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**		
	Mineral Block	Unchabali Iron and Manganese mine of Keonjhar district	
	Pillar Id	Latitude	Longitude
	P-1	85°25'44.26919"	21°52'23.57008"
	P-2	85°25'46.31568"	21°52'26.58213"
	P-3	85°25'47.16033"	21°52'27.82466"
	P-4	85°25'41.12289"	21°52'33.01076"
	P-5	85°25'38.59279"	21°52'39.81092"
	P-6	85°25'39.60799"	21°52'46.47458"
	P-7	85°25'47.03898"	21°52'55.87006"
	P-8	85°25'42.73437"	21°52'58.25702"
	P-9	85°25'41.06257"	21°52'59.01524"
	P-10	85°25'42.45625"	21°53'04.21693"
	P-11	85°25'45.74324"	21°53'16.30263"
	P-12	85°25'44.55714"	21°53'18.84361"
	P-13	85°25'43.65937"	21°53'23.05518"
	P-14	85°25'42.86203"	21°53'39.01269"
	P-15	85°25'33.55420"	21°53'38.91525"
	P-16	85°25'26.09985"	21°53'38.78007"
	P-17	85°25'20.71006"	21°53'38.74650"
	P-18	85°25'21.68881"	21°53'23.54726"
	P-19	85°25'30.98076"	21°53'15.98363"
	P-20	85°25'33.64423"	21°53'13.72369"
	P-21	85°25'36.49453"	21°53'03.45873"
	P-22	85°25'35.69819"	21°52'58.92147"

	P-23	85°25'34.02593"	21°52'48.56519"
	P-24	85°25'33.52820"	21°52'44.98396"
	P-25	85°25'33.20460"	21°52'42.54756"
	P-26	85°25'34.80445"	21°52'42.15102"
	P-27	85°25'34.40803"	21°52'37.92283"
	P-28	85°25'33.78629"	21°52'33.04487"
	P-29	85°25'33.22919"	21°52'28.78290"
	P-30	85°25'32.70465"	21°52'23.34620"
	P-31	85°25'38.96324"	21°52'23.46202"
	Village	Unchabali, Kundaposi and Balda	
	Tahasil/Taluka	Barbil	
	District	Keonjhar	
	State	Odisha	
2.	**Area(Hectares/square km)**		
	Total area	80.553Ha	
	Mineralised area	10.273 Ha	
	Non-mineralised area	70.28 Ha	
3.	**Exploration**		
	Status (G2/G3/G4 etc.)	G 2 (General Exploration)	
	Exploration Agency	Essel Mining and Industries Ltd.	
	Total No. of BHs with meterage	25 boreholes, 691 m	
	Borehole spacing (Density)	40 m to 110 m (≈3 BHs/Ha in mineralised zone)	
4.	**Quantity of Minerals(Grade wise)**		
	Mineral	Iron* and Manganese	
	Total Indicated Geological Resources	High Grade iron Ore (Fine) (+55% Fe cut off)	2.01mt(SLO Fine)

			Low grade ore (Fine) (45 to 55% Fe)	0.178 mt (Fine ore)
			Manganese(+20% Mn Cut off)	0.0637mt
	* The available lithology does not differentiate the iron ore body into hard laminated, soft laminated. In addition, few ore bodies have been categorised as lateritic ore with +55 % Fe. In absence of hard laminated ore within the area, all the ore bodies are considered as fines for resource estimation.			
	Number of mineral zones		03(Three)	
	Trend(Dip and strike)		General strike of the rocks is N-S and is mostly dipping at an angle varying between 25° to 35° due west	
6.	**Grade**	Iron	High Grade Ore (55% Fe cut off)	Fe: 61.658% (Avg)
			Low grade ore (45 to 55% Fe)	Fe: 50.025 % (Avg)
		Manganese	Medium Grade Ore (20% Mn cut off)	Mn: 23.435 %. (Avg)
7.	**Accessibility**			
	Nearest Rail head		Nayagarh and Jurudi in Banspani - Jakhapura Railway link of East-Coast Railway at a distance of 8 km from the prospect.	
	Road		The area can be approached from the district Headquarters Keonjhar through NH-215 up to Palash panga by covering a distance of 20 kms, and then all weathered black topped road uptoUnchabali for 27 km.	
	Airport		Bhubaneswar.	
8.	**Hydrography**			
	Local Surface Drainage Pattern (Channels)		A perennial nala named Baldanala is flowing across the area and subsequently merged into Baitarani River.	
	River/Streams		Baitarani River.	
9.	**Climate**			
	Mean Annual Rainfall		Fluctuating between 1200 mm to 1500 mm.	
	Temperature (December)		6^{0}C	
	Temperature (May)		45^{0}C	
10.	**Topography**			

	Topo Sheet Number	F45N45 (73G/5).
	Morphology of the area	The area in general represents an undulating to plain topography. There exist three N –S oriented ridges flanked by valleys on both sides.

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	
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	80.553 hects.
2	Forest Land with Status	79.400 hects.
3	Government land with status	0.619 hects.
4	Private land with status	0.534 hects.

5	Revenue survey details of the area	