

Ministry of Mines
National Mineral Exploration & Development Trust
Minutes of 36th meeting of Technical-cum-Cost Committee - II (TCC - II)
held on 8th and 9th September, 2026

The 36th meeting of Technical-cum-Cost Committee-II (TCC-II) of National Mineral Exploration and Development Trust (NMEDT) was convened through video conferencing on 8th and 9th September, 2026. The meeting was chaired by Dr. S. Ravi, DDG & HOD, GSITI, and Chairman, TCC-II, NMEDT.

Members of TCC-II, NMEDT and representatives from M/s Unised Research Consultants Private Limited, Mineral Exploration and Consultancy Limited (MECL), M/s Vibrant Techno Lab Private Limited, DGM Chhattisgarh, M/s Siddharth Geo Consultant, M/s BMRC Geomining Solutions Pvt Ltd, M/s MMPL Private Limited, M/s. Natural Resources Division Tata Steel Limited, M/s Bhushilp Mines and Minerals Pvt Ltd, M/s Gemcokati Exploration Pvt. Ltd, M/s Ocean Drilling and Exploration Private Limited etc. have attended the meeting through video conferencing mode. The list of participants is at **Annexure-1**.

Dr. S. Ravi, DDG & HOD, GSITI, and Chairman, TCC-II, NMEDT warmly welcomed all TCC-II members and every participant representing from State DGMs/DMGs, Notified Exploration Agencies (NEAs) and Notified Private Exploration Agencies (NPEAs).

36.1 Technical Evaluation of New Project Proposals

Agenda 36.1.1 Reconnaissance survey (G4) for Aluminous Laterite, Bauxite and Associated Critical Minerals in Guhagar area, Ratnagiri District, Maharashtra

ID: ME/IND/G4/MH/P/26-27/024

Area: 44 sq. km

[Implementing Agency: M/s Unised Research Consultants Private Limited]

- a) The proposed area of 44 sq. km for reconnaissance survey falls in Survey of India Toposheets no. 47G/02, 47G/03, 47G/06, in parts Ratnagiri District, Maharashtra.
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	GSI carried out regional assessment of Vanadium and associated critical / trace element in lateritic profiles developed over the Deccan Trap basalts in parts of Ratnagiri and Raigad districts, Maharashtra. (FS: 2024-25 & 2025-26). No ongoing projects in the proposed area.
2	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available

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5	NMEDT	No NMEDT funded blocks present in and around the proposed area as per NGDR Portal.
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- c) This project was approved in-principle in 34th TCC-II.
- d) The agency informed the committee that they were not prepared to discuss the tentative borehole plan in the current meeting.
- e) The committee therefore deferred the project to upcoming TCC-II meeting.

Recommendations of TCC-II

The committee deferred the project for next TCC-II meeting as the agency was not prepared for borehole plan and discussion of costing of the project.

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Agenda 36.1.2 Preliminary exploration (G3) of Barium, Vanadium and associated Mineralization in Baswari Block, Tehsil-Pati, District - Champawat, Uttarakhand

ID: ME/IND/G3/UK/P/26-27/018

Area: 1.54 sq. km

[Implementing Agency: M/s Vibrant Techno Lab Private Limited]

- a) The proposed block of 1.54 sq. km for preliminary exploration (G3), falls in survey of India Toposheet no. 530/15, in parts of District - Champawat, Uttarakhand
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	During Annual programme of GSI, FS 2022-23, a G-4 stage investigation (Singh and Manna, 2023) over a 50 sq. km area for Vanadium in Chaura, Sirmoli and Lohaghat areas Champawat district, Uttarakhand was carried out in parts of Toposheet no - 530/15 and 62C/03. During Annual programme of GSI, FS 2024-25, a G-4 stage investigation (Saha and Ranjan, 2025) over a 50 sq. km area for Vanadium in Mulakot areas Champawat district, Uttarakhand was carried out in parts of Toposheet no - 530/15. Two G-3 stage investigations for current FS 2026-27 are currently being undertaken by GSI in the northeastern and western parts of the block; however, there is no immediate spatial overlap with the proposed block. Two G-3 stage items are currently being taken up under the Field Season Programme (FSP)_2026-27. Therefore, recommendations for further exploration can be made only after completion and evaluation of these ongoing G-3 investigations. No overlap with the proposed block.
2	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available
5	NMEDT	No NMEDT funded blocks present in the proposed block.

- c) The agency informed that during the Field Season 2024-25, reconnaissance survey has been carried out by GSI. The survey involved the systematic collection and analysis of various sample types, including 50 bedrock samples (BRS) and 50 channel samples, 30 samples for fixed carbon and Sulphur sample. Chemical analysis of these samples revealed anomalously high values of Ba, V, and fixed carbon. GSI has collected 15 Channel sample & 19 Bed Rock sample in the proposed block area during field work (Saha & Ranjan, 2025) and high values of

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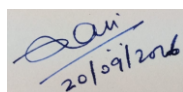
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vanadium (10-2426 ppm), Barium (214-7821 ppm), Molybdenum (0.65 146.96ppm), Mercury (1-1144 ppb) and Fixed carbon (0.53 - 3.13 %) were found in Bed rock sample & vanadium (114-2339 ppm), Barium (567-7588 ppm), Molybdenum (0.92-145.73ppm) & Mercury (1-739 ppb) were found in Channel samples in the proposed block area.

- d) In the 32nd TCC-II the committee accorded in-principle approval to the proposal with modified area of 2.12 sq. km based on the encouraging values from GSI report. The agency informed the committee that it had modified the area to 1.54 sq. km.
- e) The committee based on the above observations recommended for the 10 Boreholes with 700 m drilling quantum with grid interval of 400x200 m with borehole spacing of 100 m from the boundary. The plan of boreholes is shown in Annexure 2C. However, the drilling quantum, along with the corresponding sampling and chemical analysis, may be revised during the first review based on the results of geological mapping and sampling.

Recommendations of TCC-II

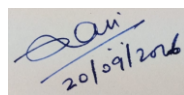
The Committee recommended the proposal for approval of PSC for “Preliminary exploration (G3) of Barium, Vanadium and associated Mineralization in Baswari Block, Tehsil-Pati, District - Champawat, Uttarakhand” with an estimated cost of ₹ 344.51/- lakhs (including GST) within time schedule of 12 months for carrying out the proposed work and submission of geological report as per Annexure 2A & 2B. The project will be reviewed after 4 months and 8 months



Annexure 2A

**Estimated Cost for Preliminary Exploration (G3) for Barium, Vanadium and associated Mineralization in Baswari block, Tehsil-Pati, District:
Champawat, Uttarakhand**
Total Drilling: 700 m, No. of BH: 10. Area: 1.54 sq. km, Schedule Timeline: 12 months, Review After: 4 and 8 months.

S. No.	Job Description	Unit *	Rates as per NMEDT SoC 2025-26		Estimated Cost of the Proposal As per Previous SoC	Total Amount (Rs) as per SoC 2025-26 (a*b = C)	Hilly terrain of Himalaya region (Total amount X 2)	Remarks
			SoC Item No.*	Rates as per SoC* (a)	Qty. (b)		(c*2)	
A	Geological Mapping (DM) (1:2000) with contouring							
1	Geological Mapping(1:2000 scale)	Sq.km	1.1	28,600	1.54	44,044	44,044	Hilly terrain rate
	Sub Total A					44,044	44,044	
B	Pitting/Trenching							-
1	Trench	per cu m	2.1.1	4,125	50	2,06,250	4,12,500	
	Sub Total B					2,06,250	4,12,500	
C	Other Charges							
1	Geologist: In field	Mandays	1.2.1a	14,500	120	17,40,000	34,80,000	
2	Geologist: at HQ	Mandays	1.2.1a	10,500	60	6,30,000	6,30,000	-
3	Charges for one sampler per day (for sample preparation)	Mandays	1.2.1b	7,850	39	3,06,150	6,12,300	
4	Labour charges (Sampler)	Mandays	5.8	556	156	86,736	1,73,472	
4	Labour charges (Includes Geologist	Mandays	5.8	556	240	1,33,440	2,66,880	
4	Labour charges (Includes Surveyor)	Mandays	5.8	556	180	1,00,080	2,00,160	

7	Surveyor (for mapping & contouring)	Mandays	1.3.1	10,500	45	4,72,500	9,45,000	
9	Demarcation of lease boundary, Fixation of borehole and determination of co-ordinates & Reduced Level (RL) of the boreholes by DGPS (including charges for labours deployed for the work)	Per point of Observation	1.3.2	24,000	14	3,36,000	6,72,000	10 Bh + 4 Boundary Pillar
	Sub Total C					38,04,906	69,79,812	
D	Geophysical Survey Work							
1	Self Potential (8-20 Line Km)	Line km	3.3a	1,55,350	10	15,53,500	15,53,500	For hilly terrain
	Sub Total-D					15,53,500	15,53,500	
E	DRILLING (Outsourced)							
1	Drilling up to 300m (Hard Rock)	Meter	2.2.1.1d	10,000	700	70,00,000	1,40,00,000	2nd level BH will be done after review of 1st Level BHs results. Borehole depth to be justified by presence of mineralization. Unnecessary drilling to be avoided.
2	Drill core Preservation	Per meter	5.3	1,590	300	4,77,000	4,77,000	

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2	Land / Crop Compensation (in case the BH falls in agricultural Land)	Per BH	5.6	30,000	10	3,00,000	3,00,000	As per actuals with 30000 being the maximum ceiling
3	Borehole deviation survey by multi shot survey tool (interval 6 m ; azimuth and inclination to be recorded)	Per shot	2.2.5	330	117	38,610	77,220	Outsourced
3	Construction of concrete Pillar (12"x12"x30")	Per BH	2.2.7	2,000	10	20,000	40,000	
4	Borehole plugging by cement	Per BH	2.2.8	10,000	10	1,00,000	2,00,000	
	Sub Total E					79,35,610	1,50,94,220	
F	LABORATORY STUDIES							
1	Graphite Proximate Analysis	Per sample	4.1.18	3,614	95	3,43,330	3,43,330	(20 BRS/Channel + 25Trench +50 Core)
2	Graphite Proximate Analysis (10%) Check samples)	Per sample	4.1.18	3,614	10	36,140	36,140	
3	Analysis of BRS/Channel, Trench sample for quantitative analysis of 14 REE elements+9 Trace element (V, Ba, Ga, Mo, U, Cu, Pb, Zn, Y) by ICPMS	Per sample	4.1.15	7,400	195	14,43,000	14,43,000	(20 BRS+ 25Trench +150 Core)
4	BRS/Channel, Trench External	Per sample	4.1.15	7,400	20	1,48,000	1,48,000	

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	(10%) Check samples)							
5	Major oxides (WD XRF) -(oxides + traces- 24 elements)	Per sample	4.1.17a	4,200	20	84,000	84,000	
6	Major oxides (WD XRF) -(oxides + traces- 24 elements) (10%) Check samples)	Per sample	4.1.17a	4200	2	8,400	8,400	
	Physical & Petrological Studies	Nos						
1	Preparation & study of thin polished section	Nos	4.3.2	800	10	8,000	8,000	
2	Complete petrographic /ore microscopic study/miner graphic report of rock sample (along with 5 nos. digital photo micrographs)	Nos	4.3.4	2,800	10	28,000	28,000	
3	SEM	hrs	4.4.2	3,500	5	17,500	17,500	
4	Specific Gravity	Nos	4.8.1	2,500	0	0	0	
	Raman Spectroscopy	Nos	4.5.1	2,700	5	13,500	13,500	
5	Bulk Density	Nos	4.8.3	2,500	5	12,500	12,500	
	Sub Total F					21,42,370	21,42,370	
	Total A to F					1,56,86,680	2,62,26,446	
G	Total outsourced component (if any)						1,40,77,220	

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H	In case of outsourcing of work, the Technical Supervision cost shall be 10% of the sum of all the outsourced work components with a maximum ceiling of ₹ 20 lakh		6		1		14,07,722	
I	Geological Report Preparation	Geological Report Preparation	5.2(iii)		1	7,50,000	7,50,000	Reimbursement will be made after submission of the final Geological Report to NMEDT.
J	Peer review Charges		As per EC decision		1	30,000	30,000	
K	Tendering Process Cost						2,81,544	
L	Preparation of Exploration Proposal (5 Hard copies with a soft copy)	Soft copy	5.1		1		5,00,000	
N	Total Estimated Cost without GST						2,91,95,712	
O	Provision for GST (18% of J)						52,55,228	GST will be reimbursed as per actual and as per notified prescribed rate
P	Total Estimated Cost with GST						3,44,50,941	
Q	Rs. In lacs						344.51	
Note								
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.							
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.							
3	If any part of the project is outsourced, the amount will be reimbursed as per Item no. 6 of NMEDT SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.							

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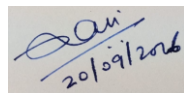
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.
5	Any item of work not mentioned above shall be added as per SoC.
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.

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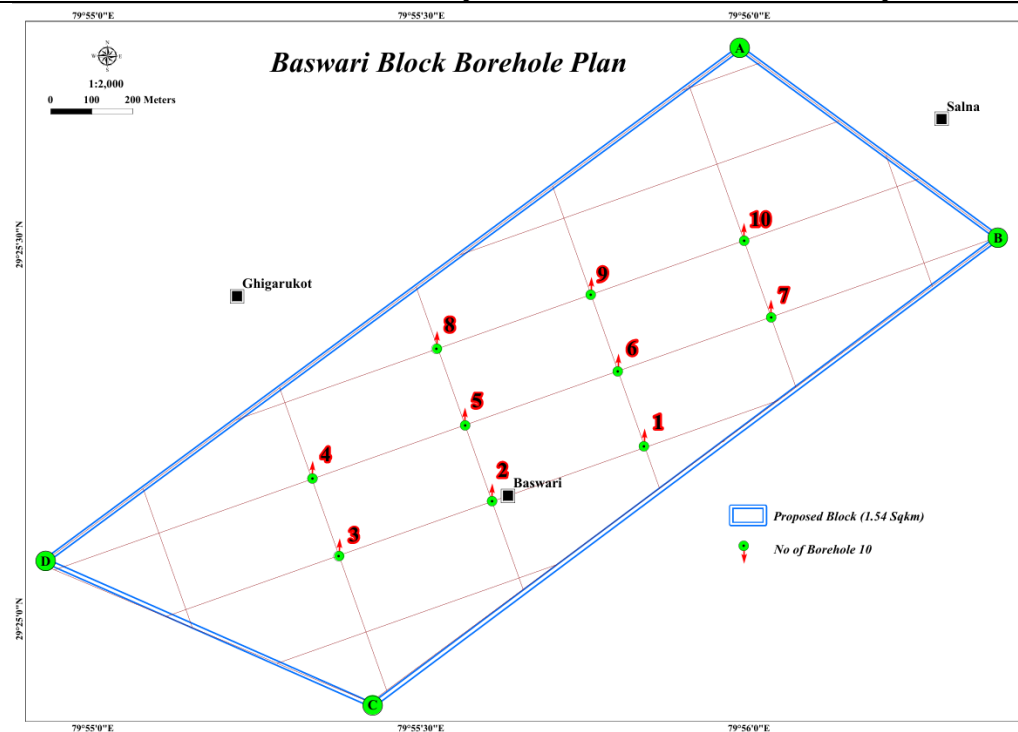
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**Timeline for Preliminary exploration for the Barium, Vanadium and associated Mineralization in Baswari block,
Tehsil-Pati, District - Champawat, Uttarakhand**

S.no			Month	Month	Month	Month		Month	Month	Month	Month	Month	Month	Month	Month	Month
	Activity	Months / Days	1	2	3	4		5	6	7	8		9	10	11	12
1	Camp setting	months														
2	Geological mapping and Sampling	days														
3	Topographic Survey	days														
4	Geophysical Survey	days														
5	Surface Drilling	m														
6	Core logging and sampling															
7	Laboratory studies	Nos.														
8	Report Writing with Peer Review	months														
9	Camp Winding	months														

**Proposed borehole plan Preliminary exploration for the Barium, Vanadium and associated mineralization in Baswari block,
Tehsil-Pati, District - Champawat, Uttarakhand, Area-1.54 sq.km**



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Agenda 36.1.3 Reconnaissance survey (G4) for Titanium-bearing Magnetite Ilmenite (Fe-Ti ± V) mineralization and associated REE minerals with differentiated mafic intrusive rocks in Lohari area, Korea, Manendragarh-Chirmiri-Bharatpur districts, Chhattisgarh

ID: ME/DD/G4/CT/26-27/167

Area: 103 sq. km

[Implementing Agency: M/s Siddharth Geo Consultant]

- a) The proposed area of 103 sq. km for reconnaissance survey (G4), falls in Survey of India Toposheet no. 64 I/07 and 64 I/08 in Korea, Manendragarh-Chirmiri-Bharatpur districts, Chhattisgarh
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	No overlap with GSI previous exploration work. GSI FS 2021-22 worked for Reconnaissance survey for coal by scout drilling in Aklasarai Area, Sonhat Coalfield, Surguja District, Chhattisgarh. (Stage: G-4) and Reconnaissance survey for manganese and Barium in Devra- Jatashankar area, Korea districts, Chhattisgarh. (Stage: G-4)
2	MECL	No overlapping with the ongoing or completed blocks of MECL.
3	AMD	AMD has carried out reconnaissance exploration (G4 stage) for uranium in and around the proposed block. No significant surface radioactive zone was delineated. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
4	DGM	Representative from DGM informed the committee that the southern part of the block overlaps with the existing mining lease of coal and advised to remove that part with the proposed block.
5	NMEDT	No NMEDT funded block present in the proposed area as per NGDR Portal. Proposed area (App. 62%) falls in Recorded Forest area. Proposed area overlaps with Exploration blocks of CMPDI_G3_FS_2023 for coal as per NGDR.

- c) The agency informed the committee that the block lies within the Central Indian Tectonic Zone (CITZ) and comprises the Chhotanagpur Gneissic Complex, Gondwana sediments and Deccan mafic intrusive. A large mafic intrusive body occurs as an extensive sill within the Gondwana sequence, with an observed width of about 2.5 km. The geological evolution involving fractional crystallization and magmatic differentiation provides a suitable setting for

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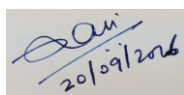
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concentration of Fe-Ti oxide minerals. GSI's NGCM data show coincident enrichment of Fe_2O_3 , TiO_2 and V.

- d) In Toposheet 64I/07, Fe_2O_3 reaches 14.14%, TiO_2 reaches 2.43%, and V reaches 271 ppm, all above their respective threshold values. The spatial coincidence of these anomalies indicates a possible common source and is considered favourable for Fe-Ti oxide/titanomagnetite mineralization.
- e) The agency further informed the committee that they have collected 6 samples from the field. Samples from the mafic intrusive body show TiO_2 up to 3.35 wt.%, Fe_2O_3 up to 18.41 wt.%, V_2O_5 up to 0.06 wt.% and P_2O_5 up to 0.42 wt.%. These values, together with the geological setting, suggest the possible presence of titanomagnetite-ilmenite assemblages formed through magmatic differentiation.
- f) The committee based on the DGM comments asked the agency to remove the overlap part of ML of SECL. The agency submitted the modified block of area 95.2 sq. km.
- g) The committee based on the above observations recommended for the 5 scout boreholes with 500 m drilling. The plan of boreholes is shown in Annexure 3C. However, the drilling quantum, along with the corresponding sampling and chemical analysis, may be revised during the first review based on the results of geological mapping and sampling. The committee opined that based on the above observations REE exploration cannot be recommended and suggest to remove the REE from the title of the project.

Recommendations of TCC-II

The Committee recommended the proposal for approval of PSC for "Reconnaissance Survey (G4) for Titanium-bearing Magnetite-Ilmenite mineralization in Lohari area, Korea, Manendragarh-Chirmiri-Bharatpur districts, Chhattisgarh", with an estimated cost of ₹ 138.34/- lakhs (including GST) within time schedule of 10 months for carrying out the proposed work and submission of geological report as per Annexure 3A & 3B. The project will be reviewed after 4 months and 8 months.

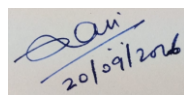


Annexure 3A

Estimated cost for Reconnaissance Survey (G4) for Titanium-bearing Magnetite-Ilmenite mineralization in Lohari area, Korea, Manendragarh-Chirmiri-Bharatpur districts, Chhattisgarh

Area: 95.2 sq. km. Drilling: 500 m, No. of BH: 5 @ 100 m, Timeline: 10 months. Review after 4 & 8 months

S. No.	Item of Work *	Unit *	Rates as per NMEDT SoC 2025-26		Estimated Cost of the Proposal		Remarks
			SoC Item No.*	Rates as per SoC* (a)	Qty. (b)	Total Amount (Rs) (a*b)	
1	Geological mapping and sampling						
i	Geological mapping (1:12,500)	Per sq. km	1.1	18300	95.2	1742160	
ii	Charges for one sampler per day	per day	1.2.1b	7850	10	78500	
iii	Labour charges	per day	5.8	556	40	22240	
	SUB- TOTAL 1					1842900	
2							
i	Trenching	per cu. m.	2.1.1	4125	100	412500	
ii	Charges for Geologist per day in field (without labour)	per day	1.2.1a	14500	90	1305000	
iii	Labour charges	per day	5.8	556	180	100080	
iv	Charges for one Geologist per day at HQ	per day	1.2.1a	10500	45	472500	
	SUB- TOTAL 2					2290080	
3	Drilling Activity						
i	Drilling	per m	2.2.1.1d	10000	500	5000000	Drilling to be decided after mapping and analysis of surface samples. Borehole depth to be justified by presence of

							mineralization. Unnecessary drilling to be avoided.
ii	Land Compensation	Per Borehole	5.6	30000	5	150000	As per actuals with 30000 being max ceiling for each BH
iii	Concrete Pillar Construction	Per Borehole	2.2.7	2000	5	10000	
iv	Borehole Plugging	Lumpsum per borehole	2.2.8	10000	5	50000	
v	Miscellaneous Charges (Transportation of Drilling Rig, Accommodation for Drill Camp, Camp setting and winding, construction of Approach road)	Lumpsum	2.2.9	For Drilling cost upto 50 Lakhs: 25% of the Drilling Cost		1250000	
vi	Drill Core Preservation	m	5.3	1590	100	159000	1 BH
	SUB- TOTAL 3					6619000	
4	Laboratory study						
i	For PGE (ICP-MS Ni-S Fire assay technique)	per sample	4.1.6	13600	10	136000	
ii	Check samples for PGE (ICP-MS Ni-S Fire assay technique)	per sample	4.1.6	13600	1	13600	
iii	Major oxides (WD XRF)- (oxides+ traces -24 elements)	per sample	4.1.17a	4200	25	105000	
iv	Check sample for Major oxides (WD XRF)- (oxides+ traces -24 elements)	per sample	4.1.17a	4200	3	12600	
v	Rapid geochemical analysis by AAS method First five radicals	per sample	4.1.8a	2506	40	100240	

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vi	Rapid geochemical analysis by AAS method First five radicals (10% check samples)	per sample	4.1.8a	2506	4	10024	
	SUB- TOTAL 4					377464	
5	Petrological studies						
i	Preparation of polished thin section of rock	per sample	4.3.2	800	25	20000	
ii	Complete petrographic /ore microscopic study/mineragraphic report of rock sample (along with 5 nos. digital photo micrographs)	per sample	4.3.4	2800	25	70000	
	SUB- TOTAL 5					90000	
	TOTAL 1 to 5					11219444	
6	Preparation of Exploration Proposal	5 hard copies with soft copies	5.1	2% of approved project cost or 5 lakh whichever is lower		224389	
7	Geological Report Preparation	5 hard copies with soft copies	5.2(ii)	Total cost exceeding ₹50 lakh but less than 150 lakh: ₹2.5 lakh		250000	
8	Peer review Charges	As per EC decision				30000	
	Total Estimated Cost without GST					11723833	
	Provision for GST (18%)					2110290	
	Total Estimated Cost with GST 18%					13834123	
	In lakhs (₹)					138.34	
Note							
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.						
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.						
3	If any part of the project is outsourced, the amount will be reimbursed as per Item no. 6 of NMEDT SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.						

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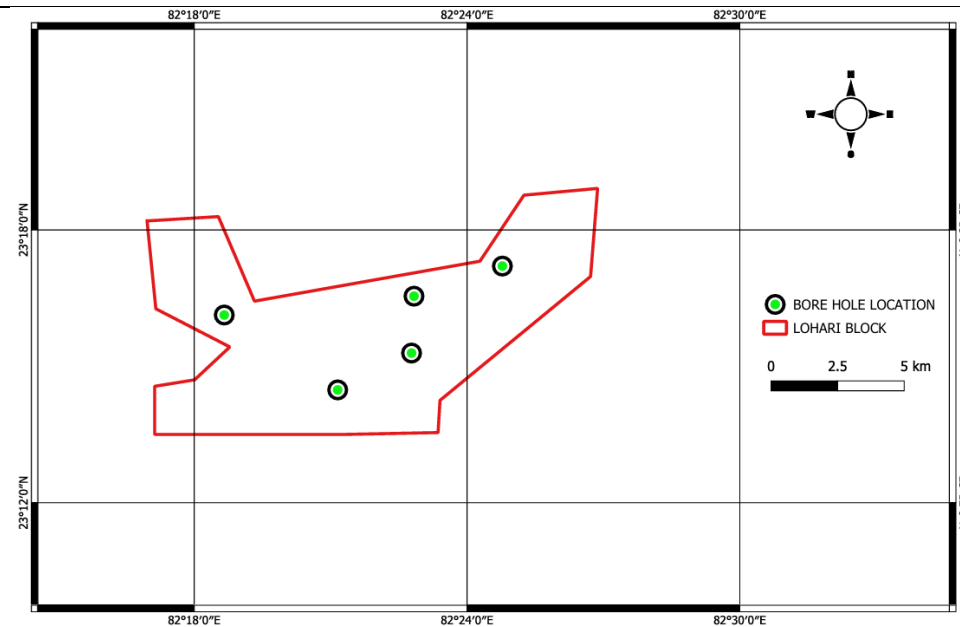
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.
5	Any item of work not mentioned above shall be added as per SoC.
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.

Annexure 3B																	
Time schedule for Reconnaissance Survey (G4) for Titanium-bearing Magnetite-Ilmenite mineralization in Lohari area, Korea, Manendragarh-Chirmiri-Bharatpur districts, Chhattisgarh																	
S.No.	ACTIVITIES		1	2	3	4	First review	5	6	7	8	Second review	9	10	Final submission		
1	Camp Setting	Month															
2	Geological Mapping	Month															
3	Sampling	Month															
4	Pitting/Trenching	Month															
5	Drilling	month															
6	Laboratory Studies	Month															
7	Camp Winding	Month															
8	Report Writing with Peer Review	Month															

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Tentative Scout borehole plan for Reconnaissance Survey (G4) for Titanium-bearing Magnetite-Ilmenite mineralization in Lohari area, Korea, Manendragarh-Chirmiri-Bharatpur districts, Chhattisgarh



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**Agenda 36.1.4 Preliminary exploration (G3) for REE Minerals in Mawphu block,
East Khasi Hills district, Meghalaya**

ID: ME/DD/G3/ML/26-27/146

Area: 3.92 sq. km

[Implementing Agency: M/s BMRC Geomining Solutions Pvt Ltd]

- a) The proposed block of 3.92 sq. km. for preliminary exploration, falls in Survey of India Toposheet no. 780/11, in parts of East Khasi Hills district, Meghalaya.
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	The proposed Mawphu block (G3 stage) falls under the G4 stage work in Mawphir area of GSI during FS 2023-24. There is no ongoing exploration/reconnaissance project related to commodities mentioned in the proposal and any other mineral/commodity in the proposed area by GSI.
2	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	DGM	The Directorate of Mineral Resources, Meghalaya, has not undertaken any reconnaissance or detailed exploration activities for REE group not containing Uranium and Thorium at Mawphu, Mawsarong Village, East Khasi Hills District, Meghalaya. At present, no reconnaissance or detailed exploration projects targeting REE group not containing Uranium and Thorium are being carried out by this Directorate in the proposed area at Mawphu, Mawsarong Village, East Khasi Hills District, Meghalaya. As per available records, no Composite License (CL) or Mining Lease (ML) has been granted for Major or Minor Minerals in the proposed block located within Mawphu, Mawsarong Village, East Khasi Hills District, Meghalaya.
4	MECL	The proposed block by M/s BMRC Geomining Solutions Pvt Ltd has no overlapping with the ongoing or completed blocks of MECL.
5	NMEDT	Proposed G3 block overlaps with Exploration block of GSI_G4_FS_2023-2024 (Reconnaissance survey for REE, Sn, Li & associated mineralization around Mawphir area of South Khasi Batholith in East Khasi Hills district, Meghalaya) as per NGDR. No NMEDT funded block present in the proposed block as per NGDR Portal.

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- c) The agency referenced the GSI's G4 investigation carried out during F.S. 2023-24 for REE, Sn, Li and associated rare metals. The block forms part of the South Khasi Batholith, where pegmatites, two-mica granite and tourmaline granite occur along structurally controlled NE-SW fracture zones. GSI delineated a 1.5 km long pegmatite zone in the Mawphu area and identified it as a potential host for REE-Nb-Sn-Li mineralization. Within the proposed G3 block, 48 BRS, 13 regoliths, 3 stream-sediments and 7 trench samples were analysed. The reported Σ REE values reach maximum concentrations of 2,128 ppm in BRS, 2,816 ppm in regolith, 1,296 ppm in stream sediment and 1,974 ppm in trench samples.
- d) The committee observed that maximum observed values are less than 2000 ppm. There were no ground control and geological evidence for G3 level of exploration in the proposed area. The agency did not collect any field samples to support G3 level of exploration.
- e) The committee based on the above observations did not recommend the proposal.

Recommendations of TCC-II

The committee did not recommend the proposal due to lack of geological support and non-encouraging values of REE.

Agenda 36.1.5 Preliminary exploration (G3) for Ni Cr-V Minerals in Kumyamala block, North Goa district, Goa

ID: ME/DD/G3/GA/26-27/153

Area: 2.67 sq. km

[Implementing Agency: M/s BMRC Geomining Solutions Pvt Ltd]

- a) The proposed block of 2.67 sq. km for preliminary exploration (G3) falls in Survey of India Toposheet no. 48E/14, in parts of North Goa district, Goa.
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	GSI has carried out, 1. Investigation for Bauxite in Mopa, Pernam, Morgim and Consua areas, Goa FS 1969-73, 2. Investigation for Bauxite in Ibrampur, Dargalim, Korgaon and Consua areas, Goa FS 1973-74. 3. Reconnaissance survey for Nickel and associated mineralization around Alorna area, part of North Goa District, Goa and Sindhudurg District, Maharashtra (Stage: G-4) FS 23-24. The area was mapped on a 1:12,500 scale, and several potential zones were delineated based on the analytical results. • In the study area, most of the samples exhibit anomalous Al_2O_3 values, with the highest recorded value being 48.28%. • Chemical analysis of surface, trench, and channel samples revealed Sc concentrations of up to 173 ppm, Ni up to 3,165 ppm, Cr up to 4.02%, Co up to 282 ppm, Fe_2O_3 up to 50.57%, PGE values up to 322 ppb, and Cu up to 601 ppm.

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		• One Geological Memorandum (Bhenale Cansarvornem) was prepared and submitted to Ministry of Mines for auction containing the part of the north-western area of the Alorna block. 4. Report on critical mineral assessment programme for vanadium, scandium and associated critical minerals in lateritic rocks of Upse block, North Goa District, Goa FS 25-26. The area was mainly focused for critical and strategic minerals apart from alumina and iron content. • Chemical analysis of the surface, channel, profile sections recorded Al_2O_3 values upto 37.69%, Fe_2O_3 values up to 50.67%, V up to 1490 ppm, Sc up to 145 ppm. Chemical analysis of drill-core samples recorded V values upto 857 ppm, Sc upto 39 ppm and Al_2O_3 upto 38%. 5. Preliminary exploration for aluminous laterite, titanium and vanadium in Dumase Menkure sector, North Goa district, Goa (Stage-G3) FS 25-26. A total resource of 219.52 Mt of aluminous laterite has been estimated, with an average grade of 30.94% Al_2O_3. • The estimated V_2O_5 resource in aluminous laterite is 43.84 Mt, with an average grade of 0.104% V_2O_5. • A total TiO_2 resource of 71.10 Mt has been estimated, with an average grade of 2.32% TiO_2. • The report has been submitted as Geological Report to Ministry of Mines for auction.
2	MECL	No overlapping with the ongoing or completed blocks of MECL.
3	State DGM	Not available
4	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
5	NMEDT	Proposed block overlaps with Exploration block of GSI_G4_FS_2023-2024 (Reconnaissance survey for Nickel & associated mineralization around Alorna area, Part of North Goa district, Goa and Sindhudurg district, Maharashtra). Proposed block does not show overlapping with NMEDT Funded blocks.

c) The agency informed the committee that the GSI carried out 1:12,500 scale geological mapping over 100 sq. km, along with pitting, trenching, bedrock, soil and regolith sampling and detailed petrographic, SEM and EPMA studies. The investigation recorded 84 BRS, 50 soil, 101 regolith and 50 pit samples, among other studies. Significant geochemical anomalies include Ni up to 3,165 ppm, Cr

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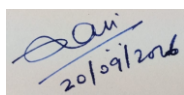
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up to 4.02%, Co up to 231 ppm and total PGE up to 322 ppb in bedrock samples. These anomalies are associated with olivine gabbro and metagabbro and indicate potential for concealed sulphide mineralization beneath the laterite cover. The mineralization occurs mainly as disseminated and fracture-controlled sulphides, including pyrrhotite, pentlandite, chalcopyrite, millerite and violarite, within the mafic-ultramafic complex.

- d) Integrated geological, geochemical and geophysical interpretation identified Kumyamala, Kristanvadi, Sangar and Alorna-Ibrampur as priority exploration sectors. Geochemical results from the proposed block indicate Al_2O_3 : 7.86–28.46%, Cr: up to 8,768 ppm, Ni: up to 2,225 ppm, Co: up to 275 ppm, V: 323–517 ppm and TiO_2 : 0.22–1.70%, demonstrating significant enrichment of Ni–Cr–Co and associated elements.
- e) The committee observed that the reported values were mainly associated with mafic bodies which were sporadic in disposition and the block was covered mainly by aluminous/ferruginous laterite and the agency had not analysed samples from the field to support the proposal. The committee opined that the data shown was not sufficient for G3 level of exploration and target lithology was not identified properly.
- f) The committee based on the above observation did not recommend the proposal and advised the agency to visit the field and collect 4-5 samples and do the analysis.

Recommendations of TCC-II

The committee did not recommend the proposal due to lack of geological support and non-encouraging values of Ni Cr-V Minerals and advised the agency to visit the field and collect 4-5 samples and do the analysis.



Agenda 36.1.6 Preliminary exploration (G3) for Ni-Cr-V Minerals in Kristanvadi block, North Goa District, Goa.

ID- ME/DD/G3/GA/26-27/152

Area: 2.18 sq. km

[Implementing Agency: M/s BMRC Geomining Solutions Pvt Ltd]

- a) The proposed block of 2.18 sq. km for preliminary exploration (G3), falls in Survey of India Toposheet no. 48E/14, in parts of North Goa District, Goa.
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	GSI has carried out, 1. Investigation for Bauxite in Mopa, Pernam, Morgim and Consua areas, Goa FS 1969-73, 2. Investigation for Bauxite in Ibrampur, Dargalim, Korgaon and Consua areas, Goa FS 1973-74. 3. Reconnaissance survey for Nickel and associated mineralization around Alorna area, part of North Goa District, Goa and Sindhudurg District, Maharashtra (Stage: G-4) FS 23-24. The area was mapped on a 1:12,500 scale, and several potential zones were delineated based on the analytical results. • In the study area, most of the samples exhibit anomalous Al_2O_3 values, with the highest recorded value being 48.28%. • Chemical analysis of surface, trench, and channel samples revealed Sc concentrations of up to 173 ppm, Ni up to 3,165 ppm, Cr up to 4.02%, Co up to 282 ppm, Fe_2O_3 up to 50.57%, PGE values up to 322 ppb, and Cu up to 601 ppm. • <i>One Geological Memorandum (Bhenale Cansarvornem) was prepared and submitted to Ministry of Mines for auction containing the part of the north-western area of the Alorna block.</i> 4. Report on critical mineral assessment programme for vanadium, scandium and associated critical minerals in lateritic rocks of Upse block, North Goa District, Goa FS 25-26. The area was mainly focused for critical and strategic minerals apart from alumina and iron content. • Chemical analysis of the surface, channel, profile sections recorded Al_2O_3 values upto 37.69%, Fe_2O_3 values up to 50.67%, V up to 1490 ppm, Sc up to 145 ppm. Chemical analysis of drill-core samples recorded V values upto 857 ppm, Sc upto 39 ppm and Al_2O_3 upto 38%. 5. Preliminary exploration for aluminous laterite, titanium and vanadium in Dumase Menkure sector, North Goa district, Goa (Stage-G3) FS 25-26. A total resource of 219.52 Mt of aluminous laterite has been estimated, with an average grade of 30.94% Al_2O_3. • The estimated V_2O_5 resource in aluminous laterite is 43.84 Mt, with an average grade of 0.104% V_2O_5. • A total TiO_2 resource of 71.10 Mt has been estimated, with an average grade of 2.32% TiO_2.

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		• The report has been submitted as Geological Report to Ministry of Mines for auction.
2	MECL	No overlapping with the ongoing or completed blocks of MECL.
3	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
4	DGM	Not available
5	NMEDT	Proposed block overlaps with Exploration block of GSI_G4_FS_2023-2024 (Reconnaissance survey for Nickel & associated mineralization around Alorna area, Part of North Goa district, Goa and Sindhudurg district, Maharashtra). Proposed block does not show overlapping with NMEDT Funded blocks.

- c) The agency informed the committee that the GSI (FS 23-24) carried out 1:12,500 scale geological mapping over 100 sq. km, along with pitting, trenching, bedrock, soil and regolith sampling and detailed petrographic, SEM and EPMA studies. The investigation recorded 84 BRS, 50 soil, 101 regolith and 50 pit samples, among other studies. Significant geochemical anomalies include Ni up to 3,165 ppm, Cr up to 4.02%, Co up to 231 ppm and total PGE up to 322 ppb in bedrock samples. These anomalies are associated with olivine gabbro and metagabbro and indicate potential for concealed sulphide mineralization beneath the laterite cover. The mineralization occurs mainly as disseminated and fracture-controlled sulphides, including pyrrhotite, pentlandite, chalcopyrite, millerite and violarite, within the mafic-ultramafic complex. Integrated geological, geochemical and geophysical interpretation identified Kumyamala, Kristanvadi, Sangar and Alorna-Ibrampur as priority exploration sectors. Geochemical results from the proposed block indicate Al_2O_3 : 7.86–28.46%, Cr: up to 8,768 ppm, Ni: up to 2,225 ppm, Co: up to 275 ppm, V: 323–517 ppm and TiO_2 : 0.22–1.70%, demonstrating significant enrichment of Ni–Cr–Co and associated elements. Within the proposed block, geochemical results further indicate Ni up to 1,866 ppm, V, 129–956 ppm, Ga 7–76 ppm, Sc 11–102 ppm, Al_2O_3 up to 46.37% and TiO_2 0.19–3.77%.
- d) The committee observed that the reported values were mainly associated with mafic bodies which were sporadic in disposition and the block was covered by lithologies including metabasalt, argillite, metagreywacke etc. and the agency had not analysed samples from the field to support the proposal. The results lack lithological control. The committee opined that the data shown was not sufficient for G3 level of exploration and target lithology was not identified properly.
- e) The committee based on the above observation did not recommend the proposal and advised the agency to visit the field and collect 4-5 samples and do the analysis.

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Recommendations of TCC-II

The committee did not recommend the proposal due to lack of geological support and non-encouraging values of Ni Cr-V Minerals and advised the agency to visit the field and collect 4-5 samples and do the analysis.

Agenda 36.1.7 Preliminary exploration (G3) for Aluminous Laterite, Vanadium & associated minerals in Alorna-Ibrampur block, North Goa district, Goa.

ID- ME/DD/G3/GA/26-27/151

Area: 5.5 sq. km

[Implementing Agency: M/s BMRC Geomining Solutions Pvt Ltd]

- a) The proposed block of 5.5 sq. km for preliminary exploration falls in Survey of India Toposheets no. 48E/14, in parts of North Goa district, Goa.
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	GSI has carried out, 1. Investigation for Bauxite in Mopa, Pernam, Morgim and Consua areas, Goa FS 1969-73, 2. Investigation for Bauxite in Ibrampur, Dargalim, Korgaon and Consua areas, Goa FS 1973-74. 3. Reconnaissance survey for Nickel and associated mineralization around Alorna area, part of North Goa District, Goa and Sindhudurg District, Maharashtra (Stage: G-4) FS 23-24. The area was mapped on a 1:12,500 scale, and several potential zones were delineated based on the analytical results. • In the study area, most of the samples exhibit anomalous Al_2O_3 values, with the highest recorded value being 48.28%. • Chemical analysis of surface, trench, and channel samples revealed Sc concentrations of up to 173 ppm, Ni up to 3,165 ppm, Cr up to 4.02%, Co up to 282 ppm, Fe_2O_3 up to 50.57%, PGE values up to 322 ppb, and Cu up to 601 ppm. • <i>One Geological Memorandum (Bhenale Cansarvornem) was prepared and submitted to Ministry of Mines for auction containing the part of the north-western area of the Alorna block.</i> 4. Report on critical mineral assessment programme for vanadium, scandium and associated critical minerals in lateritic rocks of Upse block, North Goa District, Goa FS 25-26. The area was mainly focused for critical and strategic minerals apart from alumina and iron content. • Chemical analysis of the surface, channel, profile sections recorded Al_2O_3 values upto 37.69%, Fe_2O_3 values up to 50.67%, V up to 1490 ppm, Sc up to 145 ppm. Chemical analysis of drill-core samples recorded V values upto 857 ppm, Sc upto 39 ppm and Al_2O_3 upto 38%.

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		5. Preliminary exploration for aluminous laterite, titanium and vanadium in Dumase Menkure sector, North Goa district, Goa (Stage-G3) FS 25-26. A total resource of 219.52 Mt of aluminous laterite has been estimated, with an average grade of 30.94% Al_2O_3. • The estimated V_2O_5 resource in aluminous laterite is 43.84 Mt, with an average grade of 0.104% V_2O_5. • A total TiO_2 resource of 71.10 Mt has been estimated, with an average grade of 2.32% TiO_2. • <i>The report has been submitted as Geological Report to Ministry of Mines for auction.</i>
2	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available
5	NMEDT	Proposed block overlaps with Exploration block of GSI_G4_FS_2023-2024 (Reconnaissance survey for Nickel & associated mineralization around Alorna area, Part of North Goa district, Goa and Sindhudurg district, Maharashtra) as per NGDR. The proposed block (App. 67%) falls in Recorded Forest area. Proposed block does not show overlapping with NMEDT Funded blocks.

- c) The agency informed the committee that the block lies within the Western Dharwar Craton, in the Goa Group volcano-sedimentary sequence, and is intruded by the Bondla–Usgaon Mafic–Ultramafic Complex. The complex comprises olivine gabbro, metagabbro, gabbro-norite, porphyritic gabbro and ultramafic rocks, which are established host rocks for Ni–Cr–Co–PGE mineralization.
- d) The agency informed the committee the GSI G4 investigation identified the Alorna block as prospective for aluminous laterite and associated critical minerals based on anomalous geochemical values. The 33 GSI samples falling within the proposed Alorna–Ibrampur block comprised 14 BRS, 14 regolith, 2 petrochemical and 3 channel samples. The results indicate significant aluminous laterite and associated critical-mineral potential, with the 14 regolith samples recording Al_2O_3 values of 18.52–47.98%, including 8 samples above 30% Al_2O_3 . In the Alorna block, the laterite/regolith samples recorded Al_2O_3 values of 22.27–47.98% (mean 34.70%), with TiO_2 of 0.93–5.62%, Sc of 34–121 ppm, V of 353–1,696 ppm (mean 903.6 ppm), and Ga of 35–85 ppm (mean 61.4 ppm).
- e) The committee suggested to remove the Quartz Mica Schist area from the proposed block as this lithology was not favourable for the aluminous laterite. The agency removed the eastern area and new area came to be 4.3 sq. km.
- f) The committee based on the above observations recommended for the 5 Boreholes with 200 m drilling quantum with grid interval of 800x800 m with

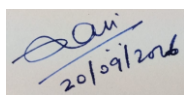
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borehole spacing of 400 m from the boundary. The plan of boreholes is shown in Annexure 4C. However, the drilling quantum, along with the corresponding sampling and chemical analysis, may be revised during the first review based on the results of geological mapping and sampling.

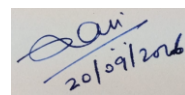
Recommendations of TCC-II

The Committee recommended the proposal for approval of PSC for "Preliminary exploration (G3) for Aluminous Laterite, Vanadium & associated minerals in Alorna-Ibrampur block, North Goa district, Goa.", with an estimated cost of ₹ 89.40/- lakhs (including GST) within time schedule of 12 months for carrying out the proposed work and submission of geological report as per Annexure 4A & 4B. The project will be reviewed after 4 months and 8 months.



Estimated Cost for Preliminary exploration (G3) for Aluminous Laterite, Vanadium & associated minerals in Alorna-Ibrampur block, North Goa district, Goa.
Total area: 4.3 sq. km, Period of Completion: 12 months, Review - After 4 and 8 months, Total Drilling Meterage: 200 m, BH: 5

			Rates as per NMEDT SoC 2025-26		Estimated Cost of the Proposal		
S. No.	Item of Work *	Unit *	SoC- Item No.*	Rates as per SoC *	Qty.	Total Amount (Rs)	Remarks
A	Geological Mapping and Other Geological Work						
i	Geological mapping with Topographic Survey (1:4,000 scale)	per Sq. Km	1.1	18,300	4.3	78690.00	
ii	Charges for Geologist per day (Field) for geological mapping with Sampling	day	1.2.1a(b)	14500	120	1740000.00	
iii	Labours Charges	day	5.8	556	240	133440.00	
iv	Charges for Geologist per day (HQ)	day	1.2.1a(a)	10500	30	315000.00	
	Sub Total- A					2267130.00	
B	Trenching/Pitting						
i	Excavation of Pit upto 2.0m depth	per cu.m	2.1.2	4725	150	708750.00	
	Sub Total- B					708750.00	
C	Survey Work						
i	Charges of one qualified surveyor with Total Station for carrying out topographical survey in different RF and surface contouring at different interval, fixation of borehole and determination of co-ordinates & Reduced Level (RL) of the boreholes with total station etc.	Charges for one Surveyor per day	1.3.1	10500	45	472500.00	
ii	Labour Charges	Days	5.8	556	180	100080.00	
iii	Sampler Charges	Days	1.2.1b	7850	26	204100.00	
iv	Labour	Days	5.8	556	104	57824.00	
	Sub Total- C					834504.00	
D	LABORATORY STUDIES (Surface samples)						

	Complete analysis of Dolomite/Limestone/Gypsum/clay/manganese ore/Bauxite/ Iron ore sample						
i	Major oxide (WD XRF)	Per sample	4.1.17a	4200.00	75	315000.00	75 PTS
	Major oxide (WD XRF) 10 % external	Per sample	4.1.17a	4200.00	8	33600.00	
ii	Analysis of one rock/soil sample for quantitative analysis of 14 REE elements + 9 trace element (U, Ta, Ge, Be, Hf, Sn, As, Rb,Th) by ICP-MS (sequential technique)	Per Sample	4.1.15	7400.00	75	555000.00	75 PTS
iii	Analysis of one rock/soil sample for quantitative analysis of 14 REE elements + 9 trace element (U, Ta, Ge, Be, Hf, Sn, As, Rb,Th) by ICP-MS (sequential technique)10 % external	Per Sample	4.1.15	7400.00	8	59200.00	
	Sub-Total-D					962800.00	
E	LABORATORY STUDIES (Core Sample)						
i	Major oxide (WD XRF) - (oxides+Traces - 24 elements)	Per sample	4.1.17a	4200.00	50	210000.00	
	10% external check	Per sample	4.1.17a	4200.00	5	21000.00	
ii	Analysis of one rock/soil sample for quantitative analysis of 14 REE elements + 9 trace element (U, Ta, Ge, Be, Hf, Sn, As, Rb,Th) by ICP-MS (sequential technique) + 10 % external check sample	Per Sample	4.1.15	7400.00	10	74000.00	
iii	10% external check	Per Sample	4.1.15	7400.00	1	7400.00	
	Sub-Total-E					312400.00	
F	Drilling (In House)						
i	Drilling	Per m	2.2.1.1c	5500	200	1100000	Drilling to be decided after mapping and analysis of samples. Borehole depth to be justified by presence of mineralization. Unnecessary drilling to be avoided.
ii	Construction of concrete Pillar (12"x12"x30")	Per borehole	2.2.7	2000	5	10000	
iii	Miscellaneous Charges (Transportation of Drilling Rig, Accommodation for Drill Camp,	Lumpsum	2.2.9	For Drilling cost less than 50		275000	

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	Camp setting and winding, construction of Approach road			Lakhs: 25% of the Drilling Cost			
iv	Land Crop compensation	Per borehole	5.6	30000	5	150000	As per actulas with Rs 30000 being max ceiling per BH
v	Drill Core Preservation	Per m	5.3	1590	100	159000	1 stratigraphic BH and remaining mineralised zone
	Sub-Total- F					1694000	
G	Survey Work						
i	Demarcation of lease boundary, Fixation of borehole and determination of co-ordinates & Reduced Level (RL) of the boreholes by DGPS (including charges for labours deployed for the work) - use of CORS Network system for all DGPS is compulsory	Per point of observation	1.3.2	24000	12	288000.00	5 Borehole + 7 Cardinal points
	Sub-Total- G					288000.00	
H	Physical & Petrological Studies						
i	Preparation of standard thin section of rock	Nos.	4.3.1	500.00	10	5000.00	
ii	Complete petrographic /ore microscopic study/mineragraphic report of rock sample (along with 5 nos. digital photo micrographs)	Nos.	4.3.4	2800.00	10	28000.00	
iii	Bulk Density - Dry / Saturated	Per Sample	4.8.3	2500	5	12500.00	
	Sub-total-H					45500.00	
I	Mineral Physics Study						
i	XRD	Per sample	4.5.2	4000.00	10	40000.00	
	Subtotal -I					40000.00	
	Total A to I					7153084.00	
	Preparation of Exploration Proposal	Soft Copy	5.1			143061.68	2% of approved project cost or 5 lakh whichever is lower
	Geological Report Preparation	Soft Copy	5.2			250000.00	
	Peer Review					30000	
	Total Estimated Cost without GST					7576145.68	
	Provision for GST (18%)					1363706.00	
	Total Estimated Cost with GST					8939852.00	
	Total Estimated Cost with GST IN Lakhs					89.40	

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Note	
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.
3	If any part of the project is outsourced, the amount will be reimbursed as per Item no. 6 of NMEDT SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.
5	Any item of work not mentioned above shall be added as per SoC.
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.

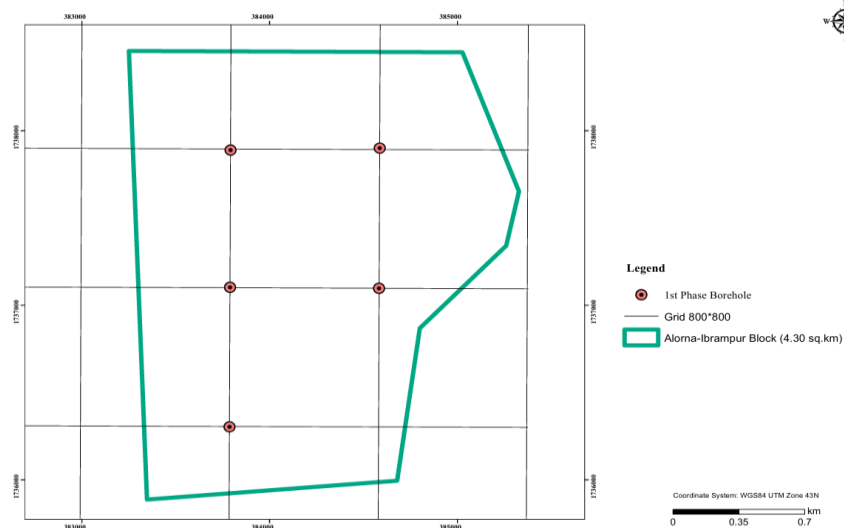
Annexure 4 B															
Time schedule for Preliminary exploration (G3) for Aluminous Laterite, Vanadium & associated minerals in Alorna-Ibrampur block, North Goa district, Goa															
S.No.	Item of work	Months													
		1	2	3	4	Review	5	6	7	8	Review	9	10	11	12
1	Camp Setup														
2	Detailed Mapping (1:4000)														
3	Bed Rock Sampling														
5	Trenching/Pitting														
6	Chemical analysis of surface samples														
7	Drilling														
8	Core sampling and its preparation														
9	Chemical analysis of Core Samples														
10	Processing of Analytical data														
11	Preparation of geological report														

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Proposed Borehole plan for Preliminary exploration (G3) for Aluminous Laterite, Vanadium & associated minerals in Alorna-Ibrampur block, North Goa district, Goa

Borehole Location Map of Alorna-Ibrampur Block, North Goa, Goa



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Agenda 36.1.8 Preliminary exploration (G3) for Aluminous Laterite, Vanadium & associated minerals in Sangar block, North Goa District, Goa

ID- ME/DD/G3/GA/26-27/154

Area: 2.41 sq. km

[Implementing Agency: M/s BMRC Geomining Solutions Pvt Ltd]

- a) The proposed block of 2.41 sq. km for preliminary exploration falls in Survey of India Toposheet no. 48E/14, in parts of North Goa District, Goa.
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	The NPEA proposed block is completely overlapping with the Geological Memorandum (Bhenale-Cansarvornem block), which has been submitted to Ministry of Mines for auction purpose.
2	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available
5	NMEDT	Proposed block overlaps with Exploration block of GSI_G4_FS_2023-2024 (Reconnaissance survey for Nickel & associated mineralization around Alorna area, Part of North Goa district, Goa and Sindhudurg district, Maharashtra) as per NGDR. The proposed block (App. 67%) falls in Recorded Forest area. Proposed block does not show overlapping with NMEDT Funded blocks.

- c) The committee did not recommend the proposal as the proposed block overlaps completely with the GSI Geological Memorandum (Bhenale-Cansarvornem block), which has been submitted to Ministry of Mines for auction purpose.

Recommendations of TCC-II

The committee did not recommend the proposal as the proposed block overlaps completely with the Geological Memorandum (Bhenale-Cansarvornem block), which has been submitted by GSI to Ministry of Mines for auction.

Agenda 36.1.9 Preliminary exploration (G3) for Copper in Ashena block, Tehri Garhwal district, Uttarakhand

ID- ME/DD/G3/UK/26-27/147

Area: 2.37 sq. km

[Implementing Agency: M/s BMRC Geomining Solutions Pvt Ltd]

- a) The proposed block of 2.37 sq. km area for preliminary exploration falls in Survey of India Toposheets no. 53J/11, in parts of Tehri Garhwal district, Uttarakhand
- b) The table containing the comments is given below:

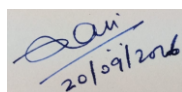
S.N.	Agency	Comment
1	GSI	During the Annual Programme of GSI for FS 2024–25, a G-4 stage investigation covering an area of 50 sq. km was carried out for base metals under the item titled “Reconnaissance Survey for Base Metal and Associated Mineralization in Ghonti, Dhungmandar Gad and Surrounding Areas in the Bhilangana River Valley, Tehri Garhwal District, Uttarakhand. At present, no exploration activities for base metals are being undertaken within the proposed area.
2	AMD	AMD has carried out reconnaissance exploration (G4 stage) for uranium in and around the proposed block. No significant surface radioactive zone was delineated. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available
5	NMEDT	Proposed block overlaps with Exploration block of GSI_G4_FS_2024-2025 (Reconnaissance survey for Base Metal & associated mineralization in Ghonti, Dhungmandar Gad & surrounding areas in the Bhilangana River valley, Tehri Garhwal district, Uttarakhand and Reconnaissance survey for base metal and associated mineralization in Paluni, Koti and Sumeri areas, Tehri Garhwal District, Uttarakhand (FS 2023-24). Proposed block does not show overlapping with NMEDT Funded blocks. The proposed block (App. 58%) falls in Recorded Forest area

- c) The agency referred the GSI's G4 reconnaissance investigation during F.S. 2024–25. The area lies within the Lesser Himalayan Sedimentary Belt, where metabasics and quartzite of the Berinag Formation provide a favourable setting for copper mineralization. GSI identified a promising 15 m × 5 m copper-bearing zone at Tamakhani Dhar, associated with an old copper working, malachite staining and sulphide mineralization including chalcopyrite, pyrite, pyrrhotite and bornite. The current block composed of two lithology quartzite and slate with metavolcanics and Limestone and Dolomite.

- d) The agency further informed the committee that geochemical results are significant, with Cu values in bedrock samples ranging from 229 to 6,882 ppm, averaging 1,647 ppm, while six trench samples from Trench-04 recorded 568–6,170 ppm Cu, averaging 2,595 ppm. Associated Pb and Zn also show anomalous values, with average concentrations of 29 ppm Pb and 62 ppm Zn in BRS, and 23 ppm Pb and 76 ppm Zn in PTS, respectively. The Ashena area also shows associated Co values of 65–260 ppm and Au values of 52–184 ppb.
- e) The committee based on the above observations advised the agency to visit the field and collect the 4-5 samples to establish the continuity between the zones MZI and MZII as marked by the agency and further to demarcate the geological control in the proposed block area.
- f) The committee deferred the project proposal till the results of the collected field samples are shown to the committee.

Recommendations of TCC-II

The committee deferred the proposal to upcoming TCC-II meeting as there was no clear geological control inferred from the available data and advised the agency to visit the field and collect the 4-5 samples to establish the continuity between the zones MZI and MZII as marked by the agency and further to demarcate the geological control in the proposed block.



Agenda 36.1.10 Preliminary exploration (G3) for Copper in Sarphul block, Tehri Garhwal district, Uttarakhand

ID- ME/DD/G3/UK/26-27/148

Area: 4.00 sq. km

[Implementing Agency: M/s BMRC Geomining Solutions Pvt Ltd]

- a) The proposed block of 4.00 sq. km for preliminary exploration falls in Survey of India Toposheets no. 53J/11, in parts of Tehri Garhwal district, Uttarakhand
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	During the Annual Programme of GSI for FS 2024–25, a G-4 stage investigation covering an area of 50 sq. km was carried out for base metals under the item titled “Reconnaissance Survey for Base Metal and Associated Mineralization in Ghonti, Dhungmandar Gad and Surrounding Areas in the Bhilangana River Valley, Tehri Garhwal District, Uttarakhand.” During the Annual Programme of GSI for FS 2024–25, a G-4 stage investigation covering an area of 50 sq. km was carried out for base metals under the item titled “Reconnaissance Survey for Base Metal and Associated Mineralization in Ghonti, Dhungmandar Gad and Surrounding Areas in the Bhilangana River Valley, Tehri Garhwal District, Uttarakhand. At present, no exploration activities for base metals are being undertaken within the proposed area.
2	AMD	AMD has carried out G4 stage of exploration for uranium in and around the proposed block in different phases, wherein evidence of U mineralisation has been established. Grab samples (n=09) analysed up to 2.2% U3O8 from the area. AMD does not have baseline / exploration data on the said commodities mentioned. In view of known potentiality for uranium in the area, analysis of uranium may be included in the analysis list. Further, intimation regarding drilling of the boreholes, if any, during the exploration may be communicated to AMD for gamma ray logging. There is no ongoing exploration / reconnaissance project.
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available
5	NMEDT	Proposed block overlaps with Exploration block of GSI_G4_FS_2024-2025 (Reconnaissance survey for Base Metal & associated mineralization in Ghonti, Dhungmandar Gad & surrounding areas in the Bhilangana River vally, Tehri Garhwal district, Uttarakhand). Proposed block does not show overlapping with NMEDT Funded blocks. The proposed block (App. 50%) falls in Recorded Forest area.

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- c) The agency informed the committee that the block lies within the Berinag/Nagnithank Formation, comprising quartzite, slate and associated basic metavolcanics, which provides a favourable geological setting for base-metal mineralization. GSI's 2024-25 investigation identified copper anomalies in the Sarphul area, with Cu values up to 5,077 ppm in bedrock samples. The agency did not visit the field.
- d) The committee observed that there was no evidence of continuity of anomalous zone and not supported by trench sample analysis results as compared to Ashena block which was near to this proposal. The committee opined that G3 stage project cannot be considered based on results of spot samples. MZ outline/ dimensions/ geometry to be established. At least tentative length and breadth of mineralized zone need to be shown.
- e) The committee based on above observations opined that the proposal lacks lithological control as well as supportive analysis of the earlier work done by GSI. The committee did not recommend the proposal.

Recommendations of TCC-II

The committee did not recommend the proposal as the proposal lacks lithological control as well as supportive analysis.

Agenda 36.1.11 Preliminary exploration (G3) for REE & RM in Komerkhoh block, Nuapada district, Odisha.

ID- ME/DD/G3/OD/26-27/135

Area: 7.46 sq. km.

[Implementing Agency: M/s BMRC Geomining Solutions Pvt Ltd]

- a) The proposed block of 7.46 sq. km for preliminary exploration falls in Survey of India Toposheets no. 64L/11, in parts of Nuapada district, Odisha.
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	The proposed block is part of the Bhela-Rajna mineral Block in which reconnaissance survey for REE, RM, PGE and associated elements was carried out by GSI in FS: 2024-25 at G4 level. The proposed block is not overlapping with any of the mineral block of GSI in G3 level. Two mineral Blocks; namely Ganiari and Karlakot Block which falls in the northern and north eastern part of the proposed block will be taken up by GSI for REE and RM exploration at G3 level in FS:2026-27 and 2027-28 respectively. At present, no exploration or reconnaissance project related to REE, RM or any other mineral commodity is being undertaken by GSI in the proposed area.

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2	AMD	AMD has carried out reconnaissance exploration (G4 stage) for uranium in and around the proposed block. No significant surface radioactive zone was delineated. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	On examination of the Komerkhola area Nuapada District, it is observed that the proposed area has been covered during F.S 1989-90 through geological mapping on 1:25000 scale. The proposed area is covered by Granetiferous granite gneiss & Nepheline syenite. On Examination of group plan, it is observed that the block falls within the Bhel-Rajna REE & RM G4 GSI block (explored during 2024-25).
5	NMEDT	Proposed G3 block overlaps with Exploration block of GSI_G4_FS_2024-2025 (Reconnaissance Survey for REE, RM and associated elements in the lithounits of Bhela-Rajna Alkaline Complex, in Rajna-Mahulpadar area, Naupada district). Proposed block (100%) falls in ESZ.

- c) The committee did not recommend the proposal as the proposed block completely overlaps with the ESZ zone as per NMEDT comment.

Recommendations of TCC-II

The committee did not recommend the proposal as the proposed block completely overlaps with the ESZ zone as per NMEDT comment.

Agenda 36.1.12 Reconnaissance survey (G4) for Tungsten, Vanadium, Graphite and associated minerals in Simrar-Birkhan area, Nainital District, Uttarakhand

ID- ME/DD/G4/UK/MECL/26-27/014

Area: 56.23 sq. km

[Implementing Agency: MECL]

- a) The proposed area of 56.23 sq. km for reconnaissance survey falls in survey of India Toposheets no. 530/10 & 530/11, in parts in Simrar-Birkhan area, Nainital District, Uttarakhand
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	1. GSI carried out 1. During Annual programme of GSI, FS 2022-23, a G-4 stage investigation over a 50 sq. km area for Vanadium in Nishni Malta area, Almora district, Uttarakhand was carried out in parts of Toposheet no - 530/15 located in the NE part outside the proposed block. 2. During Annual programme of GSI, FS 2024-25, a G-3 stage investigation over a 2.5 sq. km area for Vanadium in Nishni Malta area, Almora district, Uttarakhand was carried out in

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		parts of Toposheet no - 53O/15 in the NE part of the block located in the NE part outside the proposed block. 2. At present, a G3 stage of investigation is taken up by SU:UK, GSI for FS-2026- 27 in the eastern part of the proposed block. However, the block under study does not overlaps with the proposed exploration block of MECL. 1. The block tungsten mineralisation, primarily indicated by the anomalous NGCM stream sediment values, with 4 out of 17 samples reporting W values ranging from 250–440 ppm and showing spatial clustering within the drainage network. However, no significant bedrock tungsten mineralisation or continuous mineralised zone has yet been established within the proposed block. 2. Further, no significant vanadium or graphite/TOC values have been reported from within the proposed Simrar–Birkhan block itself. G-3 exploration in the Nishni–Malta area delineated vanadiferous horizons with V values up to 2981 ppm and established V₂O₅-bearing resources in the NE part of the proposed block.
2	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	DGM	Not available
4	NMEDT	Proposed block show overlap with GSI G4 block for Reconnaissance survey for vanadium and associated metals in black shales in and around Nishni- Malta area, Almora district, Uttarakhand in NGDR portal. Area is covered by forest (recorded forest, 50 %). No NMEDT funded blocks present in and around the proposed area in NGDR Portal.

- c) The agency informed the committee that the Simrar–Birkhan Block is situated in a favourable geological setting of the Almora Group, comprising garnet mica schist, graphite schist, sheared quartzite, graphitoid quartzite, Augen Gneiss and tourmaline-bearing foliated granite. GSI investigations during 2020–21 by Santosh & Yadav identified hydrothermal quartz–tourmaline veining, alteration, sulphides and old workings, along with significant Ba (10,000–25,000 ppm) and V (1,000–3,500 ppm) enrichment. Subsequently, GSI work during 2022–23 by Bauri & Raut identified V-enriched black shale/carbonaceous phyllite, with V concentrations of 436–2,723 ppm, accompanied by Ba and Mo enrichment. Further GSI G3 exploration during 2024–25 by Mallick & Manna around Nishni–Malta identified six V-bearing carbonaceous phyllite bands (1–12 m thick) containing 160–2,981 ppm V, with elevated Mo and Ba, and estimated about 0.069 Mt V₂O₅-bearing resources at ~0.26% V₂O₅. The NGCM geochemical data provide the principal basis for the proposed block. 17 NGCM stream-sediment samples fall within the proposed area, of which 4 samples contain anomalous W values of 250–440 ppm.

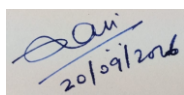
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- d) The committee opined that there was no favourability for Tungsten mineralization based on the above geological information and suggested to modify the title of the project after removal of 'Tungsten' from the title.
- e) The committee based on the above observations recommended for the 5 scout boreholes with 300 m drilling quantum. The plan of boreholes is shown in Annexure 5C. However, the drilling quantum, along with the corresponding sampling and chemical analysis, may be revised during the first review based on the results of geological mapping and sampling.

Recommendations of TCC-II

The Committee recommended the proposal for approval of PSC for "Reconnaissance Survey (G-4) for Vanadium, Graphite and Associated Minerals in Simrar-Birkhan Area, Nainital District, Uttarakhand" with an estimated cost of ₹ 124.50/- lakhs (including GST) within time schedule of 12 months for carrying out the proposed work and submission of geological report as per Annexure 5A & 5B. The project will be reviewed after 4 months and 8 months.

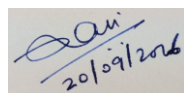


Annexure 5A

Estimated Cost for Reconnaissance Survey (G4) for Vanadium, Graphite and Associated Minerals in Simrar-Birkhan Area, Nainital District, Uttarakhand

Drilling: 300 m; 5 BHs (Area 56.23 Sq. km); Timeline- 12 months, Review after: 04 and 8 months

S. No.	Item of Work	Unit	Rates as per NMEDT Revised SoC 2025		Estimated Cost of the Proposal		Remarks
			SoC-Item -Sl. No.		Qty.	Amount (Rs)	
A	GEOLOGICAL MAPPING						
i	Large Scale Mapping (1:12,500)	per sq. km	1.1c	28,600	56.23	16,08,178	Himalayan Region more than 1000m elevation
B	OTHER GEOLOGICAL WORK/ ACTIVITIES						
i	Charges for one Geologist- Field	per day	1.2.1a (b)	14,500	130	18,85,000	
ii	Charges for one Geologist - HQ	per day	1.2.1a (a)	10,500	45	4,72,500	
iii	2 labours/ party (As per rates of Central Labour Commissioner)	per day	5.8	556	260	1,44,560	
iv	Sampling -1 Samplers Labour charge not included	per day	1.2.1b	7,850	34	2,66,900	
v	4 labours/ party (As per rates of Central Labour Commissioner)	per day	5.8	556	136	75,616	
C	TRENCHING						
i	Trenching	per cu. m.	2.1.1	4125	50	2,06,250	

	Sub Total- A TO C					46,59,004	
D	Drilling (Outsource)						
	Drilling	Meter	2.2.1.1d	10,000	300	30,00,000	Drilling to be decided after mapping and analysis of samples. Borehole depth to be justified by presence of mineralization. Unnecessary drilling to be avoided.
	Drill core Preservation	per meter	5.3	1,590	100	1,59,000	
	Land / Crop Compensation	Per BH	5.6	30,000	5	1,50,000	
	Construction of concrete Pillar (12"x12"x30")	Per BH	2.2.7	2,000	5	10,000	
	Borehole plugging by cement	Per BH	2.2.8	10,000	5	50,000	
	Tendering Cost		5.9	2% of the approved project cost or 5 Lakh whichever is lower will be paid one time		60,000	
	Technical Supervision Cost		6	Technical Supervision cost shall be 10% of the sum of all the outsourced work components with a maximum ceiling of ₹ 20 lakh.		3,00,000	
	Total D					37,29,000	
E	Chemical Analysis						
i	Analysis of one rock/ soil sample for quantitative analysis of 14 REE elements + 9 trace	per sample	4.1.15	7,400	115	8,51,000	Bedrock & soil: 25, Stream Sediment Samples: 20, Trench Samples: 20, Core samples: 50

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	element by ICP-MS (sequential technique)						
ii	Proximate analysis of Graphite	per sample	4.1.18	3,614	130	4,69,820	Bedrock/channel samples: 50 and Trench:30, Core samples: 50
iii	External (10%) Check samples Analysis of one rock/ soil sample for quantitative analysis of 14 REE elements + 9 trace element by ICP-MS (sequential technique)	per sample	4.1.15	7,400	11	81,400	
iv	External (10%) check samples Proximate analysis of Graphite	per sample	4.1.18	3,614	13	46,982	
v	Major oxides (WD XRF)- (oxides+ traces -24 elements)	per sample	4.1.17a	4,200	30	1,26,000	
vi	Major oxides (WD XRF)- (oxides+ traces -24 elements)	per sample	4.1.17a	4,200	3	12,600	
	Physical & Petrological Study						
vii	XRD analysis for identification of mineral phase	per sample	4.5.2	4,000	10	40,000	
viii	Preparation of thin polished section	per sample	4.3.2	800	10	8,000	
ix	Complete petrographic /ore microscopic study/mineragraphic report of rock sample(along with 5 nos. digital photo micrographs)	per sample	4.3.4	2,800	10	28,000	

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x	SEM study	per hr	4.4.2	3,500	5	17,500	
	Sub Total- E					16,81,302	
	Total A to E					1,00,69,306	
F	Geological Report Preparation	5 Hard copies with a soft copy	5.2.(ii)	Total cost of the project exceeding 50 lakhs, But less than150 lakhs		2,50,000	
G	Peer review Charges		As per EC decision			30,000	
H	Preparation of Exploration Proposal		5.1	2% of the Cost or Rs. 5 Lakhs whichever is lower		2,01,386	
	Total Estimated Cost without GST					1,05,50,692	
	Provision for GST (18%)					18,99,125	GST will be reimbursed as per actual and as per notified prescribed rate
	Total Estimated Cost with GST					1,24,49,817	
	or Say Rs. In Lakhs					124.50	
Note							
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.						
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.						
3	If any part of the project is outsourced, the amount will be reimbursed as per Item no. 6 of NMEDT SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.						
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.						
5	Any item of work not mentioned above shall be added as per SoC.						
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.						

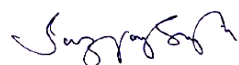
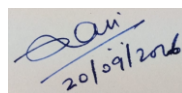
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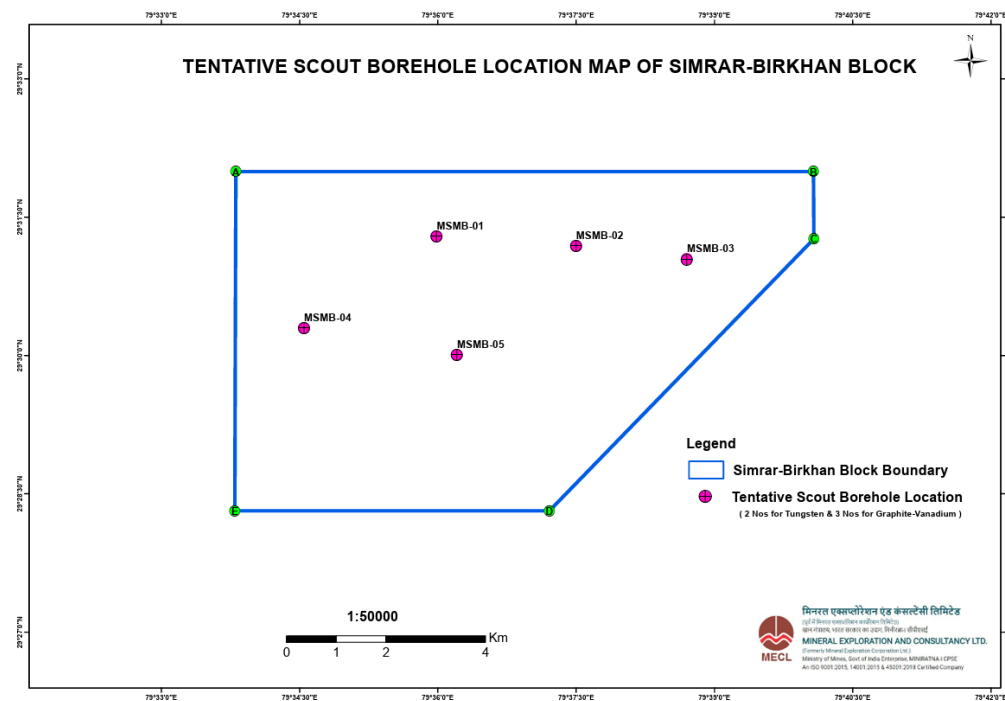
Annexure 5B

Time schedule for Reconnaissance Survey (G4) For Vanadium, Graphite and Associated Minerals in Simrar-Birkhan Area, Nainital District, Uttarakhand

Sl.	Particulars	Months	1	2	3	4		5	6	7	8		9	10	11	12
1	Camp Setting/ mobilization	Months					REVIEW					REVIEW				
2	Geologist days (Mapping, BR Sampling, Trenching, Stream Sediment Sampling)	days														
3	Sampling days	days														
4	Drilling	Months														
5	Camp winding	Months														
6	Laboratory Studies	days														
7	Geologist days, HQ	days														
8	Report Writing with Peer Review	days														

**Tentative Scout Borehole plan for Reconnaissance Survey (G-4) For Vanadium, Graphite and Associated Minerals in Simrar-Birkhan Area,
Nainital District, Uttarakhand**



Signature

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Agenda 36.1.13 Preliminary exploration (G3) of Graphite in Ejamar North block, Latehar district, Jharkhand.

ID- ME/DD/G3/JH/26-27/240

Area: 4.8 sq. km

[Implementing Agency: M/s MMPL Pvt. Ltd.]

- a) The proposed block of 4.8 sq. km area for preliminary exploration falls in Survey of India Toposheets no. 73A/5, in parts Latehar district, Jharkhand.
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	Ejamar North block proposed by MMPL Pvt. Ltd. has been delineated as the part of G4 programme taken by GSI Ranchi entitled "Reconnaissance survey for graphite in Chhotanagpur Gneissic Complex Parsahi, Satbarwa and Ranki Kalan in Latehar District, Jharkhand" (STAGE: G-4) during FS 2019-20. The block lies to the southern boundary of T. S. No. 73A/05. GSI has nearly developed all G4 blocks to G3/G2 stage in the northern part of the Toposheet which includes Karma, Adhamniya, Budhiyabagi, Mandhaniya, Suiri, Charwadiah etc and has proposed Dodang G3 block for the FS 2027-28.
2	AMD	AMD has carried out G4 stage of exploration for uranium in and around the proposed block in different phases, wherein evidence of U mineralisation has been established. Grab samples analysed up to 0.059% U ₃ O ₈ and up to 0.28% ThO ₂ from the area. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the said commodities mentioned. In view of known potentiality for uranium in the area, analysis of uranium may also be included in the analysis list.
3	MECL	The proposed block by M/s MMPL Private Limited has no overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available
5	NMEDT	The proposed area falls within the Recorded Forest Area (RFA). No overlap has been observed with ESZ/ESA, Tiger Corridors, or Protected Areas, as per the PM GatiShakti Portal. (Forest area constitutes approximately 6.45% of the proposed block, and a small portion of the northwestern corner of the buffer zone of the proposed block falls within the Eco-Sensitive Zone (ESZ)). One NMEDT funded block is present in the vicinity of the proposed block, as per the NGDR Portal (Preliminary Exploration for Graphite and Vanadium in Charwadiah Block, Palamu and Latehar Districts, Jharkhand (G3 Stage)- GSI).

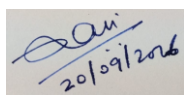
- c) This project was discussed in 34th TCC-II (7.64 sq. km) as in principle proposal and was rejected due to overlap with overlap with the NMEDT proposed block of M/s

BMRC Geomining Solutions Pvt. Ltd and ESZ zone. The committee advised the agency to modify the area after removal of overlap. The agency had presented the modified proposal as direct DPR with modified area of 4.8 sq. km.

- d) The agency informed the committee that the proposed Ejamar North lies within the Chotanagpur Gneissic Complex (CGGC), where graphite occurs in the form of discontinuous/lenticular bands and patches within gneissic country rocks. Within the block, graphite-bearing schist bands occur along Ejamar Hill, striking N70°E–S70°W, with moderate to steep southeasterly dips of 40°–70°. The graphite-bearing schists are intercalated with amphibolite and flanked by mica schist, while graphite occurs as disseminated grains and minute flakes in feldspathised mica schist.
- e) The agency further informed the committee that GSI investigations during Field Season 1967–68 reported graphite around Ejamar Hill, occurring over an aggregate width of about 150 m within a 400 m wide zone and extending for approximately 1,000 m towards Lacchmi Hill. During G4 investigation in FS 2019–20, three graphite bands were identified in the southern part of Ranki Kalan, comprising one band of about 800 m strike and 50 m width and two ENE–WSW trending bands of approximately 300 m strike and 30 m width each, with fixed carbon values ranging from 12% to 37.49%. Further G4 investigation during FS 2022–23 in the Chama–Barwaiya area identified graphite mineralized zones in the northeastern part of the proposed block, with FC values of 0.58–28.02% in BRS samples and 1.01–34.78% in trench samples, along with vanadium values of 327–1,237 mg/kg. Additionally, the G3 investigation at Budhiyabagi during FS 2022–23 estimated a graphite resource of 5.625 Mt @ 7.80% FC at 2% cut-off and a vanadium resource of 4.682 Mt @ 1,007.26 ppm (0.18% V₂O₅) at 500 ppm cut-off. The agency collected within the proposed Ejamar North Block: 14 samples, of which 10 samples showed encouraging fixed-carbon values of 2.16%–24.86%, while 4 samples were below 2% FC.
- f) The committee based on the above observations recommended for the 10 boreholes with 700 m drilling quantum with grid interval of 200x200 m with borehole spacing of 100 m from the boundary. The plan of boreholes is shown in Annexure 6C. However, the drilling quantum, along with the corresponding sampling and chemical analysis, may be revised during the first review based on the results of geological mapping and sampling.

Recommendations of TCC-II

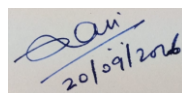
The Committee recommended the proposal for approval of PSC for “Preliminary exploration (G3) of Graphite in Ejamar North block, Latehar district, Jharkhand” with an estimated cost of ₹ 180.48/- lakhs (including GST) within time schedule of 12 months for carrying out the proposed work and submission of geological report as per Annexure 6A & 6B. The project will be reviewed after 4 months and 8 months.



Annexure 6A

Estimated Cost for Preliminary Exploration (G3) of Graphite in Ejamar North Block, District: Latehar, Jharkhand
Area: 4.8 Sq. km. Total Drilling meterage: 700 m, No. of BH: 10. Time line: 12 months. Review after: 4 and 8 months

Sl. No	Item Of Work*	Unit*	Rate As Per NMEDT SOC 2025-26		Estimated Cost of the Proposal		Remarks
			SOC. Item No	Rate As per revised SOC* (a)	Qty. (b)	Total	
						Amount (Rs) (a*b)	
A	Large Scale Geological Mapping Other Geological Work & Surveying						
i	Geological mapping (1:4000), Trenching & Drilling work	Per Sq. km	1.1	18300	4.8	87,840.00	
ii	Charges for Geologists per day (Field)	day	1.2.1a	14,500.00	120	17,40,000.00	
iii	Labours charges	day	5.8	556.00	240	1,33,440.00	Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher.
iv	Charges for Geologist (HQ)	day	1.2.1a	10,500.00	45	4,72,500.00	
					Sub Total- A	24,33,780.00	
B	Trenching/Pitting						
i	Trenching	per cu. m	2.1.1	4,125.00	100	4,12,500.00	
					Sub Total- B	4,12,500.00	
C	Survey work						
i	Charges of one qualified surveyor with Total Station for carrying out topographical survey in different RF and surface contouring at different	per day	1.3.1	10,500.00	30	3,15,000.00	

	interval, fixation of borehole and determination of co- ordinates & Reduced Level (RL) of the boreholes with total station etc.						
ii	DGPS Survey for BH fixation & RL determination	Per Point of observation	1.3.2	24,000.00	14	3,36,000.00	10 BH + 4 Cardinal points
iii	Labours Charges for survey work; Base rate	day	5.8	556.00	120	66,720.00	
	Sub Total- C					7,17,720.00	
D	Ground Geophysical Survey (in- house)						
i	SP survey	Line km	3.3a	62,140.00	10	6,21,400.00	
	Sub Total- D					6,21,400.00	
E	Drilling (in-house)						
i	Drilling	per m	2.2.1.1d	10,000.00	700	70,00,000.00	10 BH@ 70 m. Drilling to be decided after mapping and analysis of samples. Borehole depth to be justified by presence of mineralization. Unnecessary drilling to be avoided. Second level of drilling after analysis of first level drilling outcomes.
ii	Borehole deviation by multi shot camera	per m	2.2.5	330.00	117	38,610.00	
iii	Land / Crop Compensation (in case the BH falls in agricultural Land)	per borehole	5.6	30,000.00	10	3,00,000.00	
iv	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7	2,000.00	10	20,000.00	

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v	Miscellaneous charges (Transportation of drilling rigs, accommodation for drilling camp, camp setting and winding construction of approach road making)	Lumpsum	2.2.9	Drilling cost more than 50 lakhs and less than 1 crore: 20% of the drilling cost with a maximum ceiling of Rs. 15 lakhs		14,00,000.00	
vi	Borehole plugging	per borehole	2.2.8	10,000.00	10	1,00,000.00	
vii	Drill core preservation	per m	5.3	1,590.00	200	3,18,000.00	
viii	Charges for one Sampler per day (1 Party)	one sampler per day	1.2.1b	7,850.00	29	2,27,650.00	
ix	Charges for Labour	day	5.8	556.00	116	64,496.00	
					Sub Total- E	94,68,756.00	
F	Laboratory Studies						
1	Chemical Analysis						
i)	Surface Samples+ Trench samples+ BH Core samples						
a	Proximate analysis for graphite	Nos	4.1.18	3,614.00	200	7,22,800.00	
b	Proximate analysis for graphite (10% external check)	Nos	4.1.18	3,614.00	20	72,280.00	
c	Analysis of one rock/ soil sample for quantitative analysis of 14 REE elements+9 Trace elements (U, Ta, Ge, Be, Hf, Sn, As, Rb, Th) by ICP-MS (sequential technique)	Nos	4.1.15	7,400.00	20	1,48,000.00	
d	Analysis of one rock/ soil sample for quantitative analysis of 14 REE elements+9 Trace elements	Nos	4.1.15	7,400.00	2	14,800.00	

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	(U, Ta, Ge, Be, Hf, Sn, As, Rb, Th) by ICP-MS (sequential technique) (10% external check)						
e	Estimation of major oxides by XRF technique (Whole rock analysis) (10% external check)	Nos	4.1.17a	4,200.00	10	42,000.00	
f	Estimation of major oxides by XRF technique (Whole rock analysis)	Nos	4.1.17a	4,200.00	1	4,200.00	
2	Physical & Petrological Studies						
i	Preparation of Standard thin section of rock	Nos	4.3.2	800.00	10	8,000.00	
ii	Complete petrographic/ ore microscopic study/ mineragraphic report of rock sample (along with 5 nos. digital photo micrograph)	Nos	4.3.4	2,800.00	10	28,000.00	
iii	Bulk density analysis	Nos	4.8.3	2,500.00	5	12,500.00	
iv	Raman Spectroscopy	per hour	4.5.1	2,700.00	5	13,500.00	
	Sub Total- F					10,66,080.00	
	Total A to F					1,47,20,236.00	
G	Geological Report Preparation		5.2 (ii)	Total cost exceeding ₹50 lakh but less than 150 lakh:		2,50,000.00	Reimbursement will be made after submission of the Final Geological Report
H	Peer review Charges	As per EC decision		₹ 30,000.00	1	30,000.00	
I	Preparation of Exploration Proposal (soft copy)	Soft copy	5.1		2% of approved project cost or 5 lakh whichever is lower	2,94,405.00	
	Total Estimated Cost without GST					1,52,94,641.00	
	Provision for GST (18%)					27,53,035.00	GST will be reimbursed as per actual and as per notified prescribed rate
	Total Estimated Cost with GST					1,80,47,676.00	

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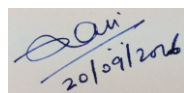
				<i>Rs. In Lakhs</i>	180.48	
Note						
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.					
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.					
3	If any part of the project is outsourced, the amount will be reimbursed as per Item no. 6 of NMEDT SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.					
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.					
5	Any item of work not mentioned above shall be added as per SoC.					
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.					

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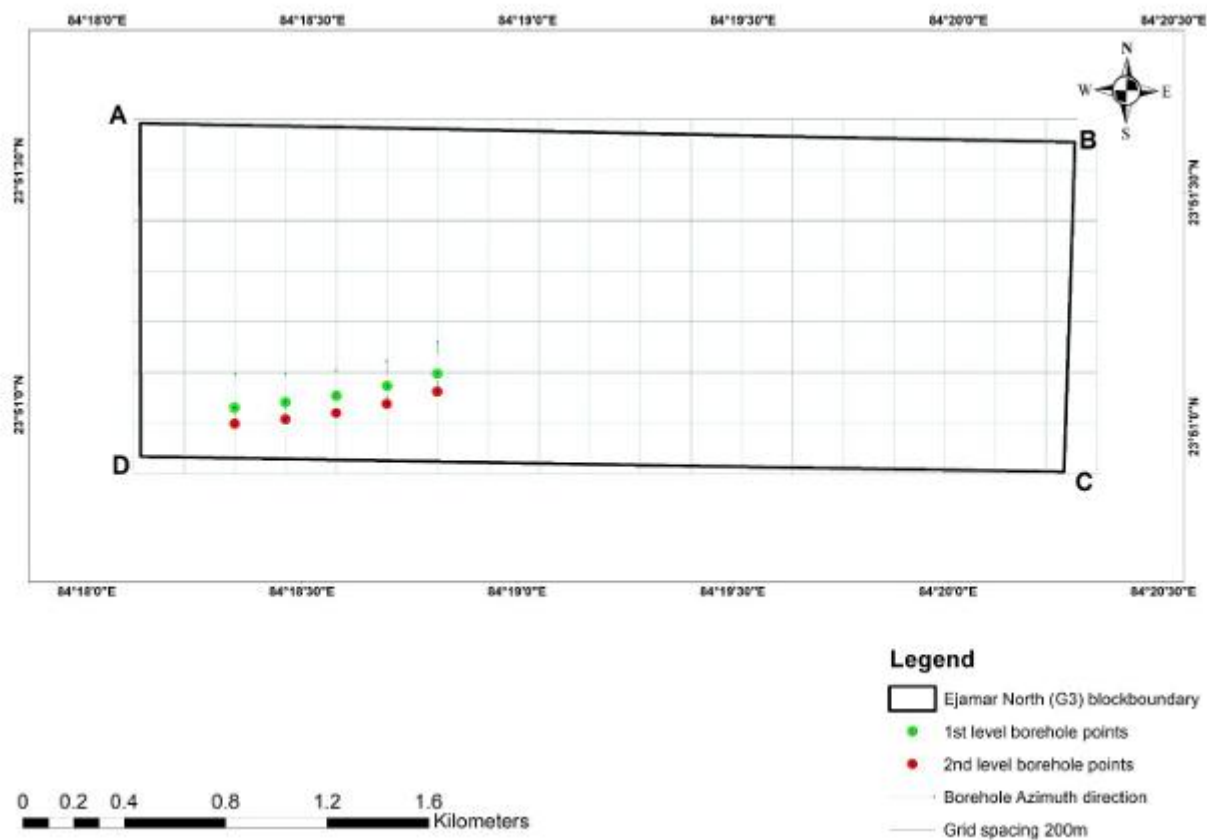
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Time Schedule for Preliminary Exploration of Graphite (G3) in Ejamar North Block, Latehar District, Jharkhand

Item of work	Months															
	1	2	3	4	REVIEW	5	6	7	8	REVIEW	9	10	11	12		
Camp Setup																
Detailed Geological Mapping (1:4,000)																
Topographic survey (2m contour interval)																
Bed Rock Sampling, Groove sampling and trenching																
Chemical analysis of surface samples																
Geophysical SP survey																
Drilling of boreholes																
Sampling of drill cores																
Analysis of drill core samples																
Preparation of Draft Geological report																
Review by external peer reviewer																
Geological report preparation																

Proposed Borehole plan for Preliminary Exploration (G3) of Graphite in Ejamar North Block, Latehar District, Jharkhand



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**Agenda 36.1.14 Reconnaissance survey (G4) for Graphite in Ejamar South area,
Latehar district, Jharkhand**

ID- ME/DD/G4/JH/26-27/119

Area: 21.9 sq. km

[Implementing Agency: M/s MMPL Pvt. Ltd.]

- a) The proposed area of 21.90 sq. km for reconnaissance survey falls in Survey of India Toposheets no. 73A/5, in parts Latehar district, Jharkhand.
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	GSI has nearly developed all G4 blocks entitled "Reconnaissance survey for graphite in Chhotanagpur Gneissic Complex Parsahi, Satbarwa and Ranki Kalan in Latehar District, Jharkhand" (STAGE: G-4) during FS 2019-20. to G3/G2 stage in the northern part of the Toposheet which includes Karma, Adhamniya, Budhiyabagi, Mandhaniya, Shiri, Charwadih etc and has proposed Dodang G3 block for the FS 2027-28. The newly proposed Ejamar South block is situated just south of GSI's previously explored G4 Ranchi block. The earlier comments remains same. However, the proposed area does not overlap with any of current GSI's Field Season Programmes (FSP). Accordingly, final decision may be taken by the NMEDT.
2	AMD	AMD has carried out G4 stage of exploration for uranium in and around the proposed block in different phases, wherein evidence of U mineralisation has been established. Grab samples analysed up to 0.059% U3O8 and up to 0.28% ThO2 from the area. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the said commodities mentioned. In view of known potentiality for uranium in the area, analysis of uranium may also be included in the analysis list.
3	MECL	The proposed block by M/s MMPL Private Limited has no overlapping with the ongoing or completed blocks of MECL.
4	DGM	The proposed block shows overlap with the ESZ zone as per the letter dated 17.8.2026.
5	NMEDT	Eco-Sensitive Zone (ESZ) is present within the 0.5 km buffer of the proposed block. The nearest Tiger Corridor is approximately 2.7 km away, while the nearest Wildlife Sanctuary is approximately 1.5 km away as per the PM Gati Shakti Portal. One NMEDT funded block is present in the vicinity of the proposed block, as per the NGDR Portal (Preliminary Exploration for Graphite and Vanadium in Charwadih Block, Palamu and Latehar Districts, Jharkhand (G3 Stage)-GSI)

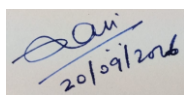
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- c) This proposal was discussed in 34th TCC-II (29.9 sq. km) and the committee deferred the proposal to the next TCC-II meeting due to significant overlap of the proposed area in the western and southern part with ESZ zone. The agency may resubmit the proposal after excluding the ESZ portion and duly considering the exploration work already done by various exploration agencies in the area. The Committee advised that the proposal will be discussed in next TCC-II meeting with fresh comments of all the agencies for the revised proposed area excluding the overlapping ESZ. The agency removed the overlapped area and submitted modified area of 21.90 sq. km.
- d) The agency informed the committee that the block lies within the Chhotanagpur Gneissic Complex, where graphite gneiss occurs as discontinuous bands, patches and lenticular bodies within the gneissic country rock. GSI investigations during FS 1967–68 reported graphite at Ejamar South Hill over an aggregate width of about 150 m, within a 400 m wide zone, extending for approximately 1,000 m towards Lacchmi Hill. GSI G4 investigations during FS 2019–20 identified three graphite bands near Ranki Kalan, including an approximately 800 m × 50 m E–W trending band and two 300 m × 30 m ENE–WSW trending bands, with FC values of 12–37.49%. Further G4 work during FS 2022–23 in the Chama–Barwaiya area reported FC values of 0.58–28.02% in BRS and 1.01–34.78% in trench samples, with V values of 327–1,237 mg/kg. GSI G3 investigation at Budhiyabagi estimated 5.625 Mt @ 7.80% FC graphite resource and 4.682 Mt @ 1,007.26 ppm V (0.18% V₂O₅) resource. The agency collected 10 samples from the proposed block, of which 8 samples showed encouraging FC values of 5.36–13.55%.
- e) The committee based on the above observations recommended for the 5 scout boreholes with 250 m drilling quantum. The plan of boreholes is shown in Annexure 7C. However, the drilling quantum, along with the corresponding sampling and chemical analysis, may be revised during the first review based on the results of geological mapping and sampling.

Recommendations of TCC-II

The Committee recommended the proposal for approval of PSC for “Reconnaissance survey (G4) for Graphite in Ejamar South area, Latehar district, Jharkhand” with an estimated cost of ₹ 100.24/- lakhs (including GST) within time schedule of 10 months for carrying out the proposed work and submission of geological report as per Annexure 7A & 7B. The project will be reviewed after 4 months and 8 months.

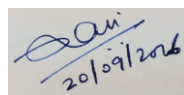


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Annexure 7A

Estimated cost for Reconnaissance Survey (G4) for Graphite in Ejamar South Area, District: Latehar, Jharkhand
Area: 21.90 sq. km, Total Drilling: 250 m, No. of BH: 5, Timeline: 10 months, Review after: 4 & 8 months

SL. No	Item Of Work*	Unit*	Rate As Per NMEDT SOC 2025		Estimated Cost of the Proposal		Remarks
			SOC. Item No	Rate As per revised SOC* (a)	Qty. (b)	Total	
						Amount (Rs) (a*b)	
A	Large Scale Geological Mapping Other Geological Work & Surveying						
i	Geological mapping (1:12,500)	Per Sq. km	1.1	18300	21.9	₹ 4,00,770.00	
ii	Charges for Geologist per (Field)	day	1.2.1a	₹ 14,500.00	100	₹ 14,50,000.00	
iii	Labours charges;	day	5.8	₹ 556.00	200	₹ 1,11,200.00	Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher.
iv	Charges for Geologist (HQ)	day	1.2.1a	₹ 10,500.00	45	₹ 4,72,500.00	
	Sub Total- A					₹ 24,34,470.00	
B	Trenching/Pitting						
i	Trenching	per cu.m	2.1.1	₹ 4,125.00	100	₹ 4,12,500.00	
	Sub Total- B					₹ 4,12,500.00	
C	Survey work						
i	DGPS Survey for BH fixation & RL determination	Per Point of observation	1.3.2	₹ 24,000.00	5	₹ 1,20,000.00	
	Sub Total- C					₹ 1,20,000.00	

D	Ground Geophysical Survey (in- house)						
i	Charge for SP survey	Line km	3.3a	₹ 62,140.00	10	₹ 6,21,400.00	
	Sub Total- D					₹ 6,21,400.00	
E	Drilling (after review) (in-house)						
i	Drilling	per m	2.2.1.1d	₹ 10,000.00	250	₹ 25,00,000.00	Drilling to be decided after mapping and analysis of samples. Borehole depth to be justified by presence of mineralization. Unnecessary drilling to be avoided.
ii	Land / Crop Compensation (in case the BH falls in agricultural Land)	per borehole	5.6	₹ 30,000.00	5	₹ 1,50,000.00	
iii	Borehole plugging by Cement	per borehole	2.2.8	₹ 10,000.00	5	₹ 50,000.00	
iv	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7	₹ 2,000.00	5	₹ 10,000.00	
v	Miscellaneous charges (Transportation of drilling rigs, accomodation for drilling camp, camp setting and winding construction of approach road making)	Lumpsum	2.2.9	Drilling cost less than 50 lakhs. 25% of the drilling cost		₹ 6,25,000.00	
vi	Drill core preservation	per m	5.3	₹ 1,590.00	100	₹ 1,59,000.00	

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vii	Charges for one Sampler per day (1 Party)	one sampler per day	1.2.1b	₹ 7,850.00	21	₹ 1,64,850.00	
viii	Charges for Labour	day	5.8	₹ 556.00	84	₹ 46,704.00	
	Sub Total- E					₹ 37,05,554.00	
F	Laboratory Studies						
1	Chemical Analysis						
i)	Surface Samples+ Trench samples+ BH Core samples						
a	Proximate analysis for graphite	Nos	4.1.18	₹ 3,614.00	150	₹ 5,42,100.00	
b	Proximate analysis for graphite (10% external check)	Nos	4.1.18	₹ 3,614.00	15	₹ 54,210.00	
c	Analysis of one rock/ soil sample for quantitative analysis of 14 REE elements+9 Trace elements (U, Ta, Ge, Be, Hf, Sn, As, Rb, Th) by ICP-MS (sequential technique)	Nos	4.1.15	₹ 7,400.00	10	₹ 74,000.00	
d	Analysis of one rock/ soil sample for quantitative analysis of 14 REE elements+9 Trace elements (U, Ta, Ge, Be, Hf, Sn, As, Rb, Th) by ICP-MS (sequential	Nos	4.1.15	₹ 7,400.00	1	₹ 7,400.00	

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	technique) 10% external check)						
e	Estimation of major oxides by XRF technique (Whole rock analysis)	Nos	4.1.17a	₹ 4,200.00	10	₹ 42,000.00	
f	Estimation of major oxides by XRF technique (Whole rock analysis)10% external check)	Nos	4.1.17a	₹ 4,200.00	1	₹ 4,200.00	
2	Physical & Petrological Studies						
i	Preparation of Standard thin section of rock	Nos	4.3.2	₹ 800.00	10	₹ 8,000.00	
ii	Complete petrographic/ ore microscopic study/ mineragraphic report of rock sample (along with 5 nos. digital photo micrograph)	Nos	4.3.4	₹ 2,800.00	10	₹ 28,000.00	
	Sub Total- F					₹ 7,59,910.00	
	Total A to F					₹ 80,53,834.00	
	Geological Report Preparation		5.2	Total cost exceeding ₹50 lakh but less than 150 lakhs		₹ 2,50,000.00	Reimbursement will be made after submission of the Final Geological Report
	Peer review Charges	As per EC decision		₹ 30,000.00	1	₹ 30,000.00	

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	Preparation of Exploration Proposal (soft copy)	soft copy	5.1	2% of the Cost or Rs. 5 Lakhs whichever is less		₹ 1,61,077.00	
	Total Estimated Cost without GST					₹ 84,94,911.00	
	Provision for GST (18% of L)					₹ 15,29,084.00	GST will be reimbursed as per actual and as per notified prescribed rate
N	Total Estimated Cost with GST					₹ 1,00,23,995.00	
				Rs. In Lakhs		₹ 100.24	
Note							
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.						
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.						
3	If any part of the project is outsourced, the amount will be reimbursed as per Item no. 6 of NMEDT SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.						
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.						
5	Any item of work not mentioned above shall be added as per SoC.						
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.						

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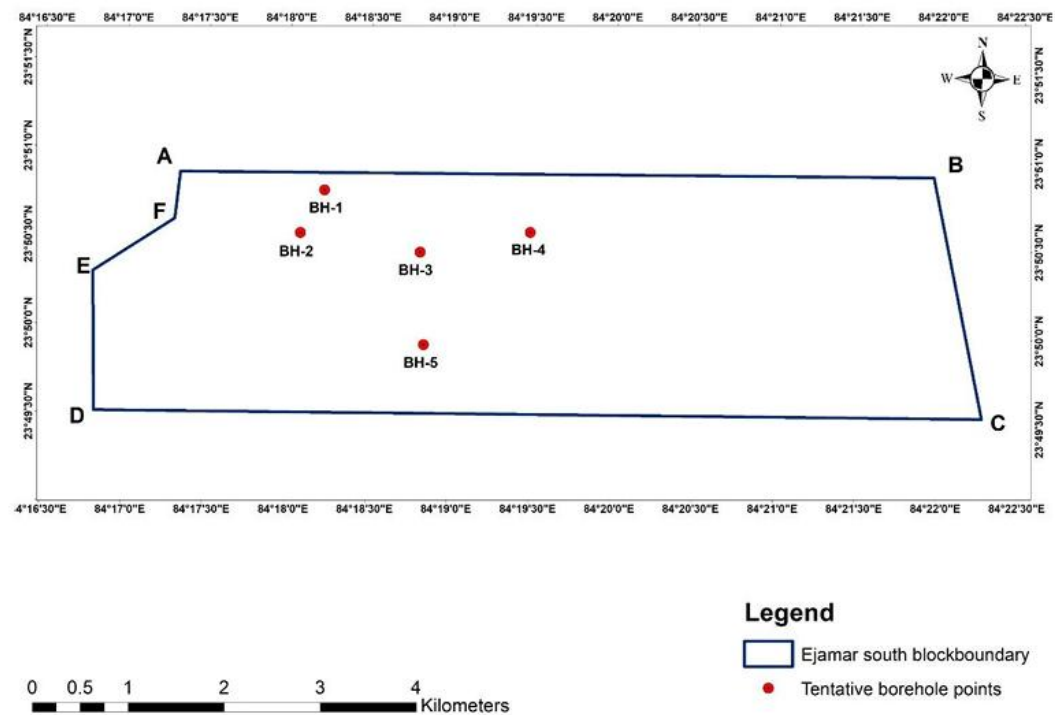
Time Schedule for Reconnaissance Survey (G4) for Graphite in Ejamar South area, Latehar District, Jharkhand

Item of work	Months												
	1	2	3	4	REVIEW	5	6	7	8	REVIEW	9	10	
Camp Setup													
Large Scale Geological Mapping (1:12,500)													
Bed Rock Sampling, Grooveline sampling and trenching													
Chemical analysis of surface samples													
Geophysical SP survey													
Drilling of borehole													
Sampling of drill core samples													
Analysis of drill core samples													
Preparation of draft geological report													
Review by external peer reviewer													
Geological report preparation													

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Tentative Scout Borehole plan for Reconnaissance Survey (G4) for Graphite in Ejamar South area, Latehar District, Jharkhand



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Agenda 36.1.15 Preliminary exploration (G3) for Glauconite and other Critical minerals in Khari Piparwasi block, Sheopur District, Madhya Pradesh

ID- ME/DD/G3/MP/26-27/162

Area: 13.8 sq. km

[Implementing Agency: M/s MMPL Pvt. Ltd]

- a) The proposed block area of 13.8 sq. km for preliminary exploration falls in Survey of India Toposheets no. 54G/5, in parts of Sheopur District, Madhya Pradesh
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	GSI worked on Reconnaissance survey for glauconite and associated mineralization in Agra, Magarda and Dubera area in the parts of T.S. no. 54G/05, Sheopur district, Madhya Pradesh, FS 2023-24. The area is underlain by the Govindgarh Formation of the Rewa Group, comprising quartz arenite, shale, siltstone, calcareous sandstone, arenite and glauconitic/non-glauconitic sandstone. Glauconitic sandstone occurs in massive and laminated forms at several locations, including Dubera, Dhaurera and along the Kunwari River near Surad, where a 3.5 m thick massive glauconitic sandstone zone was recorded. The beds generally trend NE–SW with gentle dips of 3°–5° towards southeast. Geochemical investigations indicate encouraging K ₂ O values of 0.48–6.53% in BRS and dugwell samples, with channel samples showing 2.18–4.65%, trench samples 1.68–3.43%, and PCS samples 0.15–5.86% K ₂ O, supporting the potential for further investigation of glauconite mineralization.
2	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available
5	NMEDT	One G4 exploration block for Glauconite overlaps with the proposed block (Reconnaissance Survey (G4) for Glauconite and associated Mineralization in Dhamini - Piparwasi Simliya Area, Sheopur District, Madhya Pradesh). This block is upgraded from this project carried out by the agency. Forest area constitutes approximately 52% of the total area of the proposed block.

- c) The agency informed the committee that the G4 work identified an approximately 15 km² K₂O-enriched prospective zone with overlapping Li anomalies. A total of 253 samples comprising 150 bedrock, 50 pit and 53 borehole-core samples were analysed; surface K₂O values ranged from 0.70–3.65%, with about 44% of samples ≥1% K₂O and 18% >2% K₂O. Two scout boreholes, DPS-BH01 and DPS-BH02, were drilled to 34 m and 30 m respectively (total 64 m), intersecting glauconitic

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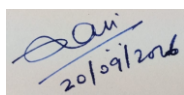
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sandstone horizons and recording K₂O values up to 4.79%; mineralized intervals included zones up to 7 m thickness with average K₂O of about 2.46–2.65%. The G4 investigation further indicated a strong association between K₂O and Li, with Li values reaching 383.9 ppm, while XRD and petrographic studies confirmed glauconite–illite as the principal K₂O-hosting phases. Based on a 2% K₂O cut-off and an average bulk density of 2.545 g/cm³, resource of 15.27 Mt (UNFC 334) was estimated from the two boreholes.

- d) The committee based on the above observations recommended for the 15 boreholes with 750 m drilling quantum at 800x800 m grid with borehole spacing of at least 400 m from the boundary. The plan of boreholes is shown in Annexure 8C. However, the drilling quantum, along with the corresponding sampling and chemical analysis, may be revised during the first review based on the results of geological mapping and sampling.

Recommendations of TCC-II

The Committee recommended the proposal for approval of PSC for “Preliminary exploration (G3) for Glauconite and other Critical minerals in Khari Piparwasi block, Sheopur District, Madhya Pradesh” with an estimated cost of ₹ 144.13/- lakhs (including GST) within time schedule of 12 months for carrying out the proposed work and submission of geological report as per Annexure 8A & 8B. The project will be reviewed after 4 months and 8 months.

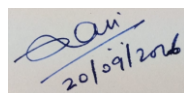


Annexure 8A

**Estimated Cost for Preliminary Exploration (G3) for Glauconite and other Critical Minerals in Khari Piparwasi Block, District: Sheopur,
Madhya Pradesh**

Area: 13.80 sq. km. Total Drilling: 750 m, No. of BH: 15, Timeline: 12 months, Review after: 4 and 8 months

Sl. No	Item Of Work*	Unit*	Rate As Per NMEDT SOC 2025		Estimated Cost of the Proposal		Remarks
			SOC. Item No	Rate As Per SOC* (a)	Qty. (b)	Total Amount (Rs) (a*b)	
A	Large Scale Geological Mapping Other Geological Work & Surveying						
i	Geological mapping (1:4000)	Sq. km	1.1	₹ 18,300.00	13.8	₹ 2,52,540.00	
ii	Charges for Geologist per day (Field) for Geological mapping & Pitting work, drilling activity (without labour)	day	1.2.1a (b)	₹ 14,500.00	120	₹ 17,40,000.00	
iii	Labours charges	day	5.8	₹ 556.00	240	₹ 1,33,440.00	Amount will be reimbursed as per the notified rates by the Central Labour Commissioner or respective State Govt. whichever is higher.
iv	Charges for Geologist per day (HQ)	day	1.2.1a (a)	₹ 10,500.00	45	₹ 4,72,500.00	
v	Charges for one Sampler	one sampler per day	1.2.1b	₹ 7,850.00	38	₹ 2,98,300.00	
vi	Charges for Labour	day	5.8	₹ 556.00	152	₹ 84,512.00	
	Sub Total- A					₹ 29,81,292.00	
B	Survey work						
i	Charges of one qualified surveyor with Total Station for carrying out topographical survey in different	Charges of one Surveyor per day	1.3.1	₹ 10,500.00	30	₹ 3,15,000.00	

	RF and surface contouring at different interval, fixation of borehole and determination of co-ordinates & Reduced Level (RL) of the boreholes with total station etc.						
ii	DGPS Survey for BH fixation & RL determination	Per Point of observation of observation	1.3.2	₹ 24,000.00	20	₹ 4,80,000.00	BH:15 and Cardinal points: 5
iii	Labours Charges for survey work	day	5.8	₹ 556.00	120	₹ 66,720.00	
	Sub Total- C					₹ 8,61,720.00	
D	Drilling (in-house)						
i	Drilling	per m	2.2.1.1c	₹ 5,500.00	750	₹ 41,25,000.00	Drilling to be decided after mapping and analysis of samples. Borehole depth to be justified by presence of mineralization. Unnecessary drilling to be avoided.
ii	Land / Crop Compensation (in case the BH falls in agricultural Land)	per borehole	5.6	₹ 30,000.00	15	₹ 4,50,000.00	
iii	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7	₹ 2,000.00	15	₹ 30,000.00	
iv	Miscellaneous charges (Transportation of drilling rigs, accommodation for drilling camp, camp setting and winding construction of approach road making)		2.2.9	Lumpsum	25% of drilling cost	₹ 10,31,250.00	
v	Borehole plugging by Cement	per borehole	2.2.8	₹ 10,000.00	15	₹ 1,50,000.00	
vi	Drill Core Preservation	per m	5.3	₹ 1,590.00	350	₹ 5,56,500.00	
	Sub Total- E					₹ 63,42,750.00	
E	Laboratory Studies						
1	Chemical Analysis						
	Geochemical Sampling-						

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a	Major oxides (WD XRF)- (oxides+traces -24 elements)	Nos	4.1.17a	₹ 4,200.00	300	₹ 12,60,000.00	
ii)	Check samples (10% External)						
a	Major oxides (WD XRF)- (oxides+traces -24 elements)	Nos	4.1.17a	₹ 4,200.00	30	₹ 1,26,000.00	
2	Physical & Petrological Studies						
i	XRD analysis for identification of minerals (Random)	Nos	4.5.2	₹ 4,000.00	20	₹ 80,000.00	
ii	Preparation of polished thin section of rock	Nos	4.3.2	₹ 800.00	10	₹ 8,000.00	
iii	Complete petrographic/ ore microscopic study/ mineragraphic report of rock sample	Nos	4.3.4	₹ 2,800.00	10	₹ 28,000.00	
iv	Bulk density analysis	Nos	4.8.3	₹ 2,500.00	5	₹ 12,500.00	
	Sub Total- E					₹ 15,14,500.00	
	Total A to E					₹ 1,17,00,262.00	
F	Geological Report Preparation	soft copy	5.2(ii)	Total cost exceeding ₹50 lakh but less than 150 lakhs		₹ 2,50,000.00	Reimbursement will be made after submission of the Final Geological Report soft copy to NMEDT.
G	Peer review Charges	As per EC decision		₹ 30,000.00	1	₹ 30,000.00	
H	Preparation of Exploration Proposal	5 soft copy	5.1	2% of the Cost or Rs. 5 Lakhs whichever is less		₹ 2,34,005.00	
	Total Estimated Cost without GST					₹ 1,22,14,267.00	

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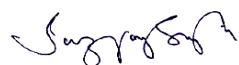
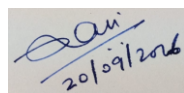
				Provision for GST (18%)	₹ 21,98,568.00	GST will be reimbursed as per actual and as per notified prescribed rate
				<i>Total Estimated Cost with GST</i>	₹ 1,44,12,835.00	
				<i>Rs. In Lakhs</i>	₹ 144.13	
Note						
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.					
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.					
3	If any part of the project is outsourced, the amount will be reimbursed as per Item no. 6 of NMEDT SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.					
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.					
5	Any item of work not mentioned above shall be added as per SoC.					
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.					

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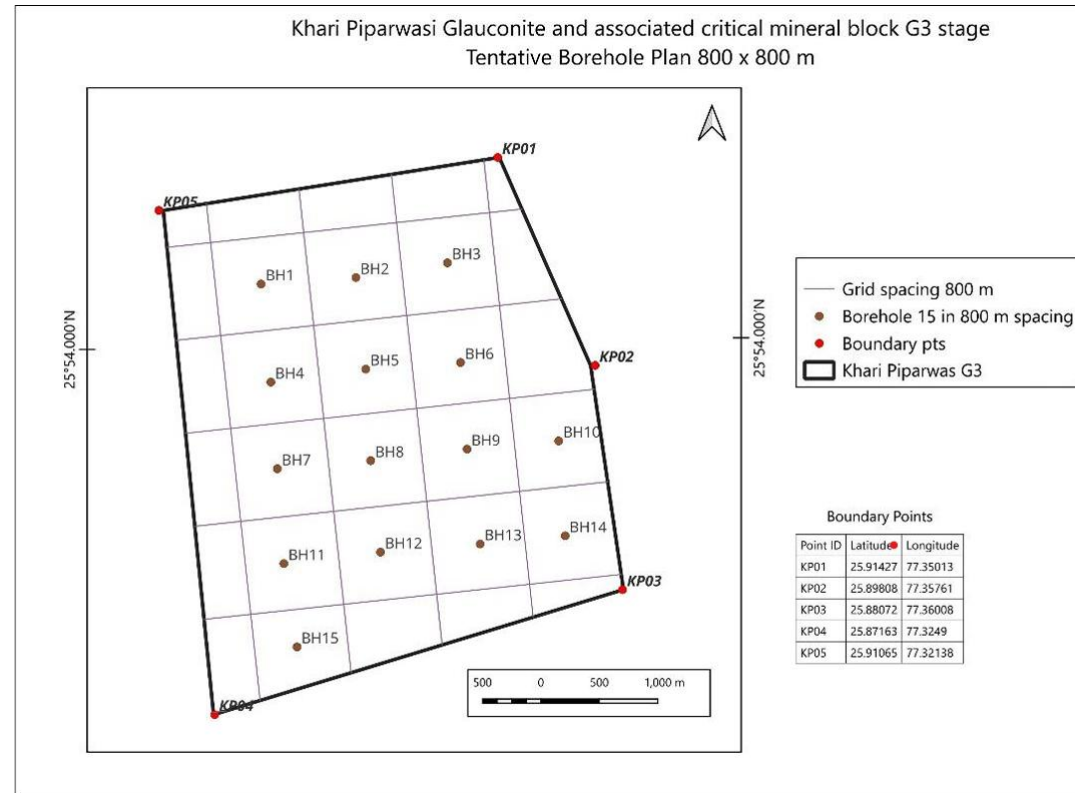
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Time schedule for Preliminary Exploration (G3) for Glauconite and Other Critical Minerals in Khari Piparwasi Block, District: Sheopur, Madhya Pradesh

		Months															
S. No.	Item of work	1	2	3	4	Review	5	6	7	8	Review	9	10	11	12		
1	Camp Setup																
2	Detailed Geological Mapping (1:4,000)																
3	Sampling and analysis of surface samples, P/T samples																
4	Physical & Petrographic study of surface samples, P/T samples																
5	DGPS Survey for BH fixation & RL determination																
6	Systematic drilling																
7	Core sampling and its preparation																
8	Chemical analysis of Core Samples																
9	Physical & Petrographic study of drill core samples																
10	Processing of Analytical data																
11	Preparation of Geological Report																

**Proposed Borehole plan for Preliminary Exploration (G3) for Glauconite and Other Critical Minerals in Khari Piparwasi Block, District: Sheopur,
Madhya Pradesh**



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Agenda 36.1.16 Preliminary exploration for Graphite in North part of Gauthana Tikari block, Betul District, Madhya Pradesh

ID- ME/DD/G3/MP/26-27/185

Area: 1.8 sq. km

[Implementing Agency: M/s Bhushilp Mines and Minerals Pvt Ltd]

- a) The proposed block of 1.8 sq. km area for preliminary exploration falls in Survey of India Toposheets no. 55G/13, in Betul District, Madhya Pradesh
- b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	Investigation for graphite in Tikari, Gauthana, Chiklar and surrounding areas, Betul district, M.P. (Stage-G4, FS: 2012-13). A Report on General Exploration of Graphite in Tikari-Gauthana-Chiklar and surrounding areas, Betul District, M.P (G-2 Stage)
2	AMD	AMD has carried out G4 stage of exploration for uranium in and around the proposed block in different phases. Grab samples analysed up to 0.084% U ₃ O ₈ from the area. A detailed radiometric survey along with geological mapping is being carried out in current field season to explore Metamorphite-type U mineralization around the Gothana-Chiklar sector. AMD does not have baseline / exploration data on the said commodities mentioned. In view of the known potential for uranium in and around the proposed block and future follow up exploration by AMD, the proposed block is not recommended.
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available
5	NMEDT	There is no overlapping with the NMEDT Funded projects

- c) The committee opined that as the current proposed area is being undertaken by AMD for detailed exploration work as per the comments of AMD and asked the agency to wait for the submission of GR by AMD. The committee did not recommend the proposal.

Recommendations of TCC-II

The committee did not recommend the proposal as the proposed block area is under detailed exploration by AMD.

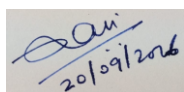
Agenda 36.1.17 Reconnaissance survey (G4) for Nickel and associated minerals around Manpur-Chardiha area in East Singhbhum District, Jharkhand

ID- ME/DD/G4/JH/26-27/141

Area: 40.02 sq. km

[Implementing Agency: M/s Natural Resource Division, Tata Steel Ltd]

- a) The proposed area of 40.02 sq. km for reconnaissance survey falls in Survey of India Toposheets no. 73J/02 and 73J/06, East Singhbhum District, Jharkhand



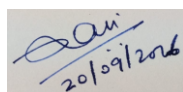
b) The table containing the comments is given below:

S.N.	Agency	Comment
1	GSI	The southern part of the proposed NMET block overlaps by about 20 to 25 % with the ongoing STM investigation of GSI Ranchi, FS 2026-27.
2	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	MECL	no overlapping with the ongoing or completed blocks of MECL.
4	DGM	Not available
5	NMEDT	Recorded forest area is 32% within the proposed block. There are no NMEDT funded blocks overlapping in the proposed area.

- c) The agency informed the committee that the previous GSI investigations include 1991, F.S. 1998–2000, F.S. 2015–16, F.S. 2017–18 and F.S. 2019–20, mainly for gold exploration in the adjoining areas, while GSI/other investigations and published studies have also documented Ni-PGE mineralization, nickel-bearing sulphides and komatiitic bodies in the regional belt. The NGDR baseline data further indicate 13 stream-sediment Ni points ranging from 46–399 ppm, with a pronounced anomaly in the southern part of the block, while 16 gravity stations show Bouguer anomalies of –40 to –22 mGal, with relatively higher gravity coinciding with the high-Ni southern sector.
- d) The agency during field investigation traced komatiite-bearing zones within the meta-ultramafic body and collected 37 BRS, with petro-mineragraphic studies on 9 samples. Of the 28 samples analysed for Ni, 16 (57%) recorded >1,000 ppm Ni, with an average of 1,306 ppm and a maximum of 3,175 ppm; gold and PGE were insignificant in the nine samples analysed. Four nickeliferous zones were delineated with average Ni grades of 2,500 ppm, 1,888 ppm, 2,291 ppm and 1,682 ppm, respectively. Petrographic examination identified pentlandite, millerite and violarite, while Ni/Cr and Ni/Ti ratios indicate fertile komatiitic pathways favourable for sulphide accumulation.
- e) The committee based on the above observations recommended for the 4 scout boreholes with 500 m drilling quantum with borehole. The plan of boreholes is shown in Annexure 9C. However, the drilling quantum, along with the corresponding sampling and chemical analysis, may be revised during the first review based on the results of geological mapping and sampling.

Recommendations of TCC-II

The Committee recommended the proposal for approval of PSC for “Reconnaissance survey (G4) for Nickel and associated minerals around Manpur-Chardiha area in East Singhbhum District, Jharkhand” with an estimated cost of ₹ 146.99/- lakhs (including GST) within time schedule of 10 months for carrying out the proposed

work and submission of geological report as per Annexure 9A & 9B. The project will be reviewed after 4 months and 8 months.

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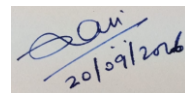
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Annexure 9A

Estimated Cost for Reconnaissance Survey (G4) for Nickel and associated minerals in Manpur-Chardiha Area, East Singhbhum District, Jharkhand

Total Area: 40.02 sq. km, Total Drilling Meterage: 500 m, No. of BH: 4, Timeline duration:10 months, Review after: 4 and 8 months

Sl. No	Item of Work	Unit	Per Unit Cost as per SOC (2025-26)		Estimated Cost of the Proposal		Remarks
			SoC Item Sl. No	Rates as per SoC (Rs)	Quantity	Amount (Rs.)	
A	Geological Mapping						
1	Geological Mapping (1:12,500 scale)-LSM	Sq. Km	1.1	18300	40.02	732366	
2	Geologist	Mandays	1.2.1a(b)	14500	120	1740000	
3	Geologist HQ	Mandays	1.2.1a(a)	10500	45	472500	
4	Labour charges (for sample collection, packaging, carrying)	Mandays	5.8	556	240	133440	
5	Charges for one sampler per day (for sample preparation)	Mandays	1.2.1b	7850	42	329700	
6	Labour charges (for sample preparation)	Mandays	5.8	556	168	93408	
7	Fixation of borehole	Per Point Observation	1.3.2	24000	4	96000	
	Sub Total - A					3597414	
B	Mineral Investigation						
1	Pitting	per cu m	2.1.2	4725	100	472500	
2	Drilling in hard rock (Outsourced)	per m	2.2.1 1d	10000	500	5000000	Drilling to be decided after mapping, GP survey and analysis of samples. Borehole depth to be justified by presence of mineralization.

							Unnecessary drilling to be avoided.
3	Borehole pillaring	per borehole	2.2.7	2000	4	8000	
4	Borehole plugging by cement	Lump sum	2.2.8	10000	4	40000	
5	Land/ Crop compensation	per borehole	5.6	30000	4	120000	Amount will be reimbursed as per actuals or max. Rs. 30000 per BH with certification from local authorities.
6	Drill core preservation	per m	5.3	1590	150	238500	one full core + skeletonized part of mineralization
	Sub Total - B					5879000	
C	Geophysical Survey						
1	Magnetic Survey (Outsourced)	Per station	3.2 a	1800	250	450000	
	Sub Total - C					450000	
D	Laboratory Studies						
1	Rapid geochemical analysis by AAS method	Per sample	4.1.8a First five radicals	2506	300	751800	
2	External 10% Check	Per sample	4.1.8a First five radicals	2506	30	75180	
3	Major oxides (WD XRF) - (oxides + trace-24 elements)	Per sample	4.1.17a	4200	10	42000	
4	External 10% Check	Per sample	4.1.17a	4200	1	4200	
5	For PGE (ICP-MS-NS Fire assay technique)	Per sample	4.1.16e	13600	20	272000	
6	External 10% Check	Per sample	4.1.16e	13600	2	27200	
7	Gold Analysis by AAS method (MIBK Method)	Per sample	4.1.7	1700	5	8500	
	Sub Total - D					1180880	

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E	Physical and Petrographic Studies						
1	Preparation of polished thin section of rock/ wafer	Per sample	4.3.2	800	20	16000	
2	Complete petrographic/ ore microscopic study/mineragraphic report of rock sample (along with 5 nos. digital photo micrographs)	Per sample	4.3.4	2800	20	56000	
3	EPMA Studies per hour	Per sample	4.4.1	10500	10	105000	
	Sub Total - E					177000	
	TOTAL APPROVED COST (A-E)					11284294	
	Total Outsourced Components					5450000	
4	Tendering Process Cost		5.9	2% of the approved project cost or 5 Lakh whichever is lower will be paid one time		109000	
5	Technical supervision cost		6.0	Technical Supervision cost shall be 10% of the sum of all the outsourced work components with a maximum ceiling of ₹ 20 lakh.		545000	
	Total					11938294	
6	Preparation of exploration proposal		5.1	2% of approved project cost or 5 lakh whichever is lower		238765.88	
7	Geological report preparation		5.2 (ii)	Total cost exceeding ₹50 lakh but less than 150 lakh:		250000	
8	Peer Review					30000	
	Total Estimated Cost without GST					12457060	

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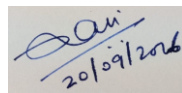
I	Provision for GST (18%)					2242271	
J	Total Estimated Cost with GST					14699331	
K	Total Estimated Cost with GST (in Lacs)					146.99	
Note							
1	Strict adherence to the Ministry of Finance's and GFR guidelines is mandatory. Every transaction must adhere to GFR rule 21.						
2	In case of delay/non- performance, the appropriate action will be taken by competent authority against delinquent agency as per prevailing govt. of India rules/guidelines on procurement.						
3	If any part of the project is outsourced, the amount will be reimbursed as per Item no. 6 of NMEDT SoC. In case of execution of the project by NEA on its own, a Certificate regarding non outsourcing of any component/project is required.						
4	Necessary efforts should be made to minimize any adverse impact on the environment during exploration activities.						
5	Any item of work not mentioned above shall be added as per SoC.						
6	All the Geological Reports and data are to be uploaded on NGDR as per MERT template by the agency.						

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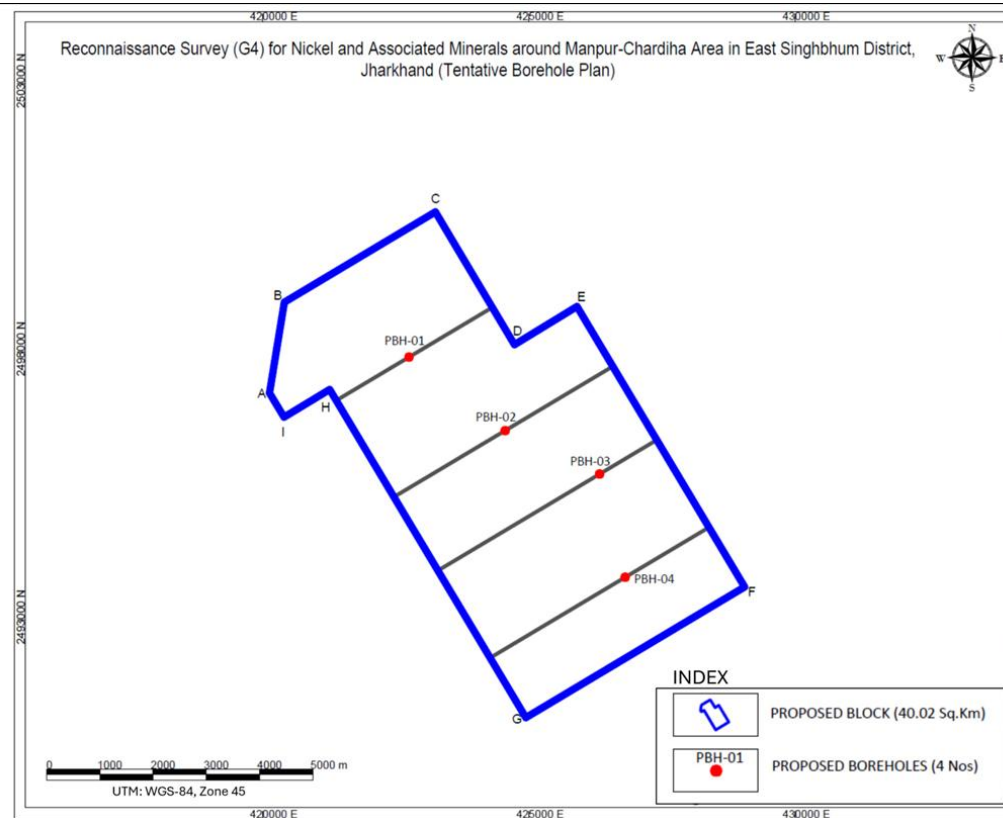
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Time Schedule for Reconnaissance Survey (G4) for Nickel and Associated Minerals in the Manpur-Chardiha Area, East Singhbhum District, Jharkhand

Sl. No.	Particulars	M1	M2	M3	M4	Review	M5	M6	M7	M8	Review	M9	M10
1	Geological Mapping, Sampling												
2	Sample Analysis (BRS & Pit)												
3	Pitting												
4	Magnetic Survey												
5	Scout drilling												
6	Borehole Pillaring												
7	Sampling and Chemical Analysis of Drill Core Samples												
8	Petromineragraphy & EPMA												
9	Report Writing with Peer Review												
10	Final Review and Report Submission in NGDR portal												

Tentative Scout boreholes plan for Reconnaissance Survey (G4) for Nickel and Associated Minerals in the Manpur-Chardiha Area, East Singhbhum District, Jharkhand



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36.2 Review of Ongoing Projects/ Completed Project & Timeline Extension

Agenda 36.2.1 Preliminary exploration (G3) for PGE, Gold and basemetal in Timkitola block, Balaghat District, Madhya Pradesh

[Implementing Agency: M/s Gemcokati Exploration Pvt. Ltd]

- a) The project was recommended in 13th TCC meeting held on 22nd, 23rd, 24th September 2025 and approved in the 2nd PSC Meeting held on 4th November 2025 with approved cost of ₹ 212.60 Lakhs with sanctioned date 06.03.2026 and time period of 12 months till 5.3.2027.
- b) In the 19th TCC-II meeting the committee opined that drilling in 6 boreholes (3 x 90m Vertical + 3 x 150m inclined) with total 720m depth will be decided after first review of detail mapping and geophysical survey work. Review will be done after 5 months & 10 months.
- c) The agency informed the committee that they have not started the exploration work till date. The agency informed the committee it had applied for forest permission on 4.5.2026, visited forest office Bhopal dated 1.6.2026, paid charges with reference to notice dated 5.6.2026. Forest inspection report was submitted on 8.7.2026. The forest permission was pending at nodal officer till 18.8.2026.
- d) The committee considering the above facts suggested the agency to expedite in getting forest permission so that the work could be initiated as soon as possible without further delay.

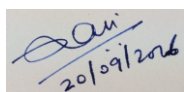
Recommendations of TCC-II

The Committee advised the agency to get the forest permission and initiate the exploration work as soon as possible.

Agenda 36.2.2 Preliminary Exploration (G3) for Bauxite in Ran Block, Dev Bhumi Dwarka District, Gujarat

[Implementing Agency: M/s Gemcokati Exploration Pvt. Ltd]

- a) The project was recommended in 12th meeting of TCC-II held on 22nd, 25th, 26th August 2025 and additional session on 27th August 2025 and approved in the 1st PSC Meeting held on 9th October 2025. The Sanction Order was issued on 10th November 2025 for scheduled timeline of 12 months up to 9th November 2026 with approved cost of ₹ 115.76/- Lakh (including GST). The item will be reviewed after 5 months. Total 16 boreholes planned, each with 30 m depth. In Phase-I, 4 boreholes (30 m each), Phase-II, 12 boreholes (30 m each) at spacing of 800m x 800m. Subsequent drilling will be after review of outcome of Phase-I boreholes.
- b) During 27th TCC-II meeting the Agency informed that geological mapping covering an area of 7.87 sq. km at a 1:2000 scale has been completed. Additionally, 87 m of drilling has been carried out across 4 boreholes, from which 19 core samples have been collected. After detailed deliberation on the agency's presentation on geological mapping and drilling carried out across four boreholes, the Committee approved proceeding with further drilling in boreholes 9, 10, and 11. Lithology wise resource to be estimated.



- c) In the present meeting the agency informed the committee that the out of 3 boreholes 9, 10 and 11, the agency was able to complete only 2 borehole 10 and 11 and borehole 9 could not be initiated due to local issue. The agency further informed out of the approved drilling quantum of 480 m for 16 boreholes @ 30 m the agency has completed drilling in 6 boreholes with total quantum of 146 meters. The agency requested for the cost revision as further no work could be carried out due to local agitation in the project area.
- d) The committee asked the agency to show the lithologs of the drilled boreholes 10 and 11. The committee observed that the agency had continued drilling in borehole 10 and 11 in the basalt for 16.1 m and 26 m respectively. The committee showed displeasure over misuse of drilling quantum.
- e) The committee considering the above facts asked the agency to submit the justification in regard to drilling in boreholes 10 and 11. The committee further suggest the agency to get the letter from the CGM, Gujarat that no further exploration work could be carried out in the current block area due to local agitation issue.
- f) The committee deferred the review to upcoming TCC subject to availability of justification and letter from CGM, Gujarat from the agency.

Recommendations of TCC-II

The committee deferred the proposal to upcoming TCC meeting subject to availability of justification and letter from CGM Gujarat.

Agenda 36.2.3 Preliminary Exploration (G3) for Vanadium, Graphite, Barium and other associated minerals in Chaura-Maunkanda block, Champawat District Uttarakhand

[Implementing Agency: M/s Ocean Drilling and Exploration Private Limited]

- a) The proposed Preliminary Exploration block, covering an area of 3.59 sq. km, falls under Survey of India Toposheet Nos. 62C/3 and 530/15 and is located in Champawat District, Uttarakhand. In-principal approval for the proposal was accorded in the 12th TCC-II meeting held on 22nd, 25th, 26th and 27th August 2025.
- b) Subsequently, the project was recommended in the 14th TCC-II meeting held on 7th and 8th October 2025 and placed before the 2nd PSC meeting held on 4th November 2025. However, the PSC deferred the proposal as, based on the manpower details furnished by QCI-NABET, the agency had only two geologists and one TAE. Considering the requirement of two geologists per project, the agency could undertake only one project at a time. Since one project was already ongoing, the agency did not have adequate manpower to undertake the proposed project.
- c) The project was subsequently recommended in the 20th TCC meeting held on 2nd and 5th January 2026 and was approved in the 4th PSC meeting held on 13th January 2026 with approved cost ₹ 75.66 Lakhs and sanctioned date 2.2.2026. The approved project has a total time schedule of 15 months with completion date 1.5.2027 for completion of the exploration work and submission of the final report.

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- d) The agency informed the committee that it has completed geological mapping, topography survey, completed 120 m trenching out of 200 m approved quantum, WD-XRF analysis. The agency informed the committee about the WD-XRF analysis results of 20 Trench samples with values of V (194.71-2726) ppm barium in the range (1119.86-5483) ppm. Proximate analysis of 60 samples has resulted in avg. FC value 1.48 %. The agency informed the committee they have mapped 6 bands of carbon phyllite. The agency further informed that they have completed SP survey of 12 L km. The agency requested for the approval of initiation of boreholes throughout the mapped bands.
- e) The committee observed that there was poor correlation between the mapped bands and the SP survey results. The committee asked the agency for the outcrop map which was not available with agency. The committee further observed that some results of geochemical analysis were pending. The committee advised the agency to show Raman spectrometry results whether graphite is amorphous / crystalline.
- f) The committee based on the available data suggest the agency to carryout drilling on the central and southern mapped bands where SP anomaly correlates with the mapped bands. The committee allowed for drilling in 5 boreholes with spacing of 200 m, 2 boreholes in the central band, 3 in the southern band covering the SP anomaly and take average depth based on RL.
- g) The committee further asked the agency to come up with outcrop map with channel and trench samples values plotted and prepare a final interpreted geological map in next review.

Recommendations of TCC-II

The committee agreed for the drilling in 5 boreholes based on the integrated geological and geophysical results and advised the agency to come up with outcrop map with channel and trench samples values plotted and prepare a final interpreted geological map in next review and show the results of drilled boreholes.

Agenda 36.2.4 Preliminary Exploration (G3) for Rare Earth Elements and associated mineralization in North of Kuship Block, Balotra District, Rajasthan

[Implementing Agency: M/s Ocean Drilling and Exploration Private Limited]

- a) The proposed exploration block of 2.296 sq. km. area falls in Survey of India Toposheet numbers 45C/06 in parts of Barmer district, Rajasthan.
- b) The project was recommended in the 11th TCC meeting held on 23rd, 24th and 25th July 2025, with an additional session on 30th July 2025. However, the project was not approved in the 1st PSC meeting held on 9th October 2025. Subsequently, the project was considered in the 89th TCC meeting held on 30th and 31st January 2026 for recasting of the cost as per the revised SoC, 2025. The project was thereafter approved in the 5th PSC meeting held on 9th February 2026 with approved cost of ₹ 684.79 lakhs, sanctioned date 6.3.2026, time period of 12 months up to 5.3.2027.
- c) The agency informed the committee The agency has completed 1:2,000-scale geological mapping over 2.3 sq. km, DGPS survey at 35 points and 50 cu. m of trenching. Drilling has progressed to 510 m through four boreholes, against the

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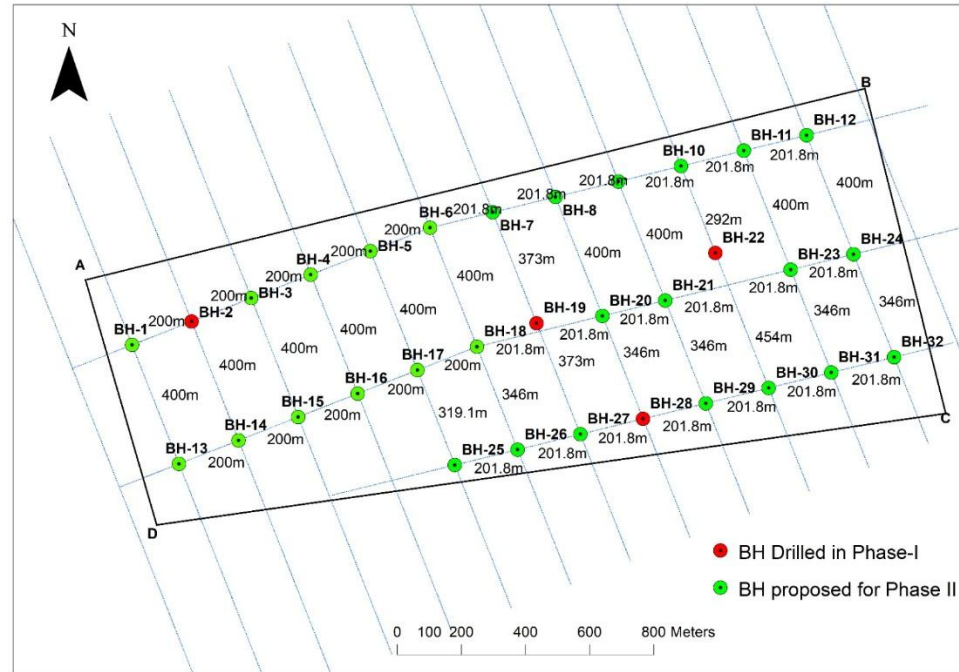
approved 3,650 m, and 285 primary samples comprising BRS, channel, trench and core samples have been analysed along with 29 internal check samples. Petrochemical analysis of 30 samples by XRF has also been completed. The analytical results obtained by the agency indicate encouraging and significant REE+Y enrichment within the rhyolitic sequence. Bedrock samples recorded Σ REE+Y values of 21.83–4,358.37 ppm, with an average of 1,260.55 ppm; 13 samples exceeded 2,000 ppm and 8 samples exceeded 2,500 ppm. Trench samples also returned elevated values, reaching 2,018.44 ppm Σ REE+Y.

- d) The drilling results of Phase-I further confirmed REE+Y enrichment at depth, with maximum values of 4,877.60 ppm in borehole ORSNK-02, 3,460.36 ppm in ORSNK-19, 2,777 ppm in ORSNK-22, and 3,023.10 ppm in ORSNK-28. The corresponding average Σ REE+Y values were 1,703.47, 1,096.46, 1,451.14 and 1,500.68 ppm, respectively. Based on the above analysis results the agency requested for approval of Phase-II boreholes, 24 in numbers.
- e) The committee observed that the agency has drilled 4 boreholes with total drilling quantum of 510 m out of approved quantum of 3650 m for 31 boreholes. The agency had drilled these boreholes based on remarks in 89th TCC-I but did not take approval from TCC regarding the drilled borehole locations.
- f) The committee based on the encouraging results in surface analysis and drilled boreholes agreed for the drilling in Phase-II of remaining 27 boreholes with grid spacing of 200x400 m approximately (Annexure 10). The committee further advised the agency to start drilling from the western side and submit the results of drilling after 1 month for review in upcoming TCC-II. The borehole BH-32 is not recommended by the TCC during the meeting. Only 31 boreholes with drilling quantum of 3650 m were approved. The approved borehole plan is tentative and may change based on the outcome of drilled boreholes results. The committee further advised the agency that the drilling to be justified by presence of mineralization. Unnecessary drilling to be avoided.

Recommendations of TCC-II

The committee agreed for the drilling in Phase-II of remaining 27 boreholes with grid spacing of 200x400 m approximately. The committee further advised the agency to start drilling from the western side and submit the results of drilling after 1 month for review in upcoming TCC-II. The approved borehole plan is tentative and may change based on the outcome of drilled boreholes results. The committee further advised the agency that the drilling to be justified by presence of mineralization. Unnecessary drilling to be avoided.

Tentative Phase-II Borehole plan for Preliminary Exploration (G3) for Rare Earth Elements and associated mineralization in North of Kuship Block, Balotra District, Rajasthan



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Agenda 36.2.5 Preliminary exploration (G3) for Graphite in the Patra graphite block, Jhabua district, Madhya Pradesh.

[Implementing Agency: MPSMC]

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Agenda 36.2.6 Preliminary exploration (G3) for PGE and Associated mineral in Mordongri-Jamtara Block in Chhindwara district, Madhya Pradesh.

[Implementing Agency: MPSMC]

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Agenda 36.2.7 Reconnaissance survey (G4) for Phosphorite in Bijawar-Imiliya block, Chhatarpur district, Madhya Pradesh

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[Implementing Agency: MPSMC]

Agenda 36.2.8 Reconnaissance survey (G4) for REE and Associated Minerals in Saiyedpar area, Kachchh District, Gujarat.

[Implementing Agency: MECL]

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Agenda 36.2.9 Reconnaissance survey (G4) for REE and Associated Minerals in Nokhaniya area, Kachchh District, Gujarat

[Implementing Agency: MECL]

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Agenda 36.2.10 Reconnaissance Survey (G4) for REE, Glauconite and Associated Minerals in Devpur area, Kachchh District, Gujarat

[Implementing Agency: MECL]

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Agenda 36.2.11 Reconnaissance survey (G4) for REE, RM, Glauconite and Phosphorite in Devisar area, Kachchh District, Gujarat

[Implementing Agency: MECL]

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Agenda 36.2.12 Reconnaissance survey (G4) for REE and Associated Minerals in Pipargaon area, West Karbi Anglong District, Assam.

[Implementing Agency: MECL]

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Agenda 36.2.13 Reconnaissance survey (G4) for Gold and Associated Minerals in Parma area, Singrauli District, Madhya Pradesh

[Implementing Agency: MECL]

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Agenda 36.2.14 Preliminary exploration (G3) for Aluminous Laterite, Vanadium and Associated Minerals in Kallar block, Kasaragod District, Kerala

[Implementing Agency: MECL]

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Agenda 36.2.15 Reconnaissance Survey (G4) for Graphite and associated Minerals in Mankota North Area, District: Upper Siang, Arunachal Pradesh

[Implementing Agency: M/s Eartnenviro Lab Pvt. Ltd.]

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Agenda 36.2.16 Reconnaissance Survey, G-4 Exploration for Graphite in Phandka Ghatakhera Area, Betul District, Madhya Pradesh

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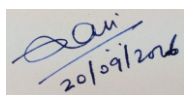
[Implementing Agency: M/s Vardan Environet LLP]

a) Agenda No. 36.2.5 to 36.2.16 deferred to 104th TCC-I meeting.

Agenda 36.2.17 Preliminary exploration (G-3) for Magnetite and associated minerals in Pipradih Area , District: Giridih, State: Jharkhand

[Implementing Agency: CMPDIL]

- a) The project was recommended during the 52nd TCC meeting held on 27th and 28th April, 2023 and was subsequently approved in the 38th EC Meeting held on 29th November 2024. The sanction order was issued on 13th December, 2024 with a project duration of 8 months, up to 12th August, 2025, at an approved cost of ₹147.25/- lakhs (including GST). The project's progress was reviewed during the 12th TCC-II meeting held on 22nd, 25th, 26th, and 27th August, 2025. Based on the Agency's request, the Committee recommended a timeline extension of 4.5 months, up to 31st December, 2025, which was subsequently approved in the 1st Project Sanctioning Committee (PSC) meeting held on 9th October, 2025. The project was reviewed again during the 19th TCC-II meeting held on 16th and 17th December, 2025. The Committee recommended a further timeline extension of 3 months, up to 31st March 2026, for approval by the PSC. It also recommended the engagement of one additional labourer per party day and provision for five mineragraphic study samples, involving an additional expenditure of ₹80,440, thereby revising the project cost to ₹148.27 lakh (including GST). These recommendations were approved during the 4th PSC meeting held on 13th January 2026.
- b) During the project review in 25th TCC-II meeting held on 17th and 18th March, 2026 the Committee recommended timeline extension of 4 months up to 31st July, 2026 for submission of the GR which was approved in 7th PSC meeting held on 27th March, 2026.



- c) In the 32nd TCC-II meeting CMPDI informed that only borehole SPPM-3 encountered economically significant magnetite ore zones, however, elevated concentrations of Cu, Pb, Zn were detected in several borehole core samples. Apart from these, elevated concentrations of Co, Mo, W & Bi were also observed. Co up to 153ppm, Mo up to 411 ppm, W up to 356 ppm & Bi up to 5917ppm were recorded. The agency informed the committee they have achieved the drilling of 243 m against the approved quantum of 400m. The agency informed the committee that it will revise the final cost at the time of GR submission. It requested peer review of the final geological report and timeline extension of one month up to 31st August 2026. The Committee agreed for Peer Review of the final geological report and suggested the agency to estimate resources of W, Co & magnetite separately after confirming threshold values, correlate mineralised zones among drilled BHs.
- d) In the present meeting the agency requested for timeline extension up to 15.9.2026 for final submission of Geological Report.

Recommendations of TCC-II

The committee recommended for the timeline extension up to 15.9.2026 for the final submission of Geological Report.

36.3 Technical Evaluation for In-Principle Approval

Agenda 36.3.1 Preliminary exploration (G3) of REE & Associated Mineralization West of Nakoda, Tehsil- Pachpadra, District - Balotra, Rajasthan.

ID: ME/IN/G3/RJ/P/26-27/188

Area: 2.30 sq. km

[Implementing Agency: M/s Vibrant Techno Lab Private Limited]

- a) Agenda No. 36.3.1 deferred to 104th TCC-I meeting.**

Agenda 36.3.2 Preliminary exploration (G3) for Bauxite, Titanium, Vanadium and associated critical minerals in Kothi block, Gumla District, Jharkhand.

ID: ME/IN/G3/JH/P/26-27/148

Area: 9 sq. km

[Implementing Agency: M/s MMPL Pvt. Ltd]

- a) The proposed area of 9 sq. km for preliminary exploration falls in Survey of India Toposheets no. 73A/04, in parts Gumla District, Jharkhand.**
- b) The table containing the comments is given below:**

S.N.	Agency	Comment
1	GSI	Upgradation will be based on GSI work only where anomalous GCM values have been indicated (NGCM by Tirkey and Mishra et

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		al.) GSI, Ranchi has taken two projects in the adjacent area for implementation during FS 2027-28.
2	AMD	AMD has not carried out any exploration / reconnaissance project in the proposed block, previously. There is no ongoing exploration / reconnaissance project. AMD does not have baseline / exploration data on the commodity mentioned.
3	MECL	No overlapping with the ongoing or completed blocks of MECL.
4	DGM	The proposal submitted by the agency is for a G4-level Reconnaissance Survey, whereas the background/reference information in the proposal mentions G3-level exploration. This contradiction needs to be examined carefully. It is also noted that similar cases are being considered in other proposals. The proposal itself states that "The proposed block has not yet been evaluated through systematic geological mapping, trenching and drilling." Therefore, it appears inappropriate to submit a G3-level proposal without first carrying out systematic exploration to establish the availability of Bauxite, Titanium, Vanadium and Associated Critical Minerals in the area. It is therefore suggested that the proposal should be reviewed before sanction, particularly because a substantial amount of expenditure is involved in such projects.
5	NMEDT	NMEDT funded blocks are not present near the proposed block in NGDR. MMPL –newly proposed Asapani block is present near this block and their buffer zone overlap with each other.

- c) This project was discussed in 34th TCC-II (9 sq. km) in which the Committee deferred the proposal for written comments of DGM, Jharkhand.
- d) The committee observed based on comments of DGM Jharkhand that the G3 proposal lack supportive geological evidence as there was no G4 stage of exploration was done in the area.

Recommendations of TCC-II

The Committee did not accord in-principle approval to the proposal based on the comments of DGM Jharkhand.

Agenda 36.3.3 Reconnaissance survey (G4) for Au-Cu-Ni in Dongripali area, Districts Mahasumund and BalodaBazar, Chhattisgarh ID: ME/IN/G4/CT/P/26-27/202

Area: 5.13 sq. km

[Implementing Agency: M/s ReVal Consulting Private Limited]

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Agenda 36.3.4 Reconnaissance survey (G4) for TiO₂, Cu, REE & associated Mineralization in Jaled and Sehada areas, Chatra District, Jharkhand

ID: ME/IN/G4/JH/P/26-27/203

Area: 50 sq. km

[Implementing Agency: M/s Wattfin Ventures Private Limited]

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Agenda 36.3.5 Reconnaissance survey (G4) for Vanadium, Scandium and Titanium bearing Aluminous Laterite of Ghodepalli area, Bidar District, Karnataka

ID: ME/IN/G4/KA/P/26-27/232

Area: 39 sq. km

[Implementing Agency: M/s GMMCO Technology Services Ltd]

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Agenda 36.3.6 Reconnaissance survey (G4) for Graphite, Vanadium, Barium and associated mineral in Kanra-Udiyari area, Almora District, Uttarakhand

ID: ME/IN/G4/UK/P/26-27/180

Area: 50 sq. km

[Implementing Agency: M/s Ocean Drilling and Exploration Private Limited]

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Agenda 36.3.7 Reconnaissance survey (G4) for Titanium and Vanadium bearing magnetite in Rangamatia-Betei A & B Blocks, Balasore district, Odisha.

ID: ME/IN/G4/OD/P/26-27/236

Area: 26 sq km

[Implementing Agency: M/s Gemcokati Exploration Pvt. Ltd]

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Agenda 36.3.8 Reconnaissance Survey (G4) for Nickel and Gold in Hatikholia Brahmihuli A & B Blocks, Balasore district, Odisha.

ID: ME/IN/G4/OD/P/26-27/235

Area: 26 sq. km

[Implementing Agency: M/s Gemcokati Exploration Pvt. Ltd]

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Agenda 36.3.9 Preliminary exploration (G3) for Aluminous Laterite, Vanadium, Titanium, Gallium and Associated Minerals in Yalgul block, Sangareddy District, Telangana

ID: ME/IN/G3/TG/P/26-27/193

Area: 6.81 sq. km

[Implementing Agency: M/s Critical Mineral Trackers]

Agenda 36.3.10 Reconnaissance survey (G4) for Limestone, in parts of Jampui Hills, Jampui block, North Tripura District, Tripura
ID: ME/IN/G4/TR/P/26-27/194
Area: 146 sq. km

[Implementing Agency: M/s Critical Mineral Trackers]

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Agenda 36.3.11 Reconnaissance survey (G4) for Vanadium, Barium and associated minerals around Arnehar & Suhara, District Mandi, Himachal Pradesh

ID: ME/IN/G4/HP/P/26-27/206

Area: 27.7 sq. km

[Implementing Agency: M/s Enkay Enviro Services Private Limited]

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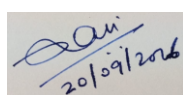
Agenda 36.3.12 Reconnaissance Survey (G4) for Graphite and associated mineralisation in Dharakhoh area, Betul District Madhya Pradesh

ID: ME/IN/G4/MP/P/26-27/204

Area: 8.38 sq. km

[Implementing Agency: M/s Vardan Environet LLP]

b) Agenda No. 36.3.3 to 36.3.12 deferred to 104th TCC-I meeting.



List of participants attended 36th meeting of Technical-cum-Cost Committee - II (TCC - II) of NMEDT held on 8th and 9th September, 2026 through video conferencing mode

Annexure 1					
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14	Dr. Suman Krishna Sit	VP			MMPL Pvt. Ltd.
15	Mr. Sourabh Sarkar	General Manager			MMPL Pvt. Ltd.
16	Mrs. Moulipriya Bhakta	Dy. Manager			MMPL Pvt. Ltd.
17	Mr. Subhajit Chakraborty	Geologist			MMPL Pvt. Ltd.
18	Mr. Saswat Subedit	Dy. Manager			MMPL Pvt. Ltd.
19	Mr. Sayamantak Pal	Geologist			MMPL Pvt. Ltd.
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