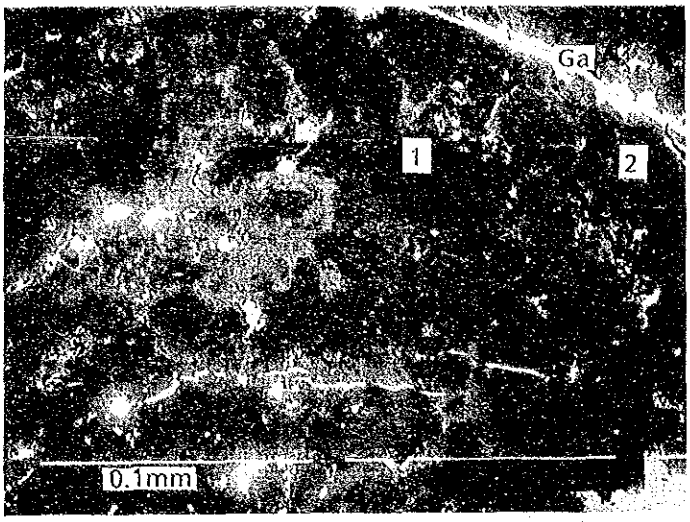
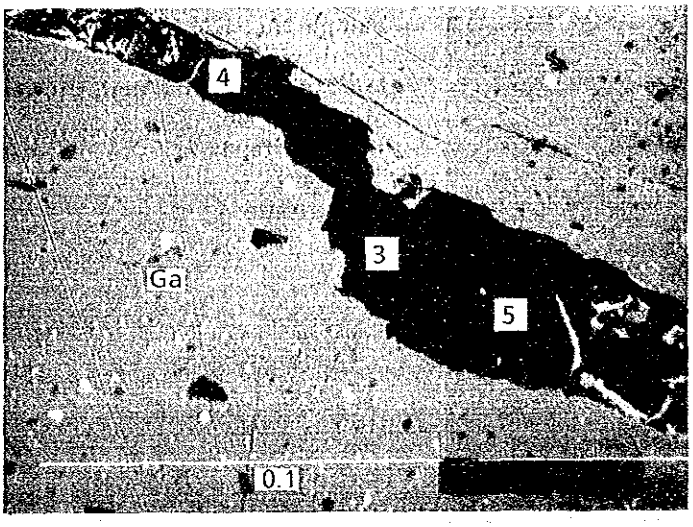
Summary of EPMA Quantitative Analysis of Minerals (2)

Sample Number	Minerals	Components	Results (weight %)			Average
			1	2		
VT-15	Barite	BaO	65.9	66.3		66.1
		SO_3	33.4	33.2		33.3
		CaO	0.1	<0.1		<0.1
		FeO	0.1	<0.1		<0.1
		SrO	<0.1	0.3		0.2
		Total	99.5	99.8		99.6
			1	2		
VT-16A	Barite	BaO	66.3	66.7		66.5
		SO_3	32.8	33.7		33.3
		CaO	<0.1	<0.1		<0.1
		FeO	0.3	0.1		0.2
		SrO	0.4	0.3		0.4
		Total	99.8	100.8		100.4
			3	4	5	
	Covellite	Cu	64.2	66.6	66.3	65.7
		Fe	<0.1	<0.1	<0.1	<0.1
		Ag	<0.1	<0.1	<0.1	<0.1
		Zn	<0.1	<0.1	<0.1	<0.1
		S	34.1	33.7	33.8	33.9
		Total	98.3	100.3	100.1	99.6
			1	2		
JA-08	Pyrite	Fe	46.9	47.6		47.3
		As	0.2	<0.1		0.1
		S	53.2	53.5		53.4
		Total	100.3	101.1		100.8
			1	2	3	
TO-09	Aggregate of Mn oxides	MnO_2	87.3	82.6	82.9	84.3
		BaO	8.9	12.6	16.7	12.7
		Al_2O_3	1.2	1.7	0.5	1.1
		K_2O	1.1	0.7	0.4	0.7
		SrO	0.2	<0.1	<0.1	<0.1
		FeO	<0.1	2.2	<0.1	0.7
		Total	98.7	99.8	100.5	99.5
			1	2		
GO-03	Barite	BaO	66.4	66.1		66.3
		SO_3	33.1	34.0		33.6
		CaO	<0.1	<0.1		<0.1
		FeO	<0.1	<0.1		<0.1
		SrO	1.1	1.1		1.1
		Total	100.6	101.2		101.0
			1	2		
MW-02	Sphalerite	Zn	62.3	58.7		60.5
		Fe	4.8	6.5		5.7
		Cu	0.4	0.4		0.4
		Ag	<0.1	<0.1		<0.1
		As	<0.1	<0.1		<0.1
		Sb	0.2	0.2		0.2
		S	31.9	31.9		31.9
		Total	99.6	97.7		98.7
			3	4		
	Pyrite	Fe	45.4	44.1		44.8
		Cu	0.3	0.1		0.2
		Zn	0.9	1.6		1.3
		As	0.1	<0.1		<0.1
		Sb	<0.1	<0.1		<0.1
		Ag	<0.1	<0.1		<0.1
		S	53.4	52.7		53.1
		Total	100.1	98.5		99.4
			1	2		
MK-22	Pyrite	Fe	46.1	46.3		46.2
		Zn	0.4	0.1		0.3
		As	0.1	0.3		0.2
		Sb	0.1	<0.1		<0.1
		S	53.8	53.7		53.8
		Total	100.5	100.4		100.5
			1	2		
TO-01	Witherite	BaO	76.3	75.8		76.1
		CaO	<0.1	<0.1		<0.1
		SrO	1.1	1.1		1.1
		FeO	<0.1	<0.1		<0.1
		Total	77.4	76.9		77.2

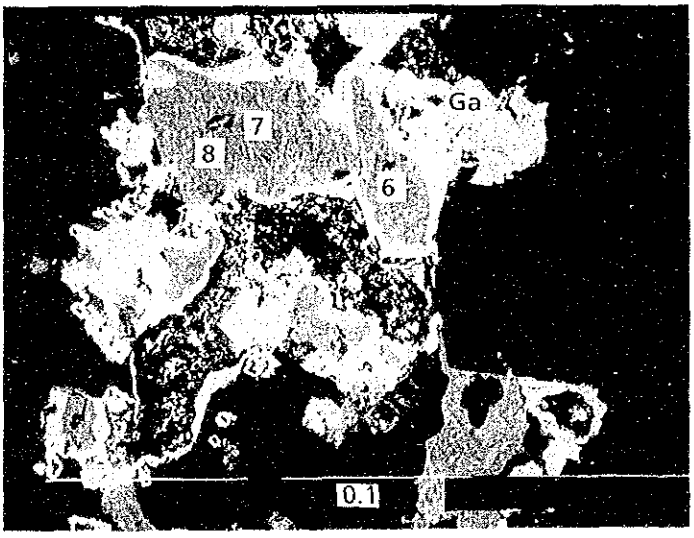
Sample Number	Minerals	Components	Results (weight %)		Average
			1	2	
TO-04	Sphalerite	Zn	65.9	67.9	66.9
		Fe	0.8	1.0	0.9
		Cu	0.3	<0.1	0.2
		As	<0.1	<0.1	<0.1
		Sb	<0.1	0.1	<0.1
		S	31.4	32.7	32.1
		Total	98.4	101.7	100.1
			3	4	
	Witherite	BaO	75.6	74.9	75.3
		CaO	0.2	<0.1	0.1
		SrO	0.7	1.5	1.1
		FeO	<0.1	<0.1	<0.1
		Total	76.5	76.4	76.5
			5	6	
	Baryto-calcite	BaO	48.5	48.6	48.6
		CaO	15.2	14.7	15.0
		SrO	1.8	1.9	1.9
		FeO	<0.1	<0.1	<0.1
		Total	65.5	65.2	65.5



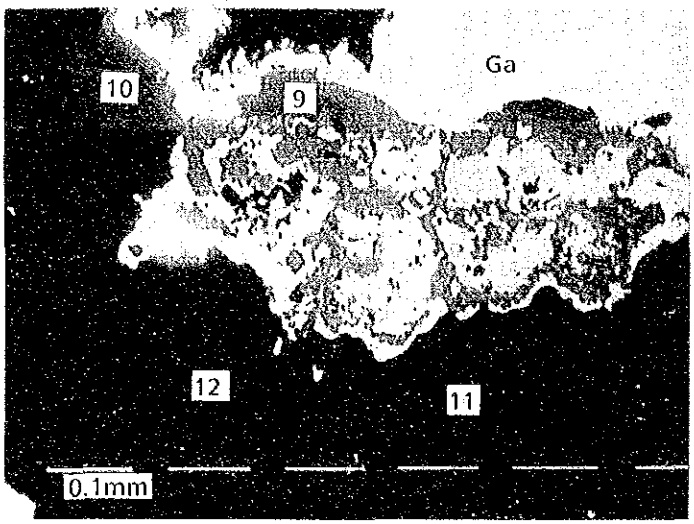
Sample No.; KN-05
Locality; Kinangoni
Rock type; Galena ore
Mineral name;
Pyrite: 1 . 2
Galena veinlet



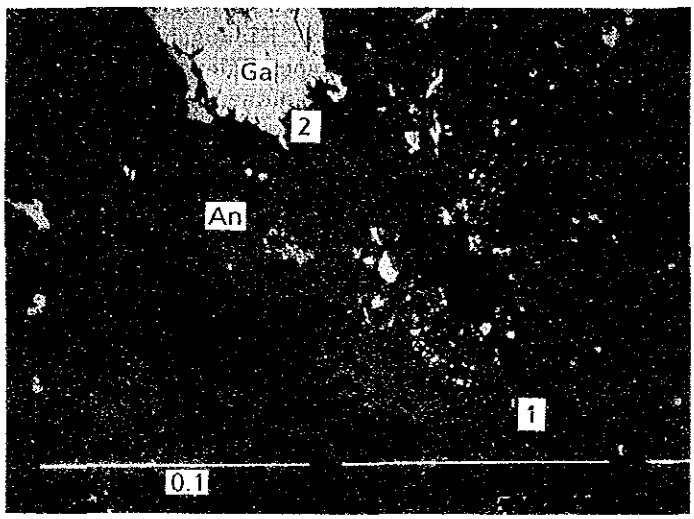
Sample No.; KN-05
Locality; Kinangoni
Rock type; Galena ore
Mineral name;
Tetrahedrite: 3 . 4 . 5
Galena



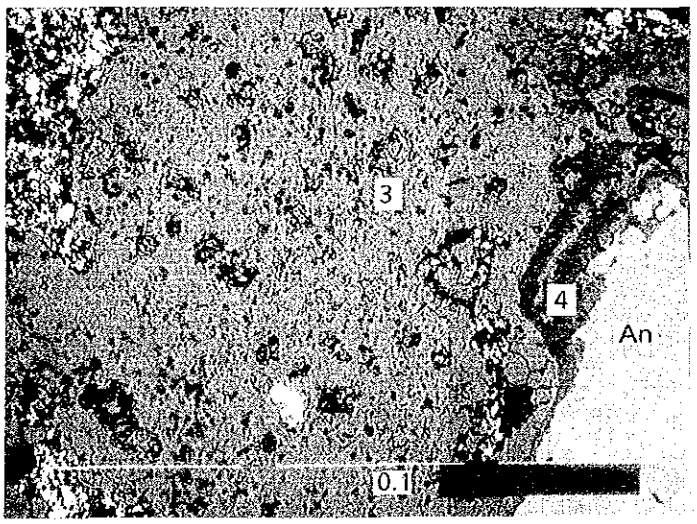
Sample No.; KN-05
Locality; Kinangoni
Rock type; Galena ore
Mineral name;
Stromeyerite: 6 . 7 . 8
Galena



Sample No.; KN-05
Locality; Kinangoni
Rock type; Galena ore
Mineral name;
Sphalerite: 9 . 10
Chalcopyrite: 11 . 12
Galena

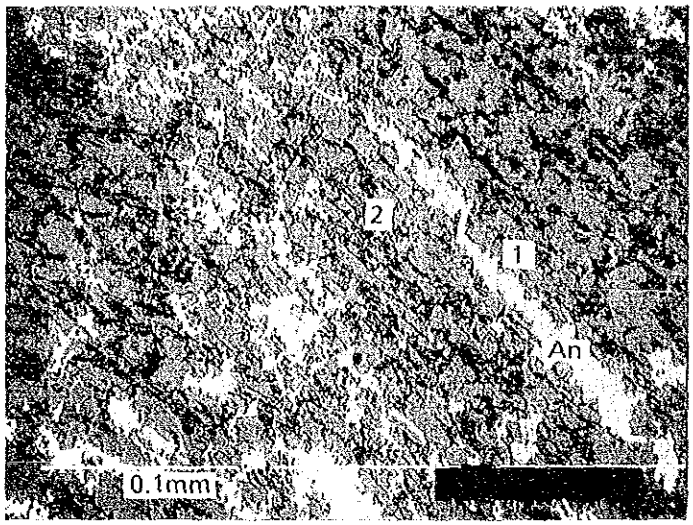


Sample No.; KN-10
Locality; Kinangoni
Rock type; Galena-Anglesite vein
Mineral name;
Covellite: 1 . 2
Galena
Anglesite

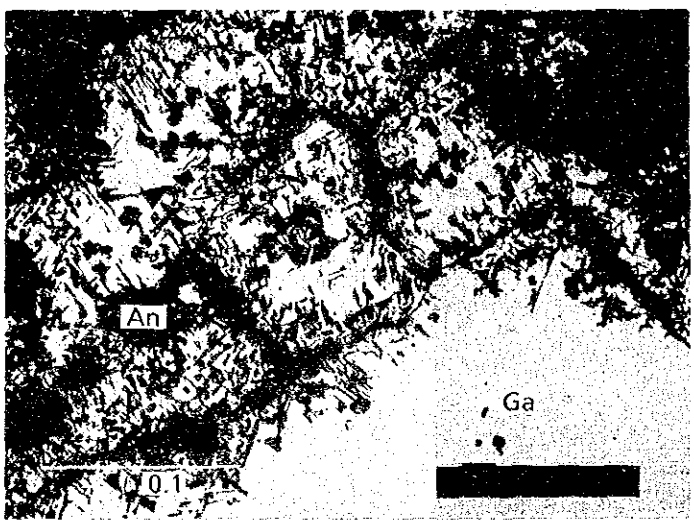


Sample No.; KN-10
Locality; Kinangoni
Rock type; Galena-Anglesite vein
Mineral name;
Goethite-Jarosite
aggregate: 3 . 4
Anglesite

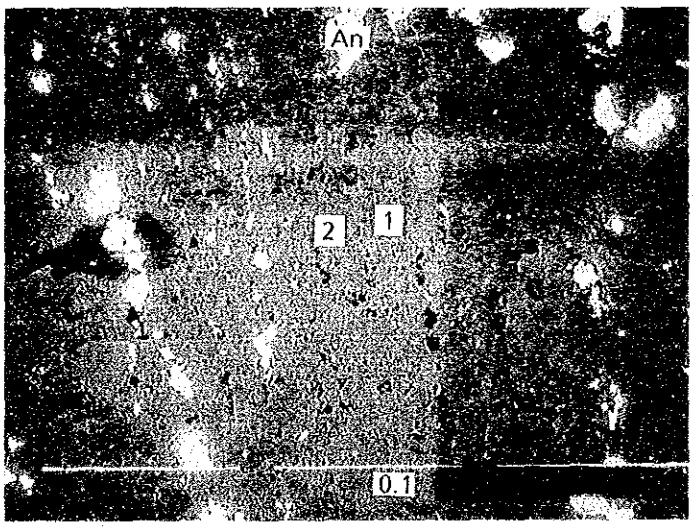
SEM Images of Minerals (EPMA)



Sample No.; KN-27
Locality; Kinangoni
Rock type; Ga-An-Py-Mal-Qtz vein
Mineral name;
Pyrite: 1 . 2
Anglesite

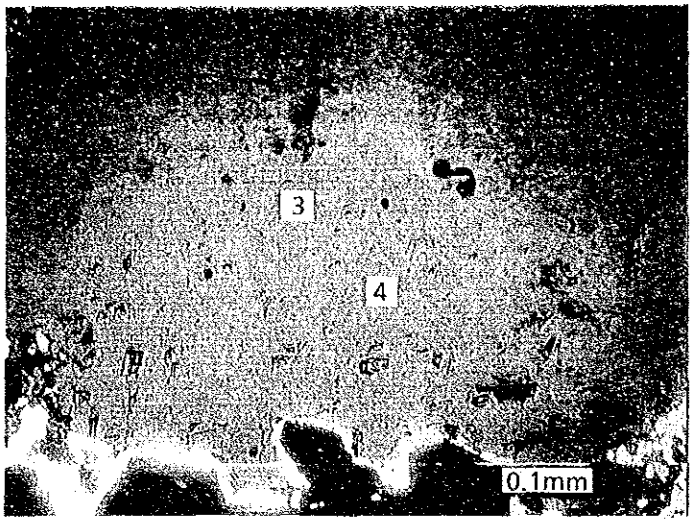


Sample No.; KN-27
Locality; Kinangoni
Rock type; Ga-An-Py-Mal-Qtz vein
Mineral name;
Chalcopyrite: 3 . 4
Galena
Anglesite

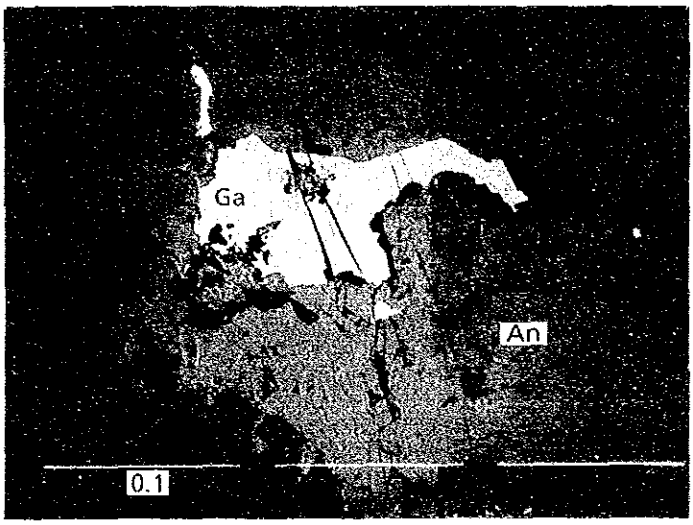


Sample No.; KN-34B
Locality; Kinangoni
Rock type; Sphalerite-Barite vein
Mineral name;
Pyrite: 1 . 2
Anglesite

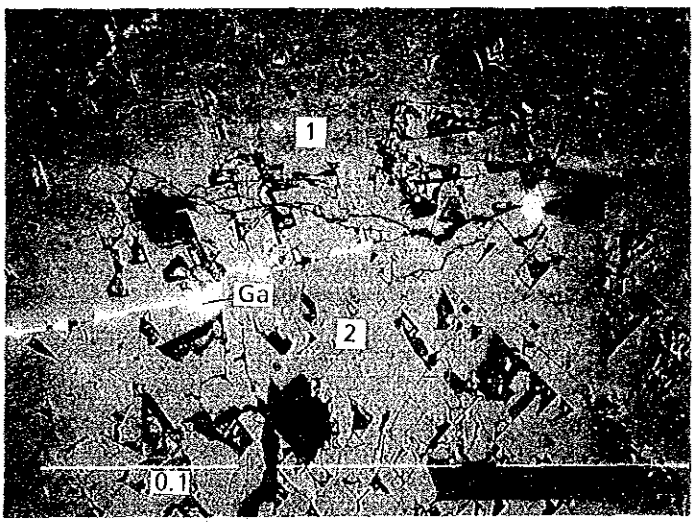
SEM Images of Minerals (EPMA)



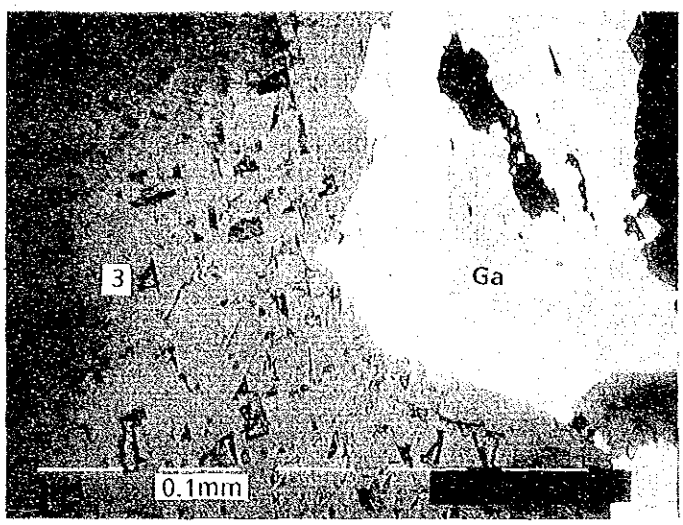
Sample No.; KN-34B
Locality; Kinangoni
Rock type; Sphalerite-Barite vein
Mineral name;
Sphalerite: 3 . 4



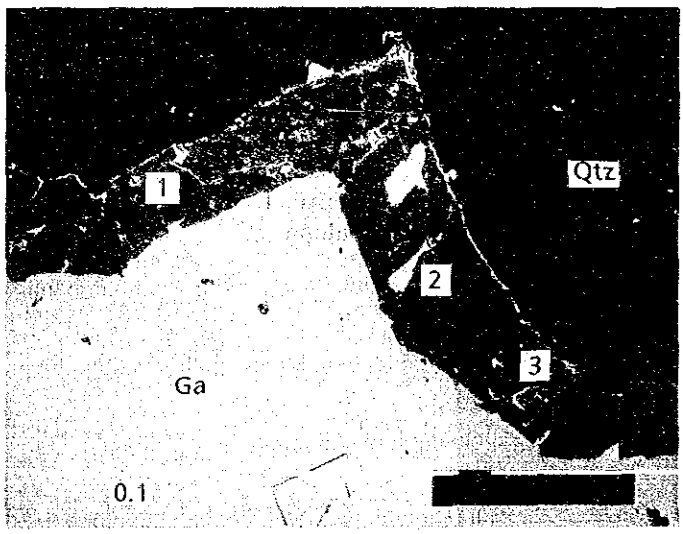
Sample No.; KN-34B
Locality; Kinangoni
Rock type; Sphalerite-Barite vein
Mineral name;
Galena
Anglesite



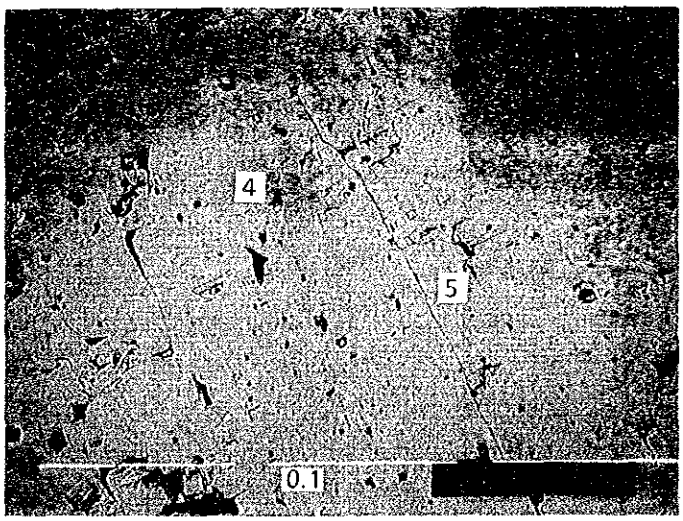
Sample No.; KN-34D
Locality; Kinangoni
Rock type; Sphalerite vein
Mineral name;
Sphalerite: 1 . 2
Galena



Sample No.; KN-34D
Locality; Kinangoni
Rock type; Sphalerite vein
Mineral name;
Sphalerite: 3
Galena



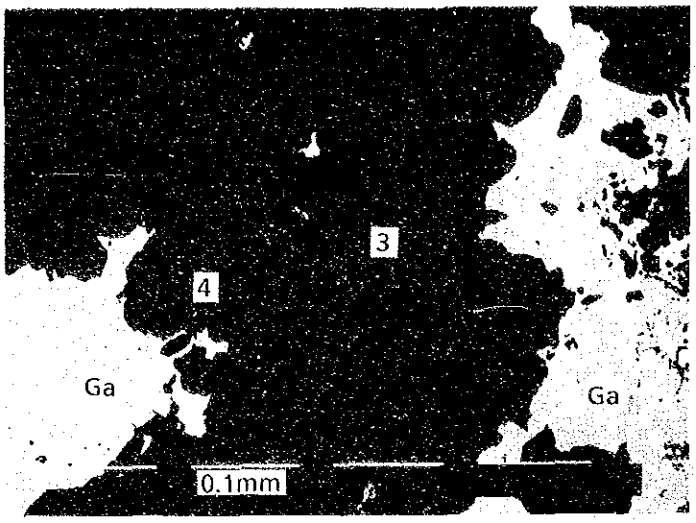
Sample No.; KN-35
Locality; Kinangoni
Rock type; Quartz vein with Galena and Barite
Mineral name;
Pyrite: 1 . 2 . 3
Galena
Quartz



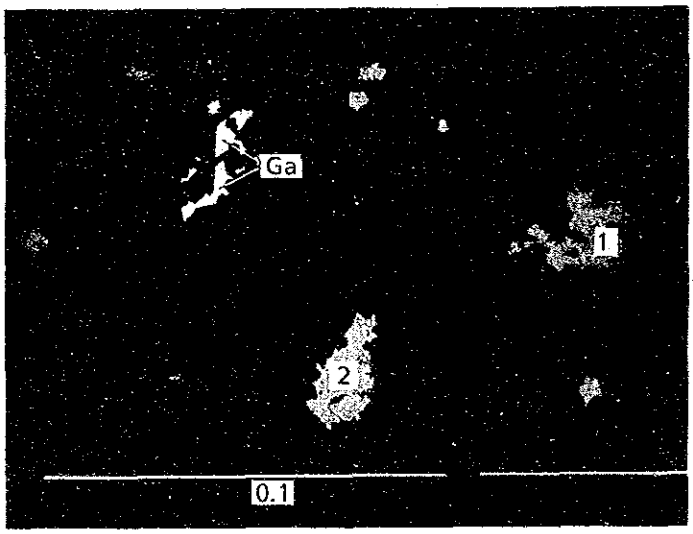
Sample No.; KN-35
Locality; Kinangoni
Rock type; Quartz vein with Galena and Barite
Mineral name;
Barite: 4 . 5

SEM Images of Minerals (EPMA)

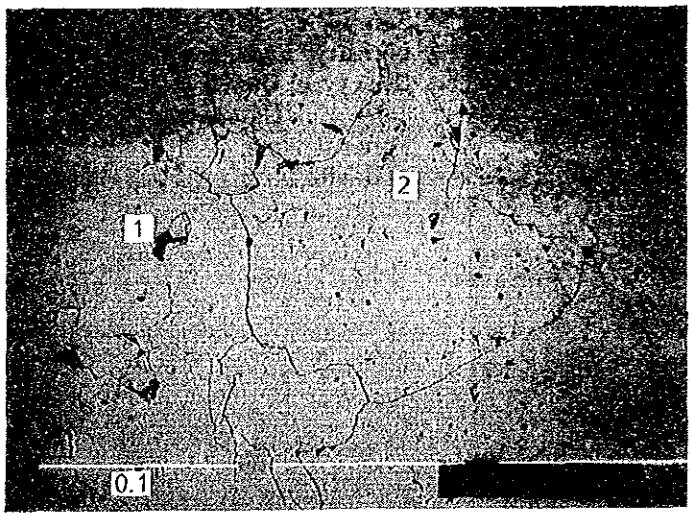
Appendix-9



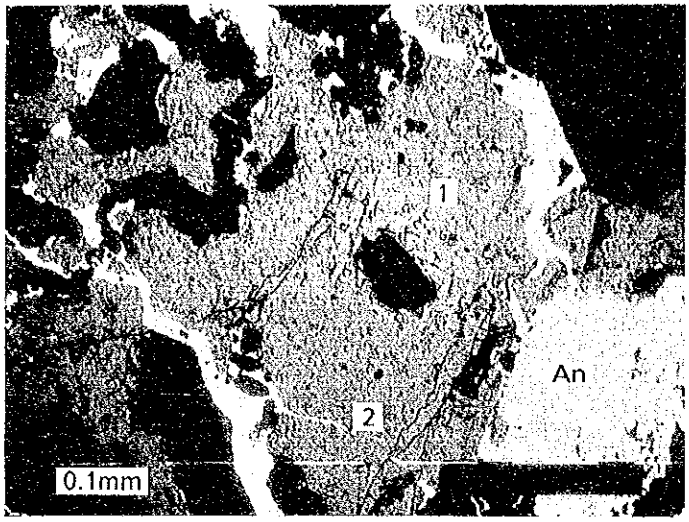
Sample No.; VT-01
Locality; Vitengeni
Rock type; Quartz-Barite vein with Galena
Mineral name;
Sphalerite: 1 . 2
Barite: 3 . 4
Galena



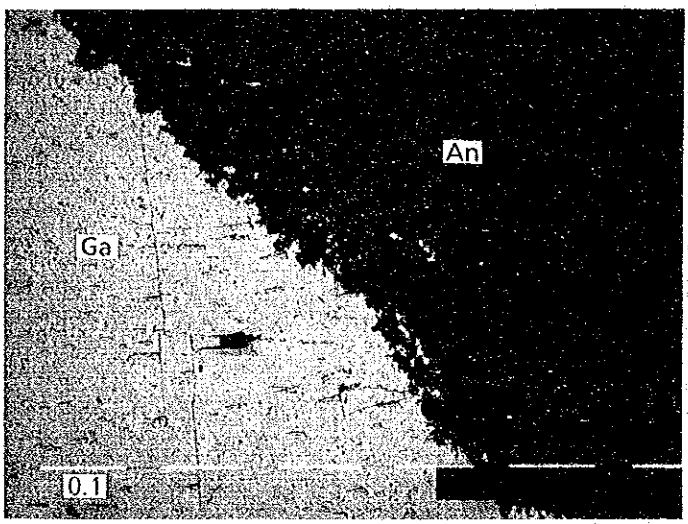
Sample No.; VT-06
Locality; Vitengeni
Rock type; Quartz-Barite vein with Galena and Sphalerite
Mineral name;
Barite: 1 . 2
Galena



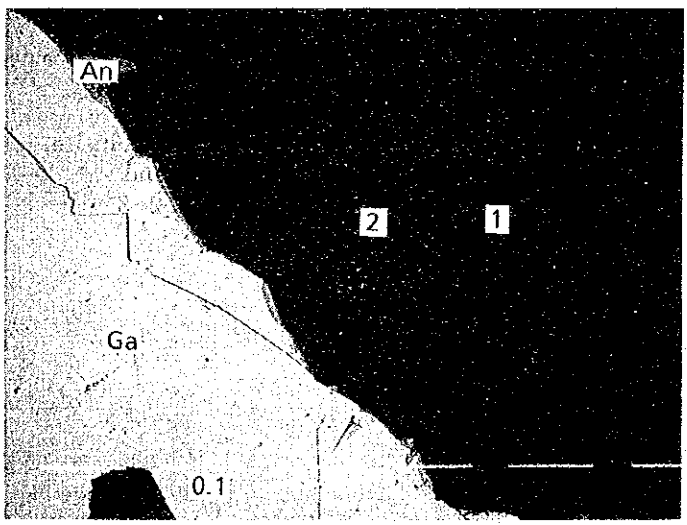
Sample No.; VT-10
Locality; Vitengeni
Rock type; Barite crystal
Mineral name;
Barite: 1 . 2



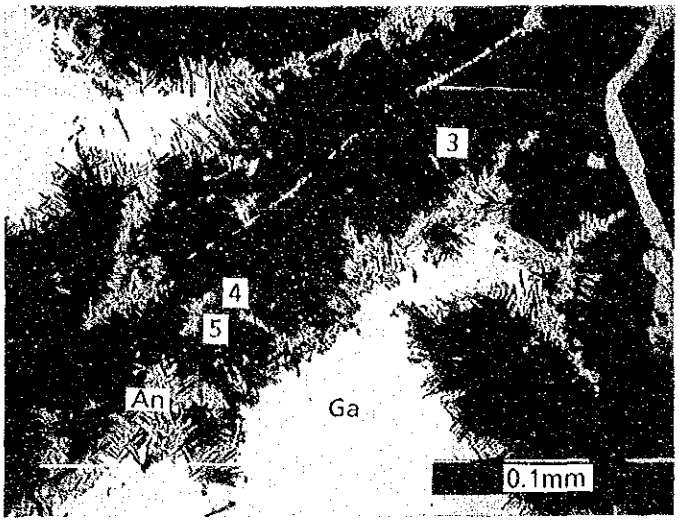
Sample No.; VT-15
Locality; Vitengeni
Rock type; Galena-Barite ore
Mineral name;
Barite: 1 . 2
Anglesite



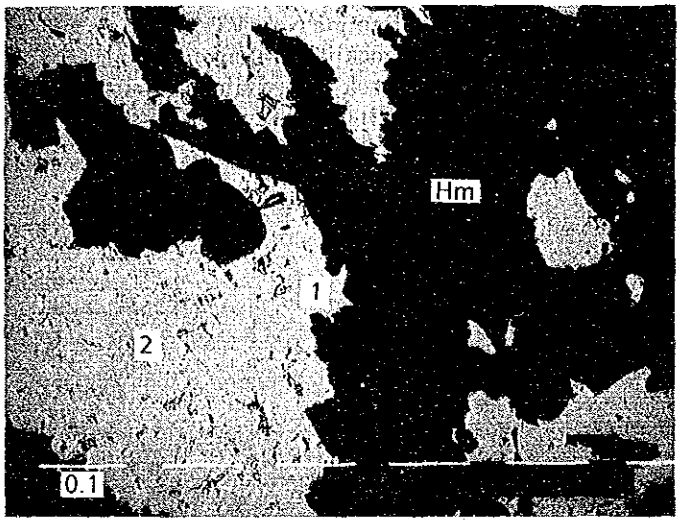
Sample No.; VT-15
Locality; Vitengeni
Rock type; Galena-Barite ore
Mineral name;
Galena
Anglesite



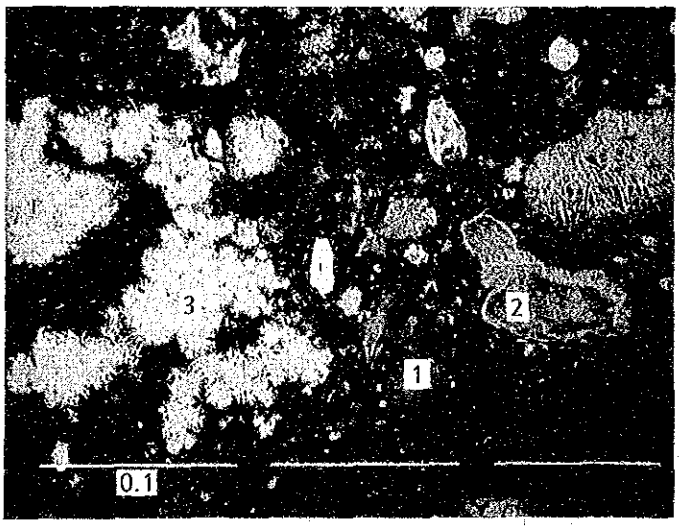
Sample No.; VT-16A
Locality; Vitengeni
Rock type; Galena-Barite ore
Mineral name;
Barite: 1 . 2
Galena
Anglesite



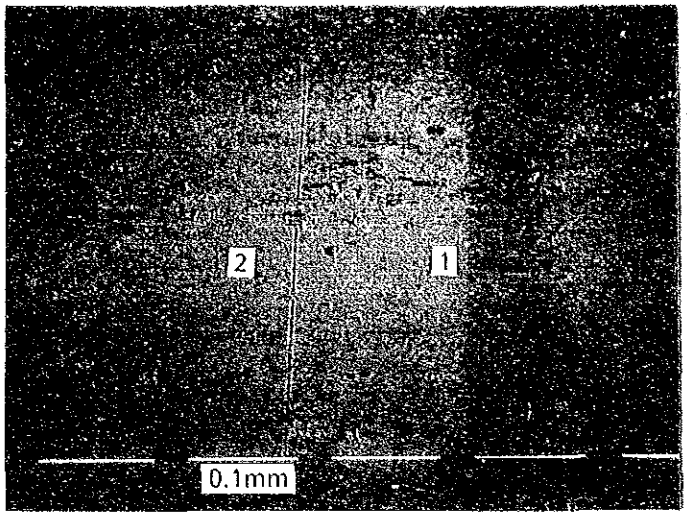
Sample No.; VT-16A
Locality; Vitengeni
Rock type; Galena-Barite ore
Mineral name;
Covelline: 3 . 4. 5
Galena
Anglesite



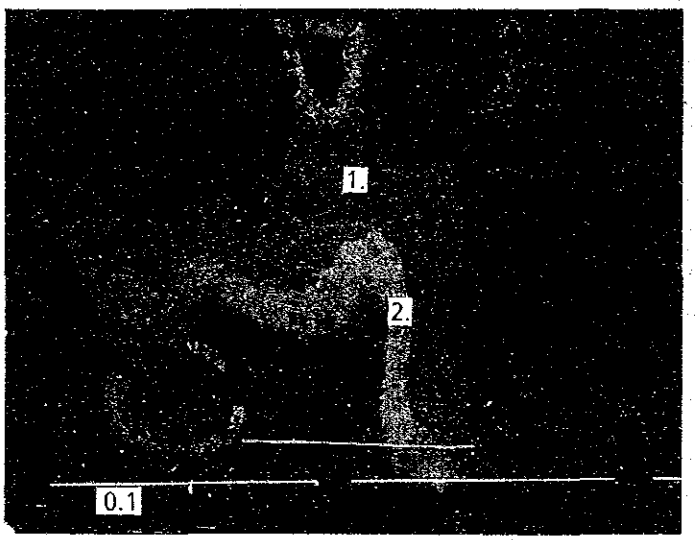
Sample No.; JA-08
Locality; Jaribuni
Rock type; Pyrite-Hematite ore
Mineral name;
Pyrite: 1 . 2
Hematite



Sample No.; TO-09
Locality; Kiwara
Rock type; Mn-oxide nodule
Mineral name;
Aggregates of Pyrolusite,
Cryptomelane and
Hollandite: 1 . 2 . 3



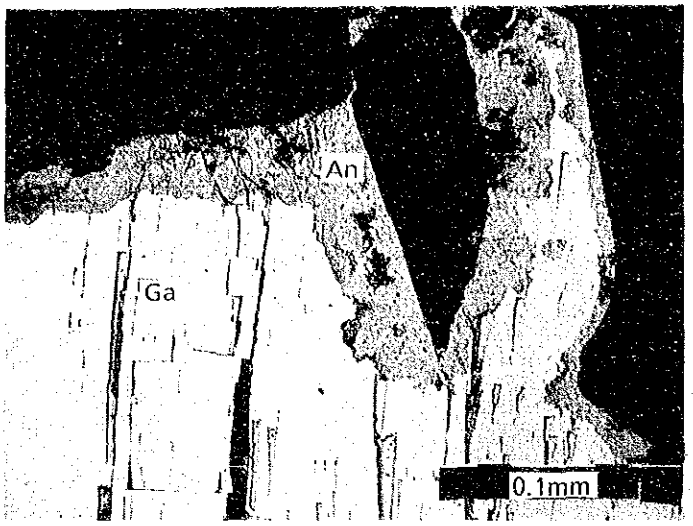
Sample No.; GO-03
Locality; Goshi
Rock type; Barite crystal
Mineral name;
Barite: 1 . 2



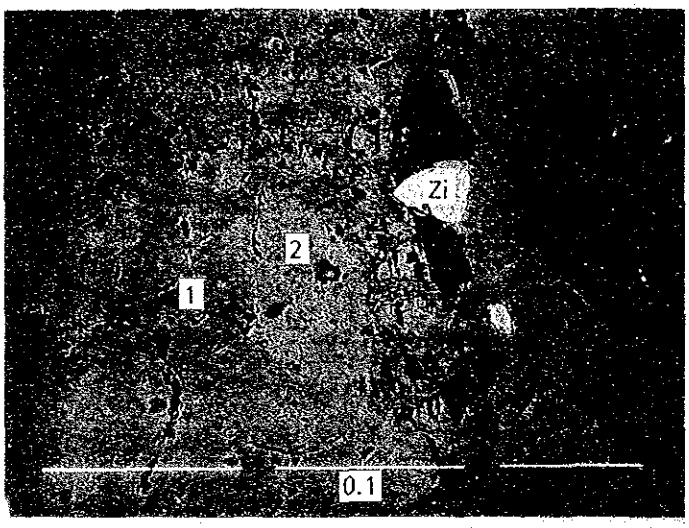
Sample No.; CH-04
Locality; Changómbe
Rock type; Limonitic gossan
Mineral name;
1. Goethite
2. Hematite

Sample No.; MW-02
Locality; Mwachi River
Rock type; Calcite vein with Sphalerite, Pyrite and Galena
Mineral name;
Sphalerite: 1 . 2
Pyrite: 3 . 4

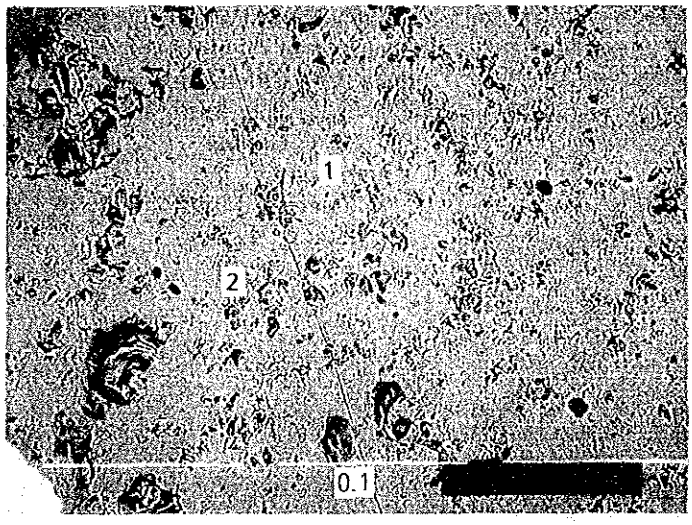
SEM Images of Minerals (EPMA)



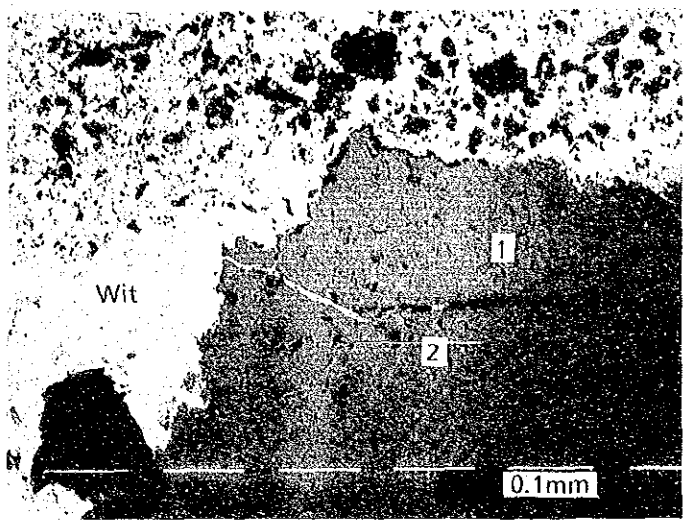
Sample No.; MK-17
Locality; Mkundi
Rock type; Quartz vein with Galena
Mineral name;
Galena
Anglesite



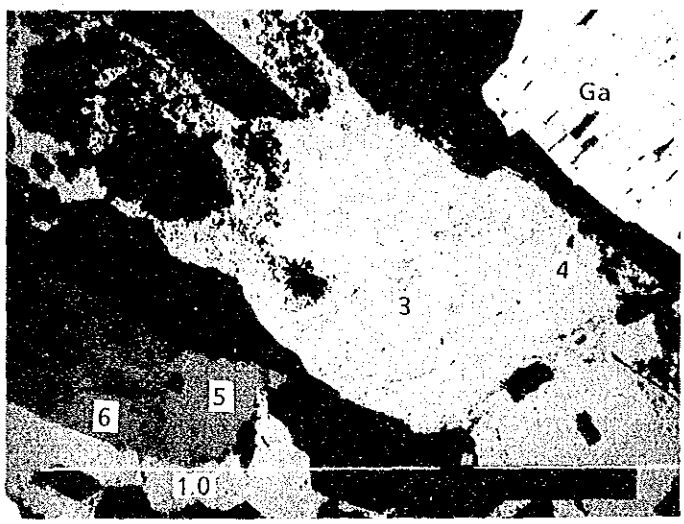
Sample No.; MK-22
Locality; Mkundi
Rock type; Black sooty Pyrite of hotspring
Mineral name;
Pyrite: 1 . 2



Sample No.; TO-01
Locality; Lunga-lunga
Rock type; Barite crystal
Mineral name;
Witherite: 1 . 2



Sample No.; TO-04
Locality; Lunga-lunga
Rock type; Ba-Sph-Ga vein
Mineral name;
Sphalerite: 1 . 2
Witherite



Sample No.; TO-04
Locality; Lunga-lunga
Rock type; Ba-Sph-Ga vein
Mineral name;
Witherite: 3 . 4
Barytocalcite: 5 . 6
Galena

Appendix - V

X-RAY DIFFRACTION ANALYSIS

Appendix-1

Summary of X-ray Diffraction (1)

Sample No.	Location	Qtz	Fel	Bar	Ca	Ak	Ka	Al	Mi	Py	Ga	Moz	An	Gor	Ce	Goe	Hm	Plu	To	Pyr
MR-01	Mrima Hill No. 1 sampling point			○								○	–	△		△				
MR-06	Mrima Hill No. 1 sampling point			◎								○	?	–		△				
MR-07	Mrima Hill No. 1 sampling point			△			○							△		△				
MR-16	Mrima Hill No. 2 sampling point			○								○				△				
MR-19	Mrima Hill No. 3 sampling point													○		○				
MR-24	Mrima Hill No. 3 sampling point								○					△		○				
KN-06	Kinangoni Hanging wall, pit	◎					○		○							△				
KN-07	Kinangoni pit bottom												◎					△		
KN-17	Kinangoni trench on the hill	◎						△	△											
KN-22	Kinangoni transported gossan	◎					△													
KN-30	Kinangoni pit, 140ML												◎							
KN-31	Kinangoni pit, 140ML	◎											○							
VT-02	Vitengeni alt. country rock	◎							○											
VT-16B	Vitengeni stock pile												○					–		
VT-17	Vitengeni stock pile	△													◎					
VT-19	Vitengeni stock pile	◎		◎			–				–									

Qtz : quartz　Fel : feldspar groupe　Bar: barite　Ca : calcite　Ak : ankerite　Ka: kaolinite
Al : alunite　Mi : mica groupe　Py : pyrite　Ga : galena　Moz : monazite　An: anglesite
Gor: gorceixite　Ce : cerussite　Goe: goethite　Hm: hematite　Plu : plumbojarosite　To : todorokite
Pyr: pyrolucite

◎ : abundant　○ : common　△ : minor　– : rare

Summary of X-ray Diffraction (2)

Sample No.	Location	Qtz	Fel	Bar	Ca	Ak	Ka	Al	Mi	Py	Ga	Moz	An	Gor	Ce	Goe	Hm	Plu	To	Pyr
JA-01	Jaribuni surface soil	◎					–				△									
JA-04	Jaribuni middle depth															◎				
JA-09	Jaribuni country rock				◎	○														
KW-02	Kiwara Hill nodule type	◎							–							△			–	△
GO-02	Goshi sketched pit			◎												–				
GO-06	Goshi Qtz-Ba vein	○		○												△				
CH-01	Chang'ombe North Qtz vein net	◎							○											
CH-04	Chang'ombe North brownish gossan	◎							–							△	○			
CH-10	Chang'ombe South reddish brown soil	◎					△		△							△				
MW-01B	Mwachi River southern showing	◎			◎				○											
MW-08	Mwachi River northern showing												○			–		△		
MW-13	Mwachi River Mazeras-Mombasa Road	◎			◎		–						◎			–				
MK-13	Mkundi North altered Lampidyke	○			○				–											
MK-18	Mkundi South Hotspring scale	–			◎															
MK-24	Mkundi South Qtz vein net	◎	◎						○											
MK-31	Mkundi South thin vein in sst.	○				◎														

Qtz : quartz　Fel : feldspar groupe　Bar: barite　Ca : calcite　Ak : ankerite　Ka: kaolinite
Al : alunite　Mi : mica groupe　Py : pyrite　Ga : galena　Moz : monazite　An: anglesite
Gor: gorceixite　Ce : cerussite　Goe: goethite　Hm: hematite　Plu : plumbojarosite　To : todorokite

◎ : abundant　○ : common　△ : minor　– : rare

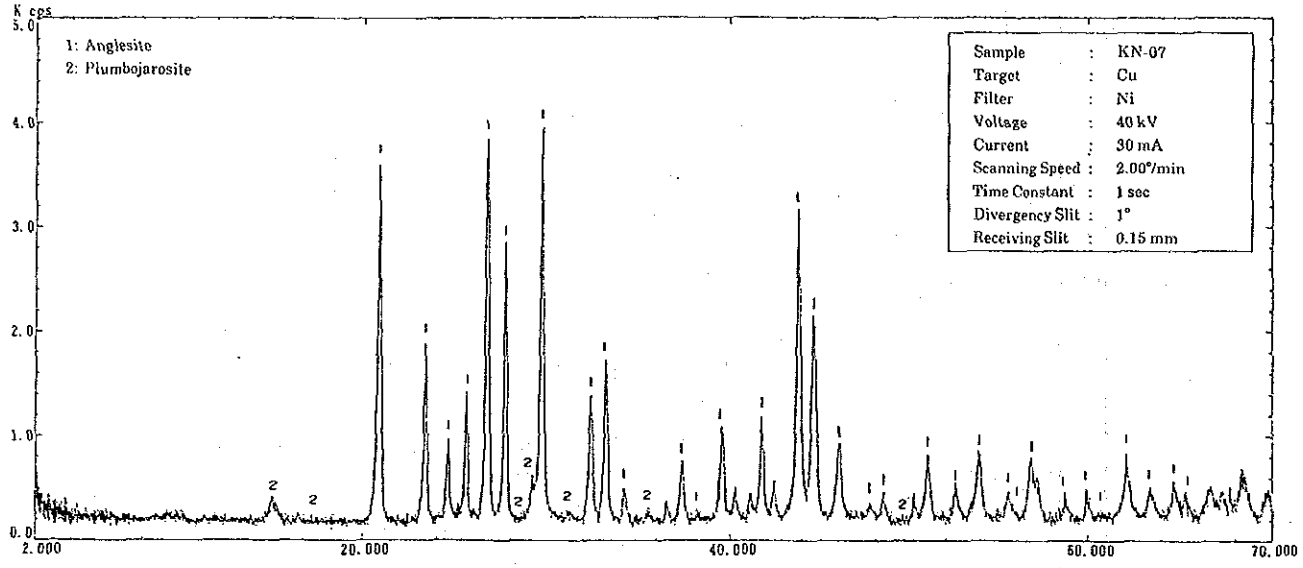
Appendix-3

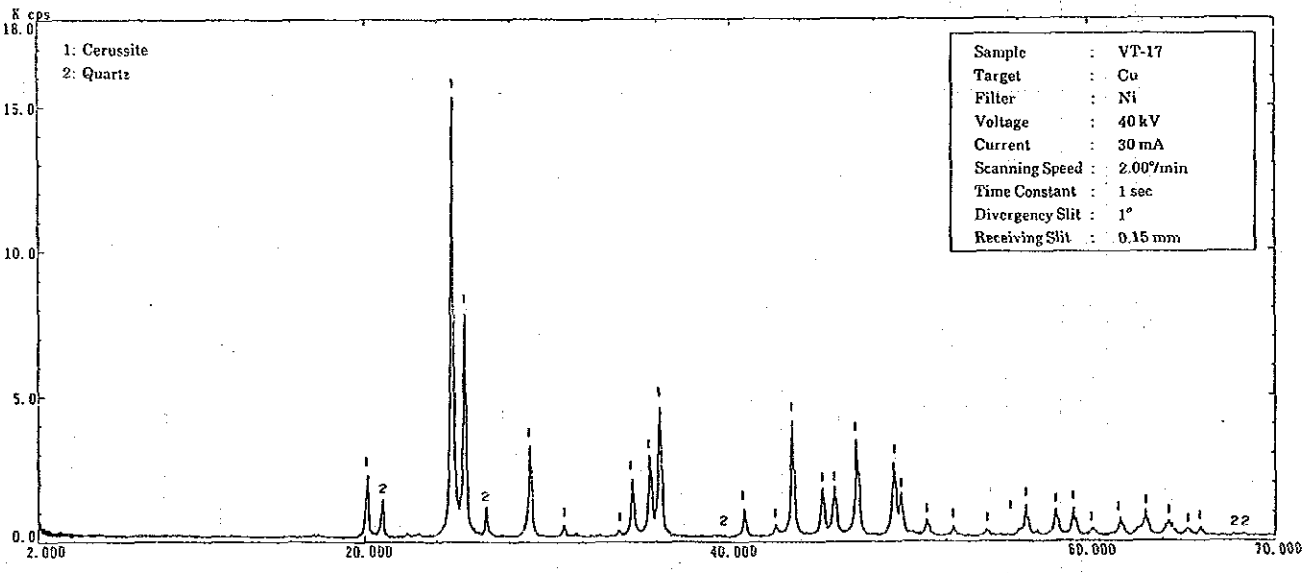
Summary of X-ray Diffraction (3)

Sample No.	Location	Qtz	Fel	Bar	Ca	Ak	Ka	Al	Mi	Py	Ga	Moz	An	Gor	Ce	Goe	Hm	Plu	To	Pyr
TO-05	Lunga-Lunga near the Border	◎	○	◎					–											
A-23	Lunga-Lunga Qtz vein net	◎	○						△											
MA-04	Mangea-Kwa Dadu limonitic gossan	◎					◎									△				

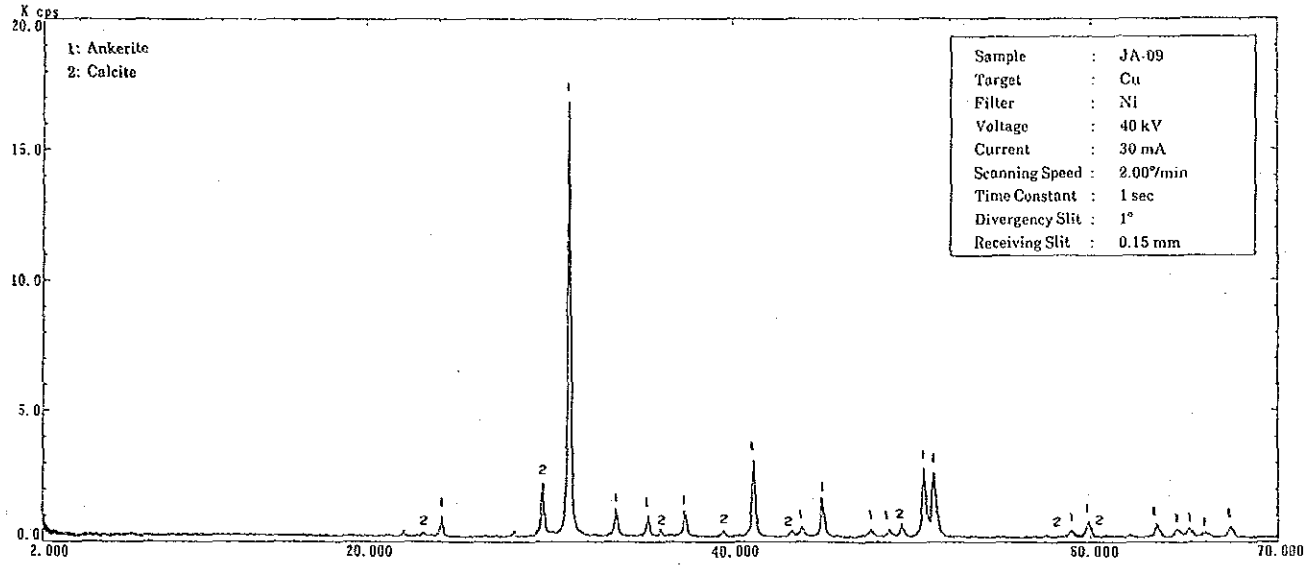
Qtz : quartz
Fel : feldspar groupe
Bar : barite
Ca : calcite
Ak : ankerite
Ka : kaolinite
Al : alunite
Mi : mica groupe
Py : pyrite
Ga : galena
Moz : monazite
An : anglesite
Gor : gorceixite
Ce : cerussite
Goe : goethite
Hm : hematite
Plu : plumbojarosite
To : todorokite
Pyr : pyrolucite

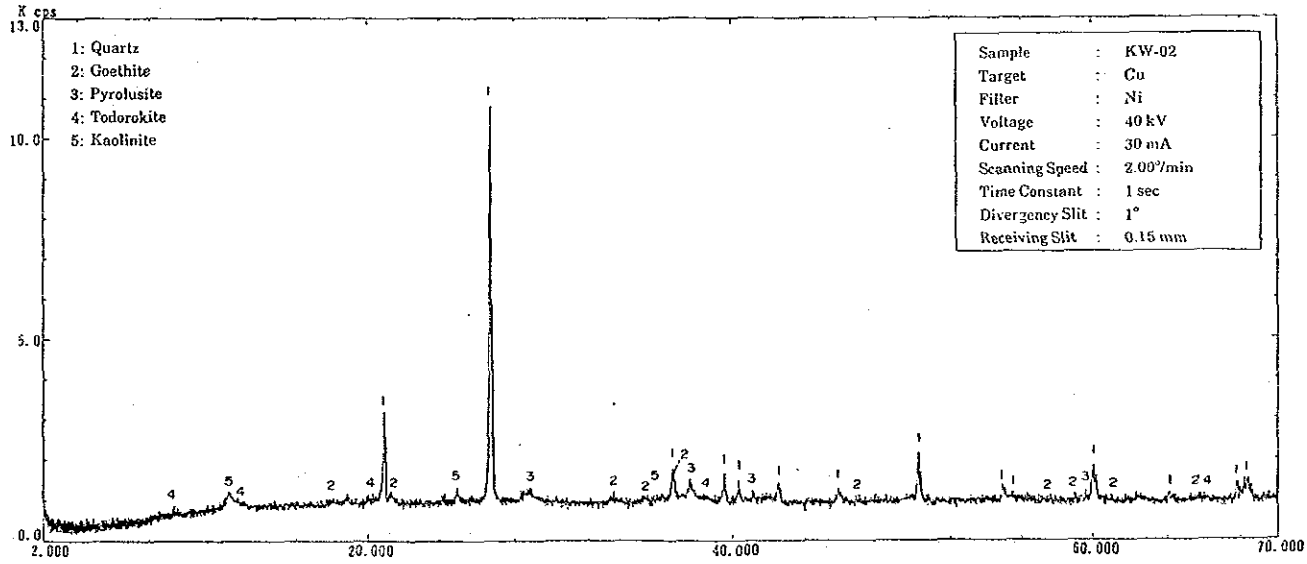
◎ : abundant
○ : common
△ : minor
– : rare



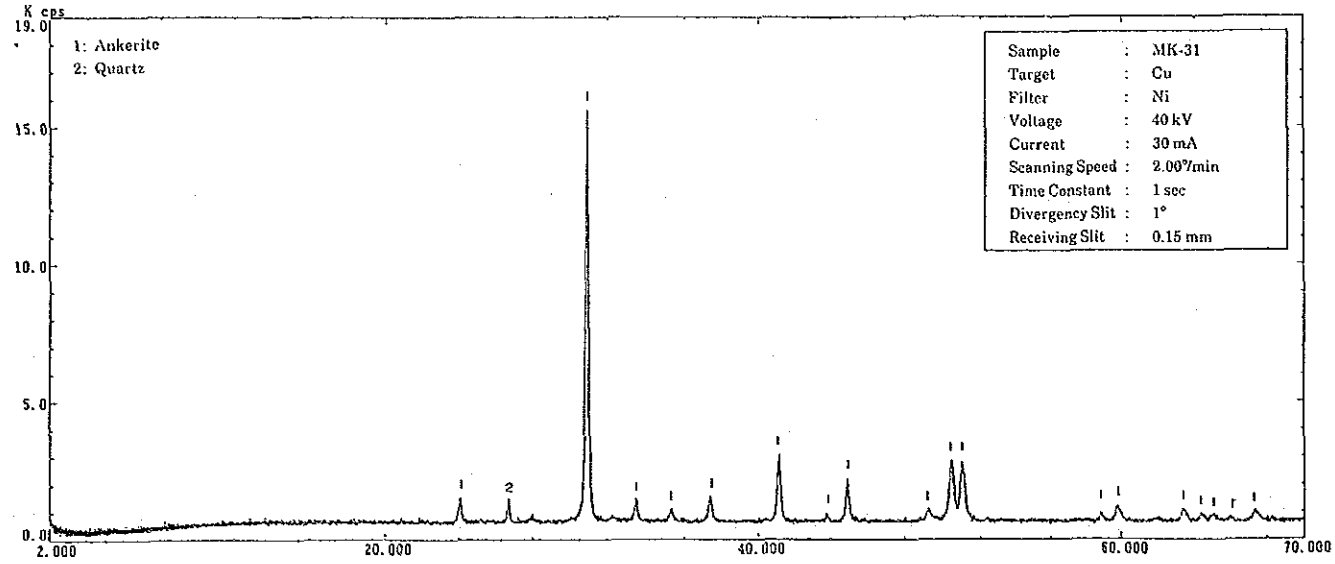


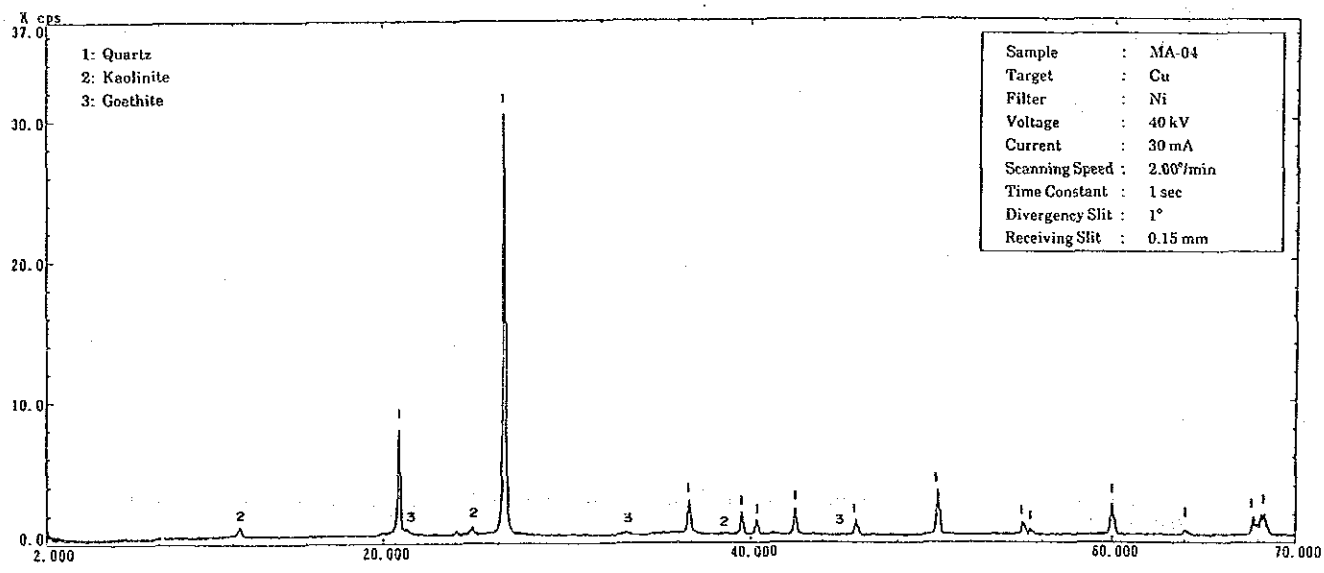
X-ray Diffraction Charts





X-ray Diffraction Charts





X-ray Diffraction Charts

Appendix - VI

Pb-Pb AGE DATING

Results of Pb-Pb Age Dating

Code No.	Sample No.	Area Name	Observation of Sample	Calculated Age (Ma)
1	KN-05	Kinangoni 140ML, pit bench	massive galena crystal in fault clay	231.9
2	KN-35	Kinangoni 140ML, pit bench	galena-guartz vein in silicified sandstone	239.7
3	KN-41	Kinangoni 170ML, underground	galena-anglesite vein in hunging wall	240.7
4	VT-03	Vitengeni old mining pit	galena-chalcopyrite-(calcite)-quartz vein	213.2
5	VT-05	Vitengeni old mining pit	float, massive galena	231.9
6	VT-24	Vitengeni northern most pit	galena crystal in barite	237.4
7	MW-06	Mwachi River northern most pit	galena-quartz-calcite vein	229.7
8	MW-09	Mwachi River north showing	galena-(sphalerite)-(quartz)-calcite vein	214.3
9	MK-17	Mkundi North showing	galena-(anglesite)-quartz vein	170.1
10	TO-03	Lunga-Lunga old mining pit	galena-barite vein	96.4
11	MI-04	Mwereni eastern	float, galena fragment	160.9

The calculations are based on the assumption that they are single stage leads and using the following formula:

$$M = \left(\frac{^{207}pb/^{204}pb - 10.294}{^{208}Pb/^{204}Pb - 9.307} \right)$$

Appendix - VII

WHOLE ROCK ANALYSIS OF SAMPLES FROM THE MOMBASA AREA

Appendix-1

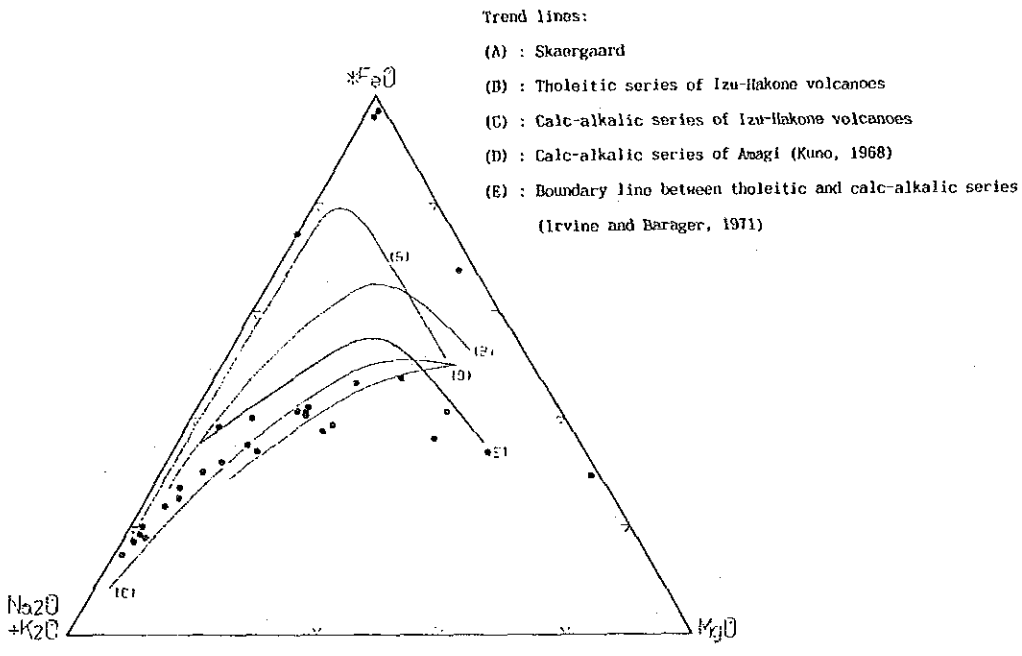
Sample	GEOL.	Lon.	Lat.	SiO2 %	TiO2 %	Al2O3 %	Fe2O3 %	FeO %	MnO %	MgO %	CaO %	Na2O %	K2O %	P2O5 %	BaO %	LOI %	TOTAL %
GO-009		32784	392206	6.90	0.04	0.97	0.43	0.19	0.05	0.66	48.18	0.09	0.18	0.27	0.18	39.87	98.05
KR-006	Mkl	35617	393086	58.31	0.77	16.29	2.02	5.11	0.09	2.70	2.63	3.09	3.01	0.21	0.09	4.71	98.60
KR-007	Mkl	35617	393086	70.64	0.48	13.59	1.29	1.12	0.04	0.87	1.85	4.11	3.36	0.12	0.11	1.80	99.50
KR-009	Ig	35820	393902	39.79	2.63	11.44	4.84	5.98	0.17	10.35	11.28	2.70	1.76	0.63	0.33	5.73	98.30
KR-010	MyCu	34952	392098	73.40	0.30	11.78	0.59	0.80	0.06	0.58	3.05	5.54	1.12	0.13	0.03	2.84	100.30
KR-013	Tu	34815	391388	74.06	0.32	10.73	1.59	0.40	0.01	0.90	0.58	3.19	3.02	0.09	1.74	2.62	99.29
KR-014	Tm	34686	390697	63.85	0.46	13.78	0.64	2.75	0.08	1.68	3.10	4.96	2.53	0.09	0.08	3.58	97.88
KR-017	Ig	42832	390769	48.93	2.06	17.51	5.71	2.08	0.21	1.88	4.82	6.89	2.07	0.46	0.07	6.05	98.97
KR-018	Ig	42845	390706	43.39	2.49	16.54	4.85	2.93	0.21	2.52	8.03	6.91	4.12	0.47	0.13	5.26	98.17
KR-020A	Ig	42762	390796	63.33	0.45	18.84	2.27	0.14	0.05	0.23	0.39	7.25	5.01	0.06	0.11	0.87	99.11
KR-020B	Ig	42762	390796	54.18	2.34	19.72	7.44	0.38	0.28	1.06	1.15	6.14	4.13	0.45	0.13	2.81	100.20
KR-020C	Ig	42762	390796	57.71	0.64	20.37	1.60	1.50	0.15	0.63	2.96	7.77	5.04	0.10	0.07	1.09	99.80
KR-021	Ig	42600	390800	47.73	2.16	18.06	3.88	3.12	0.17	2.76	6.53	6.16	3.98	0.36	0.12	4.04	99.43
KR-022	Ig	42524	390778	44.35	2.70	15.50	4.80	4.17	0.18	5.19	8.83	5.02	3.23	0.56	0.08	3.77	98.83
KR-023	Ig	42448	390755	42.35	3.42	16.39	5.50	3.55	0.23	3.89	8.26	6.98	1.63	0.66	0.14	5.71	99.10
KR-025	Ig	42682	391246	46.27	2.85	16.22	3.70	5.64	0.21	3.68	8.46	5.81	3.30	0.75	0.14	1.12	98.76
KR-026	Ig	42722	391246	44.43	3.19	14.69	3.63	7.54	0.21	5.48	9.81	4.70	2.28	0.83	0.07	0.86	98.55
KR-027	Ig	42754	391021	62.42	0.62	18.82	1.84	1.39	0.07	0.44	1.88	6.42	6.43	0.08	0.07	0.65	101.30
KR-028	Ig	42731	391120	57.28	1.15	18.09	2.59	3.03	0.12	1.32	3.50	6.18	5.00	0.22	0.09	1.15	100.05
KR-030	Ig	42642	392021	46.49	1.53	19.82	5.41	1.37	0.26	1.12	4.78	9.85	5.73	0.21	0.22	2.46	99.40

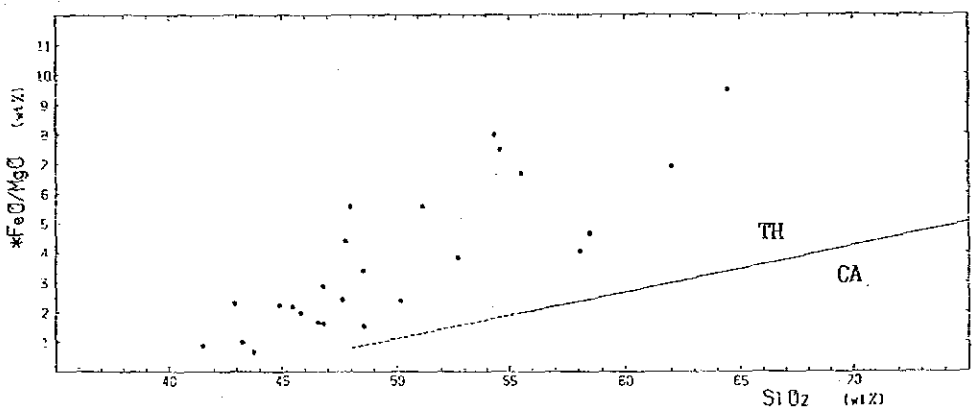
Appendix-2

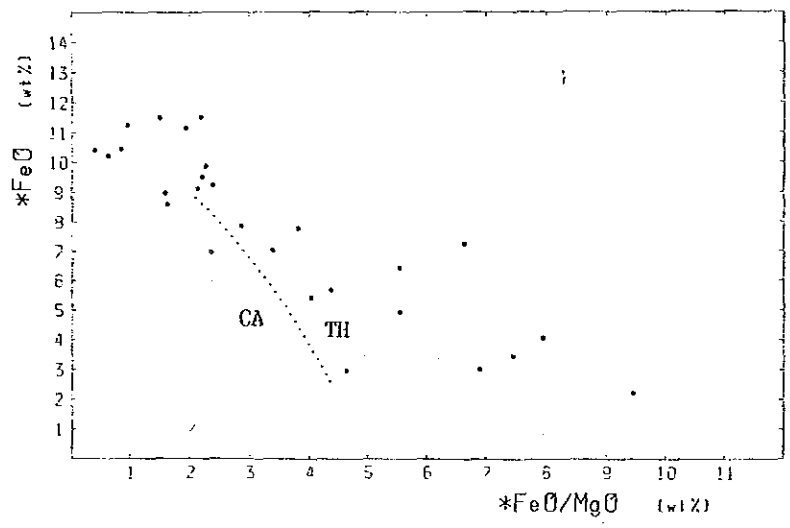
Sample		Lon.	Lat.	SiO2 %	TiO2 %	Al2O3 %	Fe2O3 %	FeO %	MnO %	MgO %	CaO %	Na2O %	K2O %	P2O5 %	BaO %	LOI %	TOTAL %
KR-031	Ig	42549	391148	53.16	0.56	21.35	3.14	0.54	0.12	0.45	1.98	10.96	4.74	0.10	0.15	0.95	98.25
KR-032	Ig	42590	391280	49.69	1.18	20.81	3.36	1.77	0.18	0.86	3.89	9.31	5.25	0.18	0.51	1.04	98.20
KR-033	Ig	42553	391260	53.19	0.61	21.03	3.28	1.04	0.16	0.50	2.32	10.66	4.80	0.07	0.13	1.09	98.87
KR-034	Ig	42500	391244	47.01	2.35	18.65	3.68	3.50	0.19	2.00	6.25	8.26	4.27	0.38	0.17	0.73	97.83
KR-039	Ig	42840	391536	20.96	4.69	22.57	25.90	0.17	1.06	0.57	0.34	0.08	0.05	2.73	1.84	12.09	93.08
KR-101	Ig	42899	391513	3.68	0.58	0.73	7.81	0.20	1.57	3.24	37.26	0.20	0.05	4.88	2.49	31.27	93.87
KR-102A	Ig	42813	391547	3.17	0.18	0.85	1.59	4.02	2.48	13.07	22.70	0.11	0.05	0.13	3.93	37.28	90.00
KR-104	Ig	42529	390549	43.04	2.49	15.48	4.50	3.88	0.24	4.78	8.68	5.21	3.18	0.50	0.29	4.88	97.57
KR-106	Ig	30594	394938	42.41	2.00	10.91	3.33	6.89	0.18	15.10	10.91	2.80	1.56	0.63	0.12	1.00	98.60
KR-109	Ig	42784	391735	59.70	1.53	6.62	14.14	0.23	3.25	0.29	0.45	0.12	0.12	0.78	3.84	6.39	97.49
MD-008	K	31082	394611	4.34	0.03	0.67	0.09	0.19	0.06	0.72	49.84	0.09	0.16	0.03	0.01	41.04	97.28
MK-001	Ig	42287	391536	38.80	2.86	15.35	6.04	3.47	0.25	3.85	10.25	4.86	3.60	0.84	0.14	7.57	98.26
MK-026	Ig	42320	391530	41.74	3.08	16.46	5.60	3.81	0.18	3.92	8.32	6.50	2.26	0.78	0.19	5.03	98.30
MR-106	Ig	42872	391493	37.75	1.60	9.26	23.96	1.52	0.01	0.16	2.29	0.80	7.08	2.54	0.27	10.11	97.56
MR-111	Ig	42573	391174	46.60	1.67	21.21	3.83	2.10	0.20	1.26	4.96	10.46	4.68	0.26	0.24	1.15	98.85
MR-113	Ig	42445	391516	39.16	1.47	7.37	3.74	5.88	0.23	6.00	10.42	1.83	2.49	1.83	0.09	17.17	98.33
SH-005	K	35054	393754	37.59	1.37	8.60	0.86	0.68	0.50	0.51	24.44	1.59	2.83	0.54	0.05	19.14	98.77
SH-013	M21	33278	393523	81.74	1.37	6.88	1.69	1.45	0.16	0.60	1.73	2.00	1.58	0.14	0.04	1.25	100.80
SH-028	Tu	34875	391361	64.44	0.54	12.74	3.04	0.79	0.05	2.32	1.90	2.28	4.36	0.15	0.05	5.42	98.16
SH-034	Ig	42905	390772	34.80	2.98	9.77	2.68	6.34	0.16	10.03	10.70	2.47	2.97	0.75	0.10	13.48	97.98

Appendix -Ⅷ

TREND IN AFM DIAGRAM, RELATION BETWEEN FeO/MgO RATIO AND SiO_2 CONTENT, AND RELATION BETWEEN FeO CONTENT AND FeO/MgO RATIO IN THE IGNEOUS ROCKS FROM THE MOMBASA AREA


Trend lines:
(A) : Skaergaard
(B) : Tholeitic series of Izu-Hakone volcanoes
(C) : Calc-alkalic series of Izu-Hakone volcanoes
(D) : Calc-alkalic series of Amagi (Kuno, 1968)
(E) : Boundary line between tholeitic and calc-alkalic series
(Irvine and Barager, 1971)
*FeO
Na2O
+K2O
MgO
(A)
(B)
(C)
(D)
(E)


*FeO/MgO (wt%)
SiO2 (wt%)
TH
CA


*FeO (wt%)
*FeO/MgO (wt%)
CA
TH

Appendix-1

Appendix -IX

CHEMICAL ANALYSIS OF ORE SAMPLES FROM THE MINERAL SHOWINGS

Appendix-1

Sample	Lon.	Lat.	Ce %	Eu %	La %	Lu ppm	Nd %	Sm %	Tb ppm	Th ppm	U ppm	Yb ppm	Sr ppm	Nb ppm	Y ppm
MR-01	42924	391514	2.11	0.019	1.71	5.6	0.55	0.090	70.6	1150	22	49.0	2800	4170	670
MR-02	42924	391514	2.56	0.035	1.80	9.3	0.81	0.140	280	1275	20	85.0	7600	4870	1550
MR-03	42924	391514	2.21	0.032	1.61	7.4	0.75	0.130	87.6	1550	22	67.7	6800	4310	1210
MR-04	42924	391514	2.66	0.036	1.81	12.6	0.93	0.150	340	1150	21	114.5	6800	6270	1530
MR-05	42924	391514	1.60	0.024	1.47	48.4	0.89	0.090	88.5	1100	36	324	15700	3420	3800
MR-06	42924	391514	5.84	0.062	4.40	96.1	1.54	0.240	880	2900	73	587	7200	8530	6900
MR-07	42924	391514	1.01	0.012	0.68	7.5	0.32	0.040	25.2	875	18	46.3	4300	2490	750
MR-08	42914	391578	2.74	0.042	1.90	9.6	1.00	0.170	370	1275	15	80.9	2800	2380	1340
MR-09	42914	391578	1.86	0.037	1.70	7.2	0.88	0.150	290	1050	13	84.1	2600	2780	1200
MR-10	42914	391578	2.84	0.037	2.26	8.0	1.04	0.160	330	625	11	38.5	1600	1980	1190
MR-11	42914	391578	3.86	0.052	3.49	10.9	1.46	0.230	540	1050	9	71.3	1400	1290	1740
MR-12	42914	391578	1.61	0.020	1.16	4.0	0.60	0.094	54.9	800	14	32.2	1900	1240	570
MR-13	42914	391578	1.72	0.028	1.48	7.2	0.71	0.120	94.5	875	8	52.7	480	670	880
MR-14	42914	391578	3.74	0.055	3.07	12.5	1.30	0.210	550	1700	12	77.5	1400	650	1870
MR-15	42914	391578	4.85	0.092	4.19	15.4	1.95	0.330	930	1825	13	90.3	1900	3010	2800
MR-16	42914	391578	6.51	0.076	5.97	18.7	1.83	0.290	960	1050	9	88.7	2500	710	3100
MR-17	42914	391578	2.94	0.028	2.66	6.0	0.86	0.110	290	475	9	25.8	4300	5920	740
MR-18	42886	391588	1.68	0.015	1.21	6.0	0.47	0.071	51.1	1125	30	36.3	6100	4370	770
MR-19	42886	391588	3.07	0.017	1.70	8.2	0.61	0.083	54.1	2550	29	56.8	5200	4290	630
MR-20	42886	391588	1.70	0.011	0.99	2.8	0.38	0.052	37.5	1275	22	31.2	10600	4740	600
MR-21	42886	391588	2.01	0.013	1.30	3.0	0.52	0.064	45.6	2175	27	29.3	8900	7280	630
MR-22	42886	391588	3.36	0.020	1.44	6.3	0.74	0.098	55.9	3425	29	52.4	3000	5870	810
MR-23	42886	391588	2.24	0.011	0.94	5.6	0.49	0.060	33.9	2550	19	38.9	880	7220	570
MR-24	42886	391588	1.99	0.011	1.34	2.3	0.54	0.062	33.2	2300	24	29.6	11200	7110	390
MR-25	42869	391573	1.68	0.017	0.94	8.8	0.51	0.082	50.6	433	44	64.3	4400	6050	920
MR-26	42869	391573	0.74	0.013	0.32	10.3	0.28	0.040	48.2	144	23	95.7	890	3480	910
MR-27	42874	391514	0.79	0.009	0.51	25.8	0.20	0.034	72.9	363	66	193.5	4500	2630	1590
MR-28	42886	391588	*1325	*24.0	*1525	1.4	*750	*500	7.7	64	6	4.7	440	315	150
MR-29	42874	391514	*5550	*23.5	*4300	1.5	0.06	*74.3	8.0	69	4	10.2	8800	360	115
MR-30	42874	391514	*4080	*78.0	*1850	1.9	0.10	*222	24.4	56	22	19.0	4800	1130	280

Appendix-2

Sample			Au	Pd	Pt	Ag	Pb	Zn	S	U	Th	Hg	Ti	V	W	Ni	P
			ppb	ppb	ppb	g/tonne	%	%	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm
A-021	43415	390581	<2	<2	<5	1.0	0.22	<0.01	0.065	0.6	3.0	1300	0.04	10	<10	7	70
A-022	43415	390581	<2	<2	<5	0.5	0.17	<0.01	0.056	1.2	5.0	810	0.08	17	<10	6	120
A-028	34112	394143	<2	<2	<5	3.0	0.14	0.01	0.068	3.2	3.0	820	0.03	<1	<10	17	660
CH-01	35470	393608	2	<2	<5	17.5	0.05	<0.01	0.030	1.6	8.0	5900	0.09	14	<10	2	170
CH-09	35547	393604	2	<2	<5	2.5	0.15	<0.01	0.063	0.6	4.0	3000	0.05	9	<10	4	100
GA-01	40358	392777	<2	<2	<5	0.5	0.02	<0.01	13.60	<0.2	<1.0	330	<0.01	1	<10	3	10
GO-07	34112	394143	<2	<2	<5	0.5	0.08	0.01	11.80	0.2	<1.0	470	<0.01	<1	<10	1	50
JA-01	33748	394430	<2	2	<5	<0.5	0.01	0.01	0.044	2.2	10.0	130	0.30	60	<10	34	400
JA-02	33748	394430	2	2	<5	0.5	0.01	0.02	0.036	2.8	11.0	230	0.28	127	<10	118	360
JA-03	33748	394430	<2	2	<5	1.0	0.08	0.01	0.304	1.6	5.0	660	0.11	163	<10	51	230
JA-04	33748	394430	<2	<2	<5	0.5	0.07	0.01	0.065	1.4	2.0	590	0.03	126	<10	47	170
JA-05	33748	394430	2	<2	<5	0.5	0.08	0.01	0.050	2.0	1.0	800	0.05	157	<10	33	260
JA-07	33748	394430	<2	<2	<5	0.5	0.09	<0.01	0.038	0.4	<1.0	1900	<0.01	32	<10	17	<10
JA-11	33748	394430	4	2	<5	<0.5	0.03	0.01	0.019	1.6	8.0	630	0.20	121	<10	59	250
KI-01	42893	390805	2	<2	<5	<0.5	0.01	<0.01	13.40	1.2	1.0	140	0.01	6	<10	<1	20
KN-03	35121	393927	8	<2	<5	23.0	0.52	0.04	13.90	<0.2	<1.0	6100	<0.01	1	<10	<1	<10
KW-01	34112	394143	<2	<2	<5	<0.5	0.01	<0.01	0.034	3.6	18.0	90	0.23	41	<10	5	210
KW-02	34112	394143	2	<2	<5	0.5	0.17	0.03	0.236	3.8	45.0	650	0.17	130	<10	9	380
KW-03	34112	394143	<2	<2	<5	0.5	0.07	0.01	0.037	2.4	24.0	120	0.17	77	<10	5	180
MA-02	31644	394117	<2	<2	<5	0.5	0.03	<0.01	0.038	1.0	5.0	900	0.09	22	<10	<1	300
ME-01	42893	390805	<2	<2	<5	<0.5	0.02	0.02	11.10	0.8	3.0	330	0.05	17	<10	11	30
MI-01	42012	390896	<2	<2	<5	<0.5	<0.01	<0.01	13.70	<0.2	<1.0	40	<0.01	2	<10	<1	10
MK-02	42292	391577	<2	<2	<5	<0.5	0.03	<0.01	0.314	1.4	3.0	630	0.09	11	<10	<1	200
MK-03	42292	391577	<2	<2	<5	<0.5	0.03	<0.01	0.121	1.0	3.0	260	0.12	12	<10	7	210
MK-04	42292	391577	<2	<2	<5	1.0	0.06	<0.01	0.380	0.4	1.0	1400	0.03	8	<10	<1	20
MK-07	42292	391577	6	<2	<5	<0.5	0.02	<0.01	0.038	2.0	7.0	640	0.35	33	<10	1	380
MK-08	42292	391577	<2	<2	<5	<0.5	0.01	0.03	0.078	0.8	4.0	120	0.07	13	<10	8	190
MK-10	42292	391577	2	<2	<5	<0.5	0.01	<0.01	0.019	0.6	2.0	120	0.05	12	<10	3	120
MK-11	42292	391577	<2	<2	<5	1.0	0.03	<0.01	0.317	<0.2	<1.0	630	0.01	2	<10	4	<10
MK-12	42292	391577	2	<2	<5	<0.5	0.02	0.01	1.350	3.8	9.0	130	1.76	291	<10	10	3390
MK-14	42292	391577	2	<2	<5	1.0	0.04	0.01	1.140	0.4	<1.0	1900	0.04	9	<50	7	<200
MK-15	42292	391577	4	<2	<5	1.0	0.38	<0.01	0.199	2.0	4.0	350	0.15	27	<50	8	200
MK-18	42292	391577	<2	<2	<5	<0.5	0.03	<0.01	0.064	1.6	2.0	9000	0.09	11	<10	5	250
MK-22	42322	391565	<2	<2	<5	<0.5	0.02	<0.01	44.3	0.6	1.0	20000	0.04	3	<10	17	<10
MK-23	42322	391565	<2	<2	<5	<0.5	0.02	0.01	0.426	3.4	6.0	270	1.70	312	<10	8	4090
MK-24	42322	391565	<2	<2	<5	<0.5	0.01	<0.01	0.417	1.8	3.0	1400	0.11	21	<10	14	230

Appendix-3

Sample	Sr ppm	Al %	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %
A-021	39	1.24	1380	0.5	20	0.02	<0.5	4	164	85	0.31	0.46	0.07	85	<1	0.04
A-022	63	2.78	1640	1.0	24	0.03	<0.5	3	149	88	0.44	1.54	0.13	780	<1	0.20
A-028	63	2.49	>10000	2.0	88	0.02	21.0	175	139	154	0.68	0.44	0.06	>10000	5	0.06
CH-01	53	2.53	630	<0.5	18	0.01	<0.5	2	164	50	0.30	0.87	0.03	605	<1	0.02
CH-09	23	0.81	1610	<0.5	20	0.01	0.5	2	210	58	0.75	0.19	0.02	860	1	0.02
GA-01	145	0.12	>10000	<0.5	10	0.01	<0.5	6	18	72	0.04	0.04	0.01	80	<1	0.03
GO-07	337	0.09	>10000	<0.5	18	0.01	<0.5	8	34	22	0.08	0.01	<0.01	80	<1	0.01
JA-01	49	5.38	1300	3.0	12	0.22	<0.5	11	128	48	7.02	0.50	0.22	>10000	4	0.09
JA-02	196	6.38	2780	14.0	84	0.17	<0.5	46	160	134	>25.0	0.36	0.37	>10000	26	0.11
JA-03	154	2.90	9800	15.0	48	0.08	<0.5	2	190	117	>25.0	0.13	0.26	>10000	31	0.03
JA-04	49	1.09	3320	13.0	42	0.06	<0.5	<1	231	150	>25.0	0.03	0.17	7060	41	0.02
JA-05	21	1.57	1710	15.5	30	0.05	2.0	<1	112	118	>25.0	0.04	0.27	5650	61	0.03
JA-07	17	0.48	1620	17.0	40	0.06	<0.5	<1	30	100	>25.0	0.06	0.21	950	27	0.02
JA-11	186	4.02	1630	12.5	44	0.32	<0.5	17	128	109	>25.0	0.37	0.48	>10000	24	0.06
KI-01	445	0.52	>10000	<0.5	<2	0.02	<0.5	3	16	19	0.75	0.13	0.02	355	1	0.01
KN-03	903	0.12	>10000	<0.5	18	<0.01	0.5	2	7	17	0.34	0.05	<0.01	115	<1	0.01
KW-01	31	5.35	510	1.0	2	0.03	0.5	3	132	17	1.98	0.23	0.06	4280	1	0.08
KW-02	260	4.60	>10000	3.5	82	0.03	6.5	107	141	44	5.91	0.74	0.09	>10000	19	0.12
KW-03	39	4.54	1830	2.0	8	0.02	1.0	10	257	28	4.20	0.21	0.05	>10000	4	0.05
MA-02	246	3.88	1000	1.0	6	0.02	1.0	<1	166	17	1.71	0.07	0.01	940	<1	0.05
ME-01	4810	1.58	>10000	<0.5	<2	0.01	0.5	4	26	28	1.08	0.61	0.03	375	<1	0.28
MI-01	4390	0.08	>10000	<0.5	<2	<0.01	<0.5	5	8	14	0.14	0.03	<0.01	95	<1	0.02
MK-02	462	3.79	8250	<0.5	6	0.89	0.5	4	135	90	1.08	0.61	0.51	525	<1	2.43
MK-03	388	3.44	2740	<0.5	<2	1.07	0.5	2	163	24	1.22	0.54	0.59	390	<1	2.12
MK-04	60	0.95	850	<0.5	<2	0.05	0.5	<1	246	6260	0.82	0.24	0.05	100	<1	0.17
MK-07	201	4.23	800	<0.5	<2	1.69	<0.5	3	114	81	1.61	0.98	0.95	350	4	2.19
MK-09	250	3.57	770	<0.5	<2	1.33	0.5	2	119	286	0.85	0.59	0.82	250	2	2.17
MK-10	306	3.52	320	<0.5	10	2.65	<0.5	3	113	145	1.21	0.40	1.21	575	2	2.02
MK-11	46	0.68	410	<0.5	<2	0.07	<0.5	2	164	4770	0.54	0.14	0.04	45	<1	0.10
MK-12	1140	7.69	760	<0.5	2	5.06	<0.5	16	31	250	5.75	1.35	1.96	1485	23	4.07
MK-14	48	0.86	410	<0.5	<20	0.10	1.0	3	170	>10000	1.18	0.19	0.06	55	<1	0.19
MK-15	117	3.78	600	0.5	<20	0.12	<0.5	5	145	>10000	0.80	0.72	0.13	210	<1	1.59
MK-18	>10000	2.30	5610	4.5	14	18.90	<0.5	6	47	289	0.64	0.44	1.55	1170	<1	1.44
MK-22	296	1.35	470	<0.5	<2	0.36	<0.5	<1	96	262	>25.0	0.22	0.21	130	19	0.46
MK-23	1815	7.99	2430	1.5	16	5.55	<0.5	21	22	236	6.62	2.95	2.19	1670	7	3.08
MK-24	439	4.46	240	<0.5	6	2.39	<0.5	6	153	110	1.95	1.99	1.57	720	3	2.11

Appendix-4

Sample			Au	Pd	Pt	Ag	Pb	Zn	S	U	Th	Hg	Ti	V	W	Ni	P
			ppb	ppb	ppb	g/tonne	%	%	%	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm
MK-29	42322	391565	<2	<2	<5	<0.5	0.01	<0.01	0.102	5.4	9.0	6000	0.30	32	<10	13	680
MW-13	35930	393188	<2	2	<5	<0.5	<0.01	<0.01	0.010	<0.2	<1.0	180	0.04	8	<10	3	60
MW-14	35930	393188	<2	2	<5	<0.5	0.01	<0.01	0.008	<0.2	<1.0	80	<0.01	1	<10	4	<10
MKN-01	40957	391075	<2	<2	<5	0.5	0.02	0.25	0.098	0.4	<1.0	6100	0.02	6	<10	4	50
MKS-04	41145	390767	2	<2	<5	<0.5	<0.01	<0.01	0.017	0.2	<1.0	880	<0.01	1	<10	<1	50
TO-01	43415	390581	<2	4	<5	<0.5	<0.01	0.05	0.049	0.2	<1.0	300	<0.01	<1	<10	8	440
TO-05A	43500	390529	<2	<5	<0.5	<0.01	<0.01	13.00	0.2	<1.0	70	<0.01	<1	<10	2	80	
TO-05B	43500	390529	<2	<2	<5	<0.5	0.02	<0.01	2.93	1.6	6.0	60	0.11	18	<10	2	110
TO-09	34112	394143	<2	<2	<5	0.5	0.01	0.05	0.172	4.4	4.0	100	0.04	<1	<10	61	990
VT-03	32125	394187	8	<2	<5	5.0	1.79	<0.01	12.20	<0.2	<1.0	6100	<0.01	<1	<10	<1	<10
VT-06	32125	394187	2	2	<5	0.5	0.26	0.25	0.315	0.4	<1.0	3400	<0.01	<1	<10	<1	<10
VT-07	32125	394187	4	<2	<5	<0.5	2.92	0.42	2.74	5.2	7.0	200	0.18	39	<50	24	<200
VT-08	32104	394191	2	<2	<5	<0.5	0.04	<0.01	0.105	1.0	3.0	470	0.04	3	<10	3	220
VT-09	32125	394187	2	<5	<0.5	0.01	<0.01	13.60	<0.2	<1.0	60	<0.01	<1	<10	<1	<10	
VT-10	32125	394187	<2	<2	<5	<0.5	0.01	<0.01	13.60	<0.2	<1.0	100	<0.01	<1	<10	<1	70
VT-12	32125	394187	<2	<2	<5	0.5	0.08	0.09	12.00	<0.2	<1.0	7500	<0.01	<1	<10	1	60
VT-20	32068	394198	4	<2	<5	3.5	0.71	<0.01	11.60	0.6	<1.0	15000	<0.01	2	<10	<1	130
VT-21	32068	394198	6	<2	<5	10.0	3.66	<0.01	8.07	1.2	3.0	71000	0.07	9	<10	4	110
VT-23	31893	394216	<2	<2	<5	<0.5	0.08	<0.01	13.20	<0.2	<1.0	800	<0.01	<1	<10	<1	<10
CH-03	35470	393608	2	2	<5	35.0	<0.01	<0.01	0.025	0.4	2.0	16000	0.04	10	10	1	150
CH-04	35470	393608	2	<2	<5	181.0	0.03	<0.01	0.054	1.0	8.0	88000	0.13	30	10	<1	350
CH-10	35547	393604	<2	4	<5	1.0	0.20	0.04	0.033	2.8	10.0	2600	0.43	102	<10	5	470
GO-02	34112	394143	<2	2	<5	2.0	<0.01	<0.01	9.86	0.2	1.0	1700	0.01	3	<10	<1	10
GO-05	34112	394143	<2	2	<5	<0.5	<0.01	0.02	10.50	0.2	<1.0	430	<0.01	4	10	<1	60
GO-06	34112	394143	<2	2	<5	0.5	0.03	0.07	5.38	0.8	<1.0	280	<0.01	9	<10	13	100
KI-03	42893	390805	<2	<2	<5	<0.5	0.01	<0.01	11.40	4.0	1.0	120	0.01	8	<10	<1	<10
KI-04	42893	390805	<2	2	<5	<0.5	<0.01	<0.01	0.908	2.0	9.0	50	0.08	28	<10	1	180
KN-01	35121	393927	6	<2	<5	<0.5	<0.01	<0.01	1.450	1.8	8.0	70	0.05	24	10	6	190
KN-02	35121	393927	72	<2	<5	16.0	3.23	0.01	0.640	0.4	3.0	5800	0.03	16	<10	<1	340
KN-04	35121	393927	16	<2	<5	86.0	0.27	<0.01	0.078	1.4	4.0	2200	0.08	17	<10	<1	560
KN-06	35121	393927	12	<2	<5	35.5	15.20	0.05	2.52	0.2	2.0	2700	0.03	14	<10	1	100
KN-07	35121	393927	10	<2	<5	10.5	1.55	<0.01	1.080	5.0	18.0	1800	0.45	58	<10	21	880
KN-10	35121	393927	170	2	<5	402	33.4	<0.01	5.62	1.2	4.0	9200	0.06	7	10	<1	260
KN-11	35121	393927	86	2	<5	395	43.3	<0.01	4.55	0.4	<1.0	5500	0.01	2	10	<1	150
KN-12	35121	393927	166	2	<5	19.0	1.23	<0.01	0.212	0.4	2.0	15000	0.02	7	<10	5	610
KN-13	35121	393927	14	<2	<5	10.0	0.62	<0.01	0.107	1.4	8.0	1000	0.12	36	<10	4	260

Appendix-5

Sample	Sr ppm	Al %	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %
MK-29	410	6.33	350	<0.5	2	2.52	0.5	10	118	119	2.00	1.56	1.50	425	<1	3.88
MW-13	322	0.91	150	<0.5	8	>25.0	<0.5	4	9	115	0.82	0.14	0.22	4160	<1	0.11
MW-14	233	0.11	220	<0.5	14	>25.0	<0.5	4	5	104	0.70	0.03	0.13	5350	<1	0.05
MKN-01	37	0.87	1060	<0.5	8	0.60	8.0	1	178	688	0.43	0.24	0.06	290	1	0.04
MKS-04	19	0.47	170	<0.5	6	0.13	0.5	7	255	28	0.31	0.04	0.02	50	<1	0.05
TO-01	9460	0.06	>10000	12.0	178	0.14	2.0	251	20	11	0.05	<0.01	0.01	25	<1	0.05
TO-05A	1320	0.13	>10000	<0.5	18	0.06	<0.5	13	5	71	0.18	0.02	0.01	80	<1	0.07
TO-05B	1480	3.65	7260	0.5	<2	0.05	<0.5	5	73	16	0.40	1.04	0.12	30	<1	1.30
TO-09	481	2.06	>10000	1.5	<2	0.07	13.0	240	<1	23	3.80	0.93	0.18	>10000	53	0.12
VT-03	163	0.04	4030	<0.5	10	<0.01	0.5	2	13	2890	0.15	0.02	<0.01	6440	<1	0.01
VT-06	44	0.16	3320	1.0	8	<0.01	2.0	<1	162	48	0.04	<0.01	<0.01	910	<1	<0.01
VT-07	114	4.39	5010	3.5	60	<0.01	1.5	73	43	>10000	2.37	1.33	0.05	1450	<1	0.01
VT-08	224	2.19	4090	<0.5	8	0.01	<0.5	6	238	154	0.41	0.03	<0.01	170	<1	0.02
VT-09	63	0.03	>10000	0.5	10	<0.01	0.5	3	<1	37	<0.01	<0.01	<0.01	95	<1	<0.01
VT-10	167	0.02	>10000	0.5	24	0.01	<0.5	14	3	13	0.02	0.03	<0.01	55	<1	0.02
VT-12	87	0.03	>10000	0.5	8	0.01	2.0	14	1	15	0.04	<0.01	<0.01	80	<1	0.02
VT-20	275	0.11	>10000	<0.5	4	0.02	<0.5	21	14	27	0.11	0.02	<0.01	735	<1	0.03
VT-21	257	1.07	4350	0.5	4	0.03	0.5	6	33	424	0.41	0.26	0.02	90	<1	0.03
VT-23	291	0.02	>10000	<0.5	<2	<0.01	<0.5	1	9	9	<0.01	0.01	<0.01	40	<1	<0.01
CH-03	26	1.62	90	<0.5	<2	0.08	<0.5	3	296	13	0.66	0.57	0.05	35	2	<0.01
CH-04	39	2.39	180	<0.5	<2	0.08	<0.5	<1	204	39	5.43	0.76	0.05	40	1	<0.01
CH-10	47	8.53	720	<0.5	<2	0.01	<0.5	7	99	19	4.54	1.94	0.50	3100	<1	<0.01
GO-02	207	0.31	>10000	<0.5	<2	0.03	<0.5	2	27	12	0.85	0.07	0.01	40	2	<0.01
GO-05	355	0.25	>10000	0.5	<2	0.01	<0.5	3	10	8	0.95	0.05	0.01	40	2	<0.01
GO-06	356	0.28	5920	5.0	<2	0.09	<0.5	<1	80	42	15.10	0.08	0.07	105	17	<0.01
KI-03	474	1.57	5670	<0.5	<2	<0.01	<0.5	<1	<1	2	2.10	0.32	0.01	30	<1	<0.01
KI-04	273	6.24	6390	<0.5	<2	0.01	<0.5	2	158	1	4.14	1.60	0.12	60	<1	<0.01
KN-01	277	4.73	5690	<0.5	<2	<0.01	<0.5	<1	196	3	6.93	1.29	0.09	120	2	<0.01
KN-02	43	2.28	3670	<0.5	<2	0.01	<0.5	1	248	37	1.72	0.88	0.06	25	3	<0.01
KN-04	56	2.31	2090	0.5	<2	0.03	<0.5	3	254	28	0.59	0.70	0.04	25	<1	<0.01
KN-06	28	1.75	980	<0.5	8	0.01	2.0	<1	238	186	5.65	0.63	0.04	30	2	<0.01
KN-07	173	8.18	1740	1.5	<2	0.03	0.5	17	128	2520	0.97	2.23	0.15	10	1	0.04
KN-10	29	1.06	450	<0.5	6	0.01	0.5	3	45	1375	2.31	0.35	0.02	330	<1	0.03
KN-11	73	0.43	260	<0.5	2	0.01	<0.5	4	87	2620	2.48	0.12	0.01	10	<1	<0.01
KN-12	22	1.34	260	<0.5	<2	0.01	<0.5	1	279	136	2.84	0.34	0.01	65	1	<0.01
KN-13	28	3.57	450	0.5	<2	<0.01	<0.5	<1	166	33	0.59	1.14	0.05	75	<1	<0.01

Appendix-6

Sample			Au ppb	Pd ppb	Pt ppb	Ag g/tonne	Pb %	Zn %	S %	U ppm	Th ppm	Hg ppb	Ti %	V ppm	W ppm	Ni ppm	P ppm
KN-15	35121	393927	14	<2	<5	7.0	0.91	<0.01	1.200	3.6	14.0	510	0.23	140	<10	5	1100
KN-17	35121	393927	4	<2	<5	1.5	0.27	<0.01	0.048	1.8	7.0	120	0.14	24	<10	3	450
KN-21	35121	393927	<2	<2	<5	8.0	0.13	<0.01	0.149	1.0	2.0	3300	0.08	4	<10	<1	<10
KN-22	35121	393927	2	2	<5	0.5	0.21	<0.01	0.389	2.4	11.0	150	0.19	37	<10	<1	330
KN-24	35121	393927	2	2	<5	2.5	0.19	<0.01	0.302	3.6	7.0	150	0.18	314	<10	<1	980
KN-25	35121	393927	62	<2	<5	468	27.0	<0.01	3.97	0.6	1.0	1300	0.03	5	30	2	30
KN-27	35121	393927	50	2	<5	1605	57.9	0.01	10.60	<0.2	<1.0	13000	<0.01	<1	130	<1	70
KN-32	35121	393927	8	<2	<5	25.0	0.58	0.01	0.135	0.4	2.0	300	0.04	6	<10	6	180
KN-38	35121	393927	<2	<2	<5	64.0	13.50	5.49	12.30	5.6	10.0	1600	0.12	25	60	78	1180
KN-40	35121	393927	32	2	<5	14.0	1.68	0.06	0.438	3.6	23.0	1600	0.42	15	<10	1	980
KN-43	35121	393927	50	<2	<5	101.0	14.20	0.01	2.29	3.4	4.0	15000	0.07	15	<10	3	4370
KV-02	32125	394187	<2	<2	<5	2.0	0.18	<0.01	14.00	<0.2	<1.0	170	<0.01	3	<10	<1	140
KV-03	32125	394187	4	<2	<5	0.5	0.04	<0.01	14.30	<0.2	<1.0	110	<0.01	<1	<10	<1	50
MA-04	31644	394117	2	<2	<5	1.0	0.06	<0.01	0.339	2.2	3.0	880	0.06	13	<10	2	680
MK-17	42292	391577	2	<2	<5	4.5	4.75	<0.01	0.734	1.2	6.0	100	0.15	18	<10	<1	240
MK-18	42292	391577	<2	<2	<5	0.5	0.16	<0.01	0.063	2.6	13.0	180	0.27	21	<10	7	220
MK-20	42292	391577	<2	<2	<5	13.0	19.20	<0.01	2.89	1.0	4.0	1400	0.08	11	<10	<1	370
MKN-03	40957	391075	<2	<2	<5	7.0	0.18	0.55	0.200	0.2	<1.0	6000	<0.01	8	250	6	<10
MW-02	35930	393188	120	<2	<5	52.0	11.50	6.45	7.10	0.4	1.0	6500	0.02	6	120	2	330
MW-07	35930	393188	2	<2	<5	2.0	0.33	0.48	0.120	<0.2	<1.0	780	0.01	<1	10	<1	50
MW-08	35930	393188	180	<2	<5	90.0	18.00	0.04	3.79	0.4	2.0	3000	0.05	10	<10	1	140
MW-10	35930	393188	72	<2	<5	340	21.8	10.60	7.45	0.2	2.0	24000	0.03	2	200	<1	470
MW-12	35930	393188	4	<2	<5	3.0	0.24	0.30	1.270	1.2	5.0	490	0.11	27	<10	2	220
TO-03	43415	390581	<2	<2	<5	1.0	2.82	0.32	1.770	0.2	<1.0	480	<0.01	<1	<10	9	360
TO-04	43415	390581	<2	<2	<5	0.5	0.53	10.80	6.00	0.8	<1.0	16000	<0.01	1	180	1	460
VT-01	32125	394187	8	<2	<5	7.0	5.36	0.15	9.09	<0.2	<1.0	20000	<0.01	<1	<10	<1	<10
VT-11	31893	394216	36	<2	<5	130.0	47.3	0.37	3.82	0.4	<1.0	>100000	<0.01	<1	10	<1	10
VT-13	32125	394187	6	<2	<5	2.5	0.84	0.01	10.20	<0.2	<1.0	16000	0.01	4	<10	<1	10
VT-18	32125	394187	26	<2	<5	162.0	41.9	0.04	9.64	0.2	<1.0	73000	<0.01	1	10	<1	<10
CH-06	35470	393608	<6	<6	<15	50.0	<0.01	0.01	0.027	0.8	3.0	15000	0.09	14	<10	<1	40
JA-08	33748	394430	4	<2	<5	2.3	0.01	0.01	4.06	0.6	<1.0	1200	<0.01	6	<10	9	<10
MR-01	42924	391514	12	4	<10	2.8	0.17	0.22	4.32	29.6	1287.0	300	0.86	1935	<10	107	>10000
MR-06	42924	391514	n.s.s.	n.s.s.	n.s.s.	8.4	0.36	0.07	3.44	100.0	2204	800	0.83	918	<10	24	>10000
KN-05	35121	393927	36	<2	<5	1270	74.1	0.35	13.20	2.6	83.0	1200	0.03	62	110	12	490

Sample	Sr ppm	Al %	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Mg %	Mn ppm	Mo ppm	Na %
KN-15	95	6.66	4220	<0.5	<2	0.06	<0.5	<1	111	41	22.2	0.81	0.09	30	17	0.02
KN-17	67	2.48	670	0.5	<2	<0.01	<0.5	<1	176	7	0.48	0.84	0.03	10	<1	<0.01
KN-21	9	0.25	3470	<0.5	<2	<0.01	<0.5	<1	216	7	1.93	0.07	<0.01	10	4	<0.01
KN-22	65	2.91	7340	<0.5	<2	0.01	<0.5	2	84	2	5.53	0.31	0.02	20	3	<0.01
KN-24	140	0.93	7460	<0.5	<2	0.04	<0.5	<1	144	7	>25.0	0.09	0.04	5	8	<0.01
KN-25	58	0.57	570	<0.5	8	<0.01	<0.5	<1	143	1005	0.51	0.17	<0.01	10	<1	<0.01
KN-27	20	0.08	270	<0.5	2	<0.01	1.5	17	31	3730	3.57	0.04	<0.01	5	<1	<0.01
KN-32	19	1.03	220	1.0	<2	0.01	0.5	<1	248	50	0.38	0.32	0.01	20	<1	<0.01
KN-38	134	2.75	530	<0.5	<2	0.01	299	82	115	41	6.22	0.99	0.06	50	<1	<0.01
KN-40	67	1.85	390	<0.5	<2	0.01	5.0	3	136	27	1.89	0.66	0.02	25	<1	<0.01
KN-43	104	2.09	620	<0.5	<2	<0.01	0.5	<1	155	434	2.63	0.58	0.01	25	<1	<0.01
KV-02	146	0.26	>10000	<0.5	6	0.04	<0.5	18	19	8	0.35	0.02	0.01	15	2	0.01
KV-03	1340	0.04	>10000	<0.5	6	0.01	0.5	13	9	4	0.02	0.03	<0.01	<5	1	<0.01
MA-04	359	2.54	8020	0.5	6	0.02	<0.5	2	130	8	4.65	0.07	0.01	45	1	<0.01
MK-17	164	3.70	1030	1.5	<2	0.09	0.5	5	156	66	0.65	0.95	0.09	20	1	1.41
MK-19	90	4.61	410	1.5	<2	0.11	<0.5	<1	102	57	0.97	0.99	0.09	95	2	2.11
MK-20	167	2.76	330	0.5	<2	0.08	1.0	7	145	335	0.40	0.71	0.06	45	<1	1.06
MKN-03	25	0.61	4430	<0.5	<20	0.04	3.0	21	78	>10000	6.98	0.18	0.04	95	3	0.03
MW-02	178	0.59	550	<0.5	<2	22.9	217	30	29	1340	2.39	0.26	0.34	>10000	2	0.04
MW-07	128	0.26	390	<0.5	<2	>25.0	18.0	10	24	277	0.80	0.15	0.06	>10000	2	0.03
MW-08	77	1.63	430	<0.5	<2	0.14	1.5	6	143	105	3.01	1.05	0.05	70	1	0.08
MW-10	52	1.19	300	<0.5	<2	4.00	340	39	49	461	3.00	0.46	0.05	2230	3	0.13
MW-12	78	3.61	1000	<0.5	<2	3.01	8.5	20	159	258	1.56	1.53	0.15	1765	1	0.52
TO-03	6160	0.10	>10000	9.0	130	2.37	18.5	189	23	33	0.08	0.03	1.46	95	<1	0.04
TO-04	3040	0.24	>10000	2.0	82	1.96	501	56	74	94	0.24	0.07	0.39	20	<1	<0.01
VT-01	472	0.02	>10000	0.5	22	0.05	9.5	6	37	516	0.06	0.03	0.02	10	<1	<0.01
VT-11	154	0.12	1820	<0.5	38	0.07	18.5	1	73	876	0.04	0.04	0.01	10	1	<0.01
VT-13	841	0.28	>10000	0.5	34	<0.01	0.5	7	48	37	0.06	0.11	<0.01	5	2	<0.01
VT-18	60	0.18	270	<0.5	40	<0.01	6.5	<1	62	2240	0.07	0.05	<0.01	15	1	<0.01
CH-06	27	3.27	130	0.5	<2	0.08	<0.5	<1	242	16	1.10	1.14	0.06	95	<1	0.04
JA-08	4	0.38	20	<0.5	32	0.06	<0.5	<1	32	72	>25.0	0.05	0.10	150	1	0.02
MR-01	1265	1.03	>10000	15.0	232	0.27	6.0	28	859	8	>25.0	<0.01	0.03	1075	254	<0.01
MR-06	8330	2.52	7420	16.0	366	0.76	17.0	36	<1	84	10.40	0.05	0.03	390	438	0.11
KN-05	50	0.18	870	1.0	88	<0.01	25.5	<1	59	3490	1.59	0.17	<0.01	50	10	<0.01

Appendix - X

MINERALS IDENTIFIED IN PAN-CONCENTRATED STREAM SEDIMENT SAMPLES FROM THE MOMBASA AREA

Minerals identified in pan-concentrated stream sediment samples from the Mombasa area.

Sample No.	Minerals identified
1. KC001	Haematite, Aquamarine, Quartz, Garnets eg (Rhodolite, Spessartine)
2. KC002	Garnets (Rhodolite, Spessartine), Quartz, Haematite
3. KC003	Garnets (Rhodolite, Spessartine), Quartz, Haematite
4. KC004	Garnets (Rhodolite, Spessartine), Quartz, Haematite
5. KC006	Garnets (Rhodolite, Spessartine), Quartz, Haematite
6. KC007	Garnets (Rhodolite, Spessartine), Quartz, Goethite
7. KC008	Garnets (Rhodolite, Spessartine), Goethite, Haematite
8. KC009	Few grains of Garnets (Rhodolite, Spessartine), Haematite
9. KC010	Few grains of Garnets (Rhodolite, Spessartine), Quartz, Haematite
10. KC011	Garnets (Rhodolite, Spessartine), Quartz, Haematite
11. KC012	Garnets (Rhodolite, Spessartine), Quartz
12. KC013	Garnets (Rhodolite, Spessartine), Quartz
13. KC014	Garnets (Rhodolite, Spessartine), Quartz, Haematite
14. KC015	Garnets (Rhodolite, Spessartine), Quartz, Haematite
15. KC016	Garnets (Rhodolite, Spessartine), Quartz,
16. KC017	Garnets (Rhodolite, Spessartine), Quartz, Haematite
17. KC018	Garnets (Rhodolite, Spessartine), Quartz
18. KC019	Garnets (Rhodolite, Spessartine), Quartz, Haematite
19. KC020	Few grains of Garnets, Quartz
20. KC021	Only Quartz
21. KC022	Quartz and Few grains of Haematite
22. KC023	Garnets (Rhodolite, Spessartine), Goethite
23. KC024	Quartz, Garnets (Rhodolite, Spessartine), Haematite
24. KC025	Quartz, Haematite
25. KC026	Quartz, Goethite, Haematite

Sample No.	Minerals identified
26. KC027	: Quartz, Garnets (Rhodolite, Spessartine)
27. KC028	: Only Quartz
28. KC029	: Quartz, Few grains of Garnets
29. KC030	: Quartz, Few grains of Garnets
30. KC031	: Quartz, garnets (Rhodolite, Spessartine)
31. KC032	: Quartz, garntts
32. KC033	: Quartz, Few grains of Garnet (Phodolite) and Few grains of Haematite
33. KC034	: Quartz, Goethite
34. KC035	: Quartz, Few grains of Garnet
35. KC036	: Quartz, Garnet (Rhodolite), Goethite
36. KC037	: Quartz, Garnet (Rhodolite)
37. KC038	: Quartz, Garnet (Rhodolite), Goethite
38. KC039	: Quartz, Garnet (Rhodolite), Goethite
39. KC040	: Quartz, Garnet, Haematite, Goethite
40. KC041	: Quartz, Few grains of Garnet
41. KC042	: Quartz, Garnet, Goethite
42. KC043	: Quartz, Garnets (Rhodolite, Spessartine), Haematite
43. KC044	: Quartz, Garnets (Rhodolite, Spessartine), Haematite
44. HC001	: Garnets (Rhodolite, Spessartine), Quartz, Goethite Few grains of Haematite
45. HC002	: Garnets (Rhodolite, Spessartine), Quartz, Haematite
46. HC003	: Garnets (Rhodolite, Spessartine), Quartz, Haematite
47. HC004	: Garnets (Rhodolite, Spessartine), Quartz, Haematite
48. HC005	: Garnets (Rhodolite, Spessartine), Quartz, Haematite
49. HC006	: Garnets (Rhodolite, Spessartine), Quartz, Haematite
50. HC007	: Garnets (Rhodolite, Spessartine), Quartz, Haematite

Sample No.	Minerals identified
51. HCO08	Goethite,Haematite and Few grains of Quartz, Garnet (Rhodolite)
52. HCO09	Garnets (Rhodolite, Spessartine, very light red and purple in colour), Quartz, Haematite
53. HCO10	Quartz, Garnet (Rhodolite), Goethite, Haematite
54. HCO11	Quartz, Garnets (Rhodolite, Spessartine), Haematite, Amphiboles
55. HCO12	Quartz, Heamatite, Goethite
56. HCO13	Quartz, Goethite
57. HCO14	Quartz, Goethite, Haematite
58. HCO15	Quartz, Goethite, Haematite
59. HCO16	Quartz, Garnet, Feldspar
60. HCO17	Quartz, Garnets (Rhodolite,Spessartine), Goethite
61. HCO18	Garnets (Rhodolite, Spessartine), Quartz, Haematite, Goethite
62. HCO19	Garnets (Rhodolite, Spessartine), Quartz, Haematite
63. HCO20	Quartz, Garnets (Rhodolite, Spessartine), Goethite, Feldspar
64. HCO21	Quartz, Garnets (Rhodolite, Spessartine), Haematite
65. HCO22	Quartz, Garnets (Rhodolite, Spessartine), Goethite, Feldspar
66. HCO23	Quartz,Garnets,Haematite,Goethite
67. HCO24	Quartz, Few grains of Garnets, Haematite, Feldspar
68. HCO25	Quartz, Garnets (Rhodolite, Spessartite), Haematite
69. HCO26	Quartz, Garnets (Rhodolite, Spessartite)
70. HCO27	Quartz, Garnets (Rhodolite, Spessartite)
71. HCO28	Quartz, Haematite, Goethite
72. HCO29	Quartz, Goethite, Garnet
73. HCO30	Only Quartz
74. HCO31	Only Quartz

Sample No.	Minerals identified
75. HCO32	Quartz, Garnets
76. HCO33	Quartz, Goethite
77. HCO34	Quartz, Few grains of Garnet, Goethite
78. HCO35	QUartz, Haematite, Goethite
79. HCO36	Quartz, Garnets (Rhodolite,Spessartine),Goethite, Feldspar, Barite
80. HCO37	Quartz, Garnets (Rhodolite, Spessartine),Goethite, Barite, Feldspar
81. HCO38	Quartz, Garnet, Goethite
82. HCO39	Quartz, Garnets (Rhodolite, Spessartine), Goethite
83. HCO40	Quartz, Garnets, grains of Amphibole
84. HCO41	Quartz, Garnets (Rhodolite, Spessartite), Haematite, Feldspar, Amphibole
85. HCO42	Quartz, Garnets (Rhodolite, Spessartite), Feldspar, Amphibole
86. HCO43	Quartz, Garnet (Rhodolite), Goethite
87. HCO44	Quartz, Few grains of Garnet, Goethite
88. HCO45	Quartz, Few grains of Garnet, Goethite
89. HCO46	Quartz, Few grains of Garnet, Goethite
90. HCO47	Goethite, Quartz, Haematite, Barite, Few grains of Garnets
91. HCO48	Goethite, Quartz, Haematite, Barite, Few grains of Garnets
92. HCO49	Goethite, Quartz, Haematite, Barite, Few grains of Garnets
93. HCO50	Qoartz, Goethite, Haematite, Barite
94. HCO51	Quartz, Garnet (Spessartite), Goethite, Feldspar
95. HCO52	Quartz, Goethite, Garnets (Rhodolite, Spessartite), Feldspar
96. HCO53	Haematite, Quartz, Garnets (Rhodolite, Spessartite), Feldspar
97. HCO54	Quartz, Goethite
98. HCO55	Quartz, Garnets

Sample No.	Minerals identified
99. HCO56	: Quartz, Garnets
100. HCO58	: Quartz, Garnets, Goethite

Appendix - XI

GEOCHEMICAL ANALYSIS OF PAN-CONCENTRATE SAMPLES FROM THE MOMBASA AREA

Appendix-1

Ser	Sample	GEOL.	Lon.	Lat.	P ppm	Pb ppm	Zn ppm	Ba ppm	Cu ppm	Au ppb	Pt ppb	Th ppm	S %	Fe %	Mn ppm	Ag ppm	Hg ppm	U ppm
1	HC-001	MyCm	43459	390565	170	22	24	280	3	<1	<5	110.0	0.020	2.13	335	<0.2	<1	<10
2	HC-002	MyCu	43252	390680	300	<2	28	30	1	<1	<5	19.0	0.019	6.48	910	<0.2	<1	<10
3	HC-003	MyCu	43069	390761	220	8	14	240	1	<1	<5	145.0	0.025	2.15	1015	<0.2	<1	<10
4	HC-004	MyCu	43028	390763	170	4	18	190	1	<1	<5	81.0	0.026	1.98	685	<0.2	<1	<10
5	HC-005	MyCl	42402	390465	120	2	10	90	3	<1	<5	20.0	0.018	2.22	720	<0.2	<1	<10
6	HC-006	MyCl	42484	390674	230	10	28	150	12	<1	<5	8.0	0.014	4.71	255	<0.2	<1	<10
7	HC-007	MyCu	42080	390819	130	2	24	70	1	<1	<5	70.0	0.023	3.64	2070	<0.2	<1	<10
8	HC-008	MyCm	42546	390833	400	26	54	330	40	<2	<10	11.0	0.004	>15.00	530	<0.2	<1	<10
9	HC-009	MyCu	41990	390841	170	8	20	160	1	3	5	82.0	0.018	3.37	1870	<0.2	<1	<10
10	HC-010	MyCu	41702	390965	320	12	14	790	8	14	<5	149.0	0.023	3.68	365	<0.2	<1	<10
11	HC-011	Mkl	42359	391210	150	2	14	70	2	<1	<5	82.0	0.021	2.48	1375	<0.2	<1	<10
12	HC-012	Mkl	42315	391211	600	16	6	40	<1	<1	<5	522.0	0.020	1.08	165	<0.2	<1	<10
13	HC-013	Mkm	42206	391456	510	14	<2	60	1	<2	<10	357.0	0.027	0.49	60	<0.2	<1	<10
14	HC-014	MyCu	40569	391869	100	6	8	580	4	<2	<10	18.0	0.025	2.33	240	<0.2	<1	<10
15	HC-015	MyCu	40364	391937	220	16	20	500	10	<2	<10	11.0	0.019	3.98	345	<0.2	<1	<10
16	HC-016	MyCu	40926	391578	80	6	14	40	<1	<2	<10	54.0	0.012	1.60	720	<0.2	<1	<10
17	HC-017	MyCu	41089	391393	360	16	10	80	6	12	<10	214.0	0.014	2.99	130	<0.2	<1	<10
18	HC-018	Mkl	40978	391928	410	24	18	130	<1	<1	<5	268.0	0.015	1.96	920	<0.2	<1	<10
19	HC-019	MyCu	43031	391042	170	8	16	330	2	<1	<5	64.0	0.035	2.97	1135	<0.2	<1	<10
20	HC-020	MyCu	35752	392314	70	4	6	210	1	<1	<5	15.0	0.021	1.19	810	<0.2	<1	<10
21	HC-021	Tu	35061	391347	120	4	8	100	<1	<1	<5	14.0	0.022	1.24	1145	<0.2	<1	<10
22	HC-022	Tu	35841	391145	90	2	8	130	1	<2	<10	14.0	0.017	0.91	560	<0.2	<1	<10
23	HC-023	Tu	40391	391061	50	2	8	950	5	<1	<5	21.0	0.037	1.47	275	<0.2	2	<10
24	HC-024	Tu	40564	390498	40	<2	8	220	<1	<2	<10	13.0	0.026	0.87	305	<0.2	<1	<10
25	HC-025	Tu	40082	390980	60	4	6	1400	1	<1	<5	7.0	0.042	0.86	360	<0.2	<1	<10
26	HC-026	MyCl	34836	391721	40	4	8	440	1	<1	<5	12.0	0.026	1.34	1210	<0.2	1	<10
27	HC-027	MyCu	34852	392117	60	6	14	200	<1	<1	<5	42.0	0.021	2.10	2230	<0.2	1	<10
28	HC-028	MyCm	35291	391805	220	18	46	190	29	<1	<5	13.0	0.011	7.04	405	<0.2	<1	<10
29	HC-029	MyCu	35583	392338	50	4	10	1080	1	<1	<5	23.0	0.040	1.69	1720	<0.2	<1	<10
30	HC-030	Mkl	35282	392499	40	<2	<2	30	<1	<1	<5	17.0	0.013	0.42	45	<0.2	<1	<10
31	HC-031	Mkl	34703	392665	50	<2	<2	200	<1	<2	<10	39.0	0.020	0.43	90	<0.2	<1	<10
32	HC-032	Mkl	34608	392630	240	6	2	1950	<1	<1	<5	191.0	0.052	0.69	345	<0.2	<1	<10
33	HC-033	Mkm	34812	392790	330	8	6	290	4	<1	<5	85.0	0.012	0.98	175	<0.2	<1	<10
34	HC-034	MyCm	34401	391743	20	4	2	120	<1	<2	<10	7.0	0.013	0.45	155	<0.2	<1	<10

Appendix-2

Ser	Sample	GEOL.	Lon.	Lat.	P ppm	Pb ppm	Zn ppm	Ba ppm	Cu ppm	Au ppb	Pt ppb	Th ppm	S %	Fe %	Mn ppm	Ag ppm	Hg ppm	U ppm
35	HC-035	Mtu	33263	394420	150	48	26	2090	14	<1	<5	68.0	0.042	2.86	1040	<0.2	<1	<10
36	HC-036	M2m	32210	394204	70	>10000	54	5520	19	13	<5	47.0	5.450	0.97	340	4.4	11	<10
37	HC-037	M2m	32065	393927	100	3140	32	5910	12	1	<5	78.0	5.060	0.86	260	1.2	2	<10
38	HC-038	M2l	32886	393366	40	76	2	1510	<1	<1	<5	6.0	0.046	0.48	85	<0.2	<1	<10
39	HC-039	M2m	32842	394128	230	20	4	3220	3	<1	<5	216.0	0.082	1.01	185	<0.2	<1	<10
40	HC-040	Mku	32081	393130	30	2	2	120	<1	<1	<5	8.0	0.017	0.36	90	<0.2	<1	<10
41	HC-041	MyCu	32398	392683	130	4	22	80	<1	<1	<5	46.0	0.018	3.06	1400	<0.2	<1	<10
42	HC-042	MyCl	32709	392449	80	12	14	90	<1	<1	<5	4.0	0.021	1.65	690	<0.2	<1	<10
43	HC-043	Tu	34472	391469	30	<2	2	350	1	<1	<5	4.0	0.023	0.75	200	<0.2	<1	<10
44	HC-044	RC	34283	391555	20	<2	2	130	<1	<2	<10	2.0	0.017	0.36	95	<0.2	<1	<10
45	HC-045	MyCl	33761	391737	20	<2	2	130	<1	<1	<5	6.0	0.019	0.53	235	<0.2	<1	<10
46	HC-046	MyCl	33730	391860	10	<2	<2	320	<1	<1	<5	4.0	0.024	0.49	130	<0.2	<1	<10
47	HC-047	MyCu	34078	392147	210	32	36	830	25	<2	<10	6.0	0.029	10.20	525	<0.2	<1	<10
48	HC-048	MyCm	35553	391733	80	40	12	1470	16	<1	<5	7.0	0.043	4.32	1155	<0.2	<1	<10
49	HC-049	RC	35701	391738	290	52	76	1230	50	<1	<5	14.0	0.029	13.35	1335	<0.2	<1	<10
50	HC-050	MyCl	35811	391710	50	6	12	140	5	<1	<5	4.0	0.031	1.35	195	<0.2	<1	<10
51	HC-051	Mtu	32809	394662	80	6	4	610	1	<1	<5	36.0	0.031	0.90	160	<0.2	2	<10
52	HC-052	K	32711	394443	640	32	10	5500	14	<1	<5	663.0	0.136	2.11	705	<0.2	79	<10
53	HC-053	RC	30663	394742	960	2	24	50	3	<1	<5	43.0	0.015	6.51	470	<0.2	1	<10
54	HC-054	M2m	30796	394159	40	4	2	100	2	1	<5	7.0	0.020	0.73	45	<0.2	1	<10
55	HC-055	M2l	30624	393860	880	2	24	90	3	<2	<10	18.0	0.016	3.16	400	<0.2	1	<10
56	HC-056	RC	30593	394920	780	4	18	40	2	<1	<5	12.0	0.015	2.55	385	<0.2	<1	<10
57	HC-057	RC	30724	394599	910	4	26	60	4	<1	<5	24.0	0.017	4.45	510	<0.2	<1	<10
58	KC-001	PLS	43764	391062	320	<2	26	60	1	<1	<5	22.0	0.021	5.99	875	<0.2	1	<10
59	KC-002	PLS	43363	391378	230	22	24	730	<1	<1	<5	167.0	0.060	2.99	850	<0.2	<1	<10
60	KC-003	M2m	42550	392033	160	8	6	180	<1	<1	<5	105.0	0.021	1.32	640	<0.2	<1	<10
61	KC-004	M2m	40991	392494	250	28	8	180	5	<1	5	99.0	0.022	6.06	120	<0.2	1	<10
62	KC-006	M2m	42228	392020	2290	72	4	70	3	<2	<10	1308.0	0.020	0.74	140	<0.2	3	<10
63	KC-007	MyCu	42399	391600	190	14	12	300	<1	<1	<5	118.0	0.027	1.81	985	<0.2	<1	<10
64	KC-008	M2m	42150	392481	1810	52	<2	20	3	<2	<5	1070.0	0.018	0.39	40	<0.2	3	<10
65	KC-009	M2m	42161	392507	440	16	2	190	2	<1	<5	274.0	0.020	1.10	115	<0.2	1	<10
66	KC-010	M2m	35104	393830	400	74	116	5940	2	<1	<5	285.0	0.508	1.60	985	<0.2	1	<10
67	KC-011	Mtm	35110	394005	780	32	46	1650	26	<2	<10	496.0	0.054	2.72	245	<0.2	1	<10

Appendix-3

Ser	Sample	GEOL.	Lon.	Lat.	P ppm	Pb ppm	Zn ppm	Ba ppm	Cu ppm	Au ppb	Pt ppb	Th ppm	S %	Fe %	Mn ppm	Ag ppm	Hg ppm	U ppm
68	KC-012	Mku	34889	393489	530	18	2	130	<1	<1	<5	352.0	0.015	0.43	125	<0.2	<1	<10
69	KC-013	Mkm	35040	393154	430	14	2	60	1	<1	<5	278.0	0.018	0.53	190	<0.2	1	<10
70	KC-014	Mkl	35085	393026	260	14	2	320	<1	2	10	103.0	0.022	0.40	85	<0.2	<1	<10
71	KC-015	M2m	40128	393104	430	28	6	6890	3	<1	<5	202.0	0.718	0.97	255	<0.2	1	<10
72	KC-016	Mkl	35710	392911	200	6	8	140	1	<2	<10	74.0	0.017	1.04	425	<0.2	1	<10
73	KC-017	Mkm	35511	393364	420	10	4	840	1	<2	<10	200.0	0.029	0.68	155	<0.2	1	<10
74	KC-018	Mtu	35242	394118	560	40	24	5490	10	<2	10	404.0	0.150	1.20	115	<0.2	1	<10
75	KC-019	Mu	35270	394137	100	16	36	830	9	<1	5	102.0	0.081	4.55	290	<0.2	1	<10
76	KC-020	Mkl	35417	393143	530	26	12	1390	13	<1	10	64.0	0.040	0.97	180	<0.2	<1	<10
77	KC-021	MyCu	40412	392365	120	8	8	1120	2	2	<10	43.0	0.035	1.01	135	<0.2	<1	<10
78	KC-022	MyCu	40339	392363	70	12	8	320	2	<2	<10	14.0	0.020	1.00	130	<0.2	1	<10
79	KC-023	Mkl	40989	392334	150	8	24	70	1	<1	<5	34.0	0.022	3.88	2590	<0.2	<1	<10
80	KC-024	M2m	41252	392415	290	18	6	300	4	<1	<10	206.0	0.023	2.80	45	<0.2	<1	<10
81	KC-025	M2m	34827	393961	380	404	234	2080	7	<1	<5	191.0	0.024	3.24	8310	<0.2	<1	<10
82	KC-026	Mtm	34879	394150	170	10	44	170	27	<1	<5	13.0	0.026	3.76	325	<0.2	<1	<10
83	KC-027	Mku	33846	392984	250	28	8	1590	3	<1	<5	34.0	0.047	0.97	485	<0.2	<1	<10
84	KC-028	Mku	34475	393602	210	12	2	90	<1	<1	<5	81.0	0.014	0.41	85	<0.2	<1	<10
85	KC-029	Mku	33922	393370	60	8	<2	170	<1	<1	<5	26.0	0.015	0.41	70	<0.2	<1	<10
86	KC-030	M2m	34317	393749	550	18	4	90	1	5	<5	278.0	0.016	0.57	140	<0.2	1	<10
87	KC-031	M2l	33947	393744	290	14	2	70	1	<1	<5	175.0	0.017	0.49	125	<0.2	1	<10
88	KC-032	M2l	33292	393463	20	6	2	110	1	<1	<5	6.0	0.017	0.55	50	<0.2	<1	<10
89	KC-033	M2m	33444	393903	240	14	2	2000	1	14	<5	185.0	0.059	0.59	50	<0.2	1	<10
90	KC-034	M2m	33634	393817	150	16	2	250	1	<1	<5	98.0	0.021	0.59	85	<0.2	<1	<10
91	KC-035	M2m	34123	393789	570	24	8	6360	1	<1	<5	352.0	0.202	0.64	240	<0.2	2	<10
92	KC-036	Mku	35984	392974	150	8	10	140	2	<1	<5	25.0	0.011	1.03	360	<0.2	<1	<10
93	KC-037	Mtm	33637	394197	640	18	4	4370	2	<1	<5	402.0	0.103	0.63	130	<0.2	3	<10
94	KC-038	Mtm	33439	394182	590	14	4	820	3	<1	<5	384.0	0.040	0.57	70	<0.2	1	<10
95	KC-039	Mtm	40755	393419	200	10	14	1380	11	<1	<5	104.0	0.052	1.39	245	<0.2	<1	<10
96	KC-040	Mtm	40488	393143	1770	48	6	230	3	<1	<5	817.0	0.018	0.93	220	<0.2	1	<10
97	KC-041	M2m	42488	391810	280	6	2	90	<1	<1	<5	126.0	0.015	0.44	80	<0.2	<1	<10
98	KC-042	M2l	30969	393466	90	6	4	150	1	<1	<5	30.0	0.017	0.79	135	<0.2	<1	<10
99	KC-043	Mkl	30675	392236	110	2	12	1030	1	<2	<10	20.0	0.032	1.86	600	<0.2	<1	<10
100	KC-044	Mku	30438	392774	50	<2	6	220	<1	<1	<5	32.0	0.018	1.29	480	<0.2	<1	<10

Appendix - XII

GEOCHEMICAL ANALYSIS OF SOIL SAMPLES FROM THE MRIMA HILL-JOMBO HILL, KINANGONI, MKUNDI, MKANG'OMBE AND MANGEA-KWA DADU AREAS

Appendix-1

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
1	N100W70	GOP	42246	391527	<1	0.008	<0.2	100	2	0.76	355	8	10
2	N100W65	GOP	42246	391529	<1	0.006	<0.2	60	1	0.74	200	2	8
3	N100W60	GOP	42246	391532	<1	0.006	<0.2	250	8	1.87	775	14	28
4	N100W55	GOP	42246	391535	<1	0.008	<0.2	30	<1	0.43	40	6	6
5	N100W50	GOP	42246	391537	2	0.008	<0.2	40	<1	0.41	10	6	2
6	N100W45	PYB	42246	391540	<1	0.005	<0.2	90	<1	0.99	15	4	6
7	N100W40	PYB	42246	391543	<1	0.004	<0.2	40	<1	0.59	20	<2	4
8	N100W35	PYB	42246	391546	<1	0.005	<0.2	20	<1	0.27	5	2	2
9	N100W30	PYB	42246	391548	<1	0.008	<0.2	80	<1	0.50	240	4	4
10	N100W25	PYB	42246	391551	<1	0.005	<0.2	40	<1	0.53	110	4	6
11	N100W20	GOP	42246	391554	<1	0.005	<0.2	70	<1	0.74	55	2	8
12	N100W15	GOP	42246	391556	<1	0.007	<0.2	140	2	0.98	335	6	10
13	N100W10	PYB	42246	391559	<1	0.006	<0.2	70	<1	0.75	115	6	4
14	N100W05	PYB	42246	391562	<1	0.004	<0.2	90	1	0.72	260	<2	6
15	N100E00	PYB	42246	391565	<1	0.004	<0.2	100	1	1.10	285	6	10
16	N100E05	PYB	42246	391567	1	0.003	<0.2	110	2	1.26	180	6	12
17	N100E10	GOP	42246	391570	2	0.001	<0.2	220	8	2.06	230	4	28
18	N100E15	PYB	42246	391573	<1	0.003	<0.2	100	3	1.17	435	10	12
19	N100E20	GOP	42246	391575	<1	0.005	<0.2	50	2	1.45	75	6	14
20	N100E25	GOP	42246	391578	<1	0.004	<0.2	440	8	2.12	685	6	30
21	N100E30	GOP	42246	391581	<1	0.006	<0.2	90	2	1.48	280	4	18
22	N100E35	GOP	42246	391584	<1	0.006	<0.2	90	5	1.50	435	4	24
23	N100E40	GOP	42246	391586	<1	0.007	<0.2	50	<1	0.92	140	<2	10
24	N100E45	GOP	42246	391589	<1	0.010	<0.2	70	1	1.35	390	10	6
25	N100E50	GOP	42246	391592	1	0.007	<0.2	40	1	0.47	185	<2	4
26	N100E55	GOP	42246	391594	<1	0.008	<0.2	40	<1	0.36	35	<2	2
27	N100E60	GOP	42246	391597	<1	0.009	<0.2	20	<1	0.27	60	<2	<2
28	N100E65	GOP	42246	391600	<1	0.008	<0.2	40	<1	0.48	205	<2	2
29	N100E70	LB	42246	391603	<1	0.008	<0.2	30	<1	0.60	140	<2	4
30	N90W70	PYB	42251	391527	<1	0.004	<0.2	50	1	0.46	75	<2	4
31	N90W65	PYB	42251	391529	<1	0.003	<0.2	50	<1	0.62	160	2	6
32	N90W60	PYB	42251	391532	<1	0.004	<0.2	40	<1	0.51	125	6	6
33	N90W55	PYB	42251	391535	<1	0.005	<0.2	40	<1	0.44	85	6	4
34	N90W50	GOP	42251	391537	<1	0.005	<0.2	50	<1	0.49	130	8	6

Appendix-2

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
35	N90W45	GOP	42251	391540	<1	0.004	<0.2	50	<1	0.94	20	8	6
36	N90W40	GOP	42251	391543	<1	0.003	<0.2	100	<1	0.78	55	8	4
37	N90W35	GOP	42251	391546	<1	0.003	<0.2	40	<1	0.52	50	8	4
38	N90W30	GOP	42251	391548	<1	0.004	<0.2	110	2	0.75	295	8	10
39	N90W25	PYB	42251	391551	<1	0.004	<0.2	50	<1	0.57	35	<2	4
40	N90W20	PYB	42251	391554	<1	0.006	<0.2	60	<1	0.50	140	2	4
41	N90W15	PYB	42251	391556	<1	0.004	<0.2	40	<1	0.38	10	2	2
42	N90W10	PYB	42251	391559	<1	0.006	<0.2	60	<1	0.55	125	4	4
43	N90W05	PYB	42251	391562	<1	0.006	<0.2	40	<1	0.75	20	6	6
44	N90E00	PYB	42251	391565	<1	0.002	<0.2	60	<1	0.64	285	6	4
45	N90E05	PYB	42251	391567	<1	0.001	<0.2	80	3	1.28	900	10	18
46	N90E10	PYB	42251	391570	<1	0.002	<0.2	80	3	1.27	875	14	18
47	N90E15	GOP	42251	391573	<1	0.002	<0.2	70	6	1.88	365	8	40
48	N90E20	GOP	42251	391575	<1	0.001	<0.2	230	8	2.35	570	10	28
49	N90E25	GOP	42251	391578	1	0.002	<0.2	90	4	1.98	300	8	22
50	N90E30	GOP	42251	391581	<1	0.002	<0.2	40	2	1.08	245	4	14
51	N90E35	GOP	42251	391584	<1	0.002	<0.2	40	<1	0.90	125	6	8
52	N90E40	GOP	42251	391586	<1	0.003	<0.2	50	1	0.64	190	6	4
53	N90E45	MB	42251	391589	<1	0.010	<0.2	60	5	1.71	530	4	12
54	N90E50	MB	42251	391592	<1	0.008	<0.2	100	5	1.61	245	2	14
55	N90E55	GOP	42251	391594	<1	0.007	<0.2	40	<1	0.60	165	2	4
56	N90E60	PYB	42251	391597	<1	0.008	0.2	30	<1	0.38	20	2	<2
57	N90E65	GOP	42251	391600	<1	0.007	<0.2	20	<1	0.63	50	2	2
58	N90E70	GOP	42251	391603	<1	0.007	<0.2	40	<1	0.91	140	2	4
59	N80W70	PYB	42256	391527	<1	0.005	<0.2	60	1	0.49	175	2	6
60	N80W65	PYB	42256	391529	<1	0.001	<0.2	40	<1	0.77	55	4	4
61	N80W60	PYB	42256	391532	<1	0.001	<0.2	50	<1	0.80	95	8	4
62	N80W55	PYB	42256	391535	<1	0.001	0.2	30	<1	0.58	30	2	4
63	N80W50	PYB	42256	391537	<1	0.002	<0.2	70	<1	0.71	80	6	4
64	N80W45	PYB	42256	391540	<1	0.001	0.2	70	<1	0.57	145	6	4
65	N80W40	PYB	42256	391543	1	0.006	<0.2	50	<1	0.54	95	4	6
66	N80W35	PYB	42256	391546	<1	0.002	<0.2	50	2	0.42	175	2	4
67	N80W30	PYB	42256	391548	<1	0.004	<0.2	60	4	0.57	205	6	6
68	N80W25	PYB	42256	391551	<1	0.006	<0.2	50	<1	0.48	20	8	4

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
69	N80W20	PYB	42256	391554	<1	0.003	<0.2	60	<1	0.51	155	6	6
70	N80W15	PYB	42256	391556	<1	0.002	<0.2	70	1	0.89	250	10	8
71	N80W10	PYB	42256	391559	<1	0.005	<0.2	70	<1	1.03	120	10	8
72	N80W05	PYB	42256	391562	<1	0.003	<0.2	70	<1	0.78	305	12	6
73	N80EW0	PYB	42256	391565	14	0.003	<0.2	110	3	1.61	95	10	18
74	N80E05	PYB	42256	391567	<1	0.004	<0.2	50	<1	0.57	115	4	6
75	N80E10	PYB	42256	391570	2	0.002	<0.2	40	1	0.58	90	2	6
76	N80E15	PYB	42256	391573	<1	0.003	<0.2	30	<1	0.74	175	6	10
77	N80E20	GOP	42256	391575	<1	0.004	<0.2	190	9	1.39	650	12	62
78	N80E25	GOP	42256	391578	<1	0.002	<0.2	70	3	1.27	130	14	20
79	N80E30	GOP	42256	391581	<1	0.005	<0.2	110	5	1.66	565	12	24
80	N80E35	GOP	42256	391584	<1	0.006	<0.2	40	<1	0.82	95	10	6
81	N80E40	GOP	42256	391586	<1	0.004	<0.2	40	2	1.11	235	6	4
82	N80E45	GOP	42256	391589	<1	0.005	<0.2	30	1	0.85	235	4	4
83	N80E50	GOP	42256	391592	<1	0.007	<0.2	30	<1	0.60	195	4	2
84	N80E55	GOP	42256	391594	<1	0.006	<0.2	70	2	0.79	300	2	10
85	N80E60	GOP	42256	391597	<1	0.007	<0.2	30	2	0.95	225	2	10
86	N80E65	GOP	42256	391600	<1	0.003	<0.2	70	2	1.17	775	6	10
87	N80E70	GOP	42256	391603	<1	0.006	<0.2	30	<1	0.54	75	<2	2
88	N70W70	PYB	42262	391527	<1	0.005	<0.2	70	<1	0.62	125	8	4
89	N70W65	PYB	42262	391529	<1	0.005	<0.2	70	<1	0.92	90	10	6
90	N70W60	PYB	42262	391532	<1	0.004	<0.2	70	<1	0.88	15	4	6
91	N70W55	PYB	42262	391535	3	0.004	<0.2	80	<1	0.49	75	8	2
92	N70W50	PYB	42262	391537	<1	0.005	<0.2	100	<1	1.03	50	4	6
93	N70W45	PYB	42262	391540	2	0.003	<0.2	240	2	1.24	350	14	10
94	N70W40	PYB	42262	391543	<1	0.006	<0.2	90	<1	0.78	215	6	6
95	N70W35	PYB	42262	391546	<1	0.003	<0.2	60	<1	0.55	125	4	4
96	N70W30	PYB	42262	391548	<1	0.005	<0.2	70	2	0.88	100	6	4
97	N70W25	PYB	42262	391551	<1	0.003	<0.2	170	5	1.37	100	8	12
98	N70W20	PYB	42262	391554	<1	0.004	<0.2	60	1	0.63	160	2	2
99	N70W15	GOP	42262	391556	1	0.005	<0.2	70	1	1.02	110	4	6
100	N70W10	GOP	42262	391559	<1	0.006	<0.2	60	1	0.56	230	6	2
101	N70W05	GOP	42262	391562	<1	0.005	<0.2	70	3	0.85	165	4	6
102	N70EW0	GOP	42262	391565	<1	0.007	<0.2	80	4	1.79	60	8	22

Appendix-4

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
103	N70E05	GOP	42262	391567	<1	0.006	<0.2	50	2	1.02	120	2	12
104	N70E10	GOP	42262	391570	<1	0.005	<0.2	40	1	0.86	225	6	10
105	N70E15	GOP	42262	391573	<1	0.008	<0.2	110	5	1.44	270	10	22
106	N70E20	GOP	42262	391575	<1	0.005	<0.2	60	1	1.04	110	6	14
107	N70E25	GOP	42262	391578	<1	0.007	<0.2	120	4	1.55	165	10	20
108	N70E30	GOP	42262	391581	1	0.008	<0.2	60	2	1.23	100	8	12
109	N70E35	GOP	42262	391584	2	0.012	<0.2	20	<1	0.75	175	4	2
110	N70E40	GOP	42262	391586	<1	0.009	<0.2	40	2	1.11	455	2	8
111	N70E45	GOP	42262	391589	3	0.007	<0.2	50	1	0.72	205	<2	6
112	N70E50	GOP	42262	391592	<1	0.009	<0.2	20	<1	0.42	70	<2	2
113	N70E55	GOP	42262	391594	<1	0.007	<0.2	30	2	0.47	150	<2	<2
114	N70E60	GOP	42262	391597	1	0.008	<0.2	50	3	0.84	165	<2	2
115	N70E65	PYB	42262	391600	<1	0.009	<0.2	10	2	0.37	35	<2	<2
116	N70E70	GO	42262	391603	<1	0.010	<0.2	230	11	2.20	1055	8	22
117	N60W70	GOP	42267	391527	<1	0.004	<0.2	150	2	1.00	420	10	12
118	N60W65	PYB	42267	391529	<1	0.006	<0.2	40	<1	0.38	20	8	4
119	N60W60	PYB	42267	391532	<1	0.003	<0.2	30	<1	0.46	10	2	4
120	N60W55	PYB	42267	391535	<1	0.006	<0.2	50	<1	0.49	70	<2	4
121	N60W50	PYB	42267	391537	<1	0.008	<0.2	360	6	1.43	730	6	18
122	N60W45	GOP	42267	391540	<1	0.006	<0.2	50	<1	0.48	15	2	2
123	N60W40	GOP	42267	391543	<1	0.010	<0.2	20	<1	0.49	5	<2	<2
124	N60W35	PYB	42267	391546	1	0.008	<0.2	80	<1	0.57	265	8	4
125	N60W30	BG	42267	391548	<1	0.007	<0.2	120	<1	0.92	310	12	8
126	N60W25	GOP	42267	391551	1	0.006	<0.2	70	<1	0.92	25	8	8
127	N60W20	PYB	42267	391554	<1	0.007	<0.2	130	3	1.48	145	12	16
128	N60W15	PYB	42267	391556	<1	0.004	<0.2	40	<1	0.51	115	12	4
129	N60W10	PB	42267	391559	<1	0.007	<0.2	250	6	1.54	415	12	22
130	N60W05	GOP	42267	391562	<1	0.005	<0.2	370	9	2.50	345	8	34
131	N60EW0	MYB	42267	391565	<1	0.008	<0.2	100	4	2.03	185	6	26
132	N60E05	MYB	42267	391567	<1	0.008	<0.2	60	2	1.18	120	6	14
133	N60E10	GOP	42267	391570	<1	0.007	<0.2	50	<1	0.78	135	2	10
134	N60E15	GOP	42267	391573	<1	0.007	<0.2	120	3	1.45	190	8	22
135	N60E20	PYB	42267	391575	<1	0.008	<0.2	130	5	1.73	250	8	26
136	N60E25	GOP	42267	391578	<1	0.006	<0.2	70	3	1.37	100	6	16

Appendix-5

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
137	N60E30	PYB	42267	391581	<1	0.006	<0.2	30	<1	0.58	75	<2	6
138	N60E35	GOP	42267	391584	<1	0.008	<0.2	20	<1	0.90	240	4	4
139	N60E40	PYB	42267	391586	<1	0.008	<0.2	30	<1	0.68	110	<2	4
140	N60E45	PYB	42267	391589	1	0.010	<0.2	20	1	0.36	120	4	4
141	N60E50	PYB	42267	391592	<1	0.014	<0.2	40	2	0.65	75	4	6
142	N60E55	PYB	42267	391594	<1	0.008	<0.2	60	1	0.53	285	4	4
143	N60E60	LB	42267	391597	<1	0.007	<0.2	60	1	0.61	180	6	4
144	N60E65	DYB	42267	391600	<1	0.007	<0.2	70	5	1.03	705	<2	16
145	N60E70	PYB	42267	391603	<1	0.007	<0.2	30	1	0.47	95	6	4
146	N50W70	PYB	42273	391527	<1	0.014	<0.2	50	<1	0.44	115	<2	4
147	N50W65	PYB	42273	391529	<1	0.011	<0.2	50	<1	0.52	165	<2	6
148	N50W60	PYB	42273	391532	<1	0.014	<0.2	60	<1	0.63	45	<2	6
149	N50W55	DYB	42273	391535	<1	0.009	4.6	280	7	1.55	365	6	22
150	N50W50	PB	42273	391537	<1	0.009	<0.2	40	<1	0.48	30	4	4
151	N50W45	DYB	42273	391540	<1	0.014	<0.2	70	<1	0.45	220	4	4
152	N50W40	DYB	42273	391543	<1	0.015	<0.2	130	<1	0.86	225	4	8
153	N50W35	DYB	42273	391546	<1	0.009	<0.2	130	1	1.04	205	<2	14
154	N50W30	PYB	42273	391548	<1	0.014	<0.2	130	1	1.06	170	10	12
155	N50W25	PYB	42273	391551	<1	0.012	<0.2	250	8	1.69	375	4	24
156	N50W20	PYB	42273	391554	<1	0.011	<0.2	120	1	0.64	235	8	8
157	N50W15	GOP	42273	391556	<1	0.012	<0.2	30	<1	0.44	60	<2	4
158	N50W10	GOP	42273	391559	<1	0.010	0.2	80	1	0.95	90	6	10
159	N50W05	GOP	42273	391562	<1	0.010	0.2	50	2	0.93	25	<2	12
160	N50E00	PYB	42273	391565	<1	0.006	0.2	150	9	2.37	365	<2	28
161	N50E05	GOP	42273	391567	<1	0.006	<0.2	90	4	1.38	255	<2	18
162	N50E10	GOP	42273	391570	<1	0.007	<0.2	50	1	1.11	115	10	14
163	N50E15	YG	42273	391573	<1	0.005	<0.2	60	2	1.03	40	6	12
164	N50E20	PYB	42273	391575	<1	0.007	<0.2	20	<1	0.35	55	6	2
165	N50E25	PYB	42273	391578	<1	0.006	<0.2	120	4	1.14	80	6	10
166	N50E30	PYB	42273	391581	<1	0.009	<0.2	30	1	0.73	10	2	4
167	N50E35	GO	42273	391584	<1	0.007	<0.2	20	1	0.89	195	6	4
168	N50E40	LB	42273	391586	<1	0.010	<0.2	30	1	0.95	230	8	6
169	N50E45	PYB	42273	391589	<1	0.007	<0.2	40	<1	1.04	40	4	4
170	N50E50	GO	42273	391592	<1	0.006	<0.2	80	3	1.09	25	8	12

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
171	N50E55	GO	42273	391594	<1	0.007	<0.2	40	3	0.85	170	<2	8
172	N50E60	GO	42273	391597	<1	0.007	<0.2	30	2	0.81	270	<2	8
173	N50E65	GO	42273	391600	2	0.006	0.2	50	1	0.70	130	<2	6
174	N50E70	GO	42273	391603	<1	0.007	<0.2	20	1	0.47	120	2	4
175	N40W70	PYB	42278	391527	<1	0.005	<0.2	70	<1	0.66	230	<2	8
176	N40W65	PYB	42278	391529	<1	0.004	<0.2	100	2	1.23	255	<2	14
177	N40W60	PYB	42278	391532	<1	0.006	<0.2	250	7	1.47	440	2	20
178	N40W55	PYB	42278	391535	<1	0.005	<0.2	80	1	1.06	205	2	10
179	N40W50	MYB	42278	391537	<1	0.006	<0.2	40	<1	0.63	85	<2	6
180	N40W45	DYB	42278	391540	<1	0.009	<0.2	120	2	1.29	240	4	18
181	N40W40	DYB	42278	391543	<1	0.008	0.2	190	6	2.19	185	<2	26
182	N40W35	DYB	42278	391546	<1	0.009	<0.2	170	2	2.50	180	10	24
183	N40W30	PYB	42278	391548	<1	0.008	<0.2	190	7	1.83	190	6	22
184	N40W25	PYB	42278	391551	<1	0.006	<0.2	340	9	2.41	320	8	34
185	N40W20	PYB	42278	391554	<1	0.008	<0.2	210	7	2.36	110	2	30
186	N40W15	PYB	42278	391556	<1	0.008	<0.2	70	<1	0.87	125	6	10
187	N40W10	PYB	42278	391559	<1	0.009	<0.2	50	<1	0.62	60	8	6
188	N40W05	PYB	42278	391562	<1	0.009	<0.2	30	<1	0.41	75	4	2
189	N40EW0	DYB	42278	391565	<1	0.009	<0.2	110	3	1.28	220	8	12
190	N40E05	PYB	42278	391567	1	0.009	<0.2	100	5	1.23	175	4	14
191	N40E10	PYB	42278	391570	2	0.007	<0.2	50	1	0.84	120	2	6
192	N40E15	PYB	42278	391573	<1	0.002	<0.2	50	<1	0.82	20	<2	6
193	N40E20	PYB	42278	391575	<1	0.013	<0.2	40	<1	0.81	20	<2	8
194	N40E25	PYB	42278	391578	<1	0.014	<0.2	40	<1	0.59	25	4	4
195	N40E30	PYB	42278	391581	<1	0.011	<0.2	20	1	0.54	100	<2	2
196	N40E35	PYB	42278	391584	<1	0.012	<0.2	20	<1	0.39	280	<2	2
197	N40E40	PYB	42278	391586	<1	0.011	<0.2	20	<1	0.38	65	<2	2
198	N40E45	DYB	42278	391589	<1	0.014	<0.2	20	<1	0.35	135	<2	2
199	N40E50	MYB	42278	391592	<1	0.012	<0.2	30	<1	0.48	325	<2	2
200	N40E55	MB	42278	391594	<1	0.012	<0.2	30	<1	0.74	250	<2	4
201	N40E60	MYB	42278	391597	<1	0.012	<0.2	20	<1	0.71	255	<2	4
202	N40E65	MYB	42278	391600	<1	0.011	<0.2	30	<1	0.77	165	4	4
203	N40E70	MYB	42278	391603	<1	0.012	<0.2	40	<1	0.94	140	<2	6
204	N30W70	DYB	42283	391527	<1	0.009	<0.2	40	<1	0.82	20	4	6

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
205	N30W65	DYB	42283	391529	1	0.007	<0.2	190	5	1.67	155	6	18
206	N30W60	DYB	42283	391532	<1	0.010	<0.2	40	<1	0.61	165	2	6
207	N30W55	DYB	42283	391535	<1	0.009	<0.2	130	3	1.50	115	6	16
208	N30W50	DYB	42283	391537	<1	0.010	<0.2	110	4	1.30	205	2	14
209	N30W45	PYB	42283	391540	<1	0.011	<0.2	60	1	0.93	20	4	10
210	N30W40	DYB	42283	391543	<1	0.009	<0.2	200	5	1.54	115	12	16
211	N30W35	MB	42283	391546	<1	0.011	<0.2	60	1	0.88	100	8	10
212	N30W30	MB	42283	391548	<1	0.010	<0.2	160	4	1.73	110	8	18
213	N30W25	DYB	42283	391551	<1	0.013	<0.2	260	8	2.01	190	4	24
214	N30W20	DYB	42283	391554	<1	0.008	<0.2	180	3	1.91	75	12	20
215	N30W15	DYB	42283	391556	<1	0.009	<0.2	140	3	1.44	170	14	14
216	N30W10	DYB	42283	391559	<1	0.015	<0.2	120	4	1.26	30	6	10
217	N30W05	DYB	42283	391562	<1	0.014	<0.2	110	2	0.84	340	8	8
218	N30EW0	PYB	42283	391565	<1	0.009	<0.2	90	1	1.16	100	10	10
219	N30E05	MYB	42283	391567	<1	0.008	<0.2	150	1	1.57	130	<2	14
220	N30E10	MYB	42283	391570	<1	0.006	<0.2	130	2	1.71	60	2	18
221	N30E15	DYB	42283	391573	<1	0.007	<0.2	350	2	1.28	560	2	22
222	N30E20	DYB	42283	391575	<1	0.001	<0.2	590	15	1.07	135	144	12
223	N30E25	MYB	42283	391578	<1	0.001	<0.2	130	7	1.60	20	34	8
224	N30E30	MYB	42283	391581	<1	0.014	<0.2	30	2	0.39	170	8	2
225	N30E35	MYB	42283	391584	<1	0.013	<0.2	20	<1	0.50	70	8	2
226	N30E40	MYB	42283	391586	<1	0.014	<0.2	50	<1	1.94	30	6	6
227	N30E45	PYB	42283	391589	<1	0.014	<0.2	10	<1	0.41	5	<2	<2
228	N30E50	PYB	42283	391592	<1	0.013	<0.2	20	<1	0.33	20	2	<2
229	N30E55	MYB	42283	391594	<1	0.014	<0.2	30	<1	0.57	120	4	2
230	N30E60	MB	42283	391597	<1	0.013	<0.2	50	<1	1.03	265	2	6
231	N30E65	LB	42283	391600	<1	0.013	<0.2	30	1	1.18	265	2	6
232	N30E70	LB	42283	391603	<1	0.017	<0.2	10	<1	1.03	100	2	4
233	N20W70	DYB	42289	391527	<1	0.011	<0.2	80	1	0.96	180	4	10
234	N20W65	DYB	42289	391529	<1	0.012	<0.2	80	2	1.39	60	2	16
235	N20W60	DYB	42289	391532	<1	0.015	<0.2	200	5	1.42	235	6	22
236	N20W55	DYB	42289	391535	<1	0.010	<0.2	160	5	1.72	110	6	22
237	N20W50	MYB	42289	391537	<1	0.014	<0.2	190	9	2.18	125	2	26
238	N20W45	DYB	42289	391540	<1	0.011	0.8	80	1	1.10	130	6	10

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
239	N20W40	DYB	42289	391543	1	0.013	0.8	80	2	1.45	60	6	16
240	N20W35	PB	42289	391546	<1	0.008	<0.2	210	7	1.52	230	8	22
241	N20W30	DYB	42289	391548	<1	0.010	<0.2	40	<1	0.81	15	8	6
242	N20W25	GO	42289	391551	<1	0.013	<0.2	10	<1	0.30	50	2	<2
243	N20W20	DYB	42289	391554	<1	0.011	<0.2	70	<1	0.82	100	6	8
244	N20W15	DYB	42289	391556	<1	0.011	<0.2	50	<1	0.67	10	4	4
245	N20W10	MYB	42289	391559	<1	0.010	<0.2	80	5	2.43	625	10	18
246	N20W05	DYB	42289	391562	<1	0.010	<0.2	40	<1	0.55	15	2	4
247	N20EW0	DYB	42289	391565	2	0.011	<0.2	40	<1	0.56	10	<2	4
248	N20E05	DYB	42289	391567	<1	0.012	<0.2	40	<1	0.79	15	6	6
249	N20E10	DYB	42289	391570	<1	0.012	<0.2	30	<1	0.46	10	2	2
250	N20E15	OG	42289	391573	<1	0.010	<0.2	240	1	0.70	135	<2	10
251	N20E20	OG	42289	391575	<1	0.008	<0.2	470	<1	0.97	180	<2	12
252	N20E25	DYB	42289	391578	<1	0.010	<0.2	260	1	0.65	160	6	8
253	N20E30	MYB	42289	391581	<1	0.013	<0.2	20	<1	0.47	5	2	2
254	N20E35	PYB	42289	391584	3	0.010	<0.2	40	1	0.98	10	6	4
255	N20E40	DYB	42289	391586	<1	0.014	<0.2	10	1	0.30	105	6	2
256	N20E45	PYB	42289	391589	<1	0.014	<0.2	10	<1	0.60	10	2	<2
257	N20E50	GO	42289	391592	<1	0.012	<0.2	30	<1	0.55	15	4	2
258	N20E55	MYB	42289	391594	<1	0.010	<0.2	20	<1	1.07	30	4	2
259	N20E60	LB	42289	391597	<1	0.010	<0.2	30	<1	0.95	55	2	4
260	N20E65	MYB	42289	391600	<1	0.014	<0.2	30	<1	0.78	240	<2	4
261	N20E70	MYB	42289	391603	<1	0.012	<0.2	10	<1	0.60	375	4	4
262	N10W70	DYB	42294	391527	<1	0.009	<0.2	130	3	1.59	190	6	18
263	N10W65	DYB	42294	391529	<1	0.010	<0.2	70	5	0.92	25	6	14
264	N10W60	DYB	42294	391532	<1	0.013	<0.2	40	<1	0.69	25	<2	6
265	N10W55	DYB	42294	391535	<1	0.010	<0.2	80	<1	0.66	195	6	8
266	N10W50	DYB	42294	391537	<1	0.008	<0.2	80	1	0.83	135	<2	12
267	N10W45	DYB	42294	391540	<1	0.010	<0.2	60	1	0.86	50	<2	10
268	N10W40	PYB	42294	391543	<1	0.008	<0.2	50	<1	0.73	30	<2	8
269	N10W35	DYB	42294	391546	<1	0.010	<0.2	80	<1	0.68	40	4	6
270	N10W30	MYB	42294	391548	<1	0.010	<0.2	60	<1	0.84	55	2	8
271	N10W25	DYB	42294	391551	<1	0.014	<0.2	100	2	0.98	85	2	8
272	N10W20	PYB	42294	391554	<1	0.011	<0.2	40	<1	0.57	10	<2	4

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
273	N10W15	PYB	42294	391556	<1	0.011	<0.2	40	<1	0.41	10	<2	4
274	N10W10	PYB	42294	391559	<1	0.010	<0.2	50	<1	0.33	70	4	4
275	N10W05	MYB	42294	391562	<1	0.009	<0.2	50	<1	0.44	70	4	4
276	N10EW0	GO	42294	391565	<1	0.007	<0.2	80	1	0.84	30	10	6
277	N10E05	PYB	42294	391567	<1	0.008	<0.2	50	<1	0.62	10	2	4
278	N10E10	DYB	42294	391570	<1	0.010	<0.2	50	<1	1.09	5	2	4
279	N10E15	PYB	42294	391573	<1	0.011	<0.2	20	<1	0.48	25	4	2
280	N10E20	PYB	42294	391575	<1	0.014	<0.2	20	<1	0.39	5	<2	<2
281	N10E25	DYB	42294	391578	<1	0.012	<0.2	40	<1	0.37	<5	2	<2
282	N10E30	DYB	42294	391581	<1	0.010	<0.2	30	<1	0.58	5	<2	2
283	N10E35	PB	42294	391584	<1	0.013	<0.2	30	<1	0.48	<5	2	2
284	N10E40	DUYB	42294	391586	2	0.009	<0.2	210	<1	0.70	400	10	4
285	N10E45	DYB	42294	391589	<1	0.008	<0.2	220	<1	0.84	150	8	6
286	N10E50	MYB	42294	391592	<1	0.011	<0.2	160	<1	0.98	10	<2	4
287	N10E55	DUYB	42294	391594	<1	0.010	<0.2	260	<1	0.87	20	2	4
288	N10E60	PYB	42294	391597	<1	0.014	<0.2	20	<1	0.40	40	<2	<2
289	N10E65	PYB	42294	391600	<1	0.013	<0.2	30	<1	0.58	330	<2	6
290	N10E70	PYB	42294	391603	<1	0.014	<0.2	30	<1	0.65	430	6	4
291	NS00W70	PB	42300	391527	<1	0.009	<0.2	100	1	0.81	250	6	10
292	NS00W65	PB	42300	391529	<1	0.009	<0.2	80	1	0.80	275	8	10
293	NS00W60	PB	42300	391532	<1	0.010	<0.2	60	<1	0.65	35	2	8
294	NS00W55	PB	42300	391535	<1	0.011	<0.2	70	1	0.80	160	8	10
295	NS00W50	PYB	42300	391537	<1	0.006	<0.2	120	3	1.17	130	6	16
296	NS00W45	PYB	42300	391540	<1	0.007	<0.2	120	3	1.37	150	6	16
297	NS00W40	PB	42300	391543	<1	0.011	<0.2	80	2	0.87	90	6	10
298	NS00W35	PYB	42300	391546	<1	0.011	<0.2	60	1	0.86	15	2	6
299	NS00W30	PYB	42300	391548	<1	0.009	<0.2	80	3	0.88	95	8	8
300	NS00W25	PYB	42300	391551	<1	0.011	<0.2	60	1	0.57	70	10	6
301	NS00W20	PYB	42300	391554	3	0.012	<0.2	60	<1	1.23	40	8	8
302	NS00W15	PYB	42300	391556	<1	0.010	<0.2	50	<1	0.46	10	4	4
303	NS00W10	PYB	42300	391559	<1	0.008	<0.2	50	1	0.54	20	2	6
304	NS00W05	PYB	42300	391562	4	0.009	<0.2	90	2	1.45	20	4	10
305	NS00EW0	GOP	42300	391565	<1	0.016	<0.2	400	8	2.00	160	12	18
306	NS00E05	GOP	42300	391567	<1	0.019	<0.2	30	<1	0.40	5	6	2

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
307	NS00E10	PB	42300	391570	<1	0.020	<0.2	40	2	0.31	340	<2	2
308	NS00E15	GOP	42300	391573	<1	0.013	<0.2	30	<1	0.38	45	<2	2
309	NS00E20	GOP	42300	391575	<1	0.012	<0.2	80	1	0.49	260	<2	4
310	NS00E25	GOP	42300	391578	<1	0.015	<0.2	40	1	0.44	65	<2	2
311	NS00E30	GOP	42300	391581	<1	0.013	<0.2	30	<1	0.46	60	<2	2
312	NS00E35	GOP	42300	391584	<1	0.012	<0.2	20	<1	0.29	55	<2	2
313	NS00E40	GOP	42300	391586	<1	0.013	<0.2	20	<1	0.25	30	<2	<2
314	NS00E45	GOP	42300	391589	<1	0.012	<0.2	20	1	0.51	25	<2	2
315	NS00E50	GOP	42300	391592	<1	0.016	<0.2	20	<1	0.37	30	<2	2
316	NS00E55	GOP	42300	391594	<1	0.011	<0.2	30	<1	0.64	25	<2	2
317	NS00E60	GOP	42300	391597	<1	0.010	<0.2	30	<1	0.47	20	6	2
318	NS00E65	PB	42300	391600	<1	0.010	<0.2	670	2	1.36	565	10	10
319	NS00E70	PYB	42300	391603	<1	0.013	<0.2	90	<1	0.60	25	2	4
320	S10W70	DG	42305	391527	<1	0.006	<0.2	90	2	0.93	225	8	12
321	S10W65	PB	42305	391529	<1	0.004	<0.2	110	3	1.38	160	6	18
322	S10W60	DB	42305	391532	<1	0.004	<0.2	140	4	1.73	210	6	26
323	S10W55	PB	42305	391535	<1	0.005	<0.2	90	2	1.32	245	14	18
324	S10W50	DYB	42305	391537	<1	0.003	<0.2	310	11	2.25	355	8	38
325	S10W45	DB	42305	391540	2	0.006	<0.2	130	4	1.55	215	8	16
326	S10W40	PYB	42305	391543	<1	0.008	<0.2	60	1	0.84	155	2	8
327	S10W35	PYB	42305	391546	<1	0.007	<0.2	50	<1	0.69	120	8	6
328	S10W30	PYB	42305	391548	<1	0.007	<0.2	40	<1	0.32	60	2	2
329	S10W25	PYB	42305	391551	<1	0.003	0.2	50	<1	0.56	10	8	4
330	S10W20	PYB	42305	391554	4	0.005	<0.2	60	1	0.73	175	2	8
331	S10W15	PYB	42305	391556	<1	0.004	<0.2	60	<1	0.77	335	8	6
332	S10W10	PYB	42305	391559	<1	0.004	<0.2	120	1	1.07	205	4	10
333	S10W05	PB	42305	391562	<1	0.003	<0.2	100	2	1.64	30	6	10
334	S10EW0	PYB	42305	391565	<1	0.004	<0.2	210	6	1.47	180	10	14
335	S10E05	PYB	42305	391567	2	0.008	<0.2	20	1	0.22	20	<2	2
336	S10E10	PYB	42305	391570	<1	0.006	0.2	40	1	0.30	160	2	2
337	S10E15	PYB	42305	391573	<1	0.006	<0.2	20	1	0.32	135	<2	2
338	S10E20	PYB	42305	391575	<1	0.007	<0.2	20	1	0.35	185	<2	2
339	S10E25	YG	42305	391578	<1	0.006	0.2	10	<1	0.29	95	<2	2
340	S10E30	YG	42305	391581	<1	0.006	0.2	10	<1	0.30	210	<2	2

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
341	S10E35	PYB	42305	391584	<1	0.009	0.2	10	<1	0.35	45	<2	2
342	S10E40	PYB	42305	391586	<1	0.007	<0.2	20	1	0.49	80	<2	4
343	S10E45	MB	42305	391589	<1	0.008	<0.2	40	3	0.73	510	6	28
344	S10E50	MB	42305	391592	<1	0.005	<0.2	20	2	0.99	295	<2	6
345	S10E55	MYB	42305	391594	<1	0.006	<0.2	10	<1	0.87	175	6	4
346	S10E60	MB	42305	391597	<1	0.004	<0.2	20	2	0.90	450	2	6
347	S10E65	LB	42305	391600	<1	0.006	<0.2	20	1	0.97	345	2	6
348	S10E70	MB	42305	391603	<1	0.008	0.2	40	1	1.07	315	4	8
349	S20W70	PYB	42310	391527	<1	0.003	<0.2	60	1	0.84	135	4	8
350	S20W65	PYB	42310	391529	<1	0.002	<0.2	120	6	1.53	245	10	18
351	S20W60	PYB	42310	391532	<1	0.002	<0.2	120	4	1.55	380	4	16
352	S20W55	PB	42310	391535	<1	0.002	<0.2	130	6	1.62	315	8	14
353	S20W50	PB	42310	391537	<1	0.002	<0.2	100	1	0.83	295	6	10
354	S20W45	PYB	42310	391540	1	0.002	<0.2	90	2	1.13	175	2	10
355	S20W40	PYB	42310	391543	<1	0.004	<0.2	80	1	0.89	105	8	10
356	S20W35	PYB	42310	391546	<1	0.004	<0.2	80	2	0.93	120	6	10
357	S20W30	PYB	42310	391548	<1	0.004	<0.2	80	3	0.93	275	4	12
358	S20W25	PB	42310	391551	<1	0.002	<0.2	80	2	1.00	115	4	12
359	S20W20	PYB	42310	391554	<1	0.008	<0.2	100	3	1.06	85	6	12
360	S20W15	PYB	42310	391556	<1	0.005	<0.2	160	6	1.40	115	8	16
361	S20W10	PYB	42310	391559	<1	0.003	<0.2	540	9	1.92	150	2	28
362	S20W05	PYB	42310	391562	<1	0.002	<0.2	410	6	1.94	675	12	30
363	S20EW0	PYB	42310	391565	<1	0.007	<0.2	30	<1	0.21	5	<2	<2
364	S20E05		42310	391567	<1	0.005	<0.2	30	<1	0.34	50	2	<2
365	S20E10	PYB	42310	391570	<1	0.008	<0.2	30	<1	0.39	105	6	2
366	S20E15	PYB	42310	391573	<1	0.008	<0.2	20	<1	0.34	75	12	2
367	S20E20	GOP	42310	391575	1	0.007	<0.2	20	<1	0.39	45	4	2
368	S20E25	GO	42310	391578	<1	0.009	<0.2	20	<1	0.32	175	<2	2
369	S20E30	PYB	42310	391581	<1	0.009	<0.2	20	<1	0.24	20	<2	<2
370	S20E35		42310	391584	<1	0.011	<0.2	10	<1	0.38	75	4	<2
371	S20E40	GOP	42310	391586	<1	0.006	<0.2	10	<1	0.34	115	2	2
372	S20E45	MB	42310	391589	1	0.005	<0.2	10	1	0.79	345	6	4
373	S20E50	LB	42310	391592	<1	0.005	<0.2	20	2	1.03	575	10	6
374	S20E55	MB	42310	391594	<1	0.012	<0.2	40	4	1.04	575	4	8

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
375	S20E60	MB	42310	391597	<1	0.005	<0.2	40	3	1.46	530	2	10
376	S20E65	RB	42310	391600	<1	0.002	<0.2	150	7	1.77	890	6	12
377	S20E70	MB	42310	391603	<1	0.012	<0.2	100	8	2.51	885	4	14
378	S30W70	PYB	42316	391527	<1	0.002	<0.2	200	11	1.88	650	14	32
379	S30W65	PYB	42316	391529	<1	0.002	<0.2	140	5	1.82	385	16	16
380	S30W60	PYB	42316	391532	<1	0.003	<0.2	40	<1	0.74	50	6	6
381	S30W55	PYB	42316	391535	<1	0.222	<0.2	50	<1	0.89	265	12	8
382	S30W50	PB	42316	391537	2	0.006	<0.2	130	3	1.05	350	12	14
383	S30W45	PYB	42316	391540	<1	0.002	<0.2	180	5	1.65	330	14	18
384	S30W40	PYB	42316	391543	<1	0.002	<0.2	80	1	0.91	310	12	12
385	S30W35	PB	42316	391546	<1	0.002	<0.2	170	5	1.81	195	14	22
386	S30W30	PYB	42316	391548	3	0.002	<0.2	90	2	0.95	60	12	10
387	S30W25	PYB	42316	391551	1	0.002	<0.2	140	4	1.65	40	10	16
388	S30W20	PYB	42316	391554	<1	0.002	<0.2	180	6	1.82	50	6	18
389	S30W15	LOG	42316	391556	<1	0.002	<0.2	420	3	1.64	330	16	22
390	S30W10	LGG	42316	391559	1	0.001	<0.2	550	10	2.18	200	6	40
391	S30W05	LOG	42316	391562	<1	0.001	<0.2	1270	<1	1.46	365	14	12
392	S30EW0	GOP	42316	391565	<1	0.002	<0.2	40	<1	0.70	5	<2	2
393	S30E05	PYB	42316	391567	<1	0.004	<0.2	30	<1	0.37	30	<2	2
394	S30E10	PYB	42316	391570	1	0.004	<0.2	30	<1	0.23	90	<2	2
395	S30E15	PYB	42316	391573	<1	0.002	<0.2	30	<1	0.40	105	<2	2
396	S30E20	PYB	42316	391575	1	0.003	<0.2	30	<1	0.36	110	<2	2
397	S30E25	PYB	42316	391578	<1	0.003	<0.2	50	<1	0.40	115	<2	2
398	S30E30	PYB	42316	391581	<1	0.005	<0.2	10	<1	0.30	65	<2	2
399	S30E35	PYB	42316	391584	<1	0.004	<0.2	30	<1	0.38	420	4	4
400	S30E40	GOP	42316	391586	<1	0.004	<0.2	10	<1	0.19	85	<2	<2
401	S30E45	PYB	42316	391589	<1	0.004	<0.2	10	<1	0.35	125	<2	2
402	S30E50	LB	42316	391592	<1	0.003	<0.2	50	1	0.89	1000	6	8
403	S30E55	LB	42318	391594	<1	0.003	<0.2	60	3	1.35	660	10	10
404	S30E60	PRB	42316	391597	<1	0.002	<0.2	70	4	2.29	695	8	12
405	S30E65	PR	42316	391600	<1	0.003	<0.2	50	2	1.73	805	8	10
406	S30E70	PR	42316	391603	<1	0.004	<0.2	40	4	1.89	755	6	14
407	S40W70	DYB	42321	391527	1	0.006	<0.2	110	2	1.10	220	6	12
408	S40W65	DYB	42321	391529	<1	0.004	<0.2	140	4	1.46	180	6	16

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
409	S40W60	DYB	42321	391532	<1	0.004	<0.2	190	8	1.92	295	10	26
410	S40W55	MB	42321	391535	<1	0.009	<0.2	160	7	2.34	250	10	28
411	S40W50	MB	42321	391537	<1	0.003	<0.2	290	11	2.81	385	14	30
412	S40W45	MYB	42321	391540	<1	0.004	<0.2	130	4	1.80	80	6	20
413	S40W40	DYB	42321	391543	<1	0.005	<0.2	110	4	1.53	80	2	18
414	S40W35	MYB	42321	391546	<1	0.006	<0.2	160	8	2.00	130	8	22
415	S40W30	MYB	42321	391548	<1	0.004	<0.2	210	8	1.62	45	4	16
416	S40W25	MYB	42321	391551	<1	0.006	<0.2	100	3	1.78	45	4	12
417	S40W20	DYB	42321	391554	<1	0.009	<0.2	140	6	1.74	215	10	24
418	S40W15	YG	42321	391556	<1	0.003	<0.2	710	4	1.61	130	8	18
419	S40W10	YG	42321	391559	<1	0.004	<0.2	1540	1	1.31	135	4	14
420	S40W05	LOG	42321	391562	1	0.003	<0.2	520	3	2.04	250	4	22
421	S40EW0	PYB	42321	391565	<1	0.002	<0.2	140	1	1.19	65	8	6
422	S40E05	PYB	42321	391567	<1	0.003	<0.2	140	1	1.49	30	4	4
423	S40E10	PR	42321	391570	<1	0.003	<0.2	20	<1	0.36	35	2	2
424	S40E15	PR	42321	391573	<1	0.004	<0.2	20	<1	0.33	105	2	2
425	S40E20	PB	42321	391575	<1	0.001	<0.2	100	3	0.87	495	4	12
426	S40E25	PYB	42321	391578	<1	0.003	<0.2	40	<1	0.32	10	4	2
427	S40E30	PYB	42321	391581	<1	0.003	<0.2	30	<1	0.44	325	6	4
428	S40E35	PYB	42321	391584	<1	0.003	<0.2	20	<1	0.44	225	10	4
429	S40E40	PYB	42321	391586	<1	0.002	<0.2	50	2	0.68	255	14	14
430	S40E45	DYB	42321	391589	<1	0.002	0.2	50	2	0.61	80	2	6
431	S40E50	DYB	42321	391592	<1	0.003	<0.2	30	1	0.51	235	<2	4
432	S40E55	PYB	42321	391594	1	0.002	<0.2	20	1	0.43	190	<2	2
433	S40E60	PYB	42321	391597	<1	0.006	0.2	10	1	0.52	255	<2	4
434	S40E65	MB	42321	391600	<1	0.006	<0.2	30	1	0.83	485	<2	6
435	S40E70	PB	42321	391603	<1	0.004	<0.2	100	8	1.41	950	2	20
436	S50W70	PYB	42327	391527	<1	0.008	0.2	90	2	0.98	175	10	8
437	S50W65	PYB	42327	391529	<1	0.009	<0.2	130	2	1.21	295	12	12
438	S50W60	PYB	42327	391532	<1	0.011	0.4	110	4	1.11	320	8	10
439	S50W55	PYB	42327	391535	<1	0.010	0.2	60	2	0.98	20	12	8
440	S50W50	DYB	42327	391537	<1	0.008	<0.2	190	8	1.82	210	12	20
441	S50W45	MYB	42327	391540	<1	0.011	<0.2	180	5	1.63	465	8	18
442	S50W40	MYB	42327	391543	<1	0.009	0.2	110	3	1.68	80	8	16

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
443	S50W35	DYB	42327	391546	<1	0.006	<0.2	470	12	1.69	405	10	24
444	S50W30	DYB	42327	391548	<1	0.009	0.2	90	2	0.73	20	8	6
445	S50W25	PB	42327	391551	<1	0.012	<0.2	120	2	0.58	175	4	6
446	S50W20	MYB	42327	391554	<1	0.010	0.2	50	<1	0.96	10	6	4
447	S50W15	DYB	42327	391556	1	0.014	<0.2	40	<1	0.49	70	2	2
448	S50W10	DYB	42327	391559	<1	0.013	<0.2	80	<1	0.59	365	4	4
449	S50W05	DYB	42327	391562	<1	0.014	0.2	80	<1	0.93	35	8	4
450	S50EW0	MYB	42327	391565	<1	0.006	<0.2	90	<1	1.14	25	<2	6
451	S50E05	PYB	42327	391567	<1	0.003	<0.2	340	7	1.54	230	6	22
452	S50E10	MYB	42327	391570	4	0.006	<0.2	110	5	1.14	225	6	12
453	S50E15	DYB	42327	391573	<1	0.007	<0.2	100	6	0.96	285	4	14
454	S50E20	MYB	42327	391575	<1	0.010	<0.2	60	2	0.62	105	<2	8
455	S50E25	DYB	42327	391578	<1	0.014	<0.2	110	5	1.09	250	<2	16
456	S50E30	PYB	42327	391581	<1	0.0014	<0.2	70	3	0.73	165	4	10
457	S50E35	DYB	42327	391584	<1	0.0012	<0.2	160	8	1.40	435	2	24
458	S50E40	DYB	42327	391586	<1	0.0013	<0.2	50	1	0.62	135	<2	6
459	S50E45	DYB	42327	391589	1	0.0012	<0.2	40	2	0.61	140	4	6
460	S50E50	PB	42327	391592	<1	0.0013	<0.2	30	1	0.48	150	<2	6
461	S50E55	DYB	42327	391594	<1	0.0013	<0.2	70	4	0.65	325	<2	12
462	S50E60	PYB	42327	391597	<1	0.0010	<0.2	140	8	0.95	265	10	12
463	S50E65	DYB	42327	391600	<1	0.0012	<0.2	60	2	0.56	175	4	8
464	S50E70	MYB	42327	391603	<1	0.0010	<0.2	40	2	0.57	115	4	6
465	S60W70	DYB	42332	391527	<1	0.011	<0.2	100	2	0.83	275	6	8
466	S60W65	DYB	42332	391529	<1	0.013	<0.2	80	1	1.03	170	4	8
467	S60W60	DYB	42332	391532	<1	0.013	<0.2	140	2	1.03	200	8	10
468	S60W55	PYB	42332	391535	<1	0.008	<0.2	260	5	1.73	455	8	20
469	S60W50	PYB	42332	391537	<1	0.012	<0.2	90	1	0.92	35	<2	8
470	S60W45	DYB	42332	391540	1	0.011	<0.2	200	6	1.75	75	4	20
471	S60W40	MYB	42332	391543	<1	0.010	<0.2	190	5	1.44	100	6	18
472	S60W35	DYB	42332	391546	<1	0.013	<0.2	70	1	0.60	100	4	6
473	S60W30	DYB	42332	391548	<1	0.013	<0.2	80	<1	0.67	35	4	6
474	S60W25	DYB	42332	391551	<1	0.008	<0.2	100	1	1.14	50	4	8
475	S60W20	MYB	42332	391554	<1	0.007	<0.2	90	2	1.29	165	<2	8
476	S60W15	PB	42332	391556	2	0.010	<0.2	50	<1	0.65	85	<2	4

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
477	S60W10	PB	42332	391559	<1	0.010	<0.2	50	<1	0.59	70	<2	2
478	S60W05	PB	42332	391562	<1	0.011	<0.2	30	<1	0.33	50	<2	2
479	S60EW0	PB	42332	391565	<1	0.013	0.2	50	3	0.46	80	8	6
480	S60E05	PB	42332	391567	<1	0.009	<0.2	60	4	0.58	165	2	10
481	S60E10	DYB	42332	391570	<1	0.010	<0.2	90	5	0.81	250	6	16
482	S60E15	DYB	42332	391573	<1	0.010	<0.2	120	7	1.16	300	2	16
483	S60E20	DYB	42332	391575	<1	0.012	<0.2	60	4	0.90	320	6	10
484	S60E25	DYB	42332	391578	<1	0.014	<0.2	20	2	0.45	155	6	4
485	S60E30	DYB	42332	391581	<1	0.013	<0.2	50	1	0.34	315	6	4
486	S60E35	DYB	42332	391584	<1	0.010	<0.2	40	3	0.62	115	4	8
487	S60E40	DYB	42332	391586	<1	0.010	<0.2	60	4	0.87	220	6	12
488	S60E45	DYB	42332	391589	<1	0.011	<0.2	70	3	0.64	210	2	12
489	S60E50	PYB	42332	391592	<1	0.010	<0.2	60	5	0.84	175	8	10
490	S60E55	DYB	42332	391594	<1	0.008	<0.2	360	7	1.16	365	6	16
491	S60E60	DYB	42332	391597	<1	0.009	<0.2	70	2	0.52	175	<2	6
492	S60E65	DYB	42332	391600	<1	0.009	<0.2	110	4	0.63	355	2	10
493	S60E70	DYB	42332	391603	1	0.014	<0.2	20	<1	0.39	85	2	2
494	S70W70	PYB	42337	391527	<1	0.016	<0.2	20	<1	0.26	105	2	2
495	S70W65	PYB	42337	391529	<1	0.018	<0.2	10	1	0.19	110	10	4
496	S70W60	PYB	42337	391532	1	0.013	<0.2	20	<1	0.23	100	2	2
497	S70W55	DYB	42337	391535	<1	0.018	0.2	50	2	0.62	265	4	6
498	S70W50	PYB	42337	391537	<1	0.016	<0.2	50	2	0.72	80	10	8
499	S70W45	DYB	42337	391540	<1	0.014	<0.2	50	1	0.50	195	12	6
500	S70W40	PYB	42337	391543	<1	0.012	<0.2	390	12	2.18	350	10	34
501	S70W35	DYB	42337	391546	<1	0.013	<0.2	80	3	1.12	55	4	16
502	S70W30	DYB	42337	391548	<1	0.015	<0.2	110	4	1.15	115	4	14
503	S70W25	DYB	42337	391551	<1	0.012	<0.2	200	11	1.47	635	2	24
504	S70W20	DYB	42337	391554	<1	0.011	<0.2	40	1	0.54	130	2	6
505	S70W15	DYB	42337	391556	<1	0.013	<0.2	100	4	1.05	290	4	16
506	S70W10	PYB	42337	391559	<1	0.016	<0.2	150	5	1.25	345	4	20
507	S70W05	PYB	42337	391562	<1	0.021	<0.2	150	6	1.20	335	6	20
508	S70EW0	PYB	42337	391565	<1	0.012	0.2	60	5	0.59	170	6	8
509	S70E05	BG	42337	391567	<1	0.014	<0.2	120	8	0.93	395	14	20
510	S70E10	PYB	42337	391570	<1	0.013	0.4	30	3	0.65	355	8	6

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
511	S70E15	PYB	42337	391573	<1	0.014	<0.2	30	4	0.77	360	10	8
512	S70E20	PYB	42337	391575	<1	0.011	<0.2	20	2	0.61	375	4	6
513	S70E25	PYB	42337	391578	<1	0.012	<0.2	10	1	0.50	155	4	2
514	S70E30	MYB	42337	391581	<1	0.011	0.2	70	3	0.99	800	10	8
515	S70E35	MYB	42337	391584	<1	0.016	<0.2	20	2	0.89	210	6	4
516	S70E40	DYB	42337	391586	<1	0.012	<0.2	20	1	0.51	180	4	2
517	S70E45	PYB	42337	391589	3	0.008	<0.2	80	5	0.78	1365	4	16
518	S70E50	PYB	42337	391592	<1	0.009	<0.2	20	2	0.52	295	6	2
519	S70E55	PYB	42337	391594	<1	0.016	<0.2	40	<1	0.44	475	4	6
520	S70E60	PYB	42337	391597	4	0.017	<0.2	10	<1	0.45	75	<2	2
521	S70E65	PB	42337	391600	<1	0.018	<0.2	30	<1	0.46	180	<2	4
522	S70E70	DYB	42337	391603	<1	0.015	<0.2	30	<1	0.38	155	4	2
523	S80W70	PYB	42343	391527	<1	0.016	<0.2	10	1	0.34	170	4	4
524	S80W65	PYB	42343	391529	<1	0.015	<0.2	20	2	0.41	120	4	6
525	S80W60	PYB	42343	391532	<1	0.016	<0.2	30	7	0.37	80	10	14
526	S80W55	PYB	42343	391535	<1	0.017	<0.2	20	1	0.39	70	<2	4
527	S80W50	PYB	42343	391537	<1	0.015	<0.2	20	1	0.46	60	<2	6
528	S80W45	PYB	42343	391540	<1	0.017	<0.2	50	3	0.65	170	<2	10
529	S80W40	PB	42343	391543	<1	0.015	<0.2	50	2	0.58	120	2	8
530	S80W35	PYB	42343	391546	<1	0.014	<0.2	60	3	0.66	170	<2	10
531	S80W30	PB	42343	391548	<1	0.015	<0.2	60	3	0.66	165	<2	10
532	S80W25	PB	42343	391551	<1	0.013	<0.2	110	5	1.01	250	4	18
533	S80W20	PB	42343	391554	<1	0.013	<0.2	110	9	1.11	420	4	20
534	S80W15	DYB	42343	391556	<1	0.014	0.2	50	2	0.46	265	4	6
535	S80W10	PB	42343	391559	<1	0.018	0.2	30	2	0.55	115	4	6
536	S80W05	PB	42343	391562	<1	0.017	<0.2	110	6	1.13	415	8	16
537	S80E00	PYB	42343	391565	2	0.012	<0.2	110	7	1.90	570	10	22
538	S80E05	PYB	42343	391567	<1	0.016	<0.2	30	1	0.83	230	6	6
539	S80E10	PYB	42343	391570	<1	0.014	<0.2	20	1	0.67	470	4	6
540	S80E15	PYB	42343	391573	<1	0.017	<0.2	20	1	0.58	315	2	6
541	S80E20	PYB	42343	391575	<1	0.013	<0.2	30	<1	0.63	630	<2	6
542	S80E25	PYB	42343	391578	<1	0.016	<0.2	10	<1	0.58	260	2	4
543	S80E30	PYB	42343	391581	<1	0.018	<0.2	20	1	0.53	320	2	2
544	S80E35	PYB	42343	391584	<1	0.015	<0.2	10	<1	0.36	190	<2	2

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
545	S80E40	PYB	42343	391586	<1	0.021	<0.2	10	1	0.38	140	<2	2
546	S80E45	PYB	42343	391589	<1	0.017	0.2	10	1	0.36	160	<2	2
547	S80E50	PYB	42343	391592	<1	0.018	<0.2	20	1	0.44	125	2	4
548	S80E55	MYB	42343	391594	<1	0.014	0.2	<10	<1	0.35	85	<2	2
549	S80E60	PYB	42343	391597	<1	0.015	0.2	10	<1	0.31	110	4	<2
550	S80E65	DYB	42343	391600	<1	0.017	<0.2	60	2	0.69	315	6	6
551	S80E70	LOG	42343	391603	<1	0.016	<0.2	50	2	0.57	90	4	4
552	S90W70	PYB	42348	391527	<1	0.013	<0.2	20	2	0.62	155	8	8
553	S90W65	PB	42348	391529	<1	0.010	<0.2	80	9	1.12	470	6	20
554	S90W60	PB	42348	391532	<1	0.013	<0.2	20	3	0.50	140	4	6
555	S90W55	PB	42348	391535	<1	0.015	<0.2	70	6	0.61	275	8	14
556	S90W50	PB	42348	391537	<1	0.014	<0.2	60	3	0.62	155	4	12
557	S90W45	DYB	42348	391540	<1	0.025	<0.2	160	8	1.45	280	6	24
558	S90W40	PYB	42348	391543	<1	0.018	<0.2	110	5	1.25	325	6	22
559	S90W35	PYB	42348	391546	<1	0.012	<0.2	80	5	1.12	240	4	16
560	S90W30	MYB	42348	391548	<1	0.013	<0.2	40	1	0.97	320	6	10
561	S90W25	PYB	42348	391551	<1	0.012	<0.2	20	<1	0.51	240	<2	4
562	S90W20	PYB	42348	391554	<1	0.015	<0.2	20	1	0.49	115	8	4
563	S90W15	PYB	42348	391556	<1	0.009	<0.2	90	5	1.53	460	4	14
564	S90W10	MYB	42348	391559	<1	0.011	<0.2	70	4	1.59	230	8	12
565	S90W05	PYB	42348	391562	<1	0.008	<0.2	90	4	1.05	75	10	10
566	S90EW0	GO	42348	391565	<1	0.011	<0.2	40	3	1.20	215	10	6
567	S90E05	PYB	42348	391567	<1	0.020	<0.2	10	2	0.37	25	4	4
568	S90E10	MYB	42348	391570	1	0.016	<0.2	20	1	0.59	410	4	6
569	S90E15	PB	42348	391573	<1	0.012	<0.2	20	2	0.49	505	4	6
570	S90E20	DYB	42348	391575	<1	0.013	<0.2	30	2	0.71	390	6	8
571	S90E25	MYB	42348	391578	<1	0.015	<0.2	20	1	0.45	370	4	4
572	S90E30	PYB	42348	391581	<1	0.016	<0.2	<10	<1	0.33	135	2	2
573	S90E35	DYB	42348	391584	<1	0.013	<0.2	10	<1	0.33	180	4	2
574	S90E40	PYB	42348	391586	<1	0.018	<0.2	20	<1	0.39	140	6	2
575	S90E45	PB	42348	391589	<1	0.017	<0.2	10	<1	0.39	235	8	2
576	S90E50	DYB	42348	391592	<1	0.013	<0.2	30	<1	0.39	120	6	2
577	S90E55	DYB	42348	391594	<1	0.019	0.2	10	<1	0.36	150	6	2
578	S90E60	PYB	42348	391597	<1	0.015	<0.2	20	<1	0.47	90	6	<2

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
579	S90E65	PYB	42348	391600	<1	0.017	<0.2	20	<1	0.33	250	10	<2
580	S90E70	PYB	42348	391603	<1	0.013	<0.2	50	1	0.52	345	12	2
581	S100W70	PB	42354	391527	2	0.007	<0.2	190	6	1.73	360	6	24
582	S100W65	DYB	42354	391529	2	0.007	<0.2	120	3	1.47	225	6	20
583	S100W60	PYB	42354	391532	<1	0.006	<0.2	60	1	0.89	80	2	8
584	S100W55	DYB	42354	391535	<1	0.011	<0.2	50	2	0.81	170	<2	8
585	S100W50	PB	42354	391537	<1	0.009	<0.2	60	2	0.48	150	<2	6
586	S100W45	DYB	42354	391540	<1	0.008	<0.2	70	2	0.59	235	4	6
587	S100W40	PB	42354	391543	3	0.009	<0.2	40	<1	0.38	205	4	4
588	S100W35	DYB	42354	391546	<1	0.010	<0.2	30	<1	0.44	250	2	2
589	S100W30	DYB	42354	391548	<1	0.013	<0.2	80	2	0.78	570	6	6
590	S100W25	PB	42354	391551	<1	0.008	<0.2	20	<1	0.58	75	<2	2
591	S100W20	PB	42354	391554	<1	0.010	<0.2	20	1	0.82	115	6	4
592	S100W15	PB	42354	391556	<1	0.012	<0.2	40	<1	0.54	100	2	2
593	S100W10	PB	42354	391559	<1	0.015	<0.2	20	<1	0.43	45	2	2
594	S100W05	DYB	42354	391562	<1	0.012	<0.2	20	1	0.61	385	8	4
595	S100EW0	MYB	42354	391565	<1	0.016	<0.2	20	2	0.89	525	4	8
596	S100E05	MB	42354	391567	<1	0.019	<0.2	30	3	1.35	555	<2	14
597	S100E10	MB	42354	391570	<1	0.021	<0.2	30	3	1.21	830	<2	12
598	S100E15	MYB	42354	391573	<1	0.017	<0.2	60	5	1.14	1525	8	16
599	S100E20	PYB	42354	391575	<1	0.018	<0.2	10	2	0.42	245	<2	6
600	S100E25	PYB	42354	391578	1	0.018	<0.2	10	<1	0.43	90	4	2
601	S100E30	PB	42354	391581	2	0.015	<0.2	10	<1	0.26	145	2	2
602	S100E35	PB	42354	391584	<1	0.016	<0.2	10	<1	0.23	80	<2	<2
603	S100E40	PB	42354	391586	<1	0.012	<0.2	40	1	0.55	70	8	4
604	S100E45	PYB	42354	391589	<1	0.012	<0.2	20	<1	0.52	75	6	<2
605	S100E50	PB	42354	391592	<1	0.012	<0.2	60	2	0.64	330	6	4
606	S100E55	PYB	42354	391594	<1	0.015	<0.2	20	<1	0.44	280	8	2
607	S100E60	PYB	42354	391597	<1	0.017	<0.2	20	<1	0.46	170	4	2
608	S100E65	PYB	42354	391600	<1	0.017	<0.2	20	<1	0.41	285	2	<2
609	S100E70	PYB	42354	391603	<1	0.016	<0.2	20	1	0.47	190	2	4
610	SJO-01	GB	42530	391225	3	0.032	0.6	910	132	9.57	1890	<2	82
611	SJO-02	B	42534	391298	4	0.009	0.6	550	169	10.10	1445	4	58
612	SJO-03	GB	42539	391324	3	0.009	0.5	490	86	8.09	1495	<2	54

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
613	SJO-04	LB	42548	391210	3	0.011	0.2	480	45	4.81	960	4	44
614	SJO-05	DRB	42549	391227	<1	0.027	0.2	1670	50	6.32	1655	<2	80
615	SJO-06	DB	42569	391298	<1	0.012	0.2	2250	41	5.30	1565	12	96
616	SJO-07	RB	42585	391304	1	0.007	0.2	500	15	5.52	1180	10	124
617	SJO-08	GB	42560	391311	3	0.007	0.4	700	103	8.16	1465	6	78
618	SJO-09	LB	42578	391188	<1	0.008	<0.2	150	12	3.57	650	8	32
619	SJO-10	RB	42567	391215	<1	0.005	0.4	660	35	5.08	1105	<2	66
620	SJO-11	GB	42581	391319	<1	0.009	0.2	760	22	4.74	1785	2	108
621	SJO-12	RB	42604	391193	2	0.007	0.2	290	43	5.57	555	4	48
622	SJO-13	RB	42619	391206	<1	0.007	0.3	520	48	6.33	790	4	52
623	SJO-14	B	42616	391243	3	0.017	0.4	1000	54	8.23	2220	2	154
624	SJO-15	RB	42633	391204	<1	0.008	0.3	210	34	6.58	815	<2	44
625	SJO-16	LB	42623	391230	<1	0.006	0.3	1020	66	8.27	1345	<2	92
626	SJO-17	GB	42635	391265	2	0.008	0.3	550	60	9.54	1745	<2	90
627	SJO-18	GB	42644	391282	2	0.006	0.3	940	91	8.73	1960	<2	82
628	SJO-19	GB	42661	391293	5	0.007	0.2	450	93	10.10	1420	<2	82
629	SJO-20	DB	42691	391290	<1	0.008	0.2	720	123	10.95	1895	<2	102
630	SMR-01	MB	42879	391521	64	0.121	0.6	>10000	49	>15.00	3120	272	1955
631	SMR-02	GB	42869	391538	6	0.181	0.8	>10000	48	>15.00	>10000	336	1000
632	SMR-03	GB	42857	391546	15	0.071	0.5	>10000	39	>15.00	>10000	190	1570
633	SMR-04	MB	42869	391552	9	0.069	0.5	>10000	55	>15.00	>10000	234	1830
634	SMR-05	MB	42890	391524	11	0.091	0.4	>10000	50	>15.00	3440	162	1110
635	SMR-06	GB	42881	391537	1	0.078	0.3	6760	39	>15.00	>10000	214	1240
636	SMR-07	GB	42881	391554	9	0.061	0.5	6410	21	>15.00	>10000	162	1255
637	SMR-08	MB	42881	391567	8	0.138	0.9	8630	16	>15.00	>10000	334	1205
638	SMR-09	GB	42884	391578	4	0.171	1.0	9060	7	>15.00	>10000	386	1450
639	SMR-10	LB	42899	391530	2	0.102	0.5	7160	46	>15.00	2960	110	1210
640	SMR-11	MB	42893	391538	4	0.083	0.6	4940	41	>15.00	>10000	104	1175
641	SMR-12	GB	42897	391576	2	0.136	0.7	8670	15	>15.00	>10000	312	1420
642	SMR-13	LB	42909	391536	32	0.109	0.7	>10000	21	>15.00	>10000	204	1925
643	SMR-14	GB	42901	391543	21	0.051	0.3	8270	24	>15.00	>10000	116	1570
644	SMR-15	MB	42915	391525	27	0.060	0.6	8070	16	>15.00	9380	124	1090
645	SMR-16	GB	42916	391543	8	0.053	0.4	5350	20	>15.00	>10000	78	1390
646	SMR-17	GB	42910	391548	8	0.082	0.5	6050	30	>15.00	>10000	122	1575

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
647	SMR-18	GB	42913	391560	8	0.083	0.4	9880	28	>15.00	>10000	360	1735
648	SMR-19	GB	42915	391572	11	1.890	0.8	>10000	<1	>15.00	>10000	626	1475
649	SMR-20	MB	42909	391581	2	1.020	0.6	9610	12	>15.00	>10000	498	1040
650	SKN-01	RB	35207	393906	<1	0.017	<0.2	350	1	1.52	245	36	16
651	SKN-02	LB	35212	393907	<1	0.022	<0.2	490	3	1.63	485	132	34
652	SKN-03	B	35217	393909	<1	0.024	<0.2	490	2	1.37	440	34	10
653	SKN-04	LB	35222	393911	<1	0.022	<0.2	420	2	2.06	725	60	22
654	SKN-05	LB	35226	393915	<1	0.017	<0.2	290	<1	1.05	195	78	8
655	SKN-06	MB	35226	393920	30	0.022	0.5	550	1	0.75	140	1180	4
656	SKN-07	MB	35227	393924	2	0.041	1.7	760	1	2.09	10	5220	8
657	SKN-08	RB	35229	393929	1	1.250	1.8	4740	24	7.58	25	1060	22
658	SKN-09	RB	35232	393933	<1	2.470	0.8	4090	3	7.00	25	560	24
659	SKN-10	RB	35237	393936	1	1.460	1.3	3890	3	6.73	50	554	28
660	SKN-11	RB	35237	393941	2	1.200	0.4	4030	1	6.61	225	190	88
661	SKN-12	MB	35240	393944	<1	0.048	<0.2	1120	<1	1.41	125	76	8
662	SKN-13	LG	35246	393934	<1	0.155	<0.2	2130	<1	0.62	115	54	4
663	SKN-14	RB	35250	393929	<1	0.044	<0.2	1070	<1	1.38	125	76	8
664	SKN-15	RB	35250	393932	<1	0.079	1.0	2720	1	3.67	40	216	20
665	SKN-16	RB	35249	393937	2	0.335	1.5	4330	<1	3.39	20	140	14
666	SKN-17	RB	35251	393941	2	0.339	0.6	3690	<1	1.62	15	62	10
667	SKN-18	LG	35254	393936	<1	0.135	0.6	2050	<1	0.88	80	40	8
668	SKN-19	RB	35257	393933	1	0.371	2.3	2680	14	5.10	25	1765	70
669	SKN-20	RB	35242	393939	<1	0.333	0.5	2380	1	3.89	80	768	20
670	SKN-21	LB	35244	393934	<1	0.028	<0.2	600	<1	0.82	70	32	6
671	SKN-22	LB	35242	393929	<1	0.022	<0.2	370	<1	1.15	30	40	6
672	SKN-23	RB	35237	393927	2	0.201	0.3	3010	3	2.69	225	508	14
673	SKN-24	LB	35237	393923	3	0.034	4.0	960	7	0.91	15	3640	6
674	SKN-25	LB	35241	393920	<1	0.023	0.5	240	<1	1.11	60	728	6
675	SKN-26	LB	35245	393917	<1	0.028	0.2	500	6	1.43	440	1310	22
676	SKN-27	LG	35247	393912	2	0.016	<0.2	90	<1	1.20	310	16	14
677	SKN-28	LB	35236	393945	1	0.037	<0.2	1110	<1	2.09	70	74	10
678	SKN-29	RB	35232	393943	<1	0.172	0.5	1950	2	5.98	20	584	36
679	SKN-30	RB	35228	393939	3	0.585	0.8	3860	2	11.15	30	2210	42
680	SKN-31	RB	35225	393935	<1	0.698	3.6	3870	1	11.10	20	1660	26

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
681	SKN-32	RB	35224	393931	6	0.975	3.3	3700	11	8.79	55	1560	28
682	SKN-33	MB	35225	393926	7	0.056	6.0	890	2	1.68	225	2950	12
683	SKN-34	W	35220	393924	10	0.043	<0.2	1410	6	1.72	<5	1620	8
684	SKN-35	B	35218	393919	2	0.021	<0.2	360	<1	1.17	55	128	8
685	SKN-36	LB	35215	393916	<1	0.029	0.9	480	11	2.07	150	1215	54
686	SKN-37	MB	35210	393914	<1	0.022	<0.2	270	1	2.81	395	58	22
687	SKN-38	YB	35205	393913	<1	0.015	<0.2	370	1	2.00	350	30	32
688	SKN-39	RB	35199	393912	3	0.010	<0.2	150	<1	2.43	225	18	26
689	SKN-40	YB	35197	393908	<1	0.014	<0.2	160	1	1.67	660	20	38
690	SMA-01	RB	31637	394137	<1	0.027	<0.2	230	3	2.95	55	10	26
691	SMA-02	RB	31638	394146	3	0.024	<0.2	220	6	2.25	140	14	26
692	SMA-03	YB	31637	394154	<1	0.059	<0.2	990	21	3.11	2060	16	62
693	SMA-04	YB	31636	394167	<1	0.024	<0.2	140	11	3.03	860	12	38
694	SMA-05	YB	31670	394184	1	0.023	<0.2	130	3	1.65	110	6	10
695	SMA-06	YB	31671	394192	<1	0.031	<0.2	120	6	1.55	85	18	16
696	SMA-07	G	31671	394202	<1	0.023	<0.2	270	12	2.24	1180	12	42
697	SMA-08	DG	31673	394215	<1	0.037	<0.2	810	14	2.70	2310	12	46
698	SMA-09	DG	31723	394216	1	0.029	<0.2	370	17	3.01	1545	12	48
699	SMA-10	LB	31724	394230	<1	0.039	<0.2	850	15	3.01	910	12	36
700	SMA-11	LB	31724	394238	<1	0.047	<0.2	1030	14	2.76	1905	8	50
701	SMA-12	G	31722	394254	<1	0.028	<0.2	320	9	2.16	835	6	32
702	SMA-13	G	31774	394234	<1	0.024	<0.2	490	5	1.95	305	10	12
703	SMA-14	LB	31774	394249	<1	0.022	<0.2	260	7	1.79	1095	12	24
704	SMA-15	G	31775	394267	<1	0.032	<0.2	910	7	1.67	525	8	20
705	SMA-16	DB	31774	394286	<1	0.026	<0.2	190	9	2.05	2020	6	40
706	SMA-17	G	31824	394260	<1	0.041	<0.2	950	7	1.32	385	6	16
707	SMA-18	G	31824	394274	3	0.022	<0.2	170	6	1.62	525	4	20
708	SMA-19	G	31827	394289	1	0.037	<0.2	1170	6	1.47	735	8	18
709	SMA-20	LB	31828	394307	<1	0.021	<0.2	130	2	1.06	130	4	6
710	SMA-21	LB	31638	394115	<1	0.028	<0.2	70	10	4.70	315	20	30
711	SMA-22	MRB	31640	394106	<1	0.009	<0.2	20	5	3.94	65	12	14
712	SMA-23	RB	31641	394096	1	0.011	<0.2	60	9	4.02	215	32	28
713	SMA-24	LB	31643	394082	1	0.010	<0.2	230	9	3.70	1010	16	40
714	SMA-25	RB	31675	394165	<1	0.023	<0.2	20	5	2.96	85	16	14

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
715	SMA-26	RB	31677	394150	<1	0.017	<0.2	30	7	2.99	225	16	20
716	SMA-27	RB	31677	394137	<1	0.022	<0.2	40	7	3.45	80	16	22
717	SMA-28	RB	31678	394119	<1	0.030	<0.2	30	8	5.80	140	10	26
718	SMA-29	LB	31724	394197	2	0.009	<0.2	150	8	2.65	475	38	38
719	SMA-30	B	31726	394182	<1	0.011	<0.2	290	12	2.85	1565	10	48
720	SMA-31	LB	31728	394170	2	0.009	<0.2	130	6	2.26	355	18	22
721	SMA-32	LB	31725	394153	<1	0.021	<0.2	30	2	2.65	155	14	18
722	SMA-33	DYB	31773	394216	<1	0.038	<0.2	1690	12	2.67	1475	6	38
723	SMA-34	DB	31773	394207	<1	0.012	<0.2	500	18	3.70	980	12	42
724	SMA-35	DG	31772	394196	<1	0.030	<0.2	950	21	3.60	570	6	36
725	SMA-36	DG	31771	394182	<1	0.049	<0.2	2100	14	3.42	1355	4	40
726	SMA-37	YB	31827	394238	<1	0.020	<0.2	150	4	1.34	275	2	10
727	SMA-38	B	31827	394223	<1	0.025	<0.2	950	13	2.55	790	10	28
728	SMA-39	G	31828	394213	4	0.021	<0.2	750	12	2.48	600	6	32
729	SMA-40	DG	31826	394190	<1	0.028	<0.2	1240	17	2.85	745	6	40
730	SMG-01	PB	40956	391080	1	0.018	<0.2	280	16	2.19	320	14	92
731	SMG-02	PYB	40959	391085	<1	0.021	<0.2	300	6	1.57	205	12	48
732	SMG-03	DB	40958	391078	<1	0.018	<0.2	150	8	1.46	400	10	132
733	SMG-04	MB	40961	391083	5	0.021	<0.2	230	17	2.65	310	30	96
734	SMG-05	MB	40960	391077	<1	0.017	<0.2	320	9	1.62	375	10	176
735	SMG-06	MB	40963	391082	<1	0.018	<0.2	270	26	3.39	450	16	78
736	SMG-07	PYB	40963	391075	<1	0.017	<0.2	190	10	1.35	460	12	266
737	SMG-08	DYB	40966	391080	<1	0.020	<0.2	290	18	3.26	600	22	82
738	SMG-09	PYB	40965	391074	<1	0.012	<0.2	160	9	1.81	305	6	84
739	SMG-10	PYB	40968	391079	1	0.014	<0.2	480	20	3.55	575	18	84
740	SMG-11	PB	41141	390795	<1	0.014	<0.2	210	17	2.71	495	12	48
741	SMG-12	DB	41144	390799	<1	0.016	<0.2	430	17	2.12	260	6	50
742	SMG-13	DB	41144	390793	<1	0.014	<0.2	210	10	2.02	235	10	32
743	SMG-14	DYB	41146	390798	<1	0.023	<0.2	870	46	1.76	910	14	272
744	SMG-15	PYB	41146	390791	1	0.016	<0.2	210	11	2.23	315	8	32
745	SMG-16	PYB	41149	390796	<1	0.025	<0.2	860	56	1.89	695	10	202
746	SMG-17	PYB	41148	390790	<1	0.012	<0.2	130	10	1.79	175	2	30
747	SMG-18	PYB	41151	390795	<1	0.014	<0.2	130	11	1.13	195	6	104
748	SMG-19	PYB	41151	390789	<1	0.017	<0.2	320	17	1.72	350	6	76

Ser	SAMPLE	Color	Lon.	Lat.	Au ppb	S %	Ag ppm	Ba ppm	Cu ppm	Fe %	Mn ppm	Pb ppm	Zn ppm
749	SMG-20	PYB	41153	390793	<1	0.012	<0.2	290	11	1.21	360	8	84
750	SMG-21	PYB	40962	391079	<1	0.025	<0.2	240	21	0.87	295	48	570
751	SMG-22	MYB	40967	391076	<1	0.018	<0.2	390	36	1.91	405	18	1410
752	SMG-23	MYB	40967	391072	1	0.017	<0.2	270	8	1.73	100	6	62
753	SMG-24	MYB	40970	391077	1	0.015	<0.2	520	16	2.31	345	10	164
754	SMG-25	MYB	40972	391073	<1	0.020	<0.2	340	43	1.70	755	34	562
755	SMG-26	GOP	40970	391071	<1	0.015	<0.2	160	8	1.95	165	6	46
756	SMG-27	MYB	40973	391076	<1	0.032	<0.2	750	28	2.82	860	36	258
757	SMG-28	GOP	40972	391069	<1	0.012	<0.2	150	11	1.91	530	18	48
758	SMG-29	GOP	40975	391074	1	0.013	<0.2	130	7	1.28	275	20	42
759	SMG-30	GOP	40976	391070	<1	0.014	<0.2	100	13	1.24	495	36	182
760	SMG-31	GOP	40957	391082	<1	0.014	<0.2	410	81	1.35	455	64	826
761	SMG-32	MYB	40954	391081	<1	0.015	<0.2	320	35	2.30	395	28	528
762	SMG-33	MYB	40957	391086	<1	0.020	<0.2	260	15	2.83	575	22	60
763	SMG-34	MYB	40951	391082	<1	0.028	<0.2	140	11	1.11	310	28	126
764	SMG-35	MYB	40953	391085	407	0.132	<0.2	6570	24	2.36	590	48	132
765	SMG-36	MYB	40954	391087	2	0.015	<0.2	340	15	2.48	310	48	70
766	SMG-37	MYB	40949	391083	1	0.025	<0.2	180	7	0.98	285	36	150
767	SMG-38	MB	40950	391086	<1	0.018	<0.2	260	8	1.28	230	30	110
768	SMG-39	MB	40952	391089	<1	0.028	<0.2	600	13	1.97	295	22	66
769	SMG-40	MYB	40948	391087	<1	0.016	<0.2	130	4	0.92	295	22	112