

Appendix 17 Assay Result for Mineral Separation Test

No.	Sample name	Au (g/t)	Ag (g/t)	Cu (%)	Fe (%)	As (%)	S (%)
1	T3-87.5	223.1	281	6.56	16.9	<0.01	2.76
2	C2-19.5L	137.7	12.9	0.69	14.85	<0.01	0.6
3	C2-19.8R	15.05	60.9	1.66	14.4	<0.01	1.55
4	Original ore minerals	20.3	16	0.98	17.2	<0.01	0.56
5	Heavy minerals	70.8	93	4.43	18.4	<0.01	2.01
6	Medium minerals	11.8	16	0.97	18.0	<0.01	0.58
7	Light minerals	6.0	10	0.34	16.9	<0.01	0.28
8	Slime	3.5	9	0.71	16.6	0.01	0.50
9	Concentrate	—	—	12.8	13.0	0.02	7.82
10	taling	1.1	2	0.01	10.2	<0.01	<0.02

Method : Au, Ag (fire assay) , Cu, Fe, As, S (ICP)

Appendix 18 Result of X-ray Diffraction Analysis for Mineral Separation Test

No.	Sample name	Bn	Cp	Qz	Ad	Hd	Amp	Cal	Sid	Ch
1	Heavy minerals	△	△	△	◎	○	△	△	·	·
2	Medium minerals			△	◎	○	△	△	·	·
3	Light minerals			◎	◎	○	○	△	·	△
4	Concentrate	○	◎	○	○	○	○	○	·	△
5	Taling			○	◎	○	△	△	·	·

Legend ◎ : Abundant, ○ : Common, △ : Poor, · : Rare

Ad : Andradite Cal : Calcite

Hd : Hedenbergite

Amp : Amphibole Ch : Chlorite

Qz : Quartz

Bn : Bornite

Cp : Chalcopyrite

Sid : Siderite

Appendix 19 Result of Modal Analysis for Mineral Separation Test

No.	Sample name	Ore minerals										Gangue minerals										
		Total	Mt	Hm	Py	Asp	Mc	Bn	Cp	Sp	Op	Qz	Ga	Cpx	Amp	Carb	Cal	Sid	Ilv	Ch	Se	Kf
1	Heavy minerals	Counting	1000	2						55	25		14	634	174	30		24	11	1	30	
		Mode(%)	100	0						6	3		1	63	17	3		2	1	0	3	
2	Light minerals	Counting	1000									6	52	347	347	73		87*			40	15
		Mode(%)	100									0	5	35	35	7		9		4	1	3
3	Concentrate	Counting	1000	1	1	3	1	1	111	139	3		14	294	175	37	196		1	23		
		Mode(%)	100	0	0	0	0	0	0	11	14	0		1	29	18	4	20		0	2	

Amp:Amphibole
 Asp:Arsenopyrite
 Bn:Bornite
 Cal:Calcite
 Carb:Carbonate
 Ch:Chlorite
 Cp:Chalcopyrite
 Cpx:Clinopyroxene
 Ga:Garnet
 Hm:Hematite
 Ilv:Illvaite
 Kf:K-feldspars
 Mc:Marcasite
 Mt:Magnetite
 Op:Opaque
 Py:Pyrite
 Qz:Quartz
 Se:Sericite
 Sid:Siderite
 Sp:Sphalerite

* Including calcite and other carbonates

Appendix 20 Result of EPMA Analysis for Mineral Separation Test

Mineral identification

Sample no.	Sample name	Analyzed domain	Analyzed element	Remarks
1	Heavy minerals	EI with Cp	Au , Ag , Cu	
2	Heavy minerals	EI with Bi	Au , Ag , Cu , Pb , Fe , Bi , Se , S	EI coexist with Bi and Clah
3	Concentrate	EI with Qz	Au , Ag , Si	Fine EI spots included in Qz
4	Concentrate	EI with Bi and Cp in Grd	Au , G , Cu , Fe , Ni , Co , Bi , As , S	
5	Concentrate	Grd and Hc in Cp	Cu , Fe , Ni , Co , Bi , As , S	Grd includes Bi

Bi : Bismuth , Clah : Clausthalite , Cp : Chalcopyrite , EI : Electrum , Grd : Gersdorffite (Ni,Co)AsS ,
 Hc : Hauchecornite Ni₉Bi₂S₈ , Qz : Quartz

Electrum (Au-Ag ratio)

Sample no.	Sample name	Weight (%)		Atomic (%)		Occurrence
		Au	Ag	Au	Ag	
1	Electrum in heavy minerals (1)	73.0	27.0	59.6	40.3	single grain , ϕ 180 μ m
2	Electrum in heavy minerals (2)	61.0	39.0	46.2	53.8	grain in Cp , ϕ 18 μ m
3	Electrum in heavy minerals (3)	56.1	43.9	41.2	58.8	grain in Bn , ϕ 13 μ m
4	Electrum in heavy minerals (4)	53.6	46.4	38.8	61.2	film along Ga , thickness 2 μ m
5	Electrum in heavy minerals (5)	70.3	29.7	56.4	43.6	grain in Ga , ϕ 12 μ m
6	Electrum in concentrate (1)	60.8	39.2	45.9	54.1	grain in Qz , ϕ 3 μ m
7	Electrum in concentrate (2)	72.1	27.9	58.6	41.4	grain in Qz , ϕ 12 μ m
Average		63.8	36.2	49.5	50.5	
Range		53.6~73.0	27.0~46.4	38.8~59.7	40.3~61.2	

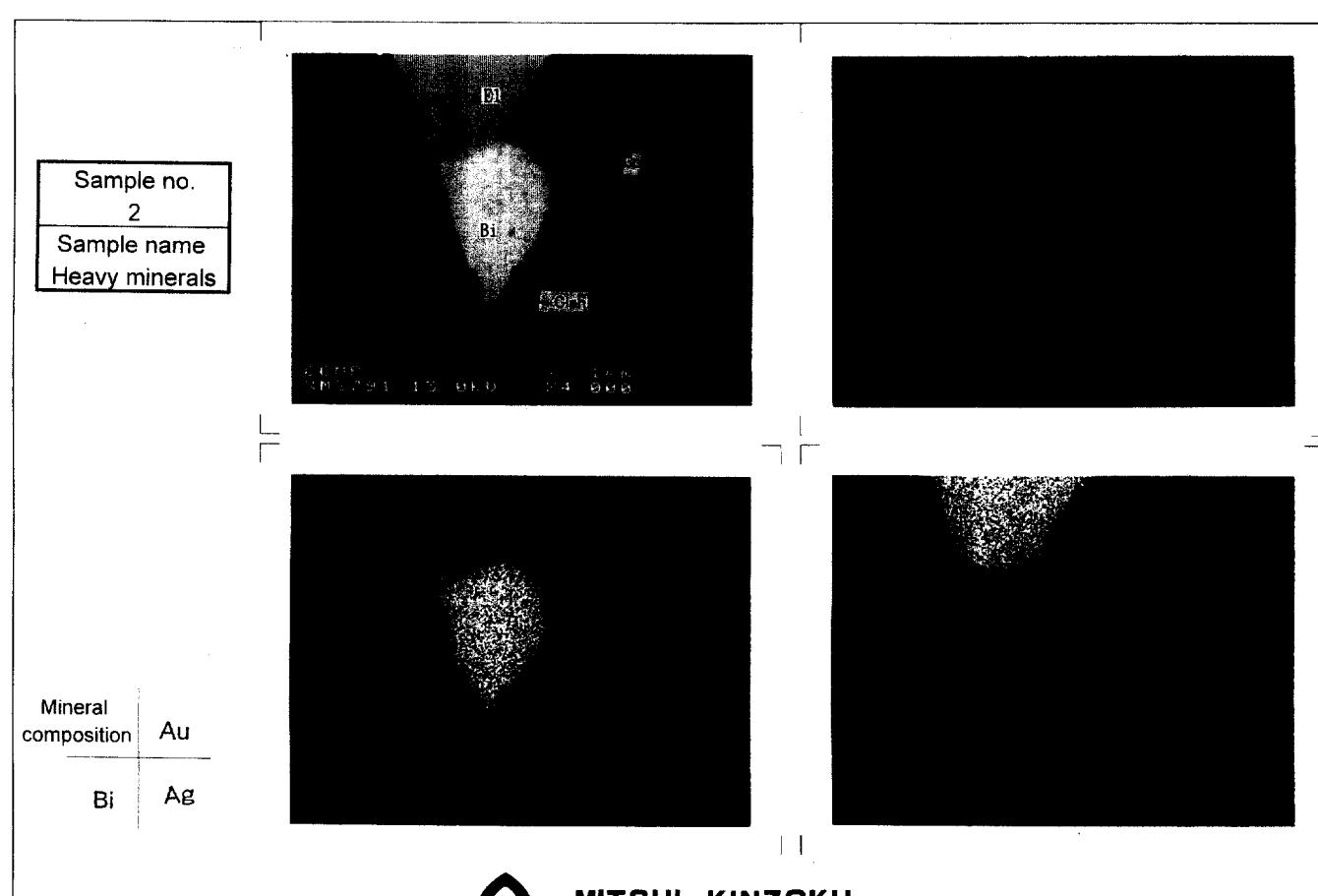
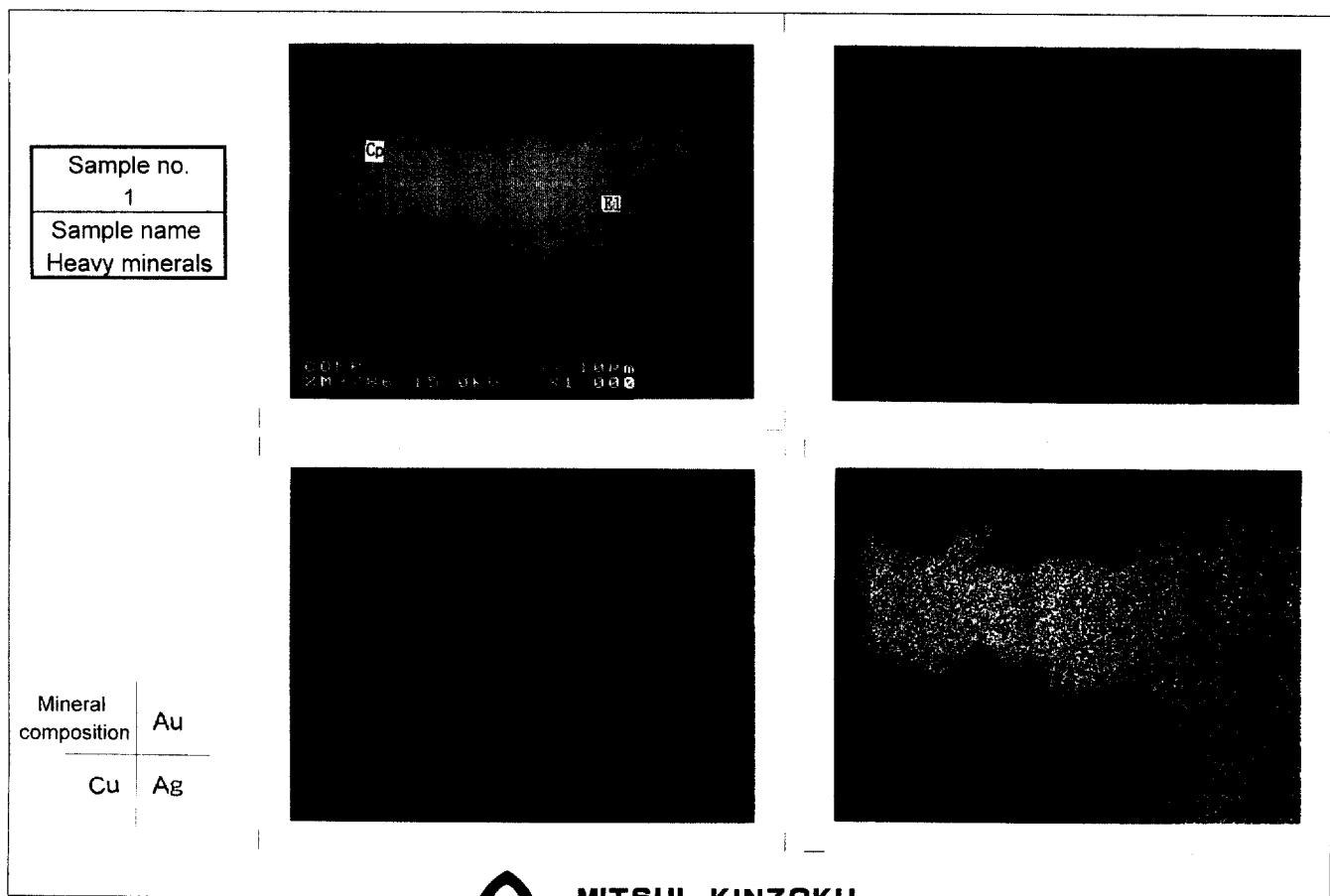
Appendix 21

Photomicrographs of EPMA Analysis for Mineral Separation Test

Abbreviations

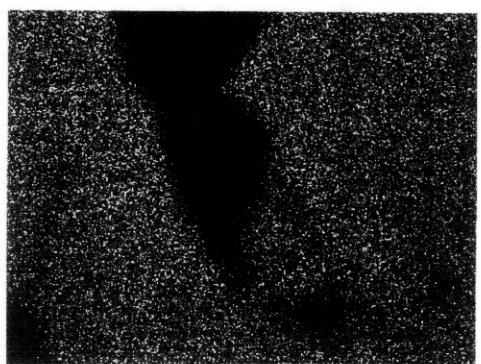
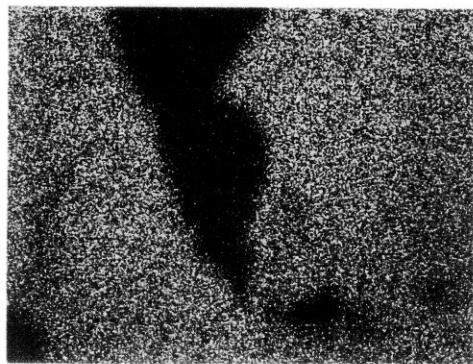
Bi	:Bismuth
Clah	:Clausthalite
Cp	:Chalcopyrite
El	:Electrum
Grd	:Gersdorffite (Ni,Co)AsS
Hc	:Hauchecornite Ni ₉ Bi ₂ S ₈
Qz	:Quartz

Appendix 21 Photomicrographs of EPMA analysis for Mineral Separation Test

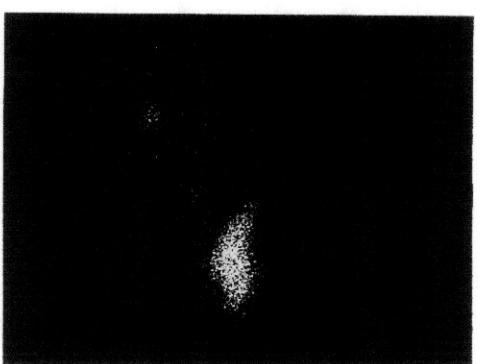


Appendix 21 Photomicrographs of EPMA analysis for Mineral Separation Test

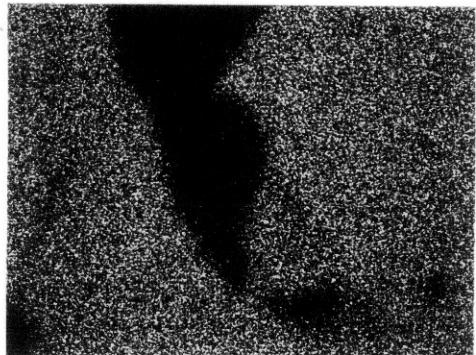
Sample no.
2
Sample name
Heavy minerals



Cu S
Pb Se



Sample no.
2
Sample name
Heavy minerals

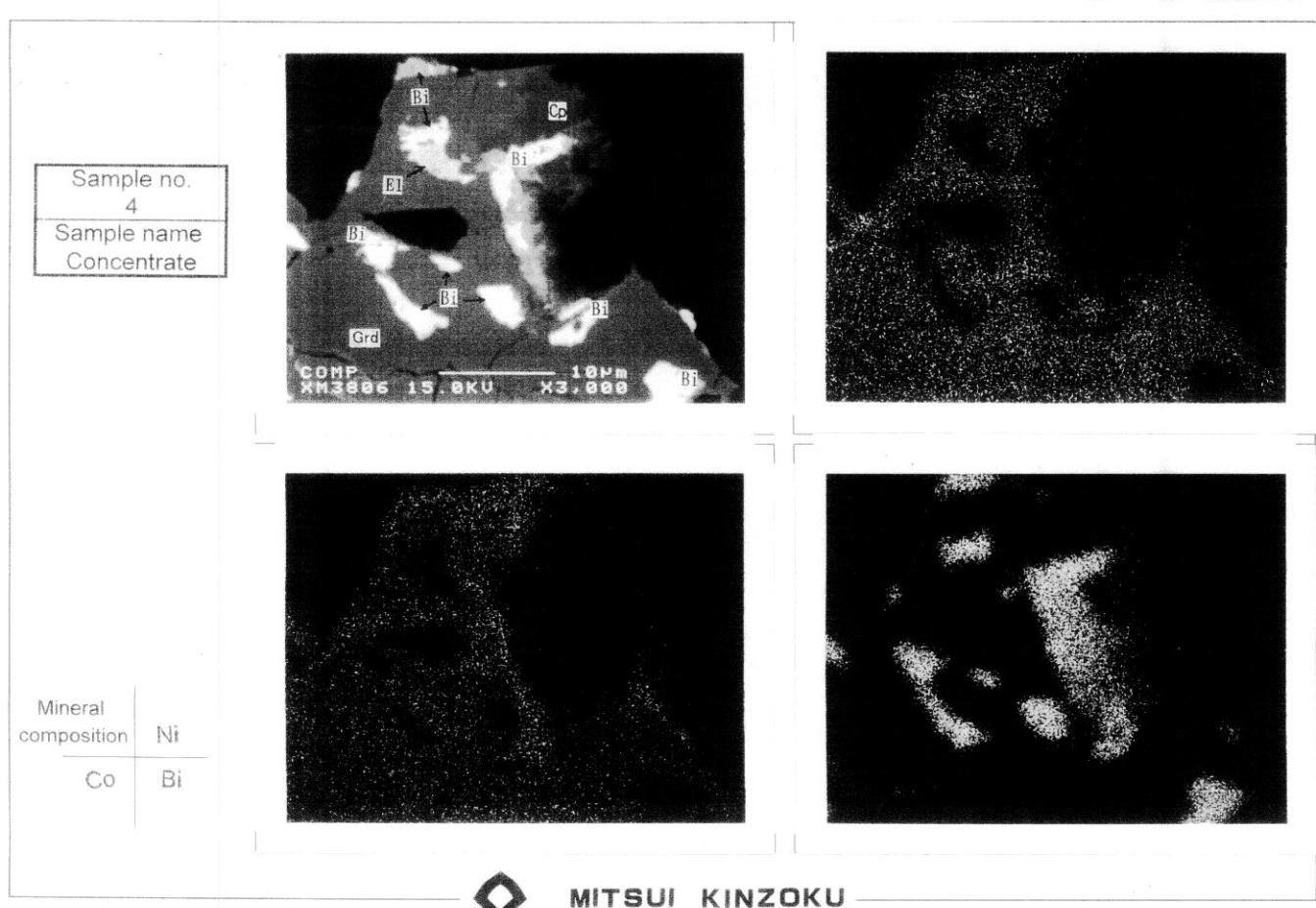
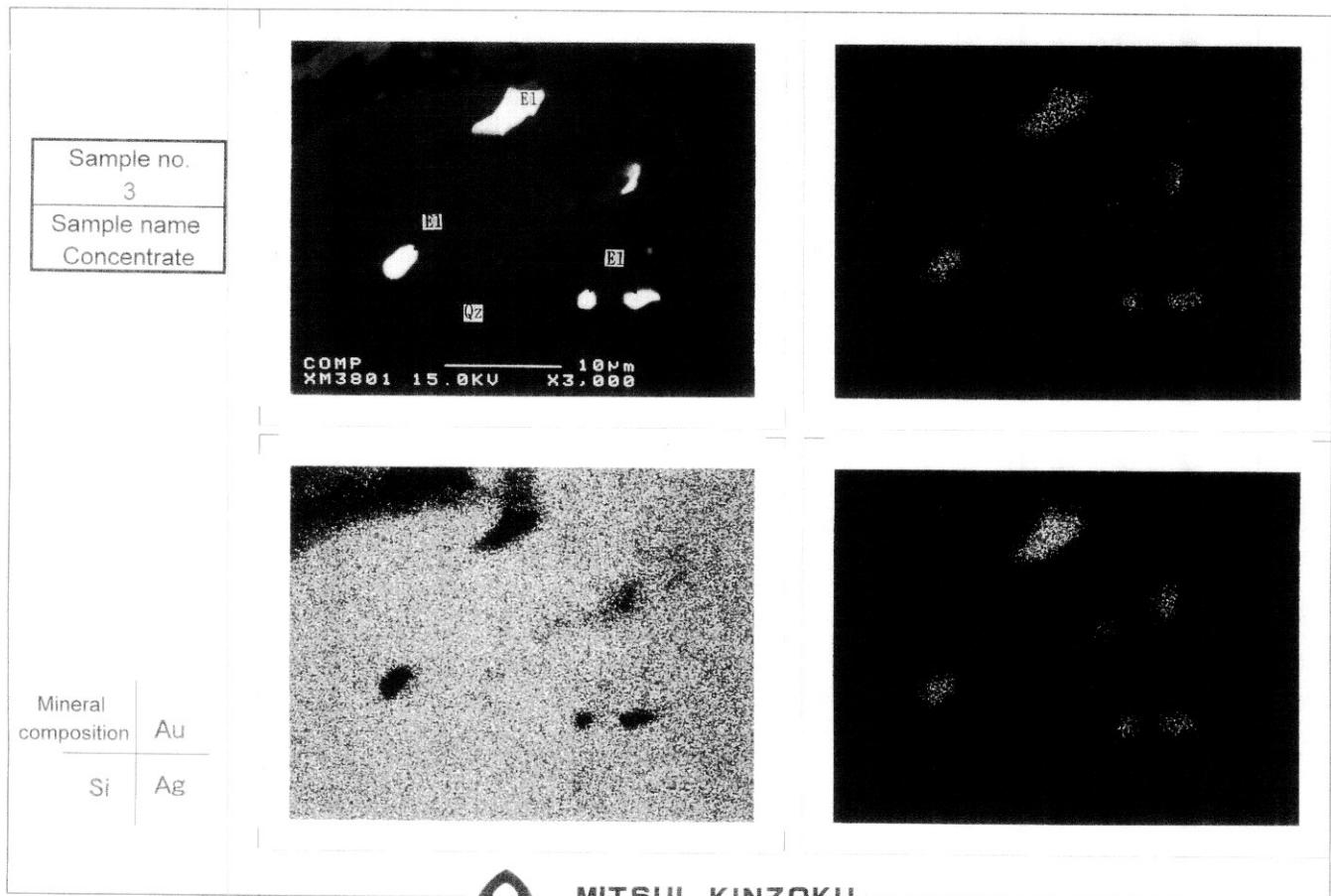


Fe



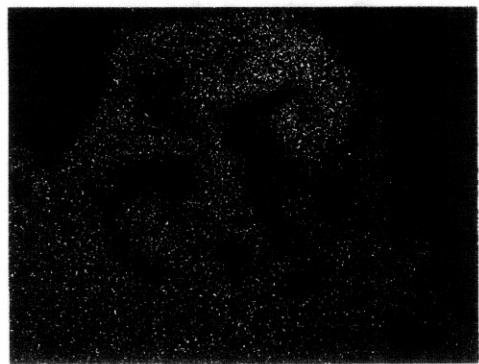
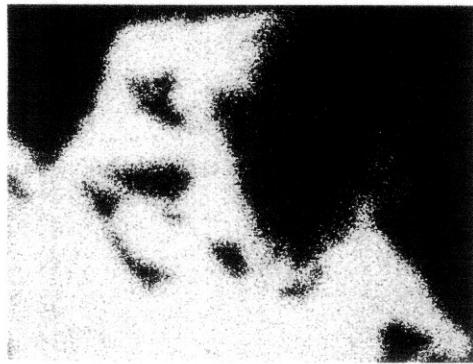
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Appendix 21 Photomicrographs of EPMA analysis for Mineral Separation Test

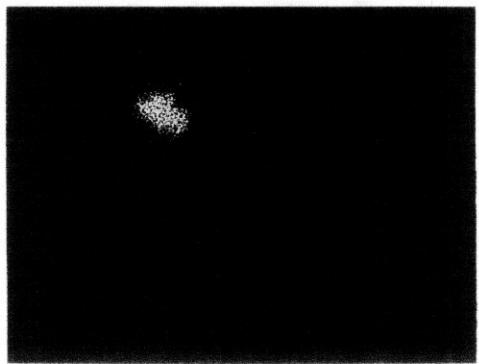
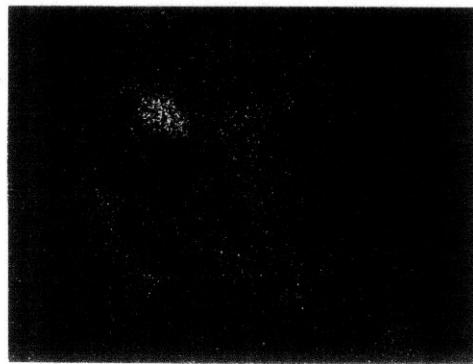


Appendix 21 Photomicrographs of EPMA analysis for Mineral Separation Test

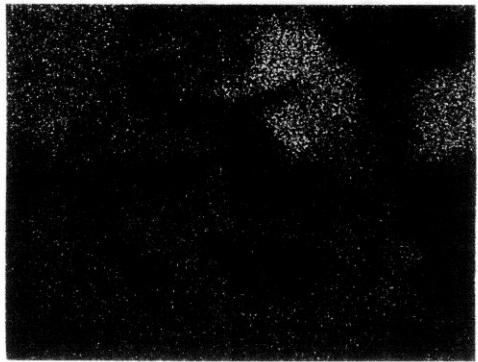
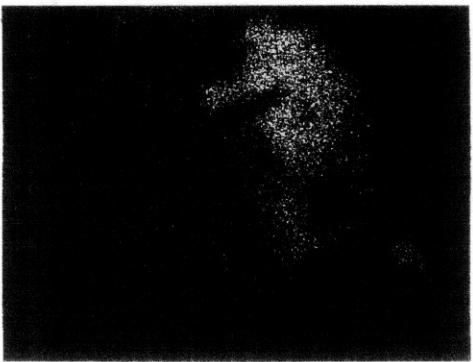
Sample no.
4
Sample name
Concentrate



As	S
Au	Ag



Sample no.
4
Sample name
Concentrate

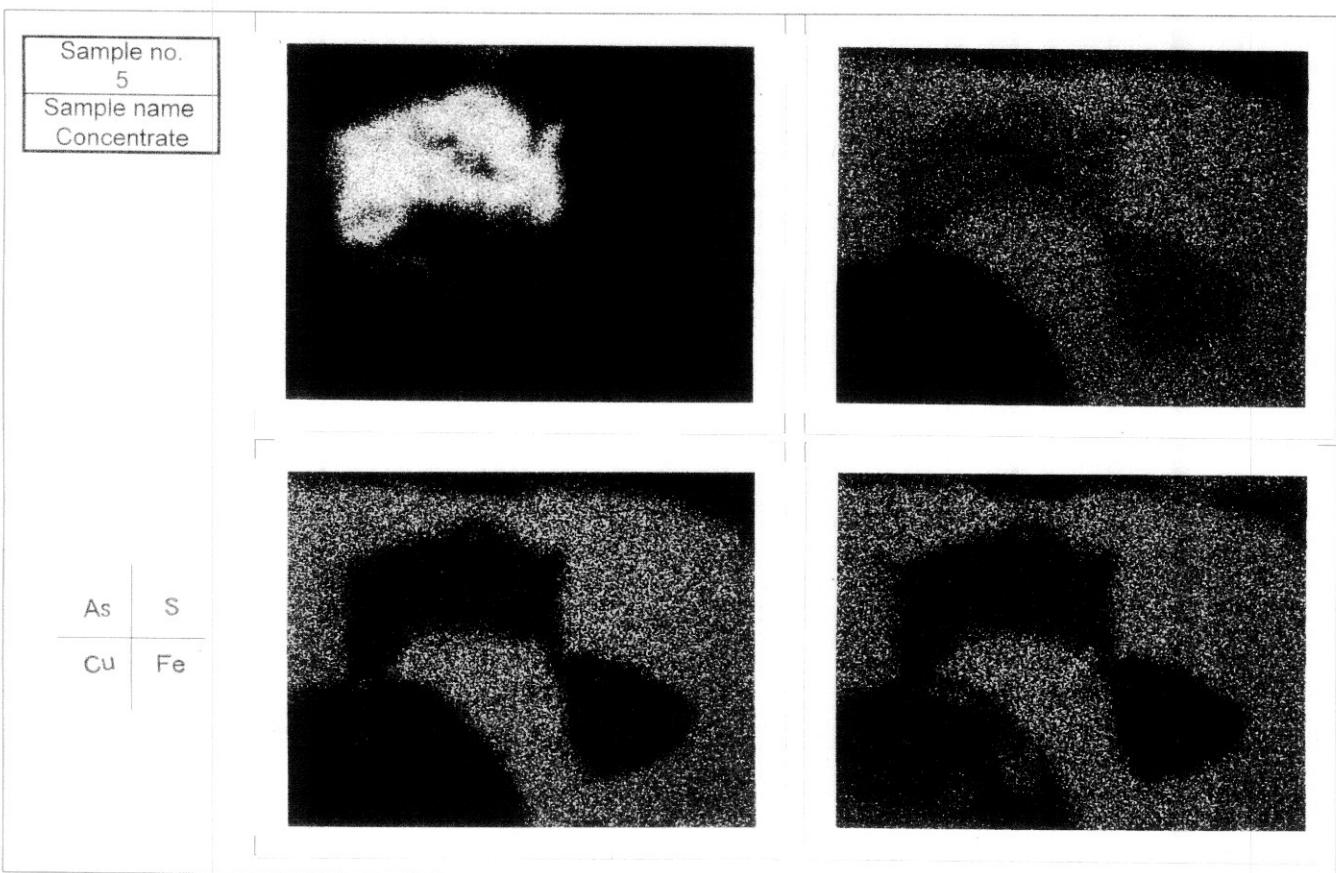
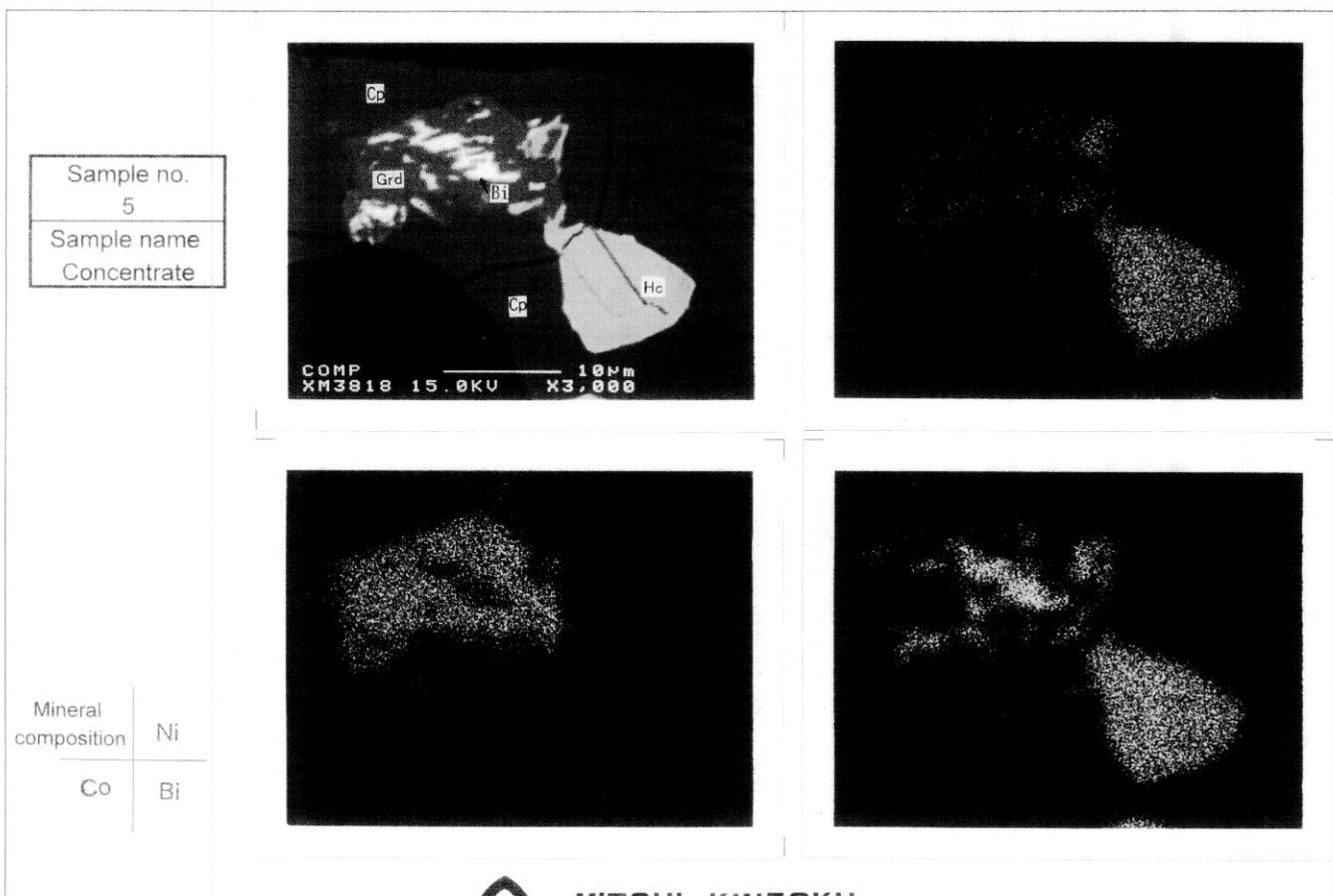


Cu	Fe
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Appendix 21 Photomicrographs of EPMA analysis for Mineral Separation Test



Appendix 22

Geologic Core Logs (MJK-A-14~18)

Abbreviations

alt	: altered/alteration	mdg	: medium grain
ap	: aplite	min	: mineral/mineralization
arg	: argillized/argillization	Mo	: molybdenite
Asp	: arsenopyrite	mzd	: monzodiorite
avg	: average	olv	: olive
blk	: black	O.C.	: open crack
brecc	: breccia/brecciated	p-	: pale
brn	: brown	para	: parallel
Ca	: calcite	pheno	: phenocryst
cly	: clay	Pl	: plagioclase
csg	: coarse grain	porph	: porphyritic
d-	: dark	Prh	: prehnite
dk	: dark	Px	: Pyroxene
diss	: disseminated/dissemination	Qv	: quartz vein
dr	: drusey	rd	: red
Fld	: feldspar	sh	: shear
fng	: fine grain	SJ	: shear joint
frac	: fracture	sid	: siderite
gb	: gabbro	sil	: silicified
Ga	: garnet	sk	: skarn
org	: grange	skd	: skarnized
gd	: granodiorite	slic	: slicken side
gdp	: granodiorite porphyry	v	: vein
gry	: grey	vl	: veinlet
Hb	: hornblende	wk	: weak
Imp	: lamprophyre	wht	: white
l-	: light	w	: width
limo	: limonite	w/	: with
Mt	: Magnetite	yel	: yellow
ma	: marble	z	: zone

GEOLOGIC CORE LOG OF MJKA - 14 (1/4)

1/200

Level 1867.1m Direction 300°
X(N) 2451.1m Inclination -70°
Y(E) 1370.6m Length 180.6m

MJKA - 14 **0.0 m - 50.0 m**

GEOLOGIC CORE LOG OF MIKA - 14 (2/4)

1 / 200

Level 1867.1m
X(N) 2481.1m
Y(E) 1370.6m

MJKA = 14 **59.9 m = 199.9 m**

GEOLOGIC CORE LOG OF MJKA - 14 (3/4)

MJKA - 14 100.0 m - 150.0 m

1/200

Level: 1557.1m Dip angle: 50°
Vertical: 1578.6m Inclination: 70°
Length: 150.0m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS	DEPTH (m)	SAMPLE #	ASSAY RESULT							LAB. TEST
					Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Se (ppm)	
100. M												100
101.	102.2	<40° 102.4-109.3 Ga-Px sk, mdg Px, minor Qz slicken 102.2-103.5 mdg Px sk Q v 2mm	102.2									101
102.	102.6	<40° 103.1 <60° 103.5-104.2										102
103.	103.1	<60° 103.5-104.2										103
104.	104.0	<40°-10 silt-Mt-Py-Ca Zone Silt-Sid: contact of Px sk, 2° w/Mt Px gr, banded Mt: dissemin. spots	103.5	A14007	0.6	-	15	<3	90	-	-	103.6
104.	104.2	<40° 104.2-105.4 Mt-Ga-Px sk, Mt: spots-dissem, minor felsic	104.2	A14008	0.8	0.3	90	30	150	7200	1500	1.5
105.	105.4	<? 105.4-109.1 l-gry wk alt Imp (candle like color) Hb d-grn, Fld remain, Hb grn max 3mm max 2mm	105.4	A14009	1.1	<0.1	70	3	300	1500	150	1.2
106.												105.7
107.												106
108.	106.2	<25° <0° <30° silt <30 silt zone	106.8	A14040	0.012	<0.3	50	7	50	-	-	5
109.	109.1	<30° 109.1-125.9 Px-Fld sk 109.1-112.7 Gx 30% 112.7-125.9 no Ga	107.4	A14041	-	-	70	5	40	-	-	3
110.	110.2	<30° Qz-Ca 3mm Qz-C a 3mm	108.4	A14042	0.012	-	50	7	30	-	-	4
111.	110.8	<30° 111.2-112.0 grn-l-gry all-skld Imp upper part porph remain porph lower part fng egulgranular texture remain, big phenoc few	109.1	A14043	0.012	-	30	7	40	-	-	4
112.	112.0	<25° 112.7-113.1 Asp-Qz v 1.5°	110.0	A14010	0.12	<0.1	30	5	120	-	-	2
113.	113.1	<40° 113.1-114.0 Asp-Qz v 1.5°	111.0	A14011	0.2	<0.1	70	15	200	-	-	3
114.	114.0	<40° 114.0-115.5 Asp-Qz v 1.5°	112.0	A14012	0.04	-	12	7	120	-	-	3
115.	115.1	<80° brn Ga-Qz v 0.4°	113.0	A14013	1.3	0.2	150	12	200	300	-	3
116.	115.5	<40° Asp-Qz v 1°	114.0	A14014	1.2	<0.1	90	30	200	1500	-	5
117.	115.9	<40° 116.6-117.4 l-blue feldspar like mineral Cav 0.5°	115.0	A14015	1.0	<0.1	70	15	200	2000	-	7
118.	116.6	<30° 116.6-117.4 l-blue feldspar like mineral Cav 0.5°	116.0	A14016	2.3	<0.1	30	5	300	200	-	5
119.	116.9	<10° 117.0 <?	117.0	A14017	0.9	2	12	5	150	-	-	9
120.	118.3	<50° 118.3-120.3 finer grain, less Fld	118.0	A14018	1.3	0.15	20	9	200	-	-	7
120.	118.8	<70° 118.8-120.3 rd-brn fng Ga (Imp) 10°	119.0	A14019	1.1	<0.1	30	5	150	-	-	7
121.	119.5	<?	120.0	A14020	1.7	0.15	50	12	150	700	-	7
122.	120.0	<40° 120.0-121.5 Asp-Qz v 4°	121.0	A14021	6.0	0.2	40	15	150	2000	-	7
123.	122.0	<50° dike porphyritic d-rd-brn	122.0	A14022	2.6	0.2	50	15	150	600	-	7
124.	123.7	124.2-133.2 Asp-Qz v 2-3mm 8/m	123.0	A14023	4.3	0.5	30	12	150	500	-	7
125.	124.7	<40° Asp-Qz v 2°	124.0	A14024	1.4	0.15	20	<3	120	-	-	3
126.	124.9	<40° 125.9-131.2 finer grain Fld-Px sk <30°-80° sh =± 1° w/Q v 1°	125.0	A14025	5.9	0.7	30	12	120	4000	-	9
127.	125.7	<40° Qv v 1°	125.9	A14026	4.4	0.5	15	7	70	-	-	15
128.	126.8	<40° 126.8-127.8 Asp-Qz v 2°	126.3	A14027	2.9	0.15	30	5	70	3000	-	12
129.	128.1	<50° Qz v 1°	127.0	A14028	2.8	0.15	30	15	200	-	-	9
129.	128.3	<40° Qz v 1°	128.0	A14029	2.7	0.15	15	7	90	-	-	12
130.	129.7	<10° slick	129.0	A14030	1.9	<0.1	<10	9	120	-	-	9
131.	131.2	<50° 131.2-134.2 wk skd gd Qz v 1° colored min-colonies min 131.8 <40° Qz v 1°	130.0	A14031	3.3	0.15	20	12	120	-	-	12
132.	132.2	<50° 132.2-132.3 Qz v 1°	131.0	A14032	1.6	<0.1	40	15	120	-	50	5
133.	132.3	<20° 132.3-134.7 shear crack z	132.0	A14033	2.5	0.3	30	12	90	-	-	30
134.	134.2	<(30°) 134.2-139 gd	133.0	A14034	1.4	<0.1	70	9	70	300	-	9
135.	135.0	<(30°) 134.2-181m ±<40° 1mm silt-Qz v 1/2cm	134.2	A14035	1.2	<0.1	30	15	30	300	-	15
136.	135.3	<20° Qz v 1°	135.2	A14044	0.5	<0.3	60	20	-	1200	-	7
136.	136.2	<45° Asp v 1mm 136.0-136.5 fng	136.2	A14045	0.9	<0.3	70	15	50	700	-	12
137.	140.5	<80° Qz v 1°	137.2	A14046	0.6	<0.3	30	20	50	500	-	13
138.												138
139.												139
140.												140
141.												141
142.												142
143.												143
144.												144
145.												145
146.												146
147.												147
148.												148
149.												149
150.												150

150.0m

GEOLOGIC CORE LOG OF MJKA - 14 (4/4)

1/200

MJKA - 14 160.0 m - 181.0 m

Level 1607.1m Direction 300°
X(18) 2261.1m Inclination -70°
Y(18) 1370.6m Length 160.6m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS	DEPTH (m)	SAMPLE #	ASSAY RESULT							LAB. TEST
					Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Sb (ppm)	
160.0												
161.0												
162.0												
163.0												
164.0												
165.0	155.0	<0° slick										
166.0												
167.0												
168.0												
169.0		<30° slick										
170.0												
171.0	161.0	<20° slick										
172.0	161.6	<20° slick										
173.0												
174.0	163.1	<60° 163.1~163.5 gry Imp porph Pl round 2-3mm max 1°, Qz 2mm										
175.0	163.5	<40°										
176.0												
177.0	165.2	<30° slick										
178.0												
179.0	168.6	<60° 168.6~168.9 Qv zone, sll 0.5° gry brn v										
180.0	168.8	<60°										
181.0	169.0	<55°										
182.0												
183.0												
184.0												
185.0												
186.0												
187.0												
188.0												
189.0												
190.0												
191.0												
192.0												
193.0												
194.0												
195.0												
196.0												
197.0												
198.0												
199.0												
200.0												

181.0m The End

T 179.7

F 180.7

E 180.7

S 181.1

GEOLOGIC CORE LOG OF MJKA - 16 (1/3)

1/200
Level: 1887.1m Direction: 300°
X(H): 2481.1m Inclination: 70°
Y(E): 1376.6m Length: 180.6m

MJKA - 16 0.0 m - 50.0 m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS	DEPTH (m)	SAMPLE #	ASSAY RESULT							LAB. TEST
					Al (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Sb (ppm)	
M	0.6	sand like core (wht ma)										0
M	1.7	sub round ϕ 5-6cm,(wht ma,gr&dk. gr alt (Hb,Ga) ma										1
M	2.0	\leq 60° 2cm gr Bi-Ga alt band										2
M	2.7	\leq 60° 5-15cm sub round ,brn-gry(Bt-Ga)....										3
M	3.1	\leq 60° brn-grey band										4
M	3.5	\leq 60°										5
M	4.4	4.4-4.8 \leq 0 O.C.										6
M	5.0	5.0-5.4 \leq 0-10° rd-brn Ga band 1.5°										7
M	5.7	\leq 30° 5.7-6.0 slicken side										8
M	7.0	\leq 30° rd-brn Ga band 1°										9
M	7.5	\leq 45° rd-brn Ga band 1°										10
M	7.8	\leq 10° rd-brn Ga+Ep band 1.5°										11
M	8.2	\leq 30° rd-brn Ga+Ep band 1.5° Max 3°										12
M	8.7	\leq 35° O.C. ma-imp contact no alt no min										13
M	9.0	Qz stringer										14
M	9.5	d-gry fng Imp,fresh phenoni Hb columnar± 4mm,>Qz 0.5-3mm >Bi ±2mm										15
M	11.3	\leq 50° l-gry-wht sphyric margin \leq 50° limo-Ca v 0.5°										16
M	12.9	\leq 30° slicken										17
M	13.5	\leq 10° O.C.										18
M	14.0											19
M	16.0											20
M	17.6	\leq 30° O.C.										21
M	18.2	\leq 10° O.C.										22
M	20.0	\leq 10° O.C.										23
M	21.35	\leq 60° dry Imp. 10cm Ga sk<Hb phrno,3cm Ga sk \leq 60° Ga vls, 20.5-20.6 \leq 0 malachite-limo vi										24
M	21.4	\leq 60° Ga vls, 20.5-20.6 \leq 0 malachite-limo vi										25
M	22.1	\leq 40° O.C.										26
M	22.5	\leq 45-55 grn-grey sknd 1-2°										27
M	23.0	\leq 30° dry Imp...non alt										28
M	23.4	\leq 35° yel-wht argillized,Ilmonet										29
M	23.8	\leq 5cm parallel Ca vts (slick)										30
M	24.0	\leq 60° limo v 0.3° wht arg.Imp 23.8-25.3 Ilmonet										31
M	24.8	\leq 40° wht clay (1°)										32
M	24.9	\leq 30° Ca-Limo v 0.3°										33
M	25.2	\leq 30° 26.1~26.2 wht ma										34
M	26.8	\leq 60° 26.8-27.2 slick wht alt vein 1°										35
M	27.4	\leq 30° 27.4 4cm ma band Cp,brn-rd oxide,rd-brn oxide										36
M	27.5	\leq 60° 27.5 +1° wht clay										37
M	27.7	\leq 60° 27.7-27.70 break off/Imp-ma-Cp										38
M	28.4	\leq 5° O.C.										39
M	29.1	\leq 60° O.C. limo										40
M	29.4	\leq 60° O.C. limo										41
M	30.3	\leq 45° O.C. limo v 0.5° (?)										42
M	30.7	\leq 30° O.C. limo										43
M	32.2	\leq 60° O.C. limo										44
M	32.7	\leq 60° slick										45
M	33.7	\leq 60° O.C.										46
M	35.2	\leq 60° 8.8										47
M	36.2	\leq 30° limo v 1mm 36.2~36.6 d-gryma										48
M	37.5	\leq 60° O.C.										49
M	38.4	\leq 40° slickbrecciation										50
M	39.5	\leq 60° slick 5 cm										51
M	39.9	\leq 30° s39.9~40.4 gry brn Ga-Bi										52
M	40.6	\leq 30° O.C. limo										53
M	41.1	\leq 60°										54
M	41.7	\leq 60° 41.4~41.7 rd-brn 41.7~6 cm silicons skn vein (skd Imp?) d-gry sphyric, Cp vi, rd-brn lower 4°										55
M	42.7	\leq 40° O.C. limo										56
M	43.2	\leq 60° O.C. limo 1 mm										57
M	43.3	\leq 60° O.C. limo										58
M	45.2	45.2 ϕ 2cm & ϕ 6cm fng rd brn Ga w/grn Px clots										59
M	49.7	\leq 40° wht clay \pm 1°										60

50.0m

GEOLOGIC CORE LOG OF MJKA - 15 (2/3)

1/200
Level 1857.1m
Y(N) 2461.1m
Direction 300°
Y(E) 1370.6m
Inclination -70°
Length 166.6m

MJKA - 15 69.0m - 100.0m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS	DEPTH (m)	SAMPLE #	ASSAY RESULT							LAB. TEST
					Al (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Sb (ppm)	
	50.3	<30° 44.5-50.3 dk colord-gry fng Cp diss-gm wht sk(imp?)	50.2	A15009	12.3	—	4000	14	11	—	—	4
	50.9	<20° O.C. limo	51.2	A15073	0.012	—	12	3	—	—	—	1.2
	51.4	<20° O.C. limo										
M	52.3	<10° O.C. limo										
M	53.0											
M	54.4	O.C. limo										
M	54.8	<35° 54.8-55.05 rd-brn sk zone	54.8	A15010	0.07	<0.1	50	43	Tr	—	—	1.5
M	55.3	<50° rd-brn sk stringers (<1mm) zone	55.05	A15011	0.03	—	50	3	Tr	—	—	1.5
M	55.6	<20° 55.3-55.5 3° sk zone										
M	55.8	55.3-57.0 1-gry sk zone (Bi-Ga)										
M	57.6	<20°										
M	58.3	<20° O.C. limo.										
M	58.8	<20° O.C.										
M	59.3	<10° slick										
M	59.9	<70°-80° slick 59.9-60.0..59.7-60.2 brecciated,-dr (sk) zone										
M	60.6	<30° l-gry (sk) zone 5°										
M	61.0	<20° slick										
M	61.3	<20° O.C. limo										
M	61.9	<30° O.C. limo										
M	62.1	<40° slick										
M	62.7	<10° slick										
M	64.1	<40° slick-breccia										
M	64.4	<20° curved slick										
M	66.7	<0°-5° 66.7-67.8 rd-brn,d-gry(skn)zone	66.7	A15074	0.05	0.5	300	4	30	—	<30	5
M	67.5	<0°-5° 67.5-67.8 d-gry fng sulphide stringers	67.8	A15012	3.2	0.2	90	5	150	—	—	120
M	67.8	67.8-67.8 gray porph imp, +1mm Ga net<70, rd-brn Ga v 2cm shear, Cu, limo Ga, shear 4cm brecc+clay (Cu, v limo) <40° color spots ave 2mm, matrix rd fng equigranular 1mm>	68.8	A15013	3.7	4	3000	5	150	—	50	1.5
M	68.5	<5° O.C. 5/20cm	69.8	A15075	0.6	<0.3	120	3	—	—	30	1.5
M	70.2	<10°-20° O.C. limo	71.0	A15014	0.07	<0.1	120	4	Tr	—	150	1.2
M	72.2	<20° 71.7-71.9 brecc 72.0-73.1 mdg px-Ca-sk	72.0	A15015	4.0	0.2	150	6	120	—	—	1.5
M	73.0	<20° 72.3 fissure	73.0	A15016	1.5	1.2	300	20	150	—	40	3
M	73.1	<35° 72.8-73.1 Ca-sk	75.0	A15017	0.9	1.5	200	9	150	—	90	2
M	73.9	<40° 73.1-(f)-74.1-(predatory)<3°,grn-gry pl.spotted skd	75.5	A15018	2.8	0.15	70	12	120	—	300	3
M	74.0	<10° 73.1-74.1(f)shd ⁵ limo powdery	76.0	A15019	6.2	0.15	120	7	300	—	70	1.5
M	76.2	<20° fsk-1° cal v	77.0	A15020	0.8	<0.1	90	3	150	—	—	1.5
M	75.7	74.2-74.4 rd-brn Px sk	78.0	A15021	28.7	9	40	3	150	—	—	1.2
M	76.4	<5° 75.2-75.7 px sk	78.9	A15022	1.5	0.2	500	40	200	—	—	3
M	76.9	<20° 75.7-77.3 brn Mt Ga sk & Px sk	80.1	A15023	1.6	0.15	400	3	150	—	—	1.2
M	77.8	<20° 77.3-78.9 Mt-Px sk	82.4	A15024	3.1	0.4	300	7	300	—	—	1.2
M	78.0	<40° 77.3-77.6 cag 77.6-78.9 mdg	82.4	A15025	1.6	0.5	400	3	300	<30	1.2	
M	78.9	<20° 78.9-80.1 Mt-Px-Ga sk Ga,fng(skd like mostly 20, Cp)	82.7	A15026	1.0	<0.1	15	4	30	150	—	15
M	79.5	<30° 79.4-79.5 grn-gry,eqigranular<1mm texture	84.0	A15027	0.09	<0.1	90	9	70	—	—	5
M	80.1	<20° 80.1-82.4 Mt-fng Ga -mdg Px sk	85.0	A15028	0.07	<0.1	90	12	120	—	—	3
M	82.4		86.5	A15029	0.04	—	70	9	90	—	—	7
M	82.7	<30° 82.4-82.7 Q w/Px big crystals f. grn-gry aphyric(sil?), few cm	87.5	A15030	1.6	0.15	120	5	150	—	—	3
M	83.0	82.7-86.5 gray porph mdg imp,weak alt	88.5	A15031	1.5	<0.1	90	200	200	3000	—	2
M	83.1	82.7-82.4,fng gradually change into mdg	89.0	A15032	1.3	<0.1	50	7	200	—	—	2
M	83.4	86.4-86.5 fng fng part<10 w=5° Qvls 30-40 ±1mm	90.0	A15033	2.6	0.12	30	7	120	—	—	3
M	86.5	grn-grn aphyric	91.0	A15034	1.8	0.15	70	4	150	400	—	4
M	86.5	<20° 86.5-89.0 (skd gabbro) Ga =Px-fld sk, Q vls <60 1mm~1/10cm Asp>Cp occasionally igneous texture remain	92.0	A15035	3.1	0.12	30	5	150	300	—	3
M	87.5	<20° 89.0-90.5 mdg fng Q,vis <1mm/cm	92.6	A15036	3.4	0.12	200	30	400	2000	—	12
M	88.6	<40° slick 0.5 cal	93.6	A15037	1.5	0.15	90	20	120	4000	—	120
M	89.0	<20° 89.0-90.6 fng Px sk Q(Asp-Cp)v. ±1mm/S ⁵ sh ~2cm d-gry cataclase filled with cal	94.2	A15038	3.2	0.15	40	9	120	120	—	5
M	89.3	<10° 90.0 gd texture	94.9	A15039	2.4	0.12	120	4	Tr	2000	<30	9
M	90.8	<60° l-rd-brn,skd-sil fng alt	95.6	A15040	7.5	0.9	150	7	90	900	—	9
M	91.0	91.0-91.4 0.1-0.4 >0 l-grn sil v	96.6	A15041	3.4	3	700	40	120	700	—	9
M	92.6	<20° reaction rim <2°	97.6	A15042	4.6	12	7000	9	200	—	70	5
M	93.4	92.6-93.7 skd gdp fng Q,vls ±1mm/cm Same as MJKA-14 131.2>	98.6	A15043	3.3	<0.1	90	4	200	300	—	7
M	94.2	93.7-94.2 grn Px sk	99.6	A15044	2.1	0.3	70	5	200	200	40	5
M	94.3	94.2-94.4 dry-whit shear alt skd fng d-gry 1-2mm grn-clay min-SMn,72cm aphyric vls 94.25-94.35 shear argillized	100.6	A15045	1.4	<0.1	90	4	200	—	—	5
M	95.1	95.1-95.6 fng Px sk -Ga sk, many Qz vls <50°										
M	95.6	95.6-95.8 (skd) mdg gd										
M	95.9	95.9-96.4 fng Px sk (skd igneous rock)										
M	96.0	95.9-98.2 96.0-98.2 many Qvls 0.1-0.5/4cm(Cp>Asp)										
M	97.0	<60° l-rd-brn gray fng alt alt rock										
M	97.7	<40° 98.2-101.1 1mm Q-Asp-Po (Cp>>Bo),5-10/m										
M	99.4	99.4-101.2 grn-gry fng Px sk (Imp?)										
100	100.0	100.0-100.6										

GEOLOGIC CORE LOG OF MJKA - 18 (3/3)

1/200

Level 1867.1m
X(N) 2481.1m
Y(E) 1376.8m

Direction 300°
Inclination -70°
Length 160.6m

MJKA - 18 100.0m - 150.6m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS	DEPTH (m)	SAMPLE #	ASSAY RESULT							LAB TEST
					Al (ppm)	As (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Sb (ppm)	
100.												100
101.	101.2	<50° 101.2-111.0 skd mdg gd	100.6	A15045	1.4	<0.1	90	4	200	-	-	5
102.	101.6	<20° 101.6-102.2 f shear, slicken	101.2	A15046	1.7	0.12	300	4	150	-	-	5
103.		101.6-109.0 grn-gry-l-grn Igneous texture remain Qz vis <60° 0.1-0.5°	102.0	A15047	1.0	0.15	90	5	150	-	-	5
104.			103.0	A15048	1.2	0.15	150	9	120	-	-	5
105.	104.5	<30° silc Ca v 2mm	104.0	A15049	0.15	0.15	150	9	120	-	-	4
106.			105.0	A15050	0.5	0.2	120	5	150	-	-	3
107.	107.1	<30° sk=1°, brec, llmo	106.0	A15051	0.09	<0.1	90	5	120	-	-	3
108.			107.0	A15052	0.5	0.12	50	5	120	-	-	9
109.	108.0	<70° 109.0-111.0 wt-p-grn wht skd mdg gd	108.0	A15053	0.9	<0.1	40	5	120	-	-	5
110.		109.2-110.4 <20-50 o.c.many	109.0	A15054	1.6	0.15	30	7	120	-	-	3
111.	111.0	<10° O.C. 111.0-123.0 gdp (pl pheno..)many Qz vis <40-70 <50 common, w=0.1-1%/cm,l-grn-wht all along Qv	110.0	A15055	0.6	0.15	70	12	90	-	-	3
112.			111.0	A15056	0.8	<0.1	120	20	90	-	-	9
113.			112.0	A15057	0.5	0.12	50	12	150	1500	-	4
114.			113.0	A15058	1.8	0.3	50	30	30	200	-	40
115.		115.5-119.3 crack llmo	114.0	A15059	0.15	0.12	50	15	120	-	-	7
116.			115.0	A15060	0.07	0.12	70	30	90	-	-	12
117.			116.0	A15061	0.07	<0.1	70	20	50	-	-	12
118.			117.0	A15062	0.12	0.12	30	15	120	-	-	5
119.	118.0	<10°	118.0	A15063	0.5	0.12	90	30	40	-	-	12
120.			119.0	A15064	0.7	0.12	40	15	120	-	-	7
121.			120.0	A15065	0.09	0.15	70	30	150	-	-	7
122.			121.0	A15066	0.05	0.12	50	15	120	-	-	7
123.	123.0	<50° 123.0-150.5 fresh mdg gd Asp-Qz-(Mo)-(Cp) vis <1mm/.4cm	122.0	A15067	0.6	<0.1	20	30	40	-	-	9
124.			123.0	A15068	0.3	<0.1	90	12	90	150	-	3
125.			124.0	A15069	0.6	<0.3	50	15	40	150	-	9
126.												F
127.	126.7	<20° O.C.										126
128.												127
129.												128
130.												129
131.	130.5	<30° sh=1°,slicken										130
132.	131.3	<40° sh<1°,sandy-like										131
133.	132.0	<45° slicken										132
134.	133.3	<30° sh=0.3°, wht clay/slicken										133
135.	134.3	<50° slicken										134
136.		134.3-142.3 5~10slickenside/m <40										135
137.			136.2									136
138.	136.0	<30° Sh=7, sandy-like	137.2	A14048	0.6		30	20	50	500	13	137
139.	139.5	<20° sh=7, wht cly										138
140.												139
141.												140
142.	142.3											141
143.												142
144.												143
145.												144
146.	145.6	<25° 145.6-147.0 Bi-Qz-Hb Imp, fresh, mdg, l-grn no marginal facies(reaction rim)	145.4									145
147.	147.0	<30°	146.4	A15077	0.6	0.3	50	12	50	120	-	12
148.	148.0	<40° 148.0-148.5 gray fmg Imp, round Pl <1mm chilled margins gray-grn aphyric w=2mmx2	147.4	A15078	0.7	0.3	70	15	70	120	30	9
149.	148.6	<45°	148.4	A15079	0.6	<0.3	50	20	60	-	-	4
150.			149.4	A15080	0.02	-	30	20	40	-	-	4
151.			150.4	A15081	0.07	<0.3	70	20	40	-	-	7
152.			150.5									150

150.6m

GEOLOGIC CORE LOG OF MJKA - 16 (1/5)

1/200

17200

MJKA- 18 **0.0 m - 50.0 m**

LITHOLOGY	DEPTH (m)	DESCRIPTIONS	DEPTH (m)	SAMPLE #	AN (ppm)	AP (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Se (ppm)	Mo (ppm)	LAB TEST
M													
M	9.3	≤40° rd-brn layer,(Cp disse)	9.0										
M	10.0	A16053 - - 20 3 - - -	10.0	A16053	-	-	20	3	-	-	-	-	
M	11.0	A16054 - - 15 3 - - - 5	11.0	A16054	-	-	15	3	-	-	-	5	
M	12.0	A16055 - - 20 5 - - - 1.2	12.0	A16055	-	-	20	5	-	-	-	1.2	
M	17.05	17.05~17.4 Irregular rd-brn layer	16.8										
M	17.3	A16001 - <0.1 12 7 - - - 2	17.3	A16001	-	<0.1	12	7	-	-	-	2	
M	19.55	≤8° 19.55~20.0 O.C.	20.0										
M	20.5	≤0° 20.5~20.65 Cp v, 1-2mm	21.0	A16056 0.012 - 120 4 - - - 2	21.0	A16056	0.012	-	120	4	-	-	2
M	22.0	A16057 0.012 - 20 3 - - - 1.2	22.0	A16057	0.012	-	20	3	-	-	-	1.2	
M	22.6	A16058 0.012 - <3 40 - - - 2	22.6	A16058	0.012	-	<3	40	-	-	-	2	
M	23.8	A16059 0.012 <0.3 40 12 40 9000 <30 1.2	23.8	A16059	0.012	<0.3	40	12	40	9000	<30	1.2	
M	24.3	A16002 0.03 0.9 400 7 40 - - - 15	24.3	A16002	0.03	0.9	400	7	40	-	-	15	
M	25.3	A16060 0.02 - 40 4 - - 900 - 3	25.3	A16060	0.02	-	40	4	-	900	-	3	
M	27.2	≤30° 27.2~27.9 grn skd dike, f-mdg, dioritic texture remain abundant ffd minor Ep rd-brn Ga v 0.5-2cm para (Cp spots), w=30cm	27.2										
M	27.9	A16003 0.012 0.3 400 40 70 - - - 5	27.9	A16003	0.012	0.3	400	40	70	-	-	5	
M	28.9	A16061 0.012 <0.3 150 4 30 - - - 1.2	28.9	A16061	0.012	<0.3	150	4	30	-	-	1.2	
M	29.6	A16062 - - 30 5 - - - 7	29.6	A16062	-	-	30	5	-	-	-	7	
M	30.1	A16004 0.5 0.9 500 3 120 - - -	30.1	A16004	0.5	0.9	500	3	120	-	-		
M	31.1	A16063 0.012 - 20 5 - - - 2	31.1	A16063	0.012	-	20	5	-	-	-	2	
M	32.3	A16064 - <0.3 150 5 40 4000 - 1.6	32.3	A16064	-	<0.3	150	5	40	4000	-	1.6	
M	33.3	A16005 0.04 0.12 <10 3 - 500 - - -	33.3	A16005	0.04	0.12	<10	3	-	500	-	-	
M	34.3	A16006 - - 12 3 - - - 5	34.3	A16006	-	-	12	3	-	-	-	5	
M	35.9		35.9										
M	36.9	A16007 0.5 0.5 300 <3 150 - - - 1.6	36.9	A16007	0.5	0.5	300	<3	150	-	-	1.6	
M	37.3	A16008 0.05 0.3 150 <3 120 - - - 2	37.3	A16008	0.05	0.3	150	<3	120	-	-	2	
M	39.8		39.8										
M	40.6	A16009 - 0.15 50 <3 120 - <30 1.2 40.3	40.6	A16009	-	0.15	50	<3	120	-	<30	1.2	40.3
M	44.6		44.6										
M	45.4	A16010 0.02 0.12 70 <3 39 - - - 2	45.4	A16010	0.02	0.12	70	<3	39	-	-	2	
M	46.3	≤25° 46.3~46.4 20~40 open crack/2cm											
M	48.0	≤10° 48.0~54.0 fng grn skd dike Igneous texture	48.0										
M	48.4	A16011 0.07 0.15 150 <3 90 - <30 1.2	48.4	A16011	0.07	0.15	150	<3	90	-	<30	1.2	
M	49.0	A16012 0.03 0.12 120 <3 200 - - - 1.2	49.0	A16012	0.03	0.12	120	<3	200	-	-	1.2	
M	50.0	A16013 0.2 0.9 500 5 150 - - - 1.5	50.0	A16013	0.2	0.9	500	5	150	-	-	1.5	

GEOLOGIC CORE LOG OF MIKA - 16 (2/5)

1/200

1/200

GEOLOGIC CORE LOG OF MJKA - 18 (3/5)

MJKA - 16 100.0 m - 150.0 m

1/200
Direction -
Inclination -90°
Length 200 cm

GEOLOGIC CORE LOG OF MJKA - 16 (4/6)

MJKA - 16 160.0m - 200.0			ASSAY RESULT								1/200		
LITHOLOGY	DEPTH (m)	DESCRIPTIONS	DEPTH (m)	SAMPLE #	AU (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Sb (ppm)	Mo (ppm)	LAB. TEST
160.	150.4	<30° Ca, 1cm, dr, slick, shear plain <70-80° w/wht clay 1mm~1.5cm/every 5~10 cm Ca, 2cm	151.0	A16083	0.3	-	70	5	-	300	-	9	160.4 arg gdr
161.	151.0	<30°	152.0	A16084	1.1	-	50	5	-	700	-	30	161
162.			153.0	A16085	0.5	<0.3	70	15	40	3000	-	9	162
163.	152.7	<45° 152.7-153.0 shear zone, f brec, w/Asp-Ca-Qz v, 0.2-1cm,shear blk											163
164.		153.0-156.8 wk sheared with d-grn cataclasite v: Fld untransparent wht alt											164
165.	155.4	<80° 155.4 shear - brecciated & solidified, grn	159.0										165
166.	155.7	<80° 155.7 shear-brecciated & solidified, grn net 4cm											166
167.	155.9	<45° 155.9 grn cataclasite v 2cm											167
168.	156.8	<20° 156.8-161.3 < 40° sll max 4cm or Q v zone											168
169.		156.8 sll v 2cm											169
170.		157.4-157.8 wk sll z, l-gry											170
171.	159.7	<40° 159.7 Asp-Qz v 0.5cm	160.0	A16086	0.12	<0.3	70	12	40	200	-	15	171
172.		Asp spots Qz v 0.5cm	161.0	A16087	0.2	<0.3	90	15	50	150	-	12	172
173.	161.3	<40° 161.3~ Qz vls.....	162.0	A16088	0.9	<0.3	90	15	30	300	-	30	173
174.		Asp-Qz v 2mm	163.0	A16089	0.12	<0.3	120	15	30	150	<30	9	174
175.	164.1	<10° bright grn v 2mm											175
176.													176
177.	166.3	<30° Asp-Qz -(Cp) 0.5°	166.0										177
178.	167.3	<20° wht granule siltite Asp-Qz v 0.5cm cut by 1cm Ca v <10°	167.0	A16090	0.09	-	90	20	40	-	-	12	178
179.			168.0	A16091	0.5	<0.3	90	20	-	1500	-	12	179
180.	168.3	<40° slick											180
181.													181
182.													182
183.													183
184.													184
185.													185
186.													186
187.													187
188.													188
189.	188.8	<30° Asp-Qz v 1mm	188.6										189
190.	189.2	<40° Asp-Qz v 1cm	189.6	A16094	0.2	<0.3	30	15	40	400	-	12	190
191.			190.6	A16095	0.012	-	50	12	40	-	-	9	191
192.													192
193.													193
194.													194
195.													195
196.													196
197.	196.0	<10° slick											197
198.	197.6	<30° slick gouge 1mm	198.0										198
199.	198.3	<40° Asp aggregate w/Py?-Qz v 1.5 cm	199.0	A16096	0.03	-	70	15	30	5000	-	15	199
200.													200

200.0 m

GEOLOGIC CORE LOG OF MJKA - 16 (5/5)

MJKA - 18 299.9m - 298.9

1/200

Level 1858.6m X(N) 2373.7m Y(E) 1336.0m

GEOLOGIC CORE LOG OF MJKA - 17 (1/4)

1/200

Level 1858.8m X(N) 2373.7m Y(E) 1335.0m Direction 300° Inclination -60° Length 161.0m

MJKA- 17 **0.0 m - 50.0 m**

GEOLOGIC CORE LOG OF MJKA - 17 (2/4)

MJKA - 17 **50.m - 100.0m**

1/200
Direction 300°
Inclination -50°
Length 181.0m

GEOLOGIC CORE LOG OF MJKA - 17 (3/4)

1/200

Level 1888.8m Direction 300°
X(N) 2373.7m Inclination -20°
Y(E) 1333.0m Length 161.0m

MJKA - 17 100.m - 160.0m

LITHOLOGY	DEPTH (m)	DESCRIPTIONS	DEPTH (m)	SAMPLE #	ASSAY RESULT								LAB TEST
					Au (ppm)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Sb (ppm)	Mn (ppm)	
100.	100.4	shear, wht clay, Qz-Asp v. 1mm	101.2	A17030	0.7	<0.1	15	12	30	5000	-	15	100
	100.7	100.7~100.95px breccia, wth clst, z, blk sulphide vis	101.1	101.1	Qz-Asp-(Py? Or Cp) v. 2°								101
102.	102.5	Asp-(Py or Cp) stringer 1mm	102.2	A17031	0.7	<0.1	70	15	50	3000	-	12	102
103.	103.2		103.2	A17032	1.1	<0.1	50	15	50	4000	-	9	103
104.	104.2		104.2	A17043	0.5	-	20	7	-	500	-	2	104
105.													105
106.	106.0												106
107.	106.6	106.6~107.2 wht, Qz-Asp(Px or Cp) v 1mm	107.0	A17044	0.4	<0.3	50	20	30	500	-	4	107
	106.8	sllicken, weak brec crack z 2°											
	107.2	grn fine net											
	107.5	<107.5~127.3 fresh gdp, similar MJKA-16 180.1-190.2											
108.	108.5	Asp -	108.0	A17045	0.4	-	150	9	-	300	<0.3	-	108
	108.5	<30° grn fine net											
109.	109.0	grn Qz v 2mm	109.0	A17046	0.09	-	30	5	30	120	-	2	109
110.													110
111.													111
112.													112
113.													113
114.			114.0										114
115.	115.8	sllicken little grn (Asp) & Py or Cp? dissezn along the fissure Asp - Cp - Qz v1 -1mm	115.0	A17047	0.09	<0.3	70	9	40	-	-	7	115
116.			116.0	A17048	0.2	<0.3	70	12	30	150	-	5	116
117.			117.0	A17049	0.05	<0.3	30	5	30	150	-	5	117
118.			118.0	A17050	0.3	<0.3	300	30	50	-	-	5	118
119.			119.0	A17051	0.2	<0.3	20	7	30	-	-	3	119
120.	120.0	Asp - Cp - Qz v1 -1mm	120.0	A17052	0.09	<0.3	30	7	40	500	-	5	120
121.	121.0	Asp - Qz v1 -1mm	121.0	A17053	0.03	-	50	9	-	-	-	3	121
122.			122.0	A17054	0.4	<0.3	70	12	50	200	-	12	122
123.													123
124.													124
125.													125
126.													126
127.	126.8	126.8 <30° whtz w=10° 127.3 - 134.3 fresh transparent grn gdp	128.0										127
128.	128.8	po - Mt? -Qz 3mm	129.0	A17055	0.3	<0.3	120	20	30	200	-	5	128
129.			130.0	A17056	0.15	<0.3	50	12	30	200	-	5	129
130.			131.1	A17057	0.07	<0.3	30	15	30	500	-	4	130
131.	131.3	Py? Asp (fng Po color, non magnetic)>> Cp v. 1mm +2mm	131.3	A17058	0.09	<0.3	30	15	70	3000	<0.3	4	131
132.	132.3	Qz - Prh - Asp v. 2mm	132.0	A17058	0.09	<0.3	70	15	70	3000	<0.3	4	132
	132.4	Qz - Asp - Cp v. 0.5mm											
133.			133.0	A17059	0.012	-	20	12	70	200	-	5	133
134.		134.3-138.0 arg. (all)											134
135.	135.0	sllicken											135
136.	135.8	l-gry-grn sill (same as 76-77m)											136
	136.5	135.9 slick, wht cly, w=?											
	136.5	136.6 Qv 0.5° sllicken											
137.		136.0-142.0 fresh grn gdp											137
138.	138.8	138.8~141.0 ± 40 slicken 4/m											138
139.													139
140.	140.6	Qz - Px - Cp v. 1mm	141.0	A17060	0.05	-	70	9	30	-	-	3	140
141.													141
142.		142.7 - 151.1,fresh,Fld slightly wht											142
143.													143
144.			144.0										144
145.	144.9	Py - Qz v. 1mm	145.0	A17061	0.5	-	70	9	30	200	-	5	145
146.			146.0	A17062	0.02	-	30	12	30	150	-	9	146
147.	146.9	146.95 blk porph imp 5°	147.0	A17063	-	-	50	15	40	120	-	5	147
	147.4	146.9 sand like											
148.	148.3	148.8 <20° slicken	148.0	A17064	0.02	-	120	15	30	150	-	3	148
149.	148.8	148.8 <30,20° slicken,wht powder	149.0	A17065	0.07	-	90	15	30	120	-	5	149
150.	150.0		150.0	A17066	0.012	<0.3	70	15	50	-	-	5	150

GEOLOGIC CORE LOG OF MJKA - 17 (4/4)

MJKA - 17 **150.m - 181.0m**

150.m - 161.0m

1/200
Direction 300°
Inclination -80°
Length 161.0m

GEOLOGIC CORE LOG OF MJKA - 18 (1/3)

~~MJKA - 18 8.9 m = 89.9 m~~

1/200

1/200
Direction 108°
Inclination 0°
Length 130.4m

GEOLOGIC CORE LOG OF MJKA - 18 (2/3)

1/200
Direction 109°
Inclination 0°
Length 130.4m

GEOLOGIC CORE LOG OF MJKA - 18 (3/3)

MJKA = 18 189.8 m = 139.1 m

1/200
Direction 109°
Inclination 0°
Length 120 m.