MINERAL BLOCK SUMMARY		
PART A- GENERAL INFORMATION ABOUT MINERAL BLOCK		
Sl. No.	**Features**	**Details**
1	**Name of the Block**	Narayanposhi Iron & Manganese Ore Block
	Location	Details of block boundary DGPS delineated coordinates are available in GR
	Latitude	$21^0$54'46.07" to $21^0$56'23.13" N
	Longitude	$85^0$13'41.16" to $85^0$14'56.56" E
	Villages	Koira , Kashira and Kathamala R.F
	Tehsil	Koira
	District	Sundargarh
	State	Odisha
	Mineral Block	Iron Ore & Mn Ore
Area/Hects/Sq.Kms		
2	Total block area	349.254 Ha(Area as per DGPS computation=347.008 Ha)
	Mineralised area	207.601 Ha
	Non-Mineralised area	141.653 Ha
Exploration		
3	Status (G2/G3/G4)	G1-99.387 Ha & G2-249.867Ha
	Exploration agency	ACC Ltd, Geo Consultant Associate, Mining Associate Pvt. Ltd, VKS Mining, Orewin Engineering, Gemco Kati Exploration Pvt. Ltd.
	Total Nos. Of bore holes with meterage	**170 nos with 8436.30 m**
	Bore hole spacing	100m x 100m/ 100m x 200m/200m x 200m
Qty. of minerals grade-wise		
4	Mineral	**Iron Ore [Total Geological Resource= 190600596 MT]**

Total Geological Resources As on 01.04.2019				
Level of Exploration	Resources of Iron Ore as on 01.04.2019		Grade	Average Grade of Ore(Fe %)
	Lumps @ 45.82%	Fines @ 54.18%		
Measured Resources (G1)	2190358	2589995	45 to 55% Fe	51.1
	6571073	7769986	55% Fe & Above	63.44
Indicated Resource (G2)	19642941	23226855	45 to 55% Fe	51.1
	58928822	69680566	55% Fe & Above	63.44
Total	87333193	103267403		60.35
Total	**190600596 tonnes: 190.60 mt**			

Mn Ore

Level of Exploration	Resources of Mn Ore(Ton)	Grade	Average Grade of Ore (Mn %)
Indicated Resource (G2)	54076.2	10 to 20% Mn	14.27
	486685.8	20% Mn& Above	31.54
Total	**540762**	**10% Mn& Above**	**29.81**

		Lump- Fines Ratio: Iron = 45.82 – 54.18; Manganese= all Lumpy
	Projected Resources As on Date 31.03.2020 considering depletion (likely production as per EC limit-6 mt Iron ore) Projected Resources As on Date 31.03.2020 considering depletion (likely production as per EC limit-0.036 mt Mn ore)	

Level of Exploration	Resources of Iron Ore as on 31.03.2020		Grade	Average Grade of Ore(Fe %)
	Lumps @ 45.82%	Fines @ 54.18%		
Indicated Resource (G2)	21145998.98	25004150.02	45 to 55% Fe	51.1
	63437994.99	75012452.01	55% Fe & Above	63.44
Total	84583993.97	100016602.03		60.35
Total	**184600596 tonnes or as 184.600 mt**			

Mn Ore

Level of Exploration	Resources of Mn Ore(Ton)	Grade	Average Grade of Ore (Mn %)
Indicated Resource (G2)	50475.50	10 to 20% Mn	14.27
	454279.50	20% Mn & Above	31.54
Total	504755.00	**10% Mn & Above**	**29.81**

		Mineralised zone
5	Nos. Of Mineralised zones	Iron Ore(Hematite) zone-1 Mn Ore(Pyrolusite & Psilomelane) Zone -1
	Trend (Dip & Strike)	General trend is NE-SW to NNE-SSW direction with westerly dips varying from 20˚ to 70˚
	Average thickness	Iron Ore Zone-51.48m Mn Ore Zone - 46.11m
		Grade
6	Minerals	Iron Ore-45-55%Fe & +55%Fe Mn Ore-10-20%Mn & +20%Mn
		Accessibility
7	Nearest Railhead	The nearest railhead is Barsuan at a distance of 30 Km from the lease area via Tensa.
	Road	The National Highway No-215 is passing within the lease area. The village road of Kasira village exists in the M.L area. Lease area is accessible from Koira (2.0km) on NH-215; running from Rimuli to Rajamunda.
	Airport	Bhubaneswar airport (330 km away) was the nearest airport from the area. There is an airstrip/ helipad near Bhadrasahi, Barbil which is around 29km from the lease area. Jharsuguda Airport started functioning in the recent past and it will be about 230 km from the lease area.
		Hydrography
8	Local surface drainage pattern (channels)	Drainage system is dendritic type. Two prominent seasonal nalas divided the whole lease area into three parts from NE to SW which flow due north. River Karo flowing due north close to the western boundary outside the lease area constitutes the principal drainage system of the locality and

		collects surface run-off water through the seasonal nalas.
	River/ Streams	Karo river
Climate		
9	Mean Annual Rainfall	1300mm
	Temperature (December)	4.4^0C
	Temperature (June)	47.6^0C
Topography		
10	Toposheet Nos.	73 G/1 & G/5
	Morphology of the area	The area is marked by undulating hills with altitudes varying from 545m to 640m above MSL. General slope of the area is towards north on an average. Three prominent mounds having their highest points at 630m, 620m and 595m are located in the lease area from south to north. Few spurs are developed in the central portion of the lease area. Another insignificant mound having peak point of RL605m occur near Quarry-6. All the above peak points are connected with each other in different trends with intervening valleys.

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

Sl. No.	Particulars	Details/Status
1	Forest Clearance	*To be obtained by the Successful bidder/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, tiral operation of equipment	-do-
8	Ground water clearance (Centre/State)	-do-
9	Railway Siding approval	-do-
10	Approval of Diesel storage	-do-
11	Power line from State Discom	-do-

12	Clearance relating to work under an existing transmission line or shifting of the transmission line	-do-
13	Gramasabha consent	-do-

PART C-PARTICULARSOF LAND		
1	Total Concession area	347.008 Ha
2	Forest land area	256.945 Ha
3	Non-Forest , Govt. & Private Land with status	90.063 Ha
5	Revenue survey details of the area	Referred to Land Schedule