

PART II SURVEY RESULTS

CHAPTER 1 B BLOCK AREA

1-1 Location of the Survey Area

As shown in Fig. 2, the survey area is located at the northwestern part of the Alta Floresta region, approximately 20 Km north from Apiacas city. The Phase III survey, consisting of geological and drilling survey, was carried out in the B block area within a large zone where concentrations of gold anomalies in soil of above 25 ppb (Fig. II-1-1) have been detected.

1-2 Survey Methods

1-2-1 Geological survey

The trench survey was carried out as part of the geological survey in order to identify within saprolite the geological structures related to gold mineralization and clarify its orientation and dip to define an adequate drilling direction within B block (Fig. II-1-1 and Fig. II-1-2).

(1) Field survey

The trenches were located by GPS and its excavation was made manually. Detailed sketch (1:100 scale) for each trench is shown in the Plate II-1-1.

(2) Sample collection and preparation

Ore samples were taken at the base of the trench with a width of 2m, as shown in the Fig. II-1-3. Samples to be used for Thin section, Polished ore and X-ray analysis were taken from quartz veins and shearing zone within the trenches. Sample preparation was carried out at Lakefield Geosol laboratory located in Belo Horizonte city, Minas Gerais state.

1-2-2 Drilling survey

In order to understand the distribution of gold anomalies in depth by acquiring geological and tectonical information related to the gold mineralization, a reverse circulation drilling (RC) program was conducted in B block. A total coring drilling (DD) program was also conducted to check the vertical continuity of the gold anomalies detected by RC drilling

(1) Drilling sites

Based on the distribution of soil gold anomalies detected on the Phase II survey, a total of five RC

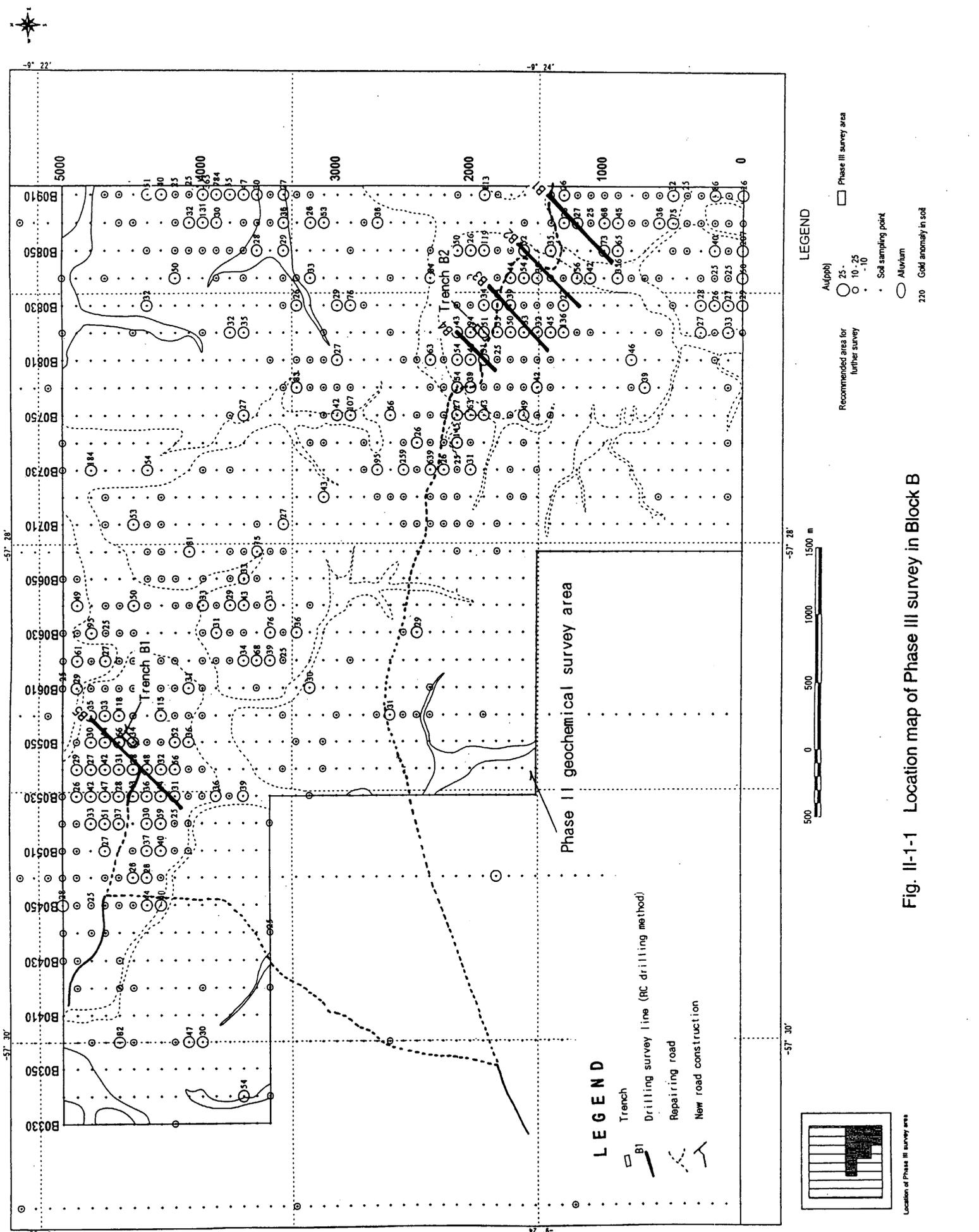
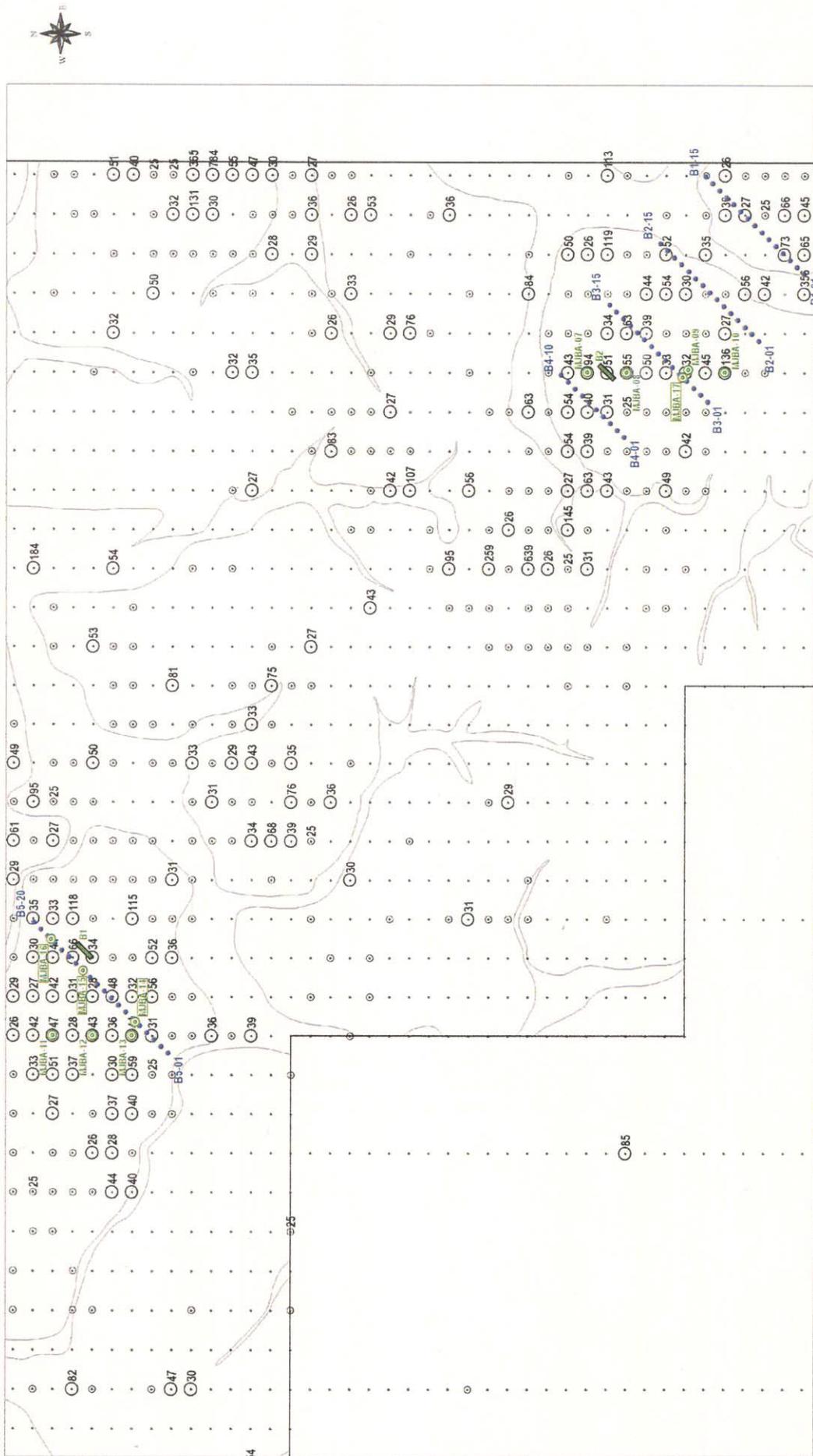
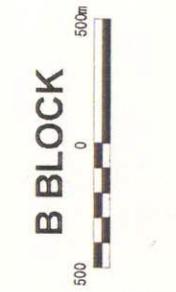


Fig. II-1-1 Location map of Phase III survey in Block B



- LEGEND**
- B2-15 RC Drilling point
 - MJA-17 DD Drilling point (Phase II)
 - MJA-08 DD Drilling point (Phase I)
 - B2 Trench



- B BLOCK**
- Au(ppb)
 - 25 -
 - 10 - 25
 - Soil sampling point
 - Alluvium
 - 85 Gold anomaly in soil

Fig. II-1-2 Location map of RC drilling line, DD holes and Trenches in Block B

drilling lines were planned (Fig. II-1-2). The distance between these parallel lines is 400m and the drilling sites were located at a 50m intervals.

(2) Drilling survey method

A list of the drilling machine and equipments used in this survey is annexed on Appendix 8. A reverse circulation-drilling (RC) program was initially conducted and followed later by a total coring drilling (DD).

(3) Sampling and Sample Preparation

1) RC drilling

Sample from RC drilling survey was collected every 2m intervals and with a weight of 2 Kg per sample. Later, it was splitted to 2 samples of 1 Kg each to send one of them to the laboratory and the other one to Metamat.

2) DD drilling

The drilling cores were stored in wood boxes at METAMAT laboratory in Cuiaba. Core samples from DD drilling were taken at 1m spacing from top to the bottom and the collected core samples were crushed to -10 mesh size and sent to the Lakefield Geosol laboratory. During the core description, the samples were tested for Thin Section, Polished Section, Fluid Inclusion and X-ray analyses.

1-2-3 Laboratory tests results

Samples for laboratory testing were taken from several DD drilling holes during the Phase III survey and their locations were plotted on their respective Location Maps annexed to this report. The tests included thin section analysis, polished ore analysis, X-ray analysis, fluid inclusion analysis and chemical analysis of ore samples. Results of these tests are presented from Appendix 1 to Appendix 7 and from Appendix 12 to Appendix 17.

1-3 Geology

(1) Geology

The Phase III survey was carried out in two areas located at the southeastern margin of the west B block and at the central part of the west B block, respectively. The geology of these two areas can be described as follows:

(i) Stratigraphy

The geology of B block is composed from Middle Proterozoic Pre-Uatuma, Middle Proterozoic Uatuma Group, Dykes and Quaternary sediments. The Iri Formation and Teles Pires represent the Uatuma Group.

The Pre-Uatuma Granite is composed of hornblende bearing biotite granite (GriIIa) and biotite granite (GriIIb). The hornblende bearing biotite granite (GriIIa) is widely distributed in the western part of the survey area. The granite shows medium grains and includes feldspar, quartz, biotite and hornblende. The biotite granite (GriIIb) is distributed widely in the central part of the survey area. The granite shows medium pinkish color and includes feldspar, quartz, biotite and hornblende.

The Iri Formation, represented by acidic volcanic rocks (PuiV), consists of gray, rhyolitic lava, tuff breccia and tuff, outcrop at the western part of the survey area. The Teles Pires Granite is composed of hornblende bearing biotite granite (Gruph), medium grained biotite granite (Grum), coarse-grained biotite granite (Grupc) and granite porphyry (Grupg).

The dikes are composed of aplite (Ap) and diabase (Di). The aplite is found in the northwestern part of the survey area while the diabase in the central part of the survey area. The dikes show in general an elongated structure along WNW-ESE direction.

The Quaternary (Qa) consists mainly of alluvial deposits that are distributed in the rivers flat.

(2) Geological structure

Some of the primary gold garimpo are located inside of shearing structures, which are the most important geological structures observed in the survey area. Examples of gold garimpo related to this shearing structure are the Jacare garimpo and Satellite garimpo, both trending along a WNW-ESE direction.

(3) Mineralization

In the gold alluvial garimpo, which is found widespread in the survey area, the source of primary gold are thought to come from a disseminated or vein / veinlets types gold mineralization. Satellite garimpo and Jacare garimpo are examples of vein / sheeted veinlets type primary gold mineralization.

1-4 Survey results

1-4-1 Geological Survey

(1) Background

A geological survey by trenching was carried out in the B block in order to uncover a hidden mineralized structure within the large soil gold anomaly. The disposition of the mineralized structure would be used to

determine the direction of the drilling survey.

(2) Survey areas and Amounts

Two trenches with a total length of 200m and depth of 3m were made in the B block in the locations shown in the Fig. II-1-1 and Fig. II-1-2. A total of 100 ore samples were collected from the two trenches.

Trench name	Direction	Trench length	Depth
Trench B1	N45E	100m	3m
Trench B2	N45E	100m	3m
Total length:		200m	

(3) Survey Method

During Phase II Auger survey, sites for the trench survey were selected from high gold anomaly locations detected in saprolite. Two trenches with 100m in lengths, 1m in width and 3m in depth were made along N45E direction. Ore samples were collected at the bottom of the trench by 2m wide channel sampling. A 1:100 scale detailed sketch was made for each of the trench as shown on Fig.II-1-3.

(4) Survey results

(a) Trench B1

Geology: Trench survey results clarified that the soil could be classified into the horizons A, B, A/B and C (Fig. II-1-3). The A soil which is dark brown, corresponds to the uppermost horizon presenting in general, mixed fragments of quartz veins and blackish sub rounded pisolith. The B soil is yellowish brown color, showing more compacted texture than A-horizon. The B-horizon presents a continuous pisolith rich layer at the bottom, just in the boundary with C-horizon. The A/B horizon is a transition horizon between A and B-horizon, and it shows a mixed texture of both horizons. The C-horizon, also known as saprolite, shows a yellowish brown color and some of the rock original structure, such as quartz veins and shearing structure.

Geological Structure: The trench B1 shows within C-horizon, a shearing structure between 10m and 16m. The shearing is 3m wide; sericite rich mylonite filled by low angle quartz veins, showing pyrite films and cubic pyrite dissemination. The shearing has E-W to N80W direction and dip 30 to 68 degrees to South. Another shearing structure observed between 84 and 85m, shows lens type quartz veins with N80W direction and dipping from vertical to 58 degrees to the south.

Gold mineralization: Results from 2m wide saprolite sample taken at the bottom of the trench, showed gold content of Au1.51g/t between 40 and 42m and lower gold grade ranging between 0.1 and 0.5g/t at its vicinities. High gold grade of Au1.15g/t and 1.01g/t were also observed between 58 and 64m and at its vicinities were observed lower gold grade ranging between Au0.1g/t and 1.0g/t. Since it could not be proved

any relationship between these high gold results and the visible geological structure, it is inferred that the high gold grade anomalies are associated to gold mineralization in broad shearing zone and with strong pyrite dissemination. The results from Polished section in Sample B1-10 and B1-12 (Appendix 2) indicated the presence of goethite, hematite and limonite. The results of X-ray showed muscovite and Kaolinite and the results from fluid inclusion in Sample B1-12 (Appendix 5) presented an average temperature of 99.7 degree and salinity of 12.5%.

(b) Trench B2

Geology: B2 Trench survey also showed the same subdivision of soil as the trench B1, i.e., into the horizons A, B, A/B and C (Fig. II-1-3). The A soil is brown to dark brown and correspond to the uppermost horizon which is mixed in general with blackish sub rounded pisolith. The B soil is yellowish brown color, showing more compacted texture than A-horizon. The B-horizon presents at its bottom, a continuous and homogenous layer rich in pisolith and quartz fragments, just at the boundary with C-horizon. The A/B horizon represents a transition horizon between A and B-horizon showing a mixed texture of both horizons. The C-horizon shows a yellowish color and some of the rock original structure, such as quartz veinlets and network structure.

Geological Structure: The trench B2 shows within C-horizon, a strong shearing structure between 4m and 8m, at 24m and again between 36m and 46m. The shearing has an unknown width, but shows lens type quartz veinlets that dips between 56 and 80 degrees to south, and with veins direction ranging between N80W and N45W.

Gold mineralization: Results from 2m wide saprolite sample taken at the bottom of the trench, showed gold content of Au0.58g/t between 20 and 22m. Field observation indicated alteration minerals as Kaolin and muscovite.

(5) Discussion

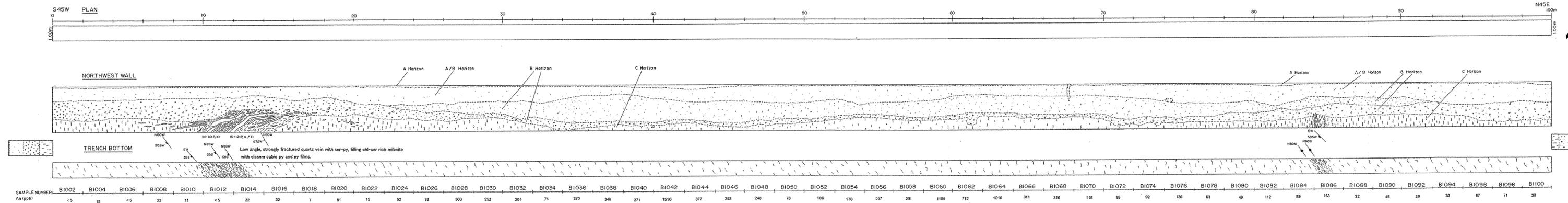
Analytical results of trenches indicated broad intervals with results above Au0.1g/t in saprolite. From the trenches results, it was determined the N45E direction for the drilling in B block.

The trench B1 showed a 3m wide sericite rich mylonitic structure filled by low angle quartz veins, showing pyrite films and cubic pyrite disseminations. The shearing trends E-W to N80W direction and dip 30 to 68 degrees to South. Another shearing structure between 84 and 85m, shows lens type quartz veins along N80W direction and dipping from vertical to 58 degrees to the south.

Results from 2m wide saprolite sample presented gold content of Au1.51g/t between 40 and 42m as well as high gold grade of Au1.15g/t and 1.01g/t between 58 and 64m. These high gold anomalies were associated to gold mineralization in broad shearing zone with strong pyrite dissemination.

The trench B2 shows at 24m, a strong shearing structure between 4m and 8m and also between 36m and

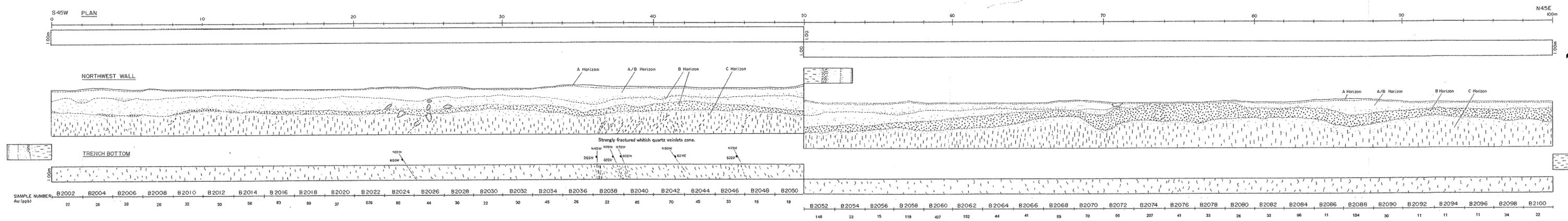
TRENCH B1
(Looking N45°W)



LEGEND

- Pisolitic iron crust and soft nodular iron crust mixed in soil.
 - Shearing plane
 - Quartz veinlets
 - Quartz vein
 - Sample for Laboratory tests
 - Ore analysis
 - Polished ore
 - Thin Section
 - Fluid Inclusion
 - X-Ray analysis
 - Fresh granite
 - Channel sample number. Collected in the trench bottom, with 2m width.
- A Horizon:** Dark brown sandy soil with roots, few pisolith and quartz vein fragments.
A/B Horizon: Yellowish brown sandy clayey soil, few roots, mixed with small fragments of quartz vein and pisolith (φ 2~8mm).
B Horizon: Yellowish brown sandy clayey soil, with medium size fragments of quartz vein and pisolith (φ 2~20mm). Presence of stone line with 20cm to 40cm thickness at the bottom of B Horizon, with many quartz fragments and subrounded pisolith (φ 2~40mm).
C Horizon: Yellowish clayey granitic saprolite with brownish red to dark red vertical to subvertical bands (w/2mm to 20mm).

TRENCH B2
(Looking N45°W)



LEGEND

- Pisolitic iron crust and soft nodular iron crust mixed in soil.
 - Shearing plane
 - Quartz veinlets
 - Quartz vein
 - Sample for Laboratory tests
 - Ore analysis
 - Polished ore
 - Thin Section
 - Fluid Inclusion
 - X-Ray analysis
 - Fresh granite
 - Channel sample number. Collected in the trench bottom, with 2m width.
- A Horizon:** Dark brown to brown color sandy soil with many roots and few blackish iron nodules.
A/B Horizon: Yellowish brown sandy silty soil, few roots, with very few mixed fragments of quartz vein and iron nodules.
B Horizon: Brownish yellow sandy silt soil with medium quantities of Mn and Fe nodules. Presence of stone line with 30cm to 70cm thickness at the bottom of B Horizon, with many subrounded pisolith (φ 5~50mm).
C Horizon: Brownish red clayey granitic saprolite showing brecciation structure and yellow subvertical lines.

Fig. II-1-3 Sketch of trench B1 and B2 in Block B

46m. The shearing structure, of unknown width, shows lens type quartz veinlets that dips south between 56 and 80 degrees and with veins direction trending between N80W and N45W.

Results from 2m wide saprolite sample showed gold content of Au0.58g/t between 20 and 22m.

1-4-2 Drilling Survey

(1) Background and Objectives

In order to understand the distribution of gold anomalies detected at depth by the geochemical survey by acquiring geological and tectonic information related to the gold mineralization, a reverse circulation drilling (RC) program was conducted in B block. A total coring drilling (DD) was also conducted to check the continuity in depth of the gold anomalies detected by RC.

(2) Survey areas and Amounts

(i) RC drilling

RC drilling survey was conducted at the southeastern part and northwestern part of a large soil geochemical anomaly. A total of 5 drilling lines, named B1 line to B5 line, were set within the soil geochemical anomaly, as shown in the Fig II-2-1 and Fig. II-2-2.

As indicated below, the total amount of survey consisted of 75 boreholes with a total drilling length of 3,750m.

Drilling line	Direction	Inclination (deg.)	Drilled Length
B1 Line (15 holes)	N45E	-50	750m
B2 Line (15 holes)	N45E	-50	750m
B3 Line (15 holes)	N45E	-50	750m
B4 Line (10 holes)	N45E	-50	500m
B5 Line (20 holes)	N45E	-50	1,000m
Total 75 holes			3,750m

(ii) DD drilling

DD drilling survey was conducted to check the continuity in depth of the gold anomalies detected by RC. The totals of boreholes were 4, numbered from MJBA-14 to MJBA-17, as shown in the Fig II-1-1 and in detail in the Fig II-1-2. As indicated below, the total drilling length was 401.00m.

Borehole Number	Direction	Inclination (deg.)	Length Executed
MJBA-14	N45E	-50	100.05m
MJBA-15	N45E	-50	100.50m
MJBA-16	N45E	-50	100.30m
MJBA-17	N45E	-50	100.15m
Total:	4 holes		401.00m

(3) Survey Method

(i) Drilling operations

RC drilling lines were set along NE direction on the basis of the NW trending indicated by the geochemical anomalies. The spacing between drilling lines was set to 400m and keeping a distance of 50m between each RC drilling hole. Trench survey results indicated broad intervals with gold results above 0.1g/t, in saprolite. Also, based on the trenches data, the drillings in B block were set along the N45E direction.

the drilling operations were carried by using the machines and equipment mentioned on the Appendix 7. The sampling spacing was set in 2m for RC drilling and 1m for DD drilling. The amount of sample collected for RC drilling in 2m intervals was of 1 Kg. The drilling operations for DD drilling was carried out by the Wire Line method with HQ and NQ sizes coring. Table II-1-1 and Appendix 9 show the work amount and the progress record of the drilling.

(ii) Core logging

Description of the drill cores was conducted at the drilling site during drilling operations and compiled in a 1:200 log sheet. Core sampling was carried out concomitant with core logging activities. The core samplings were spaced by 1m and at the same time samples were collected for laboratory tests.

Amounts of laboratory works collected in the B block area are indicated below:

Thin Section	4
Polished Section	4
X-Ray Analysis	4
Fluid Inclusion	1
Chemical Analysis	2,275

(4) Drilling Survey

(i) RC Drilling

The RC drilling survey was carried out to clarify the vertical extension of gold anomalies detected during the Phase II soil geochemical survey. The Fig. II-1-4 (1) and Fig. II-1-4 (2) show the geological cross

Table II-1-1 Drilling survey conducted in Phase III.

(1) RC Drilling Survey

Area Name	Survey Line	Number of holes	Length of a hole (m)	Length planned (m)	Length executed (m)	Direction	Inclination (deg.)	Date of Start	Date of Finish
Block B	B1 Line	15	50	750	750	N45E	50°	11-Aug	22-Aug
	B2 Line	15	50	750	750	N45E	50°	30-Aug	16-Sep
	B3 Line	15	50	750	750	N45E	50°	6-Sep	16-Sep
	B4 Line	10	50	500	500	N45E	50°	30-Aug	5-Sep
	B5 Line	20	50	1,000	1,000	N45E	50°	22-Aug	30-Aug
Block C	C1 Line	23	50	1,150	1,150	S45W	50°	19-Sep	28-Sep
	C2 Line	20	50	1,000	1,000	S45W	50°	20-Sep	10-Oct
	C3 Line	15	50	750	750	S45W	50°	28-Sep	5-Oct
	C4 Line	10	50	500	500	S45W	50°	5-Oct	10-Oct
Block G	G1 Line	12	50	600	600	N45E	50°	25-Oct	30-Oct
	G2 Line	16	50	800	800	N45E	50°	13-Oct	19-Oct
	G3 Line	15	50	750	750	N45E	50°	19-Oct	25-Oct
Total length				9,300	9,300				

(2) DD Drilling Survey

Area Name	Hole No.	Location		Length planned (m)	Length executed (m)	Direction	Inclination (deg.)	Date of Start	Date of Finish
		S	W						
Block B	MJBA-14	9° 22' 31"	57° 29' 05"	100	100.05	N45E	50°	16-Oct	20-Oct
	MJBA-15	9° 22' 22"	57° 28' 56"	100	100.50	N45E	50°	21-Oct	29-Oct
	MJBA-16	9° 22' 17"	57° 28' 51"	100	100.30	N45E	50°	30-Oct	2-Nov
	MJBA-17	9° 24' 03"	57° 27' 17"	100	100.15	N45E	50°	3-Nov	5-Nov
Block C	MJBA-18	9° 30' 26"	56° 34' 56"	100	100.15	S45W	50°	10-Nov	13-Nov
	MJBA-19	9° 30' 24"	56° 35' 13"	100	100.30	S45W	50°	14-Nov	20-Nov
	MJBA-20	9° 30' 06"	56° 35' 14"	100	100.30	S45W	50°	21-Nov	25-Nov
	MJBA-21	9° 30' 06"	56° 35' 14"	100	100.55	S45W	50°	26-Nov	30-Nov
	MJBA-22	9° 30' 03"	56° 35' 11"	100	100.75	S45W	50°	30-Nov	4-Nov
	MJBA-23	9° 30' 00"	56° 35' 24"	100	100.40	S45W	50°	5-Nov	8-Nov
Block G	MJBA-24	9° 57' 23"	55° 18' 34"	100	100.30	N45E	50°	20-Nov	27-Nov
	MJBA-25	9° 57' 12"	55° 18' 41"	100	100.30	N45E	50°	25-Oct	3-Nov
	MJBA-26	9° 57' 09"	55° 18' 53"	100	101.35	N45E	50°	7-Nov	18-Nov
Total length				1,300	1,305.40				

section by RC drilling and the Appendix 10 and Appendix 16 show respectively, the RC logs and geochemical analysis results for gold.

(a) B1 Line

Geology: The RC holes presented soil at the top level, a thick zone of yellowish brown clayey granitic saprolite below it, and fresh granitic rock at the bottom level. The soil average thickness is between 3m and 7m and the combined thickness of soil and saprolite range between 10m and 25m in B1 Line. Field observation of chips taken from RC drilling confirmed that the fresh rock is mostly composed by biotite granite (GriIIb). Chips also confirmed a continuous diabase dyke with a NW-SE disposition and a length of more than 1200m, and width of 10 to 20m.

Broadly sheared zones were regionally confirmed. Some strongly sheared zones of different sizes were also detected.

Alteration: Alteration minerals in host rock containing silica, epidote, chlorite and potassic alteration are frequently observed and with less frequency it is observed Kaolin and sericite. At the central part of the shearing zone center, it is commonly found silica, epidote and potassic alteration.

Mineralization: Gold mineralization with an average grade above Au0.1g/t was found at 4 sites in B1 Line.

Drill Hole	Hole Length (m)	From (m)	To (m)	Length (m)	Au (g/t)
B1-02	50.0	48.0	50.0	2.0	0.11
B1-04	50.0	4.0	8.0	4.0	0.37
B1-09	50.0	28.0	36.0	8.0	0.14
B1-11	50.0	8.0	12.0	4.0	0.10

(b) B2 Line

Geology: The RC holes presented soil, at the top level and has a thick zone of yellowish brown clayey granitic saprolite below it, and fresh granitic rock at the bottom level.

The soil average thickness is between 3m and 4m and the combined thickness of soil and saprolite range between 10m and 30m in B2 Line, but thicker saprolite zone was observed between B2-08 and B2-10. Field observation of chips taken from RC drilling confirmed that the fresh rock is mostly composed by biotite granite (GriIIb). Widely sheared zone were regionally confirmed and some strongly sheared zones of different sizes were also detected.

Alteration: Alteration minerals in host rock, containing alteration of silice, epidote, chlorite, and potassium are frequently observed. It is found with less frequency, Kaolin and sericite. At the central part of the shearing zone, silicic, epidote and potassic alteration are commonly found.

Mineralization: Gold mineralization with average grade above Au0.1g/t was found at 7 sites in B2 Line.

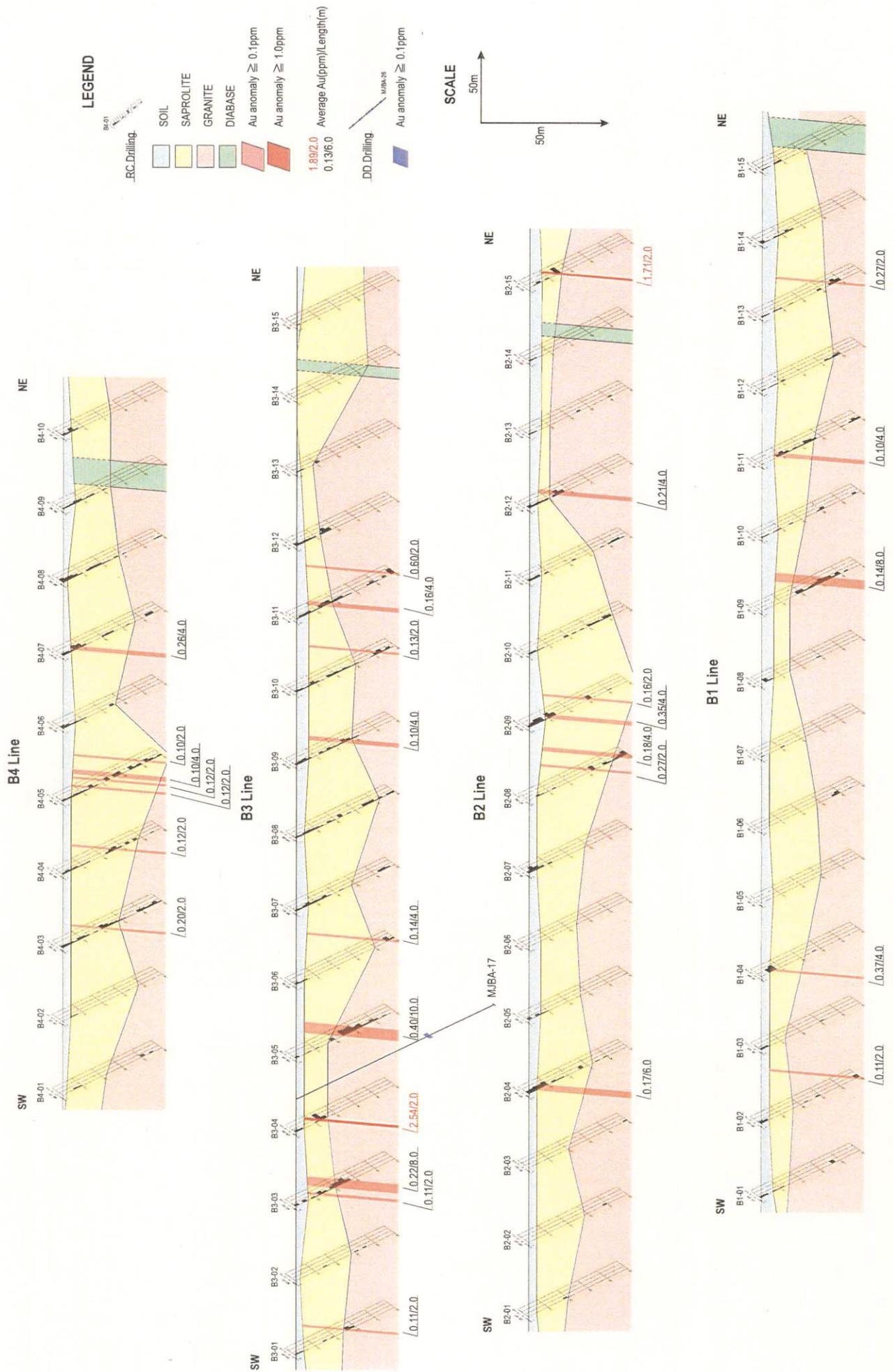


Fig. II-1-4 Geologic cross section of RC drilling survey in Block B (1)

Drill Hole	Hole Length (m)	From (m)	To (m)	Length (m)	Au (g/t)
B2-04	50.0	4.0	10.0	6.0	0.17
B2-08	50.0	32.0	34.0	2.0	0.27
"	"	46.0	50.0	4.0	0.18
B2-09	50.0	10.0	14.0	4.0	0.35
"	"	30.0	32.0	2.0	0.16
B2-12	50.0	14.0	18.0	4.0	0.21
B2-15	50.0	26.0	28.0	2.0	1.71

(c) B3 Line

Geology: RC drilling indicated the presence of soil at the top level, a thick zone of yellowish brown clayey granitic saprolite below it and fresh granitic rock. at the bottom level.

The soil average thickness is between 1m and 3m and the combined thickness of soil and saprolite range between 6m and 42m in B3 Line. The thickest zone was observed at the holes numbers B3-06, B3-08 and B3-14. Field observation of chips taken from RC drilling confirmed that the fresh rock is mostly composed of biotite granite (GriIIb). Broad sheared zones were regionally confirmed and some zones with strong shearing were detected.

Alteration: Alteration minerals in host rock such as silicic, epidote, chlorite and potassic alteration are frequently observed.. And with less frequency it is found Kaolin and sericite. At the central part of the shearing zone center, it is commonly found silicic, epidote and potassic alteration.

Mineralization: Gold mineralization with an average grade above Au0.1g/t was found at 10 sites in B3 Line. As showed below, the best results were intercepted in the holes B3-04 and B3-05.

Drill Hole	Hole Length (m)	From (m)	To (m)	Length (m)	Au (g/t)
B3-01	50.0	26.0	28.0	2.0	0.11
B3-03	50.0	12.0	14.0	2.0	0.11
"	"	20.0	28.0	8.0	0.22
B3-04	50.0	12.0	14.0	2.0	2.54
B3-05	50.0	24.0	34.0	10.0	0.40
B3-06	50.0	46.0	50.0	4.0	0.14
B3-09	50.0	24.0	28.0	4.0	0.10
B3-10	50.0	42.0	44.0	2.0	0.13
B3-11	50.0	14.0	18.0	4.0	0.16
"	"	48.0	50.0	2.0	0.60

(d) B4 Line

Geology: RC drilling indicated the presence of soil at the top level, a thick zone of yellowish brown clayey granitic saprolite below it and fresh granitic rock at the bottom level.

The soil average thickness is between 3m and 7m and the combined thickness of soil and saprolite range between 20m and 40m in B4 Line. The thickest zone was observed in the vicinities of the borehole number B4-05. Field observation of chips taken from RC drilling confirmed that the fresh rock is mostly composed of biotite granite (GriIIb). Broad sheared zones were regionally confirmed as well as some zones with strong shearing.

Alteration: Alteration minerals in host rock such as silicic, epidote, chlorite and potassic alteration are frequently observed, and with less frequency it is found Kaolin and sericite. At the center of the shearing zone center, it is commonly found silicic, epidote and potassic alteration.

Mineralization: As shown below, gold mineralization with average grade above Au0.1g/t was found in 7 sites in B4 Line.

Drill Hole	Hole Length (m)	From (m)	To (m)	Length (m)	Au (g/t)
B4-03	50.0	20.0	22.0	2.0	0.20
B4-04	50.0	26.0	28.0	2.0	0.12
B4-05	50.0	14.0	16.0	2.0	0.12
"	"	22.0	24.0	2.0	0.12
"	"	26.0	30.0	4.0	0.10
"	"	42.0	44.0	2.0	0.10
B4-07	50.0	6.0	10.0	4.0	0.26

(e) B5 Line

Geology: RC drilling indicated the presence of soil at the top level, a thick zone of yellowish brown to reddish brown clayey granitic saprolite below it and fresh granitic rock at the bottom level.

The soil average thickness is between 2m and 6m and the combined thickness of soil and saprolite range between 20m to more than 50m in B5 Line. The thickest zone was observed at a large zone between the holes numbers B5-10 and B5-17 and evidence of a strong shearing was observed on RC slime. Also, field observation of chips taken from RC drilling confirmed that the fresh rock is mostly composed of biotite granite (GriIIb).

Alteration: Alteration minerals in host rock as, silicic, epidote, chlorite and potassic alteration are frequently observed, and with less frequency it is found Kaolin and sericite. At the shearing zone center, it is commonly found silicic, epidote and potassic alteration.

Mineralization: Gold mineralization with average grade above Au0.1g/t was found at 22 sites in B5 Line. As shows below, the best results were intercepted in the holes B5-06, B5-11, B5-12, B5-13, B5-18.

Drill Hole	Hole Length (m)	From (m)	To (m)	Length (m)	Au (g/t)
B5-01	50.0	30.0	32.0	2.0	0.23
B5-03	50.0	26.0	28.0	2.0	0.54
"	"	36.0	40.0	4.0	0.50
B5-05	50.0	34.0	38.0	4.0	0.13
"	"	42.0	48.0	6.0	0.23
B5-06	50.0	4.0	8.0	4.0	0.11
"	"	20.0	22.0	2.0	0.10
"	"	28.0	40.0	12.0	0.58
"	"	44.0	46.0	2.0	0.17
B5-07	50.0	8.0	10.0	2.0	0.14
B5-09	50.0	34.0	36.0	2.0	0.20
B5-11	50.0	10.0	20.0	10.0	1.03
"	"	28.0	30.0	2.0	0.35
B5-12	50.0	34.0	40.0	6.0	0.44
B5-13	50.0	26.0	28.0	2.0	0.47
"	"	38.0	48.0	10.0	0.34
B5-14	50.0	20.0	22.0	2.0	0.17
"	"	28.0	32.0	4.0	0.20
B5-16	50.0	36.0	38.0	2.0	0.31
B5-17	50.0	14.0	20.0	6.0	0.16
"	"	32.0	34.0	2.0	0.11
B5-18	50.0	34.0	44.0	10.0	0.74

Based on the RC drilling results, 4 DD drilling holes were carried out to check the gold mineralization in depth.

- (1) **MJBA14:** This site was selected because the RC drilling holes B5-05 and B5-06 showed relatively wide gold anomalies of above Au0.1g/t, and two RC samples from hole B5-06, indicated average gold grade of Au1.06g/t and Au1.23g/t.
- (2) **MJBA15:** This site was selected because the RC drilling hole B5-13 presented a strong shearing zone with wide gold anomalies of above Au0.1g/t and because B5-14 also showed gold anomalies of above Au0.1g/t.
- (3) **MJBA16:** This site was selected because the RC drilling holes B5-18 presented relatively high gold anomaly of Au2.83g/t.
- (4) **MJBA17:** This site was selected because the RC drilling holes B3-05 presented gold anomalies of Au0.57g/t within 6m wide.

(ii) DD Drilling

Drilling logs corresponding to a total of 4 DD boreholes drilled in B block are annexed in Appendix 10. Results of Thin Section, Polished ore, X-ray, Fluid Inclusion and Ore chemical analysis were also annexed in Appendices 12 to 15 and in Appendix 17.

(a) MJBA-14 (Fig. II-1-5)

Geology: Consisting of biotite granite from Pre-Uatuma Granite (GriIIb).

0.00m - 1.60m:	Transported soil
1.60m - 15.55m:	Granitic saprolite
15.55m - 31.40m:	Strong weathered Biotite granite with weak pyrite dissem
31.40m - 31.54m:	Nodular quartz vein with Epi veins
31.54m - 42.60m:	Pinkish bi-granite with K, Epi, Chl, and Silicic alteration
42.60m - 45.10m:	Pinkish to greenish grey sheared bi-granite with K-Epi-Chl and Sil. Alteration
45.10m - 54.00m:	Pinkish to greenish grey bi-granite with K, Epi-Chl, Sil alteration
54.00m - 56.40m:	Pinkish to greenish grey sheared bi-granite with K, Epi-Chl, Sil alteration
56.40m - 65.70m:	Pinkish grey bi-granite with K, Epi-Chl-Sil alteration
65.70m - 67.00m:	Pinkish grey bi-granite with strong K alteration and Epi-Chl alteration
67.00m - 70.50m:	Pinkish grey bi-granite with K, Epi-Chl-Sil alteration
70.50m - 76.00m:	Pinkish grey bleached bi-granite with K, Epi-Chl-Sil alteration
76.00m - 92.10m:	Pinkish greenish grey bi-granite with Sil, Epi-Chl-K-Magn alteration
92.10m - 93.30m:	Greenish grey sheared and fractured zone with Epi-Chl alteration.
93.30m - 100.05m:	Pinkish greenish grey grey bi-granite with Sil, Epi-Chl-K-Magn alteration

Mineralization: Gold anomalies were observed in the following intervals. Between 12.0m and 13.0m and between 16.0m and 18.0m showed gold anomalies of above 0.2ppm and weak anomalies of Pb268ppm and Zn106ppm with strong shearing with goethite. Between 20.0m and 21.0m gold anomalies above Au0.2ppm were detected. Between 32.0m and 33.0m, gold above Au0.4ppm in strong shearing with pyrite dissemination were detected. Between 49.0m and 50.0m showed gold above Au0.3ppm in strong shearing of 1.30m widths. Between 68.0m and 69.0m showed gold values of Au1.3ppm related to pyrite dissemination in shearing zone. Between 70.0m and 71.0m showed gold above Au0.2ppm. Between 87.0m and 88.0m showed gold above Au0.2ppm. Polished sample from 44.05m presented dissemination of pyrite, chalcopyrite, sphalerite and magnetite.

Alteration: The main alteration observed in fresh granite was due to silicification, potassic, chlorite and epidote alteration. Other kind of alteration, such as kaolin and sericite were also observed. At the center of the shearing zone, silicic, potassic, epidote and chlorite alteration were mostly observed. Thin section sample taken from 42.00m showed sericite, chlorite, epidote and carbonate alteration, and from X-ray sample taken at 25.90m, 28.30m and 48.70m sericite, potassic, calcite and albite were observed.

(b) MJBA-15 (Fig. II-1-6)

Geology: Consisting of biotite granite from Pre-Uatuma Granite (GriIIb).

0.00m - 2.70m:	Transported soil
2.70m - 71.15m:	Granitic saprolite
71.15m - 73.30m:	Weathered bi-granite with weak pyrite dissemination
73.30m - 100.50m:	Bi-granite, moderately sheared and with weak epi-chl-silic alt. and weak py dissem.