MINERAL BLOCK SUMMARY

[To be made available on the website of e - auction platform]

PART A – GENERAL INFORMATION ABOUT MINERAL BLOCK

	Features	Details
1.	Location	Guali Iron Ore Mine
	Mineral Block	Guali Iron Ore Mine (Hematite)

ML Pillar No	Latitude	Longitude	Easting	Northing
1	21^{0}59'22.1"	85^{0}17'04.0"	322892.987	2432651.294
2	21^{0}59'22.3"	85^{0}17'14.6"	323189.913	2432653.424
3	21^{0}59'22.3"	85^{0}17'22.3"	323411.503	2432651.291
4	21^{0}59'22.3"	85^{0}17'26.6"	323536.350	2432650.325
5	21^{0}59'22.4 "	85^{0}17'30.3"	323639.766	2432653.632
6	21^{0}59'22.4"	85^{0}17'34.3"	323754.595	2432649.135
7	21^{0}59'22.6"	85^{0}17'43.9"	324031.622	2432654.287
8	21^{0}59'22.6"	85^{0}17'50.9"	324204.145	2432653.557
9	21^{0}59'22.6"	85^{0}17'52.1"	324264.660	2432652.360
10	21^{0}59'22.7"	85^{0}17'55.7"	324368.575	2432653.254
11	21^{0}59'22.6"	85^{0}18'02.4"	324561.338	2432650.834
12	21^{0}59'23.1"	85^{0}18'10.0"	324780.325	2432662.029
13	21^{0}59'23.5"	85^{0}18'21.6"	325114.766	2432669.980
14	21^{0}59'23.6"	85^{0}18'29.9"	325349.077	2432669.954
15	21^{0}59'23.9"	85^{0}18'32.5"	325428.200	2432675.821
16	21^{0}59'24"	85^{0}18'36.8"	325548.199	2432679.191
17	21^{0}59'24.1"	85^{0}18'43.0"	325726.566	2432679.412
18	21^{0}59'24.5"	85^{0}18'51.9"	325981.682	2432687.690
19	21^{0}59'35.2"	85^{0}18'58.1"	326164.544	2433014.314
20	21^{0}59'39.2"	85^{0}18'59"	326195.045	2433138.344
21	21^{0}59'47.0"	85^{0}18'57.5"	326151.769	2433377.232
22	21^{0}59'53.1"	85^{0}18'57.1"	326146.102	2433565.650
23	21^{0}59'57.4"	85^{0}18'56.8"	326136.354	2433698.036
24	22^{0}00'02.2"	85^{0}18'57.4"	326155.221	2433814.461
25	22^{0}00'01.0"	85^{0}18'51.7"	325994.294	2433809.781
26	22^{0}00'00.6"	85^{0}18'44.5"	325785.277	2433797.721
27	22^{0}00'00.2"	85^{0}18'37.2"	325578.914	2433788.863
28	21^{0}59'59.9"	85^{0}18'30.0"	325374.653	2433783.905
29	21^{0}59'59.6"	85^{0}18'21.1"	325109.000	2433782.751
30	21^{0}59'59.1"	85^{0}18'12.1"	324854.385	2433773.760
31	21^{0}59'59.2"	85^{0}18'09.4"	324779.517	2433773.497
32	21^{0}59'59.1"	85^{0}18'04.8"	324650.117	2433770.443
33	21^{0}59'59.1"	85^{0}18'00.5"	324522.537	2433768.154
34	21^{0}59'58.8"	85^{0}17'56.6"	324408.608	2433766.243
35	21^{0}59'58.8"	85^{0}17'51.3"	324257.852	2433765.141
36	21^{0}59'58.8"	85^{0}17'45.3"	324088.157	2433766.725
37	21^{0}59'58.8"	85^{0}17'40.5"	323950.521	2433769.804
38	21^{0}59'58.8"	85^{0}17'35.0"	323794.891	2433774.183
39	21^{0}59'58.8"	85^{0}17'31.2"	323683.268	2433777.511
40	21^{0}59'59.0"	85^{0}17'26.7"	323555.793	2433782.266
41	21^{0}59'59.3"	85^{0}17'21.6"	323411.946	2433788.404
42	21^{0}59'59.3"	85^{0}17'18.7"	323324.087	2433793.128
43	21^{0}59'59.3"	85^{0}17'11.3"	323110.994	2433800.714
44	21^{0}59'57.1"	85^{0}17'10.5"	323088.487	2433731.956
45	21^{0}59'51.4"	85^{0}17'08.5"	323027.045	2433555.170
46	21^{0}59'41.5"	85^{0}17'04.0"	322923.113	2433252.562
47	21^{0}59'34.1"	85^{0}17'02.3"	322844.220	2433026.931
48	21^{0}59'27.1"	85^{0}17'02.4"	322845.406	2432812.406
49	21^{0}59'23.4"	85^{0}17'03.7"	322880.800	2432697.056

	Village	Guali, Panduliposi, Topadihi
	Tahasil/Taluka	Barbil
	District	Keonjhar
	State	Odisha
2.	**Area(Hectares/square km)**	365.026 Ha./ 3.65 km
	Total area	365.026 Ha.
	Mineralised area	150.311Ha
	Non-mineralised area	214.715Ha
3.	**Exploration**	
	Status (G2/G3/G4 etc.)	G1 / G2
	Exploration Agency	Sri R.P.Sao
	Total No. of BHs with meterage	167Nos. / 10005.45m
	Borehole spacing (Density)	100/200
4.	**Quantity of Minerals(Grade wise)**	
	Mineral	**Iron ore(Hematite)**
	Total Geological Resources(Resource)	198741915MT or **198.741 mt**

For Resource+45-55% Fe as on 31.07.2019(Resources in Tonnes)

Category	Resource +45-55% Fe (Avg grade : 49.83%Fe)	Generation of fines with average 47.23%Fe	Generation of lumps with average 54.67%Fe
Measured (G1)	13026500	8467225	4559275
Indicated Resource (G2)	11892625	7730206.25	4162419
Total	**24919125**	**16197431.25**	**8721694**

For Resource+55% Fe

Category	Resource+55%Fe (Avg grade: 62.61% Fe)	Generation of fines with average-63.13%Fe	Generation of lumps with average 61.67%Fe
Measured (G1)	143262740	93120781	50141959
Indicated Resource (G2)	30560050	19864032.5	10696018
Total	**173822790**	**112984813.5**	**60837977**

For Resource+45% Fe

Category	Resource of ROM (+45%Fe) Avg grade:61.007% Fe	Generation of fines with average with 62.54%Fe	Generation of lumps with average 58.15%Fe
Measured (G1)	156289240	101588006	54701234
Indicated Resource (G2)	42452675	27594238.8	14858436.25
Total	**198741915**	**129182245**	**69559670.25**

Lumps : Fines = 35 : 65

For Resource+45-55% Fe as on 31.03.2020

Projected Resources

EC for 2019-20: 5.7 million tonnes

Projected production from August to March (244 days): 3800000 tonnes or 3.80 mt

Category	Resource +45-55% Fe (Avg grade : 49.83%Fe)	Generation of fines with average 47.23%Fe	Generation of lumps with average 54.67%Fe
Indicated Resource	24442664.73	15887731.92	8554932.82

For Resource+55% Fe

Category	Resource+55%Fe (Avg grade: 62.61% Fe)	Generation of fines with average-63.13%Fe	Generation of lumps with average 61.67%Fe
Indicated Resource (G2)	170499251.02	110824512.84	59674738.17

For Resource+45% Fe

Category	Resource of ROM (+45%Fe) Avg grade:61.007% Fe	Generation of fines with average with 62.54%Fe	Generation of lumps with average 58.15%Fe
Indicated Resource (G2)	194941915.75	126712244.76	68229670.99
Total in million tonnes	**194.94**		

05	Number of mineral Zones	2 - Zones-Mineralized	
	Trend(Dip and Strike)	The main rock types found in this mines are Laterite, lateritic iron ore, Hematite (Massive, Laminated, blue dust), BHJ/BHQ. In the ML area, iron ore found as mainly hard massive laminated and powdery variety. The strike varies from NE – SW. The dip is generally westerly but varying from 11^0 to 27^0. The attitude normally confirm to the regional trend of the litho unit.	
06	**Grade**	High grade Ore (< 55%)	Average Grade Fe: 62.61%, SiO_2: 4.09 %, AI_2O_3: 2.34 %,
		Low grade Ore (45% Fe to 55% Fe)	Average Grade Fe: 49.83 %Fe, SiO_2: 14.14 %, AI_2O_3: 7.30 %,
	Mineral	**Iron ore(Hematite)**	
07	**Accessibility**	**Road and Rail link** The mining lease area is approachable from Barbil town covering a distance of 23 km by Barbil – Rourkela NH–215. Also the area can be approachable from Koira which is on NH – 215 at a distance of 11 km. Nearest Rail Head is at Barbil (both Passenger and goods train)	
	Nearest Rail head	Jururi Rly siding: 8km Banspani Rly. Siding - 12km	
	Road	NH-215 is passing within the lease area.	
	Airport	Barbil- Tanto-Bhadrasahi-18KM/Biju Patnaik Airport Bhubaneswar at a distance of 320 KM	
08	**Hydrography**		
	Local Surface Drainage Pattern (Channels)	One nala namely Topadih nala fall within the lease area and controls the drainage system of the area. Karo river and SunaNadi flow at a distance of 1.1 and 5.5 Kms from the lease area.	
	River/Streams	One nala namely Topadih nala fall within the lease area and controls the drainage system of the area. Karo river and Suna	

		Nadi flow at a distance of 1.1 and 5.5 Kms from the lease area.
09	**Climate**	
	Mean Annual Rainfall	
	Temperature (December)	Minimum temperature : 4.4°c , Maximum Temperature : 27.6° c
	Temperature (May)	Minimum Temperature: 31°c Maximum : 47.6°
10	**Topography**	
	Topo sheet Number	73G/5 & 73F/8
	Morphology of the area	The lease surrounding 500 m from the Guali mining lease is having moderately sloping hillocks. Middle portion is almost flat. Highest elevation is at 620 mRL whereas the lowest elevation shows 500 mRL. Wide range of rock types discerns the iron ore.

GUALI

PART-B PARTICULARS OF STATUTORY LICENSES, PERMITS, PERMISSIONS, CONCESSIONS, APPROVALS AND CONSENTS RELATED TO MINING OPERATIONS

Sl. No.	Particulars	Details/ Status
1	**Forest Clearance**	**To be obtained by the Successful / not applicable/ if available, State to provide details**
2	Wild life clearance(sanctuary, reserve or special zone clearances)	-do-
3	Environmental clearance	-do-
4	Consent to establish	-do-
5	Explosive license	-do-
6	Permission for mines opening	-do-
7	Permission of installation/ trial operation of equipment	-do-
8	Ground Water clearance (Centre/ State)	-do-
9	Railway siding approval	-do-
10	Approval for diesel storage	-do-
11	Power line from State Discom.	-do-
12	Clearances relating to work under an existing transmission line or shifting of the transmission line	-do-
13	Gramasabha consent	-do-

PART-C PARTICULARS OF LAND

Sl. No.	Area	Details
1	Total Concession Area	358.258 hects.
2	Forest Land with Status	87.916 hects
3	Government land with status	230.02 hects
4	Private land with status	40.322 hects
5	Revenue survey details of the area	Refer : Land Schedule