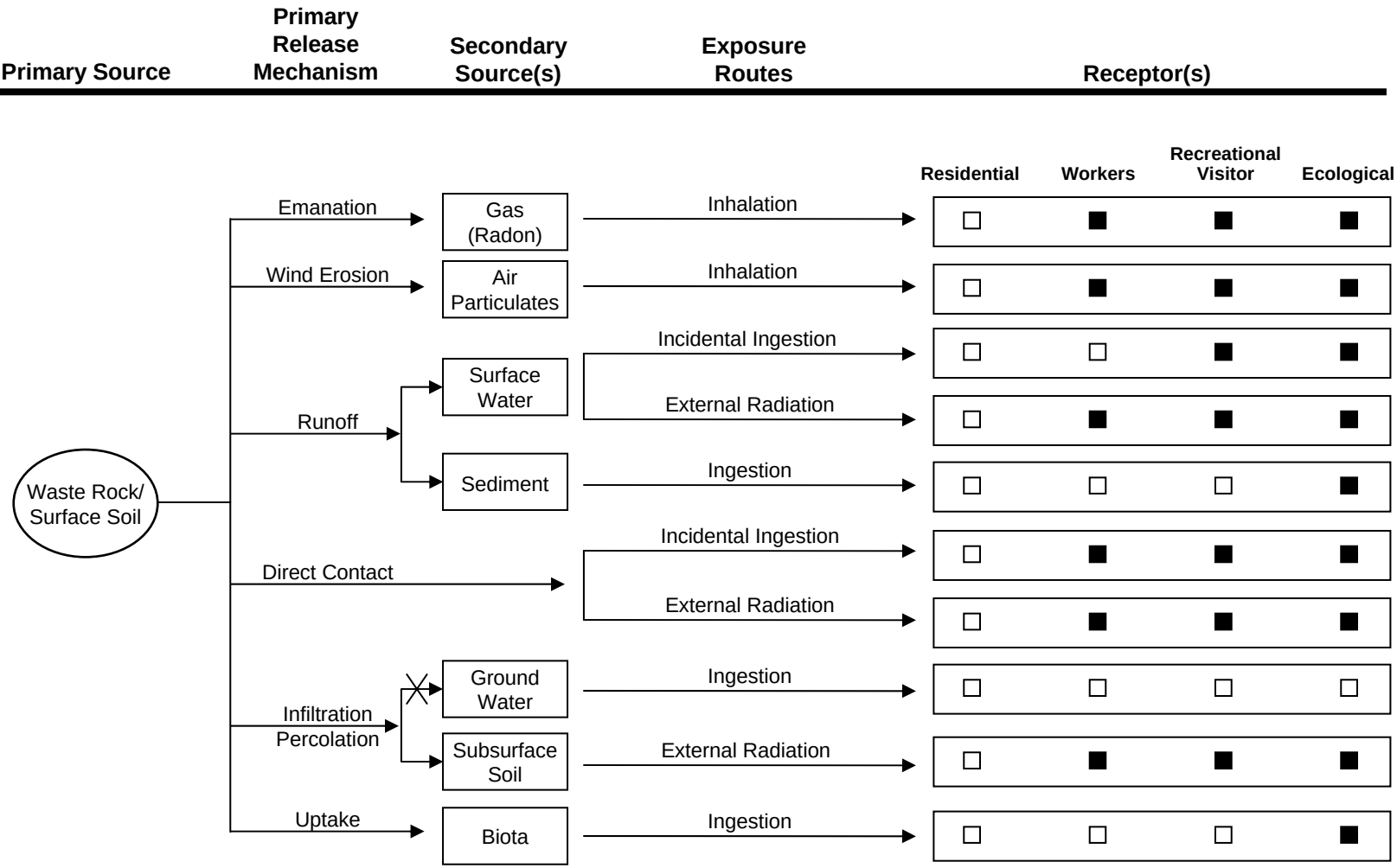

KEY:

- ☐ Not a Potential Receptor
- ■ Potential Receptor

Figure 11
Site Conceptual Exposure Model
San Mateo Uranium Mine
Cibola County, New Mexico

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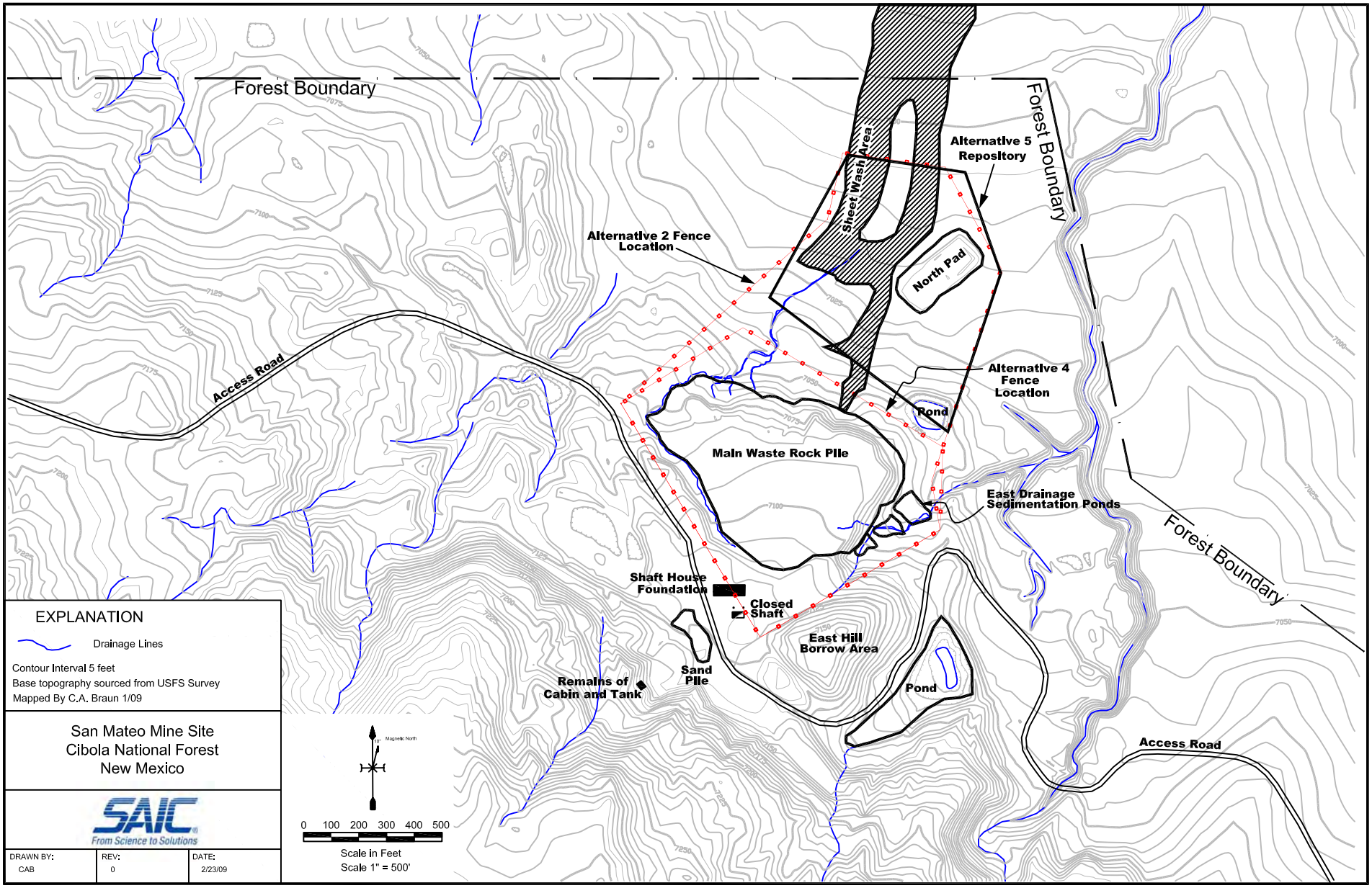


Figure 12
Site Features and Locations for Alternatives

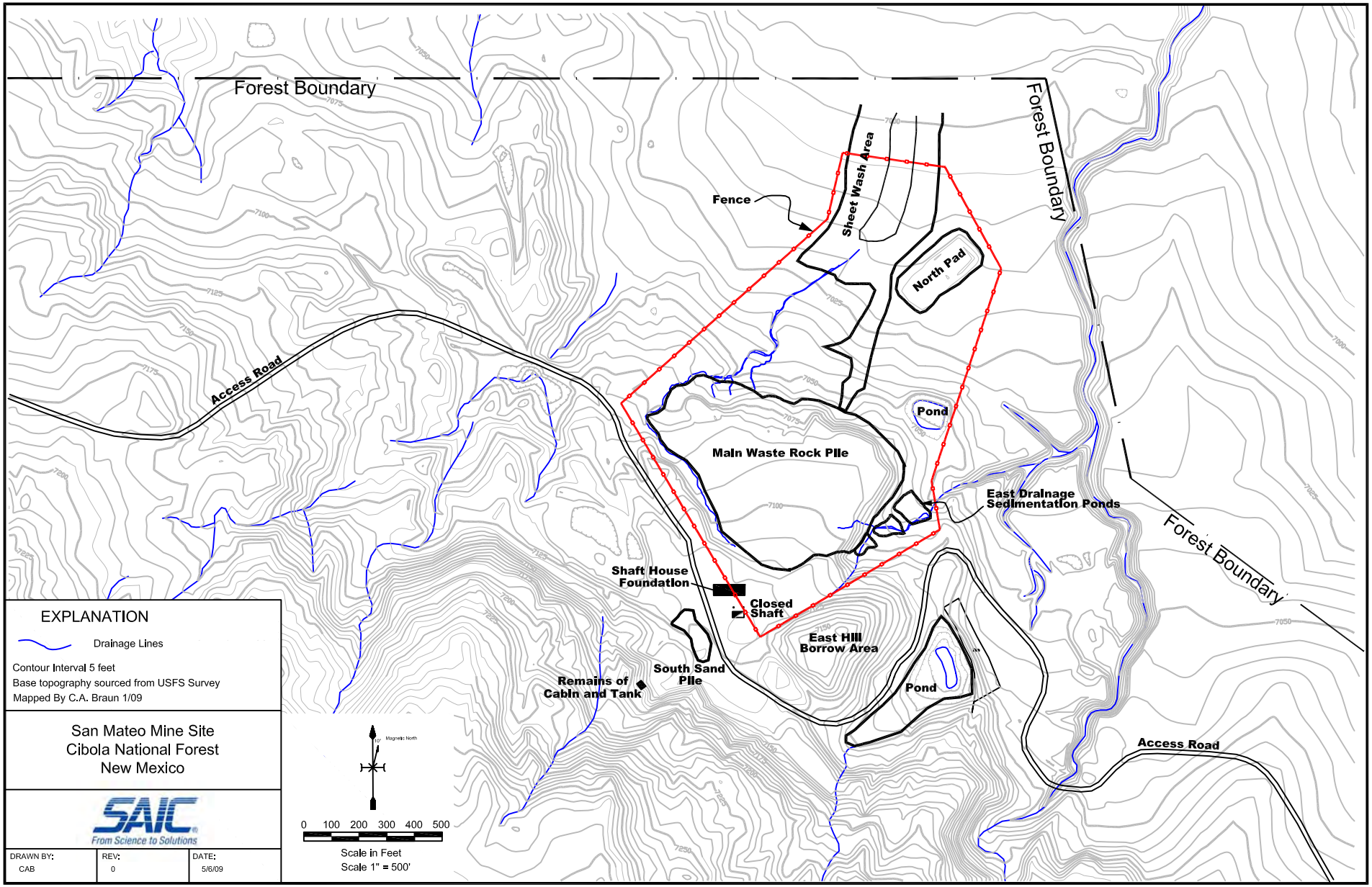


Figure 13
Alternative 2 Institutional Controls/Fencing

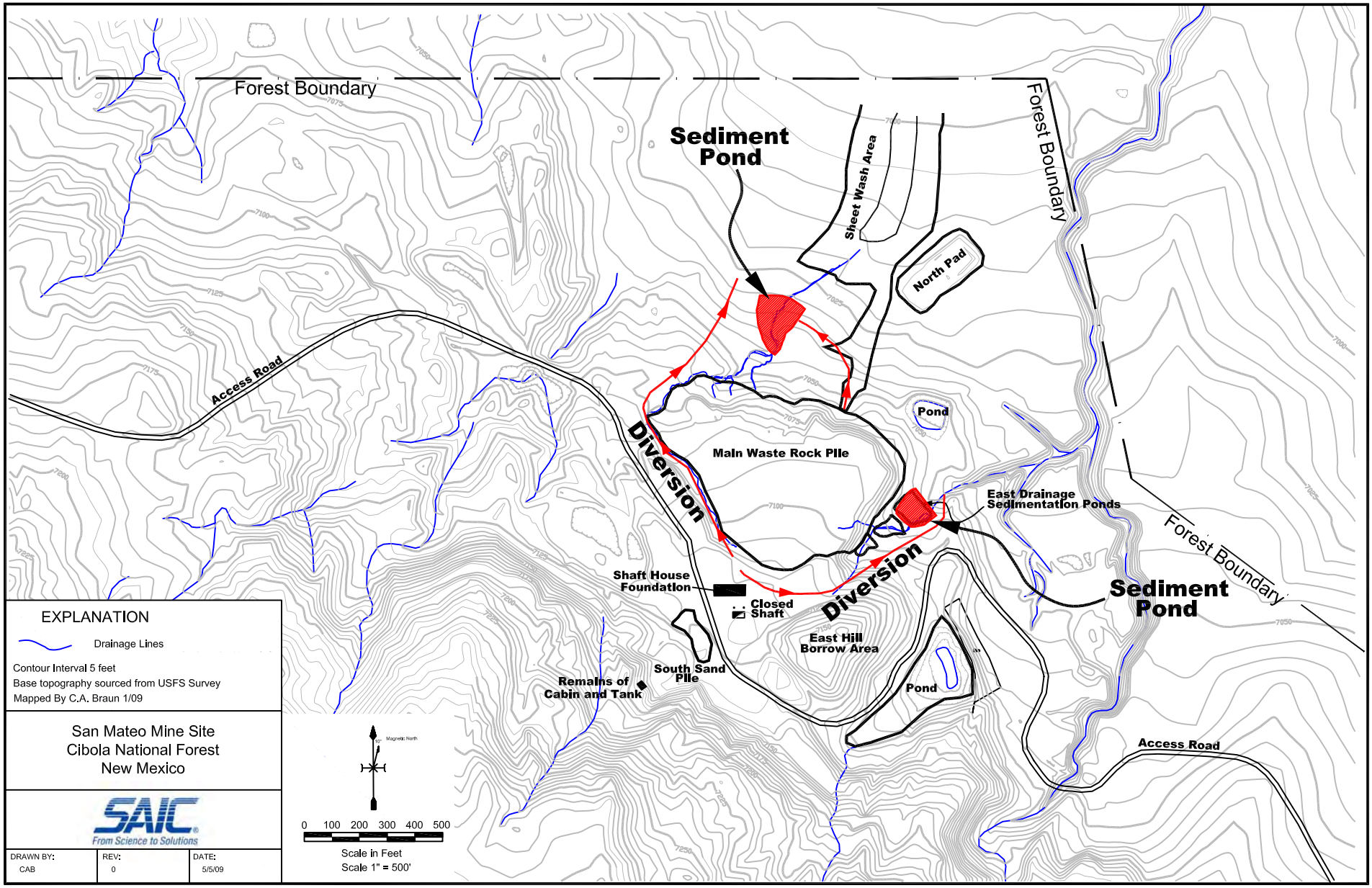


Figure 14
Alternative 3 Runoff and Sediment Control

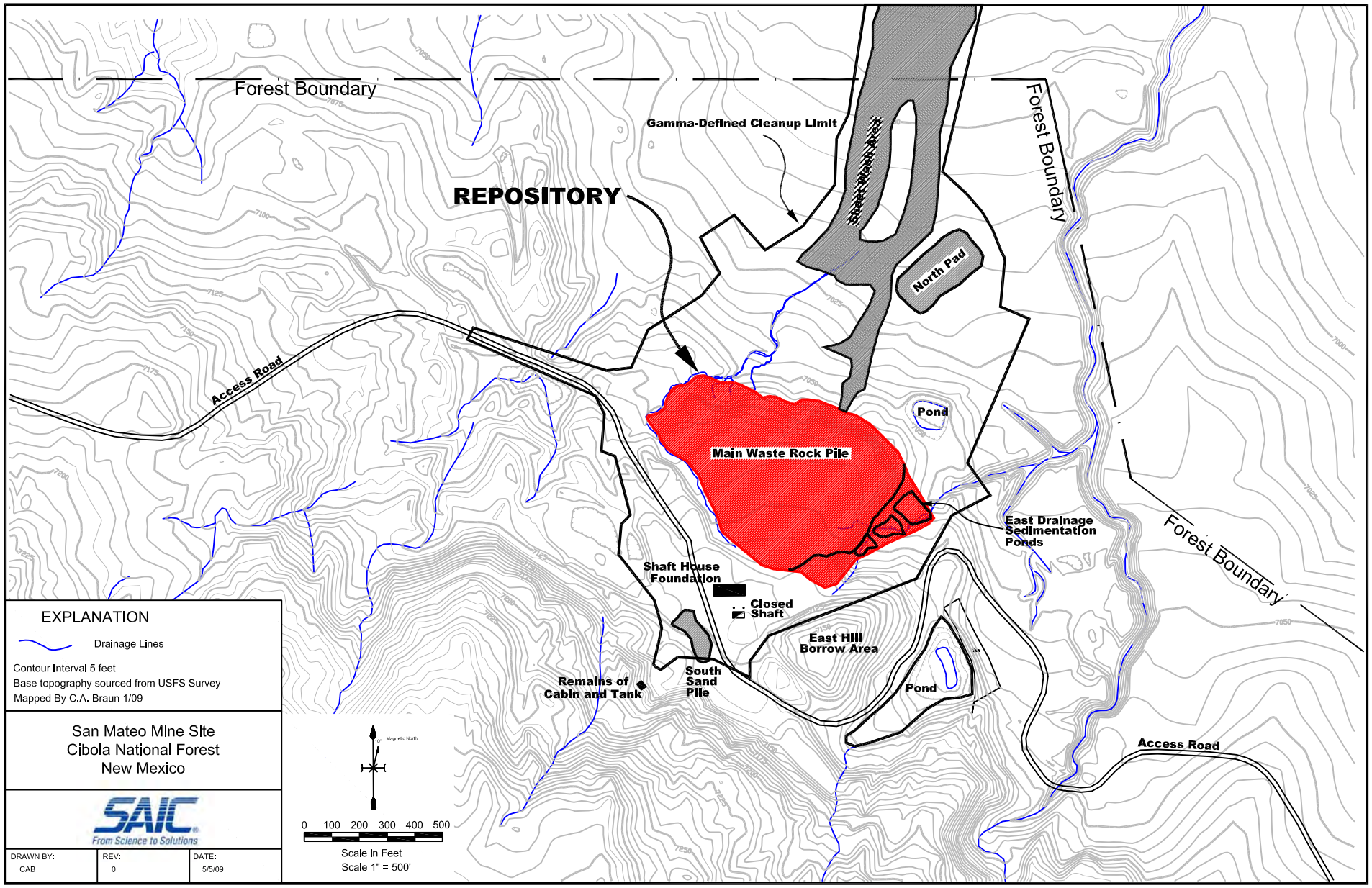


Figure 15
Alternative 4 Repository at Large Waste Rock Pile

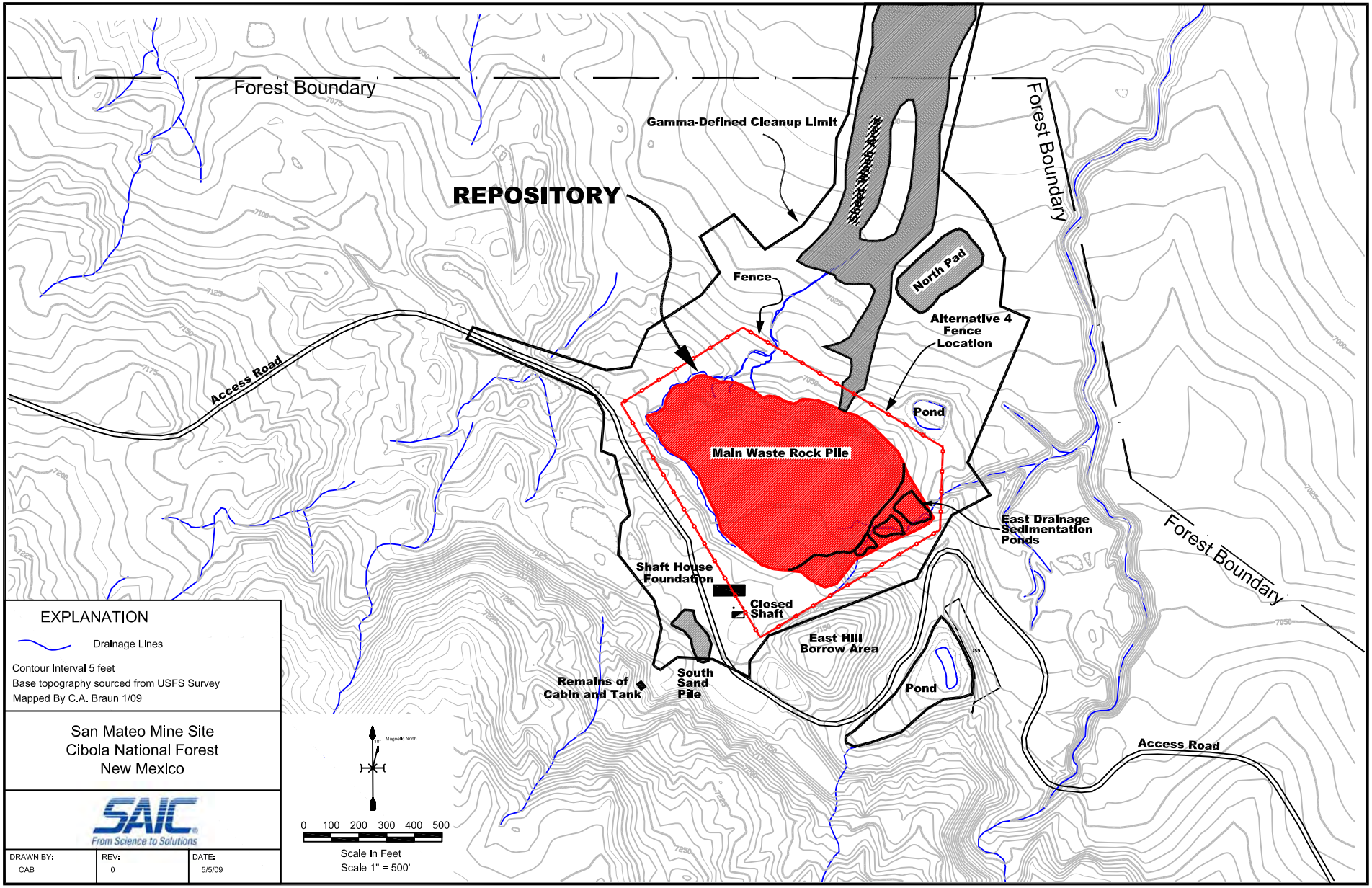
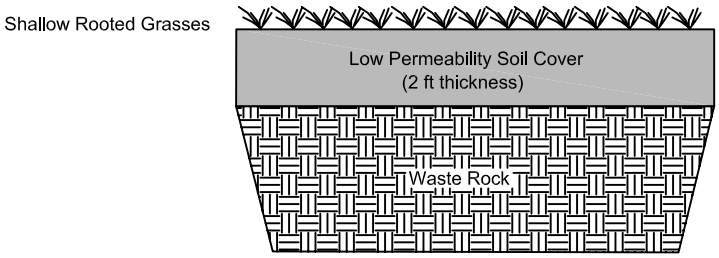


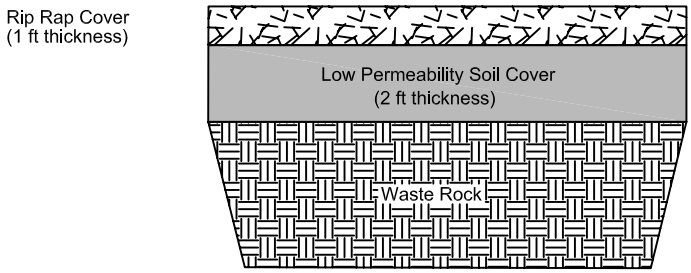
Figure 16
Alternative 4c Repository at Large Waste Rock Pile - Evapotransporation Cover

Simple Low Permeability Soil Cover

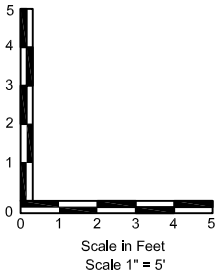


Alternative 4a - Consolidated On-Site with Simple Cap

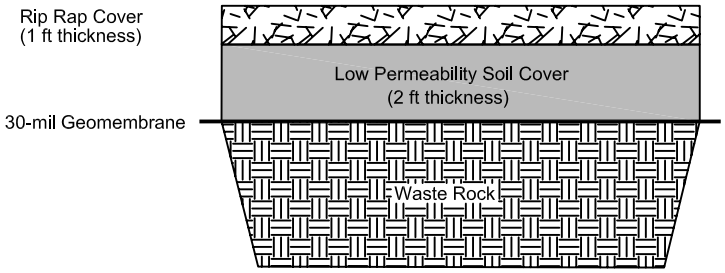
Multilayer Cover
Low Permeability Soil and Rip Rap Armor



Alternative 4b1 - Consolidated On-Site with Rock Armoring



Multilayer Cover Constructed of Geomembrane, Low Permeability Soil and Rip Rap Armor



Alternative 4b2 - Consolidated On-Site with Geomembrane and Rock Armored Cover

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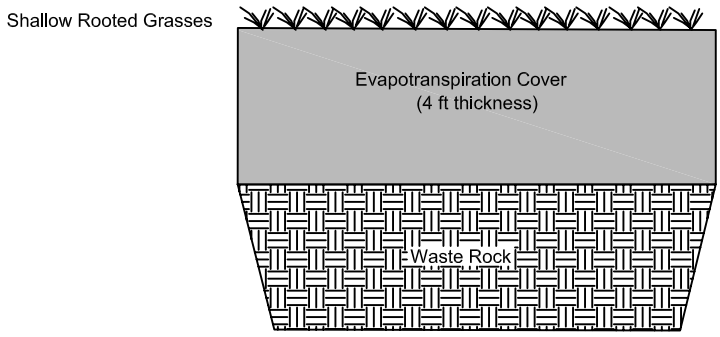
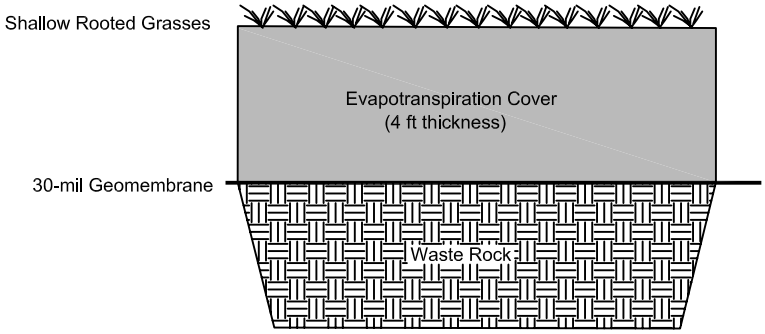
Figure 17a
Typical Repository Covers

Simple Evapotranspiration Cover



Alternative 4c1 - Consolidated with Evapotranspiration Cover

Simple Evapotranspiration Cover with Geomembrane Cover



Alternative 4c2 - Consolidation with Evapotranspiration Cover Installed over a Geomembrane

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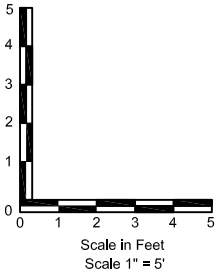


Figure 17b
Typical Repository Covers

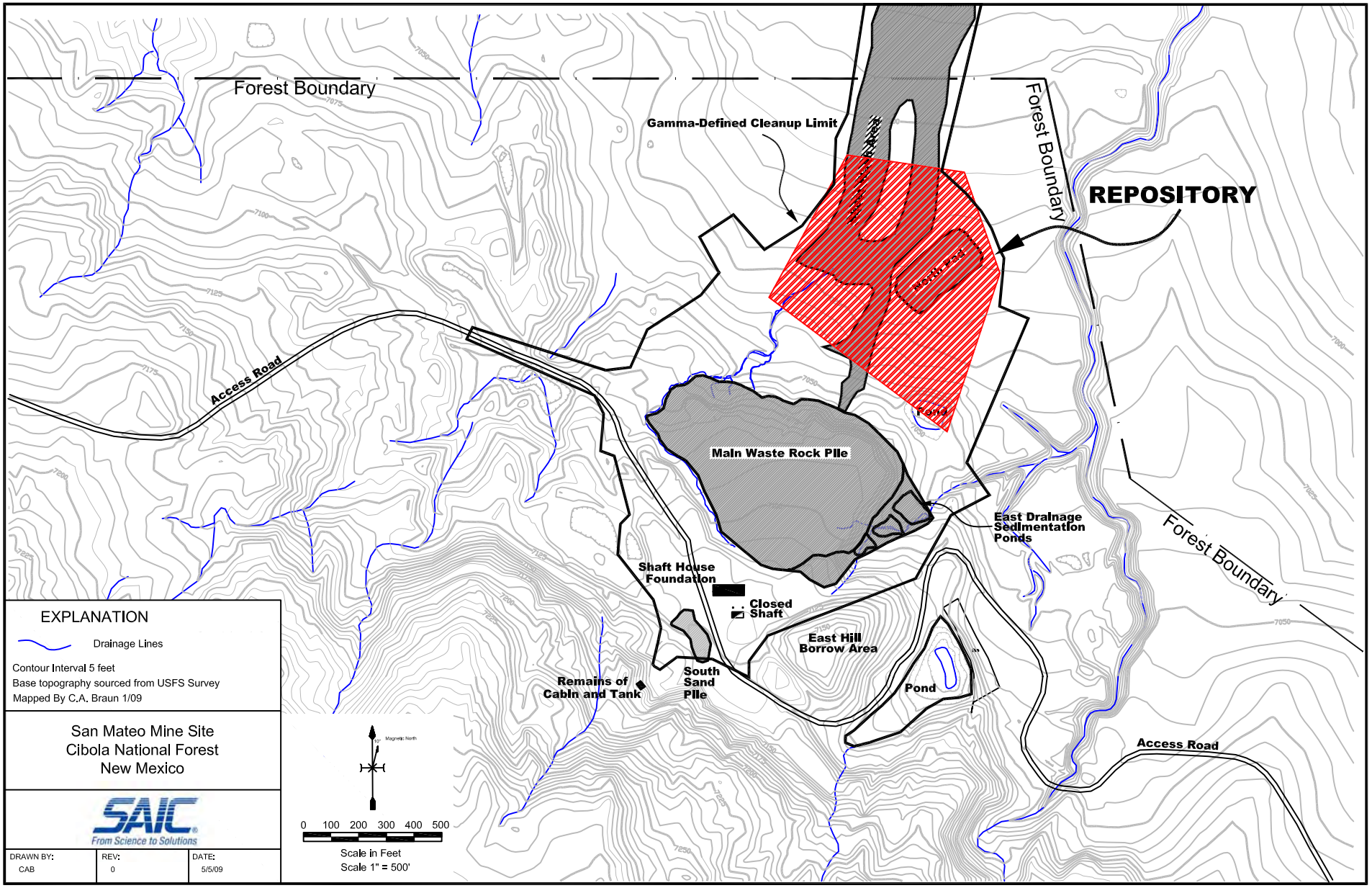
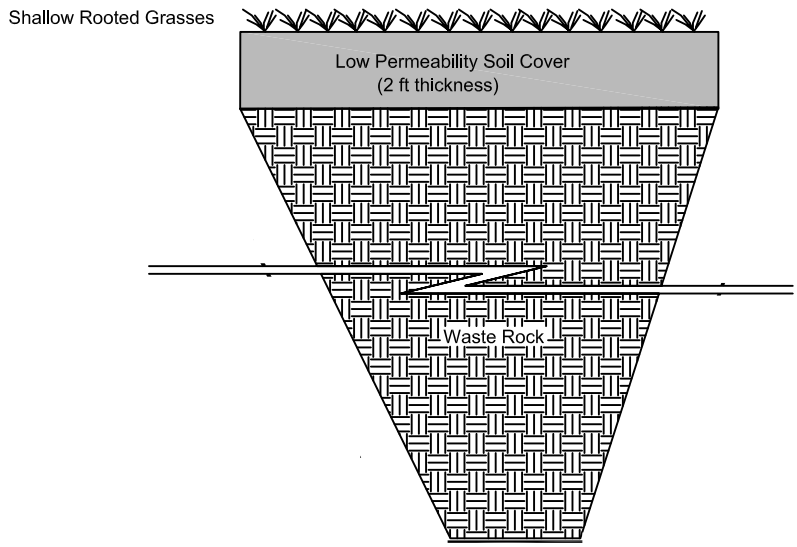


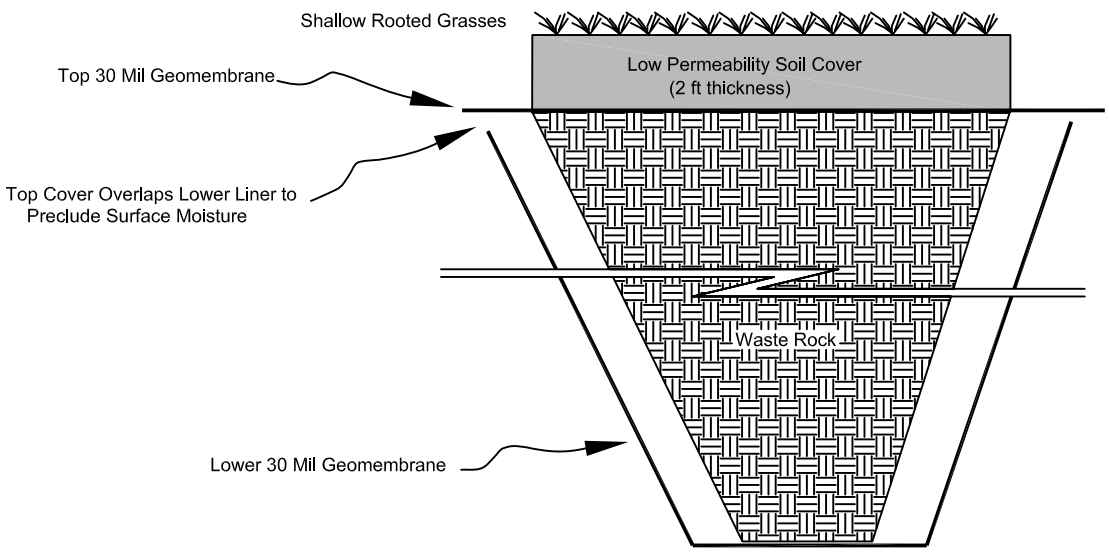
Figure 18
Alternative 5 Consolidated Repository

Simple Soil Cover



Alternative 5a1 - Alternative On-Site Repository with Simple Cap

Simple Soil Cover with Top and Bottom Geomembranes



Alternative 5a2 - Alternative On-Site Repository with Geomembrane and Simple Cap

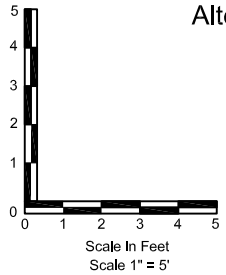


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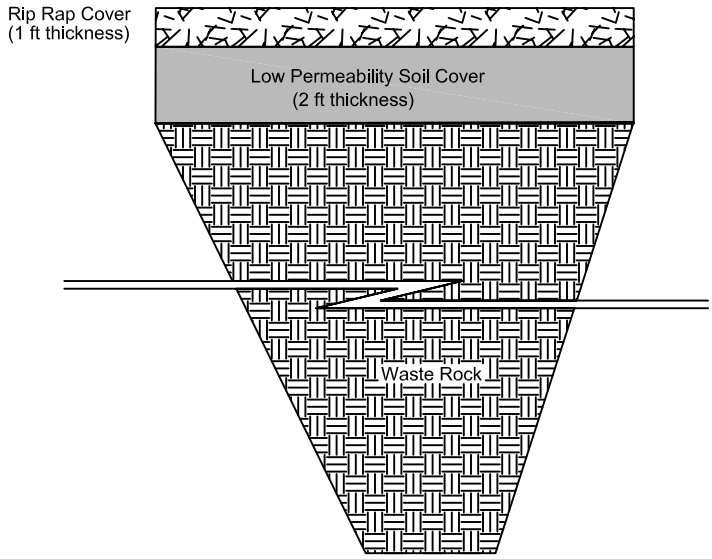
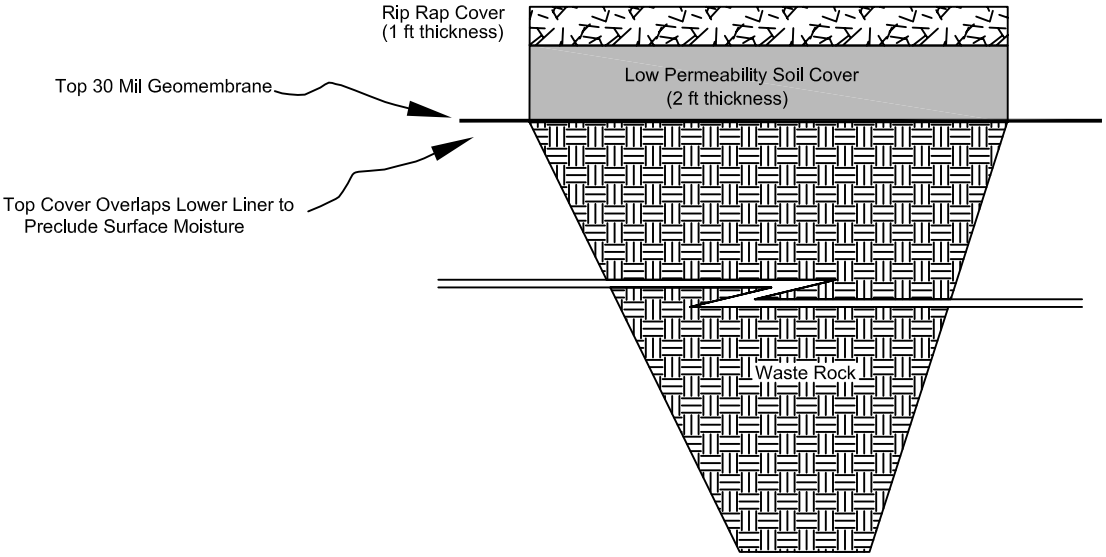
Figure 19a
Typical Repository with Top Cover and Bottom Liner

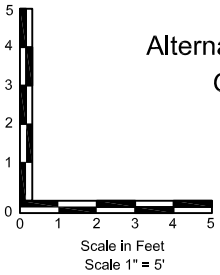
Composite Soil and Rip Rap Cover



Alternative 5b1 - Alternative On-Site Repository with Rock Armoring

Composite Soil and Rip Rap Cover with Top Geomembrane





Alternative 5b2 - Alternative On-Site Repository with Geomembrane and Rock Armored Cover

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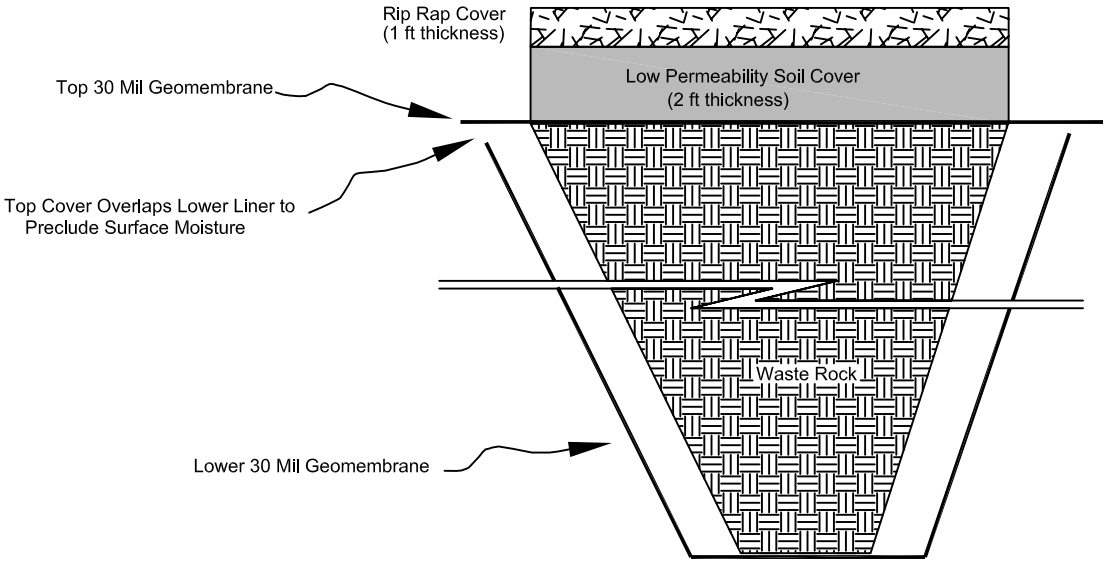
Figure 19b
Typical Repository with Top Cover and Bottom Liner

Composite Soil and Rip Rap Cover with Top and Bottom Geomembranes



Alternative 5c - Alternative On-Site Repository with Bottom and Top Geomembrane Liners and a Rock Armored Cover

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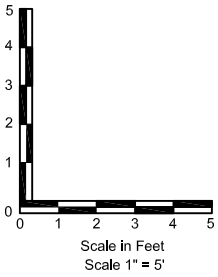

Figure 19c
Typical Repository with Top Cover and Bottom Liner

Tables

Table 1: 1993 Perimeter Sampling Results

	Sample ID	Sample Location	Radium 226[1]	Gross α[1]	Gross β[1]	As [2]	Ba [2]	Pb [2]	Mo [2]	Se [2]	Va [2]	U [3]
Soil / Waste Rock	SS-1	Background Soil Sample	0.55±0.18	17±14	28±14	3.2	71.6	5.3	ND	ND	14.1	1.7
	SS-2	Tailings area soil sample	121.3±2.2	1027±56	455±25	6.6	90.9	13.4	95.3	8.8	70.5	180
	SS-3	Tailings area soil sample	31.0±1.0	362±35	172±16	3.6	86	4.5	12.9	12	44.5	81
	SS-4	Tailings area soil sample	83.6±1.6	1724±75	542±31	19.9	46.8	10.8	885	142	71.2	360
	SS-5	Tailings area soil sample	28.3±0.7	1476±68	649±31	5.2	502	9.4	97.5	11.2	72.4	390
Sediment	SD-1	Arroyo soil sample upgradient of San Mateo Creek	0.61±0.17	311±34	123±20	5	99.9	9.7	ND	ND	16.4	2.2
	SD-2	Arroyo soil sample downgradient of San Mateo Creek	0.98±0.23	9.8±12	2.0±13	2.3	29.8	4.2	ND	ND	7.2	1.6
	SD-3	Arroyo soil sample draining mine tailings area	18.78±0.81	511±130	3390±93	3.1	58.8	5.3	3.3	2.7	30	29
	SD-4	Heap leach pad area soil sample	380.4±3.7	2240±130	678±49	3.5	130	11.5	7.3	28.9	94.9	150
	SD-5	Heap leach pad area soil sample	148.6±2.2	1041±57	328±24	4.1	230	24.2	30.8	22	288	2300
Ground water	GW-1	Lee well, upgradient of site	0.15±0.28	7.6±5.7	-1.2±7.1	ND	0.15	ND	ND	ND	0.015	6.4
	GW-2	Schmidt Ranch well, downgradient of site	0.20±0.28	6±15	7±29	ND	0.025	ND	ND	ND	ND	3.5
	GW-3	Red River well, downgradient of site	0.60±0.36	92±24	29±27	ND	ND	ND	ND	0.39	ND	76
Air	AR-1	Upwind air sample	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	AR-2	Downwind air sample	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	AR-3	Downwind air sample	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
QA/QC	DUP-1	Duplicate soil sample	--	--	--	2.1	55.1	5.4	5.4	2.5	20.7	--
	DUP-2	Duplicate soil sample	--	--	--	2.2	65	ND	ND	ND	12.2	2.5
	FB-1	Field Blank	0.05±0.27	0.2±1.2	0.2±3.3	ND	ND	ND	ND	ND	ND	ND

Source: SAIC 1994

1 Radiochemistry in picoCuries per gram (pCi/g) for soil and picoCuries per liter (pCi/l) for aqueous and air

2 Metals in milligram per kilogram (mg/kg) for soil, and milligram per liter (mg/l) for aqueous and air

3 Uranium in gram per gram (g/g) for soil and milligram per liter (mg/l) for aqueous and air

ND = Not Detected at or above laboratory reporting limits

Table 2: Description of Soil and Waste Rock Samples

Media *(Date Sampled)*	**Sample Location**	**# of Samples**	**Sampling Parameters**
Shallow Soil *Jan. 2008*	North Pad	3	Total Metals, Synthetic Precipitation Leaching Procedure (SPLP)
	Private Land (Lee Ranch)	2	
	Settling Pond	2	
Waste Rock *April 2008*	10 locations on the waste rock pile at various depths	15	
Background *Jan. 2008*	Off-site samples	2	
QA/QC *Jan. 2008*	North Pad	1	
Shallow Soil *Oct. 2008*	Various Locations	15	Uranium, α-Emitting Radium, Gross α, Gross β, Radium 228, thorium 228, 230, 232

Table 3: Site Sampling Detail

	Sample ID	Lab ID	Date sampled	Sample Depth (ft.)	Easting	Northing
Settling Ponds	SS-SPI-1-010908	L67184-02	1/9/2008	0'	2757350	1575537
	SS-SPI-2-010908	L67184-03	1/9/2008	0'	2757298	1575555
Private Land	SS-PL1-010908	L67184-04	1/9/2008	0'	2757569	1576903
	SS-PL2-010908	L67184-06	1/9/2008	0'	2758000	1576252
Waste Rock and North Pad	SS-LP1-011008	L67184-07	1/11/2008	0'	2757415	1576116
	SS-LP2-011008	L67184-09	1/11/2008	0'	2757400	1576079
	SS-LP3-010908	L67184-01	1/9/2008	0'	2757304	1576008
	WR-03-0'	L68898-01	4/24/2008	0'	2756774	1575381
	WR-04-1'	L68898-02	4/24/2008	1'	2756919	1575405
	WR-05-0'	L68898-03	4/24/2008	0'	2756963	1575485
	WR-06-1'	L68898-04	4/24/2008	1'	2756955	1575502
	WR-06-5'	L68898-05	4/24/2008	5'	2756955	1575502
	WR-06-10'	L68898-06	4/24/2008	10'	2756955	1575502
	WR-07-0'	L68898-07	4/24/2008	0'	2756587	1575472
	WR-08-5'	L68898-08	4/24/2008	5'	2756450	1575568
	WR-09-10'	L68898-09	4/24/2008	10'	2757060	1575105
	WR-10-1'	L68898-10	4/24/2008	1'	2756480	1575187
	WR-01-0'	L68898-11	4/24/2008	0'	2756467	1575448
	WR-01-3'	L68898-12	4/23/2008	3'	2756467	1575448
	WR-01-10'	L68898-13	4/23/2008	10'	2756467	1575448
	WR-01-15'	L68898-14	4/23/2008	15'	2756467	1575448
	WR-02-0'	L68898-15	4/23/2008	0'	2756769	1575379
	WR-02-5'	L68898-16	4/23/2008	5'	2756769	1575379
Gamma Survey Surface Soil	GWS-01-0.5'	L72872-01	10/28/2008	0.5'	2756422	1576616
	GWS-03-0.5'	L72872-02	10/28/2008	0.5'	2757088	1576616
	GWS-05-0.5'	L72872-03	10/28/2008	0.5'	2757809	1576520
	GWS-09-0.5'	L72872-04	10/28/2008	0.5'	2756755	1576232
	GWS-10-0.5'	L72872-05	10/28/2008	0.5'	2756422	1576232
	GWS-11-0.5'	L72872-06	10/28/2008	0.5'	2756422	1575848
	GWS-19-0.5'	L72872-07	10/28/2008	0.5'	2757976	1575464
	GWS-21-0.5'	L72872-08	10/28/2008	0.5'	2757920	1575752
	GWS-22-0.5'	L72872-09	10/28/2008	0.5'	2757865	1576040
	GWS-23-0.5'	L72872-10	10/28/2008	0.5'	2758031	1576536
	GWS-29-0.5'	L72872-11	10/28/2008	0.5'	2757754	1575272
	GWS-31-0.5'	L72872-12	10/28/2008	0.5'	2757555	1574807
	GWS-32-0.5'	L72872-13	10/28/2008	0.5'	2757296	1574604
	GWS-33-0.5'	L72872-14	10/28/2008	0.5'	2756312	1574682
	GWS-38-0.5'	L72872-15	10/28/2008	0.5'	2755885	1575726
QA/QC	SS-LP1 DUP-011008	L67184-08	1/10/2008	0'	2757415	1576116
Background	SS-BKG1-011008	L67184-10	1/11/2008	0'	2758280	1573711
	SS-BKG2-010908	L67184-05	1/9/2008	0'	2757413	1574402

Table 4: Site Inorganic Analytical Results for Metals

	Sample ID	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Mercury	Nickel	Selenium	Silver	Thalium	Uranium	Vanadium	Zinc
Settling Ponds	SS-SPI-1	22,000	0.4	11.4	127	1.19	0.80	17.1	4.65	14.3	19,400	25.7	0.1	9.6	17.0	0.16	0.82	907	230	47
	SS-SPI-2	23,100	0.2	7.9	103	1.14	0.59	18.4	5.77	13.8	20,000	19.5	0.1	10.7	5.01	0.08	0.54	233	90	50
Private Land	SS-PL1	10,600	<0.2	3.1	63.8	0.45	0.38	6.38	2.79	4.1	8,320	6.16	<0.05	4.6	0.89	0.05	0.17	3.56	33.4	20
	SS-PL2	8,860	<0.2	2.9	61.1	0.36	0.29	6.00	2.35	3.7	7,840	5.38	<0.04	6.3	0.26	0.04	0.09	1.16	<10	18
Waste Rock and North Pad	SS-LP1	22,100	0.3	5.0	321	1.21	0.64	8.24	4.13	9.9	14,600	19.4	0.09	4.9	21.2	0.13	0.68	124	220	32
	SS-LP2	8,000	<0.2	4.2	159	0.47	0.41	2.91	<3	4.4	5,870	14.9	0.07	2.1	22.4	0.06	0.27	151	149	12
	SS-LP3	8,320	0.2	5.0	933	0.53	0.37	3.80	2.24	4.6	6,710	10.3	0.12	7.9	18.3	0.08	0.53	159	40	17
	WR-03-0'	9,010	0.3	4.9	113	0.64	0.23	2.85	4.0	3.3	6,610	18.8	0.07	1.7	19.2	0.06	23	671	134	16
	WR-04-1'	7,140	<0.2	3.5	34.8	0.56	0.24	3.21	5.0	2.8	5,320	12.6	0.07	1.7	6.7	0.05	21	127	89	13
	WR-05-0'	7,490	<0.2	6.5	198	0.67	0.20	<3	5.0	3.6	6,280	16.1	0.09	1.6	15.4	0.04	17	566	206	14
	WR-06-1'	5,980	<0.2	4.9	87.6	0.41	0.14	2.77	5.0	2.9	5,670	9.29	0.07	1.3	27.6	0.04	17	312	53	12
	WR-06-5'	5,830	<4	7.6	128	0.54	0.20	<1	2.8	3.1	4,930	16.0	0.08	1.4	26.1	<0.5	6	367	173	90
	WR-06-10'	6,380	<4	4.7	103	0.47	0.12	2.65	2.4	4.0	5,660	8.65	0.09	1.3	19.3	<0.5	4	308	77	50
	WR-07-0'	7,350	<4	6.4	12.6	0.89	0.49	4.28	2.43	2.4	9,880	31.6	0.59	1.8	15.1	<0.5	3	1380	283	20
	WR-08-5'	4,550	<2	3.6	159	0.35	0.15	1.50	1.7	3.5	4,050	8.03	0.14	1.1	34.2	<0.3	0.9	234	145	30
	WR-09-10'	6,280	<4	4.4	105	0.43	0.16	2.85	2.5	3.0	7,200	9.61	0.13	1.4	59.3	<0.5	4	250	190	20
	WR-10-1'	16,400	<10	6.6	191	1.28	0.20	5.81	3.57	5.8	13,400	17.8	0.08	5.6	3.79	<1	13	150	80	50
	WR-01-0'	5,390	<4	2.9	385	0.39	0.12	<1	2.5	2.9	4,700	7.19	0.07	1.3	13.1	<0.5	4	122	123	<20
	WR-01-3'	5,610	<4	2.9	174	0.33	0.12	3.34	2.2	2.0	5,380	5.22	0.07	1.4	16.4	<0.5	2	38	50.1	<20
	WR-01-10'	5,950	<4	2.5	289	0.40	0.10	4.95	2.1	3.1	5,240	6.57	0.07	2.3	9.3	<0.5	2	90.5	76.8	60
	WR-01-15'	22,800	<10	5.2	133	1.09	0.22	5.67	2.19	5.2	7,100	13.2	0.08	3.0	7.94	<1	10	282	43.4	<50
	WR-02-0'	6,680	<4	2.5	145	0.44	0.15	<1	2.2	2.6	4,830	7.01	0.07	1.3	13.6	<0.5	3	58.7	74.4	<20
	WR-02-5'	7,380	<4	4.2	153	0.52	0.17	4.23	2.2	3.3	5,420	6.93	0.06	2.2	22.8	<0.5	2	64.4	62.1	40
Gamma Survey Surface Soil	GWS-01-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.62	-	-
	GWS-03-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56.9	-	-
	GWS-05-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.44	-	-
	GWS-09-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.57	-	-
	GWS-10-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.2	-	-
	GWS-11-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.92	-	-
	GWS-19-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	-	-
	GWS-21-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32	-	-
	GWS-22-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.02	-	-
	GWS-23-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.47	-	-
	GWS-29-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.53	-	-
	GWS-31-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.61	-	-
	GWS-32-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.72	-	-
	GWS-33-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27	-	-
	GWS-38-0.5'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35.5	-	-
QA/QC	SS-LP1 DUP	24400	0.3	5.1	211	1.26	0.65	8.12	4.48	9.9	15400	20.0	0.14	5.0	18.5	0.14	0.74	147	230	34
Background	SS-BKG1	7,000	<0.2	2.6	56.7	0.33	0.25	5.03	2.02	3.5	6,430	4.53	<0.05	3.5	0.21	0.03	0.06	0.41	<10	16
	SS-BKG2	19,200	0.2	6.8	140	0.81	0.52	12.6	5.13	7	18,200	11.5	0.08	7.6	0.42	0.07	0.17	1.65	39.5	31
BLM Risk Management Criteria	Camper		50	20			70			5,000		1,000	40	2,700	700	700				40,000
	ATV Driver		750	300			950			70,000		1,000	550	38,000	9,600	9,600				550,000
	Cattle			419			15			413		244	45							1,082
	Mule Deer			200			3			102		106	9							222
	White-tail Deer			319			3			128		124	11							267
	Robin			4			0.3			7		6	1							43

Notes
All units in milligrams per kilogram (mg/kg)

Table 5: Site Inorganic Analytical Results for SPLP Metals

	Sample ID	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Mercury	Nickel	Selenium	Silver	Thalium	Vanadium	Zinc
Settling Ponds	SS-SPI-1	0.011	0.0008	0.0045	0.0366	<0.0001	0.0002	0.0005	0.00008	0.0034	<0.02	0.0002	<0.0002	<0.0006	0.0386	<0.00005	<0.0001	0.0044	0.004
	SS-SPI-2	0.046	<0.0004	0.004	0.0105	<0.0001	<0.0001	0.0005	<0.00005	0.0032	0.07	0.0003	<0.0002	0.0007	0.0042	<0.00005	<0.0001	0.0064	0.010
Private Land	SS-PL1	0.184	<0.0004	0.0009	0.0154	<0.0001	<0.0001	0.0012	0.00016	0.0181	0.16	0.0012	<0.0002	0.0008	0.0004	<0.00005	0.0003	0.0065	0.016
	SS-PL2	0.405	<0.0004	0.0008	0.0118	<0.0001	<0.0001	0.0012	0.00011	0.0203	0.27	0.0022	<0.0002	0.002	<0.0001	<0.00005	<0.0001	0.0043	0.038
Waste Rock and North Pad	SS-LP1	0.18	<0.0004	0.0052	0.0235	<0.0001	<0.0001	0.0005	0.00006	0.0052	0.09	0.0009	<0.0002	<0.0006	0.0032	<0.00005	<0.0001	0.0413	0.011
	SS-LP2	0.168	<0.0004	0.0058	0.018	<0.0001	<0.0001	0.0004	<0.00005	0.0016	0.12	0.0004	<0.0002	<0.0006	0.0026	<0.00005	<0.0001	0.0512	0.005
	SS-LP3	0.137	<0.0004	0.0053	0.0472	<0.0001	<0.0001	0.0012	0.00007	0.0023	0.15	0.0005	<0.0002	0.0008	0.0038	<0.00005	<0.0001	0.0342	0.006
	WR-03-0'	0.509	0.0006	0.0065	0.0162	<0.0001	<0.0001	0.0007	0.00024	0.0107	1.35	0.0023	<0.0002	0.0011	0.0112	<0.00005	<0.0001	0.0752	0.038
	WR-04-1'	0.615	0.0006	0.0206	0.0136	<0.0001	0.0002	0.0006	0.00022	0.0032	1.12	0.0012	<0.0002	0.0006	0.0506	<0.00005	0.0002	0.0424	0.014
	WR-05-0'	0.123	0.0016	0.0169	0.0142	<0.0001	0.0002	0.0004	0.00010	0.0039	0.21	0.001	<0.0002	<0.0006	0.0867	<0.00005	0.0008	0.0261	0.035
	WR-06-1'	0.017	0.0009	0.0060	0.0200	<0.0001	<0.0001	<0.0005	0.00012	0.0070	<0.02	0.0008	<0.0002	<0.0006	0.894	<0.00005	0.0007	0.0051	0.028
	WR-06-5'	0.031	0.0014	0.0177	0.0254	<0.0001	0.0005	0.0003	0.00007	0.0049	<0.02	0.0004	<0.0002	<0.0006	0.408	<0.00005	0.0015	0.0057	0.041
	WR-06-10'	0.026	0.0009	0.0113	0.0178	<0.0001	0.0002	0.0002	0.00008	0.0051	<0.02	0.001	<0.0002	<0.0006	0.124	<0.00005	0.0003	0.0129	0.036
	WR-07-0'	0.0183	0.0011	0.0041	0.0018	<0.0001	<0.0001	0.0004	0.00009	0.0164	0.29	0.0027	<0.0002	<0.0006	0.069	<0.00005	0.0001	0.0125	0.048
	WR-08-5'	0.048	0.0006	0.0081	0.0091	<0.0001	0.0001	<0.0005	0.00006	0.006	0.04	0.0012	<0.0002	0.0015	1.28	<0.00005	0.0002	0.0114	0.049
	WR-09-10'	0.200	0.0005	0.0057	0.0196	<0.0001	0.0002	<0.0005	0.00015	0.005	0.38	0.002	<0.0002	<0.0006	2.13	<0.00005	0.0003	0.0167	0.078
	WR-10-1'	0.008	<0.0004	<0.0005	0.0504	<0.0001	<0.0001	<0.0001	0.00011	0.0021	<0.02	0.0001	<0.0002	<0.0006	0.0179	<0.00005	0.0001	<0.0002	0.011
	WR-01-0'	0.119	<0.0004	0.0096	0.0293	<0.0001	<0.0001	0.0002	0.00008	0.0043	0.15	0.0006	<0.0002	<0.0006	0.0051	<0.00005	<0.0001	0.0636	0.012
	WR-01-3'	0.113	<0.0004	0.0077	0.0291	<0.0001	<0.0001	0.0005	0.00007	0.0075	0.21	0.0008	<0.0002	<0.0006	0.0432	<0.00005	0.0002	0.0188	0.034
	WR-01-10'	0.125	<0.0004	0.0084	0.0329	<0.0001	<0.0001	0.0003	0.00006	0.0063	0.12	0.0005	<0.0002	<0.0006	0.0453	<0.00005	0.0002	0.0168	0.020
	WR-01-15'	0.057	<0.0004	0.0134	0.0045	<0.0001	<0.0001	0.0003	<0.00005	0.0056	0.07	0.0004	<0.0002	<0.0006	0.0834	<0.00005	<0.0001	0.0063	0.023
	WR-02-0'	0.130	<0.0004	0.0038	0.0276	<0.0001	<0.0001	0.0003	0.00009	0.0108	0.19	0.0008	<0.0002	0.0070	0.003	<0.00005	<0.0001	0.0314	0.034
	WR-02-5'	0.080	0.0004	0.0114	0.0166	<0.0001	<0.0001	0.0002	0.00008	0.0034	0.16	0.0004	<0.0002	<0.0006	0.113	<0.00005	<0.0001	0.0134	0.011
QA/QC	SS-LP1 DUP	0.160	0.0004	0.0056	0.0225	<0.0001	<0.0001	0.0003	<0.00005	0.0017	0.09	0.0004	<0.0002	<0.0006	0.0037	<0.00005	<0.0001	0.0453	0.004
Background	SS-BKG2	0.04	<0.0004	0.0016	0.0181	<0.0001	<0.0001	0.0004	0.00011	0.0020	0.06	0.0002	<0.0002	<0.0006	0.0004	<0.00005	0.0001	0.0077	0.005
	SS-BKG1	0.229	<0.0004	0.0016	0.0113	<0.0001	<0.0001	0.0004	0.00009	0.0022	0.14	0.0002	<0.0002	<0.0006	0.0001	<0.00005	<0.0001	0.0096	0.004

Notes
All units in milligrams per liter (mg/L)
SPLP = Synthetic Precipitation Leaching Procedure

Table 6: Site Radiochemistry Analytical Results

	Sample ID	α-Emitting Radium	Gross α	Gross β	Radium 228	Thorium		
						228	230	232
Settling Ponds	SS-SPI-1	360 ± 6	1500 ± 26	1100 ± 14	2 ± 1	1.5 ±0.38	220 ± 5	1.75 ± 0.56
	SS-SPI-2	210 ± 4.6	590 ± 14	290 ± 5.9	2.2 ± 1.1	1.5 ± 0.39	90 ± 3.2	1.43 ± 0.51
Private Land	SS-PL1	23 ± 1.9	90 ± 4.7	42 ±2	1.1 ± 1	0.17 ± 0.23	9.6 ± 1.1	0.49 ± 0.39
	SS-PL2	1.3 ± 0.48	8.4 ± 1.5	6.4 ± 0.96	0.45 ± 0.91	0.26 ± 0.22	0.84 ± 0.74	0.44 ± 0.62
Waste Rock and North Pad	SS-LP1	220 ± 5	640 ± 13	360 ± 5.8	2.7 ± 1.1	1.3 ± 0.36	170 ± 4.5	1.01 ± 0.48
	SS-LP2	58 ± 1.9	640 ± 13	260 ± 4.8	0.7 ± 1.1	0.57 ± 0.27	140 ± 4.3	0.69 ± 0.47
	SS-LP3	100 ± 3.4	540 ± 12	260± 4.8	2 ± .99	0.48 ± 0.27	84 ± 3.2	0.5 ± 0.41
	WR-03-0'	130 ± 4.4	2700 ± 26	1400 ± 11	0.0 ± 1.1	0.23 ± 0.23	250 ± 5.6	0.73 ± 0.47
	WR-04-1'	130 ± 5.1	370 ± 9.2	220 ± 4.3	1.6 ± 1.2	0.44 ± 0.26	110 ± 3.8	0.44 ± 0.42
	WR-05-0	210 ± 5.6	730 ± 13	430 ± 5.9	0.93 ± 1.2	0.48 ± 0.27	200 ± 4.8	0.78 ± 0.45
	WR-06-1	120 ± 4.3	880 ± 15	430 ± 5.8	0.97 ± 1.3	0.21 ± 0.23	110 ± 3.6	0.77 ±0.45
	WR-06-5	220 ± 5.8	970 ± 15	400 ± 5.4	1.4 ± 1.3	0.35 ± 0.25	160 ± 4.4	0.51 ± 0.41
	WR-06-10	110 ± 4.1	500 ± 11	290 ± 4.8	5.3 ± 1.2	0.61 ± 0.28	100 ± 3.5	0.74 ± 0.46
	WR-07-0	560 ± 8.7	3600 ± 29	1700 ± 12	8.5 ± 1.4	1.9 ± 0.39	850 ± 11	2.01 ± 0.64
	WR-08-5	68 ± 2	360 ± 9	240 ± 4.5	3.3 ± 1.1	0.31 ± 0.24	63 ± 2.9	0.4 ± 0.42
	WR-09-10	130 ± 3	400 ± 9.9	230 ± 4.4	4.1 ± 1.1	0.71 ± 0.29	99 ± 3.5	0.57 ± 0.43
	WR-10-1	63 ± 2	230 ± 8.6	180 ± 4.8	4.1 ± 1.3	1.7 ± 0.4	79 ± 3	1.32 ± 0.51
	WR-01-0'	26 ± 1.1	250 ± 7.7	120 ± 3.1	2.1 ± 1.1	0.08 ± 0.21	43 ± 2.3	0.31 ± 0.4
	WR-01-3'	19 ± 1.1	81 ± 4.3	57 ± 2.2	3.5 ± 1.1	0.48 ± 0.26	22 ± 1.7	0.68 ± 0.46
	WR-01-10'	53 ± 1.9	470 ± 20	200 ± 7.4	3.1 ± 1.2	0.48 ± 0.27	45 ± 2.3	0.56 ± 0.42
	WR-01-15'	36 ± 1.6	370 ± 13	230 ± 6.2	1.4 ± 1.1	0.94 ± 0.33	34 ± 2	1.32 ± 0.5
	WR-02-0'	25 ± 1.2	140 ± 5.9	59 ± 2.2	1.3 ± 1.1	0.2 ± 0.23	30 ± 2	0.76 ± 0.47
	WR-02-5'	15 ± 0.88	110 ± 5.1	59 ± 2.2	1.9 ± 1.1	0.32 ± 0.25	22 ± 1.6	0.27 ± 0.36
Gamma Survey Surface Soil	GWS-01-0.5'	0.49 ± 0.35	3.9 ± 0.99	3.6 ± 0.94	3.4 ± 1.4	0.3 ± 0.3	0.5 ± 0.42	0.25 ± 0.35
	GWS-03-0.5'	38 ± 2.2	60 ± 4.2	50 ± 2.4	3.0 ± 1.4	0.94 ± 0.43	20 ± 1.6	0.84 ± 0.46
	GWS-05-0.5'	0.58 ± 0.36	4.3 ± 1.2	4 ± 0.91	3.7 ± 1.4	0.34 ± 0.32	0.21 ± 0.4	0.39 ± 0.39
	GWS-09-0.5'	0.4 ± 0.35	4.5 ± 1.1	2.8 ± 0.86	3.4 ± 1.3	0.14 ± 0.3	0.33 ± 0.44	0.14 ± 0.37
	GWS-10-0.5'	1.1 ± 0.43	9.5 ± 1.6	6.6 ± 1.1	2.2 ± 1.3	0.08 ± 0.3	0.54 ± 0.48	0.37 ± 0.42
	GWS-11-0.5'	6.1 ± 0.84	23 ± 2.7	15 ± 1.4	9.5 ± 1.8	0.51 ± 0.34	3.5 ± 0.71	0.66 ± 0.41
	GWS-19-0.5'	0.67 ± 0.43	5.1 ± 1.3	4.1 ± 0.9	29 ± 2.7	0.31 ± 0.29	0.33 ± 0.38	0.45 ± 0.37
	GWS-21-0.5'	0.79 ± 0.4	3.6 ± 1.1	3.3 ± 0.85	3.2 ± 1.3	0.34 ± 0.32	0.78 ± 0.47	0.44 ± 0.4
	GWS-22-0.5'	7.9 ± 1	14 ± 1.9	6 ± 1.1	6.7 ± 1.5	0.42 ± 0.43	6.3 ± 1.1	0.35 ± 0.5
	GWS-23-0.5'	1.8 ± 0.56	5.3 ± 1.2	3.8 ± 0.95	6.3 ± 1.6	0.3 ± 0.33	0.82 ± 0.5	0.24 ± 0.38
	GWS-29-0.5'	1.5 ± 0.48	9.5 ± 1.8	7 ± 1.1	5.2 ± 1.5	0.54 ± 0.37	1 ± 0.52	0.54 ± 0.43
	GWS-31-0.5'	1.7 ± 0.54	5.1 ± 1.3	7.2 ± 1.2	6.2 ± 1.4	0.49 ± 0.37	1.1 ± 0.55	0.77 ± 0.48
	GWS-32-0.5'	4.6 ± 0.66	17 ± 2.3	10 ± 1.3	5.1 ± 1.4	1.1 ± 0.46	1.9 ± 0.62	0.69 ± 0.45
	GWS-33-0.5'	0.28 ± 0.3	7 ± 1.4	6.2 ± 1	7.1 ± 1.4	0.27 ± 0.35	0.18 ± 0.45	0.21 ± 0.41
	GWS-38-0.5'	32 ± 1.7	120 ± 5.3	53 ± 2.3	1.8 ± 1.2	0.27 ± 0.3	33 ± 1.9	0.27 ± 0.36
QA/QC	SS-LP1 DUP	230 ± 4.9	650 ± 13	300 ± 5.2	1.8 ± 1.0	0.75 ± 0.3	200 ± 5.1	1.35 ± 0.55
Background	SS-BKG1	1.2 ± 0.46	6.2 ± 1.3	4.8 ± 0.91	0.22 ± 1	0.39 ± 0.25	0.47 ± 0.46	0.47 ± 0.42
	SS-BKG2	2 ± 0.55	13 ± 2.3	11 ± 1.5	1.3 ± 1	0.82 ± 0.31	0.59 ± 0.46	0.98 ± 0.48

Notes
All units in picoCuries per gram (pCi/g)