The extracted anomalies and anomalous areas are largely arranged in the WNW-ESE direction and this is inferred to reflect the macro geologic structure of the region.

Comparing the data of this area to those of the B soil horizon of the Tavua Caldera, the gold producing area, the Cu, Pb, Zn contents of this area are somewhat smaller as seen in the following table. The data for the Tavua area in this table have been quoted from the Report of the First Phase Survey of this project. The original data have been recalculated by anti-logarithmic figures after eliminating the singular values (abnormally high values).

Contrast of Soil Assay between Tavua Caldera and Sigatoka

	Number of Samples		Average		Maximum		Minimum		unit
	Tavua	Siga'	Tavua	Siga'	Tavua	Siga'	Tavua	Siga'	
Au	56	660	85.5	2.6	*3420	20	<1	<5	ppb
Ag	57	660	–	–	<0.2	<0.2	<0.2	<0.2	ppm
Cu	52	660	131	36	406	500	59	2	ppm
Pb	52	660	9	2	120	250	<2	<1	ppm
Zn	52	660	89	81	154	800	32	1	ppm
As	56	660	6.4	0.6	*500	10	1	<1	ppm
Sb	55	660	0.2	0.4	*58.0	4.0	<0.2	<0.2	ppm
Hg	52	660	42	28	*5800	140	10	10	ppb
Mo	51	660	3.1	0.60	*4190	5	<1	<1	ppm

Siga':Sigatoka
* :abnormal high values (excluded from calculation)

PART III CONCLUSIONS AND RECOMMENDATIONS

PART III CONCLUSIONS AND RECOMMENDATIONS

Chapter 1 Viti Levu Island

1-1 Conclusions

(1) The major geologic units of Viti Levu are mainly of Late Eocene-Early Oligocene volcanic and plutonic rocks, Late Oligocene-Middle Miocene volcanic and sedimentary rocks, Middle to Late Miocene plutonic rocks, Late Miocene-Early Pleistocene volcanic, plutonic and sedimentary rocks, and Pleistocene-Holocene sediments.

(2) Vein, network, dissemination, porphyry copper, replacement, skarn, and sedimentary type mineralization occur in this island.

The vein and dissemination types are grouped into epithermal gold and meso-hypothermal base metal mineralization. The epithermal group is further classified into adularia-sericite type and acidic sulfate type. The epithermal gold mineralized zones in the Mba and Koroimavua Volcanic Groups occur near the volcanic centers which were the source of the volcanic rocks or near the zones where these centers are inferred to have existed.

The epithermal gold mineralized zones are distributed in the ENE-WSW direction from the northern to western Viti Levu.

(3) A total of 1,060 lineaments were extracted from SLAR imageries. Many of these lineaments are considered to have been formed associated with the lateral faults caused by maximum horizontal compressional stress in three main directions. Most of the mines and mineral prospects of Viti Levu, with the exception of bedded manganese, residual, placer deposits and those of the western part, occur within the zone of lineaments formed by ENE to ESE trending horizontal stress or in the vicinity.

(4) It is seen from SLAR studies, that annular structures and caldera structures occur in the vicinity of the epithermal gold deposits of the Emperor Mine, and that annular, caldera and dome structures exist near the Namosi porphyry copper deposit. These photogeologic structures were interpreted to reflect the intrusion of magma in the area. Working on this hypothesis, 15 areas which contain at least one of the SLAR structures, namely annular, caldera or dome structures were selected. From these 15 areas, Rakiraki, east of Vatukoula, upper reaches of the Mba River, north-

east of Nadi, and South of Mba area were selected as having strong geoscientific resemblance to the area near the Emperor Mine. Also northeast of Nadi and south of Mba area were selected as areas with geologic environment very similar to the Namosi Deposit area.

(5) The locations of the centers of the volcanism of the latest Miocene-earliest Late Pliocene Mba Volcanic Group were inferred from the distribution of the volcanic rocks and the photogeologic annular, caldera and dome structures. It is considered from the above that volcanic chains existed extending in the ENE direction in northern Viti Levu and in the NW direction in the eastern part of the island. These volcanoes are believed to have formed over the deep fissure zones.

(6) Many of the lineaments formed under latest Miocene-Early Pliocene NNW to NNE compressional field are distributed in the west and northwest to southeast Viti Levu. On the other hand, NW trending deep fissures are believed to have existed from northwest to southeast Viti Levu at that time. This is inferred from the distribution of the then active volcanic rocks, locations of the volcanic centers at the time and the distribution of the above lineaments.

(7) Medium-wavelength gravity features indicate that to the north of the NE-SW trending line joining Verevere in the northeast and Sigatoka in the southwest, large scale gravity highs with circular to oval shape occur isolated in a generally low gravity area, while to the southeast of the line, high and low anomalies elongated in the NE-SW direction in belt-form are distributed alternating each other. Thus the gravity features of the two areas are clearly different. The westernmost high anomaly southeast of Nadi in the northwestern part coincides well with the distribution of the Yavuna Group, but the other three highs cannot be correlated with surface geology. The zonal distribution of the high and low anomalies in the southeast more or less coincides with the distribution of the "Wainimala Group - Colo Plutonic Suite" and "Medrausucu Group - Verata Sedimentary Group".

(8) There are large medium-wavelength gravity highs at three localities, southwest of Mba, east of Vatukoula, and west of Rakiraki. Annular, caldera, dome structures identified photogeologically and collapsed structures, intrusive bodies, altered zones, and marked short-wavelength gravity anomalies are concentrated in the centers of these medium-wavelength gravity highs. The gravity gradient of the peripheral parts of these medium-wavelength highs is steep and the shape of these anomalies is circular to oval. These are considered to indicate the existence of subsurface high density igneous bodies and it is inferred that there was a large magma cham-

ber in the deeper parts.

(9) The Emperor Mine is situated at the periphery of the collapsed structure in the center of the medium-wavelength gravity high to the east of Vatukoula, the Kingston Mine in the center of the medium-wavelength gravity high to the southwest of Mba. Together with the high west of Rakiraki, the centers of these three medium-wavelength gravity highs are considered to be the localities where active volcanism occurred repeatedly. Therefore, these are listed as promising for epithermal gold exploration. The anomalies in the northern Mba-west are on the northern extension of the medium-wavelength gravity high to the southwest of Mba, and with the coincidence of SLAR annular and caldera structures and the short-wavelength gravity highs, it is believed that the northern Mba-west was the place of activity of small magma chamber branched out from large magma chamber. The area is listed as promising for epithermal gold deposit occurrence.

(10) The zones where volcanic centers are inferred to have existed in northern Viti Levu correspond to the zones of short-wavelength high gravity anomalies related to basaltic activities. It is believed that since the contents of the magmatic chambers of that time has changed from basalt to olivine-gabbro of higher density, there are positive gravity anomalies near the altered volcanic centers. However, even in cases of Kilauea type caldera, the interior of the caldera is filled with thick compact lava which is more dense than the whole volcano and thus the center of eruption would show somewhat higher density.

(11) The Tavua Caldera whose upper parts are filled by low density formations such as andesitic pyroclastics and lacustrine sediments show short-wavelength low gravity anomaly surrounded by gravity lineaments. The SLAR annular structure zone near Rakiraki in northeast Viti Levu and the vicinity of the volcanic centers west of Mba are the zones which have Tavua Caldera type gravity structure among the possible collapse caldera zones extracted photogeologically.

(12) The geologic environment necessary for the formation of epi-mesothermal deposits is the existence of magmatic heat, subsurface fractures and circulating water. The magmatic heat and the subsurface fractures are mostly likely to exist in volcanic collapsed and volcanic dome structures. The circulating water formed the mineralized and altered zones. Structures which are likely to be volcanic collapse and volcanic domes were extracted through photogeologic studies of annular, caldera and dome structures; short-wavelength gravity anomalies; and field survey. Of these zones; vicinity of Rakiraki, Tavua Caldera zone, area west of Mba to the

southern part, Sabeto Range, south of Lautoka and Namosi area are considered to contain high potential for locating mineralized and altered zones.

Regarding the selection of the survey areas for the second phase and further work, the area from west of Mba to southern Mba was chosen because it was relatively unexplored; the Sigatoka area because it was considered to have relatively high mineral potential from the occurrences of alteration and mineralized zones (porphyry cooper, skarn and other types) around plutonic bodies.

(13) It was shown by the geochemical orientation survey that gold tends to be concentrated in the A soil horizon. Also it was clarified that zones of gold concentration are continuous vertically in the A and B soil horizons. It was shown by this survey that Au has high positive correlation with As, Te, Sb, Hg, F, Tl in the A horizon, while As, Hg, Pb have positive correlation with Au in the B horizon.

Chapter 2 Mba-west Area

2-1 Conclusions

(1) The main geologic unit of Mba-west are Miocene-Pliocene andesitic/basaltic volcanic products and limestone; Pliocene basaltic/andesitic volcanic products, sandstone, and conglomerates; Holocene alluvium; and intrusive rocks (monzonite, dacite, andesite, basalt) penetrating the Pliocene formations. The Miocene and Pliocene formations largely dip northward at low angles and are superposed. Thus the strata become younger northward.

(2) A total of 95 lineaments was extracted photogeologically in the Mba-west. Many of these are concentrated in the southern and northern parts of the area. The directions of the maximum horizontal compressional stress axes were inferred to be NNW to NNE and ENE to ESE from the en echelon arrangement of the lineaments.

(3) Many lineaments of Mba-west are developed near the inferred volcanic centers in north and south, also lineaments with various trends are developed within the photogeologic annular structures. Also in short-wavelength low gravity zones and in parts of the short-wavelength high gravity zones, lineaments parallel to the elongation of the zones are developed in and near the zones. This is interpreted as reflecting fractures which were developed as the result of the vertical block movement accompanying the

rise of magma.

(4) The circular depression extracted in southern Mba-west as photogeological annular structure is believed to have been the center of volcanic activity from the distribution of the volcanic products and intrusive bodies. A large scale medium-wavelength gravity high is distributed throughout this area. This gravity high is believed to reflect high density rock bodies (deep-seated bedded basic intrusive bodies) formed by the solidification of the magma chamber which supplied the volcanic products of this area. The above annular structure is located near the center of this high gravity anomaly.

(5) Propylitized zones and sericitized zones are developed near the southern photogeological annular structures, and geochemical anomalies related to Au mineralization and auriferous quartz veins occur overlapping some of these altered zones. These features regarding geologic structure and mineralization/alteration are very similar to those of the Emperor Mine area. It is anticipated that low sulfidation epithermal gold mineralization akin to that of the Emperor Mine would exist in this area.

(6) Photogeological caldera structures were extracted at three localities in northern Mba-west and volcanic products are distributed in the vicinity. These calderas all occur in short-wavelength high gravity zones. This reflects the fact that these calderas are crater and/or volcanic collapsed structures and that the short-wavelength highs are caused by shallow high density rocks. These shallow bodies are considered to be small magma chambers formed as offshoots of the large, deeper chamber whose existence is inferred from medium-wavelength gravity high.

(7) Acidic alteration zones accompanied by silicification are developed in some of the photogeological calderas in northern Mba-west. Geochemical anomalies related to Au mineralization occur overlapping these altered zones. This is of the high sulfidation epithermal gold mineralization. This type is considered to form under shallower environment than the low sulfidation type. The results of drilling at Namosau Alteration Zone of this year, showed that the deposits could have been eroded out. The conditions of the lower parts of the Raviravi Alteration Zone is not clear, and the possibility of the occurrence of gold deposits has not died.

(8) Marked Au, As, Te geochemical anomaly zones which coincide with the altered/mineralized zones on the surface were extracted at four localities (Raviravi, Nalotawa, Nanuku-Yaloku and Tavanasa Creek) in Mba-west area. Aside from the above, small geochemical anomalies not associated with

alteration/mineralization were confirmed at several localities (Namosau Creek, Lololo Creek, Nayanggali Creek, Tauarau Creek, Koroniviria and Karawa) and blind buried altered/mineralized zones were anticipated to occur in shallow subsurface parts.

(9) The mineralization of Mba-west was brought about by hydrothermal activities related to Pliocene volcanism. And it is considered that high sulfidation type epithermal gold mineralization occurred above the shallow small magma chamber while low sulfidation type occurred near the volcanic center in the central part of the deep and large scale chamber

(10) Drilling was conducted at four localities of Mba-west Area. The following conclusions were obtained.

Namosau Creek Alteration Zone: Two holes drilled in this zone penetrated through basalt lava and basaltic pyroclastics of the Pliocene Namosau Volcanics belonging to the Ba Volcanic Group and confirmed wide argillized zone accompanied by pyrite dissemination, but promising Au mineralization could not be confirmed.

Nayanggali Creek Geochemical Anomalous Zone: The subsurface geology confirmed by drilling (MJF-3) comprises basalt lava, basaltic pyroclastics, and sedimentary rocks of the Ba Volcanic Group, basalt lava and basaltic pyroclastics of the Namosau Volcanics, and basalt dykes.

Mineral showings and alteration of significance are not found in this zone. The central part of volcanic activities probably occurred in this zone and NE-SW trending fractures are inferred to exist in the deeper parts. The Au, As, Hg geochemical anomalies are inferred to be the products of ascending post volcanic hydrothermal fluids along the NE-SW trending fissures. Subsurface gold mineralization of this zone, if any, is concluded to be small.

Nalotawa Alteration Zone: The subsurface geology comprises basalt lava, basaltic pyroclastics of the Koroyanitu Volcanic Products and intrusive bodies (basalt, hornblende andesite, altered andesite).

There are many clay-pyrite veins, but evidences of gold mineralization do not exist on the surface.

On the other hand, in the subsurface parts, occurrence of gold in quartz-calcite veins, calcite veins, and clay-pyrite-(calcite) network is confirmed by drilling. The best part contains Au 0.176g/t in 18.10m of the drill core (include 1m of Au 0.52g/t).

In this zone, the assemblage of major gangue minerals (quartz, calcite, adularia, smectite, sericite) and that of the major alteration minerals in the host rock near the veins (quartz, calcite, pyrite, smectite) is very close to that of the low sulfidation epithermal veins.

The potential for gold occurrence in the deeper parts of this zone is concluded to be high.

<u>Yaloku Alteration Zone:</u> The subsurface geology comprises andesite lava, andesitic pyroclastics, basalt lava of the Sabeto Volcanics, and basalt dykes.

Quartz veins, clay-pyrite veins, and calcite veins occur on the surface of this zone. These veins are divided into the western and eastern groups. Auriferous quartz veins occur in both groups and the highest grades are 12.10g/t (15cm wide) in the western group and 4.52g/t (3cm wide) in the east.

In the east, calcite-quartz network with Au 0.114g/t (sampling width 40cm) was confirmed by drilling, but generally the development of the veins is poor. The auriferous quartz veins exposed on the surface deteriorates downward. The potential for gold vein occurrence is concluded to be poor in the eastern side.

In the west, although of low grade, a large number of auriferous veins was confirmed by drilling. Regarding N-S trending veins, a group of relatively wide auriferous veins (Au 0.055g/t, sampling width 400cm, clay-calcite-dolomite vein; Au 0.20g/t, sampling width 15cm, pyrite-calcite-dolomite vein; others) was confirmed almost at the lower extension of the exposed gold-bearing quartz vein (Au 12.10g/t). With ENE-WSW to E-W veins, the grade of the downward extension of the exposed vein (Au 2.19g/t) deteriorates, but a different group of auriferous veins (Au 0.375r/t, Ag 880g/t, Cu 6.76%, sampling width 3cm, chalcopyrite vein; others) were found by drilling.

The common ore minerals of this zone are chalcopyrite and pyrite, with rare association of molybdenite, bornite, galena, and stromeyerite in the west. This mineral assemblage corresponds to those of the high temperature epithermal deposits formed at relatively deeper parts.

The assemblage of the main gangue minerals is quartz-smectite-chlorite-calcite in the east while it is quartz-potash feldspar in the west. Adularia is associated in both groups at times.

The alteration mineral assemblage of the host rock near the veins also differ between the western and the eastern groups. The assemblage common for both groups is quartz-chlorite-calcite-smectite with sericite in the east and potash feldspar in the west.

The above assemblages of gangue and alteration minerals are very similar to those of the low sulfidation epithermal mineralization. It is concluded that the veins in the west were formed under higher temperature.

The mode of occurrence of the veins confirmed by drilling in this zone corresponds to the quartz + adularia + illite + Ag sulfides + base metal sulfide zone of the low sulfidation (quartz-adularia type) epithermal model (Berger and Eimon, 1983). Therefore, it is believed that the three boreholes were drilled below the bonanza.

Regarding the drill holes in the west, it is inferred from the above model that the bonanza lies higher than the gold showings confirmed by drilling. This gold occurrence is only about 70m below the surface. Therefore, the potential of these veins are controlled by the topography and the direction of the ore shoots. There is not sufficient data for determining the direction of the shoots.

2-2 Recommendations for Future Exploration

(1) Nalotawa Alteration Zone

A total of three holes is recommended to be drilled in order to confirm the state of gold mineralization of the veins located by MJF-4. These veins are inferred to extend in the NNE-SSW direction and two holes should be drilled westward from the eastern side of MJF-4. Also one drilling should be made south-westward from MJF-4 in order to explore the lower parts of the NE-SW veins which exist in this zone.

(2) Yaloku Alteration Zone

A total of three holes is recommended to be drilled as follows in order to confirm the state of gold mineralization of the auriferous veins located by MJF-6 and -7 in western part of this zone. One hole should be drilled westward for exploring the N-S trending veins to the south of MJF-6. Also one northward hole should be drilled each from the east and west of MJF-7 in order to explore the ENE-WSW to E-W veins.

(3) It is recommended that one hole be drilled westward from the eastern side of the geochemical anomalies of eastern Yaloku in order to confirm the subsurface mineralization of the anomalies to the north of MJF-5.

(4) It is recommended that one vertical hole be drilled at the gold anomalies of Raviravi Alteration Zone for confirming the high sulfidation epithermal gold mineralization.

Chapter 3 Sigatoka Area

3-1 Conclusions

(1) The geology of Sigatoka consists of; Miocene basaltic and/or andesitic volcanic products, and detrital sediments; Pleistocene (?) fluviatile sediments; and intrusive bodies (granodiorite porphyry-diorite porphyry bodies, granodiorite, diorite, diorite porphyry, quartz porphyry, aplite, basalt, andesite, dacite, and rhyolite) penetrating Miocene Series. The Miocene units largely dip southwestward are superposed.

(2) Most of the mineralized/altered zones occur near the above faults, near the Colo Plutonic Suite bodies, near the SLAR lineaments, and near the en echelon dykes. Also some of them occur within the Colo Plutonic Suite bodies.

(3) Four large geochemical anomalous zones were extracted in the Sigatoka area. These four zones coincide with the surface mineralized/altered zones, and many other small anomalies were also extracted. These are believed to be anomalies related to the activities of the Colo Plutonic Suite which occur extensively in the deeper parts.

(4) The mineralization of the Sigatoka area is closely related to the activities of the Colo Plutonic Suite and they are emplaced in fractured zones in the vicinity of the plutonic and porphyry bodies. And the mineralization took the form of veins, replacement, porphyry, and other types of meso- to hypothermal activity.

(5) The intensity of the mineralization/alteration is weak with some exceptions. The intensity of the geochemical anomalies is also generally low. Many of the altered zones and anomalies have been drilled without significant success. There are two undrilled localities where multi-component anomalies are noted. If large deposits are to be anticipated, the weak surface manifestation indicates deep occurrences.

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APPENDICES

Table 1 Results of Radiometric Age Determination

(Phase I, Viti Levu Area)

Sample No.	Locality	Rock Name Formation	Sample Type	Potassium (K wt%)	Rad. ^{40}Ar (10^{-6}cc/g)	K-Ar Age (Ma)	Air Cont. (%)
A-2	NE of Singatoka	Hb-Ad	Whole rock	1.00±0.03	24.2±0.7	6.23±0.26	46.7
	N of Tuvu	(Nva)			24.6±0.7	6.33±0.26	46.9
A-5	NE of Singatoka	Hb-Ad	Whole rock	0.94±0.05	26.3±0.8	7.20±0.49	48.7
	Korolevu	(Ta)			25.9±0.8	7.08±0.48	48.3
C-2	W of Nanukuloa	Micro-Dio	Whole rock	3.97±0.08	56.8±1.4	3.68±0.12	45.7
		(ND)			58.5±1.7	3.79±0.13	47.5
C-7	Vaturu Dam Site	Ad	Whole rock	0.86±0.05	16.7±0.7	5.00±0.37	61.1
		(Ks)			16.0±0.7	4.78±0.36	61.7
C-8	E of Vaturu Dam	Ol-Bs	Whole rock	1.87±0.06	33.9±1.4	4.69±0.23	56.1
	Mbukuya	(Ks)			34.3±1.2	4.74±0.22	52.7

Abbreviations: Hb-Ad; Hornblende Andesite, Ol-Bs; Olivine Basalt, Dio; Diorite

Table 2 Results of Whole Rock Analysis

(Phase I, Viti Levu Area)

Sample No.	C038	BA102	C070	AA091	C002	C007	C008	MA052	A002	A005
SiO_2	47.850	47.870	51.270	50.110	47.840	45.480	49.460	52.760	57.280	57.840
TiO_2	0.600	0.620	0.860	0.740	0.750	0.620	0.770	0.800	0.560	0.580
Al_2O_3	12.640	12.730	17.060	17.090	18.040	17.960	18.540	19.170	19.100	16.470
Fe_2O_3	4.807	5.701	4.569	5.251	3.482	6.383	4.745	4.619	4.005	3.355
FeO	5.060	4.660	4.140	4.480	4.110	2.220	3.730	3.510	1.570	2.830
MnO	0.170	0.190	0.170	0.220	0.160	0.190	0.180	0.200	0.090	0.150
MgO	9.530	8.520	4.760	4.180	3.070	4.400	3.600	2.980	2.670	2.680
CaO	11.470	12.110	7.780	9.060	7.020	9.030	9.310	9.890	7.360	5.920
Na_2O	1.650	1.580	3.280	3.120	3.200	5.130	3.040	2.870	4.110	3.200
K_2O	2.420	3.150	2.860	4.470	5.450	1.420	2.400	1.910	1.370	1.450
P_2O_5	0.410	0.470	0.450	0.730	0.870	0.560	0.360	0.390	0.220	0.160
BaO	0.060	0.060	0.060	0.070	0.100	0.050	0.040	0.030	0.100	0.060
LOI	1.840	0.015	1.870	1.230	5.020	4.850	1.250	1.820	1.510	2.660
Total	98.557	97.676	99.129	100.751	99.112	98.293	97.425	100.949	99.945	97.355
FeOt	9.386	9.791	8.252	9.206	7.244	7.965	8.000	7.667	5.175	5.849
Fe/Mg	0.930	1.149	1.734	2.202	2.360	1.810	2.222	2.573	1.938	2.183
S.I	40.745	42.494	43.087	43.888	38.199	42.108	46.949	49.699	38.835	44.383
Q	0.000	0.000	0.175	0.000	0.000	0.000	0.419	6.221	10.198	17.108
or	14.302	18.617	16.903	26.418	32.210	8.392	14.184	11.288	8.097	8.570
ab	13.954	11.426	27.738	17.506	13.455	24.318	25.709	24.271	34.757	27.062
an	19.938	18.341	23.386	19.430	18.768	21.795	29.859	33.789	29.630	26.300
ne	0.000	1.049	0.000	4.811	7.372	10.329	0.000	0.000	0.000	0.000
di-wo	14.320	16.150	5.132	8.679	4.353	8.087	5.839	5.319	2.275	0.846
di-en	10.779	12.530	3.775	6.123	2.743	6.990	4.316	3.921	1.966	0.609
di-fs	2.100	1.877	0.868	1.810	1.339	0.000	0.960	0.889	0.000	0.160
hy-en	3.162	0.000	8.075	0.000	0.000	0.000	4.646	3.498	4.680	6.062
hy-fs	0.616	0.000	1.857	0.000	0.000	0.000	1.034	0.793	0.000	1.587
ol-fo	6.944	6.083	0.000	3.002	3.434	2.778	0.000	0.000	0.000	0.000
ol-fa	1.491	1.004	0.000	0.978	1.847	0.000	0.000	0.000	0.000	0.000
mt	6.966	8.263	6.622	7.611	5.047	5.978	6.877	6.695	3.730	4.862
hm	0.000	0.000	0.000	0.000	0.000	2.257	0.000	0.000	1.431	0.000
il	1.140	1.178	1.634	1.406	1.425	1.178	1.463	1.520	1.064	1.102
ap	0.971	1.113	1.065	1.728	2.060	1.326	0.852	0.923	0.521	0.379
TOTAL	96.680	97.630	97.200	99.490	94.040	93.430	96.150	99.120	98.350	94.640
Femic Total	48.489	48.199	29.027	31.336	22.247	28.594	25.987	23.557	15.668	15.607

FeOt: Total iron

S.I.: Solidification index (Kuno et al. 1957)

Table 3 Results of Microscopic Observation of Thin Section

(Phase I, Viti Levu Area)

Sample No.	Locality	Rock Name	Formation	Texture	Phenocryst/ Crystal Fragment										Groundmass/ Matrix									Altered Mineral	Rock Fragment
					Qz	Kf	Pl	Bi	Hb	Au	Hy	Ol	Op	Ap	Si	Kf	Pl	Bi	Hb	Au	Op	Gl	Ca		
A-2	NE of Sigatoka	Hb-Ad.	Nva	Porph.			◎		○				·		△	△	○			·	·	◎		Ac(Gl, Pl-p)	
A-3	NE of Sigatoka	Hb-Ad.	Vea	Porph.			○		○	△			·				○		△		·	◎		Ca(Au, Hb-p), Chl(Au)	
A-5	NE of Sigatoka	Hb-Ad.	Va	Porph.			○		○	△			△			○	○					◎		Mont(Au, hole Gl)	
C-2	E of Nacaulua	Micro-Dio.	ND	Suboph.			◎	△	·	○			△	·		·	·	·				○		Zeo(Gl), Ca(Gl-p)	
C-7	Vaturu Dam	Alkali Bs	Ks	Porph.			○	△		○			○				△	·		·		◎			
C-8	E of Vaturu Dam	Ol-Bs.	Ks	Porph.			○			△		·	·				·			·		◎		Ca(Ol)	
C-21	S of Lautoka	Alt-Ad.	Ks	Porph.			○	△	○	○			·			○	○					◎		Se(Pl-p), Chl(Bi, Hb, Au), Ep(Hb), Ca(Au), Mont(Gl)	
C-31	NE of Nadi Saabeto R.	Volc. Ss.	Ndi	Granul.	△	○	◎			·			·											Chl·Se·Ep(Volc. Rocks), Ca(grain boundary)	Ad·Ls(○), Yr·Ss·Ms(·)
C-38	SE of Vatukoula	Sho.	Bck. Bns	Porph.			△			○		△	·				△			△		◎			
C-43	EN of Vatukoula	Dio. Po	Bck	Porph.			◎	·	·	◎			△	·								○		Ca(Au, Gl), Chl(Gl)	
C-49	W of Mba	Lap. Tuff	Bsa	--	△		○						·										·	Mont·Chl(·), Hal(△) It(○), Chab(◎)	?(strongly altered)
C-67	NW of Korovou	Fossil. Ls.	Wla	—	·		·						·										◎	Calcite(veins)	Calcite
C-68	NW of Korovou	Tuff	Vla	Porph. (Breccia)	○			○	○				·									◎		Chl·Ca(Gl)	Dc.Ls & Volc. rock
C-70	N of Korovou	Hb-Ad.	Bua	Porph.			○		○	○			△									◎		Chl(druse), Ac(Gl, Pl)	
C-71	S of Korovou	Tfc. St	Voc	—		·	·		△	○			·											Ac(◎), Se(○), Chl·Hal(△)	
AA-91	E of Vatukoula	Ol-Monz.	TYM	Holocr.		◎	○	△		○		△	△	·											
BA-102	E of Vatukoula	Sho.	Tek	Porph.			△			○		·	·				·			·		◎			
CA-112	SW of Rakiraki	Ol-Bs.	Bck	Porph.			△			○		○	·				·			·	·	◎			
KA-52	S of Mba	Hb-Ad.	Ls	Porph.			◎		△	○			·				·					◎		Ca(Au)	
KA-53	S of Mba	Ol-Bs.	Sky	Porph.			◎			△		·	·				·			·		◎			
KA-55	S of Mba	Tuff	Bvk	—			△		·	△			·	·										Mont(○), Chab(○), Chl(·), Il(·), Cr(○)	An bearing rock(?)
VA-130	N of Korovan	Hb-Dio.	Ct	Suboph.	○		◎		◎	△			·												
VIA-26	NE of Nadi	Micro-Dio.	Anv	Holocr.		◎	○	○		○			○	·										Se(Kf·Pl, p)	

(Phase II Mba-west Area)

Sample No.	Locality	Rock Name	Formation	Texture	Phenocryst/ Crystal Fragment									Groundmass/ Matrix											Altered Mineral
					Qz	Kf	Pl	Bi	Hb	Au	Ol	Ap	Op	Si	Kf	Pl	Bi	Hb	Au	Hy	Ol	Op	Gl	Ap	
SM2-7	W of Lorongele	Ba.	Dyke	Porph.			◎			○			△			○			△		△		○		Ca(Ol, Gl-p)
SM2-14	W of Locosivicia	Ad.	Dyke	Porph.			○		○	◎			△			○		△	△		△		◎		Id(Ol) Opa(Hb)
SM2-19	S of Nalaveto	Bs.	Bna	Porph.			◎			○	△		△			○			△		△	△	◎		Id(Ol)
SM2-28	NE of Koromomo	Ba.	Int.	Suboph.			△			○	△		△			◎			△		△	△			Mont(Au, Ol)
SM2-34	E of Nasaka	Hb-Ad.	Bky	Porph.			◎		○	○			△			◎		△	△				◎		Opa(Hb)
SM2-41	N of Koronggele	Ad.	Int.	Porph.			◎		△	○			△			◎		△	△			△	◎		Opa(Hb)
AY2-14	W of Mailenga	Ad.	Mba	Porph.			○		○	△			△			○		△	△			△	◎		Mont(Gl-p) Opa(Hb)
OK2-15	NE of Koronggele	Ba.	Dyke	Porph.			◎			○	△		△			○			△		△		◎		Mont(Ol) Ca(Ol)
OK2-32	SW of Malaveto	Ba.	Bs	Porph.			◎			○	△		△			◎			△		△		◎		Mont(Ol, Gl)
OK2-34	E of Vakambuli	Bs.	Bky	Porph.			◎			○	△		△			○			○		△		◎		Mont(Ol, Gl-p, druse)
OK2-74	W of Yaloke	Monz.	Int.	Suboph.			△			○			△		△	◎	○		△			△	△		Ep(Gl, Au-p) Act(Au-p) Ca(Au-p) Chl(Gl)
KK2-57	NW of Yaloku	Monz.	Int.	Suboph.			△			○			△		△	◎	○		△			△	△		Act-Ca(Au-p) Ep(Gl, Au-p) Chl(Bi, Gl) Ab(Pl-p)
KK2-59	NW of Yaloku	Ba.	Bky	Porph.			○			△			△			◎			△			△	◎		Ca(Pl-p, Au) Chl(Pl-p, Au, Gl) Act(Au)
KK2-66	Yaloku	Ad.	Ks	Porph.			○		△	○			△			◎		△	△			△	◎		Se(Pl-p) Ca(Pl-p, Au, Gl) Chl(Au)

(Phase II, Sigatoka Area)

Sample No.	Locality	Rock Name	Formation	Texture	Phenocryst/ Crystal Fragment									Groundmass/ Matrix											Altered Mineral
					Qz	Kf	Pl	Bi	Hb	Au	Zr	Ap	Op	Si	Kf	Pl	Bi	Hb	Au	Hy	Ol	Op	Gl	Ap	
SM2-206	N of Vaindolo	Dio	Int.	Oph.	△		◎		◎	○			○												Il(Pl p) Chl Ca Mg(Hb) Sph(Op)
SM2-208	N of Korokita	Qz-Po.	Int.	Porph.	◎		◎	△	△				△	○	◎	○							△		Il(Pl p) Se(Bi, Gl) Chl(Bi, Hb, Gl) Mg(Hb)
SM2-209	Tuatoivaka Cr	Ad.	Wla	Porph.		◎			△					○		○		○				○			Se(Kf-p, Pl) Chl(Hb) or Amph(Hb) Qz-Chl-Opa(amygdaloidal)
SM2-210	SE of Vaindolo	Dio.	Int.	Suboph.	△	△	◎		○	△			△												Ep Ca Sph(Hb) Ep Chl(interstitial min)
AY2-231	Voca Cr	Dio.	Int.	Suboph.	△		◎		◎				○												Act(Qz-I, Hb) Se-Ep(Pl) Mg(Hb) Ep(vein)
OK2-239	Valasewa Cr	Gr-d.	Int.	Granul.	○		◎	○	○		△	△	△												Chl(Bi p)
OK2-242	NW of Nuoran	Bs.	Dyke	Porph.			△			△				△		◎			△			○	◎		Se(Pl) Ca(Pl, Au, Ol?) Chl(Au, Gl)
OK2-244	NW of Nuorua	Dio-Po.	Int.	Porph.			○		△				△	○		◎		△				△	△		Se(Pl) Chl(Hb, Gl) Mg(Hb) Ep(Gl)
OK2-255	S of Vaindolo	Ad.	Wla	Porph.			○		△				△	○		○						△	◎		Se(Pl-p) Chl(Hb, Gl) Mg Ep(Hb) Sph(Op-p)
KK2-290	S of Korovika	Dio Po.	Int.	Int-gra.			○			○			△	△	△	◎		○	○	△			○	△	Se(Hy)
KK2-291	S of Korovika	Gr-d-Po.	Int.	Porph.			◎		○				△	△	○	◎		△				△			Ep(Pl-p, Hb-p) Sph(Op-p)

(Phase II, Drilling Cores of Mba-west Area)

Sample	Locality	Rock Name	Formation	Texture	Phenocryst/ Crystal Fragment								Groundmass/ Matrix									Altered Mineral
					Qz	Kf	Pl	Bi	Hb	Au	Ol	Op	Si	Kf	Pl	Bi	Hb	Au	Ol	Op	Gl	
Ts-1	MJF-1 44.5m	Ol-Bs.	Bmm	Porph.			◎			◎	△	△			◎			△		○	◎	Mont(Ol, Gl-p), op-inc(Au), dev(Gl)
Ts-2	MJF-1 94.7m	Ol-Bs.	Bnw	Porph.			◎			○	△	△			◎			△		○	◎	Mont Op(Ol, Gl-p), Ca(Gl), Goe(Gl-p), op-inc(Au), dev(Gl)
Ts-3	MJF-1 133.0m	Ol-Bs.	Bnw	Porph.			◎			◎	△	△			◎			△		○	◎	Chl(Ol, Gl-p), Ca Goe(Ol), Mont(Gl-p), op-inc(Au), dev(Gl), Ca-Vein
Ts-4	MJF-1 255.6m	V-Br. (Hb-Ad.)	Bnm	Porph.			○		△	△		○			○					△	◎	Ca(Pl-p, Hb p, Au p), Ep(Pl-p), Chl(Hb-p, Au p, Gl), Opa(Hb-p), Mont(Gl)
Ts-5	MJF-1 272.0m	Ol-Bs.	Bnm	Porph.			◎			◎	△	△			◎			△		○	◎	Ca(Au-f-p, Ol, Gl-p), Op(Ol), Mont(Gl-p), dev(Gl), Ca-Vein
Ts-6	MJF-2 39.5m	Ol-Bs.	Bnm	Porph.			◎			◎	△	△			◎			△		○	◎	Ca(Au-f-p, Ol, Gl-p), Op(Ol), Mont(Gl-p), dev(Gl), Ca-Vein
Ts-7	MJF-2 57.4m	Ol-Bs.	Bcm	Porph.			◎			◎	△	△			◎			△		○	◎	Mont(Ol, Gl-p), op-inc(Au), dev(Gl)
Ts-8	MJF-2 158.0m	Ol-Bs.	Bcm	Porph.			◎			◎	△	△			◎			△		○	◎	Mont(Ol, Gl-p), op-inc(Au), dev(Gl)
Ts-9	MJF-2 202.0m	Ol-Bs.	Bcm	Porph.			◎			◎	△	△			◎			△		○	◎	Mont(Ol, Gl-p), op-inc(Au), dev(Gl)
Ts-10	MJF-2 274.1m	Alt. V-Br.	Bos																			Completely altered to Qz·Ca·Chl·Ab·Se·Op, Ca-Vein. Ca-Chl pseudomorph after mafic minerals

(Phase II, Drilling Cores of Mba-west Area)

Sample	Locality	Rock Name	Formation	Texture	Phenocryst/ Crystal Fragment							Groundmass/ Matrix										Altered Mineral
					Pl	Bi	Hb	Au	Ol	Ap	Op	Qz	Kf	Pl	Bi	Hb	Au	Ap	Op	Hem	Gl	
S3-1	MJF-3 39.4m	Ol-Bs	Enb	Porph.	◎			◎	○		○			◎			△		○			Clay(Ol), dev(Gl)
S3-2	133.6	T-Br(Ol-Bs)	Bsp	(Porph.)	◎			◎	○		○			◎			△		○			Clay(Ol), dev(Gl)
S4-1	MJF-4 51.0m	Qz-Cal-Py Vein		—								◎										Pyrite-Clay common
S4-2	65.3	T-Br (Hb-Ad.	Bkp	(Porph.)	△		◎	○											○		◎	Clay(Pl), Ca(Hb), Ca(Gl)
		Ol-Bs)		(Porph.)	◎			○	○		○								○			Ca(Ol), dev(Gl), Ca-Clay(Gl)
S4-3	79.1	Hb-Ad	HA	Porph.	○		◎	○			○			○		○			○			Ca(Hb), dev(Gl), Ca(Gl)
S4-4	110.0	Alt Ad	HA	Porph.	○		○												○			Ca-Clay(Hb), Ca-Ab-Clay(Pl), Ca-Clay(Gl)
S4-5	145.8	Hb-Ad	HA	Porph.	◎		○	○			○			○	○				○			Op(Hb), Ca(Au), dev(Gl), Ca(Gl)
S4-6	163.4	Alt Ad	A	Porph.	◎		○															Ab(Pl), Act-Qz-Ca(Hb), Kf-Clay-Ca-Ap(Gl)
		Qz Vein	—	—								○	○									Clay
S4-7	238.5	T-Br (Hb-Ad)	Bkp	(Porph.)	○		○				○			○					○			Chl-Se(Hb), dev(Gl), Chl-Clay-Ca(Gl)
S4-8	263.0	Hb-Ad	HA	Porph.	◎		○	○			○			○					○			Chl(Au), dev(Gl), Cal(Gl)
S4-9	391.0	Bs	Bkb	Hialo.	◎			○						◎		△	△		○		○	Ca-Clay(Gl)
S5-1	MJF-5 35.7m	T-Br (Alt Ad)	Ksp	(Porph.)	◎		○?				○											Ca-Chl(Mf), Clay(Pl), Ca-Chl-Clay(Gl)
S5-2	236.6	T-Br (Alt Ad)	Ksp	(Porph.)	◎		○?				○											Ca-Chl(Mf), Se(Pl), Ca-Clay(Gl)
S6-1	MJF-6 33.1m	Alkali Bs	B	Porph.	○	○		◎		△	○											Clay(Au), Se-Clay(Pl), dev(Gl), Clay-Ca(Gl)
S6-2	64.0	Cal-Qz Vein	—	—								◎										Ca abundant
S6-3	141.8	Ad	Ksa	Porph.	○			○			○			○					△		◎	Ca-Clay(Au), Zeo or Clay(Pl), Clay(Gl)
S6-4	281.9	Alkali Bs	B	Porph.	◎	○		○		△	○							△	△			Ca(Pl), Ca-Clay(Au), dev(Gl), Clay-Ca(Gl)
S6-5	299.2	Bs	B	Porph.	○			◎			○							△	△			Ca-Clay(Au), Clay(Pl), dev(Gl)
S7-1	MJF-7 50.4m	Alt Bs	B	Porph.	○			◎			○			◎	△	△	○	△	○	△	○	Ca-Op-Smc(Au), Ca-Kao(Pl), Kao(Gl)
S7-2	236.4	Alt Bs	B	Porph.	◎			◎	○		○	○		◎	△		◎	△	○		△	Ca-Kao(Pl), Ca-Ill-Qz-Op(Au), Sep-Chl-Op-Hem(Ol), Kao(Gl), Ca Vein
S7-3	299.9	T-Br (Alt Bs)	Ksb	(Porph.)	◎		○	◎			○	○		◎		○	○	△		○		Ca-Kao(Pl), Ca-Op-Cal-Ill(Au), Qz-Ca-Bi-Hem(Hb), Ca Vein, Ca-Qz Vein

Abundance of minerals ◎:abundant, ○:common, △:few

Abbreviation
- Texture: Porph.:Porphyritic, Hialo.:Hialopilitic
- Mineral: Pl:Plagioclase, Bi:Biotite, Hb:Hornblende, Au:Augite, Ol:Olivine, Ap:Apatite, Op:Opaque mineral, Kf:K-feldspar, Gl:Glass, Qz:Quartz, Hem:Hematite, Mf:Mafic minerals, Ca:Carbonate minerals, Ab:Albite, Clay:Clay minerals, Chl:Chlorite, Se:Sericite, Act:Actinolite, Ill:Illite, Smc:Smectite, Sep:Serpentine, Zeo:Zeolite, dev:devitrified
- Rock: Ad:Andesite, Ba:Basalt, T-Br:Tuff Breccia, Alt:Altered

Table 4 Results of Microscopic Observation of Polished Section

(Phase I, Viti Levu Area)

Sample No.	Locations No.	Locations Mines/Prospects	Material	Minerals Py	Cpy	Sph	Cov	Goe	Hem	Ba	Qz	Note
C-36	54	Balebuto	Py vein	○	·	·		·		·		
CA-115	—	Rakiraki	Qz vein					△	△		◎	* 1
EM-5	56	Emperor	Qz vein	△	·	·	·				◎	* 2
LC-17	53	Yoda	Qz-Alu vein	○								
WA-126	41	Wailotu	Powdery sulfide	○	○	○						

Location No. denoted as the number in the list and map of the prospects and mines
Abundance of Minerals: ◎; abundant, ○; common, △; a few, ·; trace
Abbreviations: Py; Pyrite, Cpy; Chalcopyrite, Sph; Sphalerite, Cov; Covelline,
Goe; Goethite, Hem; Hematite, Ba; Barite, Qz; Quartz, Alu; Alunite

* 1: Goethite or lepidochrocite.
Hematite denote the pseudomorph of pyrite.

* 2: Covelline are paragenetic with pyrite and are denoted as the pseudomorph of nukundamite.

(Phase II, Drilling Cores of Mba-west Area)

No.	Location	Description	Cp	Po	Py	Mg	Il	Goe	Hem	Remarks
PS-1	MJF-1, 87.9m	Qtz-Alu vein			◎			▲	▲	
PS-3	112.9	Py dis brec rock	▲		◎					
PS-5	232.5	Py dis brec rock	▲		◎					
PS-6	MJF-2, 117.1	Qtz-Alu vein			◎				*▲	*partly replaced by goethite
PS-7	287.8	Py dis brec rock		▲	◎	▲	▲			

AAbbreviations:
◎:Abundant ○:Common △:Few ▲:Rare
Cp:Chalcopyrite:Po:Pyrrhotite, Py:Pyrite, Mg:Magnetite, Il:Ilmenite:Goe:Goethito, Hem:Hematite
Alu:Alunite, dis:disseminated, brec:brecciated

(Phase III, Drilling Cores of Mba-west Area)

No.	Location	Description	Cp	Bo	Po	Py	Mg	If	Goe	Hem	Sph	Gn	Mo	Str	Remarks
P4-1	MJF-4 51.0m	Qtz-Cal-Py vein				○									
P4-2	100.5	Clay-Py network				○									
P4-3	117.0	Clay-Cal-Py network				*○			△						partly replaced by Goe
P4-4	119.4	Clay-Cal-Py network				*○			△						partly replaced by Goe
P4-5	144.9	Cal vein				○									
P4-6	145.0	Py-Cp dis rock	▲			○	○	○							
P4-7	163.4	Silica-Cal-Py vein with black band	△			○	○	○			△				
P4-8	196.5	Reddish gray mineral dis rock			*△	◎	△		△						only inclusions in Py
P4-9	250.0	Cal-Py-Clay vein				*○			△						partly replaced by Goe
P4-10	349.0	Cal-Py-Lim vein				○	△	△							
P6-1	MJF-6 180.5m	Py vein	△			◎									
P6-2	181.8	Cal-Cp vein (network)	○			△	△						△		
P7-1	MJF-7 121.95m	Cal-Cp-Gn vein (network)	◎	△		△						○		▲	
P7-2	123.5	Cp dis massive ore	◎											▲	
P7-3	276.2	Py dis alt. rock	△			◎									

Abbreviations:
◎:Abundant ○:Common △:Few ▲:Rare
Cp:Chalcopyrite, Bo:Bornite, Po:Pyrrhotite, Py:Pyrite, Mg:Magnetite, If:Ilmenite, Goe:Goethite, Hem:Hematite, Sph:Sphalerite,
Gn:Galena, Mo:Molybdenite, Str:Stromeyerite
Qtz:Quartz, Lim:Limonite, Cal:Calcite, dis:disseminated, alt.:altered

Table 5 Results of X-ray Diffractive Analysis (1)

(Phase I, Viti Levu Area)

Sample No.	Altered Rock	Rock unit	Location	Clay Mineral: Mo	Ch	Se	Ka	Pr	Ha	Da	#Ch-M	#Ily-M	Silica m.: Tr	Cr	Qz	Sulfate m.: Al	Gy	Ja	Carbonate: Ca	Do	Si	Feld.: Pl	Kf	Miscellaneous m.: He	Mg	Lm	Py	Ho
A 9	Wt. str.-clay/sil. Ln-film	Ks	SW of Kaivuivui			●		○							◎	o						●					●	
AA 83	White clay Ln. in cracks	Tv	SE of Yatukoula												◎	◎							o			●	●*	
AA-86	White, str. altered, Ridges	Tv	E of Yatukoula									o			○	o							○				●	
AA 92A	White clayey, Ln	Tvu	E of Yatukoula									o			○							●?	o			o	●	
AC-45	White, Sil./Argil.	Bu	ENE of Yatukoula				o								◎	●							●?		●?			
C-36	Dark gray, Py-diss, Sil.	Ks	E of Koroyanitu												◎	●											o	
C-56	Chloritized, Cs vein	Bak	W of Nareva		o		●							●	o				○			○		●?				o
CA 113	Weathered white clay	Bsk	SE of Nakiraki	o								●			○				●				○					
EW 11	White weak argil. tuff	Tv	Yatukoula			o		o							●	o							○				o	
EW 24	Green andesite	Tv	Yatukoula		o	○								o?	●								○‡				●?	
EW-3	Trachybasalt	Tv	Yatukoula			o									o				o?	o?			○				o?	
EW-6A	Ash	Tv	Yatukoula			o									○												o	
EW-7	White argil. And. dike	Tv	Yatukoula			●	●							o?	○	o						○	○				o?	
EW 9	Wt. argil. And. dike Ln net	Tv	Yatukoula	o		o	o								○							o	o					
EW-10	Wt-gray, sandy tuff, sil.	Tv	Yatukoula												○	o							○				●	
FADA-33	Yell-white, str-clay, Ln	Wla	Seoilamoi				○							o?	◎												●?‡	
LC 17	Argil. Py-Qz vein	Ks	SW of Kaivuivui				●								◎	◎											o	
LC-18	Yell-light brown Ln	Ks	SW of Kaivuivui												◎	○										●		
MC-32	Light brownish white	Bky	ENE of Koroyanitu				●								◎	○										●?	●?	
KA-44A	Wt-clayey, Ln-diss	Bky	ENE of Koroyanitu									o			○								●		●?		●?*	
KA-51A	Weak argil.	Ks	NE of Koroyanitu									o			○								●	●				
VA 55	White-green, porphy-And.	Sky	ENE of Koroyanitu					o			o		○			o							o					
MC-251A	Wt-brown, weak argil-Bas.	Bru	W of Koronggele									o			●								●?		●?		●?‡	
MC-47	Al Qz network, And-vol-brc	Bsa	Koronggele				o		o						◎	○											●?‡	
MC-48	Sil. Py-diss, And-tuff-brc	Bsa	Koronggele			o	●							●?	◎	o						○					o	
MC-51	Reddish-brown, Al-Qz net	Bha	E of Koronggele					●		●?					◎	○							●?			o		
VLA-25	White hard clay, Ln net	Ks	W of Savilawa				●								◎	○										o?		

Abbreviations:
◎:Abundant ○:Common o:Few ●:Rare
‡: a little irregular crystallinity
‡‡: irregular crystallinity

Mo:Montmorillonite, Ch:Chlorite, Se:Sericite, Ka:Kaoline, Pr:Pyrophyllite, Ha:Halloysite, Da:Diaspore, #:Mixed layer mineral, Tr:Tridymite, Cr:α-Cristobalite, Qz:Quartz, Al:Alunite, Gy:Gypsum, Ja:Jarosite, Ca:Calcite, Do:Dolomite, Si:Siderite, Pl:Plagioclase, Kf:Potassium feldspar, He:Hematite, Mg:Magnetite, Lm:Limonite, Py:Pyrite, Ho:Hornblende. Wt:white, Yell:yellow, Str:strong, Sil:silicification, Argil:argillization, And:andesite, Bas:basalt
*:Pyrite or marcasite ‖:Sanidine ?

(Phase I, Geochemical Survey in Tavua Caldera Area)

Sample No.	Location	Rock unit	Altered Rock	Clay Mineral: Mo	Ch	Se	Ka	Pr	Ha	Da	#Mo-M	#Ka-M	Silica m.: Tr	Cr	Qz	Sulfate m.: Al	Gy	Ja	Feld.: Pl	Kf	Miscellaneous m.: Au	Ho	He	Mg	Lm	Py
X001				o			●								○					o	o??					
X002	Waikatakata			o											○	o??				o	o??					
X003‡	Waikatakata			o		o							●?		○					○	o??					
X004	Nasivi No. 3														◎	○				●?			●?			●?
X005	Nasivi			○		o									○	o				○						
X006‡	Wainivotha										●				●?					○						
X007‡‡	Wainivotha										o				●?					o						
X008‡	Wainivotha			o							o				●?					○						
X009	Waikatakata			o							●?				○					o						
X010	Nasivi			o										o?	o				○	○	o??					
X011	Wainivotha			○			●?							o?	o				o	o	o??					o
X012	Wainivotha			o			●?								○				o	o						●?

Abbreviations:
◎:Abundant ○:Common o:Few ●:Rare
‡: a little irregular crystallinity
‡‡: irregular crystallinity

Mo:Montmorillonite, Ch:Chlorite, Se:Sericite, Ka:Kaoline, Pr:Pyrophyllite, Ha:Halloysite, Da:Diaspore, #:Mixed layer mineral
Cr:α-Cristobalite, Tr:Tridymite, Qz:Quartz, Al:Alunite, Gy:Gypsum, Ja:Jarosite, Pl:Plagioclase, Kf:Potassium feldspar,
Au:Augite, Ho:Hornblende, He:Hematite, Mg:Magnetite, Lm:Limonite, Py:Pyrite.

(Phase II, (Namosau Cr. 1)

Sample No.	Clay minerals: SME	CHL	SER	KAO	HA	PYP	TAL	SRP	S/M	C/M	K/M	ZEO	Silica m.: QTZ	ACR	TRI	Feldspar: PLA	KFL	Sulfates: ALU	JAR	GYP	Carbon.: CAL	DOL	Oxides, Hydroxides: DIA	GB	GOE	HEM	MAG	Sulfides: MAR	PYR	SPH	Others: OLI	AMP	PX
SM3		△?								△			○			○													▲?			△	
SM4			△						△?				◎			△?									△								
SM5			▲	△									○				△?								△?				△?				
SM101			▲			△?	△?						◎																△				▲
SM102			△										◎				△?								△?				△				
SM103				△		△							○					○											△		▲?		
SM104			△										◎					▲															
SM105								△?			△		○												△?				△				
SM106					▲	○							△												△				▲				
SM107													◎					◎															
SM108								▲?			△		○												△								
SM109								△?			△		○										△		△				▲?				
TK4	△			▲									▲	△?		○																	▲
TK16											△		◎				▲?												▲?				
TK17			▲								▲		○			▲?					▲				△								
TK18				○		△							◎					△							△?				▲				
OK16			△								▲		○												△	▲							
OK17	△	△	△										○			○					△												
OK18			▲	○		△							○					○					▲		△	▲?			△				
OK19			△	▲									◎				△?								▲?				△?				
OK20			△										◎				△?								▲?			▲?	▲				
OK21		△										▲	○			○					▲?								▲				▲?
AY3	△	▲?		▲?									△			○	○												△			▲?	△
AY4	△	△											○			○													△				
AY5	▲					△						▲	○			▲?				△									○				
AY6	△								▲				○			▲			△														
AY8	△								▲?				○			△			○														
AY9	△	△										△	△			○					△								▲				

(Phase II, Namosau Cr. 2)

Sample No.	Clay minerals: SME	CHL	SER	KAO	HA	PYP	TAL	SRP	S/M	C/M	K/M	ZEO	Silica m.: QTZ	ACR	TRI	Feldspar: PLA	KFL	Sulfates: ALU	JAR	GYP	Carbon.: CAL	DOL	Oxides, Hydroxides: DIA	GB	GOE	HEM	MAG	Sulfides: MAR	PYR	SPH	Others: OLI	AMP	PX
AY11	▲										▲?		△			○													▲			○	△
AY12		△				▲?						△	○			○				△?									△	○			▲
AY13											△		○																▲				
AY14			▲?								▲		○												△?				▲				
AY15				○									○														△?						
AY16								△?			△				△													△	△				
AY17			▲?					▲?			▲		○															▲					
AY18					▲						△		▲?		△?												△?	▲	▲?				
AY19											△		○				▲?								△?	▲		▲					
AY20								△?			△		○															△?					
AY21			△								△		○																▲?				
AY22			△					▲?			▲		○													▲?			▲				
AY23	▲?						△	△?			△		△				○																▲
AY24	△	▲?						▲?						△?	△	△												▲	▲				
AY25	△	△											▲?				○																△
AY26								▲?			▲				△?		○	△?															△
AY10II				△									◎					○								▲							△?

Abbreviations:
◎:Abundant ○:Common △:Few ▲:Rare

SME:Smectite, CHL:Chlorite, SER:Sericite, KAO:Kaolinite, HA:Halloysite, PYP:pyrophyllite, TAL:Talc
SRP:Serpentine, MON:Montmorillonite, S/M:Ser/Mon mixed layer mineral, C/M:Chl/Mon mixed layer mineral,
K/M:Kao/Mon mixed layer mineral, ZEO:Zeolite, QTZ:Quartz, ACR: α-Cristobalite, TRI:Tridymite,
PLA:Plagioclase, KFL:Potassium feldspar, ALU:Alunite, JAR:Jarosite, GYP:Gypsum, CAL:Calcite,
DOL:Dolomite, DIA:Diaspore, GB:Gibbsite, GOE:Goethite, HEM:Hematite, MAG:Magnetite, MAR:Marcasite,
PYR:Pyrite, SPH:Sphalerite, OLI:Olivine, AMP:Amphibole, PX:Pyroxene

Table 6 Results of X-ray Diffractive Analysis (2)

(Phase II, Raviravi-1)

Sample	Clay minerals												Silica m.			Feldspar		Sulfates			Carbon.		Oxides, Hydroxides					Sulfides			Others		
No.	SME	CHL	SER	KAO	HA	PYP	TAL	SRP	S/M	C/M	K/M	ZEO	QTZ	ACR	TRI	PLA	KFL	ALU	JAR	GYP	CAL	DOL	DIA	GB	GOE	HEM	MAG	MAR	PYR	SPH	OLI	AMP	PX
SM4	▲?										△			▲?		○																	
KK19				○									◎																				
KK25				△				△?					◎																				
KK27			△	▲?				▲?					○																				
KK28			△	△									○													▲?							
KK29				○								△?	◎																				
KK31	△	▲?		▲?									▲			○																	
KK32			△?								△?		○																				
KK33											△		◎			▲?																	
KK34	△										△?		△				○																△
KK35			▲?	△					▲				◎				△																
KK50	△			△			▲?	▲?					△				△																▲?
OK1			▲?								▲		○																				
OK2	△			△									○			○					○												
OK10	▲										△		○			△																	△
OK11			△										○				△?																
OK12	○												○			△?																	
OK13	△			△									○			○													△				
OK14	△										▲?		○			▲?																	
OK15	△			△									○																				
OK200N	△			▲								△	△?			○																	○
AY52	▲?										▲?	△	○			○													△?				△
AY53	△	△							△			△	○			○					◎												
AY54	△	△?	▲								▲?		○																				
AY55	▲		▲						△				△			▲									△	▲			▲				
AY56		△	▲	▲?									○								▲?												
AY57	△	△?		△									○			○					○												▲
AY58								△?			△		△?		△?													▲					
AY59	▲?										▲		▲?			○																	

(Phase II, Raviravi-2)

Sample	Clay minerals												Silica m.			Feldspar		Sulfates			Carbon.		Oxides, Hydroxides					Sulfides			Others		
No.	SME	CHL	SER	KAO	HA	PYP	TAL	SRP	S/M	C/M	K/M	ZEO	QTZ	ACR	TRI	PLA	KFL	ALU	JAR	GYP	CAL	DOL	DIA	GB	GOE	HEM	MAG	MAR	PYR	SPH	OLI	AMP	PX
AY60	○							▲?						△?	△	○																	△
AY61	▲										△		○			▲?									△?								
AY62		△						△?						○			△																▲
ST1				○									○													▲?							
ST2			△										◎												▲				△?				
ST3			▲	△									◎												▲								
ST4			△	△								▲?	◎												▲				▲?				
ST5			△										○				△?								△								▲?
ST6			△	○									○				▲?								△?								
ST7	▲?										△		○												△?								
ST8	△?		▲								△		○												△								
ST9	▲?			△				▲?					○				△												▲?				▲
ST10			▲	▲?									◎																				
ST11						△						△?	◎										△		△				△				
ST12				▲									◎				△?						△		▲								
ST15			○	△									◎																				▲
ST16			△								▲		◎				△?				▲?												
ST17	△	△		△									△			○					○								△?				▲
ST18	○												△			○																	▲
ST19			▲								△?		○				△?																
ST20			△	△									○				▲?																
ST21			△										◎			△?									△?								△?

(Phase II, Nalotawa-Nanuku, Yoloku and Tavanasa Cr.-1)

Sample	Clay minerals												Silica m.			Feldspar		Sulfates			Carbon.		Oxides, Hydroxides					Sulfides			Others		
No.	SME	CHL	SER	KAO	HA	PYP	TAL	SRP	S/M	C/M	K/M	ZEO	QTZ	ACR	TRI	PLA	KFL	ALU	JAR	GYP	CAL	DOL	DIA	GB	GOE	HEM	MAG	MAR	PYR	SPH	OLI	AMP	PX
SM13	△	△?											△				○				○								▲				
SM14				△									○			○					△	○?							▲?				△
SM2016	△	△											△								◎	○?							▲				▲?
KK2046	▲												△			◎													▲?				△
KK2035	△		▲													◎													▲?				△
OK2053																◎																	△
OK2066									△				○				▲											△					
OK2065	▲	▲?	○										△?			○		△?															△
OK2067	▲	▲	○										△			○																	△
OK2070			△										△?			○		△?															△
OK2071	△	▲											△			◎																	△
OK2072	▲?												△			○								△									△
OK2098	△	△											△			○					○								▲				
AY39	△	△											○			○													○				▲
AY40	○	▲											▲			○													▲		▲?		▲
AY42	○													△?		○													△				△
AY43	△	△											○			○													▲		▲?		
AY44	▲	△											○			△					◎	◎?			▲?				△				
AY45	▲	▲							▲?				○			△			△														▲
AY2077	▲	△											○			○					○								▲				
AY2098													△								◎							▲	▲				

(Phase II, Nalotawa-Nanuku, Yoloku and Tavanasa Cr.-2)

Sample	Clay minerals												Silica m.			Feldspar		Sulfates			Carbon.		Oxides, Hydroxides					Sulfides			Others		
No.	SME	CHL	SER	KAO	HA	PYP	TAL	SRP	S/M	C/M	K/M	ZEO	QTZ	ACR	TRI	PLA	KFL	ALU	JAR	GYP	CAL	DOL	DIA	GB	GOE	HEM	MAG	MAR	PYR	SPH	OLI	AMP	PX
SM5											△	▲?	△	○													▲?						
SM8	△	△	△										○			○					○										▲?		
SM9	○													△	▲?	◎					△								△				
SM10	△												○	◎			△?												△				
SM11		△											○			◎					○										▲?		△
SM12	△	▲										▲?	○			△?					○	▲?							○				
SM16		▲	○										○?			◎																	○
SM2030	▲												△	△		◎					△												○
SM2031	▲												△			◎																	△
SM2038	△	△	▲?				▲?						▲?	△?		◎																	△
KK1	○			△									○			○					▲?												▲
KK2042	△											▲			△	○															△?		△
KK2043	△	▲										▲	○			◎					△								▲				
KK2044	△							▲?								○	○																△
OK5									△				○				△																
OK6			▲								▲		○				△																
OK7	△						▲				▲		○				▲?								△?								
OK2045	△	▲										▲	△			○					△								▲				△
OK2049	△													△?		◎									▲				▲?				△
SM17	○							△					▲?	○		△																	
SM18			▲										○						○														
SM19			△					▲?					◎			△													▲				▲
SM20	△	△											○			○					○												△?
SM21	△		▲	△									○			△			○														
SM22				△		△						▲	◎										▲?										
SM23				○		▲?							◎	○				△?											▲				
KK10	△		▲?	△									○			○					▲?								△				▲?
KK11	△	△?		▲					△				○																				
KK12	△	▲		▲					▲				○			△													△				
KK13	△	△?											○			○													▲?				
KK14				△									△	◎																			
KK15	△												△			○													△				△
SK1017	△															◎																	○
KK2078	△		▲												△?	○																	△
OK9	▲?								▲				◎																				

Abbreviations:
◎:Abundant ○:Common △:Few ▲:Rare

SME:Smectite, CHL:Chlorite, SER:Sericite, KAO:Kaolinite, HA:Halloysite, PYP:pyrophyllite, TAL:Talc
SRP:Serpentine, MON:Montmorillonite, S/M:Ser/Mon mixed layer mineral, C/M:Chl/Mon mixed layer mineral,
K/M:Kao/Mon mixed layer mineral, ZEO:Zeolite, QTZ:Quartz, ACR:α-Cristobalite, TRI:Tridymite,
PLA:Plagioclase, KFL:Potassium feldspar, ALU:Alunite, JAR:Jarosite, GYP:Gypsum, CAL:Calcite,
DOL:Dolomite, DIA:Diaspore, GB:Gibbsite, GOE:Goethite, HEM:Hematite, MAG:Magnetite, MAR:Marcasite,
PYR:Pyrite, SPH:Sphalerite, OLI:Olivine, AMP:Amphibole, PX:Pyroxene

Table 7 Results of X-ray Diffractive Analysis (3)

(Phase II, Drilling Cores of Mba-west Area)

Sample		Clay minerals										Silica m.			Feldspar		Sulfates			Carbon.		Oxides			Sulfides		Others		
No.	Location	SME	CHL	SER	KAO	PYF	SRP	S/M	C/M	K/M	ZEO	QTZ	ACR	TRI	PLA	KFL	ALU	JAR	GYP	CAL	DOL	GOE	HEM	MAG	PYR	SPH	OLI	AMP	PX
XR1	MJF-1, 30.0m	△	▲									△			○					▲					△				
XR4	81.5											○					○								△				
XR6	87.1				○	△					△	○													○				▲
XR7	88.2				▲?							○					○								▲?				
XR8	101.1	△	△								△	○			○					△					△				▲
XR9	106.4	△	△									○								○					△				
XR10	111.1	△	△									○			○					△					△				▲
XR12	139.6				○	△						○			○	▲?	△								△				
XR13	165.0		△								△	○			○					△					○				▲?
XR15	224.0			△								○			△					△?					○				
XR18	267.8		△								▲	△			△										△			○	△
XR20	299.5	▲	△	△							△	○			△					▲?					△				▲
XR21	MJF-2, 10.0	△										○			○					△					▲				▲
XR22	29.3											○																	
XR23	76.7			▲	○	△					△	○													△				▲?
XR24	117.4				▲	▲					△	○					○								▲				▲?
XR25	118.0			▲								○													○				
XR26	144.3	△			▲?						○	○					○			△					△				▲?
XR27	193.0			△								○													△				
XR28	258.0		△	▲								○													△				
XR29	275.3			▲	▲							○													△				▲?
XR30	299.5	▲?	▲	△							▲	○			○					○					△				

(Phase II, Sigatoka Area)

Sample	Clay minerals									Silica		Feldspar		Carbonates			Oxides		Sulfides		Others		
No.	SME	CHL	SER	KAO	HA	SRP	C/M	K/M	ZEO	QTZ	TRI	PLA	KFL	CAL	ARA	DOL	GOE	HEM	PYR	SPH	OLI	AMP	PX
ST204	▲?									○		○											△
ST205	▲?							▲		○		○		▲?									△?
SW211			△					▲		○													
SW212			△					▲		○		○											▲
SW215			▲?							○		○											
AY210	○	△							△	○		○										○	
AY211	▲?							△	○	△?		○										△	
AY212										○		○											
KK765			△					▲		○		△?							▲?				
KK308								○		○									▲				
ST208	△									○		○											▲?
ST209	▲		△							○									▲				▲?
OK2268		△								○		○											
OK2252	△	△							△?		▲	○	△?	△?	△?							△	
SW201			△	△						○		△?											
SW202			△	▲						○							▲?						
SW203			△							○		○						▲					
SS204								△		○								▲?	▲				
KK210						▲?		△		○		○											
SW217	△	○	▲							○		○											
SW206								▲		○		○											
SW214			▲					▲		○		○					▲?						
SW215	△			▲						○		○											
OK204			△					△		○													
OK205			△					▲		○													
OS208									▲	○		○											
KK208	▲									○		○											
AY2232		△								○		○				○?			△?			○	
OS303					▲			△		○													
SW207			△	○			△			○									▲?				
SW208					△			△		○													
AY201					△?			△		○		▲?											
AY203	△	△								○		○											
AY213								▲	▲	○									▲?	△			
AY2309		△							△	○		○							△				

(Phase III, Drilling Cores of Mba-west Area)

Sample		Clay minerals								Silica		Feldspar		Carbon.		Oxides		Sulfides		Others			
No.	Location	SME	CHL	SER	KAO	HAL	TC	C/M	S/M	QTZ	TRI	PLA	KFL	CAL	DOL	MAG	CEM	PYR	MCS	AMP	BIO	ZEO	GYP
X3-1	MJF-3, 61.4m	○												◎									
X3-2	195.0	○		△?			△?				○	○		△								△?	
X4-1	MJF-4, 28.0m					○				○			△A					○					
X4-2	50.2	○					○			○		○		○				○					
X4-3	51.0									◎				○				○					
X4-4	70.0	△				△				○		○		△			○?	△		▲?	△?		
X4-5	100.5	○		△					○?	◎				○				○					
X4-6	117.5	○		○						◎				○				○					
X4-7	136.8	○								○		◎	○					△					
X4-8	160.0	○	▲?				▲?			○		○	△	○				△		▲			
X4-9	190.0	○	▲				△			○		○	△	△				△					
X4-10	228.0	△	△							◎		○	△	△				△					
X4-11	250.0			○						◎								○					
X4-12	285.0	○	△?	▲?						◎		◎		○				△					
X4-13	315.0	△	▲							○		○	△A	○				△					
X4-14	355.0	○								○		◎		○				○					
X4-15	391.0	△					△			○		◎	○?	△				△?					
X4-16	396.3	△	▲?							○				◎	◎								◎
X5-1	MJF-5, 24.0m	△	△					△?		○		○		○									
X5-2	39.7	△	○							○		○		○				▲?					
X5-3	75.55	○	○	△?				○?		◎		○		○				▲					
X5-4	75.6	○	△?							◎				◎				▲					
X5-5	120.5	△	△							○		○		◎				○					
X5-6	173.4		△							◎		○											
X5-7	211.2	△	△	○						○		△		◎									
X5-8	219.0	○	△	△						○		○		○									
X5-9	249.0		△	△						◎		○		◎									
X5-10	278.9	○	△	▲						◎		○		○									
X5-11	285.0	◎	▲	△						◎		○											
X5-12	294.0		△	▲						◎		○		○									
X5-13	299.6		△	△						◎		○		○									
X6-1	MJF-6, 50.0m			△						○			△A	△									
X6-2	64.0		▲							◎		△			◎			▲					
X6-3	65.5	△		▲	△?					○		○	○A					△					
X6-4	137.4	△	△							○		○	△A	○									
X6-5	153.0		▲	○						◎			○A					○					
X6-6	168.7	○		△?	△					○			○A	△	○								
X6-7	176.0		△	△						○		△	○A		○			△					
X6-8	180.5		▲	▲						○			○A	○	○			△					
X6-9	181.4		▲	○						○			○A		○			△					
X6-10	228.0		△	△						○			○A		○			△					
X6-11	285.3	△	△	▲?						○			○A	◎									
X5-12	298.3	△	△	△						○		○	○A	○				○					
X7-1	MJF-7, 28.1m		▲	○						◎					○								
X7-2	50.4	○	△	▲?						○		○	○A	○	○				○?				
X7-3	82.9		△	△						○			○A	○	○	△			○				
X7-4	104.1		△							○			○A	◎									
X7-5	123.4	○	△							○			○A	○									
X7-6	176.2		○							○		○	○A	△					○				
X7-7	275.0		△	△?						○		○	△	○				△					
X7-8	297.0		△							○		○		◎									

(Phase III, Yaloku Outcrops)

Sample	Clay minerals											Silica m.			Feld.		Sulfates			Carbon.		Oxides, Hydroxides					Sulfides			Others		
No.	SME	CHL	SER	KAO	HA	PYF	TAL	S/M	C/M	K/M	ZEO	QTZ	ACR	TRI	PLA	KFL	ALU	JAR	GYP	CAL	DOL	DIA	GB	GOE	HEM	MAG	MAR	PYR	SPH	OLI	AMP	PX
YX-1	○	▲										○			○	△A				△								▲?				
YX-2		△	△									○				○A												▲				
YX-3		△	△									○				○A					○											
RX-3	○	△	△									○			○					○												
RX-6		△	○									○								△												

(Phase III, Nalotawa Outcrops)

Sample	Clay minerals											Silica m.			Feld.		Sulfates			Carbon.		Oxides, Hydroxides					Sulfides			Others		
No.	SME	CHL	SER	KAO	HA	PYF	TAL	S/M	C/M	K/M	ZEO	QTZ	ACR	TRI	PLA	KFL	ALU	JAR	GYP	CAL	DOL	DIA	GB	GOE	HEM	MAG	MAR	PYR	SPH	OLI	AMP	PX
SW401	○			▲								◎			△													○				
SW415-1	○			▲								○			△	○												○				

Abbreviations: ◎:Abundant ○:Common △:Few ▲:Rare

SME : Smectite, CHL : Chlorite, SER : Sericite, KAO : Kaolinite, HA : Halloysite, PYP : Pyrophyllite, TAL : Talc, Mon : Montmorillonite, S/M : Ser/Mon mixed layer mineral, C/M : Chl/Mon mixed layer mineral, K/M : Kao/Mon mixed layer mineral, ZEO : Zeolite, QTZ : Quartz, ACR : α-Cristobalite, TRI : Tridymite, PLA : Plagioclase, KFL : Potassium feldspar, ALU : Alunite, JAR : Jarosite, GYP : Gypsum, CAL : Calcite, DOL : Dolomite, DIA : Diaspore, GB : Gibbsite, GOE : Goethite, HEM : Hematite, MAG : Magnetite, MAR : Marcasite, PYR : Pyrite, SPH : Sphalerite, OLI : Olivine, AMP : Amphibole, PX : Pyroxene A:Adularia

Table 8 Results of Ore Assaying

(Phase Ⅰ, Viti Levu Area)

Sample No.	Locations No.	Mines/Prospects	Material	Assay Results Au(g/t)	Ag(g/t)	Cu(%)	Pb(%)	Zn(%)	Mo(%)
C-36	54	Balebuto	Py vein	<0.07	<0.3	0.01	<0.01	<0.01	<0.001
CA-115	–	Bakiraki	Qz vein	0.41	<0.3	0.01	<0.01	<0.01	<0.001
EM-5	56	Emperor	Qz vein	0.14	<0.3	0.10	<0.01	<0.01	<0.001
LC-17	53	Vuda	Qz-Alu Vein	0.07	<0.3	0.06	<0.01	<0.01	<0.001
NC-48	–	West of Mba	Py diss.	<0.07	<0.3	<0.01	<0.01	<0.01	<0.001

Location No. denoted as the number in the list and map of the prospects and mines

Abbreviations: Py: Pyrite, Qz: Quartz, diss: dissemination Alu:Alunite

(Phase Ⅰ)
(Mba-west Area)

Sample No.	Location	Description	Dip-strike	Width (cm)	Ore Grade Au g/t	Ag g/t	Cu %	Pb %	Zn %	Mo %	Te %
OK1	Raviravi	Qtz vein	N6°W, 60°W	1	<0.07	<0.5	<0.01	<0.01	0.06	0.001	<0.001
KK16	"	Silica-Gossan			<0.07	<0.5	0.02	<0.01	0.01	<0.001	<0.001
KK17	"	Silica-Gossan			<0.07	<0.5	0.02	<0.01	<0.01	<0.001	<0.001
ST5	"	Silica-Gossan			<0.07	<0.5	0.01	<0.01	<0.01	<0.001	<0.001
ST1	Namosau Creek	Silica-Gossan			<0.07	<0.5	0.01	<0.01	<0.01	<0.001	<0.001
SM2	"	Qtz-Alu vein	N27°W, 90°	5	<0.07	<0.5	0.04	<0.01	<0.01	<0.001	<0.001
SM4	"	Qtz-Alu vein	N35°W, 70°E	200	<0.07	<0.5	0.04	<0.01	0.01	<0.001	<0.001
SM101	"	Gossan float			<0.07	0.5	0.01	<0.01	<0.01	<0.001	<0.001
SM102	"	Silicified rock	N10°E, 90°	50	<0.07	<0.5	0.01	<0.01	0.01	<0.001	<0.001
SM104	"	Silicified rock	N5°E, 90°	110	<0.07	<0.5	0.01	<0.01	<0.01	<0.001	<0.001
SM8	Nalotawa	Lim. network			<0.07	<0.5	0.01	<0.01	0.01	<0.001	<0.001
SM19	Tavanasa Creek	Qtz-Alu float			<0.07	<0.5	0.01	<0.01	<0.01	<0.001	<0.001
SM11	Yaloku	Qtz vein	N75°E, 60°S	15	<0.07	<0.5	0.02	<0.01	<0.01	<0.001	<0.001
OK2	"	Qtz vein	N40°W, 35°W	15	<0.07	2.0	0.05	0.05	0.01	<0.001	<0.001
OK4	"	Qtz vein	N77°W, 60°S	25	<0.07	1.0	0.04	0.02	0.01	<0.001	<0.001
OK7	"	Qtz vein	N13°E, 60°E	2	<0.07	1.0	0.04	<0.01	0.01	<0.001	<0.001
OK10	"	Qtz vein	NS, 80°E	15	12.10	2.7	0.03	0.02	0.01	<0.001	<0.001
OK12	"	Qtz vein	N88°E, 70°S	10	2.19	85.6	0.08	0.24	0.01	<0.001	<0.001
OK16	"	Qtz vein	N17°W, 30°W	5	<0.07	0.9	<0.01	<0.01	<0.01	<0.001	<0.001
OK18	"	Qtz vein	N30°W, 70°W	3	4.52	11.8	3.58	<0.01	0.01	0.020	<0.001
KK7	"	Qtz vein	NS, 84°W	5	<0.07	<0.5	0.01	<0.01	0.01	<0.001	<0.001
AY9	"	Qtz vein	N47°W, 80°S	5	<0.07	<0.5	0.10	<0.01	0.01	<0.001	<0.001
AY10	"	Qtz vein	N75°W, 80°N	3	<0.07	<0.5	0.08	<0.01	0.01	<0.001	<0.001
ST2	"	Qtz vein	N84°E, 75°S	2	<0.07	<0.5	0.01	<0.01	0.01	<0.001	<0.001
ST3	"	Qtz vein	N10°W, 80°E	3	<0.07	<0.5	0.07	<0.01	0.01	<0.001	<0.001
ST4	"	Qtz vein	N10°W, 80°E	15	<0.07	<0.5	0.04	<0.01	0.01	<0.001	<0.001

(Phase Ⅰ)
(Sigatoka Area)

Sample No.	Location	Description	Dip-strike	Width (m)	Ore Grade Au g/t	Ag g/t	Cu %	Pb %	Zn %	Mo %
KY203	Tulasewa Creek	Gossan	N80°E, 60°N	0.4	<0.07	<0.5	<0.01	0.01	0.01	<0.001
OK201	"	Quartz vein	N57°W, 70°S	1.0	<0.07	<0.5	<0.01	<0.01	0.01	<0.001
SM202	"	Silicified rock	N87°W, 55°S	1.2	<0.07	<0.5	<0.01	<0.01	<0.01	<0.001
SM203	"	Quartz float		ϕ1.5	<0.07	<0.5	<0.01	<0.01	<0.01	<0.001
OK204	Natualevu Creek	Gossan			<0.07	1.0	0.09	0.01	0.02	<0.001
KK204	Kule	Py dissem. ore			<0.07	<0.5	<0.01	<0.01	0.01	<0.001
SM201	Nathilenga Creek	Sil-Ilm gossan	N53°W, 75°N	0.5	<0.07	0.7	<0.01	<0.01	<0.01	0.001
ST204	Watawatakala Cr.	Argill. rock			<0.07	<0.5	<0.01	0.01	<0.01	<0.001
ST202	Yunayasi Creek	Quartz vein			<0.07	<0.5	<0.01	0.01	<0.01	<0.001
AT2105	Torokitu	Py-sil. rock			<0.07	<0.5	<0.01	<0.01	<0.01	<0.001

(Phase Ⅱ,
Mba-west Outcrops)

Sample No.	Location	Description	Dip-strike	Width (cm)	Ore Grade Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Te ppm	Mo ppm
SM401	Nalotawa	Py-Sil vein	N42°W, 90°	40	<0.005	<2	90	50	89	1.8	
SM402	Nalotawa	Clay-Py vein	N1°E, 80°E	20	0.005	<2	120	<5	115	0.2	
SM403	Nalotawa	Py-Clay alt.r.	–	100	<0.005	<2	105	20	115	0.1	
SM404	Nalotawa	Py-Clay alt.r.	–	300	<0.005	<2	75	15	55	1.4	
SM405	Nalotawa	Py-Clay alt.r.	–	100	<0.005	<2	95	15	90	0.6	
SM406	Nalotawa	Py-Clay alt.r.	–	350	0.022	<2	90	10	100	0.3	
SM407	Nalotawa	Clay-Py vein	N42°E, 90°	30	<0.005	<2	35	40	35	1.8	
SM409	Nalotawa	Clay-Limo vein	N13°E, 85°E	40	<0.005	<2	80	<5	135	<0.1	
SM411	Nalotawa	Clay-Py vein	N23°E, 80°E	60	<0.005	<2	55	10	60	<0.1	
SM412	Nalotawa	Py-Clay vein	N7°E, 85°E	20	<0.005	<2	85	10	85	<0.1	
SM413	Nalotawa	Clay-Py vein	N15°E, 45°E	50	0.009	<2	120	15	75	<0.1	
SM414	Nalotawa	Clay-Py vein	N35°E, 65°E	40	0.016	<2	80	10	35	1.8	
SM415-1	Nalotawa	Clay-Py vein	N18°E, 45°E	100	0.007	<2	95	30	85	1.2	
SM415-2	Nalotawa	Clay-Py vein	N28°E, 70°E	100	0.006	<2	120	20	100	0.3	
SM416	Nalotawa	Clay-Py vein	N50°W, 85°S	5	0.024	<2	135	15	280	<0.1	
SM418	Nalotawa	Clay-Py vein	N31°W, 85°E	30	<0.005	<2	55	15	55	<0.1	
SM419	Nalotawa	Clay-Py vein	N71°E, 85°S	80	<0.005	<2	45	10	60	<0.1	
SM420	Nalotawa	Clay-Py vein	N55°E, 75°E	30	<0.005	<2	60	10	90	0.5	
SM422	Nalotawa	Clay-Py vein	N43°W, 80°E	100	<0.005	<2	45	10	125	3.4	
SM-7	Nalotawa	Limo network	N25°E, 50°E	150	<0.005	<2	30	10	75	1.1	
T-4A	Yaloku	Qtz vein float(rk. p.)	–	–	0.005	<2	–	–	–	–	
T-4B	Yaloku	[illegible] (Qf. banded p.)	–	–	0.005	<2	–	–	–	–	
T-5	Yaloku	Silicified rock float	–	–	<0.005	<2	–	–	–	–	
T-9	Yaloku	Qtz-Limo-Py vein	N83°E, 55°S	8	0.022	<2	130	5	110	1.9	
T-10	Yaloku	Qtz-Limo-Clay vein	N31°E, 30°S	15	0.011	<2	120	<5	400	5.0	
T-12	Yaloku	Qtz-Py vein	N55°E, 50°S	1	0.041	<2	210	330	900	3.9	
T-13	Yaloku	Qtz vein	N73°E, 90°	3	0.020	<2	270	450	120	3.1	
T-14	Yaloku	Clay-Py vein	N33°W, 60°E	10	0.030	<2	180	23	43	3.1	
T-15	Yaloku	Qtz vein	N41°E, 75°S	3	0.021	<2	310	17	10	6.0	
T-16	Yaloku	Qtz vein	N13°E, 80°E	20	0.186	<2	270	40	2000	10	
T-17	Yaloku	Qtz vein	N87°W, 60°S	3	0.104	<2	160	20	35	3.8	
T-203	Yaloku	Qtz vein	N53°E, 65°S	5	0.047	<2	190	12	29	4.6	
KL-4	Yaloku	Qtz vein	N57-80°W, 70°S	8	0.024	<2	44	8	46	5.0	
KL-5	Yaloku	Qtz vein	N21°W, 90°	3	0.028	<2	250	6	88	4.5	
SM12	Yaloku	Qtz-Limo vein	N7°W, 60°W	5	<0.07	0.4	200	600	<100	<10	<10
OK3	Yaloku	Qtz-Limo vein	E-W, 60°S	25	<0.07	1.0	300	200	<100	<10	<10
OK5	Yaloku	Qtz-Limo vein	N13°E, 90°	3	<0.07	1.0	500	200	<100	<10	<10
OK6	Yaloku	Qtz vein	N25°E, 85°E	3	<0.07	<0.3	500	100	<100	<10	<10
OK8	Yaloku	Cal vein	N12°W, 50°W	5	<0.07	4.4	500	100	<100	<10	<10
OK9	Yaloku	Py-Clay vein	N51°E, 60°S	15	<0.07	<0.3	100	100	<100	<10	<10
OK11	Yaloku	Qtz vein	N53°E, 15°S	5	0.14	2.7	400	500	<100	<10	<10
OK13	Yaloku	Qtz-Limo vein	N52°W, 60°S	6	<0.07	<0.3	<100	100	<100	<10	20
OK14	Yaloku	Qtz-Cal vein	N57°W, 50°S	2	<0.07	0.3	900	100	<100	<10	<10
OK15	Yaloku	Qtz vein	N72°W, 35°S	2	<0.07	<0.3	100	<100	<100	<10	<10
OK17	Yaloku	Qtz-Cal vein	N53°E, 70°S	3	<0.07	<0.3	<100	<100	<100	<10	<10
KK6	Yaloku	Qtz vein	N-S, 88°W	5	<0.07	<0.3	200	100	<150	<10	<10
KK8	Yaloku	Silicified rock	–	10	<0.07	<0.3	300	200	<150	<10	<10

Table 9 Results of Chemical Analysis of Ore Samples

(Drilling Core MJF1~7)

Sample No.		Depth (m ~ m)	Width (m)	Ore Grade Au g/t	Ag g/t	Cu %	Pb %	Zn %	Mo %	Te ppm
MJF-1	OA-1-1	24.2 ~ 24.7	0.5	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.25
	OA-2-1	36.0 ~ 37.0	1.0	<0.01	<0.3	0.02	<0.01	0.01	<0.001	0.30
	OA-2-2	37.4 ~ 38.8	1.4	<0.01	<0.3	0.02	<0.01	0.01	<0.001	0.20
	OA-2-4	41.0 ~ 42.0	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.30
	OA-3-1	42.0 ~ 43.0	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.10
	OA-4-1	86.0 ~ 87.0	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.35
	OA-4-2	87.0 ~ 88.0	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	<0.05
	OA-4-3	88.0 ~ 88.5	0.5	<0.01	<0.3	<0.01	<0.01	<0.01	<0.001	0.05
	OA-4-4	89.3 ~ 90.7	1.4	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.35
	OA-5-1	105.9 ~ 106.9	1.0	<0.01	<0.3	<0.01	<0.01	<0.01	<0.001	0.50
	OA-6-1	111.75 ~ 112.75	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	<0.05
	OA-6-2	112.75 ~ 113.4	0.65	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.10
	OA-7-1	139.0 ~ 140.0	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.40
	OA-7-2	140.0 ~ 141.0	1.0	<0.01	<0.3	0.02	<0.01	0.01	<0.001	0.25
	OA-7-3	141.0 ~ 142.0	1.0	<0.01	<0.3	<0.01	<0.01	<0.01	<0.001	0.40
	OA-7-4	142.0 ~ 143.0	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.15
	OA-7-5	143.0 ~ 144.0	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.10
	OA-7-6	144.0 ~ 145.0	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.20
	OA-7-7	145.0 ~ 146.0	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.25
	OA-7-8	146.0 ~ 147.0	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	<0.05
	OA-8-1	164.5 ~ 165.5	1.0	<0.01	<0.3	0.01	<0.01	0.01	<0.001	0.20
	OA-9-1	222.2 ~ 223.2	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.30
	OA-9-2	223.2 ~ 224.2	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.35
	OA-9-3	224.2 ~ 225.2	1.0	<0.01	0.3	0.01	<0.01	<0.01	<0.001	0.30
	OA-9-4	225.2 ~ 226.2	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.30
	OA-9-5	226.2 ~ 227.2	1.0	<0.01	0.3	<0.01	<0.01	<0.01	<0.001	0.40
	OA-9-6	227.2 ~ 228.4	1.2	<0.01	<0.3	<0.01	<0.01	<0.01	<0.001	0.35
	OA-10-1	232.1 ~ 233.2	1.1	<0.01	<0.3	0.03	<0.01	<0.01	<0.001	0.55
	OA-11-1	236.1 ~ 236.4	0.3	<0.01	1.4	0.02	0.04	0.10	<0.001	0.30
	OA-12-1	299.4 ~ 299.6	0.2	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.30
MJF-2	OA-13-1	29.1 ~ 30.1	1.0	<0.01	<0.3	0.01	<0.01	0.01	<0.001	<0.05
	OA-14-1	76.3 ~ 77.3	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.20
	OA-15-1	90.9 ~ 92.2	1.3	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.30
	OA-16-1	97.8 ~ 98.8	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.25
	OA-16-2	98.8 ~ 99.8	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.40
	OA-16-3	99.8 ~ 100.8	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.30
	OA-16-4	100.8 ~ 101.8	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.40
	OA-16-5	101.8 ~ 102.8	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.10
	OA-16-6	102.8 ~ 103.5	0.7	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.20
	OA-17-1	107.2 ~ 108.2	1.0	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.15
	OA-17-2	108.2 ~ 109.2	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.10
	OA-17-3	109.2 ~ 110.2	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.20
	OA-17-4	110.2 ~ 111.4	1.2	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.15
	OA-18-1	116.1 ~ 117.1	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.15
	OA-18-2	117.1 ~ 117.4	0.3	<0.01	<0.3	<0.01	<0.01	<0.01	<0.001	0.05
	OA-18-3	117.4 ~ 118.4	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.15
	OA-18-4	118.4 ~ 119.4	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.30
	OA-18-5	119.4 ~ 120.4	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.35
	OA-18-6	120.4 ~ 121.4	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.35
	OA-18-7	121.4 ~ 122.4	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.40
	OA-18-8	122.4 ~ 123.4	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.15
	OA-18-9	123.4 ~ 124.3	0.9	<0.01	<0.3	0.01	<0.01	<0.01	<0.001	0.05
	OA-19-1	193.0 ~ 194.0	1.0	<0.01	<0.3	0.02	<0.01	<0.01	<0.001	0.35
	OA-20-1	256.7 ~ 257.7	1.0	<0.01	<0.3	<0.01	<0.01	<0.01	<0.001	0.05
	OA-20-2	257.7 ~ 258.7	1.0	<0.01	<0.3	0.01	<0.01	0.01	<0.001	0.05
	OA-20-3	258.7 ~ 259.7	1.0	<0.01	<0.3	0.01	<0.01	0.01	<0.001	<0.05
	OA-20-4	259.7 ~ 260.7	1.0	<0.01	<0.3	<0.01	<0.01	<0.01	<0.001	<0.05
	OA-20-5	260.7 ~ 261.7	1.0	<0.01	<0.3	<0.01	<0.01	<0.01	<0.001	<0.05
	OA-20-6	261.7 ~ 262.6	0.9	<0.01	<0.3	<0.01	<0.01	<0.01	<0.001	<0.05
	OA-21-1	275.0 ~ 275.3	0.3	<0.01	<0.3	<0.01	0.01	<0.01	<0.001	0.05
	OA-22-1	287.3 ~ 288.0	0.7	<0.01	<0.3	<0.01	0.01	<0.01	0.003	0.05

Sample No.		Depth (m ~ m)	Width (m)	Ore Grade Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Te ppm	Mo ppm
MJF-3	DC3-1	174.6 ~ 174.9	0.3	0.026	<2	190	<5	110	3.6	
MJF-4	DC4-3	48.5 ~ 48.55	0.05	0.043	<2	115	10	10	10.0	
	DC4-27	50.3 ~ 50.9	0.6	0.040	<2	115	5	30	4.0	
	DC4-1	50.9 ~ 51.4	0.5	0.116	<2	245	10	10	1.8	
	DC4-28	51.4 ~ 52.4	1.0	0.082	<2	195	5	20	3.0	
	DC4-4	60.1 ~ 60.25	0.15	0.009	<2	35	15	10	4.4	
	DC4-29	60.25 ~ 60.9	0.65	0.032	<2	85	10	30	2.0	
	DC4-5	60.9 ~ 60.95	0.05	0.011	<2	55	20	30	5.2	
	DC4-30	60.95 ~ 62.1	1.15	0.029	<2	145	5	35	2.2	
	DC4-6	64.5 ~ 64.53	0.03	0.033	<2	65	10	10	17	
	DC4-7	100.2 ~ 101.2	1.0	0.163	<2	520	10	50	2.6	
	DC4-8	101.2 ~ 102.2	1.0	0.125	<2	500	20	135	1.7	
	DC4-9	102.2 ~ 103.4	1.2	0.160	<2	635	10	105	1.9	
	DC4-31	115.6 ~ 116.6	1.0	0.318	<2	345	5	120	1.4	
	DC4-32	116.6 ~ 117.6	1.0	0.520	<2	485	5	225	2.4	
	DC4-33	117.6 ~ 118.6	1.0	0.241	<2	760	10	155	1.8	
	DC4-34	118.6 ~ 119.6	1.0	0.394	<2	820	10	110	2.1	
	DC4-35	119.6 ~ 120.6	1.0	0.178	<2	500	5	135	1.1	
	DC4-36	120.6 ~ 121.6	1.0	0.189	<2	440	15	100	1.2	
	DC4-37	121.6 ~ 122.6	1.0	0.126	<2	345	10	110	1.2	
	DC4-38	122.6 ~ 123.6	1.0	0.104	<2	275	20	90	1.4	
	DC4-39	123.6 ~ 124.6	1.0	0.143	<2	395	10	95	2.0	
	DC4-40	124.6 ~ 125.6	1.0	0.095	<2	310	10	90	1.6	
	DC4-41	125.6 ~ 126.6	1.0	0.220	<2	600	10	90	1.3	
	DC4-42	126.6 ~ 127.6	1.0	0.160	<2	435	10	75	2.0	
	DC4-43	127.6 ~ 128.6	1.0	0.093	<2	335	15	85	1.5	
	DC4-44	128.6 ~ 129.6	1.0	0.083	<2	305	10	80	1.2	
	DC4-45	129.6 ~ 130.6	1.0	0.085	<2	365	10	105	1.1	
	DC4-46	130.6 ~ 131.6	1.0	0.079	<2	395	10	90	1.0	
	DC4-47	131.6 ~ 132.6	1.0	0.077	<2	345	5	100	1.1	
	DC4-48	132.6 ~ 133.7	1.1	0.081	<2	310	5	90	1.5	
	DC4-10	144.8 ~ 145.0	0.2	0.091	<2	400	10	110	0.6	
	DC4-49	145.0 ~ 146.0	1.0	0.057	<2	190	5	80	1.0	
	DC4-11	158.1 ~ 158.11	0.01	0.052	<2	210	15	155	0.4	
	DC4-2	159.4 ~ 159.45	0.05	0.027	<2	180	10	785	<0.1	
	DC4-12	163.4 ~ 163.43	0.03	0.032	<2	205	15	255	<0.1	
	DC4-13	168.0 ~ 168.2	0.2	0.019	<2	200	20	250	<0.1	
	DC4-14	168.4 ~ 168.42	0.02	0.025	<2	245	25	185	0.5	
	DC4-50	196.5 ~ 196.8	0.3	<0.005	<2	155	10	260	0.2	
	DC4-51	213.0 ~ 213.2	0.2	0.017	<2	75	50	205	0.2	
	DC4-52	214.0 ~ 214.5	0.5	0.030	<2	110	5	80	0.2	
	DC4-15	249.9 ~ 250.3	0.4	0.015	<2	95	15	40	1.2	
	DC4-53	270.2 ~ 271.2	1.0	<0.005	<2	75	<5	115	0.4	
	DC4-16	290.6 ~ 290.63	0.03	0.005	<2	40	5	155	<0.1	
	DC4-17	292.0 ~ 292.2	0.2	0.008	<2	55	15	155	0.4	
	DC4-18	293.6 ~ 293.8	0.2	0.007	<2	45	45	330	<0.1	
	DC4-19	297.7 ~ 298.3	0.6	0.008	<2	60	30	180	1.1	
	DC4-54	302.7 ~ 303.5	0.8	<0.005	<2	45	<5	135	0.2	
	DC4-55	318.9 ~ 319.3	0.4	0.009	<2	35	<5	115	1.3	
	DC4-56	332.6 ~ 332.8	0.2	0.019	<2	65	<5	90	2.4	
	DC4-20	335.0 ~ 335.01	0.01	0.008	<2	60	15	120	2.8	
	DC4-21	349.0 ~ 349.01	0.01	0.043	<2	55	5	155	0.6	
	DC4-22	349.7 ~ 350.1	0.4	0.016	<2	70	5	75	0.8	
	DC4-57	354.8 ~ 355.8	1.0	0.013	<2	65	<5	65	1.1	
	DC4-58	355.8 ~ 356.8	1.0	<0.005	<2	60	<5	75	1.0	

Sample No.		Depth (m ~ m)	Width (m)	Ore Grade Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Te ppm	Mo ppm
MJF-4	DC4-59	372.1 ~ 373.1	1.0	0.016	<2	60	<5	105	2.0	
	DC4-23	377.3 ~ 377.31	0.01	0.023	<2	70	10	40	0.8	
	DC4-60	379.2 ~ 380.2	1.0	0.010	<2	70	<5	60	0.2	
	DC4-24	382.8 ~ 382.83	0.03	0.016	<2	75	15	35	0.6	
	DC4-25	395.6 ~ 395.62	0.02	0.009	<2	40	<5	70	<0.1	
	DC4-26	396.3 ~ 396.5	0.2	<0.005	<2	35	<5	60	<0.1	
MJF-5	DC5-1	24.37 ~ 24.44	0.07	0.021	<2	140	7	44	1.9	
	DC5-2	33.35 ~ 33.45	0.1	0.011	<2	120	9	370	5.3	
	DC5-3	39.65 ~ 39.75	0.1	<0.005	<2	59	6	211	3.4	
	DC5-4	44.76 ~ 44.84	0.08	0.005	<2	200	8	480	5.9	
	DC5-5	51.45 ~ 51.55	0.1	0.014	<2	66	8	180	2.9	
	DC5-6	69.45 ~ 69.55	0.1	0.018	<2	57	6	79	4.2	
	DC5-7	73.6 ~ 73.7	0.1	0.005	<2	110	<5	15	1.9	
	DC5-8	75.5 ~ 75.6	0.1	0.017	<2	56	<5	62	2.6	
	DC5-9	75.6 ~ 75.7	0.1	<0.005	<2	82	<5	8	0.4	
	DC5-10	75.7 ~ 75.8	0.1	0.095	<2	520	6	64	2.8	
	DC5-11	80.3 ~ 80.33	0.03	0.013	<2	2400	6	67	3.1	
	DC5-12	86.98 ~ 87.03	0.05	<0.005	<2	230	5	110	16.5	
	DC5-13	88.25 ~ 88.35	0.1	0.021	<2	150	7	240	4.7	
	DC5-14	89.3 ~ 89.5	0.2	0.013	<2	240	6	92	1.6	
	DC5-15	116.2 ~ 116.3	0.1	0.014	<2	100	9	88	2.1	
	DC5-16	120.45 ~ 120.55	0.1	0.015	<2	450	8	64	3.4	
	DC5-17	137.4 ~ 137.53	0.13	0.006	<2	55	6	150	1.9	
	DC5-18	149.28 ~ 149.33	0.05	0.023	<2	6400	7	110	3.6	
	DC5-19	165.2 ~ 165.3	0.1	0.038	<2	460	12	298	4.3	
	DC5-20	165.5 ~ 165.9	0.4	0.010	<2	57	<5	76	2.3	
	DC5-21	211.5 ~ 212.0	0.5	0.008	<2	89	14	480	4.8	
	DC5-22	239.2 ~ 239.4	0.2	0.027	<2	67	12	290	3.9	
	DC5-23	271.05 ~ 271.12	0.07	0.070	<2	170	12	74	2.7	
	DC5-24	274.55 ~ 274.65	0.1	0.037	<2	140	7	220	3.9	
	DC5-25	278.7 ~ 279.1	0.4	0.114	<2	95	6	90	1.3	
	DC5-26	284.8 ~ 285.7	0.9	0.013	<2	58	28	81	2.2	
	DC5-27	293.88 ~ 293.93	0.05	0.028	<2	240	7	71	3.2	
MJF-6	DC6-1	63.5 ~ 64.0	0.5	0.058	<2	98	7	440	1.5	
	DC6-2	64.0 ~ 64.1	0.1	0.056	<2	38	11	54	0.4	
	DC6-3	64.1 ~ 64.6	0.5	0.028	<2	110	11	1350	3.9	
	DC6-4	64.6 ~ 65.8	1.2	0.045	<2	81	8	300	1.5	
	DC6-5	86.2 ~ 86.4	0.2	0.061	<2	330	5	85	2.1	
	DC6-6	135.4 ~ 135.55	0.15	0.036	<2	79	7	1230	5.2	
	DC6-7	154.7 ~ 155.0	0.3	0.072	<2	300	310	110	3.3	
	DC6-8	156.0 ~ 157.0	1.0	0.086	<2	240	20	86	7.2	
	DC6-9	157.0 ~ 158.0	1.0	0.014	<2	220	17	1980	8.3	
	DC6-10	163.93 ~ 164.1	0.17	0.036	<2	160	11	45	2.8	<5
	DC6-11	164.1 ~ 165.0	0.9	0.037	<2	190	10	1780	9.5	8
	DC6-12	165.0 ~ 165.5	0.5	0.099	3	170	35	850	5.4	<5
	DC6-13	165.5 ~ 166.3	0.8	0.016	3	210	19	47	4.0	5
	DC6-14	166.3 ~ 167.3	1.0	0.025	<2	220	14	1260	7.2	<5
	DC6-15	167.3 ~ 168.0	0.7	0.047	<2	230	12	1100	6.1	<5
	DC6-16	168.0 ~ 168.6	0.6	0.15	<2	200	13	1050	3.1	<5
	DC6-17	168.6 ~ 169.0	0.4	0.025	<2	150	10	35	2.9	7
	DC6-18	175.35 ~ 175.6	0.25	0.014	<2	210	12	120	4.5	<5
	DC6-19	175.6 ~ 176.2	0.6	0.052	<2	180	11	54	3.0	6
	DC6-20	176.2 ~ 177.3	1.1	0.015	<2	180	13	360	4.5	<5
	DC6-21	177.3 ~ 177.5	0.2	0.048	<2	190	15	1100	7.1	<5
	DC6-22	177.5 ~ 178.5	1.0	0.031	<2	190	18	1300	6.8	<5

Sample No.		Depth (m ~ m)	Width (m)	Ore Grade Au g/t	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Te ppm	Mo ppm
MJF-6	DC6-23	178.5 ~ 179.2	0.7	0.027	<2	190	19	110	4.4	<5
	DC6-24	179.2 ~ 180.4	1.2	0.036	<2	270	17	63	2.8	<5
	DC6-25	180.4 ~ 180.55	0.15	0.20	4	640	78	56	1.0	6
	DC6-26	180.55 ~ 181.3	0.75	0.045	<2	630	470	78	3.1	<5
	DC6-27	181.3 ~ 181.9	0.6	0.039	<2	770	650	2180	3.0	<5
	DC6-28	190.85 ~ 190.95	0.1	0.025	<2	140	22	1100	4.3	
	DC6-29	195.3 ~ 195.35	0.05	0.059	<2	72	9	74	1.0	
	DC6-30	195.35 ~ 195.7	1.35	0.036	<2	190	12	120	3.0	
	DC6-31	201.8 ~ 202.1	0.3	0.039	<2	250	14	130	2.8	
	DC6-32	212.6 ~ 212.85	0.25	0.028	<2	160	8	99	3.8	
	DC6-33	219.35 ~ 219.41	0.06	0.007	<2	160	8	87	2.3	
	DC6-34	223.45 ~ 223.6	0.15	0.043	<2	92	7	740	4.0	
	DC6-35	224.7 ~ 224.9	0.2	0.045	<2	230	12	1890	2.4	
	DC6-36	227.7 ~ 228.4	0.7	0.076	<2	230	10	80	3.0	
	DC6-37	229.5 ~ 229.8	0.3	0.023	<2	270	9	1550	6.6	
	DC6-38	277.7 ~ 277.8	0.1	0.031	<2	250	31	1400	2.9	
	DC6-39	285.3 ~ 285.36	0.06	0.015	<2	240	10	49	2.4	
	DC6-40	295.7 ~ 297.2	0.5	0.015	<2	210	11	660	3.2	
MJF-7	DC7-1	21.65 ~ 21.9	0.25	0.013	<2	150	7	79	3.6	
	DC7-2	22.15 ~ 22.25	0.1	0.013	<2	450	<5	68	3.2	
	DC7-3	25.2 ~ 25.4	0.2	0.037	<2	140	8	59	2.0	
	DC7-4	26.8 ~ 26.85	0.05	0.015	<2	120	10	1200	5.9	
	DC7-5	28.1 ~ 28.4	0.3	0.010	<2	160	11	2100	7.8	
	DC7-6	29.1 ~ 29.25	0.15	0.114	<2	170	8	2400	1.5	
	DC7-7	76.9 ~ 77.15	0.25	0.014	<2	120	45	120	2.9	
	DC7-8	77.8 ~ 78.8	1.0	<0.005	<2	180	13	94	4.9	
	DC7-9	82.35 ~ 82.38	0.03	0.040	<2	340	900	850	4.3	
	DC7-10	85.9 ~ 86.0	0.1	0.009	<2	180	23	2200	4.1	
	DC7-11	86.5 ~ 86.7	0.2	0.012	<2	150	17	94	9.2	
	DC7-12	102.1 ~ 102.13	0.03	0.013	<2	530	177	82	6.2	
	DC7-13	104.1 ~ 104.45	0.35	0.006	<2	210	38	110	7.0	
	DC7-14	108.0 ~ 108.15	0.15	<0.005	<2	150	12	82	4.2	
	DC7-15	117.4 ~ 117.43	0.03	0.014	<2	150	13	560	10	
	DC7-16	121.0 ~ 121.1	0.1	0.142	14	2500	19	2100	9.3	<5
	DC7-17	121.93 ~ 121.96	0.03	0.088	22	4000	2100	56	1.6	<5
	DC7-18	122.8 ~ 123.3	0.5	0.005	<2	85	21	310	3.8	<5
	DC7-19	123.5 ~ 123.53	0.03	0.375	880	67600	17	760	4.0	<5
	DC7-20	176.1 ~ 176.3	0.2	0.021	<2	600	27	1400	9.1	
	DC7-21	180.5 ~ 180.53	0.03	0.027	<2	420	13	88	3.3	
	DC7-22	191.4 ~ 191.45	0.05	0.085	<2	700	36	2300	6.8	
	DC7-23	224.5 ~ 224.6	0.1	0.007	<2	88	12	1600	10	
	DC7-24	246.7 ~ 247.2	0.5	0.018	<2	210	8	450	3.5	
	DC7-25	274.0 ~ 275.0	1.0	0.016	<2	210	21	2100	11	
	DC7-26	275.0 ~ 276.0	1.0	0.017	<2	190	12	2000	9.4	
	DC7-27	276.0 ~ 277.0	1.0	0.015	<2	210	8	83	3.4	
	DC7-28	277.0 ~ 277.6	0.6	0.071	<2	230	10	79	3.2	
	DC7-29	282.0 ~ 282.05	0.05	0.011	<2	170	9	78	7.2	
	DC7-30	292.7 ~ 293.1	0.4	0.005	<2	190	9	73	6.7	
	DC7-31	295.7 ~ 297.1	0.4	0.025	<2	141	6	77	1.6	

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