

## 試錐柱状図



Drill Hole No : NJI-11  
 Location :  
 Coordinate Point :  
 Depth : 351.00 m  
 Drilling Machine : L-38

MJI - 11 - 1

Elevation :  
 Inclination : -50° (340°00')  
 Core Recovery : 89.8% (inc. soil part: 86.4%)  
 Term : 9 Sep. - 19 Sep. 1987

Depth (m)	Geolog. log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay					Results					
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
5		Surface soil (Boulder of acidic altered rock at basal part)															
13.50																	
13.60																	
14.20																	
14.50	N.C.	Leached out zone															
15		decolorized porous part.															
	N.C.	kf-gn-qtz(?)															
17.20																	
17.50	N.C.																
18.20		Slightly leached out zone															
20.00		dark grey metamorphosed															
20.90	N.C.	alkaline ig.															
22.40		qtz-ac-talc-biotite															
22.70		(ac:actinolite)															
24.90		Leached out skarnitized zone															
25.40	N.C.	gn-kf-qtz-talc															
29.30		Equi-crystalline medium grain dark color ig.															
30.90	N.C.	ac-qtz-kf															
33.30		[I.S]															
34.00		[NJI-11-1(33.0m):Af>Ag>Spinel, Apatite: Alkali gabbro or Monzonite]															
34.40		Af:Alkalifeldspar Ag:Aegirin augite															
39.80	N.C.	Weathered or decomposed part. Succaroidal qtz is visible only.															

第 2 2 図 M J I - 1 1 柱状图

Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
40.20	N.C.												
40.80	N.C.												
41.00	N.C.	qt-qtz-talc-muscovite bearing											
41.80													
42.30		yellow soil part.	41.8m, 42.3m: talcuse										
42.50													
43.20	N.C.												
43.80	N.C.												
44.60	N.C.	N.C. (soily part and cave)											
46.20	N.C.	(cave)											
50		Grey white mss. coarse grain mbl. very coarse (crystal size 20mm±) grain part at: 50.00-50.40 52.70-53.20 } crystal size max. 40mm 53.70-54.20 } black thin seams at: 55.10-55.50 } with dip of 20° 56.10-56.40 }											
55		12°											
58.60	N.C.												
60.00	N.C.	N.C. (cave)											
64.65		Grey white cg-mg-mbl. (crystal size 20mm±) 60.00-60.20 : very coarse grain mbl. with black seams											
64.75	N.C.												
65.55	N.C.	64.65-64.75m, 65.55-65.75m : small scale cave.											
65.75		30°											
70													
73.50-76.00m		a little rich in black seam with 25° dip											
75		25°											
76.40-77.20m, 80.00-81.40m		very coarse grain mbl.											
80													
82.20	N.C.	(cave)											
85	N.C.												
86.60		86.60-87.10m : grey mss. cg-mbl.											
87.15	N.C.	(cave)											
87.10-87.15m		brown siliceous rock (leached out zone?)											
88.90													
90		Grey white cg-mg-mbl.											


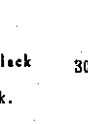
Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results						
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
95		Grey white cg-ag-abl. 97.70-98.65 : thin seams common 98.20-98.35 } purplish hornfels 98.50-98.60 } 99.65-99.80 : tf and slate seams. lamina 0°-5°																
100		0°-5°																
100.70		30°																
102.75		Pale olive, pale green and purplish hornfels of tuff and slate																
105		Grey white ag-abl.																
107.50		Pale olive color																
107.90		talcose tuff. lamina (band) 20° dip																
110		Grey white ag-abl.																
113.20		Decolorized-silicified aphanitic dk. 36° 113.10-113.20 : talc-gtz band																
115.00		115.00 : a few amount of pyrrhotite diss. & film. 115.00m boundary is irregular ±0° 115.00-115.10 : the same as 113.10-113.20 dip 56°																
120																		
125		Grey white mss.ag-abl.																
130																		
135																		
136.40		Very coarse grain abl.																
138.40																		
140		Grey white cg-ag-abl.																

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Nd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
145		Grey white og-ms-mbl.											
146.00													
147.20		Ms-mbl.											
147.80		Very coarse grain mbl.											
150		Ms-mbl.											
151.00		Very coarse grain mbl.											
153.00													
155		20° Grey-grey white. ms-mbl. black seams are rare											
160													
160.50													
165													
170		Very coarse grain mbl. crystal size max 40µm											
175													
180													
185													
190													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay			Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %	
195	[Brick pattern]	Very coarse grain mbl.										
197.10		Grey ag-mbl.										
199.80												
205	[Brick pattern]	Very coarse grain mbl. crystal size max 60mm										
210												
215												
220												
220.85 221.55 222.60		220.85-221.30 221.55-221.60 222.60-222.85	: Biotite-Po rich part with a few of talc									
225	[Brick pattern]	(indistinct)										
227.80		Lava ? upper 1.00m : brecciated-decolorized clayey part lower 1.35m : mss. dark green (Ha-Ch-Po-talc)										
229.65												
235	[Brick pattern]	Very coarse grain mbl. Color comes grey										
240												

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay			Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %	
245		Very coarse grain mbl.										
250												
255												
260												
265												
266.20		Coarse grain mbl. (crystal size 5-7mm)										
270												
275												
280.00		Very coarse grain mbl. crystal 5mm										
281.00												
285		White mg. mbl. Originally, this part has derived from "Shally" facies (?) 285.60-287.00 : Black substances (less than 3mm) disseminated & oriented (-30°) [Segregated carbonaceous substances? Spherical & Sub-spherical shaped]										
287.40												
290												



Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
293.20		Very coarse mbl.											
295		30° Brown trachytic alt. rock. accessory xenoliths (polyphenocryst) bearing. Upper : 0.35m, Lower : 0.65m → decolorized											
297.20		wd 2cm blue clayey part (Chilled margin?)  This part has a look of lava, but homogeneous, correlative to DK-6(U) of MJI-9.											
300		Very coarse mbl. 301.00-301.70 : talc(?) - Chlorite - Andradite											
301.70		Dark grey - Black holocryst. dk.											
305		56° 301.70-302.05 : slightly decolorized boundary is indistinct											
305.15		Po diss. pyroxene are visible at lower boundary : Andradite-qtz-muscovite-talc. 304.90-305.15 : slightly decolorized [This part is correlative to DK-6(L) of MJI-9]											
310													
312.00		Very coarse mbl.											
315		below 312.00 : cloudy patterns											
320													
320.20		Below 320.20m part has originated to "Shally" (?) below 320.20 : black seams are common with 25° dip											
325		324.55-326.70 : slumping structure expressed by black seams X-R [MJI-11-11(338.50m): Co>Sr>Cr (Calcite>Serpentine>Chrolite)] T-S [MJI-11-11(338.50m): Ol-Ce>Sr (Olivine) : dunite]											
330													
330.90		330.90-334.70 : Black seams are common											
334.70													
337.70		The results of X-R, T-S and appearance of occurrence are indicating that this part is derived highly metamorphosed and recrystallized mafic tuffaceous part.											
338.00		talc and recrystallized(?) black grain (H 7)											
340													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay		Results				
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
		340.40-341.40 : Slumping structure(?) Very coarse mbl.											
		354.10-345.90 : black crystal spotted											
345													
345.90		30° Greenish grey Po-talc diss. alt. igneous rock.											
347.25		55° a few amount of Andradite, Grossular are also recognizable											
350		Very coarse mbl.											
351.00		Terminated											

Drill Hole No : NJI-12

M J I - 12 - 1

Location :  
 Coordinate Point :  
 Depth : 351.00 m  
 Drilling Machine : L-38

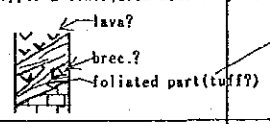
Elevation :  
 Inclination : -50° (340°00')  
 Core Recovery : 99.1% (inc. soil part: 94.9%)  
 Term : 19. Aug. - 31 Aug. 1987

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay		Results								
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
5		Surface soil															
10		boulder of alkarine rock at basal part															
14.70																	
16.30	N. C.																
16.70		A part of big (large scale) intrusion of Alkarine body															
17.00		fresh black hollocrystalline medium grain dk.															
17.90		17.10-weathered, grey, limonite stained															
19.90		17.90-slight compact															
		18.10-19.10 : compact, some as 16.30-16.70															
		19.10-19.90 : decomposed															
		19.90+ slightly coarse grain															
25		30° fissure are common															
		27.70-24.10 : decomposed, limonite stain & grey clay															
		T-S NJI-12-1(18.30m):Pl>Hr-Hy-Op+Cc:Q-diorite															
		NJI-12-3(37.20m):Af-Pl-Ag>Op:Alkali Cabbro															
		X-R NJI-12-4(39.80m):Grs>Cc															
		Grs:Grossular Bt:Biotite															
		Cc:Calcite Br:hornblende															
		Skarnitized zone with a few amount of Py, Po.															
33.90		33.90-35.40 : Qtz>Crr. (poor and porphyritic with a few of Actinolite															
		35.40-36.10 : Qtz-Act-Crr-K-feldspar(?)															
35.40		36.10-36.75 : Qtz-Cb(Crr-K-feldspar															
36.10		36.75-37.80 : Act>Qtz-Epi-Crr(?)															
36.75		37.60-37.80 : Crr-Qtz															
37.60		37.80-39.10 : Act-Epi>Crr-Qtz															
37.80																	
39.10																	

第23图 M J I - 12 柱状图

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
41.60		Skarnitized zone with a few amount of Py, Po.											
42.40		39.10-41.60:Grr-Cc, Grr grain larger than 5mm (Max 3cm 5cm)											
42.80		41.60-42.40:alkaline is.											
43.05		42.40-42.60:Grr>Cc(Qtz?)											
43.80		42.60-42.80:alkaline is.											
44.30		42.80-43.05:Grr-Cc											
45.25		43.05-43.80:Ch>Epi-Po											
46.95		43.80-44.30:Grr-Cc											
		44.30-44.50:Ch-Epi											
50		44.50-45.25:Grr-(Cc), ratio of Grr 70%											
		45.25-46.95:skarnitized is. k-f-Act>Po-Epi-Cc-V. (wd 5mm) at 45.75 with 77° dip.											
		46.95-52.30:Cc-Grr zone, Grossular mks aggregation but fine grain.											
52.30		(Upper 50.20: color of Grr is pale pink)											
52.95		(Lower 50.20: color of Grr is brownish)											
53.30		52.30-52.95:Ch-Act-Epi with (mixed by) Alkaline is. part											
54.05		52.95-53.30:Act-Ch-k-f-Hd(?) mixed zone											
54.35		53.30-54.05: fine grain Grr-Cc(Ch)											
		54.05-54.35:Grr-k-f											
		54.35-60.45: fine grain Grr-Cc											
60		60.45-67.10: green part											
60.45		67.10-67.70: v-cg-obl. (66.40-67.10: talcuse? yellow green)											
		67.70-68.70: green & white mixed part (Ad-Cc?)											
		<b>T-S</b> MJ1-12-5(51.30m):Vs>Cc: Vesuvianite skarn											
65		MJ1-12-6(60.85m):Pl-Ag>Op>Bt-Sphane: Alkaline galburo											
		<b>X-R</b> MJ1-12-5(51.30m):Vs>Sr											
67.10		MJ1-12-6(60.85m):Px>Ep-Ch>Pl>k-f?											
67.70													
68.70		(±0 of boundary)											
70		Grey white ag-cg-obl. with a few lamina											
72.50													
75		Grey white Very cg-obl. cryst. of Cc max 3cm											
		at 79.80: wd 1cm cherty Qtz-V. dip 60°											
80		at 80.80: black irr. films with 20° dip											
85													
89.60		Grey white ag-obl. Thin seams are visible commonly											

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay		Results					
							Au g/t	Ag g/t	Cu %	Pb %	Zn %			
95		Grey white mg-aml. Thin films or seams are visible commonly. 92.00-92.40, 94.25-94.55: black bands with 30° dip 94.55-94.80: Hornfelsic part, purplish (origine of facies is calcic slate?) 90.70-91.30: lamina 40° 100.15-100.45: tuffaceous? foliated with 60° dip												
100														
105														
106.80														
108.45														
109.90		Grey white mg-aml.												
115		White eg-aml.												
119.60		N. C. (N.C. caused by cave)												
121.45														
124.05		Grey white mg-aml. with thin seams. dip of thin seams are 50°-30°												
129.35		Grey eg-aml.												
135														
140														



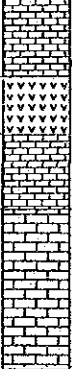



Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
145		Grey cs-mbl.											
149.52		mass. Sp-Cn-Cp-Po Ore Upper rime of ore zone: 60° dip red Sp. Lower rime of ore zone: 88° dip wavy almost Sp only			149.52-150.50	0.98	0.14	350.	3.78	6.38	25.00		
150.50		150.50-151.50: green 151.50-152.50: decolorized (white)											
152.50		(152.30-152.50: brecciated)											
153.50		Brecciated & re-consolidated abl. white (Cc-part) and black part banding roughly. 152.90-153.10: Seg. Cc.											
155.00		Pale orange ig. decolorized, silicified, epidote spot & vein net of calcite hair veins 154.90-155.00: Po-epidote											
158.60		Grey-grey white fg. (sdy.) mbl.											
158.85		159.60-158.85: Hornfelsic grey part											
160		173.20-175.10: Seams and dots of talcose part 174.30-179.10: Slumping structure, expressing by pinky hornfelsic slate 182.00-183.90: Slumping structure, expressing by black thin seams 183.40-183.60: Talcose seams											
165													
170		Polish MJ1-12-9(149.80m) : Cp>Gn>Sp>Py>Po>Gg MJ1-12-10(150.00m) : Cp>Gn>Sp>Py>Mt>Gg MJ1-12-11(150.20m) : Sp>Cp>Gn>Py>Po>Gg MJ1-12-12(150.42m) : Sp>Cp>Gn>Py>Gg>Po Gn : Galena, Gc : Gangue											
173.20													
174.30		X-R MJ1-12-13(150.70m) : Co>Ep>Ch>Se>Py(?)>Pl>Kf(?)											
175.10		*This mineral assemblage has meaning igneous rock origine.											
179.10													
182.00													
183.40													
183.60													
183.90													
185													
190													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	As g/t	Cu %	Pb %	Zn %		
195		Grey-grey white fg-sdy-mbl.											
200													
201.10		"Shally" mbl. slate-tuff part>mbl.part. slate part : hornfelsic. tuff part : talcuse Slumping structure is very clear.	201.10 										
204.50a			204.50a 										
206.95		Sdy-mbl. mbl.part>slaty-tuff part											
210													
211.60		Grey fine-very fine mbl. thin slaty and tuffaceous talcuse seams have representing of Slumping structure											
215													
220													
223.85-224.35		223.85-224.35:rich in talcuse becoms slightly to massive											
230													
233.70-234.70		Tuff breccia or outbrecciated lava, decolorized banding by lenses.											
238.10													
240		238.10-241.00:Slumping structure representing by black seams.											

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
245													
250													
255													
255.85-256.30		255.85-256.30: Hornfelsic	Dark grey slate										
257.00		257.00-259.10: Slumping structure & water escaped structure are recognizable											
259.10		(255.80-259.00: Slumping structure is very clear)											
260													
265													
266.70-266.90		266.70-268.90: Hornfelsic	slate seams with 10m wd. are common										
270													
271.80		Grey white mss cg-mbl.											
275		283.45-283.55: decolorized Cx-mbl											
		283.85-284.45: decolorized											
		284.45-285.15: dark green, skarnitized											
		285.15-285.30: Small amount of Sp in skarn (12-2a)											
		285.30-286.00: mbl.											
280		286.00-286.30: Sp-Cc ore, Low grade (12-3a)											
		286.30-287.10: Sp-Hd ore, High grade (12-4a)											
		287.10-288.00: mbl.											
		288.00-289.00: Dark green, Po diss. (12-5a)											
283.45		289.00-289.35: Dark green, Po diss. (12-6a)											
283.85		289.35-289.90: Brecciated & Reconsolidated silic-mbl.			285.15-285.30	0.15	<0.07	11.5	0.06	0.13	1.66		
285.15					286.00-286.30	0.30	<0.07	15.0	0.03	0.06	1.48		
286.00					288.30-287.10	0.80	0.34	77.0	0.09	0.20	9.20		
287.10		289.90-290.15: Sp-Hs Low grade ore (12-7a)			288.00-289.00	1.00	<0.07	1.7	<0.01	<0.01	0.11		
288.00					289.00-289.35	0.35	<0.07	1.0	<0.01	<0.01	0.04		
289.35		288.00-289.35: skarnitized dk? Po-diss			289.90-290.15	0.25	<0.07	1.0	0.01	0.08	1.00		
289.90													




Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
290.15		Grey white mss cg-abl.											
295													
300													
305													
310		White-grey white fine -very fine abl.											
312.55													
315													
320													
325		White-grey white fine abl.											
330													
331.30													
332.95													
335.00		Grey white massive mss-cg-abl.											
339.50													

313.30-331.65: green part & silicified grey part mixed .  
 green part has expansiveness.

50° 331.65-332.80: dark green hornfelsic lava.

50° 332.80-332.95: skarnitized part.

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay			Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %	
342.10		Grey mss fg-mbl.										
345		Grey white mss eg-mbl.										
350												
351.00		Terminated										

Drill Hole No : MJ1-13

M J I - 13 - 1


Location :  
 Coordinate Point :  
 Depth : 351.00 m  
 Drilling Machine : L-38


Elevation :  
 Inclination : -50° (340°00')  
 Core Recovery : 97.5% (inc. soil part: 89.3%)  
 Term : 27. July - 8. Aug. 1987

Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay Results							
							Au g/t	Ag g/t	Cu %	Pb %	Zn %			
5														
10														
15	N. C.	Surface soil												
20														
25		Boulder of alkaline rock at basal part												
29.35		White coarse grain mbl.												
31.10		Green altered dyke												
31.85														
38.85	N. C.													
35		White coarse grain mbl.												
36.80		White cg-mbl												
37.30	N. C.	Brown soil-like part												
38.30														
38.60														
39.65	N. C.	White cg-mbl.												

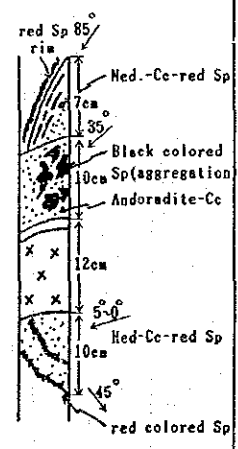
第24图 MJ1-13柱状图

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay					Results	
							Au g/t	Ag g/l	Cu %	Pb %	Zn %		
41.60	N. C.	White cg-mbl.											
43.00													
45		White cg-mbl.											
46.50	N. C.												
46.70													
46.70	N. C.	White cg-mbl.											
49.70													
		White cg-mbl.											
53.00	N. C.												
53.10													
54.20		Altered dark green dyke. Hematite-chlorite aggregate spotted. 58.05-58.25: decolorized part (cream yellow)											
58.25	N. C.												
58.80													
58.80	N. C.	White cg-mbl.											
60			X-R HJ1-13-4(84.85m): Cu-Ep-Ch>Sp>Qt										
61.50	N. C.												
61.70			Polish HJ1-13-1(85.30m): Sp-Cg>Hm>Gn-Py>Cp HJ1-13-2(85.20m): Sp-Gn-Py>Cp-Mt-Gs>Ct-Cv HJ1-13-3(85.80m): Cg>Sp>Gn-Py>Cp										
64.50	N. C.												
64.70			Qt: Quartz Ct: Chalcocite Cv: Covellite										
66.80	N. C.												
67.20													
68.90	N. C.												
69.20													
69.50		White cg-mbl.											
		White grey-grey med. mbl. 75.00m, 75.80-76.25m : slaty film layer of tuff. --20°-30° (dark greenish grey)											
80													
80.80	35°	Altered dyke, at upper most wd 2cm chlorite-hematite rim											
80.90			80.90-81.40: N.C. cause of clayey										
81.40		Grey green-skarnitized dyke, grey part: decolorized											
84.58	43°	Epidote rich green skarn, small amount of hematite											
85.35	50°	Sp-Gn-Hematite with hedenbergite ore			85.35-85.85	0.50	0.14	378.0	3.20	4.20	14.50		
85.85			hed.: rich at upper part, wd 3cm										
		White grey-grey medium grain mbl.											
90													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Nd (n)	Assay Results					
							Au g/t	Ag g/t	Cu %	Pb %	Zn %	
91.80		mbl. finer than upper.										
93.90		cloudy pattern & lamina 30° dip										
95		Medium grain grey mbl.										
98.70		White-grey, ca-sg-mbl.										
100		Sp-Gn with garnet (Andradite)										
101.13-101.53		mass.-high grade ore.			101.13-101.53	0.40	0.2	1.220	0.79	5.42	36.40	
104.10		Med. grey mbl.										
104.10		Skarn part (green sk.) epidote rich										
104.20-104.45		Epidote rich skarnitized dyke										
106.35		Med. grey mbl.										
106.50-106.85		Skarn at 106.40 ~ 106.50 grey-green epidotized dyke.			106.85-107.05	0.20	<0.07	27.5	0.04	0.22	0.85	
108.15-108.35		106.50-106.85: grey mg-mbl.			108.15-108.35	0.20	<0.07	22.5	0.03	0.20	0.39	
110		Polish MJI-13-5(101.15m): Sp>Gn>Py-Po-Cp-Gg MJI-13-6(101.50m): Sp>Cp>Py-Gn-Po-Ha-Gg Ha: Hematite										
115		Med. grey mbl.										
120												
123.70-125		20° lamina developed										
127.15												
130												
134.40-134.60		Grey-green skarn(?) part										
135.30		Med. grey mbl.										
137.90		Grey-white grey "sdy" mbl. More or less tuffaceous.										
129.75-139.80		slumping structure										
137.90		30° graded bedding (lamina)										
138.80		water escaped structure										
139.70		wd 5cm tuff part										
139.80		Tuff										

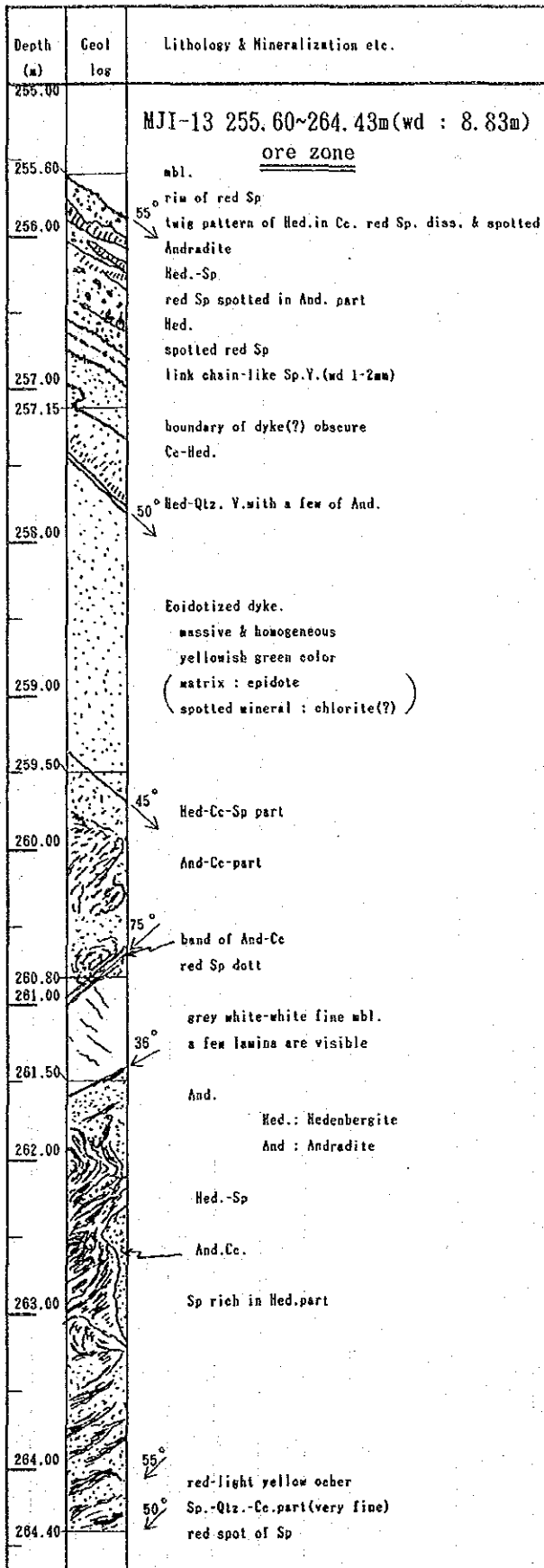
Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
140.80		Tuff. with 25cm long of segregated calcite part											
143.40		water escaped structure											
144.45		Grey fine-med.massive mbl.											
148.00		Grossular with a few of Andradite											
150		Grey fine mbl.(mass.)											
150.10		(BQ)											
153.73		Decolorized dyke,Pale greenish grey. 153.73:wd 0.8-10cm Andradite											
155		155.95:wd 5-1cm											
155.95		Grey-dark grey banded(laminated)mbl. 30° (lamina)											
160		156.40-158.70:hornfels-Segregate 160.40:wd 2cm,brown hornfels layer 161.10-161.30:pale green tuff 162.60-162.80:grossular(162.60m wd 1cm:irregular band of Andradite)											
165		30° (lamina) 166.25-168.80:frequently reddish brown part(hematite)											
170		170.93-170.95:grossular rim											
170.95		Grey-grey white skarnitized dyke with a few of Arsenopyrite(?)											
172.70		171.40-171.55:grossular part 172.70:wd 1cm grossular band											
175		20° (lamina)											
175.30		Grey "Sdy" mbl.laminae are common Coarser than upper,and laminae are indistinct 173.75-173.85:grossular 178.60-178.75:irregular shape of dark brown igneous rock (dyke)											
180													
185													
187.50		Coarser than upper(eg.type)											
190		laminae are invisible											

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay Results										
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
190.20		Finer than upper grey wa-obl.															
193.60																	
195		Dark grey "Sdy"obl. cloudy patterns and black lamina are recognizable in places															
200		10-15° (lamina)															
205																	
209.70		Grey "fresh" dyke.															
210.10		Qtz-green skarn at rims of upper and lower.															
215		Massive "Sdy" grey obl.															
217.55		Grey skarnitized dyke															
217.75																	
220		Grey-dark grey "Sdy"obl. lamina in places															
222.75		X-R MJI-13-9(222.75m):Antonly)															
222.75		Ore zone 222.80-223.00 dyke			222.75-223.10	0.35	<0.07	62.0	1.42	0.15	5.22						
223.10		Sp-garnet-hedenbergite															
225		Mass. grey "Sdy" obl.															
228.05																	
230.45		Decolorized grey-pale green dyke.															
235		Epidote: Spotted and fissure filling wd 3-5m green sk. at lower boundary															
240		Massive dark grey "Sdy" obl. black films in places															

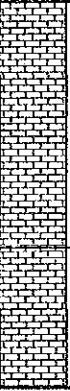



Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay Results				
							Au g/t	Ag g/t	Cu %	Pb %	Zn %
242.25 242.85		Grey "Sdy" mbl.	Andradite-heden. band "Sdy" mbl. red Sp dot.		242.25-242.85	0.60	<0.07	9.0	0.06	0.09	1.79
245		Greenish grey skarnitized dyk.	grossular spotted dyke, lower boundary 35' Andradite film.								
250		Grey "Sdy" mbl.									
255		Green skarn Sp ore wd:1.55m	Ore zone (wd:8.83m)		255.60-256.60	1.00	0.07	19.8	0.48	0.08	5.22
256.60		Epidote rich wd : 2.35m			256.60-257.15	0.55	<0.07	8.8	0.08	0.07	1.26
257.15		Skarnitized dyke			257.15-258.15	1.00	<0.07	3.9	0.01	0.04	0.16
258.15		Skarn(Andradite) rich ore wd:1.30m			258.15-259.50	1.35	<0.07	1.7	<0.01	0.04	0.04
259.50		White fine mbl.wd:0.70m			259.50-260.50	1.00	<0.07	7.5	0.33	0.04	1.54
260.50		Andradite-hedenbergite			260.50-260.80	0.30	<0.07	4.4	0.05	0.04	3.05
260.80		red Sp ore wd:2.93m			260.50-262.50	1.00	<0.07	15.0	0.16	0.07	9.20
261.50				262.50-263.50	1.00	<0.07	18.0	0.10	0.07	16.30	
262.50				263.50-264.43	0.93	<0.07	15.0	0.25	0.05	10.30	
264.43		Grey "Sdy" mbl.									
267.30		Dark grey mss cs-mbl.									
270		Dark grey mss mg-mbl.									
271.70		Dark grey "Sdy" mbl. 40° cloudy patterns & lamina are visible (lamina) commonly									
275											
276.20											
280											
285											
290											





Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
293.85 293.95		293.85-293.95: tuffaceous part											
295		Dark grey "Sdy" mbl.											
		X-R		MJI-13-11 (256.10m): Sp>Cp>An-Qt (?) MJI-13-12 (258.90m): Ce>Ch>Ep-Se-Qt>Py MJI-13-14 (263.00m): Sp>Cc>Qt-Cp-Tc (Talc) MJI-13-15 (263.80m): Sp>Cc-Ep-Tc-Qt									
300													
		Polish		MJI-13-11 (256.10m): Sp-Gg>Cp-Mt>Py>Gn MJI-13-13 (262.40m): Gg>Sp>Mt>Gn-Cp MJI-13-14 (263.00m): Sp-Gg>Cp>Gn-Mt MJI-13-15 (263.80m): Gg>Sp>Cp-Gn Mt: Magnetite									
309.00 309.10		309.00-309.10: epidote-andradite skarn. 15" red Sp (wd 2mm) band											
311.30		50° Brown black aphanite dyke											
315		Grey fine "Sdy" mbl.											
315.90		Grey cg-mbl.											
317.20		Arsenopyrite veinlet wd 3-7mm. dip 70°-80°											
320		Grey "Sdy" mbl.											
320.35 320.60		Skarnitized dyke, lack of metallic mineral.											
		Grey "Sdy" mbl.											
323.20 323.40		Skarnitized dyke, lack of metallic mineral.											
325													
		Dark grey "Sdy" mbl. flowage patterns are common											
328.90		Seg. Cc. black film layer											
329.80		Grey cg-mbl.											
		Grey-dark grey "Sdy" "flowage patterns" well developed.											
		336.70-337.10: crushed and reconsolidated mbl.											
335		339.70: crushed and reconsolidated mbl.											
		mino fault (Has. cutting the flowage)											
340													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Nd (m)	Assay			Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %	
345		Grey-dark grey "Sdy" mbl.										
374.00		↓ "Shally" mbl.? extinction of lamina by segregation and stress?										
350												
351.00		(Terminated)	flowage patterns also not in line.									

Drill Hole No : MJ1-14  
 Location :  
 Coordinate Point :  
 Depth : 351.00 m  
 Drilling Machine : L-38

Elevation :  
 Inclination : -90°  
 Core Recovery : 85.9% (inc. soil part: 81.7%)  
 Term : 24 Sep. - 5 Oct. 1987

MJ I - 14 - 1

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay		Results									
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
5																		
10		Surface soil																
15																		
17.30																		
18.20	N.C.	(cave)																
18.90																		
20																		
20.70	N.C.	(cave)																
21.35		Fine "Sdy"abl.																
22.20	N.C.	(cave) ! 60° of lamina (black)																
24.45																		
26.85																		
30	N.C.	(cave)																
33.30		Reddish-brown soil-like part																
34.40																		
37.10	N.C.																	
37.50		Reddish-brown to cream yellow soil-like part																
38.75	N.C.																	
40		Whitish soil-like (pale-pink)																

第25图 MJ I - 14 柱状图

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
40.60	N.C.												
43.20 43.70													
45	N.C.	Whitish soil-like part (pale-pink color)											
46.60 46.80	N.C.												
47.95	N.C.												
48.30	N.C.												
48.80	N.C.												
49.80	N.C.												
50.85													
51.30 51.95	N.C.	Decomposed brownish yellow mbl.											
52.80	N.C.												
53.10	N.C.												
54.30	N.C.	Upper 0.20m: grey white clay											
55.20 55.80	N.C.	Lower 0.40m: brownish yellow white decomposed mbl.											
57.00	N.C.												
57.30	N.C.	weathered-enriched silica, limonite stained mbl.											
58.10 58.70													
60.10 60.30	N.C.	(cave)											
61.80 62.70	N.C.	(cave)											
62.80 62.95	N.C.	White, weathered, crushed mbl.											
64.90	N.C.												
65.10 65.50	N.C.	H.C. (be not attributed to cave)											
65.90 68.90	N.C.												
67.30	N.C.												
68.00	N.C.	(cave)											
69.00	N.C.	(cave)											
69.70	N.C.	(cave)											
70.10 70.50	N.C.	(cave)											
71.45	N.C.	White fg-mbl.											
72.10		Crushed decomposed (weathered) igneous rock.											
75		72.80-76.80: grey aphanitic 76.80-77.13: crushed, limonite stained											
77.13	N.C.	(cave)											
78.93													
80		Grey white mss fg-mbl. 78.93-79.08: segregated calcite (20-40mm crystal)											
82.40	N.C.	(cave)											
85													
86.10		Crushed, decomposed (weathered) ig.											
87.10													
89.15	N.C.	Grey fg-mbl. (cave)											

Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
91.05	N.C.	(cave)											
92.20	N.C.	(cave)											
93.00		Grey fg-mbl.											
93.60	N.C.	(cave)											
94.30	N.C.	(cave)											
94.60	N.C.	(cave)											
95.40	N.C.	(cave)											
95.60	N.C.	(cave)											
95.85	N.C.	(cave)											
96.80													
100		Grey oss mg-mbl. 99.53-99.63: cave											
104.00													
105													
		Grey oss fg-mbl.											
110													
110.35	N.C.	(cave)											
110.38	N.C.	(cave)											
112.14	N.C.	(cave)											
113.13	(BQ)												
115		Dark grey fg-mg-mbl.											
117.00													
117.20													
120		at 117.00-117.20m few brownish garnet V. wd 3-1mm											
		121.20-121.50m:wd 3cm limonite filled v.											
		Dark aphanitic dyke.											
122.90		70° Hm-An(very fine grain)at upper boundary(wd 0.5-3cm)											
123.50		50° Hm at lower boundary											
125		Grey-dark grey mg-mbl.											
126.30													
126.95		Decolorized ig.											
		Grey-dark grey mg-mbl.											
130													
130.35		Fine grain grey mbl.											
131.50	N.C.	(cave)											
132.50		Fine grain dark grey mbl.											
135													
135.30		135.30-138.40:slumping structure.											
		grey fg-Sdy-mbl. 138.70-140.70:vertical											
		138.65-138.95 } cloudy pattern											
138.40		139.35-139.45 } aphanitic dyke with thin garnet vein											
140		140.35-140.45 }											

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
145		Grey-dark grey "Sdy" abl. 142.50-144.90:slumping structure											
150													
155													
155.90													
156.75		H.C. (cave)											
156.90													
157.70		Cream yellow part (probably ig.)											
160													
165		Dark grey Ig-sdy-abl. cloudy patterns are common.											
165.20		15° Decolorized pale pink ig. (lava?)											
166.15		10°											
170		50° (lav. rare) Dark grey Ig-sdy-abl.											
175													
175.90		40° laminae are visible commonly											
179.95		40° Sdy. laminated abl. (shally part intercalated)											
185		30°											
189.50													
189.95		189.50-189.95:grey slaty part with grading											



Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (%)	Assay			Results								
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
		Dark grey fg-mbl.																
194.65		10°																
195.10		? Brittle decolorized fg-net of Qtz-Py-Grossular(?)																
		mg-mbl.																
198.20																		
200		Crushed-reconsolidated fg-mbl. 198.20-200.00:limonite stain																
203.20																		
205		ms-mbl. 205.45-205.60(✓50°) decolorized dyke. 205.90-206.30:laminated (✓50°)	abl. → 10° grossular Dk. 50° grossular lamina(abl.)															
210																		
213.80																		
215		Dark grey fg-sdy-mbl. 214.85-214.60 } grey slaty part 215.40-215.80 } 216.00-219.60:sluiping structure																
220		220.70-222.10:cloudy patterns 30° 25°																
225		226.80-228.60:sluiping structure(?) grey sdy-mbl.																
230																		
		230.70-239.40:limonite stains at fissure																
235																		
240																		



Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay			Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %	
240.15 240.45		240.15-204.25: thin seam of slate 240.45-242.20: cloudy patterns										
245												
246.70		Grey mss. sdy-abl.										
250												
250.90		40° Decolorized ig.										
251.60		54° Grey mss. sdy-abl.										
255												
255.10 255.40		80° 80° Decolorized ig.										
260		Grey mss. sdy-abl.										
262.05 262.60		Brittle decolorized ig. (lava?) upper 10cm : dark grey lower: light grey, crushed, clayey. at 262.20: grossular(?) - Cr. rim.										
265		Grey mss. sdy-abl.										
265.85 266.10		50° 48° Decolorized aphanitic dyke.										
269.40		Cloudy patterns are visible sporadically Grey sdy-abl.										
275												
276.20 278.70		276.20-276.40 : segregated calcite 276.20-278.70 : crushed-reconsolidated?										
280												
284.00 285		Dark greenish aphanitic dyke. upper boundary is indistinct due to Mn-An skarn (wd 5cm ±)										
288.15		55° 288.00-288.15: decolorized, white grey										
290		Grey-dark grey sdy-abl.										

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
295		Grey-dark grey sdy-mbl.											
295.70		Talc-chlorite(?) - Py (Aggregation of altered minerals?) spotted Decolorized-silicified dk. correlative to 145.20m-153.70m (bottom of hole) of MJI-13 295.70-299.25: grey white crushed part. Py veinlet. 299.25-304.95: altered min. spotted silicified part (above)											
304.95		Grey white fg-mbl.											
306.55		Dark greenish grey aphanitic dyke. Andradite rim (wd 2-5cm) at upper boundary											
309.15		308.85-309.15: decolorized & clayey.											
310		Dark grey sdy-mbl. below 310.00: slightly deformed lamina. 313.70-316.20: crushed part and segregated Cc. limonite stained											
314.63 314.84		(cave)											
320		below 317.20 to 321.70m: lamination comes clear 320.25m, 321.70-321.80: slightly dissolved part limonite stain											
325													
327.90													
330		Dark grey mss cg-mbl.											
332.60		Dark grey "Sdy" mbl. cloudy patterns are not common but visible.											
335													
338.60		Dark green aphanitic dyke.											
339.80		339.60-339.80: decolorized. 339.60: Hematite											

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay			Results		
							Au g/l	Ag g/l	Cu %	Pb %	Zn %	
340.90 340.10		340.90-341.10:limonite stain at fissure										
345.00		Grey-dark grey fine mss sdy-mbl.										
347.20		345.00-347.20:slumping structure(?)rich in segregated Ce. cloudy patterns are common										
348.30		up to 348.30m:cloudy patterns are common.										
350												
351.00			(Terminated)									

Drill Hole No : MJ1-15  
 Location :  
 Coordinate Point :  
 Depth : 151.10 m  
 Drilling Machine : OE-8L

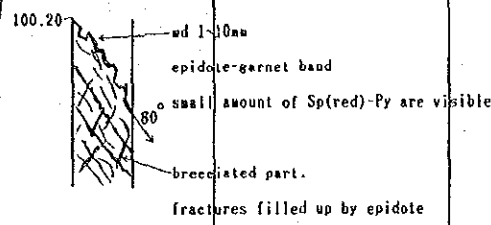
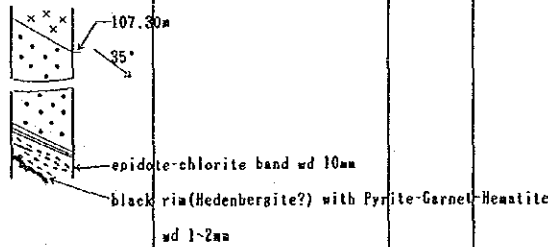
MJ1 - 15 - 1

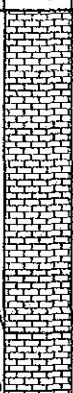
Elevation :  
 Inclination : -90°  
 Core Recovery : 87.7%(inc.soil part:69.2%)  
 Term : 30 July- 3 Aug. 1987

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results						
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
5																		
10																		
15																		
20		Soil																
25																		
30																		
32.00		Decomposed																
33.20		Decolorized																
35		Silicified rock (igneous origine)																
40	N.C.	Soily decomposed rock (?)																

第 26 图 MJ1 - 15 柱状图

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/l	Ag g/l	Cu %	Pb %	Zn %		
45	N.C.	Soily decomposed rock(?)											
47.80													
50		G-f-obl. "Sdy" (grain)											
55		cloudy patterns are visible											
		58.50-58.00m, 62.70-65.70m very fine grain											
60													
65													
70													
75													
80		1'-0"											
85													
90													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
95		Grey fg-mbl. "Sdy"											
100		 <p>100.20-101.15: dark green-olive brecciated igneous rock                      101.15-103.10: dark green-deep olive compact igneous rock                      103.10-107.30: greyish green chloritized, epidote spotted igneous rock                      107.30-108.75: yellow ochre-grey, chlorite spotted igneous rock</p>											
105													
108.75													
110													
115													
120													
125		Grey-grey white fg-mbl. "Sdy"											
130													
131.70													
135		Very fine mbl. (laminated) dark grey Slumping structure(?) at 134.10-134.20m											
137.00													
140		Grey-grey white to dark grey fg-mbl. "Sdy"											

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay			Results		
							Au s/l	Ag s/l	Cu %	Pb %	Zn %	
145		Dark grey (g-mbl. "Sdy"										
149.15 150		"Shally" mbl. dark-grey 30' of lamina 30°										
151.10		(Terminated)										

Drill Hole No : MJ1-16  
 Location :  
 Coordinate Point :  
 Depth : 151.00 m  
 Drilling Machine : OE-8L

Elevation :  
 Inclination : -90°  
 Core Recovery : 99.33 (inc. soil part: 88.5%)  
 Term : 22 July - 25 July 1987

MJ1 - 16 - 1


Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results						
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
5		Surface soil																
10																		
15																		
16.40		Brecciated grey fine marbl (C-f-mbl)																
16.80		Calcite-quartz veins have filled up cavity of brecc.																
18.40		Grey fg-mbl.																
19.00		Grey, dark grey cherty Qtz. with small amount of Y-f. Py																
20		Grey fg-mbl. with cloudy patterns																
25																		
25.10		Cherty Qtz. with limonite stain																
25.25		Grey fg-mbl. at 25.60-25.85 : segregated C-V.																
26.00		Seg. Co-V with cherty Qtz.																
27.20		Dark grey fg-mbl.																
30																		
31.00		Breccia dyke ?																
31.40		grey, silt size grain. Py dots																
35		Dark grey fg-mbl.																
40		Seg. Co-V. 27.10-27.20, 27.35-27.60, 27.90-28.10, 28.50-28.60, 28.80-29.20, 29.50h29.65, 39.70-40.20m.																

第 2 7 图 MJ1 - 1 6 柱状图



Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
45		35° (lamina are not common)  Dark grey fg-abl. cloudy patterns are visible sporadically											
50		50.20-50.35: thin deformed beds indicating "sliding"											
55													
60		58.90-59.10: cavity (N.C.)											
65													
70		Dark grey fg-abl.											
75													
80													
85													
90													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay Results										
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
90.00 90.15			90.00-90.15: greenish blue minerals and garnet with Po.														
95																	
100		Dark grey fg-abl.															
105		40° 104.50-104.60: chloritized thin seams (band-like)															
110		Dark grey fg-abl.															
115																	
120.10		Laminated-shally mbl.															
120.25		Green skarn zone (epidote-Po)															
120.39		Dark grey-black igneous rock															
120.54		Green skarn zone (garnet, epidote, Po)															
120.74																	
125		Laminated-shally mbl. dark grey															
130																	
135		5-10° Water escaped structures (W.E.S) at 34.00m (2 parts)															
137.80																	
140		"Sandy" mbl. dark grey															

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results					
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
145		"Sandy" mbl. dark grey															
145.80		Laminated-shally mbl. dark grey															
150		35°															
151.00		(Terminated)															

Drill Hole No : MJ1-17

MJ1 - 17 - 1

Location :  
 Coordinate Point :  
 Depth : 151.00 m  
 Drilling Machine : GE-8L

Elevation :  
 Inclination : -90°  
 Core Recovery : 100.01(inc.soil part:93.4%)  
 Term : 12 Aug. - 15 Aug.1987

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay					Results						
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
5		Surface soil																
10.00		White ag-obl.																
11.60		Grey ag-obl. lamina & cloudy patterns are visible but not common.																
14.30		Grey white ag-obl.																
15.60		Grey ag-obl.																
18.40		18.40-18.60:grey and reddish colored alt.dk. boundary:85° and 55°(lower side)																
19.35		19.35-19.70:pale pink decolorized dk. boundary:55° and 85°(lower side)																
20.30		White very ag-obl. 20.70:wd 5cm dk.altered																
20.80		Decolorized and brecciated (tectonic brecciation)																
21.80		from 22.70 comes grey-dark grey.																
22.70		Grey white ag-obl.																
25		cloudy pattern it has indicating by black thin seam.																
30		1cm																
35																		
38.95		Slightly decolorized green-grey alt.dk. chlorite)epidote spotted.																
40																		

第28圖 MJ1-17柱狀圖

Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
40.60													
45		Grey-dark grey ag-abl.											
50													
54.55		54.55:wd 2cm, dark cherty	Qtz-v. dip 70°										
55.75		Grey ag-abl.											
56.80		Grey white mass ag-abl.											
60													
60.10		Grey ag-abl.											
65													
67.70		Grey fg-abl.											
70													
70.70		from 70.70 comes dark grey.											
72.20-72.40		72.20-72.40:wd 5cm, 0.5cm dark cherty irregular shaped Qtz-v. with Py spots.											
75		(limonite stain: up to 71m)											
80													
80.70													
81.35		Dark grey compact dk. at 80.70:wd 2cm Andradite-Py at 81.35:wd 1-4cm Andradite-Py											
85													
90		Dark gry fg-abl.											

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay Results										
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
95		Dark grey mass fg-aml. ("Sdy")															
100																	
104.15 104.90																	
107.35		Dark grey mass. fg-aml. ("Sdy") at 107.500:wd 1cm Cc-v. dip 75°															
110		Dark grey "laminated" aml. with slumping structures. 109.30-109.85(1), 110.40-115.20(2), 121.15-124.45(3), 121.80-122.00(4) : slumping deformed thin seams have metamorphosed into hornfels.															
115		(1) dark greenish grey (tuff?) (2) Seg. Cc-v. 10cm Tuff? (max wd 5cm)															
120		123.40-127.40: slumping (4) (3) 15° Seg. Cc-v. black seam (muddy?)															
125		125.00-125.40: graded bedding in 2-4cm unit 126.20:wd 8cm, grey mud dk. 70° dip															
128.80 130		128.00-128.80: slumping (4) red seam (hornfels) ring-hornfels															
135		Dark grey-grey mass. "Sdy" aml. not accessed by the lamina 138.60-139.00: Seg. Cc-v. with wd of 3-10cm															
138.50 140		lamina are visible slightly. 45°															

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay			Results			
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
140.70 140.90		140.70-140.90: limonite stained Ce-v. (wd lca) (slightly dissolved?) 20-30°											
145		lamina well developed (indicating hornfelsic red-pink colored seams with 30° dip)											
147.70		abl. block included lapilli-tuff, green & white											
148.10		lapilli: pinky glassy, aphanitic, brecciated, size max 5cm have irregular rims Qtz grain invisible											
150		149.25-149.75, 150.05-150.40: abl. black											
151.00		this lapilli-tuff has a possibility as upper most of andesitic or basaltic submarine auto-brecciated lava flow (Terminated)											

Drill Hole No : MJ1-18  
 Location :  
 Coordinate Point :  
 Depth : 153.70 m  
 Drilling Machine : 0E-8L

MJ1 - 18 - 1

Elevation :  
 Inclination : -90°  
 Core Recovery : 57.81 (inc. soil part: 49.4%)  
 Term : 31 Aug. - 3 Sep. 1987

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay			Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %	
5												
10												
15		Surface soil.										
20												
22.40		22.60-22.40: boulder of mbf.										
22.60	N.C.											
23.80		23.30-23.60: Unconsolidated tuff (Un-tf) brown										
25	N.C.											
26.30		26.30-26.80: silicified wood bearing unconsolidated tuff										
26.80	N.C.											
29.30		29.30-29.80: Unconsolidated tuff										
29.80	N.C.											
32.30		32.30-38.80: Un-tf.										
32.80	N.C.											
35												
35.30		35.30-35.80: Un-tf. bearing 2 Qtz-v.										
35.80												
38.30		38.30-39.10: Un-tf.										
39.10												
39.80	N.C.											
40.00												

第29图 MJ1-18柱状图



Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
40.30	N.C.												
41.30	N.C.												
41.60	N.C.												
42.80	N.C.	Brown sil.-like											
43.10	N.C.	Unconsolidated tuff											
44.30	N.C.												
44.70	N.C.												
45.80	N.C.												
46.10	N.C.												
47.30	N.C.												
47.50	N.C.												
48.30	N.C.	Boulder of mbl. & ig. mixed soil-like part											
48.50	N.C.	(basal part of MINAKU Form.)											
49.30	N.C.												
49.50	N.C.												
50.30	N.C.												
50.70	N.C.												
51.30	N.C.												
51.35	N.C.												
52.60	N.C.	Grey fg-mbl.											
52.80	N.C.												
53.80-53.90	N.C.	53.80-53.90: vertical banding of thin seams. (slumping?)											
55	N.C.	(cave)											
57.80	N.C.	Polish MJ1-18-1(74.20m) : Sp>Gn-Py>Cp-As-Gs>Po MJ1-18-2(79.80m) : Cp>Py>Sp-Ct-Gs>Gn											
60	N.C.												
60.90	N.C.	(cave)											
62.20	N.C.												
62.35	N.C.												
63.10	N.C.	Decomposed mbl. (?) yellow ochre color soil-like part											
65	N.C.	(cave)											
66.20	N.C.	soil-like part											
69.10	N.C.	(cave)											
71.20	N.C.	red-red brown soil-like part											
71.60	N.C.	Gn(?) bearing (cave)											
74.03-74.50	N.C.	Ore Zone (?) 74.03-74.50(wd:0.47) 79.60-80.20(wd:0.60) 81.60-81.75(wd:0.15) High grade ass. Sp-Gn-Cp ore appearances are same.			74.03-74.50	0.47	0.35	1.730	2.52	16.10	34.70		
79.60-80.20	N.C.	These three mineralizations have a same appearance and no skarn minerals.			79.60-80.20	0.60	0.21	780	7.00	15.70	11.30		
81.60-81.75	N.C.	Caves are filled up by water.			81.60-81.75	0.15	0.07	590	6.10	27.80	14.40		
85	N.C.	Fine dark grey "Sdy" ass. mbl.											
88.85	N.C.	Grey cg-mbl.											
88.80	N.C.	white lens >5mmx7-15mm											
89.70-90	N.C.	89.70-90.85: flowage structured mbl. with cloudy patterns.											

Depth (m)	Geol. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay			Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %	
95		Pebbly Ore(Sp-Gn)bearing grey clay(18-4a)										
95.15 95.45	N.C.	(cave)			95.10-95.45	0.30	0.07	65.0	0.26	1.80	2.74	
97.80 98.20 98.55		Grey "Sdy" mbl.			98.20-98.55	0.35	0.21	7.0	0.02	0.11	0.08	
100		98.20-98.55:grey "Sdy" mbl. with a few amount of Sp(?)										
101.20 101.50 101.80		101.20-101.50:grey clay with ore(18-6a)			101.20-101.50	0.30	<0.07	265.	1.38	4.68	7.05	
		101.50-101.80:brown clay										
105	N.C.	(cave)										
110												
113.20 113.70	N.C.	Decomposed(weathered) mbl. zone										
114.70		brownish white soil-like part										
115.10		light brown soil-like part										
117.70 117.80	N.C.	light brown soil-like part										
119.20 119.40	N.C.											
125		Weathered decomposed fg-mbl...125.40-125.50(18-7a)										
125.20 125.50	N.C.				125.40-125.50	0.10	<0.07	7.5	0.03	0.13	0.13	
125.80 126.50		fg-mbl.126.15-126.25(18-8a)			126.15-126.25	0.10	<0.07	5.5	0.01	0.06	0.04	
127.90		Silicified grey white ig. Py diss.at 126.50										
130		50°(flowage)										
131.50		Grey fg."Sdy" mbl.with flowage below 131.50:breciated										
132.90 133.30					132.90-133.30	0.40	<0.07	4.4	<0.01	0.04	0.03	
133.25 133.90 134.90		Clayey white-grey ig.			133.30-133.90	0.60	<0.07	1.0	<0.01	<0.01	0.02	
135					133.90-134.90	1.00	<0.07	2.3	<0.01	0.02	0.03	
136.10		Py net work, Py rim at boundary.			134.90-135.90	1.00	<0.07	1.0	<0.01	0.01	0.01	
136.70		Grey fg-mbl.with slumping			135.90-136.20	0.30	<0.07	1.0	<0.01	<0.01	0.01	
137.20		Py diss.grey(decolor) ig.fine grain Py at upper boundary.			136.70-137.70	1.00	0.27	2.3	<0.01	0.06	0.01	
140		Dark grey "Shally" mbl.with slumping structure			139.10-140.10	1.00	<0.07	2.3	<0.01	<0.01	0.01	

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %			
140.10-140.35		Shally mbl. 140.10-140.35: Ore			140.10-140.35	0.25	1.10	6.1	<0.01	<0.01	0.08			
140.35-140.60		Ore (Sp>Py)			140.35-140.60	0.25	0.07	2.5	<0.01	<0.01	0.01			
140.60-140.75		Shally mbl.slumping structure			140.60-140.75	0.15	1.27	276.	0.04	2.98	33.1			
142.92		142.92-144.05:Sp-Gn mss.ore			140.75-141.75	1.09	0.41	3.3	<0.01	0.01	0.05			
144.05-144.25		144.05-144.25:Altered(dissolved)abl.			141.75-142.70	0.95	<0.07	2.3	<0.01	<0.01	0.01			
144.25-144.75		(indistinct of boundary) Slumping structure is recognizable.			142.70-142.92	0.22	0.27	92.0	0.13	1.51	3.47			
144.75-145.20		144.25-144.55:Fragmental mss.Sp.-Gn ore bearing mbl.			142.92-143.92	1.00	0.07	470.	0.04	19.00	27.7			
		144.55-144.75:Dark grey banded(laminated) shally mbl.			143.92-144.92	1.00	0.07	88.0	0.12	4.34	6.41			
		144.75-145.15:Fragmental mss.Sp.-Gn ore bearing mbl.			144.92-145.15	0.23	0.27	290.	0.13	21.9	16.30			
150		145.15-145.20:Grey white clayey mbl.(shally)												
		145.20-145.50:Clayey-silicified decolorized ig.rock												
		145.50-149.80:Decolorized talc-chlorite(?)spotted ig.rock(light grey)												
153.70		149.80-153.70:Decolorized talc-chlorite(?) spotted ig.rock(grey)												
		Polish MJI-18-3(143.20m):Sp>Gn-Gs>Py												
		MJI-18-4(144.65m):Sp>Gg>Gn-Py												
		X-R MJI-18-5(133.50m):Qt>Kl>Mx-Se-Py Kl:Kaolinite												

(Terminated)

Drill Hole No : MJI-19  
 Location :  
 Coordinate Point :  
 Depth : 151.00 m  
 Drilling Machine : OE-8L

MJI - 19 - 1

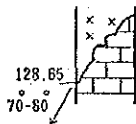
Elevation :  
 Inclination : -90°  
 Core Recovery : 94.01(inc.soil part:78.31)  
 Term : 22 Aug. - 28 Aug. 1987

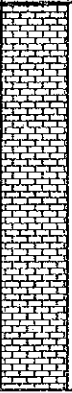
Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay Results										
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
5																	
10		Surface soil at basal part, tuff, mbl. blocks are found sporadically															
15																	
20																	
25																	
25.10		Dark grey fine mbl. thin seams well developed with dip of 0°-50° 26.50-28.10: reddish seams (Hornfelsic ironiferous)															
28.10		26.70-27.00: slumping structure															
30																	
35		Grey white fg-mbl. 29.70-31.05: dark brown soil with Mn oxide 32.75-34.40: brown-yellow soil seams visible slightly with dip of 30°-0°															
38.50																	
40																	

第30图 MJI-19柱状图

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
40.50													
40.57		Skarn zone											
41.20		40.50-40.57: Red.-Cc.-dolomite(?) band with flaky banding.											
		White cg-obl. with hematite (film and diss.)											
45		Grey fine obl. ("Sdy" and some parts are "Shally") at 41.50-41.60: water escaped structure											
50		at 54.00-54.07: decolorized pale olive dk. boundary are 45° (upper & lower)											
55													
57.25		Grey coarse grain obl.											
58.80													
60		Grey fine grain obl.											
65													
66.20													
70		Grey cg-obl. crystal size max 15mm											
73.50													
75		Dark grey "Sdy" obl. with black seams. dip of black seams 60°											
78.55													
80		Dark grey ag-obl.											
81.00		Dark grey "Sdy" obl. sporadically visible banding with dip of 40°											
84.60													
90		Very coarse grain dark grey obl.											

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay		Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %
91.50		Very eg. dark grey abl.									
95		Dark grey banded "Sdy" abl. dip of banding: 60°-50° 93.00-93.15: Hematite diss. part (tuff?) 50-60°									
96.75		at 96.75m: 1-8m of Andradite band Grey-grey white altered & decolorized is. brittle and broken easy in flaky 96.75-98.45, 98.80-100.00, 100.30-101.20 : slightly dark parts.									
100		X-R MJI-19-2 (103.30m): Ht: Natrolite	P1>Qt-Cc-Ch-Py-Ht								
104.60		Dark grey "Sdy" abl. dip of seams : 30°-40° 105.30-107.10 : eg-abl. 60° 90°									
113.70		Skarnitized-decolorized Dk. 113.70-113.85: Andradite-bed. sk. with very small amount of Hem-Sp 113.85-114.00: Dark green banded parts. 114.00-114.80: Slightly decolorized (near white), tectonic fissure (near 90°) developed and brittle flaky. below 120.30: tectonic fissures developed strongly 70°			113.70-113.85	0.15	<0.07	5.5	<0.01	0.33	0.31
115											
120											
125											
128.65											
130											
135		Dark grey "Sdy" abl.									
140											



Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay			Results		
							Au g/t	Ag g/t	Cu %	Pb %	Zn %	
145		Dark grey "Sdy"abl.										
150												
151.00												
(Terminated)												

Drill Hole No : MJ1-20  
 Location :  
 Coordinate Point :  
 Depth : 151.00 m  
 Drilling Machine : OE-8L

MJ1 - 20 - 1

Elevation :  
 Inclination : -90°  
 Core Recovery : 95.0%(inc.soil part:82.1%)  
 Term : 8.Sep. - 12 Sep.1987

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay					Results						
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
5		Surface soil																
10																		
15																		
20																		
20.50																		
24.50		N.C. (cave)																
26.30		Clary grey mss fg-abl.																
26.80		N.C. (cave)																
29.70		N.C. (cave)																
32.00		Dark grey mss fg-abl.																
35		fissures developed limonite stained 32.00-32.30:dissolved part																
39.30		Greenish grey aphanitic dk. at upper boundary:wdl-4mm An-Ha rim																

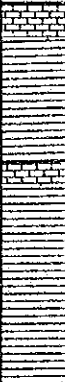
第31图 MJ1-20柱状图



Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
40.80		Hm-An-Py rim with wd of 0-6mm at lower boundary											
41.20		Dark grey fg-abl.											
41.90	BQ	Dark grey fg-abl.											
42.85		All.dk.wd 4-8mm cc-v.net developed											
44.85		Dark grey fg-abl. laminated part be present											
47.10		Decolorized whitish aphanitic dk.											
47.45		Dark grey "Sdy" abl. cloudy patterns are present. but not common											
50		Dark greenish grey dk. net work of Cc. at lower boundary wd lms>Hm rim is visible											
55.20		Dark grey cg-fg-abl. alt.											
57.20		Dark grey-grey altered dk. (?) (it is possible of lava or tuff)											
57.70		Py-Hm at upper boundary Py diss and veinlet at lower boundary											
59.60		Very coarse grain white abl.											
60.50		Dark grey "Sdy"abl.											
62.20		73.00-74.80:slumping structure with near vertical lam.											
63.75		Hm patch scattered alt. fg.											
64.80		White fg-abl.											
65.80		Alt. fg. with epidote (wd Bm Hm-Cc rim)			75.60-75.85	0.25	<0.07	1.3	<0.01	<0.01	0.01		
67.30		Basic lava. rich in Cc-v. & Py pool											
69.15		Grey white mss. fg-abl.											
70.40		Auto-brecciated lava. rich in Cc-v. blocks are slightly flattered											
73.00		Grey white mss fg-abl. below 81.40m comes "Shally"											
74.80		Purplish-grey white alt. dk. chlorite spotted. 82.30-82.50, 83.10-83.20, 84.15-84.30											
75.30		: limonite stained											
75.85		fg-abl. with slumping structure.											
76.40		limonite stain											
76.85													
77.50													
78.10													
78.90													
81.70													
85													
85.30													
88.85													
89.80													



Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay			Results								
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
90.60		Slumping fg-mbl.																
90.90																		
91.50		90.90-91.50:breccia dk.	limo-like part with low crystalline Py seams. mbl. fine coarse															
95																		
100		Grey wss fg-mbl.																
105		26°																
110																		
113.20		(indistinct)																
115		Grey "Shally" mbl.																
116.00		comes rapidly steep (±90°) slumping ?																
120		30° 90°																
122.10																		
125		Grey weak laminated fg-mbl. ~sdy mb. 123.10~123.40:coral fossil (profile) (section)																
128.30																		
130		128.60h131.35:shally "Reverse grading" ?																
131.30																		
135		133.10~133.40:"Shally"																
135.85																		
137.30		Black liay slate with slumping(?) patterns upper boundary 52°, lower is indistinct																
140		Dark grey fg-sdy-mbl.																

Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results						
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
141.00		Black limy slate 18°-20° dip of lamina																
146.00		Dark grey (g-sdy-ubl.)																
145.10		Black limy slate 30°-35° dip of lamina																
150		(Terminated)																

Drill Hole No : MJI-21  
 Location :  
 Coordinate Point :  
 Depth : 281.00 m  
 Drilling Machine : L-35

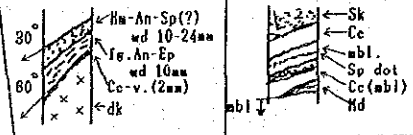
Elevation :  
 Inclination : -50° (340°00')  
 Core Recovery : 96.9%(inc.soil part:84.5%)  
 Term : 27 Oct. - 3 Nov. 1987

M J I - 2 1 - 1

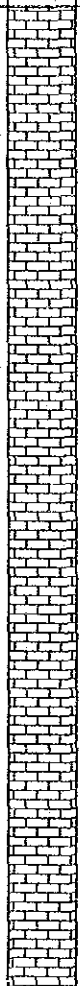

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay		Results				
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
5													
10													
15													
20													
25													
30													
35													
36.10	x x x x	Skarnitized aphanitic(?) dk. decolorized to white grey											
37.30	x x x x	N.C. (cave)											
38.50		White very cg-mbl.(crystal 8-30μ)											
40													

第 3 2 图 M J I - 2 1 柱状图

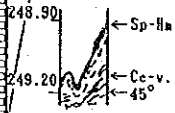

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (w)	Assay					Results	
							Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)		
40.70-41.20		very eg-mbl. (crystal 40mm')											
41.20	N.C. (cave)												
42.00													
43.15		Skarn zone (grossular-quartz-k-feldspar with a few amount of Andradite?)											
44.50		Brownish grey-white compact rock (ig.) becomes dark greenish grey (Hm bearing?)											
44.50	N.C. (cave)	→ toward deeper, scattered in the rock with irregular shape (filling up?)											
45.20		Decolor (cream white) green min. spotted (decomp. Sk+Qtz)			43.30-44.50	1.20	<0.07	2.8	<0.01	<0.01	0.04		
46.50		Decolorized aphanitic grey white dk.											
47.15		47.15-48.80: pale orange color. a few of green aggregate											
48.80		lower boundary 60°, and limonite stain			48.60-49.60	1.00	<0.07	0.5	<0.01	<0.01	0.08		
49.80		Greenish Qtz-An-Ch(?) zone with a few of Sp(?)			49.60-49.80	0.20	<0.07	1.3	<0.01	0.03	0.19		
50.50		Ore zone			49.80-50.50	0.70	0.07	148.	1.71	0.72	18.60		
52.20	N.C. (cave)	49.80-50.00 : Ce+Qtz part with Sp ore											
52.60	N.C. (cave)	50.00-50.50 : Sp)Ce-Ce-Qtz-Hd ore			52.20-52.60	0.40	<0.07	107.0	0.05	0.37	4.78		
52.80	N.C. (cave)	50.50-52.20 : (cave)											
53.70	N.C. (cave)	52.20h52.60 : decolorized Hd (brownish cream yellow)			52.80-53.70	0.90	<0.07	136.0	0.04	0.54	18.60		
54.15		with small amount of Sp.											
54.20	N.C. (cave)	limonite stained parts, upper and lower boundary			54.15-54.20	0.05	0.14	940.	0.40	4.08	47.0		
56.70													
60		52.60-52.80 : (cave)											
		52.80-53.70 : Hd-Sp ore (medium-high grade)											
		53.70-54.15 : (cave)											
		54.15-54.20 : near pure Sp ore											
		54.20-56.70 : (cave)											
85		Grey white ass. eg. mbl.											
69.00													
70													
71.10		Greenish (moss green) grey compact dk. (Aphanitic type) decolorized, hair veinlet of Hm-Py-Andradite(?)											
75													
77.00													
80		Dark grey eg-mbl. irregular (deformed) net of black seams. below 77.00m laminae are common											
85													
90													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Rd (m)	Assay Results										
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
95		Dark grey cg-obl.															
96.90																	
100		rich in tuffaceous seams fg-obl.															
101.70		tuffaceous															
102.00		Slaty(suddy)															
105		101.70-103.50:irregular shaped laminae(slumping?) Laminae are composed of tuffaceous seams and hornfelsic slate seams															
		101.70-102.00:tuffaceous 102.00-103.50:hornfelsic seams															
110		Principally,102.00-123.50 is composed of obl.with hornfelsic thin seams. laminae 35°except slumping part															
115.00		115.00-119.30:slumping structure (representing by tuffaceous seams)															
119.30																	
120.00																	
123.50		tuffaceous															
125																	
		Grey obl.with banding by tuffaceous seams															
130		<b>Ore zone</b>															
		131.30-131.70:compact dark green ig.															
131.30		131.70-133.20:fine grain of Andradite-Epidote with Hm-Sp(?)			131.30-131.70		0.40	<0.07	9.0	<0.01	0.04	0.38					
131.70					131.70-132.70		1.00	<0.07	2.3	<0.01	<0.01	0.09					
133.20		133.20-133.60:Hd-An-Ce-Sp-Cn-(Cp) ore			132.70-133.20		0.50	<0.07	1.7	<0.01	<0.01	0.04					
133.60		Sp rich at An-Ce part			133.20-133.60		0.40	<0.07	81.0	0.12	0.50	8.94					
135																	
140		Grey white ag-obl.near ass.with faded cloudy patterns															

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
145		Grey white mg-obl.											
149.30		149.30-151.80: cg ~ v.cg-obl.											
151.80													
155													
160													
165													
170													
175													
179.30		↓ Becomes coarser than upper grey.mss.obl.											
185													
190													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results						
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
195		Grey mss.wg-ubl.																
200																		
205																		
210																		
215																		
218.00																		
220		Fine grain abl. 220.80-221.00:black cloudy patterns																
225		Except 220.80-221.00 nearly faded cloudy patterns		wd lam-7m black cloudy pattern														
230		231.60-233.80:rich in wd 3cm-am order Cc-v. below 234.00:cones tuffaceous fg tuffaceous-pelitic abl.																
235		237.90-238.10:Horafelsic part (reddish) + tuffaceous (green ~cream)part mixed																
237.90		238.10-239.40:lava?altered.granular texture																
238.10		239.40-240.00:red part & green part mixed			237.80-238.80	1.00	<0.07	1.0	<0.01	<0.01	0.02							
239.40		240.00- : very fine shaly abl.			238.80-239.80	1.00	<0.07	1.0	<0.01	<0.01	0.02							
239.40		Very fine mss.abl.			239.80-240.15	0.35	<0.07	1.7	<0.01	<0.01	0.02							



Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay					Results	
							Au g/l	Ag g/l	Cu %	Pb %	Zn %		
		Very fine ass abl.											
245													
248.90					248.90-249.20	0.30	<0.07	4.4	<0.01	0.01	0.55		
249.20		Ore zone			249.20-250.20	1.00	<0.07	1.3	0.01	<0.01	0.04		
250.70		248.90-249.20: Ha-Sp-An(11a) 249.20-250.70: compact aphanitic ig. with scattered An aggregations. Py-Cp? film v. (12a, 13a) Cp-Sp at lower boundary			250.20-250.70	0.50	<0.07	1.7	0.05	<0.01	0.04		
255		"Sdy" -fg-abl.											
260		Ore zone											
260.30		260.30-260.70: Ha-Sp-Cc-Hd(?)			260.30-260.70	0.40	<0.07	21.5	0.26	0.05	6.72		
260.70		260.70-261.30: altered dk like Dk-6(u) at MJI-9			260.70-261.70	1.00	<0.07	1.3	<0.01	<0.01	0.03		
261.30		but also has a appearance of alt. lava											
262.05		brown reddish color, cutted by a lot of Cc-v.											
265		261.30-261.50: fine grain Andradite											
261.50		261.50-260.05: brown fine grain (cherty) Qtz-v. has filling up brecciated abl. block											
270													
275		ass fg-abl.											
278.50													
280		becomes slightly to tuffaceous											
281.00		(Terminated)											

Drill Hole No : MJ1-22  
 Location :  
 Coordinate Point :  
 Depth : 300.00 m  
 Drilling Machine : L-38

MJ1 - 22 - 1

Elevation :  
 Inclination : -50° (340°00')  
 Core Recovery : 94.4%(inc.soil part:80.9%)  
 Term : 9 Nov. - 18 Nov.1987

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Rd (m)	Assay		Results								
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
5																	
10																	
15																	
20		Surface soil															
25																	
30																	
35																	
40																	

第33图 MJ1-22柱状图

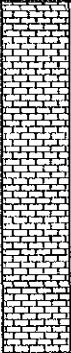
Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
		Surface soil											
43.00													
45	N.C.	(weathered, decomposed mbl. zone ?)											
49.00													
49.10	N.C.	Si-enriched weathered mbl.											
52.60		Brown -brown red soil-like decomposed mbl.											
53.40													
55													
60	N.C.												
65													
67.65		Decomposed soil-like skarn zone											
68.10	N.C.	(margin of alkaline int. body)											
68.60													
69.10		Greenish skarnitized zone (alkaline int. ?)											
70													
75		White very cg-mbl. with some parts of cloudy patterns											
80													
80													
85													
86.30		comes finer (cg-size)											
90													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Nd (m)	Assay					Results					
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
91.80																	
93.05		Comes dark.															
93.55		at 92.95-93.05: vesuvianite(Vs) skarn with Cc			93.00-94.00	1.00	<0.07	0.5	<0.01	<0.01	0.01						
94.25		Grey compact ig.(?) a lot of amount of Hm.			94.00-94.55	0.55	<0.07	1.8	<0.01	<0.01	0.01						
95		lower boundary is indistinct															
		Co-Vs skarn zone. Andradite at lower most of boundary.															
100		Dark grey-grey mg-fg. mbl. mss.															
		banding(lamina) are visible but not so clear															
105																	
110																	
		comes mss and whitish															
		lamina are invisible(faded).															
115																	
120																	
		Slightly talcused greenish dark grey compact ig.															
		lower boundary is indistinct(lava?)															
125		Banded(lamina?) mbl.															
125.60		Andradite along the "lamina" and Sp ore with			125.60-126.60	1.00	<0.07	0.5	<0.01	<0.01	0.01						
		Hd(?) also along the "lamina" and hair-v. of Sp.			126.60-127.60	1.00	<0.07	0.5	<0.01	<0.01	0.01						
					127.60-128.60	1.00	<0.07	0.8	<0.01	<0.01	0.01						
128.85					128.60-128.85	0.25	<0.07	1.0	<0.01	<0.01	0.01						
130					128.85-129.85	1.00	<0.07	5.3	<0.01	0.02	1.99						
130.35					129.85-130.35	0.50	<0.07	1.0	<0.01	<0.01	0.04						
131.65		An-pyroxene spotted compact ig. greenish															
		laminated mbl. 131.80-131.80m. 133.05-133.15m Sp diss.			131.80-131.80	0.10	<0.07	11.5	0.01	0.06	3.42						
133.15		Tuff & lava ? all skarnitized slightly grey															
135					134.00-134.15	0.15	<0.07	12.5	0.03	0.06	4.52						
135.40		Well laminated "Shally" mbl.			134.15-135.15	1.00	<0.07	1.7	0.02	<0.01	0.05						
136.40		White fg. mbl. mss.			135.15-135.55	0.40	<0.07	1.9	0.02	0.01	0.03						
137.40		Skarnitized tuff, dark greyish green															
137.80		Dark grey fg. mbl(mss).															
140																	

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
140.86		Dark grey mss fg-abl.											
141.08		Sp-Qtz ORE Zone			140.86-141.06	0.20	0.21	40.5	0.04	0.18	20.1		
141.60													
143.00		141.06-141.60:silicified,Andoradite rich zone			141.06-142.06	1.00	<0.07	0.8	<0.01	<0.01	<0.01		
		141.60-143.00:grey silicified compact is.			142.06-143.06	1.00	<0.07	<0.3	<0.01	<0.01	0.02		
145		lower boundary is irregular			143.06-143.15	0.09	<0.07	<0.3	<0.01	<0.01	0.01		
145.70		comes mss											
149.10		Dark grey laminated(shally-like)abl.											
150		rich in slightly hornfelsitized slaty(reddish) thin seams.											
		149.10-155.90:dark grey and white parts mixed.											
		154.40-155.60:slumping structure,representing by hornfelsic and talcuse seams.											
155													
155.90		155.90-157.80: mss fg-abl.											
157.80													
160		White grey-white mss cg-abl.											
165													
170													
175													
180													
185													
186.20		186.20:cloudy pattern											
190													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay			Results			
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
191.30		191.30, 192.50-193.00, 195.20-195.40											
192.50		: cloudy patterns											
193.00													
195													
195.20		Whitish grey-white mss cr-obl.											
195.40													
200													
205													
210													
215													
220													
220.50													
225		Grey-light grey mg-obl. laminae are visible commonly but nearly faded											
230													
235													
240													

Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay			Results														
							Au g/t	Ag g/t	Cu %	Pb %	Zn %													
245		Grey-light grey ag-mbl. near massive																						
250																								
255																								
260																								
265																								
270																								
275																								
280													<b>Ore zone</b> 280.35-282.13: Hw-Sp-An-Hd ore											
280.85													282.10-283.13: skarnitized compact rock (iz ?)											
282.13													 46° 3cm Sp in mbl. Sp-An (Sp is laminella or band)											
283.13	 Andradite (max 3mm) Nematite & Sp																							
285	Grey mss fg-mbl. 284.00-284.20: fossiliferous ?				280.85-281.85	1.00	<0.07	26.8	0.57	0.06	10.70													
285.05	Dark reddish skarnitized fg.				281.85-282.13	0.28	<0.07	9.0	0.23	0.01	6.10													
287.40	Dark grey mss fg-mbl. 289.70-289.90: cloudy pattern				282.13-283.13	1.00	<0.07	1.0	<0.01	<0.01	0.07													
289.70					285.70-286.70	1.00	<0.07	1.0	<0.01	<0.01	0.03													
					286.70-287.55	0.85	<0.07	1.0	<0.01	0.01	0.02													

Depth (m)	Geolos. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay		Results				
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
295		Dark grey mss fe-obl.											
300.00		293.60-294.20:cloudy pattern											
(Terminated)													



Drill Hole No : MJI-23  
 Location :  
 Coordinate Point :  
 Depth : 276.30 m  
 Drilling Machine : L-38

MJI - 23 - 1


Elevation :  
 Inclination : -50° (340°00')  
 Core Recovery : 90.1% (inc. soil part: 85.60)  
 Term : 11 Oct. - 21 Oct. 1987

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay Results						
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
5		Surface soil											
10													
15													
15.40 15.60		Alkaline ig. dark-grey											
	N.C.												
19.70													
20.90 21.00		Decomposed Alkaline ig.											
	N.C.												
		21.00-23.90, 25.00-25.90 : limonite stain											
23.90													
25.00	N.C.												
25.90													
26.60	N.C.	Dark-grey compact Alkaline ig.											
27.10													
28.90													
30		Weathered & decomposed Alkaline ig.											
31.10 31.20													
	N.C.												
32.60 32.90													
	N.C.												
33.30 33.60		Weathered skarnitized part. whitish											
35	N.C.												
36.20 37.00		Decomposed & weathered skarnitized part. white brown											
	N.C.												
37.80		38.50-39.50: black and green crystal spotted											
38.50		white-reddish skarnitized abl. (?)											
39.50	N.C.	black: 2mm-10mm green: 7mm-2.5cm											

第34図 MJI-23柱状図

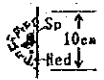
Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Hd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
40.85	N.C.												
41.40		Yellowish green garnet zone											
43.20		Andoradite spotted silicified mbl.grossular at lower boundary											
45		Grey silicified-epidotized porphyritic rock											
45.75		Skarnitized alkaline rock											
46.00	N.C.												
47.70		Epidotized pophyritic rock, decomposed											
48.10		Decomposed skarnitized alkaline rock.upper boundary 55°											
48.40	N.C.												
49.70		Decolorized(weathered) porphyritic rock											
50.30	N.C.												
51.10		Skarnitized alkaline rock											
52.45													
53.30													
53.70													
54.10	N.C.	(cave)											
55.20		White cg-mbl.											
56.30		White mg-mbl. mbl. 59.35 black streak with small amount of Cp 70 Sp 64.95 Skarn banding Cr crystal											
59.35		Andradite(?) grossular			59.25-60.25	1.00	<0.07	1.0	<0.01	<0.01	0.03		
61.75		skarn zone 45°			60.25-61.25	1.00	<0.07	1.3	<0.01	<0.01	0.02		
		Skarnitized alkaline rock			61.25-62.15	0.95	<0.07	1.0	<0.01	<0.01	0.02		
64.95		(indistinct) Yellowish-green epidote-andradite(?) aphanitic dk.											
65.95		Sp rich Sp-Cu ass. ore (Sp/Gn)			65.95-66.35	0.40	<0.07	383.	0.50	1.90	29.2		
68.25		White very cg-mbl. 10cm Sp at lower boundary											
69.70	N.C.	(cave)											
71.35		White very cg-mbl.											
72.90		below 72.90:slightly finer											
75		75.50-79.20:crushed-reconsolidated part(?)											
75.50		77.90-78.00:Py diss. in hornfelsic part											
79.20		Decolorized pale orange ig(dk?) 80° breccia dyke(?) probably boundary of dk. mbl. "flowage" with Co-v.											
79.90	N.C.	(cave)											
85		Dark grey mg-ig-mbl.											
85.28		88.00-88.20:cave											
88.00	N.C.	Seggregated calcite											
88.20													
88.65													
90		Grey mg-mbl.											

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay Results										
							Au g/t	Ag g/t	Cu %	Pb %	Zn %						
93.70		Grey mg-obl.															
94.20 94.35	30°	Ore zone			93.70-94.32	0.62	<0.07	13.3	0.15	0.04	4.26						
96.75	65°	93.70-93.80:Sp diss-spotted in mbl. 93.80-94.20:Sk(Andradite-epidote)-Sp-Hematite 94.20-94.35:Sk(very fine An-Ep) 94.35-96.75:decolorized pale orange aphanitic dk.															
99.90		Grey white mg-obl.															
101.05	30°	Grey sdy-mbl(very coarse than common "Sdy" type a few of lamina (101.05-101.15:cave)															
105		lamina(thin seams)almost hornfelsic															
110	20°	109.50:water escaped structure 111.60-113.90:slumping structure 113.90-114.10:andradite-grossular-Cc(segregated)part 114.10-114.40:"Shally" mbl.															
114.10 114.30	10°																
120																	
124.50	30°	124.46-124.50:grossular															
125.70	15°	Epidotized very fine grain ig. with a few of grossular below 125.70:wd 1.5cm grossular part															
128.80 129.85		Skeritized lava flow ? 128.80-129.35:andradite diss.but non-metallic min.															
135		Grey "Sdy" mbl.															
140																	

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Wd (m)	Assay					Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %		
		Grey "Sdy" mbl.											
145		145.50-149.00:hornfelsic lamina are common 149.00-151.00:tuffaceous lamina are common											
150													
155		157.85-158.90:crushed & reconsolidated mbl.with Py											
160													
160.37		Ore zone (probably correlative to D-2)			160.37-160.85	0.48	<0.07	13.8	0.11	0.06	1.54		
161.50		160.37-160.52:andoradite-Sp-Cp ore			160.85-161.50	0.85	<0.07	63.5	0.29	0.17	39.8		
		160.52-160.60:andoradite			161.50-162.50	1.00	<0.07	1.9	<0.01	<0.01	0.17		
		160.60-160.70:andoradite with a few of Sp			162.50-163.35	0.85	<0.07	2.5	<0.01	<0.01	0.17		
164.30 164.48		160.70-160.85:limonite stained Qtz-Sp			163.35-164.30	0.95	<0.07	9.2	0.06	0.02	0.89		
		160.85-161.50:mss.Sp ore			164.30-164.48	0.18	<0.07	63.5	2.36	0.08	14.40		
		161.50-163.35:chlorite-epidote dark green rock with hexalite											
		163.35-164.30:calcite-quartz with a few spot of Sp											
170		164.30-164.48:Cp-Sp(lower)ore											
		 161.50 boundary is clear											
175		Grey mss mg-mbl.											
180													
185													
186.30		Grey white cp-mbl.											
190													

Depth (m)	Geolog. Log	Lithology	Mineralization etc	Sample No.	Depth (m)	Md (m)	Assay					Results						
							Au g/t	Ag g/t	Cu %	Pb %	Zn %							
		Grey Sdy-abi.																
193.60																		
195		Grey mss ag-abi.																
196.60																		
198.50		Grey-grey white mss cg-abi.																
200																		
		Grey mss ag-abi.																
		cloudy patterns are recognizable																
205																		
210																		
215																		
218.30		218.30-218.90: very cg. part																
220.00		↓ becomes common of faded black seams																
225																		
		26" black seam																
230																		
235																		
238.30		All. dk.																
239.05		upper boundary(50°dip): lower boundary(55°dip):																
		***																
240		Grey mss ag-abi.																

Depth (m)	Geolog. Log	Lithology	Mineralization etc.	Sample No.	Depth (m)	Md (m)	Assay			Results	
							Au g/t	Ag g/t	Cu %	Pb %	Zn %
245		Grey mss ag-mbl.									
250											
251.50											
255		Grey cg-mbl. between 252.00-260.80 wd 2mm-5mm decolorized dk or mud dyke more than 10 bodies intruded (mud dk. in fault zone ... possible)									
260											
260.80											
265		Grey ag-mbl. with cloudy patterns									
267.15		Ore zone (probably correlative to D-6)			267.15-267.95	0.80	<0.07	46.5	2.00	0.09	14.60
268.35		267.15-267.95:Hedenbergite>Sp ore			267.95-268.95	1.00	<0.07	3.9	0.01	0.01	0.12
270		267.95-268.85:Hedenbergite			268.95-269.95	1.00	<0.07	1.3	<0.01	<0.01	0.08
		268.85-269.65:Andradite(?) - Epidote			269.95-270.95	1.00	<0.07	2.3	0.01	0.01	0.34
		269.65-270.95:Hedenbergite			270.95-271.95	1.00	<0.07	1.7	<0.01	<0.01	0.21
272.55		270.95-272.55:Hedenbergite & Andradite banded			271.95-272.55	0.66	<0.07	5.8	0.05	0.02	0.28
273.20		272.55-273.20:mbl. but at 273.10-273.20:Hed+Sp			273.10-273.20	0.10	<0.07	5.0	0.05	0.01	6.20
275											
276.30		Grey ag-fs-mbl. (Terminated)									



## 参 考 文 献

1. Chambers, L. A. et Trudinger, P. A. (1978): Microbiological fractionation of Stable sulfur isotopes, A review and critique, *Geomicrobiology Jurnal*, Vol.1, no. 3.
2. Claypool, G. E. et al (1980): The age curves of sulfur and oxygen isotopes in marine sulfur and thir mutual interpretation, *Chem, Geol.* Vol. 28, pp. 199 - 260.
3. Kajiwara, Y. et Sasaki, A. (1987) : Sulfur isotope similarity between crude oil and kuroko sulfides from the Green-tuff region of Northeastern Japan, *Mining Geol.* Vol. 37(3), pp. 199-203
4. Katili, J. A. (1987): Epithermal Gold, The Flavour of the Coming Decade ?, *Pertambangan dan Energi No. 4-1987*
5. 鞠子 正 (1981): 福井県中竜鉱山中山・人形鉱床における銀の分布と含銀鉱物, 鉱山地質特別号, 10, 159-174
6. Peterman, Z. E., Hedge, C. E. & Toutelot, H. A. (1970): Isotopic composition of strontium in seawater throughout Phanerozoic time, *Geoch. Cosmoch. Acta*, 34, 105-120
7. 島崎英彦(1977): スカルン鉱床, 立見辰雄(編) 現代鉱床学の基礎, 東京大学出版会 175-187

