

## JHARPALAM TANGRAGHAT COAL BLOCK SUMMARY

### PART A

Sr. No	Features	Details
<b>1. Location</b>		
	Coal Block	JHARPALAM TANGRAGHAT
	Latitude	22° 02' 55" N - 22° 05' 47" N (Provisional)
	Longitude	83° 33' 45" E - 83° 36' 24" E (Provisional)
	Topo Sheet No.	64 N/12
	Coalfield	Mand Raigarh
	Villages	Tangarghat, Dumarghucha, Ourajor, Karrapalli, Kesarchuan
	Tehsil/Taluka	
	District	Raigarh
	State	Chhattisgarh
<b>2. Connectivity with Block</b>		
	Nearest Rail Head	Raigarh Railway Station on the Howrah-Bombay Mainline is the nearest railway station and is located about 45 km from this block via Raigarh-Sundargarh Road and also about 50 km via Kasdol Road passing through Tamnar town.
	Road	The area is well connected with Raigarh by State Highway No 1. It is also connected to Tamnar town with roads constructed by mining companies active in the neighbouring Gare block. Raigarh-Sundargarh road lies South of the block and can be reached via a 4.7 km all weather road. This road connect the present block area with Raigarh city, which is approx. 40.7 km South-West from Tangarghat Village.
	Airport	
<b>3. Area</b>		
	Geological Block Area	13.25 sq.km. (As per shape file. Refer note below)
	Forest Area	1 % (As per FSI map)
	Non-Forest Area	99 % (As per FSI map)
<b>4. Climate and Topography</b>		
	Average Annual Rainfall	-
	Temperature (Min. — Max.)	-
	Local Surface Drainage Channels	The unnamed tributary nalas of 2nd and 3rd order of Kelo River which is flowing about 8-10 km. west and south-west of the area form main drainage system flowing mostly north-east to south-west and east to west direction.
	Rivers	-

<b>5. Exploration</b>				
Status	Explored			
Exploration Agency	MECL			
Total Number of Boreholes with meterage	97 Boreholes; 46528.70 m			
Borehole Density	Approx. 7.3 Boreholes/sq.km.			
General Dip of Seams	The dip of beds varies from 2° to 6° mostly NE to SW which slightly changes to NNE to SSW in the South-Eastern area.			
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 ESE-WNW direction.			
Faults	Two faults viz. F1-F1 and F2-F2 are deciphered to evolve the structure of Jharpalam Thangarghat block. The faults are of low to medium intensity with throw ranging from 0 to 50 m. The dip of these faults is assumed as 60°.			
<b>6. Coal Seams &amp; Reserve</b>				
Coal Seams	Thickness Range (m)	Depth Range (m)	Geological Reserve (MT)	Grade
Local-1	0.04-0.92	30.27-136.87	-	-
X LD	0.1-2.4	15.2-222.4	2.092716	G9-G17
X LC	0.05-1.21	29.79-232.88	0.14677	G12-G17
X LB	0.05-1.34	9.13-237.08	0.360646	G5-G17
X LA	0.09-0.8	62.42-298	-	-
X Top	1-5.58	59.8-320.54	78.684357	G8-G15
X Bot	0.23-1.9	73-329.95	9.920107	G8-G16
IX L3	0.14-1.25	82-323.22	0.206635	G10-G17
IX L2	0.55-2.45	75.5-347.65	23.096644	G7-G17
IX L1	0.05-1.2	86.7-355.6	1.929252	G7-G15
L-1	0.17-1.14	104.5-345.26	1.931597	G5-G17
IX Top	2.47-3.95	196.6-209.3	-	-
IX Bot	2.15-3	202.8-213.7	-	G10-G11
IX Comb	4.7-11.39	107.7-365.13	145.433946	G8-G14
Band-A	0.1-1.54	109-370.12	0.63495	G6-G16
VIII Top	0.49-4	223-362.8	1.28879	G9-G17
VIII Bot	0.2-4.18	224.46-364.86	5.189401	G8-G17
VIII Comb	0.9-8.38	116.55-350.98	37.72642	G10-G15
VII Top	0.75-1.27	257.3-270.35	0.108549	G12-G13
VII Bot	0.57-0.8	255.2-272.68	-	-
VII Comb	0.39-3.84	123.05-419.33	12.306972	G9-G14
VI Top	1-7.15	209.4-403	16.339597	G11-G16
VI Bot	0.8-6.3	216.1-411.3	12.067335	G11-G14
VI Comb	8.61-16.86	126.7-423.3	69.011829	G11-G14
VI+VII	13.07-18.12	143.16-375.21	155.840948	G11-G15
VI L	0.08-1.66	147.39-437.1	0.234875	G12-G17
VI L1	0.04-1.57	151.6-416.79	0.119795	G10-G16
VI L2	0.08-1.7	159-446	0.222013	G12-G17
Band-1 Top	0.07-1.88	163.25-457.38	1.000229	G8-G16
Band-1 Bot	0.41-2.39	165.1-461.53	3.661455	G9-G17
Band-1 Comb	1.25-2.51	196.49-374.4	3.545626	G10-G16
V-Top	0.05-1	193-492.25	-	-

V Bot Top	0.13-4.36	218.14-464.6	7.969341	G7-G15
V Bot Bot	0.47-4.75	220.75-467.3	11.17621	G7-G14
V Bot Comb	3.28-7.52	216.6-501.68	57.660172	G9-G16
L-3 Top	0.1-1.2	288.1-515.8	0.051379	G9-G17
L-3 Bot	0.11-2.15	231.34-518	9.854607	G9-G17
L-3 Comb	1.75-4.42	301.36-495.33	5.63327	G10-G15
Band-B	0.05-0.9	235.6-517.05	-	-
IV	0.21-1.78	239.45-542.8	2.057231	G6-G17
Band-3 Top	0.1-2.83	262.6-548.55	3.955395	G7-G16
Band-3 Bot	0.4-2.77	275.86-529	12.596949	G9-G17
Band-3 Comb	2-5.44	275.25-490	7.959697	G12-G17
III	0.5-4.55	276.35-571.2	50.939175	G6-G14
II Top	0.07-4.41	307-586	3.501894	G4-G17
II Bot	0.05-7.45	308.72-630.2	17.574415	G4-G16
II	2-9.05	387.69-440.3	6.684823	G7-G14
Band-C	0.07-2.35	350.66-481.65	1.787591	G4-G15
Band-4 Top	0.11-1.04	376.42-493.59	1.517326	G7-G14
Band-4 Bot	0.12-1.3	358.18-513.77	0.464357	G8-G17
Band-4 Comb	0.55-2.05	395.4-564.1	3.885227	G7-G17
I	0.1-1.34	475.2-623.66	-	-
	<b>Total</b>		<b>788.370</b>	
A total of 73.889 MT additional resources for coal seams having thickness in between 0.50 m to 0.90 m have also been estimated. Out of this, 45.600 MT falls under net insitu 'Proved' coal resource and 28.289 MT are under gross 'Indicated' coal resource.				
<b>7.</b>	<b>Surface Constraints</b>	Proposed alignment of rail corridor passes through the northern corner of the block.		
<b>8.</b>	<b>Grade of the block</b>	G12 (Provisional) based on weighted average grade as per grade-wise data available in Draft GR.		
<b>9.</b>	<b>Decision Support System (DSS) Analysis</b>	Wildlife info: The polygon touches Wildlife Habitat(s)- Sloth Bear		
<b>10.</b>	<b>Eco Sensitive Zone (ESZ)</b>	Southern boundary of the block is approx. 33 km from the boundary of ESZ of Debrigarh. Eastern boundary of the block is approx. 46 km from the boundary of ESZ of Sambalpur Elephant Region and NW boundary of the block is approx. 47 km from the boundary of buffer zone of unnotified Lemru Elephant Reserve.		

## PART B

Sr.No.	Features	Details
1.	Tentative Peak Rated Mine Capacity	1.74 MTPA

### Note:

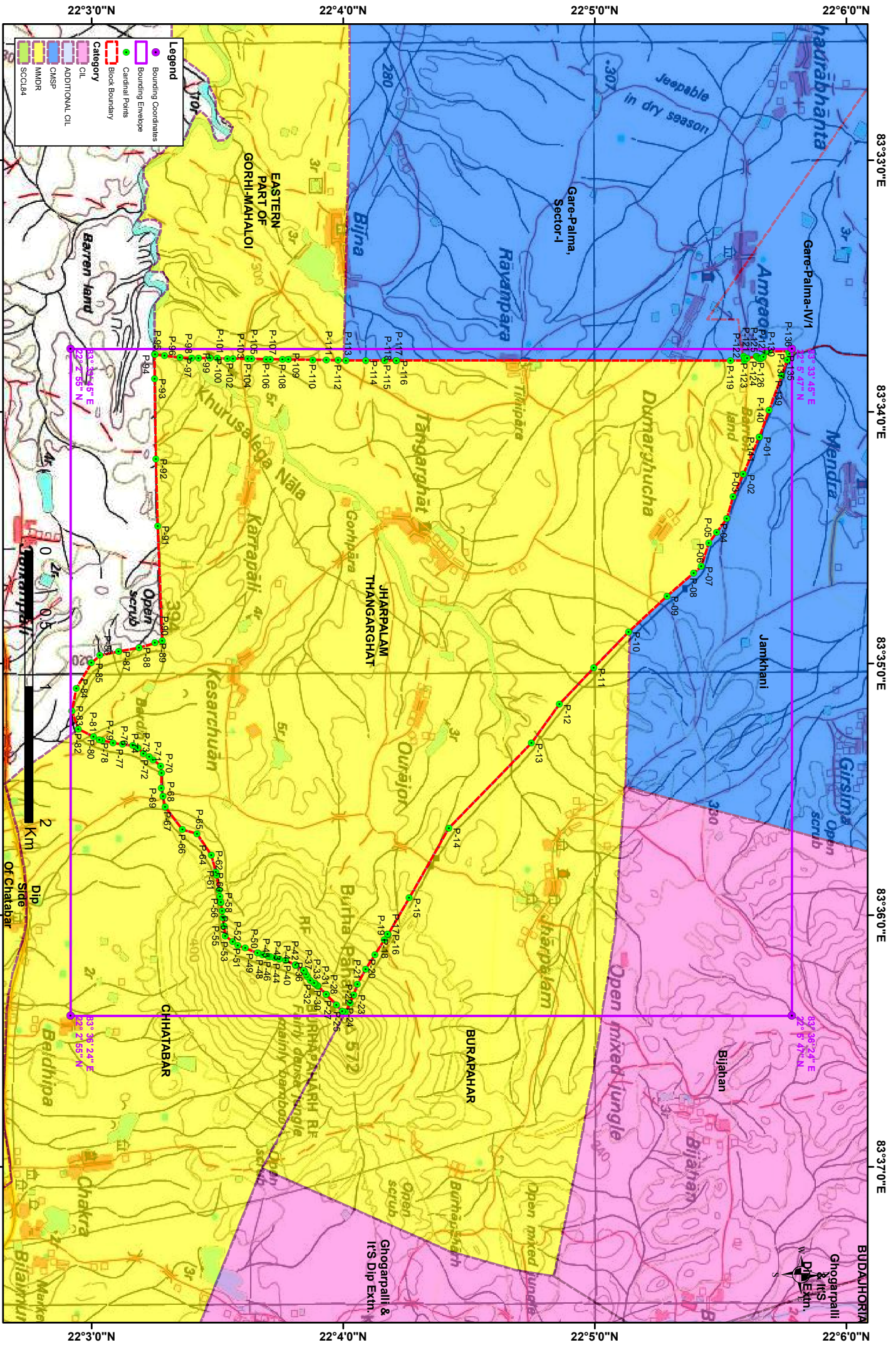
1. The mine summary data is compiled from “**Geological Report on Detailed Exploration for Coal, Jharpalam Thangarghat Block, Mand-Raigarh Coalfield, District: Raigarh, Chhattisgarh (NON-CIL BLOCK UNDER MOU PROGRAMME), February-2021**”
2. Block boundary and cardinal points are provisional and shall be 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.

Jharpalam Tangarghat Block, Mand Raigarh Coalfield

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Note: The map is prepared on WGS84 coordinate system.

**Provisional Cardinal Points of Jharpalam Thangarghat Block**

POINT_ID	LONGITUDE	LATITUDE
P-01	83° 34' 5.968" E	22° 5' 39.235" N
P-02	83° 34' 14.876" E	22° 5' 35.410" N
P-03	83° 34' 20.190" E	22° 5' 32.970" N
P-04	83° 34' 25.475" E	22° 5' 31.471" N
P-05	83° 34' 28.756" E	22° 5' 29.059" N
P-06	83° 34' 31.285" E	22° 5' 27.177" N
P-07	83° 34' 36.851" E	22° 5' 25.381" N
P-08	83° 34' 38.445" E	22° 5' 23.574" N
P-09	83° 34' 43.901" E	22° 5' 17.211" N
P-10	83° 34' 52.493" E	22° 5' 8.034" N
P-11	83° 35' 1.012" E	22° 4' 59.728" N
P-12	83° 35' 9.692" E	22° 4' 51.554" N
P-13	83° 35' 18.975" E	22° 4' 44.860" N
P-14	83° 35' 39.220" E	22° 4' 25.183" N
P-15	83° 35' 55.900" E	22° 4' 15.731" N
P-16	83° 36' 4.668" E	22° 4' 10.655" N
P-17	83° 36' 4.475" E	22° 4' 10.658" N
P-18	83° 36' 4.583" E	22° 4' 10.592" N
P-19	83° 36' 5.862" E	22° 4' 9.806" N
P-20	83° 36' 9.391" E	22° 4' 7.571" N
P-21	83° 36' 12.919" E	22° 4' 5.337" N
P-22	83° 36' 16.479" E	22° 4' 3.359" N
P-23	83° 36' 18.944" E	22° 4' 2.496" N
P-24	83° 36' 20.932" E	22° 4' 1.661" N
P-25	83° 36' 23.035" E	22° 4' 0.501" N
P-26	83° 36' 22.945" E	22° 3' 59.740" N
P-27	83° 36' 21.428" E	22° 3' 58.353" N
P-28	83° 36' 18.866" E	22° 3' 55.956" N
P-29	83° 36' 18.802" E	22° 3' 55.896" N
P-30	83° 36' 16.837" E	22° 3' 53.927" N
P-31	83° 36' 16.784" E	22° 3' 53.873" N
P-32	83° 36' 16.455" E	22° 3' 53.427" N
P-33	83° 36' 16.287" E	22° 3' 53.198" N
P-34	83° 36' 16.193" E	22° 3' 53.062" N
P-35	83° 36' 15.530" E	22° 3' 52.139" N
P-36	83° 36' 14.730" E	22° 3' 51.481" N
P-37	83° 36' 14.040" E	22° 3' 51.130" N
P-38	83° 36' 13.296" E	22° 3' 50.750" N
P-39	83° 36' 13.161" E	22° 3' 50.535" N
P-40	83° 36' 11.989" E	22° 3' 48.649" N
P-41	83° 36' 11.844" E	22° 3' 48.635" N
P-42	83° 36' 11.824" E	22° 3' 48.592" N
P-43	83° 36' 10.795" E	22° 3' 46.269" N
P-44	83° 36' 10.434" E	22° 3' 44.783" N
P-45	83° 36' 10.170" E	22° 3' 43.695" N
P-46	83° 36' 9.902" E	22° 3' 42.593" N
P-47	83° 36' 9.768" E	22° 3' 42.041" N

**Provisional Cardinal Points of Jharpalam Thangarghat Block**

POINT_ID	LONGITUDE	LATITUDE
P-48	83° 36' 9.451" E	22° 3' 40.735" N
P-49	83° 36' 9.036" E	22° 3' 39.657" N
P-50	83° 36' 8.985" E	22° 3' 39.525" N
P-51	83° 36' 7.865" E	22° 3' 36.616" N
P-52	83° 36' 7.189" E	22° 3' 34.858" N
P-53	83° 36' 6.281" E	22° 3' 33.649" N
P-54	83° 36' 4.945" E	22° 3' 31.868" N
P-55	83° 36' 2.568" E	22° 3' 31.558" N
P-56	83° 36' 0.652" E	22° 3' 31.308" N
P-57	83° 35' 59.007" E	22° 3' 31.094" N
P-58	83° 35' 57.009" E	22° 3' 30.833" N
P-59	83° 35' 56.806" E	22° 3' 30.807" N
P-60	83° 35' 55.558" E	22° 3' 30.614" N
P-61	83° 35' 54.073" E	22° 3' 30.384" N
P-62	83° 35' 50.405" E	22° 3' 29.818" N
P-63	83° 35' 49.677" E	22° 3' 29.623" N
P-64	83° 35' 45.666" E	22° 3' 28.548" N
P-65	83° 35' 40.569" E	22° 3' 25.128" N
P-66	83° 35' 39.620" E	22° 3' 21.635" N
P-67	83° 35' 34.174" E	22° 3' 17.503" N
P-68	83° 35' 31.700" E	22° 3' 17.003" N
P-69	83° 35' 29.674" E	22° 3' 16.594" N
P-70	83° 35' 26.133" E	22° 3' 16.650" N
P-71	83° 35' 24.414" E	22° 3' 16.471" N
P-72	83° 35' 22.886" E	22° 3' 14.638" N
P-73	83° 35' 22.300" E	22° 3' 13.729" N
P-74	83° 35' 21.405" E	22° 3' 12.339" N
P-75	83° 35' 20.108" E	22° 3' 11.018" N
P-76	83° 35' 19.588" E	22° 3' 9.788" N
P-77	83° 35' 19.258" E	22° 3' 7.371" N
P-78	83° 35' 18.949" E	22° 3' 5.103" N
P-79	83° 35' 18.290" E	22° 3' 2.508" N
P-80	83° 35' 18.114" E	22° 3' 1.815" N
P-81	83° 35' 17.421" E	22° 3' 0.438" N
P-82	83° 35' 15.588" E	22° 2' 56.798" N
P-83	83° 35' 11.298" E	22° 2' 55.267" N
P-84	83° 35' 5.949" E	22° 2' 56.332" N
P-85	83° 34' 59.871" E	22° 2' 59.936" N
P-86	83° 34' 58.081" E	22° 3' 1.925" N
P-87	83° 34' 57.111" E	22° 3' 6.429" N
P-88	83° 34' 56.203" E	22° 3' 11.293" N
P-89	83° 34' 55.110" E	22° 3' 15.077" N
P-90	83° 34' 54.522" E	22° 3' 16.832" N
P-91	83° 34' 27.181" E	22° 3' 15.735" N
P-92	83° 34' 11.214" E	22° 3' 15.298" N
P-93	83° 33' 52.114" E	22° 3' 14.996" N
P-94	83° 33' 46.287" E	22° 3' 14.988" N

**Provisional Cardinal Points of Jharpalam Thangarghat Block**

POINT_ID	LONGITUDE	LATITUDE
P-95	83° 33' 46.305" E	22° 3' 15.133" N
P-96	83° 33' 46.602" E	22° 3' 17.382" N
P-97	83° 33' 47.081" E	22° 3' 21.060" N
P-98	83° 33' 47.125" E	22° 3' 23.830" N
P-99	83° 33' 47.153" E	22° 3' 25.503" N
P-100	83° 33' 47.197" E	22° 3' 28.264" N
P-101	83° 33' 47.225" E	22° 3' 30.005" N
P-102	83° 33' 47.264" E	22° 3' 32.356" N
P-103	83° 33' 47.286" E	22° 3' 33.706" N
P-104	83° 33' 47.342" E	22° 3' 37.180" N
P-105	83° 33' 47.358" E	22° 3' 38.153" N
P-106	83° 33' 47.414" E	22° 3' 41.614" N
P-107	83° 33' 47.430" E	22° 3' 42.629" N
P-108	83° 33' 47.477" E	22° 3' 45.504" N
P-109	83° 33' 47.499" E	22° 3' 46.891" N
P-110	83° 33' 47.594" E	22° 3' 52.754" N
P-111	83° 33' 47.647" E	22° 3' 55.966" N
P-112	83° 33' 47.692" E	22° 3' 58.768" N
P-113	83° 33' 47.714" E	22° 4' 0.630" N
P-114	83° 33' 47.716" E	22° 4' 5.384" N
P-115	83° 33' 47.717" E	22° 4' 9.876" N
P-116	83° 33' 47.719" E	22° 4' 12.622" N
P-117	83° 33' 47.719" E	22° 4' 12.687" N
P-118	83° 33' 47.718" E	22° 4' 12.687" N
P-119	83° 33' 47.750" E	22° 5' 32.361" N
P-120	83° 33' 47.752" E	22° 5' 35.681" N
P-121	83° 33' 46.808" E	22° 5' 35.505" N
P-122	83° 33' 47.150" E	22° 5' 35.827" N
P-123	83° 33' 47.221" E	22° 5' 36.331" N
P-124	83° 33' 46.785" E	22° 5' 38.515" N
P-125	83° 33' 46.827" E	22° 5' 38.740" N
P-126	83° 33' 47.148" E	22° 5' 39.003" N
P-127	83° 33' 47.322" E	22° 5' 39.262" N
P-128	83° 33' 47.310" E	22° 5' 39.552" N
P-129	83° 33' 47.184" E	22° 5' 39.850" N
P-130	83° 33' 46.840" E	22° 5' 40.212" N
P-131	83° 33' 45.633" E	22° 5' 40.808" N
P-132	83° 33' 45.465" E	22° 5' 41.061" N
P-133	83° 33' 45.489" E	22° 5' 41.201" N
P-134	83° 33' 45.552" E	22° 5' 41.597" N
P-135	83° 33' 45.492" E	22° 5' 46.172" N
P-136	83° 33' 45.550" E	22° 5' 46.903" N
P-137	83° 33' 46.146" E	22° 5' 46.387" N
P-138	83° 33' 47.569" E	22° 5' 45.898" N
P-139	83° 33' 51.452" E	22° 5' 44.580" N
P-140	83° 33' 59.603" E	22° 5' 41.549" N
P-141	83° 34' 5.968" E	22° 5' 39.235" N