

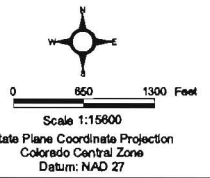
Southeast
Buffer Zone
Exposure Unit

Figure 1.6
Southeast Buffer Zone Area
Exposure Unit Surface Soil
and Surface Sediment
Sample Locations

KEY

- Sample location**
- Surface sediment sample location
 - ▲ Surface soil sample location
 - ▭ Southeast Buffer Zone Area EU
 - Historical IHSS/PAC

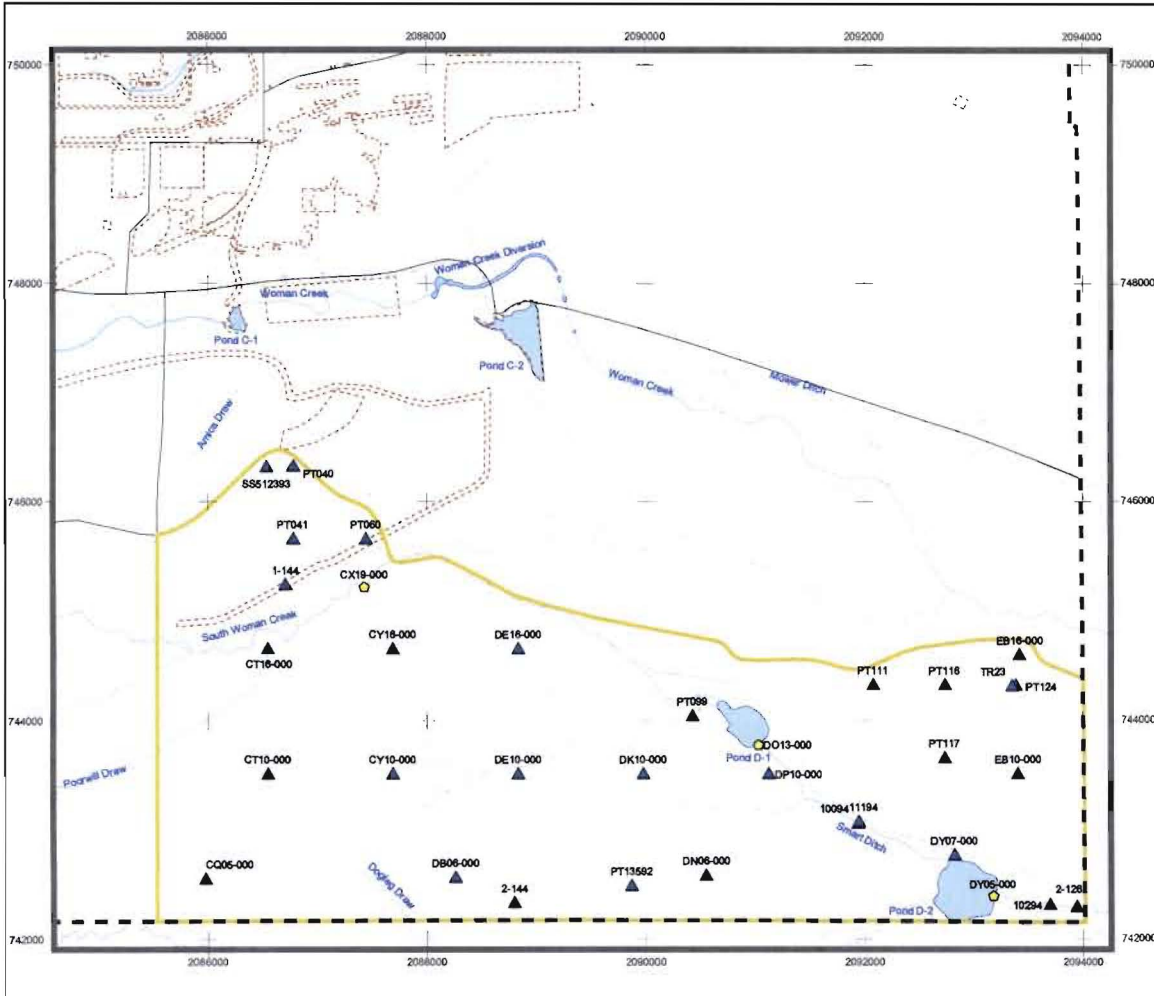
- Standard Map Features**
- ▭ Exposure unit boundary
 - ▭ Pond
 - Site boundary
 - Perennial stream
 - - - Intermittent stream
 - · - · - Ephemeral stream



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**Table 1.2
Number of Samples in Each Medium by Analyte Suite**

Analyte Suite	Surface Soil/Surface Sediment^a	Subsurface Soil/Subsurface Sediment^a	Surface Soil^b	Subsurface Soil^b
Inorganic	22	7	19	6
Organic	1	7	1	7
Radionuclide	55	9	52	8

^a Used in the HHRA.

^b Used in the ERA.

Note: The total number of results (samples) in Tables 1.3 through 1.6 may differ from the total number of samples presented in Table 1.2 because not all analyses are necessarily performed for each sample.

Table 1.3
Summary of Detected Analytes in Surface Soil/Surface Sediment

Analyte	Range of Reported Detection Limits ^a	Total Number of Results	Detection Frequency (%)	Minimum Detected Concentration	Maximum Detected Concentration	Arithmetic Mean Concentration ^b	Standard Deviation ^b
Inorganics (mg/kg)							
Aluminum		22	100	5,860	26,000	15,613	5,417
Antimony ^c	0.31 - 13.5	21	33.3	0.350	0.590	1.27	2.23
Arsenic		22	100	2.50	23	7.40	4.15
Barium		22	100	57	240	142	46.2
Beryllium	0.81 - 1	22	86.4	0.520	1.50	0.874	0.314
Boron		17	100	3.70	19	6.93	3.52
Cadmium	0.073 - 1	22	72.7	0.120	1	0.368	0.206
Calcium		22	100	1,760	55,000	9,195	11,667
Cesium ^c	6.8 - 7.8	3	33.3	14.5	14.5	7.27	6.27
Chromium		22	100	7.30	27	17.1	5.66
Cobalt		22	100	2.80	10.4	7.69	1.88
Copper		22	100	7.80	27	15.7	4.71
Iron		22	100	7,970	52,000	22,058	11,195
Lead		22	100	4.80	37	23.1	7.01
Lithium	6.7 - 6.7	19	94.7	5.20	23	13.6	5.62
Magnesium		22	100	1,360	7,100	3,236	1,316
Manganese		22	100	55	1,300	386	237
Mercury	0.0076 - 0.1	19	36.8	0.0140	0.0290	0.0155	0.0117
Molybdenum	0.86 - 4.7	21	81.0	0.260	1.90	1.08	0.591
Nickel		22	100	9.30	35	16.2	5.84
Potassium		22	100	1,200	5,200	3,066	873
Selenium	0.21 - 1.2	22	13.6	0.270	1.70	0.448	0.307
Silica		17	100	580	2,900	1,007	555
Silver	0.099 - 1.5	21	33.3	0.120	0.390	0.250	0.219
Sodium	56.5 - 130	22	22.7	54.8	510	79.0	98.2
Strontium		21	100	12.1	290	56.3	56.9
Thallium	0.21 - 1.1	22	9.09	2.30	2.60	0.575	0.632
Titanium		17	100	64	260	144	53.1
Uranium	1.3 - 1.7	17	23.5	1.60	2.80	1.09	0.640
Vanadium		22	100	22	140	50.0	25.7
Zinc		22	100	18	81	54.3	15.7
Radionuclides (pCi/g)^d							
Americium-241		46	N/A	-0.00600	0.381	0.0466	0.0624
Cesium-137		1	N/A	0.661	0.661	0.661	N/A
Gross Beta		6	N/A	18	41	26.8	7.79
Plutonium-239/240		54	N/A	0.00205	4.60	0.251	0.628
Radium-226		1	N/A	2.02	2.02	2.02	N/A
Radium-228		1	N/A	1.59	1.59	1.59	N/A
Uranium-233/234		37	N/A	0.119	1.52	0.762	0.445
Uranium-235		37	N/A	-0.0564	0.344	0.0511	0.0725
Uranium-238		37	N/A	0.162	1.81	0.820	0.433
Cesium-134		1	N/A	-0.265	-0.265	-0.265	N/A
Gross Alpha		6	N/A	8.47	43	17.0	13.3
Strontium-89/90		3	N/A	0.110	0.171	0.140	0.0304

^a Values in this column are reported results for nondetects (i.e., U-qualified results).

^b For inorganics and organics, statistics are computed using one-half the reported value for nondetects.

^c All detections are "J" qualified, signifying that the reported result is below the detection limit, but above the instrument detection limit.

^d All radionuclide values are considered detects.

N/A = Not applicable.

Note: Organics were not detected.