

**SARAPAL-NUAPARHA, TALCHER COALFIELD
ODISHA**

SALIENT FEATURES

1. **Block** : SARAPAL-NUAPARHA, TALCHER
COALFIELD, DIST-ANGUL, ODISHA
2. **Area** : 17.08 Sq.km.
3. **Location and Communication** : The block is located in north central part of the coalfield to the dipside of Aunli-patrapara block. The limiting coordinates of the block are
Latitude : 21°07'45" – 21°09'30"N (Approx)
Longitude: 84°46'29" – 84°50'56"E (approx)
Topo Sheet No: 73 C/16

Angul, the district head quarters is about 55 kms from the block and is connected by an all weather metalled road. The nearest rail head is also Angul on the Cuttuck-Sambalpur line of the East Coast Railway.

Aunli nadi flows W-E in south eastern & south central part of the block. Jamaharia nala flows in the northern part of the block. There are numbers of rain-fed streams flow in the block.

About 5% of the area of the block is covered by forest areas

4 to 5 villages are located to the north of Aunli Nadi

4. **Status of Exploration** : Regionally Explored

Agency	No. of borehole	Meterage
GSI	9	5062.85m

5. **Structure** : Strike : East-West
Dip : 2°-7° northerly
Faults : 2 faults with throw varying from 20-70m.
6. **Sequence of Coal Seams** : A total of 6 coal seam zones occur in this block. The parameters of coal seam zones are given below:

SEAM	Thickness of Coal Seam zone (cumulative thickness of coal seam & Parting range (m))	Depth Range (m)	Remarks
VI-VII-VIII	0.68-48.18 (0.68-12.84)	263-435	Occurs in 1-9 sections. The thickness of section ranges from 0.44m to 5.00m.
Parting thickness6.50m-29.46m.....		
IIIT	0.92-22.91 (0.92-7.77)	291-492	Occurs in 1-5 sections. The thickness of section ranges from 0.50m-5.77m.
Parting thickness	8.82m to 20.17m and from 38.30m to 45.81m where seam No.IIIm is not developed (tsn-5, 6, 7 and 8)		
IIIM	6.05-8.30 (1.62-2.87)	309-483	Occurs in 2 sections. The thickness of section ranges from 0.62m to 1.64m.
Parting Thickness 8.06m-28.92m.....		
IIIB	3.46-39.84 (3.46-20.71)	345-554	Occurs in 1-5 sections. The thickness of section ranges from 0.50m to 14.10m.
Parting Thickness13.75m-27.82m.....		
II	9.69-26.10 (1.98-7.14)	377-542	Occurs in 2-5 sections. The thickness of section ranges from 0.65m to 3.35m.
Parting Thickness62.51m-83.75m.....		
I	1.25-75.53 (1.25-20.65)	464-652	Occurs in 1-9 sections. The thickness of section ranges from 0.52m to 7.88m.

7. **Quality** : The broad quality parameters of different seams in the block are given below :

SEAM	M% Range	Ash% Range	UHV Range	Grade Range
VI-VII-VIII	4.10-12.1	17.5-45.5	1823-5036	C-G
III Top	3.6-8.5	21.0-41.7	2434-4829	D-F
III Middle	4.3-7.6	26.2-37.8	2731-4527	D-F
III Bottom	3.2-8.4	21.2-43.6	2372-4953	C-G
II	3.2-6.6	26.2-47.7	1806-4635	D-G
I	3.2 – 6.9	23.2 – 43.1	2414 – 5124	C - F

8. **Reserves** : A total of 701.16 Mt of reserves 622.46 Mt Indicated and 78.7 Mt Inferred have been estimated in the area. The seam-wise, grade-wise reserves are given below:

Seam	C	D	E	F	G	Total	Inf	G. Total
VI-VII-VIII	0	8.85	42.14	86.39	15.59	152.97	10.56	163.53
III T	0	0	37.52	35.63	0	73.15	12.36	85.51
III M	0	4.04	5.53	4.35	0	13.92	4.84	18.76
III B	5.14	38.92	155.36	62.14	0	261.56	40.42	301.98
II	0	5.84	0	35.75	8.4	49.99	8.63	58.62
I	19.13	22.59	15.16	13.99	0	70.87	1.89	72.76
Total	24.27	80.24	255.71	238.25	23.99	622.46	78.7	701.16

The depth-wise break up of the reserves are given below:

0-300m	-	33.31 Mt
300-600m	-	645.38 Mt
600-1200m	-	22.47 Mt
TOTAL	-	701.16 Mt

Note:

1. Salient features, Block boundary plan & lithologs are based on GSI report of Regional Exploration on Sarapal-Nuaparha Block, Talcher Coalfield.
2. Block boundary shown in the plan is approximate.
3. Forest cover details are not available with CMPDI.
4. Infrastructure details are not available with CMPDI.

Bibliography:

Final report on Regional Exploration for coal in Sarapal-Nuaphara Block, Talcher Coalfield, Angul District, Orissa, Coal wing 2003