

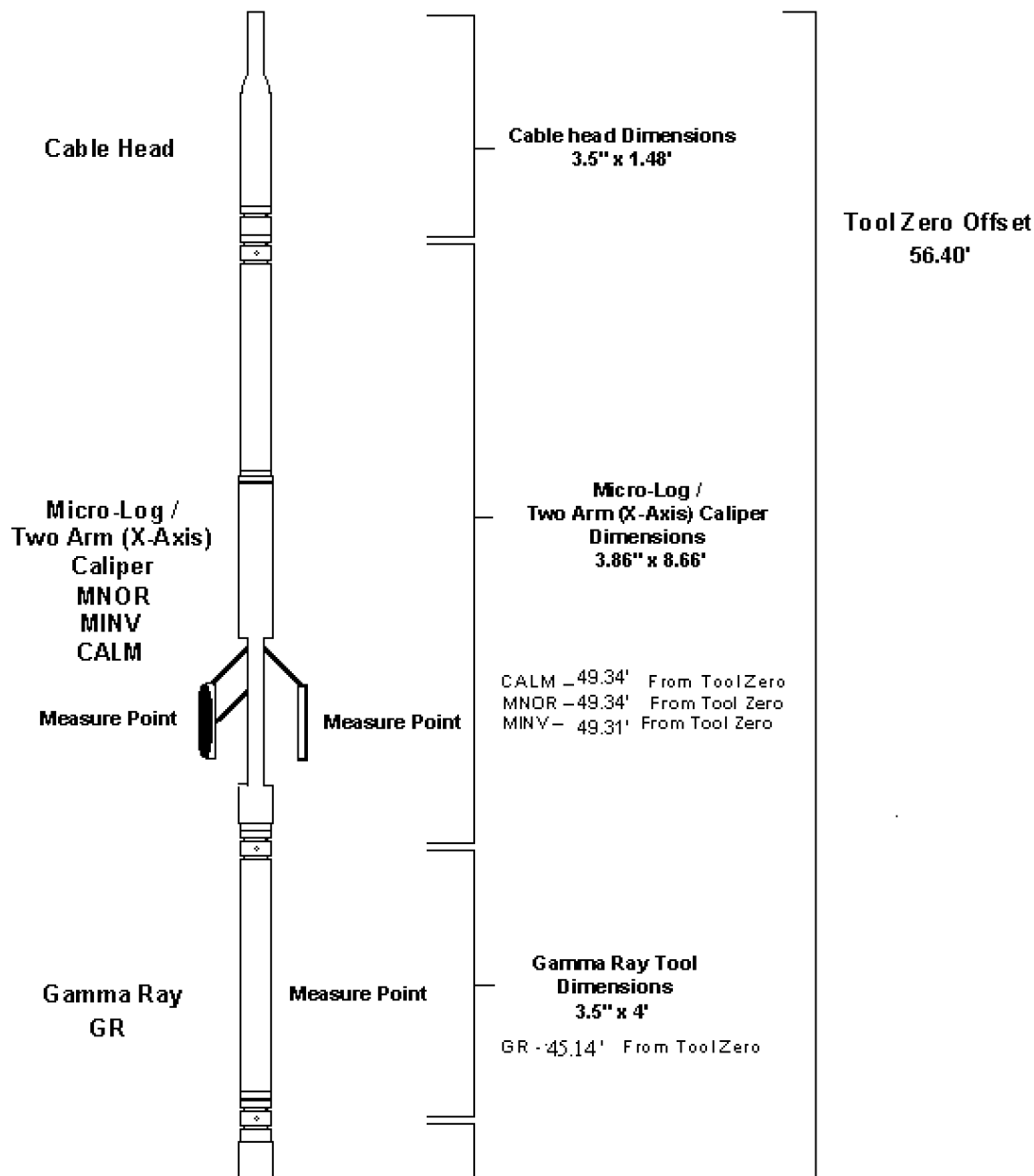
CEMENT VOLUME CALCULATIONS SUMMARY

Tool Type	LDT-CNT	Caliper Type		
Tool Serial #	RN2016 / RL4112			
	Borehole Total	Annular Volume with Casing	From Depth (MKb)	To Depth (MKb)
VOLUMES	2381.511 Cubic Feet	1172.322 Cubic Feet	SCG 1027	TD 5531

CASING INFORMATION

	SIZE (in)	GRADE	WEIGHT (lbs/ft)	ID (in)	TOP DEPTH	BOT DEPTH
SURFACE CASING	9 5/8	J-55	36	7.825	Surface	1027
INTERMEDIATE CASING	N/A	N/A	N/A	N/A	Surface	N/A
PRODUCTION CASING	7	J-55	26	6.276	Surface	TD

DUAL INDUCTION - SP / GAMMA RAY /
COMPENSATED LITHO-DENSITY / X-CALIPER
COMPENSATED NEUTRON / Y-CALIPER
MICRO - LOG / M-CALIPER



Compensated Neutron
Y – Axis Caliper
NP (SS,LS,DL)
CALY

Compensated Neutron
Y-Axis Caliper
Dimensions
3.98" x 10.25'

CALY - 37.14' From ToolZero
CNL LS - 36.32' From ToolZero
CNL SS - 35.73' From ToolZero

Measure Point

Digital Telemetry

Digital Telemetry Section
Dimensions
3.5" x 3.15'

Tool String
Length Total
57.89'

Compensated
Litho-Density (Pe)
X – Axis Caliper

DP(SS,LS,DL)
RHOB
DRHO
PE
CALX

Measure Point

Compensated Litho-Density
X-Axis Caliper
Dimensions
3.98" x 9.35'

CALX - 23.20' From ToolZero
LDT w1 -
LDT w2 -
LDT w3 -
LDT w4 -
- 22.93' From ToolZero
LDT SS - 22.44' From ToolZero

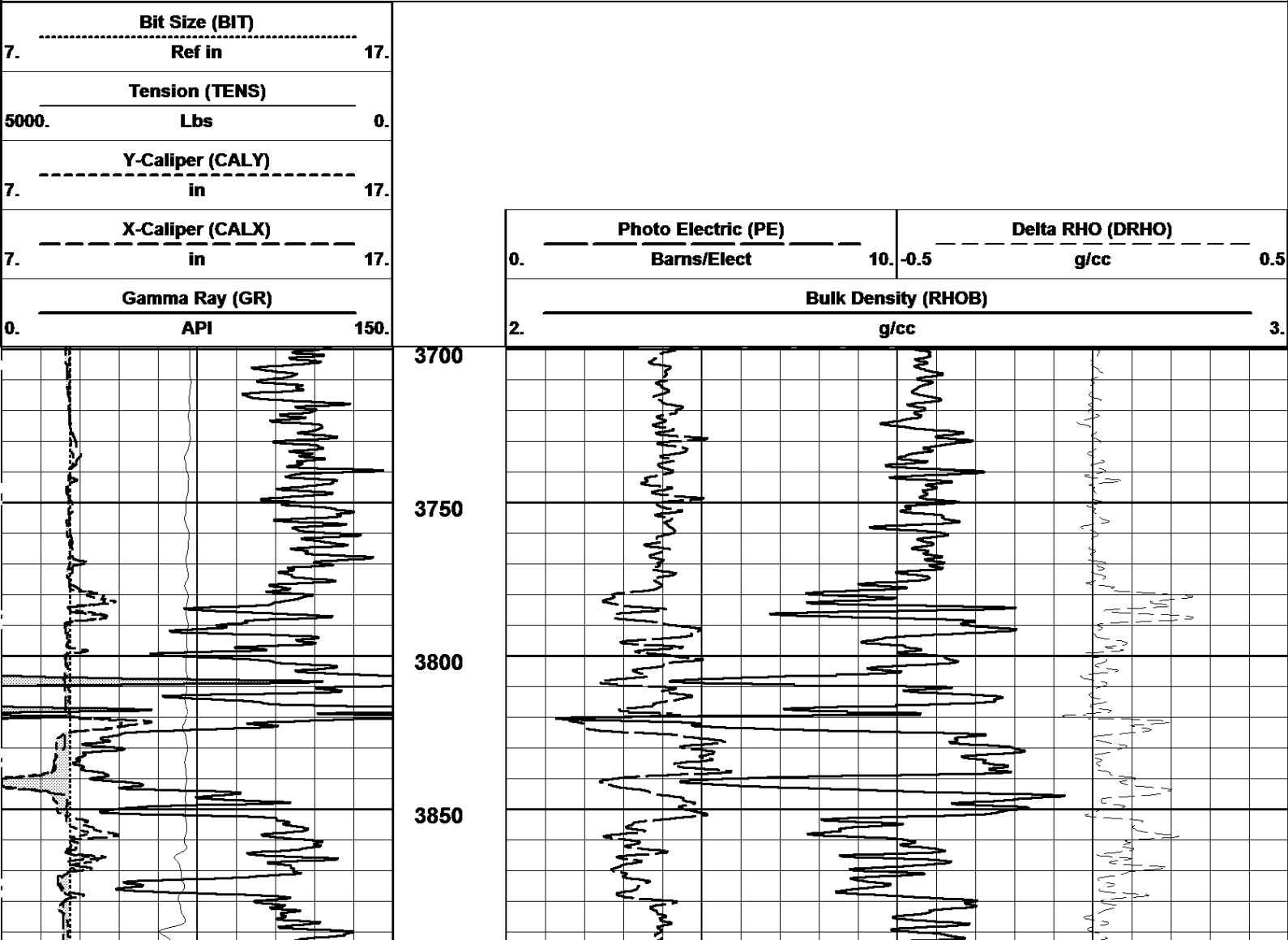
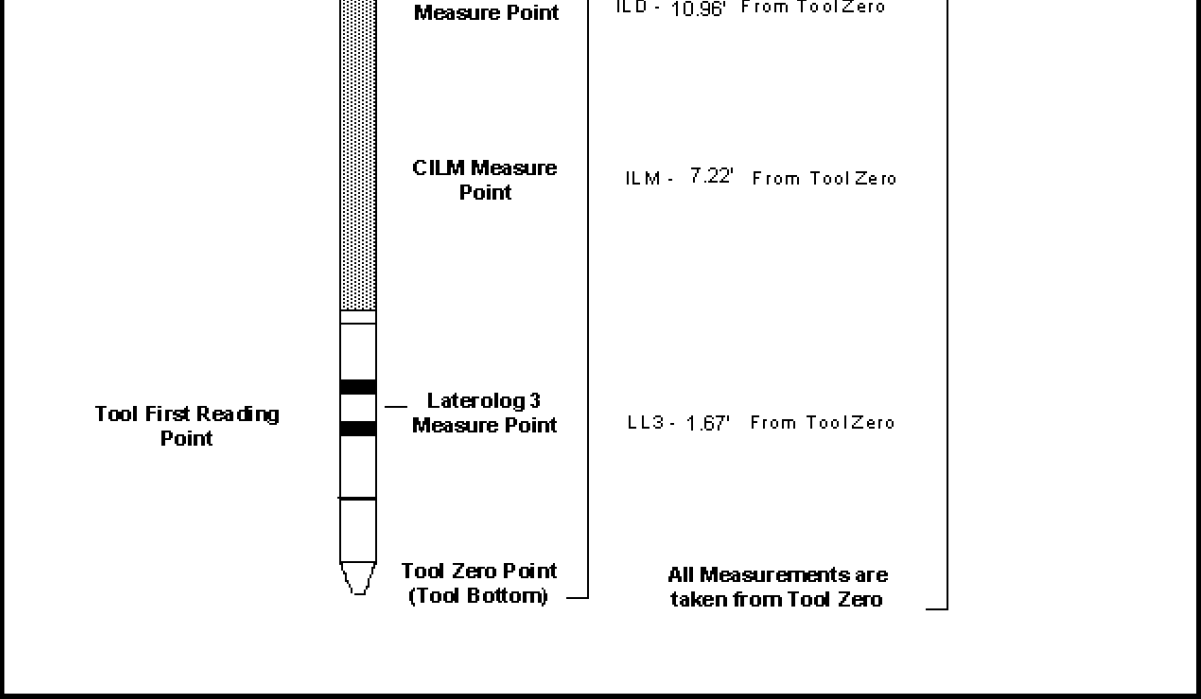
Dual Induction

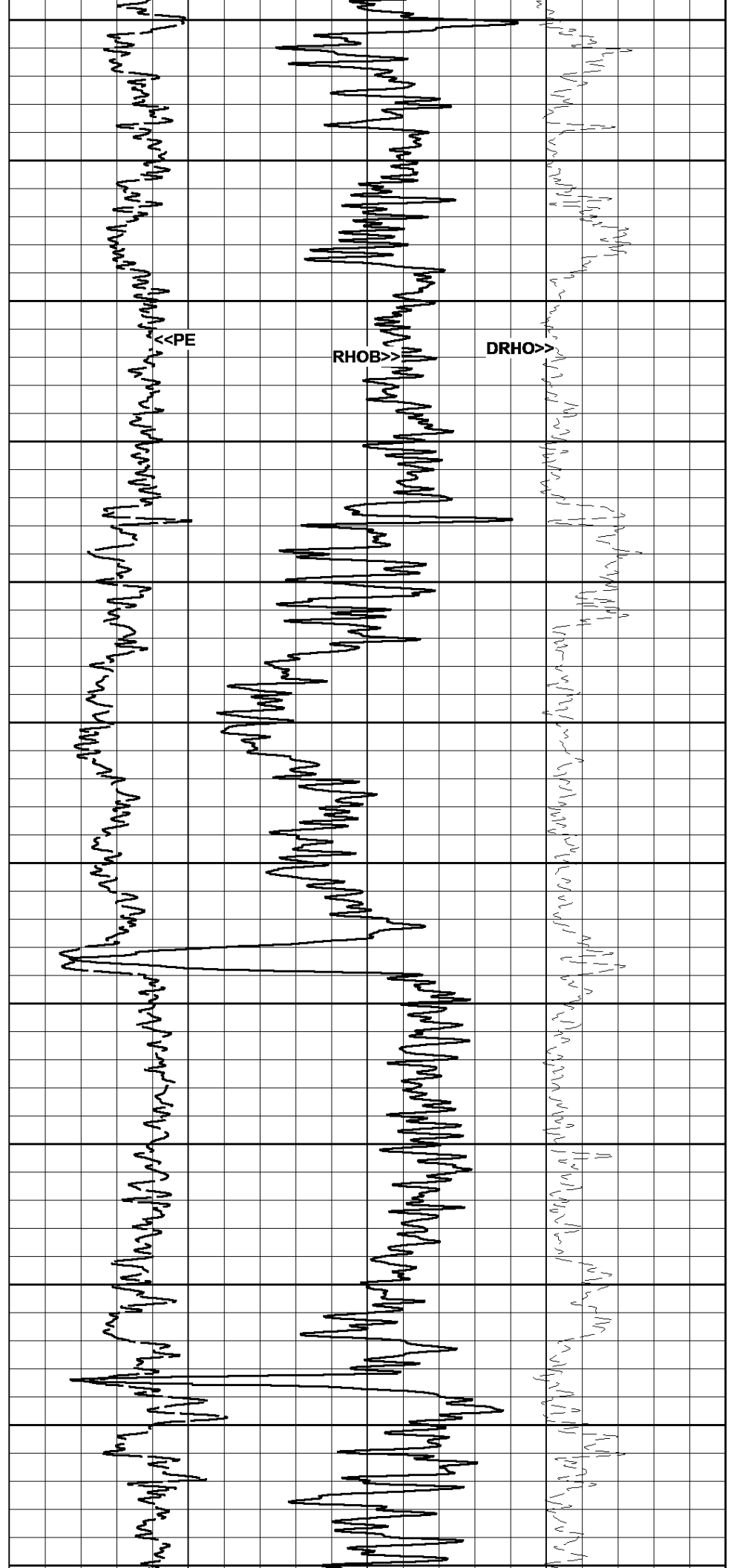
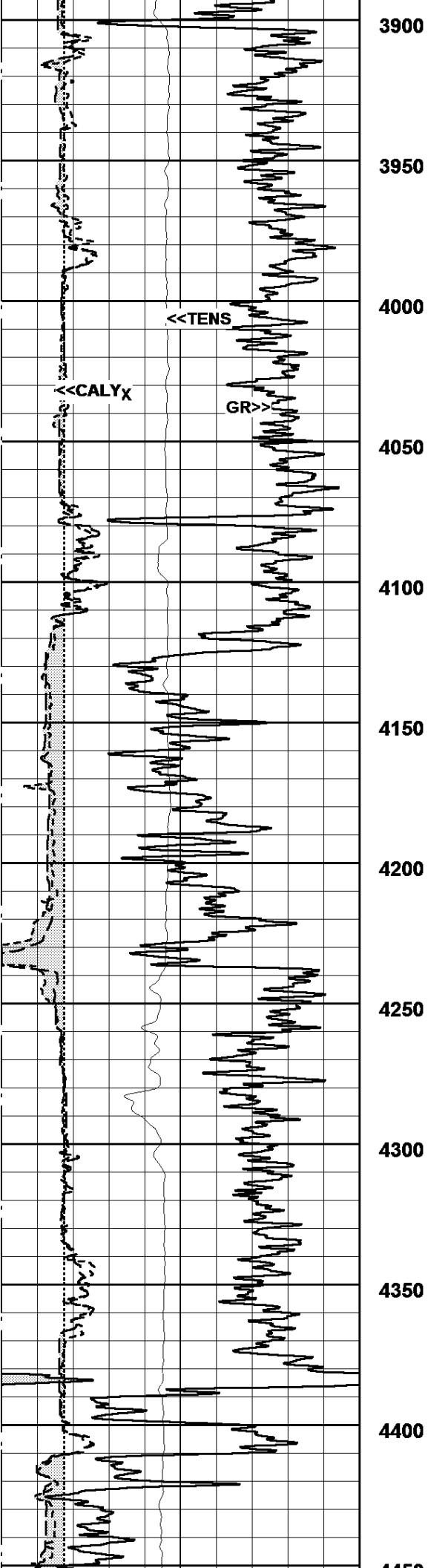
SP
ILD
ILM
LL3

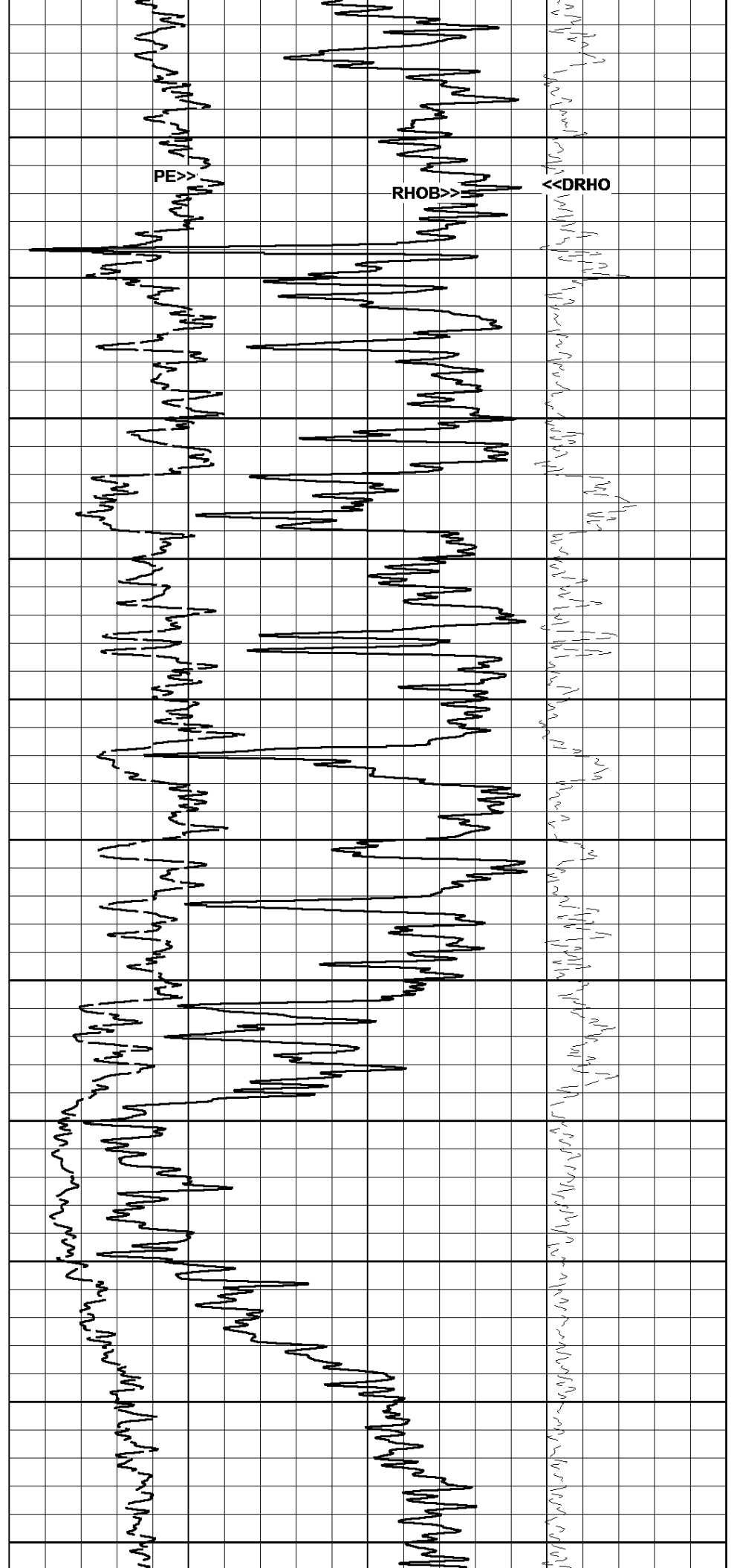
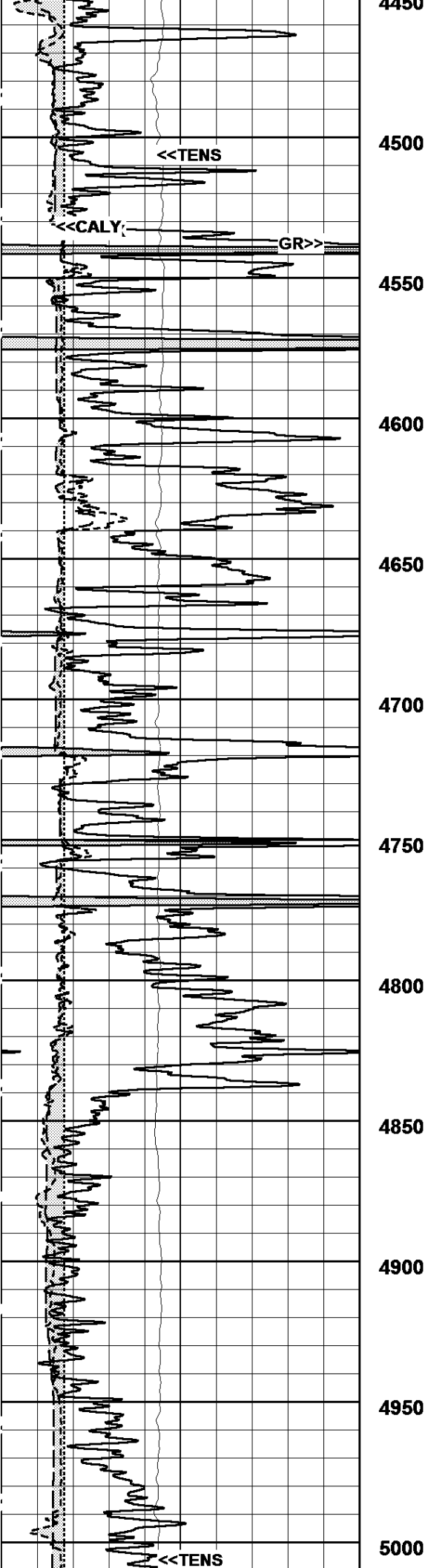
Dual Induction Tool
Dimensions
3.62" x 21'

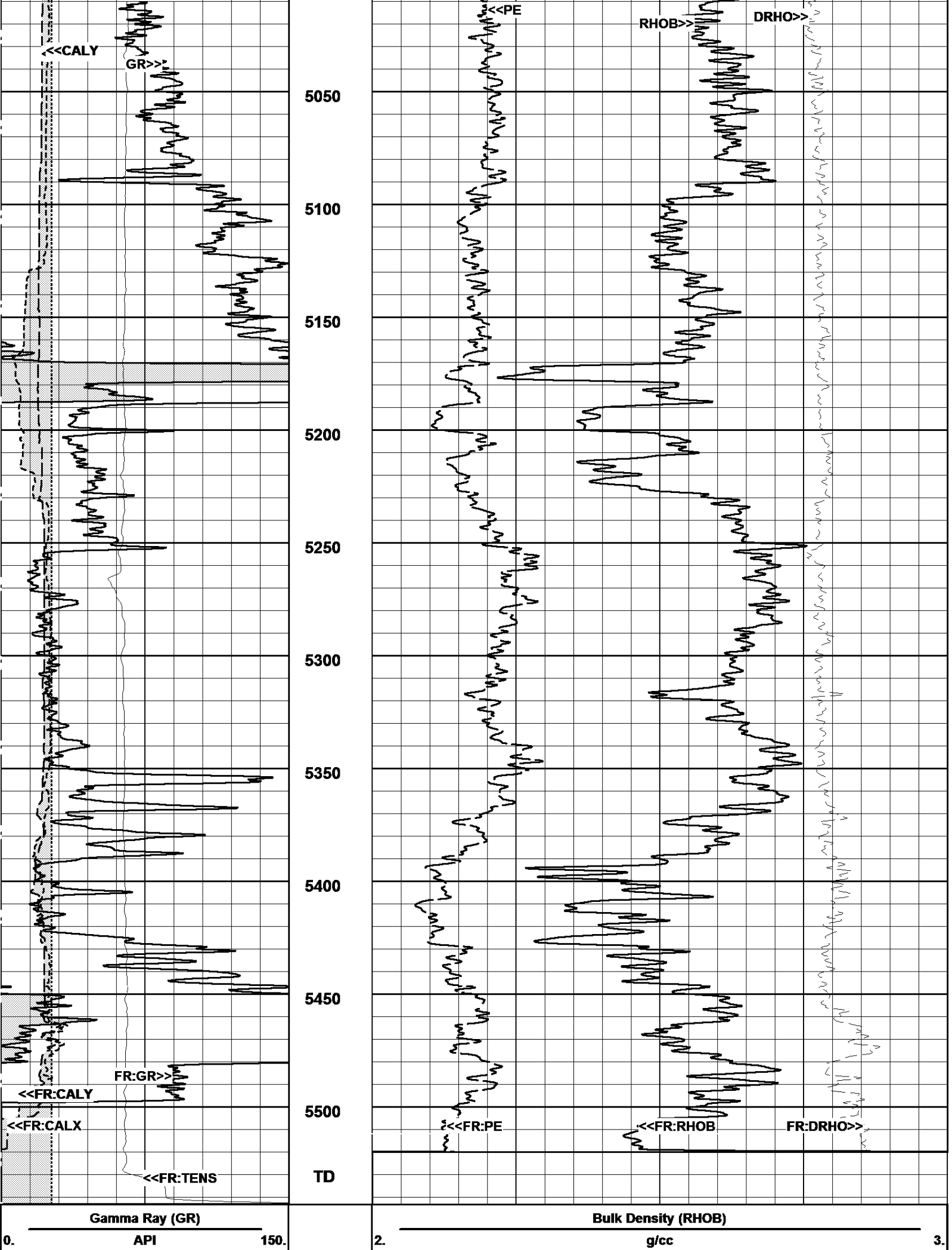
SP - 10.96' From ToolZero

S.P. / CILD

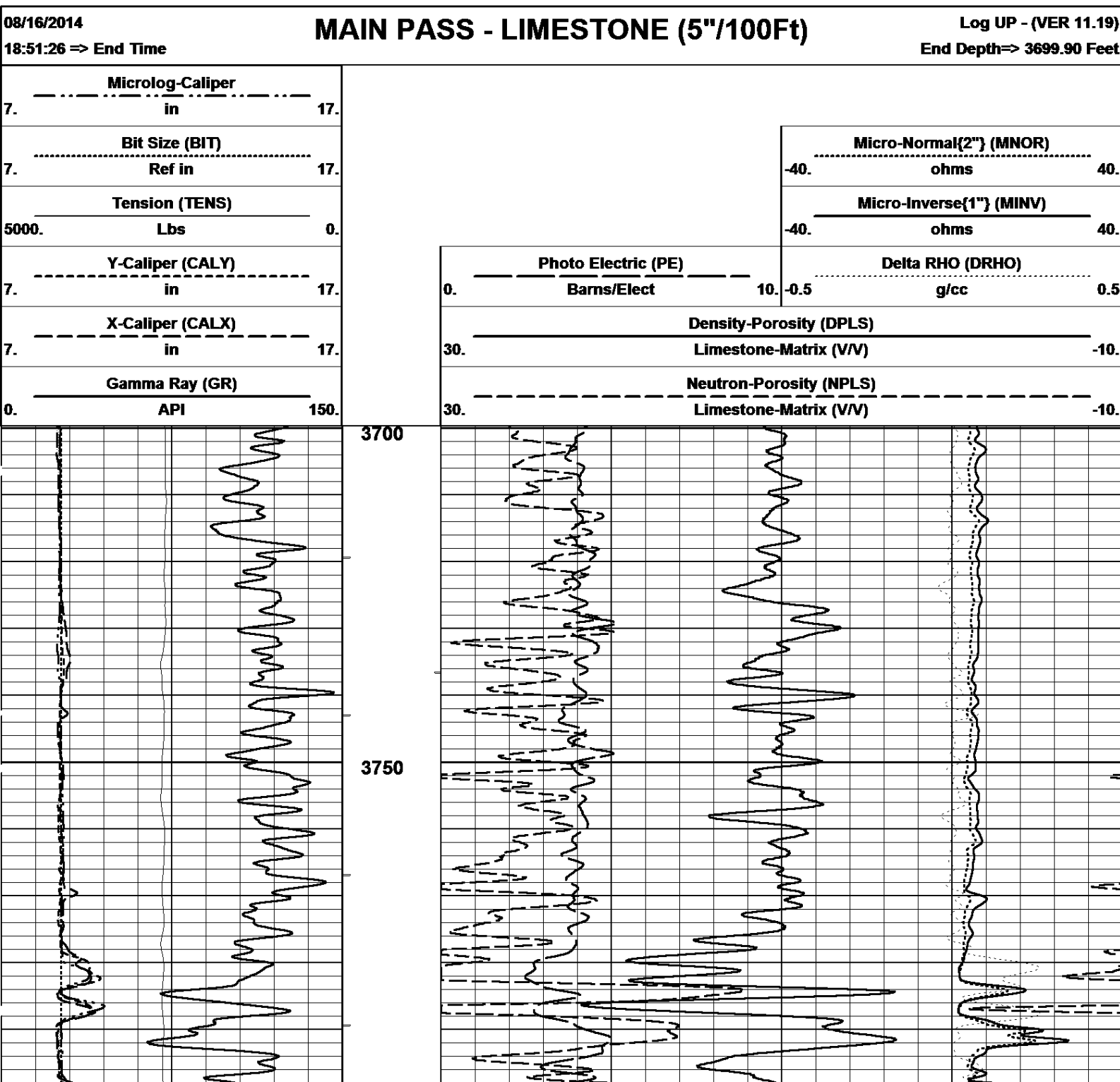


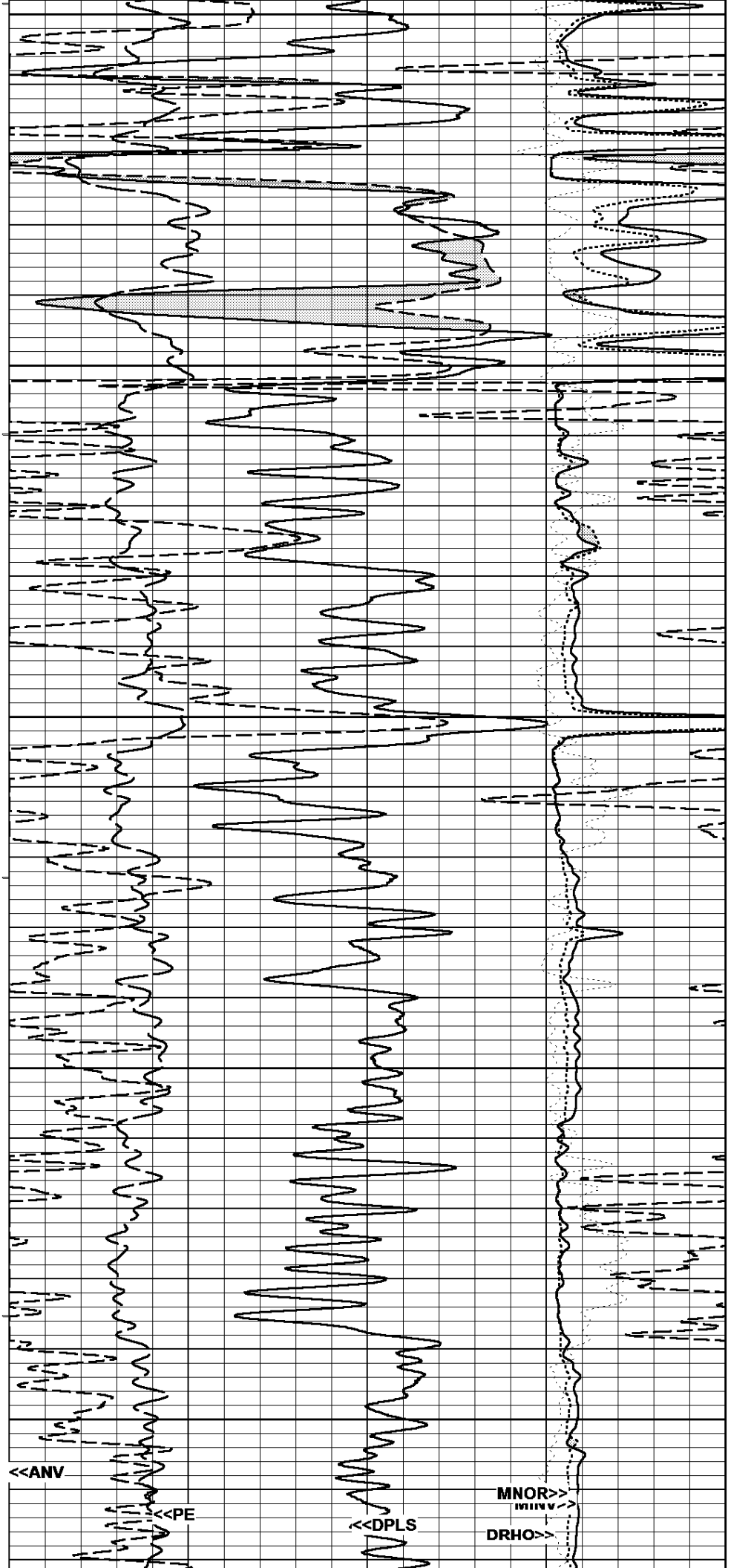
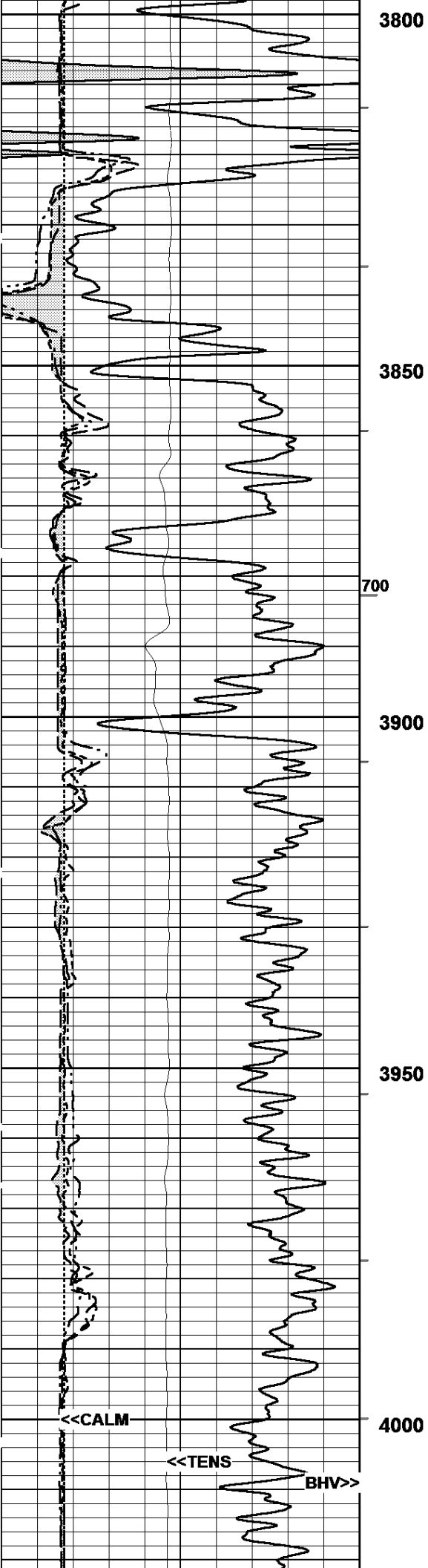


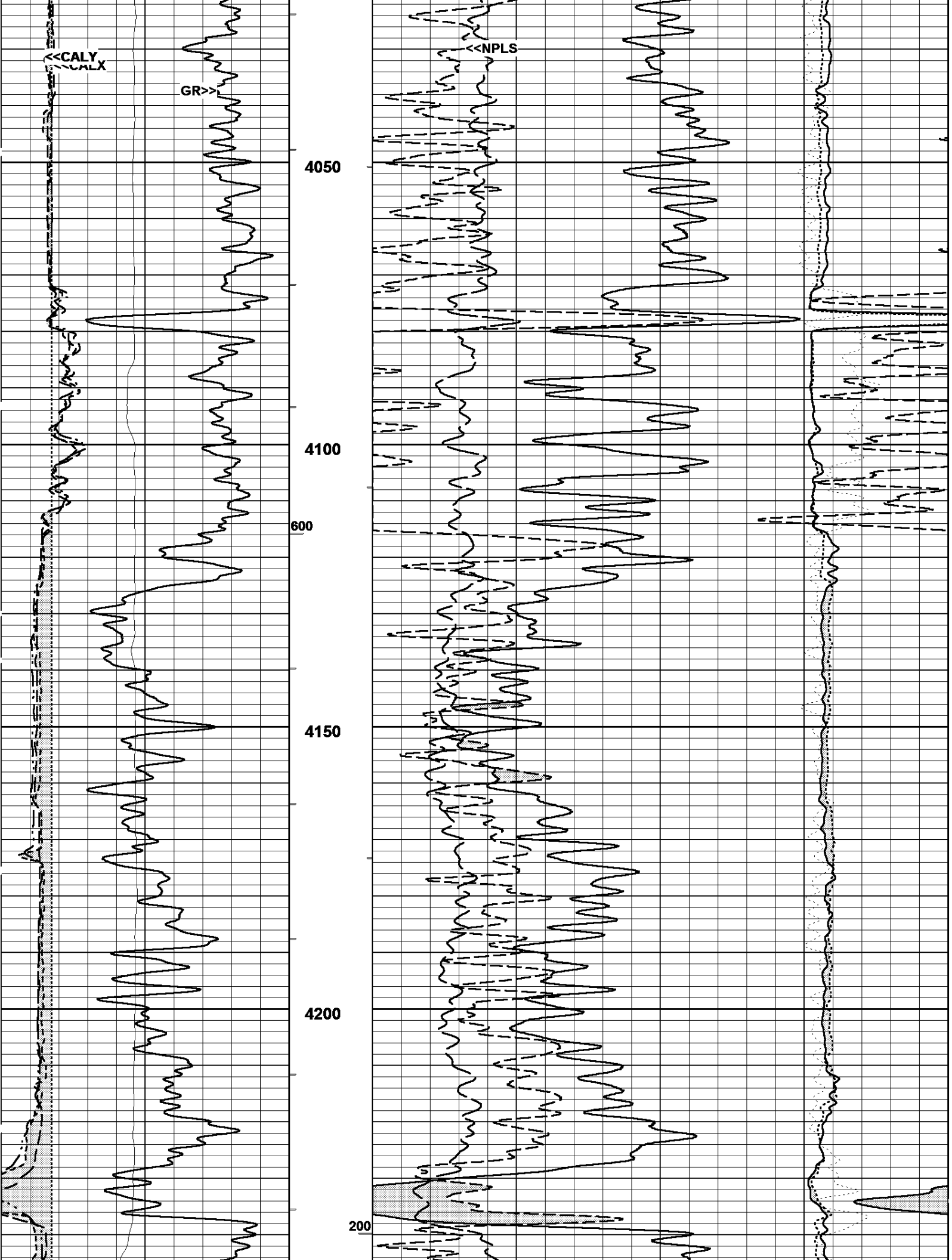


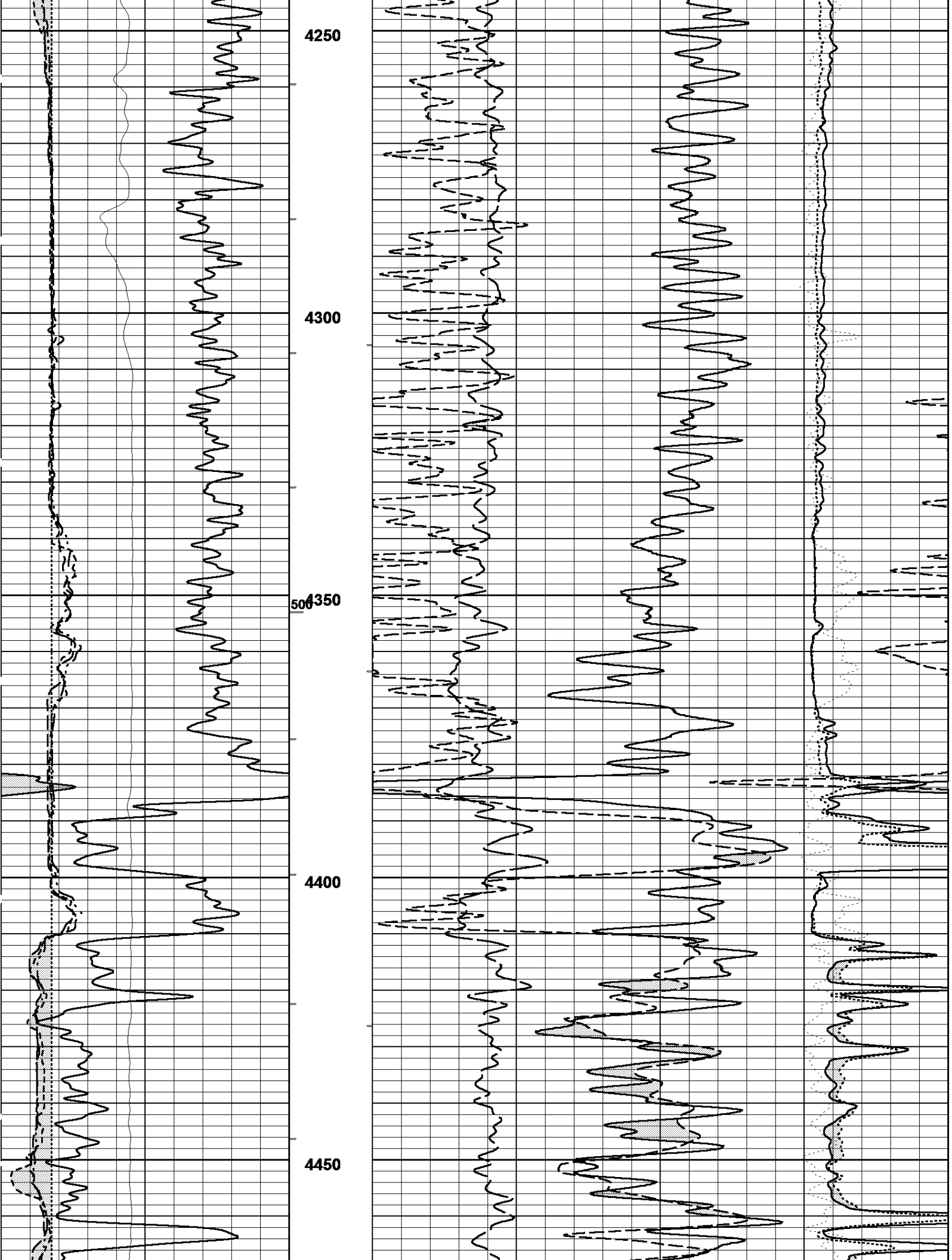


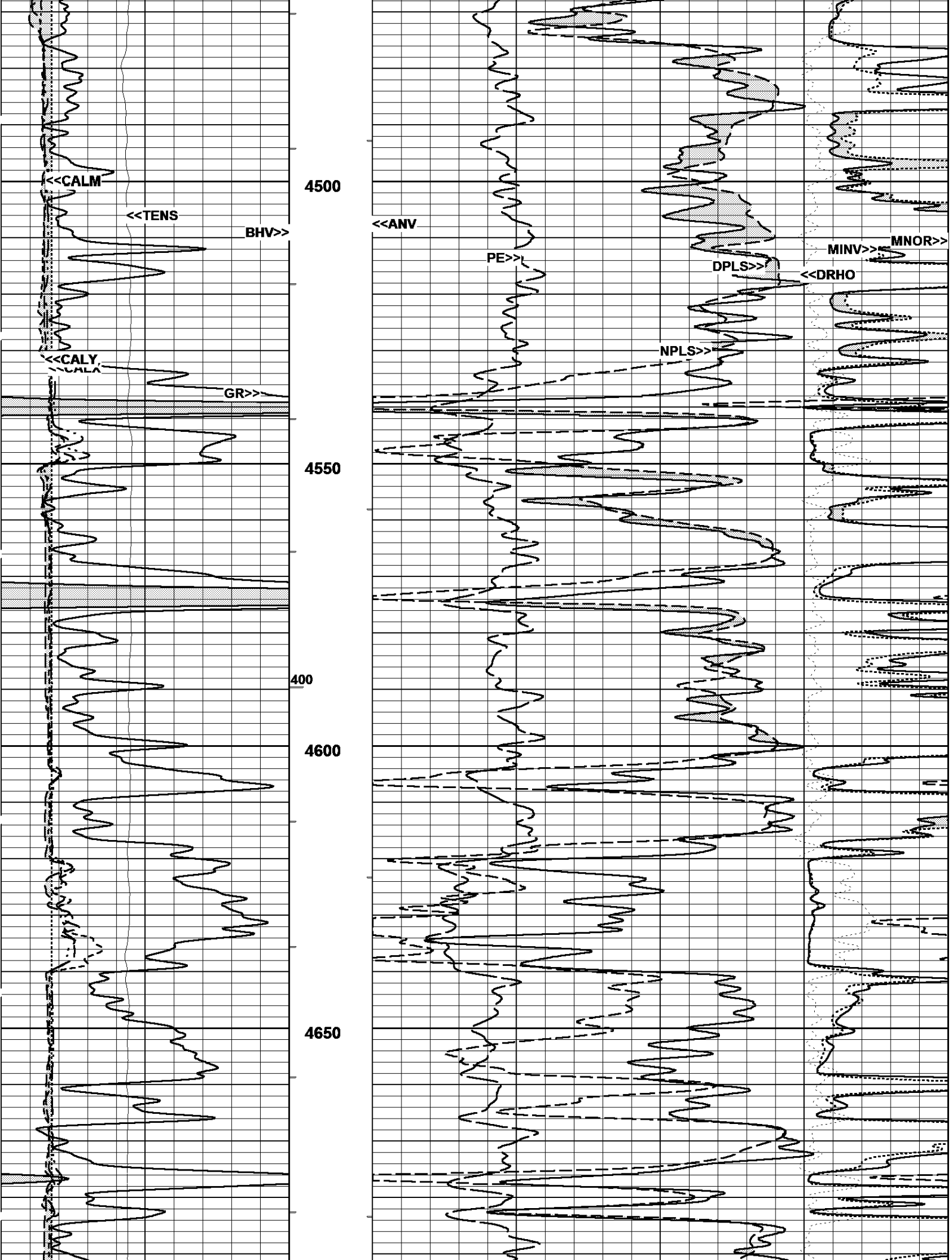
X-Caliper (CALX) 7. in 17.			Photo Electric (PE) 0. Barns/Elect 10. 0.5 g/cc 0.5		
Y-Caliper (CALY) 7. in 17.					
Tension (TENS) 5000. Lbs 0.					
Bit Size (BIT) 7. Ref in 17.					
08/16/2014 17:20:55 => Start Time			MAIN PASS - RHOB (2"/100Ft)		
			Log UP - (VER 11.19) Start Depth=> 5542.75 Feet		

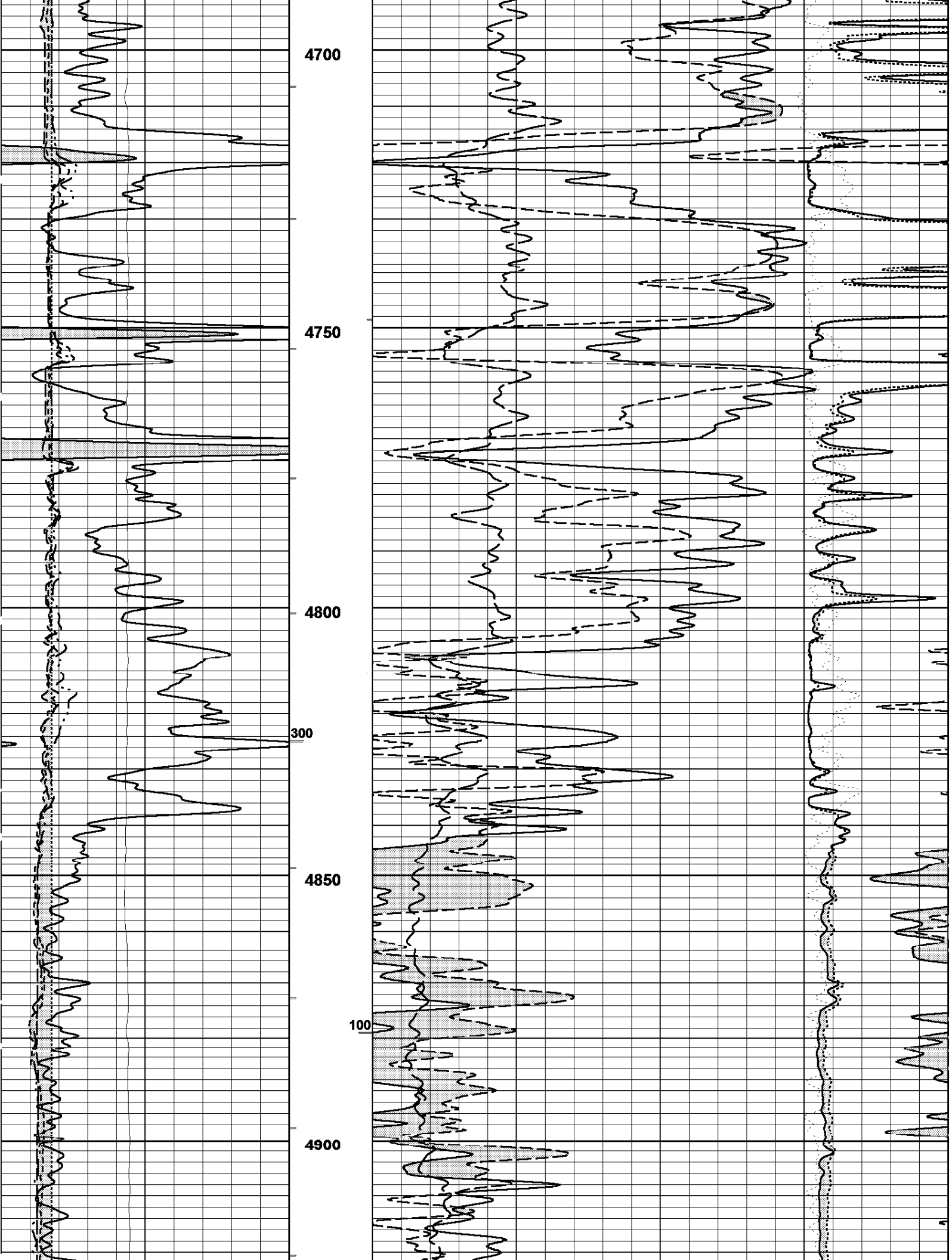


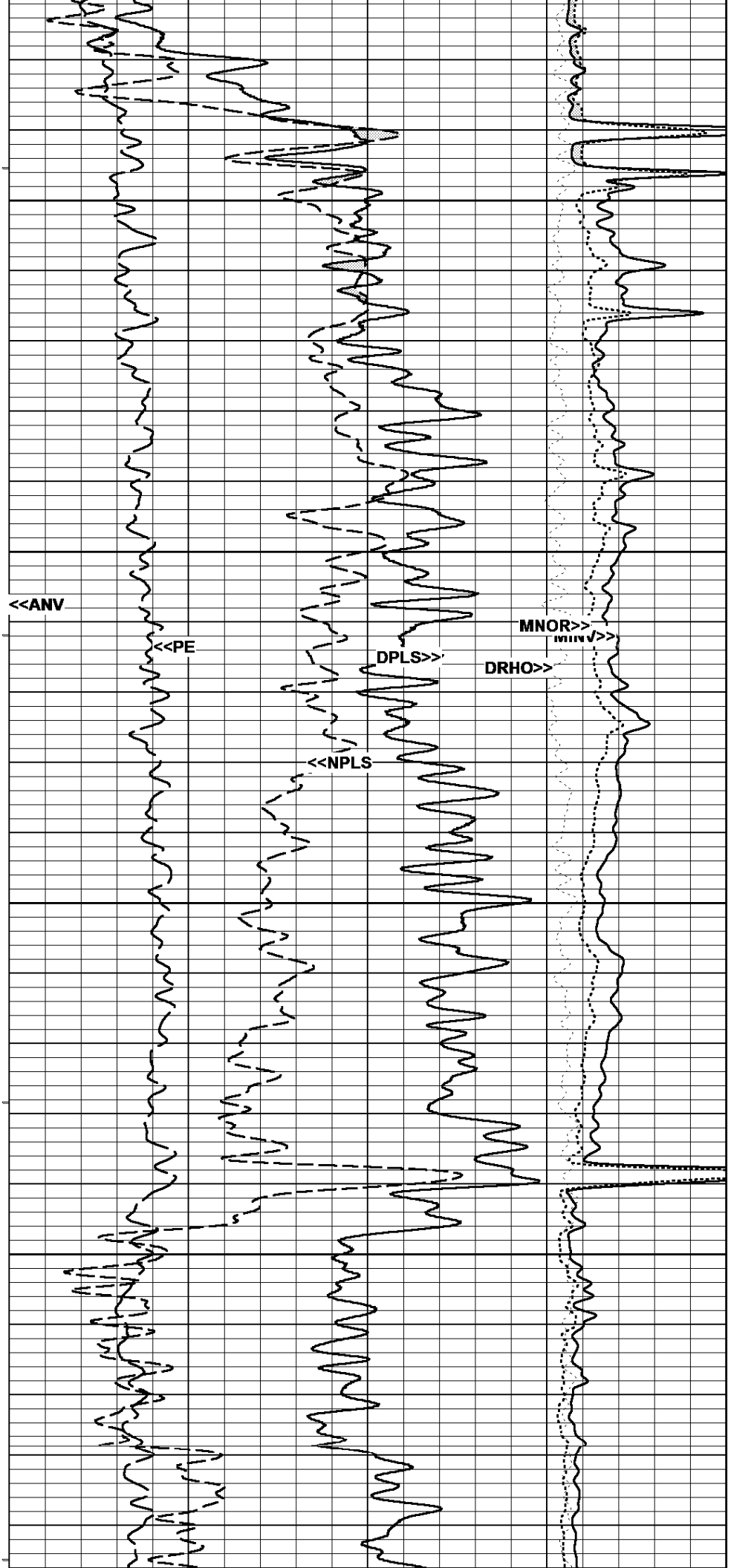
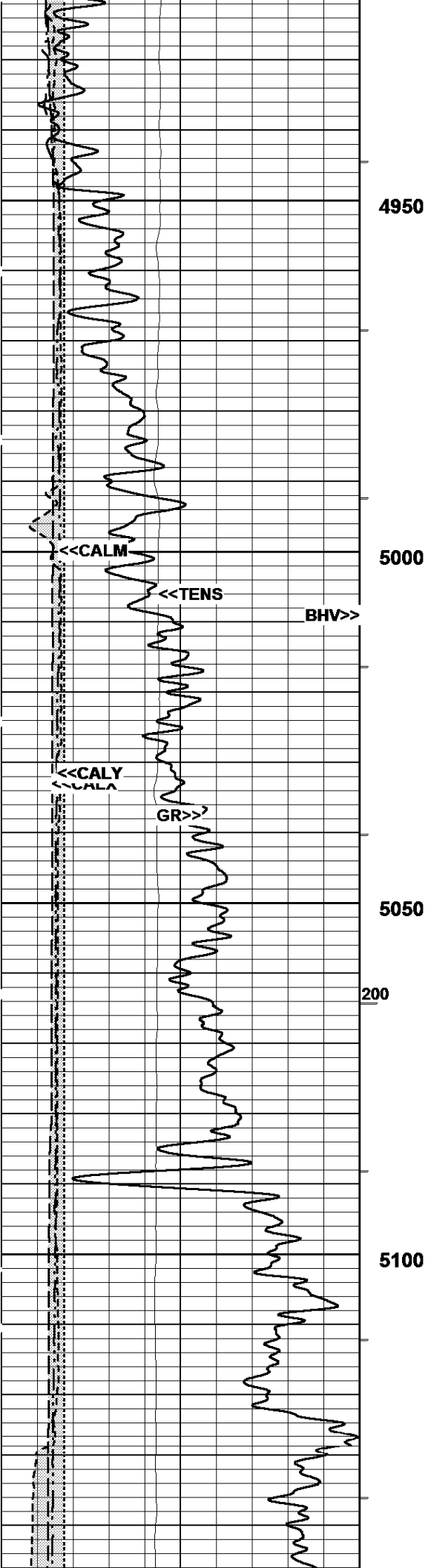


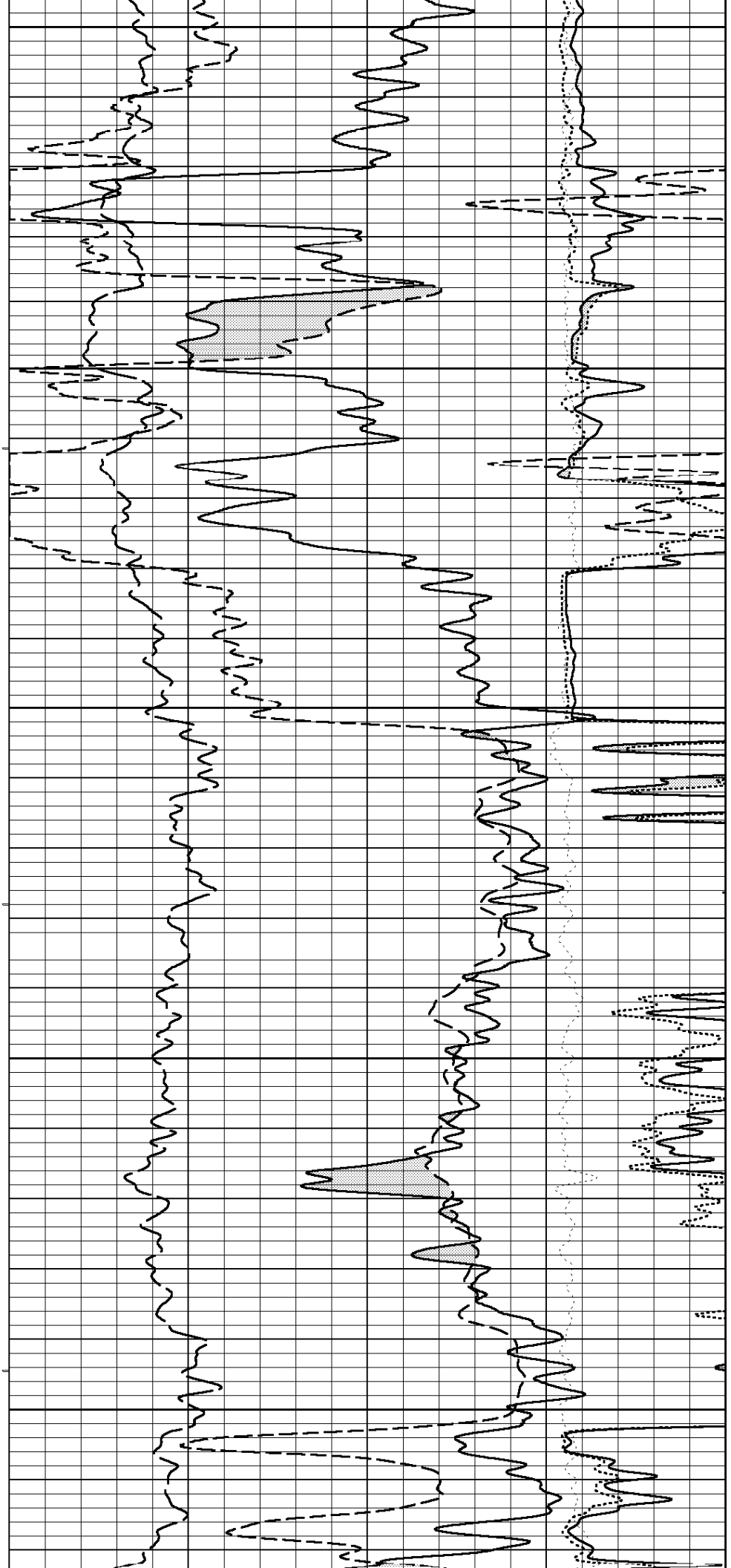
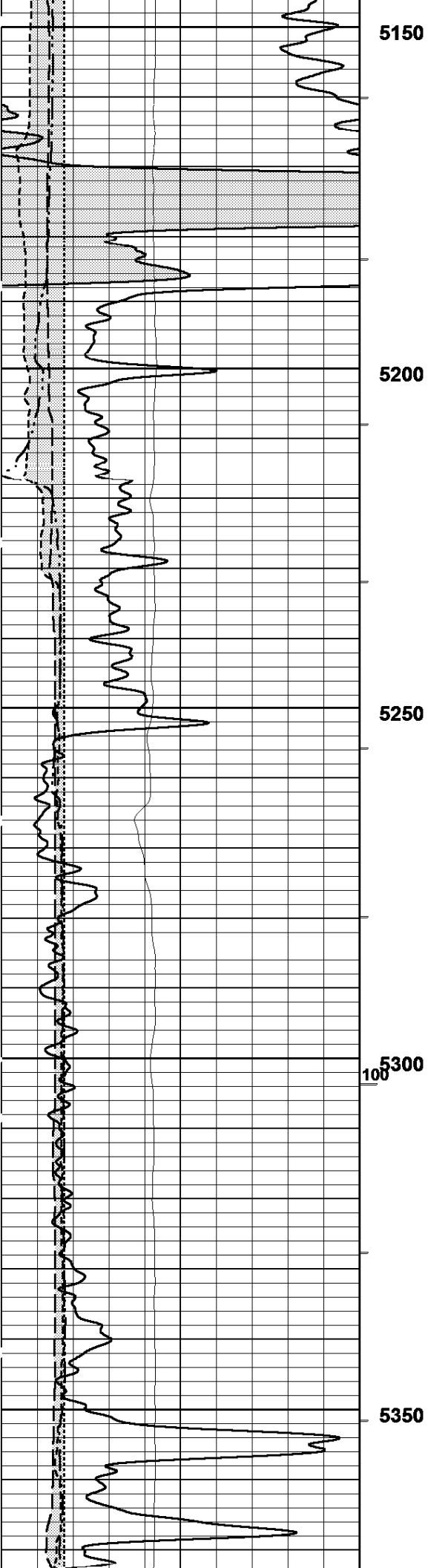


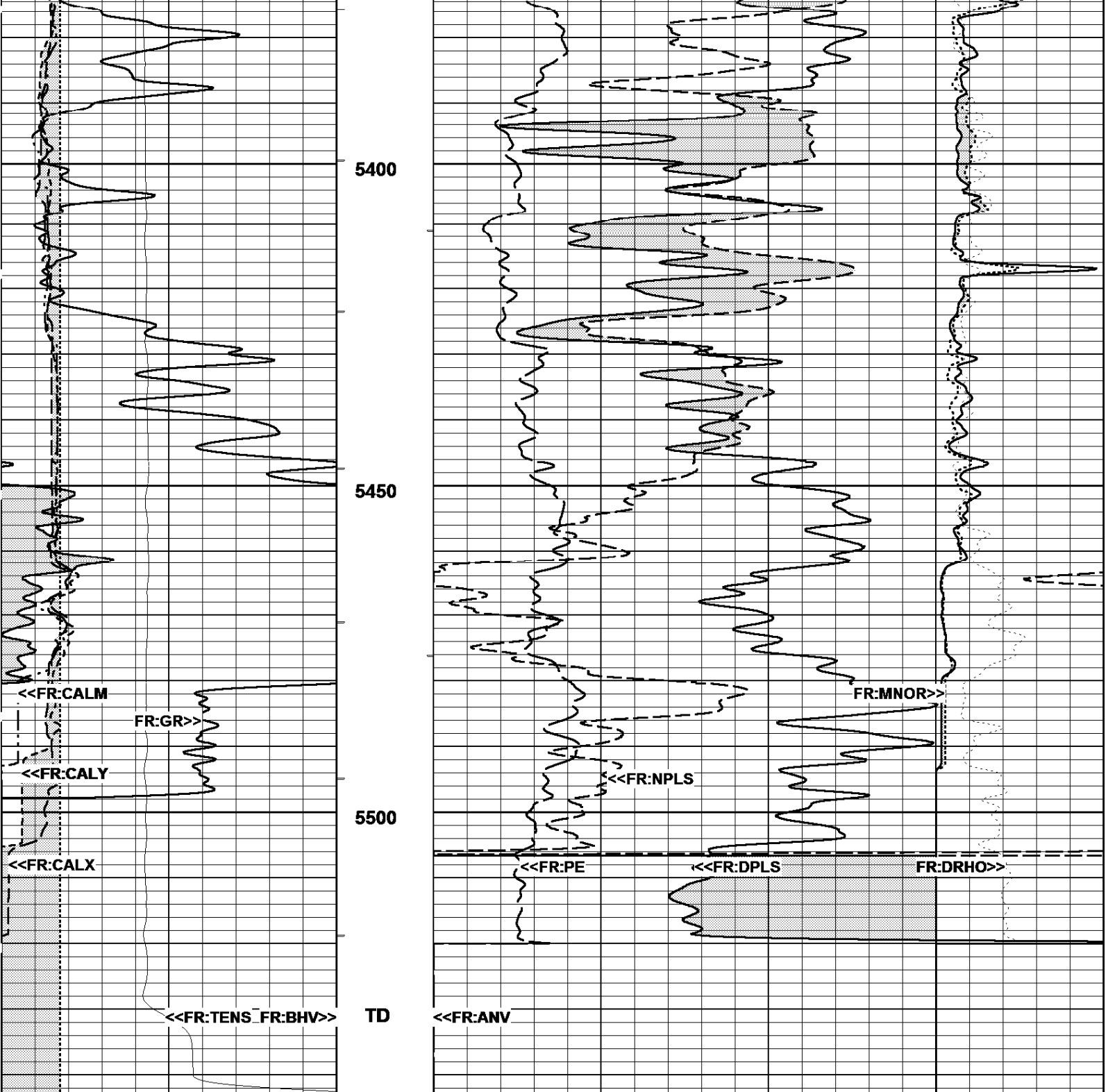












Gamma Ray (GR)		
0.	API	150.
X-Caliper (CALX)		
7.	in	17.
Y-Caliper (CALY)		
7.	in	17.
Tension (TENS)		
5000.	Lbs	0.
Bit Size (BIT)		
7.	Ref in	17.
Microlog-Caliper		
7.	in	17.

Neutron-Porosity (NPLS)	
30.	Limestone-Matrix (V/V) -10.
Density-Porosity (DPLS)	
30.	Limestone-Matrix (V/V) -10.
Photo Electric (PE)	
0.	Barns/Elect 10.
Delta RHO (DRHO)	
-0.5	g/cc 0.5
Micro-Inverse{1"} (MINV)	
-40.	ohms 40.
Micro-Normal{2"} (MNOR)	
-40.	ohms 40.

08/16/2014

MAIN PASS - LIMESTONE (5"/100Ft)

Log UP - (VER 11.19)

17:20:55 => Start Time

Start Depth=> 5542.90 Feet

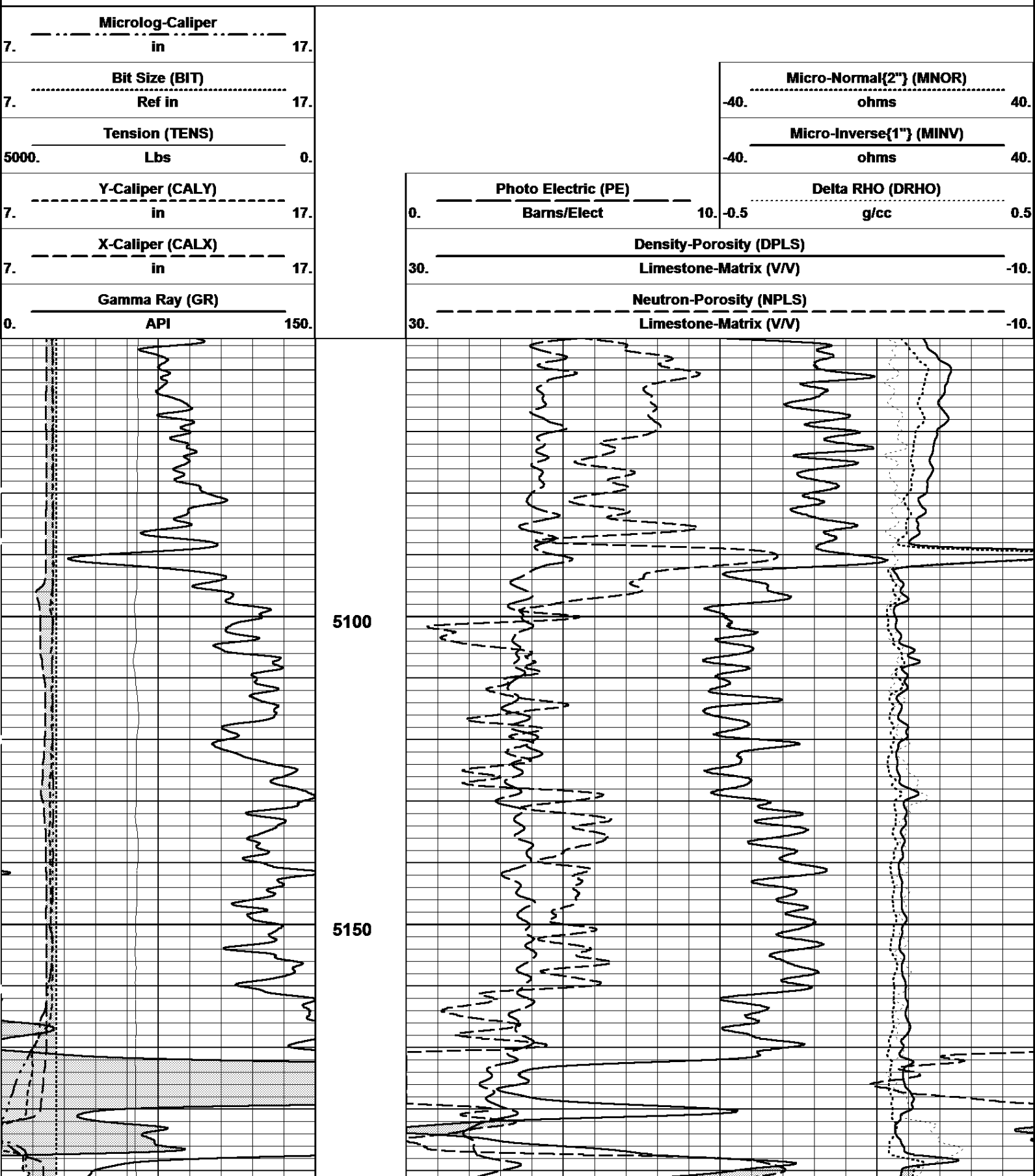
08/16/2014

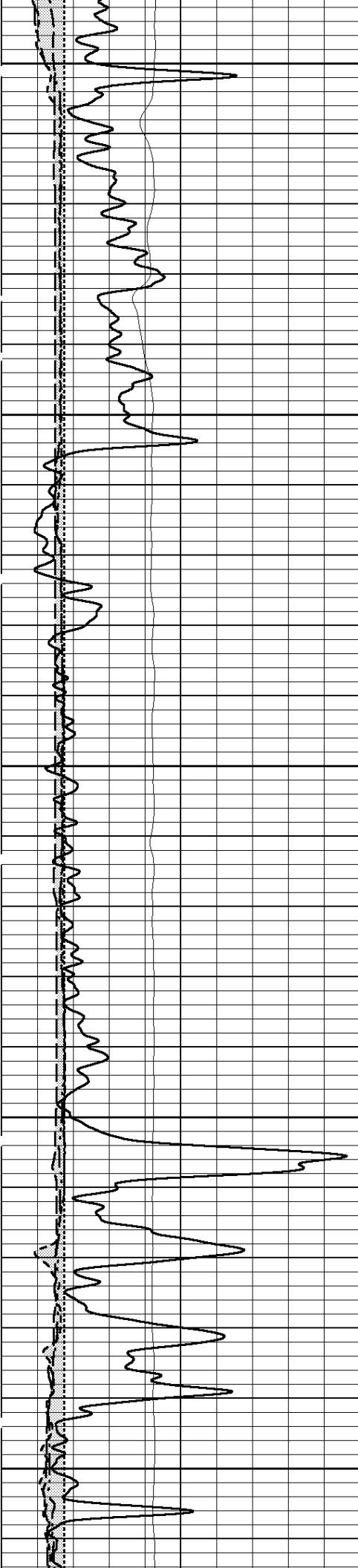
REPEAT PASS - LIMESTONE (5"/100Ft)

Log UP - (VER 11.19)

17:16:20 => End Time

End Depth=> 5055.10 Feet





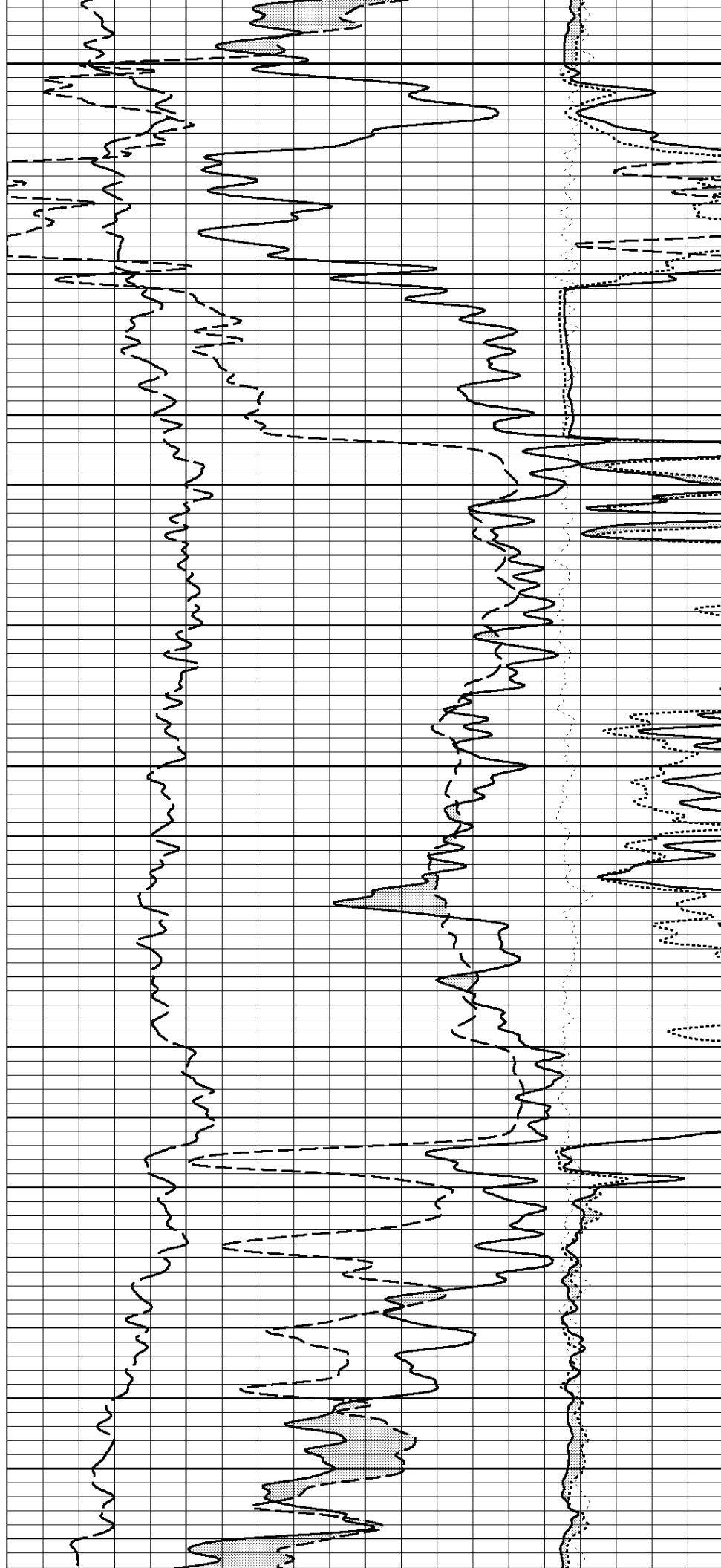
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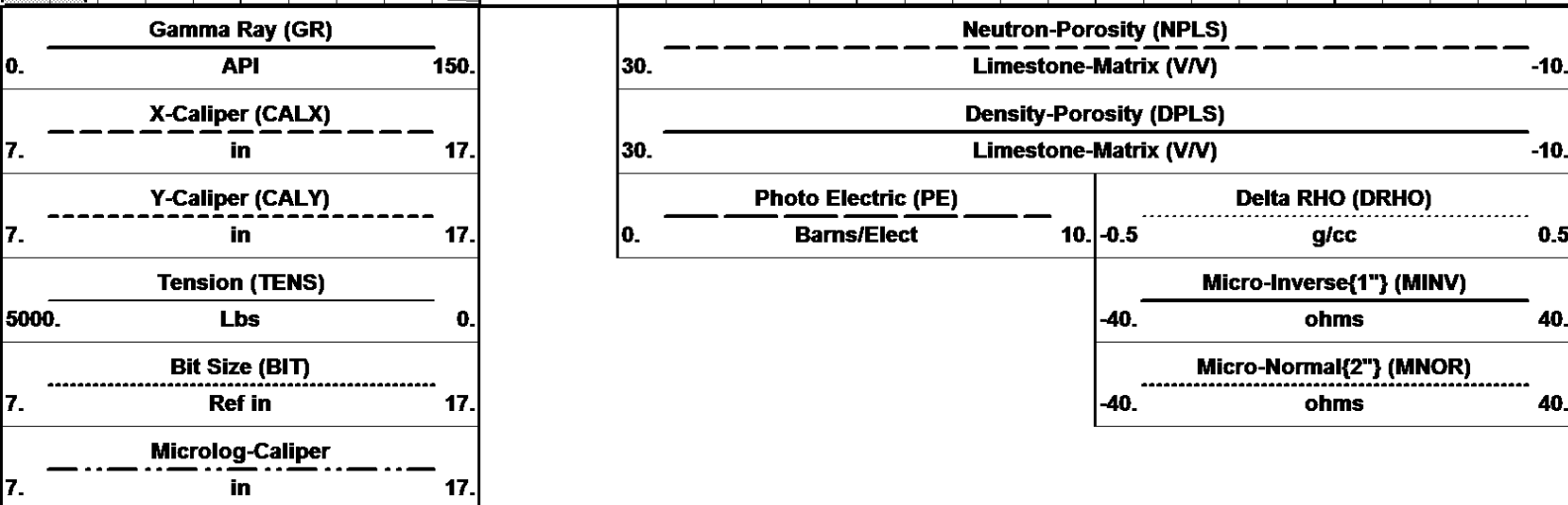
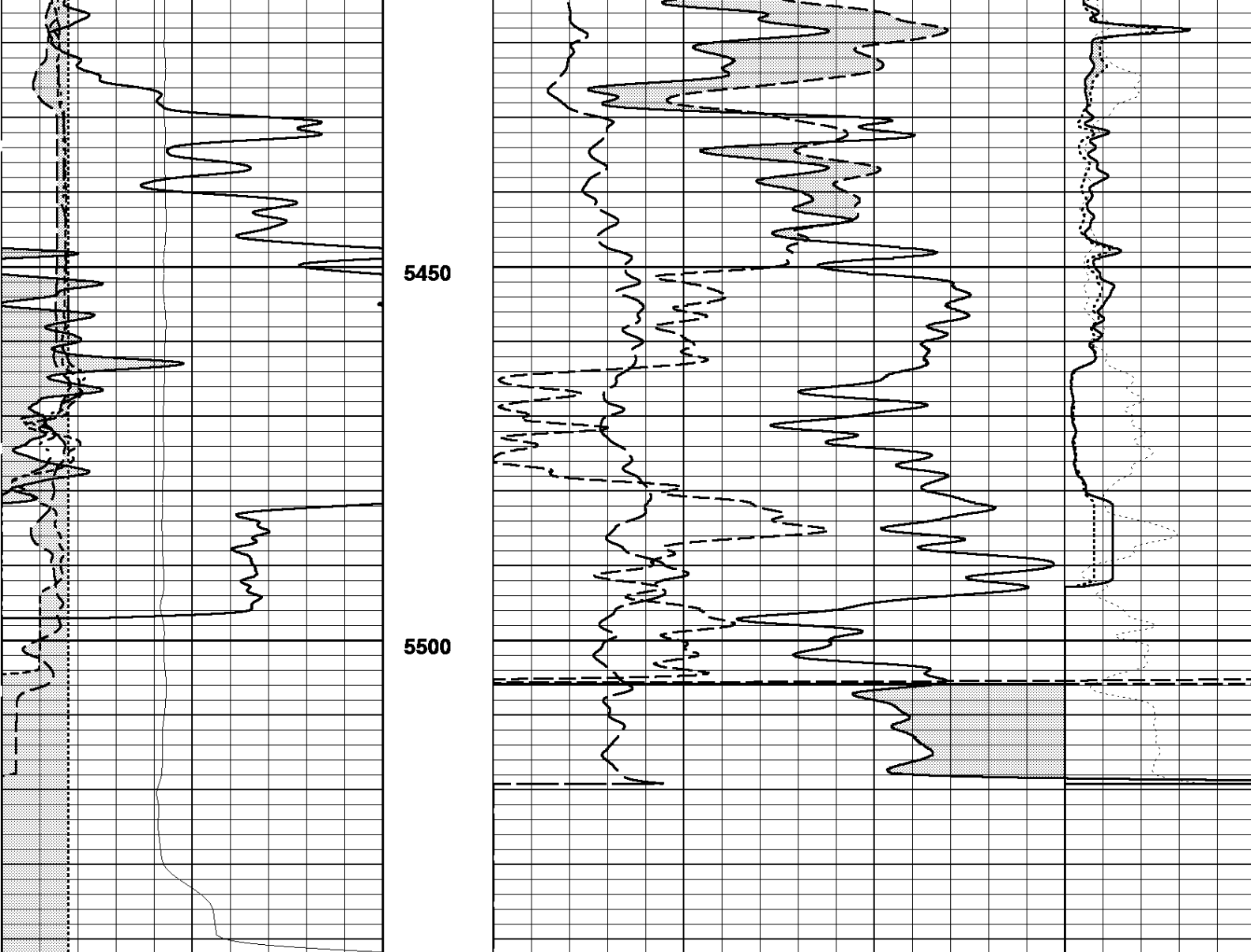
5250

5300

5350

5400





08/16/2014
 17:03:31 => Start Time

REPEAT PASS - LIMESTONE (5"/100Ft)

Log UP - (VER 11.19)
 Start Depth=> 5542.10 Feet

Litho-Density/PE Calibrations

TOOL TYPE
 SERIAL NUM

LFDC/Pe
 RL4112

SOURCE TYPE
 SOURCE NUM

CESIUM 137

SOURCE STRGTH 2 CURIE

MASTER BLOCK CALIBRATIONS

	W1(cps)	W2(cps)	W3(cps)	W4(cps)	SS	UNITS	CALIBRATION DATE	CALIBRATION TIME
ALUMINUM	4706.789	3907.183	1892.508	3.835	2897.2875	2.523(g/cc)	M/D/Y> 8/9/2014	H:M:S> 8:52:38
MAGNESIUM	14192.776	11455.427	4876.003	4.013	4263.0187	1.679(g/cc)		
BACKGROUND	1421.110	1251.838	849.630	3.680	4.6933			
SAND	12215.421	10108.379	4420.712	3.957		1.739(PE)		
IRON	4187.160	3539.675	1773.545	3.698		4.529(PE)		
FIELD VERIFIER(cps)	1426.105	1256.423	851.962	3.595	4.6962			
VER NUM LDP-4102								

WELL SITE CALIBRATIONS

VER NUM	LDP-4102	W1(cps)	W2(cps)	W3(cps)	W4(cps)	SS		CALIBRATION DATE	CALIBRATION TIME

Compensated Neutron Calibrations

TOOL TYPE	CNT-B	SOURCE TYPE	AM241BE	SOURCE STRGTH	20 CURIE
SERIAL NUM	RN2016	SOURCE NUM			

MASTER TANK CALIBRATIONS

		NEAR(cps)	FAR(cps)	RATIO	K VALUE	CALIBRATION DATE	CALIBRATION TIME
LOW PHI	3.150			0.6331	0.9636	M/D/Y> 7/17/2014	H:M:S> 19:37:14
MED PHI	19.130			1.0847	0.9636		
HIGH PHI	31.300			1.3002	0.9637		
FIELD VERIFIER(cps)	279.844		209.056	1.3386			
VER NUM 7430							

WELL SITE CALIBRATIONS

VER NUM	7430	NEAR(cps)	FAR(cps)	RATIO		CALIBRATION DATE	CALIBRATION TIME

GAMMA RAY CALIBRATION

SERIAL NUM	RG3011
BLANKET NUM	1A

MASTER CALIBRATIONS

	BackGrnd	CalVal: 159.000 API	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	62.520 - raw	342.001 - raw	0.569 - gain 0.000 - off	M/D/Y> 8/5/2014	H:M:S> 9:6:0

WELL SITE CALIBRATIONS

	BackGrnd	CalVal: 100.000 Mknu	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
PRE CAL	-0.059 - raw	26.967 - raw	3.700 - gain	M/D/Y> 11/12/2004	H:M:S> 12:40:27

X-CALIPER CALIBRATION

SERIAL NUM

RL4112

MASTER CALIBRATIONS

	ZeroVal: 6.000 mm	CalVal: 10.000 mm	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	3114.630 - raw	5049.635 - raw	0.002 - gain -0.438 - off	M/D/Y> 7/17/2014	H:M:S> 15:33:17

Y CALIPER CALIBRATIONS

SERIAL NUM

RN2016

MASTER CALIBRATIONS

	ZeroVal: 6.000 IN	CalVal: 10.000 IN	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	701.687 - raw	1398.393 - raw	0.006 - gain 1.971 - off	M/D/Y> 7/17/2014	H:M:S> 19:54:39

MICRO NORMAL CALIBRATIONS

SERIAL NUM

RM8005

MASTER CALIBRATIONS

	ZeroVal: 0.020 ohmm	CalVal: 10.000 ohmm	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	33.779 - raw	370.390 - raw	0.030 - gain -0.982 - off	M/D/Y> 7/17/2014	H:M:S> 17:4:14

MICRO INVERSE CALIBRATIONS

SERIAL NUM

RM8005

MASTER CALIBRATIONS

	ZeroVal: 0.020 ohmm	CalVal: 10.000 ohmm	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	16.240 - raw	288.748 - raw	0.037 - gain -0.575 - off	M/D/Y> 7/17/2014	H:M:S> 16:53:30

Company

CMX, INC.

Well

BARTENDER SWD #1-18

Field

STRANATHAN

County

BARBER

State

KANSAS

RECON

COMPENSATED NEUTRON
LITHOLOGY DENSITY
GAMMA RAY X-Y CALIPER
MICROLOG



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