

**REGIONAL EXPLORATION PROPOSAL (G-4 LEVEL) FOR COPPER & GOLD IN
DERAVAD – CHARGARHIA – BANSRA AREA (BLOCK ID RAJ-02)
DISTRICT- UDAIPUR, RAJASTHAN**

Mineral	COPPER & GOLD										
Location	The Udaipur – Chittaurgarh Road passes touching the northern boundary; the block is 45 km from Udaipur Township and 60 km from Chittaurgarh District Township. One road from Kheroda to Nimach also passes through the middle of block. The railway line of Western Railway passes through the middle of the block. The Bhinder railway station on this rail route is on the eastern boundary										
Bounding coordinates	The corner points of the block are as below <table> <tr> <td>Latitude</td><td>Longitude</td></tr> <tr> <td>A- 24⁰ 28' 00" N</td><td>74⁰ 03' 50"E</td></tr> <tr> <td>B- 24⁰ 27' 20" N</td><td>74⁰ 07' 50"E</td></tr> <tr> <td>C- 24⁰ 36' 30" N</td><td>74⁰ 08' 50"E</td></tr> <tr> <td>D - 24⁰ 36' 30" N</td><td>74⁰ 12' 20"E</td></tr> </table> (Survey of India Toposheet No 45 L/2 & 45 L/3)	Latitude	Longitude	A- 24 ⁰ 28' 00" N	74 ⁰ 03' 50"E	B- 24 ⁰ 27' 20" N	74 ⁰ 07' 50"E	C- 24 ⁰ 36' 30" N	74 ⁰ 08' 50"E	D - 24 ⁰ 36' 30" N	74 ⁰ 12' 20"E
Latitude	Longitude										
A- 24 ⁰ 28' 00" N	74 ⁰ 03' 50"E										
B- 24 ⁰ 27' 20" N	74 ⁰ 07' 50"E										
C- 24 ⁰ 36' 30" N	74 ⁰ 08' 50"E										
D - 24 ⁰ 36' 30" N	74 ⁰ 12' 20"E										
Total area	108 Sq Km										
Background information	Gupta et. al. 1981, identified the rock types of the block area of Mangalwar Complex of Bhilwara Supergroup. At Bansra – Gariwar block out of 4 boreholes drilled, one borehole (RBS-2) intersected three lodes of copper, whereas other three boreholes have intersected single lode individually. The copper mineralisation is the low grade (Ameta, 1992) in Bansra Gariwar block. Copper mineralisation occurs within the granites, silicified gneisses and chlorite schist. In Deravad area (Sharma et. al. 2005) anomalous values of gold (50 to 120 ppm) have recorded from the zone and from the sheared and carbonised meta-basic & ultra-mafic rocks of the area. Overall, the rock types & mineralisation as indicated by the earlier workers, the block may turn out in to a potential prospect. Regionally the area comprises of Mangalwar Complex Group of rocks and Rajpura –Dariba Group of rocks of the Bhilwara Supergroup where in Mangalwar Complex is of Archaean & Rajpura – Dariba Group is of Lower Proterozoic age. The rock types are quartzite, dolomitic marble, graphitic mica schist, dolerite sill / dyke and amphibolite, granite, granodiorite, Tonalitic gneisses, migmatite, felspathic schist, mica schist, dolomitic marble, carbonate veins & rhyolite. The area comprises of granite gneiss, granitoids, metabasics, ultramafics & pegmatites of Mangalwar Complex of Bhilwara Supergroup in general. At the north eastern portion of the block area quartzite, dolomitic marble & graphitic mica schist of Rajpura- Dariba group of rocks are exposed. The foliation shows variation from N-S to NNE – SSW and dip easterly at 60⁰ to 80⁰, shear planes of the same attitude are noticed within the block which is mineralised with chalcopyrite & pyrite. The area has										

	several shear zones which are represented by zones of silicification. The mineralisation is represented by old workings, mine and slag dumps, ferruginous, malachite and azurite staining.
Objectives	i) To carry out geological mapping on 1:12,500 scale and demarcate the rock types of copper and gold bearing formation with the structural features to identify the surface manifestation and lateral disposition of the ore body. ii) To collect surface samples to analyse them for copper, gold 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 which in turn will decide the future course of exploration programme at G-3/G-2 category of UNFC. iv) To estimate reconnaissance Copper resources in the block area with accessory elements as per UNFC norms and Minerals (Evidence of Mineral Contents) Rule- 2015 at G-4 level.
Time schedule	12 months
Cost estimate	Rs 276.93 Lakhs
Exploration agency	MECL
Date of commencement	15th October-2016

11	Whole Rock Analysis	Nos	10 Nos
12	2. Base Metal (Cu, Au) in Deravad-Chargarhia-Bansra Block (Block ID-WR-02), Block Area 108 Sq. Km., District Udaipur, Rajasthan	Nos	10 Nos
13	Report Prepared on Basis of Mineral Exploration, District Udaipur, Rajasthan	Nos	10 Nos
Sl. No.	Item of work	Unit (m)	Proposed Quantum of Work
1	Mineral Targeting and Structural Mapping through Remote Sensing	1 Scene	108 Sq. Km
2	Geological Mapping (on 1:12500 Scale)	Sq. Km	108 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.	75 Nos
	b) Soil Sampling	Nos.	150 Nos *
	c) Stream Sediment Sampling	Nos.	75 Nos*
4	Surface Geophysical Survey		
	a) Gravity Survey	No of Sts.	
	b) Magnetic Survey	No of Sts.	1020 N0s
	c) Self Potential	No of Sts.	1020 N0s
	d) Resistivity	Line Km	20 Line Km
	e) Induced Polarisation	Line Km.	20 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	75 Nos
	ii) Soil Samples		
	For 5 radicals Cu, Pb, Zn, Co & Ni	Nos	150 Nos
	iii) Stream Sediment Samples		
	For 5 radicals Cu, Pb, Zn, Co & Ni	Nos.	75 Nos.
	iv) Check Samples (Bed Rock / Soil/ Stream sediment)		
	(For 3 radicals Cu, Pb & Zn)	N0s	30 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		
	a) For (Cu, Pb, Zn Co, Ni, Se & Mo)	N0s	20 N0s
	b) For Au & Ag by Fire Assay	Nos	20 Nos
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	40 Nos
	b) Study of Thin Section	N0s	40Nos
10	Mineragraphic Studies (Surface & Bh Core Samples)		
	a) Preparation of Polished Section	N0s	30 Nos
	b) Study of Polished Section	N0s	30 Nos

32^c

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
011-29053347
koshy.john@gov.in

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

31

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