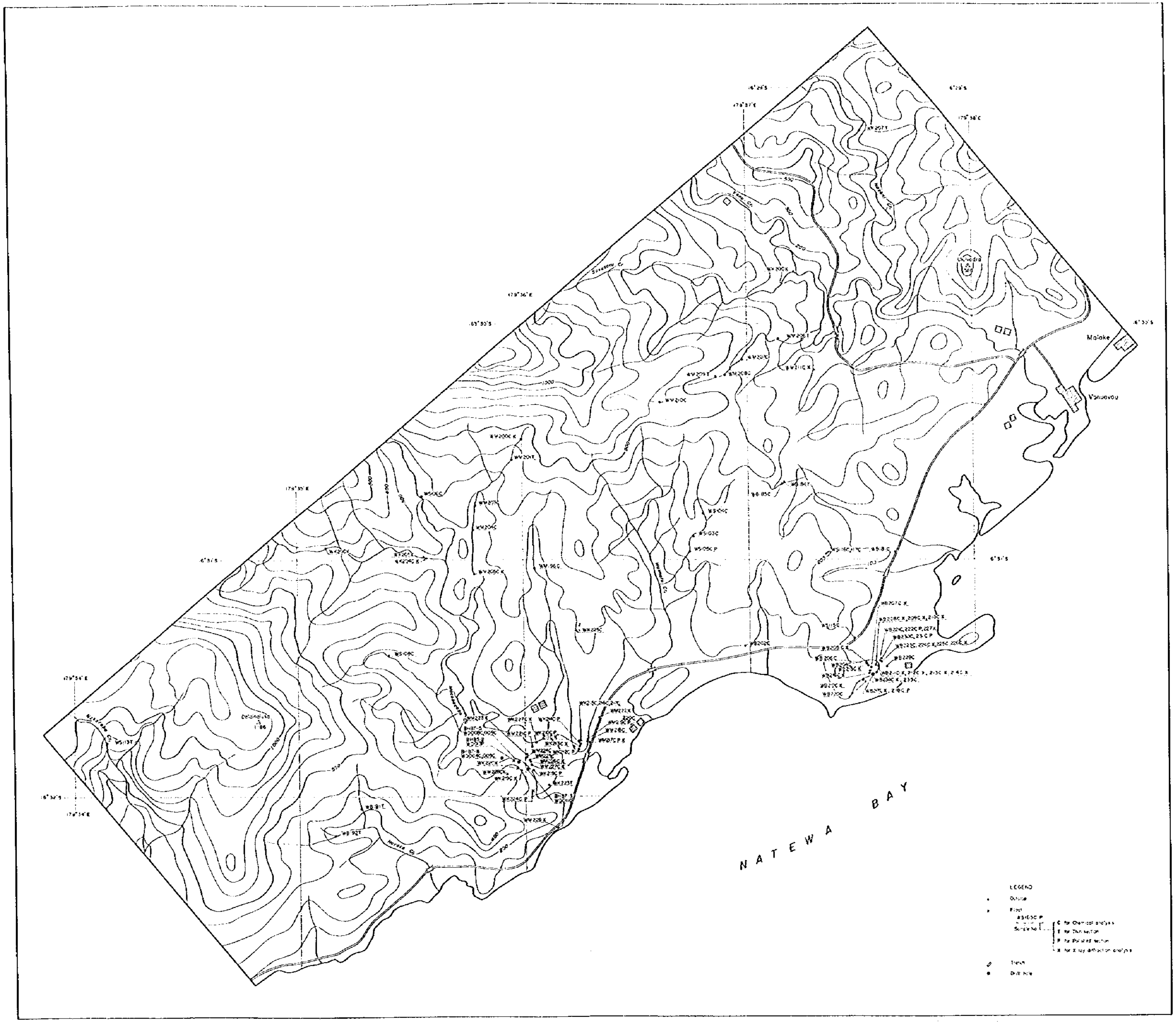
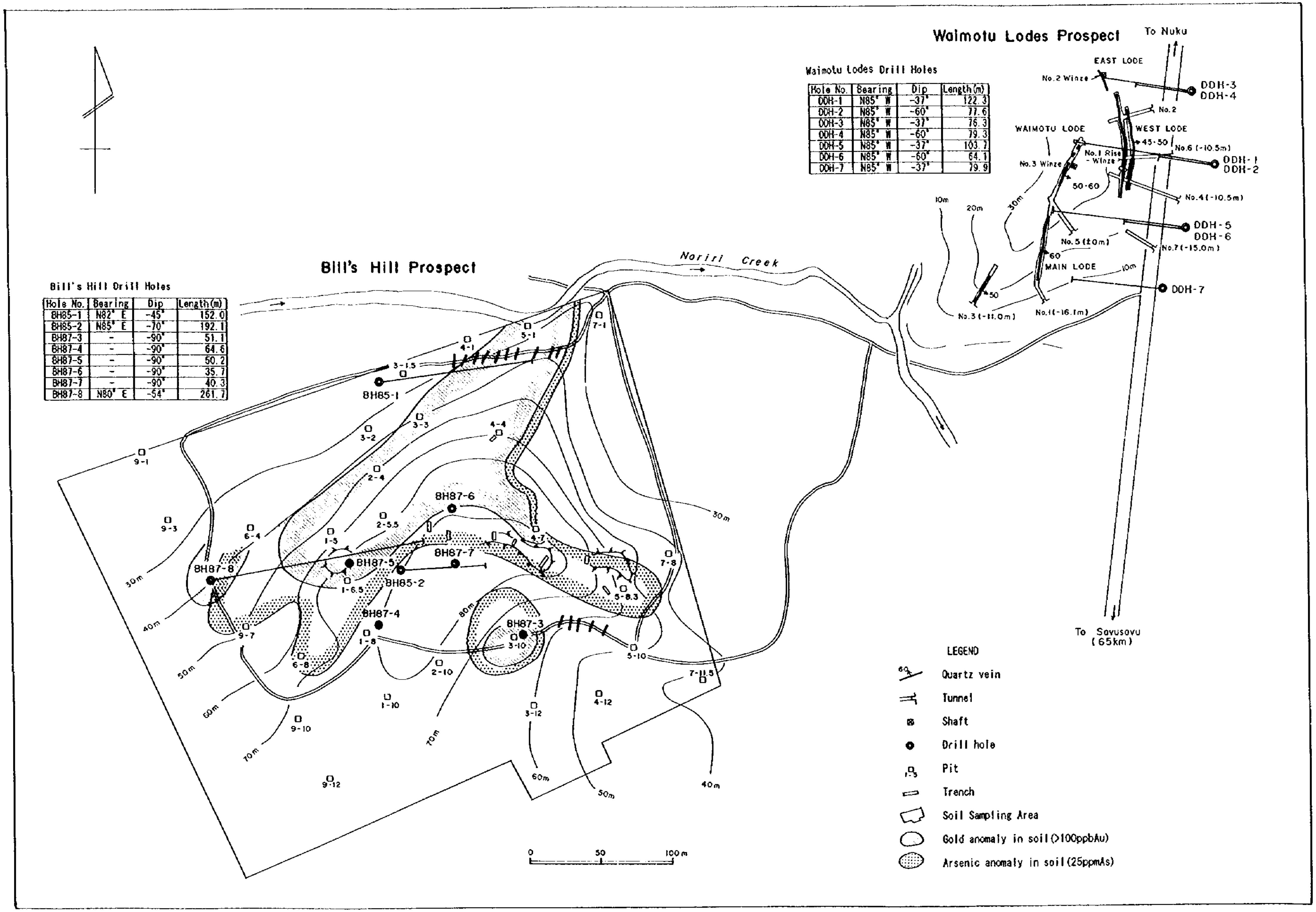


Fig. 2-4-2 Sample Location Map of the Waimotu Area



Waimotu Lodes Drill Holes

Hole No.	Bearing	Dip	Length(m)
DDH-1	N85° W	-37°	122.3
DDH-2	N85° W	-60°	77.6
DDH-3	N85° W	-37°	76.3
DDH-4	N85° W	-60°	79.3
DDH-5	N85° W	-37°	103.7
DDH-6	N85° W	-60°	64.1
DDH-7	N85° W	-37°	79.9

Bill's Hill Drill Holes

Hole No.	Bearing	Dip	Length(m)
BH85-1	N82° E	-45°	152.0
BH85-2	N85° E	-70°	192.1
BH87-3	-	-90°	51.1
BH87-4	-	-90°	64.6
BH87-5	-	-90°	50.2
BH87-6	-	-90°	35.7
BH87-7	-	-90°	40.3
BH87-8	N80° E	-54°	261.7

Fig. 2-4-3 Summary Map of Existing Data of the Waimotu Lodes and Bill's Hill Prospect

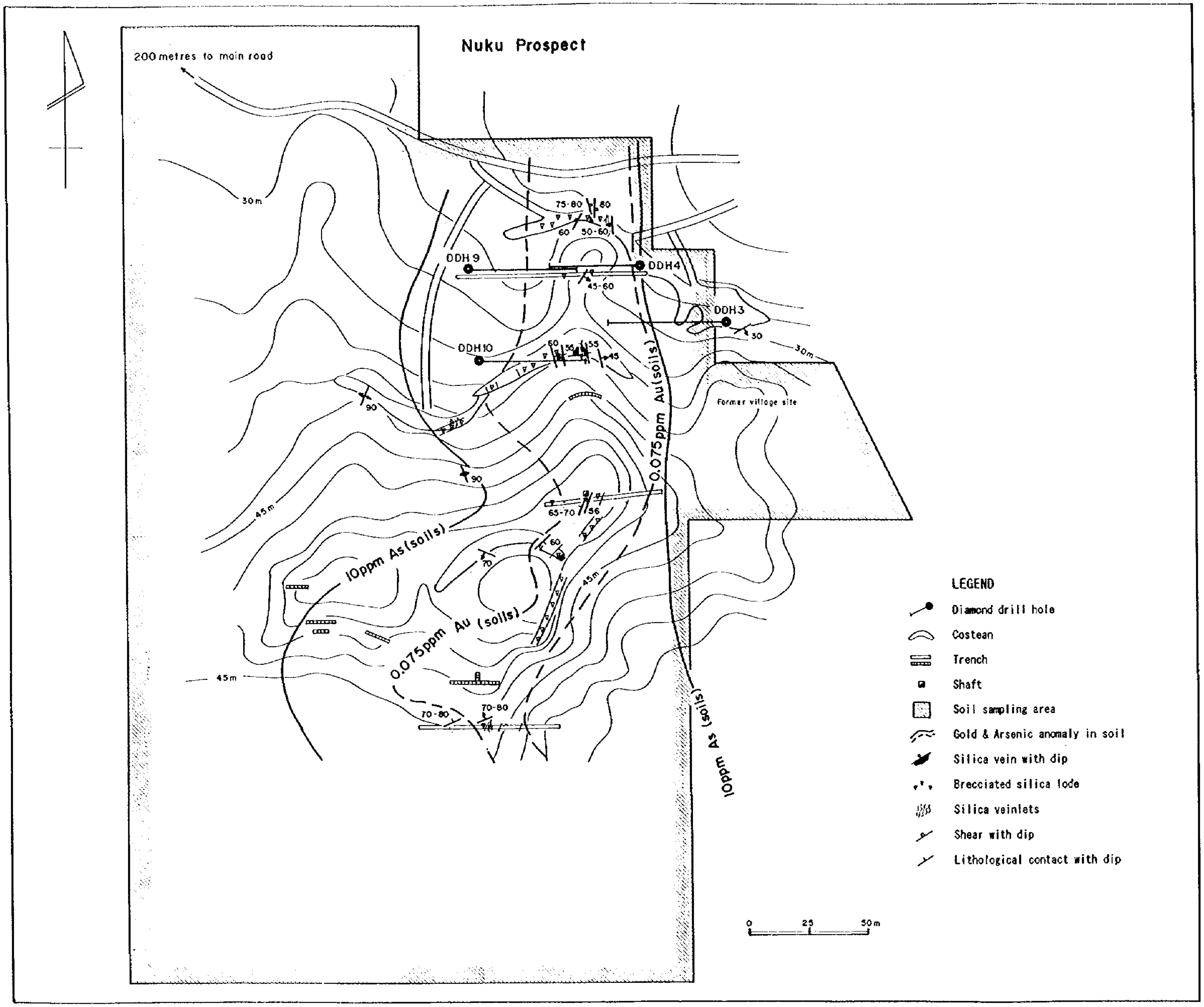


Fig. 2-4-4 Summary Map of Existing Data of the Nuku Prospect Area

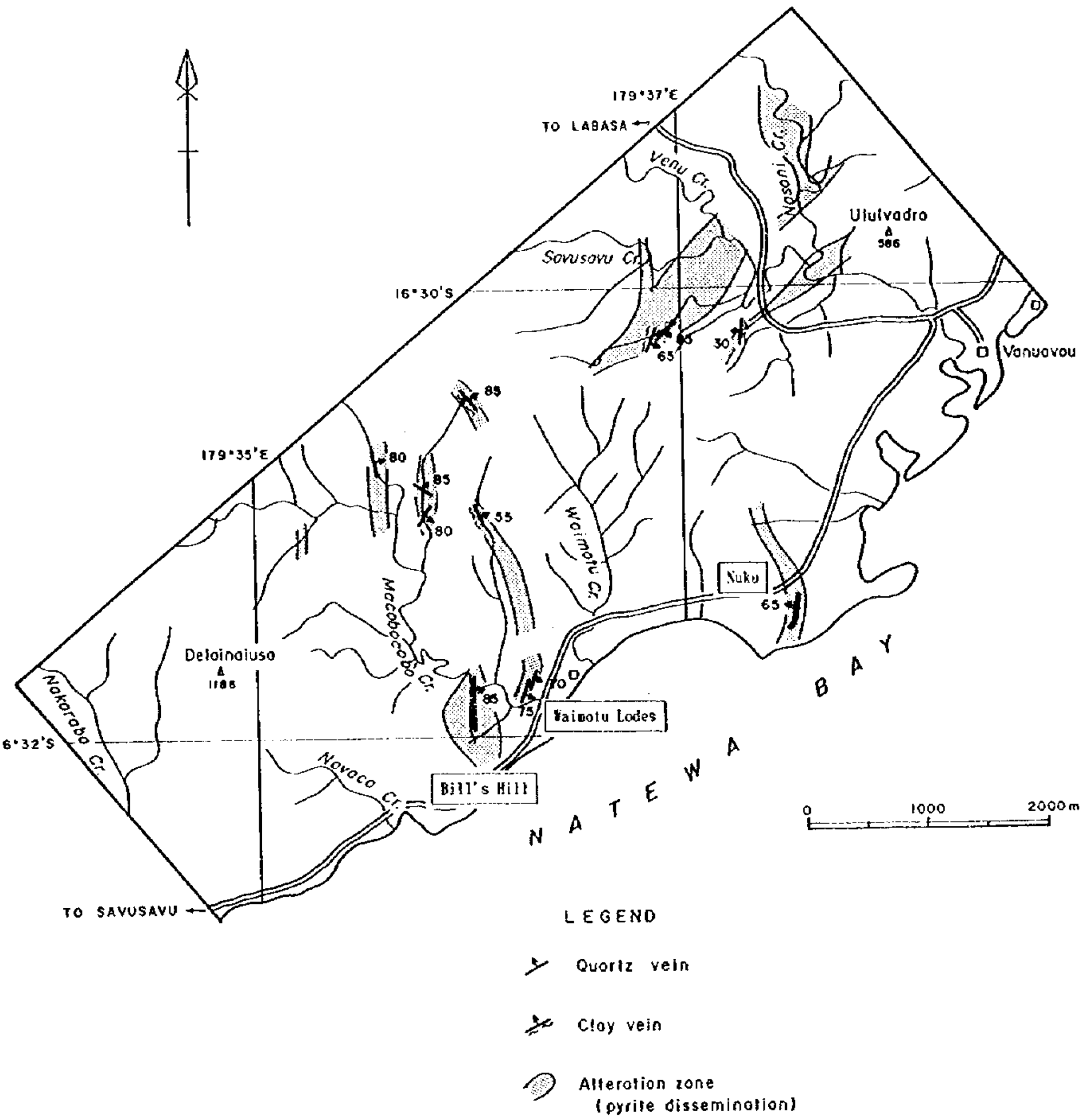
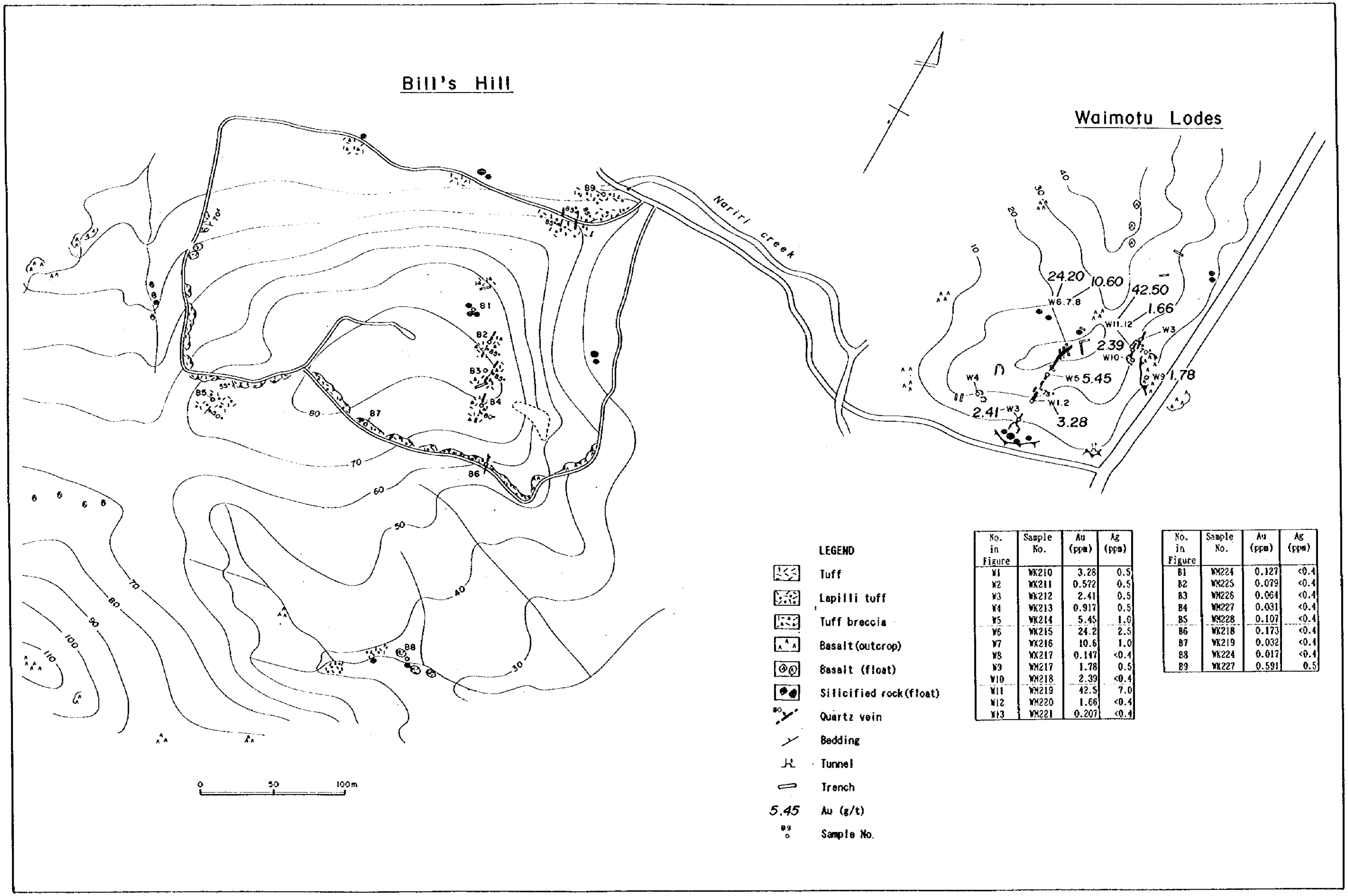


Fig. 2-4-5 Distribution Map of Prospects and Alteration Zones in the Waimotu Area



No. in Figure	Sample No.	Au (ppm)	Ag (ppm)
W1	WK210	3.28	0.5
W2	WK211	0.572	0.5
W3	WK212	2.41	0.5
W4	WK213	0.917	0.5
W5	WK214	5.45	1.0
W6	WK215	24.2	2.5
W7	WK216	10.6	1.0
W8	WK217	0.147	<0.4
W9	WM217	1.78	0.5
W10	WM218	2.39	<0.4
W11	WM219	42.5	7.0
W12	WM220	1.66	<0.4
W13	WM221	0.207	<0.4

No. in Figure	Sample No.	Au (ppm)	Ag (ppm)
B1	WM224	0.127	<0.4
B2	WM225	0.079	<0.4
B3	WM226	0.064	<0.4
B4	WM227	0.031	<0.4
B5	WM228	0.107	<0.4
B6	WK218	0.173	<0.4
B7	WK219	0.032	<0.4
B8	WK224	0.017	<0.4
B9	WK227	0.591	0.5

Fig. 2-4-6 Detailed Survey Results of the Waimotu Lodes and Bill's Hill Prospect

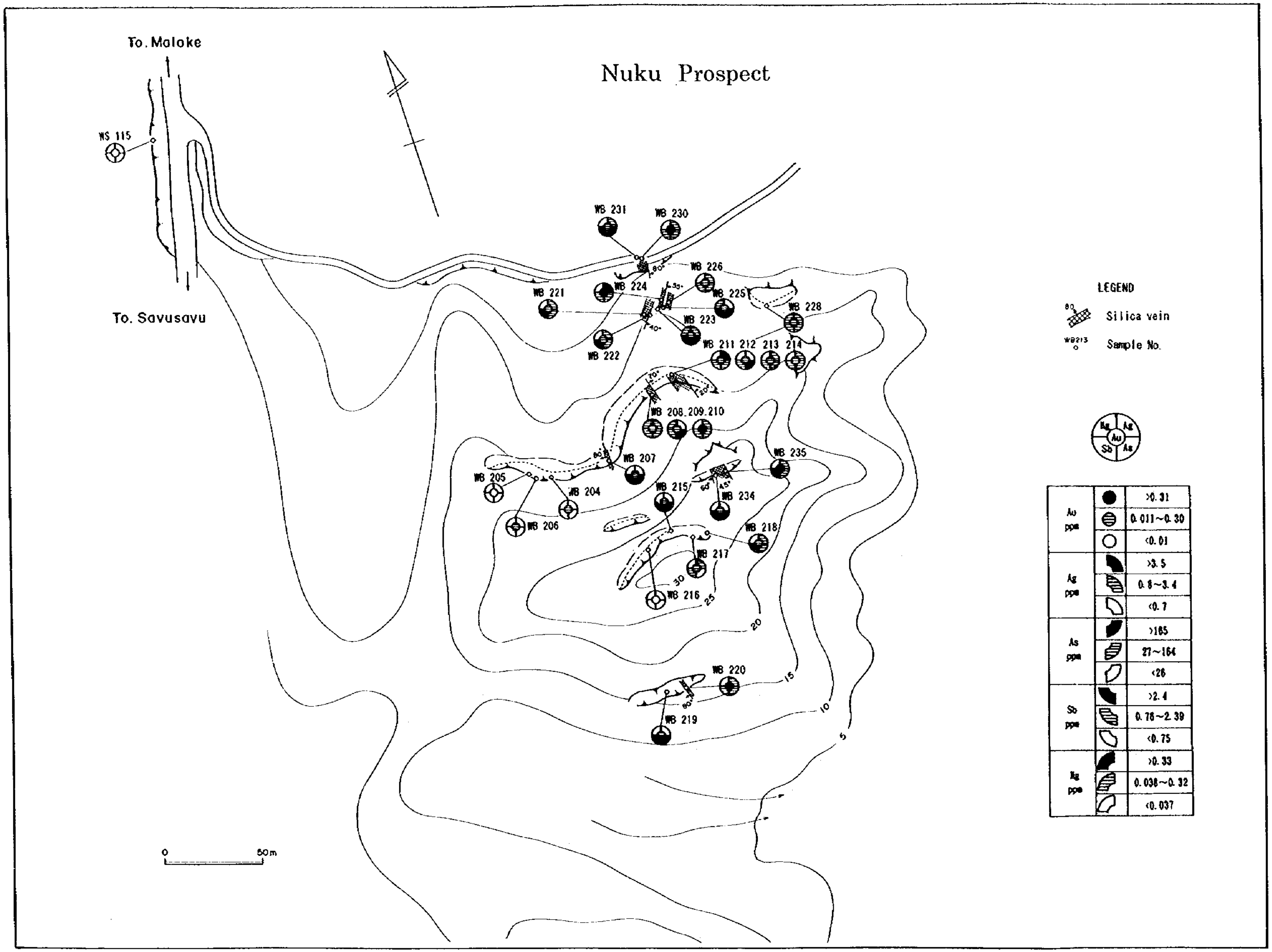


Fig. 2-4-7 Detailed Survey Results of the Nuku Prospect Area

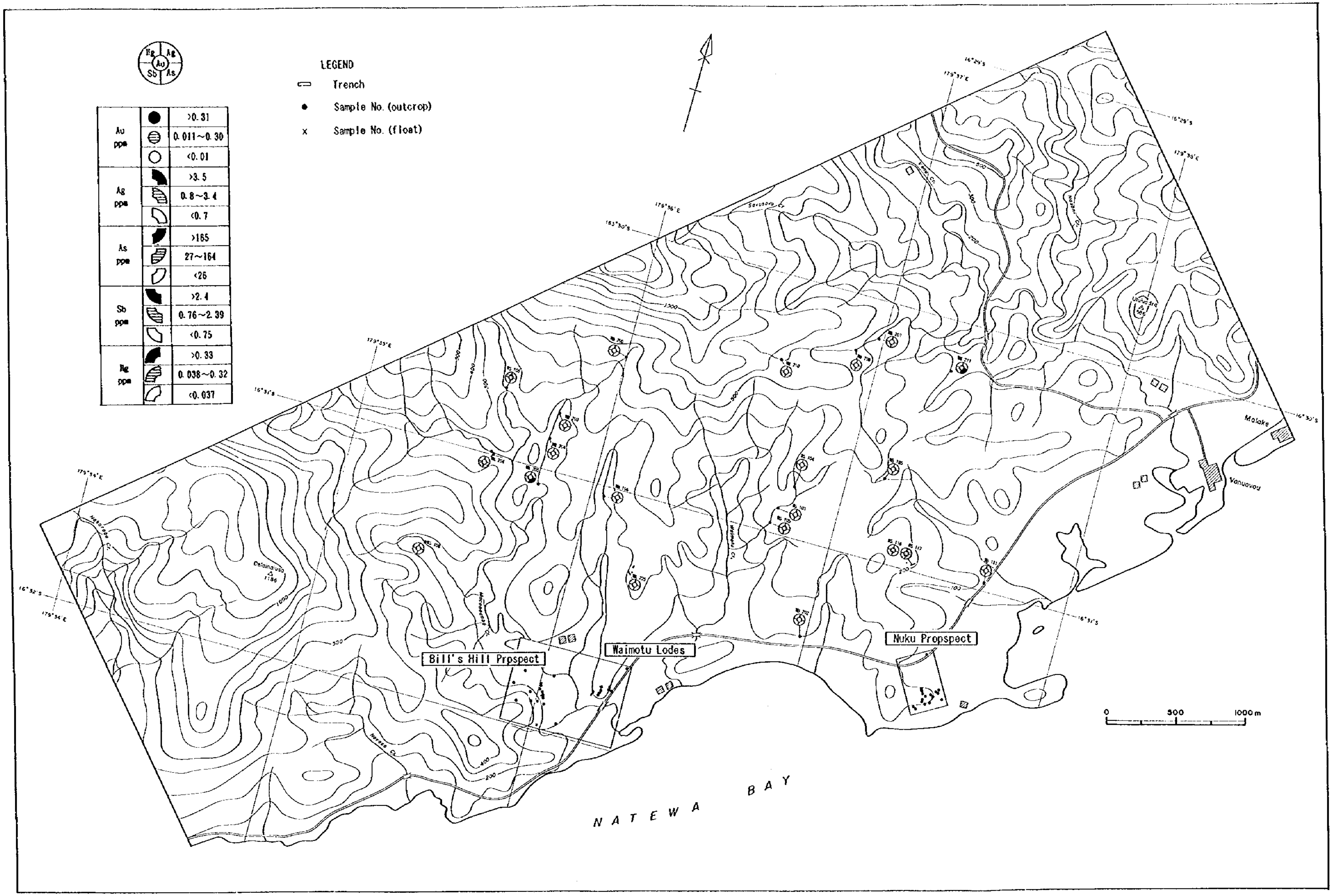


Fig. 2-4-8 Geochemical Survey Results of the Waimotu Area

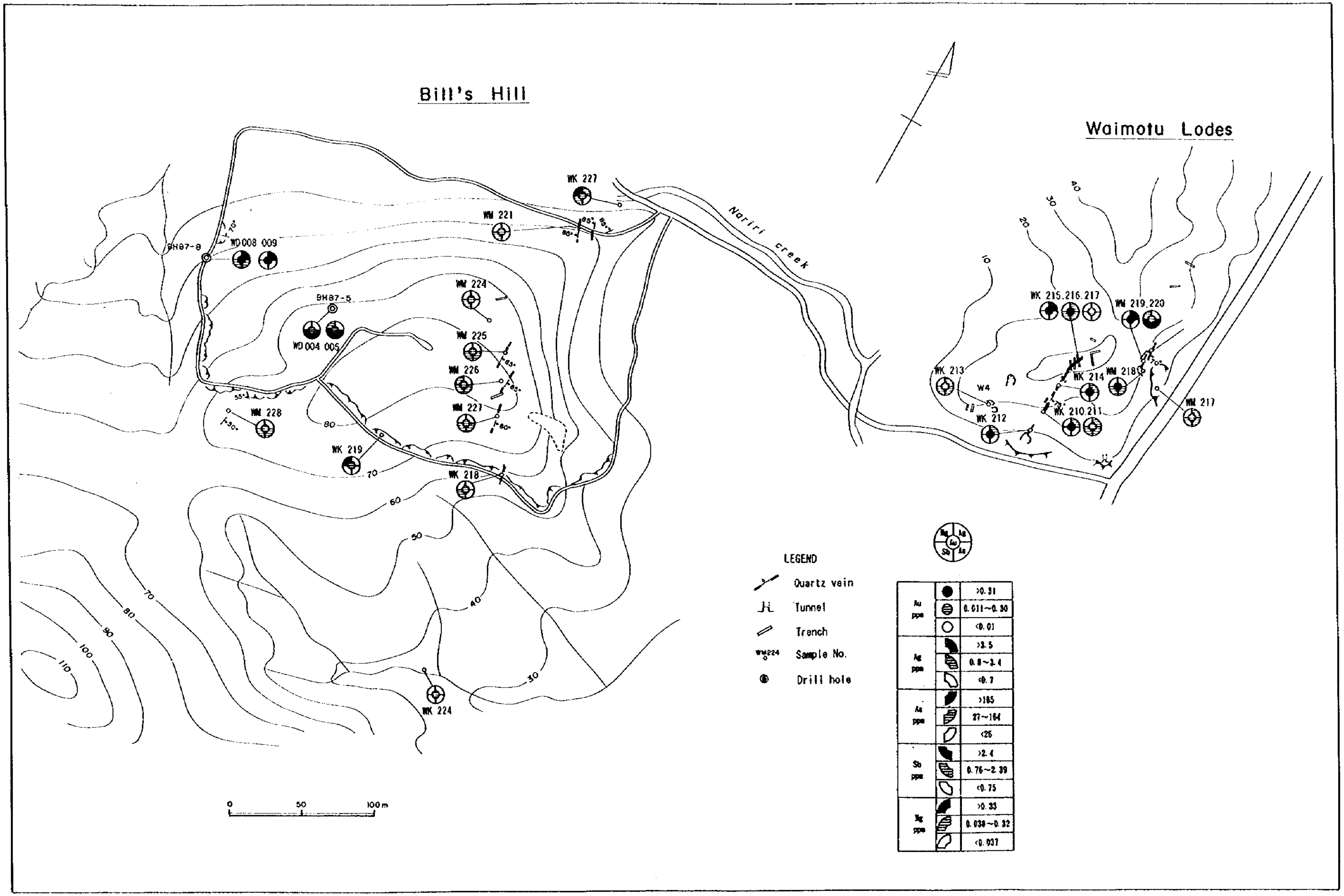
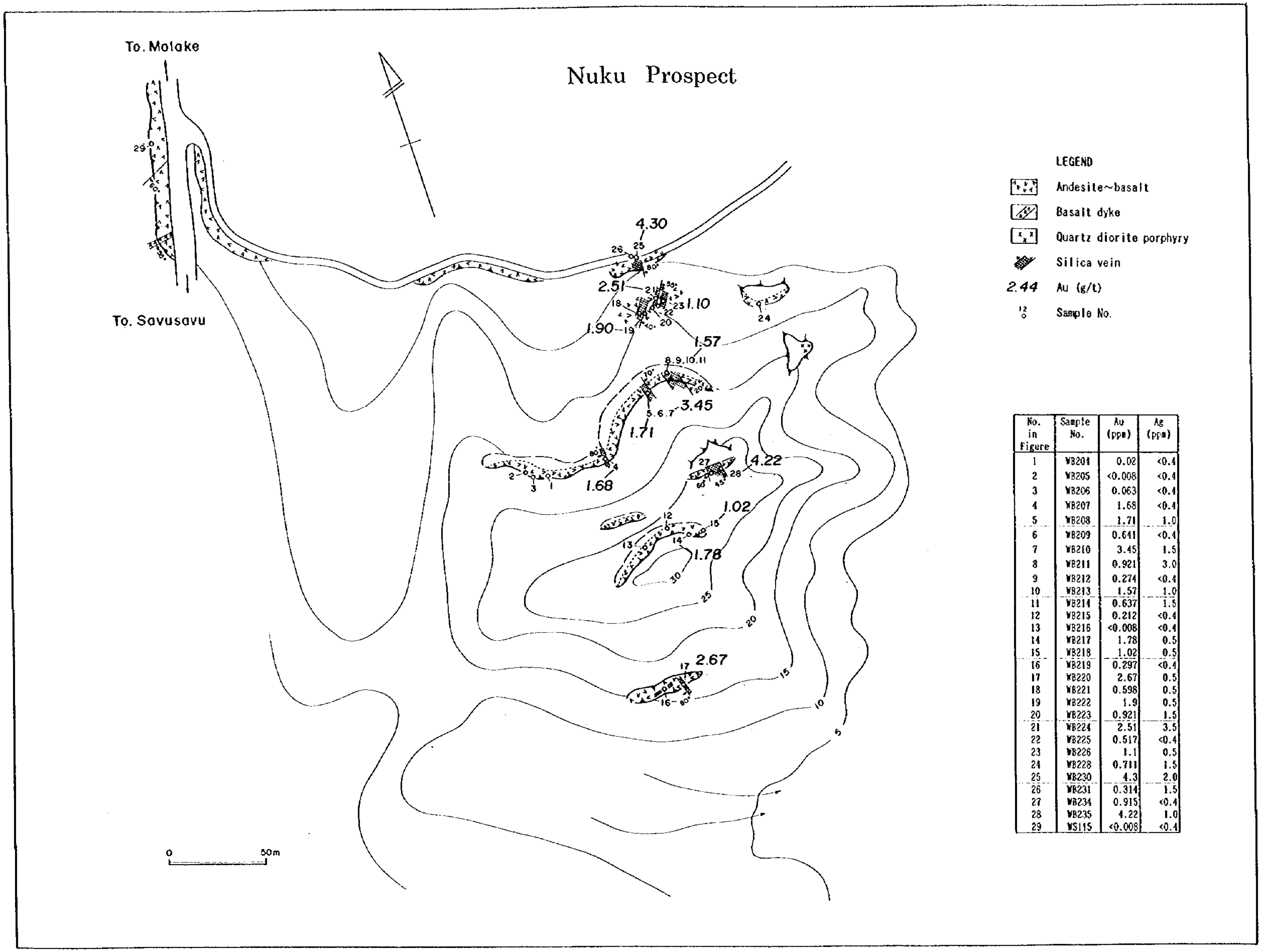


Fig. 2-4-9 Geochemical Survey Results of the Waimotu Lodes and Bill's Hill Prospect

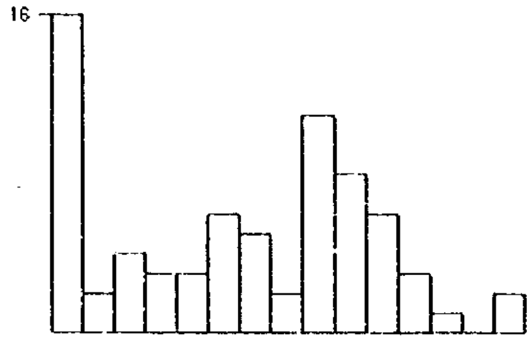


No. in Figure	Sample No.	Au (ppm)	Ag (ppm)
1	WB204	0.02	<0.4
2	WB205	<0.008	<0.4
3	WB206	0.063	<0.4
4	WB207	1.68	<0.4
5	WB208	1.71	1.0
6	WB209	0.641	<0.4
7	WB210	3.45	1.5
8	WB211	0.921	3.0
9	WB212	0.274	<0.4
10	WB213	1.57	1.0
11	WB214	0.637	1.5
12	WB215	0.212	<0.4
13	WB216	<0.008	<0.4
14	WB217	1.78	0.5
15	WB218	1.02	0.5
16	WB219	0.297	<0.4
17	WB220	2.67	0.5
18	WB221	0.598	0.5
19	WB222	1.9	0.5
20	WB223	0.921	1.5
21	WB224	2.51	3.5
22	WB225	0.517	<0.4
23	WB226	1.1	0.5
24	WB228	0.711	1.5
25	WB230	4.3	2.0
26	WB231	0.314	1.5
27	WB234	0.915	<0.4
28	WB235	4.22	1.0
29	WS115	<0.008	<0.4

Fig. 2-4-10 Geochemical Survey Results of the Nuku Prospect Area

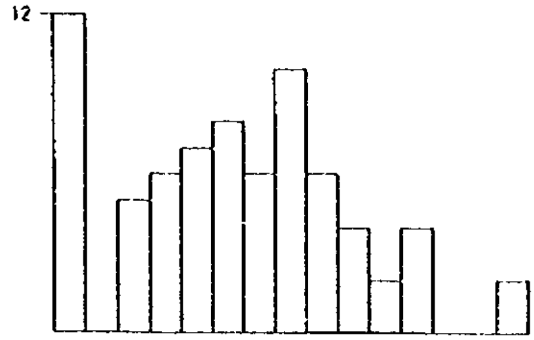
Au

MEAN(M)= .156692
STANDARD DEVIATION(σ)= 1.14397
MINIMUM= .004 M+σ= 2.18281
MAXIMUM= 42.5 M+2σ= 30.4079



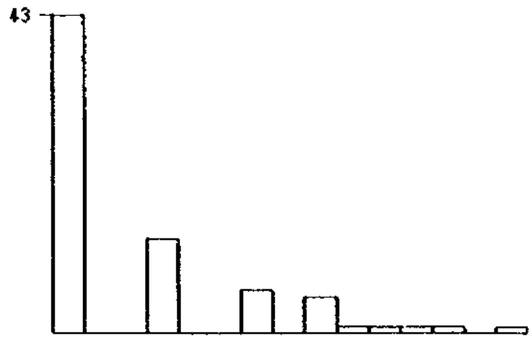
Hg

MEAN(M)= .014362
STANDARD DEVIATION(σ)= .495627
MINIMUM= .0025 M+σ= .0449616
MAXIMUM= .257 M+2σ= .140757



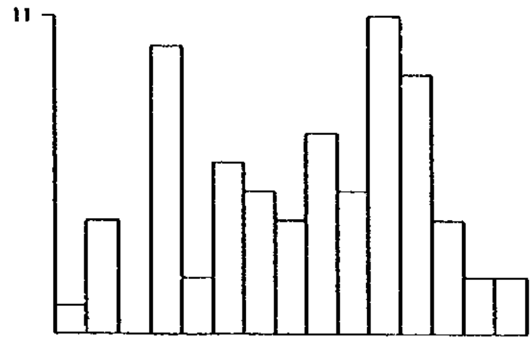
Ag

MEAN(M)= .376759
STANDARD DEVIATION(σ)= .391602
MINIMUM= .2 M+σ= .928251
MAXIMUM= 7 M+2σ= 2.28701



As

MEAN(M)= 18.5797
STANDARD DEVIATION(σ)= .719047
MINIMUM= .5 M+σ= 97.2937
MAXIMUM= 460 M+2σ= 509.485



Sb

MEAN(M)= .656245
STANDARD DEVIATION(σ)= .314184
MINIMUM= .25 M+σ= 1.35265
MAXIMUM= 2.4 M+2σ= 2.78891

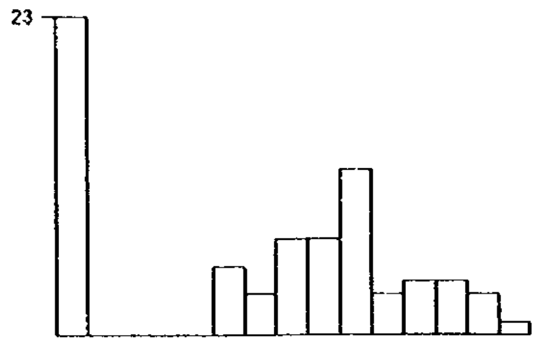


Fig. 2-4-11 Histogram of Assay Values(the Waimotu Area)

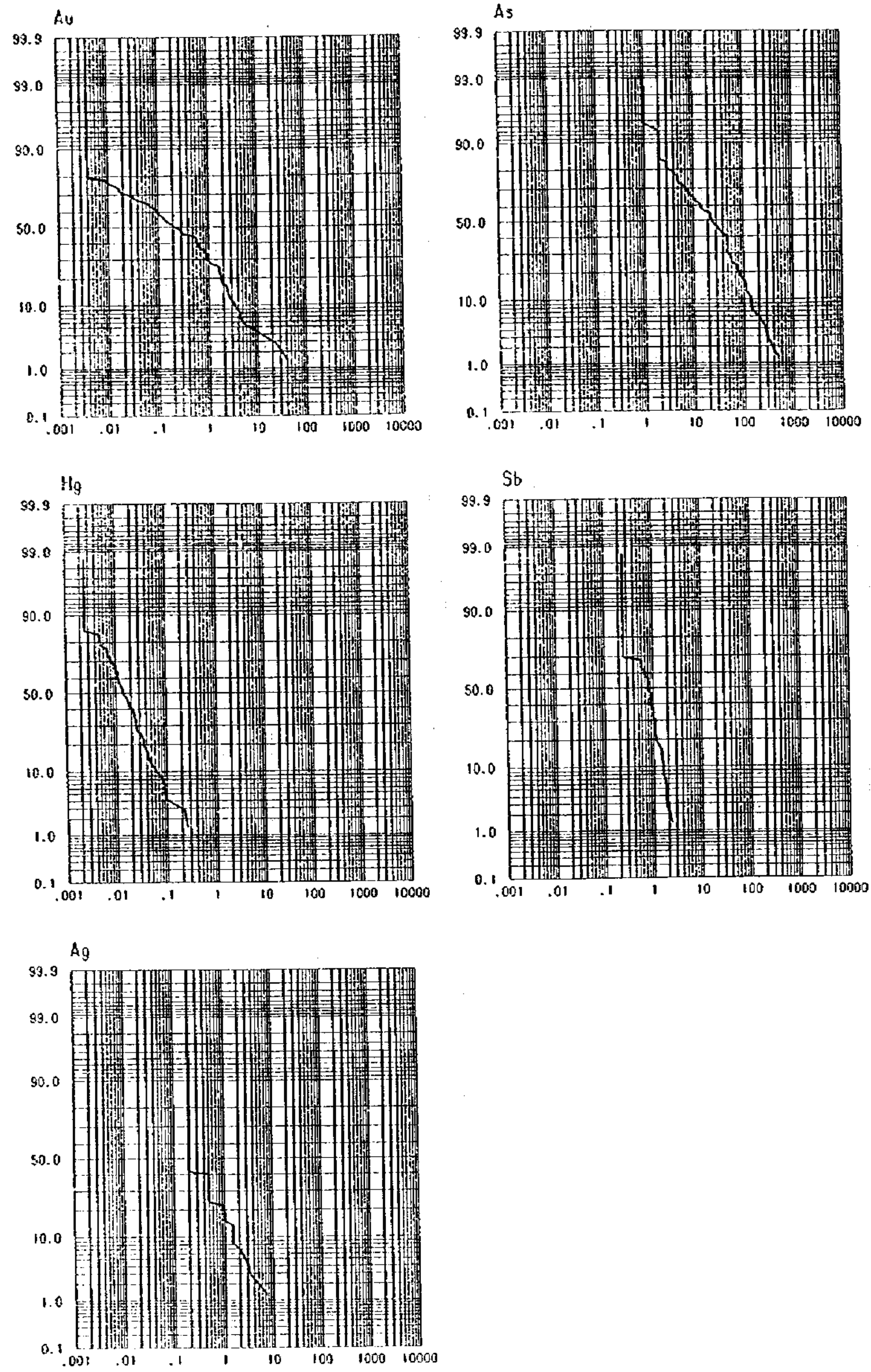


Fig. 2-4-12 Cumulative Frequency Distribution of Assay Values (the Waimotu Area)

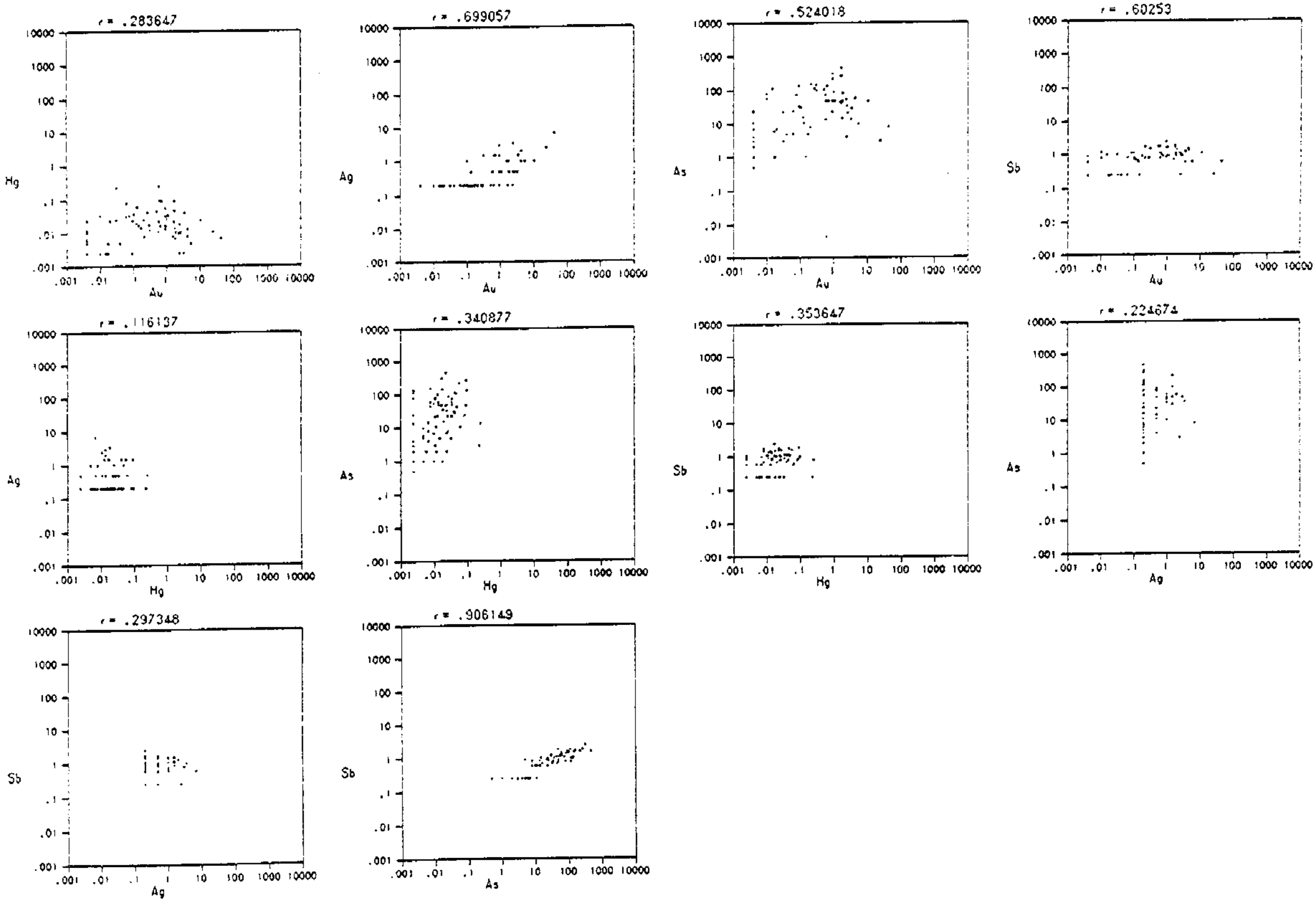


Fig. 2-4-13 Correlation between Elements (the Waimotu Area)

PART Ⅲ CONCLUSIONS AND RECOMMENDATIONS

PART III Conclusions and Recommendations

Chapter 1 Nakoroutari Area

1-1 Conclusions

(1) This area comprises an areal extent of $36km^2$ and is located approximately 15km south of Labasa. Geochemical, surface magnetic, and IP surveys had been conducted since 1988 in the Leli's Prospect. Also six holes with a total depth of 1,053 m had been drilled in this prospect. The holes were aimed at a quartz breccia zone associated with the NNW-SSE fault system and encountered ores with a core thickness of 0.6 m at 11.6 g/tAu.

(2) The geology of this area is composed mainly of basalt-andesite lava and volcaniclastics of the Koroutari Andesites, and andesitic volcaniclastics of the Sueni Breccia. These units belong to the Upper Miocene-Lower Pliocene Natewa Volcanics Group.

(3) Four zones were selected from the study of existing geological and resources data and information. They are; Leli's Prospect, a zone to the south of the same Prospect, Navakuru, and Mugsy's Prospect. Mineralization and alteration were found to occur in all five zones. The Leli's Prospect was concluded to be the most promising by geological survey. It was noted that the altered zone to the south of Leli's Prospect show evidence of gold mineralization.

(4) The Leli's Prospect occurs within the quartz vein-breccia zone developed in the Koroutari Andesite lava-volcaniclastics which belong to the Natewa Volcanic Group. There are two quartz vein-breccia zones, the eastern and western zones, part of the NNW-SSE system. A silicified tuff breccia sample with a grade of 12.9 g/tAu was collected near the Leli's Prospect, and although in a limited area, high-grade zones had been confirmed during the first year survey.

(5) Geophysical survey by array CSAMT was carried out for 12km and time domain IP for 7.5km at the Leli's Prospect.

(6) The array CSAMT method identified intrusive-shaped high resistivity zones in the central parts of Line B-C and Line D-F. One-dimensional resistivity structure analysis showed the existence of two buried high-resistivity bodies that extend in the N-S direction. These two bodies as a whole extend in the NW-SE direction and are interpreted to be areas of silicification.

The apparent resistivity measured by the time domain IP method resulted in a distribution pattern harmonious with the results of the array CSAMT. The chargeability background is dominantly low. Chargeability anomalies exceeding 10 mV·s/V were detected at three localities, but they are independent anomalies and the reliability is very low. Weak anomalies of over 5 mV·s/V occurred continuously in the central-western part of all traverse lines. It was inferred from the results that these IP anomalies were caused by bodies 100 m below the surface. Also the simulation results indicate that these bodies have chargeability in the general range of 5-7 mV·s/V and most probably formed by pyrite mineralization. These bodies and the two high-resistivity bodies detected by the Array CSAMT are located in approximately the same locality. Thus, it was believed that pyritization and silicification were closely related in this area.

(9) Resistivity and chargeability of 30 rock samples (including core samples) were measured in the laboratory. The resistivity of silicified rocks was the highest at 2,884 ohm-m, followed by basalt > andesite > volcaniclastic rocks. The chargeability of volcaniclastic rocks was the highest at 11.7 mV·s/V, followed by silicified rocks > andesite > basalt. It was shown from this work that identification of rock types from physical characteristics was difficult.

(10) Three holes MJFV-1, MJFV-2, and MJFV-3 drilled in the Nakoroutari Area all confirmed two zones of clay quartz veins. In the holes MJFV-2 and -3, weak silicified zones were confirmed in deeper parts. The clay quartz veins confirmed by this drilling strike in the NNW direction and were concluded to continue 600 m in the strike direction. Although the veins encountered in MJFV-1 and -3 are thin, grades of about 5 g/tAu were obtained by assay, and thus the surface gold showings were confirmed to continue into deeper zones. The Au content of the weakly silicified zones, however, was low.

(11) The IP anomalies obtained by CSAMT and IP surveys during the first year were inferred to reflect the deep-seated silicified zones confirmed by MJFV-1 and -3. Thus, it was clarified by the work during second year that the surface mineral showings continue downward to the deeper parts, and that the geophysical anomalous zones correspond to the silicified zones.

(12) Evidences regarding stronger mineralization in the vicinity, however, could not be obtained, and it is believed that the mineral showings confirmed by the first and second year surveys represent the characteristics of the mineralization of this area.

1-2 Recommendations

(1) The geology, alteration, and the characteristics of the gold mineralization of this area were clarified by the work carried out during the first and second years of this project. Drilling in this area (MJFV-1, -2, -3) confirmed the ores in both drill holes would be 600 m apart in the strike direction (NNW-SSE). Judging from the widths and gold grades of the veins that drill holes encountered, however, it is not felt that promising gold deposits are emplaced in this area. No further work in this area is recommended.

(2) On the other hand, the Nakoroutari area is located within the Labasa caldera near its inner slope. Within the caldera hot springs and mineralization zones occur although the volcanic center has not identified because extensive erosion has destroyed the topography. Therefore, it may be effective to

REFERENCES

[Geology]

Cox,M.E.(1980): Preliminary Geothermal Investigations in the Lambasa Area,Vanua Levu, Geothermal Report No.2, MRD.

Colley,H. and Greenbaum,D(1980): The Mineral Deposits and Metallogenesis of the Fiji Platform. Economic Geology vol.75,807-829.

Colley,H.(1976):Mineral Deposits of Fiji(Metallic Deposits),Memoir No.1

Colley,H. and Flint,D.J.(1995): Metallic Mineral Deposits. Memoir 4, 198pp,MRD.

Corbet,G.J. and Leach,T.M.(1995):Southwest Pacific Rim Au/Cu Systems: Structure, Alteration and Mineralisation, Workshop presented at Townsville Qld.

Corbet,G.J. and Taylor,G.P.(1994):The Mt. Kasi High Sulphidation Au System, Fiji. AIMM Exploration and Mining Conference, Lae, PNG.

Hathway,B.(1993): The Nadi Basin: Neogene strike-slip faulting and sedimentation in a fragmented arc,western Viti Levu, Fiji. Journal of the Geological Society, London, vol. 150, 563-581.

Hedenquist,J.W.(1987): Volcanic-related hydrothermal systems in the Circum-Pacific Basin and their potential for mineralization. Mining Geology, vol.37,347-364(in Japanese).

Izawa,E.,Urashima,Y.,Ibaraki,K.,Suzuki,R.,Yokoyama,T.,Koga,A. and Taguchi,S.(1990): The Hishikari gold deposit: high grade epithermal veins in Quaternary volcanics of southern Kyushu, Japan. Journal of Geochemical Exploration, vol.36,1-36.

Mallick,D.I.J.and Habgood,F.(1987): Interpretation of SLAR Imagery of the main islands of Fiji. British Geological Survey. 9 pp.

Mineral Resources Department(1994): Exploration and Mineral Digest,vol.10 No.4

Mineral Resources Department(1995): Exploration and Mineral Digest,vol.11 No.2

Mineral Resources Department(1996): Exploration and Mineral Digest,vol.12 No.1

Okuda, Y.(1989): Geology of Fiji. Chishitsu News,vol.415,6-17.

Reddy,D.P.,and Flint,D.J.(1995): Vanua Levu: Summary status of geological knowledge and future work proposals. Mineral Resource Department, Note BP 50/11.

Rodda,P.(1989): Geology of Fiji. MRD

Shepherd,T.J., Rankin,A.H. and Alderton,D.H.M.(1985): Practical guide to fluid inclusion studies. Blackie,London.

[Geophysics, General]

Cagniar, L. (1953) : Basic theory of the magnetotellurics method of Geophysical prospecting, Geophysics, 37, pp605-635

Goldstein,M.A. and Strangway,D.W. (1975):Audio frequency magnetotellurics with a grounded electric dipole source, Geophysics, 40, pp669-683.

Kaufman,A.A.,and Keller,G.V. (1981):The Magmetotelluric Sounding method, Elsevier, p595.

Ogawa,Y. (1988):Fortan Program Codes for Two-dimensional Magnetotelluric Forward and Inverse Analyses, Open File Report Geol. Survev. Japan No.59.

Strangway,D.W., Swift,C.M. and Holmer,R.C. (1973):The application of audio frequency magmetotellurics(AMT) to mineral exploration, Geophysics, 38, pp1159-1175

Yamashita,M. (1984):CSAMT Controlled Source Audio Magnetotellurics, PHOENIX Geophysics Limited.

Yamashita,M. and Hallof,P.G.(1985) : CSAMT case histories with a mult-channel CSAMTsystem and discussion of near-field data correction, The 55thSEG Annual Meeting, Washington, D.C.

Zonge engineering & research organization,INC.(1982):Interpretation Guide for CSAMT data.

[Geophysical prospecting (IP Method)]

Bertin,J.(1976):Experimental & Theoretical Aspect of IP. Vol.1. Presentation and Application of the IP Method Case Histories. Gebruder Borntraeger, Berlin 1976, 250pp

Keller,G.V. and Frischknecht,F.C.(1966):Electrical Methods in Geophysical Prospecting. Pergamon Press, London, 517p

Madden,T.R., & T. Cantwell(1967):Induced Polarization. A Review, Mining Geophysics, 2,pp373-400, S.E.G. Tulsa, Okla.

Parasnis,D.S.(1972):Principles of Applied Geophysics. Chapman & Hall,London.

Parasnis,D.S.(1973):Mining Geophysics. Elsevier,Amsterdam, p395

Sato,M. and Mooney,H.M.(1960):The Electrochemical Mechanism of Sulphide Self-potentials. Geophysics 25 No.1, pp226-249.

Seigel,H.O.(1959): Mathematical Formulation and Type Curves for Induced Polarization. Geophysics 24 pp547-565.

Seigel,H.O.(1967): The Induced Polarization Method. In L.W.Morley (Editor), Mining and Groundwater Geophysics. Geol. Rep.,No.26. Geol.Surv. Can. pp123-137.

Chapter 3 Waimotu Area

3-1 Conclusions

(1) The Bill's Hill Prospect is located approximately 45km northeast of Savusavu, and the Waimotu Lode and Nuku Prospect are 0.5km and 2.5km east-northeast from there.

(2) A total of 18 holes had been drilled in the three prospects of this area. A total of 551 m adits was dug and seven holes with a total of 609 m length were drilled into the Waimotu Lodes, seven and four holes were drilled in the Bill's Hill Prospect and Nuku Prospect, respectively.

(3) The geology of this area consists mainly of weakly propylitized andesite and basaltic lava and volcaniclastics of the Koroutari Andesite and Korotini Breccias. These units belong to the Natewa Volcanic Group.

(4) The Waimotu Lodes are comprised of Main Lode, East Lode, and West Lode. A length of about 70 m was confirmed for the Main Lode in outcrop, but both mineralization of the East and West Lodes were confirmed only at one outcrop and the entrance of the adit. All three veins had N-S strike and with a dip of 75°-90° east for the Main and East Lodes. The widths of the veins were, 1.2 m maximum for the Main Lode and 0.8 m was confirmed at an outcrop for the East Lode. The maximum grade was 24.2 g/tAu for the Main and 42.5 g/tAu for the East Lodes. The gold content of 42.5 g/t was obtained in a sample collected from the East Lode (0.8 m wide), but a sample collected only 1 m south of this sample contained only 2.4 g/tAu, thus the fluctuation in the grade was strong. On the other hand, the average grade of four samples collected along the 70 m length of the Main Lode was 7.2 g/tAu and the gold content is constant. The grade of the West Lode was the lowest of the three at 0.92 g/tAu.

(5) Silicified and argillized zones are well developed in the Bill's Hill Prospect. Quartz and chalcedony stockwork is developed cutting through these zones, and its strike is N-S and the eastward dip is generally steep. Surface observation of the stockwork showed the occurrence of geothite as an opaque with very minor amount of chalcopyrite. The cores drilled in the past showed strong dissemination of pyrite in the silicified zone. The maximum grade of individual veinlets of the stockwork was 0.21 g/tAu.

(6) At Nuku, a silicified zone comprising chalcedony-quartz veins extends in a N-S direction for approximately 150 m and the average width of this zone was approximately 7 m.

(7) The direction of dip was seemingly east, but it was difficult to determine the dip on the surface and from the results of the past drilling, it was inferred to be westward dipping. The highest grade of the stockwork was 4.3 g/tAu (sampled width 2.5 m) and the average of the total 150 m was 1.3 g/tAu (average sampled width 7 m). The past two holes encountered ores at approximately 50 m below the surface and the average grade over a 7 m width was 0.6 g/tAu.

(9) The lower parts of the three prospects in this area had been drilled. All three had significant mineral

potential and the zone extending from the lower part of the Waimotu Lode to the subsurface part of eastern Bill's Hill was concluded to be an interesting target for further exploration.

3-2 Recommendations

Following the first phase survey results, further work in the Waimotu area is recommended. The Waimotu Lode and Bill' Hill Prospect are most interesting within the area.

Therefore, it is recommended that we first confirm the downward continuity and the distribution of the new veins parallel to the known three veins, by electric survey, namely CSAMT and IP, then follow it up by drilling.

REFERENCES

References

[Geology]

Cox,M.E.(1980): Preliminary Geothermal Investigations in the Lambasa Area,Vanua Levu, Geothermal Report No.2, MRD.

Colley,H. and Greenbaum,D(1980): The Mineral Deposits and Metallogenesis of the Fiji Platform. Economic Geology vol.75,807-829.

Colley,H.(1976):Mineral Deposits of Fiji(Metallic Deposits),Memoir No.1

Colley,H. and Flint,D.J.(1995): Metallic Mineral Deposits. Memoir 4, 198pp,MRD.

Corbet,G.J. and Leach,T.M.(1995):Southwest Pacific Rim Au/Cu Systems: Structure, Alteration and Mineralisation, Workshop presented at Townsville Qld.

Corbet,G.J. and Taylor,G.P.(1994):The Mt. Kasi High Sulphidation Au System, Fiji. AIMM Exploration and Mining Conference, Lae, PNG.

Hedenquist,J.W.(1987): Volcanic-related hydrothermal systems in the Circum-Pacific Basin and their potential for mineralization. Mining Geology, vol.37,347-364(in Japanese).

Mallick,D.I.J.and Habgood,F.(1987): Interpretation of SLAR Imagery of the main islands of Fiji. British Geological Survey. 9 pp.

Mineral Resources Department(1994): Exploration and Mineral Digest,vol.10 No.4

Mineral Resources Department(1995): Exploration and Mineral Digest,vol.11 No.2

Mineral Resources Department(1996): Exploration and Mineral Digest,vol.12 No.1

Reddy,D.P.,and Flint,D.J.(1995): Vanua Levu: Summary status of geological knowledge and future work proposals. Mineral Resource Department, Note BP 50/11.

Hathway,B.(1993): The Nadi Basin: Neogene strike-slip faulting and sedimentation in a fragmented arc,western Viti Levu, Fiji.Journal of the Geological Society, London, vol. 150, 563-581.

Izawa,E.,Urashima,Y.,Ibaraki,K.,Suzuki,R.,Yokoyama,T.,Koga,A. and Taguchi,S.(1990): The Hishikari gold deposit: high grade epithermal veins in Quaternary volcanics of southern Kyushu, Japan. Journal of Geochemical Exploration, vol.36,1-36.

Okuda, Y.(1989): Geology of Fiji. Chishitsu News,vol.415,6-17.

Rodda,P.(1989): Geology of Fiji. MRD

Shepherd,T.J., Rankin,A.H. and Alderton,D.H.M.(1985): Practical guide to fluid inclusion studies. Blackie,London.

[Geophysics, General]

Cagniar, L. (1953) : Basic theory of the magnetotellurics method of Geophysical prospecting, Geophysics, 37, pp605-635

Goldstein,M.A. and Strangway,D.W. (1975):Audio frequency magnetotellurics with a grounded electric dipole source, Geophysics, 40, pp669-683.

Kaufman,A.A.,and Keller,G.V. (1981):The Magmetotelluric Sounding method, Elsevier, p595.

Ogawa,Y. (1988):Fortan Program Codes for Two-dimensional Magnetotelluric Forward and Inverse Analyses, Open File Report Geol. Survev. Japan No.59.

Strangway,D.W., Swift,C.M. and Holmer,R.C. (1973):The application of audio frequency magmetotellurics(AMT) to mineral exploration, Geophysics, 38, pp1159-1175

Yamashita,M. (1984):CSAMT Controlled Source Audio Magnetotellurics, PHOENIX Geophysics Limited.

Yamashita,M. and Hallof,P.G.(1985) : CSAMT case histories with a mult-channel CSAMTsystem and discussion of near-field data correction, The 55thSEG Annual Meeting, Washington, D.C.

Zonge engineering & research organization,INC.(1982):Interpretation Guide for CSAMT data.

[Geophysical prospecting (IP Method)]

Bertin,J.(1976):Experimental & Theoretical Aspect of IP. Vol.1. Presentation and Application of the IP Method Case Histories. Gebruder Borntraeger, Berlin 1976, 250pp

Keller,G.V. and Frischknecht,F.C.(1966):Electrical Methods in Geophysical Prospecting. Pergamon Press, London, 517p

Madden,T.R., & T. Cantwell(1967):Induced Polarization. A Review, Mining Geophysics, 2,pp373-400, S.E.G. Tulsa, Okla.

Parasnis,D.S.(1972):Principles of Applied Geophysics. Chapman & Hall,London.

Parasnis,D.S.(1973):Mining Geophysics. Elsevier,Amsterdam, p395

Sato,M. and Mooney,H.M.(1960):The Electrochemical Mechanism of Sulphide Self-potentials. Geophysics 25 No.1, pp226-249.

Seigel,H.O.(1959): Mathematical Formulation and Type Curves for Induced Polarization. Geophysics 24 pp547-565.

Seigel,H.O.(1967): The Induced Polarization Method. In L.W.Morley (Editor), Mining and Groundwater Geophysics. Geol. Rep.,No.26. Geol.Surv. Can. pp123-137.

APPENDIX

Table A-1(1) Results of Microscopic Observation of Thin Sections(1)

Sample	Rock type	Texture	Phenocryst						Groundmass (including microphenocryst)										Alteration
No.			ol	cpx	opx	pl	op	others	ol	cpx	opx	hb	pl	kf	qz	gl	op	others	
NS008	lapilli tuff	clastic							(△)				◎		•	◎	○		ol totally→idd, gl partly→carb +smec
NS045	basalt	porphyritic	(•)	◎		◎				○	•		○			◎	○		ol→idd
NM003	basalt	porphyritic	(○)	◎		◎				○			◎			○	○		ol→idd
NM004	basalt	porphyritic	(△)	◎	△	◎	△		(•)	•			◎			◎	○		ol→idd, opx→smec
NK009	andesite	glomeroporphyritic			(△)	◎				○	(○)		◎			◎	○		opx→idd
NK057	tuff breccia	clastic	(○)			◎	○						◎			◎	○		ol→smec, pl partly→carb, gl+druse pally→epi
NK060	andesite	aphyric		△	(△)	△					(△)		○			◎	○		opx→smec
NB005	andesite	porphyritic		(○)	(△)	◎	○			(△)	(△)		◎			◎	○		pl partly→carb, cpx→carb, opx→carb
NB035	basalt	porphyritic	(○)	○	△	○				○	△		◎			(◎)	○		ol→smec, gl→smec
NB084	basalt	glomeroporphyritic	(○)			◎				○			◎			○	△		ol→smec
NB085	basalt	porphyritic	(○)	○		◎	○			○			◎			◎	△		ol→smec
DM077	tuff	clastic		◎		○	•			•			◎		○	(◎)			gl→smec+chl+epi
DM089	picrite	porphyritic	◎	○		△	•		△	◎			○			◎	•		ol→smec
DK069	andesite	porphyritic		(○)		◎	•			△			○			(◎)			opx→smec, gl→smec
DK075	basalt	porphyritic	(○)	◎		○							◎			(◎)	○		ol→carb; pl partly→carb+alb, gl→smec
DK084	tuff breccia	clastic	(◎)	◎						△			◎			(◎)	•		ol→smec, gl→smec, druse→ca qz+carb
DK145	basalt	porphyritic	(◎)	◎		△				○			◎			(◎)	•		ol→smec, gl→smec, druse→smec+carb+epi
DB122	basalt	porphyritic	(◎)	◎		○				○			◎			(◎)	•		ol→smec, gl→smec
DB131	basalt	glomeroporphyritic	(○)			○			(○)	○			◎			◎	○		ol→smec, druse→carb pool
DB136	basalt	porphyritic	(○)	◎		◎			(○)	◎			◎			◎	•		ol→smec
DS060	picritic basalt	porphyritic	◎	○		△	•			○			◎			◎	•		ol→smec
WB184	basalt	porphyritic	(△)	◎	△	◎	△			○			○			◎	•		ol→smec
WB191	basalt	porphyritic				○			(△)	(○)			◎			(◎)			carb vein, ol→smec+carb, cpx→carb, pl partly→carb, gl→ clay
WB192	basalt	porphyritic	○	△	○	◎				△	△		○			○	•		
WK207	basalt	porphyritic	(○)		△	◎				○			◎			◎	•		ol→smec, pl partly→carb
WK223	andesite	glomeroporphyritic		○	○	◎	○			△	○		◎			◎	•		opx→clay
WM201	lapilli tuff	clastic		△		○				△			◎			◎	•		pl partly→alb
WM206	tuff breccia	clastic		△		○		qz •		△			◎			◎	•		
WM209	andesite	porphyritic				○	•						◎	○		◎	•	ap •	ol partly→alb
WS113	andesite	porphyritic		◎	△	◎	△			•	△		◎			(◎)	•		gl→smec, druse→qz+smec
ND018	andesite	porphyritic		(○)		◎	•			(△)			◎			◎	•		cpx→chl, druse→chl+epi, gl partly→carb

abbrev. ol=olivine, cpx=clinopyroxene, opx=orthopyroxene, pl=plagioclase, op=opaque minerals, qz=quartz, hb=hornblende, kf=K-feldspar
gl=glass or microcrystalline aggregate, carb.=carbonate, serp=serpentine
◎: abundant, ○: common, △: small, • : rare, ( ) : totally decomposed

Table A-1(2) Results of Microscopic Observation of Thin Sections(2)

Sample No.	Depth (m)	Rock type	Texture	Phenocryst or fragment						Groundmass or matrix										Alteration
				ol	cpx	opx	pl	op	others	ol	cpx	opx	hb	pl	kf	qz	gl	op	others	
ND106	26.00	volc. breccia	clastic	(○)	○		○	・	・		△			◎	○		(◎)	・		ol & gl totally →clay minerals, interstices→clay+aduralia
ND112	170.20	basalt	porphyritic	(△)	○		◎	△	△		△			◎			(◎)	△		ol→serp, pl partly→ carb, gl totally→ clay
ND116	275.00	volc. breccia	clastic	(△)	○		◎	・	・		△			◎			(◎)	△		ol totally →clay minerals
ND121	245.30	basalt	glomeroporphyritic	(○)	○		◎	△	△		△			◎			(◎)	△		ol & druse totally →clay minerals
ND122	232.30	tuff breccia	clastic	(○)	○		◎	△	△		△			◎			(◎)	△		ol & druse totally →clay minerals
ND123	151.80	basalt	porphyritic	(○)	○						○			◎			(○)	△		ol & gl totally →clay minerals
ND205	97.70	basalt	porphyritic	(△)	△		◎				○			◎			(○)	・		ol & gl →clay minerals, druse →quartz +clay
ND210	197.45	andesite	porphyritic		△		◎				(○)			◎		○	(◎)	・		pl partly→ epidote+albite,druse→ clay+carb+qz
ND223	73.00	volc breccia	clastic		○		◎	○	○		○			◎			(◎)	・		pl & cpx partly→ albite, gl →clay, druse→ epidote
ND238	300.00	volc.breccia	clastic		○		◎				(○)			◎			(◎)	○		gl →clay+carb, cpx partly →epidote, pl partly →albite
ND240	189.70	basalt	porphyritic	(○)	◎		○	△	△	(△)	△			◎			◎	△		ol →serp, pl partly→albite, druse →clay
ND308	126.40	trachybasalt	trachytic	(△)	○		◎				△			◎			(◎)	△		ol→ clay+carb, gl totally→ clay
ND317	224.90	volc.breccia	clastic		(○)		(◎)							(◎)			(◎)	△		calcite vein, ol →clay, pl totally →albite, gl&druse→ clay
ND302	50.00	andesite	porphyritic		○	○	○	△	△		△	△		◎			◎	・		opx rim →clay, druse →clay+carb
ND320	300.00	andesite	porphyritic		(△)		(○)					(△)		(◎)			(◎)	・		cpx totaly→ clay, pl →albite, gl & druse →clay+aduralia
DD405	127.60	picritic basalt	porphyritic	(○)	(○)		(○)							(○)			(◎)	・		qz+carb vein, ol →clay + carb, pl & cpx →carb+qz
DD407	176.50	basalt	porphyritic	(○)	◎		△			(○)	○			○			(◎)	・		ol, gl & druse totally→ clay
DD412	300.20	basalt	porphyritic		◎		◎				○			◎			(◎)	・		gl→clay, pl strongly→ albite, druse→ clay+carb
DD429	220.60	volc.breccia	clastic	(△)	○						○			△			(◎)	△		ol & gl→ clay, druse →clay+aduralia+carb
DD430	235.50	basalt	microcrystalline							(○)	◎			○			(◎)	・		ol & gl totally →clay+carb
DD521	72.80	basalt	porphyritic	(○)	◎					(○)	○			◎			(○)	・		ol & gl totally →clay
DD523	123.00	carbonatized basalt	porphyritic	(○)	(○)		○							○			(○)	・		carbonate abundant, ol & gl→ clay+carb , cpx & pl→carb+alb+qz
DD524	150.00	silicified breccia	clastic				(○)							(○)		◎	(○)	△		carbonate vein, gl→ qz+clay, pl→ alb+sericite
DD525	176.60	basalt	porphyritic	(○)	○		○				(○)			(○)			(◎)	・		ol→ qz+serp+carb, gl→ clay, pl &cpx →carb+alb
DD603	70.10	picritic basalt	porphyritic	(○)	○		○				○			○			(◎)	・		ol & gl totally →clay, pl partly→ sericite
DD605	152.00	carbonatized basalt	porphyritic	(○)	(○)		○				(○)			(○)			(◎)	・		all minerals strongly silicified and carbonatized
DD606	174.90	carbonatized tuff breccia	clastic	(○)	○						(△)			○			(◎)	△		ol &gl→ clay+carb , cpx strongly carbonatized
DD608	204.00	carbonatized volc. brecci	clastic	(○)	○						(△)			○			(◎)	△		ol &gl→ clay+carb , cpx strongly carbonatized
DD609	225.85	carbonatized basalt	porphyritic	(○)	(○)		○				(△)			(○)			(◎)	・		ol, cpx & gl →clay+carb., pl strongly →clay+alb
DD614	135.20	altered basalt	porphyritic	(○)	○						△						(◎)	・		ol & gl totally →clay, druse →carb.+clay

abbrev. ol=olivine, cpx=clinopyroxene, opx=orthopyroxene, pl=plagioclase, op=opaque minerals, qz=quartz, hb=hornblende, kf=K-feldspar
gl=glass or microcrystalline aggregate, carb.=carbonate, serp=serpentine
◎: abundant, ○: common, △: small, ・: rare, ( ): totally decomposed

Table A-1(3) Results of Microscopic Observation of Thin Sections(3)

Sample No.	Depth (m)	Rock type	Texture	Phenocryst or fragment						Groundmass or matrix										Alteration
				ol	cpx	opx	pl	op	op	ol	cpx	opx	hb	pl	kf	qz	gl	op	others	
DD713	394.00	basalt	porphyritic	(◎)	◎			・	・		○	△		○			(◎)	・		ol totally→clay minerals, druse→carb carb and qz vein
DD714	361.20	basalt	porphyritic	(◎)	(○)		(○)	△	△	(△)	△			◎			(◎)	△		ol→clay+carb, gl totally→clay, pl→carb, carb and qz vein
DD715	336.90	basalt	porphyritic	(○)	(○)			・	・	(△)	△			◎			(◎)	△		qz+carb vein, ol→clay + carb pl & cpx→carb + qz
DD716	321.90	volc.breccia	clastic	(○)	◎			△	△		○			△			(◎)	△		ol totally→clay, gl totally→clay
DD717	293.60	basalt	porphyritic	(◎)	○			・	・	(△)	△			◎			(◎)	△		ol totally→clay minerals
DD814	210.50	lapilli tuff	clastic	(○)	◎		△	△	△	(△)	○			○			(◎)	△		ol→clay, gl totally→clay, druse→carb
DD815	292.90	basalt	glomeroporphyritic	(○)	◎		○	・	・	(△)	○			◎			(○)	△		ol totally clay minerals
DD816	276.90	basalt	porphyritic	(◎)	△		○	△	△		(○)			○			(◎)	・		qz+carb vein, ol→clay+carb pl & cpx→carb+qz
DD929	178.10	basalt	porphyritic	(○)	○			△	△	(△)	○			○			(◎)	・		ol totally→clay minerals
DD931	250.00	basalt	porphyritic	(◎)	○					(○)	(○)			△			(◎)	・		ol totally→clay minerals

abbrev. ol=olivine, cpx=clinopyroxene, opx=orthopyroxene, pl=plagioclase, op=opaque minerals, qz=quartz, hb=hornblende, kf=K-feldspar
gl=glass or microcrystalline aggregate, carb.=carbonate, serp=serpentine
◎: abundant, ○: common, △: small, ・: rare, ( ): totally decomposed

Table A-2(1) Results of Microscopic Observation of Polished Thin Sections(1)

Sample	Rock type		Ore minerals						Gangue minerals										
No.	Name	Texture under microscope	Py	Cha	Sph	Aca	Gal	others	qz	kf	pl	goe	clay	smc	apa	carb	bar	ser	others
NB034	Quartz vein		△				・		◎		○		△		・	△			epi(・)
NB099	Quartz vein	dolomite rock						chcc(・)				△	△			◎			
NK033	Quartz vein	quartz vein		・	△		・		◎			・	・						
NK042	Quartz vein	quartz vein	・	・					◎			・	△				・		
NM068	Quartz vein	silicified tuff breccia							◎	○		△					△		hema(・)
NM071	Quartz vein	quartz vein	・				・		◎			・					・		
DK117	Quartz vein	silicified volcanic breccia	・						◎			△	△				△	・	
DK127	Quartz vein	silicified volcanic breccia							◎		△	△					△		
DK154	Quartz vein	silicified volcanic breccia	△	・					◎		○	△						△	
DB110	Quartz vein	silicified volcanic breccia	△		・		・		◎	◎		△							
DB111	Quartz vein	silicified tuff							◎	○		△					△	△	
DB118	Quartz vein	silicified volcanic breccia	△	・			・		◎	○							・	・	
DB119	Quartz vein	silicified volcanic breccia	△	・	・		・		◎	△		・							
DB148	Quartz vein	silicified volcanic breccia	△		・	・	・	Ars(・)	◎	◎	△	・							
DB153	Quartz vein	silicified volcanic breccia	△	・					◎	○		・							
DM102	Quartz vein	carbonatised tuff	・						◎	△	○		△			◎			
DM125	Quartz vein	silicified tuff	○				・		◎			△	△						chl(・), Pyro(△)
DM131	Quartz vein	quartz aggregate					・		◎						・				
WB218	Quartz vein	silicified tuff breccia							◎				△	△					
WB222	Quartz vein	silicified tuff	・			・			◎	△		・							
WB231	Quartz vein	opal	△									△	△						opal(◎)
WK210	Quartz vein	silicified tuff	・						◎	△									
WK212	Quartz vein	silicified tuff breccia	・						◎	・		・							
WK214	Quartz vein	silicified tuff	・						◎	△		・							
WK218	Quartz vein	silicified tuff							◎			・	△						
WK224	Quartz vein	silicified tuff		・					◎			・							
WM217	Quartz vein	silicified tuff							◎			・	・						
WM219	Quartz vein	silicified tuff breccia							◎			・	・						
WM221	Quartz vein	quartz vein							◎			・	△	△					
WS105	Quartz vein	silicified tuff breccia	・						◎		○	・		△					cpx(・)
WD013	Quartz vein	altered quenched basalt	○						△		◎		・	◎					

Py=pyrite, Cha=chalcopyrite, Sph=sphalerite, Aca=acanthite, Gal=galena, chcc=chalcocite, Ars=arsenopyrite
qz=quartz, kf=K-feldspar, pl=plagioclase, goe=goethite, clay= clay minerals, smc=smectite, apa=apatite, cb=carbonate
ba=barite, epi=epidote, hema=hematite, ser=sericite, chl=chlorite, pyro=pyrolusite, cpx=clinopyroxene
◎= abundant, ○=common, △ =small, ・= rare

Table A-2(2) Results of Microscopic Observation of Polished Thin Sections(2)

Sample No.	Depth (m)	Texture under microscope	Ore minerals						Gangue minerals								
			Py	Cha	Sph	Aca	Gal	others	Si	kf	pl	goe	clay	apa	carb	ser	others
ND103	120.20	silicified volcanic breccia	△	•			•		◎				◎		○		
ND104	120.40	silicified volcanic breccia	△	•	◎		△		◎			•	△				
ND215	118.40	silicified volcanic breccia	•	•	△		•	Hm(•)	◎	△			○	•			
ND217	118.65	silicified volcanic breccia					•	Mt(•)	◎			△	○			△	
ND227	53.30	silicified volcanic breccia	△	•				Mt(•)	◎	◎		△	△				
ND231	245.35	altered basalt		•				Hm(△)	△		◎		○				cpx (△), chl (△)
ND309	152.10	silicified volcanic breccia	△	•	△		•	Au(•)	◎	○			○			△	
ND310	152.20	silicified tuff breccia	•	•				Hm(•)	◎	○	○		◎				
DD414	138.25	silicified volcanic breccia	△	•	•		•		◎	◎			○		○		
DD421	182.20	basalt with quartz vein	△	•	•				◎	○	△		◎		○	△	
DD423	190.40	silicified volcanic breccia	○	△	•	•			○	◎			△				
DD426	191.20	silicified tuff breccia	○	•	•				○	◎	△		△				
DD504	122.75	silicified volcanic breccia	◎	•	△		△		◎	△		△	△		○		
DD507	152.70	silicified volcanic breccia	○		•		•		◎	○			•	•	•		
DD510	164.10	silicified volcanic breccia	△		•				○	◎			△		○		
DD513	182.00	silicified volcanic breccia	△	•			•		◎	○			○		△		
DD628	122.10	silicified volcanic breccia	•	•	•			Au(•)	◎	○			○		○		
DD637	267.50	silicified volcanic breccia	△	•				Hm(△),Mt(•)	◎				◎		○		
DD640	297.50	silicified volcanic breccia	△	•					◎	△	○		○		○		
DD642	75.00	silicified volcanic breccia	△						◎				◎		△		

Py=pyrite, Cha=chalcopyrite, Sph=sphalerite, Aca=acantite, Gal=galena, Au=electrum, Hm=hematite, Mt=magnetiite
Si=quartz or SiO_2 polymorphs, kf=K-feldspar, pl=plagioclase, goe=goethite, clay=clay minerals, apa=apatite, cb=carbonate, chl=chlorite
◎=abundant, ○=common, △=small, • =rare

Table A-2(3) Results of Microscopic Observation of Polished Thin Sections(3)

Sample No.	Depth (m)	Texture under microscope	Ore minerals						Gangue minerals								
			Py	Cha	Sph	Asp	Gal	others	Si	kf	pl	goe	chl	apa	carb	ser	others
DD740	227.10	silicified volcanic breccia	○		△		•	Au(•)	◎	◎			△			△	
DD742	251.20	silicified volcanic breccia	○		△		△		◎	△					○		
DD743	259.75	silicified volcanic breccia	○	△	•		•		◎	◎			△		◎		
DD817	125.40	silicified volcanic breccia	○	•	•				◎	◎			△		○	△	
DD818	141.45	silicified volcanic breccia	○	△	•	•			◎	◎					△	△	
DD819	125.50	silicified volcanic breccia	○	△					◎	○	◎		○		○		
DD822	116.80	carbonate rock	○	•											◎		
DD903	88.45	silicified tuff breccia	○	△	•			Cr(•)	◎	○	○		△		◎		
DD912	93.75	silicified volcanic breccia	○		•				◎	○			○		◎		
DD922	288.89	basalt with quartz vein	△		•		△		◎	◎	△				○	△	

Py=pyrite, Cha=chalcopyrite, Sph=sphalerite, Aca=acantite, Gal=galena, Au=electrum, Hm=hematite, Mt=magnetiite
Si=quartz or SiO2 polymorphs, kf=K-feldspar, pl=plagioclase, goe=goethite, clay=clay minerals, apa=apatite, cb=carbonate, chl=chlorite
◎=abundant, ○=common, △=small, • =rare

Table A-3(1) Results of X-ray Diffraction Analysis of Rock Samples(1)

Sample No.	Field description	Clay mineral				Silica		Feldspar		Zeolite						Carbonate		Sulfate			Others					
		Sm	Ch	Ka	Se	Tr	Cr	Qz	Pl	Kf	Cb	St	Wa	La	Na	An	Ca	Do	Al	Ja	Gv	Ap	Py	Mg	He	Gb	Others
NS 010	Lapilli tuff	△		·				○		○												○	·				
NS 011	Lapilli tuff	△						◎		○										·							
NS 012	Tuff(light gray)	△		·				○		○										·							
NS 013	Lapilli tuff			△				◎									○						○				
NS 022	Andesitic volcanic breccia			·			◎																△				
NS 028	Clay-quartz vein			·				◎											·								
NS 033	Lapilli tuff			△				○																			
NS 035	Lapilli tuff			△			○	△																			
NS 036	Volcanic breccia			·			◎																△				
NS 049	Andesite?	△																									
NS 051	Lapilli tuff	○						·																			
NM 007	Basaltic andesite(pale green)	○						·													· ?			△			
NM 010	Porphyritic basalt			·			○																				
NM 016	Coarse tuff							○		○					·								○				
NM 021	Tuff(dark green)	○							○								△										
NM 034	Basalt(pale green)	○						△		△							△										
NM 018	Coarse tuff		△					◎	○	△																	
NK 022	Silicified, argillic rock		△					◎		○																	
NK 036	Lapilli tuff		△					◎		○																	
NK 038	Silifified rock		△					◎		△																	
NK 039	Lapilli tuff~tuff breccia		○					◎		△																	
NK 040	Lapilli tuff(clayey)	○						○		○																	
NK 043	Silicified rock	△						◎		·															·		
NK 050	Lapilli tuff	○		·																							△Te?
NK 052	Lapilli tuff	○							△																		
NK 054	Lapilli tuff	○																									
NK 057	Tuff breccia(greenish)	○	△					◎	○	△			△				○						·				
NK 058	Tuff(clayey)	○		·																							
NB 012	Argillic rock			△				◎											· ?				·				
NB 016	Argillic rock																										
NB 019	Argillic rock			△				◎															·				
NB 021	Argillic rock			△			◎																·				
NB 022	Weakly argillic basalt	△							◎	○													·				
NB 026	Argillic rock	·		△			○	○																			
NB 030	Argillic volcanic breccia			△			◎																·				· Te?
NB 031	Decomposed volcanic breccia			△																			·				
NB 034	Silicified zone /quartz vein	◎						◎	△												△		·		·		
NB 043	Argillic rock			○			○	○																	·		
NB 053	Argillic rock			○				◎											·				·		·		

Table A-3(2) Results of X-ray Diffraction Analysis of Rock Samples(2)

Sample No.	Field description	Clay mineral					Silica		Feldspar		Zeolite						Carbonate		Sulfate			Others					
		Sm	Ch	Ka	Se	Tr	Cr	Qz	Pl	Kf	Cb	St	Wa	La	Na	An	Ca	Do	Al	Ja	Gv	Ap	Py	Mg	He	Gb	Others
NB 058	Argillic rock			△			○	○															•		•		
NB 090	Argillic altered volcanic breccia			△		◎		△															△				
ND 020	Andesitic vocanic breccia		△					○	○		•	•															
DS 086	Clay zone (0.3m)	○						◎		△																	
DS 068	Clay zone (0.1m)	△						◎																			• Sp?
DS 080	Clay zone (0.2m)				•			◎		•																	
DS 084	Clay zone (0.25m)	△						◎		△																	
DS 090	Brecciated zone	△	△					◎	△														△				
DS 096	Silicified, brecciated rock	•						◎		○													•				
DM 080	Argilli rock		•					○	◎														○				
DM 081	Argillic basalt	△	△					◎		•													○				
DM 086	Bleached (basalt?)	○						○	○														△	△			
DM 095	Silicified, argillic rock		○					○	○	○													○				
DM 103	Quartz, argillic zone (5cm)			•				◎										◎									• Ma?
DM 106	Argillic zone with quartz veinlets	○		△				◎										◎					•				
DM 179	Argillic zone (2m)	△	•					◎	○																		
DM 187	Argillic zone (1m)	○	△					◎		•													△				
DM 188	Argillic zone (3m)	△						◎		△													•		•		
DM 191	Tuff breccia (2m)	○		•					○														△				
DK 073	Quartz vein		△					◎	△								◎						•		•		
DK 074	Clay	○	△					○		△								○									
DK 076	Weakly silicified rock	○	△					◎		• ?							○						•				
DK 078	Strongly argillic rock		○					○	○								△						•				
DK 082	Weakly argillic rock		○					◎		• ?							◎						△				
DK 083	Basaltic tuff breccia(light blue)	△					△	△	•								◎	◎					•				
DK 086	Weakly silicified rock		△					◎	•	△							△						△				
DK 088	Breccia zone in basalt		○		○			◎															•				
DK 133	Silicified rock(float)	○	△		△			◎									◎										
DB 112	White clay	△						◎		○																	
DB 114	Leached (clay) zone			△				○																	•		
DB 120	Clay zone (whitish-brownish)				△			◎		○																	
WM 200	Clay (pale green, 0.8m)	○						◎	○							•											
WM 205	Quartz stringer (0.1m)			△				○															•		•		
WM 211	White clay (0.1m)				△			◎															•		•		
WM 217	Quartz vein (Waimotu lode)							◎																			
WM 222	Argillic andesite(pinky)			•				◎		△													•			•	
WM 223	Quartz, argillic zone(gray-purplish)			△				◎		△													•		•		
WM 226	Argillic zone							◎		○															△		
WM 227	Silicified, brecciated basalt							◎		○															△		

Table A-3(3) Results of X-ray Diffraction Analysis of Rock Core Samples(3)

Sample No.	Field description	Clay mineral				Silica		Feldspar		Zeolite						Carbonate		Sulfate			Others					
		Sm	Ch	Ka	Se	Tr	Cr	Qz	Pl	Kf	Cb	St	Wa	La	Na	An	Ca	Do	Al	Ja	Gy	Ap	Py	Mg	He	Gb	Others
WM 228	Quartz stringer bearing tuff breccia							◎																	·		
WM 229	Soapy tuff breccia	○						○																			
WK 200	Lapilli tuff		○					◎	○														·		·		
WK 204	Basalt with quartz vein		·					◎				△		○			◎										
WK 205	Weakly silicified rock		·					◎						△									·				
WK 206	Lapilli tuff		○					◎						○													
WK 211	Weakly silicified,limonitic zone	△						○		○																	
WK 213	Weakly silicified rock			△				◎		△									·								
WK 219	Quartz vein with iron oxide			· ?				◎															·				
WK 220	Clayey tuff	△						◎															△				
WK 227	Silicified rock							◎		△													△				
WB 205	Limonitic veinlet in andesite			△				○															·				
WB 207	Silicified, brecciated rock			·				◎																	·		
WB 208	Silicified, brecciated rock			·				◎															·		·		
WB 209	White clay (0.5m)			△				◎															·		·		
WB 210	Silicified, brecciated rock			·				◎																	·		
WB 211	Strongly silicified rock			·				◎																			
WB 212	Andesite(whitisch)			○				◎															·				
WB 213	Strongly silicified rock			· ?				◎																			
WB 214	Strongly silicified rock			·				◎																	·		
WB 215	Weakly silicified rock			·				◎															·		·		
WB 217	Strongly silicified,clay zone			△				◎															·				
WB 219	Strongly silicified, brecciated zone			· ?				◎		○																	
WB 224	Strongly silicified rock			·				◎															·		·		
WB 226	Strongly silicified, brecciated rock			·				◎															·		·		
WB 227	Andesite?(white, decomposed)			○																							
WB 234	Silicified, brecciated rock			△				○															·				
WD 006	Tuff breccia (weakly silicified)	○						○		△													◎				
WD 007	Shear zone			·				◎		○													○				
WD 008	Tuff breccia							◎		△																	

◎= abundant, ○=common, △=small, ·=rare

Sm:smectite, Ch:chrolite, Ka:kaolin, Se:sericite, Tr:tridymite, Cr:cristobalite, Qz:quartz
Pl:plagioclase, Kf:K-feldspar, Al:alunite, Ja:jarosite, Ca:calcite, Do:dolomite, Gy:gypsum, Ap:apatite, An:anatase
Cb:chabasite, St:stibite, Wa:wairakite, Na:natrolite,La:laumontite
Py:pyrite, Mag:magnetite, He:hematite, Gb:gibbsite, Te:tennantite, Sp:sphalerite, Ma:malachite

Table A-3(4)   Results of X-ray Diffraction Analysis of Drill Core Samples(1)

Sample No.	Drill hole	Depth (m)	Silicate: Silica: Quartz	Silicate: Silica: Christobalite	Silicate: Feldspar: K-feldspar	Silicate: Feldspar: Plagioclase	Silicate: Clay mineral: Smectite	Silicate: Clay mineral: Mixed layered(C/M)	Silicate: Clay mineral: Chlorite	Silicate: Clay mineral: Mixed layered(S/M)	Silicate: Clay mineral: Sericite	Silicate: Zeolite: Heulandite	Silicate: Zeolite: Stilbite	Silicate: Zeolite: Epistilbite	Silicate: Zeolite: Hamotome	Silicate: Zeolite: Analcime	Silicate: Others: Pyroxene	Silicate: Others: Epidote	Carbonate: Calcite	Carbonate: Dolomite	Others: Pyrite	Others: Anatase
ND102	MJFV-1	120.10	◎		○				○												○	
ND105	MJFV-1	120.40	◎		○				○													
ND106	MJFV-1	26.00				◎	◎					◎					△					
ND107	MJFV-1	50.60				·	○									◎			△			
ND108	MJFV-1	71.70		○		◎	△					△										
ND109	MJFV-1	99.40	○		○			◎												△		
ND110	MJFV-1	125.10				◎	◎										△					
ND111	MJFV-1	155.00	◎		△				○													
ND112	MJFV-1	170.20	○			◎	△		○								·					
ND113	MJFV-1	200.50	·			◎	○		△												○	
ND114	MJFV-1	225.90	△				○	○					◎			○						
ND115	MJFV-1	249.00	○			◎		○													·	
ND116	MJFV-1	275.00	○			○		○						△								
ND117	MJFV-1	300.00				◎		○						·								
ND118	MJFV-1	59.30					◎								△	·			·			
ND119	MJFV-1	32.60				○	◎										△		○			
ND201	MJFV-2	26.00					○														◎	△
ND202	MJFV-2	50.00	◎		△			△											△			
ND204	MJFV-2	69.00	○		○			△														
ND205	MJFV-2	97.70	△			◎	◎															
ND206	MJFV-2	118.80	◎				◎															
ND208	MJFV-2	147.95				◎																
ND209	MJFV-2	176.00	○			○																
ND210	MJFV-2	197.45				◎		○														
ND211	MJFV-2	225.40				◎		○														
ND212	MJFV-2	250.50	○			◎																
ND213	MJFV-2	103.80	◎																			
ND214	MJFV-2	118.20	◎																			
ND215	MJFV-2	118.40	◎																			
ND220	MJFV-2	195.10	○																			
ND234	MJFV-2	35.70																				
ND301	MJFV-3	28.50		○		◎	◎															
ND305	MJFV-3	101.20		○		◎	◎															
ND307	MJFV-3	112.30						◎														
ND308	MJFV-3	126.00				◎	◎															
ND315	MJFV-3	175.00	◎			◎			○													
ND316	MJFV-3	196.60				◎			◎													
ND317	MJFV-3	224.90				○			◎													
ND318	MJFV-3	247.75				◎																
ND319	MJFV-3	274.70							○							◎						
ND320	MJFV-3	300.00	○			◎		○						·		·						

◎ abundant   ○ common   △ small   · rare   C/M:chlorite/smectite   S/M:sericite/smectite

Table A-3(5) Results of X-ray Diffraction Analysis of Drill Core Samples(2)

Sample No.	Drill hole	Depth (m)	Silicate																Carbonate		Others	
			Silica		Feldspar		Clay mineral					Zeolite					Others					
			Quartz	Christobalite	K-feldspar	Plagioclase	Smectite	Mixed layered(C/M)	Chlorite	Mixed layered(S/M)	Sericite	Heulandite	Stilbite	Epistilbite	Hamotome	Analcime	Pyroxene	Epidote	Calcite	Dolomite	Pyrite	Anatase
DD401	MJFV-4	25.00																				
DD402	MJFV-4	50.00				○	○										○					
DD403	MJFV-4	75.50	·			○	○										○					
DD404	MJFV-4	100.00	△			◎		·								·	○					
DD405	MJFV-4	127.60	◎		△				△										○		△	
DD406	MJFV-4	154.60	○		△			○											○			
DD407	MJFV-4	176.50				△	◎										◎					
DD408	MJFV-4	205.50				○	◎										◎					
DD409	MJFV-4	230.00	◎			△		△											◎		○	
DD410	MJFV-4	250.20	△			◎	◎															
DD411	MJFV-4	273.40	△			○	◎										△					
DD412	MJFV-4	300.20	△			○		○									·		○			
DD519	MJFV-5	159.50				○	◎										◎					
DD521	MJFV-5	72.80	△			△	◎										○					
DD523	MJFV-5	123.00			△				○		·									◎		
DD524	MJFV-5	150.00			△				·	·										◎		
DD525	MJFV-5	176.60			·			○	△											○		
DD528	MJFV-5	252.40				○	◎										◎					
DD530	MJFV-5	290.25			·		◎										○		△			
DD531	MJFV-5	132.00	◎		○		△															
DD601	MJFV-6	25.00	△	·			◎													·	○	
DD603	MJFV-6	56.00				○	○										○		○			
DD604	MJFV-6	106.00			○			○														
DD605	MJFV-6	125.20	○		△				○										○			
DD606	MJFV-6	152.00	△			○		◎									△		○			
DD607	MJFV-6	174.90	△		·			◎											○			
DD609	MJFV-6	225.85	◎			○			○										○		○	
DD611	MJFV-6	272.35	△		△				◎										△		◎	
DD612	MJFV-6	300.00	○			○		·	△								○		○		○	
DD613	MJFV-6	116.00	○		△				○										◎			
DD614	MJFV-6	135.20	△		△		◎		△								◎					
DD632	MJFV-6	255.90	◎						○										·		◎	

◎ abundant ○ common △ small · rare C/M:chlorite/smectite S/M:sericite/smectite

Table A-3(6) Results of X-ray Diffraction Analysis of Drill Core Samples(3)

Sample No.	Drill hole	Depth(m)	Silicate														Carbonate			Others	
			Silica			Feldspar		Clay mineral						Zeolite	Others					
			Quartz	Christobalite	Tridymite	K-feldspar	Plagioclase	Smectite	Mixed layered(C/M)	Chlorite	Mixed layered(S/M)	meta Haloysite	Sepiolite	Analcime	Pyroxene	Calcite	Siderite	Ankerite	Pyrite	glass
DD701	MJFV-7	41.10					◎	·							○					
DD702	MJFV-7	102.50	△				○		◎						·	○				
DD703	MJFV-7	153.70				·	◎			△					△	○			△	
DD704	MJFV-7	203.00	○	·			○		◎							△			·	
DD705	MJFV-7	227.00	○				△			△						◎			·	
DD706	MJFV-7	201.65	△	·			○		◎							△				
DD707	MJFV-7	248.10	○				○		○							◎				
DD708	MJFV-7	253.20	△				△			△						·		◎	△	
DD709	MJFV-7	284.60					◎	◎				△			○					
DD710	MJFV-7	321.90					△	◎				△	△	△						
DD711	MJFV-7	338.50	·	△			△		◎											
DD712	MJFV-7	382.35	△				○	◎				△			△	△				
DD801	MJFV-8	48.30						◎												○
DD802	MJFV-8	125.50	◎				△		△							△			·	
DD803	MJFV-8	112.20	◎				△		△							·		○		
DD804	MJFV-8	134.70	○				△		◎						○	○			·	
DD805	MJFV-8	181.65	·				△			△					◎					
DD806	MJFV-8	143.00	◎				○			·									△	
DD807	MJFV-8	204.50	△				△		◎					○		○			△	
DD808	MJFV-8	261.80	△				△	◎						○		○			·	
DD809	MJFV-8	277.60	△	·			○		◎						△					
DD810	MJFV-8	336.10					◎		○							△			△	
DD811	MJFV-8	363.50	△				◎		○						△				·	
DD812	MJFV-8	396.80	△				◎		◎							·				
DD924	MJFV-9	58.70	◎				△		△						△	○			·	
DD926	MJFV-9	88.00	◎				△			△								○	△	
DD927	MJFV-9	115.00			△		◎	△				△			△	△				
DD928	MJFV-9	151.60	△				△	◎				△							·	
DD930	MJFV-9	200.70			·		◎	○				○			△	◎				
DD932	MJFV-9	258.50	△				△		◎						◎					
DD933	MJFV-9	289.90	○				○			◎	◎				△		·			
DD934	MJFV-9	300.00	◎			·	△	·		△						◎				

◎ abundant ○ common △ small · rare C/M:chlorite/smectite

S/M:sericite/smectite

Table A-4(1) Results of Chemical Analysis of Rock Samples(1)

Element Unit	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)
Detection	0.01(0.008)	0.4	1	0.5	0.005
DB 107	5.72	9.8	160	1.6	0.08
DB 108	5.11	6.5	140	1.4	0.061
DB 109	4	16.5	280	2.8	0.219
DB 110	4.55	47	500	5.8	0.483
DB 111	2.89	6.4	100	1.5	0.061
DB 113	0.38	11.1	560	2.7	0.104
DB 114	0.1	<0.4	250	3.1	0.288
DB 115	0.318	0.5	1360	14.4	2.57
DB 116	0.13	1.2	310	3.4	0.041
DB 117	4.45	12.3	410	3.9	0.276
DB 118	6.7	8.5	200	2.5	0.025
DB 119	6.56	10.4	265	2.4	0.06
DB 123	<0.01	<0.4	3	<0.5	0.016
DB 124	<0.01	<0.4	4	<0.5	0.022
DB 125	<0.01	<0.4	3	<0.5	0.018
DB 126	0.62	<0.4	2	<0.5	0.015
DB 130	<0.01	<0.4	4	<0.5	0.026
DB 132	<0.01	<0.4	2	<0.5	0.02
DB 134	<0.01	<0.4	6	<0.5	0.011
DB 137	0.02	2.8	24	<0.5	0.017
DB 139	0.12	1.2	55	<0.5	0.012
DB 140	0.2	<0.4	25	<0.5	0.014
DB 141	0.03	<0.4	<1	<0.5	0.014
DB 142	1.77	1.2	155	<0.5	0.031
DB 143	<0.01	<0.4	3	<0.5	0.014
DB 144	0.11	0.4	8	<0.5	0.02
DB 145	<0.01	<0.4	4	<0.5	0.014
DB 146	0.69	38.7	1430	9.4	2.25
DB 147	0.71	47	1590	12.6	3.16
DB 148	12.4	46	1420	12.7	2.7
DB 149	2.18	5.6	190	2.3	0.057
DB 150	0.045	2.4	70	3.3	0.136
DB 151	1.33	4.6	210	2	0.034
DB 152	0.54	7.2	280	3.4	0.03
DB 153	2.28	11.3	345	3.3	0.165
DB 154	4.61	8.3	240	2.4	0.08
DB 155	16.1	78	330	6	0.065
DB 156	<0.01	<0.4	5	<0.5	0.022
DB 158	<0.01	0.4	3	<0.5	0.096
DB 159	<0.01	<0.4	155	1.7	0.065
DB 160	<0.01	<0.4	8	<0.5	0.044
DB 161	<0.01	<0.4	4	<0.5	0.024
DB 162	<0.01	<0.4	21	<0.5	0.077
DB 163	<0.01	0.4	<1	<0.5	0.016
DB 164	<0.01	<0.4	7	<0.5	0.03
DB 165	<0.01	<0.4	2	<0.5	0.032
DB 166	<0.01	<0.4	3	1	0.039
DB 167	<0.01	<0.4	3	1.6	0.024
DB 168	<0.01	<0.4	2	1.1	0.028
DB 169	<0.01	<0.4	8	0.6	0.017
DB 171	<0.01	<0.4	3	0.9	0.017
DB 172	<0.01	<0.4	20	<0.5	0.022
DB 173	0.02	0.4	4	<0.5	0.022
DB 174	0.01	<0.4	3	<0.5	0.026
DB 175	0.015	<0.4	11	<0.5	0.027
DB 176	<0.01	<0.4	3	<0.5	0.021
DB 177	0.02	<0.4	23	<0.5	0.017
DB 178	<0.01	<0.4	7	<0.5	0.016
DK 063	<0.01	<0.4	10	0.8	0.022
DK 064	<0.01	<0.4	5	0.9	0.022
DK 065	<0.01	<0.4	7	<0.5	0.014
DK 066	<0.01	<0.4	5	0.7	0.017
DK 067	<0.01	0.4	5	<0.5	0.018
DK 068	<0.01	<0.4	1	<0.5	0.016
DK 073	<0.01	<0.4	17	0.8	0.018

Element Unit	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)
Detection	0.01(0.008)	0.4	1	0.5	0.005
DK 074	<0.01	<0.4	2	<0.5	0.025
DK 086	<0.01	<0.4	5	0.7	0.006
DK 088	<0.01	<0.4	4	0.6	0.01
DK 089	<0.01	0.4	3	0.6	0.009
DK 092	0.11	38.5	1130	28.3	0.575
DK 093	0.26	62	1050	17.4	0.63
DK 095	0.015	0.6	380	4.3	0.028
DK 096	<0.01	1.6	310	1.9	0.048
DK 097	0.1	27.2	380	12.3	0.465
DK 100	<0.01	<0.4	16	1	0.034
DK 101	0.12	<0.4	24	1.3	0.075
DK 102	2.55	0.6	26	1.1	0.065
DK 103	0.07	0.4	70	1	0.025
DK 104	0.015	<0.4	4	<0.5	0.06
DK 105	0.19	2.2	31	0.9	0.063
DK 106	0.14	1	15	0.6	0.041
DK 107	0.56	0.4	25	1.3	0.037
DK 108	0.05	<0.4	21	0.7	0.067
DK 109	0.052	<0.4	17	<0.5	0.063
DK 110	0.049	<0.4	15	<0.5	0.06
DK 111	0.173	<0.4	130	1.6	0.046
DK 112	0.049	<0.4	35	<0.5	0.064
DK 113	0.435	12.2	310	7.4	2.33
DK 114	0.04	<0.4	246	2.6	0.111
DK 115	0.162	1.7	226	2.9	0.09
DK 116	0.12	0.4	90	1.3	0.069
DK 117	0.204	16.1	160	2.6	0.076
DK 118	0.01	<0.4	5	<0.5	0.033
DK 119	0.012	<0.4	6	<0.5	0.034
DK 120	<0.01	<0.4	16	<0.5	0.012
DK 121	<0.01	0.4	23	<0.5	0.027
DK 122	0.012	<0.4	37	<0.5	0.013
DK 123	<0.01	0.6	31	<0.5	0.025
DK 126	<0.01	<0.4	50	0.6	0.022
DK 127	<0.01	1.2	25	<0.5	0.025
DK 128	0.01	0.4	60	0.5	0.031
DK 129	0.01	<0.4	60	0.8	0.029
DK 130	0.01	<0.4	50	<0.5	0.029
DK 131	<0.01	<0.4	11	<0.5	0.03
DK 132	<0.01	<0.4	20	<0.5	0.016
DK 133	0.02	0.8	8	<0.5	0.036
DK 134	0.07	2.4	70	1.1	0.045
DK 136	0.136	5.5	130	3.9	0.034
DK 140	<0.01	<0.4	7	<0.5	0.021
DK 144	<0.01	<0.4	3	<0.5	0.018
DK 146	<0.01	<0.4	7	<0.5	0.019
DK 147	1.7	9.2	34	4.7	0.045
DK 148	0.6	10.8	140	25.4	0.128
DK 149	0.141	25.4	180	14.8	0.088
DK 150	0.134	9.5	145	12.7	0.09
DK 151	0.117	32.3	175	7.4	0.065
DK 152	0.015	2.7	60	<0.5	0.058
DK 153	0.113	0.9	200	0.9	0.028
DK 154	0.04	3	80	<0.5	0.03
DK 155	0.024	34.7	14	<0.5	0.044
DM 078	<0.01	<0.4	6	1.2	0.061
DM 079	<0.01	<0.4	10	0.8	0.037
DM 080	<0.01	0.6	13	0.6	0.017
DM 081	0.07	2.8	155	0.6	0.013
DM 083	<0.01	0.4	3	<0.5	0.011
DM 085	<0.01	0.4	15	0.6	0.095
DM 086	<0.01	<0.4	6	<0.5	0.016
DM 091	0.405	23.6	550	4.3	0.342
DM 095	0.03	0.5	15	<0.5	0.016
DM 096	<0.01	0.4	3	<0.5	0.008

Table A-4(2) Results of Chemical Analysis of Rock Samples(2)

Element Unit	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)
Detection	0.01(0.008)	0.4	1	0.5	0.005
DM 097	<0.01	<0.4	11	<0.5	0.021
DM 098	<0.01	<0.4	110	0.7	0.031
DM 099	<0.01	<0.4	15	0.6	0.023
DM 101	<0.01	0.4	4	<0.5	0.013
DM 102	0.065	0.8	10	<0.5	0.028
DM 103	<0.01	0.9	25	0.8	0.026
DM 104	<0.01	<0.4	2	<0.5	0.08
DM 106	<0.01	<0.4	5	<0.5	0.018
DM 107	<0.01	<0.4	5	<0.5	0.02
DM 108	0.018	<0.4	1	<0.5	0.018
DM 109	<0.01	<0.4	6	<0.5	0.011
DM 110	<0.01	<0.4	4	<0.5	0.034
DM 111	<0.01	0.4	15	0.6	0.017
DM 112	0.112	2.2	110	1	0.022
DM 113	<0.01	<0.4	3	<0.5	0.054
DM 114	0.077	2.2	31	0.6	0.034
DM 115	<0.01	0.6	4	0.7	0.026
DM 116	<0.01	<0.4	3	<0.5	0.006
DM 117	<0.01	0.4	13	0.6	0.01
DM 118	<0.01	<0.4	6	<0.5	0.01
DM 119	0.025	2.2	70	0.9	0.019
DM 120	<0.01	<0.4	5	<0.5	0.008
DM 121	<0.01	<0.4	7	<0.5	0.007
DM 122	<0.01	<0.4	13	<0.5	0.025
DM 123	<0.01	<0.4	7	<0.5	0.037
DM 124	<0.01	<0.4	10	0.8	0.038
DM 125	0.063	2.2	110	1.3	0.043
DM 126	0.085	2.9	50	0.8	0.024
DM 127	0.06	<0.4	80	0.8	0.021
DM 128	0.288	0.9	240	1.9	0.038
DM 129	0.028	0.5	25	<0.5	0.017
DM 130	0.557	0.4	390	2	0.083
DM 131	2.85	0.7	210	2.4	0.136
DM 132	0.072	1	80	1.5	0.04
DM 133	<0.01	<0.4	<1	0.6	0.019
DM 134	0.137	<0.4	90	0.9	0.044
DM 135	0.327	0.9	130	1.3	0.042
DM 136	0.11	0.8	95	1.1	0.052
DM 137	0.027	0.4	55	0.8	0.023
DM 138	2.11	2.2	65	1	0.039
DM 139	0.112	0.5	105	1.1	0.018
DM 140	4.05	78	520	2.9	0.022
DM 141	0.5	0.7	135	1.8	0.047
DM 142	3.2	4.1	285	7.6	0.382
DM 143	0.75	0.5	70	2.3	0.059
DM 144	<0.01	<0.4	5	0.6	0.041
DM 145	0.05	1.4	55	1	0.026
DM 146	0.08	0.4	50	1.5	0.079
DM 147	0.77	1.1	150	3.8	0.068
DM 148	0.86	1.3	305	2.4	0.075
DM 149	0.135	0.6	115	1.6	0.088
DM 150	0.23	0.4	205	1.8	0.077
DM 151	0.01	<0.4	31	1	0.068
DM 152	<0.01	<0.4	12	0.6	0.043
DM 153	<0.01	<0.4	23	1	0.014
DM 154	0.05	0.5	15	<0.5	0.015
DM 155	0.03	0.6	65	1	0.014
DM 156	0.23	<0.4	345	2.3	0.014
DM 157	<0.01	1.3	23	1.1	0.014
DM 158	0.01	<0.4	20	1.2	0.017
DM 159	0.015	<0.4	31	0.9	0.013
DM 160	0.01	0.4	100	0.8	0.017
DM 161	0.02	0.6	75	1.2	0.018
DM 162	0.12	0.5	245	2.1	0.018
DM 163	0.18	0.9	180	1.1	0.014

Element Unit	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)
Detection	0.01(0.008)	0.4	1	0.5	0.005
DM 164	0.05	1	75	1	0.014
DM 165	<0.01	0.7	13	0.8	0.054
DM 166	<0.01	<0.4	8	0.6	0.015
DM 167	0.13	3.4	140	1.4	0.044
DM 168	0.31	4	130	0.9	0.091
DM 169	0.454	151	155	1.6	0.198
DM 170	0.1	5.3	160	1.3	0.022
DM 171	0.053	2.2	60	1.4	0.041
DM 172	0.039	0.5	85	1.1	0.024
DM 173	0.027	1.8	33	1.3	0.08
DM 174	0.033	2.6	85	2.2	0.051
DM 175	0.034	2.5	55	1.4	0.225
DM 176	0.03	3.9	20	1.3	0.735
DM 179	0.01	<0.4	1	<0.5	0.019
DM 180	0.014	0.7	13	<0.5	0.009
DM 181	0.024	<0.4	28	<0.5	0.013
DM 184	0.2	16.7	145	3.9	0.379
DM 185	<0.01	0.5	9	<0.5	0.04
DM 186	<0.01	<0.4	3	<0.5	0.007
DM 187	<0.01	<0.4	2	<0.5	0.01
DM 188	0.16	0.4	17	1.6	0.039
DM 190	0.63	2.4	29	1.4	0.127
DM 192	<0.01	<0.4	2	<0.5	0.022
DM 193	<0.01	<0.4	3	<0.5	0.052
DS 061	0.01	0.4	<1	<0.5	0.018
DS 065	<0.01	<0.4	2	<0.5	0.021
DS 067	<0.01	0.4	<1	<0.5	0.016
DS 069	0.01	<0.4	10	<0.5	0.052
DS 070	0.045	<0.4	9	<0.5	0.073
DS 071	0.015	<0.4	3	<0.5	0.058
DS 074	0.02	<0.4	2	<0.5	0.014
DS 076	0.688	3.4	220	1.9	0.033
DS 079	0.157	<0.4	70	1	0.032
DS 080	0.282	1.1	285	1.5	0.027
DS 081	0.015	<0.4	24	0.7	0.026
DS 082	0.04	0.4	80	0.6	0.025
DS 083	<0.01	<0.4	4	<0.5	0.026
DS 084	0.466	6.1	270	1.7	0.038
DS 085	<0.01	<0.4	4	<0.5	0.038
DS 086	0.05	<0.4	65	0.6	0.052
DS 088	0.024	<0.4	1	<0.5	0.041
DS 089	0.015	0.5	10	<0.5	0.106
DS 092	<0.01	<0.4	<1	<0.5	0.015
DS 093	<0.01	<0.4	12	<0.5	0.015
DS 094	0.015	0.4	3	<0.5	0.008
DS 096	0.45	11.8	1100	6.6	0.36
NB 006	0.018	1.4	3	0.7	0.039
NB 008	0.296	<0.4	9	<0.5	0.307
NB 009	0.545	<0.4	7	<0.5	0.022
NB 012	0.01	<0.4	<1	<0.5	0.042
NB 016	<0.01	<0.4	<1	<0.5	0.025
NB 019	<0.01	<0.4	<1	<0.5	0.023
NB 021	<0.01	<0.4	<1	<0.5	0.026
NB 023	<0.01	<0.4	<1	<0.5	0.021
NB 027	<0.01	<0.4	<1	<0.5	0.088
NB 028	<0.01	<0.4	<1	<0.5	0.022
NB 029	<0.01	<0.4	<1	<0.5	0.038
NB 030	<0.01	<0.4	<1	<0.5	0.036
NB 031	<0.01	<0.4	<1	<0.5	0.021
NB 033	<0.01	<0.4	2	<0.5	0.031
NB 034	<0.01	<0.4	6	<0.5	0.112
NB 037	<0.01	<0.4	2	<0.5	0.029
NB 043	0.01	<0.4	5	<0.5	0.016
NB 045	<0.01	<0.4	29	<0.5	0.048
NB 048	<0.01	<0.4	<1	<0.5	0.022

Table A-4(3) Results of Chemical Analysis of Rock Samples(3)

Element Unit	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)
Detection	0.01(0.008)	0.4	1	0.5	0.005
NB 050	<0.01	<0.4	<1	<0.5	0.025
NB 053	<0.01	<0.4	3	<0.5	0.041
NB 055	<0.01	<0.4	5	<0.5	0.01
NB 058	<0.01	<0.4	14	<0.5	0.023
NB 061	0.02	<0.4	<1	<0.5	0.034
NB 065	<0.01	<0.4	3	0.7	0.016
NB 067	0.01	<0.4	<1	<0.5	0.027
NB 070	<0.01	<0.4	<1	<0.5	0.025
NB 073	<0.01	<0.4	1	<0.5	0.039
NB 077	0.01	<0.4	<1	<0.5	0.035
NB 080	<0.01	<0.4	<1	<0.5	0.042
NB 081	<0.01	<0.4	4	<0.5	0.019
NB 087	<0.01	<0.4	<1	0.7	0.025
NB 088	<0.01	<0.4	<1	<0.5	0.034
NB 089	<0.01	<0.4	1	<0.5	0.036
NB 090	<0.01	<0.4	<1	<0.5	0.021
NB 091	<0.01	<0.4	<1	<0.5	0.029
NB 092	<0.01	<0.4	<1	<0.5	0.036
NB 093	<0.01	0.4	<1	<0.5	0.024
NB 094	0.01	<0.4	3	<0.5	0.075
NB 096	<0.01	0.7	3	<0.5	0.123
NB 097	<0.01	<0.4	3	<0.5	0.029
NB 099	0.013	5.3	<1	<0.5	0.138
NB 100	<0.01	<0.4	2	<0.5	0.02
NB 101	0.01	<0.4	3	<0.5	0.039
NB 102	<0.01	<0.4	<1	<0.5	0.032
NB 103	0.012	<0.4	<1	<0.5	0.025
NB 104	<0.01	0.8	3	<0.5	0.029
NB 105	<0.01	<0.4	<1	<0.5	0.063
NK 001	0.1	<0.4	9	<0.5	0.017
NK 002	<0.01	<0.4	28	<0.5	0.019
NK 003	<0.01	<0.4	5	<0.5	0.02
NK 018	<0.01	<0.4	5	<0.5	0.025
NK 019	0.026	<0.4	6	<0.5	0.021
NK 020	0.127	0.8	<1	<0.5	0.019
NK 021	0.02	<0.4	6	<0.5	0.02
NK 022	0.192	0.6	18	<0.5	0.021
NK 026	0.022	0.4	7	<0.5	0.048
NK 027	0.08	<0.4	7	<0.5	0.047
NK 029	12.9	10.4	5	0.6	0.011
NK 030	1.89	0.6	8	<0.5	0.035
NK 031	0.096	<0.4	2	<0.5	0.029
NK 032	0.064	<0.4	<1	<0.5	0.021
NK 033	9.78	2.3	3	<0.5	0.007
NK 034	0.01	<0.4	23	0.7	0.02
NK 035	0.115	<0.4	2	<0.5	0.028
NK 037	6.69	0.5	3	<0.5	0.031
NK 038	4.24	0.6	7	<0.5	0.051
NK 039	1.84	0.7	19	<0.5	0.161
NK 040	0.86	0.4	12	<0.5	0.032
NK 041	0.07	2.3	90	1.5	0.049
NK 042	0.01	1.8	11	1.8	0.032
NK 043	0.011	5.4	37	1.6	0.04
NK 044	0.04	14.9	22	14.3	0.045
NK 045	0.025	10.4	120	2.4	0.145
NK 046	0.049	1.6	90	2.9	0.109
NK 047	0.086	5.4	50	1.6	0.054
NK 048	0.01	<0.4	1	<0.5	0.046
NK 049	0.06	8.2	70	1	0.079
NK 050	<0.01	<0.4	<1	0.6	0.098
NK 051	<0.01	<0.4	<1	<0.5	92
NK 052	<0.01	<0.4	2	<0.5	0.024
NK 053	<0.01	<0.4	<1	<0.5	0.021
NK 054	<0.01	0.4	<1	<0.5	0.022
NK 056	<0.01	<0.4	<1	<0.5	0.067

Element Unit	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)
Detection	0.01(0.008)	0.4	1	0.5	0.005
NK 058	<0.01	<0.4	14	<0.5	0.141
NK 059	<0.01	<0.4	50	0.8	0.114
NM 002	<0.01	<0.4	<1	<0.5	0.014
NM 003	<0.01	<0.4	<1	<0.5	0.016
NM 005	<0.01	<0.4	<1	<0.5	0.018
NM 006	<0.01	<0.4	<1	<0.5	0.019
NM 007	<0.01	<0.4	<1	<0.5	0.026
NM 008	<0.01	<0.4	<1	<0.5	0.015
NM 009	<0.01	<0.4	<1	<0.5	0.021
NM 010	<0.01	<0.4	<1	<0.5	0.018
NM 012	<0.01	<0.4	1	<0.5	0.024
NM 014	<0.01	<0.4	2	<0.5	0.018
NM 017	<0.01	0.5	27	<0.5	0.023
NM 018	<0.01	<0.4	3	<0.5	0.081
NM 024	<0.01	0.4	7	0.9	0.021
NM 025	<0.01	<0.4	1	<0.5	0.037
NM 026	<0.01	<0.4	<1	<0.5	0.018
NM 027	<0.01	<0.4	<1	<0.5	0.022
NM 028	<0.01	<0.4	5	<0.5	0.03
NM 029	<0.01	<0.4	<1	<0.5	0.022
NM 030	<0.01	<0.4	<1	<0.5	0.016
NM 033	<0.01	<0.4	3	0.8	0.323
NM 034	<0.01	1.7	12	<0.5	0.023
NM 035	<0.01	<0.4	<1	<0.5	0.025
NM 036	<0.01	8.9	2	<0.5	0.021
NM 037	<0.01	0.7	16	<0.5	0.022
NM 038	0.012	<0.4	2	<0.5	0.021
NM 040	<0.01	<0.4	<1	<0.5	0.02
NM 041	<0.01	<0.4	<1	<0.5	0.021
NM 042	<0.01	<0.4	<1	<0.5	0.021
NM 043	0.05	<0.4	29	<0.5	0.025
NM 044	0.103	<0.4	20	0.8	0.061
NM 045	0.01	<0.4	8	<0.5	0.024
NM 046	0.015	<0.4	60	1.4	0.218
NM 047	0.026	<0.4	42	0.8	0.036
NM 048	0.01	6.5	6	0.6	0.071
NM 049	0.018	0.7	6	0.6	0.028
NM 050	0.026	<0.4	20	0.6	0.027
NM 051	0.01	2.1	60	1.2	0.03
NM 052	0.01	<0.4	70	1.1	0.029
NM 053	<0.01	<0.4	60	1.1	0.049
NM 054	0.012	3.2	5	<0.5	0.023
NM 055	<0.01	<0.4	3	<0.5	0.023
NM 056	<0.01	1.4	31	1.3	0.107
NM 057	0.015	<0.4	5	0.6	0.024
NM 058	0.05	<0.4	5	<0.5	0.034
NM 059	0.266	<0.4	5	<0.5	0.024
NM 060	1.26	0.9	21	1.8	0.048
NM 061	0.316	<0.4	60	1.1	0.033
NM 062	2.46	1.9	3	<0.5	0.074
NM 063	0.305	<0.4	2	<0.5	0.024
NM 064	1.83	<0.4	4	<0.5	0.116
NM 065	0.016	<0.4	<1	<0.5	0.026
NM 066	0.025	3.3	120	4	0.312
NM 067	<0.01	5.4	140	6.7	0.485
NM 068	0.02	9.8	70	1.9	0.108
NM 069	<0.01	2.9	190	2.9	0.184
NM 070	0.152	5	70	2.1	0.108
NM 071	0.016	2.7	210	4.1	0.184
NM 072	0.01	1.4	7	0.9	0.188
NM 073	<0.01	2.2	10	0.6	0.128
NM 074	<0.01	2.5	4	<0.5	0.08
NM 075	<0.01	1.4	20	<0.5	0.034
NM 076	<0.01	1	60	1.6	0.388
NS 010	<0.01	0.9	28	1.1	0.181

Table A-4(4) Results of Chemical Analysis of Rock Samples(4)

Element Unit	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)
Detection	0.01(0.008)	0.4	1	0.5	0.005
NS 012	<0.01	1.1	20	<0.5	0.05
NS 013	0.01	1	80	1.2	0.027
NS 018	<0.01	<0.4	<1	<0.5	0.042
NS 019	0.01	<0.4	<1	<0.5	0.03
NS 020	<0.01	<0.4	<1	<0.5	0.02
NS 021	<0.01	<0.4	<1	0.8	0.022
NS 022	<0.01	<0.4	<1	0.8	0.024
NS 023	<0.01	<0.4	<1	<0.5	0.043
NS 024	<0.01	<0.4	<1	<0.5	0.039
NS 025	<0.01	<0.4	<1	<0.5	0.024
NS 026	0.27	0.4	2	<0.5	0.023
NS 027	<0.01	<0.4	1	<0.5	0.031
NS 028	0.83	0.5	21	<0.5	0.046
NS 029	<0.01	<0.4	1	<0.5	0.048
NS 030	<0.01	<0.4	<1	<0.5	0.021
NS 031	<0.01	<0.4	<1	<0.5	0.024
NS 032	<0.01	<0.4	<1	<0.5	0.043
NS 033	<0.01	<0.4	<1	<0.5	0.024
NS 034	<0.01	<0.4	<1	<0.5	0.018
NS 035	<0.01	<0.4	<1	<0.5	0.025
NS 036	0.025	<0.4	<1	<0.5	0.02
NS 037	<0.01	<0.4	<1	<0.5	0.02
NS 038	<0.01	<0.4	<1	<0.5	0.018
NS 039	0.015	<0.4	<1	<0.5	0.029
NS 040	0.163	<0.4	2	<0.5	0.021
NS 041	0.09	<0.4	<1	<0.5	0.032
NS 042	<0.01	<0.4	<1	<0.5	0.023
NS 043	<0.01	<0.4	<1	<0.5	0.024
NS 044	<0.01	<0.4	<1	<0.5	0.03
NS 046	<0.01	<0.4	<1	<0.5	0.025
NS 049	<0.01	<0.4	7	<0.5	0.128
NS 050	<0.01	<0.4	13	<0.5	0.131
NS 051	<0.01	<0.4	<1	<0.5	0.021
NS 052	<0.01	<0.4	<1	<0.5	0.026
NS 053	<0.01	<0.4	<1	<0.5	0.024
NS 054	<0.01	<0.4	<1	<0.5	0.02
NS 055	<0.01	<0.4	<1	<0.5	0.023
NS 056	0.03	<0.4	<1	<0.5	0.018
NS 057	0.16	<0.4	1	<0.5	0.031
NS 058	0.13	<0.4	2	<0.5	0.034
WB 181	<0.008	<0.4	1	<0.5	0.01
WB 185	<0.008	<0.4	2	<0.5	<0.005
WB 202	<0.008	<0.4	1	<0.5	0.005
WB 204	0.02	<0.4	7	<0.5	0.024
WB 205	<0.008	<0.4	11	<0.5	0.012
WB 206	0.063	<0.4	5	<0.5	0.033
WB 207	1.68	<0.4	460	1.6	0.023
WB 208	1.71	1	43	1.1	0.049
WB 209	0.641	<0.4	135	1	0.097
WB 210	3.45	1.5	30	1.2	0.042
WB 211	0.921	3	50	0.8	0.014
WB 212	0.274	<0.4	115	0.8	0.043
WB 213	1.57	1	45	0.7	0.008
WB 214	0.637	1.5	50	1.1	0.017
WB 215	0.212	<0.4	155	1.7	0.008
WB 216	<0.008	<0.4	<1	<0.5	<0.005
WB 217	1.78	0.5	15	1	0.007
WB 218	1.02	0.5	90	1.6	0.028
WB 219	0.297	<0.4	145	1.5	0.018

Element Unit	Au (ppm)	Ag (ppm)	As (ppm)	Sb (ppm)	Hg (ppm)
Detection	0.01(0.008)	0.4	1	0.5	0.005
WB 220	2.67	0.5	22	0.9	0.011
WB 221	0.598	0.5	50	1.8	0.023
WB 222	1.9	0.5	85	1.4	0.011
WB 223	0.921	1.5	220	1.6	0.057
WB 224	2.51	3.5	36	1	0.019
WB 225	0.517	<0.4	110	1.8	0.046
WB 226	1.1	0.5	50	0.9	0.035
WB 228	0.711	1.5	50	0.9	0.092
WB 230	4.3	2	60	1.3	0.014
WB 231	0.314	1.5	100	1.5	0.013
WB 234	0.915	<0.4	315	2.4	0.017
WB 235	4.22	1	60	1.5	0.008
WD 004	3.65	4	33	0.8	<0.005
WD 005	4.03	2.5	15	0.6	<0.005
WD 008	0.347	<0.4	190	2.3	0.02
WD 009	1.55	<0.4	210	1.6	0.066
WD 011	<0.008	<0.4	2	<0.5	<0.005
WK 204	<0.008	<0.4	25	0.9	<0.005
WK 210	3.28	0.5	14	0.6	<0.005
WK 211	0.572	0.5	75	1.1	0.011
WK 212	2.41	0.5	4	<0.5	<0.005
WK 213	0.917	0.5	23	0.9	0.034
WK 214	5.45	1	10	0.6	0.005
WK 215	24.2	2.5	3	<0.5	0.011
WK 216	10.6	1	50	1.1	0.025
WK 217	0.147	<0.4	1	<0.5	0.018
WK 218	0.173	<0.4	5	0.9	0.015
WK 219	0.032	<0.4	3	<0.5	0.232
WK 224	0.017	<0.4	6	<0.5	0.005
WK 225	<0.008	<0.4	3	<0.5	<0.005
WK 227	0.591	0.5	14	0.8	0.257
WM 196	<0.008	<0.4	2	<0.5	0.024
WM 200	<0.008	<0.4	2	<0.5	0.025
WM 203	<0.008	<0.4	2	<0.5	<0.005
WM 204	<0.008	<0.4	2	<0.5	0.012
WM 205	0.092	<0.4	140	1	<0.005
WM 207	0.01	<0.4	80	0.8	<0.005
WM 208	<0.008	<0.4	23	0.6	0.013
WM 210	0.01	<0.4	60	1.2	0.035
WM 211	0.015	<0.4	115	1	<0.005
WM 217	1.78	0.5	50	0.9	0.014
WM 218	2.39	<0.4	55	1.1	0.01
WM 219	42.5	7	8	0.6	0.007
WM 220	1.66	<0.4	265	1.9	0.093
WM 221	0.207	<0.4	8	0.8	0.026
WM 224	0.127	<0.4	16	0.7	0.02
WM 225	0.079	<0.4	75	1.1	0.035
WM 226	0.064	<0.4	25	0.8	0.082
WM 227	0.031	<0.4	23	1	0.026
WM 228	0.107	<0.4	32	0.7	0.039
WS 103	<0.008	<0.4	2	<0.5	0.006
WS 104	<0.008	<0.4	4	<0.5	0.007
WS 105	0.017	<0.4	1	<0.5	<0.005
WS 106	0.132	0.5	11	0.6	0.064
WS 108	<0.008	<0.4	2	<0.5	<0.005
WS 115	<0.008	<0.4	7	<0.5	0.01
WS 116	0.04	<0.4	5	<0.5	0.005
WS 117	0.097	1	34	0.8	0.025

Table A-4(5) Results of Chemical Analysis of Drill Core Samples(5)

MJFV-1

Sample No.	Depth(m)			Width(m)	Au(g/t)	Ag(g/t)	As(ppm)	Sb(ppm)	Hg(ppm)
ND101	120.00	-	120.10	0.10	0.008	0.6	4.0	<0.5	0.006
ND102	120.10	-	120.20	0.10	0.100	0.7	13.0	<0.5	0.010
ND103	120.20	-	120.40	0.20	0.318	2.1	3.0	<0.5	0.005
ND104	120.40	-	120.45	0.05	5.76	90	40.0	0.9	0.047
ND105	120.45	-	120.80	0.35	0.404	3.5	38.0	<0.5	0.047
ND120	255.50	-	255.58	0.08	0.023	0.6	2.0	<0.5	0.009
ND124	212.20	-	212.50	0.30	0.011	<0.4	2.0	<0.5	<0.005
ND131	75.80	-	76.85	1.05	<0.008	<0.4	1.0	<0.5	<0.005
ND133	60.80	-	61.00	0.20	0.029	3	46.0	3.8	1.750

MJFV-2

Sample No.	Depth(m)			Width(m)	Au(g/t)	Ag(g/t)	As(ppm)	Sb(ppm)	Hg(ppm)
ND202	50.00	-	51.00	1.00	0.059	1.6	12.0	<0.5	0.009
ND212	250.50	-	250.57	0.07	<0.008	<0.4	3.0	<0.5	0.012
ND214	118.20	-	118.40	0.20	0.094	4.9	26.0	<0.5	0.009
ND215	118.40	-	118.45	0.05	0.890	1.4	8.0	<0.5	<0.005
ND216	118.45	-	118.55	0.10	0.895	1.6	2.0	<0.5	<0.005
ND217	118.55	-	118.70	0.15	0.254	1.1	3.0	<0.5	<0.005
ND218	118.70	-	118.75	0.05	0.845	3	3.0	<0.5	<0.005
ND220	195.10	-	195.20	0.10	0.010	<0.4	2.0	<0.5	<0.005
ND221	195.50	-	195.60	0.10	0.032	<0.4	3.0	<0.5	<0.005
ND222	186.00	-	186.18	0.18	0.018	<0.4	3.0	<0.5	<0.005
ND227	53.30	-	54.70	1.40	0.031	1	37.0	0.6	0.338
ND231	245.35	-	246.35	1.00	0.010	<0.4	1.0	<0.5	<0.005

MJFV-3

Sample No.	Depth(m)			Width(m)	Au(g/t)	Ag(g/t)	As(ppm)	Sb(ppm)	Hg(ppm)
ND303	67.40	-	67.55	0.15	0.010	<0.4	<1	<0.5	<0.005
ND306	104.40	-	104.90	0.50	0.638	1.6	85.0	11.9	0.023
ND309	152.10	-	152.20	0.10	5.06	<0.4	6.0	<0.5	0.005
ND310	152.20	-	152.25	0.05	2.04	1	7.0	<0.5	0.005
ND311	250.25	-	250.65	0.40	0.021	0.4	2.0	<0.5	<0.005
ND312	250.65	-	250.78	0.13	0.012	1	1.0	<0.5	<0.005
ND313	250.78	-	250.95	0.17	0.015	<0.4	<1	<0.5	<0.005
ND331	174.60	-	175.60	1.00	0.014	<0.4	<1	<0.5	<0.005
ND333	176.60	-	177.60	1.00	0.010	<0.4	<1	<0.5	<0.005
ND337	152.00	-	152.10	0.10	0.835	<0.4	<1	<0.5	<0.005

Table A-4(6) Results of Chemical Analysis of Drill Core Samples(1)

MJFV-4

Sample No.	Depth(m)			Width(m)	Au(g/t)	Ag(g/t)	As(ppm)	Sb(ppm)	Hg(ppm)
DD413	138.15	-	138.25	0.10	<0.008	0.4	20	<0.5	<0.005
DD414	138.25	-	138.35	0.10	0.231	2.6	60	<0.5	0.005
DD415	138.35	-	138.50	0.15	0.011	0.5	<20	<0.5	0.007
DD416	138.50	-	138.65	0.15	0.613	3	215	<0.5	0.016
DD417	138.65	-	139.00	0.35	0.155	3.4	70	<0.5	0.006
DD418	180.95	-	181.45	0.50	0.056	4.2	145	<0.5	0.021
DD419	181.45	-	181.80	0.35	0.033	1.4	30	<0.5	0.010
DD420	181.80	-	182.20	0.40	0.052	2.5	200	<0.5	0.013
DD421	182.20	-	182.60	0.40	0.191	3.8	200	<0.5	0.012
DD422	183.80	-	184.40	0.60	0.041	1.1	50	<0.5	0.006
DD423	190.40	-	190.60	0.20	0.393	2.3	100	<0.5	0.012
DD424	190.60	-	190.90	0.30	0.236	1.4	90	<0.5	0.013
DD425	190.90	-	191.20	0.30	0.790	5.8	220	<0.5	0.016
DD426	191.20	-	191.30	0.10	0.195	2.9	225	<0.5	0.005
DD427	295.00	-	295.12	0.12	0.009	0.5	20	<0.5	<0.005

MJFV-5

Sample No.	Depth(m)			Width(m)	Au(g/t)	Ag(g/t)	As(ppm)	Sb(ppm)	Hg(ppm)
DD501	121.45	-	121.80	0.35	0.291	5.4	350	<0.5	0.031
DD502	121.80	-	122.25	0.45	2.71	165	350	<0.5	0.047
DD503	122.25	-	122.75	0.50	13.5	140	300	1.5	0.049
DD504	122.75	-	123.35	0.60	27.6	900	320	1.2	0.017
DD505	123.35	-	123.65	0.30	0.545	8.3	300	1.4	0.045
DD506	152.40	-	152.70	0.30	0.244	14.7	220	0.6	0.015
DD507	152.70	-	153.00	0.30	3.55	16.5	220	0.8	0.023
DD508	153.00	-	153.40	0.40	1.27	4.6	90	<0.5	0.034
DD509	163.60	-	164.00	0.40	11.7	4.3	210	<0.5	0.005
DD510	164.10	-	164.40	0.30	1.51	1.5	30	<0.5	0.005
DD511	172.40	-	172.70	0.30	0.706	1.3	50	<0.5	0.005
DD512	172.70	-	173.00	0.30	0.192	1.2	40	<0.5	0.005
DD513	182.00	-	182.30	0.30	0.498	1.5	50	<0.5	<0.005
DD514	185.00	-	185.20	0.20	5.02	4	110	<0.5	0.009
DD515	186.10	-	186.30	0.20	1.05	1.7	140	<0.5	0.056
DD517	132.20	-	132.40	0.20	1.27	7.6	240	<0.5	0.097
DD518	135.20	-	135.40	0.20	0.362	5.1	300	<0.5	0.012
DD519	136.05	-	136.25	0.20	7.71	9.9	200	<0.5	0.050

Table A-4(7) Results of Chemical Analysis of Drill Core Samples(2)

MJFV-6

Sample No.	Depth(m)			Width(m)	Au(g/t)	Ag(g/t)	As(ppm)	Sb(ppm)	Hg(ppm)
DD615	55.35	-	55.55	0.20	<0.008	<0.4	2.0	<0.5	0.011
DD617	61.00	-	61.30	0.30	<0.008	<0.4	1.5	<0.5	0.012
DD618	61.30	-	61.40	0.10	<0.008	<0.4	1.0	<0.5	0.022
DD619	61.40	-	61.70	0.30	<0.008	<0.4	1.0	<0.5	0.009
DD620	68.90	-	69.90	1.00	<0.008	<0.4	1.5	<0.5	0.009
DD621	71.55	-	72.55	1.00	<0.008	<0.4	6.5	<0.5	0.027
DD622	127.10	-	128.50	1.40	0.016	<0.4	25.5	<0.5	0.008
DD623	96.10	-	96.30	0.20	<0.008	<0.4	48.5	0.5	0.047
DD624	112.00	-	113.00	1.00	<0.008	<0.4	29.0	<0.5	0.009
DD625	114.00	-	114.20	0.20	<0.008	<0.4	24.0	<0.5	0.030
DD626	114.70	-	115.60	0.90	<0.008	<0.4	35.0	<0.5	0.020
DD627	120.10	-	120.30	0.20	0.208	<0.4	42.5	<0.5	0.007
DD628	122.10	-	122.30	0.20	0.198	<0.4	100	0.6	0.010
DD629	124.40	-	125.00	0.60	0.150	<0.4	44.5	<0.5	0.014
DD638	272.55	-	273.10	0.55	0.039	0.8	36.5	<0.5	0.012
DD640	297.00	-	297.25	0.25	0.069	0.4	120	<0.5	0.011
DD641	75.05	-	75.90	0.85	0.036	<0.4	28.0	<0.5	0.020
DD642	75.00	-	75.05	0.05	0.048	<0.4	50.0	<0.5	0.013
DD643	74.40	-	74.55	0.15	<0.008	<0.4	3.0	<0.5	0.010
DD644	77.70	-	78.55	0.85	<0.008	<0.4	12.5	1.3	0.016
DD645	79.30	-	79.70	0.40	0.010	0.6	32.5	<0.5	0.013
DD646	256.90	-	259.20	2.30	<0.008	0.5	50.0	<0.5	0.008

MJFV-7

Sample No.	Depth(m)			Width(m)	Au(g/t)	Ag(g/t)	As(ppm)	Sb(ppm)	Hg(ppm)
DD721	226.60	-	226.90	0.30	0.160	4	85	1.6	0.084
DD722	226.90	-	227.50	0.60	0.041	2	54	0.6	0.038
DD723	227.50	-	227.60	0.10	2.32	6	226	2.2	0.045
DD724	227.60	-	227.90	0.30	0.591	3	108	0.6	0.150
DD725	227.90	-	228.00	0.10	0.962	6	112	0.6	0.016
DD726	249.90	-	251.05	1.15	0.162	2	56	<0.5	0.010
DD727	251.05	-	251.20	0.15	3.13	2	102	0.9	0.092
DD745	251.20	-	251.50	0.30	0.610	3	148	0.7	0.016
DD728	251.50	-	251.60	0.10	0.842	2	186	1.4	0.093
DD729	251.60	-	252.20	0.60	0.122	<2	82	<0.5	0.013
DD730	252.20	-	252.30	0.10	0.532	2	126	1.1	<0.005
DD731	252.30	-	253.20	0.90	0.496	2	105	<0.5	0.012
DD732	253.20	-	253.70	0.50	0.612	3	152	0.7	0.013
DD733	259.10	-	259.65	0.55	0.288	2	50	<0.5	<0.005
DD734	259.65	-	259.75	0.10	0.401	2	68	<0.5	<0.005
DD735	259.75	-	260.20	0.45	0.221	2	50	<0.5	<0.005
DD736	303.90	-	304.20	0.30	<0.008	<2	23	<0.5	<0.005
DD737	338.40	-	338.60	0.20	<0.008	2	11	<0.5	<0.005

Table A-4(8) Results of Chemical Analysis of Drill Core Samples(3)

MJFV-8

Sample No.	Depth(m)			Width(m)	Au(g/t)	Ag(g/t)	As(ppm)	Sb(ppm)	Hg(ppm)
DD822	116.80	-	117.25	0.45	0.228	4	86	1.0	0.093
DD837	125.10	-	125.40	0.30	0.478	2	60	1.0	0.008
DD823	125.40	-	125.60	0.20	3.13	3	80	1.1	0.013
DD833	125.60	-	126.60	1.00	0.416	2	50	<0.5	0.008
DD824	126.60	-	127.70	1.10	0.406	2	146	<0.5	<0.005
DD834	128.15	-	129.25	1.10	1.88	2	69	<0.5	<0.005
DD825	141.45	-	141.70	0.25	0.471	6	350	1.6	<0.005
DD826	142.60	-	143.00	0.40	0.473	6	265	1.6	<0.005
DD827	241.20	-	241.24	0.04	<0.008	<2	5	<0.5	<0.005
DD828	118.10	-	118.60	0.50	0.551	2	86	0.6	0.028
DD829	122.10	-	122.50	0.40	0.918	2	50	<0.5	0.009
DD830	122.50	-	123.50	1.00	0.654	2	96	0.8	0.150
DD831	123.50	-	123.80	0.30	0.203	2	86	<0.5	0.009
DD832	124.30	-	124.70	0.40	0.319	4	61	1.2	0.023
DD835	279.90	-	280.70	0.80	<0.008	<2	13	<0.5	<0.005

MJFV-9

Sample No.	Depth(m)		Width(m)	Au(g/t)	Ag(g/t)	As(ppm)	Sb(ppm)	Hg(ppm)
DD901	87.20	87.30	0.10	1.01	2	60	<0.5	0.04
DD902	88.10	88.45	0.35	0.562	3	102	0.7	0.015
DD903	88.45	88.50	0.05	0.516	4	110	0.7	0.010
DD904	88.50	88.70	0.20	0.262	2	106	0.6	0.013
DD905	90.70	91.35	0.65	0.436	3	128	0.8	0.027
DD906	91.35	91.55	0.20	0.291	4	130	1.0	0.012
DD907	91.55	91.70	0.15	0.020	2	50	<0.5	0.009
DD908	91.70	91.95	0.25	0.051	2	100	<0.5	0.014
DD909	91.95	93.00	1.05	0.101	2	63	<0.5	0.016
DD910	93.00	93.05	0.05	0.372	2	63	<0.5	0.016
DD911	93.05	93.70	0.65	0.211	2	92	0.6	0.021
DD912	93.70	93.75	0.05	0.792	3	112	0.9	0.032
DD913	93.75	94.05	0.30	2.33	3	34	0.9	<0.005
DD914	94.05	94.10	0.05	0.171	2	23	<0.5	<0.005
DD915	94.10	94.75	0.65	0.008	<2	15	<0.5	<0.005
DD916	95.15	95.25	0.10	0.401	<2	50	<0.5	0.006
DD917	243.65	243.70	0.05	<0.008	<2	1	<0.5	<0.005
DD918	245.35	245.50	0.15	<0.008	2	5	<0.5	<0.005
DD919	246.70	246.85	0.15	<0.008	<2	3	<0.5	<0.005
DD920	248.60	249.00	0.40	<0.008	<2	19	<0.5	0.009
DD921	284.10	284.50	0.40	<0.008	2	50	<0.5	<0.005
DD922	289.90	290.10	0.20	0.101	6	70	<0.5	0.006

Table A-5(1) Homogenization temperatures of Fluid Inclusions(1)

Sample No.	ND103	ND120	ND310	DD414	DD421	DD505	DD507	DD627	DD638	DD418	DD509	DD622
Hole No.	MJFV-1	MJFV-1	MJFV-3	MJFV-4	MJFV-4	MJFV-5	MJFV-5	MJFV-6	MJFV-6	MJFV-4	MJFV-5	MJFV-6
Depth(m)	120.20	255.50	152.20	138.25	182.20	123.35	152.70	120.10	272.55	180.95	163.60	127.10
	221	286	235	181	216	250	233	130	209	237	160	231
	227	275	257	174	223	245	243	130	241	176	206	229
	218	283	230	161	225	245	247	130	217	169	241	195
	228	296	239	173	233	178	260	129	214		207	242
	225		237	188	184	183	270	131	251		188	208
			233	177	184	212	253		274		216	239
	222		234	136	219		227		269		180	217
	224		233	167	228		261		241		158	259
	221		234	183	223		261		247		203	255
	213		209	181	221		217		240		222	208
	212		202	183	233		213		252		208	217
	226		245	184	189		192		252		173	218
Temperature(℃)	222		239	204	190		265		250		170	263
	228		274	161	243		273		254		190	229
	206		238	150	217		177		259		187	222
	220		239	173	217		198		269			228
	214		252	286	217		249		228			233
			252	174	214		257		269			234
			239	187	191		230		253			231
			237	186	167		251		251			250
			250	176					294			
			243	204								
			228	183								
			271	190								
number	16	4	24	24	20	6	20	5	21	3	15	20
average	220	285	240	182	212	219	239	130	249	194	194	230
max	228	296	274	286	243	250	273	131	294	237	241	263
min	206	275	202	136	167	178	177	129	209	169	158	195
standard deviation	6	9	16	27	20	33	27	1	21	37	24	18
mode	221		239	183	217	245	261	130	269			231

Table A-5(2) Homogenization temperatures of Fluid Inclusions(2)

Sample No.	DD740	DD742	DD818	DD914	DD916	DD922
Hole No.	MJFV-7	MJFV-7	MJFV-8	MJFV-8	MJFV-9	MJFV-9
Depth(m)	227.10	251.20	141.45	180.95	94.05	288.90
Temperature(℃)	460	-	345	178	365	317
	407		256	125	406	347
			196	126		268
			192	118		294
			227	125		314
			265	128		351
			223	127		284
			185	131		342
			373	131		288
			232	131		
			317	127		
			336			
			317			
			351			
			293			
			227			
number	2	0	16	11	2	9
average	434		271	132	386	312
max	460		373	178	406	351
min	407		185	118	365	268
standard deviation	37		62	16	29	30
mode			227			

Table A-6 Resistivity and Chargeability of Drill Core Samples

No	Depth(m)	Rock name	ρ	Ch	Alteration
ND106	26.00	Basalt	55	10.3	smectite
ND107	50.60	Lapilli tuff	55	21.7	smectite
ND108	71.70	Basalt	65	6.4	smectite
ND109	99.40	Tuff breccia	43	13.5	mixed layered
ND110	125.00	Basalt	55	6.5	chlorite
ND123	151.80	Basalt	113	0.9	chlorite
ND112	170.20	Basalt	519	1.6	chlorite
ND113	200.50	Tuff breccia	238	2.7	chlorite
ND115	249.00	Tuff breccia	138	3.1	mixed layered
ND116	275.00	Tuff breccia	145	5.9	mixed layered
ND117	300.00	Tuff breccia	177	2.9	mixed layered
ND203	35.70	Lapilli tuff	20	24.2	smectite
ND234	35.70	Coarse tuff	22	3.8	(smectite)
ND205	97.70	tuff breccia	165	4.5	smectite
ND207	120.30	Basalt	168	1.9	smectite
ND229	126.90	Basalt	157	6.3	(smecite)
ND208	147.90	Basalt	104	1.8	smectite
ND209	176.00	Tuff breccia	213	3.2	chlorite
ND240	189.70	Andesite	409	4.6	(chlorite)
ND210	197.45	Andesite	414	3.1	chlorite
ND230	200.00	Tuff breccia	77	0.7	(chlorite)
ND211	225.40	Tuff breccia	82	2.2	chlorite
ND233	238.40	Andesite	107	4.5	(quartz breccia)
ND238	300.00	Tuff breccia	176	3.5	(chlorite)
ND301	28.50	Andesite	243	11.8	(smectite)
ND302	50.00	Andesite	395	1.0	(smectite)
ND304	79.35	Andesite	33	20.3	pyrite diss.
ND305	101.20	Andesite	161	3.4	smectite
ND308	126.40	Andesite	60	11.7	smectite
ND315	175.00	Andesite	954	8.2	silicified
ND316	196.00	Tuff breccia	133	2.5	chlorite
ND317	224.90	Tuff breccia	122	1.1	chlorite
ND318	247.75	Andesite	211	0.8	chlorite
ND319	274.70	Tuff breccia	537	7.6	chlorite
ND320	300.00	Andesite	150	6.3	mixed layered