(Category 'A' Mechanized Opencast Mine)

MINING PLAN WITH PROGRESSIVE MINE CLOSURE PLAN

अनुमोदित
584(4)02/MP-401(370)/2021-22
आरडी (ख) / जीएमआर
12-4-22 के द्वारा प्राप्त

(Submitted under Rules 16 (1) of Minerals (other than Atomic & Hydrocarbons Energy Minerals) Concession Rules, 2016 & 23 of MCDR, 2017 for Working Lease)

OF

MEVASA BLOCK FOR BAUXITE (ALUMINOUS LATERITE)

SURVEY NO. 259,
FOR MINERAL – BAUXITE (ALUMINOUS LATERITE),
VILLAGE - MEVASA,
TALUKA - KALYANPUR,
DISTRICT- DEVBHUMI DWARKA,
STATE- GUJARAT
LEASE AREA 8.73.05 HECTARE
(NON FOREST AREA)

PLANING PERIOD FIVE YEAR FROM REGISTRATION OF LEASE DEED

Mansuri Latifbhai Kasambhai

Digitally signed by Mansuri Latifbhai Kasambhai
DN: c=IN, o=Personal,
2.5.4.20=c69446f04fae59bc720ff1f920238376cec248d439bff4b76a05a9bca17d37ab, postalCode=382006, st=Gujarat, serialNumber=cb5dcd4fa1112df70963629e6cf6308d32d6533ed5ee767bb66e7ec830bc8921, cn=Mansuri Latifbhai Kasambhai
Date: 2022.04.05 10:24:13 +05'30'

अनुमोदित
Approved

PREFERRED BIDDER

SHRI PATEL KAUSHIKKUMAR
PLOT NO.1148/A/1,
NEAR SWAMINARAYAN TEMPLE,
SECTOR-2/D, GANDHINAGAR-382007.
E-mail: kppatel5777.block@gmail.com
Mo: 9904277777.

PREPARED BY

MANSURI LATIFBHAI KASAMBHAI, Qualified Person (M.Sc., Geology)
504, Abhishek complex,
Opp. Hotel Haveli, Sector-11,
Gandhinagar-382011
(Gujarat)
Mob.No: +91-9898858183
Email: geoinfogimc@gmail.com

Email/Regd Post

भारत सरकार
खान मंत्रालय
भारतीय खान ब्यूरो
क्षेत्रीय खान नियंत्रक का कार्यलय
कर्मयोगी भवन, चतुर्थ माला,ब्लॉक-2 , सी विंग,सेक्टर-10Aगांधीनगर, गुजरात,382010

Government of India
Ministry of Mines
Indian Bureau of Mines
Office of Regional Controller of Mines
KarmayogiBhavan, 4th Floor, Block-2, Sector10A,
Gandhinagar, Gujarat-382010

Tel- 079 29750358 /29750359; ई –मेल/E-mail:ro.gandhinagar@ibm.gov.in

फाईलसंख्याFile No: 684(4)(1)/MP-401(370)/2021-22/GNR /160.

दिनाक 12 Apr 2022

सेवामेंTo,

पटेल कौशिककुमार
प्लॉट नंबर 1148/ए/1,
स्वामीनारायण मंदिर के पास,
सेक्टर-2/डी, गांधीनगर-382007

Patel Kaushikkumar
PLOT NO.1148/A/1,
NEAR SWAMINARAYAN TEMPLE,
SECTOR-2/D, GANDHINAGAR-382007
E-mail: kppatel5777.block@gmail.com

विषय/ **Sub:** Approval of Mining Plan along with Progressive Mine Closure Plan in respect of Auctioned block, i.e. MevasaBlock for Bauxite (Aluminous Laterite)mineral Bauxiteover an area of 8.7305hectares situated near Village Mevasa, Tehsil-Kalyanpur, District-DevbhumiDwarka in Gujarat State in favour of preferred bidder ShriPatel Kaushikkumarsubmitted under Rule 16(1) of Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 and Rule 23 of MCDR, 2017.

संदर्भ/Ref:
1. Letter of Intent (LOI) vide letter no. MMR/102021/BLK/534113/CHH1, Dated 30/06/2021 issued from issued from Industries and Mines Department, Govt. of Gujarat, Gandhinagar Gujarat.
2. Your email dated 05/03/2022, submission of mining plan.
3. This office letter of even number dated 16/03/2022.
4. Your letter dated 05/04/2022 received on 06/04/2022.
5. CGM Letter no. CGM/auction/major/mevasablock/21-22/74/532, dated 11th Feb. 2022 mentioning the precise demarcation of the intended (lease) area to consideration for mining plan.

महोदय/Sir,

In exercise of the power conferred by the clause (b) of sub section (2) of Section 5 of Mines and Minerals(Regulation & Development) Act,1957 read with Government of India Order number S.O. 445 (E), dated 28.4.87 and Government of India, Indian Bureau of Mines, Gazette Notification S.O. 1872 (E) dated 18th May, 2016, I hereby APPROVE the above said Mining Planon the basis and in reference to the LOI referred at S No 1 of the aforesaid references.

This approval is subject to the following conditions:

1. The Mining Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
2. The proposals shown on the plates and/or given in the mining plan is based on the demarcated intended lease map /sketch submitted by the lessee and/or as submitted/confirmed by office of Commissioner of Geology and Mining mentioned at reference 5 herein above. Proposed scale of production is subjected to environmental clearance by competent authority.
3. It is clarified that the approval of Mining Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957, or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, The Occupational Safety, Health and Working Conditions Code, 2020/The Mines Act 1952 and Rule & Regulations made there under.
4. Indian Bureau of Mines has not undertaken verification of the intended mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the precise area as furnished by the lessee and Commissioner of Geology and Mining mentioned at reference 5 herein above
5. Drone survey shall be carried out and submit the processed output as per rule 34A if MCDR, 2017 (as amended on 03/11/2021) at the earliest and prior to commencement of mining operations.
6. Adequate number of parapet walls, check dams, and/or retaining walls shall be made and maintained in good condition to check any detrimental impact on water regime.
7. Wherever side/benches have finalized or reached to its ultimate limit, immediate steps shall be taken for stabilization/ restoration of such sides/benches/terraces appropriately like plantations of suitable species etc.

8. Necessary Geotechnical and/or hydro-geological studies may be carried out if required. Pit design parameters envisaged in the mining plan be validated accordingly and all appropriate action may be taken on the outcome of such study for systematic and safe mining operations on sustainable basis.
9. Before commencement of mining operations necessary permission for carrying out drilling blasting, if any, sought from concerned department/appropriate competent authority.
10. Copy of the executed and registered mining lease deed with the State Govt. shall be submitted to this office immediately when the same is get registered.
11. The applicant/lessee shall submit the copy of the Mine Development and Production Agreement as signed with the State Government, as prescribed under relevant statutory provisions. The same is also as referred in proviso of rule 27(1) of MCDR 2017.
12. The applicant/lessee shall also provide a copy of performance security as prescribed under Mineral (Auction) Rules, 2015.
13. In addition to the PMCP proposals mining lease holder shall comply the Order of Hon'ble Supreme Court dated 08.01.2020 in the matter of Writ petition(C) No.114/2014(common Cause vs Union of India &Ors.) to undertake re-grassing of the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. Compliance status of the same shall be furnished every year along with the compliance of PMCP proposals under rule 26(2) of MCDR 2017. For the compliances including PMCP proposals. The conceptual planneeds to be examined thoroughly on planning and commencement of mining operations in next review &updation of mining plan.
14. Special appropriate actions/precautions/protective measures, like leaving adequate barrier, erecting fencing etc.shall be taken while mining in all such blocks where public road/path is passing.
15. This approval is restricted in respect of the proposals contained therein within the intended mining lease area and is applicable from the date of registration of the executed mining lease deed (date of registration) with a validity upto 5 years, viz. Year 1 to Year 5. Period of Year 1 shall be reckoned from the date of registration upto 31st March of that running financial year and Year 2 to Year 5 shall be the subsequent financial years thereafter ending on 31st day of March of that respective financial year. Further this approval is also subject to all statutory compliances and clearances for mining activities to be carried out within the intended mining lease hold area.
16. Applicant shall be get registered with IBM under rule 45 of MCDR 2017, if not registered yet prior to commencement of mining operations.
17. Details at Chapter 9 of the mining plan shall be furnished on completion of EIA studies and its report thereof. May refer TOR (term in ref to MoEFCC for obtaining Environmental Clearance.)
18. Intended mining lease area is in close vicinity of village and habitat area thus, all appropriate special precautions shall be taken while carrying our mining operation in such area.
19. At any stage, if it is found/observed that any of the information, data, details, drawings, geo-referenced spatial configuration and/or precise demarcation of the intended mining lease, proposals etc. furnished/incorporated in the mining plan are incorrect or misrepresent the facts or non-compliance of the conditions, if any, the approval of this mining plan shall be revoked with immediate effect.

Encl: One copy of approved Mining Plan.

भवदीय/Yours faithfully,

12/4/22

(पुष्पेन्द्र गौड़/ Pushpender Gaur)
क्षेत्रीय खान नियंत्रक/Regional Controller of Mines

प्रतिलिपि सुचनार्थ हेतु प्रेषित/ **Copy for kind information to:-**

1. Deputy, Secretary, Industries and Mines Department, Government of Gujarat, Block No. 5, 3rd Floor, New Sachivalaya, Gandhinagar. This is in reference to Letter of Intent (LoI) No. MMR/102021/BLK/534113/CHH1, dated 30th June 2021 and the precise area as given by CGM letter referred at S no 5 above in form of DLIR map (enclosed for ready ref.), for favor of information and necessary action, if any, please,. Also it is request to apprise the matter to Additional Chief Secretary, Industries and Mines Department Gujarat State.
2. The Commissioner, Department of Geology & Mining, Govt. of Gujarat, Block 1, 7th floor, UdyogBhavan, Sector 11, Gandhinagar, Gujarat. This is in reference to your office letter no. CGM/auction/major/mevasablock/21-22/74/532, dated 11th Feb. 22 where DLIR map as attached to this letter (enclosed for ready ref.) has been considered as recommended for this mining plan.
3. The Geologist, Geology and Mining Department, Block No. A/2, 2nd Floor, JilaSevaSadan, Lalpur Bypass Road, Khambalia, Gujarat-361305. E-mail: geologist-dwarka@gujarat.gov.in.,**along-with copy of approved aforesaid mining plan alongwith PMCP**. Kindly refer our letter no. 684(4)(1)/MP-401(370)/2021-22 GNR through email 12.04.2022 in this matter.
4. Sh. Mansuri Latifbhai K. (Geologist) E-mail- geoinfogimc@gmail.com

क्षेत्रीय खान नियंत्रक/Regional Controller of Mines

(Category 'A' Mechanized Opencast Mine)

MINING PLAN WITH PROGRESSIVE MINE CLOSURE PLAN

(Submitted under Rules 16 (1) of Minerals (other than Atomic & Hydrocarbons Energy Minerals) Concession Rules, 2016 & 23 of MCDR, 2017 for Working Lease)

OF

MEVASA BLOCK FOR BAUXITE (ALUMINOUS LATERITE)

अनुमोदित
पत्र सं. 684(42)(1)/MP-401(370)/2021-22
एमसीआरडी (ओ) / जीएनआर
दिनांक 12-4-22 के द्वारा जारी

SURVEY NO. 259,
FOR MINERAL – BAUXITE (ALUMINOUS LATERITE),
VILLAGE - MEVASA,
TALUKA - KALYANPUR,
DISTRICT- DEVBHUMI DWARKA,
STATE- GUJARAT
LEASE AREA 8.73.05 HECTARE
(NON FOREST AREA)

क्षेत्रीय खान नियंत्रक
Regional Controller of Mines
भारतीय खान ब्यूरो, गांधीनगर
Indian Bureau of Mines, Gandhinagar

भारत सरकार - भारतीय खान ब्यूरो
GOVT. OF INDIA - INDIAN BUREAU OF MINES
सत्यमेव जयते

Mansuri Latifbhai Kasambhai

Digitally signed by Mansuri Latifbhai Kasambhai
DN: c=IN, o=Personal, 2.5.4.20=c69446f04fae59bc720ff1f920238376cec248d439bff4b76a05a9bca17d37ab, postalCode=382006, st=Gujarat, serialNumber=cb5dcd4fa1112df70963629e6cf6308d32d6533ed5ee767bb66e7ec830bc8921, cn=Mansuri Latifbhai Kasambhai
Date: 2022.04.05 10:24:13 +05'30'

अनुमोदित
Approved

PLANING PERIOD FIVE YEAR FROM REGISTRATION OF LEASE DEED

PREFERRED BIDDER

SHRI PATEL KAUSHIKKUMAR
PLOT NO.1148/A/1,
NEAR SWAMINARAYAN TEMPLE,
SECTOR-2/D, GANDHINAGAR-382007.
E-mail: kppatel5777.block@gmail.com
Mo: 9904277777.

PREPARED BY

MANSURI LATIFBHAI KASAMBHAI, Qualified Person (M.Sc., Geology)
504, Abhishek complex,
Opp. Hotel Haveli, Sector-11,
Gandhinagar-382011 (Gujarat)
Mob.No: +91-9898858183
Email: geoinfogimc@gmail.com

Mining Plan With Progressive Mine Closure Plan

- (•) Opencast
- ( ) Underground
- ( ) Opencast & Underground

Start

Index

Chapter 1: GENERAL INFORMATION

1.1 : Lease Details

IBM Registration Number:	Application no.: 44822 (Ref. Annexure.1A)		
Lease Code:	Not Registered		
Mine Code:	Under Process		
Name of preffered bidder:	PATEL KAUSHIKKUMAR		
Address of preffered bidder:	PLOT NO.1148/A/1, NEAR SWAMINARAYAN TEMPLE, SECTOR-2/D, GANDHINAGAR-382007.		
Type of preffered bidder:	Individual		
Name of fresh area auction block:	MEVASA BAUXITE (ALUMINOUS LATERITE) MINE		
State:	Gujarat		
District:	Devbhumi Dwarka		
Tehsil/ Taluk/ Mandal:	Kalyanpur		
Village:	Mevasa		
Lease Area (Ha):	8.7305 ha		
Forest Area (Ha):	NA		
Name of Minerals:	BAUXITE (ALUMINOUS LATERITE)		
Name of associated minerals:	NA		
Type :			
Five Year Block (Financial Year)	1	TO	5
Type of working:	Opencast		
Nature of Use:	Non Captive		
Category of Mine:	A-Mechanised		

1.1.1: Initial/subsequent Lease grant details

Grant	From	To	Lease deed execution date	Lease registration date
Initial grant	30-06-2021	Nil	No execution	Fresh area auction block

1.1.2: Mining Plan Submission Criteria Details

Type of Document	Mining Plan
Reason/s for modification	NA
Period for which modification is proposed	NA
LOI Number:	No:MMR/102021/BLK/534113/CHH1
Date:	30-06-2021

Mansuri Latifbhai Kasambhai

Digitally signed by Mansuri Latifbhai Kasambhai
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Date: 2022.04.05 10:39:48 +05'30'

1.2: Land Ownership Details

S. No.	Village	Taluka	Area (Ha)	Khasra No	Type of Land
1	Mevasa	Kalyanpur	8.7305	259	Private Land

table continue...

Nature of Land
Private non-Agriculture Land

1.3: EXISTING LEASE

Date of Execution	NA

1.3.1: Approval of earlier Mining Plan & Its Subsequent Review in Chronological Order

Sl. No.	Letter Number	Date	Period		Type Of Approved Document
			From	To	
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

1.3.2: Partial Surrenderd Area During Stages of Operations in Chronological Order

Sl. No.	Letter Number	Date	Supplementary Surrender order Letter Number	Supplementary Lease Deed Date	Final Retained Area over which current Mining Plan is Prepared (ha)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

1.3.3: Transfer of Lease Area Subsequent to Grant

Sl. No.	Letter Number	Date	Transfer of lease deed Number	Date of execution of Transfer lease deed	Name of Transferor
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Appplicable	Not Applicable

table continue...

Nature of block transferred	
Granted through auction	other than through auction for captive use
Not Applicable	Not Applicable

1.3.4: Statutory Compliances

1.3.4.1: Environment Clearance

Applicable	No
Letter No	Not applicable
Date	Not applicable
Validity	Not applicable
ROM Mineral in tonnes	Not applicable

1.3.4.2: SPCB Approvals

Letter No	Not applicable
Approval of	Consent to operate
Date	Not applicable
Validity	Not applicable
ROM Mineral in tonnes	Not applicable

1.3.4.3: Forest Clearance

Applicable	No
Letter No	Not applicable
Date	Not applicable
Validity	Not applicable
Area (Ha)	Not applicable

1.3.4.4: Land Acquisition Details

Total Area acquired/purchased so far	Owned private land
Total Amount Paid (INR)	Nil

1.3.5: Mine Location Details

Toposheet Number:	41 F/07

1.3.5.1: Location of Boundary Pillars

Pillar No.	Pillar Latitude *(dd:mm:ss.ss)*	Pillar Longitude *(dd:mm:ss.ss)*
BP-01	22°15'14.96"N	69°17'51.10"E
BP-02	22°15'15.70"N	69°17'53.86"E
BP-03	22°15'16.25"N	69°17'55.92"E
BP-04	22°15'17.23"N	69°17'57.11"E
BP-05	22°15'19.72"N	69°17'59.87"E
BP-06	22°15'19.92"N	69°18'0.22"E
BP-07	22°15'21.09"N	69°18'1.94"E
BP-08	22°15'22.03"N	69°18'4.67"E
BP-09	22°15'18.93"N	69°18'7.59"E
BP-10	22°15'18.80"N	69°18'7.00"E
BP-11	22°15'17.37"N	69°18'4.87"E
BP-12	22°15'16.76"N	69°18'4.20"E
BP-13	22°15'15.36"N	69°18'2.52"E
BP-14	22°15'14.94"N	69°18'1.65"E
BP-15	22°15'13.54"N	69°18'2.03"E
BP-16	22°15'11.53"N	69°18'0.70"E
BP-17	22°15'10.68"N	69°18'0.69"E
BP-18	22°15'10.62"N	69°18'0.38"E
BP-19	22°15'9.13"N	69°17'55.55"E
BP-20	22°15'7.44"N	69°17'54.40"E
BP-21	22°15'6.86"N	69°17'53.35"E
BP-22	22°15'7.96"N	69°17'52.86"E
BP-23	22°15'8.39"N	69°17'52.86"E
BP-24	22°15'12.16"N	69°17'52.31"E

Note: Fresh area auction block coordinate authenticated by CGM office, state government. Show in plate no.1.

SR.NO.	N	E	SR.NO.	N	E
1	530656.54	2460989.78	13	530983.54	2461002.63
2	530735.32	2461012.40	14	530958.15	2460989.90
3	530794.03	2461029.82	15	530969.76	2460946.93
4	530828.76	2461059.19	16	530931.64	2460884.87
5	530907.86	2461136.41	17	530926.61	2460858.35
6	530917.79	2461142.68	18	530922.33	2460856.90
7	530966.61	2461178.35	19	530784.95	2460810.49
8	531044.58	2461207.80	20	530751.24	2460758.92
9	531128.73	2461112.45	21	530721.42	2460740.86
10	531111.56	2461108.04	22	530707.89	2460774.54
11	531050.72	2461064.87	23	530707.86	2460787.13
12	531031.04	2461045.18	24	530691.32	2460903.96

1.3.6: Owner/Nominated Owner Details

Name	PAN of Nominated Owner	Address of Nominated Owner	Mobile Number	Email	Please attach Minutes of Board Resolution in case of Nominated Owner
Patel Kaushikkumar	AFSPP4388R	PLOT NO.1148/A/1, NEAR SWAMINARAYAN TEMPLE, SECTOR-2/D, GANDHINAGAR-382007.	9904277777	kppatel5777.block@gmail.com	Not Applicable

table continue...

Annexure no.
5

1.3.7: Qualified Person Details as per M(OAHCEM)CR, 2016

Sr No	Prefix	Name	PAN of QP	Address	Mobile no.
1	Mr	Mansuri Latifbhai Kasambhi	AVYPM2892B	504-505, Abhisek Complex, Opp. Hotel Haveli, Sector-11, Gandhinagr	9898858183

table continue...

Qualification	Exp in years as prescribed under the rule	Email
M.Sc. (Geology)	16 Years (Annexure no.6 & 7)	geoinfogimc@gmail.com

Mansuri Latifbhai Kasambhai

Digitally signed by Mansuri Latifbhai Kasambhai
DN: c=IN, o=Personal, 2.5.4.20=c69446f04fae59bc720ff1f920238376cec248d439bff4b76a05a9bca17d37ab, postalCode=382006, st=Gujarat, serialNumber=cb5dcd4fa1112df70963629e6cf6308d32d6533ed5ee767bb66e7ec830bc8921, cn=Mansuri Latifbhai Kasambhai
Date: 2022.04.05 10:40:38 +05'30'

Chapter 2: GEOLOGY & EXPLORATION

2.1: GEOLOGY

2.1.1: Topography

Terrain *

Plain

RELIEF

Highest Level (m) from MSL *

13.99

Lowest Level (m) from MSL *

9.019

Average Level (m) from MSL

11.5

Drainage Pattern *

Dendritic

Order of Stream *

Order 1

Minimum Distance of Stream from Lease Area (m) *

300 m

2.1.2: Details of Physiographic features and Infrastructures avaiable in and around the lease/ block area

Description	Location if existing Within the lease/block area.	Distance from boundary periphery in kms, if existing outside the lease/block area. (within 5.00Kms)	Remark if any
River/Nallah/Reservoir	NA	NA	
Public roads (Tar road, cart road)	NA	51.16 m	Cart road
Railway track	NA	16.00 km	Bhopalka Railway station
Human settlements	NA	1.41 km	Virpur Village
Archaeological monuments/ places of worships/public utilities etc.	NA	NA	
Wild life sanctuaries/ national parks	NA	17.78 km	Maha Ganga Wild life Sanctuary
Coastal Regulation Zone (CRZ)	NA	NA	
Powertransmision lines/telephone lines	NA	1.41 km	
Firing range	NA	NA	
Ordinance factory	NA	NA	0
grazing land/ burial ground or cremation ground	NA	NA	
Any other specify (Artificial pond)	within block area	NA	It's artificial pond created for farming.

Particulars	Distance from lease boundary in kms
Near by village	3.01 km
Nearest Railway station	16.00 km
Nearest Port	32.51 km
Distance of SH/NH from lease area	8.74 km

2.1.3: Regional Geology

Regional Geology *

Devbhumi Dwarka is newly formed created district which was carved out of Jamnagar district on 15 August 2013. The district consists 4 talukas i.e. Khambhalia, Kalyanpur, Dwarka and Bhanvad. The named Devbhumi Dwarka is derived from the famous Dwarkadhish Temple of Dwraka city which is one of the four holy places according to Hindu mythology. The district covers an area of 4,051 sq. km. is bounded by Jamnagar district in the east, Porbandar district in the south, the Arabian Sea in the west and the Gulf of Kachchh in the north. The district can be divided into three physical regions viz. (i) the coastal plains including the offshore islands, (ii) the plains and (iii) the undulatory and hilly terrains. The district has a good sea coast and well-developed seaports and is well connected by roads and railways. The average annual rainfall of the district is about between 2594 mm. The district is devoid of any perennial river.

Devbhumi Dwarka district has volcanic rocks and associated intrusive belonging to the Deccan Volcanics (Upper Cretaceous to Eocene age) laterites of Bhatia Formation (Palaeocene age) sediments belonging to the Gaj Formation of Lower to Middle Miocene age, the Dwarka Formation of Middle Miocene to Pliocene age and undifferentiated alluvium sand dunes, Rann clay, mud and coral reef of recent period. Basalt is the prominent rock type and is traversed by basalt and dolerite dykes. The Eocene sediments include clays, limestone, sandstone, marl and conglomerate. These rocks are fossiliferous Miliolite Formation, containing limestone, sandstone, clay and conglomerate, forms blanket-like deposits. The Recent deposits have been deposited by Marine, fluvial and Aeolian agencies.

The soils are clayey, loamy, mixed and calcareous in nature. Bouger Gravity Anomaly contours range from 0 to 60 m gal while the basement depth varies from less than 1000 m to more than 1700m. A prominent north-south trending lineament passes through the area. An earthquake epicenter has been recorded close to this lineament. Seismologic ally, the northwestern part of the district falls under high intensity and the southeastern part comes under moderate intensity area. Ground water prospects are good in vegetation anomaly, vegetation fill, pediplain, Miliolite limestone ridges and piedmont zones of geomorphological domains.

Lithology	Formation	Age
Undifferentiated alluvium sand dunes, Nandanan clay, mud, soil / coral reef		Recent
Foraminifera Bauxite (gritty, pellitic and shelly) calcareous sasndstone, calcareous clay and conglomerate	Miliolite Formation	Pleistocene
Bauxite(shelly and sandy) clay, Marl, sandstone, sandy and shelly Bauxite, Marl and shelly variegated Bauxite	Dwarka Formation	Middle Miocene to Pliocene
Shelly Bauxitem foraminiferal Bauxite, marl, calcareous sandstone, varigated clay and conglomerate	Gaj Formation	Lower Miocene to Middle Miocene
Laterite	Bhatia Formation	Palaeocene to Eocene
Olivine-gabbro	Deccan Volcanics	Upper Cretaceous to Eocene
MicrogNandanaite, felsite porphyry/ gNandanaophyre		
Rholite flows		
Dykes of basalt and dolerite		
Basaltic Flows		

2.1.4: Local Geology & Structure

2.1.4.1: Local Geological Set-up *

The local geological successions of the area are given as below:

Period	Formation
Rescent	Over burden soil/Alluvium
Sub-recent	calcareous sand dunes
Tertiary	Gaj Formation
	Bhatia formation

The study area is mostly covered by Alluvium/ Soil and Clay of Recent period. Major Soil type of the area is shallow to medium brownish in nature. Whereas in Mevasa block it is found on the surface in terms of overburden. The Bauxite (Aluminous Laterite-major mineral) of Bhatiya formation presents Paleocene to Eocene age.

2.1.4.2: Structure *

Two types of Bauxite are observed in the area, ash grey or pinkish grey in colour and nodular or boulder in nature and the other dawn grey or reddish brown, earthy, massive and showing similar features and habits of occurrence as the ferrugineous Bauxite.

2.1.4.3: Lithology, Petrographic & Mineralogical Description for Major, Associated & Indicator Minerals *

Bauxite (Aluminous Laterite) : Bauxite (Aluminous Laterite) is found in the lease area. It is mostly ferruginous, brownish, pinkish and reddish in colour with nodular or boulder in form and earthy, massive in nature showing similar features and habits of occurance as the ferruginous laterite. Bauxite (Aluminous Laterite) is interbedded with clay. Average thickness of Bauxite (Aluminous Laterite) is taken as 4.94 m (Ref. borehole no.1 to 4, Ref.Plate no.2A) which can be considered up to G-1 level. As observed in surrounding lease area and other openings, it is revealed that Bauxite (Aluminous Laterite) occurrence is continued up to further resting on lithomerge. Thickness of Bauxite (Aluminous Laterite) is ranging from 1.73 m to 7.28 m which are found in core drilling boreholes done in the lease area.

Soil : The soil is found in the lease area which is lying over the Bauxite (Aluminous Laterite) mineral deposit. It is brownish and blackish in colour, with fine to medium grain size. The black soil is regarded as alluvial black soil. The thickness of soil is varies from 0.17m to 0.24m in the lease area.

Clay: Clay presented in the study area belongs to Gaj formation. The clay presented in the study area is brownish, greyish and yellowish in colour. It is also called variegated clay when mixed with multiple coloured material. It is soft and fine- grained. At places, it is intermixed with grity material. It is fine to medium grained. Lithomergic clay is also exposed in all the boreholes.

2.1.4.4: Mode of Occurance & Controls of Mineralization *

It a metamorfic rock.

2.1.4.5: Extent of Weathering/ Alteration *

Not shown in the area.

2.1.4.6: Nature/Form of Mineral:	Lump
Specify If any other	

2.1.4.7: Extent of Mineralization:

Bauxite (Aluminous Laterite) is available in entire lease area with continoution in srrounding area. Extent of Mineralization zone NE-SW direction.

2.1.4.8: Deposit Type (as per MEMC Rule)

Bedded Stratiform and tabular deposits of regular habit.

Strike / Trend of the Ore Body: *

N	45	E	**TO**
S	45	SW	

Amount of Dip of the Ore Body (degree) *	Amount of Dip of the Ore Body (degree) *
1	1
(from)	(to)

Dip Direction of the Ore Body *

SE	1	NW

Plunge of Mineral Body (degree) (if any) *

Not applicable

Direction of Plunge *

Not Applicabel

2.2: Exploration

2.2.1: Summary of The Previous Exploration (for fresh grant) / During Last Plan Period (for existing leases)

Name of The Agency *

Vinayak Engimech Pvt, Ltd.

Ref. annexure no. 20

2.2.1.1: Geological Mapping

Sl. No.	Year	Scale	Area Covered (Hect/km^2)
1	Year 1	1:1000	8.7305

2.2.1.2: Airborne Geophysical Survey

Sl. No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (Ha/km^2)
Not Applicable	Not Applicable	Not applicable	Not applicable	Not applicable

table continued...

Latitude		Longitude	
To	From	To	From
Not applicable	Not applicable	Not applicable	Not applicable

2.2.1.3: Ground Geophysical Survey

Sl. No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (Ha/km^2)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continued...

Latitude		Longitude	
To	From	To	From
Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.1.4: Geochemical Survey

Sl. No.	Type of Sample	No of Samples	Aanlysis reprt	Area Covered (Ha/km^2)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.1.5: Pitting

Number of Pits *

NA

Sl. No.	Year	Pit ID	Length of Pit (m)	Width of Pit (m)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Depth of Pit (m)	Depth (from)	Depth(to)	Running mtr	Litho units exposed
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Name of the radical	Av Grade(in %)	Latitude	Longitude
Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.1.6: TRENCHING

Number of Trenches *

NA

2.2.1.6.1: SPACING

Min (m) *

NA

Max (m) *

NA

Avg (m) *

Not Applicable

Sl. No.	Year	Trench ID	Length of Trench (m)	Width of Trench (m)	Depth of Trench (m)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Depth(from)	Depth(to)	Running mtr	Litho units exposed	Name of the radical	Av.grade
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Latitude(from)	Longitude (from)	Latitude(to)	Longitude (to)
Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.1.7 Exploratory Drilling(Core/non Core)

Sl.No	Year	Exploration agency	Core holes	
			Number of boreholes drilled	Total metr
1	2019-20	M/s Vinayak Engimech Pvt. Ltd.	4	128

table continue...

Non-core (RC/DTH)		Grand total		
Number of boreholes drilled	Total mtrs	Total boreholes	Total mtr	Attach log sheet of each borehole in csv/excel format.
Not applicable	Not applicable	4	128	Ref. annexure no.20

2.2.1.8: Exploratory Mining

Sl. No.	Pit/Adit ID	Length in Mtr	Width in Mtr	Depth in mtrs	Volume (m^3)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.1.9: Sampling

Sl.No	Type of sample	No of samples collected	Number of samples analyzed
1	Drill core	4 (BH-01)	4
2	Drill core	8 (BH-02)	8
3	Drill core	10 (BH-03)	10
4	Drill core	11 (BH-04)	11
		Total	**33**

table continue...

Sl.No	Location		Remark if any
	Latitude	Longitude	
1	22°15'10.43"N	69°17'54.48"E	
2	22°15'13.23"N	69°18'0.77"E	
3	22°15'16.29"N	69°17'59.46"E	
4	22°15'13.45"N	69°17'53.21"E	

2.2.1.10: Chemical Analysis

S.No.	Sample ID	Minerals	Radical with garde in %	Name of Agency	Type of agency
1	Various	Bauxite (Aluminous Laterite)	36.85	Petrography and Mineral Chemistry Laboratory, Gandhinagar	Govt. lab

* Chemical analysis of core /non vore samples may be uploaded in CSV file which shall normally include Five files namely collar file, survey file and Geology log file, Assay file and RQD File.

table continue...

S.No.	Attachment
1	Govt. lab

2.2.1.11: Petrology & Mineralogical Studies

Sl. No.	Type of Sample	Number of Sample Drawn	Number of Sample Analyzed	Petrographic Study Report
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.1.12: Beneficiation Studies

Sl. No.	Type of Beneficiation	Number of Samples	Attach
Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.1.13: Bulk Density Study as per M(EMC) Rules, 2016 and SOP of CGPB

Method adopted for calculating bulk density of ore and waste

The bulk density/Specific Gravity has been calculated by calculating volume of solid core and its corresponding weight. (Ref. annexure no.20)

Sl. No.	Nature of Ore/OB	Mineral	Number of samples	Bulk Density Established (t/m³)
1	Ore	Bauxite (Aluminous Laterite)	33	2.52

2.2.1.14: Area Covered under Exploration

Level of exploration	Area in Ha		Total area in Ha.
	Forest	Non-forest	
G-1	NA	0	0
G-2	NA	6.2258	6.2258
G-3	NA	2.5047	2.5047
G-4	NA	0	0
Area proved as Non-mineralized	NA	0	0
Area to be explored	NA	0	0
Total		8.7305	8.7305

2.2.2: Summary of The Previous Exploration (Before Last Plan Period)

Name of The Agency *

NA

2.2.2.1: Geological Mapping

Sl. No.	Year	Scale	Area Covered (ha)
Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.2.2: Airborne Geophysical Survey

Sl. No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (ha)
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Sl. No.	Latitude	Longitude
1	Not Applicable	Not Applicable

2.2.2.3: Ground Geophysical Survey

Sl. No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (ha)
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Sl. No.	Latitude	Longitude
1	Not Applicable	Not Applicable

2.2.2.4: Geochemical Survey

Sl. No.	Type of Sample	No of Samples
Not Applicable	Not Applicable	Not Applicable

2.2.2.5: Pitting

Sl. No.	Pit ID	Length of Pit (m)	Width of Pit (m)	Depth of Pit (m)	Litho Unit Exposed
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Sl. No.	Litho Unit From (m)	Litho Unit To (m)	Average Grade (%)	Running Meters (m)	Latitude
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Sl. No.	Longitude
1	Not Applicable

2.2.2.6: TRENCHING

Number of Trenches *

Not Applicable

Number of Trenches *

Not Applicable

SPACING

Min (m) *

Not Applicable

Max (m) *

Not Applicable

Avg (m) *

Not Applicable

Area Covered Under Trenching

Co-ordinates	
Lattitude *	
North	Not Applicable
North	Not Applicable
North	Not Applicable
North	Not Applicable

Longitude *

East	Not Applicable
East	Not Applicable
East	Not Applicable
East	Not Applicable

Sl. No.	Trench ID	Length of Trench (m)	Width of Trench (m)	Depth of Trench (m)	Litho Unit Exposed
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Sl. No.	Average Grade (%)	Running Meters (m)	From Latitude	From Longitude	To Latitude
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

Sl. No.	Longitude
1	Not Applicable

2.2.2.7: EXPLORATORY Drilling

2.2.1.7.1:Core/Non-core Drilling

			Core holes	
Sl.No	Year	Exploration agency	Number of boreholes drilled	Total meter
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continued...

	Non-core (RC/DTH)		Grand total		
Sl.No	Number of boreholes drilled	Total mtrs	Total boreholes	Total mtr	Attach log sheet of each borehole in csv/excel format.
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.2.8: Exploratory Mining

Sl. No.	Pit ID	Volume (m^3)
1	Not Applicable	Not Applicable

2.2.2.9: SAMPLING

Sl. No.	Type of Sample	Number of Samples	Area Covered (ha)	Latitude	Longitude
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.2.10: Chemical Analysis

S.No.	Sample ID	Minerals	Radical Analysis
1	Not Applicable	Not Applicable	Not Applicable

2.2.2.11: Petrographic & Mineragraphic Studies

Sl. No.	Type of Sample	Number of Sample Drawn	Number of Sample Analyzed	Petrographic Study Report
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.2.12: Beneficiation Test

Sl. No.	Type of Beneficiation	Number of Samples
1	Not Applicable	Not Applicable

2.2.2.13: Bulk Density

Sl. No.	Rock Types	Number of Samples	Minerals	Bulk Density Established (t/m³)
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable

2.2.2.14: Area Covered under Exploration

G1 (Ha)	0
G 2 (Ha)	0
G3 (Ha)	0
G4 (Ha)	0
G1+G2+G3+G4 (Ha)	0

Year	Area converted to G1 from G2, G3 & G4	% increase in G-1 Area	Remaining Area % in G2	Remaining Area % in G3	Remaining Area % in G4
Year 1	0	0	0	0	0
Year 2	0	0	0	0	0
Year 3	0	0	0	0	0
Year 4	0	0	0	0	0
Year 5	0	0	0	0	0
Potentially Mineralised area (Ha)		0			

table continue...

Year	Remaining Area in G2	Remaining Area in G3	Remaining Area in G4
Year 1	0	0	0
Year 2	0	0	0
Year 3	0	0	0
Year 4	0	0	0
Year 5	0	0	0

2.2.3: ORE BODY GEOMETRY & GRADE

Sl. No.	Name of the ore band	General Strike / Trend	Dip Of Mineral Body	Average Strike Length (m)	Average Width (m)
1	Bauxite (Aluminous Laterite)	NE-SW	SE	490	180

table continue...

	Chemical parameters				
Sl. No.	Average Depth (m)	Name of the radical	Min Grade (%)	Max Grade (%)	Avg Grade (%)
1	4.94	Al2O3	20	47.61	36.85

2.2.4: Reserve / Resource Estimation Method

2.2.4.1: Methodology

Resource / Reserve Estimation Method *	Sectional Area method

Methodology

The reserve is estimated as per the Mineral (Evidence of Mineral Content) Rules, 2015. The surface Geological Plan has been updated on the basis of mines survey done on 09.08.2021 with the help of total station survey instrument. For estimation conventional cross section area method has applied for the purpose of estimation of mineral resources/reserves. Sufficient numbers of cross section and longitudinal sections have been drawn at suitable interval across the strike length. The sectional qualities have also been estimated along these section lines by the cross-section method.

Following methodology is adopted for reserve/resource estimation:

- The maximum depth of this resource is taken up to -17.49 mRL (as per G-2 level exploration) for proved category of reserve/resource.
- The maximum depth of this resource is taken up to -15.74 mRL (as per G-3 level exploration) for probable category of reserve/resource.
- Deposit is sub-surficial and almost homogeneous. Exposures of Bauxite (Aluminous Laterite) can be seen in mining excavation wherein Bauxite (Aluminous Laterite) is found as per geological plan.
- Mineral reserve/resource can be computed by cross section area method.
- The bulk density is considered as 2.52 ton/cum.
- Since area is single mounted terrain with thickness of Bauxite (Aluminous Laterite) hence cross section area method considered for deriving available mineral quantum in the area.

2.2.4.2: RESOURCE CALCULATION

Sl. No.	Cross section/Block	Sectional Area/Block area (sq mtr)	Influence (m)	Depth in mtr	Volume (m^3)
1	A'-A" (G2)	2012	115.21	6.73	231803
2	B'-B" (G2)	619	101.95	2.16	63095
3	A'-A" (G3)	899	101.23	4.51	91006
4	B'-B" (G3)	87	100.31	2.40	8727

table continue...

Sl. No.	Bulk Density (t/m³)	Resource Quantity (t)	Level of Exploration	Type of Land	Name of the radical
1	2.52	584142	332	Private	Al2O3
2	2.52	159001	332	Private	Al2O3
3	2.52	229335	333	Private	Al2O3
4	2.52	21992	333	Private	Al2O3

table continue...

Sl. No.	Grade (%) (avg)	Method used for resource estimation
1	36.85	Cross section
2	36.85	Cross section
3	36.85	Cross section
4	36.85	Cross section

2.2.5: Reserve / Resource Estimation Method

2.2.5.1: Mineral Resource Estimate for Conversion to Mineral Reserve

Mineral Resources (332) estimated for conversion to Mineral Reserve-G2 (122) after deducted parameter of bench safety, statutory boundary and inferred resources (333) as per criteria for MEMC rule.

2.2.5.2: Threshold value & Cut off Parameters

The entire Bauxite (Aluminous Laterite) mineralization in the lease area is of lateritic nature and mostly suitable for non-plant grade. The cut off limit of Bauxite (Aluminous Laterite- major mineral) has been set in prescribed by Indian Bureau of Mines and Ministry of Mines, Nagpur vide notification No. C-284/3/CMG/2017 dated 25.04.2018 (≥ 20% Al2O3) during estimation of Bauxite (Aluminous Laterite) resources/reserves. Although the Al2O3 content is mostly suitable for non-plant grade. The entire ore produced irrespective of size is utilized very smartly. This is all for conservation of valuable mineral.

2.2.5.3: Mining Factors or Assumptions

Bench Height: 5m

2.2.5.4: Metallurgical Factors or Assumptions

The different grades of bauxite occurring in this lease are associated with clay and Silicious clay. After manual sizing and sorting of the bauxite mineral dispatch to buyers from mine. (Ref. Annexure no. 21)

2.2.5.5: Cost & Revenue Factors

The mining of bauxite from the area is profitable. The NPV of the project is Rs. 13432320. Therefore, the bauxite up to probable limit is nomenclature on Feasibility axis as F2. (Detailed Cost & Revenue Factors are described in Prefeasibility report attached as Annexure no. 21)

2.2.5.6: Market Assessment

As per Ore grade the trading of Bauxite mainly sales for cement plants and sizing and sorting of higher side Al2O3 also use in abrasive and refractory plants. High demand of aluminium within state with domestic and world wise. Bauxite is a raw material of aluminium, so there is domestic demand as well as abroad demand.(Ref. Annexure no. 21)

2.2.5.7: Other Modifying Factors

Modified mining plan will be submitted to competent authority as per rule after assessment the effect of risk depends on any, of natural risk, infrastructure, environmental, legal, marketing, social or governmental factors.

2.2.5.8: Classification

The entire reserve & resources have been classifed into 122 (probable reserve) & 222 (prefeasibility resources), 333 (Inferred resources) category.

2.2.5.9: Calculation of blocked resources

Sl. No.	Reserves blocked due to	Cross section/Block	Sectional area/ block area (in Sq mrt)	Influence (m)	Depth (m)
1	Bench Safety (G2)	A'-A"	34	115.21	4.15
2	Bench Safety (G2)	B'-B"	50	101.95	1
3	Bench Safety (G3)	A'-A"	53	101.23	7.28
4	Bench Safety (G3)	B'-B"	43	100.31	6.14
5	Boundary Barrier (G2)	A'-A"	46.03	115.21	5.18
6	Boundary Barrier (G2)	B'-B"	45	101.95	1.66
7	Boundary Barrier (G3)	A'-A"	95	101.23	7.28
8	Boundary Barrier (G3)	B'-B"	44	100.31	6.14

table continue...

Sl. No.	Volume (m^3)	Bulk Density (t/m^3)	Resource Quantity (t)	UNFC code	Type of Land
1	3917	2.52	9871	222	Private
2	5098	2.52	12846	222	Private
3	5365	2.52	13520	222	Private
4	4313	2.52	10870	222	Private
5	53003	2.52	13364	222	Private
6	4588	2.52	11561	222	Private
7	9617	2.52	24234	222	Private
8	4414	2.52	11122	222	Private

table continue...

Sl. No.	Name of the radical	Grade (%) (avg)	Method used for resource estimation
1	Al2O3	36.85	Cross section
2	Al2O3	36.85	Cross section
3	Al2O3	36.85	Cross section
4	Al2O3	36.85	Cross section
5	Al2O3	36.85	Cross section
6	Al2O3	36.85	Cross section
7	Al2O3	36.85	Cross section
8	Al2O3	36.85	Cross section

Total (Resource Quantity) (t)	107388

2.2.5.10: Calulation of Reserves

Sl. No.	Cross Sectinon/Block	Sectional area/block area in Sq mtr	Influence (m)	Depth (m)	Volume (m³)
1	A'-A" (G2)	1932	115.21	6.73	222582
2	B'-B"(G2)	524	101.95	2.16	53422

table continue...

Sl. No.	Bulk Density (t/m³)	Reserves Quantity (t)	UNFC code	Type of Land	Name of the radical
1	2.52	560907	122	Private	Al2O3
2	2.52	134623	122	Private	Al2O3

table continue...

Sl. No.	Grade (%) (avg)	Method used for resource estimation
1	36.85	Cross section
2	36.85	Cross section

अनुमोदित
Approved

क्षेत्रीय खान नियंत्रक
Regional Controller of Mines
भारतीय खान ब्यूरो, गांधीनगर
Indian Bureau of Mines, Gandhinagar

2.2.5.11

Mineral	Bauxite (Aluminous Laterite)			
Reserves/ Resources estimated as on	01-07-2021			
UNIT of estimation	Million Tonnes			
Classification	Code	Quantity		
		Forest	Non-Forest	Total
1. Proved Mineral Reserve (A)	111	0	0	0
2. Probable Mineral Reserve (A)	121	0	0	0
3. Probable Mineral Reserve (A)	122	0	0.69553	0.69553
B. Remaining Resources				
1. Feasibility Mineral Resource (B)	211	0	0	0
2. Prefeasibility Mineral Resource (B)	221	0	0	0
3. Prefeasibility Mineral Resource (B)	222	0	0.107388	0.107388
4. Measured Mineral Resource (B)	331	0	0	0
5. Indicated Mineral Resource (B)	332	0	0	0
6. Inferred Mineral Resource (B)	333	0	0.191580	0.191580
7. Reconnaissance Mineral Resource (B)	334	0	0	0

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table continue...

Classification	Grade	
	Forest	Non-Forest
1. Proved Mineral Reserve (A)	0	-
2. Probable Mineral Reserve (A)	0	-
3. Probable Mineral Reserve (A)	0	Al2O3: 20% to 47.61%
B. Remaining Resources		
1. Feasibility Mineral Resource (B)	0	-
2. Prefeasibility Mineral Resource (B)	0	-
3. Prefeasibility Mineral Resource (B)	0	Al2O3: 20% to 47.61%
4. Measured Mineral Resource (B)	0	-
5. Indicated Mineral Resource (B)	0	-
6. Inferred Mineral Resource (B)	0	Al2O3: 20% to 47.61%
7. Reconnaissance Mineral Resource (B)	0	-

Total Mineral Resources (A+B)	0.994498

* Subsequent tables to be added for other associated minerals

2.2.6: Future Exploration Proposal

2.2.6.1: Geological Mapping

Sl. No.	Year	Scale	Area Covered (ha)
1	Year1	1:1000	8.7305

2.2.6.2: Ground Geophysical Survey

Sl. No.	Type of Survey	Spacing (m)	Total line (km)	Area Covered (ha)
Nil	Nil	Nil	Nil	Nil

table continue...

Sl. No.	Latitude	Longitude
Nil	Nil	Nil

2.2.6.3: Pitting

Number of pits *

Nil

Sl. No.	Year	Land type	Pit ID	Length of Pit (m)	Width of Pit (m)
Nil	Nil	Nil	Nil	Nil	Nil

table continue...

Sl. No.	Depth of Pit (m)	Latitude	Longitude
Nil	Nil	Nil	Nil

2.2.6.4: TRENCHING

Number of Trenches *

Nil

2.2.6.4.1: SPACING

Min (m) *

Nil

Max (m) *

Nil

Avg (m) *

Nil

2.2.6.4.2: Area Covered Under Trenching

Co-ordinates

Sl. No.	Year	Land type	Trench ID	Length of Trench (m)	Width of Trench (m)
Nil	Nil	Nil	Nil	Nil	Nil

table continue...

Sl. No.	Depth of Trench (m)	From Latitude	From Longitude	To Latitude	To Longitude
Nil	Nil	Nil	Nil	Nil	Nil

2.2.6.5: Exploratory Drilling

2.2.6.5.1: Core Drilling & Non-Core Drilling

Sl.No	Year	In forest area			
		No. of boreholes	Total mtr	Type of borehole	Grid interval
1	1st Year	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Sl.No	In Non-forest				
	No. of boreholes	Total mtr	Type of borehole	Grid interval	Total borehole
1	12	600	Core	100*100	12

table continue...

Sl.No	Total Mtr	Attachment
1	600	Ref. Annexure no.20

2.2.6.6: Exploratory Mining

Sl. No.	year	Pit ID	Length in mtrs	Width in mtrs	Depth in mtrs
1	Nil	Nil	Nil	Nil	Nil

table continue...

Sl. No.	Volume (m^3)
1	Nil

2.2.6.7: Sampling

Sl. No.	Type of Sample	Number of Samples proposed	Area Covered (ha)	Latitude	Longitude
Nil	Nil	Nil	Nil	Nil	Nil

2.2.6.8: Petrographic & Mineragraphic Studies

Sl. No.	Type of Sample	Number of Sample proposed
Nil	Nil	Nil

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Chapter 3: MINERAL BENEFICIATION / PROCESSING

Name of The Ore/Mineral	Bauxite (Aluminous Laterite)

3.1: Mineralogy of the ROM ore/ Mineral:

S. No.	Valuable Mineral Name	Approx. Mineral %	Gangue Mineral/s Name	Approx. Gangue Mineral %
1	Bauxite (Aluminous Laterite)	36.85%	Clay/Silicious clay	70%

3.2: Complete Chemical Analysis of the ROM Ore/Mineral:

S.No.	Radicals	Wt %
1	Al2O3	37.95

Note: Average Al2O3 is 36.85.

3.3: Crushing Section:

3.3.1: Primary Crushing

Sl. No.	Type of Crusher	Make	Capacity of Crusher (tph)	Feed Size (mm)	Product Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.3.2: Secondary Crushing

Sl. No.	Type of Crusher	Make	Capacity of Crusher (tph)	Feed Size (mm)	Product Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.3.3: Tertiary Crushing

Sl. No.	Type of Crusher	Make	Capacity of Crusher (tph)	Feed Size (mm)	Product Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.4: Grinding Section

3.4.1: Dry Grinding

Sl. No.	Type of Mill	Stages	Make of the mill	Feed Flow Rate (tph)	Feed Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Product Size Mill Discharge (mm)	Type of screen	Make	Aperture Size of Screen/Classifier (mm), if applicable	Classifier / Screen undersize (tph)	Classifier / Screen oversize (tph)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.4.2: Wet Grinding

Sl. No.	Type of Mill	Stages	Make of the mill	Feed Flow Rate (tph)	Feed Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Product Size (mm)	Type of screen / Classifier	Aperture Size of Screen/Classifier (mm), if applicable	Classifier / Screen undersize (tph)	Classifier / Screen oversize (tph)	Water Requirement (l/h)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Fresh Water Requirement (l/h)	Recirculated Water (l/h)
Not Applicable	Not Applicable

3.5: Dry Processing

3.5.1: Screening and Classification

Sl. No.	Type of screen / classifiers	Stages	Make	Capacity (tph)	Aperture Size of Screen/Classifier (mm), if applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Feed Size (mm)	Product Size (mm)	Product quality (if applicale)
Not Applicable	Not Applicable	Not Applicable

3.5.2: Other Operations

Sl. No.	Type of equipment / operation	Stages, if applicable	Make	Capacity (tph)	Feed Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Product Size (mm)	Product-Mid (tph), if available	Product-Tail (tph)
Not Applicable	Not Applicable	Not Applicable

3.5.3: Product Quality

Products	Wt %	In tonnes	Size (range) mm	Complete chemical analysis
Concentrate	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Sub-grade	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Rejects	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.6: Wet Processing

3.6.1: Scrubbing / Washing

Sr No.	Type of Scrubbers / washers	Stages, if applicable	Make	Capacity (tph)	Feed Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Product Size (mm)	Product quality (if applicale)	Water Requirement (l/h)	Fresh Water Requirement (l/h)	Recirculated water (l/h)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.6.2: Screening and Classification

Sl. No.	Type of screen / classifiers	Stages, if applicable	Make	Capacity (tph)	Aperture Size of Screen/Classifier (mm), if applicable
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue…

Feed Size (mm)	Product Size (mm)	Product quality (if applicale)	Water Requirement (l/h)	Fresh Water Requirement (l/h)	Recirculated water (l/h)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.6.3: Gravity Separation

Sl. No.	Type of separators (jig, table, spiral, etc.)	Stages, if applicable	Make	Capacity (tph)	Feed Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue…

Product (Conc) (tph)	Product-Mid (tph), if available	Product-Tail (tph)	Water Requirement (l/h)	Fresh Water Requirement (l/h)	Recirculated water (l/h)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.6.4: Magnetic Separation

Sl. No.	Type of magnetic separators (magnetic intensity)	Stages, if applicable	Make	Capacity (tph)	Feed Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue…

Product-Mag (tph)	Product-Mid (tph), if available	Product non-Mag (tph)	Water Requirement (l/h)	Fresh Water Requirement (l/h)	Recirculated water (l/h)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.6.5: Flotation

Sl. No.	Type of flotation equipment (froth/ column)	Stages (rougher/ cleaner, etc), if applicable	Make	Capacity (tph)	Feed Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue…

Product-Float (tph)	Product non-Float (tph)	Water Requirement (l/h)	Fresh Water Requirement (l/h)	Recirculated water (l/h)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.6.6: Other Operations

Sl. No.	Type of equipment / operation	Stages, if applicable	Make	Capacity (tph)	Feed Size (mm)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Product-Conc (tph)	Product-Mid (tph), if available	Product-Tail (tph)	Water Requirement (l/h)	Fresh Water Requirement (l/h)	Recirculated water (l/h)
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.6.7: Product Quality (wet processing)

Products	Wt %	In tonnes	Size (range) mm	Complete chemical analysis
Concentrate	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Sub-grade	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Rejects	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.7: Overall Product Quality (Dry cum Wet Processing)

Products	Wt %	In tonnes	Size (range) mm	Complete chemical analysis
Concentrate	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Sub-grade	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Rejects	Not Applicable	Not Applicable	Not Applicable	Not Applicable

3.8: Disposal Method for tailing/ rejects

a) Explain the disposal method for tailing or reject from processing plant with detail chemical /	Not Applicable
b) Size and capacity of tailing pond, toxic effect of such tailings, process adopted to neutralise its	Not Applicable
c) Any other data (if available)	Not Applicable

3.9: Overall water requirement of mining and mineral processing

Indicate quantity, source of supply, disposal of water and extent of recycling and chemical analysis	**Not Applicable**

3.10: Flow sheets and charts

Material balance chart of mineral processing plant(s) (each stage of process)	**Not Applicable**
Attach flow sheet of beneficiation of plant(s)	**Not Applicable**
Any other data (if applicable)	**Not Applicable**

Mansuri Latifbhai Kasambhai

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Chapter 4: MINING OPERATIONS

4.1: MINING METHOD (Opencast)

4.1.1: Existing Method of Mining

Choose one or more	Not Applicable

4.1.2: Proposed Method of Mining

Choose one or more	HEMM without deephole drilling
Reasons for Proposed Changes	Not Applicable, No Changes Proposed

4.2: Operational Parameters

4.2.1: Inventory of Existing Pits & Dumps

4.2.1.1: PITS

S.No.	Pit ID	Pit Status	Area Covered by Pit (Ha)	Pit Dimension (m x m x m)
Nil	Nil	Nil	Nil	Nil

4.2.1.2: DUMPS & STACK

4.2.1.2.1: DUMP DETAILS

S.No.	Dump ID	Dump Status	Type of Dump	Total Dump Quantity (t)	Area covered by Dump (Ha)
Nil	Nil	Nil	Nil	Nil	Nil

table continue...

S.No.	Height (m)	Location
Nil	Nil	Nil

4.2.1.2.2: STACK DETAILS

S.No.	Stack ID	Type of Stack	Total Stack Quantity (t)	Area covered by Stack (Ha)	Height (m)
Nil	Nil	Nil	Nil	Nil	Nil

4.2.1.3: DETAILS OF STABILIZED DUMPS

Sl. No.	Dump ID	Number of Terraces	Average Height of Terraces (m)	Length of Toe Wall (m)	Length of Garland Drain (m)
Nil	Nil	Nil	Nil	Nil	Nil

table continue...

Sl. No.	Area Stabilized (ha)	Method of Stabilization
Nil	Nil	Nil

4.2.2: Opencast Mining

4.2.2.1: Bench Parameters

Pit Id	Year	Max Height of the Benches in Over Burden (m)	Min Width of the Benches in Over Burden (m)	Slope of the Bench in Over Burden (degree)	Max Height of the Benches in Mineral (m)
Pit-1	Year 1	5	5	75	5
Pit-1	Year 2	5	5	75	5
Pit-1	Year 3	5	5	75	5
Pit-1	Year 4	5	5	75	5
Pit-1	Year 5	5	5	75	5

table continue...

Minimum Width of the Benches in Mineral (m)	Slope of the Bench in Mineral (degree)	Overall Slope of Pit (degree)	Number of Benches in Top Soil	Number of Benches in Over Burden	Number of Benches in Mineral
5	75	45	0	3	3
5	75	45	0	2	2
5	75	45	0	1	2
5	75	45	0	1	1
5	75	45	0	1	2

table continue...

Max Depth of Workings (m)	Depth of Water Table (m)	Max Slope Angle of Haul Roads (1 in)	Year-Wise Development & Production Plan	Year-Wise Development & Production Sectio
7.3	28	16	Plate no.3A	Plate no.3A
13.83	28	16	Plate no.3B	Plate no.3B
4	28	16	Plate no.3C	Plate no.3C
22.44	28	16	Plate no.3D	Plate no.3D
8.96	28	16	Plate no.3E	Plate no.3E

4.2.2.2: Yearwise Opencast Development

Sr No	Year	Pit ID	Bench	Direction	Bulk Density of Overburden (BD1) (ton/m^3)
1	Year 1	Pit-1	Bench 3	West	1
2	Year 2	Pit-1	Bench 3	West	1
3	Year 3	Pit-1	Bench 2	West	1
4	Year 4	Pit-1	Bench 5	West	1
5	Year 5	Pit-1	Bench 5	West	1

table continue...

Bulk Density of Mineral (BD2) (tonn/m^3)	Top Soil Volume (Length x Width x Height) (m^3)	Over Burden Volume (Length x Width x Height) (m^3)	Over Burden Quantity (t)	ROM Volume (Length x Width x Height) (m^3)	ROM Quantity (t)
2.52	0	67325	67325	18831	47455
2.52	0	127219	127219	22719	57253
2.52	0	65775	65775	23167	58382
2.52	1294	213331	213331	33431	84246
2.52	3772	119514	119514	59225	149248

table continue...

Recovery	Mineral Reject (t)	Production Main (t)	Production Associated (t)	Location of Advancement	OB to Ore Ratio (ton/m^3)
100%	0	47455	0	North East	01:03.5
100%	0	57253	0	North East	01:05.5
100%	0	58382	0	North East	01:00.9
100%	0	84246	0	North East	01:06.4
100%	0	149248	0	North East	01:02.0

S.No.	Pit ID	Total Topsoil Volume (m^3)	Total Over Burden Volume (m^3)	Total Over Burden Quantity (t)	Total ROM Volume (m^3)
1	Pit-1 (Year-4)	1294	213342	0	33431
2	Pit-1 (Year-5)	3772	119424	0	59225

table continue...

S.No.	Total ROM Quantity (t)
1	84246
2	149248

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4.2.2.3: Transportation & Hauling Equipment

S.No.	Type	Make	Capacity (m^3)	No. of Equipments
1	Dumper	Tata Hyva 2518 or Equivalent	10	2
2	Water Tanker	2015	1500	1

4.3: Material Handling Summary

4.3.1: Studies Undertaken		
Blast Vibration Study Report	No	(If yes attach report as annexure)
Slope Stability Study Report	No	(If yes attach report as annexure)
Recovery Study Report	No	(If yes attach report as annexure)
Hydrological Study Report	No	(If yes attach report as annexure)
Mineral Beneficiation Study Report	No	(If yes attach report as annexure)
Underground Rock Displacement Study Report	No	(If yes attach report as annexure)
Subsidence Study Report	No	(If yes attach report as annexure)
Underground Geotechnical Study Report	No	(If yes attach report as annexure)
Any Other Study Report	No	(If yes attach report as annexure)
Bulk Density Study Report	Yes	Annexure no. 20

भारत सरकार-भारतीय खान ब्यूरो
GOVT. OF INDIA, INDIAN BUREAU OF MINES

क्षेत्रीय खान नियंत्रक
Regional Controller of Mines
भारतीय खान ब्यूरो, गांधीनगर
Indian Bureau of Mines, Gandhinagar

4.3.2: INSITU MINING

Sl. No.	Year	Total Handling (t)	Waste Quantity (t)	ROM Quantity (t)	ROM Quantity Saleable Mineral (t)
1	Year 1	114780	67325	47455	47455
2	Year 2	184472	127219	57253	57253
3	Year 3	124157	65775	58382	58382
4	Year 4	297577	213331	84246	84246
5	Year 5	268762	119514	149248	149248

table continue...

Sl. No.	ROM Quantity Mineral Reject (t)	OB to Ore Ratio (Waste Quantity / ROM Quantity)	Grade Range (%
1	0	01:03.5	Al2O3: 20% to 47.61%
2	0	01:05.5	Al2O3: 20% to 47.61%
3	0	01:00.9	Al2O3: 20% to 47.61%
4	0	01:06.4	Al2O3: 20% to 47.61%
5	0	01:02.0	Al2O3: 20% to 47.61%

4.3.3: Dump workings

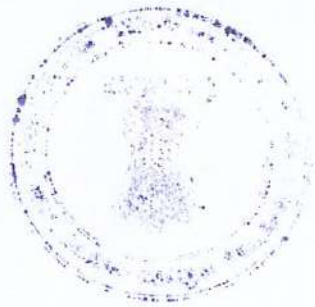
Sl. No.	Year	Dump Id	Location Latitude	Location Longitude	Area (m^2)
1	Year 1	Dump 1	22°15'11.57"N	69°17'53.29"E	4488
2	Year 2	Dump 2	22°15'7.51"N	69°17'53.32"E	8481
3	Year 3	Dump 3	22°15'10.82"N	69°17'58.35"E	4385
4	Year 4	Dump 4	22°15'13.04"N	69°17'52.31"E	10851
5	Year 5	Dump 5	22°15'13.01"N	69°17'52.21"E	11892

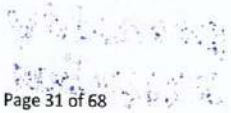
table continue...

Sl. No.	Avg Height of Dump (m)	Volume (m^3)	Total Dump Quantity (t)	Proposed Dump Handling Quantity (t) (A)	Proposed Recovery of Saleable Mineral (t)(B)
1	15	67325	67325	0	0
2	15	127219	127219	0	0
3	15	20071	20071	0	0
4	19.66	213342	213342	0	0
5	10.05	119424	119424	0	0

table continue...

Sl. No.	Proposed Waste Quantity (t) (A-B)	Grade Range (%)	Justification
1	0	Below 20% Al2O3 or Nil	Nil
2	0	Below 20% Al2O3 or Nil	Nil
3	0	Below 20% Al2O3 or Nil	Nil
4	0	Below 20% Al2O3 or Nil	Nil
5	0	Below 20% Al2O3 or Nil	Nil





4.3.4: Calculation Summary				
Year	Year 1	Year 2	Year 3	Year 4
(A) Total ROM quantity (t)	114780	184472	124157	297577
(B) Saleable ore from ROM (t)	47455	57253	58382	84246
(C) Proposed Dump Handling Quantity (t)	0	0	0	0
(D) Saleable Ore recovered from dump workings (t)	0	0	0	0
(E) Total Saleable Ore (t) (=B+D)	47455	57253	58382	84246
(F) Total Quantity Handled (t) (=A+C)	114780	184472	124157	297577

table continued...

Year	Year 5	Total
(A) Total ROM quantity (t)	268762	989748
(B) Saleable ore from ROM (t)	149248	396584
(C) Proposed Dump Handling Quantity (t)	0	0
(D) Saleable Ore recovered from dump workings (t)	0	0
(E) Total Saleable Ore (t) (=B+D)	149248	396584
(F) Total Quantity Handled (t) (=A+C)	268762	989748

4.4: Machine Calculation

4.4.1: Machine Requirement Summary		
Number of Average Working Days in One Year (A)		300
Number of Shifts per Day (B)		1
Material Handling Required per Day (t) ((D)=Largest of (Q1,Q5)/(A))		896
Material to be Handled per Shift (t) ((E)=(D)/(B))		896
Handling Required per Hour (t) ((F)=(E)/8 hours)		112
Effective Shift Time	8 hrs	00 mins

4.4.2: Shovel / Excavator Requirement

Effective Shift Time:	8 hrs	00 mins

Sl. No.	Type	Bucket Capacity (m^3)(A)	Bucket Fill Factor (B)	Swell Factor (C)	Tonnage Factor (m^3/t) (D)
1	Excavator	1.22	0.8	1.33	2.56

table continue...

Sl. No.	Machine Utilization Factor (%) (U)	Efficiency (%) (E)	Cycle time (sec) (F)	(G) TPH =TPH (G) =((3600 x A x B x C x D x E x U) / F)/1000	Total Hours (H) =Number of working days x Number of shifts/day x Effective shift hours
1	75%	10%	30	269.1699	2400

table continue...

Sl. No.	Yearly handling by one Excavator (t) (I)=(G x H)	Maximum handling of the material by this machine during the block period (t) (J)	Number of excavator machines required (K) = (J / I)	Standby excavator (L)
1	646007.6851	268762	0.416035298	1

4.4.3: Dumper Requirement

Effective Shift Time:	8 hrs	00 mins

Sl. No.	Total Hours=Number of working days (W)x Number of shifts/day x Effective shift hours (Machine Requirement Summary) (A)	Capacity of Dumpers (t) (B)	Speed of the dumper (KMPH) (i)	Lead Distance (KM) (ii)	Time taken to cover distance in minutes(iii) =(ii/i) x 60
1	2400	20	20	1	3

table continued...

Sl. No.	Queuing, Loading Time at Shovel (min) (iv)	Queuing, Unloading Time during unloading (min) (v)	Total Time to complete one trip(vi) = (iii + iv + v)	No. of Trips / hr = (60 / vi)	Total transportation per hour =(B X vii)
1	6.25	6	15.25	3.93442623	78.68852459

table continued...

Sl. No.	Yearly handling by one dumper (ix) = A x TPH	Maximum handling of the material by this machine during the block period (t) (x)	Number of dumpers will be (xi) =(x / ix)	Plus Standby dumper (xii)
1	188852.459	149248	0.790288889	1

4.4.4: Drill Machine Requirement

Effective Shift Time:	8 hrs	00 mins

Sl. No.	Type of Drill	Depth of Hole(including Sub-grade Drilling (m)	Spacing (m)	Burden (m)	Bulk Density of Waste (t/m^3)
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Sl. No.	Bulk Density of Mineral (t/m^3)	Yield per Hole (t)	Yield per Meter (t/m)	Annual Target Known (t)	Drilling Requirement per Day (m)
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

table continue...

Sl. No.	Drilling Requirement per Shif t(m)	Rate of Drilling per Hours (m/hr)	Required Number of Drills (m/c)	Stand by Drill
1	Not Applicable	Not Applicable	Not Applicable	Not Applicable

4.4.5: Machine Deployment Details

4.4.5.1: Excavator & Loading Equipment

S.No.	Type	Make	Capacity (m^3)	No. of Equipments
1	Excavator	2019	1.22	1

4.4.5.2: Dozers Details

S.No.	Type	Make	Capacity (hp)	No. of Equipments
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

4.4.5.3: Drilling Details

S.No.	Type	Make	Capacity (t)	Diameter of Hole (mm)
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

4.6: Man Power Deployment

4.6.1: Managerial

Sr No	Particulars	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3
1	Mining Engineer	0	0	0
2	Geologist	0	0	0
3	Other	0	0	0

table continue...

Sr No	Number of Persons in General Shift	Total No. of Persons per day
1	1	1
2	1	1
3	1	1

4.6.2: Supervisory

Sr No	Particulars	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3
1	Others	0	0	0

table continue...

Sr No	Number of Persons in General Shift	Total No. of Persons per day
1	1	1

4.6.3: Skilled Workers / Operators

Sr No	Particulars	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3
1	Operator	0	0	0
2	Dumper Operator	0	0	0
3	Technician	0	0	0

table continue...

Sr No	Number of Persons in General Shift	Total No. of Persons per day
1	1	1
2	1	1
3	1	1

4.6.4: Semi-skilled Workers

Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day
0	0	0	1	1

4.6.5: Unskilled Workers

Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day
0	0	0	3	3

4.6.6: Other Specify

Sr No	Particulars	Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3
1	Driver water tanker	0	0	0
2	Rock breaker operator	0	0	0
3	Driver Jeep	0	0	0

table continue...

Sr No	Number of Persons in General Shift	Total No. of Persons per day
1	1	1
2	1	1
3	1	1

4.6.7: No of Persons Engaged Per Day

Number of Persons in Shift 1	Number of Persons in Shift 2	Number of Persons in Shift 3	Number of Persons in General Shift	Total No. of Persons per day
0	0	0	13	13

No of Shifts per Day ((A) = Machine Requirement Summary (B))	1
Average Daily Employment per Shift ((B) = (Total Number of Person per Day) / (A))	13
Material to be Handled per Shift ((C) = Machine Requirement Summary (E))	896

4.6.8: Supervision

Sl. No.	Particulars	Qualification	Requirement / Proposed	In Position / Existing Strength
1	-	-	-	-

table continue...

Sl. No.	(-) Shortage / (+) Excess	Remarks
1	-	-

4.7: Waste Management

4.7.1: Existing Dump

Sl. No.	Year	Dump Id	Type of Dump	Proposed Area (ha)	Height (m)
Nil	Nil	Nil	Nil	Nil	Nil

table continue...

Sl. No.	Total Dump Quantity (m^3)	Existing Dump Location
Nil	Nil	Nil

4.7.2: New Dump

Sl. No.	Year	Dump Id	Type of Dump	Proposed Area (ha)	Height (m)
1	Year 1	Dump 1	Waste	4488	15
2	Year 2	Dump 2	Waste	8481	15
3	Year 3	Dump 3	Waste	4385	15
4	Year 4	Dump 4	Waste	10851	19.66
5	Year 5	Dump 5	Waste	11892	10.05

table continue...

Sl. No.	Total Dump Quantity (m^3)	New Dump Location
1	67320	South west
2	127215	South west
3	65775	South west
4	213331	West (within proposed production year I to III
5	119515	West (within proposed production year I to III

4.7.3: Existing Stack

Sl. No.	Year	Stack ID	Type of Stack	Proposed Area (ha)	Height (m)
Nil	Nil	Nil	Nil	Nil	Nil

table continue...

Sl. No.	Total Stack Quantity (m^3)	Existing Stack Location
Nil	Nil	Nil

4.7.4: New Stack

Sl. No.	Year	Stack ID	Type of Stack	Proposed Area (ha)	Height (m)
1	Nil	Nil	Nil	Nil	Nil

table continue...

Sl. No.	Total Stack Quantity (m^3)	New Stack Location
1	Nil	Nil

4.8: Mineral Waste Handling To Utilize As Minor Mineral

Sl. No.	Year	Dump Id	Type of Dump	Proposed Area (ha)	Quantity Handled (t)
Nil	Nil	Nil	Nil	Nil	Nil

table continued...

Sl. No.	Quantity Recovered (t)	Name Of Minor Mineral	Alternative Waste Utilization (m^3)
Nil	Nil	Nil	Nil

4.9: Use of Minerals

Sl. No.	Proposed Use Of * Mineral	Name Of Mineral	Relevant Use Of Mineral	Physical Specifications	Chemical Specifications
1	Direct selling	Bauxite (Aluminous Laterite)	Cement, Chemical & Refractories	white to gray to reddish brown with a pisolitic structure	Al2O3: 20% to 47.61%

* Choose among these:
1) Captive use in Own Industry
2) Direct Selling
3) Selling Post-Beneficiation / Up-gradation
*Select more than one, if applicable

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Chapter 5: SUSTAINABLE MINING

5.1: Sustainable Mining and SDF Implementations in Compliance of Rule 35 of MCDR'2017

Not Applicable
(Total 200 characters)

Compliance of Vishakha Committee Guidelines for prevention of women	Not applicable

5.2: CSR INITIATIVES

Details of Work Proposed during the Year / Measures Planned for the Affected Segment	Cumulative Work done / Measures Taken

5.2.1.1: Area to be Developed for Recreation

Area (Ha)
1.1892

Area (Ha)
0

5.2.1.2: Area for Water Storage & Recharge Facility

Area (Ha)
1.7354

Area (Ha)
0

5.2.1.3: Efforts Made towards Housing for Local Communities

Number of Houses
0

Number of Houses
0

5.2.1.4: Efforts Made towards Providing Transport to Local Communities

Number of Beneficiaries
1

Number of Beneficiaries
0

5.2.1.5: Efforts Made towards Providing Healthcare to Local Communities

Number of Beneficiaries
1

Number of Beneficiaries
0

5.2.1.6: Efforts Made towards Providing Hygiene & Sanitation to Local Communities

Number of Beneficiaries
2

Number of Beneficiaries
0

5.2.1.7: Efforts Made towards Skill Development Programs to Local Communities

Number of Beneficiaries
1

Number of Beneficiaries
0

5.2.1.8: Efforts Made to Promote Education & Knowledge Based Initiatives

Number of Beneficiaries	Number of Beneficiaries
0	0

5.2.1.9: Communication Facilities Provided to Local Communities

Number of Beneficiaries	Number of Beneficiaries
1	0

5.2.1.10: Any Other Steps Taken for Improving the Socio-Economic Standard of Local Communities

Number of Beneficiaries	Number of Beneficiaries
1	0

5.2.1.11: Adoption of ODF

Number of Toilets Built inside the Lease Area:	Number of Toilets Built outside the Lease Area:	Number of Beneficiaries
1	0	0

5.2.1.12: Awareness Program among Mine Workers for Swatchata

Number of Swatchata Programmes proposed:	Number of Swatchata Programmes Held:
2	0

5.2.1.13: Efforts for green energy

Total energy consumption (KWh)	Green energy consumption (% of total)
20	0

5.2.1.14: Water & recycled use

Total water consumption (KLD)	Water recycled (% of total)
3	50%

5.3: REHABILITATION & RESETTLEMENT OF AFFECTED PERSONS

Particular	Year 1	Year 2
Proposed Number of Project Affected Persons(PAP)	0	0
Proposed Number of Person for Alternate Arrangement for Sustainable Livelihood	0	0
Proposed Number of Person for Skill Training	1	1
Proposed Number of Person Likely to get Direct Employment	5	5
Proposed Number of Person Likely to get Indirect Employment	15	15
Proposed Project Affected Families Skilled and Absorbed	0	0
Proposed Number of Project Affected Families	0	0

table continue...

Year 3	Year 4	Year 5
0	0	0
0	0	0
1	1	1
5	5	5
15	15	15
0	0	0
0	0	0

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Chapter 6: PROGRESSIVE MINE CLOSURE PLAN

6.1: Status of Land

Total Area Degraded				
Total area under excavation in the lease		Area under Dumps(in hect)	Area under utility services(in hect)	Area under Stack yards(in hect)
Area under mining operation	Mined Out area in the lease			
0	0	0	0.0000	0

table continue...

Total mined out area Reclaimed and Rehabilitated			Other Areas Reclaimed and Rehabilitated	
Mined out Area Reclaimed but not rehabilitated(in hect)	Mined outArea fully Rehabilitated from	Area under Water Reservoir considered	Stabililized Waste dump Rehabilitated (in hect)	Virgin area under Green Belt (in hect)
0	0	0	0	0.0000

6.2: Progressive Reclamation and Rehabilitation Plan

6.2.1: Backfilling	
Quantity of Waste / Fill Material Available at Site (m^3)	332846
Availability of Top Soil for Spreading (m^3)	5066
Spread Area (m^2)	11892

Year Wise Proposal					
Sr No	Year	Pit ID	Area (m^2)	Top RL	Bottom RL
1	IV	Pit-1	10851	4.22	-9.34
2	V	Pit-1	11892	10.16	5.13

table continue...

Estimated Expenditure (INR)
Including in mining cost
Including in mining cost

6.2.2: Water Reservoir

Average Rainfall of The Area (mm)	573
Proposed Area under Water Storage	0

6.2.2.1: Preparations For Ground Water Recharging

6.2.2.1.1: Drilling Holes

Year	Proposed no of Holes to be Drilled
Year 1	Nil
Year 2	Nil
Year 3	Nil
Year 4	Nil
Year 5	Nil

6.2.2.1.2:Preparation of Course Gravel Bed

Year	Proposed Area of Bed (LxW)
Year 1	Nil
Year 2	Nil
Year 3	Nil
Year 4	Nil
Year 5	Nil

Please specify, if others
Not Applicable

6.2.2.2: Protective measures (Please specify running meter)

6.2.2.2.1: Fencing

Year	Proposed Fencing Length (m)	Co-ordinates from	Co-ordinates to
Year 1	367	69°17'51.44"E	69°17'56.93"E
Year 2	0	0	0
Year 3	0	0	0
Year 4	259	69°17'55.57"E	69°18'0.77"E
Year 5	514	69°17'55.60"E	69°18'3.08"E

6.2.2.2.2: Retaining Wall

Year	Proposed Wall Length (m)	Co-ordinates from	Co-ordinates to
Year 1	0	0	0
Year 2	0	0	0
Year 3	0	0	0
Year 4	84.13	69°17'55.57"E	69°17'56.82"E
Year 5	0	0	0

6.2.2.2.3: Garland Drains

Year	Proposed Bund Length (m)	Co-ordinates from	Co-ordinates to
Year 1	Nil	Nil	Nil
Year 2	Nil	Nil	Nil
Year 3	Nil	Nil	Nil
Year 4	Nil	Nil	Nil
Year 5	Nil	Nil	Nil

6.2.3: Green Belt Development

6.2.3.1: Cumulative work done (upto end of previous block of five years)				
Sl No	Total Expenditure Incurred up to Last Year (INR)	Area Covered (Ha)	Number of Plants	Survival Rate (%)
1	0	0	0	0

6.2.3.2: Year Wise Proposal				
Sr No	Year	Green Belt Location (s)	Area Proposed to be Covered (Ha)	Number of Plants Proposed
1	Year 1	West	0.0700	50
2	Year 2	West	0.0700	50
3	Year 3	Central	0.0700	50
4	Year 4	Central	0.0700	50
5	Year 5	North	0.0700	50

table continue...

Sr No	Expected Survival Rate (%)	Estimated Expenditure (INR)
1	80	5500
2	80	5500
3	80	5500
4	80	5500
5	80	5500

6.2.4: Use of shallow pits

6.2.4.1: Cumulative work done (upto end of previous block of five years)

Sr No	Pit ID	Work Done	Area covered (m^2)	Total Expenditure Incurred (up to last five year block) (INR)
1	Nil	Nil	Nil	Nil

6.2.4.2: Year Wise Proposal

Sr No	Year	Pit ID	Total Area (Ha)	Area Proposed for Crops (Ha)	Suitable Crops
1	Nil	Nil	Nil	Nil	Nil

table continue...

Sr No	Area Proposed for Grass (Ha)	Total Proposed Expenditure (INR)	Location (s)	Remarks
1	Nil	Nil	Nil	Nil

6.2.5: PISCICULTURE

6.2.5.1: Total Expenditure incurred as on Date (INR)	NA

6.2.5.2: Cumulative work done as on Date

Sr No	Pit ID	Area (m^2)	Expenditure (INR)
1	Nil	Nil	Nil

6.2.5.3: Year Wise Proposal

Sr No	Year	Pit ID	Area (m^2)	Estimated Expenditure (INR)
1	Nil	Nil	Nil	Nil

6.2.5.4: Source of Water for Pisciculture	Nil
6.2.5.5: Whether the quality of water has been assessed & found to be suitable	Nil

6.2.6: Recreational Facility

6.2.6.1: Total Expenditure Incurred (up to last five year block) (INR)	Nil

6.2.6.2: Cumulative work done as on Date

Sr No	Pit ID	Area (m^2)	Expenditure (INR)
1	Nil	Nil	Nil

6.2.6.3: Year Wise Proposal

Sr No	Year	Type of Recreational Facility	Area Covered (Ha)	Location	Estimated Expenditure (INR)
1	Year 1	Nil	Nil	Nil	Nil
2	Year 2	Nil	Nil	Nil	Nil
3	Year 3	Nil	Nil	Nil	Nil
4	Year 4	Nil	Nil	Nil	Nil
5	Year 5	Nil	Nil	Nil	Nil

6.2.7: Dump Area Stabilization & Development

Sr No	Year	Dump ID	No of Terraces	Average Height of Terraces (m)	Length of Toe Wall (m)
1	Nil	Nil	Nil	Nil	Nil

table continue...

Sr No	Length of Garland Drain (m)	Area Stabilized (Ha)	Method of Stabilization	Estimated Expenditure (INR)	No of Check Dams
1	Nil	Nil	Nil	Nil	Nil

6.2.8: Other Form of Reclaiming the Area

6.2.8.1: Cumulative work done as on Date

Sr No	Total Expenditure incurred as on Date (INR)	Work Done
1	Nil	Nil

6.2.8.2: Year Wise Proposal

Sr No	Year	Work Proposals	Estimated Expenditure (INR)
1	Year 1	Nil	Nil
2	Year 2	Nil	Nil
3	Year 3	Nil	Nil
4	Year 4	Nil	Nil
5	Year 5	Nil	Nil

6.2.9: TOPSOIL MANAGEMENT

6.2.9.1: Cummulative Work Done as on Date

Sl. No.	Top Soil Generated (m^3)	Top Soil Utilized (m^3)	Topsoil Stored (m^3)	Total expenditure incurred as on date (₹)
1	5066	5066	0	126650

6.2.9.2: Year Wise Proposal

Year	Topsoil Generated (m^3) (A)	Topsoil Utilized (m^3) (B)	Topsoil Stored (m^3) (A-B)	Estimated Expenditure (INR)
Year 1	0	0	0	0
Year 2	0	0	0	0
Year 3	0	0	0	0
Year 4	1294	1294	0	32350
Year 5	3772	3772	0	94300

6.2.10: TAILINGS DAM MANAGEMENT

Year	Yearly generation of Tailing (m^3) (A)	Total capacity of Tailing Pond (m^3)	Measures Proposed for Periodic Desilting	Yearly Utilization of Tailing (m^3) (B)	Disposal of Tailing to Tailing Pond (m^3) (A-B)
Year 1	0	0	0	0	0
Year 2	0	0	0	0	0
Year 3	0	0	0	0	0
Year 4	0	0	0	0	0
Year 5	0	0	0	0	0

table continue...

Tailing Dam Design	Structural Stability Studies	Tailing Dam Design	Structural Stability Studies
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

6.2.11 LAND USE OF LEASE AREA AT THE EXPIRY OF LEASE PERIOD (CONCEPTUAL STAGE)

Total Area Degraded				Non Degraded area
Mined Out area in the lease	Area under Dumps(in hect)	Area under the Tailing Dam	Area under utility services(in hect)	Area undisturbed/virgin
5.8243	0	0	0.1971	2.9062

table continue...

Total mined out area Reclaimed and Rehabilitated		
Mined out Area Reclaimed but not rehabilitated(in hect)	Mined outArea fully Rehabilitated from Reclaimed area(in hect)	Area under Water Reservoir considered Rehabilitated (in hect)
0	3.8998	1.9285

table continue...

Other Areas Reclaimed and Rehabilitated			
Stabililized Waste dump Rehabilitated (in hect)	Virgin area under Green Belt (in hect)	Rehabilitated Area under utility services(in	Rehabilitated Area under Tailing dam (in hect)
0	0	0	0

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Chapter 7: FINANCIAL ASSURANCE/ PERFORMANCE SURETY (AREA PUT TO USE)

Year 1

Consolidated View of Financial Assurance

Sl. No.	Particular	Area put to use at Start of Year (ha) (A)*	Additional Requirement (ha) (B)*	Total (ha) (C = A + B)
1	Area under Mining	0	1.2442	1.2442
2	Topsoil stacking	0	0	0
3	Overburden/Waste Dumping	0	0.4488	0.4488
4	Mineral Storage	0	0	0
5	Infrastructure (Workshop, Administrative Building etc.)	0	0.0060	0.006
6	Roads	0	0.1911	0.1911
7	Railways	0	0	0
8	Tailing Pond	0	0	0
9	Effluent Treatment Plant	0	0	0
10	Mineral Separation Plant	0	0	0
11	Township Area	0	0	0
12	Others to Specify	0	0	0
	Total	0	1.8901	1.8901

Year 2

Consolidated View of Financial Assurance

Sl. No.	Particular	Area put to use at Start of Year (ha) (A)*	Additional Requirement (ha) (B)*	Total (ha) (C = A + B)
1	Area under Mining	1.2442	0.1142	1.3584
2	Topsoil stacking	0	0	0
3	Overburden/Waste Dumping	0.4488	0.8481	1.2969
4	Mineral Storage	0	0	0
5	Infrastructure (Workshop, Administrative Building etc.)	0.0060	0	0.006
6	Roads	0.1911	0	0.1911
7	Railways	0	0	0
8	Tailing Pond	0	0	0
9	Effluent Treatment Plant	0	0	0
10	Mineral Separation Plant	0	0	0
11	Township Area	0	0	0
12	Others to Specify	0	0	0
	Total	1.8901	0.9623	2.8524

Year 3

Consolidated View of Financial Assurance

Sl. No.	Particular	Area put to use at Start of Year (ha) (A)*	Additional Requirement (ha) (B)*	Total (ha) (C = A + B)
1	Area under Mining	1.3584	0	1.3584
2	Topsoil stacking	0	0	0
3	Overburden/Waste Dumping	1.2969	0.4385	1.7354
4	Mineral Storage	0	0	0
5	Infrastructure (Workshop, Administrative Building etc.)	0.0060	0	0.006
6	Roads	0.1911	0	0.1911
7	Railways	0	0	0
8	Tailing Pond	0	0	0
9	Effluent Treatment Plant	0	0	0
10	Mineral Separation Plant	0	0	0
11	Township Area	0	0	0
12	Others to Specify	0	0	0
	Total	2.8524	0.4385	3.2909

Year 4

Consolidated View of Financial Assurance

Sl. No.	Particular	Area put to use at Start of Year (ha) (A)*	Additional Requirement (ha) (B)*	Total (ha) (C = A + B)
1	Area under Mining	1.3584	1.4117	2.7701
2	Topsoil stacking	0	0	0
3	Overburden/Waste Dumping	1.7354	0	1.7354
4	Mineral Storage	0	0	0
5	Infrastructure (Workshop, Administrative Building etc.)	0.0060	0	0.006
6	Roads	0.1911	0	0.1911
7	Railways	0	0	0
8	Tailing Pond	0	0	0
9	Effluent Treatment Plant	0	0	0
10	Mineral Separation Plant	0	0	0
11	Township Area	0	0	0
12	Others to Specify	0	0	0
	Total	3.2909	1.4117	4.7026

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Approved

Year 5

Consolidated View of Financial Assurance

Sl. No.	Particular	Area put to use at Start of Year (ha) (A)*	Additional Requirement (ha) (B)*	Total (ha) (C = A + B)
1	Area under Mining	2.7701	0.6352	3.4053
2	Topsoil stacking	0	0	0
3	Overburden/Waste Dumping	1.7354	0	1.7354
4	Mineral Storage	0	0	0
5	Infrastructure (Workshop, Administrative Building etc.)	0.0060	0	0.006
6	Roads	0.1911	0	0.1911
7	Railways	0	0	0
8	Tailing Pond	0	0	0
9	Effluent Treatment Plant	0	0	0
10	Mineral Separation Plant	0	0	0
11	Township Area	0	0	0
12	Others to Specify	0	0	0
	Total	4.7026	0.6352	5.3378
	Grand Total			

Financial Assurance ✓ Performance surety

भारत सरकार-भारतीय खान ब्यूरो
GOVT. OF INDIA-INDIAN BUREAU OF MINES
सत्यमेव जयते

क्षेत्रीय खान नियंत्रक
Regional Controller of Mines
भारतीय खान ब्यूरो, गांधीनगर
Indian Bureau of Mines, Gandhinagar

PERFORMANCE SECURITY

Lease Category (A/B)	Total Resources in tonnes for calculation of Performance Surety*	Existing Performance surety amount in Rs	Valid till (dd/mm/yyyy)	Upload copy of existing Performance Security
A	Preffered Bidder will be submit the perfomance surity as per rules			Not Applicable

*Submit updated performace security at State based on updated Resources

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Chapter 8: Review of Previous Proposals (Not applicable for fresh grant)

8.1: General

8.1.1: LEASE AREA UTILISATION

Sl. No.	Type of land use (in ha)	Area at the beginning of the proposal period	Area proposed under activity	Actual Area utilized in the proposal period	Deviation	Reasons for deviation
1	Mining	0	0	0	-	-
2	Mineral storage	0	0	0	-	-
3	Mineral Beneficiation plant	0	0	0	-	-
4	Township	0	0	0	-	-
5	Tailing Pond	0	0	0	-	-
6	Railways	0	0	0	-	-
7	Roads	0	0	0	-	-
8	Infrastructure (Workshop, administrative building etc.)	0	0	0	-	-
9	OB/waste dump	0	0	0	-	-
10	Top soil preservation	0	0	0	-	-
11	Others	0	0	0	-	-
12	Total area put to use	0	0	0	-	-
13	Excavated area reclaimed	0	0	0	-	-
14	Waste dump area reclaimed	0	0	0	-	-
15	Undisturbed Area	0	0	0	-	-
	Total	**0**	**0**	**0**	-	-

8.1.2: SDF and CSR Expenditures

Activity	Proposals		Achievement	Deviation	Reasons for deviation
Total expenditure incurred for implementation of SDF at mine level including - Environment Protection - CSR & other welfare activities in peripheral area *(Explanation: Expenditure is not over and above the statutory levies imposed by the Government; However, THIS EXCLUDES CONTRIBUTION TO DMF & NMET and is over and above the statutory levies imposed by the Government.)*	10% of Royalty (a)	Total Expenditure for SDF implementation (b)	Nil	Nil	Nil
CSR (Corporate Social Responsibility) spending at the mine level in Proposal Period (as per Companies Act, 2013 or otherwise)	Nil	Nil	Nil	Nil	Nil

8.2: Technical Details

8.2.1: Exploration

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
Number of Boreholes/ Pits/ Trenches	Nil	Nil	Nil	Nil
Boreholes Meterage (If Boreholes selected in first row) (m)	Nil	Nil	Nil	Nil
Grid	Nil	Nil	Nil	Nil
G Axis upgradation during Proposal Period as per guidelines of MEMC Rule 2015)	Nil	Nil	Nil	Nil
Area converted under G1 from G2/G3	Nil	Nil	Nil	Nil

8.2.2: Mine Development (Opencast/ Underground/ Both/ Dump Mining)

Particulars	Proposed	Actual	Deviation	Reasons for deviation
8.2.2.1: Generation of Ore/Waste While Development				
Ore	Nil	Nil	Nil	Nil
Waste	Nil	Nil	Nil	Nil
Generated Waste while ROM recovery	Nil	Nil	Nil	Nil
Dumping Site (For Surface)	Nil	Nil	Nil	Nil
Removal of waste/ over burden in cubic meters	Nil	Nil	Nil	Nil
Generated Waste while ROM recovery	Nil	Nil	Nil	Nil
Dumping site of waste/ overburden	Nil	Nil	Nil	Nil
8.2.2.2: Excavation				
Lateral extent	Nil	Nil	Nil	Nil
Vertical extent	Nil	Nil	Nil	Nil

8.2.3: Mining operation: Dump Mining (Dump Id)

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
Handling of Material	Nil	Nil	Nil	Nil
Waste Generated post recovery	Nil	Nil	Nil	Nil
Dumping site for waste	Nil	Nil	Nil	Nil

8.2.4: Zero Waste Mining

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
Alternative use / Disposal of Waste Generated (excluding top soil)	Nil	Nil	Nil	Nil

8.2.5: Backfilling

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
Site (Co-ordinates)	Nil	Nil	Nil	Nil
Area	Nil	Nil	Nil	Nil
Depth	Nil	Nil	Nil	Nil
Volume Backfilled (CuM)	Nil	Nil	Nil	Nil
Backfilled Area available for Reclamation and Rehabilitation	Nil	Nil	Nil	Nil
Backfilled Area Reclaimed and Rehabilitated	Nil	Nil	Nil	Nil
Balance Backfilled Area	Nil	Nil	Nil	Nil

8.2.6: Production of Mineral(s):

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
8.2.6.1: ROM				
Opencast	Nil	Nil	Nil	Nil
8.2.6.2: Cleaned Ore				
Opencast	Nil	Nil	Nil	Nil
Dump Mining	Nil	Nil	Nil	Nil
Recovery from Mineral Rejects or Tailings	Nil	Nil	Nil	Nil
Total	Nil	Nil	Nil	Nil

8.2.7: Handling of Mineral Rejects/ Sub-Grade

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
Generation of mineral rejects				
Opencast	Nil	Nil	Nil	Nil
Dump mining	Nil	Nil	Nil	Nil
Other recovery	Nil	Nil	Nil	Nil
Stacking of mineral rejects/ sub-grade mineral (Select Dump Id)	Nil	Nil	Nil	Nil
Blending of mineral reject / sub-grade	Nil	Nil	Nil	Nil

8.2.8: Environment Compliances

Particulars	Proposals	Achievement	Deviation	Reasons for deviation
8.2.8.1: Top soil				
Generation	Nil	Nil	Nil	Nil
Utilization	Nil	Nil	Nil	Nil
Stacking (Dump Id)	Nil	Nil	Nil	Nil
Reclamation	Nil	Nil	Nil	Nil
Rehabilitation	Nil	Nil	Nil	Nil
8.2.8.2: Afforestation (Dumps/Benches/Backfilled Area etc.)				
Year 1	Nil	Nil	Nil	Nil
Year 2	Nil	Nil	Nil	Nil
Year 3	Nil	Nil	Nil	Nil
Year 4	Nil	Nil	Nil	Nil
Year 5	Nil	Nil	Nil	Nil
8.2.8.3: Afforestation (Green Belt)				
Year 1	Nil	Nil	Nil	Nil
Year 2	Nil	Nil	Nil	Nil
Year 3	Nil	Nil	Nil	Nil
Year 4	Nil	Nil	Nil	Nil
Year 5	Nil	Nil	Nil	Nil
Construction of check dams	Nil	Nil	Nil	Nil
Construction of garland drains	Nil	Nil	Nil	Nil
Construction of retaining walls	Nil	Nil	Nil	Nil
8.2.8.4: Tailings				
Generation	Nil	Nil	Nil	Nil
Utilization (Autofill from production)	Nil	Nil	Nil	Nil
Disposal	Nil	Nil	Nil	Nil

8.3: Socio-Economic Review

8.3.1: Rehabilitation & Resettlement for Project Affected People

Particulars	Proposals		Actual	Deviation	Reasons for deviation
No. of Project Affected People (PAP)	Nil	Nil	Nil	Nil	Nil
%age of PAP for whom alternate arrangements made for sustained livelihood	Nil	Nil	Nil	Nil	Nil
% of project affected families given employment	Nil	Nil	Nil	Nil	Nil
% of project affected families who have been skilled by the lessee and absorbed (% of total employment given to affected families)	Nil	Nil	Nil	Nil	Nil
8.3.2: Grievance Redressal					
Grievances Received	Nil	Nil	Nil	Nil	Nil
Grievances Redressed	Nil	Nil	Nil	Nil	Nil
8.3.3: Welfare and socio-economic development programs for local communities					
8.3.3.1: Support for Drinking Water & Agriculture					
No. of Water Storage Tanks constructed	Nil	Nil	Nil	Nil	Nil
Drinking Water Facilities provided (Bore wells/ Pumps etc.)	Nil	Nil	Nil	Nil	Nil
Irrigation Support provided (Canals/ Pumps etc.)	Nil	Nil	Nil	Nil	Nil
No. of Water tanks De-silted	Nil	Nil	Nil	Nil	Nil
Water Treatment facilities provided (A/NA)	Nil	Nil	Nil	Nil	Nil
Amount of Water treated (in kL) (if selected A in above)	Nil	Nil	Nil	Nil	Nil
8.3.3.2: Support to Health & Medical Services					
No. of persons identified from Occupational health diseases	Nil	Nil	Nil	Nil	Nil
No. of Health Camps/ Medicine Camps Organized	Nil	Nil	Nil	Nil	Nil
8.3.3.3: Support to Skill development & Education					
Vocational Training Provided/ Support Provided					
No. of employees undergone Vocational training	Nil	Nil	Nil	Nil	Nil
No. of other persons undergone Vocational training	Nil	Nil	Nil	Nil	Nil
Number of Literacy & Education Camps held/ Supported	Nil	Nil	Nil	Nil	Nil

8.3.3.4: Support to Transportation Services & Infrastructure					
Expenditure on Transportation Services & Infrastructure	Nil	Nil	Nil	Nil	Nil
Road development (m) in the peripheral area (not lease area)	Nil	Nil	Nil	Nil	Nil
No. of Public transport support provided (Ambulance/Buses/ School Vans etc)	Nil	Nil	Nil	Nil	Nil
8.3.3.5: Swatchata Programs: Creating/providing sanitation and healthy condition in and around the mine area					
Adoption of ODF within mining lease area					
No. of Toilets built in the Lease Area	Nil	Nil	Nil	Nil	Nil
Adoption of ODF in nearby villages					
No. Of Toilets built in the villages	Nil	Nil	Nil	Nil	Nil
Provision for greenage recreational facility (Within Lease Area/ Outside)					
Recreational Area Type (Picnic Spot/ tracks/Park Etc)	Nil	Nil	Nil	Nil	Nil
Area covered (For within Lease Area only)	Nil	Nil	Nil	Nil	Nil
Awareness program among Mine workers for Swatchata					
No. of Swatchchta Programmes held	Nil	Nil	Nil	Nil	Nil

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Chapter 9: IMPACT ASSESSMENT(for fresh grant)

9.1: BASELINE INFORMATION

Whether Area falls under Forest*	No
Whether Area falls under Wildlife Sanctuary*	No
Whether Area falls under Coastal Regulation Zone (CRZ)*	No
Whether Area falls under Defence Land*	No
Any Other Clearance (specify)*	No

Any Significant Objections from any Agency Involved in Stakeholder's Consultation.

Not Applicable

(Total 500 characters)

9.2: Environment Parameters

9.2.1: Environment Monitoring

Monitoring Activity

9.2.1.1: Ambient Air Quality

Core Zone (Quarterly Monitoring Planned) *	Yes
Buffer Zone (Quarterly Monitoring Planned) *	Yes

9.2.1.2: Water Quality

Core Zone (Quarterly Monitoring Planned) *	Yes
Buffer Zone (Quarterly Monitoring Planned) *	Yes

9.2.1.3: Noise Level

Core Zone (Quarterly Monitoring Planned) *	Yes
Buffer Zone (Quarterly Monitoring Planned) *	Yes

9.3: Impact Assessment

9.3.2: Land Environment

9.3.2.1: BASE / PRESENT STATUS

Pre Mining Use	AREA (Ha)
Barren / Waste land with small bushes & shrubs	8.7305
Land under Agriculture / Crops	0
Land covered with Plants	0
Land under Grass Cover	0
Land under Public Infrastructure / Utilities (water bodies, roads, railways, electric lines, telephone lines etc.)	0
Land under Habitation	0
Land under Monuments & places of Historical Importance	0
Degraded by Pits & Excavation	0
Degraded by Dumps & Material Staking	0
Covered under Mine Infrastructure (plants, shades, buildings etc.)	0
Land under Forest	0
Historically, Culturally & Ecologically Important Places	0
Any Other, please specify below	0
Date of Observation	01-09-2021

9.3.2.2: ANTICIPATED IMPACT

Post Mining Use	AREA (Ha)
Degradation by Excavation	3.4053
Degradation by Dumps & Material Staking	1.7354
Covered under Plants, Shades & Buildings	0.0060
Covered by Roads & Approaches	0.1911
Any Other, please specify below	0

9.3.2.3: MITIGATION MEASURES

9.3.2.3.1: Backfilling *

In proposed production of year IV & year V dump use in production year I to III as a backfilling.

9.3.2.3.2: Area proposed to be covered by Plantation in Backfilled Area *

Not Applicable

9.3.2.3.3: Proposed Area under Agriculture *

Not Applicable

9.3.2.3.4: Proposed Area to be converted to Grazing Land *

Not applicable

9.3.2.3.5: Ground Water Recharging *

Not Applicable

9.3.2.3.6: Green Belt Development *

Plantation will be proposed in west to northeren side of lease area.

9.3.2.3.7: Agriculture *

Not Applicable

9.3.3: Air Environment

9.3.3.1: Climate & Meteorology (Please provide average of 10 years)

Temperature (°C) *	
Maximum	42 °C
Minimum	15 °C

Relative Humidity (%) *
70 to 80 %

Average Rainfall (mm) *
573 mm

9.3.3.2: Air Quality Details for Base line Information / Present Status

Sr. No.	Station Name	Season	PM10 (µg/m3)	PM10 Excess (µg/m3)2	PM2.5 (µg/m3)
1	Mevasa Lease area	Monsoon	83.5	0	39.5

table continue...

Sr. No.	PM2.5 Excess (µg/m3)2	SO_2 Value (µg/m3)	SO_2 Excess (µg/m3)	NO_X Value (µg/m3)	NO_X Excess (µg/m3)
1	0	11.5	0	15.7	0

table continue...

Sr. No.	Date of Observation	Action
1	07-03-2021	Ref. annexure no.10

9.3.3.3: Impact Assessment & Mitigation Measures

9.3.3.3.1: Anticipated Impact *

Give details on Prediction of fugitive dust emissions due to mining activities, crushing & cleaning plants, loading & unloading, transportation by rail, road or conveyor

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office .

9.3.3.3.2: Mitigation Measure *

Give details on measures to reduce the emissions of pollutants during mining, loading, unloading, transportation, drilling, blasting, crushing etc. to maintain the air quality

Prevention measures for mitigation of mine related health problems. We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office .

9.3.4: Water Environment

9.3.4.1: RAIN WATER

9.3.4.1.1: Base / Present Status *

(Details of Rivers, Springs, Lakes, Reservoirs & Drains up to First Order in Study Area)

No available rivers in the lease area.

9.3.4.1.2: Anticipated Impact *

(Impact on Surface Water Bodies / Groundwater Table Regime / Streams / Lake / Springs due to Mining, to be Assessed from Hydro-geological StudyGive details about impact on vegetation)

Not applicable

9.3.4.1.3: Mitigation Measure *

(Possibilities of Rain Water Harvesting & Artificial Recharge with in the Mining Lease)

Not Applicable

9.3.4.2: WATER BODY

9.3.4.2.1: Base / Present Status *

(Water Bodies Existing & Water Bodies likely to be created due to Mining Activities & their Water Holding Capacity)

Present Status of Water Quality Analysis Report is attached as Annexure no. 10

9.3.4.2.2: Anticipated Impact *

(Ingress of Sea Water, Particularly for Mining Projects in Coastal Areas)

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.4.2.3: Mitigation Measure *

(Steps to Minimize Impact on Water Table if Mining Intercepts Groundwater Regime)

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.4.3: WATER BALANCE

9.3.4.3.1: Base / Present Status *

(Water Balance (Withdrawal of Surface Water & Release of Mine Drainage Water) Water Requirement & Waste Water Generation from various Activities of Mine, Including Beneficiation)

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.4.3.2: Anticipated Impact *

(Impact of Water Drawl on Surface & Groundwater Resources Impact on Surface & Groundwater Quality due to Discharges from Mining, Tailings Pond, Workshop, Township, & Leach ate from Solid Waste Dumps etc)

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.4.3.3: Mitigation Measure *

(Construction of Check Dams, Sedimentation Ponds, Settling Tanks, Retaining Walls etc. with Design & Site Features for Control of run-off Mine Water Treatment for Meeting the Prescribed Standard Waste Water Treatment for Township Sewage, Workshop(s), Tailing Pond Overflow etc)

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.5: NOISE

9.3.5.1: Critical Locations Identified within Lease Area *

Places where mining equipments are being used in Lease Area.

9.3.5.2: Give Detail About Prediction of Noise Level by using Mathematical Modeling at Different Locations Identified *

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.5.3: Measures to Minimize the Impact on Receiving Environment *

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.5.4: Noise Details for Base / Present Status

Noise Standards *			
Area Code	Category of Area	Limits in dB(A)Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Area	50	40

Note:

1. Day time reckoned in between 6.00 am to 9.00p.m
2. Night time reckoned in between 9.00p.m.to 6:00am
3. Silence zone is defined as areas up to 100 meter around such premises as Hospitals, Educational institutes and Courts. The Silence zones are to be declared by the competent Authority
4. Mixed categories of areas should be declared as "one of the four above mentioned categories" by the Competent Authority and the corresponding standards shall be applied.

Sl. No.	Station Name	Season	Type of Area	Noise At Day Time:	Excess Noise At Day
1	Mevasa Lease area	Monsoon	Silence Zone	65.8	0

table continue...

Sl. No.	Noise At Night Time:	Excess Noise at Night	Date of Observation	Action
1	53.2	0	07-03-2021	Ref annexure no.10

9.3.5.5: Impact Assessment & Mitigation Measures

9.3.5.5.1: Anticipated Impact *

Give details on impact on ambient noise level due to rock excavation, transportation, processing equipment's & ancillaries

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.5.5.2: Mitigation Measure *

Give details on measures for noise abatement including point source & line source

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.6: VIBRATION

9.3.6.1: Vibration Details for Base / Present Status

Sl. No.	Station Name	Season	Distance from the Blasting Site (m)	Peak Particle Velocity (mm/s)	Air Over Pressure (DB)
1	We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.				

table continue...

Sl. No.	Frequency (Hz)	Date of Observation
1		

9.3.6.2: Impact Assessment & Mitigation Measures

9.3.6.2.1: Anticipated Impact *

(Give details on impact of vibrations including damage to materials/structures due to blasting)

No Blasting required in the mine.

9.3.6.2.2: Mitigation Measure *

Give details on measures for noise abatement including point source & line source

Not Applicable

9.3.7: SOCIO-ECONOMIC ENVIRONMENT

9.3.7.1: Demographic Profile

Sl. No.	Type of Area	Name of Village	Total Population	Male to Female Ratio	Literacy Rate (%)
1	Non-Scheduled	Mevasa	3113	1:01	48.3

table continue...

Sl. No.	Employment Rate (%)
1	53.4

9.3.7.1.1: Anticipated Impact *

(Give details about impact on the cropping pattern & crop productivity in the core zone)

As per mining & environment clause. We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.7.1.2: Mitigation Measure *

(Give details about compensation for loss of land & crops)

As per mining & environment clause. We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.7.2: Traditional Skills & Source of Livelihood

9.3.7.2.1: Base / Present Status*

(Give details about present status on traditional skills & source of livelihood)

Working lease require manpower. We will giving best oppertunity for labour livelihood.

9.3.7.2.2: Anticipated Impact *

(Give details about positive & negative impacts on present status of livelihood in the area)

No negative impacts, Good for labour livelihood.

9.3.7.2.3: Mitigation Measure *

(Give details about training to locals for employment in the project training for making them self-employable or elsewhere)

Before starting the work, the laborer is explained that he has to work with caution.

9.3.7.3: Economic Profile of the Population in Core & Buffer Zone

9.3.7.3.1: Base / Present Status*

(Give details about economic profile of the population in core & buffer zone)

We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.7.3.2: Anticipated Impact *

(Give details about impact on community resources such as grazing land)
We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.7.3.3: Mitigation Measure *

(Give details about employment opportunities & access to other amenities such as education, health care facilities to be extended to locals, addressing local unemployment, tourism or recreation opportunities, efforts for sustainable development of the local community)
We give a Health & medical services, skill development & education.

9.3.7.4: Human Settlement in Core & Buffer Zone

9.3.7.4.1: Base / Present Status*

(Give details about human settlement in core & buffer zone)
Caution board and wide sticker.

9.3.7.4.2: Anticipated Impact *

(Give details about any displacement of human settlements during the life of the mine)
As long as the mining goes on, the people of the nearby village will get wages.

9.3.7.4.3: Mitigation Measure *

(Give details about rehabilitation & resettlement of land ousters & displaced people)
There is proposal for dump retaining wall.

9.3.7.5: Health Profile of Population in Core & Buffer Zone

9.3.7.5.1: Base / Present Status*

(Give details about health profile of population in core & buffer zone)
We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.7.5.2: Anticipated Impact *

(Give details about any adverse impact on the general health condition of the population in core & buffer zone)
We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.7.5.3: Mitigation Measure *

(Give details about avenues like dispensaries, hospitals, maternity homes if any to be created)
We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.7.6: Historically, Culturally & Ecologically Important Places in Core & Buffer Zone

9.3.7.6.1: Base / Present Status*

(Give details about historically, culturally & ecologically important places in core & buffer zone)
We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.7.6.2: Anticipated Impact *

(Give details about risk profiling)
We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

9.3.7.6.3: Mitigation Measure *

(Give details about public health benefits (e.g. clean water to an aboriginal community), measure for safeguard against damage etc.)
We will gettting TOR and than after EIA Submittion to GPCB, We will submit in IBM office.

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List of Annexures (in pdf format):	
1	Notification of Auction
2	Tender copy of Auction
3	Letter of intent grant
4A	Copy of non Agriculture order of 269/P1
4B	Copy of non Agriculture order of 269
5	ID & Address Proof of Owner (Pan card & Aadhar card)
6	Copy of Pan Card of Qualified Person
7	Copy of Experience & Qualification Details of Qualified Person
8	Drilled boreholes details
9	Chemical analysis report
10	Environment Monitoring report
11	Proposed Exploration planing with coordinates
12	Mineral resources/reserves estimated
13	Resource Estimation sheet as per CGM report
14	Overburden to Mineral ratio as per CGM report
15	Boreholewise & Gradewise thickness as per CGM report
16	Individual Mineral Bed thickness as per CGM report
17	Reciept of Mining plan with PMCP submission fee
18	Consent letter for Qualified Person
19	Photographs of the lease area
20	Geological report of auction block area with supporting documents
21	Pre-feasibility report

List of Plates (Geometry type: Polygon, Datum: WGS 84) :

Lease Cadastral Plan (scanned image)	PLATE NO.1 (JPG)
Surface Plan(.KML /.KMZ/.SHP format)(Georeferenced)	PLATE NO.2A (KML & PDF)
Surface Geological Plan of the lease (.KML /.KMZ/.SHP format)(Georeferenced)	PLATE NO.2B (KML & PDF)
Surface Geological sections (in Pdf/.dwg format)	PLATE NO.2C (PDF)
Five year Production and Development plan with sections (.KML /.KMZ/.SHP format)(Georeferenced)	PLATE NO.3A TO 3E (FIVE YEAR) (KML & PDF)
Five year Production and Development sections(in pdf/.dwg format)	PLATE NO.3A TO 3E (FIVE YEAR) (PDF)
Progressive Mine Clouser Plan (.KML /.KMZ/.SHP format)(Georeferenced)	PLATE NO.4 (KML)
Progressive mine Clouser sections(in pdf/.dwg format)	PLATE NO.4 (PDF)
Conceptual Plan and section(.KML /.KMZ/.SHP format)(Georeferenced)	PLATE NO.5 (KML & PDF)
Geo referenced Cadastral Plan	PLATE NO.6 (PDF)
Environmental Plan(.KML /.KMZ/.SHP format)(Georeferenced)	PLATE NO.7 (KML & PDF)
Financial area assurance plan	PLATE NO.8 (PDF)
Any other plan/section as deemed necessary by approving authority	

ANNEXURE

NOTIFICATION
GOVERNMENT OF GUJARAT
Industries and Mines Department,
Sachivalaya, Gandhinagar,
Dated:- 13/01/2021

Mines and Minerals (Develpoment and Regulation) Act, 1957

No. GU-2020-01-102020-534113-CHH-1, Whereas the proposal vide Single file system No.CGM/AUCTIONMAJOR/MEWASA-LAMBA/2020/1, dated 01/12/2020 received from the office of the Commissioner, Geology and Mining, Gandhinagar pursuant to Mines and Minerals Concession Rules, 2016 and Mineral (Auction) Rules, 2015 as amended from time to time the State Government hereby notifies the following three mineral blocks located in Devbhumi Dwarka District and invites tender to commence the process for grant of mining lease :

Table -A

S. No.	Name of Mineral Block	Area (Hectares)	Land Type & Survey No.	Estimated Mineral Resources (Tonnes)	Value of Estimated Resources* (Rs. crore)
1.	Mevasa Block	8.7305	Private (Survey No. 259)	Bauxite (aluminous laterite – major mineral) 994866.296 tonnes	63.91 crore
2.	Lamba Block	6.6285	Private (Survey No. 92-P/2)	Bauxite (aluminous laterite – major mineral) 2327947.80 tonnes	149.54 crore
3.	Satapara Block	5.5380	Private (Survey No. 359 and 363)	Bauxite (refractory grade**) – 81848.34 tonnes Bauxite (aluminous laterite – major mineral) 2229604.14 tonnes	161.78 crore

** In the absence of prices of aluminous laterite published by Indian Bureau of Mines, the computation is based on the average sale prices of Bauxite (non-metallurgical cement grade) bauxite as published by Indian Bureau of Mines for Gujarat for the 12 months preceding the date of issuance of NIT (i.e. prices available from December 2019 to November 2020 only) assuming NIT will be issued in December 2020 and may change depending on the date of issuance of NIT or if any new prices are published by IBM prior to issuance of NIT. Once the prices of aluminous laterite are notified by the Indian Bureau of Mines, the same may be considered for collection of payments. Further, in case the prices of aluminous laterite are notified by the Indian Bureau of Mines before the*

date of issuance of NIT, the same will be taken for calculation of Value of Estimated Resources in place of bauxite (non-metallurgical cement grade). The royalty rates for aluminous laterite will be applicable as and when it is declared by the central government.

***the bauxite in Satapara block can be fall in refractory grade (Non-metallurgic grade) because the analysis result of this block are 52.84% Al2O3 and 6.45% SIO2 contents which falls near to refractory grade as per NMI, IBM end use classification where refractory grade is having Al2O3 (55% minimum), Fe2O3 (4.5% max), CaO (1.5% max) 6.45% TIO2 (6.5% max).*

(2) Currently, the following agencies were appointed for conducting auction process as prescribed in the MMDR Act, 1957 and the rules made thereunder.

1. SBI Capital Markets Limited (SBICAP) as Transaction Advisor vide engagement letter dated 10/02/2020 signed on 01/09/2020.
2. Exploration/Drilling for various blocks is detailed below:
    a. Drilling agency Vinayak Engimech Pvt. Ltd was carried out drilling in these three blocks during 2019-2020.
3. MSTC Ltd. has been appointed as the auction portal provider for this phase of auction.

After careful consideration the Government has accorded its approval to the said proposal with general terms and conditions.

General Terms and Conditions

The key parameters/natters, along with the terms and conditions and other modalities of the e-auction process that shall be mentioned in the Tender Document of the said blocks as listed in Table -A shall be be similar as considered during last phase of auction.

i. The average sale prices of bauxite (Non metallurgical cement grade and refractory grade) published by IBM for the state of Gujarat during the last 12 months are as given below and these average sale prices have been used for determining value of estimated resources.

Table B

Average Sale Price of Bauxite (Non metallurgical Cement Grade and refractory grade) in Gujarat as Published by IBM (Rs./Tonne), Assuming NIT is issued in the month of December 2020		
Month	**Cement Grade**	**Refractory Grade**
Dec '19	618	2267
Jan '20	552	2261
Feb '20	540	2261

Mar '20	649	2182
Apr '20	696	2261
May '20	763	2261
Jun '20	715	2301
Jul '20	606	2342
Aug '20	Not Published	Not Published
Sep '20	Not Published	Not Published
Oct '20	Not Published	Not Published
Nov '20	Not Published	Not Published
Average Price	**642**	**2267**

Note: The average price stated above may change depending on the date of issuance of NIT or if any new prices are published by IBM prior to issuance of NIT.

ii. Price of Tender Document shall be Rs. 2 lakh per Tender Document, in line with the price prescribed during the last phase of auctions. The price of tender document will be kept excluding GST and bidders are required to pay applicable GST under Reverse Charge Mechanism. As per the Model Tender Document circulated by the Central Government, the price of Tender Document is not to exceed Rs. 5 lakh. Other states have prescribed Rs. 1-5 lakh as the price of the Tender Document.

iii. The Reserve Price as per the Mineral (Auction) Rules, 2015 shall be 5%. It is expected that a reasonable price may emerge out of the price discovery in the first round of auction (i.e. Initial Price Offer stage) that would become the floor price for the second round of the auction (i.e. Final Price Offer stage).

iv. Stage-I of the Timetable of the Tender Process pertaining to e-auction process for selection of Preferred Bidder shall be completed in 92 days. Comparison of the timetable stipulated under (i) tender document notified by the Central Government, (ii) prescribed by GoG under Phase-VI of auctions and (iii) proposed by GoG under Phase-VII of auction is detailed below.

Table C

Events	**Timeline from the date of issuance of Notice Inviting Tender**		
	Prescribed under Tender Document notified by Central Government	**Prescribed by GoG under Phase –VI**	**Proposed by GoG under Phase – VII**
Selection of Preferred Bidder	67 days	63-69 days	63-69 days

Completion of Stage – I i.e. issuance of Letter of Intent	105 days	92 days	92 days

Whereas suitable modifications are made to complete the process early as detailed above, the timelines may get amended by a couple of days in light of public holidays. This timeline needs to be extended by issuing corrigendum depending on the prevailing covid-19 situation or due to administrative exigencies.

v. A brief sentence shall be added in notice inviting tender that the price of bauxite (cement grade) is taken for calculation of VER since the price of aluminous laterite is not available. All the applicable payments after the notification of royalty and sale price of aluminous laterite shall be levied on notified royalty rate and sale price.

vi. Upfront payment shall be an amount equivalent to 0.50% of the value of estimated resources as per Mineral (Auction) Rules, 2015. The upfront payment shall be payable to the State Government in three instalments of 10%, 10% and 80%. The same shall be adjusted in full at the earliest against the amount payable in accordance with the percentage of Value of Mineral Despatched quoted as the Final Price Offer on commencement of production of mineral(s) as specified in MDPA.

vii. Bid Security amount shall be 20% of the Upfront Payment or 0.10% of the value of estimated resources in line with the level prescribed during the last phase of auction. It may be mentioned that other states viz. Maharashtra and Odisha also prescribed similar amount of bid security while conducting auctions.

viii. The Bid Security shall be subsequently replaced with the Performance Security [0.50% of value of estimated resources as per Mineral (Auction) Rules, 2015] by the Successful Bidder. List of events that will lead to appropriation of Bid Security shall be stipulated in the tender document.

ix. Bid Security shall be valid for 240 days from Bid Due date including a claim period of 60 days in line with the Model Tender Document notified by the Central Government.

x. There will not be any reservation with regard to specified end-use.

xi. Minimum incremental price offer in second round of the e-auction will be 0.05%.

xii. Maximum time slot for auto extension of bid time during second round of the auction shall be 8 minutes.

xiii. A pre-defined communication protocol amongst all the participants of the e-auction process shall be adopted (that inter alia includes digital signature of authorized personnel, designated email ids, address and access control mechanism).

xiv. Where subsequent to the e-auction presence of minor mineral is established or discovered, its treatment shall be as per the prevailing rules at the time when the minor mineral is discovered in the concession area.

xv. Evaluation of the Technical Bids in this auction may be carried out by the Technical Evaluation Committee as formed by the Government.

xvi. During evaluation of Technical Bid, in case of discrepancies between physically and electronically submitted documents, the documents submitted physically shall be considered.

xvii. In line with the Mineral (Auction) Rules, 2015, it is proposed that the bidders will not be permitted to submit an Initial Price Offer (IPO) below the Reserve Price on the auction portal.

xviii. IPOs of only Technically Qualified Bidders shall be opened one day prior to the second round of e-auction.

xix. Each Qualified Bidder (QB) will be intimated of its qualification individually for second round of e-auction and applicable floor price (highest Initial Price Offer discovered in the first round of e-auction).

xx. Performance Security shall be an amount equivalent to 0.50% of the value of estimated resources as per Mineral (Auction) Rules, 2015. The list of events that will lead to appropriation of Performance Security shall be outlined in the Mine Development and Production Agreement (MDPA).

xxi. As per Mineral (Auction) Rules, 2015 as amended, Upfront Payment paid shall be adjusted in full at the earliest against the amount payable in accordance with the percentage of Value of Mineral Despatched quoted as the Final Price Offer on commencement of production of mineral(s) as specified in MDPA.

xxii. The format of Letter of Intent (LoI) has been provided as a Schedule in the tender document wherein as per amended Mineral (Auction) Rules, Mining Lease Deed shall not be executed on expiry of a period of three years from the date of the letter of intent, and the letter of intent shall be invalidated leading to annulment of the entire process of auction. Provided further that the State Government may allow a further extension for a period of two years for execution of the Mining Lease Deed if the reasons for delay were beyond the control of the preferred bidder.

xxiii. The Minimum Production Requirement (MPR) is prescribed in Schedule D of MDPA along with the value of the Performance Security to be appropriated in case of non-compliance. In line with the levels prescribed under the last phase of auction, the Successful Bidder shall meet the annual MPR as stated in the table below:

Table E

Year (since commencement of mining lease)	Minimum Production Requirement (% of yearly production as per approved Mining Plan)	Value of Performance Security to be appropriated
Year 1	0%	24% of Average sale price of relevant mineral published by IBM as applicable during the year of shortfall (multiplied by) shortfall in production [minimum production requirement (minus) actual annual production]
Year 2	0%	
Year 3	40%	
Year 4	50%	
Year 5	55%	
Year 6 onwards		

xxiv. In line with the tender document notified by the Central Government, in case where non-compliance with the MPR exceeds for more than seven instances, such non-compliance will give the State Government a right to terminate the mining lease.

xxv. The area limits specified under Section 6(1)(b) of the Act is stated below:

Name of Mineral	Mining Lease (sq. km.)
Bauxite	10 sq. kms. in each case

Accordingly, the State Government shall not issue a letter of intent without prior approval from the Central Government in case the Bidder holds or may hold (including the area relating to the auction hereunder) one or more mining leases covering a total area of more than ten square kilometres in respect of bauxite mineral in the State of Gujarat.

xxvi. The following changes to the tender document published in earlier phases are :

(a) A Bidder shall submit only 1 (one) Bid for a particular Mineral Block. No Affiliate(s) of such Bidder shall submit a Bid for said Mineral Block. In case an Affiliate(s) of a Bidder also submits a Bid for said Mineral Block, the Bids submitted by the Bidder and its Affiliate(s) shall be rejected.

For the purpose of this clause:

(i) "Affiliate" with respect to a Bidder shall mean a person who: (a) controls such Bidder, (b) is controlled by such Bidder, (c) is under common control with such Bidder, (d) is an associate company of the Bidder, or (e) is a subsidiary company of such Bidder.

(ii) the terms "associate company", "control" and "subsidiary company" shall have the meaning ascribed thereto in the Companies Act, 2013, as amended from time to time.

The Bidder shall declare in the Bid Letter and Affidavit that only (1) Bid has been submitted by the bidder for the Mineral Block and no Affiliate(s) of bidder has submitted a Bid for said Mineral Block and in case any Affiliate(s) of bidder also submits a Bid for said Mineral Block, the Bids submitted by bidder and his Affiliate(s) will be rejected.

(b) For eligibility, it is proposed that in case the net worth of the Bidder's holding company is considered, the shareholding pattern establishing the relationship between such holding company and the Bidder shall be as of the last day of the financial year considered in terms of Explanation No. 2 and/ or No. 3 to the Schedule I of Mineral (Auction) Rules, 2015 as amended from time to time. In case of a partnership firm, certificate should clearly mention that it has been issued by the chartered accountant, and the net worth stated therein is as per the partners' capital account.

In case the bid is submitted by a subsidiary company using the net worth of its holding company, the Bidder shall mention in the Bid Letter that it shall continue to be a subsidiary of the holding company whose net worth has been considered for meeting the terms and conditions of eligibility until such time we meet the aforementioned net worth threshold.

(c) Each Technically Qualified Bidder (TQB) shall be individually intimated via email instead of declaring the list of TQB on auction portal. The same process is followed in auction of minor minerals.

(d) The State Government shall be entitled to forfeit and appropriate the Bid Security as damages, amongst others in any of the events specified in this Tender Document. The Bidder, by submitting its bid pursuant to this Tender Document, shall be deemed to have acknowledged and confirmed that the State Government will suffer loss and damage on account of withdrawal of its bid or for any other default by the Bidder during the period of bid validity as specified in this Tender Document. No relaxation of any kind on Bid Security shall be given to any Bidder.

(e) The Successful Bidder shall make monthly payments within 20 calendar days of expiry of each month with respect to Mineral despatched instead of mineral extracted from the Lease Area in such calendar month.

(f) Schedule III will be changed as per the system requirements of MSTC.

(g) In the format of bid security, following shall be inserted:

This Guarantee may be verified by contacting the bank at;

Address of the Bank	
Name of the Contact Person	
Phone No:	
Official Email Id:	

The Commissioner, Geology and Mining is hereby directed to do the needful as per the Mines and Minerals (Development and Regulation) Act, 1957, the Mineral Auction Rules, 2015 the Mineral (Auction) Amendment Rules, 2017, the Minerals (Evidence of Mineral Contents) Rules, 2015 and all the Acts and rules with regard to mines and minerals and expedite the auction of said blocks of Devbhumi Dwarka District.

By order and in the name of the Governor of Gujarat.

KHPathak
(K.H.Pathak)
Deputy Secretary
Industries and Mines Department

To,

- The Commissioner, Geology and Mining, Block-1, Udhyog Bhavan, Gandhinagar.
- The Manager, Government Central Press, Gandhinagar.
  With a request to kindly publish the said notification in Part-IV-B of an Extra Ordinary next issue of the Government Gazette and to supply directly the copies of the said notification to the offices mentioned below as shown against their names. viz.:-

No.	Office	No. of Copies
1	Industries and Mines Department, CHH1 Branch, Sachivalaya, Gandhinagar.	20
2	Commissioner of Geology and Mining, Gandhinagar.	10
3	The Collector, District Collector Office, Jilla Seva Sadan, Devbhoomi Dwarka, Gujarat - 389001	20
	Total	50

- Revision Authority, Industries and Mines Department, Sachivalay, Gandhinagar. (3 Copies)
- Assistant Geologist,Geology and Mining Department, Devbhoomi Dwarka.
- Computer Cell, Industries and Mines Department, Sachivalay, Gandhinagar. (with a request to upload this notification on department's website.)
- Select File.

4/5/2022

X

Mansuri Latifbhai Kasambhai
Qualified Person
Signed by: Mansuri Latifbhai Kasambhai

No.MMR/102021/BLK/534113/CHH1
Industries and Mines Department
Block No.-5, 4th Floor
New Sachivalaya,
Gandhinagar, Gujarat
Date: 30 JUN 2021

To,
Patel Kaushikkumar
1148/A/1, Near Swaminarayan Temple
Sector-2/D, Gandhinagar
382007

Sub: Letter of intent with reference to e-auction dated **12/05/2021** for grant of a mining lease for **Mevasa Block** for **Bauxite (Aluminous Laterite)** in **Mevasa** village, **Kalyanpur** Taluka, **Devbhumi Dwarka** District on **8.7305** Hectare Area of Survey No. **259 (Private Land)**

1. **Background**:

1.1. The Commissioner of Geology and Mining (CGM), Government of Gujarat, pursuant to the Mines and Minerals (Development and Regulation) Act, 1957 (the "Act") and the Mineral (Auction) Rules, 2015 as amended from time to time (the "Auction Rules"), issued the notice inviting tender dated **22/01/2021** to commence the auction process for grant of mining lease for **Mevasa Block** located in **Devbhumi Dwarka**. The e-auction process was conducted in accordance with the tender document for the said mineral block and **Patel Kaushikkumar** was declared as the 'Preferred Bidder' under Rule 9(9)(iii) of the Auction Rules, having quoted a Final Price Offer of **5.62 % (Five point Sixty Two).**

1.2. As required under Rule 10(1) of the Auction Rules and the tender document for the said mineral block, **Patel Kaushikkumar** has made payment of the first instalment, being 10% (ten per cent) of the upfront payment of **Rs. 3,27,609/- (In words Three Lakh Twenty Seven Thousands Six Hundred Nine only)** through **electronically** dated **24/05/2021** which was received on **24/05/2021**.

2. **Grant of Letter of Intent**

2.1. Accordingly, pursuant to Rule 10(2) of the Auction Rules, the Government of Gujarat is issuing this letter of intent for grant of Mining Lease for **Mevasa Block** for **Bauxite (Aluminous Laterite)** in **Mevasa** village, **Kalyanpur** Taluka, **Devbhumi Dwarka** District on **8.7305** Hectare Area of Survey No. **259 (Private Land)** to **Patel Kaushikkumar** for a period of 50 years.

3. **Conditions**

3.1. This letter of intent and the subsequent grant of aforementioned mining lease shall be subject to the provisions of the Act and the rules made thereunder, as amended from time to time, and **Patel Kaushikkumar** shall be designated as the 'successful bidder' and subsequently granted the mining lease only upon satisfactory completion of all the requirements under the Act and the rules made thereunder.

3.2. This Letter of Intent shall be valid only if **Patel Kaushikkumar** ensures that the Bid Security is valid until the Performance Security is furnished to the Government of Gujarat, failing which this Letter of Intent shall become invalid from the date of expiry of the Bid Security.

3.2. For reference, the requirements under the Auction Rules for designation of **Patel Kaushikkumar** as the 'successful bidder' and subsequent grant of the mining lease are reiterated below. It is clarified that the requirements mentioned below are only for reference and in the event of any change in the Act or the rules made thereunder, the requirements under the modified Act or the rules made thereunder, as the case may be, shall be applicable.

(a) Designation as the "Successful Bidder":

Patel Kaushikkumar shall be considered to be the 'successful bidder' upon:

(i) continuing to be in compliance with all the terms and conditions of eligibility;

(ii) payment of the second instalment being 10% (ten per cent.) of the upfront payment;

(iii) furnishing performance security;

(iv) satisfying the conditions specified in clause (b) of sub-section (2) of section 5 of the Act with respect to a mining plan

(b) Signing of the Mine Development and Production Agreement

Patel Kaushikkumar shall sign the Mine Development and Production Agreement with the Government of Gujarat upon obtaining all consents, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of mining operations.

(c) Grant of mining lease

Subsequent to signing of the Mine Development and Production Agreement, **Patel Kaushikkumar** shall make payment of the third instalment being 80% (eighty per cent) of the upfront payment and thereafter the Government of Gujarat shall grant the aforementioned mining lease.

4. Validity

4.1. This letter of intent is valid for a period of **3 (three)** years from the date of its issuance, within which time all the above conditions must be fulfilled and the Mining Lease deed must be executed between **Patel Kaushikkumar** and the Government of Gujarat. In case there is a delay in execution of Mining Lease Deed due to reasons beyond the control of the Preferred Bidder, then it may submit an application to Government of Gujarat, requesting for further extension.

4.2. If the Government of Gujarat is satisfied that there is a delay in execution of Mining Lease Deed due to reasons beyond the control of the Preferred Bidder and a longer period is required to enable the Preferred Bidder to satisfy all or any of the above conditions, it may extend the validity of this letter of intent for such period or periods as the Government of Gujarat may specify. Provided that: (a) this letter of intent shall be extended for a maximum period of 2 years; and (b) the total period for which this letter of intent would remain valid must not exceed 5 (five) years from the date of issuance.

Kindly return the duplicate copy of this Letter of Intent duly signed by authorized signatory in token of having accepted the above terms and conditions. The accepted copy of Letter of Intent along with Board resolution should be submitted latest by **15/07/2021.**

(K.H.Pathak)
Deputy Secretary
Industries and Mines Department

Copy to:

1. The Secretary, Ministry of Mines, Govt. of India, Shastri Bhavan, New Delhi
2. The Commissioner, office of Geology & Mining, Udhyog Bhavan, Gandhinagar
3. The Collector, Collector office, Devbhumi Dwarka.
4. The Geologist, Office of the Geology and Mining, Devbhumi Dwarka.
5. The Regional Controller of Mines, Indian Bureau of Mines, Sector 10A, Gandhinagar
6. The Accountant General, Ahmedabad/Rajkot
7. The Controller General, Indian Bureau of Mines, 6th floor, Block No. B & C, Indira Bhavan, Civil lines, Nagpur-440001
8. Select file

4/5/2022

X

Mansuri Latifbhai Kasambhai
Qualified Person
Signed by: Mansuri Latifbhai Kasambhai

ભારત સરકાર
Government of India

આધાર

પટેલ કૌશિકકુમાર
Patel Kaushikkumar
જન્મ તારીખ/DOB: 25/02/1961
પુરુષ/ MALE

5697 0063 0988

VID : 9158 9276 1574 6674

મારો આધાર, મારી ઓળખ

ભારતીય વિશિષ્ટ ઓળખાણ પ્રાધિકરણ
Unique Identification Authority of India

આધાર

સરનામું :
S/O અમૃતભાઈ, પ્લૉટ નં-1148/એ/1,
સ્વામીનારાયણ મંદિર પાસે, સેક્ટર-2/ડી, ગાંધીનગર,
ગાંધીનગર,
ગુજરાત - 382007

Address:
S/O Amrutbhai, Plot No-1148/A/1, Near
Swaminarayan Temple, Sector-2/D,
Gandhinagar, Gandhinagar,
Gujarat - 382007

5697 0063 0988

VID : 9158 9276 1574 6674

1947 | help@uidai.gov.in | www.uidai.gov.in

4/5/2022

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Mansuri Latifbhai Kasambhai
Qualified Person
Signed by: Mansuri Latifbhai Kasambhai

Project Details –Mevasa Block for Bauxite(Aluminous Laterite) (Survey No. 259), Proposed by Patel Kaushikkumar

S.No.	Details	Particulars
ABOUT THE PROPOSAL		
1.	Name of Lease Holder	PatelKaushikkumar
2.	Location address	Survey No. 259, Village – Mevasa, Taluka – Kalyanpur, District – DevbhumiDwarka
3.	Lease Area (Hectares)	8.73.05Ha
4.	Ownership of Land (Govt../Private Land)	Private land
5.	Status of Operation (New project OR Existing project operating since)	New
6.	Status of Lease (Lease no., date of issue, lease period, date of application for lease renewal, etc.)	Letter of Intent with reference to e-auction dated 12.05.2021 for grant of mine lease issued vide Letter No. MMR/102021/BLK/534113/CHH1 dated 30/06/2021 by Industries and Mines Department, Gandhinagar, Gujarat.
7.	Name of Mineral to mine	Bauxite (Aluminous Laterite)
8.	Co-ordinates of the Lease area	

Pillar No.	Latitude (N)	Longitude (E)
BP- 01	22° 15' 14.96" N	69° 17' 51.10" E
BP- 02	22° 15' 15.70" N	69° 17' 53.86" E
BP- 03	22° 15' 16.25" N	69° 17' 55.92" E
BP- 04	22° 15' 17.23" N	69° 17' 57.11" E
BP- 05	22° 15' 19.72" N	69° 17' 59.87" E
BP- 06	22° 15' 19.92" N	69° 18' 0.22" E
BP- 07	22° 15' 21.09" N	69° 18' 1.94" E
BP- 08	22° 15' 22.03" N	69° 18' 4.67" E
BP- 09	22° 15' 18.93" N	69° 18' 7.59" E
BP- 10	22° 15' 18.80" N	69° 18' 7.00" E
BP- 11	22° 15' 17.37" N	69° 18' 4.87" E
BP- 12	22° 15' 16.76" N	69° 18' 4.20" E
BP- 13	22° 15' 15.36" N	69° 18' 2.52" E
BP- 14	22° 15' 14.94" N	69° 18' 1.65" E
BP- 15	22° 15' 13.54" N	69° 18' 2.03" E
BP- 16	22° 15' 11.53" N	69° 18' 0.70" E
BP- 17	22° 15' 10.68" N	69° 18' 0.69" E

ભુસ્તર શાસ્ત્રીની કચેરી
દેવભૂમિ દ્વારકા
ઇન્વર્ડ નંબર...25.22.....
તારીખ..8.6.22.....

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Geology & Mining Deaprtment
Devbhumi Dwarka

		BP- 18	22° 15' 10.62" N	69° 18' 0.38" E
		BP- 19	22° 15' 9.13" N	69° 17' 55.55" E
		BP- 20	22° 15' 7.44" N	69° 17' 54.40" E
		BP- 21	22° 15' 6.86" N	69° 17' 53.35" E
		BP- 22	22° 15' 7.96" N	69° 17' 52.86" E
		BP- 23	22° 15' 8.39" N	69° 17' 52.86" E
		BP- 24	22° 15' 12.16" N	69° 17' 52.31" E
9.	Mineral reserves (T)	107388(total)		
10.	Rate of mining of mineral (MT/Month& MT/Year)	149248 MTPA (ROM)		
11.	Life of mine(Years)	--		
12.	Whether project involves forest land. If yes, status of application for diversion of forest land.	No		
13.	Applicability of the CRZ Notification,2011	Not Applicable		

ENVIRONMENT SETTINGS

14.	If located within 10 km, aerial distance of the lease area from the nearest:	Name	Distance (Km)
	i. Water Body:	Rani Nadi TharuvarTalav	1.132 1.362
	ii. National park/wildlife Sanctuary/Biosphere Reserve:	Marine Sanctuary Gaga Bird Sanctuary	1.267 17.50
	iii. Reserve Forest/protected forest:	Reserve Forest	4.331
	iv. Human Habitation:	Virpur village	1.324
	v. Railway Line:	Bhopalka railway station	16.00
	vi. Road:	NH-947	9.512
	vii. Notified/Protected Archaeological sites:	None	None

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	viii. Social infrastructures, e.g. school, hospital, historic/ cultural/religious places, defense establishments, etc.:	School, Temple- Nandana	12.30
15.	Present land use of lease area	The lease area comprises of Private Land	

S. No.	Head	Area (Ha)
1.	Area under mining	--
2.	Overburden/ dumping/ mineral stack	--
3.	Roads	--
4.	Processing Plant	--
5.	Workshop etc.	--
6.	Township area	--
7.	Others to specify Plantation	--
8.	Total	8.73.05

16.	Geo-hydrological features	No prominent drainage feature is established in the area. The surface water availability in the region is very poor. lease area and vicinity is devoid of any perennial water courses (except Rani Nadi-seasonal). Rainwater flows as per natural slope of the surface in south direction. Entire surface precipitation so joins natural nallah, which is outside and far from lease boundary. No water bodies exist in the adjoining area.
17.	Predominant wind direction	South West
18.	Endemic and endangered species of flora and fauna, if any, in the area	None
19.	Width and condition of access road (kutcha/pucca) to the lease area.	4.65 meters wide Katcha road
DETAILS ON MINING / EXCAVATION ACTIVITIES		
20.	Requirement of power supply and its source	No

Mineral: Bauxite 8.73.05 Ha

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21.	Requirement of water supply and its source	9 KL/Day, water will be sourced through private water tankers.
22.	Type of mining (Manual/Semi-mechanized).	Semi-mechanized; HEMM without deep hole drilling
23.	Equipment`s to use (bulldozers, hydraulic excavators, JCB, scrapers, loaders, etc.)	Dumpers, Excavator and Water tanker.
24.	Details of method of working with phasing of activates (sequence of mining operations)	The mining will be done in the lease area by semi mechanized open cast method by forming one bench of Bauxite with the use of excavator & tipper. The height 5.0 m and width of bench are 5.0 m. Soil is removed first and the clay will be removed. After manual sorting is being loaded in trucks. The existing fair weathered road is being used as approach road. The transportation will be carried out by loading trucks.
25.	Explosives, detonators to be used	No
26.	Details of drilling &blasting	N/a
27.	Safety measures at the time of blasting	N/a
28.	Details of Over Burden (OB) removal and stacking	The waste/ reject that is likely to be generated will be in the form of associated clay with Bauxite horizon as mineral waste, which is below the threshold grade. which has no sale value in present market but it may have future market and therefore, the waste will be stacked separately at statutory barrier.
29.	Height and width of benches and side slope	Benches: 5 m height & more than 5 m width Slope:75
30.	Depth of ground water table (in meter)	28 m bgl
31.	Maximum depth of working (Meters). Whether it will	22.44 m depending upon thickness of bauxite bed, topsoil and clay. Ground water level is at 28 m bgl, so it

Mineral: Bauxite

8.73.05 Ha

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	intersect ground water table?	will not intersect the ground water level.
32.	Land use pattern of the lease area at conceptual stage.	<table><tr><th>S. No.</th><th>Head</th><th>Area (Ha)</th></tr><tr><td>1.</td><td>Area under mining</td><td>1.2442</td></tr><tr><td>2.</td><td>Overburden/Waste dumping</td><td>0.4488</td></tr><tr><td>3.</td><td>Infrastructure</td><td>0.0060</td></tr><tr><td>4.</td><td>Roads</td><td>0.1911</td></tr><tr><td>5.</td><td>Workshop etc.</td><td>--</td></tr><tr><td>6.</td><td>Township area</td><td>--</td></tr><tr><td>7.</td><td>Others to specify Plantation</td><td>--</td></tr><tr><td>8.</td><td>Total</td><td>1.8901</td></tr></table>
33.	Man power requirement	13
34.	No. of working days in a year	300
35.	Time of working hours in a day	8 hours in a day
36.	Measures proposed for protection of environmental attributes like and, water, air, human, health, etc.	The mining activities, including waste dumping have been so planned to prevent any of the disturbance to natural flow of water and also the drainage system of the area will not be affected. There will be no impact of mining on quality of water. (i) Noise – Mining operation will generate some noise but it will be minimal. Therefore, no major impact on environment due to noise. There will be occasional sound of the machines in working. To avoid this proper maintenance of the mining machinery will be done and the earmuffs will be provided to the operator. (ii) Air – Excavation and transportation of mineral which may generate dust. To reduce the impact of dust emissions, thick green belt will be provided. Regular water sprinkling will be practiced on haul roads and near the mine site. (iii) Climate Conditions – The mining activity will be on such a small scale that there will be no impact on climatic conditions of the area.

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Devbhumi Dwarka

Patel

		(iv) Occupational Safety & Health: Workers will be provided earmuffs and other protective equipment while working. Also regular health check up programs will be organized for workers and nearby villagers. Human Settlement: There is no human settlement within the lease area. The human settlement in the nearby area is not likely to be effected rather the mining project will encourage it on account of possibility of getting employment for the locals by the way of direct and indirect employment.
37.	Measures for control of noise, vibration and fly rock problems due to blasting	Following control measures shall be taken to prevent noise pollution due to mining activity. • There are no historical monuments in or around the area. Similarly, no human settlements are likely to be disturbed due to mining activities. • In order to reduce the effect of noise pollution earmuffs will be provided to all operators and employees working at mining site as a safety measure. • Proper maintenance, oiling and greasing of machines at regular intervals will be done to reduce generation of noise. • Silencers and mufflers on mining equipments wherever required, will be properly fitted and maintained. • No drilling, blasting involved.
38.	Plan for managing dust, noise, silt and pollutants during mining activities	Mining operations will be carried out by semi mechanized open cast method. The source of noise will be only the excavation and running of machineries and plying of trucks. It will have a much localized effect on the mine workers

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		only.
39.	Plan for managing dust, noise, silt and pollutants during mining activities	Mining operation will generate noise will be minimal. Therefore, no impact on environment due noise will be there. However, to avoid this proper maintenance of mining machinery will be done and the ear plugs will be provided to the workers if needed.
40.	Details on transportation route & measures proposed for control of fugitive emission during transportation	1. Transportation of minerals will be done through trucks wherein the mined out Bauxite will be sold in the local market (Cement, Chemical and Refractory etc). 2. Proper route management of the traffic will be done for smooth traffic movement. 3. On the both side of approach road plantation will be done. 4. Transportation of ore to be done during day time in covered trucks only. 5. The haul road will be compacted regularly. 6. Fixed type sprinkler will be used for dust suppression. 7. Daily water sprinkling is proposed on the Kutcha road at the mine site. Only PUC certified vehicle will be used for transportation of the minerals.
41.	Plan for port mining use/ reclamation of pits.	Reclamations of pits will be strictly in accordance with the approved mine closure plan. As per the Hon'ble Supreme Judgment all attempt will be taken for regrassing and developing in such a manner that it will be utilized as fodder for fauna.
42.	Provision of fencing the pits in case of use as water reservoir.	Not applicable
43.	Plan for green belt	Plantation will be developed on 10 % area of the lease

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	development, area of green belt, no & types of species to be planted and budgetary outlay for the same	i.e0.873 Ha. The priority for plantation of trees shall be given on the periphery of mine lease. If not possible, then the plantation will be carried out on the Govt. land with due permission from the same. A total of 800 trees will be planted. Local species of Neem, Babool, Gulmohar, Kashid are preferred based on the guidelines of CPCB. A financial outlay of INR 220 @ each tree, amounting to a total of 1, 76,000 is expected.

Patel Kaushikkumar
Project proponent

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District–DevbhumiDwarka (Gujarat)

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Devbhumi Dwarka

69°8'0"E 69°10'0"E 69°12'0"E 69°14'0"E 69°16'0"E 69°18'0"E 69°20'0"E 69°22'0"E 69°24'0"E 69°26'0"E 69°28'0"E

22°22'0"N 22°20'0"N 22°18'0"N 22°16'0"N 22°14'0"N 22°12'0"N 22°10'0"N 22°8'0"N

Gulf of Kutch

G U L F O F K A C H H

N W E S

Marine National Park (6.233 km)
Marine National Park
69° 16' 43.337" E
22° 18' 12.616" N

Gulf of Kutch (LTL) (2.557 km)

Marine Sanctuary (1.267 km)
Marine Sanctuary
69° 17' 10.900" E
22° 15' 22.200" N

CRZ Boundary (1.001 km)

Rani Nadi (1.132 km)

NH 947 (9.512 km)

SH 29 (12.347 km)

Marine Sanctuary
69° 22' 49.599" E
22° 17' 28.430" N

R.F. (4.331 km)

Tharuhar Talav (1.362 km)

Virpur Village (1.324 km)

Project Site

Rani Nadi

MewasaVillage (3.211 km)

NH 947

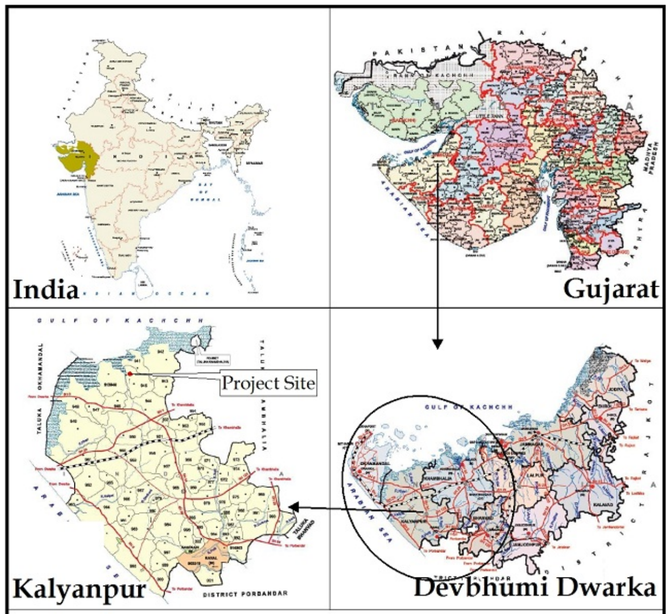
SH 29

Gaga Bird Sanctuary
69° 10' 5.570" E
22° 9' 42.610" N

Gaga Bird Sanctuary
69° 10' 41.200" E
22° 6' 48.090" N

3.7 km
3.7 km

Scale
0 1.5 3 6 9 12 15 km

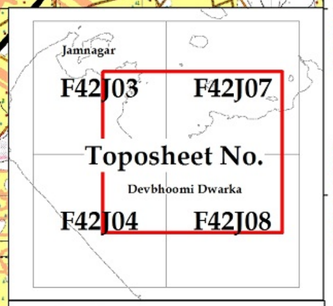


Legend

- Project Site
- Buffer Boundary 15 km
- Buffer Boundary 10 km

MEVASA BLOCK FOR BAUXITE
(ALUMINOUS LATERITE) [Suvey No. 259]
Village - Mevasa, Tehsil - Kalyanpur
District - Devbhumi Dwarka, State - Gujarat
[Area : 8.73.05 (Ha)]

ENVIRONMENT SENSITIVITY



Projection : UTM Zone 42
Datum : WGS 1984

Prepared for
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