

Annexure-I

To,
The Director & HOD
National Mineral Exploration Trust
Ministry of Mines,
New Delhi -110 001.

CMT/NMET/G4-011/2024
10th February 2025

Madam/ Sir,

Sub: Re-submission of revised “PROPOSAL FOR EXPLORATION FOR NICKEL, COBALT AND PGE IN BOTAD BLOCK, BOTAD DIST., GUJARAT STATE, RECONNAISSANCE SURVEY (G4 STAGE) UNDER NMET”.

Ref: Recommendations of 5th TCC-II held on 27th & 28th January, 2025

Additional agenda item 5.1.16, dated 27.1.2025

1. Mail dated 11.11.2024 from the CGM Gujarat duly allotting four blocks along with NOC.
Copy Enclosed
2. CMT - Allocation of Technical Team to the Gujarat Blocks & Proposed pre-field visit and to collect samples Copy Enclosed.

The CGM Gujarat duly allotted the Botad Picrite Basalt Block for Ni - Co - PGE for G4 studies through Mail dated 11.11.2024. Accordingly CMT Carried out pre-field survey and collected samples. *During 5th TCC-II meeting held on 27th & 28th January, it is observed that there was an overlapping issue with GSI block, hence the Committee has advised CMT to submit a revised proposal excluding the overlap area. Accordingly CMT has revised and reduced the study area from 224Sq.km to 99.6Sq.km and excluded the overlap area.*

We are hereby submitting the **Revised Proposal with DPR** and the Budget to TCC-II to NMET under the ‘Scheme for Engagement of Notified Private Exploration Agencies in Mineral Exploration directly through National Mineral Exploration Trust issued by Ministry of Mines Vide OM No. F.No. 6/3/2015-NMET/176 dt.27th June 2024.

Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



1. Name and Address of the Applicant

a.	Name:	Critical Mineral Trackers
b.	Name of the Authorized Signatory	Rama Murthy Soma
c.	Postal address:	#406, Concourse Building, Opp Lal Bungalow, Ameerpet, Hyderabad, Pin Code – 500016. And CMT Geo Solution center, No E5, 3 rd Floor, Technology Research park, Indian Institute of Technology, Hyderabad Kandi, Sanga Reddy – 502 284
d.	Telephone Number Office:	+914031531932
e.	Fax number (Office:	Nil
f.	Mobile No.:	Sri. Rama Murthy Soma +91 9490685131 Sri. Uma Maheswara Rao S +91 7993935619
g.	Telephone Number (Residence):	Nil
h.	E-Mail address:	criticalmineraltrackers@gmail.com director.ops@criticalmineraltrackers.co.in enquiry@criticalmineraltrackers.co.in

2. Details of Accreditation as Private Exploration Agency and Notification under the proviso to section 4 (1) of the MMDR Act.

a.	Date of Accreditation granted by QCI - NABET	May 20,2024
b.	Date of Expiry of Accreditation	May 15,2027
c.	Date of Notification Under the Proviso to section 4(1) of the MMDR Act	SONO 2379(E) 20.06.2024
d.	Date of Expiry of Notification	19.06.2027
e.	Category of the Exploration Agency (Category A Or B) under Notification	A

3. Location Details of the Area Proposed

a.	State	GUJARAT															
b.	District(S)/Taluk(s) Blocks	BOTAD															
c.	Nearby village(S)	Botad, Hadadad, Targhara, Senthali															
d.	Survey of India (SOI) Toposheet(s) No.	41N/12 & 41N/16															
e.	Area in sq.km	99.6 Sq.km (Say 100 Sq.km)															
f.	Boundary coordinates of the proposal block (in Decimal degree)	<table> <tr> <th>Point</th><th>Long</th><th>Lat</th></tr> <tr> <td>A</td><td>71.710°</td><td>22.224°</td></tr> <tr> <td>B</td><td>71.762°</td><td>22.185°</td></tr> <tr> <td>C</td><td>71.701°</td><td>22.081°</td></tr> <tr> <td>D</td><td>71.646°</td><td>22.118°</td></tr> </table>	Point	Long	Lat	A	71.710°	22.224°	B	71.762°	22.185°	C	71.701°	22.081°	D	71.646°	22.118°
Point	Long	Lat															
A	71.710°	22.224°															
B	71.762°	22.185°															
C	71.701°	22.081°															
D	71.646°	22.118°															

4. Mineral Potential of the Area

a.	Name of the Mineral(s) identified/expected in the area/block	NICKEL, COBALT AND PGE
b.	Title of the Project with name of the Block	PROPOSAL FOR EXPLORATION FOR “NICKEL, COBALT AND PGE” IN BOTAD BLOCK, BOTAD District, GUJARAT State
c.	Stage of Exploration	G4
d.	Basis on which mineral potential in the area has been identified	<p>About 99.6 sq. km (say 100 Sq.km) area around Botad-Hadadad-Senthali are known for picrite flows/ sills/ dykes within tholeiitic basalt flows. The area was mapped on scale 1:25,000 and was mapped. About 30% of the area is covered by picritic flows/sills and dykes which are 10 m to 20 m thick. Sulphide related PGE-Ni mineralization is usually localized at the basal part of thick picritic sills and flows. Weathered/ lateritic areas that developed over picritic basalts should also be tested for possible Ni rich zones. Some of these picritic rocks are very high in Ni concentration (over 1000 ppm). MgO content of these picritic rocks goes up to 20%. Co and PGE content of these picritic rocks are not analysed. High concentration of thick picritic flows/ sills and dykes with high MgO content along with isolated high Ni concentration in these rocks make them a good target for Ni-Co-PGE mineralization. Especially the basalt parts of thick picritic flows may host sulphur rich Ni-Co-PGE mineralization. However, Ghevariya et al. (1996)</p>

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		analysed 33 basaltic samples (picrite and other basalts) from the area of which nine samples yielded over 500 ppm Ni, highest concentration being 0.1% Ni. All the above observations of Ghevariya et al., 1996 are positive indicators for presence of sulphide related PGE-Ni mineralization in the area. In view of the above observations, a G4 exploration program for Ni-Co-PGE in picritic basalts of the area is proposed.
e.	List of Documents and references relied upon in support of item(b) above	Compilation of Commissioner of Geology and Mines, Gujarat on Gujarat's Mineral Wealth....A responsible exploration and Development Paradigm

5. Documents to be enclosed with the application

- Location map
- Location of the proposed block demarcated on Survey of India (SOI) Toposheet Nos.-41N/11, 41N/12, 41N/16
- Block demarcated on satellite imagery
- Block demarcated on geological map of the area

Palce : Hyderabad

Date :10/02/2025

Signature of the Applicant

S.Rama Murthy
Director-
(Geology & Mineral Exploration)

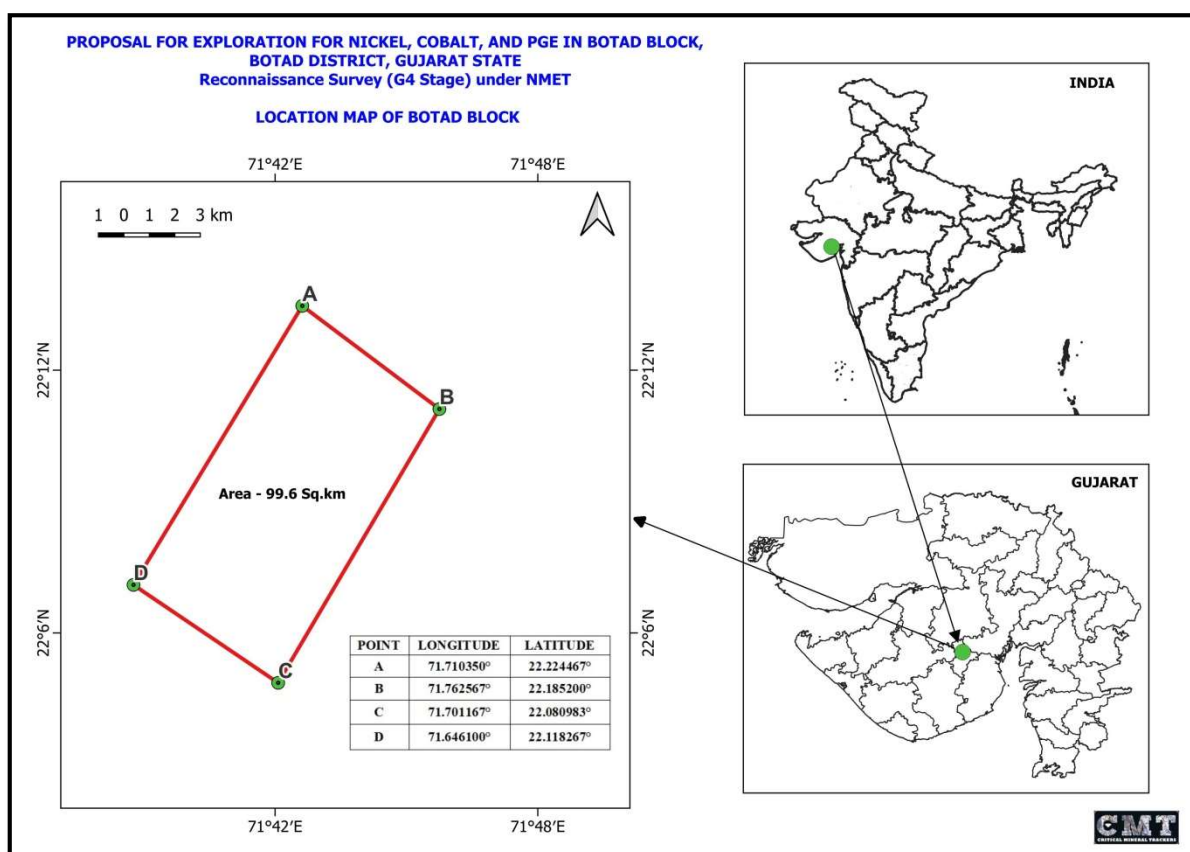
Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



f. References

- Study of picrite basalts and associated variants of Deccan Traps in parts of Bhavnagar, Rajkot and Ahmedabad districts of Gujarat (Progress Report of GSI for the Field Season 1995-'96) by Z.G. GHEVARIYA, Geologist (Sr) AND B.K. SAHU, Geologist (Jr)
- “Study of mafic rich/ picritic lava flows/ lobes and intrusive from the Deccan volcanic province to understand their origin and to comment on their fertility in terms of pt-pd mineralization” (Final Report for FSP 2014-15 and 2015-16) by Md. Naushad, Senior Geologist
- Gujarat’s Mineral Wealth: A Responsible Exploration Paradigm by the Commissioner of Geology and Mines, Gujarat, 2024

Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



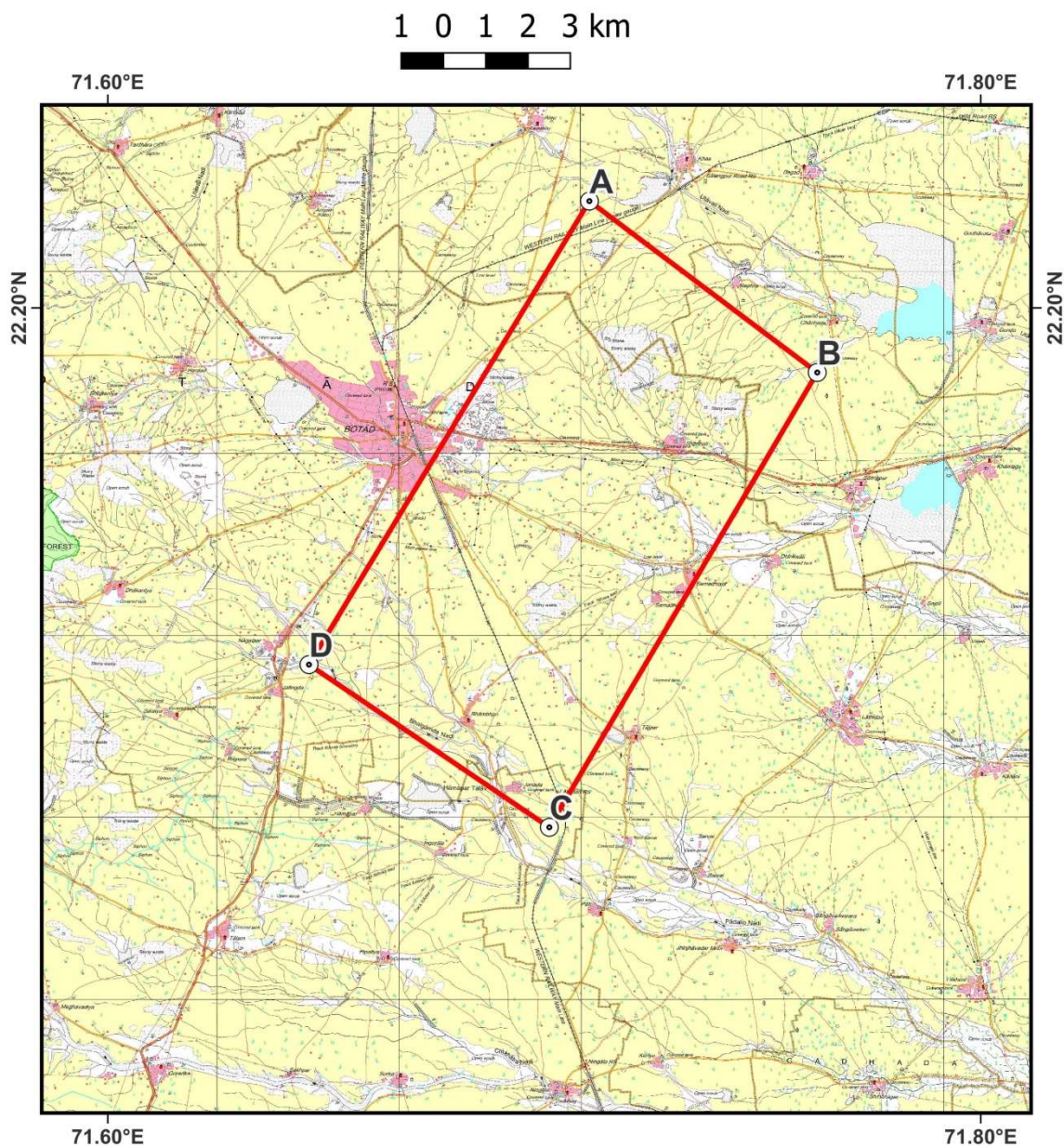
Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



**PROPOSAL FOR EXPLORATION FOR NICKEL, COBALT, AND PGE IN BOTAD
BLOCK, BOTAD DISTRICT, GUJARAT STATE
Reconnaissance Survey (G4 Stage) under NMET**



BOTAD BLOCK ON TOPOSHEET (41N/12 & 41N/16)

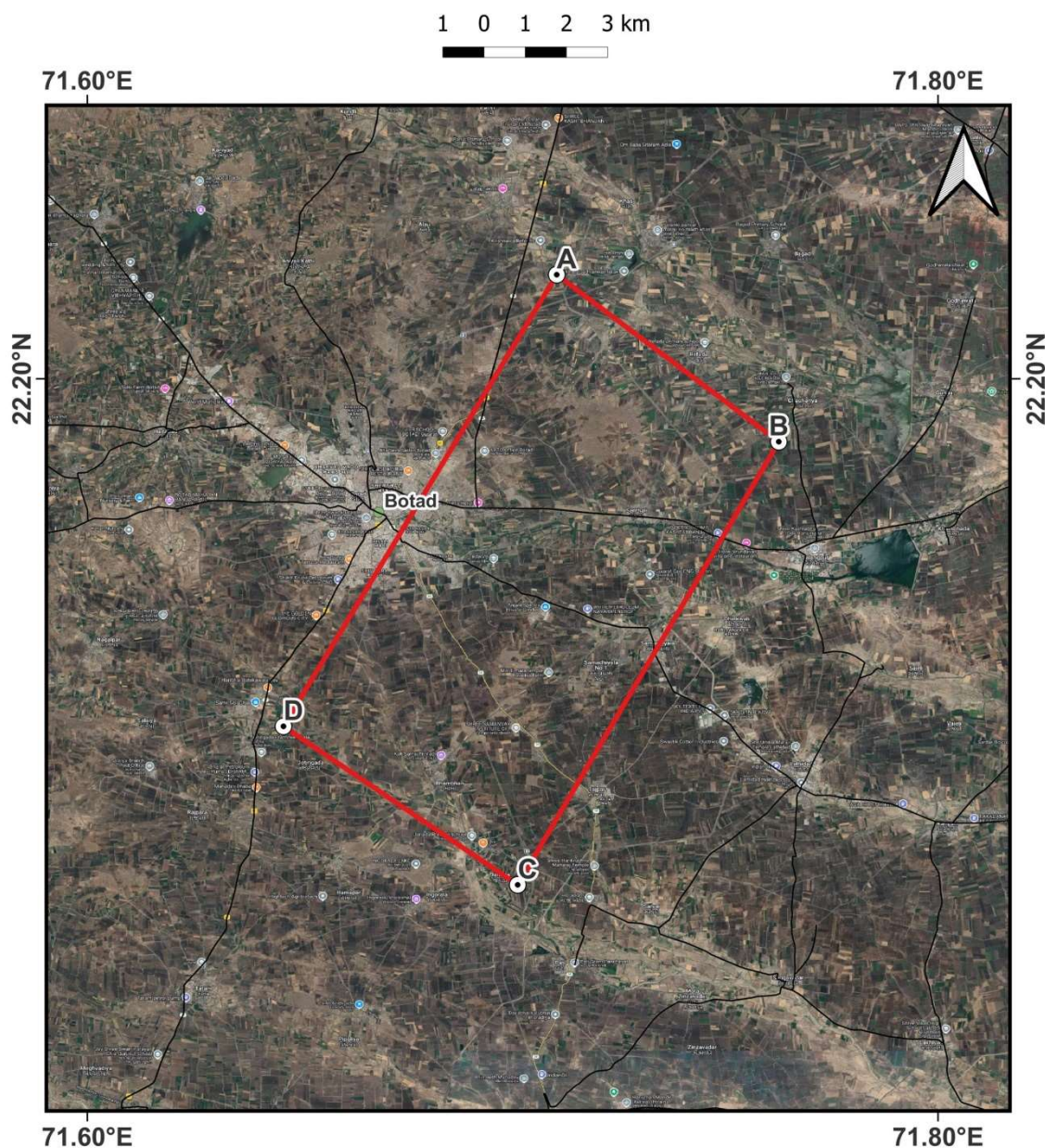


Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)

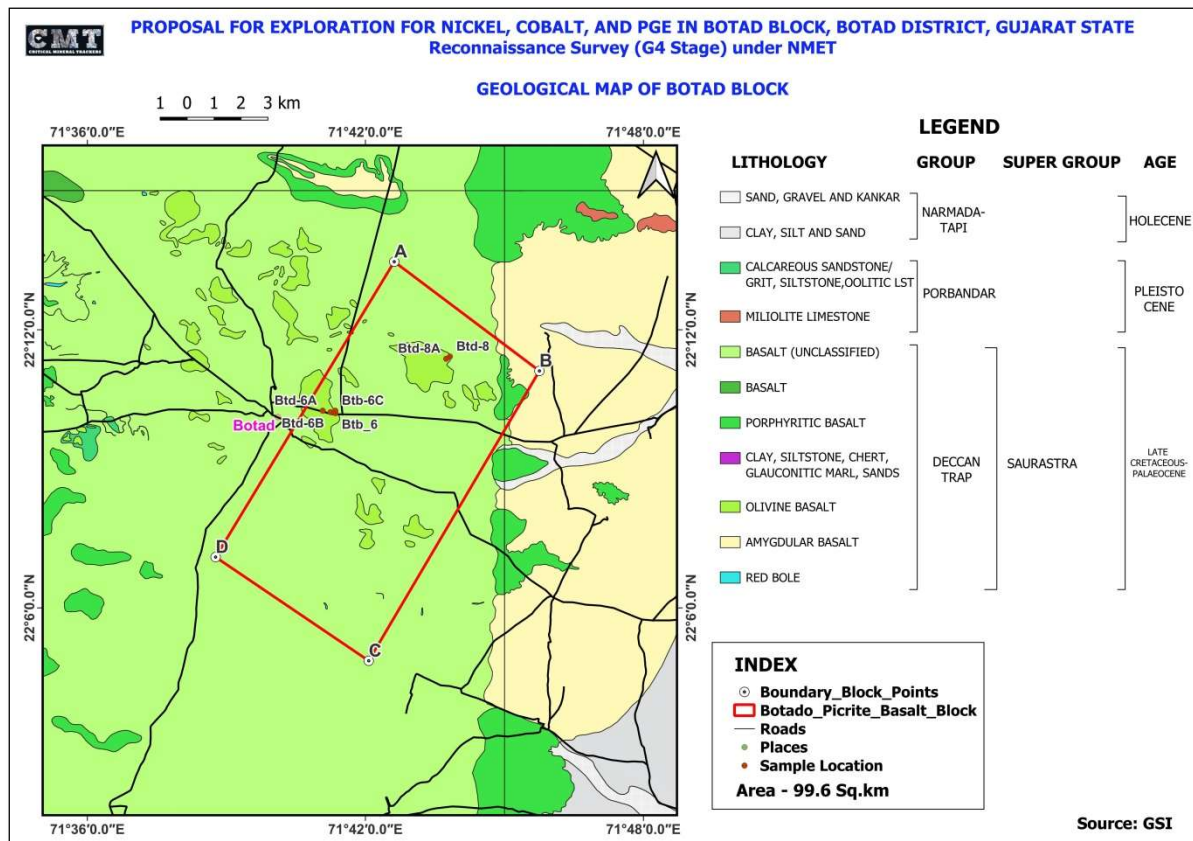


**PROPOSAL FOR EXPLORATION FOR NICKEL, COBALT, AND PGE IN
BOTAD BLOCK, BOTAD DISTRICT, GUJARAT STATE
Reconnaissance Survey (G4 Stage) under NMET**

BOTAD BLOCK ON SATELLITE IMAGERY



Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



Testing to the Core



TC-5918

F-01-MSP7.8-TRP

Plot No. 3, IDA, Balanagar,
Hyderabad - 500 037, Telangana.
Ph: 040-6904 2222/10 Lines
E-mail: info@lucidlabsindia.com
Web: www.lucidlabsindia.com

TEST REPORT



ULR : TC591824000002713F

Issued to:

Critical Mineral Trackers

H No. 7-1-58/CC/406, 'Concourse', Opp. Lal Bungalow
Greenlands, Begumpet
Hyderabad - 500 016

Kind Attn.: Mr. K Nageswara Rao, 78938-47742

Report No. : LL/24-25/008302

Issue Date : 06/12/2024

Customer Ref.: Quotation

Ref.Date : 30/11/2024

Sample Particulars : Mineral Ore Sample

Sample description : Mineral Ore Sample, **Sample ID:** BTD-6B

Qty. Received : ~500gX1 No.

Mode of Packing : Polythene Cover

Test Parameters : Nickel as Ni, Cobalt as Co, Iridium as Ir, Osmium as Os, Palladium as Pd, Platinum as Pt, Rhodium as Rh,
Ruthenium as Ru.

Date of Receipt of Sample : 02/12/2024

Date of Starting of Analysis : 03/12/2024

Date of completion of analysis : 06/12/2024

SAMPLE TESTED AS RECEIVED

TEST RESULTS

S.No.	Parameters	Units	Results	Test Method
1	Nickel as Ni	ppm	376.0	SOP OM 12
2	Cobalt as Co	ppm	66.0	SOP OM 12
3	Iridium as Ir	ppm	0.4	SOP OM 07
4	Osmium as Os	ppm	2.2	SOP OM 07
5	Palladium as Pd	ppm	<0.1	SOP OM 07
6	Platinum as Pt	ppm	<0.1	SOP OM 07
7	Rhodium as Rh	ppm	0.1	SOP OM 07
8	Ruthenium as Ru	ppm	0.2	SOP OM 07

Note: The above results are expressed on dry basis.

NOTE : This report and results relate only to the sample / items tested.

End of Report

P.V.V. Satya Kumari
Reviewed by

Page No. 1/1

A.L. Kanta Rao
Authorized Signatory

Note: This report is subject to the terms and conditions mentioned overleaf

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Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



F-01-MSP7.8-TRP

Plot No. 3, IDA, Balanagar,
Hyderabad - 500 037, Telangana.
Ph: 040-6904 2222/10 Lines
E-mail: info@lucidlabsindia.com
Web: www.lucidlabsindia.com

TEST REPORT



ULR : TC591824000002714F

Issued to:
Critical Mineral Trackers
H No. 7-1-58/CC/406, 'Concourse', Opp. Lal Bungalow
Greenlands, Begumpet
Hyderabad - 500 016
Kind Attn.: Mr. K Nageswara Rao, 78938-47742

Report No. : LL/24-25/008303
Issue Date : 06/12/2024
Customer Ref.: Quotation
Ref.Date : 30/11/2024

Sample Particulars : Mineral Ore Sample

Sample description : Mineral Ore Sample, Sample ID: BTD-8A

Qty. Received : ~500gx1 No.

Mode of Packing : Polythene Cover

Test Parameters : Nickel as Ni, Cobalt as Co, Iridium as Ir, Osmium as Os, Palladium as Pd, Platinum as Pt, Rhodium as Rh,
Ruthenium as Ru.

Date of Receipt of Sample : 02/12/2024

Date of Starting of Analysis : 03/12/2024

Date of completion of analysis : 06/12/2024

SAMPLE TESTED AS RECEIVED

TEST RESULTS

S.No.	Parameters	Units	Results	Test Method
1	Nickel as Ni	ppm	510.0	SOP OM 12
2	Cobalt as Co	ppm	80.0	SOP OM 12
3	Iridium as Ir	ppm	0.4	SOP OM 07
4	Osmium as Os	ppm	1.6	SOP OM 07
5	Palladium as Pd	ppm	<0.1	SOP OM 07
6	Platinum as Pt	ppm	<0.1	SOP OM 07
7	Rhodium as Rh	ppm	0.1	SOP OM 07
8	Ruthenium as Ru	ppm	0.2	SOP OM 07

Note: The above results are expressed on dry basis.

NOTE : This report and results relate only to the sample / items tested.

End of Report

P.V.V. Satya Kumar
Reviewed by

Page No. 1/1

A.L. Kanta Rao
Authorized Signatory

Note: This report is subject to the terms and conditions mentioned overleaf 116219

Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



Testing to the Core

F-01-MSP7.8-TRP

Plot No. 3, IDA, Balanagar,
Hyderabad - 500 037, Telangana.
Ph: 040-6904 2222/10 Lines
E-mail: info@lucidlabsindia.com
Web: www.lucidlabsindia.com

TEST REPORT



Issued to:
Critical Mineral Trackers
H No. 7-1-58/CC/406, 'Concourse', Opp. Lal Bungalow
Greenlands, Begumpet
Hyderabad - 500 016
Kind Attn.: Mr. K Nageswara Rao, 78938-47742

Sample Particulars : Mineral Ore Sample

Sample description : Mineral Ore Sample, **Sample ID:** III

Qty. Received : ~500gX1 No.

Mode of Packing : Polythene Cover

Test Parameters : Nickel as Ni, Cobalt as Co, Iridium as Ir, Osmium as Os, Palladium as Pd, Platinum as Pt, Rhodium as Rh,
Ruthenium as Ru.

Date of Receipt of Sample : 02/12/2024

Date of Starting of Analysis : 03/12/2024

Date of completion of analysis : 06/12/2024

SAMPLE TESTED AS RECEIVED

TEST RESULTS

S.No.	Parameters	Units	Results	Test Method
1	Nickel as Ni	ppm	360	SOP OM 12
2	Cobalt as Co	ppm	65	SOP OM 12
3	Iridium as Ir	ppm	0.3	SOP OM 07
4	Osmium as Os	ppm	1.8	SOP OM 07
5	Palladium as Pd	ppm	<0.1	SOP OM 07
6	Platinum as Pt	ppm	<0.1	SOP OM 07
7	Rhodium as Rh	ppm	<0.1	SOP OM 07
8	Ruthenium as Ru	ppm	0.2	SOP OM 07

Note: The above results are expressed on dry basis.

NOTE : This report and results relate only to the sample / items tested.

End of Report

P.V.V. Satya Kumar
Reviewed by

Page No. 1/1

A.L. Kanta Rao
Authorized Signatory

Note: This report is subject to the terms and conditions mentioned overleaf

107451

Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



CMT <criticalmineraltrackers@gmail.com>

NOC Approval for interested Exploration Blocks

7 messages

Ad-tech-cgm(GoG-CGM Dept.) <ad-tech-cgm@gujarat.gov.in>

Mon, Nov 11, 2024 at 4:59 PM

To: "criticalmineraltrackers@gmail.com" <criticalmineraltrackers@gmail.com>

Dear,

The Commissioner of Geology & Mining, Gandhinagar, Gujarat, organized a one-day workshop titled *Gujarat's Mineral Wealth: A Responsible Exploration and Development Paradigm* on 17.08.2024. Based on this workshop, you expressed interest in certain blocks for exploration. We are pleased to inform you that No Objection Certificate has been granted for the following blocks:

1. Lakhond Bauxite Block (G4 level)
2. Nadapa Bauxite Block (G4 level)
3. Botad Picrite Basalt Block (G4 level)
4. Reldi Moti Bauxite Block (G4 level)

Regards

Additional Director (Exploration)

Commissioner of Geology and Mining

Gujarat State

Gandhinagar

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Proposal For Exploration For Nickel, Cobalt And PGE In
Botad Block, Botad Dist., Gujarat State
Reconnaissance Survey (G4 Stage)



Critical Mineral Trackers

Mineral Exploration & Geo-solutions

To,
Additional Director (Exploration)
Commissioner of Geology and Mining
Gujarat State
Gandhinagar

Greetings for the Day

Respected Sir

Sub: Technical Team Allocation for Gujarat Projects

Ref: 1.Allocation of Projects (NOC Granted) mail received Nov 11,2024 from Additional Director(Exploration)
2.Telephonic Conversation by Director- Operations CMT with the authorities


Gujarat Projects

1. Lakhond Bauxite Block - 094(G4 level)
2. Nadapa Bauxite Block -104 (G4 level) PGE)
- 3.Reldi Moti Bauxite Block - 110 (G4 level)
- 4.Botad Picrite Basalt Block - 346 (G4 level) (Ni-Co-

Soma . Rama Murthy	Rtd.Director GSI	Team Leader	+91 94906 85131
S.Uma Maheswara Rao	Rtd. from MECL	Team Member	+91 79939 35619
K.Y Vikram	IIT DELHI	Director Operations	+91 98495 74333
GUJARAT STATE INCHARGE			
P.Gandhi	Rtd. DyDirector General GSI	Local Coordination & Operations	+91 98248 06386
HEAD OFFICE COORDINATION			
K.Nageswara Rao	Rtd. AD Mines	HO Coordination	+91 78938 47742
A.Sonika	Admin	HO Coordination	+91 96669 75499

TEAM

We Propose to conduct a pre-field investigation & Collection of samples in this week i.e. 18-11-2024 to 25-11-2024.

Sincerely
Thanks and Regards

Dr.T.Rajesham
Director - Technical & Project Coordinator
M. +91 9849574333
E . enquiry@Criticalmineraltrackers.co.in
W. www.Criticalmineraltrackers.co.in | www.cmtgsc.ai | www.cmtgsc.in | www.cmtgsc.co.in

Received

Geology and Mining Department,
Block No.15, Dr. Jivraj Mehta Bhavan,
Old Sachivalaya, Sector-10,
Gandhinagar.