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CIN: U10200DL2008PTC183269

To **13/08/2025**

The Director
National Mineral Exploration Trust
Ministry of Mines
F-114, Shastri Bhawan,
New Delhi-110001

Subject: Submission of Detailed Project report for G-3 Stage Preliminary Exploration for Iron Ore deposit in Parvi Block, Kanker District, Chhattisgarh

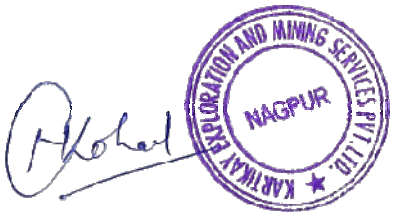
Reference: In Principal Approved project for Submission of DPR in 73rd TCC-I held on 30 – 31st January 2025

Dear Sir,

We are NABET Accredited Notified Private Exploration Company under Ministry of mines, Govt Of India Vide Notification SR No 528 dated 14th September, 2023 under Category-A.

Please refer to the meeting under reference we hereby submitting the detail project report on the above subject to NMET. It is requested to kindly consider our DPR for further necessary action.

Regards,



Nitin Kohad
DGM (Business Development/ Geology)

PROPOSAL FOR PRILIMINARY EXPLORATION (G3 STAGE) FOR IRON IN PARVI BLOCK, KANKER DISTRICT, CHHATTISGARH (UNFC: G-3)

COMMODITY: IRON

BY

KARTIKAY EXPLORATION AND MINING SERVICES PRIVATE LIMITED

PLACE: NAGPUR

DATE: 13.08.2025

Summary of the Block for Preliminary Exploration (G3 Stage)

GENERAL/BASIC INFORMATION ABOUT THE PROPOSED BLOCK

	Features	Details
	Block Name	Parvi Block
	Exploration Agency	Kartikay Exploration and Mining Services Pvt. Ltd, Nagpur
	Commodity	Iron
	Mineral Belt	Latmarka (Banded Iron Formation) Group
	Completion period with entire Time Schedule to complete the project	15 Months
	Objectives	The block area occupied by Latmarka group of rocks with N-S trending linear belt. The area was explored by Geological Survey of India (GSI) in 2008-09 and reported the BMQ in the area. The following objectives to be taken up during UNFC G3 stage. 1. The Geology of the area to be updated at 1: 4,000 scale and demarcating Iron ore bearing BIF band with structural features i.e. strike, dip, Lineation/foliation etc., 2. The block to be explored by Sampling, Trenching and drilling component based on Geological mapping. 3. Chemical analysis of core samples and surface samples. 4. If, above Exploration strategy is successful then further coarse of action will be proposed i.e demarcation of Iron ore body and estimation of resources along with associated elements as per UNFC norms and Minerals (Evidence of MineralContent) Rules-2015at G-3 level.
	Whether the work will be carried out by the proposed agency or through outsourcing and details thereof. Components to be outsourced and name of the outsource agency	Work will be carried out by the proposed agency (Kartikay Exploration and Mining Services Pvt. Ltd.)

	Number of Geoscientists	In Field: 02 Geologists and In Headquarter: 02 Geologists
	Expected Field days (Geology, Surveyor)	Details given in cost sheet
1.	**Location**	
	Longitude-Latitude	Latitude Longitude A. 20°12'26.94"N 81° 9'35.35"E B. 20°12'19.73"N 81° 9'10.82"E C. 20°12'31.50"N 81° 9'5.82"E D. 20°12'35.93"N 81° 8'49.42"E E. 20°13'48.01"N 81° 8'17.38"E F. 20°13'52.87"N 81° 8'33.62"E G. 20°14'30.32"N 81° 8'22.41"E H. 20°14'31.63''N 81°8'50.89''E
	Villages	Parvi, jalhur
	District	Kanker District
	State	Chhattisgarh
2.	**Area (hectares/square kilometres)**	
	Block Area	4.50 sq.km
	Forest Area	Yes
	Government Land Area	Data not available
	Private Land Area	Data not available
3.	**Accessibility**	
	Nearest Rail Head	The nearest railway station is Bhanupratappur which is about 15-20 km from the deposit
	Road	Parvi Block area is located near village Jhalhore and Parvi, which is about 5 km towards South from Bhanupratappur on Bhanupratappur- Antagarh road. The Bhnaupratappur is located approximately 150 km to the south from Raipur. The nearest railhead for the area is Bhanupratappur.
4.	**Hydrography**	

	Local Surface Drainage Pattern (Channels)	Physiographically, area forms NW-SE trending hill ranges whereas surrounding part forms a plain land. The area is drained by the east to west flowing Jharan river, tributary of the Khandi river and Bhoghra nala. Drainage pattern is dendritic.
	Rivers/Streams	The area is drained by the east to west flowing Jharan river, tributary of the Khandi river and Bhoghra nala.
5.	**Climate**	
	Mean Annual Rainfall	The normal annual rainfall for the district is 1090 mm. The annual temperature varies from 10°C in winter to 42°C in summer. The relative humidity varies from 87% in rainy season to 32% during winter.
	Temperatures	The annual temperature varies from 10°C in winter to 42°C in summer. The relative humidity varies from 87% in rainy season to 32% during winter.
6.	**Topography**	
	Toposheet Number	SOI 64H/4
	Morphology of the Area	Physiographyically, the district can be divided into two regions, namely the Chhattisgarh plains and the Bastar plateau. The maximum altitude is 660 m msl at Matla reserve forest area near Temargaon Pahar ranges and the minimum is 374 m msl on the western parts of the district. The average elevation is around 343.84 m msl. The general slope is towards north in the northwest part of the district and is towards south in the remaining part. The soils in the district are having wide variations. In all two types of soils are existing in the district and are mostly insitu in nature. Most of the area is covered by Red loamy/sandy Alfisols & Yellow /Red Brown Ultisols.
7.	**Availability of base line geoscience data**	
	Geological Map (1:50K/25K)	Bhukosh Portal (available map 1:50,000 scale) LSM map in G-4 Stage GSI Report

	Geochemical Map	GSI collected samples in and surrounding areas in FS 2008-09
	Geophysical Map (Aeromagnetic, ground geophysical, Regional as well Also calibrated scale maps)	NA

8.	**Justification for taking up Preliminary Exploration.**	i) The Govt. of India enacted the MMDR AmendmentAct-2015 duly introducing the system of auction for allocation of Mineral Concessions including Iron Ore Deposit in order to boost exploration of minerals. The justification of taking item in G3 stage is mentioned hereunder GSI carried out G-4 stage of exploration in and surrounding the block (75 sq km) and established the banded Iron ore formation bodies. It shows encouraging values of Fe content. the block area shows presence of BIF formation. Analytical results of the samples are encouraging and indicate the presence of High grade Iron Ore in the area. As established by GSI in G4 level exploration four discontinuous iron ore bodies of 750m (cumulative length) with varying width from 14m to 23m having 58.83% to 66.01% Fe. Considering the facts enumerated above and recommended by GSI it is proposed to undertake the area for G-3 stage of exploration for Iron ore. From aforesaid mentioned background information, it has been noticed that in this block the Iron deposit is available and reported but the the systematic exploration work has not been carried-out yet. Hence we are proposing the Exploration programme with Mapping, Sampling, & Drilling.

DETAILED PROPOSAL ON PRILIMINARY EXPLORATION FOR IRON IN PARVI BLOCK, KANKER DISTRICT, CHHATTISGARH (UNFC: G-3)

Introduction

1.1.0 Large deposits of excellent quality iron ores are found in the Bastar, Durg, and Dantewara districts of Chhattisgarh. Smaller deposits occur in Raigarh, Raipur, Bilaspur, Rajnandgaon, Kanker, and Jashpur districts. The majority of the iron ore deposits in the Bastar and Durg districts are associated with the Bailadila Iron Ore Series of Archaean age. These series of rocks resemble the iron ore series of Singhbhum-Keonjhar-Bonai in Orissa and Jharkhand.

1.1.2 The iron formations in this region have similarities in lithological association and tectonomorphic history with those in other belts. The Bailadila group, which contains the bulk of the iron formations, comprises quartz-sericite schist and arkosic quartzite at the base, followed by Banded Iron Formation associated with shale-siltstone, carbonaceous shales, and interbedded tuffs, intruded by greenstones and granites.

1.1.3 The Pakhanjur area in Chhattisgarh is also known for its iron ore occurrences, primarily associated with Banded Iron Formations (BIFs).

1.1.4 The increasing demand of Iron in the country in recent years can be eased with the exploration of new Iron deposits of economic importance.

1.1.5 In view of the auction policy of the Government of India and demand of more explored blocks Government of India amended the MM (D & R), 1957 in 2021 allowing Private Agencies to be a stake holders in explorations of major minerals in a time bound manner in which the funds will be provided by the NMET instituted by Govt. Of India (Notification, NPEA, 2021).

1.1.6 Considering the Government policies and demand for Iron and steel our agency M/s Kartikay Exploration And Mining Services Private Limited selected the area and presented in the 73rd TCC-I held on 30 -31st Jan 2025 for In Principal approval. The Committee of NMET suggested to modify the boundary and to prepare the detailed Project Report. Accordingly we have prepared the DPR and submitting to NMET for technical evaluation approval of DPR in the upcoming TCC of NMET.

1.2.0 Previous work

P.N. Bose (1890-1900) was first to carry out geological survey in Bastar region. Crookshank and Ghosh (1932-38) mapped the southern part of the Bastar. Crookshank (1963) classified the metamorphics of south Bastar into Sukma, Bengpal and Bailadila Groups. In recent years a number of workers have carried

out detailed study in various parts of the district, viz. Dutta (1956-57), Prasad and Banerjee (1962), Krupanidhi (1960-62), Ramakrishna and Dutta (1970), Narain, Pandhare and Pal (1972), Mishra, Dutta, Kanchan and Sisodiya (1970). As a result of these recent studies the metasediments of the Bastar have been classified into a composite Bengpal Group and Bailadila Group.

Gurwandi and adjoining areas (Part of the Toposheet No- 64 H/4 were mapped by Shri R. K. Sharma and G.G.S. Satyanarayana in the year 1965. Later it was mapped on scale 1:63,360 by Dr.V. P. Mishra et al. during 1980-1982. As a part of second generation mapping on 1:25,000 scale, during 1989-1990, S/Shri V. P. Mishra, N. K. Dutta, J. G. Ghosh et al. reported primary gold mineralisation in a sheared rhyolite, exposed west of Gurwandi (20°10'N: 80°45'E). It was associated with pyrite, pyrrhotite, arsenopyrite and chip samples which on analysis gave gold value ranging from <0.10 to 1.23 g/t, over a zone of 18m width.

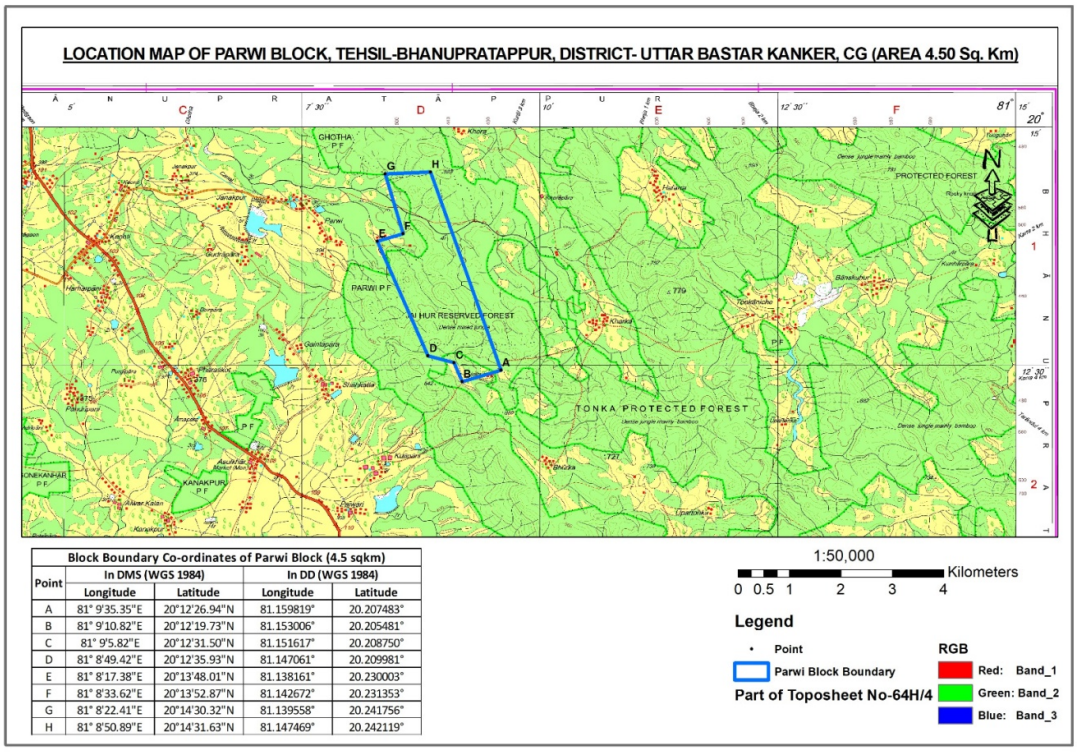
Subsequently, detailed mapping aided by trenching and sampling (Shri D.P. Das and M. R. Asoka Kumar 1990-1991 and M. C. Patel and M. R. Asoka Kumar 1991-1992) helped in recording the presence of gold over wide zones along the contact of rhyolite and rhyolitic tuffs.

The areawas explored by Geological Survey of India (GSI) in 2008-09 and reported the BMQ in the area.

1.3.0 Location and Accessibility

Parvi area is located near village Parvi that is about 6kms towards east from Keontivillage, on Bhanupratappur- Antagarh road. It is bounded by North latitudes 20°14'30.32" & 20°12'26.94" and East longitudes 81° 8'22.41" & 81° 9'35.35"

and forms parts of toposheet no. 64H/4.



Block Boundary Co-ordinates of Parwi Block (4.5 sqkm)				
Point	In DMS (WGS 1984)		In DD (WGS 1984)	
	Longitude	Latitude	Longitude	Latitude
A	81° 9'35.35"E	20°12'26.94"N	81.159819°	20.207483°
B	81° 9'10.82"E	20°12'19.73"N	81.153006°	20.205481°
C	81° 9'5.82"E	20°12'31.50"N	81.151617°	20.208750°
D	81° 8'49.42"E	20°12'35.93"N	81.147061°	20.209981°
E	81° 8'17.38"E	20°13'48.01"N	81.138161°	20.230003°
F	81° 8'33.62"E	20°13'52.87"N	81.142672°	20.231353°
G	81° 8'22.41"E	20°14'30.32"N	81.139558°	20.241756°
H	81° 8'50.89"E	20°14'31.63"N	81.147469°	20.242119°

1.4.0 Physiography & Drainage

Physiographically, the eastern part of the mapped area in toposheet no. 64H/4 forms a N-S and NNW-SSE trending hill ranges whereas western part forms a plain land. The area is drained by the east to west flowing Jharan river, tributary of the Khandi river and Bhoghra nala. The highest elevation in the area is 660m above msl, as recorded in the northeast of Shahkatta whereas lowest elevation in the area is 374m above msl near Janakpur and the drainage pattern is dendritic.

1.5.0 Climate and Vegetations

The area experiences warm humid climate with hot summer and moderate winter. Themaximum temperature rises up to 42°C in the months of May and June before the onset of monsoon and lowest temperature falls up to 10°C in the months of December and January. The rainy season commences in the beginning of July and continues upto September due to southwest monsoon. The average annual rainfall is around 1090 mm.

The area is moderate to thickly forested under classified Protected Forest. Near human settlements and along nala courses the density of vegetation is very sparse as these parts of the area is mainly used for agricultural purpose. The trees yielding good timber include sagaon (Tectona grandis), saja (Termanalia tomentosa), sal (Shorea robusta), sarai (Cupressus torulosa), bija (Pterocarpus marsupium), khamar and seasam etc. The other

floras are bamboo (Dendrocalamus strictus), mahua (Madhuca latifolia), jamun,

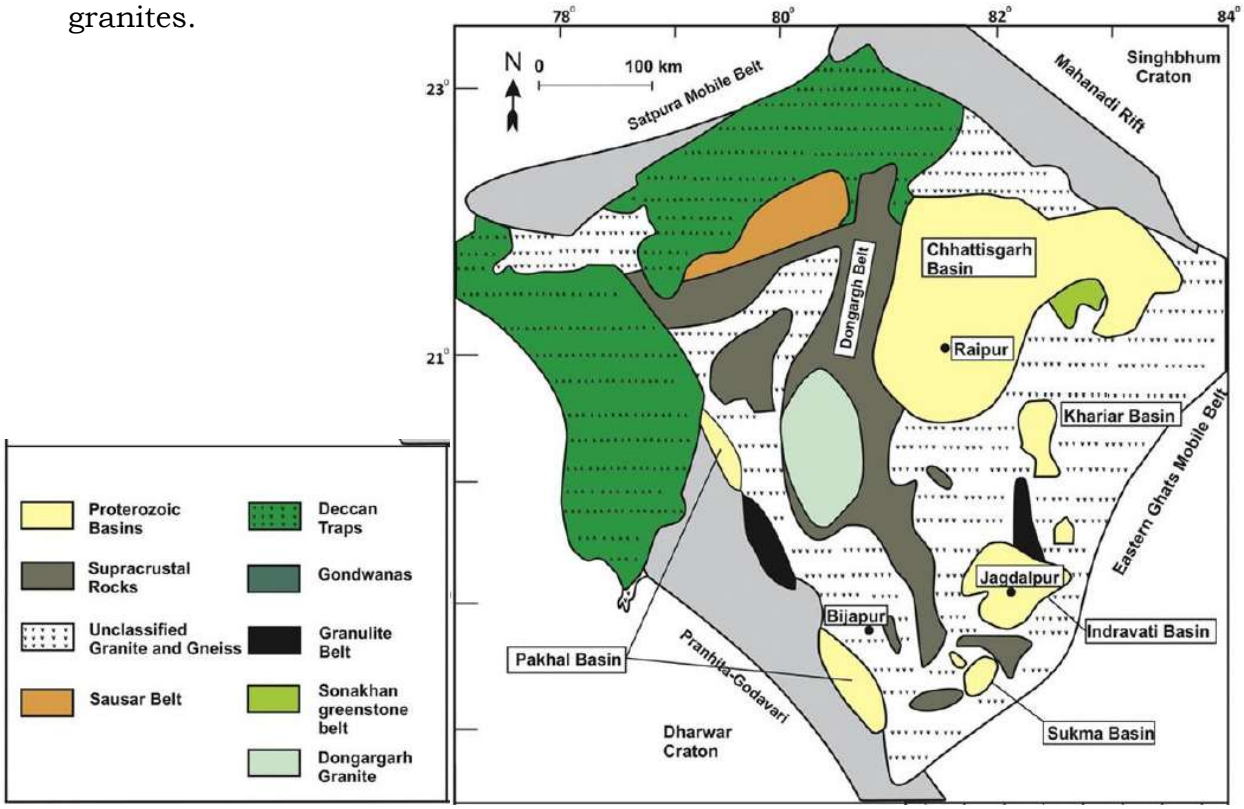
amla(Accifera indica), mango (Mangifera indica), neem (Margosa indica), dhaura (Anogerissuslatifolia), khair (Acacia katechua), shemal and tendu (Diospyros melanokylon). Peepal (Ficusreligiusa), jackfruit and other useful trees are commonly seen near human settlements. Tenduleaves are largely used in bidi industry and a good source of income for local inhabitants.

The wild animals are rare in this area because of indiscriminate deforestation. Thefauna mainly includes deer (Antelope carvicupla), jackal, monkey, wild boar (Sus christases) and bear (Melurosus versirna).

2.0 Regional Geology and Structure

The Bastar craton of the central Indian peninsular shield comprises high-grade metamorphic rocks, which include metasediments, metabasites, charnockites, and the gneiss-migmatite complex referred to as the Bengpal group. This Bengpal group is overlain by a Banded Iron Formation-greenstone sequence, known as the Bailadila group. The Bailadila iron ore series occur as a synclinorium with a north-south axis and a central eroded anticline flanked by two synclines, forming ridges with significant bands of iron ore. Most of these iron deposits are composed of hematite ore, with a few small deposits of magnetite ore.

The iron formations in this region have similarities in lithological association and tectonomorphic history with those in other belts. The Bailadila group, which contains the bulk of the iron formations, comprises quartz-sericite schist and arkosic quartzite at the base, followed by Banded Iron Formation associated with shale-siltstone, carbonaceous shales, and interbedded tuffs, intruded by greenstones and granites.

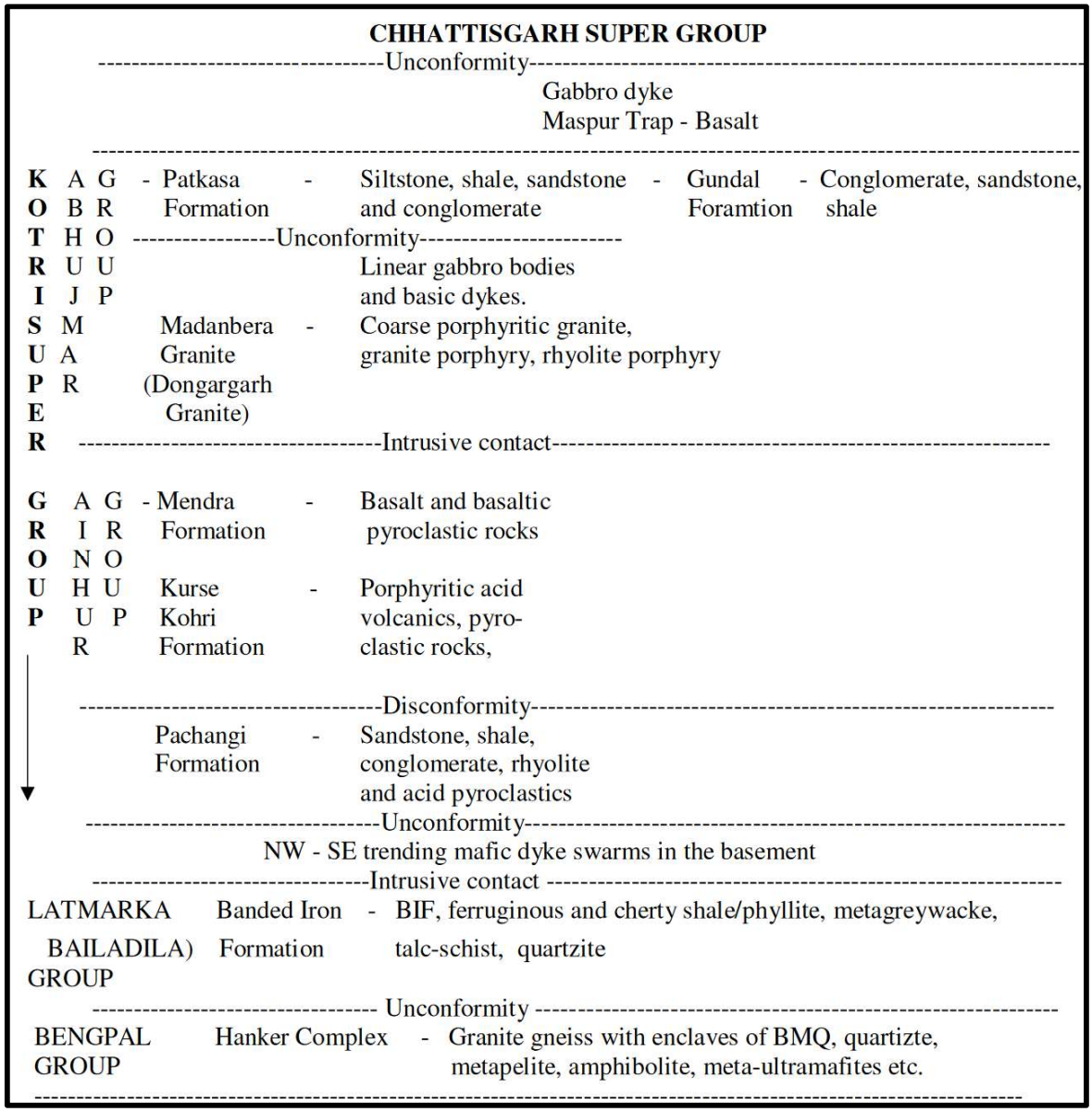


Generalized geological map of the Bastar Craton showing the location of Proposed Iron Ore Block, Pakhanjur Tehsil, Uttar Bastar Kanker District of Chhattisgarh. Inset map shows the generalized geology of the Indian subcontinent and the location of the Bastar Craton.

(Modified after Meert et al., 2010)

The Pakhanjur area in Chhattisgarh is also known for its iron ore occurrences, primarily associated with Banded Iron Formations (BIFs).

The regional stratigraphic sequence of the area (After GSI) is as follows:



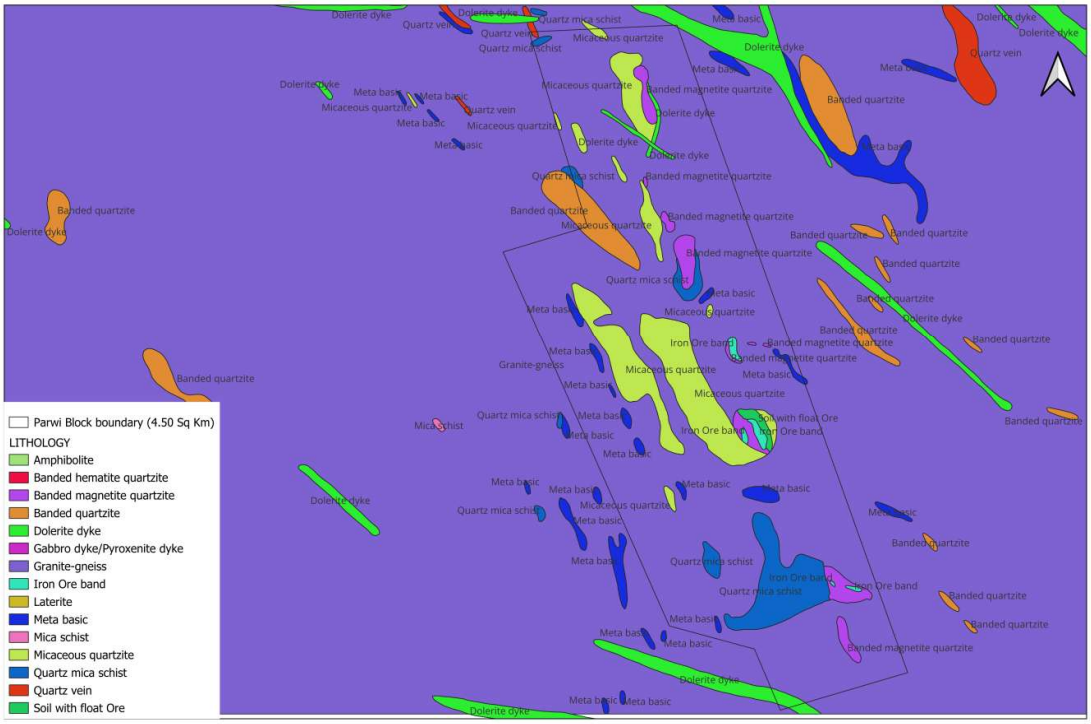
The southern half of the Bastar Craton is occupied by Archaean Gneissic complex (AGC) which is known as Hanker Complex or Bengpal Group containing meta-sedimentary and meta-igneous enclaves within gneissic complex. This is followed upward in stratigraphy by the rocks of Bailadila Group that rests

unconformably on the Bengpal Group. The Bailadila Group which forms the basement for Kotri Supergroup, also marks the eastern boundary of Kotri Super group as overturned eastern limb of Bailadila BIF forming N-S trending linear ridges.

STRUCTURE

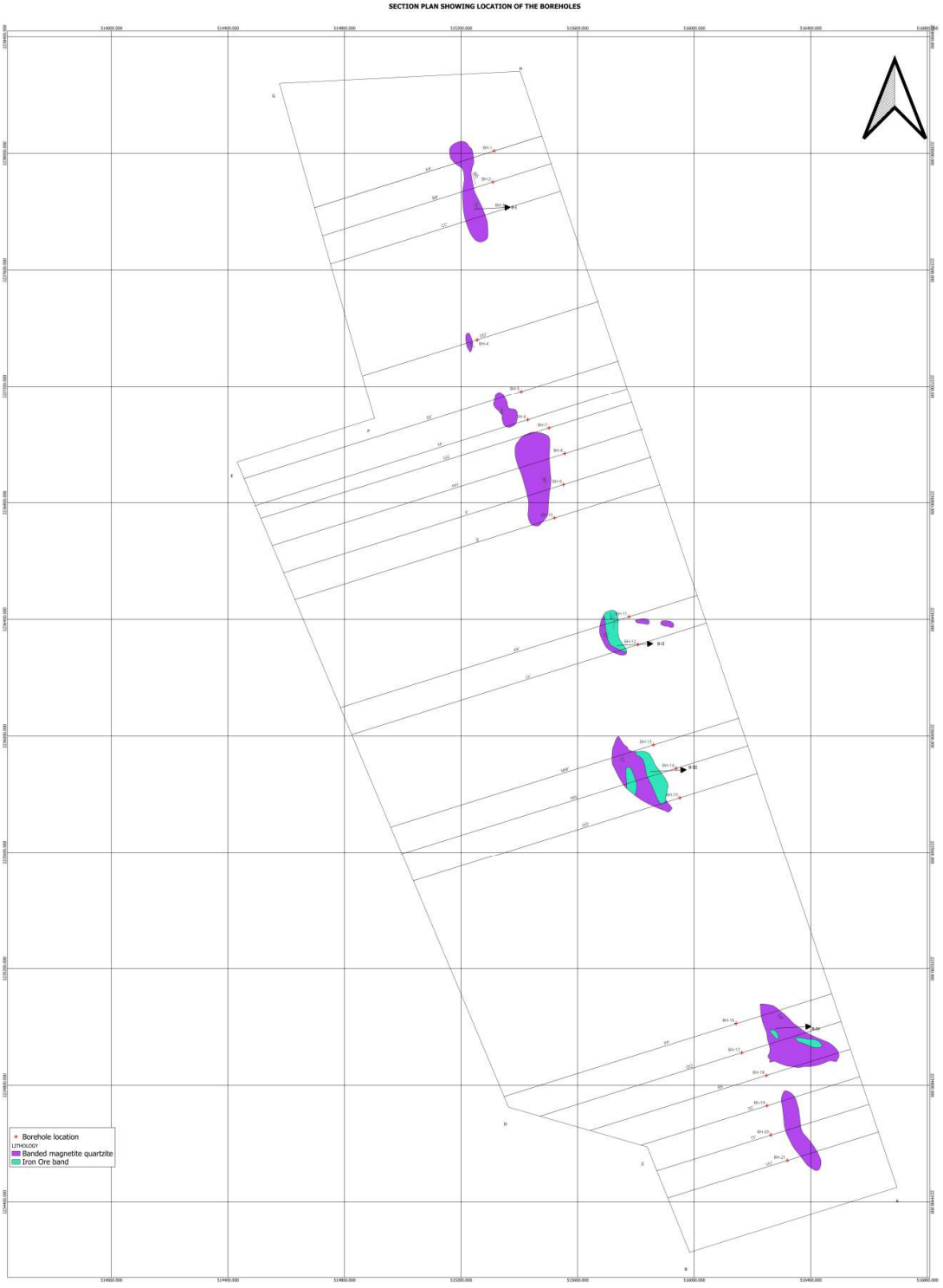
At the contact of BMQ and metapelites, the concentrated iron ore body is noticed. It is massive, lumpy and rich in magnetite. At places it is in shining specularite form. BMQ with iron ore bands are exposed as discontinuous bands and pockets trending N-S & NNW-SSE between Khora in the north and Jalhur in the south. It appears from the field observations that the area has been a highly deformed terrain.

GEOLOGICAL MAP OF PARVI BLOCK, UTTAR BASTAR KANKER DIST CHHATTISGARH
Scale 1: 12500, Source: Bhukosh



Geology of Parvi block Prospect

In the study area it is observed that mainly the Bailadila Group of rocks occur asenclaves within the granite-gneiss of Bengpal Group of Archaean age. They are characterizedby amphibolites, metapelites including micaceous quartzite, mica schist & quartz mica schist,banded quartzite, BIF mainly BMQ with iron ore bands, metabasics. Dolerite dykes, quartz &aplite are the basic and acid intrusives.



Geological cross sections

Description of lithology

Metapelites:

The metapelites are represented by quartz-mica-schist, mica schist and micaceousquartzite. They occupy the eastern part of the mapped area. The rocks of metapelite grouphave suffered intense deformation at places. The trend of foliation varies from N10°WS10°E to N60°W- S60°E with dip amount of 25 to 85° on either side. In the southeastern partof the mapped area finely banded BMQ and iron ore band are associated with quartz-micaschistand micaceous quartzite.

Amphibolite:

Amphibolites are found to occur as enclaves within the gneisses and exposed aroundRanidongri and Khora. Amphibolite occur as small, elongated bodies mostly in thenortheastern part of the mapped area. These are greenish black coloured, medium grained,hard and foliated rock. The trend of foliation varies from N25°W- S25°E to N-S with 65° to75° dip towards west.

Banded magnetite quartzite/banded hematite quartzite:

BMQ is the more prevalent than BHQ. At places, hematite has been converted intospecularite rich bands. Bedding in BMQ shows variable strike and dip. It shows N-S to NWSEstrike with dip amount of 10º to 85º on either side due to intense deformation. In thecentral eastern part, trend of BMQ varies from N-S to NNW-SSE with dip amount of 14º -85º towards east.

Banded quartzite:

Banded quartzites are exposed along the Ranidongri hill ranges. Here it is more than200m thick. Trend of banded quartzite varies from NW-SE to NNW-SSE with dip amount of45º - 79º towards west. At Bhoghra nala, it is seen that the quartzite bands are highlydeformed and folded. The thickness of these bands varies from 5m to10m.

Metabasics:

The metabasics occur in Khora, 1km southeast of Ghotha and many places in theeastern part of the mapped area. Lot of vesicles are noticed on rock surface. They occur asdiscontinuous narrow hills, which are highly altered at places.

Granite gneiss:

Most of the part within the mapped area is occupied by the granite-gneiss. They aredominant in the western part of the area. Gneisses are well exposed along Jharan Nadibetween Malarpara & Ghotha, Bhoghra nala between Ghotha & Parvi.

Gabbro/Pyroxenite/Dolerite dykes:

Gabbro and pyroxenite occur as small isolated bodies on the eastern part of the mapped area. These are coarse grained, dark coloured, very hard and massive in nature. Whereas distinct linear massive dolerite dykes trending NW-SE and WNW-ESE are noticed traversing all the former litho units. Thickness of these dykes varies from 15 to 200m.

Quartz vein/ Aplite vein:

NW-SE trending quartz veins mostly trending are observed at several places in themapped area. A few aplite veins occur as narrow linear bodies having variable trends.

3.0 Mineral Potentiality based on Geology and Ground survey

The Block area shows Banded Iron Formation of Latmarka Group.It is located towards east and north of the present area where the famous Dalli- Rajhara iron ore mine is located. The Kotri Rift Zone is located east of Latmarka Group of rocks and is defined as a N-S trending linear belt.

GSI carried out exploration work by Large scale mapping in Parvi area has brought out 4 iron ore bodies associated withBMQ, mica schist and gneisses. Sample analysis also showed encouraging values collected by KEMSPL.

As per GSI Report (G4 level) The large scale mapping (1:12,500) in Parvi area, Kanker district, Chhattisgarh has brought out a discontinuous iron ore bodies of 750m (cumulative length) with varying width from 14m to 23m having 58.83% to 66.01% Fe. The BMQ associated with massive Specularite-Magnetite band is exposed in the four hill tops as discontinuous bands trending N-S & NNW-SSE between Khora in the north and Jalhur in the south. In the south eastern part of the ridge, finely banded BMQ and iron ore band are associated with quartz-mica-schist. In the northern part of the ridge, massive iron ore and BMQ are associated with quartz-mica-schist, micaceous quartzite and gneisses. On the surface the prospect appears to be potentially good.

4.0 Scope of proposed exploration

Geological Mapping: The total block area will be mapped at a 1:4000 scale, highlighting the outcrops of iron ore in the block area along with the structural details on a plan before commencement of activities like drilling, sampling, and trenching. A geological plan featuring topographical contours, borehole points, surface features, etc., at a 1:4000 scale is to be prepared.

Topographical Survey: The topographical survey in the block will be carried out in 1:4000 scale. The survey work will be carried out for fixation of boreholes and determination of coordinates of block boundary and other topographical features contouring, Road, water bodies, Village boundaries etc. within the block during the entire exploration program. DGPS survey will be conducted to determine the coordinates and reduced levels (RL) of all block boundary coordinates and

borehole locations, along with base points. The data collected during exploration Program will be used in preparation of Topographical Map on 1:4000 scale.

Surface Sampling: To infer the surface manifestation of the mineral, 4 nos of bedrock samples are collected from the iron ore potential zone from the proposed block area. This will help us for the further course of action.

Trenching/Pitting: To uncover the mineral potential, beneath the soil cover area, a total of 200 cubic meters trenching/pitting is proposed. The depth of the trench/pits will be 2m (max) or upto the encountering of bedrock (<2m).

Drilling: Based on the outcome of the geological mapping (1:4000 scale), analytical results of surface grab samples, 6 nos. of scout/test boreholes of 150 meters each i.e. a total of 900m of core drilling is being proposed over the area to intersect the mineralized zone. The boreholes will be judiciously closed by the field geologist after encountering of non-mineralized zone. The proposed locations and depths of the boreholes are tentative, with the final decisions on their placement and closure to be made by the field geologist based on site conditions. Tentative locations and depths have been provided for each block, but these parameters may vary depending on the geological and drilling conditions encountered in the study area.

Core Logging: Geological core logging will be carried out systematically by recording of the lithological and structural characters of the formations, with its color, grain size, core recovery, banding, mineralogical composition, micro-structural/structural details, lithological variations along with visual estimate in respect of iron ore encountered in the boreholes. As per the requirement the Rock quality designation (RQD) shall also be carried out, while logging drill cores. On the basis of these parameters, grade of iron ore can be broadly assessed.

Recommendations of G4 stage Mineral exploration

The large scale mapping (1:12,500) in Parwi area, Kanker district, Chhattisgarh has brought out a discontinuous iron ore bodies of 750m (cumulative length) with varying width from 14m to 23m having 58.83% to 66.01% Fe ore. The BMQ associated with massive Specularite-Magnetite band is exposed in the four hill tops as discontinuous bands trending N-S & NNW-SSE between Khora in the north and Jalhur in the south. In the southeastern part of the ridge, finely banded BMQ and iron ore band are associated with quartz-mica-schist. In the northern part of the ridge, massive iron ore and BMQ are associated with quartz-mica-schist, micaceous quartzite and gneisses. On the surface the prospect appears to be potentially good. Detailed mapping followed by pitting/trenching & drilling have been suggested for FS 2009-10 to work out the ore geometry and calculate the reserve & grade of the identified ore bands.

6.0 Nature Quantum and Target

Details of the particular, Quantum and the targets are tabulated in Table below:-

Envisaged Quantum of proposed work in Parvi, Kanker District of Chhattisgarh. G-3 Stage

Sl.No.	Item of Work	Unit per	Proposed Quantum of work
A	**Survey work**:		
1	Boundary and borehole locations and determination of co-ordinates & Reduced level (RL) of the boreholes by DGPS.	Point	29
2	Topographical survey and surface contouring 1:4000 scale	Sq Km	4.50
B	**Detailed Geological mapping :**		
1	Deatailed Geological mapping on 1:4000 scale	Sq Km	4.50
C	**Drilling**	Cu. M	0
1	Core drilling	m	1800
2	Borehole pillaring	Nos.	29
	Trenching: 20 (8mx1mx1m)	Cu. M	160
D	**Chemical Analysis**:		
1	Primary Samples (Surface Samples (BRS & Channel + Trench) + Core Samples + Check Samples) Chemical analysis by XRF radicals (Fe%, Fe2O3%, Al2O3%, SiO2%, P%, S%, Insolubles & LOI) + other oxides and traces	Nos.	1178
E	**Physical Analysis**		
1	Preparation of standard thin section of rock	Nos.	20
2	Complete Petrographic Studies	Nos.	20
3	Preparation of polished thin section of rock.	Nos.	10
F	**Bulk Density Determination**	Nos.	10
7	**Report Preparation** (As per MEMC Amended Rule 2021/UNFC)	Nos	1

Estimated cost for Exploration Work (G-3) for Parvi Block, Kanker district, Chhattisgarh
[Block area-4.50 sq.km; Schedule timeline-15 months]

			Rates as per NMET SoC 2020-21		Estimated Cost of the		
S.No.	Item of Work	Unit	SoC-Item-Sl No.	Rates as per SoC	Proposal		Remarks
A					Qty.	Amount (Rs)	
1	**SURVEY WORK**						
	Bore Hole Fixation and determination of co-ordinates & Reduced Level of the boreholes and By DGPS	Nos	1.6.2	19,200	30	576,000	21 Boreholes and 1 base station and 8 corners of Block
	GEOLOGICALWORK						
	Charges for One Geologist for **Geoligcal Mapping** - Field	Per day	1.5.1a	11,000	120	1,320,000	Total duration of 4 months for 1 Geologist
	3 labours / party (Rs 526/day/labour) (As per rates of Central Labour Commissioner)	day	5.7	526	360	189,360	total 3 labours for 1 party for 60 days. Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt whichever is higher
	Charges for one Geologist for Core **logging & sample demarcation** - Field	Per day	1.5.1a	11,000	150	1,650,000	Drilling of 1,800m in 5 months
	Charges for one Geologist per-HQ	Per day	1.5.1a	9,000	90	810,000	
	Charges for one Geologist for **Pitting & Trenching** - Field	Per day	1.5.1a	11,000	60	660,000	
	CoreSampling-**1Samplers**	Per day	1.5.2	5,100	90	459,000	
	4 labours/ party (Rs 526/day/labour) (As per rates of Central Labour Commissioner)	Per day	5.7	526	360	189,360	Total 4 labours for 90 days. Amount will be reimburse as per the notified rates by the Central Labour Commissioner or respective State Govt.whichever is higher
					SubTotal-A	**5,853,720.00**	
B	Pitting	Cu m	2.1.2	3800	0	0	Depth 1m

	Trenching	Cu m	2.1.1	3330	160	532,800	Depth 1m
	DRILLING						
i	Drilling upto 300m (Very hard Rock)(2 rigs) HQ Size	m	2.2.1.5a	12,650	1800	22,770,000	
	PILLARING						
iii	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7a	2,000	21	42,000	
	Borehole plugging by Cement	Meters	2.2.7b	200	1800	360,000	
iv	Transportation of Drill Rig & Truck associated per Drill (2 DRILL RIGS)	Km	2.2.8	36	1200	43,200	The distrance to & Fro Nagpur to Parvi block Kanker dist.
v	Monthly Accommodation Charges for drilling Camp (upto 1Rigs)	month	2.2.9	50,000	2	100,000	
vi	Drilling Camp Setting Cost	Nos	2.2.9a	250,000	1	250,000	
vii	Drilling Camp Winding up Cost	Nos	2.2.9b	250,000	1	250,000	
	Approach Road Making (Flat Terrain)	Km	2.2.10b	32,200	5	161,000	
					SubTotal-B	**24,509,000.00**	
C	**Geophysical Survey**						
		Per Line Km	3.3a	1,435,082	0	0	
					SubTotal-C	**0.00**	
D	**LABORATORYSTUDIES**						
1.1a	Geochemical Sampling-Surface samples (Bedrock/Channel /Soil/Stream sediments a. Analysis of Major oxides and trace samples by XRF	Nos.	4.1.15a	4200	200	840,000.00	
1.1b	Check samples Major oxides (10%)	Per Sample	4.1.15b	4200	20	84,000	
1.2a	Trench Sample	Per Sample	4.1.15b	4200	200	840,000	
	Check samples of Trench	Per Sample	4.1.15b	4200	20	84,000	
1.3a	Bh core samples	Per Sample	4.1.15b	4200	630	2,646,000	

	BH core check samples (10%)	Per Sample	4.1.15b	4200	63	264,600	
	Analysis of Au & Ag by fire Assay	Per Sample	4.1.15b	4200	10	42,000	
	Petrographic studies						
	Preparation of thin sections	Per Sample	4.3.1	2353	10	23,530	
	Study of thin sections	Per Sample	4.3.4	4232	10	42,320	
	Preparation of polished sections	Per Sample	4.3.2	1549	5	7,745	
	Study of polished sections	Per Sample	4.3.3	4232	5	21,160	
	Bulk Density Analysis	Per Sample	4.8.1	1605	5	8,025	
					SubTotal-D	**4,903,380.00**	
E	**Miscelleneous Charges**						
	Preparation of Exploration Proposal (5 Hard copies with a soft copy)	**5 Hardcopies with a soft copy**	**5.1**	250000	1	250,000	EA has to submit the Hard Copies and the soft copy of the final proposal along with Maps and Plan a suggested by the TCC-NMET in its meeting while Clearing the proposal.
F	**Geological Report Preparation**		**5.2.IV**	For the projects having cost exceeding Rs.50 lakhs and less than Rs.150 lakhs- A minimum of Rs.2.5 lakhs or 5% of the value of work Whichever is more		1,852,365	Reimbursement will be made after submission of the final Geological Report in Hard Copies (5 Nos) and the soft copy to NMET.
G	**Drill Core Preservation**	Per m	5.3	1590	680	1,081,200	
H	**Peer review Charges**		**As per EC decision**	30000	1	30,000	
	Land/ Crop compensation	Per BH	5.6	20000	21	420,000	Amount will be reimbursed as per actuals or max.Rs.20000perBHwithcertificationfromlocalauthorities
					SubTotal-E	**3,633,565.00**	
I	**Total Estimated Cost without GST**					**38,899,665.00**	

J	**Provision for GST (18%ofI)**	**7,001,939.70**	GST will be reimburse as per actual and as per Notified prescribed rate
K	**Total Estimated Cost with GST**	**45,901,604.70**	
			Or Say Rs. In Lakhs 459.01
Note:			
1	If any part of the project is out sourced,the amount will be reimbursed as per the Paragraph3 of NMETSoCandItemno.6ofNMETSoC.In case of execusion of the project by NEA on its own,a Certifiate regarding non out sourcing of any component/project is required.		

S.No.	Description	Months/Days	1		2		3		4		Review	5		6	7	8	9		Review	10	11	12	13	14	15
	Phase-1 sampling																								
	Geophysical activity																								
	Sample preparation & Analysis																								
1	Camp Setting	**days**																							
2	Geophysical Survey	**days**																							
	Processing of Geophysical data and report writing	**days**																							
3	Trenching and Preparation of Geological plan by correlation of Geophysical data	**days**																							
4	Preparatory work for review by NMET	**days**																							
	DGPS Survey	**days**																							
3	Drilling(1rig)	**Months**																							
4	Sampling	**Months**																							
5	Camp winding	**days**																							
6	Laboratory Studies	**Months**																							
7	Report Writing with Review	**Months**																							