

Appendix 6 Results of Chemical Analysis of Ore Samples (45 Samples)

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No. Sample No.	Area	Au (g/t)	Cu (ppm)	Zn (ppm)	Ni (ppm)	Cr (%)	Fe (%)	remarks
1	AHk-2	A	-0.05	113	552	20		Pegmatite
2	AHk-5	"	-0.05	292	309	20		Quartz Vein
3	B-7	B	-0.05	78	99	400		Gossan
4	C-3-1	C	0.96	22	29	20		Quartz Vein
5	C-3-2	"	0.28	272	223	80		"
6	C-10	"	0.05	642	1,530	80		Diorite
7	CM-2	"	-0.05	140	101	20		Gossan
8	CM-60	"	-0.05	74	297	160		Pyrite diss.
9	CM-69	"	-0.05	574	332	80		Gossan
10	HK-59	"	-0.05	389	369	120		"
11	HK-69	"	-0.05	388	567	1,010		"
12	HK-77	"	-0.05	608	667	210		"
13	HK-78	"	-0.05	91	224	250		"
14	D-7-10	D	-0.05	29	46	70		"
15	DK-6	"	-0.05	182	248	210		"
16	DK-11	"	-0.05	111	164	210		"
17	DK-25	"	-0.05	205	136	3,700		"
18	EX-10	"	-0.05	602	3,600	920		"
19	E-1	E	-0.05	14	36	50		Quartz Vein
20	EN-4	"	-0.05	1,450	707	1,730		Gossan
21	CM-42	C					0.24	Serpentinite
22	DK-8	D					0.19	"
23	DK-15	"					0.20	"
24	DM-8	"					0.23	"
25	DN-14	"					0.40	"

- sign = Less than
+ sign = More than

No. Sample No.	Area	Nb (ppm)	Ta (ppm)	Sn (ppm)	W (ppm)	(ppm) remarks
26	A-28-02	A	15	-20	-20	Quartz Vein
27	AK-3	"	39	-20	-20	Pegmatite
28	AK-4	"	90	-20	24	Gossan
29	AK-5	"	19	-20	24	Pegmatite
30	AM-200	"	-10	-20	-20	"
31	HK-11	"	-10	21	38	Felsic Rock
32	HK-12	"	54	24	-20	"
33	HK-13	"	40	-20	-20	Pegmatite
34	B-9	B	14	-20	-20	"
35	C-17	C	-10	-20	-20	Felsic Rock
36	CM-46	"	30	-20	-20	Pegmatite
37	D-04-08	D	-10	-20	-20	"
38	D-7-16	"	24	506	45	"
39	D-40-1	"	115	155	530	"
40	D-40-2	"	220	+5,000	424	"
41	D-41-1	"	40	1,834	117	"
42	DK-18	"	70	444	98	"
43	DK-27	"	51	266	394	Gossan
44	DM-07	"	-10	-20	-20	Pegmatite
45	PB-11	"	223	106	336	"

Appendix 7 Results of Whole Rock Analysis of Komatiitic Rocks (100 Samples)

Appendix 7 Results of Whole Rock Analysis of Komatiitic Rocks(100 samples)

(1)

No.	1	2	3	4	5	6	7	8	9	10
Sample No.	A-17-07	AK-1	AK-3	AK-13	AK-14	AK-16	AK-19	AK-20	AK-21	AK-22
Area	A	A	A	A	A	A	A	A	A	A
(wt%)										
SiO ₂	49.5	48.8	51.6	48.9	45.8	51.5	48.7	47.1	54.2	50.6
TiO ₂	0.92	1.10	0.76	0.96	0.46	0.74	0.65	1.02	0.94	0.95
Al ₂ O ₃	17.5	16.1	17.2	16.9	11.7	16.9	17.6	16.5	15.3	15.0
Fe ₂ O ₃	1.00	1.87	1.24	1.70	1.90	1.54	1.20	1.27	1.82	2.05
FeO	7.69	9.74	6.07	7.65	8.73	6.29	7.47	9.74	7.54	8.77
MnO	0.24	0.22	0.22	0.18	0.24	0.18	0.18	0.18	0.19	0.19
MgO	6.30	4.40	6.50	6.60	16.30	6.70	8.80	8.70	6.30	7.50
CaO	12.40	13.80	13.00	14.20	10.80	12.40	12.30	11.60	8.36	11.40
Na ₂ O	2.20	1.10	2.10	1.70	0.70	2.10	1.90	1.10	2.80	1.70
K ₂ O	0.19	0.11	0.07	0.11	0.09	0.00	0.11	0.06	0.00	0.00
P ₂ O ₅	0.07	0.07	0.05	0.11	0.00	0.00	0.11	0.05	0.07	0.07
LOI	0.54	1.03	0.72	0.71	1.69	0.86	0.66	1.03	0.88	0.50
S	0.04	0.01	0.01	0.02	0.01	0.05	0.03	0.01	0.07	0.03
BaO (ppm)	63	280	39	36	47	50	41	-20	68	45
Cu	110	77	15	74	57	93	56	44	82	86
Cr	450	280	300	430	2000	450	510	460	50	450
Ni	260	210	210	210	940	260	280	220	110	220
Co	100	120	70	110	130	100	90	100	100	110
CaO/Al ₂ O ₃	0.71	0.86	0.76	0.84	0.92	0.74	0.70	0.70	0.55	0.76
FeO/ (FeO+MgO)	0.55	0.69	0.48	0.54	0.35	0.48	0.46	0.53	0.54	0.54

No.	11	12	13	14	15	16	17	18	19	20
Sample No.	AK-26	AM-2	AM-6	AM-7	AM-10	AM-18	HK-1	HK-12	HK-21	HK-24
Area	A	A	A	A	A	A	A	A	A	A
(%)										
SiO ₂	40.0	50.2	49.6	50.3	48.7	49.7	48.4	53.3	50.6	37.7
TiO ₂	0.25	1.59	0.88	1.04	0.64	0.87	2.08	0.83	0.94	0.18
Al ₂ O ₃	4.6	13.5	16.2	15.7	17.5	15.8	13.2	14.0	15.4	3.7
Fe ₂ O ₃	5.57	1.79	1.83	1.64	1.54	1.92	1.91	1.78	1.40	6.70
FeO	5.25	12.07	7.98	9.41	7.08	8.26	14.48	7.94	7.47	4.77
MnO	0.20	0.21	0.23	0.19	0.24	0.19	0.24	0.20	0.20	0.23
MgO	30.60	6.00	5.80	7.00	7.80	7.80	5.10	6.90	8.40	31.30
CaO	2.94	10.10	13.30	12.00	15.00	12.40	8.61	9.58	11.30	2.00
Na ₂ O	0.00	1.60	2.10	2.10	0.80	1.70	2.20	3.20	2.00	0.00
K ₂ O	0.00	0.13	0.05	0.08	0.00	0.00	0.29	0.39	0.12	0.00
P ₂ O ₅	0.00	0.10	0.05	0.06	0.00	0.06	0.18	0.06	0.00	0.00
LOI	8.41	0.38	0.75	0.36	0.51	0.47	0.94	0.73	1.00	9.94
S	0.03	0.07	0.05	0.01	0.02	0.01	0.01	0.01	0.01	0.01
BaO (ppm)	-20	55	74	67	49	23	152	121	43	-20
Cu	21	35	75	36	52	85	87	84	12	8
Cr	5600	160	480	360	430	420	110	350	460	3200
Ni	1800	110	220	180	280	230	130	140	250	1770
Co	170	80	100	240	80	90	110	90	100	180
CaO/Al ₂ O ₃	0.64	0.75	0.82	0.76	0.86	0.78	0.65	0.68	0.73	0.54
FeO/ (FeO+MgO)	0.51	0.67	0.58	0.57	0.48	0.51	0.74	0.54	0.47	0.13

* - sign = Less than

Appendix 7 Results of Whole Rock Analysis of Komatiitic Rocks (100 samples)

(2)

No.	21	22	23	24	25	26	27	28	29	30
Sample No.	HK-35	HK-36	HK-39	HK-40	B-6	B-8	B-10	B-11	BM-25	BM-29
Area	A	A	B	B	B	B	B	B	B	B
(wt%)										
SiO ₂	38.3	39.8	47.6	44.7	38.4	50.2	50.8	51.4	52.9	46.1
TiO ₂	0.20	0.22	0.35	0.39	0.20	0.63	1.15	0.58	0.81	1.04
Al ₂ O ₃	3.9	4.0	17.5	9.7	4.3	13.7	14.8	14.4	15.9	16.8
Fe ₂ O ₃	7.43	6.35	0.81	0.92	6.61	0.72	1.80	0.79	0.96	1.96
FeO	3.66	3.55	7.54	8.98	3.23	9.70	10.35	7.65	7.87	9.30
MnO	0.22	0.20	0.15	0.19	0.13	0.22	0.20	0.18	0.39	0.22
MgO	31.40	32.90	10.00	20.30	35.60	7.90	6.60	8.60	6.90	6.30
CaO	1.68	1.52	12.20	9.12	0.19	12.80	10.40	12.80	11.70	14.70
Na ₂ O	0.00	0.00	0.80	0.30	0.00	1.60	1.70	1.30	1.40	1.30
K ₂ O	0.06	0.00	0.00	0.00	0.00	0.13	0.10	0.00	0.00	0.06
P ₂ O ₅	0.00	0.00	0.00	0.00	0.00	0.07	0.10	0.00	0.00	0.06
LOI	10.40	10.10	0.60	3.18	11.10	0.40	0.74	0.59	0.35	0.98
S	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.01	0.01
BaO (ppm)	-20	-20	-20	-20	-20	86	51	23	-20	58
Cu	15	11	125	36	9	33	56	140	12	72
Cr	6500	5000	750	1790	2100	1060	220	630	270	390
Ni	1850	1890	400	1180	3700	330	130	230	230	290
Co	170	180	120	110	150	140	90	80	120	120
CaO/Al ₂ O ₃	0.43	0.38	0.70	0.94	0.04	0.93	0.70	0.89	0.74	0.88
FeO/ (FeO+MgO)	0.10	0.10	0.43	0.31	0.08	0.55	0.61	0.47	0.53	0.60

No.	31	32	33	34	35	36	37	38	39	40
Sample No.	BM-30	BM-31	BM-33	BM-36	BM-38	BM-39	HK-50	HK-58	HK-64	HK-68
Area	A	A	A	A	A	A	C	C	C	C
(%)										
SiO ₂	45.0	47.6	47.9	37.2	49.9	51.1	50.9	56.3	49.7	39.8
TiO ₂	0.65	0.76	0.38	0.14	0.57	0.58	0.78	0.75	1.44	0.06
Al ₂ O ₃	9.3	15.4	16.2	4.4	13.3	13.4	12.7	13.1	14.3	2.0
Fe ₂ O ₃	1.82	0.70	1.22	6.29	1.40	1.42	1.86	0.66	1.32	6.09
FeO	8.08	9.45	8.62	3.05	8.19	8.26	9.30	6.36	11.32	1.98
MnO	0.22	0.19	0.17	0.13	0.19	0.18	0.20	0.14	0.16	0.11
MgO	19.70	8.40	9.90	35.80	10.60	11.30	9.40	6.20	7.30	38.00
CaO	9.23	12.60	11.50	0.06	10.80	10.20	9.39	8.83	8.44	0.00
Na ₂ O	0.40	1.00	1.30	0.00	1.90	1.40	1.60	4.40	2.50	0.00
K ₂ O	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.32	0.13	0.00
P ₂ O ₅	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.08	0.10	0.00
LOI	4.06	0.59	0.71	11.20	0.51	0.97	1.28	0.77	0.66	11.50
S	0.01	0.07	0.01	0.01	0.05	0.03	0.01	0.08	0.01	0.01
BaO (ppm)	86	38	28	59	100	34	29	142	30	-20
Cu	22	83	98	10	88	88	31	24	53	17
Cr	1310	440	760	2200	880	920	720	580	230	3440
Ni	1340	260	350	2030	230	290	340	240	140	830
Co	140	100	110	150	100	90	130	80	100	90
CaO/Al ₂ O ₃	0.99	0.82	0.71	0.01	0.81	0.76	0.74	0.67	0.59	0.00
FeO/ (FeO+MgO)	0.29	0.53	0.47	0.08	0.43	0.42	0.50	0.51	0.61	0.05

* - sign = Less than

Appendix 7 Results of Whole Rock Analysis of Komatiitic Rocks (100 samples)

(3)

No.	41	42	43	44	45	46	47	48	49	50
Sample No.	HK-74	HK-81	HK-82	HK-87	HK-99	C-20	C-13-19	C-36-01	CK-98	CK-100
Area	C	C	C	C	C	C	C	C	C	C
(wt%)										
SiO ₂	39.6	51.4	53.1	39.5	50.9	52.0	48.4	50.6	51.6	50.8
TiO ₂	0.19	0.80	1.66	0.09	0.88	0.63	0.60	1.04	0.79	0.63
Al ₂ O ₃	3.0	13.8	14.9	2.0	9.5	13.5	11.7	17.7	12.9	13.6
Fe ₂ O ₃	5.81	1.08	1.08	4.87	0.90	1.55	1.48	1.32	1.82	1.62
FeO	3.31	8.66	8.66	2.08	9.45	7.33	9.38	8.80	9.16	8.26
MnO	0.20	0.19	0.22	0.09	0.19	0.18	0.23	0.35	0.18	0.22
MgO	35.00	8.70	5.40	37.30	11.60	9.10	11.10	3.90	8.40	9.50
CaO	1.18	9.72	7.79	0.00	10.10	11.40	12.40	12.10	10.10	9.98
Na ₂ O	0.00	2.10	4.40	0.00	1.50	1.50	1.70	1.20	1.60	2.00
K ₂ O	0.00	0.10	0.26	0.00	0.75	0.08	0.11	0.22	0.09	0.12
P ₂ O ₅	0.00	0.05	0.12	0.00	0.09	0.00	0.00	0.05	0.05	0.00
LOI	10.50	1.06	0.74	11.20	1.63	1.01	0.18	0.94	0.60	1.24
S	0.03	0.11	0.01	0.02	0.03	0.02	0.01	0.62	0.02	0.04
BaO (ppm)	46	54	346	-20	94	113	47	103	61	71
Cu	31	54	45	14	118	63	86	110	90	128
Cr	1880	500	140	7220	1080	730	1230	330	490	780
Ni	2020	210	100	1460	310	200	440	250	210	230
Co	130	100	110	90	100	80	100	110	100	100
CaO/Al ₂ O ₃	0.39	0.70	0.52	0.00	1.06	0.84	1.06	0.68	0.78	0.73
FeO/ (FeO+MgO)	0.09	0.50	0.62	0.05	0.45	0.45	0.46	0.69	0.52	0.46

No.	51	52	53	54	55	56	57	58	59	60
Sample No.	CM-47	CM-51	CM-52	CM-54	CM-56	CM-57	CM-58	CM-61	CM-63	CM-66
Area	C	C	C	C	C	C	C	C	C	C
(%)										
SiO ₂	37.2	54.0	48.0	50.1	40.4	50.9	51.8	50.8	46.6	55.1
TiO ₂	0.17	0.76	0.98	0.74	0.15	0.59	0.76	0.63	0.63	1.08
Al ₂ O ₃	3.3	12.8	15.3	14.8	2.8	13.1	14.2	14.1	15.6	16.1
Fe ₂ O ₃	9.49	1.24	4.68	1.32	3.45	0.70	0.88	1.23	1.04	1.56
FeO	1.72	8.69	7.40	9.16	1.08	9.27	8.84	6.86	9.05	6.29
MnO	0.20	0.20	0.20	0.18	0.11	0.15	0.20	0.21	0.19	0.19
MgO	34.40	7.20	9.60	9.30	38.60	10.80	9.70	6.80	11.20	4.10
CaO	0.00	12.10	10.40	10.80	0.00	10.30	9.64	13.60	10.80	8.62
Na ₂ O	0.00	1.00	1.40	1.60	0.00	1.40	2.00	1.80	1.00	4.20
K ₂ O	0.05	0.23	0.07	0.11	0.00	0.19	0.06	0.10	0.12	0.45
P ₂ O ₅	0.00	0.07	0.00	0.05	0.00	0.00	0.06	0.05	0.00	0.10
LOI	12.30	0.85	1.32	0.86	12.20	1.07	0.06	0.97	1.41	0.58
S	0.01	0.02	0.03	0.01	0.01	0.02	0.05	0.01	0.01	0.02
BaO (ppm)	-20	111	35	30	-20	44	50	106	24	254
Cu	112	60	90	65	33	6	76	80	55	54
Cr	1740	460	370	580	2000	700	530	790	580	370
Ni	3600	160	300	310	1030	30	280	280	420	240
Co	190	80	100	110	100	80	90	120	110	100
CaO/Al ₂ O ₃	0.00	0.95	0.68	0.73	0.00	0.79	0.68	0.96	0.69	0.54
FeO/ (FeO+MgO)	0.05	0.55	0.44	0.50	0.03	0.46	0.48	0.50	0.45	0.61

* - sign = Less than

Appendix 7 Results of Whole Rock Analysis of Komatiitic Rocks (100 samples)

(4)

No.	61	62	63	64	65	66	67	68	69	70
Sample No.	GM-67	CM-70	D-4	D-5	D-2-8	D-6-106	D-6-111	D-6-117	D-10-2	D-15-3
Area (wt%)	C	C	D	D	D	D	D	D	D	D
SiO ₂	50.7	51.2	40.0	47.2	51.4	37.6	41.4	47.7	37.7	47.8
TiO ₂	1.11	0.65	0.20	0.99	0.92	0.20	0.24	0.98	0.09	0.97
Al ₂ O ₃	10.9	13.7	4.2	15.6	10.1	3.6	4.9	15.0	2.5	15.5
Fe ₂ O ₃	2.14	1.48	4.73	1.70	2.35	6.39	3.73	1.34	9.20	1.62
FeO	8.96	8.12	4.17	10.35	8.41	2.98	4.28	10.13	1.44	9.70
MnO	0.21	0.19	0.13	0.20	0.19	0.15	0.15	0.20	0.07	0.19
MgO	10.60	9.10	34.80	7.80	10.80	35.80	31.10	6.90	36.20	6.80
CaO	9.87	9.97	1.87	12.20	9.54	0.30	3.45	12.40	0.00	11.80
Na ₂ O	1.70	2.50	0.10	1.50	1.50	0.00	0.00	1.70	0.00	2.00
K ₂ O	0.52	0.13	0.00	0.19	0.61	0.00	0.00	0.21	0.00	0.16
P ₂ O ₅	0.08	0.06	0.00	0.11	0.05	0.00	0.00	0.08	0.00	0.11
LOI	1.33	1.06	9.97	0.55	1.50	11.00	9.23	0.58	11.20	0.63
S	0.08	0.01	0.01	0.04	0.04	0.01	0.02	0.06	0.01	0.02
BaO (ppm)	264	100	-20	45	210	-20	-20	32	-20	34
Cu	130	90	12	84	103	8	6	126	54	136
Cr	890	780	2000	310	970	2600	2100	300	1660	340
Ni	360	190	1580	240	370	2900	1860	240	1500	280
Co	130	80	130	110	120	130	150	120	70	140
CaO/Al ₂ O ₃	0.91	0.73	0.45	0.78	0.94	0.08	0.70	0.83	0.00	0.76
FeO/(FeO+MgO)	0.46	0.47	0.11	0.57	0.44	0.08	0.12	0.59	0.04	0.59

No.	71	72	73	74	75	76	77	78	79	80
Sample No.	D-15-4	D-15-25	DK-1	DK-9	DK-13	DK-15	DK-17	DK-21	DK-24	DM-1
Area (%)	D	D	D	D	D	D	D	D	D	D
SiO ₂	41.7	65.9	48.1	37.6	42.0	39.6	42.4	51.1	37.7	48.4
TiO ₂	0.32	0.71	0.90	0.19	0.25	0.26	0.07	0.62	0.12	1.03
Al ₂ O ₃	7.0	15.2	15.2	4.00	5.2	5.6	1.6	13.8	2.3	15.1
Fe ₂ O ₃	7.94	0.93	2.54	6.54	3.14	6.87	2.63	1.00	7.66	2.06
FeO	3.56	3.27	9.59	1.62	5.50	3.09	5.68	8.91	1.15	10.20
MnO	0.23	0.10	0.21	0.19	0.13	0.15	0.20	0.18	0.10	0.23
MgO	24.00	0.40	8.90	36.40	30.00	30.40	35.10	9.90	37.20	6.50
CaO	5.82	1.46	9.80	0.07	3.33	2.97	1.05	9.75	0.00	11.10
Na ₂ O	0.00	0.70	2.10	0.00	0.00	0.00	0.00	2.00	0.00	2.00
K ₂ O	0.00	9.61	0.17	0.00	0.00	0.00	0.00	0.07	0.00	6.16
P ₂ O ₅	0.00	0.31	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.07
LOI	7.33	0.50	1.03	11.80	8.39	8.96	10.60	0.54	12.00	0.90
S	0.01	0.03	0.02	0.01	0.01	0.01	0.03	0.04	0.01	0.01
BaO (ppm)	59	2029	64	-20	23	-20	-20	-20	-20	60
Cu	13	40	112	35	52	9	7	76	22	31
Cr	2600	150	230	5800	2400	3500	1140	770	5500	260
Ni	2900	80	220	1370	1730	1790	3400	280	5500	260
Co	180	70	90	120	320	140	170	100	170	110
CaO/Al ₂ O ₃	0.83	0.10	0.64	0.02	0.64	0.53	0.66	0.71	0.00	0.74
FeO/(FeO+MgO)	0.13	0.89	0.52	0.04	0.15	0.09	0.14	0.47	0.03	0.61

* - sign = Less than

Appendix 7 Results of Whole Rock Analysis of Komatiitic Rocks (100 samples)

(5)

No.	81	82	83	84	85	86	87	88	89	90
Sample No.	DM-4	DM-8	DM-10	EX-1	EX-2	EX-3	EX-5	EX-6	EX-9	E-4
Area	C	C	D	D	D	D	D	D	D	E
(wt%)										
SiO ₂	40.2	37.0	50.9	39.0	48.7	43.8	48.8	49.1	38.4	51.8
TiO ₂	0.15	0.20	1.86	0.24	0.93	0.38	0.50	0.61	0.18	0.66
Al ₂ O ₃	2.4	4.4	13.7	5.3	14.1	8.8	12.6	13.8	3.6	14.7
Fe ₂ O ₃	4.22	7.29	3.56	4.46	2.98	1.98	1.44	1.54	4.90	1.40
FeO	2.37	2.44	11.46	3.48	8.66	8.66	9.23	8.51	2.98	6.04
MnO	0.13	0.12	0.22	0.15	0.20	0.19	0.16	0.16	0.12	0.30
MgO	37.50	35.90	4.50	36.00	7.80	21.80	13.80	9.50	35.00	7.60
CaO	0.30	0.00	8.39	0.33	10.80	7.56	8.68	10.10	1.84	11.30
Na ₂ O	0.00	0.00	2.80	0.00	2.90	0.00	2.00	2.90	0.00	2.20
K ₂ O	0.00	0.00	1.30	0.00	0.13	0.00	0.07	0.11	0.00	0.11
P ₂ O ₅	0.00	0.00	0.18	0.00	0.09	0.00	0.00	0.06	0.00	0.00
LOI	11.50	11.40	0.10	11.20	1.79	5.37	1.06	1.16	11.50	1.94
S	0.01	0.01	0.05	0.02	0.02	0.01	0.01	0.01	0.06	0.01
BaO (ppm)	-20	-20	344	-20	-20	-20	-20	-20	-20	-20
Cu	8	17	246	6	91	29	110	78	28	99
Cr	1970	2600	-10	2100	300	2100	1290	580	1400	680
Ni	3500	3800	110	2700	260	1200	460	170	2900	510
Co	140	170	120	150	110	120	120	100	150	100
CaO/Al ₂ O ₃	0.13	0.00	0.62	0.06	0.77	0.86	0.69	0.73	0.51	0.77
FeO/ (FeO+MgO)	0.06	0.06	0.72	0.09	0.53	0.28	0.40	0.47	0.08	0.44

No.	91	92	93	94	95	96	97	98	99	100
Sample No.	E-7	E-9	E-1-1	E-1-5	E-13-4	E-13-29	EK-3	EM-1	EM-5	EM-6
Area	E	E	E	E	E	E	E	E	E	E
(%)										
SiO ₂	52.0	41.3	47.6	49.5	40.7	43.8	39.9	51.6	37.8	41.6
TiO ₂	0.69	0.27	1.65	0.98	0.18	0.50	0.28	0.48	0.26	0.30
Al ₂ O ₃	15.0	4.8	14.5	14.4	2.8	9.5	6.60	11.7	3.7	5.60
Fe ₂ O ₃	1.65	5.91	3.61	2.22	7.23	7.55	6.59	0.30	6.75	5.48
FeO	7.51	3.95	11.06	9.88	4.20	5.53	3.70	8.73	2.91	3.34
MnO	0.16	0.20	0.21	0.20	0.21	0.30	0.16	0.22	0.15	0.16
MgO	7.10	31.80	4.90	7.60	32.60	20.00	28.40	10.80	35.80	30.10
CaO	10.40	3.75	10.90	11.10	1.44	7.62	4.51	10.80	1.05	4.23
Na ₂ O	2.50	0.10	1.70	1.80	0.00	0.50	0.00	1.80	0.00	0.00
K ₂ O	0.20	0.00	0.28	0.13	0.00	0.14	0.00	0.13	0.00	0.00
P ₂ O ₅	0.09	0.00	0.13	0.09	0.00	0.00	0.00	0.00	0.00	0.00
LOI	1.15	5.27	0.82	0.97	10.00	2.47	7.95	1.24	10.90	8.03
S	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
BaO (ppm)	-20	-20	234	64	-20	62	-20	76	-20	-20
Cu	120	6	82	107	9	57	6	42	6	9
Cr	260	2080	170	250	560	1920	3300	940	1770	2060
Ni	180	3100	180	220	3000	1920	1900	470	3400	1750
Co	110	140	110	120	210	180	150	120	170	160
CaO/Al ₂ O ₃	0.69	0.78	0.75	0.77	0.51	0.80	0.68	0.92	0.28	0.76
FeO/ (FeO+MgO)	0.51	0.11	0.69	0.57	0.11	0.22	0.12	0.45	0.08	0.10

* - sign = Less than

