

EASTERN PART OF GORHI MAHALOI BLOCK SUMMARY

PART A

Sr .	Features	Details
1.	Location	
	Coal Block	Eastern Part of Gorhi Mahaloi
	Latitude	22° 03' 10" N - 22° 05' 00" N (Provisional)
	Longitude	83° 27' 54" E - 83° 33' 48" E (Provisional)
	Topo Sheet No.	Toposheet Nos: F44K14 Old (64N/8 & 64 N/12, R.F. 1:50,000))
	Coalfield	Mand-Raigarh Coalfield
	Villages	Mahloi, Nawadih, Amlidhonda, Tilaipara, Samkera, Baigapara, Lamdand, Gaurbahari, Bijna, Part of Raipara Villages (As per Sol Toposheet)
	Tehsil/Taluka	Tamnar
	District	Raigarh
	State	Chhattisgarh
2.	Connectivity with Block	
	Nearest Rail Head	Raigarh railway station on Howrah – Nagpur section of South East Central Railway is located in the southern periphery of the coalfield.
	Road	The block is situated at about 12 km northeast of Punjipathra village which is about 25 km from Raigarh along Raigarh - Ambikapur state highway. The block can be approached from Tamnar by metalled and unmetalled (fair weather) roads.
	Airport	Raigarh Airport is located approx. 40Km from the block. The air strip is used mainly for small aircraft and choppers.
3.	Area	
	Geological Block Area	23.46 sq. km. (As per shape file. Refer note below)
	Forest Area	Nil
	Non-Forest Area	100 % Non-forest
	Climate and Topography	
	Average Annual Rainfall	Climate in the exploration area is tropical with an average annual rainfall of 53cm.
4.	Temperature (Min. - Max.)	The area experience a sub- tropical climate with very hot and dry summer. In the summer season from March to June, temperature rises to 45° C during the peak period, mostly upto 42° C in average The winter season starts from November and continues up to February. During winter the temperature goes down to 18° C
	Local Surface Drainage Channels	Koledega Nalah originated from the uplands in the east and flowing east to west

	Rivers	This block is drained by Koledega Nalah originated from the uplands in the east and flowing east to west.			
5.	Exploration				
	Status	Explored			
	Exploration Agency	GSI, MECL			
	Total Number of Boreholes with meterage	183 BHs (GSI+MECL), 67197.00m			
	Borehole Density	Approx. 7.8 Bh/ Sq Km			
	General Dip of Seams	The dip of beds varies from 2° to 10° dipping southerly.			
	General Strike Direction	The general strike of coal horizons is NW to SE with rolling behavior at few places. In the south-eastern part of the block, the strike gently swings to E-W direction.			
	Faults	Two faults viz. F1-F1 and F2-F2 are deciphered to evolve the structure of Eastern Part of Gorhi Mahloi Block. The faults are of low to medium intensity with throw ranging from 0 to 30 m. The dip of these faults is assumed as 60°.			
6.	Coal Seams & Reserve				
	Coal Seams	Thickness Range (m)	Depth Range (m)	Geological Reserve (Mt) (proved)	Grade
	R-1	0.5-0.67	30.44-58.7	-	G17-G16
	X LD	0.13-3	42.7-228.8	0.550788	G17-G10
	X LC	0.2-1.68	81.83-224.52	-	-
	X LB	0.2-1.05	40.43-233.95	0.005622	G14-G11
	X LA	0.15-0.58	100-274	-	-
	X TOP	0.61-4.85	99.69-331.8	96.246896	G17-G9
	X BOT	0.3-2.79	106-340.83	31.069341	G17-G9
	IX L3	0.06-0.74	115.82-356.24	-	-
	IX L2	0.19-3.54	121-362.4	56.853299	G17-G8
	IX L1	0.22-1.77	130.61-368.3	19.022405	G17-G7
	L-1	0.28-0.83	238.25-290.24	-	-
	IX TOP	0.15-1.95	148.34-378.75	1.988056	G17-G8
	IX BOT	0.36-6.5	149.89-380.8	50.875993	G17-G8
	IX COMB	4.68-7.83	203.97-360.56	45.49807	G14-G9
	VIII COMB	0.23-3.99	165.3-392.72	11.379395	G17-G9
	VII TOP	0.18-3.6	180.13-411.46	13.024015	G17-G8
	VII BOT	0.55-6.35	196.3-421.3	52.587059	G17-G7

	VII COMB	3.8-8.39	240-385.58	41.711981	G15-G10
	VI TOP	0.86-11	197.38-363.4	56.987709	G17-G10
	VI BOT	0.54-19.61	201.55-367.4	56.333579	G17-G8
	VI COMB	6.39-21.59	191.27-425.12	247.0494	G16-G10
	VI L	0.3-2.47	212.1-443.1	12.326854	G17-G9
	VI L1	0.11-2.17	232.85-451.15	0.999824	G17-G10
	VI L2	0.25-1.2	281.93-369.48	-	-
	BAND-1 TOP	0.2-2.66	239.9-439.81	0.647489	G17-G8
	BAND-1 BOT	0.2-3.53	240.56-464.35	3.759607	G17-G8
	V TOP	0.2-0.78	240.5-408.6	-	G17-G12
	V BOT (TOP)	0.1-1.61	251.49-461.35	0.49385	G17-G7
	V BOT (BOT)	0.19-1.7	255.26-463.67	1.472713	G17-G6
	L-3 TOP	0.31-1.65	295-428.8	-	-
	L-3 BOT	0.2-2.9	298-432	-	-
	III	0.5-1.15	382.02-495.45	-	-
	BAND-4 COMB	0.3-0.82	471.7-516.05	-	-
	I	0.5-0.5	579.12-579.12	-	-
	Total			800.883945	
A total of 23.223 million tonnes additional resources for coal seams having thickness in between 0.50 m to 0.90 m have also been estimated for underground net-insitu proved category.					
7.	Surface Constraints	-			
8.	Grade of the block	G13 (Provisional) based on weighted average grade as per grade-wise data available in Draft GR.			
9.	Decision Support System (DSS) Analysis	Hydrology info: The polygon is within 250 meters of major river(s)- Kelo River Wildlife info: The polygon touches Wildlife Habitat(s)- Sloth Bear, Elephant Grid			
10.	Eco Sensitive Zone (ESZ)	Southern boundary of the block is approx. 34 km from the boundary of ESZ of Debrigarh. Eastern boundary of the block is approx. 50 km from the boundary of ESZ of Sambalpur Elephant Region and NW boundary of the block is approx. 42 km from the boundary of buffer zone of unnotified Lemru Elephant Reserve.			

PART B

Sr. No.	Features	Details
1	Tentative Peak rated Capacity	1.74 MTPA

Note:

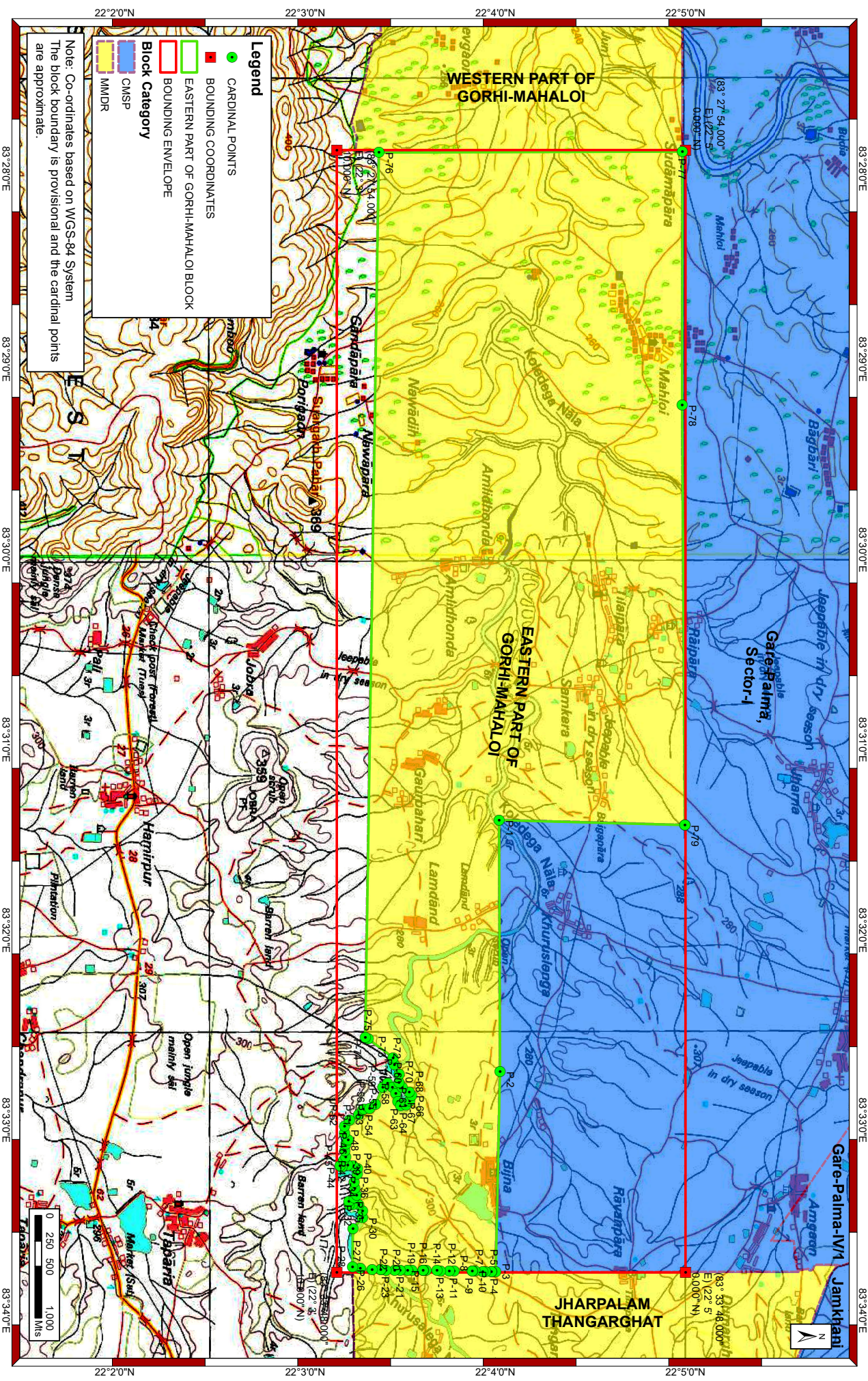
1. Above summary is compiled from “Draft Geological Report on Detailed Exploration for Coal Eastern Part of Gorhi-Mahloi Block Mand-Raigarh Coalfield District: Raigarh, Chhattisgarh (Non-CIL Block under MOU Programme), Feb-2021 by MECL.
2. Block boundary and cardinal points are provisional and shall be finalized after DGPS Survey of Boundary.

Disclaimer:

1. The analysis is done on Beta-version (Trial Version) of Decision Support System (DSS) of FSI / MOEF.
2. The Decision Rules for various parameters of this DSS System are controlled by FSI.
3. CMPDI only runs this DSS to obtain the status of any block based on these Decision Rules.
4. The database of the Decision Rules is updated by FSI from time to time.
5. CMPDI does not own any responsibility for variation in the results which are based on the Decision Rules of the FSI DSS in case of any updation of the database at FSI end.
6. ESZ analysis and tiger habitat/ corridor given here is based on the information available in public domain. Bidders are encouraged to verify this information and any other information additionally available.

**EASTERN PART OF GORHI MAHALOI BLOCK
MAND RAIGARH COALFIELD**

FOR INTERNAL/RESTRICTED USE ONLY



**Provisional cardinal points for Eastern part of Gorhi Mahaloi Block,
Mand Raigarh coalfield**

Point	Longitude	Latitude
P-1	83° 31' 25.336" E	22° 4' 1.173" N
P-2	83° 32' 44.628" E	22° 4' 1.496" N
P-3	83° 33' 47.714" E	22° 4' 0.095" N
P-4	83° 33' 47.692" E	22° 3' 58.785" N
P-5	83° 33' 47.692" E	22° 3' 58.768" N
P-6	83° 33' 47.661" E	22° 3' 56.842" N
P-7	83° 33' 47.647" E	22° 3' 55.966" N
P-8	83° 33' 47.608" E	22° 3' 53.590" N
P-9	83° 33' 47.594" E	22° 3' 52.754" N
P-10	83° 33' 47.593" E	22° 3' 52.694" N
P-11	83° 33' 47.499" E	22° 3' 46.891" N
P-12	83° 33' 47.477" E	22° 3' 45.504" N
P-13	83° 33' 47.430" E	22° 3' 42.629" N
P-14	83° 33' 47.414" E	22° 3' 41.614" N
P-15	83° 33' 47.358" E	22° 3' 38.153" N
P-16	83° 33' 47.344" E	22° 3' 37.327" N
P-17	83° 33' 47.342" E	22° 3' 37.180" N
P-18	83° 33' 47.342" E	22° 3' 37.166" N
P-19	83° 33' 47.286" E	22° 3' 33.706" N
P-20	83° 33' 47.264" E	22° 3' 32.356" N
P-21	83° 33' 47.225" E	22° 3' 30.005" N
P-22	83° 33' 47.197" E	22° 3' 28.264" N
P-23	83° 33' 47.153" E	22° 3' 25.503" N
P-24	83° 33' 47.125" E	22° 3' 23.830" N
P-25	83° 33' 47.125" E	22° 3' 23.819" N
P-26	83° 33' 47.081" E	22° 3' 21.060" N
P-27	83° 33' 46.602" E	22° 3' 17.382" N
P-28	83° 33' 46.290" E	22° 3' 14.988" N
P-29	83° 33' 34.144" E	22° 3' 15.006" N
P-30	83° 33' 30.731" E	22° 3' 18.086" N
P-31	83° 33' 28.444" E	22° 3' 18.122" N
P-32	83° 33' 26.651" E	22° 3' 16.912" N
P-33	83° 33' 26.615" E	22° 3' 14.917" N
P-34	83° 33' 26.523" E	22° 3' 13.887" N
P-35	83° 33' 25.489" E	22° 3' 13.834" N
P-36	83° 33' 24.485" E	22° 3' 15.432" N
P-37	83° 33' 23.539" E	22° 3' 16.204" N
P-38	83° 33' 21.462" E	22° 3' 15.617" N
P-39	83° 33' 19.393" E	22° 3' 15.443" N
P-40	83° 33' 16.975" E	22° 3' 16.444" N
P-41	83° 33' 15.205" E	22° 3' 16.472" N
P-42	83° 33' 14.220" E	22° 3' 15.042" N
P-43	83° 33' 14.116" E	22° 3' 13.393" N
P-44	83° 33' 14.673" E	22° 3' 11.527" N
P-45	83° 33' 14.293" E	22° 3' 10.913" N

**Provisional cardinal points for Eastern part of Gorhi Mahaloi Block,
Mand Raigarh coalfield**

Point	Longitude	Latitude
P-46	83° 33' 12.691" E	22° 3' 12.108" N
P-47	83° 33' 11.523" E	22° 3' 12.814" N
P-48	83° 33' 9.599" E	22° 3' 12.500" N
P-49	83° 33' 7.467" E	22° 3' 12.946" N
P-50	83° 33' 6.150" E	22° 3' 13.586" N
P-51	83° 33' 3.840" E	22° 3' 12.384" N
P-52	83° 33' 1.775" E	22° 3' 12.416" N
P-53	83° 32' 59.810" E	22° 3' 13.960" N
P-54	83° 32' 58.165" E	22° 3' 16.875" N
P-55	83° 32' 56.564" E	22° 3' 18.138" N
P-56	83° 32' 56.510" E	22° 3' 18.604" N
P-57	83° 32' 56.308" E	22° 3' 20.344" N
P-58	83° 32' 55.012" E	22° 3' 22.152" N
P-59	83° 32' 49.446" E	22° 3' 24.509" N
P-60	83° 32' 48.291" E	22° 3' 25.972" N
P-61	83° 32' 49.574" E	22° 3' 27.534" N
P-62	83° 32' 51.512" E	22° 3' 28.605" N
P-63	83° 32' 54.179" E	22° 3' 29.182" N
P-64	83° 32' 55.375" E	22° 3' 30.058" N
P-65	83° 32' 55.185" E	22° 3' 31.781" N
P-66	83° 32' 53.879" E	22° 3' 33.039" N
P-67	83° 32' 52.118" E	22° 3' 33.617" N
P-68	83° 32' 51.144" E	22° 3' 32.807" N
P-69	83° 32' 49.554" E	22° 3' 30.561" N
P-70	83° 32' 47.988" E	22° 3' 29.623" N
P-71	83° 32' 45.479" E	22° 3' 29.662" N
P-72	83° 32' 42.577" E	22° 3' 28.117" N
P-73	83° 32' 40.228" E	22° 3' 27.772" N
P-74	83° 32' 34.386" E	22° 3' 19.917" N
P-75	83° 32' 33.867" E	22° 3' 18.957" N
P-76	83° 27' 54.802" E	22° 3' 23.236" N
P-77	83° 27' 54.540" E	22° 4' 58.990" N
P-78	83° 29' 14.409" E	22° 4' 58.939" N
P-79	83° 31' 26.887" E	22° 4' 59.740" N