



REPORT A REPORT ON GEOTECHNICAL INVESTIGATION WORK FOR BOUNDARY WALL & SITE DEVELOPMENT FOR COMPRESSOR STATION FOR NORTH -EAST NATURAL GAS GRID PROJECT.

BH8	45	12.00	1	17.14	11.05	4.99
	50		1	19.74	12.60	6.16
	60		1	25.38	15.89	8.87
BH 8	45	13.00	1	19.47	12.95	4.99
	50		1	22.33	14.74	6.16
	60		1	28.49	18.54	8.87
	45	15.00	1	24.83	17.25	4.99
	50		1	25.47	15.33	6.16
	60		1	35.73	19.39	8.87
BH9	45	8.00	1	14.58	6.99	4.99
	50		1	17.42	7.97	6.16
	60		1	23.21	10.06	8.87
	45	9.00	1	16.06	8.29	4.99
	50		1	19.70	9.45	6.16
	60		1	27.00	11.90	8.87
	45	12.0	1	21.89	13.17	4.99
	50		1	26.18	14.95	6.16
	60		1	36.58	18.72	8.87
	45	14.0	1	26.92	17.24	4.99
	50		1	31.77	19.53	6.16
	60		1	43.28	24.36	8.87
45	15.0	1	29.77	19.51	4.99	
50		1	34.94	22.09	6.16	
60		1	47.09	27.50	8.87	
	45	7.00	1	13.65	6.63	4.99
	50		1	15.98	7.55	6.16
	60		1	21.18	9.48	8.87
	45	8.00	1	14.88	7.75	4.99
	50		1	18.61	8.82	6.16
	60		1	24.63	11.08	8.87
	45	10.0	1	18.03	10.48	4.99
	50		1	19.24	9.41	6.16



REPORT A REPORT ON GEOTECHNICAL INVESTIGATION WORK FOR BOUNDARY WALL & SITE DEVELOPMENT FOR COMPRESSOR STATION FOR NORTH -EAST NATURAL GAS GRID PROJECT.

BH 10	60	12.0	1	24.63	11.92	8.87
	45		1	22.85	13.85	4.99
	50		1	19.24	10.00	6.16
	60		1	28.25	12.77	8.87
	45	14.0	1	27.06	17.88	4.99
	50		1	19.24	10.58	6.16
	60		1	28.25	13.62	8.87
	45	15.0	1	30.66	20.14	4.99
	50		1	19.24	10.88	6.16
	60		1	28.25	14.04	8.87
BH 12	45	10.0	1	20.63	10.13	4.99
	50		1	25.39	11.52	6.16
	60		1	37.32	14.46	8.87
	45	11.0	1	22.69	11.83	4.99
	50		1	27.67	13.44	6.16
	60		1	40.06	16.84	8.87
	45	14.0	1	30.48	18.11	4.99
	50		1	36.33	20.51	6.16
	60		1	50.45	25.53	8.87
	45	15.0	1	33.62	20.60	4.99
	50		1	39.82	23.30	6.16
	60		1	54.64	28.95	8.87
BH 13	45	8.00	1	12.61	7.94	4.99
	50		1	14.49	9.03	6.16
	60		1	18.52	11.33	8.87
	45	9.00	1	14.08	9.22	4.99
	50		1	16.11	10.48	6.16
	60		1	20.47	13.14	8.87
	45	10.0	1	15.54	10.50	4.99
	50		1	17.74	11.94	6.16
	60		1	22.42	14.96	8.87
	45	12.0	1	18.46	13.07	4.99
	50		1	20.99	14.85	6.16



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	60		1	26.32	18.59	8.87	
	45	14.0	1	21.39	15.64	4.99	
	50		1	24.24	17.76	6.16	
	60		1	30.22	22.23	8.87	
	45	15.00	1	22.85	16.92	4.99	
	50		1	25.87	19.21	6.16	
	60		1	32.17	24.05	8.87	
BH 14	45	14.0	1	19.94	15.99	4.99	
	50		1	22.39	18.15	6.16	
	60		1	27.43	22.70	8.87	
	45	15.0	1	21.44	17.31	4.99	
	50		1	24.06	19.64	6.16	
	60		1	29.43	24.56	8.87	
BH 15	45	8.0	1	17.72	7.57	4.99	
	50		1	22.16	8.62	6.16	
	60		1	33.44	10.84	8.87	
	45	9.0	1	19.28	8.92	4.99	
	50		1	23.89	10.15	6.16	
	60		1	33.11	12.74	8.87	
	45	10.0	1	21.11	10.47	4.99	
	50		1	25.92	11.90	6.16	
	60		1	37.96	14.91	8.87	
	45	12.0	1	25.59	14.14	4.99	
	50		1	30.89	16.04	6.16	
	60		1	43.92	20.02	8.87	
	45	14.0	1	31.15	18.59	4.99	
	50		1	37.07	21.04	6.16	
	60		1	51.34	26.17	8.87	
	45	15.0	1	34.34	21.21	4.99	
	50		1	40.62	23.86	6.16	
	60		1	55.59	29.63	8.87	
		45	10.0	1	14.64	11.25	4.99
		50		1	16.50	12.77	6.16



REPORT A REPORT ON GEOTECHNICAL INVESTIGATION WORK FOR BOUNDARY WALL & SITE DEVELOPMENT FOR COMPRESSOR STATION FOR NORTH -EAST NATURAL GAS GRID PROJECT.

BH 16	60	11.0	1	20.36	15.96	8.87
	45		1	16.24	12.63	4.99
	50		1	18.27	14.33	6.16
	60		1	22.49	17.90	8.87
	45	12.0	1	17.83	14.04	4.99
	50		1	20.04	15.89	6.16
	60		1	24.61	19.84	8.87
	45	14.0	1	21.02	16.76	4.99
	50		1	23.59	19.01	6.16
	60		1	28.86	23.73	8.87
	45	15.0	1	22.61	18.14	4.99
	50		1	25.36	20.57	6.16
	60		1	30.99	25.67	8.87

10.0 CONCLUSION: Safe bearing capacities of soil as well as pile load capacities are shown in above Tables.

BORE LOG CUM LABORATORY TEST RESULT

Name of Project : GEOTECHNICAL INVESTIGATION WORK FOR BOUNDARY WALL & SITE DEVELOPMENT FOR COMPRESSOR STATION FOR NORTH -EAST NATURAL GAS GRID PROJECT.

Boring method: Auger & wash boring		Boring dia: 150mm							Date Commenced : 23-05-2022		Date completed : 23-05-2022										
Depth in meters below reference	Types of Sample	Observed N-Value	Corrected N-Value	Group Symbol	Visual description of soil	%Weather Rock	% Gravel > 4.75 mm	% Sand 4.75-0.075 mm	% Silt and Clay <0.075mm	Field density, gms/cm ³	Dry density, gms/cm ³	Specific Gravity	Void Ratio	Natural moisture content	Unconfined compressive Strength (Kg/cm ²)	Cohesion 'c' Kg/cm ²	Angle of shearing resistance (Φ ^o)	Compression Index Cc	LL%	PL%	PI%
0.50-0.95	P	2	2	CL	Grayish and brownish silty CLAY with fine SAND.																
1.0	U													2.64			0.13		7		
1.50-1.95	P	5	5	CL	2.80M Grayish fine SAND																
2	U													2.64	0.84	25.5	0.33		7	0.17	35.50
3.0-3.45	P	4	5	SP	4.20M Grayish silty CLAY.																
3.5	D													2.64					29		
4.5-4.95	P	8	8	CL	10.20M Grayish fine to coarse SAND.																
5	U																				
6.0-6.45	P	10	10	CL																	
6.5	U													2.65			0.67		8		
7.5-7.95	P	12	12	CL																	
8	U													2.65			0.80		7		
9.0-9.45	P	13	13	CL																	
9.5	U													2.65			0.87				
10.5-10.95	P	16	14	SW																	
11	D													2.65							
12.00-12.45	P	22	16	SW																	
12.5	D													2.66							
13.5-13.95	P	26	18	SW																	
14	D																				
15.00-15.45	P	32	20	SW																	
15.5	D													2.67							



U: Undisturbed Sample;; D: Disturbed Sample;; P: Standard Penetration test;; EGL: Existing Ground Level ;; R : Refusal N>100, NP: Non plastic

BORE LOG CUM LABORATORY TEST RESULT

Name of Project : GEOTECHNICAL INVESTIGATION WORK FOR BOUNDARY WALL & SITE DEVELOPMENT FOR COMPRESSOR STATION FOR NORTH -EAST NATURAL GAS GRID PROJECT.

Boring method: Auger & wash boring		Boring dia: 150mm										Date Commenced : 18-05-2022		Date completed : 18-05-2022								
DEPTH OF WATER TABLE=0.15M From EGL																						
Depth in meters below reference	Types of Sample	Observed N-Value	Corrected N-Value	Group Symbol	Visual description of soil	% Weather Rock	% Gravel > 4.75 mm	% Sand 4.75-0.075 mm	% Silt and Clay < 0.075mm	Field density, gms/cm ³	Dry density, gms/cm ³	Specific Gravity	Void Ratio	Natural moisture content	Unconfined compressive Strength (Kg/cm ²)	Cohesion 'c' Kg/cm ²	Angle of shearing resistance (Φ)	Compression Index Cc	LL%	PL%	PI%	
0.00-0.60					Grayish silty CLAY 0.60M																	
0.50-0.95	P 5	5	5	CL	Brownish SANDY CLAY																	
1.0	U				1.60M			75	25													
1.50-1.95	P 6	6	6		Grayish silty CLAY																	
2	U				3.10M																	
3.0-3.45	P 8	8	8	SC	Brownish SANDY CLAY																	
3.5	U				3.60M			35	65	1.92	1.57	2.64	0.68	22.35		0.48	11	0.12	32.33	23.70	8.63	
3.60-4.10					Grayish silty CLAY 4.10M																	
4.5-4.95	P 4	4	4		Brownish SANDY CLAY																	
5	U							40	60	1.60		2.64				0.25	10					
6.0-6.45	P 6	6	6																			
6.5	U			SC				35	65	1.84		2.64				0.35	11					
7.5-7.95	P 7	7	7																			
8	U				8.10M			30	70													
9.0-9.45	P 39	33	33		Grayish fine to medium SAND																	
9.5	D							100		2.15		2.67										
10.5-10.95	P 40	33	33	SW																		
11	D							100														
12.00-12.45	P 45	35	35																			
12.5	D				12.60M																	
13.40-13.40					SAND with ROCK 13.40M																	
13.5-13.95	P 45	45	45	G+V	Hard ROCK																	
14	D				13.50M		100			2.26		2.67										



U: Undisturbed Sample; D: Disturbed Sample; P: Standard Penetration test; EGL: Existing Ground Level; R: Refusal N>100, NP: Non plastic

BORE LOG CUM LABORATORY TEST RESULT

Name of Project : GEOTECHNICAL INVESTIGATION WORK FOR BOUNDARY WALL & SITE DEVELOPMENT FOR COMPRESSOR STATION FOR NORTH -EAST NATURAL GAS GRID PROJECT.

Boring method: Auger & wash boring		Boring dia: 150mm										Date Commenced : 21-05-2022		Date completed : 21-05-2022						
Depth in meters below reference	Types of Sample	Observed N-Value	Corrected N-Value	Group Symbol	Visual description of soil	%Weather Rock	%Gravel > 4.75 mm	%Sand 4.75-0.075 mm <0.075mm	Field density, gms/cm ³	Dry density, gms/cm ³	Specific Gravity	Void Ratio	Natural moisture content	Unconfined compressive Strength (Kg/cm ²)	Cohesion 'c' Kg/cm ²	Angle of shearing resistance (Φ)	Compression Index Cc	LL%	PL%	PI%
0.50-0.95	P	3	3		Grayish silty CLAY						2.64				0.20	7				
1.0	U			CL				100	1.68											
1.50-1.95	P	5	5		2.80M Grayish fine SAND						2.64				0.33	7	0.17	35.50	24.65	10.85
2	U							100	1.80	1.43	2.64	0.84	25.5							
3.0-3.45	P	6	8		5.80M Brownish silty CLAY											29				
3.5	D			SP				100	1.55		2.64									
4.5-4.95	P	8	10		6.60M Grayish fine SAND															
5	D			CL				100	1.98		2.65					0.73	7			
6.0-6.45	P	11	11		12.80M Grayish silty CLAY with fine SAND															
6.5	U							100												
7.5-7.95	P	14	15		15.50M															
8	D							100												
9.0-9.45	P	15	15		CL															
9.5	D			SP				100	1.84		2.65						31			
10.5-10.95	P	12	12		CL															
11	D			SP				100	1.79		2.65						31			
12.00-12.45	P	16	15		CL															
12.5	D							100	1.86		2.65						32			
13.5-13.95	P	19	19		CL															
14	U							20												
15.00-15.45	P	13	13																	
15.5	U						25	2.02		2.65				1.74	0.87					

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BORE LOG CUM LABORATORY TEST RESULT

Name of Project : GEO-TECHNICAL INVESTIGATION WORK FOR PROPOSED CONSTRUCTION OF BOUNDARY WALL, NEGG PIPE LINE AT BARPALAHA, BEZERA ASSAM

Boring method: Auger & wash boring		Boring dia: 150mm										Date Commenced : 19-05-2022		Date completed : 19-05-2022							
Depth in meters below reference	Types of Sample	Observed N-Value	Corrected N-Value	Group Symbol	Visual description of soil	% Weather Rock	% Gravel > 4.75 mm	% Sand 4.75-0.075 mm	% Silt and Clay < 0.075mm	Field density, gms/cm ³	Dry density, gms/cm ³	Specific Gravity	Void Ratio	Natural moisture content	Unconfined compressive Strength (Kg/cm ²)	Cohesion c' Kg/cm ²	Angle of shearing resistance (Φ°)	Compression Index Cc	LL%	PL%	PI%
0.50-0.95	P	4	4	CL	Grayish silty CLAY				100	1.76		2.64				0.27	7				
1.0	U																				
1.50-1.95	P	5	5	CL	2.10M Brownish SANDY CLAY			100	100	1.80	1.43	2.64	0.84	25.5		0.33	7	0.17	35.50	24.65	10.85
2	U																				
2.0-2.90																					
3.0-3.45	P	15	20	SP	Grayish fine SAND					1.84		2.65					33				
3.5	D																				
4.5-4.95	P	19	19	SC	4.60M Brownish SANDY CLAY		100														
5	D																				
6.0-6.45	P	12	12	SC	6.10M Brownish silty CLAY		45	55		2.00		2.65				0.70	13				
6.5	U																				
7.5-7.95	P	9	9	CL	10.50M Grayish fine to medium SAND																
8	U									100											
9.0-9.45	P	14	14	CL					100	2.04		2.65				1.86	0.93				
9.5	U																				
10.5-10.95	P	10	9	SW																	
11	D																				
12.00-12.45	P	40	33	SW			100			2.16		2.67									
12.5	D																				
13.5-13.95	P	45	36	SW																	
14	D																				
15.00-15.45	P	50	38	SW	15.50M																
15.5	D											2.24		2.67							



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BORE LOG CUM LABORATORY TEST RESULT

Name of Project : GEO-TECHNICAL INVESTIGATION WORK FOR PROPOSED CONSTRUCTION OF BOUNDARY WALL, NEGG PIPE LINE AT BARPALAHA, BEZERA ASSAM

Boring method: Auger & wash boring				Boring dia: 150mm				Date Commenced : 20-05-2022				Date completed : 20-05-2022										
Depth in meters below reference	Types of Sample	Observed N-Value	Corrected N-Value	Group Symbol	Visual description of soil	% Weather Rock	% Gravel > 4.75 mm	% Sand 4.75-0.075 mm	% Silt and Clay <0.075mm	Field density, gms/cm ³	Dry density, gms/cm ³	Specific Gravity	Void Ratio	Natural moisture content	Unconfined compressive strength (Kg/cm ²)	Cohesion c ^c Kg/cm ²	Angle of shearing resistance (Φ)	Compression Index Cc	LL%	PL%	PI%	
																						DEPTH OF WATER TABLE=0.10M From EGL
0.50-0.95	P	5	5		Grayish silty CLAY				10	1.0						0.33	7					
1.0	U																					
1.50-1.95	P	7	7					100		1.88	1.52	2.64	0.74	23.56		0.47	7	0.14	33.64	24.09	9.55	
2	U				2.00M																	
3.0-3.45	P	6	6		Grayish silty CLAY with fine SAND			20	80	1.84	1.48	2.64	0.79	24.65		0.40	7	0.16	34.39	24.32	10.07	
3.5	U																					
4.5-4.95	P	7	7					25	75													
5	U				5.80M																	
6.0-6.45	P	10	10		Grayish fine to medium SAND			100		1.76		2.65					30					
6.5	D																					
7.5-7.95	P	11	11					100														
8	D																					
9.0-9.45	P	14	13					100		1.82		2.65					31					
9.5	D																					
10.5-10.95	P	20	17					100														
11	D																					
12.00-12.45	P	28	20					100		2.03		2.66					33					
12.5	D																					
13.5-13.95	P	31	20					100														
14	D																					
15.00-15.45	P	35	21					100		2.12		2.67					33					
15.5	D				15.50M																	

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