N00296.001452
MOFFETT FIELD
SSIC NO.5090.3

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS
NAS MOFFETT FIELD, CALIFORNIA

VOLUME 3
APPENDIX C

AUGUST 1992

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U.S. Department of Energy
Contract DE-AC05-840R21400

Submitted to:

Department of the Navy
Western Division
Naval Facilities Engineering Command
San Bruno, California 94066-2402

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DATED 01 AUGUST 1992

THIS RECORD CONTAINS MULTIPLE VOLUMES
WHICH HAVE BEEN ENTERED SEPARATELY

VOLUME 1 OF 4 IS FILED AS ADMINISTRATIVE
RECORD NO. **N00296.001450**

VOLUME 2 OF 4 IS FILED AS ADMINISTRATIVE
RECORD NO. **N00296.001451**

VOLUME 4 OF 4 IS FILED AS ADMINISTRATIVE
RECORD NO. **N00296.001453**

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CPT8-10	
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CPT8-18	
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CPT-20	
CPT-39	
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W9-5(B3)
W9-7(A1)
W9-9(A2)
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RW-9

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MEW-46(A)
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CPT - (IT) — Site 9 - CPT (IT)

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GB-5	
GB-6	
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GB-1	
GB-2	
GB-3	
SITE 3	Site 3
GB-13	
GB-14	
GB-15	
GB-16	
GB-17	
SITE 4	Site 4
GB-18	
GB-19	
GB-20	
SITE 5	Site 5
GB-21	
GB-22	
GB-23	
SITE 6	Site 6
SITE 7	Site 7
GB-24	
SITE 8	Site 8
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GEOPHYSICAL LOGS (Continued)

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GB-9	
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SITE 10	Site 10
GB-27	
GB-30	
SITE 11	Site 11
SITE 12	Site 12
SITE 13	Site 13
SITE 14	Site 14
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SITE 15	Site 15
SITE 16	Site 16
SITE 17	Site 17
SITE 18	Site 18
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Boundary Source Only, No Retardation	D, Solute Transport Model
Boundary Source Only, Retardation = 2.02	
Additional Source, Without Retardation	
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VOLUME 3, APPENDIX C

BORING LOGS

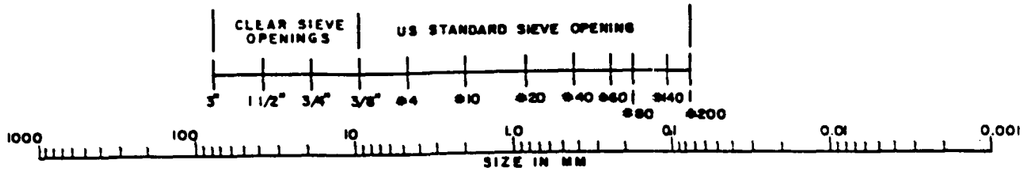
GEOPHYSICAL LOGS

VOLUME 3, APPENDIX C

BORING LOGS

DRAWN BY	CHECKED BY		DRAWING NUMBER
F.C.R. 11-14-88	APPROVED BY S.H.B.	11-14-88 / 11-14-88	409616-B7

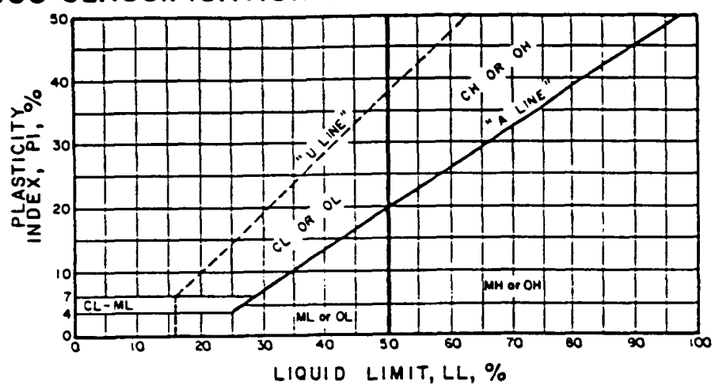
USCS CLASSIFICATION OF COARSE GRAINED MATERIALS



COBBLES	GRAVEL		SAND			SILT AND CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

USCS CLASSIFICATION FOR SOILS

USCS CLASSIFICATION OF FINE GRAINED MATERIALS



DENSITY OF GRANULAR SOILS

DESIGNATION	SPT BLOWS PER FOOT
VERY LOOSE	0 — 4
LOOSE	5 — 10
MEDIUM DENSITY	11 — 30
DENSE	31 — 50
VERY DENSE	OVER 50

CONSISTENCY OF COHESIVE SOIL

CONSISTENCY	FIELD IDENTIFICATION	UNCONFINED COMPRESSIVE STRENGTH q_u (TONS/SQ. FT.)
VERY SOFT	EASILY PENETRATED SEVERAL INCHES BY FIST	LESS THAN 0.25
SOFT	EASILY PENETRATED SEVERAL INCHES BY THUMB	0.25 — 0.5
MEDIUM STIFF	PENETRATED SEVERAL INCHES BY THUMB WITH MODERATE PRESSURE	0.5 — 1.0
STIFF	READILY INDENTED BY THUMB BUT PENETRATED WITH GREAT EFFORT	1.0 — 2.0
VERY STIFF	READILY INDENTED BY THUMBNAIL	2.0 — 4.0
HARD	INDENTED WITH DIFFICULTY BY THUMBNAIL	OVER 4.0

ABBREVIATIONS FOR LABORATORY TESTS

COMP — COMPACTION TEST
PI — ATTERBERG LIMITS
SA — SIEVE ANALYSIS
MA — MECHANICAL ANALYSIS
HYD — HYDROMETER ANALYSIS
CONS — CONSOLIDATION TEST

SAMPLE TYPE

	3" RING SAMPLER	SHELBY TUBE	PITCHER BARREL	2" SPLIT BARREL	BULK SAMPLE
RELATIVELY UNDISTURBED		T	P	S	
DISTURBED	X	X T	X P	X S	X B
NO RECOVERY		T	P	S	

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) (ASTM D2487-83)

MAJOR DIVISIONS			GROUP SYMBOLS	GRAPHIC SYMBOLS	TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN 50% RETAINED ON NO. 200 SIEVE*	GRAVELS 50% or More of Coarse Fraction Retained on No. 4 Sieve	CLEAN GRAVELS	GW		Well-graded gravels and gravel-sand mixtures, little or no fines
			GP		Poorly graded gravels and gravel-sand mixtures, little or no fines
		GRAVELS WITH FINES	GM		Silty gravels, gravel-sand-silt mixtures
			GC		Clayey gravels, gravel-sand-clay mixtures
	SANDS More Than 50% of Coarse Fraction Passes No. 4 Sieve	CLEAN SANDS	SW		Well-graded sands and gravelly sands, little or no fines
			SP		Poorly graded sands and gravelly sands, little or no fines
		SANDS WITH FINES	SM		Silty sands, sand-silt mixtures
			SC		Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS 50% OR MORE PASSES NO. 200 SIEVE*	SILTS AND CLAYS Liquid Limit 50% or Less		ML		Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL		Organic silts or organic clays of low plasticity
	SILTS AND CLAYS Liquid Limit Greater Than 50%		MH		Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
			CH		Inorganic clays of high plasticity, fat clay
			OH		Organic clays or organic silts of medium to high plasticity
HIGHLY ORGANIC SOILS			PT		Peat, muck and other highly organic soils

* BASED ON THE MATERIAL PASSING THE 3-INCH (75-mm) SIEVE.
REFERENCE: ASTM STANDARD D2487

NOTES:

(1) UPPER CASE USED FOR LABORATORY VERIFIED USCS CLASSIFICATIONS.

(2) LOWER CASE USED FOR FIELD USCS CLASSIFICATIONS.

(3) DUAL USCS SYMBOL, SUCH AS (SP-SM) DENOTES 5 TO 12% OF MINOR CONSTITUENT.

(4) BORDER LINE SYMBOL, SUCH AS (CL/CH) DENOTES SOIL HAVING PROPERTIES THAT DO NOT DISTINCTLY PLACE THE SOIL IN A SPECIFIC GROUP.

(5) SUBSURFACE INFORMATION FROM BORING AND TEST PIT LOGS DEPICT CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS AT THESE LOCATIONS. ALSO THE CONDITIONS AT THESE LOCATIONS MAY CHANGE WITH TIME.

(6) BLOW COUNTS ON LOGS ARE THE NUMBER OF BLOWS TO DRIVE THE SAMPLER 12 INCHES WITH A 140 POUND HAMMER FALLING 30 INCHES.

▽ GROUND WATER FIRST ENCOUNTERED

▼ 1-1-84 WATER LEVEL AND DATE MEASURED

LEGEND FOR LOG OF BORINGS AND TEST PITS

PREPARED FOR

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

IT ... Creating a Safer Tomorrow

122203

"Do Not Scale This Drawing"

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 8 – WELLS (IT)

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

BORING NO. W8-2(A2)

FIELD GEOLOGIST E. Wessner
EDITED BY D.H. Cox
CHECKED BY S. Bartling
TOTAL DEPTH 65 feet

COORDINATES N 338,964.9 E 1,547,887.0
DATE BEGAN 10/24/88
DATE FINISHED 10/25/88
GROUND SURFACE EL. 7.79 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	DESCRIPTION
0				FILL	Asphalt.
	MD#1	6/18	2,3,2	CL	SANDY CLAY; black to dark gray, moist, very soft, low plasticity, coarse inclusions.
	MD#2	12/18	3,3,3		
5	MD#3	12/18	3,9,9		SANDY CLAY; olive gray, moist, soft, non plastic, coarse inclusions with a 1" bed of coarse to fine gravel and sand.
10					SILTY CLAY; dark gray to black, moist, stiff to soft, low plasticity, some sand stringers.
15				SC	CLAYEY SAND; fine to coarse grained, angular to subangular, poorly sorted, unconsolidated.
20				SM-SC	CLAYEY SILTY SAND; fine grained, moderately sorted, unconsolidated.
25				CL	SANDY CLAY; dusky yellow, moist, very soft, low to moderately plastic.
30				GW	SANDY GRAVEL; moist, coarse, angular to subangular, poorly sorted, unconsolidated.
				SW	SAND; fine to medium grained.
35				CL-CH	SILTY CLAY; dusky yellow, moist, very soft, medium plasticity.
40				SW	SAND; coarse, poorly sorted, subangular.
				CH	SILTY CLAY; dusky yellow, moist, soft, high plasticity.
45				GC	CLAYEY GRAVEL; wet, coarse, angular, unconsolidated.
50				CH-CL	SILTY SANDY CLAY; light gray, moist, soft, high plasticity.
				SW	SAND; medium to coarse, angular, poorly sorted.
55				CH	SILTY CLAY; dark olive brown, moist, soft, high plasticity.
				GW	SANDY GRAVEL; poorly sorted, unconsolidated, angular coarse sands, fine grained gravels.
60				CL	SILTY SANDY CLAY; dusky yellow, moist, very soft, medium plasticity.
				CH	SILTY CLAY; olive gray, moist, soft, medium to high plasticity.
65				GW	SANDY GRAVEL; fine grained gravels, angular, poorly sorted.
70					TOTAL DEPTH 65 FEET

WELL SUMMARY

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W8-3(C)

FIELD GEOLOGIST E. Weaner
EDITED BY D. H. Cox
CHECKED BY S.Bartling
TOTAL DEPTH 166.6 feet

COORDINATES N 338,725.9 E 1,547,848.8
DATE BEGAN 10/28/88
DATE FINISHED 11/1/88
GROUND SURFACE EL. 7.9 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	DESCRIPTION
0			Top of casing; 8"x5' standpipe		FILL		SANDY CLAY; top soil.
5					CL		SILTY CLAY; dark grey, moderately moist, very soft, very high plasticity.
							SILTY, SANDY CLAY; dusky yellow, moist, very soft, medium plasticity.
10							SANDY CLAY; dusky yellow, moist, very soft, low plasticity.
15					CL		SILTY CLAY; light dusky yellow, moist, very soft, medium plasticity, some coarse inclusions.
20							
25							SANDY CLAY; orange brown, moderately moist, very soft, high plasticity.
30							SILTY CLAY; reddish brown, moderately moist, hard, low plasticity, some coarse siltstone inclusions.
			4" sch. 40 steel casing				SANDY CLAY; light brown, moist, very soft, very low plasticity.
35			Bentonite/ cement grout				
40							SILTY CLAY; light grey, moist, soft, medium to low plasticity.
45					GC		CLAYEY GRAVEL; light grey, wet, subangular, appreciable amount of fines.
50					CL		SILTY CLAY; light grey, moist, soft, low plasticity, some coarse inclusions.
55							SILTY CLAY; olive grey, moderately moist, soft, low to medium plasticity, sticky, coarse inclusions.
60							SILTY CLAY; light grey, moist, soft, moderately plastic, coarse inclusions.
65							
70					SC		CLAYEY SAND; very fine grained, wet, slurry.

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W8-3(C)

FIELD GEOLOGIST E. Wessner
EDITED BY D. H. Cox
CHECKED BY S.Bartling
TOTAL DEPTH 166.6 feet

COORDINATES N 338,725.9 E 1,347,848.8
DATE BEGAN 10/28/88
DATE FINISHED 11/1/88
GROUND SURFACE EL. 7.9 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	DESCRIPTION
70					SC		CLAYEY SAND; wet, slurry, very fine grained.
75					CL-CH		SILTY CLAY/CLAY; light grey, moist, soft to very soft, medium plasticity, sticky.
80							
85					SC-SM		SAND/CLAYEY SAND; wet, loose, fine to medium grained, subrounded, silty clay stringers throughout.
90							
95							
100					CL		SILTY CLAY; grey, moderately moist, stiff, medium plasticity, platy.
105			4" sch. 40 steel casing; Bentonite/ cement grout		SP-CL		SAND; clean, wet, unconsolidated with silty clay stringers, very fine grained.
110					CL		SILTY CLAY; greenish grey, moist, soft to stiff, high plasticity, medium grained inclusions.
115							
120					CL-CH		SILTY CLAY / CLAY; greenish grey, moderately moist, hard, medium plasticity.
125							
130			Centralizer		ML-CL		SANDY SILTY CLAY; light grey, very soft, non plastic, slurry.
135					CL		SILTY CLAY; greenish grey, moderately moist, hard to stiff, medium plasticity, some coarse inclusions.
140							

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W8-3(C)

FIELD GEOLOGIST E. Wessner
EDITED BY D. H. Cox
CHECKED BY S.Bartling
TOTAL DEPTH 166.6 feet

COORDINATES N 338,725.9 E 1,947,848.6
DATE BEGAN 10/28/88
DATE FINISHED 11/1/88
GROUND SURFACE EL 7.9 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	DESCRIPTION
140–165			Bentonite pellets 144.1 to 148.1 ft.; Centralizer; 4" .010 S.S. screen from 152 to 162 ft.; Centralizer; #1C sand; Bentonite backfill		CL		SILTY CLAY; light grey, moist, soft, medium plasticity, inclusions of firm crumbly sandy clay nodules.
					SC		CLAYEY SAND; very wet, fine to very fine grained, some gravels; angular, fine grained.
					CL		SILTY CLAY; olive green, moist, soft, medium plasticity.
					GW		GRAVEL; wet, subangular, fine grained with fine sands.
					CL		SILTY CLAY; olive grey, moist, stiff to hard, medium plasticity.
165–210			9.6"				TOTAL DEPTH 166.6 FEET

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

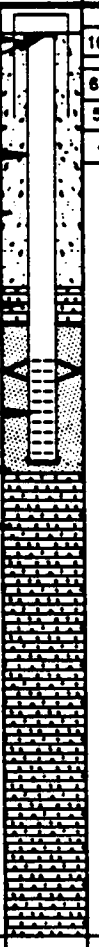
BORING NO. W8-4(A1)

FIELD GEOLOGIST S.Logan
EDITED BY D. H. Cox
CHECKED BY S. Bartling
TOTAL DEPTH 45 feet

COORDINATES N 338,701.9 E 1,547,893.3
DATE BEGAN 08/18/88
DATE FINISHED 08/18/88
GROUND SURFACE EL. 7.91 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	DESCRIPTION
0	MDØ1	8/18	10,7,10	SM	SILTY SAND; brown with black fragments, dry, stiff to very stiff, non plastic.
	MDØ2	10/18	6,11,15	ML	SANDY SILT; black, moist, very stiff, low plasticity.
5	MDØ3	18/18	5,9,14		SANDY SILT; light gray, dry, stiff to very stiff, non plastic, moisture increases with depth.
	MDØ4	15/18	4,8,9		
10					CLAYEY SILT; mottled light brown and light gray, moist, stiff, low to medium plasticity.
				SC	CLAYEY SAND; light and dark brown, wet, fine to medium grained.
15				ML	CLAYEY SILT; mottled light brown and light gray, moist, stiff, moisture increases with depth, mottling grades to include cream coloring with depth.
				SC	CLAYEY SAND; saturated, medium plasticity, fine to medium grained.
20				ML-CH	CLAYEY SILT; grading to sandy silty clay, tan with light gray spots, moist, stiff to very stiff, clay has high to medium plasticity.
25					Some fine quartz gravel..
30				CH	SANDY CLAY; light brown and light gray, very moist, very soft to soft, high plasticity, sand is fine grained with trace of medium grained.
35					SILTY CLAY; light brown and grey, moist, stiff to very stiff high plasticity, trace of sands at 40 ft.
40				ML	CLAYEY SILT; light brown with light and dark gray spots, dry to slightly moist, stiff to very stiff, low to no plasticity, trace of medium grained rounded sands throughout.
45					TOTAL DEPTH 45 FEET
50					
55					
60					
65					
70					

WELL SUMMARY



PAGE 1 OF 1

DRILLING CO.: Water Development Co.
DRILLING METHOD: Hollow Stem Auger

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

AutoCAD FILE: W8-4A(MF-27)

BORING NO. W8-6(A1)

FIELD GEOLOGIST S.Logan
EDITED BY D. H. Cox
CHECKED BY S. Bartling
TOTAL DEPTH 43 feet

COORDINATES N 338,986.4 E 1,547,845.8
DATE BEGAN 08/23/88
DATE FINISH 08/23/88
GROUND SURFACE EL 7.42 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	DESCRIPTION
0				FILL	FILL; silty sandy gravel.
	MD#1	10/18	2,20,10	GM	SANDY SILTY GRAVEL; dark brown, dry.
	MD#2	10/18	6,10,16		
5	MD#3	15/18	5,9,14	ML	CLAYEY SILT; dark gray to black, moist, very stiff, medium plasticity, trace of sand.
	MD#4	12/18	6,10,10		
10				CH	SANDY SILTY CLAY; light brown with gray spots, moist, soft, high plasticity, sand is medium to coarse grained.
				SM	SILTY SAND; light to dark brown and gray, wet to saturated, non plastic, sand is fine to very fine grained.
15				CH	SILTY CLAY; light brown with gray spots, moist, soft, high plasticity, sand is medium to coarse grained. SILTY SANDY CLAY; light brown, moist to very moist, soft to stiff, medium to high plasticity, sand is fine to very fine grn.
20				SM-SW	SILTY SAND; black and dark brown, saturated, plastic, sand is coarse to very fine grained, rounded and subangular, trace of shell fragments, dirty, becomes cleaner with depth, well graded sands.
25				SW-SP	SAND; black and dark brown, wet to saturated, medium to very fine grained, some coarse grained, clean, fine sands and fine gravels, saturated, angular to subrounded, small fraction of silts.
30				GP	SANDY GRAVEL; brown, grey and black, coarse & med grained.
				ML	CLAYEY SILT; gray with brown spots, very moist, very soft to soft, low plasticity, trace of coarse sands.
35				SM	SILTY SAND; gray, wet to saturated, sand is fine to very fine, with trace of medium grained sand.
40				CL	SILTY CLAY; mottled grayish brown, light brown, and light gray, dry to slightly moist, very stiff to hard, medium plasticity, trace of rounded coarse sand, becomes softer and lighter in color with depth.
45					TOTAL DEPTH 43 FEET
50					
55					
60					
65					
70					

WELL SUMMARY

DRILLING CO.: Water Development Co.
DRILLING METHOD: Hollow Stem Auger

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

AutoCAD FILE WB-6A(MF-27)

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W8-8(A1)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST E. Wessner
EDITED BY T. Ault
CHECKED BY W. Gorber
TOTAL DEPTH 30 ft.

COORDINATES N ____ E ____
DATE BEGAN 5/11/90
DATE FINISHED 5/11/90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0					SILTY CLAY; top soil, dry crumbly.
	MD1	12/18	7/11/16	CL	SILTY CLAY; olive black, slightly moist, medium stiff, slightly to moderately plastic.
	MD2	12/18	5/7/9	CL	SILTY CLAY; dusky yellow, moderately moist, soft, high plasticity, some coarse sand inclusions.
5	MD3	18/18	3/3/5	CL	SILTY CLAY-CLAYEY SILT; dusky yellow, moderately moist, soft, medium plasticity, fine to medium pebble inclusions of calcite. 8.0'
10				ML/SC	CLAYEY SANDY SILT; dusky yellow, moist, very soft, low plasticity, some fine pebble inclusions. 10.5'
				CL	CLAY (drill rate). Cutting returns intermittent slurry. 14.0'
15				SC	SAND zone (drill rate). 16.0'
				CL	SILTY CLAY, (drill rate), soft. 20.0'
20				SP	SAND, returns mixed slurry with fine grained sands. 27.0'
				CL	CLAY (drill rate). SILTY CLAY; moderately yellowish brown, moist, soft, palstic.
30					TOTAL DEPTH 30 FEET

WELL SUMMARY

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-55)

PAGE 1 OF 1

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

MF-W8-8(MF15)

BORING NO. W8-10(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST J. Strack
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 37 ft.

COORDINATES N ____ E ____
DATE BEGAN 5-8-90
DATE FINISHED 5-10-90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0					GRAVELLY SILTS; top dirt parking area, road fill.
	MD1	12/18	9/6/11	CL	SILTY CLAY; brownish black, slightly moist, medium stiff, slight to moderate plasticity, few coarse sand inclusions.
	MD2	16/18	6/9/12		Some mottled gray zones.
5	MD 3/4		6/11/12		SILTY CLAY; moderate yellowish brown, mottled gray, slightly to moderately moist, medium stiff, low plasticity, abundant abundant coarse sand and fine pebble inclusions. Some calcite nodules. 8.0'
10				SC	CLAYEY SAND; dark yellowish orange, moist, very soft, very fine to fine grained, moderately plastic.
					▽ Groundwater at 13 Ft. 13.0'
15				CL	SANDY CLAY Formation harden, (drill rate) at water table; returns mixed in a slurry. Some fine sands in mix. 19.0'
20					23.0'
25				SM	SILTY SAND; Fine sands in slurry..
30					Flowing sands. 34.0'
35				CL/CH	CLAY, (drill rate) SILTY CLAY; greenish black, moist, soft, high plasticity. SILTY CLAY; medium brown, moist, medium stiff, high plasticity, abundant fine pebbles.
					TOTAL DEPTH 37 FEET
40					
45					
50					
55					
60					
65					
70					

WELL SUMMARY

PAGE 1 OF 1

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-55)

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W8-10(eMF14)

BORING NO. W8-11(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST T.J. Strack
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 50.0 FT.

COORDINATES N ____ E ____
DATE BEGAN ____
DATE FINISHED ____
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0					SANDY GRAVELLY CLAY TOPSOIL/FILL
	MD1	10/18	4/8/12	CL	SILTY CLAY; olive black, slightly moist, soft, medium plasticity. Changes to dark yellowish brown at 5.5 feet.
	MD2	15/18	5/8/12		
5	MD3	18/18	4/6/13		
10					SILTY CLAY; light olive brown, moist, very soft, medium plasticity. ▽ Groundwater encountered at 12.5'.
30.0'				GC	CLAYEY GRAVEL; fine to medium angular pebbles in drill cuttings, wet.
38.0'				CH	
		24/24	6/8/11/11		CLAY; light olive gray, moist, firm and sticky, high plasticity.
50					TOTAL DEPTH 50 FEET

WELL SUMMARY

PROFILE

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (RIG CME-75)

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W8-11(MF14)

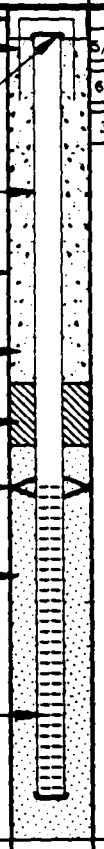
BORING NO. W8-12(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST E. Wessner
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 40 ft.

COORDINATES N ____ E ____
DATE BEGAN 5-16-90
DATE FINISHED 5-17-90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0					Medium pebble FILL.
	MD1	18/18	5/10/12	CL/CH	SILTY CLAY/CLAY; olive black, slightly moist, medium stiff, low plasticity. Some fine pebble inclusions.
	MD2	14/18	6/6/10		
5	MD 3/4	18/18	3/6/9		SILTY CLAY; olive gray/mottled light olive gray, slightly moist, medium stiff, low plasticity. 7.0'
10				CL	SILTY CLAY; light olive brown, moderately moist, soft, high plasticity. SILTY CLAY; dusky yellow, moderately moist, soft, high plasticity, coarse sand inclusions. Moist. ∇ Groundwater encountered at 13'. Due to water table, returns from hole are a homogenous mud slurry. CPT* shows clays.
15					
20					21.0'
				SC	SAND (drill rate) 22.0'
				CL	CLAY (drill rate) 25.0'
25				CL	28.0' CLAYS (drill rate) 30.0'
30				SP/CL	SAND (drill rate) 38.0'
35				CH	CLAY (drill rate)
40					TOTAL DEPTH 40 FEET
45					
50					
55					
60					
65					
70					

WELL SUMMARY



*drill rate used to refine lithology.

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-55)

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W8-12(*MF14)

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

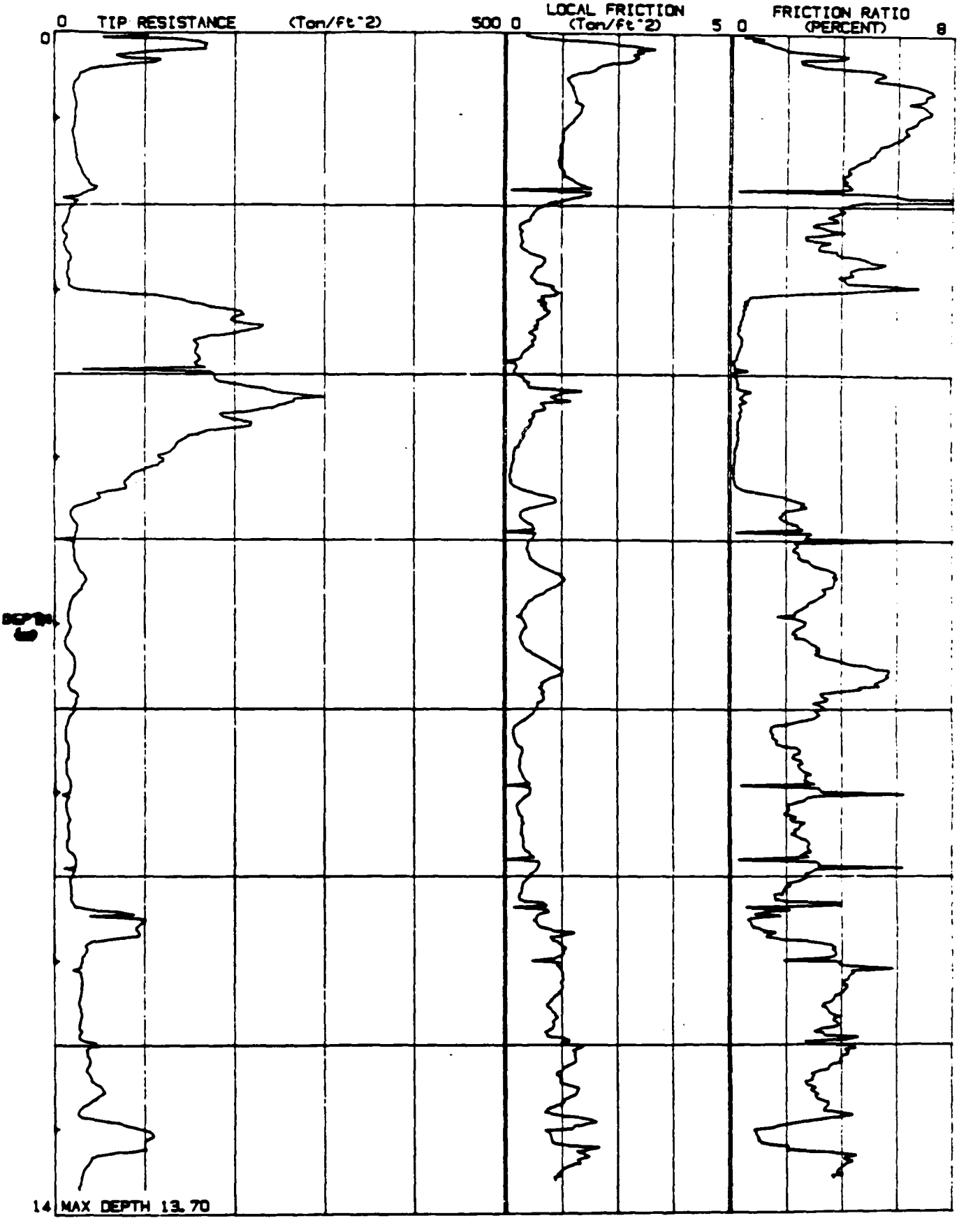
APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 8 – CPT (IT)

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

JOB # : 409700
DATE : 02/13/90
LOCATION : CPT/B-3
FILE # : 44



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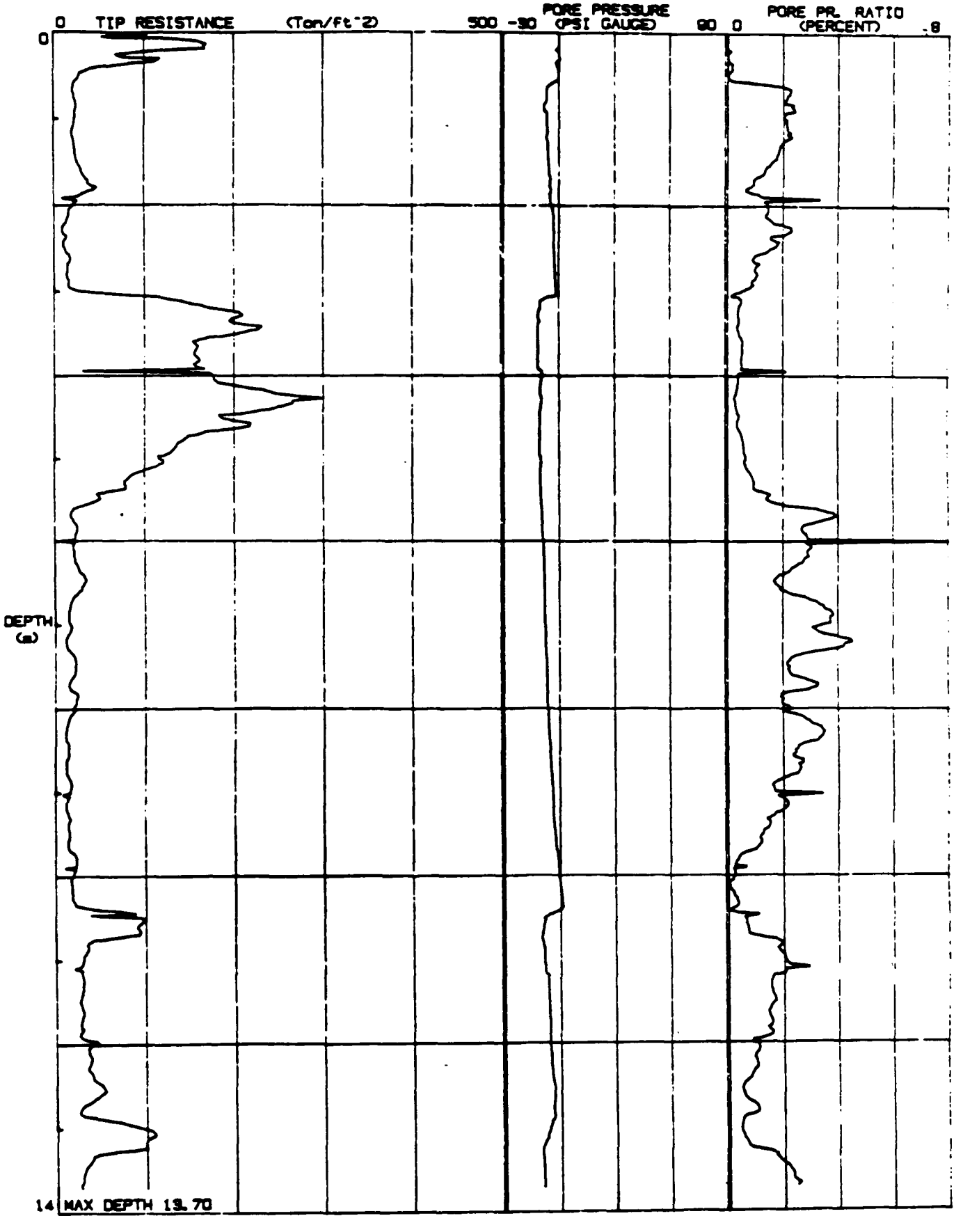
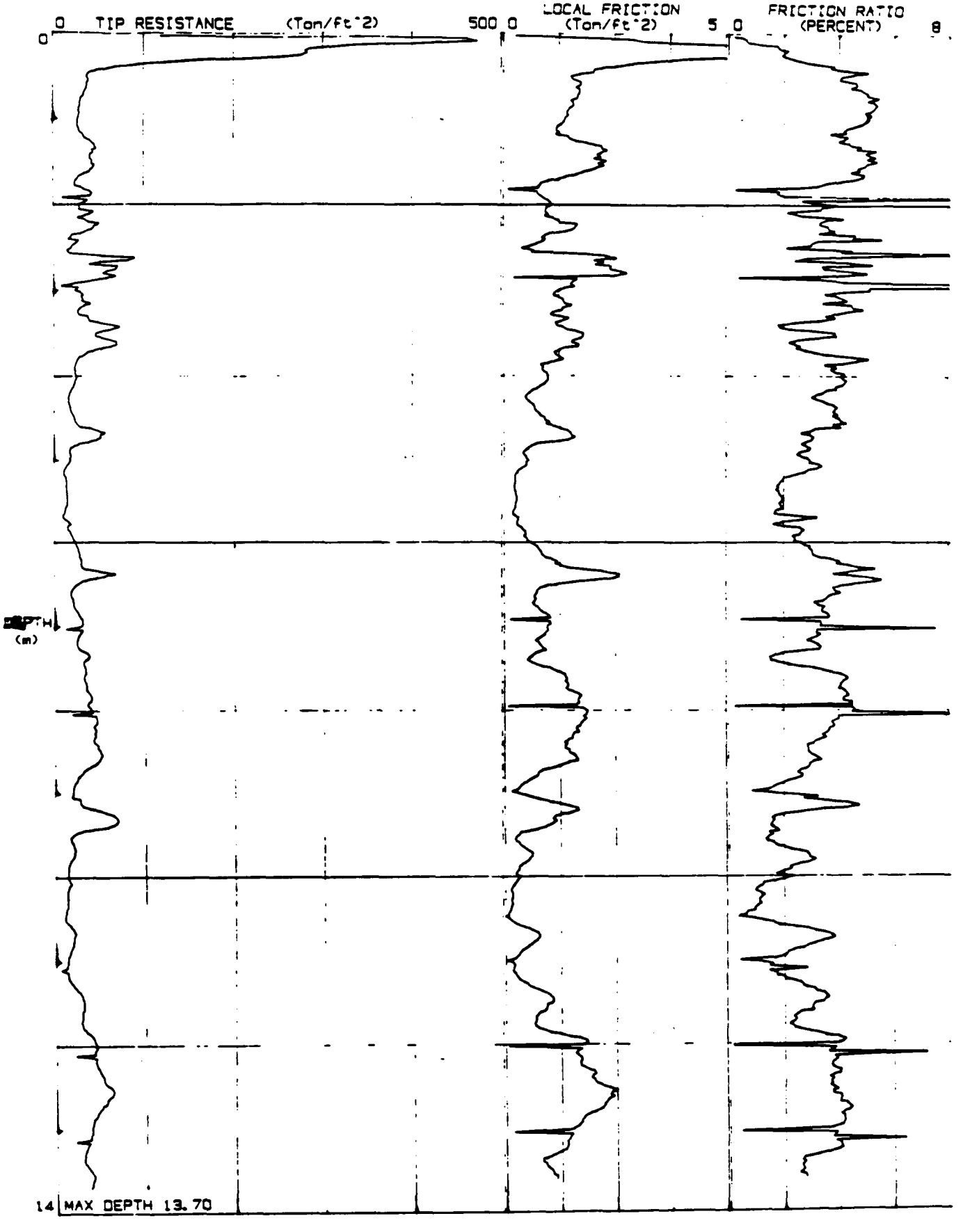
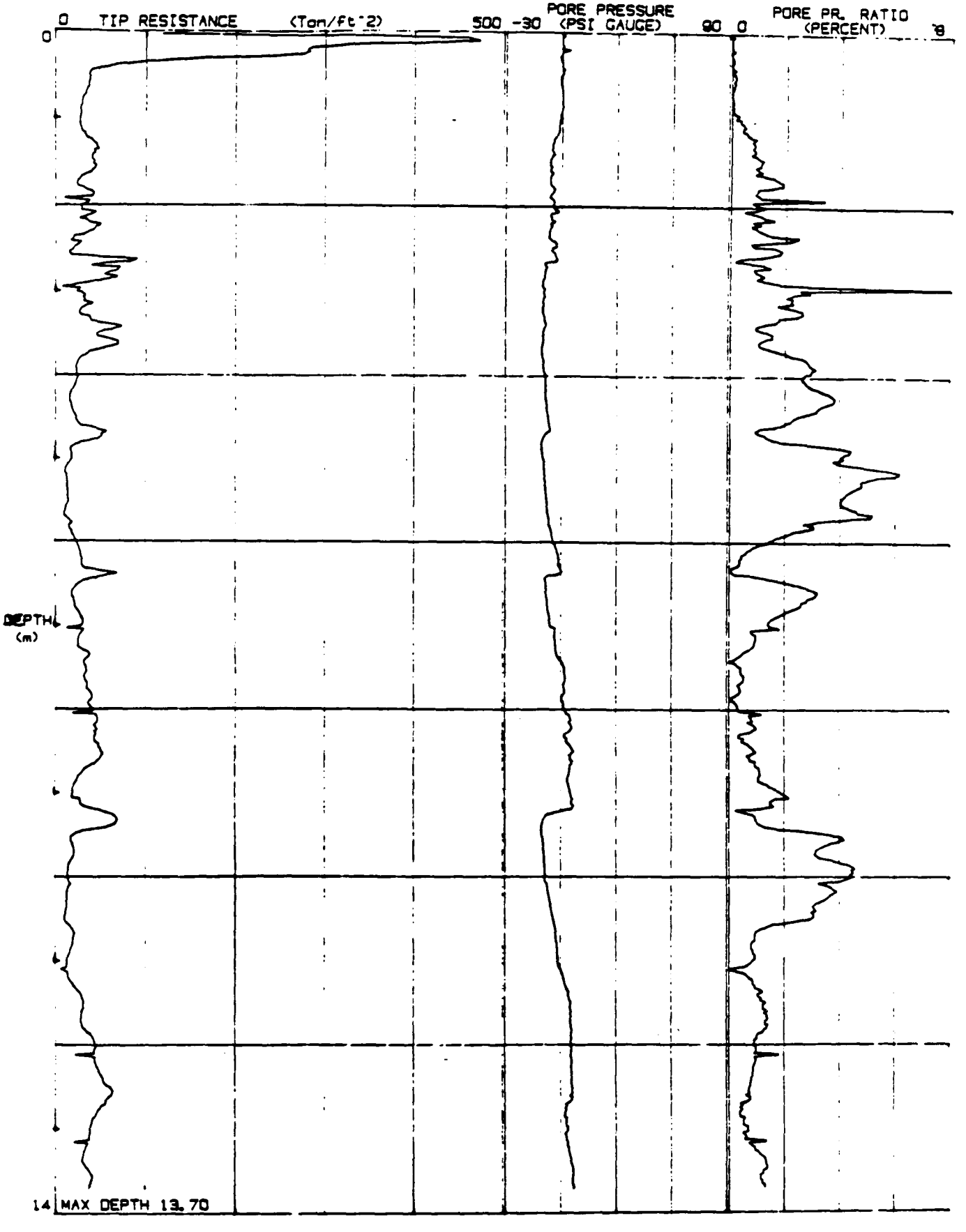
DATE : 02/13/90
LOCATION : CPT/B-3
FILE # : 44



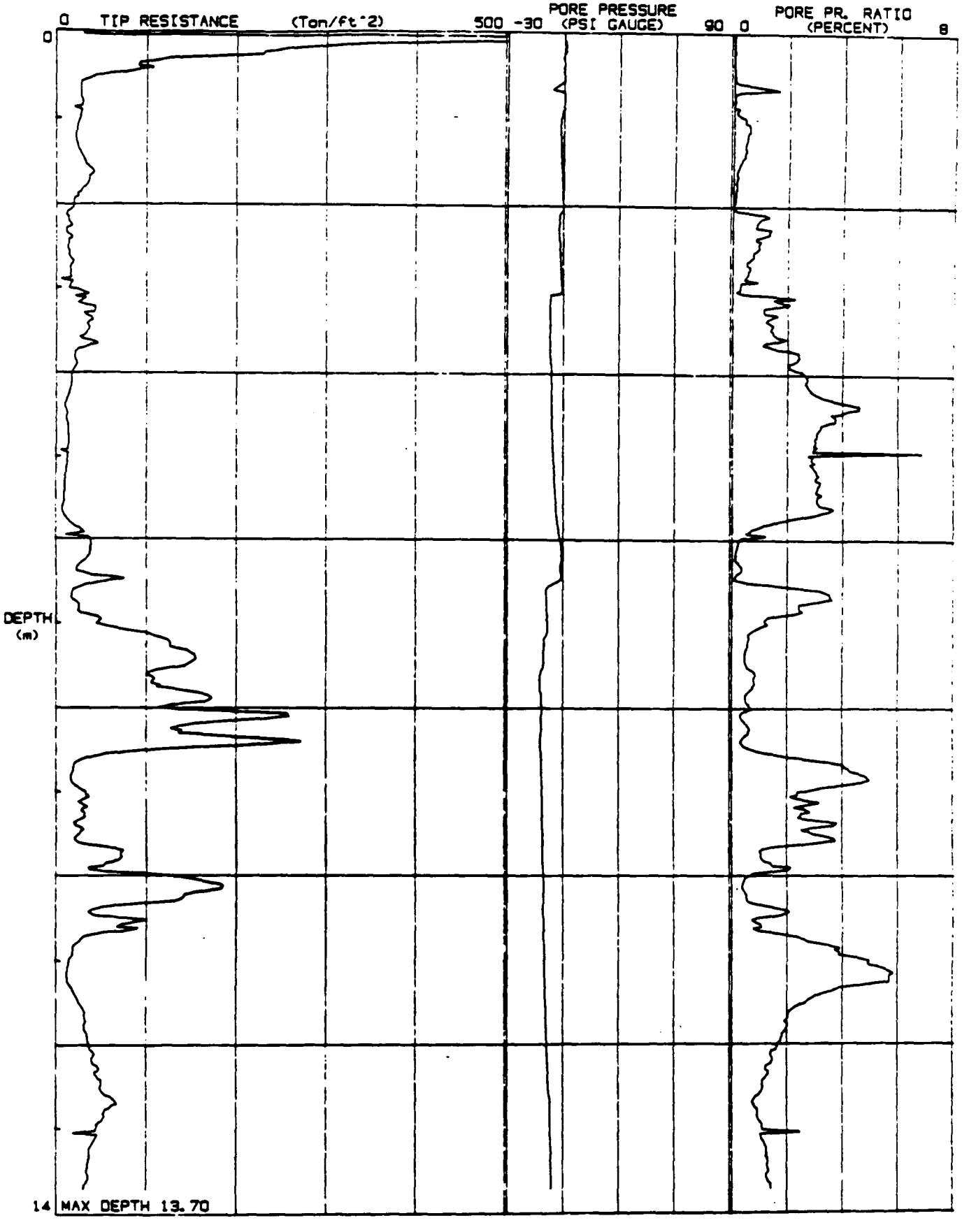
JOB # : 4C97CC
DATE : 02/08/90
LOCATION : CPT/8-5
FILE # : 36



JOB # : 409700
DATE : 02/08/90
LOCATION : CPT/8-5
FILE # : 36



JOB # : 409700
DATE : 02/09/90
LOCATION : CPT/B-7
FILE # : 40



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DATE : 02/09/90
LOCATION : CPT/B-7
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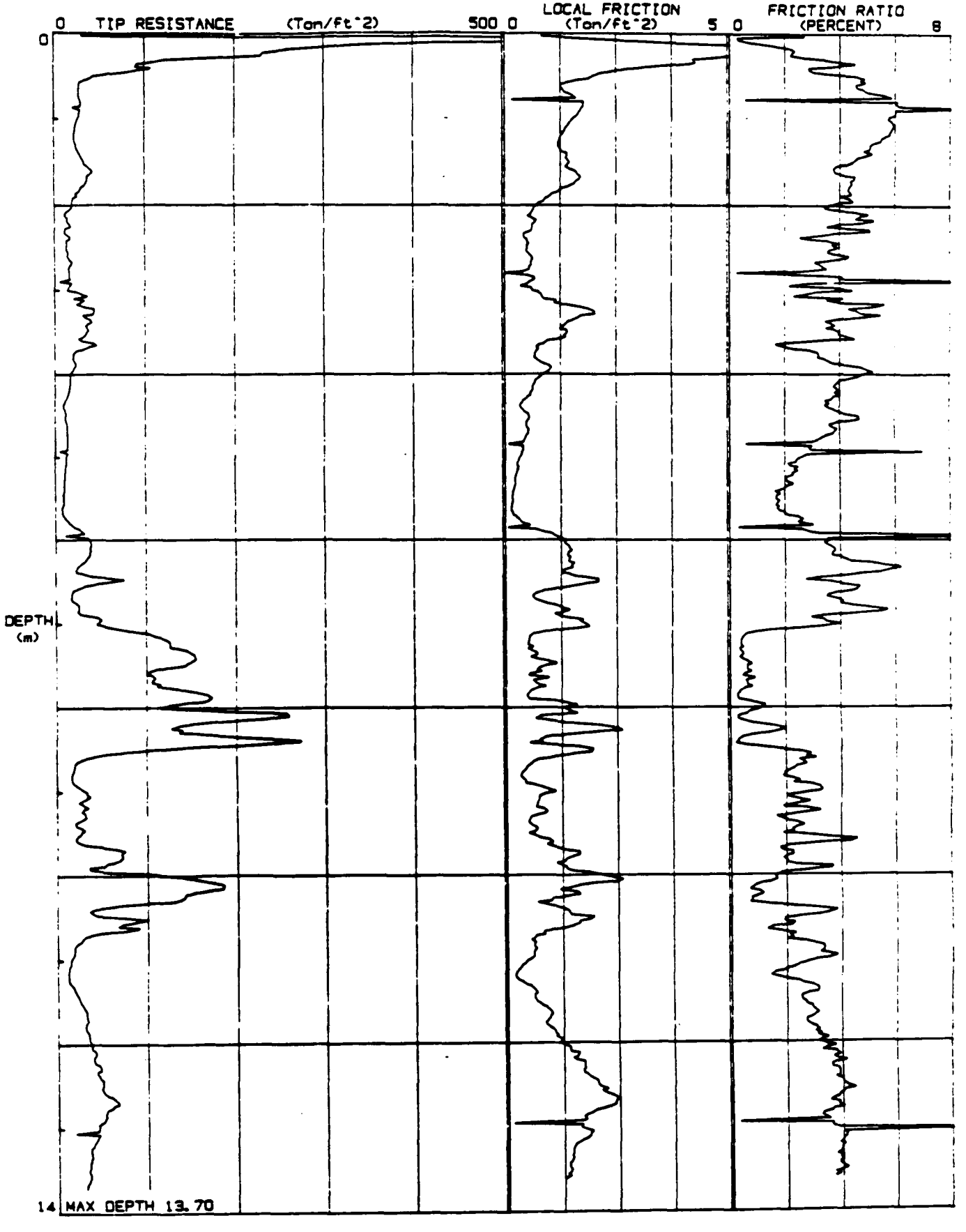

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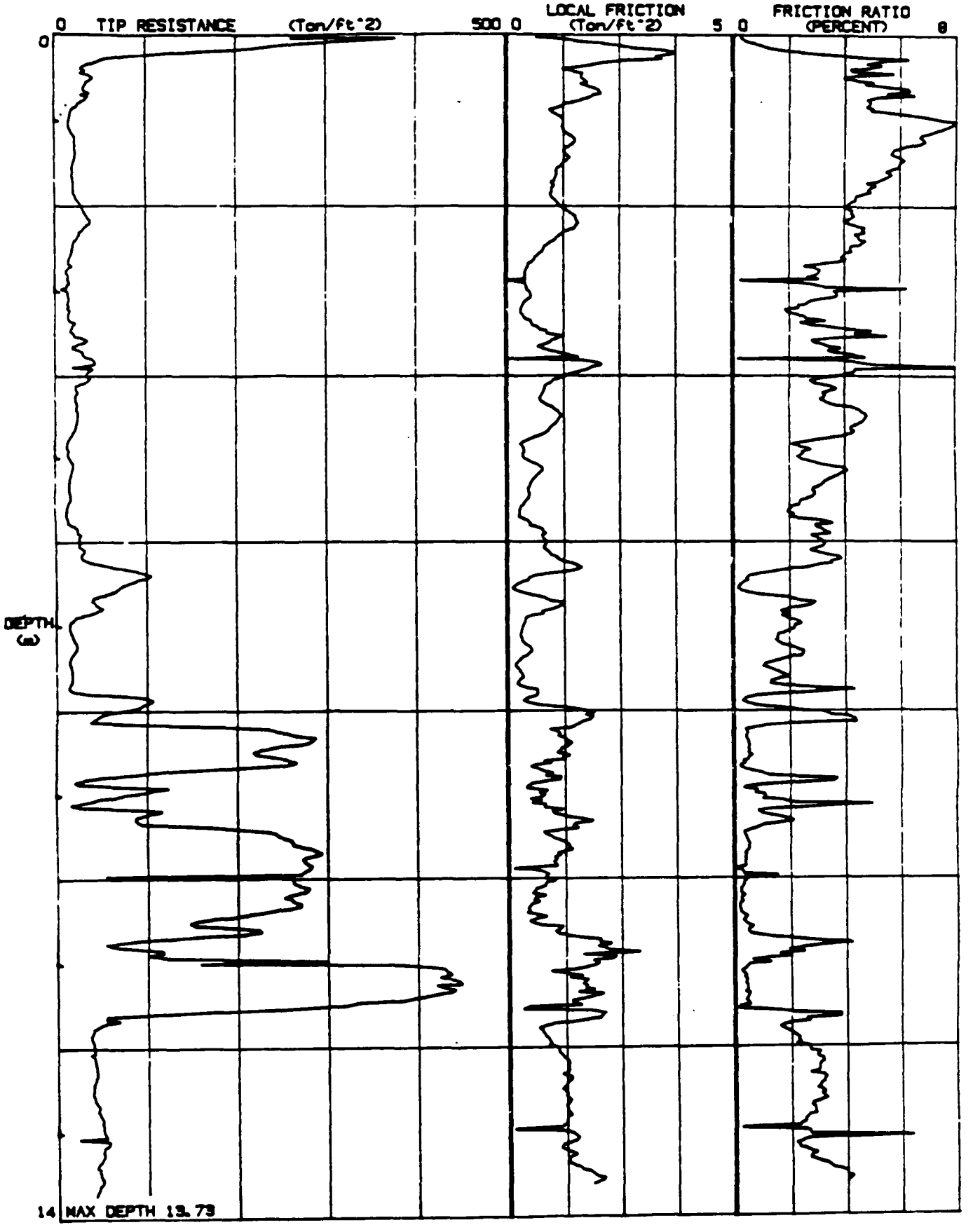
DATE : 02/13/90
LOCATION : CPT/B-10
FILE # : 45



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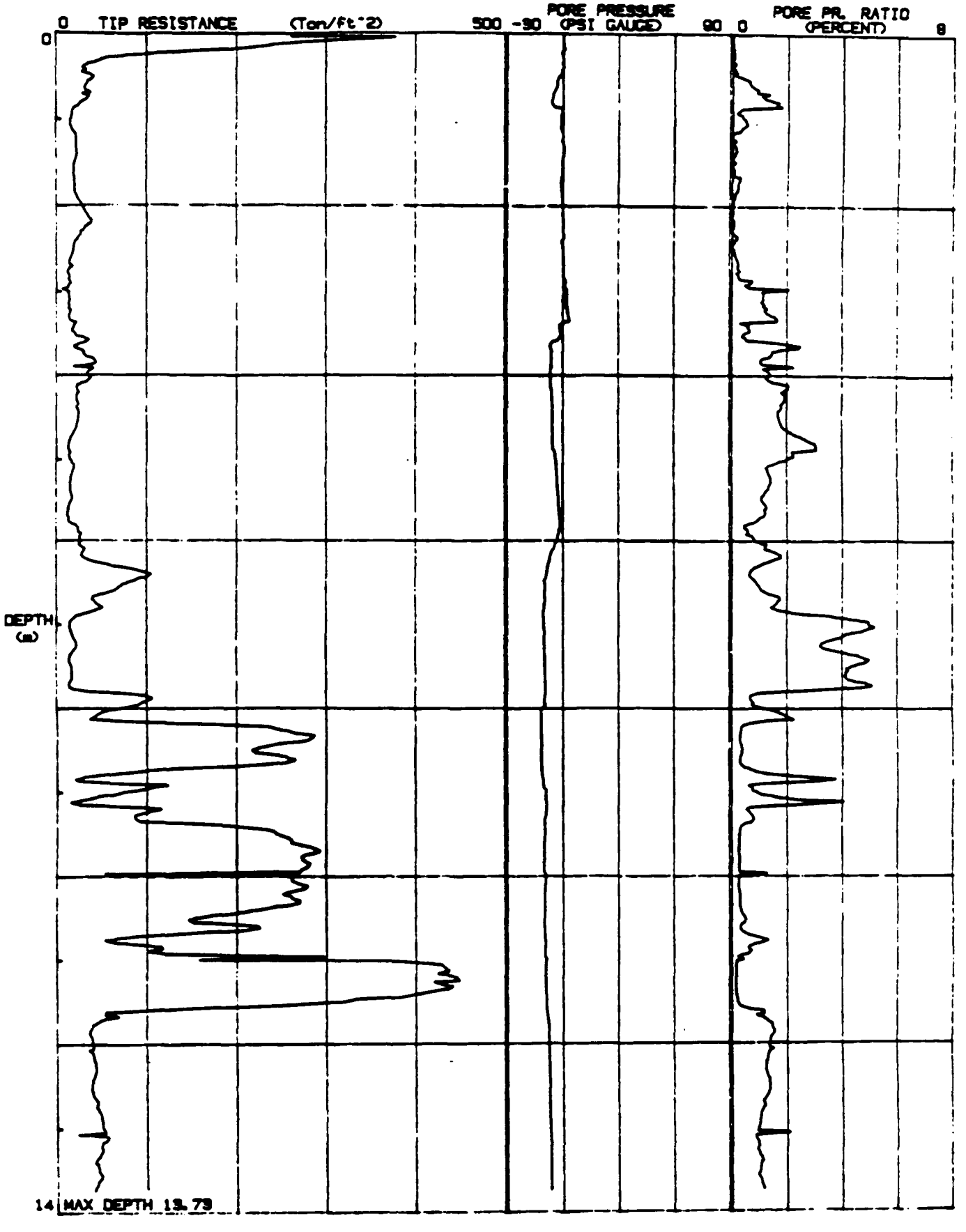
LOCATION : CPT/B-10
FILE # : 45



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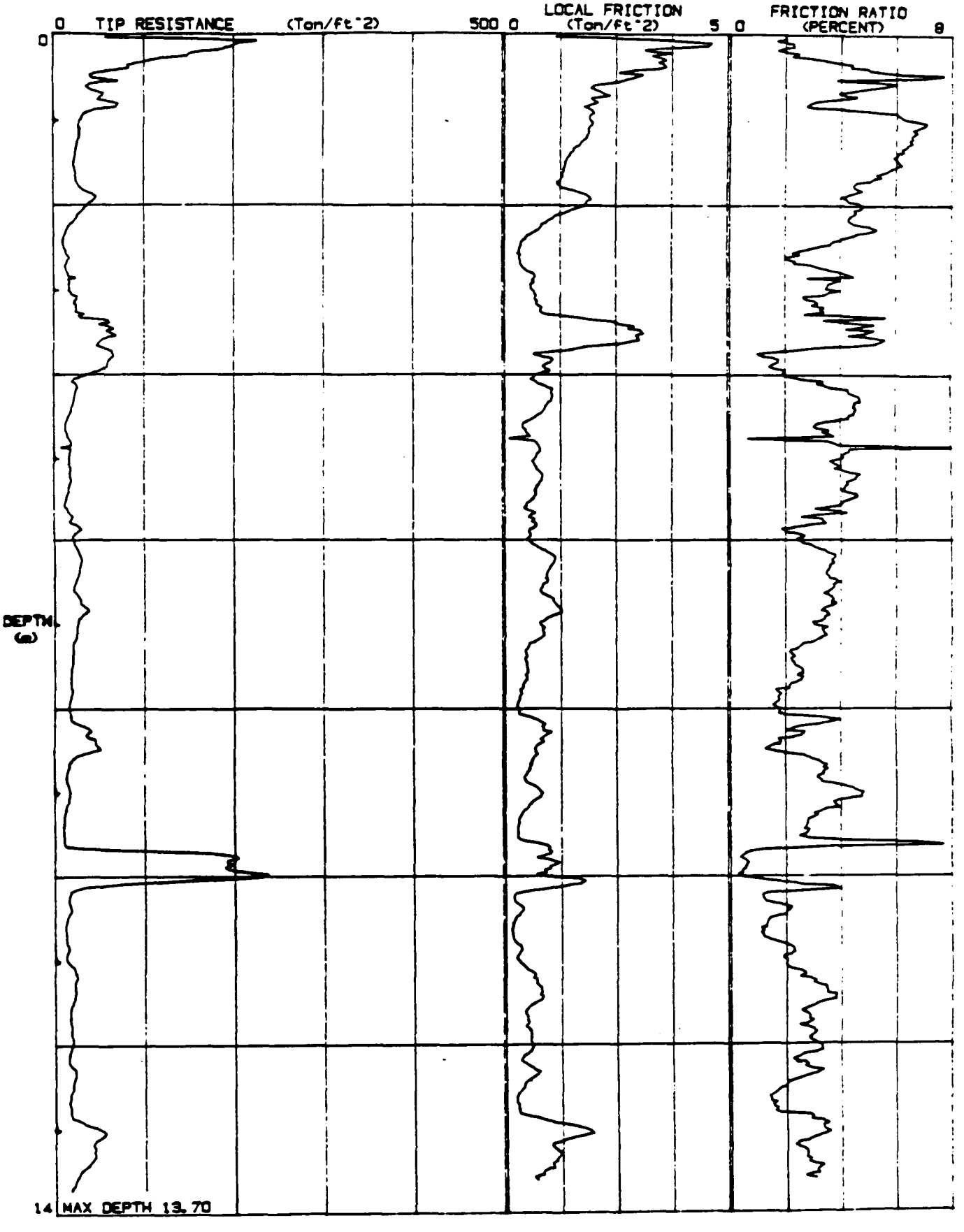
DATE : 02/08/90
LOCATION : CPT/B-12
FILE # : 29



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LOCATION : CPT/B-12
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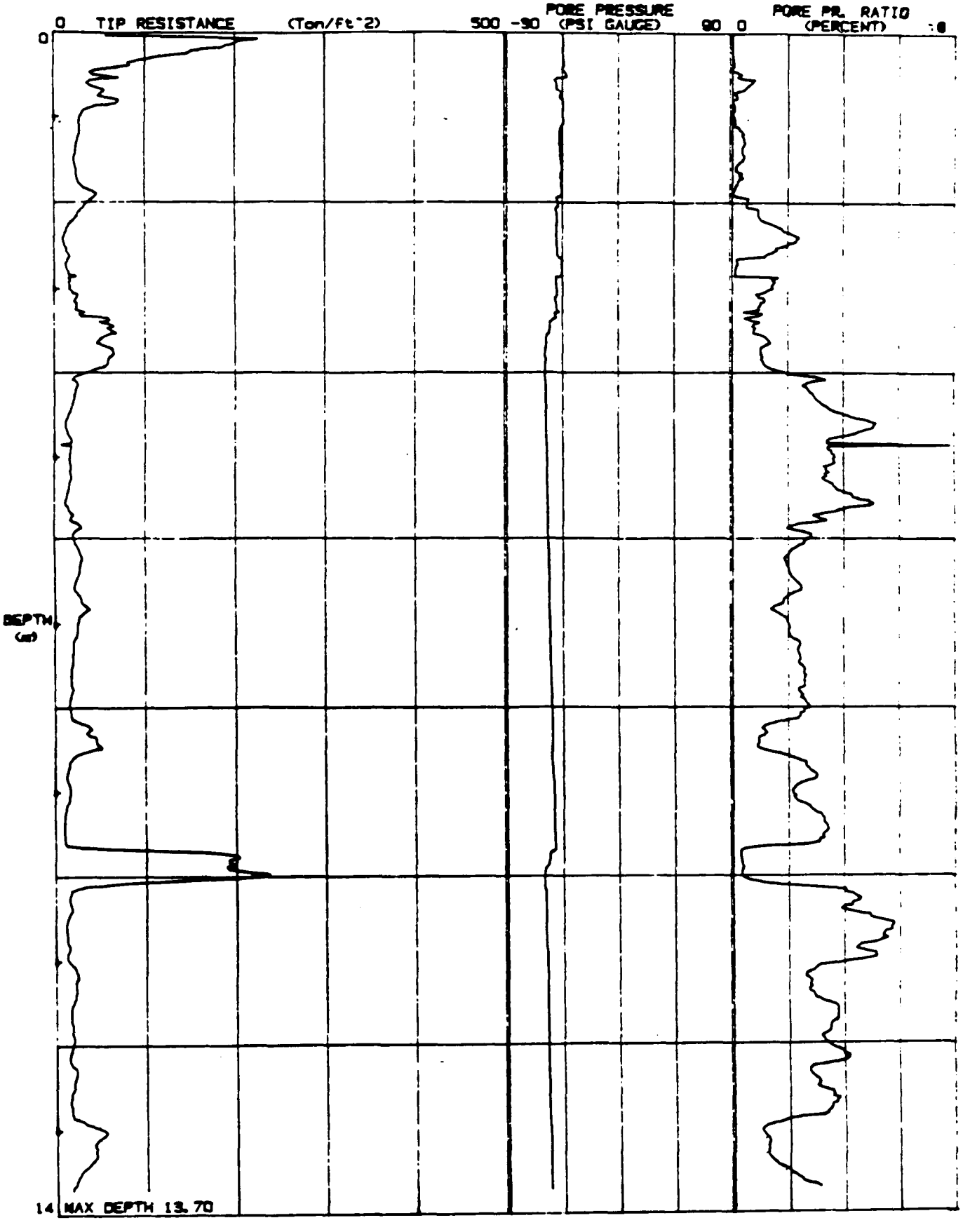

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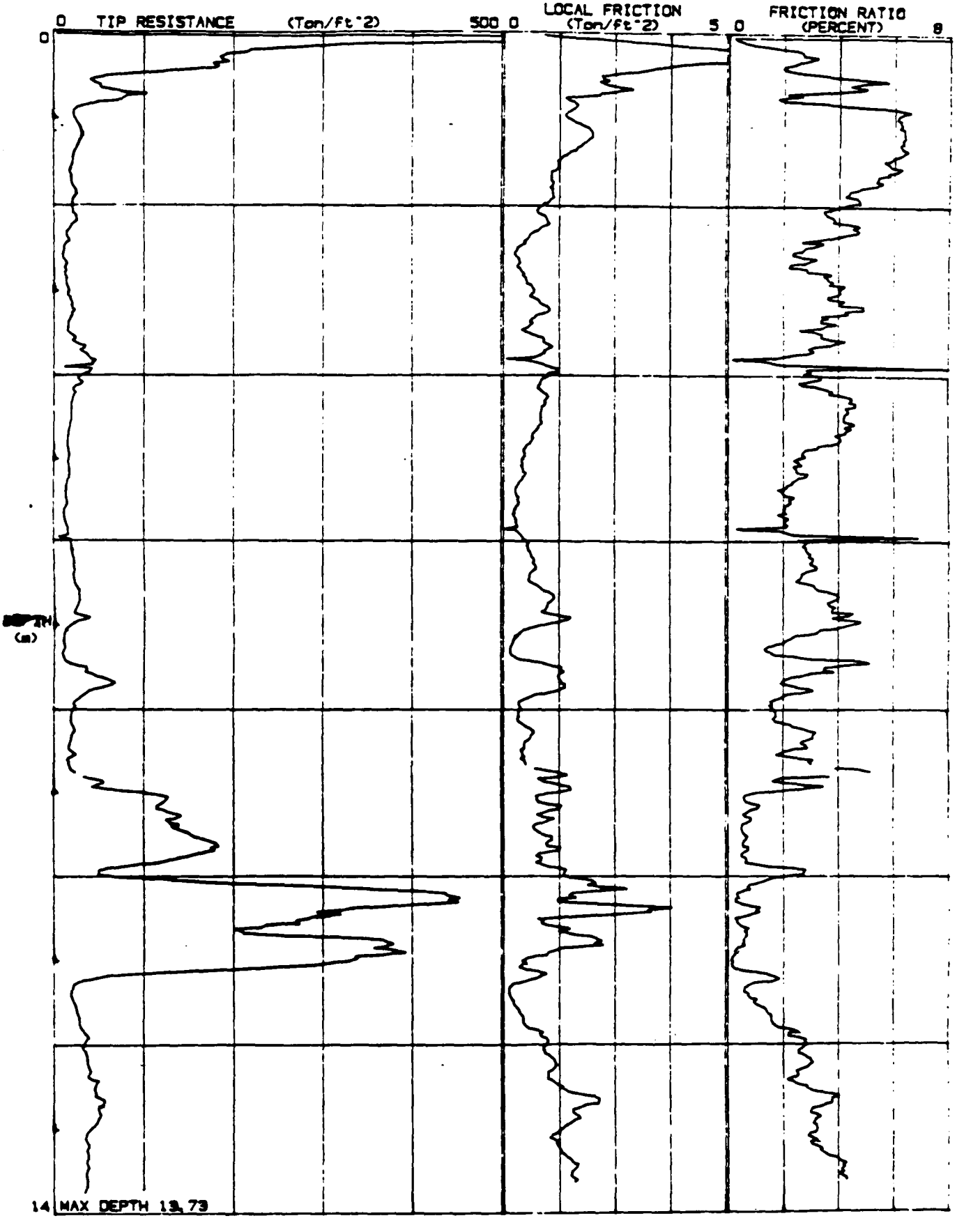
DATE : 02/08/90
LOCATION : CPT/B-14
FILE # : 30



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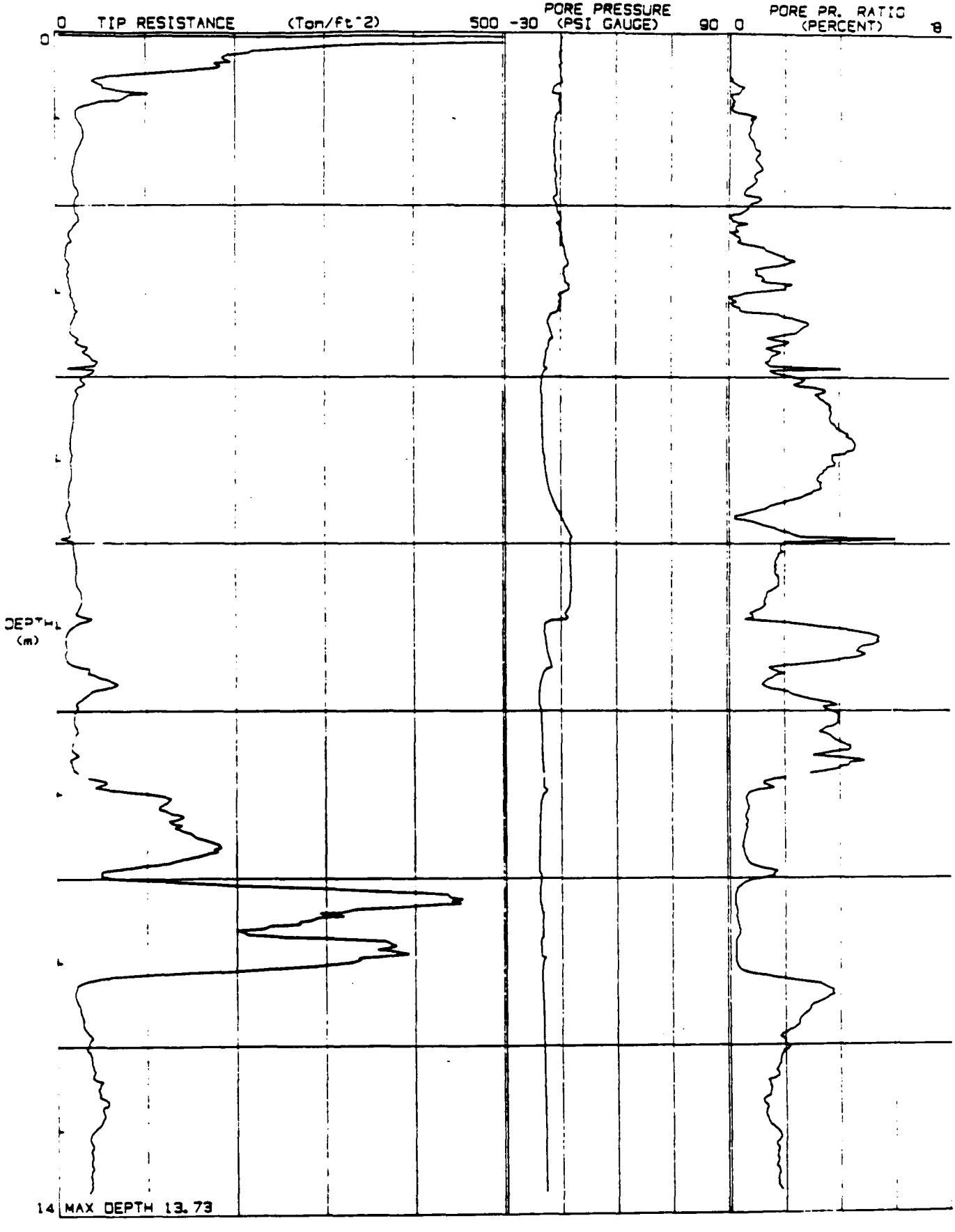
DATE : 02/06/90
LOCATION : CPT/B-14
FILE # : 30



JOB # : 409700
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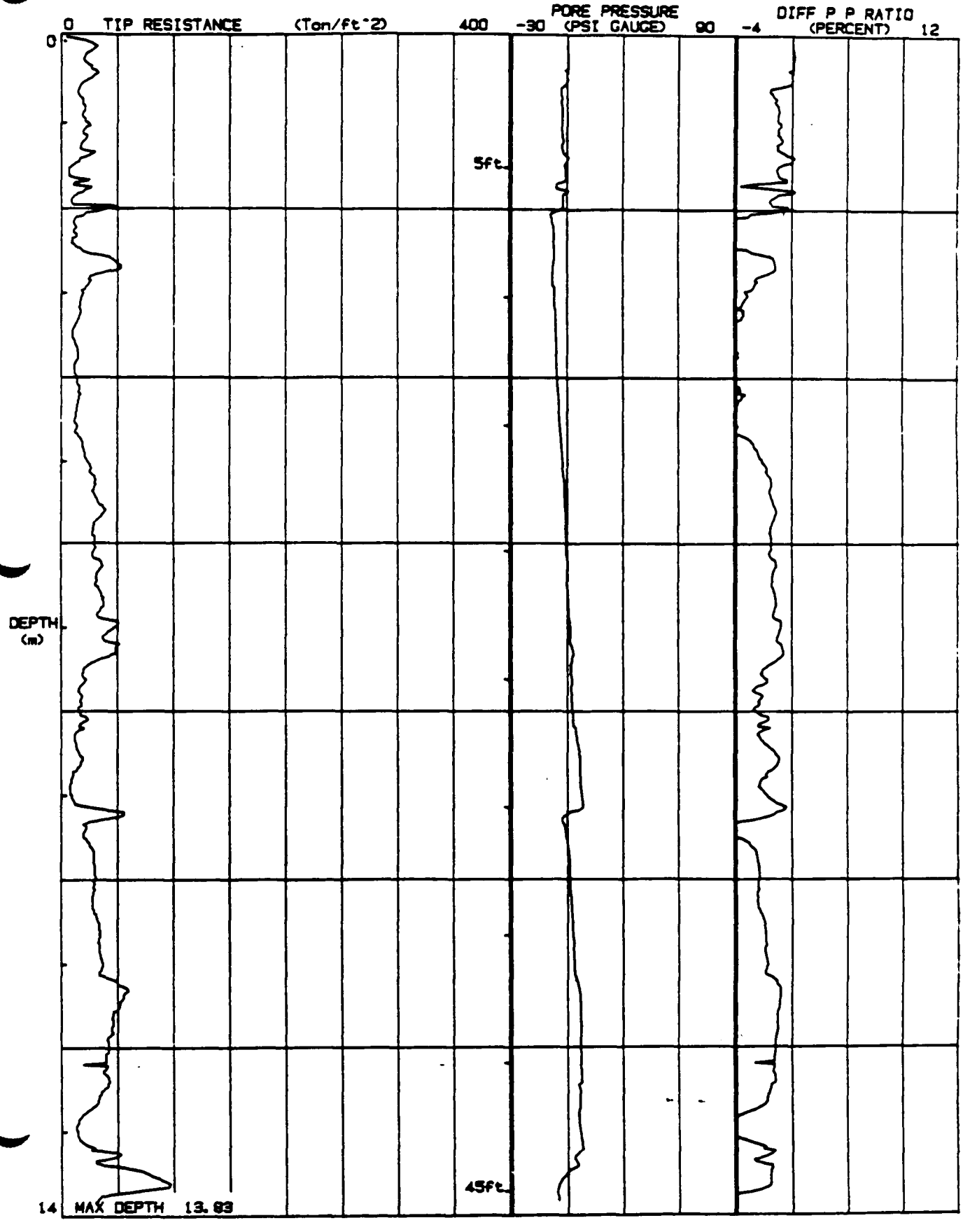
LOCATION : CPT8-18
FILE : FIL158



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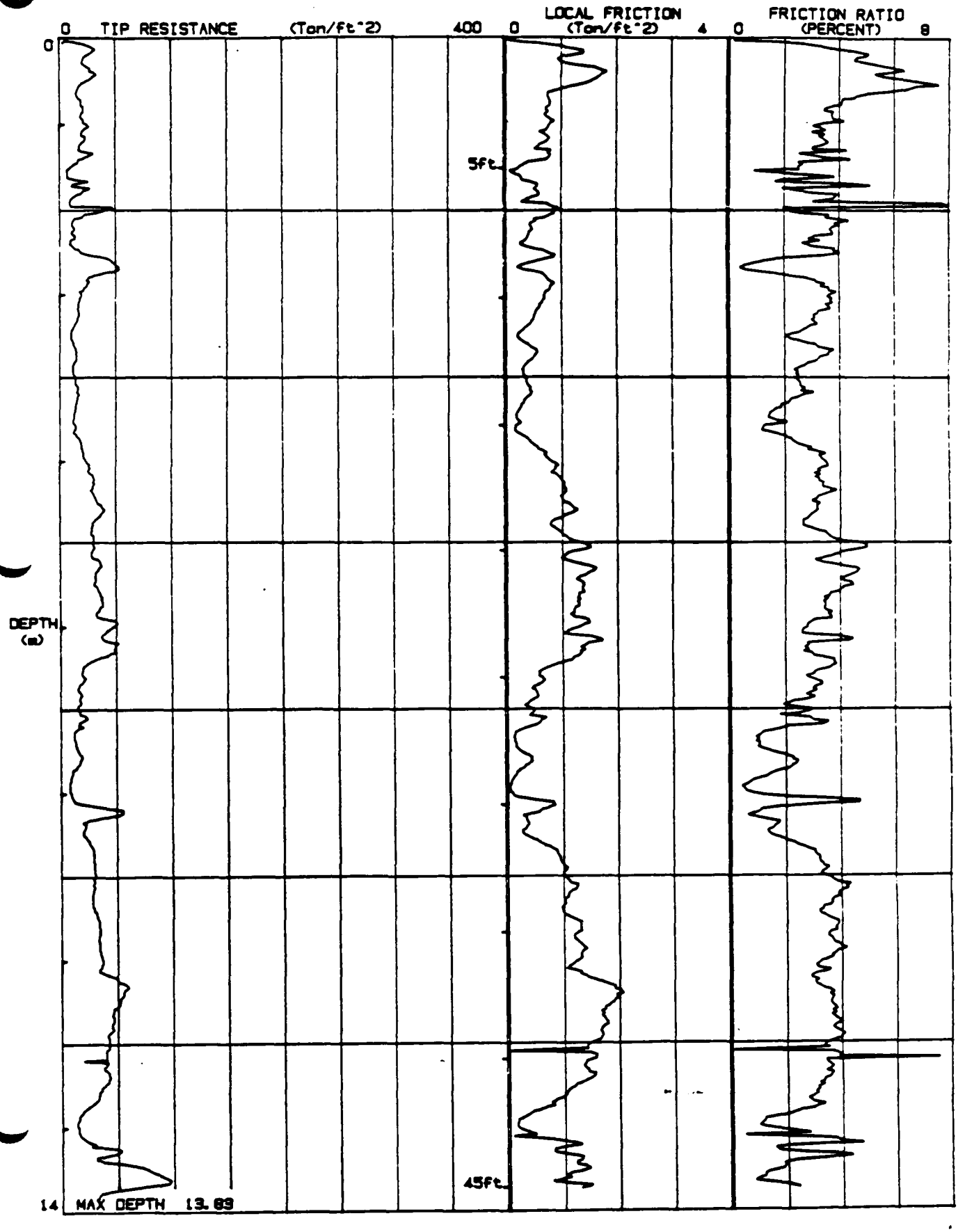
FILE : FIL158



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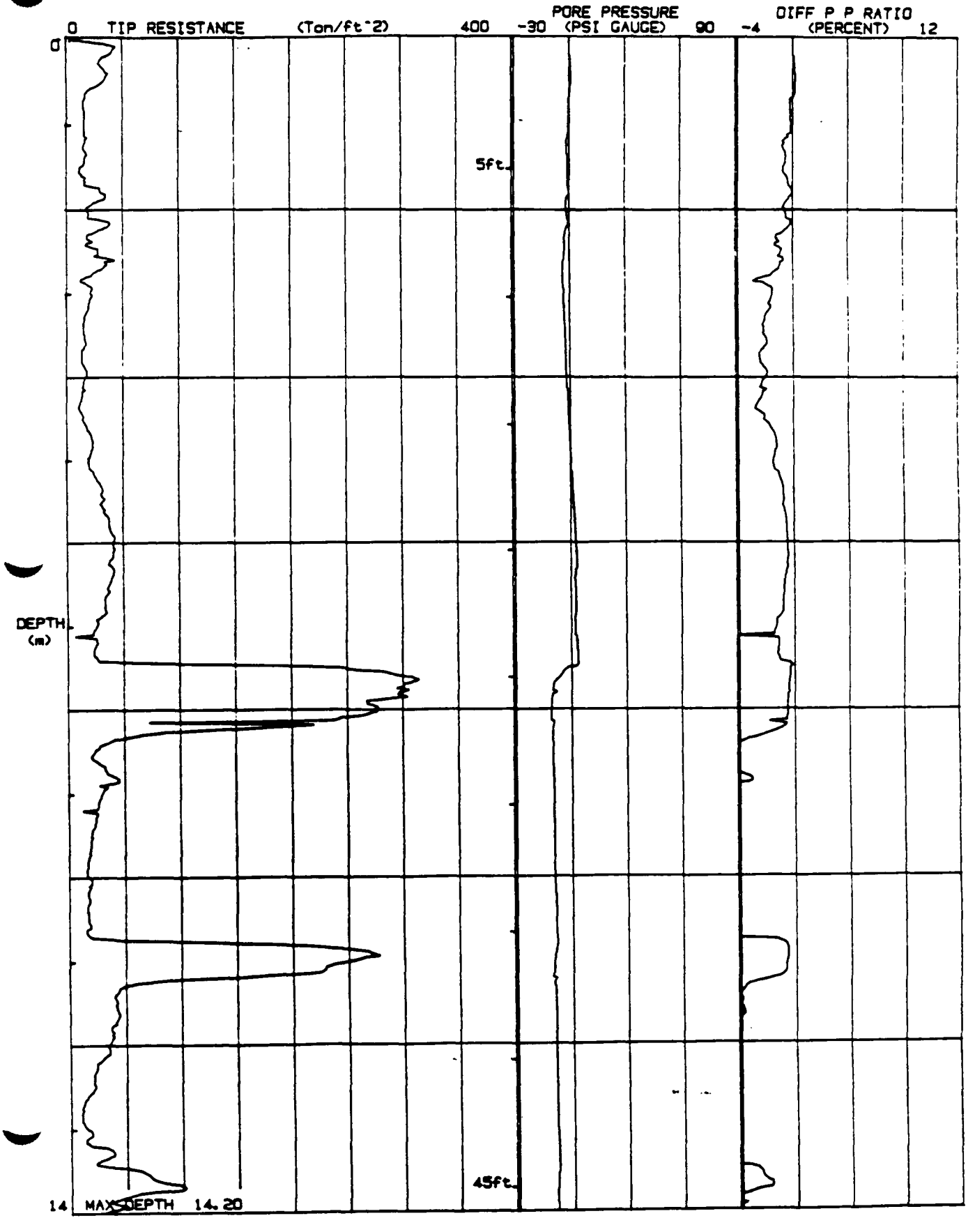
LOCATION : CPT8-19
FILE : FIL155



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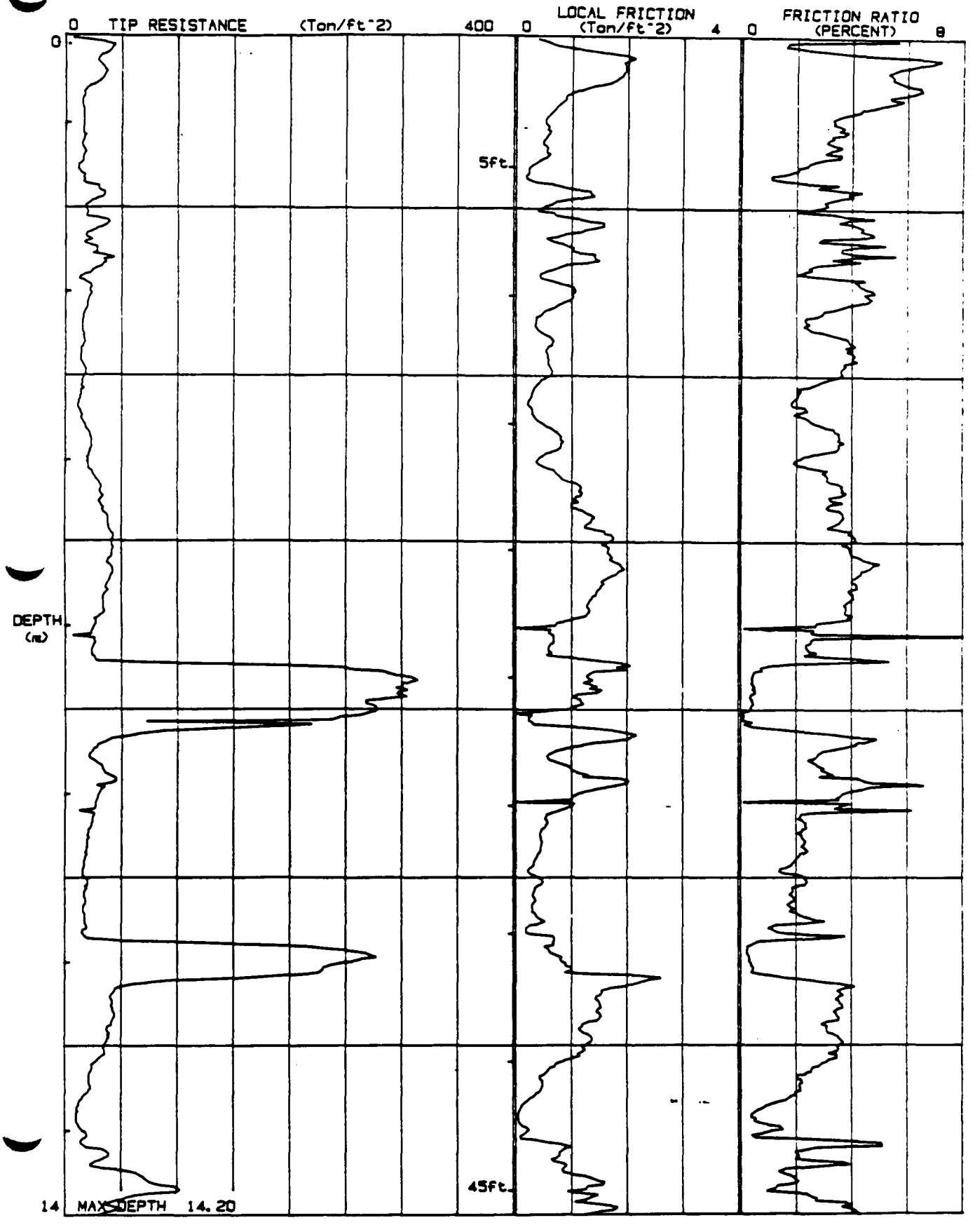
LOCATION : CPT8-19
FILE : FIL155



JOB # : 409700
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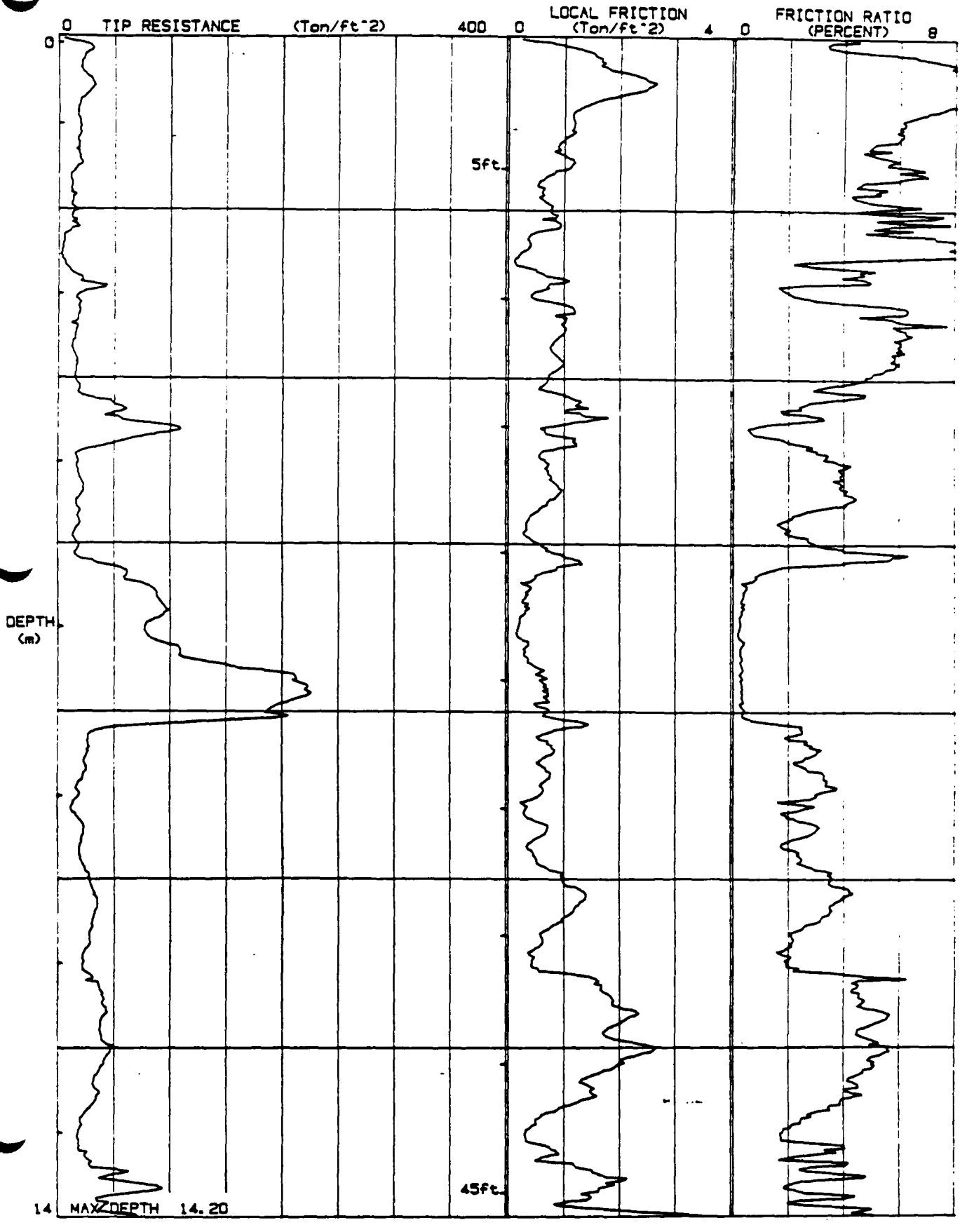
LOCATION : CPT8-21
FILE : FIL179



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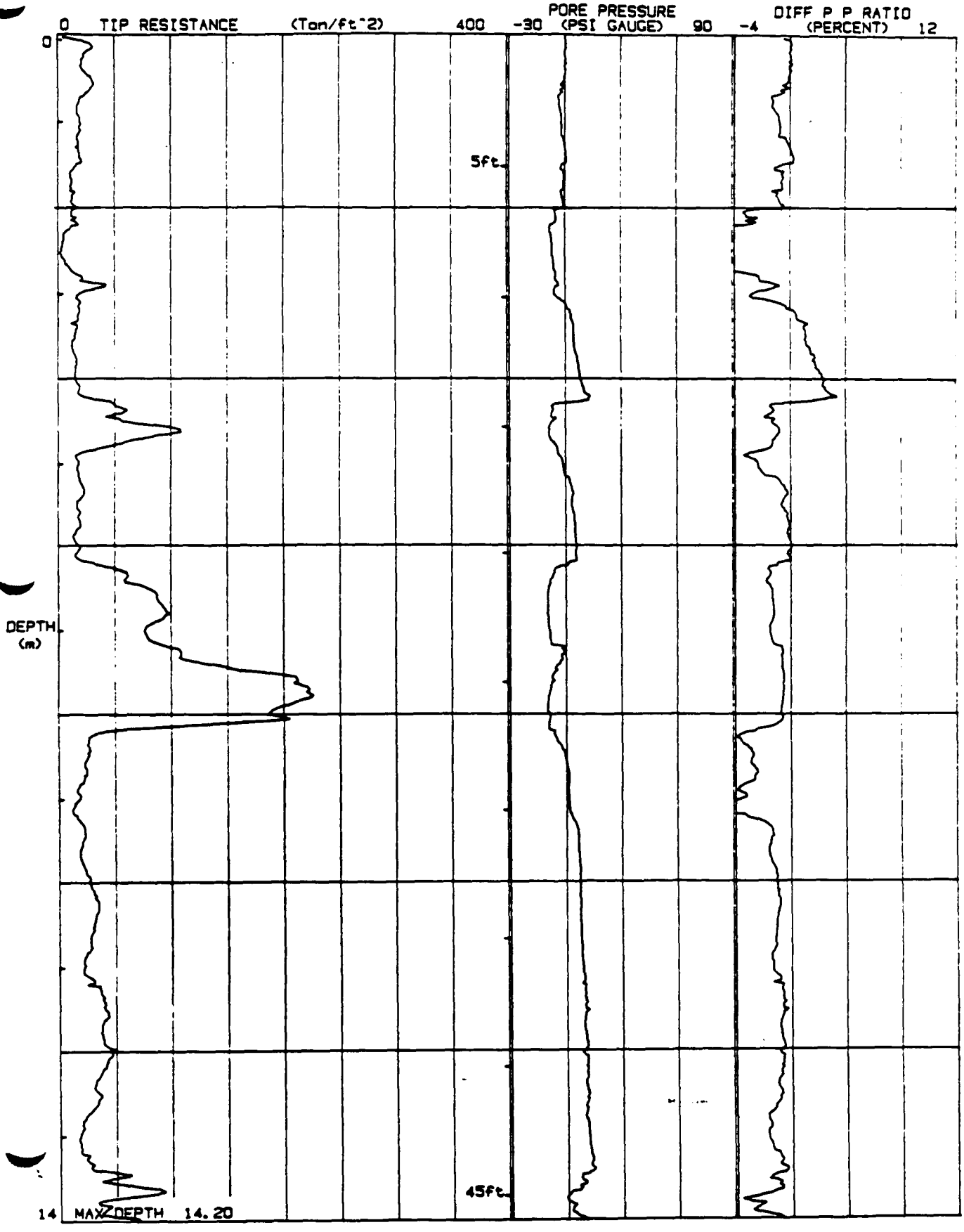
DATE : 04/23/90/15: 22
LOCATION : CPT8-21
FILE : FIL179



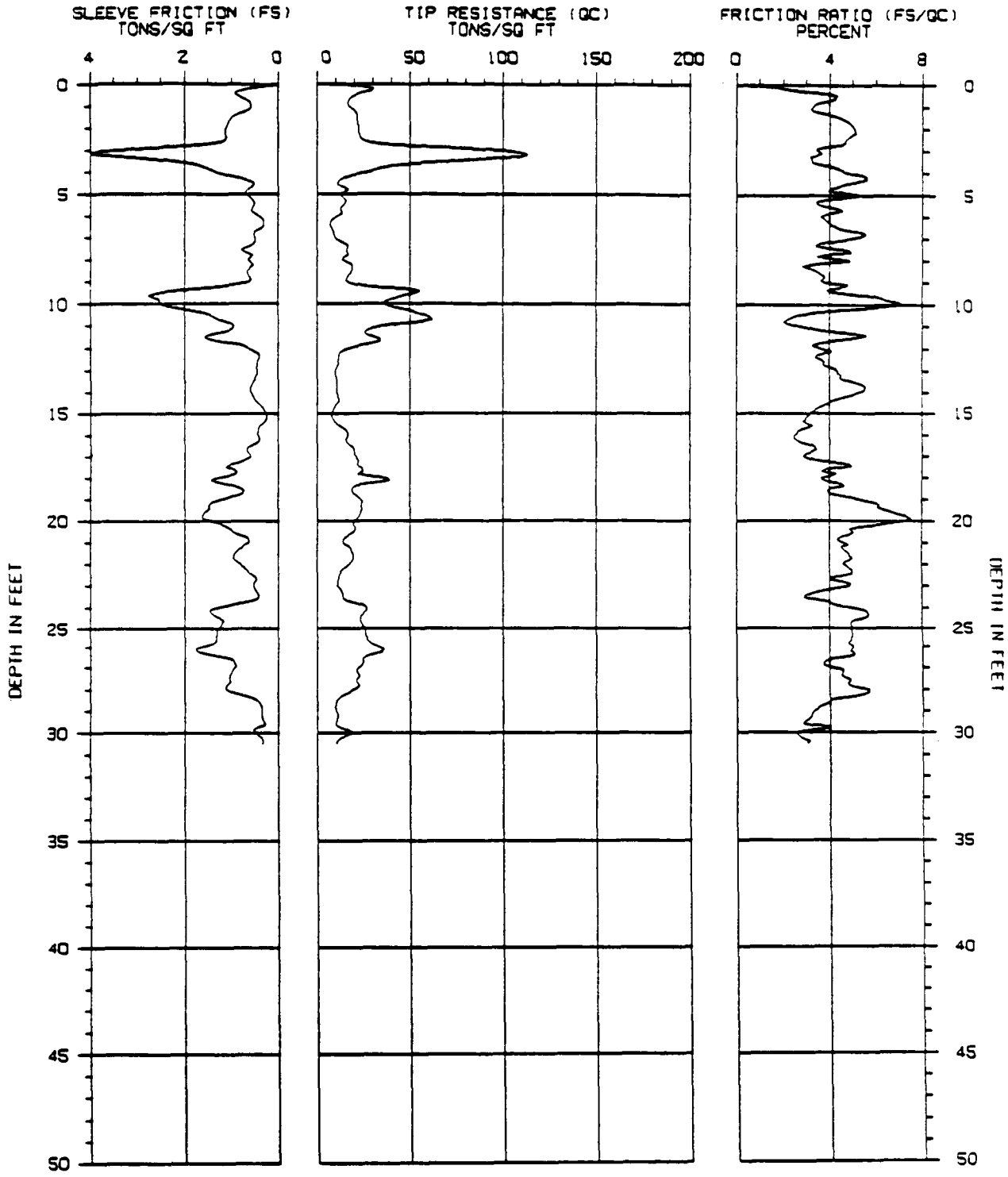
N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 8 – CPT (CLEAN)

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-2

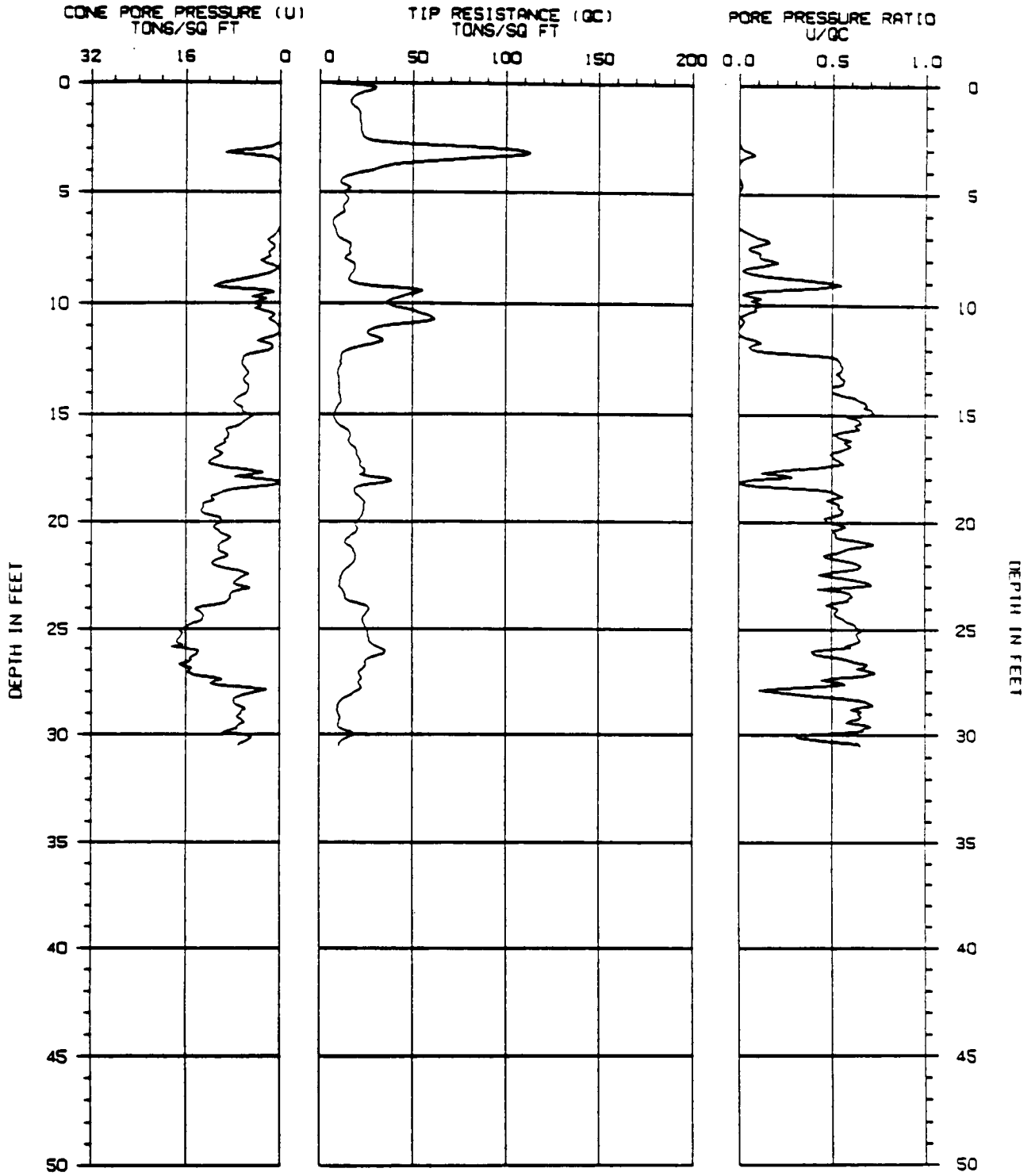
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-2

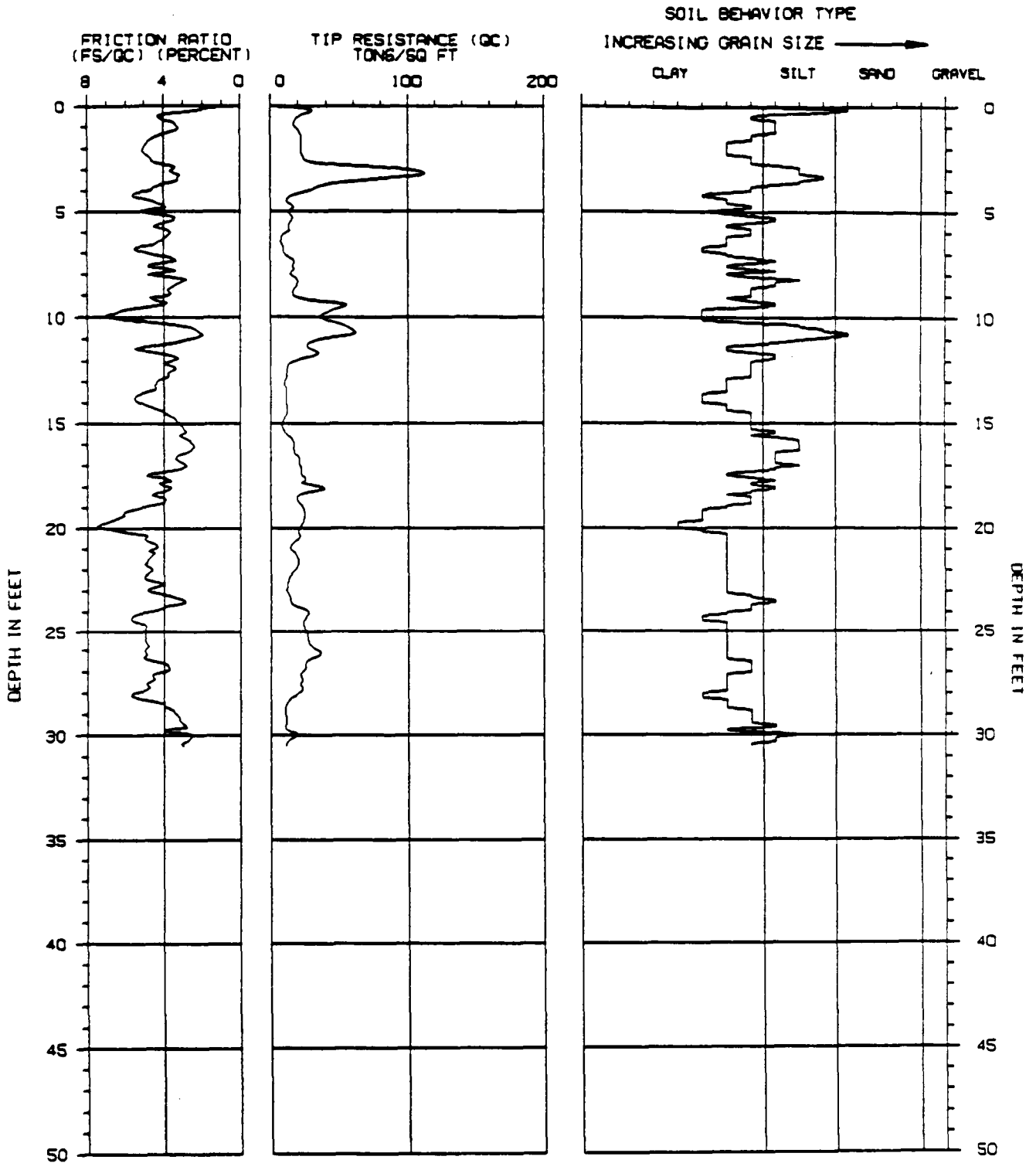
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 5.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-2

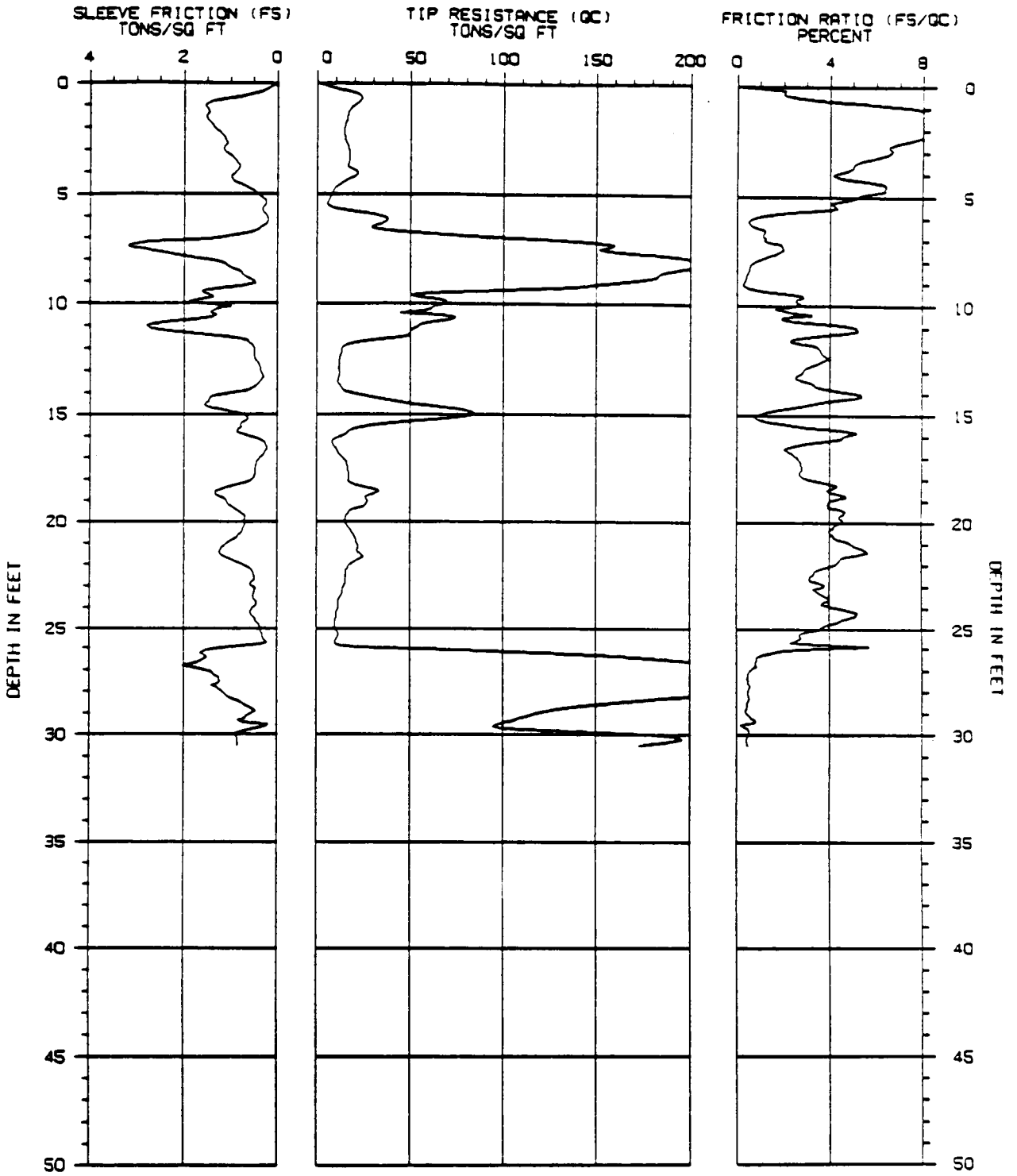
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-4

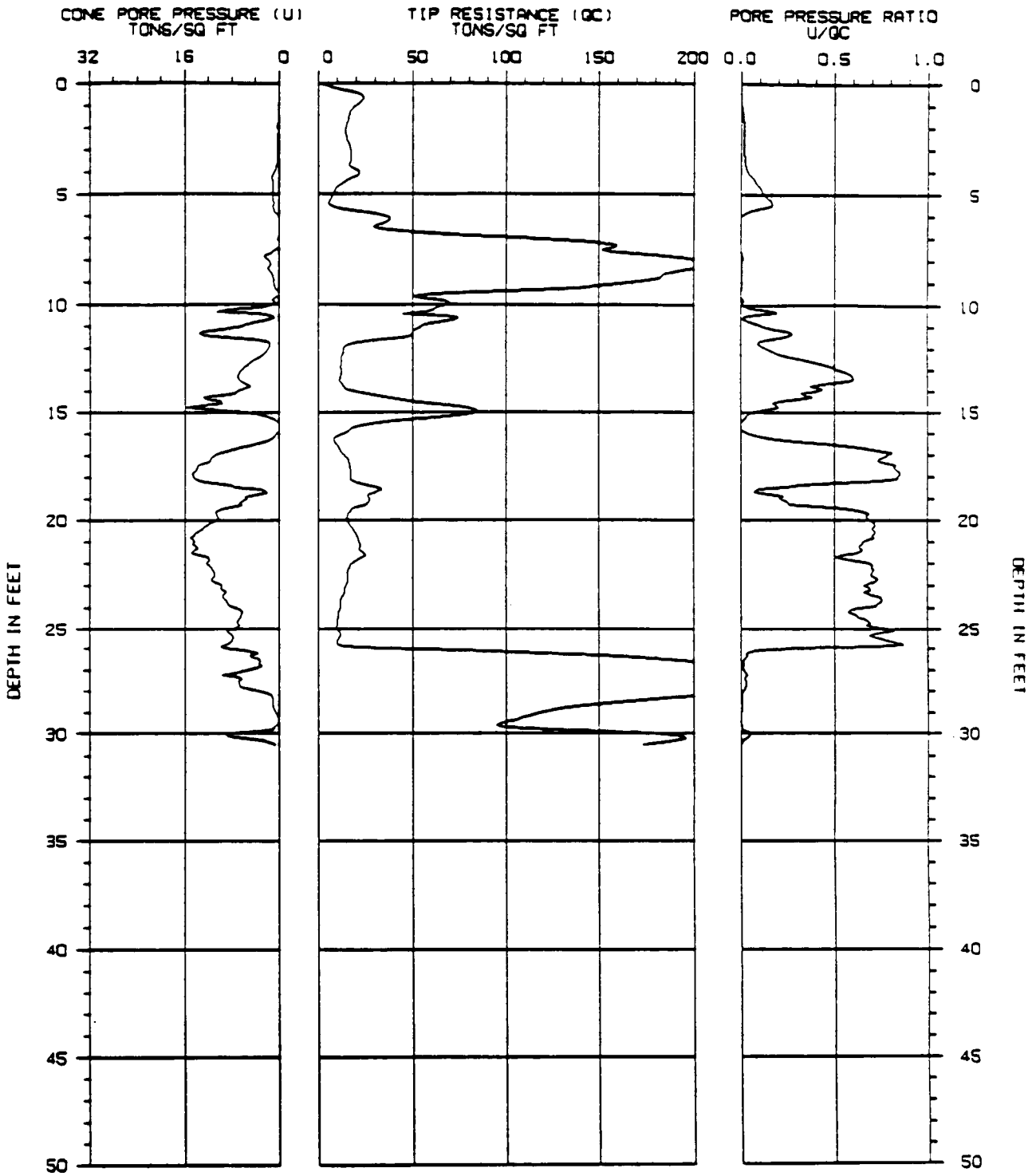
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-4

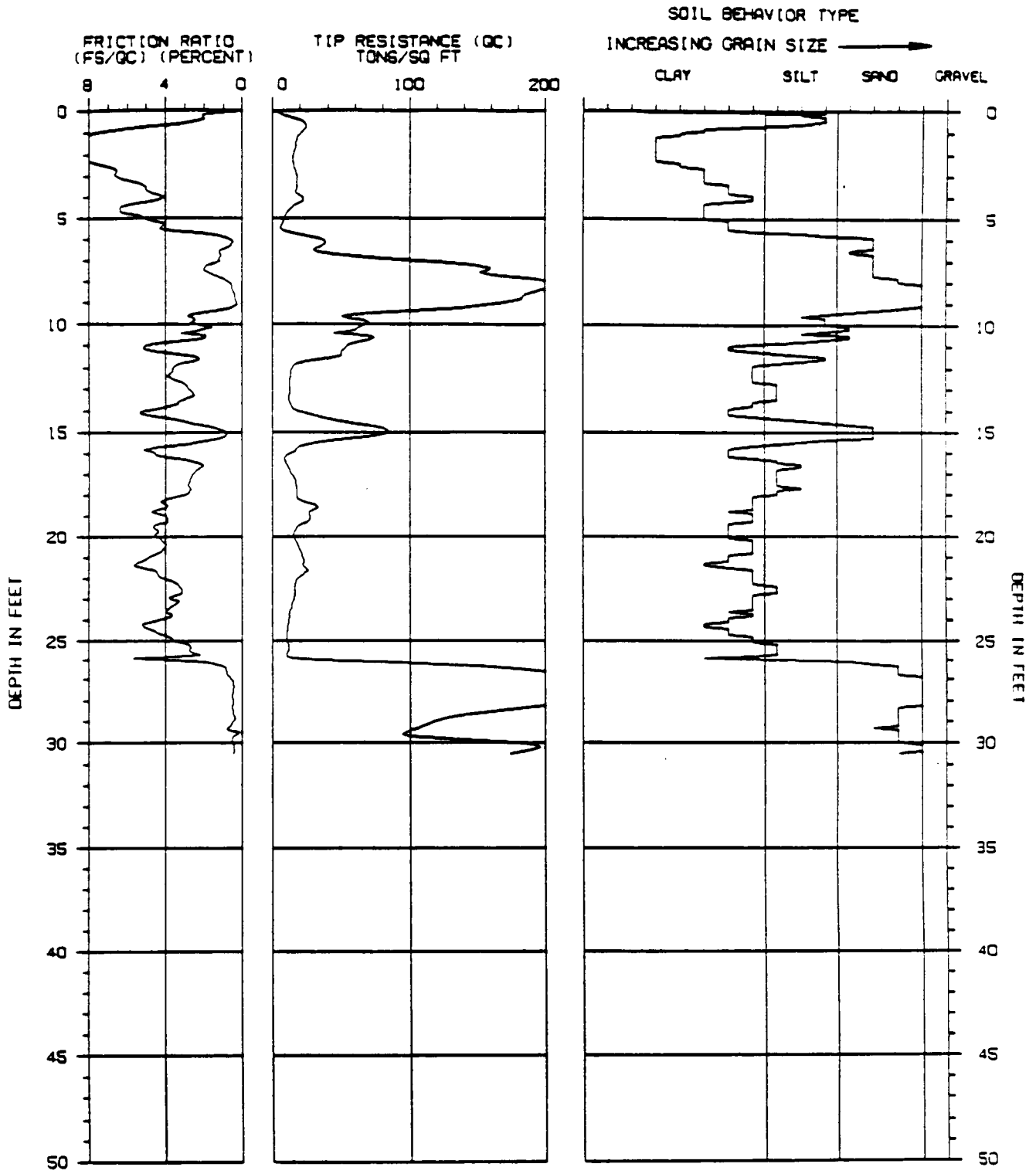
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 6.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-4

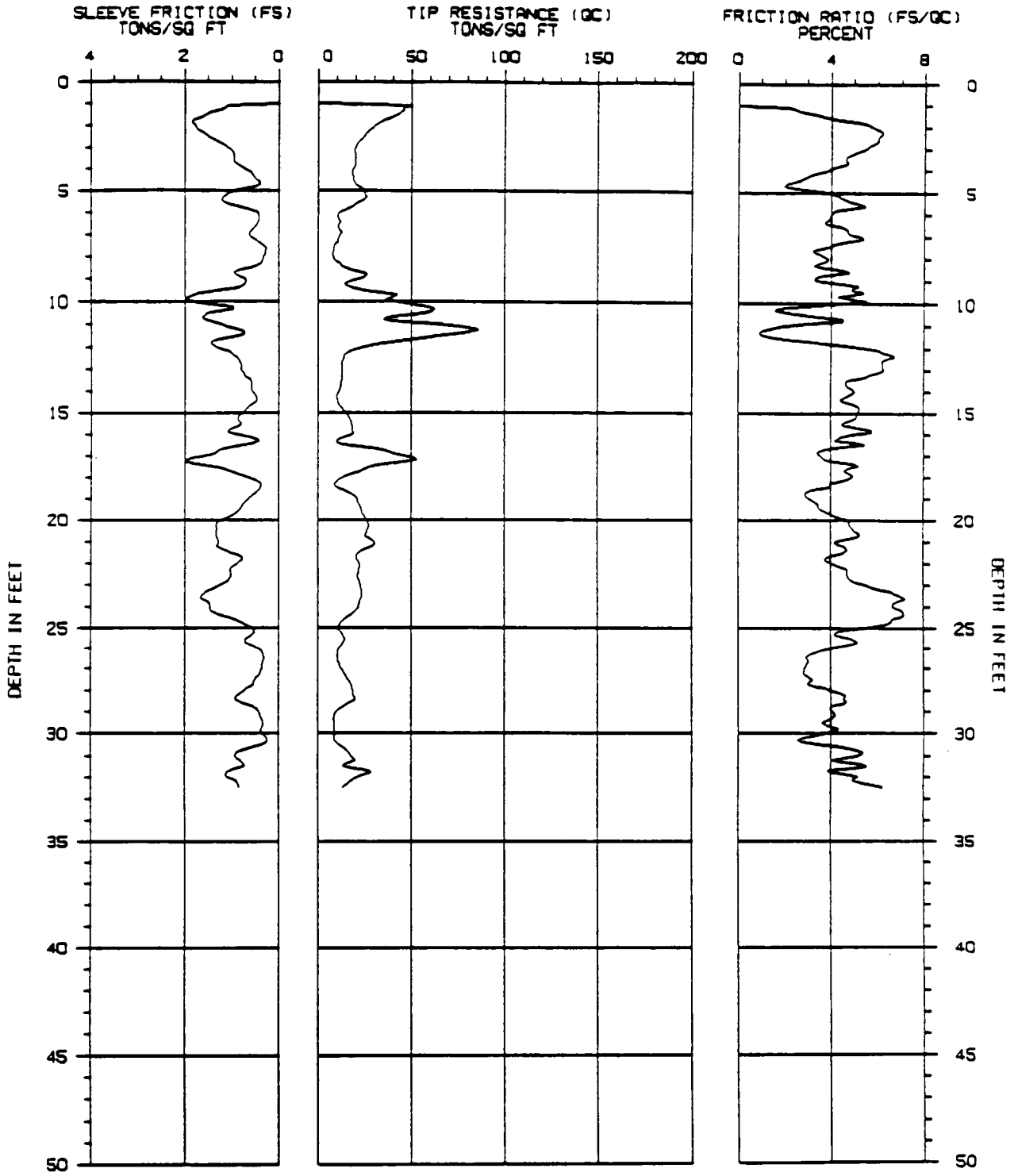
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-5

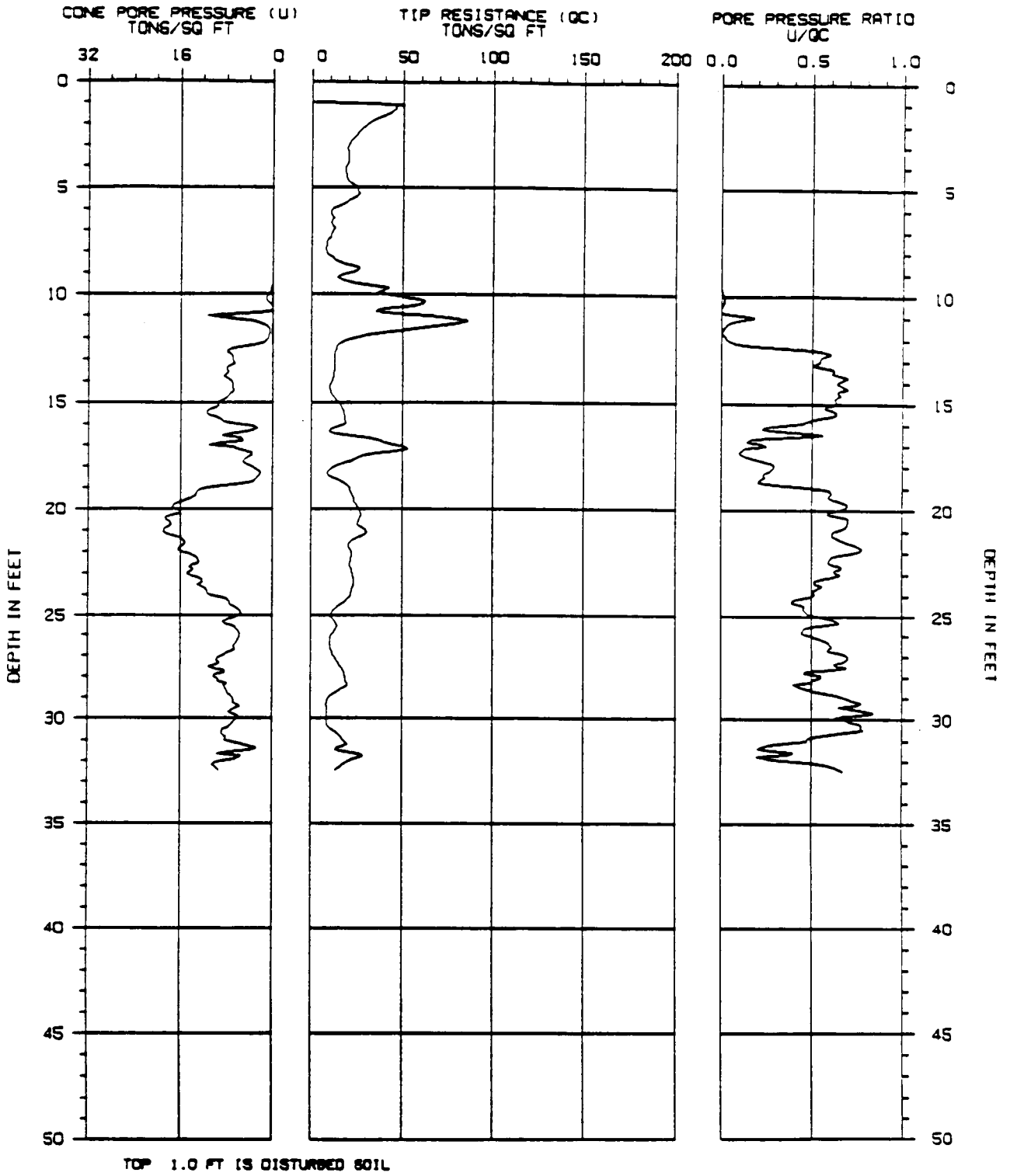
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-5

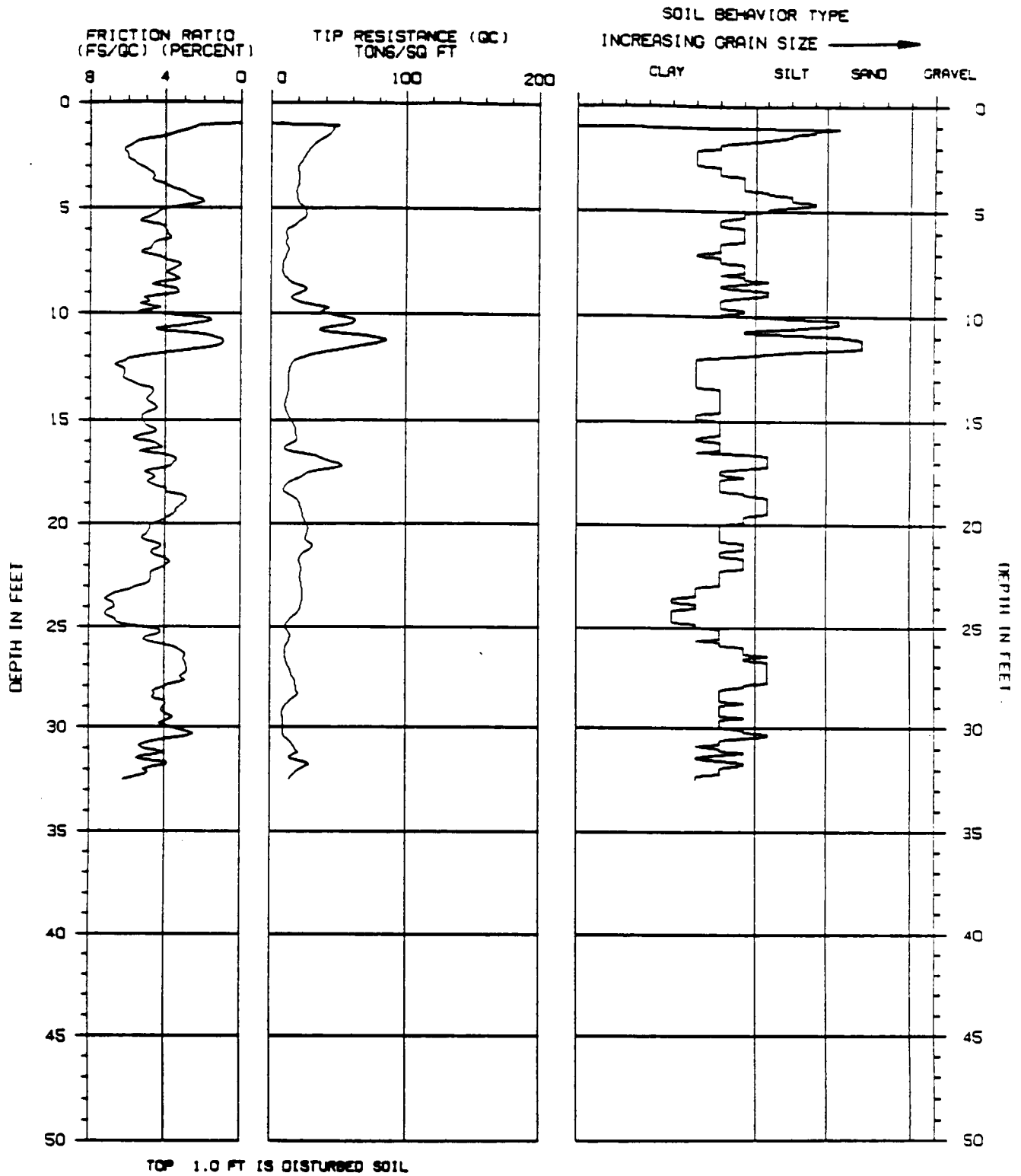
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 5.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-5

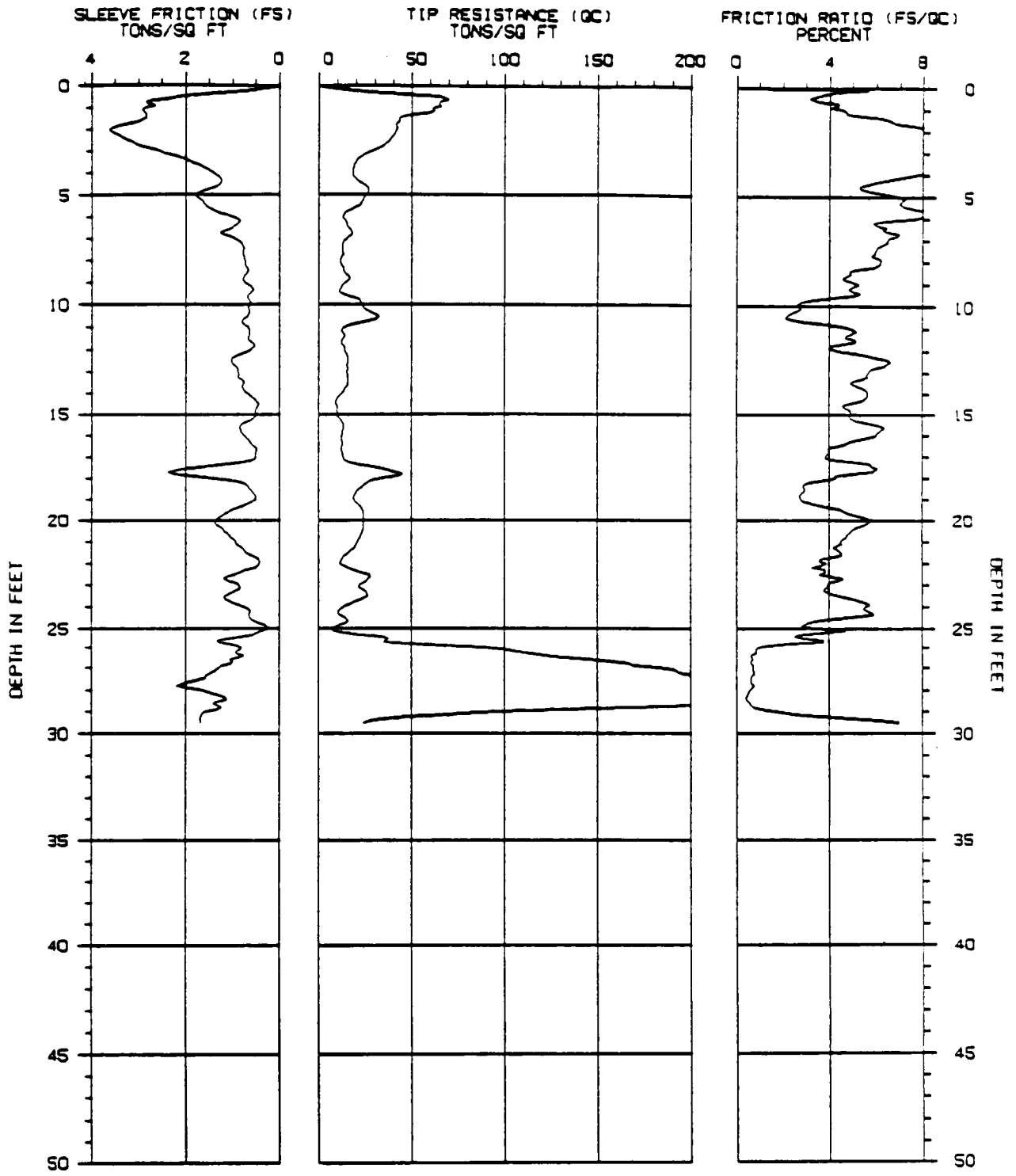
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-10

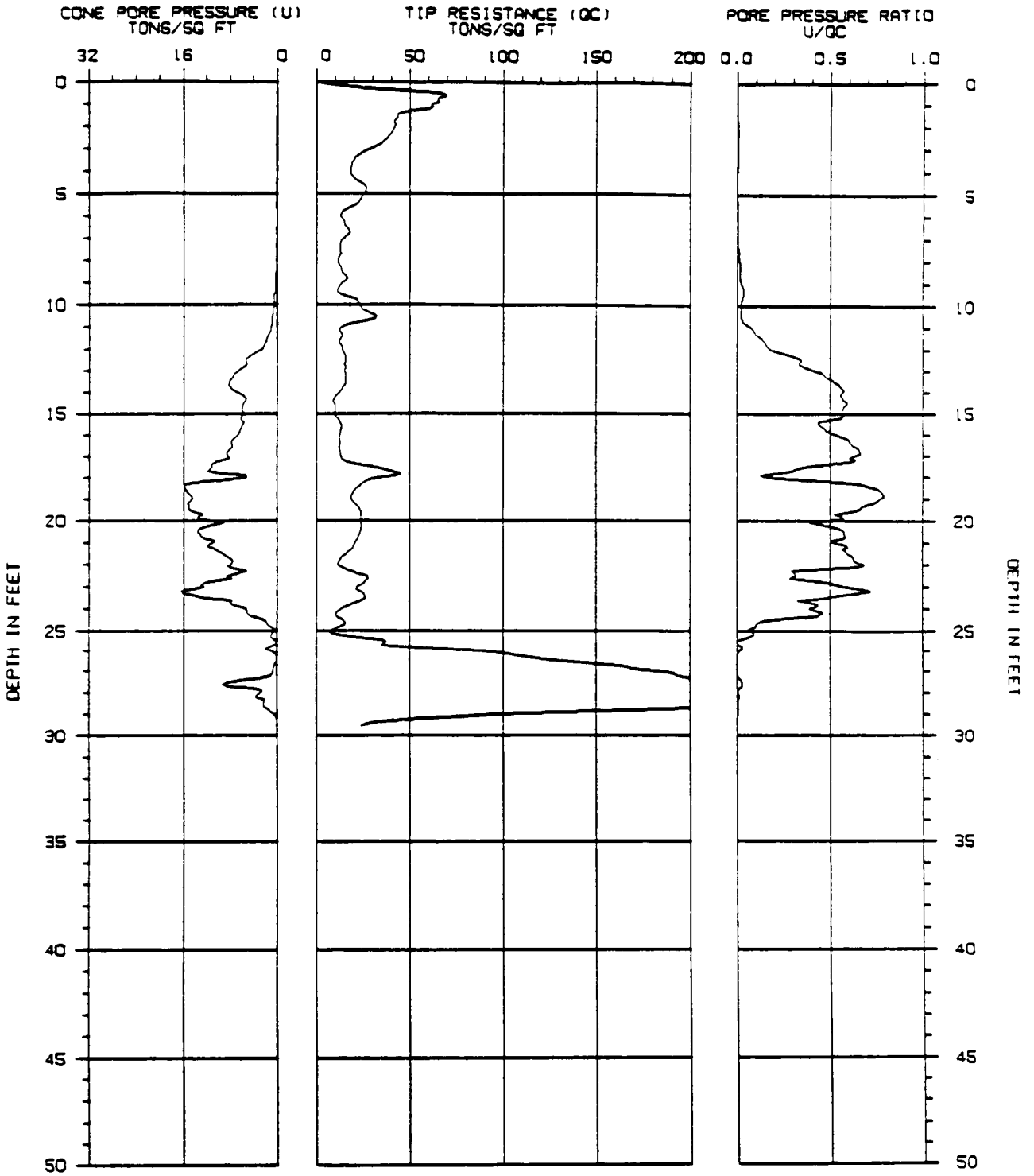
PROJECT NAME : JMM/MOFFETT NAS

PROJECT NUMBER : 9110-07002

LOCATION : SUNNYVALE

DATE : 05-07-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-10

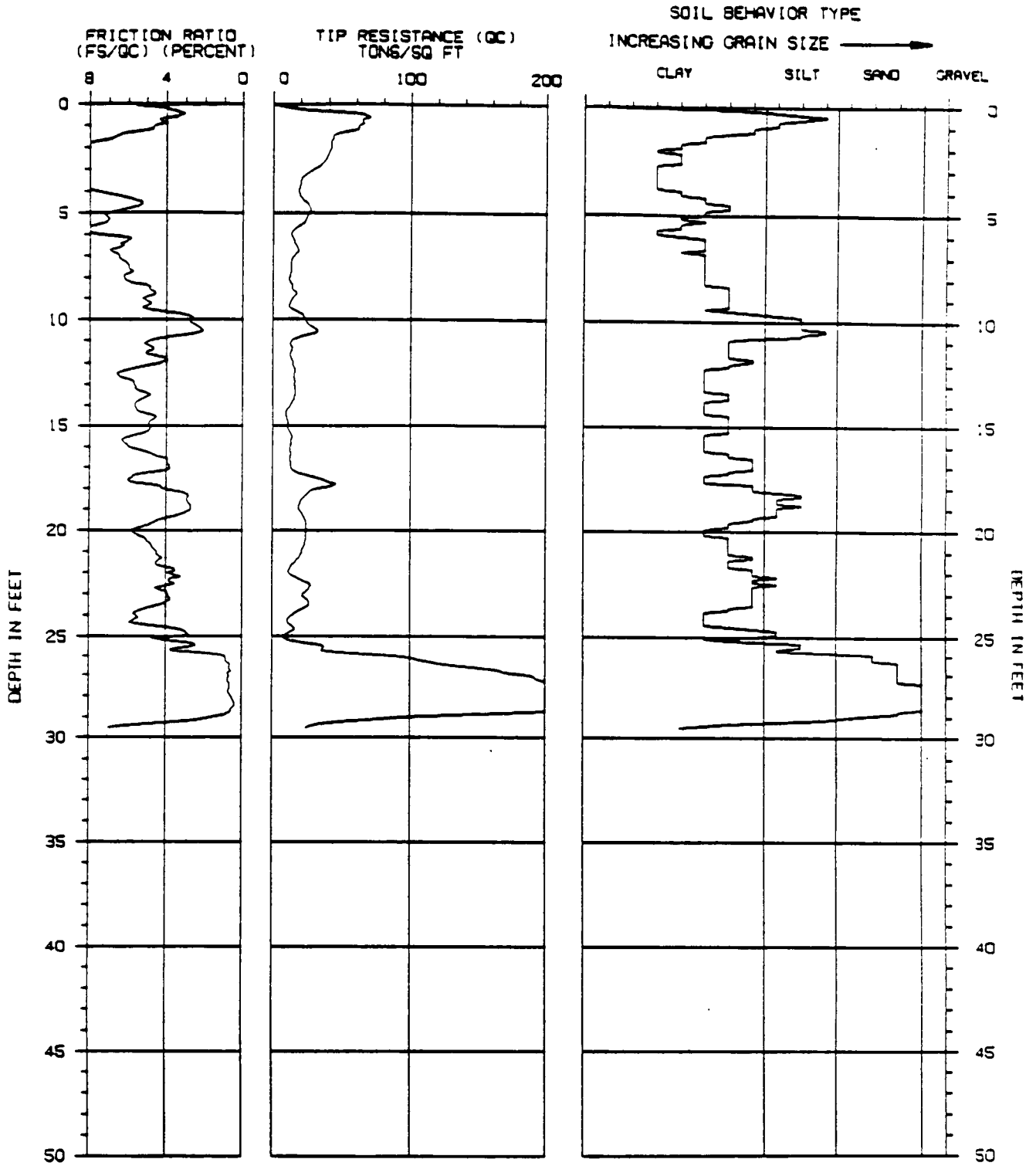
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-07-1991

THE EARTH TECHNOLOGY CORPORATION



ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 5.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-10

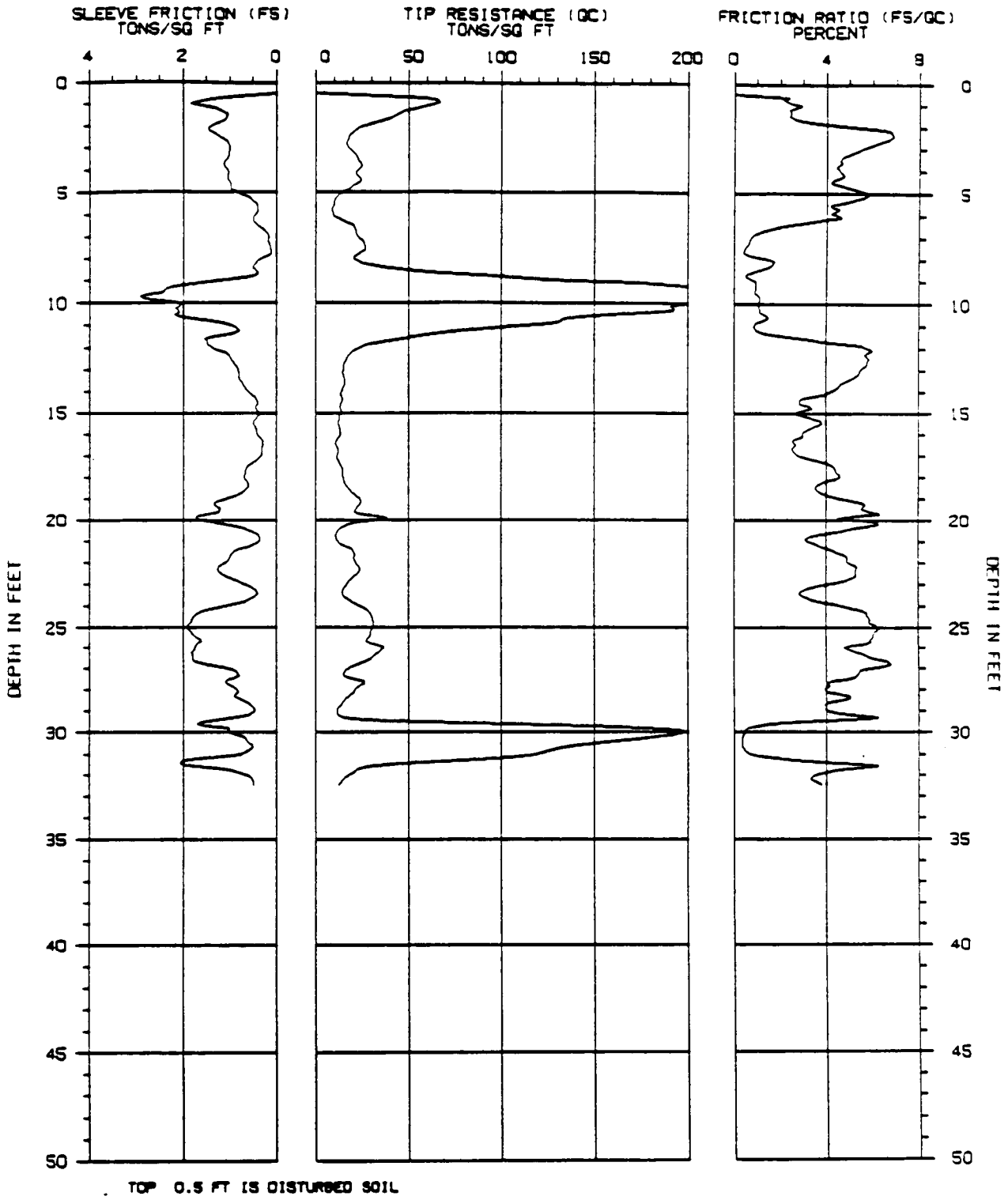
PROJECT NAME : JMM/MOFFETT NAS

PROJECT NUMBER : 9110-07002

LOCATION : SUNNYVALE

DATE : 05-07-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-11

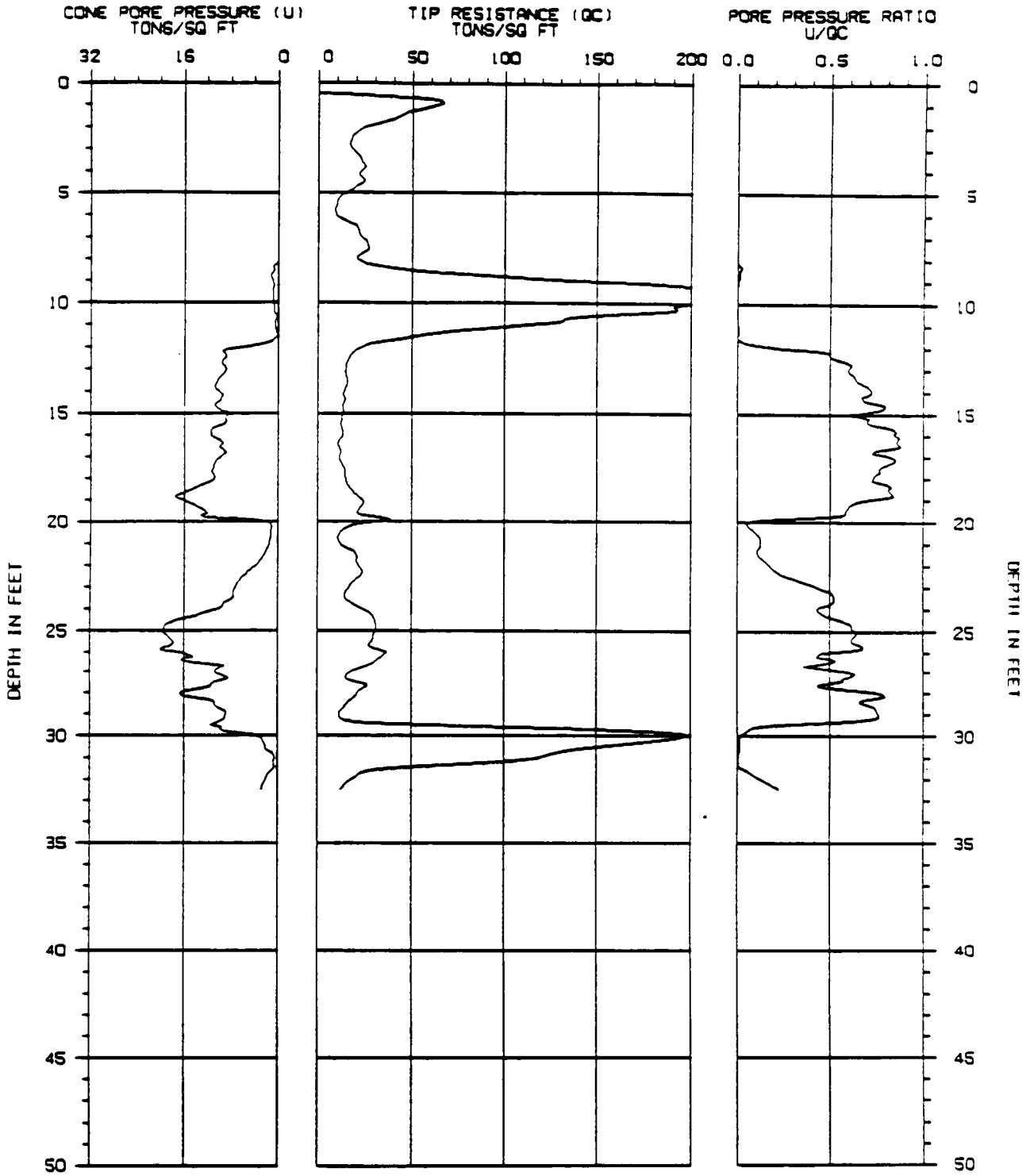
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



TOP 0.5 FT IS DISTURBED SOIL

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-11

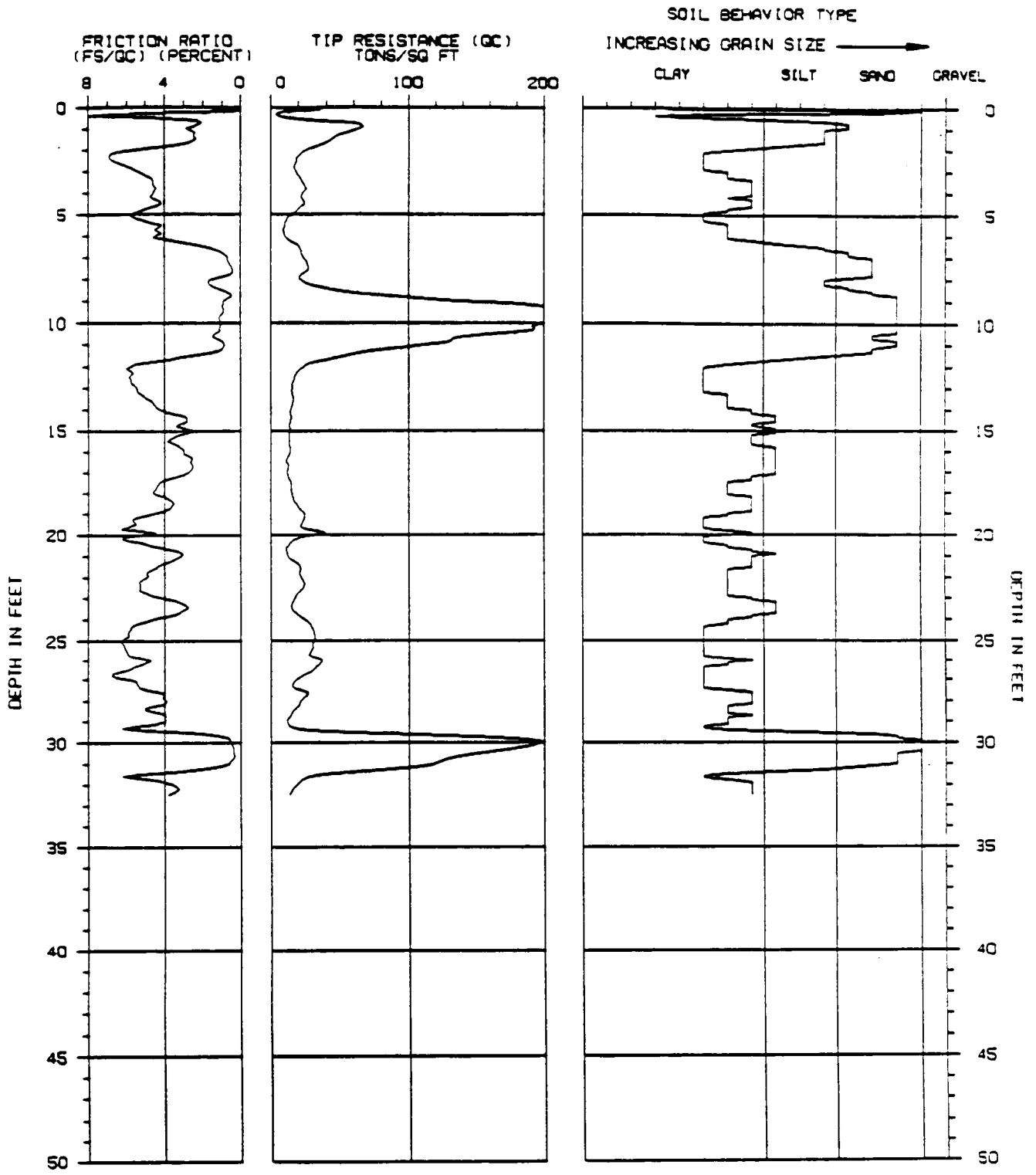
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 5.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-11

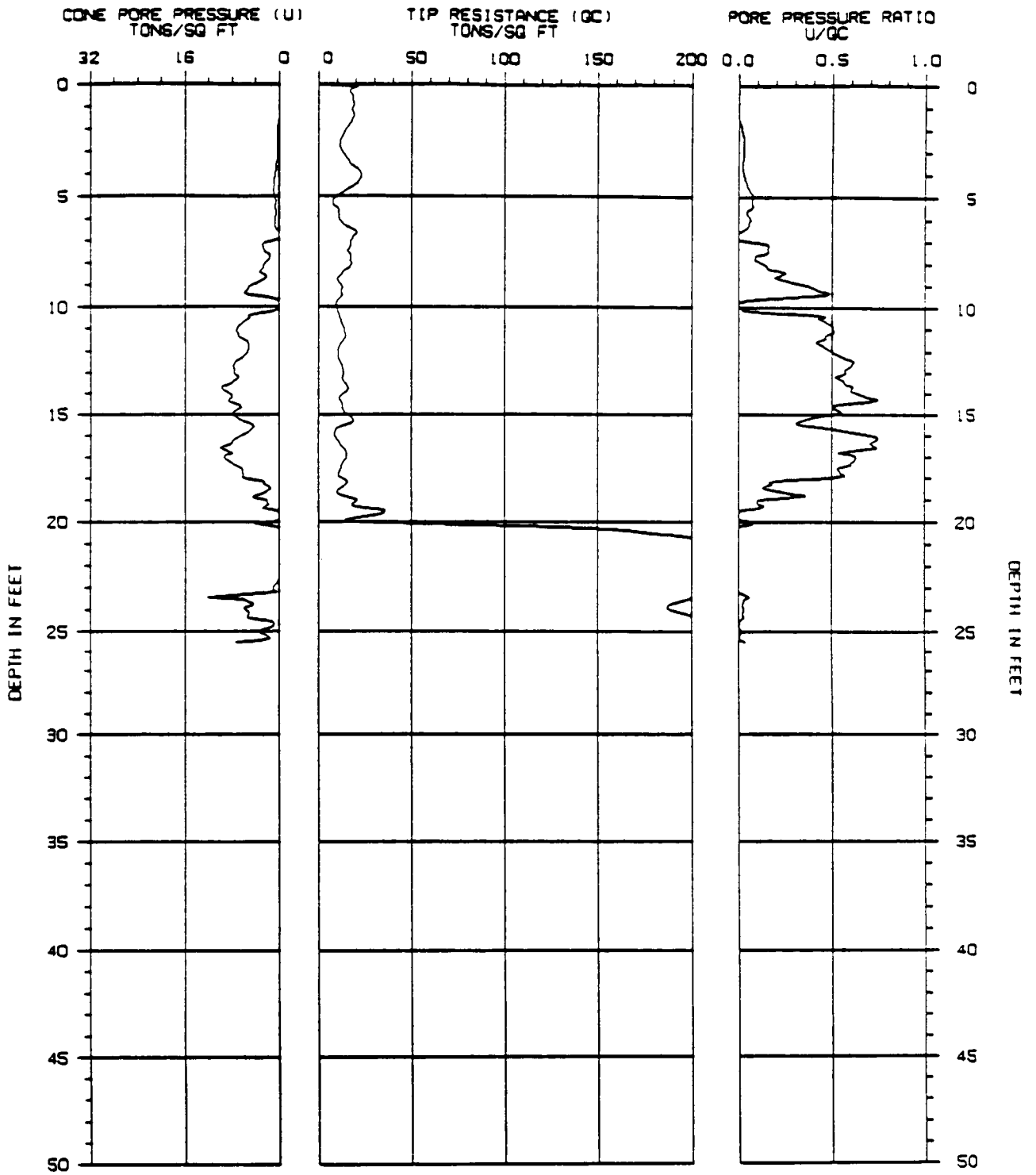
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-14

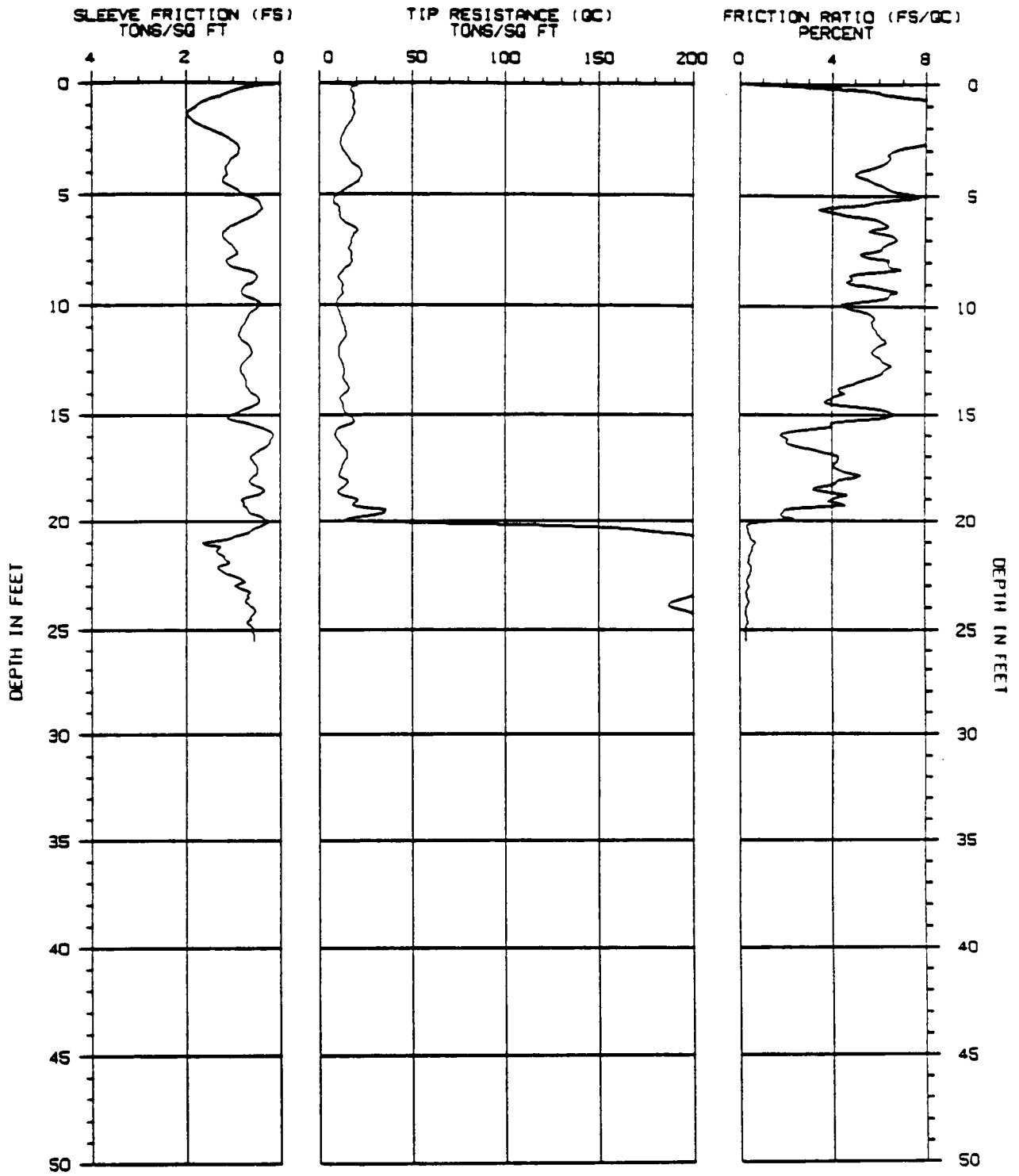
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-14

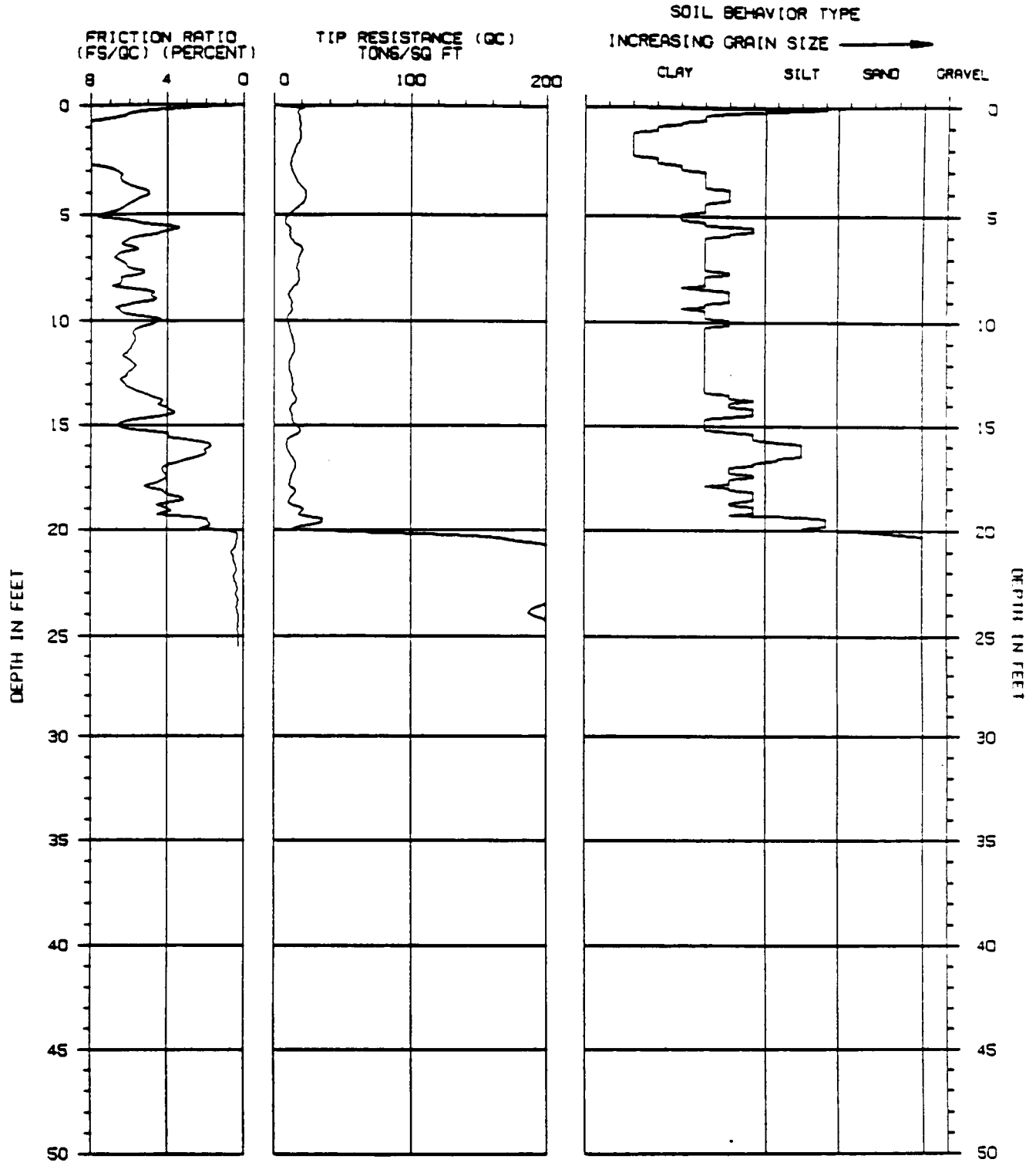
PROJECT NAME : JMM/MOFFETT NAS

PROJECT NUMBER : 9110-07002

LOCATION : SUNNYVALE

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 5.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-14

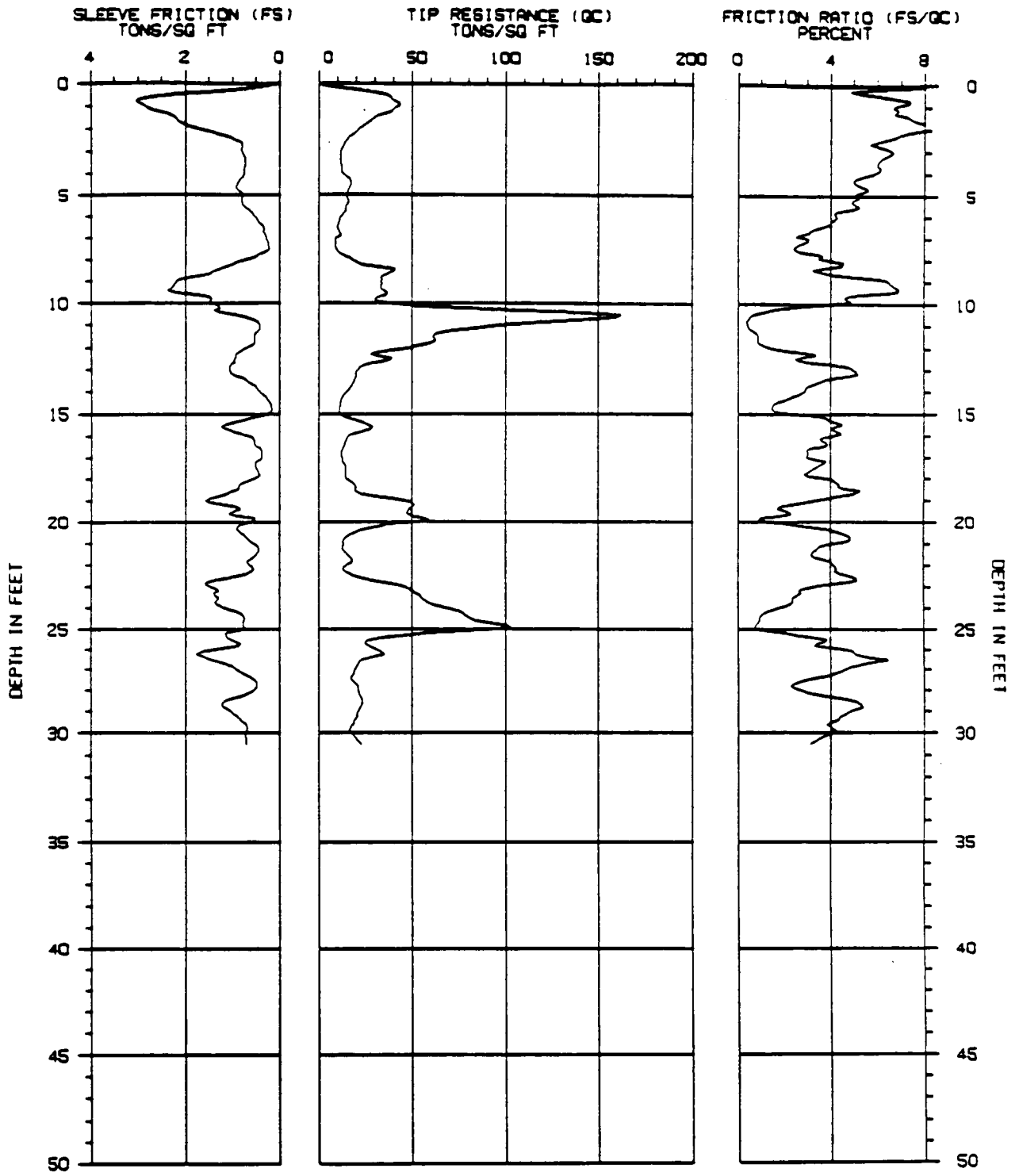
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-20

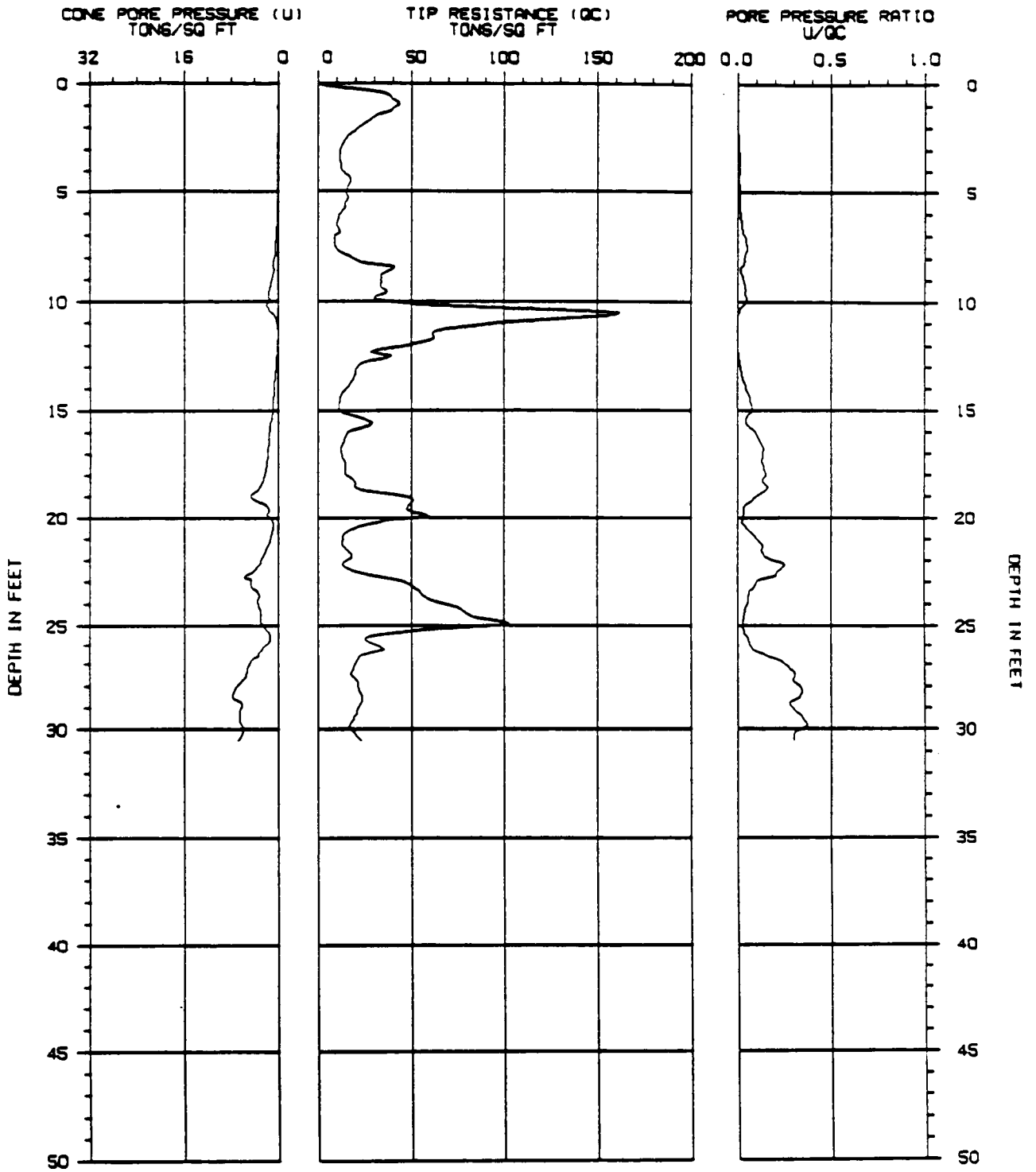
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-06-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-20

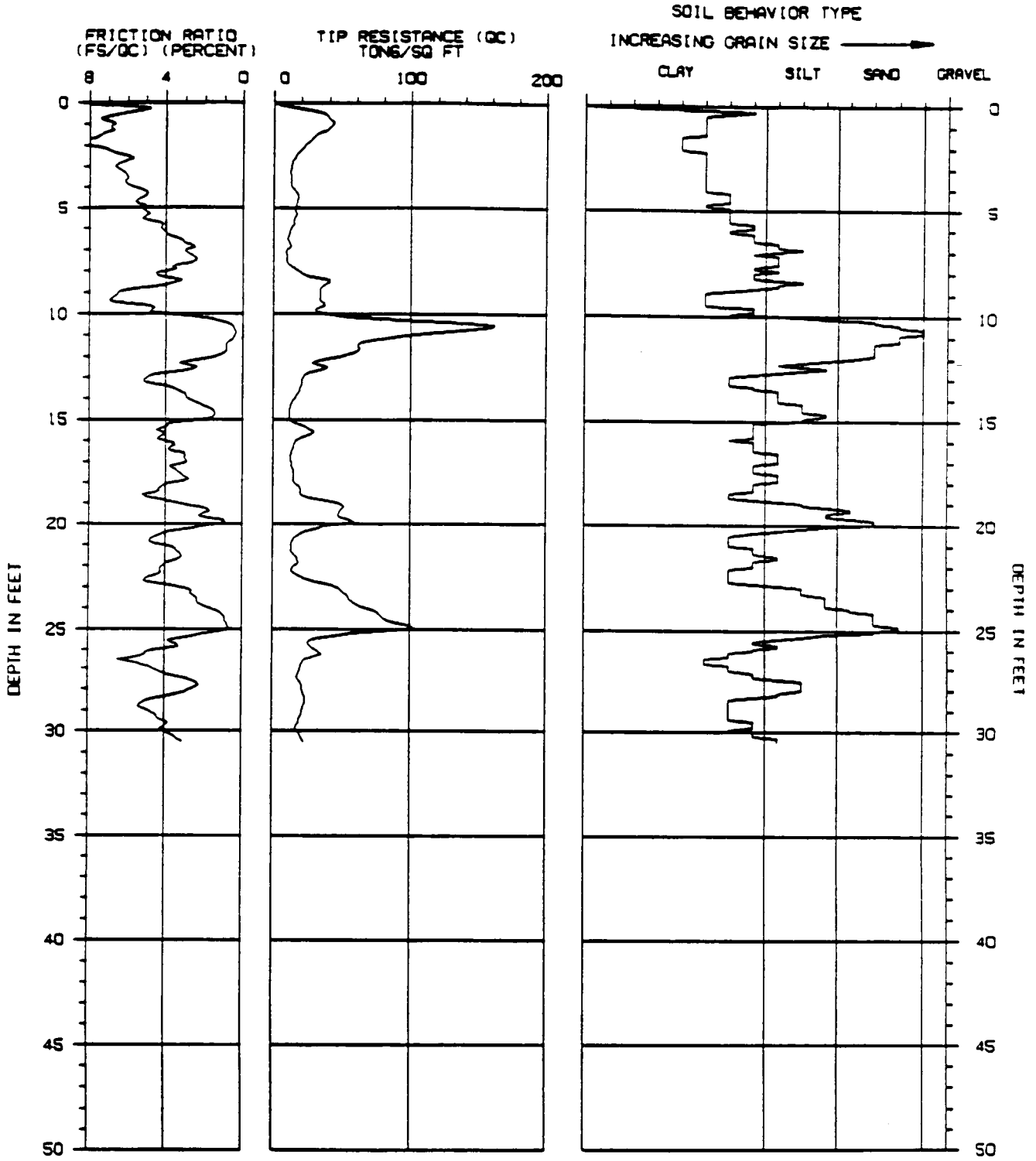
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-06-1991

THE EARTH TECHNOLOGY CORPORATION



ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 5.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-20

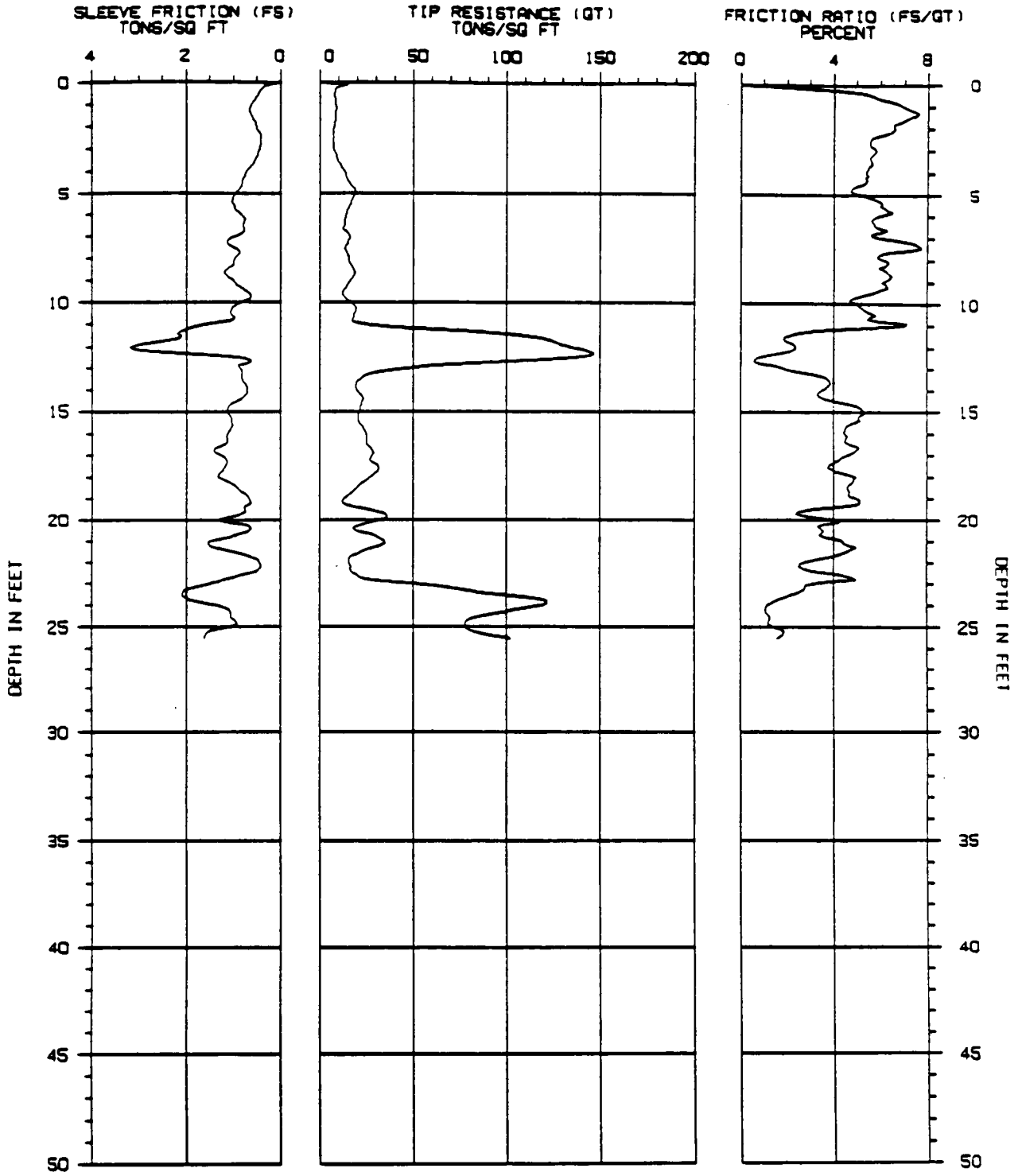
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-06-1991

THE EARTH TECHNOLOGY CORPORATION



TIP RESISTANCE CORRECTED FOR END AREA EFFECT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-39

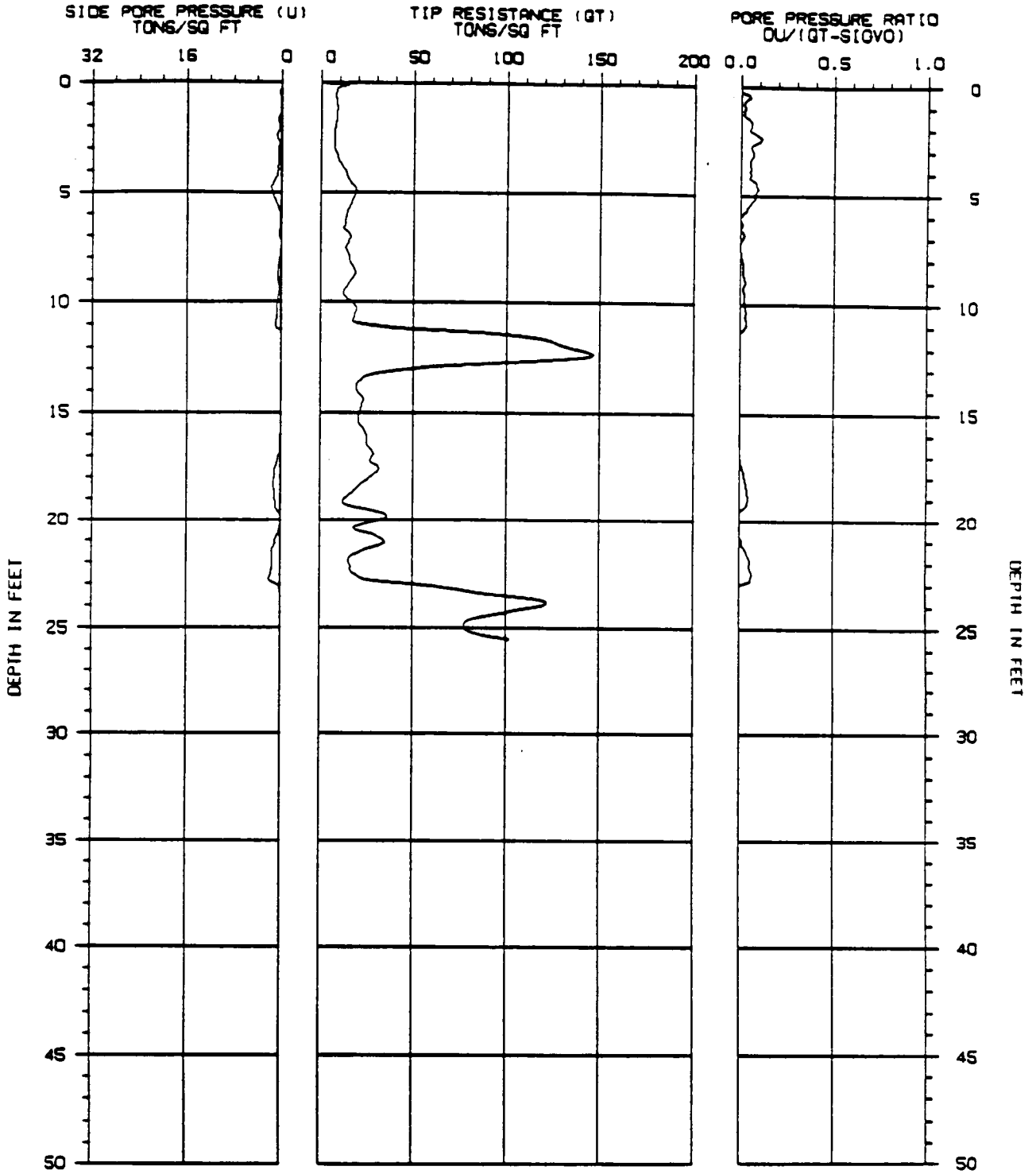
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-04-1991

THE EARTH TECHNOLOGY CORPORATION



TIP RESISTANCE CORRECTED FOR END AREA EFFECT

ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 6.0 FT

DU = U - HYDROSTATIC PWP

SIGVO = TOTAL VERTICAL STRESS

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-39

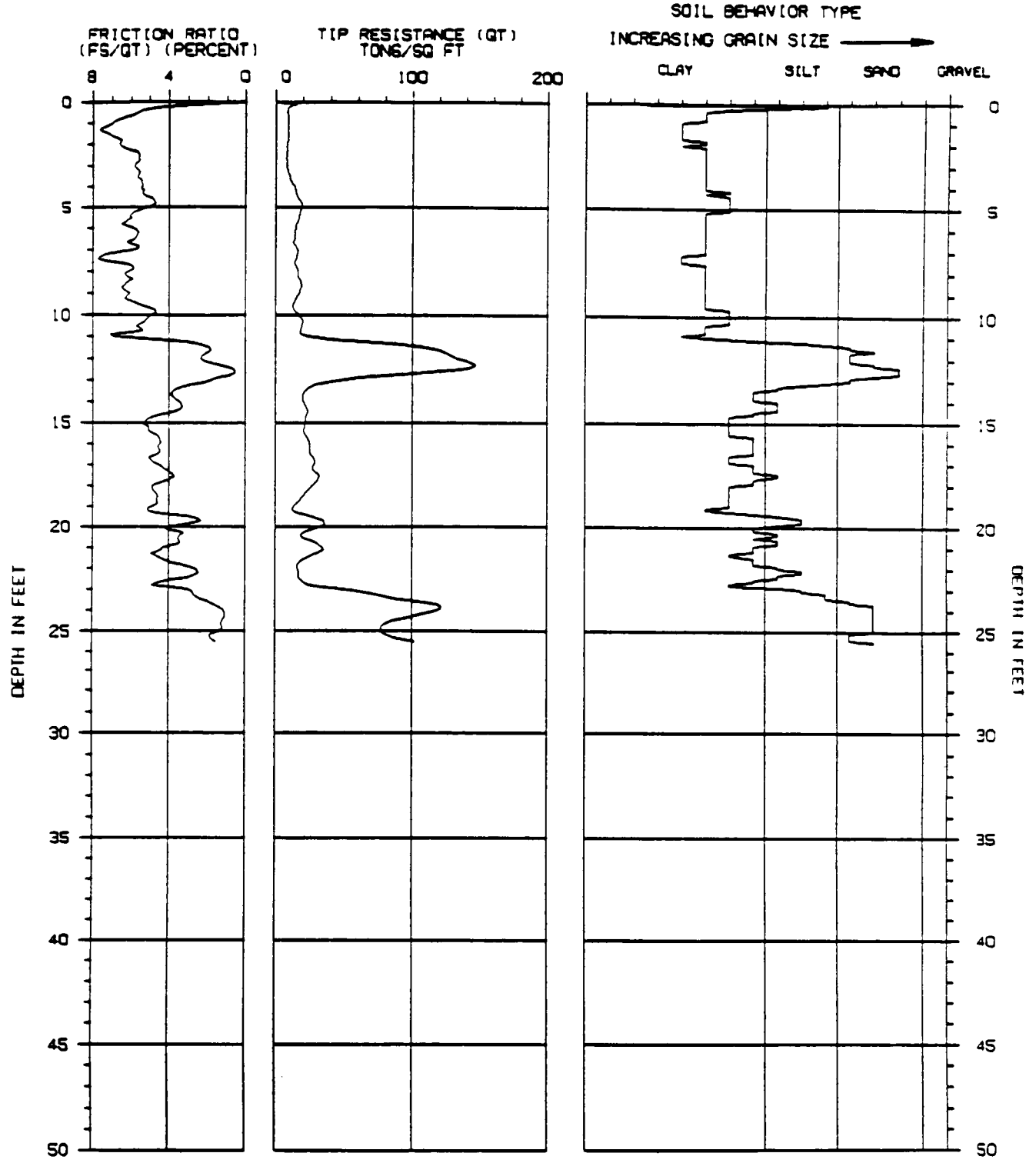
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-04-1991

THE EARTH TECHNOLOGY CORPORATION



TIP RESISTANCE CORRECTED FOR END AREA EFFECT

ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 5.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-39

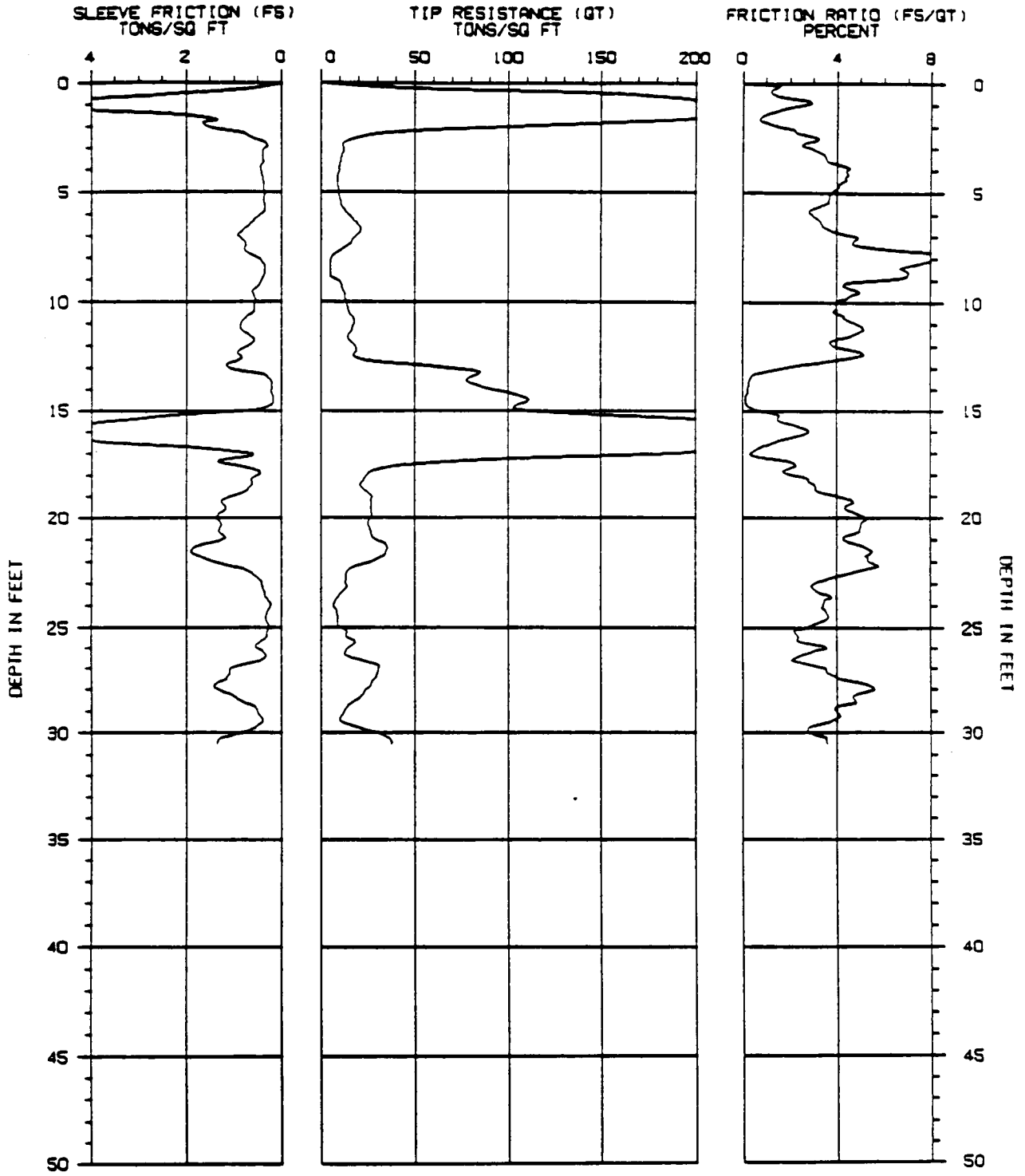
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-04-1991

THE EARTH TECHNOLOGY CORPORATION



TIP RESISTANCE CORRECTED FOR END AREA EFFECT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-46

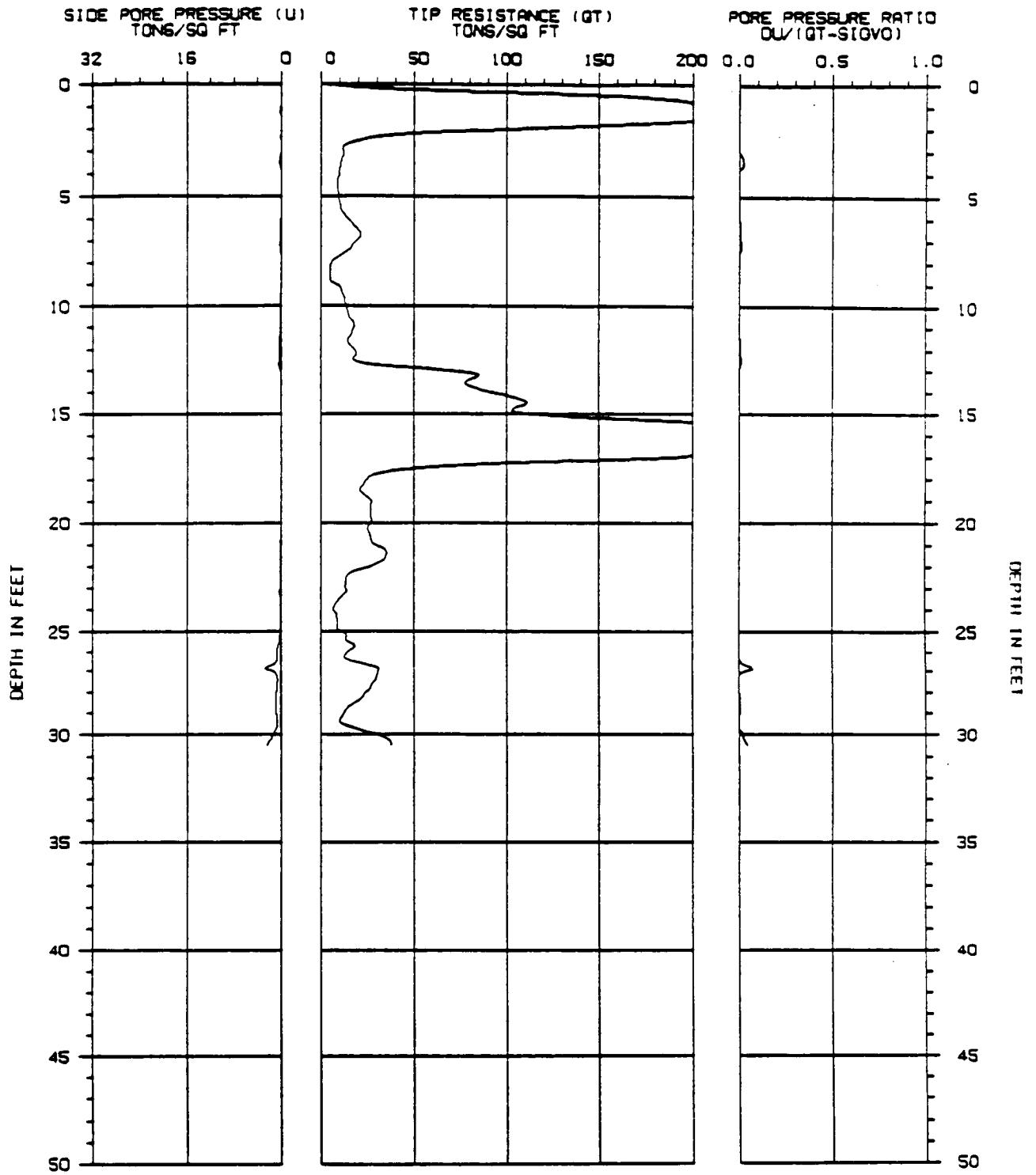
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-04-1991

THE EARTH TECHNOLOGY CORPORATION



TIP RESISTANCE CORRECTED FOR END AREA EFFECT

ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 5.0 FT

DU = U - HYDROSTATIC PWP

SIGVO = TOTAL VERTICAL STRESS

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-46

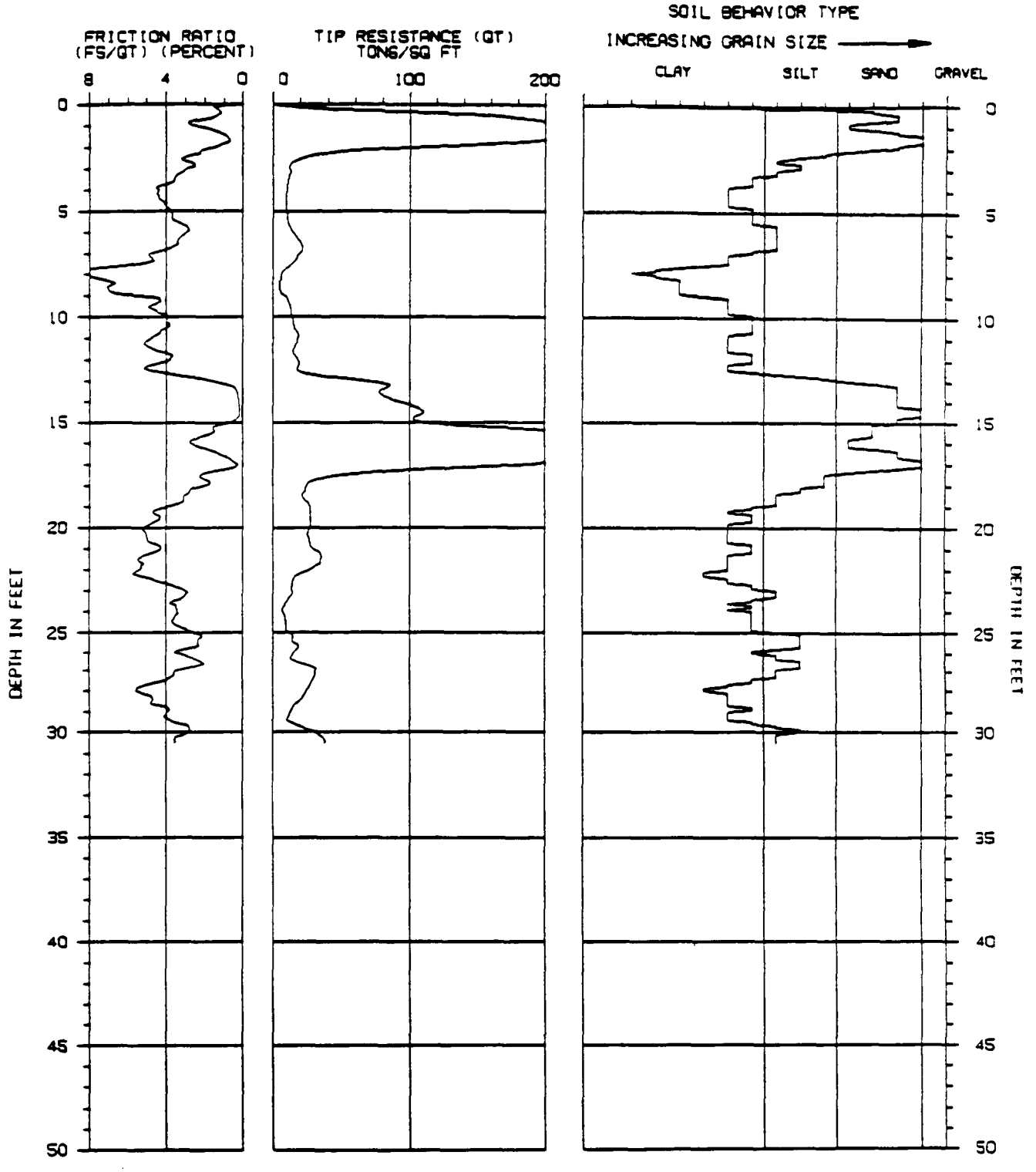
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-04-1991

THE EARTH TECHNOLOGY CORPORATION



TIP RESISTANCE CORRECTED FOR END AREA EFFECT

ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 5.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-46

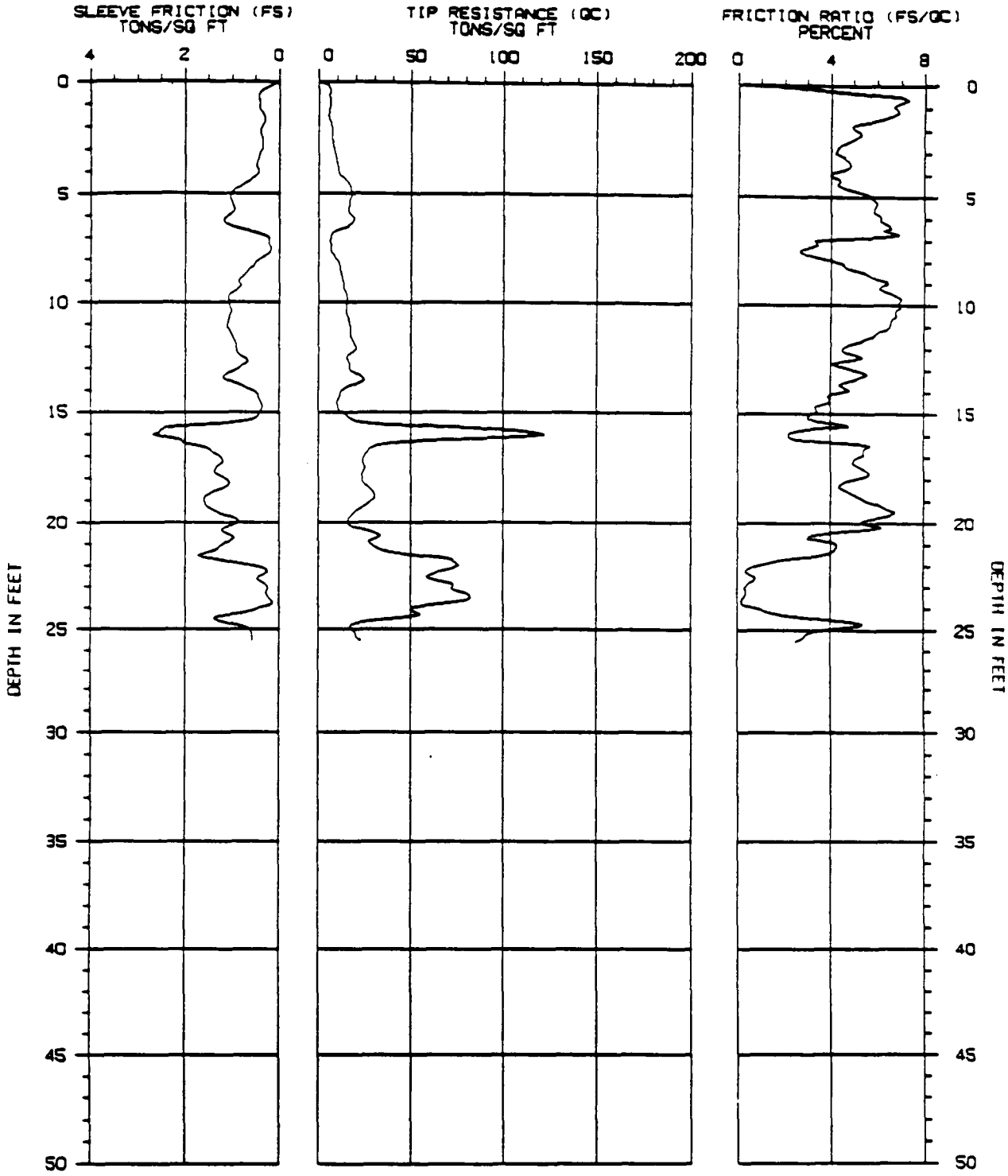
PROJECT NAME : JMM/MOFFETT NAS

PROJECT NUMBER : 9110-07002

LOCATION : SUNNYVALE

DATE : 05-04-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-60

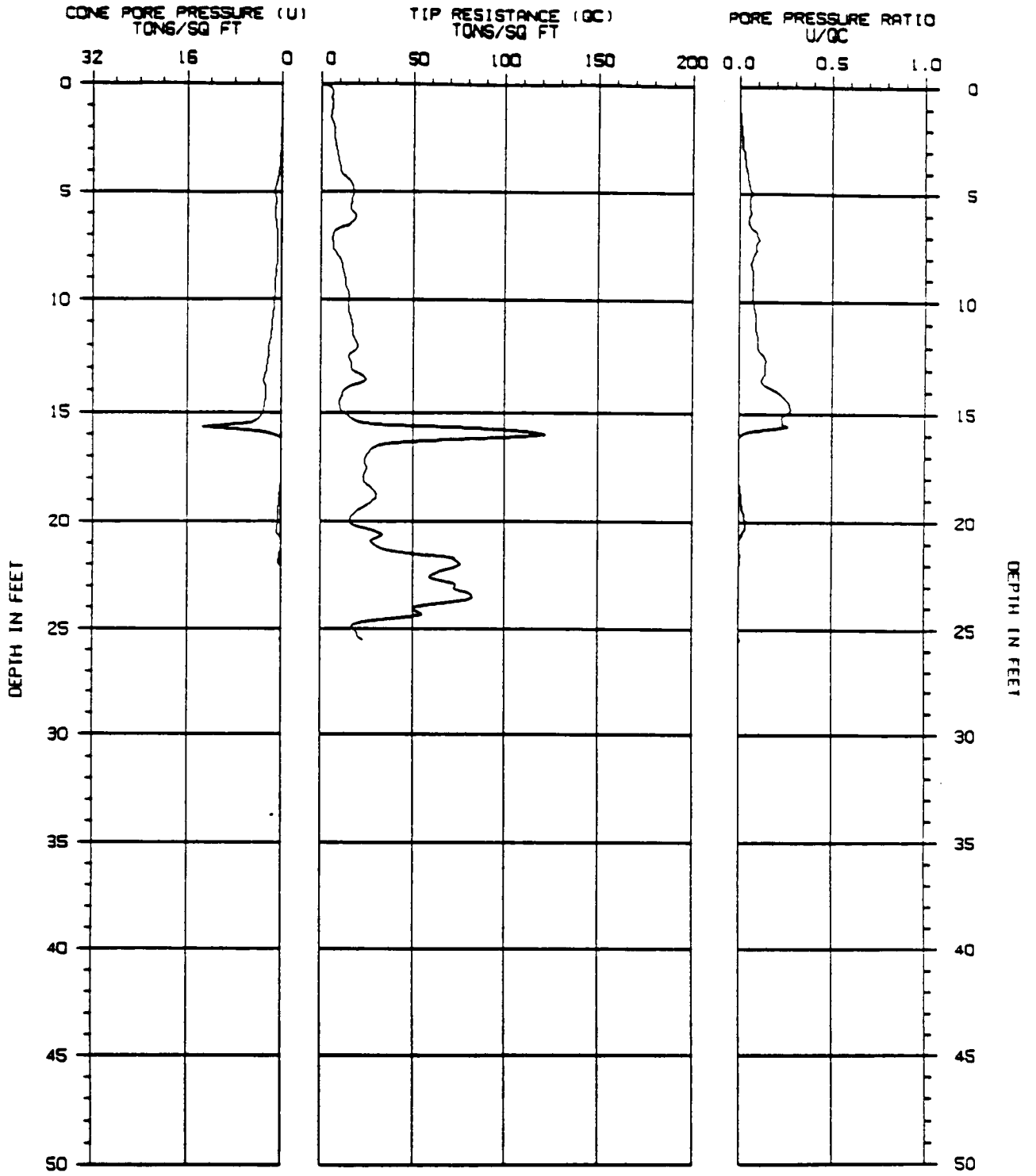
PROJECT NAME : JMM/MOFFETT NAS

PROJECT NUMBER : 9110-07002

LOCATION : SUNNYVALE

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



CONE PENETRATION TEST

SOUNDING NUMBER: CPT-60

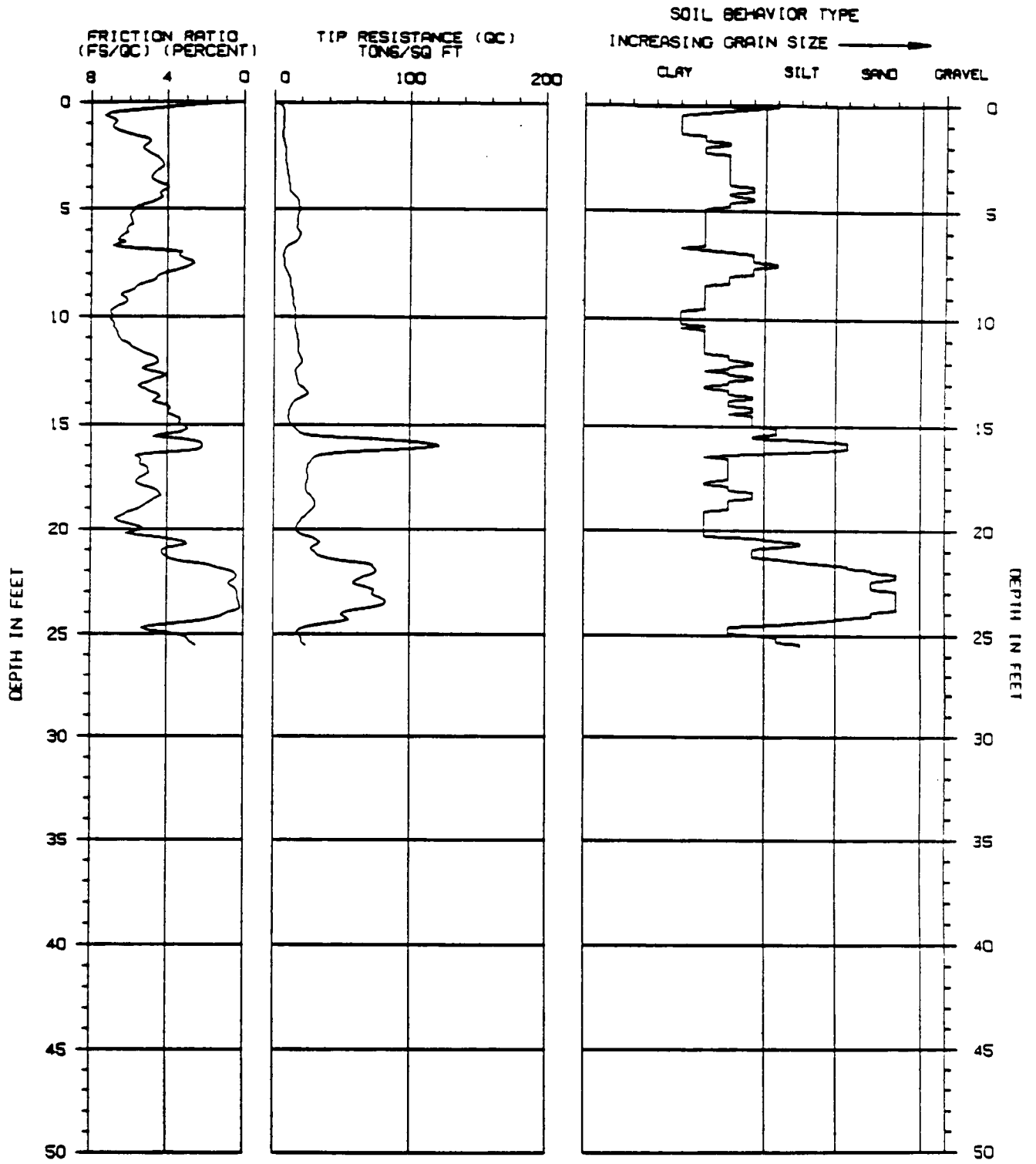
PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION



ASSUMED TOTAL UNIT WT = 110 PCF

ASSUMED DEPTH OF WATER TABLE = 6.0 FT

CONE PENETRATION TEST

SOUNDING NUMBER: CPT-60

PROJECT NAME : JMM/MOFFETT NAS

LOCATION : SUNNYVALE

PROJECT NUMBER : 9110-07002

DATE : 05-08-1991

THE EARTH TECHNOLOGY CORPORATION

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 9 – WELLS (IT)

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

BORING NO. W9-3(C)

FIELD GEOLOGIST E. Wessner
EDITED BY D. Cox
CHECKED BY J. Hodgell
TOTAL DEPTH 174.7 feet

COORDINATES N 335,811.3 E 1,548,303.4
DATE BEGAN 8/15/88
DATE FINISHED 8/18/88
GROUND SURFACE EL 20.1 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	BLOWS ON SAMPLER PER (PER 6")	USCS SYMBOL	DESCRIPTION
0				FILL	FILL: sandy clay; black-dark brown.
	MD#1	6/18	5,7,9		SILTY CLAY; dark brown, slightly moist, soft, very plastic, gravel inclusions.
	MD#2	6/18	3,6,7		
5	MD#3	10/18	3,5,4		SANDY SILTY CLAY; olive gray, slightly to moderately moist, soft, slightly to moderately plastic.
10				CL-CH	SILTY CLAY; gray, moderately moist, moderately plastic.
15					
20				GW	SANDY GRAVEL; fine grained, saturated, very poorly sorted, angular gravels.
					SILTY SAND, CLAY; olive gray, moist, moderately plastic.
25					
					Small sand stringers throughout. SILTY CLAY; orange brown, moist, soft, moderately plastic.
30					Continued stringers of coarse angular, poorly sorted sand.
35					
40				CL-SW	SILTY CLAY; brownish gray, moist, soft to very soft, plastic. Stringers of sands
45					SILTY CLAY; light brown, moderately moist, stiff, slightly plastic.
50					SAND; fine to coarse, black to clear, unsorted, angular stringers.
					SILTY CLAY; brown-gray, moist, soft, moderately plastic.
55					
60				SW	SAND; coarse, black and tan, subangular, poorly sorted.
				CL	CLAY/SILTY CLAY; brown-tan, moist, soft, plastic.
65				SP-CL	CLAY/SAND; interbedded, black and tan, sand is fine to coarse, angular. No noticable, water during drilling.
70					

WELL SUMMARY:
- 12" Christy box
- 8"x5' standpipe
- 4" sch. 40 steel casing
- Bentonite/cement grout
- Centralizer

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-3(C)

FIELD GEOLOGIST E. Wessner
EDITED BY D. Cox
CHECKED BY J. Hodgell
TOTAL DEPTH 174.7 feet

COORDINATES N 339,811.3 E 1,548,309.4
DATE BEGAN 8/15/88
DATE FINISHED 8/18/88
GROUND SURFACE EL. 20.1 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER PER (PER 6")	USCS SYMBOL	PROFILE	DESCRIPTION
70					CH-CL		CLAY/SILTY CLAY; gray-brown, moist, stiff, very plastic.
75					SP		Sand stringer
					CH-CL		CLAY/SILTY CLAY; gray brown, moist, soft, very plastic.
80					SP		SAND; very fine to medium grained, subround, unconsolidated inclusions of fine gravel.
85					CL-SP		SANDY SILTY CLAY; light brown, moist, very soft, moderately plastic, interbedded with fine sands.
90					SW		SANDS; very fine to medium grained, black and clear, sub-round, poorly sorted. Making water, flowing.
95							Sand is clayey silty, "flowing sands" (unconsolidated, saturated, very fine) Very loose flowing sands.
100							
105			Centralizer		CL-SW		SILTY CLAY/CLAY; gray, moist, stiff, moderatly to slightly plastic. A few sand stringers.
110							
115							SILTY CLAY; orangish brown, moist, soft, very plastic.
120							CLAY/SILTY CLAY; gray brown, moderately moist, stiff, moderately to slightly plastic. CLAY/SILTY CLAY; gray and brown, moist, soft to stiff, moderately plastic, with 1-2' sand; very fine grained, poorly sorted, subrounded, "flowing sand" with roots and fibers (organics). Making water.
125							
130					CH-CL		CLAY/SILTY CLAY; gray, moist, stiff, very plastic. Grading into very firm- CLAY/SILTY CLAY; olive gray, moderately moist, very stiff, moderate plasticity.
135							
140			Bentonite pellets				

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

AutoCAD FILE: MF-W9-3C.DWG

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-3(C)

FIELD GEOLOGIST F. Wessner
EDITED BY D. Cox
CHECKED BY J. Hadsell
TOTAL DEPTH 174.7 feet

COORDINATES N 335,811.3 E 1,548,305.4
DATE BEGAN 8/15/88
DATE FINISHED 8/18/88
GROUND SURFACE EL. 20.1 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER PER (PER 6")	USCS SYMBOL	PROFILE	DESCRIPTION
140–175			Bentonite pellets 137.9 to 154.8 feet; Centralizer; 4" .010 S.S. screen from 157.2 to 167.2 feet; Centralizer; #1C sand; Bentonite backfill; 9.6"		CL-CH		CLAY/SILTY CLAY; gray, moist, stiff, plastic to very plastic.
					SW		SILTY SAND; medium coarse, subangular, moderately sorted.
					GW		GRAVELLY SAND; medium coarse with gravels fine grained, black-opaque, angular, poorly sorted, clean.
					CL-SW		SILTY CLAY; gray, moist to moderately moist, soft-stiff, moderately plastic, fine gravel inclusions.
							Stringers of coarse sand, black angular, moderately sorted.
					CL-CH		CLAY/SILTY CLAY; moist to moderately moist, stiff, very plastic.
175							TOTAL DEPTH 174.6 FEET

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

AutoCAD FILE: MF-W9-3C.DWG

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-4(B2)

FIELD GEOLOGIST E. Weegner
EDITED BY D. Cox
CHECKED BY J. Hadsell
TOTAL DEPTH 94.3 feet

COORDINATES N 336,979.6 E 1,848,121.6
DATE BEGAN 7/21/88
DATE FINISHED 7/21/88
GROUND SURFACE EL 14 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	DESCRIPTION
0	MD#1	10/18	3,4,10	CL	SILTY CLAY; dark gray, slightly moist, stiff, moderately plastic.
5	MD#2	10/18	5,7,11	CL	SILTY CLAY; olive green, slightly moist, soft, moderately plastic.
	MD#3	18/18	3,5,7		
	MD#4	18/18	5,5,5		
10				CL-ML	SILTY SANDY CLAY; olive to gray, moist, soft, low plasticity, oxidized stains with few coarse sands. Adding water to drill
15					SILTY CLAY; gray, moist, soft, moderately plastic.
20				GW	GRAVEL; fine gravel, black, subangular, poorly sorted.
25				CL	SILTY CLAY; brown, moderately moist, soft, slightly plastic.
30					
35				GW	SANDY GRAVEL; tan to light brown, subround, poorly sorted, fine gravel grading to coarse sandy gravel.
40				CL	SILTY SANDY CLAY; light brown, moist, soft, moderately plastic.
45				GW	SAND/GRAVEL; black and gray, subangular, poorly sorted coarse sand and fine gravel.
				CL	SILTY CLAY; light brown, moist, soft, moderately plastic.
50				SC-CL	CLAYEY SAND; tan, wet, loose, very fine grained, interbedded 1-2' with silty clays.
55					
60				CL-ML	SILTY CLAY; light brown, moist, stiff, moderately plastic, interbedded with sandy silty clay.
65					
70					

WELL SUMMARY:
- 12" Christy box
- 8"x5' standpipe
- Bentonite/cement grout
- 4" sch. 40 steel casing

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

AutoCAD FILE: MFW9-482.DWG

IT ...Creating a Safer Tomorrow

EE LEGEND FOR LOGS AND TEST PITS
FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-4(B2)

FIELD GEOLOGIST E. Wessner
EDITED BY D. Cox
CHECKED BY J. Hadsall
TOTAL DEPTH 94.3 feet

COORDINATES N 338,979.6 E 1,548,121.6
DATE BEGAN 7/21/88
DATE FINISHED 7/21/88
GROUND SURFACE EL. 14 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	DESCRIPTION
70–75			Bentonite pellets 72.5 to 75.9 ft.		CH		CLAY/SILTY CLAY; gray, moist, stiff, very plastic to mod. plastic. Possibly top of B2 Aquifer.
75–80			4" .010 S.S. screen from 78.3 to 83.3 feet		SM-SC		SILTY CLAYEY SAND; light gray, wet, very loose, grading to a coarse sand, black, moderately sorted, sub-angular.
80–90			Centralizer; #1C sand; Bentonite backfill		CL		SILTY CLAY; gray, moist, stiff, moderately plastic.
95			9.6"				TOTAL DEPTH 94.3 FEET

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS
FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-5B3

FIELD GEOLOGIST E. Wessner
EDITED BY D. Cox
CHECKED BY J. Hadsell
TOTAL DEPTH 124.1 feet

COORDINATES N 338,983.2 E 1,948,113.8
DATE BEGAN 7/26/88
DATE FINISHED 7/26/88
GROUND SURFACE EL. 13.8 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	BLOWS ON SAMPLER PER (PER 6")	USCS SYMBOL	DESCRIPTION
0	MDØ1	10/18	2,5,8	CH	CLAY-SILTY CLAY; dark gray, slightly moist, soft, very plastic.
	MDØ2	10/18	7,14,13	CL	SILTY CLAY; light gray, slightly moist, stiff, mod. plastic.
5	MDØ3	18/18	4,5,7	ML	CLAYEY SILT; olive gray, moist, very soft, mod. plastic. Moisture increase.
	MDØ4	12/18	7,5,2		
10				CL-CH	SILTY CLAY; brown-gray, moderately moist, very soft, plastic, mottled light gray brown.
15					
					Made connection at 20' and had water blow out after connection.
20				GM-GC	SILTY GRAVELS; wet, black, fine grained, angular, moderately sorted.
25				CL-CH	SILTY CLAY; brown-gray, moist, soft, plastic.
30				MH	CLAYEY SILT; brown, moist, soft, plastic.
35				GW	FINE GRAVEL; brown, subangular, moderately to poorly sorted.
				CH	SILTY CLAY; brown, moist, soft, plastic.
40				GW-GC	FINE GRAVEL; brown to black, angular, poorly sorted.
				CH	GRAVELLY SILTY CLAY; brown, moist, soft, plastic, inclusions of gravel.
				GW	FINE GRAVEL; wet, angular, poorly sorted.
45				CH	SILTY CLAY; brown, moist, soft, plastic, mottled with slightly platey structure.
50				GW-GM	FINE GRAVEL; poorly sorted, angular.
				ML	CLAYEY SILT; interbedded, brown, moist, soft, moderately plastic, interbedded with small fine gravel. Water producing
55					
60				CL-CH	SILTY CLAY; brown, soft, moist, very plastic, interbedded with a gray silty clay.
65					
70					

WELL SUMMARY: 12" Christy box; 8"x5' standpipe; Bentonite cement grout; 4" sch. 40 steel casing

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

AutoCAD FILE MF\W9-5B3.DWG

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-5B3

FIELD GEOLOGIST E. Wessner
EDITED BY D. Cox
CHECKED BY J. Hadsall
TOTAL DEPTH 124.1 feet

COORDINATES N 338,993.2 E 1,548,115.8
DATE BEGAN 7/26/88
DATE FINISHED 7/26/88
GROUND SURFACE EL. 13.8 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER PER (PER 6")	USCS SYMBOL	PROFILE	DESCRIPTION
70–75					CL		SILTY CLAY; gray, stiff, moderately moist, moderately plastic, interbedded with a brown silty clay.
75–80			Bentonite/ cement grout		SC		CLAYEY SAND; coarse grain–fine gravel, subangular, mod. sorted, grading to medium to fine sand. Water bearing
80–85					ML		CLAYEY SILT; brown–light gray, moist, soft, moderately plastic.
85–90					CH		SILTY CLAY; brown, moist, soft, very plastic.
90–95			Bentonite pellets 92.7 to 95.6 ft.		CH		SILTY CLAY; brown–light gray, moist to moderately moist, plastic, 1' interbedding of sand.
95–100			Centralizer @ 103 feet.		CH		SILTY CLAY; gray–brown, soft, moist, very plastic.
100–105					SC		CLAYEY SAND; fine grained, brown with black specs, well sorted, loose, wet. Making water
105–110			4" .010 S.S. screen from 97.7 to 117.7 feet		SC		
110–115			#1C sand		CH		SILTY CLAY; dark brown, moist, soft, very plastic.
					SC-SM		CLAYEY SAND; fine grained, brown–gray, wet, well sorted, loose.
					CH/CL		SILTY CLAY; dark brown–gray, moist, soft, very plastic.
115–120			Centralizer @ 111 feet.		SC-SM		CLAYEY SAND; fine grained, brown–gray, wet, moderately sorted, loose, some coarse sands. Making water
120–125			Bentonite backfill		CH-CL		SILTY CLAY; dark brown–gray, moist, soft.
125–140			9.6"				TOTAL DEPTH 124.1 FEET

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

AutoCAD FILE: MFW9-5B3.DWG

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SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

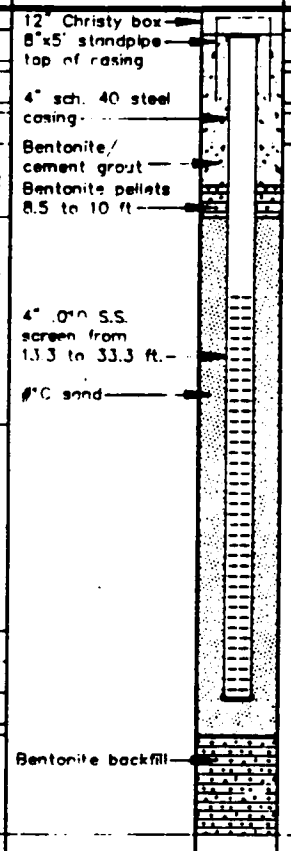
BORING NO. W9-7(A1)

FIELD GEOLOGIST W. Hopkins
EDITED BY D. Cox
CHECKED BY J. Hodsoll
TOTAL DEPTH 40 feet

COORDINATES N 338,168.7 E 1,548,103.2
DATE BEGAN 7/21/88
DATE FINISHED 7/21/88
GROUND SURFACE EL 19.66 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	DESCRIPTION
0	MD#1	6/18	1	FILL	FILL: sandy gravel; moderate brown, dry, medium dense.
	MD#2	5/18	1	OH	SILTY CLAY; black, moist, stiff, high plasticity.
5	MD#3	9/18	1	ML	CLAYEY SILT; light gray, moist, stiff, moderate plasticity, thin layer of pebbly sand (4-4.2 ft.)
	S	42/42		CL	SILTY CLAY; medium gray with medium brown spots, moist to wet, stiff, moderately plastic.
10	S	60/60			
15	S	40/60		ML	Ground water first encountered. CLAYEY SILT/SILT; dark gray, wet (saturated), very soft, low plasticity.
20	S	16/60		SW	PEBBLY SAND; with clay and silt, dark greenish gray, wet, medium dense.
25	S	10/60		GC	SANDY GRAVEL; with clay, gray, wet, low plasticity.
30	S	15/18		SP	SILTY SAND; medium brownish gray, wet, dense, poorly graded.
	S	0/18			
	S	0/18			
35	S	24/60		CL	SANDY CLAY; medium brown, wet, stiff, low plasticity.
40					TOTAL DEPTH 40 FEET
45					
50					
55					
60					
65					
70					

WELL SUMMARY



DRILLING CO.: Water Development Co.
DRILLING METHOD: CME 75 Hollow Stem Auger

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

EE LEGEND FOR LOGS AND TEST PITS
FOR EXPLANATION OF SYMBOLS AND TERMS

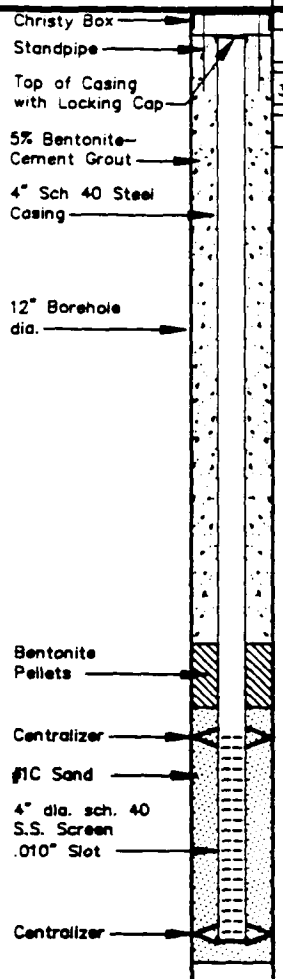
BORING NO. W9-9(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST C. Dorgan
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 47.5 feet

COORDINATES N ____ E ____
DATE BEGAN 5/10/90
DATE FINISHED 5/11/90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0					Asphalt and fill material.
	MD1	12/18	2/3/6	CL	GRAVELLY SILTY CLAY; blackish gray, stiff, dry, stiff fill material. 2.0'
	MD2	10.5/18	3/5/90	OL	SILTY CLAY; olive black, dry, very stiff. 5.0'
5	MD3	18/18	7/9/5	ML	CLAYEY SILT, medium gray, dry very stiff, trace organics. 9.5'
10				CL	SILTY CLAY; grayish olive green, medium stiff, moderately plastic. SILTY CLAY; mottled grayish olive green moderate olive brown, medium stiff, moderately plastic. SANDY GRAVELLY CLAY; grayish olive green, very loose, non-plastic to moderately plastic. 21.0'
15					
20					
25				SM	SANDY SILT; dusky yellow green, moist to wet, soft to medium stiff, moderately plastic. 27.5'
30				GP	GRAVELS
35					Increase in grain size with depth.
40					Gravels and cobbles average 1" to 2", loose. 43.0'
45				CL	SILTY CLAY, moderate yellowish brown, moist to wet, soft to medium stiff. SANDY CLAY; moderate yellowish brown, moist to wet, soft, fine to medium grained sands.
50					TOTAL DEPTH 47.5 FEET
55					
60					
65					
70					

WELL SUMMARY



DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-55)

PAGE 1 OF 1

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-9(MF15)

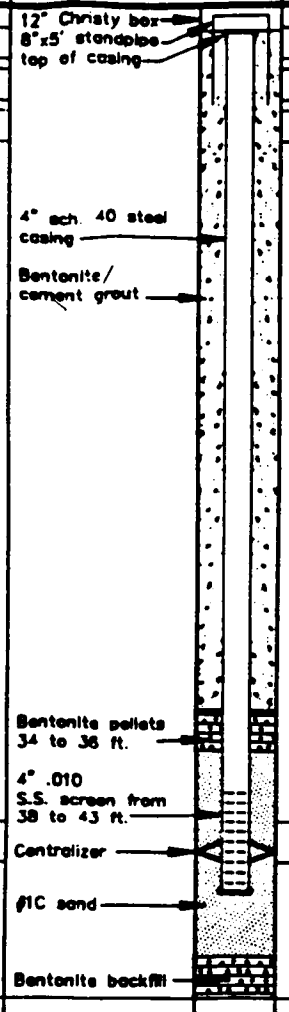
BORING NO. W9-13(A2)

FIELD GEOLOGIST E. Wessner
EDITED BY D. Cox
CHECKED BY J. Hodesll
TOTAL DEPTH 48 feet

COORDINATES N 336,152.5 E 1,548,014.9
DATE BEGAN 7/18/88
DATE FINISHED 7/19/88
GROUND SURFACE EL 19.6 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	DESCRIPTION
0	MDØ1	10/18	9,5,6	CL	SILTY CLAY; reddish brown, dry, non-plastic, gravel inclusions.
	MDØ2	8/18	4,7,10		SILTY CLAY; black-dark gray, moist to moderately moist, moderately plastic.
5	MDØ3	ND	3,7,9		Color grading to a light gray.
10					SILTY CLAY; lt. gray, moist, soft, moderately plastic, platy (slickensides)
15				CH	SILTY CLAY; light gray, moist to wet, soft to very soft, plastic. ∇ 7-18-88, 15:00.
20				GC	CLAYEY GRAVELS; gray, angular, to subround, moderately sorted.
25				SC	CLAYEY SAND; rounded, fine grained, moderately sorted.
30				CH	SANDY CLAY; light gray, soft, wet, plastic, inclusions of gravel.
35				GW	GRAVEL; poorly sorted, subround.
40	MDØ4	12/12	7,10	CH	SILTY CLAY; light-reddish brown, moist, soft, plastic. Stop to take drive sample just up hole from expected aquifer. GRAVELLY SILTY CLAY; gray, moist, plastic, very soft, inclusions of gravel.
				GW	GRAVEL; poorly sorted, subrounded. B1 Aquifer
45				CH	SILTY CLAY; light brown, moist, plastic, sticky, sand inclusions.
				CL	SILTY CLAY; light brown, moderately moist, soft, moderately plastic.
50					TOTAL DEPTH 48 FEET
55					
60					
65					
70					

WELL SUMMARY



DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

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SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-14(A2)

FIELD GEOLOGIST E. Wessner
EDITED BY D. Cox
CHECKED BY J. Hadsall
TOTAL DEPTH 54.7 feet

COORDINATES N 335,498.3 E 1,548,647.7
DATE BEGAN 8/5/88
DATE FINISHED 8/8/88
GROUND SURFACE EL. 20.9 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	DESCRIPTION
0			12" Christy box; 8"x5' standpipe; top of casing				3" of asphalt pavement.
	MD#1	12/18		5,5,7	CL		TOPSOIL: light gray, silty clay, slightly moist, stiff, slightly plastic.
	MD#2	12/18		3,3,9			SILTY CLAY: tan-light brown, slightly moist, stiff, slightly plastic, orange oxidized layers.
5	MD#3	12/18	4" sch. 40 steel casing	8,8,11			SANDY SILTY CLAY: with fine gravels, orange brown, slightly moist, soft, non-plastic.
			Bentonite/cement grout		SP		GRAVELY SAND: black and clear, fine gravels, slightly moist, sub-angular.
10					CL		SANDY CLAY: gray, moist, very soft, moderately plastic.
					CH		Graded to a silty clay, moist, very soft, very plastic. SILTY CLAY: orangish brown, moist, very soft, very plastic.
15					GP		COARSE SAND/COARSE GRAVEL, slightly moist, angular, black-gray
20					CL		SANDY-SILTY CLAY: light gray, moist, soft, moderately plastic. Hit water @21'
					SP-GP		COARSE SAND and FINE GRAVELS: black-tan, wet, angular.
25					CL		SILTY CLAY: light gray, moist, soft, moderately plastic. SANDY CLAY: light brown, moist-wet, very soft, moderately plastic.
					CH		CLAY-SILTY CLAY: gray, moist, soft, plastic, sticky.
30					SC		CLAYEY SAND: gray, medium-coarse grained, sub-angular. Drill bit suddenly fell to 34' but we made little water.
35			Bentonite pellets 34.9 to 36.8 ft.; 4" .010 sch. 40 S.S. screen from 39 to 49 ft.		CH		SILTY CLAY: gray, moist, soft, plastic, inclusions of coarse sand. Making water
40			Centralizer		SW		SAND: clear-tan, fine-coarse, poorly sorted, sub-rounded, some gravels, no fines.
					CL		SILTY CLAY: gray, moist, soft, moderately plastic.
45			Centralizer		GW		SANDY GRAVEL: very poorly, sorted, sub angular, fine grained sand to coarse gravel. Grading into coarse gravel. Making water
50			#1C sand		CL		SILTY CLAY: orangish brown, moist, soft, medium plastic.
			Bentonite backfill		SW		CLAYEY SILTY GRAVELLY SAND: black and brown, medium grained sand, fine gravels with fines interbedded.
55							TOTAL DEPTH 54.7 FEET
			9.6"				
60							
65							
70							

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-15(B2)

FIELD GEOLOGIST E. Wessner
EDITED BY D. Cox
CHECKED BY J. Hodson
TOTAL DEPTH 108 feet

COORDINATES N 335,826.0 E 1,548,605.0
DATE BEGAN 8/1/88
DATE FINISHED 8/4/88
GROUND SURFACE EL. 18.8 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	DESCRIPTION
0	MD#1	6/10	12" Christy box; 8"x5' standpipe	3,5,5	CL	SILTY CLAY; light brown-gray, slightly moist, soft, mod. plastic, inclusions of gravel.
	MD#2	18/18		3,7,18		SILTY CLAY; yellow brown, slight moist, soft, slightly plastic.
5	MD#3	18/18		12,24,25	SP	GRAVELLY SAND; yellow tan, slightly moist, medium grained, moderately sorted.
10			Bentonite/cement grout		CL	SILTY CLAY; brown-light gray, moist, very soft, moderate to slightly plastic. Moisture is picking up @ 10', water table must be close but have not seen water.
15					CH MH	SILTY CLAY; light gray, moist, very soft, plastic. SILTY CLAY/CLAYEY SILT; gray, moist, very soft, plastic, inclusions of gravel. 20' connection had water in hole. ▽ Ground water first encountered.
20					SM	SILTY SAND; gray, very fine to fine grained, wet, loose, moderately sorted with some coarse sand. Mostly opaque with black minerals. Adding water to drill. Making water.
25					CH	SILTY CLAY; gray, moist, soft, plastic.
30			4" sch. 40 S.S. casing			SILTY SANDY CLAY; gray and orange, soft, moist, moderately plastic, gravel inclusions.
					SC-GC	CLAYEY SAND & GRAVEL; brown-tan, moderately sorted sand and gravel, fine to very fine sand and gravels.
35					SM	SILTY SAND; brown, moist, very soft, very fine grained sand, loose.
40					GW	SANDY GRAVELS; fine gravels, coarse sands, poorly sorted, angular to sub-angular, light gray-black, clear quartz, stringers of silty clay; gray, soft, moderately plastic. Making lots of water
45						
50					CL	SILTY CLAY; reddish brown, moist, soft, moderately plastic.
55					SM	SILTY SAND/SANDY CLAY; light brown, wet, loose, fine to medium grained.
60					GW	GRAVEL; with coarse sand, black and opaque, fine gravels, angular poorly sorted.
65					CL	SILTY SANDY CLAY; brown, moist, soft, moderately plastic. Making water
70					SM-SP	SILTY SAND; light brown, wet, very fine grained, moderately sorted, loose, with some medium grained sands, black minerals.

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

IT ...Creating a Safer Tomorrow

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-15(B2)

FIELD GEOLOGIST E. Wessner
EDITED BY D. Cox
CHECKED BY J. Hadsall
TOTAL DEPTH 108 feet

COORDINATES N 335,826.0 E 1,548,605.0
DATE BEGAN 8/1/88
DATE FINISHED 8/4/88
GROUND SURFACE EL 18.8 ft.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY (IN.)	WELL SUMMARY	BLOWS ON SAMPLER (PER 6")	USCS SYMBOL	PROFILE	DESCRIPTION
70					SC-CH		SILTY CLAY; gray, moist, soft, moderate to very plastic. Stinger of coarse sand at 74' angular, moderately sorted, black.
75					CL		SILTY CLAY; gray, moderately moist, stiff, slightly plastic to plastic.
80			Bentonite pellets 77.3 to 81.2 ft.		SM-SP		Fine gravels grading to a fine-medium silty sand, moderately sorted, runny, with some coarse grains of sand and gravel. Making water
85			4" .010 sch. 40 S.S. screen from 87.3 to 97.3 feet		CH-CL		SILTY CLAY; light brown, moist, soft, very plastic to moderately plastic. Drive samples from 86-89 ft.
90			Centralizer		SM-SW		SILTY SAND; fine to medium grained, opaque with black minerals, moderately sorted, loose. SILTY SAND; very fine grained to medium grained, grading to a cleaner sand with less water but still wet to 100'.
95			Centralizer				
			#1C sand				
100					CH		SILTY CLAY; gray, moist, very soft, very plastic.
105					SW-GW		Very fine grained to medium grained sands with fine gravels very poorly sorted, clear and black sands and gravel. Making water. Hole backfilled with flowing sand to 102' (base of clay)
110			9.6"				TOTAL DEPTH 108 FEET
115							
120							
125							
130							
135							
140							

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

SAMPLING METHODS: MD=California Modified
S=Split Barrel

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

AutoCAD FILE: MW9 15B2.DWG

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SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-20(A2)

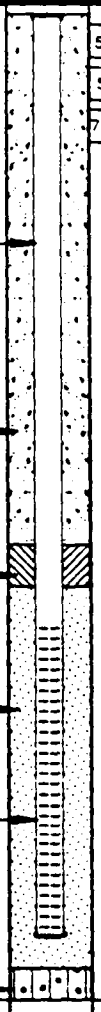
PROJ. GEOL. S. Bartling
FIELD GEOLOGIST T. Ault
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 48 ft.

COORDINATES N ____ E ____
DATE BEGAN 3-29-90
DATE FINISHED 3-30-90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0					TOP SOIL: light brown gray, sandy gravelly clay, dry
	MD1	16/18	5/7/12	CL	SILTY CLAY: dusky yellow, low plasticity, soft to very soft, slightly moist.
	MD2	16/18	5/7/11	SC	CLAYEY SILTY SAND: dusky yellow, gravel at base, dry to slightly moist, loose. 5.0
5	MD3	16/18	7/10/10	SW	SAND: medium gray, medium to coarse, very moist to wet, loose. 6.5'
		0/60		SC	CLAYEY SAND: light gray, very moist, very soft, medium plasticity, subangular to subrounded inclusions. 10.0'
10				SM	CLAYEY SILTY SAND: red brown, slightly to moderately moist, soft, moderately dense. 13.0'
		60/60		SC	CLAYEY SANDS: light gray, wet, soft. 15.0'
15				SP	SAND: gray, minor clay, very wet, (Very fine to fine grain). 22.0'
		0/60			
20					
		30/60		SC	CLAYEY SAND: light gray, very moist, very soft, low plasticity, grades to dark yellowish orange color. 26.0'
25				CL	SILTY CLAY: dusky yellow, moderately moist, soft, moderately plastic. 29.0'
		40/60		SC	SILTY SAND: very fine grain, moderately moist. 30.0'
30				SP	SAND: flowing. 37.0'
		0/60			
35					
		36/60		ML	CLAYEY SILT: dark yellowish brown, gray mottling, moderately moist, soft, moderately plastic. 39.0'
40				SM	CLAYEY SILTY SAND: light brown, wet, loose, (medium to fine grain). 43.0'
		0/36		SM	SILTY SAND: dark yellowish to orange, wet, very low plasticity, very fine grain. 44.0'
45		60/60		ML	CLAYEY SILT to SILTY CLAY: moderate yellowish orange, moderately moist, medium plasticity, abundant subrounded fine gravel.
50					TOTAL FEET IS 48 FEET
55					
60					
65					
70					

Continuous Core

WELL SUMMARY



DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-75)

PAGE 1 OF 1

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-20(MF13)

BORING NO. W9-21(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST T. Ault
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 51.5 ft.

COORDINATES N ____ E ____
DATE BEGAN 4-19-90
DATE FINISHED 4-23-90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	WELL SUMMARY	BLOWS ON SAMPLER	USCS	DESCRIPTION	
0			Christy Box		GM	GRAVEL; mixed with red brown soil, dry, unconsolidated.	1.5'
	MD1	11/18	Standpipe	6/10/12	ML	CLAYEY SILT; light olive gray, moist, firm, slightly plastic.	3.0'
	MD2	12/18	Top of Casing with Locking Cap	5/6/8	CL	SILTY CLAY; pale yellowish brown, slightly moist, slight plasticity (low).	5.0'
5	MD3	5/18		5/6/6	CL	SANDY CLAY; dark yellowish brown, slightly moist, soft, moderately plastic.	6.5'
		42/42			SC	CLAYEY SAND; fine grained, moderate yellowish brown, moist to very moist, very loose.	7.5'
10			5% Bentonite-Cement Grout		CL	SANDY CLAY; moderate yellowish brown, moist, very soft, medium plasticity, fine sand. Dark gray, soft, plastic. Mottled pale yellowish brown, moist, firm, plastic clay at 9.5'.	10.0'
		56/60	4" dia. sch. 40 Steel Casing		CL	CLAY; dark gray, wet, firm to soft, plastic.	12.0'
					SC	CLAYEY SAND; very fine grained, dark gray, very wet, loose to very loose, (gradational contact with unit above).	14.5'
15		4/60	12" Borehole dia.		SP	SAND; coarse grained, light olive brown, wet, loose, some fine gravel. Flowing sand, medium to coarse grained, clean.	20.0'
20		24/60			SP	SAND; dark gray, very wet, no cohesion (very loose), (fine sand, rounded to sub-angular).	24.5'
25					GM	SILT (gravelly); light olive brown, medium dense, non-plastic, (medium gravel, sub-rounded to sub-angular).	25.0'
		0/60			SP	SAND.	
30		0/60					
35							36.0'
					ML	CLAYEY SILT; dusky yellow, moist, firm, low plasticity, (some reddish mottling).	37.0'
		45/60	Bentonite Pellets		CL	SILTY CLAY, dusky yellow, moist, soft, medium plasticity.	38.5'
40			#1C Sand		CL	SANDY CLAY; dusky yellow, moist, very soft, medium plasticity, (sand<5%).	40.0'
		0/60	4" dia. sch. 40 S.S. Screen .010" Slot		SP	SAND.	45.0'
45		60/60	Backfill: Native Soil		CL	CLAY; grayish orange, slightly moist, firm to hard, plastic (when worked), minor silt, some fine gravel at ≈ 47'.	49.5'
50		18/18			CL	SANDY CLAY; moderate yellowish brown, soft to very soft, plastic to medium plastic, (coarse sand), zoned sand layers.	
						TOTAL DEPTH 51.5 FEET	

Continuous Core

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-75)

PAGE 1 OF 1

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

INTERNATIONAL TECHNOLOGY CORP.

MF-W9-21(=MF13)

BORING NO. W9-22(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST E. Wessner
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 52 ft.

COORDINATES N ____ E ____
DATE BEGAN 4-30-90
DATE FINISHED ____
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0	MD1	8/18	6/12/18	CL	SILTY CLAY; grayish black, slightly moist, soft, slightly plastic.
	MD2	12/18	2/6/11		SILTY CLAY; olive gray, slightly moist, soft, slightly plastic. 5.0'
5	MD3	18/18	6/7/7	CL	Loss of recovery. CPT log shows SILTY CLAY.
		0/42			
10		40/60		SC	CLAYEY SAND; very fine grained, dark greenish gray, moist, very soft, slightly plastic. 13.0'
				CH	SILTY CLAY/CLAY; olive gray, mottled dusky yellow, moist, very soft, plastic. 15.0'
15		10/60		CH	SILTY CLAY; dusky yellowish green, very moist, very soft, medium plasticity. 16.5'
				SM	Loss of recovery. CPT shows SAND. 20.0'
20		30/60		SM	SAND; fine to medium grained, wet, loose, grading into clayey sand with depth. 22.0'
				CL/CH	SILTY CLAY/CLAY; medium olive gray, moist, very soft, medium plasticity. 24.0'
25		30/60		SM/SC	SAND; fine to medium grained, very wet, loose. Grading into silty clay, greenish gray, moist, soft, medium plasticity. 28.0'
				CL	SILTY CLAY; dusky yellowish gray, moist to slightly moist, medium stiff, low to medium plasticity. Becomes grayish green, soft, with medium plasticity. 30.0'
30		50/60		ML	CLAYEY SILT; light olive gray, moist, very soft, low plasticity. 31.0'
				SP	SAND; fine to medium grained, wet, loose. 32.0'
				CL	SILTY CLAY; light olive brown, moderately moist, medium stiff, plastic. 34.0'
35		60/60		CL	SILTY CLAY; yellowish gray, moist, very soft, very plastic, coarse calcite inclusions. 36.0'
				ML	SANDY CLAYEY SILT; light olive brown, moderately moist, soft, slight to moderate plasticity. 37.0'
				ML	CLAYEY SILT; moderate olive brown, moist, very soft, moderately plastic. 39.0'
40		60/60		SC	CLAYEY SAND; olive brown, wet, very soft, medium pebbles. Very coarse sands, wet, loose, sub-angular. 49.0'
45		60/60			
50		36/36		CL	SILTY CLAY; moderate olive brown, wet, soft, plastic, coarse sand grains grading to fine pebbles included in matrix.
					TOTAL DEPTH 52 FEET
55					
60					
65					
70					

Continuous Core

WELL SUMMARY

PROFILE

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-55)

PAGE 1 OF 1

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-22(=MF16)

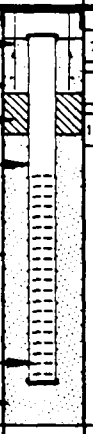
BORING NO. W9-23(A1)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST T. Ault
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 20 ft.

COORDINATES N ____ E ____
DATE BEGAN 4-17-90
DATE FINISHED 4-17-90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0	MD1	16/18	7/9/13	CL	SILTY CLAY; brownish black, dry to slightly moist, firm to hard, very slightly plastic. 2.0'
	MD2	15/18	6/8/9	ML	CLAYEY SILT; light olive gray, slightly moist, soft, non-plastic. 5.5'
5	MD3	18/18	14/16/24	SW	GRAVELLY SAND; dark brownish yellow, dry, very loose, medium sand, some very coarse sand, fine, angular gravel. Wet at 7'. Coarse sand predominant at 9'. Gravel size increases – medium to coarse. 10.0'
10	Continuous Core	40/60		SW	Flowing SAND; fine to coarse grained, dusky yellowish green, wet, very loose. 17.0'
15		4/60		SC	CLAYEY SAND; fine grained, grayish green, wet, loose. 18.5'
20		30/60		CL	SANDY CLAY; grayish green, moist to wet, very soft, medium plasticity, some layers with no sand, very fine sand.

WELL SUMMARY



TOTAL DEPTH 20 FEET

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-75)

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-23(•MF16)

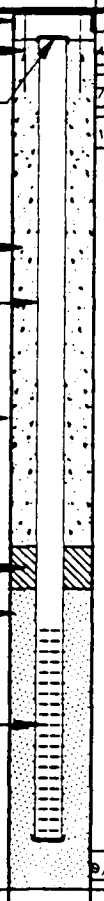
BORING NO. W9-25(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST J. Strack
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 42 ft.

COORDINATES N ____ E ____
DATE BEGAN 5-7-90
DATE FINISHED 5-8-90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0	MD1	12/18	4/15/27	ML	FILL: GRAVELLY SAND. SANDY SILT with GRAVEL FILL material; dark yellowish brown matrix, dry, firm, non-plastic. 1.5'
	MD2	18/18	7/12/24	CL	SILTY CLAY; medium gray, dry, firm, moderately plastic. Changes to light olive gray at ~ 4'.
5	MD3	10/18	10/13/18		
					SILTY CLAY; olive gray, moist, soft, moderately plastic.
10					SANDY CLAY; medium bluish gray, very moist, moderately plastic. SILTY CLAY; olive gray, moist, soft, moderately plastic.
15					▽ Groundwater encountered at ~ 16'. 16.0'
				ML	SANDY SILT; grayish green, wet, very soft, low plasticity.
20					
25					27.0'
				SM	SILTY SAND; grayish green, saturated.
30					
35					38.0'
				SP	SAND; very fine to fine grained, light olive gray, wet, dense. 40.0'
40		16/18	9/14/27	GW	GRAVEL; fine sand to coarse pebbles, wet, dusky brown matrix, loose, sub-angular grains. 40.5'
				CL	SILTY CLAY; olive gray with oxidized fractures, moist, firm, turning soft at 41.5', moderately plastic.
					TOTAL DEPTH 42 FEET
45					
50					
55					
60					
65					
70					

WELL SUMMARY



DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-75)

PAGE 1 OF 1

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

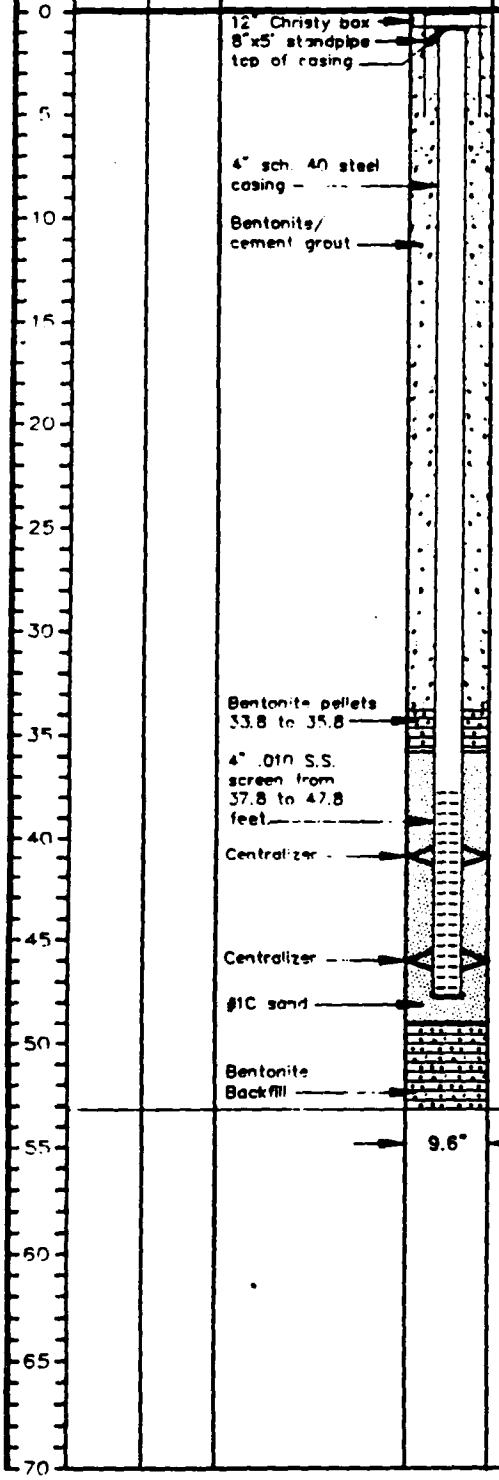
INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-25(*MF'6)

BORING NO. W9-27(A2)

FIELD GEOLOGIST E. Wessner
EDITED BY J. Hadsall
CHECKED BY J. Hadsall
TOTAL DEPTH 53.2 feet

COORDINATES N 338,678.4 E 1,548,653.8
DATE BEGAN 8/19/88
DATE FINISHED 8/22/88
GROUND SURFACE EL 16.9 ft.



USCS SYMBOL	DESCRIPTION
FILL	FILL: coarse gravels and silty clay.
CL	SILTY SANDY CLAY; dark gray-black, slightly moist, medium stiff, moderately plastic.
	SILTY CLAY; light gray to mottled brown gray, moderate to slightly moist, slightly to moderately plastic.
GW	GRAVELS; black and gray, very coarse to fine, angular, poorly sorted.
	Fuel odor, (3-4ppm in mud bin), no water.
CL	SILTY CLAY; brown-gray, moderately moist, medium stiff to soft, moderately plastic.
	Slight inflow of water.
SP-CH	SILTY COARSE SANDS; angular to subangular, medium grained and some gravels, poorly sorted.
	Stringers of silty clay, light olive gray, moist, soft, plastic.
CH	SILTY CLAY; olive gray, moist, moderately plastic to plastic.
	SILTY CLAY; orange brown, moist, soft to medium stiff, plastic, mottled brown gray.
	SILTY CLAY; mottled gray brown, moist, stiff, moderately plastic.
SP-CL	SANDY SILTY CLAY; with fine to medium sands, subangular, poorly sorted.
CL	SANDY CLAY; gray brown, wet, slightly plastic.
	SILTY CLAY; gray brown, moist, stiff, moderately plastic, minor sand.
	TOTAL DEPTH 53.2 FEET

DRILLING CO.: Water Development Co.
DRILLING METHOD: Air Rotary

NOTE: Redrill of W9-27(B1), (7-19-88)
No samples taken while drilling this well. Samples taken during the drilling of the original W9-27(B1-abandoned) will be used as sample data.

PROJECT NO.: 409616
CLIENT: Moffett Naval Air Station
Moffett Field, California

AutoCAD FILE MW9-27B1.DWG

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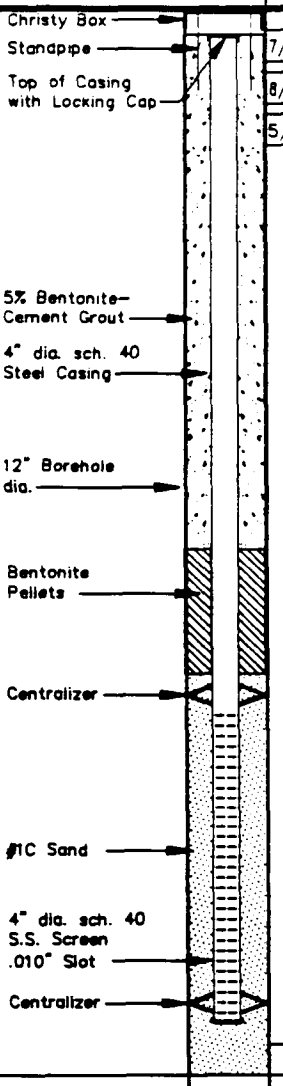
SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

BORING NO. W9-33(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST T. Ault
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 51.5 ft.
COORDINATES N ____ E ____
DATE BEGAN 4/12/90
DATE FINISHED 4/13/90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0	MD1	16/18	7/18/21	CL	SILTY CLAY, brownish black to medium gray, firm, dry non-plastic to medium plastic. Increase in moisture-moist to dry at 3'. Changes to brownish color with inclusions of brownish black clay.
5	MD2	11/18	8/12/16		
	MD3	12/18	5/6/9		
		51/60		CL	SILTY CLAY, dusky yellowish green, very soft, moist low to medium plastic, silt decreasing with depth. ▽ Groundwater At 9 Ft.
10		5/60		SW	GRAVELLY SAND, dusky yellowish green, wet, very loose, grain size medium sand, fine gravel, (some clay matrix). Flowing sands
15		4/60		SP	SAND coarse to fine, very wet, no cohesion, some fine gravel. Flowing sands
				SC	CLAYEY SAND, dark grey, wet, no to little cohesion.
20		50/60		CL	CLAY, greenish gray, wet, very soft, plastic.
				ML	CLAYEY SILT, soft, medium plastic.
				SP	SILTY SANDY, light olive brown, wet, loose, fine sand, some organics.
25		50/60		CL	SILTY CLAY, light olive brown, moist, low to medium plastic, soft to firm, greenish gray at base.
				ML	CLAYEY SILT, light olive brown, moist, low plasticity, firm, mottled with gray clay at 28'.
30		50/60		CL	CLAY, medium bluish gray, mottled with olive brown, moist, medium firm, plastic.
				ML	CLAYEY SILT, light olive brown, moist, firm, low plasticity.
				SM	SILTY SAND, light olive brown, layers of silt, very wet, silt matrix, loose.
35		45/60		GP/SP	GRAVELLY SAND(very coarse sand with fine gravel), olive gray, very wet, very loose gravel sub-angular.
				GW	SAND, medium grain, moderate olive brown, no cohesion, grains sub rounded with some sub angular. Flowing sands
40		4/60			SAND AND GRAVEL (silt matrix) gravel angular, very coarse, to fine sand, silt, no cohesion, light brown. Flowing sands
45		24/60			
50	NA	18/18	NA	ML	SANDY SILT, grading to clayey silt, dusky yellow, slightly moist, firm, non-plastic to medium plastic.
					TOTAL DEPTH AT 51.5 FT.
55					
60					
65					
70					

WELL SUMMARY



DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-55)

PAGE 1 OF 1

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-33(MF19)

BORING NO. W9-34(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST J. Strack
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 44.6 ft.

COORDINATES N ____ E ____
DATE BEGAN 5/4/90
DATE FINISHED 5/4/90
GROUND SURFACE EL ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0	MD1	18/18	5/8/10	CH	CLAYEY SAND with fine gravel fill material, dark yellowish brown, medium dense, moist.
	MD2	16/18	5/10/12		CLAY, grayish black, moist, high plasticity. Olive gray at 15 inches. Light olive gray at 40 inches.
5	MD3	14/18	5/6/11		
10				CL	SILTY CLAY, dusky yellowish green moist, medium plasticity, becoming wet at 16'.
15				SM	SILTY SAND, grayish green, wet. Groundwater At 18 Ft. ▽
20				ML	SANDY SILT-CLAYEY SILT, wet.
25					
30				SM	SILTY SAND, wet.
35				SP	GRAVELLY SAND, dusky yellowish brown, matrix, wet, loose.
40					
		18/18	5/8/10	CL	SILTY CLAY, moderate olive brown, moist, medium plasticity.
45					TOTAL DEPTH AT 44.6 FT.
50					
55					
60					
65					
70					

WELL SUMMARY

PROFILE

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-55)

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-34(MF-19)

BORING NO. W9-35(A1)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST T. Ault
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 25.0 feet

COORDINATES N ____ E ____
DATE BEGAN 4-25-90
DATE FINISHED 4-25-90
GROUND SURFACE EL ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	WELL SUMMARY	BLOWS ON SAMPLER	USCS	PROFILE	DESCRIPTION
0			Christy Box		SM		SILTY SAND:
	MD1	16/18	Standpipe	7/7/11	ML		CLAYEY SILT: light olive gray, slightly moist, low to medium plasticity, firm to soft.
	MD2	13/18	Top of Casing with Locking Cap	7/8/10	ML		CLAYEY SILT: olive gray, moist, non-plastic, firm to very firm, some fine sand layers 1-2" in clay matrix. low plasticity near base.
5	MD3	14/18	5% Bentonite-Cement Grout	3/3/3	ML		
	Continuous Core	37/60	4" dia. sch. 40 Steel Casing		SC		CLAYEY SAND: light olive brown (gradational upper contact), soft to very soft, wet, low to medium plasticity to 8', non-plastic below, (medium to fine sand-trace fine gravel), light brown streaks near base, very low clay last 4".
10			Bentonite Pellets		CH		CLAY: light olive brown, slightly moist, very firm, very plastic. 12.5'
		50/60	12" Borehole dia.		SP / SW		SAND: light olive brown, medium rounded, fine to coarse, poorly graded, sharp contacts. 13.0'
15		20/60	#1C Sand		SP		SAND: olive brown, coarse grain, wet, very loose, subrounded to subangular, some fine to very fine gravel at 15.0', well graded. 15.0'
20			4" dia. sch. 40 S.S. Screen .010" Slot		SP		15-20' medium sand poorly graded, some very coarse sand >1%. 21.5'
		43/60			SC		CLAYEY SAND: light olive gray, fine sand, clay matrix 10-20% medium coarse, very wet.
					CL		SANDY CLAY: grayish green, medium plastic, wet, very fine sand 10-20%, soft.
25							SILTY CLAY to SILT: grayish green to grayish olive, moist to dry, plastic to non-plastic at base, firm at 24' hard at 25'.
							TOTAL DEPTH 25 FEET
30							
35							
40							
45							
50							
55							
60							
65							
70							

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-75)

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION:. Moffett Field, California

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-35(MF14)

BORING NO. W9-37(A1)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST T. Ault
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 21.5 feet

COORDINATES N ____ E ____
DATE BEGAN 4-10-90
DATE FINISHED 4-10-90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in)	WELL SUMMARY	BLOWS ON SAMPLER	USCS	PROFILE	DESCRIPTION	
0					GC		CLAYEY GRAVEL: red brown, dry, loose.	1.5'
	MD1	16/18	Bentonite/ Cement Grout	6/12/21	CL		SILTY CLAY: medium light gray dark gray, slightly moist, firm, moderately plastic.	5.0'
	MD2	14/18	4" C.S. Sch 40 Casing	6/12/19				
5	MD3	14/18	Bentonite	4/7/9	CL		SILTY CLAY: dark yellowish brown, low plasticity, slightly moist, firm.	7.0'
	Continuous Core	60/60			ML		CLAYEY SILT: olive gray (7-8'), moderate yellow brown below, slightly moist to moist, soft, low plasticity, some coarse sand inclusions near top of unit. ▽ Groundwater encountered at 11.0'	11.0'
10		60/60	#1C Sand		SM		SILTY SAND: dark orange yellow to light olive gray, wet, medium dense to loose, fine to very fine sand.	14.0'
			4" dia. sch. 40 S.S. Screen .010" Slot		SC		CLAYEY SAND: medium dark gray, wet, loose, fine to very fine sand.	15.0'
15					CL		SILTY CLAY: dark gray, moist, firm, medium plasticity.	16.0'
		45/60			GW		SANDY GRAVEL: light olive brown, very wet, loose sand, fine to coarse gravel, some silt 16-17', coarse material sub-angular.	21.0'
20		18/18			CL		CLAY: light gray, soft, moist, moderately plastic.	
							TOTAL DEPTH 21.5 FEET	

25, 30, 35, 40, 45, 50, 55, 60, 65, 70

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-75)

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-37(MF14)

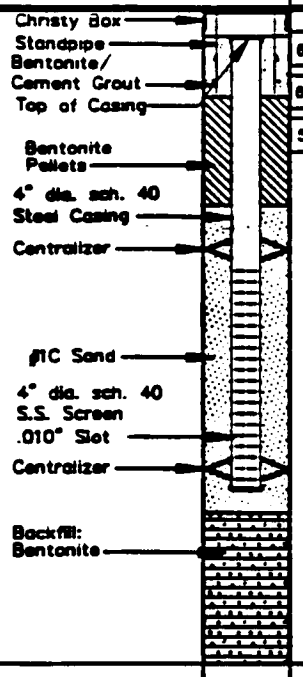
BORING NO. W9-38(A1)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST T. Ault
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 30 feet

COORDINATES N ____ E ____
DATE BEGAN 4-11-90
DATE FINISHED 4-11-90
GROUND SURFACE EL ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0	MD1	13/18	6/9/21	CL	SILTY CLAY: dark gray, slightly moist, firm moderately plastic.
	MD2	14/18	6/9/10		Sandy silty gravel at 4' (9" thick), moderate yellowish brown.
5	MD3	11/18	5/6/11		Olive black, low plasticity, gravel inclusion. 6.0'
				ML	CLAYEY SILT: mottled greenish gray, slightly moist, soft, to very soft, non-plastic. 7.0'
	Continuous Core	50/60		SP/SC	SILTY GRAVELLY SAND: greenish gray with yellow brown streaks, coarse sand and medium gravel, subangular, slightly moist, loose to very loose. 10.0'
10				CL	SANDY CLAY: dusky yellow, wet, very soft, medium plastic.
				SC	11.0'
		47/60		CL	CLAYEY SAND: dusky yellow, wet, low plasticity, coarse to very coarse sand, very loose. 12.0'
15					SANDY CLAY: dusky yellowish brown, wet, soft, medium plastic. 14.0'
		47/60		GM/GW	SILTY GRAVEL: moderate brown, wet, very loose, coarse to very coarse sand turns to coarse gravel, fractures, occasional layer of medium to coarse sand. 20.0'
20				SP	FLOWING SANDS: increased silt at 23' (as seen in core barrel, actual depth unknown. 23.0'
		5/60			
25		16/60		SP	SAND: moderate yellow brown, medium to very fine, very wet, very loose, mostly medium rounded to subrounded.
30					TOTAL DEPTH 30.0 FEET
35					
40					
45					
50					
55					
60					
65					
70					

WELL SUMMARY



PROFILE

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-75)

PAGE 1 OF 1

SEE LEGEND FOR LOGS AND TEST PITS
FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

TTI INTERNATIONAL

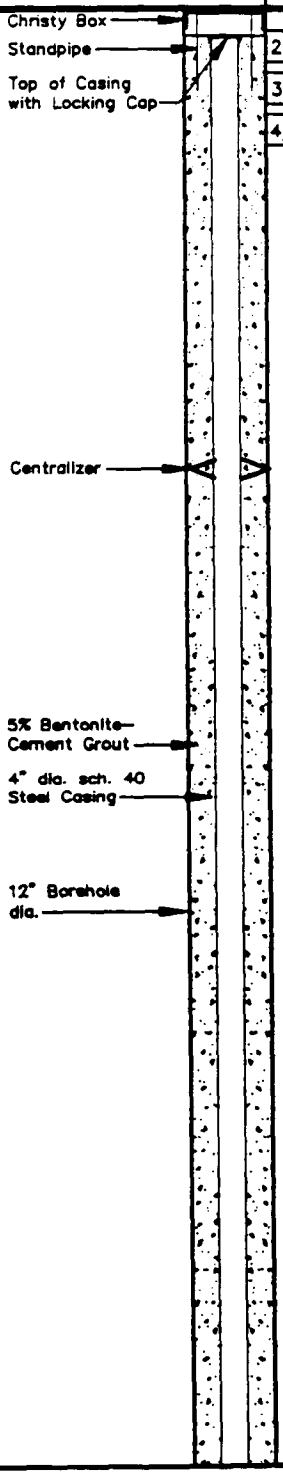
BORING NO. W9-39(B2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST C. Dorgan
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 97 ft.

COORDINATES N ____ E ____
DATE BEGAN 5/9/90
DATE FINISHED 5/9/90
GROUND SURFACE EL ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0					Asphalt & fill material.
	MD1	15/18	2/3/4	SW	GRAVELLY SAND(Some Silts), moderate olive brown, slightly moist, loose.
				ML	CLAYEY SILT, light olive gray, dry, stiff.
	MD2	17/18	3/5/7		
5	MD3	18/18	4/3/6	ML	CLAYEY SILT, olive gray, slightly moist, stiff, increase in moisture and darkness in color with depth.
10				GP/GW	SANDY GRAVELS, (medium-coarse sands & fine gravels), loose. Grondwater At 12 Ft. ▽
15				CH	SANDY SILTY CLAY, mottled moderate olive brown, and light olive gray, moist, soft highly plastic.
20				ML	CLAYEY SILT, yellowish gray, moist, soft, moderate plasticity, increase in sands with depth.
				GC	SANDY GRAVELS, loose, coarse sands and fine-medium gravels. Clay still present.
25				CL	SANDY SILTY CLAY, moderate olive brown, moist, medium stiff, moderately plastic.
30				CL	SANDY CLAY, grayish green, wet, soft , moderate plasticity. (Sands are medium to coarse grained).
35	Grab Sample			GW	SANDY GRAVELS,(Graded sequence-coarse sands to cobbles 3"), sub-rounded loose, various minerology, many quartz rich.
45				ML/SM	SANDY SILTY, highly mottled light olive gray and dark yellowish brown, soft, low plasticity, carbonate zones mottled partings.
55				CH	SILTY CLAY, mottled light olive brown and dusky yellowish green, moist, soft-medium stiff. Moderately highly plastic.
60				CH	CLAY, light olive brown, wet, medium stiff, highly plastic.
65				CH	SILTY CLAY, medium bluish gray, dry-slightly moist, moderately-highly plastic when wetted.
70					

WELL SUMMARY



DRILLING CO.: Water Developement
DRILL METHOD: Air Rotory with Drive Casing

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

INTERNATIONAL TECHNOLOGY

BORING NO. W9-39(B2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST C. Dorgan
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 97 ft.

COORDINATES N ____ E ____
DATE BEGAN 5/9/90
DATE FINISHED 5/9/90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in)	WELL SUMMARY	BLOWS ON SAMPLER	USCS	PROFILE	DESCRIPTION
70							
75			5% Bentonite-Cement Grout		CL		
					SM		SILTY SAND, grayish olive, soft. Grayish olive, wet, fine-medium gravel soft.
80			Bentonite Pellets				
					SW		SAND, grayish olive, fine, loose.
85			Centralizer				
			#1C Sand				Increase in sands grain size with depth.
90			4" dia. sch. 40 S.S. Screen .010" Slot				
95			Centralizer		CL/CH		SILTY CLAY, light olive gray, moist, moderately stiff, highly plastic.
	Grab Sample						TOTAL DEPTH 97 FT.
100							
105							
110							
115							
120							
125							
130							
135							
140							

DRILLING CO.: Water Developement
DRILL METHOD: Air Rotory with Drive Casing

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

INTERNATIONAL TECHNOLOGY CORPORATION

MF-W9-39(MF-19)

BORING NO. W9-41(A2)

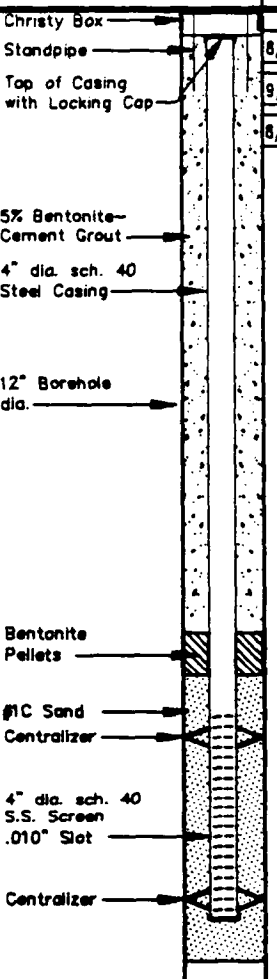
PROJ. GEOL. S. Bartling
FIELD GEOLOGIST C. Dorgan
EDITED BY T. Ault
CHECKED BY W. Gorber
TOTAL DEPTH 50 ft.

COORDINATES N ____ E ____
DATE BEGAN 4/30/90
DATE FINISHED 5/1/90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0					Fill Material
	MD1	10/18	8/12/15	CL	SILTY CLAY, olive gray, slightly moist, low-medium plastic.
	MD2	14/18	9/11/16	SM/OH	SANDY SILT, dark yellowish brown, slight moisture CLAY, grayish black, low-medium plastic.
5	MD3	14/18	8/10/15	OH	CLAY, some fine gravels, grayish black, slight moisture, medium plastic when wetted. Gravels increase in size and abundance with depth, highly mottled-color lightens with depth. Groundwater At 8.5 Ft. ▽
		40/60		SM	SANDY SILT with fine gravels, wet.
10				SP	GRAVELLY SAND, medium sands and fine gravels, highly oxidized, dark yellowish brown, wet, no plasticity.
		24/60		SM	SANDY SILTS, moderate yellowish brown, wet, non-plastic.. Sands increase with depth few fine-medium gravels.
15					
		35/60		SW	SAND well graded, olive gray, wet, non-plastic(no gravels), sub-angular/sub-rounded.
20					
		13/60		GW/SM	SANDY SILT to SANDY GRAVEL, olive gray, wet, (gravels are fine grained).
25					
		0/60			
30					
		4/60			
35				SM	SANDY SILT, light olive gray, wet, fine-medium grained and coarse sands.
		12/60		CL	GRAVELLY CLAY, moderate yellowish brown, moist, very low plasticity, highly weathered gravels and coarse sands
40				CL	SILTY CLAY, grayish green, wet, medium to high plasticity, highly mottled to light brown in areas.
		55/60		CL	SANDY SILT CLAY, light olive gray, wet, moderate plasticity, highly mottled, decrease in sands with depth increase in plasticity.
45				CL	
		30/60		CL	GRAVELLY SILTY SANDY CLAY, dark yellowish brown, wet, moderate plasticity, highly mottled increase in sands and gravels with depth.
50					TOTAL DEPTH 50 FT.
55					
60					
65					
70					

Continuous Core

WELL SUMMARY



PROFILE

DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-55)

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

INTERNATIONAL TECHNOLOGY CORPORATION

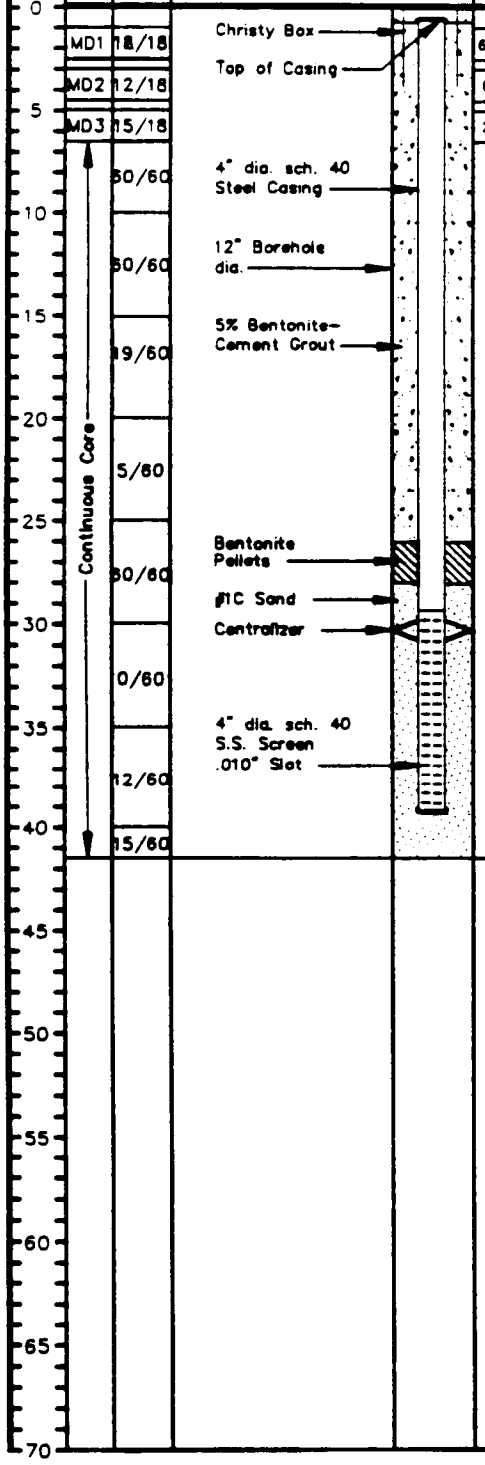
MF-W9-41(MF-19)

BORING NO. W9-42(A2)

PROJ. GEOL. S. Bartling
FIELD GEOLOGIST T. Ault
EDITED BY T. Ault
CHECKED BY W. Garber
TOTAL DEPTH 41.5 feet

COORDINATES N ____ E ____
DATE BEGAN 4-25-90
DATE FINISHED 4-25-90
GROUND SURFACE EL. ____

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in)	BLOWS ON SAMPLER	USCS	DESCRIPTION
0	MD1	18/18	6/8/10	ML	CLAYEY SILT: light olive brown, slightly moist, firm to hard. 1'
	MD2	12/18	6/7/8	ML	CLAYEY SILT: olive gray, slightly moist, slightly firm, non-plastic. 5.0'
5	MD3	15/18	2/3/5	CL	SANDY CLAY: medium bluish gray, very moist, soft, plastic, very fine sand. 6.5'
	Continuous Core	60/60		ML	SILT: moderate yellow brown, fine to very fine sand to 7.5', moist, firm, moderate to non-plastic, brown and gray mottling at intervals, gray at base, firm. 10.0'
10		60/60		SC	CLAYEY SAND: medium bluish gray, moist to very moist, medium dense, some plasticity near base, very fine sand, abundant clay matrix, mottled gray to moderate yellow brown at base. 14.0'
15		19/60		ML / SP	SILT: moderate yellow brown, moist, medium to moderately firm, non-plastic. 15.0' SAND: moderate yellow brown, medium grain, very wet, round. 15.5'
20		5/60		GW	SANDY GRAVEL: pale yellow brown, very wet, very loose, fine to medium gravel, medium to coarse sand <10% clay or silt matrix <1% sand rounded, gravel subrounded, color change to moderate yellow brown, some clay-silt matrix at 21'. 25.0'
25		60/60		CL	SANDY CLAY: moderate yellow brown, very wet, very soft, very plastic, very fine sand <5% numerous white concretions, carbonate (HCl test). 28.0'
				MH / SM	SANDY SILT: moderate yellow brown, wet, non-plastic, soft. 29.5
30		0/60		SP	SILTY SAND: dusky yellowish orange, very wet, loose, fine sand grading to medium, poorly graded at particular depth, rounded sand. 30.0' FLOWING SANDS: 37.0'
35		12/60		SP	SAND: light olive gray, very wet, very loose, fine to medium grain, poorly graded, rounded to subangular sand. 40.0'
40		15/60		GC / GM	GRAVELLY SANDY CLAY: moderate olive brown, soft, plastic, wet to moist. 41.0' GRAVELLY SANDY SILT: moderate olive brown, low to non-plastic, subangular gravel.
45					TOTAL DEPTH 41.5 FEET
50					
55					
60					
65					
70					



DRILLING CO.: Water Developement
DRILL METHOD: Hollow Stem Auger (Rig CME-75)

PAGE 1 OF 1

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

PROJECT NO.: 409700
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California

BORING NO. PT9-3(A2)

FIELD GEOLOGIST D. Kessler
CHECKED BY D. Korfas
APPROVED BY D. Cox
TOTAL DEPTH 52.5 ft.

APPROXIMATE LOCATION
DATE BEGAN 10-3-91
DATE FINISHED 10-7-91
SURFACE ELEV.

DEPTH IN FEET	SAMPLE TYPE & NUMBER	RECOVERY/DRIVE (in.)	WELL CONSTRUCTION	O.V.M. READING (ppm)	USCS	PROFILE	DESCRIPTION	
0			Christy Box; Well Cap				FILL; asphalt, crushed gravel.	0.5'
5	Continuous Core	27"/60"			cl		FILL; Silty clay, black, moist, medium to high plasticity, small rock fragments; silty clay with gravel, black, mottled orange to light brown, moist, medium plasticity.	8.0'
10		40.8"/60"	Bentonite/ Cement Grout		sw		Sandy CLAY with gravel, light to gray, very moist, sand medium grained, well rounded.	8.5'
							Well graded SAND, trace silt, dark reddish brown, very moist, medium grained, subrounded.	11.9'
					ml		SILT, trace gravel, dark gray, some mottling light brown, moist, rounded gravels.	13.5'
15		3"/60"			gm		Sandy GRAVEL with silt, dark gray, wet, rounded.	17.0'
20		1"/60"	2" PVC Casing		sw		Well graded gravelly SAND, very dark grayish brown, wet, sub angular to rounded grains. Water flowing from borehole – Artesian @ 20'.	28.5'
25		0"/60"						
30		43"/60"			ch		Silty CLAY, mottled brown and dark gray, moist, very stiff, high plasticity, very small rock fragments.	30.5'
			Bentonite Pellets		sp/sw		Well graded clayey SAND, olive brown, wet, 60% sand, 40% clay, fine sand grading to coarse grain, sub angular to rounded.	33.6'
35		60"/60"			ml		Clayey SILT, trace gravel, mottled light and dark olive brown, moist, high plasticity, organics. Clayey SILT, trace gravel yellowish brown, moist, sand lenses shifting to a gray mottled brown.	39.0'
40		54"/60"	#1C Sand		sw		Well graded SAND, dark grayish brown, wet, loose.	39.6'
					mh		Clayey SILT, with gravel, gray, wet, high plasticity.	41.5'
					sw		Well graded gravelly SAND, dark grayish brown, wet, subangular to rounded.	43.5'
45		45"/60"			sp		Poorly graded SAND, dark grayish brown, wet, rounded grains, fines grading to sandy gravel.	46.5
50			2" dia. sch. 40 S.S. .010" Slot		gp		Sandy GRAVEL, dark grayish brown, wet, rounded.	51.0'
	Drive S.S.	18"/18"			ch		Silty CLAY, trace gravel, light yellowish brown, moist, high plasticity.	52.4'
					sc		Clayey SAND, light gray wet, loose, well rounded grains.	
55							TOTAL DEPTH 52.5 FEET	
60								
65								
70								

DRILLING CO.: Water Development Corporation
DRILLER: R. Williamson
DRILLING METHOD: Hollow Stem Auger – 8" O.D.
SAMPLING METHOD: See Log
CLIENT: Moffett Naval Air Station
LOCATION: Moffett Field, California
PROJECT NO.: 409729

SEE LEGEND FOR LOGS AND TEST PITS FOR EXPLANATION OF SYMBOLS AND TERMS

INTERNATIONAL TECHNOLOGY CORPORATION

PT9-3(MF42)

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 9 – WELLS (CLEAN)

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

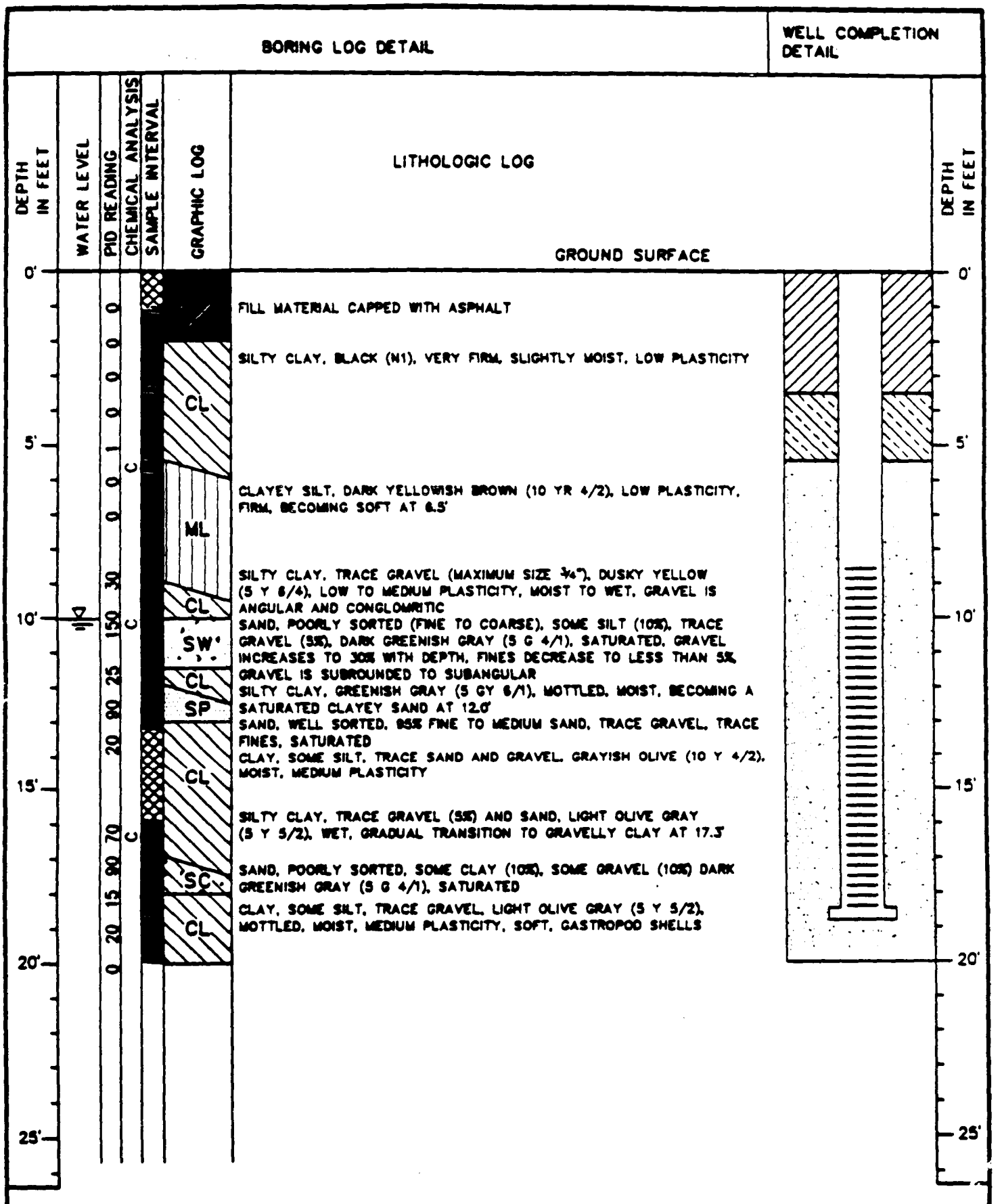


FIGURE D-1
NAS MOFFETT FIELD BUILDING 29 AREA
W29-1(A)

SCALE: AS SHOWN

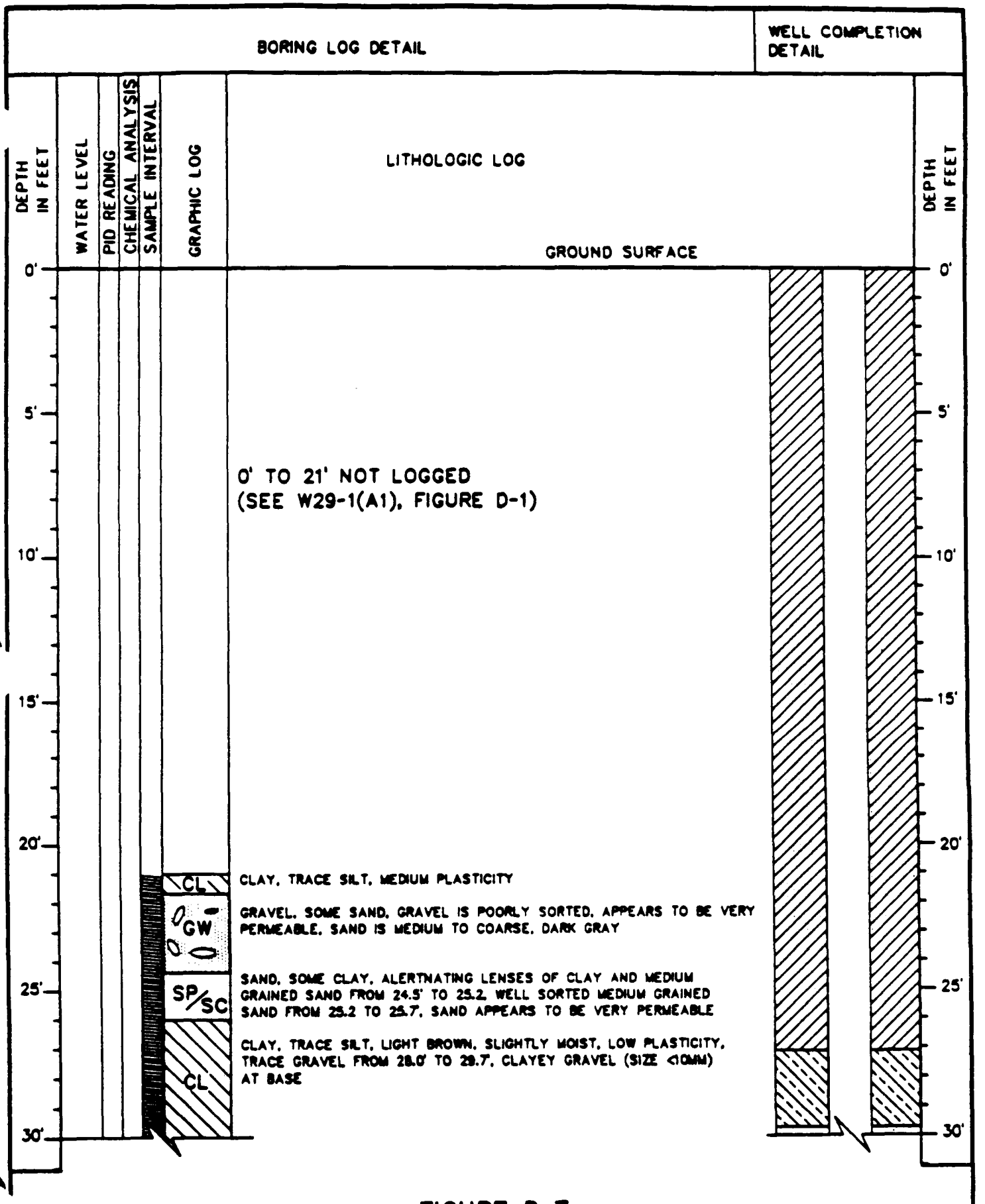


FIGURE D-7
NAS MOFFETT FIELD BUILDING 29 AREA
W29-7(A2)

SCALE: AS SHOWN

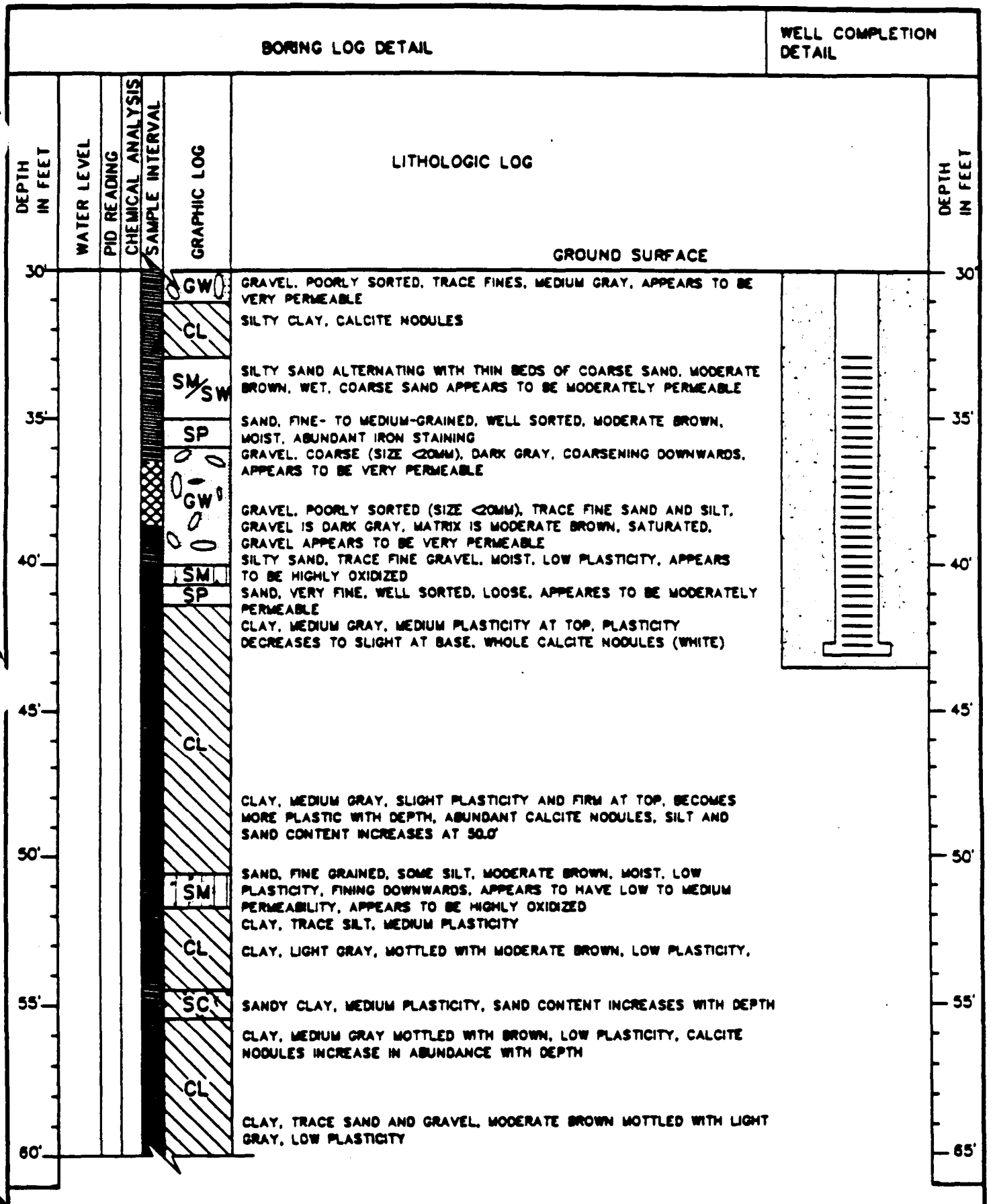


FIGURE D-7 (CONT.)
NAS MOFFETT FIELD BUILDING 29 AREA
W29-7(A2)

SCALE: AS SHOWN

BORING LOG DETAIL	WELL COMPLETION DETAIL

DEPTH IN FEET	WATER LEVEL	PID READING	CHEMICAL ANALYSIS	SAMPLE INTERVAL	GRAPHIC LOG	LITHOLOGIC LOG	DEPTH IN FEET
						GROUND SURFACE	
60'						CLAY, SOME SILT, MODERATE BROWN MOTTLED WITH GRAY, LOW PLASTICITY, SILT CONTENT INCREASES WITH DEPTH	60'
65'						SILTY CLAY, BECOMES SILTIER WITH DEPTH, LOW PLASTICITY, BECOMING SOFTER WITH DEPTH	65'
						CLAY, WITH LENSES (2 TO 5CM) OF SILT AND SAND, OLIVE GRAY, LOW PLASTICITY	
70'					CL	CLAY, OLIVE GRAY, VERY FIRM, LIGHT BROWN MOTTLING (ORGANICS) INCREASE WITH DEPTH	70'
75'							75'
						CLAY, OLIVE GRAY MOTTLED WITH LIGHT GRAY, SILT CONTENT INCREASING AT BASE	
80'						SANDY CLAY, OLIVE GRAY, MOTTLED WITH LIGHT GRAY, WET	80'
					SP	SAND, WELL SORTED, FINE GRAINED	
					CL	SANDY CLAY, SAND CONTENT INCREASES TOWARDS BASE	
						CLAY, OLIVE GRAY MOTTLED WITH LIGHT GRAY, LOW PLASTICITY	
85'							85'
90'							90'

FILE NAME: D:\0030RR\ITS\FIG D07.DWG

JAA

FIGURE D-7 (CONT.)
NAS MOFFETT FIELD BUILDING 29 AREA
W29-7(A2)

SCALE: AS SHOWN

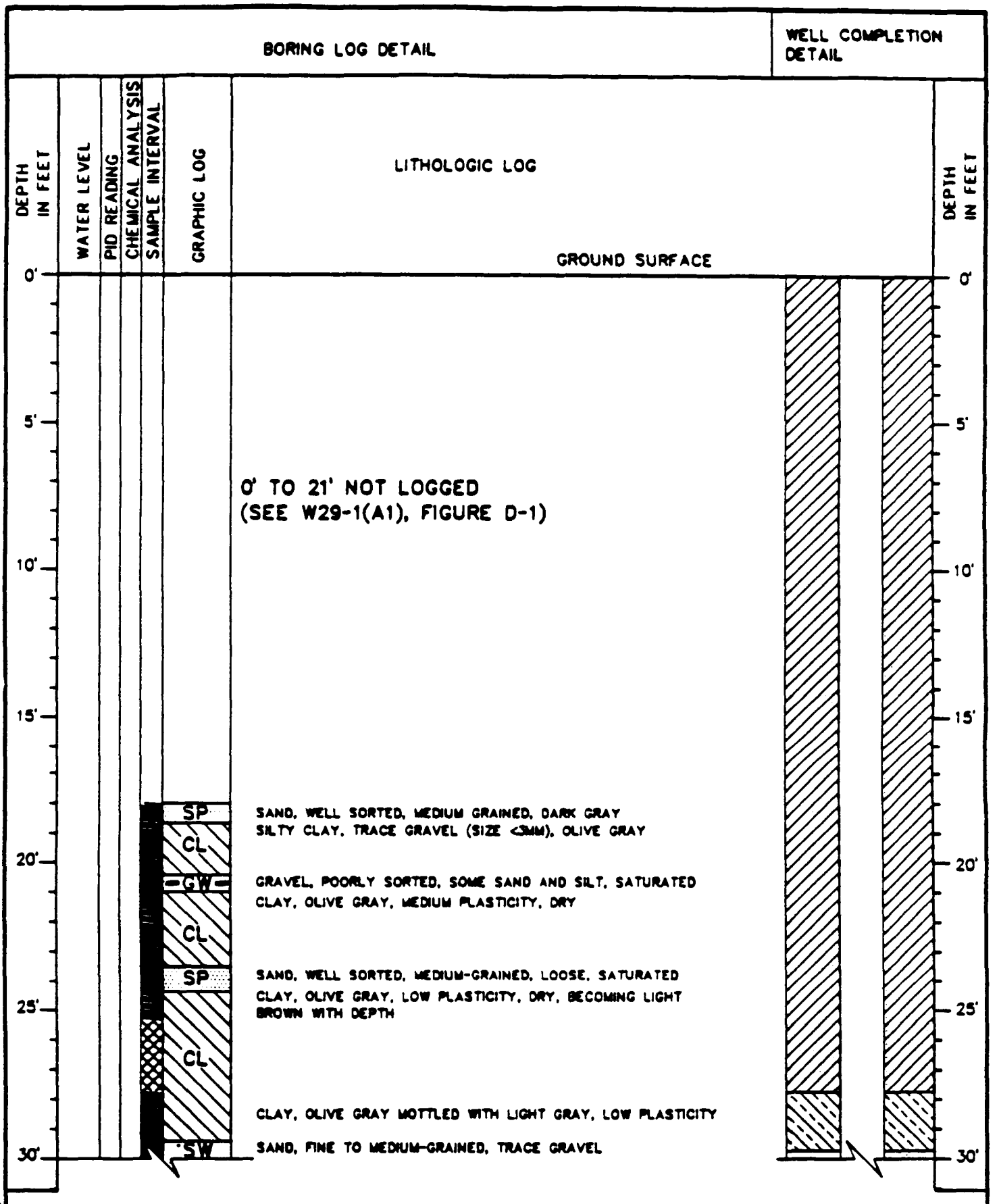


FIGURE D-10
NAS MOFFETT FIELD BUILDING 29 AREA
W29-10(A2)

SCALE: AS SHOWN

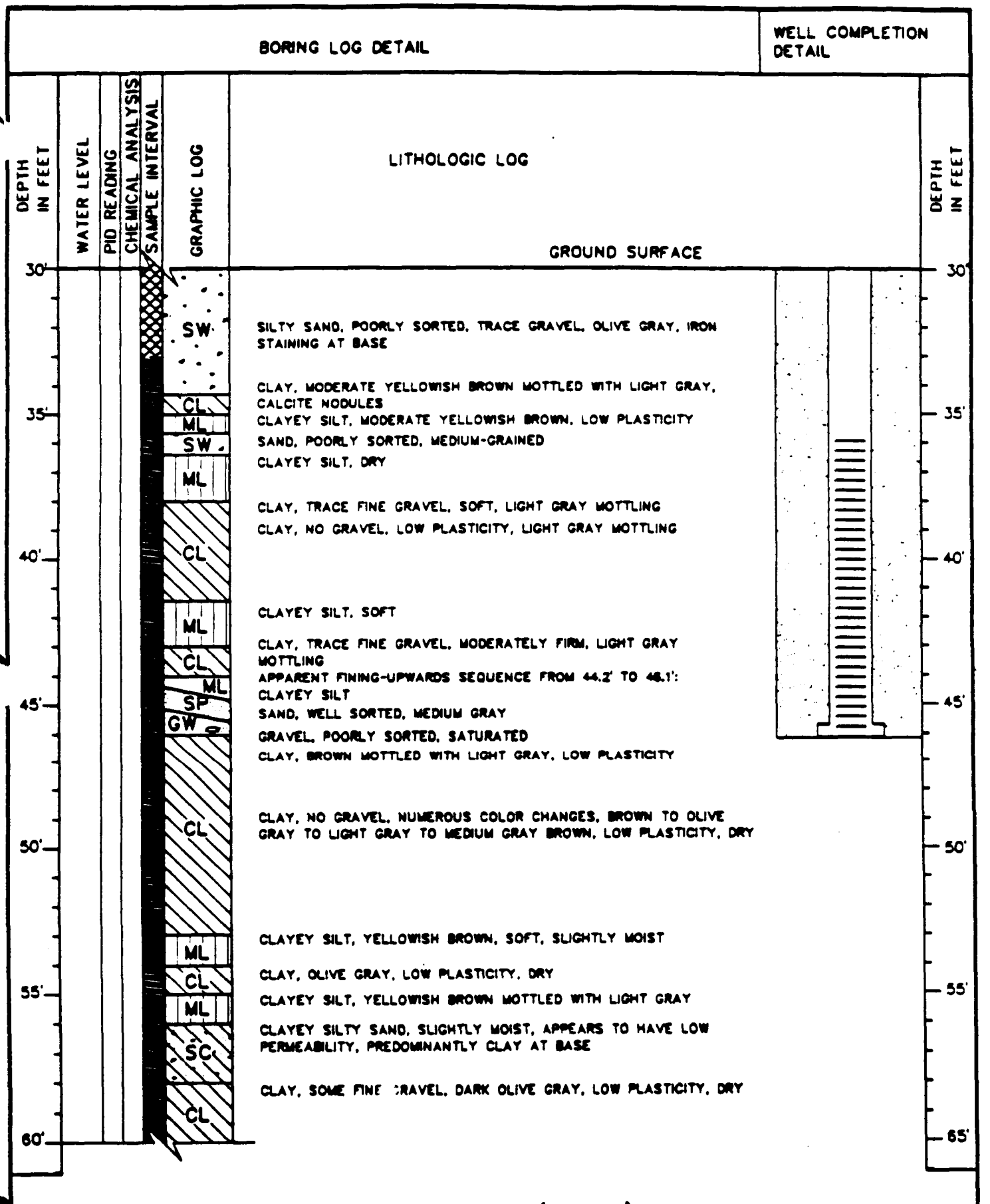


FIGURE D-10 (CONT.)
NAS MOFFETT FIELD BUILDING 29 AREA
W29-10(A2)

SCALE: AS SHOWN

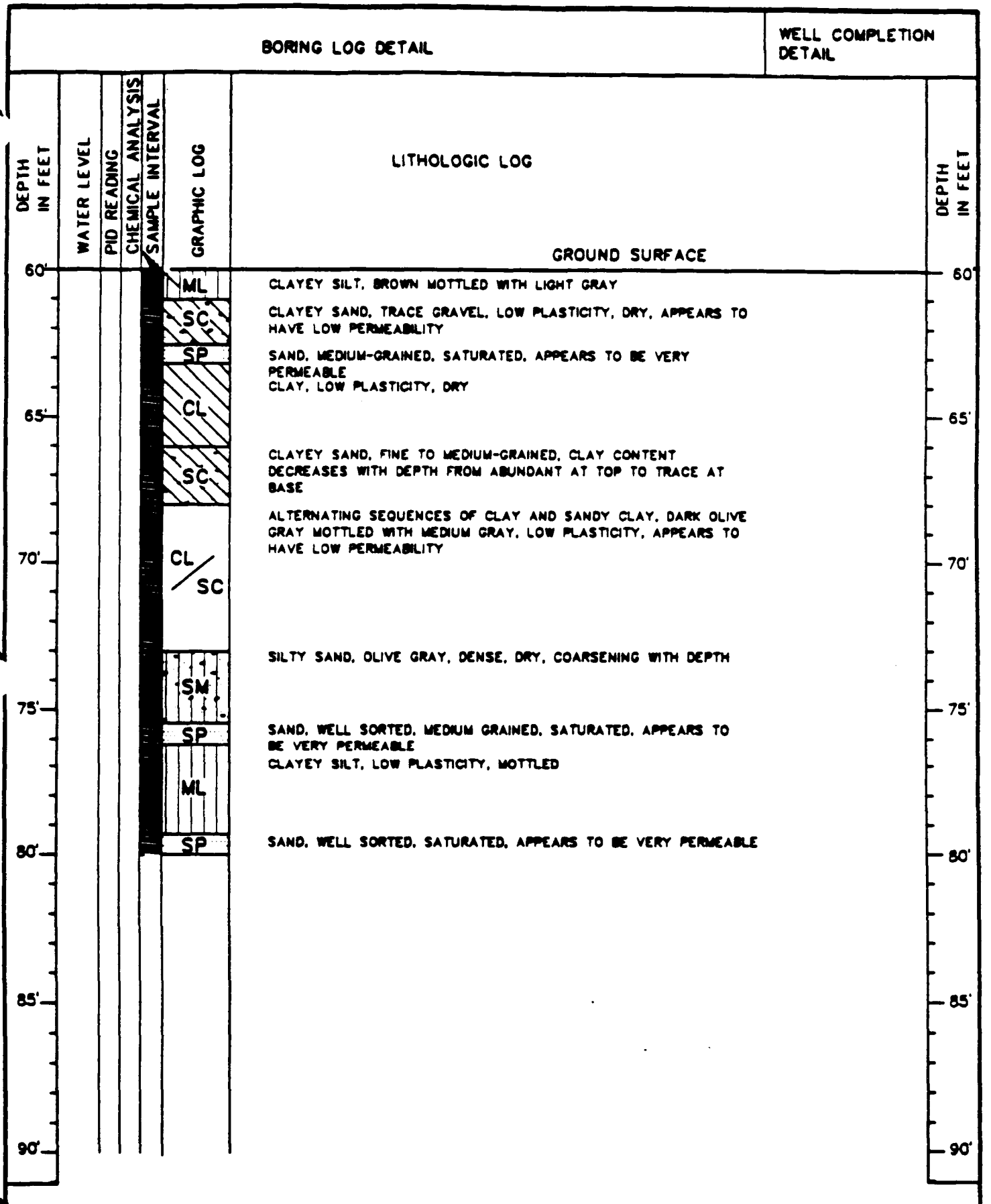


FIGURE D-10 (CONT.)
NAS MOFFETT FIELD BUILDING 29 AREA
W29-10(A2)

SCALE: AS SHOWN

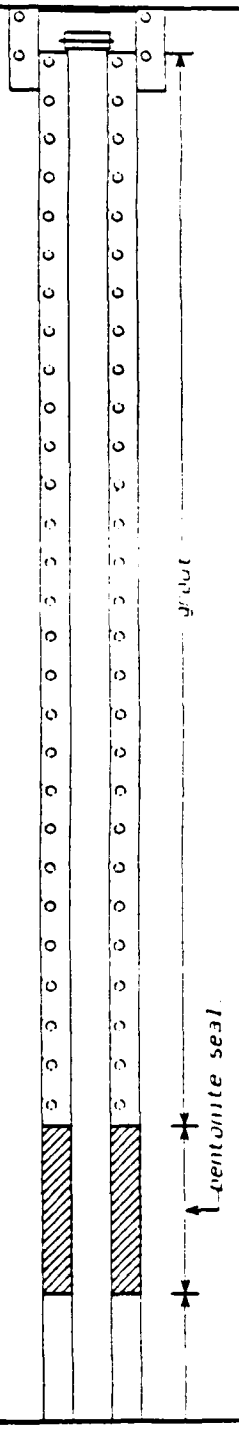
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER W89-1 (A)
DATE STARTED 11/07/90 COMPLETED 11/09/90
ELEVATION 37.32 FEET, Top of Box

CLIENT US NAVY
PROJECT NAS MOFFETT FIELD IS 8 and 9
GEOLOGIST CHRIS PETERSEN

DEPTH feet	SAMPLE	RECOVERY	BLOWS/6 IN	HNU-PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
		100%	6	0.0		CL	CLAY loamy, dry, dark clay.
1			8				
			9				
2		95%	7	0.0			
			9				CLAY, stiff, dry, grey, curious white interbedding - resistent clay.
3			9				
		100%	8	0.0			
4			9				CLAY, silty, light grey, mottled, ferrous staining.
			17				
5		80%	5	0.0			
			7				CLAY, silty, light grey, friable, dry, minor ferrous staining, calcite.
6			10				
		80%	7	0.0			
7			10				CLAY, very stiff, slightly silty, calcite veins, brown mottling.
			15				
8							
9							
10		100%		0.0			
							CLAY, very dark grey, stiff.
11							
							CLAY, very dark grey, grading into grey silty clay.
12						ML	SILT, with minor sand and gravel.
13						CL	CLAY, silty with ferrous stains, very mottled at base, moist. Silt decreases toward base.
14							
15		100%		0.0			
16							CLAY, silty, light grey, mottled, very moist downward fining to very stiff, grey clay, plastic.

WELL DIAGRAM



METHOD OF DRILLING HOLLOW STEM AUGER
HOLE DIAMETER 12 INCHES
TOTAL DEPTH 30 FEET

WELL COMPLETION DEPTH 29.8 FEET
WELL DIAMETER 4 INCHES
WELL MATERIAL LOW CARBON STEEL/STAINLESS STEEL

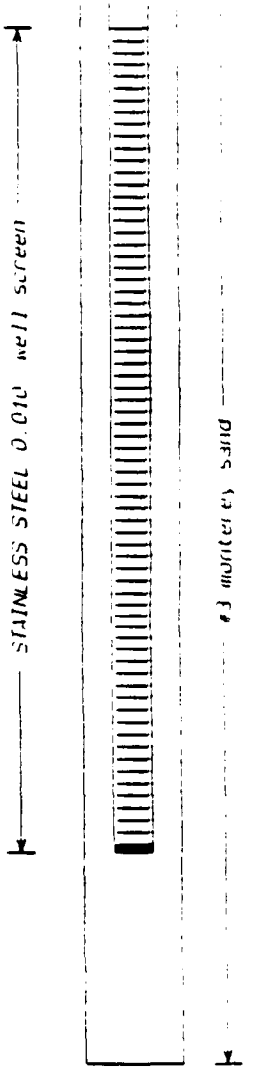
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER W89-1 (A)
DATE STARTED 11/07/90 COMPLETED 11/09/90
ELEVATION 37.32 FEET, Top of Box

CLIENT US NAVY
PROJECT NAS MOFFETT FIELD IS 8 and 9
GEOLOGIST CHRIS PETERSEN

DEPTH feet	SAMPLE	RECOVERY	BLOWS/6 IN	HNU-PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
18						CL	CLAY, grey, stiff, coarsening downward to light brown silt.
19						ML	SILT, sandy, dark brown, moist - not saturated, friable.
20		100%		0.0			
21							SILT, sandy, dark brown, very moist, friable.
22						CL	Abrupt change from sandy SILT to silty CLAY, fining downward to very dark grey clay with minor gravel.
23						GC	
24							
25		20%		0.0			Sample is a slurry of sandy gravel fining upward to a silty clay. The bottom 4 feet of sand and gravel (?) washed out.
26							
27							
28							
29							
30							
31							
32							
33							

WELL DIAGRAM



LOG OF WELL W89-1 (A) (continued)

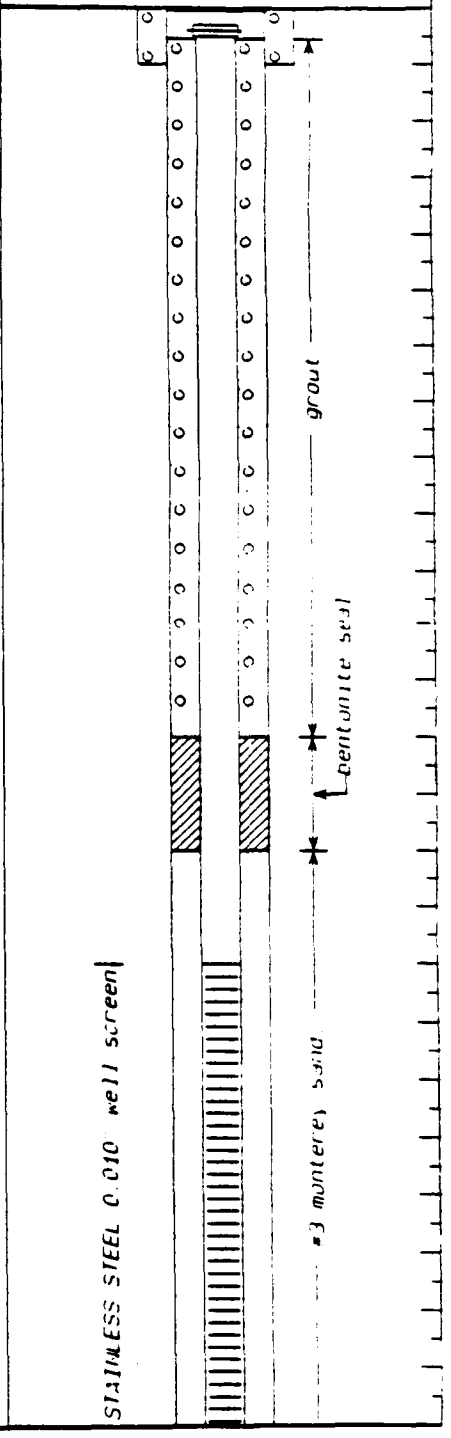
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER W89-2 (A)
DATE STARTED 11/08/90 COMPLETED 11/08/90
ELEVATION 34.96 FEET, Top of Box

CLIENT US NAVY
PROJECT NAS MOFFETT FIELD IS 8 and 9
GEOLOGIST CHRIS PETERSEN

DEPTH feet	SAMPLE	RECOVERY	BLOWS/6 IN	HNU-PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
1		100%	6 7 10	0.0		ML	CLAY, silty, dry, friable, roothairs, dark grey.
2		100%	5 7 9	0.0		CL	
3							Same as above, but some small calcite nodules.
4		100%	11 7 11	0.0			
5							CLAY, grey, friable with ferrous staining, calcite nodules, very stiff.
6		100%	7 8 10	0.0			
7		100%	7 7 11	0.0			
8							
9		100%	5 7 9	0.0			CLAY, grey to slightly green, low moisture, calcite nodules.
10		100%		0.0			
11							CLAY, dark grey, stiff.
12							CLAY, light grey with ferrous stains, coarsening downward.
13							CLAY, silty and sandy, ferrous stains abundant.
14							
15		80%		0.0			No recovery.
16						CL	CLAY, very plastic, iron staining.
17							CLAY gravelly, with minor silt, iron staining, very stiff, coarsening downward.
18							
19							CLAY, alternating sequences of clayey, sandy layers.
20		100%		0.0			
21							CLAY, gravelly, light brown, abundant iron staining, moderately stiff.
22							CLAY, dark grey, abrupt change, no iron stains.
23							
24		100%		0.0		SW	SAND, well sorted, wet.

WELL DIAGRAM



METHOD OF DRILLING HOLLOW STEM AUGER
HOLE DIAMETER 12 INCHES
TOTAL DEPTH 30 FEET

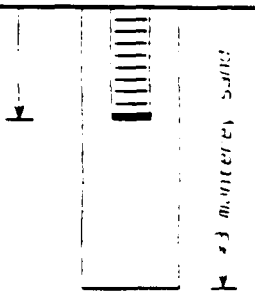
WELL COMPLETION DEPTH 30 FEET
WELL DIAMETER 4 INCHES
WELL MATERIAL LOW CARBON STEEL/STAINLESS STEEL

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER W89-2 (A)
DATE STARTED 11/08/90 COMPLETED 11/08/90
ELEVATION 34.96 FEET, Top of Box

CLIENT US NAVY
PROJECT NAS MOFFETT FIELD IS 8 and 9
GEOLOGIST CHRIS PETERSEN

DEPTH feet	SAMPLE	RECOVERY	BLOWS/6 IN	HNU-PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
26		60%		0.0		SW CL	CLAY, grey, well graded sequence from grey clay to silts, gravelly, clay mix, dark greyish green.	
27						GP	GRAVEL, sandy, poorly sorted, very wet, brown gravels up to quarter inch in size.	
28								
29							No sample recovery.	
30								
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								
45								
46								
47								
48								
49								



LOG OF WELL W89-2 (A) (continued)

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.

365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER TH89-1/W89-11 (B1) CLIENT US NAVY
DATE STARTED 11/14/90 COMPLETED 12/7/90 PROJECT NAS MOFFETT FIELD IS 3 and 9
ELEVATION 37.44 FEET, Top of Box GEOLOGIST CRAIG STEVENS

DEPTH feet	SAMPLE	RECOVERY	BLOWS 6 IN	HNU-PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
1		100%		0.0		CL	Where sample recovery was low or non-existent, lithologic descriptions were based on cuttings carried up with return mud. CLAY, silty, dark brown, loamy, dry, low PI, rootlets.	
5		50%		0.0			CLAY, silt, gray-green, streaks of whitish clay and oxidized iron, dense, dry, medium plasticity.	
9		60%		0.0			Same as above.	
13							Increase in sand (2-3%), some gravel (2-4 mm) at 12 - 13 feet.	
14		60%		0.0		ML CL	CLAY, silty/clay SILT, some fine sand and gravel (2-4 mm), gray-green, wet, low plasticity, streaks of oxidized material, some rootlets.	
19		5%		0.0			Same as above with some coarser sand (5%).	
24		0%				SW	SAND, well graded, some fine gravel (based on cuttings in drilling fluid).	

METHOD OF DRILLING MUD ROTARY WELL COMPLETION DEPTH 62 FEET
HOLE DIAMETER 10 INCHES WELL DIAMETER 4 INCHES
TOTAL DEPTH 103 FEET WELL MATERIAL LOW CARBON STEEL/STAINLESS STEEL

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA 94598 / (415) 975-3400

BORING/WELL NUMBER TH89-1/W89-11 (B1) CLIENT US NAVY
DATE STARTED 11/14/90 COMPLETED 12/7/90 PROJECT NAS MOFFETT FIELD IS 8 and 9
ELEVATION 37.44 FEET, Top of Box GEOLOGIST CRAIG STEVENS

DEPTH feet	SAMPLE	RECOVERY	BLOWS/6 IN	HNU-PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
27						SW	SAND, well graded, some fine gravel (this is based on cuttings in drilling fluid).	
28								
29		0%					Same as above.	
30								
31								
32								
33								
34		0%					0% recovery, still in sandy layer, cuttings suggest this zone may also be SW.	
35								
36								
37								
38								
39		0%					May be a GRAVEL zone, cuttings in drilling fluid range from very fine sand to gravels, well graded.	
40								
41								
42								
43								
44		0%					Same as above.	
45								
46								
47								
48								
49		5%		0.0		CL	CLAY, gravelly, some silt, tan, wet, soft, gravel fragments up to 1/4 inch in size.	
50								
51								

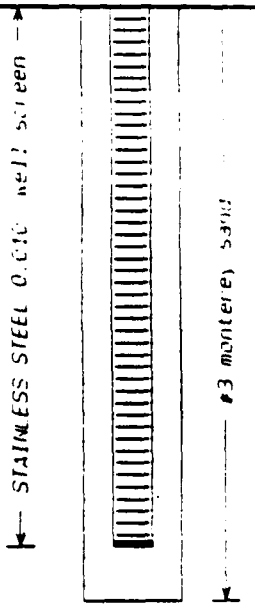
LOG OF WELL TH89-1/W89-11 (B1) (continued)

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER TH89-1/W89-11 (B1) CLIENT US NAVY
DATE STARTED 11/14/90 COMPLETED 12/7/90 PROJECT NAS MOFFETT FIELD IS 8 and 9
ELEVATION 37.44 FEET, Top of Box GEOLOGIST CRAIG STEVENS

DEPTH feet	SAMPLE	RECOVERY	BLOWS/6 IN	HNU-PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
53						CL	
54		45%		0.0			CLAY, silty, some gravel (<5%), blue-gray, some organic matter (wood or root fragments), low to moderate plasticity, wet, dense.
55							
56							
57							
58							
59		20%		0.0			Same as above.
60							
61							
62							No recovery.
63							
64		10%		0.0			
65							
66							
67							
68						CL	CLAY, silty, brown, some gravel, soft.
69		25%		0.0			
70							CLAY, silty, some sand and gravel (<5%), blue-gray, dense, low to moderate plasticity, may be interbedded with sandy or gravelly units.
71							
72							
73							
74		75%		0.0			CLAY, silty, tan-brown, very little sand, soft to somewhat dense, low to moderate plasticity, wet.
75							
76							
77							

WELL DIAGRAM



LOG OF WELL TH89-1/W89-11 (B1) (continued)

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER TH89-1/W89-11 (B1) CLIENT US NAVY
DATE STARTED 11/14/90 COMPLETED 12/7/90 PROJECT NAS MOFFETT FIELD IS 8 and 9
ELEVATION 37.44 FEET, Top of Box GEOLOGIST CRAIG STEVENS

DEPTH Feet	SAMPLE	RECOVERY	BLOWS/6 IN	HNU PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
79	X	40%		0.0		CL		
80							Same as above but color changes from tan-brown near the top of the sample to more of a blue-gray near the bottom (83.5).	
81								
82								
83								
84		5%		0.0			Same as above, blue-gray.	
85								
86								
87								
88								
89		0%					No recovery.	
90								
91								
92								
93								
94		0%						
95								
96								
97								
98								
99		75%		0.0		CL	CLAY, silty, gray-green, dense, moderate plasticity, zones of oxidation iron staining.	
100								
101							CLAY, silty, gray-green, dense, moderate plasticity, moist.	
102								
103								

LOG OF WELL TH89-1/W89-11 (B1) (continued)

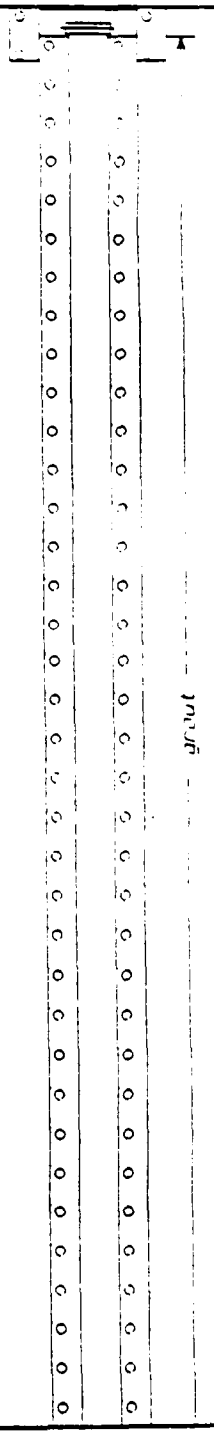
JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER TH89-2/W89-12 (B1)
DATE STARTED 11/16/90 COMPLETED 12/04/90
ELEVATION 35.28 FEET, Top of Box

CLIENT US NAVY
PROJECT NAS MOFFETT FIELD IS 9 and 9
GEOLOGIST CRAIG STEVENS/CHRIS PETERSEN

DEPTH (feet)	SAMPLE	RECOVERY	BLOWS/6 IN	HNU-PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
1		100%	6 7 10	0.0		CL	CLAY, silty, dry, friable, roothairs, dark grey.
2		100%	5 7 9	0.0			
3							Same as above, but some small calcite nodules.
4		100%	11 7 11	0.0			
5		100%	7 8 10	0.0			CLAY, grey, friable with ferrous staining, calcite nodules, very stiff.
6							
7		100%	7 7 11	0.0			
8							
9		100%	5 7 9	0.0			CLAY, grey to slightly green, low moisture, calcite nodules.
10		100%		0.0			CLAY, dark grey, stiff.
11							
12							CLAY, light grey with ferrous stains, coarsening downward.
13							CLAY, silty and sandy, ferrous stains abundant.
14							
15		80%		0.0			No recovery
16						CL	
17							CLAY, very plastic, iron staining.
18							CLAY, gravelly, with minor silt, iron staining, very stiff, coarsening downward.
19							CLAY, alternating sequences of clayey, sandy layers.
20		100%		0.0			
21							CLAY, gravelly, light brown, abundant iron staining, moderately stiff.
22							CLAY, dark grey, abrupt change, no iron stains.
23							
24						SW	SAND, well sorted, wet.
25		60%		0.0		CL	CLAY, silty, dark gray, stiff, moderately plastic.

WELL DIAGRAM



METHOD OF DRILLING MUD ROTARY
HOLE DIAMETER 10 INCHES
TOTAL DEPTH 104 FEET

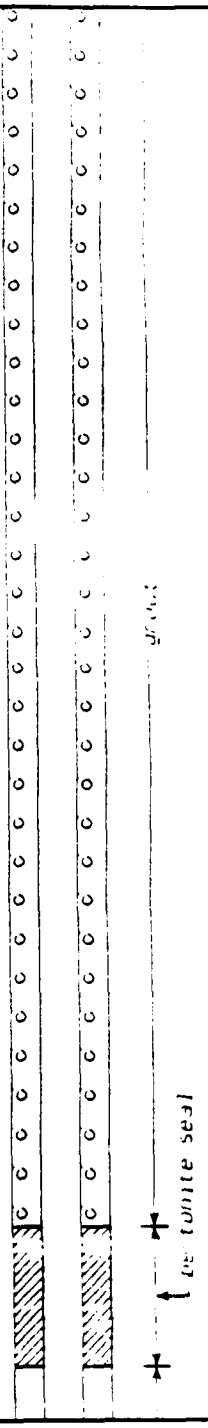
WELL COMPLETION DEPTH 65 FEET
WELL DIAMETER 4 INCHES
WELL MATERIAL LOW CARBON STEEL/STAINLESS STEEL

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER TH89-2/W89-12(B1) CLIENT US NAVY
DATE STARTED 11/16/90 COMPLETED 12/04/90 PROJECT NAS MOFFETT FIELD IS 8 and 9
ELEVATION 35.28 FEET, Top of Box GEOLOGIST CRAIG STEVENS/CHRIS PETERSEN

DEPTH feet	SAMPLE	RECOVERY	BLOWS 6 IN	HNU PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION
						CL	CLAY, silty, gravelly, dark gray-green.
						GW	GRAVEL, sandy, well graded, brown, up to 1/4 inch.
28							no recovery
29							
30		50%		0.0		CL	CLAY, silty, dark gray-green, moderate plasticity, wet, soft.
31						ML	SILT, clayey, green-brown, mottled with iron oxide, stiff, wet.
32						CL	CLAY, silty, green-brown, moderate plasticity, soft, wet.
33							
34		5%		0.0		GW	GRAVEL, sandy, multicolored, well graded, clasts to 1.5 inches long and down to granular size.
35							
36							
37							
38							
39		0%				SW/SP	SAND with trace clay and gravel, fine to very coarse sand (this description is based on cuttings coming up the drill pipe).
40							
41							
42							
43							
44		0%					
45							
46							
47							
48							
49		0%					
50							
51							

WELL DIAGRAM

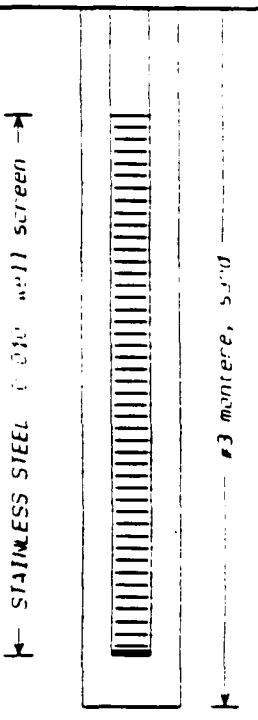


LOG OF WELL TH89-2/W89-12(B1) (continued)

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA, 94598 / (415) 975-3400

BORING/WELL NUMBER TH89-2/W89-12 (B1) CLIENT US NAVY
DATE STARTED 11/16/90 COMPLETED 12/04/90 PROJECT NAS MOFFETT FIELD IS 8 and 9
ELEVATION 35.28 FEET, Top of Box GEOLOGIST CRAIG STEVENS/CHRIS PETERSEN

DEPTH feet	SAMPLE	RECOVERY	BLOWS/6 IN	HNU-PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
53–54		0%				SW/SP	SAND, well graded to poorly graded, fine, coarse and very coarse sands, trace gravel, trace clay, particles are multicolored (description from cuttings).	STAINLESS STEEL [illegible] well screen; #3 monterey sand
55–58								
59		0%						
60–63								
64		0%				GW/SW	GRAVEL, very coarse sand.	
65–68								
69		0%						
70–73							Same as above.	
74		0%				SW/SP		
75–76								
77							Very fine to moderate SAND (description from cuttings).	



LOG OF WELL TH89-2/W89-12 (B1) (continued)

JAMES M. MONTGOMERY
CONSULTING ENGINEERS, INC.
365 LENNON LANE, WALNUT CREEK, CALIFORNIA 94598 / (415) 975-3400

BORING/WELL NUMBER TH89-2/W89-12 (B1) CLIENT US NAVY
DATE STARTED 11/16/90 COMPLETED 12/04/90 PROJECT NAS MOFFETT FIELD IS 3 and 4
ELEVATION 35.29 FEET, Top of Box GEOLOGIST CRAIG STEVENS/CHRIS PETERSEN

DEPTH feet	SAMPLE	RECOVERY	BLOWS/6 IN	HNU PID	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	WELL DIAGRAM
79	X	0%				SW/SP		
80							Very fine to moderate SAND (description from cuttings).	
81								
82								
83								
84		0%						
85							same as above.	
86								
87								
88								
89		0%						
90							same as above.	
91								
92								
93								
94		0%						
95							same as above.	
96								
97								
98								
99		20%		0.0				
100							same as above.	
101								
102								
103						CL	CLAY, silty, gray-green, stiff, low plasticity, trace gravel and sand.	

LOG OF WELL TH89-2/W89-12 (B1) (continued)

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 9 – WELLS (MEW)

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

Canonie

Boring Log

PRELIMINARY

PROJECT No. CE 82-023
BORING No. 2C
PAGE 1 OF 6

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION N 334,695 E 1,548,307 SURFACE ELEV. 28.6
DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
0													(FILL MATERIAL).	
												4.0		
5	1	PB*	4.5	7.0				30	CL		3.0		VERY STIFF BROWN SILTY CLAY, SOME FINE TO COARSE GRAVEL.	
									CL		2.0	8.0		
	2	PB	7.0	9.5				30	SM&GM				GRAY SILTY FINE TO COARSE SAND AND FINE TO COARSE GRAVEL.	
10									SM&GM			10.0		
	3	PB	9.5	12.0				30	CL		2.0		VERY STIFF BROWN MOTTLED GRAY SILTY CLAY.	
	4	PB	12.0	14.5				30	CL		2.0			
15												14.5		
	5	PB	14.5	17.0				30	SW&GW				GRAY FINE TO COARSE SAND AND FINE TO COARSE GRAVEL (WET).	
	6	PB	17.0	19.5				30	SW&GW					
20	7	PB	19.5	22.0				30	SW&GW					
	8	PB	22.0	24.5				6	SW&GW					
25	9	PB	24.5	27.0				6	SW&GW					
												27.5	(BROWN SANDY SILTY CLAY).	
	10	PB	27.0	29.5				6	SW&GW			28.5		
30	11	PB	29.5	32.0				6	SW&GW				GRAY FINE TO COARSE SAND AND FINE TO COARSE GRAVEL (WET).	
												32.0		
	12	PB	32.0	34.5				18	CL		0.5			
35	13	PB	34.5	37.0				30	CL		1.0		MEDIUM STIFF TO VERY STIFF GRAY SILTY CLAY.	
	14	PB	37.0	39.5				30	CL		1.5			
40	15	PB	39.5	42.0				30	CL		2.5			

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*PB-PITCHER BARREL

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Boring Log

PROJECT No. CE 82-023
BORING No. 2C
PAGE 2 OF 6

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
40														
	16	PB	42.0	44.5				30	CL		2.5			
45											3.0			
	17	PB	44.5	47.0				30	CL		1.5		MEDIUM STIFF TO VERY STIFF GRAY SILTY CLAY.	
	18	PB	47.0	49.5				30	CL		2.0			
50									CL		2.0			
	19	PB	49.5	52.0				30				50.5		
									SM				GRAY SILTY FINE SAND.	
									SM			53.0		
	20	PB	52.0	54.5				30	CL		2.5			
55														
	21	PB	54.5	57.0				30	CL		1.25			
	22	PB	57.0	59.5				30	CL		3.25		STIFF TO VERY STIFF GRAY AND BROWN SILTY CLAY, SOME FINE GRAVEL.	
60														
	23	PB	59.5	62.0				30	CL		3.0			
	24	PB	62.0	64.5				30	CL		2.0			
65									SW			64.5	BROWN FINE TO COARSE SAND (WET).	
	25	PB	64.5	67.0				30				65.5		
									CL		2.0			
	26	PB	67.0	69.5				30	CL		2.5			
70													VERY STIFF BROWN FINE SANDY SILTY CLAY.	
	27	PB	69.5	72.0				30	CL		2.0			
	28	PB	72.0	74.5				30	CL		2.5			
75												74.5		
	29	PB	74.5	77.0				30	SW					
													BROWN FINE TO COARSE SAND, SOME FINE GRAVEL (WET).	
	30	PB	77.0	79.5				30	SW					
80														
	31	PB	79.5	82.0				30	SW					

Rev. 5-84

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Boring Log

PROJECT No. CE 82-023
BORING No. 2C
PAGE 3 OF 6

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
80														
									CL		2.0	82.5		
	32	PB	82.0	84.5				30	CL		2.5			
85														
	33	PB	84.5	87.0				30	CL		3.0			
	34	PB	87.0	89.5				30	CL		4.5			
90														
	35	PB	89.5	92.0				30	CL		4.5			
	36	PB	92.0	94.5				30	CL		2.5		STIFF TO HARD GRAY MOTTLED BROWN SILTY CLAY.	
95														
	37	PB	94.5	97.0				30	CL		2.0			
	38	PB	97.0	99.5				30	CL		2.0			
100														
	39	PB	100.0	102.0				0						
	40	PB	102.0	104.0				24	CL		1.5			
105														
									CL		2.0			
	41	PB	104.5	106.5				30				105.5	BROWN SILTY FINE SAND.	
									SM			107.0		
	42	PB	106.5	109.0				30	CL		3.0		VERY SITFF GRAY SILTY CLAY.	
												109.0		
110													BROWN FINE TO COARSE SAND (WET).	
	43	PB	109.0	111.5				30	SW			111.0		
	44	PB	111.5	114.0				30	CL		3.0			
													VERY STIFF BROWN SILTY CLAY.	
115									CL		2.5			
	45	PB	114.0	116.5				30	SW			115.5		
												116.5	BROWN SILTY FINE SAND.	
	46	PB	116.5	119.0				30	CL		3.5			
													VERY STIFF BROWN MOTTLED GRAY SILTY CLAY.	
120														
	47	PB	119.0	121.5				30	CL		3.0			

Rev. 5-85

Canonie

Boring Log

PROJECT No. CE 82-023
BORING No. 2C
PAGE 4 OF 6

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
120														
	48	PB	121.5	124.0				30	CL SM		3.0	123.0		
125														
	49	PB	124.0	126.5				24	SM					
	50	PB	126.5	129.0				30	SM				GRAY SILTY FINE SAND.	
130														
	51	PB	129.0	133.0				0				133.0		
135	52	PB	133.0	135.5				12	CL		2.5			
	53	PB	135.5	138.0				18	CL		3.5			
140	54	PB	138.0	142.0				48	CL		3.5		VERY STIFF GRAY SILTY CLAY.	
	55	PB	142.0	146.0				48	CL		3.5			
145														
	56	PB	146.0	150.0				48	CL		3.0			
150														
	57	PB	150.0	154.0				48	CL		2.5			
155														
	58	PB	154.0	158.0				48	CL		3.0			
160	59	PB	158.0	162.0				48	CL		3.0			

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Canonie

Boring Log

PROJECT No. CE 82-023
BORING No. 2C
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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
160												162.0		
	60	PB	162.0	166.0				48	CL		2.8			
165													VERY STIFF BROWN SILTY CLAY.	
	61	PB	166.0	170.0				48						
									CL		3.0			
170														
									CL		3.0			
	62	PB	170.0	174.0				48				171.5	BROWN FINE TO COARSE SAND.	
									SW			173.0		
									CL		2.5			
175														
	63	PB	174.0	178.0				48	CL		3.5			
													VERY STIFF GRAY SILTY CLAY.	
180	64	PB	178.0	182.0				48	CL		3.5			
									CL		3.0	183.0		
	65	PB	182.0	186.0				48						
185									SP				BROWN FINE SAND (WET).	
									SP					
	66	PB	186.0	190.0				48	CL		2.0	187.5		
190														
	67	PB	190.0	194.0				36	CL		3.5			
													VERY STIFF GRAY SILTY CLAY.	
195	68	PB	194.0	198.0				48	CL		2.25			
												196.5		
									SW&GW				BROWN FINE TO COARSE SAND AND FINE TO COARSE GRAVEL.	
200	69	PB	198.0	202.0				48	SW&GW					
												200.5		
									CL		4.0			

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BORING No. 2C

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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA

BORING LOCATION _____ SURFACE ELEV. _____

DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
200												200.5		
									CL		4.0	202.0	VERY STIFF BROWN SILTY CLAY.	
									SW&GW			202.5	BROWN FINE TO COARSE SAND AND FINE TO COARSE GRAVEL.	
	70	PB	202.0	206.0				36	CL		2.5			
205														
													VERY STIFF GRAY SILTY CLAY.	
	71	PB	206.0	210.0				48	CL		2.5			
210												210.0		

BOTTOM OF BORING AT 210.0 FEET.

NOTES:

1. BORING DRILLED USING MUD ROTARY METHOD.
2. UPON COMPLETION BORING WAS CONVERTED TO OBSERVATION WELL 55B. SEE 55B OBSERVATION WELL DETAILS.

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LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-6.2

BORING NO. 3B (10L)

BY HCW DATE 4/12/82

SURFACE ELEV. * (PROJECT DATUM)

*AERO-GEODETIC: USGS ELEV. 35.4

CLASSIFICATION DATA			FIELD DATA			Depth in Ft.	Ground Water Levels	Samples	DESCRIPTION
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)				
									Asphalt
									(CL) Dark gray-brown CLAY
						5			(brown,silty)
									(minor sand and fine gravel)
						10			(GW) Coarse sandy fine GRAVEL
						15			
									(fine to medium)
						20			(medium)
						25			(CL) Blue-gray silty to fine sandy CLAY
						30			
									(fine to coarse sand)
						35			
						40			

REMARKS:

Well construction details attached.

EMCON ASSOCIATES

LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-6.2

BORING NO. 3B (10L)

BY HCW DATE 4/12/82

SURFACE ELEV.

CLASSIFICATION DATA			FIELD DATA			Depth in Ft.	Ground Water Levels	Samples	DESCRIPTION
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)				
						45			
						50			
						55			(sandy to fine gravelly)
						60			(light brown)
						65			(SP-GP) Green-brown coarse SAND and GRAVEL
						70			(CL-SC) Brown fine sandy CLAY to clayey fine SAND
						75			(CL) Brown silty to fine sandy CLAY
						80			BOTTOM OF BORING

REMARKS:

EMCON ASSOCIATES

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Boring Log

PRELIMINARY

PROJECT No. CE 82-023
BORING No. 3C
PAGE 1 OF 5

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 8-7-85 FINISH 8-12-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
0												2.0	(FILL MATERIAL)	
	1	PB*	2.0	4.5				30	CL		3.0			
5													STIFF TO VERY STIFF BROWN SILTY CLAY.	
	2	PB	5.0	7.5				30	CL		1.0			
	3	PB	7.5	10.0				30	CL		1.5			
10									CL		1.0			
	4	PB	10.0	12.5				30	SM			11.5		
													BROWN SILTY FINE SAND.	
	5	PB	12.5	15.0				30	SM			14.0		
15									CL				GRAY FINE SANDY SILTY CLAY.	
	6	PB	15.0	17.5				30	CL			17.5		
	7	PB	17.5	20.0				30	SC				GRAY CLAYEY FINE SAND.	
20														
	8	PB	20.0	22.5				30	SC					
	9	PB	22.5	25.0				30	SC					
25												25.0		
													STIFF GRAY SILTY CLAY.	
	10	PB	25.0	27.5				30	CL		1.0	27.5		
	11	PB	27.5	30.0				30	CL		2.0			
30														
													STIFF BROWN SILTY CLAY, SOME FINE TO COARSE SAND.	
	12	PB	30.0	32.5				30	CL		2.0			
	13	PB	32.5	35.0				30	CL		1.0			
35														
	14	PB	35.0	37.5				30	CL		1.5	37.5		
	15	PB	37.5	40.0				30	SC				BROWN CLAYEY FINE TO COARSE SAND. WET.	
40														

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*PB-PITCHER BARREL

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Boring Log

PROJECT No. CE 82-023
BORING No. 3C
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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 8-7-85 FINISH 8-12-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
40	16	PB	40.0	42.5				18	SC				BROWN FINE TO COARSE SAND, SOME FINE TO COARSE GRAVEL, SOME CLAY, WET.	
	17	PB	42.5	46.0				12	SC&GC					
45														
	18	PB	46.0	50.0				36	SC					
50												50.0		
	19	PB	50.0	54.0				48	CL		1.0			
55	20	PB	54.0	58.0				24	CL		2.0			
60	21	PB	58.0	62.0				48	CL		2.5		MEDIUM STIFF TO VERY STIFF BROWN SILTY CLAY.	
	22	PB	62.0	66.0				48	CL		1.0			
65														
	23	PB	66.0	70.0				48	CL		0.7	68.0		
70									SC			70.0	BROWN CLAYEY FINE TO COARSE SAND.	
	24	PB	70.0	74.0				48	CL		2.5	72.5	VERY STIFF BROWN SILTY CLAY.	
									SC			74.0	BROWN CLAYEY FINE SAND.	
75	25	PB	74.0	78.0				48	CL		2.5		STIFF TO VERY STIFF BROWN SILTY CLAY.	
									CL		1.0			
80	26	PB	78.0	82.0				48	CL		3.5			

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PROJECT No. CE 82-023
BORING No. 3C
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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 8-7-85 FINISH 8-12-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
80														
	27	PB	82.0	86.0				48	CL		1.5		STIFF TO VERY STIFF BROWN SILTY CLAY.	
85														
	28	PB	86.0	90.0				48	CL		1.5			
90														
	29	PB	90.0	94.0				48	CL		2.0			
												94.0		
95													BROWN CLAYEY FINE SAND.	
	30	PB	94.0	98.0				48	SC					
												97.0		
									CL		1.5			
100	31	PB	98.0	102.0				48	CL		1.5		STIFF TO VERY STIFF GRAY SILTY CLAY.	
	32	PB	102.0	106.0				48	CL		3.0			
105														
									CL		2.5			
	33	PB	106.0	110.0				48				108.0		
									SM				BROWN SILTY FINE SAND.	
110												110.0		
	34	PB	110.0	114.0				48	CL		1.0		MEDIUM STIFF TO VERY STIFF GRAY SILTY CLAY. 4-IN. FINE SAND LAYER AT 110.0 FT.	
115														
	35	PB	114.0	118.0				48	CL		2.5			
									CL		0.5	119.0		
120	36	PB	118.0	122.0				36					BROWN FINE TO COARSE SAND, WET.	
									SW					

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PROJECT No. CE 82-023
BORING No. 3C
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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 8-7-85 FINISH 8-12-85

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
120												122.0		
									CL		2.0	123.0	STIFF BROWN SILTY CLAY.	
	37	PB	122.0	126.0				48	SP				GRAY FINE SAND, WET.	
125												126.0		
	38	PB	126.0	130.0				48	CL		2.5		VERY STIFF GRAY SILTY CLAY.	
130												130.0		
									CL			131.0	BROWN SILTY CLAY.	
	39	PB	130.0	134.0				48	CL		3.0		4 INCH GRAY SAND LAYER AT 131.0 FT.	
135	40	PB	134.0	138.0				48	CL		2.5			
140	41	PB	138.0	142.0				48	CL		2.5			
	42	PB	142.0	146.0				48	CL		2.0			
145													VERY STIFF GRAY SILTY CLAY.	
	43	PB	146.0	150.0				48	CL		3.0			
150	44	PB	150.0	154.0				48	CL		3.0			
155	45	PB	154.0	158.0				48	CL		2.0			
160	46	PB	158.0	162.0				48	CL		3.0			

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Boring Log

PROJECT No. CES 82-023
BORING No. 3C
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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 8-7-85 FINISH 8-12-85

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
160												162.0		
													BOTTOM OF BORING AT 162.0 FT.	
165													NOTES:	
													1. BORING DRILLED USING MUD ROTARY METHOD.	
													2. UPON COMPLETION, BORING WAS BACKFILLED WITH CEMENT-BENTONITE GROUT FROM 162.0 FT. TO GROUND SURFACE.	

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LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-0.2

BORING NO. 4B

BY HCW DATE 6/15/82

SURFACE ELEV. * (PROJECT DATUM)

*AERO-GEODETIC: USGS ELEV. 27.4

CLASSIFICATION DATA			FIELD DATA			Depth in Ft.	Ground Water Levels	Samples	DESCRIPTION
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)				
									(CL) Dark Brown CLAY with trace of fine sand - damp
									(gray-brown)
						5			(minor silt to fine sand and trace of fine gravel)
						10			(SM) Green-gray silty fine SAND with minor fine gravel - moist to wet
									(SW) Brown fine gravelly medium to coarse SAND with 1" to 2" thick silt and fine gravel inter-layers
						15			
						20			(gray, silty, fine-grained, no gravel)
									(CL) Gray silty CLAY with trace fine gravel - damp to moist
						25			(GC) Brown fine sandy clayey fine GRAVEL - wet
									(CL) Brown sandy and fine gravelly CLAY - damp
						30			
						35			(green-gray, silty with minor sand)
									(reddish brown, silty, with minor coarse sand and fine gravel)
					25	40			(decrease in sand and gravel content)

REMARKS:

EMCON ASSOCIATES

LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-0.2 BORING NO. 48

BY HCW DATE 6/15/82 SURFACE ELEV. *

CLASSIFICATION DATA			FIELD DATA			Depth in Ft.	Ground Water Levels	Samples	DESCRIPTION
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)				
									(brown, trace fine sand and fine gravel)
						45			
					20				(gray, minor rootlets)
									(gray-green)
						50			
									(decrease in silt content)
					44				
						55			
									(brown, increase in fine to medium sand content)
									(GC) Brown very clayey coarse sandy fine GRAVEL - wet
					60	60			(GP/SW) Brown-green fine GRAVEL and clayey fine gravelly medium to coarse SAND - wet
									(CL) Brown silty CLAY - damp
						65			
									BOTTOM OF BORING
						70			

REMARKS: Boring was converted to a ground-water monitoring well by the installation of 64' of 4" steel casing, the lower 10' of which is a stainless steel well screen. The annular space was backfilled with #2 aquarium sand to a depth of 50'. A bentonite-concrete seal was placed in the annular space from 50' to the surface.

EMCON ASSOCIATES

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Boring Log

PRELIMINARY

PROJECT No. CES 82-023
BORING No. RW-9
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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-08-85 FINISH 7-09-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
												0.5	ASPHALT	
	1	MS*	3.5	5.0	6	13	19	18	OL		4.0		VERY STIFF GRAY ORGANIC SILTY CLAY.	
5														
	2	PB*	7.0	11.0				36	OL SW&GW		2.5	9.0		
10														
	3	PB	11.0	15.0				0					GRAY MOTTLED BROWN FINE TO COARSE SAND AND FINE TO COARSE GRAVEL.	
15														
	4	MS	15.0	16.5	7	17	17	9	SW&GW					
	5	MS	17.5	19.0	7	18	22	8	SW&GW					
20														
	6	MS	20.0	21.5	8	19	11	10	SW&GW			21.5		
	7	MS	22.5	24.0	2	3	5	18	CL		1.5			
25														
	8	PB	24.0	28.0				48	CL		1.75			
30														
	9	PB	28.0	32.0				6	CL		4.0		MEDIUM STIFF TO VERY STIFF GRAY SILTY CLAY, SOME FINE TO COARSE SAND.	
	10	MS	32.0	33.5	8	9	15	18	CL		1.0			
35														
	11	MS	34.5	36.0	3	5	7	18	CL		1.5			
	12	MS	37.0	38.5	4	6	8	18	CL		1.5			
40														
	13	MS	39.5	41.0	4	17	12	18	CL		1.75			

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*MS-MODIFIED SPOON
*PB-PITCHER BARREL

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Boring Log

PROJECT No. CES 82-023
BORING No. RW-9
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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-08-85 FINISH 7-09-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
40														
	14	MS	42.0	43.5	2	3	5	18	CL		2.0			
45														
	15	MS	44.5	46.0	8	9	12	18	CL		0.75			
	16	MS	47.0	48.5	4	6	8	18	CL		1.5		MEDIUM STIFF TO VERY STIFF GRAY SILTY CLAY, SOME FINE TO COARSE SAND.	
50														
	17	MS	49.5	51.0	4	6	8	18	CL		1.0			
	18	PB	52.0	56.0				16	CL		1.0			
55												56.0		
	19	PB	56.0	60.0				48	CL		4.0		VERY STIFF GRAY SILTY CLAY.	
60												60.0		
	20	PB	60.0	64.0				48	CL		1.5		STIFF GRAY FINE TO COARSE SANDY SILTY CLAY.	
65												64.0		
	21	PB	64.0	68.0				48	SW			67.0	GRAY FINE TO COARSE SAND.	
									CL		2.5		VERY STIFF BROWN SILTY CLAY, SOME FINE TO COARSE SAND.	
70									CL					
	22	PB	68.0	72.0				48			2.5	70.5		
									SC				BROWN FINE TO COARSE SAND, SOME CLAY.	
	23	PB	72.0	76.0				48	SC			74.0		
75									CL		1.5		STIFF BROWN SILTY CLAY.	
												76.0		
									SM			78.0	BROWN SILTY SAND.	
	24	PB	76.0	80.0				48						
80									CL		1.5		STIFF GRAY SILTY CLAY.	
												80.5		
													CONTINUED.	

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Boring Log

PROJECT No. CES 82-023
BORING No. RW-9
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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-08-85 FINISH 7-09-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
80									SP		1.5	80.5	GRAY FINE SAND.	
												81.5		
	25	PB	80.0	84.0				48	CL				VERY STIFF GRAY SILTY CLAY, SOME FINE SAND.	
85									CL		3.0			
												85.5	GRAY FINE SAND.	
	26	PB	84.0	88.0				48	SP			86.5		
									CL		2.5			
90														
	27	PB	88.0	92.0				48	CL		2.75			
													STIFF TO HARD BROWN SILTY CLAY, SOME FINE SAND.	
95	28	PB	92.0	96.0				48	CL		4.5			
	29	PB	96.0	100.0				48	CL		1.5			
100												100.0		
													BOTTOM OF BORING AT 100.0 FEET.	

NOTES:
1. BORING DRILLED USING MUD ROTARY METHOD.
2. UPON COMPLETION BORING WAS REAMED USING BUCKET RIG AND RECOVERY WELLS RW-9A, RW-9B(1), RW-9B(2) WERE INSTALLED. SEE RECOVERY WELL DETAILS.

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Boring Log

PRELIMINARY

PROJECT No. CES 82-023
BORING No. 10B
PAGE 1 OF 3

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION N 332,145 E 1,547,882 SURFACE ELEV. 44.0
DRILLER ALL TERRAIN DRILLING DATE: START 3/15/85 FINISH 3/19/85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
0												0.5	(ASPHALT)	
												3.0	(SAND AND GRAVEL)	
5	1	MS*	3.5	5.0	9	15	19	18	CL		2.8	7.0	VERY STIFF BROWN SILTY CLAY.	
10	2	MS	8.5	10.0	6	10	16	18	CL		2.6		VERY STIFF GRAY SILTY CLAY, TRACE OF WOOD FRAGMENTS.	
									CL			14.0		
15	3	MS	13.5	15.0	6	13	14	12	SW&GW				BROWN FINE TO COARSE SAND AND FINE TO COARSE GRAVEL, TRACE OF CLAY. (COBBLES)	
									SW&GW	8.3				
20	4	MS	18.5	20.0	20	28	32	18	ML			19.5		
25	5	MS	23.5	25.0	9	14	23	18	ML	21.1			GRAY CLAYEY SANDY SILT.	
									ML					
30	6	MS	28.5	30.0	6	14	28	18	CL			29.5	TAN SILTY CLAY, TRACE OF SAND, SAND SEAMS.	
35	7	MS	33.5	35.0	9	12	18	18	CL		1.5	34.5	STIFF GRAY SILTY CLAY.	
	8	MS	35.0	36.5	8	12	24	18	CL		0.8	35.5	MEDIUM STIFF TAN SILTY CLAY.	
												36.2		
	9	MS	36.5	38.0	9	23	30	18	CL-ML	23.5	2.75		VERY STIFF GRAY SILTY CLAY, TRACE OF ROOTS, 2 INCHES SAND AT 37.3 FT.	
	10	MS	38.0	39.5	16	24	41	18	CL		2.4	39.0		
40									SC				BROWN CLAYEY SAND AND GRAVEL.	
	11	MS	39.5	41.0	9	12	13	18	CL		0.8	40.5		

*MODIFIED SPOON

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Boring Log

PROJECT No. CES 82-023
BORING No. 10B

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION N 332,145 E 1,547,882 SURFACE ELEV. 44.0
DRILLER ALL TERRAIN DRILLING DATE: START 3/15/85 FINISH 3/19/85

DEPTH	SAMPLE No	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
40												41.0	MEDIUM STIFF TAN SILTY CLAY.	
	12	MS	41.0	42.5	13	13	20	18	SC&GC			41.7	GRAY SAND AND GRAVEL, SOME CLAY.	
									SW&CL	20.2			BROWN FINE TO COARSE SANDY CLAY,	
	13	MS	42.5	44.0	8	28	28	18	SC&GC	11.8		43.6	TRACE OF GRAVEL.	
45	14	MS	44.0	45.5	15	34	42	18	SC&GC					
	15	MS	45.5	47.0	6	35	50	18	SC&GC					
	16	MS	47.0	47.9	34	50/5		10	SC&GC				BROWN FINE TO COARSE SAND AND FINE TO COARSE GRAVEL, SOME CLAY.	
50	17	MS	48.5	50.0	20	41	49	12	SW&GW	9.7				
	18	MS	50.0	50.4	50/5			5	SC&GC					
									SC&GC			52.0		
	19	MS	51.5	53.0	10	9	11	14	CL		1.2			
	20	MS	53.0	54.5	3	12	15	18	CL	23.2	1.75		STIFF BROWN SILTY CLAY, TRACE OF FINE TO COARSE SAND.	
55														
	21	MS	54.5	56.0	17	27	32	18	CL		1.0			
	22	MS	56.0	57.0	12	50		12	CL			56.8		
	23	MS	57.5	58.3	32	50/4		10	SW&GW				BROWN FINE TO COARSE SAND AND FINE TO COARSE GRAVEL, SILTY CLAY SEAMS.	
60	24	MS	59.0	59.4	70/5			5	SC	15.0				
	25	MS	60.5	61.7	12	31	50/3	14	SW&GW					
	26	MS	62.0	62.8	40	51/3		9	SC&GC			62.5		
65	27	MS	63.5	65.0	10	14	18	18	SC&GC				BROWN FINE TO COARSE SAND AND FINE TO COARSE GRAVEL, SOME CLAY.	
	28	MS	65.0	66.5	28	33	39	18	SC&GC			66.1		
									CL					
	29	MS	66.5	68.0	8	18	27	16	CL		1.0		STIFF GRAY SILTY CLAY, TRACE OF ROOTS, TRACE OF SHELLS, SANDY SEAMS.	
	30	MS	68.0	69.5	8	12	18	18	CL	23.1	1.25			
70														
	31	MS	69.5	71.0	10	20	21	18	CL		1.25			
	32	MS	71.0	72.5	13	19	21	12	CL		1.25	72.0		
	33	MS	72.5	74.0	18	24	35	18	CL		1.5	73.5	STIFF GRAY SANDY CLAY, TRACE OF GRAVEL.	
75	34	MS	74.0	75.5	14	27	36	14	CL		1.75		STIFF GRAY SILTY CLAY, TRACE OF SAND, TRACE OF ROOTS.	
	35	MS	75.5	77.0	14	22	23	18	CL		1.75	76.5	STIFF GRAY SANDY CLAY, TRACE OF ROOTS, TRACE OF GRAVEL.	
	36	MS	77.0	78.5	20	30	35	15	CL			78.0		
									ML				GRAY SANDY CLAYEY SILT.	
80	37	MS	78.5	79.5	16	50		12	ML			79.5		

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Boring Log

PROJECT No. CES 82-023
BORING No. 10B
PAGE 3 OF 3

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION N 332,145 E 1,547,882 SURFACE ELEV. 44.0
DRILLER ALL TERRAIN DRILLING DATE: START 3/15/85 FINISH 3/19/85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
80	38	MS	80.0	81.5	17	22	30	18	SC		.	81.0	GRAY CLAYEY FINE TO COARSE SAND.	
									ML				VERY STIFF DARK GRAY CLAYEY SILT,	
	39	MS	81.5	83.0	12	41	45	18	ML		2.1	83.0	TRACE OF SAND.	
	40	MS	83.0	84.5	21	32	50	18	SM			84.0	DARK GRAY SILTY FINE SAND.	
85									CL				VERY STIFF GRAY SILTY CLAY, SAND	
	41	MS	84.5	86.0	18	30	48	18	CL		2.25	86.0	SEAMS.	
	42	MS	86.0	87.5	12	40	41	12	SW					
	43	MS	87.5	88.5	32	50		12	SC	16.3	.		GRAY FINE TO COARSE SAND, TRACE OF SILT, 3-INCHES CLAY AT 88 FT.	
90												90.2		
	44	MS	90.0	91.4	28	42	50/5	16	SW		2.0			
									CL					
	45	MS	91.5	93.0	16	28	35	18	CL		2.5			
	46	MS	93.0	94.5	15	25	31	16	CL		2.0		STIFF TO VERY STIFF GRAY SILTY	
95													CLAY, TRACE OF SAND, 4-INCH SAND	
	47	MS	94.5	96.0	16	21	25	18	CL		1.6		AT 91.5 FT.	
	48	MS	96.0	97.5	26	37	37	18	CL	18.3	2.75			
	49	MS	97.5	99.0	23	35	39	18	CL		2.0	99.0		
100													BOTTOM OF BORING AT 99.0 FT.	

NOTES:
1. BORING DRILLED USING 8-INCH HOLLOW STEM AUGERS.
2. UPON COMPLETION, BORING WAS CONVERTED TO A 2-INCH PVC OBSERVATION WELL WITH 5 FT. OF SCREEN FROM 85.0 TO 90.0 FT. SEE 10B(2) OBSERVATION WELL DETAILS.

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Boring Log

PRELIMINARY

PROJECT No. CES 82-023
BORING No. 128
PAGE 1 OF 3

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION N 333,426 E 1,547,826 SURFACE ELEV. 37.2
DRILLER ALL TERRAIN DRILLING DATE: START 6-10-85 FINISH 6-10-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
0												0.5	ASPHALT.	
5													(CLAY)	
10														
15														
20														
25														
30												30.0		
	1	MS*	30.0	31.5	3	4	5	18	ML					
	2	MS	32.5	34.0	4	6	10	18	ML					
35	3	MS	35.0	36.5	6	6	9	18	ML				GRAY CLAYEY SILT, SOME FINE SAND.	
	4	MS	37.5	39.0	7	9	12	18	ML			39.0		
40												40.0	(BROWN FINE TO COARSE SAND, AND FINE GRAVEL).	

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*MS-MODIFIED SPOON

Canonie

Boring Log

PROJECT No. CES 82-023
BORING No. 12B
PAGE 2 OF 3

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 6-10-85 FINISH 6-10-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
40	5	MS	40.0	41.5	9	8	6	18	ML				GRAY CLAYEY SILT, SOME FINE SAND.	
												42.0		
	6	MS	42.5	44.0	7	9	9	18	CL				BROWN SILTY CLAY, SOME FINE TO COARSE SAND.	
45	7	MS	45.0	46.5	5	7	8	18	CL			45.5		
	8	MS	47.5	49.0	4	7	9	18	CL				GRAY SILTY CLAY, SOME FINE SAND.	
50	9	MS	50.0	51.5	5	6	8	18	CL			50.5		
	10	MS	52.5	54.0	7	10	17	18	CL				BROWN SILTY CLAY, SOME FINE SAND.	
55												54.5		
	11	MS	55.0	56.5	17	22	25	14	SW&GP			57.0	BROWN FINE TO COARSE SAND AND FINE GRAVEL.	
	12	MS	57.5	59.0	7	9	13	18	ML				BROWN/GRAY CLAYEY SILT, SOME FINE SAND, 3-IN. FINE SAND LAYER AT 58.0 FEET.	
60												59.5		
	13	MS	60.0	61.5	6	9	11	18	CL				BROWN SILTY CLAY, SOME FINE TO COARSE SAND.	
	14	MS	62.5	64.0	5	7	7	5	CL					
65												65.0		
	15	MS	65.0	66.5	11	22	33	14	SW&GP				BROWN FINE TO COARSE SAND AND FINE GRAVEL.	
	16	MS	67.5	68.5	36	74	-	12	SW&GP					
70												69.5		
	17	MS	70.0	71.5	6	9	17	18	CL				BROWN SILTY CLAY, SOME FINE TO COARSE SAND.	
	18	MS	72.5	74.0	8	8	12	18	CL					
75												74.5		
	19	MS	75.0	76.5	5	7	9	18	CL				BROWN/GRAY SILTY CLAY.	
												76.5		
													BOTTOM OF BORING AT 76.5 FEET.	
80													(CONTINUED)	

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Boring Log

PROJECT No. CES 82-023
BORING No. 128
PAGE 3 OF 3

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION N 333,426 E 1,547,826 SURFACE ELEV. 37.2
DRILLER ALL TERRAIN DRILLING DATE: START 6-10-85 FINISH 6-10-85

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
													NOTES:	
													1. BORING WAS DRILLED USING MUD ROTARY METHOD.	
													2. UPON COMPLETION, BORING WAS BACKFILLED WITH CEMENT/ BENTONITE GROUT FROM 76.5 FEET TO GROUND SURFACE.	
													3. 4-INCH DIAMETER PVC OBSERVATION WELL INSTALLED IN ADJACENT BORING WITH 5 FT. OF SCREEN FROM 65.0 FT. TO 70.0 FT. SEE 128(1) OBSERVATION WELL DETAILS.	

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LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-9.1 BORING NO. 45A (18BP)

BY SMM DATE 2/26/82 SURFACE ELEV. 78.0* (PROJECT DATUM)

*AERO-GEODETIC: USGS ELEV. 43.7

CLASSIFICATION DATA			FIELD DATA						
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)	Depth in Ft.	Ground Water Levels	Samples	DESCRIPTION
									Asphalt
									(CL) Brown CLAY - damp, stiff to very stiff
						5			
									(SW) Brown to tan gravelly medium to coarse SAND - moist to wet, medium dense, slightly clayey
					27	10			
						15			(GW) Brown sandy coarse GRAVEL - wet, dense, some cobbles up to 4"
					10	20			(CL) Interlayered tan silty CLAY and fine sandy CLAY - wet, stiff
					36	25			(SC) Blue gray clayey fine SAND - wet, dense
					9				(CL) Blue CLAY - moist, stiff
									BOTTOM OF BORING

REMARKS: Boring was converted to a monitoring well by the installation of 25' of 2" PVC casing. The lower 12' of casing was slotted and the annular space backfilled with pea-gravel. A bentonite-concrete seal was placed in the annular space from 13' to the surface.

EMCON ASSOCIATES

LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-6.2 BORING NO. 46A (15L)

BY DM DATE 4/16/82 SURFACE ELEV. * (PROJECT DATUM)

*AERO-GEODETIC: USGS ELEV. 42.1

CLASSIFICATION DATA			FIELD DATA						
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)	Depth in Ft.	Ground Water Levels	Samples	DESCRIPTION
									(CL) Dark brown silty CLAY - damp
						5			
						10			
						15	▽		
									(SP) Gray-brown gravelly medium to fine SAND with trace of silt - wet
					11				
						20			
									(SM) Brown silty fine SAND - moist
					28				
						25			
					12				
						30			(CL) Blue-gray silty CLAY - damp to moist
					14				
						35			BOTTOM OF BORING

REMARKS: Boring converted to a monitoring well by the installation of 34' of 2" PVC casing, the lower 20' of which was slotted. The annular space was backfilled with gravel to within 14' of the ground surface at which point a concrete surface seal was installed.

EMCON ASSOCIATES

LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-6.1 BORING NO. 49A (8L)

BY SMM DATE 2/17/82 SURFACE ELEV. 75.7* (PROJECT DATUM)

*AERO-GEODETIC: USGS ELEV. 41.5

CLASSIFICATION DATA			FIELD DATA						DESCRIPTION
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)	Depth in Ft.	Ground Water Levels	Samples	
									Asphalt
									(CL) Brown CLAY - damp, hard, some orange silty zones
					41	5			
					27	10			(moist, very stiff)
							▽		
					37	15			(GM) Brown coarse sandy GRAVEL - wet, dense, some silt
						20			
					>50	25			(ML) Blue gray clayey SILT - moist to wet, very stiff to hard
									(GM) Brown sandy GRAVEL - wet, dense
					19	30			(CL) Blue CLAY - wet, very stiff
									BOTTOM OF BORING

REMARKS: Boring was converted to a monitoring well by the installation of 30' of 2" PVC casing. The lower 15' of casing was slotted and the annular space backfilled with pea-gravel to a depth of 10'. A bentonite and concrete seal was placed in the annular space from 10' to the surface.

EMCON ASSOCIATES

LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-5.1 BORING NO. 54A (1M)

BY HCW DATE 2/22/82 SURFACE ELEV. 74.1* (Project data)

*AERO-GEODETIC: USGS ELEV. 40.3

CLASSIFICATION DATA			FIELD DATA			Depth in Ft.	Ground Water Levels	Samples	DESCRIPTION
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)				
									(CL) Dark brown CLAY - damp
									(brown)
						5			
									(stiff)
					14	10			(silty)
					15				(very sandy and gravelly, locally moist)
						15			(SM/SP) Brown silty fine SAND and gray fine to medium SAND - damp to wet
					30	20			
									(SP/ML) Brown gravelly medium to coarse SAND with interbedded sandy silt - wet
					38	25			
									(GP) Brown fine to medium GRAVEL with minor interbeds of silty fine sand - wet
					37	30			
									(interlayered blue-gray clay)
					52	35			
									(CL) Blue-gray sandy CLAY - damp
					12	40			BOTTOM OF BORING

REMARKS: Boring converted to a monitoring well by the installation of 40' of 2" PVC casing. The lower 26' of casing was slotted and the annular space filled with pea-gravel. A bentonite and concrete seal was placed in the annular space from 14' to the surface.

EMCON ASSOCIATES

LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-6.1 BORING NO. 57A (3L)

BY SMM DATE 2/16/82 SURFACE ELEV. (PROJECT DATUM) 73.6*

*AERO-GEODETIC: USGS ELEV. 39.4

CLASSIFICATION DATA			FIELD DATA						DESCRIPTION
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)	Depth in Ft.	Ground Water Levels	Samples	
									Asphalt
					14	5			(CL) Tan to brown silty CLAY - damp, stiff, some fine to medium gravel
					23	10			(gray, very stiff)
					26	15			(SM) Gray silty SAND - wet, medium dense, some fine rounded gravel
					>50	20			(GC) Gray clayey sandy GRAVEL - wet, very dense
					27	25			(SP) Gray fine to medium SAND - wet, medium dense
					22	30			(CL) Blue CLAY - moist to wet, medium dense, some gravelly lenses
						35			BOTTOM OF BORING

REMARKS: Boring was converted to a monitoring well by the installation of 35' of 2" PVC casing. The lower 20' of casing was slotted and the annular space filled with pea-gravel to a depth of 12'. A bentonite and concrete seal was placed in the annular space from 12' to the surface.

EMCON ASSOCIATES

LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-6.2 BORING NO. 61A (14L)

BY LP DATE 4/6/82 SURFACE ELEV. * (PROJECT DATUM)

*AERO-GEODETIC: USGS ELEV. 37.7

CLASSIFICATION DATA			FIELD DATA						
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Strength (TSF)	Penetration (Blows/Ft.)	Depth in Ft.	Ground Water Levels	Samples	DESCRIPTION
									Asphalt and Base Rock
									(CL) Dark brown silty CLAY - moist
					7	5			(mottled, brown)
									(sandy)
					11	10			(very moist)
							▽		
					14	15			(CL/SM) Interlayered gray very sandy CLAY and silty SAND - wet
					17	20			(SM/SP) Interlayered brown silty SAND and gravelly coarse SAND - wet
						25			
					6	30			(CL) Light blue-green silty CLAY with trace of very sandy clay, root holes - moist
									BOTTOM OF BORING
						35			

REMARKS: Boring converted to a monitoring well by the installation of 31' of 2" PVC casing, the lower 15' of which was slotted. The annular space was backfilled with gravel to within 10' of the ground surface at which point a concrete surface seal was installed.

EMCON ASSOCIATES

Canonie

Boring Log

PRELIMINARY

PROJECT No. CES 82-023
BORING No. 648
PAGE 1 OF 3

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CA

BORING LOCATION N 332,697 E 1,549,518 SURFACE ELEV.

DRILLER ALL TERRAIN DRILLING DATE: START 7-17-85 FINISH 7-18-85

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
5														
10														
15														
20														
25														
30													FOR SOIL DESCRIPTIONS FROM 30.0 FT. TO 70.0 FT., SEE BORING LOG 148.	
35														
40														

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Boring Log

PROJECT No. CES 82-023
BORING No. 64B
PAGE 2 OF 3

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CA
BORING LOCATION N 332,697 E 1,549,518 SURFACE ELEV.
DRILLER ALL TERRAIN DRILLING DATE: START 7-17-85 FINISH 7-18-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	6-12	12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
45													FOR SOIL DESCRIPTIONS TO 70.0 FT. SEE BORING LOG 14B.	
50														
55														
60														
65														
70												70.0	(CLAY)	
	1	MS	70.0	71.5	10	9	14	18	CL		1.5		STIFF BROWN SILTY CLAY, TRACE OF FINE TO COARSE SAND.	
75	2	MS	72.5	74.0	16	18	21	18	CL		1.0	75.0		
	3	MS	75.0	76.5	12	13	16	18	CL		1.0	77.0	STIFF GRAY MOTTLED BROWN SANDY SILTY CLAY.	
													STIFF GRAY SILTY CLAY.	
80	4	MS	77.5	79.0	18	35	36	18	CL/SP		1.0	78.3	BROWN FINE TO MEDIUM SAND.	
	5	MS	80.0	81.5	19	20	21	18	SP/CL			80.3		

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Boring Log

PROJECT No. CES 82-023
BORING No. 64B
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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CA
BORING LOCATION N 332,697 E 1,549,518 SURFACE ELEV.
DRILLER ALL TERRAIN DRILLING DATE: START 7-17-85 FINISH 7-18-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
											2.0	80.3	VERY STIFF BROWN SILTY CLAY, SOME FINE SAND.	
												81.0	BROWN FINE TO MEDIUM SAND.	
	6	MS	82.5	84.0	16	28	34	18	SP			83.9		
85														
	7	MS	85.0	86.5	16	21	25	18	CL		2.5			
	8	MS	87.5	89.0	13	19	24	16	CL		2.5		VERY STIFF GRAY SILTY CLAY, TRACE OF FINE TO MEDIUM SAND.	
90														
	9	MS	90.0	91.5	12	17	21	11	CL		3.25			
												92.0		
	10	MS	92.5	94.0	12	25	35	16	CL		2.0		STIFF BROWN MOTTLED GRAY SILTY CLAY, SOME FINE TO COARSE SAND, TRACE OF ROOTS.	
95												94.5		
	11	MS	95.0	96.5	9	12	25	18	CL		0.5		MEDIUM STIFF TO VERY STIFF BROWN MOTTLED GRAY SILTY CLAY.	
	12	MS	97.5	99.0	13	19	26	18	CL		2.5	99.0		
100													SOFT BROWN SANDY SILTY CLAY.	
	13	MS	100.0	101.5	13	19	27	18	CL		0.5			
												101.5	BOTTOM OF BORING AT 101.5 FT.	
105													NOTES:	

1. BORING DRILLED USING MUD ROTARY METHOD.

2. UPON COMPLETION, BORING WAS CONVERTED TO 4-INCH DIAMETER PVC OBSERVATION WELL. SEE 64B(3) OBSERVATION WELL DETAILS.

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LOG OF EXPLORATORY BORING

PROJECT NUMBER 505-0.2 BORING NO. 65A

BY HCW DATE 6/14/82 SURFACE ELEV. * (PROJECT DATUM)

*AERO-GEODETIC: USGS ELEV. 27.4

CLASSIFICATION DATA			FIELD DATA			Depth in Ft.	Ground Water Levels	Samples	DESCRIPTION
% Fines (-No.200)	Liquid Limit	Plasticity Index		Compressive Stength (TSF)	Penetration (Blows/Ft.)				
									(CL) Dark brown CLAY with trace of fine sand - damp
									(gray-brown)
					12	5			(minor [illegible] to fine sand and trace [illegible]ine gravel)
					15	10			(SM) Green-gray silty fine SAND with minor fine gravel - moist to wet
					27	15			(SW) Brown fine gravelly medium to coarse SAND with 1" to 2" thick silt and fine gravel inter-layers - wet
					17	20			(gray, silty, fine-grained, no gravel)
									(CL) Gray silty CLAY with trace fine gravel - damp to moist
					55	25			(GC) Brown fine sandy clayey fine GRAVEL - wet
									(CL) Brown sandy and fine gravelly CLAY - damp
					20	30			
					14	35			(green-gray, silty with minor sand)
									BOTTOM OF BORING
						40			

REMARKS: Boring was converted to a ground-water monitoring well by installation of 34' of 4" PVC casing. The lower 5' of casing is unslotted with a 10' section of slotted casing above. The annular space was backfilled with gravel to a depth of 7'. A bentonite-concrete seal was placed in the annular space from 7' to the surface.

EMCON ASSOCIATES

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Boring Log

PRELIMINARY

PROJECT No. CES 82-023
BORING No. 79A
PAGE 1 OF 2

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CA
BORING LOCATION N 333,420 E 1,547,825 SURFACE ELEV.
DRILLER ALL TERRAIN DRILLING DATE: START 7-29-85 FINISH 7-29-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
												0.3	ASPHALT.	
													(FILL MATERIAL)	
5												5.0		
	1	MS*	5.0	6.5	10	19	20	18	CL		3.0			
	2	MS	7.5	9.0	13	14	19	18	CL		3.0		VERY STIFF BROWN SILTY CLAY.	
10												10.0		
	3	MS	10.0	11.5	10	16	14	18	CL		3.5		VERY STIFF GRAY SILTY CLAY, SOME MEDIUM TO COARSE SAND.	
												12.5		
	4	MS	12.5	14.0	4	4	4	18	SM				GRAY SILTY FINE TO COARSE SAND, WET.	
15														
	5	MS	15.0	16.5	4	6	8	18	SM/SC			15.5	GRAY MOTTLED BROWN CLAYEY FINE TO MEDIUM SAND.	
	6	MS	16.5	18.0	10	23	41	18	SC/SW			17.5		
	7	MS	18.0	19.5	21	25	19	15	SW				GRAY FINE TO COARSE SAND, TRACE OF FINE GRAVEL.	
20														
	8	MS	19.5	21.0	6	8	18	18	SW/ML			20.5		
	9	MS	22.0	23.5	11	10	9	18	ML		0.75		GRAY FINE SANDY SILT, WET.	
												23.5		
25														
	10	PB*	23.5	27.5				48	CL		0.75		MEDIUM STIFF GRAY FINE SANDY SILTY CLAY, TRACE OF ROOTS, TRACE OF SHELLS.	
30	11	PB	27.5	31.5				0						
												31.5		
	12	PB	31.5	35.5				40	CL		0.75		MEDIUM STIFF GRAY MOTTLED BROWN FINE SANDY SILTY CLAY, TRACE OF ROOTS.	
35												34.5		
	13	PB	35.5	39.5				0					GRAY FINE SANDY SILTY CLAY, TRACE OF ROOTS. (SILTY CLAY)	
40												39.5		
													BOTTOM OF BORING AT 39.5 FT.	

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*MS-MODIFIED SPOON

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Boring Log

PROJECT No. CES 82-023

BORING No. 79A

PAGE 2 OF 2

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CA

BORING LOCATION N 333,420 E 1,547,825 SURFACE ELEV.

DRILLER ALL TERRAIN DRILLING DATE: START 7-29-85 FINISH 7-29-85

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
													NOTES:	
													1. BORING DRILLED USING MUD ROTARY METHOD.	
													2. UPON COMPLETION, BORING WAS CONVERTED TO 4-INCH DIAMETER PVC OBSERVATION WELL. SEE 79A OBSERVATION WELL DETAILS.	

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Boring Log

PRELIMINARY

PROJECT No. CE 82-023
BORING No. 2C (MEW-82(A))
PAGE 1 OF 5

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION N 334,695 E 1,548,307 SURFACE ELEV. 28.6
DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
0													(FILL MATERIAL).	
												4.0		
5	1	PB*	4.5	7.0				30	CL		3.0		VERY STIFF BROWN SILTY CLAY, SOME FINE TO COARSE GRAVEL.	
									CL		2.0	8.0		
	2	PB	7.0	9.5				30	SM&GM				GRAY SILTY FINE TO COARSE SAND AND FINE TO COARSE GRAVEL.	
10									SM&GM			10.0		
	3	PB	9.5	12.0				30	CL		2.0		VERY STIFF BROWN MOTTLED GRAY SILTY CLAY.	
	4	PB	12.0	14.5				30	CL		2.0			
15												14.5		
	5	PB	14.5	17.0				30	SW&GW				GRAY FINE TO COARSE SAND AND FINE TO COARSE GRAVEL (WET).	
	6	PB	17.0	19.5				30	SW&GW					
20	7	PB	19.5	22.0				30	SW&GW					
	8	PB	22.0	24.5				6	SW&GW					
25	9	PB	24.5	27.0				6	SW&GW					
												27.5	(BROWN SANDY SILTY CLAY).	
	10	PB	27.0	29.5				6	SW&GW			28.5		
30	11	PB	29.5	32.0				6	SW&GW				GRAY FINE TO COARSE SAND AND FINE TO COARSE GRAVEL (WET).	
												32.0		
	12	PB	32.0	34.5				18	CL		0.5		MEDIUM STIFF TO VERY STIFF GRAY SILTY CLAY.	
35	13	PB	34.5	37.0				30	CL		1.0			
	14	PB	37.0	39.5				30	CL		1.5			
40	15	PB	39.5	42.0				30	CL		2.5			

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*PB-PITCHER BARREL

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Boring Log

PROJECT No. CE 82-023
BORING No. 2C (MEW-82(A))
PAGE 2 OF 6

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
40														
	16	PB	42.0	44.5				30	CL		2.5			
45											3.0			
	17	PB	44.5	47.0				30	CL		1.5		MEDIUM STIFF TO VERY STIFF GRAY SILTY CLAY.	
	18	PB	47.0	49.5				30	CL		2.0			
50									CL		2.0			
	19	PB	49.5	52.0				30				50.5		
									SM				GRAY SILTY FINE SAND.	
									SM			53.0		
	20	PB	52.0	54.5				30	CL		2.5			
55														
	21	PB	54.5	57.0				30	CL		1.25			
	22	PB	57.0	59.5				30	CL		3.25		STIFF TO VERY STIFF GRAY AND BROWN SILTY CLAY, SOME FINE GRAVEL.	
60														
	23	PB	59.5	62.0				30	CL		3.0			
	24	PB	62.0	64.5				30	CL		2.0			
65									SW			64.5	BROWN FINE TO COARSE SAND (WET).	
	25	PB	64.5	67.0				30				65.5		
									CL		2.0			
	26	PB	67.0	69.5				30	CL		2.5			
70													VERY STIFF BROWN FINE SANDY SILTY CLAY.	
	27	PB	69.5	72.0				30	CL		2.0			
	28	PB	72.0	74.5				30	CL		2.5			
75												74.5		
	29	PB	74.5	77.0				30	SW					
	30	PB	77.0	79.5				30	SW				BROWN FINE TO COARSE SAND, SOME FINE GRAVEL (WET).	
80														
	31	PB	79.5	82.0				30	SW					

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Boring Log

PROJECT No. CE 82-023
BORING No. 2C (MEW-82(A))
PAGE 3 OF 6

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
80														
									CL		2.0	82.5		
	32	PB	82.0	84.5				30	CL		2.5			
85														
	33	PB	84.5	87.0				30	CL		3.0			
	34	PB	87.0	89.5				30	CL		4.5			
90														
	35	PB	89.5	92.0				30	CL		4.5			
	36	PB	92.0	94.5				30	CL		2.5		STIFF TO HARD GRAY MOTTLED BROWN SILTY CLAY.	
95														
	37	PB	94.5	97.0				30	CL		2.0			
	38	PB	97.0	99.5				30	CL		2.0			
100														
	39	PB	100.0	102.0				0						
	40	PB	102.0	104.0				24	CL		1.5			
105									CL		2.0			
	41	PB	104.5	106.5				30				105.5	BROWN SILTY FINE SAND.	
									SM			107.0		
	42	PB	106.5	109.0				30	CL		3.0		VERY SITFF GRAY SILTY CLAY.	
												109.0		
110													BROWN FINE TO COARSE SAND (WET).	
	43	PB	109.0	111.5				30	SW			111.0		
	44	PB	111.5	114.0				30	CL		3.0		VERY STIFF BROWN SILTY CLAY.	
115									CL		2.5			
	45	PB	114.0	116.5				30	SW			115.5		
												116.5	BROWN SILTY FINE SAND.	
	46	PB	116.5	119.0				30	CL		3.5		VERY STIFF BROWN MOTTLED GRAY SILTY CLAY.	
120														
	47	PB	119.0	121.5				30	CL		3.0			

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Boring Log

PROJECT No. CE 82-023

BORING No. 2C (MEW-82(A))

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PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA

BORING LOCATION _____ SURFACE ELEV. _____

DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO.
120														
	48	PB	121.5	124.0				30	CL SM		3.0	123.0		
125														
	49	PB	124.0	126.5				24	SM					
	50	PB	126.5	129.0				30	SM				GRAY SILTY FINE SAND.	
130														
	51	PB	129.0	133.0				0				133.0		
135	52	PB	133.0	135.5				12	CL		2.5			
	53	PB	135.5	138.0				18	CL		3.5			
140	54	PB	138.0	142.0				48	CL		3.5		VERY STIFF GRAY SILTY CLAY.	
	55	PB	142.0	146.0				48	CL		3.5			
145														
	56	PB	146.0	150.0				48	CL		3.0			
150														
	57	PB	150.0	154.0				48	CL		2.5			
155														
	58	PB	154.0	158.0				48	CL		3.0			
160	59	PB	158.0	162.0				48	CL		3.0			

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Boring Log

PROJECT No. CE 82-023
BORING No. 2C (MEW-8240)
PAGE 5 OF 6

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA
BORING LOCATION _____ SURFACE ELEV. _____
DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	TYPE	INTERVAL FROM	INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
160												162.0		
	60	PB	162.0	166.0				48	CL		2.8			
165													VERY STIFF BROWN SILTY CLAY.	
	61	PB	166.0	170.0				48	CL		3.0			
170									CL		3.0			
	62	PB	170.0	174.0				48	SW			171.5	BROWN FINE TO COARSE SAND.	
									CL		2.5	173.0		
175	63	PB	174.0	178.0				48	CL		3.5			
													VERY STIFF GRAY SILTY CLAY.	
180	64	PB	178.0	182.0				48	CL		3.5			
									CL		3.0	183.0		
	65	PB	182.0	186.0				48						
185									SP				BROWN FINE SAND (WET).	
									SP					
	66	PB	186.0	190.0				48	CL		2.0	187.5		
190														
	67	PB	190.0	194.0				36	CL		3.5			
													VERY STIFF GRAY SILTY CLAY.	
195	68	PB	194.0	198.0				48	CL		2.25			
												196.5		
									SW&GW				BROWN FINE TO COARSE SAND AND FINE TO COARSE GRAVEL.	
200	69	PB	198.0	202.0				48	SW&GW					
												200.5		
									CL		4.0			

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Boring Log

PROJECT No. CE 82-023

BORING No. 2C (MEW-82(A))

PAGE 6 OF 6

PROJECT NAME FAIRCHILD CAMERA AND INSTRUMENT CORPORATION, MOUNTAIN VIEW, CALIFORNIA

BORING LOCATION _____ SURFACE ELEV. _____

DRILLER ALL TERRAIN DRILLING DATE: START 7-30-85 FINISH 8-05-85

DEPTH	SAMPLE No.	SAMPLE TYPE	SAMPLE INTERVAL FROM	SAMPLE INTERVAL TO	BLOW COUNT 0-6	BLOW COUNT 6-12	BLOW COUNT 12-18	RECOVERY IN INCHES	U.S.C.S. SOIL TYPE	PERCENT MOISTURE	qu TSF	CONTACT DEPTH	SOIL DESCRIPTION AND REMARKS	PIEZO
200												200.5		
									CL		4.0	202.0	VERY STIFF BROWN SILTY CLAY.	
									SW&GW			202.5	BROWN FINE TO COARSE SAND AND FINE TO COARSE GRAVEL.	
	70	PB	202.0	206.0				36	CL		2.5			
205														
													VERY STIFF GRAY SILTY CLAY.	
	71	PB	206.0	210.0				48	CL		2.5			
210												210.0		

BOTTOM OF BORING AT 210.0 FEET.

NOTES:

1. BORING DRILLED USING MUD ROTARY METHOD.
2. UPON COMPLETION BORING WAS CONVERTED TO OBSERVATION WELL 55B. SEE 55B OBSERVATION WELL DETAILS.

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N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

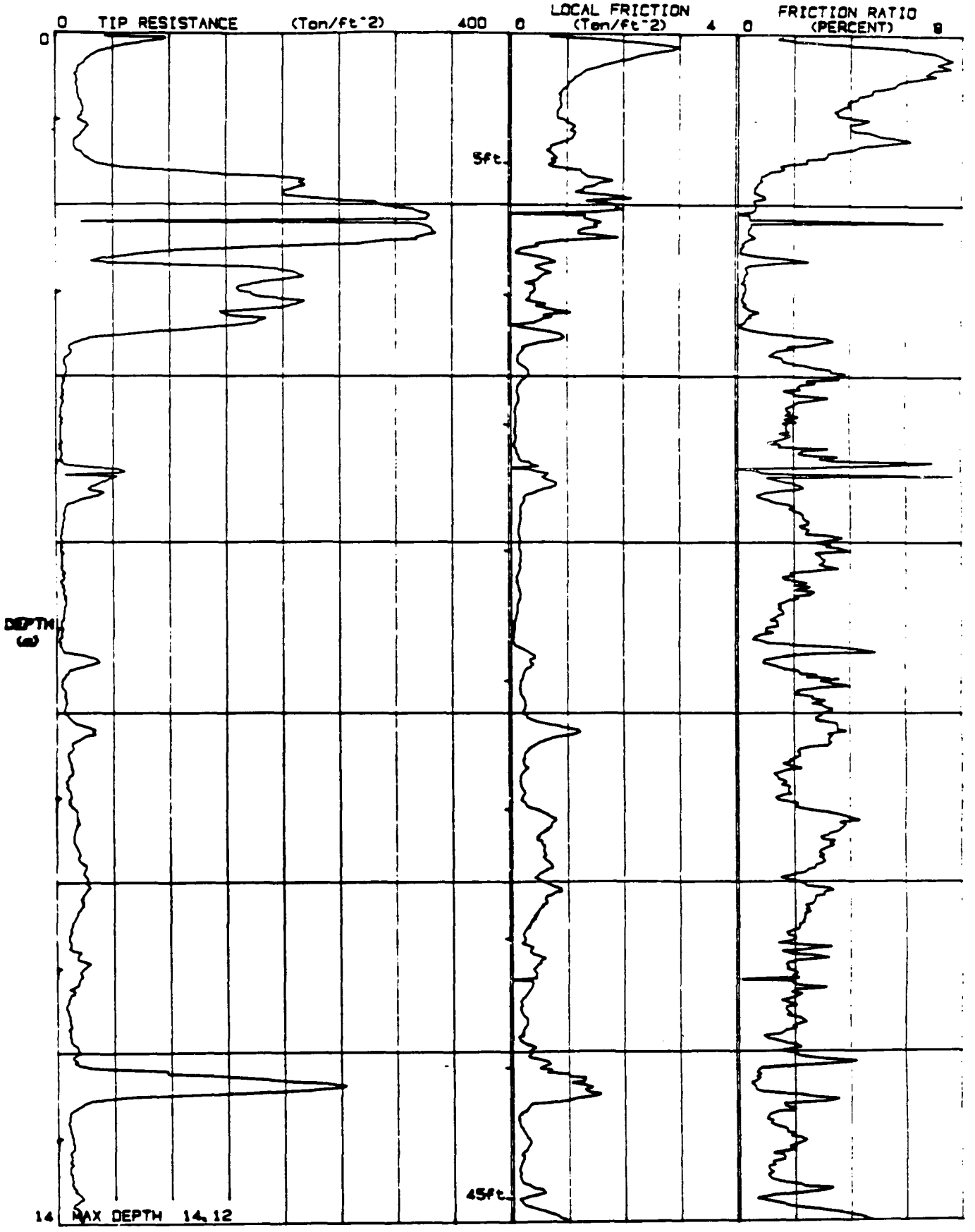
APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 9 – CPT (IT)

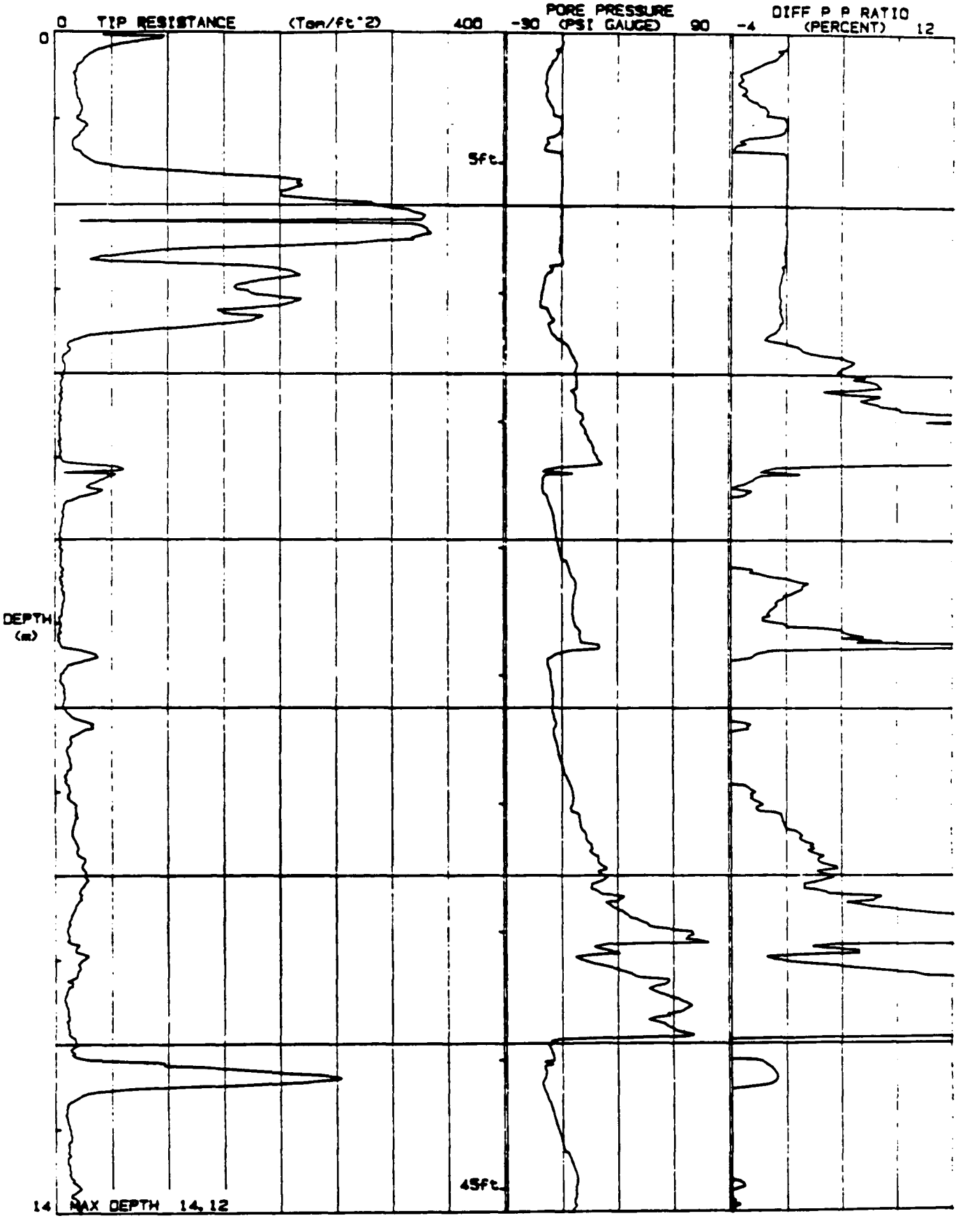
REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

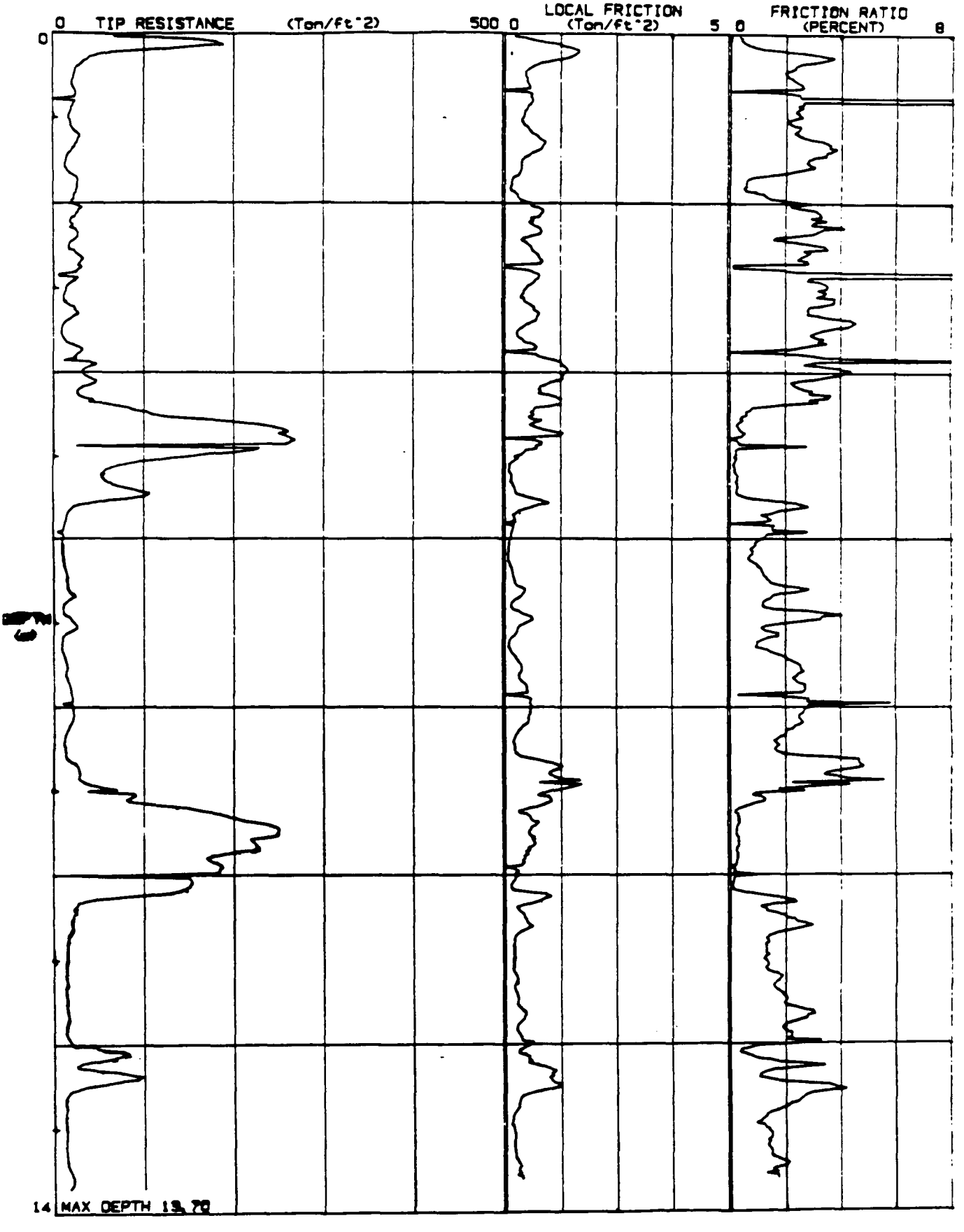
JOB # : 409700
DATE : 03/15/90/15:50
LOCATION : CPT9-5
FILE : FIL129



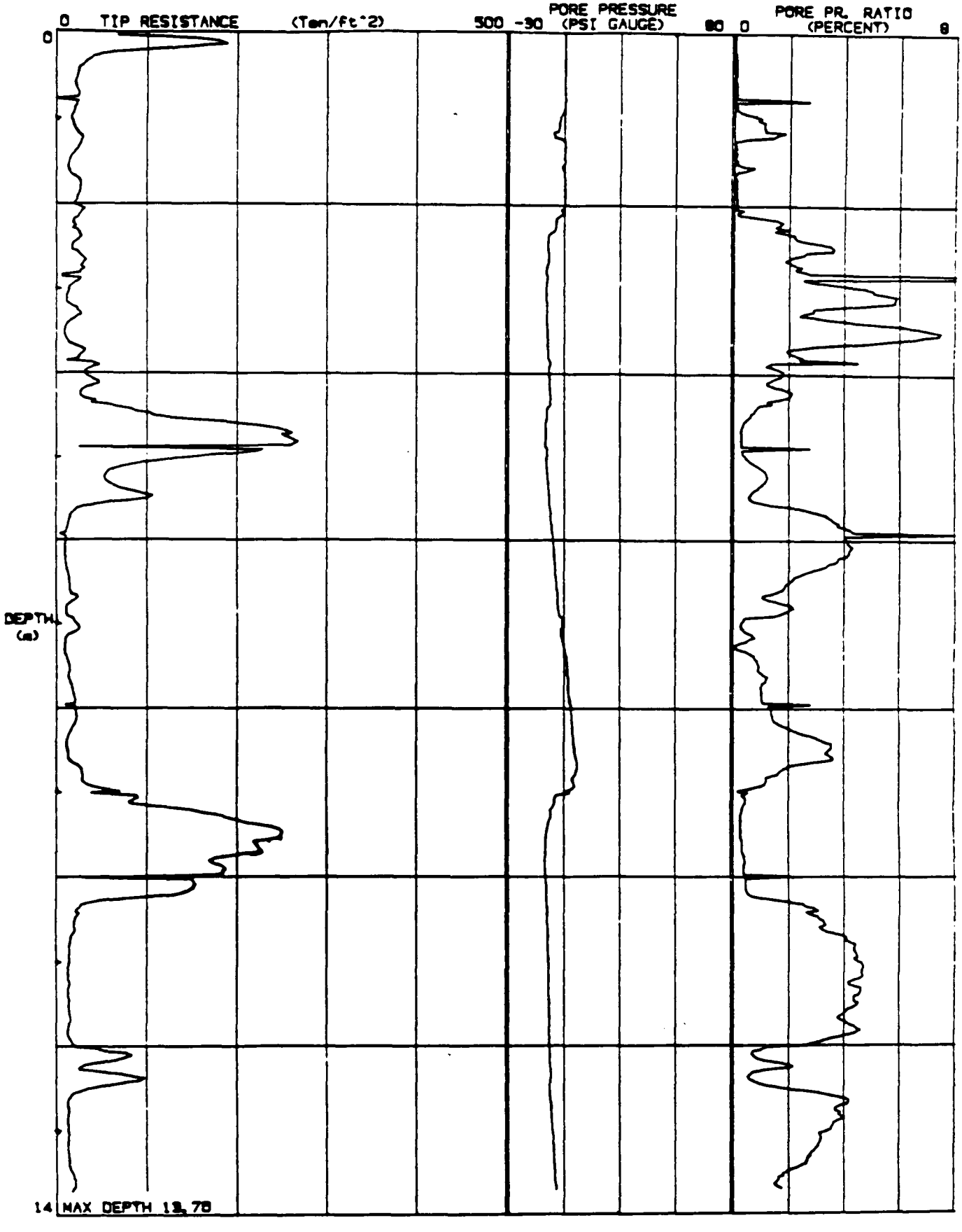
JOB # : 409700
DATE : 09/15/90/15:50
LOCATION : CPT9-5
FILE : FIL129



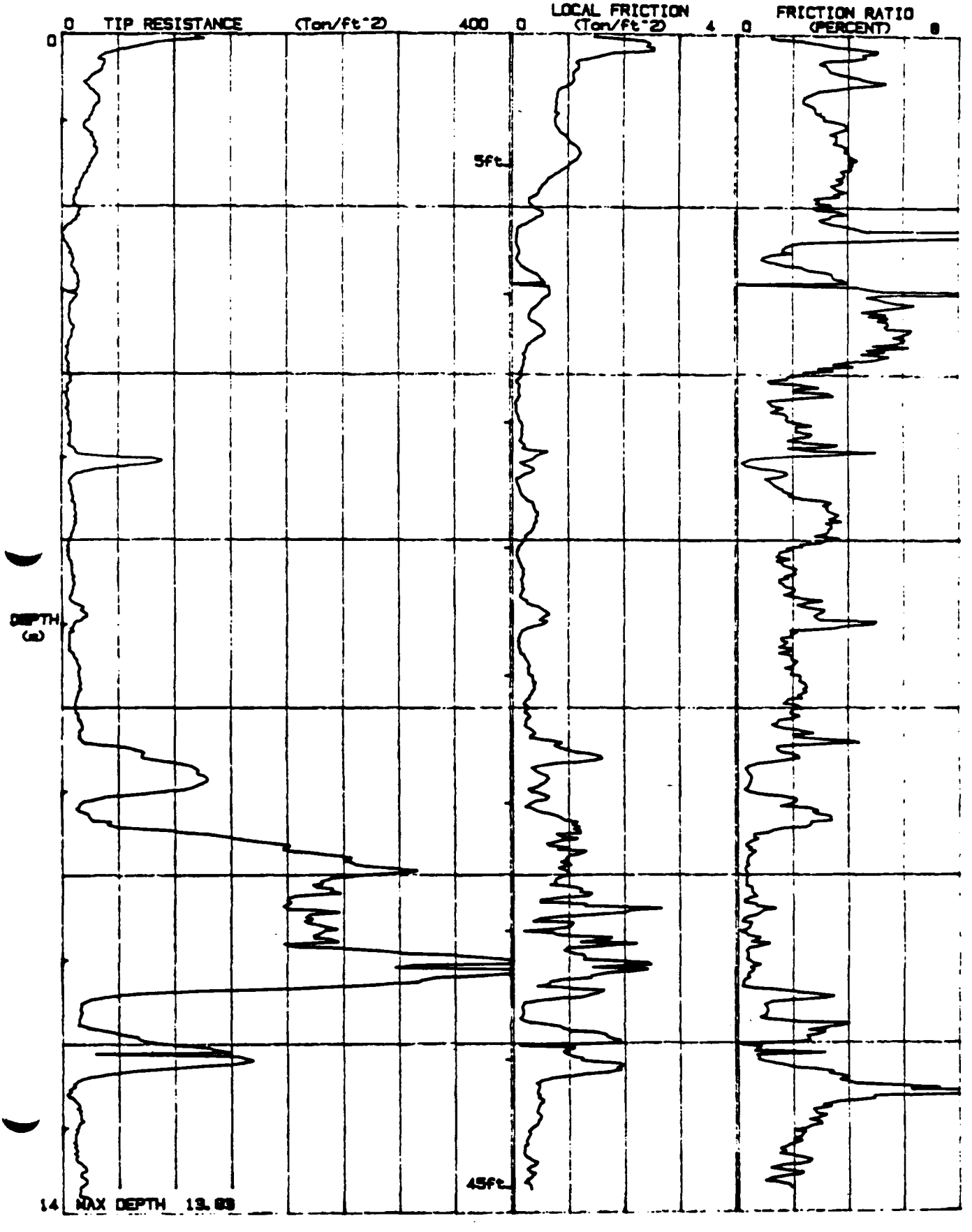
JOB # : 409700
DATE : 01/29/90
LOCATION : CPT/B-8
FILE # : 14



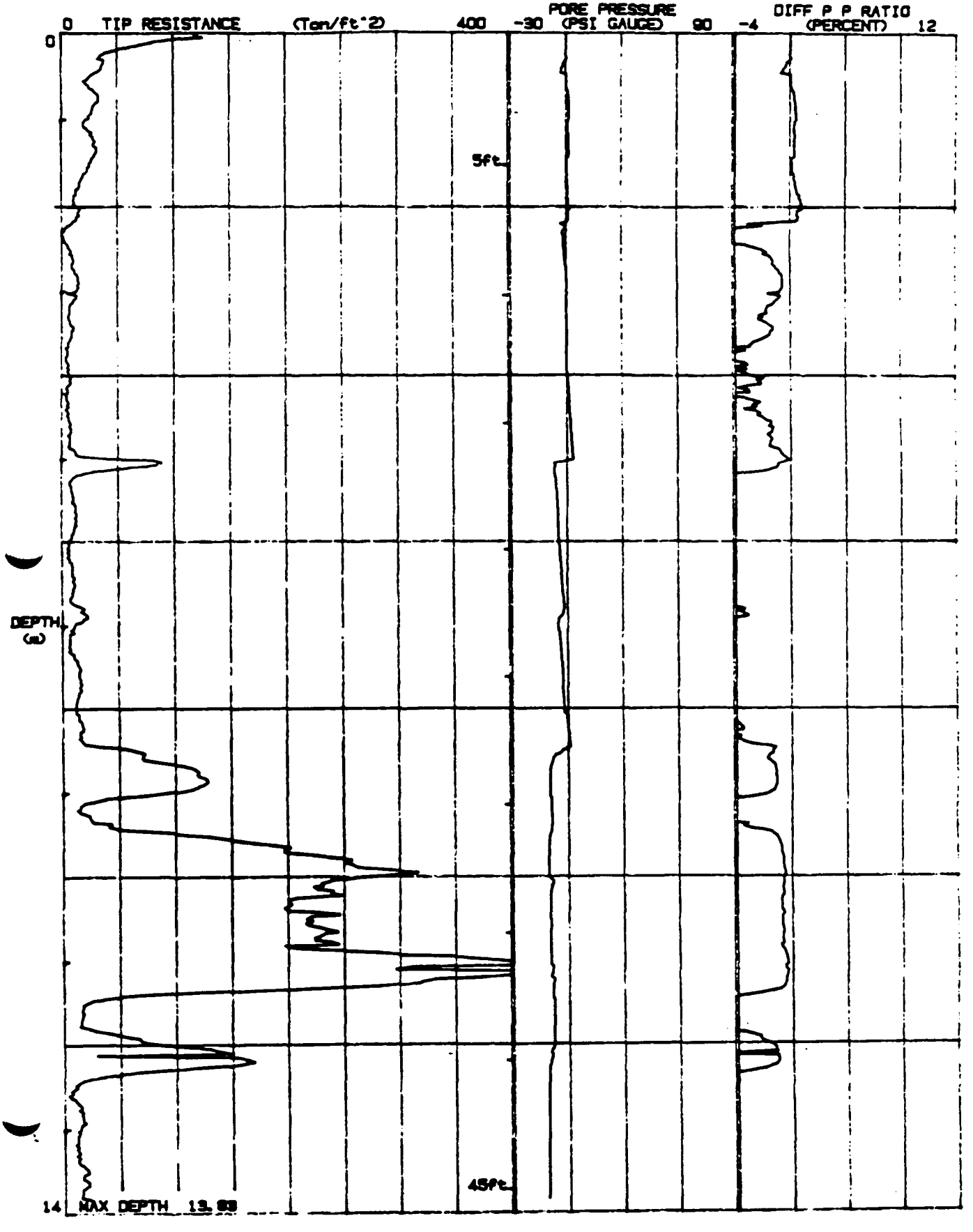
JOB # : 409700
DATE : 01/29/90
LOCATION : CPT/S-8
FILE # : 14



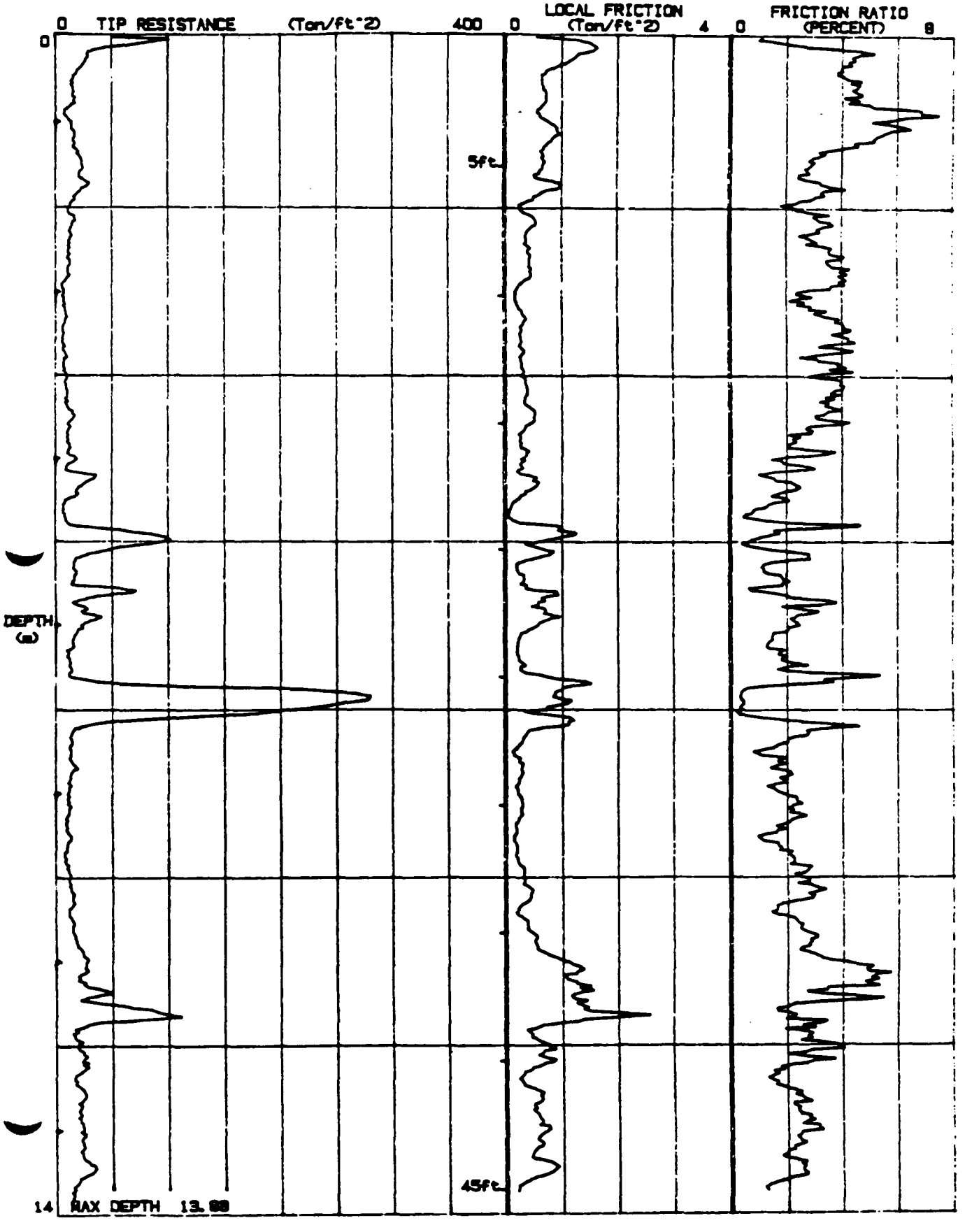
JOB # : 409700
DATE : 03/19/90/17:45
LOCATION : CPT9-9
FILE : FIL137



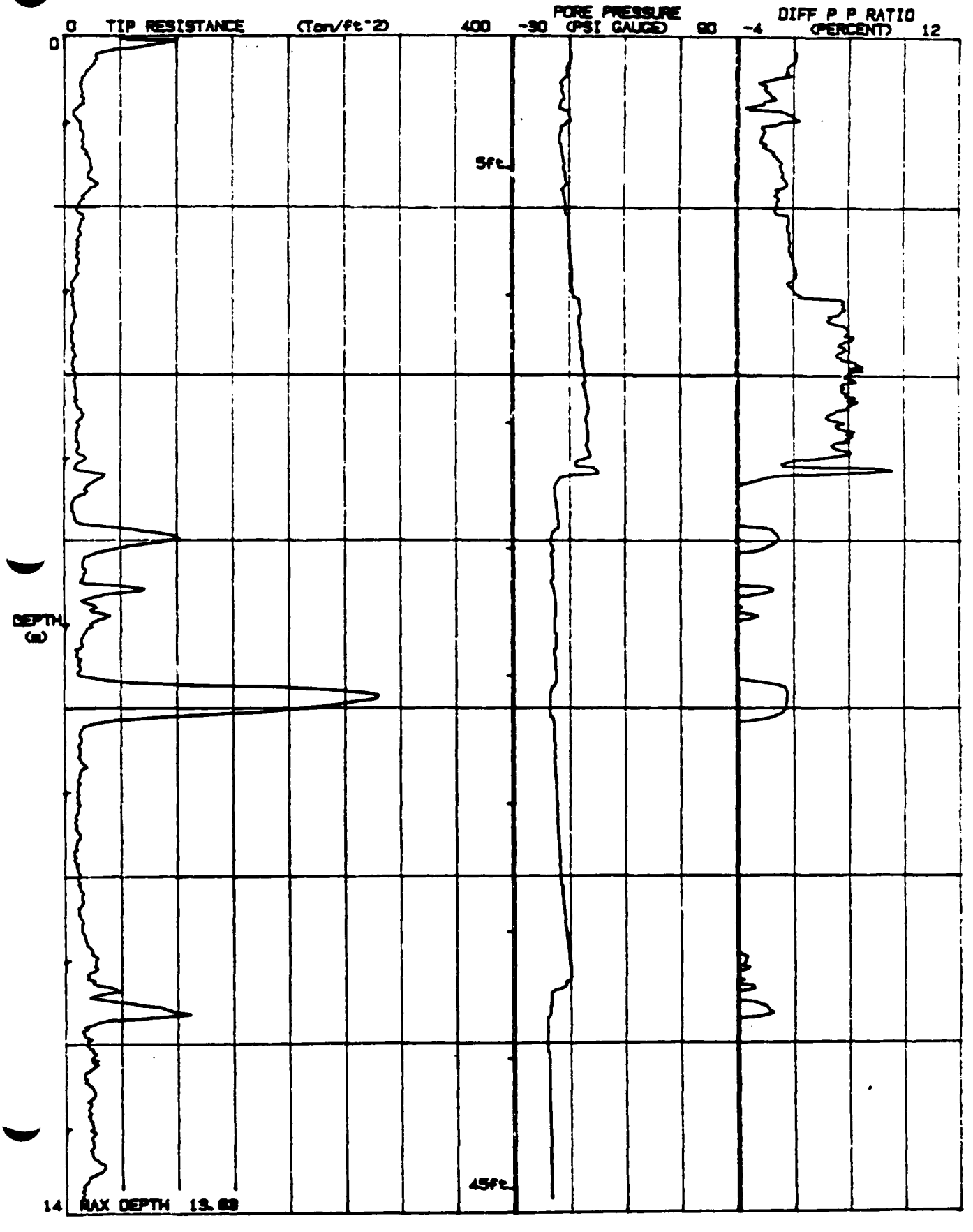
JOB # : 409700
DATE : 03/19/90/17:45
LOCATION : CPT9-9
FILE : FIL137



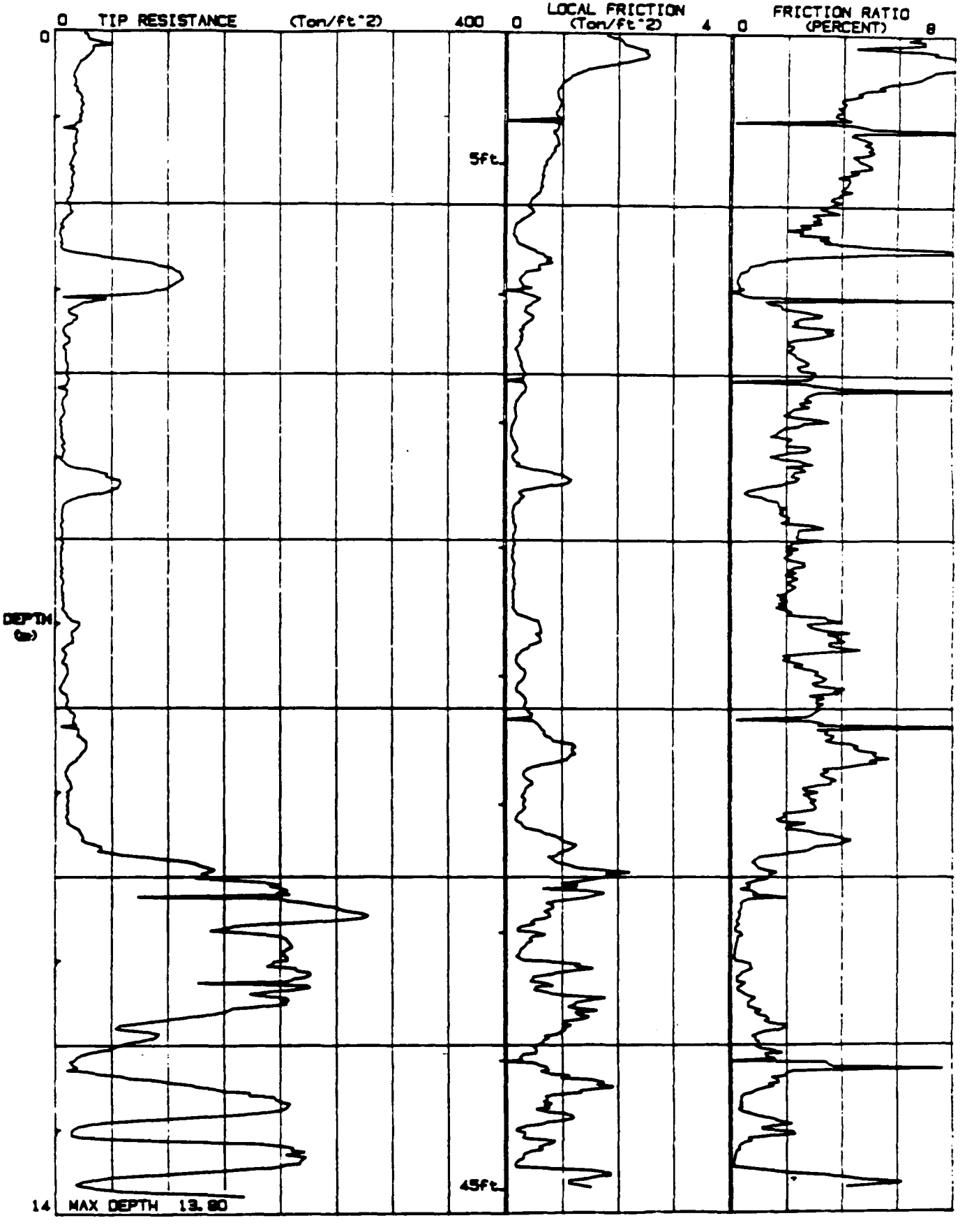
JOB # : 409700
DATE : 03/19/90/15:18
LOCATION : CPT9-11
FILE : FIL138



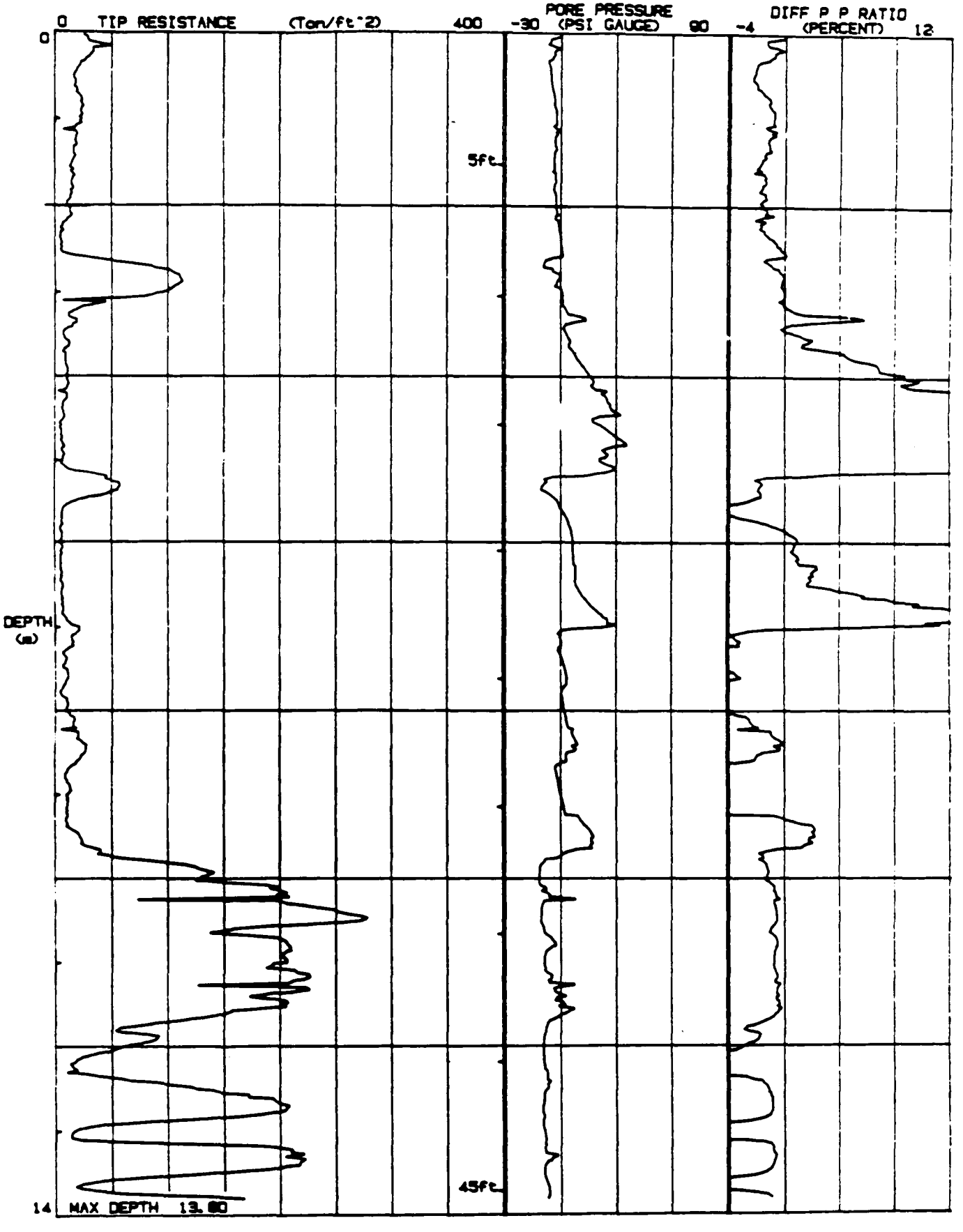
JOB # : 409700
DATE : 03/19/90/16:18
LOCATION : CPT9-11
FILE : FIL138



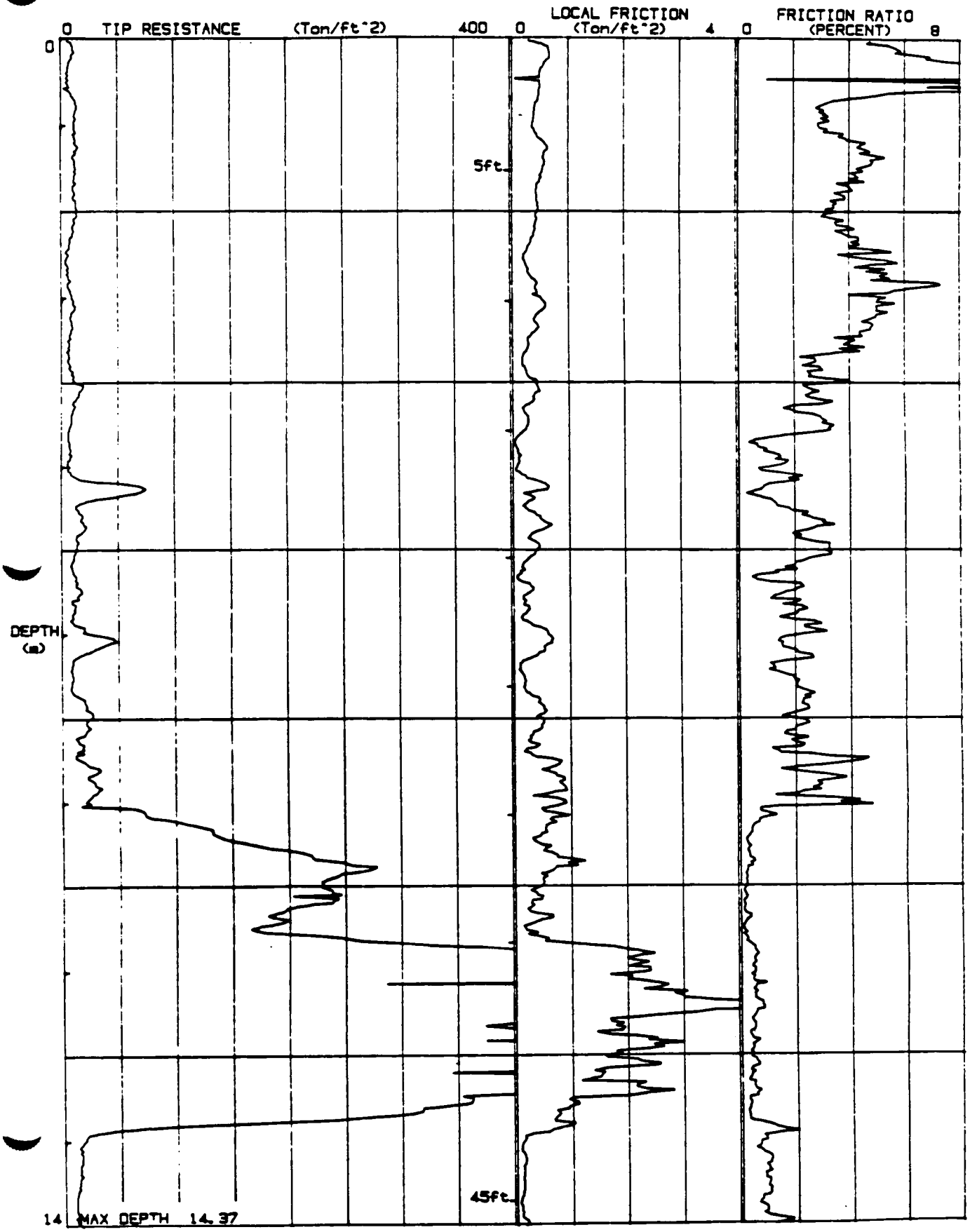
JOB # : 409700
DATE : 03/08/90/11:08
LOCATION : CPT/9-21
FILE : FIL111



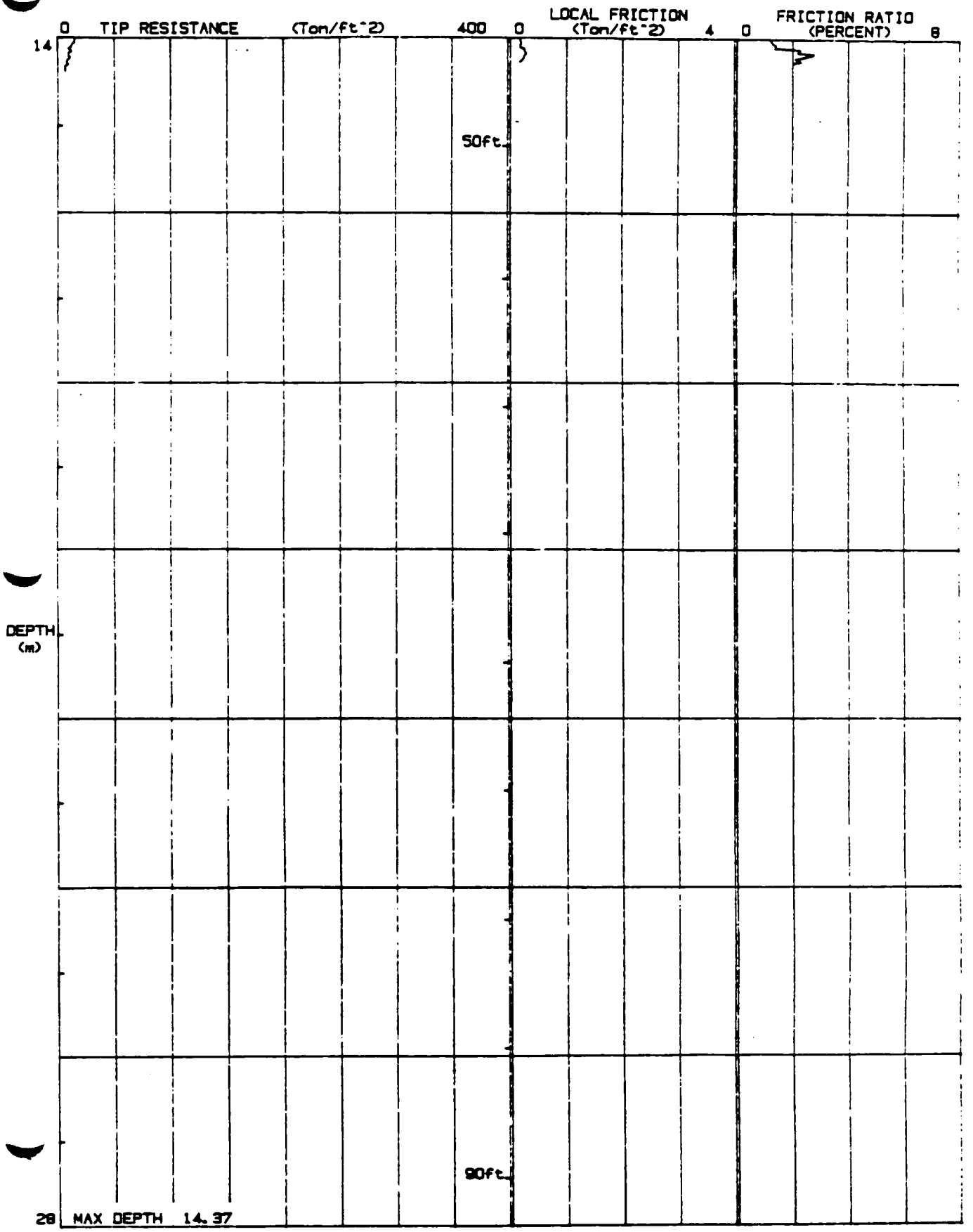
JOB # : 409700
DATE : 03/08/90/11:08
LOCATION : CPT/9-21
FILE : FIL111



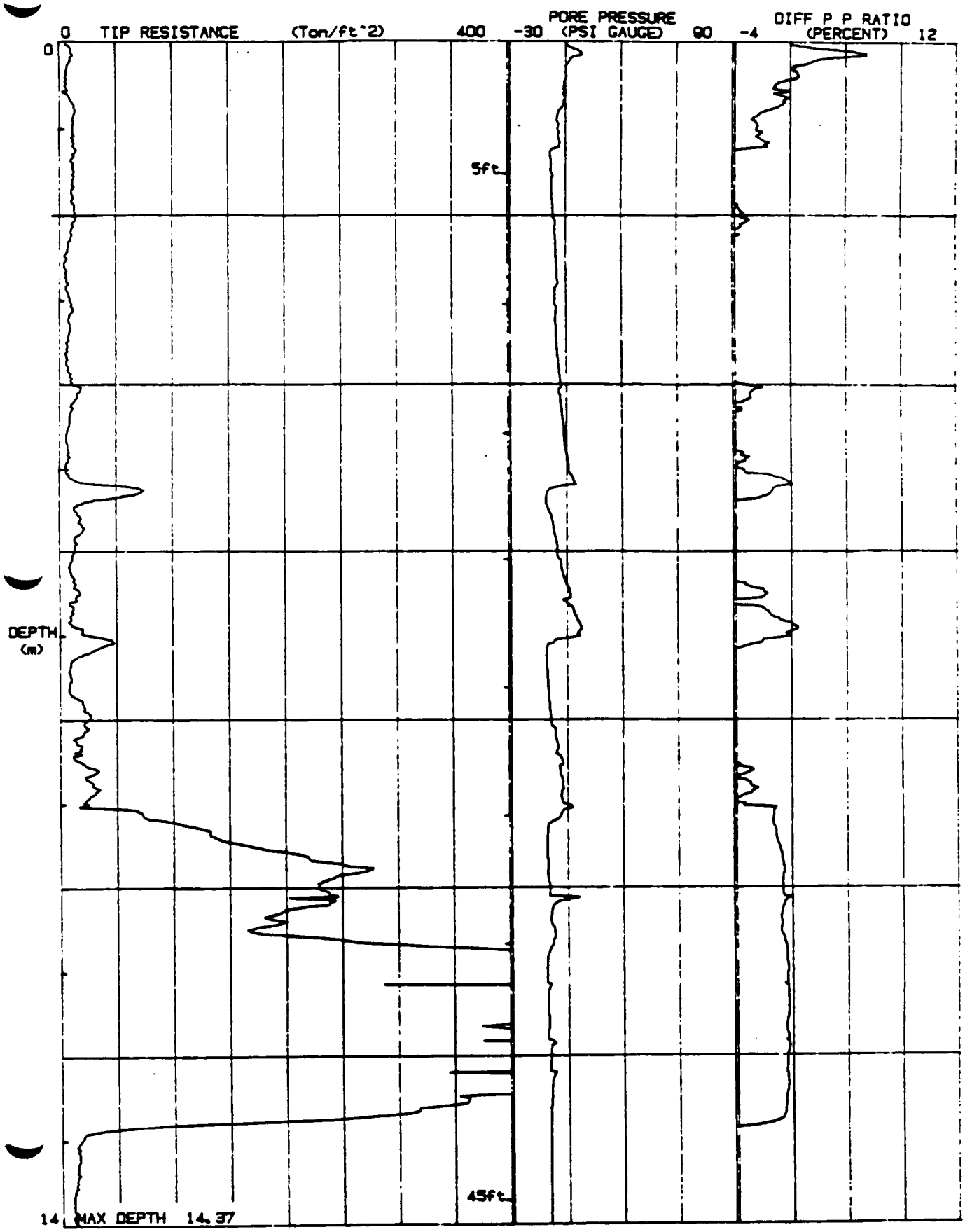
JOB # : 409700
DATE : 03/19/90/11:17
LOCATION : CPT9-22
FILE : FIL134



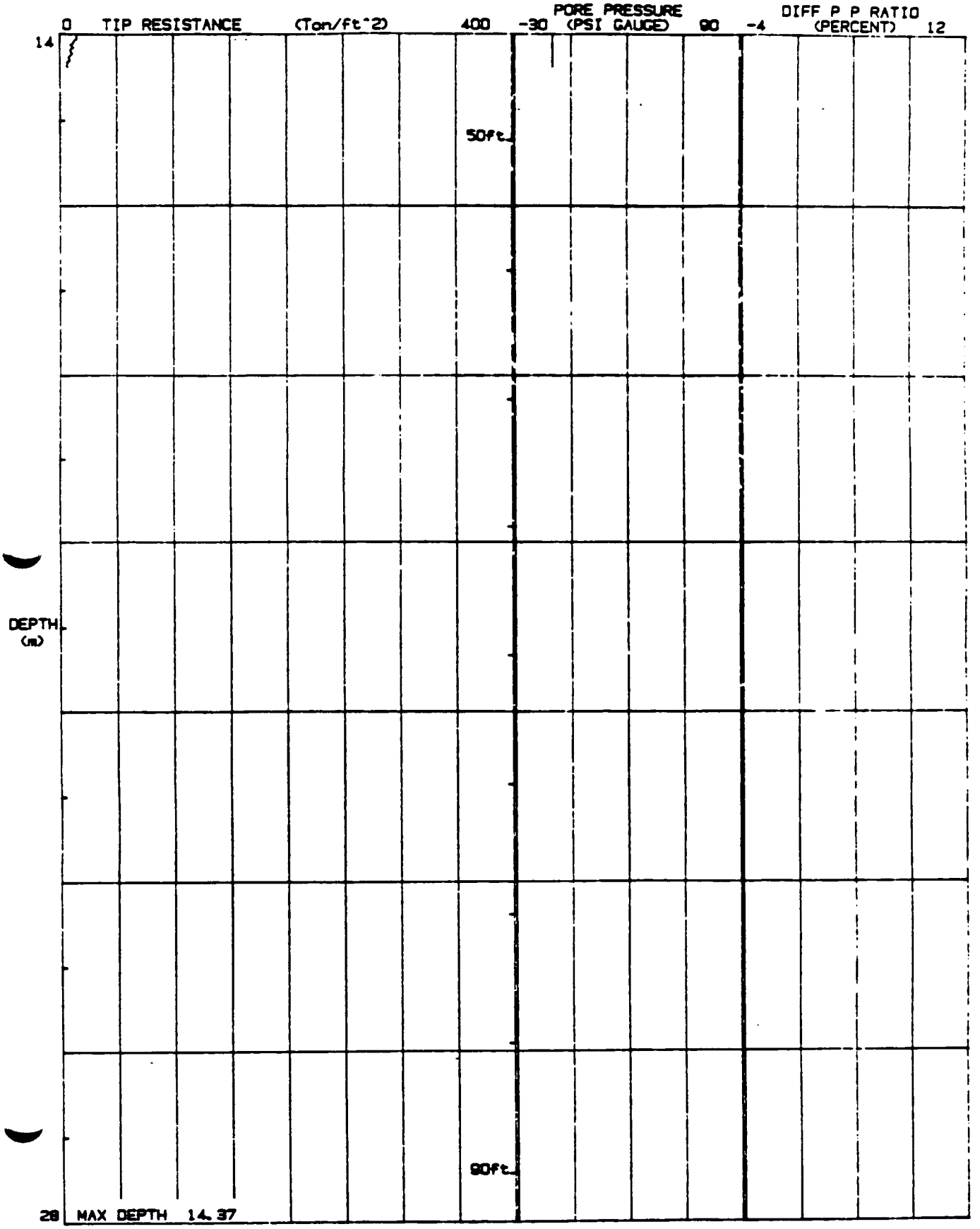
JOB # : 409700
DATE : 03/19/90/11:17
LOCATION : CPT9-22
FILE : FIL134



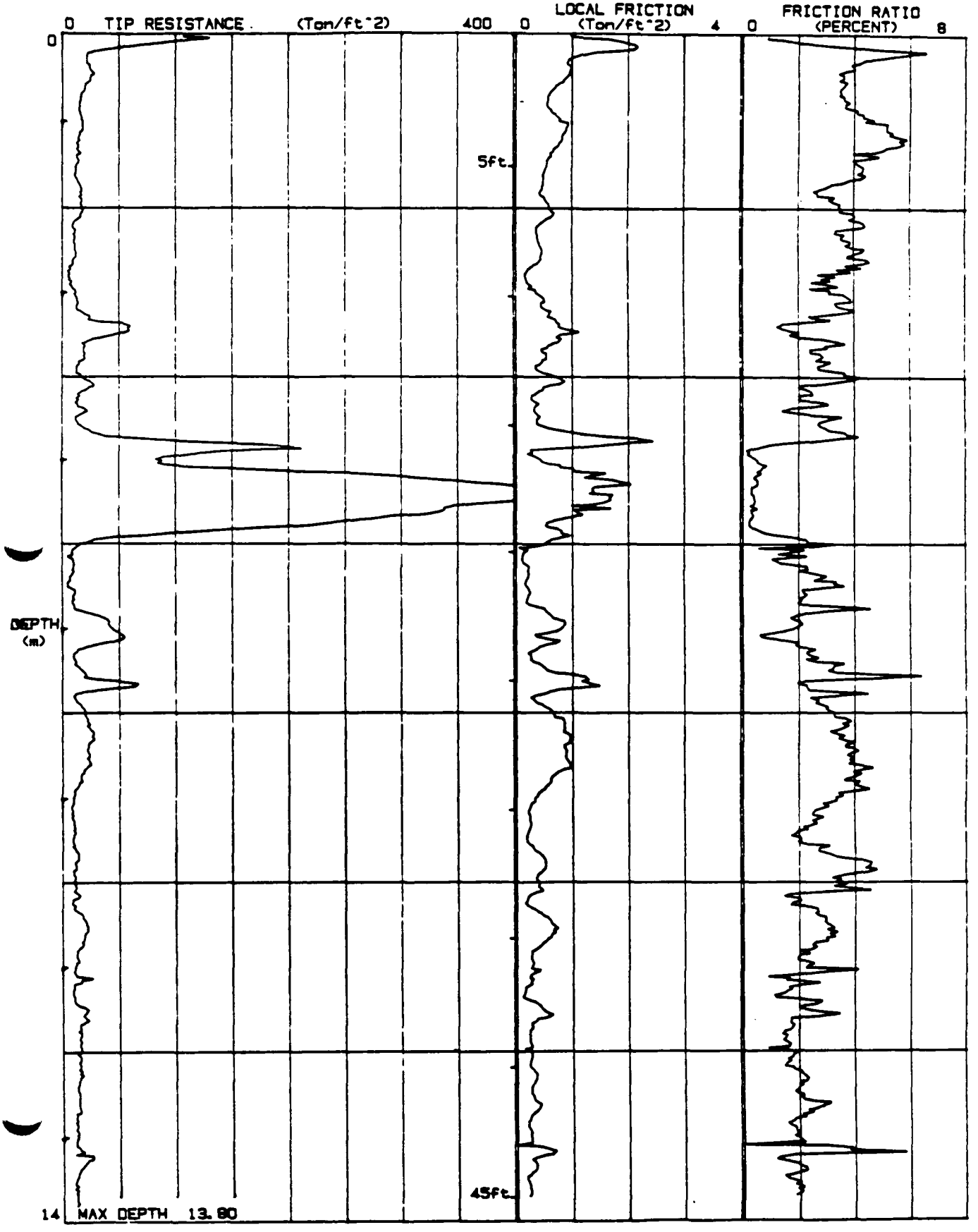
JOB # : 409700
DATE : 03/19/90/11:17
LOCATION : CPT9-22
FILE : FIL134



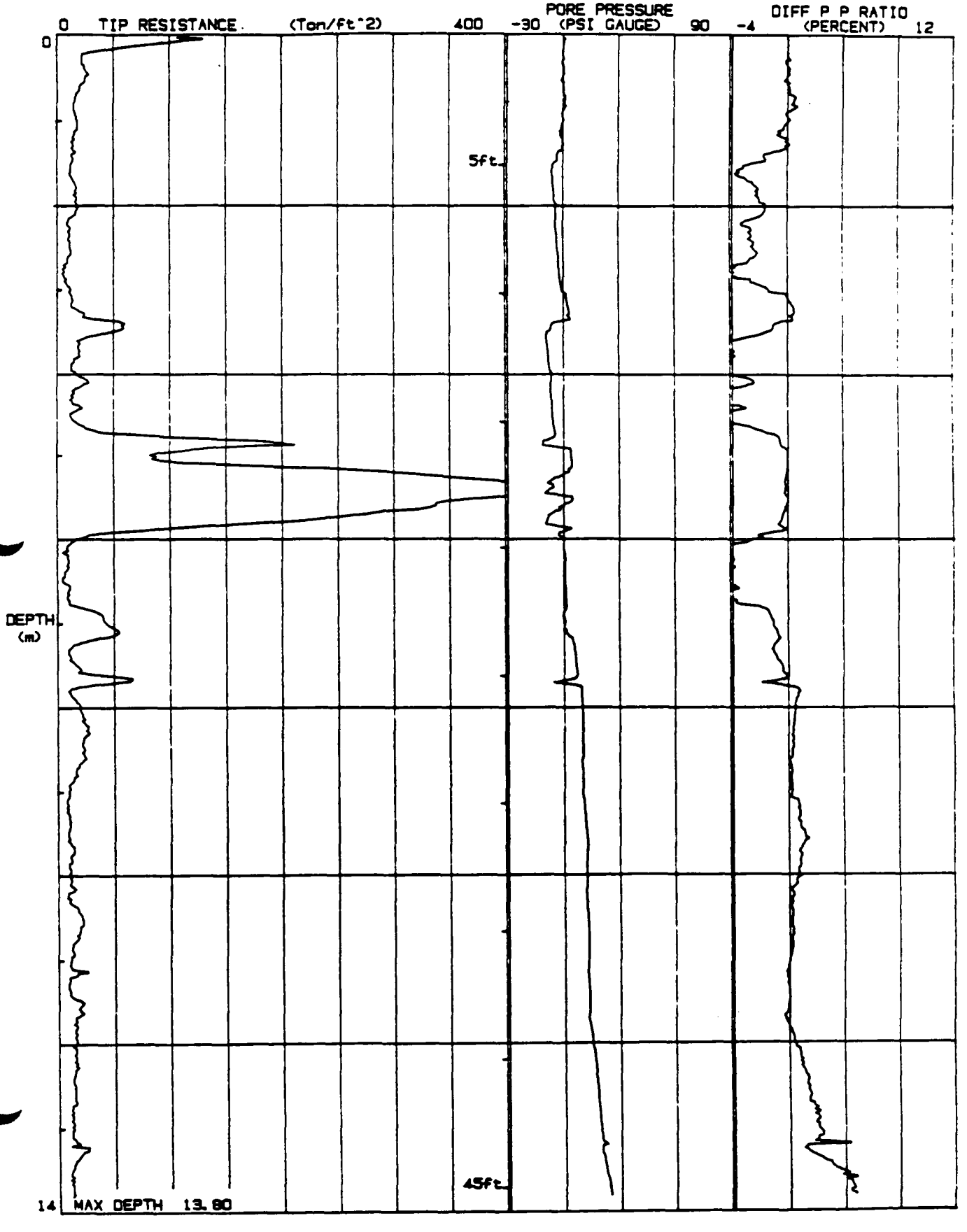
JOB # : 409700
DATE : 03/19/90/11:17
LOCATION : CPT9-22
FILE : FIL134



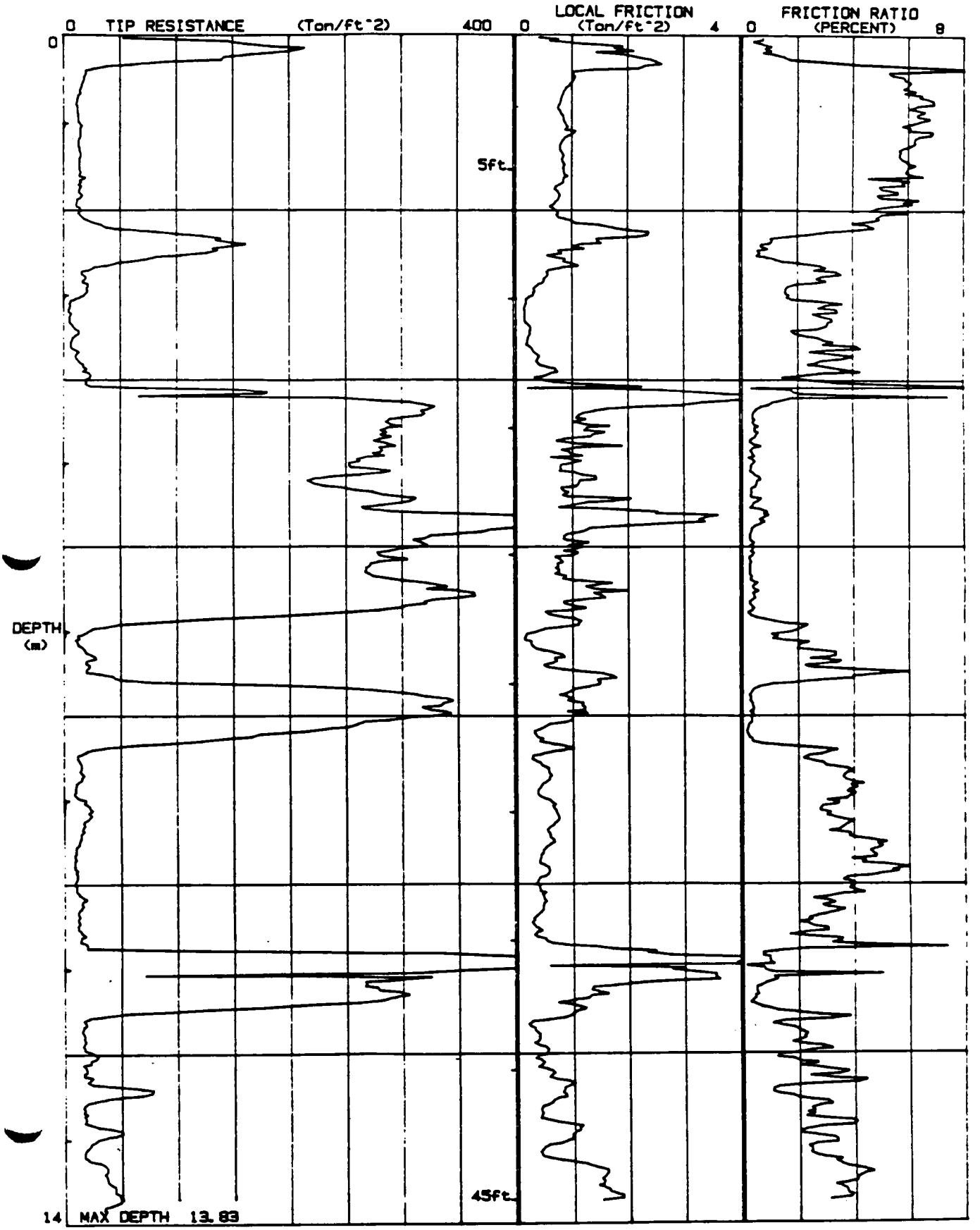
JOB # : 409700
DATE : 03/19/90/11:17
LOCATION : CPT9-25
FILE : FIL133



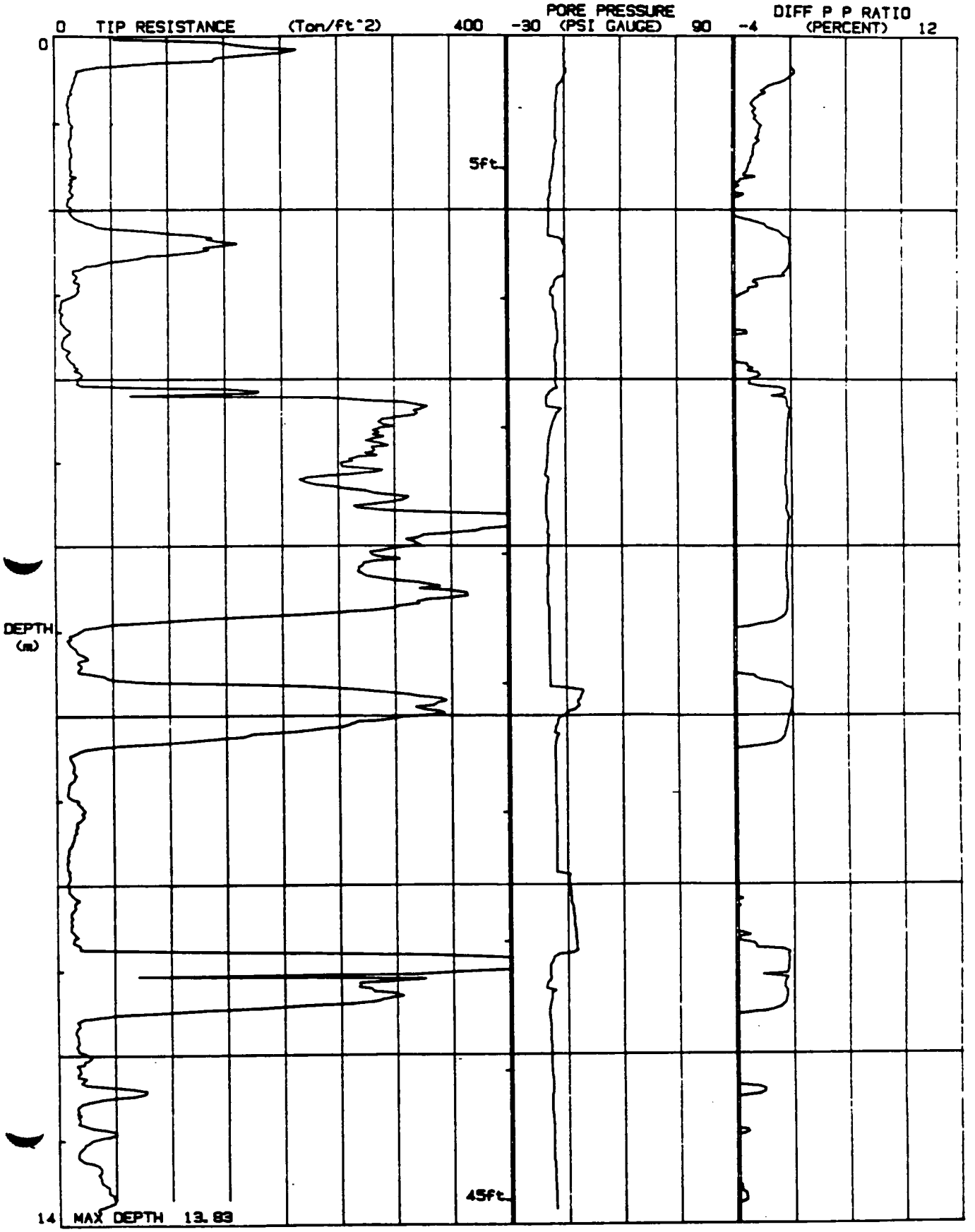
JOB # : 409700
DATE : 03/19/90/11:17
LOCATION : CPT9-25
FILE : FIL133



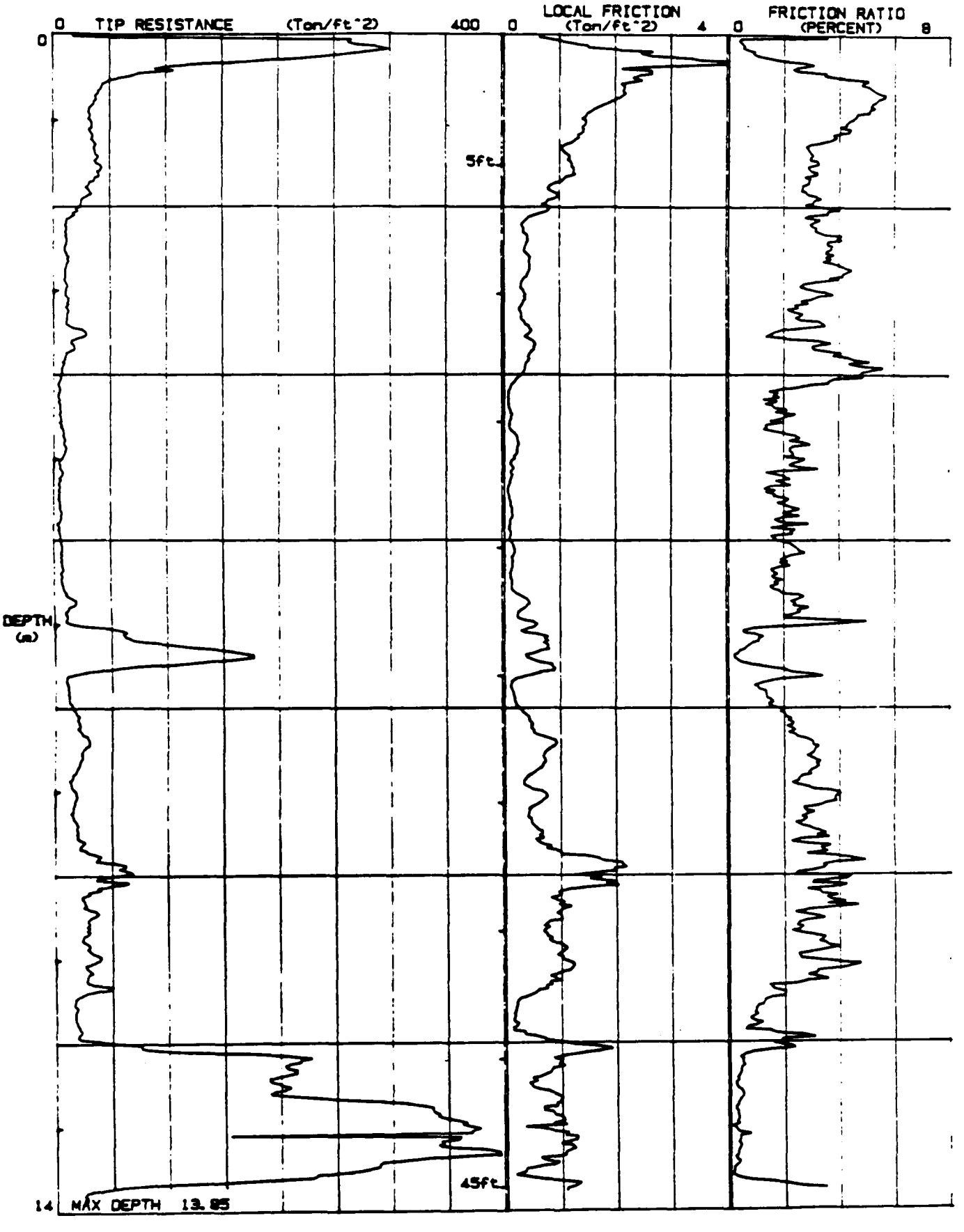
JOB # : 409700
DATE : 03/21/90/07:53
LOCATION : CPT9-26
FILE : FIL138



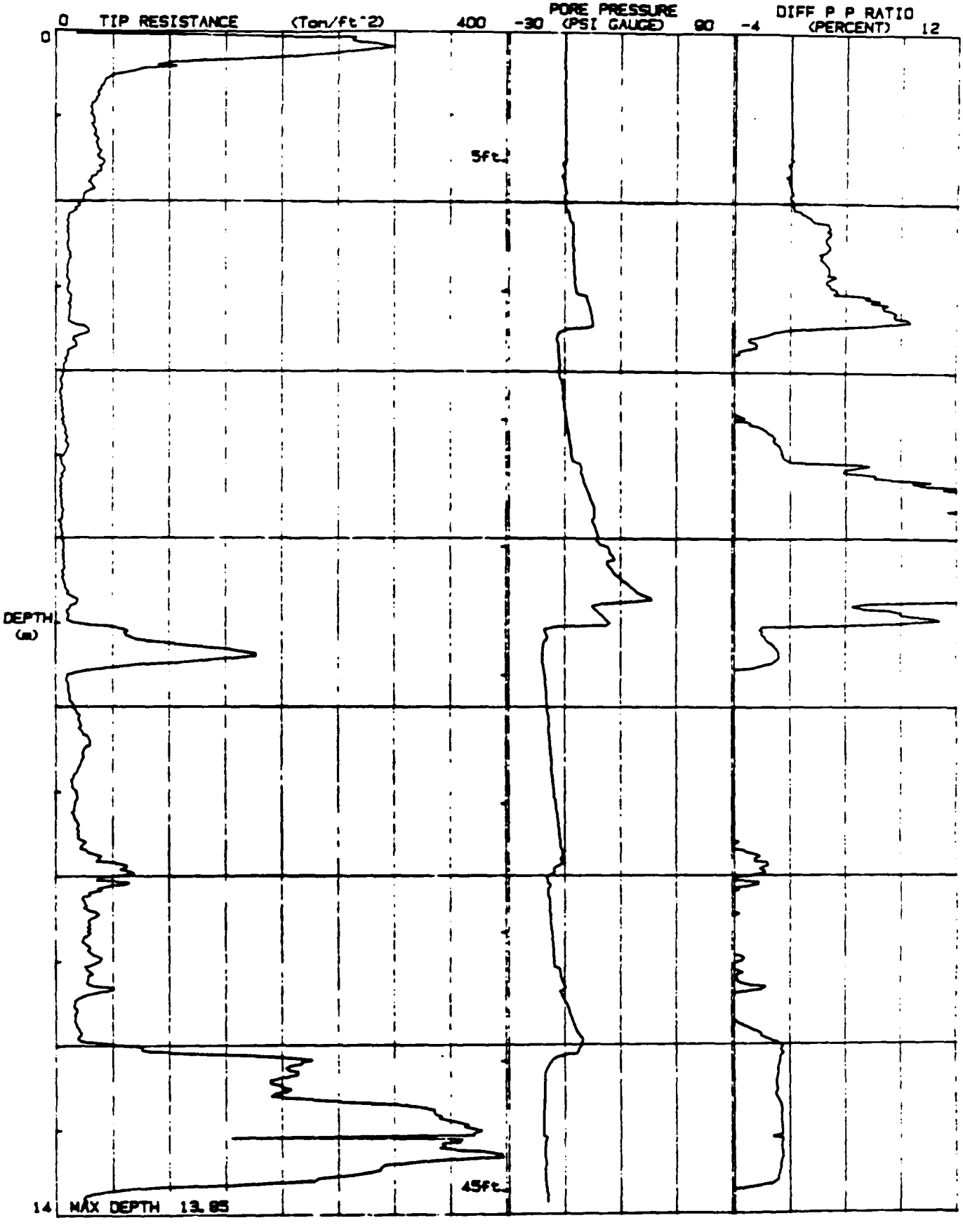
JOB # : 409700
DATE : 03/21/90/07:53
LOCATION : CPT9-28
FILE : FIL138



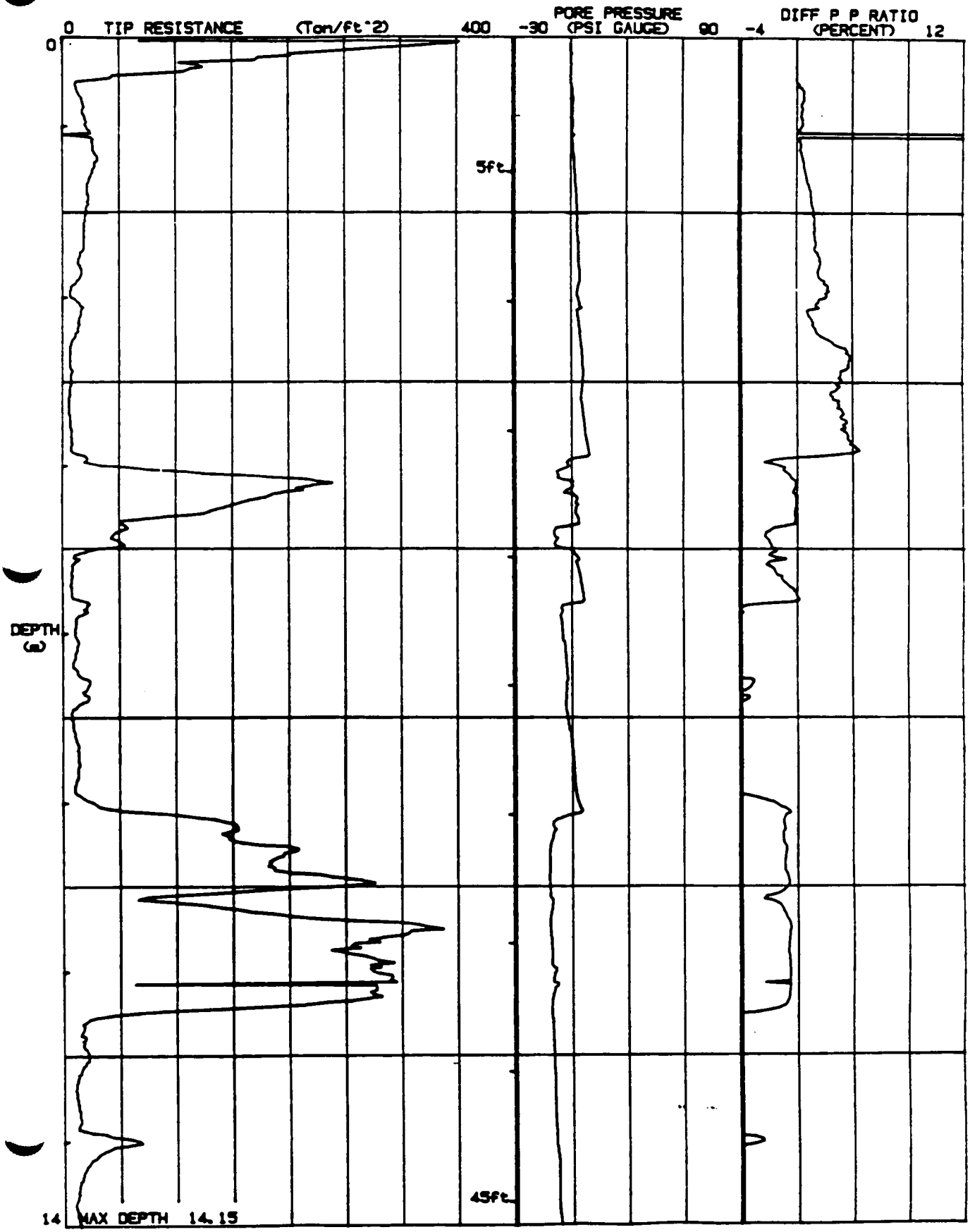
JOB # : 409700
DATE : 03/16/90 12:42
LOCATION : CPT/9-32
FILE : FIL131



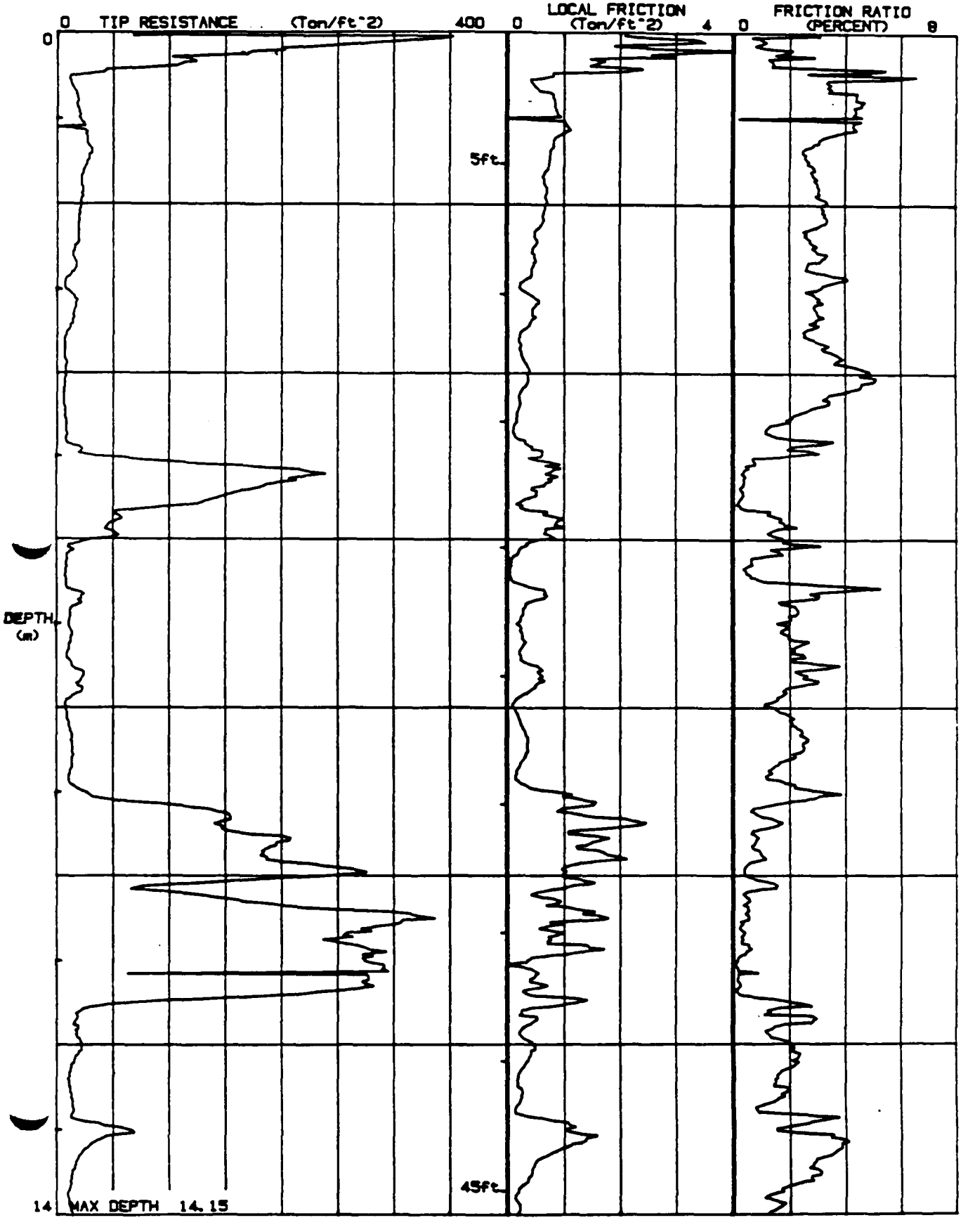
JOB # : 409700
DATE : 03/16/90 12:42
LOCATION : CPT/9-32
FILE : FIL131



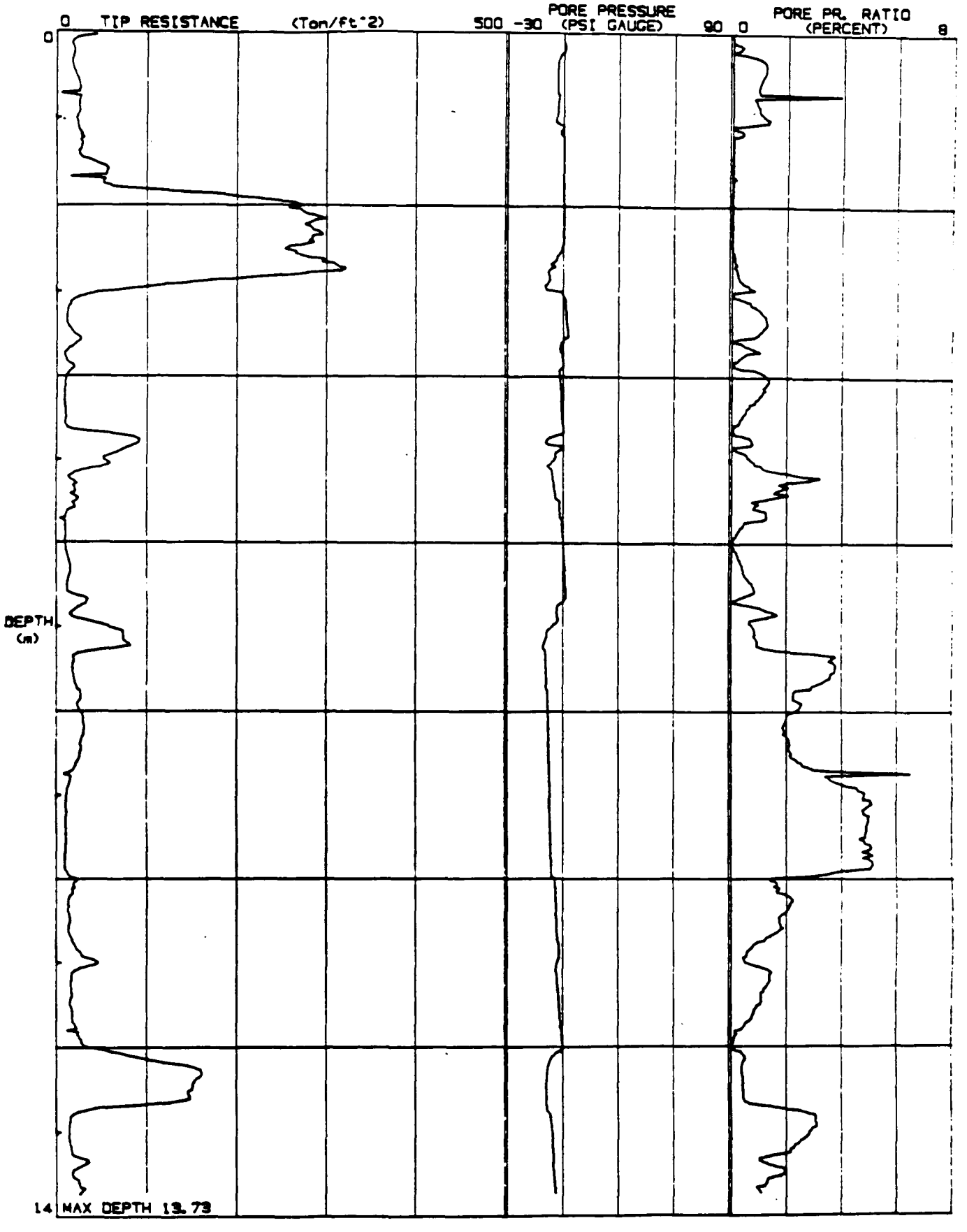
JOB # : 409700
DATE : 04/04/90/14:08
LOCATION : CPT9-38
FILE : FIL148



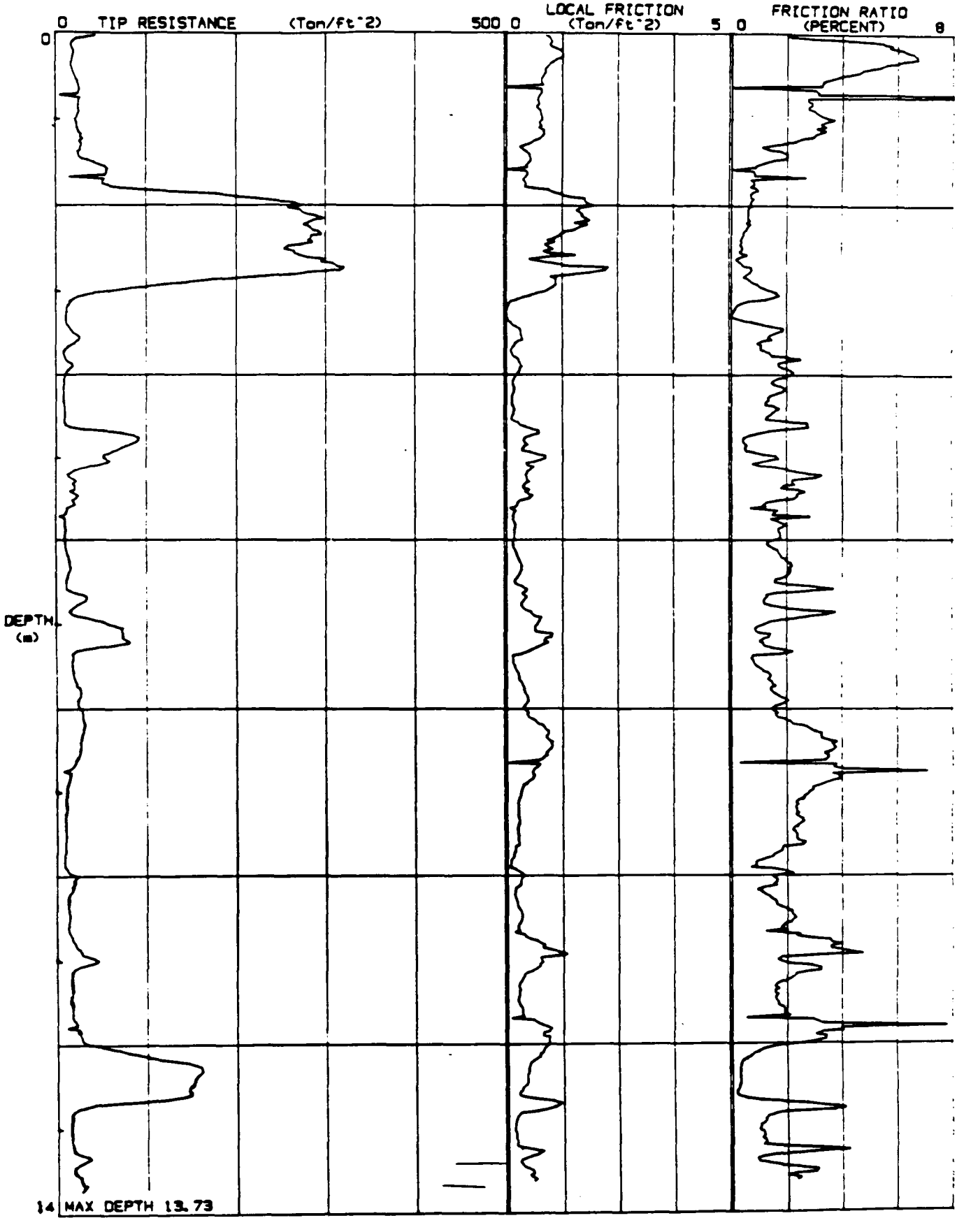
JOB # : 409700
DATE : 04/04/90/14:06
LOCATION : CPT9-36
FILE : FIL148



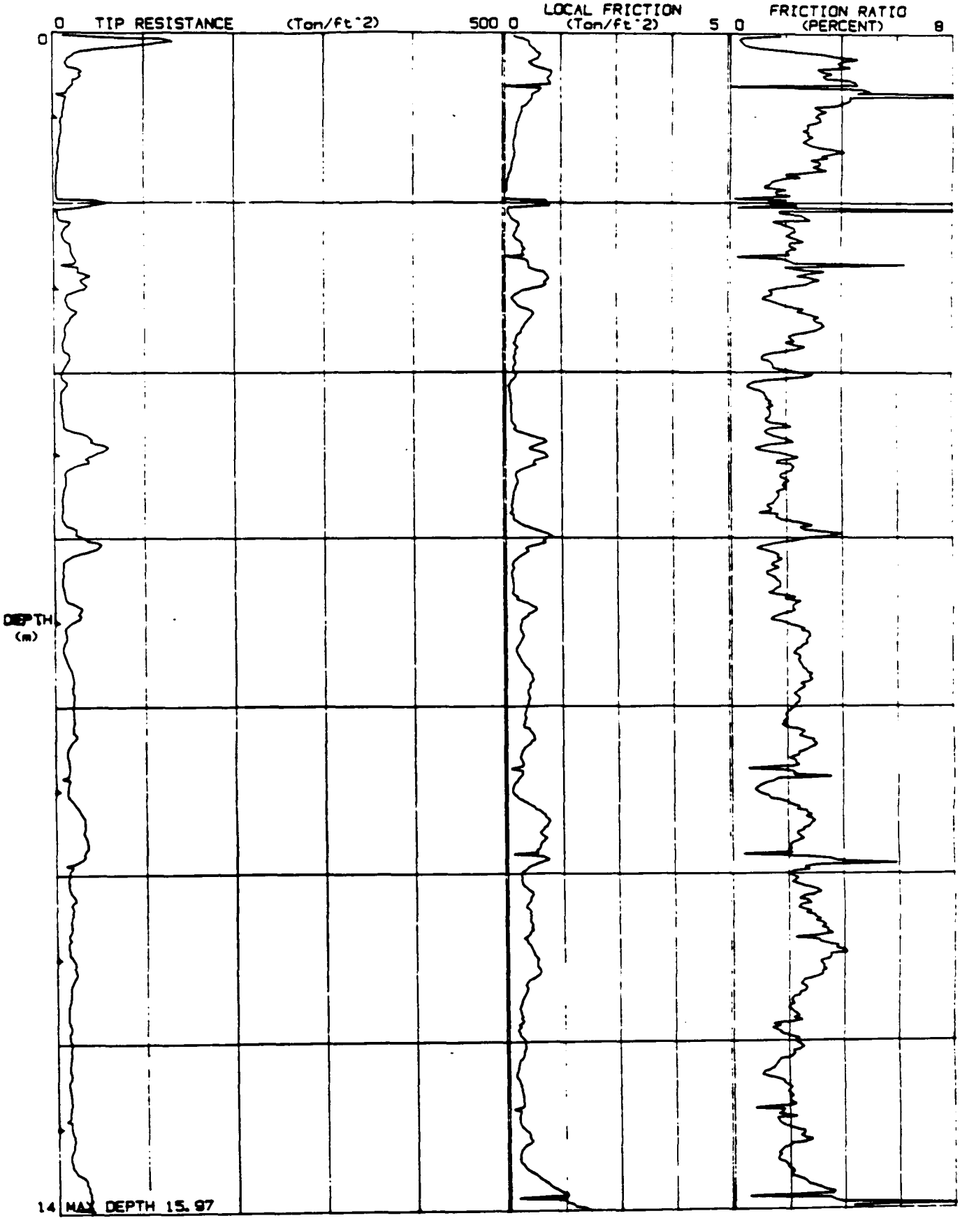
JOB # : 409700
DATE : 01/29/90
LOCATION : CPT/9-39
FILE # : 18



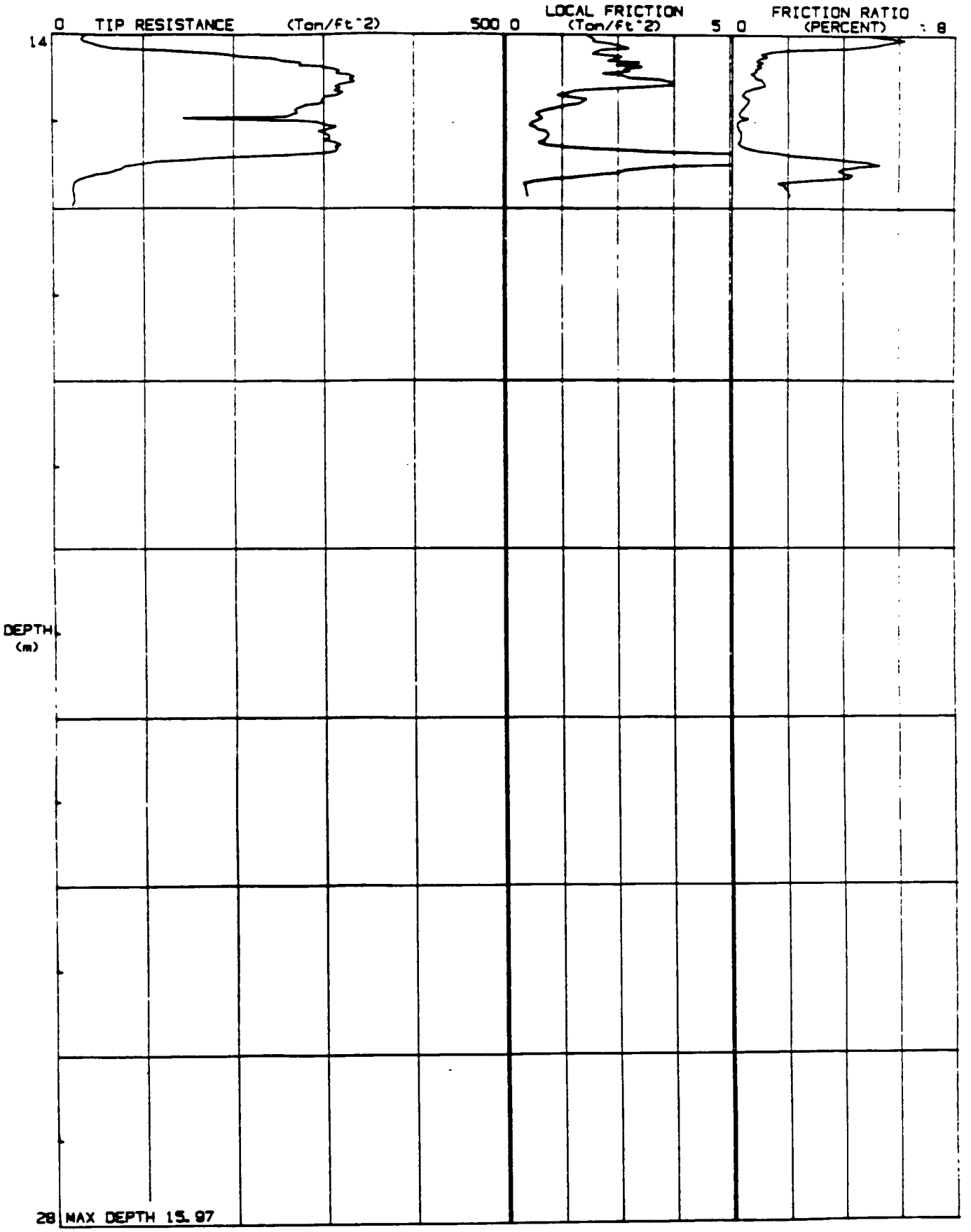
JOB # : 409700
DATE : 01/29/90
LOCATION : CPT/9-39
FILE # : 13



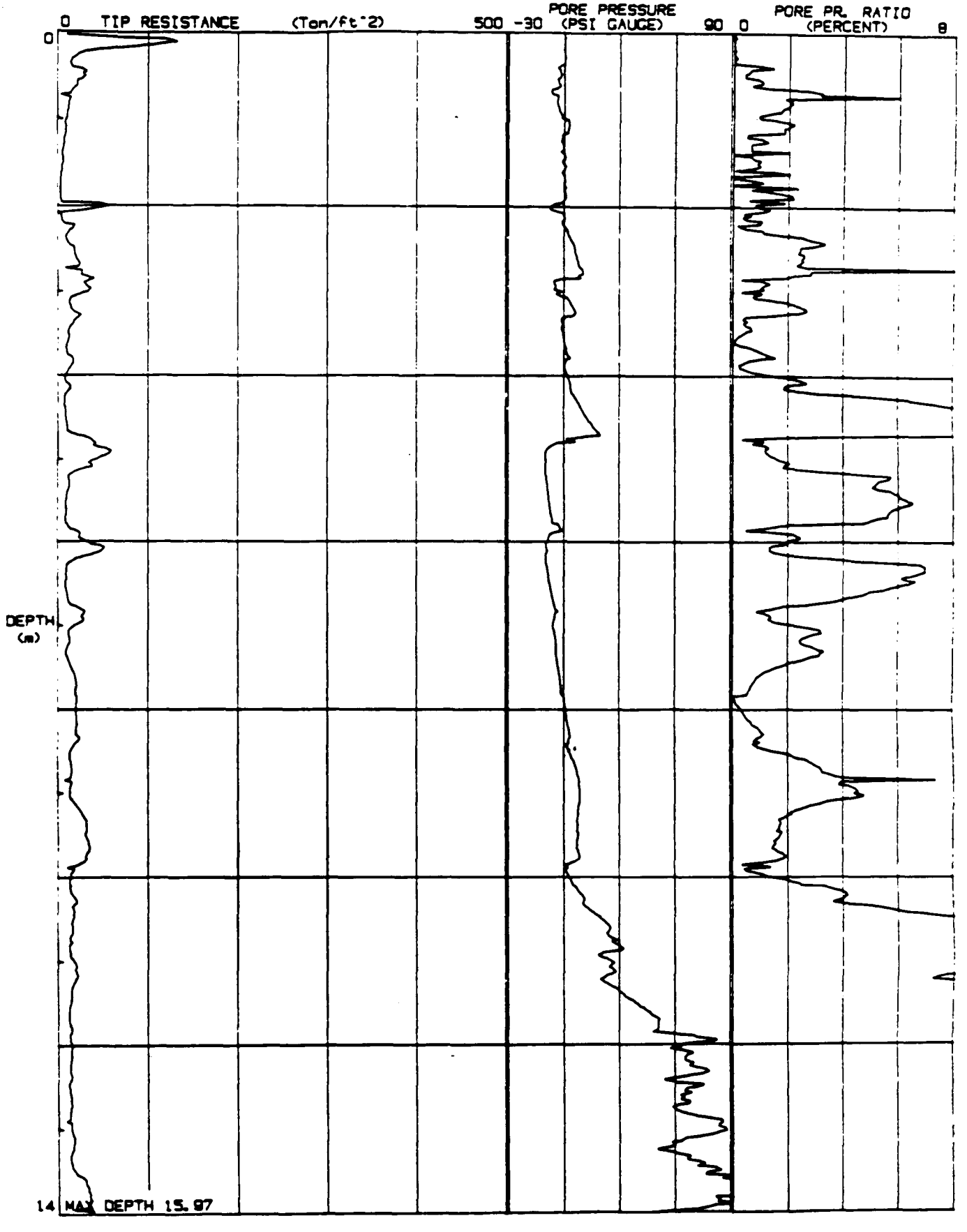
JOB # : 409700
DATE : 01/31/90
LOCATION : CPT/9-40
FILE # : 18



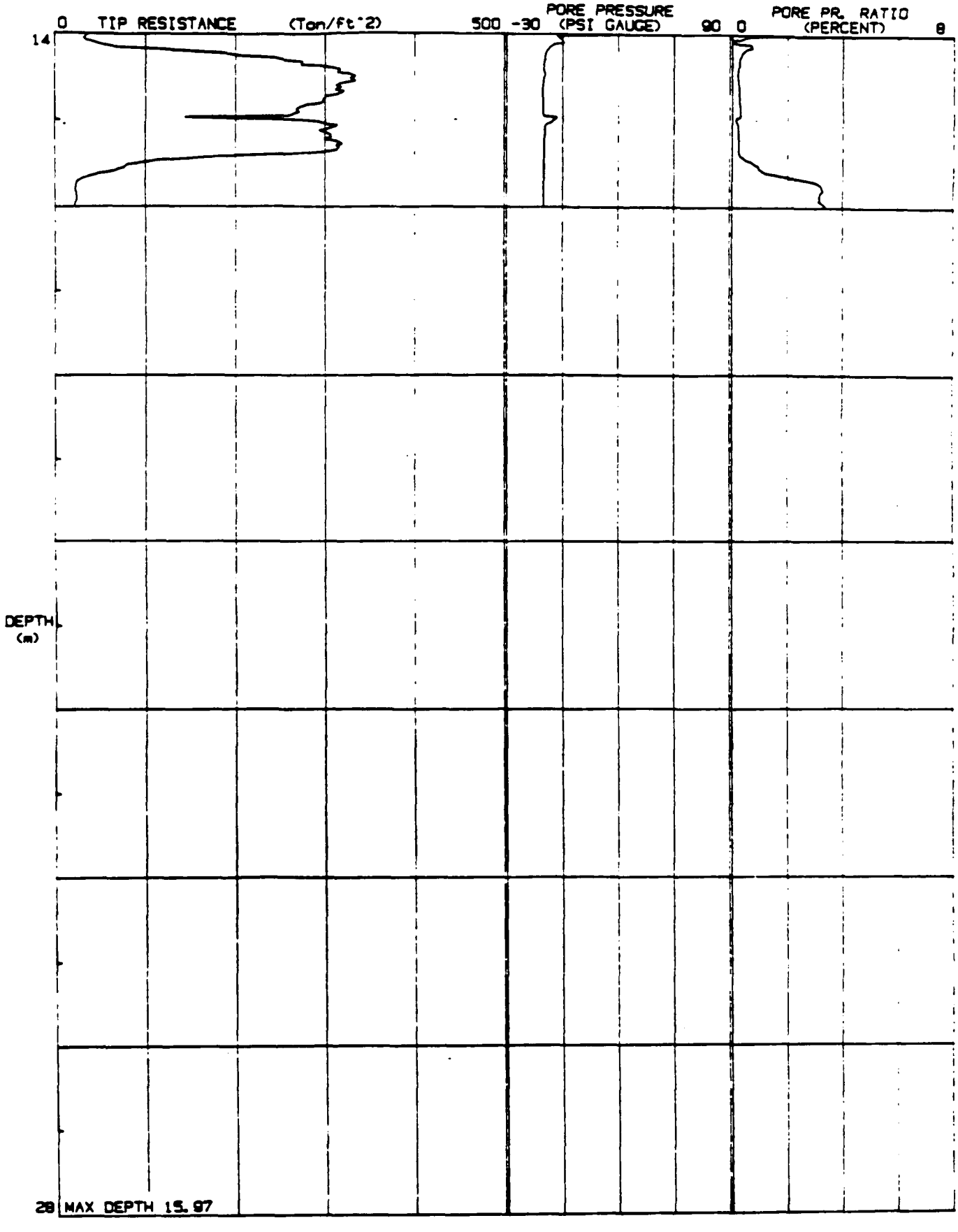
JOB # : 409700
DATE : 01/31/90
LOCATION : CPT/9-40
FILE # : 18



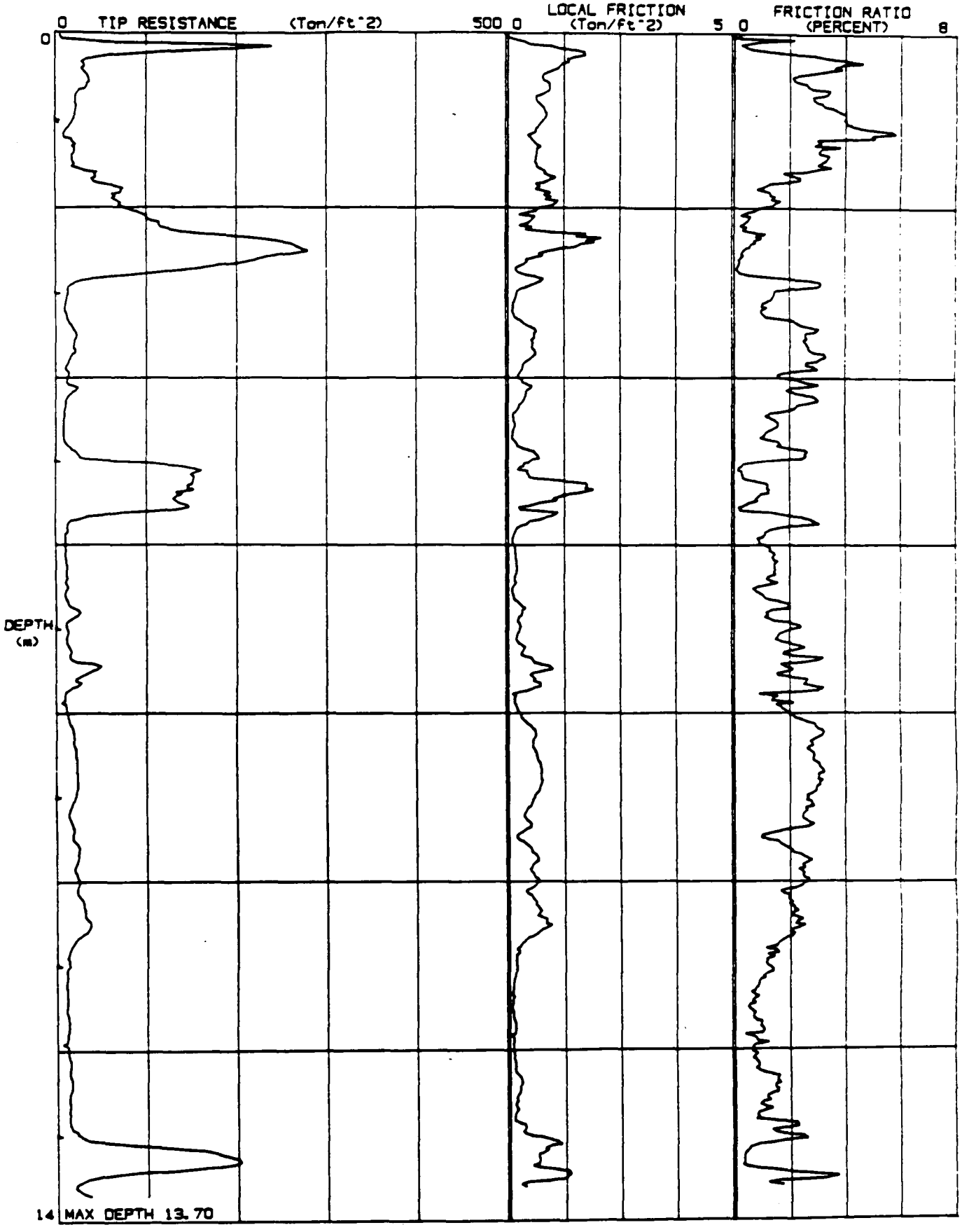
JOB # : 409700
DATE : 01/31/90
LOCATION : CPT/9-40
FILE # : 18



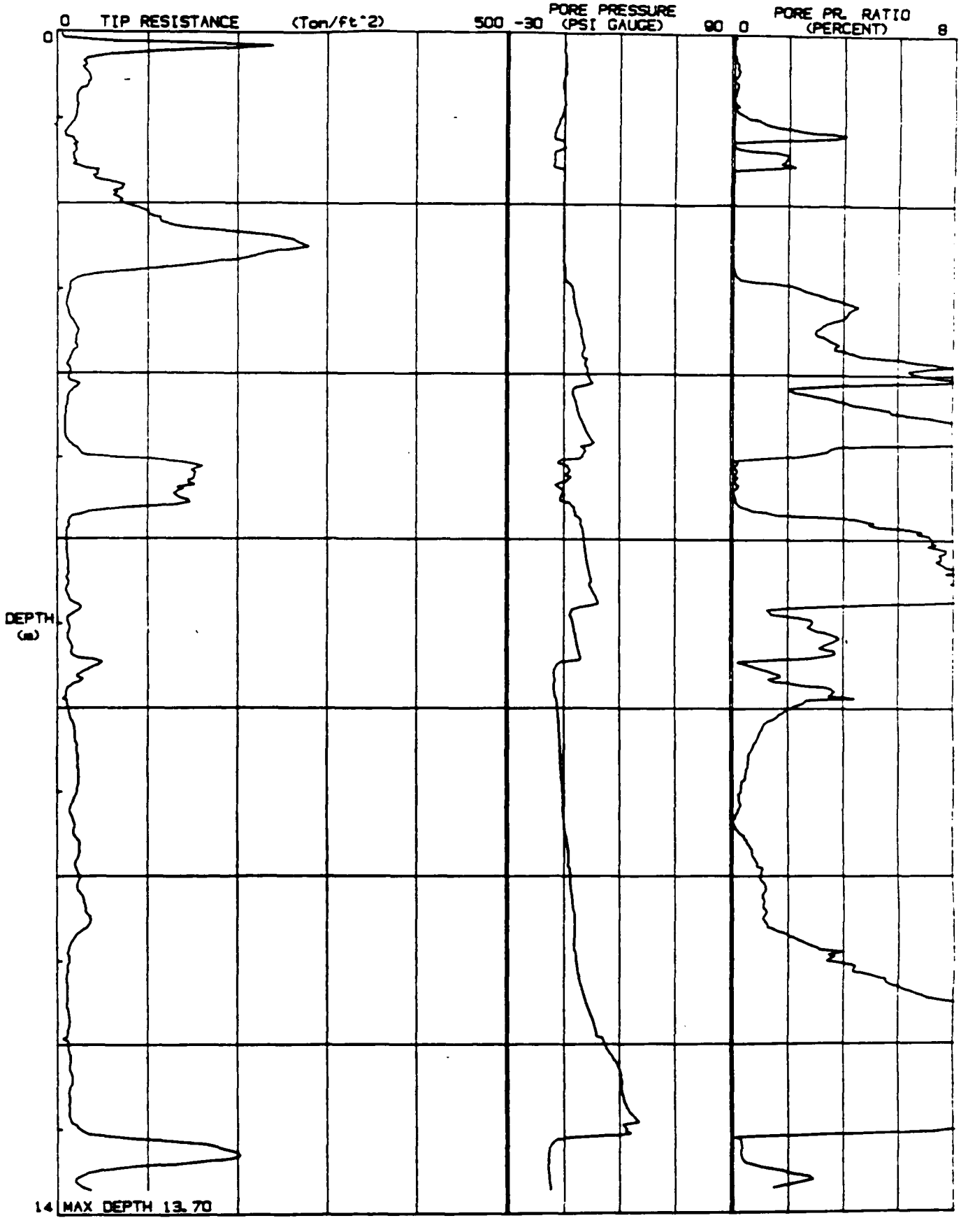
JOB # : 409700
DATE : 01/31/90
LOCATION : CPT/9-40
FILE # : 18



JOB # : 409700
DATE : 01/22/90
LOCATION : CPT/HB-44
FILE # : 4



JOB # : 405700
DATE : 01/22/90
LOCATION : CPT/H9-44
FILE # : 4



N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

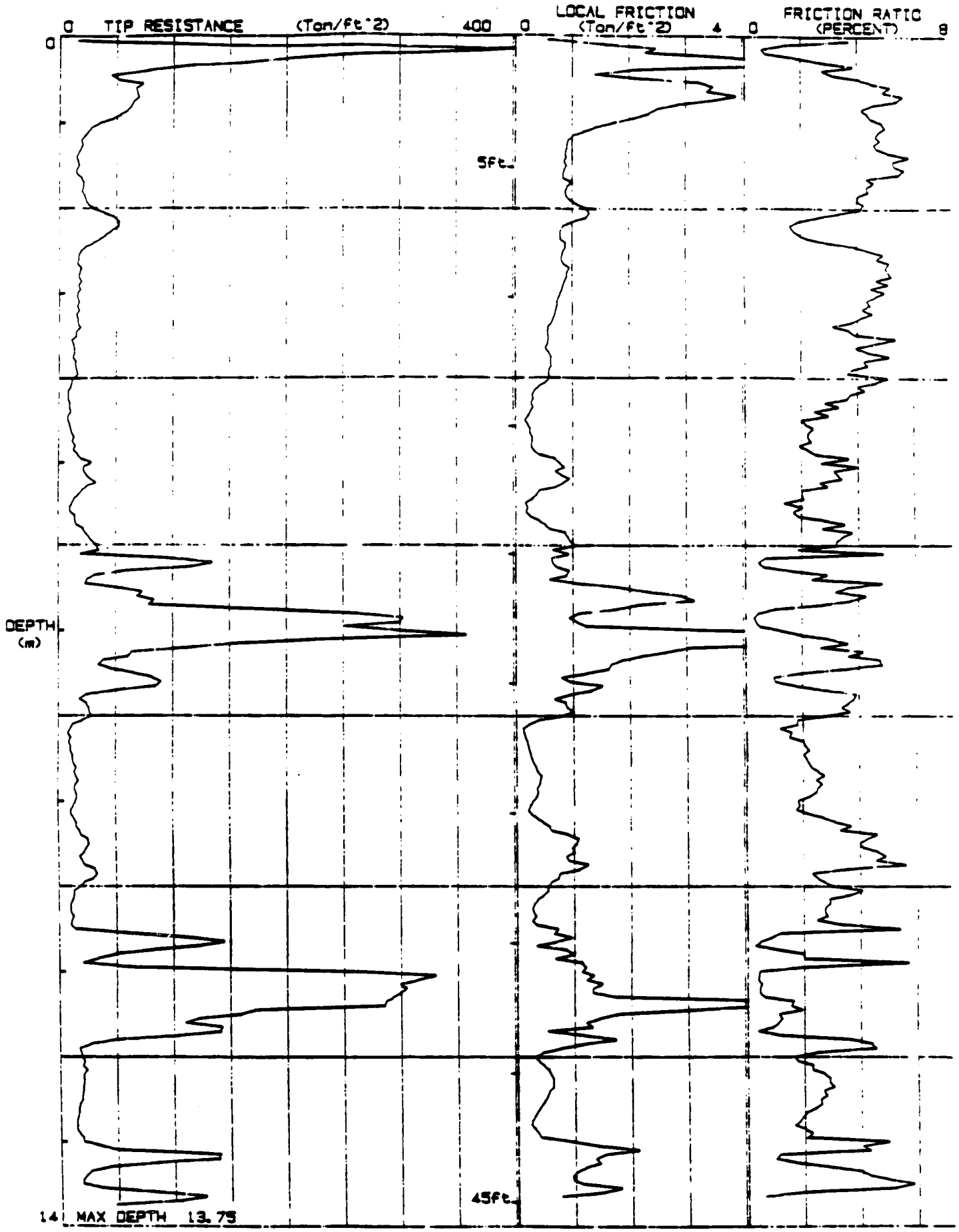
APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 9 – CPT (CLEAN)

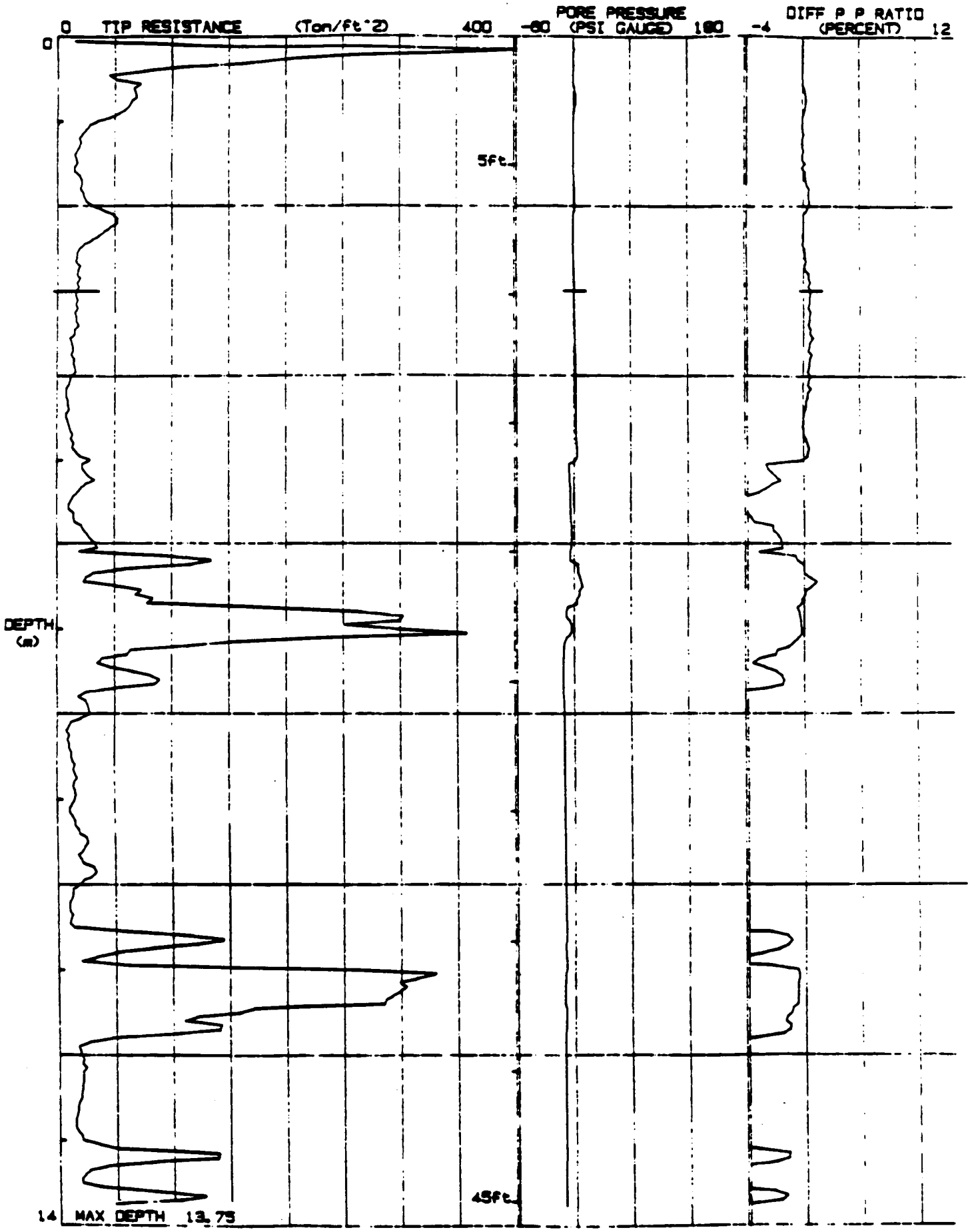
REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

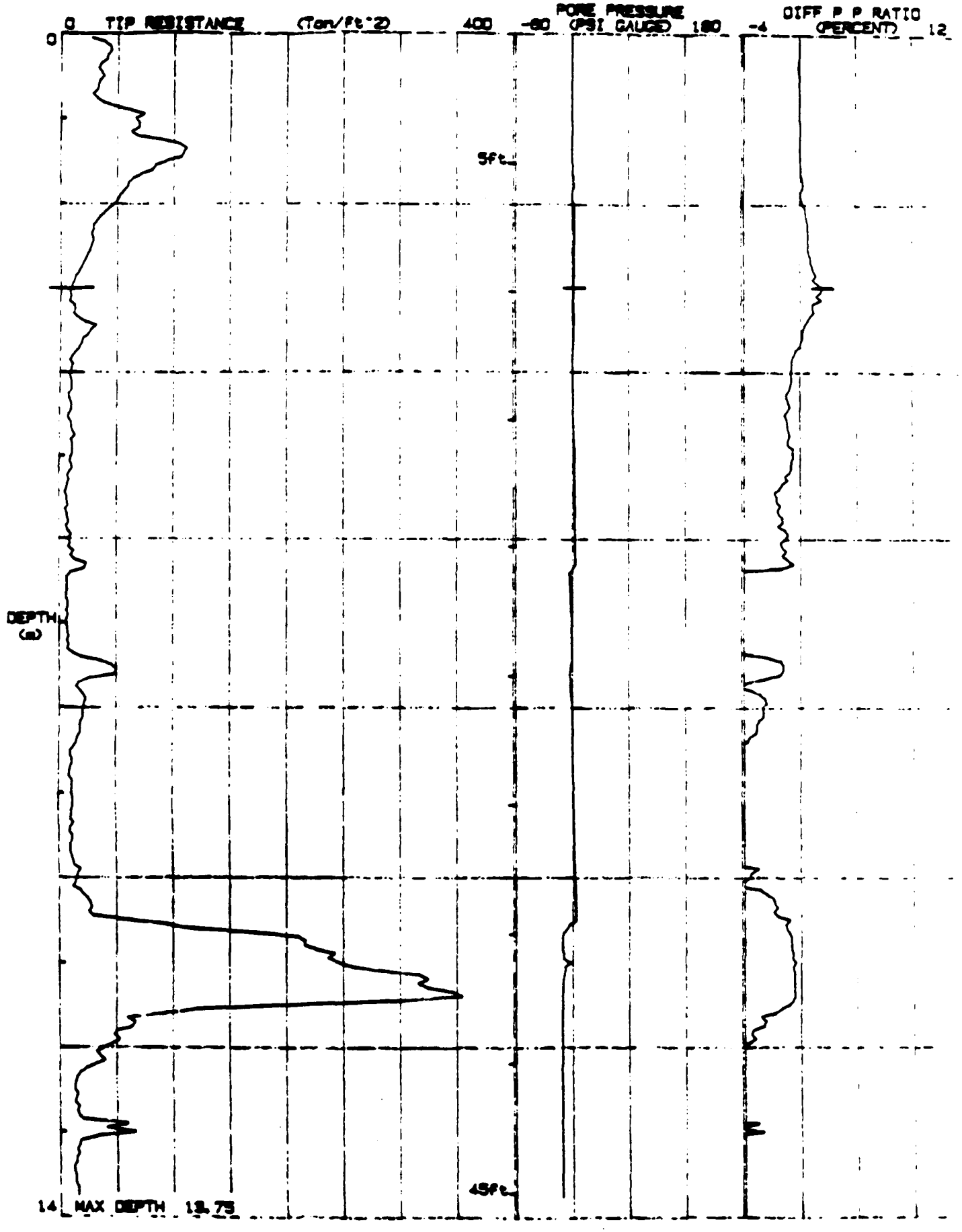
JOB # : 2738.0182
DATE : 10/29/90 15:27
LOCATION : CPT-89-5
FILE : FIL004



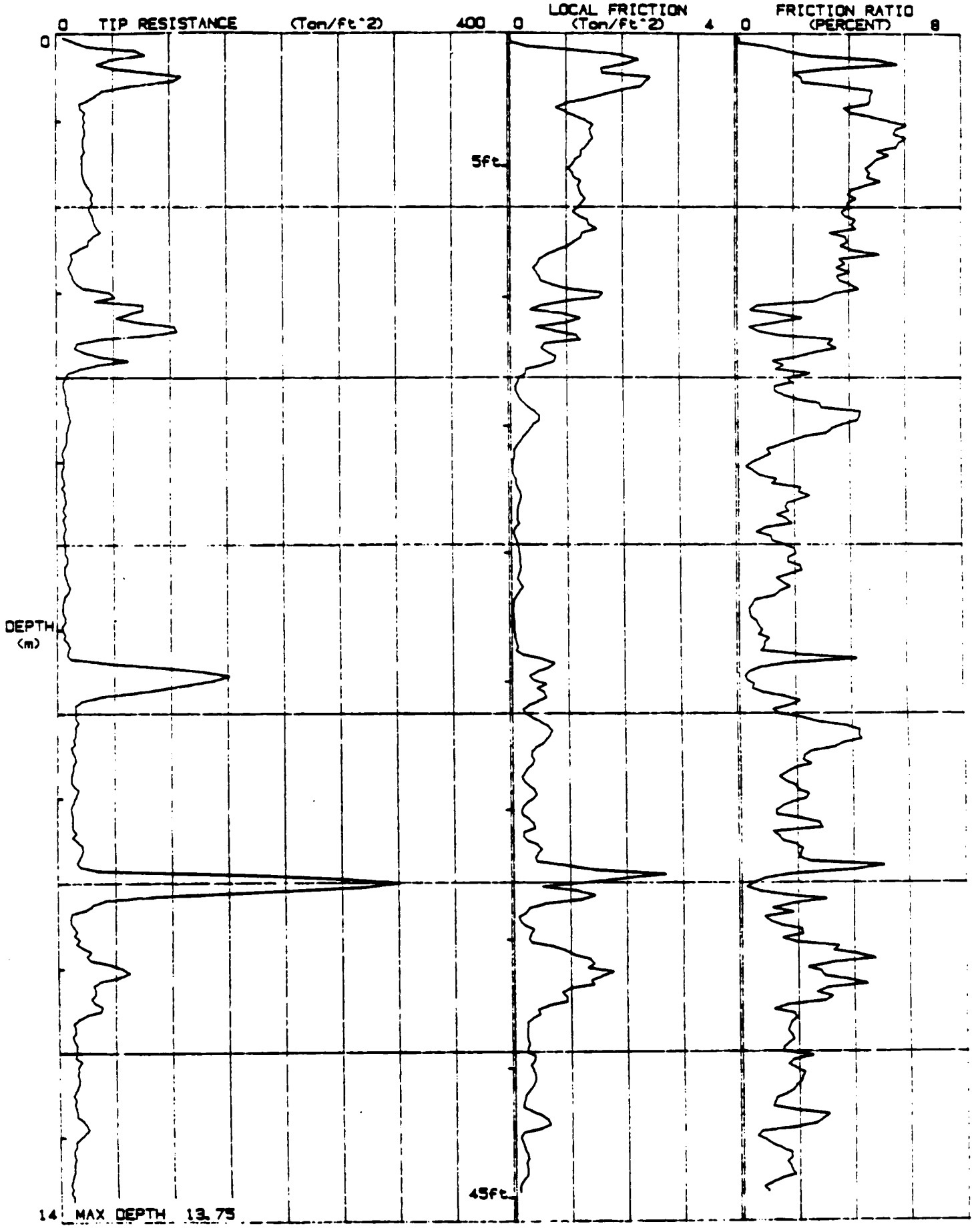
JOB # : 2738.0182
DATE : 10/29/90 15:27
LOCATION : CPT-88-5
FILE : FIL004



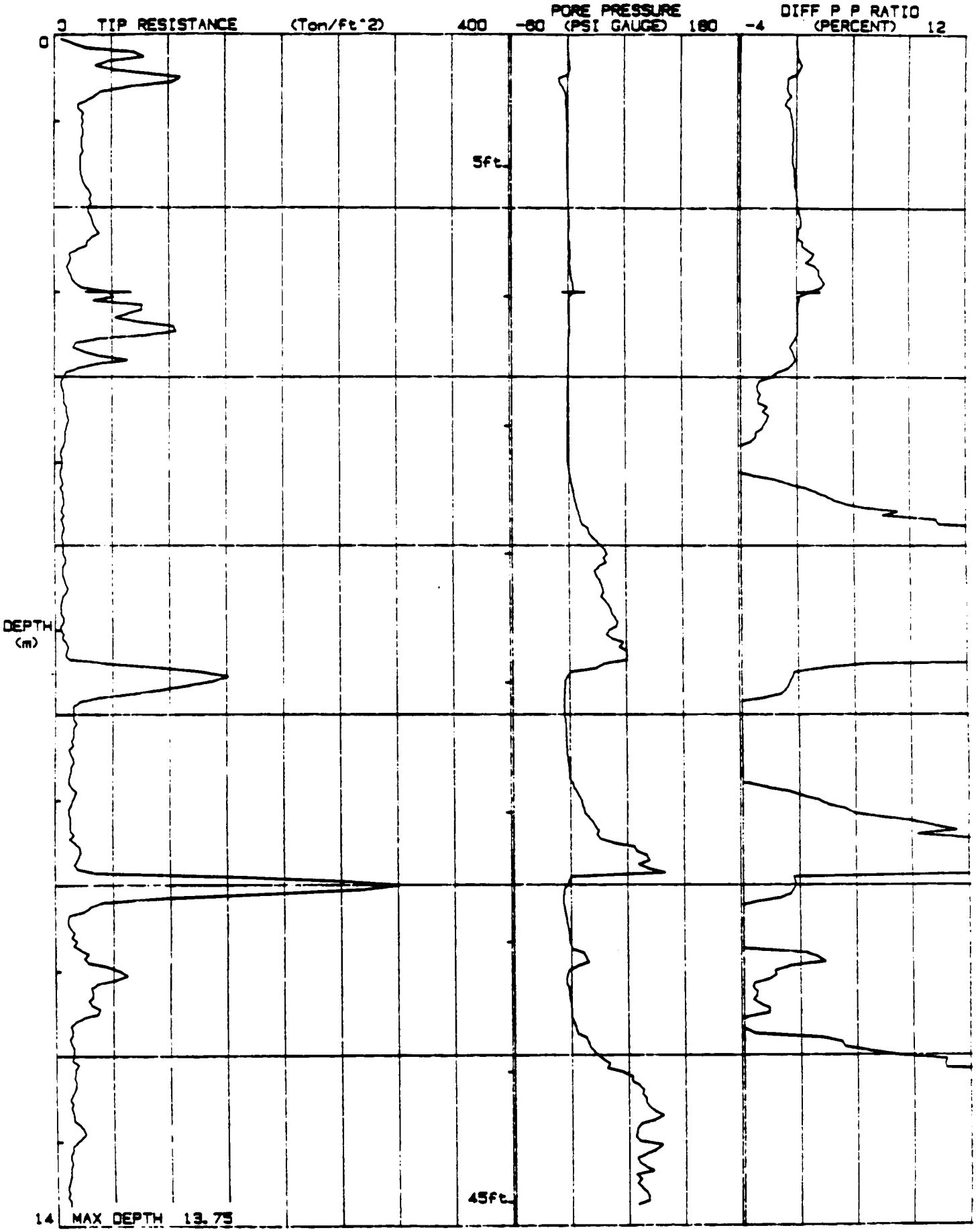
JOB # : 2738.0162
DATE : 10/31/90 12:43
LOCATION : CPT-89-13
FILE : FIL010



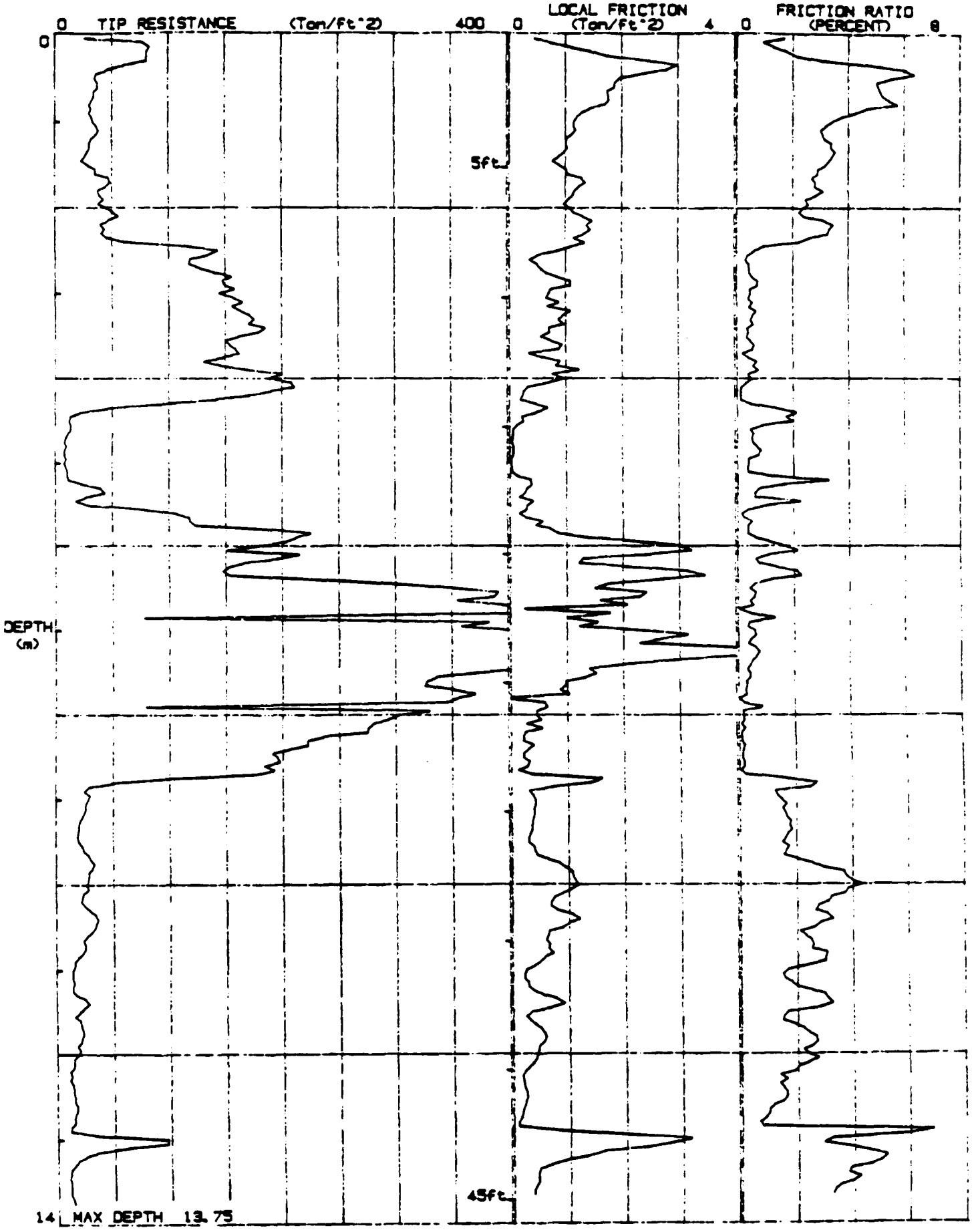
JOB # : 2738.0030
DATE : 11/27/90 15:18
LOCATION : CPT29-18
FILE : FIL029



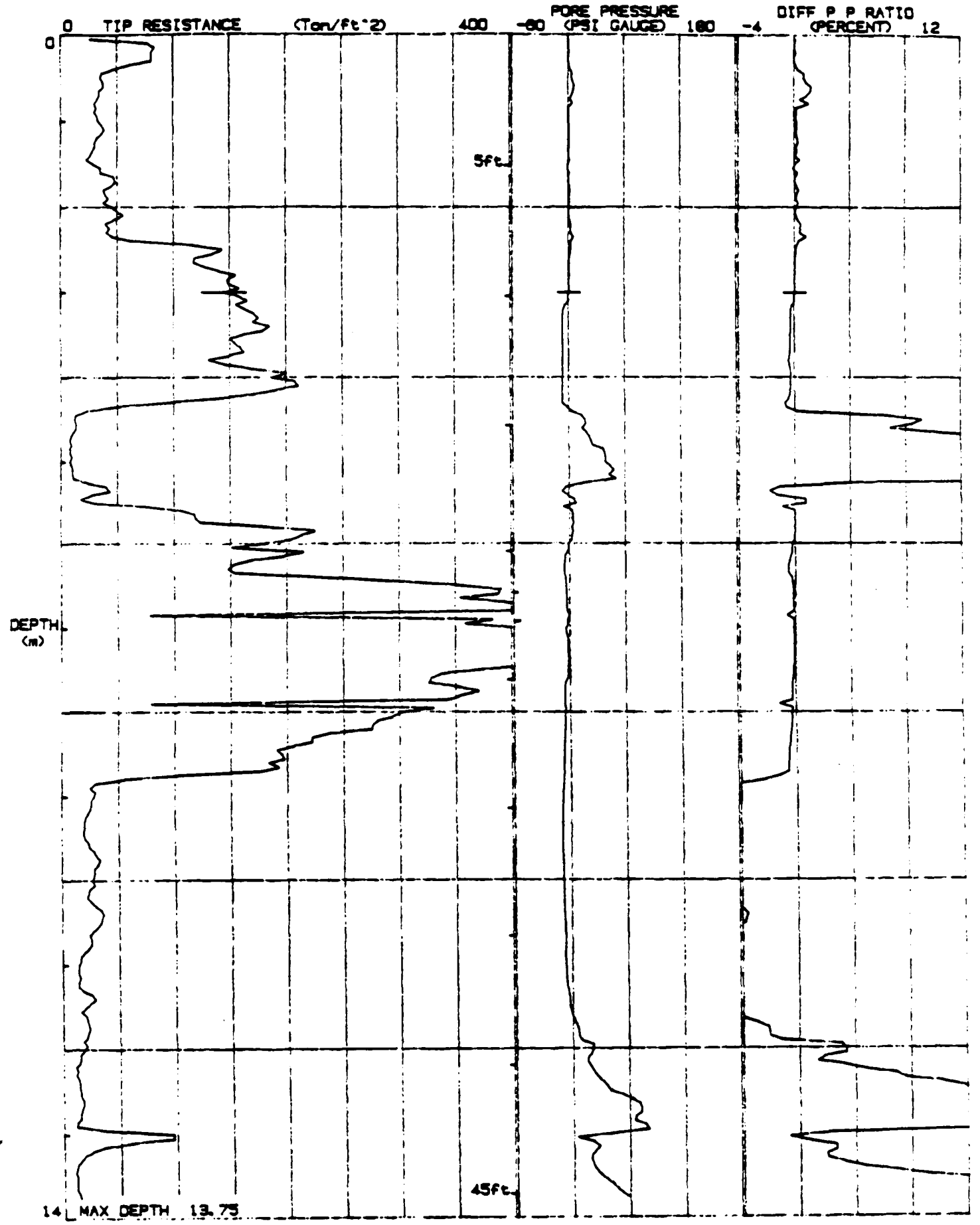
JOB # : 2738.0030
DATE : 11/27/90 15:18
LOCATION : CPT29-18
FILE : FIL029



JOB # : 2738.0030
DATE : 11/27/90 17:49
LOCATION : CPT29-40
FILE : FIL025



JOB # : 2738.0030
DATE : 11/27/90 17:49
LOCATION : CPT29-40
FILE : FIL025



VOLUME 3, APPENDIX C

GEOPHYSICAL LOGS

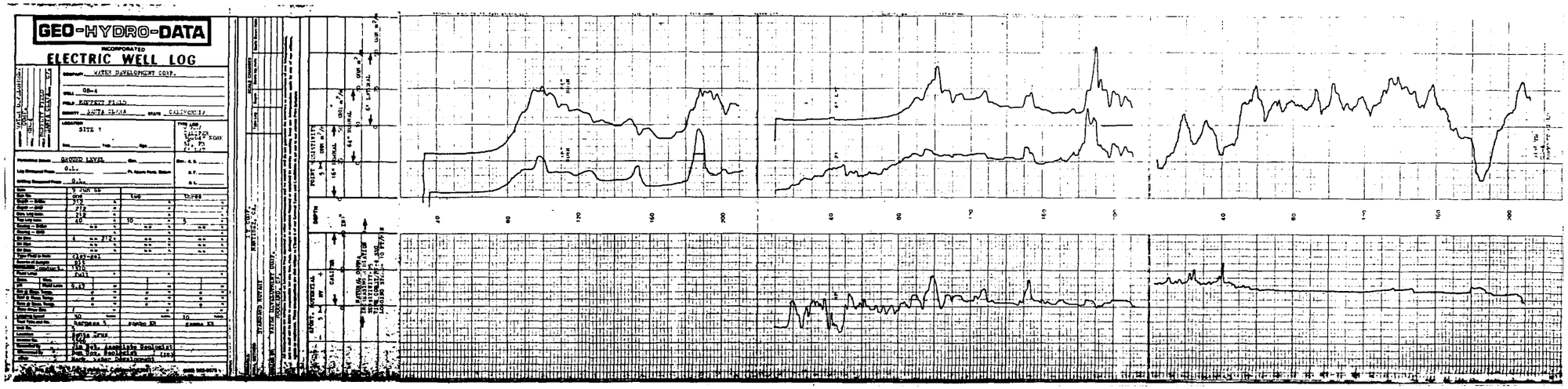
N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

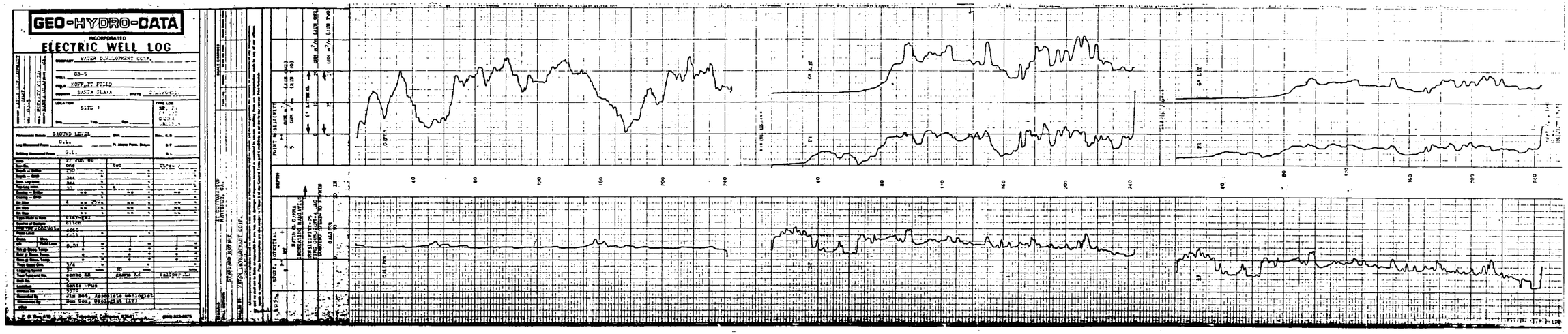
APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 1

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992


GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY WATER DEVELOPMENT CORP.
WELL GB-4
FIELD KOFFEY FIELD
COUNTY SANTA CLARA
STATE CALIFORNIA
LOCATION SITE 1
GROUND LEVEL
O.L.
9 Jun 66
Jim Det. Associate Geologist
Dwn Geol. Geologist
Mark Water Development
STANDARD NOTARY
WATER DEVELOPMENT CORP.
ROCKLAND, CA.
POINT RESISTIVITY
16" NORMAL
64" NORMAL
6" LATERAL
DEPTH
CALIPER
SPOT. POTENTIAL
40
80
120
160
200


GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY WATER DEVELOPMENT CORP.
WELL GB-5
FIELD YOFFETT FIELD
COUNTY SANTA CLARA
LOCATION SITE 1
TYPE LOG
Permanent Datum GROUND LEVEL
Log Measured From G.L.
Drilling Measured From G.L.
Date
Run No.
Depth - Driller
Depth - Grid
Bottom Log Inter.
Top Log Inter.
Casing - Driller
Casing - Grid
Bit Size
Type Fluid in Hole
Source of Sample
Fluid Level
Max. Rec. Temp.
Rec. Temp.
Time Since Circ.
Logging Speed
Tool Type and No.
Unit No.
Location
Recorded By
Witnessed By
Other
Tubesheet Company
STANDARD NORMAL
VAN DEVELOPMENT CORP.
POINT RESISTIVITY
DEPTH
SPOT. POTENTIAL
GALVANIC
CALIPER

GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

WATER DEVELOPMENT
GE-5
VORFIST FIELD
SANTA CLARA, CA.

COMPANY WATER DEVELOPMENT CORP.
WELL GE-5
FIELD VORFIST FIELD
COUNTY SANTA CLARA STATE CALIFORNIA

LOCATION
GATE 15
Sec. Twp. Rge.

TYPE LOG
SP, PR, 6' LAT
NAT. GAMMA
CALIPER
NORMALS

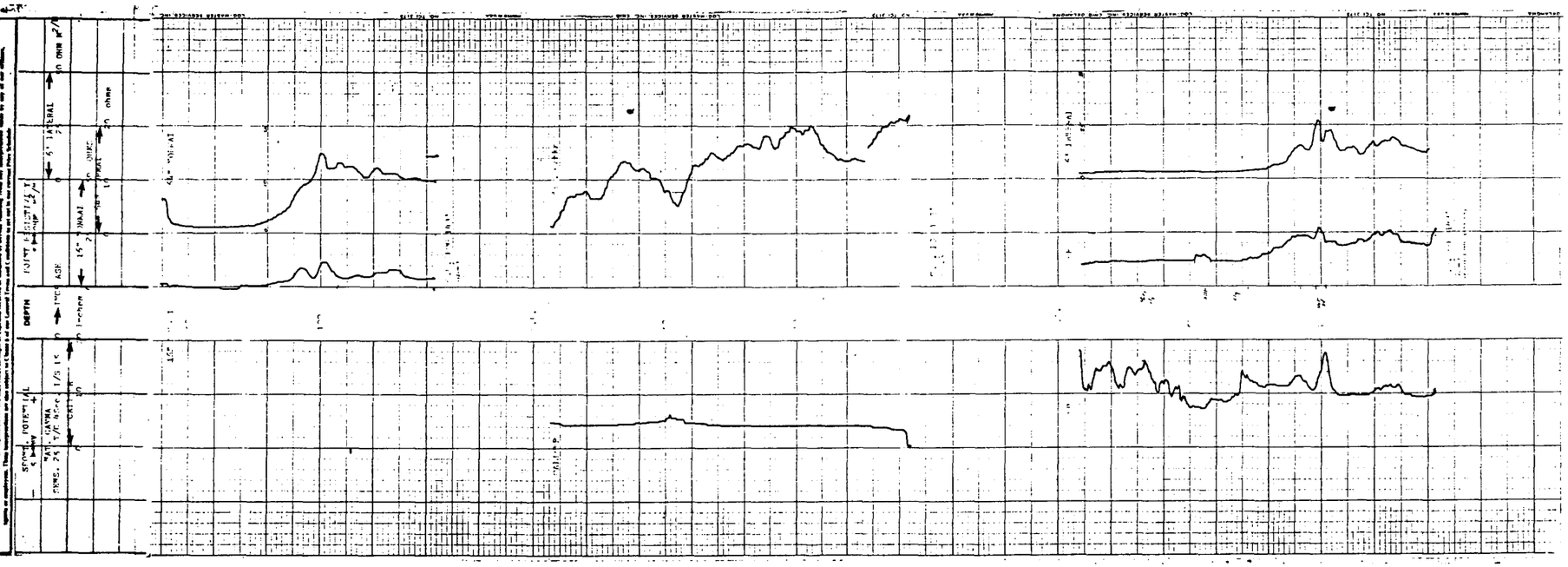
Permanent Datum GROUND LEVEL Elev.
Log Measured From G.L. 0 Ft. Above Perm. Datum
Drilling Measured From GROUND LEVEL
Elev.: K.B.
D.F.
G.L.

Date	14 Nov 58			
Run No.	one	two	three	four
Depth — Driller	163			
Depth — GHD	163			
Btm. Log Inter.	163	163	163	163
Top Log Inter.	0	5	0	0
Casing — Driller	8 @ 8			
Casing — GHD				
Bit Size	8			
Bit Type				
Bit Size				
Type Fluid in Hole	gel			
Source of Sample	pitcher			
Rm @ Meas. Temp.	5610			
Rmf @ Meas. Temp.				
Rmc @ Meas. Temp.				
Fluid Level	full			
Rmf @ Meas. Temp.				
Rmc @ Meas. Temp.				
Source Rmf / Rmc				
Rm @ Bhm. Temp.				
Rmf @ Bhm. Temp.				
Rmc @ Bhm. Temp.				
Time Since Circ.				
Max. Rec. Temp.				
Equip. Location				
Recorded By				
Witnessed By				
Density	8.26			
Viscosity	32sec			
pH / Fluid Loss				
Logging Speed	30	10	10	10
Tool Type and No.	conto 21	sal 7	ronan 3	hec-ess 7
Unit No.	7			
Location	Shafter			
Operator No.	5605			
Recorded By	Mike Alexander Assoc. Geologist			
Witnessed By	Don Cox GEOLOGIST			
Other	Park			

P. O. Box 418 Tehachapi, California 93561 (805) 822-6875

SCALE CHANGES
Time Log Depth Back Up Inch Back Down Inch

REMARKS
FULL WITNESS CONSULTANT
CONSULTING ENGINEER WATER DEVELOPMENT CORP., MARTINEZ, CA.
DRILLED BY WATER DEVELOPMENT
BIT SIZE 8"



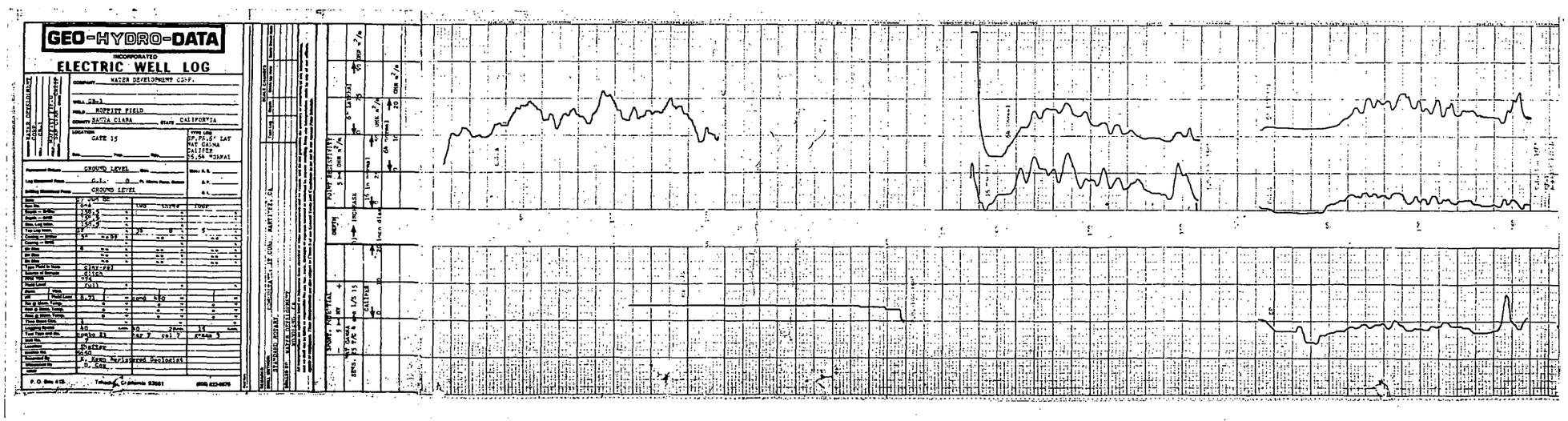
N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 2

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992


GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY WATER DEVELOPMENT CORP.
WELL GB-1
FIELD MOFFITT FIELD
COUNTY SANTA CLARA STATE CALIFORNIA
LOCATION GATE 15
TYPE LOG SP,FR,5' LAT MAT CAMMA CALIPER 55,54 NORMAL
GROUND LEVEL
GROUND LEVEL
STANDARD ROTARY
WATER DEVELOPMENT
MOUNTAIN, CA
DEPTH
INCREASE
CALIPER
SPONT. POTENTIAL
SPONT. RESISTIVITY
P. O. Box 415
Tehachapi, California 93561

GEO-HYDRO-DATA
INCORPORATED

ELECTRIC WELL LOG

WATER DEVELOPMENT CO.P.
OB-2
MOFFETT FIELD
SANTA CLARA

COMPANY WATER DEVELOPMENT CO.P.
WELL OB-2
FIELD MOFFETT FIELD
COUNTY SANTA CLARA STATE CALIFORNIA

LOCATION
Sec. Twp. Rge.

TYPE LOG
SP, PR
64' LAT
GAMMA

Permanent Datum GROUND LEVEL Elev. K.B.
Log Measured From G.L. Ft. Above Perm. Datum D.F.
Drilling Measured From G.L. G.L.

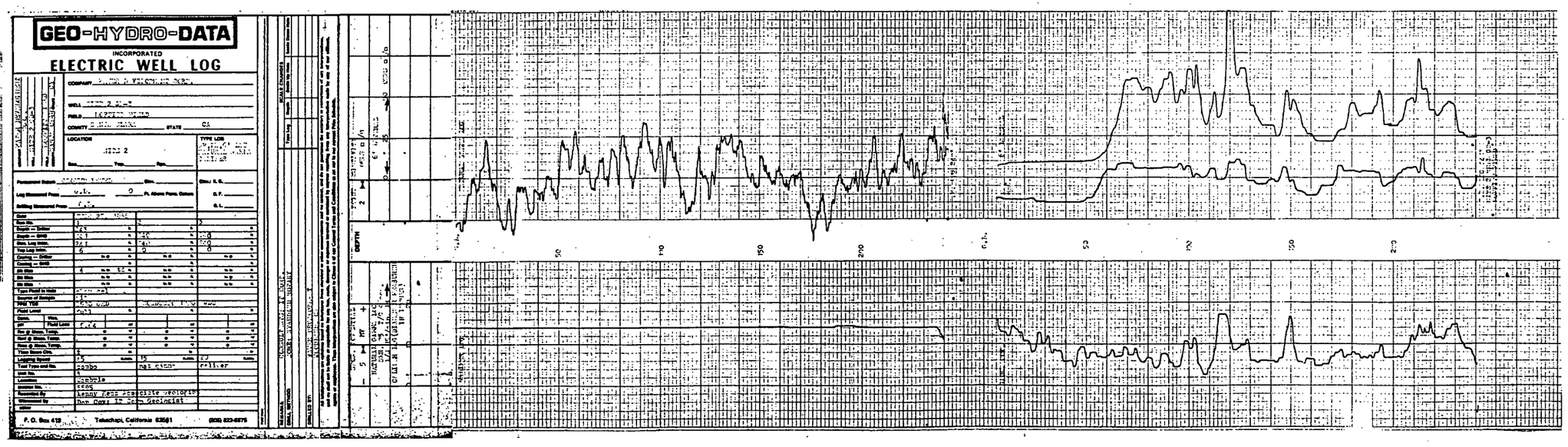
Date	10 JUN 88							
Run No.	one		two					
Depth — Driller	156	ft			ft			ft
Depth — Grd.	154	ft			ft			ft
Bott. Log Inter.	154	ft			ft			ft
Top Log Inter.	10	ft	5		ft			ft
Casing — Driller	n.a.	ft	n.a.		ft	n.a.		ft
Casing — Grd.		ft			ft			ft
Bit Size	4	in. 156	ft	n.a.	ft	n.a.		ft
Bit Size	n.a.		ft	n.a.	ft	n.a.		ft
Bit Size	n.a.		ft	n.a.	ft	n.a.		ft
Type Fluid in Hole	clay-gel							
Source of Sample	pit							
RM@MEAS. Condition	670							
Fluid Level	full		ft		ft			ft
Density / Visc.								
pH / Fluid Loss	6.32		cc		cc			cc
Rm @ Meas. Temp.		@	°F		@ °F			@ °F
Rmf @ Meas. Temp.		@	°F		@ °F			@ °F
Rmc @ Meas. Temp.		@	°F		@ °F			@ °F
Time Since Circ.	1		hr.		hr.			hr.
Logging Speed	30	ft/hr.	10	ft/hr.				ft/hr.
Tool Type and No.	combo KA		REVERS KA					
Unit No.	5							
Location	Santa Cruz							
Recorded By	5704							
Witnessed By	Jim Rat, Associate Geologist							
	Lum Con, IT Corp.							

P. O. Box 418 Tehachapi, California 93561 (805) 822-6375

BIT CONSTRUCTION
NOTHING ON IT.

STANDARD ROTARY

DRILLER BY: WATER DEVELOPMENT CORP.


GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY
WELL
FIELD
COUNTY
STATE CA
LOCATION
TYPE LOG
Permanent Datum
Elev.
Elev. K.B.
Log Measured From
Ft. Above Perm. Datum
D.F.
Drilling Measured From
G.L.
Date
Run No.
Depth — Driller
Depth — GWD
Btm. Log Interval
Top Log Interval
Casing — Driller
Casing — GWD
Bit Size
Type Fluid in Hole
Source of Sample
Rm @ Meas. Temp.
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Time Since Circ.
Logging Speed
Tool Type and No.
Location
Recorded By
Witnessed By
P. O. Box 418
Tehachapi, California 93561
(805) 823-6876
DEPTH
50
100
150
200
250
300
350
400

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 3

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

COMPANY	U S NAVY
WELL	GB-13 SITE 3
FIELD	MOFFETT FIELD
COUNTY	SANTA CLARA STATE CALIFORNIA
LOCATION	Sec. Twp. Rge.
TYPE LOG	SP, PR, 6' LATERAL CALIPER NAT GAMMA
Permanent Datum	GROUND LEVEL Elev.
Log Measured From	G.L. 0 Ft. Above Perm. Datum
Drilling Measured From	GROUND LEVEL
Elev.: K.B.	
D.F.	
G.L.	

Date	31 August 88		
Run No.	one	two	three
Depth — Driller	257		
Depth — GND	252		
Btm. Log Inter.	252		
Top Log Inter.	10	5	5
Casing — Driller	4" ø 8		
Casing — GND			
Bit Size	4 ø TD		
Bit Size			
Bit Size			
Type Fluid in Hole	gel		
Source of Sample	ditch		
PPM TDS	800		
Fluid Level	full		
Date / Time			
pH / Fluid Loss			
Rm @ Meas. Temp.			
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Time Since Circ.	1		
Logging Speed	30	15	15
Tool Type and No.	combo 21	cal 7	gamma 3
Unit No.	7		
Location	Shafter		
Invoice No.	5749		
Recorded By	Mike Alexander Assoc. Geologist		
Witnessed By	Joel Hadsall IT GEOLOGIST		

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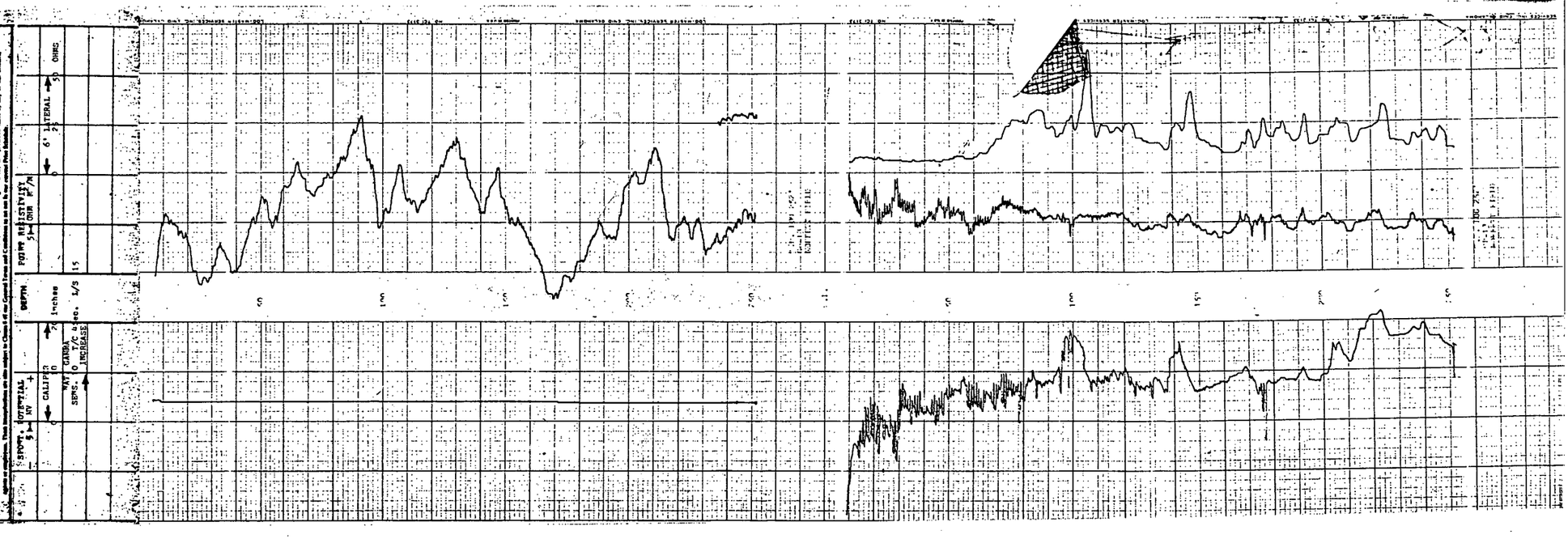
SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

REMARKS:

DRILL METHOD: STANDARD ROTARY CONSULTANT, IT CORPORATION.

DRILLED BY: WATER DEVELOPMENT CORP. MOORLAND, CA.



GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

COMPANY	WATER DEVELOPMENT CORPORATION
WELL	GB-14 Site 3
FIELD	MOFFATT FIELD
COUNTY SANTA CLARA	STATE CALIFORNIA
LOCATION	Sec. Twp. Rge.
TYPE LOG	SP, F2 6' LAT GAMMA CALIPER
Permanent Datum	GROUND LEVEL Elev.
Elev. K.B.	
Log Measured From	G.L. Ft. Above Perm. Datum
G.P.	
Drilling Measured From	G.L.
G.L.	

Date	Sep 1, 1988			
Run No.	one			
Depth — Driller	257			
Depth — Logger	254			
Btm. Log Inter.	254			
Top Log Inter.	10	5		
Casing — Driller				
Casing — Logger				
Bit Size	4	2 7/8		
Bit Size				
Bit Size				
Type Fluid in Hole	clay-gel			
Source of Sample	pit			
RM @ Meas. Temp.	840			
Rmf @ Meas. Temp.	full			
Rmc @ Meas. Temp.				
Source: Rmf / Rmc				
pH / Fluid Loss	7.55			
Rm @ Meas. Temp.				
Rmf @ Meas. Temp.				
Rmc @ Meas. Temp.				
Time Since Circ.	1/2			
Logging Speed	30	10		
Tool Type and No.	combo 5	gamma 1	caliper M2	
Unit No.	5			
Location	Santa Cruz			
Operator No.	5805			
Recorded by	Jim Rat, Associate Geologist			
Witnessed by other	Kyle, Driller			

P. O. Box 418 Tehachapi, California 93561 (805) 823-8676

Mr. Mrs. Miss

STANDARD BOREHOLE

WATER DEVELOPMENT CORP.

GB-14

MOFFATT FIELD

SANTA CLARA Co.

GO AP.

WATER DEVELOPMENT CORP.

GB-14

MOFFATT FIELD

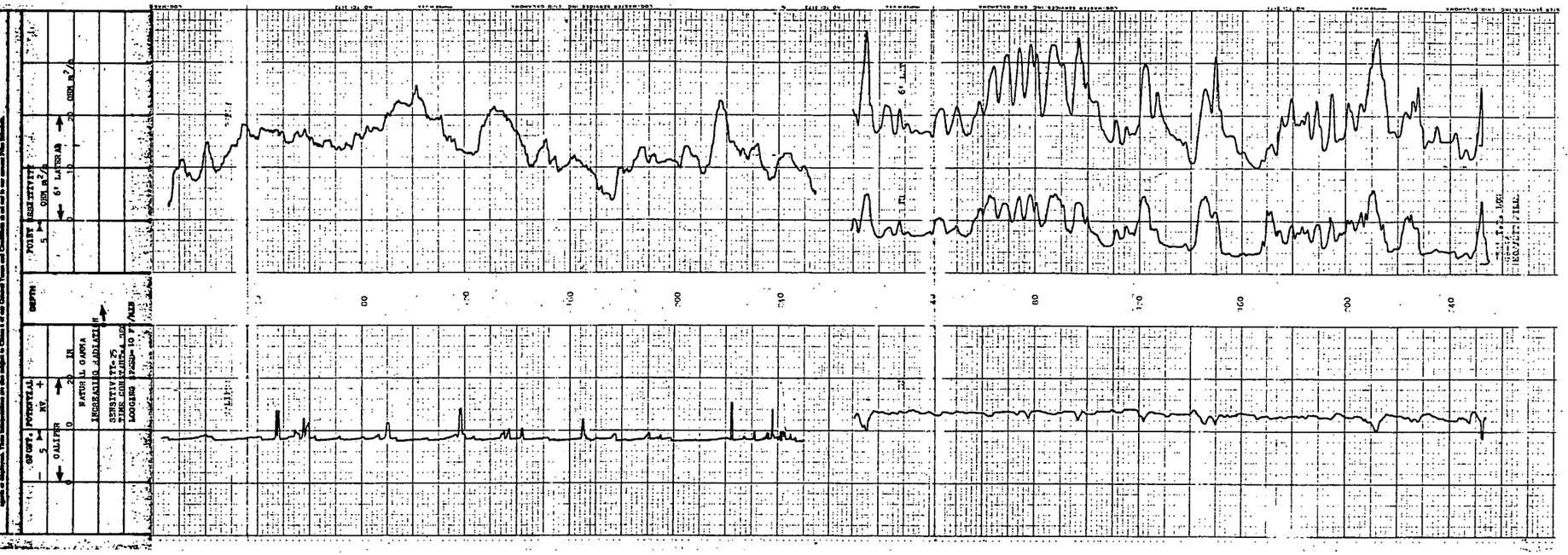
SANTA CLARA Co.

SCALE CHANGES: Depth, Time Log, Down to Hole, Back Up Hole

REMARKS:

DRILL BITS:

DRILLED BY:



GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

THE WATER DEVELOPMENT CORP. (IT)
MOFFETT FIELD
GOLF COURSE
SANTA CLARA CO. CALIF.

COMPANY THE WATER DEVELOPMENT CORP. (IT)
MOFFETT FIELD
WELL GB-15 STA. 3
FIELD GOLF COURSE
COUNTY SANTA CRARA STATE CALIFORNIA

LOCATION
GOLF COURSE
Sec. Twp. Rge.

TYPE LOG
SP FR 6' LAT.
NAT. GAMMA
CALIPER

Permanent Datum GROUND LEVEL Elev.
Log Measured From G.L. 0 Ft. Above Perm. Datum
Drilling Measured From G.L.
Elev.: K.B.
D.F.
G.L.

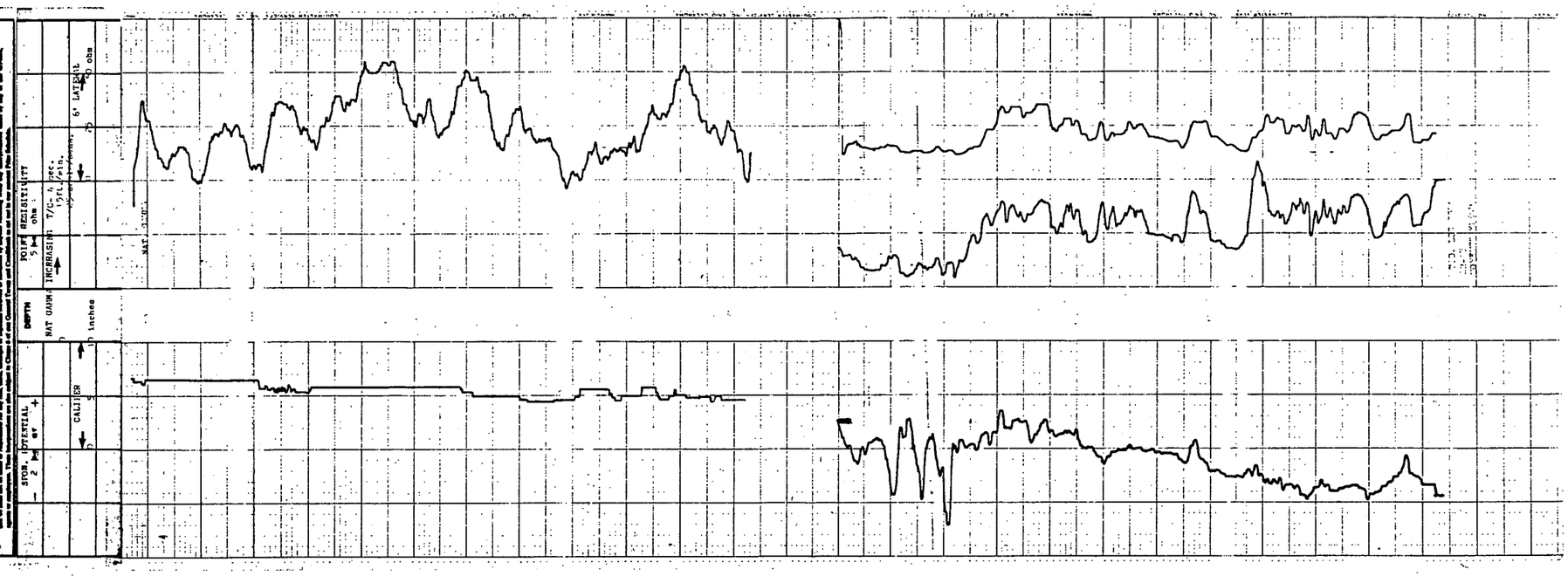
Date	16 SEPT.78			
Run No.	ONE			
Depth — Driller	236			
Depth — SMD	236			
Btm. Log Inter.	236			
Top Log Inter.	4			
Casing — Driller				
Casing — SMD				
Bit Size	4			
Bit Size				
Bit Size				
Type Fluid in Hole	WATER			
Source of Sample	PIT			
RM @ TEMP				
Fluid Level	8			
Density / Visc.				
pH / Fluid Loss	9.5			
Rm @ Meas. Temp.	.7@ @ 70			
Rmf @ Meas. Temp.				
Rmc @ Meas. Temp.				
Time Since Circ.	12			
Logging Speed	15 & 35			
Tool Type and No.	ALL-24			
Unit No.	2			
Location	STOCKTON,CA.			
Inventory No.	5275			
Recorded By	D. SHAWGO/MSB (ASSOCIATE GEOLOGIST)			
Witnessed By	JOE BASSETT (IT)			
Editor	STAR TOP CLERK			

P. O. Box 418 Tehachapi, California 93561 (805) 822-6575

SCALE CHANGES
Depth | Scale Down Hole
Time Log | Scale Up Hole

REMARKS: IT CORP. - COMPLETION
DRILL METHOD: ROTARY
DRILLED BY: THE WATER DEVELOPMENT CORP.
ROCKLIN, CA.

All interpretations in this report based on inferences from electrical or other measurements, and we can, therefore, not guarantee the accuracy or correctness of any such interpretations, and we shall not be responsible for any loss or damage arising from the use of such interpretations. This interpretation is also subject to Clause 4 of our General Terms and Conditions as set forth in our current Price Schedule.



GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

COMPANY	WATER DEVELOPMENT CORPORATION
WELL	GH-16 SITE 3
FIELD	MOORPARK FIELD
COUNTY	SANTA CLARA STATE CALIFORNIA
LOCATION	Sec. Twp. Rge.
TYPE LOG	SP, FR 6' LAT GAMMA CALIPER
Permanent Datum	GROUND LEVEL Elev.
Log Measured From	G.L. Ft. Above Perm. Datum
Drilling Measured From	G.L.
Elev.: K.B.	
D.F.	
G.L.	

Date	8 Sep 85		
Run No.	one	two	three
Depth — Driller	257		
Depth — SKID	254		
Elev. Log Inter.	254		
Top Log Inter.	12		
Casing — Driller			
Casing — SKID			
Bit Size	4	257	
Bit Size			
Bit Size			
Type Fluid in Hole	clay-gel		
Source of Sample	pit		
PPM TDS	780		
Fluid Level	full		
Dens. / Visc.			
pH / Fluid Loss	7.80		
Rm @ Meas. Temp.			
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Time Since Circ.	1		
Logging Speed	30	10	
Tool Type and No.	combo 5	gamma 1	Caliper
Unit No.	5		
Location	Santa Cruz		
Invoice No.	5909		
Recorded By	Jim Bet, Associate Geologist		
Witnessed By	Joel Hedsell, IT Corp.		
other			

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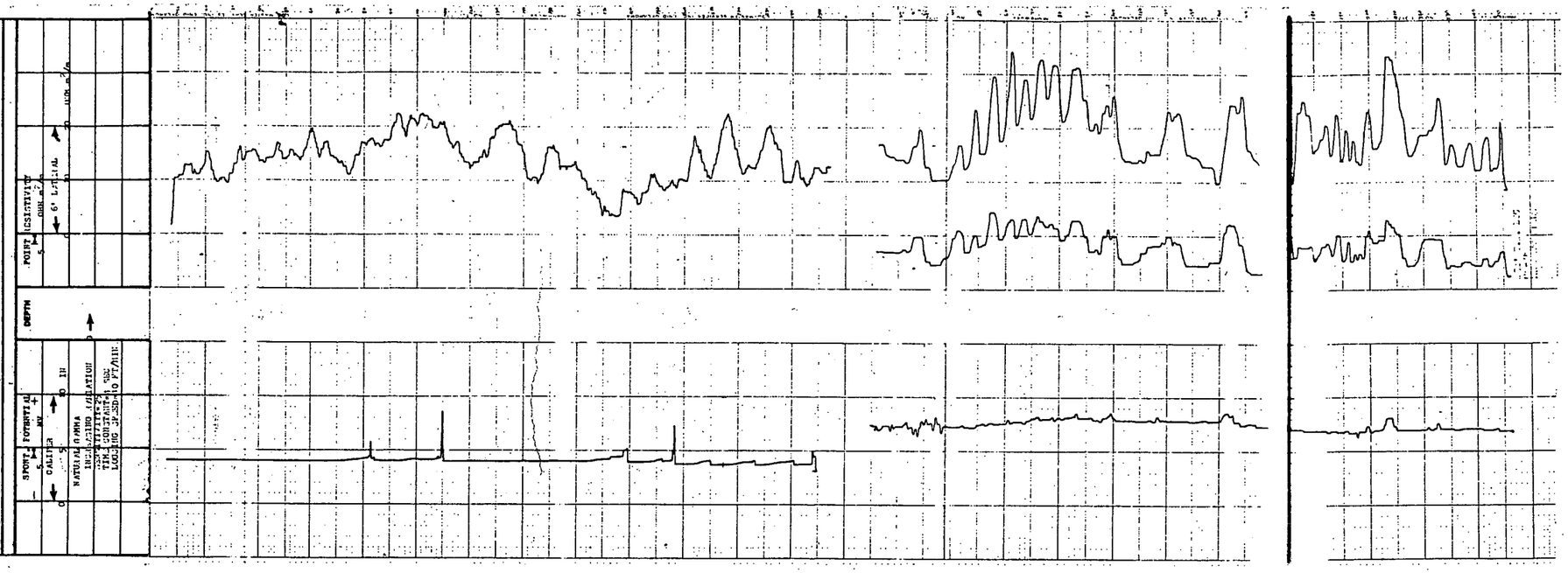
SCALE CHANGES

Type Log	Depth	Scale Up Hole	Scale Down Hole

REMARKS: IT CORPORATION

DRILL METHOD: STANDARD ROTARY

DRILLED BY: WATER DEVELOPMENT CORP.



120

GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

COMPANY: [illegible] DEVELOPMENT CORP.

WELL: 05-17 STA. 3

FIELD: MOFFETT FIELD

COUNTY: SANTA CLARA STATE: CALIFORNIA

LOCATION: Sec. ____ Twp. ____ Rge. ____

TYPE LOG: SP, R1, 64" L/T, 0.25Ω, CALIPER

Permanent Datum: GROUND LEVEL Elev.: ____ Elev.: K.B. ____

Log Measured From: G.L. Ft. Above Perm. Datum ____ D.F. ____

Drilling Measured From: G.L. G.L. ____

Date	13 Sep 88		
Run No.	one	two	three
Depth — Driller	257 ft	ft	ft
Depth — GHD	250 ft	ft	ft
Btm. Log Inter.	250 ft	ft	ft
Top Log Inter.	10 ft	5 ft	ft
Casing — Driller	n.a. ft	n.a. ft	n.a. ft
Casing — GHD	ft	ft	ft
Bit Size	n.a. 257 ft	n.a. ft	n.a. ft
Bit Size	n.a. ft	n.a. ft	n.a. ft
Bit Size	n.a. ft	n.a. ft	n.a. ft
Type Fluid in Hole	clay-gel		
Source of Sample	mixed		
WPS 2000 - DIST.	4700		
Fluid Level	full ft	ft	ft
Meas. / Meas.			
pH / Fluid Loss	9.56 cc	cc	cc
Rm @ Meas. Temp.	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	@ °F	@ °F	@ °F
Time Since Circ.	1 h	h	h
Logging Speed	30 f.p.m.	10 f.p.m.	f.p.m.
Tool Type and No.	combo 5	gamma 1	caliper 1
Unit No.	5		
Location	Santa Cruz		
Invoice No.	5904		
Recorded By	Jim Rat, Associate Geologist		
Witnessed By	Everet, IT Corp.		
other	Kenny, GHD		

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SCALE CHANGES: Type Log | Depth | Scale Up Value | Scale Down Value

IT CORPORATION
MATHESON, CA.

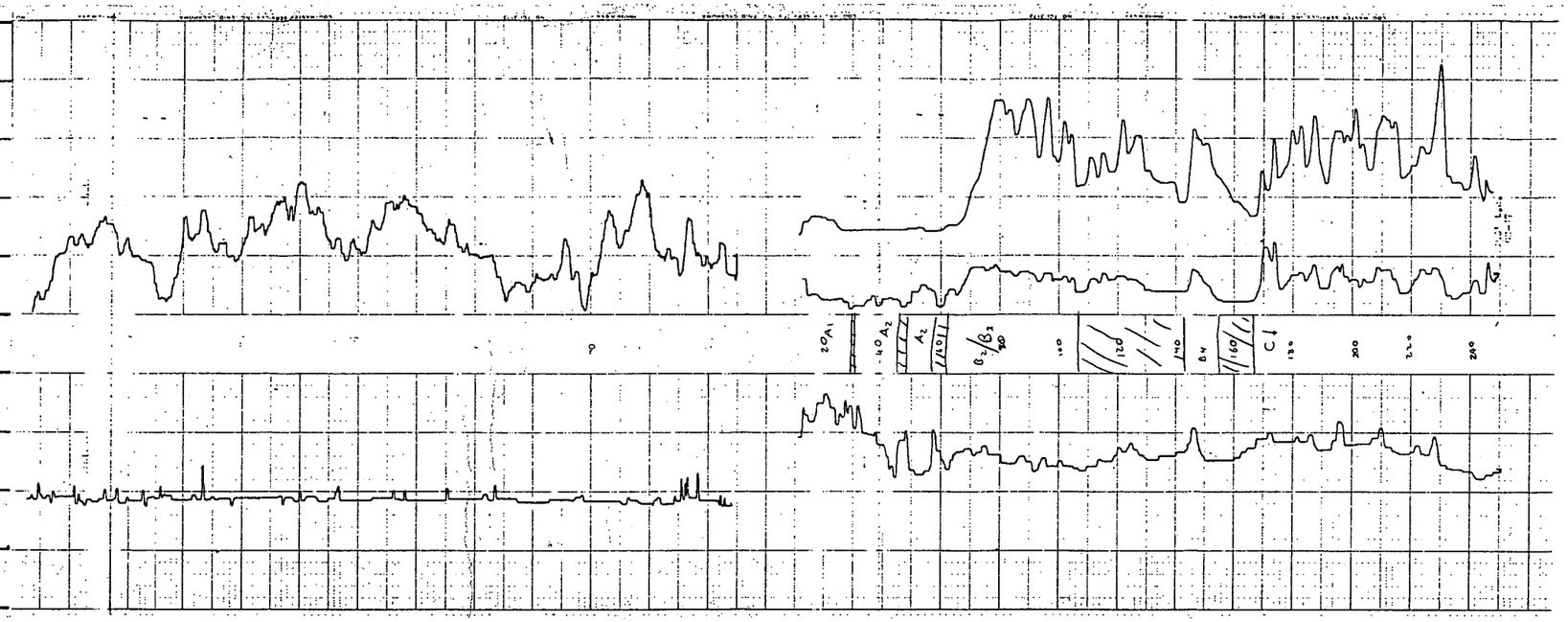
RESISTIVITY: 64" L/T, 0.25Ω m²/m

SPONT. POTENTIAL: 5 mV

CALIPER: 5 in

DEPTH

NATURAL GAMMA RADIATION: 0 counts/sec



21

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 4

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

COMPANY: WATER DEVELOPMENT CORPORATION

WELL: GB-18 SITE 4

FIELD: MOFFETT FIELD

COUNTY: SANTA CLARA STATE: CALIFORNIA

LOCATION: Sec. ____ Twp. ____ Rge. ____

TYPE LOG: SP, RA, 6" LAT, GAMMA, CALIPER

Permanent Datum: GROUND LEVEL Elev.: ____ Elev.: K. B. ____

Log Measured From: G.L. ____ Ft. Above Perm. Datum: ____ D. F. ____

Drilling Measured From: G.L. ____ G. L. ____

Date	29 Sep 65		Sept 66
Run No.	one	two	
Depth — Driller	257		
Depth — GHD	254		
Btm. Log Inter.	254		
Top Log Inter.	11	5	
Casing — Driller			
Casing — GHD			
Bit Size	4 25/8		
Bit Size			
Bit Size			
Type Fluid in Hole	clay-rel		
Source of Sample	pit		
RM @ Meas. Temp.	.4@		
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Time Since Circ.	72 hr.		
Logging Speed	30	10	
Tool Type and No.	combo 5	gamma 1	caliper 3
Unit No.	5		
Location	Santa Cruz		
Invoice No.	3820		
Recorded By	Jim Bee, Associate Geologist		
Witnessed By	Joel Hedsell, Geologist		

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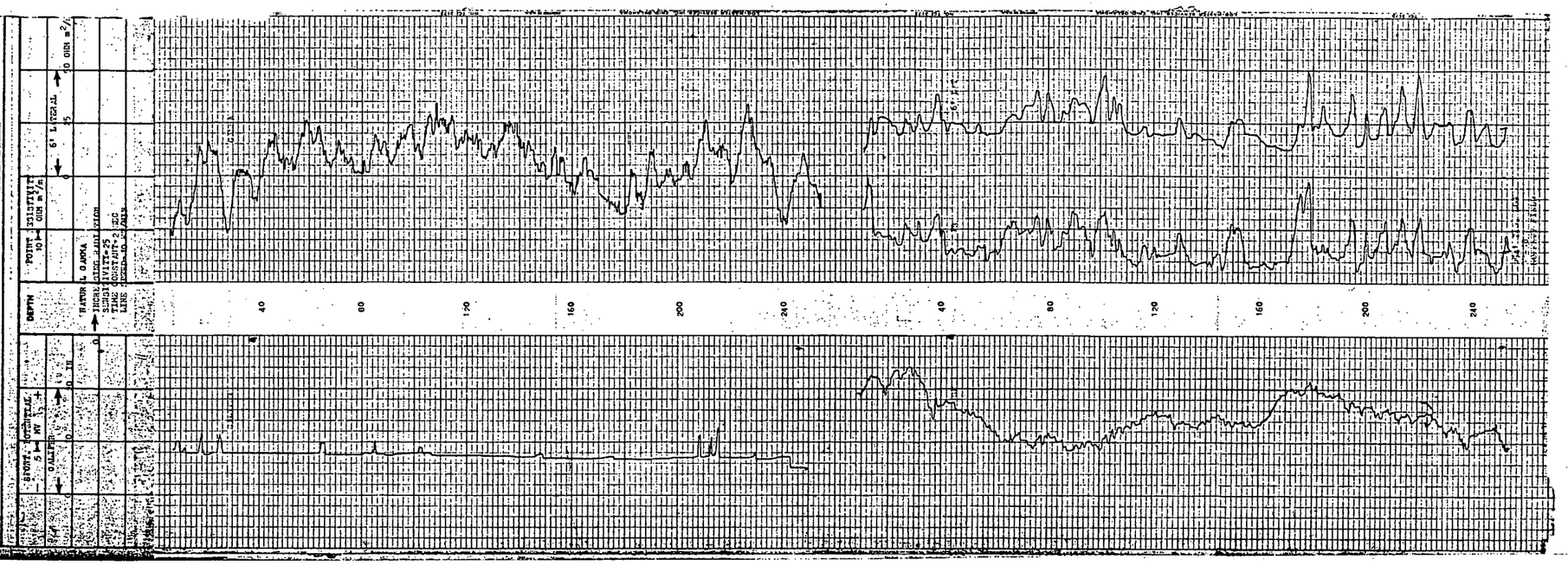
BIT RECORD: 17" CALIFORNIA MARTINEZ, CA.

DRILL METHOD: STANDARD ROTARY

DRILLER FM: WATER DEVELOPMENT CORP. SUNNYVALE, CA.

REMARKS:


POINT 10 MV
GHD #7A
6' LATERAL
25
0
10 OHM #7A
DEPTH
HEAVY LOAMY
THICK CLAY
SENSITIVITY=25
TIME CONSTANT=2 SEC
LINE SPEED=20 MM/MIN
40
80
120
160
200
240
SPOTS 10 MV
GHD #7A
CALIPER
11
0
0
0

GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

Company	WATER DEVELOPMENT CORPORATION
Well	28-19
Field	HOFFITT FIELD
County	SANTA CLARA
State	CALIFORNIA
Location	Sec. ___ Twp. ___ Rge. ___
Type Log	SP, RA, 64" LAT, SONIC, CALIPER
Permanent Datum	GROUND LEVEL
Elev.	
Elev.: K.B.	
Log Measured From	G.L.
Ft. Above Perm. Datum	
D.F.	
Drilling Measured From	G.L.
G.L.	

Date	20 Sep 88		
Run No.	one	two	three
Depth — Driller	257		
Depth — GHD	256		
Bott. Log Inter.	248		
Top Log Inter.	70	6	
Casing — Driller			
Casing — GHD			
Bit Size	7 7/8		
Bit Size			
Bit Size			
Type Fluid in Hole	clay-gel		
Source of Sample	pit		
PPM TDS (Cond)	274		
Fluid Level	full		
Meas. Meas. Fluid Loss			
pH	9.34		
Rm @ Meas. Temp.			
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Time Since Circ.	1		
Logging Speed	30	30	
Tool Type and No.	combo 5	gamma 1	caliper 3
Unit No.	5		
Location	Santa Cruz		
Service No.	5814		
Recorded By	Jim Rat, Associate Geologist		
Witnessed By	Joel Kadsall, JT Corp.		

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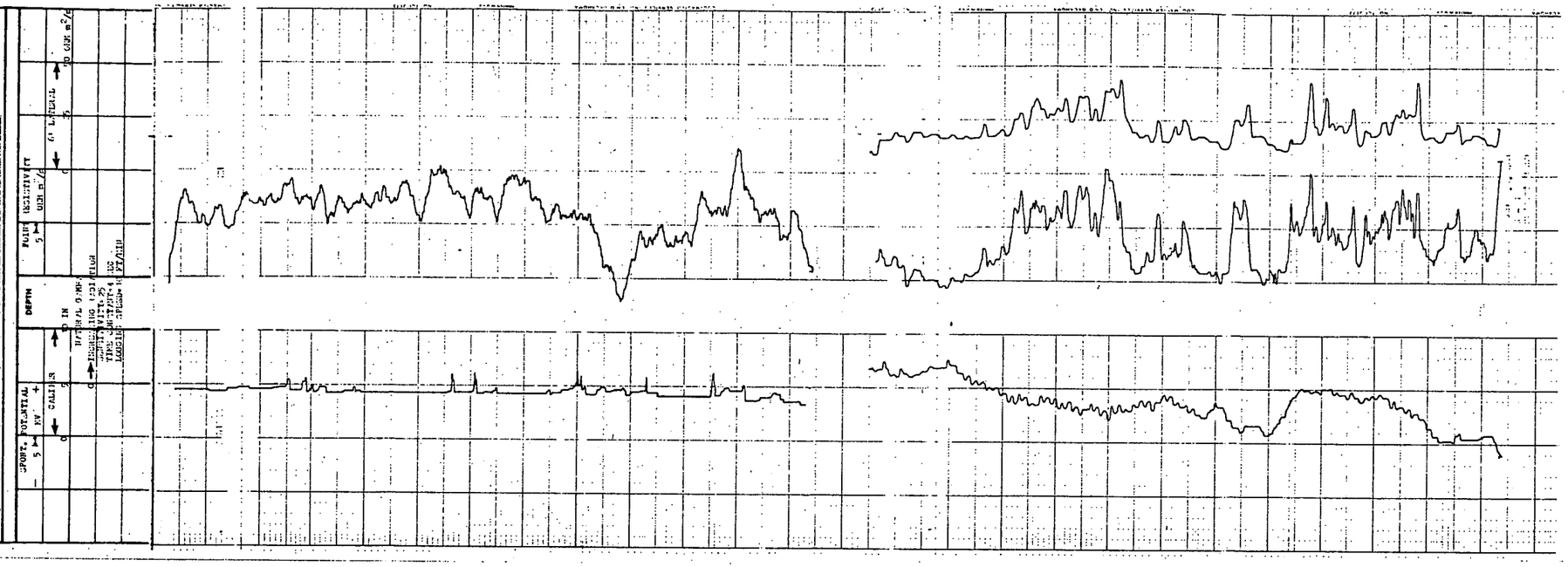
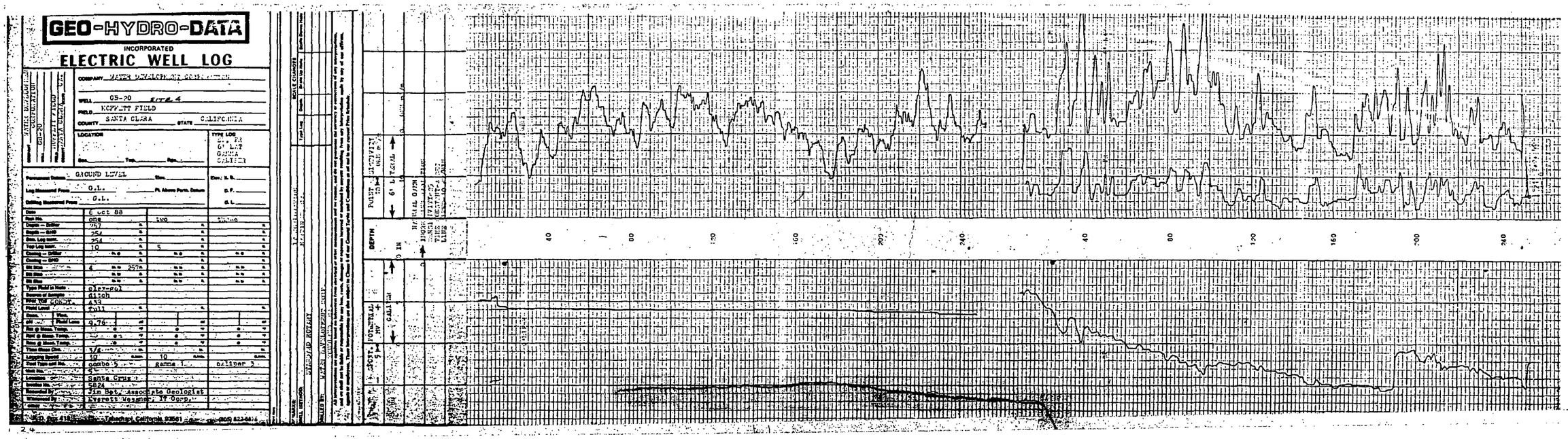
Scale Changed: Depth ___ Time Log ___ Scale Up Date ___ Scale Down Date ___

Remarks: FC SHUTTLE LOCK
Drill Method: STANDARD ROTARY
Drilled By: FIRST DEV CORPORT OCTOPUS TOOL




GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY
WELL 05-20 Site 4
FIELD NORTH FIELD
COUNTY SANTA CLARA STATE CALIFORNIA
LOCATION
TYPE LOG
Permanent Datum GROUND LEVEL Elev.
Log Measured From G.L. Ft. Above Perm. Datum
Drilling Measured From G.L.
Date 6 Oct 88
Run No. one two three
Depth — Driller 257 257
Depth — Logger 254 254
Btm. Log Interval 254 254
Top Log Interval 10 5
Casing — Driller
Casing — Logger
Bit Size 4 257A
Type Fluid in Hole clay-pol
Source of Sample flow
RMF @ Meas. Temp. 4.33
Fluid Level full
pH 9.75
Rm @ Meas. Temp.
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Time Since Circ. 3/4
Logging Speed 10 10
Tool Type and No. ocebo 5 Ratna 1 Dallmar 3
Unit No. 5
Location Santa Cruz
Operator No. 5824
Recorded By Jim Bat, Associate Geologist
Witnessed By Everett Wagner, II Corp.
Other
Phone (805) 823-8616
SCALE CHANGES
Log Scale Depth Scale Time Scale
Log Log
Depth Time Scale
Log Log
Depth Time Scale
Log Log
Depth

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 5

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG

GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

COMPANY [illegible]

WELL GL-23 SITE 5

FIELD HOWARD FIELD

COUNTY SANTA CLARA STATE CALIFORNIA

LOCATION

Sec. Twp. Rge.

TYPE LOG
SP, FR
64" Long
Gamma
Calif. 1

Permanent Datum	GROUND LEVEL	Elev.	Elev.: K. B.
Log Measured From	Gale	Ft. Above Perm. Datum	D. F.
Drilling Measured From	Gale		G. L.

Date	5 Jul 88		
Run No.	one	two	three
Depth — Driller	238		
Depth — GND	238		
Btm. Log Inter.	238		
Top Log Inter.	10	5	
Casing — Driller			
Casing — GND			
Bit Size	4		
Bit Size			
Bit Size			
Type Fluid in Hole	GREY-FRESH		
Source of Sample	ditch		
RM@ RMF@ RMC@	542		
Fluid Level	full		
Density / Visc.			
pH / Fluid Loss	5.67		
Rm @ Meas. Temp.			
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Time Since Circ.	1		
Logging Speed	30	10	
Tool Type and No.	combo 5	combo 5	caliper 1
Unit No.	6		
Location	Santa Ynez		
Recorder No.	5705		
Recorded By	Jim Bat, Associate Geologist		
Witnessed By	John Doe, II CCPs		

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SCALE CHANGES

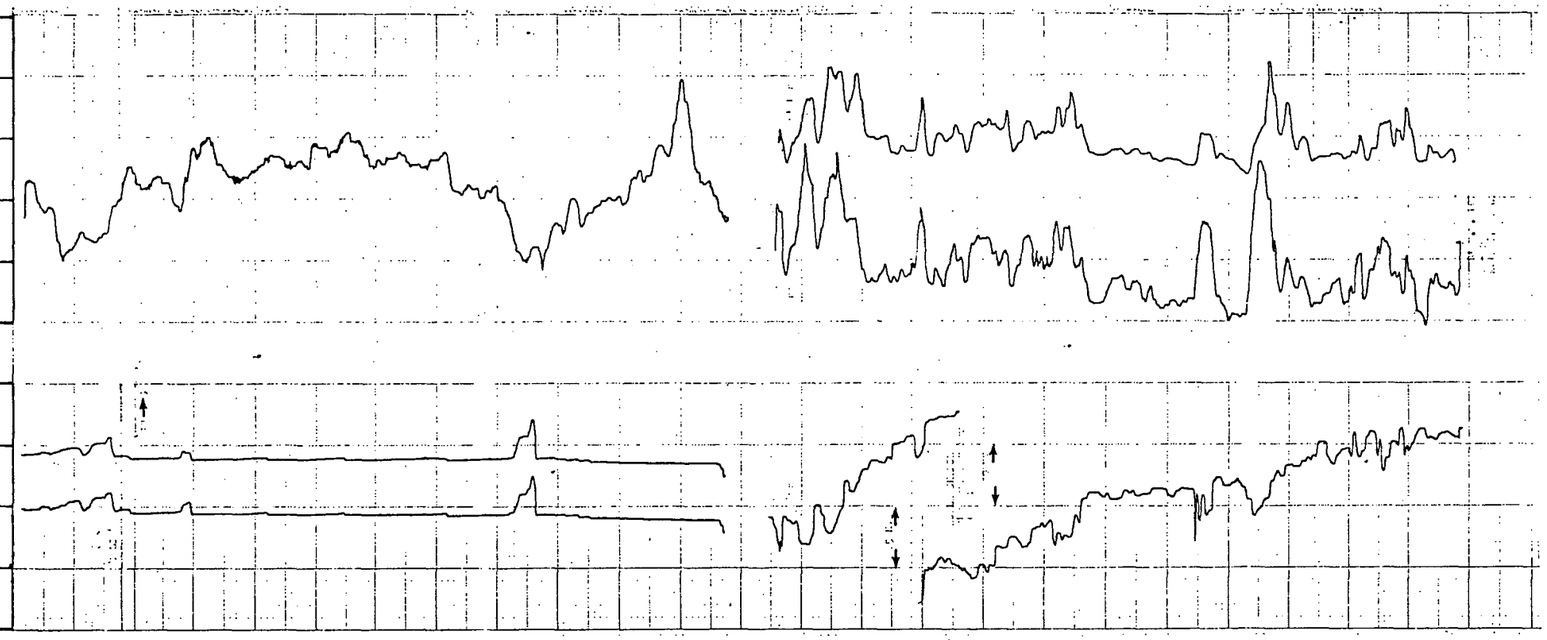
Type Log	Depth	Scale Changes	Scale Down Hole
SP	60	2/5	10

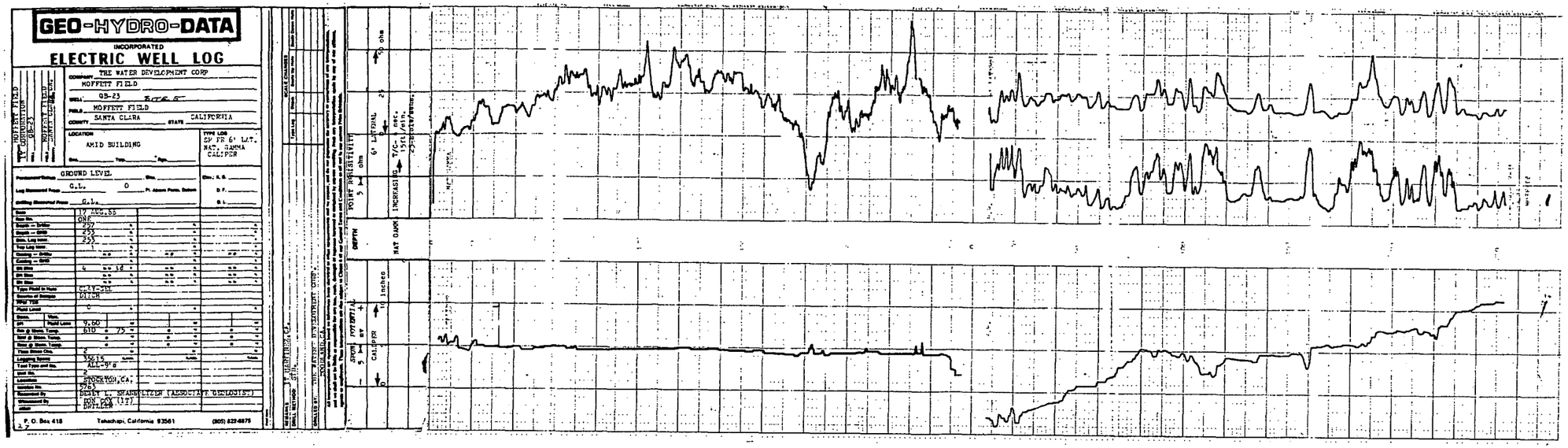
RIG NO. [illegible]

RECORDED: T. Rutherford

FINAL METHOD: Matthew Cox

DRILLED BY: [illegible]




GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY THE WATER DEVELOPMENT CORP
MOFFETT FIELD
WELL GB-23
FIELD MOFFETT FIELD
COUNTY SANTA CLARA
STATE CALIFORNIA
LOCATION AMID BUILDING
TYPE LOG SP FR 6' LAT. NAT. GAMMA CALIPER
GROUND LEVEL
G.L.
0
17 AUG.85
ONE
257
255
255
1
4
CLAY-SEL
DITCH
0
9.60
610
75
2
35.15
ALL-9'8
2
STOCKTON, CA.
5763
DEBBY L. SHARBOLTZER (ASSOCIATE GEOLOGIST)
DON COX (IT)
DRILLER
P. O. Box 418
Tehachapi, California 93561
(805) 822-6875
SCALE CHANGES
REMARKS
DRILL METHOD
CALLED BY THE WATER DEVELOPMENT CORP.
POINT RESISTIVITY
6' LATERAL
INCREASING
T/C - sec.
DEPTH
NAT GAMM
SPON POTENTIAL
CALIPER
inches

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 6

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

NO GEOPHYSICAL LOGGING WAS CONDUCTED AT SITE 6

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 7

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY WATER DEVELOPMENT CORPORATION
WELL GB-24
FIELD MOFFATT FIELD
COUNTY SANTA CLARA
STATE CALIFORNIA
LOCATION
TYPE LOG
G. LAT
GAMMA
CALIPER
Permanent Datum GROUND LEVEL
Elev. K.B.
Log Measured From G.L.
Above Perm. Datum
D.F.
Drilling Measured From G.L.
G.L.
Date 4 Oct 68
Run No. one
Depth — Driller 254
Depth — Logger 254
Bottom Log Interval 254
Top Log Interval 10
Casing — Driller 8 @ 257
Casing — Logger
Bit Size 7 7/8
Type Fluid in Hole clish
Density or Viscosity 9.0
PH, WL, RM, RMF
Fluid Level full
Source of Sample
RM @ Meas. Temp.
RMF @ Meas. Temp.
RMC @ Meas. Temp.
Time Since Circ.
Logging Speed 50
Equip. No. 5
Location Santa Cruz
Recorded By Jim Ret
Witnessed By Everett Weaver
Max. Rec. Temp. 84 Corrs.
Equipment — Location
Recorded by
Witnessed by
Scale Changes
Run No.
Date
Time
Depth Driller
Depth Logger
Bottom Log Interval
Top Log Interval
Casing — Driller
Casing — Logger
Bit Size
Type Fluid in Hole
Density or Viscosity
PH, WL, RM, RMF
Fluid Level
Source of Sample
RM @ Meas. Temp.
RMF @ Meas. Temp.
RMC @ Meas. Temp.
Time Since Circ.
Max. Rec. Temp.
Equipment — Location
Recorded by
Witnessed by
Equipment No.
Location
Recorded By
Witnessed By

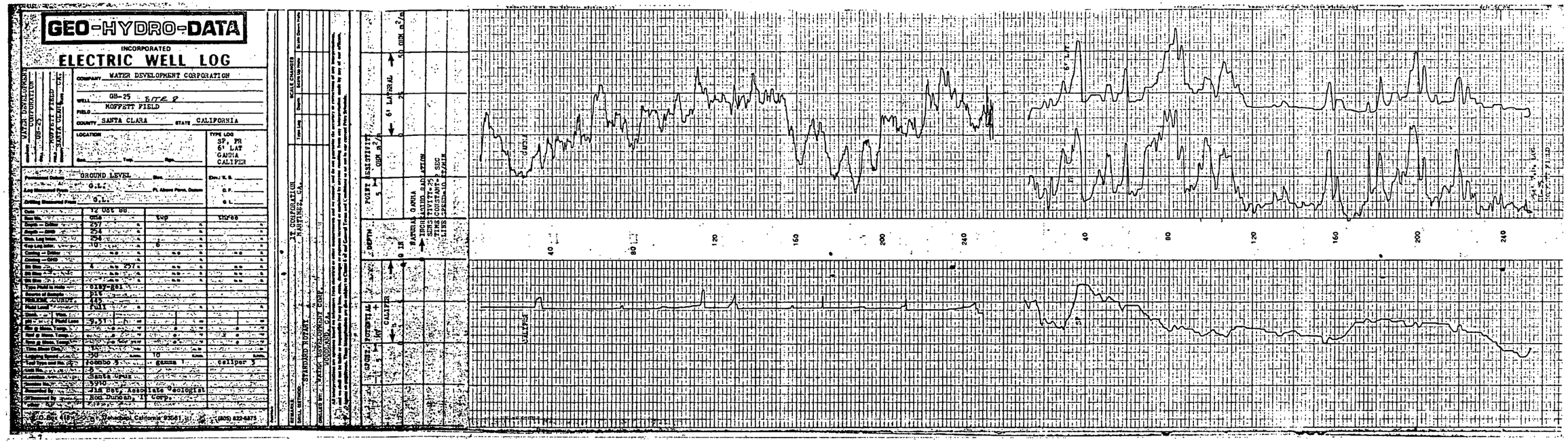
N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

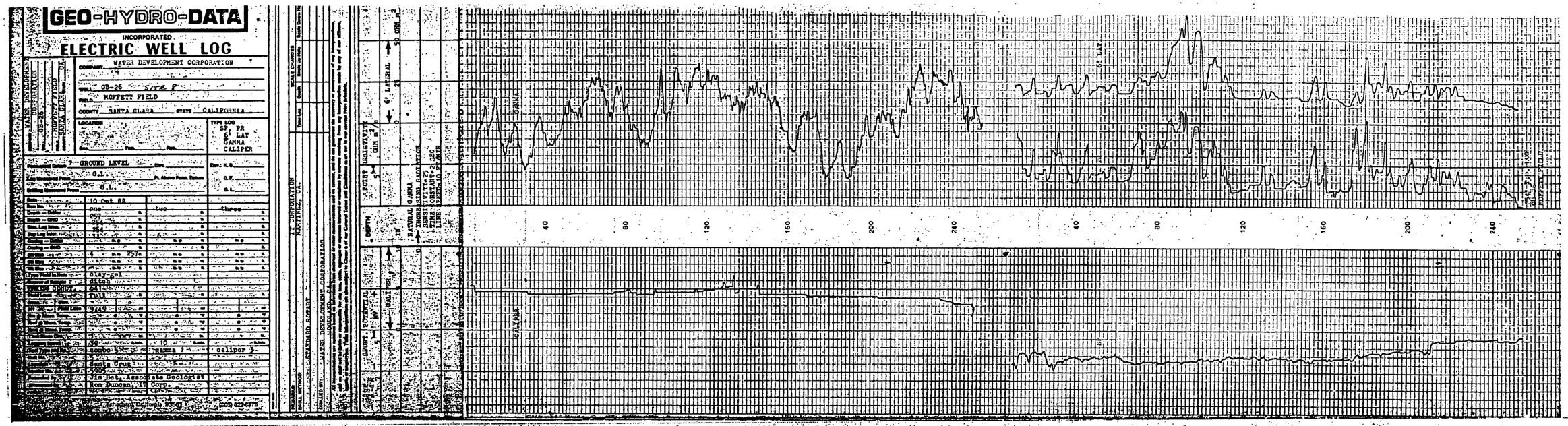
APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 8

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992


GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY WATER DEVELOPMENT CORPORATION
WELL GB-25 SITE 8
FIELD MOFFETT FIELD
COUNTY SANTA CLARA STATE CALIFORNIA
LOCATION
TYPE LOG SP, PR 6' LAT GAMMA CALIPER
GROUND LEVEL
G.L.
G.L.
12 Oct 88
one
two
three
257
254
254
10
6
4
257
clay-gel
pit
445
full
9.51
50
10
gamma 1
caliper 3
combo 5
5
Santa Cruz
5910
Jim Bet, Associate Geologist
Ron Duncan, IT Corp.
Hanford, California 93561
(805) 822-6875
IT CORPORATION
MARTINEZ, CA.
STANDARD ROTARY
WATER DEVELOPMENT CORP.
WOODLAND, CA.
POINT RESISTIVITY
OHM m²/m
6' LATERAL
50 OHM m²/m
DEPTH
NATURAL GAMMA
INCREASING RADIATION
SENSITIVITY=25
TIME CONSTANT=2 SEC
LINE SPEED=10 FT/MIN
POTENTIAL
CALIPER
40
80
120
160
200
240
40
80
120
160
200
240
CALIPER
SP


GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
WATER DEVELOPMENT CORPORATION
GB-26
MOFFETT FIELD
SANTA CLARA
CALIFORNIA
GROUND LEVEL
G.L.
10 Oct 88
one
two
three
clay-gel
ditch
641
full
9.49
10
gamma
caliper
Santa Cruz
Jim Bet, Associate Geologist
Ron Duncan, IT Corp.
IT CORPORATION
MARTINEZ, CA.
STANDARD ROTARY
WATER DEVELOPMENT CORPORATION
GAMMA
CALIPER
40
80
120
160
200
240

30

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 9

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

GEO-HYDRO-DATA
INCORPORATED

ELECTRIC WELL LOG

WATER DEVELOPMENT CORP. — WELL No. GB-7 — FIELD MOFFETT FIELD — SHR. CLR. CA.

COMPANY THE WATER DEVELOPMENT CORPORATION

WELL GB-7 SCALE 9

FIELD MOFFETT FIELD

COUNTY SANTA CLARA STATE CALIFORNIA

LOCATION

TYPE LOG SP PR 6' LAT. NAT. GAMMA CALIPER

Sec. Twp. Rge.

Permanent Datum GROUND LEVEL Elev.

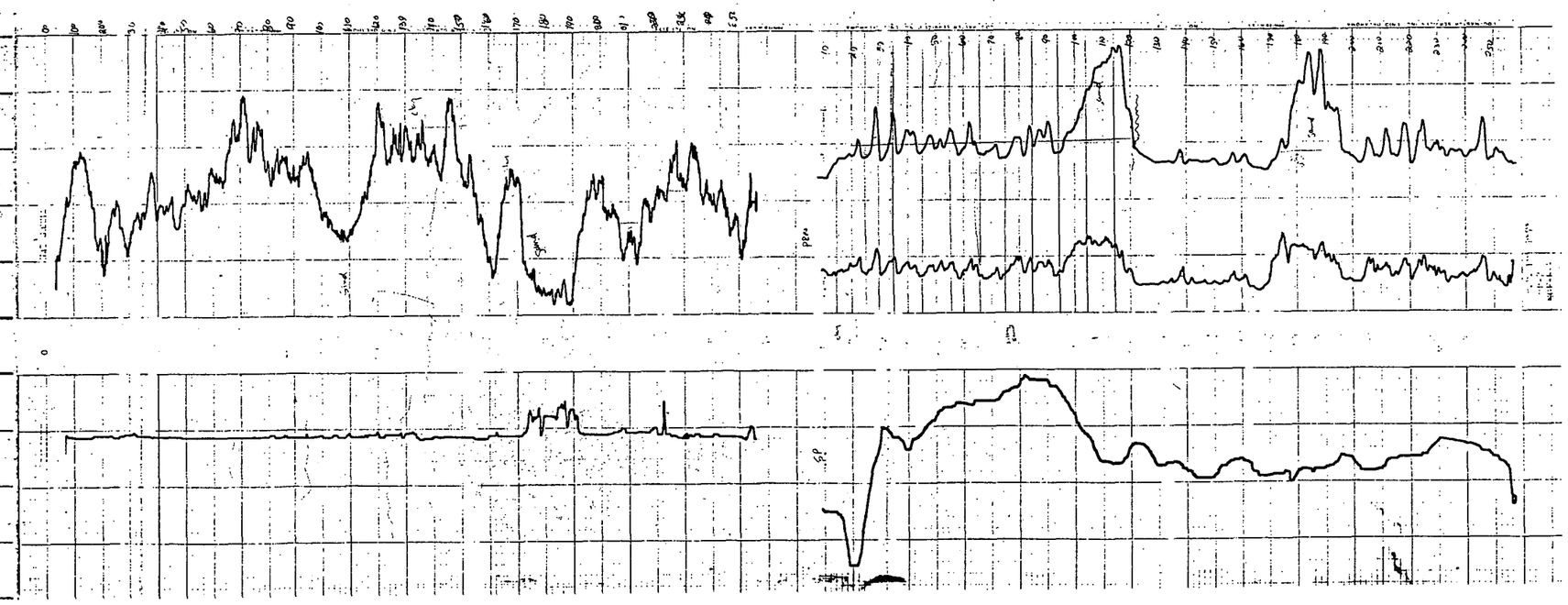
Log Measured From G.L. 0 Ft. Above Perm. Datum

Drilling Measured From G.L.

Elev.: K.B. D.F. G.L.

Date	19 JULY 88		
Run No.	ONE		
Depth — Driller	260		
Depth — GWD	257		
Btm. Log Inter.	257		
Top Log Inter.	2		
Casing — Driller			
Casing — GWD			
Bit Size	4		
Bit Size			
Bit Size			
Bit Size			
Type Fluid in Hole	CLAY-GEL		
Source of Sample	PIT		
RM@MEAS TEMPERATURE	4.95		
Fluid Level	full		
Density / Visc.			
pH / Fluid Loss	7.65		
Rm @ Meas. Temp.			
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Time Since Circ.	2		
Logging Speed	35&15		
Tool Type and No.	COMB-18,N, G-L,CAL-6		
Unit No.	2		
Location	STOCKTON,CA.		
Location Ctrl.			
Recorded By	D.L. SEARCUTCHEN (ASSOCIATE GEOLOGIST)		
Witnessed By	C. WALLACE(TO DRILLER		

P. O. Box 418 Tehachapi, California 93561 (805) 822-5875



GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

Company	WATER DEVELOPMENT CORPORATION
Well	GB-C SITE 9
Field	HOPSETT FIELD
County	SANTA CLARA State CALIFORNIA
Location	Sec. Twp. Rge.
Type Log	SP, FR 64 LAT GAMM CALIPER
Permanent Datum	GROUND LEVEL Elev. Elev.: K.B.
Log Measured From	G.L. Ft. Above Perm. Datum D.F.
Drilling Measured From	G.L. G.L.

Date	15 JUL 88					
Run No.	one		two		three	
Depth — Driller	357	ft		ft		ft
Depth — GHD	353	ft		ft		ft
Btm. Log Inter.	353	ft		ft		ft
Top Log Inter.	10	ft	5	ft		ft
Casing — Driller	n.a	ft	n.a	ft	n.a	ft
Casing — GHD		ft		ft		ft
Bit Size	4 n.a 357	ft	n.a	ft	n.a	ft
Bit Size	n.a	ft	n.a	ft	n.a	ft
Bit Size	n.a	ft	n.a	ft	n.a	ft
Type Fluid in Hole	clay-gel					
Source of Sample	pit					
RM @ Meas. Temp.	.492					
Fluid Level	full	ft		ft		ft
Density / Visc.						
pH / Fluid Loss	9.66	cc		cc		cc
Rm @ Meas. Temp.		@ °F		@ °F		@ °F
Rmf @ Meas. Temp.		@ °F		@ °F		@ °F
Rmc @ Meas. Temp.		@ °F		@ °F		@ °F
Time Since Circ.	2	h		h		h
Logging Speed	30 f.p.m.		10 f.p.m.			f.p.m.
Tool Type and No.	combo 5		gamma 1		caliper 9	
Unit No.	5					
Location	Santa Cruz					
Location No.	5711					
Recorded by	Jim Bat, Associate Geologist					
Witnessed by	Cory Wallace, Jr. Corp.					
other	D. Shannholtzer, GEO					

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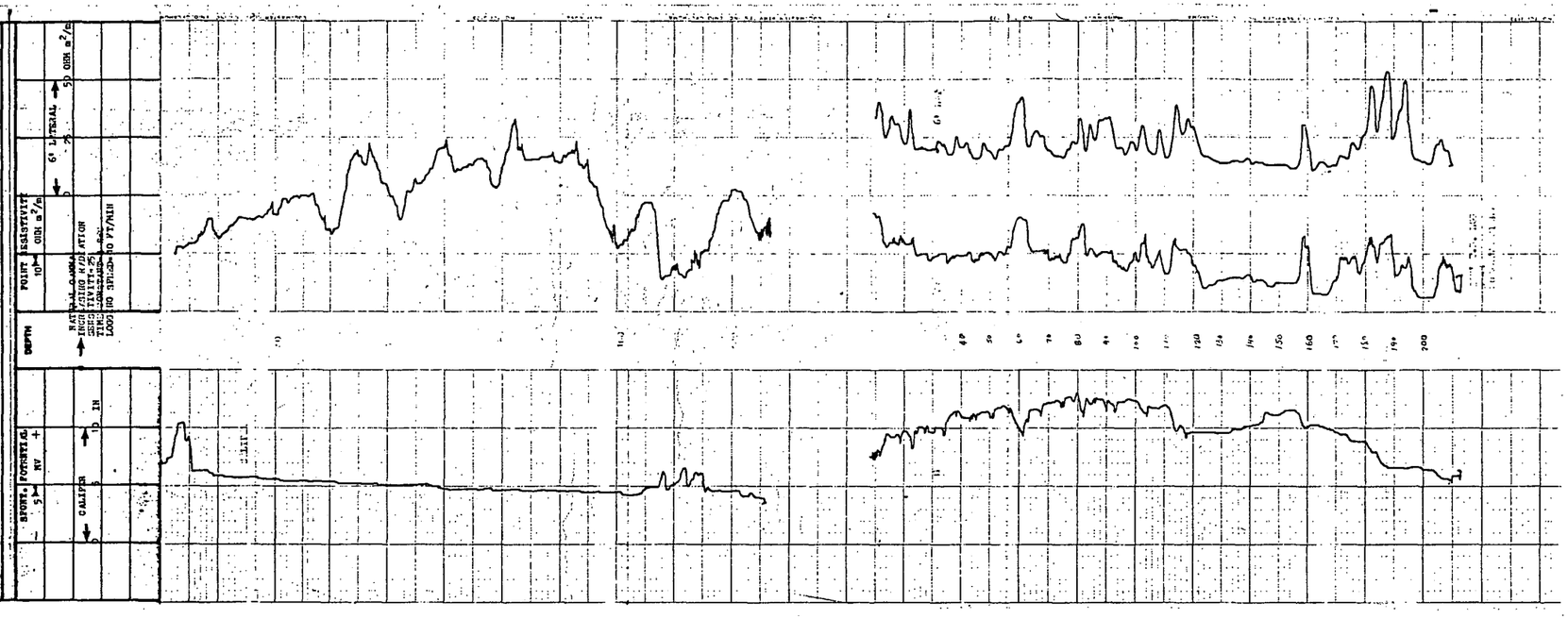
WATER DEVELOPMENT CORPORATION
BAKERSFIELD, CA.

Type Log | Depth | Scale Changes | Hole Size | Mud Type | Mud Wt. | Source Sample | Rm @ Meas. Temp.

STANDARD ROTARY

DRILLER: WATER DEVELOPMENT CORP.

All interpretations are opinions based on inferences from electrical or other measurements and we, therefore, cannot and do not guarantee the accuracy or correctness of any interpretations, and we shall not be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our standard terms and conditions as set forth in our current price schedule.



GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

COMPANY WATER DEVELOPMENT CORPORATION

WELL GD-9 Site A

FIELD MORETT FIELD

COUNTY SANTA CLARA STATE CALIFORNIA

LOCATION

TYPE LOG SP, FX 64" LAT GAMMA CALIPER

Permanent Datum G.LOUND LEVEL Elev. Elev.: K.B.

Log Measured From G.L. Ft. Above Perm. Datum D.F.

Drilling Measured From G.L. G.L.

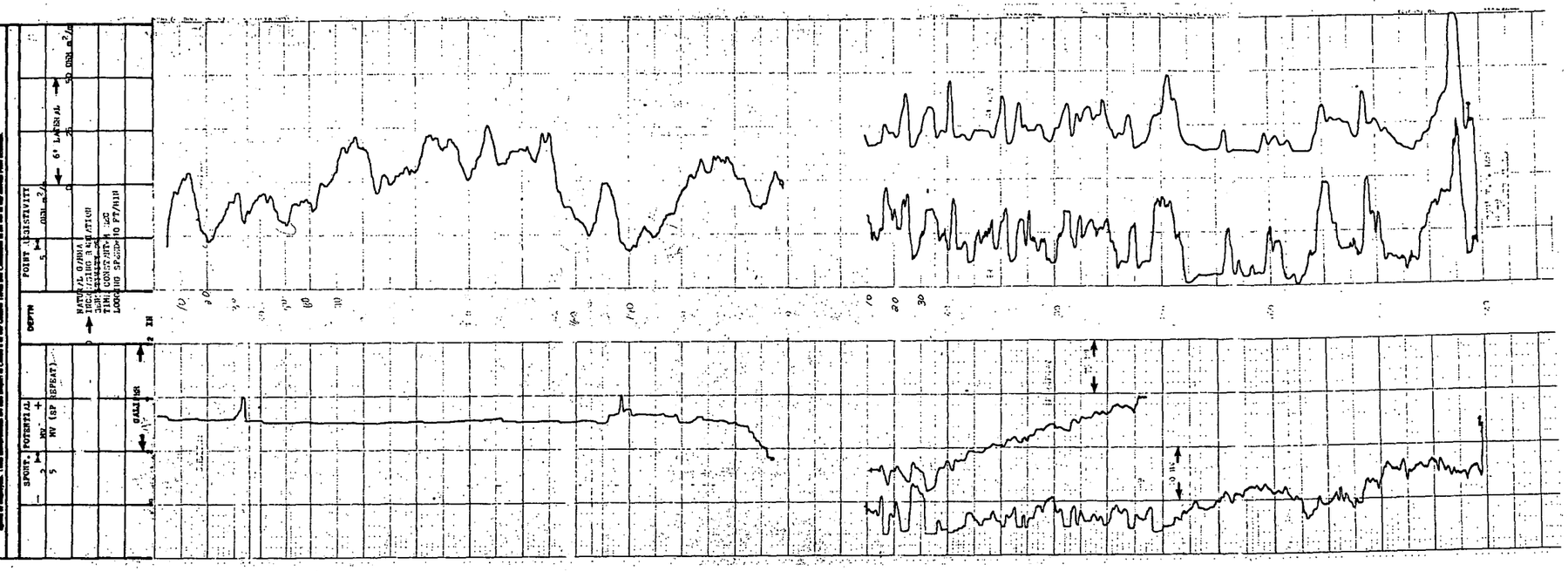
Date	12 Jul 88						
Run No.	one		two			three	
Depth — Driller	243	ft		ft			ft
Depth — Logger	238	ft		ft			ft
Btm. Log Inter.	238	ft		ft			ft
Top Log Inter.	10	ft	5	ft			ft
Casing — Driller	5 @ 6.5	ft	@	ft		@	ft
Casing — Logger		ft		ft			ft
Bit Size	4	@ 243 ft	@	ft		@	ft
Bit Size	@	ft	@	ft		@	ft
Bit Size	@	ft	@	ft		@	ft
Type Fluid in Hole	clay-gel						
Source of Sample	pit						
RM @ Meas. Temp.	502						
Fluid Level	full	ft		ft			ft
Density / Viscosity							
pH / Fluid Loss	9.38	cc		cc			cc
Rm @ Meas. Temp.	@	°F	@	°F		@	°F
Rmf @ Meas. Temp.	@	°F	@	°F		@	°F
Rmc @ Meas. Temp.	@	°F	@	°F		@	°F
Time Since Circ.	8	h		h			h
Logging Speed	30	f/min.	10	f/min.			f/min.
Tool Type and No.	combo 5		gamma			caliper 5	
Unit No.	5						
Location	Santa Cruz						
Operator No.	5708						
Recorded By	Jim Bat, Associate Geologist						
Witnessed By	Bill Hopkins, IP						
Other	Gen. Driller						

P. O. Box 418 Tehachapi, California 93561 (805) 822-6875

TO CONTRACTOR: HORIZONTAL DRILL

DRILL METHOD: STANDARD ROTARY

DRILLED BY: JOHN DONALDSON CO.



13

GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

COMPANY: US NAVY

WELL: GP-10 SITE 9

FIELD: MCKITTRICK FIELD

COUNTY: SANTA BARBARA STATE: CA

LOCATION

Sec. ____ Twp. ____ Rge. ____

TYPE LOG: 16" DIA. 64' LAG. [illegible] DRILLER

Permanent Datum: GROUND LEVEL Elev. ____ Elev.: K.B. ____

Log Measured From: G.L. 0 Ft. Above Perm. Datum D.F. ____

Drilling Measured From: G.L. G.L. ____

Date	MAY 30, 1991		
Run No.	1	2	3
Depth — Driller	260		
Depth — SMD	254		
Btm. Log Inter.	254		
Top Log Inter.	7	0	4
Casing — Driller	no	no	no
Casing — SMD			
Bit Size	8 3/4		
Bit Size	no	no	no
Bit Size	no	no	no
Type Fluid in Hole	clay gel		
Source of Sample	pit		
PPM TDS	4700		
Fluid Level	full		
Density / Visc.			
pH / Fluid Loss	9.4		
Rm @ Meas. Temp.			
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Time Since Circ.	1		
Logging Speed	25	10	20
Tool Type and No.	combo	nat gamma	caliper
Unit No.	9		
Location	Santa Barbara		
Invoice No.	5692		
Recorded By	Jerry Renz Associate Geologist		
Witnessed By	Driller		
other			

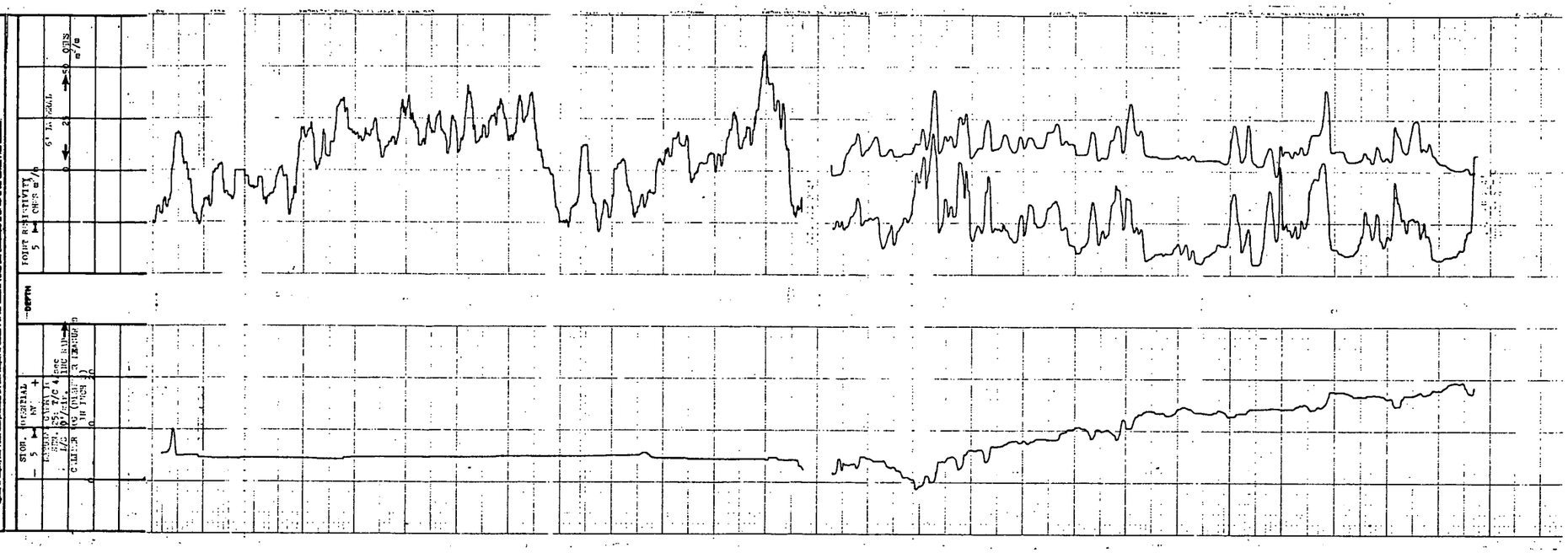
P. O. Box 418 Tehachapi, California 93561 (805) 823-4875

SCALE CHANGES: Type Log | Depth | Scale Down Hole

REMARKS: [illegible]

FIELD VERIFIED: [illegible]

DRILLED BY: [illegible]



GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

Operator: WATER DEVELOPMENT CORP.
No.: G-11
Field: MONTE VERDE
County: SANTA CLARA State: CA

COMPANY: WATER DEVELOPMENT CORP.
WELL: GS-11 SITE 0
FIELD: MONTE FIELD
COUNTY: SANTA CLARA STATE: CA

LOCATION: Sec. ___ Twp. ___ Rge. ___

TYPE LOG: 3" 1:2.61 DIFF. SHT. SANTA CLARA CALIF. R

Permanent Datum: GROUND LEVEL Elev.: ___
Log Measured From: G.L. 0 Ft. Above Perm. Datum
Drilling Measured From: G.L.
Elev.: K. B. ___ D. F. ___ G. L. ___

Date	JULY 26, 1966		
Run No.	1	2	3
Depth — Driller	265		
Depth — Logger	265		
Btm. Log Inter.	265		
Top Log Inter.	8	2	2
Casing — Driller			
Casing — Logger			
Bit Size	4		
Bit Size			
Bit Size			
Type Fluid in Hole	clay gel		
Source of Sample	pit		
RM @ Meas. Temp.	.250		
Fluid Level	full		
Density / Visc.			
pH / Fluid Loss	9.42		
Rm @ Meas. Temp.			
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Time Since Circ.	1		
Logging Speed	10	10	20
Tool Type and No.	combo	pot. comb.	caliper
Unit No.	4		
Location	Cambria		
Session No.	5680		
Recorded By	Kenny Rene Associate Geologist		
Witnessed By	Driller		

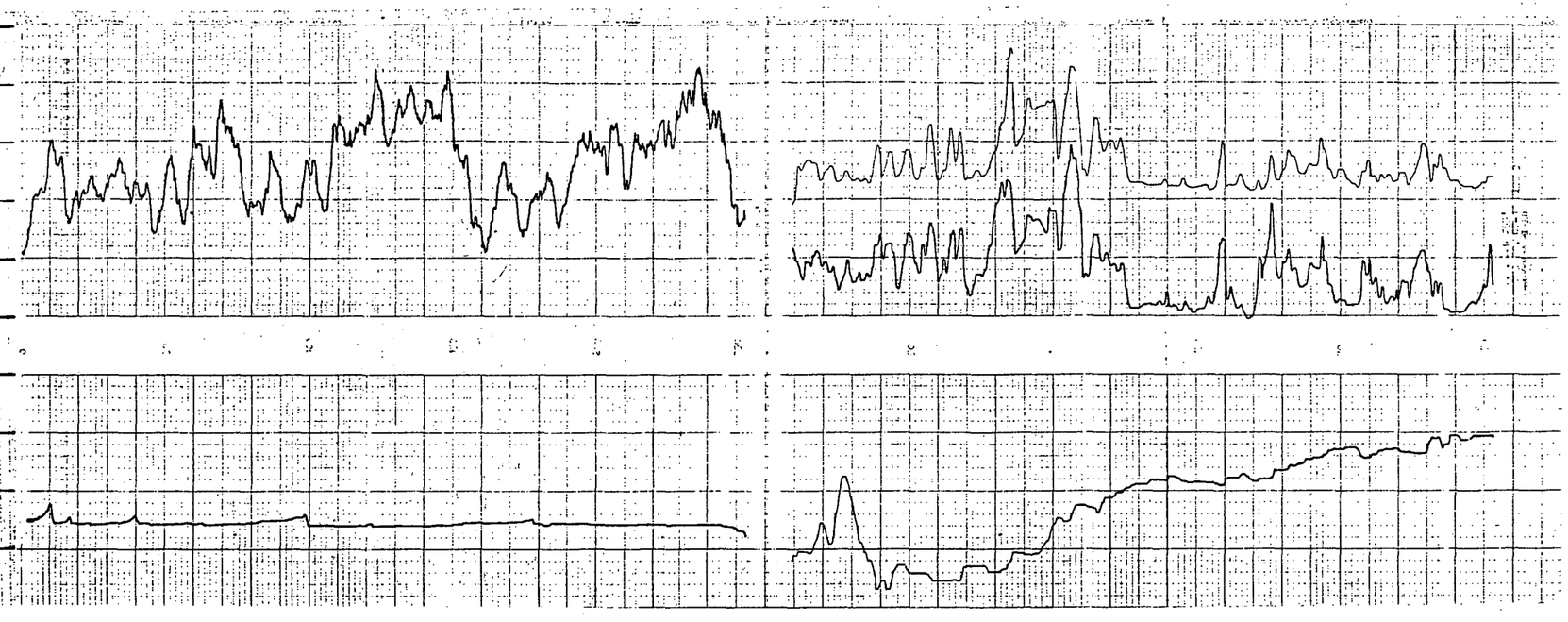
P. O. Box 418 Tehachapi, California 93561 (805) 822-8675

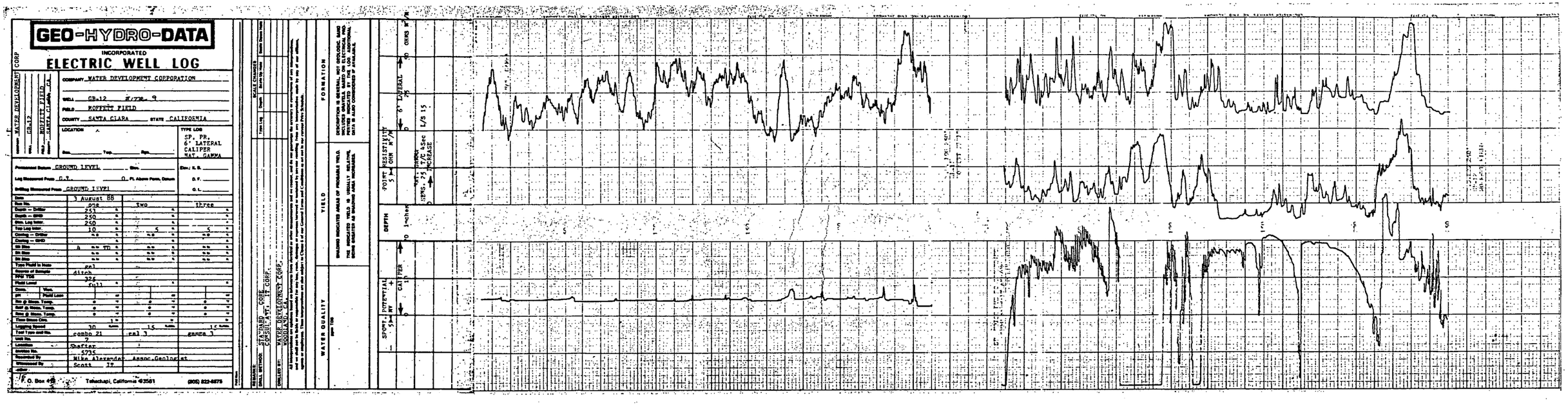
SCALE CHANGES: Type Log | Depth | Scale Down Hole | Scale Up Hole
DRILL METHOD: ROTARY
DRILLED BY: WATER DEVELOPMENT CORPORATION
RIG: ROTARY
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not, guarantee the accuracy or correctness of any interpretations, and we shall not be liable for any loss or damage arising from any interpretation made by any of our officers, agents or employees. These interpretations are subject to Chart of our Current Terms and Conditions and are to be in accord Price Schedule.

FORMATION — DESCRIPTION IS GENERAL, NOT GEOLOGIC, SAND INCLUDES GRAVELS. BASED ON ELECTRICAL PROPERTIES INDICATED BY THE LOG. ADDITIONAL DATA IS NOW CONSIDERED IF AVAILABLE.

YIELD — SHADING INDICATES AREAS OF PROBABLE YIELD. THE INDICATED YIELD IS USUALLY RELATIVE, BUT MAY BE ABSOLUTE IN SEDIMENT AREAS, BEDROCK.

WATER QUALITY — ppm TDS




GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY WATER DEVELOPMENT CORPORATION
WELL GB-12
FIELD MOFFETT FIELD
COUNTY SANTA CLARA
STATE CALIFORNIA
LOCATION
TYPE LOG
SP, PR, 6' LATERAL CALIPER NAT. GAMMA
Permanent Datum GROUND LEVEL
Log Measured From G.T.
Drilling Measured From GROUND LEVEL
Date 3 August 88
Run No. one two three
Depth — Driller 253
Depth — GND 250
Gen. Log Inter. 250
Top Log Inter. 10 5 5
Casing — Driller
Casing — GND
Bit Size 4 ft TD
Type Fluid in Hole gel
Source of Sample ditch
PPM TDS 325
Fluid Level full
Gas @ Meas. Temp.
Gas @ Meas. Temp.
Time Since Circ.
Logging Speed 30 15 15
Tool Type and No. combo 21 cal 3 gamma 3
Unit No. 7
Location Shafter
Invoice No. 5735
Recorded By Mike Alexander Assoc.Geologist
Witnessed By Scott IT
P.O. Box 418 Tehachapi, California 93581 (805) 822-6875
SCALE CHANGES
Type Log
Depth
Scale Up Hole
Scale Down Hole
REMARKS:
DRILL METHOD: STANDARD CORE CONSULTANT: IT CORP.
DRILLED BY: WATER DEVELOPMENT CORP.
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretation, and we shall not be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to Clause 4 of our Conditions of Service and Conditions as set out in our current Price Schedule.
FORMATION
DESCRIPTION IS GENERAL, NOT GEOLOGIC, SAND INCLUDES GRAVELS. BASED ON ELECTRICAL PROPERTIES INDICATED BY THE LOG. ADDITIONAL DATA IS ALSO CONSIDERED IF AVAILABLE.
YIELD
SHADING INDICATES AREAS OF PROBABLE YIELD.
THE INDICATED YIELD IS USUALLY RELATIVE, BEING GREATER AS SHADING AREA INCREASES.
WATER QUALITY
SPOT. POTENTIAL MV
CALIPER
DEPTH
POINT RESISTIVITY OHM M²/M
6' LATERAL OHMS M²/M
L/S 15
NAT. GAMMA SEMS. 25 T/C 4Sec INCREASE

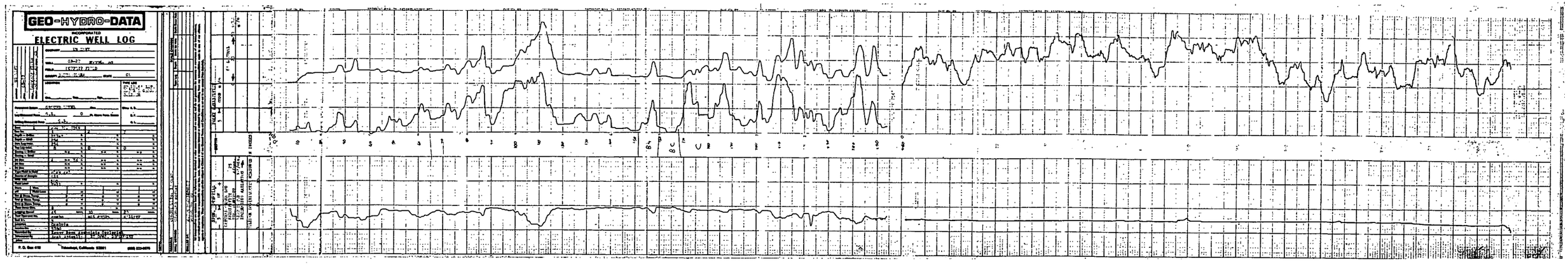
N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

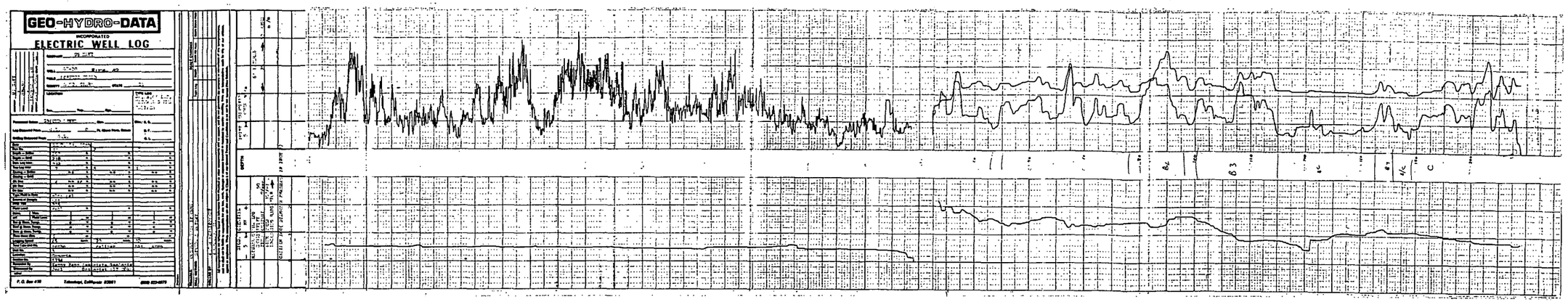
APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 10

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992


GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG



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N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 11

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

NO GEOPHYSICAL LOGGING WAS CONDUCTED AT SITE 11

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 12

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

NO GEOPHYSICAL LOGGING WAS CONDUCTED AT SITE 12

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 13

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

NO GEOPHYSICAL LOGGING WAS CONDUCTED AT SITE 13

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 14

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

GEO-HYDRO-DATA
INCORPORATED

ELECTRIC WELL LOG

COMPANY: WATER DEVELOPMENT CORPORATION
WELL: 03-28 SITE 1A
FIELD: MOFFETT FIELD
COUNTY: SANTA CLARA STATE: CALIFORNIA

LOCATION: Sec. ___ Twp. ___ Rge. ___

TYPE LOG: SP, Pt 64" LAT SPONT. CALIPER

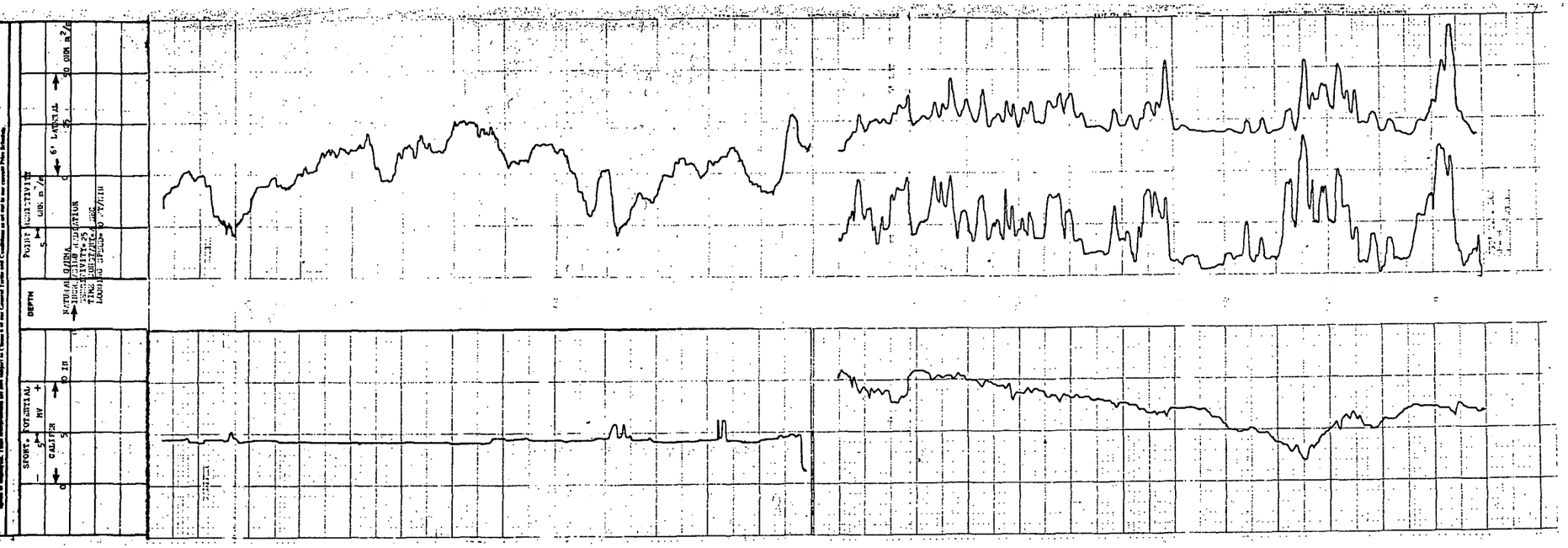
Permanent Datum: GROUND LEVEL Elev.: K. B. ___
Log Measured From: Gale Ft. Above Perm. Datum D. F. ___
Drilling Measured From: Gale G. L. ___

Date	9 Dec 88		
Run No.	one	two	three
Depth — Driller	360		
Depth — GHD	259		
Btm. Log Inter.	259		
Top Log Inter.	10	6	
Casing — Driller	**	**	**
Casing — GHD			
Bit Size	4	**	**
Bit Depth	360	**	**
Bit Size	**	**	**
Type Fluid in Hole	clay-gel		
Source of Sample	pit		
Rm @ Meas. Temp.	.440		
Fluid Level	full		
Density / Visc.			
pH / Fluid Loss	6.9		
Rm @ Meas. Temp.			
Rmf @ Meas. Temp.			
Rmc @ Meas. Temp.			
Time Since Circ.	1		
Logging Speed	30	10	
Tool Type and No.	combo 5	gamma 1	caliper 5
Unit No.	5		
Location	Santa Cruz		
Invoice No.	5721		
Recorded By	Jim Sax, Associate Geologist		
Witnessed By	Robt Logan, Project Engr.		
other	Stan, Water Development		

P. O. Box 418 Tehachapi, California 93561 (805) 822-6878

REMARKS:
DRILL METHOD: STANDARD ROTARY
DRILLED BY: PTC DRILLING, INC.
CONTRACTOR: Mariner, Inc.

SCALE CHANGES: Type Log | Depth | Scale Up Hole | Scale Down Hole



N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 15

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

NO GEOPHYSICAL LOGGING WAS CONDUCTED AT SITE 15

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 16

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

NO GEOPHYSICAL LOGGING WAS CONDUCTED AT SITE 16

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 17

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

NO GEOPHYSICAL LOGGING WAS CONDUCTED AT SITE 17

N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 18

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992

NO GEOPHYSICAL LOGGING WAS CONDUCTED AT SITE 18

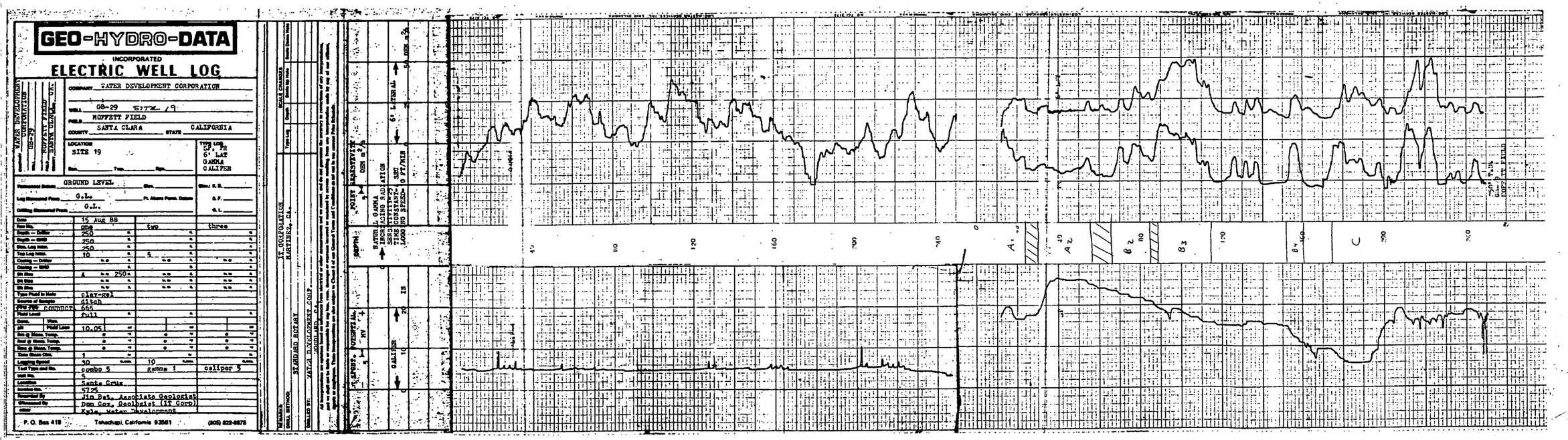
N00296.001452
MOFFETT FIELD
SSIC NO. 5090.3

APPENDIX C – BORING LOGS
GEOPHYSICAL LOGS

SITE 19

REMEDIAL INVESTIGATION REPORT
OPERABLE UNIT 4: WEST SIDE AQUIFERS

DATED 01 AUGUST 1992


GEO-HYDRO-DATA
INCORPORATED
ELECTRIC WELL LOG
COMPANY WATER DEVELOPMENT CORPORATION
WELL GB-29 SITE 19
FIELD MOFFETT FIELD
COUNTY SANTA CLARA STATE CALIFORNIA
LOCATION SITE 19
TYPE LOG SP, PR 6' LAT GAMMA CALIPER
GROUND LEVEL
Log Measured From G.L.
Drilling Measured From G.L.
Date 15 Aug 88
Run No. one two three
Depth — Driller 250
Depth — SPGR 250
Stm. Log Inter. 250
Top Log Inter. 10 5
Casing — Driller
Casing — SPGR
Bit Size 250
Bit Size
Bit Size
Type Fluid in Hole clay-gel
Source of Sample ditch
Fluid Level full
pH 10.05
Rm @ Meas. Temp.
Rmf @ Meas. Temp.
Rmc @ Meas. Temp.
Time Since Circ. 1
Logging Speed 30 10
Tool Type and No. combo 5 gamma 1 caliper 5
Unit No. 5
Location Santa Cruz
Service No. 5725
Recorded By Jim Bat, Associate Geologist
Witnessed By Don Cox, Geologist (IT Corp)
Kyle, Water Development
P. O. Box 418 Tehachapi, California 93561 (805) 822-8878
IT CORPORATION MARTINEZ, CA.
STANDARD ROTARY
WATER DEVELOPMENT CORP. WOODLAND, CA.
POINT RESISTIVITY
NATURAL GAMMA INCREASING RADIATION
SENSITIVITY=25
TIME CONSTANT=
LOGGING SPEED=
SEC
0 FT/MIN
6' LATERAL
CALIPER
IN
SPONT. POTENTIAL
MV
A1
A2
B2
B3
B4
C