

**THE LITHOGEOCHEMICAL AND
MINERALOGICAL SETTING
OF TURBIDITE HOSTED
ARSENIC-GOLD
DEPOSITS IN THE
LOWER PALAEOZOIC OF SCOTLAND.**

by

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VAR. / ID.	DJR-15	DJR-17	DJR-18	DJR-20	DJR-21	DJR-22	DJR-23	DJR-24	DJR-25	DJR-26
East	32980	33052	33081	33112	33156	33180	33219	33250	33258	33273
North	59234	59275	59280	59314	59321	59320	59355	59380	59403	59467
SiO2	64.90	53.97	60.15	58.42	59.75	57.66	58.75	58.31	55.07	58.15
Al2O3	16.58	13.07	14.33	13.06	14.69	13.87	11.75	14.16	12.01	13.79
TiO2	1.05	0.76	0.79	0.70	0.75	0.77	0.79	0.84	0.86	0.80
Fe2O3	6.78	4.94	5.63	4.93	5.18	6.11	5.22	5.88	5.23	5.59
MgO	4.88	4.07	4.68	4.10	4.48	4.40	4.09	5.08	4.53	4.71
CaO	0.55	12.44	6.32	9.33	6.60	8.28	9.52	7.06	11.48	8.65
Na2O	2.20	1.45	1.86	1.89	1.78	1.53	1.52	1.62	1.76	1.77
K2O	2.33	2.19	2.12	2.01	1.95	2.28	1.62	2.26	1.61	2.09
MnO	0.06	0.18	0.07	0.09	0.06	0.11	0.08	0.07	0.10	0.08
P2O5	0.20	0.18	0.17	0.16	0.17	0.15	0.17	0.18	0.20	0.18
Total	99.53	93.25	96.12	94.69	95.41	95.16	93.51	95.46	92.85	95.81
As	0	0	0	0	0	0	0	0	0	0
Ba	308	263	347	206	263	465	222	299	196	226
Cl	45	65	14	12	21	31	43	50	17	26
Co	42	26	26	29	33	26	34	31	31	36
Cr	155	131	118	102	103	117	164	135	175	135
Cu	18	16	25	10	17	23	24	24	16	46
Ga	18	14	14	14	14	14	13	15	13	15
La	39	42	29	44	29	29	35	34	37	37
Ni	62	55	58	51	52	59	46	61	51	60
Nb	16	15	14	12	14	16	12	15	14	15
Pb	15	11	13	13	28	16	15	13	13	11
Rb	79	70	72	67	63	75	52	77	52	70
Sr	60	214	148	161	145	175	199	153	177	155
Sb	7	0	0	0	0	4	0	0	2	0
S	0	102	26	5	0	201	9	50	15	89
Th	8	7	5	5	6	5	10	7	8	8
V	115	97	91	89	81	94	88	98	93	100
Y	26	28	24	25	22	28	24	27	30	27
Zn	72	61	63	51	53	67	53	67	54	62
Zr	265	219	180	169	176	197	258	197	282	197
Tl	0	0	0	0	0	0	0	0	0	0

VAR. / ID.	DJR-27	DJR-28	DJR-752	DJR-753	DJR-754	DJR-755	DJR-756	DJR-757	DJR-758	DJR-759
East	33270	33274	33601	33644	33654	33661	33667	33669	33678	33687
North	59457	59448	59718	59680	59667	59658	59644	59627	59617	59590
SiO2	52.01	57.66	57.54	60.01	59.60	56.21	58.64	61.48	57.80	57.87
Al2O3	11.35	12.30	13.21	16.21	14.23	13.57	15.27	14.43	14.08	13.27
TiO2	0.65	0.71	0.75	0.93	0.80	0.77	0.90	0.63	0.86	0.87
Fe2O3	4.90	4.63	5.32	5.04	5.11	5.50	5.69	4.71	5.88	5.61
MgO	4.40	4.43	4.21	2.68	4.11	4.37	3.35	2.96	4.62	4.42
CaO	14.55	10.81	10.13	7.59	7.84	10.49	6.12	7.76	7.65	8.44
Na2O	1.56	1.76	1.52	1.56	1.86	1.49	1.60	1.89	1.64	1.78
K2O	1.57	1.78	2.12	2.62	1.93	2.14	2.48	2.27	2.02	2.07
MnO	0.12	0.10	0.12	0.10	0.13	0.18	0.14	0.14	0.09	0.10
P2O5	0.16	0.17	0.18	0.20	0.19	0.18	0.19	0.16	0.18	0.18
Total	91.27	94.35	95.10	96.94	95.80	94.90	94.38	96.43	94.82	94.61
As	0	0	3	0	2	0	0	0	0	0
Ba	192	154	280	258	342	255	257	280	380	277
Cl	11	44	25	29	32	54	18	116	55	30
Co	27	23	24	20	26	26	23	24	28	26
Cr	111	134	126	137	121	125	164	103	150	149
Cu	24	12	21	27	42	37	34	38	15	23
Ga	11	14	12	13	12	13	14	14	13	13
La	32	34	34	17	29	29	30	33	38	31
Ni	51	51	53	49	54	60	61	38	52	49
Nb	13	13	12	14	13	13	15	34	13	14
Pb	12	10	12	14	12	13	10	14	14	12
Rb	47	59	64	86	59	68	76	84	61	64
Sr	190	136	130	108	134	190	72	62	118	158
Sb	0	0	2	0	0	3	0	0	0	0
S	55	24	27	5	61	43	0	38	61	11
Th	0	9	9	7	3	12	10	7	5	6
V	76	91	96	103	95	97	113	72	107	108
Y	27	25	32	29	30	30	32	40	32	34
Zn	53	50	59	135	68	89	64	65	67	54
Zr	173	187	188	215	174	181	222	319	209	234
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.63

VAR. / ID.	DJR-760	DJR-761	DJR-762	DJR-763	DJR-778	DJR-779	DJR-780	DJR-781	DJR-782	DJR-811
East	33686	33686	33690	33689	33690	33705	33692	33680	33680	34325
North	59562	59544	59528	59511	59478	59455	59428	59411	59398	60248
SiO2	57.85	57.61	58.80	59.87	57.97	60.43	59.29	58.91	58.56	63.58
Al2O3	13.52	14.79	13.59	13.91	15.88	14.03	13.55	13.25	13.95	18.13
TiO2	0.93	0.82	0.82	0.86	0.97	0.87	0.89	0.85	0.91	1.14
Fe2O3	5.65	5.94	5.18	5.83	7.16	5.94	5.65	5.97	6.10	7.75
MgO	4.52	4.80	4.24	4.81	5.08	4.69	4.68	4.46	4.66	3.14
CaO	7.22	7.93	8.21	6.77	5.64	6.37	7.62	7.06	6.95	0.65
Na2O	1.86	1.60	1.86	1.85	1.78	1.90	1.91	1.77	1.77	1.50
K2O	2.22	2.54	2.18	2.12	2.65	2.18	2.00	2.06	2.16	2.59
MnO	0.11	0.09	0.09	0.11	0.09	0.08	0.08	0.09	0.10	0.12
P2O5	0.19	0.17	0.18	0.19	0.19	0.18	0.20	0.17	0.19	0.19
Total	94.07	96.29	95.15	96.32	97.41	96.67	95.87	94.59	95.35	98.79
As	0	3	0	2	6	0	0	0	0	3
Ba	275	327	279	406	341	397	300	424	461	364
Cl	32	34	44	39	25	48	36	28	33	24
Co	30	20	26	27	22	26	25	21	26	33
Cr	158	133	138	150	144	132	158	133	155	163
Cu	20	27	19	20	32	26	23	29	27	32
Ga	14	14	12	14	17	14	13	15	14	16
La	29	29	25	30	34	23	30	31	21	44
Ni	52	63	49	53	72	56	51	60	60	80
Nb	15	15	13	14	16	14	14	14	14	18
Pb	14	26	12	9	21	14	22	13	14	14
Rb	70	81	66	69	92	73	63	70	70	89
Sr	153	155	167	143	118	148	161	156	151	76
Sb	0	0	0	3	0	0	0	0	4	2
S	33	310	25	175	246	80	181	197	194	34
Th	7	10	7	13	10	11	14	9	12	8
V	109	104	99	102	120	97	99	99	101	123
Y	33	33	29	33	38	33	35	34	38	48
Zn	59	78	55	66	89	61	62	72	76	67
Zr	246	176	198	227	204	208	242	196	236	277
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.63

VAR. / ID.	DJR-812	DJR-813	DJR-899	DJR-900	DJR-901	DJR-902	DJR-908	DJR-909	DJR-910	DJR-911
East	34306	34289	33875	33843	33817	33823	34198	34210	34205	34103
North	60239	60250	59752	59780	59829	59853	59945	59995	60012	60110
SiO2	60.12	64.68	59.61	58.31	57.78	58.48	56.46	56.96	57.94	58.88
Al2O3	18.06	20.43	15.88	11.84	15.61	14.89	14.82	14.06	15.31	16.08
TiO2	1.11	0.97	0.93	0.69	0.87	0.94	0.81	0.74	0.88	1.04
Fe2O3	8.09	5.84	7.03	4.72	6.15	6.16	6.09	6.02	6.50	7.44
MgO	4.86	1.91	4.85	4.56	4.77	4.42	4.81	4.30	5.36	4.53
CaO	0.23	3.08	4.44	8.95	7.07	6.98	7.97	9.55	6.18	4.92
Na2O	1.26	0.71	1.94	1.89	1.49	1.72	1.64	1.20	1.67	1.28
K2O	3.09	1.81	2.37	2.05	2.66	2.49	2.38	2.25	2.36	2.29
MnO	0.09	0.11	0.11	0.18	0.17	0.08	0.08	0.10	0.10	0.10
P2O5	0.18	0.19	0.19	0.16	0.19	0.20	0.16	0.17	0.19	0.19
Total	97.09	99.73	97.35	93.35	96.76	96.36	95.22	95.35	96.49	96.75
As	4	11	7	5	5	8	13	0	0	4
Ba	395	249	349	201	398	271	594	421	305	316
Cl	13	23	0	71	0	24	14	15	0	8
Co	30	30	27	23	28	26	26	21	27	27
Cr	151	145	135	117	130	162	121	106	126	205
Cu	37	29	38	16	24	20	24	23	30	21
Ga	18	12	14	11	16	15	14	13	15	15
La	34	38	27	31	34	36	32	32	32	45
Ni	82	63	71	42	59	63	62	63	64	62
Nb	19	14	15	10	16	15	13	14	14	13
Pb	10	15	11	11	12	11	20	15	30	12
Rb	112	59	79	57	88	79	75	70	81	69
Sr	51	173	91	113	98	134	159	160	109	47
Sb	2	3	0	12	0	0	0	2	0	0
S	0	28	69	10	67	26	157	177	18	15
Th	10	10	4	7	10	12	10	0	9	9
V	126	101	113	81	114	119	112	90	108	120
Y	43	34	32	24	29	31	32	27	30	33
Zn	91	66	81	45	73	69	65	68	80	64
Zr	221	231	189	163	182	233	161	170	188	315
Tl	0	0	0	0	1	3	3	0	0	2

TABLE 4.63

VAR. / ID.	DJR-944	DJR-945	DJR-948	DJR-949	DJR-950	DJR-951	DJR-952
East	33516	33522	33552	33582	33606	33635	33655
North	59609	59581	59554	59523	59510	59510	59507
SiO2	57.49	58.67	57.48	56.90	58.67	55.82	56.73
Al2O3	13.47	14.28	13.57	16.59	15.81	16.52	16.44
TiO2	0.79	0.75	0.76	0.82	0.90	0.97	0.97
Fe2O3	5.33	5.25	5.67	5.02	6.45	7.93	7.65
MgO	3.85	3.33	4.40	3.50	5.29	5.30	5.83
CaO	9.17	9.26	8.51	9.24	4.87	3.80	4.75
Na2O	1.86	1.47	1.85	1.18	1.63	1.29	1.51
K2O	1.97	2.20	1.97	2.23	2.53	3.09	2.87
MnO	0.17	0.12	0.09	0.09	0.07	0.06	0.07
P2O5	0.18	0.18	0.17	0.18	0.18	0.17	0.17
Total	94.28	95.51	94.47	95.75	96.40	94.95	96.99
As	0	2	10	0	1	12	12
Ba	343	216	327	255	271	436	373
Cl	7	45	10	89	24	0	17
Co	22	24	20	17	30	28	24
Cr	130	132	112	141	146	140	141
Cu	30	38	23	18	26	37	39
Ga	13	14	14	13	14	17	18
La	24	34	33	25	37	41	35
Ni	49	37	54	40	66	85	81
Nb	12	11	12	11	13	17	16
Pb	13	12	22	13	14	22	17
Rb	60	65	61	59	79	112	103
Sr	157	109	148	157	85	103	123
Sb	0	0	0	0	0	0	0
S	106	152	84	176	99	17	763
Th	8	5	3	9	7	15	14
V	101	91	95	99	118	134	128
Y	28	24	26	27	28	34	31
Zn	63	63	81	36	77	104	94
Zr	196	208	172	205	195	185	181
Tl	0	0	2	0	0	0	0

TABLE 4.63

VAR. / ID.	DJR-1	DJR-2	DJR-3	DJR-4	DJR-5	DJR-6	DJR-7	DJR-8	DJR-9	DJR-10
East	33555	33535	33500	33464	33447	33388	33409	33370	33358	33330
North	59802	59800	59778	59755	59736	59666	59650	59615	59598	59563
SiO2	62.49	56.08	58.36	56.79	56.24	52.14	56.42	59.95	59.13	56.92
Al2O3	18.03	13.72	13.81	16.60	11.68	10.86	15.10	14.48	12.62	14.44
TiO2	1.07	0.76	0.92	1.01	0.88	0.68	0.90	0.85	1.06	0.81
Fe2O3	6.98	4.74	6.25	7.64	5.85	4.12	6.73	5.89	5.93	6.11
MgO	4.71	4.05	3.58	5.42	4.30	2.96	5.42	2.78	4.53	3.49
CaO	0.23	10.64	6.91	4.30	10.59	16.61	6.60	7.87	9.11	8.55
Na2O	1.86	1.74	1.88	1.46	1.58	1.65	1.61	1.86	1.88	1.56
K2O	2.58	2.21	2.11	2.81	1.40	1.62	2.11	2.17	1.69	1.85
MnO	0.05	0.13	0.11	0.10	0.12	0.17	0.08	0.10	0.10	0.09
P2O5	0.18	0.19	0.21	0.19	0.18	0.18	0.18	0.19	0.21	0.18
Total	98.18	94.26	94.14	96.32	92.82	90.99	95.15	96.14	96.26	94.00
As	0	0	1	8	0	0	0	0	0	0
Ba	320	248	353	392	222	179	300	317	199	287
Cl	0	59	6	25	76	64	46	89	79	39
Co	41	34	32	27	39	26	27	32	45	32
Cr	165	116	125	144	181	105	125	130	256	132
Cu	19	36	20	38	30	51	31	13	16	10
Ga	16	14	15	19	12	11	17	13	13	13
La	39	38	39	48	35	34	31	30	44	33
Ni	65	48	64	82	45	43	65	55	53	48
Nb	16	13	16	16	15	12	16	14	18	13
Pb	13	15	36	49	13	12	12	12	16	14
Rb	86	74	71	96	44	51	70	68	57	56
Sr	55	188	98	98	156	187	134	103	156	176
Sb	3	0	0	0	3	0	0	0	0	0
S	4	25	8	19	33	71	7	0	22	16
Th	6	7	10	3	10	0	5	5	15	1
V	112	87	101	125	101	80	110	102	123	89
Y	30	29	37	37	28	29	25	26	34	25
Zn	77	64	94	99	61	51	75	54	72	30
Zr	222	194	219	204	295	178	186	224	436	194
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-11	DJR-12	DJR-13	DJR-14	DJR-16	DJR-29	DJR-30	DJR-31	DJR-32	DJR-33
East	33321	33310	33271	32997	32998	33102	33108	33114	33111	33093
North	59542	59522	59507	59661	59273	59635	59631	59622	59589	59586
SiO2	61.99	57.74	63.86	60.22	61.85	58.55	63.06	60.58	58.86	57.03
Al2O3	13.41	17.28	13.02	15.40	13.52	11.97	18.26	12.44	13.85	14.05
TiO2	0.81	1.03	0.72	0.89	0.87	0.67	1.14	0.79	0.83	0.70
Fe2O3	5.12	7.95	5.12	6.70	5.59	4.82	7.23	5.26	5.58	5.79
MgO	3.68	5.35	3.78	5.30	3.91	3.60	4.55	4.02	4.02	3.61
CaO	7.64	3.21	6.78	4.27	6.53	11.77	0.29	8.43	8.42	11.01
Na2O	1.78	1.28	2.31	1.48	2.27	1.66	1.44	1.67	1.74	0.41
K2O	1.86	2.89	1.60	2.47	1.75	1.79	3.24	1.84	2.10	1.87
MnO	0.10	0.07	0.08	0.09	0.08	0.12	0.04	0.09	0.10	0.11
P2O5	0.18	0.18	0.17	0.18	0.19	0.19	0.24	0.18	0.20	0.17
Total	96.57	96.98	97.44	97.00	96.56	95.14	99.49	95.30	95.70	94.75
As	0	0	0	0	0	0	2	0	0	0
Ba	179	375	176	262	239	203	256	246	272	218
Cl	146	12	62	15	72	56	25	0	55	57
Co	38	32	42	29	36	24	30	30	25	35
Cr	154	140	109	147	165	107	278	187	140	136
Cu	7	7	10	23	20	19	15	11	13	14
Ga	12	19	13	17	12	12	17	12	14	12
La	39	31	29	31	41	28	47	43	36	32
Ni	61	82	45	73	46	51	79	53	65	76
Nb	14	17	12	15	14	14	17	13	15	11
Pb	16	14	15	14	14	10	12	16	15	16
Rb	60	107	55	82	58	59	108	59	72	58
Sr	233	69	153	87	125	165	44	138	134	56
Sb	0	2	0	3	6	0	0	0	0	0
S	41	0	11	29	86	102	46	13	25	23
Th	8	6	7	7	4	6	14	6	7	8
V	90	122	86	109	105	87	124	93	95	79
Y	26	27	26	28	29	29	32	30	30	28
Zn	45	86	51	78	52	53	85	54	61	43
Zr	240	193	201	188	274	180	290	271	232	231
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-34	DJR-35	DJR-36	DJR-37	DJR-38	DJR-39	DJR-40	DJR-41	DJR-42	DJR-43
East	33087	33082	33070	33055	33047	33037	33028	33018	32990	32994
North	59572	59564	59555	59550	59546	59543	59538	59534	59596	59578
SiO2	57.15	63.64	61.68	59.97	60.82	60.31	60.37	59.11	58.51	59.30
Al2O3	12.67	15.42	11.42	10.90	15.16	13.72	13.96	14.33	12.16	11.11
TiO2	0.75	0.90	0.72	0.75	0.98	0.72	0.83	0.82	0.73	0.69
Fe2O3	5.20	6.01	4.78	4.83	6.57	5.38	5.93	6.26	4.85	4.58
MgO	4.13	4.77	3.80	3.90	5.39	4.39	4.82	4.68	4.05	4.04
CaO	10.17	3.33	8.47	11.07	3.54	7.77	6.28	6.74	9.73	11.81
Na2O	1.25	1.36	2.04	1.58	1.59	1.42	1.82	1.53	1.67	1.58
K2O	2.02	2.31	1.49	1.42	2.44	2.35	2.06	2.36	1.81	1.63
MnO	0.11	0.06	0.10	0.10	0.06	0.11	0.08	0.08	0.08	0.10
P2O5	0.17	0.19	0.17	0.17	0.19	0.17	0.19	0.18	0.17	0.18
Total	93.62	97.99	94.67	94.69	96.74	96.34	96.34	96.09	93.76	95.02
As	0	0	0	0	0	0	0	0	0	0
Ba	204	259	230	191	260	189	218	194	239	160
Cl	10	52	13	71	8	53	33	25	12	45
Co	30	44	29	30	28	27	26	28	32	39
Cr	141	165	140	179	156	121	128	134	132	171
Cu	25	36	18	46	23	18	20	17	15	8
Ga	11	15	13	10	16	12	15	15	12	12
La	32	27	32	26	36	29	34	34	33	34
Ni	56	67	51	48	74	58	61	64	51	49
Nb	13	15	13	12	15	13	15	15	12	13
Pb	13	12	9	14	11	12	14	15	12	13
Rb	65	77	48	48	84	76	69	79	56	54
Sr	124	77	133	161	77	115	120	112	151	166
Sb	0	0	0	0	0	0	0	0	3	0
S	13	8	5	53	0	29	21	14	21	35
Th	5	8	7	3	8	3	6	2	9	8
V	90	96	74	89	111	91	99	107	89	78
Y	27	29	27	25	29	26	27	29	24	28
Zn	59	68	55	50	71	56	63	70	49	56
Zr	215	241	248	277	235	183	225	208	215	294
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-44	DJR-45	DJR-46	DJR-47	DJR-48	DJR-49	DJR-50	DJR-51	DJR-52	DJR-53
East	33006	33010	33002	32980	32911	32960	32964	33120	33116	33114
North	59553	59525	59502	59448	59478	59390	59370	59666	59658	59659
SiO2	59.16	60.15	56.98	59.13	55.62	54.93	60.38	57.50	62.39	61.09
Al2O3	12.32	12.03	12.88	13.08	11.95	14.53	13.86	12.38	13.66	14.78
TiO2	0.86	0.75	0.80	0.74	0.80	0.69	0.86	0.88	0.73	0.83
Fe2O3	5.28	5.10	5.30	5.31	4.78	5.63	6.34	5.62	5.16	5.43
MgO	4.23	4.10	4.55	4.08	3.81	4.20	4.92	4.42	3.81	3.99
CaO	8.58	9.05	9.51	8.04	13.07	11.30	5.42	7.07	7.21	6.96
Na2O	1.63	1.81	1.57	1.85	1.52	0.35	1.65	1.39	1.91	0.67
K2O	1.86	1.71	1.92	2.02	1.89	2.36	2.03	1.98	2.01	2.09
MnO	0.08	0.09	0.08	0.10	0.14	0.12	0.07	0.09	0.08	0.08
P2O5	0.20	0.18	0.18	0.18	0.20	0.16	0.19	0.20	0.17	0.19
Total	94.20	94.97	93.77	94.53	93.78	94.27	95.72	93.51	97.13	96.11
As	0	0	0	0	0	0	0	10	1	5
Ba	185	180	214	233	200	282	213	218	212	248
Cl	21	105	8	0	32	113	20	11	48	41
Co	32	36	27	25	22	31	28	27	27	36
Cr	187	156	136	140	221	140	292	223	116	169
Cu	19	9	32	25	13	7	20	9	16	18
Ga	12	12	13	13	12	11	14	12	12	13
La	47	32	31	31	40	23	33	38	26	26
Ni	52	53	60	57	50	60	64	55	55	59
Nb	15	13	13	13	14	12	14	15	13	13
Pb	15	16	13	13	15	14	13	13	14	12
Rb	61	55	62	68	62	69	69	65	64	67
Sr	163	142	192	145	193	175	128	134	117	76
Sb	0	0	0	0	0	6	0	2	0	11
S	5	28	0	24	26	6	28	6	17	22
Th	7	6	7	12	8	5	4	9	7	7
V	106	88	90	89	101	89	98	103	85	91
Y	32	27	28	26	27	23	26	29	26	23
Zn	56	53	63	58	51	52	64	60	55	65
Zr	319	258	234	205	279	206	249	340	192	254
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-54	DJR-55	DJR-56	DJR-57	DJR-58	DJR-59	DJR-60	DJR-61	DJR-62	DJR63
East	33109	33105	33102	33082	33066	33059	33037	33020	33004	33140
North	59661	59671	59678	59692	59698	59698	59698	59698	59694	59686
SiO2	56.88	59.31	60.38	60.78	57.69	57.16	60.54	62.76	57.87	57.19
Al2O3	11.24	13.43	11.94	12.29	12.62	12.15	14.82	12.55	12.81	12.24
TiO2	0.64	0.79	0.65	0.72	0.72	0.66	0.88	0.71	0.68	0.64
Fe2O3	4.71	5.86	4.89	4.71	5.08	4.94	6.46	5.01	4.88	5.47
MgO	3.46	4.86	4.17	4.10	3.60	4.25	5.02	4.47	4.16	3.72
CaO	12.18	7.39	9.68	9.54	9.73	10.57	4.84	7.40	10.13	12.26
Na2O	1.45	1.48	1.84	1.59	1.83	1.62	1.46	1.78	1.56	0.10
K2O	1.35	1.81	1.66	1.84	1.55	1.75	2.38	1.79	1.95	2.48
MnO	0.11	0.10	0.10	0.08	0.10	0.09	0.07	0.08	0.11	0.14
P2O5	0.17	0.19	0.17	0.18	0.18	0.16	0.19	0.17	0.17	0.16
Total	92.19	95.22	95.48	95.83	93.10	93.35	96.66	96.72	94.32	94.40
As	1	0	0	0	0	0	0	0	0	33
Ba	189	209	194	263	175	189	285	183	158	211
Cl	14	46	36	89	38	26	47	102	45	0
Co	24	25	29	30	29	23	24	33	23	15
Cr	114	128	108	149	125	198	136	132	191	151
Cu	22	13	24	18	15	14	22	17	13	14
Ga	11	13	12	12	12	13	16	12	13	13
La	35	26	34	29	33	30	35	31	37	29
Ni	43	53	50	49	53	52	72	53	60	56
Nb	12	13	13	13	13	13	15	13	11	13
Pb	10	17	11	16	11	16	16	14	10	12
Rb	42	60	53	59	50	54	79	60	58	90
Sr	147	105	118	159	116	149	124	154	115	88
Sb	2	0	4	0	0	3	0	2	0	26
S	31	4	6	40	0	10	19	0	21	0
Th	4	4	1	6	3	5	8	5	2	7
V	75	82	74	91	84	86	104	84	78	74
Y	25	29	28	28	24	26	28	21	24	24
Zn	47	59	58	51	54	57	76	52	53	40
Zr	195	210	173	256	203	194	204	188	181	150
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR64	DJR65	DJR66	DJR-700	DJR-702	DJR-703	DJR-704	DJR-705	DJR-706	DJR-707
East	33140	33140	33140	32742	34361	34287	34276	34284	34197	34165
North	59686	59686	59686	59175	60352	60479	60483	60490	60505	60536
SiO2	50.69	49.91	57.00	53.32	58.58	58.15	55.60	55.70	57.88	57.94
Al2O3	9.93	7.76	12.77	11.91	17.31	16.20	17.44	15.29	13.84	15.06
TiO2	0.55	0.41	0.79	0.66	0.94	0.90	0.97	0.87	0.77	0.91
Fe2O3	6.28	5.85	5.98	4.53	7.89	7.18	8.30	6.85	5.37	6.40
MgO	5.87	6.79	3.78	3.81	5.46	5.20	5.40	5.60	4.20	5.81
CaO	18.35	21.89	11.91	15.17	3.44	3.58	3.20	6.47	7.71	5.54
Na2O	0.05	0.06	0.05	1.49	1.38	1.67	1.03	1.30	1.63	1.50
K2O	2.50	1.83	3.23	1.87	2.99	2.40	3.36	2.62	2.31	2.35
MnO	0.18	0.22	0.16	0.13	0.09	0.14	0.11	0.09	0.16	0.11
P2O5	0.12	0.11	0.16	0.17	0.17	0.19	0.17	0.18	0.17	0.19
Total	94.52	94.83	95.83	93.06	98.25	95.61	95.58	94.97	94.04	95.81
As	23	13	25	1	7	4	8	5	0	0
Ba	233	215	204	571	462	327	483	324	287	304
Cl	0	0	0	53	29	26	30	36	29	24
Co	19	11	14	21	28	34	30	26	28	26
Cr	87	71	108	121	141	123	145	129	109	136
Cu	20	12	21	61	35	38	46	40	22	24
Ga	13	10	15	12	18	14	18	16	13	13
La	25	16	24	28	32	32	43	33	24	32
Ni	55	44	56	49	86	76	89	72	52	62
Nb	10	8	14	13	16	15	16	16	15	13
Pb	11	15	11	11	10	13	15	16	16	15
Rb	86	60	109	58	106	82	123	90	73	78
Sr	148	156	90	157	76	88	65	108	146	111
Sb	31	22	29	0	0	0	16	0	2	2
S	0	0	0	196	4	36	19	33	31	34
Th	1	2	5	11	12	9	14	14	9	14
V	77	51	90	88	126	114	142	107	101	115
Y	23	28	22	31	37	33	41	35	32	34
Zn	49	43	39	52	94	93	101	103	65	92
Zr	110	87	157	175	160	167	169	162	170	192
Il	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-708	DJR-709	DJR-710	DJR-711	DJR-712	DJR-713	DJR-714	DJR-715	DJR-716	DJR-717
East	34168	34105	34101	34107	34109	34084	34044	34046	34007	34002
North	60540	60647	60652	60654	60659	60685	60735	60730	60778	60772
SiO2	57.89	59.29	58.19	60.53	59.89	61.54	58.04	58.07	55.78	55.66
Al2O3	16.80	11.85	13.79	18.66	14.69	13.22	13.14	12.40	11.74	11.61
TiO2	0.98	0.75	0.79	1.11	0.78	0.79	0.75	0.64	0.66	0.66
Fe2O3	7.40	5.10	5.51	8.57	5.46	5.32	5.40	4.19	4.67	4.45
MgO	6.21	3.67	4.17	5.48	4.29	4.47	4.34	3.48	4.20	3.41
CaO	2.89	6.40	8.01	0.17	6.73	5.19	8.63	11.71	12.26	11.97
Na2O	1.19	1.52	1.68	1.15	1.62	1.62	1.57	1.95	1.46	1.57
K2O	3.08	2.05	2.15	3.49	2.36	2.01	2.04	1.93	1.80	1.88
MnO	0.07	0.11	0.10	0.08	0.15	0.10	0.11	0.21	0.10	0.20
P2O5	0.19	0.17	0.18	0.21	0.19	0.20	0.18	0.17	0.17	0.18
Total	96.70	90.91	94.57	99.45	96.16	94.46	94.20	94.75	92.84	91.59
As	4	0	4	5	0	0	1	0	0	0
Ba	372	222	259	365	282	227	236	188	209	222
Cl	31	46	47	21	47	38	30	37	45	73
Co	29	25	24	33	23	27	16	22	23	20
Cr	130	132	121	159	115	134	130	104	127	112
Cu	47	18	29	41	52	20	21	10	18	18
Ga	18	11	13	20	14	12	11	12	11	9
La	45	33	30	41	34	36	35	24	19	29
Ni	81	51	58	97	63	56	58	40	51	51
Nb	17	12	13	18	13	11	13	11	13	10
Pb	16	16	10	12	16	13	13	13	16	16
Rb	102	64	69	133	73	63	60	57	55	57
Sr	75	107	128	33	108	93	122	170	151	131
Sb	4	0	2	0	0	0	0	4	0	0
S	0	0	29	0	30	13	30	112	18	14
Th	9	4	14	18	7	7	4	3	2	7
V	130	92	94	149	103	92	98	77	91	86
Y	43	30	35	28	34	33	31	26	28	32
Zn	88	68	65	98	89	70	71	39	68	54
Zr	169	222	191	192	166	196	192	151	179	165
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-720	DJR-721	DJR-722	DJR-723	DJR-724	DJR-726	DJR-727	DJR-728	DJR-729	DJR-730
East	34020	33995	34001	34006	34004	34118	34112	34111	34120	34166
North	60927	60895	60888	60869	60823	60562	60543	60533	60511	60493
SiO2	58.08	58.14	58.90	59.17	62.24	61.96	58.78	57.98	61.25	57.37
Al2O3	12.22	12.44	12.53	12.37	13.52	14.90	12.47	14.99	15.98	13.95
TiO2	0.67	0.69	0.68	0.72	0.75	0.87	0.89	0.91	1.10	0.86
Fe2O3	4.76	4.77	5.00	4.85	4.95	5.52	5.56	6.43	6.95	5.71
MgO	4.13	4.02	4.00	4.07	3.93	3.53	4.26	5.06	5.16	4.75
CaO	9.48	9.73	9.60	9.46	6.12	5.18	8.90	5.61	2.18	8.32
Na2O	1.65	1.60	1.73	1.67	1.78	1.45	1.50	1.79	1.89	1.67
K2O	1.96	1.91	1.87	1.87	2.08	2.44	1.90	2.24	2.21	2.26
MnO	0.09	0.10	0.12	0.10	0.17	0.07	0.09	0.09	0.14	0.08
P2O5	0.16	0.17	0.18	0.17	0.18	0.19	0.19	0.20	0.22	0.19
Total	93.20	93.57	94.61	94.45	95.72	96.11	94.54	95.30	97.08	95.16
As	0	0	0	3	0	2	3	0	3	5
Ba	202	242	255	196	225	365	217	284	323	231
Cl	31	37	34	40	38	33	44	20	42	34
Co	26	23	27	30	27	24	33	27	32	27
Cr	123	129	123	155	134	161	185	133	202	139
Cu	14	16	16	18	15	17	16	19	20	17
Ga	12	11	12	11	12	14	10	15	13	12
La	27	26	26	29	23	39	41	31	40	34
Ni	49	50	52	50	47	70	47	65	59	50
Nb	11	11	11	11	11	14	15	15	14	19
Pb	15	13	16	12	17	8	15	16	14	12
Rb	57	58	56	54	59	77	58	73	69	70
Sr	131	135	132	117	107	93	129	111	66	152
Sb	0	0	0	0	0	5	3	0	0	0
S	0	18	30	0	15	0	7	39	0	0
Th	9	12	9	6	2	8	9	10	11	13
V	88	88	81	85	93	96	108	115	123	105
Y	28	31	27	32	33	37	36	32	37	34
Zn	63	68	61	57	87	63	52	88	67	62
Zr	197	184	188	215	196	221	325	191	280	207
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-731	DJR-732	DJR-733	DJR-734	DJR-735	DJR-736	DJR-737	DJR-738	DJR-739	DJR-740
East	34211	34215	34212	34373	34396	34398	34400	34428	34395	34372
North	60557	60555	60568	60750	60734	60724	60715	60693	60651	60598
SiO2	56.57	60.26	57.46	53.77	59.72	54.74	61.05	58.79	60.27	57.49
Al2O3	10.75	15.06	14.84	13.98	15.57	13.41	14.38	14.63	14.67	13.45
TiO2	0.59	0.93	0.92	0.77	0.93	0.76	0.91	0.95	0.97	0.89
Fe2O3	4.31	6.38	6.40	6.24	6.16	5.59	5.96	6.68	6.42	5.81
MgO	4.44	4.67	5.28	4.79	4.75	4.71	5.19	5.34	5.32	4.43
CaO	13.40	4.49	6.03	10.07	5.03	11.34	4.93	4.13	4.47	9.06
Na2O	1.71	1.75	1.57	1.24	1.58	1.47	1.82	1.72	1.91	1.72
K2O	1.55	2.27	2.43	2.37	2.57	2.17	2.06	2.04	2.00	1.89
MnO	0.14	0.08	0.09	0.12	0.09	0.13	0.09	0.09	0.09	0.10
P2O5	0.15	0.20	0.19	0.17	0.19	0.18	0.19	0.20	0.19	0.20
Total	93.61	96.09	95.21	93.52	96.59	94.50	96.58	94.57	96.31	95.04
As	0	0	1	0	3	2	2	0	3	4
Ba	247	315	274	355	269	326	443	304	285	247
Cl	61	36	22	32	33	32	39	31	41	40
Co	29	29	27	26	30	25	28	28	34	28
Cr	105	129	138	111	135	120	144	143	166	156
Cu	12	23	22	54	21	32	16	23	15	23
Ga	10	13	15	16	15	13	13	14	14	12
La	25	35	35	28	32	24	30	42	35	34
Ni	33	56	56	63	57	59	50	56	56	52
Nb	9	14	15	15	14	14	14	15	14	14
Pb	14	14	17	13	10	13	11	14	12	11
Rb	46	72	77	79	84	70	62	73	64	61
Sr	136	93	111	146	97	148	70	100	117	132
Sb	0	2	0	0	2	0	0	2	0	2
S	16	0	10	17	0	50	97	0	0	0
Th	5	15	6	6	11	8	13	10	13	11
V	79	105	110	105	112	97	105	110	108	101
Y	22	29	34	32	34	36	33	33	29	37
Zn	39	73	75	79	63	65	59	70	68	62
Zr	164	206	209	157	210	170	230	235	244	239
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-741	DJR-742	DJR-743	DJR-751	DJR-764	DJR-765	DJR-766	DJR-767	DJR-768	DJR-769
East	34189	34199	34172	33560	34540	34551	34544	34493	34488	34065
North	60538	60588	60614	59750	61066	61078	61072	61022	61012	60313
SiO2	56.51	56.29	59.11	58.19	54.10	55.34	46.19	58.19	57.97	56.85
Al2O3	13.13	13.19	11.90	12.90	12.45	12.57	14.93	13.45	12.80	13.21
TiO2	0.79	0.83	0.68	0.72	0.66	0.69	0.56	0.76	0.92	0.84
Fe2O3	5.18	5.70	4.79	5.09	5.10	5.14	6.42	5.56	5.71	5.37
MgO	4.31	4.43	3.92	4.27	4.23	4.48	1.60	4.23	4.54	4.25
CaO	9.56	8.21	11.03	10.84	14.42	13.19	24.36	9.62	9.81	9.92
Na2O	1.57	1.78	1.82	1.31	1.20	1.19	0.09	1.68	1.59	1.77
K2O	2.19	2.00	1.68	2.15	2.19	2.16	4.12	2.11	1.96	2.31
MnO	0.15	0.10	0.09	0.09	0.12	0.11	0.14	0.10	0.10	0.13
P2O5	0.18	0.17	0.18	0.17	0.17	0.16	0.14	0.18	0.20	0.19
Total	93.57	92.70	95.20	95.73	94.64	95.03	98.55	95.88	95.60	94.84
As	0	4	7	3	3	0	11	0	8	3
Ba	255	273	386	258	247	302	299	234	360	306
Cl	20	21	31	60	67	64	49	41	34	34
Co	23	26	31	19	23	19	22	25	30	26
Cr	125	151	114	130	113	121	116	128	197	125
Cu	19	17	16	28	32	26	22	18	26	21
Ga	12	12	10	12	13	11	13	13	13	14
La	33	31	31	32	37	28	31	25	28	27
Ni	48	50	40	53	56	56	62	53	52	49
Nb	13	15	12	14	13	13	11	13	17	15
Pb	17	12	13	11	11	14	39	16	35	16
Rb	69	64	52	65	68	69	95	65	62	77
Sr	171	140	167	143	205	228	92	140	151	151
Sb	0	3	0	2	0	0	0	0	0	0
S	9	4	84	31	59	69	57	10	181	0
Th	10	11	7	9	6	8	15	10	9	10
V	105	100	84	93	89	88	121	94	109	104
Y	34	32	28	32	33	33	29	31	39	37
Zn	81	57	47	62	62	58	91	56	60	58
Zr	198	218	187	184	154	174	101	186	305	214
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-770	DJR-771	DJR-772	DJR-773	DJR-774	DJR-775	DJR-776	DJR-777	DJR-783	DJR-784
East	34065	33649	33787	33814	33880	33918	33951	33967	33714	33562
North	60290	60117	60227	60264	60348	60389	60430	60450	59360	60236
SiO2	57.30	59.35	63.30	58.26	57.30	59.71	61.04	57.72	58.75	63.85
Al2O3	14.31	14.28	17.37	13.69	15.10	13.12	14.00	14.35	14.03	21.31
TiO2	0.93	1.01	1.02	0.78	0.89	0.76	0.81	0.86	0.87	1.07
Fe2O3	6.40	6.46	7.28	5.75	6.58	5.49	5.66	6.12	6.47	7.09
MgO	4.79	5.76	4.47	4.37	4.91	4.34	4.40	4.39	4.95	0.91
CaO	7.34	5.67	0.75	8.02	6.02	8.78	7.07	8.05	5.83	0.09
Na2O	1.72	1.85	1.51	1.80	1.48	1.69	1.53	1.29	1.69	0.76
K2O	2.42	2.04	2.62	1.92	2.55	1.98	2.33	2.39	2.21	2.95
MnO	0.10	0.09	0.10	0.13	0.10	0.10	0.10	0.09	0.08	0.19
P2O5	0.19	0.21	0.21	0.18	0.17	0.18	0.18	0.18	0.18	0.23
Total	95.50	96.72	98.63	94.90	95.10	96.15	97.12	95.44	95.06	98.45
As	5	2	2	0	3	5	0	0	0	36
Ba	349	263	317	268	301	259	242	262	371	291
Cl	36	30	30	25	50	37	48	56	30	16
Co	20	28	28	27	30	25	30	20	24	30
Cr	136	208	169	124	141	131	140	161	141	145
Cu	26	27	24	25	43	27	15	26	23	25
Ga	14	13	15	14	15	13	15	16	14	16
La	34	42	30	25	38	28	28	30	25	40
Ni	58	62	74	60	73	55	60	63	60	75
Nb	15	16	15	14	14	12	14	17	15	17
Pb	18	14	15	15	12	30	13	13	12	22
Rb	83	69	87	60	85	65	75	79	73	94
Sr	132	114	56	148	93	150	130	100	125	82
Sb	0	1	4	4	0	2	0	4	0	14
S	4	4	24	0	10	20	14	7	76	67
Th	8	10	19	9	4	8	12	11	8	14
V	109	115	117	97	106	91	104	106	99	110
Y	38	42	40	37	46	35	35	32	35	33
Zn	64	68	72	64	74	67	70	73	69	69
Zr	218	288	240	181	187	203	220	236	202	224
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-785	DJR-786	DJR-787	DJR-788	DJR-789	DJR-790	DJR-791	DJR-792	DJR-793	DJR-794
East	33551	33553	33555	33555	33503	33580	33596	33597	33620	33612
North	60259	60251	60240	60223	60255	60201	60179	60155	60132	60100
SiO2	61.51	60.49	54.19	56.00	58.26	61.28	57.79	59.87	57.20	62.50
Al2O3	14.65	18.03	14.85	15.46	17.19	13.99	13.52	13.40	12.48	15.52
TiO2	0.67	0.90	0.66	0.69	0.94	0.71	0.78	0.76	0.77	0.90
Fe2O3	6.91	6.98	7.07	6.97	7.59	5.32	5.59	5.45	5.35	6.83
MgO	2.74	2.54	3.27	3.58	4.28	1.27	3.94	4.33	3.90	5.36
CaO	7.83	5.36	10.88	10.68	4.94	9.16	8.76	8.96	11.87	3.40
Na2O	0.17	0.44	0.25	0.31	1.03	1.33	1.55	1.61	1.44	1.74
K2O	1.27	2.39	1.87	2.00	3.34	2.51	2.28	2.05	2.12	2.23
MnO	0.16	0.28	0.14	0.15	0.23	0.14	0.11	0.10	0.10	0.11
P2O5	0.15	0.18	0.16	0.16	0.18	0.18	0.17	0.17	0.17	0.19
Total	96.06	97.59	93.34	96.00	97.98	95.89	94.49	96.70	95.40	98.78
As	23	20	11	24	0	0	0	1	5	0
Ba	193	329	207	372	332	241	269	286	546	272
Cl	53	35	38	30	27	47	25	46	101	39
Co	34	27	33	29	23	26	23	25	27	28
Cr	124	143	118	117	142	126	123	138	170	151
Cu	22	24	30	29	37	16	25	24	12	26
Ga	10	13	12	12	17	10	13	13	11	14
La	35	33	29	23	31	32	28	31	32	32
Ni	59	57	65	68	81	50	60	60	57	72
Nb	11	14	12	12	17	11	14	14	14	14
Pb	20	16	25	53	15	13	15	14	16	14
Rb	37	72	50	62	115	69	74	69	68	76
Sr	116	97	170	164	88	91	131	160	192	76
Sb	24	9	17	14	1	7	0	0	0	0
S	211	117	48	179	14	6	0	12	123	0
Th	6	13	8	10	10	7	9	5	5	9
V	79	103	82	90	117	80	91	92	94	97
Y	29	37	30	33	35	33	35	36	33	38
Zn	69	57	76	73	84	53	61	64	62	66
Zr	179	215	168	159	181	190	190	192	209	197
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-795	DJR-796	DJR-797	DJR-798	DJR-799	DJR-800	DJR-801	DJR-802	DJR-803	DJR-804
East	34067	34078	34090	34100	34101	33552	33544	33538	33530	33522
North	60483	60478	60470	60464	60451	59938	59948	59963	59971	59983
SiO2	56.58	55.12	55.93	58.53	59.26	61.29	58.42	54.79	61.66	55.08
Al2O3	13.55	13.77	12.94	14.47	15.67	16.57	16.66	12.21	15.60	12.04
TiO2	0.85	0.82	0.79	0.84	0.99	1.04	0.99	0.82	1.03	0.76
Fe2O3	6.13	6.14	5.60	6.85	6.88	6.59	7.17	5.40	6.79	5.22
MgO	4.50	4.72	4.20	4.84	5.25	3.06	5.27	3.97	5.24	4.15
CaO	9.02	10.71	10.31	7.53	5.20	1.28	3.36	12.47	2.97	12.68
Na2O	1.57	1.49	1.58	1.30	1.70	1.91	1.50	1.72	1.91	1.75
K2O	2.04	2.22	1.99	2.37	2.39	2.36	2.69	1.69	2.29	1.58
MnO	0.13	0.16	0.13	0.14	0.10	0.33	0.27	0.14	0.12	0.15
P2O5	0.19	0.19	0.18	0.18	0.19	0.19	0.19	0.19	0.21	0.18
Total	94.56	95.34	93.65	97.05	97.63	94.62	96.52	93.42	97.82	93.59
As	2	2	0	4	3	2	4	3	4	0
Ba	267	282	235	261	310	413	370	258	319	234
Cl	29	59	26	29	27	16	25	26	28	37
Co	26	25	28	24	34	30	26	20	29	24
Cr	128	118	127	129	150	139	136	126	154	115
Cu	23	42	21	21	24	20	39	41	24	28
Ga	13	13	13	14	16	14	17	12	16	12
La	31	26	30	36	43	40	33	27	36	31
Ni	55	63	50	60	60	61	64	48	60	52
Nb	12	14	14	15	16	15	15	16	17	14
Pb	14	13	13	13	15	13	22	12	18	15
Rb	69	77	66	79	81	72	92	56	81	51
Sr	160	189	166	88	114	89	91	160	86	154
Sb	0	0	5	7	3	2	2	1	0	0
S	0	47	4	39	23	28	0	0	47	34
Th	10	9	7	5	11	12	14	7	7	8
V	94	96	92	91	111	109	117	84	108	91
Y	35	38	34	36	40	44	39	38	39	37
Zn	63	73	59	69	66	54	89	69	70	67
Zr	205	176	197	190	230	225	198	212	240	185
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-805	DJR-806	DJR-807	DJR-808	DJR-809	DJR-810	DJR-814	DJR-815	DJR-816	DJR-817
East	33520	33520	33510	33494	33473	33548	34274	34270	34257	34235
North	59996	60005	60015	60032	60031	60020	60267	60270	60290	60294
SiO2	59.52	58.45	55.80	55.69	55.67	61.37	61.86	60.94	59.69	57.57
Al2O3	16.32	16.69	13.85	13.12	16.09	15.54	15.72	19.02	14.37	14.88
TiO2	0.90	1.01	0.85	0.73	0.93	0.92	0.99	0.45	0.89	0.86
Fe2O3	6.32	7.42	6.12	5.62	8.97	6.49	6.49	5.44	6.31	6.31
MgO	2.22	4.92	5.00	3.32	5.05	3.83	4.65	2.11	4.77	4.70
CaO	7.36	4.32	9.72	10.94	5.85	4.43	3.63	3.81	6.02	8.19
Na2O	1.19	1.35	1.38	1.08	1.06	1.92	2.02	4.30	1.83	1.57
K2O	2.82	2.77	2.13	2.26	2.97	2.38	2.25	2.39	2.03	2.45
MnO	0.11	0.14	0.10	0.17	0.12	0.11	0.15	0.15	0.10	0.13
P2O5	0.19	0.20	0.18	0.16	0.19	0.19	0.20	0.10	0.19	0.19
Total	96.95	97.27	95.13	93.09	96.90	97.18	97.96	98.71	96.20	96.85
As	2	5	0	0	11	5	2	0	0	3
Ba	315	384	300	268	354	317	313	278	313	325
Cl	23	27	43	46	22	19	28	19	27	33
Co	34	21	26	23	28	28	26	27	29	25
Cr	161	157	135	129	144	134	154	63	142	129
Cu	25	26	26	35	52	22	24	14	23	37
Ga	15	16	12	12	18	14	13	24	17	16
La	31	27	27	29	37	27	30	56	27	30
Ni	77	74	58	56	85	68	61	30	61	62
Nb	15	17	15	14	17	14	15	107	15	16
Pb	24	11	14	13	12	12	16	14	13	11
Rb	89	94	68	73	108	80	74	97	67	87
Sr	74	78	151	99	95	83	92	129	125	149
Sb	0	1	0	3	13	0	0	0	0	0
S	5	0	0	0	7	0	6	10	9	24
Th	8	11	8	8	7	7	14	22	12	12
V	103	111	95	89	119	97	101	43	102	104
Y	36	43	38	34	43	39	45	64	38	40
Zn	72	81	75	57	97	73	67	89	64	75
Zr	225	207	205	175	179	187	248	578	206	194
Tl	0	0	0	0	0	0	0	0	0	0

VAR. / ID.	DJR-818	DJR-819	DJR-820	DJR-821	DJR-822	DJR-823	DJR-824	DJR-825	DJR-826	DJR-827
East	34210	34193	34173	34158	34125	34101	34076	34050	34120	34121
North	60294	60300	60314	60327	60329	60340	60350	60365	60443	60432
SiO2	57.50	56.24	56.52	59.99	57.47	58.64	62.39	56.96	58.37	57.29
Al2O3	14.08	13.73	18.53	14.74	15.48	13.78	13.28	15.22	13.90	13.39
TiO2	0.80	0.80	1.08	0.92	0.94	0.94	0.83	0.90	0.86	0.81
Fe2O3	5.88	5.91	9.10	6.21	7.17	6.14	5.41	6.66	5.92	5.61
MgO	3.83	4.56	5.80	4.57	5.55	4.68	3.82	5.30	4.86	3.52
CaO	9.79	9.35	2.17	6.40	6.16	8.06	6.87	7.89	7.84	11.02
Na2O	1.55	1.49	1.15	1.69	1.54	1.74	2.12	1.26	1.61	1.45
K2O	2.20	2.29	3.60	2.32	2.45	1.92	2.00	2.53	2.27	2.32
MnO	0.16	0.13	0.16	0.09	0.09	0.12	0.10	0.10	0.10	0.16
P2O5	0.18	0.18	0.17	0.19	0.19	0.21	0.18	0.18	0.18	0.18
Total	95.97	94.68	98.28	97.12	97.04	96.23	97.00	97.00	95.91	95.75
As	3	5	11	2	2	4	2	3	2	0
Ba	532	410	520	252	342	293	219	380	254	283
Cl	55	52	31	37	20	30	38	39	40	36
Co	29	22	32	26	28	27	23	27	29	27
Cr	137	128	158	145	137	156	150	145	138	142
Cu	34	33	46	24	34	34	19	38	25	22
Ga	13	14	21	15	16	13	12	15	13	12
La	32	27	35	33	35	31	31	25	27	27
Ni	61	59	90	54	66	56	44	63	55	47
Nb	14	15	18	15	17	15	13	16	13	14
Pb	12	12	10	14	13	13	18	13	18	14
Rb	68	77	136	80	87	65	66	88	78	73
Sr	118	171	60	162	115	147	121	133	146	147
Sb	9	0	4	4	0	0	0	0	0	0
S	79	75	0	4	42	22	16	38	13	0
Th	9	8	10	0	11	8	6	10	6	6
V	92	98	142	110	114	102	97	106	98	102
Y	33	35	36	37	37	19	31	37	36	37
Zn	66	66	99	67	90	72	53	75	64	51
Zr	199	184	176	229	201	247	205	200	217	227
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-828	DJR-829	DJR-830	DJR-831	DJR-832	DJR-833	DJR-834	DJR-835	DJR-836	DJR-837
East	34131	34149	34160	33930	33946	33955	33814	33784	33746	33707
North	60420	60410	60394	60653	60643	60630	60636	60627	60626	60633
SiO2	58.71	59.28	59.27	59.20	56.56	60.82	59.85	61.71	58.39	62.66
Al2O3	14.63	13.96	14.65	12.10	14.76	12.08	13.96	15.36	13.21	16.02
TiO2	0.91	0.96	0.92	0.71	0.80	0.79	0.89	0.91	0.76	1.00
Fe2O3	6.73	6.01	6.08	4.90	6.28	5.13	6.17	6.46	5.38	6.92
MgO	5.16	5.24	4.61	3.83	4.83	4.14	4.55	4.80	4.28	5.16
CaO	6.89	6.65	6.76	10.74	9.17	9.02	5.23	4.57	9.57	2.85
Na2O	1.73	1.90	1.77	1.68	1.29	1.77	1.71	1.64	1.60	1.72
K2O	2.03	2.16	2.23	1.80	2.57	1.85	2.13	2.31	2.02	2.49
MnO	0.13	0.08	0.10	0.11	0.13	0.09	0.10	0.10	0.12	0.08
P2O5	0.19	0.20	0.20	0.18	0.18	0.19	0.18	0.19	0.17	0.21
Total	97.11	96.44	96.59	95.25	96.57	95.88	94.77	98.05	95.50	99.11
As	1	7	3	4	5	3	5	3	3	3
Ba	340	273	266	242	300	388	246	279	218	295
Cl	30	28	22	27	26	14	22	15	18	30
Co	24	31	20	23	22	31	22	23	22	26
Cr	133	162	138	129	124	154	161	144	151	151
Cu	21	19	20	19	32	21	22	29	20	26
Ga	14	13	11	12	15	12	14	14	13	17
La	44	31	33	22	28	26	22	28	31	33
Ni	60	53	57	45	64	47	58	65	54	76
Nb	16	14	14	11	13	7	11	12	11	15
Pb	15	12	14	13	10	16	13	14	12	14
Rb	69	71	74	55	85	58	66	75	63	86
Sr	145	145	147	142	129	167	100	81	136	67
Sb	0	2	1	0	0	0	0	0	2	0
S	60	17	0	14	19	77	0	0	0	0
Th	9	10	9	4	8	10	6	8	5	10
V	105	110	105	86	105	88	99	104	89	113
Y	40	32	34	28	26	27	32	35	30	41
Zn	73	77	66	47	71	48	66	73	53	76
Zr	217	263	214	214	171	262	220	205	211	220
Tl	0	0	1	1	2	0	0	0	1	4

TABLE 4.64

VAR. / ID.	DJR-838	DJR-839	DJR-840	DJR-841	DJR-842	DJR-843	DJR-844	DJR-845	DJR-846	DJR-847
East	33684	33650	33619	33593	33569	33560	33530	33599	33865	33716
North	60630	60631	60630	60630	60600	60663	60678	60625	60614	60620
SiO2	64.93	65.94	59.74	57.04	58.78	57.96	59.95	59.65	62.42	61.35
Al2O3	16.19	16.06	13.77	13.34	13.26	12.76	18.93	14.79	13.58	15.31
TiO2	0.94	0.95	0.96	0.84	0.86	0.67	1.16	0.89	0.83	0.88
Fe2O3	7.08	6.74	6.52	6.00	5.71	4.87	9.49	6.31	5.70	6.49
MgO	4.22	3.61	4.72	4.97	4.62	4.44	4.30	4.55	4.62	5.06
CaO	0.29	1.42	4.88	8.47	8.58	10.55	0.13	5.83	6.12	4.12
Na2O	1.84	2.04	1.72	1.44	1.70	1.78	1.04	1.58	1.91	1.61
K2O	2.49	2.09	1.94	2.15	1.95	1.97	3.49	2.31	1.89	2.25
MnO	0.08	0.12	0.11	0.09	0.10	0.09	0.08	0.11	0.09	0.05
P2O5	0.20	0.20	0.20	0.19	0.19	0.16	0.20	0.18	0.18	0.19
Total	98.26	99.17	94.56	94.53	95.75	95.25	98.77	96.20	97.34	97.31
As	2	2	4	3	5	2	0	2	5	2
Ba	244	263	234	233	199	208	372	282	221	275
Cl	13	32	32	24	31	17	0	57	34	14
Co	30	31	31	21	25	21	29	26	27	27
Cr	138	177	195	133	166	126	163	152	153	134
Cu	26	23	23	20	23	18	42	23	22	25
Ga	14	14	13	14	12	12	21	13	14	14
La	34	35	33	35	33	29	39	34	35	25
Ni	70	69	63	62	53	51	100	65	51	61
Nb	14	14	12	13	11	12	17	14	10	13
Pb	13	15	14	16	12	13	17	15	14	16
Rb	86	66	63	69	61	62	127	75	59	74
Sr	46	63	94	136	134	167	35	99	110	85
Sb	0	0	0	0	0	0	0	1	0	0
S	0	11	0	13	33	0	22	0	0	0
Th	10	10	6	11	9	10	13	16	9	11
V	102	99	101	101	98	72	144	98	96	100
Y	30	32	33	30	30	27	36	35	36	29
Zn	78	60	70	70	61	52	107	65	56	62
Zr	215	242	267	212	243	188	195	218	231	202
Tl	1	0	0	0	0	0	5	0	0	0

TABLE 4.64

VAR. / ID.	DJR-848	DJR-849	DJR-850	DJR-851	DJR-852	DJR-853	DJR-854	DJR-855	DJR-856	DJR-857
East	33036	33121	33940	33924	33897	33872	33872	33842	33826	33828
North	59759	59738	60622	60641	60659	60685	60720	60760	60770	60798
SiO2	61.46	60.23	60.16	55.83	57.91	59.02	59.04	60.77	58.29	59.73
Al2O3	15.02	12.57	13.78	15.54	13.86	14.20	16.68	15.74	13.89	12.55
TiO2	0.86	0.76	0.86	0.92	0.85	0.86	0.83	0.92	0.82	0.83
Fe2O3	6.20	5.27	5.95	7.20	6.05	5.97	7.03	6.33	5.68	5.40
MgO	4.52	3.92	4.02	5.37	4.47	4.56	3.94	4.70	4.25	4.69
CaO	5.23	8.68	7.74	5.28	6.93	7.61	7.24	5.05	8.13	8.99
Na2O	1.88	1.66	1.77	1.42	1.56	1.68	0.52	1.37	1.29	1.55
K2O	2.13	1.97	1.97	2.65	2.14	2.17	2.64	2.22	2.34	1.95
MnO	0.12	0.10	0.11	0.08	0.11	0.11	0.11	0.12	0.12	0.08
P2O5	0.18	0.18	0.19	0.17	0.18	0.19	0.17	0.20	0.18	0.18
Total	97.60	95.34	96.55	94.46	94.06	96.37	98.20	97.42	94.99	95.95
As	5	2	3	7	3	7	0	1	3	3
Ba	275	197	260	336	240	240	314	246	231	197
Cl	21	47	28	48	33	18	17	15	47	31
Co	28	24	27	25	23	23	28	25	27	26
Cr	135	141	148	130	139	138	128	140	139	199
Cu	17	24	21	28	23	22	35	24	18	22
Ga	14	12	12	16	13	13	15	14	13	11
La	27	30	34	32	26	28	37	30	32	32
Ni	61	48	52	68	56	50	84	64	65	47
Nb	13	12	14	15	12	13	12	12	13	12
Pb	10	12	14	16	14	10	15	15	12	17
Rb	68	62	61	87	65	68	80	68	75	58
Sr	93	131	117	90	102	110	67	87	107	131
Sb	0	3	2	0	0	0	0	0	2	0
S	0	0	13	34	0	13	11	14	35	28
Th	8	9	7	5	9	7	5	5	7	12
V	101	83	97	107	100	99	104	94	100	94
Y	34	30	31	29	33	33	30	36	30	29
Zn	66	50	63	78	63	61	71	78	71	61
Zr	194	216	266	181	204	200	172	221	216	248
Tl	0	0	0	0	0	0	0	3	0	0

TABLE 4.64

XRF Analyses: Lower Calcareous Formation (GWKE19)

Part 19

VAR. / ID.	DJR-858	DJR-860	DJR-861	DJR-862	DJR-863	DJR-864	DJR-865	DJR-866	DJR-867	DJR-868
East	33820	33810	33133	33149	33176	33205	33220	33240	33230	33196
North	60850	60870	59739	59738	59734	59726	59708	59728	59775	59778
SiO2	57.98	60.32	61.56	60.08	58.77	61.46	59.74	59.98	58.59	59.12
Al2O3	16.92	14.98	14.56	14.62	14.99	16.53	16.33	15.57	13.54	15.21
TiO2	1.03	0.86	0.88	0.84	0.72	1.15	0.88	0.96	0.84	0.89
Fe2O3	12.09	6.46	6.20	5.91	5.29	7.37	5.69	6.40	5.84	6.50
MgO	6.32	5.02	4.35	4.54	3.77	4.14	3.10	5.03	3.99	4.96
CaO	0.66	5.51	3.78	5.89	9.84	0.76	7.27	4.74	7.28	6.30
Na2O	0.38	1.70	1.94	1.70	0.50	1.64	1.14	1.76	1.71	1.61
K2O	2.76	2.29	2.14	2.21	1.82	2.48	2.83	2.43	2.20	2.50
MnO	0.06	0.10	0.11	0.10	0.12	0.07	0.07	0.09	0.09	0.09
P2O5	0.17	0.19	0.20	0.18	0.17	0.21	0.19	0.19	0.18	0.18
Total	98.37	97.43	95.72	96.07	95.99	95.81	97.24	97.15	94.26	97.36
As	4	2	6	0	65	11	0	6	0	7
Ba	524	249	218	247	190	285	239	500	251	341
Cl	85	8	0	12	43	22	9	8	8	6
Co	23	24	22	22	19	32	26	29	25	23
Cr	148	140	130	136	117	193	146	141	141	140
Cu	11	20	23	26	39	13	25	22	22	34
Ga	17	13	15	14	12	16	15	14	13	14
La	34	29	25	28	29	38	32	38	35	34
Ni	82	68	59	61	41	73	66	59	56	69
Nb	14	13	14	12	11	16	13	13	12	14
Pb	42	12	11	16	11	11	13	13	15	0
Rb	93	74	69	67	58	82	85	78	72	84
Sr	29	96	87	115	98	55	99	97	115	107
Sb	0	0	0	3	17	0	0	0	2	0
S	56	19	0	0	307	5	29	94	0	46
Th	6	6	14	14	7	10	10	12	12	6
V	132	101	101	94	85	123	100	110	97	110
Y	24	29	30	33	30	39	31	21	35	31
Zn	103	73	64	64	28	82	63	67	60	75
Zr	179	201	211	198	187	321	224	234	220	199
Tl	0	0	0	0	2	3	2	0	0	2

TABLE 4.64

XRF Analyses: Lower Calcareous Formation (GWKE19)

Part 20

VAR. / ID.	DJR-869	DJR-870	DJR-871	DJR-872	DJR-873	DJR-874	DJR-875	DJR-876	DJR-877	DJR-878
East	33177	33161	33097	33070	33140	33242	33260	33174	32870	32904
North	59778	59782	59797	59795	59829	59935	59950	59832	60147	60143
SiO2	60.50	59.12	57.91	57.23	59.05	60.37	59.97	59.41	58.56	61.65
Al2O3	13.08	13.10	14.25	13.83	15.02	14.95	11.46	12.44	14.62	15.43
TiO2	0.80	0.78	0.82	0.69	0.86	0.95	0.75	0.73	0.81	0.87
Fe2O3	5.55	5.42	6.07	5.11	6.30	6.53	4.93	4.98	5.87	6.56
MgO	4.42	3.70	4.50	4.06	5.07	4.83	3.86	4.10	4.88	4.74
CaO	8.04	6.94	7.39	10.36	6.40	3.51	10.60	10.32	7.27	3.21
Na2O	1.77	1.87	1.44	0.98	1.62	1.63	1.72	1.71	1.70	1.60
K2O	1.96	2.03	2.40	2.17	2.39	2.14	1.62	1.86	2.29	2.60
MnO	0.10	0.10	0.10	0.13	0.11	0.12	0.12	0.11	0.10	0.09
P2O5	0.18	0.17	0.18	0.17	0.17	0.19	0.18	0.19	0.17	0.18
Total	96.40	93.23	95.06	94.73	96.99	95.22	95.21	95.85	96.27	96.93
As	4	2	3	5	4	7	1	5	2	0
Ba	230	236	281	218	262	272	264	251	233	260
Cl	7	20	24	18	16	0	14	19	29	16
Co	25	17	24	27	25	22	26	17	20	24
Cr	152	125	135	131	134	144	176	118	138	130
Cu	19	22	25	21	29	23	23	28	26	23
Ga	14	14	14	12	15	13	11	12	15	15
La	29	32	42	20	31	37	28	32	37	37
Ni	54	55	64	48	68	70	44	52	58	65
Nb	12	12	12	11	14	14	13	13	13	14
Pb	12	13	13	12	41	12	16	12	11	14
Rb	61	64	75	63	76	68	51	61	73	83
Sr	121	113	114	139	98	71	174	129	117	82
Sb	0	3	0	2	0	0	2	0	0	0
S	11	0	7	185	6	20	45	12	47	5
Th	5	3	11	6	0	10	13	9	9	12
V	96	91	102	84	105	112	89	84	100	98
Y	28	35	39	29	32	51	36	29	30	37
Zn	59	57	79	53	74	68	53	62	68	69
Zr	233	203	202	193	175	228	244	192	202	185
Tl	0	0	0	4	0	3	0	3	0	1

TABLE 4.64

VAR. / ID.	DJR-879	DJR-880	DJR-881	DJR-882	DJR-883	DJR-884	DJR-885	DJR-886	DJR-887	DJR-888
East	32910	32992	33110	33008	32960	32920	32858	32936	33005	33060
North	60142	60149	60064	60176	60200	60197	60207	60270	60305	60312
SiO2	59.16	59.59	59.10	60.60	56.96	58.53	59.51	56.93	59.53	59.85
Al2O3	14.13	14.43	12.78	14.83	13.46	15.12	13.90	12.54	14.17	19.24
TiO2	0.77	0.89	0.73	0.77	0.78	0.77	0.75	0.76	0.81	1.06
Fe2O3	5.61	5.96	5.03	5.23	5.49	5.61	5.55	5.24	5.51	8.39
MgO	4.25	4.83	3.85	3.83	4.64	3.09	4.14	4.03	4.58	4.32
CaO	8.54	5.69	9.07	7.26	9.38	9.49	8.26	8.94	7.45	0.45
Na2O	1.66	1.74	1.55	1.08	1.43	1.43	1.80	1.71	1.69	0.27
K2O	2.33	2.14	2.06	2.10	2.24	2.62	2.13	1.90	2.26	3.39
MnO	0.10	0.09	0.10	0.12	0.09	0.09	0.09	0.10	0.06	0.09
P2O5	0.18	0.19	0.18	0.18	0.17	0.18	0.17	0.18	0.17	0.16
Total	96.73	95.55	94.45	96.00	94.64	96.93	96.30	92.33	96.23	97.22
As	3	1	0	2	0	1	0	4	6	5
Ba	221	214	212	175	262	525	220	212	210	455
Cl	10	9	37	60	12	19	19	27	9	0
Co	19	24	23	27	20	21	24	23	21	28
Cr	115	159	125	163	146	130	117	139	153	146
Cu	20	16	44	17	26	14	15	20	24	39
Ga	15	14	13	13	14	15	13	14	14	18
La	32	27	30	29	26	37	24	26	35	47
Ni	60	58	59	56	56	64	58	50	54	90
Nb	12	12	12	12	12	12	12	11	12	16
Pb	13	15	12	13	14	15	14	11	12	12
Rb	75	66	62	62	69	84	66	60	68	130
Sr	133	108	129	92	140	123	126	144	124	28
Sb	0	0	0	0	0	0	0	0	0	0
S	16	0	0	32	17	88	0	0	0	7
Th	10	8	8	9	9	13	9	7	9	14
V	100	107	87	88	99	110	93	84	97	122
Y	30	32	27	29	30	30	27	33	32	37
Zn	63	62	57	53	66	62	62	0	63	100
Zr	182	237	217	207	229	173	182	212	241	216
Tl	0	3	0	0	3	0	0	2	0	0

TABLE 4.64

VAR. / ID.	DJR-889	DJR-890	DJR-891	DJR-892	DJR-893	DJR-894	DJR-895	DJR-896	DJR-897	DJR-898
East	33036	33068	33085	33218	33272	33272	33080	33047	33009	33014
North	60410	60448	60292	60243	60131	60070	59980	59947	59820	59785
SiO2	60.39	56.99	62.25	57.23	61.61	55.24	61.26	65.41	58.79	56.08
Al2O3	15.05	15.06	15.56	12.29	18.39	14.96	13.59	13.98	13.15	11.69
TiO2	0.86	0.87	0.88	0.68	1.05	0.80	0.76	0.96	0.77	0.77
Fe2O3	6.47	6.22	6.32	4.82	8.17	6.14	5.27	5.94	5.55	5.21
MgO	4.77	5.06	4.82	4.07	5.83	5.13	4.51	4.39	4.98	4.19
CaO	4.30	7.62	0.55	10.80	0.13	9.40	7.36	2.38	8.56	11.86
Na2O	1.71	1.48	1.90	1.66	0.94	1.16	1.72	1.99	1.82	1.71
K2O	2.18	2.54	2.15	1.82	3.11	2.67	2.22	1.77	1.87	1.61
MnO	0.10	0.09	0.14	0.11	0.09	0.10	0.08	0.10	0.08	0.09
P2O5	0.18	0.19	0.18	0.17	0.19	0.17	0.17	0.20	0.18	0.17
Total	96.01	96.12	94.75	93.65	99.51	95.77	96.94	97.12	95.75	93.38
As	5	3	6	2	4	1	4	3	0	2
Ba	239	253	252	287	333	239	234	211	213	194
Cl	10	10	11	19	0	6	9	10	12	28
Co	25	22	31	23	35	24	20	28	23	24
Cr	136	142	139	121	152	138	136	209	147	154
Cu	13	32	23	21	32	49	19	17	18	15
Ga	14	16	14	12	18	15	13	13	12	12
La	33	26	46	26	36	33	29	30	33	29
Ni	64	68	58	53	90	73	52	55	49	53
Nb	13	14	13	10	16	14	11	13	12	12
Pb	22	17	11	12	28	15	13	17	15	12
Rb	70	83	68	56	119	84	68	53	58	49
Sr	97	128	49	147	25	125	129	82	138	163
Sb	0	0	0	0	0	4	4	4	0	2
S	18	0	0	17	30	20	42	27	21	8
Th	6	7	11	9	14	7	10	6	10	10
V	95	110	97	84	135	114	99	103	98	94
Y	39	33	50	34	36	28	27	29	30	27
Zn	96	83	65	54	103	75	59	57	60	53
Zr	203	203	211	183	203	189	198	293	207	224
Tl	0	3	1	2	2	0	2	0	2	0

VAR. / ID.	DJR-903	DJR-904	DJR-905	DJR-906	DJR-912	DJR-913	DJR-914	DJR-915	DJR-916	DJR-917
East	33830	33807	33796	33780	34072	33748	33818	33797	33749	33756
North	59881	59925	59946	59968	60183	60067	60151	60107	60158	60194
SiO2	55.46	57.33	59.57	63.54	57.41	56.52	56.94	58.62	56.87	57.14
Al2O3	17.04	14.53	15.70	13.56	14.27	14.89	14.52	12.93	15.45	13.90
TiO2	0.96	0.90	1.00	0.75	0.82	0.86	0.85	0.81	0.81	1.08
Fe2O3	7.93	5.41	5.76	5.32	5.83	6.23	6.21	5.37	6.03	6.18
MgO	4.85	3.66	3.48	4.11	4.61	5.20	5.11	4.26	4.72	4.31
CaO	5.06	9.83	6.02	4.71	7.95	7.88	8.16	9.16	8.19	8.64
Na2O	1.12	1.04	1.58	2.29	1.90	1.50	1.63	1.92	1.24	1.78
K2O	3.53	2.37	1.94	2.00	2.22	2.47	2.24	1.92	2.64	2.09
MnO	0.08	0.16	0.11	0.06	0.18	0.13	0.09	0.13	0.10	0.11
P2O5	0.19	0.18	0.20	0.16	0.17	0.18	0.19	0.18	0.18	0.21
Total	96.22	95.41	95.36	96.50	95.36	95.86	95.94	95.30	96.23	95.44
As	19	3	3	0	6	7	5	3	8	4
Ba	387	211	252	226	308	275	270	271	912	242
Cl	0	44	46	17	0	0	0	12	15	15
Co	26	23	27	26	23	23	25	22	25	26
Cr	142	207	196	117	125	132	129	139	124	239
Cu	70	17	15	12	31	26	23	18	30	25
Ga	20	13	14	13	14	18	14	14	16	13
La	36	44	44	22	27	34	38	32	33	40
Ni	90	46	85	44	57	60	58	44	62	54
Nb	15	12	13	11	14	13	13	12	13	16
Pb	9	13	8	19	10	10	13	13	16	15
Rb	128	19	58	61	73	80	74	62	84	67
Sr	72	130	70	109	136	131	136	145	129	133
Sb	23	0	0	0	0	0	0	2	0	0
S	13	19	10	0	47	11	42	71	509	11
Th	15	16	12	11	6	12	10	5	8	14
V	140	110	115	90	102	112	105	100	109	125
Y	31	44	32	23	30	31	29	28	31	37
Zn	113	46	47	51	71	73	71	84	75	65
Zr	171	310	290	164	187	202	194	217	178	387
Tl	5	0	0	0	0	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-918	DJR-919	DJR-920	DJR-921	DJR-922	DJR-923	DJR-924	DJR-925	DJR-926	DJR-927
East	33460	33490	33430	33416	33452	33433	33404	33346	33302	33360
North	59916	59953	60258	60286	60246	60222	60245	60263	60277	60200
SiO2	59.97	60.49	57.51	62.77	63.64	60.44	59.67	62.15	60.94	54.27
Al2O3	14.96	15.70	14.31	19.01	15.21	15.25	14.29	17.98	13.94	11.55
TiO2	0.98	1.06	0.79	1.02	0.93	0.87	0.94	1.03	0.84	0.68
Fe2O3	6.66	6.53	5.78	6.78	6.19	6.34	6.67	8.26	5.78	5.01
MgO	5.14	5.07	4.85	3.95	4.61	4.82	4.43	4.91	4.53	3.66
CaO	4.42	3.77	8.80	0.06	3.70	5.04	3.14	0.21	6.34	13.04
Na2O	2.06	1.93	1.36	1.30	1.88	1.71	1.78	1.33	1.76	1.38
K2O	2.04	2.33	2.42	2.45	1.98	2.26	2.20	3.14	2.01	1.89
MnO	0.08	0.12	0.09	0.13	0.09	0.12	0.10	0.16	0.11	0.10
P2O5	0.20	0.21	0.17	0.12	0.20	0.19	0.19	0.18	0.19	0.16
Total	96.51	97.21	96.08	97.59	98.43	97.04	93.41	99.35	96.44	91.74
As	3	3	6	4	2	2	1	4	0	0
Ba	286	279	215	253	268	292	271	354	224	199
Cl	11	17	14	0	0	0	11	0	20	38
Co	27	26	25	30	28	25	25	33	29	16
Cr	145	153	137	156	156	129	152	137	162	139
Cu	20	14	25	17	38	24	27	41	22	17
Ga	14	16	15	14	15	14	14	17	13	12
La	27	38	30	33	37	43	37	29	35	29
Ni	59	59	61	69	60	68	70	76	55	53
Nb	13	13	12	14	13	14	15	15	13	12
Pb	13	14	11	14	13	13	14	18	15	21
Rb	69	77	76	74	65	76	75	112	62	58
Sr	92	83	109	38	70	88	76	43	119	263
Sb	0	4	0	2	0	0	0	1	3	4
S	0	35	85	31	44	20	0	29	66	6
Th	10	8	12	9	10	13	12	15	8	12
V	106	112	100	107	105	97	111	122	106	90
Y	35	36	27	32	31	53	36	27	31	0
Zn	74	71	68	79	67	73	72	82	65	57
Zr	236	251	207	243	235	190	208	217	233	194
Tl	0	0	0	0	0	0	0	0	0	2

TABLE 4.64

VAR. / ID.	DJR-928	DJR-929	DJR-930	DJR-931	DJR-932	DJR-933	DJR-934	DJR-935	DJR-936	DJR-937
East	33359	33368	33435	33469	33507	33502	33498	33495	33490	33538
North	60178	60127	60114	60164	60234	60242	60247	60253	60266	60169
SiO2	59.75	60.90	58.94	60.54	60.90	59.13	60.66	58.07	57.74	60.46
Al2O3	14.04	13.46	14.31	16.33	15.65	14.15	14.45	12.88	14.58	13.30
TiO2	0.83	0.85	0.78	0.95	0.86	0.85	0.84	0.72	0.83	0.69
Fe2O3	5.71	5.79	5.77	6.94	6.40	6.08	5.64	5.03	5.99	4.94
MgO	4.35	4.44	4.59	4.89	3.73	4.47	4.01	4.15	4.84	3.80
CaO	7.11	7.41	7.51	3.64	5.67	7.32	6.65	10.58	7.88	8.84
Na2O	1.71	1.75	1.61	1.51	1.45	1.59	1.58	1.51	1.45	1.78
K2O	2.06	1.81	2.18	2.72	2.58	2.11	2.22	2.16	2.34	2.00
MnO	0.10	0.11	0.08	0.10	0.14	0.09	0.11	0.10	0.08	0.08
P2O5	0.18	0.20	0.18	0.20	0.19	0.19	0.19	0.18	0.19	0.17
Total	95.84	96.72	95.95	97.82	97.57	95.98	96.35	95.38	95.92	96.06
As	2	0	2	4	5	2	5	4	6	1
Ba	205	240	266	323	300	232	239	201	279	222
Cl	0	13	8	17	9	12	13	28	7	35
Co	20	26	16	24	22	25	22	28	25	23
Cr	139	141	122	142	144	139	150	131	131	119
Cu	31	25	25	25	31	26	20	18	21	15
Ga	14	13	13	16	14	13	14	13	15	15
La	35	35	34	41	27	29	35	26	33	33
Ni	60	59	61	71	74	54	59	52	63	49
Nb	12	13	15	15	15	13	13	12	13	11
Pb	13	15	13	11	10	14	12	13	48	14
Rb	66	62	76	89	86	67	69	70	75	61
Sr	108	108	115	79	76	97	108	141	111	127
Sb	0	0	3	1	0	0	6	0	0	0
S	21	30	23	41	42	49	15	56	80	46
Th	7	9	7	7	6	8	13	22	6	13
V	99	96	98	113	104	103	103	85	107	88
Y	44	41	33	51	30	29	27	26	33	23
Zn	65	69	74	73	76	68	67	65	72	55
Zr	218	241	192	217	194	209	221	205	199	183
Tl	0	7	0	0	17	0	0	0	0	0

TABLE 4.64

VAR. / ID.	DJR-938	DJR-939	DJR-940	DJR-941	DJR-942	DJR-943	DJR-946	DJR-947
East	33530	33504	33565	33595	33564	33830	33505	33545
North	60208	60205	60030	60050	60052	59463	59580	59568
SiO2	58.44	58.60	59.89	58.73	61.67	59.46	87.84	58.03
Al2O3	13.44	13.47	15.32	13.31	14.85	11.76	16.86	14.06
TiO2	0.82	0.77	0.92	0.94	0.79	0.72	0.23	0.87
Fe2O3	5.45	5.58	6.38	5.71	5.67	4.78	2.95	5.69
MgO	4.20	3.89	4.48	4.81	4.03	3.96	0.80	3.85
CaO	7.88	8.62	3.33	8.57	5.43	9.12	0.02	8.84
Na2O	1.67	1.69	1.90	1.61	1.93	2.04	0.79	1.47
K2O	2.03	2.16	2.42	2.07	2.27	1.79	0.39	2.42
MnO	0.11	0.11	0.09	0.09	0.11	0.08	0.03	0.09
P2O5	0.17	0.19	0.17	0.21	0.19	0.17	0.12	0.17
Total	94.21	95.08	94.90	96.05	96.94	93.88	100.03	95.49
As	2	0	3	5	4	3	24	39
Ba	225	220	281	207	215	333	56	514
Cl	31	0	20	16	28	32	0	11
Co	25	22	25	33	27	25	43	66
Cr	150	120	128	280	142	152	49	173
Cu	20	24	16	21	10	22	11	25
Ga	12	14	14	14	14	11	6	14
La	39	29	39	41	45	22	12	39
Ni	55	61	59	55	53	41	12	50
Nb	12	14	14	14	13	11	4	14
Pb	14	14	15	18	9	10	8	20
Rb	61	74	80	65	73	55	15	74
Sr	106	115	87	136	93	169	9	160
Sb	0	0	0	2	2	0	55	0
S	23	10	0	25	32	118	28	2755
Th	6	7	12	11	9	9	2	10
V	97	94	113	111	96	94	27	115
Y	32	31	34	33	27	28	9	32
Zn	59	73	70	59	55	43	18	165
Zr	221	182	198	332	196	204	68	277
Tl	2	0	0	2	0	0	0	0

TABLE 4.64

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 1

VAR. / ID.	AX-101	AX-110	AX-125	AX-126	AX-128	AX-129	AX-138	AX-166	AX-167	AX-178
East	32168	25001	23799	23809	25027	23846	23160	30873	30908	30250
North	62359	57656	57129	57101	57732	57031	58300	62670	62646	62155
SiO2	59.42	64.51	63.46	58.48	63.14	61.01	62.42	69.88	66.21	57.56
Al2O3	14.46	13.37	14.50	17.09	13.81	15.03	14.01	11.74	13.04	12.44
TiO2	1.10	0.82	0.87	1.04	0.93	1.06	0.99	1.07	0.75	0.93
Fe2O3	7.77	6.71	6.92	8.39	6.97	8.19	7.67	5.87	5.99	7.51
MgO	6.36	5.76	5.43	6.81	5.11	6.57	4.18	3.01	4.47	5.32
CaO	1.87	3.13	1.11	0.30	2.40	1.08	1.88	1.38	1.93	3.22
Na2O	2.31	2.60	3.95	2.71	2.61	4.33	2.95	2.23	2.46	3.63
K2O	2.61	1.25	1.19	2.82	1.58	1.40	2.20	1.45	2.49	0.74
MnO	0.12	0.10	0.09	0.09	0.10	0.12	0.10	0.08	0.07	0.11
P2O5	0.23	0.17	0.15	0.17	0.16	0.22	0.25	0.16	0.16	0.20
Total	96.25	98.42	97.67	97.90	96.81	99.01	96.65	96.87	97.57	91.66
As	0	0	5	5	58	5	1	0	0	0
Ba	871	319	405	730	291	951	1011	419	619	267
Co	36	31	34	29	30	35	31	35	40	35
Cr	205	285	240	279	295	260	158	150	192	178
Cu	11	24	24	38	29	27	27	12	20	26
Ga	17	14	16	19	14	17	17	13	14	15
La	36	20	21	27	28	30	53	30	26	22
Ni	61	103	67	198	81	130	63	48	76	58
Nb	14	10	9	15	11	14	18	16	13	12
Pb	15	19	15	41	17	18	20	17	18	12
Rb	69	37	30	77	45	27	51	41	76	22
Sr	239	231	258	76	224	442	621	86	231	228
Sb	0	0	0	0	2	0	0	0	0	0
S	0	340	2225	23	1075	0	162	40	169	171
Th	4	5	4	12	8	3	7	6	3	7
V	138	125	133	136	143	149	142	104	101	134
Y	29	20	19	22	18	22	30	25	21	22
Zn	89	56	57	107	57	74	85	50	54	57
Zr	346	196	149	187	170	206	254	310	221	233

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 2

VAR. / ID.	AX-185	AX-188	AX-203	AX-218	AX-220	AX-225	AX-227	AX-232	AX-233	AX-237
East	30173	30091	30190	30161	30116	29760	29821	28136	28167	30216
North	61763	61937	63061	61487	61554	61566	61550	59583	59565	61435
SiO2	61.46	61.28	59.80	61.35	59.54	64.26	67.23	55.93	63.30	67.00
Al2O3	14.22	13.54	14.56	11.59	11.90	13.16	11.63	13.02	12.91	12.33
TiO2	1.00	0.98	1.08	0.89	0.80	0.83	0.77	0.99	0.93	0.74
Fe2O3	7.99	7.20	7.93	6.75	6.86	6.36	5.60	7.54	6.95	5.62
MgO	6.11	4.97	5.90	5.34	4.35	5.09	4.89	5.04	5.57	4.50
CaO	1.94	2.43	2.69	1.95	2.83	3.31	3.36	2.69	2.50	2.46
Na2O	2.85	2.44	2.22	2.03	2.91	2.31	2.08	2.12	1.94	2.54
K2O	1.77	2.37	1.97	1.84	1.47	1.84	2.10	2.50	2.11	1.94
MnO	0.09	0.09	0.11	0.09	0.09	0.08	0.07	0.09	0.09	0.09
P2O5	0.20	0.19	0.31	0.16	0.17	0.17	0.14	0.21	0.19	0.17
Total	97.63	95.49	96.57	91.99	90.92	97.41	97.87	90.13	96.49	97.39
As	0	0	0	0	0	0	0	n	0	0
Ba	489	765	693	567	475	455	519	914	552	545
Co	34	36	34	34	31	32	33	33	34	35
Cr	187	164	156	231	181	187	246	136	236	225
Cu	13	11	32	18	24	20	13	26	21	16
Ga	15	15	18	15	14	14	12	14	14	13
La	24	33	51	25	25	23	31	30	29	35
Ni	68	61	67	71	63	60	73	53	59	63
Nb	12	14	19	12	11	13	11	13	14	12
Pb	11	16	23	17	13	16	17	13	21	15
Rb	49	59	55	51	40	50	51	64	58	51
Sr	293	256	449	238	326	181	144	376	215	259
Sb	0	0	0	0	0	0	2	0	0	0
S	0	0	593	453	147	440	0	560	639	514
Th	0	5	14	6	6	6	4	7	10	7
V	153	124	154	120	115	106	109	140	132	98
Y	24	25	30	25	19	23	24	24	25	22
Zn	56	50	79	44	52	48	39	42	56	51
Zr	225	242	273	252	189	258	247	227	288	249

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 3

VAR. / ID.	AX-238	AX-243	AX-245	AX-247	AX-248	ZK-348	AX452	AX973	AX974	AX975
East	30252	29555	35610	31959	31959	30678	22055	22192	22517	22291
North	61424	61626	63490	61584	61584	60129	55808	58050	58096	58122
SiO2	64.07	72.07	70.68	64.73	63.34	62.72	56.53	61.62	61.09	62.67
Al2O3	13.58	12.79	13.77	15.61	15.87	15.08	14.71	12.71	13.13	13.45
TiO2	0.91	0.85	0.98	0.76	0.85	0.79	1.07	1.13	1.00	1.32
Fe2O3	7.05	4.75	5.26	5.89	4.79	5.68	7.84	7.11	7.66	7.69
MgO	5.64	2.12	2.45	3.84	2.77	4.18	6.60	4.63	5.28	5.29
CaO	1.69	2.28	0.86	2.27	2.54	2.27	3.66	2.92	2.30	2.62
Na2O	2.13	2.07	2.05	3.07	2.77	2.69	1.17	1.70	2.84	1.62
K2O	2.28	1.57	1.66	1.94	2.50	2.76	2.20	1.65	1.91	2.04
MnO	0.10	0.08	0.06	0.35	0.47	0.12	0.17	0.09	0.11	0.10
P2O5	0.21	0.15	0.19	0.18	0.17	0.21	0.18	0.15	0.28	0.17
Total	97.66	98.73	97.96	98.64	96.07	96.50	94.13	93.71	95.60	96.97
As	3	1	0	2	0	0	1	0	0	0
Ba	795	362	393	609	521	927	339	354	827	469
Co	31	38	47	28	35	36	24	17	21	14
Cr	255	71	81	73	100	104	319	237	186	299
Cu	21	19	20	14	31	17	28	19	19	18
Ga	12	11	11	16	17	16	14	14	17	15
La	28	30	32	36	30	40	19	33	44	27
Ni	72	24	28	24	40	50	126	89	69	102
Nb	12	18	17	15	14	14	13	18	16	17
Pb	13	11	16	23	52	17	13	12	14	13
Rb	55	43	50	52	72	76	47	46	47	54
Sr	238	85	59	227	175	321	166	91	540	85
Sb	0	0	2	0	0	0	4	3	1	0
S	370	500	946	270	125	0	0	476	282	480
Th	7	9	6	8	6	4	10	10	10	11
V	127	77	78	77	105	90	156	112	149	120
Y	27	21	24	23	25	25	21	27	25	28
Zn	57	46	49	59	76	55	68	67	77	72
Zr	266	272	308	221	219	238	208	306	235	328

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 4

VAR. / ID.	AX976	AX977	AX979	AX980	AX981	AX982	DTIA-39	DTIA-48	DTIA-133	DTIA-292
East	22591	22771	22322	22326	22294	22303	25572	25729	24832	25449
North	57854	57707	58180	58207	58145	57842	58063	58457	58841	57908
SiO2	63.31	61.01	63.57	64.93	55.84	59.87	60.21	56.59	64.20	58.53
Al2O3	13.95	12.28	14.53	14.47	10.59	11.58	12.21	13.89	17.86	14.52
TiO2	1.04	1.04	1.12	1.07	1.14	0.85	0.78	1.02	0.63	0.86
Fe2O3	6.84	6.91	7.18	6.86	9.57	6.51	6.01	7.51	5.78	6.84
MgO	3.43	5.82	4.13	3.69	7.33	3.93	5.18	5.80	3.50	5.53
CaO	1.58	4.49	1.07	0.58	6.19	7.60	4.91	2.94	0.27	5.13
Na2O	2.60	1.30	2.61	2.34	2.27	2.74	2.30	2.18	1.82	1.76
K2O	2.46	2.12	2.03	1.75	1.67	1.92	2.05	1.50	3.39	2.26
MnO	0.11	0.09	0.10	0.10	0.17	0.20	0.10	0.11	0.08	0.22
P2O5	0.17	0.17	0.17	0.17	0.42	0.33	0.16	0.17	0.07	0.17
Total	95.49	95.23	96.51	95.96	95.19	95.53	93.91	91.71	97.60	95.82
As	0	2	0	0	0	0	0	0	3	1
Ba	869	412	745	428	701	909	511	325	641	399
Co	20	18	19	19	35	17	30	31	44	31
Cr	150	224	159	155	451	158	302	265	107	233
Cu	17	16	22	16	34	18	21	23	47	27
Ga	17	13	17	15	14	16	12	15	19	15
La	41	26	36	29	30	53	28	29	26	24
Ni	61	70	68	60	134	56	98	116	34	150
Nb	17	16	18	16	12	12	11	12	14	11
Pb	17	8	11	14	17	13	16	16	20	13
Rb	55	54	51	42	37	43	52	45	86	70
Sr	331	108	223	140	354	959	268	225	130	179
Sb	0	5	2	0	0	2	0	0	1	0
S	168	396	457	187	480	343	426	249	16078	139
Th	8	11	7	6	1	8	4	4	6	4
V	108	109	111	108	238	113	114	131	122	122
Y	28	25	28	27	28	24	22	21	24	24
Zn	72	64	58	68	94	60	47	61	88	65
Zr	262	280	256	293	208	207	188	200	122	182

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 5

VAR. / ID.	S-70145	S-70146	S-70147	A9	S88	S93	S101	S105	S107	S108
East	36593	36497	36476	26285	27620	27610	27630	27651	27680	27673
North	66069	66132	66142	60524	60324	60345	60260	60253	60220	60227
SiO2	68.94	68.56	64.82	58.40	62.20	69.28	69.64	69.54	71.16	75.91
Al2O3	14.89	21.95	17.08	12.43	13.98	11.32	12.31	10.93	11.56	10.18
TiO2	1.12	1.31	1.29	1.00	0.85	0.94	0.90	0.92	1.08	0.89
Fe2O3	6.36	5.36	7.32	7.47	6.91	5.26	5.20	4.96	5.59	4.76
MgO	3.07	0.38	3.41	3.77	3.57	2.76	2.64	1.99	2.16	2.21
CaO	0.37	0.05	0.37	6.61	3.08	1.53	0.89	1.70	0.83	1.38
Na2O	2.03	0.00	2.02	1.24	1.36	2.41	1.93	1.70	1.59	2.04
K2O	1.68	1.74	2.08	2.74	2.22	1.37	1.79	1.77	1.78	1.16
MnO	0.08	0.04	0.09	0.11	0.09	0.07	0.06	0.08	0.08	0.07
P2O5	0.22	0.05	0.24	0.27	0.17	0.24	0.19	0.16	0.19	0.19
Total	98.76	99.44	98.72	94.04	94.43	95.18	95.55	93.75	96.02	98.79
As	0	0	0	1	2	2	0	3	2	0
Ba	419	470	476	526	460	292	385	376	374	274
Co	37	18	40	24	18	14	13	11	12	11
Cr	107	121	115	189	85	101	84	92	92	80
Cu	15	19	22	31	20	15	14	14	12	15
Ga	13	13	16	14	15	11	12	10	11	10
La	24	36	27	51	29	27	30	18	27	19
Ni	45	18	53	70	64	31	39	28	26	26
Nb	16	17	18	19	17	18	17	17	18	15
Pb	14	16	18	16	12	24	12	10	10	11
Rb	51	47	65	81	62	39	47	45	44	32
Sr	66	40	68	279	87	129	73	75	57	83
Sb	0	0	0	0	2	0	0	0	0	0
S	0	0	0	1107	446	89	217	187	366	141
Th	6	10	8	14	17	11	14	12	9	7
V	104	106	110	153	93	83	76	81	83	61
Y	27	17	28	29	19	26	23	22	23	21
Zn	65	11	81	72	72	75	56	50	44	38
Zr	343	227	337	313	201	314	227	255	334	268

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 6

VAR. / ID.	E138	E142	E178	A217	A218	N239	A314	S352	ZK377	K379
East	27434	27397	26508	26353	26345	26722	26456	26993	30216	30275
North	60541	60585	60406	60851	60870	61247	60309	60315	60638	60602
SiO2	69.03	69.57	63.06	60.14	63.75	63.71	64.26	59.13	65.46	64.82
Al2O3	11.65	11.17	11.75	10.88	10.31	13.00	10.24	12.32	9.57	10.04
TiO2	1.20	1.03	0.90	1.28	1.22	1.12	0.87	1.03	0.70	0.73
Fe2O3	5.10	5.71	7.35	9.90	8.18	7.30	7.76	9.03	4.69	5.06
MgO	2.05	2.33	4.54	4.74	4.01	3.04	4.82	6.44	3.59	4.20
CaO	0.61	1.09	2.87	4.62	3.84	1.44	4.27	2.00	7.26	6.98
Na2O	2.09	2.11	3.40	2.85	3.01	2.03	2.52	3.71	2.08	2.15
K2O	1.63	2.01	1.94	0.96	0.93	1.90	1.54	0.66	2.45	2.46
MnO	0.08	0.08	0.12	0.17	0.14	0.16	0.14	0.10	0.09	0.12
P2O5	0.15	0.16	0.26	0.14	0.14	0.17	0.37	0.18	0.18	0.23
Total	93.59	95.26	96.19	95.68	95.53	93.87	96.79	94.60	96.07	96.79
As	0	4	3	0	2	2	1	1	16	0
Ba	396	494	1023	249	256	405	758	334	568	527
Co	12	15	18	28	17	21	24	20	12	17
Cr	90	114	183	171	149	156	216	235	196	246
Cu	13	14	19	24	19	17	25	22	15	15
Ga	11	12	15	15	14	16	13	15	12	10
La	32	23	33	6	11	24	42	21	27	33
Ni	22	27	61	51	43	70	61	81	74	75
Nb	16	17	16	8	9	18	13	9	12	12
Pb	12	13	23	11	9	11	16	12	112	18
Rb	41	54	40	21	21	51	34	18	61	64
Sr	56	111	658	173	164	73	441	272	237	205
Sb	0	0	0	0	0	0	0	0	0	2
S	1191	1268	153	0	0	61	1087	994	205	0
Th	8	11	9	0	6	12	8	10	10	5
V	98	100	122	185	166	109	137	149	78	88
Y	22	23	25	28	26	26	25	18	22	24
Zn	31	57	67	75	69	53	67	62	35	44
Zr	282	276	234	118	129	257	197	145	249	273

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 7

VAR. / ID.	K380	A393	N403	A434	A443	A444	A445	N447	N453	N454
East	30288	26524	27953	26167	26122	26130	26124	26519	28354	28364
North	60593	60419	60832	60989	60975	60967	60957	61153	60563	60539
SiO2	65.82	63.12	68.24	63.10	62.11	60.46	65.19	66.62	62.92	63.36
Al2O3	10.33	12.10	10.55	12.41	14.52	14.28	13.12	11.39	10.27	11.55
TiO2	0.96	0.81	0.98	1.04	1.17	1.22	1.14	0.92	0.79	0.92
Fe2O3	7.33	6.41	7.34	7.27	7.89	8.48	7.69	7.04	6.71	7.50
MgO	4.21	3.50	3.25	3.42	3.59	3.88	3.24	3.38	7.49	5.81
CaO	3.44	2.92	1.27	1.60	0.94	1.25	0.50	0.70	2.14	3.65
Na2O	1.86	3.47	1.69	3.08	2.13	2.30	2.40	2.50	2.72	2.71
K2O	1.55	2.08	1.39	1.52	2.42	2.31	2.18	1.97	1.14	0.96
MnO	0.43	0.11	0.08	0.10	0.09	0.10	0.10	0.09	0.10	0.16
P2O5	0.20	0.26	0.12	0.19	0.19	0.18	0.17	0.16	0.14	0.16
Total	96.13	94.78	94.91	93.73	95.05	94.46	95.73	94.77	94.42	96.78
As	2	2	3	4	6	4	3	10	1	2
Ba	400	1036	297	451	564	510	470	577	578	225
Co	18	19	15	12	22	19	15	14	27	20
Cr	235	162	176	162	185	176	138	149	312	300
Cu	16	20	16	19	26	21	19	19	13	20
Ga	12	14	11	15	17	17	16	13	14	14
La	28	38	21	27	49	27	22	24	18	17
Ni	84	57	49	59	85	76	70	63	150	162
Nb	13	15	14	17	19	20	19	15	10	11
Pb	8	21	8	7	9	17	11	15	9	10
Rb	39	47	39	42	68	60	57	58	29	30
Sr	192	774	60	378	124	134	125	196	266	130
Sb	0	0	0	0	0	0	0	0	0	0
S	124	259	537	616	1063	426	329	39	128	124
Th	13	5	7	3	9	9	8	6	5	8
V	106	111	102	108	132	119	110	108	109	110
Y	21	28	23	27	34	32	27	25	18	21
Zn	52	67	58	55	65	81	56	72	68	57
Zr	254	227	235	245	251	245	212	224	152	193

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 8

VAR. / ID.	N459	N460	C470	C471	N481	N485	N592	N593	N594	N595
East	26507	26452	26070	26050	26683	26851	26721	26721	26722	26721
North	61161	61157	60921	60914	61237	61429	61250	61249	61252	61253
SiO2	67.28	58.27	65.68	62.76	64.43	54.85	62.43	65.15	61.99	67.40
Al2O3	13.03	10.57	13.51	12.94	12.30	14.42	13.90	12.22	13.63	12.07
TiO2	1.18	1.49	0.84	0.77	1.19	1.54	1.30	1.07	1.12	1.27
Fe2O3	7.17	10.34	6.28	6.16	7.30	12.27	8.20	7.28	7.75	7.05
MgO	3.12	5.26	3.42	4.36	3.14	7.80	3.09	2.79	3.06	2.80
CaO	0.58	5.55	1.02	0.82	1.56	0.85	1.20	2.13	2.26	1.24
Na2O	2.32	3.08	3.32	3.87	2.21	2.35	2.34	2.53	1.79	2.72
K2O	1.92	0.82	1.69	1.81	1.51	1.81	1.85	1.78	2.34	1.32
MnO	0.09	0.19	0.08	0.09	0.09	0.13	0.12	0.14	0.16	0.09
P2O5	0.17	0.25	0.17	0.18	0.18	0.20	0.19	0.17	0.16	0.23
Total	96.86	95.82	96.01	93.76	93.91	96.22	94.62	95.26	94.26	96.19
As	7	6	2	3	3	7	2	4	5	2
Ba	439	362	665	930	467	308	396	414	465	540
Co	13	27	12	17	17	39	17	17	17	16
Cr	133	174	126	137	189	222	173	121	121	157
Cu	19	28	18	14	19	53	22	20	24	20
Ga	16	14	14	15	14	20	16	14	17	13
La	41	20	32	30	39	4	31	31	29	34
Ni	60	66	54	50	67	170	71	59	67	64
Nb	18	17	16	14	20	14	20	18	17	22
Pb	18	8	17	7	11	20	6	9	11	12
Rb	47	22	47	39	45	52	50	49	63	41
Sr	92	304	304	402	82	126	89	101	105	124
Sb	9	0	0	0	0	0	1	3	1	0
S	0	136	303	108	277	5519	236	170	1079	3688
Th	8	7	8	8	8	5	9	6	6	6
V	121	187	93	94	120	204	116	106	110	114
Y	32	31	27	25	28	22	30	30	27	34
Zn	158	70	59	44	77	75	71	54	80	61
Zr	247	208	196	160	256	148	286	258	199	314

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 9

VAR. / ID.	N597	N598	W606	W607	W608	W609	N611	N616	S617	S622
East	26721	24350	22030	22770	20490	20490	26670	27681	27622	27622
North	61251	59960	58660	59330	57560	57520	61202	60217	60261	60261
SiO2	55.24	64.83	62.76	52.18	64.95	63.76	65.56	72.34	70.69	72.25
Al2O3	20.06	12.93	9.48	6.54	8.96	10.92	13.30	10.00	10.36	9.86
TiO2	1.24	0.77	1.15	1.07	1.21	0.74	1.12	0.95	0.81	0.83
Fe2O3	8.82	6.03	8.08	7.12	7.46	7.27	7.59	5.13	5.23	5.44
MgO	3.10	2.40	6.69	6.96	6.78	3.96	3.11	1.79	2.04	2.08
CaO	1.58	1.56	2.34	17.48	1.63	3.39	0.75	0.85	1.25	0.89
Na2O	1.23	3.12	2.53	1.69	2.60	3.06	2.30	1.72	1.66	1.50
K2O	4.26	1.82	1.32	0.94	1.22	2.73	2.23	1.63	1.83	1.90
MnO	0.13	0.08	0.12	0.13	0.10	0.14	0.10	0.08	0.07	0.07
P2O5	0.17	0.17	0.14	0.13	0.13	0.20	0.17	0.17	0.17	0.14
Total	95.83	93.71	94.61	94.24	95.04	96.17	96.23	94.64	94.11	94.96
As	17	4	2	0	0	2	4	3	3	2
Ba	706	381	234	205	348	1397	472	355	361	316
Co	22	13	16	24	13	15	16	11	12	10
Cr	152	102	314	730	368	99	118	80	82	167
Cu	45	18	24	20	11	18	20	10	14	12
Ga	24	14	11	11	11	12	16	10	11	11
La	36	21	14	17	18	24	51	29	24	30
Ni	88	43	147	218	150	37	76	24	26	27
Nb	21	13	11	10	10	9	19	15	16	15
Pb	18	18	9	7	7	11	13	11	10	13
Rb	118	48	29	22	21	50	59	38	44	47
Sr	104	369	57	124	71	754	98	58	67	68
Sb	6	0	1	0	0	0	2	0	0	0
S	1089	339	0	93	0	374	578	286	236	288
Th	8	9	1	3	3	10	10	9	4	3
V	156	89	123	160	131	126	100	70	69	69
Y	34	23	25	25	23	22	36	20	23	23
Zn	117	53	56	56	46	50	65	41	52	45
Zr	191	162	140	144	150	114	219	281	251	216

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 10

VAR. / ID.	AX755	AX785	AX834	AX835	AX844	AX849	AX858	AX864	AX865	AX868
East	31214	30712	30905	30363	31777	30614	30196	30263	30181	30528
North	63080	61983	61633	61897	63041	61342	63013	63255	63032	61791
SiO2	63.75	60.24	65.01	63.04	63.99	63.21	64.20	64.18	63.51	63.98
Al2O3	9.66	13.30	9.67	10.51	9.12	10.38	10.73	12.95	11.48	11.26
TiO2	0.95	0.94	0.92	0.94	0.93	0.93	1.10	1.26	0.97	1.08
Fe2O3	7.24	7.63	7.11	7.93	6.59	7.26	7.34	8.00	7.01	7.77
MgO	4.75	3.76	4.63	4.62	4.18	6.16	4.25	3.43	4.00	4.48
CaO	4.20	3.66	3.63	3.07	5.19	2.25	4.17	0.95	4.32	3.12
Na2O	1.84	2.28	2.28	3.26	2.09	2.42	1.50	2.55	1.67	2.43
K2O	1.69	2.76	2.19	1.00	1.47	2.49	2.03	1.88	1.99	1.41
MnO	0.10	0.13	0.10	0.20	0.10	0.10	0.11	0.11	0.10	0.22
P2O5	0.16	0.20	0.20	0.19	0.20	0.19	0.17	0.19	0.19	0.20
Total	94.34	94.90	95.74	94.76	93.86	95.39	95.60	95.50	95.24	95.95
As	3	5	1	3	0	2	5	0	4	23
Ba	401	411	546	360	331	627	358	419	340	282
Co	13	21	19	16	12	20	17	19	18	20
Cr	275	165	237	158	289	286	187	159	167	252
Cu	15	26	14	17	14	15	19	20	17	7
Ga	14	14	12	14	12	14	15	14	14	15
La	24	24	25	20	34	35	35	36	35	29
Ni	51	68	76	51	55	88	71	70	75	67
Nb	13	12	12	11	14	15	17	21	15	13
Pb	16	11	15	9	14	12	11	16	9	10
Rb	41	75	57	29	35	58	54	48	51	36
Sr	169	184	214	417	200	229	106	95	174	211
Sb	0	7	0	0	4	0	0	0	1	2
S	296	1061	166	540	310	0	546	320	362	475
Th	4	10	5	7	6	8	9	10	7	7
V	123	116	108	113	107	102	110	124	101	133
Y	21	24	26	24	25	30	28	33	26	25
Zn	47	58	49	35	46	67	62	84	59	46
Zr	275	185	258	217	321	275	295	253	235	279

TABLE 4.65

XRF Analyses: Southern Uplands (Unassigned) (GWKE20) Part 11

VAR. / ID.	AK2
East	34238
North	65060
SiO2	58.67
Al2O3	10.85
TiO2	1.04
Fe2O3	8.46
MgO	5.18
CaO	5.79
Na2O	1.83
K2O	1.66
MnO	0.14
P2O5	0.22
Total	93.84
As	3
Ba	413
Co	25
Cr	218
Cu	34
Ga	16
La	29
Ni	68
Nb	11
Pb	11
Rb	45
Sr	454
Sb	0
S	514
Th	6
V	184
Y	27
Zn	67
Zr	207

TABLE 4.65

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 1

VAR. / ID.	PDW1	PDW2	PDW3	PDW4	PDW5	PDW6	PDW7	PDW8	PDW9	PDW10
East	20558	20540	20537	20525	20513	20510	20515	20515	20504	20499
North	57786	57778	57762	57736	57711	57675	57654	57637	57608	57591
SiO2	55.11	53.33	54.54	60.27	61.44	55.36	61.71	56.79	59.03	63.65
Al2O3	8.41	8.19	9.71	10.07	10.41	10.74	10.80	11.64	10.97	10.27
TiO2	1.28	1.21	1.16	1.00	1.01	1.16	1.17	1.45	1.14	1.11
Fe2O3	9.19	9.45	9.42	7.93	7.38	8.47	8.44	9.87	9.34	7.47
MgO	10.59	11.35	11.18	6.83	6.38	6.61	8.80	10.10	8.55	6.26
CaO	5.93	8.90	6.77	3.29	2.68	7.70	0.54	0.63	0.78	1.38
Na2O	1.86	1.75	2.13	2.85	3.04	2.91	2.39	2.01	2.11	2.46
K2O	0.99	0.86	1.07	1.22	1.47	1.45	2.11	2.10	2.42	1.93
MnO	0.13	0.15	0.14	0.12	0.10	0.15	0.10	0.13	0.12	0.10
P2O5	0.15	0.16	0.17	0.16	0.15	0.24	0.17	0.17	0.16	0.15
Total	93.64	95.35	96.31	93.72	94.05	94.79	96.24	94.89	94.63	94.80
As	2	1	3	2	2	4	1	1	0	2
Ba	254	245	280	310	367	360	427	406	366	467
Co	32	33	28	17	18	25	19	31	28	19
Cr	886	654	459	233	203	249	353	430	278	533
Cu	20	20	23	24	20	28	18	22	16	19
Ga	12	12	13	11	12	14	13	14	13	12
La	16	5	12	15	19	22	18	21	19	26
Ni	287	323	262	123	90	127	202	239	198	144
Nb	10	9	8	8	8	10	10	9	8	7
Pb	9	6	9	11	9	15	9	8	5	10
Rb	20	20	21	26	29	28	40	40	34	27
Sr	122	118	125	122	111	130	66	60	54	80
Sb	1	3	0	0	0	0	1	0	0	0
S	188	243	279	0	280	210	0	5	0	0
Th	0	4	2	1	2	2	6	10	8	5
V	201	193	172	144	147	162	127	152	128	134
Y	21	18	21	21	23	27	21	19	20	20
Zn	58	55	54	57	42	94	66	70	49	43
Zr	126	129	123	116	133	143	127	146	115	137

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 2

VAR. / ID.	PDW11	PDW12	PDW13	PDW14	PDW15	PDW16	PDW17	PDW18	PDW19	PDW20
East	20493	20482	20486	20480	20452	20460	20471	20480	20484	20479
North	57567	57547	57530	57519	57449	57403	57377	57351	57320	57298
SiO2	56.35	59.18	58.52	60.88	59.82	56.75	59.35	58.63	58.72	57.84
Al2O3	11.29	10.49	13.55	10.80	12.20	12.32	13.81	12.13	13.48	11.31
TiO2	1.53	1.29	1.56	1.24	0.85	1.03	0.82	1.35	0.99	1.70
Fe2O3	10.81	9.48	10.10	8.42	7.53	9.01	7.41	10.12	8.48	10.45
MgO	8.16	8.08	6.27	7.38	4.25	4.67	3.47	5.92	4.52	8.59
CaO	1.62	3.13	1.07	1.64	4.88	5.08	4.67	3.44	2.64	2.43
Na2O	2.38	2.06	2.26	2.10	3.58	3.03	4.47	2.37	3.67	2.31
K2O	2.21	1.71	2.85	2.20	2.19	2.02	2.18	1.90	1.57	1.33
MnO	0.12	0.15	0.11	0.10	0.16	0.21	0.16	0.14	0.13	0.15
P2O5	0.19	0.17	0.22	0.16	0.34	0.45	0.39	0.16	0.24	0.16
Total	94.66	95.74	96.52	94.92	95.80	94.58	96.72	96.16	94.44	96.27
As	2	1	5	2	2	1	3	4	5	1
Ba	465	311	259	370	966	1196	1445	282	426	184
Co	31	34	28	31	21	30	20	19	39	23
Cr	294	581	270	388	76	62	38	207	131	391
Cu	29	19	24	18	23	28	30	24	17	26
Ga	14	12	13	12	11	10	12	13	13	13
La	14	17	17	18	44	69	81	13	45	16
Ni	176	231	117	170	24	14	12	105	50	156
Nb	7	7	8	8	5	8	9	8	7	8
Pb	7	9	14	7	8	16	19	10	8	7
Rb	34	24	42	27	30	26	26	3	20	16
Sr	75	62	52	54	809	748	825	135	500	78
Sb	3	0	0	1	2	0	0	2	0	0
S	1450	49	3834	117	535	1004	1003	2961	1283	1195
Th	4	5	1	4	8	11	16	5	10	7
V	190	150	191	149	187	217	172	174	167	223
Y	22	18	20	17	17	19	16	17	15	16
Zn	40	54	63	44	43	59	53	66	47	43
Zr	128	127	121	120	92	124	119	98	102	101

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 3

VAR. / ID.	PDW21	PDW22	PDW23	PDW24	PDW25	PDW26	PDW27	PDW28	PDW29	PDW30
East	20483	20510	20509	20513	20536	20552	20570	20569	20589	20594
North	57280	57260	57241	57228	57197	57175	57128	57107	57072	57050
SiO2	54.49	54.73	65.77	58.21	61.77	62.11	63.40	62.83	64.56	63.36
Al2O3	13.13	13.67	12.35	18.59	14.59	14.10	14.17	15.58	12.06	13.31
TiO2	1.60	2.01	0.96	1.16	1.16	1.02	1.05	1.10	0.95	1.09
Fe2O3	11.48	11.75	6.95	8.60	7.63	7.21	7.26	7.57	6.15	7.43
MgO	6.70	8.32	3.86	4.11	4.11	4.65	4.79	3.79	3.38	3.96
CaO	3.08	1.55	2.69	0.74	0.37	0.85	0.89	0.34	3.88	0.72
Na2O	2.24	2.70	1.59	1.42	1.72	0.96	2.01	2.39	2.21	1.76
K2O	1.59	1.11	1.91	3.56	2.13	3.73	2.20	2.53	1.59	2.57
MnO	0.14	0.16	0.09	0.09	0.07	0.08	0.08	0.07	0.12	0.09
P2O5	0.17	0.21	0.16	0.16	0.18	0.16	0.17	0.19	0.16	0.17
Total	94.60	96.21	96.33	96.62	93.74	94.86	96.02	96.38	95.06	94.46
As	9	3	2	4	3	3	1	3	1	6
Ba	194	202	351	597	410	470	415	475	332	504
Co	34	31	17	21	11	13	23	29	16	14
Cr	364	322	152	174	215	181	150	131	147	186
Cu	34	36	16	30	21	23	21	24	18	21
Ga	13	14	11	17	13	12	13	16	11	13
La	5	20	37	42	34	43	39	32	29	33
Ni	178	124	64	96	87	83	74	68	58	77
Nb	8	10	11	14	14	13	13	14	11	12
Pb	7	10	8	8	10	10	10	7	8	10
Rb	24	20	35	73	43	55	38	49	31	48
Sr	103	113	53	43	43	33	56	61	80	53
Sb	4	2	2	0	1	0	0	0	0	1
S	2943	2667	439	1025	161	625	65	322	600	501
Th	0	6	4	7	9	3	8	4	7	8
V	225	231	91	134	119	104	97	107	105	115
Y	19	19	18	23	20	21	20	19	18	21
Zn	63	62	35	54	49	41	48	51	43	56
Zr	104	122	175	182	237	199	198	173	197	210

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 4

VAR. / ID.	PDW31	PDW32	PDW33	PDW34	PDW35	PDW36	PDW37	PDW38	PDW39	PDW40
East	20362	20350	20336	20336	20332	20319	20305	20291	20280	20266
North	57038	57049	57071	57102	57117	57130	57140	57152	57185	57211
SiO2	61.48	61.62	62.60	62.03	55.49	63.22	61.82	62.13	52.13	57.75
Al2O3	14.50	15.34	14.55	13.05	9.74	14.50	14.50	14.43	8.51	11.65
TiO2	1.80	1.40	1.08	1.10	1.12	1.26	0.96	1.27	1.23	1.93
Fe2O3	8.45	7.10	6.75	7.11	8.85	7.53	6.46	7.05	8.11	10.70
MgO	4.59	3.66	4.14	4.57	10.76	4.51	4.38	5.05	11.36	7.51
CaO	0.58	0.44	0.98	0.82	3.94	0.53	0.57	2.11	8.34	1.88
Na2O	1.92	2.54	2.16	2.92	2.41	2.08	3.94	2.13	2.37	2.66
K2O	2.07	2.35	2.37	2.16	1.84	2.19	1.48	2.26	1.57	2.36
MnO	0.10	0.09	0.08	0.09	0.13	0.09	0.09	0.10	0.27	0.16
P2O5	0.22	0.23	0.17	0.19	0.44	0.20	0.23	0.25	0.45	0.27
Total	95.74	94.75	94.89	94.03	94.73	96.09	94.43	96.78	94.32	96.87
As	3	2	2	4	3	0	2	1	2	0
Ba	365	471	425	643	571	427	547	381	366	372
Co	26	22	19	20	28	21	19	18	22	27
Cr	255	141	129	175	314	184	137	152	212	311
Cu	22	14	12	9	14	7	6	12	20	28
Ga	12	15	12	12	10	12	11	12	10	14
La	38	39	32	24	31	9	28	38	31	22
Ni	77	59	57	56	85	80	68	63	67	90
Nb	15	15	12	9	6	12	9	12	5	5
Pb	10	9	10	11	10	8	9	9	11	13
Rb	37	44	40	30	26	34	21	37	19	21
Sr	58	76	58	184	273	47	262	51	292	331
Sb	0	0	1	0	0	0	2	1	0	0
S	0	0	0	0	0	0	0	0	0	0
Th	6	11	5	4	6	3	4	4	4	2
V	140	97	99	118	202	121	98	105	199	171
Y	22	21	18	17	17	16	15	21	15	17
Zn	69	57	53	49	67	52	50	53	41	55
Zr	417	245	183	176	120	214	145	208	81	101

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 5

VAR. / ID.	PDW41	PDW42	PDW43	PDW44	PDW45	PDW46	PDW47	PDW48	PDW49	PDW50
East	20261	20253	20249	20245	20242	20235	20224	20219	20205	20188
North	57224	57257	57275	57290	57306	57324	57340	57350	57361	57368
SiO2	53.24	59.28	56.72	54.94	54.47	58.63	58.31	58.44	59.75	59.34
Al2O3	13.36	10.29	12.53	14.10	13.66	11.04	11.33	9.60	11.86	10.75
TiO2	2.17	1.41	1.52	1.08	1.55	1.70	1.53	1.34	1.55	1.09
Fe2O3	11.55	8.39	9.16	8.89	10.71	10.02	10.53	9.65	9.43	8.48
MgO	9.95	8.56	6.95	5.77	7.89	8.38	7.86	6.27	7.53	7.92
CaO	1.56	1.73	0.58	1.65	0.86	0.58	0.63	2.22	1.03	1.38
Na2O	1.79	2.14	2.27	2.28	2.08	2.13	2.32	2.75	2.63	2.41
K2O	1.86	2.56	3.49	4.60	3.14	2.36	3.20	2.43	2.95	2.88
MnO	0.14	0.13	0.13	0.14	0.14	0.13	0.13	0.16	0.11	0.12
P2O5	0.19	0.17	0.16	0.27	0.19	0.17	0.18	0.24	0.16	0.15
Total	95.82	94.65	93.52	93.73	94.71	95.14	96.01	93.77	96.99	94.53
As	3	1	4	3	3	2	1	1	3	0
Ba	287	462	565	1473	556	477	503	910	469	390
Co	35	22	20	23	25	21	22	22	18	16
Cr	527	147	131	74	133	147	99	124	117	133
Cu	33	6	32	34	27	17	8	19	12	14
Ga	13	11	13	13	17	14	14	12	13	13
La	7	22	22	59	12	21	14	31	18	18
Ni	195	45	58	27	50	52	34	43	40	62
Nb	8	5	6	9	9	7	9	8	6	7
Pb	8	8	11	16	12	8	11	13	8	12
Rb	24	28	46	62	47	36	41	45	39	37
Sr	99	147	224	504	151	170	203	341	186	210
Sb	1	0	0	0	0	0	1	0	1	0
S	0	0	0	0	0	0	0	0	0	0
Th	3	5	3	10	4	7	5	7	4	5
V	240	203	154	212	202	261	177	220	181	165
Y	18	19	15	20	22	18	18	21	20	18
Zn	69	45	59	66	71	55	55	59	59	50
Zr	96	91	111	123	123	113	125	132	115	100

TABLE 4.66

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XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 6

VAR. / ID.	PDW51	PDW52	PDW53	PDW54	PDW55	PDW56	PDW57	PDW58	PDW59	PDW60
East	20160	20143	20113	20044	19979	19904	19865	19851	19840	19826
North	57368	57367	57363	57306	57286	57275	57264	57278	57271	57276
SiO2	56.18	57.34	59.00	56.40	57.42	56.79	58.97	60.26	63.68	61.00
Al2O3	10.67	10.40	9.77	11.04	10.10	11.06	10.56	10.64	10.94	10.69
TiO2	0.89	1.14	1.27	1.51	1.72	1.76	1.60	1.22	1.15	1.49
Fe2O3	8.32	9.02	10.30	9.69	10.06	10.78	9.14	8.52	7.46	8.14
MgO	8.53	8.27	5.93	8.88	7.36	10.09	9.14	7.70	6.32	8.66
CaO	5.95	2.81	4.56	1.08	1.92	0.70	1.16	2.85	0.41	1.11
Na2O	2.99	3.09	3.47	2.00	1.98	2.20	2.46	2.41	2.38	2.52
K2O	2.23	1.71	1.54	3.22	2.94	2.45	2.27	2.10	2.94	2.28
MnO	0.17	0.14	0.19	0.14	0.17	0.16	0.15	0.14	0.11	0.14
P2O5	0.39	0.19	0.26	0.27	0.24	0.23	0.21	0.19	0.16	0.14
Total	96.32	94.11	96.29	94.25	93.90	96.22	95.66	96.02	95.55	96.18
As	0	3	1	3	4	0	1	1	1	2
Ba	837	321	426	830	407	457	636	555	442	340
Co	23	23	19	18	21	21	18	20	18	22
Cr	219	170	150	138	151	157	157	178	151	161
Cu	41	24	29	24	17	26	17	16	63	16
Ga	12	13	14	14	14	14	13	13	12	12
La	46	23	24	32	23	17	31	22	19	19
Ni	69	63	56	55	52	53	54	56	63	57
Nb	8	7	7	8	8	9	8	7	7	9
Pb	13	11	15	10	8	17	10	9	12	8
Rb	44	30	32	64	42	46	48	43	48	39
Sr	290	133	279	329	222	321	272	218	128	127
Sb	0	1	0	2	3	0	0	0	0	0
S	0	0	0	0	21	0	0	1153	0	0
Th	9	4	7	5	11	7	2	7	8	4
V	215	214	235	226	215	228	235	214	164	191
Y	20	20	24	22	21	20	19	24	16	20
Zn	60	63	63	67	59	69	76	63	71	60
Zr	122	113	129	124	118	111	132	110	99	109

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 7

VAR. / ID.	PDW61	PDW62	PDW63	PDW64	PDW65	PDW66	PDW67	PDW68	PDW69	PDW70
East	19800	19798	19778	19761	19743	19731	19718	19717	19716	19705
North	57258	57253	57206	57197	57169	57157	57141	57112	57094	57081
SiO2	60.56	59.81	58.06	57.97	56.66	57.83	59.06	61.26	59.74	53.13
Al2O3	11.29	10.15	10.23	10.92	11.40	11.45	10.37	11.39	13.20	12.06
TiO2	0.87	0.99	1.49	1.65	1.48	1.18	1.45	1.05	1.31	0.95
Fe2O3	6.79	8.77	10.04	9.56	9.94	8.40	9.52	7.89	8.55	8.97
MgO	7.90	5.96	9.63	9.49	9.81	6.99	6.84	7.06	6.52	6.20
CaO	0.44	4.30	1.46	0.73	1.37	0.79	1.69	1.64	1.16	6.92
Na2O	2.54	4.01	2.19	2.06	2.75	2.25	3.54	2.47	2.74	3.29
K2O	3.28	1.66	2.04	3.28	2.86	4.55	1.68	3.58	3.13	2.56
MnO	0.09	0.17	0.16	0.15	0.19	0.12	0.17	0.14	0.13	0.21
P2O5	0.12	0.34	0.28	0.17	0.24	0.27	0.15	0.19	0.24	0.62
Total	93.88	96.17	95.58	95.99	96.70	93.80	94.47	96.67	96.73	94.90
As	2	3	2	2	1	4	0	5	2	4
Ba	472	617	502	346	973	644	385	599	970	2017
Co	17	24	23	18	21	18	17	18	19	20
Cr	95	84	138	120	101	97	107	124	90	50
Cu	11	17	14	44	30	9	20	33	16	53
Ga	13	14	15	14	14	15	16	15	18	15
La	16	33	30	22	29	26	14	25	35	63
Ni	52	16	60	39	38	33	38	51	31	11
Nb	7	8	9	11	10	9	7	10	14	9
Pb	11	10	10	14	17	9	13	13	13	30
Rb	47	37	39	42	59	91	33	70	62	69
Sr	117	351	303	165	310	259	257	251	386	1148
Sb	2	3	0	1	0	2	0	0	0	0
S	0	0	0	0	0	0	0	0	0	1262
Th	4	5	7	6	7	7	7	4	15	16
V	128	219	185	238	198	196	155	148	194	260
Y	20	23	21	24	22	23	22	23	25	27
Zn	58	99	85	71	78	63	71	68	91	85
Zr	98	124	131	160	139	126	120	117	176	145

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 8

VAR. / ID.	PDW71	PDW72	PDW73	PDW74	PDW75	PDW76	PDW77	PDW78	PDW79	PDW80
East	19698	19692	19680	19670	19665	19670	19656	19643	19626	19622
North	57070	57051	57035	57017	57004	56993	56980	56962	56943	56927
SiO2	56.39	56.51	58.48	51.62	52.73	57.13	59.01	58.11	54.05	51.35
Al2O3	14.59	14.21	14.16	12.81	13.85	13.45	12.31	13.47	11.23	10.64
TiO2	1.35	1.55	1.51	1.72	1.92	0.94	0.96	0.83	1.50	1.78
Fe2O3	7.85	9.10	8.37	10.65	11.64	7.80	7.81	7.09	10.67	10.77
MgO	5.86	6.72	7.05	9.46	8.78	5.42	6.13	3.38	9.90	9.05
CaO	0.92	3.91	0.95	3.28	3.23	3.99	3.06	3.70	4.13	8.06
Na2O	3.00	2.18	2.66	2.21	2.41	4.50	3.44	5.72	2.48	2.20
K2O	3.42	2.17	2.47	1.49	1.55	2.76	2.14	1.97	1.37	1.31
MnO	0.12	0.13	0.12	0.15	0.14	0.15	0.13	0.18	0.16	0.17
P2O5	0.28	0.18	0.18	0.20	0.20	0.34	0.27	0.32	0.25	0.22
Total	93.79	96.68	95.95	93.58	96.46	96.48	95.26	94.76	95.74	95.56
As	1	2	0	2	5	0	1	1	8	5
Ba	1307	491	438	340	282	1398	845	1083	596	384
Co	23	21	22	25	30	18	13	11	33	30
Cr	110	261	193	383	335	54	85	51	491	647
Cu	57	16	16	59	11	14	37	40	46	52
Ga	20	17	17	17	18	16	15	15	15	18
La	32	14	19	17	11	49	31	35	30	23
Ni	48	126	91	203	183	12	25	15	211	196
Nb	15	11	11	11	12	12	11	11	11	10
Pb	14	8	14	20	5	15	14	14	25	11
Rb	86	56	60	40	38	56	49	45	34	27
Sr	576	188	116	166	148	787	577	666	501	457
Sb	0	0	0	0	0	0	1	2	0	0
S	4577	0	2245	2186	0	0	1908	143	2208	2458
Th	13	4	6	6	4	16	13	19	8	8
V	175	191	173	235	235	196	180	155	242	279
Y	24	22	26	27	20	25	25	25	26	29
Zn	81	68	68	101	103	76	54	60	100	76
Zr	178	148	162	144	142	145	159	145	157	146

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 9

VAR. / ID.	PDW81	PDW82	PDW83	PDW84	PDW85	PDW86	PDW87	PDW88	PDW89	PDW90
East	19617	19668	19660	19667	19668	19662	19652	19652	19647	19631
North	56909	56874	56858	56840	56817	56802	56785	56772	56754	56729
SiO2	58.89	53.38	63.09	62.01	61.54	63.51	61.79	60.35	64.53	57.67
Al2O3	14.18	14.30	13.44	11.53	15.10	13.71	13.62	16.41	14.43	17.61
TiO2	0.90	1.66	0.93	1.02	1.07	1.11	1.12	1.19	1.24	1.23
Fe2O3	6.87	10.98	6.86	6.70	7.76	7.57	7.41	8.26	7.67	8.68
MgO	5.24	8.58	4.72	4.46	5.09	4.41	4.61	3.97	3.94	5.38
CaO	2.81	1.59	2.06	4.98	1.80	2.02	3.21	0.60	0.50	0.57
Na2O	3.58	2.47	1.85	1.59	1.72	1.92	1.83	2.08	2.30	1.69
K2O	3.24	1.47	1.89	1.66	2.50	2.10	2.38	2.67	1.99	3.19
MnO	0.15	0.14	0.09	0.10	0.09	0.11	0.09	0.10	0.10	0.09
P2O5	0.35	0.19	0.15	0.17	0.17	0.17	0.18	0.18	0.19	0.17
Total	96.21	94.77	95.08	94.21	96.83	96.62	96.24	95.83	96.88	96.28
As	3	4	6	6	7	6	5	4	2	5
Ba	1826	387	405	328	481	415	448	590	424	602
Co	17	24	13	15	19	19	21	17	17	21
Cr	59	272	150	231	158	205	181	161	161	167
Cu	22	58	8	79	26	7	16	10	6	37
Ga	17	19	17	12	16	15	17	20	17	19
La	54	8	25	27	32	35	33	36	34	40
Ni	20	142	78	84	87	97	83	72	72	97
Nb	16	16	17	17	20	20	20	20	18	23
Pb	13	14	12	11	26	11	11	11	10	20
Rb	72	41	61	50	78	60	71	86	58	109
Sr	1433	124	81	114	96	76	108	111	84	84
Sb	0	0	1	1	0	0	0	0	0	0
S	0	5090	662	313	678	0	244	483	0	1494
Th	21	5	11	11	13	10	10	14	8	12
V	163	208	90	105	101	107	103	118	105	132
Y	27	28	26	26	28	25	28	32	26	32
Zn	81	66	63	57	110	63	65	76	68	144
Zr	194	156	210	279	236	306	266	271	271	236

TABLE 4.66

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XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 10

VAR. / ID.	PDW91	PDW92	PDW93	PDW94	PDW95	PDW96	PDW97	PDW98	PDW99	PDW100
East	19630	19620	19612	19608	19603	19608	19601	19601	19609	19606
North	56715	56690	56678	56658	56638	56611	56597	56584	56568	56544
SiO2	63.75	60.90	63.85	62.55	62.54	64.08	65.97	66.01	62.44	58.13
Al2O3	12.20	15.23	14.07	14.14	14.04	14.12	14.46	12.27	14.36	17.32
TiO2	0.96	1.09	1.08	1.01	1.51	1.07	1.03	0.93	1.09	1.38
Fe2O3	6.71	7.68	7.61	7.15	8.64	7.06	6.95	6.78	7.15	8.99
MgO	3.84	3.87	3.66	3.61	4.03	3.17	3.13	4.19	4.39	4.33
CaO	1.93	0.72	1.77	0.86	1.15	0.93	0.96	1.32	0.72	0.79
Na2O	1.93	2.31	2.27	2.33	2.20	2.48	2.26	1.95	2.11	1.79
K2O	2.16	2.29	2.02	2.04	1.74	1.97	1.85	1.56	2.28	2.89
MnO	0.08	0.10	0.10	0.09	0.12	0.10	0.09	0.10	0.08	0.08
P2O5	0.15	0.18	0.19	0.16	0.20	0.18	0.17	0.14	0.16	0.17
Total	93.73	94.35	96.60	93.93	96.18	95.16	96.86	95.25	94.78	95.86
As	9	1	3	0	4	3	2	10	2	1
Ba	488	542	474	487	341	534	385	312	513	546
Co	19	18	13	15	16	16	12	13	14	23
Cr	161	136	160	123	265	121	121	175	186	176
Cu	27	30	26	27	35	26	20	22	14	10
Ga	16	18	17	16	18	18	16	14	15	19
La	27	46	42	30	34	43	30	24	34	37
Ni	88	72	66	67	78	63	66	81	80	93
Nb	16	22	19	21	19	20	17	14	18	24
Pb	9	16	13	18	7	14	10	10	11	8
Rb	66	74	62	68	55	65	57	50	72	96
Sr	108	105	109	92	103	124	83	64	85	69
Sb	1	0	0	1	1	0	0	0	0	3
S	299	266	262	284	614	343	137	7	0	0
Th	7	10	7	8	9	9	11	4	9	13
V	92	97	104	105	131	95	103	94	102	116
Y	25	31	27	26	30	29	27	23	27	31
Zn	59	85	82	77	74	80	74	47	62	81
Zr	234	266	287	238	420	261	241	221	294	266

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 11

VAR. / ID.	PDW101	PDW102	PDW103	PDW104	PDW105	PDW106	PDW107	PDW108	PDW109	PDW110
East	19603	19601	19599	19595	19598	19593	19592	19600	19602	19594
North	56528	56506	56475	56456	56438	56420	56402	56391	56369	56350
SiO2	62.88	63.09	61.68	63.89	61.17	65.08	60.77	62.19	59.02	60.69
Al2O3	13.65	13.82	12.95	12.08	12.95	12.72	14.96	14.05	12.32	14.45
TiO2	1.10	1.32	1.13	1.09	1.41	1.12	1.09	1.11	0.89	1.35
Fe2O3	7.14	8.05	7.74	7.09	7.80	7.49	7.50	7.44	5.78	7.68
MgO	4.07	3.96	5.37	4.68	5.13	3.52	4.24	3.83	3.06	4.07
CaO	2.49	0.85	1.87	2.02	1.30	0.57	1.13	0.67	9.48	1.39
Na2O	2.19	2.39	1.86	1.64	1.64	2.17	2.79	2.49	2.40	3.02
K2O	2.37	1.64	1.90	1.50	1.98	1.68	2.46	2.21	2.79	2.83
MnO	0.12	0.12	0.11	0.09	0.09	0.09	0.10	0.10	0.20	0.10
P2O5	0.17	0.19	0.16	0.16	0.17	0.16	0.23	0.18	0.26	0.26
Total	96.20	95.42	94.76	94.25	93.64	94.59	95.26	94.26	96.20	95.83
As	14	6	3	5	3	2	3	3	3	2
Ba	483	413	414	539	356	389	734	648	1050	1084
Co	21	16	16	12	16	14	12	14	14	16
Cr	146	204	230	249	406	195	153	154	123	155
Cu	35	24	22	19	9	10	25	23	10	41
Ga	15	15	16	16	16	16	19	16	15	21
La	34	37	32	25	38	31	38	33	32	56
Ni	79	69	94	82	103	73	57	63	46	60
Nb	19	18	18	17	20	17	17	19	15	21
Pb	10	19	14	11	9	10	13	18	7	10
Rb	71	51	55	46	60	50	68	66	61	69
Sr	109	113	75	92	84	87	454	177	500	557
Sb	3	4	0	0	4	0	0	2	0	1
S	176	83	112	573	69	712	492	175	0	0
Th	6	14	5	12	13	8	8	10	9	19
V	99	118	107	114	127	117	128	119	106	115
Y	27	28	26	23	30	24	27	29	25	30
Zn	61	86	78	61	57	56	82	77	55	73
Zr	257	380	270	307	409	242	228	296	211	306

TABLE 4.66

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XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 12

VAR. / ID.	PDW111	PDW112	PDW113	PDW114	PDW115	PDW116	PDW117	PDW118	PDW119	PDW120
East	19593	19599	19598	19596	19599	19604	19612	19627	19643	19650
North	56332	56310	56290	56271	56253	56230	56202	56174	56156	56138
SiO2	62.20	58.71	63.60	62.96	64.67	64.06	60.15	63.23	63.59	66.49
Al2O3	13.60	15.45	15.78	13.89	14.06	13.86	12.29	14.21	13.76	9.57
TiO2	0.97	1.15	1.14	0.97	1.15	1.01	0.83	0.92	1.12	0.82
Fe2O3	6.38	7.84	6.24	6.47	7.48	6.80	5.52	6.45	7.54	5.15
MgO	3.36	3.50	2.90	3.39	3.51	3.47	2.82	3.18	3.72	4.29
CaO	1.74	3.21	0.38	1.02	1.04	0.93	7.91	1.09	1.56	5.95
Na2O	3.05	1.91	2.67	2.68	2.38	2.10	2.43	3.29	2.57	1.50
K2O	2.11	2.66	2.60	3.13	2.29	2.12	1.93	2.35	1.99	1.58
MnO	0.09	0.13	0.06	0.09	0.10	0.09	0.18	0.10	0.11	0.11
P2O5	0.22	0.17	0.21	0.24	0.18	0.16	0.17	0.23	0.22	0.18
Total	93.71	94.74	95.58	94.85	96.87	94.60	94.23	95.05	96.17	95.63
As	3	3	3	3	3	5	1	3	3	2
Ba	886	495	430	1339	631	478	421	1099	560	339
Co	14	13	12	15	17	14	17	16	12	13
Cr	120	145	147	144	176	139	118	118	156	312
Cu	20	51	9	11	22	21	21	24	23	5
Ga	17	20	16	16	18	15	14	16	16	10
La	42	32	36	49	34	33	33	42	46	29
Ni	52	69	54	64	66	64	55	52	54	90
Nb	16	18	17	17	18	18	16	19	18	15
Pb	14	7	10	8	18	12	14	21	17	8
Rb	53	81	64	73	64	58	54	58	57	44
Sr	659	166	265	530	156	111	263	321	345	108
Sb	1	0	0	0	0	3	2	0	0	3
S	0	798	0	0	225	136	183	115	436	331
Th	12	8	9	15	7	6	8	10	11	7
V	102	117	112	101	106	107	97	97	105	78
Y	23	33	25	28	28	25	25	26	27	20
Zn	97	63	67	69	68	65	61	71	86	38
Zr	220	237	247	251	321	240	206	245	275	250

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 13

VAR. / ID.	PDW121	PDW122	PDW123	PDW124	PDW125	PDW126	PDW127	PDW128	PDW129	PDW130
East	19655	19660	19667	19674	19690	19701	19711	19719	19730	19740
North	56122	56104	56086	56075	56062	56046	56029	56014	55994	55980
SiO2	57.97	58.87	67.61	72.60	66.99	61.56	62.19	61.72	63.09	65.02
Al2O3	12.11	14.80	12.68	11.27	13.18	13.72	13.80	13.59	12.90	11.95
TiO2	1.21	1.20	1.05	0.88	1.11	0.93	0.97	1.04	0.95	0.99
Fe2O3	9.05	8.94	6.35	5.01	6.67	6.21	6.77	6.71	6.81	6.83
MgO	5.12	4.53	2.74	2.22	2.96	3.91	4.51	4.59	5.16	4.76
CaO	4.86	1.44	1.91	0.31	0.71	4.66	1.77	3.71	2.85	1.27
Na2O	1.90	2.10	1.92	2.10	1.89	2.11	1.71	1.60	1.55	1.58
K2O	1.79	2.68	2.13	1.59	2.05	3.09	2.35	2.43	2.30	2.03
MnO	0.14	0.11	0.09	0.06	0.08	0.09	0.08	0.13	0.08	0.06
P2O5	0.36	0.28	0.16	0.14	0.18	0.25	0.18	0.20	0.19	0.17
Total	94.51	94.95	96.65	96.18	95.82	96.53	94.34	95.74	95.88	94.65
As	3	4	3	2	4	1	3	0	1	4
Ba	648	796	459	410	455	817	431	371	427	425
Co	19	16	12	8	14	9	15	13	16	14
Cr	113	124	124	88	132	124	164	188	149	164
Cu	27	37	20	13	18	13	21	6	11	20
Ga	17	20	15	13	13	13	16	15	16	16
La	47	51	23	20	29	46	38	33	35	32
Ni	44	55	49	32	47	55	66	72	75	70
Nb	18	19	19	17	18	19	17	19	17	17
Pb	11	19	9	11	11	11	18	7	10	22
Rb	49	80	64	52	59	77	74	72	70	67
Sr	606	567	115	64	81	408	91	135	168	86
Sb	0	0	0	0	0	0	5	0	1	0
S	587	1144	916	1492	1438	0	598	0	0	292
Th	11	15	9	8	10	13	8	11	11	8
V	160	146	85	65	82	117	106	114	97	98
Y	31	30	24	20	23	25	25	26	24	24
Zn	59	97	48	41	70	50	73	48	50	95
Zr	246	231	267	244	300	224	263	299	256	276

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 14

VAR. / ID.	PDW131	PDW132	PDW133	PDW134	PDW135	PDW136	PDW137	PDW138	PDW139	PDW140
East	19755	19760	19761	19763	19770	19770	19780	19793	19793	19810
North	55954	55932	55911	55892	55874	55857	55836	55816	55797	55777
SiO2	63.30	61.98	62.82	62.37	66.73	69.05	63.38	65.27	64.51	67.82
Al2O3	13.19	12.20	12.12	14.52	11.31	10.19	11.79	12.99	11.42	11.08
TiO2	1.05	1.00	1.05	1.12	1.40	1.27	1.078	1.64	0.82	1.25
Fe2O3	7.47	7.24	8.19	7.57	8.15	6.02	5.92	8.68	5.50	7.11
MgO	5.66	4.80	4.93	4.05	4.11	3.05	3.84	3.06	3.57	2.91
CaO	1.78	2.26	1.88	1.47	1.07	0.38	4.94	0.73	4.50	1.16
Na2O	1.72	1.77	1.63	1.79	2.20	2.30	1.53	2.28	1.59	2.23
K2O	2.11	2.75	2.68	2.42	1.31	1.16	2.52	1.90	1.99	1.24
MnO	0.09	0.09	0.11	0.07	0.11	0.08	0.08	0.11	0.08	0.09
P2O5	0.17	0.23	0.26	0.15	0.18	0.16	0.12	0.21	0.14	0.16
Total	96.54	94.34	95.68	95.53	96.57	93.67	94.89	96.86	94.13	95.04
As	2	4	1	3	2	1	4	4	1	0
Ba	420	822	686	463	338	271	384	341	363	329
Co	12	16	17	14	15	16	17	25	8	12
Cr	180	135	158	160	186	203	113	222	129	129
Cu	22	35	26	24	21	27	17	26	15	17
Ga	17	15	17	19	14	12	15	17	15	13
La	38	36	35	31	32	27	30	23	37	19
Ni	77	62	72	68	54	47	52	73	46	36
Nb	17	19	17	20	18	16	16	22	16	18
Pb	14	18	21	15	9	8	7	10	14	12
Rb	67	80	82	78	38	36	85	59	68	37
Sr	105	259	312	154	95	66	118	83	145	99
Sb	0	0	0	0	0	0	0	0	0	0
S	211	352	388	1189	832	942	251	297	343	1018
Th	8	12	13	15	11	6	12	12	11	6
V	106	113	124	109	123	88	74	131	72	103
Y	24	25	25	29	28	24	25	33	26	26
Zn	83	56	72	83	53	42	42	62	60	53
Zr	275	249	257	270	348	365	198	439	261	381

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 15

VAR. / ID.	PDW141	PDW142	PDW143	PDW144	PDW145	PDW146	PDW147	PDW148	PDW149	PDW150
East	19830	19830	19833	19830	19811	19810	19803	19821	19823	19826
North	55755	55738	55716	55700	55682	55668	55648	55631	55613	55598
SiO2	68.58	64.15	56.81	56.09	56.96	56.66	56.47	57.38	56.46	54.02
Al2O3	10.67	13.09	13.32	12.98	11.67	14.35	12.65	12.69	12.42	13.77
TiO2	0.94	0.94	0.96	1.13	1.05	1.01	1.17	0.98	1.02	1.02
Fe2O3	6.14	6.16	7.82	9.08	9.39	8.24	8.82	8.15	8.91	8.14
MgO	2.58	3.54	5.90	7.48	5.94	6.19	5.95	6.65	6.86	6.32
CaO	1.25	1.83	6.59	4.13	5.31	4.25	5.08	4.07	4.39	5.13
Na2O	1.71	1.99	2.32	2.81	3.07	2.31	2.14	3.07	3.11	3.59
K2O	1.46	2.01	1.46	0.99	1.30	2.32	3.06	1.46	1.37	1.72
MnO	0.07	0.06	0.15	0.15	0.17	0.13	0.13	0.12	0.14	0.16
P2O5	0.14	0.15	0.21	0.25	0.20	0.18	0.26	0.19	0.22	0.25
Total	93.55	93.91	95.55	95.08	95.06	95.63	95.74	94.76	94.90	94.12
As	3	1	2	5	1	2	1	2	2	5
Ba	364	420	346	386	412	723	846	609	403	635
Co	10	14	20	19	24	23	22	20	22	22
Cr	103	102	177	239	176	212	175	190	230	176
Cu	17	5	9	35	28	40	44	33	32	39
Ga	13	15	16	18	18	17	17	19	15	18
La	23	30	29	19	8	19	16	16	11	17
Ni	28	45	64	66	47	75	59	60	68	72
Nb	16	18	11	13	7	11	10	10	8	10
Pb	10	10	10	12	13	15	14	16	12	11
Rb	44	70	46	32	37	73	78	46	43	44
Sr	92	102	393	464	422	465	491	496	457	410
Sb	3	0	0	0	0	0	0	0	0	0
S	1423	0	0	839	233	1402	901	572	250	1002
Th	8	13	7	8	4	7	4	5	6	6
V	87	82	160	197	192	180	212	157	196	174
Y	27	27	23	24	21	22	23	20	20	21
Zn	43	47	55	74	69	77	76	60	71	66
Zr	244	240	163	182	125	152	153	144	143	147

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 16

VAR. / ID.	PDW151	PDW152	PDW153	PDW154	PDW155	PDW156	PDW157	PDW158	PDW159	PDW160
East	19848	19853	19865	19872	19895	19922	19922	19935	19959	19980
North	55588	55572	55542	55524	55522	55510	55486	55450	55427	55405
SiO2	56.78	55.38	54.99	54.45	57.99	55.46	54.37	57.26	57.91	61.98
Al2O3	13.77	13.40	11.77	13.13	13.28	13.05	12.91	14.88	15.92	13.11
TiO2	0.96	0.95	1.25	1.23	0.89	1.29	1.12	1.05	0.92	0.79
Fe2O3	7.85	8.26	10.35	9.25	7.16	9.58	8.78	8.42	7.88	6.85
MgO	5.74	5.89	6.66	7.23	6.19	7.31	7.33	6.51	6.11	4.41
CaO	4.67	4.93	6.38	5.06	2.21	3.74	4.19	1.70	2.23	2.99
Na2O	2.99	2.47	2.27	2.53	3.83	1.90	2.79	3.32	2.91	2.52
K2O	1.97	2.20	1.48	2.12	1.82	2.23	1.82	2.13	2.77	2.57
MnO	0.13	0.15	0.17	0.15	0.12	0.14	0.17	0.11	0.12	0.12
P2O5	0.22	0.22	0.21	0.26	0.20	0.28	0.25	0.21	0.19	0.14
Total	95.07	93.86	95.53	95.40	93.68	94.98	93.73	95.59	96.96	95.49
As	1	2	1	1	1	5	2	1	4	4
Ba	548	623	511	590	737	670	619	683	748	726
Co	18	26	29	22	14	30	27	21	18	20
Cr	168	189	313	205	146	310	228	219	188	183
Cu	33	39	36	38	8	11	42	6	19	36
Ga	19	18	19	20	18	20	17	20	20	17
La	24	19	17	22	21	22	21	13	21	23
Ni	59	69	74	59	50	73	61	86	83	69
Nb	11	8	10	15	10	14	11	11	11	8
Pb	14	13	12	16	12	11	15	7	11	18
Rb	58	71	39	67	52	67	56	66	92	81
Sr	524	429	468	531	546	475	482	402	401	407
Sb	1	1	0	0	0	0	1	1	0	0
S	987	713	1080	212	0	0	272	0	348	2391
Th	7	6	8	9	6	7	7	8	6	6
V	162	182	253	203	131	243	232	160	146	139
Y	22	21	22	24	21	25	25	21	22	23
Zn	64	73	77	73	53	84	88	54	43	75
Zr	142	142	146	168	154	165	145	154	144	146

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 17

VAR. / ID.	PDW161	PDW162	PDW163	PDW164	PDW165	PDW166	PDW167	PDW168	PDW169	PDW170
East	19995	20010	20019	20040	20060	20051	20064	20080	20120	20148
North	55389	55374	55360	55347	55328	55308	55289	55272	55260	55261
SiO2	63.71	61.83	61.29	56.05	58.21	59.84	64.38	61.92	59.82	63.75
Al2O3	11.87	11.21	13.18	12.98	14.80	12.93	11.68	13.34	14.40	12.89
TiO2	0.73	0.93	0.88	1.07	1.04	0.78	0.75	0.94	0.77	0.88
Fe2O3	6.33	8.04	7.34	9.71	8.26	7.11	5.99	7.71	6.77	6.94
MgO	4.04	5.94	4.97	8.08	5.73	5.47	4.20	5.72	5.95	5.54
CaO	3.09	3.47	2.39	3.08	2.77	3.14	2.42	1.61	1.93	1.35
Na2O	2.91	3.06	2.92	2.60	2.05	2.63	3.33	2.46	3.46	3.76
K2O	2.30	1.70	2.73	1.27	2.37	1.65	1.80	2.64	2.44	1.50
MnO	0.12	0.13	0.11	0.17	0.12	0.12	0.10	0.11	0.11	0.10
P2O5	0.14	0.18	0.16	0.21	0.19	0.18	0.15	0.17	0.18	0.16
Total	95.23	96.51	95.96	95.21	95.53	93.85	94.80	96.62	95.82	96.88
As	3	2	2	3	4	4	3	0	2	15
Ba	632	633	909	452	353	318	538	867	889	533
Co	13	15	21	23	17	19	15	19	15	19
Cr	156	389	249	347	233	229	151	215	178	220
Cu	20	23	30	23	35	20	22	25	38	43
Ga	14	16	17	18	17	16	15	16	18	15
La	15	25	27	29	20	20	21	24	21	22
Ni	45	79	83	88	98	76	61	91	74	77
Nb	7	10	10	10	13	8	10	12	10	9
Pb	9	13	14	11	16	11	16	17	6	11
Rb	66	43	81	31	73	50	55	61	70	40
Sr	255	384	350	235	223	235	332	325	472	293
Sb	1	0	0	0	2	3	0	3	0	8
S	1186	1267	1095	714	2101	514	915	15	200	778
Th	10	9	8	12	4	9	6	11	11	5
V	111	165	137	178	146	131	101	133	123	132
Y	21	22	23	22	22	20	21	22	20	20
Zn	27	65	72	74	76	65	59	62	38	41
Zr	136	188	151	183	171	151	133	165	150	143

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 18

VAR. / ID.	PDW171	PDW172	PDW173	PDW174	PDW175	PDW176	PDW177	PDW178	PDW179	PDW180
East	20178	20185	20199	20220	20232	20250	20278	20303	20338	20364
North	55239	55223	55204	55170	55136	55110	55102	55091	55074	55059
SiO2	63.25	57.99	58.62	58.21	64.55	60.68	58.89	61.02	62.22	59.10
Al2O3	11.35	14.55	14.90	14.44	9.82	13.87	14.80	12.97	12.60	14.33
TiO2	1.03	0.89	0.97	0.92	0.76	0.94	0.90	0.95	0.91	1.06
Fe2O3	7.15	7.18	8.26	8.01	6.22	6.68	7.32	7.16	6.77	8.45
MgO	6.85	6.20	7.73	7.03	7.19	5.95	6.42	7.86	6.77	7.59
CaO	2.64	2.75	1.43	2.32	2.02	3.76	2.46	1.02	1.20	1.20
Na2O	2.91	2.33	2.73	2.55	1.63	2.24	2.33	2.54	3.17	2.46
K2O	0.78	2.04	1.71	1.57	1.46	2.17	2.36	1.63	1.26	2.04
MnO	0.20	0.12	0.11	0.10	0.09	0.21	0.15	0.14	0.11	0.14
P2O5	0.18	0.17	0.16	0.17	0.12	0.24	0.16	0.16	0.17	0.16
Total	96.35	94.21	96.62	95.32	93.86	96.75	95.78	95.45	95.18	96.54
As	2	6	5	4	1	14	4	4	5	4
Ba	224	354	368	345	290	423	394	389	410	561
Co	18	21	22	19	17	24	22	21	20	22
Cr	428	251	279	301	441	302	280	439	280	313
Cu	58	14	30	25	18	30	30	23	26	31
Ga	14	16	18	16	12	14	17	16	14	18
La	25	27	21	25	18	26	24	27	18	25
Ni	130	139	158	143	188	149	155	189	149	177
Nb	13	13	13	12	10	12	14	11	11	13
Pb	8	9	18	16	15	9	26	16	19	19
Rb	25	63	57	47	46	68	75	40	39	63
Sr	188	192	207	192	65	182	153	148	212	213
Sb	4	0	0	2	0	2	0	5	3	1
S	0	0	787	0	0	37	0	0	0	0
Th	9	11	9	3	6	9	10	9	8	8
V	128	111	128	141	96	116	121	119	101	132
Y	22	22	22	21	20	23	21	19	20	24
Zn	50	64	77	69	52	51	70	64	66	77
Zr	187	200	183	162	227	192	182	213	183	200

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 19

VAR. / ID.	PDW181	PDW182	PDW183	PDW184	PDW185	PDW186	PDW187	PDW188	PDW189	PDW190
East	20398	20435	20443	20449	20463	20468	20467	20461	20462	20451
North	55037	54963	54962	54952	54930	54923	54908	54900	54884	54862
SiO2	60.89	57.76	59.26	60.52	59.77	49.75	59.59	61.88	67.95	63.31
Al2O3	13.27	19.18	13.91	16.85	14.43	12.68	13.34	15.52	9.63	13.23
TiO2	0.81	1.08	0.92	0.89	0.98	1.09	1.00	0.63	0.70	0.69
Fe2O3	7.20	6.66	6.96	5.64	6.99	8.81	6.02	5.46	5.64	4.56
MgO	7.32	3.01	5.84	2.74	5.46	9.02	5.51	3.54	4.32	3.20
CaO	2.53	3.10	2.19	2.58	2.65	8.04	1.88	3.11	2.62	6.58
Na2O	2.68	0.80	3.11	4.38	2.81	2.94	3.61	2.57	2.42	2.02
K2O	1.65	3.55	1.88	1.36	3.45	1.23	2.80	3.23	1.77	2.94
MnO	0.11	0.07	0.06	0.10	0.08	0.17	0.04	0.16	0.09	0.09
P2O5	0.15	0.19	0.18	0.23	0.19	0.19	0.20	0.15	0.13	0.18
Total	96.62	95.40	94.32	95.29	96.83	93.90	93.98	96.26	95.27	96.78
As	4	38	2	1	1	21	3	15	3	8
Ba	419	186	391	1218	581	363	389	539	436	449
Co	16	18	14	12	21	26	15	10	15	8
Cr	303	190	201	32	239	520	249	134	180	119
Cu	29	20	11	22	35	78	7	14	15	12
Ga	15	21	19	18	16	16	16	14	12	10
La	22	26	27	24	23	7	27	21	20	24
Ni	158	95	114	2	138	140	122	40	48	28
Nb	12	15	12	7	12	6	12	8	9	10
Pb	14	12	10	8	8	10	11	13	14	7
Rb	48	109	58	47	131	28	126	75	40	68
Sr	195	117	302	388	239	458	268	351	157	310
Sb	0	118	0	0	3	0	0	2	0	1
S	0	363	161	338	501	0	0	0	2587	0
Th	7	7	7	9	7	0	10	8	2	5
V	99	142	109	87	120	157	113	93	93	77
Y	18	25	21	18	22	16	23	18	22	21
Zn	61	54	36	50	36	56	15	42	41	6
Zr	170	185	181	158	188	108	184	158	172	176

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GwKE22) Part 20

VAR. / ID.	PDW191	PDW192	PDW193	PDW194	PDW195	PDW196	PDW197	PDW198	PDW199	PDW200
East	20455	20468	20488	20502	20520	20536	20555	20588	20600	20623
North	54843	54829	54828	54816	54810	54793	54769	54730	54719	54724
SiO2	60.21	64.46	61.17	65.38	67.96	60.68	63.41	59.37	66.14	62.42
Al2O3	11.84	12.77	12.47	12.00	10.35	14.03	12.77	12.14	11.07	12.28
TiO2	0.85	0.87	1.03	0.96	0.90	1.01	0.84	1.04	0.81	1.03
Fe2O3	6.68	6.50	7.13	6.89	5.53	7.49	6.80	7.65	5.87	7.25
MgO	5.49	5.36	5.82	5.00	4.14	5.72	4.91	6.71	4.78	5.27
CaO	4.27	2.37	2.30	1.68	2.20	0.37	1.43	2.51	1.60	2.20
Na2O	2.03	2.36	2.17	2.09	2.38	2.49	1.78	2.49	2.06	2.70
K2O	2.08	1.98	2.16	2.31	1.60	1.91	2.26	2.25	2.26	2.32
MnO	0.10	0.09	0.11	0.09	0.09	0.09	0.06	0.11	0.06	0.10
P2O5	0.20	0.22	0.20	0.18	0.14	0.20	0.16	0.25	0.18	0.25
Total	93.76	96.99	94.58	96.58	95.29	94.00	94.42	94.52	94.84	95.82
As	6	2	34	4	11	7	28	2	0	2
Ba	504	567	515	561	373	378	376	676	553	822
Co	18	16	19	16	14	12	12	19	10	18
Cr	172	185	169	201	257	157	159	178	227	156
Cu	26	25	17	19	10	16	20	25	22	22
Ga	12	16	11	13	11	16	14	15	11	14
La	29	28	18	23	21	28	29	29	37	41
Ni	54	56	48	64	69	75	92	62	51	55
Nb	11	11	10	11	10	10	11	11	11	14
Pb	11	14	135	11	6	9	14	12	15	14
Rb	53	48	49	55	37	48	56	48	56	50
Sr	271	177	185	203	124	149	85	295	171	429
Sb	1	0	0	1	1	0	0	0	0	0
S	74	0	434	752	0	0	0	0	1539	237
Th	7	8	9	6	9	7	10	7	8	12
V	107	112	135	116	98	98	84	123	82	113
Y	21	22	17	23	18	22	22	21	22	25
Zn	55	52	230	52	46	71	58	60	46	56
Zr	239	231	231	259	250	214	193	240	237	245

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 21

VAR. / ID.	PDW201	PDW202	PDW203	PDW204	PDW205	PDW206	PDW207	PDW208	PDW209	PDW210
East	20644	20639	20649	20665	20670	20677	20696	20703	20713	20710
North	54716	54700	54684	54664	54650	54634	54619	54603	54588	54571
SiO2	66.41	65.14	65.28	63.53	64.34	68.66	62.51	59.16	69.30	66.85
Al2O3	11.06	12.75	10.92	13.15	12.21	11.14	11.68	13.05	10.95	10.63
TiO2	0.78	0.77	0.79	0.87	0.76	0.83	0.98	1.03	0.78	0.85
Fe2O3	5.82	5.63	5.09	6.09	5.29	5.25	6.34	6.88	6.04	5.91
MgO	4.34	4.32	3.09	4.52	4.01	3.15	5.89	5.28	4.00	4.59
CaO	2.25	1.32	3.91	1.42	3.58	1.41	1.37	3.72	2.29	1.01
Na2O	2.30	1.66	2.15	1.81	1.57	2.42	2.03	2.54	0.98	1.74
K2O	2.22	2.89	2.25	3.03	2.80	1.19	2.69	2.43	2.08	2.45
MnO	0.08	0.06	0.08	0.06	0.08	0.13	0.06	0.10	0.17	0.07
P2O5	0.18	0.16	0.19	0.18	0.18	0.16	0.19	0.24	0.17	0.19
Total	95.44	94.70	93.75	94.67	94.81	94.34	93.75	94.42	96.75	94.28
As	1	3	0	1	2	2	6	5	5	5
Ba	520	534	435	607	408	254	610	641	432	515
Co	14	17	9	7	15	13	17	16	15	11
Cr	121	188	188	156	169	243	294	137	180	200
Cu	18	18	13	21	6	10	32	80	12	18
Ga	12	13	12	13	13	9	13	14	11	10
La	27	24	25	27	31	20	38	33	20	30
Ni	55	73	48	59	64	89	86	62	75	79
Nb	12	13	12	11	11	10	13	11	12	12
Pb	14	12	14	15	8	6	11	12	8	18
Rb	50	74	57	78	66	28	64	61	52	57
Sr	191	122	176	135	126	182	126	354	154	123
Sb	0	0	1	0	3	1	2	1	2	1
S	227	1338	824	1146	0	77	2649	472	122	0
Th	6	7	10	10	6	9	6	8	9	8
V	74	83	72	93	77	82	105	119	73	73
Y	22	22	24	22	22	13	22	21	20	21
Zn	41	45	42	67	37	29	50	42	36	53
Zr	222	208	308	236	247	265	290	230	240	260

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 22

VAR. / ID.	PDW211	PDW212	PDW213	PDW214	PDW215	PDW216	PDW217	PDW218	PDW219	PDW220
East	20712	20710	20671	20678	20683	20681	20699	20721	20741	20750
North	54552	54530	54489	54462	54439	54420	54406	54391	54389	54368
SiO2	64.65	63.90	63.49	65.66	62.51	64.47	62.81	66.75	64.06	62.28
Al2O3	11.77	11.85	12.16	11.32	13.24	12.31	15.72	11.13	12.28	14.30
TiO2	0.81	0.95	0.81	0.69	0.81	0.78	0.85	0.77	0.87	0.85
Fe2O3	5.17	6.47	5.63	4.94	6.65	6.08	5.46	5.32	6.05	6.46
MgO	4.31	6.92	4.50	4.57	4.78	4.59	3.86	3.84	4.94	5.00
CaO	5.14	1.22	2.70	2.39	1.44	2.22	2.23	4.00	2.25	1.19
Na2O	2.17	2.36	2.52	2.14	1.98	2.20	1.84	2.46	1.91	2.13
K2O	2.63	2.53	2.46	2.28	3.30	2.75	3.63	2.32	2.76	3.26
MnO	0.08	0.06	0.08	0.08	0.08	0.07	0.09	0.09	0.10	0.09
P2O5	0.20	0.23	0.23	0.17	0.17	0.18	0.21	0.19	0.20	0.19
Total	96.93	96.49	94.61	94.24	94.97	95.65	96.70	96.87	95.42	95.74
As	2	0	2	4	4	4	24	8	3	6
Ba	500	630	610	517	726	555	622	440	626	800
Co	11	16	17	12	16	11	17	15	15	14
Cr	152	195	120	167	141	132	115	137	208	145
Cu	10	13	38	19	27	24	29	21	14	33
Ga	11	12	13	11	15	14	12	12	13	16
La	28	31	25	27	43	18	34	27	31	34
Ni	70	85	66	79	83	73	74	70	81	80
Nb	12	11	11	12	13	13	15	11	14	15
Pb	11	16	10	16	18	19	9	10	14	12
Rb	67	57	70	59	86	68	96	61	77	94
Sr	212	235	305	197	173	176	226	161	149	137
Sb	0	0	1	0	0	2	4	1	3	0
S	0	0	0	267	637	401	445	180	359	768
Th	9	10	7	4	9	11	9	7	11	13
V	87	103	86	67	73	83	70	69	89	84
Y	22	22	23	22	25	22	27	22	23	27
Zn	34	38	40	56	56	58	33	39	34	58
Zr	256	278	207	213	233	213	267	271	299	253

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 23

VAR. / ID.	PDW221	PDW222	PDW223	PDW224	PDW225	PDW226	PDW227	PDW228	PDW229	PDW230
East	20774	20783	20770	20775	20766	20761	20753	20746	20762	20798
North	54360	54340	54315	54291	54268	54243	54218	54196	54177	54160
SiO2	65.32	65.31	63.52	62.90	61.47	62.14	64.87	65.64	64.18	56.21
Al2O3	11.85	11.09	13.26	13.57	13.17	13.03	13.66	12.57	13.40	15.05
TiO2	0.79	1.07	0.90	0.87	0.94	0.91	0.89	0.79	0.88	0.81
Fe2O3	5.55	7.04	5.40	6.84	7.09	7.70	5.82	6.38	5.88	7.42
MgO	5.16	4.78	3.86	4.61	5.65	4.95	2.80	3.58	2.97	3.84
CaO	3.33	1.14	1.84	1.78	1.63	2.26	1.25	2.34	2.69	5.11
Na2O	2.15	2.69	3.86	2.77	2.87	3.08	1.75	2.60	3.26	4.38
K2O	2.24	2.32	3.17	2.46	2.28	1.46	2.89	2.49	2.96	2.88
MnO	0.09	0.09	0.10	0.09	0.11	0.20	0.09	0.10	0.12	0.15
P2O5	0.18	0.22	0.27	0.19	0.22	0.20	0.18	0.21	0.22	0.29
Total	96.66	95.77	96.17	96.07	95.43	95.93	94.19	96.79	96.54	96.14
As	4	4	6	3	3	2	6	3	5	6
Ba	493	781	976	777	707	477	548	768	956	1456
Co	13	12	12	19	17	15	14	12	11	15
Cr	201	193	104	122	156	147	128	146	118	12
Cu	19	21	21	30	23	20	18	17	15	14
Ga	14	14	17	17	15	16	14	15	14	17
La	25	23	31	24	27	24	42	33	41	38
Ni	80	69	54	66	66	63	44	53	44	2
Nb	14	12	14	14	14	12	18	12	15	10
Pb	11	15	17	14	15	13	11	12	20	16
Rb	63	58	86	70	64	41	85	68	80	77
Sr	119	276	326	335	368	482	97	423	395	998
Sb	1	0	0	4	0	0	0	0	0	0
S	431	208	146	275	235	118	119	226	0	388
Th	7	12	10	6	10	5	8	10	10	3
V	84	115	74	96	113	100	71	96	88	148
Y	24	19	26	24	23	24	28	24	26	21
Zn	51	52	60	53	55	66	52	51	58	78
Zr	281	267	281	242	254	254	296	268	292	168

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 24

VAR. / ID.	PDW231	PDW232	PDW233	PDW234	PDW235	PDW236	PDW237	PDW238	PDW239	PDW240
East	20840	20870	20888	20911	20933	20937	20920	20908	20921	20933
North	54164	54157	54140	54130	54126	54043	54023	54002	53965	53944
SiO2	68.52	60.31	66.45	66.08	60.03	71.34	62.59	62.39	69.84	57.98
Al2O3	11.77	15.29	13.76	13.28	8.63	10.59	16.98	14.69	11.58	19.85
TiO2	0.69	0.87	0.86	0.99	0.64	0.83	1.04	0.86	0.87	1.07
Fe2O3	4.76	7.16	6.60	6.40	4.21	5.57	7.91	6.85	6.13	8.70
MgO	3.32	4.96	3.41	3.24	2.90	2.82	2.60	3.22	2.55	3.31
CaO	3.54	2.68	0.51	0.78	14.43	1.37	0.51	2.52	0.75	0.49
Na2O	1.50	1.52	1.87	1.70	1.70	1.76	1.94	2.07	2.18	1.40
K2O	2.15	2.98	1.95	2.38	1.65	1.61	2.78	2.96	1.35	3.77
MnO	0.08	0.06	0.09	0.04	0.14	0.07	0.08	0.08	0.06	0.08
P2O5	0.12	0.14	0.18	0.14	0.14	0.14	0.19	0.18	0.15	0.15
Total	96.44	95.97	95.68	95.04	94.50	96.10	96.62	95.82	95.47	96.81
As	2	4	1	2	0	2	8	5	1	4
Ba	249	426	459	367	190	412	541	605	330	854
Co	12	20	15	16	8	12	17	16	13	19
Cr	126	129	106	110	115	121	99	118	109	127
Cu	7	28	20	6	4	36	26	26	17	39
Ga	11	17	16	15	10	12	17	17	14	23
La	28	30	27	27	21	29	40	32	26	52
Ni	32	53	47	46	27	40	42	52	43	54
Nb	12	17	19	17	11	17	18	14	16	20
Pb	8	25	13	12	13	9	12	18	13	13
Rb	69	107	63	74	53	58	84	90	43	123
Sr	78	99	88	63	180	86	77	220	92	101
Sb	0	0	0	0	0	1	0	0	1	0
S	0	0	0	0	0	0	420	2141	55	715
Th	10	16	11	11	7	8	11	8	9	13
V	69	103	72	81	66	64	97	95	65	123
Y	25	28	27	24	27	26	29	26	23	36
Zn	46	75	64	67	41	47	82	70	59	82
Zr	269	204	253	245	284	289	249	226	256	264

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 25

VAR. / ID.	PDW241	PDW242	PDW243	PDW244	PDW245	PDW246	PDW247	PDW248	PDW249	PDW250
East	20969	20988	21000	20960	20943	20927	20891	20877	20861	20863
North	53852	53823	53813	53760	53750	53731	53695	53687	53681	53672
SiO2	67.94	64.28	66.46	66.10	67.06	69.20	73.05	61.65	52.42	72.10
Al2O3	10.57	14.10	10.93	10.36	8.72	10.87	8.57	15.33	14.25	8.17
TiO2	0.57	0.81	0.77	0.80	0.75	0.80	0.63	0.93	1.05	0.61
Fe2O3	4.12	5.88	5.51	5.45	4.63	5.68	5.18	6.94	8.05	4.57
MgO	2.81	3.62	3.63	3.52	2.52	2.86	2.83	4.41	6.37	3.16
CaO	4.04	2.48	5.66	4.00	7.29	1.86	1.69	1.59	7.07	3.60
Na2O	1.49	1.43	1.51	1.52	1.40	1.57	1.77	1.81	2.56	1.45
K2O	1.87	2.51	1.54	1.52	1.42	1.74	1.20	3.36	2.72	1.12
MnO	0.13	0.10	0.17	0.31	0.16	0.09	0.09	0.08	0.21	0.10
P2O5	0.11	0.14	0.13	0.14	0.11	0.12	0.12	0.13	0.19	0.13
Total	93.65	95.35	96.31	93.72	94.06	94.79	95.13	96.23	94.89	95.01
As	7	13	0	0	0	8	0	0	0	10
Ba	260	434	271	306	329	360	337	384	661	286
Co	9	21	15	12	12	11	12	18	26	8
Cr	91	116	151	157	153	156	120	140	88	123
Cu	2	41	30	6	5	9	9	23	33	9
Ga	11	15	12	11	10	12	11	17	19	10
La	16	25	22	36	33	31	22	37	24	26
Ni	28	46	32	28	23	31	29	52	31	30
Nb	10	14	12	14	13	13	12	15	8	13
Pb	10	8	10	9	9	8	13	18	13	9
Rb	49	75	43	44	42	50	44	105	75	41
Sr	91	83	127	85	158	93	158	110	631	181
Sb	0	5	0	2	6	2	2	0	3	2
S	0	0	0	0	16	0	0	0	2079	0
Th	5	7	8	13	7	12	7	11	6	4
V	56	84	71	80	64	74	58	108	201	61
Y	21	28	24	28	26	26	25	29	20	28
Zn	19	40	38	28	35	38	43	72	62	39
Zr	160	235	277	366	394	308	219	229	134	286

TABLE 4.66

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XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 26

VAR. / ID.	PDW251	PDW252	PDW253	PDW254	PDW255	PDW256	PDW257	PDW258	PDW259	PDW260
East	20953	20960	20971	20988	20992	21030	21053	21069	21083	21093
North	53380	53376	53361	53352	53331	53285	53264	53241	53221	53211
SiO2	61.86	68.28	69.78	59.73	70.21	69.60	68.86	67.35	65.14	65.15
Al2O3	13.71	11.46	11.04	17.20	11.84	12.28	11.69	14.65	14.16	15.25
TiO2	0.99	0.78	0.76	1.04	1.02	1.38	1.47	1.07	0.69	1.07
Fe2O3	6.76	4.74	3.76	8.36	5.82	6.36	6.37	6.12	4.48	7.27
MgO	3.44	2.12	2.11	2.53	1.89	2.29	2.05	2.73	3.37	2.87
CaO	1.26	1.86	1.98	0.71	0.81	0.61	0.69	0.25	3.74	0.52
Na2O	2.53	2.94	2.99	2.04	2.07	2.01	1.80	1.21	0.62	1.86
K2O	3.84	2.36	1.99	3.88	1.98	1.68	1.70	2.17	2.11	2.46
MnO	0.07	0.07	0.06	0.10	0.06	0.06	0.07	0.05	0.15	0.08
P2O5	0.18	0.19	0.18	0.15	0.20	0.25	0.22	0.21	0.11	0.20
Total	94.64	94.80	94.65	95.74	95.90	96.52	94.92	95.81	94.57	96.73
As	0	2	10	2	4	5	8	7	6	0
Ba	1053	530	568	772	477	416	441	639	304	543
Co	18	12	8	24	15	16	16	14	15	19
Cr	121	112	104	140	106	112	139	105	97	105
Cu	47	9	12	48	19	21	18	11	8	16
Ga	17	14	11	23	16	13	15	12	13	14
La	38	25	31	42	34	38	41	30	24	40
Ni	66	39	11	54	32	34	37	39	37	46
Nb	16	13	12	18	18	19	18	17	13	17
Pb	25	16	24	22	14	12	14	8	16	11
Rb	107	69	52	120	65	47	45	51	53	62
Sr	266	242	235	155	87	73	75	46	70	69
Sb	0	1	2	0	5	0	0	2	3	2
S	215	0	1424	1904	207	124	503	155	0	0
Th	12	4	9	10	12	9	9	6	6	6
V	114	68	71	130	80	85	90	88	63	87
Y	27	24	22	31	30	33	32	28	26	28
Zn	88	39	35	107	66	64	65	52	108	58
Zr	242	233	258	196	327	404	523	312	169	234

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 27

VAR. / ID.	PDW261	PDW262	PDW263	PDW264	PDW265	PDW266	PDW267	PDW268	PDW269	PDW270
East	21120	21155	21168	21187	21193	21216	21234	21257	21273	21305
North	53201	53167	53153	53140	53157	53152	53151	53140	53120	53105
SiO2	63.71	57.34	59.60	59.05	59.31	55.87	58.84	60.04	59.47	58.35
Al2O3	15.75	11.90	12.70	12.06	12.71	17.68	13.30	10.94	11.97	12.61
TiO2	1.08	0.72	0.88	0.67	0.78	0.72	0.89	0.79	0.80	0.82
Fe2O3	7.74	4.88	5.91	4.78	5.84	6.50	6.43	4.98	5.06	5.69
MgO	3.24	4.05	5.04	4.32	4.41	4.90	5.44	4.34	4.66	4.75
CaO	0.26	11.53	7.92	9.60	8.96	4.55	7.64	8.96	8.75	9.61
Na2O	1.54	1.55	1.89	1.67	1.62	4.18	1.43	1.59	1.72	1.52
K2O	2.60	2.21	2.06	2.21	2.32	1.63	2.40	1.85	2.14	2.41
MnO	0.06	0.08	0.07	0.07	0.09	0.12	0.08	0.08	0.11	0.09
P2O5	0.17	0.17	0.18	0.16	0.16	0.18	0.18	0.18	0.18	0.18
Total	96.15	94.43	96.25	94.59	96.20	96.33	96.63	93.75	94.86	96.03
As	5	0	0	0	0	0	5	11	0	0
Ba	533	207	185	208	197	413	279	228	231	218
Co	20	17	15	17	14	20	19	13	14	15
Cr	121	135	167	124	127	93	159	181	152	142
Cu	28	16	18	18	15	17	22	14	7	17
Ga	16	12	13	13	14	17	15	13	15	14
La	32	24	30	28	23	15	22	27	24	29
Ni	50	55	61	51	62	45	65	48	60	56
Nb	16	12	13	13	13	8	14	12	12	14
Pb	9	13	10	10	10	8	17	15	8	9
Rb	65	63	59	64	65	34	67	51	56	70
Sr	64	188	119	166	137	432	136	162	106	158
Sb	5	5	0	4	4	4	2	1	3	0
S	305	0	0	0	0	0	0	0	0	0
Th	7	6	6	5	7	1	10	8	9	8
V	98	88	94	83	93	122	104	82	82	96
Y	27	24	24	24	25	16	26	24	27	27
Zn	81	54	59	54	59	61	66	45	31	61
Zr	244	181	221	179	160	130	197	241	211	188

TABLE 4.66

XRF Analyses: Southern Uplands Coastal Traverse (GWKE22) Part 28

VAR. / ID.	PDW271	PDW272	PDW273	PDW274	PDW275	PDW276	PDW277	PDW278	PDW279
East	21319	21345	21373	21395	21410	21425	21440	21454	21508
North	53099	53098	53099	53099	53073	53052	53034	53029	53041
SiO2	59.24	61.99	57.24	60.74	60.57	58.13	48.49	49.44	58.70
Al2O3	11.02	11.26	12.31	13.48	13.38	13.07	11.14	12.95	12.56
TiO2	0.75	0.76	0.76	0.90	0.81	0.78	1.20	1.22	0.77
Fe2O3	4.87	4.63	4.98	5.62	5.13	5.16	9.36	11.13	6.29
MgO	4.29	4.78	4.09	4.44	3.91	4.40	11.79	14.51	4.34
CaO	12.30	7.78	10.73	6.10	6.35	8.60	8.98	2.90	8.59
Na2O	1.75	1.75	1.52	1.87	1.77	1.73	1.78	1.92	1.42
K2O	1.90	1.88	2.58	2.31	2.55	2.74	0.94	0.34	3.13
MnO	0.08	0.06	0.08	0.07	0.09	0.10	0.14	0.11	0.11
P2O5	0.18	0.17	0.17	0.19	0.18	0.18	0.22	0.20	0.17
Total	96.38	95.06	94.46	95.72	94.74	94.89	94.04	94.72	96.08
As	0	4	0	0	0	3	0	0	0
Ba	220	239	220	193	269	329	639	495	305
Co	15	12	19	15	16	11	46	46	19
Cr	159	155	136	147	177	181	725	829	133
Cu	14	7	5	9	24	5	56	6	12
Ga	13	13	13	14	14	14	17	15	14
La	28	22	26	23	32	25	24	20	27
Ni	50	46	67	57	63	28	327	362	64
Nb	11	11	12	13	13	12	8	8	13
Pb	28	18	14	9	6	14	13	15	8
Rb	53	53	72	65	69	67	35	15	83
Sr	219	144	150	99	109	75	278	368	120
Sb	3	5	1	0	4	3	9	7	4
S	0	0	0	0	0	0	241	0	0
Th	8	12	6	7	8	8	0	0	5
V	76	93	88	95	93	81	187	193	88
Y	25	22	25	25	27	25	15	17	27
Zn	45	43	37	57	42	12	70	81	62
Zr	220	215	188	202	241	230	107	118	154

TABLE 4.67

XRF Analyses: Tweedsmuir Interformational Studies (GWKE23) Part 1

VAR. / ID.	AX97201	AX97202	AX97203	AX97204	AX97205	AX97206	AX97207	AX97208	AX97209	AX97210
SiO2	59.55	58.49	57.79	56.50	57.75	57.42	55.84	55.30	57.35	56.78
Al2O3	12.45	13.02	12.08	13.46	13.08	12.77	12.72	13.25	14.17	13.53
TiO2	0.95	1.03	0.94	1.03	0.94	1.02	0.97	1.07	1.09	1.03
Fe2O3	7.44	8.41	8.16	8.61	8.04	8.52	8.15	9.09	8.92	8.60
MgO	5.63	6.04	5.92	7.16	6.33	7.05	6.54	8.49	8.10	7.34
CaO	4.49	5.23	5.22	4.59	5.15	6.07	5.67	3.66	2.44	2.08
Na2O	1.91	2.02	2.39	2.32	2.42	2.10	2.07	2.13	2.18	2.20
K2O	1.90	1.96	1.48	1.63	1.46	1.26	1.35	1.53	2.25	2.25
MnO	0.12	0.14	0.15	0.15	0.14	0.14	0.14	0.16	0.13	0.13
P2O5	0.19	0.20	0.21	0.24	0.22	0.21	0.23	0.23	0.23	0.19
Total	94.63	96.54	94.34	95.69	95.53	96.56	93.68	94.91	96.86	94.13
As	0	0	0	0	0	0	0	0	0	0
Ba	584	630	367	426	345	284	322	367	510	558
Co	22	29	25	28	24	29	29	27	24	29
Cr	190	205	178	198	195	252	221	234	207	175
Cu	41	43	42	40	44	46	45	45	44	47
Ga	15	16	14	15	15	15	17	16	15	16
La	26	30	22	25	30	28	29	30	26	29
Ni	58	63	60	67	61	62	68	68	67	68
Nb	11	11	9	10	9	9	10	10	11	11
Pb	14	13	11	10	13	13	15	15	18	12
Rb	49	45	36	41	37	34	35	39	53	54
Sr	532	542	460	374	348	252	281	305	393	398
Sb	1	4	5	0	2	2	4	3	0	0
S	381	648	221	137	503	288	165	240	20	93
Th	3	5	4	6	2	8	3	4	3	4
V	176	185	168	192	185	198	190	201	206	173
Y	22	23	21	24	20	21	21	22	22	25
Zn	63	62	61	59	60	64	68	65	71	65
Zr	187	212	181	202	206	242	218	216	202	205

TABLE 4.67

XRF Analyses: Tweedsmuir Interformational Studies (GWKE23) Part 2

VAR. / ID.	AX97211	AX97212	AX97213	AX97214	AX97215	AX97216	AX97217	AX97218	AX97219	AX97220
SiO2	56.41	55.55	57.82	55.43	57.42	56.79	57.54	58.34	55.59	57.94
Al2O3	13.29	13.59	13.47	12.09	12.48	12.60	13.14	12.70	12.94	12.19
TiO2	1.02	0.92	0.92	1.22	0.99	0.96	0.96	1.02	1.07	0.95
Fe2O3	8.83	7.70	7.59	8.60	8.70	8.10	8.15	8.20	9.23	7.54
MgO	8.10	6.06	5.90	6.59	7.35	5.93	6.34	5.81	9.42	6.02
CaO	3.10	5.19	3.32	7.40	4.18	6.39	5.39	5.17	2.25	5.49
Na2O	2.13	2.12	2.12	1.71	2.04	1.92	2.15	1.95	1.98	2.06
K2O	1.82	2.12	2.48	2.04	1.58	2.01	1.59	2.23	1.88	2.36
MnO	0.14	0.12	0.11	0.20	0.14	0.17	0.15	0.16	0.16	0.17
P2O5	0.21	0.19	0.19	0.27	0.20	0.19	0.22	0.20	0.22	0.18
Total	95.05	93.56	93.92	95.55	95.08	95.06	95.63	95.74	94.74	94.90
As	0	1	0	0	0	0	0	7	0	0
Ba	459	386	769	612	386	550	373	784	470	693
Co	28	28	10	21	25	28	34	29	22	23
Cr	212	186	176	233	198	200	192	210	231	233
Cu	43	46	48	48	44	41	45	43	47	44
Ga	15	16	15	16	15	17	16	17	16	16
La	33	20	27	25	27	23	24	32	28	26
Ni	68	65	65	64	63	56	71	61	70	62
Nb	10	10	11	11	11	10	10	11	10	10
Pb	12	11	16	14	15	11	10	17	7	10
Rb	48	54	65	45	46	47	41	51	54	56
Sr	349	303	508	539	425	521	306	555	310	478
Sb	0	2	0	0	2	0	4	2	3	1
S	172	235	457	239	187	647	182	556	183	483
Th	5	4	5	5	4	7	9	6	4	7
V	199	171	163	202	187	184	180	187	209	189
Y	21	23	23	24	23	21	21	22	21	21
Zn	66	63	60	61	62	64	66	69	62	50
Zr	196	192	189	279	192	202	192	205	213	183

XRF Analyses: Tweedsmuir Inter-Outcrop Studies (GWKE2A) Part 1

VAR. / ID.	AX97212	AX97211	AX97210	AX97209	AX97208	AX97207	AX97206	AX97205	AX97204	AX97203
SiO2	55.55	56.41	56.78	57.35	55.30	55.84	57.42	57.75	56.50	57.79
Al2O3	13.59	13.29	13.53	14.17	13.25	12.72	12.77	13.08	13.46	12.08
TiO2	0.92	1.02	1.03	1.09	1.07	0.97	1.02	0.94	1.03	0.94
Fe2O3	7.70	8.83	8.60	8.92	9.09	8.15	8.52	8.04	8.61	8.16
MgO	6.06	8.10	7.34	8.10	8.49	6.54	7.05	6.33	7.16	5.92
CaO	5.19	3.10	2.08	2.44	3.66	5.67	6.07	5.15	4.59	5.22
Na2O	2.12	2.13	2.20	2.18	2.13	2.07	2.10	2.42	2.32	2.39
K2O	2.12	1.82	2.25	2.25	1.53	1.35	1.26	1.46	1.63	1.48
MnO	0.12	0.14	0.13	0.13	0.16	0.14	0.14	0.14	0.15	0.15
P2O5	0.19	0.21	0.19	0.23	0.23	0.23	0.21	0.22	0.24	0.21
Total	93.56	95.05	94.13	96.86	94.91	93.68	96.56	95.53	95.69	94.34
As	1	0	0	0	0	0	0	0	0	0
Ba	386	459	558	510	367	322	284	345	426	367
Co	28	28	29	24	27	29	29	24	28	25
Cr	186	212	175	207	234	221	252	195	198	178
Cu	46	43	47	44	45	45	46	44	40	42
Ga	16	15	16	15	16	17	15	15	15	14
La	20	33	29	26	30	29	28	30	25	22
Ni	65	68	68	67	68	68	62	61	67	60
Nb	10	10	11	11	10	10	9	9	10	9
Pb	11	12	12	18	15	15	13	13	10	11
Rb	54	48	54	53	39	35	34	37	41	36
Sr	303	349	398	393	305	281	252	348	374	460
Sb	2	0	0	0	3	4	2	2	0	5
S	235	172	93	20	240	165	288	503	137	221
Th	4	5	4	3	4	3	8	2	6	4
V	171	199	173	206	201	190	198	185	192	168
Y	23	21	25	22	22	21	21	20	24	21
Zn	63	66	65	71	65	68	64	60	59	61
Zr	192	196	205	202	216	218	242	206	202	181

TABLE 4.68

XRF Analyses: Tweedsmuir Inter-Outcrop Studies (GWKE2A) Part 2

VAR. / ID.	AX97202	AX97201
SiO2	58.49	59.55
Al2O3	13.02	12.45
TiO2	1.03	0.95
Fe2O3	8.41	7.44
MgO	6.04	5.63
CaO	5.23	4.49
Na2O	2.02	1.91
K2O	1.96	1.90
MnO	0.14	0.12
P2O5	0.20	0.19
Total	96.54	94.63
As	0	0
Ba	630	584
Co	29	22
Cr	205	190
Cu	43	41
Ga	16	15
La	30	26
Ni	63	58
Nb	11	11
Pb	13	14
Rb	45	49
Sr	542	532
Sb	4	1
S	648	381
Th	5	3
V	185	176
Y	23	22
Zn	62	63
Zr	212	187

TABLE 4.68

XRF Analyses: Tweedsmuir Basal-Formation Studies (GWKE2B) Part 1

VAR. / ID.	AX97213	AX97214	AX97215	AX97216	AX97217	AX97218	AX97219	AX97220
SiO2	57.82	55.43	57.42	56.79	57.54	58.34	55.59	57.94
Al2O3	13.47	12.09	12.48	12.60	13.14	12.70	12.94	12.19
TiO2	0.92	1.22	0.99	0.96	0.96	1.02	1.07	0.95
Fe2O3	7.59	8.60	8.70	8.10	8.15	8.20	9.23	7.54
MgO	5.90	6.59	7.35	5.93	6.34	5.81	9.42	6.02
CaO	3.32	7.40	4.18	6.39	5.39	5.13	2.25	5.49
Na2O	2.12	1.71	2.04	1.92	2.15	1.95	1.98	2.06
K2O	2.48	2.04	1.58	2.01	1.59	2.23	1.88	2.36
MnO	0.11	0.20	0.14	0.17	0.15	0.16	0.16	0.17
P2O5	0.19	0.27	0.20	0.19	0.22	0.20	0.22	0.18
Total	93.92	95.55	95.08	95.06	95.63	95.74	94.74	94.90
As	0	0	0	0	0	7	0	0
Ba	769	612	386	550	373	784	470	693
Co	10	21	25	28	34	29	22	23
Cr	176	233	198	200	192	210	231	233
Cu	48	48	44	41	45	43	47	44
Ga	15	16	15	17	16	17	16	16
La	27	25	27	23	24	32	28	26
Ni	65	64	63	56	71	61	70	62
Nb	11	11	11	10	10	11	10	10
Pb	16	14	15	11	10	17	7	10
Rb	65	45	46	47	41	51	54	56
Sr	508	539	425	521	306	555	310	478
Sb	0	0	2	0	4	2	3	1
S	457	239	187	647	182	556	183	483
Th	5	5	4	7	9	6	4	7
V	163	202	187	184	180	187	209	189
Y	23	24	23	21	21	22	21	21
Zn	60	61	62	64	66	69	62	50
Zr	189	279	192	202	192	205	213	183

TABLE 4.69

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 1

VAR. / ID.	CXD-1001	CXD-1005	CXD-1011	CXD-1030	CXD-1051	CXD-1052	CXD-1077	CXD-1081	CXD-1091	CXD-1101
Ag	3	0	0	0	1	4	3	1	0	3
Bi	0	0	0	0	0	0	0	0	2	0
Br	0	0	0	0	0	0	3	0	9	0
Cd	0	0	0	0	0	0	0	0	0	0
Ce	69	71	69	68	80	68	128	79	252	88
Cs	9	11	32	34	57	51	32	28	31	37
Hf	6	7	3	8	5	6	5	5	6	5
Mo	0	1	0	1	1	1	2	2	11	2
Se	0	0	0	0	0	0	0	0	0	0
Sc	21	20	20	22	26	23	23	25	18	25
Sn	0	0	0	0	0	0	0	0	0	0
Ta	4	0	0	0	0	0	0	0	0	2
Te	0	0	0	0	0	0	0	0	0	0
Th	11	10	5	12	12	7	12	7	6	9
Tl	0	0	0	0	0	0	0	0	0	0
U	0	3	0	0	2	2	0	2	0	3
V	107	94	101	112	150	116	135	132	111	136
W	175	190	134	88	64	148	57	43	372	81

TABLE 4.70

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 2

VAR. / ID.	CXD-1111	CXD-1121	CXD-1131	CXD-1141	CXD-1151	CXD-1159	CXD-1165	CXD-1166	CXD-1168	DJR-1
Ag	0	0	0	2	0	0	0	0	0	3
Bi	0	0	0	0	0	2	0	0	0	0
Br	0	0	0	0	0	7	2	0	0	0
Cd	0	0	0	0	4	0	0	0	0	0
Ce	87	68	53	72	69	262	111	128	79	58
Cs	30	59	14	39	41	27	30	25	31	7
Hf	6	4	2	6	7	6	5	11	6	7
Mo	2	0	3	2	0	1	1	1	1	1
Se	0	0	0	0	0	0	0	0	0	0
Sc	23	24	5	22	27	17	23	19	17	22
Sn	0	0	0	0	0	0	0	0	0	0
Ta	0	0	3	3	0	0	0	3	2	0
Te	0	0	0	0	0	0	0	0	0	3
Th	9	7	2	8	12	8	10	13	9	7
Tl	0	0	0	0	0	0	0	0	0	0
U	2	3	0	2	2	2	2	2	3	0
V	125	110	46	107	153	106	120	110	84	109
W	102	57	951	78	101	333	117	267	178	201

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 3

VAR. / ID.	DJR-3	DJR-4	DJR-11	DJR-13	DJR-18	DJR-33	DJR-53	DJR-54	DJR-58	DJR-1001
Ag	2	0	0	0	3	0	2	5	0	0
Bi	0	0	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0	0	0
Ce	59	51	70	52	50	54	49	40	49	62
Cs	4	8	6	3	5	10	12	8	7	9
Hf	7	7	7	4	5	6	8	5	7	6
Mo	0	0	0	0	0	0	0	0	0	0
Se	0	0	0	0	0	0	0	0	0	0
Sc	21	24	19	19	19	20	20	19	20	24
Sn	3	0	0	0	0	0	0	0	0	0
Ta	2	0	0	2	0	0	0	0	0	5
Te	0	0	0	0	0	0	0	0	0	0
Th	9	12	12	7	7	7	10	9	4	8
Tl	0	0	0	0	0	0	0	0	0	0
U	2	0	0	0	0	2	0	2	0	2
V	102	119	96	84	92	77	90	76	82	119
W	96	85	203	234	127	154	147	119	149	46

TABLE 4.70

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 4

VAR. / ID.	DJR-1003	DJR-1004	DJR-1011	DJR-1013	DJR-1018	DJR-1033	DJR-1053	DJR-1054	DJR-1058	AX-63
Ag	0	1	0	0	2	1	0	0	0	0
Bi	0	0	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	4	0	0	4	0
Ce	81	74	60	71	72	71	75	74	71	66
Cs	11	8	7	10	9	17	23	18	12	4
Hf	8	5	7	5	8	8	6	6	5	7
Mo	0	0	0	0	0	0	0	0	0	0
Se	0	0	0	0	0	0	0	0	0	0
Sc	22	26	24	30	28	22	23	28	26	20
Sn	2	0	0	0	3	0	0	0	0	0
Ta	2	5	0	4	0	0	0	2	0	0
Te	0	0	0	0	0	0	0	0	0	0
Th	13	11	9	13	10	12	9	14	10	14
Tl	0	0	2	0	0	0	0	0	0	0
U	0	3	0	0	2	2	0	3	2	0
V	129	138	96	152	152	123	134	144	139	111
W	28	24	44	15	45	76	40	46	28	134

TABLE 4.70

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 5

VAR. / ID.	AX-94	AX-96	AX-107	AX-109	AX-111	AX-114	AX-116	AX-117	AX-118	AX-119
Ag	2	0	0	0	0	0	0	0	0	3
Bi	0	0	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0	0	0
Cd	0	0	4	0	5	0	0	0	3	0
Ce	58	59	58	51	47	62	49	24	41	38
Cs	1	1	2	2	0	3	1	1	2	1
Hf	8	11	11	9	6	7	12	4	4	4
Mo	0	0	0	0	1	0	1	0	1	1
Se	0	0	0	0	0	0	0	0	0	0
Sc	17	13	12	12	25	14	16	29	25	27
Sn	0	0	0	0	0	0	0	0	0	0
Ta	0	2	0	0	0	0	0	5	0	0
Te	0	3	0	0	0	0	2	0	0	0
Th	9	8	7	7	4	8	7	6	6	4
Tl	0	0	0	0	0	0	0	0	0	0
U	2	0	0	0	0	0	0	0	0	0
V	104	76	75	75	133	78	89	166	156	146
W	171	251	295	328	93	288	309	65	119	110

TABLE 4.70

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 6

VAR. / ID.	AX-124	AX-131	AX-132	AX-133	AX-134	AX-135	AX-151	AX-156	AX-158	AX-164
Ag	0	0	4	0	0	4	0	0	0	0
Bi	0	0	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0	0	0
Cd	0	0	4	0	0	0	0	0	0	0
Ce	49	71	69	78	80	76	48	45	28	75
Cs	2	0	4	0	1	3	2	1	0	3
Hf	4	6	6	6	9	7	7	5	6	7
Mo	1	0	0	0	0	0	0	1	0	0
Se	0	0	0	0	0	0	0	0	0	0
Sc	23	21	19	18	16	20	26	25	23	20
Sn	0	0	0	0	0	0	0	0	0	0
Ta	0	0	2	0	4	4	0	0	0	0
Te	0	0	0	0	0	0	0	0	0	0
Th	7	5	9	9	7	7	8	6	8	8
Tl	0	0	0	0	0	0	0	0	0	0
U	2	0	2	0	0	0	0	0	0	3
V	133	131	97	101	86	114	134	161	120	103
W	125	195	121	120	259	180	110	129	144	134

TABLE 4.70

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 7

VAR. / ID.	AX-177	AX-190	AX-197	AX-198	AX-199	AX-202	AX-214	AX-215	AX-216	AX-223
Ag	0	3	2	0	0	2	0	2	0	0
Bi	0	0	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0	0	0
Cd	0	4	2	0	4	0	3	0	0	0
Ce	98	63	54	65	44	59	31	60	58	60
Cs	6	4	1	2	3	2	7	1	4	4
Hf	12	7	7	9	4	7	7	9	7	7
Mo	0	0	0	2	0	0	1	1	0	0
Se	0	0	0	0	0	0	0	0	0	0
Sc	22	23	20	21	25	21	21	23	20	21
Sn	0	0	0	0	0	0	0	0	0	0
Ta	2	0	3	3	0	0	0	0	0	5
Te	0	0	0	0	0	5	3	0	0	0
Th	12	9	8	5	5	7	5	8	8	8
Tl	0	0	0	0	0	0	0	0	0	0
U	2	0	0	0	0	0	0	2	2	2
V	126	144	124	125	140	109	106	121	102	142
W	131	160	157	172	90	222	198	162	128	105

TABLE 4.70

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 8

VAR. / ID.	AX-235	AX-272	AX-276	AX-277	AX-283	AX-286	AX-288	AX-289	AX-290	AX-294
Ag	0	0	0	0	0	2	0	0	0	0
Bi	0	0	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0	0	0
Cd	3	0	0	0	4	0	0	0	6	0
Ce	52	70	49	59	56	62	56	51	50	40
Cs	1	2	3	5	4	2	2	2	1	0
Hf	4	6	7	6	11	7	7	5	6	6
Mo	0	0	0	0	0	0	0	1	0	0
Se	0	0	0	0	0	0	0	0	0	0
Sc	27	24	20	28	19	27	20	35	37	24
Sn	0	0	0	0	0	0	0	0	0	0
Ta	0	0	0	2	0	5	0	0	4	0
Te	0	0	0	0	0	0	0	0	0	0
Th	3	6	6	5	13	6	10	5	3	4
Tl	0	0	0	0	0	0	0	0	0	0
U	0	0	1	0	2	2	0	0	0	0
V	175	168	102	135	103	140	104	182	213	153
W	94	104	159	87	200	144	203	70	69	134

TABLE 4.70

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 9

VAR. / ID.	AX-604	AX-782	AX-784	AX-785	AX-796	S-54	A-232	N-241	N-292	N-400
Ag	2	0	0	0	0	0	0	1	0	0
Bi	0	0	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0	0	0
Cd	0	0	0	0	5	0	0	0	0	0
Ce	45	59	46	50	58	42	32	65	32	36
Cs	0	3	2	2	3	2	3	2	6	1
Hf	6	7	7	6	4	5	7	4	3	5
Mo	1	1	1	1	0	0	0	0	1	1
Se	0	0	0	0	0	0	0	0	0	0
Sc	15	24	21	24	22	18	38	37	37	24
Sn	0	0	0	0	0	0	0	0	0	0
Ta	0	0	2	5	3	4	0	0	0	3
Te	0	0	0	0	0	0	0	0	0	0
Th	6	10	5	5	6	5	3	6	0	5
Tl	0	0	0	0	0	0	0	0	0	0
U	2	0	0	1	0	0	0	2	0	0
V	73	169	132	119	159	112	205	184	226	134
W	0	2	0	2	0	2	3	4	0	2

TABLE 4.70

XRF Analyses: Additional Trace Element Studies (GWKE24) Part 10

VAR. / ID.	AK-4	AK-17	AK-20	AK-25	AK-30	AK-33	AK-52	AK-63
Ag	2	0	0	2	3	0	0	0
Bi	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0
Cd	0	0	0	3	2	0	0	0
Ce	46	62	49	55	84	61	60	66
Cs	3	4	2	3	3	4	4	3
Hf	8	6	11	9	6	9	10	16
Mo	0	0	0	0	0	0	0	0
Se	0	0	0	0	0	0	0	0
Sc	19	15	17	18	17	17	18	20
Sn	0	0	0	0	0	0	0	0
Ta	3	0	0	0	4	0	0	0
Te	0	0	0	0	0	0	0	0
Th	8	6	8	5	10	8	8	13
Tl	0	0	0	0	0	0	0	0
U	0	0	2	0	0	2	0	0
V	113	69	89	91	87	93	88	127
W	0	2	3	4	4	2	2	2

XRF Analyses: Kirkudbright - Lower Silurian (GWKE25) Part 1

VAR. / ID.	PDW352	PDW353	PDW354	PDW355	PDW368	PDW367	PDW366	PDW371	PDW372	PDW373
East	26562	26561	26560	26563	26318	26310	26303	26345	26326	26375
North	53491	54577	54562	54548	54498	54487	54478	54460	54455	54452
SiO2	57.07	58.33	56.74	55.25	60.97	60.18	57.21	57.79	56.53	56.76
Al2O3	12.20	12.71	11.50	13.27	11.72	12.76	10.67	14.42	14.15	13.20
TiO2	0.86	0.93	0.85	0.86	0.81	0.95	0.82	0.94	0.83	0.91
Fe2O3	6.59	6.75	6.73	6.39	5.70	5.84	5.59	5.51	5.31	6.05
MgO	7.99	6.86	6.78	4.82	4.04	4.88	3.95	3.44	4.01	4.80
CaO	7.41	6.18	7.29	9.86	6.68	5.97	12.12	8.23	11.37	9.89
Na2O	1.76	1.62	1.51	1.61	1.70	1.43	1.54	1.25	1.02	1.51
K2O	1.98	2.15	1.97	2.41	2.25	2.31	2.00	3.08	3.08	2.41
MnO	0.15	0.12	0.16	0.10	0.08	0.08	0.11	0.09	0.17	0.11
P2O5	0.18	0.18	0.19	0.18	0.16	0.21	0.17	0.20	0.18	0.19
Total	96.19	95.83	93.72	94.75	94.11	94.61	94.18	94.95	96.65	95.83
As	0	0	3	0	0	0	3	0	0	0
Ba	234	262	236	291	219	245	233	296	233	257
Co	17	18	18	15	16	15	12	14	16	18
Cr	124	152	141	135	135	218	137	168	149	143
Cu	16	27	17	21	14	5	15	11	31	9
Ga	12	13	13	16	13	13	13	12	13	15
La	22	28	27	24	22	30	16	32	20	28
Ni	58	56	53	63	58	54	47	44	38	58
Nb	13	12	13	13	12	13	12	13	13	12
Pb	6	6	8	13	8	11	17	11	10	8
Rb	54	56	54	70	61	59	51	80	78	65
Sr	53	58	59	159	117	109	174	104	119	135
Sb	5	0	2	4	3	2	7	2	2	5
S	0	0	464	55	0	0	0	0	0	0
Th	10	10	10	8	5	9	6	8	10	8
V	84	102	84	109	96	94	79	100	92	107
Y	25	24	23	26	22	28	26	25	27	27
Zn	61	55	59	71	51	54	53	40	42	63
Zr	175	221	180	184	176	301	208	240	211	198

TABLE 4.71

XRF Analyses: Kirkudbright - Lower Silurian (GWKE25) Part 2

VAR. / ID.	PDW374	PDW375
East	26386	26398
North	54443	54437
SiO2	58.54	58.02
Al2O3	12.87	13.72
TiO2	0.97	0.96
Fe2O3	7.24	6.94
MgO	6.92	6.40
CaO	5.97	4.03
Na2O	1.81	1.86
K2O	1.90	2.10
MnO	0.12	0.12
P2O5	0.19	0.19
Total	96.53	94.34
As	0	0
Ba	212	249
Co	16	20
Cr	155	144
Cu	7	10
Ga	14	14
La	26	34
Ni	52	62
Nb	13	13
Pb	7	11
Rb	48	55
Sr	54	54
Sb	3	7
S	0	0
Th	7	8
V	100	96
Y	24	25
Zn	60	58
Zr	198	194

TABLE 4.71

XRF Analyses: Kirkudbright - Upper Silurian (GWKE26) Part 1

VAR. / ID.	PDW356	PDW357	PDW358	PDW359	PDW360	PDW361	PDW362	PDW363	PDW364	PDW365
East	26565	26579	26572	26567	26524	26535	26545	26559	26569	26570
North	54538	54511	54501	54489	54490	54448	54441	54438	54429	54408
SiO2	57.05	58.73	54.37	56.15	55.00	57.64	56.88	56.14	58.64	59.02
Al2O3	11.58	11.59	10.80	10.65	13.44	12.00	10.90	10.73	11.88	11.48
TiO2	1.00	0.82	0.88	0.93	0.75	0.74	0.81	0.67	1.00	0.79
Fe2O3	6.55	6.06	4.88	5.87	5.99	5.87	4.80	4.67	7.02	6.13
MgO	7.62	7.23	3.91	5.22	4.29	5.69	3.87	3.87	7.07	6.89
CaO	7.78	6.38	17.99	12.20	10.34	9.18	14.81	15.60	6.94	5.78
Na2O	1.66	1.77	1.67	1.62	1.19	1.49	1.66	1.68	1.55	1.84
K2O	1.99	1.98	1.95	1.67	2.92	2.16	2.11	2.00	1.82	2.04
MnO	0.14	0.11	0.20	0.10	0.15	0.12	0.13	0.11	0.11	0.11
P2O5	0.20	0.17	0.21	0.19	0.16	0.17	0.20	0.17	0.19	0.16
Total	95.57	94.84	96.86	94.60	94.23	95.06	96.17	95.64	96.22	94.24
As	0	0	0	0	3	0	0	0	0	0
Ba	284	283	293	209	254	266	294	256	268	289
Co	17	16	13	16	17	12	12	14	18	17
Cr	194	129	181	206	128	122	170	113	219	120
Cu	7	21	17	13	16	2	16	17	13	17
Ga	13	12	12	13	12	13	12	11	13	12
La	31	22	29	23	25	28	29	28	34	19
Ni	49	50	46	43	44	51	47	50	49	51
Nb	13	10	13	13	12	11	12	12	13	11
Pb	9	8	10	11	14	8	9	11	11	16
Rb	52	52	48	42	69	51	53	51	44	51
Sr	63	53	273	191	118	93	197	245	85	68
Sb	0	0	0	0	9	1	3	0	2	0
S	0	0	0	0	200	0	0	58	0	0
Th	4	10	9	9	5	9	7	10	9	6
V	98	76	97	104	82	82	96	78	116	77
Y	27	23	28	25	24	25	26	23	28	24
Zn	52	53	44	48	44	40	44	47	54	51
Zr	251	178	253	277	168	167	240	158	291	158

TABLE 4.72

12/00-

XRF Analyses: Kirkudbright - Upper Silurian (GWKE26) Part 2

VAR. / ID.	PDW376	PDW377
East	26417	26422
North	54450	54435
SiO2	60.47	59.55
Al2O3	13.15	13.09
TiO2	0.92	0.85
Fe2O3	5.99	5.65
MgO	3.87	4.77
CaO	6.80	7.45
Na2O	1.61	1.88
K2O	2.62	2.34
MnO	0.12	0.14
P2O5	0.19	0.17
Total	95.74	95.89
As	0	0
Ba	245	278
Co	33	13
Cr	147	145
Cu	6	16
Ga	13	14
La	27	23
Ni	51	47
Nb	13	13
Pb	11	6
Rb	66	60
Sr	83	89
Sb	0	3
S	0	0
Th	11	9
V	87	98
Y	23	25
Zn	46	44
Zr	202	203

TABLE 4.72

XRF Analyses: Kirkudbright Mapping Studies (GWKE27) Part 1

VAR. / ID.	PDW352	PDW353	PDW354	PDW355	PDW356	PDW357	PDW358	PDW359	PDW360	PDW361
East	26562	26561	26560	26563	26565	26579	26572	26567	26524	26535
North	53491	54577	54562	54548	54538	54511	54501	54489	54490	54448
SiO2	57.07	58.33	56.74	55.25	57.05	58.73	54.37	56.15	55.00	57.64
Al2O3	12.20	12.71	11.50	13.27	11.58	11.59	10.80	10.65	13.44	12.00
TiO2	0.86	0.93	0.85	0.86	1.00	0.82	0.88	0.93	0.75	0.74
Fe2O3	6.59	6.75	6.73	6.39	6.55	6.06	4.88	5.87	5.99	5.87
MgO	7.99	6.86	6.78	4.82	7.62	7.23	3.91	5.22	4.29	5.69
CaO	7.41	6.18	7.29	9.86	7.78	6.38	17.99	12.20	10.34	9.18
Na2O	1.76	1.62	1.51	1.61	1.66	1.77	1.67	1.62	1.19	1.49
K2O	1.98	2.15	1.97	2.41	1.99	1.98	1.95	1.67	2.92	2.16
MnO	0.15	0.12	0.16	0.10	0.14	0.11	0.20	0.10	0.15	0.12
P2O5	0.18	0.18	0.19	0.18	0.20	0.17	0.21	0.19	0.16	0.17
Total	96.19	95.83	93.72	94.75	95.57	94.84	96.86	94.60	94.23	95.06
As	0	0	3	0	0	0	0	0	3	0
Ba	234	262	236	291	284	283	293	209	254	266
Co	17	18	18	15	17	16	13	16	17	12
Cr	124	152	141	135	194	129	181	206	128	122
Cu	16	27	17	21	7	21	17	13	16	2
Ga	12	13	13	16	13	12	12	13	12	13
La	22	28	27	24	31	22	29	23	25	28
Ni	58	56	53	63	49	50	46	43	44	51
Nb	13	12	13	13	13	10	13	13	12	11
Pb	6	6	8	13	9	8	10	11	14	8
Rb	54	56	54	70	52	52	48	42	69	51
Sr	53	58	59	159	63	53	273	191	118	93
Sb	5	0	2	4	0	0	0	0	9	1
S	0	0	464	55	0	0	0	0	200	0
Th	10	10	10	8	4	10	9	9	5	9
V	84	102	84	109	98	76	97	104	82	82
Y	25	24	23	26	27	23	28	25	24	25
Zn	61	55	59	71	52	53	44	48	44	40
Zr	175	221	180	184	251	178	253	277	168	167

TABLE 4.73

XRF Analyses: Kirkudbright Mapping Studies (GWKE27) Part 2

VAR. / ID.	PDW362	PDW363	PDW364	PDW365	PDW370	PDWM369	PDW368	PDW367	PDW366	PDW371
East	26545	26559	26569	26570	26319	26320	26318	26310	26303	26345
North	54441	54438	54429	54408	54519	54506	54498	54487	54478	54460
SiO2	56.88	56.14	58.64	59.02	59.46	54.14	60.97	60.18	57.21	57.79
Al2O3	10.90	10.73	11.88	11.48	10.97	10.89	11.72	12.76	10.67	14.42
TiO2	0.81	0.67	1.00	0.79	0.74	0.69	0.81	0.95	0.82	0.94
Fe2O3	4.80	4.67	7.02	6.13	5.12	5.03	5.70	5.84	5.59	5.51
MgO	3.87	3.87	7.07	6.89	3.99	3.75	4.04	4.88	3.95	3.44
CaO	14.81	15.60	6.94	5.78	10.35	15.61	6.68	5.97	12.12	8.23
Na2O	1.66	1.68	1.55	1.84	1.52	1.67	1.70	1.43	1.54	1.25
K2O	2.11	2.00	1.82	2.04	2.09	1.92	2.25	2.31	2.00	3.08
MnO	0.13	0.11	0.11	0.11	0.09	0.14	0.08	0.08	0.11	0.09
P2O5	0.20	0.17	0.19	0.16	0.17	0.17	0.16	0.21	0.17	0.20
Total	96.17	95.64	96.22	94.24	94.50	94.01	94.11	94.61	94.18	94.95
As	0	0	0	0	0	0	0	0	3	0
Ba	294	256	268	289	208	212	219	245	233	296
Co	12	14	18	17	9	16	16	15	12	14
Cr	170	113	219	120	137	126	135	218	137	168
Cu	16	17	13	17	11	17	14	5	15	11
Ga	12	11	13	12	10	13	13	13	13	12
La	29	28	34	19	20	25	22	30	16	32
Ni	47	50	49	51	50	60	58	54	47	44
Nb	12	12	13	11	12	11	12	13	12	13
Pb	9	11	11	16	9	7	8	11	17	11
Rb	53	51	44	51	55	53	61	59	51	80
Sr	197	245	85	68	150	200	117	109	174	104
Sb	3	0	2	0	3	4	3	2	7	2
S	0	58	0	0	0	47	0	0	0	0
Th	7	10	9	6	10	7	5	9	6	8
V	96	78	116	77	77	86	96	94	79	100
Y	26	23	28	24	23	25	22	28	26	25
Zn	44	47	54	51	43	52	51	54	53	40
Zr	240	158	291	158	196	164	176	301	208	240

TABLE 4.73

VAR. / ID.	PDW372	PDW373	PDW374	PDW375	PDW376	PDW377
East	26326	26375	26386	26398	26417	26422
North	54455	54452	54443	54437	54450	54435
SiO2	56.53	56.76	58.54	58.02	60.47	59.55
Al2O3	14.15	13.20	12.87	13.72	13.15	13.09
TiO2	0.83	0.91	0.97	0.96	0.92	0.85
Fe2O3	5.31	6.05	7.24	6.94	5.99	5.65
MgO	4.01	4.80	6.92	6.40	3.87	4.77
CaO	11.37	9.89	5.97	4.03	6.80	7.45
Na2O	1.02	1.51	1.81	1.86	1.61	1.88
K2O	3.08	2.41	1.90	2.10	2.62	2.34
MnO	0.17	0.11	0.12	0.12	0.12	0.14
P2O5	0.18	0.19	0.19	0.19	0.19	0.17
Total	96.65	95.83	96.53	94.34	95.74	95.89
As	0	0	0	0	0	0
Ba	233	257	212	249	245	278
Co	16	18	16	20	33	13
Cr	149	143	155	144	147	145
Cu	31	9	7	10	6	16
Ga	13	15	14	14	13	14
La	20	28	26	34	27	23
Ni	38	58	52	62	51	47
Nb	13	12	13	13	13	13
Pb	10	8	7	11	11	6
Rb	78	65	48	55	66	60
Sr	119	135	54	54	83	89
Sb	2	5	3	7	0	3
S	0	0	0	0	0	0
Th	10	8	7	8	11	9
V	92	107	100	96	87	98
Y	27	27	24	25	23	25
Zn	42	63	60	58	46	44
Zr	211	198	198	194	202	203

TABLE 4.73

XRF Analyses: Glendinning Additional Trace Element Studies (GWKE28) Part 1

VAR. / ID.	CXD-1001	CXD-1005	CXD-1011	CXD-1030	CXD-1051	CXD-1052	CXD-1077	CXD-1081	CXD-1091	CXD-1101
Ag	3	0	0	0	1	4	3	1	0	3
Bi	0	0	0	0	0	0	0	0	2	0
Br	0	0	0	0	0	0	3	0	9	0
Cd	0	0	0	0	0	0	0	0	0	0
Ce	69	71	69	68	80	68	128	79	252	88
Cs	9	11	32	34	57	51	32	28	31	37
HF	6	7	3	8	5	6	5	5	6	5
Mo	0	1	0	1	1	1	2	2	11	2
Se	0	0	0	0	0	0	0	0	0	0
Sc	21	20	20	22	26	23	23	25	18	25
Sn	0	0	0	0	0	0	0	0	0	0
Ta	4	0	0	0	0	0	0	0	0	2
Te	0	0	0	0	0	0	0	0	0	0
Th	11	10	5	12	12	7	12	7	6	9
Tl	0	0	0	0	0	0	0	0	0	0
U	0	3	0	0	2	2	0	2	0	3
V	107	94	101	112	150	116	135	132	111	136
W	175	190	134	88	64	148	57	43	372	81

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TABLE 4.74

XRF Analyses: Glendinning Additional Trace Element Study (GWKE28) Part 2

VAR. / ID.	CXD-1111	CXD-1121	CXD-1131	CXD-1141	CXD-1151	CXD-1159	CXD-1165	CXD-1166	CXD-1168
Ag	0	0	0	2	0	0	0	0	0
Bi	0	0	0	0	0	2	0	0	0
Br	0	0	0	0	0	7	2	0	0
Cd	0	0	0	0	4	0	0	0	0
Ce	87	68	53	72	69	262	111	128	79
Cs	30	59	14	39	41	27	30	25	31
Hf	6	4	2	6	7	6	5	11	6
Mo	2	0	3	2	0	1	1	1	1
Se	0	0	0	0	0	0	0	0	0
Sc	23	24	5	22	27	17	23	19	17
Sn	0	0	0	0	0	0	0	0	0
Ta	0	0	3	3	0	0	0	3	2
Te	0	0	0	0	0	0	0	0	0
Th	9	7	2	8	12	8	10	13	9
Tl	0	0	0	0	0	0	0	0	0
U	2	3	0	2	2	2	2	2	3
V	125	110	46	107	153	106	120	110	84
W	102	57	951	78	101	333	117	267	178

TABLE 4.74

XRF Analyses: Glendinning Additional Trace Element Study (GWKE29) Part 1

VAR. / ID.	DJR-1	DJR-3	DJR-4	DJR-11	DJR-13	DJR-18	DJR-33	DJR-53	DJR-54	DJR-58
Ag	3	2	0	0	0	3	0	2	5	0
Bi	0	0	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0	0	0
Ce	58	59	51	70	52	50	54	49	40	0
Cs	7	4	8	6	3	5	10	12	8	49
Hf	7	7	7	7	4	5	6	8	5	7
Mo	1	0	0	0	0	0	0	0	0	0
Se	0	0	0	0	0	0	0	0	0	0
Sc	22	21	24	19	19	19	20	20	19	0
Sn	0	3	0	0	0	0	0	0	19	20
Ta	0	2	0	0	2	0	0	0	0	0
Te	3	0	0	0	0	0	0	0	0	0
Th	7	9	12	12	7	7	7	10	9	4
Tl	0	0	0	0	0	0	0	0	0	0
U	0	2	0	0	0	0	2	0	0	0
V	109	102	119	96	84	92	77	90	2	0
W	201	96	85	203	234	127	154	147	76	82
								119	119	149

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TABLE 4.75

XRF Analyses: Glendinning Additional Trace Element Study (GWKE30) Part 1

VAR. / ID.	DJR-1001	DJR-1003	DJR-1004	DJR-1C11	DJR-1013	DJR-1018	DJR-1033	DJR-1053	DJR-1054	DJR-1058
Ag	0	0	1	0	0	2	1	0	0	0
Bi	0	0	0	0	0	0	0	0	0	0
Br	0	0	0	0	0	0	0	0	0	0
Cd	0	0	0	0	0	0	0	0	0	0
Ce	62	81	74	60	71	72	71	75	74	71
Cs	9	11	8	7	10	9	17	23	18	12
Hf	6	8	5	7	5	8	8	6	6	5
Mo	0	0	0	0	0	0	0	0	0	0
Se	0	0	0	0	0	0	0	0	0	0
Sc	24	22	26	24	30	28	22	23	28	26
Sn	0	2	0	0	0	3	0	0	0	0
Ta	5	2	5	0	4	0	0	0	0	0
Te	0	0	0	0	0	0	0	0	2	0
Th	8	13	11	9	13	10	12	9	14	10
Tl	0	0	0	2	0	0	0	0	0	0
U	2	0	3	0	0	2	2	0	0	0
V	119	129	138	96	152	152	123	0	3	2
W	46	28	24	44	15	45	76	134	144	139
								40	46	28

-2716-

TABLE 4.76

VAR. / ID.	AX575	AX576	AX577	AX578	AX579	AX580	AX581	AX588	AX589	AX590
SiO2	64.71	66.01	61.78	63.43	63.34	64.94	63.85	69.44	63.15	62.48
Al2O3	12.68	12.40	15.51	14.76	11.83	13.98	14.24	11.10	9.94	14.39
TiO2	0.77	0.74	0.88	0.85	0.68	0.80	0.86	0.79	0.59	0.83
Fe2O3	5.38	4.76	6.61	6.26	4.76	5.90	5.93	5.16	3.82	5.94
MgO	4.36	3.64	4.80	4.45	3.53	4.48	4.31	3.40	2.79	4.20
CaO	3.07	4.29	1.49	1.83	6.05	2.01	1.84	1.34	9.04	2.21
Na2O	1.90	2.01	1.62	1.73	1.89	1.70	1.67	1.99	1.79	1.76
K2O	2.69	2.77	3.62	3.37	2.74	3.08	3.34	2.43	2.48	3.16
MnO	0.08	0.08	0.07	0.07	0.09	0.07	0.07	0.05	0.11	0.07
P2O5	0.20	0.19	0.20	0.19	0.18	0.18	0.21	0.19	0.16	0.19
Total	95.84	96.89	96.58	96.94	95.09	97.14	96.32	95.89	93.87	95.23
As	0	0	0	0	0	1	0	0	0	0
Ba	598	620	740	710	529	640	661	524	497	703
Co	14	17	22	17	18	14	17	14	16	0
Cr	212	207	197	193	144	179	198	252	204	134
Cu	20	20	32	31	20	24	24	18	17	28
Ga	13	12	16	16	13	13	14	10	10	15
La	34	37	35	33	34	30	36	26	26	35
Ni	81	78	90	99	79	84	80	68	71	77
Nb	13	13	16	13	12	13	14	14	11	16
Pb	14	14	18	19	14	15	18	13	13	19
Rb	65	68	97	90	67	83	89	60	55	84
Sr	176	181	124	133	186	132	123	145	213	156
Sb	1	3	1	0	3	0	3	3	0	0
S	559	1204	1699	1369	699	763	1708	4915	2721	707
Th	6	8	8	6	3	6	9	5	8	8
V	91	86	96	90	62	91	82	73	70	85
Y	23	26	29	25	23	26	27	24	22	27
Zn	47	43	60	64	49	54	55	44	37	65
Zr	284	253	262	257	203	239	255	287	202	230

TABLE 4.77

VAR. / ID.	AX591	AX592	AX593	AX594	AX595	AX596	AX597	AX598	AX599	AX600
SiO2	68.38	64.12	69.14	69.55	60.97	67.08	68.03	66.18	64.15	60.76
Al2O3	12.48	11.01	10.28	11.10	15.72	10.90	11.48	12.65	13.31	15.37
TiO2	0.77	0.93	0.87	0.65	0.77	0.68	0.74	0.78	0.83	0.85
Fe2O3	5.30	5.76	5.80	4.51	7.09	4.56	5.19	5.49	5.86	6.39
MgO	3.92	3.89	3.80	3.16	4.66	3.11	3.85	4.00	4.16	4.87
CaO	2.74	5.53	1.76	3.16	1.20	4.41	2.63	2.64	2.23	1.38
Na2O	2.29	1.73	1.83	2.11	1.59	2.02	1.91	2.24	2.17	1.77
K2O	2.21	2.20	1.67	2.27	3.69	2.27	2.42	2.30	2.57	3.54
MnO	0.07	0.10	0.07	0.06	0.07	0.07	0.07	0.08	0.08	0.07
P2O5	0.22	0.24	0.18	0.18	0.17	0.20	0.18	0.23	0.22	0.20
Total	98.38	95.51	95.40	96.75	95.93	95.30	96.50	96.59	95.58	95.20
As	0	0	1	0	0	3	0	0	0	0
Ba	506	455	394	483	787	459	572	524	586	770
Co	16	13	14	22	24	16	14	11	15	18
Cr	166	300	379	172	135	169	274	151	139	150
Cu	22	18	17	16	28	17	19	23	23	28
Ga	12	11	10	12	18	11	11	14	14	16
La	37	32	31	31	42	34	31	40	33	32
Ni	72	61	73	73	96	64	71	69	70	83
Nb	14	15	12	12	15	14	13	14	16	15
Pb	14	13	11	16	15	12	18	16	17	16
Rb	59	51	42	58	103	62	59	61	69	96
Sr	171	175	123	154	124	167	150	176	167	151
Sb	2	0	0	1	0	4	0	0	3	3
S	480	1633	1007	441	750	336	712	376	429	699
Th	9	10	10	5	10	6	5	11	8	7
V	75	99	85	59	85	67	70	66	76	79
Y	25	28	25	23	28	26	24	27	26	30
Zn	50	52	42	40	77	45	48	50	58	64
Zr	264	330	349	226	212	294	268	270	271	242

TABLE 4.77

-2718-

VAR. / ID.	PDW280	PDW281	PDW282	PDW283	PDW284	PDW285	PDW286	PDW287	PDW288	PDW289
East	24359	24241	24192	24501	24592	24609	24623	24658	24679	24741
North	55494	55290	55270	55141	55036	55030	55014	54997	55003	54983
SiO2	63.77	65.42	65.67	60.85	56.00	51.77	58.64	58.08	61.03	57.88
Al2O3	13.21	13.31	13.10	10.27	11.27	12.67	12.80	13.21	13.71	10.90
TiO2	0.82	0.86	1.07	0.62	0.69	0.85	0.70	0.86	0.78	0.68
Fe2O3	5.70	6.00	6.57	4.51	4.93	7.66	5.20	5.95	5.92	4.80
MgO	4.53	4.30	4.18	3.75	4.68	10.25	4.84	5.68	4.04	5.03
CaO	2.14	2.64	0.52	10.81	15.49	8.02	8.19	5.59	1.98	11.65
Na2O	1.61	1.84	1.60	1.55	1.48	2.94	1.79	1.63	2.76	1.66
K2O	2.44	2.22	2.23	1.75	2.06	1.22	2.24	2.26	3.18	1.85
MnO	0.08	0.08	0.09	0.07	0.10	0.17	0.08	0.08	0.09	0.08
P2O5	0.14	0.13	0.17	0.14	0.17	0.28	0.16	0.18	0.23	0.17
Total	94.44	96.80	95.20	94.32	96.87	95.83	94.64	93.52	93.72	94.70
As	0	0	0	0	0	9	6	4	0	0
Ba	374	294	537	276	242	734	315	341	1177	241
Co	13	18	16	14	15	27	17	11	15	10
Cr	132	119	181	155	137	499	125	152	65	143
Cu	3	5	7	7	2	16	4	6	12	7
Ga	14	14	14	12	12	16	13	16	16	14
La	30	32	37	22	22	30	21	32	28	16
Ni	37	39	69	40	49	252	56	63	51	51
Nb	15	14	17	11	12	10	13	14	13	12
Pb	10	10	14	7	9	9	9	13	14	9
Rb	69	64	63	51	56	39	66	71	77	54
Sr	37	45	72	192	242	310	67	113	396	169
Sb	2	2	2	4	4	5	4	3	7	0
S	0	0	0	0	0	0	0	0	0	0
Th	8	9	10	8	9	8	6	10	7	8
V	80	69	86	84	82	137	95	98	88	84
Y	28	28	29	23	26	18	25	27	23	26
Zn	48	56	62	43	54	55	48	61	48	44
Zr	248	245	344	191	189	139	163	219	196	216

TABLE 4.78

-2719-

VAR. / ID.	PDW290	PDW291	PDW292	PDW293	PDW294	PDW295	PDW296	PDW297	PDW298	PDW299
East	24761	24780	24820	24839	24858	24879	24890	24900	24911	24930
North	54966	54950	54933	54928	54914	54908	54899	54881	54860	54833
SiO2	54.82	58.64	57.50	57.90	57.90	60.09	57.78	59.60	56.13	57.34
Al2O3	10.37	13.18	12.26	12.37	11.05	9.96	14.55	11.68	11.03	11.62
TiO2	0.76	0.76	0.81	0.80	0.73	0.64	0.69	0.83	0.78	0.75
Fe2O3	5.08	5.41	5.96	5.72	4.65	4.29	5.05	5.39	4.81	4.97
MgO	4.75	5.15	4.58	4.94	4.12	4.07	6.18	7.85	4.53	4.80
CaO	15.70	8.46	8.46	11.05	12.20	13.40	3.57	6.92	13.06	10.26
Na2O	1.51	1.64	1.74	1.66	1.62	1.78	3.79	1.82	1.35	1.51
K2O	1.87	2.51	2.20	2.29	2.01	1.85	2.24	1.90	2.28	2.42
MnO	0.10	0.09	0.08	0.09	0.09	0.08	0.07	0.12	0.08	0.07
P2O5	0.18	0.18	0.17	0.19	0.18	0.16	0.19	0.18	0.19	0.17
Total	95.14	96.02	93.76	97.01	94.55	96.32	94.11	96.29	94.24	93.91
As	0	0	0	0	0	0	0	0	0	0
Ba	228	330	291	286	254	228	687	230	487	241
Co	9	16	16	21	14	13	19	13	16	17
Cr	180	124	143	148	140	127	161	163	201	143
Cu	7	2	6	0	0	5	3	2	4	5
Ga	12	15	14	15	11	12	18	13	14	15
La	24	26	29	28	25	21	21	28	32	20
Ni	51	57	58	57	45	40	118	49	51	53
Nb	13	13	13	15	13	10	8	13	13	14
Pb	11	9	15	11	7	11	8	6	10	11
Rb	50	68	66	66	58	49	69	55	70	74
Sr	167	78	130	176	187	197	456	33	208	177
Sb	1	0	0	7	2	0	4	3	1	2
S	0	0	0	0	0	0	0	0	0	0
Th	12	9	10	10	10	6	8	11	9	8
V	87	81	88	92	85	72	85	80	96	88
Y	27	24	26	26	26	25	15	28	27	26
Zn	54	49	54	51	43	36	47	48	54	54
Zr	261	177	180	196	209	195	138	244	271	194

TABLE 4.78

-2720-

VAR. / ID.	PDW300	PDW301	PDW302	PDW303	PDW304	PDW305	PDW306	PDW307	PDW308	PDW309
East	24939	24955	24959	24957	24947	24942	24932	24899	24830	24800
North	54812	54765	54739	54719	54690	54668	54649	54647	54501	54490
SiO2	57.01	59.11	55.76	57.81	55.89	58.70	57.65	56.65	60.13	56.90
Al2O3	11.73	10.22	11.01	10.85	12.64	11.64	11.34	10.56	11.39	12.18
TiO2	0.87	0.70	0.68	0.71	0.84	0.82	0.66	0.75	0.70	0.83
Fe2O3	5.43	4.48	4.52	4.79	5.83	5.08	4.68	4.59	4.89	5.88
MgO	5.39	4.31	4.62	4.12	4.70	4.70	4.10	4.90	4.47	5.29
CaO	11.82	13.04	15.35	13.96	9.76	11.19	13.22	14.77	11.14	8.67
Na2O	1.48	1.50	1.55	1.65	1.38	1.57	1.50	1.53	1.49	1.61
K2O	2.19	2.06	2.28	2.01	2.57	2.20	2.19	1.97	2.27	2.15
MnO	0.09	0.08	0.08	0.09	0.08	0.08	0.08	0.08	0.07	0.09
P2O5	0.20	0.17	0.17	0.18	0.18	0.19	0.17	0.19	0.16	0.18
Total	96.21	95.67	96.02	96.17	93.87	96.17	95.59	95.99	96.71	93.78
As	0	0	0	0	0	0	0	0	0	0
Ba	278	179	294	216	234	325	281	177	187	217
Co	18	13	11	13	13	20	17	14	13	14
Cr	213	167	149	134	147	178	131	215	144	140
Cu	2	2	4	4	0	5	2	4	3	1
Ga	13	12	12	12	14	14	13	12	13	16
La	27	26	22	32	23	28	27	32	25	24
Ni	49	42	55	46	62	47	42	45	47	55
Nb	13	11	12	15	14	14	12	13	11	13
Pb	13	11	12	11	13	11	12	8	9	8
Rb	64	61	65	58	80	65	64	55	66	68
Sr	175	188	217	203	156	168	214	200	166	119
Sb	5	3	3	3	0	2	1	4	3	4
S	0	0	0	0	0	0	0	0	0	0
Th	9	9	6	10	11	13	7	9	7	9
V	93	83	86	86	103	98	80	81	83	99
Y	28	26	23	25	27	26	24	27	25	30
Zn	55	42	44	51	65	53	46	47	50	66
Zr	298	224	187	210	192	272	184	290	190	202

TABLE 4.78

VAR. / ID.	PDW310	PDW311	PDW312	PDW313	PDW314	PDW315	PDW316	PDW317	PDW318	PDW319
East	24769	24821	24852	24860	24841	24841	24850	24825	24830	24811
North	54479	54412	54410	54393	54339	54319	54297	54240	54215	54190
SiO2	58.19	60.40	58.10	58.69	56.12	60.07	58.91	57.12	60.03	60.27
Al2O3	12.78	13.25	9.84	10.25	12.04	12.52	13.70	12.07	11.86	12.43
TiO2	0.75	0.83	0.80	0.72	0.75	0.87	0.77	0.81	0.88	0.82
Fe2O3	5.22	5.64	4.91	5.25	5.14	4.16	5.04	5.99	6.61	5.41
MgO	4.41	4.54	4.90	7.93	4.81	6.14	6.49	6.83	6.88	6.44
CaO	8.73	7.69	14.78	8.46	11.07	9.73	6.82	6.70	6.30	7.01
Na2O	1.67	1.69	1.52	1.78	1.39	1.12	1.36	1.50	1.64	1.38
K2O	2.48	2.38	1.62	1.50	2.23	1.78	2.57	2.28	1.96	2.46
MnO	0.08	0.08	0.09	0.14	0.09	0.11	0.10	0.12	0.12	0.09
P2O5	0.16	0.18	0.19	0.17	0.17	0.19	0.18	0.18	0.20	0.17
Total	94.47	96.68	96.75	94.89	93.81	96.69	95.94	93.60	96.48	96.48
As	0	4	0	0	0	0	0	3	2	3
Ba	315	263	263	158	193	152	209	196	208	203
Co	21	19	15	12	16	15	14	16	17	16
Cr	126	139	205	126	154	269	144	139	146	181
Cu	109	36	11	0	4	0	5	1	0	0
Ga	14	15	12	12	13	12	15	14	13	13
La	23	24	33	29	20	30	26	15	30	16
Ni	58	57	43	43	57	65	68	59	58	67
Nb	13	14	15	12	13	12	13	12	14	13
Pb	11	6	13	8	9	12	10	9	11	7
Rb	77	71	47	42	67	49	75	64	59	71
Sr	153	123	194	43	161	65	51	37	31	36
Sb	0	9	0	0	3	0	1	0	5	4
S	21	0	0	0	0	0	0	0	0	0
Th	8	8	9	6	7	11	10	12	9	7
V	97	92	86	63	92	84	85	83	80	94
Y	26	28	29	26	26	26	25	24	30	24
Zn	55	62	52	50	55	32	46	50	67	52
Zr	169	194	280	187	190	322	196	200	202	217

TABLE 4.78

VAR. / ID.	PDW320	PDW321	PDW322	PDW323	PDW324	PDW325	PDW326	PDW327	PDW328	PDW329
East	24802	24799	24788	24781	24792	24791	24779	24772	24775	24788
North	54170	54149	54122	54095	54079	54051	54000	53980	53959	53949
SiO2	56.49	57.21	57.55	56.23	61.93	57.47	58.85	60.37	51.15	59.09
Al2O3	13.64	11.19	12.94	10.99	11.67	12.37	14.14	11.31	11.39	12.07
TiO2	0.84	0.83	0.76	0.86	0.76	0.78	0.82	0.76	1.08	1.10
Fe2O3	6.04	5.86	5.60	5.65	4.55	5.46	5.23	5.70	7.71	6.04
MgO	6.69	7.63	5.17	8.13	5.66	4.95	4.01	4.51	9.32	5.25
CaO	7.22	8.40	9.56	9.66	7.44	9.87	6.73	10.25	10.98	8.83
Na2O	1.53	1.55	1.36	1.57	1.43	1.48	1.51	1.66	2.77	1.63
K2O	2.53	1.80	2.55	2.09	2.49	2.13	2.66	1.98	1.44	1.93
MnO	0.10	0.11	0.08	0.17	0.11	0.08	0.09	0.10	0.14	0.08
P2O5	0.18	0.18	0.16	0.20	0.17	0.18	0.17	0.19	0.64	0.22
Total	95.26	94.76	95.73	95.55	96.21	94.77	94.21	96.83	96.62	96.24
As	1	0	2	0	0	0	1	0	0	0
Ba	264	197	241	153	163	198	230	197	3183	206
Co	19	12	20	15	14	13	18	22	32	15
Cr	141	175	134	226	174	154	152	133	286	320
Cu	5	2	2	3	4	50	7	2	39	9
Ga	16	13	13	12	14	15	15	12	13	13
La	22	25	23	29	22	26	29	20	20	34
Ni	70	58	56	48	43	55	68	57	54	58
Nb	15	13	13	13	12	14	15	13	9	15
Pb	8	11	9	12	9	7	10	9	13	10
Rb	75	52	72	56	63	64	81	56	27	58
Sr	58	46	117	37	51	154	80	120	385	129
Sb	3	0	0	0	0	0	3	0	0	3
S	0	0	0	0	0	0	0	0	1034	0
Th	12	9	10	11	13	5	6	4	4	11
V	100	84	97	90	87	93	90	73	208	122
Y	28	26	25	27	23	27	28	26	23	32
Zn	61	63	54	40	29	56	44	52	50	58
Zr	186	225	186	275	226	213	202	184	160	397

TABLE 4.78

VAR. / ID.	PDW330	PDW331	PDW332	PDW333	PDW334	PDW335	PDW336	PDW337	PDW338	PDW339
East	24789	24785	24770	24790	24790	24829	24859	24868	24877	24880
North	53929	53910	53898	53882	53858	53838	53841	53809	53790	53769
SiO2	60.42	61.21	50.25	58.22	56.81	59.36	58.76	57.98	56.94	63.26
Al2O3	12.03	14.32	11.98	11.79	11.75	13.31	11.13	11.47	9.53	11.99
TiO2	0.76	0.91	1.11	0.76	1.09	0.79	0.80	0.73	0.67	0.75
Fe2O3	5.09	5.73	7.92	4.85	6.52	5.57	5.07	4.57	4.15	5.37
MgO	4.75	4.64	12.44	4.34	5.82	4.41	4.09	3.59	4.07	4.13
CaO	8.76	5.76	8.95	9.77	8.78	8.71	10.16	13.66	16.28	7.24
Na2O	1.53	1.61	2.53	1.52	1.51	1.27	1.54	1.41	1.57	1.60
K2O	2.24	2.43	0.52	2.23	1.76	2.87	2.11	2.49	1.67	2.27
MnO	0.07	0.08	0.13	0.09	0.10	0.11	0.09	0.11	0.11	0.08
P2O5	0.17	0.19	0.44	0.17	0.21	0.19	0.18	0.17	0.17	0.16
Total	95.82	96.88	96.27	93.74	94.35	96.59	93.93	96.18	95.16	96.85
As	1	0	0	0	0	0	0	2	1	0
Ba	198	245	315	243	208	218	263	200	165	222
Co	13	18	39	12	19	16	13	13	14	16
Cr	150	180	544	141	204	142	169	146	130	112
Cu	17	9	16	11	40	2	17	1	23	15
Ga	15	16	17	12	15	14	13	12	12	13
La	22	34	41	24	41	22	30	24	24	18
Ni	51	65	353	52	56	68	51	58	42	55
Nb	14	14	13	13	18	13	13	12	12	13
Pb	11	10	12	8	12	12	9	11	9	9
Rb	68	72	23	66	57	85	65	67	47	71
Sr	138	93	193	131	137	92	135	159	203	128
Sb	0	0	2	1	2	8	0	3	0	0
S	0	0	0	0	0	0	0	0	0	0
Th	9	10	15	9	10	9	9	9	5	8
V	86	101	148	94	112	87	95	96	75	74
Y	25	27	18	26	28	26	27	25	28	24
Zn	55	56	56	50	56	42	48	34	40	52
Zr	204	226	205	202	308	190	255	213	188	161

TABLE 4.78

VAR. / ID.	PDW340	PDW341	PDW342	PDW343	PDW344	PDW345	PDW346	PDW347	PDW348	PDW349
East	24865	24847	24838	24817	24794	24801	24804	24770	24769	24750
North	53750	53715	53682	53663	53648	53622	53594	53571	53557	53532
SiO2	59.09	58.98	57.25	60.64	59.65	58.71	53.79	58.22	54.78	55.12
Al2O3	13.06	11.41	18.35	12.34	11.88	12.23	10.44	10.19	10.16	10.25
TiO2	0.74	0.74	1.00	0.75	0.77	0.82	1.23	0.69	0.86	0.69
Fe2O3	5.15	5.04	5.91	4.91	5.47	6.01	6.68	4.52	5.42	4.47
MgO	5.73	4.48	4.16	3.78	4.25	4.67	4.53	3.86	4.82	3.81
CaO	6.96	10.24	5.56	9.24	9.98	8.82	14.33	13.11	14.02	16.38
Na2O	1.19	1.59	0.15	1.75	1.70	1.79	1.30	1.75	1.36	1.60
K2O	3.04	2.06	3.25	2.20	2.26	2.10	2.06	1.66	1.94	1.91
MnO	0.13	0.08	0.10	0.09	0.09	0.10	0.15	0.11	0.11	0.19
P2O5	0.16	0.16	0.19	0.17	0.17	0.17	0.25	0.15	0.17	0.17
Total	95.25	94.78	95.92	95.87	96.22	95.42	94.76	94.26	93.64	94.59
As	1	0	7	1	0	0	0	0	0	0
Ba	269	205	259	183	256	212	208	532	238	203
Co	14	12	17	16	14	20	14	16	11	14
Cr	117	139	158	129	121	117	359	121	187	132
Cu	2	30	4	9	21	4	18	16	14	14
Ga	13	13	16	13	14	14	13	12	12	12
La	27	25	35	28	23	18	46	14	30	27
Ni	63	55	88	48	57	56	52	44	45	44
Nb	13	13	16	11	13	13	18	12	14	11
Pb	7	10	11	10	9	11	11	9	9	12
Rb	82	63	93	67	66	66	56	50	54	56
Sr	58	156	72	136	146	144	159	217	189	232
Sb	4	2	8	6	5	6	2	0	2	3
S	8	0	0	0	310	0	49	69	0	0
Th	9	4	10	9	7	10	21	9	8	8
V	91	81	99	85	80	86	129	88	96	81
Y	25	23	27	24	22	24	36	22	27	26
Zn	39	47	46	43	51	57	60	40	47	47
Zr	156	183	234	188	168	166	489	171	255	168

TABLE 4.78

VAR. / ID.	PDW350	PDW351
East	24729	24697
North	53510	53491
SiO2	59.18	59.91
Al2O3	11.35	11.74
TiO2	0.90	0.81
Fe2O3	5.79	5.63
MgO	5.06	4.74
CaO	9.21	7.63
Na2O	1.71	1.83
K2O	1.79	1.72
MnO	0.09	0.08
P2O5	0.18	0.17
Total	95.26	94.26
As	0	0
Ba	219	199
Co	15	17
Cr	178	139
Cu	15	14
Ga	12	14
La	28	25
Ni	46	49
Nb	13	12
Pb	7	10
Rb	52	48
Sr	172	167
Sb	3	0
S	0	0
Th	10	8
V	95	79
Y	25	22
Zn	49	53
Zr	236	191

TABLE 4.78

VAR. / ID.	GY5	GY7	GY8	GY10	GY14	GY16	GY17	GY20	GY21	GY22
East	21995	22006	22006	22013	22096	22588	22590	22030	22052	22090
North	55508	55460	55460	55436	55661	55166	55009	55010	56119	55329
SiO2	62.07	65.89	63.63	65.30	64.51	69.76	69.33	66.21	62.22	60.16
Al2O3	10.52	8.32	9.22	9.45	9.36	8.87	9.99	10.31	10.39	8.16
TiO2	1.26	0.66	0.64	0.89	0.84	0.68	0.78	0.76	0.96	0.96
Fe2O3	7.33	5.09	4.77	6.20	6.39	5.61	5.80	6.40	8.22	4.70
MgO	5.94	7.12	4.83	5.10	6.87	4.20	4.66	3.82	5.21	3.17
CaO	2.10	5.36	9.90	2.97	2.33	1.77	1.50	2.71	3.17	13.56
Na2O	1.87	1.38	1.15	1.84	1.96	1.54	1.58	2.82	3.04	1.63
K2O	2.20	1.27	1.92	1.73	1.55	2.11	2.33	1.63	1.10	2.11
MnO	0.13	0.12	0.12	0.09	0.09	0.08	0.07	0.10	0.16	0.15
P2O5	0.22	0.14	0.14	0.15	0.15	0.16	0.19	0.14	0.17	0.19
Total	93.64	95.35	96.32	93.72	94.05	94.78	96.23	94.90	94.64	94.79
As	2	0	7	0	3	2	3	1	2	4
Ba	509	226	258	377	355	549	524	445	369	351
Co	19	26	17	25	29	12	18	17	17	16
Cr	227	473	476	286	382	325	298	233	396	417
Cu	2	2	25	8	12	17	16	18	22	13
Ga	11	8	9	11	11	11	11	12	14	10
La	31	21	28	25	34	29	33	24	27	32
Ni	62	134	133	56	75	94	81	72	84	69
Nb	10	10	11	12	9	10	12	8	10	14
Pb	10	7	11	10	11	13	13	12	10	11
Rb	49	31	44	41	38	51	57	40	26	48
Sr	137	50	127	126	224	166	130	264	233	121
Sb	1	0	0	5	2	2	0	4	0	0
S	0	0	544	43	27	230	47	690	536	260
Th	5	5	6	7	7	7	6	10	2	8
V	144	68	75	120	144	83	96	112	152	112
Y	22	21	23	18	20	23	24	18	22	24
Zn	35	31	31	34	42	39	44	52	60	60
Zr	241	207	189	220	209	174	228	126	173	428

TABLE 4.79

VAR. / ID.	GY27	GY28	GY32	GY37	GY39	GY40	GY45	GY97	GY98	GY105
East	22096	22098	22117	22217	22249	22246	21923	23922	23871	22171
North	55315	55308	55254	55179	55159	55162	55938	53806	53851	55898
SiO2	60.72	68.45	66.04	70.43	54.91	67.90	61.22	58.32	58.27	62.86
Al2O3	13.48	8.87	10.18	8.23	11.93	10.13	14.63	9.84	11.13	12.22
TiO2	0.95	0.57	1.25	0.81	0.93	0.92	1.05	0.88	0.74	0.89
Fe2O3	6.25	4.88	6.96	4.89	7.86	5.71	7.79	5.78	5.20	6.70
MgO	5.68	4.74	6.07	4.76	8.89	4.16	6.48	5.05	3.73	4.88
CaO	2.33	3.67	1.65	1.92	6.16	1.82	0.95	12.51	10.99	4.36
Na2O	2.97	1.77	1.91	1.64	2.84	1.73	2.05	1.65	1.61	2.55
K2O	1.87	2.56	2.14	2.00	1.85	1.93	2.23	1.84	2.51	1.50
MnO	0.10	0.11	0.11	0.09	0.18	0.08	0.12	0.09	0.09	0.14
P2O5	0.29	0.11	0.22	0.15	0.27	0.20	0.20	0.20	0.18	0.18
Total	94.64	95.73	96.53	94.92	95.82	94.58	96.72	96.16	94.45	96.28
As	3	4	0	4	4	3	2	0	0	3
Ba	426	514	474	457	598	435	434	266	315	319
Co	15	13	15	22	25	16	20	12	15	19
Cr	126	172	408	359	538	465	386	275	146	266
Cu	4	4	2	41	3	4	28	17	16	27
Ga	14	9	13	9	15	10	13	12	12	12
La	39	27	34	29	27	36	25	30	28	22
Ni	68	76	90	74	203	81	192	53	57	99
Nb	14	10	13	9	9	12	12	12	11	11
Pb	10	10	7	10	7	7	16	15	13	15
Rb	47	55	49	45	34	44	53	51	65	35
Sr	85	99	97	122	390	55	89	191	167	232
Sb	4	6	0	2	3	2	0	3	4	0
S	570	4213	126	705	0	0	0	0	0	0
Th	8	2	6	7	5	9	4	8	4	6
V	93	59	133	97	127	112	135	113	93	128
Y	27	19	23	19	17	29	20	27	24	19
Zn	34	22	28	18	41	52	66	47	53	49
Zr	210	109	310	170	131	354	183	262	177	163

TABLE 4.79

VAR. / ID.	GY106	GY107	GY108	GY109	GY117	GY118	GY119	GY121	GY122	GY123
East	22082	22125	22098	22058	21920	21924	22070	22769	22750	22798
North	55777	55870	55831	55808	56084	56094	55955	55047	55021	55081
SiO ₂	63.00	61.96	58.95	62.13	57.24	56.58	67.06	63.19	69.26	67.38
Al ₂ O ₃	10.15	12.64	14.82	12.38	13.00	14.26	11.78	15.39	8.09	8.31
TiO ₂	0.89	0.86	1.09	1.22	1.05	1.16	1.03	0.95	0.87	0.58
Fe ₂ O ₃	7.18	6.53	8.16	8.74	7.83	9.49	6.83	7.96	5.53	5.38
MgO	5.00	5.31	5.80	5.19	5.01	6.08	4.20	3.33	3.75	4.55
CaO	4.10	4.18	2.80	2.06	3.89	2.17	0.34	0.31	3.54	4.63
Na ₂ O	2.35	2.51	2.45	2.93	3.81	3.00	3.37	2.30	1.87	2.16
K ₂ O	1.64	1.93	1.95	1.65	1.57	1.82	1.10	2.65	1.90	1.16
MnO	0.13	0.10	0.12	0.14	0.14	0.14	0.11	0.15	0.08	0.16
P ₂ O ₅	0.15	0.17	0.19	0.18	0.20	0.16	0.20	0.15	0.18	0.16
Total	94.59	96.19	96.33	96.62	93.74	94.86	96.02	96.38	95.07	94.47
As	3	3	4	0	0	2	2	4	2	5
Ba	405	408	341	430	541	324	239	495	474	277
Co	14	16	19	16	21	18	14	16	14	15
Cr	410	274	257	240	185	209	325	102	424	150
Cu	15	20	24	29	33	31	16	16	15	18
Ga	12	13	16	14	16	15	13	16	10	8
La	26	25	27	24	21	20	26	28	37	27
Ni	94	113	118	108	46	79	112	39	69	98
Nb	11	10	11	12	9	9	11	14	10	9
Pb	11	10	11	17	13	12	8	7	20	10
Rb	34	43	46	39	39	44	29	71	43	27
Sr	256	191	158	247	336	286	133	73	194	227
Sb	3	0	0	2	0	0	5	0	0	2
S	72	0	0	337	1631	660	0	1740	1205	42
Th	4	5	7	7	4	5	8	8	4	5
V	128	121	127	152	177	163	114	107	138	78
Y	21	21	22	23	22	19	18	26	20	20
Zn	45	46	66	61	64	65	41	75	44	44
Zr	221	164	170	168	124	114	168	182	175	142

VAR. / ID.	GY129	GY131	GY132	GY133	GY134	GY135	GY136	GY137	GY139	GY141
East	22782	22274	22872	22918	22914	22920	22948	22962	23008	22819
North	54992	56098	54980	54995	54988	54980	54897	54858	54860	55062
SiO2	65.75	62.88	67.24	64.81	65.57	68.84	67.08	67.25	64.72	68.31
Al2O3	12.91	12.68	10.59	12.49	12.99	11.64	8.66	8.42	13.10	9.81
TiO2	0.81	0.96	0.64	0.64	0.78	0.60	0.57	0.69	0.80	0.82
Fe2O3	6.09	6.91	5.18	4.50	5.41	3.63	3.98	4.60	5.43	6.21
MgO	3.28	4.41	2.78	2.68	2.40	1.82	2.78	2.82	2.25	3.78
CaO	1.47	2.10	2.96	3.31	0.80	4.06	7.96	9.62	1.36	3.40
Na2O	2.15	3.39	2.88	2.48	3.77	2.57	1.21	1.53	3.76	2.40
K2O	2.93	1.13	2.32	2.86	2.76	2.67	2.01	1.64	2.59	1.86
MnO	0.15	0.11	0.11	0.08	0.08	0.08	0.08	0.10	0.10	0.10
P2O5	0.20	0.19	0.18	0.19	0.19	0.18	0.11	0.12	0.21	0.20
Total	95.74	94.76	94.88	94.04	94.75	96.09	94.44	96.79	94.32	96.89
As	3	4	0	0	2	2	0	0	5	3
Ba	572	256	710	718	877	809	294	236	871	470
Co	11	16	11	9	12	11	9	9	19	14
Cr	153	242	162	114	151	109	100	183	88	290
Cu	21	18	12	13	13	16	9	11	22	14
Ga	15	13	12	12	15	10	10	9	14	12
La	28	23	22	23	37	35	32	31	36	34
Ni	55	109	47	32	41	28	22	24	37	79
Nb	13	11	10	12	13	10	11	12	12	12
Pb	21	10	16	10	17	23	9	15	18	11
Rb	72	27	49	90	58	75	61	45	59	41
Sr	207	134	460	273	343	256	124	164	395	230
Sb	5	2	0	3	0	0	2	0	3	0
S	538	64	457	0	230	0	0	0	1341	286
Th	6	7	9	3	9	9	5	7	6	5
V	82	104	77	66	85	76	58	76	84	103
Y	25	17	21	21	23	21	25	25	24	22
Zn	69	50	41	40	47	31	31	34	52	48
Zr	246	174	216	190	200	184	223	278	207	239

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TABLE 4.79

VAR. / ID.	GY143	GY144	GY153	GY154	GY155	GY157	GY158	GY159	GY160	GY163
East	22849	22843	22628	22605	22613	23063	23137	23147	23161	23250
North	55061	55038	55320	55330	55243	54776	54735	54738	54816	54770
SiO2	78.62	66.13	67.10	62.12	64.39	72.09	70.91	71.04	70.59	74.15
Al2O3	7.62	11.60	9.70	11.54	9.90	9.91	10.68	10.00	11.34	8.02
TiO2	0.51	0.79	0.75	0.89	0.88	0.83	0.76	0.81	0.90	0.84
Fe2O3	3.51	5.32	5.49	6.97	6.08	5.24	5.33	5.32	6.00	5.29
MgO	1.21	3.03	4.58	4.43	4.62	2.45	2.81	1.77	2.92	1.64
CaO	0.35	2.53	1.80	2.81	3.98	0.90	1.88	1.11	1.16	1.41
Na2O	3.01	2.37	1.67	1.54	1.96	1.97	1.45	1.83	1.67	1.66
K2O	0.78	2.59	2.17	2.96	2.55	1.50	1.94	1.64	2.16	1.27
MnO	0.13	0.10	0.10	0.12	0.12	0.11	0.12	0.08	0.11	0.11
P2O5	0.10	0.19	0.17	0.36	0.22	0.15	0.14	0.17	0.15	0.14
Total	95.84	94.65	93.53	93.74	94.70	95.15	96.02	93.77	97.00	94.53
As	0	4	4	4	3	0	2	0	4	1
Ba	260	632	441	631	578	292	343	353	425	329
Co	5	11	16	16	13	17	12	8	19	11
Cr	69	161	301	221	238	128	122	104	173	134
Cu	5	14	14	25	22	65	2	3	22	14
Ga	7	13	11	14	12	10	12	11	13	10
La	33	32	29	40	31	25	33	33	36	25
Ni	11	78	81	69	75	44	33	26	67	28
Nb	10	12	14	13	13	13	13	15	14	13
Pb	10	17	12	16	13	8	8	13	7	8
Rb	22	64	55	74	60	39	50	42	63	34
Sr	118	201	120	189	288	54	51	72	76	62
Sb	0	4	4	2	0	0	0	3	0	0
S	0	0	28	54	364	0	0	0	427	0
Th	5	2	7	6	10	8	3	5	12	4
V	50	85	87	108	117	78	72	78	85	89
Y	14	23	25	24	26	23	24	27	28	23
Zn	32	48	37	72	51	42	40	47	37	39
Zr	149	228	303	212	281	213	221	262	269	268

TABLE 4.79

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VAR. / ID.	GY172	GY173	GY177	GY178	GY179	GY181	GY182	GY185	GY186	GY187
East	23307	23394	23789	23837	23829	23878	23896	23836	24060	23855
North	54687	54694	54506	54453	54367	54711	54713	53876	55038	54905
SiO2	71.99	67.75	60.39	63.23	56.19	51.22	51.43	58.78	69.78	68.61
Al2O3	11.60	6.23	9.60	8.97	11.67	12.29	12.38	9.30	7.71	10.49
TiO2	0.90	0.60	0.72	0.52	0.83	1.22	0.86	0.69	0.55	0.92
Fe2O3	5.85	4.03	5.00	4.20	5.85	9.16	8.54	4.86	4.40	5.76
MgO	1.81	2.54	4.36	3.49	4.96	8.22	8.14	4.16	2.46	2.83
CaO	0.32	10.34	12.45	10.49	10.62	9.70	9.98	14.39	8.15	1.41
Na2O	1.69	1.36	1.99	1.38	1.36	2.36	2.23	2.02	1.45	1.67
K2O	1.91	1.05	1.51	1.76	2.19	1.61	1.72	1.54	1.45	1.95
MnO	0.08	0.10	0.08	0.07	0.07	0.16	0.15	0.11	0.12	0.08
P2O5	0.17	0.11	0.17	0.14	0.17	0.28	0.22	0.17	0.10	0.16
Total	96.32	94.11	96.27	94.25	93.91	96.22	95.65	96.02	96.17	93.88
As	3	0	7	3	3	23	0	4	10	1
Ba	404	193	244	332	344	243	517	174	203	360
Co	9	10	11	8	14	26	20	11	7	9
Cr	117	149	181	127	176	394	492	140	103	174
Cu	15	10	17	11	23	44	45	19	4	3
Ga	13	8	11	9	15	16	15	12	9	12
La	33	33	33	22	23	18	28	34	22	35
Ni	46	19	41	35	61	119	76	46	19	59
Nb	15	10	12	9	14	7	8	17	9	15
Pb	14	13	12	23	14	12	13	13	11	7
Rb	50	28	44	54	67	46	47	49	36	56
Sr	55	127	221	216	164	377	459	218	115	75
Sb	0	3	0	2	1	1	0	3	0	0
S	0	0	0	0	0	0	329	0	0	0
Th	6	5	1	5	8	0	7	4	2	6
V	71	65	89	70	98	180	179	77	55	81
Y	26	28	25	22	30	18	18	33	25	27
Zn	46	31	46	80	61	64	65	56	18	52
Zr	263	248	227	148	215	111	95	167	183	277

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TABLE 4.79

VAR. / ID.	GY188	GY189	GY190	GY192	GY199	GY204	GY205	GY214	GY215	GY218
East	23795	23680	23729	23651	24594	24506	24490	24438	24395	24397
North	54314	54242	54118	54002	53407	53409	53415	53446	53473	53470
SiO2	61.46	58.16	59.93	58.45	54.85	57.61	63.81	55.81	55.35	58.81
Al2O3	10.87	11.09	10.37	10.54	10.28	10.27	8.48	10.85	10.60	10.54
TiO2	0.79	0.67	0.80	0.82	0.76	0.85	0.85	0.86	0.74	0.92
Fe2O3	5.61	4.94	5.67	5.23	4.93	5.84	6.05	5.05	5.16	5.44
MgO	4.37	3.88	4.43	4.06	4.21	4.41	4.28	4.05	4.36	3.26
CaO	9.10	12.72	10.93	13.54	14.67	11.61	9.53	15.88	14.86	9.88
Na2O	1.79	1.65	1.73	1.70	1.70	1.64	1.79	1.83	1.65	1.72
K2O	1.92	2.23	1.86	2.06	2.12	1.97	1.61	2.06	1.86	2.26
MnO	0.08	0.08	0.08	0.09	0.11	0.10	0.13	0.14	0.13	0.10
P2O5	0.19	0.17	0.19	0.21	0.17	0.17	0.16	0.21	0.17	0.18
Total	96.18	95.59	95.99	96.70	93.80	94.47	96.69	96.74	94.88	93.81
As	2	0	0	0	5	1	4	2	1	0
Ba	284	308	283	270	213	230	160	195	182	200
Co	13	14	15	12	14	16	13	22	15	11
Cr	175	128	223	187	145	150	188	146	128	258
Cu	10	12	12	15	18	22	31	13	15	30
Ga	12	14	10	12	13	13	11	12	12	12
La	24	27	24	31	23	24	34	26	23	41
Ni	46	47	48	48	46	49	39	46	50	45
Nb	11	11	12	11	11	12	12	13	11	13
Pb	12	12	12	13	8	4	10	9	11	13
Rb	54	63	50	55	56	55	42	51	47	60
Sr	151	221	139	197	197	163	91	165	176	120
Sb	5	7	5	0	0	3	2	0	1	0
S	0	0	0	0	48	0	128	0	0	0
Th	10	8	8	7	10	8	8	8	9	10
V	90	82	92	95	83	97	100	97	86	110
Y	27	26	30	27	26	25	26	27	27	27
Zn	59	49	49	48	49	53	41	44	48	44
Zr	229	157	239	250	160	179	185	201	145	234

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TABLE 4.79

VAR. / ID.	GY220	GY226	GY227	GY228	GY233	GY235	GY237	GY252	GY253	GY254
East	24113	23574	23629	24074	24171	21862	24091	24355	24341	24340
North	53803	54083	54047	53757	53707	56060	53686	53509	53518	53519
SiO2	59.68	57.38	57.13	60.23	59.13	52.86	61.33	63.94	59.17	67.54
Al2O3	11.07	8.94	10.63	8.59	9.45	12.70	10.42	8.77	8.65	9.03
TiO2	0.74	0.61	0.81	0.73	0.75	1.62	0.81	0.74	0.74	0.99
Fe2O3	5.13	4.43	5.52	4.52	5.43	10.63	6.41	4.42	4.72	4.64
MgO	4.59	3.67	4.33	3.74	4.31	6.35	4.19	3.56	6.17	4.01
CaO	11.27	17.10	10.85	14.90	13.82	6.27	7.68	10.43	12.04	6.45
Na2O	1.84	1.69	1.91	1.67	1.72	2.18	2.14	1.48	1.70	1.80
K2O	2.09	1.86	2.13	1.82	1.60	2.17	1.45	2.12	2.07	1.47
MnO	0.09	0.10	0.09	0.08	0.10	0.17	0.16	0.13	0.12	0.09
P2O5	0.18	0.15	0.18	0.19	0.17	0.31	0.18	0.16	0.18	0.18
Total	96.68	95.93	93.58	96.47	96.48	95.26	94.77	95.75	95.56	96.20
As	2	2	2	0	2	1	4	0	8	2
Ba	181	181	312	436	161	728	187	163	169	181
Co	45	11	10	9	11	25	16	9	15	10
Cr	156	108	177	184	147	329	139	213	161	280
Cu	5	7	15	6	13	46	26	2	9	10
Ga	12	10	11	11	12	17	11	8	10	9
La	26	26	33	26	26	21	23	26	25	29
Ni	48	47	54	39	42	69	58	28	36	43
Nb	11	9	13	11	11	12	11	10	10	12
Pb	12	9	11	15	10	9	9	8	7	8
Rb	56	47	57	48	43	46	38	46	44	37
Sr	152	169	174	210	159	346	101	92	65	53
Sb	0	2	0	2	2	0	2	4	3	2
S	0	0	0	0	0	1611	0	0	0	0
Th	6	2	6	9	4	7	11	2	5	7
V	87	70	95	84	78	268	83	76	74	86
Y	24	20	28	25	24	24	26	23	23	25
Zn	48	39	56	39	51	78	55	21	30	34
Zr	172	122	209	237	191	156	169	167	203	290

XRF Analyses: Wigtownshire (West) Mapping Study (GWKE33) Part 9

VAR. / ID.	GY262	GY263	GY267	GY268	GY269	GY270	GY271	GY68	GY72	GY74
East	24262	24198	24526	24526	24526	24528	24568	22477	22610	22600
North	53575	53611	53416	53416	53416	53410	53401	55249	55418	55378
SiO2	57.78	58.80	59.17	59.82	54.90	58.53	59.74	67.23	63.66	64.40
Al2O3	9.40	9.56	10.86	11.22	10.85	7.90	10.56	9.66	12.64	11.64
TiO2	0.93	0.97	0.83	0.88	0.72	1.05	0.86	0.86	1.00	0.98
Fe2O3	5.30	6.17	5.33	6.36	4.75	5.77	5.70	6.26	6.63	6.30
MgO	4.23	4.11	4.15	4.14	4.01	3.54	4.07	5.35	5.28	5.15
CaO	13.23	10.81	12.34	9.78	16.69	15.55	11.64	1.10	1.30	1.74
Na2O	1.82	1.64	1.91	1.84	1.75	1.75	1.81	1.49	1.89	1.84
K2O	1.76	1.86	1.88	2.25	2.10	1.43	2.23	1.64	2.13	2.32
MnO	0.10	0.09	0.17	0.15	0.29	0.12	0.09	0.08	0.07	0.10
P2O5	0.21	0.21	0.19	0.18	0.16	0.19	0.19	0.16	0.21	0.21
Total	94.76	94.22	96.83	96.62	96.22	95.83	96.89	93.83	94.81	94.68
As	2	0	0	2	3	2	2	0	0	0
Ba	172	302	279	230	206	182	233	788	515	580
Co	9	15	13	14	14	11	13	14	18	14
Cr	250	197	216	112	151	251	135	260	338	228
Cu	6	12	20	2	24	12	15	15	18	13
Ga	11	12	12	13	12	10	12	13	15	13
La	38	36	26	27	33	36	32	25	27	33
Ni	48	47	44	53	48	38	48	60	77	64
Nb	13	13	12	11	12	13	12	12	16	14
Pb	9	8	13	6	6	5	10	9	11	15
Rb	49	51	49	59	52	35	58	43	57	60
Sr	147	169	179	146	187	205	175	198	98	181
Sb	2	0	0	1	0	3	2	0	3	2
S	0	0	274	0	0	0	0	508	468	572
Th	9	10	5	7	7	12	9	6	6	9
V	107	99	99	95	87	108	91	110	122	108
Y	30	28	24	23	24	26	24	24	28	25
Zn	46	52	48	55	49	40	51	29	52	54
Zr	357	273	198	154	145	292	168	226	328	290

TABLE 4.79

XRF Analyses: Wigtownshire (West) Mapping Study (GWKE33) Part 10

VAR. / ID.	GY83	GY276	GY277	GY283
East	23735	22417	22501	23689
North	53905	55494	55443	53937
SiO2	60.86	63.43	66.19	57.67
Al2O3	11.12	12.13	11.28	10.81
TiO2	0.83	1.05	0.91	0.85
Fe2O3	5.47	7.86	5.94	5.27
MgO	4.13	5.81	4.58	4.68
CaO	9.21	2.09	2.93	11.36
Na2O	1.81	2.76	2.19	1.51
K2O	2.12	1.45	2.04	1.79
MnO	0.10	0.10	0.11	0.08
P2O5	0.18	0.19	0.17	0.18
Total	95.83	96.87	96.34	94.20
As	7	0	1	3
Ba	252	493	531	263
Co	15	19	14	14
Cr	280	245	276	240
Cu	11	18	17	9
Ga	11	14	13	13
La	29	24	33	26
Ni	43	52	63	49
Nb	12	12	14	14
Pb	9	11	15	22
Rb	58	30	49	52
Sr	150	270	189	213
Sb	5	4	0	2
S	0	446	382	0
Th	10	9	11	11
V	86	144	104	90
Y	29	25	25	28
Zn	22	61	54	46
Zr	322	225	273	350

TABLE 4.79

VAR. / ID.	AK734	AK735	AK739	AK741	AK742	AK779
SiO2	59.51	60.52	57.41	61.20	60.67	57.49
Al2O3	11.67	9.63	9.40	10.70	11.57	10.16
TiO2	0.81	0.76	1.03	1.12	0.79	1.02
Fe2O3	5.55	5.20	6.09	6.63	5.68	6.49
MgO	4.33	4.11	4.47	4.49	4.19	4.78
CaO	10.57	9.77	14.84	6.79	9.48	11.42
Na2O	1.67	1.59	1.63	1.68	1.76	1.47
K2O	2.42	1.92	1.82	1.69	2.18	2.16
MnO	0.07	0.08	0.11	0.07	0.08	0.09
P2O5	0.17	0.16	0.20	0.20	0.17	0.21
Total	96.77	93.74	97.00	94.57	96.57	95.29
As	2	0	0	4	3	6
Ba	220	209	222	193	233	276
Co	16	14	16	13	14	19
Cr	130	164	283	211	120	243
Cu	12	14	25	21	17	20
Ga	13	12	12	12	13	13
La	29	25	28	30	28	30
Ni	49	45	47	43	51	58
Nb	15	13	14	15	12	16
Pb	10	12	13	36	11	11
Rb	68	58	52	50	64	64
Sr	158	160	189	118	146	179
Sb	2	0	1	0	2	0
S	0	0	0	0	0	0
Th	13	6	11	11	8	14
V	81	87	108	110	83	113
Y	28	29	32	32	31	33
Zn	63	51	62	58	57	64
Zr	205	239	344	329	203	437

XRF Analyses: Longford Down Traverse (GWKE40)

Part 1

VAR. / ID.	84-01001	84-01002	84-01003	84-01004	84-01005	84-01006	84-01007	84-01008	84-01009	84-01010
East	30615	30695	30712	29742	29820	29745	29910	29926	29970	29935
North	28865	28960	28883	29012	28300	28467	28383	28552	28590	28560
SiO2	65.07	59.24	55.26	53.15	77.45	63.54	66.07	77.11	63.50	53.58
Al2O3	7.93	16.83	12.03	14.72	9.29	16.51	12.61	12.46	12.90	12.64
TiO2	0.44	0.82	0.68	0.79	0.61	0.83	0.62	0.45	0.49	0.75
Fe2O3	3.13	5.82	4.31	5.61	3.12	6.11	4.07	2.88	3.94	5.31
MgO	2.70	3.45	3.28	4.02	1.98	3.54	2.67	1.61	2.95	4.51
CaO	11.24	4.67	13.28	9.73	2.91	2.85	6.73	0.19	8.04	9.88
Na2O	1.42	1.39	1.53	1.60	1.99	1.41	1.96	2.74	1.97	1.29
K2O	1.64	3.54	2.19	2.69	1.42	3.41	2.04	1.60	2.44	2.33
MnO	0.19	0.10	0.14	0.12	0.06	0.09	0.12	0.04	0.23	0.10
P2O5	0.12	0.13	0.17	0.16	0.14	0.14	0.15	0.15	0.15	0.18
Total	93.88	95.99	92.87	92.59	98.97	98.43	97.04	99.23	96.61	90.57
As	7	34	0	14	5	55	29	4	6	5
Ba	205	661	233	388	305	547	325	282	298	330
Co	7	18	15	23	16	26	12	6	9	15
Cr	107	121	118	125	184	120	101	123	116	138
Cu	6	26	6	28	9	25	11	14	11	24
Ga	8	18	12	17	9	17	11	10	11	13
La	14	31	28	20	25	28	27	20	23	35
Ni	19	69	42	62	26	70	42	28	25	59
Nb	8	15	12	13	11	16	12	9	10	13
Pb	12	30	10	13	12	32	12	12	12	27
Rb	40	114	65	86	39	117	54	46	58	68
Sr	151	106	184	180	81	65	129	63	144	169
Sb	0	10	0	0	0	14	0	0	1	0
S	200	7517	56	512	115	9568	174	30	157	50
Th	8	10	8	4	6	14	7	6	4	7
V	46	104	76	93	49	99	63	48	58	87
Y	18	31	25	28	20	29	22	19	20	33
Zn	20	31	45	37	23	37	24	19	19	57
Zr	193	214	192	159	285	216	154	225	185	215

TABLE 4.81

VAR. / ID.	84-01011	84-01012	84-01013	84-01014	84-01015	84-01016	84-01017	84-01018	84-01019	84-01020
East	29980	29760	29677	29525	29510	29510	29508	29475	29414	29384
North	28645	28740	29013	30243	30305	30350	30388	30514	30644	30665
SiO2	58.93	57.75	57.52	57.72	55.19	53.78	57.75	53.95	55.14	68.94
Al2O3	11.21	13.97	16.84	12.42	10.24	11.19	12.90	12.55	12.20	13.26
TiO2	0.65	0.80	0.95	0.73	0.68	0.67	0.77	0.72	0.70	0.79
Fe2O3	4.85	5.44	6.39	4.80	4.32	4.60	5.12	5.09	4.92	5.05
MgO	3.04	3.88	4.87	4.24	4.08	4.31	4.30	4.57	4.20	3.73
CaO	9.99	8.57	5.38	9.49	12.90	13.01	8.21	11.39	9.80	3.50
Na2O	1.93	1.42	1.24	1.69	1.48	1.50	1.50	1.26	1.25	1.28
K2O	1.70	2.42	3.32	2.03	1.75	1.86	2.20	2.30	2.24	2.24
MnO	0.24	0.09	0.07	0.07	0.09	0.09	0.07	0.11	0.09	0.06
P2O5	0.18	0.17	0.18	0.16	0.17	0.18	0.18	0.16	0.16	0.17
Total	92.72	94.51	96.76	93.35	90.90	91.19	93.00	92.10	90.70	99.02
As	4	7	0	3	2	2	2	1	3	2
Ba	296	479	350	223	155	184	210	216	239	420
Co	11	13	15	13	12	13	13	14	10	12
Cr	120	138	146	151	164	124	148	126	138	136
Cu	20	18	9	8	11	13	15	19	19	11
Ga	12	14	17	13	10	13	13	12	14	14
La	24	26	25	29	27	19	21	27	25	22
Ni	52	60	74	53	47	49	51	52	49	55
Nb	14	14	15	11	10	12	12	11	12	12
Pb	15	32	15	13	13	13	13	12	17	13
Rb	52	73	110	60	51	57	61	67	64	71
Sr	285	149	85	148	159	189	131	136	161	55
Sb	0	4	0	3	0	0	0	0	0	0
S	182	43	75	41	51	52	49	55	57	69
Th	5	11	10	13	5	8	10	12	11	10
V	71	82	101	81	79	75	84	87	79	74
Y	27	29	28	26	27	25	27	28	27	24
Zn	62	50	85	56	46	57	56	66	55	59
Zr	194	207	210	225	223	182	219	195	211	217

TABLE 4.81

VAR. / ID.	84-01021	84-01022	84-01023	84-01024	84-01025	84-01026	84-01027	84-01028	84-01029	84-01030
East	29403	29493	29276	29150	29115	29190	29187	29703	29772	29870
North	30649	30397	30347	30338	30240	30213	30174	29205	29274	29239
SiO2	52.15	58.73	55.53	54.34	57.78	54.46	52.91	60.18	54.48	55.56
Al2O3	9.53	10.20	12.45	11.51	11.12	14.83	11.51	12.37	11.96	12.33
TiO2	0.59	0.58	0.65	0.61	0.61	0.87	0.65	0.70	0.78	0.75
Fe2O3	4.31	4.00	4.86	4.45	4.27	6.43	4.63	4.90	5.61	4.91
MgO	3.86	3.50	4.01	3.97	3.72	4.61	4.15	4.11	4.62	4.35
CaO	14.73	8.49	11.61	12.56	11.64	8.74	13.33	8.36	8.87	10.26
Na2O	1.59	1.59	1.55	1.46	1.47	1.15	1.34	1.72	1.56	1.62
K2O	1.68	2.08	2.18	2.02	2.02	2.85	2.05	2.08	1.84	2.20
MnO	0.10	0.08	0.09	0.08	0.09	0.09	0.10	0.08	0.09	0.09
P2O5	0.16	0.14	0.16	0.15	0.16	0.18	0.17	0.16	0.18	0.18
Total	88.70	89.39	93.09	91.15	92.88	94.21	90.84	94.66	89.99	92.25
As	0	1	2	2	2	0	1	0	0	3
Ba	203	298	194	485	209	275	197	227	220	356
Co	13	11	15	14	9	19	12	13	16	11
Cr	120	113	110	116	120	138	121	128	125	132
Cu	16	15	17	22	17	31	19	21	19	20
Ga	10	10	13	13	11	16	12	13	14	13
La	20	24	16	24	22	27	12	22	23	26
Ni	48	33	52	48	46	71	48	57	55	44
Nb	10	11	11	11	11	14	13	12	13	13
Pb	14	13	13	12	18	11	12	13	15	13
Rb	52	55	64	58	58	91	58	63	55	69
Sr	211	168	156	194	167	107	181	125	130	154
Sb	0	0	0	0	0	0	0	0	2	0
S	49	74	43	104	57	35	50	38	32	62
Th	7	9	11	11	10	10	10	8	5	10
V	73	70	78	76	77	99	76	74	79	90
Y	25	24	26	23	24	31	26	26	27	28
Zn	53	42	56	50	53	79	57	51	66	53
Zr	177	223	161	168	188	193	184	187	187	209

TABLE 4.81

VAR. / ID.	84-01031	84-01032	84-01033	84-01034	84-01035	84-01036	84-01037	84-01038	84-01039	84-01040
East	30026	29997	29504	29669	29570	29582	29418	29496	29535	29571
North	29217	29305	29582	29660	29760	29735	29959	29916	29805	29840
SiO2	54.55	56.02	53.89	55.59	56.17	55.91	56.15	57.64	57.53	55.93
Al2O3	14.28	12.79	12.13	11.94	13.05	11.15	11.96	10.94	10.32	11.86
TiO2	0.82	0.75	0.75	0.70	0.77	0.86	0.79	0.67	0.65	0.63
Fe2O3	5.94	5.21	5.29	4.90	5.57	5.08	5.08	4.36	4.18	4.76
MgO	4.81	3.91	4.42	3.89	4.57	4.27	4.09	3.65	3.75	3.40
CaO	7.70	9.24	11.15	11.45	8.04	9.57	9.27	11.44	11.90	10.72
Na2O	1.32	1.48	1.36	1.46	1.60	1.76	1.75	1.71	1.58	1.73
K2O	2.49	2.38	2.16	2.18	2.26	1.80	2.00	1.83	1.84	2.06
MnO	0.10	0.09	0.11	0.10	0.09	0.08	0.12	0.09	0.08	0.10
P2O5	0.18	0.17	0.19	0.16	0.18	0.19	0.19	0.16	0.15	0.15
Total	92.19	92.04	91.45	92.37	92.30	90.67	91.40	92.49	91.98	91.34
As	6	0	2	0	2	2	0	0	3	2
Ba	277	275	203	252	216	182	202	207	248	203
Co	22	17	14	12	13	11	12	13	9	12
Cr	132	110	138	134	134	249	152	151	153	112
Cu	29	16	23	20	10	10	9	8	12	10
Ga	15	14	14	13	13	13	13	13	11	12
La	30	22	22	21	26	29	34	16	25	20
Ni	61	48	54	51	66	52	53	46	43	54
Nb	14	12	12	12	14	13	13	11	11	11
Pb	10	14	11	16	13	12	16	14	13	13
Rb	80	76	63	66	66	54	61	55	54	61
Sr	128	176	130	141	107	144	142	167	187	139
Sb	9	0	0	0	0	0	0	0	0	0
S	29	41	55	59	35	38	39	36	48	37
Th	12	7	7	11	7	12	11	9	8	10
V	97	79	80	86	83	91	79	76	84	66
Y	33	26	27	29	25	27	27	27	25	22
Zn	73	58	69	57	62	55	55	45	44	51
Zr	203	186	189	202	200	297	238	228	208	154

TABLE 4.81

VAR. / ID.	84-01041	84-01042	84-01044	84-01045	84-01046	84-01047	84-01048	84-01049	84-01050	84-01051
East	29420	29389	29393	29736	29746	29955	29994	30050	30013	29960
North	29681	29622	29595	29969	30030	30065	30086	30374	30385	30364
SiO2	56.53	54.65	60.52	52.10	57.09	54.10	58.07	60.31	52.49	60.52
Al2O3	12.24	10.12	11.35	9.04	12.72	12.28	13.71	12.83	8.26	13.88
TiO2	0.75	0.70	0.61	0.61	0.73	0.71	0.79	0.79	0.60	0.75
Fe2O3	5.12	4.55	5.21	4.28	5.14	5.13	5.21	5.19	3.85	5.21
MgO	4.25	4.23	5.59	3.20	4.09	4.19	4.27	4.28	3.31	4.06
CaO	9.32	12.27	7.22	10.18	8.81	10.39	8.21	7.87	16.74	6.63
Na2O	1.52	1.43	1.40	1.56	1.38	1.38	1.54	1.68	1.48	1.85
K2O	2.17	1.91	1.81	1.68	2.35	2.35	2.54	2.06	1.33	2.30
MnO	0.09	0.08	0.09	0.07	0.09	0.09	0.06	0.07	0.12	0.07
P2O5	0.18	0.17	0.14	0.13	0.16	0.16	0.17	0.18	0.19	0.16
Total	92.17	90.11	93.94	82.85	92.56	90.78	94.57	95.26	88.37	95.43
As	0	3	0	0	0	0	2	2	2	0
Ba	210	204	278	170	226	200	228	362	505	229
Co	11	13	12	14	13	15	17	15	14	15
Cr	157	176	104	139	140	137	140	153	113	120
Cu	9	16	4	4	16	17	10	20	19	19
Ga	13	13	10	12	13	12	14	13	10	15
La	22	23	28	19	20	15	26	21	19	17
Ni	54	52	42	47	54	56	60	53	39	60
Nb	13	12	10	10	14	12	13	13	12	12
Pb	11	14	12	14	9	15	13	13	22	16
Rb	64	59	53	53	70	71	79	65	43	70
Sr	146	177	45	167	110	141	87	122	237	104
Sb	0	0	2	0	0	0	0	0	0	0
S	39	46	56	36	52	35	41	50	150	47
Th	10	10	7	6	8	5	6	8	8	8
V	82	85	61	74	81	87	88	86	64	73
Y	26	27	22	24	25	26	25	27	25	23
Zn	60	49	52	47	60	58	57	64	55	68
Zr	233	255	160	201	209	184	190	222	191	169

VAR. / ID.	84-01052	84-01053	84-01054	84-01055	84-01056	84-01057	84-01058	84-01059	84-01060	84-01061
East	29910	29910	29863	29850	29835	29666	29584	29655	29673	29715
North	30391	30332	30308	30287	30270	30085	30346	30386	30400	30068
SiO2	56.30	56.45	56.02	60.53	56.71	52.82	58.50	58.63	55.86	54.76
Al2O3	12.96	12.17	10.89	13.44	10.05	10.48	12.05	10.80	11.88	10.81
TiO2	0.69	0.67	0.68	0.76	0.62	0.62	0.68	0.59	0.69	0.67
Fe2O3	4.94	5.11	5.01	4.98	4.38	3.89	4.63	4.21	4.66	4.24
MgO	3.94	4.61	4.21	4.09	4.09	3.54	3.90	3.66	4.01	3.89
CaO	8.94	9.57	11.21	8.09	13.63	14.92	9.28	10.63	9.41	11.96
Na2O	1.75	1.67	1.39	1.50	1.54	1.59	1.66	1.51	1.31	1.52
K2O	2.25	1.99	2.01	2.38	1.65	1.86	2.07	1.98	2.19	1.90
MnO	0.07	0.10	0.11	0.08	0.13	0.11	0.09	0.07	0.08	0.09
P2O5	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.15	0.16	0.15
Total	92.00	92.50	91.70	96.02	92.97	89.99	93.02	92.23	90.25	89.99
As	1	2	0	5	2	1	0	0	2	2
Ba	216	188	208	235	190	172	194	182	184	174
Co	13	11	14	11	11	8	14	12	14	11
Cr	110	119	121	150	98	137	127	111	130	138
Cu	20	24	20	16	25	18	6	10	17	4
Ga	13	12	13	12	12	12	14	13	12	10
La	25	26	21	28	26	28	24	20	16	28
Ni	51	58	51	51	46	47	47	48	47	50
Nb	13	12	12	13	12	12	10	10	12	12
Pb	15	12	14	13	16	12	15	16	13	12
Rb	66	58	60	72	50	53	60	59	65	58
Sr	139	122	122	86	156	183	138	165	141	152
Sb	0	0	0	0	2	0	0	0	1	1
S	44	50	47	213	52	51	34	38	32	38
Th	6	11	8	11	11	9	8	10	7	9
V	74	70	74	90	75	73	71	76	78	73
Y	25	24	28	27	28	27	24	23	25	27
Zn	57	58	53	57	56	45	46	46	49	54
Zr	162	171	171	203	162	187	190	163	203	216

VAR. / ID.	84-01062	84-01063	84-01064	84-01065	84-01066	84-01067	84-01068	84-01069	84-01070	84-01071
East	29733	29813	29843	29819	29775	29759	29657	29623	29626	29604
North	30043	30105	30506	30473	30456	30458	30458	30496	30516	30530
SiO2	53.63	57.99	53.47	57.62	54.63	57.08	53.44	58.35	52.59	48.13
Al2O3	10.57	10.49	10.12	10.14	10.91	8.52	10.89	11.50	11.07	8.12
TiO2	0.68	0.58	0.67	0.77	0.73	0.60	0.69	0.64	0.70	0.55
Fe2O3	4.63	4.11	4.19	4.63	5.00	4.07	4.91	4.57	4.76	3.55
MgO	3.71	3.71	3.73	4.01	4.28	3.49	4.43	3.80	4.50	3.23
CaO	13.70	10.22	12.62	11.08	8.54	12.99	12.39	10.02	13.36	19.10
Na2O	1.43	1.42	1.42	1.61	1.27	1.35	1.52	1.53	1.42	1.50
K2O	1.82	1.94	1.88	1.61	1.97	1.51	1.72	1.99	1.79	1.52
MnO	0.10	0.07	0.10	0.12	0.07	0.09	0.09	0.08	0.09	0.12
P2O5	0.18	0.15	0.16	0.17	0.16	0.13	0.18	0.16	0.17	0.15
Total	90.45	90.68	88.36	91.76	87.56	89.83	90.26	92.64	90.45	85.97
As	0	2	0	1	0	7	0	0	2	0
Ba	160	155	177	198	185	189	233	259	286	151
Co	13	8	15	16	12	12	15	12	13	9
Cr	133	135	159	220	160	162	150	140	131	153
Cu	15	10	10	11	14	12	18	12	19	13
Ga	12	10	9	12	11	9	12	11	12	9
La	21	19	17	18	19	20	18	18	21	15
Ni	49	42	43	44	48	31	53	43	48	39
Nb	13	11	12	12	12	9	13	10	13	11
Pb	16	11	15	12	15	12	16	13	15	16
Rb	54	57	54	47	58	44	49	59	54	44
Sr	150	136	165	146	131	181	183	190	202	205
Sb	0	0	3	1	0	0	0	2	3	2
S	38	29	35	37	32	46	70	48	63	51
Th	6	8	6	11	7	8	10	9	7	10
V	77	76	69	83	78	70	77	77	74	67
Y	26	24	26	26	26	24	27	23	28	24
Zn	53	41	45	51	53	38	59	47	58	38
Zr	215	191	223	276	222	239	239	203	206	200

VAR. / ID.	84-01072	84-01073	84-01074	84-01075	84-01076	84-01077	84-01078	84-01086	84-01087	84-01088
East	29555	29551	29533	29513	29495	29460	29447	25624	26587	25621
North	30558	30574	30640	30645	30657	30699	30173	29344	29435	29470
SiO2	59.46	55.94	55.65	56.99	50.39	50.76	60.21	63.60	60.16	62.70
Al2O3	10.57	12.60	11.64	12.03	11.89	9.02	11.09	16.39	14.13	14.58
TiO2	0.72	0.70	0.67	0.70	0.68	0.55	0.71	0.72	0.80	1.01
Fe2O3	4.74	5.05	4.68	5.00	5.27	4.27	4.50	5.72	5.19	5.91
MgO	4.08	4.12	4.67	4.64	4.31	3.79	4.16	3.06	4.61	4.80
CaO	8.65	9.06	10.52	10.04	12.19	15.86	9.07	0.51	4.33	0.46
Na2O	1.50	1.50	1.51	1.47	1.27	1.40	1.77	2.07	1.50	1.96
K2O	1.89	2.50	1.98	1.97	2.14	1.49	1.80	3.51	2.91	2.60
MnO	0.07	0.08	0.07	0.09	0.10	0.09	0.07	0.06	0.07	0.05
P2O5	0.17	0.17	0.16	0.16	0.15	0.13	0.17	0.11	0.19	0.22
Total	91.85	91.72	91.55	93.09	88.39	87.36	93.55	95.75	93.89	94.29
As	2	0	1	5	1	0	3	4	0	0
Ba	243	271	252	210	217	192	207	711	496	581
Co	10	14	13	13	15	12	11	16	13	16
Cr	170	129	136	132	115	118	158	80	143	231
Cu	10	18	19	27	22	15	12	19	17	18
Ga	12	13	11	13	12	11	10	17	14	16
La	24	21	27	25	25	21	22	25	36	37
Ni	42	55	47	52	53	41	44	33	61	66
Nb	11	12	11	11	13	9	11	13	13	15
Pb	13	15	14	47	18	14	13	19	18	14
Rb	55	79	58	59	64	43	52	94	79	69
Sr	151	163	178	154	186	219	134	106	121	106
Sb	0	0	0	0	0	0	0	0	0	0
S	50	57	48	80	40	43	41	6006	1057	486
Th	14	10	5	9	10	4	8	12	7	12
V	77	89	82	71	81	68	80	85	75	90
Y	26	25	25	28	26	24	26	29	28	34
Zn	52	61	48	59	64	51	47	74	52	52
Zr	267	173	207	204	163	174	231	185	257	370

TABLE 4.81

VAR. / ID.	84-01089	84-01090	84-01091	84-01092	84-01093	84-01094	84-01095	84-01096	84-01097	84-01098
East	25554	25567	25606	25621	25626	25921	25897	25574	25681	25959
North	29643	29662	29700	29191	29150	28936	28987	29324	29375	28873
SiO2	72.77	75.91	77.86	64.39	71.59	61.33	58.69	62.89	75.61	63.67
Al2O3	14.22	12.16	11.73	14.99	13.38	14.46	14.94	12.20	13.09	13.88
TiO2	0.56	0.48	0.41	0.90	0.89	0.91	0.86	0.86	0.56	0.83
Fe2O3	3.84	3.37	2.79	5.70	4.63	6.54	6.53	5.43	3.96	5.34
MgO	2.14	1.81	1.93	4.29	1.90	3.13	4.11	4.40	1.99	2.82
CaO	0.20	0.19	0.41	0.41	0.91	3.19	4.24	4.57	0.19	1.41
Na2O	3.07	2.86	3.39	2.30	2.02	2.98	2.71	2.06	2.84	2.59
K2O	2.68	2.59	1.36	2.29	1.97	3.28	2.67	2.19	1.49	3.92
MnO	0.07	0.05	0.05	0.07	0.07	0.12	0.13	0.08	0.01	0.10
P2O5	0.12	0.09	0.07	0.22	0.18	0.24	0.26	0.18	0.13	0.22
Total	99.67	99.51	100.00	95.56	97.54	96.18	95.14	94.86	99.87	94.78
As	0	0	0	1	0	2	0	0	0	2
Ba	720	718	373	493	457	1300	749	505	243	1401
Co	9	6	4	10	10	14	19	9	8	12
Cr	60	58	51	156	77	71	81	176	78	121
Cu	12	10	6	24	16	18	18	16	7	15
Ga	12	11	9	14	12	15	16	14	10	15
La	28	27	23	30	34	34	34	28	34	37
Ni	17	12	11	77	25	35	33	55	23	49
Nb	12	9	9	13	17	11	11	13	12	14
Pb	13	14	11	15	14	16	18	14	14	18
Rb	59	58	32	62	53	79	67	58	39	88
Sr	132	106	178	162	96	561	628	149	77	457
Sb	0	0	0	0	0	0	0	0	0	0
S	259	201	412	53	24	101	96	715	2838	475
Th	5	7	8	12	7	7	2	8	13	11
V	63	54	46	77	58	91	97	90	52	82
Y	17	23	16	21	26	25	26	24	21	26
Zn	21	39	16	53	54	56	61	53	46	59
Zr	183	199	154	293	315	244	224	295	250	312

TABLE 4.81

XRF Analyses: Longford Down Traverse (GWKE40)

Part 10

VAR. / ID.	84-01099	84-01100	84-01101	84-01102	84-01103	84-01104	84-01105	84-01106	84-01107	84-01108
East	26003	26085	26098	26351	26390	26293	26175	26210	26400	26401
North	28953	28937	28968	28422	28578	28645	28700	28715	28715	28681
SiO2	62.98	66.17	60.07	64.38	60.96	68.50	60.24	62.25	59.99	64.57
Al2O3	12.99	11.39	14.34	13.38	15.43	12.39	12.87	12.67	15.08	14.11
TiO2	0.78	0.70	0.93	0.78	0.80	0.67	0.83	0.73	0.83	0.79
Fe2O3	5.69	5.23	7.32	5.87	5.30	4.70	6.32	5.25	6.61	5.57
MgO	4.20	3.62	3.75	3.45	2.98	3.09	4.25	3.38	4.19	3.21
CaO	2.59	2.30	3.40	1.87	1.63	2.40	3.96	5.60	3.31	1.51
Na2O	2.35	2.06	2.75	2.75	3.71	2.23	1.98	2.28	2.63	2.77
K2O	2.42	2.90	2.33	2.90	4.15	2.86	2.61	3.18	2.68	3.05
MnO	0.09	0.08	0.10	0.09	0.22	0.08	0.13	0.11	0.10	0.08
P2O5	0.21	0.18	0.29	0.23	0.21	0.21	0.30	0.29	0.25	0.21
Total	94.30	94.63	95.28	95.70	95.39	97.13	93.49	95.74	95.67	95.87
As	1	2	0	2	2	0	2	3	1	4
Ba	749	899	501	987	1706	1901	892	881	884	827
Co	13	15	18	14	10	12	17	13	17	17
Cr	189	186	107	115	63	118	110	81	98	115
Cu	13	17	25	21	13	15	31	24	25	19
Ga	15	14	16	13	17	12	16	13	16	13
La	25	34	24	36	51	25	35	32	27	30
Ni	76	58	37	52	27	43	37	34	37	55
Nb	12	13	12	12	13	12	11	12	13	12
Pb	17	18	12	16	20	20	17	18	15	18
Rb	66	76	62	65	97	70	64	71	64	71
Sr	473	217	260	354	428	335	344	211	445	283
Sb	0	0	0	0	0	0	0	0	0	0
S	173	104	135	339	110	301	248	432	94	383
Th	11	9	6	8	11	12	7	12	10	10
V	87	96	127	97	80	79	123	98	98	87
Y	23	24	22	25	27	24	25	26	24	26
Zn	52	52	58	56	51	42	55	41	57	52
Zr	285	279	216	231	268	269	230	233	215	223

TABLE 4.81

VAR. / ID.	84-01109	84-01110	84-01111	84-01112	84-01113	84-01114	84-01115	84-01116	84-01117	84-01118
East	26415	26519	26345	26417	26455	26067	24839	24845	24860	24846
North	28494	28038	28058	28386	28401	28770	29686	29810	29628	29593
SiO2	61.60	60.94	60.40	64.70	76.81	62.21	54.50	60.89	62.06	59.97
Al2O3	13.78	13.11	15.85	11.74	16.43	15.54	15.26	15.22	13.03	12.24
TiO2	0.88	0.69	1.05	0.74	0.66	0.83	0.75	0.70	0.67	0.77
Fe2O3	6.31	3.03	6.41	5.94	4.31	5.67	6.57	6.52	5.67	6.74
MgO	3.62	2.49	2.82	3.91	1.17	3.34	5.20	4.95	4.73	6.74
CaO	3.52	8.17	1.12	1.93	0.12	3.09	7.78	2.48	2.45	3.61
Na2O	2.87	1.80	4.57	2.13	0.00	2.18	1.14	2.24	3.41	2.45
K2O	2.52	2.65	2.25	2.95	1.23	2.41	3.12	2.30	2.27	1.60
MnO	0.12	0.10	0.14	0.08	0.02	0.10	0.13	0.07	0.10	0.11
P2O5	0.33	0.17	0.26	0.22	0.17	0.22	0.16	0.19	0.14	0.14
Total	95.55	93.15	94.87	94.34	100.92	95.59	94.61	95.56	94.53	94.37
As	2	2	8	4	6	3	2	2	2	0
Ba	763	1393	975	1138	1914	624	456	493	618	477
Co	19	15	13	16	7	16	20	15	19	15
Cr	117	120	96	122	117	101	188	211	177	245
Cu	34	49	15	22	12	23	33	28	14	18
Ga	17	12	17	13	11	15	10	16	15	14
La	34	22	35	27	40	37	28	31	16	22
Ni	43	32	24	34	36	47	125	101	53	86
Nb	12	12	14	11	12	11	14	14	7	10
Pb	15	14	25	18	10	10	19	17	13	16
Rb	53	70	53	72	38	60	91	64	47	36
Sr	616	172	360	316	121	173	189	i>6	360	251
Sb	0	0	0	0	2	0	0	0	0	0
S	65	684	207	184	314	122	750	1137	135	298
Th	8	10	8	11	8	8	9	9	6	4
V	115	84	75	110	68	79	106	104	109	122
Y	24	25	23	24	26	29	27	30	21	19
Zn	60	18	87	50	38	54	87	80	48	52
Zr	242	180	296	282	260	236	183	236	145	168

TABLE 4.81

VAR. / ID.	84-01119	84-01120	84-01121	84-01122	84-01123	84-01124	84-01125	84-01126	84-01127	84-01128
East	24792	24800	24882	24722	24756	24709	24662	25390	25479	25496
North	29503	29490	29381	29396	29477	29400	29305	29054	29042	29023
SiO2	59.59	61.12	66.10	59.17	60.43	74.18	45.69	61.91	61.60	63.35
Al2O3	14.13	13.23	13.54	10.62	11.76	11.03	8.57	12.28	12.99	13.31
TiO2	0.86	0.78	0.67	0.59	0.75	0.38	0.55	0.87	0.97	0.75
Fe2O3	6.87	6.85	5.18	4.06	6.41	2.89	3.68	6.47	6.30	5.35
MgO	5.57	5.42	3.49	3.64	5.85	1.48	3.92	4.84	6.58	4.00
CaO	1.32	2.92	2.08	9.91	4.14	0.17	21.26	3.21	1.77	2.70
Na2O	3.30	2.29	2.72	1.69	2.60	2.64	1.19	2.16	1.50	2.21
K2O	1.64	2.11	1.68	2.02	1.91	2.96	1.63	2.60	2.31	2.88
MnO	0.11	0.09	0.08	0.08	0.10	0.05	0.22	0.12	0.10	0.09
P2O5	0.17	0.15	0.14	0.14	0.15	0.06	0.19	0.19	0.22	0.17
Total	93.56	94.96	95.68	91.92	94.10	95.84	86.90	94.65	94.34	94.81
As	2	3	3	2	2	0	2	2	2	0
Ba	470	476	357	289	492	717	213	880	644	962
Co	17	15	12	10	15	3	9	15	20	12
Cr	156	200	152	127	275	41	278	205	344	107
Cu	19	21	16	12	20	5	16	19	16	19
Ga	15	13	12	10	13	11	9	12	13	14
La	15	15	15	20	28	18	23	33	32	28
Ni	62	80	61	32	92	9	84	67	205	60
Nb	9	9	9	11	9	10	12	12	14	11
Pb	11	15	13	12	15	14	12	13	11	15
Rb	37	50	46	55	42	66	40	66	56	73
Sr	407	286	122	164	343	96	331	243	65	353
Sb	0	0	0	0	0	0	2	0	0	0
S	184	285	967	65	192	336	564	69	79	81
Th	7	4	7	7	4	9	6	7	6	9
V	103	105	87	67	105	44	80	81	84	75
Y	22	21	23	24	21	21	29	24	24	28
Zn	36	49	68	45	49	31	44	51	48	47
Zr	165	160	184	214	182	163	262	300	314	238

VAR. / ID.	84-01129	84-01130	84-01131	84-01132	84-01133	84-01134	84-01135	84-01136	84-01137	84-01138
East	25444	25414	25536	25510	25560	25517	25626	25661	25703	25695
North	29060	28829	28849	28847	29400	29434	29751	29737	29722	29460
SiO2	64.35	63.51	58.18	62.83	47.74	70.72	74.51	78.49	76.11	64.01
Al2O3	12.61	12.20	14.56	11.87	12.28	16.75	12.51	10.85	12.19	13.69
TiO2	0.79	0.81	1.06	0.83	0.78	0.78	0.47	0.36	0.48	0.83
Fe2O3	5.84	5.99	7.03	5.99	7.79	4.04	3.53	2.76	4.50	5.60
MgO	4.29	6.53	4.23	6.95	12.50	2.13	2.04	1.36	2.68	5.15
CaO	2.97	0.33	4.06	1.92	8.45	0.59	0.79	0.21	0.29	1.78
Na2O	2.08	1.90	2.76	1.45	1.60	3.13	2.84	2.39	2.44	1.86
K2O	2.58	2.17	2.66	2.43	2.85	3.08	2.94	3.24	1.43	2.59
MnO	0.12	0.08	0.12	0.09	0.18	0.06	0.06	0.08	0.06	0.09
P2O5	0.16	0.17	0.34	0.19	0.49	0.24	0.09	0.07	0.10	0.18
Total	95.79	93.69	95.00	94.55	94.66	101.52	99.78	99.81	100.28	95.78
As	3	6	1	2	0	3	0	0	0	0
Ba	746	585	912	773	1531	1271	748	870	379	611
Co	12	19	17	15	28	6	7	6	11	13
Cr	139	272	202	277	590	33	54	35	67	148
Cu	16	3	25	17	51	13	7	7	10	13
Ga	13	14	16	13	15	17	11	10	11	13
La	23	22	33	21	48	46	29	28	30	28
Ni	63	169	55	167	227	13	14	12	31	69
Nb	12	12	13	12	8	19	10	9	9	14
Pb	13	12	19	16	17	13	11	14	12	14
Rb	63	63	61	60	37	88	65	74	39	69
Sr	291	57	638	173	858	690	115	80	135	82
Sb	0	0	0	0	0	0	0	0	0	0
S	55	224	232	83	509	344	721	126	614	814
Th	9	8	6	7	8	15	8	13	6	9
V	78	78	117	86	159	51	55	43	51	80
Y	25	23	27	25	22	33	23	18	20	25
Zn	45	46	73	54	46	74	29	23	61	63
Zr	252	275	315	305	152	377	186	156	158	256

VAR. / ID.	84-01139	84-01140	84-01141	84-01142	84-01143	84-01144	84-01145	84-01146	84-01147	84-01148
East	25884	25161	25155	25135	25135	25105	25095	25080	25077	24974
North	29414	29777	29805	29840	29840	29930	29955	29892	29866	30273
SiO2	63.16	72.81	65.35	67.73	66.41	68.35	72.16	60.57	57.95	60.19
Al2O3	13.15	12.36	13.55	13.36	12.08	13.93	11.28	13.58	14.27	13.42
TiO2	0.63	0.47	0.51	0.57	0.56	0.53	0.36	0.74	0.69	0.74
Fe2O3	4.59	3.80	4.45	4.20	5.13	4.74	3.52	7.35	6.78	7.03
MgO	3.73	2.82	3.68	2.81	3.40	3.27	2.82	5.25	5.20	5.04
CaO	4.81	0.38	1.03	1.84	1.85	1.02	1.49	1.77	3.56	4.75
Na2O	2.16	3.04	2.95	3.44	2.99	3.22	3.22	3.36	3.20	2.69
K2O	2.59	2.55	2.68	2.57	2.47	2.33	1.81	1.46	1.43	1.37
MnO	0.09	0.06	0.07	0.07	0.09	0.08	0.06	0.13	0.13	0.16
P2O5	0.19	0.09	0.11	0.13	0.13	0.12	0.09	0.19	0.20	0.19
Total	95.10	98.38	94.38	96.72	95.11	97.59	96.81	94.42	93.41	95.58
As	0	0	2	2	0	0	2	0	0	6
Ba	630	714	637	708	660	660	630	531	498	253
Co	12	9	10	11	11	7	7	19	15	17
Cr	145	66	79	71	59	55	73	62	60	211
Cu	19	8	12	19	13	11	10	23	26	16
Ga	13	10	13	12	11	12	11	14	14	12
La	22	22	20	20	25	39	21	24	24	26
Ni	64	16	25	24	16	17	19	20	15	71
Nb	12	8	10	9	8	9	7	8	9	9
Pb	17	12	12	12	14	16	14	14	14	12
Rb	65	49	60	60	52	51	38	30	31	34
Sr	374	137	268	410	268	205	143	329	380	141
Sb	0	1	0	0	0	2	1	0	0	3
S	344	352	742	949	1451	551	587	508	417	1008
Th	7	8	9	8	5	9	7	7	6	5
V	77	64	71	80	90	75	60	132	126	92
Y	23	17	21	20	21	25	19	20	21	22
Zn	41	20	24	64	45	61	35	59	60	45
Zr	216	143	142	133	156	129	140	139	143	211

TABLE 4.81

VAR. / ID.	84-01149	84-01150	84-01151	84-01152	84-01153	84-01154	84-01155	84-01156	84-01157	84-01158
East	24878	24893	25076	25052	25048	25021	24940	24930	24921	24854
North	30098	30092	30235	30236	30281	30351	30293	30172	30191	30221
SiO2	48.85	52.90	58.97	52.31	57.73	56.59	58.94	58.87	53.15	56.61
Al2O3	11.71	11.91	13.98	14.44	14.09	13.67	16.03	13.89	13.44	16.02
TiO2	0.64	0.64	0.85	1.06	0.83	0.81	0.87	0.95	0.69	0.62
Fe2O3	4.90	5.22	7.52	8.29	7.62	7.28	7.15	8.11	5.75	5.69
MgO	3.95	4.69	6.62	6.21	7.61	6.75	5.74	6.76	3.89	4.15
CaO	14.97	12.10	2.33	5.03	1.79	1.79	2.82	1.06	9.46	5.84
Na2O	2.08	0.77	2.55	2.28	2.44	2.79	2.17	2.12	2.24	1.94
K2O	1.95	2.46	1.12	2.35	1.43	1.63	2.28	1.11	1.85	2.21
MnO	0.24	0.11	0.10	0.23	0.09	0.09	0.08	0.11	0.28	0.14
P2O5	0.17	0.20	0.15	0.21	0.15	0.16	0.18	0.16	0.16	0.16
Total	89.46	91.00	94.19	92.41	93.78	91.56	96.26	93.14	90.91	93.38
As	3	1	0	0	2	2	2	0	2	7
Ba	322	358	400	881	441	483	391	364	348	444
Co	16	16	19	21	19	19	19	25	17	17
Cr	225	210	337	199	399	279	202	421	165	216
Cu	19	22	23	30	23	23	27	20	24	23
Ga	11	12	15	16	14	15	17	15	15	12
La	30	25	19	25	19	25	26	21	19	31
Ni	71	93	140	85	157	144	88	161	73	94
Nb	9	11	11	9	10	10	12	10	10	7
Pb	14	17	11	13	10	17	12	12	13	10
Rb	50	65	26	44	31	32	63	27	46	55
Sr	308	300	302	433	173	180	176	131	310	209
Sb	0	0	0	0	0	0	0	0	0	2
S	424	89	185	188	178	246	426	173	1241	411
Th	8	7	4	2	9	4	8	4	2	3
V	121	87	137	173	137	119	111	135	104	102
Y	24	24	20	23	22	20	25	20	23	22
Zn	53	58	59	58	46	60	65	60	59	57
Zr	193	225	148	160	166	150	235	164	164	175

TABLE 4.81

VAR. / ID.	84-01159	84-01160	84-01161	84-01162	84-01163	84-01164	84-01165	84-01166	84-01167	84-01168
East	25069	25045	24625	24627	24606	24794	24763	24720	24711	24790
North	30058	30090	30046	30076	30078	29757	29783	29841	29982	30093
SiO2	63.93	75.54	56.67	58.37	72.48	55.59	58.16	51.30	55.13	53.46
Al2O3	15.18	13.10	15.75	13.94	18.46	14.12	16.53	11.30	11.69	14.09
TiO2	0.61	0.32	1.46	1.02	0.16	0.58	0.71	0.53	0.78	0.85
Fe2O3	4.76	2.78	9.63	8.04	1.22	7.86	7.00	4.00	6.41	8.03
MgO	3.63	1.43	6.23	5.49	0.43	5.93	5.20	3.75	5.22	6.09
CaO	2.30	0.19	0.75	1.07	0.20	5.66	5.73	18.41	9.60	5.92
Na2O	3.89	3.18	2.67	2.42	3.88	2.56	1.75	1.80	2.04	2.35
K2O	2.18	2.42	1.03	1.18	2.71	0.91	2.48	1.35	1.35	1.15
MnO	0.10	0.04	0.13	0.12	0.03	0.12	0.12	0.23	0.11	0.11
P2O5	0.14	0.05	0.26	0.18	0.05	0.17	0.17	0.17	0.13	0.23
Total	96.72	99.05	94.58	91.83	99.62	93.50	97.85	92.84	92.46	92.28
As	3	0	12	6	0	2	4	2	2	0
Ba	520	839	249	337	189	285	405	179	403	269
Co	11	5	23	20	0	18	14	15	17	19
Cr	119	31	287	362	10	167	211	207	296	180
Cu	14	7	34	20	0	22	29	16	17	28
Ga	14	10	16	14	19	13	15	12	13	16
La	25	22	26	27	15	19	27	22	12	20
Ni	31	6	103	109	3	88	97	61	55	61
Nb	6	7	11	12	13	8	11	9	8	9
Pb	9	9	74	12	23	14	13	11	9	16
Rb	48	49	25	32	124	25	67	35	30	30
Sr	209	136	185	134	151	256	184	389	212	344
Sb	2	0	0	3	2	0	0	1	0	0
S	71	71	112	25	24	210	286	582	157	118
Th	5	5	5	4	15	0	5	3	5	1
V	86	40	183	140	14	110	125	95	152	163
Y	19	18	21	26	12	24	27	25	18	22
Zn	44	22	91	65	23	73	81	38	42	62
Zr	162	135	195	248	103	155	172	189	196	164

TABLE 4.81

VAR. / ID.	84-01169	84-01170	84-01171	84-01172	84-01173	84-01174	84-01175	84-01176	84-01177	84-01178
East	22288	22284	22203	22215	22344	22420	22402	22657	22585	22590
North	28270	28302	28619	28686	28511	28595	28730	28816	28572	28389
SiO2	60.92	60.13	58.06	62.19	58.40	56.85	57.20	51.84	66.61	58.82
Al2O3	15.64	15.18	14.81	16.78	15.20	15.93	15.82	15.41	14.05	16.43
TiO2	0.81	0.88	0.87	1.30	0.88	0.81	0.93	0.85	0.93	0.85
Fe2O3	8.46	7.83	8.44	7.99	8.15	7.74	8.70	8.05	7.14	7.81
MgO	6.45	7.27	5.96	3.04	5.36	5.93	5.92	5.74	4.88	4.72
CaO	0.85	1.29	4.70	0.26	4.65	3.40	3.13	8.07	0.68	2.02
Na2O	2.73	2.18	2.45	2.11	3.08	2.89	2.94	2.13	1.79	3.63
K2O	1.74	1.41	1.48	2.07	1.50	2.07	1.86	1.80	2.00	1.86
MnO	0.33	0.21	0.15	0.06	0.15	0.13	0.12	0.18	0.10	0.13
P2O5	0.18	0.19	0.21	0.20	0.22	0.20	0.23	0.19	0.15	0.20
Total	98.11	96.57	97.13	96.00	97.59	95.95	96.85	94.26	98.33	96.47
As	2	0	0	3	0	2	0	0	0	4
Ba	517	369	417	455	466	487	816	370	350	415
Co	34	20	22	15	22	16	20	24	20	18
Cr	285	371	269	166	184	149	225	206	310	238
Cu	36	21	27	27	28	27	29	32	15	23
Ga	15	14	16	15	17	16	17	16	14	16
La	22	17	18	26	23	19	23	11	26	18
Ni	151	129	65	72	47	47	53	56	100	55
Nb	10	10	7	19	7	7	9	8	12	8
Pb	12	15	12	8	18	13	12	8	10	11
Rb	44	39	33	54	42	54	47	55	47	49
Sr	203	125	316	54	348	330	323	217	123	166
Sb	0	3	1	2	0	2	0	0	1	2
S	103	259	162	74	131	366	394	587	36	1420
Th	7	1	2	8	5	1	4	1	4	3
V	125	141	182	126	188	157	199	194	130	165
Y	22	20	22	27	21	22	24	20	20	21
Zn	119	63	66	89	71	65	75	65	63	44
Zr	156	165	134	253	129	119	129	114	191	133

TABLE 4.81

VAR. / ID.	84-01179	84-01180	84-01181	84-01182	84-01183	84-01184	84-01185	84-01186	84-01187	84-01188
East	22060	21950	21950	21820	21802	21511	21502	21520	21563	21559
North	28281	28457	28476	28440	28420	28407	28429	28460	28608	28634
SiO2	58.50	73.17	67.03	57.50	58.67	65.94	66.15	60.34	60.07	55.01
Al2O3	14.48	13.51	15.91	19.92	20.98	16.22	16.55	15.44	13.82	13.82
TiO2	1.00	0.80	1.13	1.22	1.25	1.25	1.11	1.35	0.87	1.37
Fe2O3	8.80	6.31	6.54	9.44	9.89	7.80	7.84	9.02	7.72	8.44
MgO	7.13	1.99	3.07	3.40	2.87	3.37	2.87	4.61	6.43	3.98
CaO	3.70	0.18	0.31	0.24	0.18	0.29	0.27	0.87	1.44	1.70
Na2O	2.57	1.41	2.30	1.63	1.72	2.13	1.99	3.44	1.86	3.79
K2O	0.97	1.82	2.04	2.72	3.32	1.96	2.18	1.11	1.87	0.78
MnO	0.14	0.23	0.48	0.40	0.09	0.09	0.09	0.16	0.11	0.14
P2O5	0.19	0.14	0.17	0.19	0.18	0.20	0.18	0.21	0.15	0.27
Total	97.48	99.56	98.98	96.66	99.15	99.25	99.23	96.55	94.34	89.30
As	3	12	2	4	4	2	2	2	1	0
Ba	591	405	459	581	754	466	481	326	441	344
Co	22	25	19	17	17	17	18	22	21	22
Cr	563	120	143	137	150	174	141	189	330	189
Cu	19	30	22	31	30	12	19	25	17	18
Ga	16	13	15	20	21	14	14	16	15	17
La	23	21	50	37	39	25	35	24	22	30
Ni	135	52	72	70	74	68	60	77	119	52
Nb	12	14	18	20	21	18	17	14	12	14
Pb	10	10	13	11	10	6	12	12	10	12
Rb	26	59	58	74	100	51	57	33	44	21
Sr	371	37	78	50	48	63	57	119	254	374
Sb	0	2	3	0	3	2	0	0	1	0
S	576	31	210	9	9	20	28	101	52	299
Th	6	6	6	8	11	5	7	4	5	4
V	177	101	109	127	124	114	102	136	150	150
Y	23	21	29	26	32	25	26	26	22	25
Zn	75	75	75	109	106	79	81	96	63	69
Zr	235	151	227	200	206	276	243	153	162	160

TABLE 4.81

VAR. / ID.	84-01189	84-01190	84-01191	84-01192	84-01193	84-01194	84-01195	84-01196	84-01197	84-01198
East	21572	21587	21613	21698	21680	21663	21787	21820	21996	21797
North	28790	28610	28525	28613	28593	28626	28717	28768	28875	28950
SiO2	60.28	65.22	61.59	61.82	67.37	67.02	59.09	60.94	66.73	58.66
Al2O3	17.00	15.19	15.05	15.15	15.23	15.19	14.20	14.29	16.38	15.84
TiO2	1.55	0.96	1.27	1.26	1.02	0.98	1.06	1.44	1.19	1.40
Fe2O3	9.19	7.36	8.51	7.64	7.36	7.46	6.75	8.56	7.43	9.03
MgO	4.87	4.91	4.54	4.26	2.67	2.81	2.60	4.27	2.93	4.70
CaO	0.36	1.51	0.78	1.48	0.32	0.41	8.82	0.92	0.36	1.12
Na2O	3.01	1.86	2.42	3.80	1.87	1.84	1.96	3.13	2.03	2.77
K2O	2.27	2.27	2.07	0.94	1.93	1.82	1.59	1.36	2.13	2.30
MnO	0.13	0.11	0.10	0.13	0.11	0.11	0.25	0.13	0.10	0.12
P2O5	0.24	0.14	0.18	0.22	0.16	0.17	0.20	0.19	0.18	0.21
Total	98.90	99.53	96.51	96.70	98.04	97.81	96.52	95.23	99.46	96.15
As	0	0	0	0	1	2	2	0	3	1
Ba	169	452	327	460	407	393	308	262	408	335
Co	18	19	21	20	15	13	16	21	20	22
Cr	237	255	208	201	155	165	194	205	163	211
Cu	8	16	9	17	20	20	22	21	18	21
Ga	16	14	15	16	15	14	14	16	15	16
La	19	26	0	22	24	31	37	19	29	23
Ni	59	98	82	58	58	56	57	65	59	76
Nb	16	14	15	14	18	16	19	15	17	14
Pb	8	8	12	12	11	14	10	7	10	8
Rb	44	52	51	24	51	49	43	33	53	52
Sr	101	64	79	199	66	60	208	114	60	91
Sb	0	3	0	3	0	0	2	2	0	2
S	6	41	66	56	21	177	166	106	226	162
Th	5	4	4	1	4	5	5	1	4	0
V	165	130	134	142	106	114	119	149	110	155
Y	17	25	22	25	29	29	34	29	28	29
Zn	102	75	89	77	77	74	70	84	73	91
Zr	192	232	166	153	294	251	376	166	307	169

VAR. / ID.	84-01199	84-01200	84-01201	84-01202	84-01203	84-01204	84-01205	84-01206	84-01207	84-01208
East	21927	21648	21709	22041	22175	23023	23028	23014	23065	23085
North	29037	29108	29300	29038	29155	29904	29884	29933	29865	29864
SiO2	65.11	56.59	59.50	62.13	53.93	65.11	65.57	66.80	67.12	64.87
Al2O3	17.41	13.49	13.70	19.54	13.86	17.20	17.10	16.67	15.53	16.69
TiO2	1.29	1.29	1.35	1.20	1.18	1.18	1.02	1.14	1.04	1.05
Fe2O3	7.61	8.74	8.86	8.22	8.13	7.66	7.61	7.40	8.05	7.87
MgO	3.21	5.28	6.21	3.13	8.21	2.87	2.95	2.84	3.02	3.19
CaO	0.26	2.14	3.00	0.27	4.55	0.28	0.26	0.45	0.36	0.34
Na2O	1.68	3.18	2.82	1.90	3.47	1.96	1.88	2.11	2.11	1.91
K2O	2.54	0.74	0.84	2.75	0.56	2.34	2.42	2.07	1.55	2.23
MnO	0.09	0.15	0.14	0.09	0.13	0.09	0.10	0.10	0.11	0.10
P2O5	0.19	0.20	0.18	0.19	0.57	0.18	0.18	0.18	0.18	0.17
Total	99.39	91.80	96.60	99.42	94.59	98.87	99.09	99.76	99.07	98.42
As	0	4	1	2	6	2	2	2	1	1
Ba	552	334	313	546	1180	512	545	454	359	522
Co	13	19	19	16	24	17	15	15	17	17
Cr	192	278	316	144	370	147	138	143	211	158
Cu	6	20	21	24	84	17	21	16	18	23
Ga	15	15	16	18	16	16	17	15	14	17
La	25	19	18	39	38	32	25	29	30	23
Ni	65	91	103	70	154	59	61	58	57	62
Nb	19	14	13	20	10	19	18	18	17	18
Pb	8	9	8	14	10	9	10	10	12	14
Rb	63	14	19	71	15	62	65	54	41	60
Sr	53	322	200	66	606	56	62	62	61	63
Sb	2	0	0	0	0	0	2	0	0	2
S	19	586	396	198	2241	21	39	119	46	49
Th	4	7	3	8	7	9	6	8	5	4
V	112	171	175	113	162	104	100	106	121	117
Y	22	28	29	30	18	29	28	27	29	28
Zn	77	80	72	87	81	76	71	76	78	77
Zr	337	154	159	238	188	276	251	256	309	262

VAR. / ID.	84-01209	84-01210	84-01211	84-01212	84-01213	84-01214	84-01215	84-01216	84-01217	84-01219
East	23095	23045	23135	23135	23135	23182	23195	23208	23221	23230
North	29858	29871	29865	29865	29865	29880	29870	29855	29848	29838
SiO2	66.61	67.81	65.81	60.56	61.40	62.99	63.16	61.08	60.74	63.12
Al2O3	15.38	16.43	17.16	17.43	16.16	17.93	16.61	18.29	13.18	18.53
TiO2	1.00	1.04	1.02	0.96	1.25	1.30	1.02	1.16	1.12	0.33
Fe2O3	7.19	7.08	7.36	8.24	8.10	7.93	7.52	8.43	7.59	2.73
MgO	2.81	2.66	3.26	3.98	4.60	3.25	2.73	3.16	3.80	1.75
CaO	0.27	0.28	0.65	0.81	1.92	0.69	0.43	0.28	1.44	3.67
Na2O	1.78	1.98	1.89	1.37	2.54	2.10	2.13	2.07	3.24	3.22
K2O	2.18	2.00	2.51	3.13	1.92	2.57	2.17	2.51	0.76	2.88
MnO	0.12	0.09	0.10	0.50	0.12	0.12	0.10	0.09	0.16	0.05
P2O5	0.17	0.19	0.15	0.13	0.19	0.19	0.17	0.18	0.18	0.12
Total	97.51	99.56	99.91	97.11	98.20	99.07	96.04	97.25	92.21	96.40
As	0	3	0	0	0	0	7	6	2	8
Ba	427	409	487	549	326	566	457	534	447	941
Co	17	19	18	23	20	20	16	16	16	3
Cr	157	164	127	190	225	157	121	138	141	28
Cu	22	17	21	29	25	27	21	24	21	13
Ga	15	15	16	16	15	18	15	17	15	17
La	33	38	29	37	24	31	34	40	26	23
Ni	61	56	64	112	80	65	59	66	56	11
Nb	16	17	16	14	14	21	18	19	18	5
Pb	15	10	12	8	11	14	16	9	15	31
Rb	51	55	61	82	51	68	58	67	54	61
Sr	57	61	69	56	84	78	68	64	67	480
Sb	2	0	2	1	0	2	0	2	2	2
S	45	27	169	44	242	73	167	23	49	173
Th	6	8	2	5	2	8	8	6	6	6
V	108	112	110	127	147	117	102	117	110	54
Y	28	27	26	25	29	31	30	29	30	10
Zn	71	72	76	90	78	87	84	86	75	38
Zr	271	283	223	169	183	283	226	235	241	108

VAR. / ID.	84-01220	84-01221	84-01222	84-01223	84-01224	84-01225	84-01226	84-01227	84-01228	84-01229
East	23468	23458	23353	23337	23350	23436	23345	23093	22938	22915
North	29601	29615	29508	29417	29403	29339	29304	29315	29323	29341
SiO2	55.66	59.07	57.26	62.03	59.05	57.54	55.79	58.88	58.38	62.40
Al2O3	16.28	14.05	12.94	13.98	14.17	15.03	13.56	15.68	16.17	14.82
TiO2	0.74	0.77	0.74	0.72	0.76	0.70	0.69	0.93	0.78	0.83
Fe2O3	7.01	7.89	8.10	7.63	7.77	6.95	6.66	8.23	7.75	8.18
MgO	5.89	6.78	6.47	6.52	5.83	5.20	5.18	5.39	5.67	4.92
CaO	3.98	5.01	4.79	4.08	4.70	4.46	8.34	4.12	5.73	3.82
Na2O	2.41	2.22	2.26	2.31	2.55	2.74	2.16	2.54	2.00	3.53
K2O	2.63	1.80	1.23	1.70	1.88	1.72	2.28	1.81	1.99	0.93
MnO	0.11	0.13	0.12	0.13	0.14	0.12	0.19	0.12	0.15	0.23
P2O5	0.18	0.16	0.16	0.13	0.17	0.16	0.17	0.24	0.23	0.17
Total	94.89	97.88	94.07	99.23	97.02	94.62	95.02	97.94	98.85	99.83
As	0	0	5	5	0	3	2	0	2	0
Ba	637	513	551	481	520	496	751	541	606	304
Co	22	27	26	23	23	16	22	18	22	22
Cr	298	388	409	427	276	207	264	258	205	210
Cu	23	31	27	25	28	27	26	27	28	21
Ga	17	14	14	15	14	16	14	16	16	14
La	12	15	17	18	16	15	13	23	25	18
Ni	115	116	104	116	87	79	87	67	58	39
Nb	8	8	8	7	8	8	8	13	9	8
Pb	14	11	11	11	13	11	12	16	15	13
Rb	61	44	28	39	46	49	61	43	48	23
Sr	432	452	401	302	390	669	240	357	416	332
Sb	0	3	2	3	2	0	2	1	2	0
S	73	110	80	192	112	60	183	224	312	288
Th	0	3	0	1	2	0	2	5	4	3
V	136	173	183	167	185	152	158	155	163	167
Y	20	20	20	19	17	19	19	23	20	21
Zn	68	66	61	60	68	59	58	76	66	64
Zr	150	160	130	137	136	125	138	192	124	124

VAR. / ID.	84-01230	84-01231	84-01232	84-01233	84-01234	84-01235	84-01236	84-01237	84-01238	84-01239
East	22739	22500	22545	22608	22600	22478	22355	22103	22157	22109
North	29010	29455	29503	29648	29646	29860	29765	29923	29957	29968
SiO2	59.12	68.79	63.50	67.17	59.83	66.11	67.03	66.69	63.64	65.08
Al2O3	14.80	15.46	17.94	15.57	14.10	16.82	15.74	14.02	16.43	16.67
TiO2	0.81	1.12	0.99	1.15	1.58	1.16	1.01	0.91	1.54	1.19
Fe2O3	8.04	7.34	8.73	7.31	9.63	7.68	7.04	6.93	8.57	7.57
MgO	5.75	2.96	3.31	2.69	6.15	2.80	2.65	3.16	4.35	4.19
CaO	4.26	0.34	0.76	0.24	1.25	0.35	0.77	0.17	0.32	0.24
Na2O	2.39	1.78	1.60	2.04	2.93	1.74	1.90	1.50	2.21	1.94
K2O	1.90	1.84	2.62	2.09	0.58	2.22	2.01	1.70	1.71	1.91
MnO	0.14	0.10	0.11	0.09	0.13	0.09	0.11	0.08	0.10	0.08
P2O5	0.22	0.18	0.15	0.19	0.19	0.19	0.17	0.16	0.20	0.20
Total	97.43	99.91	99.71	98.54	96.37	99.16	98.43	95.30	99.07	99.07
As	0	3	5	0	0	0	1	4	1	2
Ba	503	426	525	451	267	443	475	379	377	477
Co	21	17	24	15	22	16	16	11	17	14
Cr	247	169	125	154	307	151	133	204	248	201
Cu	32	17	24	20	10	23	21	18	25	26
Ga	17	15	17	16	16	15	14	14	16	15
La	17	31	33	38	19	36	32	24	32	31
Ni	67	55	69	60	98	59	61	91	82	89
Nb	8	17	18	18	14	18	18	16	20	17
Pb	17	10	17	12	12	12	15	9	15	16
Rb	44	48	72	56	17	61	53	48	46	50
Sr	359	53	62	65	133	67	76	38	78	61
Sb	0	0	0	0	0	1	0	1	0	0
S	254	167	1727	23	185	159	84	11	357	33
Th	4	3	9	8	6	7	8	3	7	9
V	173	106	112	103	174	102	104	100	143	101
Y	21	25	29	28	28	32	27	26	32	30
Zn	65	69	97	77	84	76	73	75	95	80
Zr	131	281	206	301	166	287	273	218	341	255

TABLE 4.81

VAR. / ID.	84-01240	84-01241	84-01242	84-01243	84-01244	84-01245	84-01246	84-01247	84-01248	84-01249
East	22070	21895	22045	21995	22047	22274	22296	22355	22388	22405
North	29945	29163	29034	29198	29366	29548	29563	29765	29337	30543
SiO2	61.06	60.66	70.21	65.75	64.48	63.62	65.50	65.07	66.30	63.62
Al2O3	17.39	18.05	15.23	16.18	17.58	17.68	17.53	16.81	17.22	14.54
TiO2	1.32	1.31	0.92	1.35	1.21	1.16	1.24	1.04	1.03	1.37
Fe2O3	8.34	8.45	6.70	8.16	7.83	7.91	7.43	7.86	7.33	7.90
MgO	3.36	3.56	2.75	3.87	3.01	3.63	2.93	2.86	2.99	3.70
CaO	0.36	0.33	0.34	0.28	0.28	0.47	0.28	0.44	0.38	1.04
Na2O	1.83	2.08	1.81	2.09	1.77	2.03	1.93	1.71	1.96	2.17
K2O	2.23	2.66	1.90	1.86	2.44	2.16	2.37	2.37	2.15	1.57
MnO	0.11	0.10	0.09	0.11	0.09	0.09	0.10	0.09	0.09	0.11
P2O5	0.20	0.19	0.16	0.21	0.18	0.17	0.19	0.16	0.17	0.18
Total	96.20	97.39	100.11	99.86	98.87	98.92	99.50	98.41	99.62	96.20
As	0	3	2	0	0	4	1	2	2	0
Ba	538	601	510	432	546	455	574	516	437	310
Co	24	22	12	16	18	17	19	17	16	17
Cr	176	149	129	228	142	140	133	143	129	178
Cu	29	35	26	47	30	25	24	29	14	24
Ga	18	18	14	16	17	15	16	18	16	15
La	38	42	16	30	40	33	42	39	33	29
Ni	83	79	58	67	64	67	66	62	58	70
Nb	18	19	17	18	20	17	21	20	18	19
Pb	16	10	7	7	12	19	14	15	10	15
Rb	61	69	51	44	68	57	64	68	59	44
Sr	89	100	60	82	64	94	70	70	61	94
Sb	2	0	2	3	0	0	0	0	2	1
S	14	50	80	192	19	493	41	268	102	323
Th	5	4	6	6	5	8	8	10	6	7
V	122	123	90	128	103	101	100	109	105	121
Y	32	29	23	24	30	29	31	31	25	29
Zn	88	78	64	76	74	89	83	84	73	77
Zr	265	231	248	288	278	193	290	275	241	315

VAR. / ID.	84-01250	84-01251	84-01252	84-01253	84-01254	84-01255	84-01256	84-01257	84-01258	84-01259
East	22510	22540	22540	22360	22324	22312	22312	22310	22540	22453
North	30665	30640	30610	30415	30455	30470	30295	30320	30662	30135
SiO2	67.50	62.83	64.19	65.04	64.10	61.31	64.11	64.52	65.78	66.02
Al2O3	16.25	16.87	19.36	16.58	17.09	17.17	14.55	16.45	16.05	16.41
TiO2	1.00	1.38	1.34	1.21	1.32	1.69	1.42	1.25	1.26	1.29
Fe2O3	6.41	7.96	7.46	7.26	7.84	9.04	8.13	7.66	6.93	7.59
MgO	3.02	3.37	1.33	3.43	3.56	3.99	4.16	4.94	3.56	3.34
CaO	0.21	0.32	0.21	0.43	1.13	0.76	0.52	0.37	0.25	0.52
Na2O	2.65	2.38	1.95	2.07	2.07	2.09	1.87	1.85	1.55	2.11
K2O	1.83	1.88	2.76	2.09	2.13	2.14	1.85	2.10	2.15	1.95
MnO	0.09	0.10	0.11	0.08	0.11	0.12	0.09	0.10	0.08	0.11
P2O5	0.17	0.19	0.20	0.17	0.18	0.20	0.19	0.17	0.19	0.19
Total	99.13	97.28	98.91	98.36	99.53	98.51	96.89	99.41	97.80	99.53
As	9	2	5	4	3	5	3	5	5	3
Ba	471	442	526	452	549	726	363	465	470	457
Co	14	17	21	17	18	21	16	15	16	18
Cr	137	151	155	181	190	258	290	277	222	158
Cu	11	28	22	18	26	31	27	23	26	26
Ga	14	16	18	14	15	17	15	15	16	16
La	22	28	38	29	32	41	35	38	36	36
Ni	56	77	56	84	73	83	92	90	90	70
Nb	15	20	19	18	17	21	20	17	17	19
Pb	45	18	13	14	19	9	14	33	16	13
Rb	45	52	66	57	54	54	54	53	58	52
Sr	121	89	146	68	108	91	71	63	71	89
Sb	2	2	0	0	0	3	2	0	0	3
S	41	124	260	318	279	388	450	611	79	136
Th	4	8	5	4	8	10	10	8	6	6
V	100	118	114	106	129	149	127	118	109	118
Y	17	28	29	27	29	30	33	29	26	30
Zn	133	81	55	68	88	86	85	132	68	76
Zr	200	243	257	281	289	381	435	327	308	280

VAR. / ID.	84-01260	84-01261	84-01262	84-01263	84-01264	84-01265	84-01266	84-01267	84-01268	84-01269
East	22226	22223	22215	22268	22276	22275	22204	22196	22090	22081
North	30220	30219	30189	30199	30185	30150	30085	30104	30160	30169
SiO2	62.82	64.68	61.76	65.83	61.34	66.59	66.17	65.20	60.94	62.95
Al2O3	17.13	15.92	18.45	13.70	19.19	14.67	16.52	16.33	18.32	16.45
TiO2	1.30	1.18	1.32	1.04	1.33	1.09	1.26	1.46	1.44	1.31
Fe2O3	7.55	7.46	8.09	7.20	8.81	6.59	7.43	7.64	8.80	7.82
MgO	4.06	3.86	4.64	2.97	3.75	3.05	3.53	2.17	3.96	3.40
CaO	0.28	0.24	0.23	1.15	0.36	0.86	0.58	0.17	0.32	0.66
Na2O	2.03	1.89	1.96	2.11	1.86	2.51	2.28	1.14	2.41	1.93
K2O	2.23	1.90	2.32	1.53	2.79	1.48	1.87	2.13	2.14	2.25
MnO	0.06	0.06	0.06	0.11	0.10	0.09	0.10	0.03	0.10	0.10
P2O5	0.19	0.17	0.21	0.15	0.18	0.17	0.19	0.20	0.20	0.19
Total	97.65	97.36	99.04	95.79	99.71	97.10	99.93	96.47	98.63	97.06
As	2	4	5	10	4	1	0	5	0	1
Ba	505	466	457	335	554	390	545	503	430	519
Co	18	17	18	15	19	17	17	13	21	16
Cr	169	188	247	176	147	160	175	223	153	160
Cu	25	23	13	23	36	21	23	26	35	23
Ga	18	17	17	14	18	15	15	16	19	16
La	38	36	36	28	41	21	31	38	37	37
Ni	82	82	99	62	82	64	73	67	85	70
Nb	20	19	18	16	20	15	17	20	21	18
Pb	26	10	10	13	49	14	15	21	13	11
Rb	62	56	61	41	74	41	49	51	58	59
Sr	58	57	48	92	80	130	102	85	102	80
Sb	2	0	0	0	1	0	0	1	0	0
S	148	179	22	237	507	272	290	192	37	249
Th	10	8	5	8	9	5	6	7	9	7
V	115	112	124	117	124	103	106	126	123	110
Y	28	26	24	27	31	25	30	30	30	28
Zn	83	80	91	84	148	73	77	151	118	91
Zr	315	270	305	242	217	253	261	353	237	247

VAR. / ID.	84-01270	84-01271	84-01272	84-01273	84-01274	84-01275	84-01276	84-01277	84-01278	84-01279
East	22063	22068	22177	22026	22078	22074	22072	20486	20486	20415
North	30217	30207	30266	29975	29995	29985	29973	29287	29286	29390
SiO2	57.24	61.84	62.41	64.45	64.51	65.77	65.94	67.34	69.05	64.82
Al2O3	19.91	16.78	17.38	16.41	16.83	15.48	14.66	16.22	14.09	17.13
TiO2	1.56	1.45	1.36	1.34	1.34	1.31	1.22	0.94	0.96	1.48
Fe2O3	9.43	8.11	7.89	8.02	8.06	7.44	7.41	6.43	6.19	8.16
MgO	3.90	3.29	3.03	3.50	4.12	3.26	3.33	2.85	2.69	3.36
CaO	0.31	0.51	0.25	0.43	0.40	0.25	0.51	0.75	0.24	0.29
Na2O	1.91	2.06	2.08	2.25	2.10	1.99	1.98	2.36	2.09	1.85
K2O	2.79	2.20	2.34	1.83	1.93	1.77	1.70	2.21	1.91	2.47
MnO	0.11	0.11	0.09	0.11	0.10	0.08	0.11	0.12	0.08	0.08
P2O5	0.22	0.19	0.22	0.19	0.19	0.20	0.17	0.15	0.15	0.21
Total	97.38	96.54	97.05	98.53	99.58	97.55	97.03	99.37	97.45	99.85
As	3	3	3	3	2	0	0	3	4	2
Ba	602	482	545	449	442	420	373	1259	476	412
Co	21	19	16	20	20	14	19	14	15	20
Cr	186	188	167	179	200	203	184	96	103	207
Cu	38	27	28	25	25	10	20	29	22	11
Ga	20	16	17	16	16	14	15	15	13	16
La	38	30	38	33	36	31	32	23	26	24
Ni	86	80	73	72	78	67	67	34	26	79
Nb	20	19	21	18	18	19	18	15	14	18
Pb	14	12	18	11	17	12	12	14	7	10
Rb	73	55	62	48	49	46	44	61	47	59
Sr	98	81	88	83	84	79	77	110	78	72
Sb	0	3	0	2	0	1	0	0	0	2
S	174	234	54	182	212	249	238	919	592	19
Th	8	7	5	4	11	9	4	9	5	6
V	144	128	126	119	134	122	117	109	119	120
Y	29	29	30	28	29	28	27	26	24	24
Zn	144	100	102	87	86	117	85	50	59	85
Zr	285	276	282	292	290	310	265	213	241	310

VAR. / ID.	84-01280	84-01281	84-01282	84-01283	84-01284	84-01285	84-01286	84-01287	84-01288	84-01289
East	20415	20375	20398	20322	20319	20273	20277	20072	20082	20148
North	29281	29312	29400	29609	29602	28775	28726	28785	28792	28798
SiO2	56.04	63.04	53.08	70.49	72.32	65.87	64.88	66.67	72.19	66.34
Al2O3	15.38	16.47	13.28	14.55	15.76	15.90	16.36	12.93	14.01	15.24
TiO2	1.04	1.42	0.66	0.72	0.42	1.23	1.68	0.71	0.56	1.21
Fe2O3	8.99	8.16	5.20	6.36	2.95	7.16	8.18	5.47	4.63	7.36
MgO	5.95	4.11	2.44	2.78	0.41	4.03	3.62	2.34	2.24	3.57
CaO	3.16	0.37	14.87	0.43	0.15	1.06	0.37	1.09	0.68	0.56
Na2O	2.64	2.07	1.80	3.01	1.86	1.83	1.96	2.78	3.02	2.02
K2O	2.29	2.17	1.86	1.17	2.89	2.03	2.00	1.33	2.11	1.94
MnO	0.15	0.09	0.19	0.10	0.10	0.09	0.12	0.11	0.12	0.10
P2O5	0.29	0.19	0.26	0.15	0.07	0.18	0.23	0.11	0.10	0.17
Total	95.93	98.09	93.64	99.76	96.93	99.38	99.40	93.54	99.66	98.51
As	4	2	5	3	21	6	6	0	5	1
Ba	1212	430	286	362	1099	490	411	415	667	415
Co	23	18	15	11	12	20	17	13	10	19
Cr	181	188	94	63	48	197	211	58	56	169
Cu	47	55	26	18	14	22	26	16	17	23
Ga	16	17	14	15	12	15	16	13	13	16
La	42	27	28	19	41	38	32	35	29	32
Ni	84	75	56	21	14	80	64	15	22	72
Nb	13	19	14	13	11	18	20	13	11	17
Pb	22	9	11	10	12	16	11	12	17	12
Rb	46	52	46	32	59	54	51	38	56	54
Sr	661	89	206	146	134	72	79	164	181	91
Sb	0	0	2	0	0	0	0	2	0	0
S	1912	279	338	35	146	157	158	348	237	270
Th	10	9	3	6	9	11	5	9	9	6
V	216	133	83	88	58	102	136	96	71	112
Y	28	31	26	22	23	28	29	26	20	28
Zn	83	71	50	70	16	91	71	39	38	68
Zr	163	263	155	189	156	288	339	167	147	263

TABLE 4.81

VAR. / ID.	84-01290	84-01291	84-01292	84-01293	84-01294	84-01295	84-01296	84-01297	84-01298	84-01299
East	20050	20051	19997	20110	20114	20128	19813	19821	19783	19749
North	28805	28849	28744	28835	28846	28849	28395	28393	28262	28230
SiO2	66.30	74.54	69.45	73.29	75.66	53.75	75.39	72.05	61.07	64.52
Al2O3	16.19	13.17	15.37	13.36	12.16	15.14	16.07	15.20	15.24	15.78
TiO2	0.89	0.58	0.79	0.53	0.41	1.39	0.35	0.55	1.32	1.07
Fe2O3	6.76	3.56	6.21	4.65	3.58	9.69	0.97	4.49	6.19	7.16
MgO	3.01	1.48	2.30	1.67	1.14	5.57	0.56	0.84	3.56	3.79
CaO	1.04	0.16	0.21	0.84	0.71	2.46	0.12	0.72	0.39	0.49
Na2O	2.31	2.69	2.54	2.31	1.63	2.67	2.26	2.60	2.99	2.54
K2O	2.14	2.48	1.97	1.93	4.22	2.23	3.41	2.59	1.28	2.19
MnO	0.15	0.08	0.08	0.14	0.06	0.14	0.01	0.12	0.12	0.11
P2O5	0.13	0.06	0.11	0.15	0.12	0.42	0.06	0.10	0.14	0.16
Total	98.92	98.80	99.03	98.87	99.69	93.46	99.20	99.26	94.30	97.81
As	4	0	6	3	0	4	5	4	2	2
Ba	421	601	492	493	1289	1522	402	339	638	481
Co	14	5	10	6	8	22	0	14	15	16
Cr	97	35	80	39	34	192	46	50	114	120
Cu	23	28	23	9	7	55	5	32	6	23
Ga	16	11	14	11	8	17	11	12	15	14
La	28	29	27	59	57	39	28	42	40	13
Ni	34	8	30	8	10	70	6	10	34	35
Nb	14	11	14	13	10	13	12	12	13	15
Pb	15	12	10	18	12	16	7	9	12	10
Rb	64	54	56	46	89	41	78	62	31	49
Sr	102	77	80	192	196	722	74	75	104	71
Sb	1	0	3	0	0	0	2	2	0	0
S	940	92	61	255	26	1319	37	132	75	16
Th	6	9	8	18	22	5	7	15	3	2
V	106	77	105	90	74	242	52	81	137	149
Y	28	19	26	16	18	30	25	25	25	29
Zn	51	24	58	35	24	137	4	20	57	82
Zr	171	113	161	160	161	174	139	214	175	164

VAR. / ID.	84-01300	84-01301	84-01302	84-01304	84-01305	84-01306	84-01307
East	19547	19547	19586	19517	19424	19434	19500
North	27414	27560	27581	27606	27455	27450	27490
SiO2	67.78	64.84	76.87	66.18	71.06	86.30	71.44
Al2O3	15.63	19.88	17.07	22.48	14.72	7.74	17.00
TiO2	1.12	1.34	0.35	0.72	0.51	0.49	0.55
Fe2O3	7.11	7.40	1.08	3.79	4.63	0.71	2.81
MgO	3.00	0.82	0.42	0.64	1.58	0.19	0.73
CaO	0.48	0.31	0.03	0.27	1.88	0.07	0.67
Na2O	1.97	2.20	0.00	2.82	1.95	1.14	3.31
K2O	1.86	1.82	3.32	1.98	2.26	2.73	2.60
MnO	0.13	0.18	0.01	0.03	0.11	0.04	0.09
P2O5	0.17	0.25	0.05	0.20	0.10	0.03	0.17
Total	99.25	99.04	99.20	99.11	98.80	99.44	99.37
As	2	8	9	6	3	42	6
Ba	436	467	4969	971	360	2987	342
Co	16	12	5	10	12	3	6
Cr	139	140	13	53	47	13	46
Cu	21	24	79	17	15	9	15
Ga	15	14	6	15	10	5	12
La	28	42	21	43	31	11	20
Ni	69	38	9	19	12	11	8
Nb	17	16	8	14	10	8	12
Pb	13	12	8	16	9	398	10
Rb	48	50	54	49	55	45	62
Sr	81	151	111	159	102	60	87
Sb	1	4	2	1	2	2	0
S	109	84	928	114	48	575	541
Th	7	3	4	7	5	3	10
V	104	128	43	71	61	14	46
Y	25	31	14	24	20	10	18
Zn	76	64	11	36	33	80	15
Zr	234	183	112	238	168	166	201

TABLE 4.81

XRF Analyses: Aghamore Formation (GWKE41)

Part 1

VAR. / ID.	84-01283	84-01284	84-01290	84-01291	84-01292	84-01296	84-01297
East	20322	20319	20050	20051	19997	19813	19821
North	29609	29602	28805	28849	28744	28395	28393
SiO2	70.49	72.32	66.30	74.54	69.45	75.39	72.05
Al2O3	14.55	15.76	16.19	13.17	15.37	16.07	15.20
TiO2	0.72	0.42	0.89	0.58	0.79	0.35	0.55
Fe2O3	6.36	2.95	6.76	3.56	6.21	0.97	4.49
MgO	2.78	0.41	3.01	1.48	2.30	0.56	0.84
CaO	0.43	0.15	1.04	0.16	0.21	0.12	0.72
Na2O	3.01	1.86	2.31	2.69	2.54	2.26	2.60
K2O	1.17	2.89	2.14	2.48	1.97	3.41	2.59
MnO	0.10	0.10	0.15	0.08	0.08	0.01	0.12
P2O5	0.15	0.07	0.13	0.06	0.11	0.06	0.10
Total	99.76	96.93	98.92	98.80	99.03	99.20	99.26
As	3	21	4	0	6	5	4
Ba	362	1099	421	601	492	402	339
Co	11	12	14	5	10	0	14
Cr	63	48	97	35	80	46	50
Cu	18	14	23	28	23	5	32
Ga	15	12	16	11	14	11	12
La	19	41	28	29	27	28	42
Ni	21	14	34	8	30	6	10
Nb	13	11	14	11	14	12	12
Pb	10	12	15	12	10	7	9
Rb	32	59	64	54	56	78	62
Sr	146	134	102	77	80	74	75
Sb	0	0	1	0	3	2	2
S	35	146	940	92	61	37	132
Th	6	9	6	9	8	7	15
V	88	58	106	77	105	52	81
Y	22	23	28	19	26	25	25
Zn	70	16	51	24	58	4	20
Zr	189	156	171	113	161	139	214

TABLE 4.82

VAR. / ID.	84-01298	84-01299	84-01300	84-01301	84-01302	84-01304	84-01305	84-01306	84-01307
East	19783	19749	19547	19547	19586	19517	19424	19434	19500
North	28262	28230	27414	27560	27581	27606	27455	27450	27490
SiO2	61.07	64.52	67.78	64.84	76.87	66.18	71.06	86.30	71.44
Al2O3	15.24	15.78	15.63	19.88	17.07	22.48	14.72	7.74	17.00
TiO2	1.32	1.07	1.12	1.34	0.35	0.72	0.51	0.49	0.55
Fe2O3	8.19	7.16	7.11	7.40	1.08	3.79	4.63	0.71	2.81
MgO	3.56	3.79	3.00	0.82	0.42	0.64	1.58	0.19	0.73
CaO	0.39	0.49	0.48	0.31	0.03	0.27	1.88	0.07	0.67
Na2O	2.99	2.54	1.97	2.20	0.00	2.82	1.95	1.14	3.31
K2O	1.28	2.19	1.86	1.82	3.32	1.98	2.26	2.73	2.60
MnO	0.12	0.11	0.13	0.18	0.01	0.03	0.11	0.04	0.09
P2O5	0.14	0.16	0.17	0.25	0.05	0.20	0.10	0.03	0.17
Total	94.30	97.81	99.25	99.04	99.20	99.11	98.80	99.44	99.37
As	2	2	2	8	9	6	3	42	6
Ba	638	481	436	467	4969	971	360	2987	342
Co	15	16	16	12	5	10	12	3	6
Cr	114	120	139	140	13	53	47	13	46
Cu	6	23	21	24	79	17	15	9	15
Ga	15	14	15	14	6	15	10	5	12
La	40	13	28	42	21	43	31	11	20
Ni	34	35	69	38	9	19	12	11	8
Nb	13	15	17	16	8	14	10	8	12
Pb	12	10	13	12	8	16	9	398	10
Rb	31	49	48	50	54	49	55	45	62
Sr	104	71	81	151	111	159	102	60	87
Sb	0	0	1	4	2	1	2	2	0
S	75	16	109	84	928	114	48	575	541
Th	3	2	7	3	4	7	5	3	10
V	137	149	104	128	43	71	61	14	46
Y	25	29	25	31	14	24	20	10	18
Zn	57	82	76	64	11	36	33	80	15
Zr	175	164	234	183	112	238	168	166	201

VAR. / ID.	84-01199	84-01200	84-01201	84-01235	84-01236	84-01237	84-01238	84-01239	84-01240	84-01241
East	21927	21648	21709	22478	22355	22103	22157	22109	22070	21895
North	29037	29108	29300	29860	29765	29923	29957	29968	29945	29163
SiO2	65.11	56.59	59.50	66.11	67.03	66.69	63.64	65.08	61.06	60.66
Al2O3	17.41	13.49	13.70	16.82	15.74	14.02	16.43	16.67	17.39	18.05
TiO2	1.29	1.29	1.35	1.16	1.01	0.91	1.54	1.19	1.32	1.31
Fe2O3	7.61	8.74	8.86	7.68	7.04	6.93	8.57	7.57	8.34	8.45
MgO	3.21	5.28	6.21	2.80	2.65	3.16	4.35	4.19	3.36	3.56
CaO	0.26	2.14	3.00	0.35	0.77	0.17	0.32	0.24	0.36	0.33
Na2O	1.68	3.18	2.82	1.74	1.90	1.50	2.21	1.94	1.83	2.08
K2O	2.54	0.74	0.84	2.22	2.01	1.70	1.71	1.91	2.23	2.66
MnO	0.09	0.15	0.14	0.09	0.11	0.06	0.10	0.08	0.11	0.10
P2O5	0.19	0.20	0.18	0.19	0.17	0.16	0.20	0.20	0.20	0.19
Total	99.39	91.80	96.60	99.16	98.43	95.30	99.07	99.07	96.20	97.39
As	0	4	1	0	1	4	1	2	0	3
Ba	552	334	313	443	475	379	377	477	538	601
Co	13	19	19	16	16	11	17	14	24	22
Cr	192	278	316	151	133	204	248	201	176	149
Cu	6	20	21	23	21	18	25	20	29	25
Ga	15	15	16	15	14	14	16	15	18	18
La	25	19	18	36	32	24	32	31	38	42
Ni	65	91	103	59	61	91	82	89	83	79
Nb	19	14	13	18	18	16	20	17	18	19
Pb	8	9	8	12	15	9	15	16	16	10
Rb	63	14	19	61	53	48	46	50	61	69
Sr	53	322	200	67	76	38	78	61	89	100
Sb	2	0	0	1	0	1	0	0	2	0
S	19	586	396	159	84	11	357	33	14	50
Th	4	7	3	7	8	3	7	9	5	4
V	112	171	175	102	104	100	143	101	122	123
Y	22	28	29	32	27	26	32	30	32	29
Zn	77	80	72	76	73	75	95	80	88	78
Zr	337	154	159	287	273	218	341	255	265	231

VAR. / ID.	84-01242	84-01245	84-01246	84-01247	84-01249	84-01250	84-01251	84-01252	84-01253	84-01254
East	22045	22274	22296	22355	22405	22510	22540	22540	22360	22324
North	29034	29548	29563	29765	30543	30665	30640	30610	30415	30455
SiO2	70.21	63.62	65.50	65.07	63.62	67.50	62.83	64.19	65.04	64.10
Al2O3	15.23	17.68	17.53	16.81	14.54	16.25	16.87	19.36	16.58	17.09
TiO2	0.92	1.16	1.24	1.04	1.37	1.00	1.38	1.34	1.21	1.32
Fe2O3	6.70	7.91	7.43	7.86	7.90	6.41	7.96	7.46	7.26	7.84
MgO	2.75	3.63	2.93	2.86	3.70	3.02	3.37	1.33	3.43	3.56
CaO	0.34	0.47	0.28	0.44	1.04	0.21	0.32	0.21	0.43	1.13
Na2O	1.81	2.03	1.93	1.71	2.17	2.65	2.38	1.95	2.07	2.07
K2O	1.90	2.16	2.37	2.37	1.57	1.83	1.88	2.76	2.09	2.13
MnO	0.09	0.09	0.10	0.09	0.11	0.09	0.10	0.11	0.08	0.11
P2O5	0.16	0.17	0.19	0.16	0.18	0.17	0.19	0.20	0.17	0.18
Total	100.11	98.92	99.50	98.41	96.20	99.13	97.28	98.91	98.36	99.53
As	2	4	1	2	0	9	2	5	4	3
Ba	510	455	574	516	310	471	442	526	452	549
Co	12	17	19	17	17	14	17	21	17	18
Cr	129	140	133	143	178	137	151	155	181	190
Cu	26	25	24	29	24	11	28	22	18	26
Ga	14	15	16	18	15	14	16	18	14	15
La	16	33	42	39	29	22	28	38	29	32
Ni	58	67	66	62	70	56	77	56	84	73
Nb	17	17	21	20	19	15	20	19	18	17
Pb	7	19	14	15	15	45	18	13	14	19
Rb	51	57	64	68	44	45	52	66	57	54
Sr	60	94	70	70	94	121	89	146	68	108
Sb	2	0	0	0	1	2	2	0	0	0
S	80	493	41	268	323	41	124	260	318	279
Th	6	8	8	10	7	4	8	5	4	8
V	90	101	100	109	121	100	118	114	106	129
Y	23	29	31	31	29	17	28	29	27	29
Zn	64	89	83	84	77	133	81	55	68	88
Zr	248	193	290	275	315	200	243	257	281	289

VAR. / ID.	84-01255	84-01256	84-01257	84-01258	84-01259	84-01260	84-01261	84-01262	84-01263	84-01264
East	22312	22312	22310	22540	22453	22226	22223	22215	22268	22276
North	30470	30295	30320	30662	30135	30220	30219	30189	30199	30185
SiO2	61.31	64.11	64.52	65.78	66.02	62.82	64.68	61.76	65.83	61.34
Al2O3	17.17	14.55	16.45	16.05	16.41	17.13	15.92	18.45	13.70	19.19
TiO2	1.69	1.42	1.25	1.26	1.29	1.30	1.18	1.32	1.04	1.33
Fe2O3	9.04	8.13	7.66	6.93	7.59	7.55	7.46	8.09	7.20	8.81
MgO	3.99	4.16	4.94	3.56	3.34	4.06	3.86	4.64	2.97	3.75
CaO	0.76	0.52	0.37	0.25	0.52	0.28	0.24	0.23	1.15	0.36
Na2O	2.09	1.87	1.85	1.55	2.11	2.03	1.89	1.96	2.11	1.86
K2O	2.14	1.85	2.10	2.15	1.95	2.23	1.90	2.32	1.53	2.79
MnO	0.12	0.09	0.10	0.08	0.11	0.06	0.06	0.06	0.11	0.10
P2O5	0.20	0.19	0.17	0.19	0.19	0.19	0.17	0.21	0.15	0.18
Total	98.51	96.89	99.41	97.80	99.53	97.65	97.36	99.04	95.79	99.71
As	5	3	5	5	3	2	4	5	10	4
Ba	726	363	465	470	457	505	466	457	335	554
Co	21	16	15	16	18	18	17	18	15	19
Cr	258	290	237	222	158	169	188	247	176	147
Cu	31	27	23	26	26	25	23	13	23	36
Ga	17	15	15	16	16	18	17	17	14	18
La	41	35	38	36	36	38	36	36	28	41
Ni	83	92	90	90	70	82	82	99	62	82
Nb	21	20	17	17	19	20	19	18	16	20
Pb	9	14	33	16	13	26	10	10	13	49
Rb	54	54	53	58	52	62	56	61	41	74
Sr	91	71	63	71	89	58	57	53	92	80
Sb	3	2	0	0	3	2	0	0	0	1
S	388	450	611	79	136	148	179	22	237	507
Th	10	10	8	6	6	10	8	5	8	9
V	149	127	118	109	118	115	112	124	117	124
Y	30	33	29	26	30	28	26	24	27	31
Zn	86	85	132	68	76	83	80	91	84	148
Zr	381	435	327	308	280	315	270	305	242	217

TABLE 4.84

VAR. / ID.	84-01265	84-01266	84-01267	84-01268	84-01269	84-01270	84-01271	84-01272	84-01273	84-01274
East	22275	22204	22196	22090	22081	22063	22068	22177	22026	22078
North	30150	30085	30104	30160	30169	30217	30207	30266	29975	29995
SiO2	66.59	66.17	65.20	60.94	62.95	57.24	61.84	62.41	64.45	64.51
Al2O3	14.67	16.52	16.33	18.32	16.45	19.91	16.78	17.38	16.41	16.83
TiO2	1.09	1.26	1.46	1.44	1.31	1.56	1.45	1.36	1.34	1.34
Fe2O3	6.59	7.43	7.64	8.80	7.82	9.43	8.11	7.89	8.02	8.06
MgO	3.05	3.53	2.17	3.96	3.40	3.90	3.29	3.03	3.50	4.12
CaO	0.86	0.58	0.17	0.32	0.66	0.31	0.51	0.25	0.43	0.40
Na2O	2.51	2.28	1.14	2.41	1.93	1.91	2.06	2.08	2.25	2.10
K2O	1.48	1.87	2.13	2.14	2.25	2.79	2.20	2.34	1.83	1.93
MnO	0.09	0.10	0.03	0.10	0.10	0.11	0.11	0.09	0.11	0.10
P2O5	0.17	0.19	0.20	0.20	0.19	0.22	0.19	0.22	0.19	0.19
Total	97.10	99.93	96.47	98.63	97.06	97.38	96.54	97.05	98.53	99.58
As	1	0	5	0	1	3	3	3	3	2
Ba	390	545	503	430	519	602	482	545	449	442
Co	17	17	13	21	16	21	19	16	20	20
Cr	160	175	223	153	160	186	188	167	179	200
Cu	21	23	26	35	23	38	27	28	25	25
Ga	15	15	16	19	16	20	16	17	16	16
La	21	31	38	37	37	38	30	38	33	36
Ni	64	73	67	85	70	86	80	73	72	78
Nb	15	17	20	21	18	20	19	21	18	18
Pb	14	15	21	13	11	14	12	18	11	17
Rb	41	49	51	58	59	73	55	62	48	49
Sr	130	102	85	102	80	98	81	88	83	84
Sb	0	0	1	0	0	0	3	0	2	0
S	272	290	192	37	249	174	234	54	182	212
Th	5	6	7	9	7	8	7	5	4	11
V	103	106	126	123	110	144	128	126	119	134
Y	25	30	30	30	28	29	29	30	28	29
Zn	73	77	151	118	91	144	100	102	87	86
Zr	253	261	353	237	247	285	276	282	292	290

VAR. / ID.	84-01275	84-01276	84-01277	84-01278	84-01279	84-01280	84-01281	84-01282	84-01285	84-01286
East	22074	22072	20486	20486	20415	20415	20375	20398	20273	20277
North	29985	29973	29287	29286	29390	29281	29312	29400	28775	28726
SiO2	65.77	65.94	67.34	69.05	64.82	56.04	63.04	53.08	65.87	64.88
Al2O3	15.48	14.66	16.22	14.09	17.13	15.38	16.47	13.28	15.90	16.36
TiO2	1.31	1.22	0.94	0.96	1.48	1.04	1.42	0.66	1.23	1.68
Fe2O3	7.44	7.41	6.43	6.19	8.16	8.99	8.16	5.20	7.16	8.18
MgO	3.26	3.33	2.85	2.69	3.36	5.95	4.11	2.44	4.03	3.62
CaO	0.25	0.51	0.75	0.24	0.29	3.16	0.37	14.87	1.06	0.37
Na2O	1.99	1.98	2.36	2.09	1.85	2.64	2.07	1.80	1.83	1.96
K2O	1.77	1.70	2.21	1.91	2.47	2.29	2.17	1.86	2.03	2.00
MnO	0.08	0.11	0.12	0.08	0.08	0.15	0.09	0.19	0.09	0.12
P2O5	0.20	0.17	0.15	0.15	0.21	0.29	0.19	0.26	0.18	0.23
Total	97.55	97.03	99.37	97.45	99.85	95.93	98.09	93.64	99.38	99.40
As	0	0	3	4	2	4	2	5	6	6
Ba	420	373	1259	476	412	1212	430	286	490	411
Co	14	19	14	15	20	23	18	15	20	17
Cr	203	184	96	103	207	181	188	94	197	211
Cu	10	20	29	22	11	47	55	26	22	26
Ga	14	15	15	13	16	16	17	14	15	16
La	31	32	23	26	24	42	27	28	38	32
Ni	67	67	34	26	79	84	75	56	80	64
Nb	19	18	15	14	18	13	19	14	18	20
Pb	12	12	14	7	10	22	9	11	16	11
Rb	46	44	61	47	59	46	52	46	54	51
Sr	79	77	110	78	72	661	89	206	72	79
Sb	1	0	0	0	2	0	0	2	0	0
S	249	238	919	592	19	1912	279	338	157	158
Th	9	4	9	5	6	10	9	3	11	5
V	122	117	109	119	120	216	133	83	102	136
Y	28	27	26	24	24	28	31	26	28	29
Zn	117	85	50	59	85	83	71	50	91	71
Zr	310	265	213	241	310	163	263	157	288	339

VAR. / ID.	84-01287	84-01288	84-01289	84-01293	84-01294	84-01295
East	20072	20082	20148	20110	20114	20128
North	28785	28792	28798	28835	28846	28849
SiO2	66.67	72.19	66.34	73.29	75.66	53.75
Al2O3	12.93	14.01	15.24	13.36	12.16	15.14
TiO2	0.71	0.56	1.21	0.53	0.41	1.39
Fe2O3	5.47	4.63	7.36	4.65	3.58	9.69
MgO	2.34	2.24	3.57	1.67	1.14	5.57
CaO	1.09	0.68	0.56	0.84	0.71	2.46
Na2O	2.78	3.02	2.02	2.31	1.63	2.67
K2O	1.33	2.11	1.94	1.93	4.22	2.23
MnO	0.11	0.12	0.10	0.14	0.06	0.14
P2O5	0.11	0.10	0.17	0.15	0.12	0.42
Total	93.54	99.66	98.51	98.87	99.69	93.46
As	0	5	1	3	0	4
Ba	415	667	415	493	1289	1522
Co	13	10	19	6	8	22
Cr	58	56	169	39	34	192
Cu	16	17	23	9	7	55
Ga	13	13	16	11	8	17
La	35	29	32	59	57	39
Ni	15	22	72	8	10	70
Nb	13	11	17	13	10	13
Pb	12	17	12	18	12	16
Rb	38	56	54	46	89	41
Sr	164	181	91	192	196	722
Sb	2	0	0	0	0	0
S	348	237	270	255	26	1319
Th	9	9	6	18	22	5
V	98	71	112	90	74	242
Y	26	20	28	16	18	30
Zn	39	38	68	35	24	137
Zr	167	147	263	160	161	174

XRF Analyses: Coronea Formation (GWKE44)

Part 1

VAR. / ID.	84-01182	84-01183	84-01184	84-01185	84-01186	84-01187	84-01188	84-01189	84-01190	84-01191
East	21820	21802	21511	21502	21520	21563	21559	21572	21587	21613
North	28440	28420	28407	28429	28460	28608	28634	28790	28610	28525
SiO2	57.50	58.67	65.94	66.15	60.34	60.07	55.01	60.28	65.22	61.59
Al2O3	19.92	20.98	16.22	16.55	15.44	13.82	13.82	17.00	15.19	15.05
TiO2	1.22	1.25	1.25	1.11	1.35	0.87	1.37	1.55	0.96	1.27
Fe2O3	9.44	9.89	7.80	7.84	9.02	7.72	8.44	9.19	7.36	8.51
MgO	3.40	2.87	3.37	2.87	4.61	6.43	3.98	4.87	4.91	4.54
CaO	0.24	0.18	0.29	0.27	0.87	1.44	1.70	0.36	1.51	0.78
Na2O	1.63	1.72	2.13	1.99	3.44	1.86	3.79	3.01	1.86	2.42
K2O	2.72	3.32	1.96	2.18	1.11	1.87	0.78	2.27	2.27	2.07
MnO	0.40	0.09	0.09	0.09	0.16	0.11	0.14	0.13	0.11	0.10
P2O5	0.19	0.18	0.20	0.18	0.21	0.15	0.27	0.24	0.14	0.18
Total	96.66	99.15	99.25	99.23	96.55	94.34	89.30	98.90	99.53	96.51
As	4	4	2	2	2	1	0	0	0	0
Ba	581	754	466	481	326	441	344	169	452	327
Co	17	17	17	18	21	21	22	18	19	21
Cr	137	150	174	141	189	330	189	237	255	208
Cu	31	30	12	19	25	17	18	8	16	9
Ga	20	21	14	14	16	15	17	16	14	15
La	37	39	25	35	24	22	30	19	26	0
Ni	70	74	68	60	77	119	52	59	98	82
Nb	20	21	18	17	14	12	14	16	14	15
Pb	11	10	6	12	12	10	12	8	8	12
Rb	74	100	51	57	33	44	21	44	52	51
Sr	50	48	63	57	119	254	374	101	64	79
Sb	0	3	2	0	0	1	0	0	3	0
S	9	9	20	28	101	52	299	6	41	66
Th	8	11	5	7	4	5	4	5	4	4
V	127	124	114	102	136	150	150	165	130	134
Y	26	32	25	26	26	22	25	17	25	22
Zn	109	106	79	81	96	63	69	102	75	89
Zr	200	206	276	243	153	162	160	192	232	166

TABLE 4.85

VAR. / ID.	84-01192	84-01193	84-01194	84-01195	84-01196	84-01197	84-01198	84-01202	84-01203	84-01204
East	21698	21680	21663	21787	21820	21996	21797	22041	22175	23023
North	28613	28593	28626	28717	28768	28875	28950	29038	29155	29904
SiO2	61.82	67.37	67.02	59.09	60.94	66.73	58.66	62.13	53.93	65.11
Al2O3	15.15	15.23	15.19	14.20	14.29	16.38	15.84	19.54	13.86	17.20
TiO2	1.26	1.02	0.98	1.06	1.44	1.19	1.40	1.20	1.18	1.18
Fe2O3	7.64	7.36	7.46	6.75	8.56	7.43	9.03	8.22	8.13	7.66
MgO	4.26	2.67	2.81	2.60	4.27	2.93	4.70	3.13	8.21	2.87
CaO	1.48	0.32	0.41	8.82	0.92	0.36	1.12	0.27	4.55	0.28
Na2O	3.80	1.87	1.84	1.96	3.13	2.03	2.77	1.90	3.47	1.96
K2O	0.94	1.93	1.82	1.59	1.36	2.13	2.30	2.75	0.56	2.34
MnO	0.13	0.11	0.11	0.25	0.13	0.10	0.12	0.09	0.13	0.09
P2O5	0.22	0.16	0.17	0.20	0.19	0.18	0.21	0.19	0.57	0.18
Total	96.70	98.04	97.81	96.52	95.23	99.46	96.15	99.42	94.59	98.87
As	0	1	2	2	0	3	1	2	6	2
Ba	460	407	393	308	262	408	335	546	1180	512
Co	20	15	13	16	21	20	22	16	24	17
Cr	201	155	165	194	205	163	211	144	370	147
Cu	17	20	20	22	21	18	21	24	84	17
Ga	16	15	14	14	16	15	16	18	16	16
La	22	24	31	37	19	29	23	39	38	32
Ni	58	58	56	57	65	59	76	70	154	59
Nb	14	18	16	19	15	17	14	20	10	19
Pb	12	11	14	10	7	10	8	14	10	9
Rb	24	51	49	43	33	53	52	71	15	62
Sr	199	66	60	208	114	60	91	66	606	56
Sb	3	0	0	2	2	0	2	0	0	0
S	56	21	177	166	106	226	162	198	2241	21
Th	1	4	5	5	1	4	0	8	7	9
V	142	106	114	119	149	110	155	113	162	104
Y	25	29	29	34	29	28	29	30	18	29
Zn	77	77	74	70	84	73	91	87	81	76
Zr	153	294	251	376	166	307	169	238	188	276

TABLE 4.85

VAR. / ID.	84-01205	84-01206	84-01207	84-01208	84-01209	84-01210	84-01211	84-01212	84-01213	84-01214
East	23028	23014	23065	23085	23095	23045	23135	23135	23135	23182
North	29884	29933	29865	29864	29858	29871	29865	29865	29865	29880
SiO2	65.57	66.80	67.12	64.87	66.61	67.81	65.81	60.56	61.40	62.99
Al2O3	17.10	16.67	15.53	16.69	15.38	16.43	17.16	17.43	16.16	17.93
TiO2	1.02	1.14	1.04	1.05	1.00	1.04	1.02	0.96	1.25	1.30
Fe2O3	7.61	7.40	8.05	7.87	7.19	7.08	7.36	8.24	8.10	7.93
MgO	2.95	2.84	3.02	3.19	2.81	2.66	3.26	3.98	4.60	3.25
CaO	0.26	0.45	0.36	0.34	0.27	0.28	0.65	0.81	1.92	0.69
Na2O	1.88	2.11	2.11	1.91	1.78	1.98	1.89	1.37	2.54	2.10
K2O	2.42	2.07	1.55	2.23	2.18	2.00	2.51	3.13	1.92	2.57
MnO	0.10	0.10	0.11	0.10	0.12	0.09	0.10	0.50	0.12	0.12
P2O5	0.18	0.18	0.18	0.17	0.17	0.19	0.15	0.13	0.19	0.19
Total	99.09	99.76	99.07	98.42	97.51	99.56	99.91	97.11	98.20	99.07
As	2	2	1	1	0	3	0	0	0	0
Ba	545	454	359	522	427	409	487	549	326	566
Co	15	15	17	17	17	19	18	23	20	20
Cr	138	143	211	158	157	164	127	190	225	157
Cu	21	16	18	23	22	17	21	29	25	27
Ga	17	15	14	17	15	15	16	16	15	18
La	25	29	30	23	33	38	29	37	24	31
Ni	61	58	57	62	61	56	64	112	80	65
Nb	18	18	17	18	16	17	16	14	14	21
Pb	10	10	12	14	15	10	12	8	11	14
Rb	65	54	41	60	51	55	61	82	51	68
Sr	62	62	61	63	57	61	69	56	84	78
Sb	2	0	0	2	2	0	2	1	0	2
S	39	119	46	49	45	27	169	44	242	73
Th	6	8	5	4	6	8	2	5	2	8
V	100	106	121	117	108	112	110	127	147	117
Y	28	27	29	28	28	27	26	25	29	31
Zn	71	76	78	77	71	72	76	90	78	87
Zr	251	256	309	262	271	283	223	169	183	283

TABLE 4.85

VAR. / ID.	84-01215	84-01216	84-01217	84-01231	84-01232	84-01233	84-01234	84-01243	84-01244	84-01248
East	23195	23208	23221	22500	22545	22608	22600	21995	22047	22388
North	29870	29855	29848	29455	29503	29648	29646	29198	29366	29337
SiO2	63.16	61.08	60.74	68.79	63.50	67.17	59.83	65.75	64.48	66.30
Al2O3	16.61	18.29	13.18	15.46	17.94	15.57	14.10	16.18	17.58	17.22
TiO2	1.02	1.16	1.12	1.12	0.99	1.15	1.58	1.35	1.21	1.03
Fe2O3	7.52	8.43	7.59	7.34	8.73	7.31	9.63	8.16	7.83	7.33
MgO	2.73	3.16	3.80	2.96	3.31	2.69	6.15	3.87	3.01	2.99
CaO	0.43	0.28	1.44	0.34	0.76	0.24	1.25	0.28	0.28	0.38
Na2O	2.13	2.07	3.24	1.78	1.60	2.04	2.93	2.09	1.77	1.96
K2O	2.17	2.51	0.76	1.84	2.62	2.09	0.58	1.86	2.44	2.15
MnO	0.10	0.09	0.16	0.10	0.11	0.09	0.13	0.11	0.09	0.09
P2O5	0.17	0.18	0.18	0.18	0.15	0.19	0.19	0.21	0.18	0.17
Total	96.04	97.25	92.21	99.91	99.71	98.54	96.37	99.86	98.87	99.62
As	7	6	2	3	5	0	0	0	0	2
Ba	457	534	447	426	525	451	267	432	546	437
Co	16	16	16	17	24	15	22	16	18	16
Cr	121	138	141	169	125	154	307	228	142	129
Cu	21	24	21	17	24	20	10	47	30	14
Ga	15	17	15	15	17	16	16	16	17	16
La	34	40	26	31	33	38	19	30	40	33
Ni	59	66	56	55	69	60	98	67	64	58
Nb	18	19	18	17	18	18	14	18	20	18
Pb	16	9	15	10	17	12	12	7	12	10
Rb	58	67	54	48	72	56	17	44	68	59
Sr	68	64	67	53	62	65	133	82	64	61
Sb	0	2	2	0	0	0	0	3	0	2
S	167	23	49	167	1727	23	185	192	19	102
Th	8	6	6	3	9	8	6	6	5	6
V	102	117	110	106	112	103	174	128	103	105
Y	30	29	30	25	29	28	28	24	30	25
Zn	84	86	75	69	97	77	84	76	74	73
Zr	226	235	241	281	206	301	166	288	278	241

XRF Analyses: Cornhill Formation (GWKE45)

Part 1

VAR. / ID.	84-01172	84-01180	84-01181
East	22215	21950	21950
North	28686	28457	28476
SiO2	62.19	73.17	67.03
Al2O3	16.78	13.51	15.91
TiO2	1.30	0.80	1.13
Fe2O3	7.99	6.31	6.54
MgO	3.04	1.99	3.07
CaO	0.26	0.18	0.31
Na2O	2.11	1.41	2.30
K2O	2.07	1.82	2.04
MnO	0.06	0.23	0.48
P2O5	0.20	0.14	0.17
Total	96.00	99.56	98.98
As	3	12	2
Ba	455	405	459
Co	15	25	19
Cr	166	120	143
Cu	27	30	22
Ga	15	13	15
La	26	21	50
Ni	72	52	72
Nb	19	14	18
Pb	8	10	13
Rb	54	59	58
Sr	54	37	78
Sb	2	2	3
S	74	31	210
Th	8	6	6
V	126	101	109
Y	27	21	29
Zn	89	75	75
Zr	253	151	227

TABLE 4.86

VAR. / ID.	84-01171	84-01173	84-01174	84-01175	84-01228	84-01229	84-01230
East	22203	22344	22420	22402	22938	22915	22739
North	28619	28511	28595	28730	29323	29341	29010
SiO2	58.06	58.40	56.85	57.20	58.38	62.40	59.12
Al2O3	14.81	15.20	15.93	15.82	16.17	14.82	14.80
TiO2	0.87	0.88	0.81	0.93	0.78	0.83	0.81
Fe2O3	8.44	8.15	7.74	8.70	7.75	8.18	8.04
MgO	5.96	5.36	5.93	5.92	5.67	4.92	5.75
CaO	4.70	4.65	3.40	3.13	5.73	3.82	4.26
Na2O	2.45	3.08	2.89	2.94	2.00	3.53	2.39
K2O	1.48	1.50	2.07	1.86	1.99	0.93	1.90
MnO	0.15	0.15	0.13	0.12	0.15	0.23	0.14
P2O5	0.21	0.22	0.20	0.23	0.23	0.17	0.22
Total	97.13	97.59	95.95	96.85	98.85	99.83	97.43
As	0	0	2	0	2	0	0
Ba	417	466	487	816	606	304	503
Co	22	22	16	20	22	22	21
Cr	269	184	149	225	205	210	247
Cu	27	28	27	29	28	21	32
Ga	16	17	16	17	16	14	17
La	18	23	19	23	25	18	17
Ni	65	47	47	53	58	39	67
Nb	7	7	7	9	9	8	8
Pb	12	18	13	12	15	13	17
Rb	33	42	54	47	48	23	44
Sr	316	348	330	323	416	332	359
Sb	1	0	2	0	2	0	0
S	162	131	366	394	312	288	254
Th	2	5	1	4	4	3	4
V	182	188	157	199	163	167	173
Y	22	21	22	24	20	21	21
Zn	66	71	65	75	66	64	65
Zr	134	129	119	129	124	124	131

VAR. / ID.	84-01169	84-01170	84-01176	84-01177
East	22288	22284	22657	22585
North	28270	28302	28816	28572
SiO2	60.92	60.13	51.84	66.61
Al2O3	15.64	15.18	15.41	14.05
TiO2	0.81	0.88	0.85	0.93
Fe2O3	8.46	7.83	8.05	7.14
MgO	6.45	7.27	5.74	4.88
CaO	0.85	1.29	8.07	0.68
Na2O	2.73	2.18	2.13	1.79
K2O	1.74	1.41	1.80	2.00
MnO	0.33	0.21	0.18	0.10
P2O5	0.18	0.19	0.19	0.15
Total	98.11	96.57	94.26	98.33
As	2	0	0	0
Ba	517	369	370	350
Co	34	20	24	20
Cr	285	371	206	310
Cu	36	21	32	15
Ga	15	14	16	14
La	22	17	11	26
Ni	151	129	56	100
Nb	10	10	8	12
Pb	12	15	8	10
Rb	44	39	55	47
Sr	203	125	217	123
Sb	0	3	0	1
S	103	259	587	36
Th	7	1	1	4
V	125	141	194	130
Y	22	20	20	20
Zn	119	63	65	63
Zr	156	165	114	191

XRF Analyses: Red Island Formation (GWKE48)

Part 1

VAR. / ID.	84-01178	84-01179	84-01220	84-01221	84-01222	84-01223	84-01224	84-01225	84-01226	84-01227
East	22590	22060	23468	23458	23353	23337	23350	23436	23345	23093
North	28389	28281	29601	29615	29508	29417	29403	29339	29304	29315
SiO2	58.82	58.50	55.66	59.07	57.26	62.03	59.05	57.54	55.79	58.88
Al2O3	16.43	14.48	16.28	14.05	12.94	13.98	14.17	15.03	13.56	15.68
TiO2	0.85	1.00	0.74	0.77	0.74	0.72	0.76	0.70	0.69	0.93
Fe2O3	7.81	8.80	7.01	7.89	8.10	7.63	7.77	6.95	6.66	8.23
MgO	4.72	7.13	5.89	6.78	6.47	6.52	5.83	5.20	5.18	5.39
CaO	2.02	3.70	3.98	5.01	4.79	4.08	4.70	4.46	8.34	4.12
Na2O	3.63	2.57	2.41	2.22	2.26	2.31	2.55	2.74	2.16	2.54
K2O	1.86	0.97	2.63	1.80	1.23	1.70	1.88	1.72	2.28	1.81
MnO	0.13	0.14	0.11	0.13	0.12	0.13	0.14	0.12	0.19	0.12
P2O5	0.20	0.19	0.18	0.16	0.16	0.13	0.17	0.16	0.17	0.24
Total	96.47	97.48	94.89	97.88	94.07	99.23	97.02	94.62	95.02	97.94
As	4	3	0	0	5	5	0	3	2	0
Ba	415	591	637	513	551	481	520	496	751	541
Co	18	22	22	27	26	23	23	16	22	18
Cr	238	563	298	388	409	427	276	207	264	258
Cu	23	19	23	31	27	25	28	27	26	27
Ga	16	16	17	14	14	15	14	16	14	16
La	18	23	12	15	17	18	16	15	13	23
Ni	55	135	115	116	104	116	87	79	87	67
Nb	8	12	8	8	8	7	8	8	8	13
Pb	11	10	14	11	11	11	13	11	12	16
Rb	49	26	61	44	28	39	46	49	61	43
Sr	166	371	432	452	401	302	390	669	240	357
Sb	2	0	0	3	2	3	2	0	2	1
S	1428	576	73	110	80	192	112	60	183	224
Th	3	6	0	3	0	1	2	0	2	5
V	165	177	136	173	183	167	185	152	158	155
Y	21	23	20	20	20	19	17	19	19	23
Zn	44	75	68	66	61	60	68	50	58	76
Zr	133	235	150	160	130	137	136	125	138	192

TABLE 4.89

VAR. / ID.	84-01162	84-01163	84-01168
East	24627	24606	24790
North	30076	30078	30093
SiO2	58.37	72.48	53.46
Al2O3	13.94	18.46	14.09
TiO2	1.02	0.16	0.85
Fe2O3	8.04	1.22	8.03
MgO	5.49	0.43	6.09
CaO	1.07	0.20	5.92
Na2O	2.42	3.88	2.35
K2O	1.18	2.71	1.15
MnO	0.12	0.03	0.11
P2O5	0.18	0.05	0.23
Total	91.83	99.62	92.28
As	6	0	0
Ba	337	189	269
Co	20	0	19
Cr	362	10	180
Cu	20	0	28
Ga	14	19	16
La	27	15	20
Ni	109	3	61
Nb	12	13	9
Pb	12	23	16
Rb	32	124	30
Sr	134	151	344
Sb	3	2	0
S	25	24	118
Th	4	15	1
V	140	14	163
Y	26	12	22
Zn	65	23	62
Zr	248	103	164

XRF Analyses: Hawick Formation Equivalent (GWKE50) Part 1

VAR. / ID.	84-01001	84-01002	84-01003	84-01004	84-01005	84-01006	84-01007	84-01008	84-01009	84-01010
East	30615	30695	30712	29742	29820	29745	29910	29926	29970	29935
North	28865	28960	28883	29012	28300	28467	28383	28552	28590	28560
SiO2	65.07	59.24	55.26	53.15	77.45	63.54	66.07	77.11	63.50	53.58
Al2O3	7.93	16.83	12.03	14.72	9.29	16.51	12.61	12.46	12.90	12.64
TiO2	0.44	0.82	0.68	0.79	0.61	0.83	0.62	0.45	0.49	0.75
Fe2O3	3.13	5.82	4.31	5.61	3.12	6.11	4.07	2.88	3.94	5.31
MgO	2.70	3.45	3.28	4.02	1.98	3.54	2.67	1.61	2.95	4.51
CaO	11.24	4.67	13.28	9.73	2.91	2.85	6.73	0.19	8.04	9.88
Na2O	1.42	1.39	1.53	1.60	1.99	1.41	1.96	2.74	1.97	1.29
K2O	1.64	3.54	2.19	2.69	1.42	3.41	2.04	1.60	2.44	2.33
MnO	0.19	0.10	0.14	0.12	0.06	0.09	0.12	0.04	0.23	0.10
P2O5	0.12	0.13	0.17	0.16	0.14	0.14	0.15	0.15	0.15	0.18
Total	93.88	95.99	92.87	92.59	98.97	98.43	97.04	99.23	96.61	90.57
As	7	34	0	14	5	55	29	4	6	5
Ba	205	661	233	388	305	547	325	282	298	330
Co	7	18	15	23	16	26	12	6	9	15
Cr	107	121	118	125	184	120	101	123	116	138
Cu	6	26	6	28	9	25	11	14	11	24
Ga	8	18	12	17	9	17	11	10	11	13
La	14	31	28	20	25	28	27	20	23	35
Ni	19	69	42	62	26	70	42	28	25	59
Nb	8	15	12	13	11	16	12	9	10	13
Pb	12	30	10	13	12	32	12	12	12	27
Rb	40	114	65	86	39	117	54	46	58	68
Sr	151	106	184	180	81	65	129	63	144	169
Sb	0	10	0	0	0	14	0	0	1	0
S	200	7517	56	512	115	9568	174	30	157	50
Th	8	10	8	4	6	14	7	6	4	7
V	46	104	76	93	49	99	63	48	58	87
Y	18	31	25	28	20	29	22	19	20	33
Zn	20	31	45	37	23	37	24	19	19	57
Zr	193	214	192	159	285	216	154	225	185	215

TABLE 4.91

XRF Analyses: Hawick Formation Equivalent (GWKE50) Part 2

VAR. / ID.	84-01011	84-01012	84-01013	84-01014	84-01015	84-01016	84-01017	84-01018	84-01019	84-01020
East	29980	29760	29677	29525	29510	29510	29508	29475	29414	29384
North	28645	28740	29013	30243	30305	30350	30388	30514	30644	30665
SiO2	58.93	57.75	57.52	57.72	55.19	53.78	57.75	53.95	55.14	68.94
Al2O3	11.21	13.97	16.84	12.42	10.24	11.19	12.90	12.55	12.20	13.26
TiO2	0.65	0.80	0.95	0.73	0.68	0.67	0.77	0.72	0.70	0.79
Fe2O3	4.85	5.44	6.39	4.80	4.32	4.60	5.12	5.09	4.92	5.05
MgO	3.04	3.88	4.87	4.24	4.08	4.31	4.30	4.57	4.20	3.73
CaO	9.99	8.57	5.38	9.49	12.90	13.01	8.21	11.39	9.80	3.50
Na2O	1.93	1.42	1.24	1.69	1.48	1.50	1.50	1.26	1.25	1.28
K2O	1.70	2.42	3.32	2.03	1.75	1.86	2.20	2.30	2.24	2.24
MnO	0.24	0.09	0.07	0.07	0.09	0.09	0.07	0.11	0.09	0.06
P2O5	0.18	0.17	0.18	0.16	0.17	0.18	0.18	0.16	0.16	0.17
Total	92.72	94.51	96.76	93.35	90.90	91.19	93.00	92.10	90.70	99.02
As	4	7	0	3	2	2	2	1	3	2
Ba	296	479	350	223	155	184	210	216	239	420
Co	11	13	15	13	12	13	13	14	10	12
Cr	120	138	146	151	164	124	148	126	138	136
Cu	20	18	9	8	11	13	15	19	19	11
Ga	12	14	17	13	10	13	13	12	14	14
La	24	26	25	29	27	19	21	27	25	22
Ni	52	60	74	53	47	49	51	52	49	55
Nb	14	14	15	11	10	12	12	11	12	12
Pb	15	32	15	13	13	13	13	12	17	13
Rb	52	73	110	60	51	57	61	67	64	71
Sr	285	149	85	148	159	189	131	136	161	55
Sb	0	4	0	3	0	0	0	0	0	0
S	182	43	75	41	51	52	49	55	57	69
Th	5	11	10	13	5	8	10	12	11	10
V	71	82	101	81	79	75	84	87	79	74
Y	27	29	28	26	27	25	27	28	27	24
Zn	62	50	85	56	46	57	56	66	55	59
Zr	194	207	210	225	223	182	219	195	211	217

TABLE 4.91

VAR. / ID.	84-01022	84-01023	84-01024	84-01025	84-01026	84-01027	84-01028	84-01029	84-01030	84-01031
East	29493	29276	29150	29115	29190	29187	29703	29772	29870	30026
North	30397	30347	30338	30240	30213	30174	29205	29274	29239	29217
SiO2	58.73	55.53	54.34	57.78	54.46	52.91	60.18	54.48	55.56	54.55
Al2O3	10.20	12.45	11.51	11.12	14.83	11.51	12.37	11.96	12.33	14.28
TiO2	0.58	0.65	0.61	0.61	0.87	0.65	0.70	0.78	0.75	0.82
Fe2O3	4.00	4.86	4.45	4.27	6.43	4.63	4.90	5.61	4.91	5.94
MgO	3.50	4.01	3.97	3.72	4.61	4.15	4.11	4.62	4.35	4.81
CaO	8.49	11.61	12.56	11.64	8.74	13.33	8.36	8.87	10.26	7.70
Na2O	1.59	1.55	1.46	1.47	1.15	1.34	1.72	1.56	1.62	1.32
K2O	2.08	2.18	2.02	2.02	2.85	2.05	2.08	1.84	2.20	2.49
MnO	0.08	0.09	0.08	0.09	0.09	0.10	0.08	0.09	0.09	0.10
P2O5	0.14	0.16	0.15	0.16	0.18	0.17	0.16	0.16	0.18	0.18
Total	89.39	93.09	91.15	92.88	94.21	90.84	94.66	89.99	92.25	92.19
As	1	2	2	2	0	1	0	0	3	6
Ba	298	194	485	209	275	197	227	220	356	277
Ba	298	194	485	209	275	197	227	220	356	277
Co	11	15	14	9	19	12	13	16	11	22
Cr	113	110	116	120	138	121	128	125	132	132
Cu	15	17	22	17	31	19	21	19	20	29
Ga	10	13	13	11	16	12	13	14	13	15
La	24	16	24	22	27	12	22	23	26	30
Ni	33	52	48	46	71	48	57	55	44	61
Nb	11	11	11	11	14	13	12	13	13	14
Pb	13	13	12	18	11	12	13	15	13	10
Rb	55	64	58	58	91	58	63	55	69	80
Sr	168	156	194	167	107	181	125	130	154	128
Sb	0	0	0	0	0	0	0	2	0	9
S	74	43	104	57	35	50	38	32	62	29
Th	9	11	11	10	10	10	8	5	10	12
V	70	78	76	77	99	76	74	79	90	97
Y	24	26	23	24	31	26	26	27	28	33
Zn	42	56	50	53	79	57	51	66	53	73
Zr	223	161	168	188	193	184	187	187	209	203

TABLE 4.91

VAR. / ID.	84-01032	84-01033	84-01034	84-01035	84-01036	84-01037	84-01038	84-01039	84-01040	84-01041
East	29997	29504	29669	29570	29582	29418	29496	29535	29571	29420
North	29305	29582	29660	29760	29735	29959	29916	29805	29840	29681
SiO2	56.02	53.89	55.59	56.17	55.91	56.15	57.64	57.53	55.93	56.53
Al2O3	12.79	12.13	11.94	13.05	11.15	11.96	10.94	10.32	11.86	12.24
TiO2	0.75	0.75	0.70	0.77	0.86	0.79	0.67	0.65	0.63	0.75
Fe2O3	5.21	5.29	4.90	5.57	5.08	5.08	4.36	4.18	4.76	5.12
MgO	3.91	4.42	3.89	4.57	4.27	4.09	3.65	3.75	3.40	4.25
CaO	9.24	11.15	11.45	8.04	9.57	9.27	11.44	11.90	10.72	9.32
Na2O	1.48	1.36	1.46	1.60	1.76	1.75	1.71	1.58	1.73	1.52
K2O	2.38	2.16	2.18	2.26	1.80	2.00	1.83	1.84	2.06	2.17
MnO	0.09	0.11	0.10	0.09	0.08	0.12	0.09	0.08	0.10	0.09
P2O5	0.17	0.19	0.16	0.18	0.19	0.19	0.16	0.15	0.15	0.18
Total	92.04	91.45	92.37	92.30	90.67	91.40	92.49	91.98	91.34	92.17
As	0	2	0	2	2	0	0	3	2	0
Ba	275	203	252	216	182	202	207	248	203	210
Co	17	14	12	13	11	12	13	9	12	11
Cr	110	138	134	134	249	152	151	153	112	157
Cu	16	23	20	10	10	9	8	12	10	9
Ga	14	14	13	13	13	13	13	11	12	13
La	22	22	21	26	29	34	16	25	20	22
Ni	48	54	51	66	52	53	46	43	54	54
Nb	12	12	12	14	13	13	11	11	11	13
Pb	14	11	16	13	12	16	14	13	13	11
Rb	76	63	66	66	54	61	55	54	61	64
Sr	176	130	141	107	144	142	167	187	139	146
Sb	0	0	0	0	0	0	0	0	0	0
S	41	55	59	35	38	39	36	48	37	39
Th	7	7	11	7	12	11	8	8	10	10
V	79	80	86	83	91	79	76	84	66	82
Y	26	27	29	25	27	27	27	25	22	26
Zn	58	69	57	62	55	55	45	44	51	60
Zr	186	189	202	200	297	238	228	208	154	233

TABLE 4.91

XRF Analyses: Hawick Formation Equivalent (GWKE50) Part 5

VAR. / ID.	84-01042	84-01044	84-01045	84-01046	84-01047	84-01048	84-01049	84-01050	84-01051	84-01052
East	29389	29393	29736	29746	29955	29994	30050	30013	29960	29910
North	29622	29595	29969	30030	30065	30086	30374	30385	30364	30391
SiO2	54.65	60.52	52.10	57.09	54.10	58.07	60.31	52.49	60.52	56.30
Al2O3	10.12	11.35	9.04	12.72	12.28	13.71	12.83	8.26	13.88	12.96
TiO2	0.70	0.61	0.61	0.73	0.71	0.79	0.79	0.60	0.75	0.69
Fe2O3	4.55	5.21	4.28	5.14	5.13	5.21	5.19	3.85	5.21	4.94
MgO	4.23	5.59	3.20	4.09	4.19	4.27	4.28	3.31	4.06	3.94
CaO	12.27	7.22	10.18	8.81	10.39	8.21	7.87	16.74	6.63	8.94
Na2O	1.43	1.40	1.56	1.38	1.38	1.54	1.68	1.48	1.85	1.75
K2O	1.91	1.81	1.68	2.35	2.35	2.54	2.06	1.33	2.30	2.25
MnO	0.08	0.09	0.07	0.09	0.09	0.06	0.07	0.12	0.07	0.07
P2O5	0.17	0.14	0.13	0.16	0.16	0.17	0.18	0.19	0.16	0.16
Total	90.11	93.94	82.85	92.56	90.78	94.57	95.26	88.37	95.43	92.00
As	3	0	0	0	0	2	2	2	0	1
Ba	204	278	170	226	200	228	362	505	229	216
Co	13	12	14	13	15	17	15	14	15	13
Cr	176	104	139	140	137	140	153	113	120	110
Cu	16	4	4	16	17	10	20	19	19	20
Ga	13	10	12	13	12	14	13	10	15	13
La	23	28	19	20	15	26	21	19	17	25
Ni	52	42	47	54	56	60	53	39	60	51
Nb	12	10	10	14	12	13	13	12	12	13
Pb	14	12	14	9	15	13	13	22	16	15
Rb	59	53	53	70	71	79	65	43	70	66
Sr	177	45	167	110	141	87	122	237	104	139
Sb	0	2	0	0	0	0	0	0	0	0
S	46	56	36	52	35	41	50	150	47	44
Th	10	7	6	8	5	6	8	8	8	6
V	85	61	74	81	87	88	86	64	73	74
Y	27	22	24	25	26	25	27	25	23	25
Zn	49	52	47	60	58	57	64	55	68	57
Zr	255	160	201	209	184	190	222	191	169	162

TABLE 4.91

VAR. / ID.	84-01053	84-01054	84-01055	84-01056	84-01057	84-01058	84-01059	84-01060	84-01061	84-01062
East	29910	29863	29850	29835	29666	29584	29655	29673	29715	29733
North	30332	30308	30287	30270	30085	30346	30386	30400	30068	30043
SiO2	56.45	56.02	60.53	56.71	52.82	58.50	58.63	55.86	54.76	53.63
Al2O3	12.17	10.89	13.44	10.05	10.48	12.05	10.80	11.88	10.81	10.57
TiO2	0.67	0.68	0.76	0.62	0.62	0.68	0.59	0.69	0.67	0.68
Fe2O3	5.11	5.01	4.98	4.38	3.89	4.63	4.21	4.66	4.24	4.63
MgO	4.61	4.21	4.09	4.09	3.54	3.90	3.66	4.01	3.89	3.71
CaO	9.57	11.21	8.09	13.63	14.92	9.28	10.63	9.41	11.96	13.70
Na2O	1.67	1.39	1.50	1.54	1.59	1.66	1.51	1.31	1.52	1.43
K2O	1.99	2.01	2.38	1.65	1.86	2.07	1.98	2.19	1.90	1.82
MnO	0.10	0.11	0.08	0.13	0.11	0.09	0.07	0.08	0.09	0.10
P2O5	0.16	0.17	0.17	0.17	0.16	0.16	0.15	0.16	0.15	0.18
Total	92.50	91.70	96.02	92.97	89.99	93.02	92.23	90.25	89.99	90.45
As	2	0	5	2	1	0	0	2	2	0
Ba	188	208	235	190	172	194	182	184	174	160
Co	11	14	11	11	8	14	12	14	11	13
Cr	119	121	150	98	137	127	111	130	138	133
Cu	24	20	16	25	18	6	10	17	4	15
Ga	12	13	12	12	12	14	13	12	10	12
La	26	21	28	26	28	24	20	16	28	21
Ni	58	51	51	46	47	47	48	47	50	49
Nb	12	12	13	12	12	10	10	12	12	13
Pb	12	14	13	16	12	15	16	13	12	16
Rb	58	60	72	50	53	60	59	65	58	54
Sr	122	122	86	156	183	138	165	141	152	150
Sb	0	0	0	2	0	0	0	1	1	0
S	50	47	213	52	51	34	38	32	38	38
Th	11	8	11	11	9	8	10	7	9	6
V	70	74	90	75	73	71	76	78	73	77
Y	24	28	27	28	27	24	23	25	27	26
Zn	58	53	57	56	45	46	46	49	54	53
Zr	171	171	203	162	187	190	163	203	216	215

TABLE 4.91

XRF Analyses: Hawick Formation Equivalent (GWKE50) Part 7

VAR. / ID.	84-01063	84-01064	84-01065	84-01066	84-01067	84-01068	84-01069	84-01070	84-01071	84-01072
East	29813	29843	29819	29775	29759	29657	29623	29626	29604	29555
North	30105	30506	30473	30456	30458	30458	30496	30516	30530	30558
SiO2	57.99	53.47	57.62	54.63	57.08	53.44	58.35	52.59	48.13	59.46
Al2O3	10.49	10.12	10.14	10.91	8.52	10.89	11.50	11.07	8.12	10.57
TiO2	0.58	0.67	0.77	0.73	0.60	0.69	0.64	0.70	0.55	0.72
Fe2O3	4.11	4.19	4.63	5.00	4.07	4.91	4.57	4.76	3.55	4.74
MgO	3.71	3.73	4.01	4.28	3.49	4.43	3.80	4.50	3.23	4.08
CaO	10.22	12.62	11.08	8.54	12.99	12.39	10.02	13.36	19.10	8.65
Na2O	1.42	1.42	1.61	1.27	1.35	1.52	1.53	1.42	1.50	1.50
K2O	1.94	1.88	1.61	1.97	1.51	1.72	1.99	1.79	1.52	1.89
MnO	0.07	0.10	0.12	0.07	0.09	0.09	0.08	0.09	0.12	0.07
P2O5	0.15	0.16	0.17	0.16	0.13	0.18	0.16	0.17	0.15	0.17
Total	90.68	88.36	91.76	87.56	89.83	90.26	92.64	90.45	85.97	91.85
As	2	0	1	0	7	0	0	2	0	2
Ba	155	177	198	185	189	233	259	286	151	24*
Co	8	15	16	12	12	15	12	13	9	10
Cr	135	159	220	160	162	150	140	131	153	170
Cu	10	10	11	14	12	18	12	19	13	10
Ga	10	9	12	11	9	12	11	12	9	12
La	19	17	18	19	20	18	18	21	15	24
Ni	42	43	44	48	31	53	43	48	39	42
Nb	11	12	12	12	9	13	10	13	11	11
Pb	11	15	12	15	12	16	13	15	16	13
Rb	57	54	47	58	44	49	59	54	44	55
Sr	136	165	146	131	181	183	190	202	205	151
Sb	0	3	1	0	0	0	2	3	2	0
S	29	35	37	32	46	70	48	63	51	50
Th	8	6	11	7	8	10	9	7	10	14
V	76	69	83	78	70	77	77	74	67	77
Y	24	26	26	26	24	27	23	28	24	26
Zn	41	45	51	53	38	59	47	58	38	52
Zr	191	223	276	222	239	239	203	206	200	267

TABLE 4.91

VAR. / ID.	84-01073	84-01074	84-01075	84-01076	84-01077	84-01078
East	29551	29533	29513	29495	29460	29447
North	30574	30640	30645	30657	30699	30173
SiO2	55.94	55.65	56.99	50.39	50.76	60.21
Al2O3	12.60	11.64	12.03	11.89	9.02	11.09
TiO2	0.70	0.67	0.70	0.68	0.55	0.71
Fe2O3	5.05	4.68	5.00	5.27	4.27	4.50
MgO	4.12	4.67	4.64	4.31	3.79	4.16
CaO	9.06	10.52	10.04	12.19	15.86	9.07
Na2O	1.50	1.51	1.47	1.27	1.40	1.77
K2O	2.50	1.98	1.97	2.14	1.49	1.80
MnO	0.08	0.07	0.09	0.10	0.09	0.07
P2O5	0.17	0.16	0.16	0.15	0.13	0.17
Total	91.72	91.55	93.09	88.39	87.36	93.55
As	0	1	5	1	0	3
Ba	271	252	210	217	192	207
Co	14	13	13	15	12	11
Cr	129	136	132	115	118	158
Cu	18	19	27	22	15	12
Ga	13	11	13	12	11	10
La	21	27	25	25	21	22
Ni	55	47	52	53	41	44
Nb	12	11	11	13	9	11
Pb	15	14	47	18	14	13
Rb	79	58	59	64	43	52
Sr	163	178	154	186	219	134
Sb	0	0	0	0	0	0
S	57	48	80	40	43	41
Th	10	5	9	10	4	8
V	89	82	71	81	68	80
Y	25	25	28	26	24	26
Zn	61	48	59	64	51	47
Zr	173	207	204	163	174	231

TABLE 4.91

XRF Analyses: Slieve na Calliagh Formation (GWKE51) Part 1

VAR. / ID.	84-01079	84-01080	84-01081	84-01082	84-01083	84-01084	84-01085
East	29447	29447	29447	29447	29447	29447	29447
North	30173	30173	30173	30173	30173	30173	30173
SiO2	56.27	59.48	59.24	56.70	61.01	56.73	54.52
Al2O3	14.51	10.87	17.43	11.23	14.15	14.94	10.31
TiO2	0.81	0.74	1.01	0.72	0.86	0.66	0.63
Fe2O3	6.49	5.04	8.12	4.22	7.01	4.61	4.63
MgO	4.72	4.05	5.29	3.77	4.53	3.03	3.49
CaO	7.45	8.98	0.26	11.38	3.50	10.01	10.58
Na2O	1.55	1.54	2.79	1.45	1.59	1.39	1.61
K2O	2.53	2.00	2.07	1.93	2.04	2.64	1.72
MnO	0.08	0.10	0.08	0.07	0.06	0.13	0.08
P2O5	0.16	0.16	0.21	0.17	0.19	0.16	0.15
Total	94.57	92.96	96.50	91.64	94.94	94.30	87.72
As	2	3	33	2	0	0	0
Ba	261	218	385	275	221	211	209
Co	16	12	25	10	17	9	11
Cr	123	187	248	161	124	120	116
Cu	20	13	26	4	2	6	10
Ga	15	12	17	12	14	12	12
La	22	22	20	16	32	27	20
Ni	68	40	173	53	79	33	48
Nb	13	11	13	12	13	11	12
Pb	12	14	11	12	10	13	13
Rb	80	56	55	58	62	70	49
Sr	105	124	125	169	45	78	145
Sb	0	0	0	0	0	0	4
S	27	35	37	157	29	44	69
Th	8	9	11	10	10	8	10
V	90	75	116	89	90	69	70
Y	27	24	22	27	24	24	23
Zn	74	56	79	150	98	43	85
Zr	165	254	186	246	192	183	182

TABLE 4.92

XRF Analyses: Marchburn Formation (FOR1)

Part 1

VAR. / ID.	AX-54	AX-156	AX-214	AX-215	AX-216	AX-217	AX-224	AX-292	AX-293	AX-294
K/Na	0.17	0.23	0.30	0.47	0.61	0.21	0.48	0.42	0.46	0.21
Al/Si	0.23	0.22	0.24	0.24	0.26	0.23	0.23	0.22	0.24	0.19
Fe+Mg	13.15	14.86	14.30	14.42	13.46	12.04	15.72	12.89	12.99	11.00
Fe/Mg	1.93	1.54	1.54	1.58	1.26	1.77	1.43	1.88	1.94	1.97
Al/Ca+Na	1.62	2.30	2.20	2.91	2.73	1.87	2.08	2.39	2.44	1.71
La/Y	1.42	0.92	1.07	1.10	1.29	1.23	1.08	0.84	1.30	0.85
Nb/Y	0.68	0.60	0.61	0.62	0.57	0.58	0.60	0.55	0.61	0.56
Nb/P	52.50	53.57	51.52	81.82	61.54	60.00	33.33	58.62	36.84	71.43
Rb/Sr	0.02	0.06	0.06	0.15	0.10	0.04	0.09	0.18	0.20	0.07
Ni/Co	1.39	1.68	1.74	2.35	2.17	1.37	1.20	1.59	1.39	1.87
Cu/Co	0.75	0.62	0.66	0.81	0.97	0.61	0.57	0.86	0.50	0.74
Zn/Co	2.78	2.46	2.54	1.95	2.97	2.05	2.38	2.31	2.22	2.06
Zr/Nb	9.24	12.07	10.94	10.94	11.69	9.83	11.53	10.59	11.36	11.53
K/K+Na	14.74	18.47	23.08	32.16	37.79	17.29	32.36	29.47	31.62	17.05
K+Na	4.41	4.44	5.33	4.54	5.53	5.84	4.45	4.31	4.87	4.75

XRF Analyses: Marchburn Formation (FOR1)

Part 2

VAR. / ID.	A1	A232	A233	A234	N237	N238	N241	N292	N294	A297
K/Na	0.37	0.49	0.57	0.47	0.45	0.76	0.75	0.82	0.35	0.67
Al/Si	0.18	0.22	0.24	0.24	0.22	0.23	0.17	0.23	0.21	0.23
Fe+Mg	14.71	19.79	17.08	20.68	22.83	21.01	14.75	20.23	20.87	17.38
Fe/Mg	1.86	1.37	1.51	1.53	1.09	1.52	1.87	1.48	1.44	1.70
Al/Ca+Na	1.53	2.48	2.25	2.42	1.50	2.27	1.08	2.01	1.77	2.82
La/Y	0.30	0.57	0.57	0.74	1.13	0.30	0.89	0.68	0.64	0.88
Nb/Y	0.30	0.54	0.57	0.59	0.35	0.50	0.50	0.55	0.48	0.58
Nb/P	57.14	75.00	77.27	72.73	47.06	50.00	32.56	57.14	60.00	73.68
Rb/Sr	0.12	0.17	0.18	0.13	0.12	0.28	0.08	0.25	0.10	0.29
Ni/Co	2.21	4.52	3.82	3.82	10.84	5.79	3.29	6.43	3.61	3.25
Cu/Co	1.13	1.31	1.46	1.33	2.81	0.92	1.18	1.00	1.10	0.91
Zn/Co	3.08	2.62	3.82	2.39	2.26	1.46	2.07	1.51	3.06	1.75
Zr/Nb	13.88	9.67	10.35	9.50	12.50	13.10	12.14	10.58	10.00	10.21
K/K+Na	26.82	32.67	36.48	32.15	30.96	43.08	42.89	45.09	25.68	40.00
K+Na	3.58	4.01	4.55	3.95	2.81	3.90	4.08	3.77	3.66	4.55

TABLE 4.93

XRF Analyses: Marchburn Formation (FOR1)

Part 3

VAR. / ID.	A299	W379	W380	N413	N426	N430	N431	N433	C469	C472
K/Na	0.51	0.45	0.56	0.25	0.29	0.47	0.24	0.58	0.33	0.14
Al/Si	0.18	0.18	0.18	0.15	0.19	0.23	0.19	0.18	0.21	0.21
Fe+Mg	12.64	18.78	19.75	17.95	13.90	17.23	16.65	11.59	17.78	13.25
Fe/Mg	2.05	1.10	1.13	0.92	1.84	1.64	1.16	1.96	1.34	2.10
Al/Ca+Na	2.22	1.38	1.71	0.50	1.61	2.38	0.90	2.25	1.58	2.09
La/Y	1.00	0.52	1.00	0.65	1.11	0.79	0.83	0.90	0.41	1.62
Nb/Y	0.61	0.43	0.33	0.43	0.52	0.50	0.39	0.55	0.56	0.65
Nb/P	60.87	55.56	36.36	66.67	41.18	66.67	50.00	66.67	78.95	58.62
Rb/Sr	0.16	0.06	0.09	0.12	0.06	0.16	0.07	0.12	0.10	0.05
Ni/Co	2.65	7.10	6.55	12.40	2.48	4.31	5.38	2.91	4.68	2.08
Cu/Co	0.87	0.97	1.07	1.23	1.35	1.38	0.90	1.27	1.21	0.63
Zn/Co	2.43	2.20	2.38	1.63	3.65	2.58	1.93	3.18	2.79	2.96
Zr/Nb	11.29	11.20	15.38	10.80	11.71	10.07	13.78	11.19	8.47	10.59
K/K+Na	33.61	31.14	35.75	19.89	22.37	31.90	19.30	36.77	24.61	12.59
K+Na	4.76	3.34	3.58	1.81	4.56	4.20	2.85	4.65	3.86	5.40

XRF Analyses: Marchburn Formation (FOR1)

Part 4

VAR. / ID.	C473	C474	N476	N478	N480	W506	N542	N543	N591	W603
K/Na	0.42	0.27	0.47	0.52	0.64	1.02	0.27	0.41	0.43	0.66
Al/Si	0.18	0.19	0.23	0.22	0.22	0.23	0.20	0.19	0.22	0.17
Fe+Mg	12.33	14.45	24.26	14.32	19.61	11.99	25.07	19.37	15.92	14.17
Fe/Mg	2.15	2.09	1.19	2.05	1.29	4.38	1.09	1.11	1.70	1.22
Al/Ca+Na	2.35	2.18	2.15	2.34	1.76	3.34	1.95	1.86	2.11	1.97
La/Y	1.25	0.77	0.58	0.89	0.70	0.60	0.48	0.61	0.60	0.65
Nb/Y	0.85	0.47	0.35	0.56	0.55	0.48	0.60	0.39	0.53	0.50
Nb/P	85.00	66.67	57.89	60.00	55.00	70.59	60.00	60.00	84.21	86.67
Rb/Sr	0.15	0.11	0.13	0.16	0.23	0.53	0.09	0.16	0.16	0.38
Ni/Co	3.81	3.59	8.23	4.17	8.00	4.22	4.61	8.12	5.58	8.42
Cu/Co	0.86	0.59	1.31	1.44	1.43	0.34	0.95	1.15	1.58	0.89
Zn/Co	2.57	3.18	2.00	3.78	2.00	2.12	2.07	2.15	4.42	3.37
Zr/Nb	9.82	11.43	11.00	10.33	10.82	15.42	9.40	11.89	9.38	11.69
K/K+Na	29.64	21.24	32.12	34.11	39.20	50.44	21.18	28.96	29.95	39.61
K+Na	4.42	4.52	3.02	3.87	3.75	3.41	2.55	3.35	3.74	4.67

TABLE 4.93

XRF Analyses: Marchburn Formation (FOR1)

Part 5

VAR. / ID.	W604	N610	N619	AX866
K/Na	0.70	0.25	0.63	0.76
Al/Si	0.19	0.22	0.20	0.20
Fe+Mg	25.03	16.44	13.57	14.89
Fe/Mg	1.12	1.55	1.89	1.55
Al/Ca+Na	2.66	1.88	2.40	1.84
La/Y	0.54	0.56	0.60	1.29
Nb/Y	0.38	0.56	0.53	0.46
Nb/P	56.25	78.95	69.57	38.24
Rb/Sr	0.23	0.12	0.14	0.14
Ni/Co	6.32	4.22	4.11	1.88
Cu/Co	1.06	1.04	1.00	0.92
Zn/Co	2.55	3.33	4.06	3.00
Zr/Nb	13.56	10.13	11.25	12.69
K/K+Na	41.25	19.71	38.48	43.33
K+Na	3.20	3.50	4.99	6.00

TABLE 4.93

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 1

VAR. / ID.	AX-62	AX-63	AX-131	AX-132	AX-133	AX-134	AX-135	AX-136	AX-137	AX-140
K/Na	0.77	0.68	0.82	1.17	0.50	0.58	0.85	1.13	1.04	0.57
Al/Si	0.20	0.24	0.22	0.25	0.19	0.19	0.22	0.22	0.21	0.23
Fe+Mg	8.96	11.37	11.09	10.98	8.85	8.00	11.04	13.69	10.92	9.22
Fe/Mg	1.78	1.97	1.99	1.82	1.76	2.11	1.83	1.23	1.35	2.17
Al/Ca+Na	1.37	4.96	4.10	5.22	4.11	4.36	5.07	2.83	2.35	4.07
La/Y	1.21	1.21	1.64	1.46	1.26	1.26	1.42	1.57	1.52	1.48
Nb/Y	0.67	0.61	0.56	0.75	0.70	0.70	0.69	0.54	0.64	0.64
Nb/P	100.00	100.00	73.68	105.88	100.00	86.36	105.88	53.57	100.00	94.12
Rb/Sr	0.44	0.59	0.25	0.84	0.25	0.65	0.62	0.14	0.37	0.33
Ni/Co	1.88	2.11	1.36	2.22	1.21	1.28	1.85	3.04	2.09	1.34
Cu/Co	0.55	0.71	0.40	0.93	0.46	0.40	0.62	1.11	0.63	0.54
Zn/Co	1.48	1.66	1.83	2.56	1.69	1.33	1.91	2.67	1.81	1.89
Zr/Nb	13.13	14.05	17.43	12.33	14.88	17.37	13.39	15.93	15.63	13.94
K/K+Na	43.49	40.55	45.09	53.96	33.33	36.63	45.92	53.09	51.08	36.19
K+Na	3.38	4.34	4.68	4.54	4.08	4.04	3.92	4.05	3.70	4.67

-2799-

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 2

VAR. / ID.	AX-141	AX-149	AX-169	AX-170	AX-171	AX-172	AX-202	AX-204	AX-222	AX-223
K/Na	0.71	0.86	0.84	1.15	1.27	0.95	1.50	0.78	1.40	1.25
Al/Si	0.24	0.24	0.24	0.21	0.20	0.21	0.24	0.23	0.17	0.21
Fe+Mg	12.05	10.13	8.62	11.28	10.00	13.78	12.16	9.23	11.57	12.59
Fe/Mg	2.09	2.45	2.59	1.37	1.64	1.26	1.52	2.18	1.17	1.23
Al/Ca+Na	4.47	3.96	3.22	2.17	2.27	2.42	3.25	5.20	8.36	4.86
La/Y	1.38	0.97	1.16	1.36	1.19	1.63	1.57	1.07	1.04	1.48
Nb/Y	0.69	0.61	0.64	0.57	0.63	0.67	0.70	0.60	0.64	0.65
Nb/P	117.65	82.61	94.12	84.21	141.67	94.74	105.00	90.00	133.33	125.00
Rb/Sr	0.34	0.42	0.48	0.26	0.38	0.20	0.56	0.60	1.00	0.56
Ni/Co	1.40	1.83	1.28	2.56	2.31	2.25	3.10	0.67	5.68	5.20
Cu/Co	0.56	0.58	0.56	0.56	0.55	0.69	0.77	0.44	0.45	0.46
Zn/Co	1.87	2.19	1.94	1.88	2.28	2.41	2.90	1.28	1.61	1.88
Zr/Nb	12.50	13.21	15.44	22.38	17.53	15.72	20.52	14.33	14.56	15.20
K/K+Na	41.49	46.28	45.61	53.58	55.92	48.77	60.00	43.72	58.36	55.56
K+Na	4.17	4.43	4.21	3.49	3.38	3.67	3.45	4.30	2.81	2.88

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 3

VAR. / ID.	AX-296	AX-298	AX-299	AX-300	AX-301	AX-302	AX-305	AX-306	AX-307	AX-308
K/Na	1.00	0.38	0.65	0.63	0.80	0.59	0.98	0.98	0.86	1.49
Al/Si	0.28	0.16	0.24	0.18	0.21	0.18	0.22	0.24	0.24	0.23
Fe+Mg	12.04	6.99	10.41	7.48	10.43	8.09	11.69	11.14	11.05	12.65
Fe/Mg	2.05	1.71	1.72	2.03	1.60	1.77	1.84	1.81	2.26	1.37
Al/Ca+Na	6.40	2.17	3.42	2.27	2.61	3.14	3.29	3.64	5.39	2.89
La/Y	1.38	1.60	1.48	1.60	1.60	1.60	1.18	1.36	0.96	1.78
Nb/Y	0.69	0.73	0.60	0.60	0.64	0.60	0.61	0.72	0.67	0.70
Nb/P	111.11	91.67	83.33	92.31	94.12	70.59	100.00	112.50	85.71	94.12
Rb/Sr	0.63	0.24	0.21	0.25	0.39	0.25	0.49	0.54	0.53	0.31
Ni/Co	2.21	0.82	1.70	1.32	1.68	1.34	1.95	2.69	2.17	2.70
Cu/Co	0.88	0.33	0.61	0.38	0.49	0.46	0.62	0.66	0.80	0.85
Zn/Co	2.50	1.24	1.52	1.56	1.49	1.54	1.81	1.75	1.73	2.37
Zr/Nb	13.60	14.18	14.47	15.92	17.88	16.25	18.94	13.67	20.06	18.25
K/K+Na	50.11	27.72	39.26	38.72	44.51	37.02	49.44	49.43	46.35	59.82
K+Na	4.39	4.04	4.61	3.59	3.55	4.16	3.56	4.35	3.97	3.41

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 4

VAR. / ID.	AX-311	DTIA-131	DTIA-212	E146	E148	E150	E151	E152	E153	E155
K/Na	1.27	0.64	0.85	1.27	1.22	1.15	1.03	1.39	1.23	0.58
Al/Si	0.21	0.13	0.24	0.17	0.18	0.20	0.18	0.20	0.22	0.15
Fe+Mg	11.06	6.60	11.05	10.46	11.20	11.49	11.89	10.36	10.78	9.28
Fe/Mg	1.26	2.37	2.07	1.64	1.64	2.03	1.84	1.85	1.59	1.91
Al/Ca+Na	2.43	3.18	4.21	2.28	2.57	3.97	3.06	3.32	2.93	3.25
La/Y	1.21	1.14	1.16	1.04	1.38	1.22	1.08	1.35	1.12	1.25
Nb/Y	0.67	0.62	0.61	0.56	0.65	0.63	0.68	0.70	0.72	0.63
Nb/P	94.12	118.18	90.48	115.38	113.33	106.25	106.25	114.29	112.50	93.75
Rb/Sr	0.54	0.56	0.46	0.63	0.58	0.80	0.60	0.85	0.62	0.34
Ni/Co	2.03	0.39	2.16	4.73	4.18	5.29	4.13	3.50	4.67	3.00
Cu/Co	0.61	0.32	0.63	1.07	1.00	1.14	1.27	0.67	1.33	1.00
Zn/Co	1.94	0.84	2.16	4.20	3.76	4.79	3.60	3.00	4.40	3.00
Zr/Nb	17.00	14.31	17.47	17.13	16.65	17.18	14.82	13.31	12.39	18.53
K/K+Na	55.99	39.20	45.82	56.04	54.92	53.52	50.77	58.16	55.14	36.61
K+Na	3.59	3.98	3.95	3.64	3.86	3.55	3.90	4.23	4.28	3.36

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 5

VAR. / ID.	E156	E157	E159	E160	E161	E162	E163	E164	E165	E166
K/Na	0.65	0.75	0.61	0.61	0.64	0.75	0.81	0.88	0.73	0.85
Al/Si	0.19	0.18	0.14	0.16	0.15	0.15	0.19	0.18	0.14	0.19
Fe+Mg	10.39	11.14	7.29	10.18	10.08	10.16	10.21	11.23	9.31	11.53
Fe/Mg	1.97	2.04	2.28	1.98	2.07	2.27	2.13	2.66	2.35	2.13
Al/Ca+Na	3.61	3.61	2.57	3.01	3.02	3.26	3.71	3.41	3.85	4.50
La/Y	1.31	1.30	1.22	1.04	1.08	1.21	1.23	1.23	1.04	1.55
Nb/Y	0.58	0.60	0.61	0.56	0.54	0.58	0.65	0.63	0.58	0.55
Nb/P	88.24	94.74	93.33	87.50	76.47	93.33	89.47	82.61	107.69	94.12
Rb/Sr	0.34	0.40	0.38	0.28	0.26	0.30	0.34	0.32	0.41	0.41
Ni/Co	3.16	3.10	2.64	2.65	3.06	3.50	2.90	3.63	4.00	3.11
Cu/Co	1.16	1.10	1.00	1.20	1.00	1.13	1.10	1.44	1.23	1.28
Zn/Co	3.42	3.05	2.79	3.15	3.53	3.69	3.60	4.31	3.62	3.56
Zr/Nb	14.27	20.56	16.14	19.64	19.23	16.07	13.94	21.58	14.50	15.69
K/K+Na	39.34	42.98	37.89	37.99	38.89	42.73	44.64	46.83	42.23	45.84
K+Na	3.66	3.56	3.88	3.08	3.24	3.30	3.92	3.63	3.41	3.73

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 6

VAR. / ID.	E168	E171	E172	E173	E174	E175	E176	E177	A181	A186
K/Na	0.76	0.83	2.42	0.56	0.84	0.97	0.91	0.68	1.60	1.10
Al/Si	0.17	0.17	0.22	0.18	0.17	0.18	0.18	0.15	0.24	0.19
Fe+Mg	9.01	10.40	12.48	11.92	11.19	9.06	11.43	10.10	10.72	13.29
Fe/Mg	2.25	2.35	2.20	1.88	2.42	2.32	2.74	2.01	2.68	1.71
Al/Ca+Na	3.77	4.13	10.09	2.34	2.88	4.04	4.05	3.57	5.12	3.24
La/Y	1.54	1.45	1.43	1.15	1.04	1.00	1.14	1.21	1.23	1.40
Nb/Y	0.67	0.48	0.63	0.59	0.63	0.59	0.47	0.58	0.65	0.76
Nb/P	100.00	88.89	100.00	59.26	94.44	106.67	89.47	93.33	100.00	100.00
Rb/Sr	0.43	0.41	0.54	0.17	0.33	0.55	0.42	0.43	0.79	0.59
Ni/Co	2.87	3.60	3.84	1.92	3.22	3.00	2.19	3.33	3.61	4.24
Cu/Co	1.40	1.47	1.47	0.88	1.11	1.07	0.85	1.20	1.28	1.24
Zn/Co	3.33	3.67	3.68	2.40	3.33	4.21	2.30	3.80	3.89	3.94
Zr/Nb	13.88	15.75	13.21	12.94	20.24	13.94	14.82	17.71	13.47	17.00
K/K+Na	43.13	45.33	70.74	35.97	45.61	49.35	47.55	40.65	61.57	52.29
K+Na	3.71	3.75	2.70	3.92	3.42	3.87	3.87	3.10	4.71	3.50

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 7

VAR. / ID.	A187	A188	A189	A190	A191	A192	A193	A216	A219	A221
K/Na	1.23	1.13	1.22	1.86	1.42	1.58	2.39	0.84	0.92	0.84
Al/Si	0.19	0.21	0.19	0.17	0.21	0.21	0.17	0.19	0.24	0.18
Fe+Mg	11.16	10.93	14.94	12.79	11.32	13.96	9.30	10.33	11.30	10.95
Fe/Mg	1.80	1.61	1.49	1.34	1.58	1.47	1.61	1.94	2.25	2.18
Al/Ca+Na	2.87	4.35	2.91	2.01	4.75	3.26	0.76	3.85	5.00	4.27
La/Y	1.23	1.68	1.62	1.17	1.21	1.39	1.20	1.23	1.07	1.21
Nb/Y	0.73	0.73	0.65	0.53	0.71	0.71	0.70	0.69	0.69	0.59
Nb/P	100.00	94.12	70.83	84.21	106.25	111.11	93.33	105.88	100.00	106.25
Rb/Sr	0.50	0.97	0.55	0.61	1.18	0.85	0.29	0.43	0.52	0.44
Ni/Co	2.85	4.00	4.06	4.90	4.64	3.48	4.77	3.75	4.06	4.19
Cu/Co	0.65	1.22	1.18	0.81	1.43	0.88	1.23	1.19	1.41	1.06
Zn/Co	2.54	3.28	3.71	2.43	3.43	2.28	3.85	3.31	3.53	3.44
Zr/Nb	16.31	12.31	15.59	27.75	11.18	19.45	12.71	12.89	15.10	16.71
K/K+Na	55.14	53.03	55.00	65.04	58.72	61.31	70.47	45.53	47.89	45.76
K+Na	3.70	3.96	3.40	3.49	3.90	3.67	3.42	3.58	4.26	3.54

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 8

VAR. / ID.	A222	A225	A227	A228	A229	N242	N250	N251	N252	N253
K/Na	0.99	1.12	0.37	0.69	0.92	0.91	1.11	1.01	1.09	1.00
Al/Si	0.19	0.18	0.15	0.19	0.21	0.24	0.21	0.20	0.19	0.19
Fe+Mg	10.88	9.90	13.36	10.35	10.96	11.78	10.68	10.63	10.87	9.08
Fe/Mg	2.23	1.97	2.44	2.08	2.15	2.08	2.18	2.51	2.29	2.45
Al/Ca+Na	3.45	1.44	1.33	3.32	4.53	5.12	4.09	4.46	4.51	3.32
La/Y	1.12	1.04	0.54	1.44	1.04	1.78	1.21	1.28	1.31	1.33
Nb/Y	0.58	0.67	0.36	0.64	0.64	0.74	0.68	0.72	0.69	0.76
Nb/P	88.24	106.67	76.92	100.00	105.88	111.11	111.76	100.00	120.00	94.12
Rb/Sr	0.45	0.42	0.11	0.34	0.54	0.65	0.49	0.55	0.63	0.42
Ni/Co	3.53	4.14	1.40	3.41	4.19	4.29	3.95	3.24	3.55	4.38
Cu/Co	1.21	0.91	0.73	0.82	1.44	1.35	1.10	1.14	0.95	1.38
Zn/Co	2.89	2.59	2.40	3.12	4.00	5.59	3.10	3.43	3.15	4.31
Zr/Nb	15.60	13.69	13.20	14.00	14.78	15.10	16.79	13.11	15.06	16.19
K/K+Na	49.71	52.91	27.07	40.69	47.95	47.52	52.67	50.24	52.25	50.00
K+Na	3.48	3.61	3.51	4.35	4.40	4.04	3.74	4.16	3.56	3.42

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 9

VAR. / ID.	N255	N256	N257	N258	N259	N260	N261	N262	N263	N265
K/Na	0.86	0.94	0.71	0.80	0.46	0.48	0.54	1.06	1.01	1.07
Al/Si	0.20	0.22	0.20	0.19	0.20	0.13	0.14	0.23	0.23	0.21
Fe+Mg	12.06	10.41	9.65	9.73	9.08	7.01	7.77	10.25	11.04	10.28
Fe/Mg	2.20	2.74	2.20	1.98	2.00	2.22	2.47	2.44	2.42	2.89
Al/Ca+Na	4.30	4.07	3.31	3.93	3.12	3.27	3.55	4.63	4.92	4.62
La/Y	1.07	1.28	1.32	1.29	1.43	1.30	1.13	1.22	1.47	1.23
Nb/Y	0.67	0.66	0.72	0.71	0.67	0.60	0.61	0.74	0.67	0.73
Nb/P	100.00	105.56	100.00	100.00	87.50	80.00	77.78	117.65	111.11	100.00
Rb/Sr	0.52	0.50	0.30	0.51	0.27	0.35	0.29	0.66	0.57	0.45
Ni/Co	3.45	3.39	3.24	2.89	3.29	4.00	3.50	4.18	3.18	2.52
Cu/Co	1.05	1.33	1.12	0.84	1.00	1.18	1.00	1.24	1.05	0.63
Zn/Co	3.00	3.11	3.76	2.63	3.12	4.00	3.17	3.59	3.18	2.44
Zr/Nb	18.28	14.84	13.89	13.40	14.50	12.83	14.00	13.20	17.75	14.69
K/K+Na	46.17	48.41	41.45	44.31	31.61	32.33	34.86	51.36	50.37	51.72
K+Na	4.05	4.40	4.68	4.13	4.84	3.65	3.93	4.05	4.09	4.08

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 10

VAR. / ID.	N267	N268	N269	N270	N274	K280	A302	A303	A304	A305
K/Na	0.80	0.79	0.86	0.79	1.49	1.38	1.07	1.37	1.15	1.86
Al/Si	0.20	0.21	0.19	0.20	0.19	0.22	0.19	0.21	0.19	0.34
Fe+Mg	11.77	11.35	10.49	9.73	12.02	10.87	11.49	11.81	12.06	13.41
Fe/Mg	1.82	2.15	2.33	2.54	1.63	1.84	1.64	1.60	1.70	2.65
Al/Ca+Na	3.58	3.37	3.23	4.68	2.58	3.33	2.74	3.57	3.47	9.88
La/Y	1.33	1.52	1.08	1.46	1.04	1.28	1.33	1.22	1.21	1.32
Nb/Y	0.63	0.63	0.64	0.73	0.64	0.60	0.67	0.74	0.71	0.65
Nb/P	80.95	77.27	88.89	105.56	100.00	83.33	94.12	94.44	94.44	125.00
Rb/Sr	0.38	0.29	0.44	0.51	0.75	0.82	0.35	0.53	0.54	1.07
Ni/Co	3.32	3.81	3.15	3.53	3.79	4.19	3.44	4.22	5.06	3.09
Cu/Co	1.05	1.25	0.90	1.29	0.79	1.00	1.00	1.17	1.11	1.50
Zn/Co	3.11	4.25	2.65	3.00	2.74	2.56	3.61	3.89	3.72	4.27
Zr/Nb	14.76	12.29	14.13	13.95	13.69	12.07	14.81	13.29	17.24	10.25
K/K+Na	44.33	44.25	46.32	44.16	59.79	57.96	51.78	57.83	53.45	65.00
K+Na	3.97	4.00	3.80	3.94	3.78	4.21	3.65	3.96	3.48	4.60

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TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 11

VAR. / ID.	A306	A307	N308	A309	A310	A311	A313	A315	K317	K318
K/Na	0.87	0.61	1.22	0.55	0.64	0.79	0.66	1.03	1.54	1.49
Al/Si	0.21	0.17	0.26	0.19	0.17	0.18	0.17	0.21	0.19	0.17
Fe+Mg	12.22	11.47	11.48	14.84	13.16	9.81	11.57	10.69	10.85	12.80
Fe/Mg	2.35	1.75	2.45	1.54	1.31	2.41	2.14	2.30	1.44	1.20
Al/Ca+Na	3.78	1.83	5.45	2.53	1.97	4.04	3.72	3.23	2.54	1.09
La/Y	1.24	1.41	1.26	1.58	1.13	0.96	1.10	1.43	1.17	1.27
Nb/Y	0.72	0.52	0.74	0.67	0.52	0.62	0.55	0.71	0.65	0.62
Nb/P	95.45	51.85	95.24	39.02	70.59	94.12	94.12	105.26	100.00	84.21
Rb/Sr	0.57	0.04	0.57	0.09	0.17	0.53	0.44	0.43	0.33	0.70
Ni/Co	4.29	3.71	3.00	4.44	3.40	2.52	3.81	3.39	4.06	4.50
Cu/Co	0.53	1.53	1.45	1.44	0.90	0.81	0.75	1.44	0.89	1.00
Zn/Co	3.59	2.59	4.50	4.83	2.70	2.48	3.19	4.17	3.61	2.93
Zr/Nb	15.38	17.93	11.55	16.50	21.50	13.00	20.06	13.15	13.73	19.13
K/K+Na	46.58	37.96	55.01	35.58	39.21	44.09	39.77	50.65	60.60	59.83
K+Na	3.80	4.61	4.49	3.26	3.29	3.72	3.52	3.83	4.01	3.56

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 12

VAR. / ID.	K321	K322	K323	K325	K327	K328	K330	K331	A334	A335
K/Na	2.65	1.20	1.95	1.11	1.81	1.56	1.18	0.92	0.73	0.68
Al/Si	0.24	0.20	0.26	0.20	0.23	0.22	0.20	0.21	0.17	0.17
Fe+Mg	12.47	12.27	14.28	10.94	13.37	11.77	10.62	12.27	8.98	9.81
Fe/Mg	1.90	1.70	1.50	1.76	1.62	1.47	1.70	2.20	2.49	2.11
Al/Ca+Na	3.78	4.40	5.14	4.12	3.88	3.02	2.68	5.04	4.32	3.85
La/Y	1.40	1.31	1.93	1.38	1.83	1.20	1.54	1.38	1.42	1.55
Nb/Y	0.68	0.73	0.67	0.58	0.66	0.68	0.71	0.73	0.68	0.73
Nb/P	94.44	90.48	71.43	73.68	82.61	106.25	100.00	90.48	86.67	106.67
Rb/Sr	0.63	0.74	0.47	0.64	0.63	0.70	0.53	0.55	0.53	0.38
Ni/Co	4.22	4.16	3.72	4.18	3.84	4.56	4.50	4.17	3.63	3.67
Cu/Co	1.22	1.16	2.00	1.06	1.53	1.13	1.13	1.11	1.00	1.27
Zn/Co	2.22	3.47	4.61	3.53	3.05	4.19	3.94	3.50	2.44	3.73
Zr/Nb	15.24	17.89	12.90	17.86	14.47	14.24	15.65	15.95	19.38	14.56
K/K+Na	72.59	54.50	66.14	52.67	64.39	60.88	54.16	47.87	42.13	40.45
K+Na	3.43	3.89	4.46	3.74	4.24	4.09	3.73	3.74	3.56	3.14

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 13

VAR. / ID.	A336	A337	K337	A338	K373	A377	W382	W383	W384	W385
K/Na	0.69	0.71	1.15	0.70	1.83	0.54	0.55	0.47	1.78	1.28
Al/Si	0.19	0.18	0.17	0.20	0.24	0.18	0.20	0.22	0.18	0.26
Fe+Mg	9.91	10.68	12.60	9.95	10.48	8.72	11.37	9.80	11.88	11.21
Fe/Mg	2.67	2.33	1.51	2.11	1.89	2.56	2.17	2.23	0.91	2.20
Al/Ca+Na	3.66	3.62	2.46	4.45	3.04	3.91	3.40	3.30	0.92	5.09
La/Y	1.32	1.00	1.15	1.25	1.38	1.36	1.52	1.00	1.22	2.17
Nb/Y	0.61	0.55	0.62	0.61	0.71	0.64	0.60	0.74	0.72	0.79
Nb/P	94.44	94.12	94.12	100.00	106.25	106.67	83.33	87.50	100.00	95.00
Rb/Sr	0.37	0.36	0.24	0.43	0.56	0.37	0.22	0.10	0.42	0.23
Ni/Co	3.40	4.92	3.79	2.35	5.13	3.00	3.76	3.31	4.67	3.80
Cu/Co	1.33	1.92	0.89	0.92	1.47	1.06	1.06	0.38	0.93	0.40
Zn/Co	3.07	5.08	3.68	2.58	3.27	3.59	2.53	3.00	2.73	2.87
Zr/Nb	13.47	16.69	18.63	15.29	14.41	12.19	14.07	14.64	14.08	12.00
K/K+Na	40.79	41.60	53.44	41.24	64.66	34.99	35.39	31.78	64.01	56.22
K+Na	3.80	3.63	3.63	3.54	3.82	4.23	4.69	5.79	3.89	5.87

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 14

VAR. / ID.	W386	W387	W388	W389	E391	K394	K395	A396	N397	E404
K/Na	0.93	0.68	1.22	0.83	0.18	1.61	1.04	1.50	0.86	1.17
Al/Si	0.22	0.18	0.14	0.19	0.18	0.23	0.19	0.21	0.18	0.18
Fe+Mg	10.72	7.82	11.07	9.71	10.89	12.17	10.35	13.16	6.86	10.85
Fe/Mg	2.40	2.74	1.73	2.47	1.92	2.00	1.72	1.70	2.12	1.92
Al/Ca+Na	5.07	4.61	2.15	3.68	1.55	6.58	3.84	4.39	4.40	4.76
La/Y	1.09	1.04	1.30	0.90	1.33	1.32	1.04	1.90	1.04	1.03
Nb/Y	0.64	0.75	0.50	0.58	0.52	0.64	0.62	0.60	0.58	0.59
Nb/P	116.67	105.88	48.39	105.88	60.87	112.50	94.12	64.29	107.69	113.33
Rb/Sr	0.64	0.66	0.13	0.39	0.03	1.07	0.68	0.27	0.56	0.93
Ni/Co	5.23	2.75	3.10	2.23	3.38	3.75	4.21	3.06	4.40	2.83
Cu/Co	2.00	2.25	1.25	1.31	1.19	1.15	1.29	1.76	1.60	0.29
Zn/Co	6.38	27.42	3.55	3.92	3.69	4.05	4.14	4.35	3.50	2.13
Zr/Nb	12.29	11.00	14.87	15.11	14.93	12.22	14.19	12.61	14.86	15.00
K/K+Na	48.06	40.58	54.99	45.27	15.55	61.66	50.94	60.04	46.22	53.99
K+Na	4.39	4.14	4.51	4.02	4.76	4.46	4.26	4.88	3.70	3.76

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 15

VAR. / ID.	E407	N410	S449	S450	E452	K462	A463	N486	E503	W580
K/Na	0.30	0.73	1.19	0.69	0.71	1.53	3.29	9.40	1.01	0.61
Al/Si	0.18	0.21	0.25	0.17	0.15	0.18	0.17	0.05	0.19	0.19
Fe+Mg	13.94	10.11	12.17	11.83	8.79	12.66	7.49	4.57	10.53	10.40
Fe/Mg	1.92	1.90	2.57	1.71	2.21	1.46	1.65	2.11	1.92	2.10
Al/Ca+Na	2.95	4.39	5.84	4.53	2.02	1.28	1.29	12.81	3.46	4.15
La/Y	0.70	1.08	1.15	1.11	1.23	1.21	1.18	1.36	0.83	1.37
Nb/Y	0.40	0.67	0.61	0.61	0.73	0.55	0.59	0.55	0.52	0.57
Nb/P	85.71	114.29	111.11	106.25	88.89	61.54	100.00	120.00	100.00	113.33
Rb/Sr	0.21	0.67	0.67	0.71	0.25	0.13	0.73	1.50	0.72	0.32
Ni/Co	2.60	4.06	2.70	3.47	3.67	3.29	4.67	2.30	3.53	3.53
Cu/Co	1.15	1.25	1.45	0.79	1.00	1.65	1.17	0.90	1.33	1.18
Zn/Co	2.65	3.13	4.05	3.05	6.08	4.12	3.75	2.80	4.27	3.24
Zr/Nb	13.33	13.25	13.40	20.35	11.50	14.56	14.77	7.83	16.93	15.53
K/K+Na	23.34	42.36	54.37	40.78	41.42	60.48	76.72	90.38	50.29	38.00
K+Na	3.47	4.32	4.23	3.09	4.08	3.72	3.35	1.04	3.46	4.21

TABLE 4.94

XRF Analyses: Afton Formation Ratio's (FOR3)

Part 16

VAR. / ID.	W582	N602	N612	AX857
K/Na	0.83	1.02	0.88	0.85
Al/Si	0.19	0.21	0.19	0.17
Fe+Mg	10.16	12.50	12.29	9.56
Fe/Mg	2.33	2.64	1.95	2.78
Al/Ca+Na	3.60	5.67	4.10	3.82
La/Y	0.96	0.97	0.94	1.04
Nb/Y	0.56	0.59	0.56	0.63
Nb/P	93.75	105.26	94.74	113.33
Rb/Sr	0.26	0.64	0.48	0.52
Ni/Co	3.44	4.50	4.11	2.80
Cu/Co	1.06	1.31	1.17	1.40
Zn/Co	3.94	4.81	3.61	5.10
Zr/Nb	14.93	17.80	16.00	17.29
K/K+Na	45.35	50.39	46.72	46.02
K+Na	4.41	3.89	3.96	3.52

TABLE 4.94

XRF Analyses: Blackcraig Formation Ratio's (FOR5). Part 1

VAR. / ID.	AX-288	AX-289	AX-290	A2	A6	A7	A12	A13	A14	A15
K/Na	0.63	0.37	0.42	0.36	0.32	0.29	0.41	0.40	0.52	0.43
Al/Si	0.23	0.25	0.24	0.18	0.18	0.17	0.16	0.19	0.15	0.18
Fe+Mg	10.09	17.73	18.33	13.84	13.98	13.81	12.48	14.18	13.11	13.82
Fe/Mg	2.11	1.13	1.22	1.97	1.93	2.08	2.14	1.65	2.14	1.83
Al/Ca+Na	4.40	2.18	2.14	1.43	1.37	1.50	1.22	1.64	1.36	1.58
La/Y	1.28	0.59	0.54	0.48	0.33	0.64	0.36	0.48	0.46	0.48
Nb/Y	0.59	0.52	0.58	0.38	0.30	0.32	0.32	0.41	0.42	0.33
Nb/P	100.00	77.78	88.24	78.57	57.14	66.67	64.29	78.57	84.62	69.23
Rb/Sr	0.38	0.12	0.12	0.11	0.10	0.08	0.10	0.10	0.14	0.14
Ni/Co	1.37	3.91	3.20	2.23	2.39	1.75	1.41	2.00	1.68	1.81
Cu/Co	0.54	1.09	1.00	1.14	1.13	0.92	0.88	1.05	0.96	0.81
Zn/Co	1.83	2.48	2.20	3.41	3.35	2.92	2.00	3.32	2.52	2.85
Zr/Nb	15.76	10.21	10.33	11.55	15.00	13.13	14.22	11.18	10.45	14.11
K/K+Na	38.62	27.05	29.57	26.60	24.40	22.77	29.02	28.57	34.38	30.11
K+Na	4.35	4.14	3.45	3.76	3.77	3.82	3.48	3.78	3.52	3.72

TABLE 4.95

XRF Analyses: Blackcraig Formation Ratio's (FOR5). Part 2

VAR. / ID.	A17	A18	A19	A20	A21	A22	A23	A24	A26	A33
K/Na	1.13	0.38	0.54	0.67	0.86	0.44	0.28	0.37	0.43	0.33
Al/Si	0.23	0.20	0.22	0.26	0.28	0.21	0.21	0.20	0.16	0.19
Fe+Mg	12.51	14.34	14.64	18.22	16.51	15.25	16.30	14.41	13.61	14.31
Fe/Mg	1.67	2.09	1.84	1.68	1.83	1.84	1.50	1.86	2.11	1.86
Al/Ca+Na	2.41	1.95	2.06	2.83	3.15	1.98	2.09	1.82	1.31	1.54
La/Y	0.97	0.67	0.40	0.62	0.75	0.69	0.37	0.62	0.48	0.43
Nb/Y	0.48	0.33	0.40	0.32	0.41	0.38	0.37	0.34	0.40	0.40
Nb/P	88.24	64.29	80.00	68.75	81.25	73.33	73.33	62.50	76.92	80.00
Rb/Sr	0.48	0.13	0.15	0.24	0.32	0.13	0.09	0.12	0.13	0.10
Ni/Co	3.24	2.13	2.12	2.21	2.26	1.96	1.92	1.81	1.95	1.88
Cu/Co	1.33	1.26	1.12	1.57	1.35	1.04	1.00	1.00	1.05	1.00
Zn/Co	3.67	3.22	2.92	3.43	3.32	2.71	3.00	2.85	3.14	3.00
Zr/Nb	16.07	14.33	11.83	13.82	12.46	12.64	13.82	13.60	11.80	12.17
K/K+Na	53.03	27.71	35.20	39.95	46.17	30.77	21.70	26.77	30.00	24.80
K+Na	3.79	4.15	4.29	3.88	4.31	3.90	3.41	3.81	3.80	3.71

TABLE 4.95

XRF Analyses: Blackcraig Formation Ratio's (FOR5). Part 3

VAR. / ID.	A35	A36	A43	A45	A46	A49	A51	A195	A197	A198
K/Na	0.36	0.32	0.41	0.36	0.34	0.37	0.40	0.35	0.42	0.47
Al/Si	0.18	0.19	0.15	0.18	0.18	0.18	0.22	0.19	0.17	0.15
Fe+Mg	12.74	13.37	13.15	14.25	13.40	14.49	15.83	16.11	13.67	13.88
Fe/Mg	2.15	1.83	2.51	1.99	1.90	1.89	1.53	2.13	1.72	2.02
Al/Ca+Na	1.62	1.49	1.21	1.49	1.49	1.66	1.92	1.65	1.58	1.57
La/Y	0.27	0.52	0.54	0.00	0.17	0.43	0.43	0.47	0.59	0.36
Nb/Y	0.35	0.37	0.32	0.33	0.31	0.30	0.30	0.30	0.33	0.29
Nb/P	64.29	71.43	69.23	66.67	64.29	64.29	60.00	60.00	64.29	61.54
Rb/Sr	0.14	0.12	0.12	0.11	0.14	0.13	0.14	0.11	0.14	0.18
Ni/Co	1.96	2.13	1.68	1.66	2.00	2.00	2.33	1.88	1.69	1.65
Cu/Co	1.13	1.13	0.91	0.93	1.05	1.05	0.89	1.08	0.90	0.70
Zn/Co	2.91	3.09	3.05	2.48	3.14	2.86	2.93	3.35	3.66	2.48
Zr/Nb	12.22	13.00	13.22	12.70	13.67	13.67	15.11	17.00	14.00	13.88
K/K+Na	26.62	24.07	28.99	26.55	25.52	26.91	28.39	25.89	29.35	31.78
K+Na	4.32	3.78	3.45	3.88	3.88	3.79	3.84	3.94	4.02	3.65

TABLE 4.95

XRF Analyses: Blackcraig Formation Ratio's (FOR5). Part 4

VAR. / ID.	A199	A200	A201	A202	A203	A204	A205	A207	A208	A209
K/Na	0.30	0.48	0.48	0.40	0.32	0.38	0.29	0.19	0.30	0.36
Al/Si	0.17	0.14	0.15	0.17	0.18	0.18	0.18	0.16	0.19	0.17
Fe+Mg	14.64	11.75	12.69	12.34	15.24	14.33	14.53	14.37	14.90	14.05
Fe/Mg	2.25	2.04	2.19	2.16	1.95	2.08	1.89	1.96	1.83	2.15
Al/Ca+Na	1.28	1.80	1.31	1.44	1.37	1.56	1.47	1.12	1.46	1.32
La/Y	0.32	0.52	0.25	0.52	0.48	0.48	0.45	0.36	0.74	0.50
Nb/Y	0.32	0.32	0.32	0.41	0.33	0.38	0.35	0.36	0.37	0.32
Nb/P	66.67	72.73	64.29	85.71	60.00	68.75	68.75	71.43	71.43	64.29
Rb/Sr	0.09	0.15	0.14	0.12	0.08	0.10	0.08	0.06	0.11	0.11
Ni/Co	1.81	2.17	2.47	2.10	1.84	2.35	2.17	2.63	2.21	2.48
Cu/Co	0.85	0.67	1.11	1.15	0.87	1.15	0.96	0.83	0.89	0.83
Zn/Co	2.59	2.29	3.47	3.10	2.35	4.15	3.08	2.75	2.61	2.96
Zr/Nb	14.70	12.88	15.22	11.92	14.22	17.18	13.36	11.30	11.80	14.89
K/K+Na	22.81	32.44	32.60	28.42	24.00	27.58	22.38	16.24	23.32	26.52
K+Na	3.77	4.10	3.62	3.80	3.50	3.59	3.53	3.14	3.86	3.62

TABLE 4.95

XRF Analyses: Blackcraig Formation Ratio's (FOR5). Part 5

VAR. / ID.	A210	A211	A212	A214	A215	K284	A300	A301	A340	D344
K/Na	0.30	0.34	0.29	0.24	0.20	0.29	0.44	0.33	0.34	0.31
Al/Si	0.19	0.17	0.18	0.19	0.19	0.20	0.16	0.19	0.19	0.19
Fe+Mg	14.72	15.02	15.01	16.09	14.59	15.03	12.49	15.12	16.53	14.44
Fe/Mg	1.70	1.99	1.89	1.69	1.65	1.84	2.06	2.08	1.67	1.95
Al/Ca+Na	1.64	1.12	1.80	2.01	1.82	1.87	1.15	1.41	1.88	1.66
La/Y	0.41	0.40	0.38	0.59	0.52	0.61	0.37	0.41	0.22	0.21
Nb/Y	0.31	0.37	0.28	0.34	0.34	0.32	0.30	0.31	0.31	0.32
Nb/P	52.94	64.71	61.54	71.43	71.43	62.50	61.54	62.50	66.67	69.23
Rb/Sr	0.07	0.09	0.10	0.08	0.07	0.10	0.15	0.15	0.14	0.11
Ni/Co	2.32	2.50	1.91	2.04	2.50	2.00	1.52	2.30	1.58	1.62
Cu/Co	1.08	1.15	0.96	1.09	0.95	1.00	0.92	1.00	0.70	0.86
Zn/Co	2.80	4.00	1.74	3.30	3.23	2.76	2.88	3.78	1.85	2.45
Zr/Nb	14.22	11.73	13.38	13.00	15.10	16.20	14.13	13.70	14.40	13.67
K/K+Na	23.16	25.32	22.50	19.35	16.33	22.44	30.63	24.53	25.14	23.74
K+Na	3.67	3.12	3.60	3.41	3.00	3.61	3.82	3.75	3.54	4.55

TABLE 4.95

XRF Analyses: Blackcraig Formation Ratio's (FOR5). Part 6

VAR. / ID.	A369	A370	A374	A378	A439	A440	A441	N487	A488	W581
K/Na	0.33	0.36	0.23	0.44	0.49	0.71	0.44	1.71	0.38	0.41
Al/Si	0.16	0.16	0.19	0.22	0.18	0.24	0.15	0.23	0.17	0.16
Fe+Mg	13.43	11.55	14.74	14.88	14.11	16.61	10.90	12.40	12.03	13.65
Fe/Mg	2.27	2.42	1.92	1.95	1.60	2.12	2.11	2.06	2.17	2.13
Al/Ca+Na	1.27	1.46	1.73	1.96	1.81	2.65	1.91	2.97	2.05	1.45
La/Y	0.29	0.50	0.38	0.59	0.81	0.64	0.43	1.38	0.76	0.50
Nb/Y	0.36	0.32	0.34	0.34	0.31	0.39	0.39	0.56	0.38	0.29
Nb/P	71.43	69.23	62.50	76.92	71.43	87.50	84.62	58.06	78.57	66.67
Rb/Sr	0.08	0.10	0.06	0.10	0.16	0.25	0.16	0.23	0.15	0.11
Ni/Co	1.74	1.75	1.95	1.91	2.44	2.07	3.21	3.20	2.63	2.07
Cu/Co	0.91	1.04	1.19	1.17	1.39	1.31	1.43	2.33	1.31	1.33
Zn/Co	2.96	2.46	3.52	3.39	4.11	3.17	3.36	5.13	3.81	5.53
Zr/Nb	13.30	14.44	12.90	13.70	13.60	11.07	12.09	13.11	14.09	14.00
K/K+Na	24.93	26.34	18.73	30.77	32.90	41.38	30.48	63.12	27.42	28.83
K+Na	3.69	4.29	3.79	4.29	3.86	4.35	3.97	4.42	3.83	4.44

TABLE 4.95

XRF Analyses: Blackcraig Formation Ratio's (FOR5). Part 7

VAR. / ID.	W599
K/Na	0.40
Al/Si	0.17
Fe+Mg	12.76
Fe/Mg	2.13
Al/Ca+Na	1.53
La/Y	0.45
Nb/Y	0.24
Nb/P	63.64
Rb/Sr	0.12
Ni/Co	1.82
Cu/Co	1.06
Zn/Co	3.71
Zr/Nb	15.86
K/K+Na	28.45
K+Na	4.64

TABLE 4.95

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 1

VAR. / ID.	AX-2	AX-67	AX-68	AX-73	AX-75	AX-111	AX-112	AX-113	AX-117	AX-118
K/Na	0.34	0.54	0.30	0.27	0.54	0.51	0.36	0.22	0.66	0.51
Al/Si	0.21	0.24	0.23	0.22	0.28	0.24	0.26	0.25	0.26	0.26
Fe+Mg	14.60	12.26	11.20	11.93	12.98	13.36	14.45	14.12	13.68	12.86
Fe/Mg	1.07	1.26	1.35	1.62	1.33	1.09	1.30	1.39	1.43	1.40
Al/Ca+Na	1.88	2.50	1.99	1.58	2.40	2.11	1.76	1.52	1.94	1.86
La/Y	1.15	1.00	0.52	1.00	1.05	1.10	0.78	0.89	1.00	0.90
Nb/Y	0.50	0.41	0.43	0.50	0.45	0.48	0.39	0.58	0.53	0.45
Nb/P	47.62	52.94	64.29	52.63	42.86	40.00	33.33	47.83	47.62	45.00
Rb/Sr	0.07	0.14	0.09	0.08	0.13	0.13	0.10	0.07	0.12	0.11
Ni/Co	2.86	1.86	1.82	1.15	1.69	2.09	1.94	1.68	1.91	2.11
Cu/Co	0.76	0.72	0.76	0.64	1.00	0.79	0.91	1.00	1.50	1.17
Zn/Co	1.76	1.37	1.76	1.49	2.45	2.12	2.06	1.81	2.19	1.94
Zr/Nb	16.30	16.78	14.33	13.40	14.22	13.60	18.14	12.18	13.40	14.56
K/K+Na	25.35	35.16	23.25	20.96	34.96	33.59	26.32	18.02	39.91	33.60
K+Na	2.84	5.29	5.42	4.77	5.52	5.18	4.37	4.05	4.51	5.03

TABLE 4.96

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 2

VAR. / ID.	AX-119	AX-122	AX-123	AX-124	AX-130	AX-157	AX-158	AX-159	AX-163	AX-168
K/Na	0.37	0.86	0.85	0.69	0.21	1.23	0.46	0.49	0.34	0.95
Al/Si	0.27	0.27	0.27	0.24	0.23	0.24	0.22	0.24	0.23	0.27
Fe+Mg	13.75	14.89	14.82	12.28	14.24	13.11	12.32	14.28	13.91	14.62
Fe/Mg	1.24	1.32	1.24	1.25	1.30	1.15	1.17	1.37	1.12	1.64
Al/Ca+Na	1.87	1.87	2.60	2.45	1.93	2.61	2.23	1.75	2.41	2.40
La/Y	1.12	0.72	1.11	1.45	1.10	1.05	1.00	0.79	1.28	0.78
Nb/Y	0.41	0.56	0.39	0.45	0.50	0.45	0.52	0.47	0.67	0.52
Nb/P	33.33	41.67	38.89	52.94	45.45	40.91	78.57	39.13	66.67	54.55
Rb/Sr	0.10	0.22	0.17	0.13	0.06	0.15	0.13	0.14	0.12	0.10
Ni/Co	1.59	2.06	1.79	2.20	2.41	2.72	2.79	2.43	5.06	2.52
Cu/Co	0.95	1.14	1.09	1.20	1.00	1.72	0.67	1.43	0.71	1.55
Zn/Co	1.81	2.11	2.03	1.89	2.19	1.76	1.73	2.43	2.00	2.83
Zr/Nb	17.29	13.70	17.29	16.11	14.80	17.11	13.27	17.44	13.50	12.42
K/K+Na	27.26	46.21	46.02	40.80	17.65	55.19	31.55	32.75	25.13	48.59
K+Na	5.32	4.09	4.52	5.22	4.42	5.11	4.66	4.55	3.98	4.26

TABLE 4.96

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 3

VAR. / ID.	AX-180	AX-181	AX-190	AX-191	AX-200	AX-201	AX-206	AX-210	AX-211	AX-212
K/Na	0.33	0.53	0.68	0.61	0.85	0.71	0.83	0.43	0.57	0.76
Al/Si	0.25	0.25	0.25	0.21	0.24	0.26	0.26	0.26	0.22	0.26
Fe+Mg	14.04	14.33	14.49	16.05	15.13	17.39	14.98	13.90	13.23	16.87
Fe/Mg	1.38	1.45	1.19	0.99	1.08	0.82	1.22	1.07	1.19	1.17
Al/Ca+Na	1.72	2.11	2.17	1.98	2.13	3.18	2.70	1.98	2.70	2.20
La/Y	1.00	0.96	1.14	1.05	1.17	1.16	1.04	1.32	1.29	0.83
Nb/Y	0.45	0.39	0.52	0.52	0.54	0.58	0.38	0.53	0.43	0.43
Nb/P	34.62	39.13	52.38	55.00	54.17	55.00	45.00	43.48	52.94	38.46
Rb/Sr	0.11	0.11	0.12	0.15	0.12	0.18	0.14	0.11	0.12	0.11
Ni/Co	2.28	1.83	4.00	3.18	4.63	3.83	2.17	2.97	2.71	2.11
Cu/Co	1.45	0.94	1.12	0.74	1.09	1.00	0.40	0.92	0.63	1.09
Zn/Co	2.45	2.06	2.09	1.58	1.54	1.54	1.71	1.74	1.97	2.46
Zr/Nb	17.67	15.89	15.09	14.91	15.92	14.36	16.78	15.80	22.22	15.60
K/K+Na	24.53	34.47	40.34	37.88	45.83	41.67	45.28	29.94	36.36	43.10
K+Na	4.81	4.09	4.71	3.30	4.08	4.32	5.08	4.71	4.18	4.13

TABLE 4.96

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 4

VAR. / ID.	AX-213	AX-275	AX-277	AX-278	AX-279	DTIA-103	DTIA-104	DTIA-211	S-251	S-252
K/Na	0.77	0.49	0.51	0.36	0.46	0.62	0.56	0.38	0.86	1.10
Al/Si	0.26	0.22	0.25	0.23	0.27	0.27	0.24	0.22	0.14	0.27
Fe+Mg	15.31	12.05	13.53	11.75	13.40	9.61	12.81	14.74	5.98	12.44
Fe/Mg	1.11	0.99	1.32	1.25	1.10	1.46	1.30	1.33	2.30	1.70
Al/Ca+Na	3.03	1.80	2.66	2.15	1.97	4.10	4.14	1.89	3.11	2.52
La/Y	1.05	1.42	1.13	0.85	1.10	1.23	1.50	1.18	1.44	1.14
Nb/Y	0.42	0.53	0.52	0.55	0.52	0.41	0.50	0.41	0.75	0.45
Nb/P	44.44	58.82	63.16	61.11	50.00	56.25	71.43	40.91	92.31	58.82
Rb/Sr	0.13	0.14	0.10	0.11	0.12	0.52	0.36	0.10	0.55	0.14
Ni/Co	2.30	3.43	3.97	2.18	3.48	2.36	3.08	2.32	0.43	1.88
Cu/Co	0.30	1.04	1.17	0.79	1.35	0.96	1.00	1.13	0.24	1.53
Zn/Co	1.79	1.68	2.33	1.79	2.03	4.68	3.33	2.19	0.69	2.18
Zr/Nb	15.88	16.00	14.25	13.64	14.91	17.00	14.10	17.22	13.17	13.80
K/K+Na	43.40	32.75	33.89	26.20	31.59	38.45	35.84	27.60	46.18	52.32
K+Na	5.00	4.61	4.19	5.19	4.97	5.02	3.85	4.13	2.62	5.60

TABLE 4.96

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 5

VAR. / ID.	S75	S77	S85	S95	S96	S97	S99	S100	S102	S104
K/Na	0.82	0.89	0.81	1.44	0.90	0.39	0.83	0.67	0.78	0.57
Al/Si	0.22	0.20	0.22	0.25	0.26	0.15	0.20	0.18	0.21	0.22
Fe+Mg	12.83	14.55	15.36	14.74	15.00	12.89	11.09	13.55	15.33	15.39
Fe/Mg	1.09	1.04	1.14	1.21	1.01	1.31	1.64	1.08	0.92	0.92
Al/Ca+Na	2.40	2.59	1.75	3.10	2.58	1.51	1.84	2.10	1.93	2.32
La/Y	1.00	1.10	1.19	1.24	1.21	1.27	1.09	1.35	1.22	0.90
Nb/Y	0.53	0.60	0.52	0.62	0.58	0.67	0.52	0.65	0.56	0.62
Nb/P	58.82	63.16	45.83	59.09	57.89	62.50	60.00	57.89	47.62	61.90
Rb/Sr	0.14	0.17	0.11	0.20	0.19	0.13	0.17	0.13	0.10	0.10
Ni/Co	5.92	6.32	5.30	5.13	4.91	4.94	4.17	6.71	5.52	5.48
Cu/Co	1.04	1.00	1.22	1.57	1.43	1.06	1.29	1.33	1.22	1.11
Zn/Co	2.46	2.64	2.52	2.87	2.74	3.22	1.79	3.00	2.85	2.56
Zr/Nb	15.90	13.92	17.00	12.85	13.55	13.10	16.08	13.55	15.80	13.54
K/K+Na	45.07	46.95	44.68	59.01	47.40	28.20	45.37	40.24	43.73	36.36
K+Na	4.77	4.43	4.32	4.83	4.81	3.05	4.43	4.10	4.07	4.18

TABLE 4.96

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 6

VAR. / ID.	S105	S110	S111	S113	S114	S115	S116	E117	S118	S119
K/Na	0.73	0.67	0.73	0.53	0.70	0.39	1.12	0.70	0.24	0.37
Al/Si	0.22	0.20	0.21	0.20	0.23	0.21	0.23	0.21	0.21	0.19
Fe+Mg	15.29	12.50	15.03	14.40	12.72	11.05	10.94	13.90	10.91	12.92
Fe/Mg	1.11	1.31	1.12	1.31	1.49	1.19	1.68	1.07	1.41	1.24
Al/Ca+Na	2.08	1.40	2.19	1.75	2.66	1.78	2.67	2.47	1.54	1.69
La/Y	1.17	1.11	1.10	1.14	1.17	0.83	0.91	1.15	0.86	0.76
Nb/Y	0.48	0.58	0.48	0.57	0.56	0.44	0.41	0.45	0.43	0.48
Nb/P	57.89	57.89	62.50	63.16	62.50	53.33	60.00	60.00	56.25	58.82
Rb/Sr	0.12	0.18	0.16	0.08	0.15	0.18	0.25	0.15	0.06	0.13
Ni/Co	5.81	6.57	4.62	4.52	4.60	4.83	3.05	4.94	3.43	3.58
Cu/Co	1.11	1.29	1.19	1.30	1.15	1.67	1.45	1.39	1.19	1.00
Zn/Co	4.04	2.52	3.24	2.96	3.50	4.33	3.70	3.72	2.86	2.88
Zr/Nb	17.45	15.09	16.30	13.25	14.80	16.13	15.22	15.22	16.67	14.10
K/K+Na	42.13	39.95	42.15	34.51	41.34	28.05	52.73	41.06	19.11	26.96
K+Na	4.13	3.68	4.27	3.97	4.79	4.92	5.31	4.53	4.97	4.60

TABLE 4.96

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 7

VAR. / ID.	S120	S121	S122	S123	S124	S125	S126	S127	S128	S129
K/Na	0.27	0.49	0.43	0.45	0.73	0.63	0.66	0.59	0.87	0.43
Al/Si	0.21	0.20	0.20	0.23	0.17	0.16	0.17	0.22	0.23	0.21
Fe+Mg	12.68	14.56	10.85	13.18	12.56	12.45	7.73	14.84	12.96	13.17
Fe/Mg	1.30	1.22	1.40	1.37	1.16	1.56	2.12	1.26	1.38	1.23
Al/Ca+Na	1.59	1.87	1.92	2.85	2.48	2.00	2.77	1.83	2.35	2.28
La/Y	1.06	0.81	1.15	0.74	1.28	1.14	1.33	0.81	0.83	1.14
Nb/Y	0.50	0.52	0.45	0.48	0.50	0.38	0.71	0.43	0.43	0.38
Nb/P	47.37	52.38	56.25	68.75	69.23	53.33	78.95	42.00	55.56	53.33
Rb/Sr	0.11	0.17	0.16	0.14	0.18	0.12	0.36	0.13	0.13	0.10
Ni/Co	3.04	3.35	3.60	3.70	4.06	3.30	3.23	3.12	3.24	5.94
Cu/Co	1.00	1.00	0.95	1.30	0.89	1.00	1.23	1.32	1.07	1.38
Zn/Co	2.63	2.54	2.80	3.15	3.89	3.60	3.77	2.84	2.41	3.38
Zr/Nb	15.56	17.09	15.78	13.27	13.00	24.63	14.80	16.67	15.30	18.13
K/K+Na	20.96	32.99	30.06	31.07	42.14	38.68	39.86	37.21	46.45	29.91
K+Na	5.01	3.88	5.19	4.41	4.39	3.93	4.44	4.30	4.65	4.28

TABLE 4.96

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 8

VAR. / ID.	S130	S131	S133	S134	E135	E136	E139	E140	S356	L399
K/Na	0.60	0.25	0.47	0.58	0.50	0.97	0.44	0.26	0.59	0.50
Al/Si	0.20	0.22	0.19	0.18	0.22	0.24	0.20	0.22	0.20	0.19
Fe+Mg	13.19	14.09	11.36	12.27	11.74	13.89	14.94	14.85	14.00	14.16
Fe/Mg	1.14	1.35	1.44	1.41	1.49	1.55	1.63	1.70	1.20	0.97
Al/Ca+Na	1.99	2.06	1.55	2.19	2.34	3.67	1.78	2.64	2.22	2.65
La/Y	1.00	1.05	0.63	1.47	0.90	1.09	1.24	1.06	1.06	1.00
Nb/Y	0.55	0.52	0.53	0.53	0.45	0.55	0.48	0.50	0.56	0.33
Nb/P	64.71	61.11	71.43	71.43	64.29	66.67	45.45	47.37	55.56	46.67
Rb/Sr	0.10	0.07	0.15	0.15	0.12	0.16	0.15	0.08	0.11	0.18
Ni/Co	4.32	4.00	3.62	4.35	4.56	2.72	3.61	3.33	6.48	4.50
Cu/Co	1.05	1.17	1.00	1.18	1.31	0.94	1.39	1.13	1.04	1.19
Zn/Co	2.86	3.22	2.52	3.47	4.00	2.28	3.35	2.79	2.83	3.25
Zr/Nb	14.36	13.82	13.00	14.20	13.22	13.50	16.50	15.44	15.80	19.43
K/K+Na	37.44	19.72	32.20	36.63	33.33	49.29	30.68	20.47	37.22	33.47
K+Na	4.22	4.26	4.72	4.45	5.07	4.95	4.27	4.25	4.54	5.02

TABLE 4.96

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 9

VAR. / ID.	E408	E409	S491	L527	L528	L548	L554	L559	L562	L566
K/Na	0.48	0.45	0.85	0.60	0.74	0.20	0.59	0.84	0.47	0.40
Al/Si	0.19	0.21	0.21	0.19	0.20	0.20	0.21	0.25	0.24	0.22
Fe+Mg	14.29	13.30	15.38	14.93	15.56	16.33	14.25	16.57	14.42	14.67
Fe/Mg	1.62	1.40	1.03	1.07	1.23	1.73	1.62	1.42	1.53	1.45
Al/Ca+Na	1.60	1.75	2.69	1.73	2.35	1.32	1.05	2.37	1.21	1.53
La/Y	0.91	0.91	1.00	0.90	0.67	0.67	1.00	0.76	1.06	0.70
Nb/Y	0.43	0.41	0.52	0.50	0.46	0.42	0.43	0.38	0.47	0.40
Nb/P	50.00	42.86	68.75	52.63	61.11	43.48	42.86	40.00	42.11	42.11
Rb/Sr	0.17	0.14	0.19	0.11	0.08	0.05	0.10	0.13	0.09	0.08
Ni/Co	3.43	3.17	8.17	6.67	5.54	2.55	2.32	2.54	2.17	2.89
Cu/Co	1.35	1.52	1.39	1.14	1.25	1.64	1.60	1.15	1.04	1.11
Zn/Co	2.78	2.57	2.67	2.90	1.71	3.23	3.68	2.04	2.71	3.58
Zr/Nb	14.90	16.00	14.73	14.30	15.55	15.50	16.78	15.88	15.25	15.50
K/K+Na	32.42	31.25	45.87	37.32	42.46	16.95	36.94	45.51	31.90	28.50
K+Na	4.38	4.64	4.60	4.10	4.31	4.07	3.60	4.53	4.20	3.93

TABLE 4.96

XRF Analyses: Scar Formation Ratio's (FOR7)

Part 10

VAR. / ID.	L572	L584	L585	L586	N615	S618	AX852	AX873	AK336	AK778
K/Na	0.93	0.61	0.74	0.95	0.53	0.84	0.63	0.42	0.54	0.55
Al/Si	0.23	0.18	0.20	0.30	0.17	0.19	0.16	0.22	0.20	0.21
Fe+Mg	12.84	16.06	16.71	9.37	14.43	15.03	13.06	13.94	13.66	12.71
Fe/Mg	1.40	1.27	1.19	1.40	1.27	1.20	1.57	1.45	1.38	1.43
Al/Ca+Na	1.20	2.69	3.38	8.32	1.31	1.89	1.44	1.43	1.75	2.02
La/Y	0.64	1.00	0.46	1.52	1.00	1.24	0.79	0.55	0.83	0.75
Nb/Y	0.36	0.48	0.46	0.57	0.48	0.48	0.38	0.50	0.42	0.33
Nb/P	42.86	55.56	57.89	171.43	47.62	50.00	64.29	61.11	62.50	47.06
Rb/Sr	0.17	0.15	0.19	0.56	0.08	0.10	0.18	0.13	0.15	0.17
Ni/Co	3.19	6.75	6.88	9.13	6.46	5.32	5.19	3.57	4.00	4.18
Cu/Co	2.13	0.08	0.38	22.00	1.12	1.12	1.06	1.22	1.00	1.65
Zn/Co	6.69	2.29	2.79	4.80	2.38	2.60	3.31	3.00	3.00	3.53
Zr/Nb	13.44	17.90	15.00	16.75	19.30	16.60	18.00	12.00	18.20	19.13
K/K+Na	48.22	38.05	42.51	48.72	34.69	45.76	38.52	29.59	34.91	35.41
K+Na	4.21	3.89	4.14	3.90	3.92	4.13	4.05	4.19	4.64	5.14

TABLE 4.96

XRF Analyses: Shinnel Formation Ratio's (FOR9)

Part 1

VAR. / ID.	AX-1	AX-36	AX-37	AX-38	AX-127	AX-143	AX-164	AX-177	AX-189	AX-226
K/Na	0.23	0.86	0.56	0.46	0.83	0.84	0.51	0.33	0.46	0.41
Al/Si	0.20	0.18	0.16	0.14	0.22	0.21	0.23	0.16	0.22	0.22
Fe+Mg	10.93	11.69	6.35	7.39	11.02	12.02	10.49	9.13	12.77	10.30
Fe/Mg	1.41	1.14	1.76	1.27	1.15	1.15	1.66	1.68	1.60	1.89
Al/Ca+Na	1.42	2.66	3.20	2.25	2.53	1.94	2.53	1.67	3.45	2.79
La/Y	1.27	1.19	1.65	1.00	1.37	1.05	1.32	1.14	1.20	1.26
Nb/Y	0.58	0.57	0.85	0.71	0.47	0.57	0.56	0.52	0.56	0.57
Nb/P	57.69	75.00	100.00	66.67	56.25	70.59	77.78	84.62	60.87	61.90
Rb/Sr	0.08	0.34	0.72	0.39	0.29	0.20	0.23	0.20	0.24	0.42
Ni/Co	2.11	1.85	0.52	0.74	2.54	3.33	1.45	1.35	1.56	1.34
Cu/Co	0.79	0.59	0.25	0.37	0.56	0.70	0.83	0.38	0.61	0.66
Zn/Co	2.11	1.33	0.77	0.95	1.13	1.23	1.76	1.02	2.22	1.46
Zr/Nb	23.93	23.50	17.47	35.45	17.33	15.83	19.00	22.82	19.29	17.85
K/K+Na	18.75	46.12	35.93	31.48	45.22	45.52	33.72	24.70	31.61	29.18
K+Na	4.00	4.12	3.59	3.24	4.71	4.13	5.16	3.36	4.65	4.90

TABLE 4.97

XRF Analyses: Shinnel Formation Ratio's (FOR9)

Part 2

VAR. / ID.	AX-229	AX-230	AX-231	AX-235	AX-236	AX-246	AX-276	AX-287	DTIA-47	S-6
K/Na	0.92	0.74	0.68	0.22	0.75	0.50	0.84	0.52	0.91	0.65
Al/Si	0.19	0.19	0.22	0.18	0.19	0.25	0.18	0.15	0.15	0.19
Fe+Mg	7.98	9.60	10.26	11.45	9.73	15.27	11.78	7.94	6.28	12.10
Fe/Mg	2.07	1.34	1.53	1.45	1.36	1.23	1.13	1.62	2.05	1.41
Al/Ca+Na	3.52	3.25	3.19	2.20	2.16	1.97	2.06	2.15	1.47	1.72
La/Y	1.22	1.17	1.12	1.24	1.10	1.09	1.18	1.30	1.35	1.05
Nb/Y	0.59	0.58	0.64	0.57	0.48	0.45	0.59	0.70	0.65	0.45
Nb/P	84.21	77.78	76.19	85.71	71.43	45.45	81.25	87.50	78.95	71.43
Rb/Sr	0.74	0.78	0.58	0.12	0.36	0.11	0.49	0.38	0.41	0.19
Ni/Co	1.16	2.03	1.31	1.73	1.70	2.42	2.81	1.31	1.00	4.36
Cu/Co	0.50	0.37	0.60	0.43	0.33	1.26	0.81	0.31	0.32	0.80
Zn/Co	1.21	1.13	1.89	1.17	1.09	2.42	1.24	0.79	0.97	2.16
Zr/Nb	17.75	19.86	16.19	24.42	20.90	17.60	20.85	21.00	19.40	21.50
K/K+Na	48.02	42.38	40.50	18.28	42.75	33.18	45.71	34.17	47.60	39.38
K+Na	4.04	3.61	4.42	3.72	3.86	4.25	3.50	3.60	3.13	3.25

TABLE 4.97

XRF Analyses: Shinnel Formation Ratio's (FOR9)

Part 3

VAR. / ID.	S54	S56	S57	S58	S59	S60	S62	S64	S65	S67
K/Na	0.89	0.74	2.53	0.70	0.93	0.84	0.81	0.59	0.49	0.54
Al/Si	0.19	0.14	0.21	0.17	0.16	0.15	0.15	0.15	0.12	0.19
Fe+Mg	10.64	10.62	11.09	6.72	7.43	7.03	6.78	9.27	5.80	13.54
Fe/Mg	1.50	1.64	1.34	2.57	2.24	2.35	2.04	2.38	2.02	1.37
Al/Ca+Na	1.04	1.79	2.27	3.75	3.76	2.83	2.67	2.54	1.81	2.96
La/Y	1.35	1.23	0.86	1.41	1.25	1.17	1.41	1.55	1.15	1.28
Nb/Y	0.60	0.50	0.71	0.67	0.75	0.71	0.82	0.64	0.59	0.44
Nb/P	46.15	64.71	88.24	69.23	90.00	85.00	105.88	50.00	59.26	68.75
Rb/Sr	0.29	0.27	0.56	0.69	0.69	0.53	0.52	0.38	0.29	0.22
Ni/Co	3.29	4.00	4.73	2.31	1.65	1.92	2.08	2.29	1.92	4.77
Cu/Co	1.35	1.09	1.73	1.00	0.76	1.00	0.92	0.76	0.92	0.91
Zn/Co	2.00	6.00	3.20	3.92	2.82	3.46	3.42	3.41	3.08	2.59
Zr/Nb	14.50	21.18	14.00	15.61	16.50	17.76	14.61	24.33	22.19	19.36
K/K+Na	47.07	42.57	71.63	41.07	48.23	45.53	44.65	37.20	32.85	35.16
K+Na	4.27	4.04	3.49	3.92	3.67	3.69	3.83	3.28	3.44	3.47

TABLE 4.97

XRF Analyses: Shinnel Formation Ratio's (FOR9)

Part 4

VAR. / ID.	S70	S345	S348	S350	S351	S354	S355	S359	S360	S361
K/Na	1.77	0.81	1.06	2.42	1.68	0.37	0.77	0.53	1.33	0.65
Al/Si	0.24	0.15	0.19	0.18	0.13	0.10	0.15	0.14	0.21	0.22
Fe+Mg	12.62	11.70	8.75	6.43	11.57	5.42	6.42	9.81	12.94	12.31
Fe/Mg	1.96	1.57	1.59	1.22	0.96	2.41	2.16	1.69	1.54	1.51
Al/Ca+Na	6.25	1.75	0.73	1.72	1.31	1.56	0.89	1.36	2.05	2.82
La/Y	1.29	1.50	1.00	1.05	0.95	1.29	1.09	0.89	0.96	0.76
Nb/Y	0.71	0.55	0.43	0.64	0.55	0.76	0.70	0.54	0.57	0.52
Nb/P	100.00	64.71	57.14	82.35	80.00	94.12	94.12	60.00	68.42	75.00
Rb/Sr	1.00	0.13	0.27	0.75	0.62	0.22	0.27	0.25	0.43	0.22
Ni/Co	3.83	3.19	3.47	7.76	8.61	2.57	2.56	3.13	3.75	2.68
Cu/Co	1.00	1.19	1.24	0.59	0.56	1.29	1.33	1.00	1.10	0.89
Zn/Co	3.38	3.56	2.94	2.29	1.89	4.29	4.00	3.07	2.65	2.47
Zr/Nb	12.94	17.82	27.75	23.43	28.42	23.31	14.25	25.07	17.54	18.00
K/K+Na	63.88	44.60	51.57	70.72	62.74	27.18	43.49	34.64	57.14	39.44
K+Na	4.18	4.35	4.46	4.03	3.14	2.87	3.38	3.58	3.92	4.97

TABLE 4.97

XRF Analyses: Shinnel Formation Ratio's (FOR9)

Part 5

VAR. / ID.	N400	N401	N402	S448	N456	S464	S466	S492	S494	S496
K/Na	0.73	1.04	1.00	0.59	0.72	1.48	0.82	0.62	0.59	0.55
Al/Si	0.14	0.15	0.14	0.16	0.11	0.22	0.17	0.11	0.14	0.08
Fe+Mg	13.28	8.31	7.42	11.09	6.34	8.62	11.16	6.65	6.66	5.26
Fe/Mg	1.52	1.82	1.83	1.33	1.83	1.97	1.33	1.77	2.30	2.23
Al/Ca+Na	1.77	3.14	2.17	1.10	1.91	2.05	2.10	2.10	2.05	0.62
La/Y	1.00	0.96	1.29	0.81	1.35	0.84	1.21	1.00	1.19	0.74
Nb/Y	0.46	0.63	0.54	0.48	0.71	0.60	0.58	0.78	0.65	0.48
Nb/P	64.71	100.00	75.00	75.00	109.09	93.75	87.50	107.69	100.00	108.33
Rb/Sr	0.19	0.76	0.61	0.29	0.41	0.28	0.36	0.47	0.44	0.17
Ni/Co	3.24	3.83	3.31	5.67	3.10	5.27	4.18	3.89	2.40	2.50
Cu/Co	0.88	0.75	0.46	1.07	0.90	0.93	1.06	1.11	1.30	1.10
Zn/Co	2.94	3.75	3.46	3.53	3.30	2.07	2.41	4.67	4.50	2.90
Zr/Nb	19.55	15.06	18.20	21.93	14.17	18.80	18.00	14.43	13.00	11.54
K/K+Na	42.03	50.88	50.00	36.97	41.91	59.60	45.12	38.38	37.20	35.50
K+Na	3.64	3.99	3.80	3.57	3.03	4.01	3.79	2.97	3.71	2.62

TABLE 4.97

XRF Analyses: Shinnel Formation Ratio's (FOR9)

Part 6

VAR. / ID.	5497	5498	5499	W507	L515	L520	L522	S529	S531	S532
K/Na	0.44	0.97	1.38	0.93	0.62	0.67	0.51	0.43	0.70	0.89
Al/Si	0.10	0.21	0.10	0.18	0.17	0.14	0.19	0.10	0.19	0.17
Fe+Mg	5.76	11.29	9.95	4.35	13.73	12.66	12.63	5.45	13.37	7.45
Fe/Mg	2.39	1.69	0.95	2.72	1.53	1.44	1.48	2.15	1.34	2.24
Al/Ca+Na	2.47	2.66	0.88	3.28	2.09	1.77	2.70	0.58	2.07	2.96
La/Y	1.50	1.23	0.95	1.29	1.19	0.84	0.96	0.78	0.91	1.24
Nb/Y	0.80	0.54	0.59	0.63	0.50	0.58	0.44	0.41	0.52	0.68
Nb/P	106.67	87.50	108.33	83.33	68.42	78.57	70.59	48.15	80.00	77.27
Rb/Sr	0.45	0.53	0.33	1.00	0.17	0.21	0.35	0.12	0.29	0.61
Ni/Co	2.25	3.73	8.85	3.31	3.17	3.38	4.69	2.40	5.29	3.44
Cu/Co	1.13	1.33	0.77	7.15	1.11	1.00	0.46	1.10	0.81	1.67
Zn/Co	4.00	4.27	2.00	1.92	3.22	2.38	3.85	3.40	2.48	5.22
Zr/Nb	19.88	14.00	19.62	16.87	21.54	19.55	20.67	26.85	15.33	14.94
K/K+Na	30.72	49.14	58.05	48.21	38.29	40.00	33.56	30.10	41.19	47.04
K+Na	3.06	4.64	2.67	3.90	4.10	3.20	4.41	2.99	4.03	4.06

TABLE 4.97

XRF Analyses: Shinnel Formation Ratio's (FOR9)

Part 7

VAR. / ID.	S533	L587	L589	L590	S623	S624	AX753	AX800	AK3	AK391
K/Na	0.89	1.09	1.34	1.02	0.91	0.85	0.83	0.90	0.70	0.82
Al/Si	0.15	0.16	0.15	0.13	0.14	0.15	0.16	0.14	0.19	0.14
Fe+Mg	7.20	7.79	6.50	8.00	7.48	6.67	7.69	11.17	13.14	7.57
Fe/Mg	2.50	2.54	2.42	1.96	2.51	2.18	2.71	1.71	1.31	2.23
Al/Ca+Na	2.49	5.30	2.05	2.50	3.60	3.24	3.41	1.51	2.07	2.60
La/Y	1.22	1.03	1.25	1.29	0.92	1.14	1.09	1.14	1.00	0.93
Nb/Y	0.63	0.62	0.75	0.58	0.69	0.61	0.74	0.50	0.50	0.61
Nb/P	70.83	81.82	100.00	93.33	105.88	80.95	89.47	73.33	64.71	94.44
Rb/Sr	0.47	0.78	0.69	0.57	0.73	0.86	0.61	0.29	0.17	0.59
Ni/Co	2.89	3.40	2.17	4.00	2.27	2.89	3.11	3.50	5.00	2.53
Cu/Co	1.56	0.50	0.33	0.67	1.18	1.56	1.44	1.08	2.05	0.87
Zn/Co	4.89	4.50	2.58	4.22	4.64	5.22	5.33	3.83	2.58	3.47
Zr/Nb	18.76	24.06	13.80	17.64	13.06	14.71	13.71	21.45	16.55	15.88
K/K+Na	47.09	52.05	57.22	50.55	47.51	45.94	45.45	47.24	41.32	44.92
K+Na	3.78	3.65	3.88	3.66	3.62	3.57	3.96	3.98	4.84	3.74

TABLE 4.97

XRF Analyses: Shinnel Formation Ratio's (FOR9)

Part 8

VAR. / ID.	AK397
K/Na	0.82
Al/Si	0.16
Fe+Mg	8.61
Fe/Mg	2.30
Al/Ca+Na	3.40
La/Y	0.88
Nb/Y	0.71
Nb/P	94.44
Rb/Sr	0.55
Ni/Co	2.62
Cu/Co	0.92
Zn/Co	3.85
Zr/Nb	14.29
K/K+Na	45.01
K+Na	3.71

TABLE 4.97

XRF Analyses: Pyroxenous Formation Ratio's (FOR11) Part 1

VAR. / ID.	AX-4	AX-5	AX-150	AX-151	AX-155	AX-182	AX-187	AX-194	AX-195	AX-196
K/Na	0.98	0.31	0.63	0.96	0.77	0.67	0.81	1.12	0.31	0.55
Al/Si	0.22	0.22	0.23	0.26	0.23	0.20	0.16	0.24	0.24	0.22
Fe+Mg	10.72	13.84	16.87	15.53	15.82	11.58	8.78	12.45	14.17	13.45
Fe/Mg	1.29	1.56	1.13	1.24	1.10	1.29	1.30	1.50	1.56	1.18
Al/Ca+Na	3.12	1.93	2.26	4.20	2.77	1.67	2.27	3.00	1.83	2.39
La/Y	1.16	1.52	1.33	0.91	1.05	1.36	0.95	1.13	1.29	1.26
Nb/Y	0.56	0.48	0.48	0.59	0.45	0.50	0.48	0.43	0.38	0.52
Nb/P	82.35	47.62	45.45	52.00	52.63	52.38	76.92	55.56	36.36	60.00
Rb/Sr	0.30	0.06	0.19	0.28	0.19	0.15	0.24	0.23	0.08	0.13
Ni/Co	2.41	1.81	1.65	2.13	2.03	1.83	1.18	1.85	1.41	1.85
Cu/Co	0.62	0.83	1.00	0.33	1.09	0.64	0.41	0.97	0.88	0.82
Zn/Co	1.97	2.00	1.65	2.47	2.19	1.14	1.08	1.94	1.71	1.82
Zr/Nb	16.21	23.10	21.30	16.85	18.30	19.55	17.20	19.60	23.50	18.67
K/K+Na	49.55	23.50	38.76	48.95	43.35	40.09	44.71	52.82	23.92	35.56
K+Na	4.40	4.17	3.87	4.76	3.76	4.34	4.25	4.96	4.39	4.19

TABLE 4.98

XRF Analyses: Pyroxenous Formation Ratio's (FOR11) Part 2

VAR. / ID.	AX-197	AX-198	AX-199	AX-219	AX-221	AX-234	AX-274	AX-286	DTIA-5	DTIA-27
K/Na	0.22	0.53	0.61	0.63	0.75	0.81	1.04	0.88	1.15	0.72
Al/Si	0.21	0.20	0.22	0.21	0.22	0.21	0.22	0.22	0.23	0.23
Fe+Mg	12.11	11.77	12.42	13.01	13.48	14.41	13.99	13.64	14.41	13.24
Fe/Mg	1.42	1.34	1.44	1.35	1.49	1.03	1.21	1.01	1.43	1.70
Al/Ca+Na	2.29	1.96	1.96	1.84	2.22	2.67	2.03	2.46	1.53	1.79
La/Y	1.33	1.70	1.22	1.14	1.14	1.32	1.17	1.52	1.50	1.26
Nb/Y	0.58	0.55	0.48	0.45	0.45	0.59	0.46	0.39	0.41	0.39
Nb/P	77.78	52.38	52.38	43.48	58.82	68.42	52.38	47.37	34.62	39.13
Rb/Sr	0.09	0.11	0.11	0.11	0.14	0.19	0.16	0.13	0.13	0.17
Ni/Co	1.29	1.82	1.72	1.73	1.49	2.21	2.17	1.81	1.68	1.37
Cu/Co	0.55	0.68	0.79	0.70	0.84	0.64	0.86	1.14	1.10	0.76
Zn/Co	1.48	1.63	1.64	1.55	1.81	1.67	1.80	1.61	2.61	1.97
Zr/Nb	20.36	20.00	19.18	19.90	20.00	21.85	22.82	23.00	21.67	24.78
K/K+Na	18.33	34.43	37.92	38.69	42.93	44.79	50.90	46.93	53.54	41.85
K+Na	4.80	4.56	4.43	4.11	3.75	4.22	3.34	4.24	3.81	4.11

XRF Analyses: Pyroxenous Formation Ratio's (FOR11) Part 3

VAR. / ID.	DTIA-41	DTIA-42	S-4	AX657	AX659	AX781	AX782	AX783	AX784	AX789
K/Na	0.65	0.63	0.91	0.44	0.75	0.83	1.34	1.07	0.71	0.93
Al/Si	0.23	0.21	0.21	0.15	0.17	0.19	0.18	0.20	0.15	0.17
Fe+Mg	11.68	13.70	12.89	12.14	13.00	11.89	12.57	16.22	11.85	12.60
Fe/Mg	1.23	1.37	1.40	1.67	1.73	1.87	2.20	2.04	1.60	1.48
Al/Ca+Na	1.79	2.13	2.22	1.14	1.67	1.44	1.53	2.47	1.40	2.12
La/Y	1.19	1.21	1.41	1.29	1.00	1.08	0.92	1.11	0.92	1.19
Nb/Y	0.43	0.53	0.50	0.48	0.42	0.54	0.38	0.47	0.46	0.46
Nb/P	56.25	62.50	55.00	62.50	57.89	61.90	45.45	45.00	55.00	66.67
Rb/Sr	0.19	0.22	0.15	0.11	0.14	0.11	0.20	0.25	0.16	0.18
Ni/Co	2.43	2.97	1.70	3.47	3.50	2.55	2.04	2.62	3.47	3.50
Cu/Co	0.69	0.84	0.68	0.88	1.11	1.25	1.04	0.27	1.05	1.06
Zn/Co	1.69	1.90	1.48	3.18	2.94	2.90	2.96	1.85	2.95	3.11
Zr/Nb	17.89	19.10	18.73	20.20	18.55	16.31	19.40	21.00	21.73	17.83
K/K+Na	39.36	38.69	47.76	30.49	42.76	45.48	57.18	51.78	41.69	48.20
K+Na	4.09	3.67	4.02	3.87	4.21	4.31	4.39	4.21	3.91	4.44

XRF Analyses: Pyroxenous Formation Ratio's (FOR11) Part 4

VAR. / ID.	AX790	AX791	AX796	AX797	AX802	AX803	AX805	AX861	AK1	AK83
K/Na	0.66	0.92	0.65	0.31	1.12	0.53	0.81	0.78	1.07	0.59
Al/Si	0.17	0.17	0.18	0.16	0.18	0.19	0.20	0.18	0.18	0.17
Fe+Mg	15.20	12.49	14.10	12.66	11.47	14.67	14.48	14.68	12.74	14.20
Fe/Mg	1.84	1.66	1.77	1.48	1.63	1.65	1.54	1.54	1.54	1.76
Al/Ca+Na	1.75	1.45	1.45	1.50	1.48	1.33	1.90	1.81	1.32	1.31
La/Y	0.88	1.30	1.08	0.88	0.84	0.93	1.08	1.00	1.00	1.00
Nb/Y	0.48	0.48	0.40	0.46	0.44	0.37	0.44	0.42	0.48	0.45
Nb/P	57.14	55.00	50.00	61.11	57.89	52.63	52.38	50.00	57.14	65.00
Rb/Sr	0.11	0.14	0.09	0.07	0.12	0.09	0.16	0.10	0.17	0.18
Ni/Co	2.62	4.31	2.48	3.50	3.78	2.04	2.78	2.64	3.41	3.74
Cu/Co	1.05	1.25	1.33	1.13	1.17	1.13	1.30	1.00	1.47	1.42
Zn/Co	3.38	3.56	2.33	3.13	3.22	3.74	2.48	2.64	3.06	3.58
Zr/Nb	18.08	18.91	19.50	21.09	17.45	18.70	17.09	17.45	16.92	29.31
K/K+Na	39.72	48.00	39.41	23.72	52.79	34.70	44.79	43.97	51.75	37.04
K+Na	3.55	4.00	4.44	3.92	4.30	3.89	4.22	3.98	4.56	3.78

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TABLE 4.98

XRF Analyses: Pyroxenous Formation Ratio's (FOR11) Part 5

VAR. / ID.	AK88	AK390	AK454
K/Na	0.95	0.64	0.61
Al/Si	0.21	0.19	0.20
Fe+Mg	13.01	15.39	14.27
Fe/Mg	1.82	1.53	1.31
Al/Ca+Na	1.63	1.68	2.37
La/Y	0.88	1.00	1.13
Nb/Y	0.44	0.46	0.50
Nb/P	50.00	63.16	63.16
Rb/Sr	0.08	0.10	0.13
Ni/Co	1.96	2.86	3.40
Cu/Co	1.23	1.32	1.40
Zn/Co	2.58	3.23	2.90
Zr/Nb	15.45	21.17	16.00
K/K+Na	48.80	38.99	37.93
K+Na	4.18	4.36	4.64

TABLE 4.98

XRF Analyses: Intermediate Formation Ratio's (FOR13) Part 1

VAR. / ID.	AX-40	AX-43	AX-44	AX-46	AX-47	AX-48	AX-51	AX-79	AX-80	AX-83
K/Na	0.98	1.63	1.07	0.89	0.98	0.89	1.21	0.65	0.93	0.99
Al/Si	0.20	0.27	0.22	0.19	0.22	0.18	0.18	0.21	0.24	0.22
Fe+Mg	8.93	10.26	11.92	9.76	9.51	10.37	10.60	8.09	9.49	9.67
Fe/Mg	1.39	1.58	1.10	1.00	1.05	1.17	1.25	1.25	1.33	1.24
Al/Ca+Na	3.36	4.39	4.10	3.48	2.98	3.14	3.09	2.45	3.33	3.04
La/Y	0.96	1.67	1.13	1.13	1.40	1.37	1.50	2.03	1.59	1.46
Nb/Y	0.61	0.48	0.58	0.58	0.52	0.57	0.54	0.47	0.44	0.54
Nb/P	77.27	76.47	63.64	73.68	68.42	80.95	73.68	53.85	62.50	66.67
Rb/Sr	0.40	0.29	0.28	0.35	0.23	0.42	0.38	0.21	0.26	0.25
Ni/Co	1.45	1.67	3.07	1.82	1.89	1.96	2.55	1.94	1.34	2.13
Cu/Co	0.29	0.67	0.54	0.24	0.30	0.22	0.28	0.29	0.49	0.41
Zn/Co	1.14	2.83	2.07	1.09	1.41	1.04	1.72	1.50	1.74	1.63
Zr/Nb	21.29	17.62	20.93	23.21	19.31	34.29	20.36	17.93	19.87	18.14
K/K+Na	49.47	62.02	51.69	47.15	49.42	47.15	54.76	39.30	48.31	49.81
K+Na	4.75	5.74	4.74	4.92	5.20	3.86	4.20	5.70	7.39	5.30

TABLE 4.99

XRF Analyses: Intermediate Formation Ratio's (FOR13) Part 2

VAR. / ID.	AX-87	AX-94	AX-95	AX-96	AX-97	AX-99	AX-100	AX-102	AX-103	AX-104
K/Na	1.22	1.24	1.05	0.75	0.56	0.67	0.64	1.02	0.51	0.57
Al/Si	0.19	0.20	0.18	0.18	0.23	0.21	0.21	0.19	0.22	0.17
Fe+Mg	9.29	10.69	9.78	9.47	13.10	10.45	8.49	8.82	9.98	7.91
Fe/Mg	1.41	1.33	1.83	1.11	1.47	1.35	2.72	1.13	1.30	1.73
Al/Ca+Na	3.12	3.03	3.41	2.41	2.79	3.15	5.24	2.54	2.63	4.09
La/Y	1.48	1.28	1.62	1.32	1.34	1.42	1.39	1.21	1.24	1.23
Nb/Y	0.56	0.56	0.43	0.59	0.52	0.52	0.74	0.58	0.52	0.69
Nb/P	88.24	63.64	100.00	76.47	65.22	76.19	89.47	82.35	56.52	78.26
Rb/Sr	0.69	0.37	0.62	0.26	0.10	0.26	0.62	0.46	0.19	0.70
Ni/Co	1.79	2.23	1.18	2.47	1.67	2.24	0.80	2.17	1.76	0.55
Cu/Co	0.26	0.70	0.26	0.39	0.55	0.52	0.51	0.32	0.26	0.38
Zn/Co	1.12	1.83	1.24	1.53	2.27	2.15	1.54	1.15	0.79	0.96
Zr/Nb	21.33	21.14	37.94	23.92	20.07	23.50	17.18	20.57	22.69	18.22
K/K+Na	54.90	55.30	51.16	42.77	36.08	39.96	39.14	50.45	33.80	36.49
K+Na	4.39	4.72	3.01	4.91	4.85	5.48	3.96	4.40	5.77	3.48

TABLE 4.99

XRF Analyses: Intermediate Formation Ratio's (FOR13) Part 3

VAR. / ID.	AX-105	AX-106	AX-107	AX-108	AX-109	AX-179	AX-249	AX-251	AX-272	AX-273
K/Na	0.79	0.69	0.77	0.66	0.74	1.29	0.62	3.76	0.76	1.18
Al/Si	0.18	0.14	0.15	0.13	0.15	0.18	0.24	0.30	0.20	0.22
Fe+Mg	7.14	6.77	7.35	7.08	7.33	10.07	6.51	9.32	10.43	8.57
Fe/Mg	2.01	2.24	2.15	1.79	2.05	1.12	1.89	1.84	1.69	1.30
Al/Ca+Na	2.83	3.11	2.49	2.98	3.38	2.47	3.79	5.08	5.23	2.05
La/Y	1.25	1.50	1.16	1.25	1.55	1.52	1.68	1.57	1.43	1.42
Nb/Y	0.71	0.60	0.68	0.70	0.85	0.62	0.64	0.57	0.67	0.50
Nb/P	89.47	85.71	85.00	82.35	100.00	72.22	87.50	90.91	82.35	85.71
Rb/Sr	0.50	0.43	0.56	0.55	0.59	0.41	0.29	0.39	0.71	0.65
Ni/Co	0.62	0.57	0.91	0.61	0.83	1.79	0.74	1.38	1.32	0.94
Cu/Co	0.43	0.31	0.36	0.25	0.27	0.19	0.26	1.08	0.29	0.20
Zn/Co	1.17	0.76	0.98	0.57	0.75	1.05	0.79	3.13	1.73	1.31
Zr/Nb	15.71	16.83	20.82	18.36	17.88	20.08	18.36	15.55	16.79	18.25
K/K+Na	44.06	40.88	43.48	39.61	42.56	56.39	38.43	78.98	43.20	54.20
K+Na	3.79	2.96	3.22	3.08	3.36	3.99	5.49	6.28	3.75	3.69

TABLE 4.99

XRF Analyses: Intermediate Formation Ratio's (FOR13) Part 4

VAR. / ID.	AX-280	AX-281	AX-283	AX-284	AX-285	ZK-343	ZK-344	ZK-349	DTIA-2	DTIA-3
K/Na	1.30	1.47	1.40	1.65	1.33	1.31	2.75	0.62	1.10	1.39
Al/Si	0.20	0.19	0.20	0.21	0.21	0.19	0.29	0.20	0.20	0.17
Fe+Mg	9.24	8.21	11.16	10.19	9.83	9.23	10.44	9.76	12.06	10.67
Fe/Mg	1.43	1.54	1.43	1.62	1.60	1.82	1.73	1.40	1.08	1.36
Al/Ca+Na	5.50	4.57	5.49	7.94	5.12	5.03	9.43	3.47	4.46	3.14
La/Y	1.61	1.42	1.87	1.91	1.52	1.15	1.34	1.61	1.23	1.38
Nb/Y	0.57	0.63	0.74	0.74	0.52	0.48	0.55	0.48	0.54	0.50
Nb/P	100.00	93.75	100.00	106.25	93.75	88.89	106.67	50.00	73.68	76.47
Rb/Sr	1.01	1.10	1.00	1.19	0.91	0.91	1.66	0.30	0.48	0.53
Ni/Co	1.02	1.16	2.19	1.92	1.70	1.29	1.97	1.56	2.67	2.55
Cu/Co	0.47	0.20	0.25	0.28	0.27	0.26	0.42	0.37	0.46	0.55
Zn/Co	1.77	1.31	1.83	2.36	1.97	1.74	2.55	1.29	1.23	1.03
Zr/Nb	16.69	18.60	24.06	19.35	16.93	21.88	15.50	23.36	20.00	21.00
K/K+Na	56.48	59.51	58.29	62.25	57.14	56.68	73.36	38.16	52.33	58.09
K+Na	3.86	3.68	3.50	3.55	3.85	3.67	4.88	5.11	4.51	3.77

TABLE 4.99

XRF Analyses: Intermediate Formation Ratio's (FOR13) Part 5

VAR. / ID.	S-250	S-70109	S-70110	S-70111	S-70112	S-70115	S-70116	S-70118	S-70119	S-70120
K/Na	0.91	2.27	0.82	0.81	0.68	1.09	0.90	11.64	0.74	0.69
Al/Si	0.20	0.27	0.20	0.16	0.15	0.22	0.24	0.21	0.23	0.24
Fe+Mg	11.85	10.45	10.33	7.48	7.34	10.26	13.14	11.83	10.50	14.41
Fe/Mg	1.31	1.85	1.41	1.07	1.29	1.33	1.52	1.03	1.89	1.39
Al/Ca+Na	2.35	7.46	2.83	2.28	1.64	5.74	5.13	0.82	4.64	4.33
La/Y	1.15	1.06	1.27	1.29	1.00	1.30	1.32	0.81	1.04	1.09
Nb/Y	0.55	0.46	0.54	0.39	0.38	0.48	0.45	0.43	0.56	0.33
Nb/P	78.57	114.29	87.50	85.71	92.86	59.09	45.45	47.37	63.64	52.38
Rb/Sr	0.30	1.33	0.59	0.40	0.40	0.85	0.26	0.09	0.56	0.20
Ni/Co	3.75	1.64	0.95	0.60	0.51	2.97	1.94	2.67	2.09	2.31
Cu/Co	0.75	1.22	0.58	0.29	0.23	0.43	0.35	0.72	0.33	0.53
Zn/Co	2.07	2.25	1.33	1.23	0.88	1.26	1.82	2.83	1.26	2.50
Zr/Nb	15.45	16.56	17.29	23.83	21.15	21.46	21.80	26.00	20.43	20.64
K/K+Na	47.57	69.38	45.10	44.88	40.42	52.26	47.45	92.09	42.65	40.76
K+Na	3.91	5.29	4.59	4.10	4.33	4.21	4.70	1.39	4.90	4.49

TABLE 4.99

XRF Analyses: Intermediate Formation Ratio's (FOR13) Part 6

VAR. / ID.	S-70121	S-70122	S-70123	S-70124	S-70125	S-70126	S-70127	S-70128	S-70131	S-70132
K/Na	1.63	0.78	0.76	0.00	1.22	0.95	0.98	2.31	33.71	3.68
Al/Si	0.24	0.20	0.20	0.27	0.26	0.21	0.21	0.31	0.27	0.25
Fe+Mg	9.92	10.32	10.12	7.09	8.20	11.13	10.50	12.20	5.35	6.33
Fe/Mg	2.32	1.04	1.05	11.66	4.26	1.30	1.29	1.48	2.50	2.48
Al/Ca+Na	9.74	2.29	2.24	72.38	7.06	4.07	5.70	5.06	12.56	7.05
La/Y	0.79	1.04	1.00	0.66	1.62	1.38	1.00	1.59	1.68	1.46
Nb/Y	0.34	0.43	0.39	0.19	0.50	0.52	0.41	0.66	0.54	0.54
Nb/P	68.42	50.00	45.00	60.87	61.90	78.95	66.67	110.53	93.75	87.50
Rb/Sr	1.10	0.52	0.51	2.96	0.75	0.44	0.63	1.29	0.72	1.46
Ni/Co	5.38	1.40	1.47	3.93	4.78	2.10	2.47	2.53	2.08	1.00
Cu/Co	0.22	0.34	0.33	0.28	0.22	0.23	0.50	1.53	1.06	0.93
Zn/Co	1.00	1.83	1.84	0.39	0.88	1.52	1.76	6.69	0.83	0.61
Zr/Nb	22.38	17.10	19.44	25.21	22.00	18.13	20.21	11.33	20.60	19.57
K/K+Na	61.98	43.75	43.34	100.00	55.02	48.65	49.41	69.76	97.12	78.64
K+Na	3.84	3.20	3.23	2.99	4.58	4.44	4.27	6.68	2.43	3.37

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TABLE 4.99

XRF Analyses: Intermediate Formation Ratio's (FOR13) Part 7

VAR. / ID.	S-70133	S-70134	S-70135	S-70136	S-70137	S-70141	S-70152	AX604	AX840	AX841
K/Na	1.39	0.65	1.37	0.77	1.15	1.18	1.19	0.26	1.36	1.37
Al/Si	0.18	0.18	0.17	0.20	0.18	0.24	0.11	0.21	0.16	0.16
Fe+Mg	7.84	9.79	6.86	9.63	10.63	10.84	7.77	18.35	11.11	12.07
Fe/Mg	1.35	1.55	1.21	1.69	1.11	1.31	0.96	2.50	1.45	1.49
Al/Ca+Na	1.49	3.88	1.45	3.98	3.26	6.78	2.74	0.83	3.05	2.57
La/Y	1.34	1.20	1.23	0.89	1.27	1.00	1.24	0.47	0.89	0.79
Nb/Y	0.41	0.44	0.46	0.41	0.54	0.47	0.38	0.29	0.52	0.52
Nb/P	92.31	64.71	92.31	78.95	70.00	63.64	110.00	26.83	87.50	83.33
Rb/Sr	0.68	0.62	0.54	0.75	0.45	0.82	0.60	0.11	0.50	0.49
Ni/Co	1.07	1.20	0.71	0.65	2.30	2.38	0.25	0.76	4.41	3.38
Cu/Co	0.33	0.23	0.32	0.12	0.41	0.27	0.09	1.13	0.82	0.71
Zn/Co	1.74	1.30	1.61	1.08	1.19	1.14	0.37	2.55	2.88	3.14
Zr/Nb	32.17	22.73	27.08	17.40	20.29	17.43	33.91	13.55	24.93	24.40
K/K+Na	58.17	39.57	57.85	43.54	53.49	54.14	54.44	20.42	57.62	57.86
K+Na	3.61	3.26	3.25	3.79	4.58	4.47	2.48	3.82	4.20	4.01

TABLE 4.99

XRF Analyses: Intermediate Formation Ratio's (FOR13) Part 8

VAR. / ID.	AX842	AX847	AX851	AK33	AK223	AK502	AK509	AK551	AK674
K/Na	1.25	1.47	1.23	1.35	1.46	1.21	1.18	0.95	1.05
Al/Si	0.15	0.14	0.16	0.15	0.17	0.16	0.17	0.15	0.23
Fe+Mg	9.89	9.95	9.95	9.60	12.33	11.16	11.20	10.86	10.27
Fe/Mg	1.24	1.35	1.32	2.06	1.08	1.45	1.52	1.41	2.48
Al/Ca+Na	1.85	2.13	1.62	4.67	3.79	2.75	3.04	2.18	2.99
La/Y	0.96	0.92	0.97	1.13	1.21	1.15	1.22	1.19	1.30
Nb/Y	0.56	0.54	0.53	0.53	0.48	0.56	0.48	0.52	0.53
Nb/P	87.50	82.35	84.21	80.00	70.00	78.95	72.22	73.68	84.21
Rb/Sr	0.48	0.49	0.28	0.81	0.51	0.45	0.40	0.23	0.19
Ni/Co	5.46	6.14	4.14	2.80	3.90	3.80	4.24	5.77	2.94
Cu/Co	1.08	1.07	1.07	0.70	1.15	0.75	0.88	1.31	1.13
Zn/Co	2.62	3.00	5.00	2.70	2.45	2.40	3.06	3.85	4.31
Zr/Nb	18.07	19.21	17.25	17.06	18.21	20.87	23.54	21.29	14.94
K/K+Na	55.61	59.51	55.25	57.49	59.42	54.77	54.15	48.80	51.19
K+Na	4.19	4.10	4.76	3.67	4.83	3.98	4.58	4.59	5.90

TABLE 4.99

XRF Analyses: Garnetiferous Formation Ratio's (FOR15) Part 1

VAR. / ID.	AX-271	AX-282	AK4	AK13	AK17	AK20	AK25	AK30	AK52	AK58
K/Na	0.70	1.31	0.94	0.92	1.21	1.27	1.46	1.90	1.53	1.40
Al/Si	0.17	0.18	0.13	0.17	0.13	0.15	0.15	0.18	0.14	0.16
Fe+Mg	10.24	8.91	10.17	10.21	8.01	9.77	9.73	10.55	9.71	9.32
Fe/Mg	1.40	1.66	1.63	1.62	1.72	1.65	1.65	1.44	1.79	1.77
Al/Ca+Na	3.54	3.25	2.82	4.62	3.81	2.71	3.80	6.98	3.60	4.13
La/Y	1.13	1.39	0.83	0.93	1.21	1.18	1.00	0.97	1.00	0.96
Nb/Y	0.61	0.55	0.57	0.55	0.50	0.41	0.58	0.46	0.54	0.62
Nb/P	82.35	106.25	92.86	106.67	107.69	106.67	93.33	106.67	93.33	106.67
Rb/Sr	0.39	0.88	0.36	0.75	0.92	0.81	0.93	1.28	0.87	0.97
Ni/Co	1.18	1.54	3.65	3.00	3.75	3.53	3.60	6.27	4.08	3.36
Cu/Co	0.24	0.46	1.12	0.65	0.50	0.40	0.67	2.09	0.62	0.43
Zn/Co	1.45	1.54	3.53	3.82	5.92	4.53	4.60	5.55	5.54	5.50
Zr/Nb	20.29	19.65	18.15	18.56	14.86	21.13	21.43	18.13	22.14	18.44
K/K+Na	41.16	56.76	48.47	47.80	54.65	55.90	59.40	65.56	60.47	58.27
K+Na	3.28	3.77	2.95	3.18	3.55	3.56	3.35	3.60	3.39	3.81

TABLE 4.100

XRF Analyses: Garnetiferous Formation Ratio's (FOR15) Part 2

VAR. / ID.	AK63
K/Na	1.41
Al/Si	0.16
Fe+Mg	10.88
Fe/Mg	2.09
Al/Ca+Na	2.11
La/Y	0.85
Nb/Y	0.46
Nb/P	100.00
Rb/Sr	0.60
Ni/Co	3.40
Cu/Co	0.80
Zn/Co	4.93
Zr/Nb	30.11
K/K+Na	58.52
K+Na	3.11

TABLE 4.100

XRF Analyses: Glen Trool Formation Ratio's (FOR17) Part 1

VAR. / ID.	AX-114	AX-115	AX-116	AX-121
K/Na	0.86	0.93	0.72	0.75
Al/Si	0.19	0.17	0.17	0.21
Fe+Mg	7.70	7.10	7.90	6.51
Fe/Mg	2.44	2.35	2.26	2.62
Al/Ca+Na	5.09	4.66	3.61	3.94
La/Y	1.52	1.48	1.59	1.55
Nb/Y	0.76	0.71	0.77	0.77
Nb/P	84.21	93.75	94.44	77.27
Rb/Sr	0.61	0.69	0.56	0.59
Ni/Co	0.59	0.47	0.56	0.52
Cu/Co	0.35	0.25	0.29	0.33
Zn/Co	1.04	0.75	1.00	0.98
Zr/Nb	16.56	16.87	20.12	16.94
K/K+Na	46.20	48.18	41.83	42.99
K+Na	3.68	3.57	3.49	4.42

TABLE 4.101

XRF Analyses: Epidotitic Formation Ratio's (FOR19) Part 1

VAR. / ID.	S-70113	S-70114	S-70138	S-70139	S-70140	S-70142	S-70143	S-70148	S-70149	S-70150
K/Na	0.83	0.49	0.68	0.65	0.59	0.74	0.97	0.73	0.78	0.46
Al/Si	0.17	0.17	0.18	0.19	0.19	0.17	0.18	0.18	0.19	0.16
Fe+Mg	9.69	10.17	10.00	10.20	10.44	8.76	9.16	10.54	9.87	9.28
Fe/Mg	1.94	1.90	1.53	1.55	1.57	1.67	1.68	1.59	1.66	1.76
Al/Ca+Na	3.76	3.40	3.57	3.60	3.71	4.00	4.50	3.57	4.18	3.19
La/Y	1.12	1.31	1.28	1.33	1.17	0.89	1.21	1.16	0.85	1.00
Nb/Y	0.56	0.39	0.45	0.36	0.48	0.25	0.42	0.20	0.62	0.52
Nb/P	73.68	77.78	68.42	80.00	73.68	77.78	70.00	70.00	84.21	83.33
Rb/Sr	0.41	0.25	0.39	0.38	0.38	0.46	0.54	0.29	0.43	0.26
Ni/Co	0.98	1.64	1.41	1.46	1.25	1.34	1.32	1.22	1.12	0.98
Cu/Co	1.62	0.26	0.31	1.28	0.31	0.17	0.16	1.28	0.25	0.17
Zn/Co	1.15	1.26	1.49	1.56	1.29	1.19	1.47	1.22	1.06	1.09
Zr/Nb	23.50	17.07	21.38	19.44	19.36	22.21	26.86	23.36	18.69	18.93
K/K+Na	45.22	32.99	40.51	39.24	37.21	42.57	49.27	42.04	43.75	31.67
K+Na	3.56	2.91	3.53	3.67	3.87	3.43	3.43	3.33	3.84	3.41

TABLE 4.102

XRF Analyses: Epidotitic Formation Ratio's (FOR19) Part 2

VAR. / ID.	S-70151	S-70154
K/Na	0.92	0.41
Al/Si	0.19	0.14
Fe+Mg	9.61	7.44
Fe/Mg	1.73	1.92
Al/Ca+Na	3.68	3.37
La/Y	1.03	1.21
Nb/Y	0.50	0.39
Nb/P	68.18	91.67
Rb/Sr	0.42	0.24
Ni/Co	0.94	1.00
Cu/Co	0.22	0.11
Zn/Co	1.10	0.73
Zr/Nb	18.80	12.82
K/K+Na	47.81	29.14
K+Na	3.89	2.78

TABLE 4.102

XRF Analyses: Upper Calcareous Formation Ratio's (FOR21) Part 1

VAR. / ID.	DJR-15	DJR-17	DJR-18	DJR-20	DJR-21	DJR-22	DJR-23	DJR-24	DJR-25	DJR-26
K/Na	1.06	1.51	1.14	1.06	1.10	1.49	1.07	1.40	0.91	1.18
Al/Si	0.26	0.24	0.24	0.22	0.25	0.24	0.20	0.24	0.22	0.24
Fe+Mg	11.66	9.01	10.31	9.03	9.66	10.51	9.31	10.96	9.76	10.30
Fe/Mg	1.39	1.21	1.20	1.20	1.16	1.39	1.28	1.16	1.15	1.19
Al/Ca+Na	6.03	0.94	1.75	1.16	1.75	1.41	1.06	1.63	0.91	1.32
La/Y	1.50	1.50	1.21	1.76	1.32	1.04	1.46	1.26	1.23	1.37
Nb/Y	0.62	0.54	0.58	0.48	0.64	0.57	0.50	0.56	0.47	0.56
Nb/P	80.00	83.33	82.35	75.00	82.35	106.67	70.59	83.33	70.00	83.33
Rb/Sr	1.32	0.33	0.49	0.42	0.43	0.43	0.26	0.50	0.29	0.45
Ni/Co	1.48	2.12	2.23	1.76	1.58	2.27	1.35	1.97	1.65	1.67
Cu/Co	0.43	0.62	0.96	0.34	0.52	0.88	0.71	0.77	0.52	1.28
Zn/Co	1.71	2.35	2.42	1.76	1.61	2.58	1.56	2.16	1.74	1.72
Zr/Nb	16.56	14.60	12.86	14.08	12.57	12.31	21.50	13.13	20.14	13.13
K/K+Na	51.43	60.16	53.27	51.54	52.28	59.84	51.59	58.25	47.77	54.15
K+Na	4.53	3.64	3.98	3.90	3.73	3.81	3.14	3.88	3.37	3.86

TABLE 4.103

XRF Analyses: Upper Calcareous Formation Ratio's (FOR21) Part 3

VAR. / ID.	DJR-760	DJR-761	DJR-762	DJR-763	DJR-778	DJR-779	DJR-780	DJR-781	DJR-782	DJR-811
K/Na	1.19	1.59	1.17	1.15	1.49	1.15	1.05	1.16	1.22	1.73
Al/Si	0.23	0.26	0.23	0.23	0.27	0.23	0.23	0.22	0.24	0.29
Fe+Mg	10.17	10.74	9.42	10.64	12.24	10.63	10.33	10.43	10.76	10.89
Fe/Mg	1.25	1.24	1.22	1.21	1.41	1.27	1.21	1.34	1.31	2.47
Al/Ca+Na	1.49	1.55	1.35	1.61	2.14	1.70	1.42	1.50	1.60	8.43
La/Y	0.88	0.88	0.86	0.91	0.89	0.70	0.86	0.91	0.55	0.92
Nb/Y	0.45	0.45	0.45	0.42	0.42	0.42	0.40	0.41	0.37	0.38
Nb/P	78.95	88.24	72.22	73.68	84.21	77.78	70.00	82.35	73.68	94.74
Rb/Sr	0.46	0.52	0.40	0.48	0.78	0.49	0.39	0.45	0.46	1.17
Ni/Co	1.73	3.15	1.88	1.96	3.27	2.15	2.04	2.86	2.31	2.42
Cu/Co	0.67	1.35	0.73	0.74	1.45	1.00	0.92	1.38	1.04	0.97
Zn/Co	1.97	3.90	2.12	2.44	4.05	2.35	2.48	3.43	2.92	2.03
Zr/Nb	16.40	11.73	15.23	16.21	12.75	14.86	17.29	14.00	16.86	15.39
K/K+Na	54.41	61.35	53.96	53.40	59.82	53.43	51.15	53.79	54.96	63.33
K+Na	4.08	4.14	4.04	3.97	4.43	4.08	3.91	3.83	3.93	4.09

TABLE 4.103

XRF Analyses: Upper Calcareous Formation Ratio's (FOR21) Part 4

VAR. / ID.	DJR-812	DJR-813	DJR-899	DJR-900	DJR-901	DJR-902	DJR-908	DJR-909	DJR-910	DJR-911
K/Na	2.45	2.55	1.22	1.08	1.79	1.45	1.45	1.88	1.41	1.79
Al/Si	0.30	0.32	0.27	0.20	0.27	0.25	0.26	0.25	0.26	0.27
Fe+Mg	12.95	7.75	11.88	9.28	10.92	10.58	10.90	10.32	11.86	11.97
Fe/Mg	1.66	3.06	1.45	1.04	1.29	1.39	1.27	1.40	1.21	1.64
Al/Ca+Na	12.12	5.39	2.49	1.09	1.82	1.71	1.54	1.31	1.95	2.59
La/Y	0.79	1.12	0.84	1.29	1.17	1.16	1.00	1.19	1.07	1.36
Nb/Y	0.44	0.41	0.47	0.42	0.55	0.48	0.41	0.52	0.47	0.39
Nb/P	105.56	73.68	78.95	62.50	84.21	75.00	81.25	82.35	73.68	68.42
Rb/Sr	2.20	0.34	0.87	0.50	0.90	0.59	0.47	0.44	0.74	1.47
Ni/Co	2.73	2.10	2.63	1.83	2.11	2.42	2.38	3.00	2.37	2.30
Cu/Co	1.23	0.97	1.41	0.70	0.86	0.77	0.92	1.10	1.11	0.78
Zn/Co	3.03	2.20	3.00	1.96	2.61	2.65	2.50	3.24	2.96	2.37
Zr/Nb	11.63	16.50	12.60	16.30	11.38	15.53	12.38	12.14	13.43	24.23
K/K+Na	71.03	71.83	54.99	52.03	64.10	59.14	59.20	65.22	58.56	64.15
K+Na	4.35	2.52	4.31	3.94	4.15	4.21	4.02	3.45	4.03	3.57

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TABLE 4.103

XRF Analyses: Upper Calcareous Formation Ratio's (FOR21) Part 5

VAR. / ID.	DJR-944	DJR-945	DJR-948	DJR-949	DJR-950	DJR-951	DJR-952
K/Na	1.06	1.50	1.06	1.89	1.55	2.40	1.90
Al/Si	0.23	0.24	0.24	0.29	0.27	0.30	0.29
Fe+Mg	9.18	8.58	10.07	8.52	11.74	13.23	13.48
Fe/Mg	1.38	1.58	1.29	1.43	1.22	1.50	1.31
Al/Ca+Na	1.22	1.33	1.31	1.59	2.43	3.25	2.63
La/Y	0.86	1.42	1.27	0.93	1.32	1.21	1.13
Nb/Y	0.43	0.46	0.46	0.41	0.46	0.50	0.52
Nb/P	66.67	61.11	70.59	61.11	72.22	100.00	94.12
Rb/Sr	0.38	0.60	0.41	0.38	0.93	1.09	0.84
Ni/Co	2.23	1.54	2.70	2.35	2.20	3.04	3.38
Cu/Co	1.36	1.58	1.15	1.06	0.87	1.32	1.63
Zn/Co	2.86	2.63	4.05	2.12	2.57	3.71	3.92
Zr/Nb	16.33	18.91	14.33	18.64	15.00	10.88	11.31
K/K+Na	51.44	59.95	51.57	65.40	60.82	70.55	65.53
K+Na	3.83	3.67	3.82	3.41	4.16	4.38	4.38

TABLE 4.103

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 1

VAR. / ID.	DJR-1	DJR-2	DJR-3	DJR-4	DJR-5	DJR-6	DJR-7	DJR-8	DJR-9	DJR-10
K/Na	1.39	1.27	1.12	1.92	0.89	0.98	1.31	1.17	0.90	1.19
Al/Si	0.29	0.24	0.24	0.29	0.21	0.21	0.27	0.24	0.21	0.25
Fe+Mg	11.69	8.79	9.83	13.06	10.15	7.08	12.15	8.67	10.46	9.60
Fe/Mg	1.48	1.17	1.75	1.41	1.36	1.39	1.24	2.12	1.31	1.75
Al/Ca+Na	8.63	1.11	1.57	2.88	0.96	0.59	1.84	1.49	1.15	1.43
La/Y	1.30	1.31	1.05	1.30	1.25	1.17	1.24	1.15	1.29	1.32
Nb/Y	0.53	0.45	0.43	0.43	0.54	0.41	0.64	0.54	0.53	0.52
Nb/P	88.89	68.42	76.19	84.21	83.33	66.67	88.89	73.68	85.71	72.22
Rb/Sr	1.56	0.39	0.72	0.98	0.28	0.27	0.52	0.66	0.37	0.32
Ni/Co	1.59	1.41	2.00	3.04	1.15	1.65	2.41	1.72	1.18	1.50
Cu/Co	0.46	1.06	0.63	1.41	0.77	1.96	1.15	0.41	0.36	0.31
Zn/Co	1.88	1.88	2.94	3.67	1.56	1.96	2.78	1.69	1.60	0.94
Zr/Nb	13.88	14.92	13.69	12.75	19.67	14.83	11.63	16.00	24.22	14.92
K/K+Na	58.11	55.95	52.88	65.81	46.98	49.54	56.72	53.85	47.34	54.25
K+Na	4.44	3.95	3.99	4.27	2.98	3.27	3.72	4.03	3.57	3.41

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 2

VAR. / ID.	DJR-11	DJR-12	DJR-13	DJR-14	DJR-16	DJR-29	DJR-30	DJR-31	DJR-32	DJR-33
K/Na	1.04	2.26	0.69	1.67	0.77	1.08	2.25	1.10	1.21	4.56
Al/Si	0.22	0.30	0.20	0.26	0.22	0.20	0.29	0.21	0.24	0.25
Fe+Mg	8.80	13.30	8.90	12.00	9.50	8.42	11.78	9.28	9.60	9.40
Fe/Mg	1.39	1.49	1.35	1.26	1.43	1.34	1.59	1.31	1.39	1.60
Al/Ca+Na	1.42	3.85	1.43	2.68	1.54	0.89	10.55	1.23	1.36	1.23
La/Y	1.50	1.15	1.12	1.11	1.41	0.97	1.47	1.43	1.20	1.14
Nb/Y	0.54	0.63	0.46	0.54	0.48	0.48	0.53	0.43	0.50	0.39
Nb/P	77.78	94.44	70.59	83.33	73.68	73.68	70.83	72.22	75.00	64.71
Rb/Sr	0.26	1.55	0.36	0.94	0.46	0.36	2.45	0.43	0.54	1.04
Ni/Co	1.61	2.56	1.07	2.52	1.28	2.13	2.63	1.77	2.60	2.17
Cu/Co	0.18	0.22	0.24	0.79	0.56	0.79	0.50	0.37	0.52	0.40
Zn/Co	1.18	2.69	1.21	2.69	1.44	2.21	2.83	1.80	2.44	1.23
Zr/Nb	17.14	11.35	16.75	12.53	19.57	12.86	17.06	20.85	15.47	21.00
K/K+Na	51.10	69.30	40.92	62.53	43.53	51.88	69.23	52.42	54.69	82.02
K+Na	3.64	4.17	3.91	3.95	4.02	3.45	4.68	3.51	3.84	2.28

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TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 3

VAR. / ID.	DJR-34	DJR-35	DJR-36	DJR-37	DJR-38	DJR-39	DJR-40	DJR-41	DJR-42	DJR-43
K/Na	1.62	1.70	0.73	0.90	1.53	1.65	1.13	1.54	1.08	1.03
Al/Si	0.22	0.24	0.19	0.18	0.25	0.23	0.23	0.24	0.21	0.19
Fe+Mg	9.33	10.78	8.58	8.73	11.96	9.77	10.75	10.94	8.90	8.62
Fe/Mg	1.26	1.26	1.26	1.24	1.22	1.23	1.23	1.34	1.20	1.13
Al/Ca+Na	1.11	3.29	1.09	0.86	2.96	1.49	1.72	1.73	1.07	0.83
La/Y	1.19	0.93	1.19	1.04	1.24	1.12	1.26	1.17	1.38	1.21
Nb/Y	0.48	0.52	0.48	0.48	0.52	0.50	0.56	0.52	0.50	0.46
Nb/P	76.47	78.95	76.47	70.59	78.95	76.47	78.95	83.33	70.59	72.22
Rb/Sr	0.52	1.00	0.36	0.30	1.09	0.66	0.57	0.71	0.37	0.33
Ni/Co	1.87	1.52	1.76	1.60	2.64	2.15	2.35	2.29	1.59	1.26
Cu/Co	0.83	0.82	0.62	1.53	0.82	0.67	0.77	0.61	0.47	0.21
Zn/Co	1.97	1.55	1.90	1.67	2.54	2.07	2.42	2.50	1.53	1.44
Zr/Nb	16.54	16.07	19.08	23.08	15.67	14.08	15.00	13.87	17.92	22.62
K/K+Na	61.77	62.94	42.21	47.33	60.55	62.33	53.09	60.67	52.01	50.78
K+Na	3.27	3.67	3.53	3.00	4.03	3.77	3.88	3.89	3.48	3.21

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 4

VAR. / ID.	DJR-44	DJR-45	DJR-46	DJR-47	DJR-48	DJR-49	DJR-50	DJR-51	DJR-52	DJR-53
K/Na	1.14	0.94	1.22	1.09	1.24	6.74	1.23	1.42	1.05	3.12
Al/Si	0.21	0.20	0.23	0.22	0.21	0.26	0.23	0.22	0.22	0.24
Fe+Mg	9.51	9.20	9.85	9.39	8.59	9.83	11.26	10.04	8.97	9.42
Fe/Mg	1.25	1.24	1.16	1.30	1.25	1.34	1.29	1.27	1.35	1.36
Al/Ca+Na	1.21	1.11	1.16	1.32	0.82	1.25	1.96	1.19	1.50	1.94
La/Y	1.47	1.19	1.11	1.19	1.48	1.00	1.27	1.31	1.00	1.13
Nb/Y	0.47	0.48	0.46	0.50	0.52	0.52	0.54	0.52	0.50	0.57
Nb/P	75.00	72.22	72.22	72.22	70.00	75.00	73.68	75.00	76.47	68.42
Rb/Sr	0.37	0.39	0.32	0.47	0.32	0.39	0.54	0.49	0.55	0.88
Ni/Co	1.63	1.47	2.22	2.28	2.27	1.94	2.29	2.04	2.04	1.64
Cu/Co	0.59	0.25	1.19	1.00	0.59	0.23	0.71	0.33	0.59	0.50
Zn/Co	1.75	1.47	2.33	2.32	2.32	1.68	2.29	2.22	2.04	1.81
Zr/Nb	21.27	19.85	18.00	15.77	19.93	17.17	17.79	22.67	14.77	19.54
K/K+Na	53.30	48.58	55.01	52.20	55.43	87.08	55.16	58.75	51.28	75.72
K+Na	3.49	3.52	3.49	3.87	3.41	2.71	3.68	3.37	3.92	2.76

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 5

VAR. / ID.	DJR-54	DJR-55	DJR-56	DJR-57	DJR-58	DJR-59	DJR-60	DJR-61	DJR-62	DJR63
K/Na	0.93	1.22	0.90	1.16	0.85	1.08	1.63	1.01	1.25	24.80
Al/Si	0.20	0.23	0.20	0.20	0.22	0.21	0.24	0.20	0.22	0.21
Fe+Mg	8.17	10.72	9.06	8.81	8.68	9.19	11.48	9.48	9.04	9.19
Fe/Mg	1.36	1.21	1.17	1.15	1.41	1.16	1.29	1.12	1.17	1.47
Al/Ca+Na	0.82	1.51	1.04	1.10	1.09	1.00	2.35	1.37	1.10	0.99
La/Y	1.40	0.90	1.21	1.04	1.38	1.15	1.25	1.48	1.54	1.21
Nb/Y	0.48	0.45	0.46	0.46	0.54	0.50	0.54	0.62	0.46	0.54
Nb/P	70.59	68.42	76.47	72.22	72.22	81.25	78.95	76.47	64.71	81.25
Rb/Sr	0.29	0.57	0.45	0.37	0.43	0.36	0.64	0.39	0.50	1.02
Ni/Co	1.79	2.12	1.72	1.63	1.83	2.26	3.00	1.61	2.61	3.73
Cu/Co	0.92	0.52	0.83	0.60	0.52	0.61	0.92	0.52	0.57	0.93
Zn/Co	1.96	2.36	2.00	1.70	1.86	2.48	3.17	1.58	2.30	2.67
Zr/Nb	16.25	16.15	13.31	19.69	15.62	14.92	13.60	14.46	16.45	11.54
K/K+Na	48.21	55.02	47.43	53.64	45.86	51.93	61.98	50.14	55.56	96.12
K+Na	2.80	3.29	3.50	3.43	3.38	3.37	3.84	3.57	3.51	2.58

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TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 6

VAR. / ID.	DJR64	DJR65	DJR66	DJR-700	DJR-702	DJR-703	DJR-704	DJR-705	DJR-706	DJR-707
K/Na	50.00	30.50	64.60	1.25	2.17	1.44	3.26	2.02	1.42	1.57
Al/Si	0.20	0.16	0.22	0.22	0.30	0.28	0.31	0.27	0.24	0.26
Fe+Mg	12.15	12.64	9.76	8.34	13.35	12.38	13.70	12.45	9.57	12.21
Fe/Mg	1.07	0.86	1.58	1.19	1.45	1.38	1.54	1.22	1.28	1.10
Al/Ca+Na	0.54	0.35	1.07	0.71	3.59	3.09	4.12	1.97	1.48	2.14
La/Y	1.09	0.57	1.09	0.90	0.86	0.97	1.05	0.94	0.75	0.94
Nb/Y	0.43	0.29	0.64	0.42	0.43	0.45	0.39	0.46	0.47	0.38
Nb/P	83.33	72.73	87.50	76.47	94.12	78.95	94.12	88.89	88.24	68.42
Rb/Sr	0.58	0.38	1.21	0.37	1.39	0.93	1.89	0.83	0.50	0.70
Ni/Co	2.89	4.00	4.00	2.33	3.07	2.24	2.97	2.77	1.86	2.38
Cu/Co	1.05	1.09	1.50	2.90	1.25	1.12	1.53	1.54	0.79	0.92
Zn/Co	2.58	3.91	2.79	2.48	3.36	2.74	3.37	3.96	2.32	3.54
Zr/Nb	11.00	10.88	11.21	13.46	10.00	11.13	10.56	10.13	11.33	14.77
K/K+Na	98.04	96.83	98.48	55.65	68.42	58.97	76.54	66.84	56.63	61.04
K+Na	2.55	1.89	3.28	3.36	4.37	4.07	4.39	3.92	3.94	3.85

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 7

VAR. / ID.	DJR-708	DJR-709	DJR-710	DJR-711	DJR-712	DJR-713	DJR-714	DJR-715	DJR-716	DJR-717
K/Na	2.59	1.35	1.28	3.03	1.46	1.24	1.30	0.99	1.23	1.20
Al/Si	0.29	0.20	0.24	0.31	0.25	0.21	0.23	0.21	0.21	0.21
Fe+Mg	13.61	8.77	9.68	14.05	9.75	9.79	9.74	7.67	8.87	7.86
Fe/Mg	1.19	1.39	1.32	1.56	1.27	1.19	1.24	1.20	1.11	1.30
Al/Ca+Na	4.12	1.50	1.42	14.14	1.76	1.94	1.29	0.91	0.86	0.86
La/Y	1.05	1.10	0.86	1.46	1.00	1.09	1.13	0.92	0.68	0.91
Nb/Y	0.40	0.40	0.37	0.64	0.38	0.33	0.42	0.42	0.46	0.31
Nb/P	89.47	70.59	72.22	85.71	68.42	55.00	72.22	64.71	76.47	55.56
Rb/Sr	1.36	0.60	0.54	4.03	0.68	0.68	0.49	0.34	0.36	0.44
Ni/Co	2.79	2.04	2.42	2.94	2.74	2.07	3.63	1.82	2.22	2.55
Cu/Co	1.62	0.72	1.21	1.24	2.26	0.74	1.31	0.45	0.78	0.90
Zn/Co	3.03	2.72	2.71	2.97	3.87	2.59	4.44	1.77	2.96	2.70
Zr/Nb	9.94	18.50	14.69	10.67	12.77	17.82	14.77	13.73	13.77	16.50
K/K+Na	72.13	57.42	56.14	75.22	59.30	55.37	56.51	49.74	55.21	54.49
K+Na	4.27	3.57	3.83	4.64	3.98	3.63	3.61	3.88	3.26	3.45

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 8

VAR. / ID.	DJR-720	DJR-721	DJR-722	DJR-723	DJR-724	DJR-726	DJR-727	DJR-728	DJR-729	DJR-730
K/Na	1.19	1.19	1.08	1.12	1.17	1.68	1.27	1.25	1.17	1.35
Al/Si	0.21	0.21	0.21	0.21	0.22	0.24	0.21	0.26	0.26	0.24
Fe+Mg	8.89	8.79	9.00	8.92	8.88	9.05	9.82	11.49	12.11	10.46
Fe/Mg	1.15	1.19	1.25	1.19	1.26	1.56	1.31	1.27	1.35	1.20
Al/Ca+Na	1.10	1.10	1.11	1.11	1.71	2.25	1.20	2.03	3.93	1.40
La/Y	0.96	0.84	0.96	0.91	0.70	1.05	1.14	1.13	1.08	1.00
Nb/Y	0.39	0.35	0.41	0.34	0.33	0.38	0.42	0.47	0.38	0.56
Nb/P	68.75	64.71	61.11	64.71	61.11	73.68	78.95	75.00	63.64	100.00
Rb/Sr	0.44	0.43	0.42	0.46	0.55	0.83	0.45	0.66	1.05	0.46
Ni/Co	1.88	2.17	1.93	1.67	1.74	2.92	1.42	2.41	1.84	1.85
Cu/Co	0.54	0.70	0.59	0.60	0.56	0.71	0.48	0.70	0.63	0.63
Zn/Co	2.42	2.96	2.26	1.90	3.22	2.63	1.58	3.26	2.09	2.30
Zr/Nb	17.91	16.73	17.09	19.55	17.82	15.79	21.67	12.73	20.00	10.89
K/K+Na	54.29	54.42	51.94	52.82	53.89	62.72	55.88	55.58	53.90	57.51
K+Na	3.61	3.51	3.60	3.54	3.86	3.89	3.40	4.03	4.10	3.93

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TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 9

VAR. / ID.	DJR-731	DJR-732	DJR-733	DJR-734	DJR-735	DJR-736	DJR-737	DJR-738	DJR-739	DJR-740
K/Na	0.91	1.30	1.55	1.91	1.63	1.48	1.13	1.19	1.05	1.10
Al/Si	0.19	0.25	0.26	0.26	0.26	0.25	0.24	0.25	0.24	0.23
Fe+Mg	8.75	11.05	11.68	11.03	10.91	10.30	11.15	12.02	11.74	10.24
Fe/Mg	0.97	1.37	1.21	1.30	1.30	1.19	1.15	1.25	1.21	1.31
Al/Ca+Na	0.71	2.41	1.95	1.24	2.36	1.05	2.13	2.50	2.30	1.25
La/Y	1.14	1.21	1.03	0.88	0.94	0.67	0.91	1.27	1.21	0.92
Nb/Y	0.41	0.48	0.44	0.47	0.41	0.39	0.42	0.45	0.48	0.38
Nb/P	60.00	70.00	78.95	88.24	73.68	77.78	73.68	75.00	73.68	70.00
Rb/Sr	0.34	0.77	0.69	0.54	0.87	0.47	0.89	0.73	0.55	0.46
Ni/Co	1.14	1.93	2.07	2.42	1.90	2.36	1.79	2.00	1.65	1.86
Cu/Co	0.41	0.79	0.81	2.08	0.70	1.28	0.57	0.82	0.44	0.82
Zn/Co	1.34	2.52	2.78	3.04	2.10	2.60	2.11	2.50	2.00	2.21
Zr/Nb	18.22	14.71	13.93	10.47	15.00	12.14	16.43	15.67	17.43	17.07
K/K+Na	47.55	56.47	60.75	65.65	61.93	59.62	53.09	54.26	51.15	52.35
K+Na	3.26	4.02	4.00	3.61	4.15	3.64	3.88	3.76	3.91	3.61

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 10

VAR. / ID.	DJR-741	DJR-742	DJR-743	DJR-751	DJR-764	DJR-765	DJR-766	DJR-767	DJR-768	DJR-769
K/Na	1.39	1.12	0.92	1.64	1.83	1.82	45.78	1.26	1.23	1.31
Al/Si	0.23	0.23	0.20	0.22	0.23	0.23	0.32	0.23	0.22	0.23
Fe+Mg	9.49	10.13	8.71	9.36	9.33	9.62	8.02	9.79	10.25	9.62
Fe/Mg	1.20	1.29	1.22	1.19	1.21	1.15	4.01	1.31	1.26	1.26
Al/Ca+Na	1.18	1.32	0.93	1.06	0.80	0.87	0.61	1.19	1.12	1.13
La/Y	0.97	0.97	1.11	1.00	1.12	0.85	1.07	0.81	0.72	0.73
Nb/Y	0.38	0.47	0.43	0.44	0.39	0.39	0.38	0.42	0.44	0.41
Nb/P	72.22	88.24	66.67	82.35	76.47	81.25	78.57	72.22	85.00	78.95
Rb/Sr	0.40	0.46	0.31	0.45	0.33	0.30	1.03	0.46	0.41	0.51
Ni/Co	2.09	1.92	1.29	2.79	2.43	2.95	2.82	2.12	1.73	1.88
Cu/Co	0.83	0.65	0.52	1.47	1.39	1.37	1.00	0.72	0.87	0.81
Zn/Co	3.52	2.19	1.52	3.26	2.70	3.05	4.14	2.24	2.00	2.23
Zr/Nb	15.23	14.53	15.58	13.14	11.85	13.38	9.18	14.31	17.94	14.27
K/K+Na	58.24	52.91	48.00	62.14	64.60	64.48	97.86	55.67	55.21	56.62
K+Na	3.76	3.78	3.50	3.46	3.39	3.35	4.21	3.79	3.55	4.08

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 11

VAR. / ID.	DJR-770	DJR-771	DJR-772	DJR-773	DJR-774	DJR-775	DJR-776	DJR-777	DJR-783	DJR-784
K/Na	1.41	1.10	1.74	1.07	1.72	1.17	1.52	1.85	1.31	3.88
Al/Si	0.25	0.24	0.27	0.23	0.26	0.22	0.23	0.25	0.24	0.33
Fe+Mg	11.19	12.22	11.75	10.12	11.49	9.83	10.06	10.51	11.42	8.00
Fe/Mg	1.34	1.12	1.63	1.32	1.34	1.26	1.29	1.39	1.31	7.79
Al/Ca+Na	1.58	1.90	7.69	1.39	2.01	1.25	1.63	1.54	1.87	25.07
La/Y	0.89	1.00	0.75	0.68	0.83	0.80	0.80	0.94	0.71	1.21
Nb/Y	0.39	0.38	0.38	0.38	0.30	0.34	0.40	0.53	0.43	0.52
Nb/P	78.95	76.19	71.43	77.78	82.35	66.67	77.78	94.44	83.33	73.91
Rb/Sr	0.63	0.61	1.55	0.41	0.91	0.43	0.58	0.79	0.58	1.15
Ni/Co	2.90	2.21	2.64	2.22	2.43	2.20	2.00	3.15	2.50	2.50
Cu/Co	1.30	0.96	0.86	0.93	1.43	1.08	0.50	1.30	0.96	0.83
Zn/Co	3.20	2.43	2.57	2.37	2.47	2.68	2.33	3.65	2.88	2.30
Zr/Nb	14.53	18.00	16.00	12.93	13.36	16.92	15.71	13.88	13.47	13.18
K/K+Na	58.45	52.44	63.44	51.61	63.28	53.95	60.36	64.95	56.67	79.51
K+Na	4.14	3.89	4.13	3.72	4.03	3.67	3.86	3.68	3.90	3.71

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 12

VAR. / ID.	DJR-785	DJR-786	DJR-787	DJR-788	DJR-789	DJR-790	DJR-791	DJR-792	DJR-793	DJR-794
K/Na	7.47	5.43	7.48	6.45	3.24	1.89	1.47	1.27	1.47	1.28
Al/Si	0.24	0.30	0.27	0.28	0.30	0.23	0.23	0.22	0.22	0.25
Fe+Mg	9.65	9.52	10.34	10.55	11.87	6.59	9.53	9.78	9.25	12.19
Fe/Mg	2.52	2.75	2.16	1.95	1.77	4.19	1.42	1.26	1.37	1.27
Al/Ca+Na	1.83	3.11	1.33	1.41	2.88	1.33	1.31	1.27	0.94	3.02
La/Y	1.21	0.89	0.97	0.70	0.89	0.97	0.80	0.86	0.97	0.84
Nb/Y	0.38	0.38	0.40	0.36	0.49	0.33	0.40	0.39	0.42	0.37
Nb/P	73.33	77.78	75.00	75.00	94.44	61.11	82.35	82.35	82.35	73.68
Rb/Sr	0.32	0.74	0.29	0.38	1.31	0.76	0.56	0.43	0.35	1.00
Ni/Co	1.74	2.11	1.97	2.34	3.52	1.92	2.61	2.40	2.11	2.57
Cu/Co	0.65	0.89	0.91	1.00	1.61	0.62	1.09	0.96	0.44	0.93
Zn/Co	2.03	2.11	2.30	2.52	3.65	2.04	2.65	2.56	2.30	2.36
Zr/Nb	16.27	15.36	14.00	13.25	10.65	17.27	13.57	13.71	14.93	14.07
K/K+Na	88.19	84.45	88.21	86.58	76.43	65.36	59.53	56.01	59.55	56.17
K+Na	1.44	2.83	2.12	2.31	4.37	3.84	3.83	3.66	3.56	3.97

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 13

VAR. / ID.	DJR-795	DJR-796	DJR-797	DJR-798	DJR-799	DJR-800	DJR-801	DJR-802	DJR-803	DJR-804
K/Na	1.30	1.49	1.26	1.82	1.41	1.24	1.79	0.26	1.20	0.90
Al/Si	0.24	0.25	0.23	0.25	0.26	0.27	0.29	0.22	0.25	0.22
Fe+Mg	10.63	10.86	9.80	11.69	12.13	9.65	12.44	9.37	12.03	9.37
Fe/Mg	1.36	1.30	1.33	1.42	1.31	2.15	1.36	1.36	1.30	1.26
Al/Ca+Na	1.28	1.13	1.09	1.64	2.27	5.19	3.43	0.86	3.20	0.83
La/Y	0.89	0.68	0.88	1.00	1.08	0.91	0.85	0.71	0.92	0.84
Nb/Y	0.34	0.37	0.41	0.42	0.40	0.34	0.38	0.42	0.44	0.38
Nb/P	63.16	73.68	77.78	83.33	84.21	78.95	78.95	84.21	80.95	77.78
Rb/Sr	0.43	0.41	0.40	0.90	0.71	0.81	1.01	0.35	0.94	0.33
Ni/Co	2.12	2.52	1.79	2.50	1.76	2.03	2.46	2.40	2.07	2.17
Cu/Co	0.88	1.68	0.75	0.88	0.71	0.67	1.50	2.05	0.83	1.17
Zn/Co	2.42	2.92	2.11	2.88	1.94	1.80	3.42	3.45	2.41	2.79
Zr/Nb	17.08	12.57	14.07	12.67	14.38	15.00	13.20	13.25	14.12	13.21
K/K+Na	56.51	59.84	55.74	64.58	58.44	55.27	64.20	49.56	54.52	47.45
K+Na	3.61	3.71	3.57	3.67	4.09	4.27	4.19	3.41	4.20	3.33

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 14

VAR. / ID.	DJR-805	DJR-806	DJR-807	DJR-808	DJR-809	DJR-810	DJR-814	DJR-815	DJR-816	DJR-817
K/Na	2.37	2.05	1.54	2.09	2.80	1.24	1.11	0.56	1.11	1.56
Al/Si	0.27	0.29	0.25	0.24	0.29	0.25	0.25	0.31	0.24	0.26
Fe+Mg	8.54	12.34	11.12	8.94	14.02	10.32	11.14	7.55	11.08	11.01
Fe/Mg	2.85	1.51	1.22	1.69	1.78	1.69	1.40	2.58	1.32	1.34
Al/Ca+Na	1.91	2.94	1.25	1.09	2.33	2.45	2.78	2.35	1.83	1.52
La/Y	0.86	0.63	0.71	0.85	0.86	0.69	0.67	0.88	0.71	0.75
Nb/Y	0.42	0.40	0.39	0.41	0.40	0.36	0.33	1.67	0.39	0.40
Nb/P	78.95	85.00	83.33	87.50	89.47	73.68	75.00	1070.00	78.95	84.21
Rb/Sr	1.20	1.21	0.45	0.74	1.14	0.96	0.80	0.75	0.54	0.58
Ni/Co	2.26	3.52	2.23	2.43	3.04	2.43	2.35	1.11	2.10	2.48
Cu/Co	0.74	1.24	1.00	1.52	1.86	0.79	0.92	0.52	0.79	1.48
Zn/Co	2.12	3.86	2.88	2.48	3.46	2.61	2.58	3.30	2.21	3.00
Zr/Nb	15.00	12.18	13.67	12.50	10.53	13.36	16.53	5.40	13.73	12.13
K/K+Na	70.32	67.23	60.68	67.66	73.70	55.35	52.69	35.72	52.59	60.95
K+Na	4.01	4.12	3.51	3.34	4.03	4.30	4.27	6.69	3.86	4.02

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 15

VAR. / ID.	DJR-818	DJR-819	DJR-820	DJR-821	DJR-822	DJR-823	DJR-824	DJR-825	DJR-826	DJR-827
K/Na	1.42	1.54	3.13	1.37	1.59	1.10	0.94	2.01	1.41	1.60
Al/Si	0.24	0.24	0.33	0.25	0.27	0.23	0.21	0.27	0.24	0.23
Fe+Mg	9.71	10.47	14.90	10.78	12.72	10.82	9.23	11.96	10.78	9.13
Fe/Mg	1.54	1.30	1.57	1.36	1.29	1.31	1.42	1.26	1.22	1.59
Al/Ca+Na	1.24	1.27	5.58	1.82	2.01	1.41	1.48	1.66	1.47	1.07
La/Y	0.97	0.77	0.97	0.89	0.95	1.63	1.00	0.68	0.75	0.73
Nb/Y	0.42	0.43	0.50	0.41	0.46	0.79	0.42	0.43	0.36	0.38
Nb/P	77.78	83.33	105.88	78.95	89.47	71.43	72.22	88.57	72.22	77.78
Rb/Sr	0.58	0.45	2.27	0.49	0.76	0.44	0.55	0.66	0.53	0.50
Ni/Co	2.10	2.68	2.81	2.08	2.36	2.07	1.91	2.52	1.90	1.74
Cu/Co	1.17	1.50	1.44	0.92	1.21	1.26	0.83	1.52	0.86	0.81
Zn/Co	2.28	3.00	3.09	2.58	3.21	2.67	2.30	3.00	2.21	1.89
Zr/Nb	14.21	12.27	9.78	15.27	11.82	16.47	15.77	12.50	16.69	16.21
K/K+Na	58.67	60.58	75.79	57.86	61.40	52.46	48.54	66.75	58.51	61.54
K+Na	3.75	3.78	4.75	4.01	3.99	3.66	4.12	3.79	3.88	3.77

TABLE 4.104

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XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 16

VAR. / ID.	DJR-828	DJR-829	DJR-830	DJR-831	DJR-832	DJR-833	DJR-834	DJR-835	DJR-836	DJR-837
K/Na	1.17	1.14	1.26	1.07	1.99	1.05	1.25	1.41	1.26	1.45
Al/Si	0.25	0.24	0.25	0.20	0.26	0.20	0.23	0.25	0.23	0.26
Fe+Mg	11.89	11.25	10.69	8.73	11.11	9.27	10.72	11.26	9.66	12.08
Fe/Mg	1.30	1.15	1.32	1.28	1.30	1.24	1.36	1.35	1.26	1.34
Al/Ca+Na	1.70	1.63	1.72	0.97	1.41	1.12	2.01	2.47	1.18	3.51
La/Y	1.10	0.97	0.97	0.79	1.08	0.96	0.69	0.80	1.03	0.80
Nb/Y	0.40	0.44	0.41	0.39	0.50	0.26	0.34	0.34	0.37	0.37
Nb/P	84.21	70.00	70.00	61.11	72.22	36.84	61.11	63.16	64.71	71.43
Rb/Sr	0.48	0.49	0.50	0.39	0.66	0.35	0.66	0.93	0.46	1.28
Ni/Co	2.50	1.71	2.85	1.96	2.91	1.52	2.64	2.83	2.45	2.92
Cu/Co	0.88	0.61	1.00	0.83	1.45	0.68	1.00	1.26	0.91	1.00
Zn/Co	3.04	2.48	3.30	2.04	3.23	1.55	3.00	3.17	2.41	2.92
Zr/Nb	13.56	18.79	15.29	19.45	13.15	37.43	20.00	17.08	19.18	14.67
K/K+Na	53.99	53.20	55.75	51.72	66.58	51.10	55.47	58.48	55.80	59.14
K+Na	3.76	4.06	4.00	3.48	3.86	3.62	3.84	3.95	3.62	4.21

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 17

VAR. / ID.	DJR-838	DJR-839	DJR-840	DJR-841	DJR-842	DJR-843	DJR-844	DJR-845	DJR-846	DJR-847
K/Na	1.35	1.02	1.13	1.49	1.15	1.11	3.36	1.46	0.99	1.40
Al/Si	0.25	0.24	0.23	0.23	0.23	0.22	0.32	0.25	0.22	0.25
Fe+Mg	11.30	10.35	11.24	10.97	10.33	9.31	13.79	10.86	10.32	11.55
Fe/Mg	1.68	1.87	1.38	1.21	1.24	1.10	2.21	1.39	1.23	1.28
Al/Ca+Na	7.60	4.64	2.09	1.35	1.29	1.03	16.18	2.00	1.69	2.67
La/Y	1.13	1.09	1.00	1.17	1.10	1.07	1.08	0.97	0.97	0.86
Nb/Y	0.47	0.44	0.36	0.43	0.37	0.44	0.47	0.40	0.28	0.45
Nb/P	70.00	70.00	60.00	68.42	57.89	75.00	85.00	77.78	55.56	68.42
Rb/Sr	1.87	1.05	0.67	0.51	0.46	0.37	3.63	0.76	0.54	0.87
Ni/Co	2.33	2.23	2.03	2.95	2.12	2.43	3.45	2.50	1.89	2.26
Cu/Co	0.87	0.74	0.74	0.95	0.92	0.86	1.45	0.88	0.81	0.93
Zn/Co	2.60	1.94	2.26	3.33	2.44	2.48	3.69	2.50	2.07	2.30
Zr/Nb	15.36	17.29	22.25	16.31	22.09	15.67	11.47	15.57	23.10	15.54
K/K+Na	57.51	50.61	53.01	59.89	53.42	52.53	77.04	59.38	49.74	58.29
K+Na	4.33	4.13	3.66	3.59	3.65	3.75	4.53	5.89	3.80	3.86

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 18

VAR. / ID.	DJR-848	DJR-849	DJR-850	DJR-851	DJR-852	DJR-853	DJR-854	DJR-855	DJR-856	DJR-857
K/Na	1.13	1.19	1.11	1.87	1.37	1.29	5.08	1.62	1.81	1.26
Al/Si	0.24	0.21	0.23	0.28	0.24	0.24	0.28	0.26	0.24	0.21
Fe+Mg	10.72	9.19	9.97	12.57	10.52	10.53	10.97	11.03	9.93	10.09
Fe/Mg	1.37	1.34	1.48	1.34	1.35	1.31	1.78	1.35	1.34	1.15
Al/Ca+Na	2.11	1.22	1.45	2.32	1.63	1.53	2.15	2.45	1.47	1.19
La/Y	0.79	1.00	1.10	1.10	0.79	0.85	1.23	0.83	1.07	1.10
Nb/Y	0.38	0.40	0.45	0.52	0.36	0.39	0.40	0.33	0.43	0.41
Nb/P	72.22	66.67	73.68	88.24	66.67	68.42	70.59	60.00	72.22	66.67
Rb/Sr	0.73	0.47	0.52	0.97	0.64	0.62	1.19	0.78	0.70	0.44
Ni/Co	2.18	2.00	1.93	2.72	2.43	2.17	3.00	2.56	2.41	1.81
Cu/Co	0.61	1.00	0.78	1.12	1.00	0.96	1.25	0.96	0.67	0.85
Zn/Co	2.36	2.08	2.33	3.12	2.74	2.65	2.54	3.12	2.63	2.35
Zr/Nb	14.92	18.00	19.00	12.07	17.00	15.38	14.33	18.42	16.62	20.67
K/K+Na	53.12	54.27	52.67	65.11	57.84	56.36	83.54	61.84	64.46	55.71
K+Na	4.01	3.63	3.74	4.07	3.70	3.85	3.16	3.59	3.63	3.50

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 19

VAR. / ID.	DJR-858	DJR-860	DJR-861	DJR-862	DJR-863	DJR-864	DJR-865	DJR-866	DJR-867	DJR-868
K/Na	7.26	1.35	1.10	1.30	3.64	1.51	2.48	1.38	1.29	1.55
Al/Si	0.29	0.25	0.24	0.24	0.26	0.27	0.27	0.26	0.23	0.26
Fe+Mg	18.41	11.48	10.55	10.45	9.06	11.51	8.79	11.43	9.83	11.46
Fe/Mg	1.91	1.29	1.43	1.30	1.40	1.78	1.84	1.27	1.46	1.31
Al/Ca+Na	16.27	2.08	2.55	1.93	1.45	6.89	1.94	2.40	1.51	1.92
La/Y	1.42	1.00	0.83	0.85	0.97	0.97	1.03	1.23	1.00	1.10
Nb/Y	0.58	0.45	0.47	0.36	0.37	0.41	0.42	0.42	0.34	0.45
Nb/P	82.35	68.42	70.00	66.67	64.71	76.19	68.42	68.42	66.67	77.78
Rb/Sr	3.21	0.77	0.79	0.58	0.59	1.49	0.86	0.80	0.63	0.79
Ni/Co	3.57	2.83	2.68	2.77	2.16	2.28	2.54	2.03	2.24	3.00
Cu/Co	0.48	0.83	1.05	1.18	2.05	0.41	0.96	0.76	0.88	1.48
Zn/Co	4.48	3.04	2.91	2.91	1.47	2.56	2.42	2.31	2.40	3.26
Zr/Nb	12.79	15.46	15.07	16.50	17.00	20.06	17.23	18.00	18.33	14.21
K/K+Na	87.90	57.39	52.45	56.52	78.45	60.19	71.28	58.00	56.27	60.83
K+Na	3.14	3.99	4.08	3.91	2.32	4.12	3.97	4.19	3.91	4.11

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 20

VAR. / ID.	DJR-869	DJR-870	DJR-871	DJR-872	DJR-873	DJR-874	DJR-875	DJR-876	DJR-877	DJR-878
K/Na	1.11	1.09	1.67	2.21	1.48	1.31	0.94	1.09	1.35	1.63
Al/Si	0.22	0.22	0.25	0.24	0.25	0.25	0.19	0.21	0.25	0.25
Fe+Mg	9.97	9.12	10.57	9.17	11.37	11.36	8.79	9.08	10.75	11.30
Fe/Mg	1.26	1.46	1.35	1.26	1.24	1.35	1.28	1.21	1.20	1.38
Al/Ca+Na	1.33	1.49	1.61	1.22	1.87	2.91	0.93	1.03	1.63	3.21
La/Y	1.04	0.91	1.08	0.69	0.97	0.73	0.78	1.10	1.23	1.00
Nb/Y	0.43	0.34	0.31	0.38	0.44	0.27	0.36	0.45	0.43	0.38
Nb/P	66.67	70.59	66.67	64.71	82.35	73.68	72.22	68.42	76.47	77.78
Rb/Sr	0.50	0.57	0.66	0.45	0.78	0.96	0.29	0.47	0.62	1.01
Ni/Co	2.16	3.24	2.67	1.78	2.72	3.18	1.69	3.06	2.90	2.71
Cu/Co	0.76	1.29	1.04	0.78	1.16	1.05	0.88	1.65	1.30	0.96
Zn/Co	2.36	3.35	3.29	1.96	2.96	3.09	2.04	3.65	3.40	2.88
Zr/Nb	19.42	16.92	16.83	17.55	12.50	16.29	18.77	14.77	15.54	13.21
K/K+Na	52.55	52.05	62.50	68.89	59.60	56.76	48.50	52.10	57.39	61.90
K+Na	3.73	3.90	3.84	3.15	4.01	3.77	3.34	3.57	3.99	4.20

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 21

VAR. / ID.	DJR-879	DJR-880	DJR-881	DJR-882	DJR-883	DJR-884	DJR-885	DJR-886	DJR-887	DJR-888
K/Na	1.40	1.23	1.33	1.94	1.57	1.83	1.18	1.11	1.34	12.56
Al/Si	0.24	0.24	0.22	0.24	0.24	0.26	0.23	0.22	0.24	0.32
Fe+Mg	9.86	10.79	8.88	9.06	10.13	8.70	9.69	9.27	10.09	12.71
Fe/Mg	1.32	1.23	1.31	1.37	1.18	1.82	1.34	1.30	1.20	1.94
Al/Ca+Na	1.39	1.94	1.20	1.78	1.25	1.38	1.38	1.18	1.55	26.72
La/Y	1.07	0.84	1.11	1.00	0.87	1.23	0.89	0.79	1.09	1.27
Nb/Y	0.40	0.38	0.44	0.41	0.40	0.40	0.44	0.33	0.38	0.43
Nb/P	66.67	63.16	66.67	66.67	70.59	66.67	70.59	61.11	70.59	100.00
Rb/Sr	0.56	0.61	0.48	0.67	0.49	0.68	0.52	0.42	0.55	4.64
Ni/Co	3.16	2.42	2.57	2.07	2.80	3.05	2.42	2.17	2.57	3.21
Cu/Co	1.05	0.67	1.91	0.63	1.30	0.67	0.63	0.87	1.14	1.39
Zn/Co	3.32	2.58	2.48	1.96	3.30	2.95	2.58	0.00	3.00	3.57
Zr/Nb	15.17	19.75	18.08	17.25	19.08	14.42	15.17	19.27	20.08	13.50
K/K+Na	58.40	55.15	57.06	66.04	61.04	64.69	54.20	52.63	57.22	92.62
K+Na	3.99	3.88	3.61	3.18	3.67	4.05	3.93	3.61	3.95	3.66

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 22

VAR. / ID.	DJR-889	DJR-890	DJR-891	DJR-892	DJR-893	DJR-894	DJR-895	DJR-896	DJR-897	DJR-898
K/Na	1.27	1.72	1.13	1.10	3.31	2.30	1.29	0.89	1.03	0.94
Al/Si	0.25	0.26	0.25	0.21	0.30	0.27	0.22	0.21	0.22	0.21
Fe+Mg	11.24	11.28	11.14	8.89	14.00	11.27	9.78	10.33	10.53	9.40
Fe/Mg	1.36	1.23	1.31	1.18	1.40	1.20	1.17	1.35	1.11	1.24
Al/Ca+Na	2.50	1.65	6.35	0.99	17.19	1.42	1.50	3.20	1.27	0.86
La/Y	0.85	0.79	0.92	0.76	1.00	1.18	1.07	1.03	1.10	1.07
Nb/Y	0.33	0.42	0.26	0.29	0.44	0.50	0.41	0.45	0.40	0.44
Nb/P	72.22	73.68	72.22	58.82	84.21	82.35	64.71	65.00	66.67	70.59
Rb/Sr	0.72	0.65	1.39	0.38	4.76	0.67	0.53	0.65	0.42	0.30
Ni/Co	2.56	3.09	1.87	2.30	2.57	3.04	2.60	1.96	2.13	2.21
Cu/Co	0.52	1.45	0.74	0.91	0.91	2.04	0.95	0.61	0.78	0.63
Zn/Co	3.84	3.77	2.10	2.35	2.94	3.13	2.95	2.04	2.61	2.21
Zr/Nb	15.62	14.50	16.23	18.30	12.69	13.50	18.00	22.54	17.25	18.67
K/K+Na	56.04	63.18	53.09	52.30	76.79	69.71	56.35	47.07	50.68	48.49
K+Na	3.89	4.02	4.05	3.48	4.05	3.83	3.94	3.76	3.69	3.32

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 23

VAR. / ID.	DJR-903	DJR-904	DJR-905	DJR-906	DJR-912	DJR-913	DJR-914	DJR-915	DJR-916	DJR-917
K/Na	3.15	2.28	1.23	0.87	1.17	1.65	1.37	1.00	2.13	1.17
Al/Si	0.31	0.25	0.26	0.21	0.25	0.26	0.25	0.22	0.27	0.24
Fe+Mg	12.78	9.07	9.24	9.43	10.44	11.43	11.32	9.63	10.75	10.49
Fe/Mg	1.64	1.48	1.66	1.29	1.26	1.20	1.22	1.26	1.28	1.43
Al/Ca+Na	2.76	1.34	2.07	1.94	1.45	1.59	1.48	1.17	1.64	1.33
La/Y	1.16	1.00	1.38	0.96	0.90	1.10	1.31	1.14	1.06	1.08
Nb/Y	0.48	0.27	0.41	0.48	0.47	0.42	0.45	0.43	0.42	0.43
Nb/P	78.95	66.67	65.00	68.75	82.35	72.22	68.42	66.67	72.22	76.19
Rb/Sr	1.78	0.15	0.83	0.56	0.54	0.61	0.54	0.43	0.65	0.50
Ni/Co	3.46	2.00	3.15	1.69	2.48	2.61	2.32	2.00	2.48	2.08
Cu/Co	2.69	0.74	0.56	0.46	1.35	1.13	0.92	0.82	1.20	0.96
Zn/Co	4.35	2.00	1.74	1.96	3.09	3.17	2.84	3.82	3.00	2.50
Zr/Nb	11.40	25.83	22.31	14.91	13.36	15.54	14.92	18.08	13.69	24.19
K/K+Na	75.91	69.50	55.11	46.62	53.88	62.22	57.88	50.00	68.04	54.01
K+Na	4.65	3.41	3.52	4.29	4.12	3.97	3.87	3.84	3.88	3.87

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 24

VAR. / ID.	DJR-918	DJR-919	DJR-920	DJR-921	DJR-922	DJR-923	DJR-924	DJR-925	DJR-926	DJR-927
K/Na	0.99	1.21	1.78	1.88	1.05	1.32	1.24	2.36	1.14	1.37
Al/Si	0.25	0.26	0.25	0.30	0.24	0.25	0.24	0.29	0.23	0.21
Fe+Mg	11.80	11.60	10.63	10.73	10.80	11.16	11.10	13.17	10.31	8.67
Fe/Mg	1.30	1.29	1.19	1.72	1.34	1.32	1.51	1.68	1.28	1.37
Al/Ca+Na	2.31	2.75	1.41	13.98	2.73	2.26	2.90	11.68	1.72	0.80
La/Y	0.77	1.06	1.11	1.03	1.19	0.81	1.03	1.07	1.13	0.00
Nb/Y	0.37	0.36	0.44	0.44	0.42	0.26	0.42	0.56	0.42	0.00
Nb/P	65.00	61.90	70.59	116.67	65.00	73.68	78.95	83.33	68.42	75.00
Rb/Sr	0.75	0.93	0.70	1.95	0.93	0.86	0.99	2.60	0.52	0.22
Ni/Co	2.19	2.27	2.44	2.30	2.14	2.72	2.80	2.30	1.90	3.31
Cu/Co	0.74	0.54	1.00	0.57	1.36	0.96	1.08	1.24	0.76	1.06
Zn/Co	2.74	2.73	2.72	2.63	2.39	2.92	2.88	2.48	2.24	3.56
Zr/Nb	18.15	19.31	17.25	17.36	18.08	13.57	13.87	14.47	17.92	16.17
K/K+Na	49.76	54.69	64.02	65.33	51.30	56.93	55.28	70.25	53.32	57.80
K+Na	4.10	4.26	3.78	3.75	3.86	3.97	3.98	4.47	3.77	3.27

TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 25

VAR. / ID.	DJR-928	DJR-929	DJR-930	DJR-931	DJR-932	DJR-933	DJR-934	DJR-935	DJR-936	DJR-937
K/Na	1.20	1.03	1.35	1.80	1.78	1.33	1.41	1.43	1.61	1.12
Al/Si	0.23	0.22	0.24	0.27	0.26	0.24	0.24	0.22	0.25	0.22
Fe+Mg	10.06	10.23	10.36	11.83	10.13	10.55	9.65	9.18	10.83	8.74
Fe/Mg	1.31	1.30	1.26	1.42	1.72	1.36	1.41	1.21	1.24	1.30
Al/Ca+Na	1.59	1.47	1.57	3.17	2.20	1.59	1.76	1.07	1.56	1.25
La/Y	0.80	0.85	1.03	0.80	0.90	1.00	1.30	1.00	1.00	1.43
Nb/Y	0.27	0.32	0.45	0.29	0.50	0.45	0.48	0.46	0.39	0.48
Nb/P	66.67	65.00	83.33	75.00	78.95	68.42	68.42	66.67	68.42	64.71
Rb/Sr	0.61	0.57	0.66	1.13	1.13	0.69	0.64	0.50	0.68	0.48
Ni/Co	3.00	2.27	3.81	2.96	3.36	2.16	2.68	1.86	2.52	2.13
Cu/Co	1.55	0.96	1.56	1.04	1.41	1.04	0.91	0.64	0.84	0.65
Zn/Co	3.25	2.65	4.63	3.04	3.45	2.72	3.05	2.32	2.88	2.39
Zr/Nb	18.17	18.54	12.80	14.47	12.93	16.08	17.00	17.08	15.31	16.64
K/K+Na	54.64	50.84	57.52	64.30	64.02	57.03	58.42	58.86	61.74	52.91
K+Na	3.77	3.56	3.79	4.23	4.03	3.70	3.80	3.67	3.79	3.78

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TABLE 4.104

XRF Analyses: Lower Calcareous Formation Ratio's (FOR23) Part 26

VAR. / ID.	DJR-938	DJR-939	DJR-940	DJR-941	DJR-942	DJR-943	DJR-946	DJR-947
K/Na	1.22	1.28	1.27	1.29	1.18	0.88	0.49	1.65
Al/Si	0.23	0.23	0.26	0.23	0.24	0.20	0.08	0.24
Fe+Mg	9.65	9.47	10.86	10.52	9.70	8.74	3.75	9.54
Fe/Mg	1.30	1.43	1.42	1.19	1.41	1.21	3.69	1.48
Al/Ca+Na	1.41	1.31	2.93	1.31	2.02	1.05	8.47	1.36
La/Y	1.22	0.94	1.15	1.24	1.67	0.79	1.33	1.22
Nb/Y	0.38	0.45	0.41	0.42	0.48	0.39	0.44	0.44
Nb/P	70.59	73.68	82.35	66.67	68.42	64.71	33.33	82.35
Rb/Sr	0.58	0.64	0.92	0.48	0.78	0.33	1.67	0.46
Ni/Co	2.20	2.77	2.36	1.67	1.96	1.64	0.28	0.76
Cu/Co	0.80	1.09	0.64	0.64	0.37	0.88	0.26	0.38
Zn/Co	2.36	3.32	2.80	1.79	2.04	1.72	0.42	2.50
Zr/Nb	18.42	13.00	14.14	23.71	15.08	18.55	17.00	19.79
K/K+Na	54.86	56.10	56.02	56.25	54.05	46.74	33.05	62.21
K+Na	3.70	3.85	4.32	3.68	4.20	3.83	1.18	3.89

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4.104

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 1

VAR. / ID.	AX-101	AX-110	AX-125	AX-126	AX-128	AX-129	AX-138	AX-166	AX-167	AX-178
K/Na	1.13	0.48	0.30	1.04	0.61	0.32	0.75	0.65	1.01	0.20
Al/Si	0.24	0.21	0.23	0.29	0.22	0.25	0.22	0.17	0.20	0.22
Fe+Mg	14.13	12.47	12.35	15.20	12.08	14.76	11.85	8.88	10.46	12.83
Fe/Mg	1.22	1.16	1.27	1.23	1.36	1.25	1.83	1.95	1.34	1.41
Al/Ca+Na	3.46	2.33	2.87	5.68	2.76	2.78	2.90	3.25	2.97	1.82
La/Y	1.24	1.00	1.11	1.23	1.56	1.36	1.77	1.20	1.24	1.00
Nb/Y	0.48	0.50	0.47	0.68	0.61	0.64	0.60	0.64	0.62	0.55
Nb/P	60.87	58.82	60.00	88.24	68.75	63.64	72.00	100.00	81.25	60.00
Rb/Sr	0.29	0.16	0.12	1.01	0.20	0.06	0.08	0.48	0.33	0.10
Ni/Co	1.69	3.32	1.97	6.83	2.70	3.71	2.03	1.37	1.90	1.66
Cu/Co	0.31	0.77	0.71	1.31	0.97	0.77	0.87	0.34	0.50	0.74
Zn/Co	2.47	1.81	1.68	3.69	1.90	2.11	2.74	1.43	1.35	1.63
Zr/Nb	24.71	19.60	16.56	12.47	15.45	14.71	14.11	19.38	17.00	19.42
K/K+Na	53.05	32.47	23.15	50.99	37.71	24.43	42.72	39.40	50.30	16.93
K+Na	4.92	3.85	5.14	5.53	4.19	5.73	5.15	3.68	4.95	4.37

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 2

VAR. / ID.	AX-185	AX-188	AX-203	AX-218	AX-220	AX-225	AX-227	AX-232	AX-233	AX-237
K/Na	0.62	0.97	0.89	0.91	0.51	0.80	1.01	1.18	1.09	0.76
Al/Si	0.23	0.22	0.24	0.19	0.20	0.20	0.17	0.23	0.20	0.18
Fe+Mg	14.10	12.17	13.83	12.09	11.21	11.45	10.49	12.58	12.52	10.12
Fe/Mg	1.31	1.45	1.34	1.26	1.58	1.25	1.15	1.50	1.25	1.25
Al/Ca+Na	2.97	2.78	2.97	2.91	2.07	2.34	2.14	2.71	2.91	2.47
La/Y	1.00	1.32	1.70	1.00	1.32	1.00	1.29	1.25	1.16	1.59
Nb/Y	0.50	0.56	0.63	0.48	0.58	0.57	0.46	0.54	0.56	0.55
Nb/P	60.00	73.68	61.29	75.00	64.71	76.47	78.57	61.90	73.68	70.59
Rb/Sr	0.17	0.23	0.12	0.21	0.12	0.28	0.35	0.17	0.27	0.20
Ni/Co	2.00	1.69	1.97	2.09	2.03	1.88	2.21	1.61	1.74	1.80
Cu/Co	0.38	0.31	0.94	0.53	0.77	0.63	0.39	0.79	0.62	0.46
Zn/Co	1.65	1.39	2.32	1.29	1.68	1.50	1.18	1.27	1.65	1.46
Zr/Nb	18.75	17.29	14.37	21.00	17.18	19.85	22.45	17.46	20.57	20.75
K/K+Na	38.31	49.27	47.02	47.55	33.56	44.34	50.24	54.11	52.10	43.30
K+Na	4.62	4.81	4.19	3.87	4.38	4.15	4.18	4.62	4.05	4.48

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 3

VAR. / ID.	AX-238	AX-243	AX-245	AX-247	AX-248	ZK-348	AX452	AX973	AX974	AX975
K/Na	1.07	0.76	0.81	0.63	0.90	1.03	1.88	0.97	0.67	1.26
Al/Si	0.21	0.18	0.19	0.24	0.25	0.24	0.26	0.21	0.21	0.21
Fe+Mg	12.69	6.87	7.71	9.73	7.56	9.86	14.44	11.74	12.94	12.98
Fe/Mg	1.25	2.24	2.15	1.53	1.73	1.36	1.19	1.54	1.45	1.45
Al/Ca+Na	3.56	2.94	4.73	2.92	2.99	3.04	3.05	2.75	2.55	3.17
La/Y	1.04	1.43	1.33	1.57	1.20	1.60	0.90	1.22	1.76	0.96
Nb/Y	0.44	0.86	0.71	0.65	0.56	0.56	0.62	0.67	0.64	0.61
Nb/P	57.14	120.00	89.47	83.33	82.35	66.67	72.22	120.00	57.14	100.00
Rb/Sr	0.23	0.51	0.85	0.23	0.41	0.24	0.28	0.51	0.09	0.64
Ni/Co	2.32	0.63	0.60	0.86	1.14	1.39	5.25	5.24	3.29	7.29
Cu/Co	0.68	0.50	0.43	0.50	0.89	0.47	1.17	1.12	0.90	1.29
Zn/Co	1.84	1.21	1.04	2.11	2.17	1.53	2.83	3.94	3.67	5.14
Zr/Nb	22.17	15.11	18.12	14.73	15.64	17.00	16.00	17.00	14.69	19.29
K/K+Na	51.70	43.13	44.74	38.72	47.44	50.64	65.28	49.25	40.21	55.74
K+Na	4.41	3.64	3.71	5.01	5.27	5.45	3.37	3.35	4.75	3.66

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 4

VAR. / ID.	AX976	AX977	AX979	AX980	AX981	AX982	DTIA-39	DTIA-48	DTIA-133	DTIA-292
K/Na	0.95	1.63	0.78	0.75	0.74	0.70	0.89	0.69	1.86	1.28
Al/Si	0.22	0.20	0.23	0.22	0.19	0.19	0.20	0.25	0.28	0.25
Fe+Mg	10.27	12.73	11.31	10.55	16.90	10.44	11.19	13.31	9.28	12.37
Fe/Mg	1.99	1.19	1.74	1.86	1.31	1.66	1.16	1.29	1.65	1.24
Al/Ca+Na	3.34	2.12	3.95	4.96	1.25	1.12	1.69	2.71	8.55	2.11
La/Y	1.46	1.04	1.29	1.07	1.07	2.21	1.27	1.38	1.08	1.00
Nb/Y	0.61	0.64	0.64	0.59	0.43	0.50	0.50	0.57	0.58	0.46
Nb/P	100.00	94.12	105.88	94.12	28.57	36.36	68.75	70.59	200.00	64.71
Rb/Sr	0.17	0.50	0.23	0.30	0.10	0.04	0.19	0.20	0.66	0.39
Ni/Co	3.05	3.89	3.58	3.16	3.83	3.29	3.27	3.74	0.77	3.23
Cu/Co	0.85	0.89	1.16	0.84	0.97	1.06	0.70	0.74	1.07	0.87
Zn/Co	3.60	3.56	3.05	3.58	2.69	3.53	1.57	1.97	2.00	2.10
Zr/Nb	15.41	17.50	14.22	18.31	17.33	17.25	17.09	16.67	8.71	16.55
K/K+Na	48.62	61.99	43.75	42.79	42.39	41.20	47.13	40.76	65.07	56.22
K+Na	5.06	3.42	4.64	4.09	3.94	4.66	4.35	3.68	5.21	4.02

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 5

VAR. / ID.	S-70145	S-70146	S-70147	A9	S88	S93	S101	S103	S107	S108
K/Na	0.83	0.00	1.03	2.21	1.63	0.57	0.93	1.04	1.12	0.57
Al/Si	0.22	0.32	0.26	0.21	0.22	0.16	0.18	0.16	0.16	0.13
Fe+Mg	9.43	5.74	10.73	11.24	10.48	8.02	7.84	6.95	7.75	6.97
Fe/Mg	2.07	14.11	2.15	1.98	1.94	1.91	1.97	2.49	2.59	2.15
Al/Ca+Na	6.20	439.00	7.15	1.58	3.15	2.87	4.37	3.21	4.78	2.98
La/Y	0.89	2.12	0.96	1.76	1.53	1.04	1.30	0.82	1.17	0.90
Nb/Y	0.59	1.00	0.64	0.66	0.89	0.69	0.74	0.77	0.78	0.71
Nb/P	72.73	340.00	75.00	70.37	100.00	75.00	89.47	106.25	94.74	78.95
Rb/Sr	0.77	1.17	0.96	0.29	0.71	0.30	0.64	0.60	0.77	0.39
Ni/Co	1.22	1.00	1.33	2.92	3.56	2.21	3.00	2.55	2.17	2.36
Cu/Co	0.41	1.06	0.55	1.29	1.11	1.07	1.08	1.27	1.00	1.36
Zn/Co	1.76	0.61	2.03	3.00	4.00	5.36	4.31	4.55	3.67	3.45
Zr/Nb	21.44	13.35	18.72	16.47	11.82	17.44	13.35	15.00	18.56	17.87
K/K+Na	45.28	100.00	50.73	68.84	62.01	36.24	48.12	51.01	52.82	36.25
K+Na	3.71	1.74	4.10	3.98	3.58	3.78	3.72	3.47	3.37	3.20

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 6

VAR. / ID.	E138	E142	E178	A217	A218	N239	A314	S352	ZK377	K379
K/Na	0.78	0.95	0.57	0.34	0.31	0.94	0.61	0.18	1.18	1.14
Al/Si	0.17	0.16	0.19	0.18	0.16	0.20	0.16	0.21	0.15	0.15
Fe+Mg	7.15	8.04	11.89	14.64	12.19	10.34	12.58	15.47	8.28	9.26
Fe/Mg	2.49	2.45	1.62	2.09	2.04	2.40	1.61	1.40	1.31	1.20
Al/Ca+Na	4.31	3.49	1.87	1.46	1.51	3.75	1.51	2.16	1.02	1.10
La/Y	1.45	1.00	1.32	0.21	0.42	0.92	1.68	1.17	1.23	1.38
Nb/Y	0.73	0.74	0.64	0.29	0.35	0.69	0.52	0.50	0.55	0.50
Nb/P	106.67	106.25	61.54	57.14	64.29	105.88	35.14	50.00	66.67	52.17
Rb/Sr	0.73	0.49	0.06	0.12	0.13	0.70	0.08	0.07	0.26	0.31
Ni/Co	1.83	1.80	3.39	1.82	2.53	3.33	2.54	4.05	6.17	4.41
Cu/Co	1.08	0.93	1.06	0.86	1.12	0.81	1.04	1.10	1.25	0.88
Zn/Co	2.58	3.80	3.72	2.68	4.06	2.52	2.79	3.10	2.92	2.59
Zr/Nb	17.63	16.24	14.63	14.75	14.33	14.28	15.15	16.11	20.75	22.75
K/K+Na	43.82	48.79	36.33	25.20	23.60	48.35	37.93	15.10	54.08	53.36
K+Na	3.72	4.12	5.34	3.81	3.94	3.93	4.06	4.37	4.53	4.61

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 7

VAR. / ID.	K380	A393	N403	A434	A443	A444	A445	N447	N453	N454
K/Na	0.83	0.60	0.82	0.49	1.14	1.00	0.91	0.79	0.42	0.35
Al/Si	0.16	0.19	0.15	0.20	0.23	0.24	0.20	0.17	0.16	0.18
Fe+Mg	11.54	9.91	10.59	10.69	11.48	12.36	10.93	10.42	14.20	13.31
Fe/Mg	1.74	1.83	2.26	2.13	2.20	2.19	2.37	2.08	0.90	1.29
Al/Ca+Na	1.95	1.89	3.56	2.65	4.73	4.02	4.52	3.56	2.11	1.82
La/Y	1.33	1.36	0.91	1.00	1.44	0.84	0.81	0.96	1.00	0.81
Nb/Y	0.62	0.54	0.61	0.63	0.56	0.63	0.70	0.60	0.56	0.52
Nb/P	65.00	57.69	116.67	89.47	100.00	111.11	111.76	93.75	71.43	68.75
Rb/Sr	0.20	0.06	0.65	0.11	0.55	0.45	0.46	0.30	0.11	0.23
Ni/Co	4.67	3.00	3.27	4.92	3.86	4.00	4.67	4.50	5.56	8.10
Cu/Co	0.89	1.05	1.07	1.58	1.18	1.11	1.27	1.36	0.48	1.00
Zn/Co	2.89	3.53	3.87	4.58	2.95	4.26	3.73	5.14	2.52	2.85
Zr/Nb	19.54	15.13	16.79	14.41	13.21	12.25	11.16	14.93	15.20	17.55
K/K+Na	45.45	37.48	45.13	33.04	53.19	50.11	47.60	44.07	29.53	26.16
K+Na	3.41	5.55	3.08	4.60	4.55	4.61	4.58	4.47	3.86	3.67

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 8

VAR. / ID.	N459	N460	C470	C471	N481	N485	N592	N593	N594	N595
K/Na	0.83	0.27	0.51	0.47	0.68	0.77	0.79	0.70	1.31	0.49
Al/Si	0.19	0.18	0.21	0.21	0.19	0.26	0.22	0.19	0.22	0.18
Fe+Mg	10.29	15.60	9.70	10.52	10.44	20.07	11.29	10.07	10.81	9.85
Fe/Mg	2.30	1.97	1.84	1.41	2.32	1.57	2.65	2.61	2.53	2.52
Al/Ca+Na	4.49	1.22	3.11	2.76	3.26	4.51	3.93	2.62	3.37	3.05
La/Y	1.28	0.65	1.19	1.20	1.39	0.18	1.03	1.03	1.07	1.00
Nb/Y	0.56	0.55	0.59	0.56	0.71	0.64	0.67	0.60	0.63	0.65
Nb/P	105.88	68.00	94.12	77.78	111.11	70.00	105.26	105.88	106.25	95.65
Rb/Sr	0.51	0.07	0.15	0.10	0.55	0.41	0.56	0.49	0.60	0.33
Ni/Co	4.62	2.44	4.50	2.94	3.94	4.36	4.18	3.47	3.94	4.00
Cu/Co	1.46	1.04	1.50	0.82	1.12	1.36	1.29	1.18	1.41	1.25
Zn/Co	12.15	2.59	4.92	2.59	4.53	1.92	4.18	3.18	4.71	3.81
Zr/Nb	13.72	12.24	12.25	11.43	12.80	10.57	14.30	14.33	11.71	14.27
K/K+Na	45.28	21.03	33.73	31.87	40.59	43.51	44.15	41.30	56.66	32.67
K+Na	4.24	3.90	5.01	5.68	3.72	4.16	4.19	4.31	4.13	4.04

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 9

VAR. / ID.	N597	N598	W606	W607	W608	W609	N611	N616	S617	S622
K/Na	3.46	0.58	0.52	0.56	0.47	0.89	0.97	0.95	1.10	1.27
Al/Si	0.36	0.20	0.15	0.13	0.14	0.17	0.20	0.14	0.15	0.14
Fe+Mg	11.92	8.43	14.77	14.08	14.24	11.23	10.70	6.92	7.27	7.52
Fe/Mg	2.85	2.51	1.21	1.02	1.10	1.84	2.44	2.87	2.56	2.62
Al/Ca+Na	7.14	2.76	1.95	0.34	2.12	1.69	4.36	3.89	3.56	4.13
La/Y	1.06	0.91	0.56	0.68	0.78	1.09	1.42	1.45	1.04	1.30
Nb/Y	0.62	0.57	0.44	0.40	0.43	0.41	0.53	0.75	0.70	0.65
Nb/P	123.53	76.47	78.57	76.92	76.92	45.00	111.76	100.00	94.12	107.14
Rb/Sr	1.13	0.13	0.51	0.18	0.30	0.07	0.60	0.66	0.66	0.69
Ni/Co	4.00	3.31	9.19	9.08	11.54	2.47	4.75	2.18	2.17	2.70
Cu/Co	2.05	1.38	1.50	0.83	0.85	1.20	1.25	0.91	1.17	1.20
Zn/Co	5.32	4.08	3.50	2.33	3.54	3.33	4.06	3.73	4.33	4.50
Zr/Nb	9.10	12.46	12.73	14.40	15.00	12.67	11.53	18.73	15.69	14.40
K/K+Na	77.60	36.84	34.29	35.74	31.94	47.15	49.23	48.66	52.44	55.88
K+Na	5.49	4.94	3.85	2.63	3.82	5.79	4.53	3.35	3.49	3.40

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 10

VAR. / ID.	AX755	AX785	AX834	AX835	AX844	AX849	AX858	AX864	AX865	AX868
K/Na	0.92	1.21	0.96	0.31	0.70	1.03	1.35	0.74	1.19	0.58
Al/Si	0.15	0.22	0.15	0.17	0.14	0.16	0.17	0.20	0.18	0.18
Fe+Mg	11.99	11.39	11.74	12.55	10.77	13.42	11.59	11.43	11.01	12.25
Fe/Mg	1.52	2.03	1.54	1.72	1.58	1.18	1.73	2.33	1.75	1.73
Al/Ca+Na	1.60	2.24	1.64	1.66	1.25	2.22	1.89	3.70	1.92	2.03
La/Y	1.14	1.00	0.96	0.83	1.36	1.17	1.25	1.09	1.35	1.16
Nb/Y	0.62	0.50	0.46	0.46	0.56	0.50	0.61	0.64	0.58	0.52
Nb/P	81.25	60.00	60.00	57.89	70.00	78.95	100.00	110.53	78.95	65.00
Rb/Sr	0.24	0.41	0.27	0.07	0.17	0.25	0.51	0.51	0.29	0.17
Ni/Co	3.92	3.24	4.00	3.19	4.58	4.40	4.18	3.68	4.17	3.35
Cu/Co	1.15	1.24	0.74	1.06	1.17	0.75	1.12	1.05	0.94	0.35
Zn/Co	3.62	2.76	2.58	2.19	3.83	3.35	3.65	4.42	3.28	2.30
Zr/Nb	21.15	15.42	21.50	19.73	22.93	18.33	17.35	12.05	15.67	21.46
K/K+Na	47.88	54.76	48.99	23.47	41.29	50.71	57.51	42.44	54.37	36.72
K+Na	3.53	5.04	4.47	4.26	3.56	4.91	3.53	4.43	3.66	3.84

TABLE 4.105

XRF Analyses: Southern Uplands Unassigned Ratio's (FOR25) Part 11

VAR. / ID.	AK2
K/Na	0.91
Al/Si	0.18
Fe+Mg	13.64
Fe/Mg	1.63
Al/Ca+Na	1.42
La/Y	1.07
Nb/Y	0.41
Nb/P	50.00
Rb/Sr	0.10
Ni/Co	2.72
Cu/Co	1.36
Zn/Co	2.68
Zr/Nb	18.82
K/K+Na	47.56
K+Na	3.49

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 1

VAR. / ID.	CXD1001	CXD1002	CXD1003	CXD1004	CXD1005	CXD1006	CXD1007	CXD1008	CXD1009	CXD1010
K/Na	2.43	5.31	4.25	4.23	1.34	1.35	1.48	18.78	21.69	2.75
Al/Si	0.26	0.30	0.30	0.29	0.24	0.24	0.22	0.36	0.31	0.23
Fe+Mg	10.02	10.08	11.53	10.32	9.37	10.06	9.41	7.73	6.89	8.49
Fe/Mg	1.76	2.30	1.83	2.17	1.70	1.56	1.42	2.36	3.33	1.61
Al/Ca+Na	3.84	4.77	18.34	12.88	1.74	2.10	1.29	2.74	1.83	1.42
La/Y	0.97	1.03	1.31	1.05	1.06	0.94	0.97	1.06	1.00	1.14
Nb/Y	0.44	0.47	0.50	0.43	0.44	0.44	0.45	0.44	0.41	0.46
Nb/P	80.00	88.89	94.12	106.67	70.00	73.68	72.22	78.95	82.35	76.47
Rb/Sr	1.06	1.69	2.08	1.82	0.54	0.74	0.51	1.72	1.63	0.82
Ni/Co	1.52	2.05	1.98	1.39	1.50	2.10	1.35	2.86	1.34	1.22
Cu/Co	0.67	0.92	0.81	0.52	0.50	0.52	0.68	1.57	0.73	0.65
Zn/Co	1.67	2.08	2.02	1.37	1.40	2.00	1.25	1.57	0.91	0.89
Zr/Nb	16.00	13.25	14.56	15.19	17.43	14.93	17.08	11.00	15.64	16.00
K/K+Na	70.86	84.16	80.96	80.86	57.22	57.43	59.64	94.95	95.59	73.33
K+Na	3.74	3.85	3.94	3.71	3.81	3.97	3.37	4.55	3.63	3.15

TABLE 4.106

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 2

VAR. / ID.	CXD1011	CXD1012	CXD1013	CXD1014	CXD1015	CXD1016	CXD1017	CXD1018	CXD1019	CXD1020
K/Na	12.96	28.00	28.42	56.33	31.85	31.25	29.00	25.67	32.33	19.20
Al/Si	0.29	0.34	0.29	0.37	0.33	0.33	0.32	0.30	0.28	0.27
Fe+Mg	6.81	8.26	7.80	8.03	8.60	8.40	8.25	7.94	8.96	8.88
Fe/Mg	2.27	1.55	6.03	2.98	1.37	1.84	1.55	1.50	1.75	1.37
Al/Ca+Na	1.89	2.44	6.38	3.72	2.58	1.95	2.08	2.00	1.44	1.64
La/Y	1.06	1.00	1.31	1.31	1.06	1.37	1.37	1.37	1.26	1.10
Nb/Y	0.42	0.50	0.41	0.53	0.55	0.48	0.43	0.50	0.48	0.45
Nb/P	76.47	88.24	80.00	100.00	100.00	81.25	76.47	88.24	76.47	76.47
Rb/Sr	1.44	0.79	1.64	1.52	0.92	0.77	0.44	0.79	0.73	0.70
Ni/Co	1.26	1.95	1.77	3.09	2.61	1.82	1.34	2.11	2.61	2.71
Cu/Co	0.65	1.35	1.15	0.97	1.32	1.27	1.10	1.63	2.09	0.60
Zn/Co	0.65	0.63	0.52	0.74	1.00	1.21	1.21	1.89	2.00	0.66
Zr/Nb	15.92	11.60	14.25	10.00	9.76	14.54	12.31	12.00	13.54	15.69
K/K+Na	92.83	96.55	96.60	98.26	96.96	96.90	96.67	96.25	97.00	95.05
K+Na	3.21	4.06	3.53	5.16	4.27	3.87	3.30	3.20	3.00	3.03

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 3

VAR. / ID.	CXD1021	CXD1022	CXD1023	CXD1024	CXD1025	CXD1026	CXD1027	CXD1028	CXD1029	CXD1030
K/Na	18.74	24.00	26.64	31.73	40.57	28.82	37.57	43.75	27.10	32.36
Al/Si	0.30	0.29	0.34	0.38	0.39	0.30	0.29	0.21	0.28	0.33
Fe+Mg	8.21	6.23	7.36	7.05	7.93	7.13	9.09	12.54	9.83	8.54
Fe/Mg	1.64	1.38	1.43	1.39	1.76	1.29	1.80	1.14	1.39	1.63
Al/Ca+Na	2.18	3.39	2.52	2.85	2.78	3.09	3.18	0.80	2.29	2.24
La/Y	1.32	1.33	1.79	1.41	1.30	1.29	1.81	0.76	1.59	1.46
Nb/Y	0.48	0.48	0.52	0.44	0.50	0.43	0.46	0.21	0.44	0.46
Nb/P	100.00	162.50	83.33	120.00	83.33	66.67	85.71	46.67	70.59	72.22
Rb/Sr	0.83	0.82	0.33	0.33	0.25	1.20	1.20	0.67	1.15	0.63
Ni/Co	3.08	4.24	4.67	4.53	3.46	3.86	2.62	3.15	3.22	3.55
Cu/Co	1.16	1.24	1.22	1.33	1.00	1.64	1.62	2.00	1.72	1.36
Zn/Co	0.79	1.06	0.61	1.20	0.46	6.36	26.62	2.15	2.39	0.95
Zr/Nb	10.73	11.54	15.13	16.44	11.60	16.50	13.67	16.29	16.08	13.00
K/K+Na	94.93	96.00	96.38	96.94	97.59	96.65	97.41	97.77	96.44	97.00
K+Na	3.75	3.75	3.04	3.60	2.91	3.28	2.70	1.79	2.81	3.67

TABLE 4.106

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XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 4

VAR. / ID.	CXD1031	CXD1032	CXD1033	CXD1034	CXD1035	CXD1036	CXD1037	CXD1038	CXD1039	CXD1040
K/Na	22.33	20.64	22.71	2.99	6.48	17.33	18.70	20.33	32.14	0.00
Al/Si	0.32	0.30	0.33	0.26	0.31	0.34	0.34	0.32	0.38	0.37
Fe+Mg	7.57	8.21	8.59	8.70	8.93	8.75	8.84	8.36	7.74	7.98
Fe/Mg	2.12	1.76	1.54	1.36	1.52	1.66	1.63	1.53	1.97	1.62
Al/Ca+Na	2.25	1.62	1.90	1.54	1.86	2.69	2.58	2.26	5.03	3.99
La/Y	1.33	1.04	1.14	1.22	1.07	1.61	1.57	1.07	1.41	1.54
Nb/Y	0.50	0.50	0.50	0.48	0.48	0.54	0.50	0.48	0.53	0.61
Nb/P	88.24	77.78	82.35	76.47	82.35	93.75	88.24	82.35	106.25	94.44
Rb/Sr	0.83	0.59	0.65	0.61	0.76	0.94	0.96	0.81	1.12	0.87
Ni/Co	2.97	2.68	3.04	2.00	2.14	2.34	2.96	2.19	2.97	2.32
Cu/Co	1.24	1.11	0.52	1.11	0.64	1.13	1.11	1.13	3.55	1.38
Zn/Co	1.14	1.54	1.84	1.89	1.46	1.03	1.04	0.94	1.62	0.97
Zr/Nb	11.47	12.29	11.71	13.85	12.64	11.07	11.00	13.07	10.12	10.88
K/K+Na	95.71	95.38	95.78	74.92	86.63	94.55	94.92	95.31	96.98	100.00
K+Na	3.50	3.03	3.32	3.23	3.59	3.85	3.94	3.20	4.64	4.06

TABLE 4.106

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 5

VAR. / ID.	CXD1041	CXD1042	CXD1043	CXD1044	CXD1045	CXD1046	CXD1047	CXD1048	CXD1049	CXD1050
K/Na	4.95	4.28	34.55	38.33	39.50	18.84	4.26	24.07	37.92	32.50
Al/Si	0.33	0.31	0.36	0.33	0.34	0.33	0.28	0.29	0.39	0.32
Fe+Mg	12.98	11.66	13.07	10.12	9.94	10.53	10.55	8.45	6.64	9.12
Fe/Mg	1.49	1.35	1.38	1.39	1.33	1.38	1.27	1.24	2.07	1.39
Al/Ca+Na	2.48	2.28	4.05	3.43	2.69	2.95	1.90	1.91	5.31	2.14
La/Y	1.50	1.40	1.59	1.50	1.19	1.60	1.04	1.21	1.69	1.38
Nb/Y	0.57	0.50	0.56	0.47	0.48	0.50	0.50	0.46	0.53	0.50
Nb/P	100.00	88.24	83.33	77.78	88.24	88.24	82.35	76.47	106.25	81.25
Rb/Sr	1.63	1.21	1.84	1.48	1.37	1.38	0.92	1.02	1.66	0.83
Ni/Co	3.58	2.61	2.86	2.48	5.00	1.72	2.69	1.44	2.35	2.40
Cu/Co	1.83	1.10	1.52	1.13	2.31	0.77	1.00	0.41	1.00	1.00
Zn/Co	3.71	2.68	3.00	0.68	4.69	1.08	2.77	0.54	0.73	1.17
Zr/Nb	9.12	10.73	12.73	12.86	10.87	11.80	12.36	13.31	10.76	11.85
K/K+Na	83.19	81.05	97.19	97.46	97.53	94.96	80.98	96.01	97.43	97.01
K+Na	4.52	4.38	3.91	3.54	4.05	3.77	3.89	3.51	5.06	4.02

TABLE 4.106

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 6

VAR. / ID.	CXD1051	CXD1052	CXD1053	CXD1054	CXD1055	CXD1056	CXD1057	CXD1058	CXD1059	CXD1060
K/Na	26.17	30.00	34.88	31.54	35.85	43.80	25.54	28.67	43.70	31.92
Al/Si	0.41	0.33	0.26	0.35	0.38	0.39	0.32	0.30	0.37	0.34
Fe+Mg	7.65	8.41	8.28	7.93	8.33	8.59	9.30	9.25	9.66	7.93
Fe/Mg	1.52	1.09	1.11	1.18	1.26	1.74	1.44	1.43	1.77	1.43
Al/Ca+Na	3.86	2.24	1.92	2.55	2.86	3.05	2.00	2.01	3.39	3.26
La/Y	1.86	1.34	1.56	1.28	1.52	1.41	1.22	1.22	1.38	1.41
Nb/Y	0.59	0.45	0.44	0.45	0.55	0.47	0.48	0.48	0.47	0.52
Nb/P	94.44	72.22	64.71	76.47	88.89	75.00	81.25	81.25	88.24	83.33
Rb/Sr	0.92	0.45	0.38	0.67	0.81	0.80	0.63	0.74	1.01	0.97
Ni/Co	2.62	2.23	1.26	2.58	2.65	2.31	1.41	2.44	3.24	1.30
Cu/Co	0.92	1.03	0.36	1.00	0.97	1.17	0.80	0.92	1.00	0.44
Zn/Co	0.72	0.55	0.41	0.42	0.41	0.60	0.45	0.68	0.93	0.42
Zr/Nb	10.47	14.54	15.82	13.23	10.06	9.40	11.54	11.38	9.93	11.93
K/K+Na	96.32	96.77	97.21	96.93	97.29	97.77	96.23	96.63	97.76	96.96
K+Na	4.89	3.72	2.87	4.23	4.79	4.48	3.45	3.56	4.47	3.95

TABLE 4.106

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 7

VAR. / ID.	CXD1061	CXD1062	CXD1063	CXD1064	CXD1065	CXD1066	CXD1067	CXD1068	CXD1069	CXD1070
K/Na	30.77	43.13	42.63	57.33	41.89	43.67	49.38	55.88	46.88	41.29
Al/Si	0.34	0.35	0.37	0.36	0.35	0.38	0.36	0.38	0.37	0.29
Fe+Mg	8.65	7.75	8.48	7.77	7.61	8.64	8.29	7.09	7.31	7.12
Fe/Mg	1.67	1.86	1.89	1.91	1.82	1.63	1.68	1.76	2.14	1.85
Al/Ca+Na	2.97	4.08	3.63	4.56	4.08	3.09	3.49	5.17	5.84	3.84
La/Y	1.13	1.23	1.42	1.97	1.63	1.58	1.30	1.43	1.42	1.32
Nb/Y	0.44	0.50	0.45	0.48	0.47	0.45	0.45	0.43	0.44	0.38
Nb/P	87.50	115.38	93.33	127.27	136.36	87.50	88.24	100.00	106.67	86.67
Rb/Sr	0.89	0.57	0.77	0.85	0.87	0.64	0.82	1.07	0.85	0.85
Ni/Co	2.48	1.95	2.05	1.82	2.08	2.27	2.70	2.30	1.70	2.20
Cu/Co	1.81	0.98	1.10	1.08	1.44	1.03	1.59	0.85	0.83	0.88
Zn/Co	1.26	0.32	0.33	0.28	0.31	0.50	0.44	0.58	0.22	3.92
Zr/Nb	11.64	11.40	12.43	11.57	10.87	12.36	11.20	12.75	13.94	18.23
K/K+Na	96.85	97.73	97.71	98.29	97.67	97.76	98.01	98.24	97.91	97.64
K+Na	4.13	3.53	3.49	3.50	3.86	4.02	4.03	4.55	3.83	2.96

TABLE 4.106

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XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 8

VAR. / ID.	CXD1071	CXD1072	CXD1073	CXD1074	CXD1075	CXD1076	CXD1077	CXD1078	CXD1079	CXD1080
K/Na	31.78	25.18	20.35	21.30	25.11	28.00	24.76	26.92	35.00	26.75
Al/Si	0.28	0.28	0.32	0.34	0.34	0.30	0.33	0.30	0.35	0.30
Fe+Mg	6.08	8.38	8.73	8.57	8.91	8.69	8.88	8.92	9.95	9.77
Fe/Mg	1.92	2.60	1.33	1.52	1.56	1.46	1.67	1.41	1.79	1.56
Al/Ca+Na	5.60	4.08	2.08	2.82	2.94	2.26	2.83	2.06	2.97	2.01
La/Y	1.37	1.21	1.20	1.25	1.18	1.42	1.50	1.24	1.26	0.97
Nb/Y	0.40	0.36	0.47	0.44	0.45	0.39	0.50	0.38	0.46	0.42
Nb/P	100.00	109.09	93.33	94.12	93.75	72.22	93.33	76.47	94.12	76.47
Rb/Sr	0.98	0.78	0.68	0.89	0.93	0.66	0.97	0.51	0.58	0.51
Ni/Co	5.78	2.40	3.30	4.32	3.70	2.47	2.71	3.28	2.45	2.83
Cu/Co	0.67	0.95	1.41	1.88	1.30	0.83	1.19	1.83	0.91	1.33
Zn/Co	25.64	0.26	0.93	0.60	0.70	0.47	0.52	0.94	0.85	0.96
Zr/Nb	16.17	14.75	10.43	10.06	10.27	19.23	11.43	14.00	11.06	15.46
K/K+Na	96.95	96.18	95.32	95.52	96.17	96.55	96.12	96.42	97.22	96.40
K+Na	2.95	2.88	4.27	4.46	4.70	3.48	4.38	3.63	4.32	3.33

TABLE 4.106

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 9

VAR. / ID.	CXD1081	CXD1082	CXD1083	CXD1084	CXD1085	CXD1086	CXD1087	CXD1088	CXD1089	CXD1090
K/Na	16.52	12.29	75.75	19.10	21.23	30.25	33.38	34.00	42.22	77.50
Al/Si	0.35	0.29	0.28	0.35	0.26	0.24	0.27	0.31	0.33	0.18
Fe+Mg	9.46	9.61	8.91	8.25	9.19	7.61	7.83	8.11	8.53	9.05
Fe/Mg	1.72	1.41	1.33	1.43	1.46	1.26	1.42	1.56	1.83	2.38
Al/Ca+Na	2.68	1.47	1.86	2.54	1.81	2.08	2.56	2.99	3.58	2.84
La/Y	1.29	0.80	1.41	1.47	1.32	1.10	1.33	1.35	1.34	1.35
Nb/Y	0.44	0.34	0.44	0.41	0.35	0.39	0.40	0.48	0.43	0.35
Nb/P	93.75	70.59	82.35	77.78	64.71	75.00	70.59	88.24	83.33	66.67
Rb/Sr	0.78	0.47	0.51	0.45	0.48	0.46	0.40	0.52	0.71	0.64
Ni/Co	3.61	3.13	3.12	4.96	2.00	2.27	2.03	2.15	2.41	1.10
Cu/Co	1.52	1.26	0.50	0.78	1.57	0.76	0.85	1.44	1.19	0.98
Zn/Co	1.09	1.00	0.88	0.87	0.51	0.55	0.21	0.41	0.41	0.12
Zr/Nb	10.87	20.75	15.07	14.00	22.18	18.92	16.92	12.60	13.87	12.63
K/K+Na	94.29	92.48	98.70	95.02	95.50	96.80	97.09	97.14	97.69	98.73
K+Na	4.73	3.19	3.07	4.02	2.89	2.50	2.75	3.50	3.89	1.57

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 10

VAR. / ID.	CXD1091	CXD1092	CXD1093	CXD1094	CXD1095	CXD1096	CXD1097	CXD1098	CXD1099	CXD1100
K/Na	33.71	38.00	27.25	21.19	18.80	22.65	26.80	34.18	17.68	16.00
Al/Si	0.28	0.18	0.12	0.30	0.30	0.32	0.24	0.31	0.30	0.30
Fe+Mg	8.93	7.28	9.71	7.93	8.67	9.01	9.23	8.49	10.17	9.80
Fe/Mg	2.10	1.48	2.06	1.37	1.48	1.61	1.22	1.57	1.88	1.51
Al/Ca+Na	3.37	2.38	1.60	2.40	2.39	2.65	1.55	2.97	2.33	2.04
La/Y	1.45	0.78	1.68	1.15	1.03	1.18	1.28	1.30	1.15	1.27
Nb/Y	0.45	0.37	0.42	0.42	0.34	0.45	0.41	0.45	0.41	0.43
Nb/P	108.33	90.91	88.89	82.35	68.75	93.75	76.47	88.24	82.35	86.67
Rb/Sr	0.71	0.59	0.43	0.64	0.63	0.79	0.67	0.97	0.59	0.69
Ni/Co	1.40	0.87	0.75	2.48	1.54	1.77	1.69	2.68	2.12	2.05
Cu/Co	0.81	0.78	0.68	1.84	0.79	1.15	0.66	1.42	0.88	1.53
Zn/Co	0.15	0.07	0.13	1.16	0.38	0.33	0.47	0.48	0.00	0.47
Zr/Nb	11.46	14.00	10.63	13.93	15.73	11.40	17.85	11.47	12.50	11.23
K/K+Na	97.12	97.44	96.46	95.49	94.95	95.77	96.40	97.16	94.65	94.12
K+Na	2.43	1.56	1.13	3.55	2.97	4.02	2.78	3.87	3.55	4.08

TABLE 4.106

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 11

VAR. / ID.	CXD1101	CXD1102	CXD1103	CXD1104	CXD1105	CXD1106	CXD1107	CXD1108	CXD1109	CXD1110
K/Na	26.71	23.00	11.18	14.32	13.83	19.22	18.00	18.45	18.45	17.00
Al/Si	0.34	0.31	0.31	0.30	0.32	0.31	0.37	0.35	0.36	0.27
Fe+Mg	7.71	8.99	9.85	9.32	9.95	10.10	10.08	10.08	9.87	10.19
Fe/Mg	1.67	1.44	1.51	1.65	1.55	1.49	2.00	2.00	2.04	1.36
Al/Ca+Na	2.90	2.29	1.80	1.98	1.82	1.80	2.80	2.75	2.62	1.45
La/Y	1.44	1.38	0.94	1.23	1.12	1.26	1.29	1.09	1.41	1.21
Nb/Y	0.50	0.45	0.47	0.45	0.38	0.38	0.49	0.46	0.47	0.38
Nb/P	100.00	92.86	88.24	82.35	76.47	72.22	94.44	88.89	88.24	72.22
Rb/Sr	0.74	0.75	0.58	0.65	0.56	0.49	0.84	0.84	0.82	0.57
Ni/Co	2.29	2.10	2.64	2.09	3.00	3.40	2.73	2.84	3.33	2.60
Cu/Co	1.71	1.23	0.64	0.44	0.92	1.20	0.96	1.56	1.48	1.45
Zn/Co	1.06	0.55	1.80	1.24	2.38	2.40	2.58	2.48	3.00	1.90
Zr/Nb	10.44	11.00	11.60	13.00	13.54	13.62	11.00	12.38	12.93	14.38
K/K+Na	96.39	95.83	91.79	93.47	93.26	95.05	94.74	94.86	94.86	94.44
K+Na	3.88	4.08	3.41	3.37	3.56	3.64	4.56	4.28	4.28	2.88

TABLE 4.106

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 12

VAR. / ID.	CXD1111	CXD1112	CXD1113	CXD1114	CXD1115	CXD1116	CXD1117	CXD1118	CXD1119	CXD1120
K/Na	39.60	28.92	20.31	25.64	18.65	15.28	19.20	28.60	33.00	26.60
Al/Si	0.33	0.32	0.26	0.30	0.26	0.30	0.24	0.15	0.31	0.32
Fe+Mg	9.23	8.14	9.59	8.51	8.28	8.27	8.40	7.91	9.67	9.88
Fe/Mg	1.51	1.54	1.24	1.43	1.31	1.37	1.30	2.01	1.49	1.53
Al/Ca+Na	2.34	2.51	1.49	2.26	2.11	2.38	1.90	2.41	2.22	2.16
La/Y	1.55	1.03	1.07	1.31	1.28	1.03	1.14	1.16	1.17	1.07
Nb/Y	0.48	0.39	0.46	0.47	0.41	0.41	0.43	0.32	0.41	0.40
Nb/P	100.00	73.68	76.47	83.33	70.59	82.35	80.00	75.00	70.59	75.00
Rb/Sr	0.81	0.74	0.73	0.88	0.79	0.86	0.71	0.51	0.90	0.82
Ni/Co	2.17	3.17	1.55	1.78	1.37	1.76	1.02	0.83	2.14	2.41
Cu/Co	0.90	1.25	0.76	0.84	0.87	1.38	0.85	0.39	1.03	1.14
Zn/Co	0.49	0.83	0.91	0.54	0.58	0.76	0.60	0.22	1.11	1.76
Zr/Nb	11.75	14.50	13.77	13.27	14.92	12.93	15.33	14.17	13.67	12.58
K/K+Na	97.54	96.66	95.31	96.25	94.91	93.86	95.05	96.62	97.06	96.38
K+Na	4.06	3.59	3.41	3.73	3.34	4.07	3.03	1.48	3.74	4.14

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 13

VAR. / ID.	CXD1121	CXD1122	CXD1123	CXD1124	CXD1125	CXD1126	CXD1127	CXD1128	CXD1129	CXD1130
K/Na	36.40	22.38	11.74	12.53	1.28	8.10	15.12	30.42	18.47	21.75
Al/Si	0.32	0.31	0.30	0.26	0.22	0.29	0.31	0.31	0.25	0.13
Fe+Mg	9.74	10.51	10.69	10.33	9.51	11.51	11.18	9.22	8.68	5.33
Fe/Mg	1.48	1.37	1.31	1.36	1.28	1.30	1.48	1.27	1.25	2.31
Al/Ca+Na	2.14	1.90	2.16	1.64	1.09	2.22	2.35	1.80	1.73	4.17
La/Y	1.34	1.24	1.29	1.19	1.06	1.35	1.43	1.33	1.54	1.80
Nb/Y	0.48	0.45	0.42	0.41	0.39	0.39	0.47	0.44	0.46	0.70
Nb/P	87.50	86.67	76.47	64.71	63.16	70.59	93.33	75.00	86.67	100.00
Rb/Sr	0.90	0.81	0.94	0.78	0.41	0.97	0.99	0.91	1.00	1.37
Ni/Co	2.79	2.05	2.27	2.23	1.48	5.79	2.71	1.79	1.33	0.35
Cu/Co	1.41	1.13	0.55	1.00	0.64	2.00	0.55	1.03	0.65	0.28
Zn/Co	1.48	1.45	1.85	1.73	1.42	5.36	3.23	0.85	0.68	0.09
Zr/Nb	11.21	11.62	14.00	16.64	20.92	14.17	10.86	14.17	17.38	13.29
K/K+Na	97.33	95.72	92.15	92.61	56.06	89.01	93.79	96.82	94.86	95.60
K+Na	3.74	3.74	3.44	2.30	3.30	3.64	4.19	3.77	3.31	1.82

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 14

VAR. / ID.	CXD1131	CXD1132	CXD1133	CXD1134	CXD1135	CXD1136	CXD1137	CXD1138	CXD1139	CXD1140
K/Na	16.00	30.00	24.85	17.65	36.08	33.36	56.00	31.00	34.33	43.88
Al/Si	0.12	0.13	0.26	0.34	0.35	0.29	0.31	0.19	0.29	0.32
Fe+Mg	6.29	8.78	6.94	7.44	8.66	6.76	7.74	9.71	9.06	9.37
Fe/Mg	12.38	23.39	3.03	1.36	1.54	2.45	1.47	1.56	1.38	1.60
Al/Ca+Na	15.47	31.94	6.26	3.18	2.99	7.36	3.00	1.48	2.03	2.51
La/Y	0.93	1.26	1.52	1.41	1.09	1.17	1.34	1.57	1.43	1.43
Nb/Y	0.47	0.32	0.48	0.52	0.42	0.47	0.48	0.48	0.43	0.47
Nb/P	233.33	100.00	130.00	100.00	87.50	127.27	100.00	122.22	75.00	93.33
Rb/Sr	2.32	2.00	1.74	1.21	1.20	1.68	0.97	0.45	0.78	0.75
Ni/Co	0.47	0.59	0.75	1.32	2.81	2.09	1.37	1.00	2.00	2.24
Cu/Co	0.31	0.21	0.65	0.94	2.00	1.20	0.91	0.90	0.83	1.03
Zn/Co	0.07	0.07	0.25	0.90	1.19	0.61	0.57	0.88	0.77	0.82
Zr/Nb	9.86	21.33	9.92	11.93	10.07	10.43	11.21	9.55	13.50	12.07
K/K+Na	94.12	96.77	96.13	94.64	97.30	97.09	98.25	96.88	97.17	97.77
K+Na	1.36	1.55	3.36	4.29	4.82	3.78	3.42	1.67	3.18	3.59

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 15

VAR. / ID.	CXD1141	CXD1142	CXD1143	CXD1144	CXD1145	CXD1146	CXD1147	CXD1148	CXD1149	CXD1150
K/Na	14.76	22.79	29.70	49.63	37.18	62.00	46.67	36.18	37.80	38.18
Al/Si	0.30	0.29	0.32	0.35	0.34	0.32	0.35	0.34	0.32	0.37
Fe+Mg	10.02	10.42	8.31	9.82	9.34	9.14	9.01	7.79	8.41	8.66
Fe/Mg	1.64	1.42	1.39	1.77	1.54	1.61	1.48	1.76	1.49	1.55
Al/Ca+Na	2.23	1.79	2.45	3.03	2.46	2.70	2.53	3.24	2.64	2.90
La/Y	1.13	1.21	1.39	1.41	1.04	1.00	1.33	1.45	1.31	1.28
Nb/Y	0.40	0.48	0.48	0.45	0.43	0.43	0.44	0.48	0.41	0.48
Nb/P	75.00	87.50	78.95	76.47	70.59	76.47	70.59	93.75	66.67	82.35
Rb/Sr	0.89	0.86	0.89	1.13	0.86	0.99	1.07	1.42	1.20	1.02
Ni/Co	0.00	1.82	1.90	2.41	2.69	2.57	2.15	2.09	2.61	2.75
Cu/Co	0.00	0.82	0.90	1.03	0.72	1.14	0.62	0.79	1.00	1.06
Zn/Co	0.00	0.91	0.74	0.90	0.66	1.11	0.76	0.53	0.89	0.61
Zr/Nb	13.83	11.36	13.80	11.92	12.08	13.38	12.58	12.07	15.25	14.29
K/K+Na	93.65	95.80	96.74	98.02	97.38	98.41	97.90	97.31	97.42	97.45
K+Na	3.94	3.33	3.07	4.05	4.20	3.78	4.29	4.09	3.88	4.31

-2913-

TABLE 4.106

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 16

VAR. / ID.	CXD1151	CXD1152	CXD1153	CXD1154	CXD1155	CXD1156	CXD1157	CXD1158	CXD1159	CXD1160
K/Na	43.73	20.57	32.64	31.11	32.27	52.75	41.25	37.57	29.88	23.45
Al/Si	0.42	0.30	0.38	0.29	0.32	0.24	0.29	0.24	0.22	0.23
Fe+Mg	7.88	8.70	8.42	8.79	8.53	8.91	8.09	7.01	5.61	8.31
Fe/Mg	1.76	1.36	1.43	1.28	1.47	1.68	1.37	1.74	1.67	1.33
Al/Ca+Na	3.80	1.88	2.69	1.99	2.78	2.36	2.82	3.76	4.70	2.02
La/Y	1.62	1.06	1.27	1.11	1.52	1.00	1.81	1.30	1.56	1.50
Nb/Y	0.52	0.38	0.43	0.50	0.44	0.44	0.50	0.52	0.44	0.50
Nb/P	78.95	66.67	72.22	82.35	80.00	84.62	86.67	100.00	91.67	80.00
Rb/Sr	1.14	0.66	0.81	0.85	1.05	0.55	1.09	1.16	1.31	0.80
Ni/Co	3.58	1.74	3.63	2.85	3.54	1.55	1.81	1.21	1.09	0.73
Cu/Co	1.48	1.38	1.23	0.92	1.77	0.42	3.69	1.66	0.96	0.96
Zn/Co	0.88	0.74	0.77	1.19	1.92	1.09	0.96	0.45	0.36	0.42
Zr/Nb	13.47	16.08	12.92	12.57	14.58	12.27	12.15	12.33	14.18	12.83
K/K+Na	97.76	95.36	97.03	96.89	96.99	98.14	97.63	97.41	96.76	95.91
K+Na	4.92	3.02	3.70	2.89	3.66	2.15	3.38	2.70	2.47	2.69

-2914-

TABLE 4.106

XRF Analyses: Glendinning Mineralisation Ratio's (FORM1) Part 17

VAR. / ID.	CXD1161	CXD1162	CXD1163	CXD1164	CXD1165	CXD1166	CXD1167	CXD1168	CXD1169	CXD1170
K/Na	17.40	38.57	46.33	31.29	47.88	28.00	35.64	24.50	20.24	20.78
Al/Si	0.26	0.28	0.39	0.35	0.36	0.28	0.34	0.31	0.36	0.34
Fe+Mg	8.66	9.19	7.43	8.38	9.20	8.58	7.97	7.79	8.35	9.34
Fe/Mg	1.26	1.43	1.46	1.69	1.41	1.29	1.63	1.40	1.58	1.41
Al/Ca+Na	1.82	2.04	3.49	3.44	2.24	2.09	2.90	2.63	3.01	2.16
La/Y	1.42	1.38	1.55	1.64	1.21	1.47	1.67	1.48	1.29	1.50
Nb/Y	0.42	0.41	0.52	0.54	0.48	0.38	0.47	0.52	0.54	0.47
Nb/P	64.71	75.00	78.95	100.00	82.35	60.00	93.33	106.67	83.33	82.35
Rb/Sr	0.73	0.75	0.93	1.09	0.69	0.55	0.89	0.73	0.86	0.61
Ni/Co	1.16	2.04	2.90	3.00	2.17	1.29	2.42	1.66	2.63	2.32
Cu/Co	0.76	0.79	1.03	1.79	1.07	0.55	1.13	1.00	1.26	0.87
Zn/Co	0.64	0.54	0.59	1.21	0.90	0.50	0.65	0.86	0.85	0.87
Zr/Nb	16.64	14.33	11.87	12.80	11.14	30.08	11.50	14.25	10.80	12.29
K/K+Na	94.57	97.47	97.89	96.90	97.95	96.55	97.27	96.08	95.29	95.41
K+Na	2.76	2.77	4.26	4.52	3.91	2.61	4.03	3.57	4.46	3.92

Leadhills Mineralised Core (Riofinex Ltd: Hole No.1) Part 1

TABLE 4.107

ID. / VAR.	Cu	Pb	Zn	Bi	As	Ag	Au
1A	91	51	61	0	30	2	0
1B	530	61	104	1	25	1	0
2A	151	55	109	1	30	2	0
2B	129	57	60	0	30	1	0
3A	173	53	86	0	25	1	0
3B	360	44	201	0	15	1	0
4A	94	31	51	0	10	1	0
4B	355	40	201	0	30	1	0
5A	176	44	112	0	40	1	0
5B	147	21	89	0	40	1	0
6A	126	28	105	0	50	1	0
6B	131	51	83	0	30	1	0
7A	187	70	133	1	10	1	0
7B	81	51	22	0	5	1	0
8A	113	91	47	0	30	2	0
8B	88	62	33	0	25	1	0
9A	59	6	26	0	20	0	0
9B	52	6	36	0	20	0	0
10A	330	27	191	0	30	1	0
10B	115	38	45	0	20	1	0
11A	117	72	53	0	50	2	0
11B	100	37	44	2	40	1	0
12A	200	50	125	0	30	1	0
12B	106	54	67	0	40	1	0
13A	72	40	56	0	30	1	0
13B	80	44	80	1	35	2	0
14A	73	23	102	0	5	1	0
14B	69	24	94	0	10	1	0
15A	72	18	100	0	5	1	0
15B	75	19	103	0	5	1	0
16A	67	21	99	0	5	1	0
16B	67	18	95	0	5	1	0
17A	87	23	98	0	5	1	0
17B	66	23	93	0	5	1	0
18A	91	23	113	0	5	1	0
18B	64	20	91	0	5	1	0
19A	75	25	103	0	5	1	0
19B	75	22	109	0	5	1	0
20A	65	25	103	0	5	1	0
20B	69	23	103	0	5	1	0
21A	54	27	98	0	0	1	0
21B	84	23	115	0	5	1	0
22A	55	22	103	0	0	1	0
22B	76	34	72	0	10	1	0
23A	72	21	91	0	5	1	0
23B	106	42	96	0	25	1	0
24A	69	21	89	0	20	1	0
24B	93	22	114	1	15	1	2
25A	280	22	191	0	10	1	0
25B	103	20	111	0	15	1	0

Leadhills Mineralised Core (Riofinex Ltd: Hole No.1) Part 2

TABLE 4.107

ID. / VAR.	Cu	Pb	Zn	Bi	As	Ag	Au
26A	69	15	79	0	15	1	0
26B	98	14	91	0	35	1	0
27A	72	12	84	1	30	1	0
27B	73	14	101	1	15	1	0
28A	72	10	80	1	35	1	0
28B	153	37	68	1	50	1	0
29A	92	37	59	0	40	1	0
29B	125	34	74	1	50	1	0
30A	91	35	53	0	50	1	0
30B	142	31	99	1	40	1	0
31A	74	43	44	0	35	0	0
31B	91	53	58	0	35	1	0
32A	72	53	45	0	25	1	0
32B	82	38	44	0	30	0	0
33A	530	37	360	0	20	1	0
33B	133	30	73	0	25	1	0
34A	95	52	62	0	35	1	0
34B	166	15	101	0	10	1	0

Leadhills Mineralised Core (Riofinex: Hole No. 2)

Part 1

TABLE 4.108

ID. / VAR.	Cu	Pb	Zn	Bi	As	Ag	Au
1A	290	1190	146	1	20	1	0
1B	186	1380	130	0	5	0	0
2A	174	1390	125	0	5	1	0
2B	159	9640	179	0	0	1	0
3A	66	2160	61	0	5	0	0
3B	72	3390	61	1	15	0	0
4A	158	9760	108	0	0	1	0
4B	240	1470	227	0	0	0	0
5A	82	253	80	1	5	1	0
5B	101	137	64	1	5	1	0
6A	122	790	93	0	0	1	0
6B	90	469	85	0	0	1	0
7A	69	58	35	0	5	1	0
7B	70	63	55	2	10	2	0
8A	128	62	45	1	10	1	0
8B	102	55	42	0	10	1	0
9A	96	58	41	0	15	1	0
9B	120	43	52	0	15	1	0
10A	82	37	49	0	15	1	0
10B	73	47	49	0	15	1	0
11A	91	34	58	0	0	1	0
11B	71	34	48	0	10	1	0
12A	78	26	49	0	10	1	0
12B	97	37	62	1	15	1	0
13A	84	46	58	0	15	1	0
13B	330	48	153	1	15	1	0
14A	295	45	168	0	15	1	0
14B	310	58	175	3	20	1	0
15A	315	58	189	0	15	1	0
15B	250	52	146	0	15	1	0
16A	205	53	136	1	15	1	0
16B	325	46	206	0	15	1	0
17A	620	30	361	0	1	1	0
17B	375	22	237	0	1	1	0
18A	650	15	429	0	40	1	0
18B	350	27	349	0	35	1	0
19A	150	25	197	0	10	3	0
19B	195	17	197	0	5	1	0
20A	715	16	515	0	5	1	0
20B	111	27	123	0	5	1	0
21A	127	16	168	0	5	1	0
21B	67	23	132	0	5	1	0
22A	90	25	156	0	5	1	0
22B	105	19	238	0	20	1	0
23A	55	26	1240	0	35	1	0
23B	116	113	380	0	40	3	0
24A	95	197	76	0	45	4	0
24B	180	153	123	0	35	3	0
25A	94	28	71	0	20	1	0
25B	255	21	146	3	20	1	0

XRF+ICP Analyses: Glendinning Mineralisation (MED1) Part 1

TABLE 4.109

VAR. / ID.	CXD1005	CXD1006	CXD1030	CXD1031	CXD1050	CXD1051	CXD1052	CXD1053
SiO2	61.55	61.84	57.19	58.30	55.55	56.63	57.52	61.61
Al2O3	14.58	15.11	18.61	18.82	17.92	23.14	18.81	15.90
TiO2	0.86	0.84	0.83	0.83	0.80	1.00	0.82	0.68
Fe2O3	5.90	6.13	5.29	5.14	5.31	4.61	4.39	4.36
MgO	3.47	3.93	3.25	2.43	3.81	3.04	4.02	3.92
CaO	6.75	5.52	8.18	8.23	8.25	5.82	8.29	8.19
Na2O	1.63	1.69	0.11	0.15	0.12	0.18	0.12	0.08
K2O	2.18	2.28	3.56	3.35	3.90	4.71	3.60	2.79
MnO	0.10	0.08	0.09	0.09	0.08	0.07	0.09	0.09
P2O5	0.20	0.19	0.18	0.17	0.16	0.18	0.18	0.17
Total	97.22	97.61	97.29	97.51	95.90	99.38	97.84	97.79
As	66	41	470	272	260	1018	274	962
Ba	388	313	333	357	279	338	350	271
Cl	9	25	31	0	72	28	38	58
Co	42	31	22	29	30	39	31	39
Cr	148	133	138	144	130	160	150	124
Cu	21	16	30	36	30	36	32	14
Ga	14	12	17	17	17	20	17	13
Ni	63	65	78	86	72	102	69	49
Nb	14	14	13	15	13	17	13	11
Pb	14	13	89	22	80	67	79	25
Rb	73	74	125	122	134	166	126	95
Sr	134	100	197	147	161	181	278	249
Sb	15	10	50	32	90	99	92	41
S	18	8	1113	118	1173	2458	2049	3857
Th	8	7	12	11	6	12	7	12
V	98	98	113	114	125	155	122	90
Zn	59	62	21	33	35	28	17	16
Zr	244	209	169	172	154	178	189	174
Tl	0	0	2	0	0	0	3	0
La	32.76	27.05	29.55	24.26	29.29	16.89	33.10	27.91
Ce	78.60	53.46	68.99	46.63	58.08	43.18	78.90	54.91
Pr	7.25	6.74	6.07	6.06	7.45	4.14	6.55	6.75
Nd	27.66	26.74	22.10	22.42	29.31	17.14	25.07	26.89
Sm	5.76	5.26	4.68	4.44	5.24	3.66	5.19	5.32
Eu	1.26	1.12	1.18	2.61	1.12	0.80	1.26	1.16
Gd	5.00	4.69	5.33	4.25	4.52	2.90	5.61	4.86
Dy	4.38	4.40	3.71	3.92	4.00	2.40	3.79	4.36
Ho	0.83	0.83	0.73	0.75	0.80	0.49	0.79	0.89
Er	2.33	2.39	2.11	1.86	2.37	1.39	2.18	2.41
Yb	2.37	2.31	2.12	2.17	2.34	1.60	2.32	2.32
Lu	0.39	0.35	0.36	0.32	0.35	0.27	0.38	0.37
Y	32.00	32.00	28.00	30.00	26.00	29.00	29.00	25.00

TABLE 4.109

VAR. / ID.	CXD1077	CXD1078	CXD1159	CXD1160	CXD1165	CXD1166	CXD1168
SiO2	56.97	57.91	73.48	63.76	54.41	59.68	59.97
Al2O3	19.05	17.49	16.09	14.70	19.45	16.83	18.85
TiO2	0.87	0.81	0.70	0.65	0.80	0.94	0.72
Fe2O3	5.56	5.22	3.51	4.75	5.38	4.84	4.54
MgO	3.32	3.70	2.10	3.56	3.82	3.74	3.25
CaO	6.55	8.36	3.34	7.16	8.60	7.95	7.02
Na2O	0.17	0.13	0.08	0.11	0.08	0.09	0.14
K2O	4.21	3.50	2.39	2.58	3.83	2.52	3.43
MnO	0.08	0.10	0.05	0.08	0.11	0.09	0.08
P2O5	0.15	0.17	0.12	0.15	0.17	0.20	0.15
Total	96.93	97.39	101.86	97.50	96.65	96.88	98.15
As	5170	663	15320	4325	4788	3822	1188
Ba	343	303	189	222	234	213	229
Cl	44	40	7	37	49	36	38
Co	31	18	47	40	30	38	29
Cr	160	131	139	113	147	253	125
Cu	37	33	45	46	32	21	29
Ga	22	17	16	13	21	15	15
Ni	84	59	51	35	65	49	48
Nb	14	13	11	12	14	12	16
Pb	78	88	13	16	70	39	99
Rb	169	122	94	98	129	90	116
Sr	175	238	72	123	187	163	160
Sb	105	94	56	40	50	41	34
S	3160	2019	4962	5732	3247	6198	1766
Th	9	8	6	7	8	11	11
V	132	106	104	91	130	118	98
Zn	16	17	17	20	27	19	25
Zr	160	182	156	154	156	361	228
Tl	0	0	0	0	0	0	0
La	26.65	26.08	20.22	20.60	43.47	36.42	29.97
Ce	49.43	51.57	41.46	40.83	101.37	87.88	56.15
Pr	6.62	6.57	5.24	5.21	8.84	7.97	7.23
Nd	25.99	25.60	20.05	20.69	31.90	29.38	25.60
Sm	4.94	4.91	3.99	4.04	5.77	5.86	4.83
Eu	1.10	1.07	0.87	0.88	1.46	1.27	0.97
Gd	4.38	4.50	3.41	3.57	5.83	4.81	4.04
Dy	3.96	4.01	3.16	3.32	4.70	4.13	3.69
Ho	0.79	0.81	0.61	0.66	0.91	0.79	0.75
Er	2.28	2.30	1.75	1.85	2.67	2.29	2.30
Yb	2.21	2.24	1.81	1.79	2.54	2.48	2.29
Lu	0.34	0.34	0.27	0.28	0.42	0.42	0.34
Y	28.00	34.00	25.00	24.00	29.00	32.00	31.00

XRF+ICP Analyses: Tweedsmuir Greywacke (MED2)

Part 1

TABLE 4.110

VAR. / ID.	AX97201	AX97202	AX97203	AX97204	AX97205	AX97206	AX97207	AX97208
SiO2	59.55	58.49	57.79	56.50	57.75	57.42	55.84	55.30
Al2O3	12.45	13.02	12.08	13.46	13.08	12.77	12.72	13.25
TiO2	0.95	1.03	0.94	1.03	0.94	1.02	0.97	1.07
Fe2O3	7.44	8.41	8.16	8.61	8.04	8.52	8.15	9.09
MgO	5.63	6.04	5.92	7.16	6.33	7.05	6.54	8.49
CaO	4.49	5.23	5.22	4.59	5.15	6.07	5.67	3.66
Na2O	1.91	2.02	2.39	2.32	2.42	2.10	2.07	2.13
K2O	1.90	1.96	1.48	1.63	1.46	1.26	1.35	1.53
MnO	0.12	0.14	0.15	0.15	0.14	0.14	0.14	0.16
P2O5	0.19	0.20	0.21	0.24	0.22	0.21	0.23	0.23
Total	94.63	96.54	94.34	95.69	95.53	96.56	93.68	94.91
As	0	0	0	0	0	0	0	0
Ba	584	630	367	426	345	284	322	367
Co	22	29	25	28	24	29	29	27
Cr	190	205	178	198	195	252	221	234
Cu	41	43	42	40	44	46	45	45
Ga	15	16	14	15	15	15	17	16
Ni	58	63	60	67	61	62	68	68
Nb	11	11	9	10	9	9	10	10
Pb	14	13	11	10	13	13	15	15
Rb	49	45	36	41	37	34	35	39
Sr	532	542	460	374	348	252	281	305
Sb	1	4	5	0	2	2	4	3
S	381	648	221	137	503	288	165	240
Th	3	5	4	6	2	8	3	4
V	176	185	168	192	185	198	190	201
Zn	63	62	61	59	60	64	68	65
Zr	187	212	181	202	206	242	218	216
La	19.45	20.22	19.97	19.72	19.02	16.99	19.80	20.53
Ce	44.38	46.87	45.18	45.22	44.00	47.32	46.05	47.67
Pr	6.16	6.54	6.02	6.07	6.01	7.25	6.21	6.51
Nd	23.17	24.59	23.53	23.44	22.92	24.13	23.84	24.87
Sm	4.50	4.77	4.58	4.42	4.46	4.82	4.64	4.86
Eu	1.26	1.28	1.32	1.20	1.22	1.25	1.25	1.30
Gd	3.95	4.12	4.00	3.97	3.87	1.42	4.05	4.19
Dy	3.26	3.47	3.34	3.35	3.24	3.25	3.40	3.54
Ho	0.93	0.97	0.76	0.77	0.81	0.81	0.83	0.89
Er	1.84	1.96	1.88	1.86	1.81	0.05	1.92	1.98
Yb	1.73	1.88	1.81	1.78	1.73	1.92	1.86	1.92
Lu	0.26	0.28	0.26	0.26	0.26	0.27	0.28	0.28
Y	18.56	19.27	18.74	18.23	17.83	17.99	19.07	19.73

TABLE 4.110

VAR. / ID.	AX97209	AX97210	AX97211	AX97212	AX97213	AX97214	AX97215	AX97216
SiO2	57.35	56.78	56.41	55.55	57.82	55.43	57.42	56.79
Al2O3	14.17	13.53	13.29	13.59	13.47	12.09	12.48	12.60
TiO2	1.09	1.03	1.02	0.92	0.92	1.22	0.99	0.96
Fe2O3	8.92	8.60	8.83	7.70	7.59	8.60	8.70	8.10
MgO	8.10	7.34	8.10	6.06	5.90	6.59	7.35	5.93
CaO	2.44	2.08	3.10	5.19	3.32	7.40	4.18	6.39
Na2O	2.18	2.20	2.13	2.12	2.12	1.71	2.04	1.92
K2O	2.25	2.25	1.82	2.12	2.48	2.04	1.58	2.01
MnO	0.13	0.13	0.14	0.12	0.11	0.20	0.14	0.17
P2O5	0.23	0.19	0.21	0.19	0.19	0.27	0.20	0.19
Total	96.86	94.13	95.05	93.56	93.92	95.55	95.08	95.06
As	0	0	0	1	0	0	0	0
Ba	510	558	459	386	769	612	386	550
Co	24	27	28	28	10	21	25	28
Cr	207	175	212	186	176	233	198	200
Cu	44	47	43	46	48	48	44	41
Ga	15	16	15	16	15	16	15	17
Ni	67	68	68	65	65	64	63	56
Nb	11	11	10	10	11	11	11	10
Pb	18	12	12	11	16	14	15	11
Rb	53	54	48	54	65	45	46	47
Sr	393	398	349	303	508	539	425	521
Sb	0	0	0	2	0	0	2	0
S	20	93	172	235	457	239	187	647
Th	3	4	5	4	5	5	4	7
V	206	173	199	171	163	202	187	184
Zn	71	65	66	63	60	61	62	64
Zr	202	205	196	192	189	279	192	202
La	18.39	20.53	21.10	18.63	17.59	19.27	18.19	18.29
Ce	43.20	46.70	46.89	44.45	41.81	45.58	42.86	42.06
Pr	5.94	6.24	6.32	6.45	5.83	6.43	6.12	5.53
Nd	22.34	24.43	24.37	22.91	22.55	24.24	22.22	21.89
Sm	4.39	4.72	4.74	4.48	4.44	4.72	4.41	4.20
Eu	1.14	1.30	1.26	1.20	1.19	1.27	1.21	1.14
Gd	3.74	4.18	4.06	3.32	3.83	4.16	3.42	3.76
Dy	3.24	3.51	3.39	3.19	3.31	3.56	3.18	3.18
Ho	0.81	0.77	0.81	0.78	0.88	0.95	0.71	0.65
Er	1.76	1.99	1.87	1.30	1.85	2.00	1.38	1.79
Yb	1.82	1.90	1.82	1.89	1.76	2.05	1.84	1.69
Lu	0.27	0.29	0.27	0.26	0.26	0.29	0.25	0.26
Y	17.93	19.28	18.65	17.41	18.14	19.38	17.35	17.20

TABLE 4.110

VAR. / ID.	AX97217	AX97218	AX97219	AX97220
SiO2	57.54	58.34	55.59	57.94
Al2O3	13.14	12.70	12.94	12.19
TiO2	0.96	1.02	1.07	0.95
Fe2O3	8.15	8.20	9.23	7.54
MgO	6.34	5.81	9.42	6.02
CaO	5.39	5.13	2.25	5.49
Na2O	2.15	1.95	1.98	2.06
K2O	1.59	2.23	1.88	2.36
MnO	0.15	0.16	0.16	0.17
P2O5	0.22	0.20	0.22	0.18
Total	95.63	95.74	94.74	94.90
As	0	7	0	0
Ba	373	784	470	693
Co	34	29	22	23
Cr	192	210	231	233
Cu	45	43	47	44
Ga	16	17	16	16
Ni	71	61	70	62
Nb	10	11	10	10
Pb	10	17	7	10
Rb	41	51	54	56
Sr	306	555	310	478
Sb	4	2	3	1
S	182	556	183	483
Th	9	6	4	7
V	180	187	209	189
Zn	66	69	62	50
Zr	192	205	213	183
La	20.65	17.96	21.30	20.34
Ce	46.32	46.75	47.22	46.17
Pr	6.04	7.20	6.22	6.11
Nd	23.38	23.56	24.61	23.75
Sm	4.61	4.61	4.86	4.66
Eu	1.25	1.23	1.32	1.28
Gd	3.92	2.05	4.15	4.02
Dy	3.40	3.17	3.53	3.32
Ho	0.75	0.88	0.84	0.79
Er	1.91	0.25	1.96	1.85
Yb	1.84	1.90	1.86	1.77
Lu	0.27	0.26	0.27	0.26
Y	18.91	17.86	19.63	18.82

XRF Analyses: Glendinning Mineralised Core (MINE1) Part 1

VAR. / ID.	CXD1001	CXD1002	CXD1003	CXD1004	CXD1005	CXD1006	CXD1007	CXD1008	CXD1009	CXD1010
SiO2	64.06	62.40	64.12	65.35	61.55	61.84	59.51	58.54	58.49	60.94
Al2O3	16.80	18.52	19.07	18.80	14.58	15.11	13.13	21.16	18.25	14.06
TiO2	0.97	0.99	1.05	1.03	0.86	0.84	0.74	0.92	0.82	0.72
Fe2O3	6.39	7.03	7.45	7.06	5.90	6.13	5.52	5.43	5.30	5.24
MgO	3.63	3.05	4.08	3.26	3.47	3.93	3.89	2.30	1.59	3.25
CaO	3.28	3.27	0.29	0.75	6.75	5.52	8.82	7.50	9.83	9.03
Na2O	1.09	0.61	0.75	0.71	1.63	1.69	1.36	0.23	0.16	0.84
K2O	2.65	3.24	3.19	3.00	2.18	2.28	2.01	4.32	3.47	2.31
MnO	0.10	0.11	0.11	0.10	0.10	0.08	0.11	0.09	0.10	0.10
P2O5	0.20	0.18	0.17	0.15	0.20	0.19	0.18	0.19	0.17	0.17
Total	99.17	99.40	100.28	100.21	97.22	97.61	95.27	100.68	98.18	96.66
As	65	205	121	242	66	41	29	199	112	35
Ba	334	375	425	397	388	313	453	404	372	326
Cl	14	0	7	0	9	25	33	18	0	33
Co	42	38	42	54	42	31	40	28	44	37
Cr	144	153	156	149	148	133	145	150	175	167
Cu	28	35	34	28	21	16	27	44	32	24
Ga	15	18	17	16	14	12	11	18	15	10
La	35	35	42	39	34	30	28	36	34	32
Ni	64	78	83	75	63	65	54	80	59	45
Nb	16	16	16	16	14	14	13	15	14	13
Pb	15	27	20	21	14	13	13	10	11	6
Rb	88	113	110	104	73	74	63	134	117	76
Sr	83	67	53	57	134	100	123	78	72	93
Sb	12	24	13	20	15	10	14	51	29	6
S	95	39	6	9	18	8	79	20	23	42
Th	11	16	11	11	8	7	11	12	14	9
V	113	126	132	117	98	98	93	138	120	89
Y	36	34	32	37	32	32	29	34	34	28
Zn	70	79	85	74	59	62	50	44	40	33
Zr	256	212	233	243	244	209	222	165	219	208
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.111

VAR. / ID.	CXD1011	CXD1012	CXD1013	CXD1014	CXD1015	CXD1016	CXD1017	CXD1018	CXD1019	CXD1020
SiO2	60.16	57.96	65.10	58.72	58.17	55.81	58.80	58.83	56.15	58.20
Al2O3	17.55	19.43	18.77	21.75	19.14	18.51	18.82	17.41	15.57	15.77
TiO2	0.79	0.81	0.82	0.97	0.86	0.82	0.79	0.81	0.71	0.74
Fe2O3	4.73	5.02	6.69	6.01	4.97	5.44	5.01	4.76	5.70	5.14
MgO	2.08	3.24	1.11	2.02	3.63	2.96	3.24	3.18	3.26	3.74
CaO	9.06	7.82	2.82	5.76	7.30	9.35	8.94	8.60	10.70	9.44
Na2O	0.23	0.14	0.12	0.09	0.13	0.12	0.11	0.12	0.09	0.15
K2O	2.98	3.92	3.41	5.07	4.14	3.75	3.19	3.08	2.91	2.88
MnO	0.10	0.10	0.12	0.09	0.10	0.10	0.10	0.11	0.12	0.10
P2O5	0.17	0.17	0.15	0.17	0.17	0.16	0.17	0.17	0.17	0.17
Total	97.85	98.61	99.11	100.65	98.61	97.02	99.17	97.07	95.38	96.33
As	93	1377	2959	470	88	150	63	63	275	381
Ba	332	356	524	493	326	323	365	1142	388	319
Cl	10	25	0	8	22	25	33	18	18	45
Co	23	40	60	34	28	33	29	19	23	35
Cr	144	135	152	160	127	142	128	141	128	152
Cu	15	54	69	33	37	42	32	31	48	21
Ga	13	16	16	21	16	15	17	15	12	15
La	33	30	38	42	33	37	41	41	34	32
Ni	29	78	106	105	73	60	39	40	60	95
Nb	13	15	12	17	17	13	13	15	13	13
Pb	9	13	21	13	11	12	13	8	10	30
Rb	95	130	123	184	148	115	97	103	101	102
Sr	66	165	75	121	161	150	220	131	138	145
Sb	9	67	60	56	48	39	35	41	47	35
S	14	3011	256	199	192	388	410	315	171	1467
Th	2	9	7	11	10	10	9	10	9	10
V	104	115	121	147	125	114	110	114	93	95
Y	31	30	29	32	31	27	30	30	27	29
Zn	15	25	31	25	28	40	35	36	46	23
Zr	207	174	171	170	166	189	160	180	176	204
Tl	0	0	0	2	0	0	0	0	3	3

TABLE 4.111

VAR. / ID.	CXD1021	CXD1022	CXD1023	CXD1024	CXD1025	CXD1026	CXD1027	CXD1028	CXD1029	CXD1030
SiO2	58.85	64.44	59.02	56.89	55.69	62.12	59.63	52.37	58.91	57.19
Al2O3	17.74	18.39	19.91	21.34	21.77	18.84	17.47	11.05	16.22	18.61
TiO2	0.79	0.78	0.85	0.84	0.85	0.85	0.78	0.45	0.77	0.83
Fe2O3	5.10	3.61	4.33	4.10	5.06	4.02	5.84	6.68	5.71	5.29
MgO	3.11	2.62	3.03	2.95	2.87	3.11	3.25	5.86	4.12	3.25
CaO	7.93	5.27	7.79	7.38	7.76	5.99	5.43	13.71	6.98	8.18
Na2O	0.19	0.15	0.11	0.11	0.07	0.11	0.07	0.04	0.10	0.11
K2O	3.56	3.60	2.93	3.49	2.84	3.17	2.63	1.75	2.71	3.56
MnO	0.10	0.06	0.08	0.08	0.09	0.08	0.07	0.18	0.11	0.09
P2O5	0.15	0.08	0.18	0.15	0.18	0.18	0.14	0.15	0.17	0.18
Total	97.52	99.00	98.23	97.33	97.18	98.47	95.31	92.24	95.80	97.29
As	2305	2820	1628	774	7501	2127	13923	1088	3614	470
Ba	332	314	295	291	258	296	251	165	267	333
Cl	16	55	20	218	70	19	33	105	18	31
Co	38	17	18	15	26	14	26	13	18	22
Cr	137	128	172	128	158	140	151	82	144	138
Cu	44	21	22	20	26	23	42	26	31	30
Ga	18	18	17	17	19	16	24	9	14	17
La	41	36	52	58	39	36	47	26	43	41
Ni	117	72	84	68	90	54	68	41	58	78
Nb	15	13	15	18	15	12	12	7	12	13
Pb	160	98	184	98	151	130	1717	73	102	89
Rb	129	129	101	120	102	102	91	55	91	125
Sr	156	158	302	359	405	85	76	82	79	197
Sb	76	70	60	38	61	139	956	132	180	50
S	3607	3459	3809	2680	7551	2445	7244	745	2918	1113
Th	13	9	13	21	8	10	0	6	7	12
V	122	122	115	103	134	112	123	58	105	113
Y	31	27	29	41	30	28	26	34	27	28
Zn	30	18	11	18	12	89	692	28	43	21
Zr	161	150	227	296	174	198	164	114	193	169
Tl	0	3	0	0	5	2	2	0	2	2

TABLE 4.111

VAR. / ID.	CXD1031	CXD1032	CXD1033	CXD1034	CXD1035	CXD1036	CXD1037	CXD1038	CXD1039	CXD1040
SiO2	58.30	56.26	56.16	57.90	56.71	57.44	57.08	58.18	60.36	58.66
Al2O3	18.82	17.05	18.38	14.94	17.39	19.71	19.55	18.87	22.65	21.77
TiO2	0.83	0.74	0.77	0.73	0.79	0.85	0.87	0.81	0.95	0.94
Fe2O3	5.14	5.24	5.21	5.02	5.39	5.46	5.48	5.05	5.13	4.93
MgO	2.43	2.97	3.38	3.68	3.54	3.29	3.36	3.31	2.61	3.05
CaO	8.23	10.37	9.53	8.89	8.87	7.12	7.38	8.20	4.36	5.46
Na2O	0.15	0.14	0.14	0.81	0.48	0.21	0.20	0.15	0.14	0.00
K2O	3.35	2.89	3.18	2.42	3.11	3.64	3.74	3.05	4.50	4.06
MnO	0.09	0.10	0.09	0.09	0.09	0.08	0.09	0.10	0.06	0.07
P2O5	0.17	0.18	0.17	0.17	0.17	0.16	0.17	0.17	0.16	0.18
Total	97.51	95.94	97.01	94.65	96.54	97.96	97.92	97.89	100.92	99.12
As	272	162	65	14	68	34	59	91	108	94
Ba	357	386	369	535	365	388	366	261	363	302
Cl	0	32	31	27	44	40	21	105	18	14
Co	29	28	25	19	28	32	28	31	29	34
Cr	144	127	125	125	135	148	145	147	146	151
Cu	36	31	13	21	18	36	31	35	103	47
Ga	17	14	16	13	15	17	17	15	21	18
La	40	29	32	33	31	45	47	31	45	43
Ni	86	75	76	38	60	75	83	68	86	79
Nb	15	14	14	13	14	15	15	14	17	17
Pb	22	13	15	9	14	14	12	14	8	11
Rb	122	100	110	83	99	123	126	96	159	125
Sr	147	169	170	136	130	131	131	118	142	144
Sb	32	29	24	9	15	47	45	51	143	60
S	118	104	86	107	113	405	390	358	347	1071
Th	11	15	9	10	14	11	37	6	11	9
V	114	103	116	91	114	129	129	117	138	125
Y	30	28	28	27	29	28	30	29	32	28
Zn	33	43	46	36	41	33	29	29	47	33
Zr	172	172	164	180	177	166	165	183	172	185
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.111

VAR. / ID.	CXD1041	CXD1042	CXD1043	CXD1044	CXD1045	CXD1046	CXD1047	CXD1048	CXD1049	CXD1050
SiO2	54.02	55.34	53.81	57.83	56.32	57.29	57.01	57.42	57.09	55.55
Al2O3	17.84	17.35	19.42	19.30	19.39	18.94	16.11	16.69	22.52	17.92
TiO2	0.92	0.86	1.01	0.87	0.85	0.86	0.81	0.76	0.98	0.80
Fe2O3	7.76	6.70	7.58	5.89	5.68	6.10	5.91	4.67	4.48	5.31
MgO	5.22	4.96	5.49	4.23	4.26	4.43	4.64	3.78	2.16	3.81
CaO	6.43	6.77	4.68	5.54	7.10	6.22	7.74	8.59	4.11	8.25
Na2O	0.76	0.83	0.11	0.09	0.10	0.19	0.74	0.14	0.13	0.12
K2O	3.76	3.55	3.80	3.45	3.95	3.58	3.15	3.37	4.93	3.90
MnO	0.10	0.09	0.07	0.08	0.10	0.08	0.10	0.11	0.06	0.08
P2O5	0.17	0.17	0.18	0.18	0.17	0.17	0.17	0.17	0.16	0.16
Total	96.98	96.62	96.15	97.46	97.92	97.86	96.38	95.70	96.62	95.90
As	75	27	53	642	74	2395	9	1065	1064	260
Ba	386	311	324	301	316	274	285	243	371	279
Cl	35	54	29	29	39	106	35	109	0	72
Co	24	31	29	31	13	39	26	41	37	30
Cr	144	142	151	132	140	148	130	124	154	130
Cu	44	34	44	35	30	30	26	17	37	30
Ga	18	18	19	17	18	15	14	15	23	17
La	45	42	43	45	37	48	29	34	54	36
Ni	86	81	83	77	65	67	70	59	87	72
Nb	17	15	15	14	15	15	14	13	17	13
Pb	12	11	24	94	84	64	13	18	19	80
Rb	124	119	123	111	141	123	108	109	184	134
Sr	76	98	67	75	103	89	118	107	111	161
Sb	137	72	120	101	127	104	50	26	57	90
S	34	49	307	1318	296	2989	114	2846	3176	1173
Th	10	12	9	10	15	15	9	11	10	6
V	136	127	136	123	126	122	109	105	156	125
Y	30	30	27	30	31	30	28	28	32	26
Zn	89	83	87	21	61	42	72	22	27	35
Zr	155	161	191	180	163	177	173	173	183	154
Tl	5	0	0	0	0	0	0	0	0	0

TABLE 4.111

VAR. / ID.	CXD1051	CXD1052	CXD1053	CXD1054	CXD1055	CXD1056	CXD1057	CXD1058	CXD1059	CXD1060
SiO2	56.63	57.52	61.61	56.78	56.10	53.41	55.59	56.25	56.42	59.30
Al2O3	23.14	18.81	15.90	19.68	21.39	20.88	17.66	17.04	20.62	20.35
TiO2	1.00	0.82	0.68	0.84	0.87	0.89	0.75	0.74	0.93	0.90
Fe2O3	4.61	4.39	4.36	4.29	4.65	5.45	5.49	5.45	6.17	4.67
MgO	3.04	4.02	3.92	3.64	3.68	3.14	3.81	3.80	3.49	3.26
CaO	5.82	8.29	8.19	7.58	7.36	6.74	8.72	8.36	5.98	6.12
Na2O	0.18	0.12	0.08	0.13	0.13	0.10	0.13	0.12	0.10	0.12
K2O	4.71	3.60	2.79	4.10	4.66	4.38	3.32	3.44	4.37	3.83
MnO	0.07	0.09	0.09	0.08	0.08	0.09	0.10	0.09	0.08	0.08
P2O5	0.18	0.18	0.17	0.17	0.18	0.20	0.16	0.16	0.17	0.18
Total	99.38	97.84	97.79	97.29	99.10	95.28	95.73	95.45	98.33	98.81
As	1018	274	962	352	848	2519	628	587	574	1577
Ba	338	350	271	349	630	504	299	269	356	320
Cl	28	38	58	49	18	56	73	44	25	13
Co	39	31	39	31	34	35	44	25	29	50
Cr	160	150	124	142	155	154	113	117	148	144
Cu	36	32	14	31	33	41	35	23	29	22
Ga	20	17	13	17	20	18	16	16	21	7
La	54	39	39	37	44	45	33	33	44	41
Ni	102	69	49	80	90	81	62	61	94	65
Nb	17	13	11	13	16	15	13	13	15	15
Pb	67	79	25	73	68	65	90	56	77	50
Rb	166	126	95	143	161	149	110	124	158	140
Sr	181	278	249	212	199	187	175	167	157	144
Sb	99	92	41	96	86	136	128	66	132	69
S	2458	2049	3857	1919	3316	4456	1206	1244	1141	1861
Th	12	7	12	8	8	11	9	9	9	11
V	155	122	90	126	147	147	104	105	153	127
Y	29	29	25	29	29	32	27	27	32	29
Zn	28	17	16	13	14	21	20	17	27	21
Zr	178	189	174	172	161	141	150	148	149	179
Tl	0	3	0	2	0	6	1	7	3	0

TABLE 4.111

VAR. / ID.	CXD1061	CXD1062	CXD1063	CXD1064	CXD1065	CXD1066	CXD1067	CXD1068	CXD1069	CXD1070
SiO2	58.49	60.65	58.10	60.66	59.02	56.71	58.60	60.27	61.03	61.22
Al2O3	20.17	21.21	21.40	22.01	20.87	21.50	21.17	23.07	22.65	18.06
TiO2	0.89	0.87	0.92	0.92	0.89	0.93	0.91	1.02	0.97	0.86
Fe2O3	5.41	5.04	5.55	5.10	4.91	5.36	5.20	4.52	4.98	4.62
MgO	3.24	2.71	2.93	2.67	2.70	3.28	3.09	2.57	2.33	2.50
CaO	6.65	5.12	5.82	4.77	5.03	6.86	5.99	4.38	3.80	4.63
Na2O	0.13	0.08	0.08	0.06	0.09	0.09	0.08	0.08	0.08	0.07
K2O	4.00	3.45	3.41	3.44	3.77	3.93	3.95	4.47	3.75	2.89
MnO	0.09	0.07	0.09	0.09	0.09	0.10	0.07	0.06	0.06	0.07
P2O5	0.16	0.13	0.15	0.11	0.11	0.16	0.17	0.16	0.15	0.15
Total	99.23	99.33	98.45	99.83	97.48	98.92	99.23	100.60	99.80	95.07
As	5806	7398	13381	20332	11077	8961	4996	6712	9789	11057
Ba	401	323	260	256	434	289	324	331	305	584
Cl	17	18	27	47	36	47	37	16	16	39
Co	31	40	39	50	36	30	27	33	46	40
Cr	164	161	166	183	165	169	161	191	171	189
Cu	56	39	43	54	52	31	43	28	38	35
Ga	22	20	21	26	23	21	19	24	23	23
La	36	37	44	57	52	49	43	53	51	45
Ni	77	78	80	91	75	68	73	76	78	88
Nb	14	15	14	14	15	14	15	16	16	13
Pb	104	72	84	159	146	56	95	54	68	762
Rb	154	131	135	141	150	145	150	179	147	120
Sr	173	228	176	165	173	228	183	168	173	141
Sb	134	104	118	170	156	95	124	84	120	651
S	5212	7987	10742	8541	7238	7599	8001	6319	10304	7736
Th	9	11	7	7	10	11	7	12	9	7
V	144	132	141	152	148	148	135	163	146	135
Y	32	30	31	29	32	31	33	37	36	34
Zn	39	13	13	14	11	15	12	19	10	157
Zr	163	171	174	162	163	173	168	204	223	237
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.111

VAR. / ID.	CXD1071	CXD1072	CXD1073	CXD1074	CXD1075	CXD1076	CXD1077	CXD1078	CXD1079	CXD1080
SiO2	67.66	64.25	56.39	58.53	58.46	58.99	56.97	57.91	56.82	56.84
Al2O3	19.11	18.00	17.97	19.73	19.79	17.89	19.05	17.49	20.15	17.18
TiO2	0.84	0.80	0.79	0.90	0.89	0.86	0.87	0.81	0.94	0.82
Fe2O3	4.00	6.05	4.99	5.17	5.43	5.16	5.56	5.22	6.38	5.96
MgO	2.08	2.33	3.74	3.40	3.48	3.53	3.32	3.70	3.57	3.81
CaO	3.32	4.30	8.45	6.80	6.55	7.78	6.55	8.36	6.66	8.44
Na2O	0.09	0.11	0.20	0.20	0.18	0.12	0.17	0.13	0.12	0.12
K2O	2.86	2.77	4.07	4.26	4.52	3.36	4.21	3.50	4.20	3.21
MnO	0.05	0.06	0.09	0.09	0.08	0.09	0.08	0.10	0.09	0.10
P2O5	0.12	0.11	0.15	0.17	0.16	0.18	0.15	0.17	0.17	0.17
Total	100.13	98.78	96.84	99.25	99.54	97.96	96.93	97.39	99.10	96.65
As	13399	17800	644	1014	1196	2079	5170	663	392	137
Ba	1119	601	336	365	363	301	343	333	338	407
Cl	19	43	11	19	0	48	44	40	17	13
Co	72	42	27	25	23	30	31	18	33	24
Cr	172	162	139	151	148	175	160	131	151	135
Cu	48	40	38	47	30	25	37	33	30	32
Ga	26	19	18	22	23	15	22	17	23	17
La	41	40	36	45	39	47	42	42	44	30
Ni	416	101	89	108	85	74	84	59	81	68
Nb	12	12	14	16	15	13	14	13	16	13
Pb	1276	67	112	135	82	47	78	88	77	87
Rb	119	107	142	157	164	123	169	122	155	115
Sr	121	137	208	177	177	186	175	238	268	225
Sb	228	129	124	152	97	64	105	94	117	98
S	8534	17580	1460	1865	1240	3484	3160	2019	809	1050
Th	10	6	5	9	8	11	9	8	11	6
V	132	129	112	132	128	115	132	106	133	107
Y	30	33	30	36	33	33	28	34	35	31
Zn	1846	11	25	15	16	14	16	17	28	23
Zr	194	177	146	161	154	250	160	182	177	201
Tl	0	0	0	0	0	0	0	0	3	0

TABLE 4.111

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VAR. / ID.	CXD1081	CXD1082	CXD1083	CXD1084	CXD1085	CXD1086	CXD1087	CXD1088	CXD1089	CXD1090
SiO2	56.87	55.23	58.78	57.38	59.47	64.01	62.99	60.82	60.44	71.44
Al2O3	20.10	15.76	16.69	19.99	15.71	15.22	16.90	19.09	20.10	12.62
TiO2	0.89	0.78	0.80	0.92	0.78	0.75	0.76	0.86	0.93	0.51
Fe2O3	5.98	5.62	5.09	4.86	5.45	4.25	4.59	4.94	5.52	6.37
MgO	3.48	3.99	3.82	3.39	3.74	3.36	3.24	3.17	3.01	2.68
CaO	7.22	10.45	8.91	7.66	8.53	7.25	6.52	6.28	5.52	4.43
Na2O	0.27	0.24	0.04	0.20	0.13	0.08	0.08	0.10	0.09	0.02
K2O	4.46	2.95	3.03	3.82	2.76	2.42	2.67	3.40	3.80	1.55
MnO	0.09	0.12	0.11	0.09	0.10	0.09	0.08	0.08	0.07	0.05
P2O5	0.16	0.17	0.17	0.18	0.17	0.16	0.17	0.17	0.18	0.12
Total	99.52	95.31	97.44	98.49	96.84	97.59	98.00	98.91	99.66	99.79
As	444	155	130	1290	3011	820	5032	4776	6577	6366
Ba	382	399	303	405	229	574	232	316	751	153
Cl	0	76	33	26	26	22	25	11	47	71
Co	23	23	26	23	37	33	33	34	32	50
Cr	146	155	145	149	169	177	153	164	165	88
Cu	35	29	13	18	58	25	28	49	38	49
Ga	23	14	16	19	14	13	17	20	20	13
La	44	28	45	50	41	34	40	42	47	31
Ni	83	72	81	114	74	75	67	73	77	55
Nb	15	12	14	14	11	12	12	15	15	8
Pb	111	84	27	40	111	56	62	108	60	88
Rb	160	102	109	135	104	94	101	128	152	68
Sr	205	216	213	297	215	203	253	244	214	106
Sb	126	96	34	61	138	71	97	140	101	128
S	740	870	651	1300	4204	1291	5276	7550	11380	26000
Th	6	11	14	13	13	5	8	12	11	4
V	131	102	103	133	101	89	98	123	137	75
Y	34	35	32	34	31	31	30	31	35	23
Zn	25	23	23	20	19	18	7	14	13	6
Zr	163	249	211	196	244	227	203	189	208	101
Tl	0	0	0	3	0	0	0	0	0	0

TABLE 4.111

VAR. / ID.	CXD1091	CXD1092	CXD1093	CXD1094	CXD1095	CXD1096	CXD1097	CXD1098	CXD1099	CXD1100
SiO2	63.11	72.22	72.30	59.09	59.58	57.66	59.78	60.31	58.09	57.21
Al2O3	17.63	12.76	9.01	17.49	18.07	18.49	14.38	18.55	17.25	17.20
TiO2	0.70	0.58	0.40	0.87	0.75	0.85	0.74	0.84	0.81	0.77
Fe2O3	6.05	4.34	6.54	4.59	5.17	5.56	5.08	5.18	6.64	5.90
MgO	2.88	2.94	3.17	3.34	3.50	3.45	4.15	3.31	3.53	3.90
CaO	5.16	5.32	5.59	7.12	7.42	6.80	9.18	6.13	7.21	8.21
Na2O	0.07	0.04	0.04	0.16	0.15	0.17	0.10	0.11	0.19	0.24
K2O	2.36	1.52	1.09	3.39	2.82	3.85	2.68	3.76	3.36	3.84
MnO	0.06	0.06	0.06	0.09	0.09	0.07	0.10	0.08	0.09	0.09
P2O5	0.12	0.11	0.09	0.17	0.16	0.16	0.17	0.17	0.17	0.15
Total	98.14	99.89	98.29	96.31	97.71	97.06	96.36	98.44	97.34	97.51
As	16938	5760	7259	1329	4190	8290	1717	7676	13524	10826
Ba	214	165	222	355	790	812	269	323	325	354
Cl	62	15	49	60	38	13	28	11	29	18
Co	52	55	53	25	39	48	32	31	42	38
Cr	146	106	85	136	132	158	185	160	149	141
Cu	42	43	36	46	31	55	21	44	37	58
Ga	18	11	8	18	16	21	14	23	19	19
La	42	21	32	38	33	39	41	43	39	38
Ni	73	48	40	62	60	85	54	83	89	78
Nb	13	10	8	14	11	15	13	15	14	13
Pb	55	89	54	121	67	110	50	86	36	115
Rb	94	60	44	116	99	154	100	154	126	146
Sr	133	102	103	180	156	195	149	159	213	213
Sb	125	124	95	128	81	130	53	102	106	156
S	15715	8495	24826	3986	6345	7569	2385	5871	12533	4625
Th	14	7	4	9	8	9	11	7	7	6
V	111	80	59	107	104	139	94	130	125	121
Y	29	27	19	33	32	33	32	33	34	30
Zn	8	4	7	29	15	16	15	15	0	18
Zr	149	140	85	195	173	171	232	172	175	146
Tl	0	0	0	0	0	0	0	0	0	0

VAR. / ID.	CXD1101	CXD1102	CXD1103	CXD1104	CXD1105	CXD1106	CXD1107	CXD1108	CXD1109	CXD1110
SiO2	57.15	58.49	56.36	57.37	55.76	54.81	55.42	56.63	55.83	56.85
Al2O3	19.29	18.02	17.50	17.38	17.63	17.22	20.56	19.60	19.84	15.08
TiO2	0.90	0.79	0.82	0.82	0.81	0.81	0.94	0.95	0.93	0.75
Fe2O3	4.82	5.31	5.93	5.80	6.05	6.04	6.72	6.72	6.62	5.87
MgO	2.89	3.68	3.92	3.52	3.90	4.06	3.36	3.36	3.25	4.32
CaO	6.51	7.71	9.44	8.57	9.46	9.38	7.10	6.90	7.34	10.25
Na2O	0.14	0.17	0.28	0.22	0.24	0.18	0.24	0.22	0.22	0.16
K2O	3.74	3.91	3.13	3.15	3.32	3.46	4.32	4.06	4.06	2.72
MnO	0.08	0.08	0.10	0.09	0.10	0.10	0.06	0.08	0.08	0.12
P2O5	0.16	0.14	0.17	0.17	0.17	0.18	0.18	0.18	0.17	0.18
Total	95.68	98.30	97.65	97.09	97.44	96.24	98.90	98.70	98.34	96.30
As	1687	5920	66	1780	62	90	32	40	29	25
Ba	320	349	277	286	365	5363	394	375	401	322
Cl	21	0	37	32	51	27	26	16	16	36
Co	35	40	25	34	24	25	26	25	21	20
Cr	151	136	133	146	129	112	149	154	144	114
Cu	60	49	16	15	22	30	25	39	31	29
Ga	22	21	18	18	17	15	21	20	20	13
La	46	40	30	38	38	43	45	38	45	41
Ni	80	84	66	71	72	85	71	71	70	52
Nb	16	13	15	14	13	13	17	16	15	13
Pb	35	111	9	16	17	12	13	13	19	67
Rb	136	151	104	108	107	113	143	138	136	92
Sr	184	200	179	166	192	230	170	165	165	160
Sb	107	129	25	24	21	35	38	51	48	74
S	1650	3908	156	1537	156	1706	79	126	106	222
Th	10	6	13	7	12	7	10	10	13	8
V	129	127	112	111	116	119	135	136	132	93
Y	32	29	32	31	34	34	35	35	32	34
Zn	37	22	45	42	57	60	67	62	63	38
Zr	167	143	174	182	176	177	187	198	194	187
Tl	0	0	0	0	0	0	0	0	2	0

TABLE 4.111

-2934-

VAR. / ID.	CXD1111	CXD1112	CXD1113	CXD1114	CXD1115	CXD1116	CXD1117	CXD1118	CXD1119	CXD1120
SiO2	56.85	57.91	57.60	58.25	61.98	59.93	62.37	74.68	57.25	56.54
Al2O3	19.03	18.50	15.13	17.20	16.20	17.75	15.18	11.45	17.49	17.91
TiO2	0.85	0.91	0.71	0.80	0.71	0.79	0.66	0.39	0.79	0.81
Fe2O3	5.56	4.94	5.31	5.01	4.69	4.78	4.75	5.28	5.78	5.98
MgO	3.67	3.20	4.28	3.50	3.59	3.49	3.65	2.63	3.89	3.90
CaO	8.03	7.26	9.99	7.47	7.50	7.20	7.83	4.70	7.78	8.15
Na2O	0.10	0.12	0.16	0.14	0.17	0.25	0.15	0.05	0.11	0.15
K2O	3.96	3.47	3.25	3.59	3.17	3.82	2.88	1.43	3.63	3.99
MnO	0.08	0.08	0.10	0.08	0.08	0.08	0.09	0.05	0.10	0.09
P2O5	0.16	0.19	0.17	0.18	0.17	0.17	0.15	0.08	0.17	0.16
Total	98.29	96.58	96.70	96.22	98.26	98.26	97.71	100.74	96.99	97.68
As	871	103	992	3088	2444	3079	1309	3579	215	55
Ba	344	500	277	292	293	355	236	215	475	345
Cl	23	7	55	47	74	42	50	7	17	21
Co	41	24	33	37	38	34	40	59	35	29
Cr	147	142	120	143	118	136	137	70	141	137
Cu	37	30	25	31	33	47	34	23	36	33
Ga	20	19	15	17	.14	19	14	11	18	20
La	51	37	30	42	37	35	32	22	34	32
Ni	89	76	51	66	52	60	41	49	75	70
Nb	16	14	13	15	12	14	12	6	12	12
Pb	38	68	29	21	12	12	13	19	33	31
Rb	138	121	119	133	114	136	101	54	135	144
Sr	170	164	163	151	144	158	142	105	150	175
Sb	63	89	51	43	43	55	37	42	49	37
S	3993	346	1933	5214	4620	4693	6417	18416	945	423
Th	10	13	8	11	7	0	7	3	10	8
V	121	122	94	107	97	113	87	60	112	124
Y	33	36	28	32	29	34	28	19	29	30
Zn	20	20	30	20	22	26	24	13	39	51
Zr	188	203	179	199	179	181	184	85	164	151
Tl	2	2	0	0	0	0	0	0	0	6

VAR. / ID.	CXD1121	CXD1122	CXD1123	CXD1124	CXD1125	CXD1126	CXD1127	CXD1128	CXD1129	CXD1130
SiO2	56.53	55.33	57.16	58.29	58.20	57.67	55.42	55.78	59.38	78.69
Al2O3	17.88	17.12	17.09	15.00	12.52	16.65	17.45	17.18	14.69	10.60
TiO2	0.79	0.77	0.82	0.71	0.75	0.82	0.82	0.74	0.72	0.45
Fe2O3	5.81	6.07	6.07	5.95	5.34	6.51	6.67	5.15	4.83	3.72
MgO	3.93	4.44	4.62	4.38	4.17	5.00	4.51	4.07	3.85	1.61
CaO	8.26	8.85	7.63	9.00	10.01	7.09	7.15	9.44	8.31	2.46
Na2O	0.10	0.16	0.27	0.17	1.45	0.40	0.26	0.12	0.17	0.08
K2O	3.64	3.58	3.17	2.13	1.85	3.24	3.93	3.65	3.14	1.74
MnO	0.09	0.10	0.09	0.09	0.09	0.09	0.08	0.10	0.09	0.03
P2O5	0.16	0.15	0.17	0.17	0.19	0.17	0.15	0.16	0.15	0.07
Total	97.19	96.57	97.09	95.89	94.57	97.64	96.44	96.39	95.33	99.45
As	51	45	24	7	11	15	27	297	2794	2307
Ba	353	330	360	417	526	490	478	271	266	162
Cl	34	45	23	56	39	15	8	58	79	0
Co	29	38	33	26	33	14	31	39	40	65
Cr	130	135	134	130	168	139	145	127	162	79
Cu	41	43	18	26	21	28	17	40	26	18
Ga	18	18	18	14	12	18	20	17	16	11
La	39	36	40	32	33	42	43	36	43	18
Ni	81	78	75	58	49	81	84	70	53	23
Nb	14	13	13	11	12	12	14	12	13	7
Pb	12	15	11	12	10	13	16	15	13	15
Rb	133	126	113	71	66	116	139	128	116	71
Sr	148	155	120	91	160	120	141	141	116	52
Sb	55	47	20	13	3	24	15	36	31	59
S	388	244	62	134	161	91	97	1121	3524	5839
Th	7	12	10	9	11	7	11	8	11	4
V	112	120	119	92	90	113	126	110	97	70
Y	29	29	31	27	31	31	30	27	28	10
Zn	43	55	61	45	47	75	100	33	27	6
Zr	157	151	182	183	251	170	152	170	226	93
Tl	2	0	0	0	0	0	0	0	0	0

TABLE 4.111

VAR. / ID.	CXD1131	CXD1132	CXD1133	CXD1134	CXD1135	CXD1136	CXD1137	CXD1138	CXD1139	CXD1140
SiO2	81.40	78.96	68.06	60.17	58.26	68.64	61.38	63.04	58.51	58.34
Al2O3	9.90	9.90	17.83	20.51	20.34	19.86	19.27	11.72	17.00	18.78
TiO2	0.34	0.45	0.73	0.83	0.88	0.86	0.80	0.54	0.73	0.82
Fe2O3	5.82	8.42	5.22	4.29	5.25	4.80	4.61	5.92	5.26	5.77
MgO	0.47	0.36	1.72	3.15	3.41	1.96	3.13	3.79	3.80	3.60
CaO	0.56	0.26	2.72	6.22	6.67	2.59	6.37	7.87	8.27	7.41
Na2O	0.08	0.05	0.13	0.23	0.13	0.11	0.06	0.05	0.09	0.08
K2O	1.28	1.50	3.23	4.06	4.69	3.67	3.36	1.55	3.09	3.51
MnO	0.00	0.00	0.04	0.08	0.09	0.04	0.08	0.10	0.11	0.08
P2O5	0.03	0.06	0.10	0.14	0.16	0.11	0.14	0.09	0.16	0.15
Total	99.88	99.96	99.78	99.68	99.88	102.64	99.20	94.67	97.02	98.54
As	2815	2839	4779	3531	3000	4720	3094	25994	3587	210
Ba	133	157	271	323	340	317	295	179	254	286
Cl	0	0	41	48	18	6	38	121	48	29
Co	72	73	48	31	31	46	35	50	30	34
Cr	61	80	132	145	153	153	140	106	126	129
Cu	22	15	31	29	62	55	32	45	25	35
Ga	9	9	19	19	23	22	19	12	16	19
La	14	24	41	38	36	35	39	36	40	43
Ni	34	43	36	41	87	96	48	50	60	76
Nb	7	6	13	14	14	14	14	11	12	14
Pb	32	44	18	15	20	20	22	41	39	72
Rb	51	64	125	139	164	143	114	57	112	126
Sr	22	32	72	115	137	85	117	127	143	169
Sb	134	169	84	47	73	75	44	112	35	44
S	1617	3479	6260	4241	2256	3119	3839	6936	3292	1478
Th	3	1	7	12	8	10	11	3	6	7
V	51	53	121	135	154	139	120	93	106	111
Y	15	19	27	27	33	30	29	23	28	30
Zn	5	5	12	28	37	28	20	44	23	28
Zr	69	128	129	167	141	146	157	105	162	169
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.111

VAR. / ID.	CXD1141	CXD1142	CXD1143	CXD1144	CXD1145	CXD1146	CXD1147	CXD1148	CXD1149	CXD1150
SiO2	57.79	56.57	58.94	56.87	56.90	58.19	55.96	57.25	59.02	56.41
Al2O3	17.60	16.31	18.75	19.71	19.23	18.82	19.84	19.55	18.63	20.77
TiO2	0.80	0.74	0.84	0.85	0.82	0.84	0.83	0.87	0.83	0.92
Fe2O3	6.22	6.11	4.83	6.27	5.67	5.64	5.38	4.97	5.03	5.27
MgO	3.80	4.31	3.48	3.55	3.67	3.50	3.63	2.82	3.38	3.39
CaO	7.65	8.99	7.55	6.43	7.70	6.91	7.74	5.93	6.95	7.05
Na2O	0.25	0.14	0.10	0.08	0.11	0.06	0.09	0.11	0.10	0.11
K2O	3.69	3.19	2.97	3.97	4.09	3.72	4.20	3.98	3.78	4.20
MnO	0.09	0.10	0.09	0.08	0.09	0.09	0.09	0.08	0.08	0.07
P2O5	0.16	0.16	0.19	0.17	0.17	0.17	0.17	0.16	0.18	0.17
Total	98.05	96.62	97.74	97.98	98.45	97.94	97.93	95.72	97.98	98.36
As	172	248	1976	447	453	455	956	2513	191	210
Ba	286	242	231	294	569	304	373	423	346	307
Cl	0	71	23	75	38	24	117	83	56	41
Co	0	33	31	29	29	28	34	34	28	36
Cr	130	121	153	138	131	147	146	173	137	170
Cu	28	27	28	30	21	32	21	27	28	38
Ga	18	16	17	18	19	6	20	18	18	19
La	34	35	43	41	29	30	36	45	38	37
Ni	71	60	59	70	78	72	73	71	73	99
Nb	12	14	15	13	12	13	12	15	12	14
Pb	102	125	128	74	49	95	28	20	26	34
Rb	133	114	102	135	144	130	148	151	130	143
Sr	150	132	115	120	167	131	138	106	108	140
Sb	37	38	40	46	28	45	31	24	37	46
S	1593	1234	3369	1759	1911	2485	8333	5728	842	736
Th	7	6	11	7	13	55	10	11	10	13
V	113	105	116	123	126	123	139	138	118	138
Y	30	29	31	29	28	30	27	31	29	29
Zn	29	30	23	26	19	31	26	18	25	22
Zr	166	159	207	155	145	174	151	181	183	200
Tl	0	2	3	0	0	0	0	0	0	1

TABLE 4.111

-2938-

VAR. / ID.	CXD1151	CXD1152	CXD1153	CXD1154	CXD1155	CXD1156	CXD1157	CXD1158	CXD1159	CXD1160
SiO2	53.98	56.72	56.14	58.28	59.08	63.90	62.04	69.11	73.48	63.76
Al2O3	22.90	17.08	21.33	17.00	19.09	15.61	18.02	16.51	16.09	14.70
TiO2	1.02	0.80	0.89	0.79	0.83	0.64	0.76	0.71	0.70	0.65
Fe2O3	5.02	5.02	4.95	4.94	5.08	5.58	4.67	4.45	3.51	4.75
MgO	2.86	3.68	3.47	3.85	3.45	3.33	3.42	2.56	2.10	3.56
CaO	5.91	8.94	7.82	8.44	6.76	6.57	6.32	4.32	3.34	7.16
Na2O	0.11	0.14	0.11	0.09	0.11	0.04	0.08	0.07	0.08	0.11
K2O	4.81	2.88	3.59	2.80	3.55	2.11	3.30	2.63	2.39	2.58
MnO	0.07	0.09	0.08	0.10	0.09	0.08	0.08	0.06	0.05	0.08
P2O5	0.19	0.18	0.18	0.17	0.15	0.13	0.15	0.12	0.12	0.15
Total	96.87	95.53	98.56	96.46	98.19	97.99	98.84	100.54	101.86	97.50
As	327	314	393	317	1963	3793	7570	12390	15320	4325
Ba	359	1706	306	256	311	245	301	242	189	222
Cl	21	26	81	61	61	66	13	16	7	37
Co	33	39	30	26	13	33	26	30	47	48
Cr	179	128	144	124	146	110	141	133	139	113
Cu	49	54	37	24	23	14	96	63	45	46
Ga	23	13	20	16	18	13	22	26	16	13
La	47	34	38	31	41	25	47	30	39	36
Ni	118	68	109	74	46	51	47	46	51	35
Nb	15	12	13	14	12	11	13	12	11	12
Pb	104	13	14	17	28	29	16	15	13	16
Rb	158	92	114	99	135	75	127	104	94	98
Sr	138	140	141	117	129	136	116	90	72	123
Sb	60	47	40	29	40	86	52	64	56	40
S	1041	1810	1366	1400	12029	2689	5323	8156	4962	5732
Th	11	7	9	7	3	6	6	7	6	7
V	149	102	134	97	117	90	129	116	104	91
Y	29	32	30	28	27	25	26	23	25	24
Zn	29	29	23	31	25	36	25	17	17	20
Zr	202	193	168	176	175	135	158	148	156	154
Tl	0	0	0	0	1	0	1	2	0	0

TABLE 4.111

VAR. / ID.	CXD1161	CXD1162	CXD1163	CXD1164	CXD1165	CXD1166	CXD1167	CXD1168	CXD1169	CXD1170
SiO2	60.12	59.13	57.06	59.05	54.41	59.68	56.58	59.97	57.94	55.89
Al2O3	15.86	16.67	22.41	20.52	19.45	16.83	19.22	18.85	20.63	18.97
TiO2	0.69	0.73	0.95	0.89	0.80	0.94	0.82	0.72	0.87	0.81
Fe2O3	4.83	5.41	4.41	5.26	5.38	4.84	4.94	4.54	5.11	5.47
MgO	3.83	3.78	3.02	3.12	3.82	3.74	3.03	3.25	3.24	3.87
CaO	8.55	8.12	6.34	5.82	8.60	7.95	6.51	7.02	6.64	8.60
Na2O	0.15	0.07	0.09	0.14	0.08	0.09	0.11	0.14	0.21	0.18
K2O	2.61	2.70	4.17	4.38	3.83	2.52	3.92	3.43	4.25	3.74
MnO	0.09	0.10	0.08	0.08	0.11	0.09	0.08	0.08	0.09	0.10
P2O5	0.17	0.16	0.19	0.15	0.17	0.20	0.15	0.15	0.18	0.17
Total	96.90	96.87	98.72	99.41	96.65	96.88	95.36	98.15	99.16	97.80
As	77	2034	3708	593	4788	3822	5612	1188	390	803
Ba	209	427	379	324	234	213	286	229	343	365
Cl	85	22	78	13	49	36	45	38	12	33
Co	25	28	29	24	30	38	31	29	27	31
Cr	118	121	160	147	147	253	155	125	141	142
Cu	19	22	30	43	32	21	35	29	34	27
Ga	9	13	21	22	21	15	22	15	21	17
La	37	40	45	46	35	47	50	46	36	45
Ni	29	57	84	72	65	49	75	48	71	72
Nb	11	12	15	15	14	12	14	16	15	14
Pb	12	17	26	64	70	39	16	99	80	55
Rb	92	100	154	163	129	90	150	116	149	130
Sr	126	133	166	149	187	163	168	160	173	213
Sb	25	50	49	50	50	41	56	34	48	38
S	428	2880	4620	1923	3247	6198	5455	1766	2002	3348
Th	8	6	9	9	8	11	11	11	11	11
V	85	100	153	133	130	118	134	98	129	125
Y	26	29	29	28	29	32	30	31	28	30
Zn	16	15	17	29	27	19	20	25	23	27
Zr	183	172	178	192	156	361	161	228	162	172
Tl	0	0	0	2	0	0	0	0	0	0

TABLE 4.111

VAR. / ID.	CXD1005	CXD1006	CXD1007	CXD1008	CXD1009	CXD1010	CXD1011	CXD1012	CXD1013	CXD1014
SiO2	61.55	61.84	59.51	58.54	58.49	60.94	60.16	57.96	65.10	58.72
Al2O3	14.58	15.11	13.13	21.16	18.25	14.06	17.55	19.43	18.77	21.75
TiO2	0.86	0.84	0.74	0.92	0.82	0.72	0.79	0.81	0.82	0.97
Fe2O3	5.90	6.13	5.52	5.43	5.30	5.24	4.73	5.02	6.69	6.01
MgO	3.47	3.93	3.89	2.30	1.59	3.25	2.08	3.24	1.11	2.02
CaO	6.75	5.52	8.82	7.50	9.83	9.03	9.06	7.82	2.82	5.76
Na2O	1.63	1.69	1.36	0.23	0.16	0.84	0.23	0.14	0.12	0.09
K2O	2.18	2.28	2.01	4.32	3.47	2.31	2.98	3.92	3.41	5.07
MnO	0.10	0.08	0.11	0.09	0.10	0.10	0.10	0.10	0.12	0.09
P2O5	0.20	0.19	0.18	0.19	0.17	0.17	0.17	0.17	0.15	0.17
Total	97.22	97.61	95.27	100.68	98.18	96.66	97.85	98.61	99.11	100.65
As	66	41	29	199	112	35	93	1377	2959	470
Ba	388	313	453	404	372	326	332	356	524	493
Cl	9	25	33	18	0	33	10	25	0	8
Co	42	31	40	28	44	37	23	40	60	34
Cr	148	133	145	150	175	167	144	135	152	160
Cu	21	16	27	44	32	24	15	54	69	33
Ga	14	12	11	18	15	10	13	16	16	21
La	34	30	28	36	34	32	33	30	38	42
Ni	63	65	54	80	59	45	29	78	106	105
Nb	14	14	13	15	14	13	13	15	12	17
Pb	14	13	13	10	11	6	9	13	21	13
Rb	73	74	63	134	117	76	95	130	123	184
Sr	134	100	123	78	72	93	66	165	75	121
Sb	15	10	14	51	29	6	9	67	60	56
S	18	8	79	20	23	42	14	3011	256	199
Th	8	7	11	12	14	9	2	9	7	11
V	98	98	93	138	120	89	104	115	121	147
Y	32	32	29	34	34	28	31	30	29	32
Zn	59	62	50	44	40	33	15	25	31	25
Zr	244	209	222	165	219	208	207	174	171	170
Tl	0	0	0	0	0	0	0	0	0	2

VAR. / ID.	CXD1015	CXD1016	CXD1017	CXD1018	CXD1019	CXD1020	CXD1021	CXD1022	CXD1023	CXD1024
SiO2	58.17	55.81	58.80	58.83	56.15	58.20	58.85	64.44	59.02	56.89
Al2O3	19.14	18.51	18.82	17.41	15.57	15.77	17.74	18.39	19.91	21.34
TiO2	0.86	0.82	0.79	0.81	0.71	0.74	0.79	0.78	0.85	0.84
Fe2O3	4.97	5.44	5.01	4.76	5.70	5.14	5.10	3.61	4.33	4.10
MgO	3.63	2.96	3.24	3.18	3.26	3.74	3.11	2.62	3.03	2.95
CaO	7.30	9.35	8.94	8.60	10.70	9.44	7.93	5.27	7.79	7.38
Na2O	0.13	0.12	0.11	0.12	0.09	0.15	0.19	0.15	0.11	0.11
K2O	4.14	3.75	3.19	3.08	2.91	2.88	3.56	3.60	2.93	3.49
MnO	0.10	0.10	0.10	0.11	0.12	0.10	0.10	0.06	0.08	0.08
P2O5	0.17	0.16	0.17	0.17	0.17	0.17	0.15	0.08	0.18	0.15
Total	98.61	97.02	99.17	97.07	95.38	96.33	97.52	99.00	98.23	97.33
As	88	150	63	63	275	381	2305	2820	1628	774
Ba	326	323	365	1142	388	319	332	314	295	291
Cl	22	25	33	18	18	45	16	55	20	218
Co	28	33	29	19	23	35	38	17	18	15
Cr	127	142	128	141	128	152	137	128	172	128
Cu	37	42	32	31	48	21	44	21	22	20
Ga	16	15	17	15	12	15	18	18	17	17
La	33	37	41	41	34	32	41	36	52	58
Ni	73	60	39	40	60	95	117	72	84	68
Nb	17	13	13	15	13	13	15	13	15	18
Pb	11	12	13	8	10	30	160	98	184	98
Rb	148	115	97	103	101	102	129	129	101	120
Sr	161	150	220	131	138	145	156	158	302	359
Sb	48	39	35	41	47	35	76	70	60	38
S	192	388	410	310	171	1467	3607	3459	3809	2680
Th	10	10	9	10	9	10	13	9	13	21
V	125	114	110	114	93	95	122	122	115	103
Y	31	27	30	30	27	29	31	27	29	41
Zn	28	40	35	36	46	23	30	18	11	18
Zr	166	189	160	180	176	204	161	150	227	296
Tl	0	0	0	0	3	3	0	3	0	0

TABLE 4.112

VAR. / ID.	CXD1025	CXD1030	CXD1031	CXD1032	CXD1033	CXD1034	CXD1035	CXD1036	CXD1037	CXD1038
SiO2	55.69	57.19	58.30	56.26	56.16	57.90	56.71	57.44	57.08	58.18
Al2O3	21.77	18.61	18.82	17.05	18.38	14.94	17.39	19.71	19.55	18.87
TiO2	0.85	0.83	0.83	0.74	0.77	0.73	0.79	0.85	0.87	0.81
Fe2O3	5.06	5.29	5.14	5.24	5.21	5.02	5.39	5.46	5.48	5.05
MgO	2.87	3.25	2.43	2.97	3.38	3.68	3.54	3.29	3.36	3.31
CaO	7.76	8.18	8.23	10.37	9.53	8.89	8.87	7.12	7.38	8.20
Na2O	0.07	0.11	0.15	0.14	0.14	0.81	0.48	0.21	0.20	0.15
K2O	2.84	3.56	3.35	2.89	3.18	2.42	3.11	3.64	3.74	3.05
MnO	0.09	0.09	0.09	0.10	0.09	0.09	0.09	0.08	0.09	0.10
P2O5	0.18	0.18	0.17	0.18	0.17	0.17	0.17	0.16	0.17	0.17
Total	97.18	97.29	97.51	95.94	97.01	94.65	96.54	97.96	97.92	97.89
As	7501	470	272	162	65	14	68	34	59	91
Ba	258	333	357	386	369	535	365	388	366	261
Cl	70	31	0	32	31	27	44	40	21	105
Co	26	22	29	28	25	19	28	32	28	31
Cr	158	138	144	127	125	125	135	148	145	147
Cu	26	30	36	31	13	21	18	36	31	35
Ga	19	17	17	14	16	13	15	17	17	15
La	39	41	40	29	32	33	31	45	47	31
Ni	90	78	86	75	76	38	60	75	83	68
Nb	15	13	15	14	14	13	14	15	15	14
Pb	151	89	22	13	15	9	14	14	12	14
Rb	102	125	122	100	110	83	99	123	126	96
Sr	405	197	147	169	170	136	130	131	131	118
Sb	61	50	32	29	24	9	15	47	45	51
S	7551	1113	118	104	86	107	113	405	390	358
Th	8	12	11	15	9	10	14	11	37	6
V	134	113	114	103	116	91	114	129	129	117
Y	30	28	30	28	28	27	29	28	30	29
Zn	12	21	33	43	46	36	41	33	29	29
Zr	174	169	172	172	164	180	177	166	165	183
Tl	5	2	0	0	0	0	0	0	0	0

VAR. / ID.	CXD1039	CXD1040
SiO2	60.36	58.66
Al2O3	22.65	21.77
TiO2	0.95	0.94
Fe2O3	5.13	4.93
MgO	2.61	3.05
CaO	4.36	5.46
Na2O	0.14	0.00
K2O	4.50	4.06
MnO	0.06	0.07
P2O5	0.16	0.18
Total	100.92	99.12
As	108	94
Ba	363	302
Cl	18	14
Co	29	34
Cr	146	151
Cu	103	47
Ga	21	18
La	45	43
Ni	86	79
Nb	17	17
Pb	8	11
Rb	159	125
Sr	142	144
Sb	143	60
S	347	1071
Th	11	9
V	138	125
Y	32	28
Zn	47	33
Zr	172	185
Tl	0	0

VAR. / ID.	CXD1128	CXD1129	CXD1130	CXD1131	CXD1132	CXD1133	CXD1134	CXD1135	CXD1136	CXD1137
SiO2	55.78	59.38	78.69	81.40	78.96	68.06	60.17	58.26	68.64	61.38
Al2O3	17.18	14.69	10.60	9.90	9.90	17.83	20.51	20.34	19.86	19.27
TiO2	0.74	0.72	0.45	0.34	0.45	0.73	0.83	0.88	0.86	0.80
Fe2O3	5.15	4.83	3.72	5.82	8.42	5.22	4.29	5.25	4.80	4.61
MgO	4.07	3.85	1.61	0.47	0.36	1.72	3.15	3.41	1.96	3.13
CaO	9.44	8.31	2.46	0.56	0.26	2.72	6.22	6.67	2.59	6.37
Na2O	0.12	0.17	0.08	0.08	0.05	0.13	0.23	0.13	0.11	0.06
K2O	3.65	3.14	1.74	1.28	1.50	3.23	4.06	4.69	3.67	3.36
MnO	0.10	0.09	0.03	0.00	0.00	0.04	0.08	0.09	0.04	0.08
P2O5	0.16	0.15	0.07	0.03	0.06	0.10	0.14	0.16	0.11	0.14
Total	96.39	95.33	99.45	99.88	99.96	99.78	99.68	99.88	102.64	99.20
As	297	2794	2307	2815	2839	4779	3531	3000	4720	3094
Ba	271	266	162	133	157	271	323	340	317	295
Cl	58	79	0	0	0	41	48	18	6	38
Co	39	40	65	72	73	48	31	31	46	35
Cr	127	162	79	61	80	132	145	153	153	140
Cu	40	26	18	22	15	31	29	62	55	32
Ga	17	16	11	9	9	19	19	23	22	19
La	36	43	18	14	24	41	38	36	35	39
Ni	70	53	23	34	43	36	41	87	96	48
Nb	12	13	7	7	6	13	14	14	14	14
Pb	15	13	15	32	44	18	15	20	20	22
Rb	128	116	71	51	64	125	139	164	143	114
Sr	141	116	52	22	32	72	115	137	85	117
Sb	36	31	59	134	169	84	47	73	75	44
S	1121	3524	5839	1617	3479	6260	4241	2256	3119	3839
Th	8	11	4	3	1	7	12	8	10	11
V	110	97	70	51	53	121	135	154	139	120
Y	27	28	10	15	19	27	27	33	30	29
Zn	33	27	6	5	5	12	28	37	28	20
Zr	170	226	93	69	128	129	167	141	146	157
Tl	0	0	0	0	0	0	0	0	0	0

VAR. / ID.	CXD1138	CXD1139	CXD1140	CXD1141	CXD1142	CXD1143	CXD1144	CXD1145	CXD1146	CXD1147
SiO2	63.04	58.51	58.34	57.79	56.57	58.94	56.87	56.90	58.19	55.96
Al2O3	11.72	17.00	18.78	17.60	16.31	18.75	19.71	19.23	18.82	19.84
TiO2	0.54	0.73	0.82	0.80	0.74	0.84	0.85	0.82	0.84	0.83
Fe2O3	5.92	5.26	5.77	6.22	6.11	4.83	6.27	5.67	5.64	5.38
MgO	3.79	3.80	3.60	3.80	4.31	3.48	3.55	3.61	3.50	3.63
CaO	7.87	8.27	7.41	7.65	8.99	7.55	6.43	7.70	6.91	7.74
Na2O	0.05	0.09	0.08	0.25	0.14	0.10	0.08	0.11	0.06	0.09
K2O	1.55	3.09	3.51	3.69	3.19	2.97	3.97	4.09	3.72	4.20
MnO	0.10	0.11	0.08	0.09	0.10	0.09	0.08	0.09	0.09	0.09
P2O5	0.09	0.16	0.15	0.16	0.16	0.19	0.17	0.17	0.17	0.17
Total	94.67	97.02	98.54	98.05	96.62	97.74	97.98	98.45	97.94	97.93
As	25994	3587	210	172	248	1976	447	453	455	956
Ba	179	254	286	286	242	231	294	569	304	373
Cl	121	48	29	0	71	23	75	38	24	117
Co	50	30	34	0	33	31	29	29	28	34
Cr	106	126	129	130	121	153	138	131	147	146
Cu	45	25	35	28	27	28	30	21	32	21
Ga	12	16	19	18	16	17	18	19	6	20
La	36	40	43	34	35	43	41	29	30	36
Ni	50	60	76	71	60	59	70	78	72	73
Nb	11	12	14	12	14	15	13	12	13	12
Pb	41	39	72	102	125	128	74	49	95	28
Rb	57	112	126	133	114	102	135	144	130	148
Sr	127	143	169	150	132	115	120	167	131	138
Sb	112	35	44	37	38	40	46	28	45	31
S	6936	3292	1478	1593	1234	3369	1759	1911	2485	8333
Th	3	6	7	7	6	11	7	13	55	10
V	93	106	111	113	105	116	123	126	123	139
Y	23	28	30	30	29	31	29	28	30	27
Zn	44	23	28	29	30	23	26	19	31	26
Zr	105	162	169	166	159	207	155	145	174	151
Tl	0	0	0	0	2	3	0	0	0	0

VAR. / ID.	CXD1148	CXD1149	CXD1150	CXD1151	CXD1152	CXD1153	CXD1154	CXD1155	CXD1156	CXD1157
SiO2	57.25	59.02	56.41	53.98	56.72	56.14	58.28	59.08	63.90	62.04
Al2O3	19.55	18.63	20.77	22.90	17.08	21.33	17.00	19.09	15.61	18.02
TiO2	0.87	0.83	0.92	1.02	0.80	0.89	0.79	0.83	0.64	0.76
Fe2O3	4.97	5.03	5.27	5.02	5.02	4.95	4.94	5.08	5.58	4.67
MgO	2.82	3.38	3.39	2.86	3.68	3.47	3.85	3.45	3.33	3.42
CaO	5.93	6.95	7.05	5.91	8.94	7.82	8.44	6.76	6.57	6.32
Na2O	0.11	0.10	0.11	0.11	0.14	0.11	0.09	0.11	0.04	0.08
K2O	3.98	3.78	4.20	4.81	2.88	3.59	2.80	3.55	2.11	3.30
MnO	0.08	0.08	0.07	0.07	0.09	0.08	0.10	0.09	0.08	0.08
P2O5	0.16	0.18	0.17	0.19	0.18	0.18	0.17	0.15	0.13	0.15
Total	95.72	97.98	98.36	96.87	95.53	98.56	96.46	98.19	97.99	98.84
As	2513	191	210	327	314	393	317	1963	3793	7570
Ba	423	346	307	359	1706	306	256	311	245	301
Cl	83	56	41	21	26	81	61	61	66	13
Co	34	28	36	33	39	30	26	13	33	26
Cr	173	137	170	179	128	144	124	146	110	141
Cu	27	28	38	49	54	37	24	23	14	96
Ga	18	18	19	23	13	20	16	18	13	22
La	45	38	37	47	34	38	31	41	25	47
Ni	71	73	99	118	68	109	74	46	51	47
Nb	15	12	14	15	12	13	14	12	11	13
Pb	20	26	34	104	13	14	17	28	29	16
Rb	151	130	143	158	92	114	99	135	75	127
Sr	106	108	140	138	140	141	117	129	136	116
Sb	24	37	46	60	47	40	29	40	86	52
S	9728	842	736	1041	1810	1366	1400	12029	2689	5323
Th	11	10	13	11	7	9	7	3	6	6
V	138	118	138	149	102	134	97	117	90	129
Y	31	29	29	29	32	30	28	27	25	26
Zn	18	25	22	29	29	23	31	25	36	25
Zr	181	183	200	202	193	168	176	175	135	158
Tl	0	0	1	0	0	0	0	1	0	1

VAR. / ID.	CXD1158	CXD1159	CXD1160	CXD1161	CXD1162	CXD1163	CXD1164	CXD1165	CXD1166	CXD1167
SiO2	69.11	73.48	63.76	60.12	59.13	57.06	59.05	54.41	59.68	56.58
Al2O3	16.51	16.09	14.70	15.86	16.67	22.41	20.52	19.45	16.83	19.22
TiO2	0.71	0.70	0.65	0.69	0.73	0.95	0.89	0.80	0.94	0.82
Fe2O3	4.45	3.51	4.75	4.83	5.41	4.41	5.26	5.38	4.84	4.94
MgO	2.56	2.10	3.56	3.83	3.78	3.02	3.12	3.82	3.74	3.03
CaO	4.32	3.34	7.16	8.55	8.12	6.34	5.82	8.60	7.95	6.51
Na2O	0.07	0.08	0.11	0.15	0.07	0.09	0.14	0.08	0.09	0.11
K2O	2.63	2.39	2.58	2.61	2.70	4.17	4.38	3.63	2.52	3.92
MnO	0.06	0.05	0.08	0.09	0.10	0.08	0.08	0.11	0.09	0.08
P2O5	0.12	0.12	0.15	0.17	0.16	0.19	0.15	0.17	0.20	0.15
Total	100.54	101.86	97.50	96.90	96.87	98.72	99.41	96.65	96.88	95.36
As	12390	15320	4325	77	2034	3708	593	4788	3822	5612
Ba	242	189	222	209	427	379	324	234	213	286
Cl	16	7	37	85	22	78	13	49	36	45
Co	38	47	48	25	28	29	24	30	38	31
Cr	133	139	113	118	121	160	147	147	253	155
Cu	63	45	46	19	22	30	43	32	21	35
Ga	26	16	13	9	13	21	22	21	15	22
La	30	39	36	37	40	45	46	35	47	50
Ni	46	51	35	29	57	84	72	65	49	75
Nb	12	11	12	11	12	15	15	14	12	14
Pb	15	13	16	12	17	26	64	70	39	16
Rb	104	94	98	92	100	154	163	129	90	150
Sr	90	72	123	126	133	166	149	187	163	168
Sb	64	56	40	25	50	49	50	50	41	56
S	8156	4962	5732	428	2880	4620	1923	3247	6198	5455
Th	7	6	7	8	6	9	9	8	11	11
V	116	104	91	85	100	153	133	130	118	134
Y	23	25	24	26	29	29	28	29	32	30
Zn	17	17	20	16	15	17	29	27	19	20
Zr	148	156	154	183	172	178	192	156	361	161
Tl	2	0	0	0	0	0	2	0	0	0

VAR. / ID.	CXD1168	CXD1169	CXD1170
SiO2	59.97	57.94	55.89
Al2O3	18.85	20.63	18.97
TiO2	0.72	0.87	0.81
Fe2O3	4.54	5.11	5.47
MgO	3.25	3.24	3.87
CaO	7.02	6.64	8.60
Na2O	0.14	0.21	0.18
K2O	3.43	4.25	3.74
MnO	0.08	0.09	0.10
P2O5	0.15	0.18	0.17
Total	98.15	99.16	97.80
As	1188	390	803
Ba	229	343	365
Cl	38	12	33
Co	29	27	31
Cr	125	141	142
Cu	29	34	27
Ga	15	21	17
La	46	36	45
Ni	48	71	72
Nb	16	15	14
Pb	99	80	55
Rb	116	149	130
Sr	160	173	213
Sb	34	48	38
S	1766	2002	3348
Th	11	11	11
V	98	129	125
Y	31	28	30
Zn	25	23	27
Zr	228	162	172
Tl	0	0	0

VAR. / ID.	CXD1048	CXD1049	CXD1050	CXD1051	CXD1052	CXD1053	CXD1054	CXD1055	CXD1056	CXD1057
SiO2	57.42	57.09	55.55	56.63	57.52	61.61	56.78	56.10	53.41	55.59
Al2O3	16.69	22.52	17.92	23.14	18.81	15.90	19.68	21.39	20.88	17.66
TiO2	0.76	0.98	0.80	1.00	0.82	0.68	0.84	0.87	0.89	0.75
Fe2O3	4.67	4.48	5.31	4.61	4.39	4.36	4.29	4.65	5.45	5.49
MgO	3.78	2.16	3.81	3.04	4.02	3.92	3.64	3.68	3.14	3.81
CaO	8.59	4.11	8.25	5.82	8.29	8.19	7.58	7.36	6.74	8.72
Na2O	0.14	0.13	0.12	0.18	0.12	0.08	0.13	0.13	0.10	0.13
K2O	3.37	4.93	3.90	4.71	3.60	2.79	4.10	4.66	4.38	3.32
MnO	0.11	0.06	0.08	0.07	0.09	0.09	0.08	0.08	0.09	0.10
P2O5	0.17	0.16	0.16	0.18	0.18	0.17	0.17	0.18	0.20	0.16
Total	95.70	96.62	95.90	99.38	97.84	97.79	97.29	99.10	95.28	95.73
As	1065	1064	260	1018	274	962	352	848	2519	628
Ba	243	371	279	338	350	271	349	630	504	299
Cl	109	0	72	28	38	58	49	18	56	73
Co	41	37	30	39	31	39	31	34	35	44
Cr	124	154	130	160	150	124	142	155	154	113
Cu	17	37	30	36	32	14	31	33	41	35
Ga	15	23	17	20	17	13	17	20	18	16
La	34	54	36	54	39	39	37	44	45	33
Ni	59	87	72	102	69	49	80	90	81	62
Nb	13	17	13	17	13	11	13	16	15	13
Pb	18	19	80	67	79	25	73	68	65	90
Rb	109	184	134	166	126	95	143	161	149	110
Sr	107	111	161	181	278	249	212	199	187	175
Sb	26	57	90	99	92	41	96	86	136	128
S	2846	3176	1173	2458	2049	3857	1919	3316	4456	1206
Th	11	10	6	12	7	12	8	8	11	9
V	105	156	125	155	122	90	126	147	147	104
Y	28	32	26	29	29	25	29	29	32	27
Zn	22	27	35	28	17	16	13	14	21	20
Zr	173	183	154	178	189	174	172	161	141	150
Tl	0	0	0	0	3	0	2	0	6	1

VAR. / ID.	CXD1058	CXD1059	CXD1060	CXD1061	CXD1062	CXD1063	CXD1064	CXD1065	CXD1066	CXD1067
SiO2	56.25	56.42	59.30	58.49	60.65	58.10	60.66	59.02	56.71	58.60
Al2O3	17.04	20.62	20.35	20.17	21.21	21.40	22.01	20.87	21.50	21.17
TiO2	0.74	0.93	0.90	0.89	0.87	0.92	0.92	0.89	0.93	0.91
Fe2O3	5.45	6.17	4.67	5.41	5.04	5.55	5.10	4.91	5.36	5.20
MgO	3.80	3.49	3.26	3.24	2.71	2.93	2.67	2.70	3.28	3.09
CaO	8.36	5.98	6.12	6.65	5.12	5.82	4.77	5.03	6.86	5.95
Na2O	0.12	0.10	0.12	0.13	0.08	0.08	0.06	0.09	0.09	0.08
K2O	3.44	4.37	3.83	4.00	3.45	3.41	3.44	3.77	3.93	3.95
MnO	0.09	0.08	0.08	0.09	0.07	0.09	0.09	0.09	0.10	0.07
P2O5	0.16	0.17	0.18	0.16	0.13	0.15	0.11	0.11	0.16	0.17
Total	95.45	98.33	98.81	99.23	99.33	98.45	99.83	97.48	98.92	99.23
As	587	574	1577	5806	7398	13381	20332	11077	8961	4996
Ba	269	356	320	401	323	260	256	434	289	324
Cl	44	25	13	17	18	27	47	36	47	37
Co	25	29	50	31	40	39	50	36	30	27
Cr	117	148	144	164	161	166	183	165	169	161
Cu	23	29	22	56	39	43	54	52	31	43
Ga	16	21	7	22	20	21	26	23	21	19
La	33	44	41	36	37	44	57	52	49	43
Ni	61	94	65	77	78	80	91	75	68	73
Nb	13	15	15	14	15	14	14	15	14	15
Pb	56	77	50	104	72	84	159	146	56	95
Rb	124	158	140	154	131	135	141	150	145	150
Sr	167	157	144	173	228	176	165	173	228	183
Sb	66	132	69	134	104	118	170	156	95	124
S	1244	1141	1861	5212	7987	10742	8541	7238	7599	8001
Th	9	9	11	9	11	7	7	10	11	7
V	105	153	127	144	132	141	152	148	148	135
Y	27	32	29	32	30	31	29	32	31	33
Zn	17	27	21	39	13	13	14	11	15	12
Zr	148	149	179	163	171	174	162	163	173	168
Tl	7	3	0	0	0	0	0	0	0	0

VAR. / ID.	CXD1068	CXD1069	CXD1070	CXD1071	CXD1072	CXD1073	CXD1074	CXD1075	CXD1076	CXD1077
SiO2	60.27	61.03	61.22	67.66	64.25	56.39	58.53	58.46	58.99	56.97
Al2O3	23.07	22.65	18.06	19.11	18.00	17.97	19.73	19.79	17.89	19.05
TiO2	1.02	0.97	0.86	0.84	0.80	0.79	0.90	0.89	0.86	0.87
Fe2O3	4.52	4.98	4.62	4.00	6.05	4.99	5.17	5.43	5.16	5.56
MgO	2.57	2.33	2.50	2.08	2.33	3.74	3.40	3.48	3.53	3.32
CaO	4.38	3.80	4.63	3.32	4.30	8.45	6.80	6.55	7.78	6.55
Na2O	0.08	0.08	0.07	0.09	0.11	0.20	0.20	0.18	0.12	0.17
K2O	4.47	3.75	2.89	2.86	2.77	4.07	4.26	4.52	3.36	4.21
MnO	0.06	0.06	0.07	0.05	0.06	0.09	0.09	0.08	0.09	0.08
P2O5	0.16	0.15	0.15	0.12	0.11	0.15	0.17	0.16	0.18	0.15
Total	100.60	99.80	95.07	100.13	98.78	96.84	99.25	99.54	97.96	96.93
As	6712	9789	11057	13399	17800	644	1014	1196	2079	5170
Ba	331	305	584	1119	601	336	365	363	301	343
Cl	16	16	39	19	43	11	19	0	48	44
Co	33	46	40	72	42	27	25	23	30	31
Cr	191	171	189	172	162	139	151	148	175	160
Cu	28	38	35	48	40	38	47	30	25	37
Ga	24	23	23	26	19	18	22	23	15	22
La	53	51	45	41	40	36	45	39	47	42
Ni	76	78	88	416	101	89	108	85	74	84
Nb	16	16	13	12	12	14	16	15	13	14
Pb	54	68	762	1276	67	112	135	82	47	78
Rb	179	147	120	119	107	142	157	164	123	169
Sr	168	173	141	121	137	208	177	177	186	175
Sb	84	120	651	228	129	124	152	97	64	105
S	6319	10304	7736	8534	17580	1460	1865	1240	3484	3160
Th	12	9	7	10	6	5	9	8	11	9
V	163	146	135	132	129	112	132	128	115	132
Y	37	36	34	30	33	30	36	33	33	28
Zn	19	10	157	1846	11	25	15	16	14	16
Zr	204	223	237	194	177	146	161	154	250	160
Tl	0	0	0	0	0	0	0	0	0	0

VAR. / ID.	CXD1078	CXD1079	CXD1080	CXD1081	CXD1082	CXD1083	CXD1084	CXD1085	CXD1086	CXD1087
SiO2	57.91	56.82	56.84	56.87	55.23	58.78	57.38	59.47	64.01	62.99
Al2O3	17.49	20.15	17.18	20.10	15.76	16.69	19.99	15.71	15.22	16.90
TiO2	0.81	0.94	0.82	0.89	0.78	0.80	0.92	0.78	0.75	0.76
Fe2O3	5.22	6.38	5.96	5.98	5.62	5.09	4.86	5.45	4.25	4.59
MgO	3.70	3.57	3.81	3.48	3.99	3.82	3.39	3.74	3.36	3.24
CaO	8.36	6.66	8.44	7.22	10.45	8.91	7.66	8.53	7.25	6.52
Na2O	0.13	0.12	0.12	0.27	0.24	0.04	0.20	0.13	0.08	0.08
K2O	3.50	4.20	3.21	4.46	2.95	3.03	3.82	2.76	2.42	2.67
MnO	0.10	0.09	0.10	0.09	0.12	0.11	0.09	0.10	0.09	0.08
P2O5	0.17	0.17	0.17	0.16	0.17	0.17	0.18	0.17	0.16	0.17
Total	97.39	99.10	96.65	99.52	95.31	97.44	98.49	96.84	97.59	98.00
As	663	392	137	444	155	130	1290	3011	820	5032
Ba	303	338	407	382	399	303	405	229	574	232
Cl	40	17	13	0	76	33	26	26	22	25
Co	18	33	24	23	23	26	23	37	33	33
Cr	131	151	135	146	155	145	149	169	177	153
Cu	33	30	32	35	29	13	18	58	25	28
Ga	17	23	17	23	14	16	19	14	13	17
La	42	44	30	44	28	45	50	41	34	40
Ni	59	81	68	83	72	81	114	74	75	67
Nb	13	16	13	15	12	14	14	11	12	12
Pb	88	77	87	111	84	27	40	111	56	62
Rb	122	155	115	160	102	109	135	104	94	101
Sr	238	268	225	205	216	213	297	215	203	253
Sb	94	117	98	126	96	34	61	138	71	97
S	2019	809	1050	740	870	651	1300	4204	1291	5276
Th	8	11	6	6	11	14	13	13	5	8
V	106	133	107	131	102	103	133	101	89	98
Y	34	35	31	34	35	32	34	31	31	30
Zn	17	28	23	25	23	23	20	19	18	7
Zr	182	177	201	163	249	211	196	244	227	203
Tl	0	3	0	0	0	0	3	0	0	0

VAR. / ID.	CXD1088	CXD1089	CXD1090	CXD1091	CXD1092	CXD1093	CXD1094	CXD1095	CXD1096	CXD1097
SiO2	60.82	60.44	71.44	63.11	72.22	72.30	59.09	59.58	57.66	59.78
Al2O3	19.09	20.10	12.62	17.63	12.76	9.01	17.49	18.07	18.49	14.38
TiO2	0.86	0.93	0.51	0.70	0.58	0.40	0.87	0.75	0.85	0.74
Fe2O3	4.94	5.52	6.37	6.05	4.34	6.54	4.59	5.17	5.56	5.08
MgO	3.17	3.01	2.68	2.88	2.94	3.17	3.34	3.50	3.45	4.15
CaO	6.28	5.52	4.43	5.16	5.32	5.59	7.12	7.42	6.80	9.18
Na2O	0.10	0.09	0.02	0.07	0.04	0.04	0.16	0.15	0.17	0.10
K2O	3.40	3.80	1.55	2.36	1.52	1.09	3.39	2.82	3.85	2.68
MnO	0.08	0.07	0.05	0.06	0.06	0.06	0.09	0.09	0.07	0.10
P2O5	0.17	0.18	0.12	0.12	0.11	0.09	0.17	0.16	0.16	0.17
Total	98.91	99.66	99.79	98.14	99.89	98.29	96.31	97.71	97.06	96.36
As	4776	6577	6366	16938	5760	7259	1329	4190	8290	1717
Ba	316	751	153	214	165	222	355	790	812	269
Cl	11	47	71	62	15	49	60	38	13	28
Co	34	32	50	52	55	53	25	39	48	32
Cr	164	165	88	146	106	85	136	132	158	185
Cu	49	38	49	42	43	36	46	31	55	21
Ga	20	20	13	18	11	8	18	16	21	14
La	42	47	31	42	21	32	38	33	39	41
Ni	73	77	55	73	48	40	62	60	85	54
Nb	15	15	8	13	10	8	14	11	15	13
Pb	108	60	88	55	89	54	121	67	110	50
Rb	128	152	68	94	60	44	116	99	154	100
Sr	244	214	106	133	102	103	180	156	195	149
Sb	140	101	128	125	124	95	128	81	130	53
S	7550	11380	26000	15715	8495	24826	3986	6345	7569	2385
Th	12	11	4	14	7	4	9	8	9	11
V	123	137	75	111	80	59	107	104	139	94
Y	31	35	23	29	27	19	33	32	33	32
Zn	14	13	6	8	4	7	29	15	16	15
Zr	189	208	101	149	140	85	195	173	171	232
Tl	0	0	0	0	0	0	0	0	0	0

VAR. / ID.	CXD1098	CXD1099	CXD1100	CXD1101	CXD1102	CXD1103	CXD1104	CXD1105	CXD1106	CXD1107
SiO2	60.31	58.09	57.21	57.15	58.49	56.36	57.37	55.76	54.81	55.42
Al2O3	18.55	17.25	17.20	19.29	18.02	17.50	17.38	17.63	17.22	20.56
TiO2	0.84	0.81	0.77	0.90	0.79	0.82	0.82	0.81	0.81	0.94
Fe2O3	5.18	6.64	5.90	4.82	5.31	5.93	5.80	6.05	6.04	6.72
MgO	3.31	3.53	3.90	2.89	3.68	3.92	3.52	3.90	4.06	3.36
CaO	6.13	7.21	8.21	6.51	7.71	9.44	8.57	9.46	9.38	7.10
Na2O	0.11	0.19	0.24	0.14	0.17	0.28	0.22	0.24	0.18	0.24
K2O	3.76	3.36	3.84	3.74	3.91	3.13	3.15	3.32	3.46	4.32
MnO	0.08	0.09	0.09	0.08	0.08	0.10	0.09	0.10	0.10	0.06
P2O5	0.17	0.17	0.15	0.16	0.14	0.17	0.17	0.17	0.18	0.18
Total	98.44	97.34	97.51	95.68	98.30	97.65	97.09	97.44	96.24	98.90
As	7676	13524	10826	1687	5920	66	1780	62	90	32
Ba	323	325	354	320	349	277	286	365	5363	394
Cl	11	29	18	21	0	37	32	51	27	26
Co	31	42	38	35	40	25	34	24	25	26
Cr	160	149	141	151	136	133	146	129	112	149
Cu	44	37	58	60	49	16	15	22	30	25
Ga	23	19	19	22	21	18	18	17	15	21
La	43	39	38	46	40	30	38	38	43	45
Ni	83	89	78	80	84	66	71	72	85	71
Nb	15	14	13	16	13	15	14	13	13	17
Pb	86	36	115	35	111	9	16	17	12	13
Rb	154	126	146	136	151	104	108	107	113	143
Sr	159	213	213	184	200	179	166	192	230	170
Sb	102	106	156	107	129	25	24	21	35	38
S	5871	12533	4625	1650	3908	156	1537	156	1706	79
Th	7	7	6	10	6	13	7	12	7	10
V	130	125	121	129	127	112	111	116	119	135
Y	33	34	30	32	29	32	31	34	34	35
Zn	15	0	18	37	22	45	42	57	60	67
Zr	172	175	146	167	143	174	182	176	177	187
Tl	0	0	0	0	0	0	0	0	0	0

VAR. / ID.	CXD1108	CXD1109	CXD1110	CXD1111	CXD1112	CXD1113	CXD1114	CXD1115	CXD1116	CXD1117
SiO2	56.63	55.83	56.85	56.85	57.91	57.60	58.25	61.98	59.93	62.37
Al2O3	19.60	19.84	15.08	19.03	18.50	15.13	17.20	16.20	17.75	15.18
TiO2	0.95	0.93	0.75	0.85	0.91	0.71	0.80	0.71	0.79	0.66
Fe2O3	6.72	6.62	5.87	5.56	4.94	5.31	5.01	4.69	4.78	4.75
MgO	3.36	3.25	4.32	3.67	3.20	4.28	3.50	3.59	3.49	3.65
CaO	6.90	7.34	10.25	8.03	7.26	9.99	7.47	7.50	7.20	7.83
Na2O	0.22	0.22	0.16	0.10	0.12	0.16	0.14	0.17	0.25	0.15
K2O	4.06	4.06	2.72	3.96	3.47	3.25	3.59	3.17	3.82	2.88
MnO	0.08	0.08	0.12	0.08	0.08	0.10	0.08	0.08	0.08	0.09
P2O5	0.18	0.17	0.18	0.16	0.19	0.17	0.18	0.17	0.17	0.15
Total	98.70	98.34	96.30	98.29	96.58	96.70	96.22	98.26	98.26	97.71
As	40	29	25	871	103	992	3088	2444	3079	1309
Ba	375	401	322	344	500	277	292	293	355	236
Cl	16	16	36	23	7	55	47	74	42	50
Co	25	21	20	41	24	33	37	38	34	40
Cr	154	144	114	147	142	120	143	118	136	137
Cu	39	31	29	37	30	25	31	33	47	34
Ga	20	20	13	20	19	15	17	14	19	14
La	38	45	41	51	37	30	42	37	35	32
Ni	71	70	52	89	76	51	66	52	60	41
Nb	16	15	13	16	14	13	15	12	14	12
Pb	13	19	67	38	68	29	21	12	12	13
Rb	138	136	92	138	121	119	133	114	136	101
Sr	165	165	160	170	164	163	151	144	158	142
Sb	51	48	74	63	89	51	43	43	55	37
S	126	106	222	3993	346	1933	5214	4620	4693	6417
Th	10	13	8	10	13	8	11	7	0	7
V	136	132	93	121	122	94	107	97	113	87
Y	35	32	34	33	36	28	32	29	34	28
Zn	62	63	38	20	20	30	20	22	26	24
Zr	198	194	187	188	203	179	199	179	181	184
Tl	0	2	0	2	2	0	0	0	0	0

VAR. / ID.	CXD1118	CXD1119	CXD1120	CXD1121	CXD1122	CXD1123	CXD1124	CXD1125	CXD1126	CXD1127
SiO2	74.68	57.25	56.54	56.53	55.33	57.16	58.29	58.20	57.67	55.42
Al2O3	11.45	17.49	17.91	17.88	17.12	17.09	15.00	12.52	16.65	17.45
TiO2	0.39	0.79	0.81	0.79	0.77	0.82	0.71	0.75	0.82	0.82
Fe2O3	5.28	5.78	5.98	5.81	6.07	6.07	5.95	5.34	6.51	6.67
MgO	2.63	3.89	3.90	3.93	4.44	4.62	4.38	4.17	5.00	4.51
CaO	4.70	7.78	8.15	8.26	8.85	7.63	9.00	10.01	7.09	7.15
Na2O	0.05	0.11	0.15	0.10	0.16	0.27	0.17	1.45	0.40	0.26
K2O	1.43	3.63	3.99	3.64	3.58	3.17	2.13	1.85	3.24	3.93
MnO	0.05	0.10	0.09	0.09	0.10	0.09	0.09	0.09	0.09	0.08
P2O5	0.08	0.17	0.16	0.16	0.15	0.17	0.17	0.19	0.17	0.15
Total	100.74	96.99	97.68	97.19	96.57	97.09	95.89	94.57	97.64	96.44
As	3579	215	55	51	45	24	7	11	15	27
Ba	215	475	345	353	330	360	417	526	490	478
Cl	7	17	21	34	45	23	56	39	15	8
Co	59	35	29	29	38	33	26	33	14	31
Cr	70	141	137	130	135	134	130	168	139	145
Cu	23	36	33	41	43	18	26	21	28	17
Ga	11	18	20	18	18	18	14	12	18	20
La	22	34	32	39	36	40	32	33	42	43
Ni	49	75	70	81	78	75	58	49	81	84
Nb	6	12	12	14	13	13	11	12	12	14
Pb	19	33	31	12	15	11	12	10	13	16
Rb	54	135	144	133	126	113	71	66	116	139
Sr	105	150	175	148	155	120	91	160	120	141
Sb	42	49	37	55	47	20	13	3	24	15
S	18416	945	423	388	244	62	134	161	91	97
Th	3	10	8	7	12	10	9	11	7	11
V	60	112	124	112	120	119	92	90	113	126
Y	19	29	30	29	29	31	27	31	31	30
Zn	13	39	51	43	55	61	45	47	75	100
Zr	85	164	151	157	151	182	183	251	170	152
Tl	0	0	6	2	0	0	0	0	0	0

VAR. / ID.	CXD1041	CXD1042	CXD1043	CXD1044	CXD1026	CXD1027	CXD1028	CXD1029	CXD1045	CXD1046
SiO2	54.02	55.34	53.81	57.83	62.12	59.63	52.37	58.91	56.32	57.29
Al2O3	17.84	17.35	19.42	19.30	18.84	17.47	11.05	16.22	19.39	18.94
TiO2	0.92	0.86	1.01	0.87	0.85	0.78	0.45	0.77	0.85	0.86
Fe2O3	7.76	6.70	7.58	5.89	4.02	5.84	6.68	5.71	5.68	6.10
MgO	5.22	4.96	5.49	4.23	3.11	3.25	5.86	4.12	4.26	4.43
CaO	6.43	6.77	4.68	5.54	5.99	5.43	13.71	6.98	7.10	6.22
Na2O	0.76	0.83	0.11	0.09	0.11	0.07	0.04	0.10	0.10	0.19
K2O	3.76	3.55	3.80	3.45	3.17	2.63	1.75	2.71	3.95	3.58
MnO	0.10	0.09	0.07	0.08	0.08	0.07	0.18	0.11	0.10	0.08
P2O5	0.17	0.17	0.18	0.18	0.18	0.14	0.15	0.17	0.17	0.17
Total	96.98	96.62	96.15	97.46	98.47	95.31	92.24	95.80	97.92	97.86
As	75	27	53	642	2127	13923	1088	3614	74	2395
Ba	386	311	324	301	296	251	165	267	316	274
Cl	35	54	29	29	19	33	105	18	39	106
Co	24	31	29	31	14	26	13	18	13	39
Cr	144	142	151	132	140	151	82	144	140	148
Cu	44	34	44	35	23	42	26	31	30	30
Ga	18	18	19	17	16	24	9	14	18	15
La	45	42	43	45	36	47	26	43	37	48
Ni	86	81	83	77	54	68	41	58	65	67
Nb	17	15	15	14	12	12	7	12	15	15
Pb	12	11	24	94	130	1717	73	102	84	64
Rb	124	119	123	111	102	91	55	91	141	123
Sr	76	98	67	75	85	76	82	79	103	89
Sb	137	72	120	101	139	956	132	180	127	104
S	34	49	307	1318	2445	7244	745	2918	296	2989
Th	10	12	9	10	10	0	6	7	15	15
V	136	127	136	123	112	123	58	105	126	122
Y	30	30	27	30	28	26	34	27	31	30
Zn	89	83	87	21	89	692	28	43	61	42
Zr	155	161	191	180	198	164	114	193	163	177
Tl	5	0	0	0	2	2	0	2	0	0

VAR. / ID. CXD1047

SiO2	57.01
Al2O3	16.11
TiO2	0.81
Fe2O3	5.91
MgO	4.64
CaO	7.74
Na2O	0.74
K2O	3.15
MnO	0.10
P2O5	0.17
Total	96.38

As	9
Ba	285
Cl	35
Co	26
Cr	130
Cu	26
Ga	14
La	29
Ni	70
Nb	14
Pb	13
Rb	108
Sr	118
Sb	50
S	114
Th	9
V	109
Y	28
Zn	72
Zr	173
Tl	0

XRF Analyses: Glendinning Mineralised Breccia (MINF1) Part 1

VAR. / ID.	CXD1009	CXD1012	CXD1017	CXD1022	CXD1023	CXD1024	CXD1025	CXD1062	CXD1063	CXD1064
SiO2	58.49	57.96	58.80	64.44	59.02	56.89	55.69	60.65	58.10	60.66
Al2O3	18.25	19.43	18.82	18.39	19.91	21.34	21.77	21.21	21.40	22.01
TiO2	0.82	0.81	0.79	0.78	0.85	0.84	0.85	0.87	0.92	0.92
Fe2O3	5.30	5.02	5.01	3.61	4.33	4.10	5.06	5.04	5.55	5.10
MgO	1.59	3.24	3.24	2.62	3.03	2.95	2.87	2.71	2.93	2.67
CaO	9.83	7.82	8.94	5.27	7.79	7.38	7.76	5.12	5.82	4.77
Na2O	0.16	0.14	0.11	0.15	0.11	0.11	0.07	0.08	0.08	0.06
K2O	3.47	3.92	3.19	3.60	2.93	3.49	2.84	3.45	3.41	3.44
MnO	0.10	0.10	0.10	0.06	0.08	0.08	0.09	0.07	0.09	0.09
P2O5	0.17	0.17	0.17	0.08	0.18	0.15	0.18	0.13	0.15	0.11
Total	98.18	98.61	99.17	99.00	98.23	97.33	97.18	99.33	98.45	99.83
As	112	1377	63	2820	1628	774	7501	7398	13381	20332
Ba	372	356	365	314	295	291	258	323	260	256
Cl	0	25	33	55	20	218	70	18	27	47
Co	44	40	29	17	18	15	26	40	39	50
Cr	175	135	128	128	172	128	158	161	166	183
Cu	32	54	32	21	22	20	26	39	43	54
Ga	15	16	17	18	17	17	19	20	21	26
La	34	30	41	36	52	58	39	37	44	57
Ni	59	78	39	72	84	68	90	78	80	91
Nb	14	15	13	13	15	18	15	15	14	14
Pb	11	13	13	98	184	98	151	72	84	159
Rb	117	130	97	129	101	120	102	131	135	141
Sr	72	165	220	158	302	359	405	228	176	165
Sb	29	67	35	70	60	38	61	104	118	170
S	23	3011	410	3459	3809	2680	7551	7987	10742	8541
Th	14	9	9	9	13	21	8	11	7	7
V	120	115	110	122	115	103	134	132	141	152
Y	34	30	30	27	29	41	30	30	31	29
Zn	40	25	35	18	11	18	12	13	13	14
Zr	219	174	160	150	227	296	174	171	174	162
Tl	0	0	0	3	0	0	5	0	0	0

TABLE 4.116

XRF Analyses: Glendinning Mineralised Breccia (MINF1) Part 2

VAR. / ID.	CXD1065	CXD1066	CXD1090	CXD1091	CXD1092	CXD1093	CXD1099	CXD1102	CXD1118	CXD1130
SiO2	59.02	56.71	71.44	63.11	72.22	72.30	58.09	58.49	74.68	78.69
Al2O3	20.87	21.50	12.62	17.63	12.76	9.01	17.25	18.02	11.45	10.60
TiO2	0.89	0.93	0.51	0.70	0.58	0.40	0.81	0.79	0.39	0.45
Fe2O3	4.91	5.36	6.37	6.05	4.34	6.54	6.64	5.31	5.28	3.72
MgO	2.70	3.28	2.68	2.88	2.94	3.17	3.53	3.68	2.63	1.61
CaO	5.03	6.86	4.43	5.16	5.32	5.59	7.21	7.71	4.70	2.46
Na2O	0.09	0.09	0.02	0.07	0.04	0.04	0.19	0.17	0.05	0.08
K2O	3.77	3.93	1.55	2.36	1.52	1.09	3.36	3.91	1.43	1.74
MnO	0.09	0.10	0.05	0.06	0.06	0.06	0.09	0.08	0.05	0.03
P2O5	0.11	0.16	0.12	0.12	0.11	0.09	0.17	0.14	0.08	0.07
Total	97.48	98.92	99.79	98.14	99.89	98.29	97.34	98.30	100.74	99.45
As	11077	8961	6366	16938	5760	7259	13524	5920	3579	2307
Ba	434	289	153	214	165	222	325	349	215	162
Cl	36	47	71	62	15	49	29	0	7	0
Co	36	30	50	52	55	53	42	40	59	65
Cr	165	169	88	146	106	85	149	136	70	79
Cu	52	31	49	42	43	36	37	49	23	18
Ga	23	21	13	18	11	8	19	21	11	11
La	52	49	31	42	21	32	39	40	22	18
Ni	75	68	55	73	48	40	89	84	49	23
Nb	15	14	8	13	10	8	14	13	6	7
Pb	146	56	88	55	89	54	36	111	19	15
Rb	150	145	68	94	60	44	126	151	54	71
Sr	173	228	106	133	102	103	213	200	105	52
Sb	156	95	128	125	124	95	106	129	42	59
S	7238	7599	26000	15715	8495	24826	12533	3908	18416	5839
Th	10	11	4	14	7	4	7	6	3	4
V	148	148	75	111	80	59	125	127	60	70
Y	32	31	23	29	27	19	34	22	19	10
Zn	11	15	6	8	4	7	0	22	13	6
Zr	163	173	101	149	140	85	175	143	85	93
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.116

VAR. / ID.	CXD1131	CXD1132	CXD1156	CXD1160	CXD1163	CXD1165	CXD1167	CXD1168
SiO2	81.40	78.96	63.90	63.76	57.06	54.41	56.58	59.97
Al2O3	9.90	9.90	15.61	14.70	22.41	19.45	19.22	18.85
TiO2	0.34	0.45	0.64	0.65	0.95	0.80	0.82	0.72
Fe2O3	5.82	8.42	5.58	4.75	4.41	5.38	4.94	4.54
MgO	0.47	0.36	3.33	3.56	3.02	3.82	3.03	3.25
CaO	0.56	0.26	6.57	7.16	6.34	8.60	6.51	7.02
Na2O	0.08	0.05	0.04	0.11	0.09	0.08	0.11	0.14
K2O	1.28	1.50	2.11	2.58	4.17	3.83	3.92	3.43
MnO	0.00	0.00	0.08	0.08	0.08	0.11	0.08	0.08
P2O5	0.03	0.06	0.13	0.15	0.19	0.17	0.15	0.15
Total	99.88	99.96	97.99	97.50	98.72	96.65	95.36	98.15
As	2815	2839	3793	4325	3708	4788	5612	1188
Ba	133	157	245	222	379	234	286	229
Cl	0	0	66	37	78	49	45	38
Co	72	73	33	48	29	30	31	29
Cr	61	80	110	113	160	147	155	125
Cu	22	15	14	46	30	32	35	29
Ga	9	9	13	13	21	21	22	15
La	14	24	25	36	45	35	50	46
Ni	34	43	51	35	84	65	75	48
Nb	7	6	11	12	15	14	14	16
Pb	32	44	29	16	26	70	16	99
Rb	51	64	75	98	154	129	150	116
Sr	22	32	136	123	166	187	168	160
Sb	134	169	86	40	49	50	56	34
S	1617	3479	2689	5732	4620	3247	5455	1766
Th	3	1	6	7	9	8	11	11
V	51	53	90	91	153	130	134	98
Y	15	19	25	24	29	29	30	31
Zn	5	5	36	20	17	27	20	25
Zr	69	128	135	154	178	156	161	228
Tl	0	0	0	0	0	0	0	0

XRF Analyses: Glendinning Mineralised Greywacke (MING1) Part 1

VAR. / ID.	CXD1005	CXD1007	CXD1010	CXD1011	CXD1020	CXD1026	CXD1027	CXD1028	CXD1029	CXD1030
SiO2	61.55	59.51	60.94	60.16	58.20	62.12	59.63	52.37	58.91	57.19
Al2O3	14.58	13.13	14.06	17.55	15.77	18.84	17.47	11.05	16.22	18.61
TiO2	0.86	0.74	0.72	0.79	0.74	0.85	0.78	0.45	0.77	0.83
Fe2O3	5.90	5.52	5.24	4.73	5.14	4.02	5.84	6.68	5.71	5.29
MgO	3.47	3.89	3.25	2.08	3.74	3.11	3.25	5.86	4.12	3.25
CaO	6.75	8.82	9.03	9.06	9.44	5.99	5.43	13.71	6.98	8.18
Na2O	1.63	1.36	0.84	0.23	0.15	0.11	0.07	0.04	0.10	0.11
K2O	2.18	2.01	2.31	2.98	2.88	3.17	2.63	1.75	2.71	3.56
MnO	0.10	0.11	0.10	0.10	0.10	0.08	0.07	0.18	0.11	0.09
P2O5	0.20	0.18	0.17	0.17	0.17	0.18	0.14	0.15	0.17	0.18
Total	97.22	95.27	96.66	97.85	96.33	98.47	95.31	92.24	95.80	97.29
As	66	29	35	93	381	2127	13923	1088	3614	470
Ba	388	453	326	332	319	296	251	165	267	333
Cl	9	33	33	10	45	19	33	105	18	31
Co	42	40	37	23	35	14	26	13	18	22
Cr	148	145	167	144	152	140	151	82	144	138
Cu	21	27	24	15	21	23	42	26	31	30
Ga	14	11	10	13	15	16	24	9	14	17
La	34	28	32	33	32	36	47	26	43	41
Ni	63	54	45	29	95	54	68	41	58	78
Nb	14	13	13	13	13	12	12	7	12	13
Pb	14	13	6	9	30	130	1717	73	102	89
Rb	73	63	76	95	102	102	91	55	91	125
Sr	134	123	93	66	145	85	76	82	79	197
Sb	15	14	6	9	35	139	956	132	180	50
S	18	79	42	14	1467	2445	7244	745	2918	1113
Th	8	11	9	2	10	10	0	6	7	12
V	98	93	89	104	95	112	123	58	105	113
Y	32	29	28	31	29	28	26	34	27	28
Zn	59	50	33	15	23	89	692	28	43	21
Zr	244	222	208	207	204	198	164	114	193	169
Tl	0	0	0	0	3	2	2	0	2	2

TABLE 4.117

XRF Analyses: Glendinning Mineralised Greywacke (MING1) Part 2

VAR. / ID.	CXD1032	CXD1033	CXD1035	CXD1036	CXD1038	CXD1052	CXD1055	CXD1056	CXD1058	CXD1061
SiO2	56.26	56.16	56.71	57.44	58.18	57.52	56.10	53.41	56.25	58.49
Al2O3	17.05	18.38	17.39	19.71	18.87	18.81	21.39	20.88	17.04	20.17
TiO2	0.74	0.77	0.79	0.85	0.81	0.82	0.87	0.89	0.74	0.89
Fe2O3	5.24	5.21	5.39	5.46	5.05	4.39	4.65	5.45	5.45	5.41
MgO	2.97	3.38	3.54	3.29	3.31	4.02	3.68	3.14	3.80	3.24
CaO	10.37	9.53	8.87	7.12	8.20	8.29	7.36	6.74	8.36	6.65
Na2O	0.14	0.14	0.48	0.21	0.15	0.12	0.13	0.10	0.12	0.13
K2O	2.89	3.18	3.11	3.64	3.05	3.60	4.66	4.38	3.44	4.00
MnO	0.10	0.09	0.09	0.08	0.10	0.09	0.08	0.09	0.09	0.09
P2O5	0.18	0.17	0.17	0.16	0.17	0.18	0.18	0.20	0.16	0.16
Total	95.94	97.01	96.54	97.96	97.89	97.84	99.10	95.28	95.45	99.23
As	162	65	68	34	91	274	848	2519	587	5806
Ba	386	369	365	388	261	350	630	504	269	401
Cl	32	31	44	40	105	38	18	56	44	17
Co	28	25	28	32	31	31	34	35	25	31
Cr	127	125	135	148	147	150	155	154	117	164
Cu	31	13	18	36	35	32	33	41	23	56
Ga	14	16	15	17	15	17	20	18	16	22
La	29	32	31	45	31	39	44	45	33	36
Ni	75	76	60	75	68	69	90	81	61	77
Nb	14	14	14	15	14	13	16	15	13	14
Pb	13	15	14	14	14	79	68	65	56	104
Rb	100	110	99	123	96	126	161	149	124	154
Sr	169	170	130	131	118	278	199	187	167	173
Sb	29	24	15	47	51	92	86	136	66	134
S	104	86	113	405	358	2049	3316	4456	1244	5212
Th	15	9	14	11	6	7	8	11	9	9
V	103	116	114	129	117	122	147	147	105	144
Y	28	28	29	28	29	29	29	32	27	32
Zn	43	46	41	33	29	17	14	21	17	39
Zr	172	164	177	166	183	189	161	141	148	163
Tl	0	0	0	0	0	3	0	6	7	0

TABLE 4.117

VAR. / ID.	CXD1071	CXD1072	CXD1077	CXD1082	CXD1083	CXD1085	CXD1086	CXD1087	CXD1088	CXD1097
SiO2	67.66	64.25	56.97	55.23	58.78	59.47	64.01	62.99	60.82	59.78
Al2O3	19.11	18.00	19.05	15.76	16.69	15.71	15.22	16.90	19.09	14.38
TiO2	0.84	0.80	0.87	0.78	0.80	0.78	0.75	0.76	0.86	0.74
Fe2O3	4.00	6.05	5.56	5.62	5.09	5.45	4.25	4.59	4.94	5.08
MgO	2.08	2.33	3.32	3.99	3.82	3.74	3.36	3.24	3.17	4.15
CaO	3.32	4.30	6.55	10.45	8.91	8.53	7.25	6.52	6.28	9.18
Na2O	0.09	0.11	0.17	0.24	0.04	0.13	0.08	0.08	0.10	0.10
K2O	2.86	2.77	4.21	2.95	3.03	2.76	2.42	2.67	3.40	2.68
MnO	0.05	0.06	0.08	0.12	0.11	0.10	0.09	0.08	0.08	0.10
P2O5	0.12	0.11	0.15	0.17	0.17	0.17	0.16	0.17	0.17	0.17
Total	100.13	98.78	96.93	95.31	97.44	96.84	97.59	98.00	98.91	96.36
As	13399	17800	5170	155	130	3011	820	5032	4776	1717
Ba	1119	601	343	399	303	229	574	232	316	269
Cl	19	43	44	76	33	26	22	25	11	28
Co	72	42	31	23	26	37	33	33	34	32
Cr	172	162	160	155	145	169	177	153	164	185
Cu	48	40	37	29	13	58	25	28	49	21
Ga	26	19	22	14	16	14	13	17	20	14
La	41	40	42	28	45	41	34	40	42	41
Ni	416	101	84	72	81	74	75	67	73	54
Nb	12	12	14	12	14	11	12	12	15	13
Pb	1276	67	78	84	27	111	56	62	108	50
Rb	119	107	169	102	109	104	94	101	128	100
Sr	121	137	175	216	213	215	203	253	244	149
Sb	228	129	105	96	34	138	71	97	140	53
S	8534	17580	3160	870	651	4204	1291	5276	7550	2385
Th	10	6	9	11	14	13	5	8	12	11
V	132	129	132	102	103	101	89	98	123	94
Y	30	33	28	35	32	31	31	30	31	32
Zn	1846	11	16	23	23	19	18	7	14	15
Zr	194	177	160	249	211	244	227	203	189	232
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.117

VAR. / ID.	CXD1119	CXD1123	CXD1124	CXD1125	CXD1126	CXD1129	CXD1143	CXD1144	CXD1158	CXD1159
SiO2	57.25	57.16	58.29	58.20	57.67	59.38	58.94	56.87	69.11	73.48
Al2O3	17.49	17.09	15.00	12.52	16.65	14.69	18.75	19.71	16.51	16.09
TiO2	0.79	0.82	0.71	0.75	0.82	0.72	0.84	0.85	0.71	0.70
Fe2O3	5.78	6.07	5.95	5.34	6.51	4.83	4.83	6.27	4.45	3.51
MgO	3.89	4.62	4.38	4.17	5.00	3.85	3.48	3.55	2.56	2.10
CaO	7.78	7.63	9.00	10.01	7.09	8.31	7.55	6.43	4.32	3.34
Na2O	0.11	0.27	0.17	1.45	0.40	0.17	0.10	0.08	0.07	0.08
K2O	3.63	3.17	2.13	1.85	3.24	3.14	2.97	3.97	2.63	2.39
MnO	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.06	0.05
P2O5	0.17	0.17	0.17	0.19	0.17	0.15	0.19	0.17	0.12	0.12
Total	96.99	97.09	95.89	94.57	97.64	95.33	97.74	97.98	100.54	101.86
As	215	24	7	11	15	2794	1976	447	12390	15320
Ba	475	360	417	526	490	266	231	294	242	189
Cl	17	23	56	39	15	79	23	75	16	7
Co	35	33	26	33	14	40	31	29	38	47
Cr	141	134	130	168	139	162	153	138	133	139
Cu	36	18	26	21	28	26	28	30	63	45
Ga	18	18	14	12	18	16	17	18	26	16
La	34	40	32	33	42	43	43	41	30	39
Ni	75	75	58	49	81	53	59	70	46	51
Nb	12	13	11	12	12	13	15	13	12	11
Pb	33	11	12	10	13	13	128	74	15	13
Rb	135	113	71	66	116	116	102	135	104	94
Sr	150	120	91	160	120	116	115	120	90	72
Sb	49	20	13	3	24	31	40	46	64	56
S	945	62	134	161	91	3524	3369	1759	8156	4962
Th	10	10	9	11	7	11	11	7	7	6
V	112	119	92	90	113	97	116	123	116	104
Y	29	31	27	31	31	28	31	29	23	25
Zn	39	61	45	47	75	27	23	26	17	17
Zr	164	182	183	251	170	226	207	155	148	156
Tl	0	0	0	0	0	0	3	0	2	0

TABLE 4.117

VAR. / ID.	CXD1166	CXD1170
SiO2	59.68	55.89
Al2O3	16.83	18.97
TiO2	0.94	0.81
Fe2O3	4.84	5.47
MgO	3.74	3.87
CaO	7.95	8.60
Na2O	0.09	0.18
K2O	2.52	3.74
MnO	0.09	0.10
P2O5	0.20	0.17
Total	96.88	97.80
As	3822	803
Ba	213	365
Cl	36	33
Co	38	31
Cr	253	142
Cu	21	27
Ga	15	17
La	47	45
Ni	49	72
Nb	12	14
Pb	39	55
Rb	90	130
Sr	163	213
Sb	41	38
S	6198	3348
Th	11	11
V	118	125
Y	32	30
Zn	19	27
Zr	361	172
Tl	0	0

TABLE 4.117

XRF Analyses: Glendinning Mineralised Siltstone (MINS1) Part 1

VAR. / ID.	CXD1006	CXD1016	CXD1019	CXD1021	CXD1034	CXD1040	CXD1042	CXD1044	CXD1051	CXD1067
SiO2	61.84	55.81	56.15	58.85	57.90	58.66	55.34	57.83	56.63	58.60
Al2O3	15.11	18.51	15.57	17.74	14.94	21.77	17.35	19.30	23.14	21.17
TiO2	0.84	0.82	0.71	0.79	0.73	0.94	0.86	0.87	1.00	0.91
Fe2O3	6.13	5.44	5.70	5.10	5.02	4.93	6.70	5.89	4.61	5.20
MgO	3.93	2.96	3.26	3.11	3.68	3.05	4.96	4.23	3.04	3.09
CaO	5.52	9.35	10.70	7.93	8.89	5.46	6.77	5.54	5.82	5.99
Na2O	1.69	0.12	0.09	0.19	0.81	0.00	0.83	0.09	0.18	0.08
K2O	2.28	3.75	2.91	3.56	2.42	4.06	3.55	3.45	4.71	3.95
MnO	0.08	0.10	0.12	0.10	0.09	0.07	0.09	0.08	0.07	0.07
P2O5	0.19	0.16	0.17	0.15	0.17	0.18	0.17	0.18	0.18	0.17
Total	97.61	97.02	95.38	97.52	94.65	99.12	96.62	97.46	99.38	99.23
As	41	150	275	2305	14	94	27	642	1018	4996
Ba	313	323	388	332	535	302	311	301	338	324
Cl	25	25	18	16	27	14	54	29	28	37
Co	31	33	23	38	19	34	31	31	39	27
Cr	133	142	128	137	125	151	142	132	160	161
Cu	16	42	48	44	21	47	34	35	36	43
Ga	12	15	12	18	13	18	18	17	20	19
La	30	37	34	41	33	43	42	45	54	43
Ni	65	60	60	117	38	79	81	77	102	73
Nb	14	13	13	15	13	17	15	14	17	15
Pb	13	12	10	160	9	11	11	94	67	95
Rb	74	115	101	129	83	125	119	111	166	150
Sr	100	150	138	156	136	144	98	75	181	183
Sb	10	39	47	76	9	60	72	101	99	124
S	8	388	171	3607	107	1071	49	1318	2458	8001
Th	7	10	9	13	10	9	12	10	12	7
V	98	114	93	122	91	125	127	123	155	135
Y	32	27	27	31	27	28	30	30	29	33
Zn	62	40	46	30	36	33	83	21	28	12
Zr	209	189	176	161	180	185	161	180	178	168
Tl	0	0	3	0	0	0	0	0	0	0

TABLE 4.118

-2968-

VAR. / ID.	CXD1068	CXD1076	CXD1078	CXD1080	CXD1084	CXD1089	CXD1095	CXD1096	CXD1098	CXD1100
SiO2	60.27	58.99	57.91	56.84	57.38	60.44	59.58	57.66	60.31	57.21
Al2O3	23.07	17.89	17.49	17.18	19.99	20.10	18.07	18.49	18.55	17.20
TiO2	1.02	0.86	0.81	0.82	0.92	0.93	0.75	0.85	0.84	0.77
Fe2O3	4.52	5.16	5.22	5.96	4.86	5.52	5.17	5.56	5.18	5.90
MgO	2.57	3.53	3.70	3.81	3.39	3.01	3.50	3.45	3.31	3.90
CaO	4.38	7.78	8.36	8.44	7.66	5.52	7.42	6.80	6.13	8.21
Na2O	0.08	0.12	0.13	0.12	0.20	0.09	0.15	0.17	0.11	0.24
K2O	4.47	3.36	3.50	3.21	3.82	3.80	2.82	3.85	3.76	3.84
MnO	0.06	0.09	0.10	0.10	0.09	0.07	0.09	0.07	0.08	0.09
P2O5	0.16	0.18	0.17	0.17	0.18	0.18	0.16	0.16	0.17	0.15
Total	100.60	97.96	97.39	96.65	98.49	99.66	97.71	97.06	98.44	97.51
As	6712	2079	663	137	1290	6577	4190	8290	7676	10826
Ba	331	301	303	407	405	751	790	812	323	354
Cl	16	48	40	13	26	47	38	13	11	18
Co	33	30	18	24	23	32	39	48	31	38
Cr	191	175	131	135	149	165	132	158	160	141
Cu	28	25	33	32	18	38	31	55	44	58
Ga	24	15	17	17	19	20	16	21	23	19
La	53	47	42	30	50	47	33	39	43	38
Ni	76	74	59	68	114	77	60	85	83	78
Nb	16	13	13	13	14	15	11	15	15	13
Pb	54	47	88	87	40	60	67	110	86	115
Rb	179	123	122	115	135	152	99	154	154	146
Sr	168	186	238	225	297	214	156	195	159	213
Sb	84	64	94	98	61	101	81	130	102	156
S	6319	3484	2019	1050	1300	11380	6345	7569	5871	4625
Th	12	11	8	6	13	11	8	9	7	6
V	163	115	106	107	133	137	104	139	130	121
Y	37	33	34	31	34	35	32	33	33	30
Zn	19	14	17	23	20	13	15	16	15	18
Zr	204	250	182	201	196	208	173	171	172	146
Tl	0	0	0	0	3	0	0	0	0	0

TABLE 4.118

XRF Analyses: Glendinning Mineralised Siltstone (MINS1) Part 3

VAR. / ID.	CXD1101	CXD1103	CXD1104	CXD1105	CXD1106	CXD1107	CXD1108	CXD1109	CXD1110	CXD1111
SiO2	57.15	56.36	57.37	55.76	54.81	55.42	56.63	55.83	56.85	56.85
Al2O3	19.29	17.50	17.38	17.63	17.22	20.56	19.60	19.84	15.08	19.03
TiO2	0.90	0.82	0.82	0.81	0.81	0.94	0.95	0.93	0.75	0.85
Fe2O3	4.82	5.93	5.80	6.05	6.04	6.72	6.72	6.62	5.87	5.56
MgO	2.89	3.92	3.52	3.90	4.06	3.36	3.36	3.25	4.32	3.67
CaO	6.51	9.44	8.57	9.46	9.38	7.10	6.90	7.34	10.25	8.03
Na2O	0.14	0.28	0.22	0.24	0.18	0.24	0.22	0.22	0.16	0.10
K2O	3.74	3.13	3.15	3.32	3.46	4.32	4.06	4.06	2.72	3.96
MnO	0.08	0.10	0.09	0.10	0.10	0.06	0.08	0.08	0.12	0.08
P2O5	0.16	0.17	0.17	0.17	0.18	0.18	0.18	0.17	0.18	0.16
Total	95.68	97.65	97.09	97.44	96.24	98.90	98.70	98.34	96.30	98.29
As	1687	66	1780	62	90	32	40	29	25	871
Ba	320	277	286	365	5363	394	375	401	322	344
Cl	21	37	32	51	27	26	16	16	36	23
Co	35	25	34	24	25	26	25	21	20	41
Cr	151	133	146	129	112	149	154	144	114	147
Cu	60	16	15	22	30	25	39	31	29	37
Ga	22	18	18	17	15	21	20	20	13	20
La	46	30	38	38	43	45	38	45	41	51
Ni	80	66	71	72	85	71	71	70	52	89
Nb	16	15	14	13	13	17	16	15	13	16
Pb	35	9	16	17	12	13	13	19	67	38
Rb	136	104	108	107	113	143	138	136	92	138
Sr	184	179	166	192	230	170	165	165	160	170
Sb	107	25	24	21	35	38	51	48	74	63
S	1650	156	1537	156	1706	79	126	106	222	3993
Th	10	13	7	12	7	10	10	13	8	10
V	129	112	111	116	119	135	136	132	93	121
Y	32	32	31	34	34	35	35	32	34	33
Zn	37	45	42	57	60	67	62	63	38	20
Zr	167	174	182	176	177	187	198	194	187	188
Tl	0	0	0	0	0	0	0	2	0	2

TABLE 4.118

VAR. / ID.	CXD1112	CXD1113	CXD1114	CXD1115	CXD1116	CXD1117	CXD1120	CXD1121	CXD1122	CXD1128
SiO2	57.91	57.60	58.25	61.98	59.93	62.37	56.54	56.53	55.33	55.78
Al2O3	18.50	15.13	17.20	16.20	17.75	15.18	17.91	17.88	17.12	17.18
TiO2	0.91	0.71	0.80	0.71	0.79	0.66	0.81	0.79	0.77	0.74
Fe2O3	4.94	5.31	5.01	4.69	4.78	4.75	5.98	5.81	6.07	5.15
MgO	3.20	4.28	3.50	3.59	3.49	3.65	3.90	3.93	4.44	4.07
CaO	7.26	9.99	7.47	7.50	7.20	7.83	8.15	8.26	8.85	9.44
Na2O	0.12	0.16	0.14	0.17	0.25	0.15	0.15	0.10	0.16	0.12
K2O	3.47	3.25	3.59	3.17	3.82	2.88	3.99	3.64	3.58	3.65
MnO	0.08	0.10	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10
P2O5	0.19	0.17	0.18	0.17	0.17	0.15	0.16	0.16	0.15	0.16
Total	96.58	96.70	96.22	98.26	98.26	97.71	97.68	97.19	96.57	96.39
As	103	992	3088	2444	3079	1309	55	51	45	297
Ba	500	277	292	293	355	236	345	353	330	271
Cl	7	55	47	74	42	50	21	34	45	58
Co	24	33	37	38	34	40	29	29	38	39
Cr	142	120	143	118	136	137	137	130	135	127
Cu	30	25	31	33	47	34	33	41	43	40
Ga	19	15	17	14	19	14	20	18	18	17
La	37	30	42	37	35	32	32	39	36	36
Ni	76	51	66	52	60	41	70	81	78	70
Nb	14	13	15	12	14	12	12	14	13	12
Pb	68	29	21	12	12	13	31	12	15	15
Rb	121	119	133	114	136	101	144	133	126	128
Sr	164	163	151	144	158	142	175	148	155	141
Sb	89	51	43	43	55	37	37	55	47	36
S	346	1933	5214	4620	4693	6417	423	388	244	1121
Th	13	8	11	7	0	7	8	7	12	8
V	122	94	107	97	113	87	124	112	120	110
Y	36	28	32	29	34	28	30	29	29	27
Zn	20	30	20	22	26	24	51	43	55	33
Zr	203	179	199	179	181	184	151	157	151	170
Tl	2	0	0	0	0	0	6	2	0	0

TABLE 4.118

VAR. / ID.	CXD1133	CXD1134	CXD1135	CXD1136	CXD1138	CXD1139	CXD1140	CXD1141	CXD1142	CXD1146
SiO2	68.06	60.17	58.26	68.64	63.04	58.51	58.34	57.79	56.57	58.19
Al2O3	17.83	20.51	20.34	19.86	11.72	17.00	18.78	17.60	16.31	18.82
TiO2	0.73	0.83	0.88	0.86	0.54	0.73	0.82	0.80	0.74	0.84
Fe2O3	5.22	4.29	5.25	4.80	5.92	5.26	5.77	6.22	6.11	5.64
MgO	1.72	3.15	3.41	1.96	3.79	3.80	3.60	3.80	4.31	3.50
CaO	2.72	6.22	6.67	2.59	7.87	8.27	7.41	7.65	8.99	6.91
Na2O	0.13	0.23	0.13	0.11	0.05	0.09	0.08	0.25	0.14	0.06
K2O	3.23	4.06	4.69	3.67	1.55	3.09	3.51	3.69	3.19	3.72
MnO	0.04	0.08	0.09	0.04	0.10	0.11	0.08	0.09	0.10	0.09
P2O5	0.10	0.14	0.16	0.11	0.09	0.16	0.15	0.16	0.16	0.17
Total	99.78	99.68	99.88	102.64	94.67	97.02	98.54	98.05	96.62	97.94
As	4779	3531	3000	4720	25994	3587	210	172	248	455
Ba	271	323	340	317	179	254	286	286	242	304
Cl	41	48	18	6	121	48	29	0	71	24
Co	48	31	31	46	50	30	34	0	33	28
Cr	132	145	153	153	106	126	129	130	121	147
Cu	31	29	62	55	45	25	35	28	27	32
Ga	19	19	23	22	12	16	19	18	16	6
La	41	38	36	35	36	40	43	34	35	30
Ni	36	41	87	96	50	60	76	71	60	72
Nb	13	14	14	14	11	12	14	12	14	13
Pb	18	15	20	20	41	39	72	102	125	95
Rb	125	139	164	143	57	112	126	133	114	130
Sr	72	115	137	85	127	143	169	150	132	131
Sb	84	47	73	75	112	35	44	37	38	45
S	6260	4241	2256	3119	6936	3292	1478	1593	1234	2485
Th	7	12	8	10	3	6	7	7	6	55
V	121	135	154	139	93	106	111	113	105	123
Y	27	27	33	30	23	28	30	30	29	30
Zn	12	28	37	28	44	23	28	29	30	31
Zr	129	167	141	146	105	162	169	166	159	174
Tl	0	0	0	0	0	0	0	0	2	0

TABLE 4.118

VAR. / ID.	CXD1148	CXD1149	CXD1152	CXD1153	CXD1154	CXD1155	CXD1157	CXD1161	CXD1162	CXD1164
SiO2	57.25	59.02	56.72	56.14	58.28	59.08	62.04	60.12	59.13	59.05
Al2O3	19.55	18.63	17.08	21.33	17.00	19.09	18.02	15.86	16.67	20.52
TiO2	0.87	0.83	0.80	0.89	0.79	0.83	0.76	0.69	0.73	0.89
Fe2O3	4.97	5.03	5.02	4.95	4.94	5.08	4.67	4.85	5.41	5.26
MgO	2.82	3.38	3.68	3.47	3.85	3.45	3.42	3.83	3.78	3.12
CaO	5.93	6.95	8.94	7.82	8.44	6.76	6.32	8.55	8.12	5.82
Na2O	0.11	0.10	0.14	0.11	0.09	0.11	0.08	0.15	0.07	0.14
K2O	3.98	3.78	2.88	3.59	2.80	3.55	3.30	2.61	2.70	4.38
MnO	0.08	0.08	0.09	0.08	0.10	0.09	0.08	0.09	0.10	0.08
P2O5	0.16	0.18	0.18	0.18	0.17	0.15	0.15	0.17	0.16	0.15
Total	95.72	97.98	95.53	98.56	96.46	98.19	98.84	96.90	96.87	99.41
As	2513	191	314	393	317	1963	7570	77	2034	593
Ba	423	346	1706	306	256	311	301	209	427	324
Cl	83	56	26	81	61	61	13	85	22	13
Co	34	28	39	30	26	13	26	25	28	24
Cr	173	137	128	144	124	146	141	118	121	147
Cu	27	28	54	37	24	23	96	19	22	43
Ga	18	18	13	20	16	18	22	9	13	22
La	45	38	34	38	31	41	47	37	40	46
Ni	71	73	68	109	74	46	47	29	57	72
Nb	15	12	12	13	14	12	13	11	12	15
Pb	20	26	13	14	17	28	16	12	17	64
Rb	151	130	92	114	99	135	127	92	100	163
Sr	106	108	140	141	117	129	116	126	133	149
Sb	24	37	47	40	29	40	52	25	50	50
S	9728	842	1810	1366	1400	12029	5323	428	2880	1923
Th	11	10	7	9	7	3	6	8	6	9
V	138	118	102	134	97	117	129	85	100	133
Y	31	29	32	30	28	27	26	26	29	28
Zn	18	25	29	23	31	25	25	16	15	29
Zr	181	183	193	168	176	175	158	183	172	192
Tl	0	0	0	0	0	1	1	0	0	2

TABLE 4.118

VAR. / ID.	CXD1169
SiO2	57.94
Al2O3	20.63
TiO2	0.87
Fe2O3	5.11
MgO	3.24
CaO	6.64
Na2O	0.21
K2O	4.25
MnO	0.09
P2O5	0.18
Total	99.16
As	390
Ba	343
Cl	12
Co	27
Cr	141
Cu	34
Ga	21
La	36
Ni	71
Nb	15
Pb	80
Rb	149
Sr	173
Sb	48
S	2002
Th	11
V	129
Y	28
Zn	23
Zr	162
Tl	0

XRF Analyses: Glendinning Mineralised Mudstone (MINM1) Part 1

VAR. / ID.	CXD1008	CXD1013	CXD1014	CXD1015	CXD1018	CXD1037	CXD1039	CXD1041	CXD1043	CXD1053
SiO2	58.54	65.10	58.72	58.17	58.83	57.08	60.36	54.02	53.81	61.61
Al2O3	21.16	18.77	21.75	19.14	17.41	19.55	22.65	17.84	19.42	15.90
TiO2	0.92	0.82	0.97	0.86	0.81	0.87	0.95	0.92	1.01	0.68
Fe2O3	5.43	6.69	6.01	4.97	4.76	5.48	5.13	7.76	7.58	4.36
MgO	2.30	1.11	2.02	3.63	3.18	3.36	2.61	5.22	5.49	3.92
CaO	7.50	2.82	5.76	7.30	8.60	7.38	4.36	6.43	4.68	8.19
Na2O	0.23	0.12	0.09	0.13	0.12	0.20	0.14	0.76	0.11	0.08
K2O	4.32	3.41	5.07	4.14	3.08	3.74	4.50	3.76	3.80	2.79
MnO	0.09	0.12	0.09	0.10	0.11	0.09	0.06	0.10	0.07	0.09
P2O5	0.19	0.15	0.17	0.17	0.17	0.17	0.16	0.17	0.18	0.17
Total	100.68	99.11	100.65	98.61	97.07	97.92	100.92	96.98	96.15	97.79
As	199	2959	470	88	63	59	108	75	53	962
Ba	404	524	493	326	1142	366	363	386	324	271
Cl	18	0	8	22	18	21	18	35	29	58
Co	28	60	34	28	19	28	29	24	29	39
Cr	150	152	160	127	141	145	146	144	151	124
Cu	44	69	33	37	31	31	103	44	44	14
Ga	18	16	21	16	15	17	21	18	19	13
La	36	38	42	33	41	47	45	45	43	39
Ni	80	106	105	73	40	83	86	86	83	49
Nb	15	12	17	17	15	15	17	17	15	11
Pb	10	21	13	11	8	12	8	12	24	25
Rb	134	123	184	148	103	126	159	124	123	95
Sr	78	75	121	161	131	131	142	76	67	249
Sb	51	60	56	48	41	45	143	137	120	41
S	20	256	199	192	310	390	347	34	307	3857
Th	12	7	11	10	10	37	11	10	9	12
V	138	121	147	125	114	129	138	136	136	90
Y	34	29	32	31	30	30	32	30	27	25
Zn	44	31	25	28	36	29	47	89	87	16
Zr	165	171	170	166	180	165	172	155	191	174
Tl	0	0	2	0	0	0	0	5	0	0

TABLE 4.119

VAR. / ID.	CXD1059	CXD1074	CXD1075	CXD1079	CXD1081	CXD1127	CXD1145	CXD1147	CXD1150	CXD1151
SiO2	56.42	58.53	58.46	56.82	56.87	55.42	56.90	55.96	56.41	53.98
Al2O3	20.62	19.73	19.79	20.15	20.10	17.45	19.23	19.64	20.77	22.90
TiO2	0.93	0.90	0.89	0.94	0.89	0.82	0.82	0.83	0.92	1.02
Fe2O3	6.17	5.17	5.43	6.38	5.98	6.67	5.67	5.38	5.27	5.02
MgO	3.49	3.40	3.48	3.57	3.48	4.51	3.67	3.63	3.39	2.86
CaO	5.98	6.80	6.55	6.66	7.22	7.15	7.70	7.74	7.05	5.91
Na2O	0.10	0.20	0.18	0.12	0.27	0.26	0.11	0.09	0.11	0.11
K2O	4.37	4.26	4.52	4.20	4.46	3.93	4.09	4.20	4.20	4.81
MnO	0.08	0.09	0.08	0.09	0.09	0.08	0.09	0.09	0.07	0.07
P2O5	0.17	0.17	0.16	0.17	0.16	0.15	0.17	0.17	0.17	0.19
Total	98.33	99.25	99.54	99.10	99.52	96.44	98.45	97.93	98.36	96.87
As	574	1014	1196	392	444	27	453	956	210	327
Ba	356	365	363	338	382	478	569	373	307	359
Cl	25	19	0	17	0	8	38	117	41	21
Co	29	25	23	33	23	31	29	34	36	33
Cr	148	151	148	151	146	145	131	146	170	179
Cu	29	47	30	30	35	17	21	21	38	49
Ga	21	22	23	23	23	20	19	20	19	23
La	44	45	39	44	44	43	29	36	37	47
Ni	94	108	85	81	83	84	78	73	99	118
Nb	15	16	15	16	15	14	12	12	14	15
Pb	77	135	82	77	111	16	49	28	34	104
Rb	158	157	164	155	160	139	144	148	143	158
Sr	157	177	177	268	205	141	167	138	140	138
Sb	132	152	97	117	126	15	28	31	46	60
S	1141	1865	1240	809	740	97	1911	8333	736	1041
Th	9	9	8	11	6	11	13	10	13	11
V	153	132	128	133	131	126	126	139	138	149
Y	32	36	33	35	34	30	28	27	29	29
Zn	27	15	16	28	25	100	19	26	22	29
Zr	149	161	154	177	163	152	145	151	200	202
Tl	3	0	0	3	0	0	0	0	1	0

TABLE 4.119

XRF Analyses: Clontibret Mineralised Greywacke (MINE2) Part 1

VAR. / ID.	LTG1	LTG2	LTG3	LTG4	LGT5	LTG6	LTG7	LTG8	LTG9	LGT10
SiO2	67.90	58.78	58.43	57.54	59.83	55.96	58.61	58.64	57.98	71.79
Al2O3	9.03	14.27	13.87	13.62	15.06	13.16	13.18	13.62	13.01	4.26
TiO2	0.60	0.08	0.83	0.74	0.76	0.08	0.08	0.77	0.76	0.13
Fe2O3	0.47	0.83	0.46	0.89	0.68	2.07	0.66	0.51	4.47	3.17
FeO	3.92	5.50	6.12	4.76	4.83	4.31	5.25	4.68	1.28	0.00
MgO	3.12	5.31	5.64	4.80	4.66	4.95	4.45	3.77	1.83	1.35
CaO	3.32	2.89	2.62	4.29	2.88	4.88	3.99	3.92	2.54	2.57
Na2O	1.98	3.39	3.06	2.62	0.43	0.17	2.16	2.59	0.15	0.00
K2O	1.08	1.57	1.78	2.19	2.68	2.89	1.68	1.57	3.01	0.96
MnO	0.13	0.10	0.12	0.11	0.08	0.09	0.11	0.13	0.05	0.07
P2O5	0.11	0.16	0.15	0.15	0.14	0.13	0.15	0.14	0.02	0.05
LOI	0.08	2.15	2.08	1.23	3.14	0.06	1.88	0.74	0.32	2.30
CO2	8.60	3.50	4.48	7.23	4.53	9.06	6.86	9.02	3.97	5.15
Total	100.34	99.22	99.63	100.16	99.72	99.06	99.75	100.09	89.08	91.81
Au	0.0	0.0	0.0	0.0	0.1	2.2	0.0	0.0	36.0	3.5
Ag	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
As	9	12	13	60	154	1733	61	95	21	5576
Ba	265	502	498	524	590	555	447	378	500	99
Bi	3	0	0	0	0	11	0	1	111	40
Co	9	18	21	20	22	22	12	17	42	12
Cr	173	203	219	210	161	213	204	180	371	85
Cu	13	26	28	27	30	22	28	12	36	43
Ni	80	124	117	122	135	118	110	113	137	41
Nb	7	7	8	5	8	6	8	8	10	3
Pb	11	11	9	18	9	5	13	18	270	1322
Rb	28	41	49	57	77	80	46	46	95	0
Sb	14	48	56	69	65	58	86	59	483	61470
Sn	0	0	0	0	0	0	0	0	0	0
Sr	162	188	128	222	106	222	155	182	218	131
V	78	137	134	127	133	165	129	128	371	102
W	0	0	2	4	0	6	2	8	0	0
Y	11	14	13	12	11	10	15	12	10	85
Zn	28	60	60	38	55	54	53	59	1693	226
Zr	132	127	128	120	119	131	120	124	144	11

TABLE 4.120

VAR. / ID.	LTG10A	LGT11	LTG12	LTG13	LTG14	LTG15	LTG16	CL121	CL135	CL142
SiO2	63.35	87.74	59.26	56.00	57.70	57.71	57.96	55.40	57.30	58.40
Al2O3	10.32	1.01	13.70	14.81	14.10	14.65	14.48	15.23	15.23	15.37
TiO2	0.52	0.04	0.76	0.85	0.78	0.74	0.83	0.91	0.76	0.77
Fe2O3	1.81	0.18	1.55	1.47	0.91	0.31	0.72	0.36	0.74	0.76
FeO	2.91	1.19	2.63	3.91	4.59	5.32	5.42	6.50	4.55	4.24
MgO	2.77	1.66	2.92	3.96	3.95	4.94	5.08	5.92	3.59	3.26
CaO	4.20	2.95	3.39	3.91	3.55	3.34	3.23	2.52	3.43	3.20
Na2O	0.03	0.04	0.24	1.26	1.78	3.28	2.90	3.73	2.19	1.37
K2O	2.63	0.10	3.04	2.62	2.04	1.86	1.68	1.60	1.92	2.78
MnO	0.07	0.07	0.07	0.09	0.09	0.09	0.09	0.10	0.08	0.08
P2O5	0.01	0.03	0.08	0.16	0.16	0.16	0.14	0.17	0.16	0.14
LOI	0.27	0.00	1.10	1.13	1.04	1.37	2.92	3.12	2.06	1.28
CO2	6.90	5.10	6.71	10.15	9.44	6.12	4.36	0.83	7.94	8.74
Total	95.80	100.11	95.46	100.32	100.14	99.88	99.82	99.39	99.97	100.40
Au	20.5	0.6	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Ag	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
As	10187	353	2480	133	96	13	13	14	62	124
Ba	404	24	482	525	458	410	394	528	460	493
Bi	63	0	10	2	0	0	0	2	1	1
Co	23	4	19	20	19	16	18	21	16	17
Cr	213	30	190	243	221	157	187	254	162	169
Cu	30	16	20	23	15	25	24	37	17	20
Ni	79	11	131	145	123	102	112	130	118	115
Nb	4	0	7	10	6	6	7	9	8	9
Pb	722	21	5	12	31	12	20	14	52	19
Rb	74	0	85	75	62	54	48	45	55	83
Sb	13839	295	85	83	76	76	91	73	120	94
Sn	0	0	0	0	0	0	0	0	0	0
Sr	253	165	173	185	179	184	175	148	169	150
V	206	5	128	141	124	113	132	159	122	127
W	0	0	19	5	2	2	0	0	4	0
Y	21	1	10	14	11	13	14	14	14	12
Zn	278	14	14	20	22	47	62	63	26	69
Zr	79	13	135	145	140	135	125	152	129	135

TABLE 4.120

VAR. / ID.	CL145	CL166	CL177
SiO2	56.55	61.28	57.21
Al2O3	13.37	14.65	14.42
TiO2	0.73	0.75	0.81
Fe2O3	0.65	0.23	0.41
FeO	4.68	3.18	6.03
MgO	4.13	2.94	5.37
CaO	4.62	3.44	2.68
Na2O	1.42	2.57	3.67
K2O	2.29	2.84	1.44
MnO	0.09	0.08	0.11
P2O5	0.15	0.15	0.16
LOI	1.86	0.83	1.92
CO2	9.65	7.07	5.27
Total	100.18	100.01	99.50
Au	0.0	0.0	0.0
Ag	0.0	0.0	0.0
As	74	26	10
Ba	443	635	430
Bi	1	0	0
Co	16	12	10
Cr	180	147	221
Cu	28	28	24
Ni	95	90	118
Nb	8	15	7
Pb	81	17	7
Rb	66	79	41
Sb	167	115	57
Sn	0	0	0
Sr	181	214	171
V	127	118	143
W	8	0	0
Y	13	13	12
Zn	14	29	61
Zr	129	176	148

TABLE 4.120

XRF Analyses: Clontibret Mineralised Greywacke (MINE3) Part 1

VAR. / ID.	PDR08-1	PDR08-2	PDR09-1	PDR09-3	PDR11-2	PDR17-2	PDR19-1	PDR19-2	PDR20-1	PDR20-2
SiO2	58.87	58.72	57.37	57.32	59.75	54.13	58.64	58.35	56.94	56.78
Al2O3	16.91	15.73	17.54	18.73	21.07	19.66	15.76	17.25	14.54	12.56
TiO2	0.82	0.86	0.70	0.76	0.83	0.79	0.86	0.79	0.50	0.44
Fe2O3	6.95	7.75	5.89	6.23	6.32	6.09	7.74	6.72	4.79	4.61
MgO	4.91	7.02	4.87	4.64	2.87	4.36	5.95	3.85	4.71	5.49
CaO	3.48	1.87	4.79	3.79	2.44	5.57	2.72	3.82	7.85	9.97
Na2O	3.01	3.04	0.91	0.80	0.29	0.11	3.29	1.96	0.22	0.23
K2O	2.62	1.60	3.30	3.57	3.53	4.12	1.73	2.57	2.80	2.61
MnO	0.12	0.28	0.14	0.20	0.07	0.15	0.12	0.13	0.09	0.11
P2O5	0.17	0.15	0.15	0.16	0.09	0.13	0.15	0.17	0.04	0.04
Total	97.86	97.02	95.66	96.20	97.26	95.11	96.96	95.61	92.48	92.84
As	81	15	270	310	6062	2311	15	246	11862	11711
Ba	608	502	571	662	623	644	511	552	387	347
Cl	0	0	0	0	0	26	0	19	23	26
Co	30	24	32	25	32	26	26	25	33	27
Cr	256	254	232	236	299	305	285	270	211	187
Cu	29	33	25	34	20	24	31	26	35	28
Ga	17	15	15	14	17	18	15	14	16	15
La	20	23	25	33	21	31	25	24	27	16
Ni	128	139	117	126	120	128	129	129	82	78
Nb	9	8	8	8	9	10	9	9	6	6
Pb	25	5	18	22	74	11	9	12	514	622
Rb	65	41	77	85	84	96	45	64	45	50
Sr	208	130	171	144	148	250	137	147	357	457
Sb	84	42	99	186	169	74	106	777	10495	5626
S	93	77	535	407	2961	2324	170	407	10225	7641
Th	9	4	4	1	4	10	2	0	0	0
V	136	140	123	137	169	153	140	140	126	103
Y	21	13	22	21	21	22	18	23	23	16
Zn	45	78	46	59	1650	29	61	148	1959	2341
Zr	143	134	131	132	145	143	146	134	99	89
Tl	0	0	0	3	0	0	0	0	0	0

TABLE 4.121

XRF Analyses: Leadhills Mineralised Greywacke (MINE4) Part 1

VAR. / ID.	PDL-2	PDL-3	PDL-4	PDL-5	PDL-6	PDL-7	PDL-8	PDL-9	PDL-10	PDL-11
SiO2	56.53	56.80	52.37	56.29	56.74	50.98	54.90	55.38	54.52	51.49
Al2O3	18.50	16.42	17.06	18.68	19.56	17.54	21.04	20.06	19.94	19.13
TiO2	1.06	1.14	1.02	0.93	0.96	1.05	1.09	1.19	1.10	1.07
Fe2O3	9.46	9.27	8.03	7.57	5.90	9.93	8.99	9.42	9.62	9.60
MgO	3.64	6.69	5.06	3.89	3.20	7.12	5.76	6.18	6.05	6.23
CaO	0.52	0.44	0.43	0.30	0.44	0.57	0.29	0.34	0.35	0.35
Na2O	3.15	3.63	3.07	0.67	3.11	2.71	0.41	1.11	1.34	1.04
K2O	2.10	0.75	1.11	2.67	1.55	0.48	4.03	3.16	2.48	1.96
MnO	0.18	0.14	0.11	0.07	0.04	0.14	0.11	0.14	0.13	0.12
P2O5	0.30	0.20	0.22	0.15	0.25	0.35	0.15	0.15	0.16	0.18
Total	95.44	95.48	88.48	91.22	91.75	90.87	96.77	97.13	95.69	91.17
As	26	0	3	8	8	0	5	5	6	3
Ba	676	324	409	554	358	344	962	742	766	650
Cl	0	0	10	0	0	0	0	0	0	0
Co	37	32	27	29	18	23	21	43	24	18
Cr	242	239	205	217	209	265	234	271	235	236
Cu	29	42	18	29	20	16	54	72	49	51
Ga	18	16	17	18	15	19	23	21	21	19
La	23	24	26	43	21	26	23	26	32	38
Ni	88	83	87	91	71	76	79	158	85	138
Nb	9	9	11	9	9	8	13	11	10	10
Pb	257	54	179	248	150	803	589	253	699	811
Rb	59	25	34	86	41	22	123	96	73	56
Sr	191	241	196	61	158	180	50	119	134	118
Sb	0	0	0	0	0	0	3	0	0	0
S	0	0	0	0	0	0	0	0	0	56
Th	3	2	5	1	3	6	11	8	6	6
V	175	173	166	160	166	173	184	195	178	180
Y	27	22	22	31	18	19	29	25	23	23
Zn	779	315	483	1311	630	837	988	1922	1078	1709
Zr	148	150	137	129	133	142	154	164	153	146
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.122

XRF Analyses: Leadhills Mineralised Greywacke (MINE4) Part 2

VAR. / ID.	PDL-12	PDL-13	PDL-14	PDL-15	PDL-16	PDL-17	PDL-18	PDL-19	PDL-20	PDL-21
SiO2	56.30	56.46	52.40	53.63	53.65	55.20	50.06	55.98	52.16	50.47
Al2O3	21.95	20.31	19.65	20.06	19.94	19.51	19.11	18.50	18.76	19.42
TiO2	0.98	1.01	1.20	1.01	1.13	0.98	1.32	1.00	1.36	1.36
Fe2O3	8.73	8.66	10.01	10.22	10.01	9.02	10.64	7.99	11.15	10.27
MgO	4.53	4.78	6.95	5.56	5.63	5.34	6.76	4.65	6.44	5.98
CaO	0.21	0.17	0.36	0.21	0.36	0.84	0.28	0.76	0.63	0.24
Na2O	0.37	0.46	1.04	0.43	0.59	0.38	0.73	1.21	0.73	0.49
K2O	4.51	4.13	1.95	3.47	2.43	3.46	1.85	1.81	2.25	2.18
MnO	0.10	0.12	0.12	0.11	0.13	0.10	0.14	0.13	0.17	0.14
P2O5	0.16	0.09	0.22	0.10	0.10	0.13	0.30	0.12	0.14	0.11
Total	97.84	96.19	93.90	94.80	93.97	94.96	91.19	92.15	93.79	90.66
As	9	7	2	18	9	11	11	5	18	6
Ba	1004	892	590	892	766	1114	806	579	839	660
Cl	0	0	13	0	0	0	0	0	0	0
Co	24	41	26	25	28	22	29	25	39	33
Cr	184	193	242	223	212	234	283	197	277	251
Cu	66	71	44	69	51	105	60	67	46	53
Ga	29	20	21	24	18	0	0	0	22	28
La	31	35	29	33	19	40	26	27	17	32
Ni	93	192	154	119	106	124	120	106	121	146
Nb	15	14	9	13	11	13	10	9	9	12
Pb	1450	198	843	449	348	4258	5448	4363	746	1674
Rb	148	132	59	104	71	115	61	65	69	70
Sr	60	43	117	57	110	70	135	165	116	76
Sb	0	11	0	2	0	7	0	3	0	0
S	13	0	5	0	0	10019	0	0	0	115
Th	15	9	8	11	5	0	0	0	7	6
V	190	163	184	188	178	199	239	148	211	197
Y	30	27	25	28	21	30	19	22	26	23
Zn	1196	1579	1779	1045	1304	1386	1848	760	402	1411
Zr	157	154	150	145	151	139	152	146	154	151
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.122

XRF Analyses: Leadhills Mineralised Greywacke (MINE4) Part 3

VAR. / ID.	PDL-22	PDL-23	PDL-24	PDL-25	PDL-26	PDL-27	PDL-28	PDL-29
SiO2	54.86	51.09	52.19	54.46	50.15	50.45	51.95	52.18
Al2O3	18.99	17.90	19.17	17.90	19.46	18.77	16.98	20.76
TiO2	1.07	1.33	1.40	1.09	1.31	1.24	1.09	1.25
Fe2O3	8.59	9.66	10.33	8.67	9.96	10.02	9.00	8.87
MgO	5.45	6.91	6.60	5.47	5.66	6.10	5.16	5.28
CaO	0.28	1.51	0.21	0.21	0.15	0.21	0.59	0.28
Na2O	1.24	2.26	0.90	2.14	0.59	1.31	1.89	0.80
K2O	2.34	1.13	2.16	1.69	2.54	1.98	1.77	3.12
MnO	0.12	0.15	0.14	0.21	0.14	0.33	0.18	0.16
P2O5	0.12	0.23	0.18	0.26	0.25	0.31	0.15	0.16
Total	93.06	92.17	93.28	92.10	90.21	90.72	88.76	92.86
As	5	4	4	7	11	5	0	10
Ba	666	497	624	510	680	516	657	887
Cl	0	0	0	0	0	0	0	0
Co	26	28	27	44	41	44	36	33
Cr	211	260	271	239	233	236	221	208
Cu	58	42	52	49	85	58	42	45
Ga	28	19	27	26	0	0	20	27
La	27	27	34	34	41	52	34	40
Ni	103	89	89	96	108	100	98	95
Nb	12	11	10	11	12	10	10	11
Pb	1594	677	1748	2250	3081	3538	583	1689
Rb	82	34	69	57	85	70	53	85
Sr	130	213	92	181	72	113	175	85
Sb	0	0	2	3	0	0	3	0
S	0	0	353	169	54	187	0	0
Th	6	7	9	10	0	0	8	12
V	165	196	201	172	216	199	169	191
Y	23	24	21	27	28	28	29	35
Zn	995	945	882	732	1886	1713	308	645
Zr	156	174	153	163	159	150	165	160
Tl	0	1	0	0	0	0	0	0

TABLE 4.122

-2983-

XRF Analyses: Cairngarroch Mineralised Greywacke (MINE5) Part 1

VAR. / ID.	PDMIN1	PDMIN2	PDMIN3	PDMIN4	PDMIN5	PDMIN10
SiO2	89.32	78.58	81.38	75.09	58.02	78.08
Al2O3	2.24	3.55	3.52	1.22	17.68	4.35
TiO2	0.11	0.18	0.17	0.09	0.70	0.14
Fe2O3	1.04	3.01	2.86	4.16	4.55	2.88
MgO	1.29	3.08	2.39	4.36	2.66	2.58
CaO	2.11	6.86	5.28	9.76	4.49	5.95
Na2O	0.03	0.00	0.04	0.02	2.64	0.03
K2O	0.79	1.23	1.01	0.52	2.86	1.14
MnO	0.02	0.06	0.05	0.08	0.06	0.06
P2O5	0.04	0.05	0.05	0.03	0.19	0.06
Total	96.99	96.60	96.75	95.33	93.85	95.27
As	615	1901	655	2764	12	22
Ba	83	540	110	86	1239	268
Co	4	3	6	3	10	4
Cr	38	60	51	39	63	33
Cu	7	515	252	87	35	13
Ga	3	5	6	4	18	5
La	7	7	6	6	29	12
Ni	2	16	13	7	19	5
Nb	4	4	4	2	12	5
Pb	17	211	60	23	9	15
Rb	23	33	28	15	73	29
Sr	98	233	201	213	282	261
Sb	13	249	130	76	10	20
S	515	3202	6556	3992	1033	3541
Th	2	26	2	0	14	1
V	10	22	20	9	99	19
Y	7	10	8	6	21	10
Zn	0	40	17	10	17	0
Zr	25	43	39	25	181	49

TABLE 4.123

XRF Analyses: Tongerhie Mineralised Greywacke (MINE6)

VAR. / ID.	T1	T2	T4	T5
SiO2	55.87	57.56	58.41	53.51
Al2O3	11.94	15.85	15.66	8.20
TiO2	0.56	0.81	0.81	0.37
Fe2O3	4.91	4.24	3.93	4.22
MgO	5.27	3.48	3.44	7.45
CaO	14.19	9.71	8.74	20.33
Na2O	0.56	0.72	0.42	0.28
K2O	2.17	2.78	3.51	1.80
MnO	0.17	0.12	0.10	0.28
P2O5	0.14	0.17	0.16	0.10
Total	95.78	95.44	95.18	96.54
As	48	17	16	196
Ba	192	224	237	116
Co	11	17	19	14
Cr	90	144	132	65
Cu	0	14	15	31
Ga	12	13	23	8
La	24	32	28	26
Ni	27	34	30	17
Nb	12	13	12	9
Pb	9	10	8	6
Rb	57	67	84	39
Sr	202	149	119	126
Sb	3	8	5	19
S	70	122	297	691
Th	5	10	6	4
V	74	94	81	49
Y	22	27	24	28
Zn	22	31	18	11
Zr	130	212	185	79

TABLE 4.124

XRF Analyses: Miscellaneous Mineralisation (MINE7) Part 1

VAR. / ID.	PDL-1	KN1	KN2	KN3	TALAS1	PDTAL1
SiO2	56.40	63.67	61.96	67.74	80.51	61.98
Al2O3	10.71	23.20	26.41	16.92	0.11	13.27
TiO2	0.44	0.81	0.82	0.45	0.08	0.47
Fe2O3	6.51	3.16	3.26	2.74	14.13	7.95
MgO	2.32	0.65	0.76	2.48	0.00	1.95
CaO	0.16	0.15	0.14	3.54	0.04	1.12
Na2O	0.08	0.02	0.00	0.00	0.00	7.02
K2O	1.41	4.99	5.36	3.60	0.50	0.36
MnO	0.02	0.00	0.00	0.12	0.00	0.04
P2O5	0.06	0.10	0.09	0.13	0.02	0.17
Total	78.11	96.75	98.80	97.72	95.39	94.33
As	168	5965	6209	3836	108510	10
Ba	249	568	612	297	51	177
Co	71	45	18	6	47	91
Cr	261	29	27	33	114	31
Cu	697	33	35	40	195	13443
Ga	0	22	23	12	11	13
La	41	21	18	8	0	24
Ni	63	5	8	6	38	2736
Nb	8	11	10	9	3	8
Pb	94792	12	13	22	2930	67
Rb	148	139	137	93	57	14
Sr	13	17	15	82	0	406
Sb	206	200	199	145	16	8
S	158	13377	13477	8536	29949	35820
Th	0	4	2	4	101	8
V	203	124	138	57	24	24
Y	0	24	23	15	0	11
Zn	6116	34	36	38	287	109
Zr	75	134	133	104	29	215

TABLE 4.125

XRF Analyses: Glendinning Regional Mudstone (MUD1) Part 1

VAR. / ID.	DJR-1001	DJR-1002	DJR-1003	DJR-1004	DJR-1005	DJR-1006	DJR-1007	DJR-1008	DJR-1009	DJR-1010
East	33555	33535	33500	33464	33447	33388	33409	33370	33358	33330
North	59802	59800	59778	59755	59736	59666	59650	59615	59598	59563
SiO2	60.06	57.39	60.78	59.06	59.72	55.85	57.87	57.44	58.11	57.27
Al2O3	18.64	19.05	19.39	18.93	18.51	15.62	19.31	19.72	17.65	20.78
TiO2	1.13	1.11	1.02	1.11	1.13	0.92	1.14	1.04	1.02	1.02
Fe2O3	8.28	10.24	7.65	9.32	8.20	6.30	8.91	9.33	8.71	4.92
MgO	5.36	6.59	4. 1.06							
CaO	0.13	0.40	1.27	0.46	1.44	9.19	0.26	0.95	2.17	6.68
Na2O	1.41	0.80	1.04	1.17	0.77	1.28	1.08	1.04	1.16	0.70
K2O	2.82	3.83	4.10	3.63	3.38	2.77	3.75	3.94	3.22	3.82
MnO	0.06	0.08	0.06	0.09	0.08	0.12	0.05	0.06	0.07	0.08
P2O5	0.16	0.19	0.14	0.20	0.21	0.19	0.20	0.16	0.18	0.20
Total	98.05	99.68	99.73	99.73	98.76	96.87	98.55	99.73	98.27	96.53
As	0	2	0	0	0	0	0	17	4	2
Ba	401	454	495	482	432	311	389	510	397	392
Cl	0	0	0	0	0	26	0	0	7	0
Co	26	29	27	32	24	25	26	38	27	19
Cr	147	166	129	157	151	140	153	156	150	152
Cu	33	43	105	32	10	28	15	96	48	12
Ga	20	25	22	21	20	18	23	25	21	20
La	40	37	41	40	39	45	35	43	37	40
Ni	83	112	84	102	84	73	94	117	90	61
Nb	19	19	19	18	17	16	17	19	16	17
Pb	14	41	16	15	12	14	11	15	14	12
Rb	105	154	159	141	114	91	142	151	119	120
Sr	46	34	43	41	47	163	39	44	65	131
Sb	3	0	0	0	0	0	0	4	0	0
S	17	14	12	38	10	46	0	37	36	9
Th	8	15	5	7	8	9	9	10	5	11
V	134	153	128	145	138	123	148	181	132	136
Y	39	32	36	37	33	33	30	31	30	33
Zn	98	127	98	115	94	85	114	107	102	30
Zr	231	167	252	190	215	213	184	167	180	220
Tl	0	0	0	0	0	0	2	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1011	DJR-1012	DJR-1013	DJR-1017	DJR-1018	DJR-1019	DJR-1020	DJR-1021	DJR-1022	DJR-1023
East	33321	33310	33271	33052	33081	33103	33112	33156	33180	33219
North	59542	59522	59507	59275	59280	59301	59314	59321	59320	59355
SiO2	54.10	58.71	56.26	56.08	55.14	54.72	57.05	55.72	58.09	59.67
Al2O3	17.43	18.43	18.81	18.27	19.37	18.11	19.50	19.15	19.24	19.05
TiO2	0.83	1.05	1.10	1.00	1.11	0.96	1.10	1.00	1.06	1.05
Fe2O3	6.63	8.13	9.81	9.36	9.27	8.08	8.71	7.36	8.99	8.92
MgO	4.08	5.18	6.43	6.51	6.43	4.84	6.13	5.65	5.28	4.89
CaO	8.94	2.60	2.02	2.49	1.82	4.71	1.11	4.64	1.35	0.31
Na2O	0.00	1.04	1.08	1.10	1.13	0.92	0.97	0.46	1.09	1.03
K2O	2.63	3.53	3.64	3.56	3.87	3.95	3.89	3.53	4.14	3.98
MnO	0.15	0.08	0.07	0.10	0.07	0.07	0.07	0.07	0.08	0.05
P2O5	0.18	0.19	0.18	0.17	0.19	0.17	0.18	0.17	0.17	0.14
Total	94.97	98.94	99.40	98.64	98.40	96.53	98.71	97.75	99.49	99.09
As	4	0	4	18	0	5	2	30	0	145
Ba	286	414	410	470	441	455	434	451	494	443
Cl	29	14	0	0	15	0	0	11	7	0
Co	25	30	33	25	25	25	26	22	24	24
Cr	121	148	161	153	158	152	152	153	153	150
Cu	46	8	48	53	27	46	34	38	47	51
Ga	17	21	24	22	24	22	23	21	24	23
La	33	30	43	35	41	34	40	39	40	43
Ni	79	89	110	103	99	102	96	83	101	85
Nb	15	18	17	18	18	17	19	18	18	19
Pb	14	13	9	11	9	13	12	24	20	209
Rb	81	124	136	132	142	140	136	118	160	148
Sr	154	57	53	64	67	77	53	122	47	45
Sb	5	0	4	0	3	0	0	2	0	25
S	14	20	16	32	14	6	9	16	14	42
Th	8	7	5	11	8	8	8	11	2	8
V	108	133	160	146	160	138	140	139	158	135
Y	30	29	30	30	30	29	31	30	30	30
Zn	46	97	116	102	103	90	100	98	111	718
Zr	171	189	172	173	186	167	192	192	172	242
Tl	0	0	0	0	0	0	2	1	0	0

TABLE 4.126

VAR. / ID.	DJR-1024	DJR-1025	DJR-1026	DJR-1027	DJR-1028	DJR-1029	DJR-1031	DJR-1033	DJR-1034	DJR-1035
East	33250	33258	33273	33270	33274	33102	33114	33093	33087	33082
North	59380	59403	59467	59457	59448	59635	59628	59586	59572	59564
SiO2	58.71	56.38	54.14	55.16	59.86	57.13	57.70	62.38	56.80	56.86
Al2O3	18.34	19.16	17.22	21.29	17.48	20.18	19.97	19.04	20.09	20.40
TiO2	1.04	1.09	0.91	1.18	1.02	1.16	1.15	1.10	1.10	1.20
Fe2O3	8.08	9.69	8.31	9.13	7.68	9.78	10.21	7.85	8.92	9.51
MgO	6.02	5.93	5.64	5.78	5.25	5.36	5.45	3.15	4.02	5.68
CaO	1.89	1.25	5.34	0.59	2.37	0.24	0.14	1.51	2.55	0.65
Na2O	1.33	0.91	0.91	0.83	1.45	1.00	0.84	0.31	0.65	0.78
K2O	3.65	4.10	3.63	4.87	3.12	4.22	4.14	2.76	4.34	4.43
MnO	0.05	0.06	0.09	0.06	0.09	0.08	0.06	0.22	0.16	0.08
P2O5	0.17	0.18	0.16	0.19	0.18	0.18	0.18	0.21	0.19	0.19
Total	99.28	98.75	96.35	99.08	98.50	99.33	99.84	98.53	98.82	99.78
As	0	16	11	2	0	6	22	4	2	3
Ba	389	457	397	499	399	434	370	424	443	505
Cl	0	0	0	0	19	0	0	0	0	0
Co	23	32	22	26	23	30	29	34	26	26
Cr	140	161	143	182	134	167	165	153	167	168
Cu	34	44	48	25	20	65	47	18	39	39
Ga	23	23	21	29	19	26	25	16	23	25
La	44	41	40	39	36	48	38	36	40	43
Ni	92	109	98	112	85	122	119	133	111	116
Nb	18	18	15	19	18	19	18	18	19	19
Pb	11	20	31	13	11	11	19	13	14	12
Rb	136	149	130	182	110	158	154	98	157	163
Sr	63	43	95	42	52	37	28	38	59	38
Sb	0	0	3	0	0	0	0	0	0	0
S	12	31	18	22	12	66	94	15	35	21
Th	7	6	4	5	7	12	12	7	12	12
V	137	145	134	177	120	170	156	118	153	163
Y	28	30	28	31	27	30	30	36	35	36
Zn	88	107	108	104	86	111	136	80	105	114
Zr	170	173	151	190	198	176	183	262	185	188
Tl	2	0	0	0	0	0	0	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1036	DJR-1037	DJR-1038	DJR-1039	DJR-1040	DJR-1041	DJR-1042	DJR-1043	DJR-1044	DJR-1045
East	33070	33055	33047	33037	33028	33018	32990	32994	33006	33010
North	59555	59550	59546	59543	59538	59534	59596	59578	59553	59525
SiO2	58.41	55.17	54.11	54.90	56.02	56.03	54.38	59.58	56.95	58.01
Al2O3	18.59	20.70	20.54	17.88	19.59	19.38	20.83	16.65	18.74	19.90
TiO2	1.06	1.23	1.23	1.00	1.17	1.14	1.22	0.98	1.13	1.13
Fe2O3	8.28	10.26	9.05	9.23	9.45	9.87	10.50	7.49	9.41	9.63
MgO	5.70	6.28	6.00	5.68	6.22	5.97	6.39	5.59	5.95	5.41
CaO	2.84	0.52	1.89	2.86	1.12	1.50	0.40	3.83	0.57	0.59
Na2O	0.79	0.37	0.87	0.83	0.92	0.81	0.83	1.40	0.90	0.66
K2O	3.99	4.62	4.31	4.04	4.06	4.38	4.86	3.11	3.83	4.29
MnO	0.10	0.03	0.06	0.10	0.07	0.09	0.08	0.07	0.11	0.07
P2O5	0.18	0.18	0.20	0.16	0.17	0.18	0.17	0.18	0.17	0.18
Total	99.94	99.36	98.26	96.68	98.79	99.35	99.66	98.88	97.76	99.87
As	0	3	2	15	0	8	2	0	5	0
Ba	416	434	459	362	415	409	463	308	436	405
Cl	15	0	8	0	13	0	6	23	0	18
Co	25	27	29	29	28	28	26	27	35	30
Cr	150	172	166	153	152	164	180	136	166	156
Cu	5	8	31	41	47	38	42	5	60	7
Ga	22	28	24	23	25	26	28	18	24	24
La	41	56	52	47	37	37	51	40	42	54
Ni	99	126	108	108	106	123	130	77	109	111
Nb	17	20	18	17	18	18	19	17	17	18
Pb	15	13	13	14	15	12	10	15	16	17
Rb	146	170	144	143	142	161	177	109	141	151
Sr	62	28	61	54	52	41	37	68	37	34
Sb	0	0	0	2	0	0	0	0	0	4
S	21	15	10	132	43	20	33	8	28	31
Th	3	7	6	14	8	4	8	0	0	3
V	141	173	162	146	157	165	185	131	148	160
Y	31	30	35	30	30	30	30	30	31	30
Zn	102	119	110	101	113	116	123	80	108	109
Zr	174	176	205	146	183	166	171	181	173	171
Tl	0	0	0	0	0	1	0	0	0	2

TABLE 4.126

VAR. / ID.	DJR-1046	DJR-1047	DJR-1048	DJR-1049	DJR-1050	DJR-1052	DJR-1053	DJR-1054	DJR-1055	DJR-1056
East	33002	32980	32911	32960	32964	33116	33114	33109	33105	33102
North	59502	59448	59478	59390	59370	59658	59659	59661	59671	59678
SiO2	57.43	56.98	53.19	60.19	57.82	55.90	57.04	55.69	57.53	57.82
Al2O3	14.98	19.40	18.44	21.44	18.08	18.10	19.21	19.07	18.95	17.84
TiO2	0.96	1.14	1.12	0.97	1.09	1.04	0.99	1.11	1.10	0.99
Fe2O3	6.63	8.88	10.00	5.13	9.49	8.26	7.62	7.65	8.69	7.81
MgO	5.20	5.43	5.57	1.25	5.97	5.66	3.80	4.30	5.59	4.57
CaO	5.64	0.80	1.30	5.14	1.30	3.93	5.43	5.18	1.93	4.37
Na2O	1.41	0.97	0.19	0.44	1.21	0.97	0.20	0.96	0.81	1.05
K2O	2.54	4.25	4.22	4.54	3.43	3.68	3.80	3.74	3.85	3.71
MnO	0.10	0.09	0.12	0.08	0.14	0.09	0.09	0.08	0.08	0.11
P2O5	0.18	0.18	0.17	0.17	0.18	0.17	0.18	0.20	0.18	0.19
Total	95.07	98.12	94.32	99.35	98.71	97.80	98.36	97.98	98.71	98.46
As	3	4	36	0	3	0	23	15	6	24
Ba	287	432	427	539	428	387	351	390	408	357
Cl	0	0	0	0	0	15	0	21	0	14
Co	23	24	31	13	26	28	25	25	27	31
Cr	135	167	163	159	148	147	147	154	150	146
Cu	34	10	19	5	37	40	15	25	14	30
Ga	16	25	26	24	22	20	20	21	22	19
La	40	46	45	47	42	43	35	48	40	50
Ni	70	112	122	93	102	97	103	95	104	90
Nb	15	18	18	15	18	16	15	18	16	15
Pb	12	13	12	10	14	14	11	12	14	13
Rb	82	160	160	157	123	121	130	119	136	120
Sr	131	37	30	77	41	61	64	76	47	56
Sb	2	0	0	2	0	0	16	9	3	0
S	42	32	40	0	18	14	13	28	22	17
Th	2	12	5	3	0	5	5	5	3	5
V	116	152.	163	149	138	147	138	144	145	130
Y	29	28	28	29	28	28	29	29	29	30
Zn	75	101	113	18	99	87	93	96	97	88
Zr	201	175	162	150	176	162	179	192	173	177
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1057	DJR-1058	DJR-1059	DJR-1060	DJR-1061	DJR-1062	DJR-1702	DJR-1704	DJR-1705	DJR-1708
East	33082	33066	33059	33037	33020	33004	34361	34276	34284	34168
North	59692	59698	59698	59698	59698	59694	60352	60483	60490	60540
SiO2	57.42	55.82	55.12	55.79	53.24	56.24	58.13	57.70	56.73	58.49
Al2O3	14.20	18.47	18.68	17.08	19.54	17.49	18.94	18.62	18.87	18.02
TiO2	0.82	0.96	1.06	0.96	1.08	0.99	1.10	1.06	1.10	1.04
Fe2O3	5.78	8.08	9.52	7.94	9.30	8.03	9.22	9.07	9.52	7.90
MgO	4.20	3.96	6.32	5.89	6.36	6.03	5.77	5.58	6.63	6.63
CaO	7.87	5.90	3.01	5.27	3.35	4.50	0.72	1.71	0.85	1.85
Na2O	1.44	0.77	0.69	1.09	0.83	0.97	1.15	1.12	0.98	1.21
K2O	2.34	3.87	4.13	3.45	4.42	3.46	3.78	3.51	3.74	3.34
MnO	0.11	0.07	0.07	0.08	0.08	0.10	0.10	0.13	0.09	0.09
P2O5	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.19	0.20	0.19
Total	94.35	98.07	98.77	97.73	98.38	97.99	99.09	98.69	98.71	98.76
As	3	0	4	0	5	3	13	15	10	7
Ba	266	369	402	314	445	301	472	516	405	397
Cl	0	0	0	0	14	20	0	0	0	0
Co	26	29	30	23	28	23	31	33	34	30
Cr	130	149	161	149	163	145	162	159	167	138
Cu	16	7	53	36	38	22	50	56	69	66
Ga	14	22	24	21	24	19	21	22	21	20
La	32	35	46	29	43	40	38	41	45	38
Ni	64	104	114	96	119	88	108	105	104	94
Nb	13	15	17	15	17	16	18	17	18	18
Pb	13	15	11	15	11	11	9	7	11	13
Rb	73	130	150	120	154	118	140	134	145	126
Sr	107	75	46	91	84	73	43	54	43	63
Sb	0	0	0	2	0	0	0	12	3	0
S	4	23	11	23	31	24	0	7	19	0
Th	1	7	4	3	4	2	11	9	11	12
V	102	145	158	140	161	131	157	148	163	151
Y	26	27	29	27	28	29	35	37	32	40
Zn	63	103	111	92	111	87	110	110	121	98
Zr	178	144	147	164	157	163	174	175	175	172
Tl	0	0	0	0	0	0	3	2	0	0

TABLE 4.126

VAR. / ID.	DJR-1711	DJR-1715	DJR-1716	DJR-1719	DJR-1728	DJR-1734	DJR-1754	DJR-1757	DJR-1759	DJR-1761
East	34107	34046	34007	34018	34111	34373	33654	33669	33687	33686
North	60654	60730	60778	60939	60533	60750	59667	59627	59590	59544
SiO2	60.94	56.22	57.75	62.28	60.61	56.03	56.42	62.28	61.13	55.92
Al2O3	18.43	19.43	19.39	16.37	19.03	20.23	20.14	17.63	14.68	17.25
TiO2	1.11	1.13	1.13	0.90	1.09	1.13	1.18	0.97	0.90	0.92
Fe2O3	8.56	9.79	9.74	7.53	7.73	9.49	9.47	7.28	5.30	8.17
MgO	5.35	6.08	6.33	5.76	5.30	6.00	6.00	4.73	4.42	5.68
CaO	0.16	0.17	0.14	2.32	0.22	0.35	0.33	1.46	6.16	4.83
Na2O	1.24	0.77	0.86	1.05	1.40	0.87	0.72	1.18	2.08	1.08
K2O	3.27	4.26	3.78	3.09	3.40	4.60	4.61	3.39	2.15	3.64
MnO	0.09	0.07	0.09	0.08	0.05	0.06	0.06	0.06	0.09	0.09
P2O5	0.22	0.17	0.18	0.16	0.22	0.17	0.20	0.13	0.20	0.16
Total	99.37	98.09	99.39	99.54	99.05	98.93	99.13	99.11	97.11	97.74
As	2	7	3	5	2	16	1	18	3	24
Ba	348	406	375	339	392	497	472	559	283	416
Cl	0	0	0	9	11	0	0	0	10	0
Co	28	30	33	25	30	33	27	23	29	29
Cr	160	186	170	143	146	173	175	133	139	147
Cu	41	50	68	10	26	93	8	40	26	50
Ga	19	21	22	17	19	24	22	19	13	20
La	36	31	45	28	45	33	51	43	42	34
Ni	93	127	113	102	83	111	130	73	56	96
Nb	18	18	16	16	17	17	19	17	15	16
Pb	10	8	31	8	11	8	12	5	8	14
Rb	125	163	141	112	127	180	178	123	68	130
Sr	36	32	38	47	41	41	38	47	128	99
Sb	2	0	0	0	0	0	0	1	0	0
S	16	14	11	20	21	8	24	147	5	522
Th	15	12	11	6	10	17	15	15	10	10
V	139	175	156	130	150	185	182	113	110	155
Y	30	28	30	24	30	31	35	36	36	32
Zn	112	130	129	125	92	118	128	86	67	104
Zr	203	165	176	154	200	167	181	243	217	144
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1764	DJR-1765	DJR-1766	DJR-1767	DJR-1768	DJR-1769	DJR-1770	DJR-1771	DJR-1772	DJR-1776
East	34540	34551	34544	34493	34488	34065	34065	33649	33787	33951
North	61066	61078	61072	61022	61012	60313	60290	60117	60227	60430
SiO2	56.00	49.79	47.36	56.02	56.97	56.15	57.24	62.96	64.21	58.45
Al2O3	17.37	14.10	15.60	16.58	18.16	18.31	17.97	14.91	17.34	19.00
TiO2	0.96	0.70	0.58	0.92	1.02	1.05	1.03	0.98	1.02	1.09
Fe2O3	7.89	5.74	6.30	7.51	8.52	9.06	8.33	6.11	7.26	9.30
MgO	5.75	4.70	1.61	5.81	6.17	6.89	5.84	5.28	4.94	5.97
CaO	5.11	14.81	22.88	5.71	3.05	1.63	2.36	4.01	0.19	0.39
Na2O	1.02	0.82	0.19	1.11	1.00	1.23	1.12	1.92	1.60	1.19
K2O	3.60	3.02	4.22	3.21	3.76	3.74	3.56	2.11	2.56	3.73
MnO	0.07	0.10	0.15	0.08	0.06	0.06	0.07	0.10	0.09	0.08
P2O5	0.18	0.15	0.15	0.18	0.17	0.17	0.18	0.25	0.24	0.20
Total	97.95	93.93	99.04	97.13	98.88	98.29	97.70	98.63	99.45	99.40
As	4	6	14	5	3	12	6	2	5	12
Ba	375	812	305	337	420	570	446	260	316	387
Cl	9	53	35	37	8	0	7	12	0	0
Co	26	23	24	24	28	30	25	25	37	33
Cr	150	127	115	144	150	159	150	140	146	163
Cu	41	39	33	44	53	51	51	27	26	62
Ga	20	15	14	18	21	20	20	14	16	20
La	41	33	33	38	35	32	35	47	30	34
Ni	93	75	72	90	105	99	90	64	84	103
Nb	17	15	10	15	17	17	16	16	17	18
Pb	10	14	34	9	16	9	9	11	8	9
Rb	126	97	94	107	136	143	135	77	88	142
Sr	87	278	84	100	64	58	62	83	45	41
Sb	0	0	0	0	0	0	0	0	2	0
S	36	206	89	32	25	14	7	20	32	30
Th	0	9	7	13	13	11	10	18	12	16
V	139	112	122	131	148	157	149	105	114	154
Y	33	30	29	32	30	30	30	42	36	33
Zn	99	80	94	86	103	102	98	67	82	116
Zr	170	137	99	170	162	167	171	231	229	178
Tl	2	0	0	2	0	0	0	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1777	DJR-1781	DJR-1782	DJR-1784	DJR-1788	DJR-1791	DJR-1792	DJR-1794	DJR-1798	DJR-1799
East	33967	33680	33680	33562	33555	33596	33597	33612	34100	34101
North	60450	59411	59398	60236	60223	60179	60155	60100	60464	60451
SiO2	58.41	59.32	56.33	60.16	59.03	55.98	59.28	60.42	58.04	57.88
Al2O3	15.33	17.29	16.97	21.86	18.56	11.68	16.86	18.38	20.39	18.17
TiO2	0.88	1.02	0.98	1.18	0.80	0.62	0.96	1.06	1.14	1.12
Fe2O3	6.69	7.99	7.93	9.70	7.22	4.37	7.60	8.72	7.68	8.78
MgO	5.54	5.62	5.71	2.28	2.95	3.40	5.36	6.61	5.23	6.27
CaO	5.61	2.17	4.29	0.00	8.77	14.69	4.07	0.18	0.90	1.69
Na2O	1.21	1.47	1.20	0.34	0.58	1.58	1.27	0.92	0.92	1.12
K2O	2.71	3.07	3.31	4.53	3.57	2.01	3.09	3.38	4.31	3.28
MnO	0.09	0.08	0.07	0.10	0.09	0.24	0.08	0.06	0.05	0.10
P2O5	0.18	0.19	0.17	0.22	0.17	0.18	0.18	0.19	0.21	0.20
Total	96.65	98.22	96.96	100.37	101.74	94.75	98.75	99.92	98.87	98.61
As	4	10	13	24	14	4	5	3	8	3
Ba	294	762	1076	376	294	212	364	354	452	501
Cl	0	0	16	0	0	35	7	0	0	0
Co	24	23	23	48	28	20	22	33	29	29
Cr	139	145	147	176	132	100	146	159	164	154
Cu	31	44	45	37	27	22	43	34	25	41
Ga	15	18	18	23	17	12	19	20	23	20
La	35	35	39	49	39	44	36	31	37	35
Ni	72	91	0	222	58	48	85	102	91	95
Nb	13	18	18	19	14	11	16	19	17	17
Pb	75	35	23	115	21	9	8	10	8	12
Rb	93	112	118	169	108	64	113	132	152	125
Sr	88	72	111	65	161	141	82	29	56	63
Sb	0	0	0	3	9	0	0	0	0	0
S	51	203	592	131	82	0	7	0	18	28
Th	10	17	11	13	9	11	14	15	30	11
V	113	140	142	170	129	96	130	144	158	148
Y	37	37	36	43	33	36	43	35	34	37
Zn	88	108	100	119	88	52	93	106	91	101
Zr	192	188	180	193	132	141	174	183	208	192
Tl	0	0	2	0	0	0	0	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1801	DJR-1802	DJR-1804	DJR-1811	DJR-1812	DJR-1814	DJR-1815	DJR-1816	DJR-1817	DJR-1818
East	33544	33538	33522	34325	34306	34274	34270	34257	34235	34210
North	59948	59963	59983	60248	60239	60267	60270	60290	60294	60294
SiO2	58.15	56.49	55.77	63.36	58.22	63.47	65.75	64.14	57.69	62.35
Al2O3	19.47	18.91	16.79	18.44	21.10	17.89	20.06	18.56	18.84	18.05
TiO2	1.08	1.07	0.96	1.02	1.16	0.95	1.01	0.99	1.00	1.09
Fe2O3	9.24	9.53	8.01	8.27	8.36	7.54	5.72	7.29	8.80	7.59
MgO	5.83	6.15	6.01	4.21	5.39	5.57	2.24	4.63	5.49	5.24
CaO	0.32	1.82	5.74	0.02	0.13	0.19	0.12	0.12	2.34	0.51
Na2O	0.94	0.88	1.17	1.10	0.85	1.12	0.53	1.14	1.13	1.53
K2O	3.77	3.89	2.99	3.33	4.38	3.27	4.28	3.72	3.66	2.87
MnO	0.07	0.07	0.09	0.07	0.05	0.09	0.17	0.08	0.11	0.08
P2O5	0.19	0.19	0.18	0.14	0.19	0.13	0.15	0.14	0.17	0.22
Total	99.06	99.00	97.71	99.96	99.83	100.22	100.03	100.81	99.23	99.53
As	6	26	8	47	12	13	91	11	31	4
Ba	523	471	375	578	428	406	401	397	509	409
Cl	0	0	10	0	0	0	0	0	0	0
Co	31	29	30	49	29	37	25	31	35	35
Cr	157	168	147	133	171	127	140	121	154	141
Cu	44	109	51	76	39	45	54	49	47	28
Ga	21	22	18	7	24	19	20	18	20	17
La	41	32	35	49	42	47	42	50	39	42
Ni	96	106	84	84	102	71	64	77	99	81
Nb	17	17	17	18	21	18	17	19	16	19
Pb	65	9	33	20	7	68	11	12	24	10
Rb	145	147	107	124	159	122	163	147	132	102
Sr	38	44	128	59	48	41	114	44	67	52
Sb	0	0	0	4	9	0	0	0	0	0
S	49	40	52	121	7	67	41	0	12	16
Th	8	20	15	15	13	11	16	15	17	16
V	154	157	133	127	164	116	118	113	148	128
Y	38	36	34	40	37	42	37	41	43	50
Zn	152	128	107	85	102	90	54	83	105	83
Zr	188	179	170	262	206	240	224	252	161	218
Tl	0	0	0	0	2	0	0	0	0	0

TABLE 4.126

XRF Analyses: Glendinning Regional Mudstone (MUD1) Part 11

VAR. / ID.	DJR-1819	DJR-1820	DJR-1822	DJR-1823	DJR-1825	DJR-1828	DJR-1830	DJR-1834	DJR-1835	DJR-1836
East	34193	34173	34125	34101	34050	34131	34160	33814	33784	33746
North	60300	60314	60329	60340	60365	60420	60394	60636	60627	60626
SiO2	57.86	56.83	57.41	57.31	57.58	59.10	57.47	60.75	59.72	58.19
Al2O3	19.43	19.06	16.68	14.76	18.36	18.17	19.03	18.28	18.94	19.21
TiO2	1.08	1.07	0.95	0.99	1.05	1.09	1.13	1.08	1.11	1.10
Fe2O3	8.44	9.22	7.74	6.60	8.18	8.43	10.20	9.00	9.55	10.21
MgO	5.62	6.03	5.50	5.44	6.16	6.11	6.45	5.72	5.51	5.83
CaO	2.01	1.59	4.68	6.95	2.73	1.55	0.30	0.39	0.15	0.11
Na2O	1.18	1.09	1.44	1.60	1.08	1.24	1.00	1.27	1.14	0.78
K2O	4.09	3.82	3.00	2.12	3.47	3.30	3.84	3.32	3.58	3.93
MnO	0.06	0.13	0.10	0.10	0.07	0.09	0.06	0.09	0.08	0.09
P2O5	0.19	0.18	0.19	0.22	0.19	0.20	0.18	0.19	0.19	0.19
Total	99.96	99.02	97.69	96.09	98.87	99.28	99.66	100.09	99.97	99.64
As	5	7	6	3	6	6	21	4	4	6
Ba	472	534	384	288	396	447	455	391	406	382
Cl	0	0	0	20	20	0	0	0	0	9
Co	23	27	27	30	25	28	40	31	30	31
Cr	162	158	134	139	150	158	177	160	157	163
Cu	42	37	33	48	57	43	68	45	50	53
Ga	21	22	18	14	21	20	23	20	21	22
La	37	36	38	40	36	32	34	31	41	46
Ni	96	104	80	64	86	94	111	107	100	118
Nb	18	17	16	17	18	18	17	17	17	18
Pb	11	11	9	11	13	9	9	12	14	15
Rb	155	143	112	72	126	125	154	128	135	148
Sr	62	49	86	131	50	68	36	39	37	31
Sb	0	0	0	0	0	0	0	0	8	2
S	0	13	14	17	0	7	0	17	5	14
Th	16	13	7	9	9	12	16	9	14	14
V	165	159	127	114	144	149	165	145	147	153
Y	34	33	36	38	33	36	38	42	34	37
Zn	106	107	98	81	96	102	112	103	107	111
Zr	187	167	168	250	185	200	169	181	199	180
Tl	0	0	0	0	0	0	3	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1837	DJR-1838	DJR-1839	DJR-1840	DJR-1841	DJR-1842	DJR-1844	DJR-1845	DJR-1846	DJR-1848
East	33707	33684	33650	33619	33593	33569	33530	33599	33865	33036
North	60633	60630	60631	60630	60630	60600	60678	60625	60614	59759
SiO2	58.65	57.45	59.20	60.36	58.69	60.41	62.01	57.92	60.56	58.41
Al2O3	19.17	19.40	19.27	18.37	18.04	18.48	15.73	18.76	18.04	16.37
TiO2	1.10	1.10	1.13	1.09	1.08	1.11	0.93	1.08	1.09	0.89
Fe2O3	10.09	9.33	8.53	8.34	8.90	8.61	6.37	9.27	8.31	6.64
MgO	5.88	4.64	5.75	6.03	6.67	5.93	4.41	5.95	5.63	4.58
CaO	0.16	0.06	0.17	0.17	1.00	0.28	4.44	1.60	0.91	6.40
Na2O	0.86	0.84	1.24	1.16	1.15	1.16	1.67	0.91	1.32	1.21
K2O	4.03	4.26	3.52	3.16	3.31	3.35	2.46	3.74	3.30	3.06
MnO	0.08	0.06	0.09	0.08	0.07	0.08	0.12	0.08	0.07	0.10
P2O5	0.20	0.16	0.22	0.22	0.19	0.21	0.20	0.19	0.20	0.17
Total	100.22	97.30	99.12	98.98	99.10	99.62	98.34	99.50	99.43	97.83
As	5	6	3	3	2	3	0	7	4	0
Ba	366	391	312	332	371	373	273	384	383	353
Cl	0	0	0	7	0	0	0	0	0	0
Co	33	30	34	29	29	30	30	28	20	31
Cr	171	157	167	157	158	160	147	170	156	141
Cu	29	45	39	39	41	52	25	40	37	36
Ga	22	21	21	18	19	19	14	21	21	17
La	41	37	38	42	45	31	36	44	43	41
Ni	120	97	104	100	109	100	.69	112	98	76
Nb	19	17	18	16	16	18	14	18	17	15
Pb	15	12	13	13	13	12	11	52	11	13
Rb	154	157	129	113	125	126	80	136	125	104
Sr	29	39	41	33	47	35	93	49	53	96
Sb	0	0	0	0	0	0	0	0	0	0
S	0	23	39	4	31	13	0	18	5	8
Th	12	6	16	14	13	13	11	10	5	11
V	152	144	141	137	145	147	115	158	136	121
Y	33	28	34	35	30	36	37	34	39	38
Zn	112	100	108	100	124	110	67	111	99	82
Zr	181	208	213	192	166	184	227	173	206	196
Tl	0	0	0	2	0	0	0	2	0	0

TABLE 4.126

VAR. / ID.	DJR-1850	DJR-1851	DJR-1857	DJR-1858	DJR-1860	DJR-1861	DJR-1862	DJR-1864	DJR-1868	DJR-1869
East	33940	33924	33828	33820	33810	33133	33149	33205	33196	33177
North	60622	60641	60798	60850	60870	59739	59738	59726	59778	59778
SiO2	66.01	60.22	57.85	63.03	58.25	61.17	57.39	59.59	55.97	59.03
Al2O3	17.12	14.14	18.78	16.92	19.94	18.38	18.30	20.55	20.28	19.24
TiO2	0.98	0.91	1.09	1.01	1.11	1.06	1.13	1.18	1.18	1.11
Fe2O3	6.38	5.92	8.94	9.78	9.39	8.38	9.01	8.26	10.12	8.87
MgO	3.80	3.72	6.07	5.22	5.85	5.62	5.23	4.61	6.39	5.61
CaO	0.16	4.79	0.44	0.19	0.23	0.30	0.17	0.13	0.12	0.57
Na2O	1.76	1.51	0.71	0.84	0.79	1.34	1.01	1.13	0.84	1.17
K2O	2.64	2.17	3.96	2.88	4.38	3.08	3.55	3.82	4.46	3.71
MnO	0.09	0.09	0.07	0.06	0.08	0.09	0.11	0.05	0.05	0.08
P2O5	0.21	0.19	0.18	0.15	0.18	0.20	0.19	0.22	0.17	0.18
Total	99.15	93.66	98.09	100.08	100.20	99.62	96.09	99.59	99.58	99.57
As	6	1	4	0	3	6	7	22	7	5
Ba	279	257	341	360	417	351	423	400	393	427
Cl	0	19	0	73	0	0	0	0	0	0
Co	33	24	29	24	32	29	31	31	33	29
Cr	135	180	164	138	177	150	162	168	180	167
Cu	28	17	48	20	53	43	46	14	39	47
Ga	16	13	22	20	25	19	21	21	24	21
La	38	38	33	37	45	39	40	50	47	45
Ni	78	59	116	81	119	95	107	107	128	104
Nb	15	13	18	15	19	18	18	18	17	18
Pb	8	14	12	27	12	9	10	10	23	7
Rb	90	67	149	111	174	117	135	136	172	142
Sr	41	82	33	27	34	41	39	49	26	42
Sb	2	0	0	0	0	0	0	0	3	0
S	36	0	6	7	6	21	0	33	24	10
Th	17	8	13	9	21	12	14	17	9	18
V	102	107	160	141	168	138	150	160	174	149
Y	29	40	34	21	33	35	38	39	30	39
Zn	74	56	117	92	119	99	110	103	125	104
Zr	226	250	174	160	176	190	187	214	172	183
Tl	0	0	2	0	0	0	0	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1870	DJR-1871	DJR-1872	DJR-1873	DJR-1874	DJR-1875	DJR-1877	DJR-1878	DJR-1879	DJR-1880
East	33161	33097	33070	33140	33242	33260	32870	32904	32910	32992
North	59782	59797	59795	59829	59935	59950	60147	60143	60142	60149
SiO2	58.01	58.23	58.84	61.47	58.35	59.83	50.64	61.34	57.47	57.20
Al2O3	19.43	19.09	20.75	19.95	19.74	19.19	17.10	18.50	19.17	19.29
TiO2	1.15	1.13	1.15	1.00	1.09	1.09	1.12	1.05	1.08	1.14
Fe2O3	9.97	9.81	9.78	8.63	10.19	9.21	9.52	8.37	8.21	10.25
MgO	5.97	5.93	4.27	4.18	5.38	5.31	5.54	6.00	5.49	6.72
CaO	0.10	0.41	0.06	0.09	0.11	0.13	0.15	0.16	2.17	0.13
Na2O	1.00	1.01	0.61	1.00	0.39	1.06	0.64	1.32	1.05	0.74
K2O	3.86	3.83	4.35	4.74	4.62	3.70	4.22	3.22	3.79	3.89
MnO	0.08	0.08	0.07	0.03	0.39	0.08	0.05	0.07	0.07	0.06
P2O5	0.18	0.18	0.18	0.13	0.17	0.20	0.15	0.20	0.22	0.19
Total	99.75	99.70	100.06	101.22	100.43	99.80	89.13	100.23	98.72	99.61
As	2	7	11	15	10	10	4	3	2	13
Ba	412	450	395	366	363	373	367	330	351	360
Cl	7	0	8	0	0	0	0	8	0	0
Co	36	31	34	22	31	32	33	40	27	35
Cr	166	175	188	119	157	164	159	148	150	167
Cu	60	52	70	39	43	48	49	31	31	58
Ga	23	22	24	20	21	20	24	20	21	22
La	49	53	53	48	42	39	38	38	47	41
Ni	124	112	130	63	102	102	114	91	100	120
Nb	18	18	20	17	17	18	17	17	17	17
Pb	10	7	7	21	20	10	9	6	14	22
Rb	150	147	172	181	176	135	173	124	132	149
Sr	34	38	45	42	31	35	26	28	52	27
Sb	2	0	0	0	2	0	0	0	0	1
S	21	20	48	0	9	41	0	12	84	43
Th	15	16	18	15	17	16	20	11	13	14
V	163	167	164	121	155	141	172	140	152	163
Y	37	50	33	33	33	33	36	31	34	32
Zn	116	119	126	77	114	102	116	99	96	120
Zr	176	170	178	238	194	197	180	185	200	170
Tl	3	0	0	2	2	1	0	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1881	DJR-1883	DJR-1884	DJR-1885	DJR-1886	DJR-1888	DJR-1889	DJR-1890	DJR-1891	DJR-1892
East	33110	32960	32920	32858	32936	33060	33036	33068	33085	33218
North	60064	60200	60197	60207	60270	60312	60410	60448	60292	60243
SiO2	59.68	57.90	59.58	64.66	59.41	58.13	58.23	60.29	56.66	58.23
Al2O3	17.20	17.33	15.21	15.81	18.11	19.78	18.17	18.14	18.82	19.77
TiO2	0.97	0.98	0.85	0.89	1.01	1.15	1.12	1.04	1.07	1.12
Fe2O3	7.50	8.04	6.32	6.71	8.47	9.67	9.35	8.15	9.06	8.70
MgO	5.23	5.74	4.23	3.79	5.44	5.05	5.44	5.83	6.08	6.04
CaO	3.58	4.11	6.92	1.25	2.17	0.21	0.12	1.15	2.45	0.14
Na2O	1.14	1.08	1.60	1.71	1.15	0.12	1.06	1.23	0.83	1.03
K2O	3.32	3.43	2.59	2.47	3.41	3.97	3.54	3.37	3.98	3.79
MnO	0.10	0.09	0.08	0.11	0.12	0.10	0.08	0.08	0.07	0.08
P2O5	0.19	0.19	0.19	0.18	0.19	0.15	0.18	0.20	0.18	0.20
Total	98.91	98.89	97.57	97.58	99.48	98.33	97.29	99.48	99.20	99.10
As	5	5	0	3	2	4	9	;	3	2
Ba	343	382	291	342	391	526	400	371	440	365
Cl	0	0	36	0	0	0	0	0	0	0
Co	29	22	26	27	32	35	32	30	29	33
Cr	142	142	137	125	145	157	141	143	173	164
Cu	49	50	13	32	39	67	15	39	45	21
Ga	18	36	15	15	20	24	20	20	22	22
La	40	34	32	30	50	41	33	50	39	43
Ni	90	97	73	70	95	123	100	94	118	109
Nb	16	17	15	13	16	17	18	16	17	17
Pb	9	71	13	9	11	10	28	11	10	14
Rb	115	129	85	89	128	150	135	126	149	141
Sr	66	72	76	51	56	28	29	47	51	36
Sb	0	0	0	0	0	0	0	0	0	0
S	18	26	0	0	74	13	0	11	26	13
Th	12	14	18	8	11	16	13	7	7	14
V	128	142	114	109	141	158	148	144	158	150
Y	34	39	32	33	47	41	33	57	56	45
Zn	87	100	70	69	102	129	135	101	119	107
Zr	185	175	190	174	164	182	171	179	166	194
Tl	0	0	0	0	0	3	0	0	0	0

TABLE 4.126

VAR. / ID.	DJR-1893	DJR-1894	DJR-1895	DJR-1896	DJR-1898	DJR-1899	DJR-1900	DJR-1901	DJR-1903	DJR-1908
East	33272	33272	33080	33047	33014	33875	33843	33817	33830	34198
North	60131	60070	59980	59947	59785	59752	59780	59829	59881	59945
SiO2	57.50	60.44	56.27	62.80	57.14	52.52	55.64	57.65	55.66	57.87
Al2O3	18.31	19.06	17.90	17.23	18.78	17.12	14.50	16.00	17.74	18.38
TiO2	1.10	1.07	0.96	1.08	1.11	1.08	0.80	0.86	1.03	1.04
Fe2O3	8.99	8.70	7.69	7.59	9.69	9.35	5.33	6.47	8.16	8.43
MgO	5.72	5.46	5.38	3.81	5.59	5.19	5.01	4.69	4.91	5.96
CaO	0.10	0.21	4.98	0.82	0.11	1.14	8.91	6.55	3.34	1.75
Na2O	0.63	1.11	0.95	1.59	0.90	1.16	1.38	1.41	1.06	1.20
K2O	3.58	3.69	3.88	2.66	3.85	3.56	2.95	3.00	3.65	3.26
MnO	0.08	0.10	0.09	0.11	0.08	0.07	0.19	0.12	0.07	0.07
P2O5	0.18	0.20	0.17	0.23	0.17	0.16	0.16	0.19	0.19	0.17
Total	96.19	100.04	98.27	97.92	97.42	91.35	94.87	96.94	95.81	98.13
As	0	2	2	3	7	6	4	0	18	42
Ba	372	379	369	328	405	423	325	391	413	555
Cl	0	0	0	0	0	0	74	0	24	0
Co	36	31	26	41	32	28	22	24	31	31
Cr	165	156	150	173	165	161	127	128	151	147
Cu	49	69	39	23	74	36	28	25	54	50
Ga	20	20	20	17	22	22	13	16	19	19
La	37	37	39	43	50	36	30	41	42	35
Ni	108	109	97	76	115	102	53	69	96	88
Nb	19	17	16	17	18	18	13	16	17	18
Pb	34	13	11	16	8	7	9	14	10	24
Rb	139	139	137	93	148	135	86	106	133	119
Sr	20	36	85	55	33	51	76	103	62	75
Sb	0	0	0	1	0	0	19	2	16	4
S	15	40	22	7	0	0	28	11	6	5
Th	8	13	4	17	13	15	10	11	13	6
V	148	143	148	125	157	160	111	121	149	135
Y	41	36	35	41	32	36	31	31	34	51
Zn	133	109	100	80	117	104	56	22	108	108
Zr	183	182	159	258	187	184	166	162	178	174
Tl	0	2	2	0	0	0	0	2	3	0

TABLE 4.126

VAR. / ID.	DJR-1909	DJR-1910	DJR-1911	DJR-1912	DJR-1913	DJR-1914	DJR-1916	DJR-1917	DJR-1918	DJR-1919
East	34210	34205	34103	34072	33748	33818	33749	33756	33460	33490
North	59995	60012	60110	60183	60067	60151	60158	60194	59916	59953
SiO2	57.49	59.28	60.54	55.49	54.94	58.02	57.70	57.54	61.19	53.83
Al2O3	18.93	20.12	19.54	16.15	17.19	19.52	18.85	17.99	17.61	19.14
TiO2	0.98	1.09	1.07	0.86	0.94	1.16	1.06	1.01	1.07	1.17
Fe2O3	7.79	9.36	8.16	6.77	8.09	8.44	9.15	8.53	8.08	10.20
MgO	4.94	5.68	4.87	4.71	5.73	6.37	6.39	5.83	5.83	5.47
CaO	4.05	0.10	0.30	7.14	5.01	0.84	1.38	3.39	0.38	0.09
Na2O	0.34	0.13	0.45	1.29	1.03	1.08	1.01	1.19	1.61	0.51
K2O	4.01	4.20	3.52	3.08	3.38	3.85	3.55	3.36	2.68	4.18
MnO	0.07	0.10	0.09	0.18	0.12	0.06	0.09	0.09	0.09	0.06
P2O5	0.17	0.16	0.20	0.17	0.17	0.21	0.19	0.19	0.20	0.18
Total	98.77	100.22	98.74	95.84	96.60	99.55	99.37	99.12	98.74	94.83
As	7	21	1	2	9	6	13	14	5	4
Ba	485	464	374	365	381	412	405	395	366	590
Cl	0	0	0	9	0	0	0	0	14	0
Co	25	33	31	24	76	24	35	34	27	30
Cr	150	162	142	132	150	166	155	149	142	168
Cu	40	52	20	40	49	33	56	55	30	75
Ga	22	22	20	14	20	22	22	21	20	23
La	29	40	41	41	32	45	43	46	31	40
Ni	90	108	89	75	90	92	102	94	67	119
Nb	17	18	16	17	17	19	17	17	18	19
Pb	10	27	14	13	32	14	59	34	12	15
Rb	134	157	122	107	123	145	139	127	99	166
Sr	68	31	35	104	91	51	52	78	44	33
Sb	0	2	0	0	0	0	5	0	0	0
S	28	25	11	0	9	6	30	19	0	5
Th	9	12	11	11	13	19	14	10	10	16
V	145	155	135	120	142	152	155	147	129	170
Y	30	32	36	33	34	36	32	44	39	42
Zn	91	108	83	90	104	106	116	122	101	124
Zr	168	173	207	161	162	208	173	174	201	177
Il	1	0	3	0	0	0	0	0	0	2

TABLE 4.126

VAR. / ID.	DJR-1920	DJR-1921	DJR-1922	DJR-1923	DJR-1925	DJR-1926	DJR-1927	DJR-1928	DJR-1929	DJR-1930
East	33430	33416	33452	33433	33346	33302	33360	33359	33368	33435
North	60258	60286	60246	60222	60263	60277	60200	60178	60127	60114
SiO2	58.56	58.85	58.40	57.69	56.72	59.31	58.22	60.13	60.47	53.94
Al2O3	19.14	20.93	19.27	18.93	18.82	19.59	19.14	18.00	17.18	17.76
TiO2	1.12	1.14	1.11	1.11	1.12	1.08	1.10	1.05	1.09	1.11
Fe2O3	8.99	9.27	8.78	9.56	9.25	8.77	9.41	8.03	7.92	9.34
MgO	6.02	5.24	4.70	5.73	5.95	5.36	4.75	5.55	5.12	5.53
CaO	0.17	0.00	0.08	0.21	0.37	0.33	0.10	0.99	0.19	0.65
Na2O	0.85	0.29	0.94	0.89	0.90	0.87	0.86	1.23	1.38	0.79
K2O	3.78	3.86	3.43	3.86	3.97	4.18	3.91	3.04	2.71	3.97
MnO	0.06	0.09	0.06	0.08	0.10	0.09	0.08	0.14	0.15	0.08
P2O5	0.19	0.10	0.18	0.17	0.18	0.18	0.17	0.20	0.21	0.17
Total	98.88	99.77	96.95	98.23	97.38	99.76	97.74	98.30	96.42	93.34
As	8	4	4	6	7	7	0	4	9	8
Ba	350	404	329	401	419	399	398	347	345	451
Cl	0	0	7	0	0	0	0	6	0	0
Co	33	38	37	29	31	33	36	31	40	33
Cr	167	171	156	159	167	162	157	152	153	169
Cu	48	21	31	49	49	74	38	34	48	12
Ga	20	22	20	22	22	20	20	18	18	23
La	41	42	33	41	35	39	36	41	43	41
Ni	102	112	99	106	115	95	104	93	86	116
Nb	18	18	16	18	18	18	18	17	17	17
Pb	10	18	13	13	11	14	14	15	45	11
Rb	141	137	122	148	152	158	144	106	103	156
Sr	34	30	47	37	34	43	37	52	45	44
Sb	0	0	0	0	0	4	0	0	0	3
S	33	14	75	9	0	22	9	25	41	0
Th	12	11	16	15	13	14	12	17	14	14
V	150	147	141	152	155	143	146	129	131	168
Y	33	39	29	33	39	33	31	57	32	37
Zn	119	130	111	109	114	102	111	97	90	123
Zr	182	182	199	182	172	206	186	195	207	172
Tl	0	0	0	0	4	0	0	2	0	0

TABLE 4.126

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VAR. / ID.	DJR-1931	DJR-1933	DJR-1934	DJR-1936	DJR-1937	DJR-1938	DJR-1939	DJR-1940	DJR-1941	DJR-1942
East	33469	33502	33498	33490	33538	33530	33504	33565	33595	33564
North	60164	60242	60247	60266	60169	60208	60205	60030	60050	60052
SiO2	56.80	59.66	59.43	57.69	58.17	59.50	56.69	58.67	60.92	55.46
Al2O3	18.68	18.75	16.78	20.64	17.81	19.20	19.63	19.85	19.31	19.98
TiO2	1.13	0.93	0.94	1.17	1.02	1.11	1.18	1.12	1.07	1.14
Fe2O3	9.43	6.74	7.39	8.14	7.75	9.26	9.05	8.73	7.97	10.18
MgO	5.82	3.76	4.49	3.49	5.27	5.75	5.67	5.60	4.95	5.93
CaO	0.31	4.63	3.45	0.37	3.03	0.16	0.58	0.15	0.11	0.11
Na2O	0.83	0.96	1.18	0.90	1.08	1.07	0.93	0.99	1.07	0.75
K2O	3.86	3.96	3.46	4.55	3.38	3.71	4.01	3.77	3.42	4.14
MnO	0.10	0.08	0.08	0.10	0.08	0.08	0.06	0.06	0.07	0.09
P2O5	0.18	0.16	0.17	0.19	0.19	0.19	0.19	0.21	0.20	0.19
Total	97.14	99.63	97.37	97.24	97.78	100.03	97.99	99.15	99.09	97.97
As	4	4	5	3	5	8	4	3	4	16
Ba	459	446	334	481	343	388	381	415	358	428
Cl	0	11	27	0	9	0	24	0	0	0
Co	37	23	31	27	28	29	32	32	45	38
Cr	164	128	134	172	148	152	171	158	157	182
Cu	56	29	29	41	20	39	25	37	49	79
Ga	22	18	18	23	19	21	23	21	19	24
La	45	36	35	46	35	41	44	40	33	38
Ni	104	76	72	111	87	102	106	94	102	122
Nb	23	16	16	19	18	19	20	17	18	17
Pb	11	13	13	13	11	59	12	14	15	9
Rb	148	134	121	171	119	141	151	141	123	161
Sr	35	103	88	67	63	36	44	42	42	36
Sb	0	8	4	0	4	3	0	0	3	12
S	0	59	12	8	13	37	95	36	62	27
Th	9	12	6	17	15	17	17	15	15	17
V	152	121	121	161	131	139	154	136	137	161
Y	45	31	29	37	29	30	31	32	28	33
Zn	109	78	85	102	95	111	113	109	99	125
Zr	171	187	184	199	185	184	198	191	195	180
Tl	0	0	6	0	0	0	7	4	3	2

TABLE 4.126

VAR. / ID.	DJR-1943	DJR-1947	DJR-1948	DJR-1949	DJR-1950	DJR-1951	DJR-1952
East	33830	33545	33552	33582	33606	33635	33655
North	59463	59568	59554	59523	59510	59510	59507
SiO2	56.40	55.32	57.03	56.34	59.41	57.54	58.01
Al2O3	17.42	17.96	17.77	17.05	19.89	17.74	18.21
TiO2	0.91	1.00	1.07	0.96	0.87	1.00	1.05
Fe2O3	7.80	7.94	8.11	7.69	6.67	8.17	8.30
MgO	5.99	5.19	5.78	5.34	2.21	5.60	5.91
CaO	5.41	3.55	2.31	4.52	5.76	3.25	1.70
Na2O	0.33	1.26	1.38	1.27	0.64	1.31	1.37
K2O	3.82	3.68	3.20	3.19	3.77	3.39	3.49
MnO	0.06	0.07	0.06	0.07	0.09	0.07	0.06
P2O5	0.16	0.16	0.18	0.17	0.16	0.18	0.18
Total	98.30	96.13	96.89	96.60	99.47	98.25	98.28
As	20	19	4	6	9	16	18
Ba	496	522	420	433	406	442	763
Cl	0	9	10	0	19	0	0
Co	22	24	20	22	27	32	25
Cr	143	146	148	140	136	149	151
Cu	21	43	41	44	18	47	43
Ga	20	19	20	19	18	20	21
La	36	38	32	35	43	34	39
Ni	87	90	77	82	68	95	94
Nb	16	16	17	17	15	16	17
Pb	47	21	19	23	17	24	25
Rb	133	133	111	90	115	122	129
Sr	90	98	70	96	162	86	77
Sb	5	0	5	2	2	0	0
S	92	71	19	87	168	11	512
Th	14	11	8	11	10	10	12
V	139	148	134	126	130	144	143
Y	33	33	32	34	30	32	31
Zn	198	110	89	93	59	119	100
Zr	164	173	190	163	155	170	185
Tl	1	0	0	0	4	0	0

TABLE 4.126

XRF Analyses: BGS Pan Concentrates - Glendinning Extension (PAN1)

TABLE 4.127

ID. / VAR.	East	North	Sb	Sn	Pb	Zn	Cu	Ni
2415	32436	58613	42	26	774	70	97	36
2429	32452	58704	23	0	52	56	56	39
2427	32509	58667	14	0	18	53	37	32
2430	32471	58738	12	0	8	77	32	27
2531	32530	58789	16	0	18	70	135	44
2532	32554	58789	11	0	15	75	160	30
2533	32559	58799	13	1	21	222	17	43
2536	32569	58909	13	7	38	142	9	36
5071	32511	58470	13	3	13	82	25	49
5072	32518	58479	16	2	13	76	26	35
2413	32582	58544	11	3	19	61	81	37
2412	32613	58590	31	16	39	105	94	54
2426	32630	58659	13	0	22	70	14	30
2425	32641	58658	12	9	12	77	31	32
2388	32787	58906	26	5	33	76	58	45
2387	32789	58857	11	0	16	127	30	51
2402	32896	58848	28	1	38	136	64	42
2396	32895	58847	17	25	50	107	60	43
2403	32939	58878	30	3	50	103	39	43
2405	32943	58892	19	5	11	72	28	41
2408	33007	58869	29	9	39	105	26	49
2406	32955	58793	34	5	54	124	11	63
2407	32962	58790	18	7	123	145	330	73
2887	33317	58750	11	12	28	70	52	48
5036	32934	59103	27	37	58	90	18	57
5145	33309	58989	13	8	32	123	73	62
5144	33320	58973	11	9	32	154	32	75
4878	33428	59336	11	0	51	240	26	42
4879	33465	59315	18	0	40	110	30	44
4792	33462	59439	11	0	104	213	95	66
4794	33509	59414	14	0	33	265	73	91
5042	33672	59496	42	4	561	176	277	75
5046	33534	59583	43	6	59	157	54	65
5044	33579	59538	17	3	43	176	21	66
5047	33562	59538	16	8	28	164	42	59
5.48	33612	59513	36	6	153	158	103	70
4950	33642	59689	12	1	147	306	320	48
4951	33692	59685	16	4	353	1137	195	61
4952	33699	59678	13	6	27	147	39	52
5137	33684	59593	14	0	26	142	94	60
4895	34242	59882	15	0	101	496	60	30
4966	34178	59601	13	0	80	70	27	93
5151	34118	59519	13	3	48	74	0	83
4718	35036	60388	17	28	53	79	17	41
4808	34983	60359	13	1	29	140	10	36
4805	34937	60231	35	4	65	138	8	39
4398	34925	60177	24	0	39	111	2	45
4477	36205	60213	32	0	21	96	0	56
4555	35258	60311	19	19	53	174	0	43
4034	35015	5991	14	0	45	99	2	31
4125	35130	60042	15	0	31	82	0	31
4127	35083	59919	13	7	28	54	0	22

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 1

VAR. / ID.	DJR1	DJR3	DJR4	DJR11	DJR13	DJR18	DJR33	DJR53	DJR54	DJR58
La	25.70	29.19	29.37	26.40	23.98	23.26	21.10	22.35	20.16	21.49
Ce	50.19	56.62	55.81	53.70	48.97	46.65	41.49	42.48	40.89	42.79
Pr	6.69	7.30	7.28	6.40	5.92	5.92	5.27	5.36	5.49	5.29
Nd	26.37	29.12	28.01	25.26	23.10	21.78	20.86	20.99	20.73	21.32
Sm	5.03	5.78	5.57	4.94	4.55	4.30	4.24	4.18	4.24	4.31
Eu	1.15	1.21	1.24	1.06	1.01	0.98	0.99	0.86	0.95	0.93
Gd	4.59	5.27	5.24	4.27	3.96	3.82	4.17	3.66	4.00	3.88
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	4.02	4.81	4.62	3.81	3.72	3.38	3.71	3.38	3.71	3.62
Ho	0.81	0.94	0.92	0.79	0.73	0.66	0.73	0.64	0.73	0.70
Er	2.26	2.60	2.63	2.06	2.04	1.92	2.03	1.87	2.07	1.95
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.16	2.48	2.44	2.05	1.98	1.90	1.95	1.92	1.95	1.90
Lu	0.35	0.37	0.37	0.32	0.31	0.29	0.31	0.30	0.29	0.29

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 2

VAR. / ID.	CXD1005	CXD1006	CXD1030	CXD1031	CXD1050	CXD1051	CXD1052	CXD1053	CXD1077	CXD1078
La	32.76	27.05	29.55	24.26	29.29	16.89	33.10	27.91	26.65	26.08
Ce	78.60	53.46	68.99	46.63	58.08	43.18	78.90	54.91	49.43	51.57
Pr	7.25	6.74	6.07	6.06	7.45	4.14	6.55	6.75	6.62	6.57
Nd	27.66	26.74	22.10	22.42	29.31	17.14	25.07	26.89	25.99	25.60
Sm	5.76	5.26	4.68	4.44	5.24	3.66	5.19	5.32	4.94	4.91
Eu	1.26	1.12	1.18	2.61	1.12	0.80	1.26	1.16	1.10	1.07
Gd	5.00	4.69	5.33	4.25	4.52	2.90	5.61	4.86	4.38	4.50
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	4.38	4.40	3.71	3.92	4.00	2.40	3.79	4.36	3.96	4.01
Ho	0.83	0.83	0.73	0.75	0.80	0.49	0.79	0.89	0.79	0.81
Er	2.33	2.39	2.11	1.86	2.37	1.39	2.18	2.41	2.28	2.30
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.37	2.31	2.12	2.17	2.34	1.60	2.32	2.32	2.21	2.24
Lu	0.39	0.35	0.36	0.32	0.35	0.27	0.38	0.37	0.34	0.34

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 3

VAR. / ID.	CXD1159	CXD1160	CXD1165	CXD1166	CXD1168	AK4	AK13	AK17	AK20	AK25
La	20.22	20.60	43.47	36.42	29.97	17.90	22.97	31.81	40.39	26.70
Ce	41.46	40.83	98.37	87.88	56.15	39.71	50.39	64.83	74.91	52.44
Pr	5.24	5.21	8.84	7.97	7.23	5.72	6.46	7.24	8.40	5.79
Nd	20.05	20.69	31.90	29.38	25.60	19.53	23.97	26.79	31.81	23.55
Sm	3.99	4.04	5.77	5.86	4.83	3.63	4.54	5.10	5.92	4.88
Eu	0.87	0.88	1.46	1.27	0.97	0.91	1.04	1.11	1.25	1.03
Gd	3.41	3.57	5.83	4.81	4.04	2.81	4.03	4.46	5.75	4.04
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.16	3.32	4.70	4.13	3.69	3.00	3.59	3.32	4.18	3.55
Ho	0.61	0.66	0.91	0.79	0.75	0.67	0.75	0.62	0.83	0.57
Er	1.75	1.85	2.67	2.29	2.30	1.28	2.02	1.78	2.34	1.98
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.81	1.79	2.54	2.48	2.29	1.93	2.07	1.75	2.12	2.15
Lu	0.27	0.28	0.42	0.42	0.34	0.28	0.31	0.29	0.39	0.26

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 4

VAR. / ID.	AK30	AK33	AK52	AK58	AK63	AK502	AK674	A20	A21	A45
La	23.87	26.29	29.49	16.14	34.25	25.34	37.38	23.87	18.37	12.37
Ce	56.67	51.71	67.00	33.60	81.56	51.94	67.39	50.57	42.89	30.62
Pr	6.71	6.52	6.86	4.31	7.55	6.10	8.10	5.96	3.79	2.70
Nd	26.98	26.37	25.23	17.35	29.22	23.64	32.38	18.87	18.27	14.10
Sm	5.73	4.78	4.74	3.65	6.06	4.64	5.85	4.56	4.30	3.53
Eu	1.29	1.14	1.03	0.82	1.44	1.21	1.55	1.56	1.37	1.16
Gd	5.24	4.42	4.49	3.31	5.38	3.97	4.69	8.07	4.59	4.14
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	5.15	3.79	3.52	3.31	5.29	3.64	4.00	4.63	4.57	4.23
Ho	0.98	0.74	0.70	0.65	1.03	0.74	0.86	0.91	0.92	0.86
Er	2.76	2.08	2.08	1.77	2.97	1.97	2.16	2.94	2.59	2.44
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.71	1.87	2.07	1.04	3.15	2.03	2.09	2.88	2.77	2.59
Lu	0.39	0.28	0.38	0.27	0.52	0.30	0.31	0.50	0.46	0.43

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 5

VAR. / ID.	S54	S56	S58	S64	S102	S103	S105	S110	S111	S116
La	24.29	31.30	30.59	33.25	21.65	20.23	28.07	30.79	37.77	24.90
Ce	48.82	66.00	57.95	70.95	52.05	46.75	60.98	47.47	77.26	53.46
Pr	5.65	6.33	7.39	7.27	5.05	4.94	5.87	4.53	5.94	4.87
Nd	22.09	22.63	28.76	23.31	20.19	17.26	23.70	18.10	18.52	17.07
Sm	4.05	4.24	5.55	4.38	3.75	3.39	4.77	3.61	3.42	3.58
Eu	1.05	1.10	1.21	1.08	1.11	0.79	1.46	0.98	0.94	1.13
Gd	3.66	4.62	4.69	6.03	3.48	3.24	4.12	3.09	3.12	4.96
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.20	2.84	4.46	3.11	2.72	2.87	3.35	2.62	2.82	2.83
Ho	0.64	0.57	0.85	0.59	0.54	0.57	0.63	0.49	0.55	0.65
Er	1.84	1.55	2.42	1.92	1.49	1.64	1.65	1.37	1.62	1.91
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.02	1.68	2.36	1.87	1.43	1.62	1.73	1.43	1.64	1.84
Lu	0.29	0.20	0.34	0.31	0.23	0.27	0.27	0.21	0.26	0.33

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 6

VAR. / ID.	E117	S118	S119	S121	S122	S124	S126	S127	S128	E136
La	20.43	23.44	22.48	27.24	22.36	14.38	28.04	21.72	26.39	20.48
Ce	44.01	48.48	48.58	40.77	48.00	31.59	62.13	49.75	55.48	44.65
Pr	3.84	4.21	4.30	5.96	4.05	4.26	5.95	4.47	4.60	3.22
Nd	17.03	16.96	18.88	26.90	17.98	16.24	22.31	18.38	19.16	16.54
Sm	3.52	3.51	3.92	4.17	3.70	3.25	4.39	4.01	3.98	3.42
Eu	1.05	1.14	1.12	1.11	1.11	0.90	1.24	1.12	1.22	1.13
Gd	3.13	3.56	3.46	2.98	3.17	2.96	3.78	3.52	3.30	3.31
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	2.83	2.69	3.08	3.07	2.87	2.63	3.22	3.13	3.09	2.81
Ho	0.58	0.60	0.62	0.73	0.61	0.65	0.61	0.62	0.66	0.63
Er	1.48	1.54	1.63	1.07	1.51	1.52	1.75	1.69	1.66	1.63
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.70	1.71	1.80	1.84	1.72	1.54	1.87	1.84	1.89	1.62
Lu	0.27	0.29	0.30	0.27	0.28	0.23	0.29	0.30	0.31	0.28

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 7

VAR. / ID.	E138	E139	E140	A222	A232	A233	A234	N237	N241	N292
La	24.29	22.09	19.39	27.81	14.44	17.54	17.28	20.54	26.31	17.83
Ce	46.09	49.55	46.11	59.25	26.82	37.78	35.31	38.91	62.94	42.20
Pr	5.24	4.39	4.06	7.65	4.00	4.69	4.72	4.88	6.13	4.76
Nd	19.92	19.07	18.70	29.20	16.94	19.95	19.60	19.97	27.41	16.11
Sm	3.93	4.09	3.62	5.54	4.05	4.62	4.35	4.07	5.82	3.56
Eu	0.99	1.19	1.07	1.40	1.24	1.39	1.34	1.25	1.72	1.18
Gd	3.15	3.58	3.33	4.95	4.24	4.66	4.41	4.43	6.04	5.62
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.01	2.93	2.77	4.41	4.39	4.82	4.49	3.68	4.40	3.22
Ho	0.58	0.59	0.61	0.92	0.85	1.00	0.87	0.74	0.90	0.63
Er	1.66	1.66	1.57	2.41	2.37	2.61	2.44	2.13	2.35	1.94
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.82	1.67	1.56	2.24	2.38	2.63	2.41	1.80	2.13	1.89
Lu	0.27	0.27	0.27	0.32	0.35	0.38	0.35	0.29	0.38	0.31

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 8

VAR. / ID.	N294	A297	A299	S345	S348	S350	W379	W380	N400	N401
La	15.85	18.74	23.75	25.87	30.37	21.46	14.46	26.67	23.65	23.51
Ce	35.58	45.66	44.98	60.49	76.95	44.73	36.04	64.42	48.06	49.88
Pr	3.48	4.68	5.88	5.19	6.59	5.48	3.12	5.73	5.89	5.83
Nd	16.33	16.56	21.95	22.10	26.48	20.94	15.19	23.13	22.44	22.57
Sm	3.87	3.77	4.24	4.24	5.41	4.11	3.46	4.77	4.25	4.43
Eu	1.28	1.26	1.13	1.13	1.38	0.89	1.09	1.51	1.08	1.00
Gd	4.53	3.95	3.89	3.67	4.86	3.53	3.64	4.22	3.63	3.85
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.93	3.52	3.31	2.94	4.29	3.25	3.38	3.72	3.17	3.66
Ho	0.82	0.67	0.68	0.62	0.83	0.65	0.70	0.72	0.65	0.72
Er	2.18	1.92	2.07	1.61	2.29	1.84	1.84	1.99	1.67	2.01
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.06	2.15	1.89	1.55	2.27	1.93	1.81	2.00	1.74	2.04
Lu	0.35	0.37	0.27	0.24	0.36	0.29	0.28	0.33	0.26	0.30

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 9

VAR. / ID.	N413	N426	E452	N454	N456	N460	K462	A463	S466	N468
La	9.67	28.21	26.89	17.37	16.75	19.49	43.53	19.92	24.22	11.30
Ce	23.83	65.81	56.27	43.36	34.09	47.47	98.10	43.63	59.09	26.33
Pr	2.58	5.55	5.34	4.48	4.22	4.50	8.45	5.78	5.41	2.41
Nd	9.92	22.98	20.34	17.63	15.60	18.40	34.25	20.11	21.33	8.94
Sm	2.57	4.59	3.70	3.58	2.98	3.93	6.73	3.84	4.28	1.63
Eu	0.85	1.38	1.03	0.87	0.67	1.32	1.85	0.82	1.03	0.42
Gd	2.92	4.14	3.10	2.95	2.46	4.06	5.50	3.05	3.46	1.49
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	2.93	3.29	2.70	2.57	2.12	3.73	4.07	2.90	2.93	1.07
Ho	0.56	0.67	0.54	0.48	0.42	0.79	0.80	0.60	0.57	0.21
Er	1.57	1.73	1.50	1.38	1.12	2.26	2.12	1.31	1.65	0.58
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.67	1.79	1.54	1.39	1.22	2.39	2.02	1.70	1.74	0.53
Lu	0.26	0.29	0.27	0.23	0.18	0.39	0.34	0.24	0.28	0.10

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 10

VAR. / ID.	C471	C472	N485	S492	S494	S772	AX1	AX36	AX38	AX44
La	26.94	29.40	8.37	20.45	28.46	19.98	30.24	24.78	28.19	27.99
Ce	55.94	59.96	20.48	50.14	66.99	45.62	73.28	57.83	70.30	70.42
Pr	5.35	6.03	1.93	4.67	6.34	3.90	6.51	5.36	6.53	6.26
Nd	20.90	25.45	8.99	17.74	23.56	17.25	25.31	21.63	25.15	26.01
Sm	4.19	4.78	2.19	3.48	4.29	3.46	4.92	4.26	5.11	5.34
Eu	1.23	1.27	0.62	0.79	1.08	0.98	1.21	1.04	1.36	1.35
Gd	5.23	3.80	2.32	2.67	3.82	3.22	4.60	3.66	4.33	4.58
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	2.96	3.32	2.64	2.28	3.17	2.59	3.69	3.20	3.76	3.82
Ho	0.60	0.65	0.54	0.43	0.61	0.54	0.76	0.63	0.73	0.75
Er	1.64	1.81	1.52	1.21	1.75	1.41	2.06	1.78	2.10	2.01
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.56	1.87	1.71	1.32	1.73	1.41	2.24	1.84	2.34	1.96
Lu	0.25	0.29	0.28	0.21	0.28	0.23	0.40	0.30	0.40	0.33

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 11

VAR. / ID.	AX46	AX48	AX54	AX94	AX96	AX97	AX107	AX108	AX109	AX110
La	23.02	38.62	36.62	23.39	19.87	30.00	22.94	22.72	19.34	16.37
Ce	57.23	84.28	87.66	51.29	45.01	76.60	52.34	55.06	43.32	36.37
Pr	5.58	7.86	6.51	6.57	5.97	6.04	6.76	5.22	5.70	4.85
Nd	21.22	29.06	31.39	24.85	23.05	28.00	24.77	19.78	21.76	18.57
Sm	4.07	5.28	6.26	4.44	4.40	5.55	4.72	3.93	3.95	3.60
Eu	1.11	1.38	1.71	1.08	1.07	1.63	1.00	0.89	0.87	0.96
Gd	3.92	5.05	5.46	3.68	3.79	4.96	3.83	3.34	3.53	3.21
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.24	3.86	4.56	3.41	3.41	3.93	3.60	2.86	3.16	2.86
Ho	0.64	0.79	1.01	0.76	0.78	0.85	0.71	0.55	0.64	0.61
Er	1.86	2.35	2.51	1.98	1.99	2.09	2.00	1.60	1.83	1.65
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.88	2.43	2.63	1.90	1.96	2.18	2.12	1.65	1.05	1.61
Lu	0.32	0.44	0.42	0.27	0.29	0.37	0.30	0.27	0.28	0.23

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 12

VAR. / ID.	AX111	AX112	AX117	AX119	AX124	AX131	AX132	AX133	AX134	AX135
La	15.55	12.02	13.70	17.49	17.06	26.16	23.69	33.90	20.43	27.65
Ce	35.92	26.99	31.65	44.04	39.10	62.84	47.68	79.80	47.37	60.32
Pr	5.14	3.74	4.71	3.68	5.16	8.49	6.28	7.55	6.06	7.54
Nd	19.27	14.59	17.56	15.26	19.38	33.34	25.00	28.28	23.17	28.40
Sm	3.96	3.13	3.61	3.17	3.88	6.27	4.61	5.45	4.43	5.27
Eu	1.21	0.98	1.03	1.12	1.03	1.55	1.14	1.22	1.04	1.23
Gd	3.54	3.08	3.42	3.98	3.22	4.95	4.05	4.49	3.88	4.55
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.13	2.89	3.13	2.69	2.99	3.94	3.59	3.67	3.58	3.96
Ho	0.75	0.62	0.75	0.62	0.73	0.85	0.67	0.69	0.73	0.79
Er	1.63	1.65	1.67	1.42	1.67	2.19	1.96	1.97	2.05	2.26
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.71	1.66	1.79	1.68	1.66	1.99	1.79	1.93	1.98	2.14
Lu	0.24	0.25	0.26	0.28	0.24	0.29	0.27	0.31	0.29	0.32

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 13

VAR. / ID.	AX136	AX137	AX140	AX141	AX149	AX151	AX156	AX157	AX158	AX159
La	33.83	25.67	31.51	26.27	26.91	13.26	17.79	13.10	16.62	14.18
Ce	74.28	53.13	75.05	59.38	60.19	31.48	40.07	30.25	36.42	32.61
Pr	9.37	6.79	6.69	7.75	7.36	4.21	5.56	4.38	4.85	4.59
Nd	36.10	26.94	26.16	28.67	27.93	16.54	20.04	16.75	17.74	17.77
Sm	6.48	4.88	5.09	5.50	5.16	3.28	4.04	3.48	3.54	3.79
Eu	1.60	1.14	1.33	1.33	1.21	0.88	1.13	0.99	0.91	1.04
Gd	5.40	4.23	4.29	4.81	4.74	3.08	3.69	3.26	3.27	3.44
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	4.24	3.66	3.58	4.32	4.01	2.89	3.58	2.85	2.93	3.08
Ho	0.88	0.72	0.69	0.86	0.77	0.61	0.92	0.71	0.74	0.63
Er	2.31	2.07	1.91	2.31	2.21	1.68	1.92	1.61	1.71	1.64
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.05	1.98	1.81	2.31	1.91	1.70	2.14	1.66	1.76	1.76
Lu	0.31	0.29	0.30	0.33	0.29	0.26	0.31	0.24	0.26	0.26

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 14

VAR. / ID.	AX164	AX170	AX171	AX172	AX177	AX181	AX182	AX190	AX191	AX194
La	21.80	34.98	36.33	28.45	21.05	18.05	24.27	23.85	18.33	22.12
Ce	46.63	85.65	85.94	63.50	45.07	43.29	61.02	58.61	40.60	49.54
Pr	6.04	7.42	7.92	8.32	5.95	3.84	5.80	4.37	5.53	6.59
Nd	22.83	29.83	29.47	32.04	21.49	17.09	21.53	21.93	21.43	23.90
Sm	4.43	5.85	5.27	5.86	4.00	3.81	4.38	4.46	4.17	4.68
Eu	1.03	1.28	1.20	1.39	0.98	1.08	1.24	1.35	1.13	1.35
Gd	4.03	5.03	4.68	4.89	3.47	3.55	4.16	3.92	3.65	4.06
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.47	4.20	3.75	4.07	3.14	3.08	3.12	3.03	3.14	3.85
Ho	0.73	0.83	0.73	0.88	0.72	0.61	0.60	0.67	0.73	0.92
Er	2.04	2.30	2.09	2.30	1.76	1.65	1.67	1.60	1.76	2.07
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.09	2.20	2.02	2.16	1.88	1.67	1.77	1.57	1.62	2.24
Lu	0.32	0.37	0.34	0.32	0.27	0.27	0.30	0.25	0.24	0.31

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 15

VAR. / ID.	AX195	AX196	AX197	AX198	AX199	AX200	AX202	AX204	AX210	AX211
La	16.80	21.32	22.31	21.21	17.37	21.73	32.75	22.35	15.27	19.72
Ce	38.73	47.53	50.26	46.79	39.67	46.42	73.76	44.12	34.29	39.40
Pr	5.36	6.41	6.54	6.08	5.36	5.97	9.45	6.02	4.64	5.30
Nd	21.40	24.45	24.75	23.53	21.55	23.32	34.71	23.42	18.31	20.58
Sm	4.37	4.57	4.71	4.49	4.14	4.28	6.42	4.49	3.51	3.94
Eu	1.16	1.21	1.15	1.12	1.08	1.19	1.30	1.08	1.06	1.06
Gd	3.87	3.95	4.10	3.75	3.72	3.82	5.27	4.04	3.17	3.69
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.37	3.41	3.67	3.24	3.27	3.34	4.72	3.57	2.06	3.25
Ho	0.75	0.86	0.88	0.68	0.65	0.66	0.93	0.72	0.56	0.70
Er	1.89	2.05	1.93	1.84	1.86	1.84	2.49	2.00	1.49	1.82
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.86	1.83	2.06	1.75	1.73	1.63	2.62	1.86	1.40	1.84
Lu	0.28	0.27	0.31	0.26	0.26	0.25	0.38	0.27	0.21	0.28

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 16

VAR. / ID.	AX213	AX214	AX215	AX216	AX217	AX221	AX222	AX223	AX224	AX226
La	13.98	21.31	19.86	19.69	24.17	18.55	19.75	21.22	22.22	21.97
Ce	30.82	47.68	43.41	45.01	53.47	42.37	44.09	45.71	44.58	45.97
Pr	4.25	6.06	5.66	5.95	7.19	5.79	5.76	5.75	5.76	5.94
Nd	16.38	23.26	22.27	22.77	26.57	22.31	21.47	21.78	24.63	24.11
Sm	3.37	4.63	4.59	4.55	5.05	4.45	4.09	4.05	4.65	4.66
Eu	0.96	1.30	1.23	1.18	1.35	1.21	0.88	0.91	1.25	1.16
Gd	3.05	4.06	4.33	3.85	4.52	3.91	3.53	3.66	4.19	4.06
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	2.74	3.83	4.29	3.49	4.17	3.51	3.02	3.30	3.77	3.56
Ho	0.67	0.84	0.87	0.74	1.04	0.85	0.62	0.67	0.91	0.70
Er	1.56	2.16	2.43	1.93	2.40	2.00	1.71	1.87	2.17	1.98
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.56	2.13	2.36	1.86	2.57	1.93	1.72	1.74	2.06	1.84
Lu	0.23	0.30	0.34	0.27	0.37	0.29	0.25	0.27	0.32	0.29

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 17

VAR. / ID.	AX229	AX235	AX236	AX238	AX271	AX272	AX274	AX275	AX276	AX277
La	20.32	21.01	17.50	26.67	24.65	14.28	19.10	14.47	17.81	12.79
Ce	44.83	45.56	37.60	55.01	45.33	30.84	44.69	32.99	39.91	28.10
Pr	5.77	5.78	5.03	7.29	5.68	5.22	6.32	4.45	5.14	3.91
Nd	22.16	21.48	19.00	27.06	22.68	18.00	22.53	17.41	19.57	15.39
Sm	4.37	4.12	3.64	5.08	4.41	3.62	4.28	3.60	3.78	3.25
Eu	0.96	0.99	0.87	1.24	1.08	0.87	1.12	0.95	0.90	0.85
Gd	3.77	3.49	3.17	4.37	4.04	2.82	3.54	3.16	3.32	3.12
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.42	3.15	3.82	3.66	3.62	2.91	3.37	2.79	3.08	2.89
Ho	0.69	0.71	0.58	0.77	0.72	0.62	0.72	0.61	0.66	0.67
Er	1.97	1.81	1.59	1.96	2.05	1.06	1.44	1.58	1.81	1.66
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.94	1.82	1.64	2.06	1.98	1.85	1.95	1.55	1.87	1.67
Lu	0.29	0.28	0.24	0.31	0.30	0.26	0.29	0.24	0.27	0.25

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 18

VAR. / ID.	AX278	AX279	AX280	AX281	AX282	AX283	AX285	AX286	AX287	AX288
La	16.07	18.28	26.42	21.12	26.08	25.36	29.37	19.31	27.33	28.12
Ce	36.51	41.99	43.09	51.02	58.44	56.83	58.00	41.39	38.06	60.34
Pr	5.09	5.78	6.81	6.20	7.42	7.31	7.65	5.47	4.93	7.45
Nd	18.33	21.93	27.87	23.38	28.27	26.69	29.37	22.69	19.42	28.02
Sm	3.62	4.30	5.12	4.42	5.41	4.86	5.31	4.31	3.71	5.22
Eu	1.01	1.25	1.08	0.94	1.14	1.00	1.21	1.12	0.90	1.26
Gd	3.23	3.71	4.49	3.70	4.58	3.85	4.80	3.86	3.50	4.45
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	2.90	3.07	3.77	3.38	4.25	3.20	4.20	3.41	3.10	3.92
Ho	0.71	0.78	0.73	0.69	0.85	0.65	0.82	0.74	0.62	0.81
Er	1.58	1.69	2.05	1.95	2.43	1.82	2.32	1.89	1.76	2.20
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.76	1.62	1.90	1.90	2.39	2.08	2.08	1.79	1.79	2.09
Lu	0.25	0.24	0.29	0.28	0.34	0.32	0.31	0.27	0.29	0.30

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 19

VAR. / ID.	AX289	AX290	AX292	AX293	AX294	AX296	AX298	AX604	AX657	AX659
La	12.31	15.14	21.43	22.70	16.43	29.88	15.56	25.89	23.54	26.54
Ce	29.55	30.10	42.51	48.81	37.39	57.44	34.46	58.16	43.91	62.86
Pr	4.22	4.06	5.72	6.36	4.89	7.53	4.51	5.47	4.75	6.11
Nd	16.46	17.04	23.92	24.85	19.12	29.56	16.29	20.58	20.76	21.56
Sm	3.75	3.87	4.86	4.70	3.96	5.47	3.09	3.73	3.36	4.37
Eu	1.14	1.20	1.41	1.29	1.04	1.29	0.75	1.04	1.06	1.26
Gd	3.85	4.15	4.70	4.08	3.67	4.97	2.55	3.63	3.77	5.36
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.91	4.07	4.47	3.51	5.60	4.23	2.26	2.72	3.00	3.16
Ho	0.87	0.90	0.93	0.78	0.78	0.83	0.47	0.55	0.53	0.61
Er	2.20	2.34	2.53	2.02	2.10	2.38	1.26	1.63	1.65	1.84
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.27	2.31	2.31	1.97	2.09	2.22	1.38	1.61	1.59	1.88
Lu	0.33	0.35	0.36	0.30	0.31	0.34	0.20	0.27	0.18	0.30

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 20

VAR. / ID.	AX781	AX782	AX783	AX784	AX785	AX789	AX790	AX791	AX796	AX797
La	27.10	30.13	15.64	24.43	28.56	23.45	27.22	22.30	22.52	26.21
Ce	62.50	60.45	31.92	49.97	63.02	47.05	64.50	45.41	48.78	61.36
Pr	5.94	6.61	3.66	5.87	6.28	5.04	6.58	5.77	5.74	5.62
Nd	24.28	28.43	17.30	23.59	22.14	22.38	25.70	21.87	24.27	21.91
Sm	4.76	5.73	3.63	4.56	4.16	4.64	4.72	4.30	4.84	4.36
Eu	1.23	1.34	0.89	1.11	1.32	1.20	1.36	1.12	1.33	1.15
Gd	4.09	4.86	3.16	3.87	5.33	4.04	4.49	3.86	4.17	3.99
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.36	4.15	2.71	3.52	2.87	3.58	3.47	3.34	3.71	3.16
Ho	0.67	0.74	0.49	0.77	0.60	0.67	0.67	0.67	0.89	0.65
Er	1.83	2.04	1.41	1.95	1.89	1.82	1.98	1.91	2.01	1.75
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.76	2.08	1.61	1.96	1.79	1.96	1.89	1.57	1.98	1.82
Lu	0.30	0.24	0.17	0.29	0.33	0.22	0.29	0.27	0.29	0.32

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 21

VAR. / ID.	AX834	AX840	AX841	AX842	AX847	AX849	AX851	AX97201	AX97202	AX97203
La	30.62	29.78	27.51	26.18	34.57	27.31	20.93	19.45	20.22	19.97
Ce	67.41	69.28	55.25	61.67	79.53	64.15	45.57	44.38	46.87	45.18
Pr	6.64	6.31	5.89	6.22	5.93	6.65	5.60	6.16	6.54	6.02
Nd	25.56	24.23	25.20	23.44	23.00	24.33	23.02	23.17	24.59	23.53
Sm	4.85	4.76	5.02	4.47	4.94	4.70	4.71	4.50	4.77	4.58
Eu	1.24	1.04	1.21	1.04	1.22	1.21	1.29	1.26	1.28	1.32
Gd	4.65	4.13	4.32	3.77	4.43	4.47	4.10	3.95	4.12	4.00
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.43	3.47	3.96	3.07	3.60	3.43	3.64	3.26	3.47	3.34
Ho	0.69	0.68	0.68	0.57	0.76	0.65	0.74	0.93	0.97	0.76
Er	1.97	1.93	2.09	1.65	1.98	1.91	1.95	1.84	1.96	1.88
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.87	2.02	2.23	1.60	2.22	1.86	1.93	1.73	1.88	1.81
Lu	0.34	0.35	0.27	0.26	0.43	0.32	0.28	0.26	0.28	0.26

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 22

VAR. / ID.	AX97204	AX97205	AX97206	AX97207	AX97208	AX97209	AX97210	AX97211	AX97212	AX97213
La	19.72	19.02	16.99	19.80	20.53	18.39	20.53	21.10	18.63	17.59
Ce	45.22	44.00	47.32	46.05	47.67	43.20	46.70	46.89	44.45	41.81
Pr	6.07	6.01	7.25	6.21	6.51	5.94	6.24	6.32	6.45	5.83
Nd	23.44	22.92	24.13	23.84	24.87	22.34	24.43	24.37	22.91	22.55
Sm	4.42	4.46	4.82	4.64	4.86	4.39	4.72	4.74	4.48	4.44
Eu	1.20	1.22	1.25	1.25	1.30	1.14	1.30	1.26	1.20	1.19
Gd	3.97	3.87	1.42	4.05	4.19	3.74	4.18	4.06	3.32	3.83
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.35	3.24	3.25	3.40	3.54	3.24	3.51	3.39	3.19	3.31
Ho	0.77	0.81	0.81	0.83	0.89	0.81	0.77	0.81	0.78	0.88
Er	1.86	1.81	0.05	1.92	1.98	1.76	1.99	1.87	1.30	1.85
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.78	1.73	1.92	1.86	1.92	1.82	1.90	1.82	1.89	1.76
Lu	0.26	0.26	0.27	0.28	0.28	0.27	0.29	0.27	0.26	0.26

TABLE 4.128

ICP Analyses: S.Uplands Regional Greywacke REE Study (REES) Part 23

VAR. / ID.	AX97214	AX97215	AX97216	AX97217	AX97218	AX97219	AX97220
La	19.27	18.19	18.29	20.65	17.96	21.30	20.34
Ce	45.58	42.86	42.06	46.32	46.75	47.22	46.17
Pr	6.43	6.12	5.53	6.04	7.20	6.22	6.11
Nd	24.24	22.22	21.89	23.38	23.56	24.61	23.75
Sm	4.72	4.41	4.20	4.61	4.61	4.86	4.66
Eu	1.27	1.21	1.14	1.25	1.23	1.32	1.28
Gd	4.16	3.42	3.76	3.92	2.05	4.15	4.02
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.56	3.18	3.18	3.40	3.17	3.53	3.32
Ho	0.95	0.71	0.65	0.75	0.88	0.84	0.79
Er	2.00	1.38	1.79	1.91	0.25	1.96	1.85
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.05	1.84	1.69	1.84	1.90	1.86	1.77
Lu	0.29	0.25	0.26	0.27	0.26	0.27	0.26

TABLE 4.128

ICP Analyses: Glendinning Greywacke REE Study (REEG)

VAR. / ID.	DJR1	DJR3	DJR4	DJR11	DJR13	DJR18	DJR33	DJR53	DJR54	DJR58
La	25.70	29.19	29.37	26.40	23.98	23.26	21.10	22.35	20.16	21.49
Ce	50.19	56.62	55.81	53.70	48.97	46.65	41.49	42.48	40.89	42.79
Pr	6.69	7.30	7.28	6.40	5.92	5.92	5.27	5.36	5.49	5.29
Nd	26.37	29.12	28.01	25.26	23.10	21.78	20.86	20.99	20.73	21.32
Sm	5.03	5.78	5.57	4.94	4.55	4.30	4.24	4.18	4.24	4.31
Eu	1.15	1.21	1.24	1.06	1.01	0.98	0.99	0.86	0.95	0.93
Gd	4.59	5.27	5.24	4.27	3.96	3.82	4.17	3.66	4.00	3.88
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	4.02	4.81	4.62	3.81	3.72	3.38	3.71	3.38	3.71	3.62
Ho	0.81	0.94	0.92	0.79	0.73	0.66	0.73	0.64	0.73	0.70
Er	2.26	2.60	2.63	2.06	2.04	1.92	2.03	1.87	2.07	1.95
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.16	2.48	2.44	2.05	1.98	1.90	1.95	1.92	1.95	1.90
Lu	0.35	0.37	0.37	0.32	0.31	0.29	0.31	0.30	0.29	0.29

TABLE 4.129

ICP Analyses: Glendinning Mineralisation REE Study (REEM) Part 1

VAR. / ID.	CXD1005	CXD1006	CXD1030	CXD1031	CXD1050	CXD1051	CXD1052	CXD1053	CXD1077	CXD1078
La	32.76	27.05	29.55	24.26	29.29	16.89	33.10	27.91	26.65	26.08
Ce	78.60	53.46	68.99	46.63	58.08	43.18	78.90	54.91	49.43	51.57
Pr	7.25	6.74	6.07	6.06	7.45	4.14	6.55	6.75	6.62	6.57
Nd	27.66	26.74	22.10	22.42	29.31	17.14	25.07	26.89	25.99	25.60
Sm	5.76	5.26	4.68	4.44	5.24	3.66	5.19	5.32	4.94	4.91
Eu	1.26	1.12	1.18	2.61	1.12	0.80	1.26	1.16	1.10	1.07
Gd	5.00	4.69	5.33	4.25	4.52	2.90	5.61	4.86	4.38	4.50
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	4.38	4.40	3.71	3.92	4.00	2.40	3.79	4.36	3.96	4.01
Ho	0.83	0.83	0.73	0.75	0.80	0.49	0.79	0.89	0.79	0.81
Er	2.33	2.39	2.11	1.86	2.37	1.39	2.18	2.41	2.28	2.30
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.37	2.31	2.12	2.17	2.34	1.60	2.32	2.32	2.21	2.24
Lu	0.39	0.35	0.36	0.32	0.35	0.27	0.38	0.37	0.34	0.34

TABLE 4.130

ICP Analyses: Glendinning Mineralisation REE Study (REEM) Part 2

VAR. / ID.	CXD1159	CXD1160	CXD1165	CXD1166	CXD1168
La	20.22	20.60	43.47	36.42	29.97
Ce	41.46	40.83	97.37	87.88	56.15
Pr	5.24	5.21	8.84	7.97	7.23
Nd	20.05	20.69	31.90	29.38	25.60
Sm	3.99	4.04	5.77	5.86	4.83
Eu	0.87	0.88	1.46	1.27	0.97
Gd	3.41	3.57	5.83	4.81	4.04
Tb	0.00	0.00	0.00	0.00	0.00
Dy	3.16	3.32	4.70	4.13	3.69
Ho	0.61	0.66	0.91	0.79	0.75
Er	1.75	1.85	2.67	2.29	2.30
Tm	0.00	0.00	0.00	0.00	0.00
Yb	1.81	1.79	2.54	2.48	2.29
Lu	0.27	0.28	0.42	0.42	0.34

TABLE 4.130

ICP Analyses: Tweedsmuir Interformational REE Study (REET) Part 1

VAR. / ID.	AX97201	AX97202	AX97203	AX97204	AX97205	AX97206	AX97207	AX97208	AX97209	AX97210
La	19.45	20.22	19.97	19.72	19.02	16.99	19.80	20.53	18.39	20.53
Ce	44.38	46.87	45.18	45.22	44.00	47.32	46.05	47.67	43.20	46.70
Pr	6.16	6.54	6.02	6.07	6.01	7.25	6.21	6.51	5.94	6.24
Nd	23.17	24.59	23.53	23.44	22.92	24.13	23.84	24.87	22.34	24.43
Sm	4.50	4.77	4.58	4.42	4.46	4.82	4.64	4.86	4.39	4.72
Eu	1.26	1.28	1.32	1.20	1.22	1.25	1.25	1.30	1.14	1.30
Gd	3.95	4.12	4.00	3.97	3.87	1.42	4.05	4.19	3.74	4.18
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.26	3.47	3.34	3.35	3.24	3.25	3.40	3.54	3.24	3.51
Ho	0.93	0.97	0.76	0.77	0.81	0.81	0.83	0.89	0.81	0.77
Er	1.84	1.96	1.88	1.86	1.81	0.05	1.92	1.98	1.76	1.99
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.73	1.88	1.81	1.78	1.73	1.92	1.86	1.92	1.82	1.90
Lu	0.26	0.28	0.26	0.26	0.26	0.27	0.28	0.28	0.27	0.29

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ICP Analyses: Tweedsmuir Interformational REE Study (REET) Part 2

VAR. / ID.	AX97211	AX97212	AX97213	AX97214	AX97215	AX97216	AX97217	AX97218	AX97219	AX97220
La	21.10	18.63	17.59	19.27	18.19	18.29	20.65	17.96	21.30	20.34
Ce	46.89	44.45	41.81	45.58	42.86	42.06	46.32	46.75	47.22	46.17
Pr	6.32	6.45	5.83	6.43	6.12	5.53	6.04	7.20	6.22	6.11
Nd	24.37	22.91	22.55	24.24	22.22	21.89	23.38	23.56	24.61	23.75
Sm	4.74	4.48	4.44	4.72	4.41	4.20	4.61	4.61	4.86	4.66
Eu	1.26	1.20	1.19	1.27	1.21	1.14	1.25	1.23	1.32	1.28
Gd	4.06	3.32	3.83	4.16	3.42	3.76	3.92	2.05	4.15	4.02
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.39	3.19	3.31	3.56	3.18	3.18	3.40	3.17	3.53	3.32
Ho	0.81	0.78	0.88	0.95	0.71	0.65	0.75	0.88	0.84	0.79
Er	1.87	1.30	1.85	2.00	1.38	1.79	1.91	0.25	1.96	1.85
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.82	1.89	1.76	2.05	1.84	1.69	1.84	1.90	1.86	1.77
Lu	0.27	0.26	0.26	0.29	0.25	0.26	0.27	0.26	0.27	0.26

ICP Analyses: Marchburn Formation REE Study (REE1) Part 1

VAR. / ID.	A232	A233	A234	N237	N241	N292	N294	A297	A299	W379
La	14.44	17.54	17.28	20.54	26.31	17.83	15.85	18.74	23.75	14.46
Ce	26.82	37.78	35.31	38.91	62.94	42.20	35.58	45.66	44.98	36.04
Pr	4.00	4.69	4.72	4.88	6.13	4.76	3.48	4.68	5.88	3.12
Nd	16.94	19.95	19.60	19.97	27.41	16.11	16.33	16.56	21.95	15.19
Sm	4.05	4.62	4.35	4.07	5.82	3.56	3.87	3.77	4.24	3.46
Eu	1.24	1.39	1.34	1.25	1.72	1.18	1.28	1.26	1.13	1.09
Gd	4.24	4.66	4.41	4.43	6.04	5.62	4.53	3.95	3.89	3.64
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	4.39	4.82	4.49	3.68	4.40	3.22	3.93	3.52	3.31	3.38
Ho	0.85	1.00	0.87	0.74	0.90	0.63	0.82	0.67	0.68	0.70
Er	2.37	2.61	2.44	2.13	2.35	1.94	2.18	1.92	2.07	1.84
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.38	2.63	2.41	1.80	2.13	1.89	2.06	2.15	1.89	1.81
Lu	0.35	0.38	0.35	0.29	0.38	0.31	0.35	0.37	0.27	0.28

TABLE 4.132

ICP Analyses: Marchburn Formation REE Study (REE1) Part 2

VAR. / ID.	W380	N413	N426	C472	AX54	AX156	AX214	AX215	AX216	AX217
La	26.67	9.67	28.21	29.40	36.62	17.79	21.31	19.86	19.69	24.17
Ce	64.42	23.83	65.81	59.96	87.66	40.07	47.68	43.41	45.01	53.47
Pr	5.73	2.58	5.55	6.03	6.51	5.56	6.06	5.66	5.95	7.19
Nd	23.13	9.92	22.98	25.45	31.39	20.04	23.26	22.27	22.77	26.57
Sm	4.77	2.57	4.59	4.78	6.26	4.04	4.63	4.59	4.55	5.05
Eu	1.51	0.85	1.38	1.27	1.71	1.13	1.30	1.23	1.18	1.35
Gd	4.22	2.92	4.14	3.80	5.46	3.69	4.06	4.33	3.85	4.52
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.72	2.93	3.29	3.32	4.56	3.58	3.83	4.29	3.49	4.17
Ho	0.72	0.56	0.67	0.65	1.01	0.92	0.84	0.87	0.74	1.04
Er	1.99	1.57	1.73	1.81	2.51	1.92	2.16	2.43	1.93	2.40
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.00	1.67	1.79	1.87	2.63	2.14	2.13	2.36	1.86	2.57
Lu	0.33	0.26	0.29	0.29	0.42	0.31	0.30	0.34	0.27	0.37

TABLE 4.132

ICP Analyses: Marchburn Formation REE Study (REE1) Part 3

VAR. / ID.	AX224	AX292	AX293	AX294
La	22.22	21.43	22.70	16.43
Ce	44.58	42.51	48.81	37.39
Pr	5.76	5.72	6.36	4.89
Nd	24.63	23.92	24.85	19.12
Sm	4.65	4.86	4.70	3.96
Eu	1.25	1.41	1.29	1.04
Gd	4.19	4.70	4.08	3.67
Tb	0.00	0.00	0.00	0.00
Dy	3.77	4.47	3.51	5.60
Ho	0.91	0.93	0.78	0.78
Er	2.17	2.53	2.02	2.10
Tm	0.00	0.00	0.00	0.00
Yb	2.06	2.31	1.97	2.09
Lu	0.32	0.36	0.30	0.31

ICP Analyses: Afton Formation REE Study (REE3)

Part 1

VAR. / ID.	A222	E452	K462	A463	C471	AX131	AX132	AX133	AX134	AX135
La	27.81	26.89	43.53	19.92	26.94	26.16	23.69	33.90	20.43	27.65
Ce	59.25	56.27	98.10	43.63	55.94	62.84	47.68	79.88	47.37	60.32
Pr	7.65	5.34	8.45	5.78	5.35	8.49	6.28	7.55	6.06	7.54
Nd	29.20	20.34	34.25	20.11	20.90	33.34	25.00	28.28	23.17	28.40
Sm	5.54	3.70	6.73	3.84	4.19	6.27	4.61	5.45	4.43	5.27
Eu	1.40	1.03	1.85	0.82	1.23	1.55	1.14	1.22	1.04	1.23
Gd	4.95	3.10	5.50	3.05	5.23	4.95	4.05	4.49	3.88	4.55
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	4.41	2.70	4.07	2.90	2.96	3.94	3.59	3.67	3.58	3.96
Ho	0.92	0.54	0.80	0.60	0.60	0.85	0.67	0.69	0.73	0.79
Er	2.41	1.50	2.12	1.31	1.64	2.19	1.96	1.97	2.05	2.26
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.24	1.54	2.02	1.70	1.56	1.99	1.79	1.93	1.98	2.14
Lu	0.32	0.27	0.34	0.24	0.25	0.29	0.27	0.31	0.29	0.32

TABLE 4.133

ICP Analyses: Afton Formation REE Study (REE3)

Part 2

VAR. / ID.	AX136	AX137	AX140	AX141	AX149	AX170	AX171	AX172	AX202	AX204
La	33.83	25.67	31.51	26.27	26.91	34.98	36.33	28.45	32.75	22.35
Ce	74.28	53.13	75.05	59.38	60.19	85.65	85.94	63.50	73.76	44.12
Pr	9.37	6.79	6.69	7.75	7.36	7.42	7.92	8.32	9.45	6.02
Nd	36.10	26.94	26.16	28.67	27.93	29.83	29.47	32.04	34.71	23.42
Sm	6.48	4.88	5.09	5.50	5.16	5.85	5.27	5.86	6.42	4.49
Eu	1.60	1.14	1.33	1.33	1.21	1.28	1.20	1.39	1.30	1.08
Gd	5.40	4.23	4.29	4.81	4.74	5.03	4.68	4.89	5.27	4.04
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	4.24	3.66	3.58	4.32	4.01	4.20	3.75	4.07	4.72	3.57
Ho	0.88	0.72	0.69	0.86	0.77	0.83	0.73	0.88	0.93	0.72
Er	2.31	2.07	1.91	2.31	2.21	2.30	2.09	2.30	2.49	2.00
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.05	1.98	1.81	2.31	1.91	2.20	2.02	2.16	2.62	1.86
Lu	0.31	0.29	0.30	0.33	0.29	0.37	0.34	0.32	0.38	0.27

TABLE 4.133

ICP Analyses: Afton Formation REE Study (REE3)

Part 3

VAR. / ID.	AX222	AX223	AX296	AX298
La	19.75	21.22	29.88	15.56
Ce	44.09	45.71	57.44	34.46
Pr	5.76	5.75	7.53	4.51
Nd	21.47	21.78	29.56	16.29
Sm	4.09	4.05	5.47	3.09
Eu	0.88	0.91	1.29	0.75
Gd	3.53	3.66	4.97	2.55
Tb	0.00	0.00	0.00	0.00
Dy	3.02	3.30	4.23	2.26
Ho	0.62	0.67	0.83	0.47
Er	1.71	1.87	2.38	1.26
Tm	0.00	0.00	0.00	0.00
Yb	1.72	1.74	2.22	1.38
Lu	0.25	0.27	0.34	0.20

ICP Analyses: Blackcraig Formation REE Study (REE5) Part 1

VAR. / ID.	A20	A21	A45	AX288	AX289	AX290
La	23.87	18.37	12.37	28.12	12.31	15.14
Ce	50.57	42.89	30.62	60.34	29.55	30.10
Pr	5.96	3.79	2.70	7.45	4.22	4.06
Nd	18.87	18.27	14.10	28.02	16.46	17.04
Sm	4.56	4.30	3.53	5.22	3.75	3.87
Eu	1.56	1.37	1.16	1.26	1.14	1.20
Gd	8.07	4.59	4.14	4.45	3.85	4.15
Tb	0.00	0.00	0.00	0.00	0.00	0.00
Dy	4.63	4.57	4.23	3.92	3.91	4.07
Ho	0.91	0.92	0.86	0.81	0.87	0.90
Er	2.94	2.59	2.44	2.20	2.20	2.34
Tm	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.88	2.77	2.59	2.09	2.27	2.31
Lu	0.50	0.46	0.43	0.30	0.33	0.35

TABLE 4.134

ICP Analyses: Scar Formation REE Study (REE7)

Part 1

VAR. / ID.	S102	S105	S110	S111	S116	E117	S118	S119	S121	S122
La	21.65	28.07	30.79	37.77	24.90	20.43	23.44	22.48	27.24	22.36
Ce	52.05	60.98	47.47	77.26	53.46	44.01	48.48	48.58	40.77	48.00
Pr	5.05	5.87	4.53	5.94	4.87	3.84	4.21	4.30	5.96	4.05
Nd	20.19	23.70	18.10	18.52	17.07	17.03	16.96	18.88	26.90	17.98
Sm	3.75	4.77	3.61	3.42	3.58	3.52	3.51	3.92	4.17	3.70
Eu	1.11	1.46	0.98	0.94	1.13	1.05	1.14	1.12	1.11	1.11
Gd	3.48	4.12	3.09	3.12	4.96	3.13	3.56	3.46	2.98	3.17
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	2.72	3.35	2.62	2.82	2.83	2.83	2.69	3.08	3.07	2.87
Ho	0.54	0.63	0.49	0.55	0.65	0.58	0.60	0.62	0.73	0.61
Er	1.49	1.65	1.37	1.62	1.91	1.48	1.54	1.63	1.07	1.51
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.43	1.73	1.43	1.64	1.84	1.70	1.71	1.80	1.84	1.72
Lu	0.23	0.27	0.21	0.26	0.33	0.27	0.29	0.30	0.27	0.28

TABLE 4.135

ICP Analyses: Scar Formation REE Study (REE7)

Part 2

VAR. / ID.	S124	S126	S127	S128	E136	E139	E140	AX111	AX112	AX117
La	14.38	28.04	21.72	26.39	20.48	22.09	19.39	15.55	12.02	13.70
Ce	31.59	62.13	49.26	55.48	44.65	49.55	46.11	35.92	26.99	31.65
Pr	4.26	5.95	4.47	4.60	3.22	4.39	4.06	5.14	3.74	4.71
Nd	16.24	22.31	18.38	19.16	16.54	19.07	18.70	19.27	14.59	17.56
Sm	3.25	4.39	4.01	3.98	3.42	4.09	3.62	3.96	3.13	3.61
Eu	0.90	1.24	1.12	1.22	1.13	1.19	1.07	1.21	0.98	1.03
Gd	2.96	3.78	3.52	3.30	3.31	3.58	3.33	3.54	3.08	3.42
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	2.63	3.22	3.13	3.09	2.81	2.93	2.77	3.13	2.89	3.13
Ho	0.65	0.61	0.62	0.66	0.63	0.59	0.61	0.75	0.62	0.75
Er	1.52	1.75	1.69	1.66	1.63	1.66	1.57	1.63	1.65	1.67
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.54	1.87	1.84	1.89	1.62	1.67	1.56	1.71	1.66	1.79
Lu	0.23	0.29	0.30	0.31	0.28	0.27	0.27	0.24	0.25	0.26

TABLE 4.135

ICP Analyses: Scar Formation REE Study (REE7)

Part 3

VAR. / ID.	AX119	AX124	AX157	AX158	AX159	AX181	AX190	AX191	AX200	AX210
La	17.49	17.06	13.10	16.62	14.18	18.05	23.85	18.33	21.73	15.27
Ce	44.04	39.10	30.25	36.42	32.61	43.29	58.61	40.60	46.42	34.29
Pr	3.68	5.16	4.38	4.85	4.59	3.84	4.37	5.53	5.97	4.64
Nd	15.26	19.38	16.75	17.74	17.77	17.09	21.93	21.43	23.32	18.31
Sm	3.17	3.88	3.48	3.54	3.79	3.81	4.46	4.17	4.28	3.51
Eu	1.12	1.03	0.99	0.91	1.04	1.08	1.35	1.13	1.19	1.06
Gd	3.98	3.22	3.26	3.27	3.44	3.55	3.92	3.65	3.82	3.17
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	2.69	2.99	2.85	2.93	3.08	3.08	3.03	3.14	3.34	2.06
Ho	0.62	0.73	0.71	0.74	0.63	0.61	0.67	0.73	0.66	0.56
Er	1.42	1.67	1.61	1.71	1.64	1.65	1.60	1.76	1.84	1.49
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.68	1.66	1.66	1.76	1.76	1.67	1.57	1.62	1.63	1.40
Lu	0.28	0.24	0.24	0.26	0.26	0.27	0.25	0.24	0.25	0.21

TABLE 4.135

ICP Analyses: Scar Formation REE Study (REE7)

Part 4

VAR. / ID.	AX211	AX213	AX275	AX277	AX278	AX279
La	19.72	13.98	14.47	12.79	16.07	18.28
Ce	39.40	30.82	32.99	28.10	36.51	41.99
Pr	5.30	4.25	4.45	3.91	5.09	5.78
Nd	20.58	16.38	17.41	15.39	18.33	21.93
Sm	3.94	3.37	3.60	3.25	3.62	4.30
Eu	1.06	0.96	0.95	0.85	1.01	1.25
Gd	3.69	3.05	3.16	3.12	3.23	3.71
Tb	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.25	2.74	2.79	2.89	2.90	3.07
Ho	0.70	0.67	0.61	0.67	0.71	0.78
Er	1.82	1.56	1.58	1.66	1.58	1.69
Tm	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.84	1.56	1.55	1.67	1.76	1.62
Lu	0.28	0.23	0.24	0.25	0.25	0.24

TABLE 4.135

ICP Analyses: Shinnel Formation REE Study (REE9) Part 1

VAR. / ID.	S54	S56	S58	S64	N400	N401	N456	S466	S492	S494
La	24.29	31.30	30.59	33.25	23.65	23.51	16.75	24.22	20.45	28.46
Ce	48.82	66.00	57.95	70.95	48.06	49.88	34.09	59.09	50.14	66.99
Pr	5.65	6.33	7.39	7.27	5.89	5.83	4.22	5.41	4.67	6.34
Nd	22.09	22.63	28.76	23.31	22.44	22.57	15.60	21.33	17.74	23.56
Sm	4.05	4.24	5.55	4.38	4.25	4.43	2.98	4.28	3.48	4.29
Eu	1.05	1.10	1.21	1.08	1.08	1.00	0.67	1.03	0.79	1.08
Gd	3.66	4.62	4.69	6.03	3.63	3.85	2.46	3.46	2.67	3.82
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.20	2.84	4.46	3.11	3.17	3.66	2.12	2.93	2.28	3.17
Ho	0.64	0.57	0.85	0.59	0.65	0.72	0.42	0.57	0.43	0.61
Er	1.84	1.55	2.42	1.92	1.67	2.01	1.12	1.65	1.21	1.75
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.02	1.68	2.36	1.87	1.74	2.04	1.22	1.74	1.32	1.73
Lu	0.29	0.20	0.34	0.31	0.26	0.30	0.18	0.28	0.21	0.28

TABLE 4.136

-504/-

ICP Analyses: Shinnel Formation REE Study (REE9) Part 2

VAR. / ID.	AX1	AX36	AX38	AX164	AX177	AX226	AX229	AX235	AX236	AX276
La	30.24	24.28	28.19	21.80	21.05	21.97	20.32	21.01	17.50	17.81
Ce	73.28	57.83	70.30	46.63	45.07	45.97	44.83	45.56	37.60	39.91
Pr	6.51	5.36	6.53	6.04	5.95	5.94	5.77	5.78	5.03	5.14
Nd	25.31	21.63	25.15	22.83	21.49	24.11	22.16	21.48	19.00	19.57
Sm	4.92	4.26	5.11	4.43	4.00	4.66	4.37	4.12	3.64	3.78
Eu	1.21	1.04	1.36	1.03	0.98	1.16	0.96	0.99	0.87	0.90
Gd	4.60	3.66	4.33	4.03	3.47	4.06	3.77	3.49	3.17	3.32
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.69	3.20	3.76	3.47	3.14	3.56	3.42	3.15	3.82	3.08
Ho	0.76	0.63	0.73	0.73	0.72	0.70	0.69	0.71	0.58	0.66
Er	2.06	1.78	2.10	2.04	1.76	1.98	1.97	1.81	1.59	1.81
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.24	1.84	2.34	2.09	1.88	1.84	1.94	1.82	1.64	1.87
Lu	0.40	0.30	0.40	0.32	0.27	0.29	0.29	0.28	0.24	0.27

TABLE 4.136

TABLE 4.136

ICP Analyses: Shinnel Formation REE Study (REE9) Part 3

VAR. / ID.	AX287
La	27.33
Ce	38.06
Pr	4.93
Nd	19.42
Sm	3.71
Eu	0.90
Gd	3.50
Tb	0.00
Dy	3.10
Ho	0.62
Er	1.76
Tm	0.00
Yb	1.79
Lu	0.29

ICP Analyses: Pyroxenous Formation REE Study (REE11) Part 1

VAR. / ID.	AX151	AX182	AX194	AX195	AX196	AX197	AX198	AX199	AX221	AX238
La	13.26	24.27	22.12	16.80	21.32	22.31	21.21	17.37	18.55	26.67
Ce	31.48	61.02	49.54	38.73	47.53	50.26	46.79	39.67	42.37	55.01
Pr	4.21	5.80	6.59	5.36	6.41	6.54	6.08	5.36	5.79	7.29
Nd	16.54	21.53	23.90	21.40	24.45	24.75	23.53	21.55	22.31	27.06
Sm	3.28	4.38	4.68	4.37	4.57	4.71	4.49	4.14	4.45	5.08
Eu	0.88	1.24	1.35	1.16	1.21	1.15	1.12	1.08	1.21	1.24
Gd	3.08	4.16	4.06	3.87	3.95	4.10	3.75	3.72	3.91	4.37
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	2.89	3.12	3.85	3.37	3.41	3.67	3.24	3.27	3.51	3.66
Ho	0.61	0.60	0.92	0.75	0.86	0.88	0.68	0.65	0.85	0.77
Er	1.68	1.67	2.07	1.89	2.05	1.93	1.84	1.86	2.00	1.96
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.70	1.77	2.24	1.86	1.83	2.06	1.75	1.73	1.93	2.06
Lu	0.26	0.30	0.31	0.28	0.27	0.31	0.26	0.26	0.29	0.31

TABLE 4.137

ICP Analyses: Pyroxenous Formation REE Study (REE11) Part 2

VAR. / ID.	AX274	AX286	AX657	AX659	AX781	AX782	AX783	AX784	AX785	AX789
La	19.10	19.31	23.54	26.54	27.10	30.13	15.64	24.43	28.56	23.45
Ce	44.69	41.39	43.91	62.86	62.50	60.45	31.92	49.97	63.02	47.05
Pr	6.32	5.47	4.75	6.11	5.94	6.61	3.66	5.87	6.28	5.04
Nd	22.53	22.69	20.76	21.56	24.28	28.43	17.30	23.59	22.14	22.38
Sm	4.28	4.31	3.36	4.37	4.76	5.73	3.63	4.56	4.16	4.64
Eu	1.12	1.12	1.06	1.26	1.23	1.34	0.89	1.11	1.32	1.20
Gd	3.54	3.86	3.77	5.36	4.09	4.86	3.16	3.87	5.33	4.04
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.37	3.41	3.00	3.16	3.36	4.15	2.71	3.52	2.87	3.58
Ho	0.72	0.74	0.53	0.61	0.67	0.74	0.49	0.77	0.60	0.67
Er	1.44	1.89	1.65	1.84	1.83	2.04	1.41	1.95	1.89	1.82
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.95	1.79	1.59	1.88	1.76	2.08	1.61	1.96	1.79	1.96
Lu	0.29	0.27	0.18	0.30	0.30	0.24	0.17	0.29	0.33	0.22

TABLE 4.137

ICP Analyses: Pyroxenous Formation REE Study (REE11) Part 3

VAR. / ID.	AX790	AX791	AX796	AX797	AX834
La	27.22	22.30	22.52	26.21	30.62
Ce	64.50	45.41	48.78	61.36	67.41
Pr	6.58	5.77	5.74	5.62	6.64
Nd	25.70	21.87	24.27	21.91	25.56
Sm	4.72	4.30	4.84	4.36	4.85
Eu	1.36	1.12	1.33	1.15	1.24
Gd	4.49	3.86	4.17	3.99	4.65
Tb	0.00	0.00	0.00	0.00	0.00
Dy	3.47	3.34	3.71	3.16	3.43
Ho	0.67	0.67	0.89	0.65	0.69
Er	1.98	1.91	2.01	1.75	1.97
Tm	0.00	0.00	0.00	0.00	0.00
Yb	1.89	1.87	1.98	1.82	1.87
Lu	0.29	0.27	0.29	0.32	0.34

TABLE 4.137

ICP Analyses: Intermediate Formation REE Study (REE13) Part 1

VAR. / TD.	AK502	AK674	AX44	AX46	AX48	AX94	AX96	AX97	AX107	AX108
La	25.34	37.38	27.99	23.02	38.62	23.39	19.87	30.00	22.94	22.72
Ce	51.94	67.39	70.42	57.23	84.28	51.29	45.01	76.60	52.34	55.06
Pr	6.10	8.10	6.26	5.58	7.86	6.57	5.97	6.04	6.76	5.22
Nd	23.64	32.38	26.01	21.22	29.06	24.85	23.05	28.00	24.77	19.78
Sm	4.64	5.85	5.34	4.07	5.28	4.44	4.40	5.55	4.72	3.93
Eu	1.21	1.55	1.35	1.11	1.38	1.08	1.07	1.63	1.00	0.89
Gd	3.97	4.69	4.58	3.92	5.05	3.68	3.79	4.96	3.83	3.34
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.64	4.00	3.82	3.24	3.86	3.41	3.41	3.93	3.60	2.86
Ho	0.74	0.86	0.75	0.64	0.79	0.76	0.78	0.85	0.71	0.55
Er	1.97	2.16	2.01	1.86	2.35	1.98	1.99	2.09	2.00	1.60
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	2.03	2.09	1.96	1.88	2.43	1.90	1.96	2.18	2.12	1.65
Lu	0.30	0.31	0.33	0.32	0.44	0.27	0.29	0.37	0.30	0.27

TABLE 4.138

ICP Analyses: Intermediate Formation REE Study (REE13) Part 2

VAR. / ID.	AX109	AX272	AX280	AX281	AX283	AX285	AX604	AX840	AX841	AX842
La	19.34	14.28	26.42	21.12	25.36	29.37	25.89	29.78	27.51	26.18
Ce	43.32	30.84	43.09	51.02	56.83	58.00	58.16	69.28	55.25	61.67
Pr	5.70	5.22	6.81	6.20	7.31	7.65	5.47	6.31	5.89	6.22
Nd	21.76	18.00	27.87	23.38	26.69	29.37	20.58	24.23	25.20	23.44
Sm	3.95	3.62	5.12	4.42	4.86	5.31	3.73	4.76	5.02	4.47
Eu	0.87	0.87	1.08	0.94	1.00	1.21	1.04	1.04	1.21	1.04
Gd	3.53	2.82	4.49	3.70	3.85	4.80	3.63	4.13	4.32	3.77
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.16	2.91	3.77	3.38	3.20	4.20	2.72	3.47	3.96	3.07
Ho	0.64	0.62	0.73	0.69	0.65	0.82	0.55	0.68	0.68	0.57
Er	1.83	1.06	2.05	1.95	1.82	2.32	1.63	1.93	2.09	1.65
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.05	1.85	1.90	1.90	2.08	2.08	1.61	2.02	2.23	1.60
Lu	0.28	0.26	0.29	0.28	0.32	0.31	0.27	0.35	0.27	0.26

TABLE 4.138

ICP Analyses: Intermediate Formation REE Study (REE13) Part 3

VAR. / ID.	AX847	AX849	AX851
La	34.57	27.31	20.93
Ce	79.53	64.15	45.57
Pr	5.93	6.65	5.60
Nd	23.00	24.33	23.02
Sm	4.94	4.70	4.71
Eu	1.22	1.21	1.29
Gd	4.43	4.47	4.10
Tb	0.00	0.00	0.00
Dy	3.60	3.43	3.64
Ho	0.76	0.65	0.74
Er	1.98	1.91	1.95
Tm	0.00	0.00	0.00
Yb	2.22	1.86	1.93
Lu	0.43	0.32	0.28

TABLE 4.138

ICP Analyses: Garnetiferous Formation REE Study (REE15) Part 1

VAR. / ID.	AK4	AK13	AK17	AK20	AK25	AK30	AK33	AK52	AK58	AK63
La	17.90	22.97	31.81	40.39	26.70	23.87	26.29	29.49	16.14	34.25
Ce	39.71	50.39	64.83	74.91	52.44	56.67	51.71	67.00	33.60	81.56
Pr	5.72	6.46	7.24	8.40	5.79	6.71	6.52	6.86	4.31	7.55
Nd	19.53	23.97	26.79	31.81	23.55	26.98	26.37	25.23	17.35	29.22
Sm	3.63	4.54	5.10	5.92	4.88	5.73	4.78	4.74	3.65	6.06
Eu	0.91	1.04	1.11	1.25	1.03	1.29	1.14	1.03	0.82	1.44
Gd	2.81	4.03	4.46	5.75	4.04	5.24	4.42	4.49	3.31	5.38
Tb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dy	3.00	3.59	3.32	4.18	3.55	5.15	3.79	3.52	3.31	5.29
Ho	0.67	0.75	0.62	0.83	0.57	0.98	0.74	0.70	0.65	1.03
Er	1.28	2.02	1.78	2.34	1.98	2.76	2.08	2.08	1.77	2.97
Tm	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Yb	1.93	2.07	1.75	2.12	2.15	2.71	1.87	2.07	1.04	3.15
Lu	0.28	0.31	0.29	0.39	0.26	0.39	0.28	0.38	0.27	0.52

ICP Analyses: Standard KC10 Duplicates (STD1)

Part 1

VAR. / ID.	KC10	KC10	KC10	KC10	KC10	KC10	KC10	KC10	KC10	KC10
La	5.23	3.56	4.73	4.07	3.42	4.17	2.94	2.42	3.15	3.04
Ce	10.06	13.85	13.41	12.40	9.69	11.92	8.90	9.19	9.06	8.62
Pr	0.71	2.22	1.92	1.40	0.74	1.65	1.97	2.28	2.01	1.86
Nd	5.32	5.70	5.48	5.38	5.17	5.39	6.24	6.45	6.27	6.05
Sm	1.44	1.44	1.34	1.38	1.39	1.33	1.53	1.58	1.58	1.50
Eu	0.69	0.80	0.77	0.75	0.65	0.70	0.67	0.69	0.69	0.67
Gd	1.62	1.47	1.31	1.49	1.56	2.03	1.58	1.19	1.52	1.67
Dy	1.69	1.66	1.58	1.65	1.67	1.62	1.70	1.69	1.75	1.71
Ho	0.34	0.38	0.37	0.38	0.34	0.35	0.51	0.52	0.50	0.50
Er	0.94	0.70	0.85	0.86	0.86	0.86	0.70	0.32	0.67	0.77
Yb	0.92	1.27	1.08	1.02	0.92	0.99	1.05	1.06	1.08	1.05
Lu	0.14	0.20	0.19	0.17	0.13	0.18	0.14	0.15	0.15	0.14
Y	11.31	13.13	12.44	12.56	11.29	12.50	9.52	9.40	9.86	9.48

TABLE 4.140

ICP Analyses: Standard KC10 Duplicates (STD1)

Part 2

VAR. / ID.	KC10	KC10
La	3.27	2.91
Ce	8.43	8.25
Pr	1.68	1.64
Nd	5.81	5.62
Sm	1.49	1.47
Eu	0.65	0.64
Gd	1.67	1.60
Dy	1.71	1.68
Ho	0.44	0.41
Er	0.83	0.79
Yb	1.02	0.99
Lu	0.14	0.14
Y	9.48	9.40

TABLE 4.140

ICP Analyses: Standard 1005 Duplicates (STD2)

Part 1

VAR. / ID.	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005
La	21.87	21.41	22.26	23.72	25.25	24.21	24.08	24.71	22.47	30.26
Ce	43.54	43.87	43.83	46.10	50.67	49.70	44.68	50.16	47.57	62.87
Pr	5.51	5.76	5.49	5.47	5.72	5.84	5.71	5.53	5.58	4.88
Nd	22.42	22.73	22.72	22.11	22.81	22.32	22.83	22.79	21.38	21.07
Sm	3.85	3.82	3.97	3.84	4.06	4.00	4.04	4.06	3.85	4.70
Eu	1.16	1.13	1.17	1.13	1.22	1.21	1.20	1.22	1.17	1.52
Gd	3.25	3.38	3.30	3.17	3.32	3.31	3.24	3.37	3.21	4.06
Dy	2.64	2.73	2.81	2.68	2.79	2.74	2.81	2.78	2.61	2.94
Ho	0.76	0.66	0.73	0.65	0.71	0.64	0.66	0.72	0.74	0.78
Er	1.51	1.50	1.55	1.47	1.52	1.45	1.53	1.62	1.34	1.45
Yb	1.45	1.47	1.45	1.42	1.50	1.54	1.51	1.56	1.48	1.91
Lu	0.22	0.22	0.23	0.21	0.23	0.23	0.22	0.22	0.22	0.25
Y	14.40	13.72	14.56	14.21	15.63	15.60	15.63	15.60	14.85	21.56

TABLE 4.141

ICP Analyses: Standard 1005 Duplicates (STD2)

Part 2

VAR. / ID.	1005	1005	1005	1005	1005	1005	1005	1005	1005	1005
La	26.92	26.25	26.56	27.41	27.83	27.32	27.22	25.90	27.21	19.78
Ce	64.91	64.61	64.09	68.28	67.10	65.41	65.08	59.34	60.88	44.70
Pr	4.98	4.44	4.87	3.98	3.79	5.13	5.10	4.45	5.07	6.17
Nd	21.11	20.84	21.60	21.73	22.42	21.64	21.51	21.72	22.42	22.06
Sm	3.84	3.84	3.92	4.00	4.20	4.02	4.02	3.95	4.01	3.83
Eu	1.26	1.25	1.27	1.33	1.32	1.29	1.29	1.16	1.19	1.13
Gd	3.78	3.67	3.76	3.57	3.32	3.54	3.57	3.21	3.51	3.25
Dy	2.44	2.37	2.52	2.53	2.65	2.58	2.58	2.52	2.55	2.61
Ho	0.59	0.60	0.59	0.68	0.69	0.57	0.57	0.60	0.58	0.72
Er	1.35	1.34	1.38	1.37	1.43	1.38	1.38	1.39	1.45	1.44
Yb	1.51	1.42	1.43	1.54	1.46	1.48	1.48	1.31	1.37	1.48
Lu	0.26	0.24	0.25	0.27	0.24	0.24	0.25	0.22	0.25	0.22
Y	19.45	18.54	19.27	20.08	19.99	19.74	19.74	17.59	18.05	14.38

TABLE 4.141

ICP Analyses: Standard 1005 Duplicates (STD2)

Part 3

VAR. / ID.	1005	1005	1005	1005	1005	1005	1005	1005
La	22.15	20.53	20.46	23.50	18.55	22.13	22.34	20.07
Ce	49.24	46.16	46.94	50.55	41.63	47.90	48.46	45.51
Pr	6.88	6.41	6.44	6.22	5.46	6.12	6.47	6.43
Nd	23.73	22.52	22.53	23.41	19.60	22.50	23.00	22.20
Sm	4.03	3.91	3.91	4.12	3.48	3.88	3.91	3.87
Eu	1.22	1.17	1.19	1.18	1.02	1.15	1.17	1.16
Gd	3.32	3.23	3.17	3.35	2.72	3.17	3.25	3.16
Dy	2.70	2.65	2.65	2.79	2.37	2.62	2.65	2.61
Ho	0.91	0.84	0.86	0.54	0.64	0.70	0.81	0.81
Er	1.45	1.46	1.42	1.54	1.33	1.52	1.49	1.27
Yb	1.55	1.55	1.54	1.42	1.32	1.47	1.53	1.55
Lu	0.22	0.22	0.22	0.20	0.18	0.21	0.22	0.22
Y	14.84	14.67	14.83	14.99	13.09	14.53	14.73	14.49

TABLE 4.141

XRF Analyses : Glendinning Greywacke Anomalies (As) Part... 1

VAR. / ID.	DJR63	DJR64	DJR66	DJR-784	DJR-785	DJR-786	DJR-788	DJR-863	DJR-903	DJR-946
East	33140	33140	33140	33562	33551	33553	33555	33176	33830	33505
North	59686	59686	59686	60236	60259	60251	60223	59734	59881	59580
SiO2	57.19	50.69	57.00	63.85	61.51	60.49	56.00	58.77	55.46	87.84
Al2O3	12.24	9.93	12.77	21.31	14.65	18.03	15.46	14.99	17.04	6.86
TiO2	0.64	0.55	0.79	1.07	0.67	0.90	0.69	0.72	0.96	0.23
Fe2O3	5.47	6.28	5.98	7.09	6.91	6.98	6.97	5.29	7.93	2.95
MgO	3.72	5.87	3.78	0.91	2.74	2.54	3.58	3.77	4.85	0.80
CaO	12.26	18.35	11.91	0.09	7.83	5.36	10.68	9.84	5.06	0.02
Na2O	0.10	0.05	0.05	0.76	0.17	0.44	0.31	0.50	1.12	0.79
K2O	2.48	2.50	3.23	2.95	1.27	2.39	2.00	1.82	3.53	0.39
MnO	0.14	0.18	0.16	0.19	0.16	0.28	0.15	0.12	0.08	0.03
P2O5	0.16	0.12	0.16	0.23	0.15	0.18	0.16	0.17	0.19	0.12
Total	94.40	94.52	95.83	98.45	96.06	97.59	96.00	95.99	96.22	100.03
As	33	23	25	36	23	20	24	65	19	24
Ba	211	233	204	291	193	329	372	190	387	56
Cl	0	0	0	16	53	35	30	43	0	0
Co	15	19	14	30	34	27	29	19	26	43
Cr	151	87	108	145	124	143	117	117	142	49
Cu	14	20	21	25	22	24	29	39	70	11
Ga	13	13	15	16	10	13	12	12	20	6
La	29	25	24	40	35	33	23	29	36	12
Ni	56	55	56	75	59	57	68	41	90	12
Nb	13	10	14	17	11	14	12	11	15	4
Pb	12	11	11	22	20	16	53	11	9	8
Rb	90	86	109	94	37	72	62	58	128	15
Sr	88	148	90	82	116	97	164	98	72	9
Sb	26	31	29	14	24	9	14	17	23	55
S	0	0	0	67	211	117	179	307	13	28
Th	7	1	5	14	6	13	10	7	15	2
V	74	77	90	110	79	103	90	85	140	27
Y	24	23	22	33	29	37	33	30	31	9
Zn	40	49	39	69	69	57	73	28	113	18
Zr	150	110	157	224	179	215	159	187	171	68
Tl	0	0	0	0	0	0	0	2	5	0

TABLE 4.142

XRF Analyses : Glendinning Greywacke Anomalies (As) Part... 2

VAR. / ID. DJR-947

East 33545
North 59568

SiO2 58.03
Al2O3 14.06
TiO2 0.87
Fe2O3 5.69
MgO 3.85
CaO 8.84
Na2O 1.47
K2O 2.42
MnO 0.09
P2O5 0.17
Total 95.49

As 39
Ba 514
Cl 11
Co 66
Cr 173
Cu 25
Ga 14
La 39
Ni 50
Nb 14
Pb 20
Rb 74
Sr 160
Sb 0
S 2755
Th 10
V 115
Y 32
Zn 165
Zr 277
Tl 0

TABLE 4.142

XRF Analyses : Glendinning Greywacke Anomalies (Sb) Part... 1

VAR. / ID.	DJR-900	DJR-53	DJR63	DJR64	DJR65	DJR66	DJR-704	DJR-784	DJR-785	DJR-787
East	33843	33114	33140	33140	33140	33140	34276	33562	33551	33555
North	59780	59659	59686	59686	59686	59686	60483	60236	60259	60240
SiO2	58.31	61.09	57.19	50.69	49.91	57.00	55.60	63.85	61.51	54.19
Al2O3	11.84	14.78	12.24	9.93	7.76	12.77	17.44	21.31	14.65	14.85
TiO2	0.69	0.83	0.64	0.55	0.41	0.79	0.97	1.07	0.67	0.66
Fe2O3	4.72	5.43	5.47	6.28	5.85	5.98	8.30	7.09	6.91	7.07
MgO	4.56	3.99	3.72	5.87	6.79	3.78	5.40	0.91	2.74	3.27
CaO	8.95	6.96	12.26	18.35	21.89	11.91	3.20	0.09	7.83	10.88
Na2O	1.89	0.67	0.10	0.05	0.06	0.05	1.03	0.76	0.17	0.25
K2O	2.05	2.09	2.48	2.50	1.83	3.23	3.36	2.95	1.27	1.87
MnO	0.18	0.08	0.14	0.18	0.22	0.16	0.11	0.19	0.16	0.14
P2O5	0.16	0.19	0.16	0.12	0.11	0.16	0.17	0.23	0.15	0.16
Total	93.35	96.11	94.40	94.52	94.83	95.83	95.58	98.45	96.06	93.34
As	5	5	33	23	13	25	8	36	23	11
Ba	201	248	211	233	215	204	483	291	193	207
Cl	71	41	0	0	0	0	30	16	53	38
Co	23	36	15	19	11	14	30	30	34	33
Cr	117	169	151	87	71	108	145	145	124	118
Cu	16	18	14	20	12	21	46	25	22	30
Ga	11	13	13	13	10	15	18	16	10	12
La	31	26	29	25	16	24	43	40	35	29
Ni	42	59	56	55	44	56	89	75	59	65
Nb	10	13	13	10	8	14	16	17	11	12
Pb	11	12	12	11	15	11	15	22	20	25
Rb	57	67	90	86	60	109	123	94	37	50
Sr	113	76	88	148	156	90	65	82	116	170
Sb	12	11	26	31	22	29	15	14	24	17
S	10	22	0	0	0	0	19	67	211	48
Th	7	7	7	1	2	5	14	14	6	8
V	81	91	74	77	51	90	142	110	79	82
Y	24	23	24	23	28	22	41	33	29	30
Zn	45	65	40	49	43	39	101	69	69	76
Zr	163	254	150	110	87	157	169	224	179	158
Tl	0	0	0	0	0	0	0	0	0	0

TABIE 4.143

XRF Analyses : Glendinning Greywacke Anomalies (Sb) Part... 2

VAR. / ID.	DJR-788	DJR-809	DJR-863	DJR-903	DJR-946
East	33555	33473	33176	33830	33505
North	60223	60031	59734	59881	59580
SiO2	56.00	55.67	58.77	55.46	87.84
Al2O3	15.46	16.09	14.99	17.04	6.86
TiO2	0.69	0.93	0.72	0.96	0.23
Fe2O3	6.97	8.97	5.29	7.93	2.95
MgO	3.58	5.05	3.77	4.85	0.80
CaO	10.68	5.85	9.84	5.06	0.02
Na2O	0.31	1.06	0.50	1.12	0.79
K2O	2.00	2.97	1.82	3.53	0.39
MnO	0.15	0.12	0.12	0.08	0.03
P2O5	0.16	0.19	0.17	0.19	0.12
Total	96.00	96.90	95.99	96.22	100.03
As	24	11	65	19	24
Ba	372	354	190	387	56
Cl	30	22	43	0	0
Co	29	28	19	26	43
Cr	117	144	117	142	49
Cu	29	52	39	70	11
Ga	12	18	12	20	6
La	23	37	29	36	12
Ni	68	85	41	90	12
Nb	12	17	11	15	4
Pb	53	12	11	9	8
Rb	62	108	58	128	15
Sr	164	95	98	72	9
Sb	14	13	17	23	55
S	179	7	307	13	28
Th	10	7	7	15	2
V	90	119	85	140	27
Y	33	43	30	31	9
Zn	73	97	28	113	18
Zr	159	179	187	171	68
Tl	0	0	2	5	0

TABLE 4.143

XRF Analyses : Glendinning Greywacke Anomalies (Cu) Part... 1

VAR. / ID.	DJR-6	DJR-700	DJR-712	DJR-734	DJR-809	DJR-903
East	33388	32742	34109	34373	33473	33830
North	59666	59175	60659	60750	60031	59881
SiO2	52.14	53.32	59.89	53.77	55.67	55.46
Al2O3	10.86	11.91	14.69	13.98	16.09	17.04
TiO2	0.68	0.66	0.78	0.77	0.93	0.96
Fe2O3	4.12	4.53	5.46	6.24	8.97	7.93
MgO	2.96	3.81	4.29	4.79	5.05	4.85
CaO	16.61	15.17	6.73	10.07	5.85	5.06
Na2O	1.65	1.49	1.62	1.24	1.06	1.12
K2O	1.62	1.87	2.36	2.37	2.97	3.53
MnO	0.17	0.13	0.15	0.12	0.12	0.08
P2O5	0.18	0.17	0.19	0.17	0.19	0.19
Total	90.99	93.06	96.16	93.52	96.90	96.22
As	0	1	0	0	11	19
Ba	179	571	282	355	354	387
Cl	64	53	47	32	22	0
Co	26	21	23	26	28	26
Cr	105	121	115	111	144	142
Cu	51	61	52	54	52	70
Ga	11	12	14	16	18	20
La	34	28	34	28	37	36
Ni	43	49	63	63	85	90
Nb	12	13	13	15	17	15
Pb	12	11	16	13	12	9
Rb	51	58	73	79	108	128
Sr	187	157	108	146	95	72
Sb	0	0	0	0	13	23
S	71	196	30	17	7	13
Th	0	11	7	6	7	15
V	80	88	103	105	119	140
Y	29	31	34	32	43	31
Zn	51	52	89	79	97	113
Zr	178	175	166	157	179	171
Tl	0	0	0	0	0	5

TABLE 4.144

XRF Analyses : Glendinning Greywacke Anomalies (Pb) Part... 1

VAR. / ID.	DJR-21	DJR-761	DJR-910	DJR-3	DJR-4	DJR-766	DJR-768	DJR-775	DJR-787	DJR-788
East	33156	33686	34205	33500	33464	34544	34488	33918	33555	33555
North	59321	59544	60012	59778	59755	61072	61012	60389	60240	60223
SiO2	59.75	57.61	57.94	58.36	56.79	46.19	57.97	59.71	54.19	56.00
Al2O3	14.69	14.79	15.31	13.81	16.60	14.93	12.82	13.12	14.85	15.46
TiO2	0.75	0.82	0.88	0.92	1.01	0.56	0.02	0.75	0.66	0.69
Fe2O3	5.18	5.94	6.50	6.25	7.64	6.42	5.71	5.49	7.07	6.97
MgO	4.48	4.80	5.36	3.58	5.42	1.60	4.54	4.34	3.27	3.58
CaO	6.60	7.93	6.18	6.91	4.30	24.36	9.81	8.78	10.88	10.68
Na2O	1.78	1.60	1.67	1.88	1.46	0.09	1.59	1.69	0.25	0.31
K2O	1.95	2.54	2.36	2.11	2.81	4.12	1.96	1.98	1.87	2.00
MnO	0.06	0.09	0.10	0.11	0.10	0.14	0.10	0.10	0.14	0.15
P2O5	0.17	0.17	0.19	0.21	0.19	0.14	0.20	0.18	0.16	0.16
Total	95.41	96.29	96.49	94.14	96.32	98.55	95.60	96.15	93.34	96.00
As	0	3	0	1	8	11	8	5	11	24
Ba	263	327	305	353	392	299	360	259	207	372
Cl	21	34	0	6	25	49	34	37	38	30
Co	33	20	27	32	27	22	30	25	33	29
Cr	103	133	126	125	144	116	197	131	118	117
Cu	17	27	30	20	38	22	26	27	30	29
Ga	14	14	15	15	19	13	13	13	12	12
La	29	29	32	39	48	31	28	28	29	23
Ni	52	63	64	64	82	62	52	55	65	68
Nb	14	15	14	16	16	11	17	12	12	12
Pb	28	26	30	36	49	39	35	30	25	53
Rb	63	81	81	71	96	95	62	65	50	62
Sr	145	155	109	98	98	92	151	150	170	164
Sb	0	0	0	0	0	0	0	2	17	14
S	0	310	18	8	19	57	181	20	48	179
Th	6	10	9	10	3	15	9	8	8	10
V	81	104	108	101	125	121	109	91	82	90
Y	22	33	30	37	37	29	39	35	30	33
Zn	53	78	80	94	99	91	60	67	76	73
Zr	176	176	188	219	204	101	305	203	168	159
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.145

-3067-

XRF Analyses : Glendinning Greywacke Anomalies (Pb) Part... 2

VAR. / ID.	DJR-858	DJR-873	DJR-893	DJR-936
East	33820	33140	33272	33490
North	60850	59829	60131	60266
SiO2	57.98	59.05	61.61	57.74
Al2O3	16.92	15.02	18.39	14.58
TiO2	1.03	0.86	1.05	0.83
Fe2O3	12.09	6.30	8.17	5.99
MgO	6.32	5.07	5.83	4.84
CaO	0.66	6.40	0.13	7.88
Na2O	0.38	1.62	0.94	1.45
K2O	2.76	2.39	3.11	2.34
MnO	0.06	0.11	0.09	0.08
P2O5	0.17	0.17	0.19	0.19
Total	98.37	96.99	99.51	95.92
As	4	4	4	6
Ba	524	262	333	279
Cl	85	16	0	7
Co	23	25	35	25
Cr	148	134	152	131
Cu	11	29	32	21
Ga	17	15	18	15
La	34	31	36	33
Ni	82	68	90	63
Nb	14	14	16	13
Pb	42	41	28	48
Rb	93	76	119	75
Sr	29	98	25	111
Sb	0	0	0	0
S	56	6	30	80
Th	6	0	14	6
V	132	105	135	107
Y	24	32	36	33
Zn	103	74	103	72
Zr	179	175	203	199
Tl	0	0	2	0

TABLE 4.145

XRF Analyses : Glendinning Greywacke Anomalies (Zn) Part... 1

VAR. / ID.	DJR-753	DJR-951	DJR-704	DJR-705	DJR-844	DJR-858	DJR-888	DJR-893	DJR-903	DJR-947
East	33644	33635	34276	34284	33530	33820	33060	33272	33830	33545
North	59680	59510	60483	60490	60678	60850	60312	60131	59881	59568
SiO2	60.01	55.82	55.60	55.70	59.95	57.98	59.85	61.61	55.46	58.03
Al2O3	16.21	16.52	17.44	15.29	18.93	16.92	19.24	18.39	17.04	14.06
TiO2	0.93	0.97	0.97	0.87	1.16	1.03	1.06	1.05	0.96	0.87
Fe2O3	5.04	7.93	8.30	6.85	9.49	12.09	8.39	8.17	7.93	5.69
MgO	2.68	5.30	5.40	5.60	4.30	6.32	4.32	5.83	4.85	3.85
CaO	7.59	3.80	3.20	6.47	0.13	0.66	0.45	0.13	5.06	8.84
Na2O	1.56	1.29	1.03	1.30	1.04	0.38	0.27	0.94	1.12	1.47
K2O	2.62	3.09	3.36	2.62	3.49	2.76	3.39	3.11	3.53	2.42
MnO	0.10	0.06	0.11	0.09	0.08	0.06	0.09	0.09	0.08	0.09
P2O5	0.20	0.17	0.17	0.18	0.20	0.17	0.16	0.19	0.19	0.17
Total	96.94	94.95	95.58	94.97	98.77	98.37	97.22	99.51	96.22	95.49
As	0	12	8	0	0	4	5	4	19	39
Ba	258	436	483	324	372	524	455	333	387	514
Cl	29	0	30	36	0	85	0	0	0	11
Co	20	28	30	26	29	23	28	35	26	66
Cr	137	140	145	129	163	148	146	152	142	173
Cu	27	37	46	40	42	11	39	32	70	25
Ga	13	17	18	16	21	17	18	18	20	14
La	17	41	43	33	39	34	47	36	36	39
Ni	49	85	89	72	100	82	90	90	90	50
Nb	14	17	16	16	17	14	16	16	15	14
Pb	14	22	15	16	17	42	12	28	9	20
Rb	86	112	123	90	127	93	130	119	128	74
Sr	108	103	65	108	35	29	28	25	72	160
Sb	0	0	16	0	0	0	0	0	23	0
S	5	17	19	33	22	56	7	30	13	2755
Th	7	15	14	14	13	6	14	14	15	10
V	103	134	142	107	144	132	122	135	140	115
Y	29	34	41	35	36	24	37	36	31	32
Zn	135	104	101	103	107	103	100	103	113	165
Zr	215	185	169	162	195	179	216	203	171	277
Tl	0	0	0	0	5	0	0	2	5	0

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TABLE 4.146

XRF Analyses : Glendinning Greywacke (Na depletion) Part... 1

VAR. / ID.	DJR-33	DJR-49	DJR63	DJR64	DJR65	DJR66	DJR-766	DJR-785	DJR-786	DJR-787
East	33093	32960	33140	33140	33140	33140	34544	33551	33553	33555
North	59586	59390	59686	59686	59686	59686	61072	60259	60251	60240
SiO2	57.03	54.93	57.19	50.69	49.91	57.00	46.19	61.51	60.49	54.19
Al2O3	14.05	14.53	12.24	9.93	7.76	12.77	14.93	14.65	18.03	14.85
TiO2	0.70	0.69	0.64	0.55	0.41	0.79	0.56	0.67	0.90	0.66
Fe2O3	5.79	5.63	5.47	6.28	5.85	5.98	6.42	6.91	6.98	7.07
MgO	3.61	4.20	3.72	5.87	6.79	3.78	1.60	2.74	2.54	3.27
CaO	11.01	11.30	12.26	18.35	21.89	11.91	24.36	7.83	5.36	10.88
Na2O	0.41	0.35	0.10	0.05	0.06	0.05	0.09	0.17	0.44	0.25
K2O	1.87	2.36	2.48	2.50	1.83	3.23	4.12	1.27	2.39	1.87
MnO	0.11	0.12	0.14	0.18	0.22	0.16	0.14	0.16	0.28	0.14
P2O5	0.17	0.16	0.16	0.12	0.11	0.16	0.14	0.15	0.18	0.16
Total	94.75	94.27	94.40	94.52	94.83	95.83	98.55	96.06	97.59	93.34
As	0	0	33	23	13	25	11	23	20	11
Ba	218	282	211	233	215	204	299	193	329	207
Cl	57	113	0	0	0	0	49	53	35	38
Co	35	31	15	19	11	14	22	34	27	33
Cr	136	140	151	87	71	108	116	124	143	118
Cu	14	7	14	20	12	21	22	22	24	30
Ga	12	11	13	13	10	15	13	10	13	12
La	32	23	29	25	16	24	31	35	33	29
Ni	76	60	56	55	44	56	62	59	57	65
Nb	11	12	13	10	8	14	11	11	14	12
Pb	16	14	12	11	15	11	39	20	16	25
Rb	58	69	90	86	60	109	95	37	72	50
Sr	56	175	88	148	156	90	92	116	97	170
Sb	0	6	26	31	22	29	0	24	9	17
S	23	6	0	0	0	0	57	211	117	48
Th	8	5	7	1	2	5	15	6	13	8
V	79	89	74	77	51	90	121	79	103	82
Y	28	23	24	23	28	22	29	29	37	30
Zn	43	52	40	49	43	39	91	69	57	76
Zr	231	206	150	110	87	157	101	179	215	168
Tl	0	0	0	0	0	0	0	0	0	0

TABLE 4.147

VAR. / ID.	DJR-788	DJR-858	DJR-863	DJR-888
East	33555	33820	33176	33060
North	60223	60850	59734	60312
SiO2	56.00	57.98	58.77	59.85
Al2O3	15.46	16.92	14.99	19.24
TiO2	0.69	1.03	0.72	1.06
Fe2O3	6.97	12.09	5.29	8.39
MgO	3.58	6.32	3.77	4.32
CaO	10.68	0.66	9.84	0.45
Na2O	0.31	0.38	0.50	0.27
K2O	2.00	2.76	1.82	3.39
MnO	0.15	0.06	0.12	0.09
P2O5	0.16	0.17	0.17	0.16
Total	96.00	98.37	95.99	97.22
As	24	4	65	5
Ba	372	524	190	455
Cl	30	85	43	0
Co	29	23	19	28
Cr	117	148	117	146
Cu	29	11	39	39
Ga	12	17	12	18
La	23	34	29	47
Ni	68	82	41	90
Nb	12	14	11	16
Pb	53	42	11	12
Rb	62	93	58	130
Sr	164	29	98	28
Sb	14	0	17	0
S	179	56	307	7
Th	10	6	7	14
V	90	132	85	122
Y	33	24	30	37
Zn	73	103	28	100
Zr	159	179	187	216
Tl	0	0	2	0

XRF Analyses : Glendinning Greywacke (Zn depletion)

Part... 1

VAR. / ID.	DJR-949	DJR-10	DJR63	DJR66	DJR-715	DJR-731	DJR-863	DJR-886	DJR-946
East	33582	33330	33140	33140	34046	34211	33176	32936	33505
North	59523	59563	59686	59686	60730	60557	59734	60270	59580
SiO2	56.90	56.92	57.19	57.00	58.07	56.57	58.77	56.93	87.84
Al2O3	16.59	14.44	12.24	12.77	12.40	10.75	14.99	12.54	6.86
TiO2	0.82	0.81	0.64	0.79	0.64	0.59	0.72	0.76	0.23
Fe2O3	5.02	6.11	5.47	5.98	4.19	4.31	5.29	5.24	2.95
MgO	3.50	3.49	3.72	3.78	3.48	4.44	3.77	4.03	0.80
CaO	9.24	8.55	12.26	11.91	11.71	13.40	9.84	8.94	0.02
Na2O	1.18	1.56	0.10	0.05	1.95	1.71	0.50	1.71	0.79
K2O	2.23	1.85	2.48	3.23	1.93	1.55	1.82	1.90	0.39
MnO	0.09	0.09	0.14	0.16	0.21	0.14	0.12	0.10	0.03
P2O5	0.18	0.18	0.16	0.16	0.17	0.15	0.17	0.18	0.12
Total	95.75	94.00	94.40	95.83	94.75	93.61	95.99	92.33	100.03
As	0	0	33	25	0	0	65	4	24
Ba	255	287	211	204	188	247	190	212	56
Cl	89	39	0	0	37	61	43	27	0
Co	17	32	15	14	22	29	19	23	43
Cr	141	132	151	108	104	105	117	139	49
Cu	18	10	14	21	10	12	39	20	11
Ga	13	13	13	15	12	10	12	14	6
La	25	33	29	24	24	25	29	26	12
Ni	40	48	56	56	40	33	41	50	12
Nb	11	13	13	14	11	9	11	11	4
Pb	13	14	12	11	13	14	11	11	8
Rb	59	56	90	109	57	46	58	60	15
Sr	157	176	88	90	170	136	98	144	9
Sb	0	0	26	29	4	0	17	0	55
S	176	16	0	0	112	16	307	0	28
Th	9	1	7	5	3	5	7	7	2
V	99	89	74	90	77	79	85	84	27
Y	27	25	24	22	26	22	30	33	9
Zn	36	30	40	39	39	39	28	0	18
Zr	205	194	150	157	151	164	187	212	68
Tl	0	0	0	0	0	0	2	2	0

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TABLE 4.148

XRF Analyses: Glendinning Mudstone Anomalies (As)

Part... 1

VAR. / ID.	DJR-1021	DJR-1023	DJR-1031	DJR-1048	DJR-1053	DJR-1056	DJR-1761	DJR-1784	DJR-1802	DJR-1811
East	33156	33219	33114	32911	33114	33102	33686	33562	33538	34325
North	59321	59355	59628	59478	59659	59678	59544	60236	59963	60248
SiO2	55.72	59.67	57.70	53.19	57.04	57.82	55.92	60.16	56.49	63.36
Al2O3	19.15	19.05	19.97	18.44	19.21	17.84	17.25	21.86	18.91	18.44
TiO2	1.00	1.05	1.15	1.12	0.99	0.99	0.92	1.18	1.07	1.02
Fe2O3	7.36	8.92	10.21	10.00	7.62	7.81	8.17	9.70	9.53	8.27
MgO	5.65	4.89	5.45	5.57	3.80	4.57	5.68	2.28	6.15	4.21
CaO	4.64	0.31	0.14	1.30	5.43	4.37	4.83	0.00	1.82	0.02
Na2O	0.46	1.03	0.84	0.19	0.20	1.05	1.08	0.34	0.88	1.10
K2O	3.53	3.98	4.14	4.22	3.80	3.71	3.64	4.53	3.89	3.33
MnO	0.07	0.05	0.06	0.12	0.09	0.11	0.09	0.10	0.07	0.07
P2O5	0.17	0.14	0.18	0.17	0.18	0.19	0.16	0.22	0.19	0.14
Total	97.75	99.09	99.84	94.32	98.36	98.46	97.74	100.37	99.00	99.96
As	30	145	22	36	23	24	24	24	26	47
Ba	451	443	370	427	351	357	416	376	471	578
Cl	11	0	0	0	0	14	0	0	0	0
Co	22	24	29	31	25	31	29	48	29	49
Cr	153	150	165	163	147	146	147	176	168	133
Cu	38	51	47	19	15	30	50	37	109	76
Ga	21	23	25	26	20	19	20	23	22	7
La	39	43	38	45	35	50	34	49	32	49
Ni	83	85	119	122	103	90	96	222	106	84
Nb	18	19	18	18	15	15	16	19	17	18
Pb	24	209	19	12	11	13	14	115	9	20
Rb	118	148	154	160	130	120	130	169	147	124
Sr	122	45	28	30	64	56	99	65	44	59
Sb	2	25	0	0	16	0	0	3	0	4
S	16	42	94	40	13	17	522	131	40	121
Th	11	8	12	5	5	5	10	13	20	15
V	139	135	156	163	138	130	155	170	157	127
Y	30	30	30	28	29	30	32	43	36	40
Zn	98	718	136	113	93	88	104	112	128	85
Zr	192	242	183	162	179	177	144	193	179	262
Tl	1	0	0	0	0	0	0	0	0	0

TABLE 4.149

XRF Analyses: Glendinning Mudstone Anomalies (As)

Part... 2

VAR. / ID.	DJR-1815	DJR-1817	DJR-1830	DJR-1864	DJR-1908	DJR-1910	DJR-1943
East	34270	34235	34160	33205	34198	34205	33850
North	60270	60294	60394	59726	59945	60012	59463
SiO2	65.75	57.69	57.47	59.59	57.87	59.28	56.40
Al2O3	20.06	18.84	19.03	20.55	18.38	20.12	17.42
TiO2	1.01	1.00	1.13	1.18	1.04	1.09	0.91
Fe2O3	5.72	8.80	10.20	8.26	8.43	9.36	7.80
MgO	2.24	5.49	6.45	4.61	5.96	5.68	5.99
CaO	0.12	2.34	0.30	0.18	1.75	0.10	5.41
Na2O	0.53	1.13	1.00	1.13	1.20	0.13	0.33
K2O	4.28	3.66	3.84	3.82	3.26	4.20	3.82
MnO	0.17	0.11	0.06	0.05	0.07	0.10	0.06
P2O5	0.15	0.17	0.18	0.22	0.17	0.16	0.16
Total	100.03	99.23	99.66	99.59	98.13	100.22	98.30
As	91	31	21	22	42	21	20
Ba	401	509	455	400	555	464	496
Cl	0	0	0	0	0	0	0
Co	25	35	40	31	31	33	22
Cr	140	154	177	168	147	162	143
Cu	54	47	68	14	50	52	21
Ga	20	20	23	21	19	22	20
La	42	39	34	50	35	40	36
Ni	64	99	111	107	88	108	87
Nb	17	16	17	18	18	18	16
Pb	11	24	9	10	24	27	47
Rb	163	132	154	136	119	157	133
Sr	114	67	36	49	75	31	90
Sb	0	0	0	0	4	2	5
S	41	12	0	33	5	25	92
Th	16	17	16	17	6	12	14
V	118	148	165	160	135	155	139
Y	37	43	38	39	51	32	33
Zn	54	105	112	103	108	108	198
Zr	224	161	169	214	174	173	164
Tl	0	0	3	0	0	0	1

TABLE 4.149

XRF Analyses: Glendinning Mudstone Anomalies (Sb)

Part... 1

VAR. / ID.	DJR-1023	DJR-1053	DJR-1704	DJR-1900	DJR-1903	DJR-1942
East	33219	33114	34276	33843	33830	33564
North	59355	59659	60483	59780	59881	60052
SiO ₂	59.67	57.04	57.70	55.64	55.66	55.46
Al ₂ O ₃	19.05	19.21	18.62	14.50	17.74	19.98
TiO ₂	1.05	0.99	1.06	0.80	1.03	1.14
Fe ₂ O ₃	8.92	7.62	9.07	5.33	8.16	10.18
MgO	4.89	3.80	5.58	5.01	4.91	5.93
CaO	0.31	5.43	1.71	8.91	3.34	0.11
Na ₂ O	1.03	0.20	1.12	1.38	1.06	0.75
K ₂ O	3.98	3.80	3.51	2.95	3.65	4.14
MnO	0.05	0.09	0.13	0.19	0.07	0.09
P ₂ O ₅	0.14	0.18	0.19	0.16	0.19	0.19
Total	99.09	98.36	98.69	94.87	95.81	97.97
As	145	23	15	4	18	16
Ba	443	351	516	325	413	428
Cl	0	0	0	74	24	0
Co	24	25	33	22	31	38
Cr	150	147	159	127	151	182
Cu	51	15	56	28	54	79
Ga	23	20	22	13	19	24
La	43	35	41	30	42	38
Ni	85	103	105	53	96	122
Nb	19	15	17	13	17	17
Pb	209	11	7	9	10	9
Rb	148	130	134	86	133	161
Sr	45	64	54	76	62	36
Sb	25	16	12	19	16	12
S	42	13	7	28	6	27
Th	8	5	9	10	13	17
V	135	138	148	111	149	161
Y	30	29	37	31	34	33
Zn	718	93	110	56	108	125
Zr	242	179	175	166	178	180
Tl	0	0	2	0	3	2

TABLE 4.150

XRF Analyses: Glendinning Mudstone Anomalies (Cu)

Part... 1

VAR. / ID.	DJR-1003	DJR-1008	DJR-1734	DJR-1802	DJR-1811	DJR-1872	DJR-1898	DJR-1919	DJR-1926	DJR-1942
East	33500	33370	34373	33538	34325	33070	33014	33490	33302	33564
North	59778	59615	60750	59963	60248	59795	59785	59953	60277	60052
SiO2	60.78	57.44	56.03	56.49	63.36	58.84	57.14	53.83	59.31	55.46
Al2O3	19.39	19.72	20.23	18.91	18.44	20.75	18.78	19.14	19.59	19.98
TiO2	1.02	1.04	1.13	1.07	1.02	1.15	1.11	1.17	1.08	1.14
Fe2O3	7.65	9.33	9.49	9.53	8.27	9.78	9.69	10.20	8.77	10.18
MgO	4.28	6.05	6.00	6.15	4.21	4.27	5.59	5.47	5.36	5.93
CaO	1.27	0.95	0.35	1.82	0.02	0.06	0.11	0.09	0.33	0.11
Na2O	1.04	1.04	0.87	0.88	1.10	0.61	0.90	0.51	0.87	0.75
K2O	4.10	3.94	4.60	3.89	3.33	4.35	3.45	4.18	4.18	4.14
MnO	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.06	0.09	0.09
P2O5	0.14	0.16	0.17	0.19	0.14	0.18	0.17	0.18	0.18	0.19
Total	99.73	99.73	98.93	99.00	99.96	100.06	97.42	94.83	99.76	97.97
As	0	17	16	26	47	11	7	4	7	16
Ba	495	510	497	471	578	395	405	590	399	428
Cl	0	0	0	0	0	8	0	0	0	0
Co	27	38	33	29	49	34	32	30	33	38
Cr	129	156	173	168	133	188	165	168	162	182
Cu	105	96	93	109	76	70	74	75	74	79
Ga	22	25	24	22	7	24	22	23	20	24
La	41	43	33	32	49	53	50	40	39	38
Ni	84	117	111	106	84	130	115	119	95	122
Nb	19	19	17	17	18	20	18	19	18	17
Pb	16	15	8	9	20	7	8	15	14	9
Rb	159	151	180	147	124	172	148	166	158	161
Sr	43	44	41	44	59	45	33	33	43	36
Sb	0	4	0	0	4	0	0	0	4	12
S	12	37	8	40	121	48	0	5	22	27
Th	5	10	17	20	15	18	13	16	14	17
V	128	181	185	157	127	164	157	170	143	161
Y	36	31	31	36	40	33	32	42	33	33
Zn	98	107	118	128	85	126	117	124	102	125
Zr	252	167	167	179	262	178	187	177	206	180
Tl	0	0	0	0	0	0	0	2	0	2

TABLE 4.151

XRF Analyses: Glendinning Mudstone Anomalies (Pb)

Part... 1

VAR. / ID.	DJR-1002	DJR-1023	DJR-1777	DJR-1784	DJR-1801	DJR-1814	DJR-1845	DJR-1883	DJR-1916	DJR-1929
East	33535	33219	33967	33562	33544	34274	33599	32960	33749	33368
North	59800	59355	60450	60236	59948	60267	60625	60200	60158	60127
SiO ₂	57.39	59.67	58.41	60.16	58.15	63.47	57.92	57.90	57.70	60.47
Al ₂ O ₃	19.05	19.05	15.33	21.86	19.47	17.89	18.76	17.33	18.85	17.18
TiO ₂	1.11	1.05	0.88	1.18	1.08	0.95	1.08	0.98	1.06	1.09
Fe ₂ O ₃	10.24	8.92	6.69	9.70	9.24	7.54	9.27	8.04	9.15	7.92
MgO	6.59	4.89	5.54	2.28	5.83	5.57	5.95	5.74	6.39	5.12
CaO	0.40	0.31	5.61	0.00	0.32	0.19	1.60	4.11	1.38	0.19
Na ₂ O	0.80	1.03	1.21	0.34	0.94	1.12	0.91	1.08	1.01	1.38
K ₂ O	3.83	3.98	2.71	4.53	3.77	3.27	3.74	3.43	3.55	2.71
MnO	0.08	0.05	0.09	0.10	0.07	0.09	0.08	0.09	0.09	0.15
P ₂ O ₅	0.19	0.14	0.18	0.22	0.19	0.13	0.19	0.19	0.19	0.21
Total	99.68	99.09	96.65	100.37	99.06	100.22	99.50	98.89	99.37	96.42
As	2	145	4	24	6	13	7	5	13	9
Ba	454	443	294	376	523	406	384	382	405	345
Cl	0	0	0	0	0	0	0	0	0	0
Co	29	24	24	48	31	37	28	22	35	40
Cr	166	150	139	176	157	127	170	142	155	153
Cu	43	51	31	37	44	45	40	50	56	48
Ga	25	23	15	23	21	19	21	36	22	18
La	37	43	35	49	41	47	44	34	43	43
Ni	112	85	72	222	96	71	112	97	102	86
Nb	19	19	13	19	17	18	18	17	17	17
Pb	41	209	75	115	65	68	52	71	59	45
Rb	154	148	93	169	145	122	136	129	139	103
Sr	34	45	88	65	38	41	49	72	52	45
Sb	0	25	0	3	0	0	0	0	5	0
S	14	42	51	131	49	67	18	26	30	41
Th	15	8	10	13	8	11	10	14	14	14
V	153	135	113	170	154	116	158	142	155	131
Y	32	30	37	43	38	42	34	39	32	32
Zn	127	718	88	119	152	90	111	100	116	90
Zr	167	242	192	193	188	240	173	175	173	207
Tl	0	0	0	0	0	0	2	0	0	0

TABLE 4.152

VAR. / ID.	DJR-1938	DJR-1943
East	33530	33830
North	60208	59463
SiO ₂	59.50	56.40
Al ₂ O ₃	19.20	17.42
TiO ₂	1.11	0.91
Fe ₂ O ₃	9.26	7.80
MgO	5.75	5.99
CaO	0.16	5.41
Na ₂ O	1.07	0.33
K ₂ O	3.71	3.82
MnO	0.08	0.06
P ₂ O ₅	0.19	0.16
Total	100.03	98.30
As	8	20
Ba	388	496
Cl	0	0
Co	29	22
Cr	152	143
Cu	39	21
Ga	21	20
La	41	36
Ni	102	87
Nb	19	16
Pb	59	47
Rb	141	133
Sr	36	90
Sb	3	5
S	37	92
Th	17	14
V	139	139
Y	30	33
Zn	111	198
Zr	184	164
Tl	0	1

TABLE 4.152

XRF Analyses: Glendinning Mudstone Anomalies (Zn)

Part... 1

VAR. / ID.	DJR-1002	DJR-1023	DJR-1031	DJR-1715	DJR-1716	DJR-1719	DJR-1754	DJR-1801	DJR-1802	DJR-1868
East	33535	33219	33114	34046	34007	34018	33654	33544	33538	33196
North	59800	59355	59628	60730	60778	60939	59667	59948	59963	59778
SiO2	57.39	59.67	57.70	56.22	57.75	62.28	56.42	58.15	56.49	55.97
Al2O3	19.05	19.05	19.97	19.43	19.39	16.37	20.14	19.47	18.91	20.28
TiO2	1.11	1.05	1.15	1.13	1.13	0.90	1.18	1.08	1.07	1.18
Fe2O3	10.24	8.92	10.21	9.79	9.74	7.53	9.47	9.24	9.53	10.12
MgO	6.59	4.89	5.45	6.08	6.33	5.76	6.00	5.83	6.15	6.39
CaO	0.40	0.31	0.14	0.17	0.14	2.32	0.33	0.32	1.82	0.12
Na2O	0.80	1.03	0.84	0.77	0.86	1.05	0.72	0.94	0.88	0.84
K2O	3.83	3.98	4.14	4.26	3.78	3.09	4.61	3.77	3.89	4.46
MnO	0.08	0.05	0.06	0.07	0.09	0.08	0.06	0.07	0.07	0.05
P2O5	0.19	0.14	0.18	0.17	0.18	0.16	0.20	0.19	0.19	0.17
Total	99.68	99.09	99.84	98.09	99.39	99.54	99.13	99.06	99.00	99.58
As	2	145	22	7	3	5	1	6	26	7
Ba	454	443	370	406	375	339	472	523	471	393
Cl	0	0	0	0	0	9	0	0	0	0
Co	29	24	29	30	33	25	27	31	29	33
Cr	166	150	165	186	170	143	175	157	168	180
Cu	43	51	47	50	68	10	8	44	109	39
Ga	25	23	25	21	22	17	22	21	22	24
La	37	43	38	31	45	28	51	41	32	47
Ni	112	85	119	127	113	102	130	96	106	128
Nb	19	19	18	18	16	16	19	17	17	17
Pb	41	209	19	8	31	8	12	65	9	23
Rb	154	148	154	163	141	112	178	145	147	172
Sr	34	45	28	32	38	47	38	38	44	26
Sb	0	25	0	0	0	0	0	0	0	3
S	14	42	94	14	11	20	24	49	40	24
Th	15	8	12	12	11	6	15	8	20	9
V	153	135	156	175	156	130	182	154	157	174
Y	32	30	30	28	30	24	35	38	36	30
Zn	127	718	136	130	129	125	128	152	128	125
Zr	167	242	183	165	176	154	181	188	179	172
Tl	0	0	0	0	0	0	0	0	0	0

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TABLE 4.153

XRF Analyses: Glendinning Mudstone Anomalies (Zn)

Part... 2

VAR. / ID.	DJR-1872	DJR-1888	DJR-1889	DJR-1893	DJR-1921	DJR-1942	DJR-1943
East	33070	33060	33036	33272	33416	33564	33830
North	59795	60312	60410	60131	60286	60052	59463
SiO ₂	58.84	58.13	58.23	57.50	58.85	55.46	56.40
Al ₂ O ₃	20.75	19.78	18.17	18.31	20.93	19.98	17.42
TiO ₂	1.15	1.15	1.12	1.10	1.14	1.14	0.91
Fe ₂ O ₃	9.78	9.67	9.35	8.99	9.27	10.18	7.80
MgO	4.27	5.05	5.44	5.72	5.24	5.93	5.99
CaO	0.06	0.21	0.12	0.10	0.00	0.11	5.41
Na ₂ O	0.61	0.12	1.06	0.63	0.29	0.75	0.33
K ₂ O	4.35	3.97	3.54	3.58	3.86	4.14	3.82
MnO	0.07	0.10	0.08	0.08	0.09	0.09	0.06
P ₂ O ₅	0.18	0.15	0.18	0.18	0.10	0.19	0.16
Total	100.06	98.33	97.29	96.19	99.77	97.97	98.30
As	11	4	9	0	4	16	20
Ba	395	526	400	372	404	428	496
Cl	8	0	0	0	0	0	0
Co	34	35	32	36	38	38	22
Cr	188	157	141	165	171	182	143
Cu	70	67	15	49	21	79	21
Ga	24	24	20	20	22	24	20
La	53	41	33	37	42	38	36
Ni	130	123	100	108	112	122	87
Nb	20	17	18	19	18	17	16
Pb	7	10	28	34	18	9	47
Rb	172	150	135	139	137	161	133
Sr	45	28	29	20	30	36	50
Sb	0	0	0	0	0	12	5
S	48	13	0	15	14	27	92
Th	18	16	13	8	11	17	14
V	164	158	148	148	147	161	139
Y	33	41	33	41	39	33	33
Zn	126	129	135	133	130	125	198
Zr	178	182	171	183	182	180	164
Tl	0	3	0	0	0	2	1

TABLE 4.153

XRF Analyses: Glendinning Mudstone (Na depletion)

Part... 1

VAR. / ID.	DJR-1011	DJR-1021	DJR-1033	DJR-1037	DJR-1048	DJR-1049	DJR-1053	DJR-1766	DJR-1784	DJR-1874
East	33321	33156	33093	33055	32911	32960	33114	34544	33562	33212
North	59542	59321	59586	59550	59478	59390	59659	61072	60236	59935
SiO2	54.10	55.72	62.38	55.17	53.19	60.19	57.04	47.36	60.16	58.35
Al2O3	17.43	19.15	19.04	20.70	18.44	21.44	19.21	15.60	21.86	19.74
TiO2	0.83	1.00	1.10	1.23	1.12	0.97	0.99	0.58	1.18	1.09
Fe2O3	6.63	7.36	7.85	10.26	10.00	5.13	7.62	6.30	9.70	10.19
MgO	4.08	5.65	3.15	6.28	5.57	1.25	3.80	1.61	2.28	5.38
CaO	8.94	4.64	1.51	0.52	1.30	5.14	5.43	22.88	0.00	0.11
Na2O	0.00	0.46	0.31	0.37	0.19	0.44	0.20	0.19	0.34	0.39
K2O	2.63	3.53	2.76	4.62	4.22	4.54	3.80	4.22	4.53	4.62
MnO	0.15	0.07	0.22	0.03	0.12	0.08	0.09	0.15	0.10	0.39
P2O5	0.18	0.17	0.21	0.18	0.17	0.17	0.18	0.15	0.22	0.17
Total	94.97	97.75	98.53	99.36	94.32	99.35	98.36	99.04	100.37	100.43
As	4	30	4	3	36	0	23	14	24	10
Ba	286	451	424	434	427	539	351	305	376	363
Cl	29	11	0	0	0	0	0	35	0	0
Co	25	22	34	27	31	13	25	24	48	31
Cr	121	153	153	172	163	159	147	115	176	157
Cu	46	38	18	8	19	5	15	33	37	43
Ga	17	21	18	28	26	24	20	14	23	21
La	33	39	36	56	45	47	35	33	49	42
Ni	79	83	133	126	122	93	103	72	222	102
Nb	15	18	18	20	18	15	15	10	19	17
Pb	14	24	13	13	12	10	11	34	115	20
Rb	81	118	98	170	160	157	130	94	169	176
Sr	154	122	38	28	30	77	64	84	65	31
Sb	5	2	0	0	0	2	16	0	3	2
S	14	16	15	15	40	0	13	89	131	9
Th	8	11	7	7	5	3	5	7	13	17
V	108	139	118	173	163	149	138	122	170	155
Y	30	30	36	30	28	29	29	29	43	33
Zn	46	98	80	119	113	18	93	94	119	114
Zr	171	192	262	176	162	150	179	99	193	194
Tl	0	1	0	0	0	0	0	0	0	2

TABLE 4.154

XRF Analyses: Glendinning Mudstone (Na depletion)

Part... 2

VAR. / ID.	DJR-1888	DJR-1909	DJR-1910	DJR-1911	DJR-1921	DJR-1943
East	33060	34210	34205	34103	33416	33830
North	60312	59995	60012	60110	60286	59463
SiO2	58.13	57.49	59.28	60.54	58.85	56.40
Al2O3	19.78	18.93	20.12	19.54	20.93	17.42
TiO2	1.15	0.98	1.09	1.07	1.14	0.91
Fe2O3	9.67	7.79	9.36	8.16	9.27	7.80
MgO	5.05	4.94	5.68	4.87	5.24	5.99
CaO	0.21	4.05	0.10	0.30	0.00	5.41
Na2O	0.12	0.34	0.13	0.45	0.29	0.33
K2O	3.97	4.01	4.20	3.52	3.86	3.82
MnO	0.10	0.07	0.10	0.09	0.09	0.06
P2O5	0.15	0.17	0.16	0.20	0.10	0.16
Total	98.33	98.77	100.22	98.74	99.77	98.30
As	4	7	21	1	4	20
Ba	526	485	464	374	404	496
Cl	0	0	0	0	0	0
Co	35	25	33	31	38	22
Cr	157	150	162	142	171	143
Cu	67	40	52	20	21	21
Ga	24	22	22	20	22	20
La	41	29	40	41	42	36
Ni	123	90	108	89	112	87
Nb	17	17	18	16	18	16
Pb	10	10	27	14	18	47
Rb	150	134	157	122	137	133
Sr	28	68	31	35	30	90
Sb	0	0	2	0	0	5
S	13	28	25	11	14	92
Th	16	9	12	11	11	14
V	158	145	155	135	147	139
Y	41	30	32	36	39	33
Zn	129	91	108	83	130	198
Zr	182	168	173	207	182	164
Tl	3	1	0	3	0	1

TABLE 4.154

XRF Analyses: Glendinning Mudstone (Zn depletion)

Part... 1

VAR. / ID.	DJR-1010	DJR-1011	DJR-1049	DJR-1057	DJR-1791	DJR-1815	DJR-1851	DJR-1900	DJR-1950
East	33330	33321	32960	33082	33596	34270	33924	33843	33606
North	59563	59542	59390	59692	60179	60270	60641	59780	59510
SiO2	57.27	54.10	60.19	57.42	55.98	65.75	60.22	55.64	59.41
Al2O3	20.78	17.43	21.44	14.20	11.68	20.06	14.14	14.50	19.89
TiO2	1.02	0.83	0.97	0.82	0.62	1.01	0.91	0.80	0.87
Fe2O3	4.92	6.63	5.13	5.78	4.37	5.72	5.92	5.33	6.67
MgO	1.06	4.08	1.25	4.20	3.40	2.24	3.72	5.01	2.21
CaO	6.68	8.94	5.14	7.87	14.69	0.12	4.79	8.91	5.76
Na2O	0.70	0.00	0.44	1.44	1.58	0.53	1.51	1.38	0.64
K2O	3.82	2.63	4.54	2.34	2.01	4.28	2.17	2.95	3.77
MnO	0.08	0.15	0.08	0.11	0.24	0.17	0.09	0.19	0.09
P2O5	0.20	0.18	0.17	0.17	0.18	0.15	0.19	0.16	0.16
Total	96.53	94.97	99.35	94.35	94.75	100.03	93.66	94.87	99.47
As	2	4	0	3	4	91	1	4	9
Ba	392	286	539	266	212	401	257	325	406
Cl	0	29	0	0	35	0	19	74	19
Co	19	25	13	26	20	25	24	22	27
Cr	152	121	159	130	100	140	180	127	136
Cu	12	46	5	16	22	54	17	28	18
Ga	20	17	24	14	12	20	13	13	18
La	40	33	47	32	44	42	38	30	43
Ni	61	79	93	64	48	64	59	53	68
Nb	17	15	15	13	11	17	13	13	15
Pb	12	14	10	13	9	11	14	9	17
Rb	120	81	157	73	64	163	67	86	115
Sr	131	154	77	107	141	114	82	76	162
Sb	0	5	2	0	0	0	0	19	2
S	9	14	0	4	0	41	0	28	168
Th	11	8	3	1	11	16	8	10	10
V	136	108	149	102	96	118	107	111	130
Y	33	30	29	26	36	37	40	31	30
Zn	30	46	18	63	52	54	56	56	59
Zr	220	171	150	178	141	224	250	166	155
Tl	0	0	0	0	0	0	0	0	4

TABLE 4.155