# Ramgad Minerals & Mining P.

Dated: 26th July, 2006.

To,

The Controller General Indian Bureau of Mines, Department of Mines, Ministry of Mines & Minerals Indira Bhawan, Civil Lines, Nagpur-440001.

Sub. Final report on Reconnaissance permits No: 15/2001. for exploration of Gold and associated minerals in Gadag.

Dear Sir,

The Government of Karnataka granted Reconnaissance Permit (No.15/2001), dated 10th August, 2001 to M/s Ramgad Minerals and Mining (P) Ltd., for exploration of Gold and associated minerals over an area of 1233.05 Sq.Kms in the districts of Gadag, Haveri, Bellary and Dharwad.

As required by MCDR 3(E), the first annual progress report on the Reconnaissance Permit was submitted to your office on the 4th December, 2002.

The second annual progress report on the Reconnaissance Permit was submitted to your office on the 9th September, 2003.

At the end of the second year we surrendered 50% of the R.P. area as per the MCR -Reconnaissance license deed part-II Serial No.19 of form F-1 under section 7(I) on 9th August, 2003, retaining 616 Sq.Kms. of the Reconnaissance Permit area.

Half yearly report for the Third year was submitted to your office on the 4th June, 2004.

At the end of the third year remaining area was surrendered, retaining 25 Sq.Kms. area as per MCR under section 7(II) for further detailed exploration. Meanwhile, application for Mining Lease for 39.27 Hectares in Sangli Block and applications for P.L. for various other blocks were also submitted. The details are attached in Annexure-I. 9 6

where find enclosed herewith the final Report of Reconnaissance Permit. We regret delay in timely submission.

hanking you

Yours faithfully,

for RAMGAD MINERALS & MINING P. LTD.,

AUTHORISED SIGNATORY

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# FIRST ANNUAL REPORT ON R.P.

# SALIENT FEATURES:

# 1 Geological

# 1.1 Regional Survey:

Satellite imagery maps procured from NRSA, Hyderabad on scale 1:50.000 has been reprocessed to give an output of 1: 12,500 scale maps, Marker beds, ancient working, shafts, inclines, adits, and mine dumps was demarcated and thus indicating the mineralized zone. Geological maps procured are being remapped on scale 1:25,000 to indicate geological contacts and stratigraphic breaks. The geology of the belt is very similar to the geology of gold bearing green stone belts in many other parts of the world. In essence the belt is keel — shaped having been intruded by granites both on eastern and western flanks. A lower sequence of well developed meta-basalt in which massive flow centers overlain by carapaces of pillows as well as pillow breccias, are conspicuous and constitute the dominant rock types. Pillow structures and flow features indicating the younging direction has been used to indicate the new stratigraphic classification. Within the chloritic phyllite schist's and greywacke-Argillite marked. Fine grained and coarse grained (lapilli) tuffs with well preserved graded bedding were observed in numerous places and these new rock types identified while remapping has been used as marker beds to indicate mineralized zones.

#### 1.2 Aerial Photo Work:

Aerial photo interpretation has been carried out to obtain regional picture and structural patterns of the area.

# 1.3 Geological Mapping:

Geological Mapping of 1:50,000 scale, over an area of 500 Sq.Kms. was carried out.

# 2 Geophysical:

# 2.1 Airborne Electromagnetics:

Airborne, electromagnetic survey was conducted over the area of interest and the anomalies obtained are being reinterpreted with respect to the other data sets. Electromagnetic anomalies frequently reflect sulphides or graphite, which at times are related to gold mineralisation.

# 2,2 Aeromagnetics:

For the permit area, airborne magnetic survey has already been carried out by AMSE, Geological Survey of India, and Bangalore. The data has been procured in the contour format by RMMPL. Hence no further airborne surveys required to be under taken for this area. After careful study of the pattern all the contoured maps were digitized and a number of color images of the magnetics, depicting amongst other parameters, total magnetic intensity and first vertical derivatives were produced. This information has been particularly useful in the mapping of the green stone belt stratigraphy, especially where banded iron formations are involved. The imagery also revealed the position of previously unknown linear features representing dykes and or shear zones some of which could be important with regard to gold mineralisation.

A number of circular magnetic highs have also been identified from the imagery and it is possible that some of these might represent kimberlite intrusives or ultramafic plugs. These possibilities need further investigation.

# 2.3 Airborne Radiometrics:

Total count as well as individual channel (K, U and Th) radio-metrics (gamma ray spectrometry) covering the area of interest was flown, together with the magnetics. AS in the case of the magnetics, the contoured products procured by RMMPL were digitized and image processed. The final product of the image processed, total count radio-metrics contains large amount of useful information. Besides clearly delineating the positions of the granites surrounding the green stone belt, it also shows the position of the important mineralized trends in the area. Of particular interest is the arcurate Kabulyatkatti-Mysore- Sangli block (central Lode system) trend as well as other anomalies immediately east of this trend, which could be indicative of mineralisation. Although not yet complete, the interpretation of the radio-metrics could provide important information regarding further exploration targets. Interpretation of the potassium channel could provide even definitive information regarding gold exploration targets.

# 3 Geochemistry:

The Gadag schist belt has been covered by comprehensive stream sediment, geochemical survey carried out by the Geological Survey of India in collaboration with the BRGM, Analysis of large number of elements including gold, have been undertaken and the results have been plotted on the geological maps. Plotting of information is in progress and the exploration targets emerging.

# 4 Diamond Drilling:

4.1 Test drilling: Number, area of	Nil

4.2 Nature and structure of the ore body: Vein type in highly sheared

And brecciated zone.

Influence meter age and sampling

4.3 Analysis of the ores or minerals: About 1000 samples.

# SECOND ANNUAL REPORT ON R.P.

#### **SALIENT FEATURES:**

### 1 Geological

#### 1.1 Regional Survey:

The existing geological map of Gadag belt has been modified.

#### 1.2 Satellite imagery interpretation:

The interpretation of good quality satellite imagery covering the RMMPL permit area has provided some important insights into the regional geology, structure and controls of gold mineralisation in the Gadag belt. Spectral responses for various soil and rock types are generally distinct and have been used as the main basis for the interpretation. Structural features in the form of stratigraphic components and foliation trends as well as position of major discontinuities, structural breaks, deduced from detailed study of bedding and foliation is also conspicuous. In addition to dividing the belt into number of structural blocks, these major discontinuities are related second order structures, which represent shear zones and or faults, are thought to be important with regard to the emplacement of Gold mineralisation.

### 1.3 Out crops and sub-outcrop areas:

In contrast to many green stone belt worldwide, the Gadag belt is relatively well exposed and many areas of good outcrops occur. A large amount of information in the form of differing spectral responses and stratigraphic information is to be seen on the imagery, in such outcrop areas. What are very conspicuous are stratigraphic, and structural trends and linear features representing faults and fractures.

Interpretation of this information with other data sets described gives a good indication of the position of first and second orders structure and discontinuities in the belt, which represents faults, fractures and shear zones. It is possible by using these structural features to divide the belt into number of tectonic domains, which assist with an understanding with the structure of the belt and description of geology.

Seven structural domains have been recognized from the satellite imagery and in most instances these domains are (1) Northern (2) North-Central,(3)Central,(4) South-Central (5) South-West (6) Southern (7) Granite and Dykes.

#### 1.4 Aerial photo work:

Aerial photo interpretation has been carried out to obtain regional picture and structural pattern of mineralisation of the area.

#### 1.5 Geological Mapping:

Geological Mapping was carried out for 1:50,000 and 1:2,000 scale with an area of 900Sq.km and 60 Sq.Kms respectively.

# 2 Geophysical:

### 2.1 Aeromagnetic:

Interpretation has been attempted on the aero-magnetic data in the form of sun-shaded total intensity is shown in fig.3.A high magnetic response is apparent in the BIF zone of the northern domain particularly in the stratigraphic zone SE of Nagavi. Stratigraphic trends are clearly to be seen and offsets on the magnetic marker bands are also conspicuous.

Southeast trending high magnetic responses are also present in the BIFs of the SE tail of the North-Central domain east of Kadkol structure and west of Kalkeri. The tight fold closure on the BIFs in the extreme south east of the North Central domain is very apparent and coincides with a high magnetic response.

Other magnetic features to note are two ENE-WNW trending low linear cutting across the entire belt, the northern one running through the villages of Sirahatti, Attikatti and Dambal and the southern one lying north of Belhatti, Bagewadi and Kalkeri.

It is concluded that they represent dykes belonging to a strong ENE-WNW set of intrusives the positions of which has been partly deduced from the interpretation of other data sets,

A noteworthy feature to the south of Kadkol structure is three sets of weak, NW-SE trending magnetic linears. Interpretation of other data sets clearly reveals that these linears are manifestations of a strong dyke swarm which is confined to the southern structural domains.

#### 2.2 Electromagnetics:

Five-channel air borne electromagnetic anomalies representing very conductive source rocks as well as the border out lines of conductive areas are shown in the interpretation. Of interst is the general lack of electromagnetic responses with in the green stone belt

and the generally good response related to the granites in the northwest part of the area in the vicinity of Gadag.

The other granitic terrain represent essentially by the grey granite do not show obvious electromagnetic responses except in the case of some of the granite contact with the green stone belt. Such anomalies occur along the contact to the north of Shirahatti, east of Belhatti, around the southern granite contact in the vicinity of Bedarhalli and in the area north of Kalkeri in the east.

Good electromagnetic anomalies within the belt occur between Nagavi and Nabhapura mining blocks, around Kabuliyatkatti and specifically immediately east in the eastern Kabuliyatkatti mining blocks.

Further south, good anomalies are associated with the folded BIF lying to the north of Belhatti and immediately south of Bagiwadi. These anomalies would suggest the presence of sulphides or graphitic zones particularly in those BIF.

# 2.3 Airborne Radio metrics:

The image data of the total count airborne radiometric covering the Gadag belt is processed. In general the granitic rocks surrounding the Gadag green stone belt as is to be expected, give rise to high or very high radiometric responses, while the radiometric responses with in the belt are generally low to very low.

It is interesting to note that the three areas of granitic outcrops and sub-outcrops defined from the interpretation of the satellite imagery and described earlier, coincide closely with the areas of highest radiometric responses.

Radiometric anomalies of interest include the intermediate responses along the part of zone of BIF west of Kalkeri.

# 3 Geochemistry:

The results of the comprehensive stream sediment-sampling programme carried out has been processed and interpreted. Data from a variety of elements were examined and it was found that for some elements, insufficient anomalies existed to warrant plotting on the map. Eventually the five elements that have shown showed the most variation values with clear anomalous populations and which would give guidelines as to the position of gold mineralisation were used in the interpretation.

# 3.1 Identification of potential Targets:

From the integration and interpretation of the various data sets, some 24 well-defined target areas have been identified. These target blocks have been plotted onto a

background, black and white, geological base map, which also shows the regional gold geochemical anomalies and the Kadakol, Nagavi, and southern domain structures.

All the target blocks to the north of the Kadakol structure and the Nagavi structure are associated with quartz lodes and shear zones, which lie dominantly in mafic lithologies and tuff or argillite sequences.

In strong contrast all the areas to the south of the Kadakol structure are all associated with banded iron formations.

# 4 Diamond Drilling:

# 4.1 Number, area of influence meterage and sampling:

42 drill holes, giving a total 1210 metres were drilled in Sangli Block.
17 drill holes, 834 metres of core drilling was carried out in kabuliyatkatti area.
1707 core samples from Sangli Block and 583 core samples from Kabuliyatkatti were sent for analysis

# 4.2 Mineralogical / metallurgical studies:

Further steps in the programme and concurrent with the diamond drilling programme, would include mineralogical and metallurgical studies as well as studies aimed at designing the most suitable method for mining the deposit (e.g. under ground or opencast).

# 4.3 Nature and structure of ore body:

Vein type in highly sheared and brecciated zone.

# 4.4 Analysis of the ores or minerals:

About 1500 samples were sent to Shiva laboratory, Bangalore for analysis.

A detailed programme for drilling in other blocks during the next year has already been planned.

# THIRD ANNUAL REPORT ON R.P.

#### **SAILENT FEATURES:**

### 1 Stream Sediment Surveys:

As indicated above several gold target areas have been identified based on satellite imagery studies, aeromagnetic, electromagnetic and radiometric surveys. All the blocks identified have been taken up for detailed exploration starting with geological mapping on 1:2000 scale. In addition to these identified targets to know the concealed ore bodies if any it is proposed to take up quick surface stream sediment sampling in the areas. It is found that gold dispersion is best in -120# fraction in hydromorphic sedimentation in the stream.

Within the R.P. area stream sediment sampling has been carried out in parts of 48 M/11 and M/12. Several geochemical anomalous areas have been identified. To find out the source of anomaly follow up work has been taken up in the up stream catchment area. After critical examination of the area, shallow DTH drilling was carried out in a grid pattern of 50X250m to arrive at the gold concentration zones.

# 2 Digitisation of Maps:

As indicated in the previous reports all the identified target blocks have been mapped on 1:2000 scale detailed geological maps have been prepared using logical adhoc 100 X 100m grid. Now all the geological information is being computer digitized. The maps are redrawn in the UTM, India-Bangladesh international flat grid which could be utilized for easy processing and transmission in digital mode.

### 3 Metallurgical Studies:

To know the characteristics of gold and its recoverability, metallurgical studies have been taken up. From mineralized zones of Gadag area 6 samples have been collected and sent to Mintek Lab, South Africa. The details of the samples are shown below.

Sample No.1: Kabuliyatkatti high grade ore from mine dump

Sample No.2: Kabuliyatkatti med. Grade ore from tailing dump

Sample No.3: From Sangli block proposed open cast area No.1

Sample No.4: From Sangli block proposed open cast area No.2

Sample No.5: From Sangli block open cast area No.3

Sample No.6: Composite sample from Sangli,

The results of the studies will be intimated in the next progress report.

### 4 Exploration in hotspot blocks:

#### 4.1 Sangli Block:

Surface geological mapping of 2.1Sq km (2.1 X 1 Km) on 1:2000 scale has been completed and 3 mineralized lodes viz., Temple East, New East and Middle Lodes have been demarcated in the map showing all the old workings, 12 shafts, 3 adits, 8 mine dumps. Four areas for opencast possibilities have been located.

Shallow bore holes have been drilled in four open cast proposed areas and economic possibilities are being explored.

#### 4.2 Mysore:

Mysore mine is located North of Sangli mine area which has been well explored and exploited by earlier workers. After obtaining PL the following works have been proposed to be taken up in Mysore mine.

#### Future work proposed:

- Dewatering and underground development of two levels
- Underground core drilling to explore the parallel lodes.

#### 4.3 Kabuliyatkatti:

Kabuliyatkatti area was the centre of entire mining and milling activity of Gadag schist belt and considered as Hotspot block. Detailed exploration by way of drilling

investigation is proposed in the block to explore open pit possibilities. Economic possibilities of the ore shoots are being worked out.

#### 4.4 Hosur:

Hosur block is considered as one of the hotspot target of exploration which has been reclaimed by MECL and carried out trial stoping by BGML. The data has to be procured from these organization and further reclamation and underground sampling has to be carried out to asses the economic viability of this block.

# 5 Exploration in BIF bands:

Presence of gold is reported in Banded Iron Formations (BIF) associated with iron sulphides in some parts of the world. Homestake of U.S.A. and Morro Velho of Brazil, Lupin of Canada are typical examples of gold production from BIF. South of Gadag gold field several BIF bodies are found. The present report summarises the exploration carried out and results achieved in BIF in Gadag field area.

The Gadag schist belt is characterized by several banded iron formation which occur in a number of geological settings. They are most commonly associated with phyllites and acid volcanics but are also present in mafic volcanics, amphibolites and carbonate sequences, as well as greaywackes. Because of the association of gold with BIF at the Ajjinahalli mine lying further south in the Chitradurga belt, and also because of the world wide association of certain types of gold deposits with BIF, RMMPL has targeted and sampled number of BIF'S in the Gadag belt as gold targets.

Almost all the BIF bands have been picked up by aero-magnetic, electromagnetic and radiometric surveys. From a few blocks geochemical gold, arsenic, copper, nickel and boron anomalies have also been recorded.

Generally gold mineralization in Gadag schist belt is restricted to silicified shear zones associated with quartz. All the ancient workings, mining activities were restricted to these zones only. However, preliminary investigations carried out have

shown that Banded Iron Formations (BIF) also at places contain anomalous gold values. A few samples collected initially from BIF bands assayed high gold values up to 6 grams per tonne at places. The continuity of gold mineralization and economic viability of these BIF bands have been taken up for detailed investigation.

Gadag schist belt in which BIF forms a part has been mapped by Geological Survey of India on 1:50,000 scale. Stream sediment samples have been collected initially by GSI – under BRGM (France) collaboration programme in late ninetees.

### 6 Identification of targets:

The area around Gadag schist belt has been scanned by electro-magnetic, aero-magnetic and radiometric surveys followed by ground stream sediment geochemical sampling by Geological Survey of India. Satellite imageries of the area and aerial photos have been examined, tectonic frame work and structural configuration have been worked out. All geological, airborne geophysical and geochemical data has been procured, processed, reinterpreted and several anomalous maps have been prepared. Based on the anomalies 14potential BIF blocks have been identified as shown in the table below. Some blocks shown aeromagnetic or electromagnetic and others have radiometric anomalies. These anomalies have been integrated stream sediment geochem gold, copper and boron anomalies and the BIF target blocks have been identified and shown in table No. 1.

Table No. 1 Identification of BIF blocks based on electro- magnetic, aero-magnetic, radiometric and stream sediment geochem anomalies.

NO.	BLOCK	ELEC- MAG	AERO -MAG	RADIOM ETRIC	GEOCHEM. ANOMALIES
BIF-1	Kuslapur			☼	Au, B
BIF-2	Majjur	*		*	Au, Cu, B
BIF-3	Suganahalli	*		☆	Au, Cu
BIF-4	Bannikoppa	☆		☆	Au, As, B

BIF-5	Jyalawadgi		☆	☆	Au, As, B, Cu,
					Ni
BIF-6	Kerehalli	☆			Au
BIF-7	Tangod		☼	☆	Au
BIF-8	Mallikarjun		⋫	☆	В
BIF-9	Basappagud		☆		Au, B, Cu
	da	*		*	
BIF-10	Sanjeev		ఘ	☆	Au, B
	betta	i			
BIF-11	Kellur				Au, B
BIF-12	Surangi	❖			
BIF-13	Magala		☼		
BIF-14	Hamgi		☼	₩.	В
	14 Blocks				

First reconnoitery traverses have been taken up on BIF bodies and samples have been collected and analysed mainly from 7 localities. Later RMMPL Gadag exploration team carried out systematic exploration during 2002 to 2003. The work has been re-reviewed in 2004 with analysis from Shiva laboratories.

### BIF-1: Kuslapur

Taken up to test the regional geochemical anomaly (up to 99 ppb Au). One major NW-SE trending BIF body delineated. Initially 38 bed rock samples, recheck samples collected from BIF bands and assayed by Shiva lab also have not shown any significant gold values as all samples analysed 0.01 to 0.02 g/t of gold.

#### BIF-2: Majjur

To investigate the electromagnetic, radiometric anomalies and gold, copper and boron geochem anomalies Majjur block was taken up. Two main and several BIF bands demarcated and sampled. The BIF bodies did not indicate any significant gold values. A minor cherty sulphidic BIF band analysed 1.4g/t of gold.

BIF bands have been re-examined once again in April, 2004 and 15 check samples have been collected from 9 BIF bands. The samples which have been analysed by Shiva lab for gold ranges from less than 0.01 to 0.05g/t.

#### BIF-3: Suganahalli

To investigate the electromagnetic, radio magnetic anomalies and gold, copper geochemical anomalies Suganahalli block was taken up. Two major BIF bands of about 2 Km long with several sub parallel bodies delineated and sampled. A few sporadic high values of 1.8 to 3.1 g/t of gold have been obtained initially based on RMMPL lab analysis.

During April, 2004 BIF bands have been re-examined. In the places where high gold values have been encountered 4 check samples have been collected and analyzed by Shiva lab. The incidence of gold ranges from <0.01 to 0.15g/t.

#### BIF-4: Bannikoppa

Taken up to test the Electromagetic, Radiomagnetic anomalies and for gold, arsenic & boron geochemical anomalies was carried out.

Six BIF bands of 1 of 3 Km long identified. Two spot values of 2 and 6 g/t of gold with barren horizons in the intervening areas have been recorded.

However, resampling of the band at closer interval could not indicate the reproducibility of results. All the samples analysed less than 1 g/t.

The zones of high concentration of gold obtained at selected places have been reexamined in April, 2004. Eight samples have been collected and assayed by Shiva lab yielded less than 0.01 to 0.03 g/t.

### BIF-5: Jyalawadgi:

To find out the Aeromagnetic, Radiomagnetic and gold arsenic boron copper & nickel Geochemical anomalies Jyalawadgi was taken up.

Six linear BIF bands of 1 to 5 m wide and 200m to 1.5 Km long has been traced. 101 samples have been collected and assayed for gold. Most of the samples analysed very low values ranging from nil to 0.1 g/t. Only two samples have analysed 0.5 to 0.6 g/t.

The BIF bodies have been re-examined once again in April, 2004 and 7 check samples have been collected to assess the potential.

#### BIF-6: Kerehalli:

To test the electromagnetic anomaly and gold geochemical anomaly the Kerehalli block was considered for investigation.

Four distinct BIF bands of 1 to 30m wide and 1 to 2 Km long have been demarcated in this block, from this block 97 outcrops samples have been collected from BIF bands. Though 95 samples have not shown any gold values a couple of samples have yielded high spot values. These zones have been reexamined and 67 samples have been collected at closer interval to find out the continuity. The resampling of these zones have not yielded any encouraging value. The samples analysed nil to 0.6 g/t.

These bands have been re-examined closely in April, 2004. The spots where high gold values have been encountered studied in detail and 6 samples have been collected. The samples analysed less than 0.01 to 0.02 g/t.

#### BIF-7: Tangod:

From Tangod block a major BIF band and 4 sub-parallel linear bodies have been demarcated and sampled. Out of 58 samples collected two samples analysed 2 and 5.5 g/t of gold.

The BIF bands have been re-examined and 9 check samples have been collected and assayed by Shiva laboratory. The analytical results obtained ranges from 0.01 to 0.03 g/t of Au.

#### BIF-8: Mallikarjun:

To find out the Aeromagnetic, radiometric anomalies and Boron geochemical anomaly the area was taken up for investigation.

From Mallikarjun block 75 samples of BIF, 49 other host rock samples have been collected. The analytical results of this block have not yielded encouraging results. Most of the samples assayed less than 0.1. At places some spot values of 0.3 to 0.4g/t have been obtained. In the road section between Mundargi and Belhatti earlier a few high values ranging from 0.2 to 4.8 g/t analysed by MSPL lab. These spot values have been reexamined in the field in April, 2004 and collected 7 samples. The analytical results obtained from Shiva lab ranges from less than 0.01 to 0.02 g/t.

#### BIF-9: Basappagudda:

To investigate Aeromagnetic anomaly and Gold, Boron, Copper geochemical anomalies the block was taken up.

Five distinct long BIF bands could be demarcated from this block. At places silicification, sulphidisation and carbonization are very pronounced. Analytical results have shown certain positive spot high values of the order of 20 g/t as analysed by MSPL lab. These bands re-examined and 13 samples have been collected. The samples analysed by Shiva lab ranges from less than 0.01 to 0.05 g/t.

### BIF-10: Sanjeevbetta:

To Test the Aeromagnetic, Radiometric anomalies and Gold, Boron geochemical anomalies the block was taken up.

6 main BIF bands (1 to 20 m wide and 0.5 to 1.75 Km long) and 11 minor bands of 1 to 10m wide and 20 to 300m long delineated. The results of 57 samples analysis indicated that the gold content in BIF in this area varies from traces to 0.02g/t. The results have not shown encouraging values.

However, again in April, 2004 after scanning the entire block 4 samples were collected and analysed by Shiva lab. The samples shown gold content ranging from 0.01 to 0.02g/t. Thus all the BIF bodies encountered in Sanjeevbetta block are barren of gold mineralization.

#### BIF-11: Kellur:

To investigate the geochemical anomalies of Gold and Boron the block was taken up. From this block 57 samples were collected and assayed for gold content. Out of these 57 samples, 3 random samples analysed spot high values of 1.2, 1.4 and 21 g/t by MSPL lab. Rest of all other samples did not show encouraging values. The areas and spots providing high gold values of more than 1 g/t have been re-examined again in April, 2004. From these zones 3 samples have been collected and analysed by Shiva lab. All the samples assayed less than 1 g/t (Values ranging from 0.02 to 0.03 g/t).

### BIF-12: Surangi:

To find out the electromagnetic anomaly the block was taken up.

6 BIF bands 1 to 6m wide, 1 to 2.5 Km long massive, cherty and sulphidic at places could be demarcated in the map and 108 samples collected. Most of the samples analysed traces to 0.1g/t. Out of 108 samples only 1 sample (No.SR1503) analysed highest 1.3g/t.

In April, 2004 the area was revisited and 10 selected samples were collected to examine the economic possibility if any. The samples analysed by Shiva lab shown gold content ranging from 0.01 to 0.68 g/t. Exploration carried out in this block indicates that though there is concentration of gold at places in the BIF there is no lateral continuity.

#### BIF-13: Magala:

To test the Aeromagnetic anomaly the block was taken up. Three main BIF bands of 1 to 2.6Km long, 5 to 15m wide traced out along the ridge of the hill. BIF bands at places found highly altered to limonitised. A trench and a pit found in hanging wall side of main BIF band.

162 samples in BIF and host rock collected from the block. One BIF sample (MGC 3301) analysed 1.1 g/t and a chert band within chlorite phyllite assayed 2.8 g/t. Rest of all the samples assayed less than 1 g/t indicating that there is no strike extension of gold mineralization.

Again in April, 2004 all the BIF bands were re-examined and 7 samples were collected in the potential areas of gold concentration. The samples analysed by Shiva lab analysed from 0.01 to 0.05 g/t. Based on the geological mapping, observations made and analysis obtained it can be concluded that this block is not a priority target area for follow up exploration.

#### BIF-14: Hamgi:

To investigate Aeromagnetic and Radiometric anomalies and Boron Geochemical anomaly the block was taken up.

Two BIF bands 5 to 20m wide and more than 3.5Km long traced out parallel to the road. From this block 51 samples collected from BIF bands and adjoining host rocks. Two samples cherty BIF bands, brecciated with pyrite analysed 1 to 2.6 g/t. Rest of the samples analysed less than 1 g/t.

The BIF bands have been re-examined again in April, 2004 for finding out the possible economic viability of gold bearing zones. From certain key areas 6 samples have been collected and analysed by Shiva lab. The samples assayed from 0.01 to 0.03 g/t. The study indicated that the economic significance of BIF bands in Hamgi area is remote.

# 7 Diamond Drilling:

Diamond drilling for 65 holes, equivalent to 7366 metres was carried out in Sangli, Mysore, Block No.23, Kabuliyatkatti and Hosur Mine area.

Nearly 7500 core samples were sent to Shiva laboratory, Bangalore for analysis.

# 8 Ore Resource Estimation:

Based on diamond drilling results, ore resources for Sangli, Mysore Mine, Block No.23, Kabuliyatkatti and Hosur Mine area have been estimated.

### ANNEXURE-I

# Prospecting License:

Sl.No	Date of Application	Area ( Sq. Kms)	Blocks	Village/Taluka	DMG Ref No
1	21 <sup>st</sup> March 2003	6.110	Sangli, Mysore & block No.23	Jelligeri, Doni, Sortur, Attikatti/ Gadag & Mundargi	06/APL/2003 dt. 27-03-03
2	7 <sup>th</sup> January 2004	11.700	Kabulayatkatti Attikatti, Part of Block No. 23, Doni, Nabhapur.	Kabulayatkatti Attikatti, Dindur, Nabhapur/Gadag & Mundargi	04/APL/2004/ 20015 dt. 16-1-04
3	14th January 2004	5.062	Hosur, Yelisirur, Venkatapura	Hosur Sirunj, Shirol, Yelisirur, Sortur/ Gadag	05/APL/2004/308 dt. 16-1-04
4	2 <sup>nd</sup> August 2004	3.200	Basappagudda BIF	Bidhanal,Chegankeri/ Shirahatti	82/APL/04/6537 dt. 18-08-04
5	2 <sup>nd</sup> August 2004	1.760	Kellur BIF	Kellur/ Shirahatti	89/APL/04/6715 dt. 23-08-04
6	2 <sup>nd</sup> August 2004	10.110	Sanktodak, Doni	Doni/Mundargi	85/APL/04/6720 dt. 23-08-04
7	2 <sup>nd</sup> August 2004	7.880	Jalligeri	Kadkol, Jalligeri, Sortur/ Shirahatti	86/APL/04/6718 dt. 23-08-04
8	2 <sup>nd</sup> August	3.000	Suranagi	Suranagi/ Shirahatti	87/APL/04/6717 dt. 23-08-04
9	2 <sup>nd</sup> August 2004	11.040	Nagavi	Nagavi, Beladadi, Nabhapur/ Gadag	88/APL/04/6716 dt. 23-08-04
10	2 <sup>nd</sup> August 2004	15.370	Kanavi Block I	Kanavi/ Gadag	93/APL/04/6713 dt. 23-08-04
11	2 <sup>nd</sup> August 2004	12.900	Kanavi Block II	Kanavi/ Gadag	94/APL/04/6712 dt. 23-08-04
12	2 <sup>nd</sup> August 2004	17.750	Kanavi Block III	Kanavi/ Gadag	92/APL/04/6714 dt. 23-08-04
TOTAL		105.882			

# Mining Lease:

1	6 <sup>th</sup> Jan 2004	0.397	Sangli Open pit area	<b>Jelligeri</b> / Shirahatti	06/AML/2004/ 598dt 08-01- 04
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