

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999

[Major element data expressed in weight percent; trace element data expressed in ppm (parts per million) or µg/g, dry weight basis]

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
SRM-2709								
(n = 49)	7.3	1.9	3.5	1.9	1.5	1.2	0.07	0.32
	7.2	1.9	3.5	1.9	1.4	1.1	0.07	0.32
	7.2	2.0	3.5	1.8	1.5	1.2	0.07	0.32
	7.3	2.0	3.5	1.9	1.5	1.2	0.07	0.31
	7.3	1.9	3.5	1.9	1.5	1.2	0.07	0.32
	7.5	1.9	3.5	1.9	1.5	1.3	0.06	0.31
	7.2	1.9	3.4	1.8	1.5	1.2	0.07	0.32
	7.1	1.9	3.4	2.0	1.5	1.2	0.06	0.32
	7.1	1.9	3.4	1.9	1.5	1.2	0.06	0.32
	7.5	2.0	3.6	2.0	1.6	1.3	0.06	0.34
	7.3	1.9	3.4	2.0	1.5	1.2	0.06	0.34
	7.7	2.0	3.8	2.2	1.6	1.3	0.06	0.35
	7.3	1.9	3.4	1.9	1.5	1.1	0.06	0.34
	7.6	2.0	3.5	2.1	1.5	1.3	0.06	0.34
	7.0	1.9	3.3	1.9	1.6	1.2	0.06	0.33
	7.7	2.0	3.3	2.1	1.5	1.2	0.07	0.34
	7.5	1.9	3.4	2.0	1.5	1.1	0.07	0.33
	7.2	1.9	3.3	2.0	1.5	1.1	0.06	0.35
	7.6	1.9	3.3	2.0	1.5	1.1	0.06	0.34
	7.4	1.9	3.4	2.0	1.6	1.2	0.06	0.33
	7.0	1.9	3.3	1.9	1.5	1.1	0.06	0.34
	7.3	1.8	3.4	2.0	1.5	1.2	0.06	0.31
	7.4	1.9	3.5	2.0	1.5	1.2	0.06	0.35
	7.5	1.9	3.7	2.1	1.5	1.2	0.06	0.34
	7.6	1.9	3.3	2.0	1.5	1.2	0.07	0.34

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
<u>SRM-2709</u>								
	7.3	1.9	3.4	2.0	1.5	1.1	0.07	0.35
	7.5	2.0	3.3	2.1	1.5	1.2	0.06	0.35
	7.5	2.0	3.5	2.0	1.5	1.2	0.06	0.34
	7.5	2.0	3.4	2.1	1.6	1.1	0.06	0.35
	7.3	1.9	3.4	2.0	1.5	1.1	0.06	0.33
	7.4	1.9	3.4	2.0	1.5	1.1	0.06	0.34
	7.4	1.8	3.5	2.0	1.5	1.1	0.06	0.34
	7.2	1.9	3.4	2.0	1.5	1.1	0.06	0.34
	7.3	1.9	3.4	2.0	1.5	1.2	0.06	0.35
	7.2	1.9	3.5	1.9	1.4	1.1	0.07	0.32
	7.2	2.0	3.5	1.8	1.5	1.2	0.07	0.32
	7.3	2.0	3.5	1.9	1.5	1.2	0.07	0.31
	7.3	1.9	3.5	1.9	1.5	1.2	0.07	0.32
	7.5	1.9	3.5	1.9	1.5	1.3	0.06	0.31
	7.2	1.9	3.4	1.8	1.5	1.2	0.07	0.32
	7.1	1.9	3.4	2.0	1.5	1.2	0.06	0.32
	7.5	1.9	3.5	2.1	1.5	1.1	0.06	0.34
	7.6	2.0	3.5	2.1	1.5	1.2	0.06	0.35
	7.3	1.9	3.5	2.0	1.5	1.2	0.06	0.32
	7.7	2.0	3.4	2.0	1.5	1.2	0.07	0.35
	7.3	1.9	3.3	2.0	1.5	1.1	0.07	0.34
	7.2	1.9	3.3	2.0	1.5	1.2	0.06	0.34
	7.4	1.9	3.4	2.0	1.5	1.2	0.06	0.34
	7.4	1.8	3.4	2.0	1.5	1.0	0.06	0.33

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
<u>SRM-2709</u>								
MEDIAN	7.3	1.9	3.4	2.0	1.5	1.2	0.06	0.34
MEAN	7.36	1.92	3.44	1.98	1.51	1.18	0.06	0.33
STD DEV	0.18	0.05	0.10	0.09	0.04	0.07	0.005	0.013
REL STD DEV	2.4	2.8	2.9	4.4	2.5	5.6	7.5	3.9
Percent Recovery	98	101	98	98	100	102	97	96
<i>NIST CERTIFIED VALUE</i>	7.50	1.90	3.50	2.03	1.51	1.16	0.062	0.342

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2709</u>									
14	900	900	4	< 2	53	130	15	30	16
23	880	880	4	< 2	42	120	15	30	15
22	870	870	4	< 2	43	140	16	29	15
21	910	910	3	< 2	42	130	16	32	16
21	910	910	3	< 2	40	120	15	31	14
17	940	940	3	< 2	38	120	14	34	15
14	880	880	3	< 2	41	120	15	30	16
13	880	880	4	< 2	43	120	14	33	16
16	940	940	4	< 2	42	120	14	35	16
17	1,000	1,000	4	< 2	42	120	13	33	14
18	910	910	4	< 2	42	130	15	34	17
19	1,000	1,000	4	< 2	49	130	14	34	14
27	900	900	3	< 2	40	120	12	39	16
20	900	900	4	< 2	41	120	12	30	15
36	880	880	3	< 2	42	120	14	32	16
27	910	910	4	< 2	41	130	15	35	15
25	880	880	4	< 2	44	120	13	32	14
10	890	890	3	< 2	41	120	14	32	15
19	920	920	4	< 2	39	120	14	32	15
22	930	930	4	< 2	43	130	13	31	18
24	910	910	3	< 2	40	120	14	33	14
17	840	840	3	< 2	44	120	13	33	17
20	930	930	4	< 2	43	130	14	34	20
15	1,000	1,000	4	< 2	48	120	14	37	16
21	910	910	4	< 2	42	120	14	31	14
22	900	900	4	< 2	45	120	14	34	16

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2709</u>									
	21	930	4	< 2	41	120	13	31	16
	26	940	3	< 2	45	120	15	32	14
	21	880	5	< 2	44	120	13	33	15
	22	930	3	< 2	41	120	14	30	16
	21	920	4	< 2	40	120	14	31	17
	22	920	4	< 2	42	120	14	31	18
	20	880	4	< 2	40	130	14	31	17
	23	900	4	< 2	46	120	14	31	16
	23	880	4	< 2	42	120	15	30	15
	22	870	4	< 2	43	140	16	29	15
	21	910	3	< 2	42	130	16	32	16
	21	910	3	< 2	40	120	15	31	14
	17	940	3	< 2	38	120	14	34	15
	14	880	3	< 2	41	120	15	30	16
	13	880	4	< 2	43	120	14	33	16
	23	960	4	< 2	46	120	15	34	15
	28	940	4	< 2	45	130	16	32	20
	18	970	4	< 2	41	120	13	36	13
	25	950	4	< 2	42	130	14	31	16
	27	930	3	< 2	43	120	14	30	16
	21	900	4	< 2	42	120	14	32	15
	22	920	4	< 2	41	120	14	30	16
	32	850	4	< 2	38	120	14	32	16

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2709</u>									
MEDIAN	21	910	4	< 2	42	120	14	32	16
MEAN	20.9	912	3.69	< 2	42.4	123	14.2	32.2	15.7
STD DEV	4.83	35.1	0.50	--	2.74	5.42	0.95	2.04	1.38
REL STD DEV	23.1	3.8	13.6	--	6.5	4.4	6.7	6.4	8.8
Percent Recovery	118	94	--	--	101	95	106	93	112
<i>NIST CERTIFIED VALUE</i>	<i>17.7</i>	<i>968</i>		<i>0.38</i>	<i>42</i>	<i>130</i>	<i>13.4</i>	<i>34.6</i>	<i>14</i>

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2709</u>									
	24	16	53	540	< 2	22	83	20	12
	24	14	51	530	< 2	17	85	16	11
	24	16	53	550	< 2	18	85	11	12
	23	14	54	540	< 2	17	83	13	12
	23	10	54	540	< 2	17	84	14	12
	23	15	56	530	< 2	17	82	11	12
	23	20	54	550	< 2	19	83	17	12
	25	12	53	520	< 2	20	80	18	12
	22	16	53	540	< 2	22	87	10	12
	22	14	58	540	< 2	22	86	9	12
	23	17	54	530	< 2	21	88	12	12
	25	17	60	570	< 2	24	90	10	12
	25	20	56	580	2	22	82	9	12
	26	15	60	540	3	21	78	9	12
	25	22	53	540	2	20	82	13	12
	24	36	61	590	3	21	82	11	12
	24	21	52	530	2	19	78	11	12
	22	22	55	530	< 2	18	80	15	12
	22	21	59	530	2	18	80	13	12
	23	20	56	560	2	20	82	14	12
	23	23	50	540	2	20	78	14	12
	25	24	52	530	< 2	20	80	13	12
	24	23	58	550	2	20	81	12	12
	24	22	58	540	< 2	20	81	23	12
	25	15	56	530	< 2	21	81	13	12
	26	16	56	550	< 2	22	81	13	12

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2709</u>									
	24	14	58	550	< 2	21	80	13	12
	24	15	57	550	< 2	19	82	15	12
	24	14	56	540	< 2	20	83	13	12
	23	16	55	540	< 2	19	81	14	12
	23	15	55	530	< 2	21	80	13	12
	24	16	56	550	< 2	20	82	15	12
	24	15	55	540	< 2	20	80	12	12
	25	16	54	540	< 2	21	81	14	12
	24	14	51	530	< 2	17	85	16	11
	24	16	53	550	< 2	18	85	11	12
	23	14	54	540	< 2	17	83	13	12
	23	10	54	540	< 2	17	84	14	12
	23	15	56	530	< 2	17	82	11	12
	23	20	54	550	< 2	19	83	17	12
	25	12	53	520	< 2	20	80	18	12
	23	17	55	540	< 2	22	87	6	12
	23	17	57	530	< 2	22	87	12	12
	22	17	59	540	< 2	22	88	9	12
	25	15	59	550	< 2	21	82	12	13
	22	19	55	530	3	19	78	14	12
	25	17	55	520	< 2	20	80	13	12
	23	15	57	530	< 2	20	82	13	12
	23	13	49	540	< 2	18	78	14	11

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese Ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2709</u>									
MEDIAN	24	16	55	540	< 2	20	82	13	12
MEAN	23.7	17.0	55.1	541	< 2	19.8	82.3	13.2	12.0
STD DEV	1.05	4.29	2.62	13.53	--	1.76	2.83	2.95	0.28
REL STD DEV	4.4	25.2	4.7	2.5	--	8.9	3.4	22.4	2.4
Percent Recovery	103	90	110	101	--	104	94	--	100
<i>NIST CERTIFIED VALUE</i>	23	18.9	50	538	2	19	88		12

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2709</u>								
	< 2	230	10	< 5	110	1	15	100
	< 2	220	10	< 5	110	2	18	100
	< 2	220	10	< 5	110	2	18	99
	< 2	230	10	< 5	110	1	20	100
	< 2	230	10	< 5	110	2	18	99
	< 2	240	12	< 5	110	2	17	99
	< 2	230	11	< 5	110	2	17	99
	< 2	220	12	< 5	110	2	17	96
	< 2	230	9	< 5	110	2	15	110
	< 2	230	11	< 5	110	2	16	110
	< 2	220	10	< 5	110	2	15	100
	< 2	230	9	< 5	120	2	16	110
	< 2	230	12	< 5	120	1	17	110
	< 2	240	11	< 5	110	1	16	97
	< 2	240	11	< 5	120	1	15	100
	< 2	230	11	< 5	110	1	15	110
	< 2	230	10	5	110	1	16	110
	< 2	220	9	< 5	110	1	15	100
	< 2	220	9	5	110	2	16	100
	< 2	240	11	5	120	1	16	100
	< 2	230	10	5	110	2	17	100
	< 2	230	12	< 5	110	2	16	100
	< 2	230	11	5	110	2	16	100
	< 2	240	11	10	110	1	16	100
	< 2	220	12	< 5	110	2	17	100
	< 2	240	12	< 5	110	2	16	100

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2709</u>								
	< 2	230	12	5	120	2	17	100
	< 2	230	10	< 5	110	2	15	110
	< 2	220	11	< 5	110	2	16	100
	< 2	230	10	< 5	110	2	16	100
	< 2	230	11	< 5	110	1	16	100
	< 2	230	11	< 5	110	2	17	100
	< 2	230	11	< 5	110	2	16	100
	< 2	230	12	< 5	110	2	16	100
	< 2	220	10	< 5	110	2	18	100
	< 2	220	10	< 5	110	2	18	99
	< 2	230	10	< 5	110	1	20	100
	< 2	230	10	< 5	110	2	18	99
	< 2	240	12	< 5	110	2	17	99
	< 2	230	11	< 5	110	2	17	99
	< 2	220	12	< 5	110	2	17	96
	< 2	240	12	< 5	120	2	15	110
	< 2	220	11	< 5	110	2	15	99
	< 2	230	9	< 5	110	2	15	110
	< 2	230	11	< 5	120	2	18	100
	< 2	230	9	5	110	1	15	95
	< 2	230	12	< 5	110	2	16	100
	< 2	240	11	< 5	110	2	15	100
	< 2	210	11	< 5	110	1	16	100

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2709</u>								
MEDIAN	< 2	230	11	< 5	110	2	16	100
MEAN	< 2	229.0	10.7	< 5	111.4	1.7	16.4	101.3
STD DEV	--	7.07	0.97	--	3.50	0.45	1.23	4.26
REL STD DEV	--	3.1	9.0	--	3.1	26.4	7.5	4.2
Percent Recovery	--	99	99	--	99	106	91	96
<i>NIST CERTIFIED VALUE</i>	<i>0.41</i>	<i>231</i>	<i>10.8</i>		<i>112</i>	<i>1.6</i>	<i>18</i>	<i>106</i>

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
<u>SRM-2704</u>								
(n = 48)	5.8	2.7	4.1	1.9	1.2	0.59	0.10	0.26
	6.0	2.7	4.1	1.9	1.2	0.58	0.10	0.30
	6.2	2.7	4.2	2.0	1.2	0.64	0.11	0.33
	6.2	2.7	4.2	2.0	1.2	0.64	0.11	0.35
	6.2	2.6	4.0	2.0	1.2	0.62	0.10	0.25
	6.0	2.6	4.0	1.8	1.2	0.59	0.10	0.28
	5.9	2.5	3.9	1.9	1.2	0.58	0.10	0.28
	6.0	2.6	4.2	2.0	1.2	0.59	0.10	0.31
	6.3	2.7	4.2	2.0	1.2	0.62	0.10	0.29
	6.3	2.7	4.1	2.0	1.2	0.63	0.10	0.29
	6.2	2.7	4.0	2.0	1.2	0.60	0.10	0.32
	6.4	2.7	4.1	2.0	1.2	0.60	0.10	0.28
	6.0	2.6	4.0	1.9	1.2	0.54	0.10	0.26
	5.6	2.4	3.8	1.8	1.2	0.56	0.10	0.26
	6.3	2.8	3.8	1.9	1.2	0.58	0.10	0.31
	6.3	2.5	4.1	1.9	1.2	0.56	0.10	0.30
	6.2	2.6	4.1	2.0	1.2	0.58	0.10	0.26
	6.4	2.7	4.2	2.0	1.2	0.60	0.10	0.27
	6.2	2.6	4.0	1.9	1.2	0.59	0.10	0.33
	6.3	2.7	4.2	2.0	1.2	0.58	0.10	0.32
	6.2	2.6	4.0	2.0	1.2	0.58	0.10	0.27
	5.8	2.4	4.0	1.9	1.2	0.56	0.10	0.27
	6.1	2.6	4.2	1.9	1.2	0.58	0.10	0.31
	6.3	2.7	4.0	2.0	1.2	0.58	0.11	0.35
	6.1	2.6	4.0	2.0	1.2	0.57	0.11	0.31
	6.2	2.7	4.0	2.1	1.2	0.56	0.11	0.36

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
<u>SRM-2704</u>								
	6.2	2.7	4.1	2.0	1.2	0.60	0.11	0.27
	6.2	2.7	4.0	2.0	1.2	0.57	0.10	0.29
	6.5	2.8	4.3	2.2	1.3	0.59	0.11	0.25
	6.6	2.7	4.1	2.1	1.2	0.61	0.11	0.32
	6.3	2.6	4.1	2.0	1.2	0.59	0.11	0.26
	6.1	2.6	3.9	2.0	1.2	0.58	0.10	0.30
	6.2	2.6	4.0	2.0	1.2	0.59	0.11	0.31
	5.8	2.7	4.1	1.9	1.2	0.59	0.10	0.26
	6.0	2.7	4.1	1.9	1.2	0.58	0.10	0.30
	6.2	2.7	4.2	2.0	1.2	0.64	0.11	0.33
	6.2	2.7	4.2	2.0	1.2	0.64	0.11	0.35
	6.2	2.6	4.0	2.0	1.2	0.62	0.10	0.25
	6.0	2.6	4.0	1.8	1.2	0.59	0.10	0.28
	5.9	2.5	3.9	1.9	1.2	0.58	0.10	0.28
	5.9	2.6	3.9	2.0	1.2	0.56	0.10	0.32
	6.4	2.7	4.2	2.2	1.2	0.59	0.10	0.30
	6.1	2.7	4.0	1.9	1.2	0.63	0.10	0.28
	6.4	2.7	4.1	2.0	1.2	0.59	0.12	0.25
	6.4	2.7	4.2	2.1	1.2	0.61	0.11	0.30
	6.1	2.6	4.0	2.0	1.2	0.59	0.11	0.32
	6.2	2.6	4.1	2.1	1.2	0.60	0.10	0.33
	6.3	2.5	4.0	2.0	1.2	0.55	0.10	0.32

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
<u>SRM-2704</u>								
MEDIAN	6.2	2.7	4.1	2.0	1.2	0.59	0.1	0.3
MEAN	6.16	2.64	4.06	1.98	1.20	0.59	0.10	0.30
STD DEV	0.20	0.09	0.11	0.08	0.01	0.02	0.005	0.03
REL STD DEV	3.2	3.3	2.7	4.3	1.2	4.1	5.0	10.1
Percent Recovery	101	102	99	99	100	107	101	66
<i>NIST CERTIFIED VALUE</i>	<i>6.11</i>	<i>2.60</i>	<i>4.11</i>	<i>2.00</i>	<i>1.20</i>	<i>0.55</i>	<i>0.099</i>	<i>0.457</i>

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium Ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2704</u>									
23	390	2	3	55	140	16	87	14	
18	400	2	3	59	150	16	88	17	
22	430	2	3	72	150	16	99	15	
33	420	2	3	62	150	16	110	15	
21	420	2	3	53	140	15	99	15	
21	390	2	2	58	150	16	95	15	
23	390	2	2	61	140	15	94	14	
24	420	2	2	66	150	15	99	13	
19	450	2	2	57	140	15	100	13	
14	440	2	2	60	140	14	98	14	
21	410	2	2	59	150	16	97	17	
11	460	2	2	53	140	14	95	15	
10	430	2	2	56	150	14	91	14	
16	410	2	2	56	140	14	99	14	
14	440	2	3	56	140	15	100	14	
15	430	2	3	61	150	14	100	13	
17	460	2	3	55	140	16	100	15	
12	460	2	3	55	150	16	98	15	
15	440	2	3	59	150	14	95	16	
16	460	2	3	58	140	15	96	14	
10	430	2	4	57	140	15	100	11	
15	430	2	4	58	140	14	96	10	
21	480	2	3	65	150	15	92	14	
29	470	2	4	60	140	14	94	13	
25	430	2	4	62	140	14	99	14	

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2704</u>									
	25	440	2	4	57	140	14	95	13
	24	450	2	5	62	150	14	110	12
	23	410	2	4	60	140	12	93	13
	25	470	2	5	58	150	14	100	18
	26	470	2	4	57	150	15	100	18
	22	450	2	4	56	150	14	110	18
	22	420	2	4	56	140	14	98	15
	29	440	2	5	61	140	14	96	16
	23	390	2	3	55	140	16	87	14
	18	400	2	3	59	150	16	88	17
	22	430	2	3	72	150	16	99	15
	33	420	2	3	62	150	16	110	15
	21	420	2	3	53	140	15	99	15
	21	390	2	2	58	150	16	95	15
	23	390	2	2	61	140	15	94	14
	28	390	2	2	59	150	16	98	18
	21	430	2	2	61	140	16	99	13
	21	420	2	2	57	140	14	92	13
	24	460	2	4	55	150	14	97	15
	27	460	2	4	59	150	14	99	15
	17	480	2	2	60	150	14	97	16
	26	440	2	4	58	140	14	95	17
	28	420	2	3	54	140	14	91	15

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2704</u>									
MEDIAN	22	430	2	3	58	140	15	97	15
MEAN	21.1	430.8	2.0	3.1	58.8	144.8	14.8	97.1	14.7
STD DEV	5.46	25.81	0.00	0.90	3.99	5.00	0.95	5.27	1.72
REL STD DEV	25.8	6.0	0.0	29.4	6.8	3.5	6.4	5.4	11.8
Percent Recovery	90	104	--	90	82	107	106	98	98
<i>NIST CERTIFIED VALUE</i>	23.4	414		3.45	72	135	14	98.6	15

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2704</u>									
	28	140	43	560	< 2	25	43	14	11
	31	140	47	580	< 2	32	42	14	12
	36	150	49	580	< 2	32	42	14	12
	33	150	48	610	< 2	27	44	16	12
	28	150	48	640	< 2	26	43	10	12
	29	170	46	550	< 2	27	42	16	12
	31	140	46	540	< 2	30	40	16	11
	32	160	47	620	3	35	44	6	12
	29	170	50	590	2	33	44	6	12
	31	150	49	570	3	34	43	7	11
	30	160	47	560	3	31	43	11	12
	31	140	48	570	4	33	46	9	12
	32	140	46	560	4	32	43	7	12
	31	140	42	550	3	30	44	10	12
	31	150	46	560	4	31	43	10	12
	31	140	42	560	4	29	44	9	12
	28	160	47	550	4	28	45	11	12
	29	150	48	580	4	28	45	8	12
	30	150	47	580	4	30	45	12	12
	31	160	46	580	4	31	45	10	12
	30	150	47	570	3	30	46	10	12
	32	160	45	580	3	32	44	11	12
	30	160	47	580	5	31	46	18	12
	33	140	46	560	< 2	33	45	11	12
	33	150	47	580	2	34	46	8	12

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2704</u>									
	31	160	48	570	2	32	44	11	12
	31	140	48	580	2	30	46	11	12
	31	140	46	560	2	31	45	10	11
	31	150	50	610	2	32	48	10	12
	32	150	49	590	3	33	48	11	13
	30	140	49	600	2	31	46	10	12
	32	150	48	570	2	31	43	10	12
	31	150	47	570	2	32	45	11	12
	28	140	43	560	< 2	25	43	14	11
	31	140	47	580	< 2	32	42	14	12
	36	150	49	580	< 2	32	42	14	12
	33	150	48	610	< 2	27	44	16	12
	28	150	48	640	< 2	26	43	10	12
	29	170	46	550	< 2	27	42	16	12
	31	140	46	540	< 2	30	40	16	11
	30	150	45	560	4	33	45	10	12
	30	160	49	560	3	32	45	7	12
	30	150	48	560	3	33	43	7	11
	31	150	50	570	3	32	46	8	12
	32	160	50	580	2	32	48	9	13
	28	140	46	570	3	29	44	12	12
	33	150	47	550	2	31	46	10	12
	30	140	42	580	< 2	28	44	11	11

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2704</u>									
MEDIAN	31	150	47	570	< 2	31	44	11	12
MEAN	30.8	150	46.9	575	< 2	30.5	44.1	11.1	11.9
STD DEV	1.79	8.78	2.01	22.27	--	2.44	1.79	2.96	0.44
REL STD DEV	5.8	5.9	4.3	3.9	--	8.0	4.1	26.7	3.7
	106	93	94	104	--	--	100	--	99
<i>NIST CERTIFIED VALUE</i>	29	161	50	555			44		12

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2704</u>								
	< 2	130	7	< 5	85	2	23	430
	< 2	130	11	< 5	90	2	23	420
	< 2	140	12	< 5	91	2	25	440
	< 2	140	9	< 5	94	2	25	460
	< 2	130	10	< 5	90	2	23	440
	< 2	130	8	< 5	87	2	22	420
	< 2	130	10	< 5	86	2	22	410
	< 2	130	7	< 5	97	2	22	430
	< 2	140	6	< 5	96	2	22	410
	< 2	130	9	< 5	93	2	22	410
	< 2	130	10	< 5	93	2	21	410
	< 2	130	8	12	95	2	22	450
	< 2	140	8	10	92	2	21	430
	< 2	130	7	10	94	2	20	440
	< 2	130	8	11	90	2	21	420
	< 2	130	6	8	97	2	22	430
	< 2	130	8	10	94	2	21	430
	< 2	130	6	11	95	2	21	440
	< 2	140	7	10	96	2	21	440
	< 2	130	8	10	94	2	23	420
	< 2	130	< 4	8	96	3	21	450
	< 2	140	6	10	90	2	21	440
	< 2	140	8	15	95	2	22	440
	< 2	130	8	12	92	3	24	430
	< 2	140	8	6	94	2	22	430

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2704</u>								
	< 2	130	7	10	95	2	24	420
	< 2	140	6	6	94	2	21	440
	< 2	130	7	< 5	93	2	22	430
	< 2	140	8	< 5	96	2	23	440
	< 2	140	8	< 5	98	3	24	440
	< 2	140	6	< 5	90	3	23	420
	< 2	140	8	< 5	91	2	22	420
	< 2	130	8	< 5	95	3	23	430
	< 2	130	7	< 5	85	2	23	430
	< 2	130	11	< 5	90	2	23	420
	< 2	140	12	< 5	91	2	25	440
	< 2	140	9	< 5	94	2	25	460
	< 2	130	10	< 5	90	2	23	440
	< 2	130	8	< 5	87	2	22	420
	< 2	130	10	< 5	86	2	22	410
	< 2	130	9	< 5	95	2	20	420
	< 2	140	8	< 5	95	2	20	430
	< 2	130	9	< 5	92	2	21	400
	< 2	130	8	< 5	95	2	23	430
	< 2	140	7	< 5	97	2	22	440
	< 2	140	6	11	96	2	21	420
	< 2	140	8	< 5	92	2	22	420
	< 2	120	9	6	93	2	22	440

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2704</u>								
MEDIAN	< 2	130	8	< 5	93	2	22	430
MEAN	< 2	134	8.0	< 5	92.6	2.1	22.3	429.8
STD DEV	--	5.25	1.91	--	3.31	0.31	1.28	12.99
REL STD DEV	--	3.9	23.9	--	3.6	14.5	5.8	3.0
Percent Recovery	--	103	87	--	97	75	--	98
<i>NIST CERTIFIED</i>		<i>130</i>	<i>9.2</i>		<i>95</i>	<i>2.8</i>		<i>438</i>
<i>VALUE</i>								

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
<u>SRM-2711</u>								
(n = 54)	6.5	2.9	2.8	2.4	1.1	1.2	0.09	0.26
	6.2	2.8	2.8	2.0	1.0	1.1	0.08	0.25
	6.2	2.9	2.8	2.3	1.0	1.1	0.09	0.25
	6.4	3.1	3.0	2.3	1.0	1.2	0.08	0.24
	6.1	2.9	2.8	2.2	1.0	1.1	0.09	0.26
	6.6	3.0	2.9	2.5	1.1	1.3	0.09	0.26
	6.5	2.9	2.9	2.4	1.1	1.2	0.09	0.27
	6.7	3.0	2.9	2.4	1.1	1.3	0.08	0.25
	6.2	2.8	2.8	2.1	1.0	1.2	0.08	0.26
	6.2	2.8	2.7	2.5	1.0	1.2	0.08	0.25
	6.3	2.8	2.7	2.4	1.0	1.1	0.09	0.29
	6.8	3.0	3.0	2.6	1.1	1.3	0.09	0.31
	6.5	2.9	2.9	2.4	1.0	1.2	0.09	0.28
	7.0	3.2	3.1	2.6	1.2	1.3	0.10	0.30
	6.6	2.8	2.7	2.3	1.0	1.2	0.08	0.27
	6.8	3.0	2.8	2.5	1.0	1.2	0.08	0.26
	6.2	2.8	2.8	2.4	1.1	1.2	0.09	0.26
	6.5	2.9	2.7	2.4	1.0	1.2	0.08	0.25
	6.5	2.7	2.8	2.3	1.0	1.2	0.08	0.26
	6.2	2.8	2.7	2.4	1.0	1.1	0.08	0.26
	6.4	2.8	2.8	2.4	1.0	1.2	0.09	0.26
	6.4	2.7	2.7	2.3	1.1	1.2	0.08	0.26
	6.4	2.9	2.8	2.4	1.0	1.2	0.08	0.28
	6.2	2.7	2.8	2.3	1.0	1.1	0.08	0.26
	6.5	2.8	2.8	2.5	1.0	1.2	0.08	0.26

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
<u>SRM-2711</u>								
	6.6	2.9	2.9	2.4	1.0	1.2	0.08	0.28
	6.6	2.8	2.7	2.4	1.0	1.2	0.09	0.28
	6.4	2.9	2.7	2.5	1.1	1.3	0.13	0.30
	6.5	2.9	2.7	2.5	1.0	1.1	0.09	0.26
	6.4	2.8	2.8	2.4	1.0	1.1	0.08	0.25
	6.4	2.8	2.7	2.4	1.0	1.1	0.09	0.27
	6.5	2.8	2.8	2.5	1.0	1.1	0.08	0.27
	6.7	2.8	2.7	2.4	1.0	1.2	0.09	0.26
	7.1	2.9	3.0	2.6	1.1	1.2	0.09	0.29
	6.6	2.9	2.8	2.5	1.1	1.2	0.09	0.27
	6.5	2.8	2.7	2.4	1.0	1.2	0.08	0.26
	6.2	2.9	2.8	2.3	1.0	1.1	0.09	0.25
	6.4	3.1	3.0	2.3	1.0	1.2	0.08	0.24
	6.1	2.9	2.8	2.2	1.0	1.1	0.09	0.26
	6.6	3.0	2.9	2.5	1.1	1.3	0.09	0.26
	6.5	2.9	2.9	2.4	1.1	1.2	0.09	0.27
	6.7	3.0	2.9	2.4	1.1	1.3	0.08	0.25
	6.2	2.8	2.8	2.1	1.0	1.2	0.08	0.26
	6.2	2.8	2.7	2.5	1.0	1.2	0.08	0.25
	7.0	3.0	3.0	2.7	1.0	1.2	0.08	0.29
	6.8	3.0	3.0	2.5	1.0	1.3	0.08	0.26
	6.8	3.0	2.9	2.6	1.1	1.2	0.09	0.31
	6.4	2.8	2.8	2.4	1.0	1.2	0.09	0.27
	6.4	2.8	2.7	2.4	1.0	1.1	0.08	0.26
	6.5	2.9	2.7	2.5	1.1	1.2	0.09	0.27

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
<u>SRM-2711</u>								
	6.3	2.8	2.7	2.4	1.0	1.2	0.09	0.25
	6.6	2.8	2.8	2.4	1.0	1.1	0.09	0.26
	6.2	2.8	2.6	2.4	1.0	1.1	0.08	0.25
	6.5	2.7	2.8	2.4	1.0	1.1	0.08	0.28
MEDIAN	6.5	2.9	2.7	2.4	1.0	1.2	0.09	0.26
MEAN	6.47	2.87	2.81	2.40	1.03	1.19	0.09	0.27
STD DEV	0.23	0.11	0.11	0.13	0.05	0.06	0.008	0.02
REL STD DEV	3.6	3.7	3.8	5.3	4.9	5.5	9.4	6.0
Percent Recovery	99	100	97	98	98	104	105	88
<i>NIST CERTIFIED VALUE</i>	<i>6.53</i>	<i>2.88</i>	<i>2.89</i>	<i>2.45</i>	<i>1.05</i>	<i>1.14</i>	<i>0.086</i>	<i>0.306</i>

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2711</u>									
	97	710	2	34	69	45	12	110	15
	86	680	2	33	73	44	11	110	15
	110	670	2	37	67	58	12	98	15
	94	670	2	38	62	48	12	100	15
	100	650	2	37	67	48	12	97	14
	97	730	2	38	72	48	12	110	17
	110	700	2	37	68	48	12	110	16
	92	740	2	38	67	48	11	120	16
	99	660	2	36	67	45	11	110	17
	110	670	2	37	69	44	11	110	17
	100	680	2	39	70	49	10	120	16
	110	760	2	41	77	48	10	120	14
	94	740	2	38	68	48	10	110	15
	100	820	2	41	76	51	12	130	14
	95	710	2	40	64	44	9	110	15
	100	720	2	40	66	44	10	110	15
	100	670	2	39	68	45	10	120	16
	100	680	2	36	67	46	11	130	15
	98	680	2	34	69	41	11	110	14
	110	670	2	39	64	43	12	120	14
	110	690	2	36	62	46	11	130	16
	110	710	2	37	67	47	10	120	16
	99	720	2	36	68	44	11	110	15
	100	660	2	34	71	44	10	120	20
	100	710	2	34	70	45	10	110	18

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2711</u>									
	110	720	2	37	74	44	9	110	14
	100	690	2	39	71	43	11	110	13
	100	680	2	38	71	43	11	120	14
	100	700	2	37	66	43	11	120	14
	110	690	2	39	74	44	12	120	13
	96	640	2	36	71	42	10	110	13
	100	720	2	40	70	44	12	110	16
	100	710	2	37	64	42	12	120	16
	110	770	2	41	76	46	12	120	17
	100	690	2	37	68	46	12	120	15
	100	680	2	40	74	44	11	110	14
	110	670	2	37	67	58	12	98	15
	94	670	2	38	62	48	12	100	15
	100	650	2	37	67	48	12	97	14
	97	730	2	38	72	48	12	110	17
	110	700	2	37	68	48	12	110	16
	92	740	2	38	67	48	11	120	16
	99	660	2	36	67	45	11	110	17
	110	670	2	37	69	44	11	110	17
	100	760	2	42	73	46	10	110	14
	95	780	2	36	66	44	10	110	13
	120	720	2	41	73	51	12	120	14
	100	680	2	41	66	44	11	110	15
	95	690	2	38	65	43	10	110	14
	110	750	2	40	68	45	11	120	15

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2711</u>									
	100	700	2	41	63	46	12	110	15
	110	700	2	40	64	46	11	120	14
	94	680	2	38	62	43	10	110	14
	99	650	2	38	65	41	11	110	15
MEDIAN	100	690	2	38	68	45	11	110	15
MEAN	101.5	699.8	2.0	37.8	68.4	45.9	11.1	113.0	15.2
STD DEV	6.62	36.34	--	2.05	3.72	3.30	0.87	7.76	1.37
REL STD DEV	6.5	5.2	--	5.4	5.4	7.2	7.9	6.9	9.0
Percent Recovery	97	96	--	91	99	98	111	99	101
<i>NIST CERTIFIED VALUE</i>	<i>105</i>	<i>726</i>		<i>41.7</i>	<i>69</i>	<i>47</i>	<i>10</i>	<i>114</i>	<i>15</i>

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2711</u>									
	36	1,100	27	630	< 2	32	20	28	9
	39	1,100	25	610	< 2	32	18	28	10
	40	930	25	620	< 2	30	20	20	9
	35	1,000	25	670	< 2	27	20	13	9
	38	990	26	620	< 2	29	20	19	9
	38	1,200	28	660	< 2	28	19	15	10
	38	1,100	27	640	< 2	30	20	20	9
	40	1,000	29	640	< 2	31	20	7	10
	37	1,100	26	910	< 2	28	19	22	9
	39	1,100	26	600	< 2	29	19	23	9
	38	1,100	26	620	< 2	33	20	21	9
	39	1,200	28	670	< 2	35	21	19	9
	37	1,200	28	640	< 2	34	20	19	9
	41	1,300	30	700	< 2	37	23	22	10
	41	1,000	27	640	< 2	35	23	19	9
	41	1,000	28	640	< 2	33	22	17	9
	42	1,000	26	630	< 2	32	23	23	10
	40	1,100	28	660	< 2	33	22	21	9
	39	1,000	24	610	< 2	30	22	21	9
	36	1,000	26	610	< 2	29	22	21	9
	36	1,000	28	630	< 2	29	22	21	9
	38	1,000	27	640	< 2	31	23	21	10
	39	1,000	26	640	2	32	22	22	10
	40	1,000	26	620	< 2	32	21	22	10
	40	1,000	28	630	< 2	32	22	20	9

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2711</u>									
	38	1,100	28	640	< 2	32	21	30	9
	42	1,100	27	610	< 2	34	23	20	10
	42	1,100	26	630	< 2	34	23	19	10
	39	1,100	27	640	< 2	33	22	19	9
	40	1,000	27	630	< 2	32	22	23	9
	39	1,100	26	610	< 2	32	22	19	9
	41	1,100	27	650	< 2	32	23	20	10
	39	1,100	26	630	< 2	33	23	20	10
	45	1,200	30	710	< 2	36	25	23	10
	41	1,100	28	650	< 2	33	22	20	10
	41	1,100	26	620	< 2	35	22	20	9
	40	930	25	620	< 2	30	20	20	9
	35	1,000	25	670	< 2	27	20	13	9
	38	990	26	620	< 2	29	20	19	9
	38	1,200	28	660	< 2	28	19	15	10
	38	1,100	27	640	< 2	30	20	20	9
	40	1,000	29	640	< 2	31	20	7	10
	37	1,100	26	910	< 2	28	19	22	9
	39	1,100	26	600	< 2	29	19	23	9
	39	1,200	27	630	< 2	34	20	16	9
	36	1,200	27	630	< 2	33	19	19	9
	39	1,200	28	650	< 2	34	21	24	10
	40	1,000	28	620	< 2	31	21	22	10
	38	1,000	26	610	< 2	32	22	19	10
	35	1,000	26	640	2	29	22	22	9

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2711</u>									
	40	1,000	26	610	< 2	32	21	23	9
	39	1,000	28	620	< 2	32	22	18	10
	38	1,100	25	590	< 2	30	22	19	9
	39	1,100	25	630	< 2	30	22	22	9
MEDIAN	39	1,100	27	630	< 2	32	21	20	9
MEAN	38.9	1,071	26.8	644.3	< 2	31.4	21.1	20.0	9.4
STD DEV	1.94	81.30	1.30	56.78	--	2.31	1.46	4.00	0.48
REL STD DEV	5.0	7.6	4.9	8.8	--	7.3	6.9	20.0	5.2
Percent Recovery	97	92	--	101	--	101	102	--	104
<i>NIST CERTIFIED VALUE</i>	<i>40</i>	<i>1162</i>		<i>638</i>		<i>31</i>	<i>20.6</i>		<i>9</i>

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2711</u>								
	4	250	13	< 5	77	2	25	350
	3	240	13	< 5	76	3	25	330
	3	240	13	< 5	76	2	26	340
	4	240	13	< 5	79	3	26	380
	3	230	13	< 5	76	2	25	330
	4	250	14	< 5	79	2	29	350
	4	250	14	< 5	78	3	28	350
	4	260	14	< 5	81	3	28	350
	3	240	14	< 5	75	3	26	380
	3	240	15	< 5	75	3	26	330
	4	240	13	< 5	82	2	24	320
	5	250	11	< 5	84	3	27	350
	4	250	13	< 5	84	3	25	330
	5	280	14	< 5	91	3	28	360
	4	240	16	7	83	2	27	360
	4	250	14	6	81	3	26	350
	4	250	14	6	85	3	25	360
	4	250	16	< 5	82	3	24	350
	4	240	12	6	81	2	26	340
	4	240	13	6	80	2	25	330
	4	240	12	6	82	2	25	350
	4	250	13	5	84	2	25	350
	4	250	14	6	81	2	26	330
	4	250	16	< 5	82	3	25	340
	4	250	15	5	80	3	26	350

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2711</u>								
	5	260	16	10	81	2	26	340
	4	240	14	< 5	81	3	28	340
	4	250	14	< 5	80	3	27	340
	4	240	15	5	82	3	28	340
	4	250	13	< 5	79	3	25	350
	4	230	14	< 5	80	3	26	330
	4	250	13	< 5	80	3	27	340
	4	240	15	< 5	80	3	27	340
	4	270	16	< 5	84	3	30	350
	4	250	15	< 5	82	3	27	350
	4	240	14	< 5	81	3	27	330
	3	240	13	< 5	76	2	26	340
	4	240	13	< 5	79	3	26	380
	3	230	13	< 5	76	2	25	330
	4	250	14	< 5	79	2	29	350
	4	250	14	< 5	78	3	28	350
	4	260	14	< 5	81	3	28	350
	3	240	14	< 5	75	3	26	380
	3	240	15	< 5	75	3	26	330
	4	250	13	< 5	83	3	24	340
	4	250	13	< 5	81	3	25	320
	4	250	11	< 5	85	2	25	340
	4	260	16	< 5	80	3	27	320
	4	250	14	< 5	78	3	25	330
	4	250	11	5	84	2	24	340

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2711</u>								
	4	240	14	< 5	81	2	26	330
	4	240	15	< 5	81	3	28	340
	4	230	13	< 5	75	2	25	330
	3	230	15	< 5	81	2	26	340
MEDIAN	4	250	14	< 5	81	3	26	340
MEAN	3.9	246.1	13.8	< 5	80.2	2.6	26.2	343.5
STD DEV	0.47	9.51	1.23	--	3.14	0.48	1.38	14.29
REL STD DEV	12.2	3.9	8.9	--	3.9	18.4	5.3	4.2
Percent Recovery	84	100	101	--	98	96	105	98
<i>NIST CERTIFIED</i>	4.63	245	14		81.6	2.7	25	350
<i>VALUE</i>								

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Aluminum percent	Calcium percent	Iron percent	Potassium percent	Magnesium percent	Sodium percent	Phosphorous percent	Titanium percent
<u>SRM-2710</u>								
(n = 6)	6.2	1.3	3.3	2.0	0.85	1.1	0.11	0.26
	6.4	1.3	3.6	2.0	0.88	1.1	0.11	0.26
	6.5	1.3	3.5	2.0	0.90	1.2	0.1	0.26
	6.4	1.3	3.6	2.0	0.88	1.1	0.11	0.26
	6.5	1.3	3.5	2.0	0.90	1.2	0.1	0.26
	6.2	1.2	3.4	2.0	0.87	1.1	0.1	0.25
MEDIAN	6.4	1.3	3.5	2.0	0.88	1.1	0.11	0.26
MEAN	6.37	1.28	3.48	2.00	0.88	1.13	0.11	0.26
STD DEV	0.12	0.04	0.11	0.00	0.02	0.05	0.01	0.00
REL STD DEV	2.0	2.9	3.1	0.0	2.0	4.2	4.8	1.4
Percent Recovery	99	102	103	95	103	99	104	92
<i>NIST CERTIFIED VALUE</i>	<i>6.44</i>	<i>1.25</i>	<i>3.38</i>	<i>2.11</i>	<i>0.853</i>	<i>1.14</i>	<i>0.106</i>	<i>0.283</i>

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Arsenic ppm	Barium ppm	Beryllium ppm	Cadmium ppm	Cerium ppm	Chromium ppm	Cobalt ppm	Copper ppm	Gallium ppm
<u>SRM-2710</u>									
	560	690	2	16	56	32	11	2,700	41
	680	680	2	20	55	36	11	2,600	48
	680	690	2	21	54	37	10	2,900	41
	680	680	2	20	55	36	11	2,600	41
	680	690	2	21	54	37	10	2,900	48
	620	690	2	21	52	32	10	2,800	48
MEDIAN	680	690	2	20.5	54.5	36	10.5	2,750	44
MEAN	650.0	686.7	2.0	19.8	54.3	35.0	10.5	2,750	44.5
STD DEV	45.8	4.71	--	1.77	1.25	2.16	0.50	126	3.8
REL STD DEV	7.1	0.7	--	8.9	2.3	6.2	4.8	4.6	8.6
Percent Recovery	104	97	--	91	95	90	105	93	131
<i>NIST CERTIFIED VALUE</i>	626	707		21.8	57	39	10	2950	34

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Lanthanum ppm	Lead ppm	Lithium ppm	Manganese ppm	Molybdenum ppm	Neodymium ppm	Nickel ppm	Niobium ppm	Scandium ppm
<u>SRM-2710</u>									
	29	5,300	39	9,700	16	22	13	21	9
	31	4,900	38	10,000	15	27	14	13	9
	33	5,400	40	10,000	20	28	10	10	9
	31	4,900	38	10,000	15	27	14	13	9
	33	5,400	40	10,000	20	28	10	10	9
	30	5,400	40	9,900	20	20	20	< 8	10
MEDIAN	31	5,350	39.5	10,000	18	27	13.5	11.5	9
MEAN	31.2	5,220	39.2	9,930	17.7	25.3	13.5	11.2	9.2
STD DEV	1.46	227	0.90	110	2.36	3.14	3.35	6.20	0.37
REL STD DEV	4.7	4.3	2.3	1.1	13.3	27.0	24.8	55.5	4.1
Percent Recovery	92	94	--	98	93	110	94	--	106
<i>NIST CERTIFIED VALUE</i>	34	5532		10,100	19		14.3		8.7

Table 6. Major and trace-element data from total digestions of Standard Reference Materials, Abandoned Mine Lands Project, 1996-1999--
(continued)

Standard Reference Material Number	Silver ppm	Strontium ppm	Thorium ppm	Tin ppm	Vanadium ppm	Ytterbium ppm	Yttrium ppm	Zinc ppm
<u>SRM-2710</u>								
	29	330	11	< 5	68	2	19	6,500
	33	330	12	< 5	72	2	22	7,000
	35	340	10	< 10	73	2	22	7,000
	33	330	12	< 5	72	2	22	7,000
	35	340	10	< 10	73	2	22	7,000
	33	330	20	< 10	74	2	20	6,400
MEDIAN	33	330	11.5	< 5	72.5	2	22	7,000
MEAN	33.0	333	12.5	< 5	72.0	2.0	21.2	6,820
STD DEV	2.00	4.71	3.45	--	1.91	0.00	1.21	261
REL STD DEV	6.1	1.4	27.6	--	2.7	0.0	5.7	3.8
Percent Recovery	93	--	96	--	94	154	92	98
<i>NIST CERTIFIED VALUE</i>	35.3		13.5		76.6	1.3	23	6952