

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structures in STPP St:2 of NTPC at Telangana

BH No. :- DBH 10

Co-Ordinate :- N 1317, E 3530

Reduced Level :- 147.5 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Consolidation Parameters			Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm ² /kg	Pre-consolidation Pressure kg/cm ²			
1	0.00	DS	-	-	-	-	8	66	26	25	12	13	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	2	77	21	31	24	7	-	-	-	SM-SC	-	-	-	-	-	-	26	-	-	-	-	-	-
3	3.00	UDS	2.04	1.67	22.58	2.67	20	68	12	29	22	7	-	-	-	SM-SC	0.05	28	DSU	-	-	-	-	-	-	-	0.60	37.6	
4	4.50	UDS	2.12	1.79	18.66	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	91.4	124.2	-	-	-	-	13.33	0.50	33.3	
5	6.00	UDS	2.21	1.92	15.25	2.71	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	124.2	12.0	-	-	-	-	38.66	0.41	29.2	
6	7.50	UDS	2.16	1.85	16.99	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	110.6	-	-	-	-	-	22.66	0.46	31.4	
7	9.00	UDS	2.27	2.02	12.54	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	199.0	20.1	-	-	-	-	55.33	0.34	25.3	
8	10.00	UDS	2.37	2.17	9.39	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	183.8	-	-	-	-	-	65.00	0.26	20.3	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structures in STPP St:2 of NTPC at Telangana

BH No. :- DBH 11

Co-Ordinate :- N 1201, E 3202

Reduced Level :- 147.5 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree								
1	0.00	DS	-	-	-	-	8	72	20	25	17	8	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	7	64	29	32	16	16	-	-	-	-	Boulderous	-	-	-	-	17	-	-	-	-	-
3	3.00	SPT	-	-	-	-	51	31	18	26	15	11	-	-	-	-	Boulderous	-	-	-	-	>100	-	-	-	-	-
4	4.50	SPT	-	-	-	-	56	29	15	25	17	8	-	-	-	-	Boulderous	-	-	-	-	>100	-	-	-	-	-
5	6.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	>100	-	-	-	-	-
6	7.50	UDS	2.27	2.02	12.29	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	11.9	110.5	-	56.00	0.33	24.9	
7	9.00	UDS	2.25	1.99	13.09	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	156.4	156.4	-	85.00	0.35	26.0	
8	10.00	UDS	2.28	2.03	12.15	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	160.7	160.7	-	99.00	0.33	24.7	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structures in STPP St:2 of NTPC at Telangana

BH No. :- DBH 13

Co-Ordinate :- N 1081, E 3171

Reduced Level :- 147.5 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Consolidation Parameters			Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm ² /kg	Pre-consolidation Pressure kg/cm ²				SPT N Value
1	0.00	DS	-	-	-	-	12	57	31	26	16	10	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	0	60	40	35	17	18	-	-	-	SC	-	-	-	-	-	-	-	8	-	-	-	-		
3	3.00	UDS	1.93	1.49	29.21	2.65	8	41	26	25	40	19	21	-	-	CI	0.43	8	-	TUU	-	-	0.19	0.0231	0.41	-	17	-	0.77	43.6
4	4.50	SPT	-	-	-	-	0	77	23	28	18	10	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	6.00	UDS	2.00	1.60	25.09	2.67	0	79	21	25	17	8	-	-	-	SC	0.04	25	-	DSU	-	-	-	-	-	-	-	0.67	40.1	
6	7.50	UDS	2.31	2.09	10.78	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	15.0	261.3	-	-	-	-	-	9.09	0.29	22.5
7	9.00	UDS	2.28	2.04	11.91	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	-	252.8	-	-	-	-	-	7.33	0.32	24.3
8	10.00	UDS	2.30	2.06	11.88	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	16.6	296.7	-	-	-	-	-	68.00	0.32	24.4

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structures in STPP St:2 of NTPC at Telangana

BH No. :- DBH 31

Co-Ordinate :- N 1234, E 2917

Reduced Level :- 145.50

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Consolidation Parameters			SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm ² /kg	Pre-consolidation Pressure kg/cm ²				
1	0.00	DS	-	-	-	-	16	64	20	23	14	9	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	UDS	2.20	1.91	15.18	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	18.3	-	-	-	-	-	-	-	0.41	29.0	-
3	3.00	UDS	2.18	1.88	15.81	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	20.1	-	-	-	-	-	-	-	0.42	29.8	-	
4	4.50	UDS	2.25	1.99	13.33	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	161.4	-	UCS	-	-	-	-	-	0.36	26.5	-	
5	6.00	UDS	2.26	2.01	12.69	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	143.7	-	UCS	-	-	-	-	0.34	25.4	-		
6	7.50	UDS	2.29	2.04	12.49	2.73	-	-	-	-	-	-	-	-	-	ROCK	-	-	219.6	-	UCS	-	-	-	-	0.34	25.4	-		
7	9.00	UDS	2.30	2.05	12.35	2.74	-	-	-	-	-	-	-	-	-	ROCK	-	-	244.8	-	UCS	-	-	-	-	0.34	25.3	-		
8	10.00	UDS	2.29	2.03	12.73	2.74	-	-	-	-	-	-	-	-	-	ROCK	-	-	251.5	-	UCS	-	-	-	-	0.35	25.9	-		

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structures in STPP St:2 of NTPC at Telangana

BH No. :- DBH 32

Co-Ordinate :- N 1210, E 2961

Reduced Level :- 145.50

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Type of Shear Test	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg					Pre-consolidation Pressure kg/cm ²	SPT N Value	Rock Quality Designation %					
1	0.00	DS	-	-	-	-	3	60	37	30	15	15	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	0	77	23	25	18	7	-	-	-	-	SM-SC	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	3.00	UDS	2.18	1.89	15.55	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	169.8	-	UCS	-	-	-	-	-	8.57	0.42	29.3
4	4.50	UDS	2.20	1.91	15.18	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	219.5	14.8	UCS	-	-	-	-	26.66	0.41	29.0	
5	6.00	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	182.2	-	UCS	-	-	-	-	16.66	0.41	29.2	
6	7.50	UDS	2.28	2.03	12.15	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	231.6	-	UCS	-	-	-	-	76.00	0.33	24.7	
7	9.00	UDS	2.31	2.07	11.51	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	234.6	22.4	UCS	-	-	-	-	72.00	0.31	23.8	
8	10.00	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	198.2	18.1	UCS	-	-	-	-	62.00	0.35	25.9	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structures in STPP St.2 of NTPC at Telangana

BH No. :- DBH 34

Co-Ordinate :- N 1185, E 2556

Reduced Level :- 145.50

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit		Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Consolidation Parameters	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Shrinkage Limit %	Cohesion C Kg/cm ²				Angle of Internal Friction φ Degree	Compression Index C _c									Coefficient of Volume Compressibility mm ³ /kg
1	0.00	DS	-	-	-	-	12	68	20	28	16	12	-	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-
2	1.50	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	99.6	-	-	-	22.00	0.41	29.2	
3	3.00	UDS	2.31	2.08	11.03	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	156.2	-	-	77.33	0.30	22.9		
4	4.50	UDS	2.25	1.99	13.09	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	97.7	11.3	-	41.33	0.35	26.0		
5	6.00	UDS	2.24	1.98	13.24	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	130.4	-	-	39.33	0.35	26.2		
6	7.50	UDS	2.30	2.06	11.64	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	276.3	29.8	-	28.66	0.32	24.0		
7	9.00	UDS	2.32	2.08	11.38	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	298.1	-	-	20.66	0.31	23.7		
8	10.50	UDS	2.28	2.03	12.15	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	150.6	-	-	21.33	0.33	24.7		
9	12.00	UDS	2.36	2.15	9.73	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	161.5	25.2	-	89.33	0.26	20.9		
10	13.50	UDS	2.34	2.12	10.19	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	241.6	-	-	96.66	0.28	21.6		
11	15.00	UDS	2.37	2.16	9.63	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	210.2	28.3	-	80.66	0.26	20.8		
12	16.50	UDS	2.36	2.16	9.26	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	298.6	-	-	91.33	0.25	20.0		
13	18.00	UDS	2.38	2.18	9.06	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	334.5	-	-	95.33	0.25	19.8		

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RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana
 BH No. :- DBH 38
 Co-Ordinate :- N 1128, E 2862
 Reduced Level :- 145.5 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Point Load Index in rock Kg/cm ²	Type of Shear Test	Consolidation Parameters				SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree			Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²				
1	0.00	DS	-	-	-	-	6	67	27	29	16	13	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	UDS	2.28	2.04	11.91	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	186.1	-	UCS	-	-	-	-	-	-	16.00	0.32	24.3
3	3.00	UDS	2.30	2.06	11.40	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	235.4	-	UCS	-	-	-	-	-	26.66	0.31	23.5	
4	4.50	UDS	2.31	2.07	11.51	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	242.1	-	UCS	-	-	-	-	-	37.33	0.31	23.8	
5	6.00	UDS	2.22	1.94	14.32	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	134.9	-	UCS	-	-	-	-	-	8.00	0.39	27.8	
6	7.50	UDS	2.21	1.93	14.49	2.68	-	-	-	-	-	-	-	-	-	ROCK	-	-	20.4	UCS	-	-	-	-	-	-	0.39	28.0	
7	9.00	UDS	2.35	2.13	10.08	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	194.5	25.3	UCS	-	-	-	-	56.00	0.27	21.5		
8	10.50	UDS	2.28	2.03	12.40	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	136.8	-	UCS	-	-	-	-	39.33	0.34	25.1		
9	12.00	UDS	2.31	2.07	11.51	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	248.7	25.0	UCS	-	-	-	-	92.00	0.31	23.8		
10	13.50	UDS	2.34	2.11	10.66	2.73	-	-	-	-	-	-	-	-	-	ROCK	-	266.3	-	UCS	-	-	-	-	98.66	0.29	22.5		
11	15.00	UDS	2.35	2.14	9.60	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	297.4	-	UCS	-	-	-	-	78.00	0.26	20.6		

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RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana
 BH No. :- DBH 44
 Co-Ordinate :- N , E
 Reduced Level :- 145.5 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Consolidation Parameters			Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm ² /kg	Pre-consolidation Pressure kg/cm ²			
1	0.00	DS	-	-	-	-	5	65	30	24	16	8	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	8	68	24	30	24	6	-	-	-	-	W.ROCK	-	-	-	-	-	12	-	-	-	-	-	-
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	>100	-	-	-	-	-	-
4	4.50	UDS	2.18	1.88	15.81	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	124.1	-	-	-	-	56.66	0.42	29.8
5	6.00	UDS	2.31	2.08	11.03	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	156.3	-	-	-	84.00	0.30	22.9	
6	7.50	UDS	2.29	2.05	11.53	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	147.8	-	-	-	84.66	0.31	23.7	
7	9.00	UDS	2.30	2.06	11.40	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	162.0	-	-	-	94.66	0.31	23.5	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 49

Co-Ordinate :- N , E

Reduced Level :- m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis			Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Consolidation Parameters			Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %					Plasticity Index %	Cohesion C Kg/cm ²					Angle of Internal Friction φ Degree	Compression Index C _c	Coefficient of Volume Compressibility mm ² /kg			
1	0.00	DS	-	-	-	-	2	63	35	34	23	24	22	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	6	67	27	36	23	24	22	-	-	SC	-	-	-	-	-	-	74	-	-	-	-	-
3	3.00	UDS	2.18	1.88	16.07	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	136.4	100.9	-	-	-	58.46	0.43	30.2	
4	4.50	UDS	2.16	1.85	16.73	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	100.9	144.5	-	-	-	36.66	0.45	31.0	
5	6.00	UDS	2.21	1.92	15.00	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	144.5	156.7	-	-	-	96.66	0.40	28.8	
6	7.50	UDS	2.25	1.99	13.33	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	156.7	129.3	-	-	-	98.00	0.36	26.5	
7	9.00	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	129.3	160.0	-	-	-	96.66	0.41	29.2	
8	10.50	UDS	2.20	1.90	15.68	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	160.0	-	-	-	-	98.66	0.43	29.8	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana
 BH No. :- DBH 59
 Co-Ordinate :- N 1215, E 2784
 Reduced Level :- 145.8 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Type of Shear Test	Consolidation Parameters				SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²					
1	0.00	DS	-	-	-	-	0	62	38	30	17	13	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	UDS	2.09	1.74	19.93	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	19.9	-	-	-	-	-	-	-	0.53	34.7	
3	3.00	UDS	2.11	1.77	19.42	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	20.1	-	-	-	-	-	-	0.52	34.3		
4	4.50	UDS	2.30	2.06	11.64	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	203.4	UCS	-	-	-	-	23.33	0.32	24.0		
5	6.00	UDS	2.09	1.74	19.93	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	76.8	UCS	-	-	-	30.66	0.53	34.7			
6	7.50	UDS	2.10	1.76	19.14	2.66	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	89.1	UCS	-	-	-	48.66	0.51	33.7			
7	9.00	UDS	2.09	1.73	20.46	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	157.5	UCS	-	-	-	17.33	0.55	35.5			
8	10.50	UDS	2.06	1.69	21.82	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	123.8	UCS	-	-	-	9.33	0.58	36.9			
9	12.00	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	177.4	UCS	-	-	-	63.33	0.35	25.9			
10	13.50	UDS	2.30	2.06	11.64	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	195.6	UCS	-	-	-	86.00	0.32	24.0			
11	15.00	UDS	2.31	2.08	11.27	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	232.5	UCS	-	-	-	88.00	0.31	23.4			
12	16.50	UDS	2.30	2.07	11.15	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	220.6	UCS	-	-	-	83.33	0.30	23.1			

UDS - Undisturbed Sample
 DS - Disturbed Sample
 SPT - Standard Penetration Tests
 NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
 TCU - Triaxial Consolidated Undrained
 DSU - Direct Shear Test
 UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 60

Co-Ordinate :- N , E

Reduced Level :- 145.853 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %		
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree			Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²				SPT N Value	
1	0.00	DS	-	-	-	-	7	67	26	29	16	13	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	
4	4.50	UDS	2.47	2.32	6.48	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	0.0	-	-	-	-	-	-	0.18	15.0	
5	6.00	UDS	2.39	2.20	8.50	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	498.6	-	-	-	-	-	-	9.33	0.23	18.7
6	7.50	UDS	2.19	1.89	15.62	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	134.1	-	-	-	-	-	-	8.00	0.42	29.6
7	9.00	UDS	2.17	1.87	16.26	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	120.6	-	-	-	-	-	-	6.66	0.44	30.4
8	10.50	UDS	2.23	1.95	14.15	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	213.6	-	-	-	-	-	-	14.66	0.38	27.6
9	12.00	UDS	2.11	1.77	19.16	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	119.6	-	-	-	-	-	-	58.00	0.51	33.9
10	13.50	UDS	2.65	2.60	1.78	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	524.1	-	-	-	-	-	-	49.33	0.05	4.6
11	15.00	UDS	2.17	1.86	16.52	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	136.9	-	-	-	-	-	-	40.66	0.44	30.8
12	16.50	UDS	2.59	2.50	3.66	2.75	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	-	-	0.10	9.1	
13	18.00	UDS	2.13	1.81	17.90	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	124.1	-	-	-	-	-	-	14.66	0.48	32.3
14	20.00	UDS	2.01	1.62	23.91	2.65	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	98.7	-	-	-	-	-	-	10.50	0.63	38.8

UDS - Undisturbed Sample
DS - Disturbed Sample
SPT - Standard Penetration Tests
NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
TCU - Triaxial Consolidated Undrained
DSU - Direct Shear Test
UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 61

Co-Ordinate :- N 1550, E 2786

Reduced Level :- 145.650 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree											
1	0.00	DS	-	-	-	-	0	74	26	29	16	13	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	4	84	12	NP	NP	NP	-	-	-	-	SM	-	-	-	-	-	-	-	18	-	-	-	-	-
3	3.00	SPT	-	-	-	-	6	64	30	31	17	14	-	-	-	-	SC	-	-	-	-	-	-	-	63	-	-	-	-	-
4	4.50	UDS	1.98	1.57	25.80	2.65	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	11.4	-	-	-	-	-	0.68	40.6	-	-
5	6.00	UDS	2.19	1.89	15.62	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	213.6	-	-	-	-	-	18.66	0.42	29.6	-
6	7.50	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	234.1	-	-	-	-	44.00	0.35	25.9	-	
7	9.00	UDS	2.59	2.51	3.23	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	220.8	-	-	-	-	44.00	0.09	8.1	-	
8	10.50	UDS	2.32	2.09	11.14	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	231.9	-	-	-	-	82.00	0.30	23.3	-	
9	12.00	UDS	2.34	2.11	10.66	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	247.5	-	-	-	-	95.33	0.29	22.5	-	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana
 BH No. :- DBH 62
 Co-Ordinate :- N 1508, E 2749
 Reduced Level :- 145.189 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Compression Index C _c	Consolidation Parameters			SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree			Unconfined Compression Test Kg/cm ²	Point Load Index in rock Kg/cm ²	Compression Index C _c					Coefficient of Volume Compressibility mm ³ /kg
1	0.00	DS	-	-	-	-	5	66	29	23	14	9	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	8	64	28	22	12	10	-	-	-	SC	-	-	-	-	-	-	-	25	-	-	-	-	-
3	3.00	SPT	-	-	-	-	14	72	14	20	14	6	-	-	-	SM-SC	-	-	-	-	-	-	-	>100	-	-	-	-	-
4	4.50	UDS	2.21	1.93	14.24	2.67	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	UCS	-	-	-	-	9.00	0.38	27.5	-	-
5	6.00	UDS	2.28	2.04	11.91	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	-	-	-	-	16.66	0.32	24.3	-	-
6	7.50	UDS	2.29	2.04	12.01	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	-	-	-	-	16.66	0.33	24.6	-	-
7	9.00	UDS	2.27	2.01	13.03	2.72	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	UCS	-	-	-	-	68.00	0.35	26.2	-	-
8	10.50	UDS	2.18	1.88	15.81	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	0.42	29.8	-	-
9	10.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	>100	-	-	-	-	-
10	12.00	UDS	2.21	1.93	14.75	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	UCS	-	-	-	-	24.00	0.40	28.4	-	-
11	13.50	UDS	2.28	2.03	12.15	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	0.33	24.7	-	-
12	15.00	UDS	2.32	2.09	11.14	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	-	-	-	-	58.66	0.30	23.3	-	-
13	16.50	UDS	2.31	2.08	11.03	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	-	-	-	-	82.00	0.30	22.9	-	-
14	18.00	UDS	2.33	2.10	11.02	2.73	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	-	-	-	-	92.00	0.30	23.1	-	-
15	20.00	UDS	2.29	2.04	12.01	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	-	-	-	-	71.00	0.33	24.6	-	-

UDS - Undisturbed Sample
 DS - Disturbed Sample
 SPT - Standard Penetration Tests
 NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
 TCU - Triaxial Consolidated Undrained
 DSU - Direct Shear Test
 UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 63

Co-Ordinate :- N 1486, E 2787

Reduced Level :- 145.859 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shear Parameter		Soil Classification	Type of Shear Test	Consolidation Parameters				SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %					
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Shrinkage Limit %	Swelling Pressure Kg/cm ²			Free Swell Index %	Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree	Unconfined Compression Test Kg/cm ²					Point Load Index in rock Kg/cm ²	Compression Index C _c cm ² /kg	Coefficient of Volume Compressibility mm	Pre-consolidation Pressure kg/cm ²	
1	0.00	DS	-	-	-	-	6	61	33	29	16	13	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-		
2	1.50	SPT	-	-	-	-	0	73	27	24	19	5	-	-	-	SM	-	-	-	-	-	-	-	-	-	-	-	-		
3	3.00	SPT	-	-	-	-	39	43	18	26	15	11	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-		
4	4.50	UDS	2.21	1.93	14.75	2.69	-	-	-	-	-	-	-	-	-	ROCK	UCS	139.4	-	-	-	-	-	-	-	-	-	40.00	0.40	28.4
5	6.00	UDS	2.62	2.52	4.17	2.81	-	-	-	-	-	-	-	-	-	W.ROCK	UCS	486.4	-	-	-	-	-	-	-	-	-	21.33	0.12	10.5
6	7.50	UDS	2.31	2.08	11.03	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	UCS	120.4	-	-	-	-	-	-	-	-	-	22.66	0.30	22.9
7	9.00	UDS	2.32	2.09	11.14	2.72	-	-	-	-	-	-	-	-	-	W.ROCK	UCS	143.3	-	-	-	-	-	-	-	-	-	41.33	0.30	23.3
8	10.50	UDS	2.29	2.04	12.01	2.71	-	-	-	-	-	-	-	-	-	W.ROCK	UCS	110.8	-	-	-	-	-	-	-	-	-	24.00	0.33	24.6
9	12.00	UDS	2.27	2.02	12.54	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	UCS	179.6	-	-	-	-	-	-	-	-	-	45.33	0.34	25.3
10	13.50	UDS	2.59	2.45	5.54	2.84	-	-	-	-	-	-	-	-	-	W.ROCK	UCS	431.5	-	-	-	-	-	-	-	-	-	62.66	0.16	13.6
11	15.00	UDS	2.28	2.02	12.88	2.73	-	-	-	-	-	-	-	-	-	ROCK	UCS	163.5	-	-	-	-	-	-	-	-	-	40.00	0.35	26.0
12	16.50	UDS	2.58	2.45	5.39	2.82	-	-	-	-	-	-	-	-	-	ROCK	UCS	443.8	-	-	-	-	-	-	-	-	-	87.33	0.15	13.2
13	18.00	UDS	2.63	2.53	3.93	2.81	-	-	-	-	-	-	-	-	-	ROCK	UCS	516.9	-	-	-	-	-	-	-	-	-	92.66	0.11	9.9
14	20.00	UDS	2.64	2.54	4.09	2.83	-	-	-	-	-	-	-	-	-	ROCK	UCS	487.6	-	-	-	-	-	-	-	-	-	62.00	0.12	10.4

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana
 BH No. :- DBH 64
 Co-Ordinate :- N 1486, E 2726
 Reduced Level :- 145.576 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density	Field Dry Density	Natural Moisture Content	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit		Swelling Pressure	Free Swell Index	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock	Unconfined Compression Test	Type of Shear Test	Consolidation Parameters				Rock Quality Designation	Void Ratio	Porosity
							Gravel	Sand	Silt	Clay	Liquid Limit	Plastic Limit	Plasticity Index	Shrinkage Limit	Shrinkage Limit				Swelling Pressure	Free Swell Index					Cohesion C	Angle of Internal Friction ϕ	Index C_c	Coefficient of Volume Compressibility			
1	0.00	DS	-	-	-	-	2	69	29	24	16	8	-	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-
4	4.50	UDS	2.34	2.12	10.43	2.72	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	176.8	-	UCS	-	-	-	41.53	0.28	22.1
5	6.00	UDS	2.10	1.77	18.87	2.65	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	100.8	-	UCS	-	-	-	63.33	0.50	33.3
6	7.50	UDS	2.29	2.05	11.53	2.69	-	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	189.9	-	UCS	-	-	-	82.66	0.31	23.7
7	9.00	UDS	2.28	2.05	11.41	2.67	-	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	176.6	-	UCS	-	-	-	6.66	0.30	23.4
8	10.50	UDS	2.22	1.95	14.07	2.68	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	138.4	-	UCS	-	-	-	20.00	0.38	27.4
9	12.00	UDS	2.08	1.73	19.92	2.65	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	118.4	-	UCS	-	-	-	7.33	0.53	34.5
10	13.50	UDS	2.19	1.89	15.87	2.70	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	0.43	30.0
11	15.00	UDS	2.05	1.69	21.56	2.65	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	0.57	36.4
12	16.50	UDS	2.08	1.73	20.46	2.67	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	0.55	35.3
13	18.00	UDS	2.09	1.75	19.66	2.66	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	0.52	34.3
14	20.00	UDS	2.04	1.67	22.13	2.65	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	0.59	37.0

UDS - Undisturbed Sample
 DS - Disturbed Sample
 SPT - Standard Penetration Tests
 NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
 TCU - Triaxial Consolidated Undrained
 DSU - Direct Shear Test
 UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana
 BH No. :- DBH 65
 Co-Ordinate :- N 1458, E 2703
 Reduced Level :- 145.576 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree								
1	0.00	DS	-	-	-	-	1	66	33	27	17	10	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	2	51	47	30	18	12	-	-	-	SC	-	-	-	-	-	5	-	-	-	-	-
3	3.00	SPT	-	-	-	-	3	53	44	22	13	9	-	-	-	SC	-	-	-	-	-	>100	-	-	-	-	-
4	4.50	UDS	2.15	1.84	16.67	2.66	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	136.1	-	-	8.57	0.44	30.7	-
5	6.00	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	159.4	-	-	63.33	0.41	29.2	-
6	7.50	UDS	2.18	1.89	15.55	2.67	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	126.1	-	-	39.33	0.42	29.3	-
7	9.00	UDS	2.01	1.62	23.91	2.65	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	98.2	-	-	28.66	0.63	38.8	-
8	10.50	UDS	2.25	1.99	13.33	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	132.0	-	-	75.33	0.36	26.5	-
9	12.00	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	129.8	-	-	32.00	0.41	29.2	-
10	13.50	UDS	2.29	2.04	12.25	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	128.5	-	-	94.00	0.33	25.0	-
11	15.00	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	135.4	-	-	96.00	0.32	24.3	-
12	16.50	UDS	2.25	1.99	13.09	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	120.6	-	-	45.33	0.35	26.0	-
13	18.00	UDS	2.28	2.03	12.40	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	187.6	-	-	69.33	0.34	25.1	-
14	20.00	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	136.8	-	-	46.50	0.41	29.2	-

UDS - Undisturbed Sample
 DS - Disturbed Sample
 SPT - Standard Penetration Tests
 NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
 TCU - Triaxial Consolidated Undrained
 DSU - Direct Shear Test
 UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 66

Co-Ordinate :- N 1466, E 2756

Reduced Level :- 145.315 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density	Field Dry Density	Natural Moisture Content	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit	Swelling Pressure	Free Swell Index	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock	Unconfined Compression Test	Kg/cm ²	Type of Shear Test	Consolidation Parameters				Rock Quality Designation	Void Ratio	Porosity
							Gravel	Sand	Silt	Clay	Liquid Limit	Plastic Limit	Plasticity Index					Cohesion C	Angle of Internal Friction ϕ						Compression Index C _c	Coefficient of Volume Compressibility	Pre-consolidation Pressure	SPT N Value			
1	0.00	DS	-	-	-	-	3	71	26	20	14	6	-	-	-	-	SM-SC	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	36	41	23	24	15	9	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	3.00	UDS	2.23	1.96	13.90	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	19.7	-	-	-	-	-	-	-	-	-	0.37	27.2
4	4.50	UDS	2.35	2.13	10.31	2.73	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	183.4	-	-	-	-	-	-	-	-	71.33	0.28	22.0
5	6.00	UDS	2.18	1.87	16.32	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	166.8	-	-	-	-	-	-	-	-	32.66	0.44	30.6
6	7.50	UDS	2.22	1.93	15.07	2.72	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	171.3	-	-	-	-	-	-	-	-	18.00	0.41	29.1
7	9.00	UDS	2.29	2.05	11.77	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	186.9	-	-	-	-	-	-	-	-	74.66	0.32	24.1
8	10.50	UDS	2.31	2.07	11.51	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	213.5	-	-	-	-	-	-	-	-	64.66	0.31	23.8
9	12.00	UDS	2.22	1.94	14.32	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	168.7	-	-	-	-	-	-	-	-	20.00	0.39	27.8
10	13.50	UDS	2.29	2.05	11.77	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	235.7	-	-	-	-	-	-	-	-	62.66	0.32	24.1
11	15.00	UDS	2.21	1.93	14.49	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	210.7	-	-	-	-	-	-	-	-	28.00	0.39	28.0
12	16.50	UDS	2.18	1.89	15.55	2.67	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	193.2	-	-	-	-	-	-	-	-	7.33	0.42	29.3
13	18.00	UDS	2.23	1.95	14.15	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	0.38	27.6
14	20.00	UDS	2.26	2.00	13.18	2.71	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	0.36	26.3

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 67

Co-Ordinate :- N 1410, E 2703

Reduced Level :- 145.794 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree			Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²				SPT N Value
1	0.00	DS	-	-	-	-	8	68	24	29	15	14	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	0	68	32	26	16	10	-	-	-	-	SC	-	-	-	-	-	-	>100	-	-	-	-	-
3	3.00	UDS	2.21	1.93	14.49	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	18.7	-	-	-	-	-	-	0.39	28.0
4	4.50	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	21.0	-	-	-	-	-	-	0.35	25.9
5	6.00	UDS	2.28	2.03	12.40	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	22.3	-	-	-	-	-	-	0.34	25.1
6	7.50	UDS	2.27	2.02	12.29	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	21.6	-	-	-	-	-	-	0.33	24.9
7	9.00	UDS	2.34	2.12	10.43	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	31.1	221.3	-	-	-	-	88.66	0.28	22.1
8	10.50	UDS	2.29	2.05	11.77	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	196.4	-	-	-	-	85.33	0.32	24.1
9	12.00	UDS	2.28	2.04	11.91	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	195.1	-	-	-	78.00	0.32	24.3	
10	13.50	UDS	2.30	2.06	11.40	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	30.8	302.2	-	-	-	80.66	0.31	23.5	
11	14.00	UDS	2.27	2.03	12.05	2.68	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	246.5	-	-	-	68.00	0.32	24.4	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 68

Co-Ordinate :- N 1399, E 2741

Reduced Level :- 146.120 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Type of Shear Test	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value			
1	0.00	DS	-	-	-	-	38	40	22	24	15	9	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	UDS	1.98	1.80	9.98	2.67	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	0.0	-	-	-	-	-	0.48	32.6		
3	1.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-		
4	3.00	UDS	2.06	1.69	22.09	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	0.0	-	-	-	-	-	0.59	37.3			
5	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-		
6	4.50	UDS	2.18	1.87	16.32	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	27.1	-	-	-	-	-	0.44	30.6			
7	6.00	UDS	2.29	2.04	12.25	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	188.2	-	-	-	-	0.33	25.0			
8	7.50	UDS	2.20	1.91	15.43	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	164.4	-	-	-	-	0.42	29.4			
9	9.00	UDS	2.23	1.95	14.40	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	30.8	286.4	-	-	-	0.39	28.1				
10	11.00	DS	-	-	-	-	-	-	-	-	-	-	-	-	-	Boulders	-	-	-	-	-	-	-	-	-	-	-	-		
11	11.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	Boulders	-	-	-	-	-	-	-	-	-	-	-	-		
12	12.00	UDS	2.09	1.73	20.46	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	26.7	-	-	-	-	-	0.55	35.5			
13	13.50	UDS	2.21	1.92	15.25	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	234.5	-	-	-	-	0.41	29.2			
14	15.00	UDS	2.28	2.02	12.64	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	28.7	291.7	-	-	-	-	0.34	25.6			
15	17.00	UDS	2.29	2.04	12.25	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	33.8	287.5	-	-	-	-	0.33	25.0			

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 69

Co-Ordinate :- N 1367, E 2221

Reduced Level :- 145.676 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit		Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %						
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Shrinkage Limit %	Cohesion C Kg/cm ²				Angle of Internal Friction φ Degree																	
1	0.00	DS	-	-	-	-	24	50	26	25	14	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
2	1.50	SPT	-	-	-	-	43	36	21	24	15	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
3	3.00	UDS	2.56	2.44	5.07	2.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	355.6	321.1	-	-	-	-	-	-	-	-	-				
4	4.50	UDS	2.34	2.11	10.89	2.74	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	321.1	276.4	-	-	-	-	-	-	-	-	-	-			
5	6.00	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	276.4	261.4	-	-	-	-	-	-	-	-	-	-	-		
6	7.50	UDS	2.28	2.03	12.15	2.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	261.4	198.6	-	-	-	-	-	-	-	-	-	-	-	-	
7	9.00	UDS	2.24	1.97	13.99	2.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	198.6	210.4	-	-	-	-	-	-	-	-	-	-	-	-	
8	10.50	UDS	2.26	2.01	12.69	2.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	210.4	182.2	-	-	-	-	-	-	-	-	-	-	-	-	-
9	12.00	UDS	2.19	1.90	15.11	2.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	182.2	221.3	-	-	-	-	-	-	-	-	-	-	-	-	-
10	13.50	UDS	2.28	2.04	11.91	2.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	221.3	254.7	-	-	-	-	-	-	-	-	-	-	-	-	-
11	15.00	UDS	2.30	2.06	11.40	2.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	254.7	246.6	-	-	-	-	-	-	-	-	-	-	-	-	-
12	16.50	UDS	2.18	1.88	16.07	2.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	246.6	36.5	-	-	-	-	-	-	-	-	-	-	-	-	-
13	18.00	UDS	2.20	1.92	14.67	2.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	-	19.9	-	-	-	-	-	-	-	-	-	-	-	-	-
14	20.00	UDS	2.20	1.91	14.93	2.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	UCS	-	20.1	-	-	-	-	-	-	-	-	-	-	-	-	-

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 70

Co-Ordinate :- N 1382, E 2801

Reduced Level :- 145.995 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree									Unconfined Compression Test Kg/cm ²
1	0.00	DS	-	-	-	-	9	53	38	34	16	18	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	14	77	9	NP	NP	NP	-	-	-	-	SP-SM	-	-	-	-	-	4	-	-	-	-	-
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	>100	-	-	-	-	-
4	4.50	UDS	2.18	1.88	15.81	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	12.66	0.42	29.8	-	-
5	6.00	UDS	2.56	2.43	5.49	2.80	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	0.15	13.3	-	-
6	7.50	UDS	2.24	1.98	13.24	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	96.66	0.35	26.2	-	-
7	9.00	UDS	2.23	1.97	13.40	2.67	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	96.66	0.36	26.3	-	-
8	10.50	UDS	2.30	2.06	11.64	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	10.00	0.32	24.0	-	-
9	12.00	UDS	2.26	2.01	12.44	2.68	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	33.33	0.33	25.0	-	-
10	13.50	UDS	2.30	2.07	11.15	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	86.00	0.30	23.1	-	-
11	15.00	UDS	2.33	2.12	10.06	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	98.66	0.27	21.3	-	-
12	16.50	UDS	2.34	2.13	9.95	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	39.33	0.27	21.2	-	-
13	18.00	UDS	2.36	2.16	9.50	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	90.66	0.26	20.5	-	-

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 71

Co-Ordinate :- N 1356, E 2751

Reduced Level :- 145.609 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree										
1	0.00	DS	-	-	-	-	3	31	52	14	26	14	12	-	-	-	CL	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	76	15	9	NP	NP	NP	NP	-	-	-	GW-GM	-	-	-	-	-	-	-	>100	-	-	-	-
3	3.00	SPT	-	-	-	-	81	12	7	NP	NP	NP	NP	-	-	-	GW-GM	-	-	-	-	-	-	-	>100	-	-	-	-
4	4.50	UDS	1.98	1.56	26.65	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	0.71	41.7	-
5	6.00	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	37.2	192.1	-	-	-	-	32.66	0.35	25.9
6	7.50	UDS	2.24	1.97	13.49	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	293.9	-	-	-	71.33	0.36	26.6	
7	9.00	UDS	2.28	2.03	12.40	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	281.7	-	-	-	48.00	0.34	25.1	
8	10.50	UDS	2.25	1.99	13.09	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	39.8	213.8	-	-	-	95.33	0.35	26.0	
9	12.00	UDS	2.28	2.03	12.40	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	220.2	-	-	-	80.66	0.34	25.1	
10	13.50	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	35.5	-	-	-	-	86.66	0.32	24.3	
11	14.00	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	29.7	-	-	-	-	64.00	0.35	25.9	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 72

Co-Ordinate :- N 1356, E 2790

Reduced Level :- 145.913 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density	Field Dry Density	Natural Moisture Content	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit	Swelling Pressure	Free Swell Index	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock	Unconfined Compression Test	Kg/cm ²	Type of Shear Test	Consolidation Parameters				SPT N Value	Rock Quality Designation	Void Ratio	Porosity
							%	%	%	%	%	%	%					%	%						%	kg/cm ²	Degree	Angle of Internal Friction				
1	0.00	DS	-	-	-	-	7	71	22	25	16	9	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	0	75	25	27	15	12	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	3.00	UDS	2.56	2.44	5.07	2.78	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	UCS	513.2	-	-	-	-	-	-	-	55.83	0.14	12.4	
4	4.50	UDS	2.49	2.32	7.22	2.79	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	UCS	467.2	-	-	-	-	-	-	-	48.66	0.20	16.8	
5	6.00	UDS	2.67	2.62	1.95	2.76	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	536.5	-	-	-	-	-	-	-	80.00	0.05	5.1	
6	7.50	UDS	2.28	2.03	12.15	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	216.5	-	-	-	-	-	-	-	44.66	0.33	24.7	
7	9.00	UDS	2.31	2.08	11.27	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	234.1	-	-	-	-	-	-	-	96.00	0.31	23.4	
8	10.50	UDS	2.27	2.03	12.05	2.68	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	210.8	-	-	-	-	-	-	-	82.00	0.32	24.4	
9	12.00	UDS	2.26	2.01	12.69	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	209.8	-	-	-	-	-	-	-	70.00	0.34	25.4	
10	13.50	UDS	2.21	1.94	13.98	2.66	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	198.3	-	-	-	-	-	-	-	50.00	0.37	27.1	
11	15.00	UDS	2.29	2.05	11.53	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	235.7	-	-	-	-	-	-	-	90.66	0.31	23.7	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 73

Co-Ordinate :- N 1356, E 2790

Reduced Level :- 145.913 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density	Field Dry Density	Natural Moisture Content	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit	Swelling Pressure	Free Swell Index	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock	Unconfined Compression Test	Type of Shear Test	Consolidation Parameters				Rock Quality Designation	Void Ratio	Porosity
							Gravel	Sand	Silt	Clay	Liquid Limit	Plastic Limit	Plasticity Index					Cohesion C	Angle of Internal Friction ϕ					Index C_c	Coefficient of Volume Compressibility	Pre-consolidation Pressure	SPT N Value			
1	0.00	DS	-	-	-	-	0	30	40	27	49	26	24	22	-	34	CI	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	0	66	34	36	23	24	22	-	-	-	SC	-	-	-	-	-	-	19	-	-	-	-	-	
3	3.00	UDS	2.20	1.91	15.43	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	0.42	29.4	-	-	
4	4.50	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	0.41	29.2	-	-	
5	6.00	UDS	2.24	1.97	13.99	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	0.38	27.5	-	-	
6	7.50	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	0.32	24.3	-	-	
7	9.00	UDS	2.33	2.09	11.25	2.74	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	0.31	23.6	-	-	
8	10.50	UDS	2.32	2.09	10.90	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	0.30	22.8	-	-	
9	12.00	UDS	2.06	1.69	21.55	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	0.58	36.5	-	-	
10	13.50	UDS	2.02	1.63	23.59	2.66	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	0.63	38.6	-	-	
11	15.00	UDS	2.34	2.12	10.19	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	0.28	21.6	-	-	
12	16.50	UDS	2.22	1.94	14.32	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	0.39	27.8	-	-	
13	18.00	UDS	2.33	2.11	10.54	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	0.29	22.2	-	-	
14	20.00	UDS	2.29	2.05	11.77	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	0.32	24.1	-	-	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 74

Co-Ordinate :- N 1322, E 2774

Reduced Level :- 146.38

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree			Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility cm ² /kg	Pre-consolidation Pressure kg/cm ²				SPT N Value
1	0.00	DS	-	-	-	-	4	64	32	28	15	13	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-
3	3.00	UDS	2.23	1.96	13.90	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-
4	4.50	UDS	2.33	2.11	10.54	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	-	-	-	-
5	6.00	UDS	2.30	2.06	11.40	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	-	-	-	-
6	7.50	UDS	2.34	2.12	10.43	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	-	-	-	-
7	9.00	UDS	2.33	2.10	10.78	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	-	-	-	-
8	10.50	UDS	2.37	2.16	9.63	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	-	-	-	-
9	12.00	UDS	2.37	2.17	9.39	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	-	-	-	-

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St:2 of NTPC at Telangana

BH No. :- DBH 75

Co-Ordinate :- N 1294, E 2664

Reduced Level :- 145.72

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Unconfined Compression Test Kg/cm ²	Point Load Index in rock Kg/cm ²	Type of Shear Test	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree				Compression Index C _c	Coefficient of Volume Compressibility cm ² /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value			
1	0.00	DS	-	-	-	-	3	66	31	25	15	10	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	0	61	39	33	21	12	-	-	-	-	SC	-	-	-	60	-	-	-	-	-	-	-	
3	3.00	SPT	-	-	-	-	61	21	18	24	16	8	-	-	-	-	Boulders	-	-	-	>100	-	-	-	-	-	-	-	
4	4.50	SPT	-	-	-	-	69	18	13	NP	NP	NP	-	-	-	-	Boulders	-	-	-	>100	-	-	-	-	-	-	-	
5	6.00	SPT	-	-	-	-	58	23	19	25	15	10	-	-	-	-	Boulders	-	-	-	>100	-	-	-	-	-	-	-	
6	7.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	>100	-	-	-	-	-	-	-	
7	9.00	UDS	2.09	1.74	20.20	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	18.1	-	-	-	0.54	35.1	-	-	
8	9.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	>100	-	-	-	-	-	-	-	
9	10.50	UDS	2.08	1.73	20.46	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	17.6	-	-	-	0.55	35.3	-	-	
10	10.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	>100	-	-	-	-	-	-	-	
11	12.00	UDS	2.14	1.82	17.41	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	21.0	-	-	-	0.46	31.7	-	-	
12	13.50	UDS	2.60	2.49	4.26	2.79	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	564.3	-	UCS	-	-	14.00	0.12	10.6	-	
13	15.00	UDS	2.58	2.47	4.55	2.78	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	521.4	-	UCS	-	-	6.66	0.13	11.2	-	

UDS - Undisturbed Sample
DS - Disturbed Sample
SPT - Standard Penetration Tests
NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
TCU - Triaxial Consolidated Undrained
DSU - Direct Shear Test
UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 76

Co-Ordinate :- N 1260, E 2671

Reduced Level :- 145.72

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %				
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree		Unconfined Compression Test Kg/cm ²	Point Load Index in rock Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility cm ³ /kg				Pre-consolidation Pressure kg/cm ²	SPT N Value		
1	0.00	DS	-	-	-	-	2	72	26	24	13	11	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	14	70	16	21	12	9	-	-	-	-	SC	-	-	-	-	-	-	3	-	-	-	-	-	-	
3	3.00	UDS	1.88	1.42	32.71	2.84	0	44	25	31	48	21	27	-	-	-	CI	0.38	9	TUU	0.22	0.0286	0.39	-	-	-	-	-	-	0.86	46.3
4	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-	-	-
5	6.00	UDS	2.29	2.05	11.53	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	0.31	23.7	-
6	7.50	UDS	2.30	2.06	11.88	2.72	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	-	-	-	6.66	0.32	24.4
7	9.00	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	12.0	-	-	-	-	-	-	-	24.00	0.32	24.3
8	10.50	UDS	2.25	1.99	13.09	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	-	-	-	19.33	0.35	26.0
9	12.00	UDS	2.29	2.05	11.77	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	-	-	-	-	-	-	-	35.33	0.32	24.1
10	13.50	UDS	2.20	1.92	14.67	2.67	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	-	-	-	26.66	0.39	28.1
11	15.00	UDS	2.35	2.15	9.36	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	-	-	-	-	-	-	-	22.66	0.25	20.1

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 77

Co-Ordinate :- N 1266, E 2709

Reduced Level :- 140.500 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Unconfined Compression Test Kg/cm ²	Point Load Index in rock Kg/cm ²	Type of Shear Test	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree				Compression Index C _c	Coefficient of Volume Compressibility cm ² /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value			
1	0.00	DS	-	-	-	-	0	79	21	27	19	8	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	0	73	27	29	18	11	-	-	-	-	SC	-	-	-	26	-	-	26	-	-	-	-	
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	>100	-	-	>100	-	-	-	-	
4	4.50	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	16.7	-	-	>100	-	0.41	29.2	-	
5	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	
6	6.00	UDS	2.23	1.96	13.65	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	18.1	-	-	-	-	0.37	26.8	-	
7	7.50	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	220.3	-	UCS	-	-	20.00	0.35	25.9	-	
8	9.00	UDS	2.49	2.33	7.00	2.78	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	389.6	-	UCS	-	-	7.33	0.19	16.3	-	
9	10.50	UDS	2.25	1.99	13.09	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	187.6	-	UCS	-	-	16.66	0.35	26.0	-	
10	12.00	UDS	2.38	2.18	9.29	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	226.3	-	UCS	-	-	6.66	0.25	20.2	-	
11	13.50	UDS	2.49	2.33	7.00	2.78	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	352.5	22.2	UCS	-	-	62.00	0.19	16.3	-	
12	15.00	UDS	2.20	1.91	15.43	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	210.6	-	UCS	-	-	7.33	0.42	29.4	-	
13	16.50	UDS	2.24	1.96	14.23	2.72	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	234.7	-	UCS	-	-	8.00	0.39	27.9	-	
14	18.00	UDS	2.53	2.38	6.09	2.79	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	431.6	-	UCS	-	-	42.66	0.17	14.5	-	
15	20.00	UDS	2.44	2.25	8.49	2.78	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	510.9	38.0	UCS	-	-	40.00	0.24	19.1	-	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 79

Co-Ordinate :- N 1220, E 2694

Reduced Level :- 140.500 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Consolidation Parameters			Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Coefficient of Volume Compressibility cm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value			
1	0.00	DS	-	-	-	-	7	68	25	29	16	13	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	>100	-	-	-	-	-	-
3	3.00	UDS	2.21	1.93	14.75	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	23.6	-	-	-	-	-	-	0.40	28.4	
4	4.50	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	156.3	-	-	-	-	-	-	0.35	25.9	
5	6.00	UDS	2.09	1.74	20.20	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	82.4	-	-	-	-	-	-	0.54	35.1	
6	7.50	UDS	2.08	1.73	20.19	2.66	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	78.3	-	-	-	-	-	-	0.54	34.9	
7	9.00	UDS	2.17	1.86	16.52	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	95.2	-	-	-	-	-	-	0.44	30.8	
8	10.50	UDS	2.14	1.81	18.19	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	81.4	-	-	-	-	-	-	0.49	32.9	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 80

Co-Ordinate :- N 1217, E 2748

Reduced Level :- 146.490 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %		
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree			Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility cm ² /kg	Pre-consolidation Pressure kg/cm ²				SPT N Value	
1	0.00	DS	-	-	-	-	6	31	47	16	29	15	14	-	-	-	CL	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	24	25	37	14	26	14	12	-	-	-	CL	-	-	-	-	-	-	14	-	-	-	-	-	
3	3.00	SPT	-	-	-	-	18	26	44	12	27	16	11	-	-	-	CL	-	-	-	-	-	-	20	-	-	-	-	-	
4	4.50	SPT	-	-	-	-	2	64	34	34	24	15	9	-	-	-	SC	-	-	-	-	-	-	22	-	-	-	-	-	
5	6.00	SPT	-	-	-	-	5	34	48	13	29	17	12	-	-	-	CL	-	-	-	-	-	-	43	-	-	-	-	-	
6	7.50	SPT	-	-	-	-	8	38	43	11	28	18	10	-	-	-	CL	-	-	-	-	-	-	58	-	-	-	-	-	
7	9.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-	
8	10.50	UDS	2.18	1.87	16.57	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	18.3	-	-	-	-	-	0.45	31.0	-	
9	12.00	UDS	2.06	1.68	22.36	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	16.4	-	-	-	-	-	0.60	37.6	-	
10	12.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-	
11	13.50	UDS	2.49	2.32	7.22	2.79	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	43.5	-	-	-	-	-	0.20	16.8	-	
12	13.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-	
13	15.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-	
14	16.50	UDS	2.21	1.91	15.74	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-
15	18.00	UDS	2.09	1.73	20.46	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	158.3	-	-	-	-	-	7.33	0.43	30.1	-
16	20.00	UDS	2.16	1.84	17.50	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	134.2	-	-	-	-	-	61.33	0.55	35.5	-
																	W.ROCK	-	-	-	187.6	-	-	-	-	-	18.00	0.47	32.2	-

UDS - Undisturbed Sample
DS - Disturbed Sample
SPT - Standard Penetration Tests
NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
TCU - Triaxial Consolidated Undrained
DSU - Direct Shear Test
UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 82

Co-Ordinate :- N 1146, E 2694

Reduced Level :- 145.5 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density	Field Dry Density	Natural Moisture Content	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit	Swelling Pressure	Free Swell Index	Soil Classification	Shear Parameter		Type of Shear Test	Consolidation Parameters				Rock Quality Designation	Void Ratio	Porosity		
							Gravel	Sand	Silt	Clay	Liquid Limit	Plastic Limit	Plasticity Index					Cohesion C	Angle of Internal Friction ϕ		Unconfined Compression Test	Point Load Index in rock	Compression Test	Index C_c				Coefficient of Volume Compressibility	Pre-consolidation Pressure
1	0.00	DS	-	-	-	-	3	70	27	24	16	8	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	0	82	18	30	17	13	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	
4	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	
5	6.00	UDS	2.06	1.69	21.82	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	18.6	-	-	-	-	-	-	-	0.58	36.9	
6	7.50	UDS	2.28	2.04	11.91	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	159.3	-	UCS	-	-	-	-	-	22.00	0.32	24.3
7	9.00	UDS	2.31	2.09	10.78	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	178.4	-	UCS	-	-	-	-	-	21.33	0.29	22.5
8	10.50	DS	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-
9	12.00	UDS	2.35	2.14	9.60	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	186.4	-	UCS	-	-	-	-	-	20.00	0.26	20.6
10	13.50	UDS	2.39	2.19	8.96	2.73	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	220.4	-	UCS	-	-	-	-	-	35.33	0.24	19.7
11	15.00	UDS	2.21	1.93	14.75	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	167.3	-	UCS	-	-	-	-	-	8.66	0.40	28.4

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 84

Co-Ordinate :- N 1551, E 2741

Reduced Level :- 145.50

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree			Compression Test Unconfined Kg/cm ²	Index C _c	Coefficient of Volume Compressibility cm ² /kg	Pre-consolidation Pressure kg/cm ²			
1	0.00	DS	-	-	-	-	0	82	18	22	14	8	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	16	58	26	32	18	14	-	-	-	-	SC	-	-	-	-	-	-	14	-	-	-	-
3	3.00	SPT	-	-	-	-	12	66	22	26	16	10	-	-	-	-	SC	-	-	-	-	-	-	18	-	-	-	-
4	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-
5	6.00	UDS	2.21	1.93	14.75	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	176.3	-	-	-	-	42.72	0.40	28.4	
6	7.50	UDS	2.30	2.05	12.12	2.73	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	196.0	-	-	-	-	84.66	0.33	24.9	
7	9.00	UDS	2.28	2.03	12.15	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	204.1	-	-	-	-	84.00	0.33	24.7	
8	10.50	UDS	2.36	2.14	10.20	2.74	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	229.6	-	-	-	-	90.66	0.28	21.8	
9	12.00	UDS	2.28	2.04	11.91	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	132.6	13.7	-	-	-	22.00	0.32	24.3	
10	13.50	UDS	2.33	2.11	10.54	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	119.6	15.0	-	-	-	21.33	0.29	22.2	
11	15.00	UDS	2.25	1.99	13.09	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	152.4	14.3	-	-	-	29.33	0.35	26.0	
12	16.50	UDS	2.18	1.88	15.81	2.68	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	104.7	-	-	-	-	9.33	0.42	29.8	
13	18.00	UDS	2.28	2.04	11.91	2.69	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	206.5	-	-	-	-	40.00	0.32	24.3	
14	20.00	UDS	2.20	1.91	14.93	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	198.6	-	-	-	-	14.00	0.40	28.6	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 85

Co-Ordinate :- N 1512, E 2706

Reduced Level :- 145.511 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree			Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility cm ² /kg	Pre-consolidation Pressure kg/cm ²				SPT N Value
1	0.00	DS	-	-	-	-	2	47	36	15	31	18	13	-	-	-	CL	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	4	63	33	33	26	17	9	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	
3	3.00	Remoulded	2.19	1.90	15.36	2.88	53	38	9	9	NP	NP	NP	-	-	-	W.ROCK	0.00	33	-	-	-	-	-	-	-	0.41	29.2	
4	3.00	SPT	-	-	-	-	40	34	26	26	28	15	13	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	
5	4.50	Remoulded	2.23	1.96	13.90	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	0.00	34	-	-	-	-	-	-	-	0.37	27.2	
6	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	
7	6.00	UDS	2.31	2.09	10.78	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	155.8	25.9	UCS	-	-	-	47.30	0.29	22.5
8	7.50	UDS	2.04	1.65	23.50	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	110.2	26.8	UCS	-	-	-	24.00	0.63	38.8
9	9.00	UDS	2.08	1.72	20.73	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	14.1	-	-	-	-	0.56	35.7	
10	10.50	UDS	2.21	1.92	15.25	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	98.6	-	UCS	-	-	-	15.33	0.41	29.2
11	12.00	UDS	2.16	1.85	16.47	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	16.3	-	-	-	-	0.44	30.5	
12	13.50	UDS	2.26	2.01	12.69	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	20.8	-	-	-	-	0.34	25.4	
13	15.00	UDS	2.25	1.99	12.84	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	18.7	-	-	-	-	0.34	25.6	
14	16.50	UDS	2.10	1.75	20.20	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	15.0	-	-	-	-	0.55	35.3	
15	18.00	UDS	2.31	2.07	11.51	2.72	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	31.4	-	-	-	-	0.31	23.8	
16	20.00	UDS	2.33	2.10	11.02	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	213.2	-	UCS	-	-	-	5.00	0.30	23.1

UDS - Undisturbed Sample
DS - Disturbed Sample
SPT - Standard Penetration Tests
NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
TCU - Triaxial Consolidated Undrained
DSU - Direct Shear Test
UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 89

Co-Ordinate :- N 1294, E 2602

Reduced Level :- 145.50 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density	Field Dry Density	Natural Moisture Content	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit	Swelling Pressure	Free Swell Index	Soil Classification	Shear Parameter		Type of Shear Test	Consolidation Parameters				Rock Quality Designation	Void Ratio	Porosity		
							Gravel	Sand	Silt	Clay	Liquid Limit	Plastic Limit	Plasticity Index					Cohesion C	Angle of Internal Friction ϕ		Unconfined Compression Test	Point Load Index in rock	Compression Index C_c	Coefficient of Volume Compressibility				Pre-consolidation Pressure	SPT N Value
1	0.00	DS	-	-	-	-	9	60	31	28	15	13	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	0	66	34	26	15	11	-	-	-	SC	-	-	-	-	-	-	-	73	-	-	-	-	-
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	>100	-	-	-	-	-
4	4.50	UDS	2.02	1.63	23.87	2.67	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	0.64	-	-	-	38.9
5	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	>100	-	-	-	-	-
6	6.00	UDS	2.19	1.89	15.62	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	0.42	-	-	-	29.6
7	7.50	UDS	2.27	2.02	12.54	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	-	-	-	-	-	0.34	-	-	-	25.3
8	9.00	UDS	2.29	2.04	12.25	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	-	-	-	-	-	0.33	-	-	-	25.0
9	10.50	UDS	2.30	2.06	11.64	2.71	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	-	-	-	-	-	0.32	-	-	-	24.0
10	12.00	UDS	2.27	2.02	12.54	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	-	-	-	-	-	0.34	-	-	-	25.3
11	13.50	UDS	2.32	2.08	11.38	2.73	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	-	-	-	-	-	0.31	-	-	-	23.7
12	15.00	UDS	2.31	2.07	11.51	2.72	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	-	-	-	-	-	0.31	-	-	-	23.8

UDS - Undisturbed Sample
DS - Disturbed Sample
SPT - Standard Penetration Tests
NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
TCU - Triaxial Consolidated Undrained
DSU - Direct Shear Test
UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 99

Co-Ordinate :- N 1275, E 2533

Reduced Level :- 145.50 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density	Field Dry Density	Natural Moisture Content	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit	Swelling Pressure	Free Swell Index	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock	Unconfined Compression Test	Kg/cm ²	Consolidation Parameters				Rock Quality Designation	Void Ratio	Porosity	
							Gravel	Sand	Silt	Clay	Liquid Limit	Plastic Limit	Plasticity Index					Cohesion C	Angle of Internal Friction ϕ					Compression Test	kg/cm ²	Degree	Index C _c				Coefficient of Volume Compressibility
1	0.00	DS	-	-	-	-	5	70	25	28	15	13	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	4.50	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	141.3	-	-	-	-	-	-	17.33	0.41	29.2
5	6.00	UDS	2.31	2.09	10.78	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	178.7	16.7	-	-	-	-	-	15.33	0.29	22.5
6	7.50	UDS	2.34	2.12	10.43	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	184.1	-	-	-	-	-	-	52.00	0.28	22.1
7	9.00	UDS	2.36	2.15	9.97	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	186.8	23.6	-	-	-	-	-	65.33	0.27	21.4
8	10.50	UDS	2.32	2.09	11.14	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	152.3	-	-	-	-	-	-	54.66	0.30	23.3
9	12.00	UDS	2.29	2.05	11.53	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	116.3	-	-	-	-	-	-	22.66	0.31	23.7

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 101

Co-Ordinate :- N , E

Reduced Level :- 145.50 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density	Field Dry Density	Natural Moisture Content	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit	Swelling Pressure	Free Swell Index	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock	Consolidation Parameters				SPT N Value	Rock Quality Designation	Void Ratio	Porosity			
							Gravel	Sand	Silt	Clay	Liquid Limit	Plastic Limit	Plasticity Index					Cohesion C	Angle of Internal Friction ϕ			Unconfined Compression Test	Compression Test	Index C_c	Coefficient of Volume Compressibility					Pre-consolidation Pressure		
1	0.00	DS	-	-	-	-	4	64	32	26	15	11	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	1.50	SPT	-	-	-	-	2	33	50	29	16	13	-	-	-	-	CL	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
4	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	6.00	UDS	2.16	1.85	16.99	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	164.3	UCS	-	-	-	-	-	-	10.00	0.46	31.4	-	-	
6	7.50	UDS	2.27	2.02	12.54	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	196.3	UCS	-	-	-	-	-	22.60	0.34	25.3	-	-	-	
7	9.00	UDS	2.51	2.35	6.65	2.79	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	510.3	UCS	34.6	-	-	-	-	56.00	0.19	15.6	-	-	-	
8	10.50	UDS	2.22	1.93	15.07	2.72	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	246.1	UCS	-	-	-	-	-	6.66	0.41	29.1	-	-	-	-
9	12.00	UDS	2.10	1.75	19.67	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	29.7	-	-	-	-	-	0.53	34.5	-	-	-	-
10	13.50	UDS	2.09	1.74	19.93	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	25.4	-	-	-	-	-	0.53	34.7	-	-	-	-
11	15.00	UDS	2.18	1.87	16.32	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	38.5	-	-	-	-	-	0.44	30.6	-	-	-	-

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St.2 of NTPC at Telangana

BH No. :- DBH 108

Co-Ordinate :- N 1303, E 2518

Reduced Level :- m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Unconfined Compression Test Kg/cm ²	Point Load Index in rock Kg/cm ²	Type of Shear Test	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %		
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree				Compression Index C _c cm ² /kg	Volume Compressibility mv	Pre-consolidation Pressure kg/cm ²	SPT N Value					
1	0.00	DS	-	-	-	-	13	35	28	24	38	17	21	-	-	-	CI	-	-	-	-	-	-	-	-	-	-	-	-		
2	1.50	SPT	-	-	-	-	11	37	31	21	37	18	19	-	-	-	CI	-	-	-	-	-	>100	-	-	-	-	-	-		
3	3.00	UDS	2.14	1.82	17.67	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	30.8	-	-	-	-	-	-	-	0.47	32.1	
4	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	>100	-	-	-	-	-	-	-	
5	4.50	UDS	2.15	1.84	16.94	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	29.4	-	-	-	-	-	-	-	0.45	31.1	
6	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	>100	-	-	-	-	-	-	-	
7	6.00	UDS	2.08	1.72	20.73	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	19.6	-	-	-	-	-	-	-	0.56	35.7	
8	6.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	>100	-	-	-	-	-	-	-	
9	7.50	UDS	2.16	1.85	16.99	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	31.4	-	-	-	-	-	-	-	0.46	31.4	
10	7.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	>100	-	-	-	-	-	-	-	-
11	9.00	DS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	>100	-	-	-	-	-	-	-	-
12	9.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	>100	-	-	-	-	-	-	-	-
13	10.50	UDS	2.09	1.73	20.46	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	86.8	-	-	-	-	-	-	-	6.66	0.55	35.5	
14	12.00	UDS	2.30	2.06	11.88	2.72	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	188.7	-	-	-	-	-	-	-	16.66	0.32	24.4	
15	13.50	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	169.3	-	-	-	-	-	-	-	7.33	0.35	25.9	
16	15.00	UDS	2.25	1.99	13.09	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	155.5	-	-	-	-	-	-	-	7.33	0.35	26.0	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana
 BH No. :- DBH 111
 Co-Ordinate :- N 1158, E 2506
 Reduced Level :- 145.5 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Index Load Kg/cm ²	Unconfined Compression Test Kg/cm ²	Point Load Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %		
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm	Pre-consolidation Pressure kg/cm ²	SPT N Value				Rock Quality Designation %	
1	0.00	DS	-	-	-	-	8	63	29	26	15	11	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-		
2	1.50	SPT	-	-	-	-	8	66	26	25	16	9	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	3.00	UDS	2.12	1.92	10.34	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	28.0	
4	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	5.50	UDS	2.19	1.90	15.36	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	29.2	
6	6.00	SPT	-	-	-	-	39	48	13	27	16	11	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	7.50	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.9
8	9.00	UDS	2.29	2.04	12.01	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	196.4	-	-	-	-	-	-	-	-	-	24.6
9	10.50	UDS	2.21	1.93	14.75	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28.4
10	12.00	UDS	2.28	2.03	12.40	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	193.4	-	-	-	-	-	-	-	-	-	25.1
11	13.50	UDS	2.30	2.05	12.12	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	231.4	-	-	-	-	-	-	-	-	-	24.9
12	15.00	UDS	2.33	2.09	11.25	2.74	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	-	240.8	-	-	-	-	-	-	-	-	-	23.6

UDS - Undisturbed Sample
 DS - Disturbed Sample
 SPT - Standard Penetration Tests
 NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
 TCU - Triaxial Consolidated Undrained
 DSU - Direct Shear Test
 UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 112

Co-Ordinate :- N 1567, E 2523

Reduced Level :- 145.595 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Consolidation Parameters			SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm ² /kg	Pre-consolidation Pressure kg/cm ²				
1	0.00	DS	-	-	-	-	5	71	24	27	15	12	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	19	21	45	29	16	13	-	-	-	-	CL	-	-	-	-	-	-	-	14	-	-	-	-	-
3	3.00	SPT	-	-	-	-	0	74	26	26	18	8	-	-	-	-	SC	-	-	-	-	-	-	-	>100	-	-	-	-	-
4	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	>100	-	-	-	-	-
5	6.00	UDS	2.24	1.97	13.49	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	186.4	-	-	-	55.33	0.36	26.6	-	-
6	7.50	UDS	2.34	2.12	10.43	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	234.9	-	-	86.60	0.28	22.1	-	-	
7	9.00	UDS	2.41	2.23	8.31	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	298.7	-	-	99.33	0.23	18.5	-	-	
8	10.50	UDS	2.39	2.19	8.96	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	220.5	-	-	74.66	0.24	19.7	-	-	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 113

Co-Ordinate :- N 1470, E 2518

Reduced Level :- 145.578 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %		
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree			Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm	Pre-consolidation Pressure kg/cm ²				SPT N Value	
1	0.00	DS	-	-	-	-	6	78	16	23	16	7	-	-	-	-	-	GC	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	39	35	26	24	15	9	-	-	-	-	-	GC	-	-	-	-	-	-	10	-	-	-	-	-
3	3.00	SPT	-	-	-	-	32	28	40	27	17	10	-	-	-	-	-	GC	-	-	-	-	-	-	17	-	-	-	-	-
4	4.50	SPT	-	-	-	-	16	31	42	26	16	10	-	-	-	-	-	CL	-	-	-	-	-	-	33	-	-	-	-	-
5	6.00	SPT	-	-	-	-	4	78	18	24	15	9	-	-	-	-	-	SC	-	-	-	-	-	-	>100	-	-	-	-	-
6	7.50	UDS	2.28	2.02	12.88	2.73	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	28.3	-	-	-	0.35	-	-	26.0	-
7	9.00	UDS	2.32	2.10	10.66	2.70	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	36.1	-	-	-	0.29	-	-	22.4	-
8	10.50	SPT	-	-	-	-	66	21	13	NP	NP	NP	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-
9	12.00	UDS	2.29	2.04	12.01	2.71	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	34.4	-	-	-	0.33	-	-	24.6	-
10	12.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 114

Co-Ordinate :- N , E

Reduced Level :- 145.582 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree											
1	0.00	DS	-	-	-	-	0	73	27	28	16	12	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	38	37	25	31	18	13	-	-	-	SC	-	-	-	-	-	-	-	-	15	-	-	-	-	-
3	3.00	UDS	1.96	1.78	9.89	2.66	10	69	21	33	17	16	-	-	-	SC	0.03	25	-	DSU	-	-	-	-	-	-	0.49	-	32.9	
4	4.50	SPT	-	-	-	-	4	64	32	34	19	15	-	-	-	SC	-	-	-	-	-	-	-	>100	-	-	-	-	-	
5	6.00	UDS	2.18	1.88	16.07	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	UCS	188.9	-	-	-	-	18.18	0.43	30.2		
6	7.50	UDS	2.23	1.94	14.89	2.73	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	UCS	226.3	-	-	-	33.33	0.41	28.9			
7	9.00	UDS	2.29	2.03	12.73	2.74	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	UCS	254.8	-	-	-	26.66	0.35	25.9			
8	10.50	UDS	2.34	2.10	11.36	2.76	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	UCS	277.1	-	-	-	54.66	0.31	23.9			
9	12.00	UDS	2.35	2.12	10.77	2.75	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	UCS	282.5	-	-	-	71.33	0.30	22.9			

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 115

Co-Ordinate :- N 1388, E 2479

Reduced Level :- 145.546 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Consolidation Parameters	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree									Compression Index C _c
1	0.00	DS	-	-	-	-	42	28	30	28	16	12	-	-	-	-	GC	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	0	73	27	29	15	14	-	-	-	SC	-	-	-	-	-	-	64	-	-	-	-	-
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-
4	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-
5	6.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	>100	-	-	-	-	-
6	7.50	UDS	2.29	2.05	11.53	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	211.8	-	-	-	8.00	0.31	23.7	-	-
7	9.00	UDS	2.16	1.85	16.73	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	0.45	31.0	-	-
8	10.50	UDS	2.30	2.06	11.88	2.72	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	230.4	-	-	-	18.66	0.32	24.4	-	-
9	12.00	UDS	2.32	2.09	10.90	2.71	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	264.5	-	-	-	44.66	0.30	22.8	-	-
10	13.50	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	224.1	-	-	-	22.66	0.32	24.3	-	-
11	15.00	UDS	2.30	2.05	12.35	2.74	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	210.3	-	-	-	22.00	0.34	25.3	-	-
12	16.50	UDS	2.34	2.13	9.95	2.70	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	253.6	-	-	-	66.33	0.27	21.2	-	-
13	18.00	UDS	2.29	2.05	11.53	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	240.9	-	-	-	62.00	0.31	23.7	-	-
14	20.00	UDS	2.30	2.06	11.88	2.72	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	200.5	-	-	-	21.50	0.32	24.4	-	-

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 116

Co-Ordinate :- N 1329, E 2464

Reduced Level :- 145.659 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Type of Shear Test	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value			
1	0.00	DS	-	-	-	-	3	76	21	24	16	8	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	SPT	-	-	-	-	12	65	23	26	15	11	-	-	-	-	SC	-	-	-	-	-	54	-	-	-	-	-	-	
3	3.00	SPT	-	-	-	-	26	56	18	24	16	8	-	-	-	-	SC	-	-	-	-	-	>100	-	-	-	-	-	-	
4	4.50	UDS	2.18	1.89	15.29	2.66	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	20.4	-	-	-	-	-	0.41	28.9		
5	6.00	UDS	2.15	1.84	16.94	2.67	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	11.7	-	-	-	-	-	0.45	31.1		
6	7.50	UDS	2.09	1.73	20.73	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	63.4	UCS	-	-	-	0.56	35.9			
7	9.00	UDS	2.13	1.78	19.45	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	75.1	UCS	-	-	-	0.53	34.7			
8	10.50	UDS	2.12	1.78	18.92	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	95.5	UCS	-	-	-	0.51	33.7			
9	12.00	UDS	2.23	1.94	15.13	2.74	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	186.4	UCS	-	-	-	0.41	29.3			
10	13.50	UDS	2.29	2.03	12.97	2.75	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	156.8	UCS	-	-	-	0.36	26.3			
11	15.00	UDS	2.21	1.92	15.25	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	199.3	UCS	-	-	-	0.41	29.2			
12	16.50	UDS	2.20	1.91	15.18	2.69	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	-	168.3	UCS	-	-	-	0.41	29.0			

UDS - Undisturbed Sample
DS - Disturbed Sample
SPT - Standard Penetration Tests
NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
TCU - Triaxial Consolidated Undrained
DSU - Direct Shear Test
UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 117

Co-Ordinate :- N 1268, E 2958

Reduced Level :- 146.085 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree											
1	0.00	DS	-	-	-	-	8	64	28	27	15	12	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	3	72	25	26	16	10	-	-	-	-	SC	-	-	-	-	-	-	-	61	-	-	-	-	-
3	3.00	SPT	-	-	-	-	2	68	30	29	18	11	-	-	-	-	SC	-	-	-	-	-	-	-	70	-	-	-	-	-
4	4.50	UDS	2.26	2.01	12.44	2.68	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	210.6	-	-	-	-	25.00	0.33	25.0	
5	6.00	UDS	2.23	1.95	14.15	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	-	186.4	-	-	-	24.00	0.38	27.6		
6	7.50	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	246.6	-	-	-	82.66	0.32	24.3		
7	9.00	UDS	2.34	2.11	10.89	2.74	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	233.8	-	-	-	72.00	0.30	23.0		
8	10.50	UDS	2.30	2.06	11.64	2.71	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	-	189.6	-	-	-	41.33	0.32	24.0		
9	12.00	UDS	2.10	1.75	19.94	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	20.1	-	-	-	-	-	0.54	34.9		

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana
 BH No. :- DBH 118
 Co-Ordinate :- N 1231, E 2464
 Reduced Level :- 146.566 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shear Parameter		Soil Classification	Type of Shear Test	Compression Index C _c	Coefficient of Volume Compressibility mm	Pre-consolidation Pressure kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %	Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree									
1	0.00	DS	-	-	-	-	38	44	18	24	15	9	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	UDS	2.15	1.83	17.71	2.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.48	32.4
3	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	6.00	UDS	2.41	2.20	9.66	2.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.27	21.2
6	7.50	UDS	2.21	1.92	15.25	2.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	29.2
7	9.00	UDS	2.16	1.85	16.99	2.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.46	31.4
8	10.50	UDS	2.20	1.91	15.43	2.70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.42	29.4
9	12.00	UDS	2.23	1.96	13.65	2.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.37	26.8
10	13.50	UDS	2.22	1.94	14.32	2.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.39	27.8
11	15.00	UDS	2.19	1.90	15.11	2.67	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40	28.7
12	16.50	UDS	2.30	2.06	11.88	2.72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.32	24.4
13	18.00	UDS	2.53	2.38	6.30	2.80	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.18	15.0
14	20.00	UDS	2.20	1.91	14.93	2.68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.40	28.6

UDS - Undisturbed Sample
 DS - Disturbed Sample
 SPT - Standard Penetration Tests
 NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
 TCU - Triaxial Consolidated Undrained
 DSU - Direct Shear Test
 UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 119

Co-Ordinate :- N 1210, E 2437

Reduced Level :- 145.911 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %		
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree			Unconfined Compression Test Kg/cm ²	Index C _c Compression	Coefficient of Volume Compressibility cm ² /kg	Pre-consolidation Pressure kg/cm ²				SPT N Value	
1	0.00	DS	-	-	-	-	3	64	33	25	14	11	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-		
2	1.50	SPT	-	-	-	-	23	55	22	27	15	12	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-		
3	3.00	UDS	2.16	1.85	16.73	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	18.7	-	-	-	-	-	-	-	0.45	31.0	
4	3.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	
5	4.50	UDS	2.29	2.05	11.77	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	156.4	-	-	-	-	-	-	-	6.66	24.1	
6	4.50	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	
7	6.00	UDS	2.09	1.74	19.93	2.67	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.53	34.7
8	6.00	SPT	-	-	-	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9	7.50	UDS	2.29	2.04	12.01	2.71	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.33	24.6
10	9.00	UDS	2.25	1.99	13.33	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.36	26.5
11	10.50	UDS	2.20	1.91	15.18	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.41	29.0
12	12.00	UDS	2.19	1.89	15.62	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.42	29.6
13	13.50	UDS	2.26	2.00	13.18	2.71	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	188.7	-	-	-	-	-	-	-	-	7.33	26.3
14	15.00	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.32	24.3
15	16.50	UDS	2.26	2.00	12.93	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.35	25.9
16	18.00	UDS	2.28	2.03	12.40	2.71	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.34	25.1
17	19.50	UDS	2.25	1.99	13.09	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.35	26.0
18	21.00	UDS	2.23	1.95	14.15	2.70	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.38	27.6
19	22.50	UDS	2.20	1.91	15.18	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.41	29.0
20	24.00	UDS	2.34	2.12	10.43	2.72	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	200.3	-	-	-	-	-	-	-	-	6.66	22.1
21	25.00	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	-	-	-	0.32	24.3

UDS - Undisturbed Sample
DS - Disturbed Sample
SPT - Standard Penetration Tests
NP - Non Plastic

TUU - Triaxial Unconsolidated Undrained
TCU - Triaxial Consolidated Undrained
DSU - Direct Shear Test
UCS - Unconfined Compression Strength

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 120

Co-Ordinate :- N 1545, E 2481

Reduced Level :- 145.786 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Consolidation Parameters			SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm	Pre-consolidation Pressure kg/cm ²				
1	0.00	DS	-	-	-	-	14	74	12	NP	NP	NP	-	-	-	-	SM	-	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	DS	-	-	-	-	10	69	21	27	16	11	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-
3	3.00	DS	-	-	-	-	6	72	22	52	20	32	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-
4	4.50	SPT	-	-	-	-	20	52	28	33	18	15	-	-	-	-	SC	-	-	-	-	-	-	-	>100	-	-	-	-	-
5	6.00	UDS	2.21	1.93	14.75	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	UCS	174.4	-	-	-	-	66.42	0.40	28.4	-	-
6	7.50	UDS	2.29	2.04	12.25	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	192.2	-	-	-	98.66	0.33	25.0	-	-	
7	9.00	UDS	2.36	2.14	10.20	2.74	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	180.8	-	-	-	87.33	0.28	21.8	-	-	
8	10.50	UDS	2.37	2.15	10.09	2.75	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	UCS	200.7	-	-	-	90.00	0.28	21.7	-	-	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 121

Co-Ordinate :- N 1531, E 2481

Reduced Level :- 145.862 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Consolidation Parameters				Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction ϕ Degree			Unconfined Compression Test Kg/cm ²	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²			
1	0.00	DS	-	-	-	-	6	41	44	9	24	16	8	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	0	18	49	33	53	23	30	13	-	54	CH	-	-	-	-	6	-	-	-	-	-	-
3	3.00	SPT	-	-	-	-	0	12	50	38	56	21	35	12	-	60	CH	-	-	-	-	7	-	-	-	-	-	-
4	4.50	SPT	-	-	-	-	2	18	47	33	52	24	28	14	-	52	CH	-	-	-	-	5	-	-	-	-	-	-
5	6.00	SPT	-	-	-	-	0	80	20	24	16	8	-	-	-	-	SC	-	-	-	-	>100	-	-	-	-	-	-
6	7.50	UDS	2.00	1.60	25.37	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	14.6	-	-	-	-	-	0.68	40.5	-
7	9.00	UDS	2.16	1.84	17.24	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	152.3	-	-	-	-	-	8.00	0.47	31.8
8	10.50	UDS	2.19	1.89	16.12	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	168.9	-	-	-	-	-	16.66	0.44	30.4
9	12.00	UDS	2.32	2.08	11.38	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	200.1	-	-	-	-	58.00	0.31	23.7	
10	13.50	UDS	2.31	2.08	11.27	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	193.4	-	-	-	-	54.00	0.31	23.4	
11	15.00	UDS	2.11	1.77	19.42	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	0.52	34.3	
12	16.50	UDS	2.24	1.98	13.24	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	0.35	26.2	
13	18.00	UDS	2.26	2.00	13.18	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	223.6	-	-	-	-	20.66	0.36	26.3	
14	20.00	UDS	2.38	2.17	9.52	2.74	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	412.7	-	-	-	-	6.50	0.26	20.7	

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 124

Co-Ordinate :- N 1478, E 2477

Reduced Level :- 145.737 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Point Load Index in rock Kg/cm ²	Type of Shear Test	Compression Index C _c	Coefficient of Volume Compressibility mm ³ /kg	Pre-consolidation Pressure kg/cm ²	SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %	
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree										Unconfined Compression Test Kg/cm ²
1	0.00	DS	-	-	-	-	12	75	13	NP	NP	NP	-	-	-	-	SM	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	0	44	17	39	54	21	33	-	-	-	CH	-	-	-	-	-	-	12	-	-	-	-	-
3	3.00	SPT	-	-	-	-	8	41	36	15	28	15	13	-	-	-	CL	-	-	-	-	-	-	20	-	-	-	-	-
4	4.50	SPT	-	-	-	-	4	44	40	12	26	16	10	-	-	-	CL	-	-	-	-	-	-	>100	-	-	-	-	-
5	6.00	UDS	2.04	1.86	23.23	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	146.3	UCS	-	-	-	16.43	0.63	38.5	-	-
6	7.50	UDS	1.99	1.59	25.44	2.66	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	16.8	-	-	-	-	0.68	40.4	-	-	
7	9.00	UDS	2.23	1.95	14.40	2.71	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	194.6	UCS	-	-	-	40.00	0.39	28.1	-	-
8	10.50	UDS	2.31	2.07	11.74	2.73	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	252.5	UCS	-	-	-	48.66	0.32	24.3	-	-
9	12.00	UDS	2.36	2.15	9.73	2.72	-	-	-	-	-	-	-	-	-	-	ROCK	-	-	220.6	UCS	-	-	-	48.66	0.26	20.9	-	-

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 125

Co-Ordinate :- N 1451, E 2441

Reduced Level :- 145.125 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Compression Index C _c	Consolidation Parameters			Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm ² /kg	Pre-consolidation Pressure kg/cm ²			
1	0.00	DS	-	-	-	-	11	43	46	27	15	12	-	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-
2	1.50	SPT	-	-	-	-	9	62	29	24	16	8	-	-	-	-	SC	-	-	-	-	-	36	-	-	-	-	-	-
3	3.00	SPT	-	-	-	-	2	68	30	23	15	8	-	-	-	-	SC	-	-	-	-	-	>100	-	-	-	-	-	-
4	4.50	UDS	2.16	1.84	17.24	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	21.3	-	-	-	-	-	0.47	31.8	-
5	6.00	UDS	2.20	1.89	16.18	2.73	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	25.8	-	-	-	-	-	0.44	30.6	-
6	7.50	UDS	2.07	1.70	21.81	2.70	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	19.9	-	-	-	-	-	0.59	37.1	-
7	9.00	UDS	2.01	1.61	24.75	2.68	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	18.4	-	-	-	-	-	0.66	39.9	-
8	10.00	UDS	2.03	1.64	23.82	2.69	-	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	19.2	-	-	-	-	-	0.64	39.1	-

KCT Consultancy Services, Ahmedabad

RESULTS OF LABORATORY TEST

Project :- Proposed structure in STPP St 2 of NTPC at Telangana

BH No. :- DBH 126

Co-Ordinate :- N 1412, E 2459

Reduced Level :- 145.625 m

Sr No	Depth of Sample	Type of Sample	Field Bulk Density gm / cc	Field Dry Density gm / cc	Natural Moisture Content %	Specific Gravity	Grain Size Analysis				Consistency limits			Shrinkage Limit %	Swelling Pressure Kg/cm ²	Free Swell Index %	Soil Classification	Shear Parameter		Type of Shear Test	Point Load Index in rock Kg/cm ²	Unconfined Compression Test Kg/cm ²	Type of Shear Test	Consolidation Parameters				SPT N Value	Rock Quality Designation %	Void Ratio	Porosity %
							Gravel %	Sand %	Silt %	Clay %	Liquid Limit %	Plastic Limit %	Plasticity Index %					Cohesion C Kg/cm ²	Angle of Internal Friction φ Degree					Compression Index C _c	Coefficient of Volume Compressibility mm	Pre-consolidation Pressure kg/cm ²					
1	0.00	DS	-	-	-	-	8	65	27	26	16	10	-	-	-	-	Filled up Soil	-	-	-	-	-	-	-	-	-	-	-	-	-	
2	1.50	DS	-	-	-	-	5	71	24	24	15	9	-	-	-	SC	-	-	-	-	-	-	-	-	-	-	-	-	-		
3	3.00	UDS	2.18	1.88	16.07	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	19.4	-	-	-	-	-	-	-	0.43	30.2	-	
4	4.50	UDS	2.27	2.00	13.27	2.73	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	152.4	-	UCS	-	-	-	-	0.36	26.6	-		
5	6.00	UDS	1.98	1.56	26.65	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	0.71	41.7	-			
6	7.50	UDS	2.09	1.74	20.20	2.68	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	0.54	35.1	-			
7	9.00	UDS	2.19	1.89	15.62	2.69	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	165.4	-	UCS	-	-	-	0.42	29.6	-			
8	10.00	UDS	2.00	1.60	25.09	2.67	-	-	-	-	-	-	-	-	-	W.ROCK	-	-	-	-	-	-	-	-	-	0.67	40.1	-			

