

PATAL EAST COAL BLOCK SUMMARY

PART A

Sr. No	Features	Details
1. Location		
	Coal Block	PATAL EAST
	Latitude	23° 39' 34" N-23° 41' 20" N (Provisional)
	Longitude	85° 9' 37" E-85° 13' 6" E (Provisional)
	Topo Sheet No.	73E/2 (R.F. 1:50000)
	Coalfield	South Karanpura Coalfield
	Villages	Hendag, Binja, Arid, Koejam, Buchadih, Hendegir, Umedanda
	Tehsil/Taluka	Burmu, Barkagaon
	District	Ranchi and Hazaribagh
	State	Jharkhand
2. Connectivity with Block		
	Nearest Rail Head	The Gomoh-Barkakana-Dehri-On-Sone loop line of Eastern Railway is located at a distance of about 1 km to the north of the block and makes a small part of NE boundary of the block. The Hendgiri railway station is located in the north of the block at a distance of about 1km.
	Road	Ranchi is located at a distance of 50 km. Block is well connected with district headquarters Hazaribagh and Ranchi by NH 33. There are some roads within the block connecting the different villages.
	Airport	The nearest airport is in Ranchi (60 kms)
3. Area		
	Geological Block Area	12.53 sq.km. (As per shape file. Refer Note below) 12.43 sq.km. (As per GR)
	Forest Area	Approx. 52% (As Per FSI map)
	Non-Forest Area	Approx. 48%
4. Climate and Topography		
	Average Annual Rainfall	1200mm-1400mm
	Temperature (Min. — Max.)	5°C to 45 °C
	Local Surface Drainage Channels	A number of valleys are present in the Block most of them followed by nallas. The area shows dendritic pattern of the drainage and is traversed by 5-6 nalas. All these nalas flow almost northerly and ultimately drain to Damodar river.

	River	Damodar river			
5.	Exploration				
	Status	Explored			
	Exploration Agency	MECL			
	Total Number of Boreholes with meterage	116 Boreholes; 20682.95m			
	Borehole Density	Approx. 9.33 bh/sq.km			
	General Dip of Seams	The coal seams exhibit gentle dip varying in general within the range of 7° to 12° towards SE			
	General Strike Direction	Strike of the Beds is almost NE-SW with minor swings.			
	Faults	The block is traversed by a total of 8 Faults designated as F1-F1 to F8-F8 from North to South. All are deciphered on the basis of floor level difference in coal seams noticed on either side of the fault. A few fault have been intersected in the boreholes. The faults are of low to medium intensity as the throw ranges from 5m to 100m, F8-F8 is a major fault.			
6.	Coal Seams & Reserve				
	Coal Seams	Thickness Range (m)	Depth Range (m)	Geological Reserve (MT)	Grade
	BM-I	0.33-1.57	52.34-331.88	1.719	F-E
	XI	0.05-1.04	56.31-449.12		
	X A	0.17-2.62	135.75-470.82	1.837	E-C
	X B	0.45-2.21	139.06-473.05	0.772	F
	X A+B	0.05-3.34	15.32-569.30	5.331	G-D
	IX A	0.10-4.08	33.35-574.04	8.419	G-E
	IX B	0.05-1.98	16.89-578.70	2.055	F-D
	IX A+B	0.1-2.46	14.31-110.54	1.118	G-F
	VIII A	0.06-2.61	95.61-533.21	4.86	F-E
	VIII B	0.21-1.91	96.97-538.17	1.144	G-E
	VIII A+B	0.14-3.74	16.80-474.56	2.283	G-E
	VIII C	0.09-1.60	24.46-539.62	1.079	G-E
	VIII D	0.03-1.39	27.24-543.40	1.169	G-C
	VIII C+D	0.08-4.04	14.88-480.21	6.016	G-D
	VII	0.05-2.97	8.20-603.31	5.369	G-C
	VI TOP	0.15-1.22	375.60-565.85	0.885	E-D
	VI BOT	0.04-2.34	378.91-580.22	2.136	E-D
	VI COMB	0.05-4.75	7.72-574.86	10.78	F-D
	V	0.05-5.23	9.32-617.21	14.179	G-D
	IV TOP	0.38-3.88	14.93-117.73	1.593	F-E
	IV BOT	0.30-3.94	19.71-125.00	2.881	G-D
	IV COMB	0.20-11.62	9.60-639.80	39.612	G-D
	L-3	0.06-1.66	16.62-627.20	0.291	G-E
	L-2	0.05-2.79	10.01-584.87	1.472	G-C

	L-1	0.07-2.86	14.12-590.42	0.819	G-D
	III	0.10-2.80	21.30-663.03	9.139	G-C
	II	0.08-2.80	43.33-483.15	1.457	F-D
	I	0.11-8.62	96.48-207.00	1.353	F-E
		Total		129.768	
7.	Surface Constraints	NA			
8.	Grade of the block	G10 (Provisional) based on weighted average grade as per data available in GR.			
9.	Decision Support System (DSS) Analysis	-			
10.	Eco Sensitive Zone (ESZ) Analysis	Northern boundary of the block is approx. 36 km from the boundary of ESZ of Hazaribagh.			

PART B

Sr. No.	Features	Details
1.	Previous Allocation	
	Name and Address of Allocatee	Bhushan Power and Steel Ltd., and subsequently to Jharkhand State Mineral Development Corporation Ltd.
2.	Target Capacity as per Mining Plan	2.5 MTPA
3.	Status of Clearances/Approvals (As per the information submitted by the prior allottee)	
	Mining Plan/ Mine Closure Plan	Approved vide MoC Letter 34011/32/2017-CPAM Date 17/04/2018 for M/s JSMDC
	Forest Clearance	Not available
	Environmental Clearance	Not available
	Mining Lease	Not available
	Land Acquisition	--
	No. of PAPs	Not available

Note:

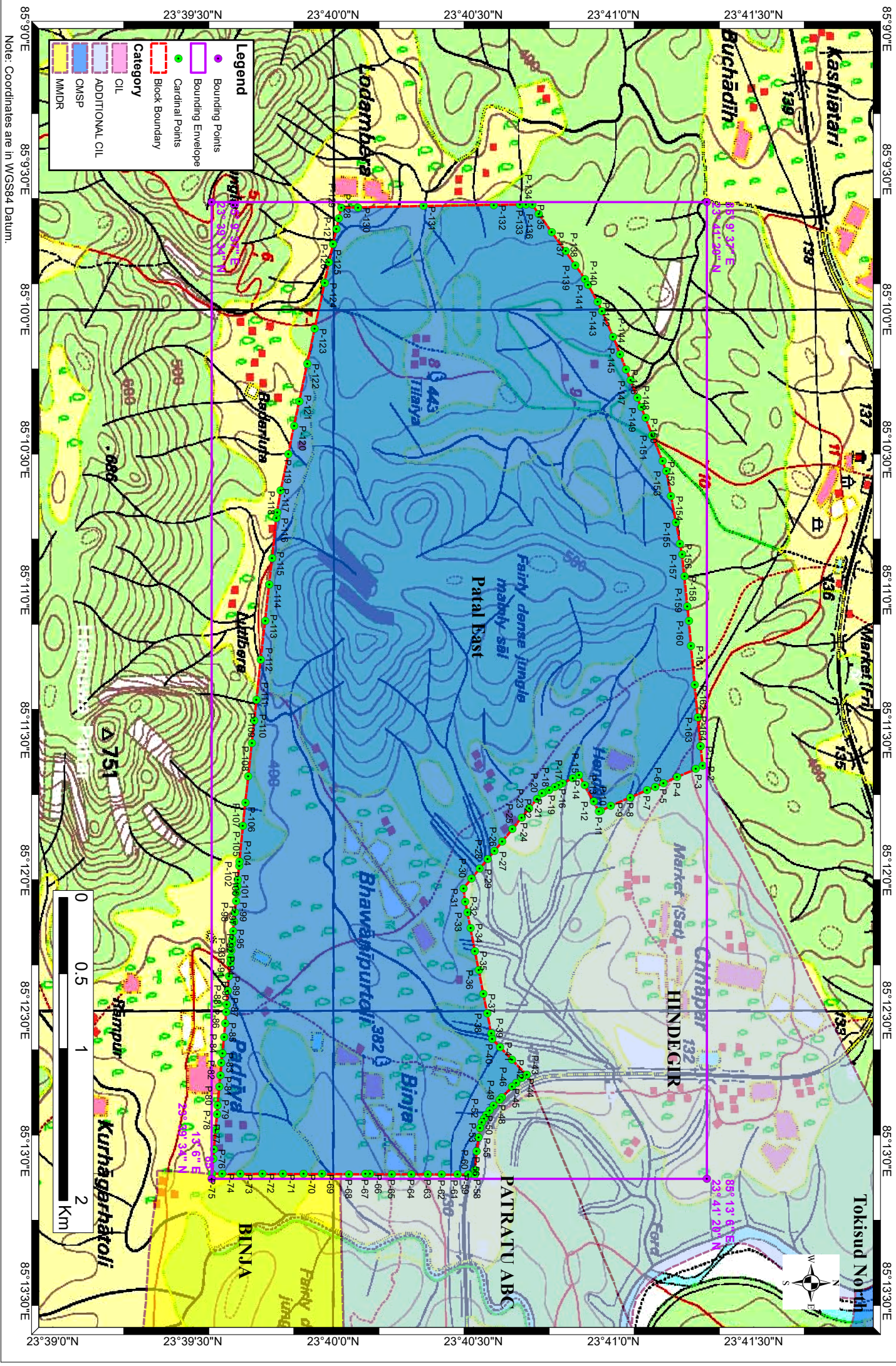
1. The above data is compiled from Geological Report, Mining Plan and the data furnished by the prior allottee in Annexure-I/II, as available. For clarifications with regard to above data, please refer aforesaid source documents.
2. The boundary of the block has been taken from GR after conversion to WGS84 system by feature matching. The block boundary is provisional and the cardinal points, bounding co-ordinates are approximate.
3. There is 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.

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 update 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.

Patal East Block, South Karanpura Coalfield

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Note: Coordinates are in WGS84 Datum.

Provisional Cardinal Points for Patal East Block

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-1	85° 11' 33.391" E	23° 41' 18.656" N
P-2	85° 11' 37.652" E	23° 41' 19.078" N
P-3	85° 11' 38.328" E	23° 41' 17.595" N
P-4	85° 11' 39.998" E	23° 41' 13.607" N
P-5	85° 11' 41.313" E	23° 41' 10.693" N
P-6	85° 11' 42.061" E	23° 41' 8.937" N
P-7	85° 11' 42.828" E	23° 41' 7.156" N
P-8	85° 11' 44.369" E	23° 41' 3.562" N
P-9	85° 11' 46.182" E	23° 40' 59.366" N
P-10	85° 11' 47.244" E	23° 40' 57.249" N
P-11	85° 11' 47.422" E	23° 40' 56.872" N
P-12	85° 11' 45.252" E	23° 40' 55.742" N
P-13	85° 11' 41.734" E	23° 40' 53.808" N
P-14	85° 11' 39.539" E	23° 40' 52.622" N
P-15	85° 11' 40.248" E	23° 40' 51.275" N
P-16	85° 11' 41.337" E	23° 40' 49.105" N
P-17	85° 11' 41.731" E	23° 40' 48.309" N
P-18	85° 11' 42.153" E	23° 40' 47.439" N
P-19	85° 11' 42.753" E	23° 40' 46.204" N
P-20	85° 11' 43.320" E	23° 40' 45.021" N
P-21	85° 11' 43.525" E	23° 40' 44.614" N
P-22	85° 11' 44.671" E	23° 40' 43.606" N
P-23	85° 11' 46.756" E	23° 40' 41.891" N
P-24	85° 11' 48.660" E	23° 40' 40.314" N
P-25	85° 11' 51.091" E	23° 40' 38.350" N
P-26	85° 11' 53.799" E	23° 40' 36.157" N
P-27	85° 11' 55.826" E	23° 40' 34.474" N
P-28	85° 11' 57.533" E	23° 40' 33.056" N
P-29	85° 11' 59.597" E	23° 40' 31.333" N
P-30	85° 12' 1.697" E	23° 40' 29.609" N
P-31	85° 12' 3.835" E	23° 40' 27.866" N
P-32	85° 12' 6.631" E	23° 40' 28.270" N
P-33	85° 12' 8.978" E	23° 40' 28.737" N
P-34	85° 12' 12.383" E	23° 40' 29.382" N
P-35	85° 12' 17.211" E	23° 40' 30.305" N
P-36	85° 12' 21.272" E	23° 40' 31.144" N
P-37	85° 12' 26.376" E	23° 40' 32.111" N
P-38	85° 12' 30.525" E	23° 40' 32.964" N
P-39	85° 12' 34.809" E	23° 40' 33.812" N
P-40	85° 12' 36.017" E	23° 40' 34.025" N
P-41	85° 12' 37.787" E	23° 40' 35.725" N
P-42	85° 12' 40.487" E	23° 40' 38.253" N
P-43	85° 12' 43.768" E	23° 40' 41.422" N
P-44	85° 12' 44.432" E	23° 40' 40.411" N
P-45	85° 12' 45.412" E	23° 40' 39.157" N
P-46	85° 12' 46.253" E	23° 40' 38.293" N
P-47	85° 12' 48.495" E	23° 40' 36.055" N

Provisional Cardinal Points for Patal East Block

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-48	85° 12' 49.017" E	23° 40' 35.607" N
P-49	85° 12' 50.252" E	23° 40' 34.320" N
P-50	85° 12' 51.280" E	23° 40' 33.465" N
P-51	85° 12' 52.275" E	23° 40' 32.761" N
P-52	85° 12' 53.037" E	23° 40' 32.233" N
P-53	85° 12' 53.933" E	23° 40' 31.755" N
P-54	85° 12' 55.043" E	23° 40' 31.396" N
P-55	85° 12' 57.139" E	23° 40' 31.097" N
P-56	85° 13' 0.110" E	23° 40' 30.698" N
P-57	85° 13' 4.105" E	23° 40' 30.331" N
P-58	85° 13' 4.908" E	23° 40' 30.255" N
P-59	85° 13' 5.137" E	23° 40' 30.233" N
P-60	85° 13' 5.089" E	23° 40' 28.835" N
P-61	85° 13' 5.067" E	23° 40' 26.592" N
P-62	85° 13' 5.038" E	23° 40' 23.220" N
P-63	85° 13' 5.004" E	23° 40' 20.241" N
P-64	85° 13' 4.969" E	23° 40' 16.717" N
P-65	85° 13' 4.996" E	23° 40' 12.510" N
P-66	85° 13' 4.962" E	23° 40' 7.839" N
P-67	85° 13' 4.967" E	23° 40' 6.877" N
P-68	85° 13' 4.978" E	23° 40' 3.360" N
P-69	85° 13' 4.924" E	23° 39' 57.574" N
P-70	85° 13' 4.968" E	23° 39' 53.661" N
P-71	85° 13' 4.935" E	23° 39' 49.197" N
P-72	85° 13' 4.901" E	23° 39' 44.819" N
P-73	85° 13' 4.955" E	23° 39' 40.132" N
P-74	85° 13' 4.905" E	23° 39' 36.227" N
P-75	85° 13' 4.888" E	23° 39' 34.059" N
P-76	85° 13' 1.691" E	23° 39' 34.332" N
P-77	85° 12' 59.635" E	23° 39' 34.480" N
P-78	85° 12' 55.540" E	23° 39' 34.848" N
P-79	85° 12' 52.152" E	23° 39' 35.129" N
P-80	85° 12' 50.268" E	23° 39' 35.277" N
P-81	85° 12' 46.173" E	23° 39' 35.638" N
P-82	85° 12' 43.798" E	23° 39' 35.871" N
P-83	85° 12' 41.159" E	23° 39' 36.060" N
P-84	85° 12' 39.109" E	23° 39' 36.299" N
P-85	85° 12' 35.706" E	23° 39' 36.624" N
P-86	85° 12' 32.718" E	23° 39' 36.889" N
P-87	85° 12' 30.269" E	23° 39' 37.081" N
P-88	85° 12' 28.695" E	23° 39' 37.200" N
P-89	85° 12' 25.771" E	23° 39' 37.424" N
P-90	85° 12' 22.634" E	23° 39' 37.670" N
P-91	85° 12' 19.807" E	23° 39' 37.968" N
P-92	85° 12' 18.886" E	23° 39' 38.051" N
P-93	85° 12' 18.599" E	23° 39' 38.075" N
P-94	85° 12' 17.134" E	23° 39' 38.196" N

Provisional Cardinal Points for Patal East Block

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-95	85° 12' 15.659" E	23° 39' 38.332" N
P-96	85° 12' 14.663" E	23° 39' 38.425" N
P-97	85° 12' 12.946" E	23° 39' 38.573" N
P-98	85° 12' 11.003" E	23° 39' 38.751" N
P-99	85° 12' 8.928" E	23° 39' 38.957" N
P-100	85° 12' 6.625" E	23° 39' 39.173" N
P-101	85° 12' 4.835" E	23° 39' 39.326" N
P-102	85° 12' 3.353" E	23° 39' 39.477" N
P-103	85° 12' 1.946" E	23° 39' 39.579" N
P-104	85° 11' 58.984" E	23° 39' 39.839" N
P-105	85° 11' 58.131" E	23° 39' 39.930" N
P-106	85° 11' 50.431" E	23° 39' 40.685" N
P-107	85° 11' 45.503" E	23° 39' 41.187" N
P-108	85° 11' 39.861" E	23° 39' 41.810" N
P-109	85° 11' 32.693" E	23° 39' 42.573" N
P-110	85° 11' 27.877" E	23° 39' 43.113" N
P-111	85° 11' 23.439" E	23° 39' 43.572" N
P-112	85° 11' 14.954" E	23° 39' 44.462" N
P-113	85° 11' 6.541" E	23° 39' 45.454" N
P-114	85° 10' 58.785" E	23° 39' 46.286" N
P-115	85° 10' 53.143" E	23° 39' 46.921" N
P-116	85° 10' 44.589" E	23° 39' 47.824" N
P-117	85° 10' 43.427" E	23° 39' 47.974" N
P-118	85° 10' 38.739" E	23° 39' 48.732" N
P-119	85° 10' 30.990" E	23° 39' 50.351" N
P-120	85° 10' 24.835" E	23° 39' 51.636" N
P-121	85° 10' 19.646" E	23° 39' 52.732" N
P-122	85° 10' 11.575" E	23° 39' 54.431" N
P-123	85° 10' 4.063" E	23° 39' 56.022" N
P-124	85° 9' 54.230" E	23° 39' 58.198" N
P-125	85° 9' 49.878" E	23° 39' 59.077" N
P-126	85° 9' 46.007" E	23° 39' 59.984" N
P-127	85° 9' 42.815" E	23° 40' 0.682" N
P-128	85° 9' 40.512" E	23° 40' 1.175" N
P-129	85° 9' 38.243" E	23° 40' 1.697" N
P-130	85° 9' 38.148" E	23° 40' 5.299" N
P-131	85° 9' 37.852" E	23° 40' 19.307" N
P-132	85° 9' 37.608" E	23° 40' 34.367" N
P-133	85° 9' 37.569" E	23° 40' 39.984" N
P-134	85° 9' 37.573" E	23° 40' 41.257" N
P-135	85° 9' 37.550" E	23° 40' 42.628" N
P-136	85° 9' 39.480" E	23° 40' 43.962" N
P-137	85° 9' 43.468" E	23° 40' 46.782" N
P-138	85° 9' 47.521" E	23° 40' 49.713" N
P-139	85° 9' 50.487" E	23° 40' 51.805" N
P-140	85° 9' 53.484" E	23° 40' 53.898" N
P-141	85° 9' 54.707" E	23° 40' 54.566" N

Provisional Cardinal Points for Patal East Block

POINT NO	Longitude (WGS84)	Latitude (WGS84)
P-142	85° 9' 58.377" E	23° 40' 56.605" N
P-143	85° 10' 0.307" E	23° 40' 57.488" N
P-144	85° 10' 5.809" E	23° 40' 59.906" N
P-145	85° 10' 9.539" E	23° 41' 1.423" N
P-146	85° 10' 12.741" E	23° 41' 2.679" N
P-147	85° 10' 15.161" E	23° 41' 3.633" N
P-148	85° 10' 18.913" E	23° 41' 5.105" N
P-149	85° 10' 20.896" E	23° 41' 5.934" N
P-150	85° 10' 23.185" E	23° 41' 6.856" N
P-151	85° 10' 26.870" E	23° 41' 8.289" N
P-152	85° 10' 32.458" E	23° 41' 10.502" N
P-153	85° 10' 34.517" E	23° 41' 11.276" N
P-154	85° 10' 39.874" E	23° 41' 12.295" N
P-155	85° 10' 45.500" E	23° 41' 13.359" N
P-156	85° 10' 50.091" E	23° 41' 14.225" N
P-157	85° 10' 52.363" E	23° 41' 14.685" N
P-158	85° 10' 57.004" E	23° 41' 15.153" N
P-159	85° 11' 3.517" E	23° 41' 15.807" N
P-160	85° 11' 6.554" E	23° 41' 16.138" N
P-161	85° 11' 11.912" E	23° 41' 16.600" N
P-162	85° 11' 20.343" E	23° 41' 17.394" N
P-163	85° 11' 27.245" E	23° 41' 18.034" N