

APPENDIX D

CHEMICAL DATA QUALITY REVIEW AND LABORATORY REPORTS (DVD)

ANALYTICAL RESULTS SUMMARY TABLES (HARD COPY AND DVD)

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DATA QUALITY REVIEW (DVD)

LABORATORY REPORTS (DVD)

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Table D1 - Subarea SA-01 Soil Analytical Results

Sample ID	SA1-1C	SA1-2C	SA1-3C	SA1-3C2	SA1-4C	SA1-5C	SA1-6C	SA1-7C
Sampling Date	10/30/2012	10/30/2012	10/30/2012	10/30/2012	10/30/2012	10/30/2012	10/30/2012	10/30/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	9.54	5.51	5.85	3.93	2.97	8.47	4.75	4.96
Total Solids in %	87.6	94.5	95.7	96.6	94.5	93.2	93	94.9
pH	5.83	5.91	5.9	5.69	5.84	5.87	5.56	5.9
Metals in mg/kg								
Aluminum	21700	23600	23000	26600	26800	17900	20600	20800
Antimony	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	10.7	13.8	9.8	12.2	9.4	16.9	21.2	12.6
Barium	665	1120	425	426	487	267	261	226
Beryllium	0.8	1.2	1	1	0.8	0.8	0.7	0.7
Cadmium	3.3	2.1	1	0.9	1	1.7	1.6	1.5
Calcium	10800	7500	5140	4980	3690	5000	3110	5720
Chromium	47.1	29.8	27.3	26.7	21.8	23.5	22.9	19.5
Cobalt	10.9	12.3	9.2	10	8.1	8.3	9	7.1
Copper	25	18.2	20.5	21.6	15	19.6	16.7	16
Iron	22700	40800	23700	24900	22100	21900	22500	20700
Lead	158	84.9	62.9	51.2	37.6	72.5	89.4	66.3
Magnesium	8750	6550	5780	6080	4340	5230	5030	4360
Manganese	2320	2340	1030	957	914	1150	1670	1120
Mercury	0.073	0.042	0.048	0.05	0.044	0.046	0.04	0.049
Nickel	33.6	20.9	25.4	26.5	23.4	19.9	24.7	19.8
Potassium	1570	1820	1370	1490	1500	1170	1090	1220
Selenium	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sodium	150	130 U	160	170	200	100	160	200
Thallium	0.3	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vanadium	35.7	42.5	34.6	33.8	32.3	32.7	28.3	27.8
Zinc	171	227	131	133	147	127	134	150

Table D1 - Subarea SA-01 Soil Analytical Results

Sample ID	SA1-8C	SA1-3P-1	SA1-3P-2	SA1-3P-3	SA1-3P-4
Sampling Date	10/30/2012	10/30/2012	10/30/2012	10/30/2012	10/30/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
Total Org. Carbon in %	7.92	3.93	2.52	2.41	1.5
Total Solids in %	94.9	92.6	96.2	95.4	95.9
pH	5.68	6.06	6.06	6.1	6.24
Metals in mg/kg					
Aluminum	16500	29900	33500	34400	35400
Antimony	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	10.4	11.1	8.6	9.5	7.9
Barium	399	404	376	326	288
Beryllium	0.7	1.1	1.1	1.1	1.2
Cadmium	2	1.2	0.3	0.4	0.3
Calcium	5280	5870	3820	3530	3880
Chromium	14.7	24.1	32.8	27.6	28.5
Cobalt	6	9.3	9.5	9.9	9.3
Copper	14.3	24.5	27.2	32.3	35.3
Iron	17200	24600	27200	26800	27400
Lead	81.7	75.6	25.1	20.8	18.4
Magnesium	3670	6430	6680	6550	7050
Manganese	1330	857	428	512	449
Mercury	0.059	0.062	0.039	0.049	0.058
Nickel	13.1	29.9	28	32.4	26.3
Potassium	1170	1410	1400	1420	1440
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.2	0.3	0.4	0.7
Sodium	100	210	230	240	280
Thallium	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vanadium	23	35.8	39.2	40	37.5
Zinc	150	137	104	103	98

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.

Sample identified as SA1-Field Duplicate in field notes and laboratory reports.

U = Not detected at the reporting limit indicated.

J = Estimated value.

Table D2 - Subarea SA-02 Soil Analytical Results

Sample ID	SA2-1C	SA2-2C	SA2-3C	SA2-4C	SA2-4C2	SA2-5C	SA2-6C	SA2-7C
Sampling Date	10/31/2012	10/31/2012	10/31/2012	10/31/2012	10/31/2012	10/31/2012	10/31/2012	10/31/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	6.6	2.37	2.56	3.13 J	3.28	3.87	3.63	6.59
Total Solids in %	95.7	97.1	97.3	95.7	97.9	98.4	98	97.4
pH	5.65	5.73	6.11	5.22	5.27	5.65	5.85	5.8
Metals in mg/kg								
Aluminum	21600	18800	15900	16600	14700	11200	14800	21100
Antimony	0.3 J	0.2 UJ	0.2 UJ	0.2 UJ	0.4 J	0.2 UJ	0.2 J	0.2 UJ
Arsenic	16.2	12.2	8.2	13.9	16.8	7.4	22.7	17.7
Barium	744	344	321	264	308	90.4	203	209
Beryllium	0.7	0.6	0.5	0.5	0.5	0.4	0.5	0.9
Cadmium	5.2	2	1.9	2.4	4.9	1.4	13.1	3.2
Calcium	5730	4150	5010	3370	3390	7760	5940	5230
Chromium	16.4	31.7	15.3	17.3	15.9	20.6	48.6	28.7
Cobalt	6.4	8.5	5.3	6.9	6.4	6.8	9.4	17.6
Copper	20.4	17.5	12	11.9	15.8	19.5	30.4	34.3
Iron	20800	20900	18300	19900	18700	21100	23100	28700
Lead	248	86.5	107	122	229	69.5	405	105
Magnesium	4470	5000	3220	4270	4100	5620	6570	5720
Manganese	2510	1090	818	1240	1270	399	702	1120
Mercury	0.062	0.04	0.03	0.033	0.06	0.043	0.066	0.041
Nickel	14.2	20.7	14.3	13.5	12.9	15.3	26.3	41.2
Potassium	2050	1630	1570	1900	1620	1320	3380	2730
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2 U
Sodium	190	220	180	180	180	260	170	120 U
Thallium	0.3	0.2 U	0.2 U	0.2	0.3	0.2 U	0.5	0.2
Vanadium	22.6	33.8	17.5	30.1	25.3	34.6	27.7	28.6
Zinc	490	254	130	180	252	105	520	188

Table D2 - Subarea SA-02 Soil Analytical Results

Sample ID	SA2-8C	SA2-2P-1	SA2-2P-2	SA2-2P-3	SA2-2P-4
Sampling Date	10/31/2012	10/31/2012	10/31/2012	10/31/2012	10/31/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
Total Org. Carbon in %	2.14	1.4	2.1	1.99	1.45
Total Solids in %	97.5	98.8	98.3	98.1	97.4
pH	6.26	5.6	5.34	5.48	5.94
Metals in mg/kg					
Aluminum	23600	13200	18900	20700	26300
Antimony	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	16.2	9.7	9.6	9.7	10
Barium	392	216	361	264	315
Beryllium	0.8	0.4	0.5	0.7	1
Cadmium	2.1	1.59	0.8	0.8	0.8
Calcium	4590	3250	3650	3740	4520
Chromium	30.3	23.1	26.4	28.8	37.1
Cobalt	8.5	5.9	8.5	8.6	9.4
Copper	17.6	11.2	15.4	22.5	34.3
Iron	23700	18700	22600	23500	26800
Lead	59.5	44.1	28.4	31.3	26
Magnesium	5490	4920	5410	5990	5980
Manganese	1160	704	721	526	1450
Mercury	0.033	0.019	0.025	0.022	0.029
Nickel	31.7	13.7	18.4	23.7	30.5
Potassium	2090	1370	1730	1620	1990
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2	0.2 U	0.2 U	0.2 U	0.5
Sodium	220	220	200	220	250
Thallium	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Vanadium	25.7	26.5	30.9	36.7	34.2
Zinc	210	129	139	121	166

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.

Sample identified as SA2-Field Duplicate in field notes and laboratory reports.

U = Not detected at the reporting limit indicated.

J = Estimated value.

Table D3 - Subarea SA-03 Soil Analytical Results

Sample ID	SA3-1C	SA3-2C	SA3-3C	SA3-4C	SA3-5C	SA3-6C	SA3-6C2	SA3-7C
Sampling Date	11/1/2012	11/1/2012	11/1/2012	11/1/2012	11/1/2012	11/1/2012	11/1/2012	11/1/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	1.76	1.98	2.42	2.42	2.17	6.97	15.7	9.03
Total Solids in %	97.3	97.5	97.5	97.8	98.4	94.5	94.9	95.7
pH	5.97	5.58	6.26	5.87	6.58	5.63	6.41	5.76
Metals in mg/kg								
Aluminum	21900	17200	20300	14800	11000	19700	22100	14700
Antimony	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.6 J
Arsenic	6.5	5.9	15.2	12.8	8.7	17.7	17.3	14.2
Barium	316	442	422	275	269	934	827	301
Beryllium	0.6	0.5	0.9	0.5	0.4	0.8	0.9	0.5
Cadmium	0.6	1.4	4	1.6	2.3	11.1	6.8	7.7
Calcium	4090	2800	6260	2930	2990	14900	15200	7960
Chromium	20.6	11.8	62	12.3	20.6	94	110	20.3
Cobalt	6.4	4.6	11	4.9	5.6	22	23	6.7
Copper	17.5	9.8	21.7	10.3	14.7	47	43.6	28.7
Iron	20400	14200	23300	14700	15100	36300	39100	18000
Lead	31	64.1	174	73.8	105	509	348	430
Magnesium	4260	2350	8830	2670	3420	11800	13800	4570
Manganese	862	1290	1420	983	622	2420	1850	1090
Mercury	0.022	0.031	0.036	0.027	0.025	0.148	0.126	0.106 J
Nickel	19.4	13	55.8	11.4	14	73.9	95.3	21.7
Potassium	1640	990	2800	1090	1120	4310	4730	1810
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3	0.3	0.2
Sodium	210	220	150	170	110	130 U	130 U	170
Thallium	0.2 U	0.2 U	0.2	0.2 U	0.2 U	0.6	0.5	0.3
Vanadium	23.7	17.5	35	18.7	19.5	36	39	18.3
Zinc	83	143	272	128	144	660	470	390

Table D3 - Subarea SA-03 Soil Analytical Results

Sample ID	SA3-8C	SA3-4P-1	SA3-4P-2	SA3-4P-3	SA3-4P-4
Sampling Date	11/1/2012	11/1/2012	11/1/2012	11/1/2012	11/1/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
Total Org. Carbon in %	4.02	2.36	1.69	0.989	0.51
Total Solids in %	97.7	98.2	98.3	98.5	99.2
pH	5.94	5.69	5.8	5.91	5.89
Metals in mg/kg					
Aluminum	14600	16000	16400	16400	12900
Antimony	0.2	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	7.9 UJ	6.8	4.7	3.2	3.3
Barium	313	201	236	138	98
Beryllium	0.4	0.5	0.5	0.5	0.4
Cadmium	3.6	0.65	0.5	0.3	0.2
Calcium	4970	2480	2290	2200	1800
Chromium	14.6	15	13.5	14.3	14.3
Cobalt	5	5	4.7	5	4.7
Copper	13.8	10	9.8	11.8	10.4
Iron	16600	15300	15700	16900	14300
Lead	199	49.3	22	9	8.2
Magnesium	3820	2800	2610	2760	2670
Manganese	902	799	875	299	262
Mercury	0.051	0.021	0.017	0.017	0.012
Nickel	11.9	12.3	12.2	12.3	11.9
Potassium	1450	880	910	850	760
Selenium	0.5	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sodium	180 U	150	140	150	120
Thallium	0.2	0.2 U	0.2 U	0.2 U	0.2 U
Vanadium	17.5	21.5	19.9	21.4	21.9
Zinc	233	80	61	44	35

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.

Sample identified as SA3-Field Duplicate in field notes and laboratory reports.

U = Not detected at the reporting limit indicated.

J = Estimated value.

Table D4 - Subarea SA-04 Soil Analytical Results

Sample ID	SA4-1C	SA4-2C	SA4-3C	SA4-4C	SA4-5C	SA4-6C	SA4-6C2	SA4-7C
Sampling Date	11/1/2012	11/1/2012	11/1/2012	11/1/2012	11/1/2012	11/2/2012	11/2/2012	11/1/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	6.59	8.72	9.55	11.4	5.7	12.2	10.2	4.9
Total Solids in %	98.1	96.9	98.1	96.7	98.2	96.6	97.7	96.8
pH	6	6.59	4.69	5.4	6	5.77	5.8	5.9
Metals in mg/kg								
Aluminum	16600	14700	15000	14300	17300	12900	14700	18700
Antimony	0.2 J	0.2 UJ	0.3 J	0.2 J	0.2 UJ	0.3 J	0.2 J	0.2 UJ
Arsenic	14.3	9.1	20.2	11.8	11.9	16.1	17.8	15
Barium	290	168	135	215	175	207	202	383
Beryllium	0.5	0.5	0.5	0.5	0.7	0.5	0.6	0.6
Cadmium	5.44	3.4	9	5.6	2.7	9.2	7.6	5.5
Calcium	5650	7470	4420	7740	4980	6410	5690	7070
Chromium	27.5	21.9	28.9	28	20.7	24.5	30.5	53.8
Cobalt	9.6	7.6	9.7	8.3	9.3	8.4	8.9	9.3
Copper	25.3	22.1	36	27.1	23.5	25.2	23.7	25.9
Iron	22700	21800	23900	19800	21500	19600	22000	22900
Lead	213	135	398	224	109	512	386	299
Magnesium	5120	5440	7580	4830	4370	4830	5660	7900
Manganese	870	574	654	831	842	1040	801	1190
Mercury	0.057	0.049	0.08	0.073	0.039	0.139	0.102	0.075
Nickel	21.2	15.3	17	19.3	21.7	21.3	24.3	35.5
Potassium	2790	3520	2830	2870	2760	2010	2450	1930
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2	0.2 U	0.2	0.2 U	0.2 U	0.4	0.3	0.3
Sodium	130	160	150	130 U	130 U	140	160	150
Thallium	0.3	0.2	0.4	0.3	0.2	0.4	0.4	0.3
Vanadium	28.6	32.9	43.1	28.6	26.4	23	25.4	29.4
Zinc	281	186	370	320	192	430	380	270

Table D4 - Subarea SA-04 Soil Analytical Results

Sample ID	SA4-8C	SA4-1P-1	SA4-1P-2	SA4-1P-3	SA4-1P-4
Sampling Date	11/1/2012	11/2/2012	11/2/2012	11/2/2012	11/2/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
Total Org. Carbon in %	5.14	7.71	5.97	0.732	0.458
Total Solids in %	97.2	97.9	98.3	99.1	99.3
pH	5.63	5.98	5.79	5.92	6.06
Metals in mg/kg					
Aluminum	13800	15600	17000	20600	17000
Antimony	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	12.5	18.2	11.2	5.5	4.5
Barium	182	301	302	193	182
Beryllium	0.5	0.6	0.6	0.7	0.5
Cadmium	3.6	6.6	2.2	0.2	0.2
Calcium	4840	5490	4740	3150	3500
Chromium	13.5	28.3	27.3	26.4	24.4
Cobalt	6	10.7	10.5	9	7.7
Copper	17.6	28.7	25.7	22.5	15.3
Iron	15400	25700	26600	25600	23600
Lead	133	268	103	13.8	9.3
Magnesium	3280	5670	5650	5690	5520
Manganese	612	1010	958	569	433
Mercury	0.051	0.068	0.035	0.012	0.009
Nickel	14.5	23.9	23.5	21.8	17.2
Potassium	1350	2930	2850	2380	2280
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.2	0.2 U	0.2 U	0.2 U
Sodium	160	120 U	130	150	160
Thallium	0.2 U	0.3	0.2 U	0.2 U	0.2 U
Vanadium	18.4	29.7	27.8	31.6	27.8
Zinc	186	320	146	56	38

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.

Sample identified as SA4-Field Duplicate in field notes and laboratory reports.

U = Not detected at the reporting limit indicated.

J = Estimated value.

Table D5 - Subarea SA-05 Soil Analytical Results

Sample ID	SA5-1C	SA5-2C	SA5-3C	SA5-4C	SA5-5C	SA5-5C2	SA5-7C	SA5-5P-1
Sampling Date	11/9/2012	11/9/2012	11/3/2012	11/2/2012	11/9/2012	11/2/2012	11/2/2012	11/9/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	6.81	5.96	3.59	4.69	6.01	5.46	5.54	7.34
Total Solids in %	84.1	94.5	96.4	96.4	94.9	97.2	97.6	95.2
pH	6.47	6.15	6.79	6.12	6.17	6.16	6.19	6.16
Metals in mg/kg								
Aluminum	14300	31600	15500	12000	14500	11800	10700	14700
Antimony	0.5 J	0.2 UJ	0.3 J	0.5 J	0.2 UJ	0.3 J	0.3 J	0.2 UJ
Arsenic	11	12.1	17	8.7	8.4	10.4	10.1	11
Barium	197	773	293	227	160	199	130	159
Beryllium	0.6	0.8	0.6	0.4	0.4	0.4	0.3	0.4
Cadmium	5.6	3.7	8.6	7.5	2.9	6.6	9.5	5.1
Calcium	10300	7540	15300	6910	7000	5960	7260	7770
Chromium	16.5	182	22.2	14	21.1	19.3	15.5	19.6
Cobalt	5	20	7.6	5.2	6.6	5.6	4.8	6.5
Copper	35.2	22.8	30.9	20.4	22.4	19.7	21.7	25.9
Iron	15100	41500	18400	13900	16400	14100	13900	16200
Lead	337	139	301	344	118	250	389	224
Magnesium	3330	24500	4680	3670	4840	3640	3690	5010
Manganese	851	963	1090	539	435	492	427	479
Mercury	0.09	0.05	0.088	0.079	0.043	0.054	0.114	0.056
Nickel	10.8	44.9	23.5	10.8	16.6	12.4	10.9	15.8
Potassium	1120	10400	1690	2360	2600	2560	2060	2410
Selenium	0.6 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.3	0.2 U	0.3	0.3	0.2	0.2	0.4	0.2
Sodium	230	210	190	180	230	140	270	270
Thallium	0.2	0.5	0.4	0.3	0.2	0.3	0.4	0.2
Vanadium	20.5	73	22.9	20.5	26.5	22.1	21.3	26.5
Zinc	320	233	510	360	161	300	460	200

Table D5 - Subarea SA-05 Soil Analytical Results

Sample ID	SA5-5P-2	SA5-5P-3	SA5-5P-4
Sampling Date	11/9/2012	11/9/2012	11/9/2012
Sampling Depth in Inches	3 to 6	6 to 12	12 to 18
Total Org. Carbon in %	7.22	5.17	4.71
Total Solids in %	94.6	96.1	98.2
pH	6.15	6.06	6.13
Metals in mg/kg			
Aluminum	14000	15500	15700
Antimony	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	9.7	6.7	3.8
Barium	144	141	127
Beryllium	0.4	0.4	0.5
Cadmium	3.6	1.2	0.7
Calcium	6890	6870	6150
Chromium	19.1	19.5	21
Cobalt	6.1	6.4	6.8
Copper	24.2	23	23.8
Iron	16200	17000	17700
Lead	170	47.7	24.9
Magnesium	4690	5170	5220
Manganese	450	455	389
Mercury	0.051	0.022	0.018
Nickel	15.5	16.3	18.7
Potassium	2070	2030	1940
Selenium	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.2 U	0.2 U
Sodium	260	320	290
Thallium	0.2	0.2 U	0.2 U
Vanadium	25	26.7	28.3
Zinc	165	83	65

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.

Sample identified as SA5-Field Duplicate in field notes and laboratory reports.

U = Not detected at the reporting limit indicated.

J = Estimated value.

Table D6 - Subarea SA-06 Soil Analytical Results

Sample ID	SA6-1C	SA6-2C	SA6-2C2	SA6-3C	SA6-4C	SA6-5C	SA6-6C	SA6-7C
Sampling Date	11/2/2012	11/2/2012	11/2/2012	11/2/2012	11/3/2012	11/3/2012	11/3/2012	11/2/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	6.74	3.92	4.24	8.08	4.84	2.56	11.2	7.92
Total Solids in %	97.5	97.6	97.5	97.4	99.6	99.7	98.8	97.7
pH	5.91	6.09	5.78	5.46	5.53	6.02	5.18	5.3
Metals in mg/kg								
Aluminum	9020	16400	15600	16200	6060	4590	5190	17100
Antimony	0.3 J	0.3 J	0.4 J	0.2 J	0.2 UJ	0.3 J	1.5 J	0.5 J
Arsenic	15.5	14.8	15.6	25.6	5.7	6.9	9.5	36.3
Barium	352	319	315	340	44.1	34.8	138	295
Beryllium	0.4	0.6	0.5	0.6	0.2	0.2	0.2	0.6
Cadmium	8.6	8.9	7.17	10.6	1.5	1.1	8.4	9.8
Calcium	5920	4790	4070	4800	1590	1310	3010	4950
Chromium	20	20.6	17.3	40.3	8.9	8.3	7.6	27.8
Cobalt	8.3	8.9	8	11.7	2.5	2.2	2.6	9.3
Copper	18.1	28.3	26	33.9	7.5	6.4	20.1	33.1
Iron	16600	21000	19800	25300	8830	8170	7980	27200
Lead	402	401	359	523	84.5	60.3	619	616
Magnesium	3570	4010	3950	6200	1980	1800	2050	6070
Manganese	2020	942	1140	1280	162	182	692	1380
Mercury	0.096	0.08	0.082	0.093	0.026	0.015	0.108	0.103
Nickel	16.6	22.2	20.3	27.3	7.1	6.9	6.6	30.3
Potassium	1490	1830	1800	2280	600	790	740	2480
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.3	0.3	0.3	0.4	0.2 U	0.2 U	0.3	0.3
Sodium	160	180	190	140	120 U	120 U	120 U	160
Thallium	0.3	0.4	0.3	0.4	0.2 U	0.2 U	0.4	0.4
Vanadium	22.2	23.3	20.3	28.5	12.4	11.6	10.6	22.7
Zinc	460	420	440	470	87	70	370	540

Table D6 - Subarea SA-06 Soil Analytical Results

Sample ID	SA6-8C	SA6-4P-1	SA6-4P-2	SA6-4P-3	SA6-4P-4
Sampling Date	11/3/2012	11/3/2012	11/3/2012	11/3/2012	11/3/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
Total Org. Carbon in %	9.66	4.53	3.49	0.814	0.358
Total Solids in %	99	99.6	99.5	99.2	99.8
pH	6.17	5.11	5.1	6.07	5.98
Metals in mg/kg					
Aluminum	8500	6450	6240	6710	6300
Antimony	0.5 J	0.4 J	0.7 J	0.2 UJ	0.2 UJ
Arsenic	12.9	9	13.9	1.3	1.3
Barium	119	48	44	69.6	57.7
Beryllium	0.3	0.2	0.3	0.3	0.2
Cadmium	2.5	2.3	2.7	0.2	0.13
Calcium	1730	1270	1370	1440	1550
Chromium	9.2	7.4	7.8	7.8	7.5
Cobalt	2.9	2.3	2.2	2.3	2.2
Copper	11.5	8.2	10.7	6.5	5.8
Iron	9680	8380	8420	8140	8020
Lead	122	108	223	5.2	4.95
Magnesium	2090	1870	1840	1940	1840
Manganese	461	190	179	121	114
Mercury	0.029	0.023	0.028	0.007 U	0.007 U
Nickel	9	7.2	7.1	7.5	7.3
Potassium	730	580	580	510	580
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Sodium	120 U	120 U	120 U	120 U	120 U
Thallium	0.2 U	0.2 U	0.2	0.2 U	0.2 U
Vanadium	12.7	10.1	11.5	11.7	11.2
Zinc	128	107	108	40	24

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.
 Sample identified as SA6-Field Duplicate in field notes and laboratory reports.
 U = Not detected at the reporting limit indicated.
 J = Estimated value.

Table D7 - Subarea SA-07 Soil Analytical Results

Sample ID	SA7-1C	SA7-2C	SA7-3C	SA7-4C	SA7-5C	SA7-5C2	SA7-6C	SA7-7C
Sampling Date	11/3/2012	11/3/2012	11/3/2012	11/3/2012	11/3/2012	11/3/2012	11/3/2012	11/9/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	6.63	2.87	8.81	9.91	8.07	6.12	4.26	5.19
Total Solids in %	97.9	98.7	98.6	99.4	96.7	97.1	98.3	96
pH	5.65	6.15	5.48	5.23	5.12	5.43	5.89	5.46
Metals in mg/kg								
Aluminum	12400	8140	10500	4600	17500	20200	11000	13000
Antimony	0.8 J	0.4 J	1.7 J	1.5 J	3.3 J	0.7 J	0.6 J	1.1 J
Arsenic	16.6	8.8	29.5	10	35.5	24.9	15.6	24.1
Barium	292	99.4	120	55	159	167	167	274
Beryllium	0.4	0.3	0.4	0.2	0.5	0.6	0.4	0.4
Cadmium	5.6	5.8	6.8	4.77	9	8.1	11.1	17.2
Calcium	3310	5160	1960	1630	3330	3360	4060	7110
Chromium	16.1	18.1	10.3	7	11.3	15.1	12.5	18.5
Cobalt	5.5	5.6	3.4	2.1	4.3	5.8	4.6	6.4
Copper	18.8	18.7	30.1	12.7	43.5	31.7	22	37.4
Iron	15600	15700	11200	7620	15800	16300	14100	18000
Lead	309	314	637	268	906	356	496	1280
Magnesium	3700	4440	2550	1760	3300	3200	3340	4480
Manganese	1050	362	364	254	395	559	542	933
Mercury	0.064	0.075	0.091	0.055	0.192	0.099	0.113	0.278
Nickel	15.6	14.3	9.8	5.9	11.2	14.5	11.5	16.4
Potassium	1370	2370	860	490	1040	1160	1400	2430
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.6
Silver	0.2	0.3	0.5	0.2	0.9	0.5	0.4	1
Sodium	130	160	140	120 U	180	200	120 U	160
Thallium	0.3	0.4	0.5	0.2	0.6	0.4	0.5	0.8
Vanadium	18.7	23	17.5	9	19.1	23.6	16.7	22.4
Zinc	340	400	285	188 J	490	480	650	1130

Table D7 - Subarea SA-07 Soil Analytical Results

Sample ID	SA7-8C	SA7-6P-1	SA7-6P-2	SA7-6P-3	SA7-6P-4
Sampling Date	11/9/2012	11/3/2012	11/3/2012	11/3/2012	11/3/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
Total Org. Carbon in %	1.21	7.7	1.03	0.642	0.29
Total Solids in %	97.4	98	98.9	99.4	99.5
pH	5.97	5.64	5.69	5.82	5.69
Metals in mg/kg					
Aluminum	28400	9230	11000	11700	11400
Antimony	0.3 J	1.1 J	0.4 J	0.2 UJ	0.2 UJ
Arsenic	38.7	11.4	15.5	5	2.3
Barium	514	146	146	104	80.6
Beryllium	0.7	0.3	0.3	0.4	0.4
Cadmium	13.9	8.9	3.1	0.9	0.2
Calcium	6730	3880	2420	2130	2110
Chromium	159	12.6	12.7	14.1	13.8
Cobalt	22	4.4	4.2	4.5	4.5
Copper	62	25.4	12.9	10.4	11.3
Iron	41200	12400	13700	14800	14100
Lead	934	587	127	27	6.3
Magnesium	23400	2930	3100	3380	3310
Manganese	1040	445	451	323	236
Mercury	0.17	0.13	0.026	0.012	0.009
Nickel	83.8	11.3	11.4	12.5	12.8
Potassium	13900	1240	1360	1390	1340
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.9	0.6	0.2 U	0.2 U	0.2 U
Sodium	320	120 U	130	120	130
Thallium	0.9	0.5	0.2	0.2 U	0.2 U
Vanadium	75	17	17.1	17.9	19.8
Zinc	770	570	220	115	47

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.

Sample identified as SA7-Field Duplicate in field notes and laboratory reports.

U = Not detected at the reporting limit indicated.

J = Estimated value.

Table D8- Subarea SA-08 Soil Analytical Results

Sample ID	SA8-1C	SA8-2C	SA8-3C	SA8-3C2	SA8-4C	SA8-5C	SA8-6C	SA8-7C
Sampling Date	11/4/2012	11/4/2012	11/3/2012	11/3/2012	11/4/2012	11/4/2012	11/4/2012	11/4/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	3.85	10.7	1.85	1.27	7.52	18.3	1.82	8.3
Total Solids in %	98	98	99.5	99.4	97.7	96.7	98.7	96.3
pH	5.66	5.32	5.7	5.59	5.62	5.43	5.66	5.56
Metals in mg/kg								
Aluminum	10400	9990	8730	9120	8590	7360	13000	16000
Antimony	0.6 J	0.9 J	0.2 UJ	0.2 UJ	0.4 J	1.2 J	0.2 J	0.7 J
Arsenic	20.2	28.6	7.6	11.9	11.7	17	17.3	37.6
Barium	192	159	75.7	82.9	161	119	191	268
Beryllium	0.4	0.3	0.2	0.3	0.3	0.3	0.4	0.5
Cadmium	10.8	8.6	1.5	3	6.5	9.3	6.8	18.4
Calcium	4010	2280	3250	2820	3540	3810	3070	4830
Chromium	12.2	9.1	17.1	16.9	10.6	11.7	14.5	15.8
Cobalt	4.3	3.6	6.3	6.4	3.5	3.9	5.1	8.3
Copper	20.8	24.7	16.6	17.8	15	29.1	18.6	41
Iron	13100	10600	16700	17000	11200	10700	15400	17600
Lead	381	363	62.5	129	449	737	308	1070
Magnesium	2800	2180	4250	4170	2470	2900	3210	4150
Manganese	713	557	304	376	601	619	856	796
Mercury	0.085	0.072	0.019	0.033	0.098	0.157	0.055	0.169
Nickel	11.5	8.9	14.4	14.7	9.6	10.1	14.1	17.6
Potassium	1110	610	1330	1390	740	790	1670	1480
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.3	0.4	0.2 U	0.2 U	0.2 U	0.6	0.3	0.6
Sodium	130 U	130 U	140	120	130 U	120 U	130	170
Thallium	0.4	0.3	0.2 U	0.2	0.3	0.5	0.3	0.9
Vanadium	15.6	15.6	30.8	29.7	15.7	18.7	19.2	25
Zinc	560	330	112	149	297	410	370	860

Table D8- Subarea SA-08 Soil Analytical Results

Sample ID	SA8-8C	SA8-2P-1	SA8-2P-2	SA8-2P-3	SA8-2P-4
Sampling Date	11/4/2012	11/4/2012	11/4/2012	11/4/2012	11/4/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
Total Org. Carbon in %	3.79	17.7	6.41	2.4	0.793
Total Solids in %	93.3	97	98.7	98.9	99.2
pH	5.76	4.89	5.5	5.66	5.65
Metals in mg/kg					
Aluminum	15000	7580	10400	11500	10000
Antimony	2.6 J	5.1 J	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	45.1	20.1	5.9	2	1.6
Barium	427	114	92.1	78.4	75.7
Beryllium	0.4	0.3	0.3	0.4	0.3
Cadmium	18.5	10.6	1.09	0.2	0.1
Calcium	7020	3220	1910	1810	1790
Chromium	11.9	7.6	8.8	8.4	9.9
Cobalt	4.9	2.8	3.1	3.1	3.2
Copper	49.4	22.7	9.6	10	9.2
Iron	11400	9130	11100	10400	10900
Lead	1440	668	16.6	7.9	6.1
Magnesium	2600	1960	2410	2190	2310
Manganese	918	406	355	176	157
Mercury	0.287	0.195	0.019	0.011	0.007 U
Nickel	11.3	7.7	9.2	9.1	8.2
Potassium	1410	490	510	530	560
Selenium	0.7	0.5 U	0.5 U	0.5 U	0.5 U
Silver	1.2	0.6	0.2 U	0.2 U	0.2 U
Sodium	270	130 U	120 U	120	130
Thallium	1	0.4	0.2 U	0.2 U	0.2 U
Vanadium	12.9	12.7	16.5	15.7	17.5
Zinc	1210	430	128	42	34

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.

Sample identified as SA8-Field Duplicate in field notes and laboratory reports.

U = Not detected at the reporting limit indicated.

J = Estimated value.

Table D9 - Subarea SA-09 Soil Analytical Results

Sample ID	SA9-1C	SA9-2C	SA9-3C	SA9-4C	SA9-5C	SA9-6C	SA9-7C	SA9-8C
Sampling Date	11/8/2012	11/9/2012	11/8/2012	11/8/2012	11/7/2012	11/7/2012	11/7/2012	11/8/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
Total Org. Carbon in %	4.06	3.8	4.78	3.32	5.34	8.4	2.79	12.4
Total Solids in %	95	98	97.4	93	93.8	95.6	96.4	93.7
pH	6.19	6.1	5.96	6.13	6.1	6.44	5.78	5.97
Metals in mg/kg								
Aluminum	20800	28700	29400	15600	18400	15300	18200	21200
Antimony	0.4 J	0.2 UJ	0.2 UJ	0.5 J	1.1 J	0.5 J	0.5 J	0.7 J
Arsenic	28.6	10.3	13.7	17.9	28.1	14.1	36	26.3
Barium	721	2590	597	120	445	368	354	535
Beryllium	0.6	1.5	0.8	0.5	0.6	0.6	0.6	0.6
Cadmium	24.2	4.9	4.26	6.5	12.8	13.9	13.6	16
Calcium	7380	13200	5180	10300	8760	11900	4810	13200
Chromium	43.9	470	89	19.4	18.1	24.9	24.2	33.5
Cobalt	10	24.2	14.4	6.2	7.8	8.6	8.6	11.4
Copper	32.4	50.1	38	25.8	30.5	28.3	30.9	38.4
Iron	25300	40400	33700	14200	17200	19700	22900	28300
Lead	1040	230	165	503	534	651	539	691
Magnesium	8560	34900	15200	2850	3960	5670	5400	8250
Manganese	1730	840	1260	334	1730	1150	1260	2030
Mercury	0.136	0.054	0.054	0.157	0.191	0.184	0.115	0.262
Nickel	20.9	178	37.4	20.7	25.9	27.4	25.9	33.5
Potassium	2390	17200	5570	1150	1510	2020	1800	1860
Selenium	0.5 U	0.5 U	0.5 U	1	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.5	0.5	0.3	0.6	0.6	0.5	0.4	0.5
Sodium	160	310	150	340	200	290	210	150
Thallium	0.8	0.8	0.5	0.4	0.5	0.6	0.6	0.9
Vanadium	36.5	73.5	61.9	18.9	17.3	25.3	28.7	20.9
Zinc	780	360	280	490	720	550	580	850

Table D9 - Subarea SA-09 Soil Analytical Results

Sample ID	SA9-9C	SA9-10C	SA9-10C2	SA9-7P-1	SA9-7P-2	SA9-7P-3	SA9-7P-4
Sampling Date	11/7/2012	11/9/2012	11/9/2012	11/7/2012	11/7/2012	11/7/2012	11/9/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
	Field Variability Sample ^a						
Total Org. Carbon in %	3.29	9.18	6.56	1.13	0.717	0.717	0.585
Total Solids in %	97.4	95.9	96	97.7	98.1	98.2	98.8
pH	5.6	6.03	6.11	6.03	6.1	6.11	5.73
Metals in mg/kg							
Aluminum	21000	18700	16200	20400	21000	20300	18700
Antimony	0.2 UJ	0.2 UJ	0.3 J	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	33.3	22	30.6	14.6	7.3	8.2	6.6
Barium	375	189	186	251	177	167	226
Beryllium	0.6	0.6	0.6	0.7	0.6	0.6	0.5
Cadmium	9.8	6.7	10.5	1.1	0.5	0.8	0.3
Calcium	3590	8250	7230	4140	3930	3760	4170
Chromium	29.7	25.6	26.4	24.7	24.9	28.9	29.6
Cobalt	10.2	8.1	8.2	8.7	8.8	9.1	9.5
Copper	33.1	24.7	23.4	22	24	25.3	25
Iron	28100	22000	20400	23700	25200	25500	26900
Lead	362	260	436	37.5	16.5	34.5	16
Magnesium	6630	6040	5780	5790	6020	6070	7980
Manganese	1340	654	671	738	537	431	434
Mercury	0.068	0.094	0.113	0.031	0.022	0.023	0.014
Nickel	35.5	26.9	26.7	30.5	30.7	30	36.7
Potassium	2900	1890	1530	1740	1850	1870	3040
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.3	0.3	0.3	0.2	0.2	0.3	0.2
Sodium	230	310	210	240	270	270	260
Thallium	0.3	0.3	0.4	0.2	0.2 U	0.2 U	0.2
Vanadium	26.1	26.7	29.1	30	30.5	34.7	36.3
Zinc	430	310	440	154	103	111	80

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability. Sample identified as SA9-Field Duplicate in field notes and laboratory reports.
 U = Not detected at the reporting limit indicated.
 J = Estimated value.

Table D10 - Subarea SA-10 Soil Analytical Results

Sample ID	SA10-1C	SA10-2C	SA10-3C	SA10-3C2	SA10-4C	SA10-5C	SA10-6C	SA10-7C
Sampling Date	11/8/2012	11/8/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012	11/5/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	8.8	12.8	6.66	4.13	21.3	9.37	11.1	8.72
Total Solids in %	94.3	91.7	95.8	96.4	89.6	95.3	94.7	95.4
pH	6.14	5.96	6.02	6.08	5.97	6.41	5.74	6.12
Metals in mg/kg								
Aluminum	17400	20800	18100	19000	18700	17900	23700	19500
Antimony	0.2 UJ	1.7 J	0.8 J	0.5 J	1.5 J	0.2 J	0.2 UJ	0.4 J
Arsenic	11.9	55.5	28.7	30.9	5.6	11.5	16.4	39.3
Barium	507	498	512	441	132	229	427	502
Beryllium	0.6	1.2	0.7	0.7	0.5	0.5	0.8	0.7
Cadmium	7.4	37.3	22.2	19.8	6.4	4.5	4.1	9
Calcium	8760	14000	9030	7390	21100	10700	7650	9480
Chromium	34	20.6	15	14.9	11.2	26.2	20.4	20.6
Cobalt	9	21.5	12.1	10.6	2.9	8.6	10.6	12.4
Copper	39.1	62.9	41.8	39.2	30.8	20.7	26.5	38.8
Iron	20300	33900	24400	25200	9150	21100	23000	29000
Lead	330	1240	400	328	222	200	162	246
Magnesium	6280	6200	4040	3890	2510	6080	5170	4360
Manganese	1070	5490	2870	2340	43.6	830	2190	3810
Mercury	0.104	0.232	0.094	0.06	0.114	0.083	0.077	0.088
Nickel	24.8	52.9	57.2	54.8	13.1	24.9	25.5	40.9
Potassium	2120	1380	1600	1430	460	1860	1660	1840
Selenium	0.5 U	1.3	0.5	0.5 U	5.2	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.6	0.4	0.4	0.3	0.2	0.2	0.3
Sodium	130 U	150	200	190	230	250	160	200
Thallium	0.4	1.2	0.4	0.4	0.2 U	0.3	0.3	0.4
Vanadium	42.4	24.6	21.4	20.8	21.5	25.6	26.7	22.3
Zinc	370	1330	830	810	165	250	267	520

Table D10 - Subarea SA-10 Soil Analytical Results

Sample ID	SA10-8C	SA10-2P-1	SA10-2P-2	SA10-2P-3
Sampling Date	11/8/2012	11/8/2012	11/8/2012	11/8/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12
Total Org. Carbon in %	5.02	30.6	18.9	15.6
Total Solids in %	94.9	89.6	92	93.9
pH	6.08	6.21	6.27	6.22
Metals in mg/kg				
Aluminum	20600	18000	21600	25500
Antimony	0.4 J	2.1 J	0.6 J	0.2 J
Arsenic	21.2	23.1	28.2	16.1
Barium	374	445	275	131
Beryllium	0.6	0.9	2.4	2.1
Cadmium	7.4	26.9	11.6	4.1
Calcium	6330	21800	12700	10900
Chromium	21.2	15.6	23.4	26.3
Cobalt	9	19.9	32.3	24.5
Copper	27	69.7	70.4	64
Iron	22500	32600	41600	60200
Lead	313	1620	552	248
Magnesium	5070	6680	10600	13400
Manganese	2840	5920	3590	2690
Mercury	0.124	0.241	0.144	0.061
Nickel	29.8	44.8	78.2	75.6
Potassium	1390	1650	1140	960
Selenium	0.5 U	1.3	1.4	2 U
Silver	0.3	1	0.9	1.4
Sodium	200	140 U	140	160
Thallium	0.5	1	0.5	0.2
Vanadium	25.7	20.7	27.8	32.2
Zinc	400	1230	720	410

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.

Sample identified as SA10-Field Duplicate in field notes and laboratory reports.

U = Not detected at the reporting limit indicated.

J = Estimated value.

Table D11 - Subarea SA-11 Soil Analytical Results

Sample ID	SA11-1C	SA11-2C	SA11-3C	SA11-4C	SA11-5C	SA11-6C	SA11-7C	SA11-8C
Sampling Date	11/8/2012	11/6/2012	11/10/2012	11/8/2012	11/6/2012	11/6/2012	11/6/2012	11/7/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
Total Org. Carbon in %	1.98	3.01	5.68	8.71	5.13	6.23 J	23.4	1.99
Total Solids in %	97.8	97.3	94.7	95.7	95.3	97.6	89.3	97.2
pH	6.09	6.19	6.52	6.37	5.41	5.54	5.16	5.27
Metals in mg/kg								
Aluminum	23500	16600	16100	14900	15000	21400	6940	18900
Antimony	0.2 UJ	0.2 UJ	0.2 UJ	0.6 J	0.8 J	0.3 J	17.2 J	0.2 J
Arsenic	12.3	10.6	9	20.7	21	22.4	28.6	20.2
Barium	230	443	255	484	413	192	876	276
Beryllium	0.7	0.4	0.5	0.6	0.5	0.7	0.6	0.5
Cadmium	2.2	2.5	2.4	13.3	6.9	6.3	15.8	5
Calcium	4010	5590	10900	7340	4640	3780	12100	4130
Chromium	31.9	19.5	23.2	21.5	14.9	31.4	8.6	25.9
Cobalt	10.8	7.9	6	6.7	6.4	8.7	4.1	8.1
Copper	32	18.7	22.6	24.9	24.1	32.5	52	25.1
Iron	27100	21900	17600	18000	15700	24000	9140	22300
Lead	83	94.7	113	500	374	572	1920	209
Magnesium	7150	5460	4420	4570	3290	6410	1960	5420
Manganese	880	1200	497	1330	1630	676	1460	726
Mercury	0.035	0.05	0.074	0.126	0.15	0.104	0.527	0.071
Nickel	31.1	19.2	18.6	17.9	14.4	22.8	7.8	20.4
Potassium	1760	1930	1440	2230	1260	1300	1200	2000
Selenium	0.5 U	0.5 U	0.7	0.5 U	0.5 U	0.5 U	2 U	0.5 U
Silver	0.2	0.2 U	0.2 U	0.3	0.4	0.3	2	0.3
Sodium	140	240	280	160	270	120 U	140 U	280
Thallium	0.2	0.2	0.2	0.6	0.5	0.5	1	0.3
Vanadium	41.2	31.3	30.7	26.2	24.8	47.3	11.4	33.7
Zinc	169	196	187	700	410	310	1150	268

Table D11 - Subarea SA-11 Soil Analytical Results

Sample ID	SA11-8C2	SA11-9C	SA11-8P-1	SA11-8P-2	SA11-8P-3	SA11-8P-4
Sampling Date	11/7/2012	11/8/2012	11/7/2012	11/7/2012	11/7/2012	11/7/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
	Field Variability					
	Sample ^a					
Total Org. Carbon in %	3.2	8.29	2.78	1.27	0.599	0.453
Total Solids in %	96	97.2	96.4	97.6	98.2	95
pH	5.41	5.9	5.62	5.68	5.95	5.98
Metals in mg/kg						
Aluminum	19000	22500	18600	21300	20700	17100
Antimony	0.9 J	0.9 J	0.4 J	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	37.3	35	26.2	16.9	6.4	6.8
Barium	523	420	423	258	159	117
Beryllium	0.5	1	0.5	0.6	0.6	0.5
Cadmium	14.7	16.9	6.8	0.58	0.2	0.2
Calcium	5680	8990	5450	3460	3680	3860
Chromium	19.8	31.2	18.6	20	21	24
Cobalt	7.8	12.2	8	8.2	8.6	9.2
Copper	41.9	43.5	22.1	23.3	31.6	33.1
Iron	21500	31000	20700	21900	23100	22800
Lead	810	715	236	19.2	8.4	7.8
Magnesium	4870	7580	4700	5060	5900	5900
Manganese	1570	2850	1340	797	411	335
Mercury	0.185	0.15	0.104	0.029	0.02	0.015
Nickel	20.7	38.8	19.3	23.3	21.9	21.8
Potassium	1870	2010	1610	1630	1890	2190
Selenium	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.6	0.5	0.4	0.2 U	0.2	0.2
Sodium	320	130	250	310	370	280
Thallium	0.6	0.7	0.3	0.2	0.2 U	0.2 U
Vanadium	28.8	31.1	31.4	35.1	41.2	45.3
Zinc	660	750	460	120	67	59

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.

Sample identified as SA11-Field Duplicate in field notes and laboratory reports.

U = Not detected at the reporting limit indicated.

J = Estimated value.

Table D12 - Subarea SA-12 Soil Analytical Results

Sample ID	SA12-1C	SA12-2C	SA12-3C	SA12-4C	SA12-6C	SA12-7C	SA12-7C2	SA12-8C
Sampling Date	11/7/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	3.21	4.47	10.6	5.55	3.9	1.38	3.29	2.4 J
Total Solids in %	97.2	94.8	97	97	94.7	96.6	96.3	97.1
pH	6.06	5.08	5.89	6.75	6.42	6.13	6.25	5.61
Metals in mg/kg								
Aluminum	34600	20800	17000	16600	25100	25600	23600	19200
Antimony	0.2 J	0.2 UJ	0.4 J	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	25.3	16.3	11	10	13.4	15.6	17.4	15.8
Barium	266	252	154	425	370	590	414	362
Beryllium	1.3	0.5	0.4	0.4	1.6	0.6	0.6	0.5
Cadmium	6.23	2.8	4.1	4	3.3	4.9	4.2	2.6
Calcium	6040	3250	10400	6910	5720	6770	5500	4530
Chromium	35	21.4	16.1	16	15.1	20.9	22.6	17.7
Cobalt	18.6	8.8	6.5	6.7	6.5	8.6	8.4	7.2
Copper	52.9	18.4	21	14.7	42.9	25.9	21.6	15.2
Iron	40800	22700	17900	18200	19700	25400	23800	21200
Lead	207	224	217	183	120	210	204	249
Magnesium	9370	4980	4600	3910	3280	6250	5540	4370
Manganese	1610	1470	655	966	1250	2380	1860	1370
Mercury	0.08	0.063	0.135	0.045	0.073	0.065	0.061	0.067
Nickel	76.4	20.4	14.3	17.9	16.5	24.4	23.8	18
Potassium	1920	1400	1100	1580	1330	2010	1470	1530
Selenium	0.5 U	0.5 U	0.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	1.2	0.2 U	0.3	0.2 U	0.2 U	0.3	0.2	0.2 U
Sodium	170	270	310	160	220	270	190	230
Thallium	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.2
Vanadium	44.3	33.6	25	23.4	23.7	31.4	31.4	26.1
Zinc	428	218	196	249	251	440	350	239

Table D12 - Subarea SA-12 Soil Analytical Results

Sample ID	SA12-9C	SA12-3P-1	SA12-3P-2	SA12-3P-3	SA12-3P-4
Sampling Date	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
Total Org. Carbon in %	2.97	13.7	2.03	1	0.714
Total Solids in %	95.9	93.5	97.6	97.6	98.3
pH	6.24	5.45	5.73	6.67	7.48
Metals in mg/kg					
Aluminum	26200	12300	18800	23000	18800
Antimony	0.2 UJ	1.1 J	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	13.8	10.2	7.1	4.4	6.3
Barium	406	171	138	133	209
Beryllium	0.7	0.3	0.3	0.6	0.4
Cadmium	2	5.4	2.2	0.4	0.3
Calcium	4690	8050	6100	5520	57300
Chromium	22.6	14.1	18.7	21.8	25.6
Cobalt	10.3	6.3	7.6	9	9.3
Copper	19.8	18.6	13.9	18.5	28.9
Iron	26500	14900	20700	22700	27900
Lead	66.4	271	50.9	11	9
Magnesium	4640	3690	5390	5360	10400
Manganese	2750	914	479	229	396
Mercury	0.046	0.124	0.047	0.031	0.035
Nickel	35.5	12.6	15.1	18.3	24.5
Potassium	1620	1190	1160	1290	2010
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2	0.3	0.2 U	0.2	0.2
Sodium	190	170	320	400	430
Thallium	0.2 U	0.3	0.2 U	0.2 U	0.2 U
Vanadium	28.5	20.6	27.9	30.8	36.6
Zinc	163	280	164	60	56

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.
 Sample identified as SA12-Field Duplicate in field notes and laboratory reports.
 U = Not detected at the reporting limit indicated.
 J = Estimated value.

Table D13 - Subarea SA-13 Soil Analytical Results

Sample ID	SA13-1C	SA13-2C	SA13-3C	SA13-4C	SA13-5C	SA13-5C2	SA13-6C	SA13-7C
Sampling Date	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/7/2012
Sampling Depth in Inches	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3	0 to 3
	Field Variability Sample ^a							
Total Org. Carbon in %	11.5	12.6	3.2	5.64	4.31	6.33	2.77	2.57
Total Solids in %	96	92.5	95.8	95.7	95.4	95.5	95.3	97
pH	6.18	6.68	5.77	5.95	6.34	6.19	5.73	5.96
Metals in mg/kg								
Aluminum	21000	13900	17500	12700	22400	22200	28200	19400
Antimony	0.2 UJ	0.3 UJ	0.3 J	0.2 UJ	0.5 J	0.5 J	0.4 J	0.5 J
Arsenic	7.7	5.9	12.8	5.3	17.3	18.4	22.4	21.7
Barium	274	311	385	157	452	454	294	295
Beryllium	0.8	0.5	0.5	0.4	0.5	0.5	0.6	0.5
Cadmium	2.4	4.4	3.9	1.3	12.9	11.7	3.6	2.6
Calcium	6490	24500	4510	10200	9820	9680	3050	2700
Chromium	21.5	21.2	18.7	22	28	28	18	22
Cobalt	8.5	7.1	6.9	9	11	11	7	9
Copper	25.6	39	17.9	21.5	43.7	34.6	16.9	18.6
Iron	23000	17200	19000	20900	24600	25800	22400	22000
Lead	104	202	163	31.9	649	551	289	281
Magnesium	5530	4800	3510	4770	6070	6610	3940	4330
Manganese	851	1260	1480	317	1480	1370	2270	833
Mercury	0.044	0.1	0.085	0.058	0.113	0.101	0.1	0.068
Nickel	17.7	17.3	18.5	26.5	22.1	21.9	15.5	18.9
Potassium	1230	1470	1300	1200	2380	2280	1250	1340
Selenium	0.5 U	1.7	0.5 U	2 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.3	0.3	0.3	0.4	0.3	0.3	0.3
Sodium	200	290	170	130 U	290	230	220	210
Thallium	0.2	0.2	0.3	0.2 U	0.5	0.5	0.4	0.3
Vanadium	37.7	27.2	23.3	30	39	38	32	35
Zinc	172	305	280	160	660	600	271	217

Table D13 - Subarea SA-13 Soil Analytical Results

Sample ID	SA13-8C	SA13-6P-1	SA13-6P-2	SA13-6P-3	SA13-6P-4
Sampling Date	11/10/2012	11/10/2012	11/10/2012	11/10/2012	11/10/2012
Sampling Depth in Inches	0 to 3	0 to 3	3 to 6	6 to 12	12 to 24
Total Org. Carbon in %	3.69	1.13	0.527	0.288	0.613
Total Solids in %	96.7	96.2	96.9	98.3	97.3
pH	5.29	5.69	5.51	5.47	5.48
Metals in mg/kg					
Aluminum	17300	28000	28600	23300	24800
Antimony	0.3 J	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Arsenic	16.4	9.5	4.9	4	6.2
Barium	272	233	244	259	205
Beryllium	0.5	0.7	0.8	0.6	0.7
Cadmium	2.8	0.9	0.3	0.2	0.6
Calcium	4280	1830	2180	2890	2390
Chromium	21.4	20	21	25	23
Cobalt	7.8	8	8	9	8
Copper	16.4	13.3	22.3	20.2	21.7
Iron	23100	22200	22800	24500	23100
Lead	168	38.6	12.5	10.8	21.2
Magnesium	4200	3930	4800	5840	4920
Manganese	1180	1100	291	330	361
Mercury	0.069	0.045	0.027	0.017	0.032
Nickel	19.7	18.1	19	20.5	19.8
Potassium	1350	1010	1180	1540	1210
Selenium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Silver	0.2 U	0.2	0.3	0.2	0.2
Sodium	170	170	240	200	200
Thallium	0.2	0.2 U	0.2 U	0.2 U	0.2 U
Vanadium	34.6	34	37	45	39
Zinc	186	152	78	67	88

a - Secondary sample collected at station by rotating 45 degrees from the primary sampling points to assess short range concentration variability.
 Sample identified as SA13-Field Duplicate in field notes and laboratory reports.
 U = Not detected at the reporting limit indicated.
 J = Estimated value.

APPENDIX D DATA QUALITY REVIEW

A total of 170 soil samples (including four-point composites, field replicates, and discrete profiles) were collected between October 30 and November 10, 2012. The samples were submitted to Analytical Resources, Inc. (ARI), in Tukwila, Washington, for chemical analysis. The laboratory reported the results in 13 separate data packages with job numbers: VR30, VR31, VR32, VR33, VR34, VR35, VR36, VR37 VS18, VS19, VS20, VS21, VS22, and VS23.

All samples were analyzed for:

- EPA Target Analyte List (TAL) metals (silver, aluminum, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, magnesium, manganese, nickel, lead, potassium, sodium, antimony, selenium, thallium, vanadium, zinc, and mercury), which were prepared and analyzed as follows:
 - Total mercury by EPA method 7471A
 - Total metals (Al, Ba, Ca, Fe, Mg, Mn, K, and Na) by EPA method 6010C
 - Total metals (Sb, As, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, and Zn) by EPA method 200.8
- Soil pH by EPA method 9045;
- Total organic carbon (TOC) following Plumb 1981; and
- Total solids (TS) by Standard Method 2540B.

The laboratory performed quality assurance/quality control (QA/QC) reviews on an ongoing basis. Hart Crowser reviewed the data to ensure they met data quality objectives for the project and recorded the results on laboratory quality control summary sheets. The following criteria were evaluated:

- Holding times;
- Reporting limits;
- Method blanks;
- Laboratory control sample (LCS) recoveries;
- Matrix spike/matrix spike duplicate (MS/MSD) recoveries;
- Laboratory duplicate relative percent differences (RPDs);
- Continuing calibration verifications (CCV);
- ICP interference check sample; and
- Post-digest spike recoveries (where applicable).

One sample from each subarea was incorrectly identified as a field duplicate. Field duplicate samples were not collected. Instead, these samples were

secondary samples collected within 20 feet of the primary sample to assess spatial variability and, as such, RPD criteria are not applicable.

Samples used for laboratory quality control (matrix spike and laboratory duplicate analysis) are summarized in the following table.

Laboratory Quality Control Sample	Laboratory Batch
SA1-1C	VR30
SA1-Field Duplicate	VR31
SA2-8C	VR32
SA3-7C	VR33
SA4-6C	VR34
SA6-4P-1 (0 to 3" depth)	VR35
SA7-4C	VR36
SA8-2P-3 (6 to 12" depth)	VR37
SA5-1C	VS18
SA9-3C	VS19
SA9-Field Duplicate	VS20
SA11-6C	VS21
SA12-3P-1	VS22
SA13-3C	VS23

The data were determined to be acceptable for use with minor qualification. The data review is summarized in the following pages and the complete laboratory reports are included on DVD at the end of the report.

Sample Receiving Discrepancies

Two sample numbers were listed incorrectly on the chain of custody (COC) for lab package VR30.

- The sample listed as SA1-3P-1 (3-inch to 6-inch depth) should be SA1-3P-2 (3-inch to 6-inch depth).
- The sample listed as SA1-3P-1 (6-inch to 12-inch depth) should be SA1-3P-3 (6-inch to 12-inch depth).

Although these errors appear on the COC, the sample numbers were written correctly on the jar labels and the laboratory logged the samples using the numbers on the labels. Therefore, the sample numbers are correct in the laboratory reports. Hart Crowser corrected the sample numbers on both the paper and electronic versions of the COC.

Total Mercury by EPA method 7471A

Holding times and reporting limits were acceptable. No method blank (MB) contamination was detected. The LCS recoveries were within method control limits. The laboratory duplicate RPD was within control limits or was not applicable when the sample and duplicate were non-detect or when the result was less than five times the RL.

Matrix Spike Recovery

MS recoveries were within method and QAPP control limits with the following exceptions.

- SA3-7C MS: The recovery for Hg fell below the control limits. The result for Hg in SA3-7C was qualified as estimated (J).

Continuing Calibration Verification

The CCVs were within method control limits with the following exception.

- CCV3 on 11/17/2012: The recovery failed low. The laboratory analyzed an additional CCV4 immediately, which was within control. Associated samples were reanalyzed following the passing CCV, and results were not qualified.

Total Metals by EPA method 6010A (includes Al, Ba, Ca, Fe, Mg, Mn, K, and Na)

Holding times and reporting limits were acceptable for all samples. All the LCS recoveries were within method control limits. The laboratory duplicate RPD was within control limits or was not applicable when the sample and duplicate were non-detect or when the result was less than five times the RL. The ICP interference check samples were within control limits.

Method Blank Analysis

Analytes were not detected in method blanks with the following exceptions.

- Method Blank 11/16/12: The MB had a detection for calcium above the RL. The results for calcium in the associated samples were greater than ten times the amount in the MB, and no results were qualified.

- Method Blank 11/15/12: The MB had a detection for manganese at the RL. The results for Mn in the associated samples were greater than ten times the amount in the MB, and no results were qualified.

Matrix Spike Recovery

All the MS/MSD recoveries were either within method control limits or not applicable when the source sample concentration was greater than four times the spiking amount, with the following exception.

- SA12-3P-1 (0 to 3 inches depth) MS: The recovery for Mn exceeded the control limits. The laboratory ran a post-digestion spike and recovery was within control limits. The failure likely occurred because the source sample concentration was higher than the spike amount. Results for this analyte are not qualified.

Continuing Calibration Verification and Continuing Calibration Blanks

The CCVs and CCBs were within method control limits with the following exceptions.

- CCV5 on 11/16/12: The recoveries for Ba, Mg, Na, and Fe exceeded the control limits. The laboratory analyzed an additional CCV6 following CCV5, which was in control. Samples analyzed prior to CCV5 (SA4-7C, SA4-8C, SA4-Field Duplicate, and SA4-6C) were reanalyzed later in the analytical sequence with passing CCVs and not qualified.
- CCV10 on 11/16/12: The recoveries for Al, Ba, Fe, Mg, Mn, K, and Na exceeded the control limits. The laboratory analyzed an additional CCV11 following CCV10, which was within control. As CCV11 was in control, the laboratory reported the associated samples, and results were not qualified.
- CCV15 on 11/16/12: The recoveries for Ca and Na fell below the control limits. The associated samples were reanalyzed on 11/19/12 with passing CCVs, and no results qualified.
- CCB5 on 11/15/12: There was a detection for Mn above the RL but below the CRDL.
- CCB9 on 11/15/12: There were detections for Al and Mn above the RL, but below the CRDL. There was a detection for Fe above the CRDL. The laboratory analyzed CCB10 immediately following CCB9, with all analytes below the RL. The associated samples MB, SA2-Field Duplicate, SA3-1C,

SA3-2C, SA2-8C, Dup, MS, and LCS were analyzed prior to CCB9. The MB is ND for Al, Fe, Mn and not qualified. Results for Al, Fe, and Mn in samples SA2-8C, Dup, MS, SA2-Field Duplicate, SA3-1C, and SA3-2C were greater than ten times the amount in CCB9 and not qualified. Results for the LCS were within method control limits, and are not qualified. Samples SA2-8C, Dup, and MS were reanalyzed on 11/16/12, and results for Al, Fe, and Mn were reported from the reanalysis without qualification.

Total Metals by EPA method 200.8 (includes Sb, As, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, V, and Zn)

The holding times and reporting limits were acceptable for all samples. No method blank (MB) contamination was detected. All the LCS recoveries were within method control limits. Post digest spike recoveries were within method control limits.

Matrix Spike Recovery

All the MS/MSD recoveries were either within method control limits or not applicable because the source sample concentration was greater than four times the spiking amount, with the following exceptions.

- SA7-4C MS: The recovery for Zn fell below the control limits. The laboratory performed a post-digestion spike, which fell within the control limits. Results for Zn in SA7-4C were qualified as estimated (J).
- Antimony (Sb) matrix spikes: The MS/MSD recoveries failed low in all batches. The laboratory performed post-digestion spikes and recoveries were within control. Due to the poor MS recoveries, all the Sb results for this project are qualified as estimated (J).

Laboratory Duplicate Analysis

The laboratory duplicate RPD was within control limits or was not applicable when the sample and duplicate were less than five times the RL with the following exceptions.

- SA1-Field Duplicate: The RPD for Ni exceeded the laboratory control limits, but fell within the QAPP control limits. Sample results were not qualified.
- SA3-7C: The RPD for Ni exceeded the laboratory control limits, but fell within the QAPP control limits. Sample results were not qualified.

- SA7-4C: The RPD for Sb exceeded the laboratory control limits, but fell within the QAPP control limits. Sample results were not qualified.
- SA12-3P-1: The RPD for Sb exceeded the laboratory control limits, but fell within the QAPP control limits. Sample results were not qualified.

Continuing Calibration Verification

The CCVs were within method control limits with the following exceptions.

- CCV6, CCV7, and CV11 on 11/15/12: The recovery for Be failed high. The associated samples were reanalyzed for Be on 11/16/12 with passing CCVs, and no results were qualified.
- CCV7, CCV8, and CCV9 on 11/15/12: The recoveries for Ag failed low. The associated samples were reanalyzed for Ag on 11/19/12 with passing CCVs and no results were qualified.
- CCV6 on 11/16/12: The recovery for Co failed low. Co in the associated samples were reported from analyses on 11/15/12, 11/19/12, and 11/16/12 with passing CCVs, and no results were qualified.
- CCV4 on 11/21/12: The recovery for Ag failed low. The associated samples were reanalyzed for Ag on 11/23/12 and 11/26/12 with passing CCVs and results were not qualified.
- CCV10 on 11/23/12: The recoveries for Be and Se failed high. The associated samples were reanalyzed for Be and Se on 11/26/12 with passing CCVs and results were not qualified.
- CCV6 on 11/26/12: The recovery for Ag failed high. An additional CCV7 was analyzed shortly following, which passed. Silver was not reported from the associated samples analyzed prior to CCV6. The samples were reanalyzed for Ag on 11/28/12 with passing CCVs and results were not qualified.

Soil pH by EPA 9045

Holding times and reporting limits were acceptable. The LCS and laboratory duplicate were within control limits. Field duplicate RPDs were within QAPP control limits.

Total Organic Carbon (TOC) by Plumb 1981

Holding times and reporting limits were acceptable. The MB was ND. The standard reference results were within control limits. The laboratory control samples were within control limits.

Matrix Spike Recovery

The MS/MSD recoveries were within method control limits with the following exceptions.

- SA2-4C MS: The recovery for TOC slightly exceeded control limits. The results for TOC in sample SA2-4C are therefore qualified as estimated (J).
- SA12-8C MS: The recovery for TOC slightly exceeded control limits. The results for TOC in sample SA12-8C are therefore qualified as estimated (J).

Laboratory Duplicate Analysis

The RSD for laboratory replicates was within control limits except for the following.

- SA11-6C: The RSD is outside control limits due to sample inhomogeneity. The results for TOC in SA11-6C are therefore qualified as estimated (J).

Total Solids (TS) by SM 2540B

Holding times and reporting limits were acceptable. The MB was ND. The RSD for laboratory replicates was within control limits. Field duplicate RPDs were within QAPP control limits.

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