

**Proposal for Prospect Evaluation by Reconnaissance (G-4 stage) Investigation for the
sporadic occurrences of Molybdenite, South of Karimnagar (56 N/4), Siddipet and
Karimnagar district, Telangana State**

(for NMET)

Strategic Mineral

by

Telangana State Mineral Development Corporation Limited

Date: 10-12-2019

Place: Hyderabad

Proposal for Prospect Evaluation by Reconnaissance (G-4 stage) Investigation for the sporadic occurrences of Molybdenite, South of Karimnagar (56 N/4), Siddipet and Karimnagar district, Telangana State

GENERAL INFORMATION ABOUT THE BLOCK

Sl, No	Feature	Details
1	Block ID	
	Exploration agency	Telangana Mineral Development Corporation Limited (TSMDC)
	Previous Exploration agency	Geological Survey of India
	G4 (Previous stage Geological Report)	Geological Survey of India, Prospecting Stage
	Commodity	Molybdenum
	Mineral Belt/ Basin	Tonalite-Granodiorite-Monzogranite terrain
	Completion Period with entire Time schedule to complete the project	24 months
	Objective	1. To carry out Geological Mapping (LSM) on 1:12500 scale, geochemical sampling and Geophysical survey 2. To identify & delineate the Molybdenum mineralized zones in the block worthy for further exploration
	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	Exploration to be carried out by officers of TSMDC with outsourcing of Surveying, geophysical survey, drilling & chemical analysis components. Outsourcing of components for identifying agencies will be done through e-tendering.
	Name/ Number of Geoscientists	Two (2)
	Expected Field days (Geology, Geophysics, Surveyor)	Geology = 480 days (Geological mapping, geochemical sampling, core logging & sampling) Geophysics = 180 days
2.	Location	
	Latitude	N 18° 00' to N 18° 15'
	Longitude	E 79° 00' to E 79° 15'
	Villages	Husnabad, Baswapuram, Shanigaram, Koheda, Chigurumamidi, Sundaragiri
	Tehsil/ Taluk/ Mandal	Husnabad, Koheda, Bejjanki and Chigurumamidi
	District	Siddipet & Karimnagar
	State	Telangana State
	Toposheet	56 N/4

3.	Total Block Area	
	Forest area	
	Govt land area	
	Private land area	
4.	Accessibility	
	Nearest Rail Head	Karimnagar and Peddapalli Railway station
	Road	Karimnagar town is 170 km NE from Hyderabad, lies on NH 163
	Airport	Hyderabad
5.	Hydrography	
	Local Surface Drainage Pattern (Channels)	Dendritic
	Rivers/ Streams	The areas are drained by the Maner and its tributary Mohedamada, both of which are perennial rivers.
6.	Climate	
	Rainfall	average rainfall is about 80 cm and is derived mostly from the South– west Monsoon between June and September
	Temperature	Max temperature is 47°C in summer
7.	Topography / Morphology	Area forms gently undulating plain
8.	Availability of baseline geoscience data	
	Geological Maps	1:50K map available
	Geochemical Map	Not available
	Geophysical Maps	Not available
21	Justification for taking up Reconnaissance stage/ Regional	Geological Survey of India carried out prospecting for molybdenum in the area/ block during 1965-67 field season and reported number of occurrences near Basawapur, Chegurumamidi, Nustlapur, Nallagonda, Elgandal & Shenigaram in parts of Karimnagar district in toposheet 56 N/3 & 56 N/4. Porphyroblastic gneiss and porphyritic granite are the dominant rock types. Molybdenite occurs as stringers and disseminations in narrow pegmatites, aplites and at places in the porphyroblastic biotite-gneiss in the Basawapur area and in thin quartz veins in the Chegurumamidi areas. Chalcopyrite, pyrite and pyrrhotite are associated with molybdenite at places. Authors felt that though individual molybdenite bearing veins are small, it is likely that there are several such veins at depth. Results of beneficiation tests and chemical analysis of bulk samples collected by author ranges from 0.017 to 0.26%. Estimates made visually place the percentage of molybdenum in veins at about 0.05 to 0.1 in Basawapur area and 0.1 to 0.3 in Chegurumamidi area. STM studies (2014-16) indicated Sporadic occurrences of molybdenite (MoS₂) at > 19 places within sheared porphyritic monzogranite of TGM suite, equigranular

		monzogranite of MS suite and also within granodiorite of TGM suite. Geochemically, the granitoids of the study area show calcic to calc-alkaline nature and dominantly fall within metaluminous field. The granitoids tectonically falls within syn-collisional to volcanic arc granite (VAG) to within plate granite (WPG) in the bi-variant trace element diagram. The granitoids of TTG, TGM and MS suite falls within I & S type granitoids while AFG suite falls in the field of A-type granitoids indicating collisional to anorogenic tectonic setting. The Mo values of all the occurrences vary from 25 ppm to 1124 ppm. Though the STM studies in the area has not yielded encouraging results, the recommendation of author who carried out exploration for Mo during 1966-68 are positive and indicated possible extension of molybdenum mineralization at depth is positively indicated. As the calc alkaline granitoid intrusions in the area are normally tectonically related to arc environment, there is possibility of getting porphyry type molybdenum mineralization in the area. In view of available information thatmolydenite dissemination is extensively seen in the area and as no systematic explorationwas carried out, it is proposed to carry out G-4 stage exploration in the area to gather all necessary information systematicallyto delineate potential molbdenite mineralized zones within the area for further detailed exploration. The exploration will be carried out with the help of geological mapping on 1:12500 scale, geophysical surveys, petrographical & petrochemical studies&scout drilling as per the exploration norms indicated in Minerals (Contents & Evidence) Rule, 2015.
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Detailed description on the following titles to be made in the Proposal

1. Block Summary

Physiography:

Physiographically, the area is undulating, mainly controlled by lithology, while drainage pattern in the area is controlled by both structure as well as lithology. The area is mainly drained by northerly flowing Yellamma Gedda in eastern part and Pedda Vaguand Siddipet Vagu which form Mohidummeda Vagu after their confluence in the western part along with its tributaries. Numerous seasonal streams control the drainage pattern of the area. Dendritic pattern drainage is prominent in the area, which is typical of granitoids. Small check dams are constructed on many tributaries, of which, the Yellamma cheruvu near Husnabad, Pedda cheruvu near Mallampalli, Vura cheruvu near Gandhinagar and Shanigaram Cheruvu near Shanigaram are the important one, which serves the irrigation purpose during the dry season along with tube-wells.

Background Geology (Regional Geology, Geology of the Block).

The present study area forms a part of the Peninsular Gneissic Complex (PGC II) falling in the NE part of Eastern Dharwar Craton which lies west to the well-known Karimnagar Granulite belt, which forms the western shoulder of the Proterozoic Pakhal Basin. The oldest rocks comprising amphibolite, hornblende schist, biotite schist, quartzite and BMQ belonging to Yerraballi Schist Belt (YSB) occurring as mappable/unmappable xenoliths within the granitoids. The granitoids have been classified as per the IUGS scheme into Tonalite-Trondhjemite-Granodiorite (TTG) suite, Tonalite-GranodioriteMonzogranite (TGM) suite, Monzogranite-Syenogranite (MS) suite and Alkali Feldspar Granite (AFG) Suite. The TTG suite is represented by granodiorite gneiss occurring as NW-SE trending mappable linear body as well as unmappable xenoliths within the younger TGM suite of granitoids. The TGM suite which occupies major part of the mapped area is an expanded suite showing a large variation in composition from granodiorite to monzogranite. Porphyritic monzogranite is the dominant lithounit of TGM suite followed by granodiorite. The ubiquitous presence of rounded to elliptical shaped micro mafic enclaves (MME) is the chief diagnostic character of TGM suite.

The TGM suite is intruded by younger MS suite of granitoids which is represented by monzogranite and syenogranite. The youngest granitoids in the area is Alkali feldspar granite of AFG suite which is intrusive into the TGM and MS suite. These granitoids especially the TGM suite are traversed by quartz/ pegmatite veins (NW-SE & NE-SW) and epidote veins (NE-SW and ENE-WSW trending). Babingtonite was noticed in a few of these veins. The granitoids are intruded by dolerite dykes (NE-SW & ENE-WSW trending) and pyroxenite (NNE-SSW & N-S trending).

Geochemically the granitoids of the study area show calcic to calc-alkaline nature and dominantly fall within metaluminous field and show magnesium composition typically representing cordilleran granite field. The REE pattern is highly fractionated with LREE enrichment, small negative Eu anomaly and depleted to flat HREE indicating early fractionation of plagioclase. The granitoids of TTG, TGM and MS suite falls within I & S type granitoids while AFG suite falls in the field of A-type granitoids indicating collisional to anorogenic tectonic setting.

Sandy and loamy soils of brown colour at places, bearing nodules of "kankar", form a capping to the granite. Over the dykes are seen red, clayey soils. All the soils are of recent age.

The geological succession of the area may provisionally be given as below :-

Age	Lithology
Recent	Soils
Proterozoic	Younger Intrusives: Quartz veins Pyroxenite dykes Dolerite dykes Pegmatite, quartzo-feldspathic veins, Quartz veins
	Younger Granitoids (PGC II):
	Alkali feldspar granite (AFG suite)
	Monzogranite-Syenogranite (MS suite) Granite

Archaean to Proterozoic	Porphyritic monzogranite (TGM suite
	Granodiorite (TGM Suite)
	Tonalite Granodiorite Gneiss (TTG Suite)

Mineral potentiality based on geology, geophysics, ground geochemistry etc.

For Mo – Cu mineralization

Scope for proposed exploration.

Surface indications for molybdenum mineralization has been seen in the previous exploration. Sporadic occurrences of molybdenite (MoS₂) is recorded at >19 places within sheared porphyritic monzogranite of TGM suite, equigranular monzogranite of MS suite and also within granodiorite of TGM suite. Molybdenite occurs as disseminated grains and stringers within granitoids as well as in NE-SW trending quartz and pegmatite vein at places. It is very limited/sparce in nature. Grab sample in which molybdenite grains are visible yields average value ~125ppm which is below the cutoff grade (1000ppm). The Mo values of all the occurrences vary from 25 ppm to 1124 ppm. Though the STM studies carried out during 2014-16 in the area has not yielded encouraging results, the recommendation of author who carried out exploration for Mo during 1966-68 are positive and indicated possible extension of molybdenum mineralization at depth is positively indicated. Hence, scope for further systematic exploration by geological, geochemical & geophysical studies along with petrographical & petrochemical studies is there which will help in delineating most potential zones for molybdenum mineralization for further exploration.

Observation and Recommendations of previous work.

1. **Investigation carried out during 1966 to 1968:** “Molybdenite occurs as stringers and disseminations in narrow pegmatites, aplites and at places in the porphyroblastic biotite-gneiss in the Basawapur area, and in this quartz veins in the Chegurumamidi areas. Though individual molybdenite bearing veins are small, it is likely that there are several such veins at depth. Results of beneficiation tests and chemical analysis of bulk samples indicated 0.017 to 0.26%. Estimates made visually place the percentage of molybdenum in veins at about 0.05 to 0.1 in Basawapur area and 0.1 to 0.3 in Chegurumamidi area. The question of further prospecting these areas at depth by suitable methods may be taken up after obtaining the results of beneficiation tests and chemical analysis samples. In the meantime search for more occurrences of molybdenite in the adjacent areas may be taken up.”
2. **STM carried out during 2014 to 16:** The occurrence of molybdenite in the study area at various locations is very local in nature and restricted to small pegmatite veins with no strike continuity. As there are no surface indications of molybdenite mineralisation it is recommended to carryout geophysical survey to check the presence molybdenite mineralisation along NW-SE trending belt from Baddipadagada to Katkur.

2. Previous Work

Ch. Narasimha Rao Rao (1952-53) mapped the area on the scale 1:126,720 and the area between Alipur (18°14':78°56'; 56 J/16), and Kundannapalli (18°2':79°10'; 56 N/4) in the field season 1960-61 on the scale 1:120,720, with a view to locating zones of copper-lead mineralisation. In the course of this work he located for the first time several occurrences of molybdenite. The area around Tornal (18°7':78°45'; 56 J/16), was mapped by Narasimha Rao, and Mani in the field season 1961-62 and during this time the molybdenite occurrences near Tornal was located. Again Narasimha Rao and Varaprasada Rao mapped the area between Alipur and Siddipet in the field season 1963-64 on 1:63,360 scale, but no new occurrences of molybdenite were located. During the field season 1965-66, Narasimha Rao and Kittu mapped parts of toposheet No. 56 N/4, and location 10 more occurrence of molybdenite.

Simultaneously prospecting for the occurrences of molybdenite near Basawapur (18°6':79°4'; 56 N/4) and Chegurumamidi (18°14' 79°11', 56 N/4) in Karimnagar taluk, Karimnagar district, Andhra Pradesh was carried out by Ch Narsimha Rao & N.Kittu during 1966-67 by examining & opening 11 trenches. They indicated that Molybdenite occurs as stringers and disseminations in narrow pegmatites, aplites and at places in the porphyroblastic biotite-gneiss in the Basawapur area, and in this quartz veins in the Chegurumamidi areas and felt that possibility of several such veins occurring at depth. Visual estimates place the percentage of molybdenum in veins at about 0.05 to 0.1 in Basawapur area and 0.1 to 0.3 in Chegurumamidi area. Investigation for molybdenum was continued during 1967-68 by N.Kittu in southern parts of Karimnagar taluq and reported five new occurrences of molybdenite.

The IUGS classification of granitoid suites comprising TTG, TGM, MS, AFG and AG suites was done by Gopal Reddy et al. (1992 and 1998) under the specialised thematic mapping programmes

Satyapal, Nilmadhob Sinha and Kunal Kumar Singh (2014-16) carried out STM mapping in the area and concluded that the occurrence of molybdenite in the study area at various locations is very local in nature and restricted to small pegmatite veins with no strike continuity. They also recommended that as there are no surface indications of molybdenite mineralisation geophysical survey to be carried to check the presence molybdenite mineralisation along NW-SE trending belt from Baddipadagada to Katkur.

3. Block description

Block corner points / Cardinal Points	Latitude	Longitude
A	18°15'00"	79°12'30"
B	18°00'00"	79°12'30"
C	18°00'00"	79°06'00"
D	18°02'00"	79°06'00"
E	18°02'00"	79°03'00"
F	18°04'48"	79°03'00"

G	18 ⁰ 04'48''	79 ⁰ 02'30''
H	18 ⁰ 10'00''	79 ⁰ 02'30''
I	18 ⁰ 10'00''	79 ⁰ 10'00''
J	18 ⁰ 15'00''	79 ⁰ 10'00''

4. Planned Methodology

G-4 stage exploration shall be carried out with the help of satellite imagery study, geological mapping, geochemical sampling, geophysical survey & scout drilling which will be supported by laboratory studies. Detailed re interpretation of all chemical analysis of the area will be carried out keeping in mind the recent concepts of molybdenum mineralization and localization. In G-4 stage of exploration it is first essential to establish whether Mo mineralization which are recorded are indicative of porphyry type deposits are only present within pegmatite. If study establishes/ indicates that Mo mineralization is of porphyry type and has occurred in Arc type or Rift type environment than based on results of geophysical studies few scout boreholes shall be drilled to see the possibility of depth extension of Mo mineralization.

Brief details of each methodology is given below:

satellite imagery study:

- ✓ of the area to identify altered zones within granitoids

Geological:

- ✓ Geological mapping on 1:12500 scale: is extremely important in the discovery of deposits and delineating areas of higher grade molybdenum mineralization.
- ✓ Mapping of igneous rocks, their distribution patterns, and pervasiveness of veining, hydrothermal alteration, sulfide mineralization, faulting, and weathered products provide critical information.
- ✓ Identifying following surface indications, if any:
 - Nature of Mo distribution
 - Yellow ferrimolybdite — the product of molybdenite oxidation — may be present at the surface
 - Unidirectional solidification textures, sometimes forming a rock called “brain rock,” are found at the summit of the intrusive cupola.
 - hydrothermally altered breccia zones are also evident just above the contact with the porphyry intrusions. These breccias are crosscut by a fairly classic quartz-molybdenite stockwork.
 - Silicification, argillic and potassic alteration zones
- ✓ Intrusions of the proper chemical makeup and mineralogy (in other words, I-type calc-alkaline intermediate to felsic intrusions) may then be favored for further detailed exploration. Furthermore, identifying a location where potassic alteration grades outward or upward into phyllic alteration is important.

Geochemical

Geochemical surveys using following media may identify high-grade molybdenum mineralization.

- ✓ Soils near porphyry molybdenum deposits commonly contain molybdenum concentrations that are substantially higher than the median values of the area.
- ✓ Groundwater interacts with buried deposits and rock formations and will inherit certain chemical characteristics of the ore and rocks, with the metallic levels partially dependent on the residence time of the fluids in an underground environment.
- ✓ Key aqueous pathfinder elements for porphyry molybdenum deposits include molybdenum, selenium, rhenium, and arsenic, with secondary pathfinder elements including lead and zinc.
- ✓ In stream-sediment surveys Common elements that are anomalous in stream sediments include molybdenum, tungsten, fluorine, copper, lead, zinc, and silver.

Geophysical

- ✓ Most promising geophysical surveys for Mo may be magnetic, IP & radiometric surveys.
- ✓ Initially magnetic & radiometric surveys will be carried out and in delineated area of interest IP surveys shall be carried out

Pitting/Trenching

To expose molybdenum bearing pegmatite/ quartz veins intruding granitoid in soil covered areas.

Scout Drilling

In identified most promising molybdenum mineralized zones about four boreholes may be planned to see the depth extension of mineralization.

Time line: 24 months

5. Nature Quantum and Target

Nature and Quantum of work proposed in G4 Stage in the Block a.

Nature of work	Work detail	Total Quantum	1 st year
Satellite imagery studies		500 sq km -	500 sq km
Large Scale Geological Mapping on 1:12500 scale		350 Sq km	175 sq km
Geochemical Survey	a. Stream sediment	50	50
	b. Bed rock	100	100
	c. Soil	100	100
	d. Water	50	50
Geophysical Survey (Magnetic, gravity,	Magnetic	150 sq km	-
	Gravity	As necessary	-

radiometric & IP)	IP	As necessary	-
Pitting/ Trenching	Wide spaced	200 cu. M	100
Scout Drilling	Four boreholes (300m)	Four boreholes (300m)	-
Core Logging	The borehole cores would be logged systematically. Details of the litho units viz. colour, structural feature, texture, mineralization, besides the recovery would be recorded. The details of Molybdenum ore will also be recorded.	300m	-
Core Sampling		150	-
Pit /trench sampling		200	100
Laboratory studies			
Chemical analysis of geochemical samples	Analysis for Mo, Bi, W, F, Ag, Cu, Pb, Zn) a. Stream (from 1 st order) b. Bed rock c. Soil d. Water	a. 50 b. 100 c. 100 d. 50	50 100 50
Petrochemical study	Major minerals: SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , FeO, MgO, CaO, Na ₂ O, K ₂ O, H ₂ O ⁺ , H ₂ O ⁻ , TiO ₂ , P ₂ O ₃ , MnO, CO ₂ , F, S Minor Minerals: Be, Cs, F, Li, Mo, Nb, Rb, Sn, Ta, Th, U, and W.	30 samples	20
Petrographic and mineragraphic studies	Thin and polished section studies on drill cores as well as out-crop samples would be done for detailed petrographic and mineragraphic characteristics. These samples would be drawn from ore zones and host rocks.	Petrological: 20 nos (core: 5 & surface:15) Mineralogical: 10 nos (XRD)	15 10
Preparation of Geological Report	In Digital form		Interim report

6. Manpower deployment: Geologist (2)

7. Break-up of expenditure

TABLE -

COST ESTIMATE FOR EXPLORATION OF MOLYBDENUM, KARIMNAGAR DISTRICT, TELANGANA STATE					
Sr. NO	Item of Work	Unit	Rate	Quantity	Amount
A	Geological work & survey work				
1	Satellite imagery study	per scene	476193		476193
2	Geologist party working days during field work (Pitting & Trenching)	day	8590	360 days	3092400
3	Core sampling	day	3078	120 days	369360
4	Camp Establishment	day	1000	06 days	6000
SUB TOTAL A				486 days	3493203
B	Geochemical Surveys		4529	240 days	1086960
1	Stream sediment	Nos.		50	
2	Water	Nos.		100	
3	Soil	Nos.		100	
4	Bed rock	Nos.		50	
SUB TOTAL B				240 days	1086960
C	Surface Geophysical Survey				
1	Magnetic	Per station	498	500	249000
2	Radiometric	Per station	600	500	300000
3	IP	line km	64434	60	3866040
4					
SUB TOTAL C					4415040
D	Pitting/ Trenching				
1	Pits/ Trench	Cu m	1856	200	371200
2		Cu m			
SUB TOTAL D					371200
E	Drilling				
1	Borehole & meterage	m	10910	4 BH; 300m	3273000
2	Transportation including shifting of core boxes to HQ	K.M	35	600 km	21000
3	Accommodation	1 Month	Consolidated	1 Rig	733958
4	Camp setting / winding	1 Camp	one time cost	1 Camp	270829
5	Road making(cost of crop compensation to farmers)	Crop compensation	20528	Per each Borehole	82112
Sub Total					4380899

F	Laboratory studies				
1	Chemical analysis				
	a) Primary & check samples for Mo, Bi, W, F, Ag, Cu, Pb, Zn (Rate given is for 8 radicals including Mo)	Nos.	3714	200+20	817080
	b) External check samples (NABL LAB)	Nos.	3714	10	37140
2	Major minerals(SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , FeO, MgO, CaO, Na ₂ O, K ₂ O, H ₂ O+, H ₂ O-, TiO ₂ , P ₂ O ₃ , MnO, CO ₂ , F, S)	Per Sample	7160	30	214800
	Minor Minerals(Be, Cs, F, Li, Mo, Nb, Rb, Sn, Ta, Th, U, and W.)	Per Sample	7160	30	214800
3	Physical analysis				
	a) XRD studies	Per sample	6187	10	61870
	b) ICP-MS studies	Per sample	-	-	-
	c) Preparation of thin sections	Per sample	589	20	11780
	d) Petrographic studies	Per sample	1553	20	31060
	e) Preparation of polished sections	Per sample	589	20	11780
	f) Minerographic studies	Per sample	2210	10	22100
SUB TOTAL F					1422410
G	Preservation of cores				
	i) GI core boxes	Nos	-	-	-
	ii) Transportation of core boxes	Kms	-	-	-
SUB TOTAL G					NIL
TOTAL (A+B+C+D+E+F)					15169712
H	Exploration report + Preparation of proposal (includes cost of maps, toposheets, field visits, digitation work etc) 5% of (A+B+C+D+E+F)				758486
I	Preparation of proposal (includes cost of maps, toposheets, field visits, digitation work etc)	-		-	-
TOTAL (A+B+C+D+F+G+H)					15928198
I	GST @ 18%				2867076
GRAND TOTAL					18795274

8. References

Durga Rao, Ch., Gopal Reddy, T., 2009. Specialised thematic mapping of granite-granulite terrain in Karimnagar district, Andhra Pradesh. Unpub. GSI Prog.Rep. for FS 2006-07.

Kittu, N., 1967-68. Molybdenite investigation in parts of Karimnagar district. Unpub.prog.rep, GSI.

Narasimha Rao, Ch., Kittu, N., 1965-66. Investigation for molybdenite in Karimnagar and Medak districts. Unpub.pro.rep, GSI.

Narasimha Rao, Ch., Kittu, N., 1965-67. A report on prospecting of the occurrences of molybdenite near Baswapur and Chigurumamidi, Karimnagar district. Unpub.pro.rep, GSI.

Patel, S.N., Durga Rao, Ch., Gopal Reddy, T., 2008. Specialised Thematic Mapping of Granitoids and The Associated Granulites in Karimnagar District, Andhra Pradesh. Unpub. Prog.Rep. for FS 2005-06.

Satyapal, Nilmadhob Sinha and Kunal Kumar Singh (2016). Report on Specialized Thematic Mapping of Granitoids and associated Shear Zones in Parts of Karimnagar and Medak, Districts, NE Part of Eastern Dharwar Craton, Andhra Pradesh with special reference to Molybdenite and other associated mineralization. Unpub. Prog.Rep. for FS 2014-16.

List of Plates

Plate 1: Geological map on 1:50,000 with location index.

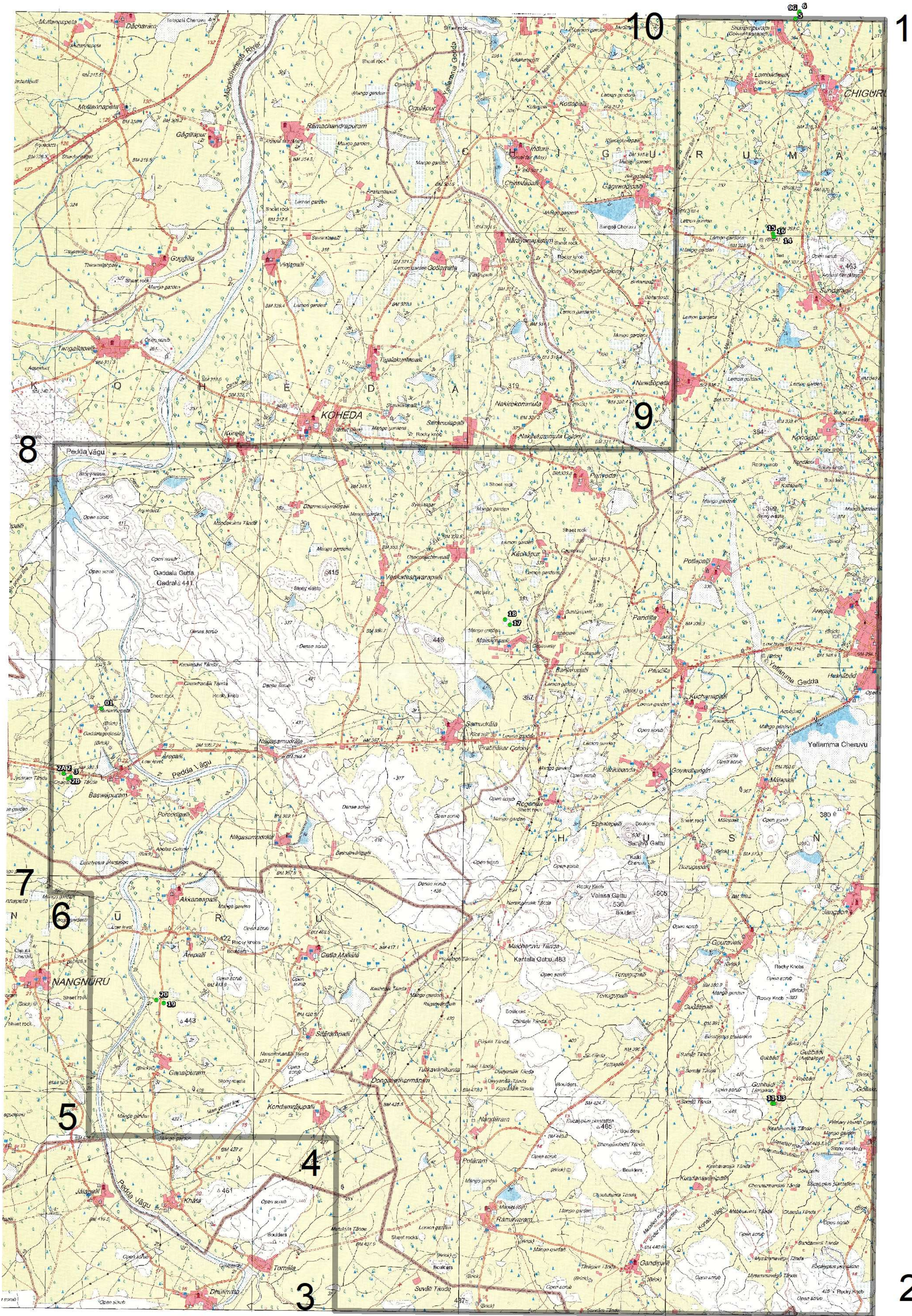
Plate 2: Proposed block boundary over Geological map.

Plate 3: Proposed block boundary over topographic map on 1:50,000.

Any other relevant plates.

Telangana State Mineral Development Corporation Ltd.

Proposal block of Molybdenum bearing area in Karimnagar & Medak Districts



N
1:38,000

S NO	NORTH	EAST
PRA-1	18°15'0.00"N	79°12'30.00"E
PRA-2	18° 0'0.00"N	79°12'30.00"E
PRA-3	18° 0'0.00"N	79° 5'60.00"E
PRA-4	18° 2'0.00"N	79° 5'60.00"E
PRA-5	18° 2'0.00"N	79° 2'60.00"E
PRA-6	18° 4'48.00"N	79° 2'60.00"E
PRA-7	18° 4'48.00"N	79° 2'30.00"E
PRA-8	18°10'0.00"N	79° 2'30.00"E
PRA-9	18°10'0.00"N	79°10'0.00"E
PRA-10	18°15'0.00"N	79°10'0.00"E

Legend

Samples

Proposal Block