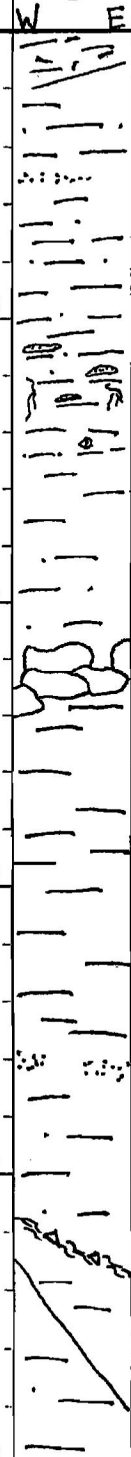


DOCKETED	
Docket Number:	24-OPT-02
Project Title:	Compass Energy Storage Project
TN #:	264552
Document Title:	Geotechnical Evaluation Report (TN #255561-6) References Part 2_5 of 9
Description:	N/A
Filer:	Erin Phillips
Organization:	Dudek
Submitter Role:	Applicant Consultant
Submission Date:	7/2/2025 6:58:42 PM
Docketed Date:	7/2/2025

DATE STARTED: 8/8/01 DATE ENDED: 8/9/01
 DRILLING COMPANY: Tri Valley
 EQUIPMENT USED: Bucket Auger
 HOLE DIAMETER (in.) 30"
 DRIVE DROP (in.) 12"
 DRIVE WEIGHT (lbs.) See Notes

Boring No. B-3

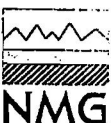
GROUND SURFACE ELEVATION: 292 ft
 DATUM: MSL
 LOCATION:
 COORD/STATION:

Elevation (ft.)	Depth (ft.)	Graphic Log	Altitudes	Sample Method and Number	Blow Count/ Penetration	Soil Class. (U.S.C.S.)	DESCRIPTION		Dry Density (pcf)	Moisture Content (%)	Remarks
							Logged By: KV/WG	Sampled By: KV			
240	55			D-8	1		@ 50' SAMPLE: Dark gray CLAY, very moist, medium stiff, abundant FeO and MnO stain, plastic, caliche. @ 50.3' Thin organic horizons, dipping northwest, carbon chips; below is medium gray clay. @ 52' Interbedded gray green SILT and dark gray to olive brown CLAYS, abundant caliche stringers and FeO stain, very plastic. @ 52.5' Discontinuous white SAND, 1/4" thick, west wall.		95.7	28.5	
60				SB-2			@ 56' Green black to black unoxidized silty CLAY/clayey SILT, very moist, medium stiff, plastic, micaceous, trace organics (roots), light brown siltstone and sandstone fragments, strongly odoriferous, carbon chips.				
230	65			D-9	1		@ 60' SAMPLE: Dark green gray to green black unoxidized clayey SILT, moist, slightly plastic, micaceous, trace organics, MnO stain. @ 60.6'-62' Pods and irregularly-shaped light yellow brown concretions.		88.7	33.5	
70				D-10	1		@ 67' Color changes to dark gray. @ 68.2' White sandy zone, discontinuous.				
220				SB-3			@ 70' SAMPLE: Same as at 60 ft.		91.6	31.0	
75			RS: N5E 26SE J: N-S 39E				@ 71.5' Rupture surface: planar surface at base of light gray CLAY, very plastic, possible striations down-dip. Capistrano Formation (Tc) @ 72' Low angle joint.				

GEOTECHNICAL LOG OF BORING

01012-02

CUSD/Rancho Capistrano



DATE STARTED: 8/8/01 DATE ENDED: 8/9/01
 DRILLING COMPANY: Tri Valley
 EQUIPMENT USED: Bucket Auger
 HOLE DIAMETER (in.) 30"
 DRIVE DROP (in.) 12"
 DRIVE WEIGHT (lbs.) See Notes

Boring No. B-3

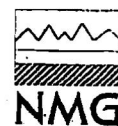
GROUND SURFACE ELEVATION: 292 ft
 DATUM: MSL
 LOCATION:
 COORD/STATION:

Elevation (ft.)	Depth (ft.)	Graphic Log	Attitudes	Sample Method and Number	Blow Count/ Penetration	Soil Class. (U.S.C.S.)	DESCRIPTION	Dry Density (pcf)	Moisture Content (%)	Remarks
							Logged By: KV/WG Sampled By: KV			
							@ 75' Material changes to hard clayey SILTSTONE.			
80				D-11	28		@ 80' SAMPLE: Dark green black slightly clayey unoxidized SILTSTONE, damp to moist, hard, massive, micaceous, weathered foraminifera. @ 80.8' Discontinuous sand lenses.	96.8	27.1	
210							@ 83.8' Planar partings.			
85										
90				D-12	50		@ 90' SAMPLE: Same as at 80 ft.	92.3	29.7	
200										
95										
100							@ 99-101' Concretion, west and south walls, seepage at base.			

**GEOTECHNICAL
LOG OF BORING**

01012-02

CUSD/Rancho Capistrano



DATE STARTED: 8/8/01 DATE ENDED: 8/9/01
 DRILLING COMPANY: Tri Valley
 EQUIPMENT USED: Bucket Auger
 HOLE DIAMETER (in.) 30"
 DRIVE DROP (in.) 12"
 DRIVE WEIGHT (lbs.) See Notes

Boring No. B-3

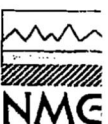
GROUND SURFACE ELEVATION: 292 ft
 DATUM: MSL
 LOCATION:
 COORD/STATION:

Elevation (ft.)	Depth (ft.)	Graphic Log	Altitudes	Sample Method and Number	Blow Count/ Penetration	Soil Class. (U.S.C.S.)	DESCRIPTION		Dry Density (pcf)	Moisture Content (%)	Remarks
							Logged By: KV/WG	Sampled By: KV			
190				D-13	48		@ 101' SAMPLE: Same as at 90 ft., coprolite.		92.7	29.9	
105				D-14	43		@ 107.5' SAMPLE: Same as at 101 ft.		91.0	30.9	
110							@ 112.5' Concretion, slight seepage.				
180				D-15	66		@ 115' SAMPLE: Same as at 107.5 ft.		97.0	26.4	
115							@ 123' SAMPLE: Same as at 115 ft.		100.8	24.1	
120				D-16	53						
170											
125											

**GEOTECHNICAL
LOG OF BORING**

01012-02

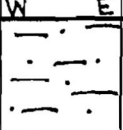
CUSD/Rancho Capistrano



DATE STARTED: 8/8/01 DATE ENDED: 8/9/01
 DRILLING COMPANY: Tri Valley
 EQUIPMENT USED: Bucket Auger
 HOLE DIAMETER (in.) 30"
 DRIVE DROP (in.) 12"
 DRIVE WEIGHT (lbs.) See Notes

Boring No. B-3

GROUND SURFACE ELEVATION: 292 ft
 DATUM: MSL
 LOCATION:
 COORD/STATION:

DESCRIPTION											
Elevation (ft.)	Depth (ft.)	Graphic Log	Altitudes	Sample Method and Number	Blow Count/ Penetration	Soil Class. (U.S.C.S.)	Logged By: <u>KV/WG</u>	Sampled By: <u>KV</u>	Dry Density (pcf)	Moisture Content (%)	Remarks
											
130							NOTES Total Depth 127 ft. Groundwater Not Encountered Seepage Encountered at 101.5 ft. and 112 ft. Downhole Logged to 126 ft. Backfilled and Tamped 0-110 ft. Drive Weights: 0-28'/5952, 28-55'/3921, 55-84'/2531, 84-110'/1407, 110-168'/1600				
160											
135											
140											
150											
145											
150											

**GEOTECHNICAL
LOG OF BORING**

01012-02

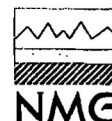
CUSD/Rancho Capistrano



Date(s) Drilled	5/30/01	Logged By	BO	H-1 Sheet 1 of 3	
Drilling Company	2R Drilling	Drill Bit Size/Type	8"		
Drill Rig Type	CME 55	Hammer Data	140 lbs. @ 30" Drop		
Sampling Method(s)	Modified California				
Approximate Groundwater Depth: 6 feet				Total Depth Drilled (ft)	95.5
Comments				Approximate Ground Surface Elevation (ft)	205.0 MSL

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
0					ML	Alluvium (Qal) @ 0' Yellowish brown silty fine SAND/fine sandy SILT, damp.			
200	5	D-1	9			@ 5' Mottled grayish brown and dark grayish brown clayey SILT, moist, medium stiff, occasional root hairs, plastic, occasional charcoal, sandy silt in upper rings.	24.5	93.9	
	10	D-2	5			@ 10' Dark grayish brown to brown clayey SILT, wet, soft, abundant caliche stringers, plastic; dark gray and grayish brown clay in tip.	31.3	90.5	
190	15	D-3	12		CL	@ 15' Dark grayish brown silty CLAY, moist, medium stiff to stiff, slightly to moderately porous, abundant caliche, plastic; sandy clay in tip.	29.7	93.0	
	20	D-4	13			@ 20' Dark grayish brown silty CLAY, moist, medium stiff, moderately porous, abundant caliche/gypsum, plastic.	27.2	98.2	
180	25	D-5	13		CL/ML	@ 25' Dark grayish brown silty CLAY/clayey SILT, moist, medium stiff, no visible porosity, abundant caliche veins/stringers, very plastic.	25.0	98.3	
30									

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



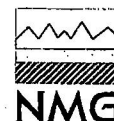
CUSD/Rancho Capistrano

San Juan Capistrano

H-1
Sheet 2 of 3

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
30		D-6	9		ML/CL	@ 30' Dark grayish brown clayey SILT/silty CLAY, moist, medium stiff, very plastic; very pale brown sandy silt in tip.	29.2	95.8	
170	35	D-7	14		ML	@ 35' Light brownish gray slightly clayey fine sandy SILT, very moist, stiff; dark gray silty clay/clayey silt in upper rings.	25.0	100.3	
40		SB-1 D-8	12			@ 40' Top: Dark olive gray clayey SILT, very moist, medium stiff, very plastic, scattered organic fragments. Tip: Olive gray fine sandy SILT, very moist, medium stiff.	30.5	96.0	SB-1 @ 40'
160	45	D-9	13		CL	@ 45' Olive gray silty CLAY, moist, medium stiff, plastic, some FeO mottling.	29.3	95.7	GS, AL
50		D-10	14		CH	@ 50' Dark olive gray silty CLAY, very moist, stiff, plastic, some FeO mottling, occasion gypsum crystals.	29.9	93.3	GS, AL
150	55	D-11	13			@ 55' Olive gray silty CLAY, very moist, stiff; dark gray clay with rock fragments and FeO mottling in tip.	28.1	95.2	
60		D-12	17		CL	@ 60' Olive gray CLAY, very moist, stiff.	30.9	93.6	GS, AL
140	65								

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



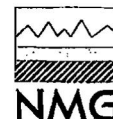
CUSD/Rancho Capistrano

San Juan Capistrano

H-1
Sheet 3 of 3

Elevation (ft)	Depth (ft)	SAMPLES			USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number	Blows per foot					
140	65		D-13	16	ML	@ 65' Olive gray clayey SILT, very moist, stiff, scattered pale yellow bedrock fragments, slightly micaceous.	26.5	99.3	
	70		D-14	15		@ 70' Olive gray clayey SILT, very moist, stiff, slightly micaceous, occasional FeO-stained pockets.	30.6	93.1	
-130	75		D-15	15	ML/CL	@ 75' Olive gray clayey SILT/silty CLAY, very moist, stiff, abundant siltstone fragments, occasional oxidized root fragment, fine sandy layer (1/8") in tip.	34.5	88.3	
	80		D-16	74	CL SP	@ 80' Top: Olive gray coarse sandy CLAY, saturated, soft. Tip: Light brownish gray medium to coarse SAND with clay lenses, wet, dense. Note: Spacer broken in sampler.	22.5	105.4	SB-2 @ 81.5'
-120	85		D-17	25	CL SC	@ 85' Top: Grayish brown coarse sandy CLAY, saturated, soft. Tip: Dark gray and brown clayey coarse SAND with pebbles, moist, medium dense.	19.5	109.3	
	90		D-18	38	SLST	Capistrano Formation (Tc) @ 90' Dark olive gray to black clayey SILTSTONE, moist, very stiff, weathered foraminifera and fish scales, strong petroliferous odor; clayey coarse sand with pebbles in upper rings.	38.6	84.8	
-110	95		D-19	50/6"		@ 95' Same as at 90 ft., very stiff.	29.7	93.4	
100						NOTES Total Depth 95.5 ft. Groundwater Encountered at 6 ft. Bedrock (Tc) Encountered at Approximately 90.5 ft. Backfilled with Cuttings			

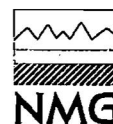
LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



Date(s) Drilled	5/30/01	Logged By	BO	H-2 Sheet 1 of 3	
Drilling Company	2R Drilling	Drill Bit Size/Type	8"		
Drill Rig Type	CME 55	Hammer Data	140 lbs. @ 30" Drop		
Sampling Method(s)	Modified California				
Approximate Groundwater Depth: 12 feet				Total Depth Drilled (ft)	71.5
Comments				Approximate Ground Surface Elevation (ft)	208.0 MSL

Elevation (ft)	Depth (ft)	SAMPLES			USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number	Blows per foot					
0					ML	Alluvium (Qal)			
5		D-1	7			@ 5' Dark grayish brown to olive brown slightly clayey SILT, moist, medium stiff, slightly porous, occasional roots, scattered caliche.	25.0	95.1	
-200									
10		D-2	8			@ 10' Dark grayish brown slighty clayey SILT, very moist, medium stiff, trace porosity	26.9	98.4	GS, AL
15		D-3	8			@ 15' Same as at 10 ft., slightly porous.	26.4	98.0	GS, AL
-190									
20		D-4	13		CL	@ 20' Dark grayish brown silty CLAY, very moist, medium stiff, very plastic, abundant caliche.	28.7	95.1	
25		D-5	11			@ 25' Same as at 20 ft., olive gray.	30.9	93.5	
-180									
30									

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



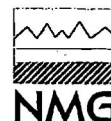
CUSD/Rancho Capistrano

San Juan Capistrano

H-2
Sheet 2 of 3

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
30		D-6	10		ML	@ 30' Olive gray clayey SILT, very moist, medium stiff, abundant caliche, plastic.	27.8	96.4	
35		D-7	13		CL CL/ML	@ 35' Top: Olive gray medium to coarse sandy CLAY, very moist, stiff, FeO mottling, gray silt in upper rings. Tip: Grayish brown silty CLAY/clayey SILT, very moist, medium stiff, occasional silt pockets.	26.2	98.0	
40		D-8	10		ML CH	@ 40' Top: Olive gray clayey SILT, very moist, medium stiff, plastic, FeO mottling. Tip: Very dark gray silty CLAY, very moist, medium stiff, very plastic, scattered caliche.	28.4	96.1	GS, AL
45		D-9	13		CL/ML CL	@ 45' Top: Dark olive gray silty CLAY/clayey SILT, very moist, medium stiff, scattered caliche, FeO mottling. Tip: Dark olive gray silty CLAY, very moist, medium stiff, very plastic, abundant caliche.	25.5	99.4	GS, AL
50		D-10	19			@ 50' Very dark gray CLAY, moist, medium stiff to stiff, scattered caliche, sparse rounded pebbles.	21.5	106.4	
55		D-11	22		ML	@ 55' Dark gray clayey SILT, very moist, medium stiff to stiff, FeO mottling, micaceous, sparse caliche.	25.4	99.8	
60		D-12	23			@ 60' Dark olive gray clayey SILT, moist, stiff, abundant FeO mottling, micaceous, sub-vertical gypsum/caliche-lined fractures, possible weathered bedrock.	30.3	92.8	
65									

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



CUSD/Rancho Capistrano		San Juan Capistrano		H- 2		Sheet 3 of 3			
Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Blows per foot						
65		D-13	20		ML/CL	@ 65' Dark olive gray silty CLAY/clayey SILT, moist, stiff, abundant MnO-stained joints/fractures, micaceous.	37.3	86.9	
140									
70		SB-1 D-14 SB-2	33		ML SM	@ 70' Top: Olive gray fine sandy SILT, moist, stiff, organic-rich silt layer in upper rings. Tip: Dark gray clayey silty fine to medium SAND, moist, medium dense.	24.1	107.4	SB-1 @ 70' SB-2 @ 71.5'
75									
130									
80									
85									
120									
90									
95									
110									
100									

LOG OF BORING

CUSD/Rancho Capistrano

San Juan Capistrano

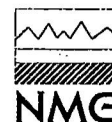
PROJECT NO. 01012-02



NMG

NOTES
Total Depth 71.5 ft.
Groundwater Encountered at 12.5 ft.
Backfilled with Cuttings

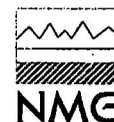
LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



Date(s) Drilled	5/31/01	Logged By	BO	H-3 Sheet 1 of 4	
Drilling Company	2R Drilling	Drill Bit Size/Type	8"		
Drill Rig Type	CME 55	Hammer Data	140 lbs. @ 30" Drop		
Sampling Method(s)	Modified California				
Approximate Groundwater Depth: 12 feet				Total Depth Drilled (ft)	101.5
Comments				Approximate Ground Surface Elevation (ft)	205.0 MSL

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
0					ML	Alluvium (Qal)			
200	5	D-1	6		CL	@ 5' Top: Dark grayish brown clayey SILT, very moist, medium stiff, plastic. Tip: Very dark gray silty CLAY, very moist, medium stiff, very plastic, abundant caliche stringers.	30.2	92.6	
	10	D-2	8			@ 10' Very dark grayish brown silty CLAY, very moist, medium stiff, very plastic, abundant caliche stringers.	27.1	96.6	
190	15	D-3	11			@ 15' Same as at 10 ft.	28.2	95.2	
	20	SB-1 D-4	8		ML CL	@ 20' Dark grayish brown CLAY, very moist, medium stiff, scattered caliche, slightly porous, grades dark gray and stiffer in tip; clayey silt in upper rings.	27.6	95.4	SB-1 @ 20'
180	25	D-5	9			@ 25' Olive gray CLAY, very moist, medium stiff, scattered caliche.	24.5	100.2	
	30								

LOG OF BORING
 CUSD/Rancho Capistrano
 San Juan Capistrano
 PROJECT NO. 01012-02



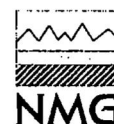
CUSD/Rancho Capistrano

San Juan Capistrano

H-3
Sheet 2 of 4

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
30		D-6	9		CL ML	@ 30' Grayish brown clayey SILT, very moist, medium stiff, plastic, slightly micaceous, clay in upper rings.	28.5	95.3	
170 35		D-7	10			@ 35' Same as at 30 ft., wet, very plastic.	29.4	94.8	
40		SB-2 D-8	12		CL	@ 40' Very dark gray silty CLAY and CLAY, very moist, medium stiff to stiff, scattered charcoal in upper rings; gray silt in upper rings.	36.2	87.7	SB-2 @ 40'
160 45		D-9	10		CL/ML	@ 45' Very dark gray brown silty CLAY/clayey SILT, very moist, medium stiff.	26.9	98.2	
50		D-10	13		CL	@ 50' Dark grayish brown CLAY, very moist, stiff.	31.2	94.7	
150 55		D-11	15		ML	@ 55' Dark grayish brown clayey SILT, very moist, stiff, micaceous.	25.6	102.3	
60		SB-3 D-12	13		CL ML	@ 60' Top: Grayish brown slightly clayey SILT, very moist, stiff, micaceous; sandy silt with charcoal in upper rings. Tip: Very dark grayish brown silty CLAY, very moist, stiff, plastic; fine sandy silt in tip of sampler.	28.0	94.8	SB-3 @ 60'
		SB-4							SB-4 @ 61.5'
140 65									

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



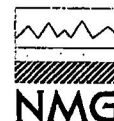
CUSD/Rancho Capistrano

San Juan Capistrano

H-3
Sheet 3 of 4

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
-140	65	SB-5 D-13	70		SM	@ 65' Grayish brown silty fine SAND, very moist, dense, micaceous; pale brown fine to medium sand with occasional pebbles in tip.	21.5	108.2	SB-5 @ 65'
	70	SB-6 D-14	30		SC SM	@ 70' Top: Grayish brown slightly clayey medium to very coarse SAND, very moist, medium dense; silty fine to coarse sand in upper rings. Tip: Grayish brown clayey silty fine to medium sand, very moist, medium dense.	14.2	119.1	SB-6 @ 70'
-130	75	D-15	43		SC	@ 75' Gray to dark gray clayey medium to very coarse SAND, very moist, dense.	19.0	115.5	
	80	D-16	76		SP	@ 80' Gray to dark gray medium to very coarse SAND with pebbles, wet, very dense; sparse thin clay lenses/pods; clayey sand in upper rings.	10.9	128.6	
-120	85	D-17	55/6"		CL	@ 85' Dark gray to dark grayish brown fine to medium sandy CLAY, wet to saturated, medium stiff, abundant pebbles, some cobbles.	19.6	111.6	
	90	D-18	55			@ 90' Dark gray sandy CLAY, wet to saturated, medium stiff, abundant pebbles.	28.1	96.4	
-110	95	D-19	33			@ 95' Same as at 90 ft., grayish brown.	34.4	89.0	
	100								

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



CUSD/Rancho Capistrano

San Juan Capistrano

H-3
Sheet 4 of 4

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
		D-20	40	---	SLST	Capistrano Formation (Tc) @ 100' Very dark gray to very dark grayish brown SILTSTONE, moist, very stiff, weathered foraminifera, micaceous, petroliferous odor, massive.	34.5	87.2	
100	105					NOTES Total Depth 101.5 ft. Groundwater Encountered at Approximately 12 ft. Bedrock Encountered at 100 ft. Backfilled with Cuttings			
	110								
90	115								
	120								
80	125								
	130								
70	135								

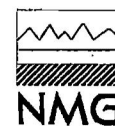
LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



Date(s) Drilled	5/31/01	Logged By	BO	H-4 Sheet 1 of 3	
Drilling Company	2R Drilling	Drill Bit Size/Type	8"		
Drill Rig Type	CME 55	Hammer Data	140 lbs. @ 30" Drop		
Sampling Method(s)	Modified California				
Approximate Groundwater Depth: 24 feet					
Comments				Total Depth Drilled (ft)	71.5
				Approximate Ground Surface Elevation (ft)	203.0 MSL

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number	Blows per foot					
0					SM	Alluvium (Qal) @ 0' Silty fine SAND with pebbles.			
-200		B-1							
5		SB-1 D-1	6		ML/CL CL	@ 5' Top: Interlayered light gray SILT and grayish brown CLAY, moist, medium stiff, micaceous, abundant organics, siltier in upper rings. Tip: Black CLAY, moist, medium stiff.	34.6	86.9	SB-1 @ 5'
10		D-2	10			@ 10' Grayish brown silty CLAY, very moist, medium stiff, plastic; tip is dark to very dark gray.	29.1	91.2	
-190		D-3	23			@ 14' Very dark gray CLAY, moist, stiff, occasional pebbles stringers.	22.6	102.9	
20		SB-2 D-4	10			@ 20' Dark grayish brown CLAY, very moist, medium stiff; silty clay/clayey silt in upper rings.	26.9	97.9	SB-2 @ 20'
-180		D-5	10		SP CL	@ 25' Dark gray to very dark gray CLAY, very moist, medium stiff, scattered caliche; thin sand layer (1") in upper rings.	31.0	93.7	
25									
30									

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



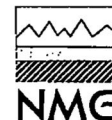
CUSD/Rancho Capistrano

San Juan Capistrano

H-4
Sheet 2 of 3

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number	Blows per foot					
30		D-6		6	ML	@ 30' Dark grayish brown clayey SILT, very moist, soft to medium stiff, occasional gypsum, slightly porous.	29.3	94.8	
170									
35		SB-3 D-7		10	CL ML CL	@ 35' Top: Dark grayish brown SILT, very moist, medium stiff; dark gray clay in upper rings. Tip: Dark gray silty CLAY, very moist, medium stiff.	30.2	90.3	SB-3 @ 35'
40		SB-4 D-8		14	CL/ML ML	@ 40' Top: Grayish brown silty CLAY/clayey SILT, very moist, medium stiff, plastic, scattered gypsum. Tip: Gray clayey SILT, very moist, medium stiff, plastic.	29.1	96.4	SB-4 @ 40'
160									
45		D-9		12	CL SM/ML	@ 45' Top: Dark gray CLAY, very moist, medium stiff to stiff; Tip: Gray to dark gray sandy SILT/silty SAND with clay, very moist, medium stiff to stiff/medium dense.	25.7	98.0	
50		D-10		9		@ 50' No recovery.			
150									
55		SB-5 & 6 D-11		11	SM ML CL	@ 55' Top: Olive brown clayey SILT, very moist, medium stiff, organic fragments in upper rings, silty sand in uppermost rings, dark gray sandy clay in tip.	28.7	95.1	SB-5&6 @ 55'-56.5'
60		D-12		24	SC/CL SM ML	@ 60' Top: Very dark grayish brown silty fine SAND, very moist, medium dense; sandy clay/clayey sand in upper rings; Tip: Dark gray sandy SILT, very moist, stiff.	18.6	138.5	
140									
65									

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



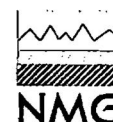
CUSD/Rancho Capistrano

San Juan Capistrano

H-4
Sheet 3 of 3

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
65		D-13 SB-7	20		ML	@ 65' Grayish brown fine sandy SILT, moist, stiff, scattered organics.	22.3	105.0	SB-7 @ 65.5'
70		D-14	41		SM/ML SC	@ 70' Dark gray clayey coarse to very coarse SAND with occasional pebbles, wet, dense; dark gray clayey silty fine sand/fine sandy silt.			
-130									
75						NOTES Total Depth 71.5 ft. Groundwater Encountered at 24 ft. Backfilled with Cuttings			
80									
-120									
85									
90									
-110									
95									
100									

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02

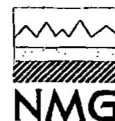


Date(s) Drilled	6/1/01	Logged By	BO
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 55	Hammer Data	140 lbs. @ 30" Drop
Sampling Method(s)	Modified California		
Approximate Groundwater Depth: 10.3 feet			
Comments			

Total Depth Drilled (ft)	61.5
Approximate Ground Surface Elevation (ft)	208.0 MSL

Elevation (ft)	Depth (ft)	SAMPLES			USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number	Blows per foot					
0					CL	Alluvium (Qal)			
5		D-1	12			@ 5' Very dark grayish brown silty CLAY, moist, medium stiff to stiff, slightly porous, occasional organics (small charcoals and grass).	24.6	100.5	
10		D-2	10			@ 10' Dark grayish brown silty CLAY, moist, medium stiff, slightly porous, scattered caliche.	26.5	99.2	
15		D-3	11			@ 16' Dark grayish brown silty CLAY, very moist, medium stiff, scattered caliche.	26.7	98.4	
20		D-4	14			@ 20' Dark grayish brown silty CLAY, very moist, stiff, scattered caliche.	25.3	100.3	
25		D-5	8			@ 25' Brown CLAY, very moist to wet, medium stiff, very plastic.	27.0	96.5	

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



CUSD/Rancho Capistrano

San Juan Capistrano

H-5
Sheet 2 of 2

Elevation (ft)	Depth (ft)	SAMPLES			USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number	Blows per foot					
30		D-6	12		CL	@ 30' Olive brown to yellowish brown CLAY, moist, medium stiff to stiff, slightly porous, scattered caliche.	26.0	99.0	
35		D-7	11			@ 35' Very dark gray CLAY, very moist medium stiff.	26.4	98.5	
40		SB-1 D-8	19		ML CL	@ 40' Top: Light brownish gray and light gray clayey SILT, moist, stiff, organics in upper rings. Tip: Dark grayish brown CLAY, FeO mottling, organics, laminated.	25.4	99.2	SB-1 @ 40'
45		SB-2 D-9	24			@ 45' Grayish brown CLAY, moist, stiff to very stiff, FeO mottled, abundant organics in upper rings.	23.1	103.3	SB-2 @ 45'
50		D-10	16		CL	@ 50' Dark grayish brown CLAY, moist, medium stiff to stiff, FeO and jarosite staining, weathered foraminifera, micaceous, gray in upper rings.	38.9	82.6	
55		D-11	15			@ 55' Same as at 50 ft.	36.4	83.9	
60		SB-3 D-12	17		ML	@ 60' Olive brown clayey SILT, very moist, stiff, charcoal fragments.	28.2	98.2	SB-3 @ 60'
NOTES Total Depth 61.5 ft. Groundwater Encountered at 10.3 ft. Backfilled with Cuttings									

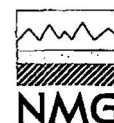
LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



Date(s) Drilled	6/1/01	Logged By	BO	H-6 Sheet 1 of 3	
Drilling Company	2R Drilling	Drill Bit Size/Type	8"		
Drill Rig Type	CME 55	Hammer Data	140 lbs. @ 30" Drop		
Sampling Method(s)	Modified California				
Approximate Groundwater Depth: 17 feet				Total Depth Drilled (ft)	71.5
Comments				Approximate Ground Surface Elevation (ft)	209.0 MSL

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
0					CL	Alluvium (Qal) @ 0' Dark brown silty CLAY, dry, scattered small gravel, dead grass and weeds.			Bag Sample from 0'-5'
		B-1							
5		D-1	9			@ 5' Very dark grayish brown silty CLAY, wet, medium stiff, plastic, slightly porous, sparse charcoal, root hairs.	28.3	93.0	
200									
10		D-2	13			@ 10' Mottled dark grayish brown, very dark brown, and dark yellowish brown silty CLAY, moist, stiff, plastic, slightly porous, caliche veins.	21.8	106.6	
15		D-3	8			@ 15' Mottled yellowish brown, grayish brown, and dark brown silty CLAY, moist to wet, medium stiff, plastic, sparse caliche nodules, trace pinhole porosity, abundant FeO stain, charcoal.	25.6	99.2	
190									
20		D-4	11		ML/CL	@ 20' Mottled grayish brown, dark yellowish brown, and dark brown interlayered SILT and silty CLAY, very moist, medium stiff, FeO stained, clay layers are plastic, FeO stained, scattered charcoal.	25.2	98.9	
25		D-5	17		ML	@ 25' Mottled olive brown, olive gray, yellowish brown, and brown clayey SILT, very moist, stiff, slightly plastic, FeO stained, caliche stringers and sand-sized nodules.	22.3	106.3	
180									
30									

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



CUSD/Rancho Capistrano

San Juan Capistrano

H-6
Sheet 2 of 3

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
	30	D-6	21		CL	@ 30' Olive brown silty CLAY, very moist, stiff, plastic, caliche, charcoal, rock fragments in upper 2 rings.	24.6	101.5	
	35	SB-1 D-7	25		CL/ML	@ 35' Greenish black silty CLAY/clayey SILT, very moist, very stiff, slightly plastic, sparse caliche, moderate charcoal, sparse organics.	23.6	103.8	SB-1 @ 35'
-170	40	SB-2 D-8	23		ML	@ 40' Greenish black clayey SILT, moist to very moist, very stiff, slightly plastic, sparse caliche nodules, charcoal, sparse organics.	26.6	98.2	SB-2 @ 40'
	45	SB-3 D-9	19		CL	@ 45' Dark greenish gray to greenish black silty CLAY, very moist, stiff, plastic, sparse charcoal, wood fragment; clayey silty in upper rings.	29.0	94.9	SB-3 @ 45'
-160	50	SB-4 D-10	31		ML	@ 50' Greenish black, grayish green, and black clayey SILT, moist, very stiff, slightly plastic, abundant charcoal, petroliferous (unoxidized), laminated in tip.	28.4	94.4	SB-4 @ 50'
	55	D-11	31		CL	@ 55' Dark greenish gray silty CLAY, moist, very stiff, plastic, charcoal, sparse organics, petroliferous odor, caliche.	24.6	100.1	
-150	60	D-12	37			@ 60' Same as at 55 ft., very stiff.	25.2	100.0	
	65								

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02



CUSD/Rancho Capistrano

San Juan Capistrano

H-6
Sheet 3 of 3

Elevation (ft)	Depth (ft)	SAMPLES		Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
		Type	Number						
65		SB-5 D-13	36		CL	@ 65' Same as at 60 ft.	29.0	97.3	SB-5 @ 65'
140									
70		D-14	44		SLST, CLST	Capistrano Formation (Tc) @ 70' Dark greenish gray clayey SILTSTONE/silty CLAYSTONE, moist, very stiff to hard, massive, very odoriferous, trace caliche.	26.5	98.6	
75									
130									
80									
85									
120									
90									
95									
110									
100									

NOTES
Total Depth 71.5 ft.
Groundwater Encountered at 17 ft.
Bedrock Encountered at Approximately 70 ft.
Backfilled with Cuttings

LOG OF BORING
CUSD/Rancho Capistrano
San Juan Capistrano
PROJECT NO. 01012-02

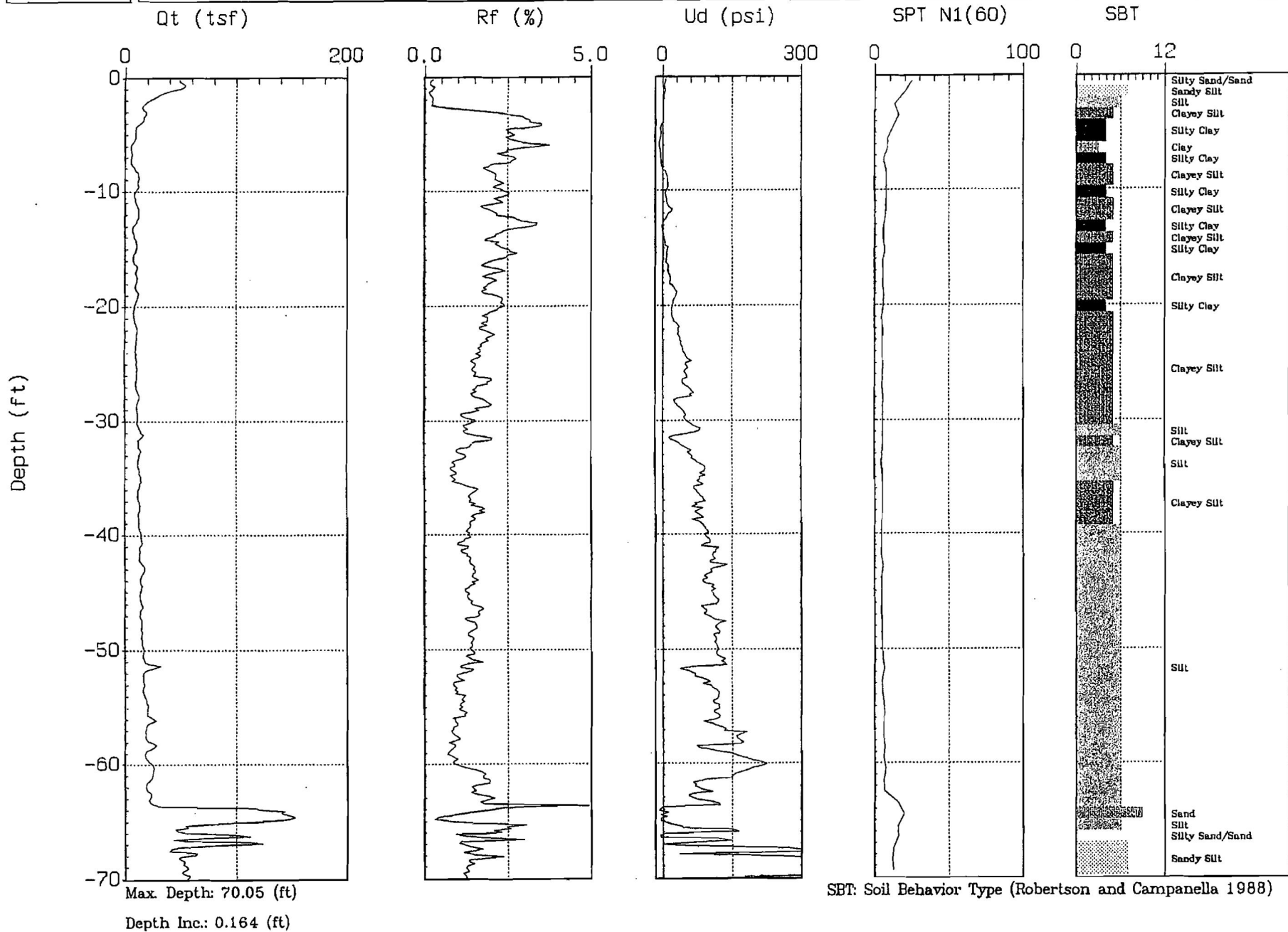


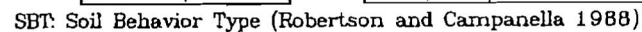
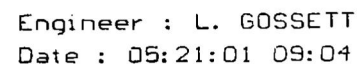


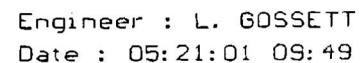
NMG GEOTECHNICAL

Site : CUSD/RANCHO CAPISTRANO
Location : CPT-1

Engineer : L. GOSSETT
Date : 05:21:01 07:09





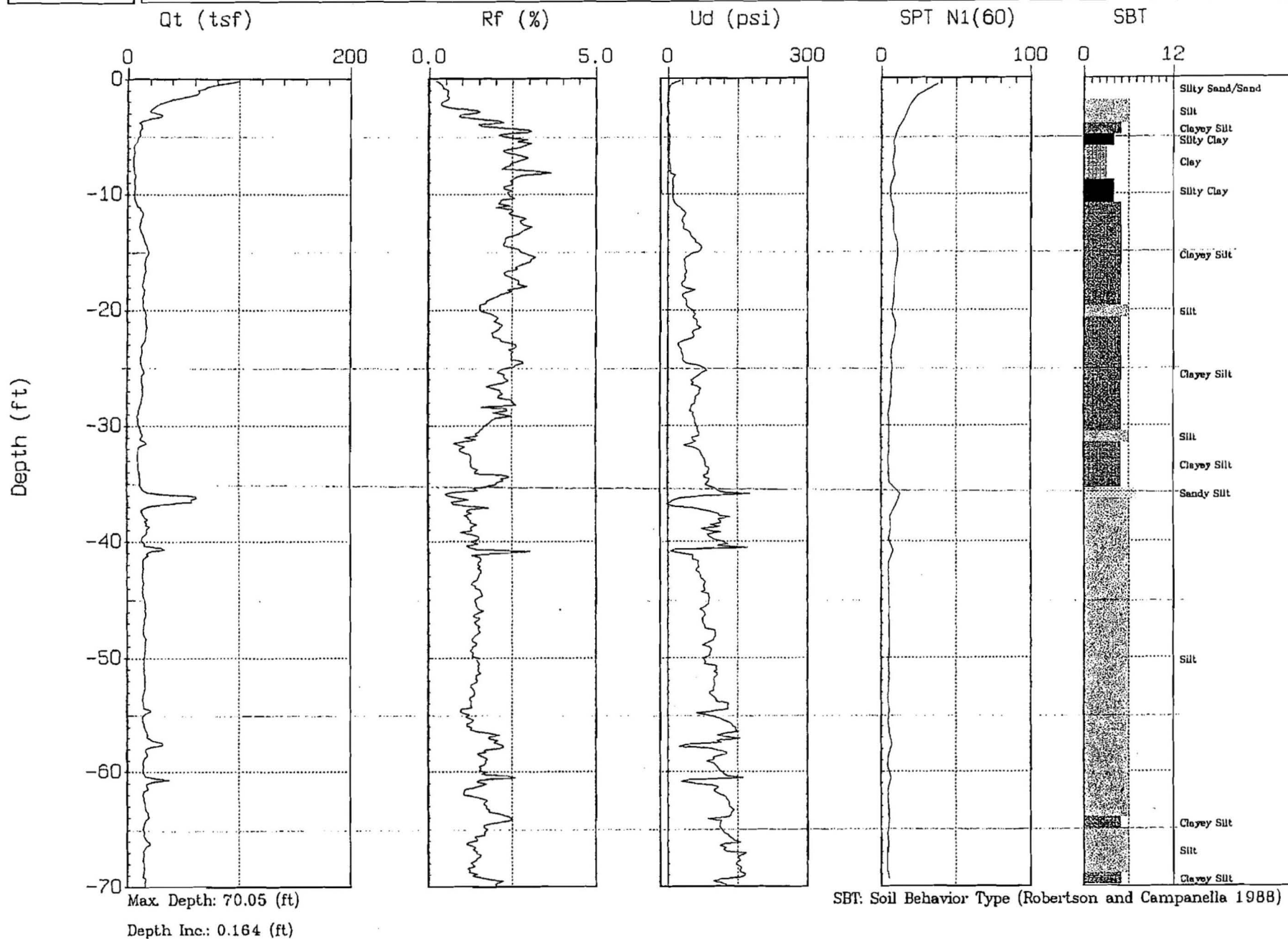




NMG GEOTECHNICAL

Site : CUSD/RANCHO CAPISTRANO
Location : CPT-5

Engineer : L. GOSSETT
Date : 05/21/01 10:44

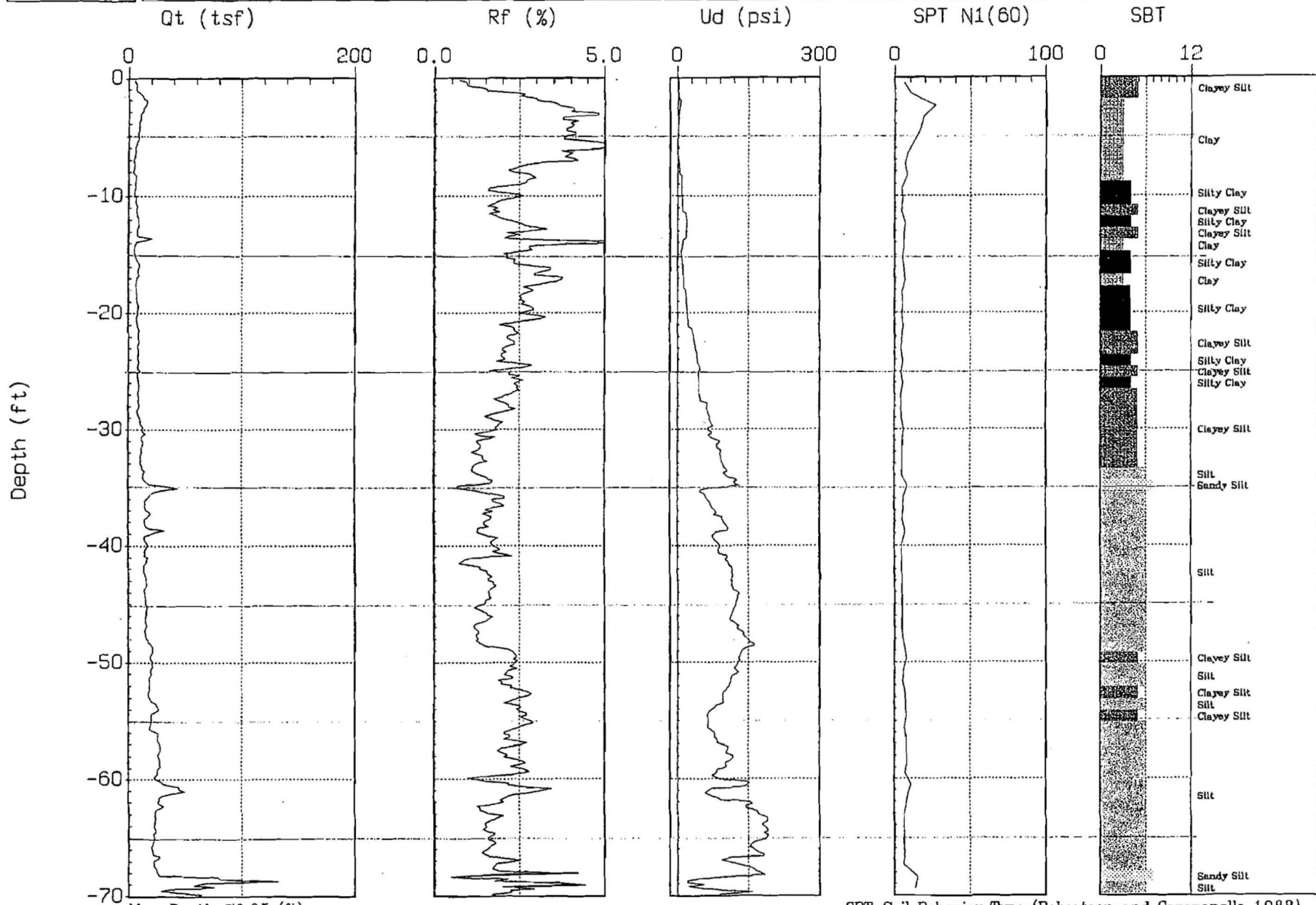




NMG GEOTECHNICAL

Site : CUSD/RANCHO CAPISTRANO
Location : CPT-6

Engineer : L. GOSSETT
Date : 05:21:01 11:40



Max. Depth: 70.05 (ft)

Depth Inc.: 0.164 (ft)

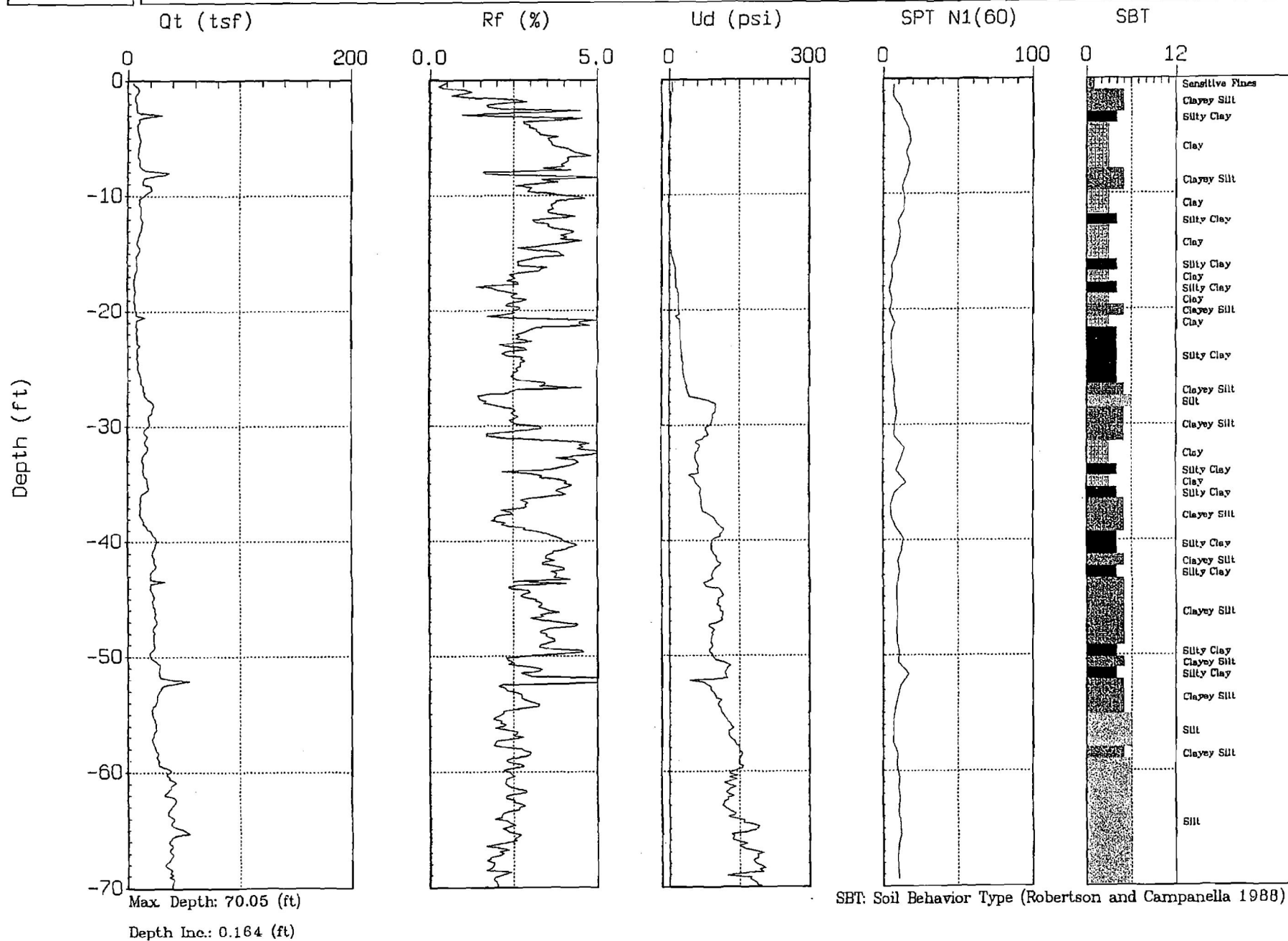
SBT: Soil Behavior Type (Robertson and Campanella 1988)

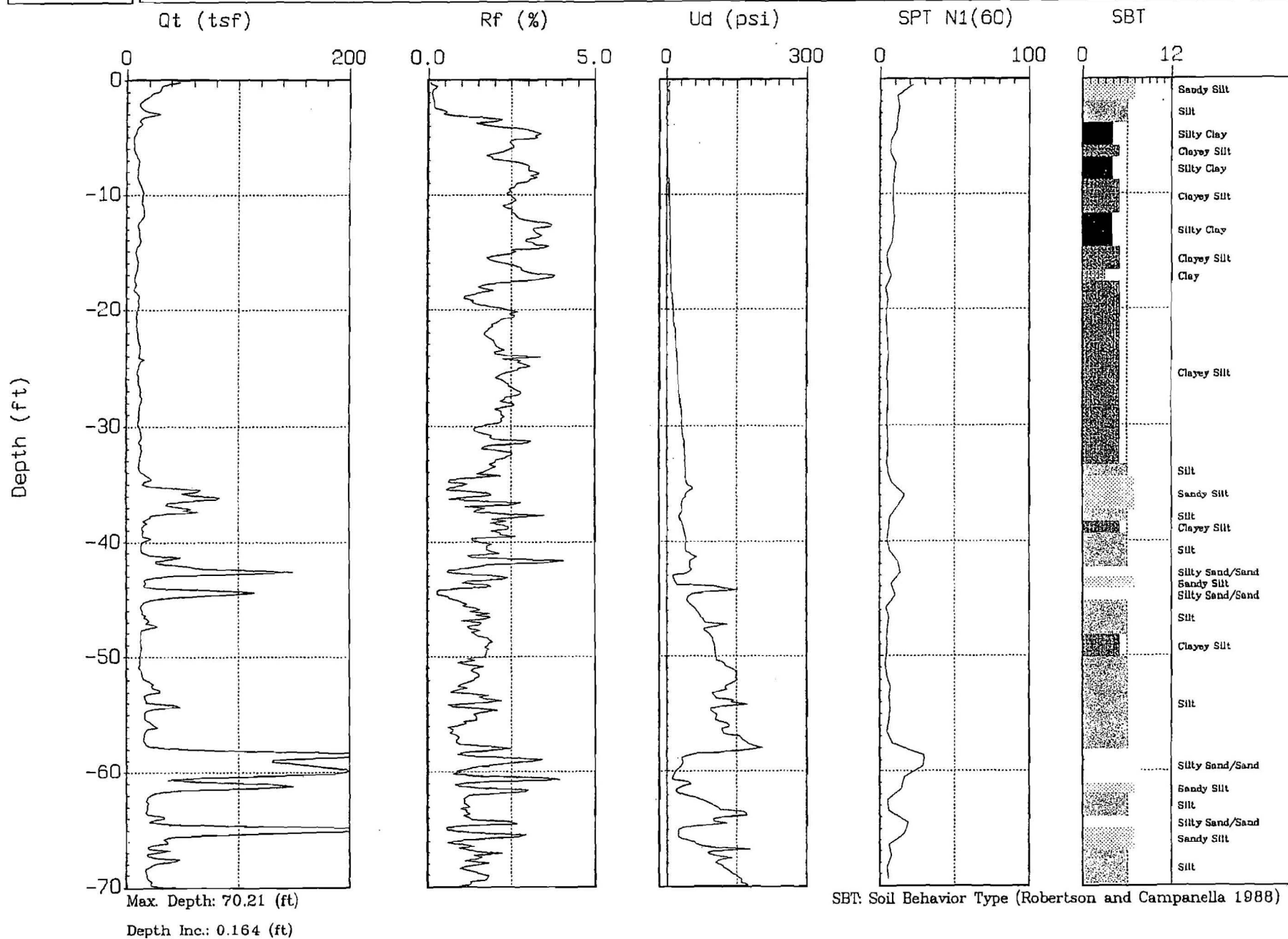
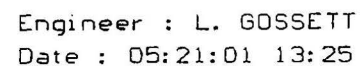


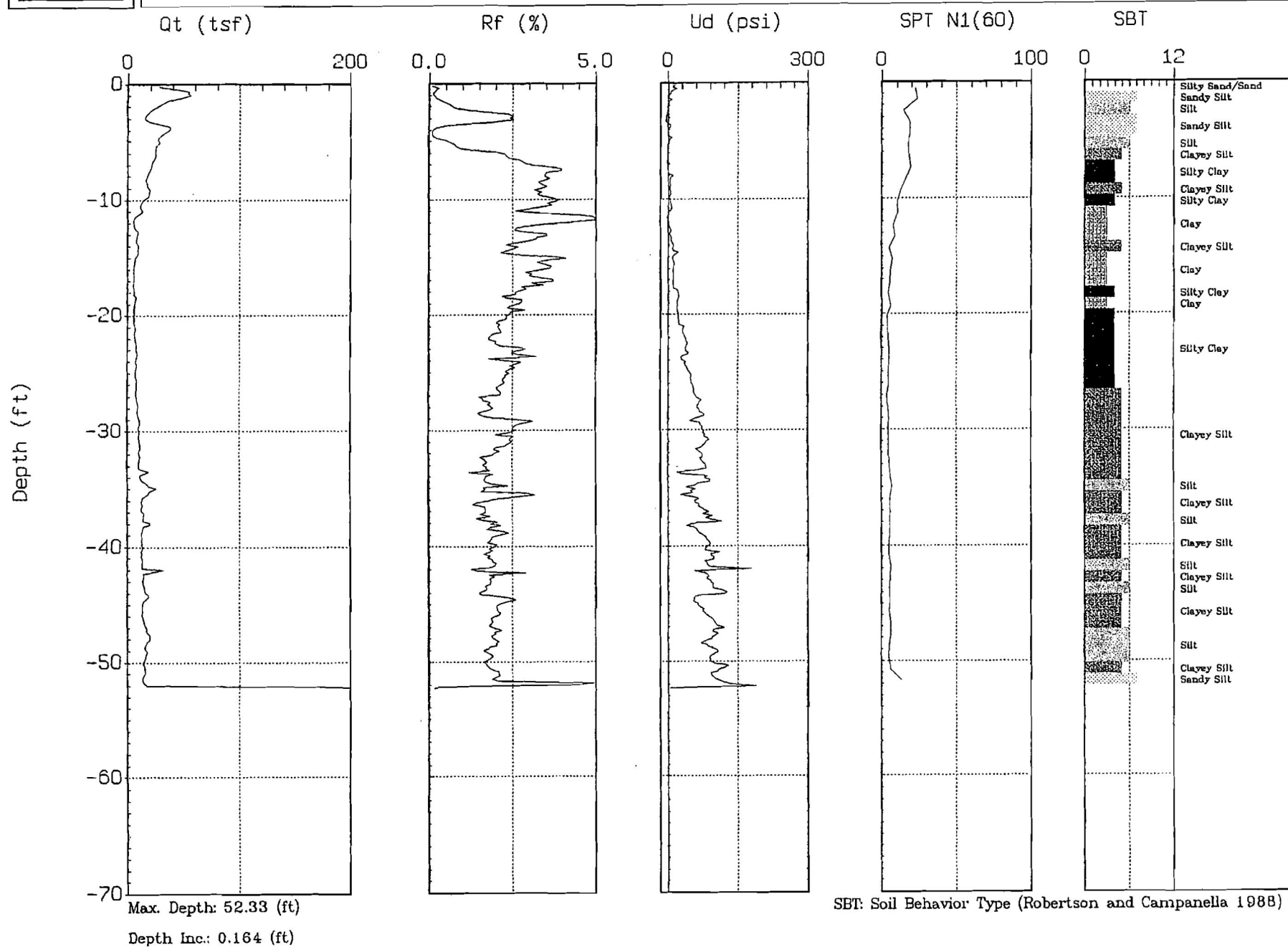
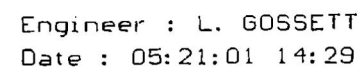
NMG GEOTECHNICAL

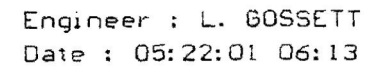
Site : CUSD/RANCHO CAPISTRANO
Location : CPT-7

Engineer : L. GOSSETT
Date : 05/21/01 12:39







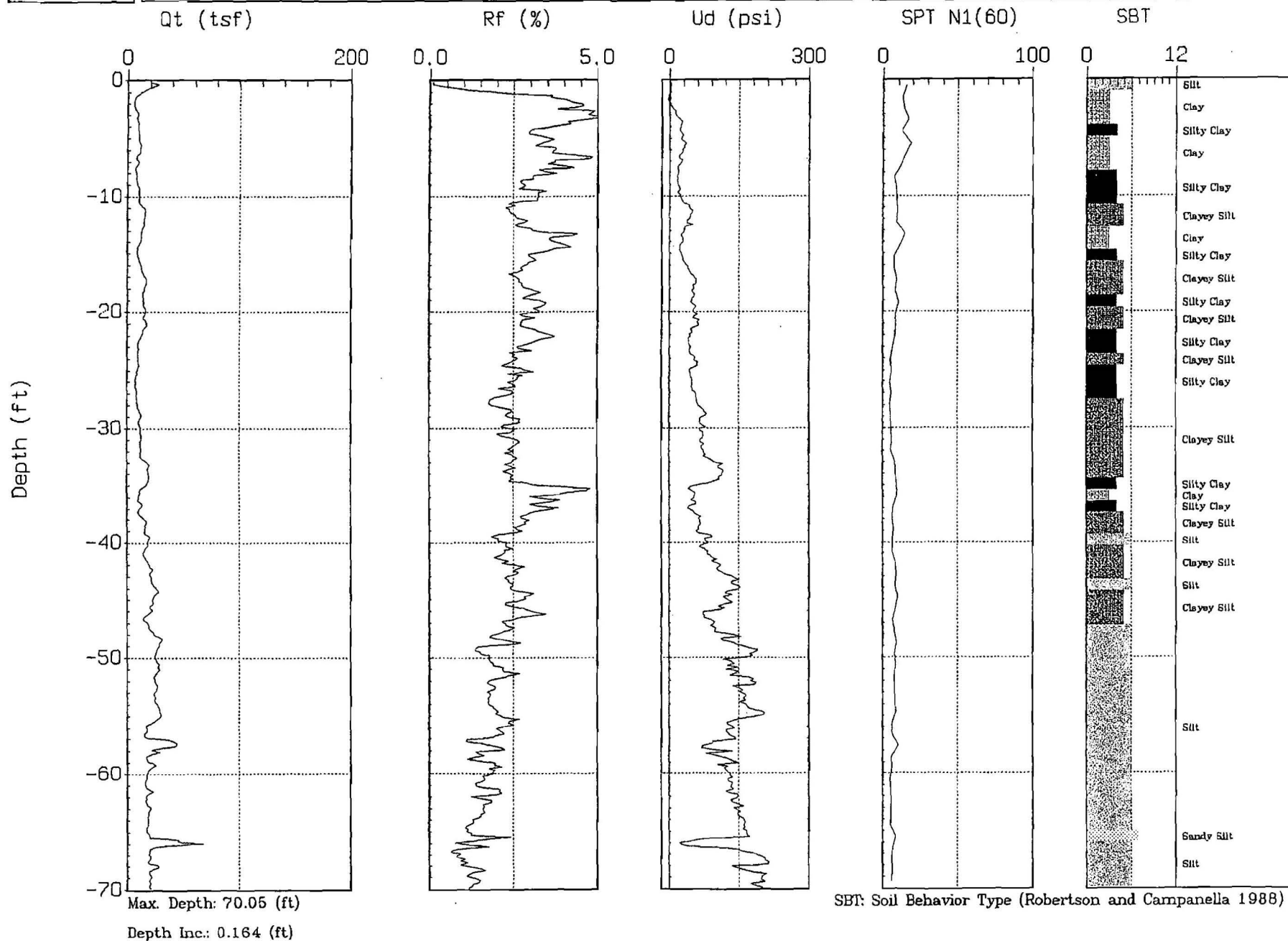




NMG GEOTECHNICAL

Site : CUSD/RANCHO CAPISTRANO
Location : CPT-12

Engineer : L. GOSSETT
Date : 05:22:01 07:09

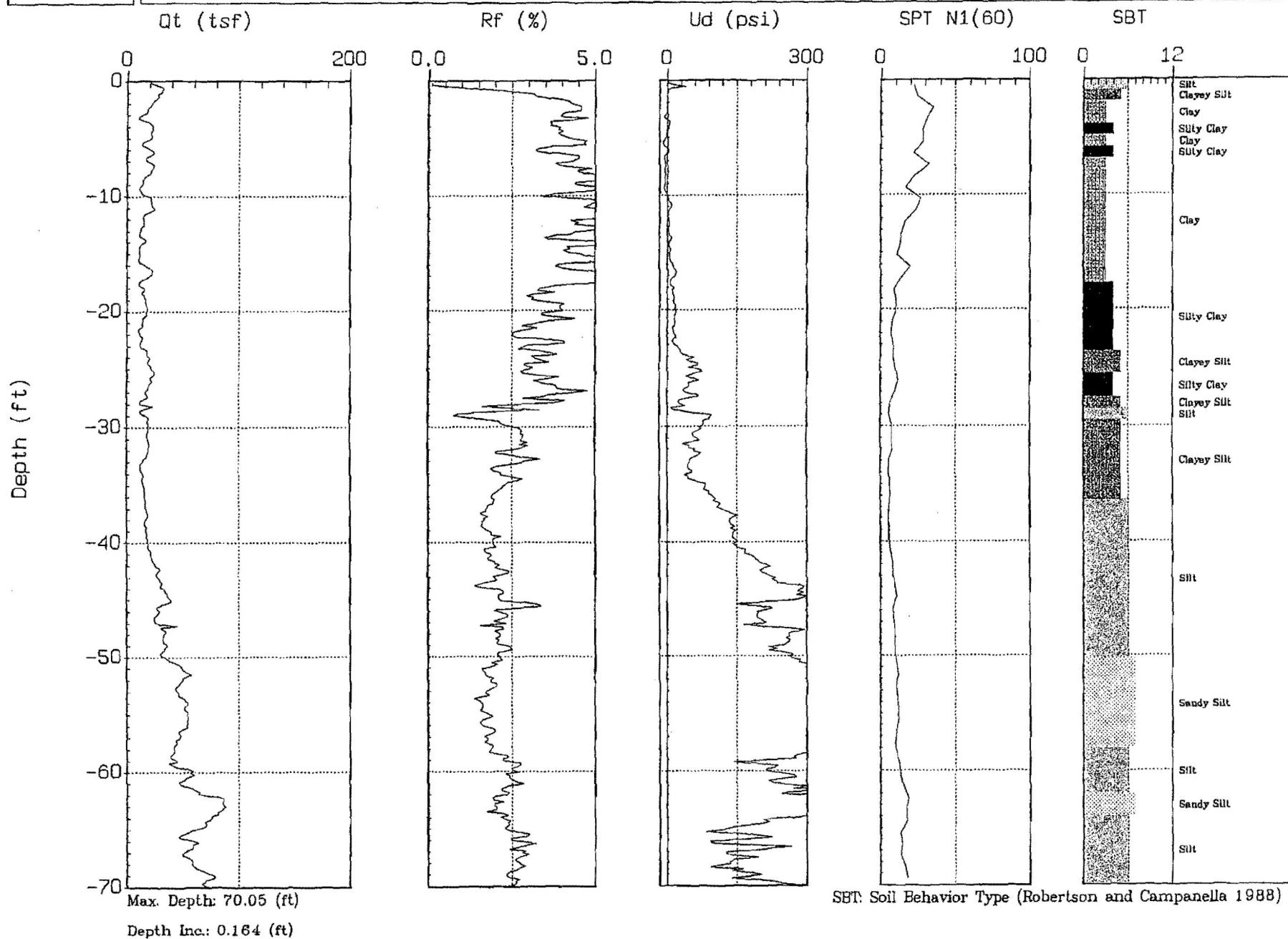




NMG GEOTECHNICAL

Site : CUSD/RANCHO CAPISTRANO
Location : CPT-13

Engineer : L. GOSSETT
Date : 05:22:01 07:53

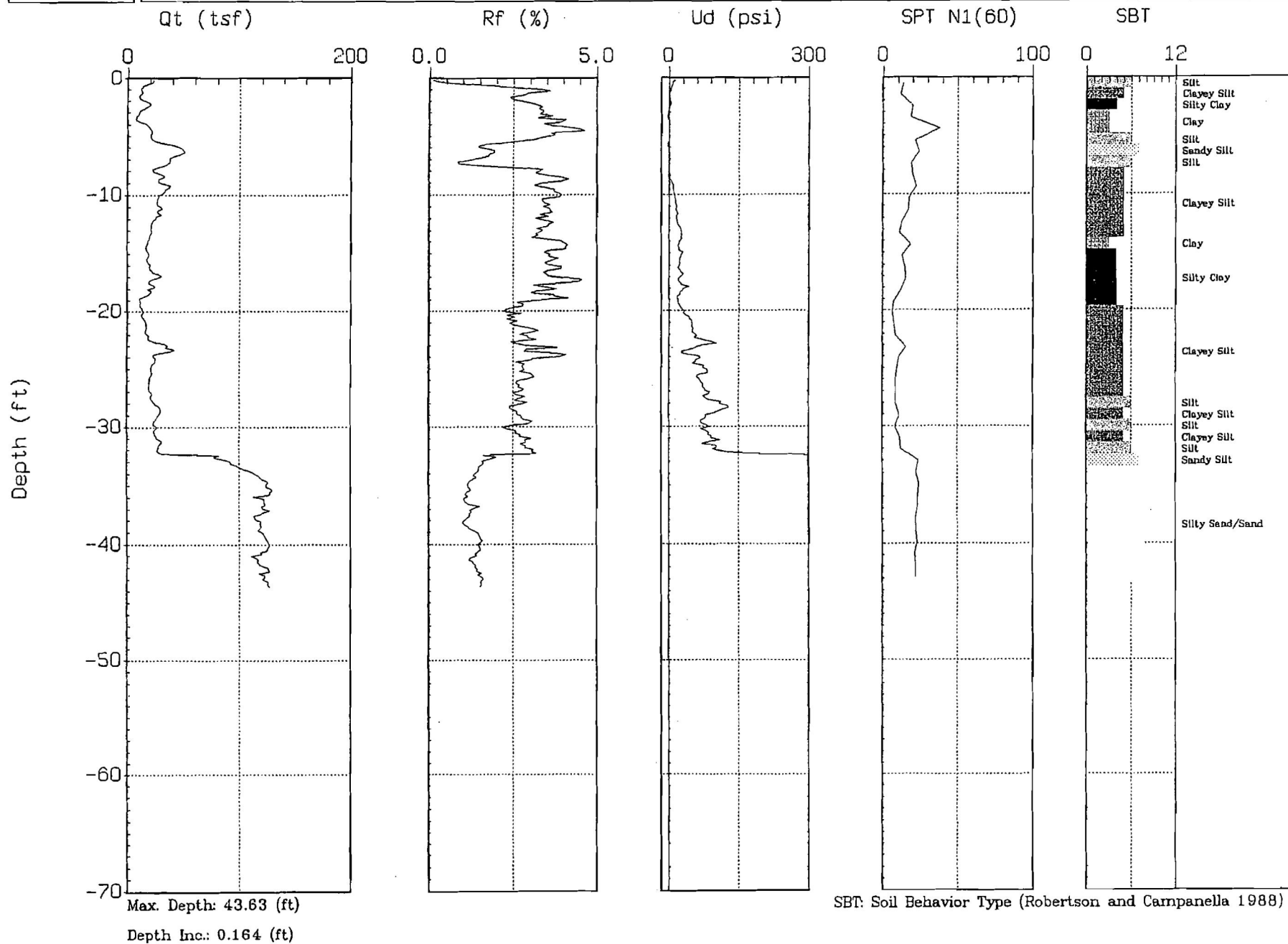




NMG GEOTECHNICAL

Site : CUSD/RANCHO CAPISTRANO
Location : CPT-14

Engineer : L. GOSSETT
Date : 05:22:01 08:44



**Ninyo and Moore
Boring Logs**

DEPTH (feet)	BULK SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED _____	BORING NO. _____	CALIF. SYMBOLS _____
							GROUND ELEVATION _____	SHEET <u>1</u> OF <u>1</u>	METHOD OF DRILLING _____
							DESCRIPTION/INTERPRETATION		
0							Solid line denotes unit change. Dashed line denotes material change. Modified split-barrel drive sampler. No recovery with modified split-barrel drive sampler. Seepage. Groundwater encountered during drilling. Groundwater measured after drilling. Standard Penetration Test (SPT). No recovery with a SPT. Shelby tube sample. Distance pushed in inches/length of sample recovered in inches. No recovery with Shelby tube sampler. Bulk sample. Attitudes: Strike/Dip b: Bedding c: Contact j: Joint f: Fracture F: Fault cs: Clay Seam s: Shear bss: Basal Slide Surface sf: Shear Fracture sz: Shear Zone sbs: Sheared Bedding Surface		
5									
10									
15									
20							The total depth line is a solid line that is drawn at the bottom of the boring.		

Ninyo & Moore

BORING LOG

EXPLANATION OF BORING LOG SYMBOLS

PROJECT NO.
SYMSAMP

DATE
Rev. 1/99

FIGURE

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/7/99</u> BORING NO. <u>B-1</u>	
	Bulk	Driven						GROUND ELEVATION <u>214' ± (MSL)</u> SHEET <u>1</u> OF <u>4</u>	METHOD OF DRILLING <u>8" hollow stem auger (A&R Drilling)</u>
								DRIVE WEIGHT <u>140 lbs.</u>	DROP <u>30"</u>
								SAMPLED BY <u>GMC</u>	LOGGED BY <u>GMC</u> REVIEWED BY <u>MD/CAP</u>
DESCRIPTION/INTERPRETATION									
0							SC	FILL: Dark brown, moist, firm, clayey SAND with gravel; few roots and rootlets. Filter fabric and 3/4 inch rock layer. Layer of black plastic liner.	
5									
10			15				SM	TERRACE DEPOSITS: Yellowish brown, moist, loose, silty SAND; interbedded with poorly graded gravel layers.	
15			71				GP	Light brown, moist, very dense, sandy GRAVEL. Blow counts high due to rock stuck in sampler.	
20			51					Orange, moist, medium dense, sandy poorly graded GRAVEL.	

Ninyo & Moore

BORING LOG

Oso Creek Channel
San Juan Capistrano, California

PROJECT NO.
201885-01

DATE
6/00

FIGURE
A-1

DEPTH (feet)	SAMPLES Bulk Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/7/99</u> BORING NO. <u>B-1</u>	
							GROUND ELEVATION <u>214' ±(MSL)</u> SHEET <u>2</u> OF <u>4</u>	
METHOD OF DRILLING <u>8" hollow stem auger (A&R Drilling)</u>							DRIVE WEIGHT <u>140 lbs.</u> DROP <u>30"</u>	
SAMPLED BY <u>GMC</u> LOGGED BY <u>GMC</u> REVIEWED BY <u>MD/CAP</u>							DESCRIPTION/INTERPRETATION	
20		47				GP	<u>TERRACE DEPOSITS:</u> (Continued)	
						SP	Orange, moist, medium dense, sandy poorly graded GRAVEL.	
						SM	White to light gray, moist, medium dense, fine SAND.	
							Brown, moist, medium dense, silty SAND; minor fine gravel.	
25		37				SP	Light gray, moist, dense, fine SAND; few very thin interbedded fine gravel; some red oxidation in gravel.	
							<u>CAPISTRANO FORMATION:</u> Light grayish brown, weakly to moderately indurated, CLAYSTONE; few thin red oxidized laminations and very thin beds; interbedded with occasional very thin to thin beds of gray weakly cemented fine gravelly sandstone and reddish brown, medium-grained sandstone; red oxidation.	
30		55						
35		20					Gray to dark gray, weakly to moderately indurated, CLAYSTONE; few reddish brown to red laminations.	
40								

Ninyo & Moore

BORING LOG

Oso Creek Channel
San Juan Capistrano, California

PROJECT NO.
201885-01

DATE
6/00

FIGURE
A-2

DEPTH (feet)	Bulk Driven SAMPLES	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.
							4/7/99	B-1
GROUND ELEVATION 214' ±(MSL)							SHEET	3 OF 4
METHOD OF DRILLING 8" hollow stem auger (A&R Drilling)								
DRIVE WEIGHT 140 lbs.							DROP	30"
SAMPLED BY GMC							LOGGED BY GMC	REVIEWED BY MD/CAP
DESCRIPTION/INTERPRETATION								
40		93/11"					CAPISTRANO FORMATION: (Continued) Dark gray to gray, moderately indurated, silty CLAYSTONE; micaceous; massive.	
45		47					Small white speckles/nodules of caliche up to approximately 1/16 inch in diameter throughout samples; less micaceous.	
50		105					Fine reddish brown laminations.	
55		57						
60								

Ninyo & Moore

BORING LOG

Oso Creek Channel
San Juan Capistrano, California

PROJECT NO.
201885-01

DATE
6/00

FIGURE
A-3

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/7/99</u> BORING NO. <u>B-1</u> GROUND ELEVATION <u>214' ± (MSL)</u> SHEET <u>4</u> OF <u>4</u> METHOD OF DRILLING <u>8" hollow stem auger (A&R Drilling)</u> DRIVE WEIGHT <u>140 lbs.</u> DROP <u>30"</u> SAMPLED BY <u>GMC</u> LOGGED BY <u>GMC</u> REVIEWED BY <u>MD/CAP</u>
	Bulk	Driven						
60								CAPISTRANO FORMATION: (Continued) Dark gray to gray, moderately indurated, silty CLAYSTONE; massive. Weakly indurated; increase in silt.
65			83					
70								Total Depth = 66.5 feet. No groundwater encountered. Backfilled on 4/7/99.
75								
80								

	BORING LOG		
	Oso Creek Channel San Juan Capistrano, California		
	PROJECT NO. 201885-01	DATE 6/00	FIGURE A-4

DEPTH (feet)	BULK SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.
							GROUND ELEVATION	SHEET
							4/7/99	B-2
							220' ±(MSL)	1 OF 4
							METHOD OF DRILLING 8" hollow stem auger (A&R Drilling)	
							DRIVE WEIGHT 140 lbs.	DROP 30"
							SAMPLED BY GMC	LOGGED BY GMC REVIEWED BY MD/CAP
DESCRIPTION/INTERPRETATION								
0						SC	FILL: Light brown, moist, medium dense, clayey SAND; scattered gravel and pockets of brown clay.	
5		28				SM + SP	TERRACE DEPOSITS: White to very light yellowish brown, moist, medium dense, fine SAND; interbedded with few thin beds of light gray SILT, and light brown silty SAND; red oxidation along contacts between the sand and silt.	
10		37					Dense; alternating thin beds of poorly graded fine to medium SAND; few fine gravel at base of each bed; few red oxidation within beds.	
15		75/10"				SP + GP	Orange, moist, dense, medium SAND; interbedded with few thin beds of sandy, fine and coarse, poorly graded GRAVEL and silty SAND.	
20								

		BORING LOG	
		Oso Creek Channel San Juan Capistrano, California	
PROJECT NO. 201885-01	DATE 6/00	FIGURE A-5	

DEPTH (feet)	BULK SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.			
							4/7/99	B-2			
GROUND ELEVATION							220' ± (MSL)	SHEET	2	OF	4
METHOD OF DRILLING							8" hollow stem auger (A&R Drilling)				
DRIVE WEIGHT							140 lbs.	DROP	30"		
SAMPLED BY							GMC	LOGGED BY	GMC	REVIEWED BY	MD/CAP
DESCRIPTION/INTERPRETATION											
20		30				SP + GP	TERRACE DEPOSITS: (Continued) Orange, moist, dense, medium SAND; interbedded with few thin beds of sandy, fine to coarse, poorly graded GRAVEL and silty SAND.				
25		79					Interbed of light brown, fine to coarse SAND; few fine gravel; poorly graded GRAVEL at base.				
30		46					CAPISTRANO FORMATION: Dark brown to dark gray, weakly indurated, silty CLAYSTONE; massive.				
35		100					Moderately indurated; few very small white specks/nodules; micaceous.				
40											

		BORING LOG Oso Creek Channel San Juan Capistrano, California	
		PROJECT NO. 201885-01	DATE 6/00

DEPTH (feet)	SAMPLES Bulk Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.
							GROUND ELEVATION	SHEET
							4/7/99	B-2
							220' ±(MSL)	3 OF 4
							METHOD OF DRILLING 8" hollow stem auger (A&R Drilling)	
							DRIVE WEIGHT	DROP
							140 lbs.	30"
							SAMPLED BY	LOGGED BY
							GMC	GMC
							REVIEWED BY	MD/CAP
							DESCRIPTION/INTERPRETATION	
40		35					CAPISTRANO FORMATION: (Continued) Dark grayish brown, moist, moderately indurated, silty CLAYSTONE; massive; micaceous.	
45		73					Few white nodules less than approximately 1/16 inch in diameter of caliche.	
50								
55		56						
60								

Ningo & Moore

BORING LOG

Oso Creek Channel
San Juan Capistrano, California

PROJECT NO.
201885-01

DATE
6/00

FIGURE
A-7

DEPTH (feet)	SAMPLES		BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED <u>4/7/99</u> BORING NO. <u>B-2</u>	
	Bulk	Driven						GROUND ELEVATION <u>220' ±(MSL)</u>	SHEET <u>4</u> OF <u>4</u>
								METHOD OF DRILLING <u>8" hollow stem auger (A&R Drilling)</u>	
								DRIVE WEIGHT <u>140 lbs.</u> DROP <u>30"</u>	
								SAMPLED BY <u>GMC</u> LOGGED BY <u>GMC</u> REVIEWED BY <u>MD/CAP</u>	
								DESCRIPTION/INTERPRETATION	
60								CAPISTRANO FORMATION: (Continued) Dark grayish brown, moist, moderately indurated, silty CLAYSTONE; massive; micaceous.	
65			100						
70								Total Depth = 66.5 feet. No groundwater encountered. Backfilled on 4/7/99.	
75									
80									

	BORING LOG		
	Oso Creek Channel San Juan Capistrano, California		
	PROJECT NO. 201885-01	DATE 6/00	FIGURE A-8

DEPTH (feet)	BULK SAMPLES Driven	BLOWS/FOOT	MOISTURE (%)	DRY DENSITY (PCF)	SYMBOL	CLASSIFICATION U.S.C.S.	DATE DRILLED	BORING NO.
							4/8/99	B-3
GROUND ELEVATION 218' ±(MSL)							SHEET	1 OF 4
METHOD OF DRILLING 8" hollow stem auger (A&R Drilling)								
DRIVE WEIGHT 140 lbs.							DROP	30"
SAMPLED BY GMC							LOGGED BY GMC	REVIEWED BY MD/CAP
DESCRIPTION/INTERPRETATION								
0						SC	<u>FILL:</u> Brown, moist, stiff CLAY; little fine gravel; trace pieces of trash.	
5		18						
10		27				CL	<u>ALLUVIUM:</u> Reddish brown, moist, very stiff, fine sandy CLAY; few to little medium and coarse sand; trace caliche nodules up to approximately 1/8 inch in diameter; abundant pinhole voids; trace decayed rootlets in voids.	
15		27					Few thin interbeds of fine gravel.	
						SM	Light brown, damp to moist, medium dense, silty fine SAND; few coarse sand.	
						CL	Reddish brown, moist, very stiff, CLAY; trace to few coarse sand.	
20								

	BORING LOG		
	Oso Creek Channel San Juan Capistrano, California		
	PROJECT NO. 201885-01	DATE 6/00	FIGURE A-9