



**REPORT ON DGPS SURVEY & PREPARATION OF
GEO-REFERENCED CADASTRAL MAP
AT VILLAGES KHAMARIA KALAN, KHAMARIA KHURD,
KOSMAHA KHURD, SHAHPUR AND KATHOTIA,
SAHAPUR WEST COAL BLOCK
LEASE AREA: 619.000 HA.
TEHSIL - PALI AND SOHAGPUR;
DISTRICT- UMARIA AND SHAHDOL
STATE – MADHYA PRADESH**



2021-22



PREPARED BY : SOHAM FERRO MANGANESE PVT. LTD. (SFMPL)

NKY Tower, Block No.16/17, Ajani Sq.Wardha Road, Nagpur - 440015, soham.ferromagnese@gmail.com, 0712-2239964, 2252221

**Report On DGPS Survey & Preparation of
Geo-referenced Cadastral Map
At Villages Khamaria Kalan, Khamaria Khurd,
Kosmaha Khurd, Shahpur And Kathotia,
Sahapur West Coal Block
Lease Area: 619.000Ha.
Tehsil: Pali And Sohagpur;
District: Umaria And Shahdol
State – Madhya Pradesh.**

For

SARDA ENERGY AND MINERALS LTD.

**Regd. Office address:- 1st Floor, Vanijya Bhavan, Jail Road,
Devendra Nagar Square, Raipur- 492001(C.G.)**

2021-22

Prepared by,



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Nagpur-440015**

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1.) INTRODUCTION

Directorate of Geology & Mining, has decided to facilitate the work of fixing of mine boundaries by carrying out survey with the help of DGPS and Total Station instruments and erection of boundary pillars in the state of Maharashtra in order to comply the guidelines and directions issued in Mineral (Auction) Rules, 2015/ IBM Circular no. 2/2010 and Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules-2016], by calling bids from the Empanelled Agencies.

Soham Ferro Magnese Pvt. Ltd. (SFMPL) is a leading consultant in India and empanelled with Directorate of Geology & Mining, Madhya Pradesh vide Empanelment Letter/Order No.13926/I.T./2017-18 dated 30.06.2017 as an expert agency specialized for survey works.

The Ministry of Coal has allotted 619.000 hectares of the lease to Sarda Energy And Minerals LTD. at villages – Khamaria Kalan, Khamaria Khurd, Kosmaha Khurd, Shahpur And Kathotia, Tehsil – Pali And Sohagpur in the Umaria And Shahdol district of the Madhya Pradesh State for captive use of its Coal. The proponent is committed to operating systems and scientific mining operations, making optimum utilization of the resources.

CIRCULAR OF IBM 2/2010

**GOVERNMENT OF INDIA
MINISTRY OF MINES
INDIAN BUREAU OF MINES
OFFICE OF THE CHIEF CONTROLLER OF MINES**

No. N-11013/3/MP/90-CCOM Vol-VII

Nagpur, dated 06/04/2010

CIRCULAR NO. 2/2010

Sub: Submission of Geo-referenced Cadastral Map.

As per the procedure in vogue, a Mining Lease map / Prospecting License map showing the area/areas with details on a cadastral map with the Khasra numbers / Survey Nos. for mining lease / prospecting license, granted by the state governments under Act and Rules made there-under, is a basic requirement which is enclosed alongwith the Mining Plan / Scheme of Mining / Progressive Mine Closure Plan and Scheme of Prospecting. The Mining Lease map/ Prospecting License map is a certified copy obtained from the state / district authorities which is essential for planning purpose in mining plan / Scheme of Mining etc.

In supersession to all the instructions issued on the subject, it is decided that:

1. The Mining Lease / Prospecting License boundary showing all Khasra numbers / Survey Nos. on a Cadastral Map (Khasra Plan) on original plan (not the photo copy) and duly certified by State Government on a scale of 1:3960 shall be submitted with Mining Plan / Scheme of Mining / Progressive Mine Closure Plan and Scheme of Prospecting by the Lessee / Applicant / Licensee.
2. The boundary pillars of each mine lease / prospecting license are to be fixed precisely. Each boundary pillars shall be surveyed using DGPS (at least 2 Hours observation) for its ground position by an agency recognized by the State Government).
3. The Geo-referenced mining lease / prospecting licenses map prepared using DGPS shall be superimposed on Geo-referenced vectorised cadastral map.
4. On integration, the Geo-referenced mining lease / prospecting licenses map shall duly matched with geo-referenced vectorised cadastral maps.
5. In case of forest areas, the boundary pillars shall be fixed on ground with reference to at least three permanent ground features in and around mining leases / prospecting licenses.
6. The geo-referenced mining leases / prospecting licenses map shall be superimposed on latest high-resolution satellite data (cloud-free) derived from merging of Cartosat-2 and LISS-IV (Scale 1:5,000) covering an area of 500 meters from the mining lease / applied area boundary.
7. The satellite data products are available from NRSC, Hyderabad. The superimposed output in the form of soft copy and hard copy should be submitted along with the Mining plan / Scheme of Mining / Progressive Mine Closure Plan and Scheme of Prospecting. The soft copy submission should be in the standard format and digitized maps should be in shape file, which can be imported in any GIS database.
8. The above maps will be base for preparation of all statutory as well as working plans of the mines.

This circular may be given wide publicity amongst RQPs / Mine Owners / Lessee's / Licensee's / Applicants for implementation. Further, this may be intimated to all the states.

(Ranjan Sahai)
Chief Controller of Mines In Charge

LETTER OF EMPANELMENT WITH DIRECTORATE, GEOLOGY & MINING,
MADHYA PRADESH

संचालनालय भूमिकी तथा खनिकर्म,

मध्यप्रदेश, भोपाल

29-ए खनिज भवन, अरेरा हिल्स भोपाल

फोन एवं फैक्स 0755-2551795

e-mail : dirgeomn@nic.in

:: आदेश ::

भोपाल, दिनांक 30/6/17

13926

क्रमांक /आई.टी./2017-18 प्रदेश में स्वीकृत खनि रियायतों एवं नवीन खनिजधारी क्षेत्रों का डी.जी.पी.एस. तथा टोटल स्टेशन से सर्वेक्षण तथा सीमांकन संबंधी समस्त कार्यों के करने हेतु निम्नलिखित संस्थानों को एतद् द्वारा अधिमान्यता प्रदान की जाती है :-

स.क्र.	एजेंसी का नाम व पता
1	M/s IIC TECHNOLOGIES Ltd., 6-3 -250 /2, Road No.-1 Banjara Hills, Hyderabad- 500034
2	M/s Infinium Solutionz unlimited, A-601, Samudra Complex, Near Klassic Gold Hotel, off CG Road, Navrabgoyra Ahmadabad - 380009
3	M/s Ramtech Software Solutions Private Limited, A-6, Sector-67, NOIDA- 201307 U.P.
4	M/s MNEC Consultants Pvt. Ltd., First Floor, Pratibha Sankul, Besides Alankar Cinema Dharampeth, Nagpur- 440010
5	M/s Soham Ferro Manganese Pvt. Ltd., Block No. 16-17, Ground Floor NKY Tower, Ajani Square Wardha Road, Nagpur- 440015

उपरोक्त अधिमान्यता निम्नलिखित शर्तों के अधीन होगी।

- Each corner of the lease area shall have a boundary pillar (corner pillar).
- There shall be erected intermediate boundary pillars between the corner pillars in such a way that each pillar is visible from the adjacent pillar located on either side of it;
- The distance between two adjacent pillars shall not be more than fifty meters;
- The pillar shall be of square pyramid frustum shaped above the surface and cuboid shaped below the surface;
- Each pillar shall be of reinforced cement concrete;
- The corner pillar shall have a base of 0.3m X 0.3m and height of 1.30m of which 0.70m shall be above ground level and 0.60m below the ground;
- The intermediate pillars shall have a base of 0.25m X 0.25m and height of 1.0m of which 0.70m shall be above ground level and 0.30m below the ground;
- All pillars shall be painted in yellow colour and the top ten centimeters in red colour by enamel paint and shall be grouted with cement concrete.
- On all corner pillars, distance and being to the forward and backward pillars and latitude and longitude shall be marked.
- Each pillar shall have serial number in a clockwise direction and the number shall be engraved on the pillars.



//2//

11. The number of pillars shall be the numbers of the individual pillar upon the total number of pillars in the lease;
12. The tip of the entire corner boundary pillar is a square of 15 centimeter on which a permanent circle of 10 centimeter diameter shall be drawn by paint or engraved and the actual boundary point shall be intersection of two diameters drawn at 90 degrees.
13. The lease boundary survey shall be accurate within such limits of error as the Controller General, India Bureau of Mines may specify in this behalf.
14. The location and number of the pillars shall also be shown in the surface and other plans maintained by the lessee; and
15. In case of forest area within the lease, the size and construction and colour of the boundary pillars shall be as per the norms specified by the Forest Department in this behalf.
16. The Survey Agency shall be responsible for the accuracy of the data collected during Survey.
17. Coordinates of boundary pillar shall be established in the World Geodetic system 1984 (WGS-84) Datum.
18. उक्त अधिमान्यता आदेश जारी दिनांक से 05 वर्ष की अवधि के लिए मान्य होगी।
19. डी.जी.पी.एस सर्वे कार्य हेतु पारिश्रमिक का निर्धारण अधिमान्यता प्राप्त संस्थान एवं खनिज रियायतधारी के मध्य आपसी समन्वय से किया जायेगा। किसी भी प्रकार का आपसी विवाद होने पर राज्य शासन उत्तरदायी नहीं होगा।
20. डी.जी.पी.एस सर्वे कार्य के गुणवत्ता में कमी पाये जाने पर या किसी भी प्रकार की कार्य संबंधी शिकायत पाये जाने पर जाँच उपरांत राज्य शासन को यह अधिकार होगा कि उक्त अधिकृत एजेंसी की मान्यता किसी भी समय समाप्त की जा सकती है।
21. डी.जी.पी.एस सर्वे के संबंध में भारत सरकार/राज्य शासन द्वारा समय-समय पर जारी निर्देशों का पालन अधिमान्यता प्राप्त संस्थान को करना होगा।
22. एजेंसी निविदा में उल्लेखित शर्तों तथा निर्बंधनों के अधीन कार्य निष्पादन करने हेतु बाध्य होगी।

13927
पृ. क्र. /न.क्र. /आई.टी./2017-18
प्रतिलिपि :-

भोपाल, दिनांक

U. Singh
संचालक

30/6/17

1. सचिव, भारत सरकार खान मंत्रालय, शास्त्री भवन, नई दिल्ली।
2. सचिव, म.प्र. शासन, खनिज साधन विभाग, मंत्रालय वन्य भवन भोपाल।
3. कंट्रोलर जनरल, भारतीय खान ब्यूरो, द्वितीय तल ए-ब्लॉक इन्दिरा भवन, सिविल लाईन नागपुर (महाराष्ट्र)
4. आयुक्त, जबलपुर, सागर, रीवा, इंदौर, भोपाल, उज्जैन, खालियर, नर्मदापुरम, चंबल एवं शहडोल संभाग की ओर सूचनायें।
5. समस्त कलेक्टर, जिला समस्त।
6. उप खान नियंत्रक, क्षेत्रीय कार्यालय भारतीय खान ब्यूरो स्कीम नं. 11 कमला नेहरू नगर जबलपुर।
7. प्रभारी अधिकारी, खनिज शाखा, कलेक्टर कार्यालय जिला समस्त।
8. कार्यपालक संचालक, म.प्र. राज्य खनिज निगम, पर्यवास भवन, भोपाल।

11/3/11

9. (i) M/s IIC TECHNOLOGIES, Hyderabad,
(ii) M/s Infinium Solutionz unlimited, Ahmadabad.
(iii) M/s Ramtech Software Solutions Private Limited, Ludhiana.
(iv) M/s MNEC Consultants Pvt. Ltd., Nagpur.
(v) M/s Soham Ferro Manganese Pvt. Ltd., Nagpur

की ओर सूचनाएं एवं आवश्यक कार्यवाही हेतु।

10. श्री कृष्णा शर्मा, आई-टी सलहाकार, संचालनालय भौमिकी तथा खनिकर्म, भोपाल की ओर विभागीय वेबसाइट के नोटिस बोर्ड पर अपलोड करने हेतु।
11. गार्ड फाईल।


संचालक
11/3/11

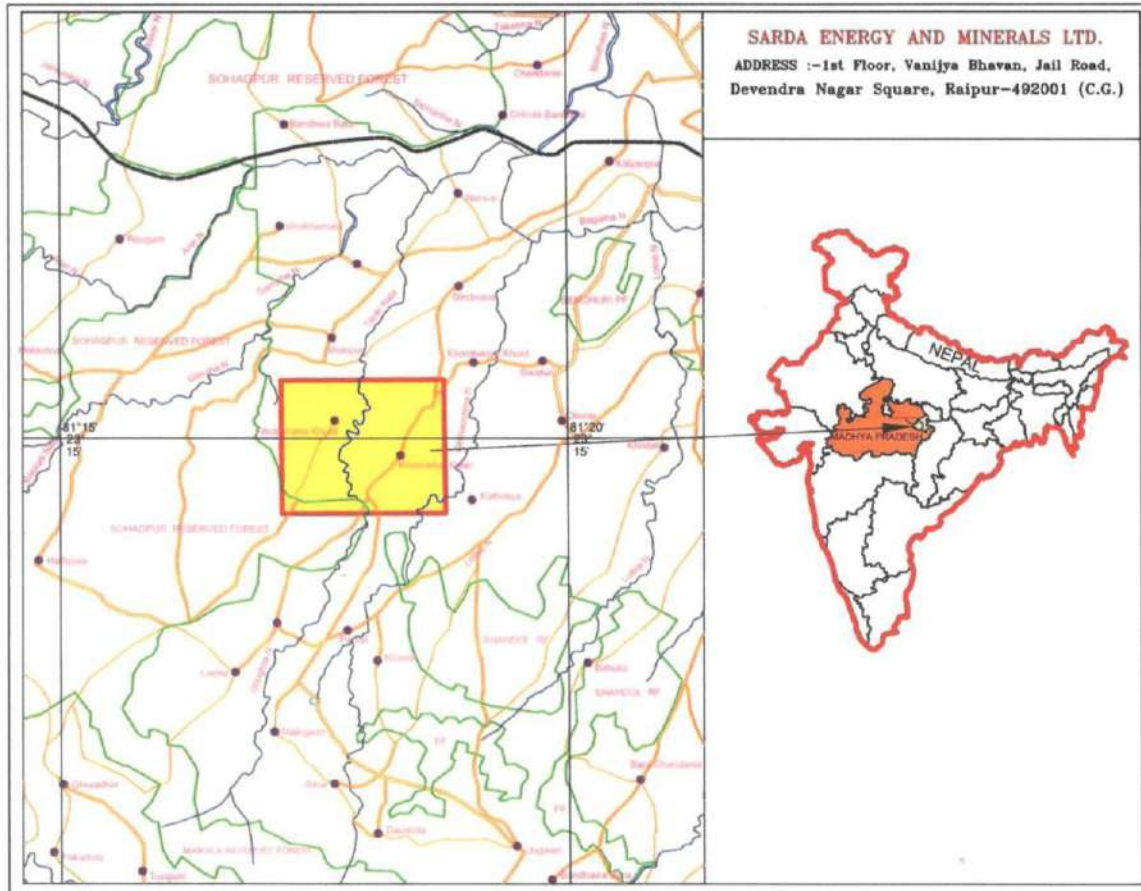
OUR EMPANELMENT NOTIFED LETTER

We M/s. Soham Ferro Manganese Pvt. Ltd., would like to impress upon you that, our organization has been duly empanelled by **Govt. Of Madhya Pradesh, Directorate of Geology and Mining** 29-A, 'Khanij Bhawan' Arera Hills, Bhopal vide their order bearing no. NO/13926/IT/2017-18 Dt. 30.06.2017 for carrying Differential Global Positioning Systems (DGPS) survey and for carrying Geo referencing and Cadastral Map as per Guide lines issued by IBM Letter No. 02/2010 Dt. 06.04.2010 and Subsequent Guide Lines.

For Soham Ferro Manganese Pvt. Ltd.,

(Nitin Y. Selukar)
Director

5) LOCATION WITH LATITUDE AND LONGITUDE COORDINATES(WGS84)



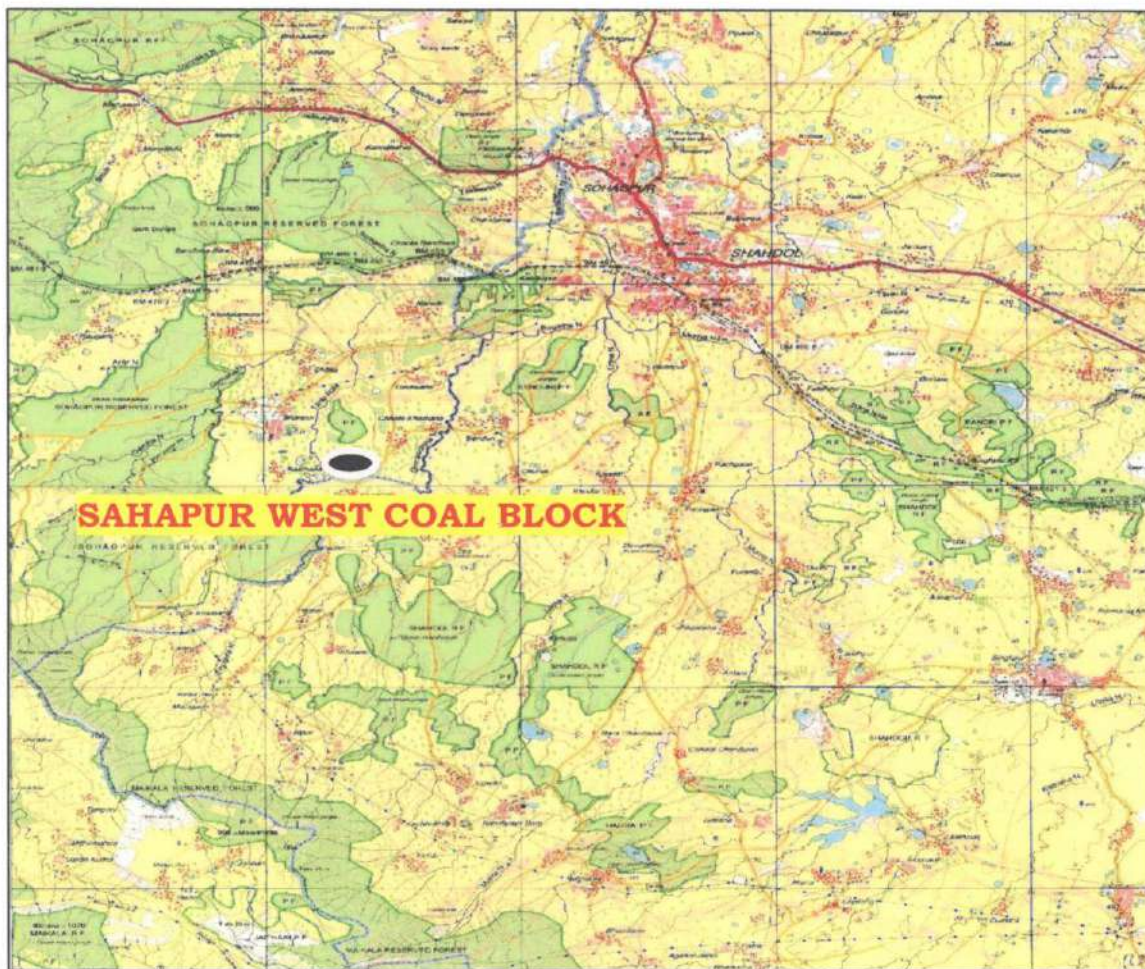
Coordinate of Centre of Mine Block: Lat -: N 23°14'56.247"

Long. -: E 81°17'59.102"

Reference Point: The reference coordinates are brought to the site of the existing GCP monument (BM) established by Survey of India situated in the playground of GOVT. Raghuraj Excellence Higher Secondary School Shahdol, Tehsil-sohagpur, District-Shahdol (M.P.) approx. 6 KM (aerial distance) from the surveying Coal block area. With reference to the SOI GCP point We have fixed a permanent BASE STATION on Rock Stone at THAKUR BABA Temple and on Forest Pillar in Khamaria Khurd village. Capturing satellite signals on static mode observation for 2 hours continuously on this benchmark point. Please refer to BM References and Site Location Photographs on pages no-26, 27 and 28.

6) IDENTIFICATION AND DEMARCATION OF AREA

The lease area falls at Pali & Sohagpur Tehsil on Umaria & Shahdol District in Madhya Pradesh State having of Khamaria Kalan, Khamaria Khurd, Kosmaha Khurd, Shahpur And Kathotia villages. The lease area is approachable from district headquarter Umaria & Shahdol via Pali Rd/Station Rd/Umaria Rd/NH43 & Madhya Pradesh State Highway 9 Rd up to Khamaria Kalan, Khamaria Khurd, Kosmaha Khurd, Shahpur And Kathotia villages is 76km from Umaria & 10km from Shahdol. Shahdol is the nearest railway station situated in Shahdol District. The mining lease area is a part of the Survey of India Topo sheets no 64E/7 & 64E/8. Geographically the ML area falls under the following under Latitude N 23°14'56.247" & Longitude E 81°17'59.102" Co-ordinates.



Topo Sheet No. 64E/7 & 64E/8

7) SCOPE OF WORK:

The Scope of work for the Surveying and Associated Activities are as follows:

- i. DGPS Survey: The mine lease areas provided by the client shall be surveyed by DGPS instrument. The data collected shall be duly geo-referenced using Ground Control Points (GCPs) from the nearest GSI reference/control point/GTS bench mark and collected using dual frequency DGPS receiver. A base map shall be prepared using these data.
- ii. The Boundary pillars (intermediate as well as corner) are made as prescribed under Rule 12(V) of MCR 2016.
- iii. Preparation of geo-referenced vectorised ML map using necessary digitization, amalgamation of maps, mosaicing, ground level point referring etc. all complete in all respects. On integration, the Geo-Referenced ML map shall duly match with geo-referenced vectorised cadastral map.
- iv. Survey of all the lease boundary pillar locations using DGPS.
- v. Vectorised Geo-referenced ML maps shall be superimposed on latest high resolution satellite data (cloud free), derived from merging of Cartosat-2 and LISS-IV (scale 1:5000) covering ML area plus an area coming within the ML area boundary and 500 m beyond the ML boundary line.

Survey Agencies' scope of work is based on the Ministry of Mines, IBM Circular No. 2/2010 under reference no. N-11013/2/MP/90/CCOM Vol-VII dated 6/4/2010.

8) Instruments and Software Used:

Hardware:

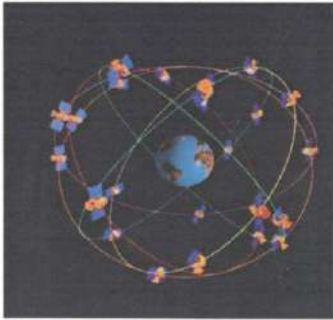
Sr. No.	Name of Instrument	Make/ Model	Accuracy	Numbers
1	DGPS (Dual Frequency)	Topcon Sokkia India Pvt. Ltd. / GSX-2	3mm±1PPM	2
2.	Handle GPS	Garmin	3 Mt.	5

Software:

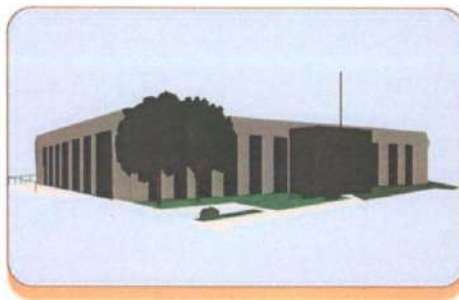
Sr. No.	Software	Make	Version
1	Magnet Tools	Topcon Sokkia India Pvt. Ltd.	1.2.1
2.	LEICA Geo Office Combined	Leica geosystems AG	7.0.1.0
3.	AutoCAD	Autodesk	2012
4.	Ms Office	Microsoft Corp.	2010
5.	EradasImagin	Eradas	8.4
6.	ArcGIS	ArcGIS	10.3

9) DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS)

9. A] INTRODUCTION



The Global Positioning System (GPS) is a worldwide radio-navigation system formed from a constellation of 24 satellites and their ground stations. It consists of Three Segments:-



- **User Segment**
- **Control Segment**
- **Space Segment**

GPS uses these “man-made stars” as reference points to calculate positions accurate to a matter of meters. In fact, with advanced forms of GPS you can make measurements to better than a centimeter. Surveying/Mapping most commonly used now days, in a sense it's like giving every square meter on the planet a unique tackle.

9. B] ACCURACY & INSTRUMENT USED

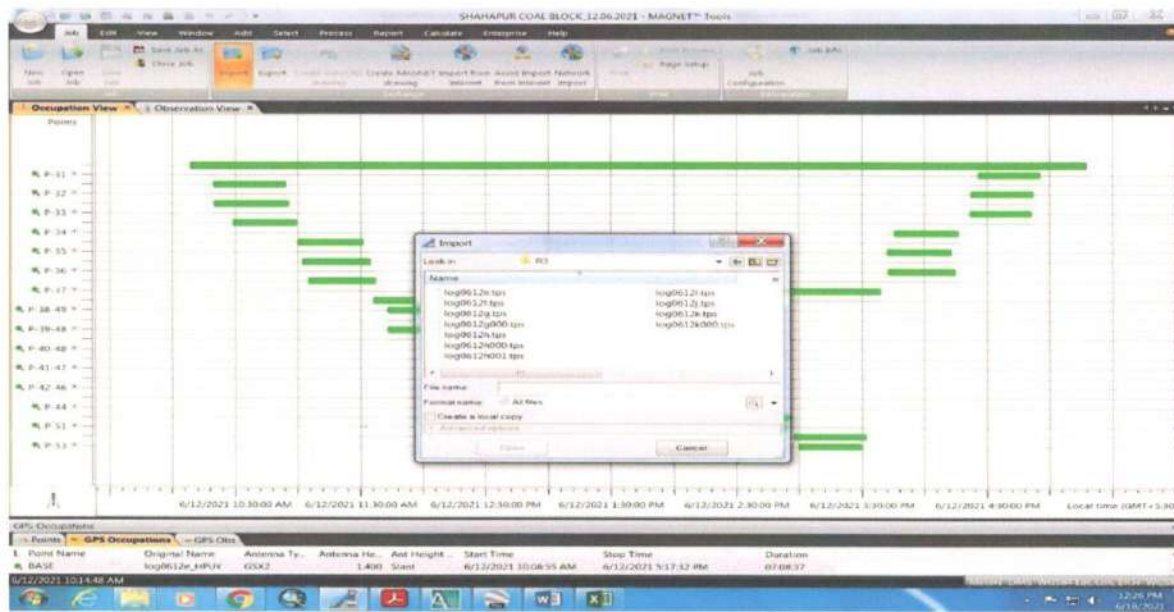
SFMPL Generally used Dual frequency Sokkia DGPS equipment are to be used for all static mode of observation. By having the base station close to the area of interest there is minimum time lag and with the appropriate DGPS receiver, an accuracy of (+/-10mm) can be achieved. The accuracy of DGPS may be increased considerably by including a reference station (GPS receiver on a site with known coordinates). In the so-called post-processing method, the observations of the rover (GPS receiver) are then corrected so that, depending on the type of receiver, accuracies of a few decimeters or a few centimeters may be reached.

9. C] DATA PROCESSING IN SOKKIA MAGNET TOOLS SOFTWARE

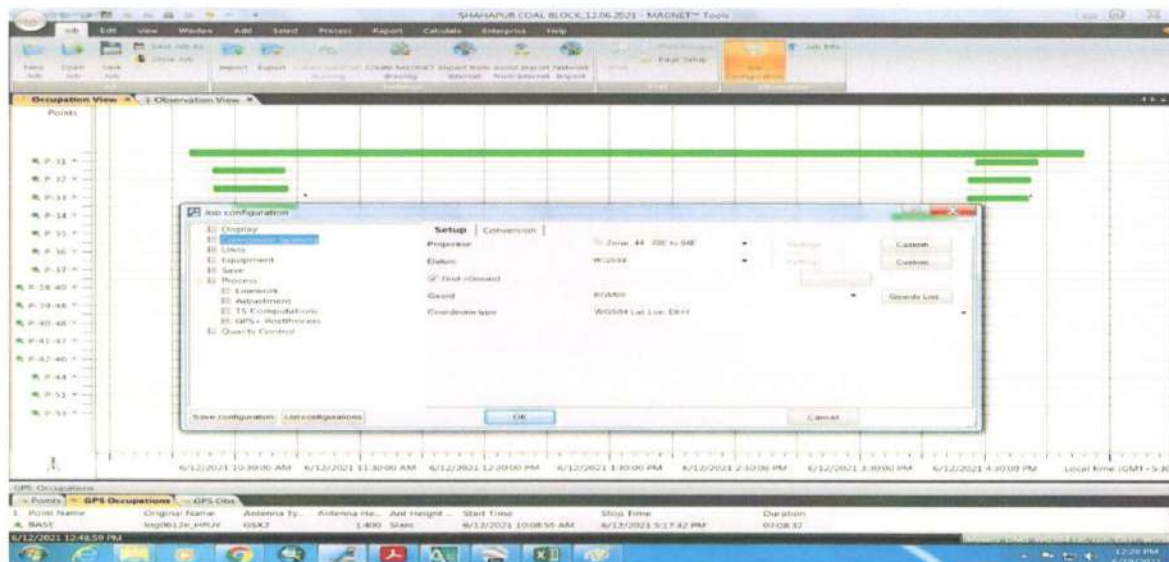
All the pillar coordinates were taken for two hours of reading and pillar points are used for georeferencing. The processed coordinates have been exported to Shape file from the Sokkia Magnet Tools software. These coordinates are imported in to GIS software and Georeferencing of cadastral map, lease map and LISS- IV image was carried out. The lease boundary was digitized using the processed coordinates of the pillars and georeferenced maps. These lease boundaries was exported to shape file for the final submission as required by IBM.

Sokkia –GSX 2 antenna recorded field survey data are downloading in Sokkia Receiver as following steps:

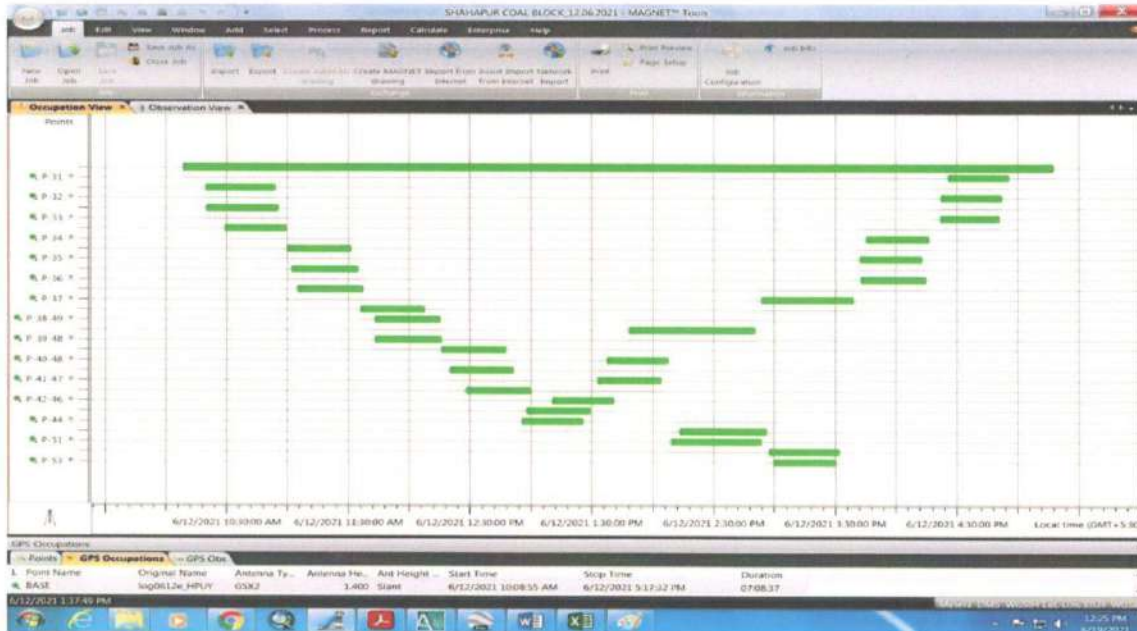
I] IMPORT



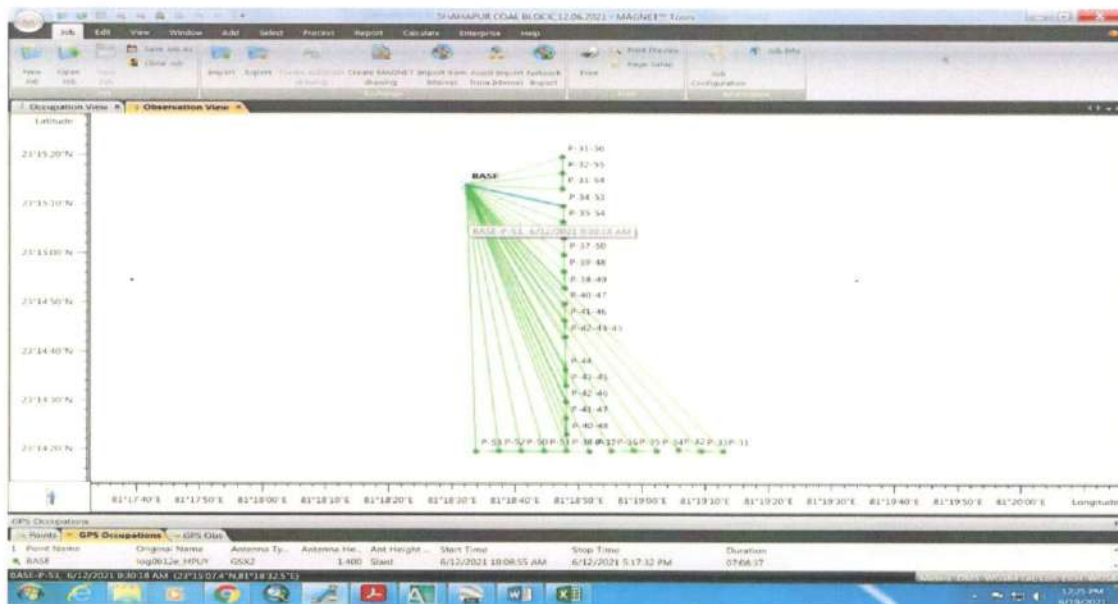
II] APPLYING PROJECTION SYSTEM



III] PROCESSING DATA



IV] POINT POSITION



10) METHODOLOGY ADOPTED FOR VECTORIZED CADASTRAL MAP AND SATELLITE IMAGING DATA

10. a] INTRODUCTION OF VECTORIZATION CADASTRAL

Cadastral surveys are specially designed large scale surveys, some in conjunction with other records, which are linked to land ownership and property. In India normally land Record Department created a cadastral map on Tracing film or Cloth Paper. It is usually generating in most Common Scale Factor which is to be saying that 16"=1Mile (1:3960). This paper is very essential to the rural for its village properties. The urban cadastral, although very vital needs a separate and detailed discussion. It's seen very older and shrinkage appearance quality. Receiving those maps to land record department to start with scanning in High Resolution scale and get converted into TIF format. AutoCAD Draftsmen digitize a map on his professional skilled with Different Colours, Layer, Polyline & Block Entities Etc. on this way generated a accurate scale map to help us the geo reference.

10. b] GEO REFERENCE VECTORIZATION CADASTRAL MAP

The term is commonly used in the geographic information systems field to describe the process of associating a physical map or raster image of a map with spatial locations. Geo reference means triangular Combination of DGPS Control points (Static Based), Topographic Survey and Vectorized Cadastral Map (Raster image). Geo referencing may be applied to any kind of object or structure that can be related to a geographical location, such as points of interest, roads, places, bridges, Forest munara or field bund. Geographic locations are most commonly represented using a coordinate reference system, which in turn can be related to a geodetic reference system such as WGS-84. There are various GIS tools available that can transform image data to some geographic control framework, like the commercial ArcMap, or ERDAS Imagine Recorded Survey data importing in Arc Map For instance, a DGPS device will Easting and

nothing coordinates for a given point of interest, effectively geo referencing this point. A geo reference must be a matchless identifier. In other words, there must be only one location for which a geo reference acts as the reference.

10. c] METHODOLOGY OF SATELLITE IMAGERY

Ideal recent satellite data are characterized by intersection of features, such as roads, canals or streams. Considering the high resolution of satellite data (IKONOS) has been used mostly Geo-Tiff Format image is preferred. Satellite data typically on basis of different forest band applicable it's depend upon mineral of that area.

The following list describes the main phases applied in the present study, for the creation of the land cover maps:-

- Preparation of Digital Map
- Satellite data selection
- Geo reference satellite image in WGS84 Datum
- Satellite data classification, Selection & Estimation WGS84 Datum.
- Satellite data interpretation and vectorization of the resulting units,
- Post Processing of DGPS Data, Validation of decision Observation Period
- Field checking

For this methodology most preferable softwares being used i.e. Erdas imagine 8.4, ArcGIS & Autocad Map.

11. SAHAPUR WEST COAL BLOCK SUMMARY

Sahapur West Coal Block Summary PART A

Sr. No.	Features	Details
1.	Location	
	Coal Block	Sahapur West
	Latitude	23° 14' 19" N to 23° 15' 33" N (Provisional)
	Longitude	81° 17' 10" E to 81° 18' 49" E (Provisional)
	Topo Sheet No.	Survey of India Toposheet No. 64 E/7 & E/8 (R.F. 1:50,000)
	Coalfield	Sohagpur Coalfield
	Villages	Senduri, Chunia are the villages falling within the block.
	Tehsil/Taluka	Pali & Sohagpur
	District	Umaria & Shahdol
	State	Madhya Pradesh
2.	Connectivity with Block	
	Nearest Rail Head	The nearest railway station is Shahdol located 12 Km. south-east of the block on Anuppur- Chirimiri & Bilaspur - Katni broad gauge line of South-Eastern Railways.
	Road	The block is well connected by road.
3.	Area	
	Geological Block Area	6.19 sq. km. (As per shape file. Refer Note No. 3)
	Forest Area	5 – 10% (Approximately, as per FSI Map)
	Non-Forest Area	90 – 95% (Approximately, as per FSI Map)
4.	Climate and Topography	
	Average Annual Rainfall	Annual rainfall varies between 1000mm and 1700mm
	Temperature (Min. — Max.)	7°C - 46°C
	Local Surface Drainage Channels	The main drainage is Ghogra Nala which flows northerly. A number of small ponds are found within the block.
	Rivers	Ghogra Nala
5.	Exploration	
	Status	Explored
	Exploration Agency	MECL
	Total Number of Boreholes with meterage	64 Boreholes; 11494.00 m (59 boreholes & 10107.00 m by CMPDI. Another 5 boreholes & 1387.00 m by GSI.)
	Borehole Density	Approximately 11 boreholes per sq. km.
	General Dip of Seams	The dip is NE in general and SE in the southern part of the block. Gradient varies from 1° - 2°.
	General Strike Direction	The strike of the coal seams in general is NW-SE and deflects to E-W due to rolling nature of attitude of coal seams.

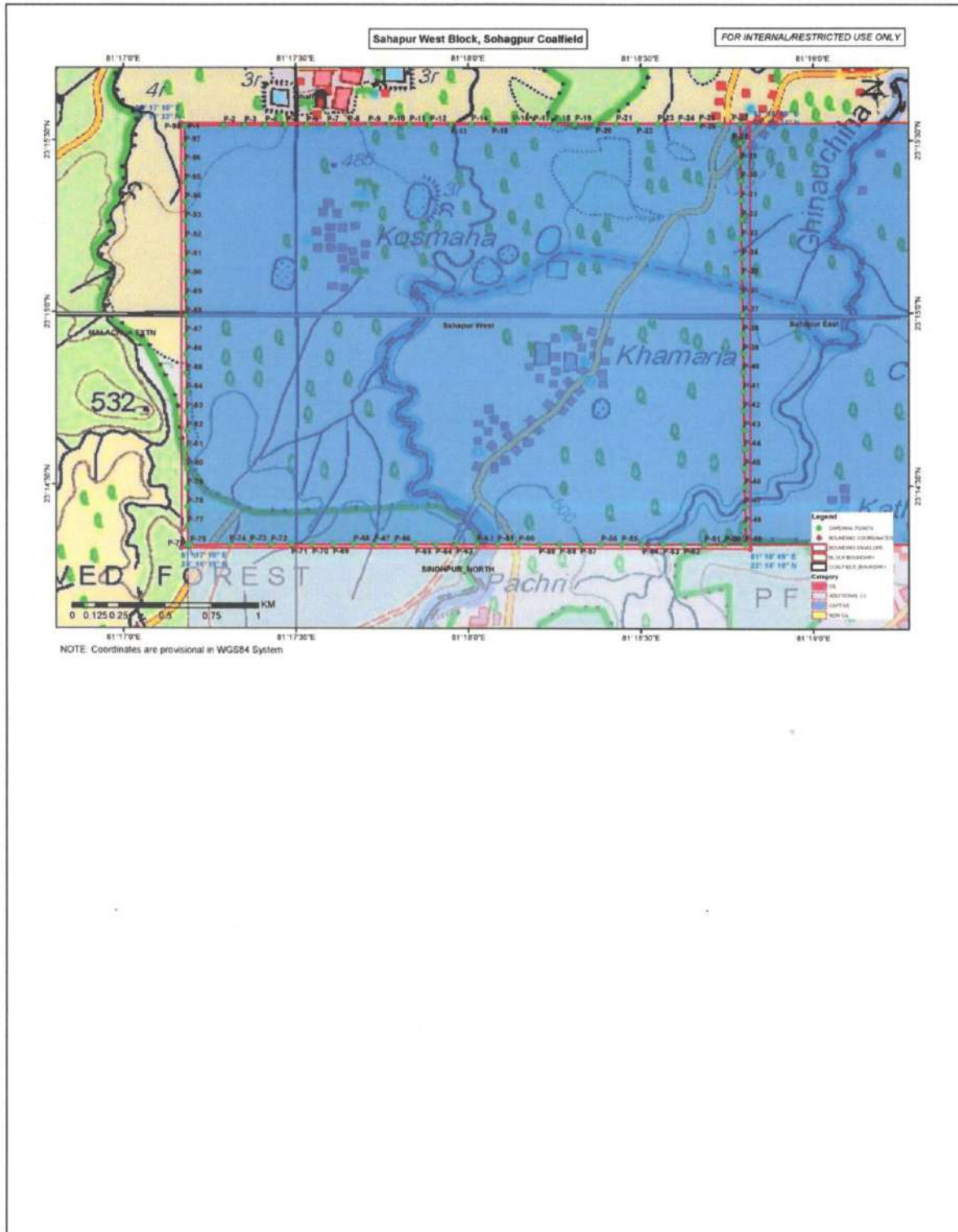
6. Coal Seams & Reserve				
Number of Coal Seams	Thickness Range (m)	Depth Range (m)	Net Proved Reserves (Mt.)	Grade
IV	0.15 – 1.70	24.04 – 100.85	8.014	B – C
L2	0.55 – 3.16	72.75 – 152.60	9.492	C – D
III A	0.35 – 2.84	85.20 – 172.80	9.206	D – F
III B	0.14 – 1.78	88.32 – 130.83	2.738	C – E
III L	0.62 – 1.40	89.88 – 106.15	0.413	C – E
II	0.92 – 4.16	108.77 – 193.20	18.579	C – E
I	0.03 – 1.25	135.70 – 217.97		C – E
L1	0.10 – 1.66	151.10 – 230.30	4.237	C – E
TOTAL			52.679	
7. Surface Constraints		NA		

PART B

Sr. No.	Features	Details
1.	Previous Allocation	
	Name and Address of Allocatee	National Mineral Development Corporation Limited, Khanij Bhavan, 10-3-311/A, Castle Hills Masab Tank, Hyderabad- 500173, India
2.	Target Capacity as per Mining Plan	0.60 MTY.
3.	Status of Clearances/Approvals	
	Mining Plan/ Mine Closure Plan	Approved
	Forest Clearance	Not available
	Environmental Clearance	Pending subject to Stage-I FC
	Mining Lease	Not granted
	Land Acquisition	Not acquired
	No. of PAFs as per Mining Plan/ Mine Closure Plan	NIL
4.	Surface Infrastructure already built, if any.	Nil

Note:

- The above data is compiled from Geological Report, Mining Plan and the data furnished by the prior allottee in Annexure-I/II, as available. For clarifications with regard to above data, please refer aforesaid source documents.
- The boundary of the block has been taken from GR after conversion to WGS84 system by feature cardinal points. The block boundary is provisional and the cardinal points, bounding co-ordinates are approximate.
- There may be a difference in area in the shape file and GR. Area in the shape file is based on feature mapped plan of the block as given in the GR. So, the area is tentative and field DGPS survey is required to ascertain the exact area.



Provisional Cardinal Points for Sahapur West Block

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-1	81° 17' 10.594" E	23° 15' 32.476" N
P-2	81° 17' 17.447" E	23° 15' 32.593" N
P-3	81° 17' 21.042" E	23° 15' 32.606" N
P-4	81° 17' 24.637" E	23° 15' 32.620" N
P-5	81° 17' 28.232" E	23° 15' 32.633" N
P-6	81° 17' 31.826" E	23° 15' 32.646" N
P-7	81° 17' 35.421" E	23° 15' 32.659" N
P-8	81° 17' 39.016" E	23° 15' 32.672" N
P-9	81° 17' 42.611" E	23° 15' 32.686" N
P-10	81° 17' 46.205" E	23° 15' 32.699" N
P-11	81° 17' 49.800" E	23° 15' 32.712" N
P-12	81° 17' 53.395" E	23° 15' 32.725" N
P-13	81° 17' 56.990" E	23° 15' 32.738" N
P-14	81° 18' 0.584" E	23° 15' 32.751" N
P-15	81° 18' 4.179" E	23° 15' 32.764" N
P-16	81° 18' 7.774" E	23° 15' 32.777" N
P-17	81° 18' 11.369" E	23° 15' 32.790" N
P-18	81° 18' 14.964" E	23° 15' 32.803" N
P-19	81° 18' 18.558" E	23° 15' 32.816" N
P-20	81° 18' 22.153" E	23° 15' 32.829" N
P-21	81° 18' 25.748" E	23° 15' 32.842" N
P-22	81° 18' 29.343" E	23° 15' 32.855" N
P-23	81° 18' 32.937" E	23° 15' 32.868" N
P-24	81° 18' 36.532" E	23° 15' 32.881" N
P-25	81° 18' 40.127" E	23° 15' 32.893" N
P-26	81° 18' 43.722" E	23° 15' 32.906" N
P-27	81° 18' 47.317" E	23° 15' 32.919" N
P-28	81° 18' 47.355" E	23° 15' 29.593" N
P-29	81° 18' 47.393" E	23° 15' 26.267" N
P-30	81° 18' 47.432" E	23° 15' 22.941" N
P-31	81° 18' 47.470" E	23° 15' 19.615" N
P-32	81° 18' 47.509" E	23° 15' 16.289" N
P-33	81° 18' 47.547" E	23° 15' 12.963" N
P-34	81° 18' 47.586" E	23° 15' 9.636" N
P-35	81° 18' 47.624" E	23° 15' 6.310" N
P-36	81° 18' 47.662" E	23° 15' 2.984" N
P-37	81° 18' 47.701" E	23° 14' 59.658" N
P-38	81° 18' 47.739" E	23° 14' 56.332" N
P-39	81° 18' 47.778" E	23° 14' 53.006" N
P-40	81° 18' 47.816" E	23° 14' 49.680" N
P-41	81° 18' 47.855" E	23° 14' 46.354" N
P-42	81° 18' 47.893" E	23° 14' 43.028" N
P-43	81° 18' 47.931" E	23° 14' 39.702" N
P-44	81° 18' 47.970" E	23° 14' 36.376" N
P-45	81° 18' 48.008" E	23° 14' 33.050" N
P-46	81° 18' 48.047" E	23° 14' 29.724" N
P-47	81° 18' 48.085" E	23° 14' 26.397" N

Provisional Cardinal Points for Sahapur West Block

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-48	81° 18' 48.123" E	23° 14' 23.071" N
P-49	81° 18' 48.162" E	23° 14' 19.745" N
P-50	81° 18' 44.572" E	23° 14' 19.738" N
P-51	81° 18' 40.983" E	23° 14' 19.731" N
P-52	81° 18' 37.393" E	23° 14' 19.723" N
P-53	81° 18' 33.803" E	23° 14' 19.716" N
P-54	81° 18' 30.214" E	23° 14' 19.708" N
P-55	81° 18' 26.624" E	23° 14' 19.701" N
P-56	81° 18' 23.034" E	23° 14' 19.693" N
P-57	81° 18' 19.445" E	23° 14' 19.686" N
P-58	81° 18' 15.855" E	23° 14' 19.678" N
P-59	81° 18' 12.265" E	23° 14' 19.671" N
P-60	81° 18' 8.676" E	23° 14' 19.663" N
P-61	81° 18' 5.086" E	23° 14' 19.656" N
P-62	81° 18' 1.496" E	23° 14' 19.648" N
P-63	81° 17' 57.907" E	23° 14' 19.640" N
P-64	81° 17' 54.317" E	23° 14' 19.633" N
P-65	81° 17' 50.727" E	23° 14' 19.625" N
P-66	81° 17' 47.138" E	23° 14' 19.617" N
P-67	81° 17' 43.548" E	23° 14' 19.609" N
P-68	81° 17' 39.958" E	23° 14' 19.602" N
P-69	81° 17' 36.369" E	23° 14' 19.594" N
P-70	81° 17' 32.779" E	23° 14' 19.586" N
P-71	81° 17' 29.190" E	23° 14' 19.578" N
P-72	81° 17' 25.600" E	23° 14' 19.570" N
P-73	81° 17' 22.010" E	23° 14' 19.563" N
P-74	81° 17' 18.421" E	23° 14' 19.555" N
P-75	81° 17' 11.565" E	23° 14' 19.445" N
P-76	81° 17' 11.108" E	23° 14' 19.437" N
P-77	81° 17' 11.085" E	23° 14' 22.757" N
P-78	81° 17' 11.061" E	23° 14' 26.077" N
P-79	81° 17' 11.038" E	23° 14' 29.397" N
P-80	81° 17' 11.015" E	23° 14' 32.717" N
P-81	81° 17' 10.991" E	23° 14' 36.037" N
P-82	81° 17' 10.968" E	23° 14' 39.357" N
P-83	81° 17' 10.945" E	23° 14' 42.677" N
P-84	81° 17' 10.921" E	23° 14' 45.997" N
P-85	81° 17' 10.898" E	23° 14' 49.317" N
P-86	81° 17' 10.875" E	23° 14' 52.637" N
P-87	81° 17' 10.851" E	23° 14' 55.956" N
P-88	81° 17' 10.828" E	23° 14' 59.276" N
P-89	81° 17' 10.805" E	23° 15' 2.596" N
P-90	81° 17' 10.781" E	23° 15' 5.916" N
P-91	81° 17' 10.758" E	23° 15' 9.236" N
P-92	81° 17' 10.734" E	23° 15' 12.556" N
P-93	81° 17' 10.711" E	23° 15' 15.876" N
P-94	81° 17' 10.688" E	23° 15' 19.196" N

Provisional Cardinal Points for Sahapur West Block

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-95	81° 17' 10.664" E	23° 15' 22.516" N
P-96	81° 17' 10.641" E	23° 15' 25.836" N
P-97	81° 17' 10.618" E	23° 15' 29.156" N

12. Vesting Order

GOVERNMENT OF INDIA
MINISTRY OF COAL
OFFICE OF THE NOMINATED AUTHORITY
(Constituted under Section 6 of The Coal Mines (Special Provisions) Act, 2015)
Shastri Bhawan, New Delhi

VESTING ORDER
(under clause (b) of sub-rule (2) of rule 7 and sub-rule (1) of rule 13 of the Coal Mines (Special Provisions) Rules 2014 read with clause (b) of sub-section (3) of Section 6 and sub-section (3) of Section 8 of the Coal Mines (Special Provisions) Act, 2015)

In re: **Sahapur West Coal Mine** (the "mine") particulars of which is specified in Annexure 1

Order no.: **NA-104/2/2020-NA**

Date: **March 03, 2021**

In favour of: **Sarda Energy and Minerals Limited**, incorporated in India under the Companies Act, 1956 with corporate identity number **L27100MH1973PLC016617**, whose registered office is at **73 A Central Avenue, Nagpur, Maharashtra 440018, India** and principal place of business is at **1st Floor, Vanijya Bhawan, Jail Road, Devendra Nagar Square, Raipur, Chhattisgarh, 492001** (the "successful bidder")

For the purpose of: **Sale of coal, including sale to Affiliates and related parties, utilisation of coal for any purpose including but not limited to captive consumption, Coal Gasification, Coal Liquefaction and export of coal.**

WHEREAS, the nominated authority has, in accordance with provisions of the Coal Mines (Special Provisions) Act, 2015 (the "Act") and the Coal Mines (Special Provisions) Rules 2014 (the "Rules") conducted the auction of the mine;

AND WHEREAS the successful bidder is eligible to receive this vesting order with respect to the mine including, inter-alia, -

AS



- (a) the coal bearing land acquired by the prior allottee and the lands, in or adjacent to the coal mines used for coal mining operations acquired by the prior allottee; and
- (b) any existing mine infrastructure as defined in clause (j) of sub-section (1) of section 3 of the Act;

AND WHEREAS the successful bidder has furnished a performance bank guarantee dated February 18, 2021 for an amount equal to INR 38,00,36,240.07 (Indian Rupees Thirty Eight Crore Thirty Six Thousand Two Hundred Forty and Seven Paise) issued by Axis Bank Ltd in accordance with the tender document and in accordance with the provisions of sub-section (6) of section 8 of the Act and sub-rule (4) of rule 13 of the rules.

AND WHEREAS the successful bidder has entered into a Coal Mine Development and Production Agreement dated January 11, 2021 ("CMDPA") (as amended) with the nominated authority in accordance with the provisions of sub-rule (5) of rule 13.

NOW, THE NOMINATED AUTHORITY DOES ORDER:

1. On and from March 03, 2021 ("vesting date") and in accordance with the provisions of sub-section (4) of section 8 of the Act, with respect to the mine, the following shall stand fully and absolutely transferred and vested in the successful bidder, namely: -

- (a) all the rights, title and interest of the prior allottee in and over the land and mine infrastructure free from all encumbrances;
- (b) entitlement to a prospecting license, mining lease or prospecting license-cum-mining lease to be granted by the State Government with the terms and conditions of CMDPA forming a part of it on making an application;
- (c) all statutory licences, permits, permissions, approvals or consents as per rules, required to undertake coal mining operations in the mine, if already issued by the Central Government, to the prior allottee on the same terms and conditions as were applicable to the prior allottee, as listed in the **Annexure 2**;
- (d) entitlement to any statutory licence, permit, permission, approval or consent required to undertake coal mining operations in the mine, if already issued by the

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Central Government, to the prior allottee on making an application on the same terms and conditions as were applicable to the prior allottee, as listed in the **Annexure 3**;

(e) entitlement to any statutory licence, permit, permission, approval or consent required to undertake coal mining operations in the mine, if already issued by the State Government, to the prior allottee on making an application on the same terms and conditions as were applicable to the prior allottee, as listed in the **Annexure 4**;

(f) rights appurtenant to the approved mining plan of the prior allottee;

(g) any subsisting contract in relation to coal mining operations, to which the prior allottee was a party and which is assumed, adopted and continued by the successful bidder and listed in the **Annexure 5** shall stand novated (by virtue of a deemed consent from the relevant party(ies)), in accordance with the provisions of sub-section (1) of section 11 of the Act in favour of the successful bidder for the residual term or residual performance of such contract;

2. The successful bidder may seek any change in the terms and conditions attached to such licence, permit, permission, approval or consent by making an application in accordance with applicable laws;

3. Hereinafter, the successful bidder shall be entitled to take possession of the mine as specified in **Annexure 1** without let or hindrance;

4. This vesting order is liable to be cancelled in accordance with the provisions of sub-rule (6) of rule 13.

(By the nominated authority)



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Annexures:

Annexure 1: Particulars of the mine

Part A – Description of the mine

Name of Coal Mine	Sahapur West
Coal Field	Sohagpur Coalfield
Latitude	23° 14' 19" N to 23° 15' 33" N (Provisional)
Longitude	81° 17' 10" E to 81° 18' 49" E (Provisional)
Villages	Senduri, Chunia
Tehsil/ Taluka	Pali & Sohagpur
District	Umaria & Shahdol
State	Madhya Pradesh

Part B – Description of Land in relation to the mine

Nil

Part C – Description of Mine Infrastructure in relation to the mine

Nil



MS

Annexure 2: Particulars of statutory licences, permits, permissions, approvals or consents issued by the Central Government which are being transferred along with this vesting order.

S. No	Statutory Clearance	Ministry/ Agency	Letter No.	Date
1.	Approval of Mining Plan and Mine Closure Plan	Ministry of Coal	13016/28/2010-CA-I	07.02.2012
2.	Mining Lease – Administrative Approval of the Central Government under Section 5 (1) of the MMDR Act 1957 for granting of mining lease over an area of 587.50 Ha of coal bearing area in Sahapur West coal block located in villages Shahpur, Khamaria, Kathotia and Kosmaha, Taluq – Sohagpur (Dist. - Shahdol) Pali (Dist. – Umariya), District- Umariya & Shahdol, Madhya Pradesh for 30 years in favour of M/s National Mineral Development Corporation	Ministry of Coal	13016/28/2010-CA-I	02.08.2012
3.	Mining Lease – Corrigendum - Administrative Approval of the Central Government under Section 5 (1) of the MMDR Act 1957 for granting of mining lease over an area of 587.50 Ha of coal bearing area in Sahapur West coal block located in villages Shahpur, Khamaria, Kathotia and Kosmaha, Taluq – Sohagpur (Dist. - Shahdol) Pali (Dist. – Umariya), District- Umariya & Shahdol, Madhya Pradesh for 30 years in favour of M/s National Mineral Development Corporation	Ministry of Coal	13016/28/2010-CA-I	22.02.2013




Annexure 3: Particulars of statutory licences, permits, permissions, approvals or consents issued by the Central Government to be obtained on application by the successful bidder.

S. No	Statutory Clearance	Ministry/ Agency	Letter No.	Date
1.	Environment Clearance (Proposal was considered in the EAC meeting for granting EC and competent authority had approved the project. However, the formal EC was to be issued only after Stage I Forest Clearance has been obtained and submitted)	Ministry of Environment and Forests	No-J-11015/280/2010-IA-II(M)	08.07.2014



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Annexure 4: Particulars of statutory licences, permits, permissions, approvals or consents issued by the State Government to be obtained on application by the successful bidder.

Nil



AB

Annexure 5: Particulars of the contracts adopted by the successful bidder

The Successful Bidder does not intend to adopt and continue with any of the contracts of the Prior Allottee.



(Signature) 03/03/2021
ARVIND KUMAR SINGH
AVP (LIASIONING)
SARDA ENERGY & MINERALS LTD.

13. Forest Approved Maps And Letters



कार्यालय वनपरिक्षेत्राधिकारी वनपरिक्षेत्र घुनघुटी सा०

Phone – 9424794546, Email – rotghunghunti@mp.gov.in

क्रमांक /
प्रति,

दिनांक /

वनमण्डलाधिकारी
वनमण्डल उमरिया म०प्र०

विषय:- शाहपुर वेस्ट कोल ब्लॉक अंतर्गत प्रभावित वनभूमि के सर्वेक्षण/पूर्वक्षण करने बावत्।
संदर्भ:- आपका पत्र क./मा.चि./2021/2261 दिनांक 08.07.2021

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विषयांतर्गत एवं संदर्भित पत्र के संबंध में निवेदन है कि दिनांक 13.07.2021 को परिक्षेत्र सहायक हथपुरा एवं शारदा एनर्जी एण्ड मिनरल्स रायपुर छ.ग. के अधिकृत अधिकारी/कर्मचारी द्वारा आवेदित स्थल का संयुक्त निरीक्षण करते हुये स्थल निरीक्षण पंचनामा तैयार किया गया है। आवेदित वनभूमि के चारों कोनों का जी.पी.एस. दर्ज करते हुये स्थल का माप किया गया है। किये गये संयुक्त स्थल निरीक्षण के पंचनामा अनुसार जानकारी निम्नानुसार है :-

1. प्रस्तावित वन भूमि का विवरण कक्ष क्रमांक एवं क्षेत्रफल हे० में

क.	प०स० वृत्त	बीट का नाम	कक्ष क्रमांक	क्षेत्रफल हे. में
1	हथपुरा	पड़री	RF 227	34.240
2			PF 27 (New P779)	12.248
			Total	46.448 ha

2. प्रस्तावित वन भूमि के चारों ओर की जी.पी.एस. रीडिंग

क.	प०स०	बीट	कक्ष क्रमांक	रीडिंग
1	हथपुरा	पड़री	RF 227	F19 – N23°14'32.127" E-81°17'11.019" F26 – N23°14'27.279" E-81°17'41.101" P68 – N23°14'19.602" E-81°17'39.958" P76 – N23°14'19.437" E-81°17'11.108"
2			PF 27 (New P779)	F8 – N23°15'32.842" E-81°18'25.748" F13 – N23°15'17.023" E-81°18'25.017" F14 – N23°15'21.185" E-81°18'13.816" F18 – N23°15'30.689" E-81°18'20.595"

3. प्रस्तावित शाहपुर वेस्ट कोल ब्लॉक भूमिगत खदान है। जिस कारण प्रस्तावित वन भूमि कक्ष क. आर 227 एवं पी. 27 में कोई भी वृक्ष प्रभावित नहीं हो रहे हैं।

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4. प्रस्तावित शाहपुर वेस्ट कोल ब्लॉक भूमिगत खदान है। जिसमें कोयला का उत्खनन प्रस्तावित वनक्षेत्र के जमीनी सतह से लगभग 180 मीटर के नीचे से किया जावेगा।
 5. प्रस्तावित शाहपुर वेस्ट कोल ब्लॉक में कोयला उत्खनन हेतु भूमिगत जाने का मार्ग राजस्व क्षेत्र ग्राम खम्हरियाकला के खसरा नम्बर 290/2 एवं 291/2 रकबा 1.955 हे. में बनाया जाना प्रस्तावित है। जिसकी वनक्षेत्र से दूरी निम्नानुसार है
1. पी.एफ. 27 – लगभग 1 कि.मी.
 2. आर.एफ. 227 – लगभग 880 मीटर

संलग्न –

1. संयुक्त स्थल निरीक्षण पंचनामा
2. रेखांकित मानचित्र
3. प्रस्तावित वनक्षेत्र का गूगल मैप

पृ०क०/1734
प्रतिलिपि-

दिनांक/ 03 / 08 / 2021

1. उपवनमण्डलाधिकारी पाली की ओर सूचनार्थ सम्प्रेषित।
2. शारदा एनर्जी एण्ड मिनरल्स रायपुर छ.ग. की ओर सूचनार्थ अग्रेषित।


प्रभारी
वनपरिक्षेत्राधिकारी
वनपरिक्षेत्र धुनघुटी सा०


प्रभारी
वनपरिक्षेत्राधिकारी
वनपरिक्षेत्र धुनघुटी सा०

①
संयुक्त स्थल निरीक्षण पंचनामा - दिनांक- 13/07/2021
स्थान- R. 228
समय- 11.00 AM

हम पंचगण नीचे हस्ताक्षर करने वाले इस बात की पुष्टि-सन्तुष्ट कर रहे हैं कि आज दिनांक- 13/07/2021 को शाहपुर वेस्ट कोल हलाक, शारदा एनर्जी एण्ड मिनि-रल्स लिमिटेड, रायपुर (इ.ग.) अन्तर्गत प्रस्तावित क्षेत्र R.F. 227 एकड़- 34.240 हे० एवं P.F. 27 (पुराना) P.F. 279 (नया) एकड़- 12.248 कुल एकड़- 46.448 हे०, उपरोक्त कुक्ष कुम्हों का पन विभाग के कर्मचारियों एवं शारदा एनर्जी एण्ड मिनिरल्स लिमिटेड रायपुर (इ.ग.) के अधिकारियों/कर्मचारियों की उपस्थिति में संयुक्त सर्वेक्षण का कार्य किया गया। उपर्युक्त क्षेत्र में शारदा एनर्जी एण्ड मिनिरल्स लिमिटेड रायपुर (इ.ग.) को उपयोग पर देने हेतु प्रस्तावित है। जिसमें कुक्ष R.F. 227 एवं P.F. 27 (नया नं. 279) में एक कुक्ष का निरीक्षण संयुक्त रूप से किया गया जिसमें आवेदित संस्था के अधिकारियों द्वारा प्रस्तावित एवं वास्तविक रूप से उपर्युक्त कुक्ष में एक कुक्ष की संख्या जगह पाई गई। यह कुक्ष अन्तर्गत एवदान है जिससे वन क्षेत्र प्रभावित नहीं होगा। प्रस्तावित स्थल में शारदा एनर्जी एण्ड मिनिरल्स लिमिटेड के कर्मचारियों द्वारा सीमा क्षति के उपरान्त जी. पी. एस. सीटिंग की गई है। निरीक्षण के दो अनुमान (अनुमान) में R.F. 227 क्षेत्र की दूरी- 1000 मी. (1 कि.मी.) एवं R.F. 228 से 280 मी. पर प्रस्तावित है। एवं कुक्ष अन्तर्गत एवदान से लगभग 180 मी. गहराई से कोल खनन किया जाना है। अतः कुक्ष अन्तर्गत एवदान देने के कारण कुक्ष की गणना की आवश्यकता नहीं पड़ जाती है। वन क्षेत्र की जी. पी. एस. सीटिंग निम्न प्रकार है:

R.F. 227 (P.F. 19) N-23°14'23" E-81°17'11.019"

(P.T.O.)

P.F. 227 ③ P. 68 N- 23°14'19.602" ②
E- 81°17'45.958"
④ P. 75 N- 23°14'19.437"
E- 81°17'11.108"

P.F. 27 ① F. 8 N- 23°15'32.242"
E- 81°18'25.748"
② F. 13 N- 25°15'17.083"
E- 81°18'25.017"
③ F. 14 - N- 23°15'21.185"
E- 81°18'13.816"
④ F. 18 - N- 23°15'30.690"
E- 81°18'20.595"

उपरोक्त संयुक्त स्थल निरीक्षण उपरान्त
मौके से पंचनामा तैयार किया गया एवं पादकर
खुनाया गया, लकी पाये जाने पर क्षणिक क्षणिक
हस्ताक्षर किये / पंचनामा मे रेडार तैयार किया
गया /

हस्ताक्षर फागण -

गिरधारी यादव

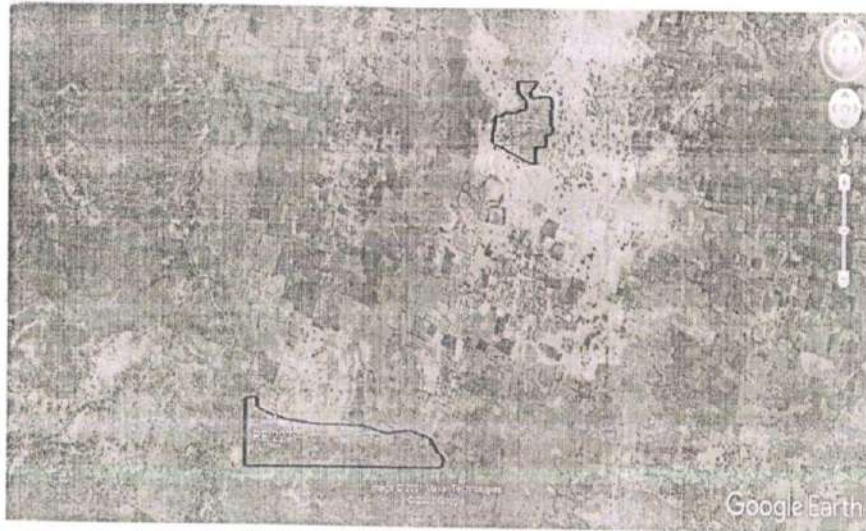
(R.P. Deivedi)
(C.P. Deivedi)

(C.P. Deivedi)

(C. Singh)
(गिरधारी यादव)
पंचनामा
परिक्षेत्र अधिकारी हथपुरा
पंच परिक्षेत्र - धुनछली
पंचनामा - अमरिया (म.प्र.)

(C. Singh)





c/s
Hall
वन परिक्षेत्र अधिकारी
पुणे
68/08/2021
वन परिक्षेत्र अधिकारी
पुणे

कार्यालय वन वृत्त शहडोल-484001 (मध्यप्रदेश)

PHONE - 245361 FAX - 240189 E-MAIL - ccf.sdi@mp.gov.in

क्रमांक/मानचित्रकार/2021/ 4526

शहडोल, दिनांक 08/07/2021

प्रति,

वनमण्डलाधिकारी,
वनमण्डल उमरिया

विषय :- शाहपुर वेस्ट कोल ब्लॉक अन्तर्गत प्रभावित वनभूमि के सर्वेक्षण/पूर्वेक्षण हेतु अनुमति प्रदाय करने के संबंध में।

संदर्भ :- आपका पत्र क्रमांक/माचि./1378 दिनांक 23.06.2021.

- 121212 -

शारदा ईनर्जी एण्ड मिनरल्स लिमिटेड, देवेन्द्र नगर स्कैवयर, रायपुर (छ.ग.) द्वारा शाहपुर वेस्ट कोल ब्लॉक के अन्तर्गत वनमण्डल उमरिया के परिक्षेत्र घुनघुटी के प्रस्तावित वनभूमि के कक्ष क्रमांक आर.एफ. 227 एवं पी.एफ. 27 रकबा 46.488 हे. में सर्वेक्षण कार्य करने की अनुमति चाही गई है।

मध्य प्रदेश शासन वन विभाग के ज्ञापन क्रमांक/5/16/81/10-3 भोपाल दिनांक 23.07.1983 के परिपालन में प्रस्तावित वनक्षेत्र में निम्नानुसार शर्तों के अधीन सर्वेक्षण की अनुमति दी जाती है :-

- सर्वेक्षण की अनुमति दिनांक 31 दिसम्बर 2021 तक के लिये होगी। परन्तु वर्षा ऋतु में (15 जुलाई से 30 सितम्बर तक) वनक्षेत्र में सर्वेक्षण ^{नहीं} अनुमति नहीं रहेगी।
- सर्वेक्षण के समय किसी वनाधिकारी को साथ में रखा जावे।
- भारत सरकार के निर्देशानुसार न तो वृक्ष काटे जावें और न ही वनभूमि की क्षतिपूर्ति पहुँचायी जावेगी किन्तु Sighting के लिये बेकार झाड़ियों की सफाई/छालियों की छाटाई आवश्यक हो तो वन कर्मचारी की उपस्थिति में ही की जा सकेगी।
- सर्वेक्षण के समय साथ रहने वाले वन प्रतिनिधि का दायित्व होगा कि वह भरसक प्रयत्न करें कि उक्त योजना वनक्षेत्र एवं वनाच्छादित क्षेत्र के बाहर ही बनायी जावे या वन भूमि न्यूनतम प्रभावित हो।
- किसी भी प्रकार वाहन का प्रवेश वन क्षेत्र में नहीं कराया जावेगा। वन मार्गों के उपयोग के लिये आवेदक संस्थान को वाहनों की जानकारी वनमण्डलाधिकारी को देकर वांछित अवधि हेतु निर्धारित शुल्क जमा कर अनुमति प्राप्त करना होगा।
- सर्वेक्षण के दौरान वनभूमि/वनोपज को कोई हानि पहुँचती है तो तत्काल प्रभाव से यह अनुमति निरस्त हो जावेगी तथा हानि की आंकलित मुआवजा राशि का भुगतान आवेदक संस्थान को करना होगा। साथ ही प्रचलित वन

अधिकारों नियमों के तहत आवेदक संस्थान के विरुद्ध कार्यवाही की जा सकेगी।

- (vii) अगर सर्वेक्षण हेतु प्रस्तावित वनभूमि में कोई प्रिजर्वेशन या सेम्पल प्लॉट पाया जाता है तो यह अनुमति स्वमेव प्रभावहीन हो जायेगी और आवेदक संस्थान प्रस्तावित वनभूमि पर सर्वेक्षण का कार्यवाही नहीं कर सकेगा।
- (viii) सर्वेक्षण की अनुमति प्रदान करने का तात्पर्य यह नहीं लगाया जावे कि इस प्रकरण में वनभूमि प्राप्त हो जावेगी। यदि शासन उपयुक्त समझेगा तभी प्रकरण में भूमि उपलब्ध कराने हेतु आवश्यक कार्यवाही करेगा।
- (ix) वनक्षेत्र में प्रवेश करने की अनुमति आवेदक संस्थान को कार्य प्रारंभ करने के पूर्व वनमण्डलाधिकारी से लेनी होगी। निर्धारित अवधि में सर्वेक्षण कार्य समाप्त होने की सूचना भी आवेदक संस्थान को वनमण्डलाधिकारी को देनी होगी।
- (x) सर्वेक्षण कार्य सूर्योदय से सूर्यास्त तक होगा।
- (xi) वनभूमि पर कार्य करने की अनुमति देने के पूर्व आवेदक संस्थान से उपरोक्त शर्तें मान्य करने संबंधी लिखित वचन-पत्र प्राप्त किया जावे।

2.

कोविड-19 प्रोटोकॉल का पूर्णतः पालन किया जावे।

(पी.के.बर्मा)
मुख्य वन संरक्षक
वन कृत्त शहडोल (म०प्र०)

पृ.क्रमांक/माचि/2021/ 4527
प्रतिलिपि—

शहडोल, दिनांक 08/02/2021

1. अपर प्रधान मुख्य वन संरक्षक (भू-प्रबंध) म.प्र. भोपाल।
2. उपाध्यक्ष, शारदा ईनर्जी एण्ड मिनरल्स लिमिटेड, देवेन्द्र नगर स्केवर, रायपुर (छ.ग.) को सूचनार्थ एवं आवश्यक कार्यवाही हेतु अग्रेषित।।

मुख्य वन संरक्षक
वन कृत्त शहडोल (म०प्र०)

कार्यालय वनमण्डलाधिकारी वनमण्डल उमरिया (म.प्र.)

Phone - 87653-222217, 87653-222218, 87653-222219, E-mail - dfo@umariya.gov.in

क्रमांक / मा0वि0 / 2021 /

उमरिया, दिनांक /

प्रति,

वन परिक्षेत्राधिकारी
वन परिक्षेत्र धुनधुटी

विषय:- शाहपुर वेस्ट कोल ब्लॉक अन्तर्गत प्रभावित वनभूमि के सर्वेक्षण/पूर्वक्षण करने के संबंध में।
संदर्भ:- मुख्य वन संरक्षक, वनवृत्त गण्डोल का पत्र क्र0/4526 दिनांक 08.07.2021

उपरोक्त विषयान्तर्गत संदर्भित पत्र द्वारा शाहपुर वेस्ट कोल ब्लॉक अन्तर्गत प्रभावित वनभूमि के सर्वेक्षण/पूर्वक्षण करने हेतु रणनीति अनुमति जारी किया गया है, सुलग संदर्भ हेतु छायाप्रति संलग्न है का अवलोकन करे। स्वीकृति में निरोधित समस्त शर्तों का पालन कराया जाना सुनिश्चित करे, जिसमें किसी भी शर्त का उल्लंघन होने पाये। परिक्षेत्र धुनधुटी अन्तर्गत प्रस्तावित वनक्षेत्र का आवेदन संस्था के साथ संयुक्त स्थल सत्यापन कर स्थल सत्यापन पंचनामा, प्रस्तावित वनभूमि का विवरण, कक्षा क्र0, लम्बाई, चौड़ाई, क्षेत्रफल हे0 में, प्रभावित स्थल का जीपीएस रीडिंग अनुसार मानचित्र में रेखांकन सहित तथा वृक्ष प्रचुरित हो तो वृक्षों की गणना सूची मोशवारा सहित विदोहन योजना, अभिगत सहित प्रतिवेदन आवेदन संस्था को उपलब्ध करावे एवं एक प्रति इस कार्यालय में प्रस्तुत किया जाना सुनिश्चित करे।
संलग्न:- उपरोक्तानुसार।

(मोहित सूद)

मा.प्र.से.

वनमण्डलाधिकारी
उमरिया वनमण्डल (म.प्र.)

उमरिया, दिनांक / 8/7/2021

पू0क्रमांक / मा0वि0 / 2021 / 2262

प्रतिनिधि:-

1. उप-वनमण्डलाधिकारी पाली की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु अग्रेषित।
2. सहायक, सारदा ईनर्जी एण्ड मिनरल्स, लिमिटेड, देवेन्द्र नगर स्केचर, रायपुर (छ.ग.) की ओर सूचनार्थ। उक्त वनाधिकारियों से समर्पक स्थापित कर प्रस्तावित स्थल का संयुक्त स्थल निरीक्षण कराया जाना सुनिश्चित करे।

वनमण्डलाधिकारी
वनमण्डल उमरिया (म.प्र.)

वन अपराध या अवैध शिकार से निवारण हेतु वन विभाग की नमबर 151322 अथवा 18000134396 पर दीजिये

8/7/21 10:00 AM

X

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Devendra Nagar Square,
Raipur - 492001 (C.G.)
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क्रमांक / SEML/KW/FC/5274
प्रति,

रायपुर, दिनांक 17.6.2021

वनमण्डलाधिकारी
वनमण्डल उमरिया
जिला उमरिया (म.प्र.)
विषय - शाहपुर वेस्ट कोल ब्लॉक अन्तर्गत प्रभावित वनभूमि के सर्वेक्षण/पूर्वक्षण
हेतु अनुमति प्रदाय करने के संबंध में।
संदर्भ :- भारत सरकार, कोयला मंत्रालय, शास्त्री भवन, नई दिल्ली के आदेश
क्र० / NA-104 / 2 / 2020-NA दिनांक 03.03.2021

उपरोक्त विषयांतर्गत शाहपुर वेस्ट कोल ब्लॉक अन्तर्गत प्रभावित वनभूमि
के आर.एफ. 227 एवं पी.एफ. 27 कुल रकवा 46.488 हे० वनभूमि प्रभावित होना
संगणित है, जिसके सर्वेक्षण/पूर्वक्षण की अनुमति हेतु निर्धारित प्रपत्र में आवेदन
तैयार कर 03 प्रतियों में आवश्यक कार्यवाही हेतु संलग्न प्रस्तुत है।

संलग्न:- उपरोक्तानुसार। डायरेक्शन मुक्त वी.ए.सी. नम्बर/...
... 01/05/2021 दि. 17/06/2021



[Signature]
17/6/2021
उपाध्यक्ष
(शिवशंकर श्रीवास्तव)
सारदा ईनर्जी एण्ड मिनरल्स
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रायपुर (छ.ग.)

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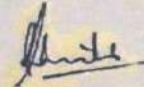
रायपुर, दिनांक

वनमण्डलाधिकारी
वनमण्डल उमरिया
जिला उमरिया (म.प्र.)

विषय - शाहपुर वेस्ट कोल ब्लॉक अन्तर्गत प्रभावित वनभूमि के सर्वेक्षण/पूर्वक्षण हेतु अनुमति प्रदाय करने के संबंध में।

संदर्भ :- मुख्य वन संरक्षक, वनवृत्त शहडोल का पत्र क्र०/4526 दिनांक 08.07. 2021

उपरोक्त विषयांतर्गत शाहपुर वेस्ट कोल ब्लॉक का प्रस्तावित वनक्षेत्र में सर्वेक्षण/पूर्वक्षण में अधिरोपित शर्त क्र०-01 से 09 तक समस्त शर्त मान्य करने हेतु वचन-पत्र संलग्न कर आवश्यक कार्यवाही हेतु प्रस्तुत हैं।
संलग्न:- वचन-पत्र।



उपाध्यक्ष
(शिवशंकर श्रीवास्तव)
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लिमिटेड, देवेन्द्र नगर स्केवयर,
रायपुर (छ.ग.)

14. BM References and Site Location Photographs



**BASE STATION ON FOREST PILLAR
AT KHAMARIA KHURD VILLAGE**



R-10 COAL GRID POINT



P-24



P-32



P-53



P-56



P-73



P-75



P-79



P-82



P-90



P-95

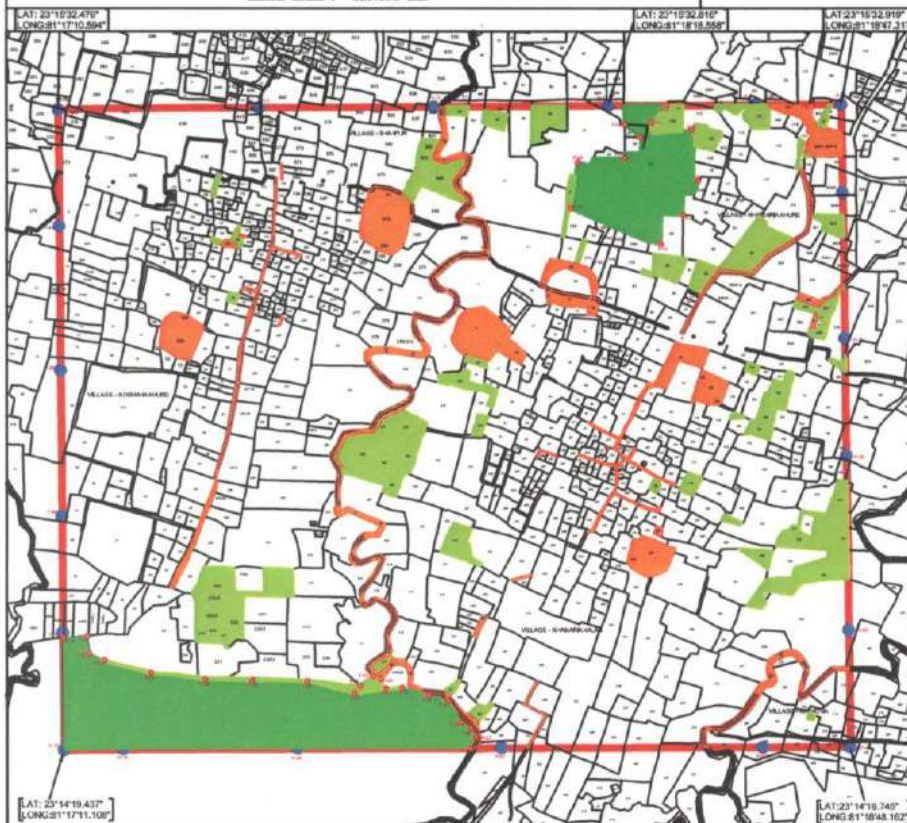
MAP NO. - 1

SAHAPUR WEST COAL BLOCK CADASTRAL MAP OF FIXED BOUNDARY PILLER BY DGPS SURVEY

SARDA ENERGY AND MINERALS LTD.

Tehsil - Pali & Sohagpur, District - Umaria & Shahdol, State - Madhya Pradesh

LEASE AREA :- 619.000 Ha.



LIST OF DGPS CO-ORDINATE

SR.NO.	POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
1	P-1	81°17'10.594"	23°15'32.476"	529281.821	2572222.754
2	P-7	81°17'35.421"	23°15'32.659"	529987.212	2572229.790
3	P-13	81°17'56.990"	23°15'32.738"	530600.042	2572233.470
4	P-19	81°18'18.558"	23°15'32.816"	531212.843	2572237.145
5	P-24	81°18'36.532"	23°15'32.881"	531723.529	2572240.227
6	P-27	81°18'47.317"	23°15'32.919"	532029.958	2572242.054
7	P-30	81°18'47.432"	23°15'22.941"	532033.888	2571935.225
8	P-35	81°18'47.624"	23°15'6.310"	532040.447	2571423.813
9	P-39	81°18'47.778"	23°14'53.006"	532045.706	2571014.708
10	P-45	81°18'48.008"	23°14'33.050"	532053.566	2570401.051
11	P-49	81°18'48.162"	23°14'19.745"	532058.825	2569991.916
12	P-52	81°18'37.393"	23°14'19.723"	531752.803	2569990.583
13	P-61	81°18'5.086"	23°14'19.656"	530834.738	2569986.588
14	P-68	81°17'39.958"	23°14'19.602"	530120.678	2569983.463
15	P-74	81°17'18.421"	23°14'19.555"	529508.663	2569980.789
16	P-76	81°17'11.108"	23°14'19.437"	529300.857	2569976.749
17	P-80	81°17'11.015"	23°14'32.717"	529297.408	2570385.119
18	P-84	81°17'10.921"	23°14'45.997"	529293.932	2570793.489
19	P-89	81°17'10.805"	23°15'2.596"	529289.629	2571303.921
20	P-94	81°17'10.688"	23°15'19.196"	529285.297	2571814.384

CERTIFICATE

Certified that this map is prepared by as based on cadastral map authenticated by the State Govt. Coordinates of the Boundary Pillars shown on map are correct in our knowledge.

Prepared By :-

RAHUL RUTHE
A.G.M (PROJECT COORDINATOR)
(CIVIL ENGINEER)

NITH SELIKAR
MANAGING DIRECTOR
(MINING ENGINEER)



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soham.ferromagnese@gmail.com

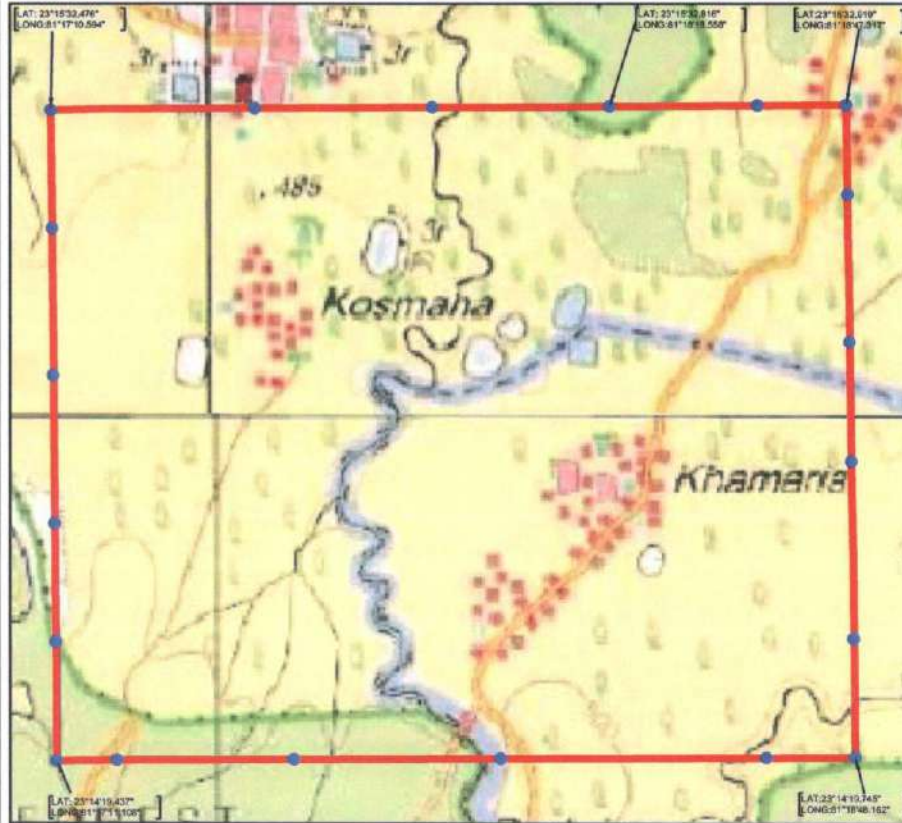
MAP NO. - 2

SAHAPUR WEST COAL BLOCK FIXED BOUNDARY PILLAR BY DGPS SURVEY OVERLAYED ON PART OF TOPOSHEET NO. - 64E/7 & 64E/8

SARDA ENERGY AND MINERALS LTD.
Tehsil - Pali & Sohagpur, District - Umaria & Shahdol, State - Madhya Pradesh
LEASE AREA :- 619.000 Ha.



NOT TO SCALE



LIST OF DGPS CO-ORDINATE

SR.NO.	POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
1	P-1	81°17'10.594"	23°15'32.476"	529281.821	2572222.754
2	P-7	81°17'35.421"	23°15'32.659"	529987.212	2572229.790
3	P-13	81°17'56.990"	23°15'32.738"	530600.042	2572233.470
4	P-19	81°18'18.558"	23°15'32.816"	531212.843	2572237.145
5	P-24	81°18'36.532"	23°15'32.881"	531723.529	2572240.227
6	P-27	81°18'47.317"	23°15'32.919"	532029.958	2572242.054
7	P-30	81°18'47.432"	23°15'22.941"	532083.888	2571935.225
8	P-35	81°18'47.624"	23°15'6.310"	532040.447	2571423.813
9	P-39	81°18'47.778"	23°14'53.006"	532045.706	2571014.708
10	P-45	81°18'48.008"	23°14'33.050"	532053.566	2570401.051
11	P-49	81°18'48.162"	23°14'19.745"	532058.825	2569991.915
12	P-52	81°18'37.393"	23°14'19.723"	531752.803	2569990.583
13	P-61	81°18'5.086"	23°14'19.656"	530834.738	2569986.588
14	P-68	81°17'39.958"	23°14'19.602"	530120.678	2569983.463
15	P-74	81°17'18.421"	23°14'19.555"	529508.663	2569980.789
16	P-76	81°17'11.108"	23°14'19.437"	529300.857	2569976.749
17	P-80	81°17'11.015"	23°14'32.717"	529297.408	2570385.119
18	P-84	81°17'10.921"	23°14'45.997"	529293.932	2570793.489
19	P-89	81°17'10.805"	23°15'2.596"	529289.629	2571303.921
20	P-94	81°17'10.688"	23°15'19.196"	529285.297	2571814.384

CERTIFICATE

Certified that this map is prepared by as based on cadastral map authenticated by the State Govt. Coordinates of the Boundary Pillars shown on map are correct in our knowledge.

Prepared By :-

RAHUL RUTHE
A.G.M (PROJECT COORDINATOR)
(CIVIL ENGINEER)

NITIN SELBIAKAR
MANAGING DIRECTOR
(MINING ENGINEER)



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E-mail : sohamcad@rediffmail.com,
soham.ferromanganese@gmail.com

Map : Boundary of Survey area overlaid on Survey of India
Toposheet No. - 64E/7 & 64E/8

MAP NO. - 3

SAHAPUR WEST COAL BLOCK
FIXED BOUNDARY PILLAR BY DGPS SURVEY OVERLAYED ON
SATELLITE IMAGE IRS-P6 LISS-4 MX

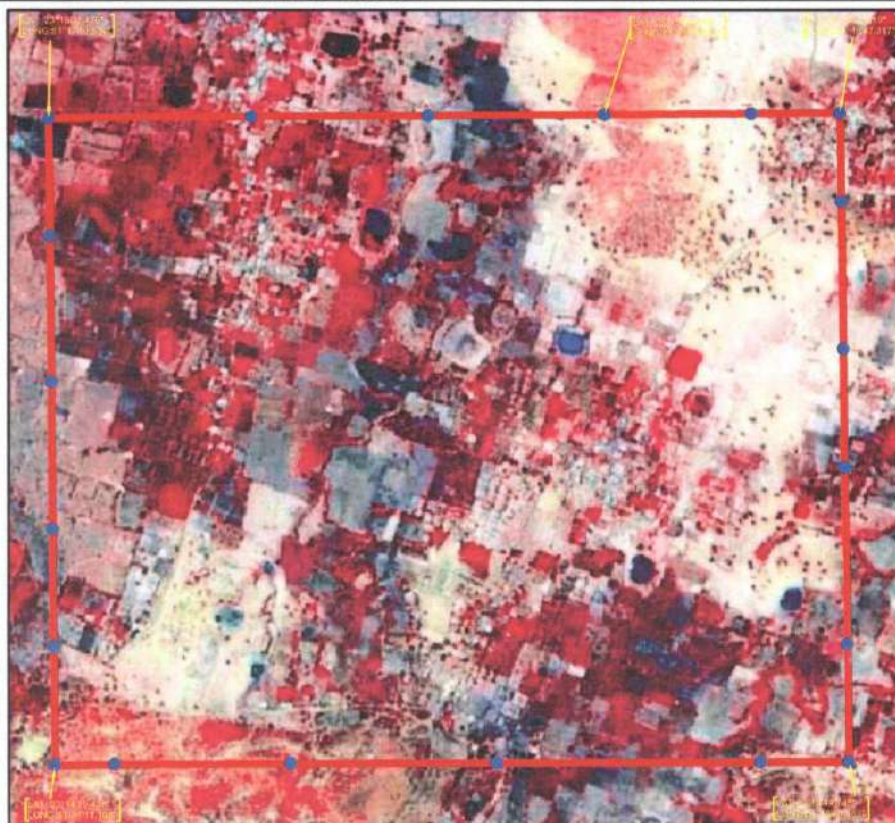
SARDA ENERGY AND MINERALS LTD.

Tehsil - Pali & Sohagpur, District - Umaria & Shahdol, State - Madhya Pradesh

LEASE AREA :- 619.000 Ha.



NOT TO SCALE



LIST OF DGPS CO-ORDINATE

SR.NO.	POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
1	P-1	81°17'10.594"	23°15'32.476"	529281.821	2572222.754
2	P-7	81°17'35.421"	23°15'32.659"	529987.212	2572229.790
3	P-13	81°17'56.990"	23°15'32.738"	530600.042	2572233.470
4	P-19	81°18'18.558"	23°15'32.816"	531212.843	2572237.145
5	P-24	81°18'36.532"	23°15'32.881"	531723.529	2572240.227
6	P-27	81°18'47.317"	23°15'32.919"	532029.958	2572242.054
7	P-30	81°18'47.432"	23°15'22.941"	532033.888	2571935.225
8	P-35	81°18'47.624"	23°15'6.310"	532040.447	2571423.813
9	P-39	81°18'47.778"	23°14'53.006"	532045.706	2571014.708
10	P-45	81°18'48.008"	23°14'33.050"	532053.566	2570401.051
11	P-49	81°18'48.162"	23°14'19.745"	532058.825	2569991.916
12	P-52	81°18'37.393"	23°14'19.723"	531752.803	2569990.583
13	P-61	81°18'5.086"	23°14'19.656"	530834.738	2569986.588
14	P-68	81°17'39.958"	23°14'19.602"	530120.678	2569983.463
15	P-74	81°17'18.421"	23°14'19.555"	529508.663	2569980.789
16	P-76	81°17'11.108"	23°14'19.437"	529300.857	2569976.749
17	P-80	81°17'11.015"	23°14'32.717"	529297.408	2570385.119
18	P-84	81°17'10.921"	23°14'45.997"	529293.932	2570793.489
19	P-89	81°17'10.805"	23°15'2.596"	529289.629	2571303.921
20	P-94	81°17'10.688"	23°15'19.196"	529285.297	2571814.384

CERTIFICATE

Certified that this map is prepared by as based on cadastral map authenticated by the State Govt. Coordinates of the Boundary Pillars shown on map are correct in our knowledge.

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E-mail : sohamcad@rediffmail.com,
soham.ferromagnese@gmail.com

Map : Boundary of Survey area overlaid on LISS IV MX Satellite Imagery

SARDA ENERGY AND MINERALS LTD.					
SAHAPUR WEST COAL BLOCK					
AREA - 619.000 Ha.					
TEHSIL - Pali & Sohagpur, DISTRICT - Umaria & Shahdol , STATE - Madhya Pradesh					
LIST OF DGPS BOUNDARY PILLAR CO-ORDINATE					
SR.NO.	POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
1	P-1	81°17'10.594"	23°15'32.476"	529281.821	2572222.754
2	P-2	81°17'17.447"	23°15'32.593"	529476.526	2572226.737
3	P-3	81°17'21.042"	23°15'32.606"	529578.669	2572227.340
4	P-4	81°17'24.637"	23°15'32.620"	529680.812	2572227.975
5	P-5	81°17'28.232"	23°15'32.633"	529782.955	2572228.579
6	P-6	81°17'31.826"	23°15'32.646"	529885.069	2572229.184
7	P-7	81°17'35.421"	23°15'32.659"	529987.212	2572229.790
8	P-8	81°17'39.016"	23°15'32.672"	530089.355	2572230.397
9	P-9	81°17'42.611"	23°15'32.686"	530191.498	2572231.035
10	P-10	81°17'46.205"	23°15'32.699"	530293.613	2572231.642
11	P-11	81°17'49.800"	23°15'32.712"	530395.756	2572232.251
12	P-12	81°17'53.395"	23°15'32.725"	530497.899	2572232.860
13	P-13	81°17'56.990"	23°15'32.738"	530600.042	2572233.470
14	P-14	81°18'0.584"	23°15'32.751"	530702.156	2572234.081
15	P-15	81°18'4.179"	23°15'32.764"	530804.299	2572234.692
16	P-16	81°18'7.774"	23°15'32.777"	530906.442	2572235.305
17	P-17	81°18'11.369"	23°15'32.790"	531008.585	2572235.917
18	P-18	81°18'14.964"	23°15'32.803"	531110.728	2572236.531
19	P-19	81°18'18.558"	23°15'32.816"	531212.843	2572237.145
20	P-20	81°18'22.153"	23°15'32.829"	531314.986	2572237.760
21	P-21	81°18'25.748"	23°15'32.842"	531417.129	2572238.376
22	P-22	81°18'29.343"	23°15'32.855"	531519.272	2572238.992
23	P-23	81°18'32.937"	23°15'32.868"	531621.386	2572239.609
24	P-24	81°18'36.532"	23°15'32.881"	531723.529	2572240.227
25	P-25	81°18'40.127"	23°15'32.893"	531825.672	2572240.815
26	P-26	81°18'43.722"	23°15'32.906"	531927.815	2572241.434
27	P-27	81°18'47.317"	23°15'32.919"	532029.958	2572242.054
28	P-28	81°18'47.355"	23°15'29.593"	532031.259	2572139.777
29	P-29	81°18'47.393"	23°15'26.267"	532032.559	2572037.501

SR.NO.	POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
30	P-30	81°18'47.432"	23°15'22.941"	532033.888	2571935.225
31	P-31	81°18'47.470"	23°15'19.615"	532035.188	2571832.948
32	P-32	81°18'47.509"	23°15'16.289"	532036.517	2571730.672
33	P-33	81°18'47.547"	23°15'12.963"	532037.818	2571628.396
34	P-34	81°18'47.586"	23°15'9.636"	532039.147	2571526.089
35	P-35	81°18'47.624"	23°15'6.310"	532040.447	2571423.813
36	P-36	81°18'47.662"	23°15'2.984"	532041.748	2571321.537
37	P-37	81°18'47.701"	23°14'59.658"	532043.076	2571219.260
38	P-38	81°18'47.739"	23°14'56.332"	532044.377	2571116.984
39	P-39	81°18'47.778"	23°14'53.006"	532045.706	2571014.708
40	P-40	81°18'47.816"	23°14'49.680"	532047.006	2570912.432
41	P-41	81°18'47.855"	23°14'46.354"	532048.335	2570810.156
42	P-42	81°18'47.893"	23°14'43.028"	532049.636	2570707.880
43	P-43	81°18' 47.931"	23°14'43.028"	532050.716	2570707.882
44	P-44	81°18'47.970"	23°14'36.376"	532052.265	2570503.327
45	P-45	81°18'48.008"	23°14'33.050"	532053.566	2570401.051
46	P-46	81°18'48.047"	23°14'29.724"	532054.895	2570298.775
47	P-47	81°18'48.085"	23°14'26.397"	532056.195	2570196.468
48	P-48	81°18'48.123"	23°14'23.071"	532057.496	2570094.192
49	P-49	81°18'48.162"	23°14'19.745"	532058.825	2569991.916
50	P-50	81°18'44.572"	23°14'19.738"	531956.808	2569991.481
51	P-51	81°18'40.983"	23°14'19.731"	531854.820	2569991.047
52	P-52	81°18'37.393"	23°14'19.723"	531752.803	2569990.583
53	P-53	81°18'33.803"	23°14'19.716"	531650.786	2569990.150
54	P-54	81°18'30.214"	23°14'19.708"	531548.798	2569989.687
55	P-55	81°18'26.624"	23°14'19.701"	531446.781	2569989.255
56	P-56	81°18'23.034"	23°14'19.693"	531344.765	2569988.793
57	P-57	81°18'19.445"	23°14'19.686"	531242.776	2569988.363
58	P-58	81°18'15.855"	23°14'19.678"	531140.760	2569987.903
59	P-59	81°18'12.265"	23°14'19.671"	531038.743	2569987.474
60	P-60	81°18'8.676"	23°14'19.663"	530936.755	2569987.016
61	P-61	81°18'5.086"	23°14'19.656"	530834.738	2569986.588
62	P-62	81°18'1.496"	23°14'19.648"	530732.721	2569986.131

SR.NO.	POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
63	P-63	81°17'57.907"	23°14'19.640"	530630.733	2569985.674
64	P-64	81°17'54.317"	23°14'19.633"	530528.716	2569985.249
65	P-65	81°17'50.727"	23°14'19.625"	530426.700	2569984.794
66	P-66	81°17'47.138"	23°14'19.617"	530324.711	2569984.339
67	P-67	81°17'43.548"	23°14'19.609"	530222.695	2569983.885
68	P-68	81°17'39.958"	23°14'19.602"	530120.678	2569983.463
69	P-69	81°17'36.369"	23°14'19.594"	530018.690	2569983.010
70	P-70	81°17'32.779"	23°14'19.586"	529916.673	2569982.558
71	P-71	81°17'29.190"	23°14'19.578"	529814.685	2569982.107
72	P-72	81°17'25.600"	23°14'19.570"	529712.668	2569981.657
73	P-73	81°17'22.010"	23°14'19.563"	529610.652	2569981.238
74	P-74	81°17'18.421"	23°14'19.555"	529508.663	2569980.789
75	P-75	81°17'11.565"	23°14'19.445"	529313.843	2569977.021
76	P-76	81°17'11.108"	23°14'19.437"	529300.857	2569976.749
77	P-77	81°17'11.085"	23°14'22.757"	529300.002	2570078.842
78	P-78	81°17'11.061"	23°14'26.077"	529299.118	2570180.934
79	P-79	81°17'11.038"	23°14'29.397"	529298.263	2570283.026
80	P-80	81°17'11.015"	23°14'32.717"	529297.408	2570385.119
81	P-81	81°17'10.991"	23°14'36.037"	529296.525	2570487.211
82	P-82	81°17'10.968"	23°14'39.357"	529295.670	2570589.304
83	P-83	81°17'10.945"	23°14'42.677"	529294.815	2570691.396
84	P-84	81°17'10.921"	23°14'45.997"	529293.932	2570793.489
85	P-85	81°17'10.898"	23°14'49.317"	529293.077	2570895.581
86	P-86	81°17'10.875"	23°14'52.637"	529292.222	2570997.674
87	P-87	81°17'10.851"	23°14'55.956"	529291.339	2571099.735
88	P-88	81°17'10.828"	23°14'59.276"	529290.484	2571201.828
89	P-89	81°17'10.805"	23°15'2.596"	529289.629	2571303.921
90	P-90	81°17'10.781"	23°15'5.916"	529288.745	2571406.013
91	P-91	81°17'10.758"	23°15'9.236"	529287.890	2571508.106
92	P-92	81°17'10.734"	23°15'12.556"	529287.007	2571610.198
93	P-93	81°17'10.711"	23°15'15.876"	529286.152	2571712.291
94	P-94	81°17'10.688"	23°15'19.196"	529285.297	2571814.384
95	P-95	81°17'10.664"	23°15'22.516"	529284.414	2571916.476

SR.NO.	POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
96	P-96	81°17'10.641"	23°15'25.836"	529283.559	2572018.569
97	P-97	81°17'10.618"	23°15'29.156"	529282.704	2572120.661

SARDA ENERGY AND MINERALS LTD.					
SAHAPUR WEST COAL BLOCK					
AREA - 619.000 Ha.					
TEHSIL - Pali & Sohagpur, DISTRICT - Umaria & Shahdol, STATE - Madhya Pradesh					
LIST OF FOREST PILLAR CO-ORDINATE					
SR.NO.	POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
1	F-8	81°18'25.748"	23°15'32.842"	531417.129	2572238.376
2	F-9	81°18'23.77"	23°15'30.882"	531361.054	2572177.987
3	F-10	81°18'28.777"	23°15'29.997"	531503.379	2572151.063
4	F-11	81°18'29.571"	23°15'24.279"	531526.322	2571975.272
5	F-12	81°18'27.706"	23°15'20.401"	531473.573	2571855.920
6	F-13	81°18'25.017"	23°15'17.083"	531397.375	2571753.710
7	F-14	81°18'13.816"	23°15'21.185"	531078.868	2571879.203
8	F-15	81°18'14.696"	23°15'26.407"	531103.517	2572039.825
9	F-16	81°18'20.602"	23°15'26.885"	531271.299	2572054.877
10	F-17	81°18'22.544"	23°15'29.239"	531326.329	2572127.391
11	F-18	81°18'20.595"	23°15'30.689"	531270.853	2572171.860
12	F-19	81°17'11.019"	23°14'32.127"	529297.560	2570366.985
13	F-20	81°17'13.974"	23°14'32.355"	529381.503	2570374.165
14	F-21	81°17'14.212"	23°14'30.351"	529388.413	2570312.538
15	F-22	81°17'16.074"	23°14'29.612"	529441.353	2570289.925
16	F-23	81°17'21.767"	23°14'28.205"	529603.224	2570246.970
17	F-24	81°17'28.521"	23°14'27.472"	529795.176	2570224.820
18	F-25	81°17'34.29"	23°14'27.362"	529959.132	2570221.768
19	F-26	81°17'41.101"	23°14'27.279"	530152.693	2570219.611
20	F-27	81°17'46.944"	23°14'25.946"	530318.799	2570178.951
21	F-28	81°17'47.638"	23°14'26.737"	530338.479	2570203.328
22	F-29	81°17'49.231"	23°14'27.818"	530383.658	2570236.661
23	F-30	81°17'50.162"	23°14'27.51"	530410.147	2570227.245
24	F-31	81°17'50.833"	23°14'26.459"	530429.290	2570194.960
25	F-32	81°17'52.857"	23°14'26.514"	530486.801	2570196.756
26	F-33	81°17'56.104"	23°14'25.707"	530579.121	2570172.148
27	F-34	81°17'58.438"	23°14'25.062"	530645.482	2570152.438
28	F-35	81°18'0.131"	23°14'22.586"	530693.748	2570076.390
29	F-36	81°18'1.35"	23°14'21.885"	530728.425	2570054.925
30	F-37	81°18'1.951"	23°14'20.985"	530745.575	2570027.264

SR.NO.	POINT ID	LONGITUDE	LATITUDE	EASTING	NORTHING
31	F-38	81°18'1.273"	23°14'19.648"	530726.389	2569986.103
32	P-62	81°18'1.496"	23°14'19.648"	530732.721	2569986.131
33	P-63	81°17'57.907"	23°14'19.640"	530630.733	2569985.674
34	P-64	81°17'54.317"	23°14'19.633"	530528.716	2569985.249
35	P-65	81°17'50.727"	23°14'19.625"	530426.700	2569984.794
36	P-66	81°17'47.138"	23°14'19.617"	530324.711	2569984.339
37	P-67	81°17'43.548"	23°14'19.609"	530222.695	2569983.885
38	P-68	81°17'39.958"	23°14'19.602"	530120.678	2569983.463
39	P-69	81°17'36.369"	23°14'19.594"	530018.690	2569983.010
40	P-70	81°17'32.779"	23°14'19.586"	529916.673	2569982.558
41	P-71	81°17'29.190"	23°14'19.578"	529814.685	2569982.107
42	P-72	81°17'25.600"	23°14'19.570"	529712.668	2569981.657
43	P-73	81°17'22.010"	23°14'19.563"	529610.652	2569981.238
44	P-74	81°17'18.421"	23°14'19.555"	529508.663	2569980.789
45	P-75	81°17'11.565"	23°14'19.445"	529313.843	2569977.021
46	P-76	81°17'11.108"	23°14'19.437"	529300.857	2569976.749
47	P-77	81°17'11.085"	23°14'22.757"	529300.002	2570078.842
48	P-78	81°17'11.061"	23°14'26.077"	529299.118	2570180.934
49	P-79	81°17'11.038"	23°14'29.397"	529298.263	2570283.026