Map ID	Sample ID	Field Type	Sample Name	Longitude DMS (W)	Latitude DMS (N)	Elevation (ft)	Sample Date	Sample Time	pH su	Cond uS/cm	Temp C	ORP millivolt	Metals	Radio	Filtration	Preserved	Bacterial Sampling	Ludlum 19 mR/hr	Notes
1	BI980708DIS005	Spring	Echo Spring No. 2	110 16 34.35	35 16 53.086	5856	08-Jul-1998	1:42 pm	7.65	746	26.4	186	Yes	Yes	No	Yes	No	11	
2	BI980708DIS006	Spring	Cottonwood Spring	110 14 29.23	35 19 5.4840	5704	08-Jul-1998	2:21 pm	8.77	498	24.8	220	Yes	Yes	No	Yes	No	12	
3	BI980708DIS007	Spring	Castle Butte Spring	110 19 30.12	35 19 34.333	5873	08-Jul-1998	3:18 pm	9.78	699	19.2	150	Yes	Yes	No	Yes	No	19	
4	BI980714DIS008	Spring	Chimney Butte Spring	110 25 20.89	35 19 17.469	5525	14-Jul-1998	10:26 am	8.42	765	22.8	214	Yes	Yes	No	Yes	No	11	
5	BI980708DIS003	Spring	Coyote Spring	110 27 58.44	35 20 37.191	5359	08-Jul-1998	11:21 am	7.68	1,257	22.8	116	Yes	Yes	No	Yes	No	10	
6	BI980708DIS001	Spring	Chandler Spring	110 28 32.06	35 22 38.434	5441	08-Jul-1998	10:01 am	8.35	988	23.5	115	Yes	Yes	No	Yes	No	11	
7	BI990414DIW001	Well	Dilkon Chapter House	110 19 19.94	35 23 8.9382	5811	14-Apr-1999	4:20 pm	7.65	694	13.3	564	Yes	Yes	No	Yes	No	10 - 12	Dilkon Chapter House Sample
8	BI980708DIS004	Spring	Shonto Spring	110 22 50.34	35 24 39.502	6066	08-Jul-1998	12:36 pm	8.27	471	22.2	157	Yes	Yes	No	Yes	No	18	
9	BI980713TES001	Spring	Cedar Spring	110 21 54.73	35 27 4.0032	6183	13-Jul-1998	10:10 am	8.14	656	25.9	198	Yes	Yes	No	Yes	No	12	
10	BI980713TES003	Spring	Lone Cottonwood Spring	110 22 21.27	35 28 19.828	5958	13-Jul-1998	1:08 pm	8.31	526	35.1	205	Yes	Yes	No	Yes	No	11	
11	BI990414TEW001	Well	Teesto Chapter House	110 24 14.20	35 29 45.031	5711	14-Apr-1999	5:10 pm	7.67	705	14.5	448	Yes	Yes	No	Yes	No	8 - 11	TEESTO Chapter House Sample
12	BI990414TEW002	Wind Mill	7H-180	110 24 18.81	35 29 57.733	5667	14-Apr-1999	5:33 pm	7.23	672	17.2	360	Yes	Yes	No	Yes	No	8 - 12	
13	BI980713TES002	Spring	Cottonwoods Spring	110 18 18.90	35 29 45.415	6156	13-Jul-1998	10:57 am	7.94	520	28.5	241	Yes	Yes	No	Yes	No	12	
14	BI980713TES004	Spring	Lukai Spring	110 21 1.276	35 31 10.811	6161	13-Jul-1998	2:25 pm	7.95	878	28.3	236	Yes	Yes	No	Yes	No	11	
15	BI980713TES005	Spring	Shonetoh Spring	110 17 27.03	35 32 52.114	6044	13-Jul-1998	3:19 pm	7.80	964	29.2	244	Yes	Yes	No	Yes	No	12	
16	BI980630WCW001	Wind Mill	Tank 507-1	110 15 41.48	35 33 58.376	5885	30-Jun-1998	12:05 pm	9.55	896	21.9	108	Yes	Yes	No	Yes	No	15	
17	BI980709IWS007	Spring	Malpais Spring	110 7 14.806	35 19 52.630	5652	09-Jul-1998	1:49 pm	8.12	658	25.2	179	Yes	Yes	No	Yes	No	13	
18	BI980707IWS004	Spring	Dog Spring	110 5 0.7025	35 22 13.388	5566	07-Jul-1998	2:59 pm	8.36	1,357	24.0	160	Yes	Yes	No	Yes	No	12	
19	BI980707IWS005	Spring	Shonto Spring	110 5 44.202	35 22 11.303	5620	07-Jul-1998	3:46 pm	8.33	1,077	21.1	171	Yes	Yes	No	Yes	No	15	
20	BI990414IWW001	Well	Indian Wells Chapter House	110 5 3.2471	35 24 2.7251	5674	14-Apr-1999	3:44 pm	7.62	697	15.4	537	Yes	Yes	No	Yes	No	8 - 12	Indian Wells Chapter House Sample
21	BI980709IWS006	Spring	Home	110 5 12.099	35 24 4.7574	5706	09-Jul-1998	11:20 am	8.41	1,240	23.1	131	Yes	Yes	No	Yes	No	15	
22	BI980707IWS003	Spring	Lokasakad Spring	110 8 28.290	35 24 6.0005	5892	07-Jul-1998	1:13 pm	8.96	1,013	23.1	153	Yes	Yes	No	Yes	No	12.5	
23	BI980701LGS001	Spring	D-7H-116 Spring	110 1 19.355	35 24 12.978	5775	01-Jul-1998	3:27 pm	8.74	641	NA	184	Yes	Yes	No	Yes	No	12	
24	BI980707IWS002	Spring	Sunshine Spring	110 1 52.139	35 26 43.442	6067	07-Jul-1998	11:40 am	7.93	512	22.9	133	Yes	Yes	No	Yes	No	14.5	
25	BI980707IWS001	Spring	H-189 Spring	110 1 28.878	35 27 21.705	6112	07-Jul-1998	10:12 am	8.05	567	20.5	133	Yes	Yes	No	Yes	No	18	
26	BI980629WCS002	Spring	Middle Spring	110 9 1.7880	35 29 14.332	6153	29-Jun-1998	1:56 pm	7.60	845	27.8	114	Yes	Yes	No	Yes	No	12	
27	BI980629WCS003	Spring	Coyote Spring	110 10 14.11	35 29 45.392	6295	29-Jun-1998	2:33 pm	8.15	387	28.3	122	Yes	Yes	No	Yes	No	12	
28	BI980630WCW003	Wind Mill	Tank 507-W6	110 11 21.25	35 31 6.6695	6453	30-Jun-1998	4:40 pm	8.60	719	26.7	227	Yes	Yes	No	Yes	No	20	Sample ID changed from BI980630WCS003 to BI980630WCW003
29	BI980629WCS001	Spring	Yazzie Spring	110 8 6.6912	35 33 2.9369	6270	29-Jun-1998	10:02 am	8.46	605	23.6	134	Yes	Yes	No	Yes	No	15-20	
30	BI980630WCW002	Wind Mill	Tank 507-5	110 11 12.54	35 33 36.564	6006	30-Jun-1998	1:57 pm	10.21	782	24.5	121	Yes	Yes	No	Yes	No	10	
31	BI980630WCS004	Spring	H-60-Spring	110 7 24.273	35 38 2.8781	6198	30-Jun-1998	3:17 pm	8.50	620	23.8	126	Yes	Yes	No	Yes	No	17	
32	BI980701WCS005	Spring	White Cone Spring	110 2 14.083	35 35 35.863	6121	01-Jul-1998	12:09 pm	8.71	420	NA	204	Yes	Yes	No	Yes	No	18	
33	BI990414WCW004	Well	White Cone Chapter House	110 4 48.299	35 33 41.649	6135	14-Apr-1999	3:05 pm	7.58	693	13.4	526	Yes	Yes	No	Yes	No	12 - 15	White Cone Chapter House Sample
34	BI980701LGW002	Wind Mill	Tank 17T-518	109 57 45.80	35 36 29.208	5971	01-Jul-1998	10:58 am	9.63	1,545	NA	181	Yes	Yes	No	Yes	No	15	
35	BI980701LGW004	Wind Mill	17M-203	109 55 19.91	35 32 59.605	5836	01-Jul-1998	2:17 pm	9.47	784	NA	188	Yes	Yes	No	Yes	No	14	
36	BI980701LGW003	Wind Mill	Tank 17T-540	109 57 41.54	35 31 52.334	5902	01-Jul-1998	1:30 pm	9.43	782	NA	185	Yes	Yes	No	Yes	No	17	
37	BI980702LGS002	Spring	Sheep Dip Spring	109 51 31.83	35 31 1.7064	5797	02-Jul-1998	8:42 am	7.26	6,890	20.2	212	Yes	Yes	No	Yes	Yes	12	
38	BI990414LGW006	Well	Lower Greasewood Chapter House	109 51 14.65	35 31 42.855	5862	14-Apr-1999	2:09 pm	7.08	694	14.6	486	Yes	Yes	No	Yes	No	10 - 12	Lower Greasewood Chapter House Sample
39	BI980701LGW001	Wind Mill	Tank 17T-517	109 50 50.01	35 36 47.494	6330	01-Jul-1998	9:30 am	9.36	970	NA	195	Yes	Yes	No	Yes	No	9	
40	BI980721LGS003	Spring	Greasewood Spring	109 54 39.88	35 25 31.018	5720	21-Jul-1998	12:33 pm	8.24	1,577	20.3	NA	Yes	Yes	No	Yes	Yes	NA	
41	BI980702LGH001	Home	Home				02-Jul-1998	10:06 am	7.43	719	22.7	605	Yes	Yes	No	Yes	No	10	Water obtained from a home on the NTUA Water Supply
42	BI980702LGW005	Wind Mill	Tank 17M-187	109 44 42.24	35 27 59.440	6185	02-Jul-1998	11:59 am	9.05	842	20.4	253	Yes	Yes	No	Yes	No	10	

Abandoned Uranium Mines Project
Navajo Lands

Bidahochi Area

Water Sample Analysis for Stable Metals

Map ID	Sample ID	Sample Name	Field Type	Aluminum	Antimony [2]	Arsenic [2,4]	Barium	Beryllium [2,4]	Cadmium [2,4]	Calcium	Chromium [2,5]	Cobalt [2]	Copper [2]	Iron [2]	Lead [2]	Magnesium	Manganese [2]	Mercury [2]	Nickel [2]	Potassium [2]	Selenium [2]	Silver [2]	Sodium	Thallium [2,5]	Vanadium [2]	Zinc [2]	ILCR [1,6]	HI [3,6]
		Primary MCLs in Micrograms per Liter (ug/L) [7]		1000	6	50	1000	4	5	NONE	100	NONE	1300	300	15	NONE	50	2	NONE	NONE	50	100	NONE	2	NONE	5000		
		PRG Limits in Micrograms per Liter (ug/L) [8]		37000	15	0.045	2600	73	18	NONE	180	2200	1400	1100	4	NONE	1700	11	730	NONE	189	180	NONE	2.6	260	11000		
1	BI980708DIS005	Echo Spring No. 2	Spring	95.3	0	8.4	26.2	0	0	52,000	0	0	0	0	0	17,900	0.4	0.017	0	3,010	0	0	87,400	0	39.5	18.8	1.87E-004	0.93
2	BI980708DIS006	Cottonwood Spring	Spring	96.5	0	6.7	2.3	0	0	9,940	0	0	4.4	0	2.9	8,790	0	0.017	0	5,770	17.5	0	95,900	0	51.7	22.1	1.49E-004	0.91
3	BI980708DIS007	Castle Butte Spring	Spring	153.0	0	63.0	2.5	0	0	1,020	0	0	1.7	37.1	0	186	0.8	0.018	0	4,530	11.5	0	187,000	0	119.0	28.6	1.40E-003	6.26
4	BI980714DIS008	Chimney Butte Spring	Spring	74.0	0	19.6	54.6	0	0	15,700	0	0	14.0	46.2	0	9,350	1.3	0.017	0	3,030	3.0	0	154,000	0	92.1	1,740.0	4.36E-004	2.35
5	BI980708DIS003	Coyote Spring	Spring	67.0	0	6.4	30.5	0	0	62,600	0	0	0	0	0	26,300	0.6	0.013	0	3,170	5.8	0	179,000	0	21.9	13.2	1.42E-004	0.71
6	BI980708DIS001	Chandler Spring	Spring	85.2	0	10.9	2.2	0	0	29,500	0	0	7.5	0	0	11,700	0.3	0	0	0	6.2	0	176,000	0	44.4	171.0	2.42E-004	1.22
7	BI990414DIW001	Dilkon Chapter House	Well	38.7	4.9	3.2	1,020.0	0	0	51,800	0	1.2	1.2	112.0	0	21,100	19.5	0	0	5,150	0	0	60,900	0	0	44.6	7.11E-005	1.04
8	BI980708DIS004	Shonto Spring	Spring	65.4	0	2.7	3.0	0	0	9,980	0	0	0	0	0	4,870	0	0.011	0	5,550	0	0	98,800	0	19.8	4.2	6.00E-005	0.33
9	BI980713TES001	Cedar Spring	Spring	88.8	0	0	8.4	0	0	30,800	0	0	0	734.0	0	17,500	97.4	0.019	0	6,110	0	0	93,000	0	14.9	57.5	0.00E+00	0.19
10	BI980713TES003	Lone Cottonwood Spring	Spring	82.7	0	4.7	6.7	0	0	13,300	0	0	37.4	0	4.1	8,760	0.4	0.014	0	4,430	0	0	73,400	0	28.7	122.0	1.04E-004	0.58
11	BI990414TEW001	Teesto Chapter House	Well	0	4.9	2.4	1,030.0	0	0	53,700	0	0	6.5	61.5	0	21,800	12.6	0	0	5,360	0	0	63,400	0	0	30.4	5.33E-005	0.96
12	BI990414TEW002	7H-180	Wind Mill	0	2.0	6.1	2.3	0	0	17,500	0	0	11.9	246.0	0	8,640	2.4	0	0	5,120	0	0	116,000	0	24.6	90.9	1.36E-004	0.82
13	BI980713TES002	Cottonwoods Spring	Spring	115.0	0	3.6	0.8	0	0	20,900	0	0	0	21.1	5.6	16,300	15.9	0.015	0	6,050	3.6	0	61,700	0	31.3	22.7	8.00E-005	0.48
14	BI980713TES004	Lukai Spring	Spring	79.2	0	0	0.8	0	0	52,600	0	0	28.2	20.8	1.8	54,900	0	0.012	0	7,440	0	0	53,400	0	29.0	317.0	0.00E+00	0.17
15	BI980713TES005	Shonetoh Spring	Spring	81.0	0	2.8	1.1	0	0	45,800	0	0	4.2	0	0	68,300	0	0.012	0	5,350	3.7	0	71,400	0	27.8	91.4	6.22E-005	0.40
16	BI980630WCW001	Tank 507-1	Wind Mill	84.3	0	4.0	1.2	0	0	770	0	0	7.4	111.0	0	66	3.8	0	0	2,020	0	0	190,000	0	0	20.1	8.89E-005	0.39
17	BI980709IWS007	Malpais Spring	Spring	174.0	0	0	2.0	0	0	19,500	0	0	1.7	83.4	0	13,500	1.8	0.008	0	6,780	0	0	104,000	6.4	9.7	14.4	0.00E+00	2.52
18	BI980707IWS004	Dog Spring	Spring	57.8	0	4.5	3.1	0	0	49,300	0	0	6.3	0	0	20,800	0.6	0	0	4,720	0	0	215,000	0	28.8	24.2	1.00E-004	0.53
19	BI980707IWS005	Shonto Spring	Spring	73.3	0	2.6	17.9	0	0	14,900	0	0	0	0	0	32,400	0.3	0	0	15,200	0	0	196,000	0	1.2	10.2	5.78E-005	0.25
20	BI990414IWW001	Indian Wells Chapter House	Well	0	0	2.0	1,060.0	0	0	53,000	0	0	21.9	118.0	0	21,400	27.1	0	0	5,220	0	0	62,900	0	0	9.1	4.44E-005	0.63
21	BI980709IWS006	Home	Spring	209.0	0	21.4	2.1	0	0	8,900	0	0	8.1	1,330.0	0	951	10.8	0	0	4,440	0	0	292,000	3.2	16.5	51.6	4.76E-004	3.38
22	BI980707IWS003	Lokasakad Spring	Spring	58.1	0	6.0	15.6	0	0	2,150	0	0	1.8	0	0	741	2.2	0	0	6,520	0	0	245,000	0	0	5.4	1.33E-004	0.56
23	BI980701LGS001	D-7H-116 Spring	Spring	79.1	0	13.8	17.5	0	0	11,600	0	0	11.0	0	0	4,180	0.6	0	0	2,000	9.1	0	144,000	0	87.8	17.4	3.07E-004	1.66
24	BI980707IWS002	Sunshine Spring	Spring	87.0	0	19.9	0	0	0	25,400	0	0	0	0	0	15,900	0	0.017	0	3,190	9.9	0	73,900	0	61.1	154.0	4.42E-004	2.11
25	BI980707IWS001	H-189 Spring	Spring	84.9	0	6.3	0.6	0	0	32,100	0	0	0	0	0	18,500	0	0.038	0	6,740	4.5	0	88,500	0	35.2	5.7	1.40E-004	0.74
26	BI980629WCS002	Middle Spring	Spring	88.4	0	3.0	0.7	0	0	76,900	0	0	2.6	103.0	0	52,200	7.0	0	0	7,560	0	0	36,300	0	16.4	58.4	6.67E-005	0.36
27	BI980629WCS003	Coyote Spring	Spring	129.0	0	4.1	8.7	0	0	34,500	0	0	3.1	43.7	0	11,800	1.2	0	0	4,520	0	0	17,500	0	22.7	49.7	9.11E-005	0.48
28	BI980630WCW003	Tank 507-W6	Wind Mill	76.4	0	14.3	5.7	0	0	22,600	0	0	15.0	459.0	0	17,200	3.4	0	0	7,410	12.8	0	86,000	0	22.3	144.0	3.18E-004	1.53
29	BI980629WCS001	Yazzie Spring	Spring	119.0	0	4.2	0.3	0	0	45,600	0	0	4.7	0	0	26,200	0	0	0	6,660	4.4	0	45,400	0	22.9	4.2	9.33E-005	0.50
30	BI980630WCW002	Tank 507-5	Wind Mill	154.0	0	16.4	8.0	0	0	2,200	0	0	4.2	93.8	0	129	8.2	0.012	0	1,880	0	0	146,000	0	0	20.3	3.64E-004	1.52
31	BI980630WCS004	H-60-Spring	Spring	102.0	0	2.4	0.9	0	0	52,500	0	0	0	0	0	13,000	0	0	0	5,940	0	0	29,900	0	15.3	86.9	5.33E-005	0.29
32	BI980701WCS005	White Cone Spring	Spring	95.6	0	28.5	1.3	0	0	7,600	3.6	0	0	0	0	4,520	0.4	0	0	3,710	5.9	0	82,600	3.1	63.3	20.9	6.33E-004	4.08
33	BI990414WCW004	White Cone Chapter House	Well	29.4	2.0	2.4	1,080.0	0	0	53,900	0	0	10.0	132.0	0	21,900	29.8	0	0	5,370	0	0	64,300	3.2	0	21.7	5.33E-005	2.04
34	BI980701LGW002	Tank 17T-518	Wind Mill	115.0	0	77.5	32.7	0	0	3,320	0	0.8	0	201.0	0	654	5.0	0	0	4,680	0	0	372,000	0	41.4	328.0	1.72E-003	7.27
35	BI980701LGW004	17M-203	Wind Mill	90.1	0	19.0	10.6	0	0	114,000	0	1.0	6.3	2,990.0	0	49,200	222.0	0	0	18,000	0	0	1,030,000	0	0	281.0	4.22E-004	2.17
36	BI980701LGW003	Tank 17T-540	Wind Mill	104.0	0	49.7	0	0	0	1,260	0	0	2.3	206.0	4.7	114	2.5	0	0	4,220	0	0	193,000	0	1.5	26.3	1.10E-003	4.55
37	BI980702LGS002	Sheep Dip Spring	Spring	108.0	0	21.2	14.1	0	0	509,000	0	1.5	0	175.0	0	169,000	651.0	0.020	4.0	15,500	149.0	0	1,370,000	3.3	25.4	5.1	4.71E-004	4.50
38	BI990414LGW006	Lower Greasewood Chapter Ho	Well	23.6	5.6	0	1,120.0	0	0	55,100	0	0	53.0	218.0	0	22,100	48.6	0	0	5,440	0	0	64,700	0	0	24.3	0.00E+00	0.89
39	BI980701LGW001	Tank 17T-517	Wind Mill	91.5	0	237.0	15.6	0	0	1,990	0	0	9.8	690.0	1.4	307	10.0	0.015	0	2,670	17.9	0	227,000	0	203.0	519.0	5.27E-003	22.55
40	BI980721LGS003	Greasewood Spring	Spring	119.0	0	11.6	32.4	0	0	20,900	0	0	0	17.8	0	10,800	8.0	0	0	5,080	3.6	0	311,000	0	72.2	4.7	2.58E-004	1.37
41	BI980702LGH001	Home	Home	84.5	0	0	1,210.0	0	0	56,000	0	0	845.0	235.0	0	21,400	49.9	0.013	2.2	4,620	0	0	70,700	0	0	29.9	0.00E+00	1.13
42	BI980702LGW005	Tank 17M-187	Wind Mill	86.6	0	156.0	2.8	0	0	2,930	0	0	2.8	160.0	0	742	9.1	0.009	0	2,270	0	0	148,000	0	14.0	26.5	3.47E-003	14.26

1. ILCR = Incremental Lifetime Cancer Risk with Respect to Stable Metals.
2. The values of "0" represent a result of either "not detected" at the detection limit of the laboratory method or a negative count. In both cases, the result can be considered "0".
3. The evaluation of Beta is in two steps. The initial screening level is 50 pCi/L. If the measured level of Beta exceeds the 50 pCi/L, a further evaluation is merited. Beta-emitting radionuclides would be screened.
4. The values of "0" in the Pb210 column represent analytical results that measured less than the Minimum Detectable Activity (MDA).
5. Definition of final calculations and ranking will be fully described and published in a final report.
6. When comparing these PRG's with the U.S. EPA's PRG list, the calculated PRG used for U238 is less than the EPA's PRG for U238D (D meaning that its decay daughters are included in the risk calculations).
7. MCL- Maximum Contaminant Levels are the maximum permissible level of a contaminant in water delivered to users of a public water system. This level is not always based on health or risk criteria.
8. PRG- Preliminary Remediation Goals are tools for evaluating and cleaning up contaminated sites. They are risk-based concentrations derived from standardized equations, combining exposure information assumptions and EPA toxicity data.

Abandoned Uranium Mines Project
Navajo Lands

Bidahochi Area

Water Sample Analysis for Radioactive Metals

Map ID	Sample ID	Sample Name	Field Type	Alpha [2]	Beta [3]	Lead210 [4]	Radium226 [2]	Radium228 [2]	Thorium228 [2]	Thorium230 [2]	Thorium232 [2]	Uranium234 [2]	Uranium235 [2]	Uranium238 [2,6]	ILCRrad [1,5]
		Primary MCL's in pico Curies per Liter (pCi/L) [7]		15	50	NONE	5	5	NONE	NONE	NONE	20	20	20	
		PRG Limits in pico Curies per Liter (pCi/L) [8]		NONE	NONE	0.047	0.16	0.19	0.21	1.3	1.5	1.1	1.1	0.71	
1	BI980708DIS005	Echo Spring No. 2	Spring	6.18	5.24	2.27	0.034	0.840	0.005	0.011	0	4.88	0.049	2.63	6.11E-005
2	BI980708DIS006	Cottonwood Spring	Spring	3.53	5.24	1.84	0.016	0.917	0.008	0.021	0	2.11	0.043	1.26	8.71E-006
3	BI980708DIS007	Castle Butte Spring	Spring	9.08	9.25	1.17	0.020	0.551	0	0.005	0.005	5.81	0	2.87	3.72E-005
4	BI980714DIS008	Chimney Butte Spring	Spring	6.47	7.60	0.88	0.059	0.353	0.018	0.010	0	3.32	0.177	1.76	2.67E-005
5	BI980708DIS003	Coyote Spring	Spring	3.70	5.29	4.68	0.106	0.565	0.024	0.016	0	2.14	0	0.77	1.06E-004
6	BI980708DIS001	Chandler Spring	Spring	2.14	1.40	0.80	0	0.400	0.006	0.009	0	2.32	0.131	0.78	5.47E-006
7	BI990414DIW001	Dilkon Chapter House	Well	0.03	8.00	0.90	0.072	0.215	0	0.005	0	0	0	0	2.08E-005
8	BI980708DIS004	Shonto Spring	Spring	3.09	6.46	0.53	0.015	0.599	0	0.010	0	2.55	0	1.82	8.14E-006
9	BI980713TES001	Cedar Spring	Spring	1.54	6.29	0.42	0.032	0.439	0	0.006	0	0.97	0.089	0.22	3.79E-006
10	BI980713TES003	Lone Cottonwood Spring	Spring	2.16	4.97	0.28	0.073	0.559	0	0.023	0.005	1.33	0	0.82	5.78E-006
11	BI990414TEW001	Teesto Chapter House	Well	0.37	5.23	0.58	0.069	0.346	0.010	0	0.004	0	0.009	0.06	2.40E-006
12	BI990414TEW002	7H-180	Wind Mill	3.26	5.13	0.37	0.020	0.483	0	0.003	0.003	1.95	0.088	1.04	5.99E-006
13	BI980713TES002	Cottonwoods Spring	Spring	4.33	9.08	2.63	0.050	0.768	0	0.027	0	1.28	0.183	0.60	6.25E-005
14	BI980713TES004	Lukai Spring	Spring	5.58	10.80	4.01	0.018	0.699	0	0	0.005	3.33	0.115	1.90	9.49E-005
15	BI980713TES005	Shonetoh Spring	Spring	6.01	7.12	0.58	0.023	0.898	0.026	0.015	0	3.74	0.081	2.45	1.19E-005
16	BI980630WCW001	Tank 507-1	Wind Mill	1.52	1.83	0.51	0.030	0.592	0.012	0.011	0	0.14	0	0.05	3.56E-006
17	BI980709IWS007	Malpais Spring	Spring	1.03	8.82	0.70	0	0.437	0.026	0.009	0.005	1.07	0.057	0.23	3.78E-006
18	BI980707IWS004	Dog Spring	Spring	4.49	5.63	0.52	0.022	0.942	0.011	0.005	0	2.96	0.169	1.65	1.03E-005
19	BI980707IWS005	Shonto Spring	Spring	0.97	18.90	0.68	0.025	0.203	0.002	0.005	0	0.53	0.086	0.24	2.14E-006
20	BI990414IWW001	Indian Wells Chapter House	Well	0.10	6.23	0.78	0.062	0.552	0.008	0.002	0.002	0.08	0	0	2.00E-005
21	BI980709IWS006	Home	Spring	13.10	8.80	1.00	0	0.917	0.014	0.021	0.003	12.00	0	1.59	3.93E-005
22	BI980707IWS003	Lokasakad Spring	Spring	1.81	4.53	0.60	0.041	0.425	0.012	0.014	0	1.38	0	0.13	4.00E-006
23	BI980701LGS001	D-7H-116 Spring	Spring	6.48	5.92	0.36	0.068	0.337	0.047	0.010	0.005	5.37	0.055	1.68	9.73E-006
24	BI980707IWS002	Sunshine Spring	Spring	12.50	7.38	0.11	0.030	0.362	0.030	0.009	0	5.05	0.125	2.68	1.07E-005
25	BI980707IWS001	H-189 Spring	Spring	6.11	6.59	0.69	0.038	0.504	0.006	0.006	0	4.34	0.049	2.59	1.06E-005
26	BI980629WCS002	Middle Spring	Spring	6.05	9.41	0.50	0.019	0.215	0.025	0.017	0	4.06	0.268	3.00	9.54E-006
27	BI980629WCS003	Coyote Spring	Spring	3.94	6.59	0.38	0.032	0.249	0.004	0.020	0.002	2.01	0.249	2.19	6.68E-006
28	BI980630WCW003	Tank 507-W6	Wind Mill	5.91	8.98	0.99	0.017	0.484	0.004	0.004	0	3.37	0.091	2.09	2.98E-005
29	BI980629WCS001	Yazzie Spring	Spring	12.90	10.40	0	0.039	0.370	0.037	0.010	0	6.02	0.393	5.74	1.63E-005
30	BI980630WCW002	Tank 507-5	Wind Mill	1.11	1.74	0.58	0.029	0.591	0	0.011	0	0.13	0	0	3.42E-006
31	BI980630WCS004	H-60-Spring	Spring	4.76	7.14	0.29	0.028	0.409	0	0	0.002	3.01	0.159	1.42	7.21E-006
32	BI980701WCS005	White Cone Spring	Spring	5.27	6.41	0.89	0.024	0.325	0	0.010	0	2.71	0.078	2.51	7.94E-006
33	BI990414WCW004	White Cone Chapter House	Well	0.76	5.47	0.29	0.055	0.655	0.003	0.004	0	0	0	0.04	3.87E-006
34	BI980701LGW002	Tank 17T-518	Wind Mill	11.10	4.62	0.83	0.094	0.308	0.003	0.005	0.004	7.47	0.040	1.52	1.12E-005
35	BI980701LGW004	17M-203	Wind Mill	16.60	20.70	0.21	0.423	0.834	0	0	0	10.80	0	4.76	2.36E-005
36	BI980701LGW003	Tank 17T-540	Wind Mill	2.47	4.82	1.66	0.032	0.190	0.023	0.004	0	0.20	0	0.08	3.69E-005
37	BI980702LGS002	Sheep Dip Spring	Spring	140.00	155.00	0.78	0.047	0.413	0	0.063	0	102.00	2.830	85.90	2.35E-004
38	BI990414LGW006	Lower Greasewood Chapter House	Well	0.34	5.25	0.40	0.058	0.591	0.015	0.004	0	0.20	0	0.02	3.76E-006
39	BI980701LGW001	Tank 17T-517	Wind Mill	26.80	17.10	0.70	0.049	0.309	0.025	0.023	0	24.50	0.412	8.82	3.71E-005
40	BI980721LGS003	Greasewood Spring	Spring	15.70	9.40	0.19	0.120	0.534	0.004	0.006	0.005	8.24	0.151	4.08	1.70E-005
41	BI980702LGH001	Home	Home	0.97	5.31	0.56	0.078	0.483	0.008	0.009	0	0.06	0	0	3.13E-006
42	BI980702LGW005	Tank 17M-187	Wind Mill	2.16	4.76	1.93	0.037	0.563	0.003	0	0	3.15	0.050	0.65	4.81E-005

1. ILCR = Incremental Lifetime Cancer Risk with Respect to Radioactive Metals.
2. The values of "0" represent a result of either "not detected" at the detection limit of the laboratory method or a negative count. In both cases, the result can be considered "0".
3. The evaluation of Beta is in two steps. The initial screening level is 50 pCi/L. If the measured level of Beta exceeds the 50 pCi/L, a further evaluation is merited. Beta-emitting radionuclides would be screened.
4. The values of "0" in the Pb210 column represent analytical results that measured less than the Minium Detectable Activity (MDA).
5. Definition of final calculations and ranking will be fully described and published in a final report.
6. When comparing these PRG's with the U.S. EPA's PRG list, the calculated PRG used for U238 is less than the EPA's PRG for U238D (D meaning that its decay daughters are included in the risk calculations).
7. MCL- Maximum Contaminant Levels are the maximum permissible level of a contaminant in water delivered to users of a public water system. This level is not always based on health or risk criteria.
8. PRG- Preliminary Remediation Goals are tools for evaluating and cleaning up contaminated sites. They are risk-based concentrations derived from standardized equations, combining exposure information assumptions and EPA toxicity data.

Abandoned Uranium Mines Project
Navajo Lands

Bidahochi Area

Water Quality Analysis: Stable and Radioactive Metals
In Order of Map ID

Map ID	Sample ID	Field Type	Alpha [2]	Beta [2]	ILCR for Stable Metals [1]	ILCR for Rad Metals [1]		Total Cancer Risk	Hazard Index (HI)	Arsenic [3]	Lead [3]	Total U [2]		Water Quality with Respect to Stable and Radioactive Metals [4]			Risk Category	Risk Ranking [6]		Map ID	Bacteria Present [7]	Total Coliform Detected/ Fecal Coliform Not Detected [7]	Total Coliform & Fecal Coliform Detected [8]
														Less Risk	Some Risk	More Risk							
		MCL: [9]	15	50						50	15	30 [5]											
		PRG: [10]	NONE	NONE						0.045	4	NONE											
1	BI980708DIS005	Spring	6.18	5.24	1.87E-004	6.11E-005		2.48E-004	0.93	8.4	0	7.51			ILCR		SOME	27		1			
2	BI980708DIS006	Spring	3.53	5.24	1.49E-004	8.71E-006		1.58E-004	0.91	6.7	2.9	3.37			ILCR		SOME	24		2			
3	BI980708DIS007	Spring	9.08	9.25	1.40E-003	3.72E-005		1.44E-003	6.26	63.0	0	8.68				ILCR	MORE	38		3			
4	BI980714DIS008	Spring	6.47	7.60	4.36E-004	2.67E-005		4.62E-004	2.35	19.6	0	5.08			ILCR, HI		SOME	32		4			
5	BI980708DIS003	Spring	3.70	5.29	1.42E-004	1.06E-004		2.49E-004	0.71	6.4	0	2.91			ILCR		SOME	21		5			
6	BI980708DIS001	Spring	2.14	1.40	2.42E-004	5.47E-006		2.48E-004	1.22	10.9	0	3.10			ILCR, HI		SOME	22		6			
7	BI990414DIW001	Well	0.03	8.00	7.11E-005	2.08E-005		9.19E-005	1.04	3.2	0	0.00			ILCR, HI		SOME	9		7			
8	BI980708DIS004	Spring	3.09	6.46	6.00E-005	8.14E-006		6.81E-005	0.33	2.7	0	4.37			ILCR		SOME	12		8			
9	BI980713TES001	Spring	1.54	6.29	0.00E+000	3.79E-006		3.79E-006	0.19	0	0	1.19		X			LESS	2		9			
10	BI980713TES003	Spring	2.16	4.97	1.04E-004	5.78E-006		1.10E-004	0.58	4.7	4.1	2.15			ILCR, Lead		SOME	23		10			
11	BI990414TEW001	Well	0.37	5.23	5.33E-005	2.40E-006		5.57E-005	0.96	2.4	0	0.00			ILCR		SOME	5		11			
12	BI990414TEW002	Wind Mill	3.26	5.13	1.36E-004	5.99E-006		1.42E-004	0.82	6.1	0	2.99			ILCR		SOME	16		12			
13	BI980713TES002	Spring	4.33	9.08	8.00E-005	6.25E-005		1.43E-004	0.48	3.6	5.6	2.07			ILCR, Lead		SOME	28		13			
14	BI980713TES004	Spring	5.58	10.80	0.00E+000	9.49E-005		9.49E-005	0.17	0	1.8	5.23			ILCR		SOME	19		14			
15	BI980713TES005	Spring	6.01	7.12	6.22E-005	1.19E-005		7.42E-005	0.40	2.8	0	6.19			ILCR		SOME	15		15			
16	BI980630WCW001	Wind Mill	1.52	1.83	8.89E-005	3.56E-006		9.24E-005	0.39	4.0	0	0.00			ILCR		SOME	10		16			
17	BI980709IWS007	Spring	1.03	8.82	0.00E+000	3.78E-006		3.78E-006	2.52	0	0	1.07			HI		SOME	4		17			
18	BI980707IWS004	Spring	4.49	5.63	1.00E-004	1.03E-005		1.10E-004	0.53	4.5	0	4.61			ILCR		SOME	17		18			
19	BI980707IWS005	Spring	0.97	18.90	5.78E-005	2.14E-006		5.99E-005	0.25	2.6	0	0.53			ILCR		SOME	8		19			
20	BI990414IWW001	Well	0.10	6.23	4.44E-005	2.00E-005		6.44E-005	0.63	2.0	0	0.00			ILCR		SOME	7		20			
21	BI980709IWS006	Spring	13.10	8.80	4.76E-004	3.93E-005		5.15E-004	3.38	21.4	0	13.59			ILCR, HI		SOME	35		21			
22	BI980707IWS003	Spring	1.81	4.53	1.33E-004	4.00E-006		1.37E-004	0.56	6.0	0	1.38			ILCR		SOME	13		22			
23	BI980701LGS001	Spring	6.48	5.92	3.07E-004	9.73E-006		3.16E-004	1.66	13.8	0	7.05			ILCR, HI		SOME	30		23			
24	BI980707IWS002	Spring	12.50	7.38	4.42E-004	1.07E-005		4.53E-004	2.11	19.9	0	7.73			ILCR, HI		SOME	33		24			
25	BI980707IWS001	Spring	6.11	6.59	1.40E-004	1.06E-005		1.51E-004	0.74	6.3	0	6.93			ILCR		SOME	20		25			
26	BI980629WCS002	Spring	6.05	9.41	6.67E-005	9.54E-006		7.62E-005	0.36	3.0	0	7.33			ILCR		SOME	18		26			
27	BI980629WCS003	Spring	3.94	6.59	9.11E-005	6.68E-006		9.78E-005	0.48	4.1	0	4.20			ILCR		SOME	14		27			
28	BI980630WCW003	Wind Mill	5.91	8.98	3.18E-004	2.98E-005		3.48E-004	1.53	14.3	0	5.46			ILCR, HI		SOME	29		28			
29	BI980629WCS001	Spring	12.90	10.40	9.33E-005	1.63E-005		1.10E-004	0.50	4.2	0	12.15			ILCR		SOME	25		29			
30	BI980630WCW002	Wind Mill	1.11	1.74	3.64E-004	3.42E-006		3.68E-004	1.52	16.4	0	0.00			ILCR, HI		SOME	26		30			
31	BI980630WCS004	Spring	4.76	7.14	5.33E-005	7.21E-006		6.05E-005	0.29	2.4	0	4.43			ILCR		SOME	11		31			

1. ILCR = Incremental Lifetime Cancer Risk with Respect to Stable Metals and Radioactive Metals.
2. The PRG's and MCL's for Alpha, Beta, and Uranium are in Pico-Curies per Liter (pCi/L).
3. The PRG's and MCL's for Lead and Arsenic are in Micrograms per Liter (ug/L).
4. Water Quality Levels:
   - Less Risk — Total Cancer Risk is less than or equal to 1E-05 and Hazard Index is less than or equal to 1 and Lead is less than 4 and total U less than 30.
   - Some Risk — Total Cancer Risk is less than or equal to 6E-04 but greater than 1E-05 or Hazard Index is less than 10 but greater than 1 or Lead is less than 15 but greater than 4 and total U less than 30.
   - More Risk — Total Cancer Risk is greater than 6E-04 or Hazard Index is greater than 10 or Lead is greater than 15 or total U equal to or greater than 30.

   The three categories will be color coded on the associated map to be published with the final document.
5. Proposed EPA MCL is 30 pCi/L for the sum of three U isotopes.
6. The definitions of the risk categories and the ranking will be fully described and published in the final report.
7. No change in water quality assessment with respect to stable and radioactive metals results.
8. In accordance with USEPA emergency response procedures for purifying bacteria - impacted water, please use the following methods of emergency disinfection These methods will not remove stable metals or radionuclides from water.
   Boiling: Vigorous boiling for one minute will kill any disease-causing microorganisms present in water. The flat taste of boiled water can be improved by pouring it back and forth from one container to another (callled aeration), by allowing it to stand for a few hours, or by adding a small pinch of salt for each quart of water boiled.
   Chemical Treatment: When boiling is not practical, chemical disinfection should be used. The two chemicals commonly used are chlorine and iodine. Chlorine and iodine are somewhat effective in protecting against exposure to Giardia, but may not be effective in controlling Cryptosporidium.
   Therefore, use iodine or chlorine only to disinfect well water (as opposed to surface water sources such as rivers, lakes, and springs), because well water is unlikely to contain these disease causing organisms. Chlorine is generally more effective than iodine in controlling Giardia, and both disinfectants work much better in warmer water.
   Chlorine Bleach: Common household bleach contains a chlorine compound that will disinfect water. The procedure to be followed is usually written on the label. When the necessary procedure is not given, find the percentage of available chlorine on the label and use the information in the following tabulation as a guide.

Available Chlorine	1%	4-6%	7-10%
Drops per Quart of Clear Water	10	2	1

   (If strength is unknown, add ten drops per quart of water. Double amount of chlorine for cloudy or colored water.) The treated water should be mixed thoroughly and allowed to stand for 30 minutes. The water should have a slight chlorine odor, if not, repeat the dosage and allow the water to stand for an additional 15 minutes.
   If the treated water has too strong a chlorine taste, it can be made more pleasing by allowing the water to stand exposed to the air for a few hours or by pouring it from one clean container to another several times.
9. MCL- Maximum Contaminant Levels are the maximum permissible level of a contaminant in water delivered to users of a public water system. This level is not always based on health or risk criteria.
10. PRG- Preliminary Remediation Goals are tools for evaluating and cleaning up contaminated sites. They are risk-based concentrations derived from standardized equations, combining exposure information assumptions and EPA toxicity data.

Abandoned Uranium Mines Project
Navajo Lands

Bidahochi Area

Water Quality Analysis: Stable and Radioactive Metals
In Order of Map ID

Map ID	Sample ID	Field Type	Alpha [2]	Beta [2]	ILCR for Stable Metals [1]	ILCR for Rad Metals [1]		Total Cancer Risk	Hazard Index (HI)	Arsenic [3]	Lead [3]	Total U [2]		Water Quality with Respect to Stable and Radioactive Metals [4]			Risk Category	Risk Ranking [6]		Map ID	Bacteria Present [7]	Total Coliform Detected/ Fecal Coliform Not Detected [7]	Total Coliform & Fecal Coliform Detected [8]
														Less Risk	Some Risk	More Risk							
		MCL: [9]	15	50						50	15	30 [5]											
		PRG: [10]	NONE	NONE						0.045	4	NONE											
32	BI980701WCS005	Spring	5.27	6.41	6.33E-004	7.94E-006		6.41E-004	4.08	28.5	0	5.22				ILCR	MORE	36		32			
33	BI990414WCW004	Well	0.76	5.47	5.33E-005	3.87E-006		5.72E-005	2.04	2.4	0	0.00			ILCR, HI		SOME	6		33			
34	BI980701LGW002	Wind Mill	11.10	4.62	1.72E-003	1.12E-005		1.73E-003	7.27	77.5	0	8.99				ILCR	MORE	39		34			
35	BI980701LGW004	Wind Mill	16.60	20.70	4.22E-004	2.36E-005		4.46E-004	2.17	19.0	0	15.56			ILCR, HI		SOME	34		35			
36	BI980701LGW003	Wind Mill	2.47	4.82	1.10E-003	3.69E-005		1.14E-003	4.55	49.7	4.7	0.00				ILCR	MORE	37		36			
37	BI980702LGS002	Spring	140.00	155.00	4.71E-004	2.35E-004		7.06E-004	4.50	21.2	0	190.73				ILCR, Total U	MORE	41		37			
38	BI990414LGW006	Well	0.34	5.25	0.00E+000	3.76E-006		3.76E-006	0.89	0	0	0.00		X			LESS	1		38			
39	BI980701LGW001	Wind Mill	26.80	17.10	5.27E-003	3.71E-005		5.30E-003	22.55	237.0	1.4	33.73				ILCR, HI, Total U	MORE	42		39			
40	BI980721LGS003	Spring	15.70	9.40	2.58E-004	1.70E-005		2.75E-004	1.37	11.6	0	12.32			ILCR, HI		SOME	31		40			
41	BI980702LGH001	Home	0.97	5.31	0.00E+000	3.13E-006		3.13E-006	1.13	0	0	0.00			HI		SOME	3		41			
42	BI980702LGW005	Wind Mill	2.16	4.76	3.47E-003	4.81E-005		3.51E-003	14.26	156.0	0	3.80				ILCR, HI	MORE	40		42			

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2. The PRG's and MCL's for Alpha, Beta, and Uranium are in Pico-Curies per Liter (pCi/L).
3. The PRG's and MCL's for Lead and Arsenic are in Micrograms per Liter (ug/L).
4. Water Quality Levels:
   - Less Risk — Total Cancer Risk is less than or equal to 1E-05 and Hazard Index is less than or equal to 1 and Lead is less than 4 and total U less than 30.
   - Some Risk — Total Cancer Risk is less than or equal to 6E-04 but greater than 1E-05 or Hazard Index is less than 10 but greater than 1 or Lead is less than 15 but greater than 4 and total U less than 30.
   - More Risk — Total Cancer Risk is greater than 6E-04 or Hazard Index is greater than 10 or Lead is greater than 15 or total U equal to or greater than 30.

   The three categories will be color coded on the associated map to be published with the final document.
5. Proposed EPA MCL is 30 pCi/L for the sum of three U isotopes.
6. The definitions of the risk categories and the ranking will be fully described and published in the final report.
7. No change in water quality assessment with respect to stable and radioactive metals results.
8. In accordance with USEPA emergency response procedures for purifying bacteria - impacted water, please use the following methods of emergency disinfection These methods will not remove stable metals or radionuclides from water.
   Boiling: Vigorous boiling for one minute will kill any disease-causing microorganisms present in water. The flat taste of boiled water can be improved by pouring it back and forth from one container to another (callled aeration), by allowing it to stand for a few hours, or by adding a small pinch of salt for each quart of water boiled.
   Chemical Treatment: When boiling is not practical, chemical disinfection should be used. The two chemicals commonly used are chlorine and iodine. Chlorine and iodine are somewhat effective in protecting against exposure to Giardia, but may not be effective in controlling Cryptosporidium.
   Therefore, use iodine or chlorine only to disinfect well water (as opposed to surface water sources such as rivers, lakes, and springs), because well water is unlikely to contain these disease causing organisms. Chlorine is generally more effective than iodine in controlling Giardia, and both disinfectants work much better in warmer water.
   Chlorine Bleach: Common household bleach contains a chlorine compound that will disinfect water. The procedure to be followed is usually written on the label. When the necessary procedure is not given, find the percentage of available chlorine on the label and use the information in the following tabulation as a guide.

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Drops per Quart of Clear Water	10	2	1

   (If strength is unknown, add ten drops per quart of water. Double amount of chlorine for cloudy or colored water.) The treated water should be mixed thoroughly and allowed to stand for 30 minutes. The water should have a slight chlorine odor, if not, repeat the dosage and allow the water to stand for an additional 15 minutes.
   If the treated water has too strong a chlorine taste, it can be made more pleasing by allowing the water to stand exposed to the air for a few hours or by pouring it from one clean container to another several times.
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10. PRG- Preliminary Remediation Goals are tools for evaluating and cleaning up contaminated sites. They are risk-based concentrations derived from standardized equations, combining exposure information assumptions and EPA toxicity data.

Abandoned Uranium Mines Project
Navajo Lands

Bidahochi Area

Water Quality Analysis: Stable and Radioactive Metals
In Order of Risk Ranking

Map ID	Sample ID	Field Type	Alpha [2]	Beta [2]	ILCR for Stable Metals [1]	ILCR for Rad Metals [1]		Total Cancer Risk	Hazard Index (HI)	Arsenic [3]	Lead [3]	Total U [2]		Water Quality with Respect to Stable and Radioactive Metals [4]			Risk Category	Risk Ranking [6]		Map ID	Bacteria Present [7]	Total Coliform Detected/ Fecal Coliform Not Detected [7]	Total Coliform & Fecal Coliform Detected [8]
		MCL; [9] PRG: [10]	15 NONE	50 NONE						50 0.045	15 4	30 [5] NONE		Less Risk	Some Risk	More Risk							
38	BI990414LGW006	Well	0.34	5.25	0.00E+000	3.76E-006		3.76E-006	0.89	0	0	0.00		X			LESS	1		38			
9	BI980713TES001	Spring	1.54	6.29	0.00E+000	3.79E-006		3.79E-006	0.19	0	0	1.19		X			LESS	2		9			
41	BI980702LGH001	Home	0.97	5.31	0.00E+000	3.13E-006		3.13E-006	1.13	0	0	0.00			HI		SOME	3		41			
17	BI980709IWS007	Spring	1.03	8.82	0.00E+000	3.78E-006		3.78E-006	2.52	0	0	1.07			HI		SOME	4		17			
11	BI990414TEW001	Well	0.37	5.23	5.33E-005	2.40E-006		5.57E-005	0.96	2.4	0	0.00			ILCR		SOME	5		11			
33	BI990414WCW004	Well	0.76	5.47	5.33E-005	3.87E-006		5.72E-005	2.04	2.4	0	0.00			ILCR, HI		SOME	6		33			
20	BI990414IWW001	Well	0.10	6.23	4.44E-005	2.00E-005		6.44E-005	0.63	2.0	0	0.00			ILCR		SOME	7		20			
19	BI980707IWS005	Spring	0.97	18.90	5.78E-005	2.14E-006		5.99E-005	0.25	2.6	0	0.53			ILCR		SOME	8		19			
7	BI990414DIW001	Well	0.03	8.00	7.11E-005	2.08E-005		9.19E-005	1.04	3.2	0	0.00			ILCR, HI		SOME	9		7			
16	BI980630WCW001	Wind Mill	1.52	1.83	8.89E-005	3.56E-006		9.24E-005	0.39	4.0	0	0.00			ILCR		SOME	10		16			
31	BI980630WCS004	Spring	4.76	7.14	5.33E-005	7.21E-006		6.05E-005	0.29	2.4	0	4.43			ILCR		SOME	11		31			
8	BI980708DIS004	Spring	3.09	6.46	6.00E-005	8.14E-006		6.81E-005	0.33	2.7	0	4.37			ILCR		SOME	12		8			
22	BI980707IWS003	Spring	1.81	4.53	1.33E-004	4.00E-006		1.37E-004	0.56	6.0	0	1.38			ILCR		SOME	13		22			
27	BI980629WCS003	Spring	3.94	6.59	9.11E-005	6.68E-006		9.78E-005	0.48	4.1	0	4.20			ILCR		SOME	14		27			
15	BI980713TES005	Spring	6.01	7.12	6.22E-005	1.19E-005		7.42E-005	0.40	2.8	0	6.19			ILCR		SOME	15		15			
12	BI990414TEW002	Wind Mill	3.26	5.13	1.36E-004	5.99E-006		1.42E-004	0.82	6.1	0	2.99			ILCR		SOME	16		12			
18	BI980707IWS004	Spring	4.49	5.63	1.00E-004	1.03E-005		1.10E-004	0.53	4.5	0	4.61			ILCR		SOME	17		18			
26	BI980629WCS002	Spring	6.05	9.41	6.67E-005	9.54E-006		7.62E-005	0.36	3.0	0	7.33			ILCR		SOME	18		26			
14	BI980713TES004	Spring	5.58	10.80	0.00E+000	9.49E-005		9.49E-005	0.17	0	1.8	5.23			ILCR		SOME	19		14			
25	BI980707IWS001	Spring	6.11	6.59	1.40E-004	1.06E-005		1.51E-004	0.74	6.3	0	6.93			ILCR		SOME	20		25			
5	BI980708DIS003	Spring	3.70	5.29	1.42E-004	1.06E-004		2.49E-004	0.71	6.4	0	2.91			ILCR		SOME	21		5			
6	BI980708DIS001	Spring	2.14	1.40	2.42E-004	5.47E-006		2.48E-004	1.22	10.9	0	3.10			ILCR, HI		SOME	22		6			
10	BI980713TES003	Spring	2.16	4.97	1.04E-004	5.78E-006		1.10E-004	0.58	4.7	4.1	2.15			ILCR, Lead		SOME	23		10			
2	BI980708DIS006	Spring	3.53	5.24	1.49E-004	8.71E-006		1.58E-004	0.91	6.7	2.9	3.37			ILCR		SOME	24		2			
29	BI980629WCS001	Spring	12.90	10.40	9.33E-005	1.63E-005		1.10E-004	0.50	4.2	0	12.15			ILCR		SOME	25		29			
30	BI980630WCW002	Wind Mill	1.11	1.74	3.64E-004	3.42E-006		3.68E-004	1.52	16.4	0	0.00			ILCR, HI		SOME	26		30			
1	BI980708DIS005	Spring	6.18	5.24	1.87E-004	6.11E-005		2.48E-004	0.93	8.4	0	7.51			ILCR		SOME	27		1			
13	BI980713TES002	Spring	4.33	9.08	8.00E-005	6.25E-005		1.43E-004	0.48	3.6	5.6	2.07			ILCR, Lead		SOME	28		13			
28	BI980630WCW003	Wind Mill	5.91	8.98	3.18E-004	2.98E-005		3.48E-004	1.53	14.3	0	5.46			ILCR, HI		SOME	29		28			
23	BI980701LGS001	Spring	6.48	5.92	3.07E-004	9.73E-006		3.16E-004	1.66	13.8	0	7.05			ILCR, HI		SOME	30		23			
40	BI980721LGS003	Spring	15.70	9.40	2.58E-004	1.70E-005		2.75E-004	1.37	11.6	0	12.32			ILCR, HI		SOME	31		40			
4	BI980714DIS008	Spring	6.47	7.60	4.36E-004	2.67E-005		4.62E-004	2.35	19.6	0	5.08			ILCR, HI		SOME	32		4			

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2. The PRG's and MCL's for Alpha, Beta, and Uranium are in Pico-Curies per Liter (pCi/L).
3. The PRG's and MCL's for Lead and Arsenic are in Micrograms per Liter (ug/L).
4. Water Quality Levels:
   - Less Risk — Total Cancer Risk is less than or equal to 1E-05 and Hazard Index is less than or equal to 1 and Lead is less than 4 and total U less than 30.
   - Some Risk — Total Cancer Risk is less than or equal to 6E-04 but greater than 1E-05 or Hazard Index is less than 10 but greater than 1 or Lead is less than 15 but greater than 4 and total U less than 30.
   - More Risk — Total Cancer Risk is greater than 6E-04 or Hazard Index is greater than 10 or Lead is greater than 15 or total U equal to or greater than 30.

   The three categories will be color coded on the associated map to be published with the final document.
5. Proposed EPA MCL is 30 pCi/L for the sum of three U isotopes.
6. The definitions of the risk categories and the ranking will be fully described and published in the final report.
7. No change in water quality assessment with respect to stable and radioactive metals results.
8. In accordance with USEPA emergency response procedures for purifying bacteria - impacted water, please use the following methods of emergency disinfection These methods will not remove stable metals or radionuclides from water.
   Boiling: Vigorous boiling for one minute will kill any disease-causing microorganisms present in water. The flat taste of boiled water can be improved by pouring it back and forth from one container to another (callled aeration), by allowing it to stand for a few hours, or by adding a small pinch of salt for each quart of water boiled.
   Chemical Treatment: When boiling is not practical, chemical disinfection should be used. The two chemicals commonly used are chlorine and iodine. Chlorine and iodine are somewhat effective in protecting against exposure to Giardia, but may not be effective in controlling Cryptosporidium.
   Therefore, use iodine or chlorine only to disinfect well water (as opposed to surface water sources such as rivers, lakes, and springs), because well water is unlikely to contain these disease causing organisms. Chlorine is generally more effective than iodine in controlling Giardia, and both disinfectants work much better in warmer water.
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Navajo Lands

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In Order of Risk Ranking

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24	BI980707IWS002	Spring	12.50	7.38	4.42E-004	1.07E-005		4.53E-004	2.11	19.9	0	7.73			ILCR, HI		SOME	33		24			
35	BI980701LGW004	Wind Mill	16.60	20.70	4.22E-004	2.36E-005		4.46E-004	2.17	19.0	0	15.56			ILCR, HI		SOME	34		35			
21	BI980709IWS006	Spring	13.10	8.80	4.76E-004	3.93E-005		5.15E-004	3.38	21.4	0	13.59			ILCR, HI		SOME	35		21			
32	BI980701WCS005	Spring	5.27	6.41	6.33E-004	7.94E-006		6.41E-004	4.08	28.5	0	5.22				ILCR	MORE	36		32			
36	BI980701LGW003	Wind Mill	2.47	4.82	1.10E-003	3.69E-005		1.14E-003	4.55	49.7	4.7	0.00				ILCR	MORE	37		36			
3	BI980708DIS007	Spring	9.08	9.25	1.40E-003	3.72E-005		1.44E-003	6.26	63.0	0	8.68				ILCR	MORE	38		3			
34	BI980701LGW002	Wind Mill	11.10	4.62	1.72E-003	1.12E-005		1.73E-003	7.27	77.5	0	8.99				ILCR	MORE	39		34			
42	BI980702LGW005	Wind Mill	2.16	4.76	3.47E-003	4.81E-005		3.51E-003	14.26	156.0	0	3.80				ILCR, HI	MORE	40		42			
37	BI980702LGS002	Spring	140.00	155.00	4.71E-004	2.35E-004		7.06E-004	4.50	21.2	0	190.73				ILCR, Total U	MORE	41		37			
39	BI980701LGW001	Wind Mill	26.80	17.10	5.27E-003	3.71E-005		5.30E-003	22.55	237.0	1.4	33.73				ILCR, HI, Total U	MORE	42		39			

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