APPENDICES

Appendix 1 Summary of Descriptions of Ore Deposits and Mineral Showings, Bau Area

No.	Name	Geographic Coordinate	Location	Type	General Trend	Scale	Host Rock	Mineral	Metallic Element Assemblage	Ore Grade	General Feature of Ore Deposit	Physical Control of Mineralization	Alteration of Host Rock	History of Operation	Relevant Information and Remarks
1.	Luckyhill A (Main deposit)	91645 5495	1.2 km south of Bau town	Vein	N50°W/45°–60°S	Tunnelling area 150 m in strike-side 110 m in dip-side Ore body: 20~50 m in length less than 4 m in width	Limestone and marble.	Stibnite, gold, pyrite, arsenopyrite, jamesonite, quartz, calcite, sarabanite, wollastonite, grossularite, vesuvianite, epidote, chlorite.	Sb-(As)-(Au)-(Ag)	4~59% Sb 3.6–14.1 g/t Au 8~150 g/t Ag 1~3% As	Ore deposit occurs along NW–SE–trending fractured and shattered zones in limestone as fracture-filling veins and along contact between pure limestone and argillaceous limestone as replacement bodies. Vein type ore consists mainly of stibnite-quartz-calcite, and replacement ore is of stibnite-quartz-calcite-sarabanite-wollastonite-grossularite-epidote. Lesser amount of gold is contained in both types with pyrite and arsenopyrite.	NW–SE fractured zone and joints. Contact between pure and argillaceous limestones.	Silicification, sericitization and chloritization in part.	Ore deposit was first mined by Kwei Fah Mining Company. The mine property was awarded to the Luckyhill Mining Sdn. Bhd. in 1972, and was abandoned in 1982. During the operation by the Luckyhill Mine, about 4,850 t of 60–68% antimony concentrate was produced.	
2.	Luckyhill B (South deposit)	91635 5445	500 m south of Luckyhill A.	Vein-shaped replacement	N20°–30°W/35°N	Tunnelling area 40 m in strike-side 90 m in dip-side Ore body: 15~20 m in length less than 2 m in width	Limestone and marble	Stibnite, pyrite, arsenopyrite, gold, calcite, quartz, wollastonite, grossularite, vesuvianite, epidote.	Sb-(As)-(Au)-(Ag)	14–15% Sb 5–15% Au 17–148 g/t Ag (lump ore)	Ore deposit consists of several replacement bodies occurring along NNW–SSE–trending fracture in argillaceous limestone and black marble immediate adjacent to the dyke of quartz porphyry trending NE–SW direction. Main constituent minerals of ore are stibnite, quartz, calcite, wollastonite and grossularite. Minor amount of pyrite, arsenopyrite and some calc-silicate minerals are also found. No ore occurred in dyke.	NNW–SSE joint fractures in argillaceous limestone near dyke.	Silicification and sericitization	The deposit was worked by the Kwei Fah Mining Company during the early part of 1960's. Then the mine was prospected and mined by the Luckyhill Mining Sdn. Bhd. up to 1982.	
3.	G Krian	91640 5520	1 km south of Bau town	Lenticular vein	NNE–SSW, NW–SE and WNW–ESE	Eleven ore bodies are formed within an area of 250m x 150m, Each ore body is Strike extent: less than 30 m Vein width: max. 4 m	Limestone and marble	Gold, pyrite, arsenopyrite, sphalerite, stibnite, quartz, calcite, prehnite, wollastonite, grossularite, epidote.	Au-As-Sb Au-As-(Zn) Au-(Sb)	Au: 1~10 g/t locally 62 g/t Au	This deposit comprises eleven veins occurring along two sets of joint fractures in limestone and marble. Each vein consists predominantly of calcite and quartz, but some veins are rich is calc-silicate minerals. Gold content is usually high in quartzose ore associated with calc-silicate minerals.	NNE–SSE and NW–SE trending joint fractures. Some of the fractures are parallel to quartz porphyry dyke.	Mainly silicification but sericitization is also observed in some ore bodies.	Operated by the Liew Nyan Foo Gold Mining Company between 1950 and 1978. Total production of gold is approximately 60 kg.	Five boreholes were drilled, and two of them encountered gold-bearing mineralized zones.
4.	G. Bau	91645 5475	1.5 km south of Bau town	Vein	N40°W/75°–80°SW	30 m in length 1–2.5 m in width	Marble	Gold, stibnite, pyrite, quartz, calcite, wollastonite, grossularite, epidote, prehnite, rare adularia.	Au-(Sb)	Average: 18 g/t Au, highest: 120 g/t Au Sb content is less than 1%	Ore deposit occurs along steeply dipping NW–SE joint in marble as quartzose vein consisting of quartz, calcite, calc-silicate minerals, gold and small amounts of stibnite and pyrite.	NW–SE joint.	Silicification	The deposit was mined by Ban Lee Gold Mining Company.	
5.	G. Arong Bukit A	91590 5444	Eastern side of G. Arong Bakit	Lenticular vein	N10°–30°W	Less than 20 m in length 3–4 m in width	Marble	Gold, stibnite, pyrite, sphalerite, arsenopyrite, quartz, calcite, wollastonite, grossularite, diopside, chlorite, vesuvianite, clay minerals	Au-Sb-(As) Au-Sb-(Zn)-(As)		This comprises three ore bodies consisting of quartz-calcite vein and quartz-calcite-calc-silicate vein, and these occur along NNW–SSE striking joint fractures in marble. Gold is usually associated with quartz-calcite veins but some calc-silicate rich veins also contain high grade of gold.	NNW–SSE joint fracture.	Silicification	Two of the three ore bodies have been mined by the Kwei Fah Mining Company, and the other one by Ban Lee Gold Mining Company during 1964.	
6.	G. Arong Bakit B	91569 5426	300 m west of G. Arong Bakit A	Lenticular vein	Almost horizontal	12 m in length 1.5–4.5 in thickness	Marble	Gold, stibnite, pyrite, sphalerite, arsenopyrite, quartz, calcite, wollastonite, grossularite, andradite, diopside, vesuvianite.	Au-(Sb)-(Ag)	14–22 g/t Au in quartzose-calc-silicate vein, but low grade in calcite vein	Auriferous clay ore containing primary ore had been mined. Primary ore consists of quartzose and calcite veins with calc-silicate vein, and in some places quartzose vein and calcite vein show banded texture. Gold is rich in quartzose and calc-silicate veins but in calcite rich vein contains low grade gold.	Flat bedding plane(?)		Ore deposit was mined during 1964 by Kwei Fah Mining Company.	
7.	West of Batu Bekajang Lake	96695 5535	Western adjacent of Batu Bekajang Luke	Vein-shaped replacement	N30°E, parallel to porphyry dyke	The opencasts are distributed over an area of 180 m x 80 m. Each opencast is small.	Limestone, shale	Gold, pyrite, arsenic mineral, quartz, calcite, sericite, epidote.	Au-As-(Sb)	Quartzose ore assayed 3.7–63 g/t Au. Silicified shale	Ore deposits consist of auriferous clay ore and primary quartzose gold ore occurred as vein-shaped replacement along the contact between limestone and shale near or at dacite porphyry dykes.	Limestone near limestone-shale contact along fault and porphyry dyke intrusion.	Silicification and sericitization in some places.	Operated by Borneo Comapny in 1900's then by Bukit Young in 1960's. The total production is not known. All workings are flooded.	
8.	G. Siriung	91618 5398	500 m southwest of Luckyhill B	Vein	N30°W 65°E; N20°E/70°W	3–5 m in strike side 0.15–0.3 in width	Limestone	Calcite and quartz.	Au(?)	Not available (possibly very low)	Soarsely crystallized calcite veins with a little quartz occur along fractures in massive limestone. Megascopically no ore minerals are observed.	NNE–SSW and NNW–SSE joint fractures		Only short prospecting tunnel was made.	
9.	G. Tongga	91590 5310	1.5 km south of Luckyhill B	Lenticular vein	N50°E/80°W	Strike extent: 25 m Vein width: 1 m	Marble	Galena, sphalerite, pyrite, chalcopyrite, arsenopyrite, gold, quartz, calcite	Pb-Zn-Cu-Au-As-(Ag)	Au: 3–20 g/t Cu: 0.24–1.54% Pb: 2.6–10.4% Zn: 1.2–7.9%	Ore deposit occurs as lenticular vein along fracture in marble, immediate adjacent to the large stock of quartz porphyry. It is composed of a complex mixture of base-metal sulphide, arsenic minerals and gold associated with gangue of quartz and calcite.	NE–SW fracture parallel to boundary between quartz porphyry and limestone	Silicification	The deposit was prospected and mined by the Malayan Miners Limited during 1962.	Three boreholes were drilled, and one hole encountered dissemination of pyrite about 20 m below the bottom of the mine working.
10.	Saburan	91520 5435	2 km southwest of Bau town	Vein (locally dissemination)	N10°W–N10°E and N60°E	Working area: 250 m x 150 m Ore body: strike extent: less than 50 m thickness: max. 10 m	Pure limestone and argillaceous limestone	Gold, pyrite, stibnite, native arsenic, realgar, arsenopyrite, quartz, calcite.	Au Au-(Sb)-(As)	Average 8 g/t Au. Some of lump ores 9–77 g/t Au.	This ore deposit comprises numerous ore bodies consisting mainly of quartz-calcite veins and some auriferous limestone ore. These occur along fractured zone in limestone associated with thin sandstone layers, immediate adjacent to the Tai Parit Fault. Gold is mainly contained in quartzose ore of quartz-calcite vein and argillaceous limestone near veins.	NNW–SSE to NNE–SSW fractures parallel to the fault and ENE–WSW fractures, and lithologically argillaceous limestone.	Slight silicification, sericitization and chloritization	The ore deposit was mined by the Saburan Gold Mining Company from 1947 to 1964. During the operation, 109 kg of gold was obtained from approximately 14,000 t of crude ore.	Three boreholes were drilled but the results are discouraging.
11.	G. Saburan A	91527 5407	300 m south of Saburan mine	Lenticular vein	NE–SW	Very small scale. Vein width is 1 m (max.)	Marble	Gold, quartz, calcite, wollastonite, grossularite.	Au	Gold content is low, but some lump samples showed 70–74 g/t Au.	Small ore body consisting of quartz, calcite and calc-silicate minerals occurs as lenticular vein along NE–SW trending fracture in marble. Gold content is generally low but some of the quartzose ores contain very high grade of gold.	N–S joint fracture	Silicification near contact with vein, in which gold is partly rich.	This was formerly mines on a very small scale.	
12.	G. Saburan B	91525 5380	300 m south of G. Saburan A	Lenticular vein	NW–SE	Very small scale	Marble	Gold, quartz, calcite, wollastonite, grossularite, vesuvianite	Au	7–21 g/t Au	An elongated quartzose ore associated with minor amount of calc-silicate minerals is formed along NW–SE trending joint in marble. Gold is rich in calc-silicate quartzose ore and low in quartzose ore.	NW–SW joint	Slight silicification	The deposit was worked on a very small scale by the Ban Lee Gold Mining Comapny.	
13.	Tai Ton B	91362 5409	800 m south of Tai Ton	Vein	N45°W/40–85°N	Strike extent: 350 m Vein width: max. 7 m	Limestone	Gold, stibnite, pyrite native arsenic, quartz, calcite.	Au-(Sb)-(As)	Au: 1.1–13.8 g/t Ag: 7–19 g/t	A calcite-quartz vein is formed along NE–SW trending fracture in limestone. The vein consists predominantly of coarsely crystalline calcite, subordinate fine-grained auriferous quartz with little stibnite and native arsenic.	NW–SE fracture parallel to the NW–SE fault	Silicification	Tai Ton Gold Mining Syndicate operated this mine.	
14.	G. Tai Ton	91485 5333	Northeastern side of G. Tabai and southeastern side of G. Tai Ton	Lenticular vein	NNE SSW	Strike extent: very small Vein width: 0.2–5.0 m	Limestone	Gold, pyrite, stibnite, sphalerite, quartz, calcite.	Au-(Sb)-(Zn)	Au: 1–12 g/t	Several outcrops and mine workings of quartz-calcite veins are found along NNE–SSW trending joints in limestone. Quartz and calcite formed banded texture in places, and contain gold and a little amount of sulphide minerals.	NNE–SSW joint fracture and bedding planes of limestone	Slight silicification	Tai Ton Gold Mining Syndicate mined the area during 1950's.	
15.	G. Nanui	91423 5345	Northwestern side of G. Nanui	Lenticular vein	NW–SE	Strike extent: unknown, but possibly small Vein width: max. 3 m	Limestone	Gold, stibnite realgar, native arsenic, orpiment, quartz, calcite.	Au-(Sb)-As	Average 3g/t Au, but some lump ore contains 12 g/t Au	Ore deposit comprises 7 small ore bodies consisting of calcite-quartz veins. Gold is rich in quartzose zone associated with sparse stibnite and arsenic minerals.	NW–SE joint and fracture	Silicification ear contact with veins.	This ore deposit was worked by the Tai Ton Gold Mining Syndicate and the Ng Kui Hiung Gold Mining Company between 1950's and 1960's.	
16.	Rumoh	91430 5285	300 m northwest of Bidi	Lenticular vein	N40°E and N5°E	Worked area: 250 m x 80 m Each ore body : Strike extent: max. 100 m Vein width: max. 10 m	Limestone	Gold, stibnite, sphalerite, arsenopyrite, native arsenic, quartz, calcite.	Au-(Sb)-(As)-(Zn)	Au: 5.5–6.0 g/t	Two sets of quartz-calcite veins occur along fractures in massive limestone immediate adjacent to the Tai Parit Fault, These veins consist predominantly of large crystals of calcite with quartz and minor sulphide and arsenic minerals containing gold. Auriferous clay ore is also found in wide calcite-quartz vein.	N–S and NE–SW fractures		The deposit was worked by Rumoh Gold Mining Company from 1949 to 1970's. The mine obtained about 165 kg of gold from more than 36,000 t of crude ore between 1949 and 1964.	

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17.	Bidi	91387 5248	Southwest adjacent to Bidi	Vein	NNE–SSW, ENE–NSW and possible NW–SE	Worked area: 300 m x 130 m Each vein: Strike extent: max. 70 m(?) Vein width: max. 3 m (?)	Limestone	Gold, pyrite, stibnite, native arsenic, arsenopyrite, realgar, orpiment, quartz, calcite.	Au-Sb-As		Quartz-calcite veins containing abundant arsenic minerals, and stibnite and gold occur along NNE–SSW and ENE–WSW trending fractures in massive limestone. Banded texture of quartz and calcite are observed in places. The ore is rich is arsenic minerals contains high grade of gold and silver (210–270 g/t Ag).	NNE–SSW fracture with subordinate ENE–WSW and possibly WNW–ESE fractures.	Silicification	The area was first mined by Jong Kuet Syn Mining Company. Later the mine was operated by the Kusa Mining Sdn. Bhd. but at present the operation is being ceased due to abundant arsenic and workings are flooded.	
18.	Bidi South	91380 5214	0.5 km to the south-southeast of Bidi	Vein	Trending E to ENE direction and trending north in some open-casts	Consisted of opencast workings within an area of 600 m x 300 m Each opencast workings are small.	Limestone except for one opencast where the gold ore was extracted from quartzose ore at limestone-shale contact	Gold, realgar, orpiment, native arsenic, stibnite, pyrite, calcite, quartz, clay minerals.	Au-As-(Sb)	Quartzose ore assayed around 4–14 g/t Au. Rare elliptical nodules in the weathered porphyry dyke assayed 174.4 g/t Au and 12.4 g/t Ag.	The gold ore was removed from elongated ore bodies aligned along the fault zone in the limestone flats. The primary deposits are consisted of quartzose occurring as replacement bodies in limestone. Some of the gold ore was also extracted from quartz-calcite veins in limestone.	E to ENE trending fault in	Silicification	The area was first mined by Jong Kuet Syn Mining Company. Later the mine was operated by the Kusa Mining Sdn. Bhd. but at present the operation is being ceased due to abundant arsenic and workings are flooded.	
19.	Name Loong B	91325 5280	600 m west of Kusa	Lenticular vein	Trending NNW and NE directions	Two underground workings along incline joint-planes trending NNW: 1–3 m width 7 m depth 100 m length	Limestone	Gold, calcite, quartz	Au	Auriferous clay assayed about 1.5–7.5 g/t Au	The gold was extracted from the auriferous clay derived from the weathering of quartz-clacite veins. Below the northern end of the underground working, quartzose gold ore was discovered during 1966 drilling at 6.6–12 m below the surface by the Geological Survey of Malaysia, Sarawak.	Limestone	Silification	The underground working are now reprospected for gold.	The result of three drill holes are available.
20.	Jambussan East	92020 5540	300 m north-northwest of Jambusan	Vein and vein-shaped replacement	The open-casts follow the trend of the lime-stone shale contact	The opencast workings are distributed over an area of 500 m x 300 m. The opencasts are small.	Limestone, shale	Gold, native arsenic, realgar, stibnite, quartz, calcite.	Au-As-Sb	Quartzose ore: 7.5–30 g/t Au Silicified shale: trace - 7.5 g/t Au	The ore bodies were of auriferous silicified shale and quartzose ore. The main ore type is the quartzose ore which may contain as high as 11% stibnite.	Limestone, shale	Silicification	The area was first mined by local Chinese for antimony ore and coarse gold. Towards the end of 19th century most of the rich bodies of primary and eluvial ore were mined by Borneo Company. Small scale mining resumed in the area in the 1930's and lasted only for a years. All the opencasts are now flooded.	
21.	Gading	91125 4300	14 km to the south-southwest of Bar	Vein	Trending NE dipping 70° S	Primary and eluvial deposits are distributed over an area of 30 m x 50 m Primary ore deposit; Extent in strike direction = 20 m Width = 2 m Extent in dip direction = 40 m	Sandstone, shale	Cinnabar, native arsenic, realgar, stibnite, marcasite, pyrite calcite, flourite, talc.	Hg-As-Sb	Ore assayed around 0.18% Hg.	The ore mined was of sandstone and shale breccia. Most of the ore was of eluvial type. The main mercury mineral is cinnabar.	Sandstone and shale breccia affected by faulting.	Silification, pyritization	The area was first mined in early 1870. By 1900 most of the ore had already been mined out. During operation, the ore from Gading was sent to Tegora for smelting. The area was again reworked by the Japanese between 1942 to 1945. The mine is now covered with secondary jungle.	
22.	G. Ropih	91540 5150	Southern slope of G. Ropih	Disseminated porphyry copper type		500 m x 300 m	Quartz porphyry	Chalcopyrite, pyrite, molybdenite, bornite, malachite, pyrrhotite galena, sphalerite hematite, quartz, chlorite, epidote, andradite, calcite, wollastonite	Cu-Mo-Pb-Zn-Fe	0.18%~ 0.25% Cu in drilling core	The main part is silicified with quartz veinlets. Chalcopyrite and pyrite are ofserved in the quartz veinlets. Galena and pyrrhotite are observed in argillized and brecciated quartz porphyry in the northern slope of the G. Ropih.		Silicification, Kaolinitization, Sericitization	The mineralization was found in 1982 by investigation of the mineral exploration project. Three holes were drilled in the area after geochemical soil survey and geophysical I.P. survey.	
23.	Tai Parit	91635 5585	Immediately south of Bau town.	Replacement	N50°E and N70°W in northern part	Opencast workings: 500 m x 200 m quartzose gold ore zone Strike extent : 60 m Width : 30 m Depth : 60 m	Limestone, shale, sandstone	Gold, realgar, orpiment, native arsenic, calcite, quartz	Au-As-(Sb)	7.6 g/t Au	Early part of mining, alluvial deposit was mined. Primary ore occurred as elongated massive and/or networked bodies consisting of calcited and quartz in limestone near contact with shale and limestone along or around fault.	Limestone near the limestone-shale contact at or around faults.	Silicification near ore bodies.	The area was mined by Borneo Company from 1898 to 1921. Total production of gold was 15,371 kg from about 2,000,000 t of ore with average gold grade of 7.6 g/t. The opencast is now flooded.	3 holes were drilled to establish the extent and depth of the ore. However no ore was encountered.
24.	Bukit Young	91670 5558	Immediately southeast of Bau town.	Vein-shaped replacement	N10°E and N20°E with steep dips towards east.	Opencast workings: 180mx100m Auriferous ore zone: 50mx35m Quartzose gold ore zone Strike extent : 40 m Width : 4 m	Limestone, shale, sandstone	Gold, quartz, calcite, stibnite, native arsenic, galena, sericite, clay minerals.	Au-Sb-(Pb)	3.6 g/t Au	Main ore mined out is auriferous clay with boulders and fragments of highly weathered primary ore. Primary deposits consist of quartzose gold ore with subordinate stibnite, native arsenic, galena and Pb-Sb sulphosalts minerals, and occurred mainly as replacement of limestone and shale in immediate adjacent of NE–SW fault.	Limestone near the contact with shale at or near faults.	Silicification	The area was mined by Bukit Young Mining Company from 1955 to 1979. Total production was 68 kg of gold from 85,000 t of ore with average grade of 8.5 g/t of Au. The opencast is now flooded.	The results of fluid inclusion study gave a homogenization temperature range from 140°–240°C.
25.	Batu Bekajang Lake	91750 5521	1.5 km southeast of Bau town	Replacement	Ore bodies occurred at limestone-shale contact.	Opencast workings: 600 m x 200 m	Limestone, shale	Gold, native arsenic, stibnite, arsenopyrite, galena, pyrite, chalcopyrite, sphalerite, calcite, quartz.	Au-As-Sb-(Pb)	Not available	The area was first mined for alluvial gold. The main gold ore was of quartzose gold ore and auriferous silicified shale. The quartzose ore commonly contained pyrite, stibnite, sphalerite, galena, arsenopyrite, native arsenic, chalcopyrite.	Limestone near contact with shale and sometimes in the country rock below sills.	Silicification	The area was first mined by local Chinese for alluvial gold. In the later part of the nineteenth century the area was mined by Borneo Company for its primary ore.	
26.	North of Batu Bekajang Lake	91735 5575	North of Batu Bekajang Lake	Vein-shaped replacement	Some of the workings indicate a N30°E trend	The area comprising opencasts covered an area of 250mx180m. Each working is small.	Limestone, shale	Quartzose ore: gold, quartz, pyrite, Sulphide ore: gold, pyrite, sphalerite, galena, chalcopyrite, arsenic minerals, quartz.	Au Au-Zn-Pb-As-(Cu)	6–9 g/t Au	All workings mined auriferous clay ore and some primary deposits consisting of quartzose gold ore and sulphide-rich ore. Both primary ores occurred in limestone near contact with shale as vein-shaped replacement.	Limestone near contact with shale or intrusive rock at/near faults.	Silicification	The area was mined by Borneo Company in 1900's and by Kwong Lee Mining Syndicate from 1930–1941 and from 1949–1951.	
27.	South of Batu Bekajang Lake	91740 5487	Southwest and south of Batu Bekajang Lake	Replacement	Alignment of workings shows trend of N75°W	All workings aligned along fault within length of 350m.	Limestone, shale	Gold, pyrite, stibnite, acicular mineral, quartz, sericite, calcite, clay minerals.	Au-Sb	Average content 1.5 g/t Au. Ore Sample 5.4 g/t Au.	Highly weathered primary ores had been mined. Primary ore body is formed at limestone-shale contact along fault as replacement of limestone.	Limestone near limestone-shale contact along fault.	Silicification, sericitization	Operated by Borneo Company in 1900's. The total production is not known and the area is now covered with secondary jungle.	
28.	G. Totag	91767 5437	Northeastern side of G. Totag(2 km south-west of Bau town)	Vein	NNE–SSW joint?	Small vein	Limestone	Gold, stibnite, calcite, quartz.	Au-Sb	5–15 g/t Au 0.71% Sb (locally 20% Sb)	Auriferous calcite-quartz vein forms the ore deposit occurring along NNE–SSW joint parallel to small NNE–SSW–trending dyke.	NE–SW fracture parallel to dyke.		Ore deposit was discovered in 1964 and mined by Lee Thong Sen Gold Mining Company.	
29.	South of G. Juala	91550 5344	250 m southeast of G. Saburan B	Lenticular vein	Unknown	Very small scale	Quartz porphyry	Gold, galena, sphalerite, pyrite, arsenopyrite, chalcopyrite, quartz.	Pb-Zn-Cu-Au-As	Au: 13–16 g/t Cu: 0.1–1.1% Pb: 2.7–21.6% Zn: 3.5–4.4%	A small sulphide rich quartz vein similar to the G. Tongga ore deposit occurs along joint in quartz porphyry stock. The vein consists of a mixture of base-metal sulphide, pyrite and arsenopyrite in gangue of quartz.	Joint fracture	Silicification	Formerly this was prospected on a small scale, but details are unknown.	
30.	Tai Ton A	91436 5403	1 km south-southeast Tai Ton	Vein	N50°W and N30°E	Four ore bodies are distributed within and area of 800 x 500 m, but each ore body is small.	Limestone	Gold, stibnite, native arsenic, arsenopyrite, realgar, quartz, calcite.	Au-Sb-As	Au: 8.2–17.5 g/t Sb: 0.07–1.01% As: 10.32%	This deposit comprises four ore bodies consisting of quartzose and quartz-calcite vein. These veins are formed in fractured zones parallel to the two major faults, and are characterized by high content of arsenic.	NW–SE and NNE–SSW fractured zone.		These were first mined by the Borneo Company in 1920's, then by the Tai Ton Gold Mining Syndicate between 1931 and 1954.	
31.	Nam Loong A	91360 5185	1.5 km to the south-southwest of Bidi	Vein		Consisted of opencast workings distributed in an area of 300 m x 300 m	Limestone	Gold, quartz, calcite.	Au	Not available	The gold ore is part of the quartz-calcite veins occurring in limestone flats.	Limestone	Silicification	The area was mined by Nam Loong Mining Company sometime during the middle of 1900's. The opencasts are flooded and most of the area is covered by secondary jungle.	

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32.	Northwest of Batu Sepit	91300 5180	400 m north-northwest of Batu Sepit	Replacement	Around an outlier of shale occurring on the limestone flat	Consisted of opencast working distributed in an area of 200 m x 200 m. The opencasts are small.	Limestone, shale	Gold, quartz, calcite.	Au	Quartzose ore and silicified shale assayed about 12 g/t Au	The gold ore are consisted of quartzose ore and silicified shale occurring at the contact between limestone and overlying shale.	Limestone near contact with shale.	Silification	The area was mined by Kong Fah mining company sometime in the middle of 1900's. The opencasts are now flooded.	
33.	Ban Him Lee	91255 5215	0.5 km to the southeast of Boring	Vein	The distribution of the opencast indicate ENE trending.	Consisted of opencast workings distributed over an area of 100 m x 100 m	Limestone	Gold, native arsenic, realgar, orpiment, arsenopyrite, stibnite, calcite, quartz.	Au-As-Sb	The arsenical quartzose ore assayed around 11–23 g/t Au	The gold was extracted from ore with variable amount of As. The ore was probably part of the quartz-calcite vein.	Limestone	Silification	The area was mined by Ban Him Lee mining company sometime during the middle of 20th century.	
34.	Ferry Cave	91275 5239	1.2 km to the west-southwest of Bidi	Vein		Underground working distributed over an area of 50 m x 50 m	Limestone	Gold, quartz, calcite.	Au		The gold was extracted from auriferous clay collected from the floor of cave in limestone hill. The cave probably resulted from the weathering of quartz-calcite veins.	Limestone	Silification	The area was mined by Jong Kuet Syn sometime in the 1950's and 1960's.	
35.	Batu Sepit	91322 5144	Immediately west of Batu Sepit	Vein	The old working are aligned along a NNW trending fault	Opencast workings are aligned along a fault zone measuring 5 m x 200 m. The largest of the ore bodies measure 1--2 m in thickness, 15 m in dip direction, but limited in strike extent.	Limestone	Gold, quartz, calcite	Au		The gold ore was probably of the quartzose vein and auriferous clay extracted along the NNW trending fault that cut a limestone hill.	Limestone	Silification	The area was mined by Kong Fah gold mining company during the 1950's and early 1960's.	
36.	Krokong	91295 5094	Just north of Krokong bazaar	Replacement	Occurring in limestone-shale contact	Opencast workings distributed over an area of 250 m x 800 m. The workings are small.	Limestone and silicified shale	Gold, quartz, calcite	Au	Silicified shale assayed around 1.5--3 g/t Au	The gold ore is of quartzose ore occurring as replacement bodies in limestone at the limestone-shale contact.	Limestone near contact with shale and at the vicinity of faults.	Silicification	The area was first mined by Borneo Company around 1900 and alter mined by Associated Mining Company in the early 1950's. Around 1960's the area was again reworked by Kong Fah Mining Company. Total production from this area is not known and at present all former workings are flooded.	
37.	Pedi	91190 5088	Just west of S. Pedi	Replacement	Occurring in limestone, shale at limestone shale contact and also in brecciated shale	Opencast workings are distributed over an area of 400 m x 250 m. Workings are small, the largest measured 150 m x 100 m.	Limestone, silicified shale, brecciated shale	Gold, quartz, calcite	Au	Silicified shale and shale breccia assayed around 1.5–4 g/t Au	The main gold ore is probably of the quartzose type occurring as replacement bodies in limestone at the limestone-shale contact. Low grade ore also can be obtained from silicified shale and shale breccia.	Limestone near contact with shale.	Silicification	This area was worked by Borneo Company in early 1900's and later mined by Associated Mining Company during the middle of 1900's. Between 1950–1960 the area was reworked by local chinese under small-scale mining.	
38.	Pejiru	91045 5113	About 400 m to the northeast of Pejiru bazaar	Replacement	Occurring in limestone at limestone-shale contact and in shale breccia	The opencast workings are distributed over an area of 200 m x 500 m. The largest of the opencast working is about 30 m x 20 m.	Limestone, silicified shale, brecciated shale	Gold, quartz, calcite	Au	Silicified shale assayed about 1.5 g/t Au	The main gold ore is probably of the quartzose gold ore occurring as replacement bodies in limestone at the limestone-shale contact. Low grade ore also can be obtained from silicified shale and shale breccia.	Limestone near contact with shale.	Silicification	This area was probably mined in the middle of 1900's by local chinese.	
39.	Jougjang	91120 5175	About 2–3 km northeast of Pejiru bazaar	Replacement	Occurring in limestone at limestone-shale contact	The opencast workings are distributed around the foot of a shale hill over an area of 100 m x 200 m.	Limestone, shale	Gold, quartz, calcite	Au	Silicified shale assayed about 1 g/t Au	The main gold ore is probably of the quartzose gold ore occurring as replacement bodies at the limestone-shale contac.	Limestone near contact with shale	Silicification	This area was probably mined in the middle of 1900's by local chinese miner.	
40.	Liew Nyan Foo	91168 5115	About 200 m to the south of Kg. Boring	Vein	NNW trending	The opencast workings are distributed over an area of 100 m x 200 m. The quartz-calcite veins are of variable width and limited both in strike and dip extents.	Limestone	Gold, native arsenic, calcite, quartz	Au-As-(Sb)	The arsenical gold ore assayed around 3–4 g/t Au	The main gold ore is of the arsenical quartzose ore extracted from the NNW trending quartz-calcite veins.	Limestone	Silicification	This area was mined by Liew Nyan Foo Mining Company sometime during the middle of 1900's.	
41.	Southwest of Tai Parit	91550 5547	Southwest of Tai Parit Lake	Vein ?	WNW–ESE to EW	Each ore body is possibly small.	Limestone	Gold, quartz, calcite	Au	Not available	Nine flooded old mine working aligns along fault trending WNW--ESE to E–W direction. Details are unknown.				
42.	Northeast of Tai Ton	91455 5520	600 m northwest of Tai Ton	Vein ?	Possibly E–W	Small	Limestone	Gold, quartz, calcite	Au	Not available	Three flooded old mine workings are located in limestone flats immediate adjacent to fault trending WNW–ESE direction. Details of ore deposit are unknown.				
43.	Sirenggok	91782 5685	Immediately northeast of Bau Town			Small scale working at G. Sirenggok	Igneous rock	Gold, manganese, quartz	Au	Silicified quartz porphyry assayed about 0.7–2.4 g/t Au	The deposit was of silicified microgranodiorite porphyry occurring at the top of G. Sirenggok, bearing quartz veins occur as fissure filling. Some of the ore occur as aluvial deposit at the base of G. Sirenggok.	Fractured micro-granodiorite	Silicification	The deposit at G. Sirenggok was mined in 1930's by local Chinese miner. The area is now covered with secondary jungle.	
44.	Skunyit	92825 5700	4.5 km to the south of Siniawan Town	Vein		Small-scale opencast	Limestone	Stibnite, quartz, calcite	Sb	No data	The ore mined was of primary and eluvial deposits occurring in limestone flats. The sulphide ore bodies probably occur as quartz-calcite veins.	Limestone affected by fault.		The area was mined for antimony during the early 1900's. At present, the opencast are flooded.	
45.	Buan Bidi	91112 5425	5.75 km to the south of Bau Town	Vein		Small-scale opencast	Shale	Stibnite, quartz	Sb	No data	The ore mined was of primary and eluvial deposit. The primary ore was probably of quartz vein occurring in shale.	Shale	Silicification	The area was worked on a small scale by West Mine in early 1900's. At present the opencasts are flooded.	
46.	Sebuloh	90375 4155	0.66 km west of Pangkalan	Vein-shaped replacement		Small-scale panning and sluicing	Alluvial (originally from quartz porphyry intrusion?)	Gold	Au	No data	Coarse gold was panned and sluiced from Sungai Sebulon.	Microgranodiorite with fissue	Silicification	The area was mined by panning and sluicing for coarse gold sometime in eary 1900's. At present the area is abandoned.	
47.	Opar	9055 5785	2.25 km to the southwest of opar village	Vein		Small-scale deposit	Shale	Stibnite, quartz, calcite	Sb	No data	Antimony ore was probably extracted from eluvial deposit.	Shale	Silicification	The area was mined under small scale mining in early 1900's. The mine only lasted for sometime and at present the mine is abandoned.	
48.	Tegora	91680 4370	11 km to the south of Bau	Vein	Trending NE with SE dip	Primary and eluvial deposits are distributed over an area of 130 m x 120 m	Sandstone, shale	Cinnabar, native arsenic, realgar, stibnite, pyrite, marcasite, calcite, talc flourite.	Hg-As-Sb	Ore assayed around 0.25% Hg.	The ore mined was consisted of eluvial and primary ore of brecciated sandstone and shale. The main mercury bearing mineral is cinnabar.	Sandstone and shale breccia affected by faulting.	Silicification, pyritization	The area was first mined by Borneo Company from 1868. By 1908 most of the had already been mined out. Between 1942 to 1945 the area was again mined by Japanese.	

Appendix 2 Analytical Results of Rock and Ore Samples, Phase I

Ser No.	Sample No.	Sample Locality	Macroscopic Feature	Sampling Width(m)	Au g/t	Ag g/t	Cu %	Pb %	Zn %	Sb %	As %	Hg ppm
001	AR0007	G. Krian No.5	zb-ga-calcite vein	–	2.3	52.3	0.02	0.20	3.54	0.14	–	–
002	AR0008		py-sb-calcite vein	–	24.0	17.2	tr.	0.16	0.07	0.11	–	–
003	AR0021	Kg. Boring	brecciated, with sb-py-calcite veinlets	–	2.1	8.1	0.02	0.14	0.05	0.23	–	–
004	AR032a	G. Tongga	galena and sphalerite rich ore	–	7.0	268.0	1.54	5.39	4.25	0.46	–	–
005	AR032c		pyrite-arsenic rich ore	–	3.3	129.0	0.64	2.62	1.20	0.26	14.28	–
006	AR032d		py-zb-calcite ore	–	20.0	84.3	0.24	4.05	7.90	tr.	–	–
007	AR0043	(boulder at G. Roplh)	wein quartz with py-sb	–	1.3	9.8	0.02	0.45	0.60	0.52	–	–
008	AR0049	Bidi	big crystal calcite vein	0.20	tr.	tr.	tr.	0.01	tr.	tr.	–	–
009	AR0050		banded calcite-quartz vein	0.20	0.7	tr.	tr.	0.01	tr.	0.02	–	–
010	AR0051		medium size calcite vein	0.60	tr.	tr.	tr.	0.02	tr.	0.03	–	–
011	AR0052		quartz-calcite vein	0.30	tr.	tr.	tr.	0.02	tr.	tr.	–	–
012	AR0053		stocked ore (crushed)	–	9.0	18.0	tr.	0.01	0.03	1.69	11.15	19.3
013	AR054d		stibnite and realgar rich ore	–	20.0	237.0	0.18	0.03	0.01	13.10	17.89	–
014	AR054e		stibnite and arsenic ore	–	24.0	272.0	0.08	0.01	0.02	2.10	7.48	–
015	AR054f		realgar rich calcite vein	–	74.4	211.0	tr.	0.04	0.01	0.53	46.44	–
016	AR054g		banded black mineral and calcite ore	–	0.2	26.1	0.01	0.01	tr.	1.26	1.38	14.2
017	AR054h		brecciated, black limestone with calcite	–	6.0	14.7	tr.	0.02	0.01	1.22	–	–
018	AR058a	Nam Loong	light brown-coloured clay ore	–	0.2	tr.	tr.	0.01	0.01	tr.	–	–
019	AR058b		vein calcite in clay ore	–	4.2	16.2	tr.	0.03	0.01	0.17	–	–
020	AR059c		clay ore	–	65.2	43.8	tr.	tr.	0.01	5.71	–	–
021	AR059d		clay ore	–	2.4	tr.	0.01	0.01	0.04	tr.	–	–
022	AR061a	Bidi South	sb-quartz ore	–	69.6	29.1	0.01	0.03	0.01	1.36	1.91	–
023	AR061b		sb-arsenic ore	–	20.4	89.8	tr.	1.09	0.10	1.78	–	–
024	AR062a	Rumoh	clay ore	–	6.0	124.0	0.03	0.25	0.06	0.01	–	–
025	AR063b		black banded vein calcite	–	5.5	tr.	tr.	0.01	0.02	0.14	–	–
026	AR065a	Lucky Hill A	sb-rich calcite vein	0.2	6.0	35.2	0.01	tr.	0.04	53.92	–	–
027	AR065c		sb-rich calcite vein	0.4	14.1	150.0	tr.	tr.	0.01	36.02	2.03	–
028	AR069a		fine-grained sb-epidote ore	–	7.6	21.7	0.01	0.03	0.01	4.61	1.70	–
029	AR069d		sarabauite and stibnite ore	–	3.6	8.1	tr.	tr.	0.01	11.90	2.81	–
030	AR070a	Lucky Hill B	massive stibnite ore	–	15.3	148.0	0.02	tr.	0.05	15.38	1.65	–
031	AR070b		sb-wollastonite-calcite ore	–	5.1	17.6	tr.	tr.	0.02	14.02	–	–
032	AR083a	Tai Ton A	sb-realgar-calcite vein	–	17.5	tr.	tr.	tr.	0.01	0.07	10.32	–
033	AR083b		black mineral-calcite vein	–	14.9	tr.	tr.	0.05	tr.	0.14	–	–
034	AR0084		stibnite rich, arsenic ore	–	8.2	1.6	tr.	tr.	0.01	1.01	–	–
035	AR0086	Tai Ton B	black calcite vein	–	1.1	tr.	tr.	tr.	0.01	tr.	–	–
036	AR0087		brown clay ore	–	5.7	7.0	0.03	0.02	0.10	0.04	–	–
037	AR0089		clay ore	–	13.8	19.0	0.03	0.67	0.11	0.20	–	–
038	AR0090		big crystal calcite vein	1.5	8.4	tr.	tr.	tr.	tr.	tr.	–	–
039	AR0091		big crystal calcite vein	1.5	1.4	tr.	tr.	0.01	tr.	tr.	–	–
040	AR0092		big crystal calcite vein	2.5	1.1	tr.	tr.	0.01	tr.	tr.	–	–
041	AR0093		big crystal calcite vein	2.5	1.8	tr.	tr.	0.01	tr.	0.01	–	–
042	AR0094	Saburan	calcite-quartz bein	1.0	9.7	tr.	tr.	0.01	tr.	tr.	–	–
043	AR0098		py-aspy in black vein calcite	–	77.6	8.1	tr.	0.02	tr.	tr.	1.53	17.3
044	AR0100		py-aspy in black limestone	–	5.9	tr.	tr.	0.02	tr.	0.04	1.04	48.0
045	AR0101		red-cotoured ore	–	1.6	tr.	tr.	0.05	0.01	0.04	–	–
046	AR0103	Lucky Hill A	sb-py-calcite vein	–	4.2	27.5	tr.	0.26	0.06	0.36	0.37	–
047	BR0003	S. of Bt. Bekajang Lake	py-sb-aspy-calcite vein	–	33.2	85.0	0.03	0.65	0.90	0.33	3.98	–
048	BR0007	Ban Him Lee	fibrous stibnite in brecciated l.s.	–	8.9	3.3	tr.	0.01	0.01	0.04	5.43	–
049	BR0008	Pejiru	py-calcite-quartz vein	–	3.2	3.2	tr.	0.04	tr.	0.12	–	–
050	BR0009		quartz, calcite and pyrite ore	–	7.6	tr.	tr.	0.01	0.02	0.04	–	–
051	BR0017	G. Tabai	black calcite ore	–	1.1	tr.	tr.	0.03	0.03	0.01	–	–
052	BR0020		py-calcite-quartz vein	–	11.7	37.6	0.03	0.72	0.84	0.07	–	–
053	AR0075	G. Sirrenggok	py rich ore in sandstone	–	0.2	6.5	0.02	0.02	1.90	tr.	–	–
054	AR0078	boulder(near Jambusan)	py rich ore in conglomerate	–	0.2	tr.	tr.	tr.	tr.	tr.	–	–
055	JR0011	Tegora	gray, muddy rock with cinnaber	–	tr.	tr.	0.01	tr.	tr.	0.06	0.78	23100
056	SR0061	Gadin	py-realgar in brecciated zone	–	0.2	tr.	tr.	tr.	0.01	0.51	1.62	–
057	SR0075	SW of Bt. Skunyit	sb-patch in gangue	–	0.4	1.6	tr.	tr.	tr.	8.49	–	–

Abbreviations:
sb : stibnite, py : pyrite, zb : zineblende, ga : galena, aspy : arsenopyrite

Appendix 3 Analytical Results of Rock and Ore Samples, Pahse II

Ser No.	Sample No.	Name of Mineral Showing	Ore Type	Macroscopic Feature	Sampling Width(m)	Au g/t	Ag g/t	Sb %	Cu %	Pb %	Zn %	Mo %
001	AR0358	G.Krian No.1	Vein quartz	quartz vein	--	9.17	19.1	--	--	--	--	--
002	AR0359	G.Krian No.1	Stibnite ore	sb-quartz-calcite vein	--	6.30	79.5	1.17	--	--	--	--
003	AR0361	G.Krian No.1	Stibnite ore	sb-quartz-calcite vein	--	9.10	30.6	0.07	--	--	--	--
004	AR0362	G.Krian No.2	Vein calcite	calcite vein	--	20.00	12.6	--	--	--	--	--
005	AR0399	G.Krian No.4	Quartz vein (Channel)	quartz dominant part in vein	1.70	2.30	10.8	--	--	--	--	--
006	AR0340	G.Krian No.4	Calcite vein(Channel)	calcite dominant part in vein	0.50	tr.	tr.	--	--	--	--	--
007	AR0341	G.Krian No.4	Calcite vein (Channel)	calcite vein with quartz veinlets	2.10	1.10	3.3	--	--	--	--	--
008	AR0342	G.Krian No.4	Calcite vein (Channel)	calcite vein with quartz network	2.50	0.70	0.70	--	--	--	--	--
009	AR0343	G.Krian No.4	Vein calcite	calcite vein with quartz veinlets	--	4.17	9.3	--	--	--	--	--
010	AR0344	G.Krian No.4	Vein quartz	quartz vein in limestone	--	1.60	3.8	--	--	--	--	--
011	AR0345	G.Krian No.4	Vein quartz	quartz vein	--	1.00	1.7	--	--	--	--	--
012	AR0346	G.Krian No.4	Vein quartz	quartz vein	--	2.00	34.0	--	--	--	--	--
013	AR0347	G.Krian No.4	Vein calcite	calcite vein with quartz network	--	2.75	2.4	--	--	--	--	--
014	AR0348	G.Krian No.4	Vein calcite	quartz vein network with calcite	--	1.83	0.9	--	--	--	--	--
015	AR0350	G.Krian No.5	Quartz vein (Channel)	quartz vein network with calcite	0.20	0.20	1.7	--	--	--	--	--
016	AR0351	G.Krian No.5	Calcite vein (Channel)	calcite vein with quartz	0.80	0.50	2.4	--	--	--	--	--
017	AR0352	G.Krian No.5	Calcite vein (Channel)	calcite vein with quartz	2.00	0.75	3.7	--	--	--	--	--
018	AR0353	G.Krian No.5	Vein quartz	quartz vein	--	23.00	20.2	--	--	--	--	--
019	AR0354	G.Krian No.5	Calcite vein (Channel)	white calcite	0.80	tr.	tr.	--	--	--	--	--
020	AR0355	G.Krian No.5	Vein calcite	black calcite vein	--	3.17	4.0	--	--	--	--	--
021	AR0356	G.Krian No.5	Vein quartz	quartz vein with calcite	--	0.63	1.4	--	--	--	--	--
022	AR0357	G.Krian No.5	Vein quartz	quartz vein with calcite	--	3.00	8.2	--	--	--	--	--
023	AR0363	G.Krian No.7	Calcite vein (Channel)	quartz-calcite vein with purite	1.00	tr.	tr.	--	--	--	--	--
024	AR0368	G.Krian No.8	Calcite vein (Channel)	calcite vein with a little stibnite	0.80	0.80	8.8	0.01	--	--	--	--
025	AR0369	G.Krian No.8	Clay	black gossanized clay	--	26.25	29.27	--	--	--	--	--
026	AR0370	G.Krian No.8	Calcite vein	calcite vein with stibnite streak	--	4.00	6.1	1.75	--	--	--	--
027	AR0349	G.Krian No.9	Stibnite ore	sb-quartz-calcite vein	--	2.33	3.2	--	--	--	--	--
028	AR0376	G.Bau No.1	Calcite vein (Channel)	quartz-calcsilicate-calcite vein	0.90	0.20	0.2	0.39	--	--	--	--
029	AR0378	G.Bau No.1	C-S vein (Channel)	calcsilicate vein with stibnite	0.80	tr.	tr.	0.55	--	--	--	--
030	AR0380	G.Bau No.1	C-S vein (Channel)	calcsilicate-quartz dominant part	0.50	1.43	0.9	--	--	--	--	--
031	AR0381	G.Bau No.1	C-S vein (Channel)	quartz-calcsilicate vein with stibnite	0.40	7.50	0.5	0.83	--	--	--	--
032	AR0382	G.Bau No.1	C-S vein (Channel)	quartz-calcsilicate vein with stibnite	0.20	6.00	7.1	--	--	--	--	--
033	AR0383	G.Bau No.1	Stibnite ore	sb-quartz-calcsilicate vein	--	5.71	1.2	--	--	--	--	--
034	AR0384	G.Bau No.1	C-S vein (Channel)	quartz-calcsilicate vein with stibnite	1.00	21.00	36.4	--	--	--	--	--
035	AR0385	G.Bau No.1	Stibnite ore	sb-quartz-calcsilicate vein	--	11.67	4.2	--	--	--	--	--
036	AR0402	G.Arong Bakit A No.1	C-S vein (Channel)	calcite-calcsilicate vein	0.80	5.75	0.8	--	--	--	--	--
037	AR0403	G.Arong Bakit A No.1	C-S vein (Channel)	calcite-calcsilicate vein	0.80	1.83	0.5	--	--	--	--	--
038	AR0406	G.Arong Bakit A No.2	Stibnite ore	stibnite-arsenic streak in marble	--	7.50	2.4	--	--	--	--	--
039	AR0407	G.Arong Bakit A No.2	Stibnite ore	stibnite-arsenic streak in marble	--	7.80	7.8	--	--	--	--	--
040	AR0408	G.Arong Bakit A No.2	Stibnite ore	sb-as-mag veinlet	--	8.60	9.5	--	--	--	--	--
041	AR0410	G.Arong Bakit A No.3	Vein calcite	calcsilicate-calcite vein	--	4.75	10.8	--	--	--	--	--
042	AR0412	G.Arong Bakit B No.1	Calcite vein (Channel)	quartz-calcsilicate-calcite vein	1.50	4.70	26.4	--	--	--	--	--
043	AR0413	G.Arong Bakit B No.1	Calcite vein (Channel)	quartz-calcsilicate-calcite vein	1.70	1.80	11.3	--	--	--	--	--
044	AR0414	G.Arong Bakit B No.1	Calcite vein (Channel)	calcite vein with quartz	2.00	0.50	3.7	--	--	--	--	--
045	AR0415	G.Arong Bakit B No.1	Wollastonite ore	banded, wollastonite-quartz vein	--	3.33	1.4	--	--	--	--	--
046	AR0416	G.Arong Bakit B No.1	Wollastonite ore	wollastonite-quartz vein	--	1.80	1.9	--	--	--	--	--
047	AR0417	G.Arong Bakit B No.1	C-S vein	banded quartz-calcsilicate vein	--	1.90	25.5	--	--	--	--	--
048	AR0419	G.Arong Bakit B No.2	C-S vein (Channel)	quartz-calcsilicate vein	2.20	123.90	58.9	--	--	--	--	--
049	AR0420	G.Arong Bakit B No.2	C-S vein (Channel)	brittle quartz-calcsilicate vein	1.30	1.20	5.5	--	--	--	--	--
050	AR0421	G.Arong Bakit B No.2	C-S vein (Channel)	quartz-calcsilicate vein	0.50	26.00	34.0	--	--	--	--	--

Ser No.	Sample No.	Name of Mineral Showing	Ore Type	Macroscopic Feature	Sampling Width(m)	Au g/t	Ag g/t	Sb %	Cu %	Pb %	Zn %	Mo %
051	AR0422	G.Arong Bakit B No.2	C-S vein (Channel)	brittle quartz-calcsilicate vein	1.00	0.10	0.3	–	–	–	–	–
052	AR0423	G.Arong Bakit B No.2	C-S vein	quartz-calcsilicate vein	–	1,197.00	973.8	–	–	–	–	–
053	AR0424	G.Arong Bakit B No.2	Vein quartz	calcsilicate-quartz vein	–	16.00	62.4	–	–	–	–	–
054	AR0425	G.Arong Bakit B No.2	C-S vein	calcsilicate-rich vein	–	3.88	9.1	–	–	–	–	–
055	AR0444	G.Arong Bakit B No.3	C-S vein (Channel)	quartz-calcsilicate vein	0.60	1.17	0.5	–	–	–	–	–
056	AR0446	G.Arong Bakit B No.3	C-S vein (Stocked)	quartz-calcsilicate vein		tr.	tr.	–	–	–	–	–
057	BR0330	Saburan	Limestone	with much calcite veinlet	0.80	0.38	0.9	–	–	–	–	–
058	BR0331	Saburan	Limestone	black limestone with calcite veinlet	0.80	0.67	1.1	–	–	–	–	–
059	BR0332	Saburan	Gossan zone (Channel)	gossan zone in calcite vein	0.05	5.17	3.7	–	–	–	–	–
060	BR0333	Saburan	Limestone	black, argillaceous	–	22.86	3.9	–	–	–	–	–
061	BR0334	Saburan	Calcite vein (Channel)	calcite vein with gossan	0.05	tr.	tr.	–	–	–	–	–
062	BR0335	Saburan	Clay zone (Channel)	brown clay with gossan	0.20	15.43	109.2	–	–	–	–	–
063	BR0336	Saburan	Calcite vein (Channel)	with gossan and clay	0.20	4.50	0.7	–	–	–	–	–
064	BR0337	Saburan	Calcite vein (Channel)	with gossan and a little clay	0.20	tr.	tr.	–	–	–	–	–
065	BR0338	Saburan	Calcite vein (Channel)	with gossan and clay	0.15	6.33	7.0	–	–	–	–	–
066	BR0339	Saburan	Gossan zone (Channel)	with calcite and clay	0.20	60.67	31.1	–	–	–	–	–
067	BR0340	Saburan	Calcite vein (Channel)	with gossan and clay	0.15	tr.	tr.	–	–	–	–	–
068	BR0341	Saburan	Limestone (Channel)	black, with calcite vein and gossan	3.00	0.20	0.2	–	–	–	–	–
069	BR0342	Saburan	Calcite vein (Channel)	white, large crystal	1.50	3.29	3.7	–	–	–	–	–
070	BR0343	Saburan	Bossan zone (Channel)	with clay in cavity of calcite vein	0.10	11.00	3.5	–	–	–	–	–
071	BR0345	Saburan	Limestone (Channel)	with calcite vein	0.60	11.56	16.1	–	–	–	–	–
072	BR0346	Saburan	Limestone	with calcite veinlet and gossan	–	tr.	tr.	–	–	–	–	–
073	BR0347	Saburan	Limestone	with calcite veinlets	–	tr.	tr.	–	–	–	–	–
074	BR0348	Saburan	Calcite vein (Channel)	of large calcite crystal	0.25	2.50	0.5	–	–	–	–	–
075	BR0349	Saburan	Calcite vein (Channel)	with gossan and brown clay	0.50	tr.	tr.	–	–	–	–	–
076	BR0350	Saburan	Limestone (Channel)	with calcite vein	1.20	1.75	7.4	–	–	–	–	–
077	BR0351	Saburan	Calcite vein (Channel)	with gossan and clay	1.50	7.00	9.7	–	–	–	–	–
078	BR0352	Saburan	Limestone (Channel)	with calcite vein	2.00	11.50	2.6	–	–	–	–	–
079	BR0354	Saburan	Limestone	with many calcite veinlets	–	0.50	0.9	–	–	–	–	–
080	BR0355	Saburan	Vein calcite	with gossan and clay	0.15	tr.	tr.	–	–	–	–	–
081	BR0356	Saburan	Calcite vein (Channel)	with gossan and brown clay	0.90	22.00	19.6	–	–	–	–	–
082	BR0357	Saburan	Limestone (Channel)	with calcite vein	1.50	2.86	0.9	–	–	–	–	–
083	BR0358	Saburan	Limestone (Channel)	with much arsenic mineral and calcite	2.00	21.50	8.9	–	–	–	–	–
084	BR0359	Saburan	Limestone	argillaceous	–	0.63	0.4	–	–	–	–	–
085	BR0360	Saburan	Limestone (Channel)	with calcite vein	2.00	tr.	tr.	–	–	–	–	–
086	BR0361	Saburan	Realgar ore	in black limestone	–	9.50	8.2	–	–	–	–	–
087	BR0362	Saburan	Calcite vein (Channel)	of white calcite crystal	–	tr.	tr.	–	–	–	–	–
088	BR0363	Saburan	Calcite vein (Channel)	with gossan and clay	0.80	tr.	tr.	–	–	–	–	–
089	BR0364	Saburan	Limestone (Channel)	black, with calcite vein	1.50	38.00	0.7	–	–	–	–	–
090	BR0365	Saburan	Limestone	with calcite vein, gossan and clay	–	1.00	0.3	–	–	–	–	–
091	BR0366	Saburan	Gossan	with calcite and clay	–	1.90	1.8	–	–	–	–	–
092	BR0367	Saburan	Clay (Stocked)	pinkish, with calcite and gossan	–	22.50	6.4	–	–	–	–	–
093	BR0368	Saburan	Clay (Stocked)	pinkish, with calcite and gossan	–	tr.	tr.	–	–	–	–	–
094	BR0369	Saburan	Clay (Stocked)	pinkish, with calcite and gossan	–	2.95	6.8	–	–	–	–	–
095	BR0370	Saburan	Limestone (Channel)	black, with calcite vein	0.80	2.50	9.7	–	–	–	–	–
096	BR0371	Saburan	Limestone (Channel)	black, with calcite vein	1.00	3.17	0.2	–	–	–	–	–
097	BR0372	Saburan	Limestone (Channel)	black, with calcite vein	1.20	2.75	5.0	–	–	–	–	–
098	BR0373	Saburan	Limestone (Channel)	black, with calcite vein	1.30	4.13	3.3	–	–	–	–	–
099	BR0374	Saburan	Limestone (Channel)	black, with calcite network vein	0.60	7.86	10.0	–	–	–	–	–
100	BR0375	Saburan	Limestone (Channel)	black, with calcite vein	0.70	6.38	9.1	–	–	–	–	–

Ser No.	Sample No.	Name of Mineral Showing	Ore Type	Macroscopic Feature	Sampling Width(m)	Au g/t	Ag g/t	Sb %	Cu %	Pb %	Zn %	Mo %
101	BR0376	Saburan	Fault breccia (Channel)	with some clay	0.20	1.63	4.9	–	–	–	–	–
102	BR0377	Saburan	Limestone (Channel)	black, with calcite vein	0.80	1.50	7.1	–	–	–	–	–
103	BR0378	Saburan	Calcite vein (Channel)	with some black limestone	1.20	0.13	0.7	–	–	–	–	–
104	BR0379	Saburan	Calcite vein (Channel)	with some black limestone	1.10	0.25	0.8	–	–	–	–	–
105	BR0380	Saburan	Limestone (Channel)	black, with calcite vein	1.00	1.20	2.9	–	–	–	–	–
106	BR0381	Saburan	Limestone (Channel)	black, with calcite vein	1.50	tr.	tr.	–	–	–	–	–
107	BR0382	Saburan	Limestone (Channel)	black, with calcite veinlet	1.00	2.00	1.3	–	–	–	–	–
108	BR0383	Saburan	Limestone (Channel)	black, with calcite vein	1.10	1.33	2.1	–	–	–	–	–
109	BR0384	Saburan	Limestone (Channel)	black, with calcite vein	0.70	6.80	1.3	–	–	–	–	–
110	BR0385	Saburan	Limestone	black, with calcite vein and gossan	–	3.33	0.7	–	–	–	–	–
111	AR0448	G.Saburan No.1	C-S vein	quartz-calcite-calcsilicate vein	–	1.50	0.2	–	–	–	–	–
112	AR0449	G.Saburan No.1	C-S vein	banded quartz-calcsilicate vein with sb	–	tr.	tr.	–	–	–	–	–
113	AR0439	G.Saburan No.2	C-S vein (Channel)	quartz-calcsilicate vein	1.60	12.00	104.0	–	–	–	–	–
114	*AR0440*	*G.Saburan No.2*	*C-S vein (Channel)*	*quartz-calcsilicate vein*	*0.60*	*3.83*	*2.6*	–	–	–	–	–
115	AR0441	G.Saburan No.2	Calcsilicate ore	banded, quartz-calcsilicate vein	–	14.00	60.0	–	–	–	–	–
116	AR0426	G.Tai Ton No.1	Calcite vein (Channel)	quartz-calcite vein with clay	3.00	20.67	37.8	–	–	–	–	–
117	AR0427	G.Tai Ton No.1	Calcite vein (Channel)	quartz-calcite vein with clay	2.60	tr.	tr.	–	–	–	–	–
118	AR0430	G.Tai Ton No.1	Gossanized clay	black, gossanized clay	–	13.00	9.8	–	–	–	–	–
119	AR0431	G.Tai Ton No.1	Clay	light gray clay with calcite	–	17.50	7.9	–	–	–	–	–
120	AR0432	G.Tai Ton No.1	Vein calcite	calcite vein with drusy quartz	–	11.83	41.8	–	–	–	–	–
121	AR0434	G.Tai Ton No.2	Calcite vein (Channel)	weathered calcite vein with clay	1.00	10.50	31.0	–	–	–	–	–
122	AR0435	G.Tai Ton No.3	Clay	reddish brown clay	–	1.00	1.5	–	–	–	–	–
123	AR0436	G.Tai Ton No.4	Calcite vein (Channel)	calcite vein with a few quartz	1.50	7.50	5.3	–	–	–	–	–
124	AR0438	G.Tai Ton No.5	Calcite vein	calcite vein with a few quartz	–	27.00	14.2	–	–	–	–	–
125	BR0402	G.Siriung	Calcite vein (Channel)	with gossan	–	3.60	1.1	–	–	–	–	–
126	BR0403	G.Siriung	Calcite vein (Channel)	with gossan	0.10	1.00	1.1	–	–	–	–	–
127	BR0404	G.Siriung	Calcite vein (Channel)		–	1.13	0.4	–	–	–	–	–
128	BR0405	G.Siriung	Calcite vein (Channel)	with gossan	1.00	2.20	1.1	–	–	–	–	–
129	BR0406	Rumoh	Calcite vein (Channel)	large crystal, with gossan	1.00	1.67	26.9	–	–	–	–	–
130	BR0407	Rumoh	Calcite vein (Channel)	large crystal, white and black	1.80	10.63	2,626.2	–	–	–	–	–
131	BR0408	Rumoh	Calcite vein (Channel)	large crystal, with white clay	0.15	0.83	0.5	–	–	–	–	–
132	BR0409	Rumoh	Limestone (Channel)	with calcite veinlet	0.15	0.50	0.5	–	–	–	–	–
133	BR0410	Rumoh	Limestone	with calcite network	–	3.00	31.5	–	–	–	–	–
134	BR0411	Rumoh	Limestone	with calcite vein	–	1.40	36.3	–	–	–	–	–
135	BR0412	Rumoh	Gossan	with calcite and clay	–	tr.	tr.	–	–	–	–	–
136	BR0413	Rumoh	Limestone (Channel)	with calcite veinlet and gossan	–	0.90	2.4	–	–	–	–	–
137	*BR0414*	*Rumoh*	*Limestone (Channel)*	*with calcite veinlet and gossan*	*1.20*	*1.50*	*0.7*	–	–	–	–	–
138	BR0415	Rumoh	Bossan zone (Channel)	with calcite vein and clay	1.00	tr.	tr.	–	–	–	–	–
139	BR0416	Rumoh	Calcite vein (Channel)	sporadically gossanized	–	0.75	1.8	–	–	–	–	–
140	BR0417	Rumoh	Vein calcite	black, large crystal	–	2.50	1.6	–	–	–	–	–
141	BR0418	Rumoh	Limestone	with calcite veinlet	–	0.88	0.7	–	–	–	–	–
142	BR0419	Rumoh	Calcite vein (Channel)	black, with large crystal calcite	1.50	tr.	tr.	–	–	–	–	–
143	BR0420	Rumoh	Gossan zone (Channel)	with black calcite and clay	0.45	1.83	13.8	–	–	–	–	–
144	BR0421	Rumoh	Calcite vein (Channel)	black, with gossanized clay	0.30	5.50	19.4	–	–	–	–	–
145	BR0422	Rumoh	Clay zone (Channel)	white, with gossan and calcite	0.70	10.75	4.5	–	–	–	–	–
146	BR0423	Rumoh	Calcite vein (Channel)	balck and white calcite, with gossan	1.00	2.83	0.9	–	–	–	–	–
147	BR0424	Rumoh	Calcite vein (Channel)	black calcite, with gossanized clay	0.80	2.50	20.0	–	–	–	–	–
148	BR0425	Rumoh	Gossan zone (Channel)	with black calcite and clay	1.20	3.20	5.0	–	–	–	–	–
149	BR0426	Rumoh	Calcite vein (Channel)	black and white calcite	0.50	1.00	17.4	–	–	–	–	–
150	BR0427	Rumoh	Calcite vein (Channel)	black calcite	0.20	0.83	38.3	–	–	–	–	–

Ser No.	Sample No.	Name of Mineral Showing	Ore Type	Macroscopic Feature	Sampling Width(m)	Au g/t	Ag g/t	Sb %	Cu %	Pb %	Zn %	Mo %
151	BR0428	Rumoh	Quartz vein (Channel)	dog tooth-shaped	0.15	1.67	7.0	--	--	--	--	--
152	BR0464	Rumoh	Calcite vein (Channel)	black clacite with gossan	1.20	tr.	tr.	--	--	--	--	--
153	BR0465	Rumoh	Calcite vein (Channel)	black calcite with gossan	2.00	tr.	tr.,	--	--	--	--	--
154	BR0466	Rumoh	Calcite vein (Channel)	black calcite with gossan	1.20	tr.	tr.	--	--	--	--	--
155	BR0467	Rumoh	Calcite vein (Channel)	black calcite dominant	1.00	4.67	7.7	--	--	--	--	--
156	BR0468	Rumoh	Calcite vein (Channel)	large white crystal dominant	1.20	0.71	3.7	--	--	--	--	--
157	BR0469	Rumoh	Calcite vein (Channel)	large white crystal with gossan	0.70	2.14	2.2	--	--	--	--	--
158	BR0470	Rumoh	Vein quartz-calcite	white calcite with gossan and clay	--	tr.	tr.	--	--	--	--	--
159	BR0471	Rumoh	Vein quartz	dog tooth-shaped, in druse	--	2.67	393.4	--	--	--	--	--
160	BR0472	Rumoh	Vein quartz	dog tooth-shaped, in druse	--	1.67	2.8	--	--	--	--	--
161	BR0473	Rumoh	Vein calcite	large crystal white calcite dominant	--	0.20	0.8	--	--	--	--	--
162	BR0474	Rumoh	Calcite vein (Channel)	black calcite with gossan and clay	2.50	2.80	11.3	--	--	--	--	--
163	BR0475	Rumoh	Calcite vein (Channel)	black calcite with gossan and clay	--	2.50	15.8	--	--	--	--	--
164	BR0476	Rumoh	Calcite vein (Channel)	black calcite with gossan and clay	1.50	tr.	tr.	--	--	--	--	--
165	BR0477	Rumoh	Calcite vein (Channel)	black calcite with gossan	2.00	1.88	10.1	--	--	--	--	--
166	BR0478	Rumoh	Calcite vein (Channel)	black calcite with gossan and clay	1.00	0.10	0.5	--	--	--	--	--
167	BR0479	Rumoh	Stalactite (Channel)	bedded, occurs in cave	0.50	tr.	tr.	--	--	--	--	--
168	BR0480	Rumoh	Calcite vein (Channel)	black calcite with gossan and clay	2.00	0.70	0.7	--	--	--	--	--
169	BR0481	Rumoh	Limestone	with abundant of calcite veinlet	--	tr.	tr.	--	--	--	--	--
170	BR0482	Rumoh	Calcite vein (Channel)	black calcite with gossan and clay	1.00	68.30	48.4	--	--	--	--	--
171	BR0483	Rumoh	Limestone (Channel)	with abundant of calcite veinlet	1.50	0.88	1.2	--	--	--	--	--
172	BR0484	Rumoh	Calcite vein (Channel)	black calcite with gossan and clay	0.60	0.50	1.2	--	--	--	--	--
173	AR0456	B.Juala South	Galena ore (Float)	high grade ga-zb ore	--	1.00	166.5	--	0.49	26.96	2.55	--
174	BR0387	G.Tongga	Sulphide ore (Channel)	of cp-zb-py-ga	--	7.50	102.8	--	0.33	8.34	5.19	--
175	BR0389	G.Tongga	Gossan zone (Channel)	gossan zone,	0.80	1.25	3.2	--	--	--	--	--
176	BR0390	G.Tongga	Clay zone (Channel)	brown clay zone	0.08	2.20	2.7	--	--	--	--	--
177	BR0391	G.Tongga	Gossan zone (Channel)	gossan with clay	0.15	19.25	117.9	--	--	--	--	--
178	BR0392	G.Tongga	Calcite vein (Channel)	calcite vein,	0.50	tr.	tr.	--	--	--	--	--
179	BR0393	G.Tongga	Gossan zone (Channel)	gossan with clay	1.00	18.75	119.4	--	--	--	--	--
180	BR0394	G.Tongga	Sulphide ore (Channel)	of cp-py-zb-ga	--	21.10	158.9	--	0.62	15.20	8.86	--
181	BR0491	Bekajang West	Vein quartz	ga-calcite-quartz vein in limestone	--	1.00	157.1	--	0.05	9.32	2.83	--
182	BR0501	Bekajang West	Shale	silicified, with py-quartz vein	--	2.41	12.0	--	0.01	0.08	0.05	--
183	BR0502	Bekajang West	Quartz vein	in silicified shale	--	0.50	0.7	--	--	--	--	--
184	BR0507	Bekajang West	Shale	silicified, with zb-ga-py-quartz vein	--	6.00	71.2	--	0.07	0.43	0.90	--
185	YR0347	Jambusan A	Limestone	altered limestone	--	tr.	tr.	--	--	--	--	--
186	AR0317	Jambusan B	Vein calcite	calcite vein	--	0.67	0.7	--	--	--	--	--
187	YR0350	Jambusan B	Stibnite ore	with pyrite, arsenopyrite and clay	--	tr.	tr.	14.61	--	--	--	--
188	YR0351	Jambusan B	Silicified rock	highly silicified rock with quartz vein	--	1.17	2.3	--	--	--	--	--
189	YR0352	Jambusan B	Stibnite ore	with pyrite, arsenopyrite	--	0.40	0.4	8.08	--	--	--	--
190	YR0353	Jambusan B	Silicified rock	highly silicified rock with quartz vein	1.50	0.63	3.0	--	--	--	--	--
191	YR0354	Jambusan B	Silicified rock	highly silicified rock with quartz vein	--	3.90	2.6	--	--	--	--	--
192	AR0301	G.Ropih	Quartz porphyry	silicified, with quartz veinlets	--	tr.	tr.	--	0.07	--	--	0.012
193	AR0371	G.Ropih	Quartz porphyry	with mo-cp-py-quartz veinlets	--	tr.	tr.	--	0.04	--	--	0.004
194	AR0373	G.Ropih	Vein quartz (Float)	barren quartz vein	--	tr.	tr.	--	0.01	--	--	tr.
195	AR0374	G.Ropih	Quartz porphyry	with cp-py-quartz veinlets	--	tr.	tr.	--	0.08	--	--	tr.
196	AR0460	G.Ropih	Quartz porphyry	with many quartz veinlets	--	0.10	0.3	--	0.12	--	--	0.004
197	AR0464	G.Ropih	Quartz porphyry	silicified, with quartz veinlets	--	tr.	tr.	--	0.09	--	--	0.003
198	AR0465	G.Ropih	Quartz porphyry	with py-malachite quartz veinlets	--	0.20	0.4	--	0.15	--	--	0.005
199	AR0470	G.Ropih	Quartz porphyry	highly weathered, with quartz veinlets	--	tr.	tr.	--	0.01	--	--	tr.
200	JR0339	G.Ropih	Quartz porphyry	chloritized, silicified, cp-diss.	--	0.10	0.5	--	0.23	--	--	0.008

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201	JR0340	G.Ropih	Quartz porphyry	with mo-chlorite-quartz veinlet	--	tr.	tr.	--	0.03	--	--	0.010
202	JR0341	G.Ropih	Vein quartz	with mo-aggregates, in quartz porphyry	--	tr.	tr.	--	0.01	--	--	0.127
203	JR0343	G.Ropih	Quartz-porphyry	silicified, with cp-quartz veinlet	--	0.20	1.3	--	0.08	--	--	0.002
204	JR0346	G.Ropih	Quartz porphyry	with mo-chlorite-quartz veinlet	--	tr.	tr.	--	0.05	--	--	0.009
205	JR0350	G.Ropih	Vein quartz	with chalcopyrite and molybdenite	--	tr.	tr.	--	0.05	--	--	0.004
206	JR0351	G.Ropih	Quartz porphyry	silicified, with mal-quartz veinlet	--	tr.	tr.	--	0.14	--	--	0.001
207	AR0386	Tai Ton B	Quartz vein (Channel)	black sil. lenticular zone with sb	0.20	36.70	2.4	1.29	--	--	--	--
208	AR0387	Tai Ton B	Calcite vein (Channel)	white calcite rich part in vein	0.80	0.10	0.1	0.02	--	--	--	--
209	AR0388	Tai Ton B	Calcite vein (Channel)	white calcite rich part in vein	1.20	tr.	tr.	0.02	--	--	--	--
210	AR0389	Tai Ton B	Stibnite ore	sb-ore in black sil. lenticular zone	--	9.80	1.9	5.78	--	--	--	--
211	AR0390	Tai Ton B	Gossanized clay	gossanized clay part in calcite vein	--	15.83	24.3	--	--	--	--	--
212	AR0392	Tai Ton B	Calcite vein (Channel)	calcite rich part in vein	0.40	tr.	tr.	0.04	--	--	--	--
213	AR0393	Tai Ton B	Stibnite ore	black fine-grained quartz with sb	--	9.20	5.5	--	--	--	--	--
214	AR0395	Tai Ton B	Stibnite ore	sb-quartz veinlets in calcite vein	--	5.10	1.6	0.01	--	--	--	--
215	AR0396	Tai Ton B	Gossanized clay	gossanized clay in calcite vein	--	18.00	14.7	--	--	--	--	--
216	AR0397	Tai Ton B	Vein quartz	drusy quartz veinlets in calcite vein	--	11.25	28.6	--	--	--	--	--
217	AR0399	Tai Ton B	Stibnite ore	sb with black lenticular quartz	--	21.10	2.2	3.16	--	--	--	--
218	AR0400	Tai Ton B	Vein quartz	drusy quartz with calcite	--	1.33	21.3	--	--	--	--	--
219	AR0401	Tai Ton B	Stibnite ore	drusy quartz veinlets with sb-realgar	--	17.67	39.6	--	--	--	--	--
220	BR0449	Nanui A	Vein calcite	of large white crystal	--	2.67	1.4	--	--	--	--	--
221	BR0450	Nanui A	Calcite vein (Channel)	white, with black calcite and gossan	1.20	0.86	1.2	--	--	--	--	--
222	BR0451	Nanui A	Calcite vein (Channel)	black, with gossan	1.00	tr.	tr.	--	--	--	--	--
223	BR0452	Nanui A	Limestone (Channel)	gray, with calcite vein	1.50	4.00	2.5	--	--	--	--	--
224	BR0453	Nanui A	Calcite vein (Channel)	black, with gossan and clay	1.00	2.30	14.2	--	--	--	--	--
225	BR0454	Nanui A	Calcite vein (Channel)	of large white crystal	0.80	0.60	1.5	--	--	--	--	--
226	BR0455	Nanui A	Calcite vein (Channel)	of large crystal, white and black	1.20	1.50	6.4	--	--	--	--	--
227	BR0456	Nanui A	Calcite vein (Channel)	of large white crystal, with magnetite	1.20	1.67	5.3	--	--	--	--	--
228	BR0457	Nanui A	Vein calcite	black colored	--	1.83	11.4	--	--	--	--	--
229	BR0458	Nanui A	Limestone (Channel)	with calcite vein	1.00	tr.	tr.	--	--	--	--	--
230	BR0459	Nanui A	Limestone	with calcite vein	--	tr.	tr.	--	--	--	--	--
231	BR0460	Nanui A	Limestone (Channel)	with calcite network	0.80	tr.	tr.	--	--	--	--	--
232	BR0488	Nanui B	Calcite vein (Channel)	large white crystal	0.50	tr.	tr.	--	--	--	--	--
233	BR0489	Nanui B	Calcite vein (Channel)	white and black large crystal	1.20	1.20	0.8	--	--	--	--	--
234	BR0490	Nanui B	Calcite vein (Channel)	white and black large crystal	1.00	tr.	tr.	--	--	--	--	--
235	BR0485	Bidi South	Quartz vein (Channel)	with calcite containning asp-real-sb	--	31.90	12.3	0.71	--	--	--	--
236	BR0486	Bidi South	Dacite	dyke, highly argillized	--	1.50	5.3	--	--	--	--	--
237	BR0487	Bidi South	Quartz vein (Waste)	real-sb found in druse	--	5.71	27.4	0.27	--	--	--	--
238	BR0461	Nam Long	Clay (Stocked)	brown clay and gossan	--	11.25	11.3	--	--	--	--	--
239	BR0462	Nam Long	Clay (Stocked)	brown clay and gossan	--	19.20	14.3	--	--	--	--	--
240	BR0463	Nam Long	Vein calcite (Stocked)	black calcite with gossan and clay	--	tr.	tr.	--	--	--	--	--
241	HR0251	Other Places	Orpiment ore	vuggy quartz-orpiment ore	--	7.57	4.3	--	--	--	--	--
242	HR0252	Other Places	Siliceous rock	black, siliceous	--	5.33	1.1	--	--	--	--	--
243	HR0253	Other Places	Vein calcite	calcite vein	--	tr.	tr.	--	--	--	--	--
244	HR0276	Other Places	Vein calcite	quartz-calcite vein	--	tr.	tr.	--	--	--	--	--
245	HR0279	Other Places	Shale	siliceous shale	--	tr.	tr.	--	--	--	--	--
246	HR0280	Other Places	Shale	siliceous shale	--	7.86	3.7	--	--	--	--	--

Appendix 4 Analytical Results of Rock and Ore Samples, Phase III

Results of Chemical Analysis of Drill Core Samples, Gunung Ropih Area

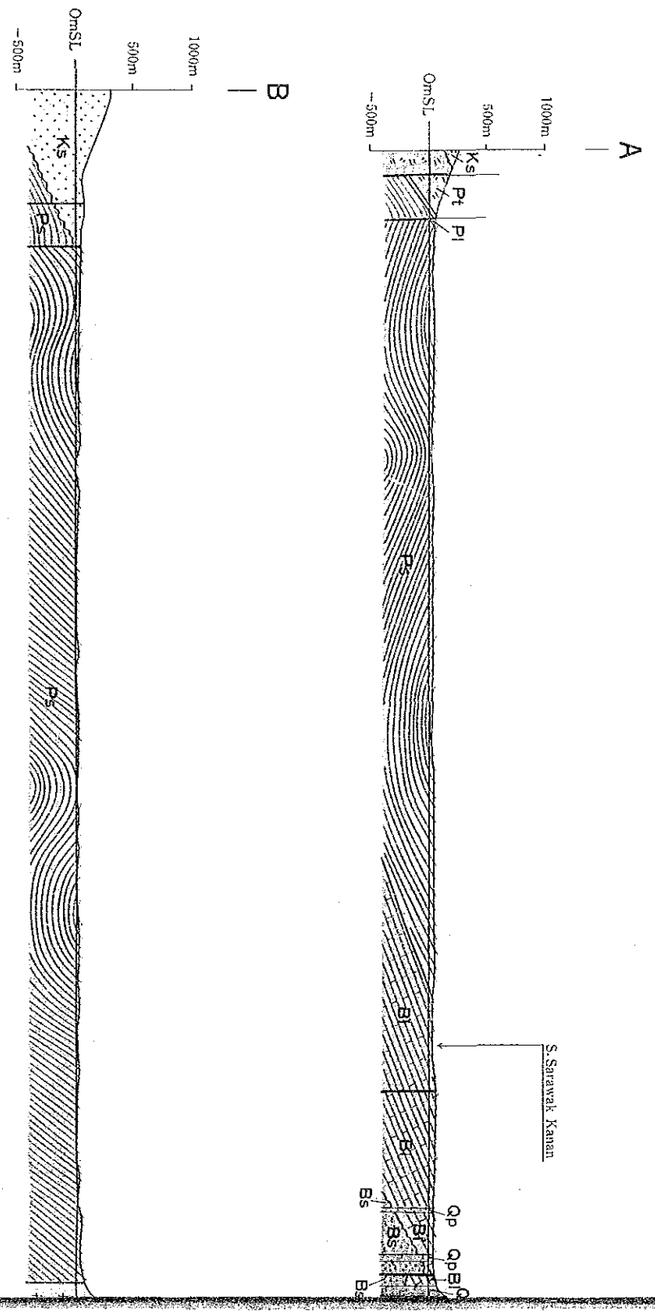
Serial No.	Drill Hole No.	Depth (m)	Au (g/t)	Ag (g/t)	Cu (%)	Mo (ppm)
1	MJM-1	43.4 – 45.0	tr.	tr.	0.15	27
2		65.0 – 67.0	tr.	tr.	0.11	56
3		67.0 – 69.0	tr.	tr.	0.07	68
4		69.0 – 71.0	tr.	tr.	0.10	125
5		71.0 – 73.0	tr.	tr.	0.09	67
6		121.0 – 123.0	tr.	tr.	0.05	84
7		123.0 – 125.0	tr.	tr.	0.07	52
8		135.0 – 137.0	tr.	tr.	0.07	46
9		137.0 – 139.0	tr.	tr.	0.06	53
10		139.0 – 141.0	tr.	tr.	0.14	50
11		141.0 – 143.0	tr.	tr.	0.27	95
12		143.0 – 195.0	tr.	tr.	0.21	36
13		145.0 – 147.0	tr.	tr.	0.13	18
14		147.0 – 149.0	tr.	tr.	0.13	23
15		149.0 – 151.0	tr.	tr.	0.18	24
16		151.0 – 153.0	tr.	tr.	0.15	17
17		153.0 – 155.0	tr.	tr.	0.12	22
18		155.0 – 157.0	tr.	tr.	0.17	74
19		157.0 – 160.0	tr.	tr.	0.25	64
20		160.0 – 162.0	tr.	tr.	0.25	124
21		162.0 – 164.0	tr.	tr.	0.23	104
22		164.0 – 166.0	tr.	tr.	0.25	93
23		166.0 – 168.0	tr.	0.84	0.19	50
24		168.0 – 170.0	tr.	tr.	0.16	37
25		170.0 – 172.0	tr.	1.05	0.22	25
26		172.0 – 174.0	tr.	tr.	0.16	30
27		174.0 – 176.0	tr.	0.70	0.17	46
28		176.0 – 178.0	tr.	tr.	0.15	49
29		178.0 – 180.0	tr.	tr.	0.15	41
30		180.0 – 182.0	tr.	tr.	0.19	66
31		182.0 – 184.0	tr.	tr.	0.29	43
32		184.0 – 186.0	tr.	0.21	0.11	48
33		186.0 – 188.0	tr.	tr.	0.12	59
34		188.0 – 190.0	tr.	0.21	0.17	41
35		228.0 – 230.0	tr.	tr.	0.13	55
36	MJM-2	35.0 – 37.0	tr.	tr.	tr.	9
37		37.0 – 39.0	tr.	tr.	tr.	5
38		39.0 – 41.0	tr.	tr.	tr.	8
39		41.0 – 43.0	tr.	tr.	tr.	5
40		43.0 – 45.0	tr.	tr.	tr.	7
41		85.0 – 87.0	tr.	tr.	tr.	10
42		87.0 – 89.0	tr.	tr.	tr.	8
43		89.0 – 91.0	tr.	tr.	tr.	6
44		91.0 – 93.0	tr.	tr.	tr.	15
45		93.0 – 95.0	tr.	tr.	tr.	10
46	MJM-3	50.0 – 52.0	tr.	tr.	0.30	21
47		52.0 – 54.0	tr.	tr.	0.21	21
48		54.0 – 56.0	tr.	tr.	0.30	13
49		56.0 – 58.0	tr.	1.10	0.23	13
50		58.0 – 60.0	tr.	tr.	0.30	18
51		60.0 – 62.0	tr.	tr.	0.27	12
52		62.0 – 64.0	tr.	tr.	0.14	37
53		64.0 – 66.0	tr.	tr.	0.18	14
54		66.0 – 68.0	tr.	tr.	0.20	16
55		68.0 – 70.0	tr.	1.30	0.20	16
56		70.0 – 72.0	tr.	0.42	0.19	25
57		72.0 – 74.0	tr.	tr.	0.17	19
58		74.0 – 76.0	tr.	0.42	0.23	18
59		76.0 – 78.0	tr.	0.21	0.15	19
60		78.0 – 80.0	tr.	tr.	0.19	20
61		80.0 – 82.0	tr.	0.84	0.17	24
62		82.0 – 84.0	tr.	tr.	0.19	22
63		84.0 – 86.0	tr.	0.63	0.25	24
64		86.0 – 88.0	tr.	tr.	0.19	40
65		88.0 – 90.0	tr.	0.84	0.19	26
66		90.0 – 92.0	tr.	tr.	0.21	37
67		92.0 – 94.0	tr.	tr.	0.46	36
68		94.0 – 96.0	tr.	tr.	0.35	43
69		96.0 – 98.0	tr.	0.36	0.26	44
70		98.0 – 100.0	tr.	0.21	0.31	48
71		100.0 – 102.0	tr.	tr.	0.23	47
72	MJM-3	102.0 – 104.0	tr.	0.42	0.28	47
73		104.0 – 106.0	tr.	0.42	0.27	55
74		106.0 – 108.0	tr.	tr.	0.13	43
75		108.0 – 110.0	tr.	tr.	0.17	62
76		110.0 – 112.0	tr.	tr.	0.15	45
77		112.0 – 114.0	tr.	tr.	0.19	57
78		114.0 – 116.0	tr.	tr.	0.08	40
79		116.0 – 118.0	tr.	tr.	0.13	48
80		118.0 – 120.0	tr.	tr.	0.04	15
81		120.0 – 122.0	NA	NA	0.06	18
82		122.0 – 124.0	NA	NA	0.06	46
83		124.0 – 126.0	NA	NA	0.04	43
84		126.0 – 128.0	NA	NA	0.02	40
85		128.0 – 130.0	NA	NA	0.03	40
86		130.0 – 132.0	NA	NA	0.05	45
87		132.0 – 134.0	NA	NA	0.07	50
88		134.0 – 136.0	NA	NA	0.03	39
89		136.0 – 138.0	NA	NA	0.04	38
90		138.0 – 140.0	NA	NA	0.04	49
91		140.0 – 142.0	NA	NA	0.05	48
92		142.0 – 144.0	NA	NA	0.03	44
93		144.0 – 146.0	NA	NA	0.06	52
94		146.0 – 148.0	NA	NA	0.03	52
95		148.0 – 150.0	NA	NA	0.04	49

NA – Not Analysed
tr. – Trace

	Sample No.	Thickness of vein at sampling site (m)	Channel sample width (m)	Au g/t	Ag g/t
Old Working No. 2 Vein	JR 0532	0.2	0.2	1.00	2.30
	JR 0531	1.8	1.8	0.86	3.00
	JR 0530	2.4	2.4	1.04	2.4
	JR 0502	2.0	2.0	6.25	15.5
	JR 0501	4.2	1.8	14.67	107.1
	JR 0512		1.3	1.50	165.6
	JR 0513		1.1	2.27	16.2
	JR 0515	5.4	2.2	1.09	2.1
	JR 0516		3.2	38.64	10.5
	JR 0503	6.0	6.0	11.88	23.8
	JR 0505	4.6	4.6	0.33	2.4
	JR 0508	5.5	5.5	tr	tr
	JR 0509	5.0	5.0	1.00	8.4
	JR 0510	5.6	5.6	0.67	3.2
	JR 0514	2.0	2.0	0.83	3.3
Old Working No. 3 Vein	AR 502	0.4	0.2	14.09	83.0
	AR 503		0.2	1.76	129.1
	AR 501	0.3	0.2	0.94	35.1
	AR 505	1.0	1.0	0.16	0.8
	AR 504	0.2	0.2	6.03	7.3

(Au) tr – trace (< 0.01 g/t), (Ag) tr – trace (< 0.1 g/t)

GEOLOGIC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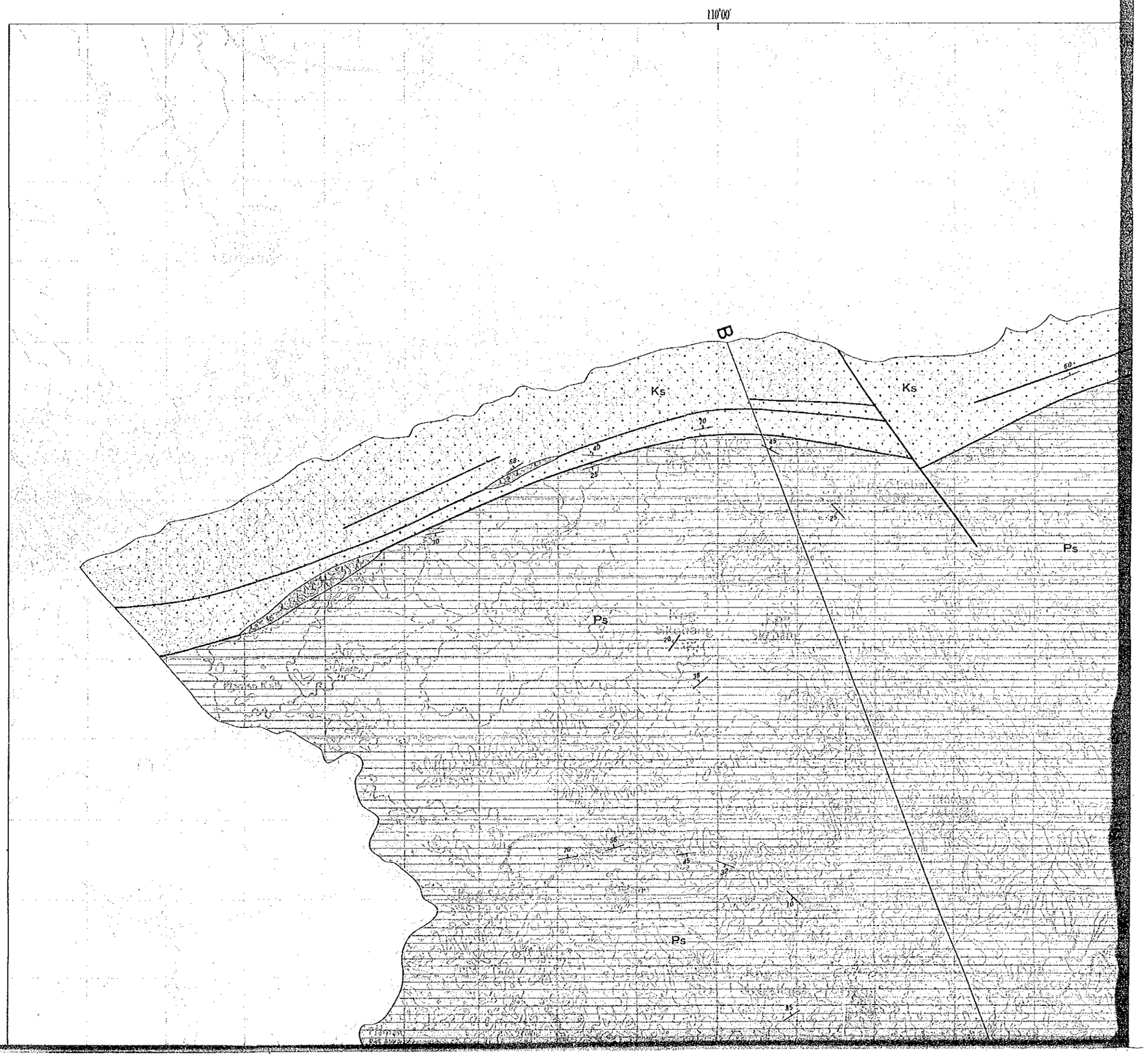
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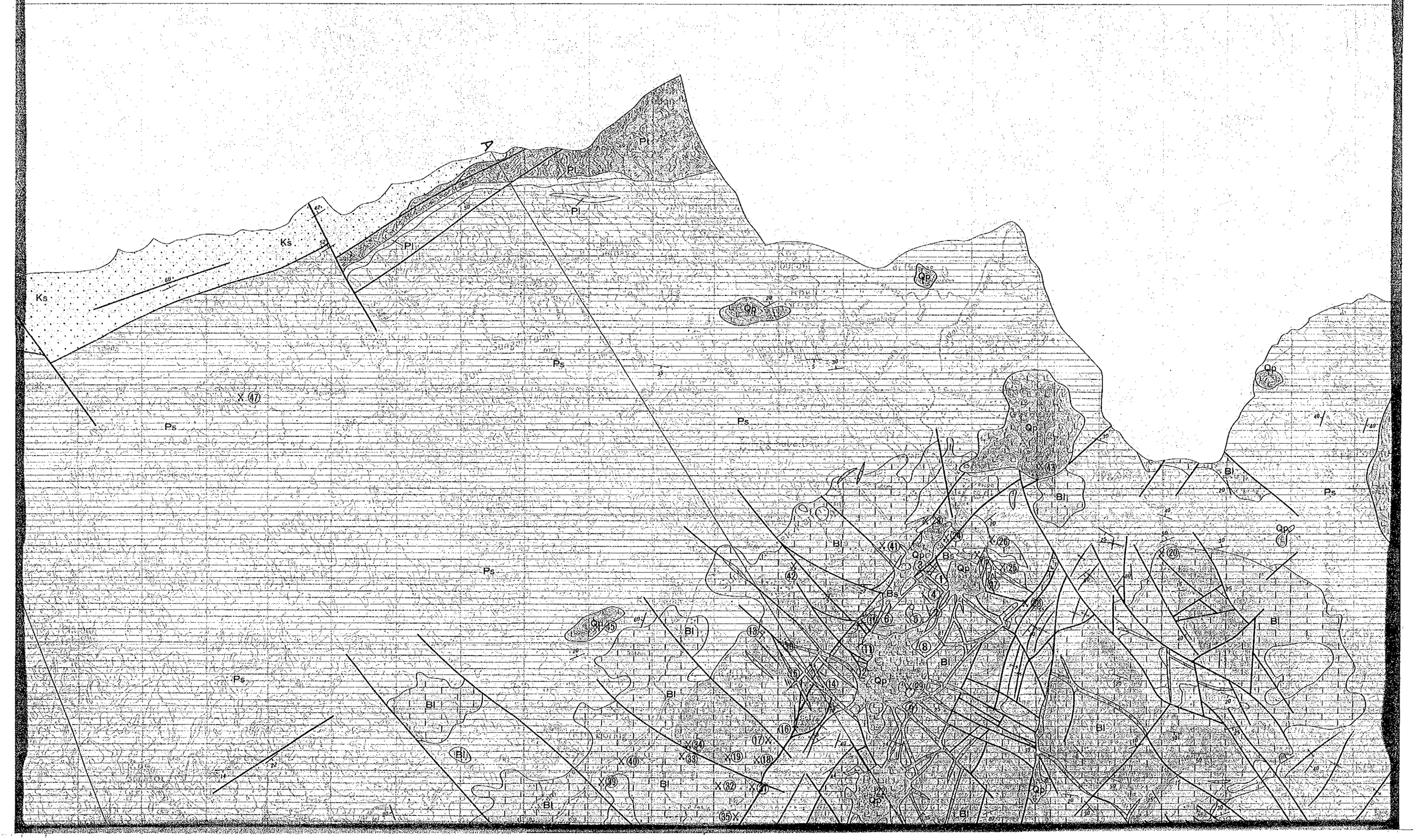
OLOGICAL MAP OF BAU AREA, WEST SARAW



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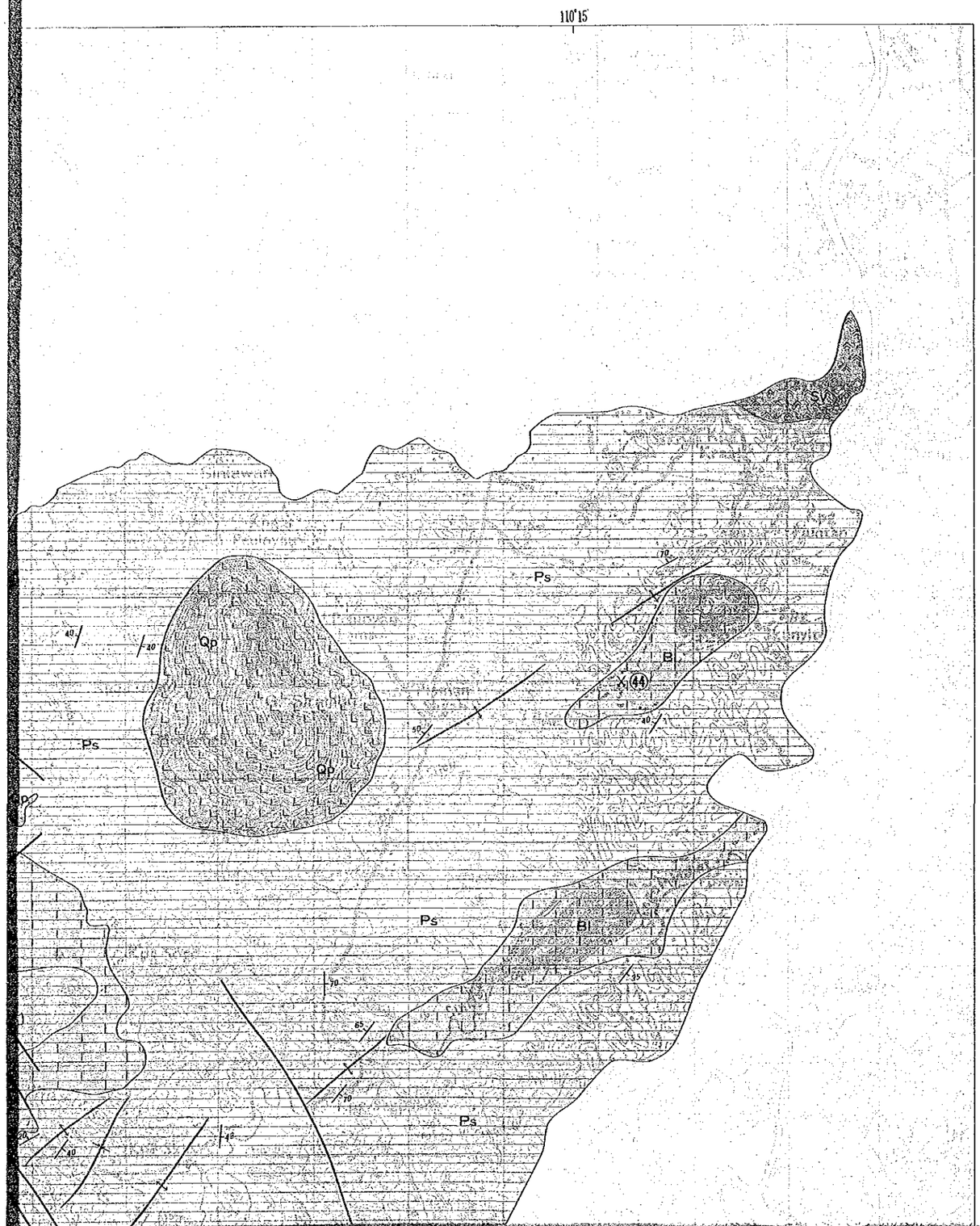
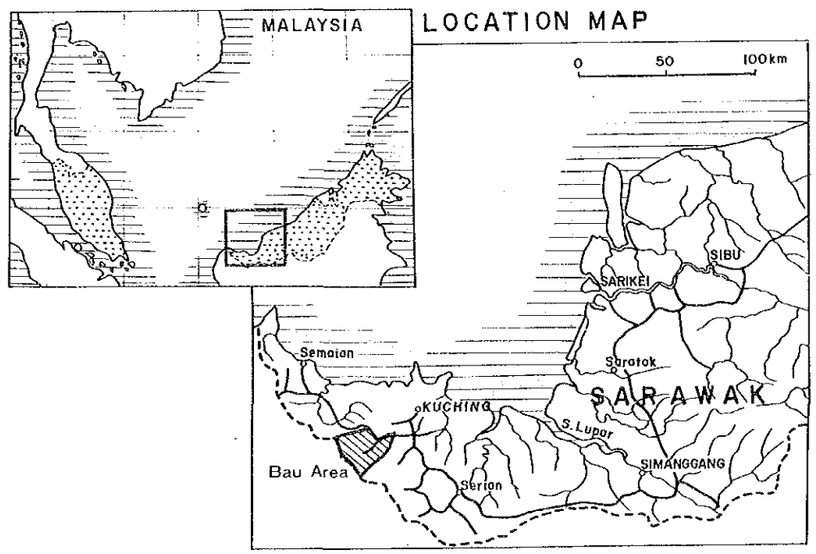


MINERAL EXPLORATION

BAU AREA

WEST SARAWAK, MALAYSIA

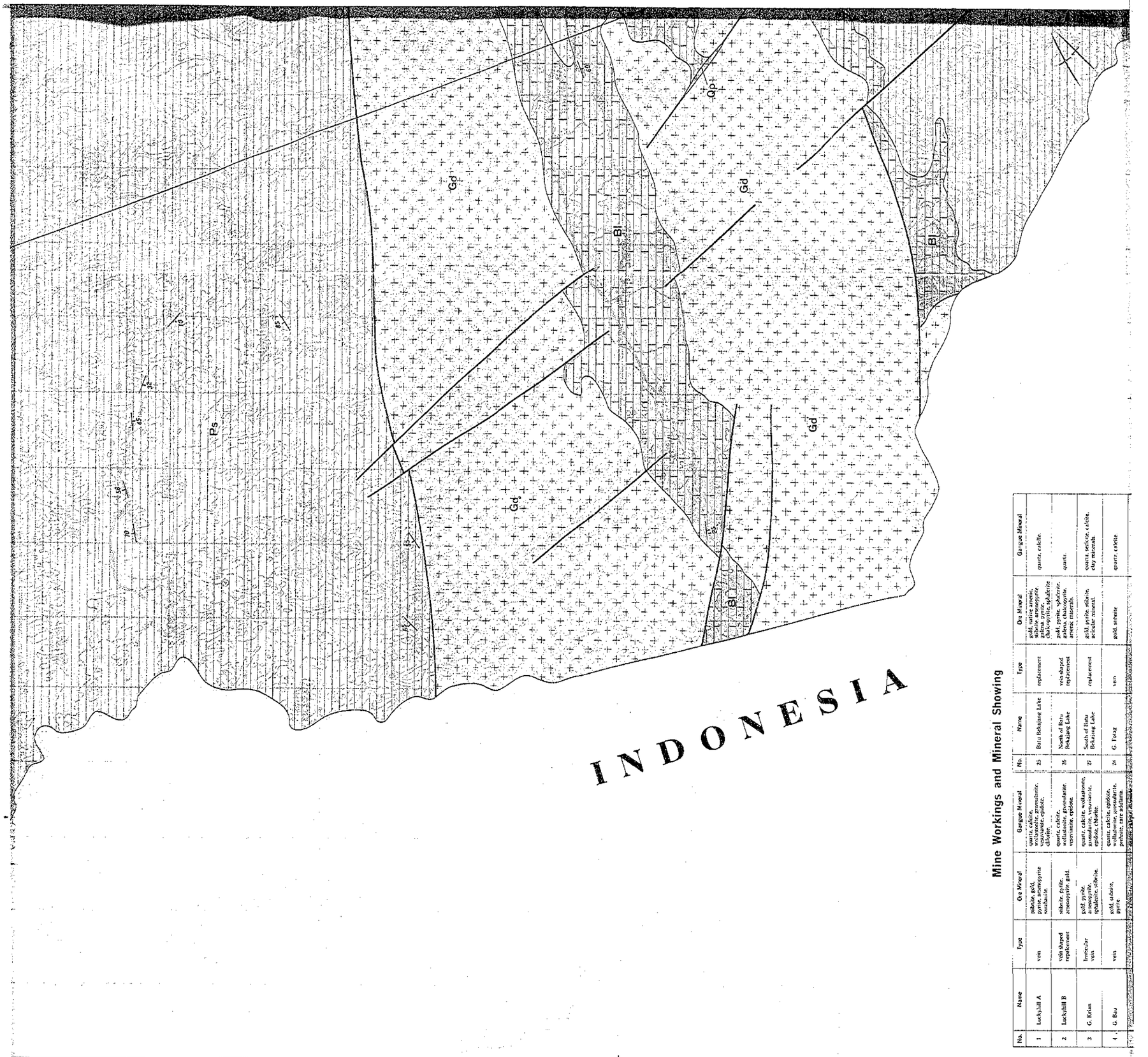
GEOLOGICAL MAP OF BAU AREA, WEST SARAWAK



JAPAN INTERNATIONAL COOPERATION AGENCY

METAL MINING AGENCY OF JAPAN

GEOLOGICAL SURVEY OF MALAYSIA



Mine Workings and Mineral Showing

No.	Name	Type	Ore Mineral	Gangue Mineral
1	Luckyhill A	vein	stibnite, gold, pyrite, arsenopyrite, sarabauite.	quartz, calcite.
2	Luckyhill B	vein-shaped replacement	stibnite, pyrite, arsenopyrite, gold.	quartz.
3	G. Krian	Intricular vein	gold, pyrite, arsenopyrite, cinnabar, stibnite.	quartz, sericite, calcite, clay minerals.
4	G. Ekus	vein	gold, stibnite, pyrite.	quartz, calcite.

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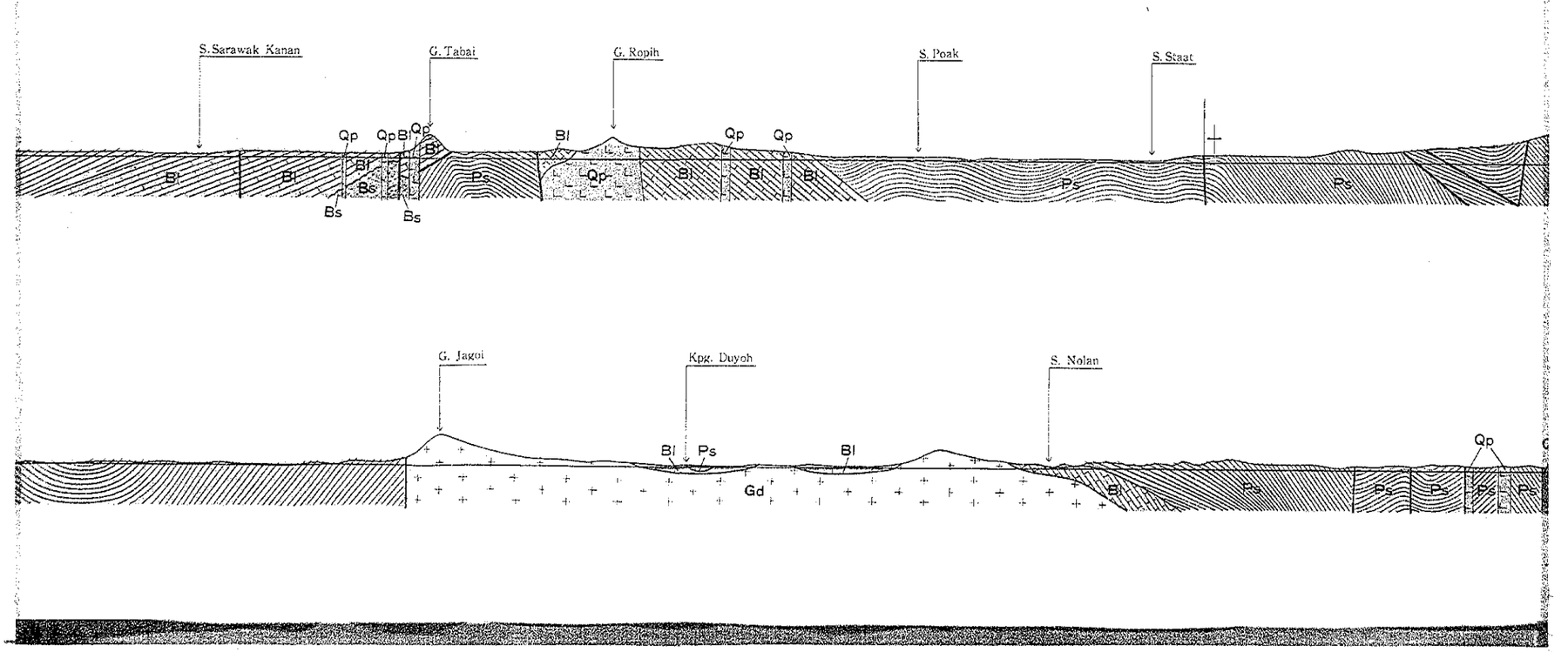

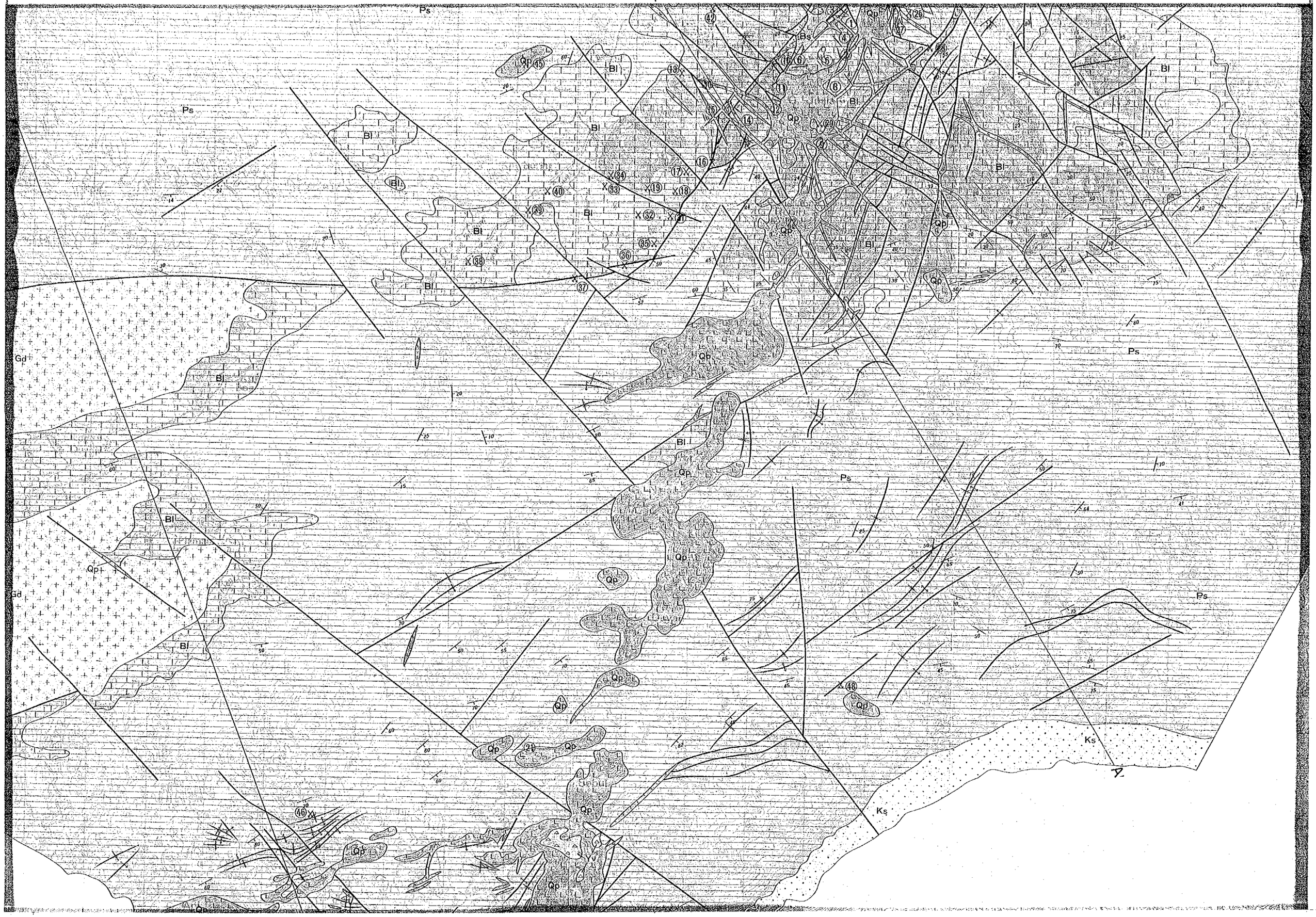
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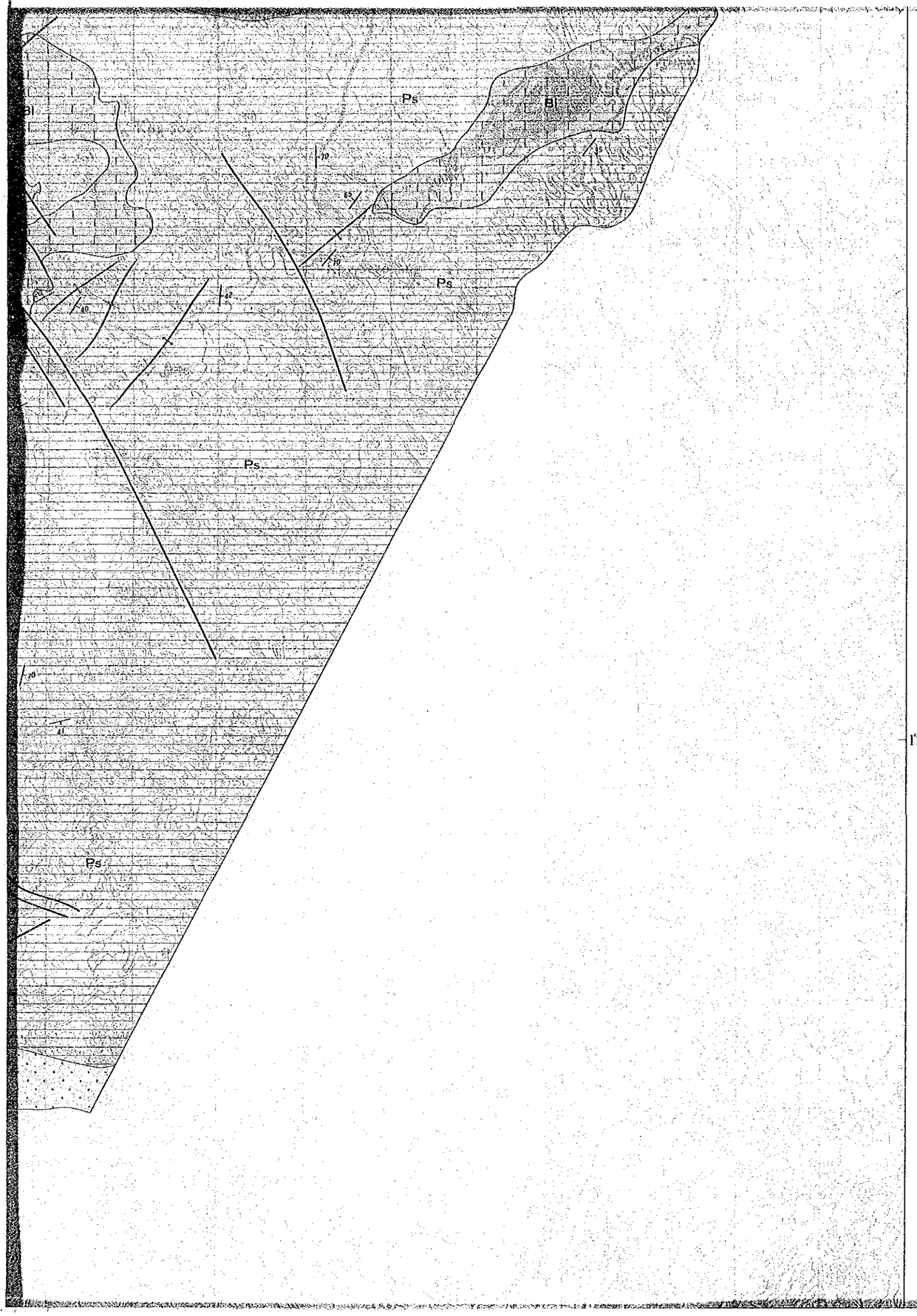
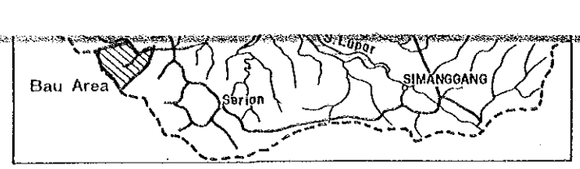




JAPAN INTERNATIONAL COOPERATION AGENCY

METAL MINING AGENCY OF JAPAN

GEOLOGICAL SURVEY OF MALAYSIA

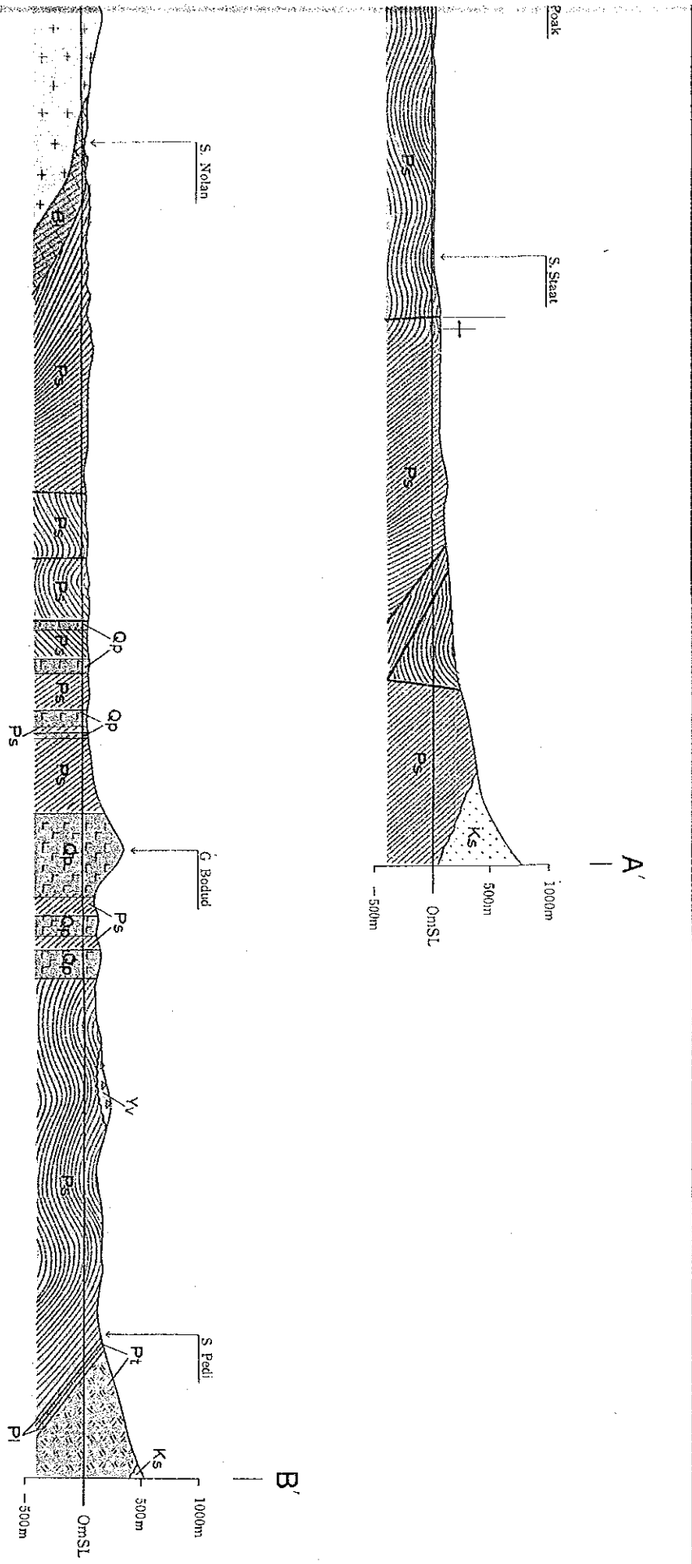
LEGEND

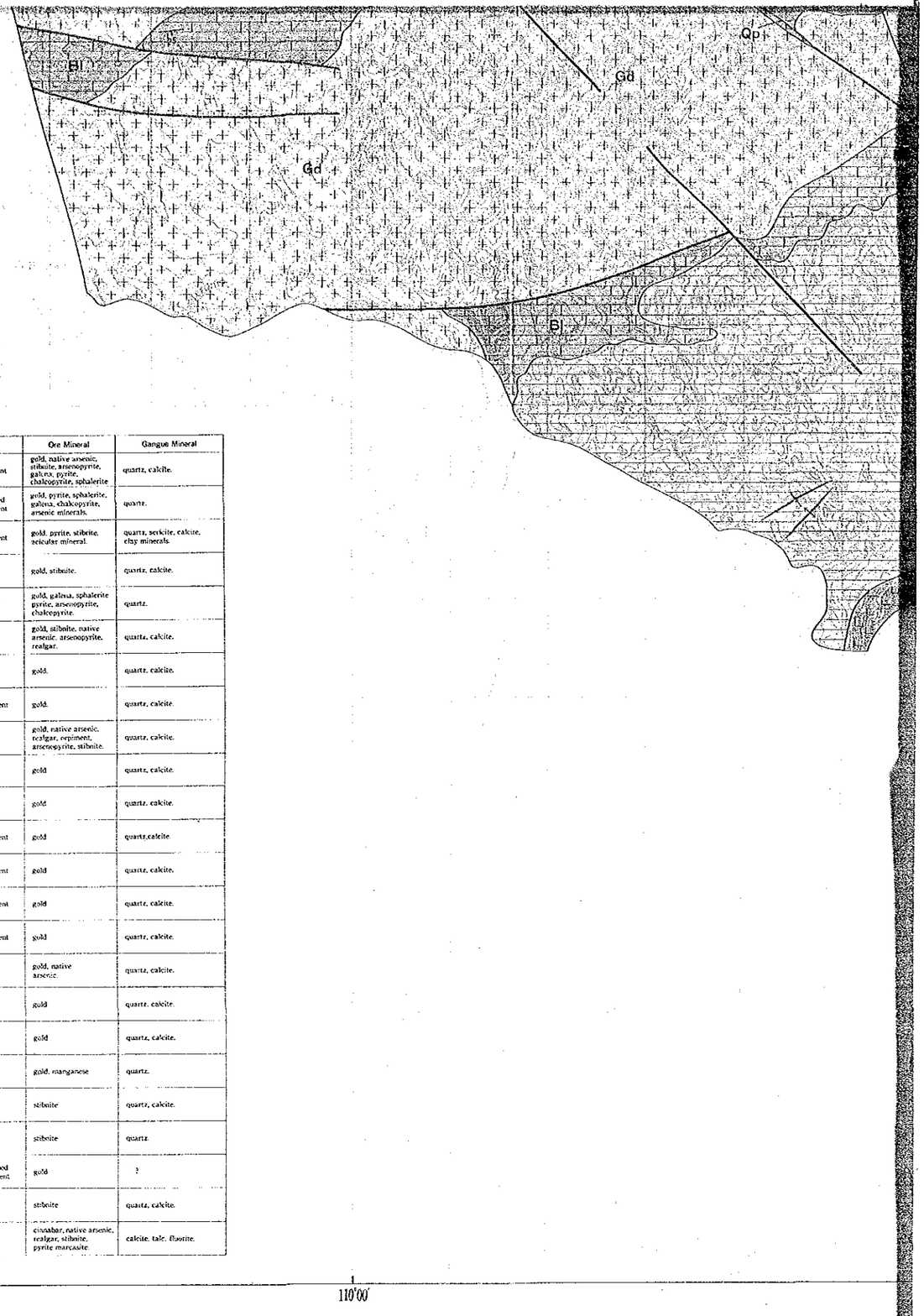
Stratigraphy

Tertiary	Younger Volcanics	Yv	Dacitic volcanic breccia including volcanic mudflow
Tertiary	Kayan Sandstone	Ks	Quartzose sandstone with conglomerate
Upper Jurassic-Cretaceous	Pedawan Formation	Pt	Dacitic sandy tuff and tuffaceous sandstone ~ mudstone
Upper Jurassic-Cretaceous	Pedawan Formation	Pl	Calcareous shale with rare limestone beds
Upper Jurassic-Cretaceous	Pedawan Formation	Ps	Alternations of shale, mudstone, siltstone and sandstone
Upper Jurassic-Cretaceous	Bau Limestone	Bl	Limestone
Upper Jurassic-Cretaceous	Bau Limestone	Bs	Ill-sorted sandstone (Krian Member)
Triassic	Serian Volcanics	Sv	Basic andesite and gabbro

Intrusives

Tertiary (Neogene)	Qp	Stocks and dykes mainly of quartz porphyry and dacite





Mine Workings and Mineral Showing

No.	Name	Type	Ore Mineral	Gangue Mineral
1	Lockyhill A	vein	stibnite, gold, pyrite, arsenopyrite sarabauite.	quartz, calcite, wollastonite, grossularite, vesuvianite, epidote, chlorite.
2	Lockyhill B	vein-shaped replacement	stibnite, pyrite, arsenopyrite, gold.	quartz, calcite, wollastonite, grossularite, vesuvianite, epidote.
3	G. Krian	lenticular vein	gold, pyrite, arsenopyrite, sphalerite, stibnite.	quartz, calcite, wollastonite, grossularite, vesuvianite, epidote, chlorite.
4	G. Bau	vein	gold, stibnite, pyrite.	quartz, calcite, epidote, wollastonite, grossularite, prehnite, rare adularia.
5	G. Arong Bakit A	lenticular vein	gold, stibnite, pyrite, sphalerite arsenopyrite.	quartz, calcite, diopside, wollastonite, grossularite, chlorite, vesuvianite, clay minerals.
6	G. Arong Bakit B	lenticular vein	gold, stibnite, pyrite sphalerite, arsenopyrite	quartz, calcite, wollastonite, grossularite, andradite, diopside, vesuvianite.
7	West Batu Bekajang Lake	vein-shaped replacement	gold, pyrite, arsenic mineral.	quartz, calcite, sericite, epidote.
8	G. Sirung	vein	—	calcite and quartz
9	G. Tonuga	lenticular vein	galena, sphalerite, pyrite, chalcopyrite, arsenopyrite, gold.	quartz, calcite.
10	Saburan	vein (locally disseminated)	gold, pyrite, stibnite, native arsenic, realgar, arsenopyrite.	quartz, calcite.
11	G. Saburan A	lenticular vein	gold	quartz, calcite, wollastonite, grossularite.
12	G. Saburan B	lenticular vein	gold	quartz, calcite, wollastonite, grossularite, vesuvianite.
13	Tai Ton B	vein	gold, stibnite, pyrite, native arsenic.	quartz, calcite.
14	G. Tai Ton	lenticular vein	gold, pyrite, stibnite, sphalerite	quartz, calcite.
15	G. Namil	lenticular vein	gold, pyrite, stibnite, sphalerite	quartz, calcite.
16	Runoh	lenticular vein	gold, stibnite, sphalerite, native arsenic, arsenopyrite.	quartz, calcite.
17	Bidi	vein	gold, pyrite, stibnite, native arsenic, arsenopyrite, realgar, orpiment.	quartz, calcite
18	Bidi South	vein	gold, realgar, orpiment, native arsenic, stibnite, pyrite.	quartz, calcite, clay minerals.
19	Nam Loong B	lenticular vein	gold	quartz, calcite.
20	Jambusan	vein and vein-shaped replacement	gold.	quartz.
21	Gading	vein	cinnabar, native arsenic, realgar, stibnite marcasite, pyrite.	calcite, fluorite, talc.
22	G. Ropih	disseminated	chalcopyrite, bornite, molybdenite, galena, malachite, pyrrhotite	quartz, chlorite, epidote, andradite, calcite, wollastonite.
23	Tai Parit	replacement	gold, realgar, orpiment, native arsenic.	quartz, calcite
24	Bukit Yoong	vein-shaped replacement	gold, stibnite, native arsenic, galena.	quartz, calcite, sericite clay minerals.

No.	Name	Type	Ore Mineral	Gangue Mineral
25	Batu Bekajang Lake	replacement	gold, native arsenic, stibnite, arsenopyrite, galena, pyrite, chalcopyrite, sphalerite	quartz, calcite.
26	North of Batu Bekajang Lake	vein-shaped replacement	gold, pyrite, sphalerite, galena, chalcopyrite, arsenic minerals.	quartz.
27	South of Batu Bekajang Lake	replacement	gold, pyrite, stibnite, acicular mineral.	quartz, sericite, calcite, clay minerals.
28	G. Totag	vein	gold, stibnite.	quartz, calcite.
29	South of G. Jaala	lenticular vein	gold, galena, sphalerite pyrite, arsenopyrite, chalcopyrite.	quartz.
30	Tai Ton A	vein	gold, stibnite, native arsenic, arsenopyrite, realgar.	quartz, calcite.
31	Nam Loong A	vein	gold.	quartz, calcite.
32	Northwest of Batu Sepit	replacement	gold.	quartz, calcite.
33	Ban Hin Lee	vein	gold, native arsenic, realgar, orpiment, arsenopyrite, stibnite.	quartz, calcite.
34	Ferry Cave	vein	gold	quartz, calcite.
35	Batu Sepit	vein	gold	quartz, calcite.
36	Krokong	replacement	gold	quartz,calcite.
37	Pedi	replacement	gold	quartz, calcite.
38	Pejiru	replacement	gold	quartz, calcite.
39	Jongjang	replacement	gold	quartz, calcite.
40	Liew Nyan Foo	vei	gold, native arsenic	quartz, calcite.
41	Southwest of Tai Parit	vein?	gold	quartz, calcite.
42	Northeast of Tai Ton	vein?	gold	quartz, calcite.
43	Sirenggok	vein?	gold, manganese	quartz.
44	Skunyit	vein	stibnite	quartz, calcite.
45	Buan Bidi	vein	stibnite	quartz.
46	Sebuluh	vein-shaped replacement	gold	?
47	Opar	vein	stibnite	quartz, calcite.
48	Tegora	vein	cinnabar, native arsenic, realgar, stibnite, pyrite marcasite.	calcite, talc, fluorite.

Note : No. corresponds to No. on map

110°00'

Qp

Bl

Ps

Ks

A

B

Pl

Yk

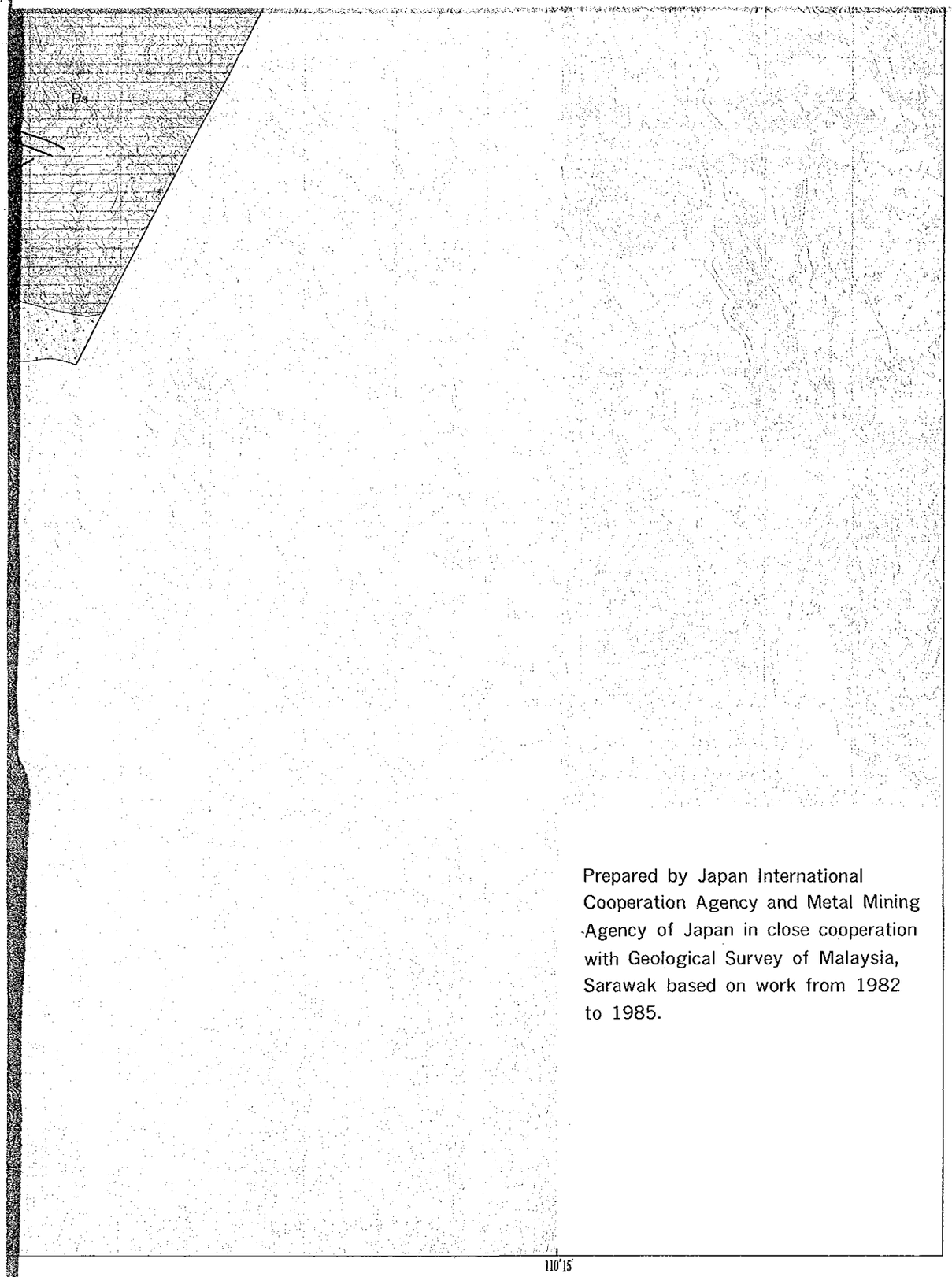
(2)

(46)

(48)

SCALE
1 : 50,000

0 1 2 3 4km



Prepared by Japan International Cooperation Agency and Metal Mining Agency of Japan in close cooperation with Geological Survey of Malaysia, Sarawak based on work from 1982 to 1985.

with conglomerate

Upper Jurassic-Cretaceous

Pedawan Formation

Pt — Dacitic sandy tuff and tuffaceous sandstone ~ mudstone

Pl — Calcareous shale with rare limestone beds

Ps — Alternations of shale, mudstone, siltstone and sandstone

Bau Limestone

Bl — Limestone

Bs — Ill-sorted sandstone (Krian Member)

Triassic

Serian Volcanics — SV — Basic andesite and gabbro

Intrusives

Tertiary (Neogene) — Qp — Stocks and dykes mainly of quartz porphyry and dacite

Pre-Late Jurassic — Gd — Granodiorite

Anticline

Syncline

Fault

Bedding plane (40)

Operating mine

Old working (abandoned mine)

Old working (abandoned mine), investigated vein type deposit

Disseminated porphyry copper type mineralization

A A′ Section Line