

SECOND REPORT ON  
ILLEGAL MINING OF  
IRON AND MANGANESE ORES  
IN THE STATE OF ODISHA

**OCTOBER, 2013**

**VOLUME: III**

**Justice M. B. Shah  
Commission of Enquiry  
for  
Illegal Mining of Iron Ore & Manganese**

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## Volume: III

### Encroachment outside the leased area

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**Opinion/Remarks of the Commission on the survey done by the Survey Team (State of Orissa).**  
**The survey was ordered by the Commission during the hearing as accepted by the lessees.**

<b>Sl. No.</b>	<b>Name of lessee and lease</b>	<b>Lease Area (ha.)</b>	<b>Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.</b>	<b>Encroachment Area (ha.)</b>	<b>% of encroachment as against total leased area all types.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1	M/s. Tarini Minerals, Nuagaon Mn. Mines	7.85	The extent of 9.429 ha. of encroachment is accepted. All the areas covered under this encroachment are found worked out area. Hence, the sub-classification given by the survey team is not accepted. Action should be taken as discussed in this Chapter.	9.429	120.11
2	R. B. Das, Kundrupani Iron & Manganese Ore Mines	10.255	The encroachment of an extent of 6.814 ha. is admitted for various activities. The area of 0.418 ha. for nallah and 0.422 ha. for playground is excluded from encroachment. Action should be taken to recover the value of ore after quantification from the pits. All other actions as suggested in this Report should be taken.	6.814	66.45
3	M/s. O.M. & M. (P) Ltd., Kusumdihi Mn. Mines	31.549	An area of 15. 378 ha. has been accepted as encroachment as surveyed by the survey team. The area of 0.462 ha. of agricultural land and graveyard is excluded. The quantification for the ore removed from the quarry pit should be done. Further, action should be taken as discussed in this Chapter.	15.86	50.27

<b>Sl. No.</b>	<b>Name of lessee and lease</b>	<b>Lease Area (ha.)</b>	<b>Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.</b>	<b>Encroachment Area (ha.)</b>	<b>% of encroachment as against total leased area all types.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
4	S. D. Sharma, Nuagaon Iron/Mn. Mines	12.942	The extent of 6.367 ha. of encroachment is accepted. It is to note here that the extension of quarry pit shown towards north-east side should be treated as part of encroachment and taken into account during the measurement of ore quantification. Other actions should be taken as discussed in this Chapter.	6.367	49.20
5	J. N. Pattnaik, Bhanjpali Iron Ore Mines	18	The area 6.803 ha. identified by survey team has been accepted as encroachment. Quantification of ore should be carried out from the encroached pits. Other action should be taken as discussed in this Chapter.	6.803	37.79
6	M/s. Serrajuddin & Co., Guruda Iron & Manganese Ore Mines	40.064	The finding of the survey team for an area of 13.882 ha. of encroachment has been accepted. By comparing the old satellite imaginary with the present it is noted that the extraction from the pit is going on continuously since many years. The contention of the lessee as per his letter 10.8.2013 is not accepted. The quantification of removal of manganese ore from all the pits should be done and cost be recovered as per law. Other actions should be taken as discussed in this Chapter.	13.882	34.65

Sl. No.	Name of lessee and lease	Lease Area (ha.)	Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.	Encroachment Area (ha.)	% of encroachment as against total leased area all types.
1	2	3	4	5	6
7	M/s. Pattnaik Minerals Pvt. Ltd., Joribahal Manganese Ore Mines	106.53	An area of an extent of 33.209 ha. as surveyed by the survey team is accepted. The area of 3.450 ha. for plantation is excluded. Action should be taken accordingly.	33.209	31.17
8	D. R. Patnaik, Murgabeda Iron Ore Mines	15.378	An area of 4.7820 ha. as identified by the survey team is accepted. Action should be taken to quantify the ore removed from the quarry pit. Other actions should be taken as suggested in this Chapter.	4.782	31.10
9	S. N. Mohanty, Ganua Iron/Mn. Mines	13.796	The area of an extent of 3.993 ha. identified by the survey team is accepted as encroachment. The barren area shown is actually the worked out area by destroying the forest/vegetation. Action should be taken as discussed in this Chapter.	3.993	28.94
10	S. N. Dasmohapatra, Kolha-Rudukela Iron & Manganese Ore Mines	36.474	<b>Joint Survey has not been carried out. The survey done by the Commission is accepted.</b>	10	27.42

<b>Sl. No.</b>	<b>Name of lessee and lease</b>	<b>Lease Area (ha.)</b>	<b>Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.</b>	<b>Encroach-ment Area (ha.)</b>	<b>% of encroachment as against total leased area all types.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
11	M/s. Tarini Minerals, Tehrai Iron/Mn. Mines	29.067	The findings of the survey team are accepted for an area of 7.824 ha. of encroachment. The ores should be quantified removed from the pits. Action should be taken as discussed in this Chapter.	7.824	26.92
12	M/s. Geetarani Mohanty, Raikela Iron Ore Mines	67.586	The encroachment to an extent of 11.812 ha. identified by survey team is accepted. The barren land shown by the survey team is actually the worked out area by destroying the surrounding forest / vegetation. Action should be taken as discussed in this Chapter.	11.812	17.48
13	M/s. Narayani Sons (P) Ltd., Suruguturia Iron Ore Mines	99.784	An area of 15.711 ha. has been occupied as encroachment. Except the agricultural land 2.192 ha. out of 17.343 ha. is taken as encroachment. The B location of the Commission's finding is included as encroachment. Action should be taken to recover the cost of minerals removed from the quarry pit (4.855 ha.) Other actions as per discussion made in this Chapter.	17.343	17.38

<b>Sl. No.</b>	<b>Name of lessee and lease</b>	<b>Lease Area (ha.)</b>	<b>Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.</b>	<b>Encroachment Area (ha.)</b>	<b>% of encroachment as against total leased area all types.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
14	M/s. B. I. Co. Ltd., Nadidiha Iron/Mn. Mines	73.855	The encroachment identified by the survey team for an area of 12.451 ha. is accepted excluding the school area. The barren land is actually worked out area by destroying natural forest / vegetation. Action should be taken as discussed in this chapter.	12.519	16.95
15	M/s. National Enterprises, Sanindupur Iron/ Mn. Mines	75	In addition to 8.378 ha. encroachment identified by the survey team, an area of 4.0 ha. as identified by the Commission should be added. Hence, in total there is about 12.378 ha. of encroachment. The area shown as barren area is actually the worked out area by destroying natural forest/vegetation in this high rain fall area. Action should be taken as suggested in this Chapter.	12.378	16.50
16	M/s. Feegrade & Co. Ltd., Nadidiha Iron/Mn. Mines	121.41	The area of an extent of 16.449 ha. identified by the survey team is accepted as encroachment. The barren area is actually the worked out areas by destroying natural forest / vegetation. Action should be taken as discussed in this Chapter.	16.449	13.55



<b>Sl. No.</b>	<b>Name of lessee and lease</b>	<b>Lease Area (ha.)</b>	<b>Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.</b>	<b>Encroach-ment Area (ha.)</b>	<b>% of encroachment as against total leased area all types.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
17	B. D. Patnaik, Kalaparbat Iron Ore Mines	25.633	The encroachment of an extent of 3.170 ha. as surveyed by survey team is accepted. The lessee has not denied that he has not done this mining. There is extension of pit and dumps from within the inside to outside of the lease in continuity. Hence, there is no doubt that the encroachment is done by lessee. Action should be taken accordingly..	3.17	12.37
18	Dr. S. Pradhan, Balita Iron Ore Mines	34.75	<b>Joint Survey has not been carried out. The finding of the Commission taken as final.</b>	4.03	11.60
19	M/s. MGM Minerals Ltd., Patabeda Iron Ore Mines	28.397	The findings of the survey team are accepted for 3.168 ha of encroachment. The barren land shown by the team is actually a worked out area in past by destroying natural forest / vegetation. All the surveys done in the past should be treated as modified to the extent of present survey. Action should be taken as discussed in this Chapter.	3.168	11.16
20	M/s. Essel Mining & Industries Ltd., Koiria Iron Ore Mines	90.143	The finding of the survey team for the area of 9.622 ha. as encroachment is accepted. The open ground shown is actually the worked area by destroying the forest/vegetation. Action should be taken as discussed in this Chapter.	9.622	10.67

Sl. No.	Name of lessee and lease	Lease Area (ha.)	Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.	Encroachment Area (ha.)	% of encroachment as against total leased area all types.
1	2	3	4	5	6
21	M/s. Kalinga Mining Corporation, Jurudi Iron Ore Mines	73	The encroachment of an extent of 2.966 ha. identified by survey team and A pit of Commission finding for an extent of 4.00 ha. has been accepted. Hence total encroachment of 6.966 ha. is considered for further necessary action. The railway area for 3.126 ha. is excluded.	6.966	9.54
22	K.J.S. Ahluwalia Nuagaon Iron Ore Mines	767.28	An area of 32.470 ha. identified by the survey team is accepted. An area of 2.705 ha. shown as barren land is in fact the already worked out land. The lessee has tried to remove the evidence. Action should be taken as discussed in this Chapter.	32.47	4.23
23	M/s. Arujun Lodha, Balagunda Iron & Manganese Ore Mines	326.5	<b>Joint Survey has not been carried out. The findings of the Commission taken as final.</b>	13.81	4.23
24	M/s. Tarini Minerals Pvt. Ltd., Jurudi Iron and Manganese Ore Mines	66.368	The finding of the survey team is accepted for 2.263 ha.. Action should be taken as discussed in this Chapter.	2.263	3.41

Sl. No.	Name of lessee and lease	Lease Area (ha.)	Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.	Encroachment Area (ha.)	% of encroachment as against total leased area all types.
1	2	3	4	5	6
25	M/s. Tata Steel Ltd., Joda-East Iron Ore & Manmora Manganese Mines	671.09	The finding of the survey team is accepted for encroachment of 13.255 ha. Action should be taken as discussed in this Chapter.	13.255	1.98
26	M/s. O. M. & M. (P) Ltd., Patmunda Mn. Mines	807.32	<b>Joint Survey has not been carried out. Taken as done by the Commission.</b>	15.27	1.89
27	M/s. Tarini Minerals, Deojhar Iron Ore Mines	34.365	The finding of the survey team is accepted. A prominent road has not been included which is passing in a high reserve forest land. It should be measured and included.	0.633	1.84
28	M/s. Kalinga Mining Corporation, Jurudi Iron Ore Mines	39.173	The findings of the survey team as regards encroachment are accepted. The rest of findings are subject to the observations made in the concerned Chapter of the Commission's Report.	0.697	1.78

<b>Sl. No.</b>	<b>Name of lessee and lease</b>	<b>Lease Area (ha.)</b>	<b>Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.</b>	<b>Encroach-ment Area (ha.)</b>	<b>% of encroachment as against total leased area all types.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
29	K.J.S. Ahluwalia, Panduliposi Iron & Manganese Ore Mines	40.47	The finding of the survey team is accepted. Action should be taken as discussed in this Chapter.	0.707	1.75
30	K. C. Pradhan, Chamakpur Iron Ore Mines	31.693	The encroachments in patch (1), (2) and (3) are admitted. The encroachment is the extension of the dump. Rolled into the forest land. The encroachments which are not identified but reported in the Commission's finding is admitted herein. The total encroachment is to the extent of 0.908 ha. is accepted. Action should be taken accordingly.	0.528	1.67
31	R. P. Sao, Guali Iron Ore Mines	365.03	The encroachment of 4.162 ha. as identified by the survey team is admitted. Action should be initiated against the concerned encroachers.	4.162	1.14

<b>Sl. No.</b>	<b>Name of lessee and lease</b>	<b>Lease Area (ha.)</b>	<b>Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.</b>	<b>Encroachment Area (ha.)</b>	<b>% of encroachment as against total leased area all types.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
32	M/s. M. L. Rungta, Silijora–Kalimati Iron & Manganese Ore Mines	715.64	As regards the findings of the encroachment for an area of 8.097 ha is accepted. By comparing the old satellite images and approach road to the quarry pits, the contention of the OMC vide letter dated 10/8/13 of Manager, SGBK Mines is not accepted. It is not known whether the contention of the letter is approved by the Board of OMC. Hence action should be taken for quantification of the ores removed from the pits against the lessee. The actions should be taken as discussed in this Chapter.	8.097	1.13
33	B. C. Dagara, Suleipat Iron Ore Mines	618	The encroachment for patches (1), (2) and (3) are the admitted encroachments for various mining activities and should be included as encroachments against the lessee. The patch (4) and (5) are admitted encroachments for mining pit and road used for mining. Hence, they should be included against the lessee. In total, the encroachment to an extent of <b>5.488 ha.</b> is used for mining and allied activities is accepted.	5.488	0.89

<b>Sl. No.</b>	<b>Name of lessee and lease</b>	<b>Lease Area (ha.)</b>	<b>Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.</b>	<b>Encroachment Area (ha.)</b>	<b>% of encroachment as against total leased area all types.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
34	M/s. Serrajuddin & Co., Balda Block Iron Ore Mines	335.59	The finding of the survey team is accepted. For the other observations, the details discussed in the concerned chapter should be referred. The violation of working plan should also be taken into consideration.	1.814	0.54
35	M/s. P. K. Ahluwalia, Ganua	86.886	The finding of the survey team is accepted.	0.145	0.17
36	M/s Matadin Sharda, Khajurdihi Iron & Manganese Mines	31.565	The area adjacent to the lease boundary with some mining related activity was captured by TS survey team.	—	—
37	M/s. Essel Mining & Industries Ltd., Kasia Iron Ore, Dolomite & Limestone Mines	134.73	It is observed here that the survey team has wrongly shown and surveyed an area of 194.196 ha. and surprisingly the supervisory officers have also endorsed it. A detailed report is made in a separate Chapter and the findings in that Chapter are the findings here also. The findings of the survey team are not accepted. The State Government shall demarcate 134.733 ha. land as per the notification issued in this regard and then encroachment should be identified.	—	—

<b>Sl. No.</b>	<b>Name of lessee and lease</b>	<b>Lease Area (ha.)</b>	<b>Remarks of the Commission on encroachment part only. The excess area occupied by the lessee (more than lease notification) should be added.</b>	<b>Encroachment Area (ha.)</b>	<b>% of encroachment as against total leased area all types.</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
38	M/s. Mineral Trading Syndicate, Bhulbeda Iron Ore Mines	62.322	There is a difference in the lease map available with the Commission and the survey team provided. The lease map was also not provided by the State Government to the Commission. Hence, the survey done by the survey team is not accepted.	—	—
—	<b>Total:—</b>	<b>6185.3</b>	—	<b>306.33</b>	—

## **RECOMMENDATION**

The Commission has requested the State Government to identify the encroachment done by the lessees in all the leases of iron and/or manganese ores in the State of Orissa. The State Government, in turn, has carried out survey of the leases and the findings were submitted to the Commission. The Commission has accepted the finding of the State Government and plotted on the satellite images. These images with encroachments were sent to the lessees for their feedback. The lessees were heard through their respective learned Sr. Counsel at Bhubaneswar and Ahmedabad. Some of the lessees were agreed with the finding of the Commission. However, some of them differed. Lessees who were not agreed with the encroachments, the Commission has ordered to carry out re-survey of the leases at their cost.

The State Government with its officers of the Forest Department, Revenue Department, ORSAC and others were requested to form teams and carry out the survey in the supervision of the Commission. Accordingly, re-survey was carried out after issuing the notices to the concerned lessees. The lessees or agent or their representatives were present during the survey. Some of them have also given their observations in writing.



Re-survey done by the State Government has been examined by the Commission only for encroachment. The other findings of survey team could not be examined because of time constraint and, hence, no comments are offered. Further, the Commission has not gone into the geo-referencing the leases viz-a-viz present locations at the ground, shifting etc. because at the ground, it could not be verified by the Commission team.

- i) Encroachment in the forest land outside the leased area should be dealt in accordance with the Orissa Forest Act, 1972. The detailed report and comments in this regard have been made in the **First Report for the State of Orissa**.
- ii) Assessment/Quantification of the ore removed from the illegal encroached quarry pits shall be done and the value of ore so removed should be recovered along with appropriate penalty from the lessees.
- iii) For other kind of encroachments (due to various mining activities), an amount of Rs.2.0 crores per ha. should be charged.

It is stated here that the Hon'ble Supreme Court has directed the State Government, Karnataka to recover the cost of damages due to the encroachment outside the leased area at the rate of Rs.1.00 crore per ha. But in Orissa, the ecosystem is very sensitive, high forest, best elephant habitat

and corridor, hence, considered to impose Rs.2.00  
crores per ha.

- iv) The Hon'ble Supreme Court by its order dated 18.04.2013 in W.P. No.562 of 2009 has cancelled the leases in Karnataka State (C-category) who have encroached more than 15% of the forest land/other lands outside the leased areas. Similar action should be taken in the case of Orissa State also.

The State Government should prepare Rehabilitation and Reclamation Plan (R&R Plan) at the cost of the lessees and implement the same to restore the environment of the area, in the same manner, as being done in the State of Karnataka, as per the order of the Supreme Court.

All other actions arising out of the above violations should also be taken.

**Date:**       **October, 2013**

**(M. B. SHAH)**  
**(Former Judge, Supreme Court of India)**

**Chairman  
Commission of Enquiry  
for  
Illegal Mining of Iron Ore & Manganese**

## **JOINT SURVEY REPORT**

**MINING LEASE: Nuagaon Manganese Mines**

**LESSEE/MINE OWNER: M/s Tarini Minerals**



**1. Name of the Mining lease: Nuagaon Manganese Mines**

**2. Name of the Lessee: M/s Tarini Minerals**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map is not available.

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

**Map enclosed:**

- i. Geo-referenced Lease Deed map in vector format.

**7. Comparison of lease map:**

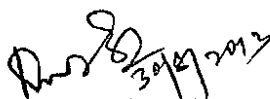
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains same the enjoyment position appears to have taken a small anti clock-wise rotation. Lease area computed in three different ways is tabulated below.


As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
7.85 hectares	8.055 hectares	8.282 hectares

**Map enclosed:**

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra)  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE  
AREA BY TEAM-1, KOIRA CIRCLE IN PURSUANCE TO THE DECISION OF THE  
HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Nuagaon Manganese Mines

Date: 13.08.13

M/s Tarini Minerals

1. The T. S. Data taken in the field in presence of Lessee / Representative has been checked and validated in the laboratory in the presence of team members as well as the Lessee / Representative and found correct.
2. The area adjacent to the lease boundary with some mining related activity were captured through T.S. Survey. The same was also validated by the team members in the presence of Lessee/Representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Shah Commission communication.	Description
Patch-1	'A'	Agriculture land continuing from lease pillar TM-G.
Patch-2	'A'	Vacant land.
Patch-3	'A'	Road passing from the lease area between lease pillar TM-F and TM-G towards dump site.
Patch-4	'A'	Vacant area with a retaining wall about 171 m from pillar TM-G.
Patch-5	'A'	Overburden dump located at distance of about 141m from lease pillar TM-F.
Patch-6	'A'	Open ground with vegetation cover.
Patch-7	'A'	Dump located at a distance of 13m from lease pillar TM-F which belongs to Orahuri Manganese Mines of M/s. OM&M Ltd. as per lease records.

Patch-8	'A'	Barren land between the two dump areas about 88m from pillar TM-F.
Patch-9	'A'	Plantation area located adjacent to the lease boundary between pillars TM-F and TM-G. A portion of this area near safety zone appears to be back filled.
Patch-10	'B'	Barren land with rock fragments near pillar TM-D.
Patch-11	'B'	Plantation located at distance of 23m from lease pillar TM-D.
Patch-12	'B'	Over burden dump extending beyond the lease boundary (about 14m) near lease pillar TM-D.
Patch-13	'B'	Open ground with scrub/grass cover about 26m from lease boundary between pillars TM-C & TM-D.
Patch-14	'B'	Plantation area at a distance of 13m from lease pillar TM-C.
Patch-15	'B'	Village road going out of the lease area about 3m from TM-C.

SIGNATURE

(Lessee/Representative)

*Bidhu*  
13.8.13  
Bidhu Bhustam Sahu  
DGM mines  
M/s Tarini Minerals.

SIGNATURE

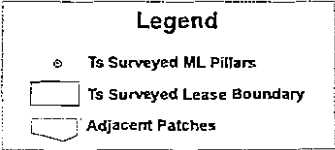
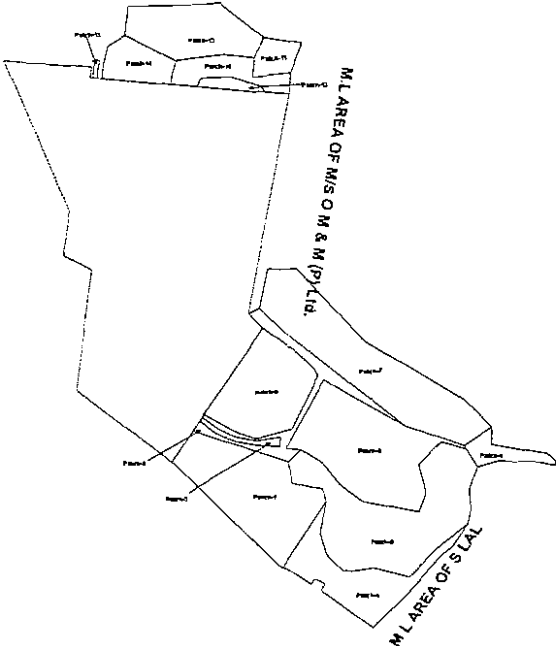
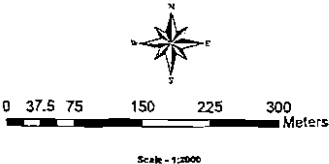
(Team Members)

1. Dr. Srikantha Das  
Scientist, ORSAT *Das*  
13.8.13
2. Ganesh Mishra  
Range Officer, Barpeta *Ganesh*  
13.8.13
3. Jitendra Mahanta  
Revenue Supervisor, Lakhimpur *Jitendra*  
13/8/13
4. Bhaktabandhu Patra  
Sr. Inspector of Mines, Balangir *Patra*  
13.8.13
5. Akshaya K. Maharana  
Amin, Tahasil office-Koira *Akshaya*  
13.8.13
6. Haladhara Das  
Sr. Surveyor, Koira *Haladhara*  
13/8/13
7. Chandra Sekhar Ghorogam  
Sr. Dergeh *Chandra*  
13/8/13



AREA STATISTICS OUTSIDE ML	
Sub-Catagory	Area_Ha.
Agricultural Land	1.221
Barren Land	1.641
Dump Yard	1.619
Dump Yard OMM	1.505
Open Ground	0.903
Plantation	1.367
Road	0.064
Vacant Land	1.109
<b>Total Area =</b>	<b>9.429</b>

TS SURVEY OF MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
( NUAGAON MANGANESE MINES OF M/S TARINI MINERALS)



# **JOINT SURVEY REPORT**

**MINING LEASE: Kundrupani Iron & Manganese Mines**

**LESSEE/MINE OWNER: M/s R.B. Das**

**1. Name of the Mining lease: *Kundrupani Iron & Manganese Mines***

**2. Name of the Lessee: M/s R.B. Das**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map was referenced with geo-referenced lease deed map and then vectorised for computing the land use area statistics. The area statistics is in Annexure-C.

**Map enclosed:**

- i. Proposed Land use Map in vector format

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-

referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

**Map enclosed:**

- i. Geo-referenced Lease Deed map in vector format.

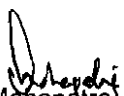
## **7. Comparison of lease map:**

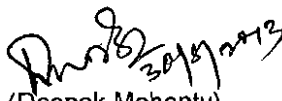
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that the shape of polygon in both cases is almost same and there is significant shift towards eastern side. Lease area computed in three different ways is tabulated below.

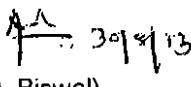
As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
10.255 hectares	10.475 hectares	10.228 hectares

**Map enclosed:**

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 30.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE  
AREA BY TEAM-1, JODA CIRCLE IN PURSUANCE TO THE DECISION OF THE  
HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Date: 13.08.2013

Kundurpani Iron & Mn.Ore Mines  
Sri R.B.Das.

1. The T.S. Data taken in the field in presence of lessee/ representative has been checked and validated in the laboratory in presence of team members as well as lessee/representative & found correct.
2. The areas adjacent to the lease boundary with some mining related activity were captured through T.S. survey. The same was also validated by the team members in presence of lessee/representative. The details of such patches are given below.

3.

Patch No.	Area marked as working encroachment in Shah Commission communication	Description
Patch-1	*	Nala in between M.L.Pillar No. D to A
Patch-2	*	Nala in between M.L.Pillar No. D to A
Patch-3	*	Nala in between M.L.Pillar No. D to A
Patch-4	*	Vacant land in between M.L.Pillar No. D to A
Patch-5	'C'	Vacant land in between M.L.Pillar No. D to A
Patch-6	'C'	OB in between M.L.Pillar No. D to A
Patch-7	'C'	OB in between M.L.Pillar No. D to A
Patch-8	'C'	Vacant land in between M.L.Pillar No. D to A
Patch-9	*	Road in between M.L.Pillar No. D to A
Patch-10	*	Road near M.L.Pillar No. B
Patch-11	*	Nala near M.L.Pillar No. B
Patch-12	'B'	Sub grade dump 301 meter from LP B
Patch-13	'B'	Quarry about 301 meter from LP B

Patch-14	'B'	Quarry about 428 meter from LP B
Patch-15	*	Quarry inside to outside lease in between M.L. Pillar B to C
Patch-16	*	OB inside to outside lease in between M.L. Pillar B to C
Patch-17	*	OB adjacent to M.L. Pillar B to C
Patch-18	*	Stack yard inside to outside lease in between ML Pillar B to C
Patch-19	'D'	Quarry about 240 meter from ML Pillar C
Patch-20	'D'	Dump about 240 meter from ML Pillar C
Patch-21	'A'	Quarry about 1048 meter from ML Pillar C in between river Kundaramala is flowing
Patch-22	*	Playground near ML Pillar D extending inside to outside lease
Patch-23	*	Playground near ML Pillar D extending inside to outside lease
Patch-24	*	Vacant land near ML Pillar D extending inside to outside lease
Patch-25	*	Nala adjacent to boundary line in between ML Pillar A to D

\*These patches are not shown as working encroachment in Shah Commission communication.

SIGNATURE  
(Lessee/Representative)

Proceedi a vohela  
a 200 m piece  
a 100 representu d  
been a all survey  
ten meter. now, item  
representation decided to 11,

SIGNATURE  
(Team Members)

1. ANIL KUMAR KANUNGO kanungo  
13.08.2013
2. Benurk Kh. Sehwal Benurk  
13.8.13
3. Poomod K. R. Pehesa Poomod  
13/8/13
4. Shree Ramapad Aralinda Moshre Shree  
Ranga Hecr Champar 13/08/12
5. Panchanan Naik Panchanan  
Forester, Joda 13/8/13

## Annexure-B

LAND USE AREA STATISTICS OF ML	
Kundrupani Iron & Manganese Mines	
SUB-CATEGORY	AREA-HA
Old Quarry Pit	0.717
Crusher	0.013
Nala	0.696
Old Quarry Pit	0.001
Over Burden Dump	0.503
Play Ground	0.330
Pucca House	0.030
Quarry Pit	1.230
Road	0.230
Safety Zone	1.335
Semi Pucca House	0.024
Semipucca House	0.001
Shed	0.005
Stack Yard	0.597
Temporary House	0.049
Vacant Land	4.477
Weigh Bridge	0.003
TOTAL AREA	10.241



## Annexure-C

APPROVED LAND USE AREA STATISTICS OF ML	
Kundrupani Iron & Manganese Mines	
CATEGORY	AREA-HA
Hutting	0.151
Dump	0.739
Nala	0.463
Quarry	4.54
Road	0.344
Safety Zone	2.656
Others	1.587
TOTAL AREA	10.48

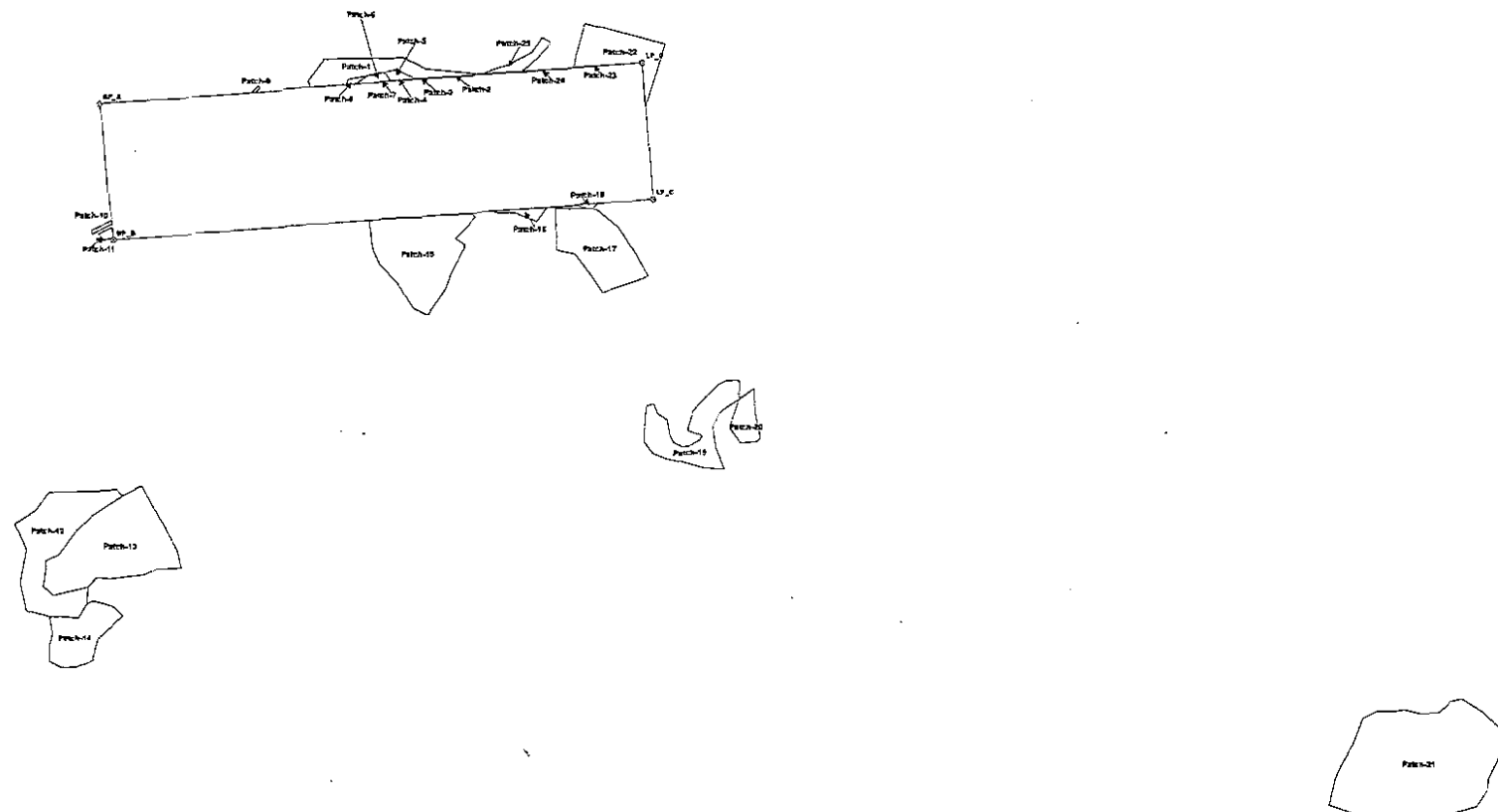
Area outside mining lease

SUB-CATEGORY	AREA-HA
Nala	0.418
Over Burden Dump	0.707
Play Ground	0.422
Quarry Pit	5.051
Road	0.014
Stack Yard	0.009
Sub Grade Dump	0.995
Vacant Land	0.038
<b>TOTAL AREA</b>	<b>7.654</b>

TS SURVEY OF MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
KUNDURUPANI IRON & MANGANESE ORE MINE OF SRI R.B.DAS



SCALE-1:3000  
0 0.075 0.15 0.3 0.45 0.6 Km.



LEGEND	
*	TS Surveyed ML Pillars
	TS Surveyed Lease Boundary
	Adjacent Patches

# **JOINT SURVEY REPORT**

**MINING LEASE : Kusumdihi Manganese  
Mines**

**LESSEE / MINE OWNER : M/s. Orissa Manganese &  
Minerals Ltd.**

**1. Name of the Mining lease: *Kusumdihi Manganese Mines***

**2. Name of the Lessee: M/s Orissa Manganese & Minerals Ltd**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map was referenced with geo-referenced lease deed map and then vectorised for computing the land use area statistics. The area statistics is in Annexure-C.

**Map enclosed:**

- i. Proposed Land use Map in vector format

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-

referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

**Map enclosed:**

- i. Geo-referenced Lease Deed map in vector format.

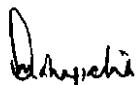
**7. Comparison of lease map:**

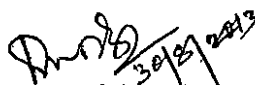
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains almost same, a shift in enjoyment position has occurred towards southern side. Lease area computed in three different ways is tabulated below.


As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
31.549 hectares	29.79 hectares	31.673 hectares

**Map enclosed:**

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 30.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING  
LEASE AREA BY TEAM-2, KOIRA CIRCLE IN PURSUANCE TO THE DECISION  
OF THE HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Name of the Mining Lease : M/s O.M.M. Ltd.

Date : 14-8-2013

Village : Kusumdihi

Name of the Lessee : M/s O.M.M. Ltd.

1. The T.S. data taken in the field in presence of Lessee / Representative has been checked and validated the laboratory in presence of the team members as well as lessee/ representative and found correct.
2. The areas adjacent to the lease boundary with some mining related activity were captured through TS survey. The same also validated by the team members in presence of lessee/ Representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Shah Commission Communication	Description
Patch-1	A*	Road in between Boundary pillar no. 7 & 8
Patch-2	A*	Quarry pit in between boundary pillar No. 17, 18 & 19.
Patch-3	A*	Dump yard at a distance of 39 mtrs from Boundary pillar 18.
Patch-4	A	Dump yard in between pillar no. 22 and BP-1
Patch-5	A	Barren land in between Boundary pillar No. 22 and BP-1
Patch-6	A	Road near BPNo-1
Patch-7	A	Road near BP-1
Patch-8	A	Vacate land at distance of 25 mtrs from BP-1

Patch -9	A	Road at distance of 19 mtrs from BP-1
Patch-10	A	Barrel land at a distance of 15 mtrs from BP-1
Patch-11	A	Grave yard at a distance of 99 mtrs from BP-1
Patch-12	A	Wastage materials at a distance of 183 mtrs from BP No. 1
Patch-13	A	Dump yard at a distance of 303 mtrs from BP No.-1
Patch-14	A	Pond at a distance of 218 mtrs from BP No. 1
Patch-15	A	Dump yard at a distance 200 mtrs from BP No.1
Patch-16	A	Boundary wall at a distance of 271 mtrs from BP No.1
Patch-17	A	Petrol pump at a distance 280 mtrs from BP No.1
Patch-18	A	Petrol pump at a distance 294 mtrs from BP No.1
Patch -19	A	Crosser Plant at a distance 136 mtrs from BP No.1
Patch – 20	A	Boundary at a distance 132 mtrs from BP No.1
Patch-21	A	Fines stack at a distance 138 mtrs from BP No.1
Patch-22	A	Boundary wall at a distance 120 mtrs from BP No.1
Patch-23	A	Barrel land at a distance 131 mtrs from BP No.1
Patch-24	A	Fines stack at a distance 25 mtrs from BP No.1
Patch-25	A	Boundary wall at a distance 74 mtrs from BP No.1



Patch-42	A	Passenger shed at a distance 85 mtrs from BP No. 3.
----------	---	---

\* These patches were not shown as working encroachment in Shah Commission Communication.

*P. Jesh*  
14/8/13  
SIGNATURE

(Lessee/Representative)

Representation of Lessee:-

On the above finding related to DGPS Survey of our Kusumdihi Mn mine in Series 'A' ~~4~~ <sup>13</sup> are not related to us except patch No '4'. It is explained in the enclosed representation in separate sheet.

*P. Jesh*  
14/8/13

SIGNATURE

(Team Members)

1. Sri A.K. Mohanty  
TA'B', ORSAC *[Signature]* 14.8.13
2. Sri S.C Barik  
Sr. Inspector of Mines  
DDM, Koira *[Signature]* 14.8.13
3. Sri Suresh Behera  
Surveyor, The Director of Mines *[Signature]* 14.8.13
4. Sri Ashok Kumar Biswal  
Range Officer, Koira  
Banai Forest Division *[Signature]* 14.8.13
5. Sri Narayan Chandra Behera  
Forester, Ranisal,  
Bonai Forest Division *[Signature]* 14.8.13
6. Sri Biranchi Bag,  
R.I. Sadar Tahasil, Sundargarh *[Signature]* 14.8.13
7. Sri Dandadhar Nayak  
Amin, L.A. Section Collectorate  
Sundargarh *[Signature]* 14.8.13

**REPRESENTATION ON FINDINGS OF DGPS SURVEY OF KUSUMDIHI MANGANESE MINE****1. Spreading of overburden dump near Boundary Pillar no 22.**

Kusumdihi Manganese Mining Lease originally held by M/s. Young & Company during 1939. Subsequently M/s. Young & Company transferred all these lease areas to the Central Province Manganese Ore Limited to operate the said leases up to 1955. Subsequently the mining lease areas have been transferred in favour of M/s. Orissa Manganese & Minerals Pvt. Ltd. by the day of transfer of lease deed executed on 25.8.1955. The first renewal for the said mines was granted in favour of M/s. Orissa Manganese & Minerals Private Limited for a period of 20 years from 1.1.1960 to 31.12.1979 over an area of 31.549 hectares. The deed in respect to first renewal had been executed on 13.5.1969. The second renewal for the above Mining Leases was granted for a further period of 20 years from 1.1.1980 to 31.12.1999. The Lease Deed for 2<sup>nd</sup> renewal was executed on 1.1.1981. The company applied for 3<sup>rd</sup> renewal on 21.12.98.

This is a very old mine working since 1939. Presently due to want of forest clearance the mine is not in operation since 2004. As a result the Overburden dumps near Boundary Pillar no 22 collapsed and spread across the M L Boundary. We have no option to rectify the same but to wait till working permission granted to us.

**2. Encroachment by quarry between Boundary Pillars 17 to 19**

In the mine our mining and allied activities are mostly confined to north, north central and eastern part of the lease area. During 2004 at the time of geological mapping we found quarries with bauxite mineralization faces near pillar no 17,18 & 19 extended from the adjacent mining lease of M/s Rungta Sons (P) Ltd., Kamando Bauxite & Manganese Mine. Immediately we informed the matter to DDM, Koira Circle, Koira for necessary action. Copy of the intimation letter is enclosed herewith for your kind perusal.

  
MANAGER  
KUSUMDIHI Mn. MINES  
M/S. ORISSA MANGANESE & MINERALS LTD.  
AT/PO: KOIRA, DIST: SUNDARGARH  
ODISHA - 750048

**ORISSA MANGANESE & MINERALS PVT. LTD.**

MINE OWNERS ★ MINERS ★ EXPORTERS

Head Office :

8, ESPLANADE MANSIONS  
14, GOVT. PLACE (EAST)  
KOLKATA - 700 069  
PH. : 2434176  
2434177  
248-2871  
FAX : 033 248-3717

Mines :

P. O. KOIRA - 770 048  
DIST. SUNDARGARH  
ORISSA  
PH. 0661 - 4735063

Ref. No. C/DDM-24/ 243 /04

Date 9.12.2004

To,  
The Dy. Director of Mines,  
Koira Circle,  
K o i r a.

Sub : Information regarding encroachment by Rungta Sons(P)Ltd.  
within our Kusumdhī Mn.Mines lease area.

Dear Sir,

We have the honour to write the following lines for your kind information that there is a lease named as Kamando Manganese and Buxite Mines of Rungta Sons(P)Ltd., adjacent to our Kusumdhī Mn.Mines over 31.459 ha at village Kusumdhī in south direction.

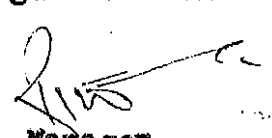
Rungta Sons(P)Ltd. has been encroached our lease area in between boundary pillar No.17 - 19. by quarrying and extracting Buxite Ore illegally.

This is for your kind information and necessary action.

Thanking you,

Yours faithfully,

for Orissa Manganese &amp; Minerals(P)Ltd.

  
Manager  
( Admn. & Legal )

## Annexure-B

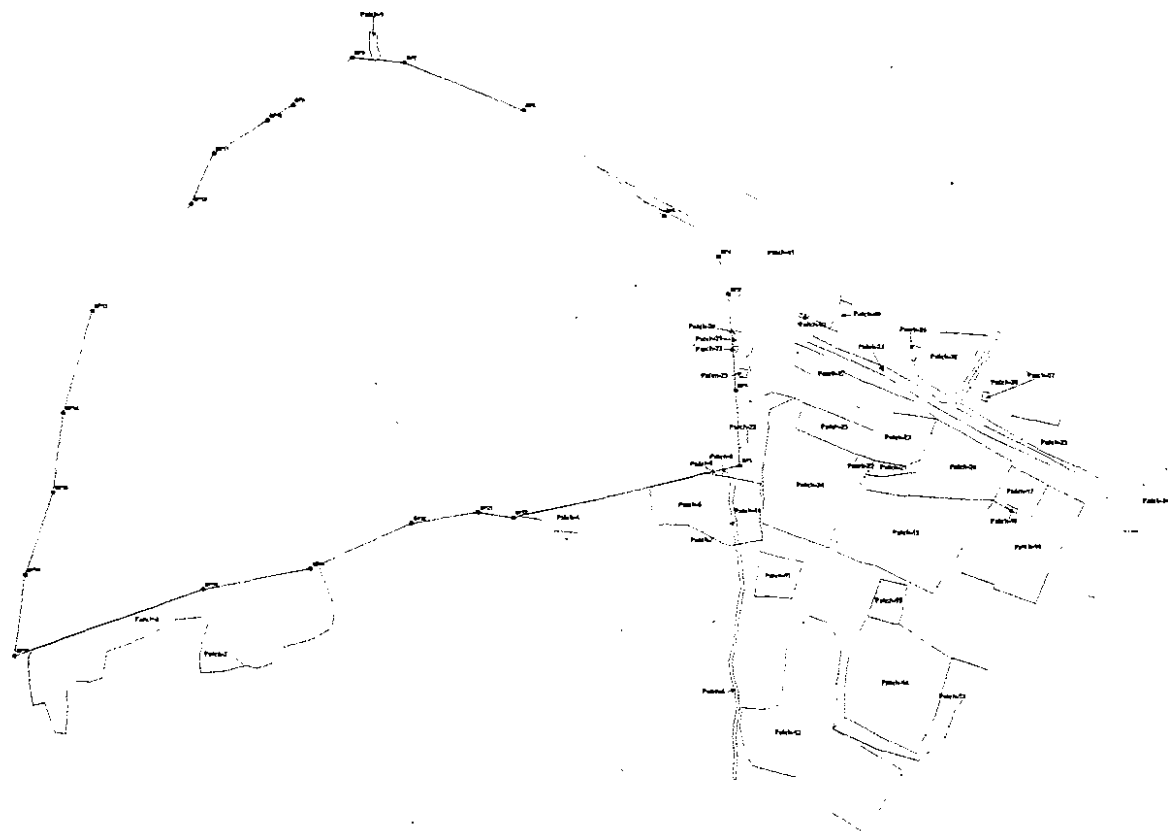
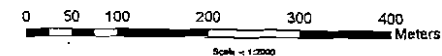
PRESENT LAND USE AREA STATISTICS INSIDE ML	
Kusumdihi Manganese Mines	
SUB-CATEGORY	AREA(Ha)
Barren Land	0.011
Broken Area	10.161
DLC Forest	0.053
Dump Yard	6.237
Labour Collony	0.221
Quarry Pit	6.367
Road	0.922
Safety Zone	1.228
Stack Yard	0.146
Temporary Stack	0.049
Vacant Land	6.286
<b>TOTAL AREA</b>	<b>31.681</b>

## Annexure-C

APPROVED LAND USE STATISTICS INSIDE ML	
Kusumdihi Manganese Mines	
CATEGORY	AREA (Ha)
DLC FOREST	4.046
NH	0.558
PROPOSED DUMPING	1.967
PROPOSED HITING	1.168
PROPOSED MINERAL STOCK	0.268
ROAD	1.174
SAFETY ZONE	2.570
VILLAGE FOREST	3.474
OTHERS	14.493
TOTAL AREA	29.718

Area outside mining lease

SUB-CATEGORY	AREA-HA
Agricultural Land	0.254
Barren Land	3.689
Crusher Plant	1.192
Dump Yard	0.868
Fines Stack	1.195
Graveyard	0.208
Labour Collony	0.040
Market Area	0.282
Pasenger Shed	0.003
Petrol Pump	0.199
Pond	1.197
Quarry Pit	1.958
Residentrial Area	0.275
Road	0.857
Temporary Hut	0.007
Vacant Land	0.006
Wall Boundary	1.791
Westage Metarials	1.839
<b>TOTAL AREA</b>	<b>15.860</b>



- Ts Surveyed ML Pillars
- Ts Surveyed Lease Boundary
- Adjacent Patches

# **JOINT SURVEY REPORT**

**MINING LEASE: Nuagaon Iron & Manganese Mines**

**LESSEE / MINE OWNER :M/s. S.D. Sharma**



**1. Name of the Mining lease: Nuagaon Iron & Manganese Mines**

**2. Name of the Lessee: M/s SD Sharma**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map is not available.

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

**Map enclosed:**

- i. Geo-referenced Lease Deed map in vector format.

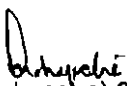
**7. Comparison of lease map:**

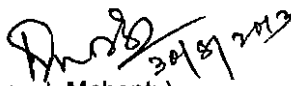
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains almost same, a shift in enjoyment position has occurred towards south-eastern side. Lease area computed in three different ways is tabulated below.

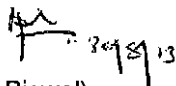
As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
12.942 hectares	12.726 hectares	12.602 hectares

**Map enclosed:**

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 30-6-13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING  
LEASE AREA BY TEAM 2 KORA CIRCLE IN PURSUANCE TO THE DECISION  
OF THE HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Name of the Mining Lease : Nuagaon Iron & Mn Mines.

Date : 13-8-2013

Name of the Lessee : S.D. Sharma

1. The T.S. data taken in the field in presence of Lessee / Representative has been checked and validated the laboratory in presence of the team members as well as lessee/ representative and found correct.
2. The areas adjacent to the lease boundary with some mining related activity were captured through TS survey. The same also validated by the team members in presence of lessee/ representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Sah Commission Communication	Description
Patch-1	A*	Temporary start in between lease pillar no. 6 & 7.
Patch-2	A*	Quarry pit in between boundary pillar 8 & 9.
Patch-3	A*	Quarry pit in between boundary pillar 9 & 10.
Patch-4	A	Vacant land in between boundary pillar No. 9 and 11.
Patch-5	A	Vacant land in between boundary pillar No. 11 and 1.
Patch-6	A	Barrel land in between boundary pillar no. 11 and 1.
Patch-7	A	Barrel land in between boundary pillar no. 11 and 1.
Patch-8	A	Dump yard in between boundary pillar no. 11 and 1

Patch-9	A	Road connecting to the lease area near pillar no. 1
Patch-10	A	Residential area at a distance of 250 mtrs from Boundary pillar no. 1
Patch-11	A	Weigh bridge a distance 240mtrs from Boundary pillar No.1
Patch -12	A	Barrel land at a distance of 130 mtr from Boundary Pillar.No. 1
Patch -13	A	Dump yard at a distance of 50 mtr from Boundary Pillar No. 1
Patch -14	A	Quarry pit near Boundary Pillar No.1
Patch -15	A	Fines stack in between boundary pillar No. 3 and 4.
Patch -16	A	Quarry pit in between Boundary Pillar No. 4 and 5.

\* These patches were not shown as working encroachment in Sahah Commission communication.

#### SIGNATURE

(Lessee/Representative)

#### SIGNATURE

(Team Members)

1. Sri A.K. Mohanty  
TA'B', ORSAC
2. Sri S.C Barik  
Sr. Inspector of Mines  
DDM, Koira
3. Sri Suresh Behera  
Surveyor, The Director of Mines
4. Sri Ashok Kumar Biswal  
Range Officer, Koira  
Banai Forest Division
5. Sri Narayan Chandra Behera  
Forester, Ranisal,  
Bonai Forest Division
6. Sri Biranchi Bag,  
R.I. Sadar Tahasil, Sundargarh
7. Sri Dandadhar Nayak  
Amin, L.A. Section Collectorate  
Sundargarh

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13-8-13

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13-8-13

## Annexure-B

PRESENT LAND USE AREA STATISTICS INSIDE ML	
Nuagaon Iron & Manganese Mines	
SUB-CATEGORY	AREA (Ha)
Dump Yard	1.273
Fines Stack	0.145
Magazine	0.033
Quarry Pit	3.455
Road	0.366
Safety Zone	0.000
Safety Zone	0.424
Temporary Stack	0.540
Vacant Land	6.367
TOTAL AREA	12.604

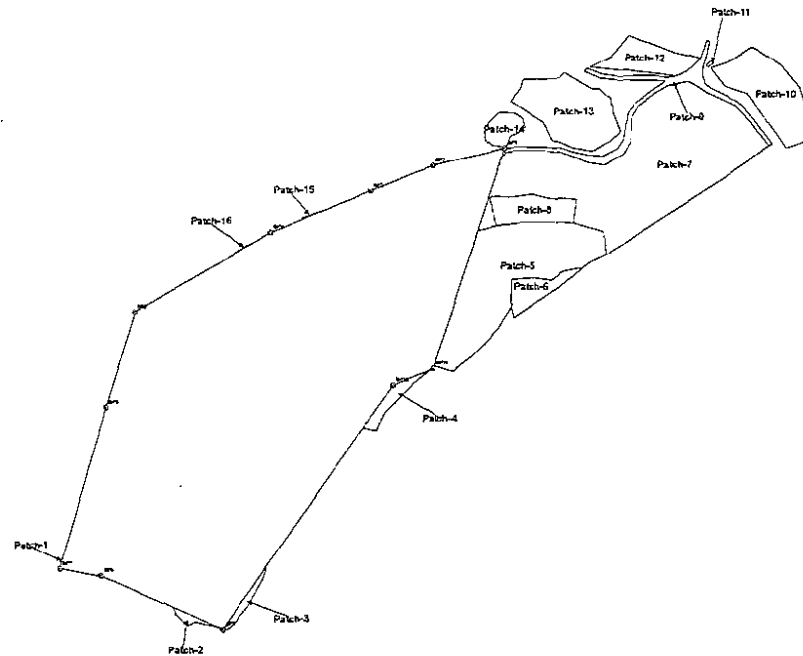
Area out side mining lease

CATEGORY	AREA-HA
Barren Land	2.987
Dump Yard	0.890
Fines Stack	0.002
Quarry Pit	1.499
Residential Area	0.581
Road	0.307
Temporary Stack	0.000
Vacant Land	0.098
Weigh Bridge	0.002
<b>TOTAL AREA</b>	<b>6.367</b>

MAP SHOWING TS SURVEY MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
OF  
Nuagaon Iron & Mn Mines ( S.D.Sharma)



0 50 100 200 300 400 Meters  
Scale = 1:2000



Legend

- ⊙ TS Surveyed ML Pillars
- ▭ TS Surveyed Lease Boundary
- ▭ Adjacent Patches

# **JOINT SURVEY REPORT**

**MINING LEASE: Bhanjapali Iron Ore Mines**

**LESSEE / MINE OWNER : M/s. J.N. Pattnaik**



**1. Name of the Mining lease: *Bhanjapali Iron Ore Mines***

**2. Name of the Lessee: M/s JN Pattnaik**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map is not available.

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

Map enclosed:

- i. Geo-referenced Lease Deed map in vector format.

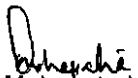
## 7. Comparison of lease map:

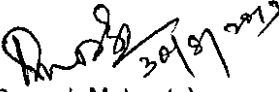
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains almost same, a shift in enjoyment position has occurred towards south-western sides. Lease area computed in three different ways is tabulated below.


As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
18.00 hectares	20.993 hectares	21.598 hectares

Map enclosed:

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra)  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING  
LEASE AREA BY TEAM 2 KOIRA CIRCLE IN PURSUANCE TO THE DECISION  
OF THE HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Name of the Mining Lease : Bhanjapalli Iron Mines

Date : 14-8-2013

Name of the Lessee : J.N. Pattanaik

1. The T.S. data taken in the field in presence of Lessee / Representative has been checked and validated the laboratory in presence of the team members as well as lessee/ representative and found correct.
2. The areas adjacent to the lease boundary with some mining related activity were captured through TS survey. The same also validated by the team members in presence of lessee/ representative. The details of such patches are given below. *Outside the Lease area*

Patch No.	Area marked as working encroachment in Saha Commission Communication	Description
Patch-1	B	Dump yard in between BP-A and BP-Q.
Patch-2	B	Query pit at a distance 31 mtrs from BP-A
Patch-3	B	Query pit at a distance 31 mtrs from BP-A & BP-A1
Patch-4	C	Query pit in between BP-B & BP-A3
Patch-5	C	Dum yard in between BP-A3 & BP-B
Patch-6	C	Abounded crosser plant adjacent to Boundary Line in between BP-B, BP-C & BP-I & BP-J
Patch-7	C	Fines Stack adjacent to Boundary Line in between BP-C & BP-D
Patch-8	C	Stack yard adjacent to Boundary Line in between BP-D & BP-C

Patch-9	C	Query pit adjacent to Boundary line in between BP-J & BP-K
Patch-10	A	Barrel and adjacent to Boundary line in between BP-K, BP-K3 & BP-L
Patch-11	A	Query pit adjacent to Boundary line in between BP-K & BP-K3
Patch -12	A	Residential area at a distance 34 mtrs from Boundary pillar BP-L
Patch -13	A	Pucca House at a distance 41 mtrs from BP-L
Patch -14	A	Stack yard adjacent boundary line in between BP-L & BP-M
Patch -15	A	Security room at a distance 38 mtrs from BP- N
Patch -16	A	Road adjacent to Boundary line in between BP-L & BP-M
Patch-17	A	Vacant land adjacent to Boundary line BP-L & BP-M.
Patch-18	A	Barrel land adjacent boundary line in between BP-M, BP-N & BP-O.
Patch-19	A	Abounded house at a distance 1.8 mtrs from BP-N.
Patch-20	A	Residential area at a distance 90 mtrs from BP-L.
Patch-21	A	Arabinda Junior School at a distance 92 mtrs from BP-L.
Patch-22	A	Pucca well at a distance 82 mtrs from BP-L.
Patch-23	A	Parking zone at a distance 31 mtrs from BP-N.
Patch-24	A	Barrel land adjacent to Boundary Line BP-P.

Patch-25	A	Under construction at a distance 28 mtrs from BP-L.
Patch-26	A	Road adjacent boundary line in between BP-P, BP-P1 & BP-P2.

# SIGNATURE

(Lessee/Representative)

# SIGNATURE

(Team Members)

1. Sri A.K. Mohanty  
TA'B', ORSAC
2. Sri S.C Barik  
Sr. Inspector of Mines  
DDM, Koira,
3. Sri Suresh Behera  
Surveyor, The Director of Mines
4. Sri Ashok Kumar Biswal  
Range Officer, Koira  
Banai Forest Division
5. Sri Narayan Chandra Behera  
Forester, Ranisal,  
Bonai Forest Division
6. Sri Biranchi Bag,  
R.I. Sadar Tahasil, Sundargarh
7. Sri Dandadhar Nayak  
Amin, L.A. Section Collectorate  
Sundargarh

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14.8.13

## Annexure-B

PRESENT LAND USE AREA STATISTICS INSIDE ML	
Bhanjapali Iron Ore Mines	
SUB-CATEGORY	AREA (Ha)
Abondon Crusher Plant	0.026
Crusher Plant	0.088
Dump Yard	3.151
Fines Stack	0.246
Hutment Area	0.173
Pucca House	0.010
Quarry Pit	8.239
Road	0.102
Safety Zone	0.948
Semipucca House	0.002
SemiPucca House	0.013
Stack Yard	0.525
Temporary Hut	0.003
Temporary Stack Yard	0.038
Vacant Land	8.023
Weigh Bridge	0.011
<b>TOTAL AREA</b>	<b>21.598</b>

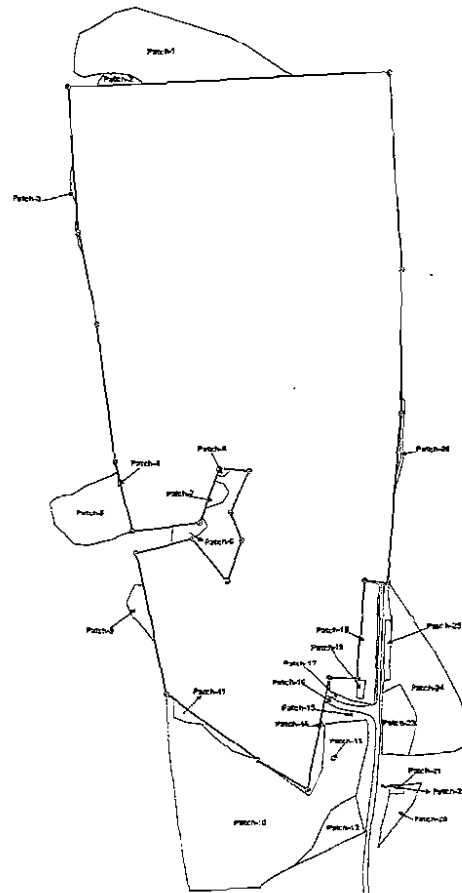
Area outside lease boundary

SUB-CATEGORY	AREA-HA
Abondon Crusher Plant	0.063
Abondon House	0.016
Arbind Jr.School	0.014
Barren Land	3.786
Dump Yard	1.744
Fines Stack	0.041
Parking Zone	0.244
Pucca House	0.002
Pucca Well	0.001
Quarry Pit	0.212
Residential Area	0.342
Road	0.224
Security Room	0.001
Stack Yard	0.010
Under Construction	0.044
Vacant Land	0.059
<b>TOTAL AREA</b>	<b>6.803</b>

MAP SHOWING TS SURVEY MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
OF  
Bhanjapalli Iron & Mn. Mines(J.N.Pattnaik)



0 50 100 200 300 400 Meters  
Scale = 1:2000



Legend

- ⊙ Ts Surveyed ML Pillars
- Ts Surveyed Lease Boundary
- ▭ Adjacent Patches



# **JOINT SURVEY REPORT**

**MINING LEASE: Guruda Manganese Mines**

**LESSEE/MINE OWNER: M/s Serajuddin &Co.**

**1. Name of the Mining lease: *Guruda Manganese Mines***

**2. Name of the Lessee: M/s Serajudin & Co.**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map is not available as per report of the Divisional Forest Officer, Keonjhar.

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

**Map enclosed:**

- i. Geo-referenced Lease Deed map in vector format.

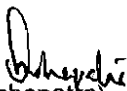
**7. Comparison of lease map:**

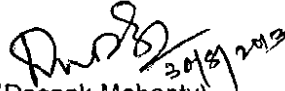
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that the shape of polygon in both cases is almost same and there is a little deviation on east side. Lease area computed in three different ways is tabulated below.


As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
40.064 hectares	39.317 hectares	39.32 hectares

**Map enclosed:**

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 30.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal) 30/8/13  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE  
AREA BY TEAM - 3, JODA CIRCLE IN PURSUANCE TO THE DECISION OF THE  
HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Date: 14.08.2013

Name of the Mining Lease - Guruda Manganese Mines

Name of the Lessee - M/s Serajuddin & Co.

1. The TS data taken in the field in presence of lessee/ representative has been checked and validated in the laboratory in presence of the team members as well as lessee/ representative and found correct.
2. Areas adjacent to the lease boundary with some mining related activity were captured through TS survey. The same also validated by the team members in presence of lessee/ representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Shah Commission Communication	Description
Patch No.1	D	Manganese quarry near boundary pillar No.2 and continued upto safety zone of surveyed lease hold area. As per the lessee's statement it is done prior to the grant of lease. Letter of clarification of M/s OMC SGBK Mines Guruda is at Annexure-1.
*Patch No.2	-	Barren land about 16 m away from lease boundary pillar No.2
*Patch No.3	-	Manganese quarry about 200m away from boundary pillar No.2 As per the lessee's statement it is done prior to the grant of lease. Letter of clarification of M/s OMC SGBK Mines Guruda is at Annexure-1.
Patch No.4	C	Old dump continuing from inside lease hold area to outside adjacent to boundary pillar No.3 As per the lessee's statement it was done prior to grant of lease.
Patch No.5	C	Manganese quarry near boundary pillar No.4 and continued upto safety zone of surveyed lease hold area. As per the lessee's statement it is an activity of OMC. Letter of clarification of M/s OMC SGBK Mines Guruda is at Annexure-1.

Patch No.6	C	Manganese quarry near boundary pillar No.5 and continued upto safety zone of surveyed lease hold area. As per the lessee's statement it was done prior to grant of lease.
*Patch No.7	-	Dump about 98 m away from lease pillar No.4
*Patch No.8	-	Manganese quarry about 98 m away from lease pillar No.4
*Patch No.9	-	Road continuing from the OMC lease hold area to surveyed lease area.
Patch No.10	B	Manganese quarry adjacent to boundary pillar No.9 touching safety zone of surveyed lease hold area. As per the lessee's statement it is an activity of OMC. Letter of clarification of M/s OMC SGBK Mines Guruda is at Annexure-1.
*Patch No.11	-	Old dump continuing from inside lease hold area to outside adjacent to boundary line between pillar No.18 & 19 As per the lessee's statement it was done prior to grant of lease.
*Patch No.12	-	Govt. school
*Patch No.13	-	Road near pillar No.2
*Patch No.14	-	Road between pillar No.21 & 22
*Patch No.15	-	Road between pillar No.23 & 24
*Patch No.16	-	Road between pillar No.1 & 27
*Patch No.17	-	Road near pillar No.1

\* These patches are not shown as working encroachment in Shah Commission communication.

3. Area marked as working encroachment 'A' in Hon'ble Shah Commission communication is found well inside the present surveyed boundary.

SIGNATURE  
(Lessee/Representative)

SIGNATURE  
(Team Members)

proceedings and validation is done in presence of Lessee/Representative and all the survey team members. However Lessee/Representative decline to sign.

- Prasanta Kumar Sarangi  
Scientist, ORSAT 14/8/13
- Pranab Kumar Samal, Revenue Inspector, Boudha Tahsil 14/8/13
- Dhoushendra Ghoshal, Amin Telkoi Tahsil 14/8/13
- Ramesh Chandra Jena, Forest Range Officer Boudha 14/08/13
- Abhiram Mishra, Forest Officer, Guadi 14/08/2013
- Suresh Kumar Samal, I.T.M, Joda, Cutki 14/8/13

ANX-1

Annexure-1

70

**CIVIL**

**THE ODISHA MINING CORPORATION LIMITED**

**(A GOLD CATEGORY STATE PSU)**

**(A GOVT. OF ODISHA UNDERTAKING)**

**S.G.B.K. MINES, GURUDA.**

AT/PO. GURUDA VIA JODA DIST. KEONJHAR PIN NO. 758034

L.No. 610/OMC/SGBK/13

To,

The DDM, Joda.

Sub: - Verification of working pit adjacent to the lease boundary of M/S Serajuddin & Co. of Guruda and M.L. Rungta Mines of Salfora -- Kalimati area.

Ref. No:-270/Nims Dt:- 08-08-13.

Sir,

With reference to the letter and subject cited above, we would like to inform that we inspected and verified the status of Mining pits adjacent to M/s. Serajuddin & Co. Guruda and M/s. M.L. Rungta (Salfora, Kalimati area), which are shown as encroachment by the Hon'ble Justice Saha Commission of enquiry. In actual these mining pits are coming under lease hold area of SGBK mines, which is adjacent to M.L. Rungta, Salfora and M/s Serajuddin & Co. Guruda. Said mining activities had been done many years ago by Ex-lease M/S Serajudin & Co. and OMC Ltd. within lease area of 1011.47 Hect. No encroachment mining pits are being found by the adjacent lessee within SGBK lease hold area.

This is for your kind information and necessary action.

Yours Faithfully,

*[Signature]*  
Manager (Mining)

SGBK Mines.

10571  
14-8-13

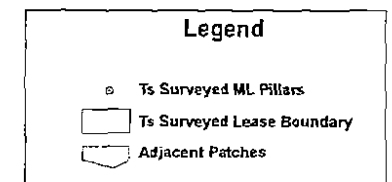
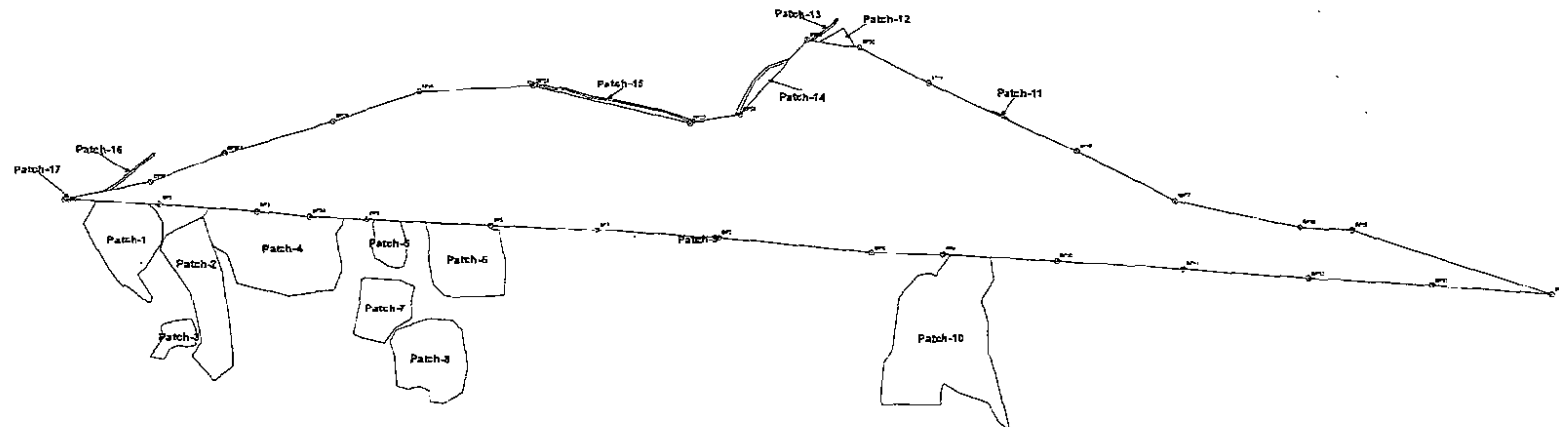
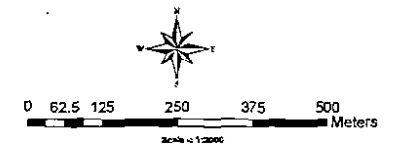
## Annexure-B

LAND USE AREA STATISTICS INSIDE ML Guruda Manganese Mines	
Sub-Category	Area-Ha.
Manganese Quarry Pit	5.081
Old Dump	5.429
Barren Land	23.789
Office	0.346
Old Dump	0.042
Quarry Pit	0.001
Road	0.125
Safety Zone	3.048
School	0.223
Semipucca House	0.079
Stack Yard	1.131
Vacant Land	0.027
Total Area =	39.321

AREA STATISTICS OUTSIDE ML	
Sub-Category	Area-Ha.
Manganese Quarry Pit	8.558
Old Dump	2.589
Barren Land	1.626
Dump Yard	0.817
Old Dump	0.011
Road	0.197
School	0.084
Total Area =	13.882



MAP SHOWING TS SURVEY MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
OF  
M/S Serajudin and Co. (Guruda)



# **JOINT SURVEY REPORT**

**MINING LEASE: Jaribahal Iron Ore Mines**

**LESSEE/MINE OWNER: M/s Patnaik Minerals Pvt. Ltd.**

**1. Name of the Mining lease: Jaribahal Iron Ores Mines**

**2. Name of the Lessee: M/s Patnaik Minerals Pvt. Ltd.**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map is not available in DFO's office.

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

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**Map enclosed:**

- i. Geo-referenced Lease Deed map in vector format.

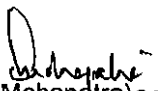
**7. Comparison of lease map:**


TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that the shape of polygon in both cases is almost same and there is slight deviation in eastern and south-eastern sides. Lease area computed in three different ways is tabulated below.

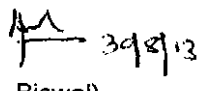
As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
106.53 hectares	109.424 hectares	107.44 hectares

**Map enclosed:**

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 20.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE  
AREA BY TEAM-3, JODA CIRCLE IN PURSUANCE TO THE DECISION OF THE  
HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

**Jaribahal Iron Ore Mines  
M/S Patnaik Minerals Pvt. Limited**

**Date: 14.08.2013**

1. The T.S. data taken in the field in presence of Lessee/Representative has been checked and validated in the laboratory in presence of the team members as well as the Lessee/Representative and found correct.
2. The areas adjacent to the lease boundary with some mining related activity were captured through T.S. Survey. The same was also validated by the team members in presence of Lessee/Representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Shah Commission communication	Description
Patch-1	B	Village road adjacent to the lease between Boundary Pillar No.9 & 10.
Patch-2	B	Garland drain between Boundary Pillar No.9 & 10 continuing from inside lease to outside.
Patch-3	B	Dump adjacent to boundary line between Pillars No.9 & 10.
Patch-4	B	Dump adjacent to boundary line near Boundary Pillar No. 10
Patch-5	B	Dump about 15m.away from Boundary Pillar No.10
Patch-6	B	Old float working area about 10m.away in between Boundary Pillar No.10 & 11
Patch-7	B	Garland drain close to the quarry pit along the boundary line from Pillar No.10 & 11
Patch-8	B	Garland drain adjacent to the boundary line near Pillar No.12
Patch-9	B	Old quarry pit adjacent to Boundary Pillar No.10
Patch-10	B	Vacant land
Patch-11	B	Residential area
Patch-12	B	Old quarry pit adjacent to the boundary line between Pillar No.12 & 13
Patch-13	B	Quarry pit near Boundary Pillar No.12

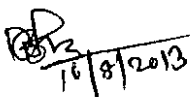
Patch-14	B	Dump about 55m.away from Pillar No.13
Patch-15	B	Road connecting quarry and dump parallel to boundary line between Pillar No.13 to 15
Patch-16	B	Footpath road close to the boundary line between Pillar No.13 & 14
Patch-17	B	Quarry pit adjacent to boundary line between Pillar No.13 & 14
Patch-18	B	Rock debris about 22m.away from boundary line between Pillar No.13 & 14
Patch-19	B	Dump about 18m.away from boundary line between Pillar No.13 & 14
Patch-20	B	Quarry pit adjacent to boundary line between Pillar No.13 & 15
Patch-21	B	Scattered quarry about 55m.away from boundary line between Pillar No.13 & 14
Patch-22	B	Dump near Boundary Pillar No.16. As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached.
Patch-23	B	Sub-grade Stack near Pillar No.17.As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached.
Patch-24	B	Fines Stack nearly 60m.away from boundary line between Pillar No.17 & 18.
Patch-25	B	Sub-grade Stack adjacent to boundary line between Pillar No.18 & 19. As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal.Copies of original lease map and present lease map are attached.
*Patch-26		Sub-grade Stack adjacent to boundary line near Pillar No.19.
*Patch-27		Main road parallel to boundary line from Pillar No.22 to 29.
Patch-28	C	Plantation area adjacent to boundary line between Pillar No.23 to 30.
Patch-29	C	Sub-grade Stack adjacent to boundary line between Pillar No.25 to 28
Patch-30	A	Sub-grade Stack adjacent to boundary line between Pillar No.1 & 30. As per Lessee

		statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached.
Patch-31	A	Approaching public road to the lease area from Main road
Patch-32	A	Barren land and semi-pucca house. As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached.
Patch-33	A	Sub-grade dump adjacent to the boundary line between Pillar No.1 & 2. As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached.
Patch-34	A	Barren land
Patch-35	A	A dump about 180m.away from Pillar No.1. As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached
Patch-36	A	Fines Stack nearly 300m.away from boundary Pillar No.1. As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached
Patch-37	A	Barren land
Patch-38	A	Sub-grade dump about 300m.away from Pillar No.1. As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached.
Patch-39	A	Dump about 300m.away from Pillar No.1. As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached.
Patch-40	A	Dump about 200m.away from boundary line between Pillar No.1 & 2. As per Lessee statement it is relinquished area during the period from 1988 to 1998 lease renewal. Copies of original lease map and present lease map are attached.
*Patch-41		Road

*Patch-42		Residential area
*Patch-43		Teak Plantation between Pillar No.5 & 6

\* These Patches are not shown as working encroachments in Hon'ble Shah Commission communication.

3. As per Lessee's statement the patches shown from Patch-1 to Patch-21 are the old workings of M/S OMC Limited and some put down by miscreants indulging in illegal raising and dumping.

  
16/8/2013


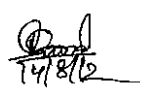
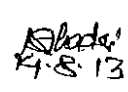
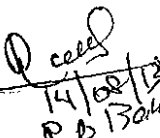
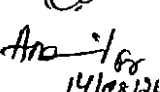
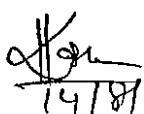

SIGNATURE

(Lessee/Representative)

B. Mohapatra  
for Patnaire Minerals (P) Ltd.  
All Supporting documents submitted

SIGNATURE

(Team Members)

1. Prasanta Kumar Sahoo - Scientist, ORSA. 14/8/13. 
2. Surendra Kumar Sood, Revenue Inspector, Bargarh. 
3. Dhruvendra Ghoshal Amin, Tahsil Tahsil. 
4. Ramesh Chandra Jena, Forest Range Officer, Bargarh. 
5. Abhiram Mohapatra, Forester, Guahati. 
6. Hala dhar Dash, Sr. Surveyor, Mining office, Bargarh. 
7. Surendra K. Samal, Sr. Inspector Mines, DDM office, Joda. 

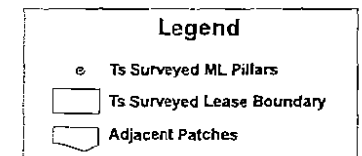
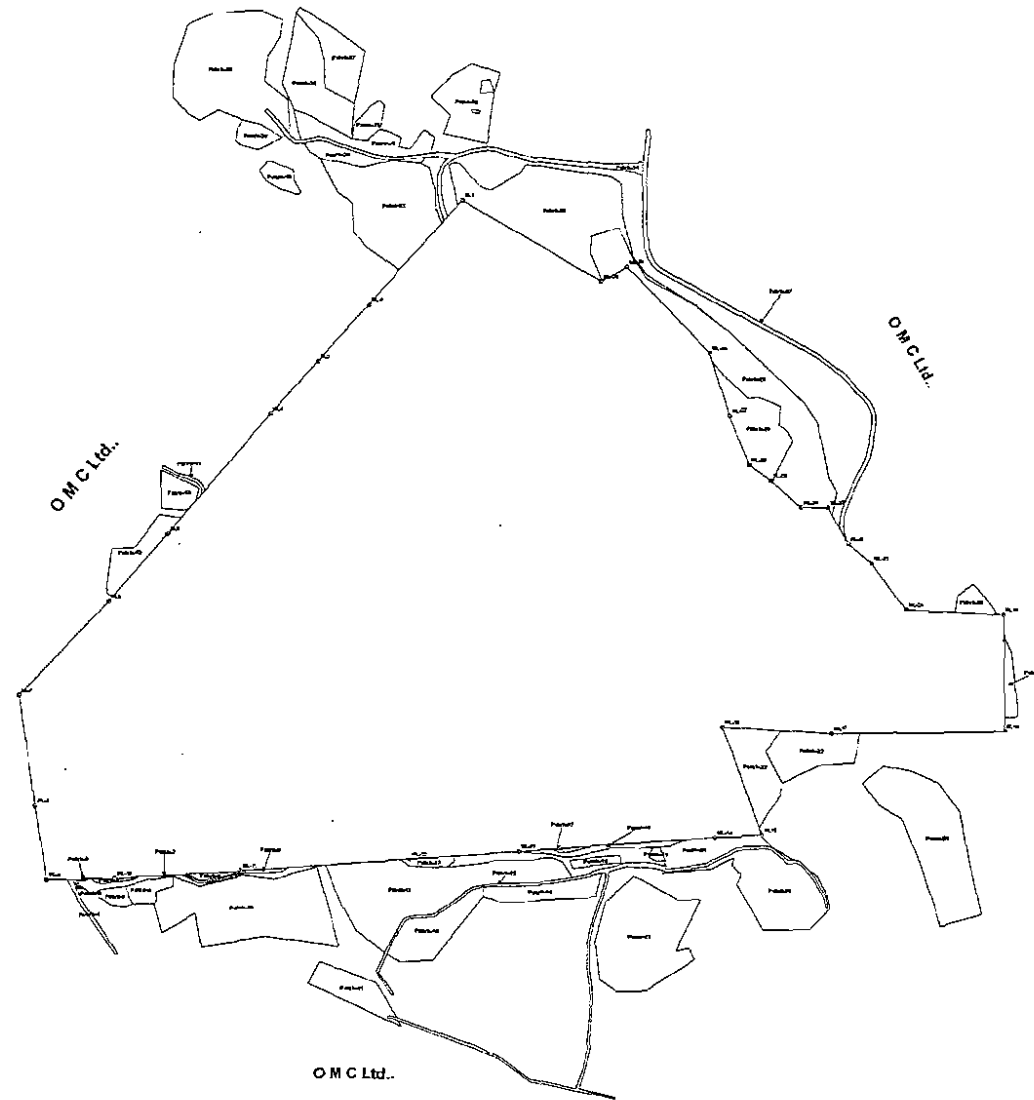
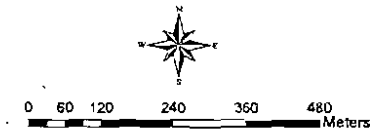


## Annexure-B

LAND USE AREA STATISTICS INSIDE ML	
Jaribahal Iron Ores Mines	
Sub-Category	Area-Ha
Crusher Plant Area	0.072
DLC Forest	0.182
Dump	4.653
Fines Stack	5.563
Float Working Area	0.312
Garland Drain	0.250
Old Quarry Pit	0.130
Plantation	5.017
Pump House	0.036
Quarry Pit	55.627
Residential Area	0.006
Road	3.674
Safety Zone	1.864
Semi Puca House	0.013
Stack Yard	1.466
Subgrade Dump	0.289
Subgrade Stack	6.249
Sugrade Stack	9.363
Vacant Land	10.922
Washing Plant	1.750
Weigh Bridge	0.013
<b>Total Area =</b>	<b>107.451</b>

AREA STATISTICS OUTSIDE ML	
Sub-Category	Area-Ha.
Barren Land	2.623
Dump	2.244
Fines Stack	3.471
Float Working Area	0.218
Garland Drain	0.071
Old Quarry Pit	3.483
Plantation	3.450
Quarry Pit	2.276
Residential Area	0.925
Road	2.174
Rock Debris	0.105
Scattered Quarry	2.329
Semi Puca House	0.046
Subgrade Dump	5.113
Subgrade Stack	1.326
Sugrade Stack	4.011
Vacant Land	2.794
<b>Total Area =</b>	<b>36.659</b>

MAP SHOWING TS SURVEY MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
OF  
Patnaik Minerals Pvt. Ltd (Jaribahal, Palsa Iron & Manganese)



# **JOINT SURVEY REPORT**

**MINING LEASE: Murgabeda Iron Ores Mines**

**LESSEE/MINE OWNER: Sri D.R. Patnaik**

**1. Name of the Mining lease: *Murgabeda Iron Ores Mines***

**2. Name of the Lessee: Sri DR Patnaik**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map was referenced with geo-referenced lease deed map and then vectorised for computing the land use area statistics. The area statistics is in Annexure-C.

**Map enclosed:**

- i. Proposed Land use Map in vector format

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-

referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

Map enclosed:

- i. Geo-referenced Lease Deed map in vector format.

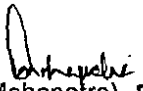
#### 7. Comparison of lease map:

TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that the shape of polygon in both cases is almost same and there is deviation in southern side and eastern side. Lease area computed in three different ways is tabulated below.

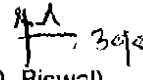
As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
15.378 hectares	15.655 hectares	15.818 hectares

Map enclosed:

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 30.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

\*These patches are not shown as working encroachment in Shah Commission communication.

The western side of said quarry comes within surrender area of M/s B.N. Sarada (Block'A) and southern side comes within lease area of M/s Tarini Minerals Pvt.Ltd., Deojhar.

SIGNATURE  
(Lessee/Representative)

Proceeds of sale of  
is done on premises  
1/5 represent it been  
as all survey team  
members. However, terms  
representation declared by

SIGNATURE  
(Team Members)

1 ANIL KUMAR KANUNGO - 13.08.2013

2 Binata Kumar Seh - 13.8.13

3 Poomod K. Behera - 13/8/13

4. Shree Ramapad Arasinda Mishra  
Range Officer Champen. 13/08/2013

5. Panchanan Naik  
Forester Jod. 13/8/13

## Annexure-B

LAND USE AREA STATISTICS OF ML	
Murgabeda Iron Ores Mines	
SUB-CATEGORY	AREA-HA
Crusher	0.0040
Dispensary	0.0070
Fines Stack	0.0910
Magazine	0.0180
Nala	0.0580
Office Area	0.1290
Pucca House	0.0070
Quarry Pit	8.4950
Residential Area	0.1250
Road	1.1600
Safety Zone	1.0990
Security Room	0.0150
Semi Pucca House	0.0190
Stack-10-33	0.0830
Stack-10-40	0.1320
Stack-5-18	0.1110
Stack 40-20	0.1000
Sub Grade dump	0.8900
Sub Grade Dump	0.3570
Sub Grade Dump-1	0.4340
Temporary House	0.0470
Vacant Land	2.4340
Weigh Bridge	0.0040
TOTAL AREA	15.8190



## Annexure-C

APPROVED LAND USE AREA STATISTICS	
Murgabeda Iron Ores Mines	
CATEGORY	AREA-HA
Dumping	0.4380
Magazine	0.1550
Mining	9.1880
Mining Road	0.3530
Nala	0.0960
Non Forest Area	0.2750
Revenue Road	0.5730
Safety Zone	2.3310
Village Forest	0.0440
OTHERS	2.1650
TOTAL AREA	15.6180

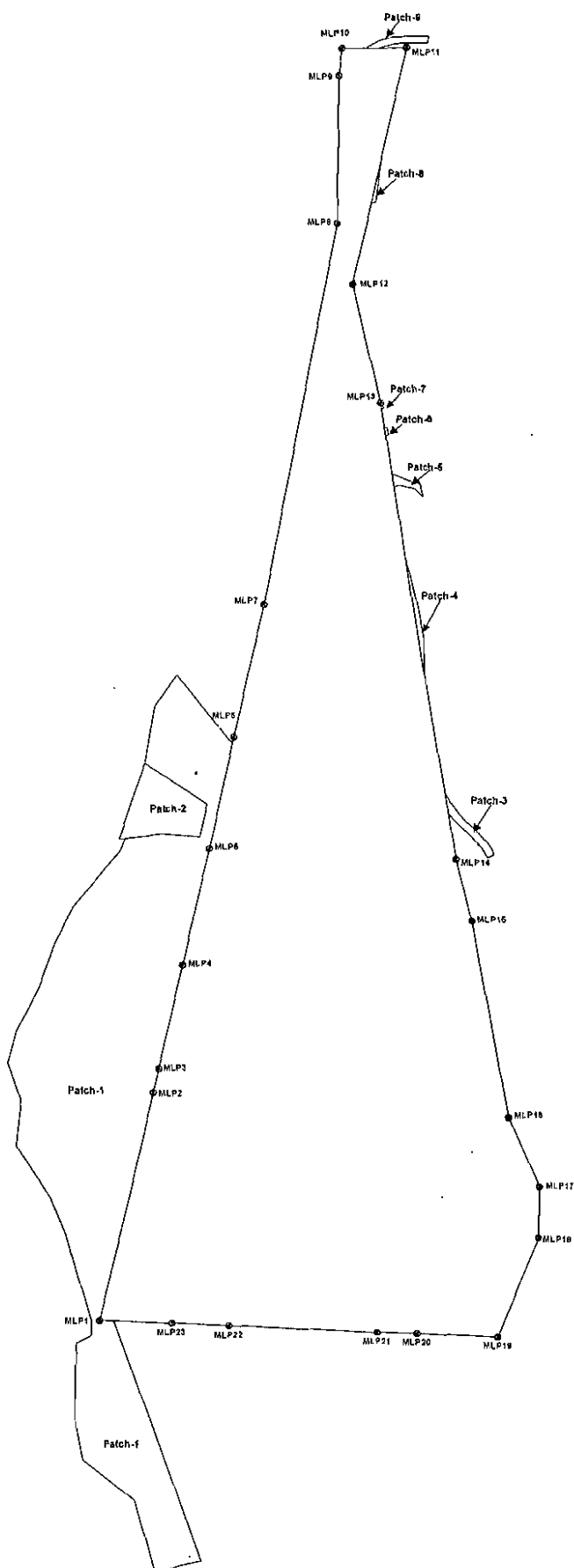
Area outside lease boundary

CATEGORY	AREA-HA
Nala	0.0150
Quarry Pit	4.4280
Road	0.0820
Residential Area	0.0060
Sub Grade Dump	0.2500
Temporary House	0.0010
TOTAL-AREA	4.7820

# TS SURVEY OF MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY MURGABEDA IRON ORE MINE OF SRI D.R.PATTNAIK

SCALE-1:2500

0 0.045 0.09 0.18 0.27 0.36 Km



## LEGEND

- TS Surveyed ML Pillars
- TS Surveyed Lease Boundary
- ◡ Adjacent Patches

## **JOINT SURVEY REPORT**

**MINING LEASE: Gonua Iron & Manganese Mines**

**LESSEE/MINE OWNER: M/s S N Mohanty  
(P K Mohanty)**

**1. Name of the Mining lease: *Gonua Iron & Manganese Mines***

**2. Name of the Lessee: M/s S.N. Mohanty (M/s P.K. Mohanty)**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map was referenced with geo-referenced lease deed map and then vectorised for computing the land use area statistics. The area statistics is in Annexure-C.

**Map enclosed:**

- i. Proposed Land use Map in vector format

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-

referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

**Map enclosed:**

- i. Geo-referenced Lease Deed map in vector format.

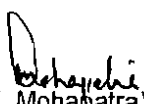
**7. Comparison of lease map:**

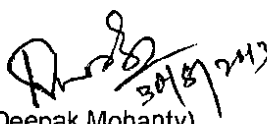
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that the shape of polygon in both cases is almost same but the enjoyment position has shifted towards south eastern side. Lease area computed in three different ways is tabulated below.

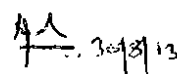
As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
13.796 hectares	14.536 hectares	13.723 hectares

**Map enclosed:**

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 20.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE  
AREA BY TEAM-1, KOIRA CIRCLE IN PURSUANCE TO THE DECISION OF THE  
HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Gonua Iron &amp; Manganese Mines

Date: 14.08.13

M/s S.N. Mohanty (P.K. Mohanty)

1. The T. S. Data taken in the field in presence of Lessee / Representative has been checked and validated in the laboratory in the presence of team members as well as the Lessee / Representative and found correct.
2. The area adjacent to the lease boundary with some mining related activity were captured through T.S. Survey. The same was also validated by the team members in the presence of Lessee/Representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Shah Commission communication.	Description
Patch-1	*	Village road coming from Gonua and passing through the lease area between lease pillars LP-C & LP-D.
Patch-2	*	Village road connecting the patches observed in the field.
Patch-3	'B'	Barren land adjacent to lease boundary between pillar LP-G1 & LP-G2 within the lease area of TISCO Ltd. as per lease records.
Patch-4	'B'	Barren land adjacent to lease boundary between pillar LP-G1 & LP-G2 within the lease area of TISCO Ltd. as per lease records.
Patch-5	'B'	Barren land adjacent to lease boundary between pillar LP-G1 & LP-G2 within the lease area of TISCO Ltd. as per lease records.
Patch-6	'A'	Barren land between lease pillars LP-F & LP-G coming within surrender ML area of V.D. Pandya and partly in TISCO area as per lease records.

Patch-7	'A'	Dump located at a distance of 74m from lease pillar LP-G within surrender ML area of V.D. Pandya as per lease records.
Patch-8	'A'	Dump located at a distance of 108m from lease pillar LP-G within surrender ML area of V.D. Pandya as per lease records. .
Patch-9	'A'	Barren land located at a distance of 125m from pillar LP-G within surrender ML area of V.D. Pandya.
Patch-10	'A'	Quarry pit located at a distance of 160m from pillar LP-G within surrender ML area of V.D. Pandya.
Patch-11	'A'	A dump located at a distance of 212m from lease pillar LP-G within surrender ML area of V.D. Pandya.
Patch-12	'A'	Dump located at a distance 172 m from lease pillar LP-F within surrender ML area of V.D. Pandya.
Patch-13	'A'	A quarry pit located at a distance of 125m from lease pillar LP-F within surrender ML area of V.D. Pandya.
Patch-14	*	Barren land adjacent to the lease boundary about 25m from pillar LP-E1 in non-working encroachment area.
Patch-15	*	Barren land adjacent to the lease boundary about 8m from pillar LP-E1 in non-working encroachment area.

\* These patches were not shown as working encroachment in Shah Commission communication.

**SIGNATURE**  
(Lessee/Representative)

*19/8/2013*  
Tnx/ Chandan Lee  
G.M. (mines)

Our views & remarks  
submitted.

*19/8/2013*

**SIGNATURE**  
(Team Members)

1. Dr. Srikant Adal  
Scientist, ORSA *14.8.13*
2. Ganesh Wagh  
Range Officer, Bansur *14.8.13*
3. Jitendra Mahaling  
Revenue Supervisor, Holurpara *14/8/13*
4. Bhaktabandhu Patra  
Sr. Inspector of mines, Bolangir *14.8.13*
5. Akshaya K. Maharana  
Amin, Tahasil Office-Kolara *14.8.13*
6. Haradhar Dash  
Sr. Surveyor, Kolara *14/8/13*
7. Chandro Sekhar Goryar *14/8/13*



Off. : 06767-212164, 277530  
Fax : 06767-275362  
Res. : 06767-275254, 275196

# SURENDRA NATH MOHANTY

MINES OWNER

Head Office :

STATION ROAD

Post Box No.21

P.O. BARBIL-758035


DIST. KEONJHAR (ORISSA)

(2)

Ref. No. SNM/BBL/ .....

Date.....

patch 13 A - A very old quarry pit with  
vegetation located at a distance  
of 125mts from lease pillar LP-F  
within Surrender ML area of V.D. Pandya

  
19/8/201  
T.C. Lee  
G.M. (mines)

# Annexure-B

LAND USE AREA STATISTICS INSIDE ML	
Gonua Iron & Manganese Mines	
Sub-Category	Area (Ha)
Back Fill Area	0.910
Dump Yard	1.953
Garland Drain	0.078
Magazine	0.029
Office Area	0.011
Plantation	0.150
Quarry Pit	2.566
Road	0.105
Safety Zone	1.295
Semipucca House	0.011
Soalr Panel Area	0.055
Stack Yard	0.006
Temporary Stack	0.039
Vacant Land	6.444
Village Road	0.072
Weigh Bridge	0.003
<b>Total Area</b>	<b>13.727</b>

## Annexure-C

AREA STATISTICS OF PROPOSED LAND USE	
Gonua Iron & Manganese Mines	
Category	Area (Ha)
Not Specified	2.500
Dump	0.579
Magazine	0.008
Proposed Mining	8.867
Road	0.278
Safety Zone	1.516
Stacking	0.627
Total Area	14.375

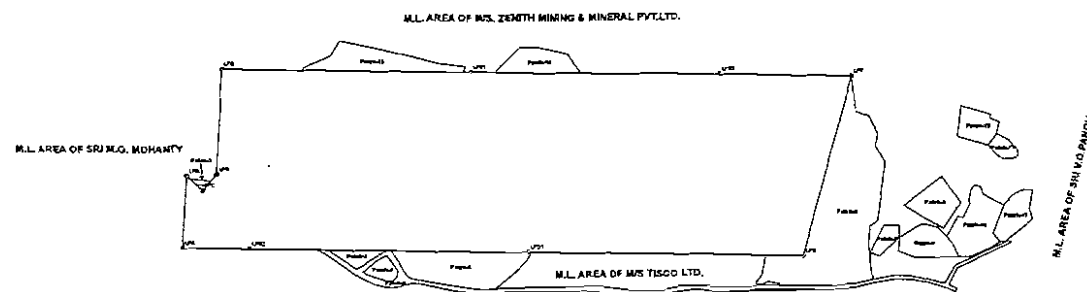
AREA STATISTICS OUTSIDE ML	
Sub-Category	Area-Ha.
Barren Land	2.669
Dump Yard	0.448
Quarry Pit	0.423
Village Road	0.453
<b>Total Area =</b>	<b>3.993</b>

# TS SURVEY OF MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY ( GONUA IRON & MANGANESE MINES OF M/S S.N. MOHANTY (P.K. MOHANTY) )



0 37.5 75 150 225 300 Meters

Scale - 1:2000



## Legend

- ⊙ Ts Surveyed ML Pillars
- Ts Surveyed Lease Boundary
- ▭ Adjacent Patches

## **JOINT SURVEY REPORT**

**MINING LEASE: Teherai Sonua Iron & Manganese  
Mines**

**LESSEE/MINE OWNER: M/s Tarini Minerals**

**1. Name of the Mining lease: *Teherai Sonua Iron & Manganese Mines***

**2. Name of the Lessee: M/s Tarini Mineral**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map was referenced with geo-referenced lease deed map and then vectorised for computing the land use area statistics. The area statistics is in Annexure-C.

**Map enclosed:**

- i. Proposed Land use Map in vector format

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-

referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

Map enclosed:

- i. Geo-referenced Lease Deed map in vector format.

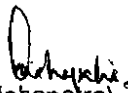
#### 7. Comparison of lease map:

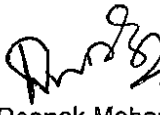
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains same a shift has occurred towards eastern side. Lease area computed in three different ways is tabulated below.

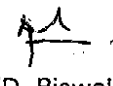
As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
29.076 hectares	31.098 hectares	26.552 hectares

Map enclosed:

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 20.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department



**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE  
AREA BY TEAM-1, KOIRA CIRCLE IN PURSUANCE TO THE DECISION OF THE  
HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Teherai-Sonua Iron &amp; Manganese Mines

Date: 13.08.13

M/s Tarini Minerals

1. The T. S. Data taken in the field in presence of Lessee / Representative has been checked and validated in the laboratory in the presence of team members as well as the Lessee / Representative and found correct.
2. The area adjacent to the lease boundary with some mining related activity were captured through T.S. Survey. The same was also validated by the team members in the presence of Lessee/Representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Shah Commission communication.	Description
Patch-1	'A'	Crusher plant area of Koira Steel (P) Ltd. around lease pillar TM-H.
Patch-2	'A'	Crusher plant of Koira Steel (P) Ltd. at a distance of 26m from pillar TM-H.
Patch-3	*	Temporary stack at a distance of 4.7m from lease pillar TM-I.
Patch-4	*	Dump at a distance of 44m from lease pillar TM-I.
Patch-5	*	Road coming out of lease area near pillar TM-J.
Patch-6	*	Dump yard at a distance of 29m from lease pillar TM-A.
Patch-7	*	Crusher plant area at a distance of 86.9m from TM-A and continuing up to TM-B and extending east wards in non-encroachment area.
Patch-8	*	Crusher plant site about 21m from lease boundary between lease pillars TM-A & TM-B in non-encroachment area.

Patch-9	*	Road coming out of the lease area between lease pillars TM-D and TM-E.
Patch-10	'B'	Open ground along the lease boundary with vegetation between pillars TM-F & TM-G.
Patch-11	'B'	Barren land with black dust patch around lease pillar TM-F1.
Patch-12	'B'	Vacant land near pillar TM-F1
Patch-13	'B'	Road coming from lease area towards quarry pit and barren land near TM-F1.
Patch-14	'B'	Vacant land near TM-F1.
Patch-15	'B'	Quarry pit extending beyond the lease boundary near lease pillar TM-F1.
Patch-16	'B'	Approach road to the lease area about 100m from TM-G.

\* These patches were not shown as working encroachment in Shah Commission communication.

SIGNATURE  
(Lessee/Representative)

*[Signature]*  
27.8.13  
(Bidhu Bhushan Sahu)  
DGM (mines)  
M/s Taoni minerals

SIGNATURE

(Team Members)

1. Dr. Srikanta Das  
Scientist, ORSA
2. Ganesh Wajhi  
Range Officer, Barsoan
3. Jitendra Mahapatra  
Revenue Supervisor, Lakhimpur
4. Bhaktabandhu Patra  
Sr. Inspector of mines.
5. Anshaya K. Maharana  
Amin, Tahasil office, Koira
6. Harendra Das  
Sr. Surveyor, Koira
7. Chandro Secha Gayan  
Sr. Dergah.

*[Signature]*  
13.8.13  
*[Signature]*  
13.8  
*[Signature]*  
13.8  
*[Signature]*  
13.8.13  
*[Signature]*  
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*[Signature]*  
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*[Signature]*  
13.8.13

## Annexure-B

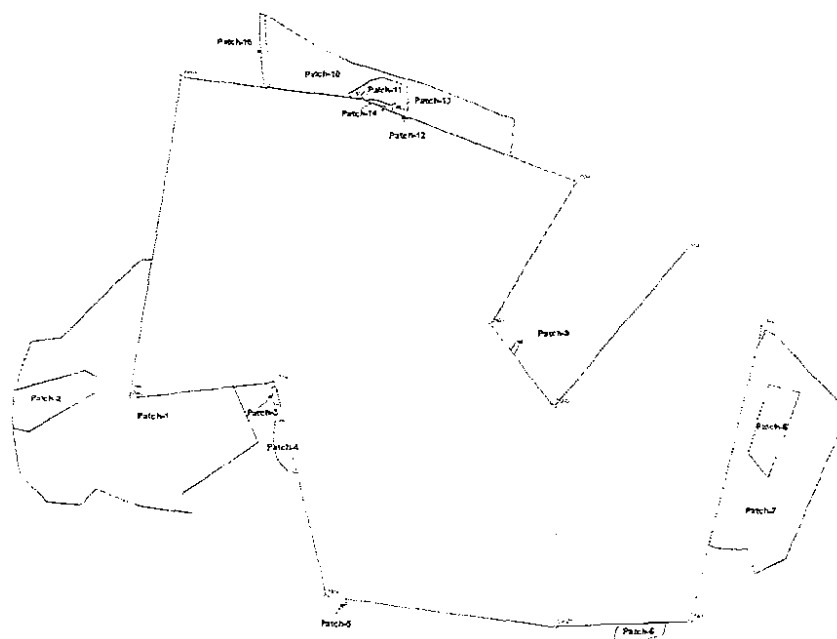
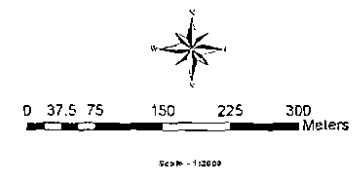
LAND USE AREA STATISTICS INSIDE ML	
Teherai Sonua Iron & Manganese Mines	
Sub-Catagory	Area-Ha
Crusher Plant Area	1.527
Dump Yard	1.511
Fines Temporary Stack	0.256
Koira Steel (P) LTD. Office	0.041
Magazine	0.001
Quarry Pit	4.060
Road	0.645
Safety Zone	1.181
Subgrade Stack	0.061
Temple	0.002
Temporary Stack	0.070
Vacant Land	17.193
<b>Total Area =</b>	<b>26.548</b>

## Annexure-C

AREA STATISTICS OF PROPOSED LAND USE	
Teheral Sonua Iron & Manganese Mines	
Category	Area(Ha)
Not specified	21.647
Dump	0.793
Labour hutment	0.268
Nala	0.656
Quarry pit	6.365
Road	1.065
Stuck yard	0.314
Total Area	31.108

AREA STATISTICS OUTSIDE ML	
Sub-Catagory	Area-Ha
Barren Land	0.140
Crusher Plant	0.676
Crusher Plant Area	5.606
Dump Yard	0.180
Open Ground	1.118
Quarry Pit	0.002
Road	0.069
Temporary Stack	0.012
Vacant Land	0.021
<b>Total Area =</b>	<b>7.824</b>

# TS SURVEY OF MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY ( TEHERAI - SONUA IRONN & MANGANESE MINES OF M/S TARINI MINERALS )



## Legend

- Ts Surveyed ML Pillars
- Ts Surveyed Lease Boundary
- Adjacent Patches

## **JOINT SURVEY REPORT**

**MINING LEASE: Raikela Iron Ore Mines**

---

**LESSEE/MINE OWNER: M/s Gitarani Mohanty**

**1. Name of the Mining lease: *Raikela Iron Ore Mines***

**2. Name of the Lessee: M/s Gitarani Mohanty**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map was referenced with geo-referenced lease deed map and then vectorised for computing the land use area statistics. The area statistics is in Annexure-C.

**Map enclosed:**

- i. Proposed Land use Map in vector format

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-



referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

**Map enclosed:**

- i. Geo-referenced Lease Deed map in vector format.

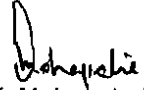
**7. Comparison of lease map:**


TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains same deviations have occurred along the entire length of the boundary. Lease area computed in three different ways is tabulated below.


As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
67.586 hectares	68.089 hectares	68.865 hectares

**Map enclosed:**

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 20.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE AREA  
BY TEAM-1, KOIRA CIRCLE IN PURSUANCE TO THE DECISION OF THE HON'BLE  
JUSTICE SHAH COMMISSION OF ENQUIRY**

Raikela Iron Ore Mines

Date: 13.08.13

M/s Geetarani Mohanty

1. The T. S. Data taken in the field in presence of Lessee / Representative has been checked and validated in the laboratory in the presence of team members as well as the Lessee / Representative and found correct.
2. The area adjacent to the lease boundary with some mining related activity were captured through T.S. Survey. The same was also validated by the team members in the presence of Lessee/Representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Shah Commission communication.	Description
Patch-1	'A'	Barren land with rock fragments and exposures located from lease pillars ML-4 to ML-8.
Patch-2	'A'	Temporary hut about 32m from lease pillar ML-8.
Patch-3	'A'	Temporary hut about 122m from lease pillar ML-8.
Patch-4	'A'	Temporary hut about 174m from lease pillar ML-8.
Patch-5	'A'	Koira-Tensa road about 10m from lease pillar ML-8.
Patch-6	'A'	Barren land with rock fragments and exposures located about 255m from pillar ML-8.

Patch-7	'A'	OFDC Timber Depot located at a distance of 124m from lease pillar from ML-8
Patch-8	'A'	Barren land with rock exposures located close to lease boundary between pillars ML-9 & ML-10.
Patch-9	'A'	Continuation of Koira-Tensa road near pillar ML-10.

3. Parts of the area marked as working encroachment 'A' in Shah Commission communication is found well inside the present surveyed boundary.

SIGNATURE  
(Lessee/Representative)

*[Signature]*  
13.8.13  
Bidhu Bhushan Sahu  
DGM (Mines)  
M/S Geetarani Mahanty

SIGNATURE  
(Team Members)

1. Dr. Srikantadas  
Scientist, ORCA

*[Signature]*  
13.8.13

2. Ganesh Singh  
Range Officer Barsoan

*[Signature]*  
13.8.13

3. Jitendra Mahaling  
Revenue Supervisor Lahurpatti

*[Signature]*  
13/8/13

4. Bhaktabandhu Patra  
Sr. Inspector of Mines, Bolangir

*[Signature]*  
13.8.13

5. Akshaya K. Mahasana  
Amin, Tahasildar Office - Koira

*[Signature]*  
13.8.13

6. Haladhar Dash  
Sr. Surveyor,  
Koraput

*[Signature]*  
13/8/13

7. Chandra Sekhar Gouda  
Po. Dergah.

*[Signature]*  
13/8/13

## Annexure-B

LAND USE AREA STATISTICS INSIDE ML	
Raikela Iron Ore Mines	
Sub-Catego	Area (Ha)
Anfo Shed	0.001
Camp House	0.008
Crushing Plant Area	1.483
Fines Temporary Stock	0.595
Garland Drain	0.087
Magazin	0.014
Mesonry Check Dam	0.101
Non Forest	0.045
Old Quarry Pit	0.494
Overburden Dump Yard	1.553
Quarry Pit	9.506
Road	2.015
Safety Zone	2.261
Security Guard Room	0.005
Setting Pond	0.015
Sub Grade Dump	5.793
Temporary Hut	0.277
Top Quarry Pit	14.022
Vacant Land	30.577
Weigh Bridge	0.008
Weight Bridge	0.007
<b>Total Area</b>	<b>68.867</b>

## Annexure-C

AREA STATISTICS OF PROPOSED LAND USE	
Category	Area (Ha)
Not Specified	45.900
Church area	0.198
Crusher site	1.713
Dump	2.295
Existing quarry	14.021
Hutment	0.158
Labour hutment	0.296
Office	0.017
Road	3.707
<b>Total Area</b>	<b>68.305</b>

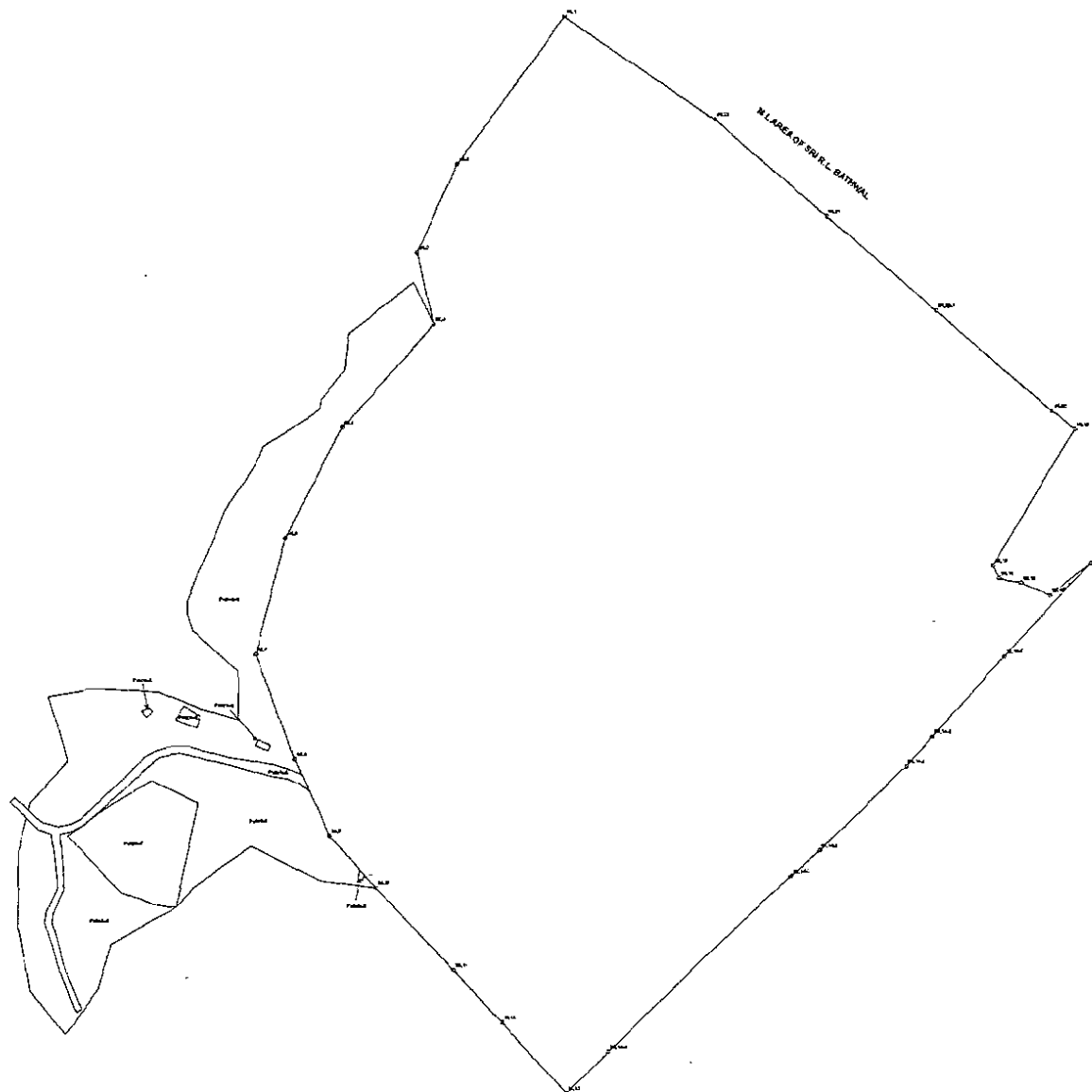
AREA STATISTICS OUTSIDE ML	
Sub-Catego	Area-Ha.
Barren Land	9.830
Forest Wood Depo	1.374
Road	0.549
Temporary Hut	0.059
<b>Total Area =</b>	<b>11.812</b>

MAP SHOWING TS SURVEY MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
OF  
M/s Geetarani Mohanty (Raikela)



0 37.5 75 150 225 300 Meters

Scale - 1:2000



**Legend**

- Ts Surveyed ML Pillars
- Ts Surveyed Lease Boundary
- ▭ Adjacent Patches

## **JOINT SURVEY REPORT**

**MINING LEASE: Surguturia Iron Mines**

**LESSEE/MINE OWNER: M/s Narayani Sons**



**1. Name of the Mining lease: *Surguturia Iron Mines***

**2. Name of the Lessee: M/s Narayani Sons**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map was referenced with geo-referenced lease deed map and then vectorised for computing the land use area statistics. The area statistics is in Annexure-C.

**Map enclosed:**

- i. Proposed Land use Map in vector format

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-

referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

**Map enclosed:**

- i. Geo-referenced Lease Deed map in vector format.

**7. Comparison of lease map:**

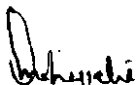
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains same and shift has occurred towards eastern side. Lease area computed in three different ways is tabulated below.


As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
99.784 hectares	100.202 hectares	42.35 hectares

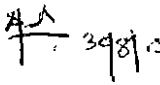
The TS survey has been carried over the area under enjoyment and balance area has been stated to have been surrendered.

**Map enclosed:**

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 30.8.17  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE  
AREA BY TEAM-1, JODA CIRCLE IN PURSUANCE TO THE DECISION OF THE  
HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Date: 13.08.2013

M/s Narayani Sons,  
Suruguturia Iron Ore Mines,  
Keonjhar

- 1 The T.S. Data taken in the field in presence of lessee/ representative has been checked and validated in the laboratory in presence of team members as well as lessee/representative & found correct.
- 2 The areas adjacent to the lease boundary with some mining related activity were captured through T.S. survey. The same was also validated by the team members in presence of lessee/representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Shah Commission communication	Description
Patch-1	'A'	Stack yard continuous inside to outside lease near ML Pillar D
Patch-2	'A'	Sheet rock near ML Pillar D
Patch-3	'A'	Dolomite stack near ML Pillar D, 106 meter from ML Pillar D
Patch-4	'A'	Dolomite stack near ML Pillar D, 134 meter from ML Pillar D
Patch-5	'A'	Barren land in between ML Pillar E to D
Patch-6	'A'	Dump yard in between ML Pillar E to D, 105 meter from ML Pillar D
Patch-7	'A'	Sheet rock in between ML Pillar E to D
Patch-8	'A'	Barren land adjacent to ML Pillar E
Patch-9	'A'	Agricultural land near ML Pillar E
Patch-10	'A'	Vacant land near ML Pillar E
Patch-11	'A'	Vacant land near ML Pillar E
Patch-12	'A'	Road near in between ML Pillar E to 38
Patch-13	'A'	Semi pucca house in between ML Pillar E to 38
Patch-14	'A'	Residential area inside to outside lease in between ML Pillar E to 38
Patch-15	'A'	Barren land adjacent to ML Pillar E to 38

Patch-16	'A'	Dump yard, 198 meter from ML Pillar E
Patch-17	'A'	Vacant land in between ML Pillar E to 38
Patch-18	'A'	Vacant land in between ML Pillar E to 38
Patch-19	'A'	Stack yard in between ML Pillar E to 38
Patch-20	'A'	Stack yard in between ML Pillar E to 38
Patch-21	'A'	Stack yard in between ML Pillar E to 38
Patch-22	'A'	Quarry pit in between ML Pillar 1 to 5
Patch-23	'A'	Quarry pit in between ML Pillar 1 to 5
Patch-24	'A'	Road near ML Pillar 1
Patch-25	'A'	Road
Patch-26	'A'	Road
Patch-27	'A'	Quarry pit near ML Pillar 5
Patch-28	*	Stack yard near ML Pillar A1

\*These patches are not shown as working encroachment in Shah Commission communication.

The patch No. 22, 23, 27 are inside the lease area of SC Padhi.

SIGNATURE  
(Lessee/Representative)

Proceeds as valid  
as done in presence  
of the representative of  
lessee as all survey  
team members. However  
lessee representative  
declines to sign.

SIGNATURE  
(Team Members)

1. ANIL KUMAR KANUNGO Anil Kanungo  
13.08.2013
2. Bimanta Kh. Shaw Bimanta Kh. Shaw  
13.8.13
3. Poornod Kumar Behera Poornod Kumar Behera  
13/8/13
4. Shree Ramapada Arabinda Mishra Shree Ramapada Arabinda Mishra  
Range Officer Champua  
13/08/2013
5. Panchanan Naik Panchanan Naik  
Forester Joda Lakshmi -  
13/8/13

## Annexure-B

LAND USE AREA STATISTICS OF ML	
Suruguturia Iron Ores Mines	
SUB-CATEGORY	AREA-HA
Crusher	0.123
Fines Stack	0.271
Oil Meter	0.000
Pucca house	0.003
Quarry Pit	7.970
Residential Area	0.082
Road	1.459
Safety zone	0.925
Semipucca house	0.008
Semipucca House	0.006
Shed	0.090
Stack Yard	3.326
Sub Grade Dump	1.441
Temporary House	0.014
Vacant Land	26.608
Water Tank	0.014
Weigh Bridge	0.006
<b>TOTAL AREA</b>	<b>42.346</b>

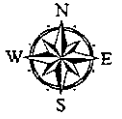
## Annexure-C

APPROVED LAND USE AREA STATISTICS OF ML	
Suruguturia Iron Ore Mines	
CATEGORY	AREA-HA
Area proposed for surrender	57.530
Broken Space	1.167
Crusher Unit	1.267
Diesel Pump	0.487
Dolerite Stack	1.467
Dumping	3.402
Green Belt	0.295
Iron Ore Stack	1.408
Magazine	0.617
Mining	25.325
Office	0.369
Ore Stack	0.770
Road	1.335
Safety Zone	2.082
Subgrade Stack	0.544
Top Soil Stack	0.234
OTHERS	1.147
<b>TOTAL AREA</b>	<b>99.446</b>

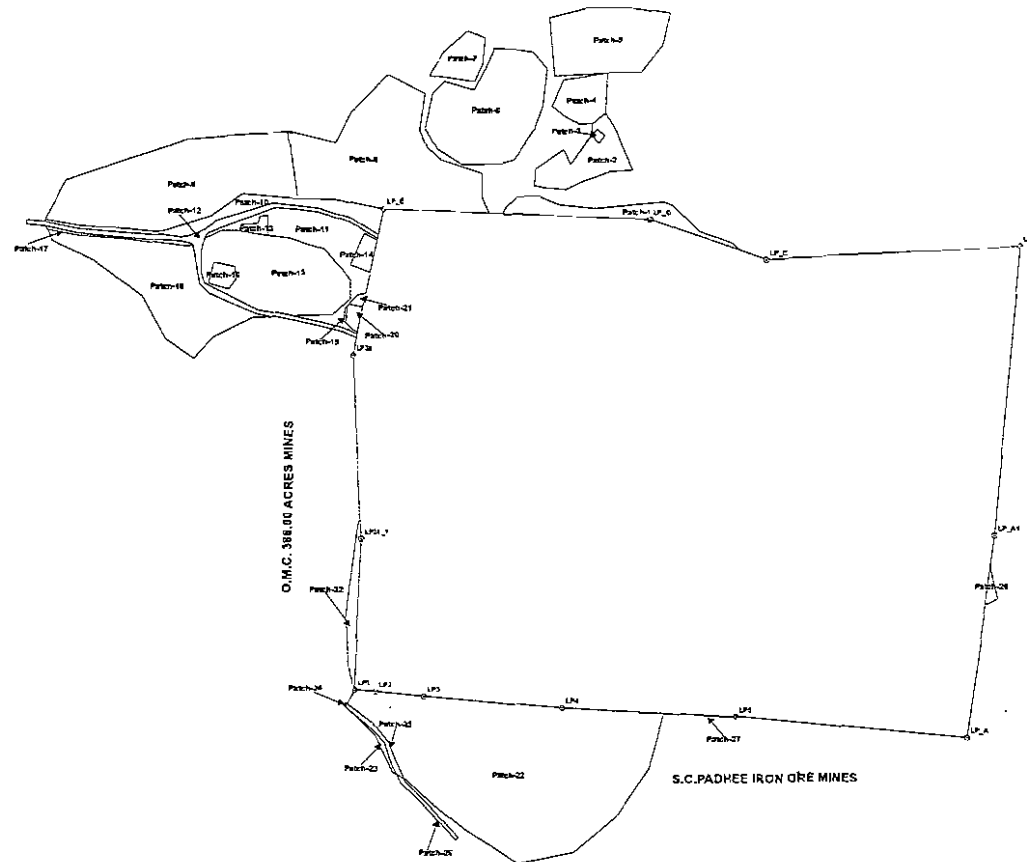
Area outside mining lease

SUB-CATEGORY	AREA-HA
Agricultural Land	2.192
Barren Land	5.623
Dolomite Stack	0.307
Dump Yard	1.442
Quarry Pit	4.855
Residential Area	0.082
Road	0.493
Semipucca House	0.044
Sheet Rock	0.244
Shite Rock	0.454
Stack Yard	0.497
Vacant Land	1.110
<b>TOTAL AREA</b>	<b>17.343</b>

TS SURVEY OF MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
IRON ORE & DOLERITE MINES OF M/S. NARAYANI SONS PVT. LTD.



SCALE-1:3000  
0 0.075 0.15 0.3 0.45 0.6 Km.



LEGEND

- TS Surveyed ML Pillars
- TS Surveyed Lease Boundary
- ◡ Adjacent Patches



## **JOINT SURVEY REPORT**

**MINING LEASE: Nadidihi Iron Ore Mines**

**LESSEE/MINE OWNER: M/s Bonai Industries Co.  
Ltd.**

**1. Name of the Mining lease: *Nadidihi Iron Ore Mines***

**2. Name of the Lessee: M/s Bonai Industries Co.**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map is not available.

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

**Annexure- A**

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE  
AREA BY TEAM-1, KOIRA CIRCLE IN PURSUANCE TO THE DECISION OF THE  
HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

**Nadidihi Iron Ore Mines,**

**Date: 14.08.13**

**M/s B.I.Co. Ltd**

1. The T. S. Data taken in the field in presence of Lessee / Representative has been checked and validated in the laboratory in the presence of team members as well as the Lessee / Representative and found correct.
2. The area adjacent to the lease boundary with some mining related activity were captured through T.S. Survey. The same was also validated by the team members in the presence of Lessee/Representative. The details of such patches are given below.

<b>Patch No.</b>	<b>Area marked as working encroachment in Shah Commission communication.</b>	<b>Description</b>
Patch-1	'B'	Barren land with rock fragments and standing trees near lease pillar BP-E.
Patch-2	'B'	School area at about 80m from lease pillar BP-E.
Patch-3	'C'	Barren land with rock fragments near pillar BP-E1.
Patch-4	'A'	Barren land with rock fragments / debris with isolated standing trees from lease pillars BP-E2 to BP-G.
Patch-5	'A'	Community hall at about 23m from lease pillar BP-F.

Patch-6	'A'	Kutchra road coming out of lease area between pillars BP-F1 & BP-F2 and joining NH-215.
Patch-7	'A'	Road devide.
Patch-8	'A'	Barren land near lease pillar BP-G.
Patch-9	'A'	National Highway No. 215.
Patch-10	'A'	Barren land near pillar BP-G.
Patch-11	'A'	Barren land near pillar BP-I.
Patch-12	'A'	Barren land near pillar BP-J.

3. Parts of the area marked as working encroachment 'A' & 'B' in Shah Commission communication is found well inside the present surveyed boundary.

SIGNATURE  
(Lessee/Representative)

SIGNATURE  
(Team Members)

Encl :- one copy of objections is Attached.

1. Dr. Snikanta Das  
Scientist, ORSAE

13.8.13

2. Ganesh Majhi  
Range Officer, Barsoan

14.8.13

3. Bhaktabandhu Patra  
Sr. Inspector of Mines, Odango

14.8.13

4. Tolendra Mahanta  
Revenue Supervisor, Kohnipara

14.8.13

5. Akshaya K. Maharana  
Amin, Tahasil Office - Koira

14.8.13

6. Haradhar Das  
Sr. Surveyor, Koira

14.8.13

7. Chandra Sekhar Gogoi  
Sr. Derge

14.8.13

# Annexure-B

LAND USE AREA STATISTICS INSIDE ML	
Nadidihi Iron Ore Mines	
Sub-Category	Area (Ha)
Back Filling	0.430
Dump Yard	12.493
Export Oriented Unit	1.221
Garland Drain	0.613
HSD House	0.045
Magazine Area	0.048
Pump House	0.004
Quarry Pit	28.592
Rest seltar	0.012
Road	2.890
Safety Zone	2.604
Security House	0.002
Settling Pond	1.192
Stack Yard	5.477
Subgrade Stack	5.246
Tailing Pond	0.079
Temporary Stack	0.229
Vacant Land	12.732
Washing Plant Area	0.216
Water Harvesting Pond	0.236
Weigh Bridge	0.028
Work shop area	0.103
Workshop	0.005
<b>Total Area</b>	<b>74.497</b>

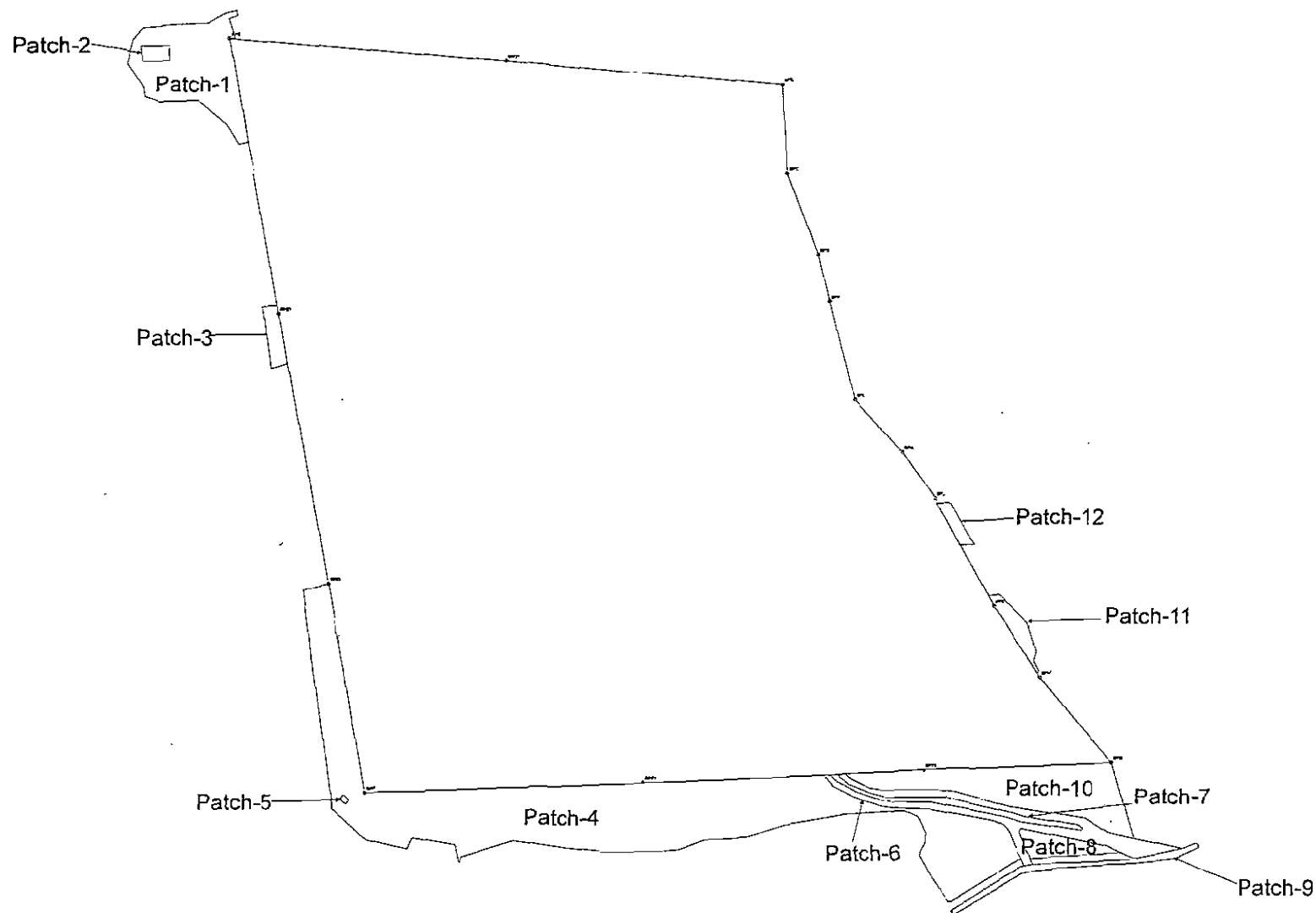
AREA STATISTICS OUTSIDE ML	
Sub-Category	Area-Ha
Barren Land	11.031
Community Hall	0.007
Road	1.182
Road Divider	0.231
School Area	0.068
<b>Total Area =</b>	<b>12.519</b>

TS SURVEY OF MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
( NADIDIHI IRON ORE MINES OF M/S BONAI INDUSTRIAL CO. LTD. )



0 37.5 75 150 225 300 Meters

Scale = 1:2000



**Legend**

- Ts Surveyed ML Pillars
- Ts Surveyed Lease Boundary
- ▭ Adjacent Patches

# **JOINT SURVEY REPORT**

**MINING LEASE : Sanindpur Iron & Manganese Mines**

**LESSEE / MINE OWNER : National Enterprise**



**1. Name of the Mining lease: *Sanindpur Iron & Manganese Mines***

**2. Name of the Lessee: M/s National Enterprise**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map was referenced with geo-referenced lease deed map and then vectorised for computing the land use area statistics. The area statistics is in Annexure-C.

**Map enclosed:**

- i. Proposed Land use Map in vector format

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-

referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

Map enclosed:

- i. Geo-referenced Lease Deed map in vector format.

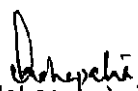
## 7. Comparison of lease map:

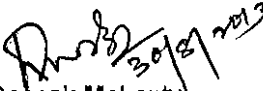
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains almost same, a shift in enjoyment position has occurred towards north-western & eastern sides. Lease area computed in three different ways is tabulated below.

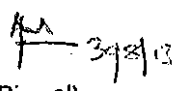
As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
70.917 hectares	72.85 hectares	72.727 hectares

Map enclosed:

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 20.6.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING  
LEASE AREA BY TEAM 2 KOIRA CIRCLE IN PURSUANCE TO THE DECISION  
OF THE HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Name of the Mining Lease : Samindpur Iron & Mn Mines.

Date : 13-8-2013

Name of the Lessee : M/s National Enterprises.

1. The T.S. data taken in the field in presence of Lessee / Representative has been checked and validated the laboratory in presence of the team members as well as lessee/ representative and found correct.
2. The areas adjacent to the lease boundary with some mining related activity were captured through TS survey. The same also validated by the team members in presence of lessee/ representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Sah Commission Communication	Description
Patch-1	A	Stock a distance in between 251 mtrs from BP -B4
Patch-2	A	Stock a distance in between 217 mtrs from BP -B4
Patch-3	A	Crosser at a distance 60 mtrs from BP - B4
Patch-4	A	Stock a distance 176 mtrs from BP -B4
Patch-5	A	Stock a distance 146 mtrs from BP -B4
Patch-6	A	Crosser at a distance 19 mtrs from BP - B4
Patch-7	A	Barrel land at a distance 27 mtrs from BP -B4
Patch-8	A	Barrel land at a distance 143 mtrs from BP -B4

Patch-9	A	Residential area at a distance of 150 mtrs from from BP -B4
Patch-10	A	Road in between BP-B4 and BP-B3.
Patch-11	A	Barrel land at a distance 222 mtrs from BP -B4
Patch -12	B	Barrel land in between BP -B2 and BP-B1.
Patch -13	B	Road in between BP-B2 and BP-B1
Patch -14	C	Residential area at a distance 52 mtrs from BP-B1
Patch -15	F	Road in between BP -B1 and BP-B
Patch -16	D	Barrel land in between BP-B1 and BP-B
Patch-17	E	Dump in between BP-B1 and BP-B

#### SIGNATURE

(Lessee/Representative)

#### SIGNATURE

(Team Members)

1. Sri A.K. Mohanty  
TA'B', ORSAC
2. Sri S.C Barik  
Sr. Inspector of Mines  
DDM, Koira
3. Sri Suresh Behera  
Surveyor, The Director of Mines
4. Sri Ashok Kumar Biswal  
Range Officer, Koira  
Banai Forest Division
5. Sri Narayan Chandra Behera  
Forester, Ranisai,  
Bonai Forest Division
6. Sri Biranchi Bag,  
R.I. Sadar Tahasil, Sundargarh
7. Sri Dandadhar Nayak  
Amin, L.A. Section Collectorate  
Sundargarh

*[Signature]*  
13.8.13

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13.8.13

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*[Signature]*  
13.8.13

*[Signature]*  
13.8.13

# National Enterprises

P. O. Box No.44 Barbil - 758 035, Distt. Keonjhar, Odisha

Phone : 06767 - 275321, 275686 Fax : 06767 - 275631, E-mail : ne.minerals@gmail.com

ANEXURE - (A)

Ref No:-NE / BBL / 715 / 13-14

Dated:- 21.08.2013

**M/s Odisha Space Applications Centre (ORSAC),  
Department of Science & Technology,  
Government of Odisha,  
Plot No.-45/48, Jaydev Vihar, Unit-16,  
Bhubaneswar-751023.**

Dear Sir,

Re: Hon'ble Shah Commission's direction for physical Survey of our Sanindpur Iron & Mn. Ore Mines over an area of 70.917 Ha. in the District Sundargarh, Odisha.

We refer you to your letter no. JMBS/JOINT SURVEY-ORISSA/2013/ 373 dated 06.04.2013 advising us to verify the area on the basis of the Joint Verification done at our area on dated 13.08.2013. Our Authorised Representatives Mr. N. Pradhan and Mr. K. K. Pradhan attended the same. You had shown them status of the outside M.L. area desiring certain clarification on the undernoted points falling outside our M.L. Area. We have given clarification but would like to clarify again about the desired points.

## OUTSIDE

ML-A1 : Material - } The materials and the area does not belong to us. It belongs to  
ML-A2 : Material - } M/s Jagannath Minerals (P) Ltd.

ML-A3 : The crusher is owned by M/s Jagannath Minerals (P) Ltd. with Mr. Mahabir Prasad Agarwal as its Director. The party has no connection with us. We are submitting proof of ownership of the Crusher Plant.

ML-A4 : Material - } The materials and the area does not belong to us. It belongs to  
ML-A5 : Material - } M/s Mangalam Steel Pvt. Ltd.

ML-A6 : The Crusher belongs to M/s Mangalam Steel Pvt. Ltd. with the Director Mr. Naresh Kumar Agarwal. The material lying belongs to the crusher owner and land carrying material belongs to them. We are submitting documents in proof of the ownership of the Crushers owned by parties having no relevance to us. We are attaching photographs of the area showing the location of the crusher.

ML-A7 : It's a barren land belonging to the villagers owned by them and having growth of bushes.

ML-A8 : It's a residential area with having number of villagers staying there.

ML-A9 : It's a barren land owned by villagers and having growth of bushes.

Contd....Page-2

## Annexure-B

PRESENT LAND USE AREA STATISTICS INSIDE ML	
Sanindpur Iron & Manganese Mines	
SUB-CATEGORY	AREA (Ha)
Manganise Quarry	1.191
Pucca Building	0.035
Baren Land	0.160
Crusher Area	0.055
Crusher Plant Area	0.051
Dump Yard	5.697
Labour Colony	0.104
Pucca Building	0.005
Quarry Area	4.268
Quarry Pit	14.289
Residential Area	0.154
Road	1.302
Safety Zone	2.589
Security House	0.001
Semi Pucca Building	0.059
Setting Tank	0.006
Shiv Mondir	0.017
Subgrade Dump	1.300
Subgrade Stack	0.706
Subgrade Stock	1.295
Surface Right	0.070
Temporary Stack	1.350
Transformer Platform	0.006
Vacant Land	38.254
Weigh Bridge	0.003
TOTAL AREA	72.965

## Annexure-C

APPROVED LAND USE AREA STATISTICS INSIDE ML	
Sanindpur Iron & Manganese Mines	
CATEGORY	AREA (Ha)
Crusher	0.373
Dump	6.783
Dump-2	1.766
Magazine	0.103
Plantation	0.847
Quarry	40.759
Roads	1.429
Safety Zone	9.185
Site service	1.542
Storing of minerals	4.584
Storing of Tools & Machinery	2.400
Sub Grade Storage	4.206
Top soil storage	1.057
others	0.330
<b>TOTAL AREA</b>	<b>75.364</b>

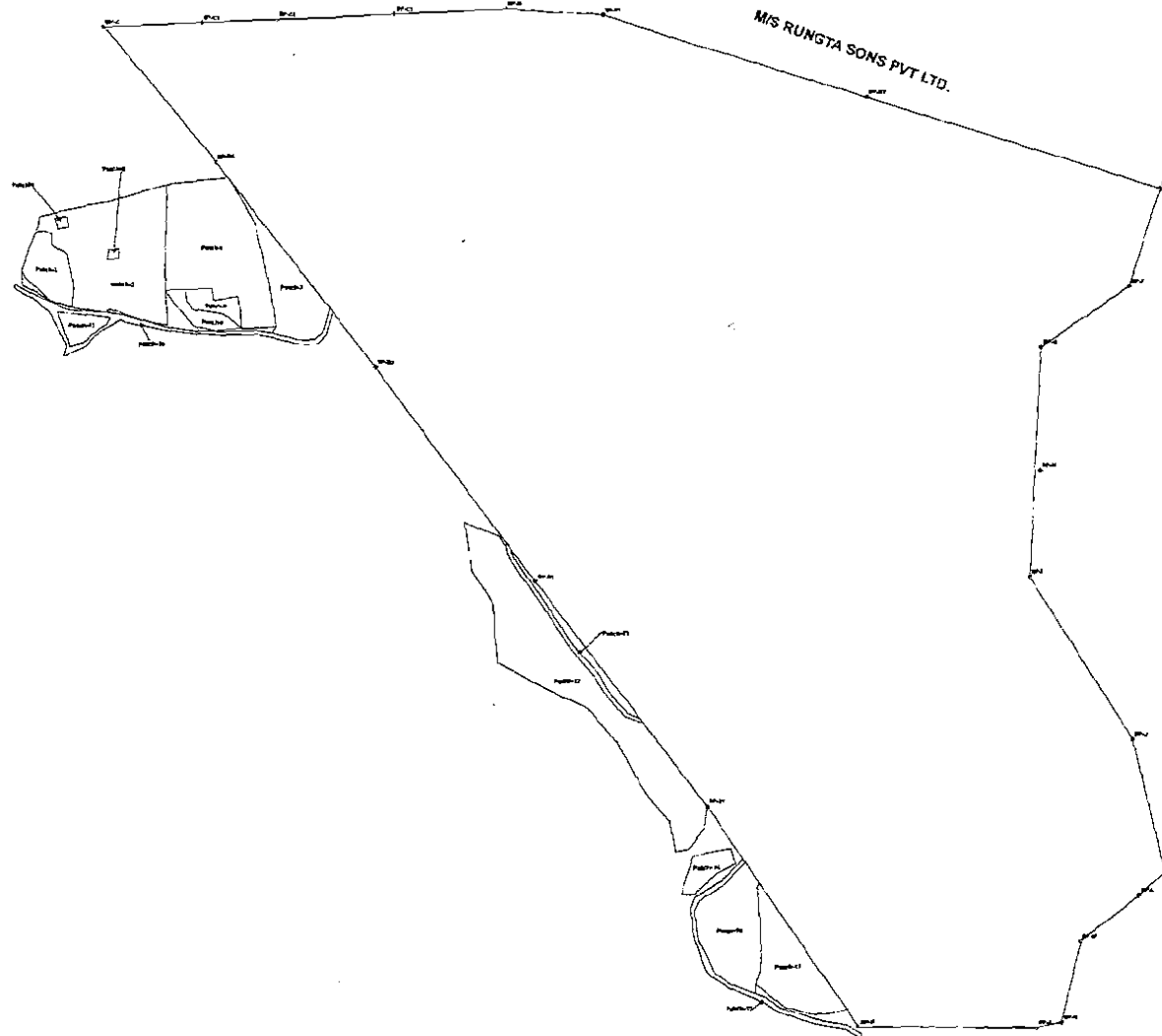
AREA STATISTICS OUTSIDE ML	
CATEGORY	AREA-HA
Baren Land	3.535
Crusher	2.946
Dump	0.686
Residential Area	0.299
Road	0.546
Stock	0.366
<b>TOTAL AREA</b>	<b>8.378</b>



MAP SHOWING TS SURVEY MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
OF  
(National Enterprises Sanindpur Iron & Manganese Mines)



0 50 100 200 300 400 Meters  
Scale - 1:2000



Legend

- Ts Surveyed ML Pillars
- Ts Surveyed Lease Boundary
- ▭ Adjacent Patches

# **JOINT SURVEY REPORT**

**MINING LEASE : Nadidihi Irons & Manganese Mines**

**LESSEE / MINE OWNER : M/s. Fee grade & Co. (P) Ltd.**

**1. Name of the Mining lease: *Nadidihi Iron & Manganese Mines***

**2. Name of the Lessee: M/s Feegrade & Co.**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map is not available.

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

Map enclosed:

- i. Geo-referenced Lease Deed map in vector format.

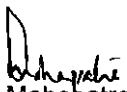
## 7. Comparison of lease map:

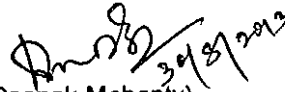
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains almost same, a shift in enjoyment position has occurred towards eastern sides. Lease area computed in three different ways is tabulated below.

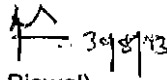
As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
121.405 hectares	119.273 hectares	117.055 hectares

Map enclosed:

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra)  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING  
LEASE AREA BY TEAM 2 KOIRA CIRCLE IN PURSUANCE TO THE DECISION  
OF THE HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Name of the Mining Lease : M/s Nadidihi Iron Ore Mines.

Date : 14-8-2013

Name of the Lessee : M/s Feegrade & Co. (P) Ltd.

1. The T.S. data taken in the field in presence of Lessee / Representative has been checked and validated the laboratory in presence of the team members as well as lessee/ representative and found correct.
2. The areas adjacent to the lease boundary with some mining related activity were captured through TS survey. The same also validated by the team members in presence of lessee/ representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Saha Commission Communication	Description
Patch-1	B	Residential area near Boundary Pillar 31
Patch-2	B	Barrel land in between Boundary Pillar 30 & 31.
Patch-3	B	Temporary Hut at a distance 36 mtrs from Boundary Pillar 30.
Patch-4	B	Temporary Hut at a distance 35 mtrs from Boundary Pillar 30.
Patch-5	B	Temporary Hut at a distance 54 mtrs from Boundary Pillar 30.
Patch-6	B	Road near Boundary Pillar 30.
Patch-7	B	Vacant land near Boundary pillar 30.
Patch-8	B	Barrel land in between Boundary pillar 26, 27, 28, 29 & 30.
Patch-9	A	Barrel land in between Boundary pillar 18.

Patch-10	A	Road in between Boundary pillar 17 & 18.
Patch-11	A	Barrel land in between Boundary Pillar 15 & 18.
Patch -12	A	Vacant land near Boundary Pillar 15.
Patch -13	A	Barrel land in between Boundary Pillar 11 & 12.
Patch -14	A	Community Centre at a distance 66 mtrs from Boundary Pillar 18.
Patch -15	A	Crosser Plant at a distance 69 mtrs from Boundary Pillar 18.
Patch -16	A	Crosser Plant at a distance 55 mtrs from Boundary Pillar 17.
Patch-17	A	Stack yard at a distance 104 mtrs from Boundary Pillar 17.
Patch-18	A	Stack yard at a distance 128 mtrs from Boundary Pillar 17.
Patch-19	A	Stack yard at a distance 148 mtrs from Boundary Pillar 17.
Patch-20	A	Crosser Plant at a distance 112 mtrs from Boundary Pillar 17.
Patch-21	A	Crosser Plant in between Boundary Pillar 14 & 15.
Patch-22	A	Stack yard at a distance 109 mtrs from Boundary Pillar 15.
Patch-23	A	Vacant land near Boundary Pillar 14.
Patch-24	A	Stack yard at a distance 62 mtrs from Boundary Pillar 14.
Patch-25	A	Semi Pucca House at a distance 92 mtrs from Boundary Pillar 14.
Patch-26	A	Residential area at a distance 41 mtrs from Boundary Pillar 14.

Patch-27	A	Weigh bridge at a distance 23 mtrs from Boundary Pillar 14.
Patch-28	A	Weigh bridge at a distance 18 mtrs from Boundary Pillar 14.
Patch-29	A	Barrel land in between Boundary Pillar 14,13 & 12.
Patch-30	A	Park zone near Boundary Pillar 12.
Patch-31	A	Road in between Boundary Pillar 11 & 12.


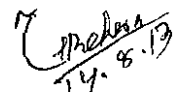
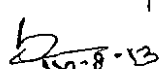
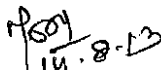
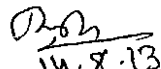

  
**SIGNATURE**

(Lessee/Representative)

One copy of objection is attached.

**SIGNATURE**

(Team Members)

1. Sri A.K. Mohanty  
TA'B', ORSAC 
2. Sri S.C Barik  
Sr. Inspector of Mines  
DDM, Koira
3. Sri Suresh Behera  
Surveyor, The Director of Mines 
4. Sri Ashok Kumar Biswal  
Range Officer, Koira  
Banai Forest Division 
5. Sri Narayan Chandra Behera  
Forester, Ranisal,  
Bonai Forest Division 
6. Sri Biranchi Bag,  
R.I. Sadar Tahasil, Sundargarh 
7. Sri Dandadhar Nayak  
Amin, L.A. Section Collectorate  
Sundargarh 

ANEXURE 'A'



## FEEGRADE & CO PVT LTD

RUNGTA HOUSE, CHAIBASA - 833 201, JHARKHAND

Phone : ( 06582 ) 256861, 256761, 256661, Fax : 91-6582-256442, Cable : RUNGTA

E-mail : rungtas@satyam.net.in

### LETTER OF AUTHORIZATION

Dr. Saran Kumar Sahoo, Senior General Manager (Corporate Affairs), aged about 42 years, son of Sri Bholanath Sahoo, be and is hereby authorized by the Board of Directors of the Company in their meeting held on 13.08.2013 to represent / appear, comment and sign on behalf of M/s. Feegrade & Company Private Limited in the proceeding, before the Odisha Space Applications Centre (ORSAC), Bhubaneswar, in relation to joint survey of leasehold area of Nadidih Iron & Manganese Mine of M/s. Feegrade & Company Private Limited, held as per directives of the Hon'ble M.B. Shah Commission of Enquiry.

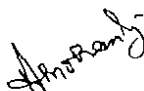
Signature of Dr. Saran Kumar Sahoo is duly attested as appended below.

**For M/s. Feegrade & Company Private Limited.**

Signature of Dr. Saran Kumar Sahoo.

  
**(ASHUTOSH MOHANTY)**  
**DIRECTOR.**

Attested:

  
**(ASHUTOSH MOHANTY)**  
**DIRECTOR.**



ANEXURE-A'

**Nadidih Iron & Manganese Mines**  
(M/s Feegrade & Co. Pvt. Ltd.)

Without prejudice to our rights, further to our earlier letter no. FEE/ED/13-14/03 dated 29.04.2013 submitted to DDM, Koira & your kind office on the subject matter, this is to state that as the matter being a critical issue in regard to our Nadidih Iron & Manganese Mines, we have to verify thoroughly in presence of our field technical teams regarding the survey conducted as well as the map prepared by the joint team formed as per the direction of Hon'ble commission. For this purpose we require the soft copy of the map prepared for our corresponding lease area along with the Geo-referencing/digitized cadastral maps, the documents, data & any other information relied upon for survey & preparation of map. Accordingly, only after receipt of aforesaid maps, documents, data & information, a considerable time be given to us to make necessary comments and only after incorporating our comments it should be treated as final from our end. Therefore, we are signing this proceeding as our attendance and without admitting and accepting the contentions made therein in this proceeding.

  
(Representative)

## Annexure-B

PRESENT LAND USE AREA STATISTICS INSIDE ML	
Nadidihi Iron & Manganese Mines	
SUB-CATEGORY	AREA (Ha)
Anfo Shed	0.002
Dump Yard	23.594
Export Oriented Unit	0.843
Magazine	0.019
Manganese Quarry	2.034
Petrol Pump	0.095
Pucca House	0.013
Pump House	0.005
Quarry Pit	28.868
Residential Area	0.862
Road	4.632
Safety Zone	3.818
Security Barrack	0.032
Semipucca House	0.008
Stack Yard	6.744
Vacant Land	45.462
Weigh Bridge	0.035
<b>TOTAL AREA</b>	<b>117.066</b>

Area statistics outside mining lease

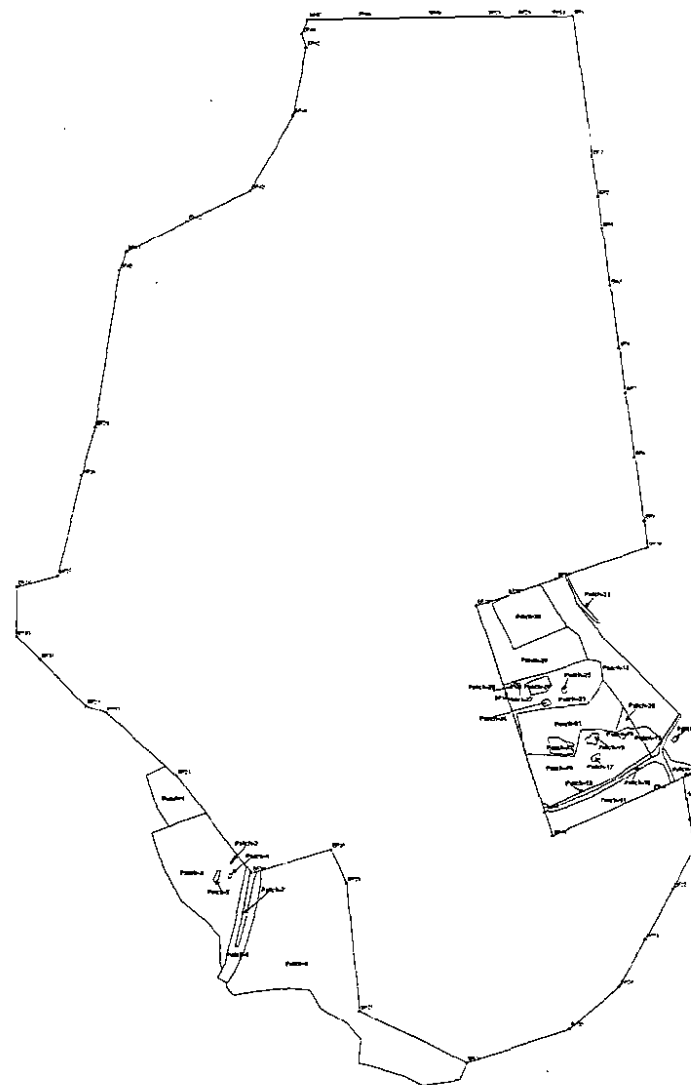
CATEGORY	AREA-HA
Ajay Mineral Ltd. Crusher Plant	1.141
Barren Land	10.568
Community Centre	0.007
Parking Zone	0.786
Raniseti Crusher Plant	1.419
Residential Area	0.598
Road	0.673
Semipucca House	0.006
Stack Yard	0.168
Temporary Hut	0.019
Vacant Land	1.059
Weigh Bridge	0.005
<b>TOTAL AREA</b>	<b>16.449</b>

MAP SHOWING TS SURVEY MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
OF  
M/S FEEGRADE RUNGTA, NADIDIHI



0 87.5 175 350 525 700

Scale = 1:5000



Legend

- ⊙ Ts Surveyed ML Pillars
- ▭ Ts Surveyed Lease Boundary
- ▭ Adjacent Patches

# **JOINT SURVEY REPORT**

**MINING LEASE: Kalaparbat Iron Ore Mines**

**LESSEE/MINE OWNER: M/s B. D. Patnaik**

**1. Name of the Mining lease: *Kalaparbat Iron Ore Mines***

**2. Name of the Lessee: M/s B.D. Patnaik**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map is not available.

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

Map enclosed:

- i. Geo-referenced Lease Deed map in vector format.


#### 7. Comparison of lease map:

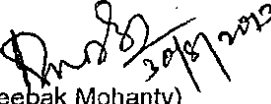
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that the shape of polygon in both cases is nearly same and there is shift towards western side. Lease area computed in three different ways is tabulated below.

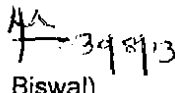
As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
25.633 hectares	23.948 hectares	25.735 hectares

Map enclosed:

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 20.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal)  
Additional Secretary  
F & E Department

**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE  
AREA BY TEAM - 3, JODA CIRCLE IN PURSUANCE TO THE DECISION OF THE  
HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Date: 14.08.2013

Name of the Mining Lease - Kalaparnbat Iron Ore Mines  
Name of the Lessee - M/s B D Patnaik

1. The TS data taken in the field in presence of lessee/ representative has been checked and validated in the laboratory in presence of the team members as well as lessee/ representative and found correct.
2. Areas adjacent to the lease boundary with some mining related activity were captured through TS survey. The same also validated by the team members in presence of lessee/ representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Shah Commission Communication	Description
*Patch No.1	-	Road adjacent to lease hold area between pillar No.A&B
*Patch No.2	-	Road adjacent to lease hold area near pillar No. C
*Patch No.3	-	Road adjacent to lease hold area between pillar No.C&D
*Patch No.4	-	Road adjacent to lease hold area near pillar No. E
*Patch No.5	-	Road adjacent to lease hold area between pillar No.E & A
Patch No.6	A	Dump about 70 m away from the lease boundary line between pillar No.A&B As per the lessee's statement it was an activity of M/s Balasore Minerals Pvt. Ltd. (Documents attached as Annexure-1)
Patch No.7	A	Iron quarry adjacent to lease boundary near pillar No.A As per the lessee's statement it was an activity of M/s Balasore Minerals Pvt. Ltd. (Documents attached as Annexure-1)

\* These patches are not shown as working encroachment in Shah Commission communication.



3. Area marked as non working encroachment 'A' in Hon'ble Shah Commission communication is found having no mining activity.

SIGNATURE  
(Lessee/Representative)

supporting data submitted

SIGNATURE  
(Team Members)

1. Prasenjit Kumar Sarangi - 14/8/13  
Sci. Officer, ORSAE
2. Sunil Kumar Samal, Revenue 14/8/13  
Inspector, Boudhal Tahasil
3. Dhruvaswarup Ghadei Amin 14.8.13  
TECHNICAL
4. Ramesh Chandra Jena 14/08/2013  
Forest Range Officer, Boudhal Range
5. Abhiram Mohapatra 14/08/2013  
Forester, Guali
6. Sunendra K. Samal 14/8/13  
IIM, Joda
7. Rajwinder Sethi 14.8.13  
Sr. Surveyor, Mining Office, Boudhal

Amx-1.

# M/s. B. D. PATNAIK

**MINE OWNER ○ LIME STONE . DOLOMITE . QUARTZ**

Head Off. : P.O. : Keonjhargarh, Dist. - Keonjhar, Orissa


Branch Off. : H-12, Area 7&8, Rourkela -769 004, Orissa, Ph.: 2400302, Fax : 91-661-2400717

Date: 14.08.2013

## KALAPARBAT IRON ORE MINES

Over an area of 25.633 ha. in Keonjhar district of Odisha

- Earlier the lessee of M/s Balasore Minerals was using the road (Kuccha) of Sri B.D. Patnaik for their purpose with mutual consent as the (Kuccha) road to their mine was not motorable.
- Old working pit & over burden dumps outside the base area are within the lease hold area of M/s Balasore Minerals.

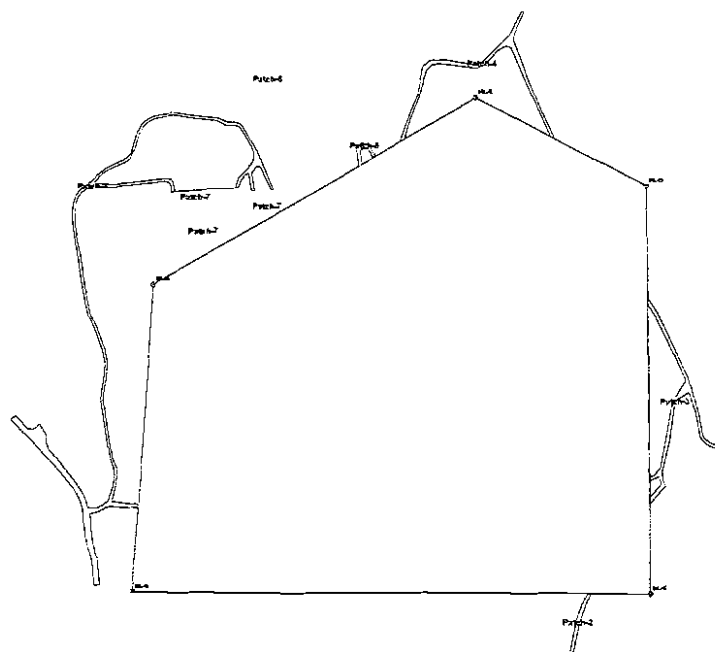
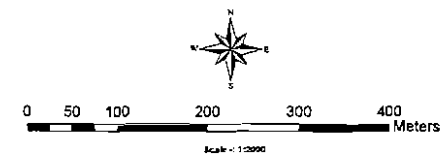
  
B. Mahapatra  
(Authorized Signatory)

## Annexure-B

LAND USE AREA STATISTICS INSIDE ML	
M/S BD PATNAIK	
Sub-Category	Area-Ha
Dump Yard	2.490
Float Working Area	3.456
Quarry Pit	5.131
Road	0.489
Safety Zone	0.998
Stack Yard	0.234
Vacant Land	12.935
Total area =	25.733

AREA STATISTICS OUTSIDE ML	
Sub-Category	Area-Ha.
Dump Yard	1.689
Quarry Pit	0.691
Road	0.790
Total area =	3.170

**MAP SHOWING TS SURVEY MINING LEASE AREA AND ADJACENT AREA WITH SOME MINING ACTIVITY  
OF  
B D Patnaik (Kalaparbat) Iron Ore Mine**



**Legend**

- ⊙ Ts Surveyed ML Pillars
- Ts Surveyed Lease Boundary
- ▭ Adjacent Patches

# **JOINT SURVEY REPORT**

**MINING LEASE : Patabeda Iron Ore Mines**

**LESSEE / MINE OWNER: M/s M.G.M.Minerals Ltd.**

**1. Name of the Mining lease: *Patabeda Iron Ore Mines***

**2. Name of the Lessee: M/s MGM Minerals Ltd**

**3. TS surveyed map (Present Enjoyment)**

TS survey of present lease boundary pillar positions, land use within lease area, areas shown as encroachment in Shah Commission's communication and areas adjacent to the lease boundary with some mining related activity was undertaken. A composite map has been prepared showing present enjoyment lease boundary, inside land use and outside land use of area adjacent to lease boundary with some mining activity. The observation of the field team in regard to land use of the adjacent area has been recorded in form of minutes attached as Annexure-A.

**Maps enclosed:**

- i. Vector map of TS surveyed Map showing present enjoyment and adjacent area with mining activity.
- ii. PDF version of above map.

**4. Surveyed Land use map (Present Enjoyment)**

All the land use area like broken up area, S/R, DLC, Forest/Non-forest, Reserve forest pillars, Safety zone pillars as per field position were TS surveyed. The broken up area comprising quarry, dump, stack-yard, road, office and other mining related activities have been captured within the leasehold area. The area statistics is in Annexure-B.

**Map enclosed:**

- i. TS surveyed Land use map (Present Enjoyment) in vector format

**5. Land use map (Approved):**

The approved Land use map is not available.

**6. Geo-referenced Lease deed map.**

This is prepared by geo-referencing the original lease map with geo-referenced cadastral map coming within the lease area. The cadastral sheets are geo-referenced based on the GCP surveyed in the field (Village Tri-junction, Bi-junction, Mustakil Chand and any other identifiable feature as shown by Revenue officials on the field in connection with geo-referencing of village cadastral sheets) and using Ortho-image of the area.

Map enclosed:

- i. Geo-referenced Lease Deed map in vector format.

#### 7. Comparison of lease map:

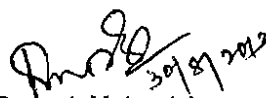
TS surveyed present enjoyment area map was compared with the geo-referenced lease deed map by superimposing both the maps. It is observed that while the shape of polygon in both cases remains almost same, a shift in enjoyment position has occurred towards north-western side. Lease area computed in three different ways is tabulated below.


As per Lease Deed (Land schedule)	As per geo-referenced Lease Map	As per TS survey
28.397 hectares	29.187 hectares	29.418 hectares

Map enclosed:

- i. PDF version of vector map of TS survey super-imposed on geo-referenced lease deed vector map.

  
(A.K. Mohapatra) 30.8.13  
CE, ORSAC

  
(Deepak Mohanty)  
Director, Mines

  
(D. Biswal) 30/8/13  
Additional Secretary  
F & E Department



**PROCEEDING OF THE JOINT SURVEY AND DEMARCATION OF MINING LEASE AREA BY TEAM 2 KOIRA CIRCLE IN PURSUANCE TO THE DECISION OF THE HON'BLE JUSTICE SHAH COMMISSION OF ENQUIRY**

Name of the Mining Lease : M/s M.G. (Mohanty) Mineral

Date : 14-8-2013

Village : Petabeda

Name of the Lessee : M.G. Mohanty (MGM, Mineral Ltd).

1. The T.S. data taken in the field in presence of Lessee / Representative has been checked and validated the laboratory in presence of the team members as well as lessee/ representative and found correct.
2. The areas adjacent to the lease boundary with some mining related activity were captured through TS survey. The same also validated by the team members in presence of lessee/ representative. The details of such patches are given below.

Patch No.	Area marked as working encroachment in Sah Commission Communication	Description
Patch -1	A	Quarry pit in between boundary pillar No. BP-M & BP-L3
Patch-2	B	Quarry pit in between boundary pillar No. BP-M & BP-M1
Patch-3	C	Vacant land in between boundary pillar BP-D, BP-C, BP-B, BP-AB and BP-A.

**SIGNATURE**

(Lessee/Representative)

*Our observations/clarifications/Contentions attached herewith.*

**SIGNATURE**

(Team Members)

1. Sri A.K. Mohanty  
TA'B', ORSAC
2. Sri S.C Barik  
Sr. Inspector of Mines  
DDM, Koira
3. Sri Suresh Behera  
Surveyor, The Director of Mines
4. Sri Ashok Kumar Biswal  
Range Officer, Koira  
Banai Forest Division
5. Sri Narayan Chandra Behera  
Forester, Ranisal,  
Bonai Forest Division
6. Sri Biranchi Bag,  
R.I. Sadar Tahasil, Sundargarh
7. Sri Dandadhar Nayak  
Amin, L.A. Section Collectorate  
Sundargarh

Sirs,

The above coordinates generated in the laboratory on the basis of joint field survey matches with the readings as dictated and noted down in the field without any counter verification of the same. The map drawn on the basis of this coordinates needs to be superimposed on the topo-sheet of the Survey of India as well as that of the concerned cadastral map after proper geo-referencing of the same. Authentication/validation of the coordinates can thereafter be done. Any deviation between the prepared geo-referenced map superimposed over the topo-sheet and cadastral map will lead to misinterpretation and wrong allegation regarding the so alleged "non-working encroachment and working encroachment".

The status and facts of the surveyed area beyond the lease hold area has no mention regarding the visit of the officials of the Mining office on 6<sup>th</sup>, 7<sup>th</sup> & 11<sup>th</sup> of July, 2009 and our letter of 26<sup>th</sup> Nov., 2009 to the Chief Vigilance Officer, Directorate of Mines, Odisha; and the visit thereafter of the State Level Enforcement Squad and their report.

The report of joint physical verification and demarcation of the lease boundary carried out on 21<sup>st</sup> April, 2011 by the Officers of Forest Department, Revenue Department and Mining Department needs mentioning. Also there is no mention of the joint inspections carried out by the officers of the Forest Department, Revenue Department and Mining Department from time to time thereafter and on 12.04.2013.

Any ambiguity regarding the alleged non-working encroachment and working encroachment will lead to the truth being misinterpreted.

We request that before finalization of any report our above contentions/ observations should be taken into account

We shall be ever grateful for the same.

Thanking you,

Yours faithfully,

For MGM Minerals Ltd.



(M R Swain)

Sr. Surveyor