

LITHOLOGS OF MATANA BLOCK, SUTRAPADA TALUKA, GIR-SOMNATH DISTRICT

Borehole No.	MTBH-1						Date of commencement			22-06-2025		
Coordinates							Date of closure			23-06-2025		
20°49'34.80"N	70°38'21.20"E											
R.L.	26.00											
Run Length		RUN	RECOVERY %	RECOVERY (m)	RQD (%)	LITHOLOGY	EXTRAPOLATION			REMARK		
FROM	TO						FROM	TO	THICKNESS			
0.00	1.00	1.00	78.00%	—		Top black soil with limestone fragments	0.00	0.20	0.20			
				0.78		Pinkish to whitish limestone	0.20	1.00	0.80			
1.00	2.00	1.00	98.00%	0.98		Pinkish to whitish limestone	1.00	2.00	1.00			
2.00	3.00	1.00	98.00%	0.65		Pinkish to whitish limestone	2.00	2.66	0.66			
				0.33		Brown to yellowish limestone	2.66	3.00	0.34			
3.00	4.00	1.00	98.00%	0.98	54.00	Brown to yellowish limestone	3.00	4.00	1.00			
4.00	5.00	1.00	97.00%	0.26	68.00	Brown to yellowish limestone	4.00	4.27	0.27			
				0.16		Yellow to brownish marl	4.27	4.44	0.17			
				0.55		Yellow to brownish marl	4.44	5.00	0.56			
5.00	6.00	1.00	98.00%	0.98	88.00	Yellow to brownish marl	5.00	6.00	1.00			
6.00	7.00	1.00	98.00%	0.16	90.00	Yellow to brownish marl	6.00	6.17	0.17			
				0.82	65.00	Greyish brown to yellowish clay	6.17	7.00	0.83			
7.00	8.00	1.00	98.00%	0.98		Greyish brown to yellowish clay	7.00	8.00	1.00			
8.00	9.00	1.00	98.00%	0.98	85.00	Greyish brown to yellowish clay	8.00	9.00	1.00			
9.00	10.00	1.00	98.00%	0.98	89.00	Greyish brown to yellowish clay	9.00	10.00	1.00			
Borehole MTBH- 1 closed at depth of 10.00 m												
Average core recovery (%) of Limestone in Borehole MTBH-1 is 97.75												

Borehole No.	MTBH-2						Date of commencement			20-06-2025		
Coordinates							Date of closure			21-06-2025		
20°49'16.20"N	70°38'29.80"E						Final Depth			10.00		
R.L.	19.50											
Run Length		RUN	RECOVERY %	RECOVERY (m)	RQD (%)	LITHOLOGY	EXTRAPOLATION			REMARK		
FROM	TO						FROM	TO	THICKNESS			
0.00	1.00	1.00	72.00%	–		Top black soil	0.00	0.26	0.26			
				0.72		Pinkish to buff white limestone	0.26	1.00	0.74			
1.00	2.00	1.00	98.00%	0.33		Pinkish to buff white limestone	1.00	1.34	0.34			
				0.65		Yellowish limestone with calcareous kankar	1.34	2.00	0.66			
2.00	3.00	1.00	97.00%	0.97		Yellowish calcareous marl	2.00	3.00	1.00			
3.00	4.00	1.00	98.00%	0.46	41.00	Yellowish calcareous marl	3.00	3.47	0.47			
				0.52		Yellow to brown calcareous clay	3.47	4.00	0.53			
4.00	5.00	1.00	98.00%	0.32	89.00	Yellow to brown calcareous clay	4.00	4.33	0.33			
				0.66		Dark brown clay	4.33	5.00	0.67			
5.00	6.00	1.00	97.00%	0.31	74.00	Dark brown clay	5.00	5.32	0.32			
				0.37		Yellow to brownish calcareous clay with fine sand	5.32	5.70	0.38			
				0.29		Yellow to brownish calcareous clay with fine sand	5.70	6.00	0.30			
6.00	7.00	1.00	98.00%	0.98	87.00	Yellow to brownish calcareous clay with fine sand	6.00	7.00	1.00			
7.00	8.00	1.00	98.00%	0.98	38.00	Yellow to brownish calcareous clay with fine sand	7.00	8.00	1.00			
8.00	9.00	1.00	98.00%	0.50	81.00	Yellow to brownish calcareous clay with fine sand	8.00	8.51	0.51			
				0.48		Brownish to yellowish clay	8.51	9.00	0.49			
9.00	10.00	1.00	98.00%	0.98	82.00	Brownish to yellowish clay	9.00	10.00	1.00			
Borehole MTBH- 2 closed at depth of 10.00 m												
Average core recovery (%) of Limestone in Borehole MTBH-2 is 85.00												

Borehole No.	MTBH-3						Date of commencement			28-06-2025		
Coordinates							Date of closure			29-06-2025		
20°49'29.90"N	70°38'44.00"E											
R.L.	14.00											
Run Length		RUN	RECOVERY %	RECOVERY (m)	RQD (%)	LITHOLOGY	EXTRAPOLATION			REMARK		
FROM	TO						FROM	TO	THICKNESS			
0.00	1.00	1.00	82.00%	—		Top black soil	0.00	0.15	0.15			
				0.53		Clay with limestone	0.15	0.70	0.55			
				0.29		Yellowish to whitish limestone	0.70	1.00	0.30			
1.00	2.00	1.00	98.00%	0.98		Yellowish to whitish limestone	1.00	2.00	1.00			
2.00	3.00	1.00	98.00%	0.39	12.00	Yellowish to whitish limestone	2.00	2.40	0.40			
				0.59		Yellowish to whitish weathered limestone	2.40	3.00	0.60			
3.00	4.00	1.00	98.00%	0.98	72.00	Yellowish marl with calcareous kankar	3.00	4.00	1.00			
4.00	5.00	1.00	98.00%	0.29	72.00	Yellowish marl with calcareous kankar	4.00	4.30	0.30			
				0.69		Brown to yellowish limestone	4.30	5.00	0.70			
5.00	6.00	1.00	98.00%	0.98	76.00	Brown to yellowish limestone	5.00	6.00	1.00			
6.00	7.00	1.00	98.00%	0.79	71.00	Brown to yellowish limestone	6.00	6.80	0.80			
				0.19		Yellow to brown calcareous clay with fine sand	6.80	7.00	0.20			
7.00	8.00	1.00	97.00%	0.97		Yellow to brown calcareous clay with fine sand	7.00	8.00	1.00			
8.00	9.00	1.00	98.00%	0.39		Yellow to brown calcareous clay with fine sand	8.00	8.40	0.40			
				0.59		Yellow to brownish calcareous clay with fine sand	8.40	9.00	0.60			
9.00	10.00	1.00	97.00%	0.97		Yellow to brownish calcareous clay with fine sand	9.00	10.00	1.00			
Borehole MTBH- 3 closed at depth of 10.00 m												
Average core recovery (%) of Limestone in Borehole MTBH-3 is 95.33												

Borehole No.	MTBH-4						Date of commencement			24-06-2025
Coordinates							Date of closure			26-06-2025
20°49'50.80"N	70°38'29.00"E						Final Depth			10.00
R.L.	20.50									
Run Length		RUN	RECOVERY %	RECOVERY (m)	RQD (%)	LITHOLOGY	EXTRAPOLATION			REMARK
FROM	TO						FROM	TO	THICKNESS	
0.00	1.00	1.00	72.00%	—		Top black soil with calcareous fragments	0.00	0.27	0.27	
				0.72		Reddish yellow to buff white limestone	0.27	1.00	0.73	
1.00	2.00	1.00	97.00%	0.97		Reddish yellow to buff white limestone	1.00	2.00	1.00	
2.00	3.00	1.00	97.00%	0.97		Reddish yellow to buff white limestone	2.00	3.00	1.00	
3.00	4.00	1.00	98.00%	0.47	32.00	Reddish yellow to buff white limestone	3.00	3.48	0.48	
				0.51		Brown to yellowish limestone with calcareous clay at some places	3.48	4.00	0.52	
4.00	5.00	1.00	98.00%	0.98		Yellowish limestone with calcareous clay at some places	4.00	5.00	1.00	
5.00	6.00	1.00	98.00%	0.98		Yellowish limestone with calcareous clay at some places	5.00	6.00	1.00	
6.00	7.00	1.00	97.00%	0.39		Yellowish limestone with calcareous clay at some places	6.00	6.40	0.40	
				0.58		Yellowish calcareous marl	6.40	7.00	0.60	
7.00	8.00	1.00	98.00%	0.87	36.00	Yellowish calcareous marl	7.00	7.89	0.89	
				0.11		Yellow to brown calcareous clay with fine sand	7.89	8.00	0.11	
8.00	9.00	1.00	98.00%	0.88	36.00	Yellow to brown calcareous clay with fine sand	8.00	8.90	0.90	
				0.10		Yellow to brownish calcareous clay with fine sand	8.90	9.00	0.10	
9.00	10.00	1.00	97.00%	0.97	34.00	Yellow to brownish calcareous clay with fine sand	9.00	10.00	1.00	
Borehole MTBH- 4 closed at depth of 10.00 m										
Average core recovery (%) of Limestone in Borehole MTBH-4 is 93.86										