

資料 8 土質調査結果概要

FIELD WORK LOCATIONS

SITE	LOCATION
3	Sesori, San Miguel
7	San Jose, Usulután
11	Puerto El Triunfo, Usulután
21	El Pilon, La Union
24	Los Conejos, La Union
30	Joya de las Tunas, La Union
34	Cerro Grande, San Vicente

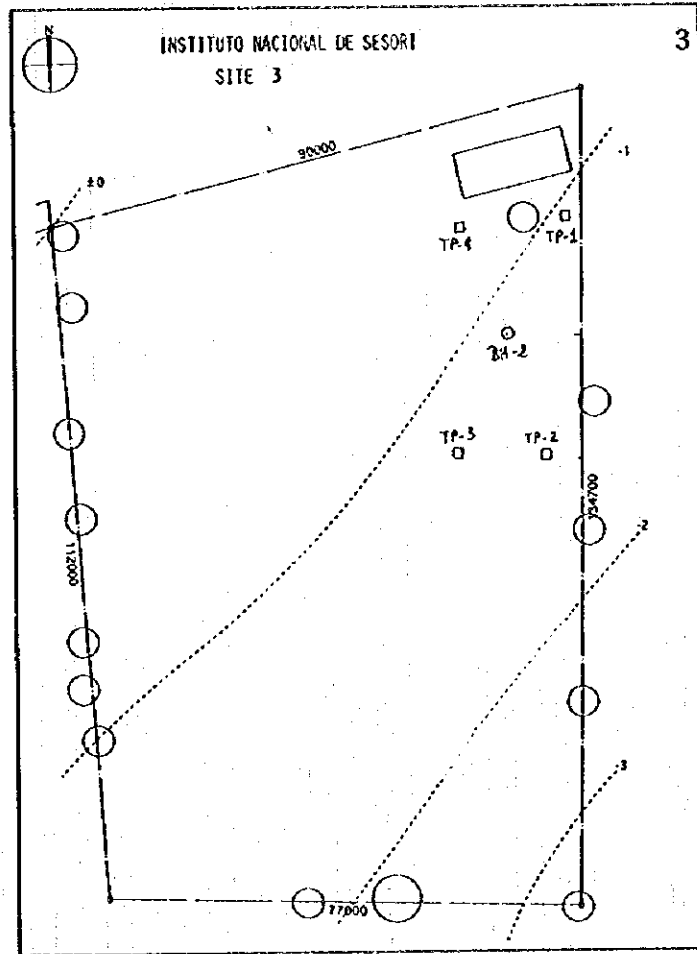
LABORATORY INVESTIGATION PROGRAM

The following is a list of the laboratory tests performed on the samples including their ASTM names and ASTM identification numbers where applicable.

Laboratory Test Performed	ATM Number
Soil Classification	D-2487-83
Water Content Determination	D-2216-80
Particle Size Analysis	D-422-72
Unit Weight Determination	D-837
Laboratory Test Performed	ASTM Number
Specific Gravity Determination	D-854
Unconfined Compression Test	D-2850
Triaxial Compression Tests Q (U.U.)	D-2850
Atterberg Limits	D-4318-84

The soils laboratory contracted for this investigation and testing program is SUELOS Y MATERIALES S.A. DE C.V., Final Senda B, Jardines de Miramonte, San Salvador, El Salvador, telephone 74-8849, Ing. Mario Angel Guzman Urbina.

Site 3 Sesori, San Miguel



TEST PIT #1
 0.00-0.20 Mts.
 0.20-0.50 Mts.
 0.50-1.00 Mts.

Clayey Silt (ML) with low plasticity fines, brown, $\pm 15\%$ medium to fine sand.
 Sandy Silt (ML), dark grey, slightly plastic, $\pm 40\%$ sand.
 Silty Sand (SM), dark grey, non plastic, $\pm 65\%$ fine sand.

TEST PIT #2
 0.00-0.13 Mts.
 0.13-0.53 Mts.
 0.53-1.00 Mts.

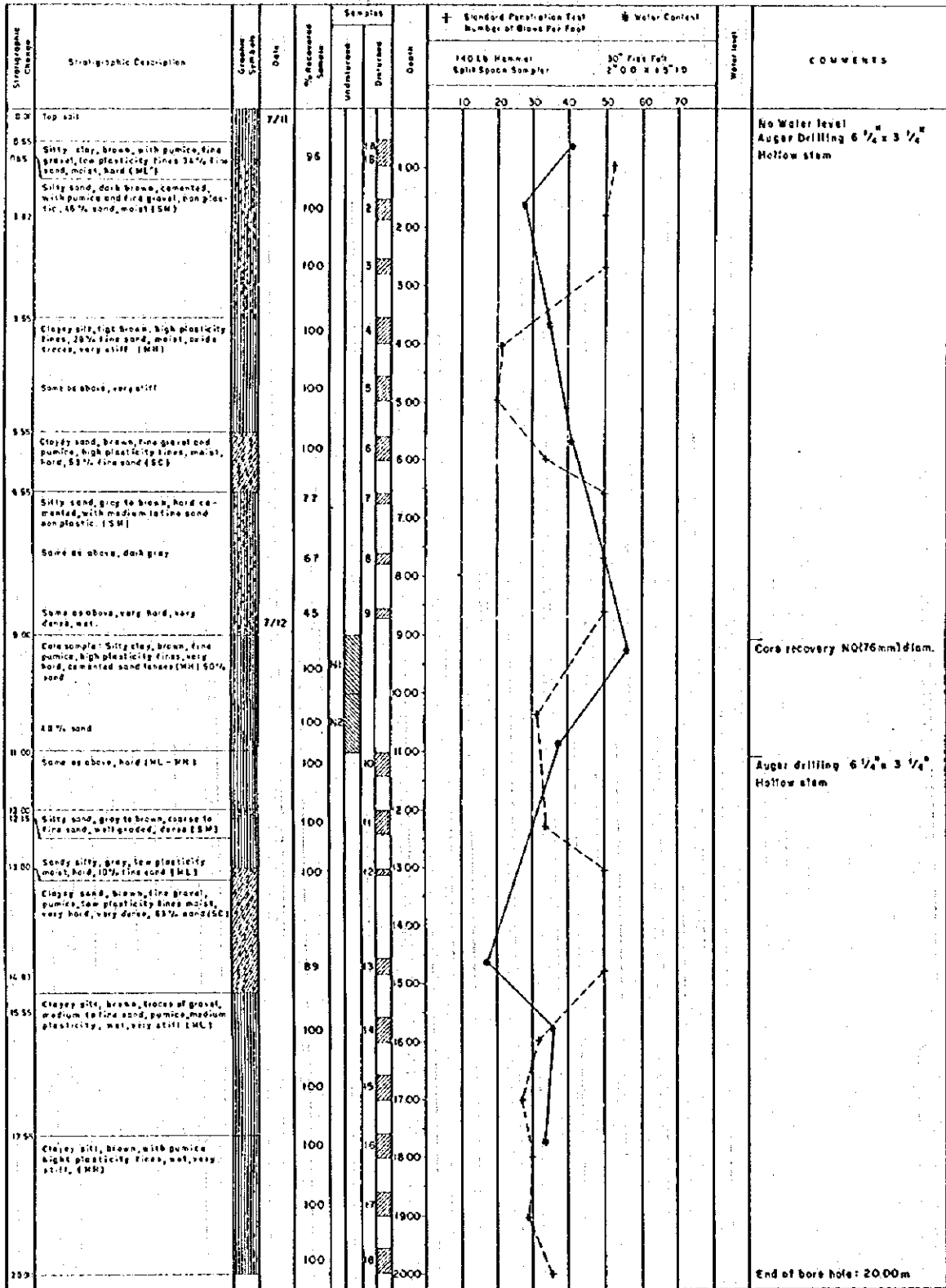
Clayey silt (ML) with roots, medium plasticity fines, brown $\pm 15\%$ medium to fine sand.
 Cemented sandy silt dark brown to grey, non plastic fines, $\pm 40\%$ fine sand.
 Silty sand (SM), grey, non plastic, $\pm 70\%$ medium to fine sand.

TEST PIT #3
 0.00-0.13 Mts.
 0.13-0.69 Mts.
 0.69-1.00 Mts.

Clayey Silt (ML) with roots, medium plasticity fines, brown, $\pm 15\%$ medium to fine sand.
 Cemented Sandy Silt (ML), dark brown to grey, non plastic, $\pm 60\%$ medium to fine sand.
 Cemented Silty Sand (SM) dark grey.

TEST PIT #4
 0.00-0.30 Mts.
 0.30-0.80 Mts.
 0.80-1.00 Mts.

Clayey Silt (ML) with low to medium plasticity fines, brown, $\pm 15\%$ medium to fine sand.
 Cemented Sandy Silt (ML), dark grey to brown, non plastic, $\pm 20\%$ medium to fine sand.
 Cemented Silty Sand, dark grey, non plastic, $\pm 65\%$ medium to fine sand.



SITE 3 SESORI, SAN MIGUEL
BH 2 SUMMARY OF LABORATORY TEST RESULTS

Unit Weight

SAMPLE NUMBER	DEPTH (mts)	DIAMETER (cms)	HEIGHT (cms)	WEIGHT (kgs)	UNIT WEIGHT (ton/m3)
N-1	9.45	5	10.4	318	1.56
N-2	11	5	9.2	286.8	1.59

Specific Gravity

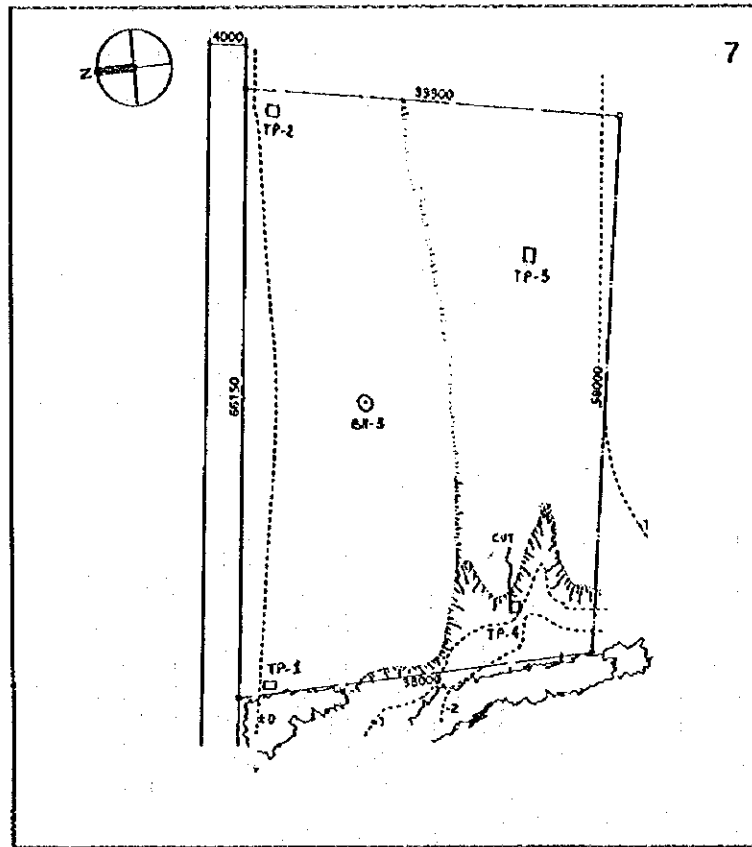
SAMPLE NUMBER	DEPTH (m)	SPECIFIC GRAVITY (SG)
1A	0.55 - 1.00	2.45
2	1.55 - 1.82	2.46
4	3.55 - 4.00	2.47
6	5.55 - 6.00	2.15
N-1	9.30 - 9.45	2.16
N-2	10.85 - 11.00	2.42
13	14.55 - 14.83	2.45
14	15.55 - 16.00	2.39
16	17.55 - 18.00	2.47

AVERAGE SPECIFIC GRAVITY: 2.38

Grain Size Distribution, Water Content, Atterberg Limits and Soil Classification

SAMPLE NO.	DEPTH (m)	CLASSIFICATION (SUCS)	GRAIN SIZE %			ATTERBERG LIMITS			WATER CONTENT %
			G	S	F	LL	PL	PI	
1A	0.55-1.00	ML	6	34	60	38.8	32.6	6.4	40.4
2	1.55-1.82	SM	26	46	28	-	-	-	28.7
4	3.55-4.00	MH	0	29	71	66.7	47.6	19.1	35.3
6	5.55-6.00	SC	14	53	33	56.8	43.5	13.3	41.8
N-1	9.30-9.45	MH	0	50	50	69.4	46.7	22.7	57.8
N-2	10.85-11.00	MH	0	40	60	60.0	40.7	19.3	38.0
13	14.55-14.83	SC	19	63	18	44.3	35.2	9.1	18.6
14	15.55-16.00	ML	0	42	58	46.7	38.1	8.6	36.1
16	17.55-18.00	MH	0	23	77	88.8	47.7	41.1	34.0

Site 7 San Jose, Usulután

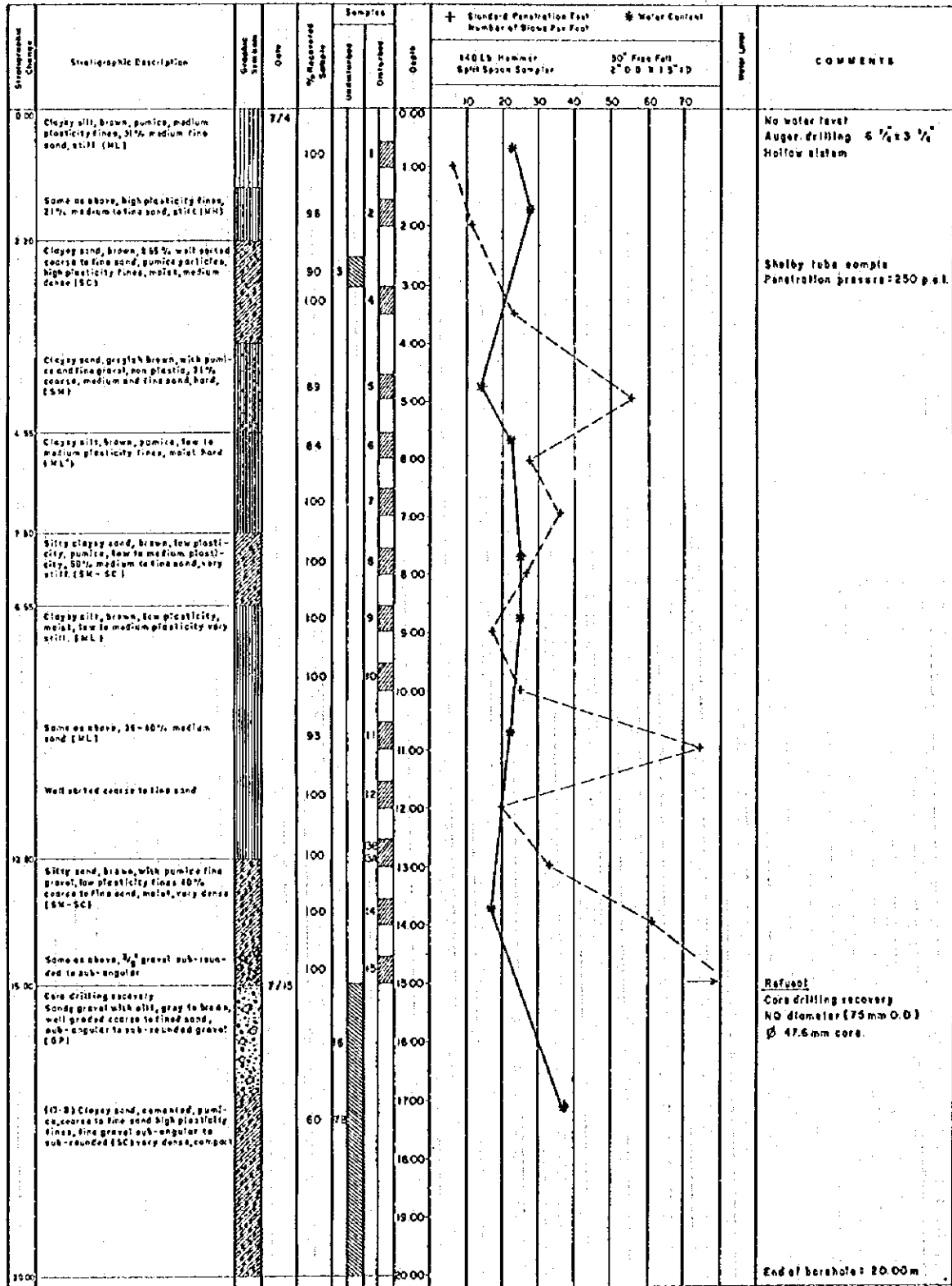


TEST PIT #1-4

0.00-1.00 Mts.

Clayey Silt (ML), brown with roots, low plasticity fines, ± 15% medium to fine sand.

7 San Jose, Usulután



SITE 7 SAN JOSE, USULUTAN
BII-3 SUMMARY OF LABORATORY TEST RESULTS

Specific Gravity

SAMPLE NUMBER	DEPTH (m)	SPECIFIC GRAVITY (SG)
1	0.55 - 1.00	2.58
2	1.55 - 2.00	2.5
5	4.55 - 5.00	2.68
6	5.55 - 6.00	2.56
8	7.55 - 8.00	2.41
10	9.55 - 10.00	2.33
11	10.55 - 11.00	2.56
14	13.55 - 14.00	2.49
17B	16.55 - 17.80	2.56

AV. SPECIFIC GRAVITY: 2.52

Grain Size Distribution, Water Content, Atterberg Limits and Soil Classification

SAMPLE NO.	DEPTH (m)	CLASSIFICATION (SUCS)	GRAIN SIZE %			ATTERBERG LIMITS			WATER CONTENT %
			G	S	F	LL	PL	PI	
1	0.55-1.00	ML	0	31	69	42.6	32.6	6.2	23.4
2	1.55-2.00	MH	0	21	79	59.2	44.0	15.2	28.9
5	4.55-5.00	SM	8	71	21	-	-	-	14.5
6	5.55-6.00	ML	0	27	73	43.5	32.1	11.4	23.2
8	7.55-8.00	SM-SC	0	58	42	42.0	36.7	5.3	23.2
10	9.55-10.00	ML	0	40	60	34.5	27.2	7.3	25.3
11	10.55-11.00	SC	0	25	75	42.7	28.1	14.6	22.8
14	13.55-14.00	SM-SC	12	66	22	26.3	20.8	5.5	18.2
17B	16.55-17.80	SC	30	33	37	40.2	30.9	9.3	38.2

Shear Strength

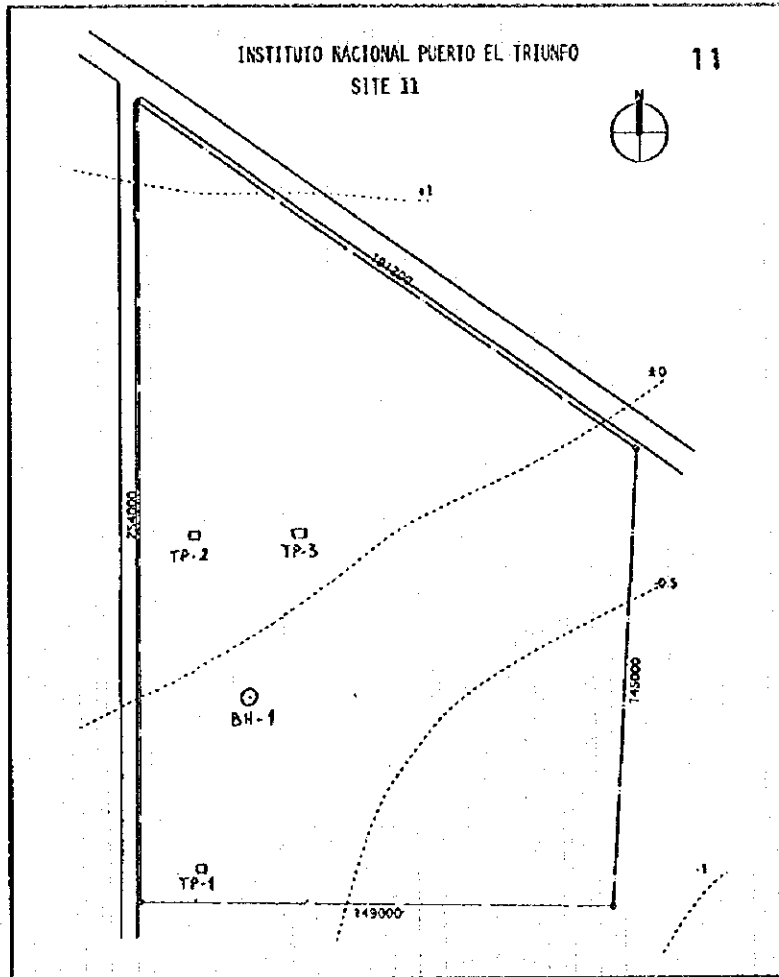
One undisturbed sample was obtained from Shelby Tubes to perform Triaxial Compression Tests with the following results:

Triaxial Compression

SAMPLE TEST NO.	σ_3 NO	$\sigma_1 - \sigma_3$	σ_1 (Kg/cm ²)	Wi (%)	Th (%)	PARAMETERS (T/m ³)
	1	1.06	3.65	4.71	51.69	1.43
	2	2.11	5.31	7.42	51.5	1.4
	3	3.17	5.11	8.28	56.7	1.54

$\phi = 26.0$
 $c = 6.0 \text{ T/m}^2$

Site 11 Puerto El Triunfo, Usulután



TEST PIT #1

- 0.00-0.32 Mts
- 0.32-0.52 Mts
- 0.52-1.00 Mts

Organic Silty Sand (SM-OL), with roots, non plastic, dark brown, ± 55% fine sand
 Brown Clayey Silt (ML)

Organic Sandy Silt (ML-OL), dark grey, ± 15% fine sand

TEST PIT #2

- 0.00-0.20 Mts.
- 0.20-0.35 Mts.
- 0.35-0.65 Mts.
- 0.65-1.00 Mts.

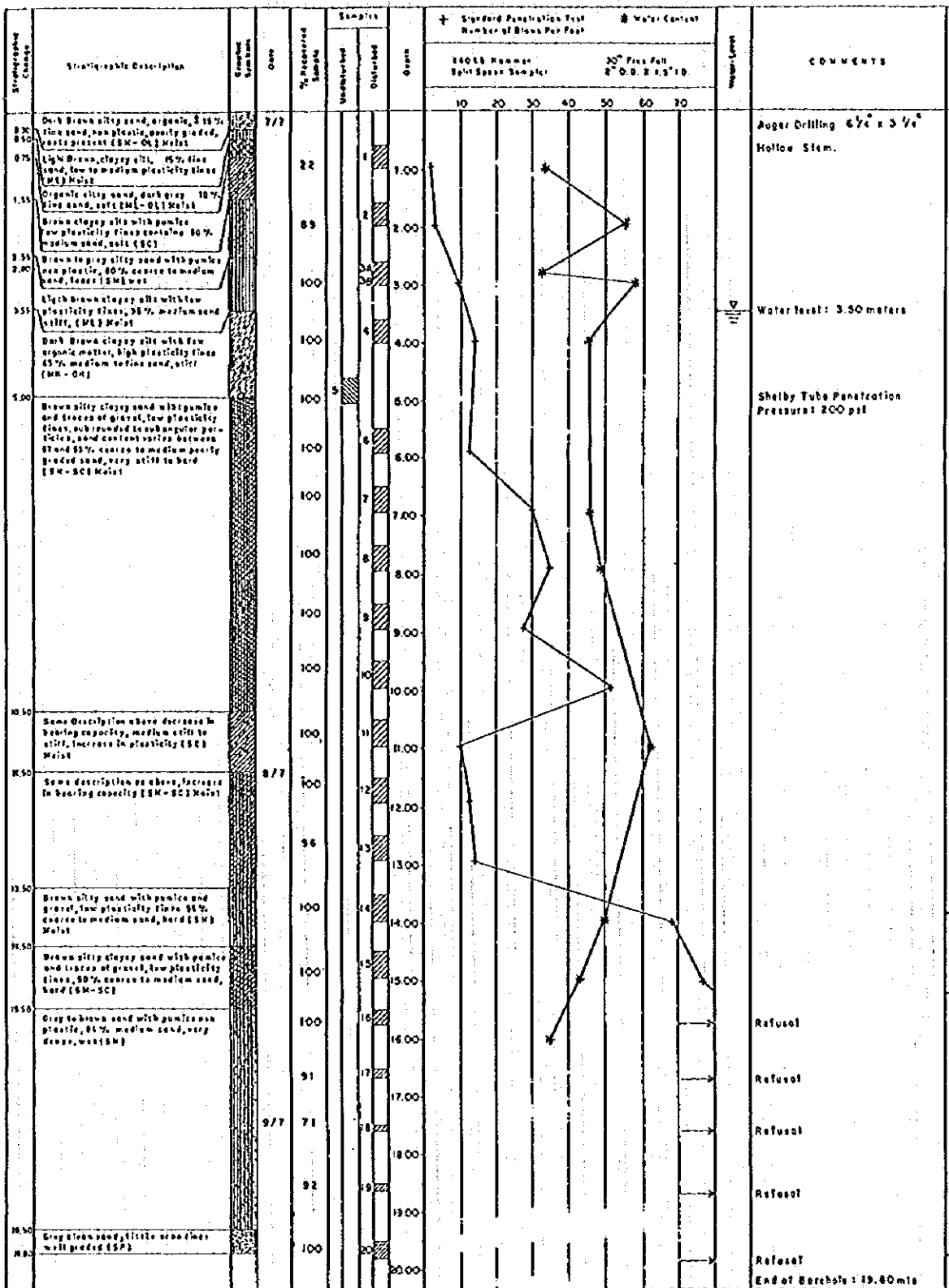
Organic Silty Sand (SM-OL) with roots, non plastic, dark brown, ± 55% fine sand.
 Silty Sand (SM), brown, non plastic, ± 60% fine sand.
 Clayey Silt (ML), brown, low to medium plasticity fines, ± 15% fine sand.
 Organic Sandy Silt (ML-OL), dark brown to grey, ± 15% fine sand.

TEST PIT #3

- 0.00-0.25 Mts.
- 0.25-0.50 Mts.
- 0.50-0.75 Mts.
- 0.75-1.00 Mts.

Organic Silty Sand (SM-OL) with roots, non plastic, dark brown ± 55% fine sand.
 Clayey Silt (ML), low plasticity fines, brown, ± 15% fine sand.
 Organic Sandy Silt (ML-OL), dark grey to brown, ± 10% fine sand.
 Clayey Sand (SC), dark brown, with fine gravel, ± 60% coarse to fine sand.

11 Puerto El Triunfo, Usulután



SITE 11 PUERTO EL TRIUNFO, USULUTAN
BII-1 SUMMARY OF LABORATORY TEST RESULTS

Unit Weight

SAMPLE WEIGHT	DEPTH (m)	VOLUME (cm ³)	WEIGHT (ton)	UNIT WEIGHT (ton/m ³)
5	5.05	595.2	982.2	1.65

Grain Size Distribution, Water Content, Soil Classification

SAMPLE NO.	DEPTH (m)	CLASSIFICATION (SUCS)	GRAIN SIZE %			ATTERBERG LIMITS			WATER CONTENT %
			G	S	F	LL	PL	PI	
1	0.55-1.00	SM	0	66	34	23.0	20.6	2.4	33.4
2	1.55-2.00	SC	0	59	41	42.2	33.1	9.1	55.5
3A	2.55-2.85	SM	3	86	11	-	-	-	33.1
3B	2.85-3.00	ML	0	36	64	47.8	34.7	13.1	58.3
4	3.55-4.00	MH-OH	0	45	55	84.6	53.6	31.0	45.2
7	6.50-6.95	SC	4	67	29	22.5	17.0	55.0	46.4
8	7.50-7.95	SC	4	57	39	44.9	36.0	8.9	49.4
11	10.50-10.95	SC	4	53	43	57.7	47.7	10.0	62.0
14	13.50-13.95	SM	6	55	39	35.7	33.7	2.0	49.7
15	14.50-14.95	SC	3	50	47	25.5	21.1	4.4	42.0
16	15.50-15.75	SM	0	84	16	-	-	-	34.0

Shear Strength

One undisturbed sample was obtained from Shelby Tubes to perform Triaxial Compression Tests with the following results:

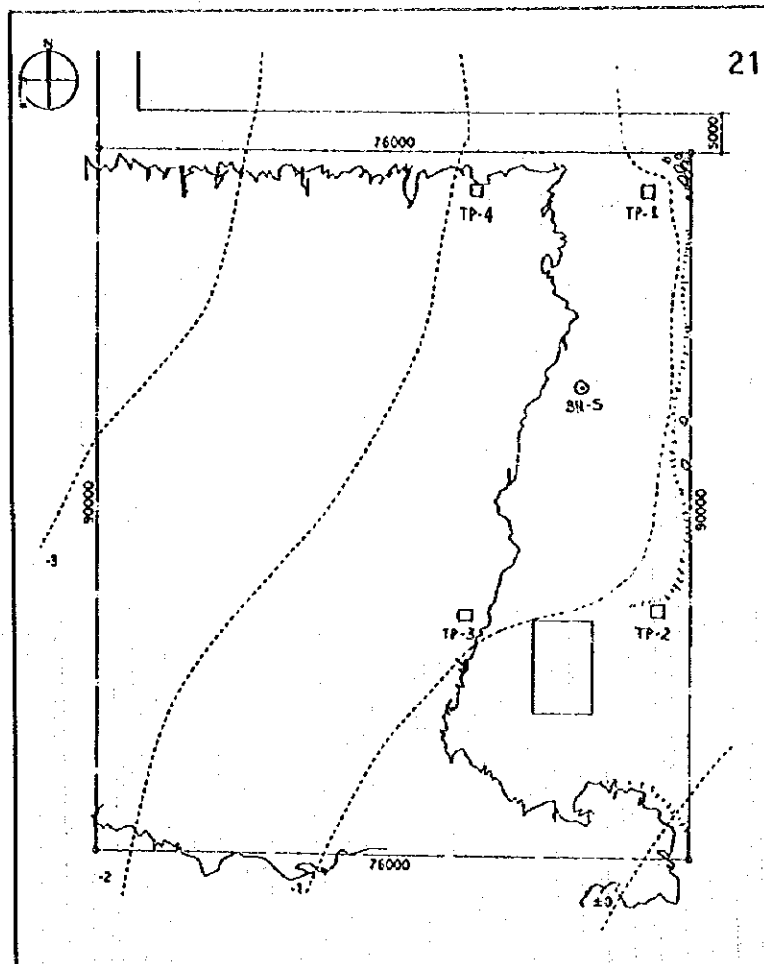
SAMPLE NO.	TEST NO.	σ_3 (KG/CM ²)	$\sigma_1 - \sigma_3$ (KG/CM ²)	σ_1	Wi (%)	Th Parameter (T/m ³)
5	1	1.06	4.62	5.68	37.7	1.53 $\phi = 42.44^\circ$
	2	1.00	2.03	3.03	44.1	1.68 C = 0.00

AVERAGE: T = 1.60 TON/M³

$\phi = 42.44^\circ$

C = 0.00 Ton/m²

Site 21 El Pilon, La Union

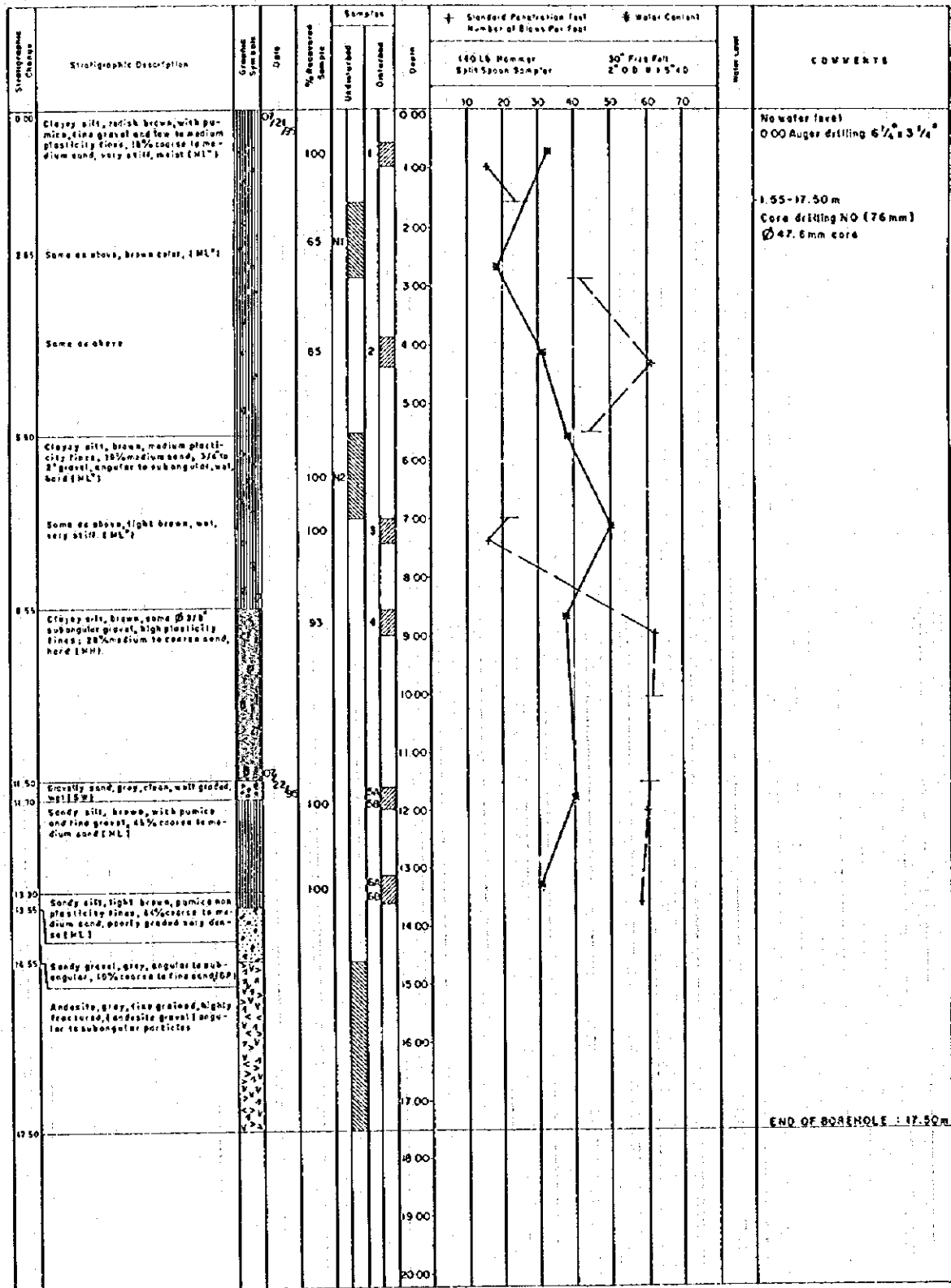


TEST PIT # 1-2

0.00-1.00 Mts. Silty Clay (CL) with roots, contains gravel, reddish brown.

TEST PIT # 3-4

0.00-1.00 Mts. Silty Clay (CL), with roots and large diameter rounded boulders, reddish brown, low to medium plasticity fines, \pm 20% medium to fine sand.



SITE 21 EL PILON, LA UNION
BII-5 SUMMARY OF LABORATORY TEST RESULTS

Specific Gravity

SAMPLE NUMBER	DEPTH (m)	SPECIFIC GRAVITY (SG)
1	0.55 - 1.00	2.56
N-1	2.65 - 2.85	2.37
2	3.95 - 4.35	2.41
N-2	5.60 - 5.75	2.36
3	7.00 - 7.45	2.51
4	8.55 - 9.00	2.58
5B	11.70 - 11.90	2.64
6B	13.30 - 13.55	2.51

AV. SPECIFIC GRAVITY 2.52

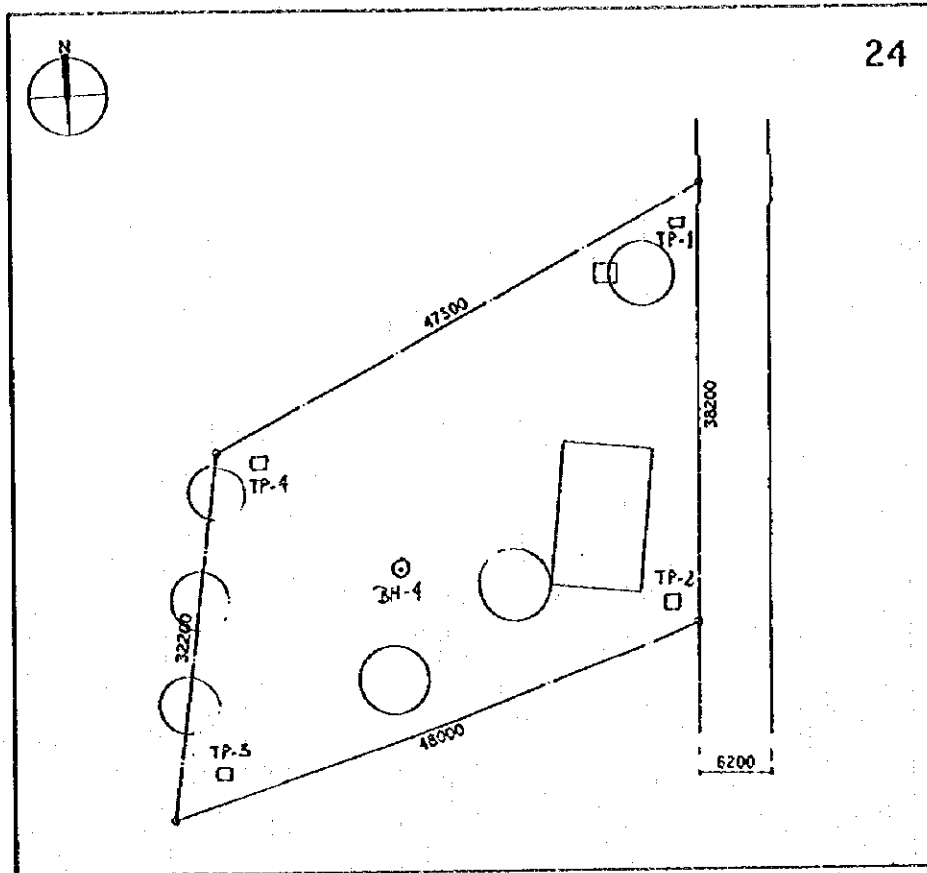
Grain Size Distribution, Water Content, Atterberg Limits and Soil Classification

SAMPLE No.	DEPTH (m)	CLASSIFICATION (SUCS)	GRAIN SIZE (%)			ATTERBERG LIMITS			WATER CONTENT (%)
			G	S	F	LL	PL	PI	
1	0.55-1.00	ML	1	18	81	47.7	33.8	13.9	33.1
N-1	2.65-2.85	ML	21	18	61	40.7	30.1	10.6	19.5
2	3.95-4.35	ML	5	25	70	39.8	32	7.8	31.5
N-2	5.60-5.75	ML	0	19	81	48.2	34.5	13.7	39.7
3	7.00-7.45	ML	3	20	77	46.7	39.8	6.9	50.7
4	8.55-9.00	MH	24	28	48	51.8	40.4	11.4	38.3
5B	11.70-11.90	ML	4	45	51	NON PLASTIC			40.9
6B	13.30-13.55	ML	1	44	55	NON PLASTIC			30.3

Unit Weight

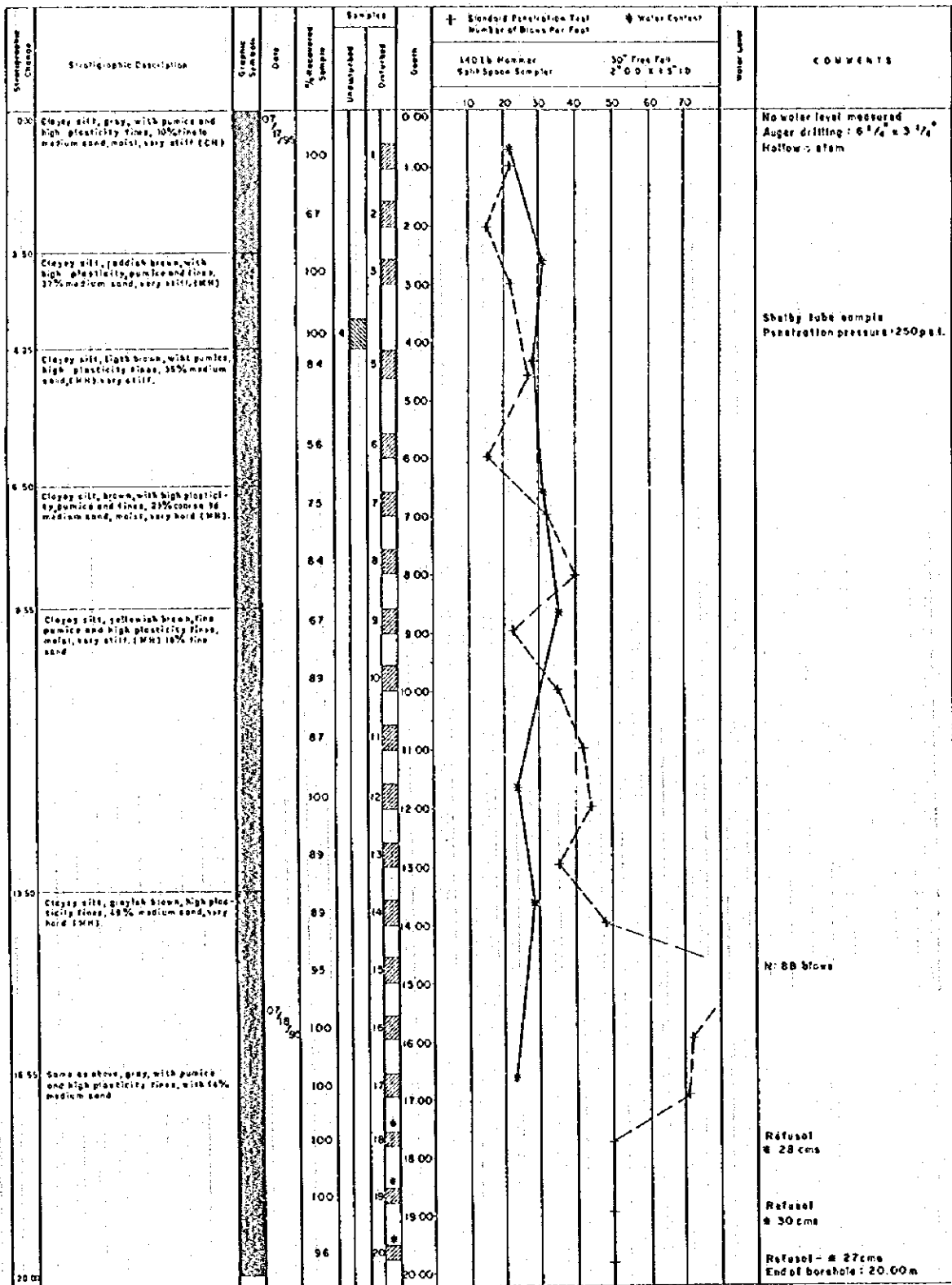
SAMPLE No.	DEPTH (Mts.)	DIAMETER (Cm.)	HEIGHT (Cm.)	WEIGHT (Grs.)	UNIT WEIGHT (Ton/m3)
N-1	2.65-2.85	4.8	10.0	300.0	1.65
N-2	5.60-5.75	4.9	11.0	350.0	1.69

Site 24 Los Conejos, La Union



TEST PIT # 1-4

0.00-1.00 Mts. Clayey Silt (MH) with roots, dark brown to grey with medium to high plasticity fines, ± 10% fine sand.



SITE 24 LOS CONEJOS, LA UNION
BII-4 SUMMARY OF LABORATORY TEST RESULTS

Specific Gravity

SAMPLE NUMBER	DEPTH (m)	SPECIFIC GRAVITY (SG)
1	0.55 - 1.00	2.51
2	2.55 - 3.00	2.57
5	4.25 - 4.70	2.54
7	6.55 - 7.00	2.68
9	8.55 - 9.00	2.56
12	11.55 - 12.00	2.56
14	13.55 - 14.00	2.50
17	16.55 - 17.00	2.45

AV. SPECIFIC GRAVITY 2.55

Grain Size Distribution, Water Content, Atterberg Limits and Soil Classification

SAMPLE No.	DEPTH (m)	CLASSIFICATION (SUCS)	GRAIN SIZE (%)			ATTERBERG LIMITS			WATER CONTENT
			G	S	F	LL	PL	PI	
1	0.55-1.00	CH	0	10	90	83.7	31.3	52.4	20.3
3	2.55-3.00	MH	0	63	37	90.0	44.4	45.6	31.6
5	4.25-4.70	MH	0	35	65	86.0	45.2	40.8	29.0
7	6.55-7.00	MH	5	23	72	67.2	52.6	14.6	31.4
9	8.55-9.00	MH	0	16	84	87.1	60.3	26.8	36.0
12	11.55-12.00	MH	0	35	65	70.1	41.0	29.1	24.6
14	13.55-14.00	MH	0	48	52	78.2	46.1	32.1	29.7
17	16.55-17.00	MH	0	56	44	58.0	36.0	22.0	23.6

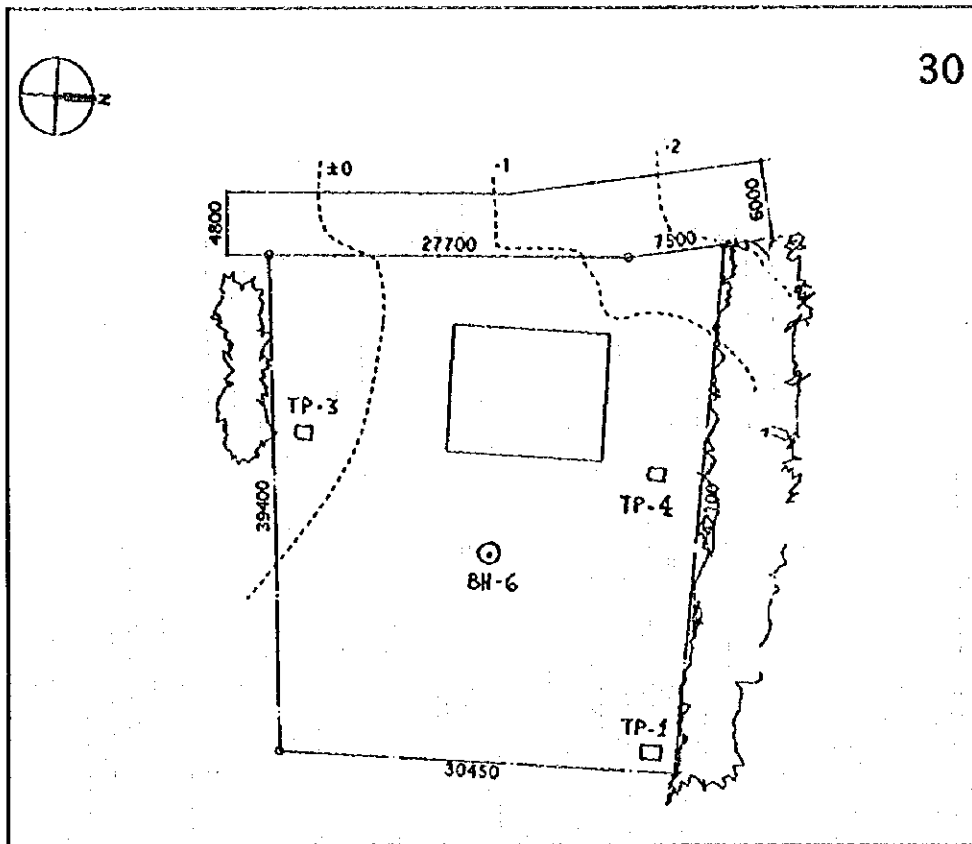
Shear Strength

One undisturbed sample was obtained from Shelby Tubes to perform Triaxial Compression Tests with the following results:

Triaxial Compression

SAMPLE NO.	TEST NO.	σ_3 (KG/CM ²)	$\sigma_1 - \sigma_3$	σ_1	W _i (%)	T _h (T/m ³)	PARAMETERS
	1	0	4.42	4.42	31.7	1.6	$\phi = 26.1^\circ$ C = 2.86 T/m ²
4	2	1.06	5.2	6.26	35.3	1.62	
	3	2.11	7.8	9.91	35.3	1.64	
AVERAGE					34.1	1.62	

Site 30 Joya de las Tunas, La Union



30

TEST PIT#1

- 0.00-0.20 Organic clayey silt with roots, dark brown, with low to medium plasticity fines, ± 30% coarse to fine grained sand (ML-OL)
- 0.20-1.00 Gravelly clay, reddish brown, ± 20% coarse to fine sand, ± 15% subangular gravel and subangular boulders in different sizes. (CL)

TEST PIT#3

- 0.00-0.20 Organic clayey silt with roots, brown, low plasticity fines, ± 15% coarse to fine sand. subangular gravel cobbles and large diameter boulders present. (ML-OL)

TEST PIT#4

- 0.00-0.20 Organic clayey silt with roots, dark brown, medium to low plasticity fines ± 20% medium to fine sand. (ML-OL).
- 0.20-1.00 Clayey Silt, reddish brown with pumice, high plasticity fines, 12 % medium sand, soft (MH).

Stratigraphic Change	Stratigraphic Description	Grain Size	Date	% Recovered Sample	Samples		Depth	+ Standard Penetration Test Number of Blows Per Foot		* Water Content		Water Seal	COMMENTS
					Undisturbed	Disturbed		140 lb Power Split Spoon Sampler		50' Free Fall 2" O.D. x 1.5" I.D.			
								10	20	30	40		
0.00	Clayey silt, dark brown with some roots, low plasticity fines, 9% medium to fine sand, some cobbles, matrix hard. (1M)		07/22/75	60		1	0.00						No water test Auger drilling 6 1/4" x 3 1/4" Hollow stem
1.50	Clayey silty sand, brown, with pumice, low plasticity fines, 50% medium sand, very dense (SM-SC)			100		2	1.00	20	30				Refused: (14cm=50 blows)
2.55	Sandy gravel, light gray to brown, 48% coarse to fine sand, gravel up to 1/2", sub-angular to sub-rounded. (GP)		07/23/75	73		3	2.55	30	40				Refused: (11cm=50 blows)
3.00	High fractured andesite, dark gray to brown, fine grained fractures with fine sand and pebbles.			88			3.00						Core drilling (NQ-76mm)
				84			4.00						
				78			5.00						
	Fracturation decreases downward, compact.			94			6.00						
				82			7.00						
				95			8.00						End of borehole: 8.00m
4.00							9.00						
							10.00						
							11.00						
							12.00						
							13.00						
							14.00						
							15.00						
							16.00						
							17.00						
							18.00						
							19.00						
							20.00						

SITE 30 JOYA DE LAS TUNAS, LA UNION
BII-6 SUMMARY OF LABORATORY TEST RESULTS

Grain Size Distribution, Water Content, Atterberg Limits and Soil Classification

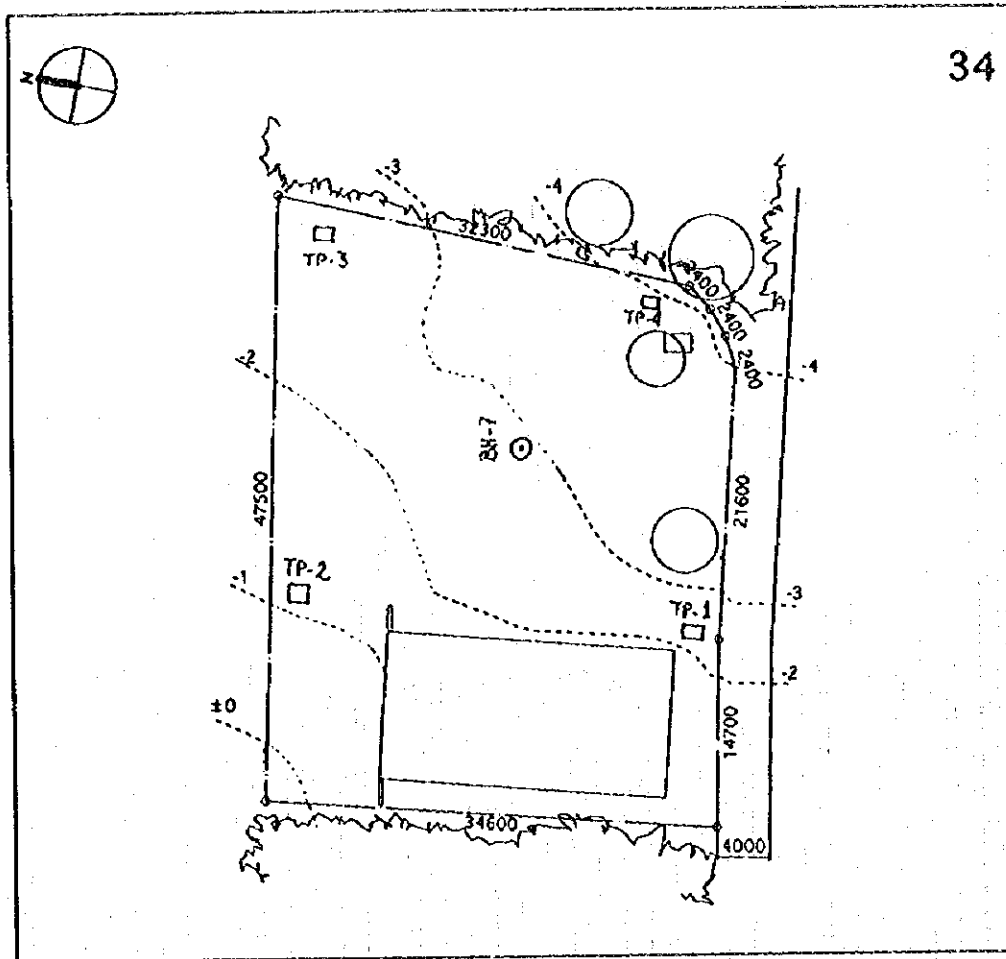
SAMPLE No.	DEPTH (m)	CLASSIFICATION (SUCS)	GRAIN SIZE (%)			ATTERBERG LIMITS			WATER CONTENT (%)
			G	S	F	LL	PL	PI	
1	0.55-1.00	MH	0	9	91	57.7	38.0	19.7	33.4
2	1.55-1.85	SM-SC	1	60	39	22.7	17.7	5.0	7.0
TP-4	0.50-1.00	MH	0	12	88	57.3	30.3	27.0	49.3

Specific Gravity

SAMPLE NUMBER	DEPTH (m)	SPECIFIC GRAVITY (SG)
1	0.55 - 1.00	2.54
2	1.55 - 1.85	2.36
TP-4	0.50 - 1.00	2.46

AVERAGE SPECIFIC GRAVITY: 2.45

Site 34 Cerro Grande, San Vicente



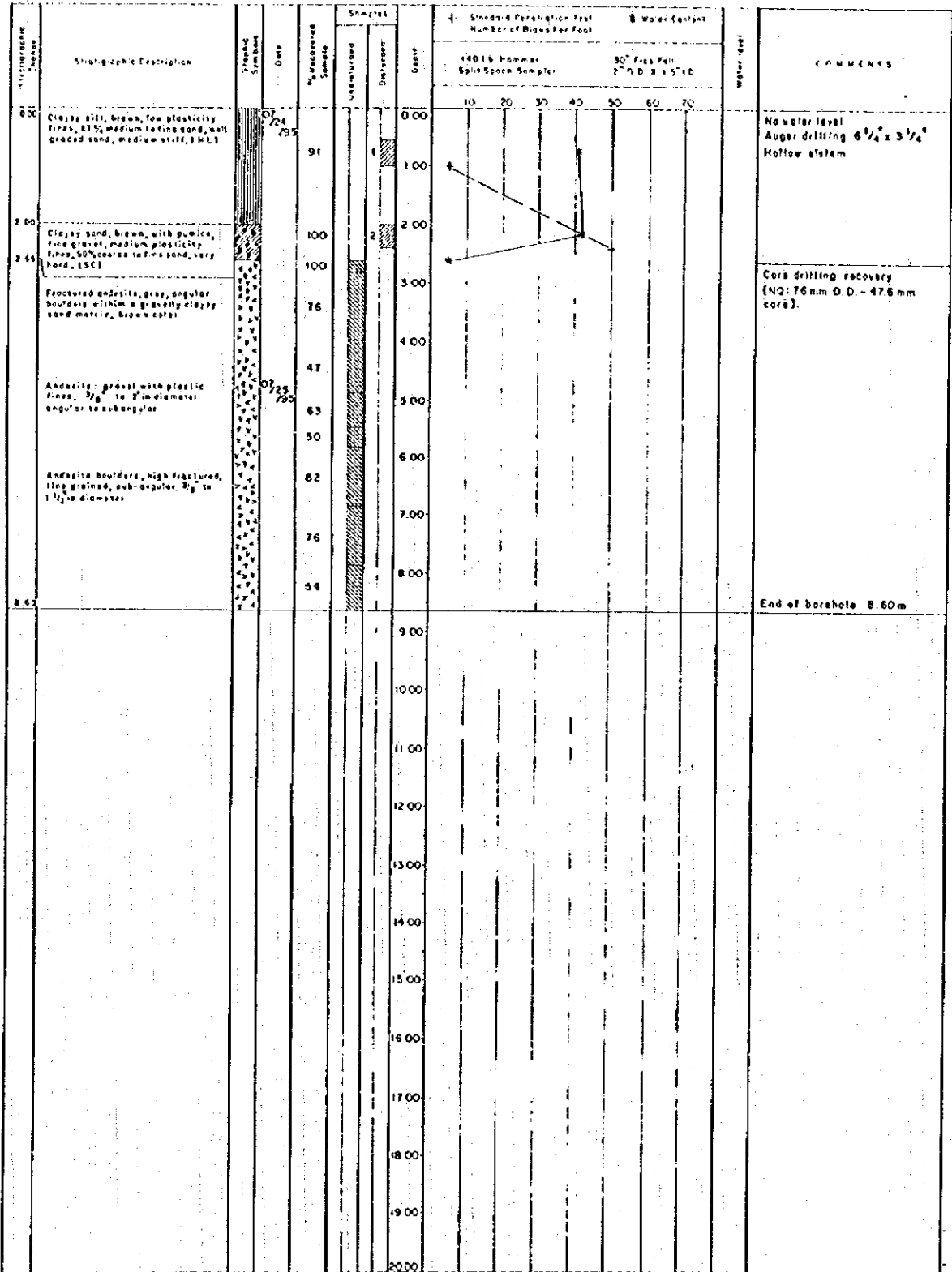
TEST PIT #1, 3 - 4

- 0.00-0.20 Organic sandy silt with roots, brown, non plastic fines, \pm 20% medium to fine sand. (ML-OL)
- 0.20-1.00 Organic sandy silt, brown, low plasticity fines, \pm 20% medium to fine sand. (ML-OL)

TEST PIT #2

- 0.00-0.60 Organic sandy silt, dark brown, non plastic fines, \pm 20% coarse to fine sand. Contains gravel, cobbles and large diameter sub rounded boulders.

34 Cerro Grande, San Vicente



SITE 34 CERRO GRANDE, SAN VICENTE
BH-7 SUMMARY OF LABORATORY TEST RESULTS

Grain Size Distribution, Water Content, Atterberg Limits and Soil Classification

SAMPLE No.	DEPTH (m)	CLASSIFICATION (SUCS)	GRAIN SIZE (%)			ATTERBERG LIMITS			WATER CONTENT
			G	S	F	LL	PL	PI	
1	0.55-1.00	MI	0	47	53	29.2	24.9	4.3	40.2
2	2.00-2.40	SC	11	50	39	42.3	30.6	11.7	41.6
3	2.65-2.77	GM	64	18	18	Non Plastic			5.5

Specific Gravity

SAMPLE NUMBER	DEPTH (m)	SPECIFIC GRAVITY (SG)
1	0.55 - 1.00	2.47
2	2.00 - 2.40	2.32
3	2.65 - 2.77	2.32
AVERAGE SPECIFIC GRAVITY:		2.37

ASTM Soil Classification

MAJOR DIVISIONS			GRAPHIC SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS <small>MORE THAN 80% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE</small>	GRAVEL AND GRAVELLY SOILS <small>MORE THAN 80% OF COARSE FRACTION PASSING NO. 4 SIEVE</small>	CLEAN GRAVELS <small>(LITTLE OR NO FINES)</small>		GW	WELL - GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES.
		GRAVELS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GP	POORLY - GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES.
		GRAVELS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES.
	SAND AND SANDY SOILS <small>MORE THAN 80% OF COARSE FRACTION PASSING NO. 4 SIEVE</small>	CLEAN SAND <small>(LITTLE OR NO FINES)</small>		SW	WELL - GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SP	POORLY - GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES.
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		SM	SILTY - SANDS, SAND - SILT MIXTURES.
FINE GRAINED SOILS <small>MORE THAN 80% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE</small>	SILTS AND CLAYS <small>LIQUID LIMIT LESS THAN 50</small>	CLEAN SAND <small>(LITTLE OR NO FINES)</small>		ML	INORGANIC SILTS AND VEALY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY.
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS.
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY.
	SILTS AND CLAYS <small>LIQUID LIMIT GREATER THAN 50</small>	SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS.
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS.
		SANDS WITH FINES <small>(APPRECIABLE AMOUNT OF FINES)</small>		OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS.
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS.

資料9 相手国側負担工事の内訳

サイト名	1) 敷地造成	(敷地造成内訳)			2) 法面保護	3) 建物撤去	4) 薪木伐採	5) 道路改修	6) 電気引込	7) 水道引込	8) 門原工事	合計 (30%)
		切土	盛土	搬入盛土								
1 Anapala	282m ² €18,440	282m ² €5,000	224m ² €13,440	m ²	72m ² 8,640	m ²	m ²	m	m	10m €2,000	147m €20,730	49,810
2 C/Chariac (対象外)	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	m	m	m	
3 I.N. de Sessor	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	150m €4,000	m	280m €32,700	36,700
4 Cas/El Chirrión	180m ² €24,620	33m ² €5,000	33m ² €1,980	147m ² €17,640	91m ² €10,920	390m ² €3,900	100m ² €16,000	m	m	m	50m €12,000	57,440
5 C/El Quebracho (対象外)	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	m	m	m	
6 Nahualapa	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	50m €3,000	m	420m €45,300	48,300
7 Lo/La Poza	325m ² €10,000	775m ² €15,000	150m ² €9,000	m ²	m ²	m ²	m ²	m	m	m	202m €25,680	35,680
8 C/El Cahal	775m ² €24,000	m ²	m ²	m ²	129m ² 15,480	1,500m ² €7,500	m ²	m	75m €3,000	m	205m €25,950	75,930
9 Cas/Aneva Prusia	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	m	m	339m €38,010	38,010
10 Hacienda La Poza	915m ² €109,800	m ²	m ²	m ²	126m ² 15,120	90m ² €9,000	840m ² €6,720	m	290m €4,000	m	226m €27,840	172,480
11 I.N. de Puerto El Triunfo	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	2,000m €150,000	200m €30,000	290m €33,600	213,600
12 Cas/El Botoncillo	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	200m €4,000	m	175m €23,250	27,250
13 Cas/Las Flores	198m ² €22,820	99m ² €5,000	99m ² €5,940	99m ² €11,880	62m ² 7,440	m ²	m ²	m	m	m	230m €28,200	58,460
14 C/El Corozo (対象外)	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	m	m	m	
15 C/El Taipetate	m ²	m ²	m ²	m ²	m ²	396m ² €39,600	m ²	m	30m €3,000	m	100m €16,300	59,100
16 Cas/El Junquillo	455m ² €14,500	455m ² €10,000	75m ² €4,500	m ²	75m ² €9,000	m ²	m ²	m	m	10m €2,000	110m €17,400	42,900
17 Cas/La Capilla	300m ² €9,140	300m ² €5,000	69m ² €4,140	m ²	15m ² €1,800	20m ² €300	m ²	m	m	m	130m €19,200	30,440
18 Cas/Los Lazos	435m ² €53,000	70m ² €5,000	70m ² €4,200	365m ² €43,800	70m ² €8,400	810m ² €6,480	m ²	m	m	m	108m €17,220	85,100
19 Volcancillo	390m ² €32,080	390m ² €10,000	390m ² €22,080	m ²	130m ² €15,000	m ²	m ²	m	m	m	180m €23,700	71,380
20 Maquila	175m ² €11,780	175m ² €5,000	113m ² €6,780	m ²	94m ² €11,280	396m ² €39,600	m ²	m	20m €3,000	10m €2,000	196m €25,140	92,800
21 Col/San Francisco	m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	120m €3,500	m	322m €36,480 C	39,980

サイト名	1) 敷地造成		(敷地造成内訳)				2) 法面保護	3) 建物撤去	4) 樹木伐採	5) 道路改修	6) 電気引込	7) 水道引込	8) 門扉工事	合計 (円)
	敷地造成	切土	盛土	盛土	盛土	盛土								
22 C/El Guavabito (対象外)	m ²		m ²	m ²	m ²	m ²	m ²	m ²	m ²	m	m	m	m	
23 C/La Cañada	105m ² €13,040	76m ² €5,000	76m ² €4,560	29m ² €3,480	32m ² €3,840			60m ² €900					140m €20,100	37,880
24 C/Los Conejos	m ²		m ²	m ²	m ²						150m €3,600		152m €21,180	24,780
25 El Carbajal	m ²		m ²	m ²	m ²						100m €3,500		150m €21,000	24,500
26 C/Higueras	m ²		m ²	m ²	m ²		140m ² 14,000	50m ² €750				10m €2,000	124m €18,660	35,410
27 C/Tolina	m ²		m ²	m ²	m ²		308m ² 30,800	300m ² €2,400					153m €21,270	54,470
28 Cas/La Ceiba	938m ² €20,000	938m ² €20,000			54m ² 6,480						100m €3,500		110m €17,400	47,380
29 Cas/Los Guzmanes	675m ² €17,160	675m ² €17,160	36m ² 2,160		7m ² 840						100m €3,500		214m €26,760	48,260
30 C/Joya de Las Tunas	m ²		m ²	m ²	m ²		18m ² €1,800				50m €2,000		0	3,800
31 Cas/Pueblo Viejo	215m ² €25,220	215m ² €5,220	215m ² €12,900	61m ² €7,320	110m ² €13,200						20m €2,000		145m €20,550	60,970
32 Cas/Las Huertas	m ²		m ²	m ²	m ²								254m €160	160
33 C/La Laguna	m ²		m ²	m ²	m ²			40m ² €600				100m €15,000		15,600
34 C/Cerro Grande	337m ² 32,060	225m ² €5,000	225m ² €13,500	113m ² €13,560			17m ² €1,700	50m ² €750			250m €4,200	10m €2,000		40,710
35 C/San Marcos	m ²		m ²	m ²	m ²								270m €31,800	33,800
(1) Cas/Teheacán	m ²		m ²	m ²	m ²									2,000
(2) Cas/El Porvenir	m ²		m ²	m ²	m ²							10m €2,000	394m €42,960	44,960
(3) C/El Puente (対象外)	m ²		m ²	m ²	m ²									
(4) C/Santa Eúvigas (対象外)	m ²		m ²	m ²	m ²									
(5) C/Las Anonas	m ²		m ²	m ²	m ²			50m ² €400				10m €2,000	190m €24,600	27,000
(6) Cas/San Francisco co. de la Cruz	m ²		m ²	m ²	m ²				100m ² €16,000				280m €32,700	48,700
合計 (円)	437,660	125,000	105,180	207,480	128,040		136,500	30,700	32,000	203,800	59,000	768,040	1,795,740	

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