



GEOPHYSICAL LOGGING DIVISION

**YOUNGQUIST
BROTHERS, Inc**

**FLUID CONDUCTIVITY
TEMPERATURE
LOG**

Company **HAZEN & SAWYER**
Well **IW - 1**
Field **S. CTY REGIONAL WTP R/O EXP**
County **COLLIER** State **FLORIDA**

Company **HAZEN & SAWYER**
Well **IW - 1**
Field **S. CTY RGL WTP R/O EXP**
County **COLLIER**
State **FL**

Location	Permanent Datum	Elevation	Other Services SEE REMARKS
	Log Measured From	PAD	
	Drilling Measured From	GROUND LEVEL	
		Elevation	K.B. D.F. G.L.

Date	11/29/01
Run Number	THREE
Depth Driller	1420'
Depth Logger	1420'
Bottom Logged Interval	1420'
Top Log Interval	CASING
Open Hole Size	12.25"
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	N/A
Estimated Cement Top	N/A
Time Well Ready	0830
Time Logger on Bottom	0900
Equipment Number	103
Location	FT. MYERS
Recorded By	FERGUSON
Witnessed By	N. KUGLER

Borehole Record		Tubing Record	
Run Number	Bit	Size	Weight
ONE	4 5/8"	SURFACE	336'
TWO	12.25"	CASING	1420'

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	42"	37.5 W.T.	SURFACE	330'
Prod. String				
Production String				
Line				

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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, except in the case of gross or willful negligence on our part, 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 general terms and conditions set out in our current Price Schedule.

Comments

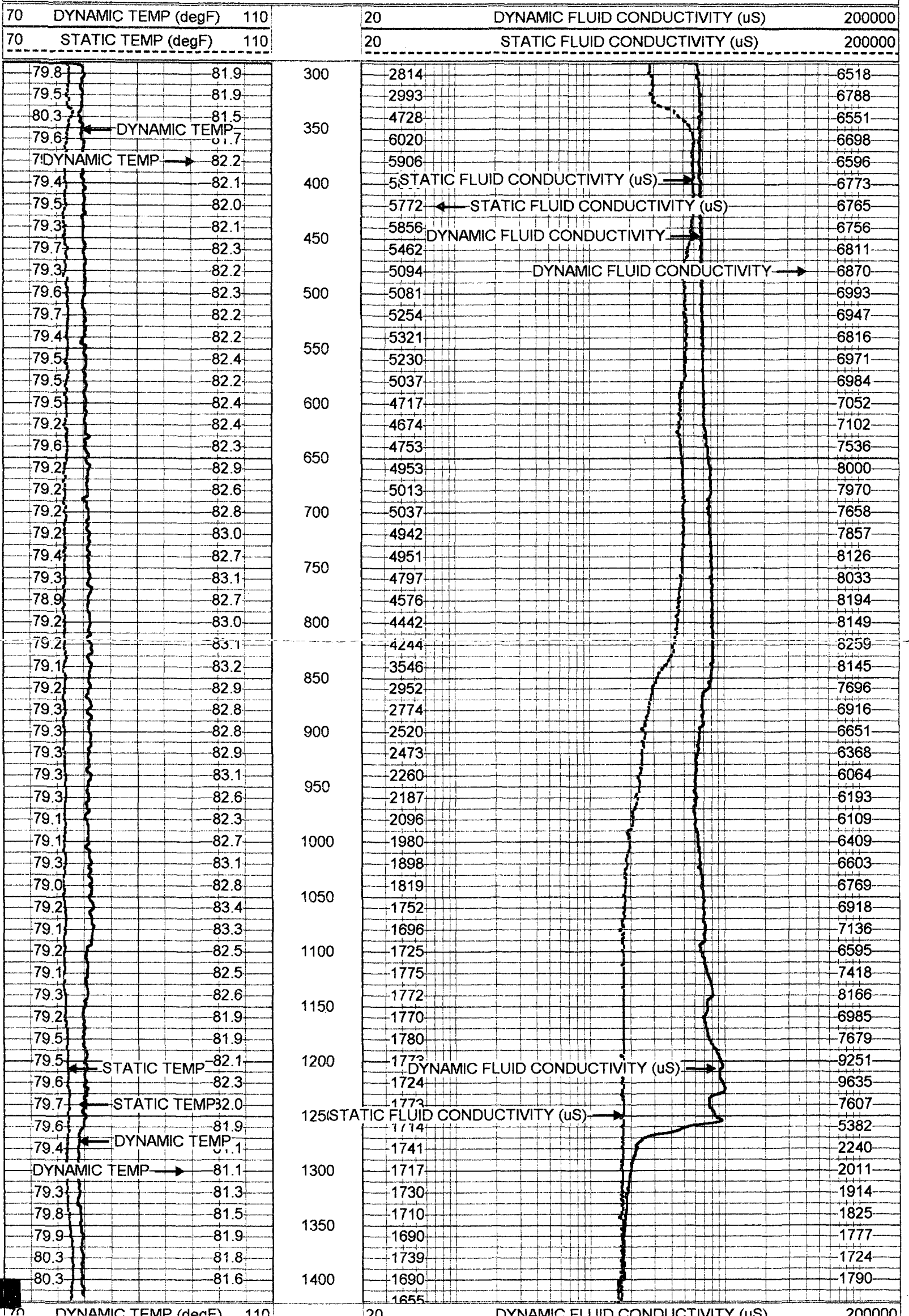
DYNAMIC FLOWRATE = 250 GPM

OTHER SERVICES:
DUAL INDUCTION LL3/SP
X-Y CALIPER/GAMMA RAY
FLOWMETER
BOREHOLE COMPENSATED SONIC



MERGED FLUID COND/TEMP

Database File: scriw1.db
Dataset Pathname: run3/pass23
Presentation Format: prt, mc, prc



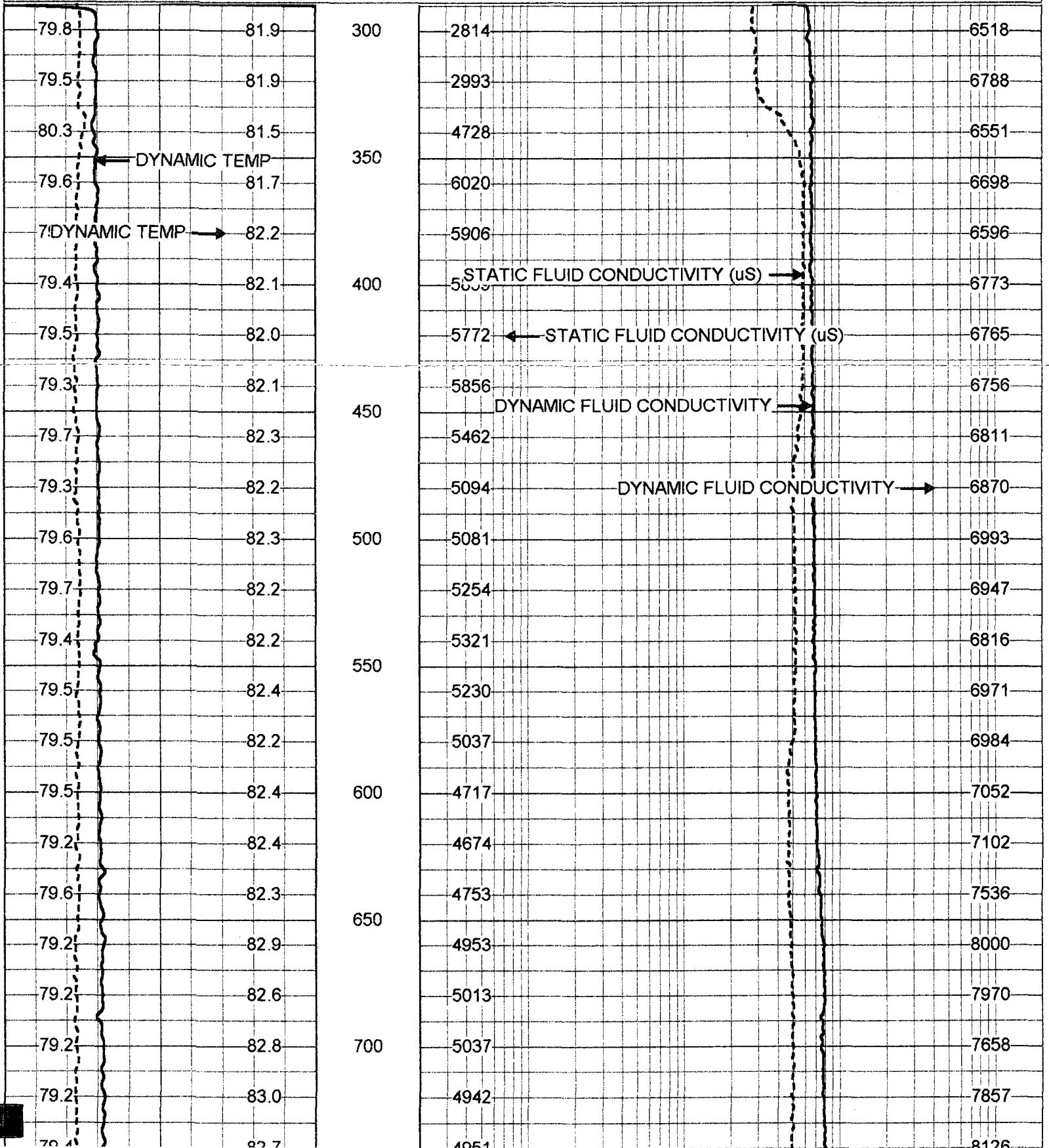


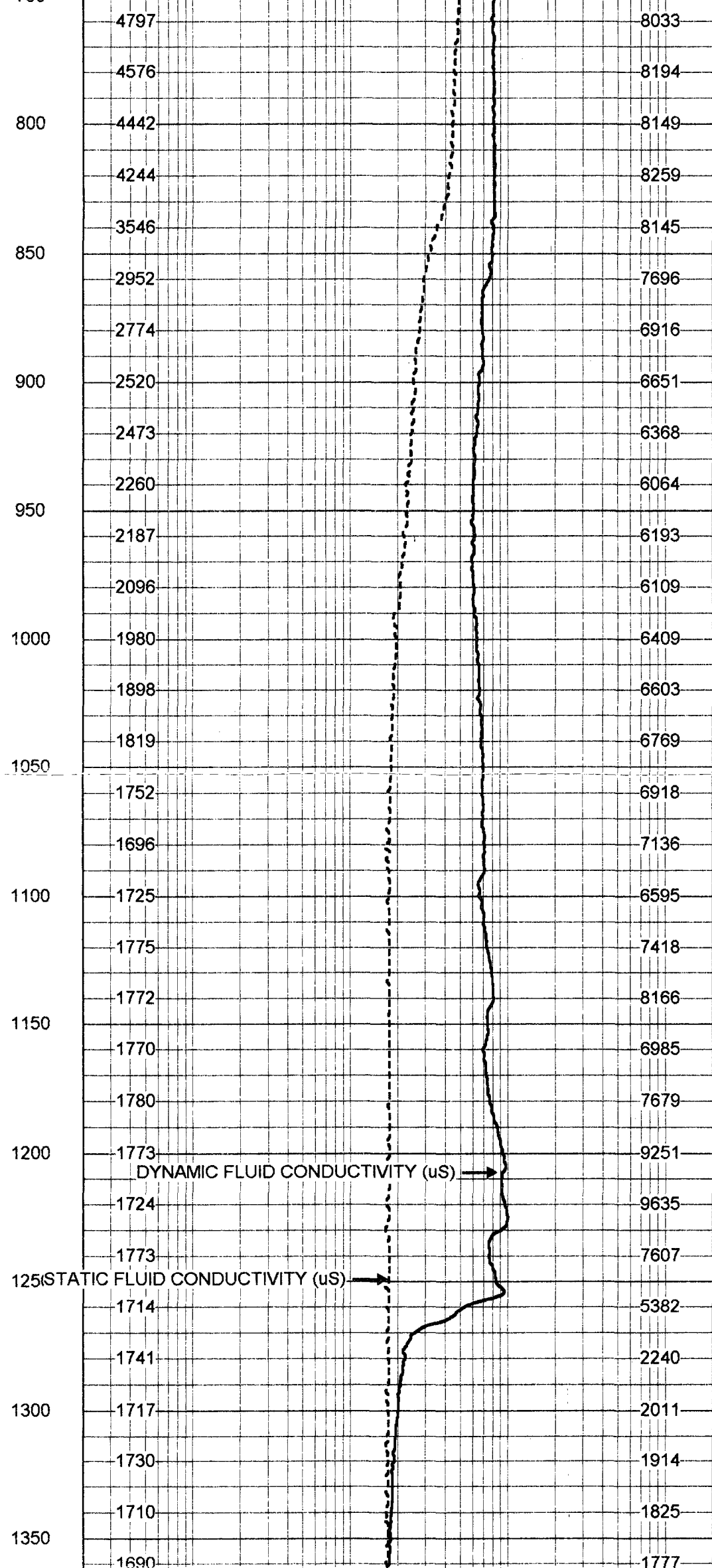
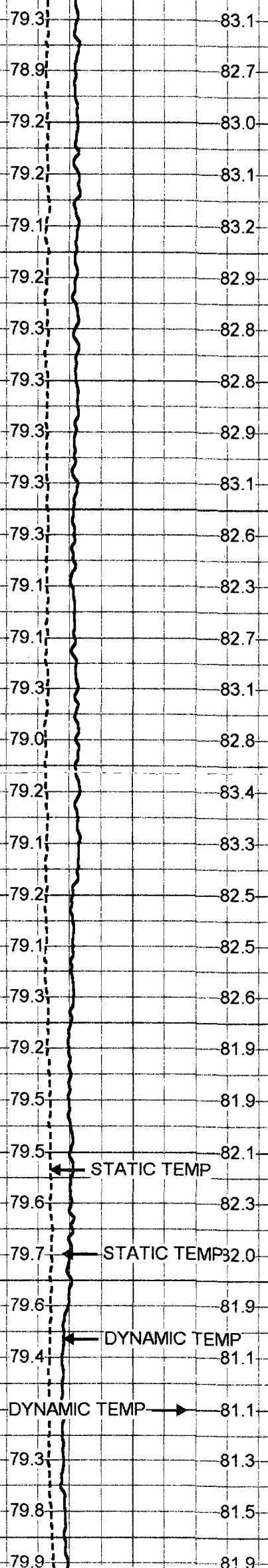
MERGED FLUID COND/TEMP

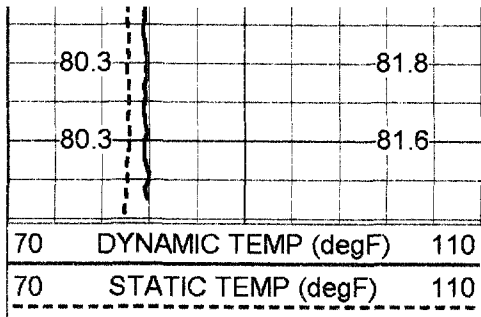
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 Dataset Pathname: run3/pass23
 Presentation Format: frt_mg.prs
 Dataset Creation: Thu Nov 29 19:36:11 2001 by Log VER_5.4
 Charted by: Depth in Feet scaled 1:600

70 DYNAMIC TEMP (degF) 110
 70 STATIC TEMP (degF) 110

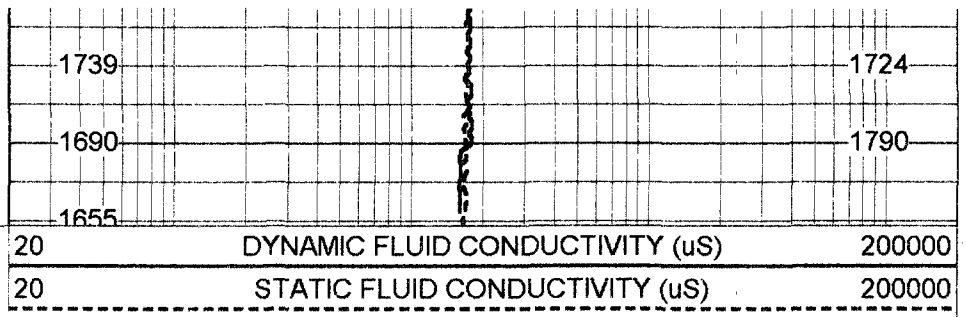
20 DYNAMIC FLUID CONDUCTIVITY (uS) 200000
 20 STATIC FLUID CONDUCTIVITY (uS) 200000







1400

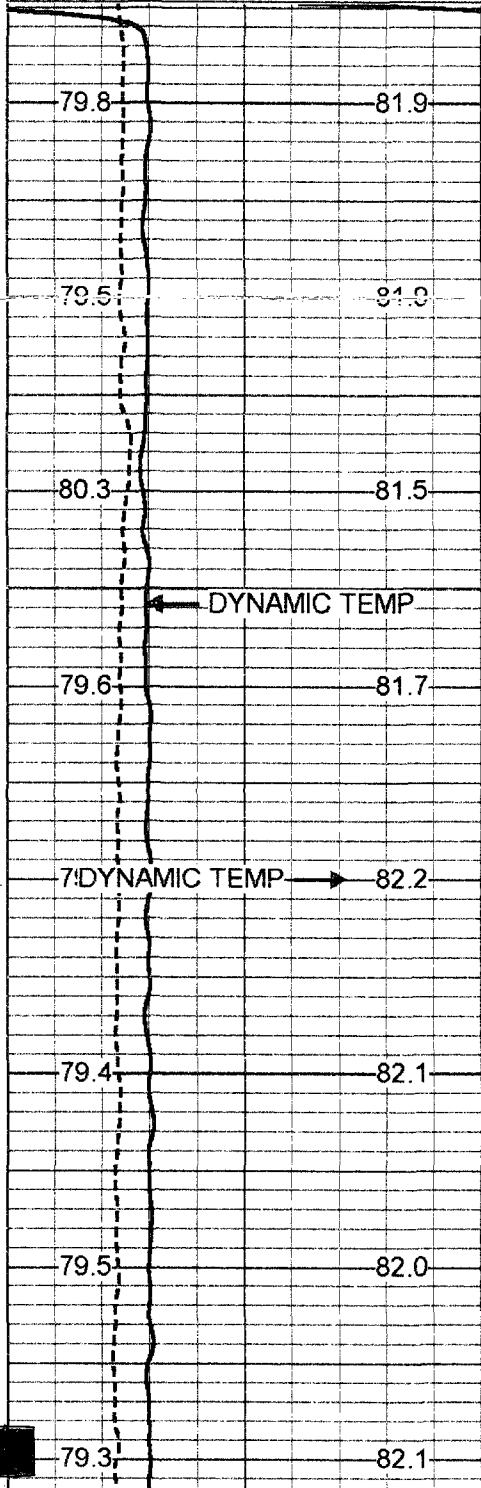


MERGED FLUID COND/TEMP

Database File: scriw1.db
 Dataset Pathname: run3/pass23
 Presentation Format: frt_mg.prs
 Dataset Creation: Thu Nov 29 19:36:11 2001 by Log VER_5.4
 Charted by: Depth in Feet scaled 1:240

70	DYNAMIC TEMP (degF)	110
70	STATIC TEMP (degF)	110

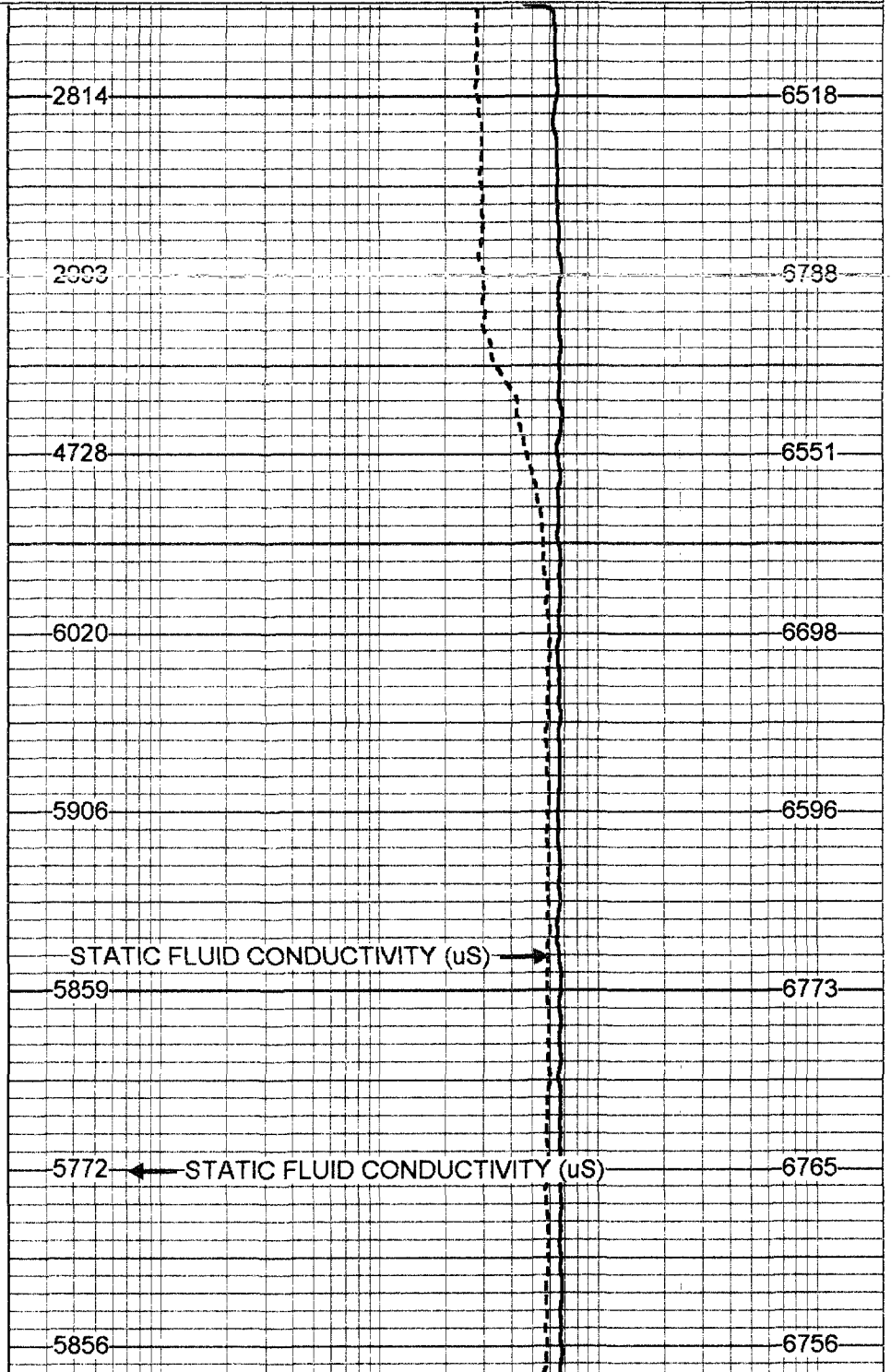
20	DYNAMIC FLUID CONDUCTIVITY (uS)	200000
20	STATIC FLUID CONDUCTIVITY (uS)	200000

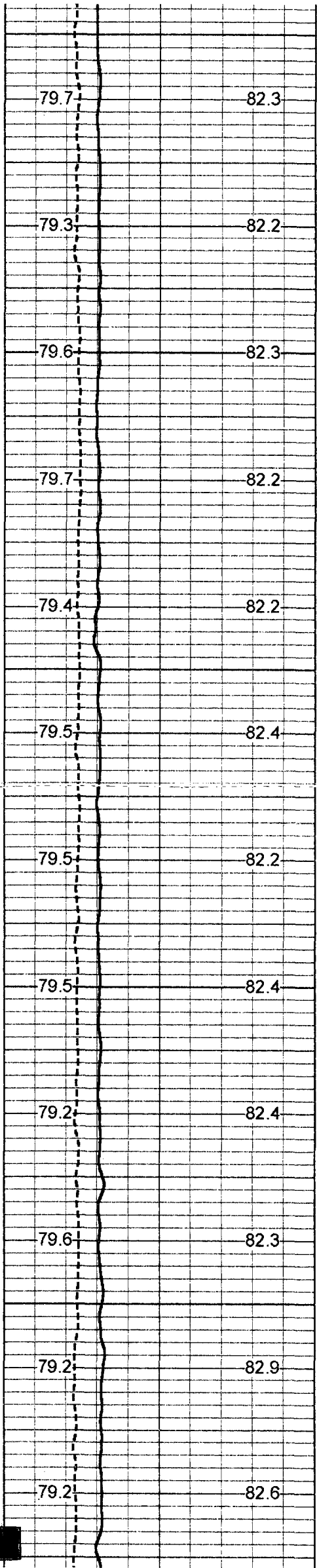


300

350

400





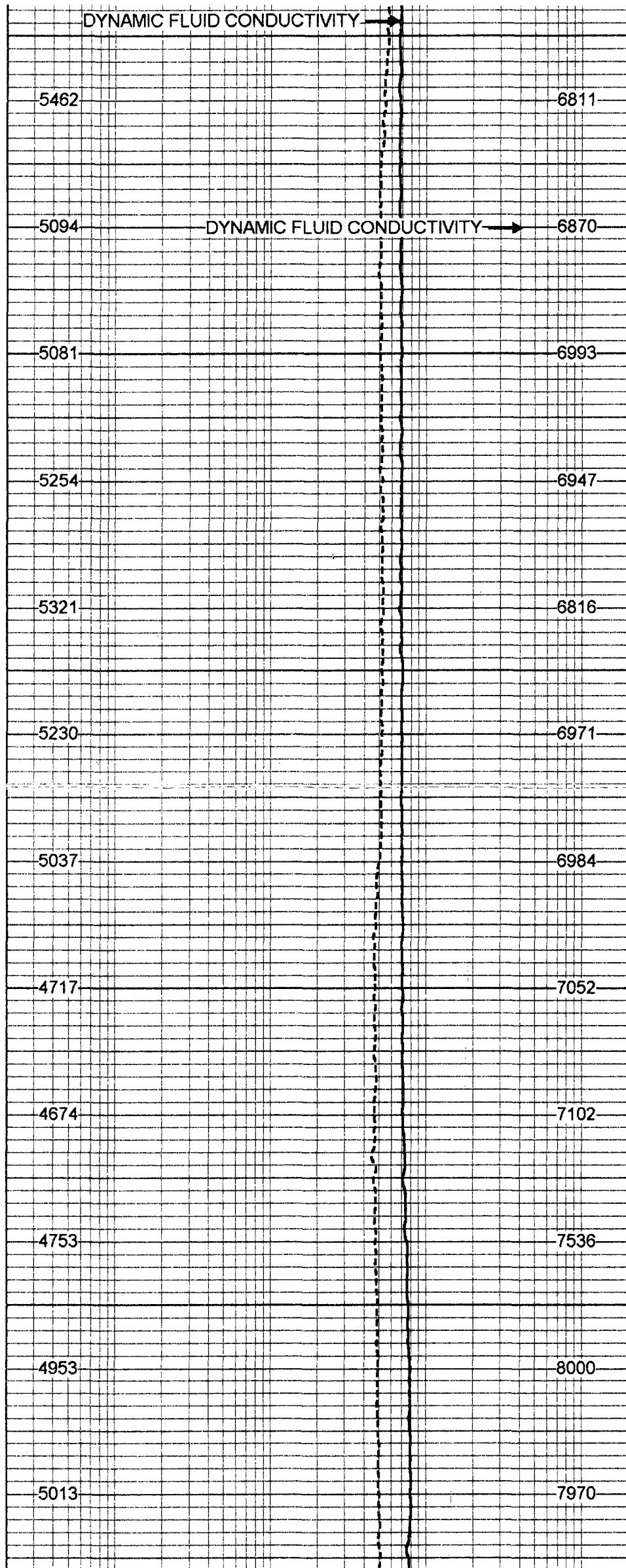
450

500

550

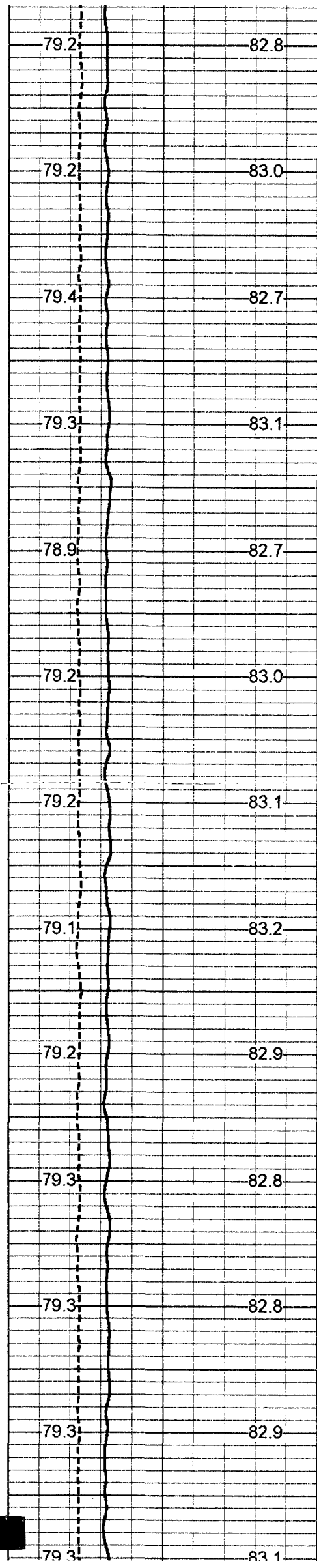
600

650

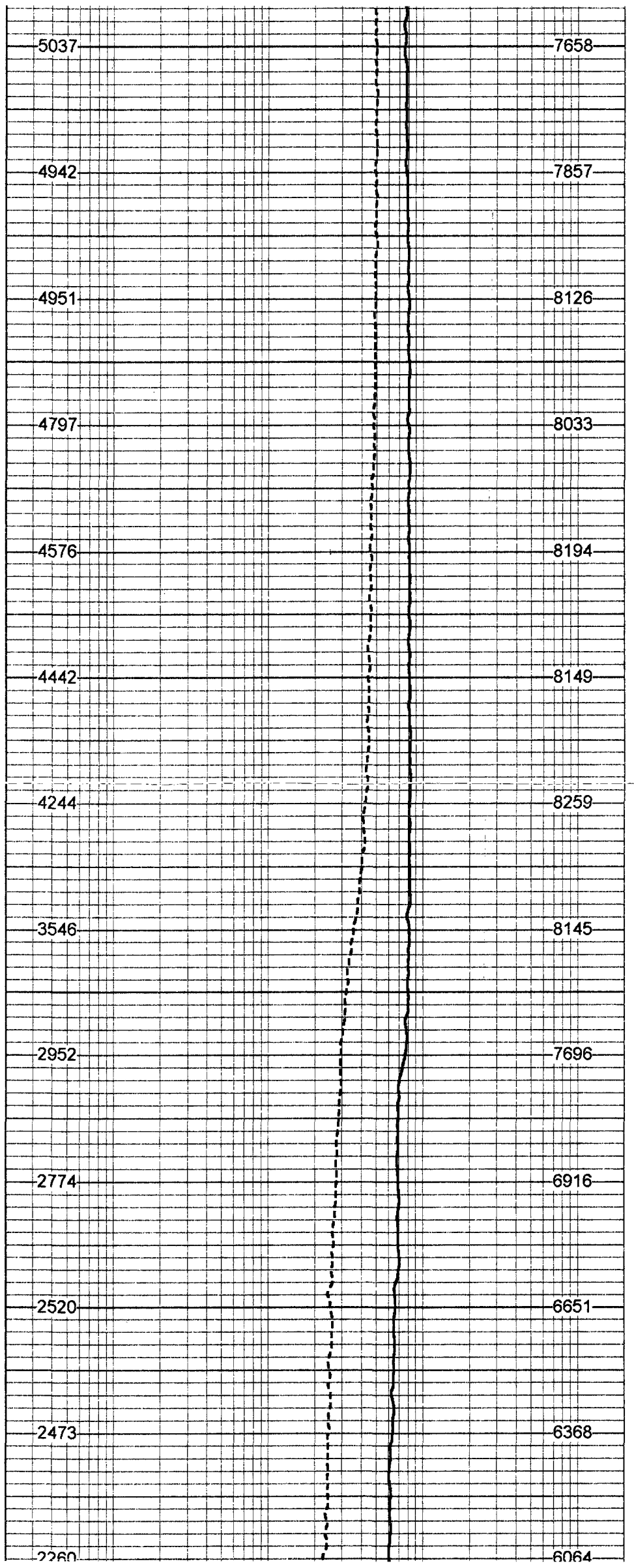


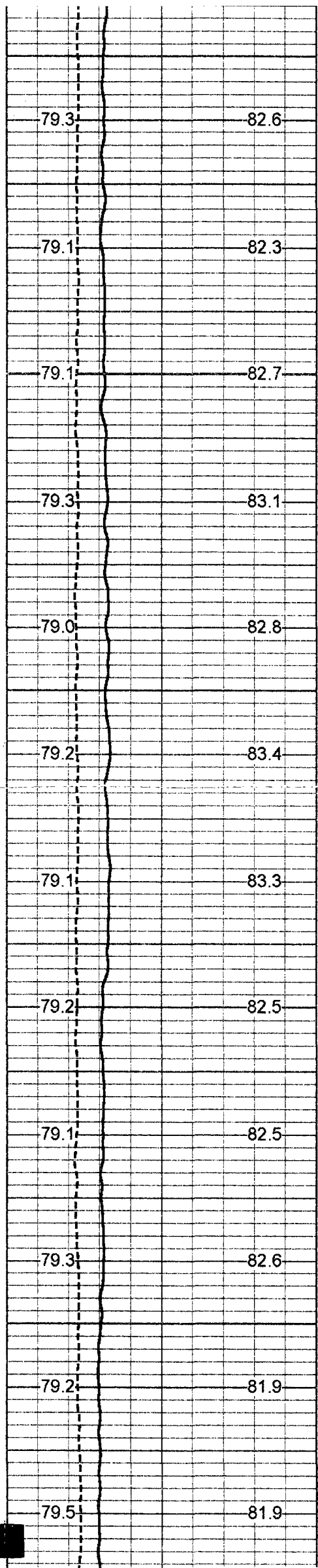
DYNAMIC FLUID CONDUCTIVITY

DYNAMIC FLUID CONDUCTIVITY



700
750
800
850
900





950

79.3 82.6

79.1 82.3

79.1 82.7

79.3 83.1

79.0 82.8

1000

79.2 83.4

79.1 83.3

1050

79.2 82.5

1100

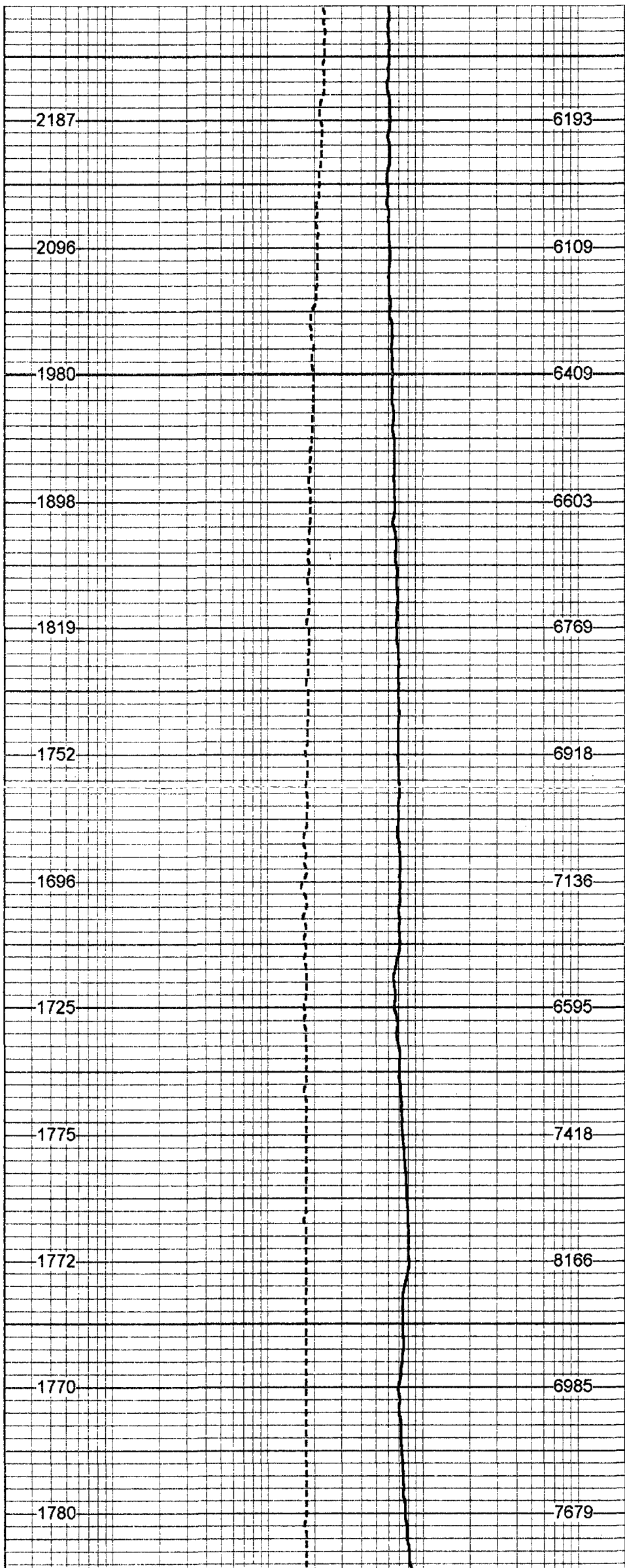
79.1 82.5

79.3 82.6

1150

79.2 81.9

79.5 81.9



2187 6193

2096 6109

1980 6409

1898 6603

1819 6769

1752 6918

1696 7136

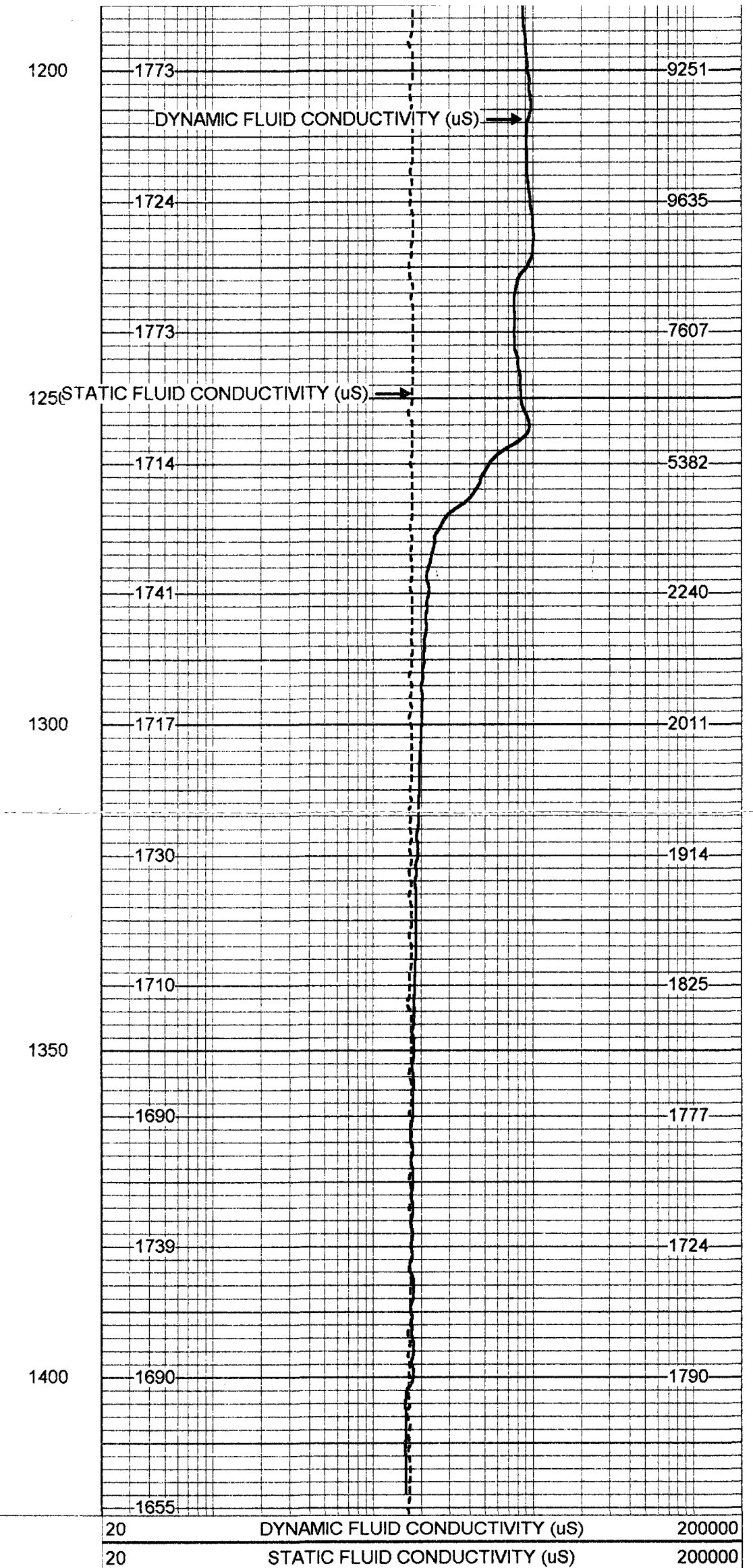
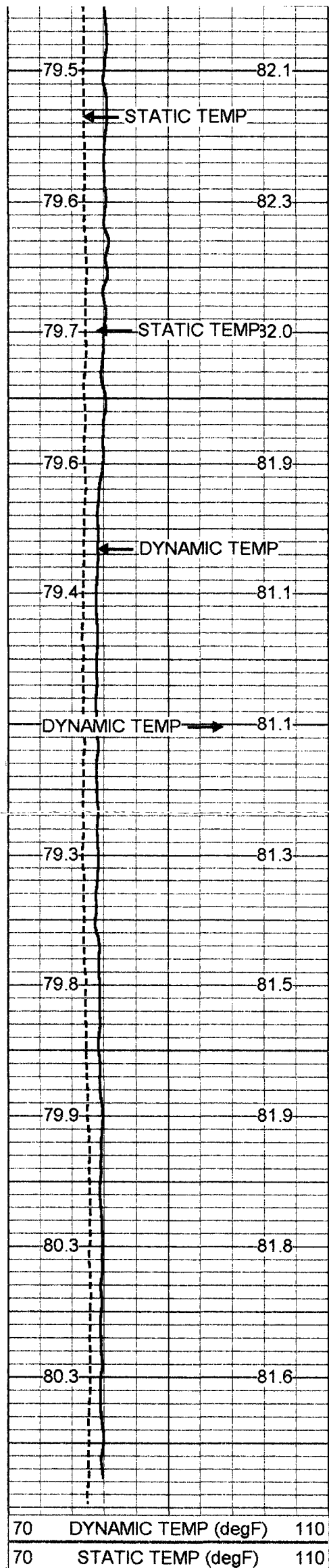
1725 6595

1775 7418

1772 8166

1770 6985

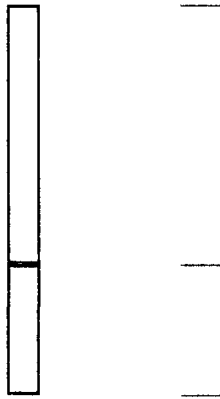
1780 7679



70 DYNAMIC TEMP (degF) 110
 70 STATIC TEMP (degF) 110

20 DYNAMIC FLUID CONDUCTIVITY (uS) 20000
 20 STATIC FLUID CONDUCTIVITY (uS) 20000

TEMP 0.70 ft
 FRES 0.50 ft



TEMP-SONDEX (31) 10.00 lb 1.62 in OD 1.20 ft
 FRT-SONDEX (31) 10.00 lb 1.69 in OD 0.60 ft

Dataset: run3/pass23
 Total Length: 1.80 ft
 Total Weight: 20.00 lb
 O.D.: 1.69 in

FRT Calibration Report

Serial Number: 31
 Tool Model: SONDEX
 Performed: Mon May 07 10:39:40 2001

Point #	Reading		Reference
1	33.812	cps	1000.000
2	186.494	cps	10000.000
3	963.690	cps	50000.000
4		cps	
5		cps	
6		cps	

Temperature Calibration Report

Serial Number: 31
 Tool Model: SONDEX
 Performed: Mon May 07 15:54:58 2001

Point #	Reading		Reference	
1	120.679	cps	34	degF
2	582.95	cps	135	degF
3		cps		degF