

An aerial photograph of a large-scale manganese mining operation in Banswara, India. The image shows a deep, terraced mine pit with multiple levels of excavation. A dirt road winds through the site, and a large truck is seen in the foreground, carrying a load of dark manganese ore. The surrounding landscape is rugged and hilly.

**PROJECT REPORT OF  
MINING OF MANGANESE  
ORE IN BANSWARA**

# SUMMARY

## Introduction

M/s Saiyyed Akhtar Ali has been involved in diversified business portfolios during the years. Our firm has been working with major mining and beneficiation projects. With reference to e-Auction held on dated

- 1. 02/08/2022 = Kalakhunta Manganese ore Block having price offer 12.11% & Area = 6.30 Sqkm**
- 2. 7/10/2022 = Rupakhera Manganese ore Block having price offer 10.10% & Area = 4.735 Sqkm**
- 3. 10/10/2022 = Tamesara Manganese ore Block having price offer 10.05% & Area = 2.41 Sqkm**

declaration order for preferred bidder was given in favor of M/s Saiyyed Akhtar Ali by DMGR for Composite License (Prospecting-cum-Mining Lease). M/s Saiyyed Akhtar Ali has been planning to execute G-2 level exploration operations in this area utilizing innovative technologies and advanced methods. By deploying world class exploration methodology, we will be targeting potential manganese ore deposit in Composite License area.

## Property Description and Location

The Banswara district is situated in southern Rajasthan, bordering Gujarat & Madhya Pradesh covers an area of 5037 Sq.km The district has eleven tehsils, the Banswara town is the district headquarter. The Western part of district is rugged terrain punctuated by small ridges, the eastern part of the district is occupied by flat topped hills of Deccan Traps. The plains are covered mostly by black cotton soil. The mineral wealth of the district is comprised of minerals like Limestone, Rock Phosphate, Dolomite, Soapstone, Graphite, Marble etc. The metallic minerals occurring in the district are Manganese, Iron, Gold also reported in the district. In the state workable deposits of Manganese ore are found in Banswara district. The Manganese ore contains Pyrolusite, Psilomelane occurs in association with Phyllite along lineation place and ptygmatic folding. DMG Rajasthan carried out Manganese investigation and exploration (F.S. 1986-88) in the Tamesra, Kalakhunta and Rupakhera villages area, the preliminary work by GSI carried out in 2020-21. On the basis of available data (G4 stage) this block area proposed for composite licence. NW to this proposed Kalakhunta block, a working mining lease for mineral Manganese (ML. No.-04/2014) is exist.

1. Kalakhunta Manganese Block is located near villages Kalakhunta, Sagwa, Itala etc. tehsil Sajjangarh district Banswara.
2. Rupakhera Manganese Block is situated near villages Rupakhera, Nawagaon, Wagicha etc., tehsil Kushalgarh & Sajjangarh, district Banswara.

3. Tambesara Manganese Block is situated near villages Tambesra, Tima-Mahuri etc., tehsil Kushalgarh & Sajjangarh, district Banswara.

Block area is located about 50 km towards south from district headquarter Banswara. This area falls under toposheet no. 46I/07. Nearest Railway station from the area is Ratlam junction which is at about 105 km & nearest airport is known as Maharana-Pratap Airport Udaipur and is situated on Mangalwar-Udaipur N.H.27 near village Dabok which is at about 215 km. (Figure 1-2).

**Coordinates of Kalakhunta Manganese block : -**

| POINT | LATTITUDE       | LONGITUDE       |
|-------|-----------------|-----------------|
| A     | N23°18'48.0002" | E74°16'57.2042" |
| B     | N23°19'16.6550" | E74°17'25.7480" |
| C     | N23°17'21.7085" | E74°19'42.4519" |
| D     | N23°16'52.9428" | E74°19'13.6862" |

**BlockArea: 6.30 sq. k.m.**

**Coordinates of Rupakhera Manganese Block: -**

| POINT | LATTITUDE       | LONGITUDE       |
|-------|-----------------|-----------------|
| A     | N23°14'04.6717" | E74°21'35.3520" |
| B     | N23°14'13.9838" | E74°21'49.6493" |
| C     | N23°11'37.1604" | E74°23'49.2480" |
| D     | N23°11'21.3582" | E74°23'24.6980" |
| E     | N23°13'36.9002" | E74°21'41.3720" |
| F     | N23°13'43.3904" | E74°21'51.4365" |

**Block Area:- 4.735 sq. k.m.**

**Coordinates of Tambesra Manganese block : -**

| POINT | LATTITUDE       | LONGITUDE       |
|-------|-----------------|-----------------|
| A     | N23°16'20.7311" | E74°20'05.6798" |
| B     | N23°16'30.5860" | E74°20'23.7916" |
| C     | N23°14'59.1283" | E74°21'21.4563" |
| D     | N23°14'45.1449" | E74°20'55.8867" |
| E     | N23°15'37.2828" | E74°20'22.9260" |
| F     | N23°15'41.2781" | E74°20'30.5169" |

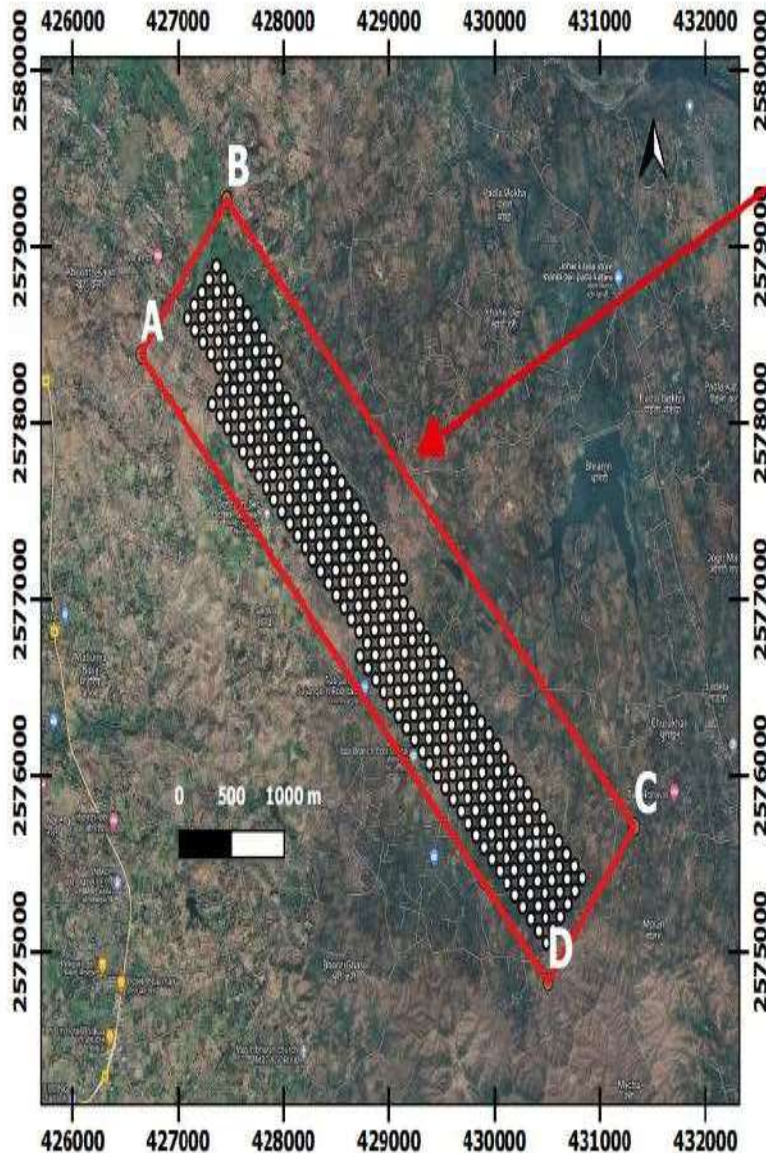
**Block Area:- 2.41 sq. k.m**

# KEY PLAN 1:50,000




## Kalakhunta Manganese Block (630 Ha)

Tehsil Sajjangarh, District Banswara, Rajasthan  
Part of Toposheet no: 46 I/07




### Legend

CL Block: 630 Ha 

Geological Mapping (630 Ha)

Geophysical surveys (630 Ha)

Planned drill holes: 300 nos 

# KEY PLAN

## 1:50,000

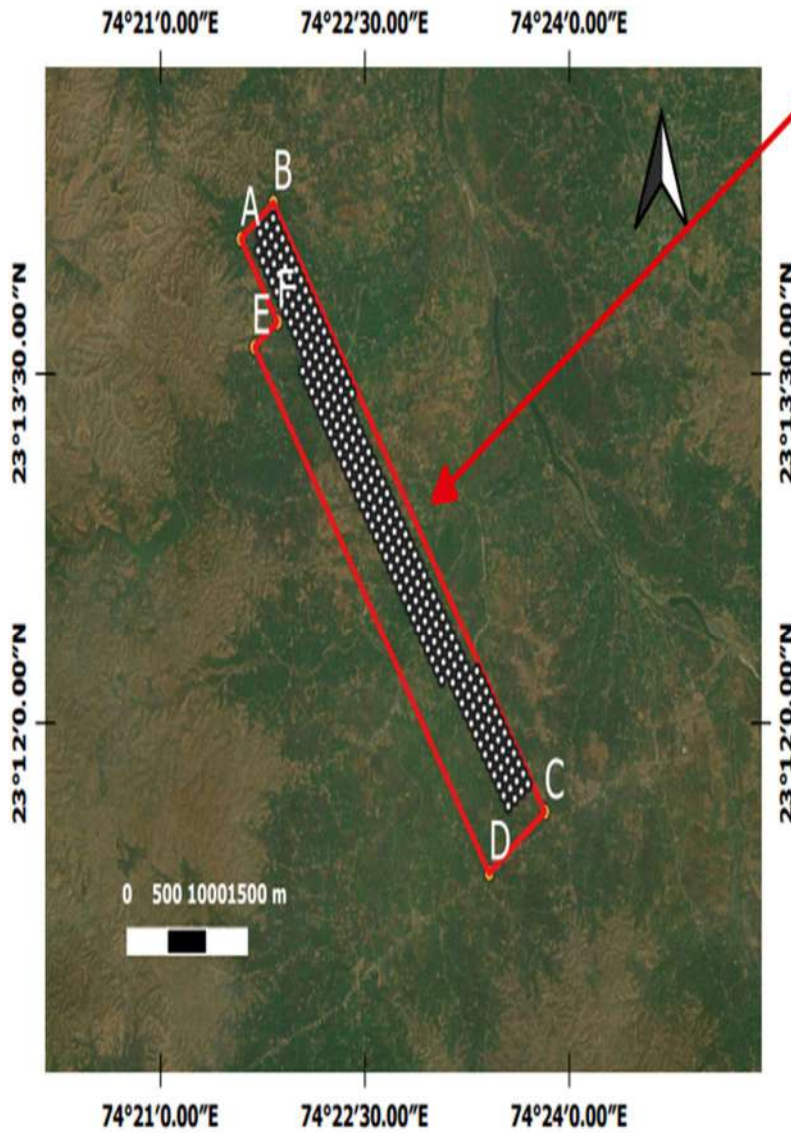


### Roopakhera Manganese Block (473.5 Ha)



Tehsil: Kushalgarh, Sajjangarh,

District: Banswara, Rajasthan

Part of Toposheet no: 46 I/08



Legend

- CL Block: 473.5 Ha 
- Geological Mapping (473.5 Ha)
- Geophysical surveys (473.5 Ha)
- Planned drill holes: 228 nos 

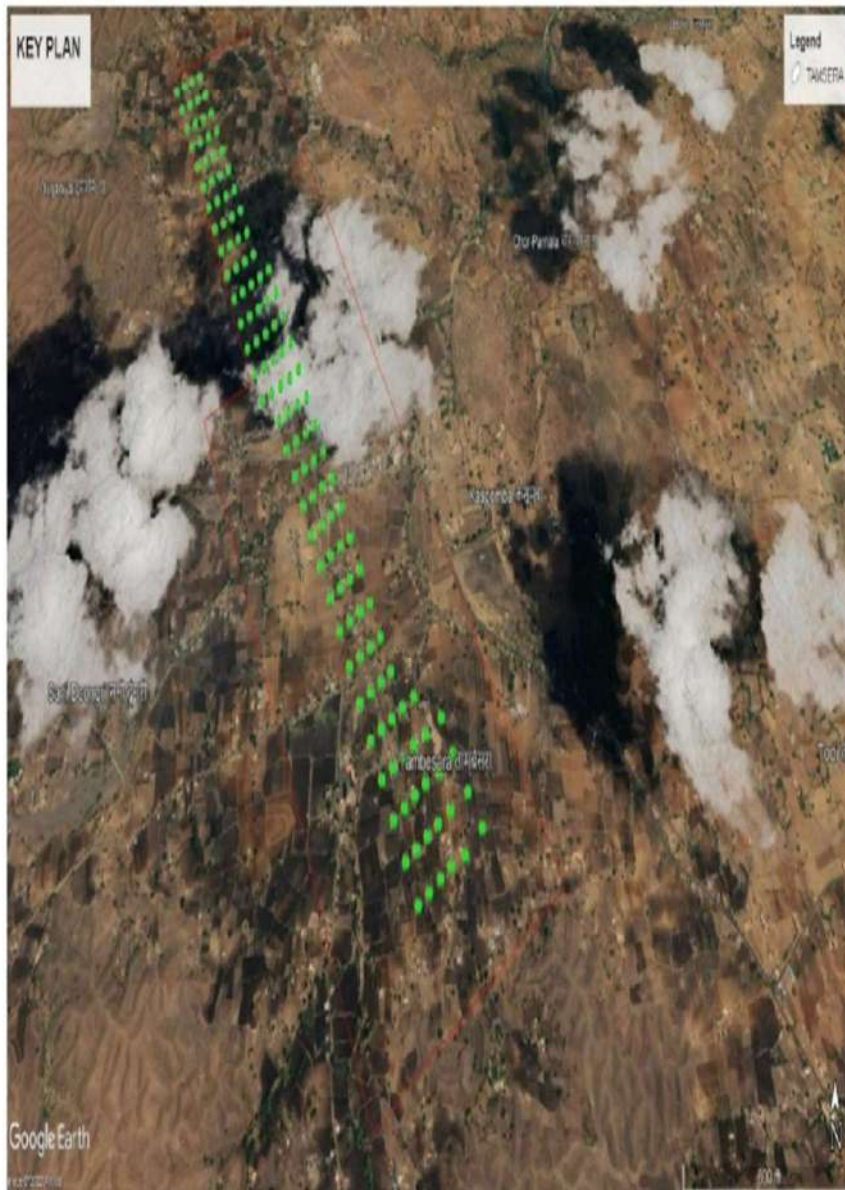
# KEY PLAN




## Tambesra Manganese Block (2.41 sq.kms)

Tehsil: Sajjangarh,

District: Banswara, Rajasthan  
Part of Toposheet no: 46 I/07




### Legend

CL Block: 2.41 sq. kms 

Geological Mapping (2.41 sq.kms)

Geophysical surveys (2.41 sq. kms)

Planned drill holes: 121 nos 

# Biggest Achievement for SAA Group

BREAKING NEWS

Date: 11/10/2022

Jaipur: प्रदेश के खान विभाग ने रचा इतिहास !

मेजर मिनरल मैंगनीज के तीन खनन ब्लॉक किए नीलाम, बांसवाड़ा के काला खूंटा, रूप खेड़ा और तांबेसरा के मैंगनीज ब्लॉक नीलाम, बांसवाड़ा के तांबेसरा का मैंगनीज ब्लॉक हुआ 10 अक्टूबर को नीलाम, मेसर्स सैयद अख्तर अली ने रिजर्व प्राइस की बोली लगाई, 10.05 फीसदी की बोली लगा ब्लॉक को किया अपने नाम, MSTC के जरिए ब्लॉक की रखी गई थी ऑनलाइन नीलामी, मध्यप्रदेश के रतलाम की फर्म सैयद अख्तर अली को मिला कम्पोजिट लाइसेंस, अब इस फर्म द्वारा किया जाएगा एक्सप्लोरेशन, 2 महीने में प्रदेश के 3 मैंगनीज ब्लॉक का कंपोजिट लाइसेंस हासिल कर चुकी है फर्म

TATA PLAY  
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airtel  
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hathway  
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DEN  
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RPM  
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**THE TIMES OF INDIA**

## 1st manganese block from Rajasthan auctioned

TNN | Aug 6, 2022, 05:28 AM IST



JAIPUR: The mines department has auctioned a composite licence for a manganese block in Banswara district, fetching 12 times of the premium of the base price fixed. This is the first manganese mine block to have been auctioned in Rajasthan. ACS mines and petroleum Subodh Agarwal said, "The auctioning of the manganese block is a new achievement for the state in the mining sector. Our auctions have been fetching good premiums compared to the auctions witnessed in the country."

It is estimated that Rajasthan has manganese reserves of about 20 million tonne, said Agarwal. Most of the manganese reserves are available in Banswara and some in Rajsamand district, he added.

Kala Khunta, Tambesara, Roopa Kehra, and Nawagaon, villages in Banswara district, are estimated to have reserves of around 17 million tonne manganese, while the reserves in Delwara Tehsil in Rajsamand are calculated at 2.16 million tonne.

As per the composite licence, the winning bidder will start exploration of the minerals and after that mining licences will be issued.

Preliminary estimates suggest that Kalakhunta has 6.55 million tonne reserves spread over 6.30 sq km. The department had set a 5% premium in the bidding, which was participated by three entities. In the final round, the premium went up to 12.11%.

Our Achievement- <https://www.facebook.com/watch/?v=738339674059968>

Successful Auctions so far in 2022-23 – 87 (ML-43, CL-44)

(as on 07.03.2023)

| S No | State          | Name of the Block           | Mineral   | Date of auction | ML / CL | Area (in Ha) | Reserv es (in MT) | Final Bid (in %) | Preferred Bidder                            |
|------|----------------|-----------------------------|-----------|-----------------|---------|--------------|-------------------|------------------|---------------------------------------------|
| 1    | Maharashtra    | Lanjera-Futala block        | Manganese | 30.06.2022      | CL      | 8            | -                 | 33.00            | PM Granite Pvt. Ltd                         |
| 2    | Madhya Pradesh | Jam                         | Manganese | 19.04.2022      | CL      | 6.810        | 0.02              | 45.50            | M/s Jitendra Kumar Kushwaha                 |
| 3    | Madhya Pradesh | Botejhari                   | Manganese | 20.04.2022      | CL      | 6.094        | 0.07              | 45.10            | Om Sairam Steels & Alloys Pvt. Ltd.         |
| 4    | Andhra Pradesh | Chinnabantupalli            | Manganese | 22.04.2022      | ML      | 44.53        | N.A.              | 11.70            | M/s Veerashiva Granites Exports pvt Limited |
| 5    | Andhra Pradesh | Nanda                       | Manganese | 21.04.2022      | CL      | 204.00       | N.A.              | 12.00            | M/s Andhra Mining Corporation               |
| 6    | Andhra Pradesh | Mulagapadu                  | Manganese | 21.04.2022      | CL      | 402.00       | N.A.              | 11.10            | M/s AZ Mining and Trading Enterprises       |
| 7    | Andhra Pradesh | Garikapeta                  | Manganese | 21.04.2022      | CL      | 460.00       | N.A.              | 11.00            | M/s MOR Metals and Minerals                 |
| 8    | Andhra Pradesh | Sivannadoraval              | Manganese | 21.04.2022      | CL      | 420.00       | N.A.              | 11.20            | M/s Hill Side Estates LLP                   |
| 9    | Andhra Pradesh | Budharayavalasa             | Manganese | 22.04.2022      | CL      | 638.00       | N.A.              | 11.10            | M/s MOR Metals and Minerals                 |
| 10   | Andhra Pradesh | Batuvu                      | Manganese | 22.04.2022      | CL      | 243.00       | N.A.              | 11.10            | M/s AZ Mining and Trading Enterprises       |
| 11   | Andhra Pradesh | Peddalingalavalasa          | Manganese | 22.04.2022      | CL      | 472.00       | N.A.              | 11.00            | M/s Easterwood Estates LLP                  |
| 12   | Rajasthan      | Kala Khunta Manganese Block | Managnese | 02.08.2022      | CL      | 6.30         | 6.56              | 12.11            | M/s Saiyad Akhtar Ali                       |
| 13   | Rajasthan      | Rupakhera Block Banswara    | Manganese | 07.10.2022      | CL      | 473.5        | 6.93              | 10.10            | M/s Syed Akhtar Ali                         |
| 14   | Rajasthan      | Tambesara Block Banswara    | Manganese | 10.10.2022      | CL      | 241.0        | 4.03              | 10.05            | M/s Syed Akhtar Ali                         |
| 15   | Madhya Pradesh | Nandia Loharpura            | Manganese | 03.01.2023      | CL      | 21.387       | 0.2               | 62.00            | Shobha Mineral                              |
| 16   | Madhya Pradesh | Budbuda                     | Manganese | 04.01.2023      | CL      | 5.204        | 0.45              | 320.00           | Bhaswar Associates                          |

## Surface Ownership and Land Access Agreements

At present, M/S Saiyyed Akhtar Ali does not hold surface rights to the Kalakhunta, Tambesara Area and Rupa Khera Area, which are considered as those lands of original ground elevation surrounding and immediately underlying the protected area that contains Manganese. The area of interest for the Kalakhunta, Tambesara Area and Rupa Khera Area overlies and adjoins privately land, Forest land, Charagah and government land.

Land details for Kalakhunta Manganese Block are as follows:-

| Block                                     | Type of Land    | Land (In Hectares) | Number of Khasra |
|-------------------------------------------|-----------------|--------------------|------------------|
| <b>Kalakhunta<br/>Manganese<br/>Block</b> | Private Land    | 469.16             | 1718             |
|                                           | Government Land | 102.65             | 451              |
|                                           | Pasture Land    | 32.54              | 69               |
|                                           | Forest Land     | 25.66              | 108              |
|                                           | <b>Total</b>    |                    | <b>630.00</b>    |

Land details for Tambesara Manganese Block are as follows:-

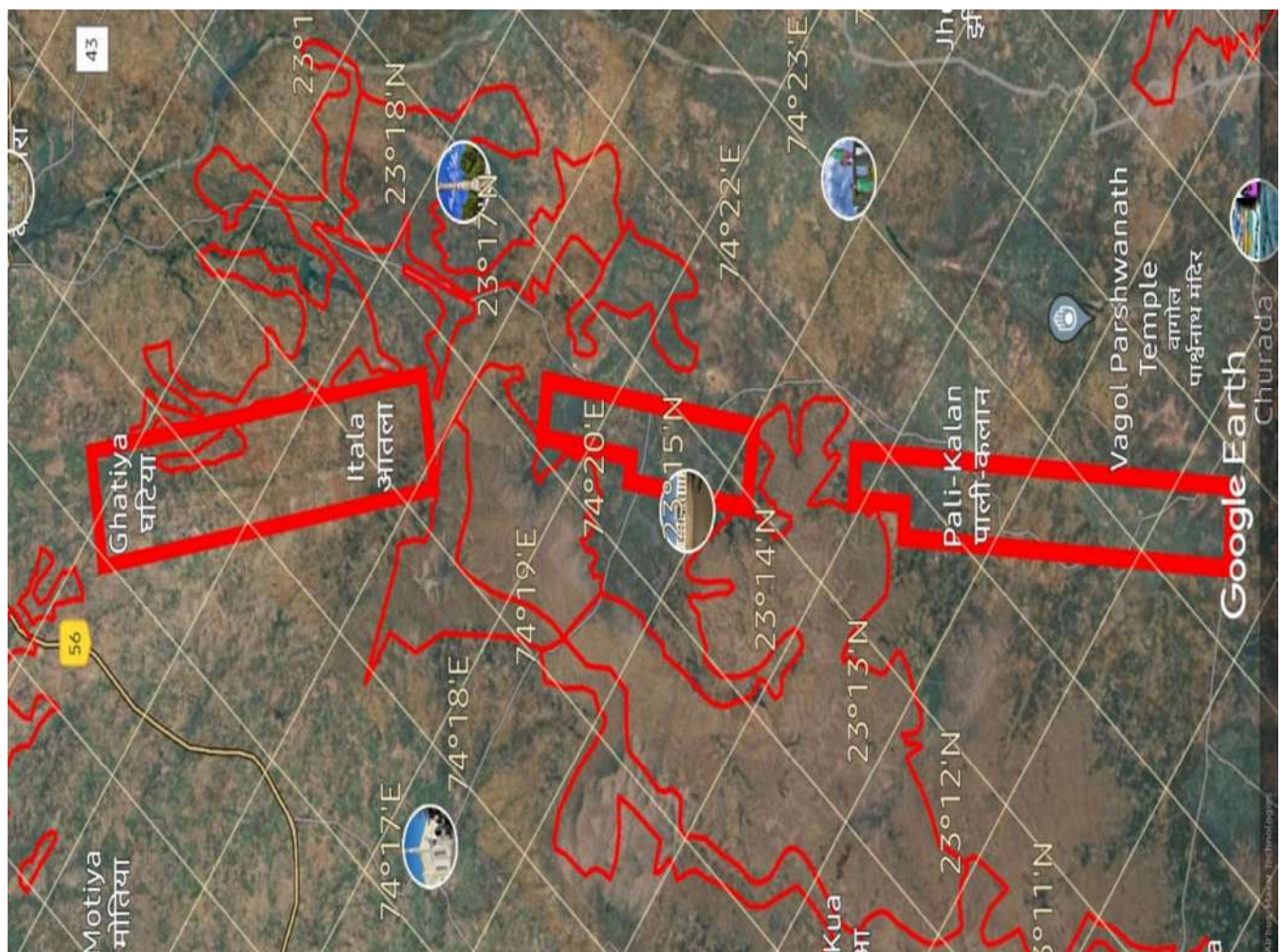
| Block                                    | Type of Land    | Land (In Hectares) | Number of Khasra |
|------------------------------------------|-----------------|--------------------|------------------|
| <b>Tambesara<br/>Manganese<br/>Block</b> | Private Land    | 207.76             | 993              |
|                                          | Government Land | 30.44              | 136              |
|                                          | Pasture Land    | 2.78               | 9                |
|                                          | Forest Land     | 0.01               | 1                |
|                                          | <b>Total</b>    |                    | <b>241.00</b>    |



Land details for Rupa Khera Manganese Block are as follows:-

| Block                             | Type of Land    | Land (In Hectares) | Number of Khasra |
|-----------------------------------|-----------------|--------------------|------------------|
| <b>Rupa Khera Manganese Block</b> | Private Land    | 404.39             | 1585             |
|                                   | Government Land | 48.28              | 168              |
|                                   | Pasture Land    | 20.08              | 38               |
|                                   | Forest Land     | 0.81               | 3                |
|                                   | <b>Total</b>    | <b>473.56</b>      | <b>1794</b>      |

Land access agreements and permissions will be obtained by M/S Saiyyed Akhtar Ali from landowners as well as the Municipalities and Ministry for sampling, surveys, studies, road-building and drilling that were conducted.



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## **Abstract**

In Rajasthan the workable deposits of Manganese ore are found in Banswara district. The Manganese ore contains Pyrolusite, Psilomelane occurs in association with Phyllite.

During the field season 1986-88 (project BSW-2), "Report on investigation carried out for Assessment of Manganese deposits in Tambesra, Tima-Mahuri and Rupakhera area" shows a total 100 Sq.km area was covered under Reconnaissance survey followed by Regional Geological Mapping of 15 Sq.km.. Detailed Geological Mapping of 0.50 Sq.km for the prospecting of Manganese ore. To know the grade & depth persistence of the Manganese mineralisation 297 meter drilling over 5 scout boreholes were carried out in Tambesra, Tima-Mahuri and Rupakhera area.

On the basis of available data of previous work / recent work by DMGR & GSI, this Kalakhunta block area is categories under G-4 stage exploration.

The grade of Manganese mineralisation Mn- 20.36 %, Fe- 4.58 %, SiO<sub>2</sub>- 32.11% as mentioned in the approved mine plan by IBM in favor of Asian mining associates (ML 04/2014).

Kalakhunta block comprises an area of 6.30 Sq.km., as per the DMGR prospecting report, stike extension of Manganiferous-Phyllite is considered Manganese over 5200 m block length, 60 mt. average width & 25 mt. average depth. As per approved mining plan of nearby ML- 4/2014, bulk density of the Manganese ore is considered 2.8 and resources calculated at 30 % volume.

The estimated geological resources of the block is about 6.552 Million Tonnes.

Tambesra block comprises an area of 2.41 Sq.km., as per the DMGR prospecting report, stike extension of Manganiferous-Phyllite is considered Manganese over 3200 m block length, 60 mt. average width & 25 mt. average depth. As per approved mining plan of nearby ML- 4/2004, bulk density of the Manganese ore is considered 2.8 and resources calculated at 30 % volume.

The estimated geological resources of the block is about 4.032 Million Tonnes.

Rupakhera block comprises an area of 4.735 Sq.km, As per the DMGR prospecting report, strike extension of Manganiferous&Phyllite is is considered Manganese over 5500 m block length, 60 m average width & 25 m average depth. As per approved mining plan of nearby lease ML- 4/2004, bulk density of the Manganese ore is considered 2.8 and resources calculated at 30% volume.

The estimated geological resources of the block is about 6.93 Million Tonnes.

## Mineral Resources

Manganese mineralisation associated with Manganiferous-Phyllite, it is extending in the block area in the form of linear band. The main structural control of ores in the area are locales of foliation plane, shear zone, fissure plane, weak zone and are in the form of thin layers alternating with Phyllite along lineation in bedded form with different shades, that is steel grey, grayish black & black in color, in the form of Pyrolusite & Psilomelane ore mineralisation. Thickness of veins of Manganese ore varies from 8 cm to 30 cm alternate layers, occurs in 50 to 80 mt. wide zone associate with Manganifeous-Phyllite, at places exhibit pygmatic folding.

The grade of Manganese mineralisation Mn- 20.36 %, Fe- 4.58 %, SiO<sub>2</sub>- 32.11%, as mentioned in the approved mine plan by IBM in favor of Asian Mining Associates (ML 04/2014).

## Mineral Resources Estimate by SAA

As per Amendment in Mineral auction rule 2015, under rule 2 (1)(ii){(b)(ii)}- As per the prospecting report of DMGR, strike extension of Manganiferous-Phyllite considered along block length 5200 m, width of mineralised zone 50 to 80 m and in the 5 scout boreholes, Manganese mineralisation was encountered from 2.50 to 42.50 m around Tima- Mahuri, Tambesra area and from 3.05 to 38.25 m around Rupakhera at inclined depth. The approved mine plan shows out of the calculated volume 30 % is considered as mineral & the Bulk Density of the Manganese ore is 2.8 considered.

**Table : Mineral Resource Estimate for the Kalakhunta Manganese Project**

| Area (Sqkm) | Area (Sqm)    | Avg. Depth (M) | Volume In CuM | Mineral Ton |
|-------------|---------------|----------------|---------------|-------------|
| (A)         | (B=A*1000000) | (C)            | BXC =D        | E = DX2.8   |
| 6.30        | 6300000       | 56             | 352800000     | 987840000   |

**Table : Mineral Resource Estimate for the Rupakhera Manganese Project**

| Area (Sqkm) | Area (Sqm)    | Avg. Depth (M) | Volume In CuM | Mineral Ton |
|-------------|---------------|----------------|---------------|-------------|
| (A)         | (B=A*1000000) | (C)            | BXC =D        | E = DX2.8   |
| 4.735       | 4735000       | 56             | 265160000     | 742448000   |

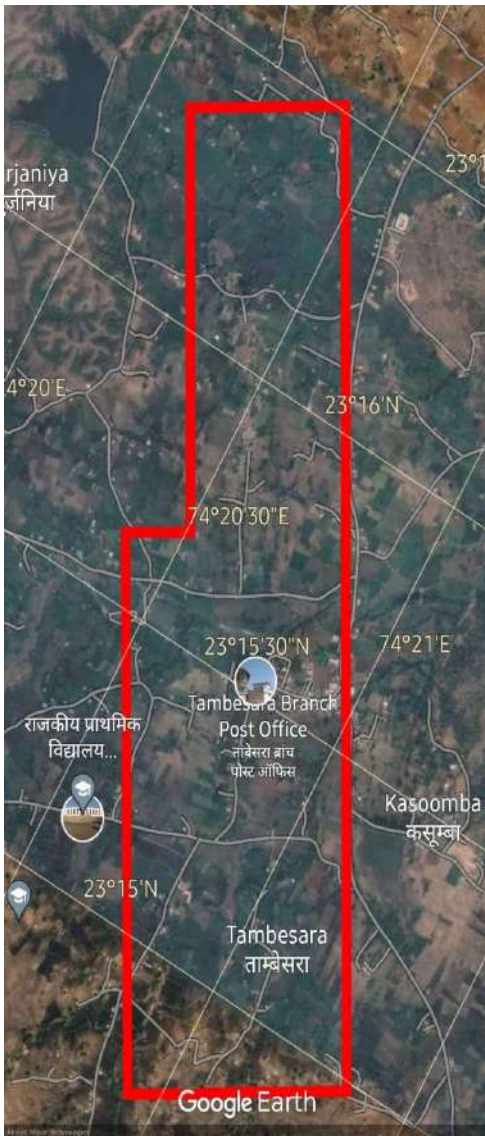
**Table : Mineral Resource Estimate for the Tambesara Manganese Project**

| Area (Sqkm) | Area (Sqm)    | Avg. Depth (M) | Volume In CuM | Mineral Ton |
|-------------|---------------|----------------|---------------|-------------|
| (A)         | (B=A*1000000) | (C)            | BXC =D        | E = DX2.8   |
| 2.41        | 2410000       | 56             | 134960000     | 377888000   |

As this Kalakhunta, Tambesra and Rupakhera area is laid down for Manganese investigation and exploration by State and Central agency since last 2-3 decades. As per exploration report (FS:1986-88) of DMGR, the area has regionally mapped followed by detailed geological mapping and for depth persistence 5 scout bores drilled. Manganese mineralisation was encountered from 2.50 to 42.50 m. Earlier and recent report/ publication of GSI, Manganese mineralization in the area were reported. This proposed Kalakhunta block area is of G-4 stage.

One Manganese working mining lease ML- 04/2014 in favor of Asian mining associates n/v Kalakhunta located on the NW extension of this block.

Considering the DMG Reports and approved mine plan of ML-04/2014 located in the extension of this block area, estimation of mineral resource by considering 5200 m, 5500m & 3200 m block length with average width 60 m & depth 25 m. The approved mine plan shows out of the calculated volume 30 % is considered as mineral & the Bulk Density of the Manganese ore is 2.8 considered.



## Prospecting Operation

In all three Manganese block, M/s Saiyyed Akhtar Ali has planned to conduct prospecting activities in phased manner as under:

### Phase I

#### A. Geological Mapping

We will start our exercise through desktop studies of the available legacy data, maps and compile a geospatial database before commencing field work. Further procure all relevant satellite data / imageries like ASTER, LANDSAT, DEM, other high resolution maps and carryout remote sensing analysis for lithologies, geological structures, especially faults, lineaments, drainages & numbering the order of streams, alterations, soil classification etc. Ground truthing will be carried out with available data / information before updating the geospatial database for data integration.

Surface Geological mapping for 630 Hectare will be carried out to prepare a litho-structural map with all litho types, all structural features like dip, strike, folds, faults etc. on scale 1:1000 or 1:4000 (whichever is appropriate) targeting Manganese mineral.

#### B. Geophysical Exploration

Ground geophysical survey by deploying Ground gravity, magnetic, resistivity and SP methods will be conducted of G-3 level exploration. This will help to ensure efficient and productive core drilling further.

- A high resolution ground magnetic survey on 50m x 50m grid or walk mode which ever is better is proposed for data acquisition at 100m line interval in the block.
- Ground Gravity survey using 1 micro Gal resolution at 50m x 50m grid in the block.
- Multi electrode electrical resistivity survey for 50 to 100m depth conductivity mapping @ selected targets @ 100m / 200m line interval, 10m spaced electrodes.
- Self Potential at every 10m along 100m spaced lines in the block.
- DGPS systems with sub centimeter accuracy (both horizontal and vertical) is required to used in topographic survey and all stations covered in gravity survey.

#### C. Geochemical Exploration

Geochemical exploration will follow SOP for National Geochemical & Quality Management issued by GSI in May 2014. A total of 400 rock chip/grab samples are estimated to be collected during geochemical mapping work. All the chemical analysis will be conducted at NABL accredited laboratories.

## Phase II & III

### A. Drilling

Core Drilling will be done of 50m deep holes over 40% of the area in 100m x 100m grid for resource estimations (this includes target drill testing & UNFC Grid pattern drilling). This will be added up with Core Logging, Core Sampling, Sample preparation for QA/ QC, Chemical Analysis, Petrographic and mineralographic study etc.

All the chemical analysis will be conducted at NABL accredited laboratories.

- (a) Resource reporting:-
  - (i) 3D Geological Model
  - (ii) Reserves & Resource Estimation
  - (iii) Detail Geological Report
  - (iv) Pre-feasibility study



# Quantum of Prospecting

## **Drilling of Kalakhunta**

- (a) Type of drilling: Core drilling
- (b) No of bore holes:300
- (c) Grid spacing: 100 meters
- (d) Total quantum of drilling proposed (in m.):15000 meters
- (e) Potential mineralised area to be covered (in hectare):252 hectares
- (f) Level of exploration envisaged as per MEMC Rules, 2015: G2 level exploration

## **Drilling of Rupakhera**

- (g) Type of drilling: Core drilling
- (h) No of bore holes:228
- (i) Grid spacing: 100 meters
- (j) Total quantum of drilling proposed (in m.):11400 meters
- (k) Potential mineralised area to be covered (in hectare):190 hectares
- (l) Level of exploration envisaged as per MEMC Rules, 2015: G2 level exploration

## **Drilling of Tambesara**

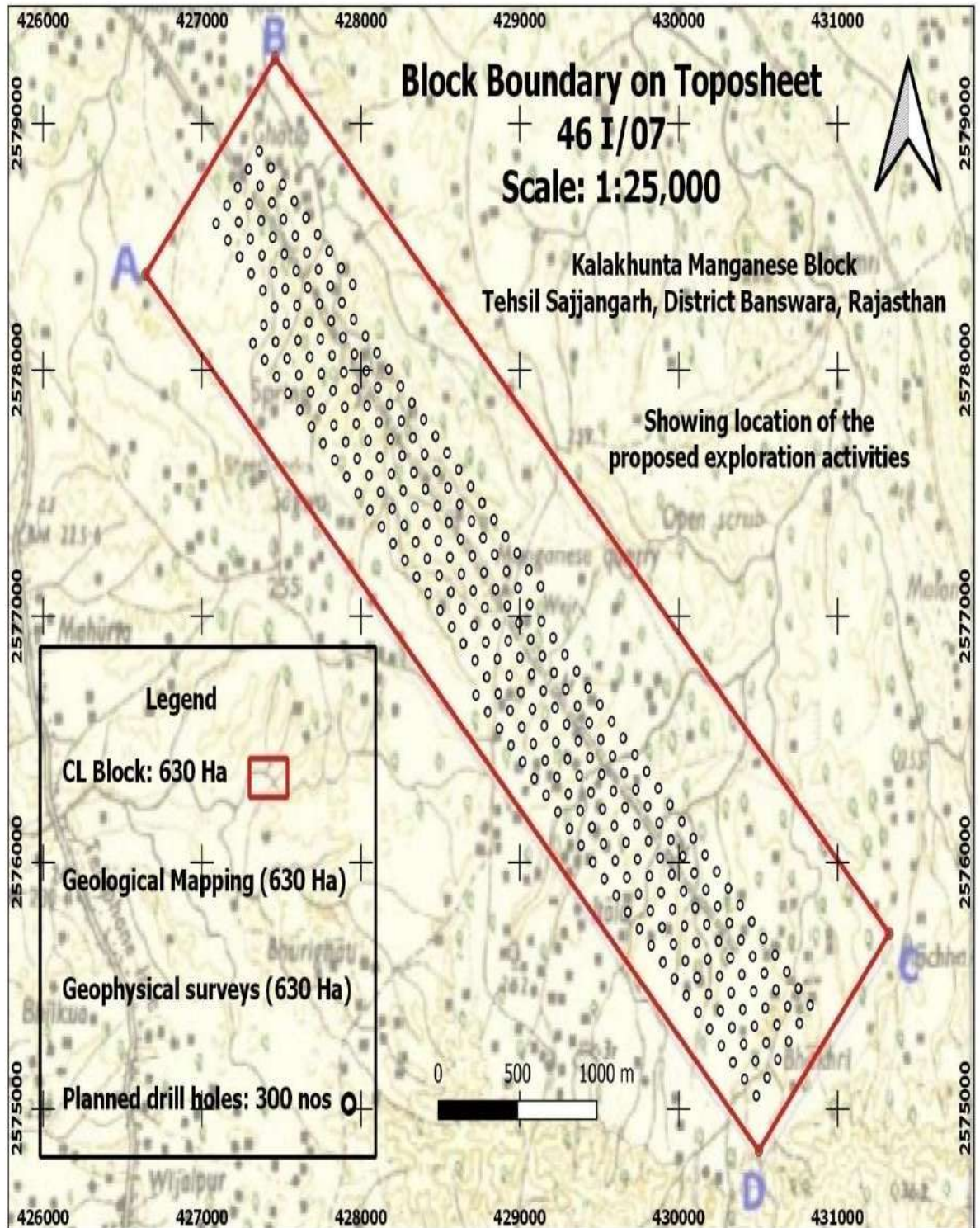
- (m) Type of drilling: Core drilling
- (n) No of bore holes:121
- (o) Grid spacing: 100 meters
- (p) Total quantum of drilling proposed (in m.):6050 meters
- (q) Potential mineralised area to be covered (in hectare):97 hectares
- (r) Level of exploration envisaged as per MEMC Rules, 2015: G2 level exploration

Total Bore Hole = 649 Number

## Timeline for Exploration Activities

| S. No. | Work                                           | Approximate timeline (From the date of grant of composite license) |
|--------|------------------------------------------------|--------------------------------------------------------------------|
| 1.1    | Geological and Geochemical Studies             | 90 days                                                            |
| 2.2    | Geophysical Studies                            | 90 days                                                            |
| 3.3    | Core Drilling (Including logging and sampling) | 90 days                                                            |
| 4.4    | Geological report Submission                   | 10 days                                                            |

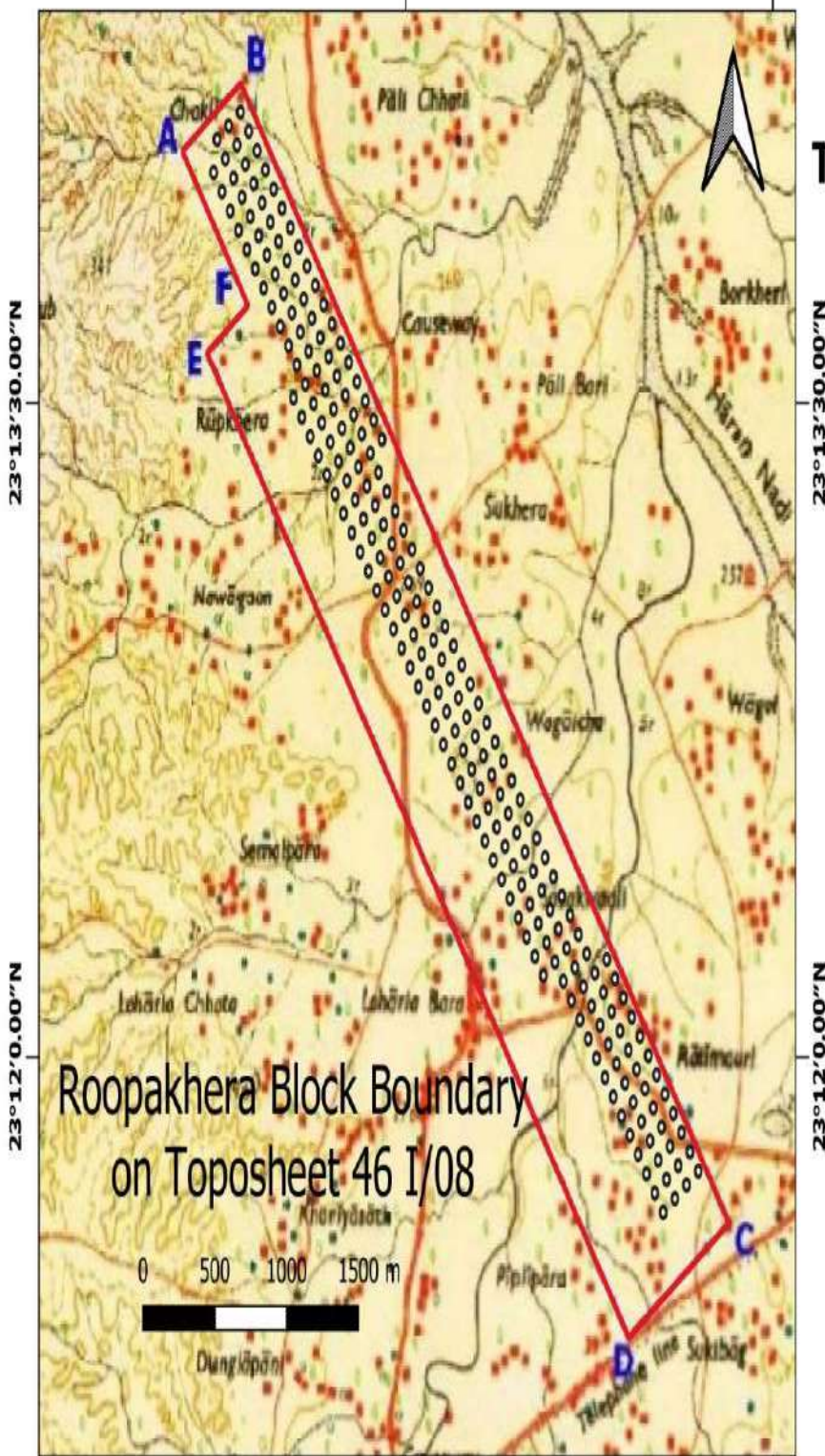
## Kalakhunta Manganese Ore Block Prospecting Plan





74°22'30.00"E

74°24'0.00"E



Roopakhera Block Boundary  
on Toposheet 46 I/08

**Roopakhera Block**  
**Tehsil: Kushalgarh-Sajjangarh**  
**District: Banswara**

**Toposheet**  
**Part of 46 I/08**

**Scale: 1:25,000**

**Legend**

CL Block: 473.5 Ha 

Geological Mapping (473.5 Ha)

Geophysical surveys (473.5 Ha)

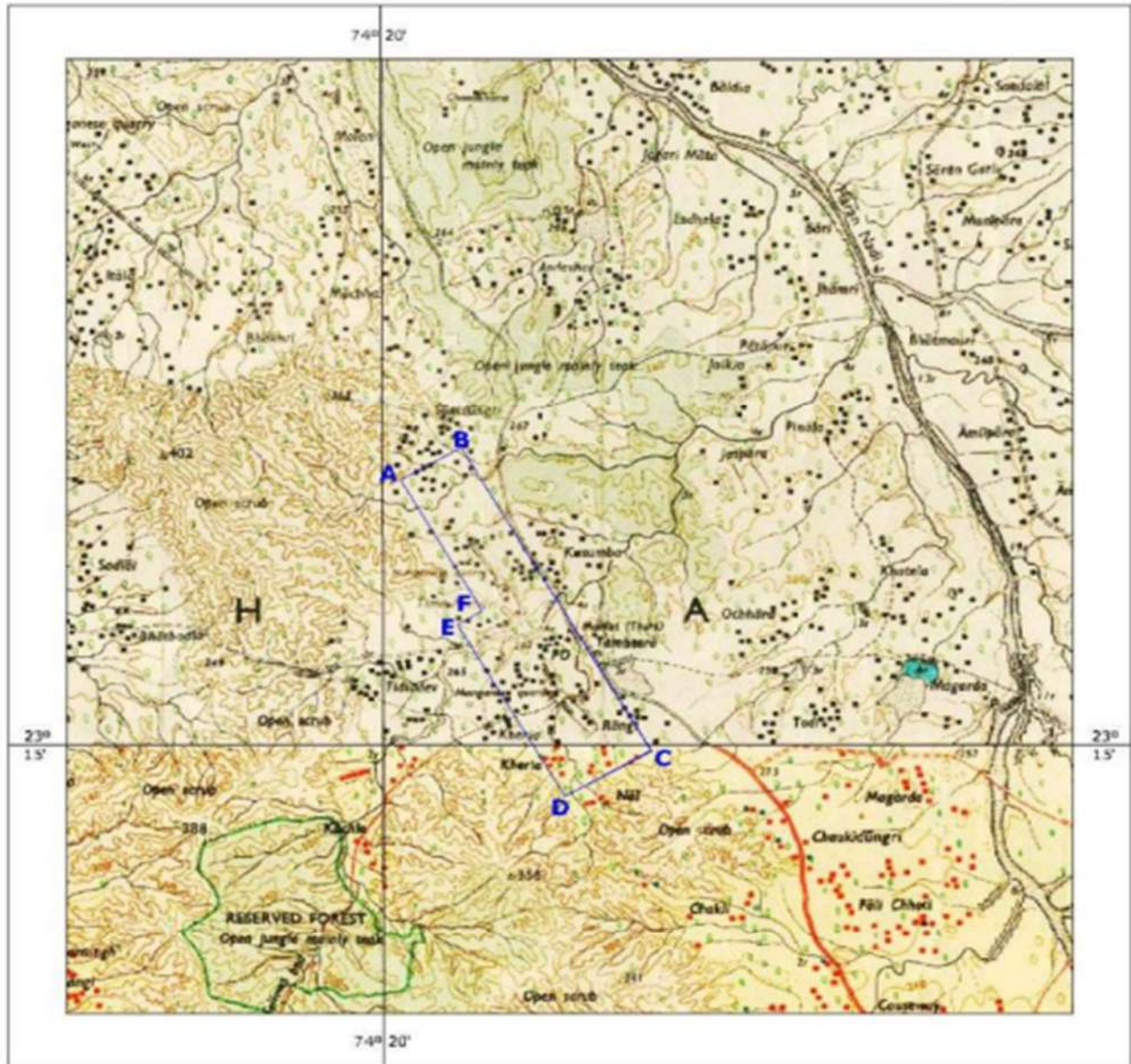
Planned drill holes: 228 nos 

FRP: -G.T.S 356 LATITUDE 23°-15'-25.67" LONGITUDE 74°-21'-5.108"

**TAMBESARA MANGANESE BLOCK  
N/ V TIMA MAHURI, TAMBESARA, TEHSIL -SAJJANGARH, DISTRICT- BANSWARA.**

SCALE ICM= 500MTS.

G.T. SHEET NO. 46 17



FRP: - Chhatri on bank of tambesara talab      LATITUDE 23°-15'-25.67"      LONGITUDE 74°-21'-5.108"

|   | <u>Latitude</u>  | <u>Longitude</u> |
|---|------------------|------------------|
| A | 23°-16'-20.7311" | 74°-20'-05.6798" |
| B | 23°-16'-30.5860" | 74°-20'-23.7916" |
| C | 23°-14'-59.1283" | 74°-21'-21.4563" |
| D | 23°-14'-45.1449" | 74°-20'-55.8867" |
| E | 23°-15'-37.2828" | 74°-20'-22.9260" |
| F | 23°-15'-41.2781" | 74°-20'-30.5169" |

**AREA 2.4176 SQ. KM.**

**BANSWARA COMPOSITE LICENSE REQUIREMENT****Working Capital for Composite Licence Till Aug 23**

| S. no. | Description                           | Qty           | Price    | Amount                |
|--------|---------------------------------------|---------------|----------|-----------------------|
| 1      | Surface Geological Mapping Per Hactor | 1344          | 1,500    | 20,16,000             |
| 2      | Topography Survey Per Hactor          | 1344          | 2,200    | 29,56,800             |
| 3      | Drilling Contract Per Meter           | 17000         | 1,800    | 3,06,00,000           |
| 4      | Sample Kit                            | 649           | 700      | 4,54,300              |
| 5      | Sample Analysis                       | 6490          | 600      | 38,94,000             |
| 6      | Pre Feasibility Report                | 3             | 3,50,000 | 10,50,000             |
| 7      | GR Report                             | 3             | 7,00,000 | 21,00,000             |
| 8      | Diesel                                | 4500          | 100      | 4,50,000              |
| 9      | Other Exp.                            |               |          | 3,72,00,000           |
|        | <b>TOTAL</b>                          | <b>Jul-23</b> |          | <b>8,07,21,100</b>    |
| 1      | BG (0.5% of Reserve) (Margine 25%)    | Aug-23        |          | 27,23,81,620          |
| 2      | Upfront Payment 40%                   | Aug-23        |          | 43,58,10,592          |
|        | <b>TOTAL</b>                          |               |          | <b>70,81,92,212</b>   |
|        | <b>TOTAL FUND BASED</b>               |               |          | <b>78,89,13,312</b>   |
| 1      | BG (0.5% of Reserve) (75%)            | Aug-23        |          | 81,71,44,860          |
|        | <b>TOTAL NON FUND BASED</b>           |               |          | <b>81,71,44,860</b>   |
|        | <b>TOTAL FUNDING REQUIREMENT</b>      |               |          | <b>1,60,60,58,172</b> |

### Manganese ore Block Timeline and Financial Requirement

| S.No.                 | Description                                    | Timeline   | Tambesara              | Kala Khunta            | Rupa Khera             | Total                    | Amount in Million Dollor | Remarks                                                                                              |
|-----------------------|------------------------------------------------|------------|------------------------|------------------------|------------------------|--------------------------|--------------------------|------------------------------------------------------------------------------------------------------|
| <b>Reserve in Ton</b> |                                                |            | <b>1,43,36,000</b>     | <b>2,32,96,000</b>     | <b>2,46,40,000</b>     | <b>6,22,72,000</b>       | <b>62.27</b>             | 2.8 density, 50 Mtr Depth, 80 Mtr Width and 40% mineralised area                                     |
| <b>Reserve Value</b>  |                                                |            | <b>50,16,52,48,000</b> | <b>81,51,85,28,000</b> | <b>86,22,15,20,000</b> | <b>2,17,90,52,96,000</b> | <b>2,657.3817</b>        |                                                                                                      |
| 1                     | Performance BG                                 | 26/10/2022 | 3,52,72,400            | 5,73,17,715            | 6,06,24,507            | <b>15,32,14,622</b>      | <b>1.8685</b>            | Submitted at banswada Office                                                                         |
| 2                     | Khasra Map                                     | 21/11/2022 | 25,000                 | 50,000                 | 25,000                 | <b>1,00,000</b>          | <b>0.0012</b>            | Received from patwari Banswara                                                                       |
| 3                     | Preparation of Map                             | 18-03-2023 | 15,000                 | 25,000                 | 30,000                 | <b>70,000</b>            | <b>0.0009</b>            | Prepared                                                                                             |
| 4                     | LOI for CL                                     | 20-03-2023 | 15,00,000              | 25,00,000              | 30,00,000              | <b>70,00,000</b>         | <b>0.0854</b>            | Received                                                                                             |
| 5                     | <b>Department Exp.-</b>                        |            |                        |                        |                        |                          |                          |                                                                                                      |
| 5.1                   | Mining Department                              | 22-03-2023 | 1,50,000               | 2,00,000               | 1,50,000               | <b>5,00,000</b>          | <b>0.0061</b>            | Agreement with Mining office done                                                                    |
| 5.2                   | Udaipur Directorate                            | 20-03-2023 | 2,00,000               | 2,00,000               | 2,00,000               | <b>6,00,000</b>          | <b>0.0073</b>            |                                                                                                      |
| 6                     | <b>Permission for Composite Survey-</b>        |            |                        |                        |                        |                          |                          |                                                                                                      |
| 6.1                   | District Collector                             | 31-03-2023 | 5,000                  | 10,000                 | 5,000                  | <b>20,000</b>            | <b>0.0002</b>            | Forest Permission done and other permission are under process                                        |
| 6.2                   | Forest NOC                                     | 31-03-2023 | 500                    | 1,000                  | 500                    | <b>2,000</b>             | <b>0.0000</b>            |                                                                                                      |
| 6.3                   | Panchayat                                      | 31-03-2023 | 5,00,000               | 5,00,000               | 5,00,000               | <b>15,00,000</b>         | <b>0.0183</b>            |                                                                                                      |
| 7                     | Core Drilling & prospecting exploration agency | 30-06-2023 | 15,00,000              | 25,00,000              | 20,00,000              | <b>60,00,000</b>         | <b>0.0732</b>            | work started for Site visit and quotation                                                            |
| 8                     | Laboratory & Office Setup                      | 30-06-2023 | 20,00,000              | 20,00,000              | 20,00,000              | <b>60,00,000</b>         | <b>0.0732</b>            | We will Start after getting CL                                                                       |
| 9                     | Drilling work on Rent Basis (649 Bore)         | 30-06-2023 | 1,01,64,000            | 2,52,00,000            | 1,91,52,000            | <b>5,45,16,000</b>       | <b>0.6648</b>            | (Grid=100 m)(depth 56m) Tambesara=121, Kala Khunta 300, Rupa Kheda 228 (1500 Per M)                  |
| 10                    | Sample Analysis                                | 30-06-2023 | 15,73,000              | 39,00,000              | 29,64,000              | <b>84,37,000</b>         | <b>0.1029</b>            | Tambesara=1210, Kala Khunta 3000, Rupa khera 2280 (500 samples from SGS & Sample collection from SGS |
| 11                    | Composite licence agreement                    | 30-06-2023 | 25,00,000              | 50,00,000              | 25,00,000              | <b>1,00,00,000</b>       | <b>0.1220</b>            | After getting all permission we will get CL                                                          |
| 12                    | IBM Registration                               | 30-06-2023 | 20,000                 | 50,000                 | 30,000                 | <b>1,00,000</b>          | <b>0.0012</b>            |                                                                                                      |
| 13                    | Submission of report                           | 30-06-2023 | 25,00,000              | 50,00,000              | 25,00,000              | <b>1,00,00,000</b>       | <b>0.1220</b>            |                                                                                                      |
| 14                    | Selection of area for mining lease             | 31-07-2023 |                        |                        |                        |                          |                          |                                                                                                      |
| 15                    | Upfront Payment (20%)                          | 31-07-2023 | 5,01,65,248            | 8,15,18,528            | 8,62,21,520            | <b>21,79,05,296</b>      | <b>2.6574</b>            |                                                                                                      |
| 16                    | LOI for ML                                     | 11-08-2023 | 50,00,000              | 1,00,00,000            | 50,00,000              | <b>2,00,00,000</b>       | <b>0.2439</b>            |                                                                                                      |
| 17                    | Performance BG for Mining (0.5%)               | 21-08-2023 | 25,08,26,240           | 40,75,92,640           | 43,11,07,600           | <b>1,08,95,26,480</b>    | <b>13.2869</b>           |                                                                                                      |

|                               |                                         |                        |                       |                       |                       |                        |                 |                                |
|-------------------------------|-----------------------------------------|------------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------|--------------------------------|
| 18                            | Upfront Payment (20%)                   | 21-08-2023             | 5,01,65,248           | 8,15,18,528           | 8,62,21,520           | <b>21,79,05,296</b>    | <b>2.6574</b>   |                                |
| 19                            | Land Procurement (537.80 Hactare- 40%)  | At the time of CL Work | 48,20,00,000          | 1,26,00,00,000        | 94,70,00,000          | <b>2,68,90,00,000</b>  | <b>32.7927</b>  | Basic rate 50 lakh per hectare |
| 20                            | Party Fund 2% of Reserve Value          |                        | 1,00,33,04,960        | 1,63,03,70,560        | 1,72,44,30,400        | <b>4,35,81,05,920</b>  | <b>53.1476</b>  |                                |
| 21                            | All Type NOC                            | Apr-24                 | 30,00,000             | 50,00,000             | 30,00,000             | <b>1,10,00,000</b>     | <b>0.1341</b>   |                                |
| 22                            | Mine Development & production Aggrement | Apr-24                 | 25,00,000             | 50,00,000             | 25,00,000             | <b>1,00,00,000</b>     | <b>0.1220</b>   |                                |
| 23                            | Upfront Payment (60%)                   | Apr-24                 | 15,04,95,744          | 24,45,55,584          | 25,86,64,560          | <b>65,37,15,888</b>    | <b>7.9721</b>   |                                |
| 24                            | Mining lease deed                       | Apr-24                 | 50,00,000             | 1,00,00,000           | 50,00,000             | <b>2,00,00,000</b>     | <b>0.2439</b>   |                                |
| 25                            | Equipment Procurement                   | Apr-24                 | 50,00,00,000          | 1,50,00,00,000        | 1,00,00,00,000        | <b>3,00,00,00,000</b>  | <b>36.5854</b>  |                                |
| 26                            | Mining plan Preparation                 | Apr-24                 | 10,00,000             | 30,00,000             | 10,00,000             | <b>50,00,000</b>       | <b>0.0610</b>   |                                |
| 27                            | Mining Start                            | Apr-24                 | 50,00,000             | 1,00,00,000           | 50,00,000             | <b>2,00,00,000</b>     | <b>0.2439</b>   |                                |
| <b>Total Expense and Time</b> |                                         | <b>Apr-24</b>          | <b>2,53,11,09,940</b> | <b>5,29,56,91,840</b> | <b>4,59,02,02,100</b> | <b>12,41,70,03,880</b> | <b>151.4269</b> |                                |

| Particular                                     | FUND REQUIRED          | Amount in Million \$ | COST INCURED TILL DATE |
|------------------------------------------------|------------------------|----------------------|------------------------|
| Fixed (Plant & Machinery)                      | 3,00,60,00,000         | 36.66                | -                      |
| Working Capital                                | 18,48,45,000           | 2.25                 | 97,92,000              |
| Land 40% (537.8 H @ 50 Lacs) (Total- 1344.5 H) | 2,68,90,00,000         | 32.79                | 84,00,00,000           |
| Upfront (100% of 0.50%)                        | 1,08,95,26,480         | 13.29                | -                      |
| BG (0.50%)                                     | 1,08,95,26,480         | 13.29                | 15,32,14,622           |
| Party Fund (2% of Reserve)                     | 4,35,81,05,920         | 53.15                | -                      |
| <b>Total</b>                                   | <b>12,41,70,03,880</b> | <b>151.43</b>        | <b>1,00,30,06,622</b>  |

## Kala Khunta Manganese ore Block Timeline and Financial Requirement

| S.No.                         | Description                                    | Timeline               | Amount in Indian Rps   | Amount in Million Dollor | Remarks                                                                            |
|-------------------------------|------------------------------------------------|------------------------|------------------------|--------------------------|------------------------------------------------------------------------------------|
| <b>Reserve in Ton</b>         |                                                |                        | <b>2,32,96,000</b>     | <b>23.30</b>             | 2.8 density, 50 Mtr Depth, 80 Mtr Width and 40% mineralised area                   |
| <b>Reserve Value</b>          |                                                |                        | <b>81,51,85,28,000</b> | <b>994.1284</b>          |                                                                                    |
| 1                             | Performance BG                                 | 26/10/2022             | 5,73,17,715            | <b>0.6990</b>            | Submitted at banswada Office                                                       |
| 2                             | Khasra Map                                     | 21/11/2022             | 50,000                 | <b>0.0006</b>            | Received from patwari Banswara                                                     |
| 3                             | Preparation of Map                             | 18-03-2023             | 25,000                 | <b>0.0003</b>            | Prepared                                                                           |
| 4                             | LOI for CL                                     | 20-03-2023             | 25,00,000              | <b>0.0305</b>            | Received                                                                           |
| 5                             | <b>Department Exp.-</b>                        |                        |                        |                          |                                                                                    |
| 5.1                           | Mining Department                              | 22-03-2023             | 2,00,000               | <b>0.0024</b>            | Agreement with Mining office done                                                  |
| 5.2                           | Udaipur Directorate                            | 20-03-2023             | 2,00,000               | <b>0.0024</b>            |                                                                                    |
| 6                             | <b>Permission for Composite Survey-</b>        |                        |                        |                          |                                                                                    |
| 6.1                           | District Collector                             | 31-03-2023             | 10,000                 | <b>0.0001</b>            | Forest Permission received and other Permission are under process                  |
| 6.2                           | Forest NOC                                     | 31-03-2023             | 1,000                  | <b>0.0000</b>            |                                                                                    |
| 6.3                           | Panchayat                                      | 31-03-2023             | 5,00,000               | <b>0.0061</b>            |                                                                                    |
| 7                             | Core Drilling & prospecting exploration agency | 30-06-2023             | 20,00,000              | <b>0.0244</b>            | work started for Site visit and quotation                                          |
| 8                             | Laboratory & Office Setup                      | 30-06-2023             | 20,00,000              | <b>0.0244</b>            | We will Start after getting CL                                                     |
| 9                             | Drilling work on Rent Basis                    | 30-06-2023             | 2,52,00,000            | <b>0.3073</b>            | (Grid=100 m)(depth 56m)<br>Kalakunta=300 (1500 Per M)                              |
| 10                            | Sample Analysis                                | 30-06-2023             | 39,00,000              | <b>0.0476</b>            | Kalakunta=3000 (every 5m each) & 500 samples from SGS & Sample collection from SGS |
| 11                            | Composite licence agreement                    | 30-06-2023             | 50,00,000              | <b>0.0610</b>            | After getting all permission we will get CL                                        |
| 12                            | IBM Registration                               | 30-06-2023             | 50,000                 | <b>0.0006</b>            |                                                                                    |
| 13                            | Submission of report                           | 30-06-2023             | 50,00,000              | <b>0.0610</b>            |                                                                                    |
| 14                            | Selection of area for mining lease             | 31-07-2023             |                        |                          |                                                                                    |
| 15                            | Upfront Payment (20%)                          | 31-07-2023             | 8,15,18,528            | <b>0.9941</b>            |                                                                                    |
| 16                            | LOI for ML                                     | 11-08-2023             | 1,00,00,000            | <b>0.1220</b>            |                                                                                    |
| 17                            | Performance BG for Mining (0.5%)               | 11-08-2023             | 40,75,92,640           | <b>4.9706</b>            |                                                                                    |
| 18                            | Upfront Payment (20%)                          | 11-08-2023             | 8,15,18,528            | <b>0.9941</b>            |                                                                                    |
| 19                            | Land Procurement (252 Hactare ) (40%)          | At the time of CL Work | 1,26,00,00,000         | <b>15.3659</b>           | Basic rate 50 lakh hectare                                                         |
| 20                            | Party Fund 2% of Reserve Value                 |                        | 1,63,03,70,560         | <b>19.8826</b>           |                                                                                    |
| 21                            | All Type NOC                                   | Apr-24                 | 50,00,000              | <b>0.0610</b>            |                                                                                    |
| 22                            | Mine Development & production Aggrement        | Apr-24                 | 50,00,000              | <b>0.0610</b>            |                                                                                    |
| 23                            | Upfront Payment (60%)                          | Apr-24                 | 24,45,55,584           | <b>2.9824</b>            |                                                                                    |
| 24                            | Mining lease deed                              | Apr-24                 | 1,00,00,000            | <b>0.1220</b>            |                                                                                    |
| 25                            | Equipment Procurement                          | Apr-24                 | 1,50,00,00,000         | <b>18.2927</b>           |                                                                                    |
| 26                            | Mining plan Preparation                        | Apr-24                 | 30,00,000              | <b>0.0366</b>            |                                                                                    |
| 27                            | Mining Start                                   | Apr-24                 | 1,00,00,000            | <b>0.1220</b>            |                                                                                    |
| <b>Total Expense and Time</b> |                                                | <b>Apr-24</b>          | <b>5,29,51,91,840</b>  | <b>64.5755</b>           |                                                                                    |

| Particular                               | FUND REQUIRED         | Amount in Million \$ |
|------------------------------------------|-----------------------|----------------------|
| Fixed (Plant & Machinery)                | 1,50,20,00,000        | 18.32                |
| Working Capital                          | 8,76,36,000           | 1.07                 |
| land 40% (252 H @ 50 Lacs) (Total-630 H) | 1,26,00,00,000        | 15.37                |
| Upfront (100% of 0.50%)                  | 40,75,92,640          | 4.97                 |
| BG (0.50%)                               | 40,75,92,640          | 4.97                 |
| Party Fund (2% of Reserve)               | 1,63,03,70,560        | 19.88                |
| <b>Total</b>                             | <b>5,29,51,91,840</b> | <b>64.58</b>         |

## Rupa Khera Manganese ore Block Timeline and Financial Requirement

| S.No.                         | Description                                    | Timeline               | Amount in Indian Rps   | Amount in Million Dolor | Remarks                                                                             |
|-------------------------------|------------------------------------------------|------------------------|------------------------|-------------------------|-------------------------------------------------------------------------------------|
| <b>Reserve in Ton</b>         |                                                |                        | <b>2,46,40,000</b>     | <b>24.64</b>            | 2.8 density, 50 Mtr Depth, 80 Mtr Width and 40% mineralised area                    |
| <b>Reserve Value</b>          |                                                |                        | <b>86,22,15,20,000</b> | <b>1,051.4820</b>       |                                                                                     |
| 1                             | Performance BG                                 | 26/10/2022             | 6,06,24,507            | <b>0.7393</b>           | Submitted at banswada Office                                                        |
| 2                             | Khasra Map                                     | 21/11/2022             | 25,000                 | <b>0.0003</b>           | Received from patwari Banswara                                                      |
| 3                             | Preparation of Map                             | 18-03-2023             | 30,000                 | <b>0.0004</b>           | Prepared                                                                            |
| 4                             | LOI for CL                                     | 20-03-2023             | 30,00,000              | <b>0.0366</b>           | Received                                                                            |
| 5                             | <b>Department Exp.-</b>                        |                        |                        |                         |                                                                                     |
| 5.1                           | Mining Department                              | 22-03-2023             | 1,50,000               | <b>0.0018</b>           | Agreement with Mining office done                                                   |
| 5.2                           | Udaipur Directorate                            | 20-03-2023             | 2,00,000               | <b>0.0024</b>           |                                                                                     |
| 6                             | <b>Permission for Composite Survey-</b>        |                        |                        |                         |                                                                                     |
| 6.1                           | District Collector                             | 31-03-2023             | 5,000                  | <b>0.0001</b>           | Forest permission received and other permission is under process                    |
| 6.2                           | Forest NOC                                     | 31-03-2023             | 500                    | <b>0.0000</b>           |                                                                                     |
| 6.3                           | Panchayat                                      | 31-03-2023             | 5,00,000               | <b>0.0061</b>           |                                                                                     |
| 7                             | Core Drilling & prospecting exploration agency | 30-06-2023             | 20,00,000              | <b>0.0244</b>           | work started for Site visit and quotation                                           |
| 8                             | Laboratory & Office Setup                      | 30-06-2023             | 20,00,000              | <b>0.0244</b>           | We will Start after getting CL                                                      |
| 9                             | Drilling work on Rent Basis                    | 30-06-2023             | 1,91,52,000            | <b>0.2336</b>           | (Grid=100 m)(depth 56m)<br>Rupakhera=228, (1500 Per M)                              |
| 10                            | Sample Analysis                                | 30-06-2023             | 29,64,000              | <b>0.0361</b>           | Rupakhera=2280, (every 5m each) & 500 samples from SGS & Sample collection from SGS |
| 11                            | Composite licence agreement                    | 30-06-2023             | 25,00,000              | <b>0.0305</b>           | After getting all permission we will get CL                                         |
| 12                            | IBM Registration                               | 30-06-2023             | 30,000                 | <b>0.0004</b>           |                                                                                     |
| 13                            | Submission of report                           | 30-06-2023             | 25,00,000              | <b>0.0305</b>           |                                                                                     |
| 14                            | Selection of area for mining lease             | 31-07-2023             |                        |                         |                                                                                     |
| 15                            | Upfront Payment (20%)                          | 31-07-2023             | 8,62,21,520            | <b>1.0515</b>           |                                                                                     |
| 16                            | LOI for ML                                     | 11-08-2023             | 50,00,000              | <b>0.0610</b>           |                                                                                     |
| 17                            | Performance BG for Mining (0.5%)               | 11-08-2023             | 43,11,07,600           | <b>5.2574</b>           |                                                                                     |
| 18                            | Upfront Payment (20%)                          | 11-08-2023             | 8,62,21,520            | <b>1.0515</b>           |                                                                                     |
| 19                            | Land Procurement (189.4 Hactare) (40%)         | At the time of CL Work | 94,70,00,000           | <b>11.5488</b>          | Basic rate 50 lakh per hectare                                                      |
| 20                            | Party Fund 2% of Reserve Value                 |                        | 1,72,44,30,400         | <b>21.0296</b>          |                                                                                     |
| 21                            | All Type NOC                                   | Apr-24                 | 30,00,000              | <b>0.0366</b>           |                                                                                     |
| 22                            | Mine Development & production Aggrement        | Apr-24                 | 25,00,000              | <b>0.0305</b>           |                                                                                     |
| 23                            | Upfront Payment(60%)                           | Apr-24                 | 25,86,64,560           | <b>3.1544</b>           |                                                                                     |
| 24                            | Mining lease deed                              | Apr-24                 | 50,00,000              | <b>0.0610</b>           |                                                                                     |
| 25                            | Equipment Procurement                          | Apr-24                 | 1,00,00,00,000         | <b>1.2195</b>           |                                                                                     |
| 26                            | Mining plan Preparation                        | Apr-24                 | 10,00,000              | <b>0.0122</b>           |                                                                                     |
| 27                            | Mining Start                                   | Apr-24                 | 50,00,000              | <b>0.0610</b>           |                                                                                     |
| <b>Total Expense and Time</b> |                                                | <b>Apr-24</b>          | <b>4,59,02,02,100</b>  | <b>55.9781</b>          |                                                                                     |



| <b>Particular</b>                            | <b>FUND REQUIRED</b>  | <b>Amount in Million \$</b> |
|----------------------------------------------|-----------------------|-----------------------------|
| Fixed (Plant & Machinery)                    | 1,00,20,00,000        | 12.22                       |
| Working Capital                              | 5,45,56,500           | 0.67                        |
| land 40% (189.4 H @ 50 Lacs) (Total-473.5 H) | 94,70,00,000          | 11.55                       |
| Upfront (100% of 0.50%)                      | 43,11,07,600          | 5.26                        |
| BG (0.50%)                                   | 43,11,07,600          | 5.26                        |
| Party Fund (2% of Reserve)                   | 1,72,44,30,400        | 21.03                       |
| <b>Total</b>                                 | <b>4,59,02,02,100</b> | <b>55.98</b>                |

## Tambesara Manganese ore Block Timeline and Financial Requirement

| S.No.                 | Description                                    | Timeline               | Amount in Indian Rps   | Amount in million Dollor | Remarks                                                            |
|-----------------------|------------------------------------------------|------------------------|------------------------|--------------------------|--------------------------------------------------------------------|
| <b>Reserve in Ton</b> |                                                |                        | <b>1,43,36,000</b>     | <b>14.34</b>             | 2.8 density, 50 Mtr Depth, 80 Mtr Width and 40% mineralised area   |
| <b>Reserve Value</b>  |                                                |                        | <b>50,16,52,48,000</b> | <b>611.7713</b>          |                                                                    |
| 1                     | Performance BG                                 | 26/10/2022             | 3,52,72,400            | <b>0.4302</b>            | Submitted at banswada Office                                       |
| 2                     | Khasra Map                                     | 21/11/2022             | 25,000                 | <b>0.0003</b>            | Received from patwari Banswara                                     |
| 3                     | Preparation of Map                             | 18-03-2023             | 15,000                 | <b>0.0002</b>            | Prepared                                                           |
| 4                     | LOI for CL                                     | 20-03-2023             | 15,00,000              | <b>0.0183</b>            | Received                                                           |
| 5                     | <b>Department Exp.-</b>                        |                        |                        |                          |                                                                    |
| 5.1                   | Mining Department                              | 22-03-2023             | 1,50,000               | <b>0.0018</b>            | Agreement with Mining office done                                  |
| 5.2                   | Udaipur Directorate                            | 20-03-2023             | 2,00,000               | <b>0.002</b>             |                                                                    |
| 6                     | <b>Permission for Composite Survey-</b>        |                        |                        |                          |                                                                    |
| 6.1                   | District Collector                             | 31-03-2023             | 5,000                  | <b>0.0001</b>            | Forest Permission done and other permission are under process      |
| 6.2                   | Forest NOC                                     | 31-03-2023             | 500                    | <b>0.0000</b>            |                                                                    |
| 6.3                   | Panchayat                                      | 31-03-2023             | 5,00,000               | <b>0.0061</b>            |                                                                    |
| 7                     | Core Drilling & prospecting exploration agency | 30-06-2023             | 20,00,000              | <b>0.0244</b>            | work started for Site visit and quotation                          |
| 8                     | Laboratory & Office Setup                      | 30-06-2023             | 20,00,000              | <b>0.0244</b>            | We will Start after getting CL                                     |
| 9                     | Drilling work on Rent Basis                    | 30-06-2023             | 1,01,64,000            | <b>0.1240</b>            | (Grid=100 m)(depth 56m)<br>Tambesara=121, (1500 Per M)             |
| 10                    | Sample Analysis                                | 30-06-2023             | 15,73,000              | <b>0.0192</b>            | Tambesara=1210, (500 samples from SGS & Sample collection from SGS |
| 11                    | Composite licence agreement                    | 30-06-2023             | 25,00,000              | <b>0.0305</b>            | After getting all permission we will get CL                        |
| 12                    | IBM Registration                               | 30-06-2023             | 20,000                 | <b>0.0002</b>            |                                                                    |
| 13                    | Submission of report                           | 30-06-2023             | 25,00,000              | <b>0.0305</b>            |                                                                    |
| 14                    | Selection of area for mining lease             | 31-07-2023             |                        |                          |                                                                    |
| 15                    | Upfront Payment (20%)                          | 31-07-2023             | 5,01,65,248            | <b>0.6118</b>            |                                                                    |
| 16                    | LOI for ML                                     | 11-08-2023             | 50,00,000              | <b>0.0610</b>            |                                                                    |
| 17                    | Performance BG for Mining (0.5%)               | 11-08-2023             | 25,08,26,240           | <b>3.0589</b>            |                                                                    |
| 18                    | Upfront Payment (20%)                          | 11-08-2023             | 5,01,65,248            | <b>0.6118</b>            |                                                                    |
| 19                    | Land Procurement (96.4 Hactare) (40%)          | At the time of CL Work | 48,20,00,000           | <b>5.8780</b>            | Basic rate 50 lakh per hectare                                     |
| 20                    | Party Fund 2% of Reserve Value                 |                        | 1,00,33,04,960         | <b>12.2354</b>           |                                                                    |
| 21                    | All Type NOC                                   | Apr-24                 | 30,00,000              | <b>0.0366</b>            |                                                                    |
| 22                    | Mine Development & production Aggrement        | Apr-24                 | 25,00,000              | <b>0.0305</b>            |                                                                    |
| 23                    | Upfront Payment (60%)                          | Apr-24                 | 15,04,95,744           | <b>1.8353</b>            |                                                                    |
| 24                    | Mining lease deed                              | Apr-24                 | 50,00,000              | <b>0.0610</b>            |                                                                    |
| 25                    | Equipment Procurement                          | Apr-24                 | 50,00,00,000           | <b>6.0976</b>            |                                                                    |
| 26                    | Mining plan Preparation                        | Apr-24                 | 10,00,000              | <b>0.0122</b>            |                                                                    |
| 27                    | Mining Start                                   | Apr-24                 | 50,00,000              | <b>0.0610</b>            |                                                                    |

|                               |               |                       |                |  |
|-------------------------------|---------------|-----------------------|----------------|--|
| <b>Total Expense and Time</b> | <b>Apr-24</b> | <b>2,53,16,09,940</b> | <b>30.8733</b> |  |
|-------------------------------|---------------|-----------------------|----------------|--|

| <b>Particular</b>                         | <b>FUND REQUIRED</b>  | <b>Amount in Million \$</b> |
|-------------------------------------------|-----------------------|-----------------------------|
| Fixed (Plant & Machinery)                 | 50,20,00,000          | 6.12                        |
| Working Capital                           | 4,26,52,500           | 0.52                        |
| land 40% (96.4 H @ 50 Lacs) (Total-241 H) | 48,20,00,000          | 5.88                        |
| Upfront (100% of 0.50%)                   | 25,08,26,240          | 3.06                        |
| BG (0.50%)                                | 25,08,26,240          | 3.06                        |
| Party Fund (2% of Reserve)                | 1,00,33,04,960        | 12.24                       |
| <b>Total</b>                              | <b>2,53,16,09,940</b> | <b>30.87</b>                |

| <b>Summary</b>                                |              |                                  |                |
|-----------------------------------------------|--------------|----------------------------------|----------------|
| <b>Parameter</b>                              | <b>S.No.</b> | <b>Description</b>               | <b>Rate</b>    |
| <b>Mining</b>                                 | 1            | Cost of Mining                   | 120            |
|                                               | 2            | Government Royalty and taxes     | 200            |
| <b>Total Mining Cost per Ton</b>              |              |                                  | <b>320</b>     |
| <b>Monthly Production in Ton</b>              | 1            | Mined ore production (Grade 20%) | 3500000        |
| <b>Final Production Monthly</b>               |              |                                  | <b>3500000</b> |
| <b>Value</b>                                  | 1            | Market Rate                      | 3500           |
|                                               | 2            | Cost per Ton                     | 320            |
| <b>Government Premium Percentage (10.75%)</b> |              |                                  | <b>376</b>     |
| <b>Profit Margin Before Tax (80%)</b>         |              |                                  | <b>2804</b>    |
| <b>Income tax expense (30%)</b>               |              |                                  | <b>841</b>     |
| <b>Our Profit Margin After Tax (56%)</b>      |              |                                  | <b>1963</b>    |

| <b>FIXED ASSETS</b>    |                                       |                 |                   |               |
|------------------------|---------------------------------------|-----------------|-------------------|---------------|
| <b>S.no.</b>           | <b>Description</b>                    | <b>Quantity</b> | <b>Rate</b>       | <b>Amount</b> |
| 1                      | Excavator 300                         | 25              | 11988012          | 299700300     |
| 2                      | Dumper 12 Tyre                        | 405             | 6060000           | 2454300000    |
| 3                      | Dozer                                 | 15              | 4000000           | 60000000      |
| 4                      | Crawler                               | 10              | 2900000           | 29000000      |
| 5                      | Loader                                | 10              | 4945050           | 49450500      |
| 6                      | Rock Breaker                          | 20              | 2612388           | 52247760      |
| 7                      | JCB                                   | 12              | 3366337           | 40396044      |
| 8                      | Water Tanker                          | 20              | 500000            | 10000000      |
| 9                      | Bulero and Camper                     | 5               | 999510            | 4997550       |
| 10                     | Camper                                | 5               | 1052600           | 5263000       |
| 11                     | Weight Bridge (100 Ton)               | 3               | 1156400           | 3469200       |
| 12                     | Electricity Connection 200 KVA        | 1               | 5000000           | 5000000       |
| 13                     | Office Structure/Container            | 1               | 20000000          | 20000000      |
| 14                     | Civil Construction Exp. With Material | 1               | 20000000          | 20000000      |
| <b>Total</b>           |                                       |                 | <b>3053824354</b> |               |
| <b>WORKING CAPITAL</b> |                                       |                 |                   |               |

| S.no.                                             | Description                    | Quantity    | Rate   | Amount           |
|---------------------------------------------------|--------------------------------|-------------|--------|------------------|
| 1                                                 | Diesel                         | 2000000     | 120    | 240000000        |
| 2                                                 | Blasting Charges (35 Lacs ton) | 100         | 500000 | 50000000         |
| 3                                                 | Electricity                    | 200 KVA     | 9      | 1500000          |
| 4                                                 | Office & Mining Staff          |             |        | 13100000         |
| 5                                                 | Office exp.                    |             |        | 500000           |
| 6                                                 | Store & Lab                    |             |        | 1000000          |
| 7                                                 | Canteen                        |             |        | 3000000          |
| 8                                                 | Repair and Maintenance         |             |        | 38000000         |
| 9                                                 | Department office Govt.        |             |        | 10000000         |
| <b>Total</b>                                      |                                |             |        | <b>357100000</b> |
| <b>Working Capital</b>                            |                                |             |        | <b>35.71 Cr.</b> |
| Total Material Production with overburdon         |                                |             |        | 3500000          |
| Production of Ore Per Month in Ton (7%-20% Grade) |                                |             |        | <b>3500000</b>   |
| <b>Cost per Ton</b>                               |                                |             |        | <b>102</b>       |
| Royalty 5% + DMFT(10%) +NMET (2%)                 |                                | 11200000000 | 6%     | 672000000        |
| <b>Cost Per Ton Government Taxes</b>              |                                |             |        | <b>192</b>       |

### DETAIL FOR SUBMISSION OF BG AND UPFRONT PAYMENT TO GOVERNMENT-

#### 10.3 Grant of composite license:

- (a) Upon declaration of the Successful Bidder, the State Government shall grant a Composite Licence to the Successful Bidder, and such Composite Licence shall be subject to the provisions of the Act and the rules made thereunder, as applicable to a prospecting licence and mining lease.

Provided that on expiry of a period of one year from the date of the letter of intent, no Prospective Licence Deed of Composite Licence shall be executed 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 period of six months for execution of the Prospective Licence Deed, if the reasons for delay were beyond the control of the Preferred Bidder.

- (b) The holder of a composite licence shall be required to complete, within the period laid down in section 7, the prospecting operations satisfactorily.

#### 10.4 Prospecting by the holder of Composite Licence

- (a) The holder of the Composite Licence shall conduct geological exploration of the area under the Composite Licence so as to ascertain evidence of mineral contents and shall submit periodic reports in accordance with the Act and rules made thereunder, as applicable to a prospecting licence and all reports, studies and other documentation related to the geological exploration of the area under the Composite Licence shall be submitted to the State Government and Indian Bureau of Mines.

- (b) If the holder of the Composite Licence:

- i fails to complete prospecting operations in accordance with sub-section (9) of section 11 of the Act or fails to establish the existence of mineral contents in accordance with the Minerals (Evidence of Mineral Contents) Rules, 2015, the holder shall not be eligible to receive a mining lease and the Composite

Licence shall be terminated

- ii completes prospecting operations and submits to the State Government the result of the prospecting operations in the form of a geological report prepared in accordance with sub-section (10) of section 11 resulting in determination of evidence of mineral contents conforming to the Mineral (Evidence of Mineral Contents) Rules, 2015; specifying the area required for grant of a mining lease, accompanied with the first installment of the upfront payment as specified in rule 11 of the Auction Rules, then the State Government shall issue a letter of intent for mining lease within a period of fifteen days:

Provided that any excess area shall be deemed to be surrendered by the holder of the Composite Licence after completing its reclamation:

Provided further that after submission of the geological report prepared in accordance with the Mineral (Evidence of Mineral Contents) Rules, 2015, the holder of the Composite Licence may relinquish the entire area and in such case the State Government shall, after being satisfied that the geological report has been prepared conforming to the said rules, return the Performance Security.

Notwithstanding, in case the holder of the Composite Licence completes the prospecting operations in accordance with the Act, rules framed under the Act, the tender document and the relevant permissions issued with respect to prospecting operations, but fails to establish the existence of mineral contents in accordance with sub-section (10) of section 11, and the Minerals (Evidence of Mineral Contents) Rules, 2015, then such holder shall not be eligible to receive a mining lease.

- (c) The performance security shall be provided through bank guarantee in the format as specified in Schedule IV of the Auction Rules or through security deposit, which may be invoked as per the provisions of:
  - i the prospecting licence deed;
  - ii the Mine Development and Production Agreement;
  - iii the Mining Lease Deed:

Provided that the State Government on being satisfied that the holder of Composite Licence has completed prospecting operations in accordance with sub-section (9) of section 11 of the Act but is unable to establish the existence of mineral contents even after making all possible efforts in accordance with the Minerals (Evidence of Mineral Contents) Rules, 2015, shall return the bank guarantee or the security deposit provided by the holder of the Composite Licence as performance security.

Provided further that in case the holder of composite licence fails to complete prospecting operations in accordance with sub-section (9) of section 11 of the Act, the performance security provided by it shall be forfeited.

10.5 Issuance of letter of intent for Mining Lease

- a) Upon receipt of the duly completed mining lease application and payment of the first installment of the Upfront Payment in accordance with clause (b) of subrule (6) of rule 18 of the Auction Rules after completion of prospecting operations as stated in clause 10.4(b)(ii), the State Government shall issue a letter of intent for mining lease.

10.6 Execution of Mine Development and Production Agreement:

A Mine Development and Production Agreement shall be executed between the State Government and the holder of Composite Licence if the holder of a Composite Licence:

- (a) continues to be in compliance with all the terms and conditions of eligibility;
- (b) pays the second instalment of the Upfront Payment in accordance with clause (b) of sub-rule (8) of rule 18 of the Auction Rules;
- (c) furnishes an irrevocable and unconditional enhanced Performance Security to the State Government in favour of concerned ME/AME pursuant to the Auction Rules.

(i) The enhanced Performance Security should be valid until

- a) all the obligations of the holder of the Composite Licence under the tender document, the deed for grant of a mining lease to be executed between the State Government and the successful bidder and/or the MDPA with respect to the Performance Security have been fully paid and its claims satisfied or discharged; or
- b) till the State Government certifies that the terms and conditions of the Tender Document, the deed for grant of a mining lease to be executed between the State Government and the Successful Bidder, and/ or the MDPA with respect to the Performance Security have been fully and properly carried out by the Preferred Bidder or Successful Bidder and accordingly discharges this guarantee,

whichever is later.

- (ii) The enhanced Performance Security must be for an amount computed in accordance with sub-rule (2) of rule 19 of the Auction Rules. The amount of performance security shall be equivalent to an amount of 0.50% of the value of estimated resources established by the holder of the Composite Licence after completion of prospecting operations in accordance with sub section (9) of Section 11 of the Act resulting in determination of evidence of mineral contents conforming to the Mineral (Evidence of Mineral Contents) Rules, 2015.

- (iii) Pursuant to sub-rule (3) of rule 19 of the Auction Rules, the Performance Security shall be adjusted every five years so that it continues to correspond

to 0.5% of the reassessed Value of Estimated Resources determined in accordance with the Auction Rules, including the value of any newly discovered mineral that may be included in the mining lease deed on its discovery.

- (iv) In such case, the bank guarantee constituting Performance Security shall be substituted with another bank guarantee from an Acceptable Bank of the reassessed value issued in accordance with this Clause 10.6, which is for the revised amount or if the Performance Security has been provided through a security deposit, additional amount towards security deposit shall be provided;
- (d) obtains all consents, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of mining operations;
- (e) satisfies the conditions specified in clause (b) of sub-Section (2) of Section 5 with respect to a mining plan; and.
- (f) satisfies such other conditions as may be specified by the State Government with the prior approval of the Central Government.

**10.7. Grant of mining lease:**

- (a) The holder of the Composite Licence shall pay the third instalment being 60% (sixty percent) of the Upfront Payment in accordance with sub-rule (9) of rule 18 of the Auction Rules, subsequent to execution of the Mine Development and Production Agreement, and upon such payment, the State Government shall execute a mining lease deed with the holder of the Composite Licence within thirty days of the date of completion of all the conditions specified in clause 10.6.
- (b) The date on which a duly executed mining lease deed is registered shall be the date of commencement of the mining lease.

| <b>Stage III – Process for grant of mining lease</b> |                                                                                                                                                                      |                                        |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 1                                                    | Submission of mining lease application and first installment of upfront payment (20%) after completion of prospecting as per timeline mentioned in the act and rules | T <sub>2</sub>                         |
| 2                                                    | Issuance of letter of intent for mining lease by State Government                                                                                                    | T <sub>2</sub> +15 days=T <sub>3</sub> |
| 3                                                    | Submission of enhanced performance security and approved mining plan along with second installment of upfront payment by the holder of composite license             | T <sub>3</sub> + 6 months              |
| 1                                                    | Submission of all necessary clearances /approvals from various government agencies/departments by Successful Bidder                                                  | T <sub>4</sub>                         |
| 2                                                    | Execution of Mine Development & Production Agreement (MDPA) between State Government & Successful Bidder.                                                            | T <sub>4</sub> +20                     |
| 3                                                    | Payment of third installment (60%) of Upfront Payment                                                                                                                | T <sub>4</sub> +50                     |
| 4                                                    | Grant of Mining Lease to the Successful Bidder.                                                                                                                      | T <sub>4</sub> +80                     |
| 5                                                    | Execution of Mining Lease Deed                                                                                                                                       | T <sub>4</sub> +110                    |
| 6                                                    | Registration of Mining Lease Deed                                                                                                                                    | T <sub>4</sub> +140 = T <sub>5</sub>   |
| 7                                                    | Scheduled Date of Commencement of Production                                                                                                                         | T <sub>5</sub> + 365+365               |

**Note:**

- The timeline shown above is based on calendar days.
- Due dates may be updated if any holidays are announced by government on the due date.
- The State Government reserves the right to update/ change or modify any of the above dates.
- Provided that no Mining Lease Deed shall 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 period of two years for execution of the Mining Lease Deed if the reasons for delay were beyond the control of the preferred bidder



## Conclusion

In Rajasthan the workable deposits of Manganese ore are found in Banswara district. The Manganese ore contains Pyrolusite, Psilomelane occurs in association with Phyllite.

Geologically Kalakhunta block comprises rocks of Kalinjara formation dominantly Feldspathised-Mica-Schist, Phyllite, Quartzite, Dolomite, Meta- subgreywacke, Manganiferous-Phyllites, Conglomerate and Quartz-Mica-Schist. These Manganese ore are interbedded in a repetitive sequence throughout the belt and the Manganiferous beds are generally following the regional strike of associated rocks. The Manganese ores of the area classified as stratified Meta-Sedimentary Metamorphosed in form of thin layers (varies from 8cm to 30 cm) associated with Phyllite trending NNW- SSE.

During the field season 1986-88 (project BSW-2), "Report on investigation carried out for Assessment of Manganese deposits in Tambesra, Tima-Mahuri and Rupakhera area" shows a total 100 Sq.km area was covered under Reconnaissance survey followed by Regional Geological Mapping of 15 Sq.km.. Detailed Geological Mapping of 0.50 Sq.km for the prospecting of Manganese ore. To know the grade & depth persistence of the Manganese mineralisation 297 meter drilling over 5 scout boreholes were carried out in Tambesra, Tima-Mahuri and Rupakhera area which lies SE of this Kalakhunta block.

On the basis of available data of previous work / recent work by DMGR & GSI, this Kalakhunta block area is categories under G-4 stage exploration.

The grade of Manganese mineralisation Mn- 20.36 %, Fe- 4.58 %, SiO<sub>2</sub>- 32.11% as mentioned in the approved mine plan by IBM in favor of Asian mining associates (ML 04/2014).

Kalakhunta block comprises an area of 6.30 Sq.km., as per the DMGR prospecting report, stike extension of Manganiferous-Phyllite is considered Manganese over 5200 m block length, 60 mt. average width & 25 mt. average depth. As per approved mining plan of nearby ML- 4/2014, bulk density of the Manganese ore is considered 2.8 and resources calculated at 30 % volume.

The estimated geological resources of the block is about 6.552 Million Tonnes. As per Mineral (Auction) second Amendment Rules 2015 sub rule 2(ii)(b-ii). For the purpose of this clause 'nearby mining lease or mineral blocks' shall be considered.

Loking to above this Kalakhunta, Tambesara and Rupakhera block area is proposed for composite license.

**M/S Saiyyed Akhtar Ali analysed the area and market of manganese and also profit ratio of work and profit to government and also to local peoples.**

| Summary                            |         |
|------------------------------------|---------|
| Area for Mining Lease (Sqkm)       | 13.445  |
| Deposit in M Ton                   | 2108.18 |
| Total Turnover in 50 Year (In Cr.) | 737862  |
| Total Profit in 50 Year (In Cr.)   | 400553  |

THANK  
YOU

