2	6.2	< 1
0141	N	4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.008	0.5	< 1	0.5	< 0.2	1.7	< 1
0141	N	7/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.2	< 0.1	< 0.05	0.001	< 0.1	0.004	1.5	< 1	1.5	< 0.2	< 1	1.7
0141	N	10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.26	< 0.1	< 0.05	< 0.001	< 0.1	0.003	0.5	< 1	0.5	< 0.2	< 1	< 1
0141	N	1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.29	< 0.1	< 0.05	< 0.001	< 0.1	0.016	0.7	< 1	0.7	< 0.2	< 1	< 1
0141	N	4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.15	< 0.1	< 0.05	< 0.001	< 0.1	0.004	0.4	< 1	0.4	< 0.2	< 1	< 1
0141	N	7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.3	< 0.1	< 0.05	0.001	< 0.1	0.0033	1	< 1	1	< 0.2	< 1	< 1
0141	N	10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0034	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	0.3	1.4	1.7	0.6	< 1	1.1
0141	N	4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0016	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.0039	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.007	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	1/21/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	28	< 1
0141	N	10/7/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	< 0.001	< 0.1	0.005	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	1/15/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0031	< 0.2	< 1	0	< 0.2	< 1	2.8
0141	N	4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0029	< 0.2	< 1	0	< 0.2	< 1	< 1

TABLE C.1
 Zone 1 Data Summary, 1989-2012
 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
			Elevation	pH	pH											as N	as N	(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	ug/l	mg/l	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0141	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0141	N	7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	0.05	< 0.001	< 0.1	0.0027	< 0.2	< 1	0	< 0.2	< 1	< 1
0141	N	10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.37	< 0.1	< 0.05	< 0.001	< 0.1	0.334	1.5	< 1	1.5	< 0.2	< 1	< 1
0141	N	1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.43	0.14	< 0.05	< 0.001	< 0.1	0.014	1.5	< 1	1.5	< 0.2	< 1	< 1
0141	N	4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.24	< 0.1	< 0.05	0.001	< 0.1	0.0059	1	< 1	1	< 0.2	< 1	< 1
0141	N	7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.27	< 0.1	< 0.05	0.001	< 0.1	0.0541	1.1	< 1	1.1	< 0.2	< 1	< 1
0141	N	1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.11	< 0.1	< 0.05	0.001	< 0.1	0.0183	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	10/12/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.02	0.03	< 0.05	< 0.001	< 0.1	0.005	0.3	< 1	0.3	< 0.2	3.1	1.1
0142	N	1/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.03	0.02	< 0.05	0.001	< 0.1	0.006	1.3	1.1	2.4	< 0.2	2.9	1.9
0142	N	4/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.12	< 0.1	< 0.05	0.003	< 0.1	0.008	1.3	< 1	1.3	< 0.2	< 1	2.1
0142	N	7/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0019	0.5	< 1	0.5	< 0.2	< 1	< 1
0142	N	10/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	1/3/1991	< 0.01	0.02	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0032	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	4/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.001	< 0.1	0.0029	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.003	1.3	< 1	1.3	< 0.2	1.6	< 1
0142	N	10/14/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.015	1.5	< 1	1.5	< 0.2	< 1	< 1
0142	N	1/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.002	0.2	< 1	0.2	< 0.2	< 1	< 1
0142	N	4/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	0.002	< 0.1	0.003	0.6	3.1	3.7	< 0.2	< 1	< 1
0142	N	10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	< 0.0003	0.4	1.1	1.5	< 0.2	1.4	< 1
0142	N	1/5/1993	< 0.01	< 0.01	0.01	< 0.05	0.01	< 0.1	< 0.05	0.007	< 0.1	0.01	1.5	< 1	1.5	< 0.2	< 1	1.6
0142	N	4/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.8	< 1	0.8	< 0.2	2.6	< 1
0142	N	7/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142	N	10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	1.1	< 1	1.1	< 0.2	2.9	< 1
0142	N	1/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.7	< 1	0.7	< 0.2	< 1	1.4
0142	N	4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	1.9	2.4	< 0.2	1.6	3.5
0142	N	7/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.8	< 1	0.8	< 0.2	1.2	< 1
0142	N	10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	< 1	< 1
0142	N	1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.4	1.8	2.2	< 0.2	< 1	3.3
0142	N	4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.6	2.5	3.1	< 0.2	< 1	4.5
0142	N	7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	< 0.0003	1.2	< 1	1.2	0.4	< 1	< 1
0142	N	10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.9	3.4	4.3	< 0.2	< 1	< 1
0142	N	1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.14	< 0.1	< 0.05	< 0.001	< 0.1	0.0034	0.4	< 1	0.4	0.6	< 1	< 1
0142	N	4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0007	0.5	< 1	0.5	< 0.2	< 1	< 1
0142	N	10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.003	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142	N	1/21/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1

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

Location ID	Desc	Sample Date	Water	Field	Lab	Lab TDS	Ca	Mg	Na	K	HCO ₃	SO ₄	Chl	NH ₄	NO ₃	TTHMs	Al	As
			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	ug/l	mg/l	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0142	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
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
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
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
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
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
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
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
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
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
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
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
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
0142	Dup	5/10/2000	no data	8.32	8.26	1110	26.5	12.2	307	3.1	239	611	18.5	0.25	< 0.1	< 1	0.7	< 0.001
0142	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
0142	Dup	7/10/2000	no data	8.13	8.06	1060	24.3	11.2	314	3.01	240	537	19.3	0.29	< 0.1	< 1	0.39	< 0.001
0142	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0142	N	4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0142	N	10/7/1997	< 0.01	< 0.01	< 0.01	0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.001	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	1/15/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	1.8	< 1	1.8	< 0.2	< 1	< 1
0142	N	4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	0.9	< 1	0.9	< 0.2	< 1	< 1
0142	N	7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0006	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.0051	1.1	< 1	1.1	< 0.2	< 1	< 1
0142	N	1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.21	0.14	< 0.05	< 0.001	< 0.1	0.004	2.1	3	5.1	< 0.2	< 1	< 1
0142	N	4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	0.001	< 0.1	0.0009	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0008	0.7	< 1	0.7	< 0.2	< 1	< 1
0142	N	1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.1	0.14	< 0.05	< 0.001	< 0.1	0.0077	2.4	1.5	3.9	< 0.2	< 1	2.5
0142	N	5/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	Dup	5/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0012	0.7	< 1	0.7	< 0.2	< 1	< 1
0142	N	7/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.07	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	0.9	< 1	0.9	< 0.2	< 1	1.4
0142	Dup	7/10/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0024	0.7	< 1	0.7	< 0.2	< 1	1.4
0142	N	10/2/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.39	0.76	< 0.05	< 0.001	< 0.1	0.0019	0.9	< 1	0.9	< 0.2	< 1	< 1
0142	N	1/16/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	0.4	3	3.4	< 0.2	< 1	< 1
0142	N	4/2/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/16/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142	N	10/3/2001	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0142	N	1/7/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.6	1.9	2.5	< 0.2	< 1	< 1
0142	N	4/8/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142	N	7/15/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1
0142	N	10/14/2002	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0003	0.8	< 1	0.8	< 0.2	< 1	< 1
0142	N	1/13/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	1	< 1	1	< 0.2	< 1	1.9
0142	N	4/14/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0003	< 0.2	< 1	0	< 0.2	< 1	1.1
0142	N	7/15/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.3	< 1	0.3	< 0.2	< 1	< 1.0
0142	N	10/13/2003	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0061	< 0.2	< 1	0	< 0.2	< 1	< 1.0
0142	N	1/13/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0005 D	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142	N	4/12/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/19/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.4	< 1.0	0.4	< 0.2	< 1.0	< 1.0
0142	N	10/11/2004	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142	N	1/10/2005	< 0.01	< 0.005	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.5	< 1.0	0.5	< 0.2	< 1.0	< 1.0
0142	N	4/12/2005	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142	N	7/18/2005	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0

TABLE C.1

Zone 1 Data Summary, 1989-2012

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
			Elevation	pH	pH											as N	as N	(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	ug/l	mg/l	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0142	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
0142	N	1/10/2012	6,782.10	8.04	7.14 H	1240	57	26	308	4	269	672 D	17	0.39	< 0.1	< 0.50	< 0.1	< 0.001
0142	N	4/10/2012	6,782.05	7.91	7.34 H	1260	52	26	312	4	283	658 D	16	0.45	< 0.1	< 0.50	0.1	< 0.01
0142	N	7/17/2012	6,781.90	7.83	7.78 H	1330	61	29	336	4	288	693 D	18	< 0.05	< 0.1	< 0.50	< 0.1	< 0.001
0142	N	10/16/2012	6,782.00	8.07	7.36 H	1290	61	31	362	4	296	697 D	18	0.4	< 0.1	< 0.50	< 0.1	< 0.001
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
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
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
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
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
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
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



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

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0142	N	10/10/2005	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1.0	0	< 0.2	< 1.0	< 1.0
0142	N	1/16/2006	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	< 0.2	2.3	2.3	< 0.2	< 1.0	< 1.0
0142	N	4/10/2006	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	2.8	2.8	< 0.2	< 1.0	< 1.0
0142	N	7/24/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	2.8	2.8	< 0.2	< 1.0	< 1.0
0142	N	10/9/2006	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	0.002	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	1/15/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	4/16/2007	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	7/17/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	10/9/2007	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0142	N	1/22/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0005	0.9	< 1	0.9	< 0.2	6.1	3.6
0142	N	4/16/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	0.0004	0.1 U	0.7 U	0.8	0.3	-0.8 U	1.5
0142	N	7/15/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0006	0.54	0.71 U	1.25	0 U	0.3 U	0.7 U
0142	N	10/14/2008	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.08 U	0.57 U	0.65	0.3	-0.1 U	1.5
0142	N	1/20/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.45	1.4	1.85	-0.2 U	0.2 U	0.6 U
0142	N	4/14/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.67	0.24 U	0.91	-0.02 U	-2 U	0.7
0142	N	7/14/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.05	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.73	0.70 U	1.43	0.05 U	0.4 U	1.7
0142	N	10/13/2009	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.28	0.95 U	1.23	0.2 U	1.0 U	0.9
0142	N	1/12/2010	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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
0142	N	1/10/2012	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.8	1.8	4.4	0.06 U	0.2 U	0.3 U
0142	N	4/10/2012	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.66	0.07 U	0.8	0.04 U	0.1 U	0.7
0142	N	7/17/2012	< 0.001	< 0.005	< 0.01	< 0.001	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.82	0.72 U	2.26	0.01 U	0.4 U	0.8
0142	N	10/16/2012	< 0.001	< 0.005	< 0.01	< 0.001	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.57	1.1 U	0.57	0.04 U	0.4 U	1.1
0143	N	7/22/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	0.001	< 0.1	0.0034	0.7	< 1	0.7	3	< 1	1.4
0143	N	10/11/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.04	0.11	< 0.05	0.001	< 0.1	0.006	1.2	1.5	2.7	0.9	< 1	3.2
0143	N	1/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.04	0.01	< 0.05	0.001	< 0.1	0.006	1.4	< 1	1.4	< 0.2	2.1	4
0143	N	4/3/1990	< 0.05	< 0.01	0.01	< 0.05	0.06	< 0.1	< 0.05	< 0.001	< 0.1	0.0681	0.8	< 1	0.8	< 0.2	< 1	1.3
0143	N	7/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0068	0.6	< 1	0.6	< 0.2	< 1	< 1
0143	N	10/2/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.006	0.3	< 1	0.3	< 0.2	< 1	< 1
0143	N	1/3/1991	< 0.01	0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.0057	0.9	< 1	0.9	< 0.2	< 1	< 1

TABLE C.1
 Zone 1 Data Summary, 1989-2012
 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
			Elevation	pH	pH											as N	as N	(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	ug/l	mg/l	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0143	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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



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

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0143	N	4/9/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	1.7	1.7	< 0.2	< 1	< 1
0143	N	7/16/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	10/14/1991	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	1/14/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.01	0.1	< 0.05	< 0.001	< 0.1	0.007	0.2	< 1	0.2	< 0.2	< 1	< 1
0143	N	4/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	0.1	< 0.05	< 0.001	< 0.1	0.006	< 0.2	1.8	1.8	< 0.2	< 1	< 1
0143	N	7/7/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.008	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	10/6/1992	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.001	< 0.1	0.017	0.3	3.7	4	< 0.2	< 1	< 1
0143	N	1/5/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.007	< 0.1	0.006	0.4	< 1	0.4	< 0.2	< 1	< 1
0143	N	4/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.004	0.4	1.6	2	< 0.2	2.2	< 1
0143	N	7/13/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.003	0.8	1.2	2	< 0.2	< 1	< 1
0143	N	10/6/1993	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.7	< 1	0.7	< 0.2	< 1	< 1
0143	N	1/5/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	1.4	< 1
0143	N	4/13/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	0.8	2.5	3.3	< 0.2	< 1	4.7
0143	N	7/20/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.002	1	< 1	1	< 0.2	< 1	1.2
0143	N	10/4/1994	< 0.01	< 0.01	< 0.01	< 0.05	0.04	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.7	< 1	0.7	< 0.2	< 1	< 1
0143	N	1/4/1995	< 0.01	< 0.01	< 0.01	< 0.05	< 0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.8	< 1	0.8	< 0.2	< 1	< 1
0143	N	4/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	< 0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	0.2	< 1	0.2	< 0.2	1.5	< 1
0143	N	7/6/1995	< 0.01	< 0.01	< 0.01	< 0.05	< 0.03	< 0.1	< 0.05	0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0143	N	10/3/1995	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0018	0.3	1.3	1.6	< 0.2	< 1	< 1
0143	N	1/3/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	1	2.5	3.5	0.4	1	2.1
0143	N	4/2/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	0.19	< 0.001	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0143	N	7/7/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.002	< 0.2	< 1	0	< 0.2	< 1	3.8
0143	N	10/1/1996	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	0.003	< 0.1	< 0.0003	0.5	< 1	0.5	< 0.2	< 1	< 1
0143	N	1/21/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.6	< 1	0.6	< 0.2	< 1	< 1
0143	N	4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	7/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	10/7/1997	< 0.01	< 0.01	0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	< 0.0003	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	1/15/1998	< 0.01	< 0.005	< 0.01	< 0.05	< 0.01	< 0.1	< 0.05	< 0.001	< 0.1	0.0013	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	4/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0015	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	7/7/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0009	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	10/6/1998	< 0.01	< 0.005	< 0.01	< 0.05	0.1	< 0.1	< 0.05	< 0.001	< 0.1	0.0081	0.6	< 1	0.6	< 0.2	< 1	< 1
0143	N	1/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.09	< 0.1	< 0.05	< 0.001	< 0.1	0.0148	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	4/6/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0014	< 0.2	1.7	1.7	< 0.2	< 1	< 1
0143	N	7/13/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.02	< 0.1	< 0.05	< 0.001	< 0.1	0.0011	< 0.2	< 1	0	< 0.2	< 1	< 1
0143	N	10/5/1999	< 0.01	< 0.005	< 0.01	< 0.05	0.03	< 0.1	< 0.05	< 0.001	< 0.1	0.001	0.3	< 1	0.3	< 0.2	< 1	< 1
0143	N	1/4/2000	< 0.01	< 0.005	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.001	< 0.1	0.0047	2	< 1	2	< 0.2	< 1	3.1

TABLE C.1

Zone 1 Data Summary, 1989-2012

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

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As
			ft amsl	SU	SU	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0604	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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



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

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0604	N	7/23/1989	< 0.05	< 0.01	0.31	< 0.05	22	< 0.1	0.39	< 0.001	< 0.1	0.004	14.1	16.8	30.9	3.5	1.7	60.2
0604	N	10/12/1989	< 0.05	0.01	0.31	< 0.05	22	< 0.1	0.34	0.006	< 0.1	0.006	4.5	11	15.5	33.9	< 1	41.7
0604	N	1/10/1990	< 0.05	< 0.01	0.33	< 0.05	22	< 0.1	0.38	< 0.001	< 0.1	0.005	5.1	8.5	13.6	1.7	2.8	6.5
0604	N	4/5/1990	< 0.05	< 0.01	0.31	< 0.05	19	< 0.1	0.38	< 0.001	< 0.1	0.0006	5	9	14	< 0.2	2.6	6
0604	N	7/3/1990	< 0.05	< 0.01	0.21	< 0.05	18.2	< 0.1	0.34	< 0.001	< 0.1	0.0029	7.6	6.5	14.1	0.4	< 1	8
0604	N	10/3/1990	< 0.05	< 0.01	0.35	< 0.05	22.7	< 0.1	0.4	< 0.001	< 0.1	0.003	5.8	20.3	26.1	< 0.2	< 1	6
0604	N	1/15/1991	0.02	< 0.01	0.39	< 0.05	20.1	< 0.1	0.44	< 0.001	< 0.1	0.007	8.2	13.8	22	< 0.2	2.3	9.1
0604	N	4/2/1991	0.016	< 0.01	0.23	< 0.05	14.6	< 0.1	0.38	< 0.001	< 0.1	0.005	9.1	24.3	33.4	< 0.2	1.3	15
0604	N	7/17/1991	0.03	< 0.01	0.3	< 0.05	20.5	< 0.1	0.41	< 0.001	< 0.1	0.006	4.3	12.5	16.8	< 0.2	2.1	4
0604	N	9/4/1991	< 0.01	< 0.01	0.39	< 0.05	21	< 0.1	0.45	0.001	< 0.1	0.005	3.8	14.3	18.1	< 0.2	< 1	4
0604	N	10/15/1991	0.03	< 0.01	0.36	< 0.05	21.3	< 0.1	0.41	< 0.001	< 0.1	0.06	3.9	20.6	24.5	< 0.2	< 1	4
0604	N	11/4/1991	0.02	< 0.01	0.39	< 0.05	15.1	< 0.1	0.55	< 0.001	< 0.1	0.0059	4.1	16.9	21	< 0.2	< 1	4
0604	N	12/2/1991	< 0.01	< 0.01	0.35	< 0.05	19.6	< 0.1	0.42	< 0.001	< 0.1	0.004	6.2	22.7	28.9	< 0.2	< 1	6
0604	N	1/15/1992	0.02	< 0.01	0.34	< 0.05	20.5	< 0.1	0.41	0.013	< 0.1	0.0601	3.9	20.6	24.5	< 0.2	< 1	4
0604	N	4/8/1992	0.02	< 0.01	0.36	< 0.05	17.8	< 0.1	0.4	< 0.001	< 0.1	0.003	3.6	15.3	18.9	< 0.2	1.2	3.8
0604	N	7/8/1992	0.029	< 0.01	0.37	< 0.05	21.8	< 0.1	0.5	< 0.001	< 0.1	0.005	5.6	11.7	17.3	< 0.2	3.4	3.8
0604	N	10/7/1992	< 0.01	< 0.01	0.37	< 0.05	19.9	< 0.1	0.42	< 0.001	< 0.1	0.004	6.8	11.6	18.4	< 0.2	1.9	6.9
0604	N	1/6/1993	0.01	< 0.01	0.36	< 0.05	14.5	< 0.1	0.44	0.006	< 0.1	0.009	5.7	7.6	13.3	< 0.2	< 1	6.1
0604	N	4/6/1993	0.022	< 0.01	0.37	< 0.05	14.5	< 0.1	0.49	0.002	< 0.1	0.006	3.3	12	15.3	< 0.2	1.7	3.8
0604	N	7/13/1993	< 0.01	< 0.01	0.35	< 0.05	14.2	< 0.1	0.62	0.002	< 0.1	< 0.0003	2.4	6.9	9.3	< 0.2	3.1	3.2
0604	N	10/6/1993	0.017	< 0.01	0.36	< 0.05	13.5	< 0.1	0.43	< 0.001	< 0.1	0.0059	5.6	2.3	7.9	< 0.2	< 1	9
0604	N	1/6/1994	0.02	< 0.01	0.37	< 0.05	13	< 0.1	0.43	< 0.001	< 0.1	0.003	5.7	8.2	13.9	< 0.2	2.3	18.9
0604	N	4/12/1994	0.02	< 0.01	0.28	< 0.05	14.1	< 0.1	0.41	< 0.001	< 0.1	0.004	7.7	8	15.7	< 0.2	2.3	24.9
0604	N	7/20/1994	< 0.01	< 0.01	0.3	< 0.05	9.63	< 0.1	0.39	< 0.001	< 0.1	0.003	10	13	23	< 0.2	< 1	29.7
0604	N	10/4/1994	< 0.01	< 0.01	0.4	< 0.05	12.9	< 0.1	0.57	< 0.001	< 0.1	0.006	5.2	5.4	10.6	< 0.2	3.8	13.5
0604	N	1/4/1995	0.01	< 0.01	0.32	< 0.05	10.4	< 0.1	0.42	< 0.001	< 0.1	0.004	5.1	7.7	12.8	< 0.2	< 1	16.8
0604	N	4/5/1995	< 0.01	< 0.01	< 0.01	< 0.05	12	< 0.1	0.5	< 0.001	< 0.1	0.004	5	7.6	12.6	< 0.2	4	16.6
0604	N	7/6/1995	0.02	< 0.01	0.35	< 0.05	2.61	< 0.1	0.4	< 0.001	< 0.1	0.0035	3.8	5.7	9.5	< 0.2	< 1	15.3
0604	N	10/3/1995	< 0.01	< 0.01	0.32	< 0.05	11.1	< 0.1	0.38	0.031	< 0.1	0.0046	5.3	17.1	22.4	< 0.2	< 1	15.5
0604	N	1/3/1996	< 0.01	< 0.01	0.04	< 0.05	12	< 0.1	< 0.05	0.031	< 0.1	0.0034	3.1	2.2	5.3	< 0.2	2.8	9
0604	N	4/2/1996	< 0.01	< 0.01	0.32	< 0.05	10.8	< 0.1	0.36	< 0.001	< 0.1	< 0.0003	2.1	6.9	9	< 0.2	< 1	5.3
0604	N	7/7/1996	< 0.01	< 0.01	0.36	< 0.05	12.7	< 0.1	0.41	< 0.001	< 0.1	0.0034	2.5	< 1	2.5	< 0.2	< 1	3.1
0604	N	10/1/1996	< 0.01	< 0.01	0.35	< 0.05	11.4	< 0.1	0.42	0.002	< 0.1	0.0011	2.3	7.4	9.7	< 0.2	< 1	3.3
0604	N	1/22/1997	0.01	< 0.01	0.36	< 0.05	11.4	< 0.1	0.4	< 0.001	< 0.1	0.004	2.5	8.8	11.3	< 0.2	< 1	4.7
0604	N	4/8/1997	< 0.01	< 0.01	< 0.01	< 0.05	1.87	< 0.1	< 0.05	0.038	< 0.1	0.003	5.2	6.8	12	< 0.2	< 1	19.8
0604	N	7/8/1997	0.01	< 0.01	0.35	< 0.05	12.4	< 0.1	0.38	< 0.001	< 0.1	0.003	2.3	7.2	9.5	< 0.2	< 1	4

TABLE C.1

Zone 1 Data Summary, 1989-2012

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

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Cl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As
			ft amsl	SU	SU	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0604	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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



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

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0604	N	10/7/1997	0.01	< 0.01	0.4	< 0.05	12.6	< 0.1	0.43	< 0.001	< 0.1	0.004	2.3	3.8	6.1	< 0.2	< 1	4.6
0604	N	1/15/1998	0.01	0.006	0.37	< 0.05	11.8	< 0.1	0.41	< 0.001	< 0.1	0.0032	2.1	6	8.1	< 0.2	< 1	3.1
0604	N	4/7/1998	0.01	0.007	0.34	< 0.05	10.7	< 0.1	0.39	< 0.001	< 0.1	0.0031	3.3	7	10.3	< 0.2	< 1	4.6
0604	N	7/7/1998	0.01	0.006	0.36	< 0.05	12.5	< 0.1	0.41	< 0.001	< 0.1	0.0031	1.6	4.3	5.9	< 0.2	< 1	3.7
0604	N	10/6/1998	0.01	0.006	0.37	< 0.05	12	< 0.1	0.45	< 0.001	< 0.1	0.0078	2.4	4.1	6.5	< 0.2	3.4	3.4
0604	N	1/5/1999	0.01	0.011	0.37	< 0.05	12.8	< 0.1	0.4	< 0.001	< 0.1	0.0033	2.4	7.4	9.8	< 0.2	4.3	4.3
0604	N	4/6/1999	0.01	0.015	0.41	< 0.05	12.6	< 0.1	0.44	< 0.001	< 0.1	0.0034	4	7.8	11.8	< 0.2	3.2	3.2
0604	N	7/13/1999	0.01	0.009	0.42	< 0.05	14	< 0.1	0.62	< 0.001	< 0.1	0.0071	3	5.2	8.2	< 0.2	3.7	3.7
0604	N	10/5/1999	< 0.01	0.015	0.53	< 0.05	16.1	< 0.1	0.46	< 0.001	< 0.1	0.0033	2.5	2.9	5.4	< 0.2	< 1	4.3
0604	N	1/4/2000	0.01	0.01	0.38	< 0.05	11.2	< 0.1	0.46	< 0.001	< 0.1	0.0032	2.3	6	8.3	< 0.2	< 1	4.7
0604	N	5/3/2000	< 0.01	0.022	0.23	< 0.05	8.81	< 0.1	0.26	< 0.001	< 0.1	0.0027	4.3	6.6	10.9	< 0.2	< 1	4.8
0604	N	7/11/2000	0.01	0.011	0.31	< 0.05	10.1	< 0.1	0.31	< 0.001	< 0.1	0.0022	2.5	6	8.5	< 0.2	< 1	4.2
0604	N	10/3/2000	< 0.01	0.005	0.26	< 0.05	8.17	0.23	0.25	< 0.001	< 0.1	0.002	1.9	7.5	9.4	< 0.2	< 1	4.3
0604	N	1/10/2001	< 0.01	< 0.005	0.29	< 0.05	9.38	< 0.1	0.35	< 0.001	< 0.1	0.0019	2.1	7.6	9.7	< 0.2	< 1	3.2
0604	N	4/3/2001	< 0.01	< 0.005	0.32	< 0.05	9.52	< 0.1	0.39	< 0.001	< 0.1	0.0018	1.9	7.1	9	< 0.2	< 1	3.9
0604	N	7/17/2001	< 0.01	< 0.005	0.29	< 0.05	9.9	< 0.1	0.36	< 0.001	< 0.1	0.002	2.2	6	8.2	< 0.2	< 1	4.1
0604	N	10/2/2001	< 0.01	< 0.005	0.26	< 0.05	9.45	< 0.1	0.35	< 0.001	< 0.1	0.0014	3.9	7.6	11.5	< 0.2	< 1	4.3
0604	N	1/14/2002	0.01	0.006	0.32	< 0.05	11	< 0.1	0.4	< 0.001	< 0.1	0.0016	2.9	9.3	12.2	< 0.2	< 1	4.5
0604	N	4/9/2002	< 0.01	0.007	0.33	< 0.05	11.2	< 0.1	0.4	< 0.001	< 0.1	0.0016	2.6	4.5	7.1	< 0.2	< 1	3.3
0604	N	7/16/2002	< 0.01	< 0.005	0.28	< 0.05	10.4	< 0.1	0.28	< 0.001	< 0.1	< 0.0003	2.9	3.5	6.4	< 0.2	< 1	5.3
0604	N	10/9/2002	< 0.01	< 0.005	0.26	< 0.05	9.67	< 0.1	0.3	< 0.001	< 0.1	0.0018	3.3	5.6	8.9	< 0.2	< 1	9.6
0604	N	1/8/2003	< 0.01	0.006	0.29	< 0.05	10.9	< 0.1	0.32	< 0.001	< 0.1	0.0019	3.6	6.8	10.4	< 0.2	< 1	4.7
0604	N	4/14/2003	< 0.01	< 0.005	0.26	< 0.05	9.91	< 0.1	0.28	< 0.001	< 0.1	0.0019	2.8	15.3	18.1	< 0.2	< 1	8.4
0604	N	7/9/2003	< 0.01	0.006	0.29	< 0.05	11.9	< 0.1	0.32	< 0.001	< 0.1	0.0008	1.8	8.2	10	< 0.2	< 1	4
0604	N	10/8/2003	< 0.01	< 0.005	0.31	< 0.05	11.3	< 0.1	0.34	< 0.001	< 0.1	0.0023	1.4	3.5	4.9	< 0.2	< 1	5.8
0604	N	1/7/2004	< 0.01	< 0.005	0.32	< 0.05	13.5	< 0.1	0.33	< 0.001	< 0.1	0.0018 D	1.9	4.9	6.8	< 0.2	< 1.0	5.8
0604	N	4/7/2004	< 0.01	0.005	0.3	< 0.05	12.1	< 0.1	0.35	0.007	< 0.1	0.0018 D	1.5	4.7	6.2	< 0.2	< 1	5.8
0604	N	7/14/2004	< 0.01	0.007	0.3	< 0.05	11.1	< 0.1	0.3	< 0.001	< 0.1	0.0017 D	2.4	1.9	4.3	< 0.2	< 1.0	3.3
0604	N	10/6/2004	< 0.01	< 0.005	0.27	< 0.05	11	< 0.1	0.18	< 0.001	< 0.1	0.0017 D	2	5.1	7.1	< 0.2	< 1.0	3.4
0604	N	1/5/2005	< 0.01	< 0.005	0.31	< 0.05	11.1	< 0.1	0.35	< 0.001	< 0.1	0.0017	4	3.9	7.9	< 0.2	< 1.0	13.4
0604	N	4/6/2005	< 0.01	< 0.005	0.24	< 0.05	11.9	< 0.1	0.33	< 0.001	< 0.1	0.0018	4.3	5.6	9.9	< 0.2	< 1.0	1.7
0604	N	7/13/2005	< 0.01	< 0.005	0.28	< 0.05	11.7	< 0.1	0.34	< 0.001	< 0.1	0.0015	4	5.6	9.6	< 0.2	< 1.0	3.3
0604	N	10/5/2005	< 0.01	< 0.005	0.27	< 0.05	11.1	< 0.1	0.34	< 0.001	< 0.1	0.0015	2.2	5.7	7.9	< 0.2	< 1.0	4
0604	N	1/11/2006	< 0.01	< 0.005	0.26	< 0.05	11.2	< 0.1	0.31	0.004	< 0.1	0.0013	1.8	3.5	5.3	< 0.2	< 1.0	4.6
0604	N	4/5/2006	< 0.01	< 0.005	0.28	< 0.05	11.7	< 0.1	0.33	0.004	< 0.1	0.0014 D	1.1	< 1.0	1.1	< 0.2	< 1.0	2.9
0604	N	7/19/2006	< 0.01	< 0.005	0.25	< 0.05	10.3	< 0.1	0.29	< 0.001	< 0.1	0.0013	1.4	4.7	6.1	< 0.2	< 1.0	1.7

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

Location ID	Desc	Sample Date	Water Elevation	Field pH	Lab pH	Lab TDS	Ca	Mg	Na	K	HCO3	SO4	Chl	NH4 as N	NO3 as N	TTHMs (Chloroform)	Al	As
			ft amsl	SU	SU	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	ug/l	mg/l	mg/l
NRC Standard			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	80	NA	0.05
EPA Standard			NA	NA	NA	4800	NA	NA	NA	NA	NA	2125	250	NA	190	NA	5	0.05
0604	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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
0604	N	1/4/2012	6,902.50	5.3	5.48 H	7100 D	506	842	321	14	18	4440 D	56 D	<0.05	69 D	2.69	2	<0.001
0604	N	4/4/2012	6,902.77	5.35	5.46 H	7140 D	410	733	290	13	12	4630 D	56 D	<0.05	71 D	1.08	1.8	<0.001
0604	N	7/11/2012	6,902.30	5.24	5.48 H	7450	444	817	292	11	17	4760 D	62 D	<0.05	71 D	5.96	0.9	<0.001
0604	N	10/10/2012	6,902.35	5.31	5.40 H	6880	473	794	302 D	13	29	4620 D	62 D	<0.05	68 D	6.6	1.6	<0.001
0614	N	1/4/2012	6,907.31	6.59	6.87 H	6980 D	550	671	449	14	1170	3630 D	264 D	137 D	137 D	135	<0.1	<0.001
0614	N	4/4/2012	6,907.66	6.52	6.70 H	7500 D	492	641	448	17	1190	3610 D	261 D	138 D	144 D	48.4	<0.1	<0.001
0614	N	7/11/2012	6,907.26	6.42	6.70 H	7010	527	728	463	15	1270	3780 D	274 D	158 D	113 D	132	0.1	<0.001
0614	N	10/10/2012	6,907.36	6.52	6.58 H	7170	562	703	464 D	17	1370	3720 D	269 D	161 D	139 D	238	<0.1	<0.001
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
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
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
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
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
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

TABLE C.1

Zone 1 Data Summary, 1989-2012

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

Location ID	Desc	Sample Date	Be	Cd	Co	Pb	Mn	Mo	Ni	Se	V	U	Rad-226	Rad-228	Rad Total	Th-230	Pb-210	Gross Alpha
			mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	pci/l	pci/l	pci/l	pci/l
NRC Standard			0.05	0.01	NA	0.05	NA	NA	0.05	0.01	0.1	0.3	NA	NA	9.4	5	1	15
EPA Standard			0.017	0.01	0.05	0.05	2.6	1	0.2	0.01	0.7	5	NA	NA	5	NA	NA	15
0604	N	10/4/2006	< 0.01	< 0.005	0.26	< 0.05	10.8	< 0.1	0.32	< 0.001	< 0.1	0.0019	1.5	7.3	8.8	< 0.2	< 1	2.2
0604	N	1/10/2007	< 0.01	< 0.005	0.23	< 0.05	10.4	< 0.1	0.28	< 0.001	< 0.1	0.0011	2.7	4.2	6.9	< 0.2	< 1	1.9
0604	N	4/11/2007	< 0.01	< 0.005	0.26	< 0.05	10.2	< 0.1	0.3	< 0.001	< 0.1	0.001	1.7	6	7.7	< 0.2	< 1	4.2
0604	N	7/11/2007	< 0.01	< 0.005	0.25	< 0.05	10.2	< 0.1	0.31	< 0.001	< 0.1	0.001	2.8	4.4	7.2	< 0.2	< 1	1.8
0604	N	10/3/2007	< 0.01	< 0.005	0.26	< 0.05	10.8	< 0.1	0.29	< 0.001	< 0.1	0.0008	1.7	2.9	4.6	< 0.2	< 1	6.1
0604	N	1/16/2008	< 0.01	< 0.005	0.24	< 0.05	9.73	< 0.1	0.29	< 0.001	< 0.1	0.0009	2.9	4.3	7.2	< 0.2	< 1	2.9
0604	N	4/9/2008	< 0.01	< 0.005	0.23	< 0.05	10.3	< 0.1	0.29	< 0.001	< 0.1	0.0009	1.5	5.4	6.9	1.1	-1.3 U	12
0604	N	7/9/2008	< 0.01	< 0.005	0.23	< 0.05	10.6	< 0.1	0.29	< 0.001	< 0.1	0.0008	1.2	5.7	6.9	-0.1 U	1.8 U	1.9
0604	N	10/13/2008	< 0.01	< 0.005	0.22	< 0.05	9.12	< 0.1	0.27	< 0.001	< 0.1	0.0014	0.93	5	5.93	1	-3 U	3.7
0604	N	1/14/2009	< 0.01	< 0.005	0.24	< 0.05	9.8	< 0.1	0.28	< 0.001	< 0.1	0.0007	1.4	5.8	7.2	-0.2 U	-1 U	2.1
0604	N	4/8/2009	< 0.01	< 0.005	0.22	< 0.05	9.68	< 0.1	0.29	< 0.001	< 0.1	0.0006 D	1.2	4.4	5.6	-0.4 U	-1 U	2.6
0604	N	7/8/2009	< 0.01	< 0.005	0.22	< 0.05	9.56 D	< 0.1	0.26	< 0.001	< 0.1	0.0007	1.9	6.2	8.1	0.2 U	2.2 U	3.6
0604	N	10/6/2009	< 0.01	< 0.005	0.19	< 0.05	8.55	< 0.1	0.26	< 0.001	< 0.1	0.0009	1.3	4.8	6.1	0.08 U	-1 U	2.6
0604	N	1/6/2010	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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
0604	N	4/5/2011	< 0.01	< 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	< 0.01	< 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	< 0.01	< 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
0604	N	1/4/2012	< 0.01	< 0.005	0.16	< 0.05	6.41	< 0.1	0.24	< 0.001	< 0.1	0.0005	1.5	3.6	8.7	0.02 U	1.1	1.6
0604	N	4/4/2012	< 0.01	< 0.005	0.17	< 0.05	6.75	< 0.1	0.26	< 0.001	< 0.1	< 0.0003	1.5	3.5	8.5	< 0.004 U	0.5 U	2.8
0604	N	7/11/2012	0.001	< 0.005	0.13	< 0.001	5.94	< 0.1	0.21	< 0.001	< 0.1	0.0004	1.3	4.4	10.1	0.06 U	0.8 U	1.3
0604	N	10/10/2012	0.002	< 0.005	0.15	< 0.001	5.36	< 0.1	0.25	0.003	< 0.1	0.0004	1.4	4.6	6	0.05 U	0.4 U	1.3
0614	N	1/4/2012	< 0.01	< 0.005	< 0.01	< 0.05	0.43	< 0.1	< 0.05	< 0.001	< 0.1	0.0469	0.46	4.1	8.66	< 0.004 U	0.5 U	0.7
0614	N	4/4/2012	< 0.01	< 0.005	< 0.01	< 0.05	0.61	< 0.1	< 0.05	< 0.001	< 0.1	0.0463	0.85	3.3	7.45	0.04 U	< 0.1 U	1.3
0614	N	7/11/2012	< 0.001	< 0.005	< 0.01	0.002	0.61	< 0.1	< 0.05	< 0.001	< 0.1	0.0421	0.61	3.4	7.41	0.06 U	0.9 U	0.9
0614	N	10/10/2012	< 0.001	< 0.005	< 0.01	0.003	0.82	< 0.1	< 0.05	< 0.001	< 0.1	0.0459	1.1	3	4.1	0.04 U	0.3 U	0.6
0614	N	7/23/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.13	< 0.1	< 0.05	0.003	< 0.1	0.0624	2.9	3.4	6.3	0.6	< 1	8.9
0614	N	10/12/1989	< 0.05	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 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	< 0.05	0.01	< 0.01	< 0.05	0.06	< 0.1	< 0.05	0.002	< 0.1	0.064	0.6	< 1	0.6	< 0.2	< 1	0.9
0614	N	4/5/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.09	< 0.1	< 0.05	0.003	< 0.1	0.045	1	< 1	1	< 0.2	< 1	1.7
0614	N	7/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.07	< 0.1	< 0.05	0.002	< 0.1	0.0611	0.9	1.6	2.5	< 0.2	< 1	< 1
0614	N	10/3/1990	< 0.05	< 0.01	< 0.01	< 0.05	0.08	< 0.1	< 0.05	< 0.001	< 0.1	0.036	0.4	3	3.4	< 0.2	< 1	< 1