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CLEAN II TRANSMITTAL/DELIVERABLE RECEIPT

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Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 57CS1.RS
Building 127, Room 112
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San Diego, CA 92132-5190

DATE: December 15, 1997
CTO #: 142
LOCATION: MCAS El Toro

FROM: D. J. Tedaldi, Ph.D., P.E., Project Manager

DESCRIPTION: Meeting Minutes, Site 24 Pilot Test Update - DTD October 15, 1997

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MEETING MINUTES

Meeting Subject: Site 24 Pilot Test Update	**Meeting Date**: October 15, 1997 **Meeting Time**: 10:00 AM **Meeting Place**: Conference Call **Meeting Notes Prepared By**: Patrick Brooks

Attendees: (*Part Time)

Navy	Bechtel	Other
Bernie Lindsey, SWDIV	Pat Brooks, CTOL	Glenn Kistner, U.S. EPA
	Tim Latas, Field Manager	Herb Levine, U.S. EPA
	Dante Tedaldi, PM	Tayseer Mahmoud, DTSC
		Larry Vitale, RWQCB

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Pat Brooks opened the update meeting with a discussion of the constant-rate pumping test at extraction well 24EX3. The pumping rate is 15 gallons per minute, as agreed upon during the 3 September Site 24 update meeting. Numerous electrical and logic problems have been encountered and solved. The current test was started on October 3, so the 2-week test has nearly been completed after several attempts. The drawdown curves that are attached to these minutes were faxed to the group for discussion. Drawdown in the extraction well is about 24 feet. Observation well drawdown varies from about 0.2 feet in well 24EX3OB2 to about 1.1 feet at well 24EX3OB3. Estimated transmissivity values in the observation wells are similar. When calculating transmissivity, the larger value of drawdown in OB3 is countered by the smaller well screen (5 feet compared to 40 feet in OB1 and OB2). Based on the drawdown curves and assuming that no more electrical problems arise, Pat suggested that the test be completed on October 17. The final drawdown curves would then be provided to the group. Representatives from the U.S. EPA, DTSC, and RWQCB concurred with ending the test on October 17.

Water-level data from injection well 24IN1 show a maximum buildup of about 12 feet and about 3 feet of buildup in monitoring well 24IN1OB. These data are consistent with other test results. The injection well appears to be working very well with no signs of clogging.

Drilling is being conducted at the 24EX4 extraction well group. One monitoring well (24EX4OB1) has been drilled and well 24EX4OB2 is currently being drilled. The extraction well is scheduled to be drilled later this week. After 24EX4 is drilled, all three wells will be constructed.

New funding for CPT/HydroPunch work is available and Pat discussed proposed locations for additional sampling. All of the sampling is to take place within the TCE hot spot to support decision-making regarding proposed well locations. New CPT/HydroPunch locations are proposed downgradient of existing sample points and generally follow the long axis of the TCE hot spot. Pat said he would fax out a map showing proposed locations by tomorrow. The group agreed that sampling should be within the TCE hot spot. Pat added that possible locations for the remaining extraction wells and injection well are restricted because Building 297 is very active. The areas available for drilling are on either side of Building 297 between the northern and southern hangar doors. Unlike Building 296, where the group had some latitude in well locations, the proposed well locations for 24EX5, 24EX6, and 24IN2 are restricted due to Station operations. Bernie Lindsey reminded the group that we would still evaluate the HydroPunch data before installing a well, so a well is not installed outside the TCE hot spot. Pat asked if the group agreed to this rationale. Everyone concurred.

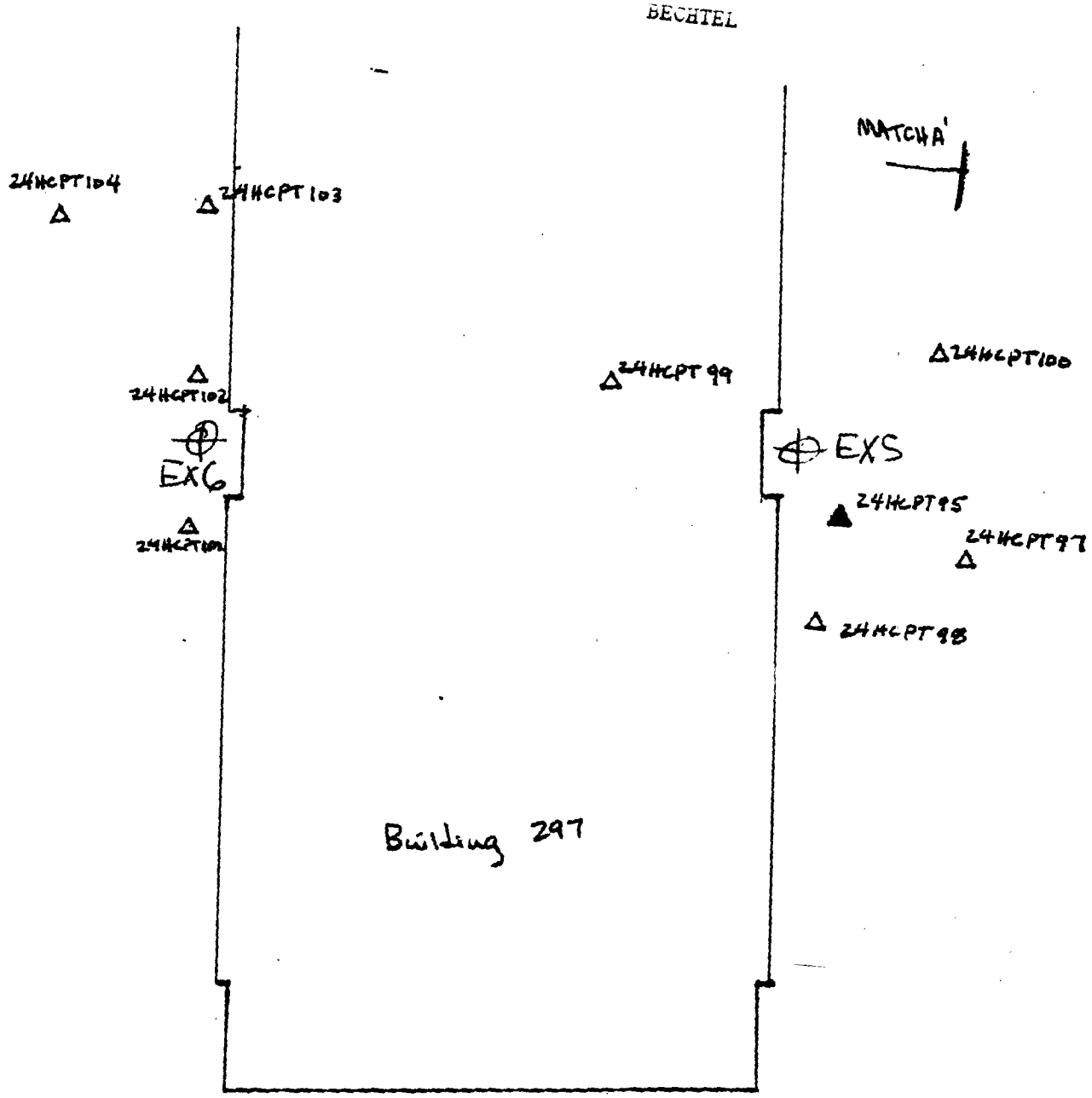
MEETING MINUTES (continued)

The SVE system has been extracting soil gas at 24SVE10. By operating the SVE system near extraction well 24EX3, soil gas levels will be low when the vacuum-enhanced groundwater extraction test begins. This will allow us to evaluate the contribution to soil gas concentrations made by the dewatered aquifer. High readings may indicate residual DNAPL in the aquifer. Pat said this was not expected based on an evaluation of the groundwater TCE concentrations, which have been around 250 μg/L. The vacuum-enhanced test is scheduled to begin during the week of October 20 and will depend on whether the data logger vendor can deliver absolute pressure transducers and a new data logger.

Attached to these minutes are a site plan showing the locations of CPT/HydroPunch locations, drawdown and buildup curves, and CPT logs for locations 24HCPT 97, 98, 99, and 102.

The Plan of Action for Site 24 field work for the next two weeks includes the following:

1. Continue SVE at well 24SVE10 to reduce soil gas background concentrations near extraction well 24EX3 (SVE began at well 24SVE10 on 24 September).
2. Begin long-term vacuum-enhanced test at extraction well 24EX3 (20 October).
3. Compile and present constant-rate aquifer test data from extraction well 24EX3.
4. Drill and install extraction well 24EX4 and monitoring wells.
5. Continue CPT/HydroPunch work within the TCE groundwater hot spot (initiated 14 October).

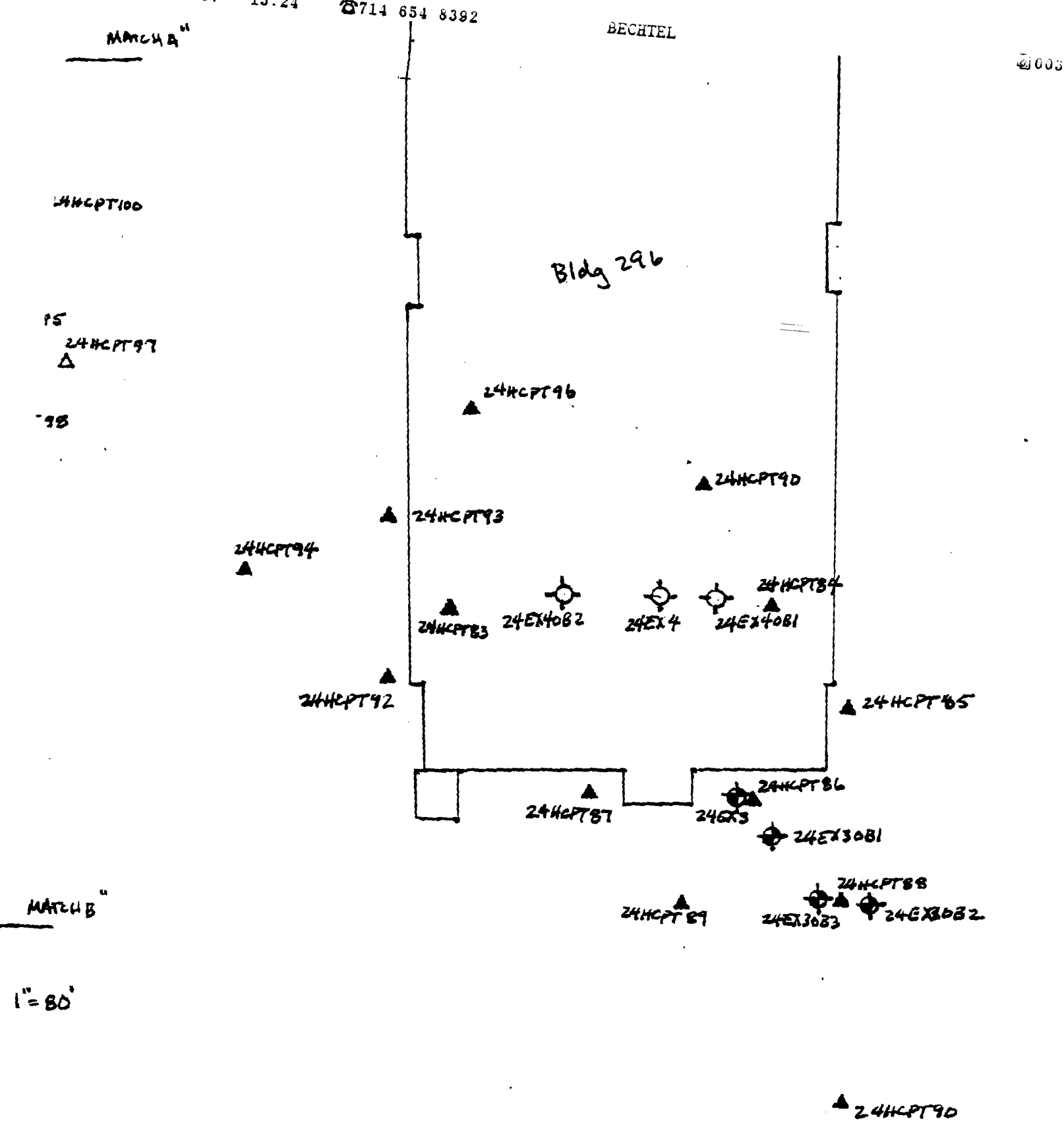


LEGEND

- ▲ Existing CPT location
- △ Proposed CPT location
- Proposed extraction and observation wells
- Existing wells

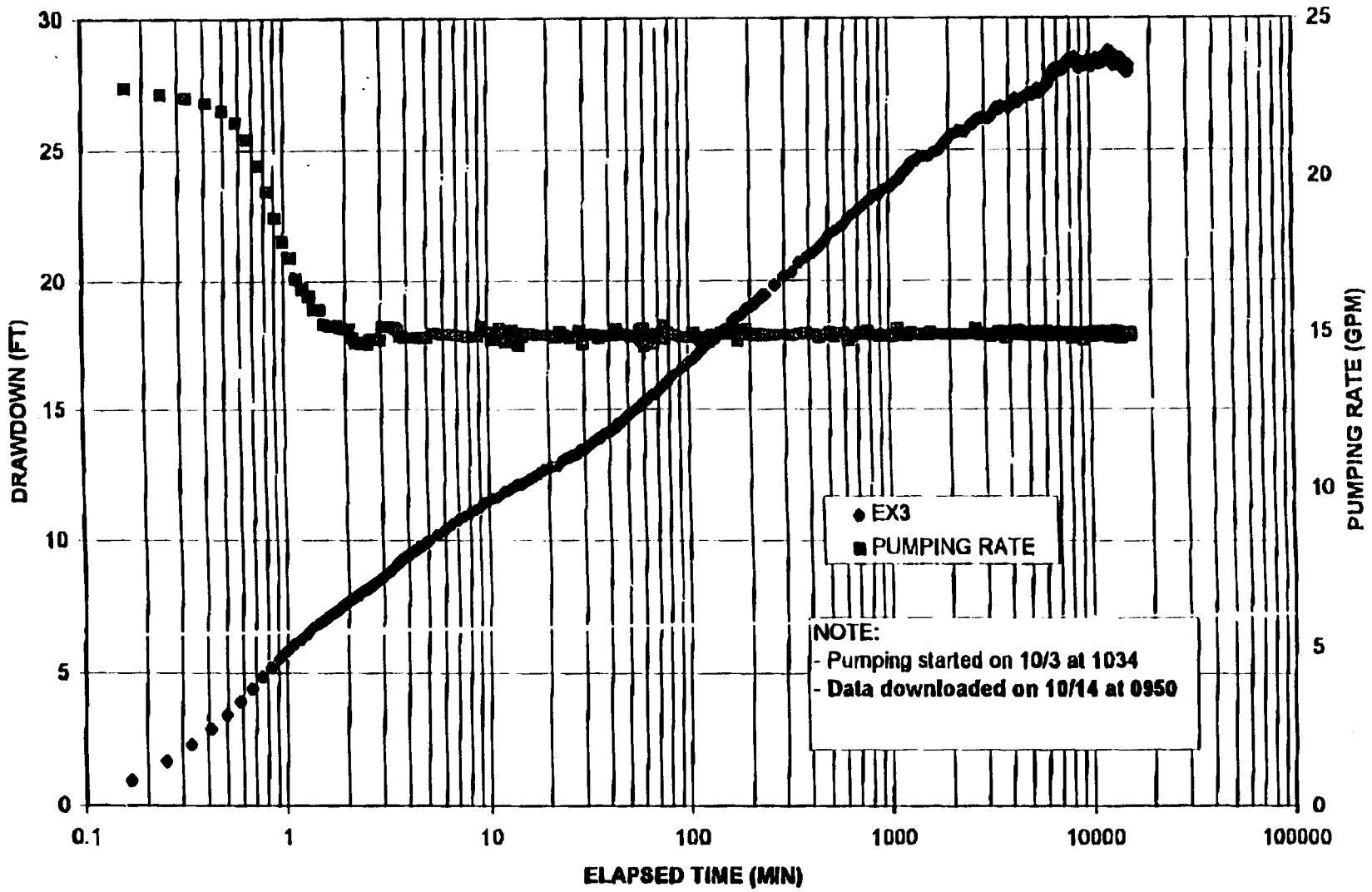
MATCH B'

SCALE 1" = 80'


MATCH B"
24HCPT100
Bldg 296
95
24HCPT97
24HCPT96
98
24HCPT90
24HCPT93
24HCPT94
24HCPT84
24HCPT83
24EX4082
24EX4
24EX4081
24HCPT92
24HCPT85
24HCPT86
24HCPT87
24EX3
24EX3081
24HCPT88
MATCH B"
24HCPT89
24EX3083
24EX3082
1"=80'
24HCPT90

10/14/97 13:43 714 654 5382 BECHTEL

EX3 CONSTANT RATE AQUIFER TEST #7
PUMPING



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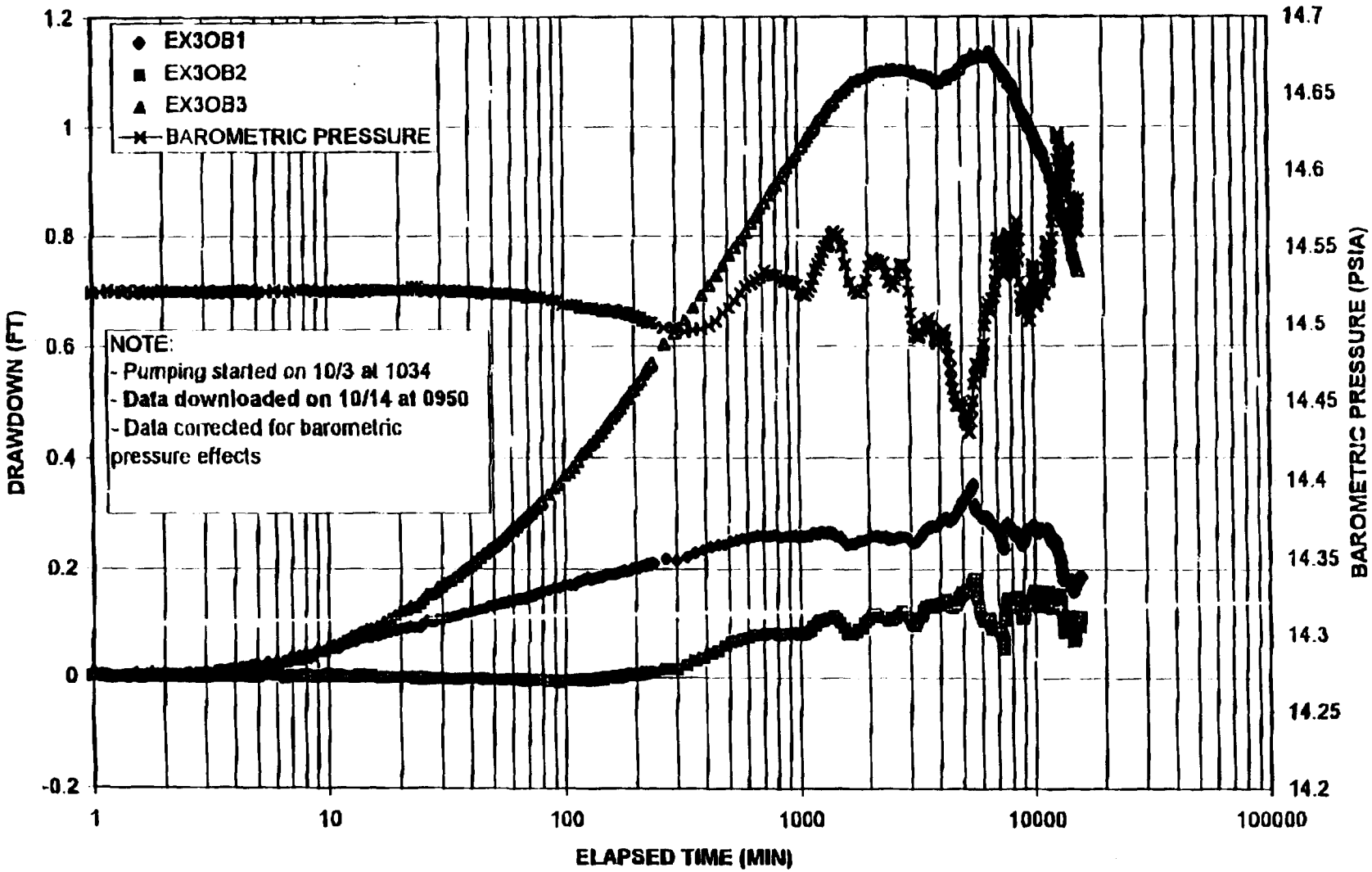
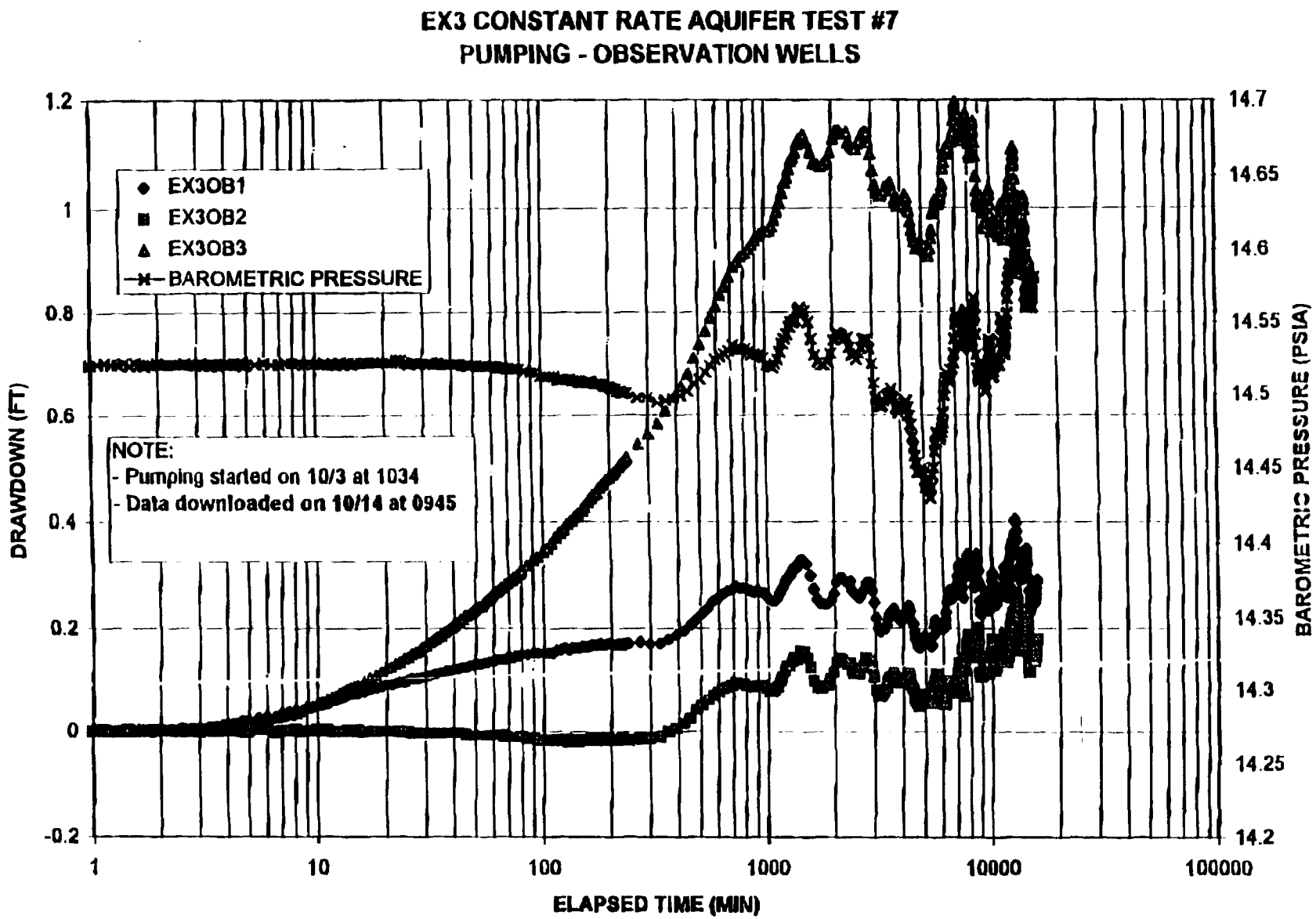
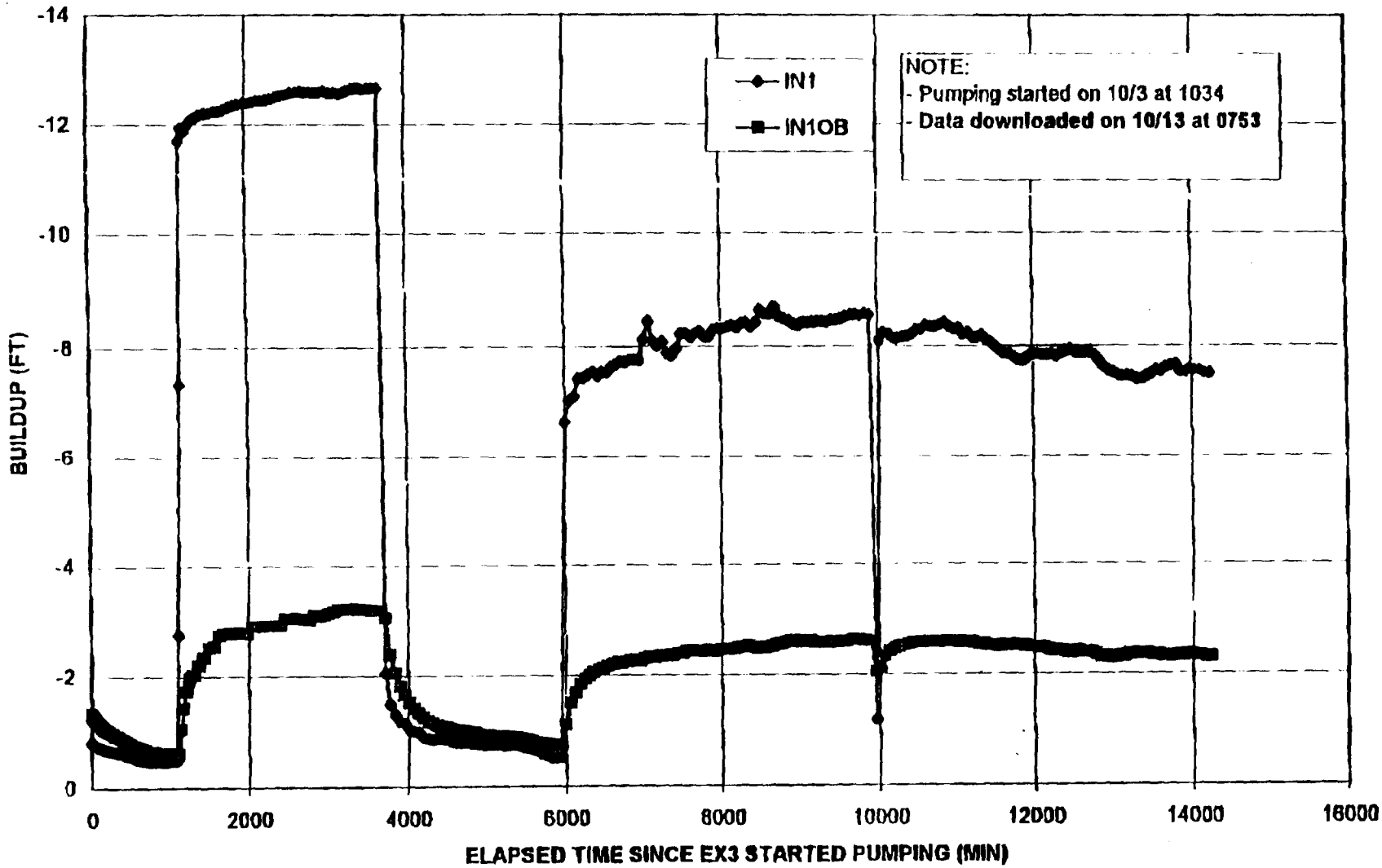
EX3 CONSTANT RATE AQUIFER TEST #7
PUMPING - OBSERVATION WELLS




EX3 CONSTANT RATE AQUIFER TEST #7
PUMPING - OBSERVATION WELLS
EX3OB1
EX3OB2
EX3OB3
BAROMETRIC PRESSURE
NOTE:
- Pumping started on 10/3 at 1034
- Data downloaded on 10/14 at 0945
DRAWDOWN (FT)
BAROMETRIC PRESSURE (PSIA)
ELAPSED TIME (MIN)
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
14.7
14.65
14.6
14.55
14.5
14.45
14.4
14.35
14.3
14.25
14.2
1
10
100
1000
10000
100000

EX3 CONSTANT RATE AQUIFER TEST #7
INJECTION WELL



10/13/97 09:00 ☎714 654 5592 BECHTEL

10/16/97 13:24 ☎714 654 8392 BECHTEL 004

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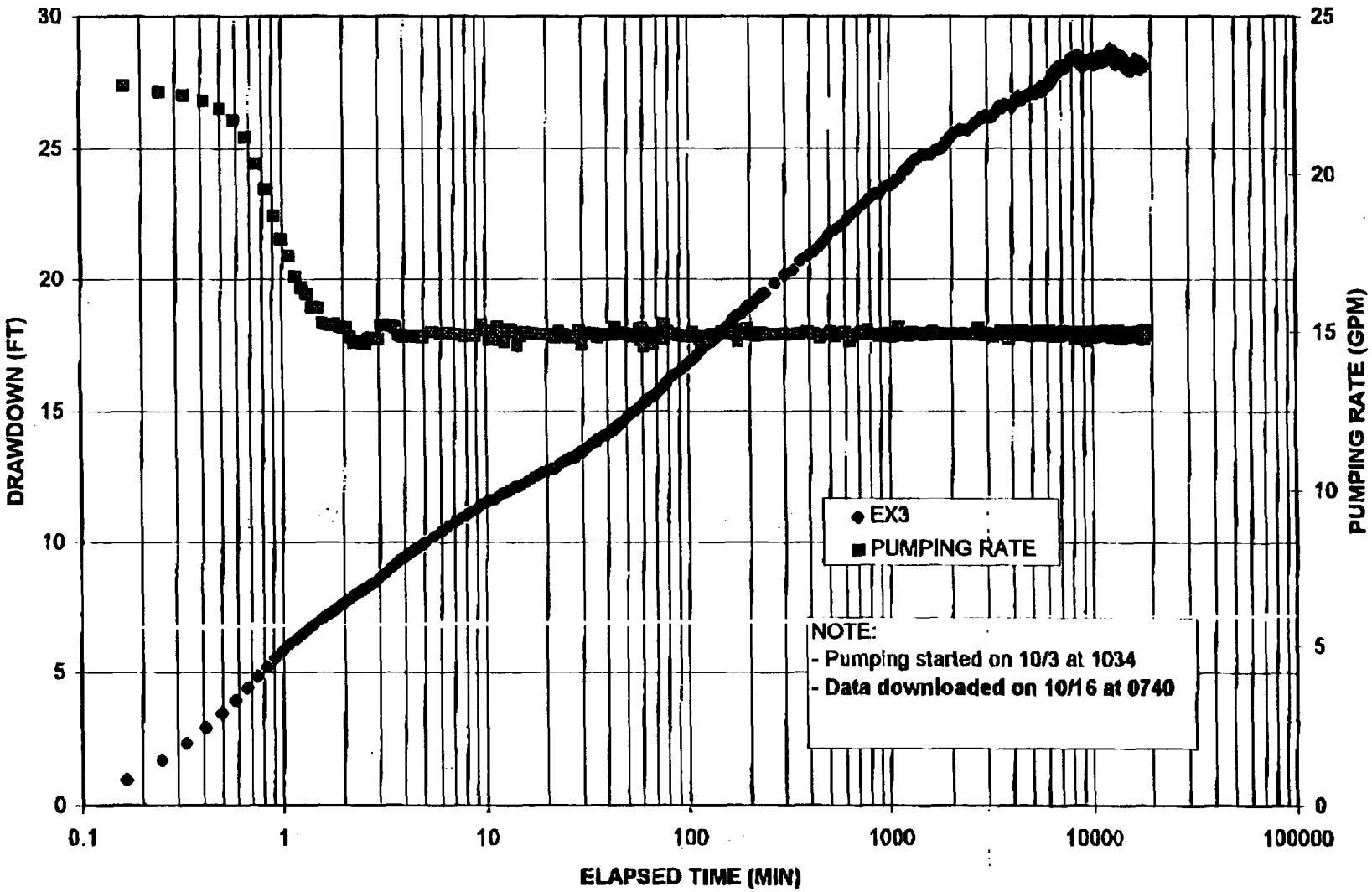

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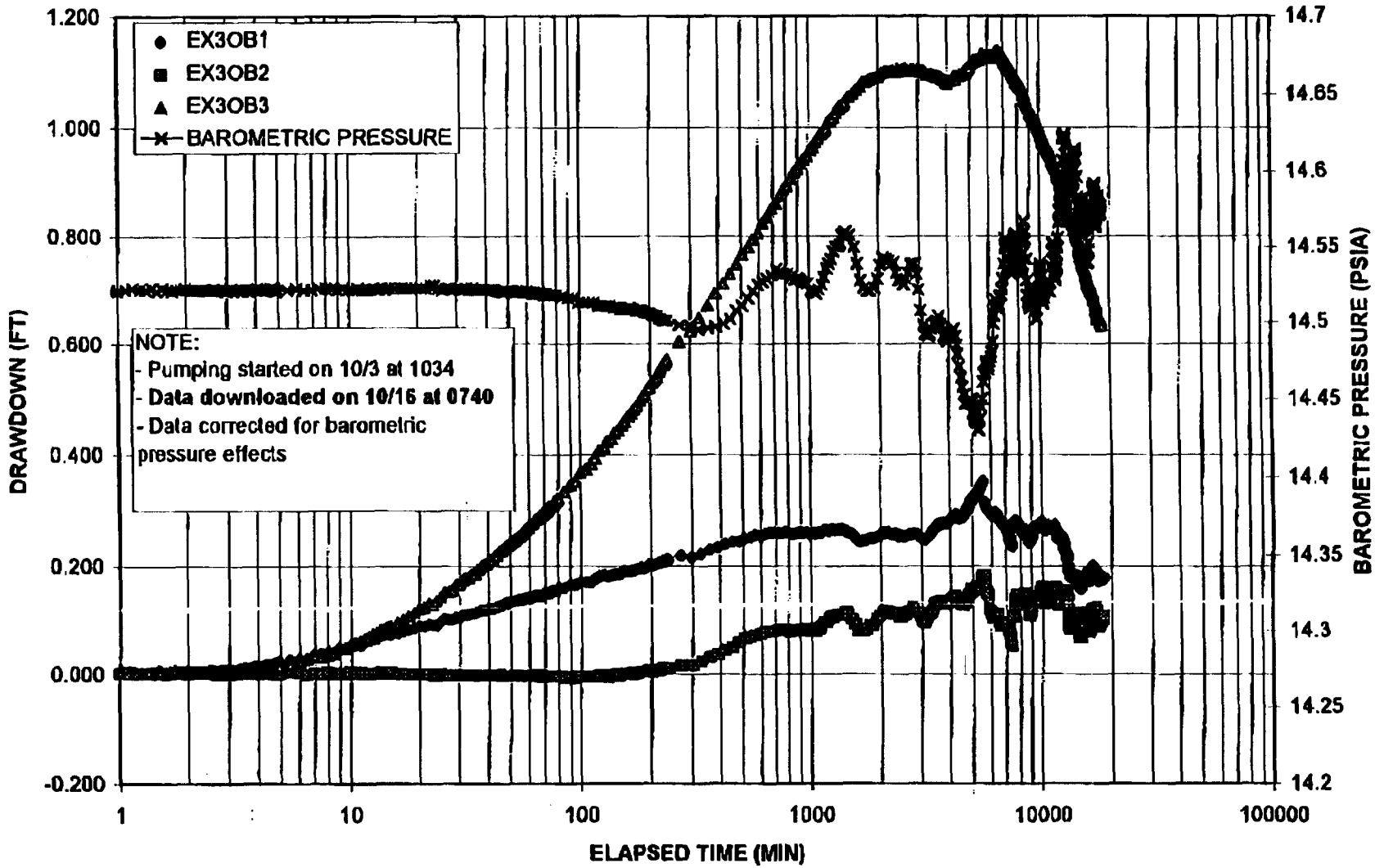
PUMPING - OBSERVATION WELLS



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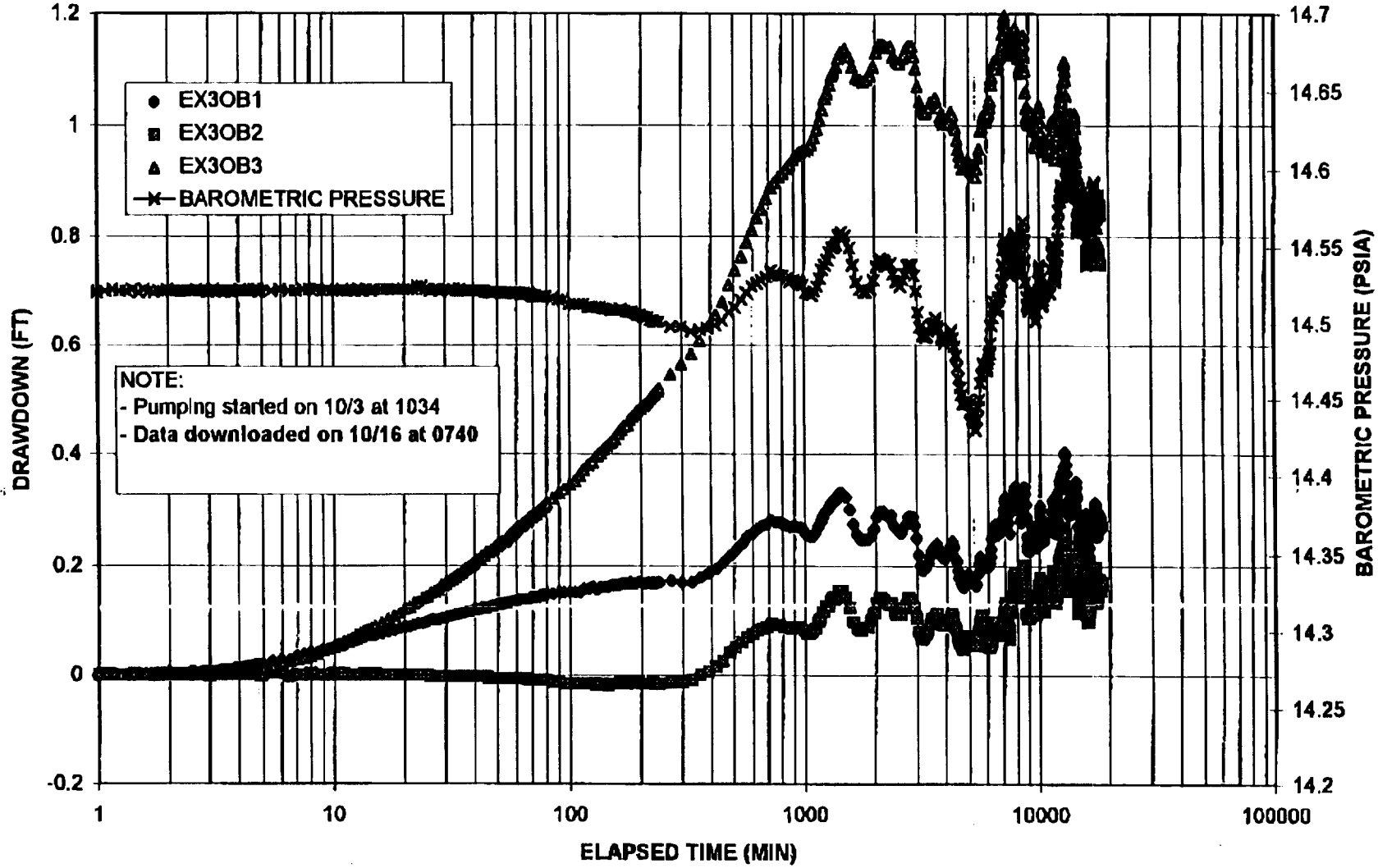
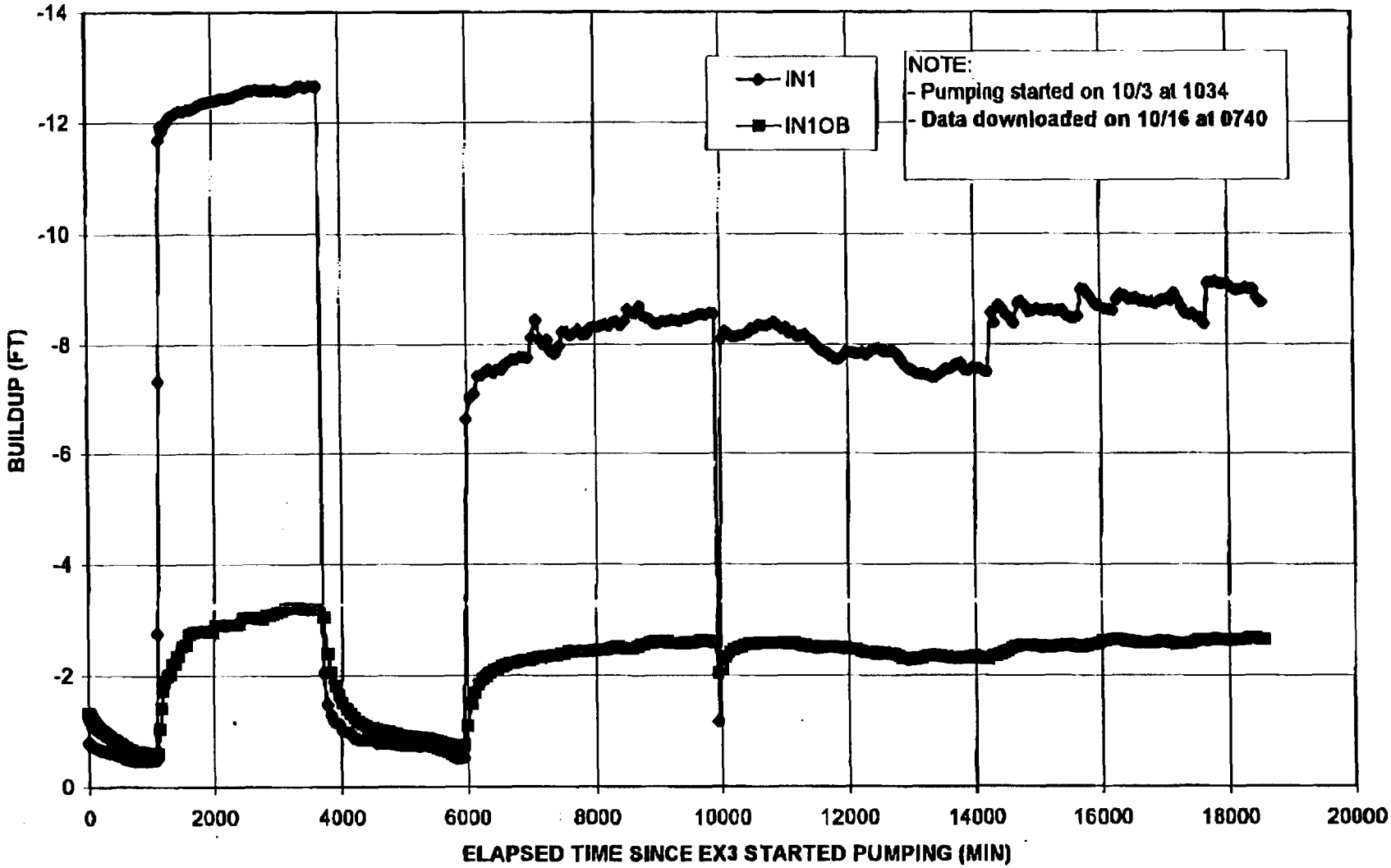
PUMPING - OBSERVATION WELLS

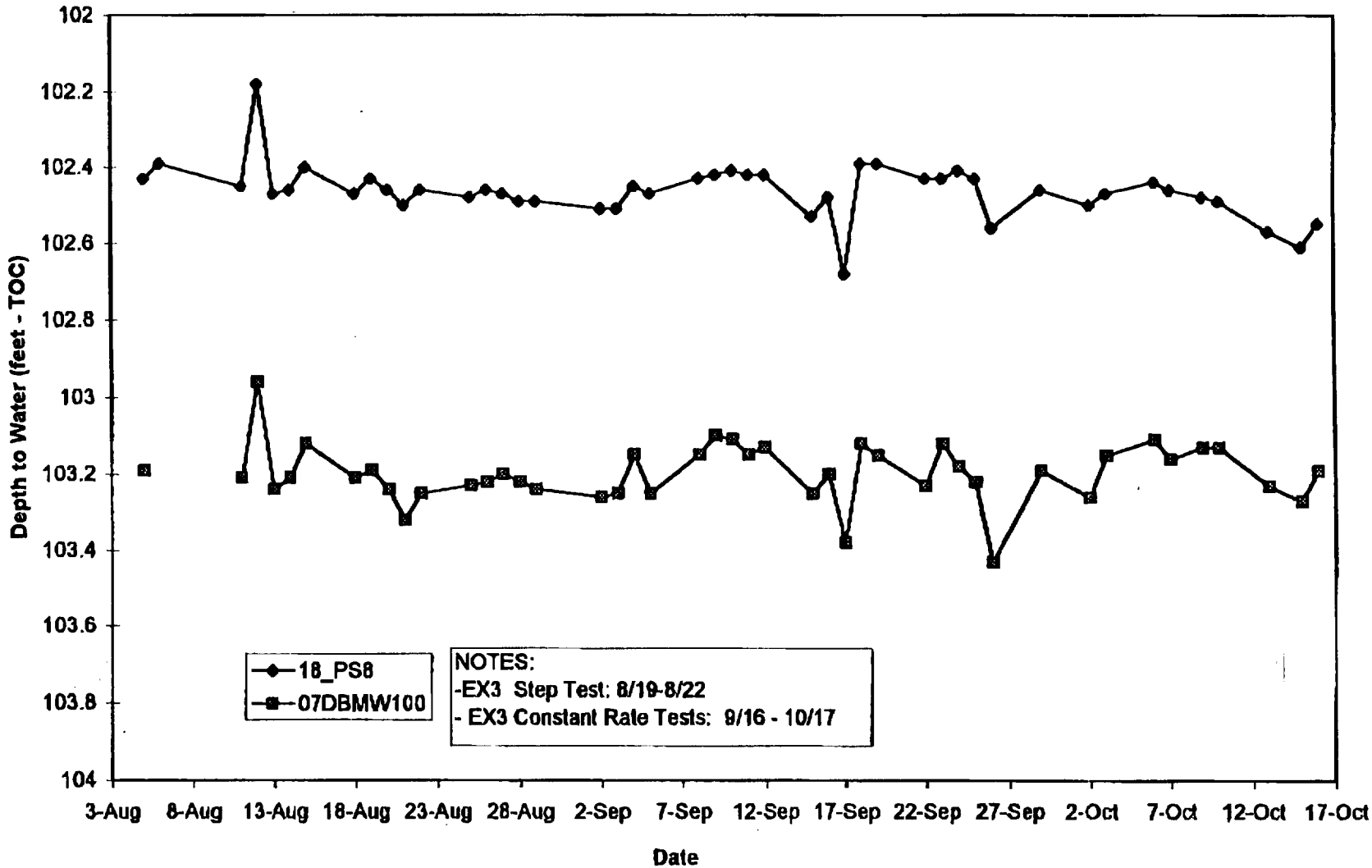


IN1

EX3 CONSTANT RATE AQUIFER TEST #7
INJECTION WELL

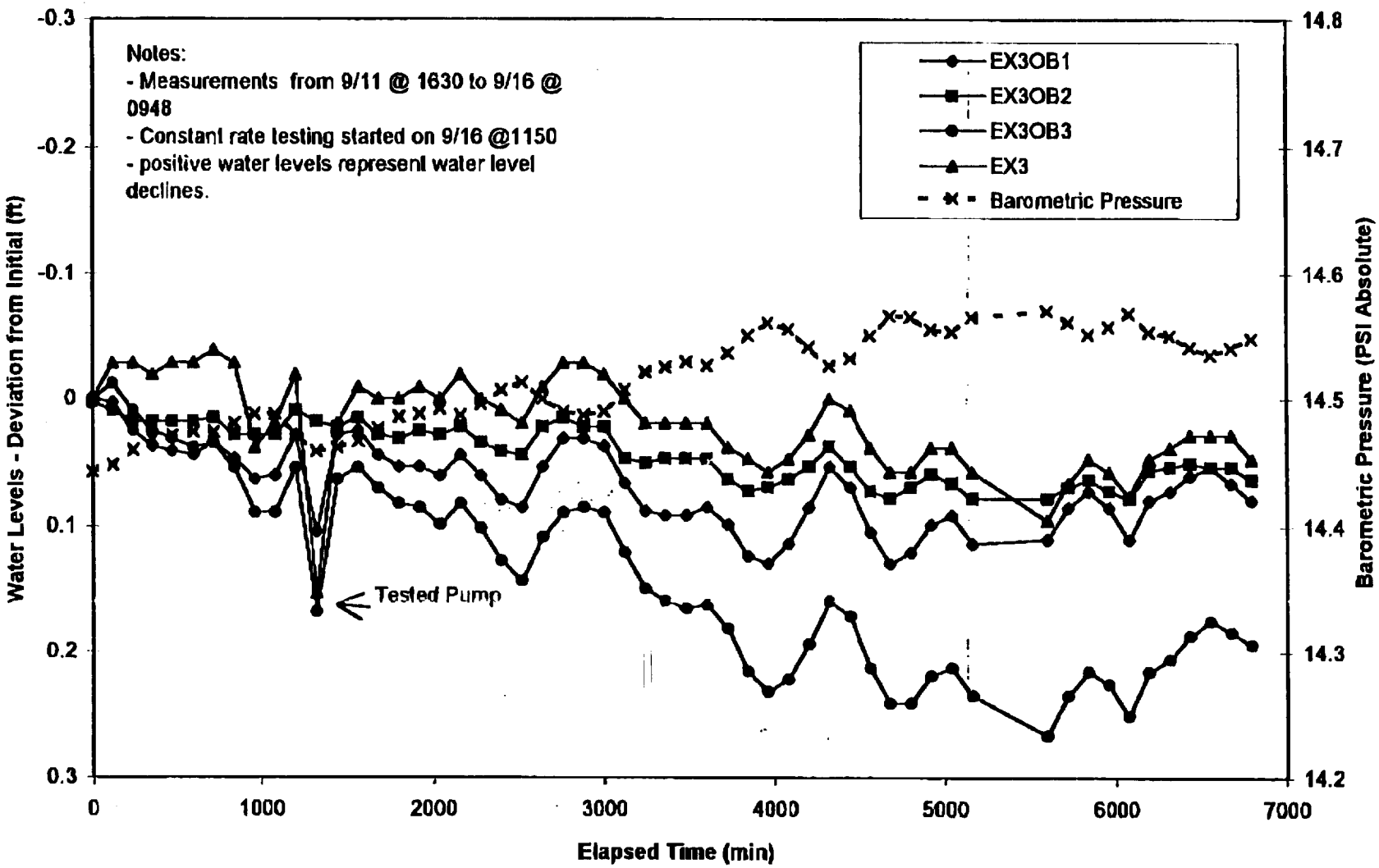


Water Levels Prior to And During Aquifer Tests in 24EX3
Background Wells



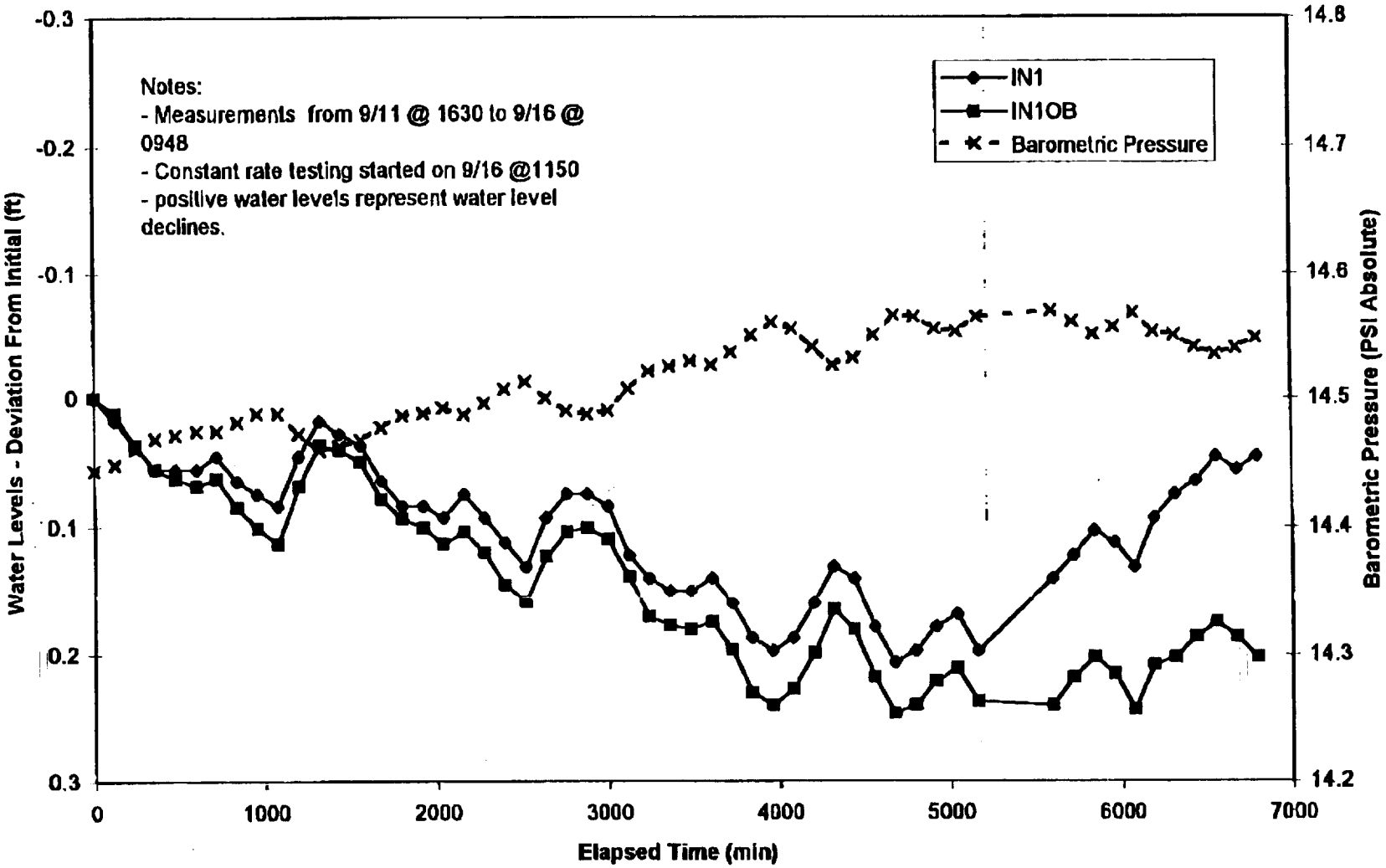
10/16/97 13:26 ☎714 654 8382 RECEIVED

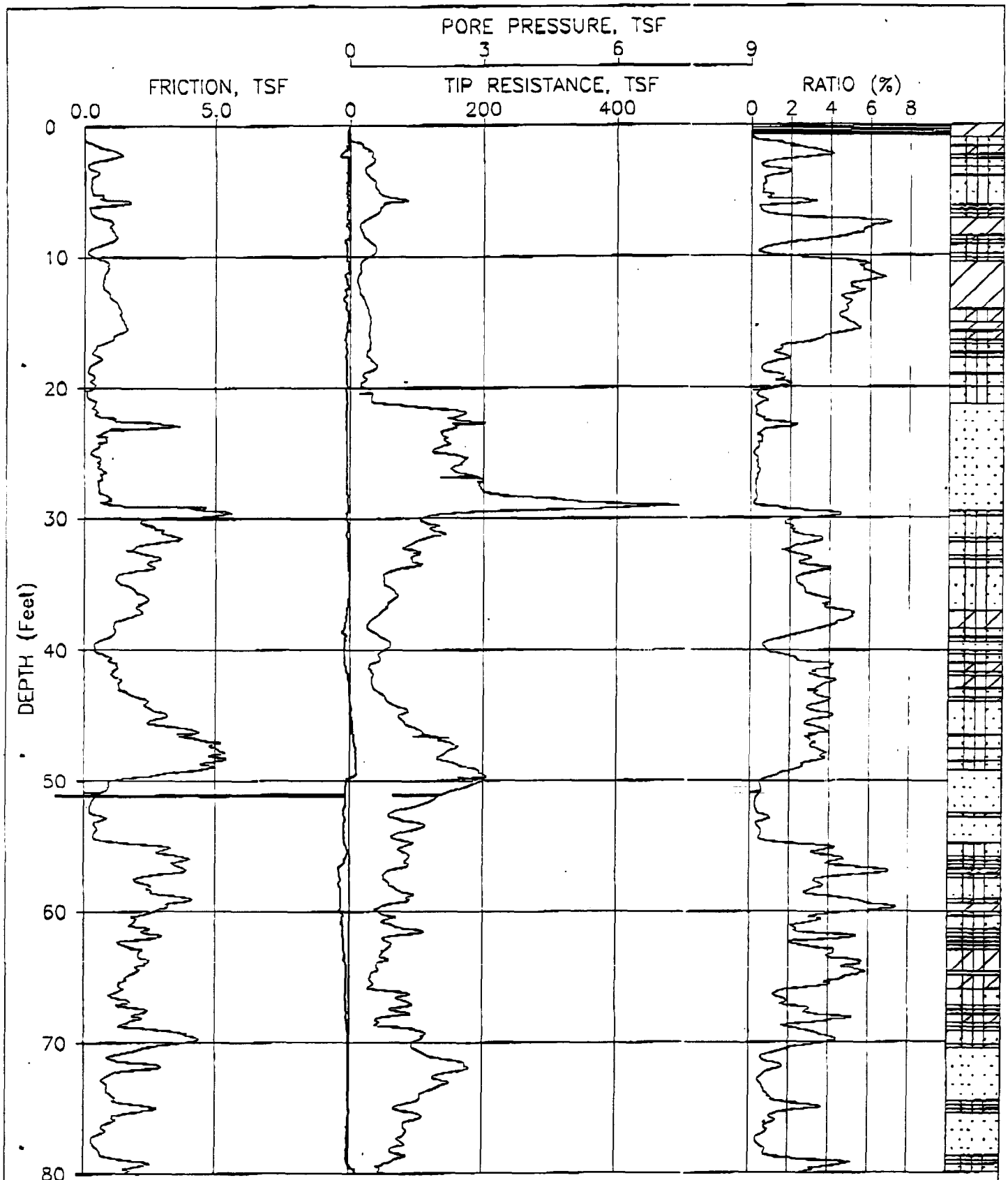
Pre EX3 Costant Rate Test Water Levels
EX3 Well Cluster



IN1

Pre EX3 Constant Rate Test Water Levels
IN1 Well Cluster





JOB NUMBER: 0303-0191 CPT NUMBER: CPT97A DATE: 10-14-1997
ELEVATION: 0.00 CONE NUMBER: F7.5CKEW893 PLATE: 1 OF 2

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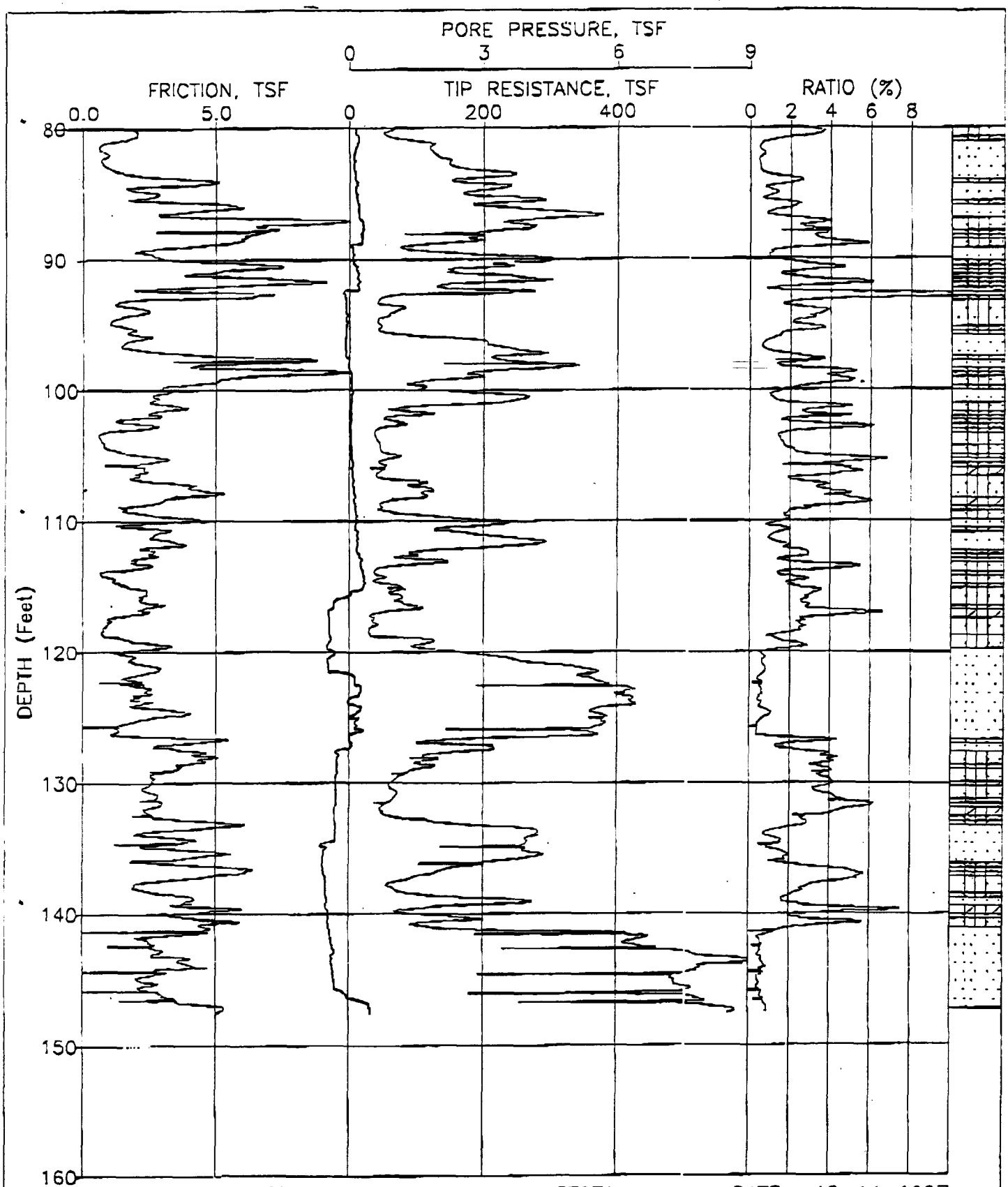
24 HCRT 97



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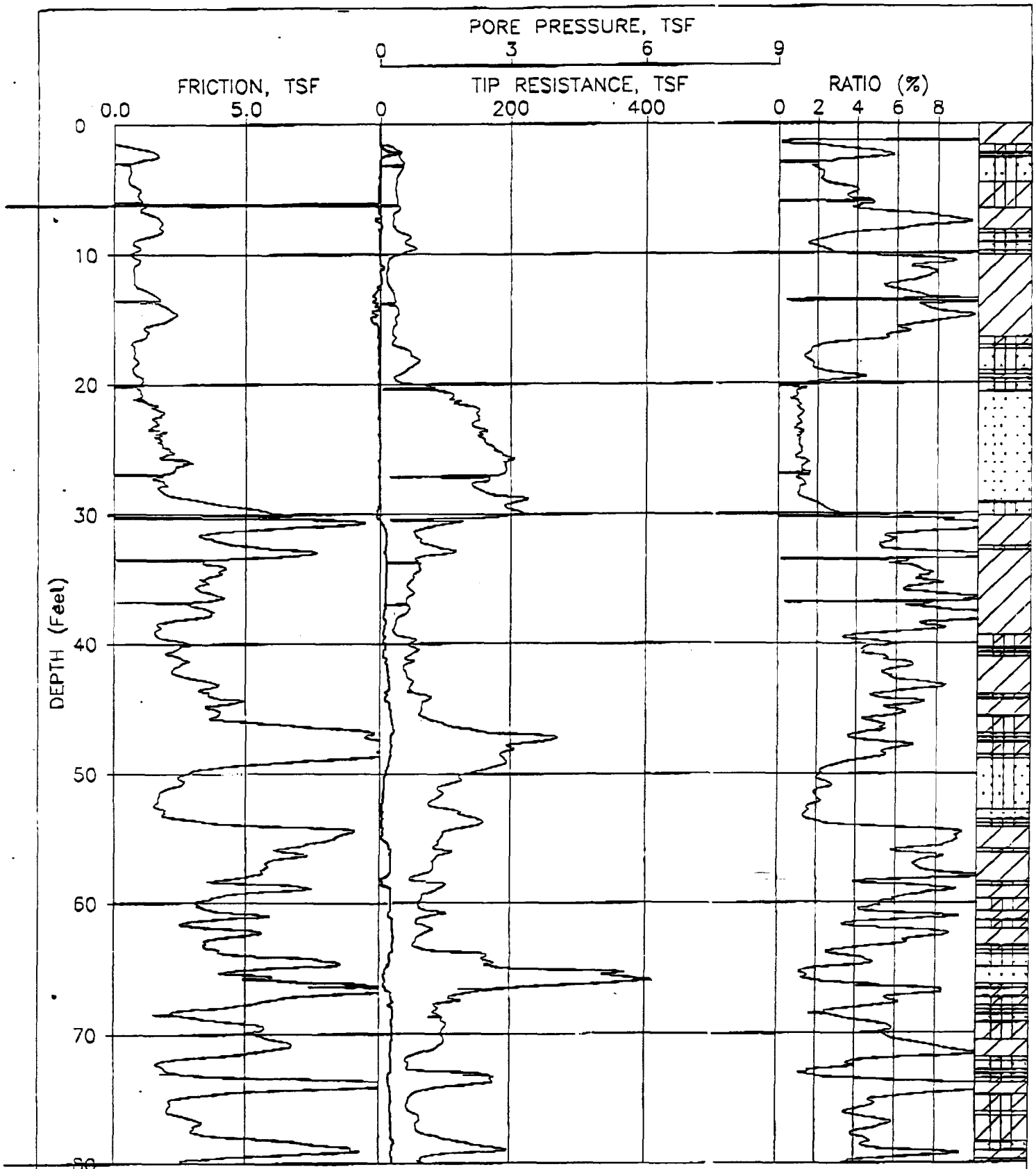
ELEVATION: 0.00 CONE NUMBER: F7.5CKEW893 PLATE: 2 OF 2



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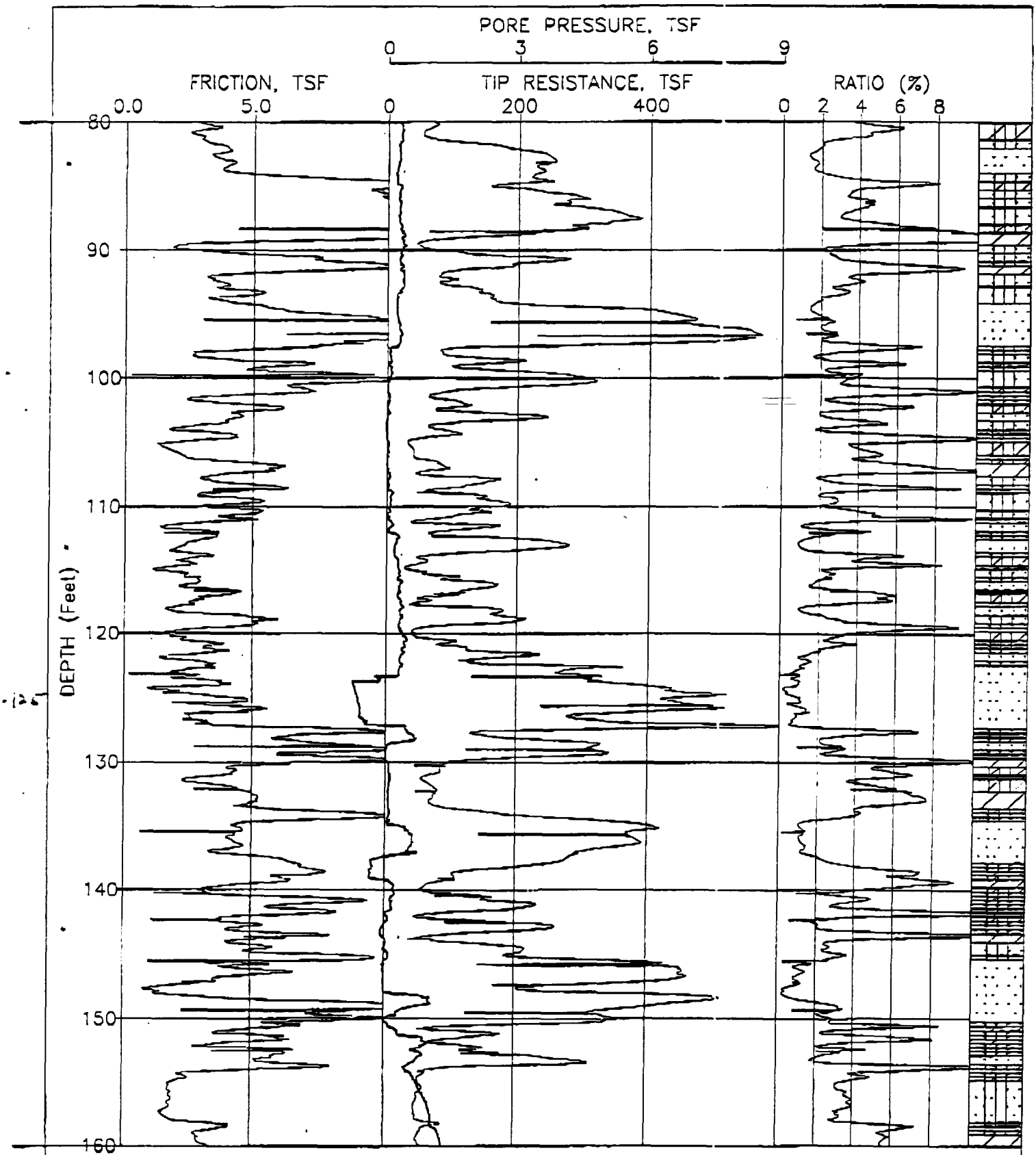
24 HCPT 98



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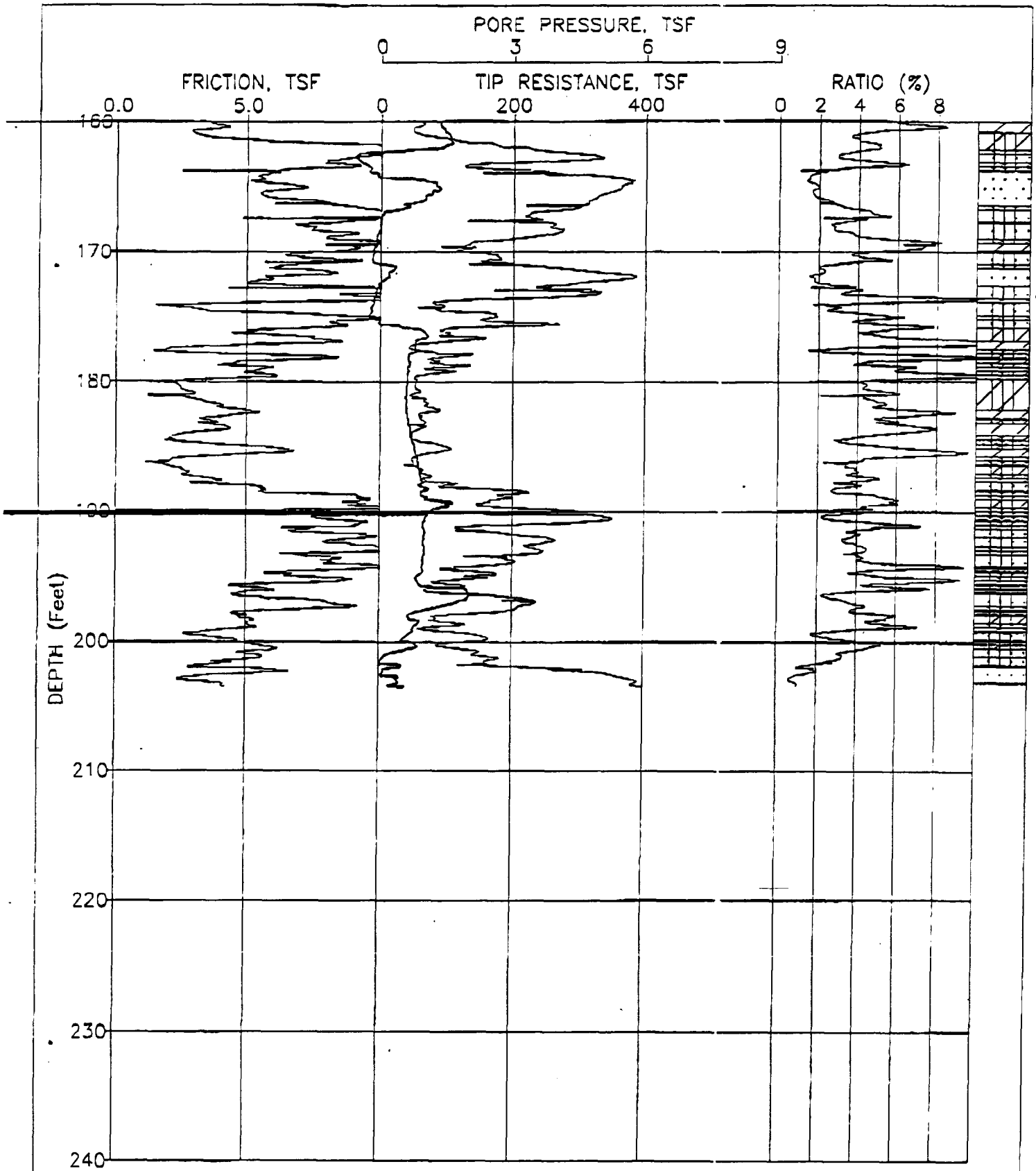
FUGRO GEOSCIENCES,INC



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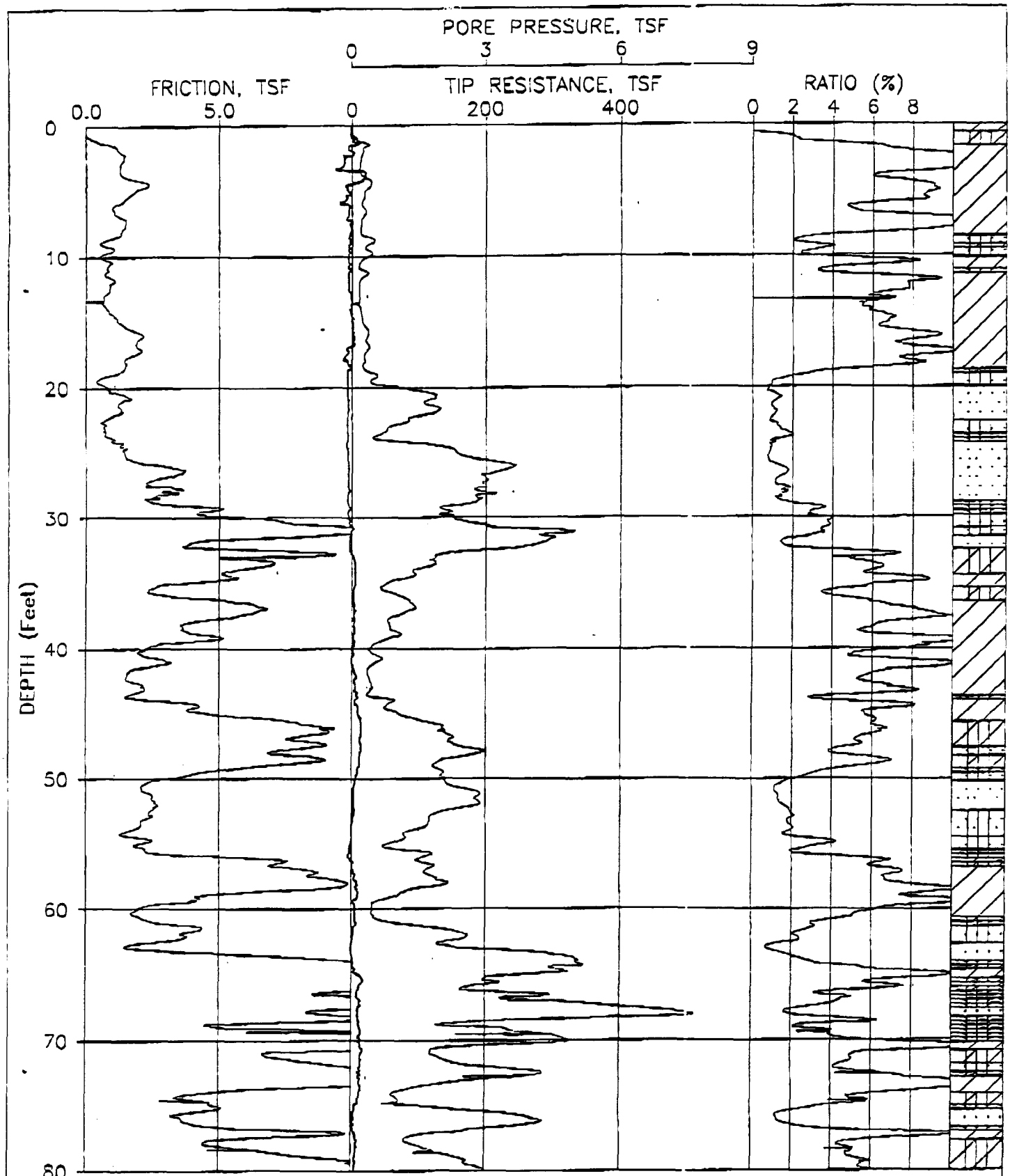

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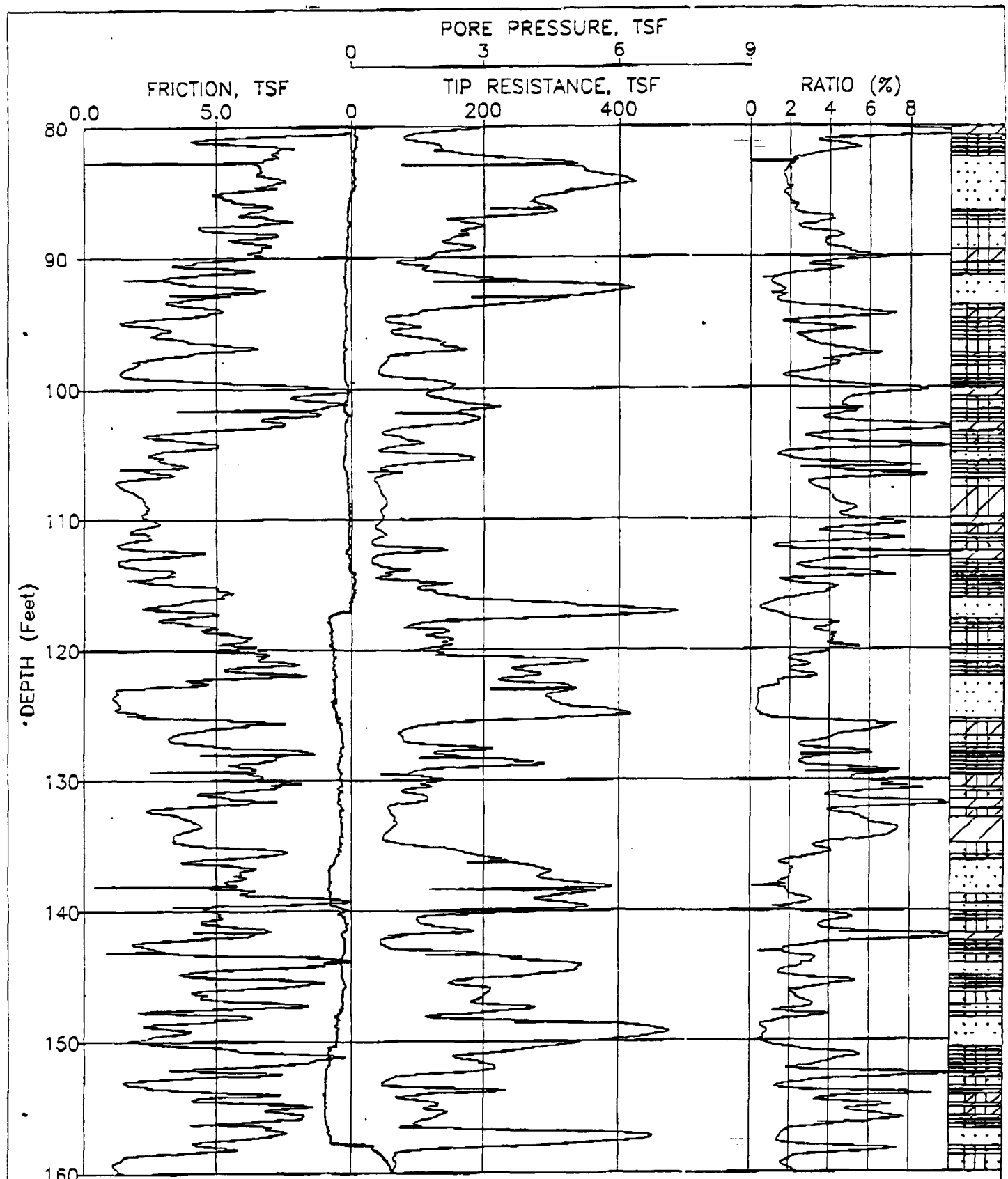
24ACPT99



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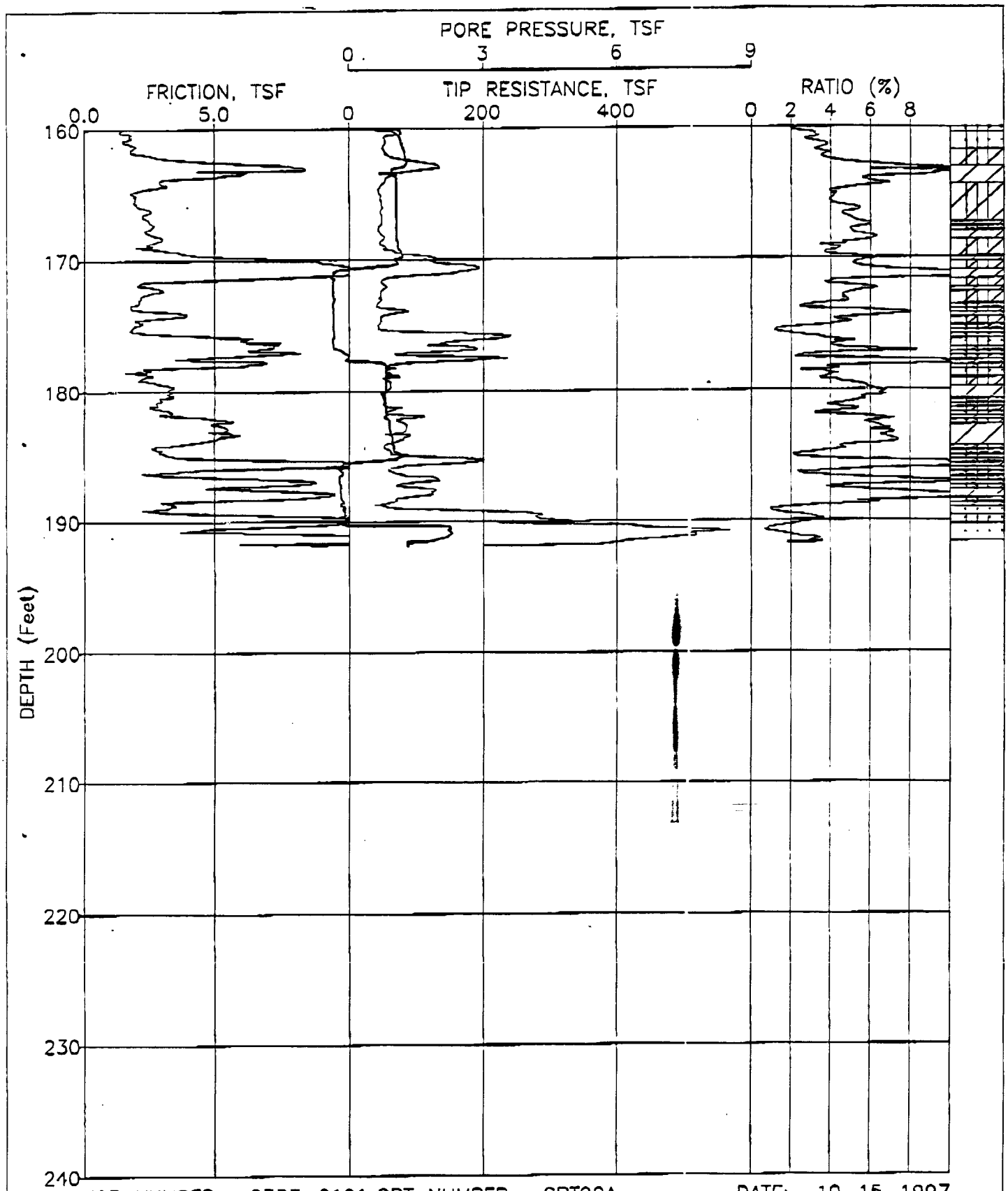

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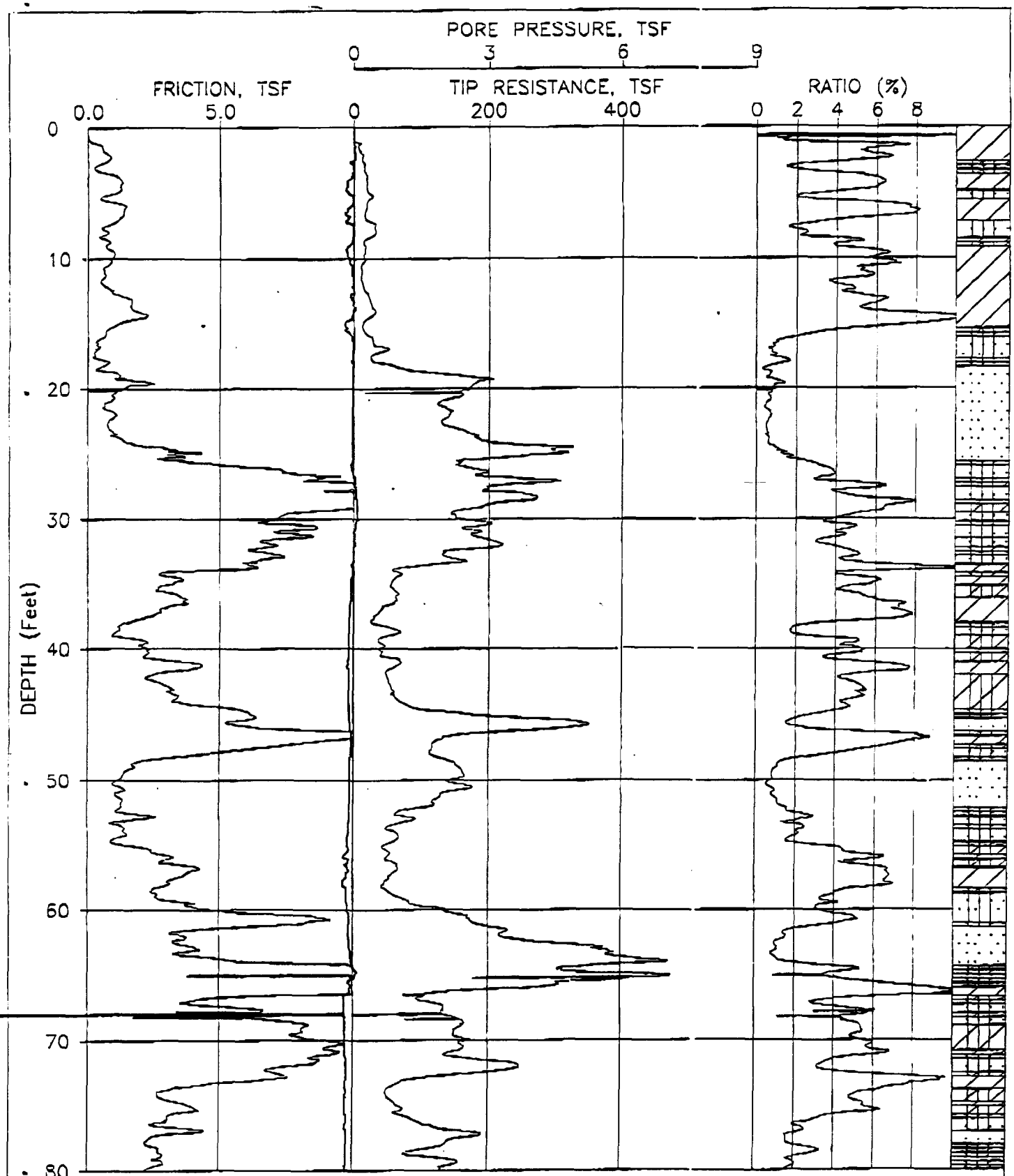

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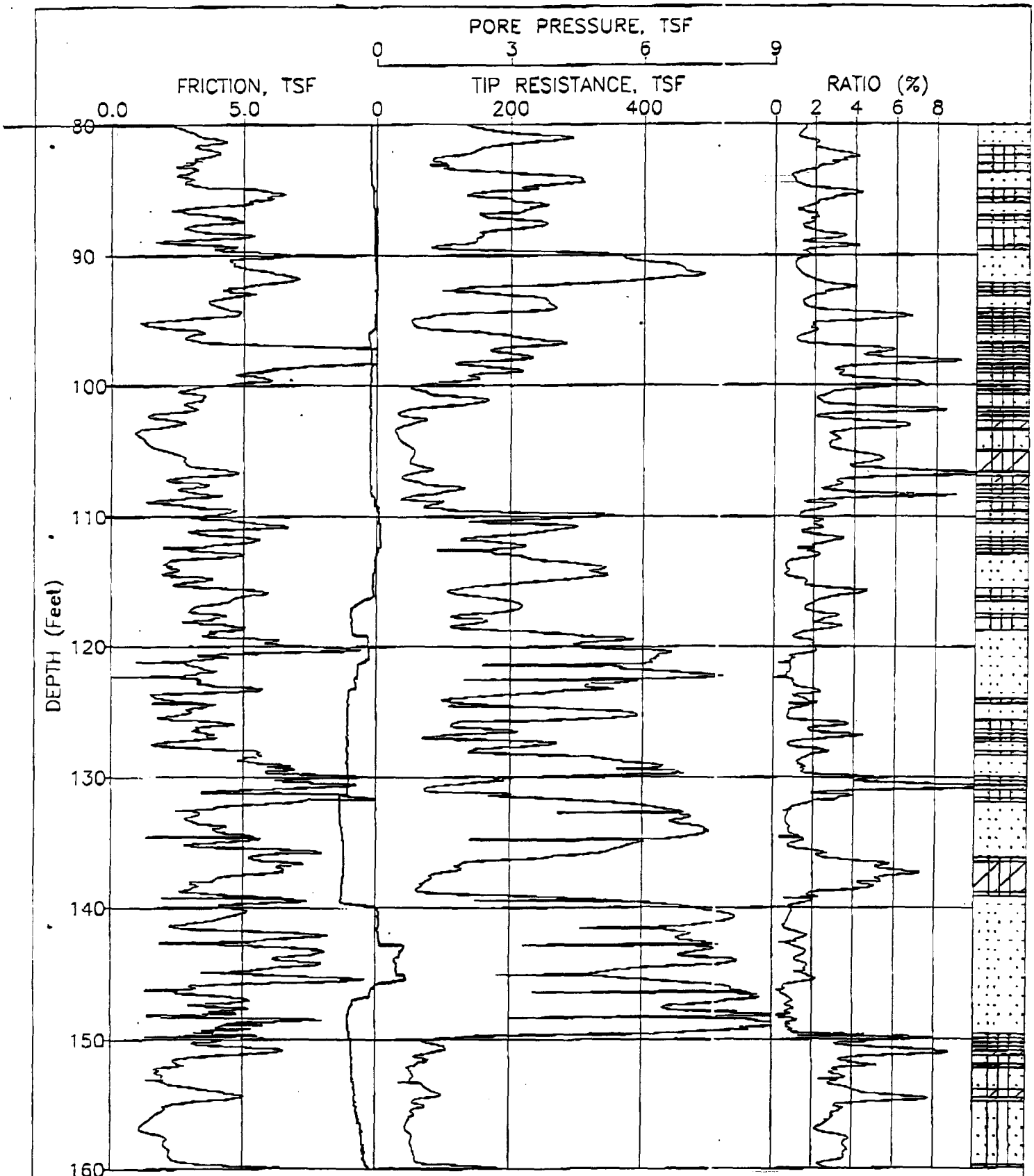
24HCPT100



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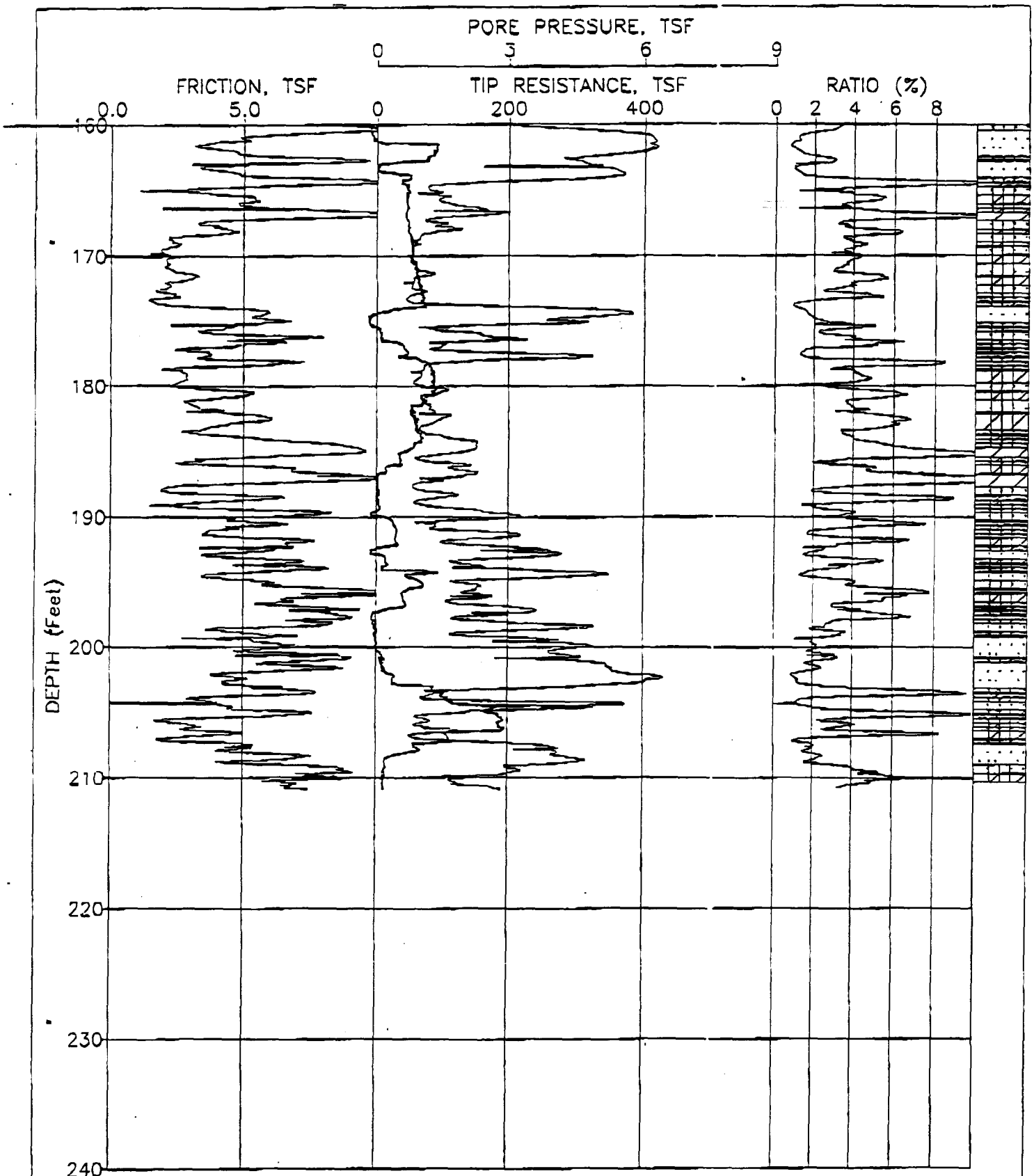

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ELEVATION: 0.00 CONE NUMBER: F7.5CKEW893 PLATE: 3 OF 3

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