

## CHHENDIPADA & CHHENDIPADA-II COAL BLOCK SUMMARY

### PART A

#### 1. CHHENDIPADA

Sr. No.	Features	Details
<b>1.</b>	<b>Location</b>	
	Coal Block	<b>Chhendipada</b>
	Latitude	21° 4' 33" N - 21° 5' 53" N (Provisional)
	Longitude	84° 51' 46" E - 84° 54' 51" E (Provisional)
	Topo Sheet No.	F45S9
	Coalfield	Talcher
	Villages	Bagadia, Khosla
	Tehsil/Taluka	Chhendipada
	District	Angul
State	Orissa	
<b>2.</b>	<b>Connectivity with Block</b>	
	Nearest Rail Head	Nearest Railway station at Angul on Bhubaneswar-Sambalpur line (40 Kms from the block)
	Road	Connected by metal road to Angul (40kms)
	Airport	Biju Patnaik International Airport
<b>3.</b>	<b>Area</b>	
	Geological Block Area	8.16 sq. km. (As per shape file. Refer Note No. 3)
	Forest Area	Approx. 12% (As per FSI map)
	Non-Forest Area	Approx. 88% (As per FSI map)
<b>4.</b>	<b>Climate and Topography</b>	
	Average Annual Rainfall	71 cm and 186 cm
	Temperature (Min. — Max.)	9°C - 46.7°C
	Local Surface Drainage Channels	Gaudhuni nala, which forms the south and eastern boundary of the block, is flowing from south to north. Gaudhuni nala controls the drainage and topographical pattern around south eastern part of Chhendipada-I block. A smaller nala, Kumbhira, is flowing across the block from south to north near western boundary the block. The Gauduni and the Kumbhira nalas drain the area and both are discharging in Tikra nadi, which is running along the northern boundary of the coalfield.
	Rivers	Brahmani river, flowing in approximately north-south direction along the eastern boundary of the Tacher coalfield provide the main drainage of the region. Gauduni and Kumbhira nalas drain the area and both are discharging in Tikra nadi which is running along the northern boundary of the coalfield.
<b>5.</b>	<b>Exploration</b>	
	Status	Explored
	Exploration Agency	CMPDI
	Total Number of Boreholes with meterage	125 boreholes & 26237.30m

	Borehole Density	15 boreholes per sq. km.				
	General Dip of Seams	1°-3° towards North in general				
	General Strike Direction	East-West with minor variations at eastern part				
<b>6.</b>	<b>Coal Seams &amp; Reserve</b>					
	Number of Coal Seams	Thickness Range (m)	Depth Range (m) (Floor)	Net Geological reserve (Mt)		Grade
				Proved	Indicated	
	VIII	0.56 – 15.81	8.07 – 37.91	10.288		G9 – G14
	VI-VII	0.72 – 16.88	10.48 – 51.22	58.067	0.860	G9 – G14
	VI-VII-VIII	30.22 – 30.22	40.41 – 40.41	5.741	0.031	G11 – G12
	V	0.43 – 2.91	11.00 – 63.20	8.242	0.938	G7 – G14
	IV	0.23 – 3.55	8.90 – 70.70	4.242	0.020	G9 – G14
	IV-V	1.24 – 6.12	12.47 – 39.00	1.355	-	G11 – G14
	III Top (T)	1.87 – 7.91	17.26 – 66.82	14.088	-	G7 – G14
	III Top (M)	0.75 – 4.31	22.30 – 83.00	7.153	-	G9 – G14
	III Top (B)	0.10 – 2.80	19.70 – 81.64	3.070	1.728	G11 – G14
	III Top (T+M)	3.30 – 11.92	14.27 – 82.74	53.229	5.330	G9 – G12
	III Top	2.59 – 12.23	11.00 - 37.73	2.927	1.606	G11 – G14
	III Middle	1.22 – 9.53	16.22 – 121.80	82.780	8.945	G7 – G14
	III Bottom	2.19 – 10.95	29.00 – 146.57	80.671	8.053	G7- G14
	I A Top	9.22 – 18.83	96.27 – 253.45	116.956	9.252	G7 – G12
	I A Bottom	2.11 – 11.87	105.40 – 266.72	47.654	3.351	G4 – G14
	I A	14.90 – 23.44	105.47 – 217.49	17.645	4.763	G7 – G12
		<b>Total</b>		<b>558.985</b>		
<b>7.</b>	<b>Surface Constraints</b>	Densely populated village Chhendipada, lies at the southwestern corner of the block.				

## 2. CHHENDIPADA-II

Sr. No.	Features	Details
<b>1.</b>	<b>Location</b>	
	Coal Block	<b>Chhendipada-II</b>
	Latitude	21° 05' 48" N to 21° 08' 03" N (Provisional)
	Longitude	84° 51' 42" E to 84° 54' 51" E (Provisional)
	Topo Sheet No.	73 C / 16 (1:50000) Special Toposheet Nos. M-11 & L-11 (1:10000)
	Coalfield	Talcher
	Villages	Golarghia, Sana Golarghia, Bhagasahi, Nanguli, Bahalsahi
	Tehsil/Taluka	Chhendipada
	District	Angul
	State	Odisha

<b>2.</b>	<b>Connectivity with Block</b>					
	Nearest Rail Head	Nearest Railway station is Angul about 45km from the block, on Bhubaneswar Sambalpur railway line of East Coast Railways				
	Road	The block is connected by all weather unmetalled/ and metalled road to Talcher, Angul and thereafter through NH 5 via Cuttack to Bhubaneswar (190 km.). The block is connected via Angul to Sambalpur by NH 42 (180 km.)				
	Airport	The nearest airport is Biju Patnaik International Airport located in the state capital, Bhubaneswar.				
<b>3.</b>	<b>Area</b>					
	Geological Block Area	18.99 sq. km. (As per shape file. Refer Note No. 3)				
	Forest Area	Approx. 05% (As per FSI map)				
	Non-Forest Area	Approx 95% (As per FSI map)				
<b>4.</b>	<b>Climate and Topography</b>					
	Average Annual Rainfall	1300 mm				
	Temperature (Min. — Max.)	6.7°C to 38.1°C (Approx)				
	Local Surface Drainage Channels & Rivers	Durhuba Nala flows across the block from south to north and Thuntimahal nala flows in the south eastern part of the block.				
<b>5.</b>	<b>Exploration</b>					
	Status	Partly Explored				
	Exploration Agency	CMPDI (1996 to 2004)				
	Total Number of Boreholes with meterage	91 Boreholes; 24012.00m				
	Borehole Density	Approx. 4.8 Boreholes/sq.km.				
	General Dip of Seams	North to North West				
	General Strike Direction	E-W				
<b>6.</b>	<b>Coal Seams &amp; Reserve</b>					
	Number of Coal Seams	Thickness Range (m)	Depth Range (m) (Floor)	Geological Reserve (MT)		Grade
				Proved	Indicated	
	XIV	0.41	-	-	-	-
	XIII	0.74-0.95	-	-	-	-
	XII	1.04-3.06	-	-	-	-
	XI	0.22-5.78	-	-	-	-
	X	0.54-4.53	-	-	-	-
	IX	0.27-7.64	-	-	-	-
	VIIIT	1.20-10.41	-	-	-	-
	VIIIB	1.33-11.9	-	-	-	-
	VIII	1.3-22.11	-	-	-	-
	VII & VIII	21.19	-	-	-	-
	VII	0.56-16.02	-	-	-	-
	VI, VII & VIII	12.68-17.88	-	-	-	-
	VI & VII	3.14-17.47	-	-	-	-
	VI	0.65-12.94	-	-	-	-
VB	0.62-3.44	-	-	-	-	
VA	0.16-2.31	-	-	-	-	
V	0.45-6.05	-	-	-	-	

	IV&V	2.10-12.31	-	-	-	-
	IVB	0.83-4.08	-	-	-	-
	IVA	0.87-3.71	-	-	-	-
	IV	0.22-8.90	-	-	-	-
	IIIT	0.15-5.65	-	-	-	-
	IIITM	0.07-9.44	-	-	-	-
	IIITB	0.30-9.62	-	-	-	-
	IIIM	0.10-10.94	-	-	-	-
	IIIM&IIIB	11.5	-	-	-	-
	IIIB	0.13-9.18	-	-	-	-
	LOCAL I	0.21-1.90	-	-	-	-
	IIT	0.29-4.87	-	-	-	-
	IIM	0.25-3.46	-	-	-	-
	IIB	0.11-4.51	-	-	-	-
	IATT	0.64-8.26	-	-	-	-
	IATOP	0.39-20.72	-	-	-	-
	IABOT	1.30-12.46	-	-	-	-
	IB	0.93-5.12	-	-	-	-
	IC	1.14-4.62	-	-	-	-
	ID	1.47-3.03	-	-	-	-
	IE	0.50-6.88	-	-	-	-
	IF	1.01	-	-	-	-
		<b>Grand Total</b>		<b>1350 Mt (Tentative)</b>		
<b>7.</b>	<b>Surface Constraints</b>	NA				
<b>8.</b>	<b>Grade of coal</b>	G10 (Provisional) based on weighted average grade as per data available in GR for combined block.				
<b>9.</b>	<b>Decision Support System (DSS) Analysis</b>	Wildlife Info: Polygon touches wildlife habitat- Sloth Bear & Dhole				
<b>10.</b>	<b>Eco Sensitive Zone (ESZ)</b>	The ESZ boundary of Mahanadi Elephant Region is located approx.7 km away from S-W boundary of the block &ESZ boundary of Sambalpur Elephant Region is located approx.15 km away from N-W boundary of the block. Also, the tiger corridor between Simlipal-Satkosia is located approx.6.0 kms from the S-W block boundary.				

## PART B

Sr. No.	Features	Details
<b>1.</b>	<b>Previous Allocation</b>	
	<b>Name and Address of Allocatee</b>	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL) Chhattisgarh Mineral Development Corporation (CMDC) Maharashtra Power Generation Corporation (MAHAGENCO)
<b>2.</b>	<b>Target Capacity as per Mining Plan</b>	40 MTY (Mining Plan Phase-I for Chhendipada & Chhendipada-II)
<b>3.</b>	<b>Status of Clearances/Approvals</b>	
	Mining Plan/ Mine Closure Plan	Approved
	Forest Clearance	No
	Environmental Clearance	No
	Mining Lease	NA
	Land Acquisition	Nil

	No. of PAFs as per Mining Plan/ Mine Closure Plan	2748
<b>4.</b>	<b>Surface Infrastructure already built, if any.</b>	Nil

**Note:**

1. The above data is compiled from Geological Report, Mining Plan and the data furnished by the prior allottee in Annexure-I/II, as available. For clarifications with regard to above data, please refer aforesaid source documents.
2. The boundary of the block has been taken from GR after conversion to WGS84 system by feature matching. The block boundary is provisional and the cardinal points, bounding co-ordinates are approximate.
3. There may be a difference in area in the shape file and GR. Area in the shape file is based on feature mapped plan of the block as given in the GR. So, the area is tentative and field DGPS survey is required to ascertain the exact area.
4. The summary sheet has been prepared based on the available GR data and may change with the additional Geological Information as and when revised/updated. Geological Grades as available in GRs has been provided.
5. GR is not available for the Chhendipada II block. Data prepared based on the Basic Exploration Data. Depth and reserve figure may change with subsequent exploration and preparation of GR.

**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

21°4'0"N

21°5'0"N

21°6'0"N

84°52'0"E

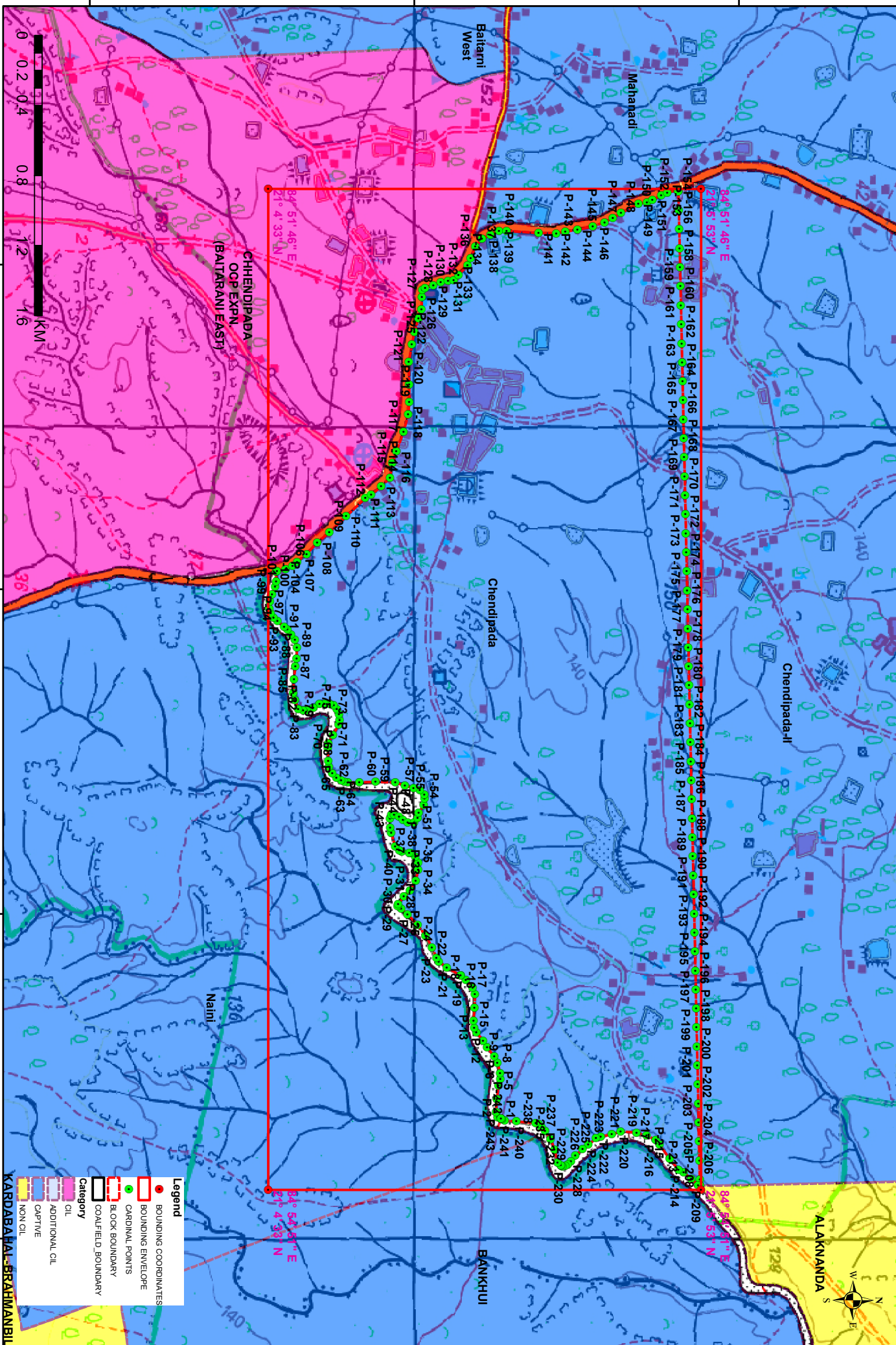
84°53'0"E

84°54'0"E

84°55'0"E

# Chendipada Block, Talcher Coalfield

FOR INTERNAL/RESTRICTED USE ONLY



21°4'0"N

21°5'0"N

21°6'0"N

84°52'0"E

84°53'0"E

84°54'0"E

84°55'0"E

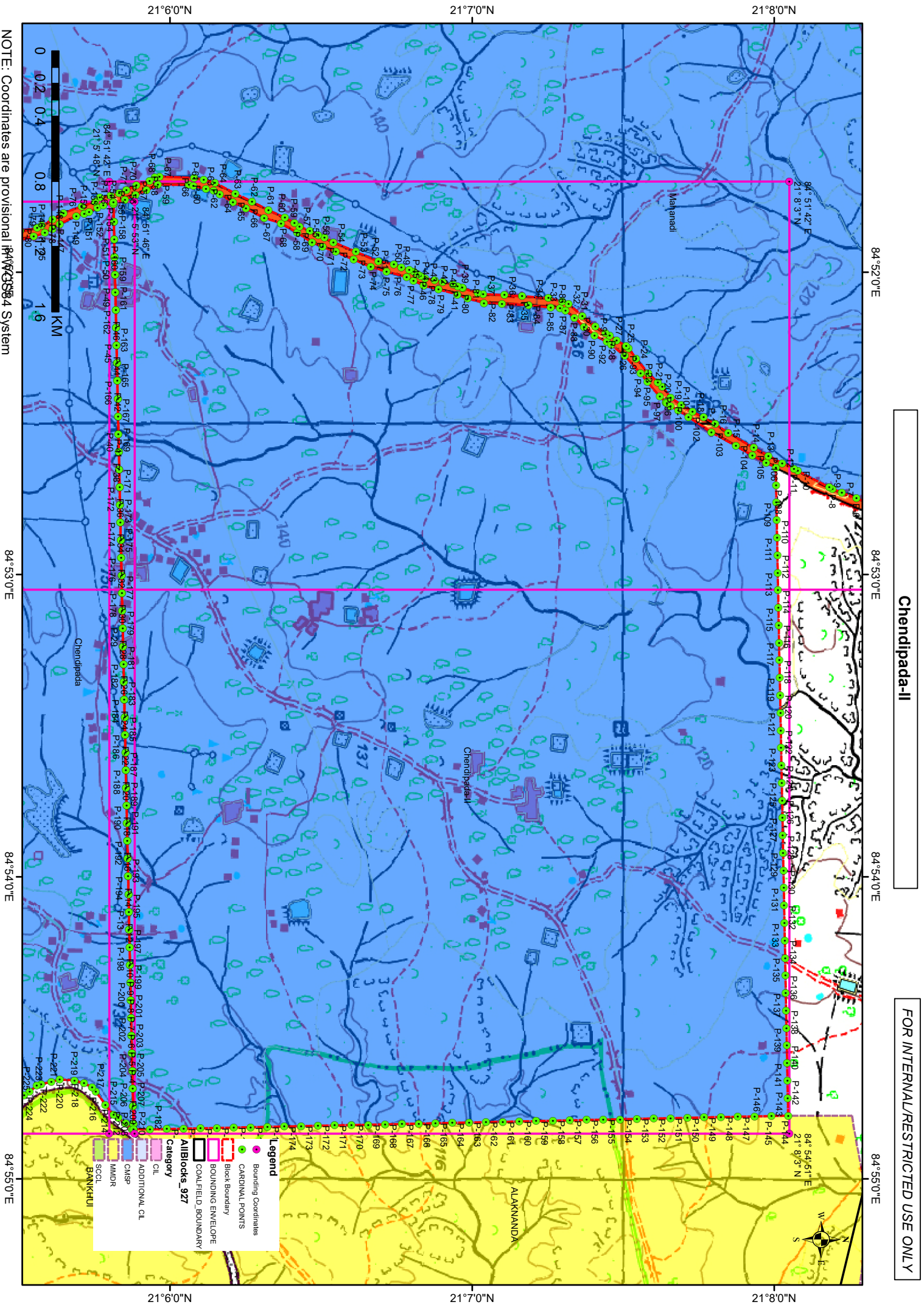
**Legend**

- BOUNDING COORDINATES
- BOUNDING ENVELOPE
- CARDINAL POINTS
- ▭ BLOCK BOUNDARY
- ▭ COALFIELD BOUNDARY

**Category**

- OIL
- ▭ ADDITIONAL OIL
- ▭ CAPTIVE
- ▭ NON OIL

**KARDABAHAL-BRAHMANBIL**



Chendipada-II

FOR INTERNAL/RESTRICTED USE ONLY

NOTE: Coordinates are provisional WGS84 System

**Legend**

- Bounding Coordinates
- CARDINAL POINTS
- Block Boundary
- BOUNDING ENVELOPE
- COALFIELD BOUNDARY

**AllBlocks\_927**

**Category**

- ADDITIONAL CL
- CMSP
- MMDR
- SCCL
- BANKHUI

21°6'0"N

21°7'0"N

21°8'0"N

84°52'0"E

84°53'0"E

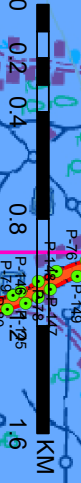
84°54'0"E

84°55'0"E

21°6'0"N

21°7'0"N

21°8'0"N



**Provisional Cardinal Points for Chendipada Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-1	84° 54' 37.857" E	21° 5' 16.030" N
P-2	84° 54' 37.545" E	21° 5' 15.375" N
P-3	84° 54' 36.554" E	21° 5' 15.096" N
P-4	84° 54' 34.244" E	21° 5' 15.239" N
P-5	84° 54' 31.689" E	21° 5' 15.564" N
P-6	84° 54' 30.508" E	21° 5' 15.880" N
P-7	84° 54' 29.408" E	21° 5' 15.861" N
P-8	84° 54' 27.535" E	21° 5' 15.355" N
P-9	84° 54' 26.376" E	21° 5' 14.768" N
P-10	84° 54' 24.689" E	21° 5' 13.462" N
P-11	84° 54' 23.397" E	21° 5' 12.712" N
P-12	84° 54' 21.899" E	21° 5' 11.473" N
P-13	84° 54' 21.002" E	21° 5' 11.070" N
P-14	84° 54' 19.755" E	21° 5' 10.948" N
P-15	84° 54' 17.336" E	21° 5' 11.117" N
P-16	84° 54' 14.806" E	21° 5' 11.209" N
P-17	84° 54' 13.593" E	21° 5' 10.777" N
P-18	84° 54' 12.169" E	21° 5' 9.521" N
P-19	84° 54' 11.399" E	21° 5' 8.605" N
P-20	84° 54' 11.352" E	21° 5' 8.541" N
P-21	84° 54' 9.916" E	21° 5' 5.985" N
P-22	84° 54' 8.784" E	21° 5' 4.535" N
P-23	84° 54' 8.137" E	21° 5' 4.080" N
P-24	84° 54' 6.175" E	21° 5' 3.271" N
P-25	84° 54' 4.005" E	21° 5' 2.077" N
P-26	84° 54' 2.044" E	21° 5' 0.619" N
P-27	84° 54' 0.054" E	21° 4' 58.728" N
P-28	84° 53' 59.019" E	21° 4' 57.557" N
P-29	84° 53' 58.505" E	21° 4' 56.888" N
P-30	84° 53' 58.120" E	21° 4' 56.994" N
P-31	84° 53' 56.807" E	21° 4' 58.059" N
P-32	84° 53' 55.687" E	21° 4' 59.201" N
P-33	84° 53' 53.824" E	21° 5' 0.245" N
P-34	84° 53' 51.820" E	21° 5' 0.721" N
P-35	84° 53' 50.554" E	21° 5' 0.702" N
P-36	84° 53' 49.396" E	21° 5' 0.193" N
P-37	84° 53' 48.779" E	21° 4' 59.353" N
P-38	84° 53' 48.694" E	21° 4' 59.063" N
P-39	84° 53' 48.428" E	21° 4' 57.671" N
P-40	84° 53' 48.195" E	21° 4' 57.216" N
P-41	84° 53' 47.502" E	21° 4' 56.461" N
P-42	84° 53' 45.049" E	21° 4' 55.726" N
P-43	84° 53' 44.003" E	21° 4' 55.526" N
P-44	84° 53' 42.353" E	21° 4' 55.510" N
P-45	84° 53' 41.722" E	21° 4' 55.746" N
P-46	84° 53' 41.588" E	21° 4' 56.263" N
P-47	84° 53' 42.044" E	21° 4' 57.155" N



**Provisional Cardinal Points for Chendipada Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-48	84° 53' 42.587" E	21° 4' 57.897" N
P-49	84° 53' 43.092" E	21° 4' 58.795" N
P-50	84° 53' 43.069" E	21° 4' 59.945" N
P-51	84° 53' 42.248" E	21° 5' 0.595" N
P-52	84° 53' 41.287" E	21° 5' 0.807" N
P-53	84° 53' 39.863" E	21° 5' 1.744" N
P-54	84° 53' 38.709" E	21° 5' 1.880" N
P-55	84° 53' 37.994" E	21° 5' 1.858" N
P-56	84° 53' 37.071" E	21° 5' 1.003" N
P-57	84° 53' 36.731" E	21° 4' 59.852" N
P-58	84° 53' 36.259" E	21° 4' 58.245" N
P-59	84° 53' 35.705" E	21° 4' 56.496" N
P-60	84° 53' 35.598" E	21° 4' 52.838" N
P-61	84° 53' 35.688" E	21° 4' 49.844" N
P-62	84° 53' 35.702" E	21° 4' 47.727" N
P-63	84° 53' 35.593" E	21° 4' 47.056" N
P-64	84° 53' 35.347" E	21° 4' 46.485" N
P-65	84° 53' 34.833" E	21° 4' 45.629" N
P-66	84° 53' 33.978" E	21° 4' 44.820" N
P-67	84° 53' 32.764" E	21° 4' 44.234" N
P-68	84° 53' 31.691" E	21° 4' 44.111" N
P-69	84° 53' 29.326" E	21° 4' 44.021" N
P-70	84° 53' 28.419" E	21° 4' 44.104" N
P-71	84° 53' 26.884" E	21° 4' 44.964" N
P-72	84° 53' 25.076" E	21° 4' 46.007" N
P-73	84° 53' 24.115" E	21° 4' 46.193" N
P-74	84° 53' 23.096" E	21° 4' 46.070" N
P-75	84° 53' 22.189" E	21° 4' 45.685" N
P-76	84° 53' 21.454" E	21° 4' 45.116" N
P-77	84° 53' 21.163" E	21° 4' 44.343" N
P-78	84° 53' 21.161" E	21° 4' 43.387" N
P-79	84° 53' 21.178" E	21° 4' 42.473" N
P-80	84° 53' 21.941" E	21° 4' 41.333" N
P-81	84° 53' 22.336" E	21° 4' 40.126" N
P-82	84° 53' 22.369" E	21° 4' 39.472" N
P-83	84° 53' 22.179" E	21° 4' 38.544" N
P-84	84° 53' 20.489" E	21° 4' 37.934" N
P-85	84° 53' 19.130" E	21° 4' 37.633" N
P-86	84° 53' 16.674" E	21° 4' 37.750" N
P-87	84° 53' 14.256" E	21° 4' 38.004" N
P-88	84° 53' 12.828" E	21° 4' 38.253" N
P-89	84° 53' 10.738" E	21° 4' 38.300" N
P-90	84° 53' 9.306" E	21° 4' 37.929" N
P-91	84° 53' 8.384" E	21° 4' 37.212" N
P-92	84° 53' 7.415" E	21° 4' 36.529" N
P-93	84° 53' 6.895" E	21° 4' 35.954" N
P-94	84° 53' 5.854" E	21° 4' 34.732" N

**Provisional Cardinal Points for Chendipada Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-95	84° 53' 5.261" E	21° 4' 33.977" N
P-96	84° 53' 4.409" E	21° 4' 33.444" N
P-97	84° 53' 3.606" E	21° 4' 33.212" N
P-98	84° 53' 2.291" E	21° 4' 33.323" N
P-99	84° 53' 1.001" E	21° 4' 33.718" N
P-100	84° 52' 59.547" E	21° 4' 34.268" N
P-101	84° 52' 58.600" E	21° 4' 34.467" N
P-102	84° 52' 56.743" E	21° 4' 34.451" N
P-103	84° 52' 56.685" E	21° 4' 34.644" N
P-104	84° 52' 56.315" E	21° 4' 36.220" N
P-105	84° 52' 55.718" E	21° 4' 37.475" N
P-106	84° 52' 54.893" E	21° 4' 38.349" N
P-107	84° 52' 53.483" E	21° 4' 40.078" N
P-108	84° 52' 51.365" E	21° 4' 42.068" N
P-109	84° 52' 49.482" E	21° 4' 44.277" N
P-110	84° 52' 46.499" E	21° 4' 47.391" N
P-111	84° 52' 43.130" E	21° 4' 50.938" N
P-112	84° 52' 42.529" E	21° 4' 52.015" N
P-113	84° 52' 41.000" E	21° 4' 53.856" N
P-114	84° 52' 39.334" E	21° 4' 55.517" N
P-115	84° 52' 36.669" E	21° 4' 55.945" N
P-116	84° 52' 34.501" E	21° 4' 56.680" N
P-117	84° 52' 30.824" E	21° 4' 58.017" N
P-118	84° 52' 27.694" E	21° 4' 58.860" N
P-119	84° 52' 25.386" E	21° 4' 59.054" N
P-120	84° 52' 22.104" E	21° 4' 59.025" N
P-121	84° 52' 18.001" E	21° 4' 58.983" N
P-122	84° 52' 14.773" E	21° 4' 59.539" N
P-123	84° 52' 12.439" E	21° 5' 0.004" N
P-124	84° 52' 9.877" E	21° 5' 0.771" N
P-125	84° 52' 8.230" E	21° 5' 1.318" N
P-126	84° 52' 6.008" E	21° 5' 1.395" N
P-127	84° 52' 4.711" E	21° 5' 1.492" N
P-128	84° 52' 4.348" E	21° 5' 1.989" N
P-129	84° 52' 3.853" E	21° 5' 3.497" N
P-130	84° 52' 3.197" E	21° 5' 4.878" N
P-131	84° 52' 2.999" E	21° 5' 6.234" N
P-132	84° 52' 2.864" E	21° 5' 7.271" N
P-133	84° 52' 1.879" E	21° 5' 8.154" N
P-134	84° 52' 0.157" E	21° 5' 9.841" N
P-135	84° 51' 58.868" E	21° 5' 10.416" N
P-136	84° 51' 56.646" E	21° 5' 11.281" N
P-137	84° 51' 55.196" E	21° 5' 12.502" N
P-138	84° 51' 54.519" E	21° 5' 14.071" N
P-139	84° 51' 53.786" E	21° 5' 15.676" N
P-140	84° 51' 53.795" E	21° 5' 17.043" N
P-141	84° 51' 54.162" E	21° 5' 22.978" N

**Provisional Cardinal Points for Chendipada Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-142	84° 51' 54.182" E	21° 5' 26.204" N
P-143	84° 51' 53.891" E	21° 5' 27.935" N
P-144	84° 51' 53.543" E	21° 5' 30.157" N
P-145	84° 51' 52.942" E	21° 5' 32.999" N
P-146	84° 51' 52.153" E	21° 5' 35.154" N
P-147	84° 51' 51.406" E	21° 5' 36.686" N
P-148	84° 51' 50.430" E	21° 5' 38.192" N
P-149	84° 51' 48.800" E	21° 5' 41.402" N
P-150	84° 51' 48.453" E	21° 5' 43.004" N
P-151	84° 51' 48.074" E	21° 5' 43.987" N
P-152	84° 51' 47.177" E	21° 5' 45.644" N
P-153	84° 51' 46.689" E	21° 5' 46.756" N
P-154	84° 51' 46.191" E	21° 5' 48.690" N
P-155	84° 51' 46.162" E	21° 5' 48.803" N
P-156	84° 51' 46.436" E	21° 5' 48.807" N
P-157	84° 51' 49.948" E	21° 5' 48.884" N
P-158	84° 51' 53.461" E	21° 5' 48.960" N
P-159	84° 51' 56.973" E	21° 5' 49.037" N
P-160	84° 52' 0.486" E	21° 5' 49.114" N
P-161	84° 52' 3.999" E	21° 5' 49.191" N
P-162	84° 52' 7.511" E	21° 5' 49.267" N
P-163	84° 52' 11.024" E	21° 5' 49.344" N
P-164	84° 52' 14.537" E	21° 5' 49.421" N
P-165	84° 52' 18.049" E	21° 5' 49.498" N
P-166	84° 52' 21.562" E	21° 5' 49.574" N
P-167	84° 52' 25.074" E	21° 5' 49.651" N
P-168	84° 52' 28.587" E	21° 5' 49.727" N
P-169	84° 52' 32.100" E	21° 5' 49.804" N
P-170	84° 52' 35.612" E	21° 5' 49.881" N
P-171	84° 52' 39.125" E	21° 5' 49.957" N
P-172	84° 52' 42.637" E	21° 5' 50.034" N
P-173	84° 52' 46.150" E	21° 5' 50.110" N
P-174	84° 52' 49.663" E	21° 5' 50.187" N
P-175	84° 52' 53.175" E	21° 5' 50.263" N
P-176	84° 52' 56.688" E	21° 5' 50.340" N
P-177	84° 53' 0.201" E	21° 5' 50.416" N
P-178	84° 53' 3.713" E	21° 5' 50.492" N
P-179	84° 53' 7.226" E	21° 5' 50.569" N
P-180	84° 53' 10.738" E	21° 5' 50.645" N
P-181	84° 53' 14.251" E	21° 5' 50.721" N
P-182	84° 53' 17.764" E	21° 5' 50.798" N
P-183	84° 53' 21.276" E	21° 5' 50.874" N
P-184	84° 53' 24.789" E	21° 5' 50.950" N
P-185	84° 53' 28.302" E	21° 5' 51.026" N
P-186	84° 53' 31.814" E	21° 5' 51.103" N
P-187	84° 53' 35.327" E	21° 5' 51.179" N
P-188	84° 53' 38.839" E	21° 5' 51.255" N

**Provisional Cardinal Points for Chendipada Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-189	84° 53' 42.352" E	21° 5' 51.331" N
P-190	84° 53' 45.865" E	21° 5' 51.407" N
P-191	84° 53' 49.377" E	21° 5' 51.483" N
P-192	84° 53' 52.890" E	21° 5' 51.559" N
P-193	84° 53' 56.403" E	21° 5' 51.636" N
P-194	84° 53' 59.915" E	21° 5' 51.712" N
P-195	84° 54' 3.428" E	21° 5' 51.788" N
P-196	84° 54' 6.941" E	21° 5' 51.864" N
P-197	84° 54' 10.453" E	21° 5' 51.940" N
P-198	84° 54' 13.966" E	21° 5' 52.015" N
P-199	84° 54' 17.479" E	21° 5' 52.091" N
P-200	84° 54' 20.991" E	21° 5' 52.167" N
P-201	84° 54' 24.504" E	21° 5' 52.243" N
P-202	84° 54' 28.016" E	21° 5' 52.319" N
P-203	84° 54' 31.529" E	21° 5' 52.395" N
P-204	84° 54' 35.042" E	21° 5' 52.471" N
P-205	84° 54' 38.554" E	21° 5' 52.547" N
P-206	84° 54' 42.067" E	21° 5' 52.622" N
P-207	84° 54' 45.580" E	21° 5' 52.698" N
P-208	84° 54' 49.092" E	21° 5' 52.774" N
P-209	84° 54' 50.112" E	21° 5' 52.803" N
P-210	84° 54' 50.125" E	21° 5' 52.815" N
P-211	84° 54' 50.124" E	21° 5' 52.465" N
P-212	84° 54' 48.937" E	21° 5' 51.191" N
P-213	84° 54' 47.817" E	21° 5' 49.778" N
P-214	84° 54' 47.288" E	21° 5' 48.826" N
P-215	84° 54' 45.269" E	21° 5' 47.212" N
P-216	84° 54' 42.644" E	21° 5' 45.318" N
P-217	84° 54' 41.762" E	21° 5' 44.610" N
P-218	84° 54' 40.966" E	21° 5' 42.918" N
P-219	84° 54' 40.403" E	21° 5' 41.078" N
P-220	84° 54' 40.208" E	21° 5' 38.148" N
P-221	84° 54' 40.720" E	21° 5' 36.493" N
P-222	84° 54' 41.146" E	21° 5' 34.451" N
P-223	84° 54' 41.443" E	21° 5' 33.572" N
P-224	84° 54' 42.671" E	21° 5' 32.145" N
P-225	84° 54' 43.407" E	21° 5' 31.083" N
P-226	84° 54' 44.663" E	21° 5' 29.733" N
P-227	84° 54' 45.785" E	21° 5' 28.952" N
P-228	84° 54' 46.354" E	21° 5' 28.360" N
P-229	84° 54' 46.581" E	21° 5' 27.907" N
P-230	84° 54' 46.655" E	21° 5' 27.384" N
P-231	84° 54' 46.536" E	21° 5' 27.164" N
P-232	84° 54' 46.426" E	21° 5' 27.085" N
P-233	84° 54' 45.971" E	21° 5' 26.491" N
P-234	84° 54' 43.519" E	21° 5' 25.911" N
P-235	84° 54' 41.644" E	21° 5' 25.200" N

**Provisional Cardinal Points for Chendipada Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-236	84° 54' 40.125" E	21° 5' 24.150" N
P-237	84° 54' 39.353" E	21° 5' 23.505" N
P-238	84° 54' 38.824" E	21° 5' 22.931" N
P-239	84° 54' 38.623" E	21° 5' 22.430" N
P-240	84° 54' 38.366" E	21° 5' 18.851" N
P-241	84° 54' 38.174" E	21° 5' 16.710" N
P-242	84° 54' 37.919" E	21° 5' 16.161" N
P-243	84° 54' 37.859" E	21° 5' 16.031" N

**Provisional Cardinal Points for Chendipada-II Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-1	84° 54' 50.112" E	21° 5' 52.803" N
P-2	84° 54' 49.092" E	21° 5' 52.774" N
P-3	84° 54' 45.580" E	21° 5' 52.698" N
P-4	84° 54' 42.067" E	21° 5' 52.622" N
P-5	84° 54' 38.554" E	21° 5' 52.547" N
P-6	84° 54' 35.042" E	21° 5' 52.471" N
P-7	84° 54' 31.529" E	21° 5' 52.395" N
P-8	84° 54' 28.016" E	21° 5' 52.319" N
P-9	84° 54' 24.504" E	21° 5' 52.243" N
P-10	84° 54' 20.991" E	21° 5' 52.167" N
P-11	84° 54' 17.479" E	21° 5' 52.091" N
P-12	84° 54' 13.966" E	21° 5' 52.015" N
P-13	84° 54' 10.453" E	21° 5' 51.940" N
P-14	84° 54' 6.941" E	21° 5' 51.864" N
P-15	84° 54' 3.428" E	21° 5' 51.788" N
P-16	84° 53' 59.915" E	21° 5' 51.712" N
P-17	84° 53' 56.403" E	21° 5' 51.636" N
P-18	84° 53' 52.890" E	21° 5' 51.559" N
P-19	84° 53' 49.377" E	21° 5' 51.483" N
P-20	84° 53' 45.865" E	21° 5' 51.407" N
P-21	84° 53' 42.352" E	21° 5' 51.331" N
P-22	84° 53' 38.839" E	21° 5' 51.255" N
P-23	84° 53' 35.327" E	21° 5' 51.179" N
P-24	84° 53' 31.814" E	21° 5' 51.103" N
P-25	84° 53' 28.302" E	21° 5' 51.026" N
P-26	84° 53' 24.789" E	21° 5' 50.950" N
P-27	84° 53' 21.276" E	21° 5' 50.874" N
P-28	84° 53' 17.764" E	21° 5' 50.798" N
P-29	84° 53' 14.251" E	21° 5' 50.721" N
P-30	84° 53' 10.738" E	21° 5' 50.645" N
P-31	84° 53' 7.226" E	21° 5' 50.569" N
P-32	84° 53' 3.713" E	21° 5' 50.492" N
P-33	84° 53' 0.201" E	21° 5' 50.416" N
P-34	84° 52' 56.688" E	21° 5' 50.340" N
P-35	84° 52' 53.175" E	21° 5' 50.263" N
P-36	84° 52' 49.663" E	21° 5' 50.187" N
P-37	84° 52' 46.150" E	21° 5' 50.110" N
P-38	84° 52' 42.637" E	21° 5' 50.034" N
P-39	84° 52' 39.125" E	21° 5' 49.957" N
P-40	84° 52' 35.612" E	21° 5' 49.881" N
P-41	84° 52' 32.100" E	21° 5' 49.804" N
P-42	84° 52' 28.587" E	21° 5' 49.727" N
P-43	84° 52' 25.074" E	21° 5' 49.651" N
P-44	84° 52' 21.562" E	21° 5' 49.574" N
P-45	84° 52' 18.049" E	21° 5' 49.498" N
P-46	84° 52' 14.537" E	21° 5' 49.421" N
P-47	84° 52' 11.024" E	21° 5' 49.344" N

**Provisional Cardinal Points for Chendipada-II Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-48	84° 52' 7.511" E	21° 5' 49.267" N
P-49	84° 52' 3.999" E	21° 5' 49.191" N
P-50	84° 52' 0.486" E	21° 5' 49.114" N
P-51	84° 51' 56.973" E	21° 5' 49.037" N
P-52	84° 51' 53.461" E	21° 5' 48.960" N
P-53	84° 51' 49.948" E	21° 5' 48.884" N
P-54	84° 51' 46.436" E	21° 5' 48.807" N
P-55	84° 51' 46.162" E	21° 5' 48.803" N
P-56	84° 51' 45.583" E	21° 5' 51.102" N
P-57	84° 51' 44.679" E	21° 5' 53.172" N
P-58	84° 51' 43.739" E	21° 5' 55.380" N
P-59	84° 51' 42.616" E	21° 5' 57.623" N
P-60	84° 51' 42.655" E	21° 6' 3.783" N
P-61	84° 51' 42.882" E	21° 6' 4.644" N
P-62	84° 51' 43.466" E	21° 6' 7.154" N
P-63	84° 51' 43.796" E	21° 6' 8.715" N
P-64	84° 51' 44.493" E	21° 6' 9.902" N
P-65	84° 51' 46.069" E	21° 6' 12.545" N
P-66	84° 51' 47.355" E	21° 6' 15.087" N
P-67	84° 51' 49.188" E	21° 6' 18.740" N
P-68	84° 51' 50.297" E	21° 6' 22.044" N
P-69	84° 51' 52.159" E	21° 6' 25.283" N
P-70	84° 51' 54.092" E	21° 6' 28.217" N
P-71	84° 51' 54.928" E	21° 6' 30.309" N
P-72	84° 51' 55.954" E	21° 6' 32.938" N
P-73	84° 51' 57.526" E	21° 6' 36.508" N
P-74	84° 51' 58.906" E	21° 6' 39.864" N
P-75	84° 51' 59.896" E	21° 6' 42.992" N
P-76	84° 52' 0.928" E	21° 6' 47.016" N
P-77	84° 52' 1.690" E	21° 6' 48.390" N
P-78	84° 52' 2.671" E	21° 6' 50.402" N
P-79	84° 52' 3.408" E	21° 6' 53.319" N
P-80	84° 52' 4.398" E	21° 6' 57.070" N
P-81	84° 52' 5.234" E	21° 6' 59.144" N
P-82	84° 52' 6.087" E	21° 7' 2.355" N
P-83	84° 52' 6.252" E	21° 7' 5.934" N
P-84	84° 52' 6.566" E	21° 7' 11.250" N
P-85	84° 52' 6.986" E	21° 7' 15.626" N
P-86	84° 52' 7.136" E	21° 7' 17.475" N
P-87	84° 52' 7.641" E	21° 7' 18.573" N
P-88	84° 52' 9.004" E	21° 7' 20.299" N
P-89	84° 52' 10.867" E	21° 7' 22.223" N
P-90	84° 52' 12.517" E	21° 7' 24.314" N
P-91	84° 52' 13.827" E	21° 7' 26.759" N
P-92	84° 52' 14.422" E	21° 7' 27.623" N
P-93	84° 52' 16.584" E	21° 7' 30.350" N
P-94	84° 52' 20.125" E	21° 7' 33.470" N

**Provisional Cardinal Points for Chendipada-II Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-95	84° 52' 21.765" E	21° 7' 34.803" N
P-96	84° 52' 24.715" E	21° 7' 37.282" N
P-97	84° 52' 25.809" E	21° 7' 38.473" N
P-98	84° 52' 25.856" E	21° 7' 38.512" N
P-99	84° 52' 26.013" E	21° 7' 38.695" N
P-100	84° 52' 26.636" E	21° 7' 39.420" N
P-101	84° 52' 27.375" E	21° 7' 40.928" N
P-102	84° 52' 28.733" E	21° 7' 42.973" N
P-103	84° 52' 31.809" E	21° 7' 47.517" N
P-104	84° 52' 34.455" E	21° 7' 52.359" N
P-105	84° 52' 36.380" E	21° 7' 55.627" N
P-106	84° 52' 37.837" E	21° 7' 58.382" N
P-107	84° 52' 38.788" E	21° 8' 0.287" N
P-108	84° 52' 42.264" E	21° 8' 0.353" N
P-109	84° 52' 45.740" E	21° 8' 0.420" N
P-110	84° 52' 49.216" E	21° 8' 0.487" N
P-111	84° 52' 52.693" E	21° 8' 0.553" N
P-112	84° 52' 56.169" E	21° 8' 0.620" N
P-113	84° 52' 59.645" E	21° 8' 0.687" N
P-114	84° 53' 3.121" E	21° 8' 0.753" N
P-115	84° 53' 6.597" E	21° 8' 0.820" N
P-116	84° 53' 10.073" E	21° 8' 0.886" N
P-117	84° 53' 13.549" E	21° 8' 0.953" N
P-118	84° 53' 17.025" E	21° 8' 1.019" N
P-119	84° 53' 20.502" E	21° 8' 1.086" N
P-120	84° 53' 23.978" E	21° 8' 1.152" N
P-121	84° 53' 27.454" E	21° 8' 1.219" N
P-122	84° 53' 30.930" E	21° 8' 1.285" N
P-123	84° 53' 34.406" E	21° 8' 1.352" N
P-124	84° 53' 37.882" E	21° 8' 1.418" N
P-125	84° 53' 41.358" E	21° 8' 1.484" N
P-126	84° 53' 44.835" E	21° 8' 1.551" N
P-127	84° 53' 48.311" E	21° 8' 1.617" N
P-128	84° 53' 51.787" E	21° 8' 1.683" N
P-129	84° 53' 55.263" E	21° 8' 1.749" N
P-130	84° 53' 58.739" E	21° 8' 1.816" N
P-131	84° 54' 2.215" E	21° 8' 1.882" N
P-132	84° 54' 5.691" E	21° 8' 1.948" N
P-133	84° 54' 9.167" E	21° 8' 2.014" N
P-134	84° 54' 12.644" E	21° 8' 2.080" N
P-135	84° 54' 16.120" E	21° 8' 2.147" N
P-136	84° 54' 19.596" E	21° 8' 2.213" N
P-137	84° 54' 23.072" E	21° 8' 2.279" N
P-138	84° 54' 26.548" E	21° 8' 2.345" N
P-139	84° 54' 30.024" E	21° 8' 2.411" N
P-140	84° 54' 33.500" E	21° 8' 2.477" N
P-141	84° 54' 36.977" E	21° 8' 2.543" N



**Provisional Cardinal Points for Chendipada-II Block**

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-142	84° 54' 40.453" E	21° 8' 2.609" N
P-143	84° 54' 43.929" E	21° 8' 2.675" N
P-144	84° 54' 47.405" E	21° 8' 2.741" N
P-145	84° 54' 47.477" E	21° 7' 59.407" N
P-146	84° 54' 47.549" E	21° 7' 56.073" N
P-147	84° 54' 47.621" E	21° 7' 52.739" N
P-148	84° 54' 47.693" E	21° 7' 49.406" N
P-149	84° 54' 47.765" E	21° 7' 46.072" N
P-150	84° 54' 47.838" E	21° 7' 42.738" N
P-151	84° 54' 47.910" E	21° 7' 39.404" N
P-152	84° 54' 47.982" E	21° 7' 36.070" N
P-153	84° 54' 48.054" E	21° 7' 32.736" N
P-154	84° 54' 48.126" E	21° 7' 29.403" N
P-155	84° 54' 48.198" E	21° 7' 26.069" N
P-156	84° 54' 48.270" E	21° 7' 22.735" N
P-157	84° 54' 48.342" E	21° 7' 19.401" N
P-158	84° 54' 48.414" E	21° 7' 16.067" N
P-159	84° 54' 48.486" E	21° 7' 12.734" N
P-160	84° 54' 48.558" E	21° 7' 9.400" N
P-161	84° 54' 48.630" E	21° 7' 6.066" N
P-162	84° 54' 48.702" E	21° 7' 2.732" N
P-163	84° 54' 48.774" E	21° 6' 59.398" N
P-164	84° 54' 48.846" E	21° 6' 56.065" N
P-165	84° 54' 48.918" E	21° 6' 52.731" N
P-166	84° 54' 48.990" E	21° 6' 49.397" N
P-167	84° 54' 49.063" E	21° 6' 46.063" N
P-168	84° 54' 49.135" E	21° 6' 42.729" N
P-169	84° 54' 49.207" E	21° 6' 39.396" N
P-170	84° 54' 49.279" E	21° 6' 36.062" N
P-171	84° 54' 49.351" E	21° 6' 32.728" N
P-172	84° 54' 49.423" E	21° 6' 29.394" N
P-173	84° 54' 49.495" E	21° 6' 26.060" N
P-174	84° 54' 49.567" E	21° 6' 22.727" N
P-175	84° 54' 49.639" E	21° 6' 19.393" N
P-176	84° 54' 49.711" E	21° 6' 16.059" N
P-177	84° 54' 49.783" E	21° 6' 12.725" N
P-178	84° 54' 49.855" E	21° 6' 9.391" N
P-179	84° 54' 49.927" E	21° 6' 6.058" N
P-180	84° 54' 49.999" E	21° 6' 2.724" N
P-181	84° 54' 50.071" E	21° 5' 59.390" N
P-182	84° 54' 50.143" E	21° 5' 56.056" N