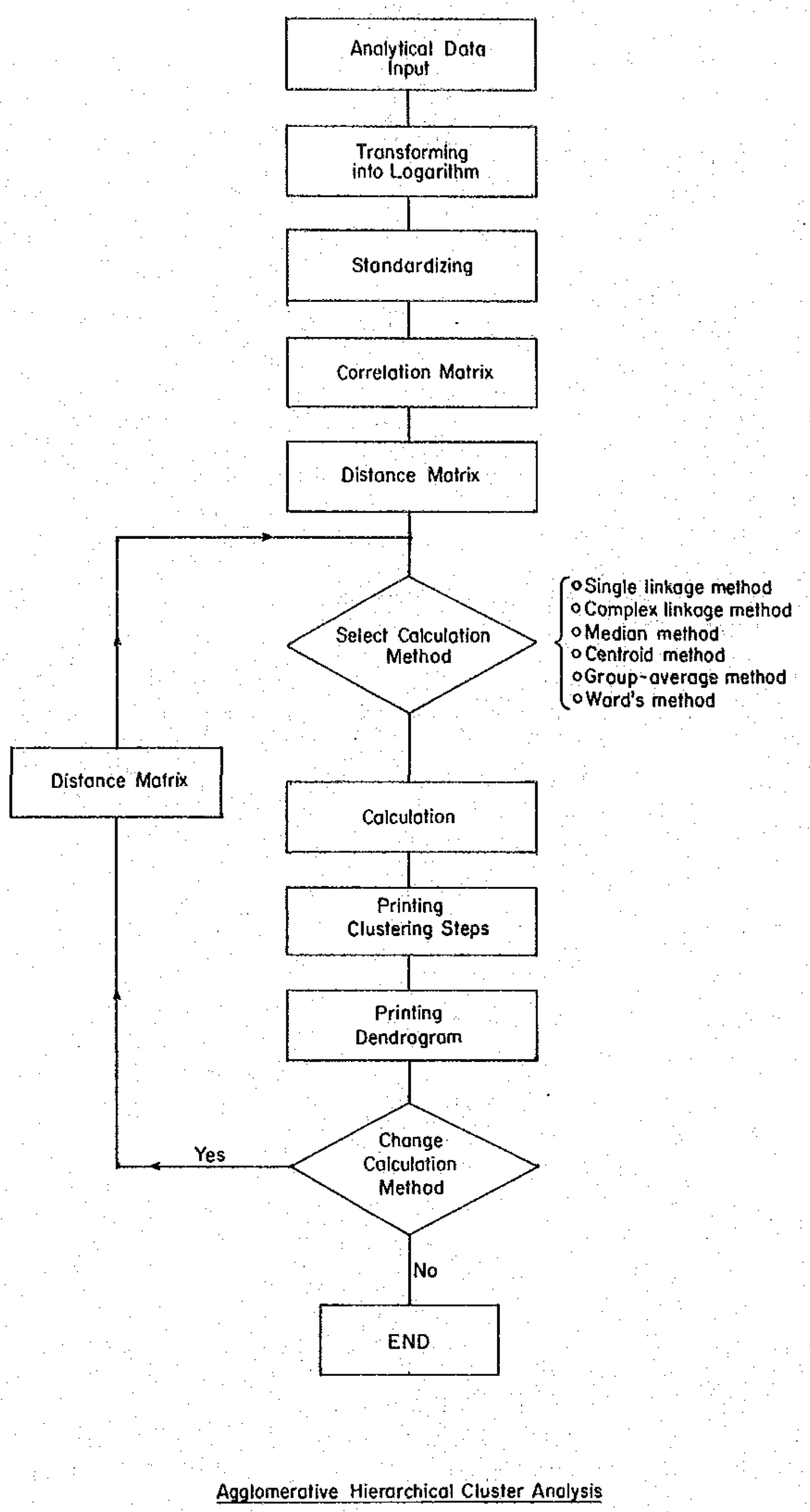


Fig. Ⅲ—1 Flow Chart of Cluster Analysis

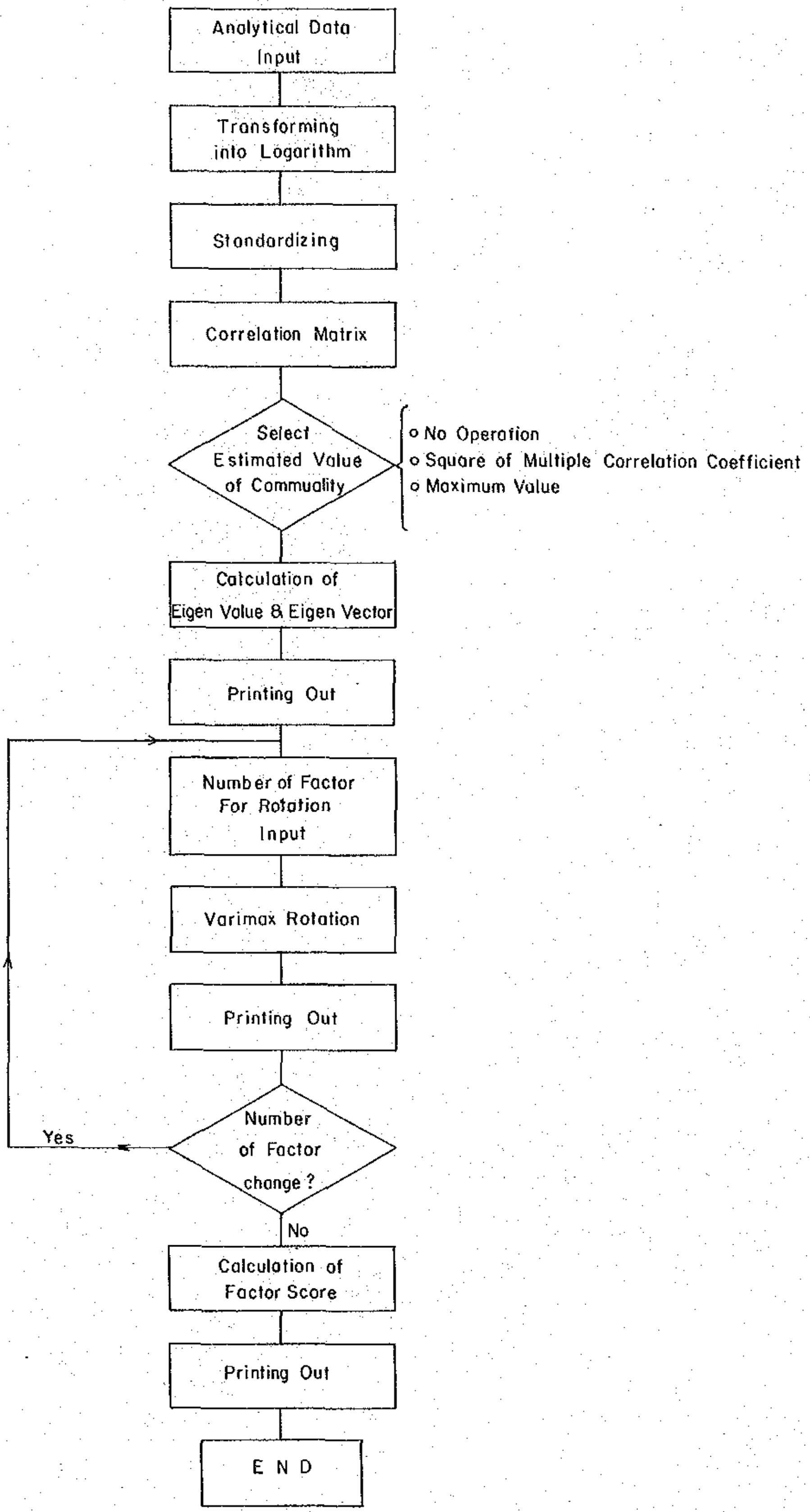


Fig. Ⅲ—2 Flow Chart of Factor Analysis

の近くの既知鉱徴もまた$\overline{x}+2s$以上の4つの異常値に反映している。

アピ山の北東の金採掘跡は$\overline{x}+2s$以上の値の異常値を示している。熱水変質した貫入岩類や火砕岩類中を流れているブテ川の鉱徴も川砂試料中に19.8ppmという高い異常値を示している。$\overline{x}+2s$以上のもう一つの異常値は，ペダワン層中を流れるノラン川の支流中に認められる。

バウ町地域以外での金の異常域は，ブテ川流域と，鉱化作用が知られていないドゥヨ部落の北方地域およびアピ山地域と考えられる。

2－4－2　アンチモン（Sb）

アンチモンの分布はMap Ⅲ－1(2)に表示されている。$\overline{x}+2s$のスレッショルド値は2.6ppmであり金の場合と同様に，大部分の異常値はバウ町地域周辺に分布している。分析された663試料のうち，17.4％はスレッショルド値以上であり，72試料が$\overline{x}+3s$以上の高い異常を示し，その値は21.0ppm～10,640ppmの範囲にある。高い異常の多くは明らかに過去の採掘活動による汚染で，程度の違いはあるにせよ，その値が引き上げられた可能性がある。しかしながら，その分布は既知旧坑や露頭の存在を反映している。これ以外にも，鉱化の確認されていない異常もいくつかある。鉱化のまだ確認されていない異常としては，ソゴ部落（Kg. Sogo）の東にあるスタアト川の支流から得られた211ppmの異常値およびスキオ部落（Kg. Skio）の南西にある28.0ppmから36.6ppmの範囲に3点の異常値がある。シジャイク川（S. Sijaik）から得られた34.0ppmとカポック川（S. Kapok）から得られた1,110ppmは道路からの汚染の可能性もある。

バウ町地域以外では，ブテ川は$\overline{x}+2s$以上の2つの異常値を示しており，テバン山付近の旧ガディン水銀鉱山もまた$\overline{x}+3s$以上の異常値を2点示している。

2－4－3　砒素（As）

砒素の分布はMap Ⅲ－1(3)に表示されている。分析された663試料のうち，15.1％がスレッショルド値$\overline{x}+2s$（40ppm）以上である。$\overline{x}+3s$（105ppm）以上の高い異常は105ppmから7,952ppmの範囲にある。

異常値の大局的な分布パターンはアンチモンや金の分布とよく似ている。

2－4－4　タングステン（W）

タングステンの分布はMap Ⅲ－1(4)に表示されている。663試料のうち，9.4％の試料がスレッショルド値$\overline{x}+2s$（4ppm）以上である。そのうち，30試料は$\overline{x}+3s$以上であり，10ppm～450ppmの範囲にある。異常値はシャンブサン，パンガ山（Bt. Panga），ウンバット山（G. Umbut）およびロピイ山（G. Ropih）の地域に一群をなして分布しており，金，アンチモンおよび砒素の分布とほぼ一致している。$\overline{x}+3s$の数倍高い値が，バウ石灰岩の分布する最初の三つの地域において検出されている。$\overline{x}+3s$よりわずかに高い1～2試料を含む他の

小規模な異常は，ウンギアン山（G. Ungian）の第三紀貫入岩類中を流れるピニアワン川（S. Piniyawan）の二つの支流，セガー部落（Plamam Segah）の近くのスクニット川（S. Skunyit）の支流や，ペジル川（S. Pejiru），セリキン部落の近くのセリキン川の支流，およびスゲバン・オバ部落の近くのトゥバ川（S. Tubah）の支流に認められる。

2－4－5　銀（Ag）

銀の分布はMap Ⅲ－2(5)に表示されている。６６２試料のうち，４.８％の試料がスレッショルド値$\overline{x}$＋２ｓ（１.２ppm）以上である。さらにそのうち１６試料が$\overline{x}$＋３ｓ以上であり，２.８ppmから３４ppmの範囲にある。

異常値の一部が，タバイ山周辺の石灰岩地域にあるが，他の異常値は分散しており，せいぜい２～３点まとまっているに過ぎない。これらのうち，ドゥヤン山（G. Duyan）の第三紀貫入岩類中を流下するドゥヤン川から採取されたものは最高３４.０ppmの値を示し，もう一点のペダウン川の上流の支流から採取したもので８.３ppmを示す。

2－4－6　モリブデン（Mo）

モリブデンの分布はMap Ⅲ－2(6)に表示されている。６６３試料のうちの１７試料がスレッショルド値$\overline{x}$＋２ｓ（１.７５ppm）以上を示している。これらのうちのさらに５試料は，$\overline{x}$＋３ｓ以上の高い異常を示し，その値は４.４ppmから６.０ppmの範囲にある。

ロピー山の第三紀貫入岩類中を流れる川に異常値の一群が見られるが，その他の異常は分散しており，ペジル川から$\overline{x}$＋３ｓ以上の値が得られた以外には，$\overline{x}$＋２ｓ以上のオーダーのものからなっている。

2－4－7　銅（Cu）

銅の分布はMap Ⅲ－2(7)に表示されている。６６２試料のうち，２７試料がスレッショルド値$\overline{x}$＋２ｓ（２８ppm）以上であり，さらにこれらの試料のうち，１１試料が$\overline{x}$＋３ｓ以上の値を示し，その範囲は５０ppmから１７４ppmである。

大規模な異常値の一群がジュアラ山（G. Juara）とロピー山の第三紀貫入岩類周辺に認められるが，それ以外の異常は分散している。

2－4－8　鉛（Pb）

鉛の分布はMap Ⅲ－2(8)に表示されている。分析された６６２試料のうち，３２試料がスレッショルド値$\overline{x}$＋２ｓ（３５ppm）以上であり，さらにそのうちの１９試料が$\overline{x}$＋３ｓ以上で，６９ppmから７４０ppmの範囲にある。

異常値の大規模な一群がジュアラ山とロピー山の第三紀貫入岩類周辺にあり，パンガ山（Bt. Pannga），クリアン山およびタバイ山周辺の石灰岩地域にも異常値のまとまりが認められる。セブワッド山（G. Sebwad）やトゥラアン山（G. Tra'an）の南斜面などの第三紀貫入岩類中を流れるピニアワン川の支流にも３点の異常値が認められる。

概して，鉛異常値の分布は銅異常値の分布と一致している。

2－4－9　亜鉛（Zn）

亜鉛の分布はMapⅢ－3(9)に表示されている。662試料のうち，27試料がスレッショルド値$\bar{x}+2s$（142ppm）以上であり，さらにそのうちの9試料が$\bar{x}+3s$以上の値を示し，その範囲は296ppmから910ppmである。

一般に，異常値は分散しており，過去採掘されたような地域に限られている。ジュアラ山の第三紀貫入岩類分布域から得られた545ppmの値を含む2点の異常は，おそらく，すでに知られている硫化鉱脈の影響と考えられる。$\bar{x}+3s$以上の異常値は，ペジル川，カポック川（S. Kapok）およびムンガン川（S. Mungan）の支流にそれぞれ認められる。

2－4－10　鉄（Fe）

鉄の分布はMapⅢ－3(10)に表示されている。鉄の異常については特に鉱床との関係で重要と思われるものは認められない。

2－4－11　マンガン（Mn）

マンガンの分布はMapⅢ－3(11)に示されている。662試料のうち，37試料がスレッショルド値$\bar{x}+2s$（500ppm）以上であり，そのうち18試料は$\bar{x}+3s$以上で，1,000ppmから4,320ppmの範囲にある。

6試料を除いて，大部分の異常値は過去に盛大に採掘されたバウ町周辺の石灰岩地域に集中している。$\bar{x}+3s$以上の値をもつ4点の異常は，マウング川部落（Kg. S. Maung）の北東にあるピニアワン川に認められる。これらの異常は銀およびバリウムの異常と一致する傾向が見られる。カポック川やボアリング部落（Kg. Boring）付近のプンドン川（S. Pundon）にも，高い値が単独に認められる。

2－4－12　ウラニウム（U）

ウラニウムの分布は，MapⅢ－3(12)に表示されている。663試料のうち，58試料がスレッショルド値$\bar{x}+2s$（1.8ppm）以上である。そのうち24試料は$\bar{x}+3s$以上であり，3.2ppmから9.0ppmの範囲にある。

異常値のすべてがジャゴイ花崗閃緑岩中あるいはその周辺にあり，花崗岩質岩体の高いウラニウム含有を明瞭に反映している。$\bar{x}+3s$以上の局部的な高異常は，セリキン部落の北西方の地域に分布しており，シンチレーションカウンターによるホローアップの価値があると思われる。

2－4－13　バリウム（Ba）

バリウムの分布はMapⅢ－4(13)に表示されている。663試料のうち，26試料がスレッショルド値$\bar{x}+2s$（340ppm）以上であり，これらのうちのただ1試料のみが$\bar{x}+3s$以上で3,280ppmを示している。$\bar{x}+3S$以上の異常は，旧テゴラ水銀鉱山を流下する川から得られたものである。$\bar{x}+2S$以上の異常値の小規模なまとまりは，水銀やマンガの異常といっしょ

にピニアワン川に分布している。

2−4−14　水銀（Hg）

水銀の分布はMapⅢ−4⒁に表示されている。608試料のうち，116試料がスレッショルド値$\overline{x}$＋2s（210ppb)以上であり，これらのうち68試料が$\overline{x}$＋3s以上で，543ppbから157,000ppbの範囲にある。

水銀異常の分布は，旧テゴラ水銀鉱山から北東方向のスタアト山まで広がっており，一つのゾーンを形成している。このゾーン中には，他の元素の異常は見られない。このゾーン以外にも，異常値はジャンブサン地域で，金，アンチモン，砒素およびタングステンといっしょにまとまって分布しており，バンガ山地域でも同様に分布している。また，テバン山付近の旧ガディン水銀鉱山周辺にも水銀の異常が認められる。

2−5　多変量解析結果

2−5−1　クラスター分析

凝集型階層的クラスター分析のメジアン法によって得られたデンドログラムは，Fig.Ⅲ−3に示されている。

デンドログラムからわかるように，ZnとFeの間に非常に密接な関係が認められ，さらにそれらにMn，CuおよびPbが一緒になって，一つのグループを形成しているように見える。これらの関係は，この地域の卑金属鉱化作用によって生じた元素の組合せを示していると推測される。

デンドログラムはまたSbがAsと密接に，つづいてAuやWと関係して，もう一つの元素の共生を形成していることを示している。このグループの共生は，ラッキーヒルやタイパリットおよびタイトン鉱山のようなバウ鉱床区にある大部分の既知鉱床の形成に関与したAu−Sb鉱化作用に関係しているように見える。WとAuやSbとの共生は注目に値する。事実，この調査に先立ってマレイシア地質調査所の手により実施されたパン・コンセントレート調査の結果，灰重石が金や輝安鉱と共に検出されている。

デンドログラムはまたHgが二つのグループと遠い関係にあることを示している。この3つのグループは，先に述べられた元素の分布によって暗示されているような一般的な帯状配列の可能性を否定するものではない。

また元素の分布からも明らかなようにデンドログラムはUが他の元素とほとんど無関係に挙動していることを示している。

2−5−2　因子分析

R−モード因子分析の結果は，TableⅢ−3にまとめられている。このTableに示されている因子負荷量は，先のクラスター分析の結果を加味して，4因子に対してバリマックス回転を行った結果得られたものである。

Table Ⅲ—2 Correlation Matrix of 14 Elements in Stream Sediments

	Au	Ag	Cu	Pb	Zn	Sb	As	Hg	Mo	W	Fe	Mn	Ba	U
Au	1.000													
Ag	0.206	1.000												
Cu	0.105	0.499	1.000											
Pb	0.355	0.552	0.674	1.000										
Zn	0.151	0.464	0.738	0.669	1.000									
Sb	0.478	0.195	0.213	0.405	0.351	1.000								
As	0.434	0.169	0.264	0.446	0.380	0.626	1.000							
Hg	0.123	0.136	0.267	0.211	0.335	0.273	0.404	1.000						
Mo	0.284	0.229	0.343	0.361	0.338	0.397	0.332	0.157	1.000					
W	0.458	0.208	0.150	0.341	0.208	0.511	0.470	0.194	0.396	1.000				
Fe	0.027	0.374	0.633	0.500	0.782	0.234	0.259	0.296	0.207	0.101	1.000			
Mn	0.239	0.381	0.531	0.594	0.636	0.308	0.317	0.198	0.240	0.234	0.680	1.000		
Ba	–0.170	0.294	0.352	0.291	0.204	–0.160	–0.202	–0.076	–0.083	–0.185	0.269	0.338	1.000	
U	–0.067	0.023	–0.260	–0.118	–0.289	–0.254	–0.290	–0.234	–0.105	–0.083	–0.157	0.021	0.292	1.000

Table Ⅲ−3 Result of R-Mode Factor Analysis

	factor loadings (varimax rotation)				
	Factor				communality
	1	2	3	4	
Au	0.086	0.676	0.018	−0.008	0.464
Ag	0.647	0.203	0.086	−0.167	0.495
Cu	0.743	0.057	−0.290	−0.366	0.774
Pb	0.650	0.401	−0.060	−0.351	0.710
Zn	0.564	0.157	−0.377	−0.574	0.814
Sb	0.067	0.711	−0.265	−0.177	0.612
As	0.049	0.651	−0.384	−0.224	0.624
Hg	0.055	0.203	−0.430	−0.248	0.290
Mo	0.297	0.446	−0.167	−0.034	0.317
W	0.102	0.692	−0.073	−0.027	0.495
Fe	0.391	0.006	−0.244	−0.758	0.786
Mn	0.367	0.261	0.085	−0.709	0.713
Ba	0.408	−0.255	0.347	−0.295	0.439
U	−0.041	−0.095	0.588	−0.001	0.356
factor contributions	16.3%	17.7%	8.6%	13.7%	

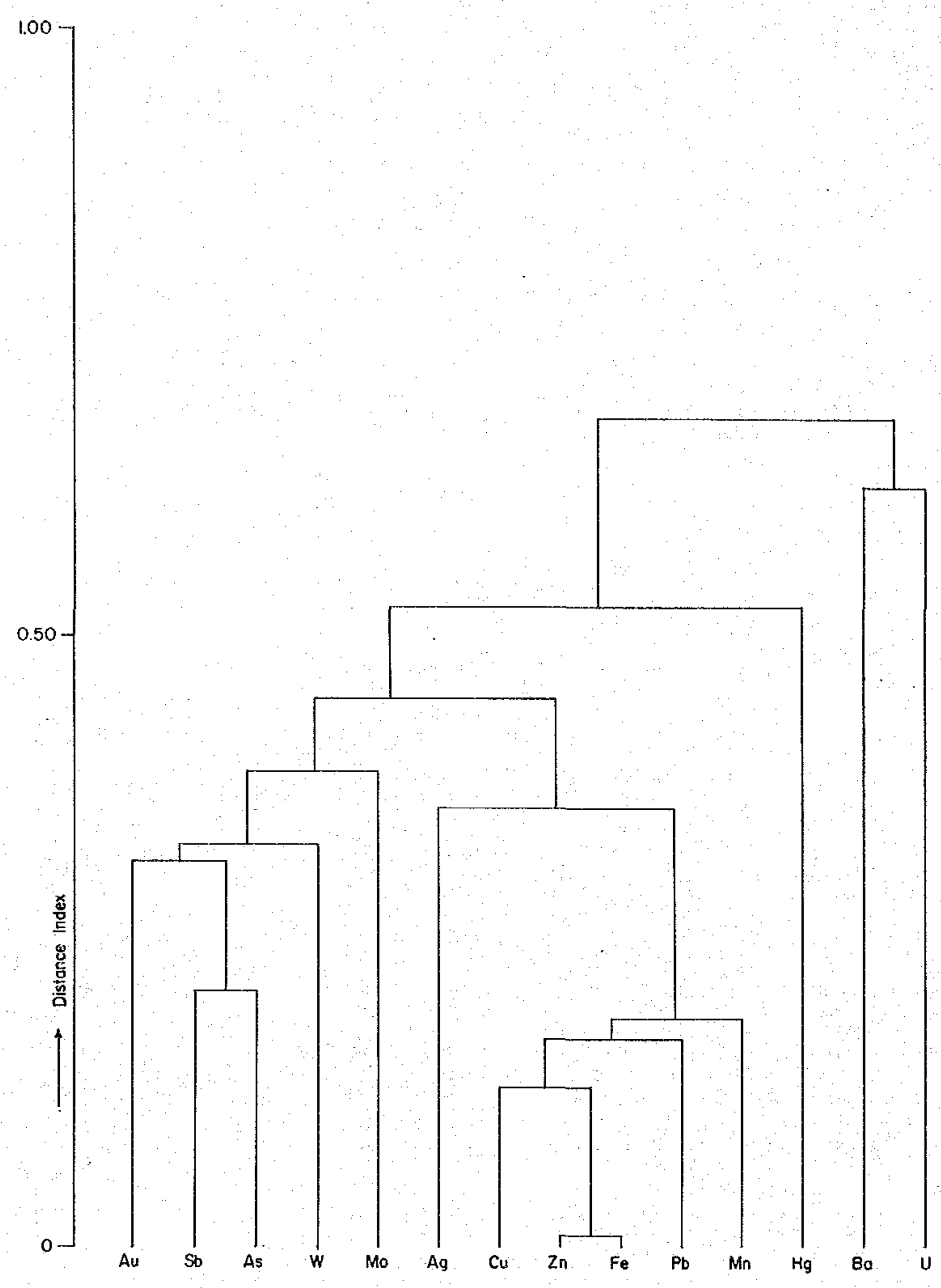


Fig. Ⅲ—3 Dendrogram of Analysed Elements by Median Method

各々の因子の鉱床地質上の意味は次のように考えられる。

(i) 第1因子はCu，Pb，AgおよびZnに対して0.5以上の高い因子負荷量をもっており，データの分布に対して16.3％寄与している。これらの元素の共生は，第Ⅱ部第3章で詳述されているような鉱物共生（黄銅鉱―閃亜鉛鉱―方鉛鉱）にも反映されており，第1因子は，Cu－Pb－Znを中心とした卑金属の鉱化作用に関係した因子と推定される。

(ii) 第2因子はSb, W, AuおよびAsに対して高い負荷量（0.65以上)をもっており，寄与率は17.7％である。これらの元素の共生はクラスター分析の項で述べたように，この地域の主要なAu－Sb鉱化作用に関係した因子と推定される。

(iii) 第3因子はUに対して0.588という高い負荷量をもっており，その寄与率は8.6％である。Uの鉱化作用が存在したかどうか不明であるが，Uの元素の分布からわかるように，酸性貫入岩類特にジャコイ花崗閃緑岩に密接な関係を持つ因子と考えられる。

(iv) 第4因子はFe，ZnおよびMnに対して負の高い負荷量（－0.55以下)をもっており，その寄与率は13.7％である。これらの元素の共生は，たぶん閃亜鉛鉱に関係していると考えられるが，詳細は不明である。

2－5－3　因子スコアの分布

すべての川砂試料に対して，バウ地域の鉱化作用に関係して重要と考えられる第1因子と第2因子について因子スコアが計算された。次にその各因子スコアの分布について記述する。

第1因子（Cu－Pb－Ag－Zn）

第1因子スコアの分布はMap Ⅲ－5(1)に表示されている。$\bar{x}+2s$に相当するスコア2.0以上の高スコアの試料はジュアラ山，ロピー山，セブワッド山，ドゥヤン山およびバラン山(G. Baran）の近くから採取されたものであり，スコア1.0（$\bar{x}+s$に相当)以上2.0以下の試料は，主としてこれらの地域をとり囲むように分布している。そのほか，バウ町南部の石灰岩地域およびプロジェクト地域最南部のバドゥド山（G. Badud）の近くに高スコア試料が集中している。

一般に，高スコア試料は，北北東方向の直線状に配列する第三紀貫入岩岩株に密接な関係をもって分布している。ジュアラ山からバラン山に至る貫入岩類に沿う高スコア試料の集中する地域は，Cu－Pb－Ag－Znの卑金属鉱化作用の存在する可能性が十分考えられる地域である。

第2因子（Sb－W－Au－As）

第2因子スコアの分布はMap Ⅲ－5(2)に表示されている。スコア2.0以上の高スコア試料は，主としてパンガ山，ジャンブサンおよびタバイ山の3地域に分布している。スコア1.0以上2.0以下の高スコア試料は，主としてこれらの地域をとり囲むように分布しており，バウ町周辺の石灰岩地域にほとんど限られている。この地域以外では，スコア1.0以上の高スコア試料は極く少数で散在しているにすぎない。このような試料の一つとして，熱水変質を受けた第三

紀貫入岩類および火砕岩類中を流下するブテ川から採取されたものがある。

第2因子の高スコアの分布から，すでにかなりの探鉱・採掘が行われてきたバウ町周辺の石灰岩地域に当然のことながらSb−Au 鉱化作用の存在を確認することができ，さらにその外側のブテ川上流にも，同様の鉱化作用の存在する可能性のあることがわかる。

2−6 元素分布の一般的特徴

先の項で述べられた各元素の分布および因子スコアの分布から，元素の共生およびその分布の一般的パターンが得られる。このパターンはプロジェクト地域にあるいろいろなゾーンに予想され得る異なったタイプの鉱化作用を暗示している。

(i) Au, Sb, WおよびAsはお互いに密接に関係しており，一般にバウ町周辺の石灰岩地域に分布している。このゾーンの濃集の中心は，バンガ山，ジャンブサンおよびタバイ山周辺に想定される。

(ii) Cu, PbおよびZnの高異常帯は部分的にAgとMoを伴って，北北東方向の第三紀貫入岩岩株のゾーン特にジュアラ山からバラン山にかけて分布している。

(iii) Hgの高異常は他の元素と無関係に分布しているように見え，テゴラ山からスタァト山にかけて，北東方向に走るペダワン層の分布する地帯に限られている。ランドサット・イメージから得られた顕著な北東方向のリニアメントはこのゾーンに平行である。

(iv) Uの高異常帯はジャゴイ花崗閃緑岩特にセリキン部落の北東部にほぼ限られて分布している。

石灰岩と共生しないAu鉱化作用の可能性もまたアピ山とブテ川地域に存在する。これらの地域は，パン・コンセントレート調査や地質調査の結果と合わせて，フォローアップの必要性について検討すべきであろう。

2−7 地化学異常地域

各種の元素に対する異常値の組み合せや異常試料が採取された川の流域を考慮して，いくつかの異常地域がMapIII−6 や TableA−9に表示されているように抽出された。

ジャンブサン地域

この地域は約13 km^2からなり，一般にAu, Sb, WおよびAsの高異常からなる。39の異常試料がこの地域から得られており，そのうち，重要な元素はAu, SbおよびWである。Auの異常値は0.5 ppmから5.7 ppm，Sbは3.8 ppmから1,592.0 ppmそしてWは12 ppmから110 ppm の範囲にある。後述する川砂50ℓ中の金粒が10粒以上検出された試料は，6試料見られる。

この地域では以前にかなり探鉱，採掘が行われてはいるが，新鉱床あるいは既知鉱床の延長部発見の可能性がある。

タイ・パリット断層地域

この地域は9㎢以上で，一般にAu, Sb, WおよびAsに富む地域である。23の異常試料がこの地域から得られている。そのうち重要な元素はAu, Sb, Wである。Auは0.3ppmから9.1ppm，Sbは3.3ppmから612.0ppm，Wは4ppmから450ppmの範囲にある。

この地域もまた過去にかなり探鉱，採掘が行なわれてはいるが，新鉱床あるいは既知鉱床延長部の発見の可能性は残されている。

ロピー山・ジュアラ山地域

この地域は6.5㎢で，主としてCu, PbおよびZnからなるゾーンとAu, Sb, WおよびAsからなるゾーンで構成され，その他AgやMoも認められる。25の異常試料がこの地域から得られており，重要な元素はCu, Pb, Ag, Mo, Au, SbおよびWである。Cuの異常値は29ppmから174ppm，Pbは37ppmから740ppm，Agは1.2ppmから7.6ppm，Moは2.8ppmから5.8ppm，Auは0.5ppmから61.2ppm，Sbは6.1ppmから157ppmおよびWは4ppmから13ppmの範囲にある。後述する金粒が10粒以上認められる試料としては5試料ある。

ジュアラ山付近は過去にかなり探鉱，採掘が行われているが，いぜんとしてCu, Pb, Au, SbおよびAgに対する探鉱の可能性は残されている。

ロピー山付近では，第三紀貫入岩岩株中を流下する沢において，黄鉄鉱塊や石英脈の転石が発見されている。このことは特にCu, Pb, Au, Mo などの鉱床存在の可能性を支持するものである。

テゴラ山地域

この地域は約18㎢で，Hgに富む地域である。26の異常試料からなっており，その値は251 ppbから105,000 ppbの範囲にある。

テゴラ山近くに旧テゴラ水銀鉱山が位置しており，この鉱床の延長およびHg新鉱床に期待がもてる地域である。

アピ山地域

この地域は約5㎢である。Au, WおよびAgの異常試料が1点得られたのみであるが，10粒異常の金粒が4試料から検出されており，しかもこれらの試料のうち2試料からは，27粒および56粒の金粒が得られており，金鉱床に期待がもてる。

プテ川地域

この地域は2.5㎢であり，熱水変質を受けた第三紀貫入岩，火山礫凝灰岩，火山泥流堆積物が分布している。

19.8ppmというAuの高異常試料が1点のみではあるが得られており，さらに2.2ppmおよび8.3ppmのAg異常試料も得られている。

地質は金鉱床にとって好条件でもあり，Au・Ag鉱化作用に期待がもてる地域である。

第3章　パン・コンセントレートによる地化学探査

川砂中の重鉱物の採取は，主として金の探鉱を目的として，パンニングによって実施された。

一般に川砂試料中の金は，化学分析によるよりもパン・コンセントレートにおいて容易に検出される。しかしながら化学分析によって検出された金が，パン・コンセントレート中では検出されない場合もある。それは，金粒が極めて細粒でパンニングの際に流出してしまったものと考えられる。

以下，パンニングの方法，パン・コンセントレートの処理，データ処理およびその結果について述べる。

3－1　試料採取

パンニングは，原則として川砂試料採取と併行して実施された。

パンニングに供した川砂の量を記録するため容積5ℓの木箱が用いられ，パン・コンセントレートは，径70cmの木製パンニング皿を使って，熟練者の手で採取された。パンニングは，得られるパン・コンセントレートの量が15～20gになるまで，何回も繰り返し行われた。したがって重鉱物の少ない沢では，30回以上繰り返し行われた場合もあった。このようにして得られたパン・コンセントレートは，その都度ビニール小袋に収納された。

試料採取時に，付近の岩石タイプ，植生など必要な情報がコード型式で記録された。

このようにして454個のパン・コンセントレート試料が採取された。それは1km^2あたり0.84試料に相当する。

3－2　試料処理

採取されたパン・コンセントレート試料は自然乾燥され，ブロモフォルム（比重2.89）を使って重鉱物が分離された。得られた重鉱物から，磁鉄鉱粒が取り除かれた後，双眼実体鏡の下で，全粒がカウントされた。

その磁鉄鉱を含まない重鉱物は，将来の重鉱物分析に備え，粒径を0.15㎜から0.18㎜に整えられた。

3－3　データ処理

カウントされた金粒数については，パンニングに供された川砂の量を使って，50ℓ当りの補正金粒数が求められた。このようにして得られた補正金粒数が1.0以下のものは，すべて1とされた。

計算に供されたデータおよびその結果は，Table A－10およびMap Ⅲ－7に示されている。

MapⅢ－７は補正金粒数を縮尺１：１００,０００の水系図上にシンボルを使って表示したものである。

３－４　金粒の分布

MapⅢ－７を見ると，金粒が検出された試料は，ジャンプサン石灰岩地域，ロピー山第三紀貫入岩地域およびアピ山第三紀貫入岩地域の三地域に比較的まとまって分布している。

ジャンプサン石灰岩地域では，補正金粒数が２１粒から１７５粒の範囲のものが６試料，ロピー山地域には２７粒と５８粒の２試料，アピ山地域には２７粒と５６粒の２試料，それぞれ認められる。ジャンプサン地域には，いくつかの旧坑があり，アピ山地域にも１つの旧坑がある。ロピー山地域では旧坑は見られない。

ジャンプサンやロピー山地域では，金粒の分布は川砂試料のAu異常分布とほぼ一致するが，アピ山地域では川砂によるAu異常は１点しか認められない。

これらの３地域以外に，パンガ山，タバイ山およびジュアラ山付近に，補正金粒数が１０以下であるが，数点検出されている。そのほかの金粒が検出された試料は，まとまりはないが，北北東方向の第三紀貫入岩岩株から流下する沢から得られたものが多い。

金粒が検出されているにもかかわらず，川砂試料の化学分析結果ではAuが検出限界以下である場合が多い。たとえば補正金粒が１０以上検出されたアピ山地域で採取された川砂試料の分析結果のうち，異常値が認められたものは１試料にすぎない。

タバイ山，ドゥヨ部落，ボガッグ部落，アウブ川およびプテ川の地域のように逆の場合もある。たとえばプテ川からのパン・コンセントレート中からは金粒が検出されないにもかかわらず，川砂試料の化学分析結果では１９.８ppmという高値が得られている。このことは，金は非常に細粒で存在し，パンニングに際し流出してしまったことを暗示している。

第４章　地化学探査結果の要約

川砂試料中の元素の分布および地化学データの多変量解析結果に基づいて，次のことが結論づけられる。

1. プロジェクト地域には，巨視的に見ると４つの金属濃集帯が存在する。すなわち，(1)バウ町周辺の石灰岩地域中で，Au，Sb，WおよびAs が濃集している地帯，(2)北北東方向の第三紀貫入岩岩株に沿い，Cu，Pb，Zn と少量のAg やMo を伴う地帯，(3)テゴラ山から北北東方向にのびてスタアト山に至るHg の濃集地帯，および(4) ジャゴイ花崗閃緑岩の分布に限られたUの濃集地帯からなっている。
2. 各々の元素の異常値とその異常試料の後背地域を合わせ考えて，１６の異常地域がプロジェクト地域において抽出された。

参 考 文 献

[illegible] 文 [illegible] [illegible]

REFERENCES

Bayliss, D.O. (1965): Foraminifera from the Bau Limestone Formation, Sarawak, Malaysia; Borneo Reg. Malaysia Geol. Surv. Ann. Rept. 1965, pp. 173–195.

Chang, F. (1981): A Manual of Geochemical Exploration Methods; Geol. Surv. of Malaysia, Special paper 3.

Chu, L.H. et al (1982): Regional Geochemistry of South Kelantan; Geol. Surv. of Malaysia, Geochemical Rept. 1.

Claveau, J. (1976): Bau Gold District, Sarawak; Unpubl. Rept.

Dorani, J. (1978): Geology and Mineralization of the Bidi Area in the Bau Mining District, West Sarawak; Unpubl. B. Sc. Hons Thesis, Dept. of Geol., Univ. of Malaya, Kuala Lumpur.

Geikei, S. (1905): The occurrence of gold in Upper Sarawak, Inst. of Min. & Met., V. XV, pp. 63–86.

Harris, J.H. (1958): Gold ores and treatment methods at Bau; Brit. Borneo Geol. Surv. Ann. Rept. 1985, pp. 53–61.

Hon, V. (1981): Physical Controls of Mineralization in the Bau Town Area, West Sarawak, Malaysia, Sarawak Mining Bull., v. 1, pp. 43–55.

Ito, S. (1979): A Strategy on Geochemical Exploration in Bau Region of Sarawak, Malaysia; ESCAP, advisory rept. GC/18, unpubl.

Keiji, A.J. (1964): Bibliography of Paleontological Literarure on Sarawak, Brunei and Sabah 1945–1965; Borneo Reg. Malaysia Geol. Surv. Ann. Rept. 1964, pp. 160–162.

Lau, J.W.E. (1970): Mineralogical Study of the Arsenical Gold Ore from the Bau Mining District, Sarawak, Malaysia; Unpubl. B.Sc. Hons Thesis, Dept. of Geol., Carleton Univ., Ottawa.

(1970): Bau-Gunung Undan Area, West Sarawak (Progress Report); Geol. Surv. Malaysia, Ann. Rept. 1970, pp. 194–199.

Lau, J.W.E. (1971): *Bau-Gunung Undan Area (Progress Report); Geol. Surv. of Malaysia,* Ann. Rept. 1971, pp. 159–165.

(1972): Bau-Gunung Undan Area (Progress Report); Geol. Surv. of Malaysia, Ann. Rept. 1972, pp. 214–218.

(1972): Iron-rich ore occurrences in the Bau Area; Geol. Surv. of Malaysia, Ann. Rept. pp. 231–238.

(1973): The rediscovery of rudist with its associated fauna in the Bau Limestone and its palaeobiogeographic significance in circumglobal correlation and plate tectonic studies; Geol. Surv. of Malaysia, Ann. Rept. 1973, pp. 188–196.

(1974): The Bau-Gunung Undan Area, Sarawak (Progress Report); Geol. Surv. of Malaysia, Ann. Rept. 1974, pp. 213–218.

(1975): Bau-Gunung Undan Area, West Sarawak (Progress Report); Geol. Surv. of Malaysia, Ann. Rept, 1975, pp.209–210.

(1976): History of Mining in Sarawak; Jour. of Malaysian Historical Society (Sarawak Branch), No. 2 pp. 17–32.

Milroy, W. V. (1953): The Geology of West Sarawak; Unpubl. Rept.

Pimm, A.C. (1967): The Bau Mining District (Krokong), West Sarawak, Malaysia, Geol. Surv. Borneo Region, Malaysia, Bull. 7, Pt. II

Roe, F.W. (1958): Gold Extraction and Gold Ore at Bau, West Sarawak; Geol. Surv. Dept., British Territories in Borneo, Unpubl. Rept.

Roe, F.W. and Kirk, H.J.C. (1958): Classification of Bau Mining Areas; Brit. Borneo Geol. Surv. Ann. Rept. 1958, pp. 48–52.

Rose, A.W., Hawkee, H.E. & Webb, J.S. (1979): Geochemistry in Mineral Exploration on; 2nd Ed., Academic Press.

Scrivenor, J.B. (1905): A Report on the Geology of the Residency of Sarawak, and of the Sadong District; Borneo with Special Reference to the Occurrence of Gold and Coal; Unpubl. Rept., Geol. Dept., Federated Malaya States.

Sinclair, A.J. (1974): Selection of Threshold Values in Geochemical Data using Probability Graphs; Jour. Geochem. Expl., v. 3, no. 2, pp. 129–149.

Sugiyama, R. (1981): Bedding Fabric Analysis (B.F.A); Tokai Univ., Japan.

Tsukada, F., Kujirai, S. & Yabuki, J. (1968): Report of the Mercury Deposits in Sarawak; Unpubl. Rept., Japan Mining Industry Assocn.

Tyler, W.H. (1940): Geological Report of the Area Prospected for Mercury and Gold at Tegora and Gading, Bau District, Sarawak; Unpubl. Rept., Mineral Property Investigation Ltd.

Wolfenden, E.B. and Kho, C.H. (1964): Bau Area: Bau-Lundu Road, Geol. Surv., Borneo Region, Malaysia, Ann. Rept. 1964, pp. 100–113.

Wolfenden, E.B. (1965): The Bau Mining District (Bau), West Sarawak, Malaysia, Geol. Surv. Borneo Region, Malaysia, Bull. 7, pt. I.

Wilford, G.E. (1955): The Geology and Mineral Resources of the Kuching-Lundu Area, West Sarawak including the Bau Mining District; Geol. Surv. Dept., British Territories in Borneo, Mem. 3.

Yajima, S. (1958): The Study of Mercury Deposits in West Sarawak; Unpubl. Dept. Nomura Mining Co. Ltd., Tokyo.

Zeylmans Van Emmichoven, C.P.A. (1939): De Geologic van het centrals en ootelijke deel van de Westerafdeeling van Borneo, translated in Geological accounts of West Borneo, Brit. Borneo Geol. Surv., Bull. 2, 1955, pp. 159–272.

APPENDICES

A–1 Detection Limits

Detection limits of the various analytical methods used for the 14 elements are shown below:

Element	Dection Limit	Remarks
Au	0.1 ppm	analysed by Geological Survey of Malaysia, Sarawak (Au–Hg)
Ag	0.1 ppm	
Sb	0.5 ppm	
Cu	1.0 ppm	
Pb	1.0 ppm	
Zn	1.0 ppm	
Fe	0.1 %	
Mn	1 ppm	
As	1 ppm	
Mo	0.5 ppm	
Hg	25 ppb	dependent on vapour pressure of Hg
W	2 ppm	analysed by Chemex Labs
Ba	10 ppm	Ltd., Vancouver, Canada
U	0.5 ppm	

A–2 Analytical Method of Each Element

A–2–1 Analysis of Au

1) Weigh 2 g of sample into breaker.
2) Add 10 ml HC1 and 5 ml HNO_3.
3) Heat unitl paste-like.
4) Dissolve in 10 ml HC1 and 1 ml HNO_3 and make up to 100 ml.
5) Shake and allow to settle.
6) Take 50 ml aliquot in a separating funnel and add 5 ml of MIBK.
7) Shake vigorously for 2 minutes.
8) Transfer organic phase into test tube and measure for Au by AAS.

The AAS setting for Au is wavelength 242.8 nm, slit width 0.7 nm and current 10 mA.

A–2–2 Analysis of Cu, Pb, Zn, Ag, Fe and Mn

Cu, Pb, Zn, Ag, Fe and Mn were analysed using the Perkin Elmer 2380 ASS after the samples has been prepared according to the procedure below:

1) 1g of sample weighed and transferred into a beaker.
2) Add 10 ml HCl and 1 ml HNO_3.
3) Stir, cover with watch glass and heat in sand bath for 1 hour.
4) Cool and transfer solution to a graduated test tube.
5) Make-up to 20 ml.
6) Shake and allow to settle over night.
7) Measure with AAS.

Settings of AAS:

Element	Wavelength (nm)	Slit width (nm)	Current (mA)
Cu	324.7	0.7	15
Pb	283.3	0.7	10
Zn	213.9	0.7	15
Ag	328.1	0.2	12
Fe	248.3	0.2	30
Mn	279.5	0.2	20

A–2–3 Analysis of As

1) Weigh 0.5g of sample into test-tube.
2) Fuse with 2 g of $K_2S_2O_7$.
3) Cool and add 10 ml of 1:3 H_2SO_4 (As free).
4) Leach in a water bath until completely dissolved.
5) Add 10 ml 1:3 H_2SO_4 (As free), shake and allow to settle over night.
6) Take 5 ml aliquot in flask and add 20 ml of 1:3 H_2SO_4 (As free).
7) Make up to 50 ml mark with distilled water and add 5 ml of KI solution (15%) and 0.2 ml of $SnCl_2$ solution (40%).
8) Wait for 15 minutes and add about 8 g of zinc pellets (As free).
9) Connect flask to arsenic apparatus.
10) Allow gas to bubble through chloroform - Ag DDTC solution* via a patch of lead acetate-soaked glass wool until reaction stops.
11) The resulting colour is compared against similarly prepared standards using a photo-spectrometer (wavelength 550 nm).

* Chloroform - Ag DDTC solution is prepared by dissolving 1.25 g silver-diethyl dithiocarbamate and 0.82 g ephedrine in 500 ml chloroform.

A–2–4 **Analysis of Mo**

1) Weigh 1 g of sample into test tube.
2) Fuse with 3 g of $K_2S_2O_7$ and fuse.
3) Cool and add 20 ml of 1:1 HCL.
4) Shake and allow to settle.
5) Take 5 ml aliquot and add 2 ml of reduction solution*.
6) Add 1 ml of zinc-dithiol solution**.
7) Mix thoroughly and wait for 10 minutes.
8) Add 1 ml of petroleum spirit and shake vigorously for 30 seconds.
9) Compare visually with prepared standards. If concentration is above 0.5 ug/1 ml, the photospectrometer set at wavelength 670 nm is used for comparison. Step 5 onwards is repeated with a lesser aliquot if concentration appears to be above standards.

* Reduction solution - 75 g citric acid + 100 g ascorbic acid made up to 1 1.

** Zinc dithiol solution - 0.3 g zinc dithiol digested until clear with 2 ml ethanol, 4 ml H_2O and 2 g NaOH. 1 ml thioglycollic acid, 40 ml H_2O and 50 5% KI solution added and made up to 100 ml with H_2O.

A–2–5 **Analysis of Sb**

1) Weigh 1 g of sample into test tube.
2) Add 3 g $K_2S_2O_7$ and fuse.
3) Cool and add 20 ml of 1:1 HCl.
4) Shake and allow to settle.
5) Take 5 ml aliquot and add 0.2 ml $Ce(SO_4)_2$ solution,* 0.1 ml 1% $HONH_2Cl$ solution, 5 ml 8% $(NaPO_3)_6$ solution, 1 ml 0.05% brilliant green solution followed immediately by 5 ml toluene.
6) Shake vigorously for 30 seconds.
7) Compare with prepared standards using the photospectrometer set at wavelength 625 nm. Step 5 onwards is repeated with a lesser aliquot if concentration appears to be above standards.

* Cerium sulphate solution - 0.1M $Ce(SO_4)_2$ in $1MH_2SO_4$.

A–2–6 **Analysis of Hg**

Hg is analysed using the Jerome Gold Film Mercury Detector, model 301. 0.1 g scoop of sample is normally used but for sample suspected to be high in Hg, the 0.01 g scoop is sufficient.

A–2–7 **Analysis of W**

0.5 g of sample is fused with potassium bisulphate and leached with HC1. The reduced form of W is complexed with toluence 3, 4 dithiol and extracted into an organic phase. The resulting colour is visually compared with similarly prepared standards.

A–2–8 **Analysis of U**

1.0 g of sample is digested with a mixture of HNO_3 and perchloric acid for approximately 2 hours on a hot water bath. An aliquot of the sample solution is extracted with MIBK after addition of an aluminium nitrate tripropyl anmonium nitrate solution. An aliquot of the extract solution is analysed fluorimetrically against aqueous standards that have been carried through the same procedure.

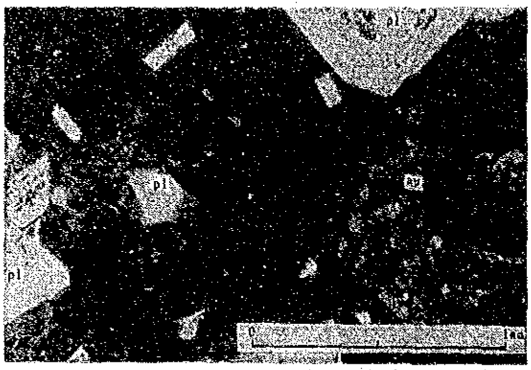
A–2–9 **Analysis of Ba**

0.2 g of sample is digested with a mixture of hydrofluoric, nitric and perchloric acids in a teflon vessel. The mixture is allowed to evaporate to dryness on a hot plate. The solid residue is leached with 25 ml of 10% by volume HC1. NaCl is added as a ionization suppressant in the AAS flame.

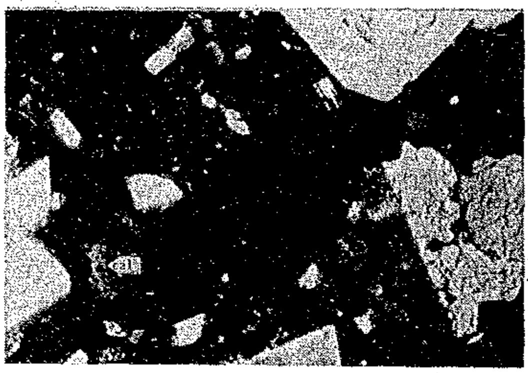
Fig. A–1 Microphotograph of Thin Section

Abbreviation

qz : Quartz
pl : Plagioclase
au : Augite
b : Biotite
cal : Calcite
chl : Chlorite
ser : Sericite
op : Opaque mineral

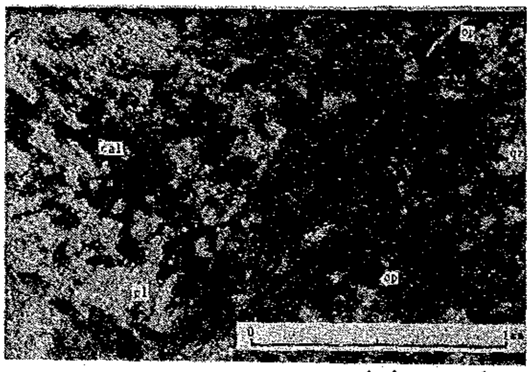


only lower polar

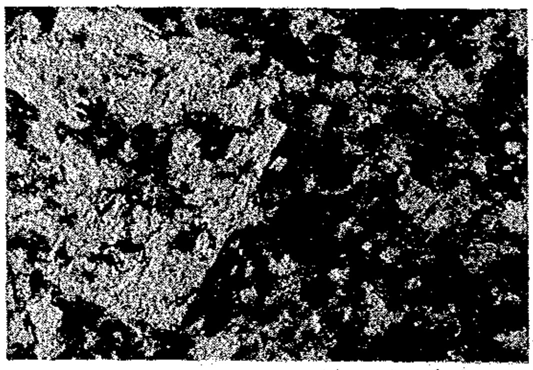


crossed ploars

Sample No. : AR 0055
Location : Kusa Mine
Rock Name : two pyroxene andesite
Texture : porphyritic

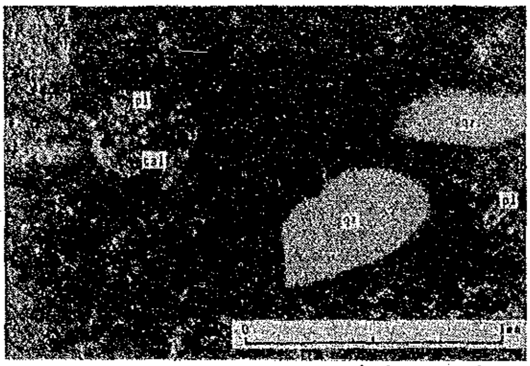


only lower polar



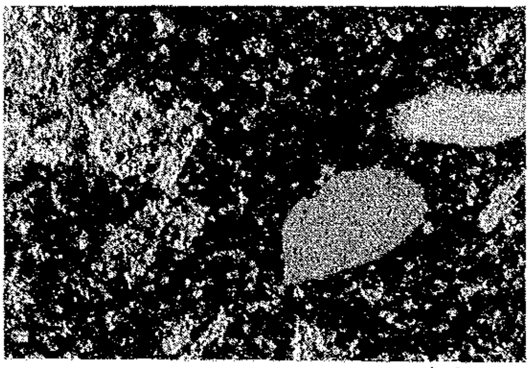
crossed ploars

Sample No. : AR 0099
Location : Saburan Mine
Rock Name : quartz porphyry
Texture : porphyritic

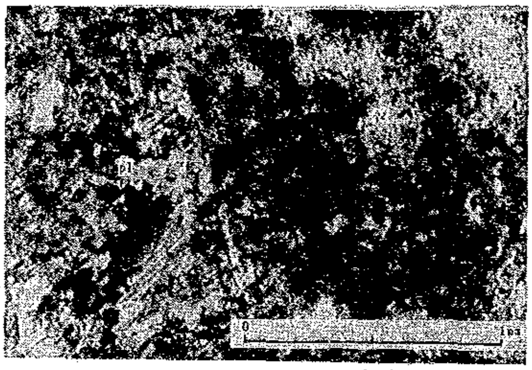


only lower polar

Sample No. : AR 0027
Location : G. Juala
Rock Name : quartz porphyry
Texture : porphyritic

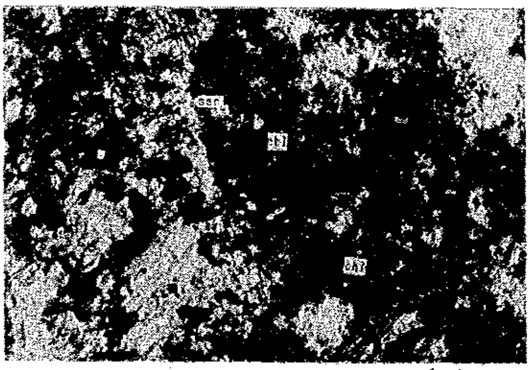


crossed ploars

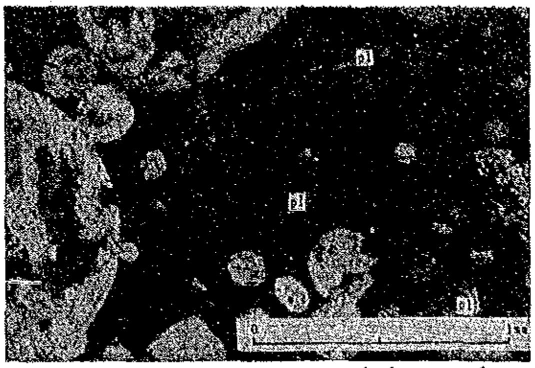


only lower polar

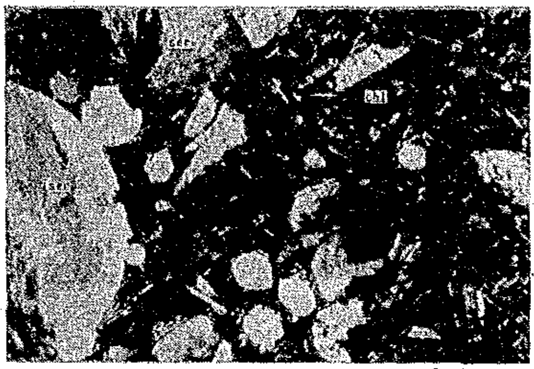
Sample No. : AR 0029
Location : G. Juala
Rock Name : quartz porphyry
Texture : porphyritic



crossed ploars

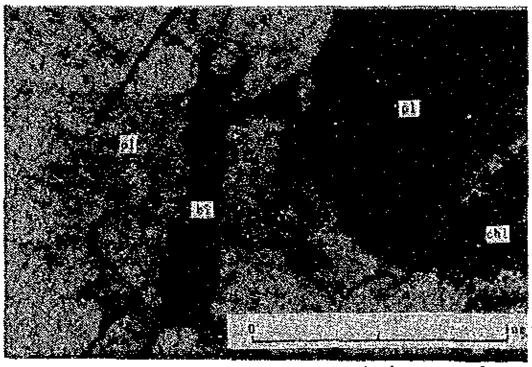


only lower polar

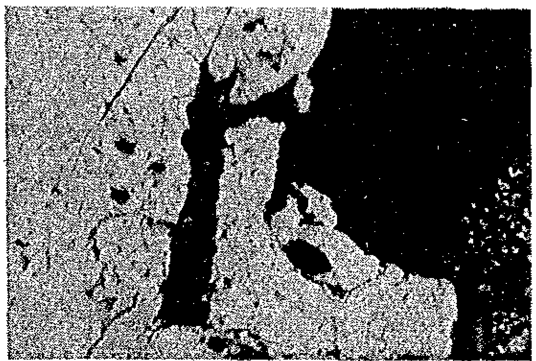


crossed ploars

Sample No. : AR 0039
Location : northeast of Kg. Poak
Rock Name : altered andesite
Texture : porphyritic and amygdaloidal



only lower polar



crossed ploars

Sample No. : JK 0040
Location : Kg. Serikin
Rock Name : hb-bio granodiorite
Texture : equigranualr

Fig. A–2 Microphotograph of Polished Section

Abbreviation

Py : Pyrite

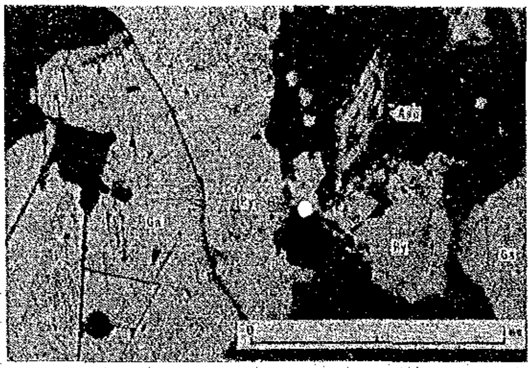
Asp : Arsenopyrite

As : Native arsenic

Sb : Stibnite

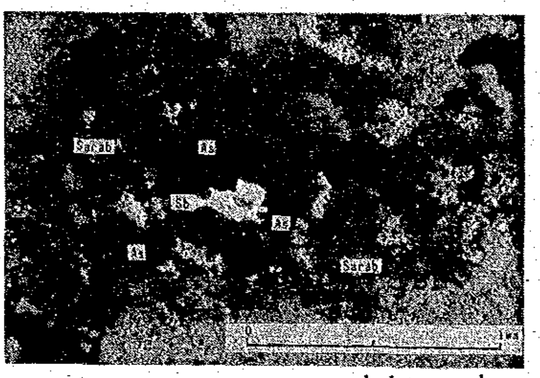
Sarab : Sarabauite

Ga : Galena



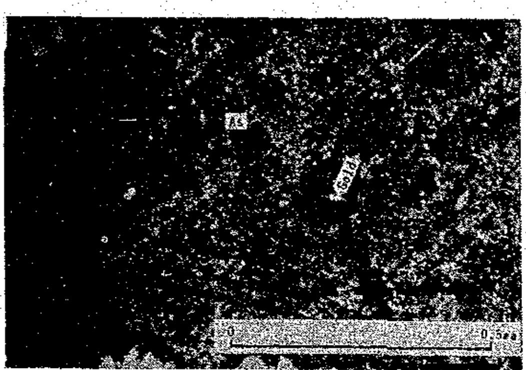
only lower polar

Sample No. : AR 0032-a
Location : G. Tongga
Ore Name : Py-Asp-Ga ore

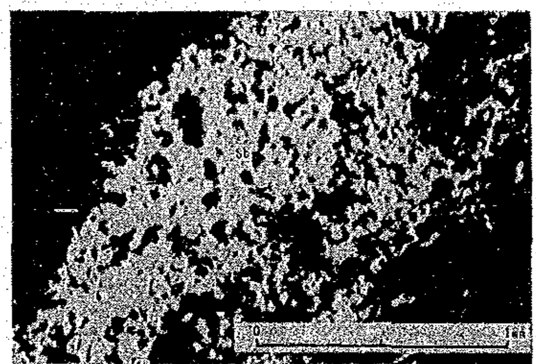


only lower polar

Sample No. : AR 0054-f-2
Location : Kusa
Ore Name : Gold-Asp ore

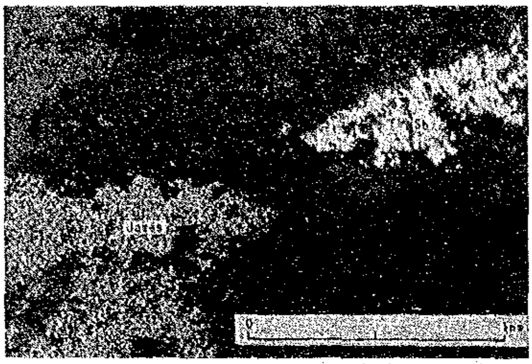


only lower polar



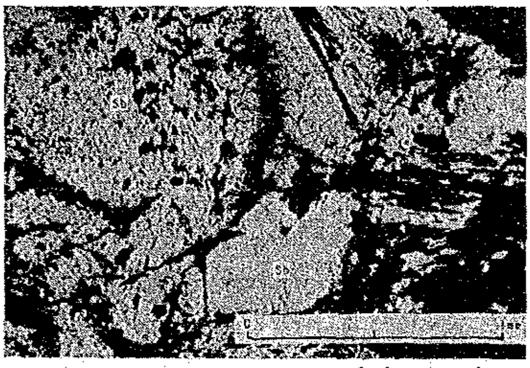
Sample No. : AR 0069-d-1
Location : Lucky Hill A
Ore Name : Sb-Ore

only lower polar



only lower polar

Sample No. : AR 0069-d-2
Location : Lucky Hill A
Ore Name : Sb-ore



only lower polar

Sample No. : AR 0070-a-2
Location : Lucky Hill B
Ore Name : Sb-ore

Table A—1 Lineaments from Landsat Imagery E-30160-02132-7, Bau Area

(1)

Direction of Lineament	Length of lineament km	Length (weighted)			No. of Lineaments (155 total)	
		Total length in 10° sector km	% (longest total length = 100%)	Average length per lineament km	No. of lineament in 10° sector	% (largest No. of lineaments = 100%)
000	2.0					
003	1.5					
003	1.3					
008	2.0	16.1	17.8	2.01	8	22.9
008	1.8					
009	4.5					
009	1.5					
009	1.5					
011	3.0					
013	2.5					
013	3.0					
013	0.5	10.5	11.6	1.50	7	20.0
014	1.5					
018	1.5					
018	1.5					
020	5.0					
020	2.0					
021	1.0					
021	0.8					
023	2.0	18.3	20.2	2.03	9	25.7
023	2.0					
025	2.5					
026	1.0					
029	2.0					
033	5.5	5.5	6.1	5.5	1	2.9
049	1.0	1	1	1	1	2.9
050	2.0					
050	3.5					
050	2.5					
050	2.5					
050	2.8					
050	2.5					
050	1.5					
050	1.0					
050	3.5					
052	1.5					
053	27.0					
053	1.5	76.4	84.5	3.32	23	65.7
053	3.0					
054	4.0					
056	2.5					

Direction of Lineament	Length of lineament km	Length (weighted)			No. of Lineaments (155 total)	
		Total length in 10° sector km	% (longest total length = 100%)	Average length per lineament km	No. of lineament in 10° sector	% (largest No. of lineaments = 100%
056	1.5					
056	2.5					
056	3.5					
056	1.5					
057	1.8					
057	0.5					
058	2.5					
058	1.3					
061	2.0					
061	2.0					
061	4.3					
061	8.0	29.8	33.0	3.31	9	25.7
061	3.0					
062	3.0					
064	3.5					
066	2.0					
067	2.0					
283	0.5	0.5	0.5	0.50	1	2.9
300	2.0					
303	1.0					
303	1.8					
303	4.0					
303	1.0					
305	1.5	27.3	30.2	2.73	11	31.4
306	2.0					
308	6.5					
308	2.0					
308	5.5					
309	2.0					
310	3.5					
310	3.5					
311	3.0					
312	7.5					
312	3.5					
314	3.5					
314	2.0					
314	3.0					
314	4.5					
314	3.0	90.4	100	2.58	35	100
315	3.0					
315	3.5					
316	4.5					
316	3.0					
316	4.0					
316	2.5					
316	2.5					

Direction of Lineament	Length of lineament km	Length (weighted) Total length in 10° sector km	% (longest total length = (100%)	Average length per lineament km	No. of Lineaments (155 total) No. of lineament in 10° sector	% (largest No. of lineaments = 100%
317	3.0					
317	2.0					
317	1.5					
317	1.5					
317	1.3					
317	1.3					
317	1.0					
317	1.0					
317	1.5					
317	0.8					
317	1.0					
317	0.5					
317	2.5					
318	4.0					
319	2.0					
319	0.5					
319	1.5					
319	1.5					
321	1.3					
321	1.5					
322	2.5					
323	1.5					
323	1.3					
323	1.0					
324	1.3					
324	3.0	27	29.9	1.8	15	42.9
324	2.0					
324	1.0					
326	4.5					
326	1.0					
326	1.8					
327	0.8					
329	2.5					
330	2.0					
331	1.0					
331	2.5					
331	1.5					
332	1.3					
333	1.0					
333	1.3					
333	1.0	21.4	23.7	1.43	15	42.9
334	2.5					
334	2.0					
334	1.5					
335	1.8					
339	0.5					
339	0.5					
339	1.0					

Direction of Lineament	Length of lineament km	Length (weighted)			No. of Lineaments (155 total)	
		Total length in 10° sector km	% (longest total length = (100%)	Average length per lineament km	No. of lineament in 10° sector	% (largest No. of lineaments = 100%
341	1.5					
341	1.0					
341	2.0					
341	1.8					
341	1.0					
342	1.0					
342	1.0					
342	0.5	24.1	26.7	1.34	18	51.4
342	0.5					
342	0.5					
343	1.3					
343	1.5					
343	2.0					
345	3.5					
346	1.5					
348	1.0					
349	1.5					
353	1.0	2.3	2.5	1.15	2	5.7

Table A−2 Petrographic Description of Sedimentary Rocks

Ser No.	Sample No.	Coordinates X	Coordinates Y	Formation	Rock Name	Lithic Fragment	Crystal Fragment	
1	BR0001	91528	5434	Bau Limestone	Muddy limestone	–	Gph, Q, Op	Cc, Chl*, Ser*
2	BR0012	91490	5385	Bau Limestone	Sandstone	*Granite? (Q + Kf + Ser*)* Mylonitic quartz	–	Q, Kf*, Ser* Chl*, Ze*
3	BR0071	91797	5150	Bau Limestone	Sandy limestone	*Mosaic quartz*	Q, Op*	Cc, Chl*, Ser*, Ze*
4	JR0012	92077	4487	Kayan Sandstone	Conglomerate	Sandstone (Q + Ser* + Chl*)	Q	Chl*, Ser*, Ze*, Op
5	JR0013	92085	4413	Pedawan	Calcareous mudstone	–	Q, Pl, Cc	Cc, Chl*, Ser*, Bt
6	JR0017	90972	3512	Pedawan	Banded limestone	–	Cc, Q	Cc
7	JR0018	90972	3512	Pedawan	Sandy tuff	–	Q, Pl (Cc* + Ser*), Bt	Cc, Chl*, Ser*
8	JR0019	90977	3502	Pedawan	Calcareous conglomerate	Mosaic Calcite, Sandstone (mosaic Q + Ser*)	Kf, Pl, Q	Ze*, Chl*, Ser*, Cc
9	JR0022	90957	3695	Younger Volcanics	Tuffaceous mudstone	Sandstone (mosaic Q + Ser* + Bt) Tuff (Chl* + Ser* + Pl) Basalt (Pl)	Pl (Cc), Q	Cc
10	JR0025	91150	3990	Younger Volcanics	Lapilli tuff	Tuff (Pl + Ser*) *Sandstone* (Q + Pl + Ser*)	Q, Pl (Ser* + Cc*)	Mosaic Q

* : probable alteration mineral

Q : Quartz, Pl: Plagioclase, Kf: Kali-feldspar, Bt: Biotite, Cc: Calcite,

Ser : Sericite, Ze: Zeolite, Chl: Chlorite, Gph: Graphite, Op: Opaque minerals

Table A—3 Petrographic Description of Igneous Rocks and Skarn

(Igneous)

Ser. No.	Sample No.	Coordinates X	Coordinates Y	Rock Name	Texture	Rock forming minerals Q	Kf	Pl	Bt	Hb	Cpx	Opx	Op	Secondary minerals Cc	Ser	Chl	Epi	Pr	Ze	Hm	Ac	Id
1	AR0011	91400	4777	Granite porphyry	Porphyritic	R	C	A	R	R			R	*	*	*	*	*				
2	AR0016	91426	4975	Quartz porphyry	Porphyritic	A	R	A					R	*	*			*				
3	AR0017	91389	4991	Quartz porphyry	Porphyritic	A		A	R				R		*	*	*					
4	AR0024	91486	5645	Two-pyroxene andesite	Porphyritic, Pilotaxitic		R	A		R	C	R	R	*			*					
5	AR0027	91620	5387	Quartz porphyry	Porphyritic	C		A					R	*	*	*						
6	AR0029	91616	5354	Quartz porphyry	Porphyritic	A		A					R		*	*						
7	AR0039	91792	5173	Altered andesite	Hyalopilitic, Amygdaloidal			A						*	*	*			*			
8	AR0045	91590	5214	Quartz porphyry	Porphyritic	C		A					R				*					
9	AR0046	91559	5156	Quartz porphyry	Porphyritic	C		A	R				R				*					
10	AR0047	91592	5158	Quartz porphyry	Porphyritic	C		A	R	R			R	*		*	*					
11	AR0055	91387	5211	Two-pyroxene andesite	Porphyritic, Pilotaxitic	R		A	R	C	C	C	R	*	*							
12	AR0066	91651	5501	Quartz porphyry	Porphyritic	C		A					R	*	*	*						
13	AR0071	91707	5670	Dacite	Hyalophitic	C		A					R	*	*	*	*					
14	AR0076	91865	5830	Quartz porphyry	Porphyritic	A		A					R		*	*	*			*		
15	AR0099	91530	5428	Quartz porphyry	Porphyritic	C		A					R	*	*							
16	AR0127	91636	5444	Dacite	Hyalophitic	C	R	A						*	*	*			*			
17	BR0069	91813	5164	Altered andesite	Intersertal			A			C					*			*			
18	BR0074	91914	5311	Dacite	Porphyritic, Hyalopilitic	C		A					R	*	*				*			
19	JR0039	91420	5925	Quartz porphyry	Porphyritic	C		A	R	C			R	*	*	*	*					
20	JR0040	89865	4700	Granodiorite	Equigranular	C	C	A	C	C			R		*	*						
21	KR0058	93055	5999	Gabbro	Ophitic	R		A			A			*	*	*		*			*	
22	SR0028	90690	4740	Basalt	Subophitic, Amygdaloidal			A			A					*	*					*
23	SR0046	90770	3825	Dacite	Porphyritic, Hyalopilitic	C		A	R				R		*	*	*					
24	SR0052	90745	3475	Diorite porphyry	Porphyritic	R		A	C	C			R		*	*	*					
25	SR0058	91150	4280	Dacite	Porphyritic, Hyalopilitic	C		A					R		*			*		*		
26	SR0069	90450	5000	Biotite granite	Equigranular	A	A	C	C					*	*							
27	SR0079	92380	5720	Biotite granite	Porphyritic			A	C	R			R		*		*					

(Skarn)

Ser No.	Sample No.	Coordinates X	Coordinates Y	Rock Name	Texture	Rock forming minerals Q	Cr	Ga	Chl	Epi	Ser	Op
1	AR0068	91651	5501	Skarn	Mosaic, Layered	A	A	A	C	R	R	R

A = Abundant, C = Common, R = Rare, * = Detected, Q = Quartz, Kf = K-feldspar, P1 = Plagioclase, Bt = Biotite,
Cpx = Clinopyroxene, Opx = Orthopyroxene, Op = Opaque minerals, Cc = Calcite, Ser = Sericite, Chl = Chlorite,
Epi = Epidote, Pr = Prehnite, Ze = Zeolite, Hm = Hematite, Ac = Actinolite, Id = Idingsite, Ga = Garnet.

Table A—4 Result of Pollen Determination

		Sample No.	AR0010	AR0033	AR0074	AR0081	AR0133	BR0043	BR0052	BR0082	JR0029	JR0036	SR0023	SR0026	SR0042	SR0047
	Coordinates	X	91460	91600	91770	91903	91668	90965	90745	91625	91017	89850	90690	90605	91985	90900
		Y	4899	9830	5770	5488	5515	5060	4235	5702	4805	5360	4475	4640	4725	3815
	Formation		Pedawan	Pedawan	Pedawan	Pedawan	Pedawan	Pedawan	Pedawan	Pedawan	Pedawan	Pedawan	Pedawan	Bau Limestone	Pedawan	Bau Limestone
	Rock Name		Mudstone	Mudstone	Mudstone	Mudstone	Mudstone	Shale	Shale	Shale	Siltstone	Siltstone	Shale	Limestone	Shale	Limestone
Pollen & Spore	Tsugaepollenites?											1				
	Araucariacites?												3			
	Classopollis?			8					1			39	28			2
	cf. Cycadopites											1				
	Tricolporate			1												
	cf. *Eucommia*											1				
	Cicatricosisporites?											1				2
	Lycopodiacidites?												1			
	re. Monolete spore		3													
	Trilete spore			16					1	1		20	17			5
	Retitriletes															1
Total Number			3	25	0	0	0	0	2	1	0	53	49	0	0	10
Inferred Age			–	Mesozoic	–	–	–	–	Mesozoic	–	–	Mesozoic	Mesozoic	–	–	Mesozoic

Numerals indicate number of pollen/spore identified

Table A–5 Result of Foraminifera Determination

(Large Foraminifera)

Ser. No.	Sample No.	Coordination X	Y	Rock Name	Formation	Large Foreminiferas
1	AR0004	91433	5521	Limestone	Bau Limestone	–
2	AR0025	91036	5070	Limestone	Bau Limestone	–
3	AR0035	91856	5175	Limestone	Bau Limestone	–
4	AR0038	93793	5173	Limestone	Bau Limestone	Pseudocyclammina lituus (Yokoyama) P. sp.
5	AR0057	91322	5221	Limestone	Bau Limestone	Pseudocyclammina lituus (Yokoyama)
6	AR0079	92028	5472	Limestone	Bau Limestone	–
7	AR0085	91410	5415	Limestone	Bau Limestone	Pseudocyclammina lituus (Yokoyama) P. sp.
8	AR0135	91650	5592	Limestone	Bau Limestone	–
9	BR0023	91636	5445	Limestone	Bau Limestone	–
10	BR0075	91863	5297	Limestone	Bau Limestone	Pseudocyclammina lituus (Yokoyama) P. sp.
11	BR0085	91609	5605	Limestone	Bau Limestone	–
12	JR0020	90977	3502	Limestone	Pedawan	–
13	SR0074	90700	5035	Limestone	Bau Limestone	–

(Smaller Foraminifera)

Ser. No.	Sample No.	Coordination X	Y	Rock Name	Formation	Smaller Foraminifera
1	AR0010	91460	4879	Mudstone	Pedawan	–
2	AR0081	91903	5488	Mudstone	Pedawan	–
3	BR0082	91625	5702	Shale	Pedawan	–

Table A—6 Description of Ore Deposits, Semi-Detailed Area, Bau

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.	Tai Parit	19635 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 calcite 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.
2.	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°C –240°C.
3.	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.	
4.	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.	
5.	West of Batu Bekajang Lake	96695 5535	Western adjacent of Batu Bekajang Lake	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 assayed 16.5. g/t Au.	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 Company in 1900's then by Bukit Young in 1960's. The total production is not known. All workings are flooded.	
6.	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.	

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	Alternation of Host Rock	History of Operation	Relavant Information and Remarks
7.	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 in calc-silicate minerals. Gold content is usually high in quartzose ore associated with calc-silicate minerals.	NNE–SSW 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.
8.	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, sarabauite, 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-sarabauite-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.	
9.	Luckyhill B (South deposit)	91635 5445	500 m south of Luckyhill A.	Vein-shaped repalcement	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.	
10.	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.	
11.	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.	
12.	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)	Usually 1–10 g/t Au, locally 30–65 g/t Au	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.	

No.	Name	Geographic Coordinate	Location	Type	General Trend	Sacle	Host Rock	Mineral	Metallic Element Assemblage	Ore Grade	General Feature of Ore Deposit	Physical Control of Mineralization	Alternation of Host Rock	History of Operation	Relevant Information and Remark
13.	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 Pah Mining Company.	
14.	G. Sirlung	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)	Coarsely 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.	
15.	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.
16.	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 fomerly mines on a very small scale.	
17.	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–SE joint	Slight silicification	The deposit was worked on a very small scale by the Ban Lee Gold Mining Company.	
18.	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.	
19.	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.

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	Alternation of Host Rock	History of Operation	Relevant Information and Remark
20.	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.	
21.	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, pyritw 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.	
22.	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 3 g/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 near 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	
23.	G. Tabai	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	
24.	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.	
25.	Bidi	91410 5251	Bidi 300 m south of Rumoh Mine	Lenticular vein	Unknown	Very small	Limestone and brecciated shale	Gold, stibnite, realgar, arsenopyrite, calcite, quartz.	Au-Sb-As	Au: 3.5–5 g/t Sb: 4% As: 30%, locally	Small lenticular ore body occurs in limestone near contact with overlying shale. The ore consists of fine-grained quartz and calcite associated with abundant arsenic minerals and minor stibnite and gold.	Contact between limestone and shale, and fractures in both rocks.	Silicification and weak sericitization	This was worked during 1963, but the operation was not continued due to high content of arsenic.	
26.	Kusa	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	Au: less than 10 g/t in general, but some lump samples contain 20–74 g/t Au, 0.5–13% Sb	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 in 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 Joing 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.	

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	Alternation of Host Rock	History of Operation	Relevant Information and Remark
27.	Associated Mine	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.	
28.	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.	
29.	Nam Loong B	91325 5280	600 m west of Kusa	Lenticular vein	Trending NNW and NE directions	Two underground workings along inclined 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.
30.	Northwest of Batu Sepit	91300 5180	400 m north-northwest of Batu Sepit	Replacement	Around an outlier of shale occurring on the lime-stone flat	Consisted of opencast workings 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.	
31.	Ban Him Lee	91255 5215	0.5 km to the southeast of Boring	Vein	The distribution of the opencasts 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.	
32.	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	Silicification	The area was mined by Jong Kuet Syn sometime in the 1950's and 1960's.	
33.	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.	

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	Alternation of Host Rock	History of Operation	Relevant Information and Remarks
34.	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 later 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.	
35.	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 re-worked by local chinese under small-scale mining.	
36.	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.	
37.	Jongjang	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 contact.	Limestone near contact with shale	Silicification	This area was probably mined in the middle of 1900's by local chinese miner.	
38.	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.	
39.	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.				
40.	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.				

Table A—7 Description of Ore Deposits Outside Semi-Detailed Area, Bau

No.	Name	Geographic Coordinated	Location	Type	General Trend	Scale	Host Rock	Mineral	Metallic Element Assemblage	Assay	General Feature of Ore Deposit	Physical Control of Mineralization	Alteration of Host Rock	History of Operation	Relevant Information and Remarks
1.	Gading	91125 4300	14 km to the south-southwest of Bau	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.	Silicifications, 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.	
2.	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 Primary ore deposit; Extent in strike direction = 20 m Width = 60 m Extent in dip direction = 80 m	Sandstone, shale	Cinnabar, native arsenic, realgar, stibnite, pyrite, marcasite, calcite, talc flourite.	Hg-As-Sb	Ore assayed around 0.2% 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.	
3.	Jambusan	92020 5540	300 m north-northwest of Jambusan	Vein and vein-shaped replacement	The opencasts follow the trend of the limestone 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.	
4.	Sirenggok	91782 5685	Immediately northeast of Bau Town	Vein-shaped fissure filling		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.	
5.	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 opencasts are flooded.	
6.	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.	
7.	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 fissure	Silicification	The area was mined by panning and sluicing for coarse gold sometime in early 1900's. At present the area is abandoned.	
8.	Opar	90555 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.	

Table A--8 Result of Chemical Analysis of Stream Sedimeut Samples

Ser No.	Sample No.	Coordination X Y	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	As ppm	Hg ppb	Mo ppm	W ppm	Fe %	Mn ppm	Ba ppm	U ppm
001	AS0010	91605 5193	tr.	0.5	32	32	85	tr.	41	-	1.4	13	2.00	110	385	0.8
002	AS0011	91597 5144	tr.	0.4	54	20	68	tr.	46	-	1.4	8	1.38	300	144	0.5
003	AS0012	92020 5477	tr.	0.5	7	3	42	6.0	49	-	0.6	1	1.62	100	70	0.4
004	BS0003	91290 5236	tr.	0.2	16	36	53	5.6	48	19	tr.	3	1.75	281	200	0.5
005	BS0010	91298 4915	tr.	0.6	17	18	72	0.7	3	24	tr.	1	2.67	786	335	0.4
006	BS0011	90772 4220	tr.	0.3	12	10	69	tr.	9	78	tr.	1	2.63	100	160	0.8
007	BS0012	90777 4175	tr.	0.4	16	11	65	tr.	7	48	tr.	1	3.31	42	145	0.6
008	BS0013	90768 4130	tr.	0.1	15	17	42	1.5	17	214	0.8	15	1.60	7	110	0.5
009	BS0014	90795 4090	0.5	0.4	12	14	73	2.2	7	258	1.8	2	2.64	80	185	0.6
010	BS0015	90737 4075	tr.	0.4	19	15	91	0.8	6	183	1.8	1	3.01	80	190	0.6
011	BS0016	90727 4022	tr.	0.4	4	10	15	tr.	3	36	0.6	3	0.86	4	80	0.5
012	BS0017	90727 4026	tr.	0.3	6	8	22	1.0	4	56	0.6	1	1.64	150	120	0.4
013	BS0018	90750 4245	tr.	0.1	13	11	57	0.6	6	36	tr.	1	2.99	76	110	0.6
014	BS0019	90720 4237	tr.	0.2	14	12	93	0.6	4	36	tr.	1	3.31	283	160	0.7
015	BS0020	90700 4230	tr.	0.6	13	11	64	0.9	6	32	0.6	1	3.53	86	145	0.7
016	BS0021	90693 4217	tr.	0.2	5	6	26	tr.	4	20	tr.	1	0.81	10	90	0.6
017	BS0022	90704 4188	tr.	0.4	9	7	48	tr.	6	24	0.6	1	2.20	80	145	0.6
018	BS0023	90682 4135	tr.	2.8	13	10	56	0.6	7	52	0.6	1	3.08	66	170	0.4
019	BS0024	90657 4132	tr.	0.7	9	10	55	tr.	4	28	1.0	2	2.05	143	175	0.4
020	BS0025	90918 4438	tr.	0.8	13	10	41	tr.	10	1080	0.6	1	1.37	70	170	0.8
021	BS0026	90883 4415	tr.	0.5	8	9	23	0.9	10	9080	tr.	1	0.96	52	145	1.0
022	BS0027	90895 4318	tr.	0.4	9	9	33	0.8	11	440	tr.	1	1.28	72	170	0.8
023	BS0028	90872 4320	tr.	0.5	9	8	31	0.8	15	88	tr.	1	1.22	70	160	0.8
024	BS0029	90922 4322	tr.	0.6	12	9	55	0.9	8	76	tr.	1	2.19	110	185	0.7
025	BS0030	90967 4270	tr.	0.3	8	9	29	tr.	9	40	tr.	1	1.08	85	170	1.0
026	BS0031	90965 4245	tr.	0.1	7	7	22	tr.	tr.	32	tr.	1	1.00	70	175	0.8
027	BS0032	90900 4522	tr.	0.6	12	11	62	0.6	tr.	36	tr.	1	2.36	75	135	0.4
028	BS0033	90860 4507	tr.	0.4	25	13	111	0.8	3	44	tr.	1	3.89	240	175	0.4
029	BS0034	90848 4467	tr.	-	-	-	-	0.6	tr.	40	tr.	1	-	-	145	0.4
030	BS0035	91005 4440	tr.	0.8	27	18	122	0.6	tr.	44	tr.	1	4.76	115	230	0.4
031	BS0036	91000 4392	tr.	0.3	11	9	76	0.9	9	6796	tr.	1	3.20	65	135	0.4
032	BS0037	91036 4370	tr.	0.5	14	16	309	1.1	tr.	448	1.2	1	5.07	290	160	0.6
033	BS0038	91052 4371	tr.	0.5	13	12	81	tr.	5	396	0.6	1	3.07	150	160	0.4
034	BS0042	91830 5360	tr.	0.4	9	10	30	tr.	40	-	0.6	2	1.58	235	110	1.0
035	BS0045	91784 5359	tr.	0.4	2	5	30	2.9	27	-	0.6	1	1.16	85	70	0.2
036	BS0049	91403 5433	1.2	0.9	7	30	46	4.7	812	-	1.0	3	1.08	350	90	0.4
037	JS0001	92560 5310	tr.	0.1	4	6	18	tr.	5	323	tr.	1	0.79	41	95	0.5
038	JS0002	92560 5320	tr.	0.3	10	8	4	tr.	8	412	tr.	1	3.55	76	105	0.4
039	JS0003	92595 5330	tr.	0.2	5	5	27	tr.	4	1640	tr.	1	1.35	62	110	0.6
040	JS0004	92665 5370	tr.	0.2	3	6	50	tr.	6	22	tr.	1	1.20	55	95	0.2

Ser No.	Sample No.	Coordination X Y	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	As ppm	Hg ppb	Mo ppm	W ppm	Fe %	Mn ppm	Ba ppm	U ppm
041	JS0005	92580 5280	tr.	0.6	11	13	104	0.9	12	291	tr.	1	9.70	157	110	0.4
042	JS0006	92640 5305	tr.	0.5	14	10	48	tr.	8	112	0.7	1	3.57	97	120	0.4
043	JS0007	92820 5380	tr.	0.3	15	13	66	tr.	5	3510	tr.	1	3.85	110	120	0.8
044	JS0008	92840 5390	tr.	0.4	16	11	56	tr.	6	440	tr.	1	3.60	218	130	0.6
045	JS0009	89837 5605	tr.	tr.	2	6	14	tr.	6	13	tr.	1	0.81	32	70	0.3
046	JS0010	89607 5680	tr.	0.1	1	5	8	tr.	tr.	14	0.9	1	0.50	47	90	0.5
047	JS0011	89615 5780	tr.	tr.	1	5	8	tr.	tr.	11	tr.	1	0.50	59	95	0.4
048	JS0012	89570 5767	tr.	tr.	2	6	8	tr.	tr.	28	tr.	1	0.60	66	160	0.8
049	JS0013	89567 5737	tr.	0.1	1	2	5	tr.	tr.	28	tr.	2	0.27	27	80	0.4
050	JS0014	89575 5707	tr.	tr.	1	4	11	tr.	tr.	22	tr.	1	0.26	29	90	0.4
051	JS0015	89570 5700	tr.	tr.	1	3	6	tr.	tr.	22	tr.	1	0.25	21	95	0.6
052	JS0017	89827 5782	tr.	0.1	1	3	7	tr.	5	7	tr.	1	0.20	14	90	0.4
053	JS0018	89807 5777	tr.	tr.	1	3	7	tr.	4	22	tr.	1	0.42	17	90	0.4
054	JS0019	89730 5840	tr.	tr.	1	1	6	tr.	3	22	tr.	1	0.40	20	120	0.6
055	JS0020	89740 5847	tr.	0.2	2	7	9	tr.	3	7	tr.	4	0.69	19	95	0.8
056	JS0021	89773 5840	tr.	0.2	1	4	5	tr.	tr.	7	tr.	1	0.36	11	90	0.4
057	JS0022	89786 5845	tr.	0.2	4	5	11	tr.	3	22	tr.	1	0.76	28	135	0.6
058	JS0023	89800 5850	tr.	tr.	1	tr.	4	tr.	7	16	tr.	1	0.36	58	145	0.5
059	JS0024	89830 5845	tr.	0.2	tr.	3	5	tr.	3	131	tr.	1	0.28	21	95	0.3
060	JS0025	89840 5850	tr.	0.1	2	5	9	tr.	4	7	tr.	1	0.23	15	90	0.6
061	JS0026	89867 5860	tr.	0.1	1	4	9	tr.	6	7	tr.	1	0.30	35	95	0.4
062	JS0027	89877 5867	tr.	0.1	2	3	10	tr.	tr.	tr.	tr.	1	0.81	17	90	0.4
063	JS0028	90067 5525	tr.	tr.	2	2	18	tr.	5	9	tr.	1	1.32	115	90	0.4
064	JS0029	90087 5514	tr.	tr.	1	1	13	tr.	2	14	tr.	1	0.47	36	90	0.4
065	JS0030	90137 5473	tr.	tr.	1	1	9	tr.	4	12	tr.	1	0.51	16	80	0.6
066	JS0032	90220 5487	tr.	tr.	1	2	17	tr.	3	26	tr.	1	0.46	30	80	0.6
067	JS0033	90267 5607	tr.	0.2	3	5	11	tr.	tr.	tr.	tr.	1	1.67	58	95	0.6
068	JS0034	90310 5527	tr.	tr.	2	2	11	tr.	tr.	9	tr.	1	0.57	25	90	0.6
069	JS0037	90338 5532	tr.	0.1	3	3	24	tr.	tr.	9	tr.	1	1.32	89	130	0.5
070	JS0038	90333 5545	tr.	0.1	3	4	40	tr.	tr.	9	tr.	1	1.59	136	120	0.6
071	JS0039	89857 4972	tr.	0.2	1	2	11	tr.	tr.	14	tr.	1	0.69	96	200	3.8
072	JS0041	89782 4963	tr.	0.2	3	9	20	tr.	tr.	18	tr.	1	1.24	204	330	3.2
073	JS0043	89908 4984	tr.	0.5	5	8	34	tr.	tr.	19	tr.	1	3.94	301	225	5.9
074	JS0044	89917 4993	tr.	0.6	4	6	33	tr.	tr.	42	tr.	1	3.55	327	305	4.4
075	JS0045	89773 4477	tr.	0.3	4	9	19	tr.	tr.	-	tr.	1	1.20	154	190	1.8
076	JS0046	89768 4450	tr.	0.3	2	6	12	tr.	tr.	tr.	tr.	1	1.38	217	110	1.4
077	JS0047	89786 4455	tr.	0.1	3	6	16	tr.	tr.	tr.	tr.	1	0.72	100	210	1.5
078	JS0048	89770 4427	tr.	0.4	2	5	8	tr.	tr.	40	tr.	1	0.80	55	90	1.2
079	JS0049	89785 4402	tr.	0.3	6	11	26	tr.	1	tr.	tr.	1	2.17	259	390	2.6
080	JS0050	89800 4390	tr.	0.7	9	11	30	tr.	tr.	40	tr.	1	2.49	354	350	3.2

Ser No.	Sample No.	Coordination X Y	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	As ppm	Hg ppb	Mo ppm	W ppm	Fe %	Mn ppm	Ba ppm	U ppm
081	JS0051	89810 4393	tr.	0.7	7	11	33	0.9	3	23	tr.	1	3.34	860	480	4.6
082	JS0052	89767 4510	tr.	0.3	4	10	21	tr.	4	tr.	tr.	1	2.88	425	330	2.8
083	JS0053	89826 4574	tr.	0.8	4	10	23	tr.	1	40	0.8	1	3.48	176	350	5.2
084	JS0054	89844 4573	tr.	0.5	2	5	24	tr.	tr.	24	tr.	1	1.60	142	295	2.6
085	JS0055	89842 4585	tr.	0.4	2	3	9	tr.	2	24	tr.	1	0.64	65	150	1.4
086	JS0057	89800 4706	tr.	0.6	1	4	10	tr.	4	16	tr.	1	0.57	119	175	4.8
087	JS0058	89787 4712	tr.	0.5	3	10	16	tr.	2	16	1.2	1	1.93	206	120	1.8
088	JS0059	89775 4706	tr.	0.4	2	2	15	tr.	5	7	tr.	1	0.74	164	225	1.0
089	JS0060	89747 4720	tr.	0.3	3	7	22	tr.	2	tr.	tr.	1	1.16	105	295	1.4
090	JS0061	89757 4740	tr.	0.3	2	1	17	tr.	tr.	7	tr.	1	1.13	107	230	1.6
091	JS0062	89772 4768	tr.	0.1	2	5	16	tr.	2	tr.	tr.	1	0.62	98	295	3.2
092	JS0063	89757 4778	tr.	0.4	1	2	20	tr.	tr.	32	tr.	1	1.36	261	320	2.5
093	JS0064	89747 4778	tr.	0.2	3	8	22	tr.	2	40	tr.	1	1.83	236	255	1.4
094	JS0065	89750 4685	tr.	tr.	5	5	11	tr.	tr.	42	tr.	1	0.51	61	105	1.2
095	JS0066	89910 4682	tr.	0.2	5	3	11	tr.	tr.	9	tr.	1	0.35	47	255	2.6
096	JS0067	89887 4700	tr.	0.1	2	7	21	tr.	6	11	tr.	1	1.37	155	200	3.2
097	JS0068	89860 4716	tr.	0.1	3	8	18	tr.	tr.	18	tr.	1	1.49	168	240	3.2
098	JS0069	89846 4725	tr.	0.4	3	8	20	tr.	4	29	tr.	1	1.98	158	245	4.4
099	JS0070	89832 4760	tr.	0.2	2	8	18	tr.	5	11	tr.	1	1.03	106	190	2.8
100	JS0071	89832 4780	tr.	0.5	3	10	31	tr.	1	65	tr.	1	2.27	268	305	3.0
101	JS0072	89822 4787	tr.	0.4	3	10	19	tr.	6	94	tr.	1	2.86	178	200	9.0
102	JS0073	89807 4804	tr.	0.3	7	3	22	tr.	tr.	67	tr.	1	1.43	205	320	4.6
103	JS0074	89783 4820	tr.	0.5	3	9	23	tr.	6	32	tr.	1	2.36	212	270	4.9
104	JS0075	89770 4815	tr.	0.6	3	6	29	tr.	5	49	tr.	1	2.14	274	385	3.2
105	JS0076	89912 4555	tr.	0.1	3	8	27	tr.	11	7	tr.	1	1.28	172	385	1.6
106	JS0077	89932 4553	tr.	0.3	8	9	31	tr.	6	9	1.6	1	2.62	229	320	2.7
107	JS0078	89834 4544	tr.	0.7	5	11	23	tr.	9	16	0.8	1	3.05	383	375	4.2
108	JS0079	89822 4602	tr.	0.3	2	6	19	tr.	tr.	27	tr.	10	0.78	101	245	1.7
109	JS0080	89957 4640	tr.	0.3	4	6	9	tr.	tr.	27	tr.	5	0.16	45	55	1.0
110	JS0081	91690 4634	tr.	0.3	17	14	81	tr.	11	4170	tr.	1	2.95	199	210	0.4
111	JS0082	91703 4620	tr.	0.6	17	18	156	tr.	4	13900	tr.	1	5.33	245	175	0.3
112	JS0083	91685 4588	tr.	0.6	27	18	166	tr.	7	256	tr.	1	5.33	236	190	0.4
113	JS0084	91666 4560	tr.	0.3	5	6	27	tr.	4	112	tr.	1	0.94	31	90	0.4
114	JS0085	91638 4523	tr.	0.6	21	17	162	tr.	9	64	tr.	1	5.42	456	225	0.4
115	JS0086	91665 4443	tr.	0.3	16	13	90	0.6	22	28000	tr.	3	2.98	142	3280	0.6
116	JS0087	91694 4425	tr.	0.5	21	12	70	tr.	68	59300	tr.	4	3.05	210	310	0.6
117	JS0088	91705 4413	tr.	0.4	50	19	77	3.7	63	31100	tr.	7	4.74	195	480	0.8
118	JS0089	91757 4390	tr.	0.1	8	9	24	tr.	11	4550	tr.	2	1.37	126	210	0.8
119	JS0090	91764 4395	tr.	0.2	8	12	31	tr.	8	2070	tr.	1	1.47	204	200	0.8
120	JS0092	91510 4430	tr.	0.2	11	12	40	tr.	28	105000	tr.	1	1.66	80	345	0.6

Ser No.	Sample No.	Coordination X	Coordination Y	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	As ppm	Hg ppb	Mo ppm	W ppm	Fe %	Mn ppm	Ba ppm	U ppm
121	JS0093	91493	4423	tr.	0.2	17	15	84	tr.	5	6960	tr.	1	3.93	179	210	1.0
122	JS0094	91468	4463	tr.	0.4	9	9	49	tr.	14	-	tr.	1	1.78	96	185	0.8
123	JS0095	91455	4475	tr.	0.3	20	17	107	0.5	6	3000	tr.	1	4.01	141	210	0.4
124	JS0096	91474	4507	tr.	0.8	18	18	130	tr.	6	1120	tr.	1	4.59	239	200	0.5
125	JS0097	91506	4540	tr.	0.2	15	19	86	0.6	9	1150	tr.	1	2.68	124	190	0.4
126	JS0098	91527	4525	tr.	0.2	11	10	68	tr.	23	4740	tr.	1	2.79	165	170	0.4
127	JS0099	91577	4600	tr.	0.6	18	17	104	tr.	12	19300	0.6	1	3.34	186	210	0.6
128	JS0100	91577	4627	tr.	0.6	16	13	104	2.9	15	19700	tr.	1	4.48	172	155	0.6
129	JS0101	91594	4615	tr.	0.7	20	19	88	0.7	20	10500	tr.	1	5.11	460	200	0.6
130	JS0102	91653	4660	tr.	0.6	18	17	73	0.5	12	1298	tr.	1	4.94	179	210	0.6
131	JS0103	91700	4678	tr.	0.2	10	9	64	0.8	8	20900	tr.	1	2.68	154	150	0.8
132	JS0104	91751	4715	tr.	0.5	8	12	30	tr.	8	590	tr.	1	2.72	129	150	0.8
133	JS0105	92002	4572	tr.	0.4	12	13	38	tr.	9	413	tr.	1	2.23	150	175	0.9
134	JS0106	92027	4525	tr.	0.3	12	12	39	tr.	4	88	tr.	1	2.36	257	200	1.2
135	JS0107	92032	4518	tr.	0.4	12	13	26	tr.	17	59	tr.	1	2.21	169	185	0.9
136	JS0108	92050	4482	tr.	0.4	26	14	67	tr.	3	57	tr.	1	3.57	260	240	1.0
137	JS0109	92070	4452	tr.	0.7	22	20	47	tr.	10	77	tr.	1	2.34	242	255	0.8
138	JS0110	92070	4415	tr.	0.5	16	12	64	tr.	4	62	tr.	1	2.54	488	295	0.8
139	JS0111	92090	4377	tr.	0.3	7	6	26	tr.	3	44	tr.	1	1.36	161	210	1.0
140	JS0112	92075	4380	tr.	0.2	9	7	27	tr.	2	34	tr.	1	1.26	125	190	0.9
141	JS0114	92042	4650	tr.	0.6	79	16	54	tr.	57	53	tr.	1	4.00	173	170	0.6
142	JS0115	92035	4595	tr.	0.2	11	8	33	tr.	14	47	tr.	1	2.14	99	145	0.5
143	JS0116	90960	3855	tr.	0.2	8	10	24	tr.	4	56	tr.	1	0.74	111	185	0.9
144	JS0117	90997	3888	tr.	0.3	17	14	57	0.6	2	30	tr.	1	1.87	196	240	1.0
145	JS0118	91043	3880	tr.	0.5	11	13	38	0.8	5	26	tr.	1	0.88	131	200	0.4
146	JS0119	91048	3850	tr.	0.2	14	11	47	tr.	1	26	tr.	1	1.26	157	190	0.7
147	JS0120	91165	3825	tr.	0.6	7	9	17	tr.	7	20	tr.	1	0.87	130	200	1.4
148	JS0121	90930	3750	tr.	3.6	14	12	31	tr.	3	26	tr.	1	1.33	149	225	0.8
149	JS0122	90990	3720	tr.	0.5	15	8	26	0.8	tr.	15	tr.	1	1.35	166	225	1.2
150	JS0123	91007	3753	tr.	0.2	14	6	27	tr.	4	15	tr.	1	1.07	152	170	0.8
151	JS0124	91078	3720	tr.	0.4	14	8	28	tr.	5	15	tr.	1	1.42	181	190	1.0
152	JS0125	91078	3730	tr.	0.4	12	7	22	tr.	3	20	tr.	1	0.90	108	200	1.2
153	JS0126	90905	3580	tr.	0.2	5	11	18	tr.	4	10	tr.	1	1.29	111	150	1.0
154	JS0127	90947	3550	tr.	0.3	14	11	35	tr.	1	10	tr.	1	1.14	207	230	1.0
155	JS0128	90970	3507	tr.	0.3	2	5	6	tr.	4	10	tr.	1	0.27	50	130	1.0
156	JS0129	91035	3413	tr.	0.2	4	12	19	tr.	4	10	tr.	2	1.78	103	120	1.0
157	JS0130	90905	3605	tr.	0.2	10	4	13	tr.	3	15	tr.	1	0.14	18	270	0.8
158	JS0131	90877	3650	tr.	0.2	10	8	24	tr.	4	26	tr.	1	1.05	87	175	0.4
159	JS0132	90875	3655	tr.	0.3	21	13	42	tr.	4	105	0.6	1	1.61	253	190	0.2
160	JS0133	90865	3647	tr.	0.8	34	22	73	0.6	4	142	tr.	1	4.64	348	265	0.9

Ser No.	Sample No.	Coordination X Y	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	As ppm	Hg ppb	Mo ppm	W ppm	Fe %	Mn ppm	Ba ppm	U ppm
161	JS0134	90835 3645	tr.	0.3	12	15	42	tr.	3	95	0.6	1	0.65	39	230	0.8
162	JS0135	90825 3640	tr.	0.2	17	10	47	0.8	5	95	0.6	1	2.31	273	280	0.6
163	JS0136	90915 3635	tr.	0.1	15	9	39	tr.	4	44	tr.	1	1.31	180	265	1.0
164	JS0137	90940 3655	tr.	0.2	22	13	65	1.3	10	64	1.4	1	1.93	243	200	0.4
165	JS0138	90923 3715	tr.	0.2	6	8	19	tr.	4	48	tr.	1	0.82	70	185	0.4
166	JS0139	90955 3817	tr.	0.7	20	9	29	1.9	10	64	1.4	1	1.25	127	190	0.4
167	JS0140	90985 3860	tr.	0.9	20	19	67	1.6	9	88	tr.	1	1.97	168	240	0.4
168	JS0141	90965 3890	tr.	0.5	23	11	64	1.0	6	58	tr.	1	2.92	199	260	0.4
169	JS0142	91005 4125	tr.	0.2	11	10	29	tr.	6	54	0.6	1	1.16	90	170	0.6
170	JS0143	91053 4125	tr.	0.2	9	9	33	0.6	8	109	0.6	1	1.01	37	135	0.4
171	JS0144	91090 4085	tr.	0.5	13	12	45	1.9	21	68	0.8	1	1.78	133	240	0.4
172	JS0145	91150 4010	tr.	0.6	34	18	31	4.0	7	54	1.8	1	3.80	309	210	0.2
173	JS0146	91145 4005	19.8	0.4	17	15	42	2.8	11	61	1.6	1	0.89	122	225	0.4
174	JS0147	90270 5850	tr.	0.5	2	2	9	0.7	4	-	tr.	1	0.65	10	110	1.2
175	JS0148	90260 5896	tr.	0.4	2	5	9	tr.	2	-	tr.	1	0.54	225	135	0.8
176	JS0149	90247 5903	tr.	0.5	2	4	7	tr.	3	-	tr.	1	0.43	15	110	1.0
177	JS0150	90230 5950	tr.	0.2	2	6	12	tr.	3	-	tr.	1	0.48	30	120	1.0
178	JS0151	90303 5870	tr.	0.4	1	4	5	tr.	2	-	tr.	1	0.40	10	90	1.2
179	JS0152	90330 5880	tr.	0.2	1	3	5	tr.	7	-	tr.	1	0.37	5	70	1.0
180	JS0153	90375 5872	tr.	0.2	1	3	6	tr.	7	-	tr.	28	0.40	15	90	1.0
181	JS0154	91148 6186	tr.	1.2	14	11	47	tr.	4	-	tr.	1	2.76	220	425	1.0
182	JS0155	91193 6102	tr.	1.5	3	6	9	tr.	3	-	tr.	1	1.03	55	90	0.6
183	JS0156	91230 5938	tr.	0.4	2	3	6	tr.	5	-	0.5	1	0.12	35	80	0.5
184	JS0157	90550 5317	tr.	1.4	26	12	92	tr.	8	-	tr.	1	4.81	375	160	0.3
185	JS0158	90623 5373	tr.	0.3	2	3	9	tr.	8	-	tr.	1	0.62	15	80	0.3
186	JS0159	90603 5520	tr.	0.4	4	5	14	tr.	7	-	tr.	1	0.93	10	70	0.6
187	JS0160	90557 5587	tr.	0.2	3	3	15	tr.	8	-	tr.	1	0.34	5	80	0.3
188	JS0161	90595 5593	tr.	0.3	4	4	10	tr.	7	-	tr.	1	0.41	15	70	0.2
189	JS0162	90675 5640	tr.	0.5	12	4	46	tr.	18	-	tr.	1	0.86	10	80	0.4
190	JS0163	90810 5852	tr.	0.2	2	3	7	tr.	5	-	tr.	1	0.14	tr.	55	0.4
191	JS0164	90870 5775	tr.	0.6	4	4	20	tr.	tr.	-	tr.	1	1.09	45	110	0.6
192	JS0165	90902 5752	tr.	0.5	6	6	30	tr.	11	-	tr.	1	2.51	25	110	0.4
193	JS0166	90990 5777	tr.	0.2	1	2	6	tr.	2	-	tr.	1	0.30	5	65	0.3
194	JS0167	91040 5700	tr.	0.4	2	3	13	tr.	4	-	tr.	1	0.33	15	70	0.3
195	JS0168	89788 5290	tr.	0.3	2	4	12	tr.	4	-	tr.	1	0.14	45	120	1.4
196	JS0169	89833 5166	tr.	0.4	2	5	14	tr.	7	-	tr.	1	0.91	110	185	1.8
197	JS0170	89860 5120	tr.	0.5	3	6	25	tr.	8	-	tr.	1	1.72	165	200	1.2
198	JS0171	89760 5067	tr.	0.5	2	3	8	tr.	5	-	tr.	1	0.85	45	205	2.2
199	JS0172	89790 5107	tr.	0.4	2	4	12	tr.	10	-	tr.	1	1.38	135	225	3.0
200	JS0173	89767 5287	tr.	0.1	2	3	8	tr.	4	-	tr.	1	0.43	30	120	1.0

Ser No.	Sample No.	Coordination X	Y	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	As ppm	Hg ppb	Mo ppm	W ppm	Fe %	Mn ppm	Ba ppm	U ppm
201	JS0174	91052	4807	tr.	0.9	15	14	92	tr.	6	-	tr.	1	3.84	460	290	0.7
202	JS0175	91038	4810	tr.	1.1	15	13	83	tr.	6	-	tr.	1	3.69	170	260	0.6
203	JS0176	91016	4803	tr.	1.2	13	15	84	0.6	6	-	tr.	1	4.31	495	335	0.6
204	JS0177	90963	4783	tr.	1.3	23	22	56	tr.	3	-	tr.	1	3.60	1090	350	0.8
205	JS0178	90935	4773	tr.	0.1	12	13	96	tr.	6	-	tr.	1	4.21	1175	370	0.6
206	JS0179	90938	4760	tr.	1.0	13	12	96	tr.	4	-	tr.	1	3.83	1365	365	0.2
207	JS0180	90985	4915	tr.	1.2	17	18	106	1.2	11	-	tr.	1	4.33	1920	350	0.6
208	JS0181	92315	5332	tr.	0.7	12	6	44	tr.	9	-	tr.	1	1.93	60	105	0.6
209	JS0182	92357	5295	tr.	0.5	4	4	18	tr.	4	-	tr.	1	1.37	15	105	0.4
210	JS0183	92075	5295	tr.	2.0	5	15	66	367.0	112	-	0.8	42	3.64	185	80	0.4
211	JS0186	91225	5432	tr.	0.8	2	5	17	236.0	53	-	tr.	1	0.67	45	120	1.1
212	JS0187	91113	5408	tr.	1.2	27	13	86	15.9	50	-	1.0	1	5.79	355	245	0.4
213	JS0188	91092	5392	tr.	1.0	14	11	55	tr.	9	-	0.6	1	2.93	185	350	0.4
214	KS0001	89956	4635	tr.	0.4	1	8	18	tr.	6	9	tr.	1	1.26	88	210	1.5
215	KS0002	89965	4650	tr.	0.1	1	6	8	tr.	tr.	9	tr.	1	0.56	83	130	6.3
216	KS0003	90031	4597	tr.	0.3	1	5	13	tr.	19	167	tr.	1	0.71	204	120	1.2
217	KS0004	90102	4600	tr.	0.4	1	10	27	tr.	tr.	5	tr.	1	1.94	249	135	2.0
218	KS0005	90127	4614	tr.	0.5	1	11	27	tr.	2	5	tr.	1	2.91	281	210	2.6
219	KS0006	90215	4705	tr.	0.3	1	6	11	tr.	4	781	tr.	1	0.59	106	160	1.6
220	KS0007	90262	4712	tr.	0.4	5	10	19	tr.	tr.	5	tr.	1	1.62	163	280	4.2
221	KS0008	90252	4650	tr.	0.5	7	15	59	tr.	tr.	10	tr.	1	3.40	208	350	6.6
222	KS0009	90168	4756	tr.	0.3	3	5	13	tr.	1	175	tr.	1	1.10	95	145	1.0
223	KS0010	90156	4750	tr.	0.1	2	5	13	tr.	2	116	tr.	1	0.95	234	120	1.4
224	KS0011	90135	4783	tr.	0.2	8	11	39	tr.	2	5	tr.	1	3.52	340	180	1.0
225	KS0012	90067	4737	tr.	0.3	1	6	7	tr.	1	5	tr.	1	0.50	32	230	5.0
226	KS0013	90042	4707	tr.	0.4	2	5	16	tr.	2	5	tr.	1	1.11	127	290	2.7
227	KS0014	89965	4685	tr.	0.3	3	11	34	tr.	14	16	tr.	1	3.93	353	375	2.2
228	KS0015	91856	5018	tr.	0.3	13	13	87	1.0	24	226	tr.	1	3.52	255	105	0.4
229	KS0016	91800	4985	tr.	0.3	10	5	41	tr.	8	48	tr.	1	2.21	57	105	0.5
230	KS0017	91646	4896	tr.	0.3	8	10	44	tr.	5	1160	tr.	1	2.09	80	145	0.6
231	KS0018	91650	4909	0.6	0.2	10	13	53	1.1	17	116	tr.	1	1.82	49	150	0.3
232	KS0019	91778	4865	tr.	0.4	16	13	101	tr.	8	182	tr.	1	6.06	375	185	0.4
233	KS0020	91764	4877	tr.	0.3	10	9	66	tr.	5	598	tr.	1	3.36	159	145	0.6
234	KS0021	91925	4995	tr.	0.2	15	10	81	tr.	7	7900	tr.	1	3.45	145	105	0.4
235	KS0022	92000	5001	tr.	0.3	16	12	79	tr.	12	35	tr.	1	6.15	188	135	0.6
236	KS0023	91898	5101	tr.	0.2	9	11	60	2.1	71	2580	tr.	3	3.59	214	30	0.6
237	KS0024	91816	5087	tr.	0.2	9	11	15	tr.	13	79	0.8	4	0.79	87	80	1.0
238	KS0025	92052	5155	tr.	0.2	9	5	27	48.0	8	35	tr.	1	0.92	40	30	0.2
239	KS0026	92036	5207	tr.	0.3	2	6	40	0.8	17	3710	1.0	1	1.76	197	30	0.6
240	KS0027	92280	5172	tr.	0.3	11	9	51	43.0	tr.	48	0.8	2	2.39	36	85	0.6

Ser No.	Sample No.	Coordination X Y	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm	Sb ppm	As ppm	Hg ppb	Mo ppm	W ppm	Fe %	Mn ppm	Ba ppm	U ppm
241	KS0028	92163 5100	tr.	0.4	14	11	54	tr.	21	4940	0.8	1	3.32	171	200	0.8
242	KS0029	92119 5018	tr.	0.3	19	15	78	tr.	14	2550	tr.	1	3.89	239	175	0.6
243	KS0030	92084 4999	tr.	0.2	9	10	38	tr.	7	15000	tr.	1	2.27	68	95	0.6
244	KS0031	91498 4419	tr.	0.6	19	14	107	0.8	tr.	103	0.6	1	3.49	175	160	0.6
245	KS0032	91471 4355	tr.	0.4	20	15	88	tr.	tr.	108	0.6	1	3.11	195	225	0.8
246	KS0033	91447 4298	tr.	0.5	14	13	60	0.5	tr.	58	tr.	1	2.36	220	190	0.8
247	KS0034	91455 4293	tr.	0.2	12	12	35	tr.	tr.	72	tr.	1	1.65	130	210	1.0
248	KS0035	91368 4250	tr.	0.5	20	13	69	tr.	tr.	72	0.6	1	2.26	125	200	0.8
249	KS0036	91356 4227	tr.	0.4	16	12	45	tr.	tr.	54	tr.	1	1.80	135	210	1.0
250	KS0038	91337 4175	tr.	0.6	24	15	76	tr.	2	67	tr.	1	3.07	205	245	0.8
251	KS0039	91328 4178	tr.	0.5	10	10	25	tr.	tr.	558	tr.	1	1.30	155	225	1.0
252	KS0040	91090 4469	tr.	0.7	18	13	100	0.7	tr.	73	tr.	1	4.10	310	200	0.4
253	KS0041	91185 4440	tr.	0.7	21	17	101	tr.	tr.	63	tr.	1	4.52	355	160	0.4
254	KS0042	91245 4450	tr.	34.0	15	11	58	0.7	1	68	0.8	11	2.33	130	210	0.4
255	KS0043	91243 4432	tr.	0.4	9	10	47	0.7	tr.	88	0.8	1	2.09	105	225	0.4
256	KS0044	91231 4398	tr.	0.7	14	12	88	0.8	3	63	0.8	1	2.86	195	220	0.4
257	KS0045	91245 4376	tr.	0.4	12	10	52	tr.	2	34	0.6	1	2.01	90	190	0.6
258	KS0046	90605 5846	tr.	0.1	2	5	40	tr.	1	78	tr.	1	0.50	40	80	1.0
259	KS0047	90687 5864	tr.	0.1	2	3	12	tr.	tr.	769	tr.	1	0.17	25	95	1.2
260	KS0048	90640 5917	tr.	0.1	3	4	12	tr.	2	34	tr.	1	0.61	40	110	0.7
261	KS0049	90646 5922	tr.	0.2	3	5	13	tr.	1	36	tr.	1	0.76	65	150	0.8
262	KS0050	91066 6079	tr.	0.5	19	11	31	tr.	3	46	tr.	1	2.42	490	255	0.8
263	KS0051	91109 6090	tr.	0.5	21	16	57	tr.	3	41	tr.	1	5.08	785	280	1.0
264	KS0052	90759 5661	tr.	0.1	2	3	12	tr.	1	50	tr.	1	0.25	30	90	0.6
265	KS0053	90763 5569	tr.	0.7	7	7	36	tr.	2	27	tr.	1	1.37	150	160	0.8
266	KS0054	90783 5567	tr.	0.2	2	3	14	tr.	2	18	tr.	1	0.35	20	95	0.6
267	KS0055	91412 5891	tr.	0.8	13	9	87	tr.	3	41	0.6	1	3.08	190	225	0.8
268	KS0056	91362 5869	tr.	0.3	3	4	18	tr.	2	32	tr.	1	0.64	15	90	0.4
269	KS0057	91341 5882	tr.	0.2	12	8	75	tr.	7	50	0.6	1	2.22	280	145	0.6
270	KS0058	91317 5846	tr.	0.1	1	2	9	tr.	1	36	tr.	1	0.28	20	50	0.3
271	KS0059	91239 5817	tr.	0.3	5	5	29	tr.	2	27	tr.	1	1.28	30	70	0.4
272	KS0060	91235 5822	tr.	0.2	5	5	39	tr.	5	46	0.6	1	0.88	105	225	0.5
273	KS0061	91237 4814	tr.	0.4	14	14	63	1.2	23	36	0.8	1	2.91	90	160	0.4
274	KS0062	91236 4829	tr.	0.5	13	18	58	3.1	44	32	1.0	1	1.92	80	220	0.4
275	KS0063	91370 4844	tr.	0.5	17	29	49	2.7	78	46	1.2	1	2.09	120	265	0.3
276	KS0064	91430 4901	tr.	1.1	21	143	137	8.3	127	46	1.4	1	2.06	255	345	0.9
277	KS0065	91262 4775	tr.	0.6	11	12	67	0.7	11	78	0.6	13	2.56	120	220	0.4
278	KS0066	91187 4692	tr.	0.6	13	14	58	6.1	36	166	1.2	5	2.61	150	185	0.4
279	KS0067	90986 6368	tr.	0.2	3	6	10	3.7	2	29	tr.	3	0.50	30	145	0.6
280	KS0068	91197 6324	tr.	0.9	6	5	10	tr.	13	543	tr.	2	0.91	65	150	0.6