

**REGIONAL EXPLORATION PROPOSAL (G-4 LEVEL) FOR BASE METALS IN
AGNIGUNDALA NORTH BLOCK (BLOCK ID: SRAP-09)
DISTRICT-GUNTUR, ANDHRA PRADESH**

SYNOPSIS

Mineral	BASE METAL															
Location	The block area is 80 km from district town Guntur. The Township Karempudi is just at the northern boundary of the block area. The block is traversed by two important roads routes through the central portion.															
Bounding coordinates	The corner points of the block are as below <table><tr><td></td><td>Longitude</td><td>Latitude</td></tr><tr><td>A)</td><td>79°38'26'' E</td><td>16° 23' 14''N</td></tr><tr><td>B)</td><td>79°50'19'' E</td><td>16° 23' 24''N</td></tr><tr><td>C)</td><td>79°50'19'' E</td><td>16° 19' 08''N</td></tr><tr><td>D)</td><td>79°38'32'' E</td><td>16° 18' 59'' N</td></tr></table> (Survey of India Toposheet No 56 P/11 & 56 P/15)		Longitude	Latitude	A)	79°38'26'' E	16° 23' 14''N	B)	79°50'19'' E	16° 23' 24''N	C)	79°50'19'' E	16° 19' 08''N	D)	79°38'32'' E	16° 18' 59'' N
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Total area	169 Sq Km															
Background information	During the field season 1959-61 the area of the Agnigundala minor basin was mapped by Md. Ziauddin & R.K. Shrama. The first pilot hole put down to cover as much as ground as possible indicated the presence of copper in the depth. Sastry B.B.K, Rao N.S., Sagar A. K. and Rao I.R.L. in 1972 carried out exploration and observed mineralization occurring in dolomite which is as intercalation in phyllites& Argillites belonging to Cumbum Sub-group. Surface manifestation of the mineralization is in the form of extensive development of gossans. They have estimated and resource of 0.63 million tonnes with 2.61%Pb+Zn. The area constitutes the marginal zone between the Dharwar Craton to the west and the Eastern Ghats mobile belt (EGMB) to the east Copper & base metal mineralization is hosted in the lithounits of Meso-Proterozoic Nalamallai Group of Cuddapah Supergroup. The rocks have been intensively folded into overturned isoclinal fold along a northeast-southwestern axis and are in some places very tightly drag folded, overturned and thrust against the Archaean gneisses .The oldest lithounits of area are Biotite schist & gneisses, Quartz-sericite-schist, ferruginous-Quartzites and amphibolites. Over these lithounits are quartzites, succeeded by slates, Argillites or chlorite phyllite which in upper horizons passes into limestone which is dolomitized. The beds in the upper most horizons become arenaceous and are represented by the upper quartzite. This quartzite & dolomites which are most favorable host rock for mineralization, although in exceptional cases mineralization is localized in calcareous phyllites too. The block area forms part of the eastern margin of Cuddapah basin. Agnigundala mineral belt of the Nallamalai sub-basin is one of the most potential polymetallic regions of Cuddapah basin. The rocks are folded, faulted and slightly metamorphosed .The mineralization is parallel to the eastern margin of the Cuddapah basin and is related to the tectonic axis and domal structures of the area. Earlier workers suggested that the mineralization in the Agnigundala mineral belt is litho controlled as they are mostly found in the dolomites, strata controlled as found in the particular horizons and also															

	structurally controlled as ore shoots are localized along favorable structures within the dolomites. The surface manifestation of the mineralization is in the form of extensive development of gossans. Galena and Sphalerite are the principal ore minerals occurring as disseminations, veinlets and pockets in the dolomite, minor amount of chalcopyrite and pyrite also occur. In the dolomite the mineralization seems to be localized in fractures, shears and breccia zones. The lithounits of the block area are Granite, Shale, Dolomite, Quartzite & massive limestone.
Objectives	i) To carry out Geological Mapping on 1:12500 scale and demarcate the rock types with structural features, shear zones and surface manifestations of mineralisation in the block area for localisation of the area of interest within 167 sq. km. area of the block. ii) To collect surface samples for analysis of Copper, Lead & Zinc and decide further course of exploration programme. iii) In case surface samples give positive results then Geophysical Survey to be carried out for delineation of mineralised zone area. Based on the results of surface samples and Geophysical Survey studies 5 Scout boreholes shall be drilled if the mineralised zones are parallel and are apart from each other in an area of 167 sq. km. This will decide the future course of exploration programme at G-3/G-2 category of UNFC
Time schedule	12 months
Cost estimate	Rs. 308.99 Lakhs
Exploration agency	MECL
Date of commencement	15th October-2016

10	Mineragraphic Studies (Surface & Bh Core Samples)		
	Proposed Quantum of Work for Base Metal (Pb -Zn& Cu) Exploration in		
	Aganigandala North Block (Block Id- SR-AP-09), Block Area-167 Sq. Km. ,		
11	Whole Rock Analysis	Nos	30 Nos
12	Specific gravity Determination	Nos	15 Nos
SI. No.	Report Preparation [As per Mineral (Evidence of Mineral Contents) Rule-2015]	Unit (m)	Proposed Quantum of Work
Note 1	* As per point b) in minutes		
	Mineral Targeting and Structural Mapping through Remote Sensing	1 Scene	167 Sq. Km
2	Geological Mapping (on 1:12500 Scale)	Sq. Km	167 sq km
	Topographical Survey (on 1: 12500 Scale in potential zone areas)	Sq. Km	As per requirement
	Bore Hole Fixation (Scout Boreholes)	Nos	5 Nos
	RL & Coordinate Determination	Nos	5 N0s
3	Geochemical Sampling		
	a) Bed rock sampling	Nos.	100 Nos
	b) Soil Sampling	Nos.	200 Nos *
	c) Stream Sediment Sampling	Nos.	100 Nos*
4	Surface Geophysical Survey		
	a) Gravity Survey	No of Sts.	
	b) Magnetic Survey	No of Sts.	1530 N0s
	c) Self Potential	No of Sts.	1530 N0s
	d) Resistivity	Line Km	30 Line Km
	e) Induced Polarisation	Line Km.	30 Line Km
5	Drilling (coring)	m	600m (5 Bhs)
6	Geological work		
	a) Geological Core Logging	m	600m (5 Bhs.)
7	Laboratory Studies		
	Surface Sampling (Primary samples)		
	i) Bed Rock samples		
	a) For five radicals (Cu, Pb, Zn, Co & Ni)	Nos	100 Nos
	ii) Soil Samples		
	For 5 radicals Cu, Pb, Zn, Co & Ni	Nos	200 Nos
	iii) Stream Sediment Samples		
	For 5 radicals Cu, Pb, Zn, Co & Ni	Nos.	100 Nos.
	iv) Check Samples (Bed Rock / Soil/ Stream sediment)		
	(For 3 radicals Cu, Pb & Zn)	N0s	40 Nos
	v) Drill Core Primary ,Primary & Check Samples		
	a) For 5 radicals Cu, Pb, Zn, Co & Ni	N0s	300 Nos
	vi) Composite Samples for 7 radicals		
8	Physical Studies		
	a) XRD – Studies on Composite samples	Nos.	10 Nos
	b) Trace Element Studies through La –MC-ICP-MS Method for full spectrum of 48 elements or Spectroscopic studies.	Nos.	15 Nos
9	Petrological Samples (Surface & Bh Core Samples)		
	a) Preparation of Thin Section	N0s	50 Nos
	b) Study of Thin Section	N0s	50Nos

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Government of India
Ministry of Mines
National Mineral Exploration Trust

F.No. 6/1/NMET-2015

New Delhi, 23rd Feb. 2017

OFFICE MEMORANDUM

Sub: - Approval of mineral exploration projects in 10 blocks

On the recommendations of the Technical Committee of NMET, the Executive Committee in its third meeting held on 25.10.2016 has approved ten (10) mineral exploration projects in five states at a cost of Rs. 2620.00 lakhs. (List enclosed)

2. The ten exploration projects will be funded by NMET as per the costing recommended by the Technical Committee and approved by the Executive Committee. MECL will undertake exploration in these ten blocks under a Tripartite Agreement among (Ministry of Mines (NMET), MECL and the respective State Governments and complete the same as per the approved work plan and time schedule.

5. The execution of work will be continuously monitored and periodically reviewed by the NMET Technical Committee/regional Sub-committees and MECL shall submit monthly progress report to NMET Secretariat.


(M. Koshy John) 23/2/17
DDG, NMET Secretariat
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To

The Chairman-cum-Managing Director, MECL, Dr. Bhabasaheb Ambedkar Bhawan,
Seminary Hills, Nagpur – 440 006

Copy to

1. Dr. P.R. Golani, DDG, GSI TI, Hyderabad and Chairman, NMET Technical Committee
2. Dr. Joyesh Bagchi, Director, MoM, N.Delhi and Member, NMET Technical Committee

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MINERAL EXPLORATION PROJECTS /BLOCKS APPROVED BY NMET EXECUTIVE COMMITTEE ON 25.10.2016 FOR EXECUTION BY MECL						
Sl. No	Name of the Block (Location, District, State)	Mineral	Area of the Block	Work Already done in the Block	Work Proposed in the Block	Estimated Cost (Rs in Lakhs)
1.	BRH Iron Ore Mines, NEB Range M/s RMMPL, ML NO. 2010, Village – Papinayakanahalli, District- Ballary, Karnataka	Iron	8.00 Sq. Km	Area Falls in the extension area of mine lease of M/s RMMPL	Geological Mapping, Topographical work G-4	13.99
2	Regional Exploration proposal for Manganese ore in Kalakhunta Block, Khushalgarh Tehsil District Banswara, Rajasthan	Manganese	5.17 Sq. Km	Reconnaissance By DMG Rajasthan	Geological Mapping Trenching, Geophysical Survey Drilling – 550m in 5 Scout Borehole G-4	274.83
3.	Regional Exploration proposal for Manganese ore in Tamesara Block, Khushalgarh Tehsil, District: Banswara, Rajasthan	Manganese	1.15 Sq. km	Reconnaissance By DMG, Rajasthan	Geological Mapping Trenching, Geophysical Survey, Drilling – 515m in 5 Scout Borehole G-4	180.18
4	Regional Exploration proposal for Limestone in Gothra-Parasrampura Block, Tehsil- Nawaigarh, District-Jhunjhunu, Rajasthan	Limestone	8.25 Sq. km	Reconnaissance By DMG, Rajasthan North Eastern Continuation of Explored Block of DMG, Rajasthan Reconnaissance	Drilling- 3600m (40 Boreholes), Geological Mapping Sampling, Analytical & Report Preparation Work G-3	424.52
5.	Regional Exploration proposal (G-4 level) for Copper & Gold in Deravad-Chargaria-Bansra Area (Block-ID-Raj-02), District-Udaipur, Rajasthan	Copper & Gold	108 Sq. Km.		Geological Mapping, Geochemical Sampling, Geophysical Survey Drilling – 600m. Sampling, Analytical & Report Preparation work, G-4	276.93
6.	Regional Exploration proposal (G-4 level) for Copper in Isarwas-Karavalli - Baroliya-Angeni-Beras Area (Block-ID-WR, Raj-13), District-Udaipur, Rajasthan.	Copper	209 Sq. Km	Reconnaissance	Geological Mapping, Geochemical Sampling, Geophysical Survey Drilling – 600m. Sampling, Analytical & Report Preparation work, G-4	353.29
7.	Regional Exploration (G-3 Level) for Limestone in Ghunchihai Block, District- Satna, Madhya Pradesh. (Upgradation of the G-4 Exploration Block sanctioned earlier.)	Limestone	6.5 Sq. Km	G-4	Drilling- 1330m (in 38 Boreholes) Sampling, Analytical & Report Preparation Work G-3	182.05