

Company **GRAND MESA OPERATING CO.**
 Well **PARKINSON-GOUGH #1-8**
 Field **WILDCAT**
 County **SCOTT**
 State **KANSAS**



**DUAL INDUCTION
 LATEROLOG - SP
 GAMMA RAY**

SEC	TWP	RGE	OTHER SERVICES:	
08	17S	33W	LDT	CNL
Location: 1885' FSL & 2050' FWL		NW SE NE SW	XY CALLIPER	MEL SONIC
SURF. SAME	AP#:	015-171-21098	ELEVATIONS K.B. 3089 G.L. 3080 D.F. 3088	
Permanent Datum	Ground Level	Elev	3080	
Log Measured From	Kelly Bushing			
Drilling Measured From	Kelly Bushing			

Date	30-OCT-2014			
Run No.	ONE			
TD Driller	5050	ft		ft
TD RECON	5053	ft		ft
Bot Logged Interval	5052	ft		ft
Top Logged Interval	2400	ft		ft
Casing Depth Driller	8 5/8	in.	@ 222	in.
Casing Depth RECON	8 5/8	in.	@ 220	in.
Bit Size	7 7/8	in.		in.
Drilling Fluid Type	Chemical			
Density	9.2	lb/gal	55	sec/qt
Fluid Loss	9.6	ml/30min	10.0	strip
PH	Flowline			
Source Of Sample				
RM @ Measured Temp	0.475	Ohmm	@ 75	Ohmm @
RMF @ Measured Temp	0.356	Ohmm	@ 75	Ohmm @
RMC @ Measured Temp	0.594	Ohmm	@ 75	Ohmm @
RM @ MRT	0.295	Ohmm	@ 125	Ohmm @
Max Recorded Temp	125	DegF		DegF
Time Drilling Stopped	29-OCT-2014		20:30	
Time Circulation Stopped	29-OCT-2014		22:00	
Time Logger On Bottom	30-OCT-2014		01:57	
Unit Num	S409	Location	OKLAHOMA CITY, OK	
Recorded By	H. GARCIA			
Witnessed By	MR. K. MATSON			

All interpretations are based on inferences from electrical or other readings, and therefore, RECON cannot and will not guarantee the accuracy of any interpretations of log data. RECON shall not be liable for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from

interpretations made by any of our officers, agents or employees, except in the case of provable Gross Negligence or willfull damage. Interpretations are also subject to the terms and conditions of our Price Schedule and General Service Agreement.

RIG INFORMATION

Drill Contr/Rig#	DUKE DRLG. #4
------------------	---------------

GENERAL REMARKS SECTION

FIRST RUN IN THE HOLE
 CNL AND LDT LOGGED IN A LIMESTONE MATRIX
 TOP MARK - 297, BOTTOM MARK - 5002.6
 CNL/LDT LOGGED MATRIX: 2.71 g/cc.

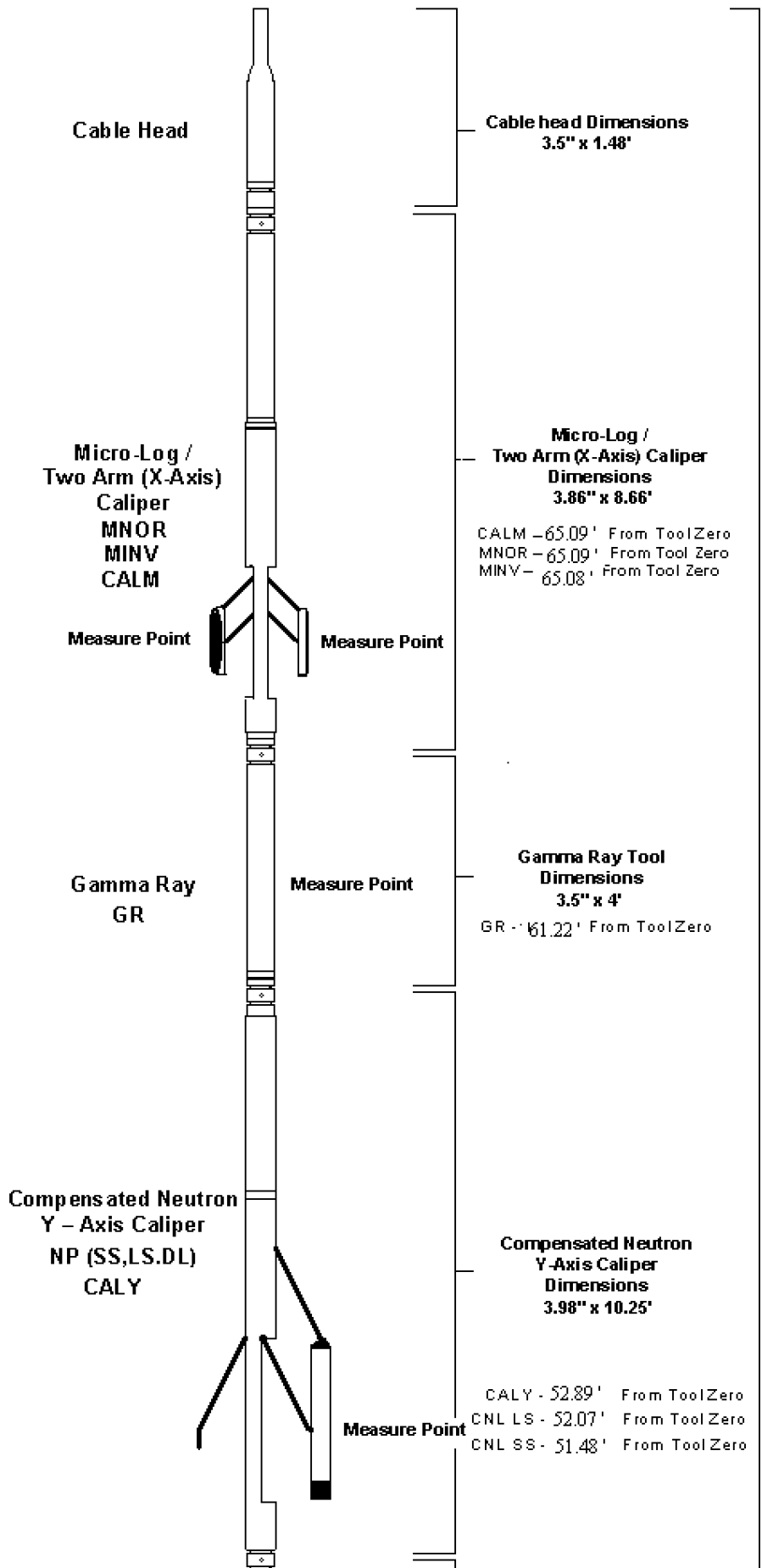
CHLORIDES: 8000 ppm
 LCM: 2 lbs/bbl

THANK YOU FOR USING RECON PETROTECHNOLOGIES LTD.

AHV CALCULATED ON 5.5" PROD. CASING

CREW: M. CALLENTINE

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



Digital Telemetry

**Digital Telemetry Section
Dimensions
3.5" x 3.15'**

**Compensated
Litho-Density (Pe)
X - Axis Caliper**

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

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

CALX - 38.94' From ToolZero
LDT w1 -
LDT w2 -
LDT w3 - } -38.68' From ToolZero
LDT w4 -
LDT SS - 38.19' From ToolZero

**Tool String
Length Total
73.64'**

**Borehole
Compensated
Sonic**

**Borehole Compensated Sonic
Tool Dimensions
3.5" x 15.75'**

SP(SS,LS,DL)
DT
TTI
VDL
TT
Measure Point
Tool First Reading
Point

T-1
Transmitter 1

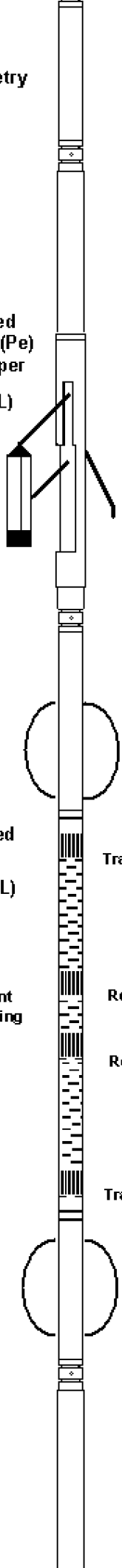
T1R1 - 33.35' From ToolZero
T1R2 - 31.35' From ToolZero

R-1
Receiver 1

R-2
Receiver 2

T2R1 - 28.54' From ToolZero
T2R2 - 28.37' From ToolZero

T-2
Transmitter 2



Dual Induction

SP
ILD
ILM
LL3



S.P. / CILD
Measure Point

CILM Measure
Point

Laterolog 3
Measure Point

Tool Zero Point
(Tool Bottom)

**Dual Induction Tool
Dimensions
3.62" x 21'**

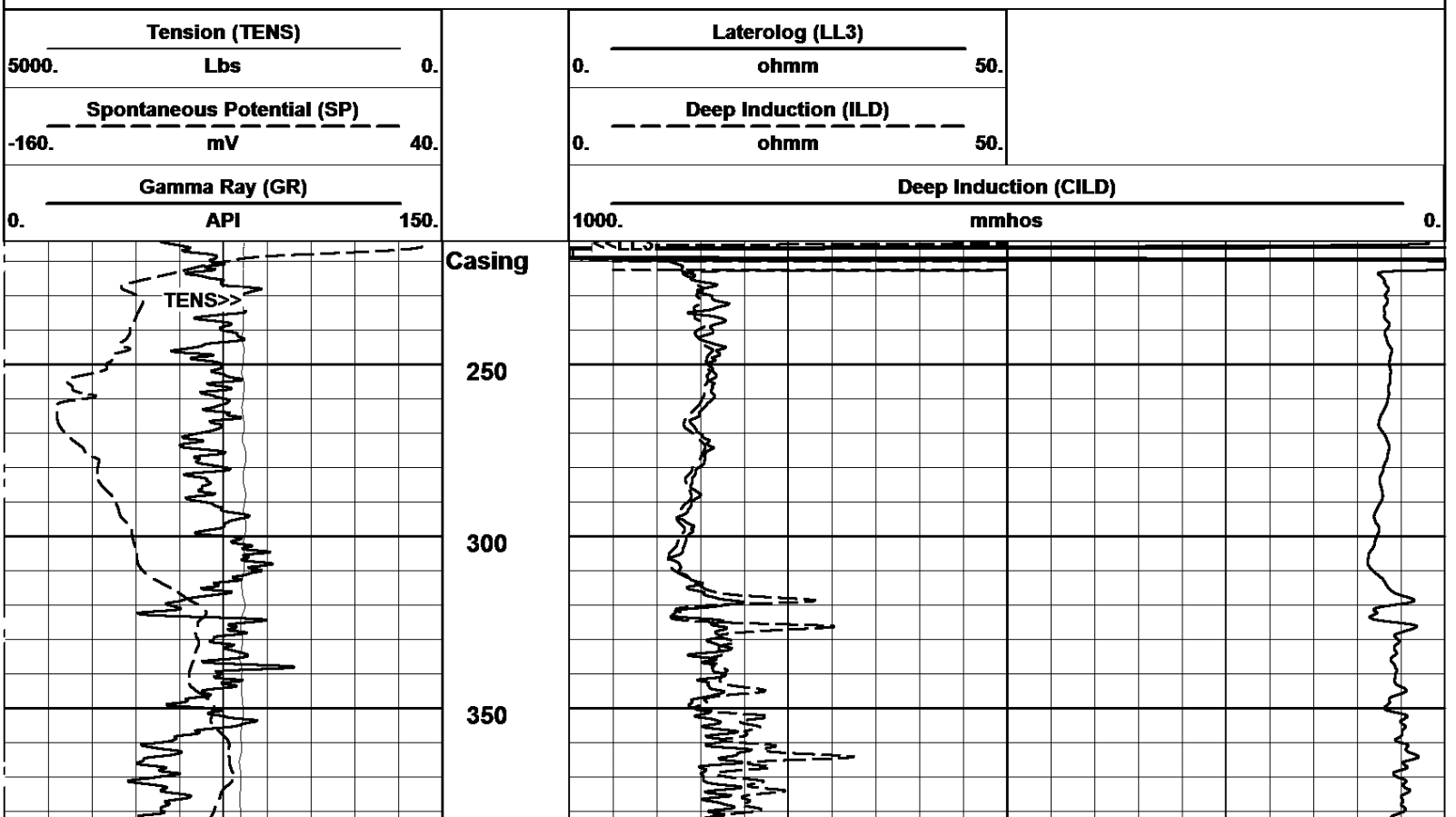
SP - 10.96' From ToolZero
ILD - 10.96' From ToolZero

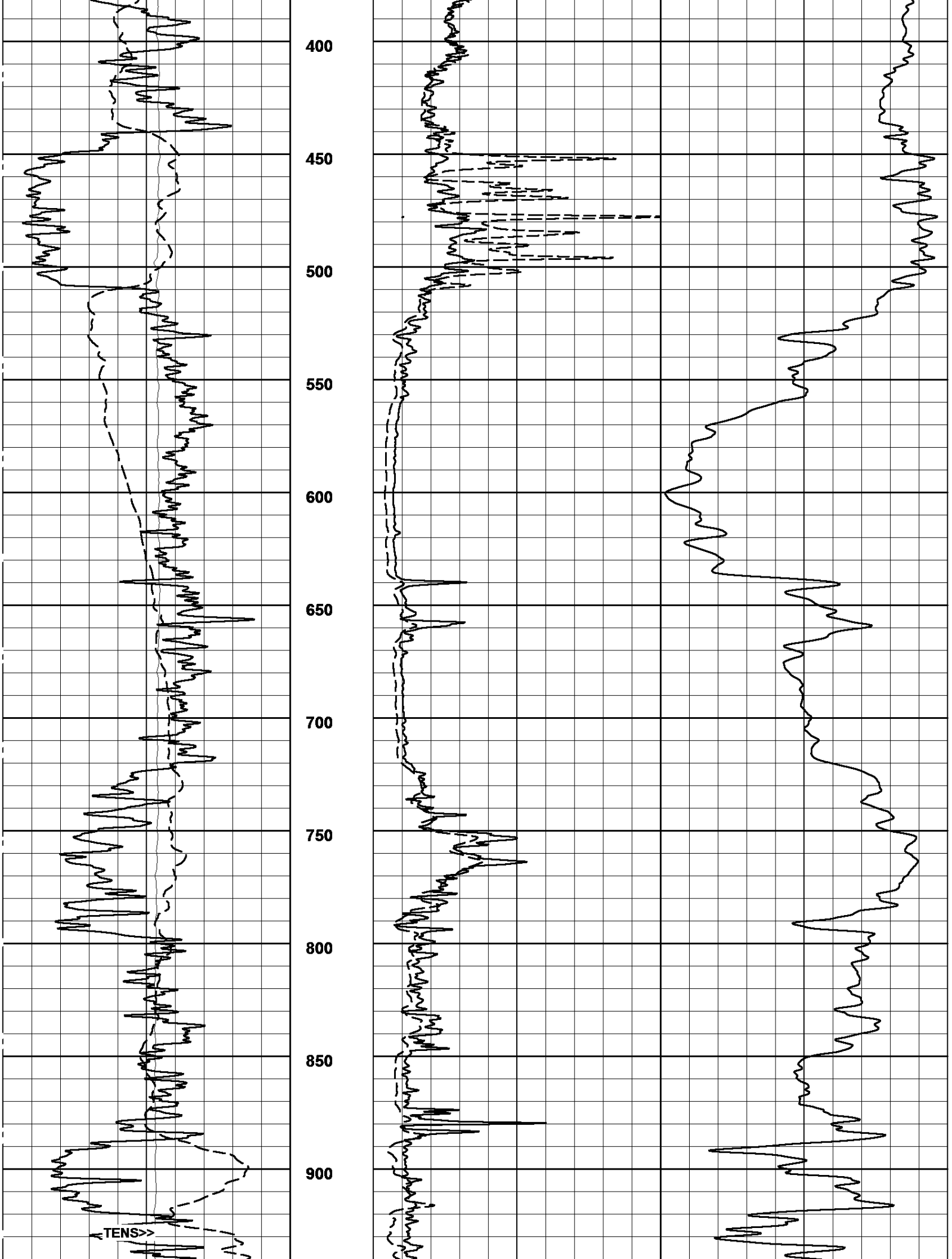
ILM - 7.22' From Tool Zero

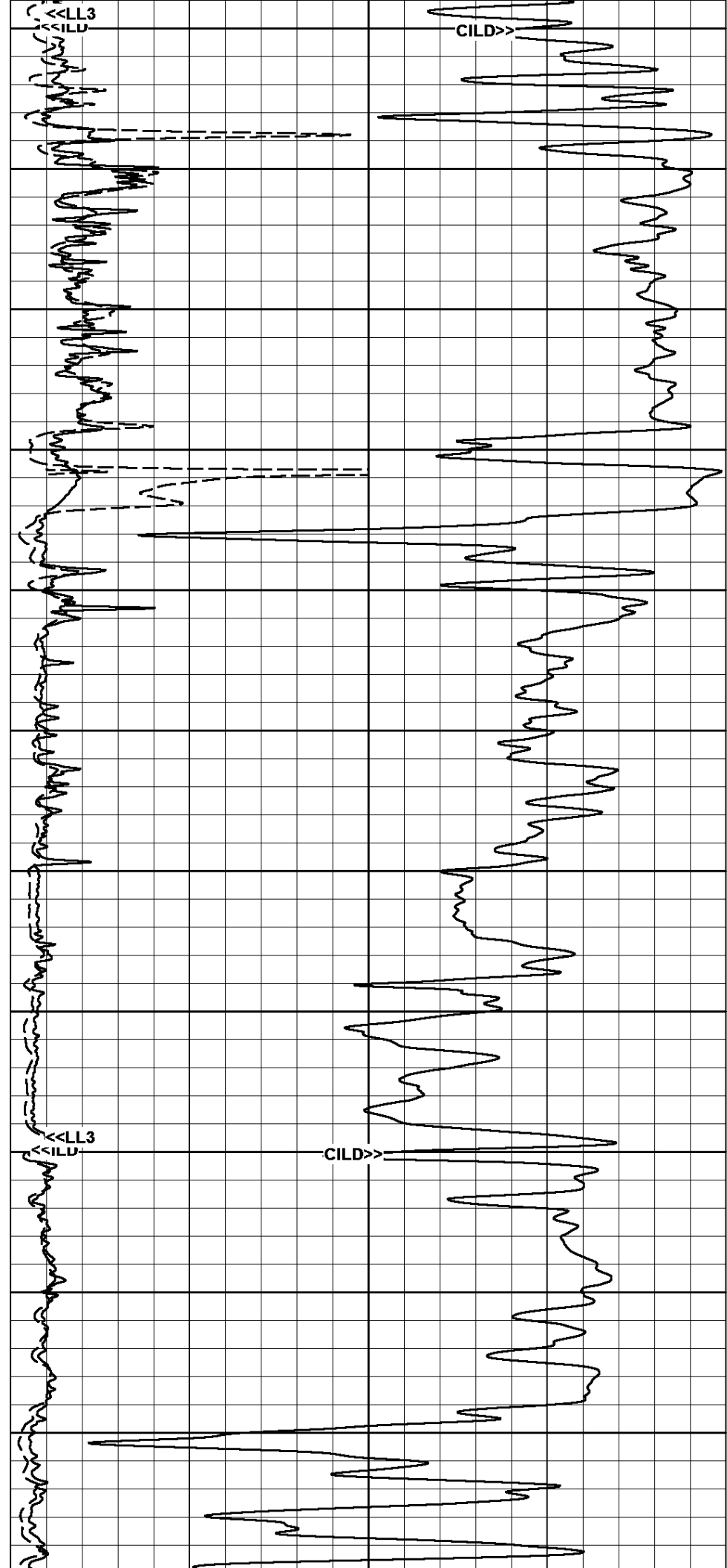
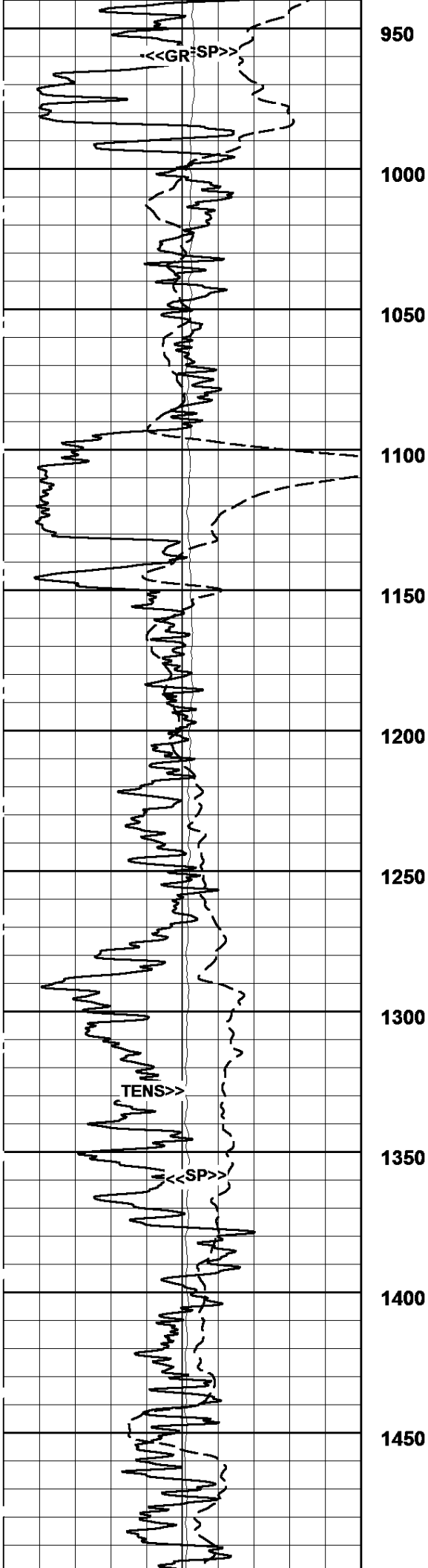
LL3 - 1.67' From ToolZero

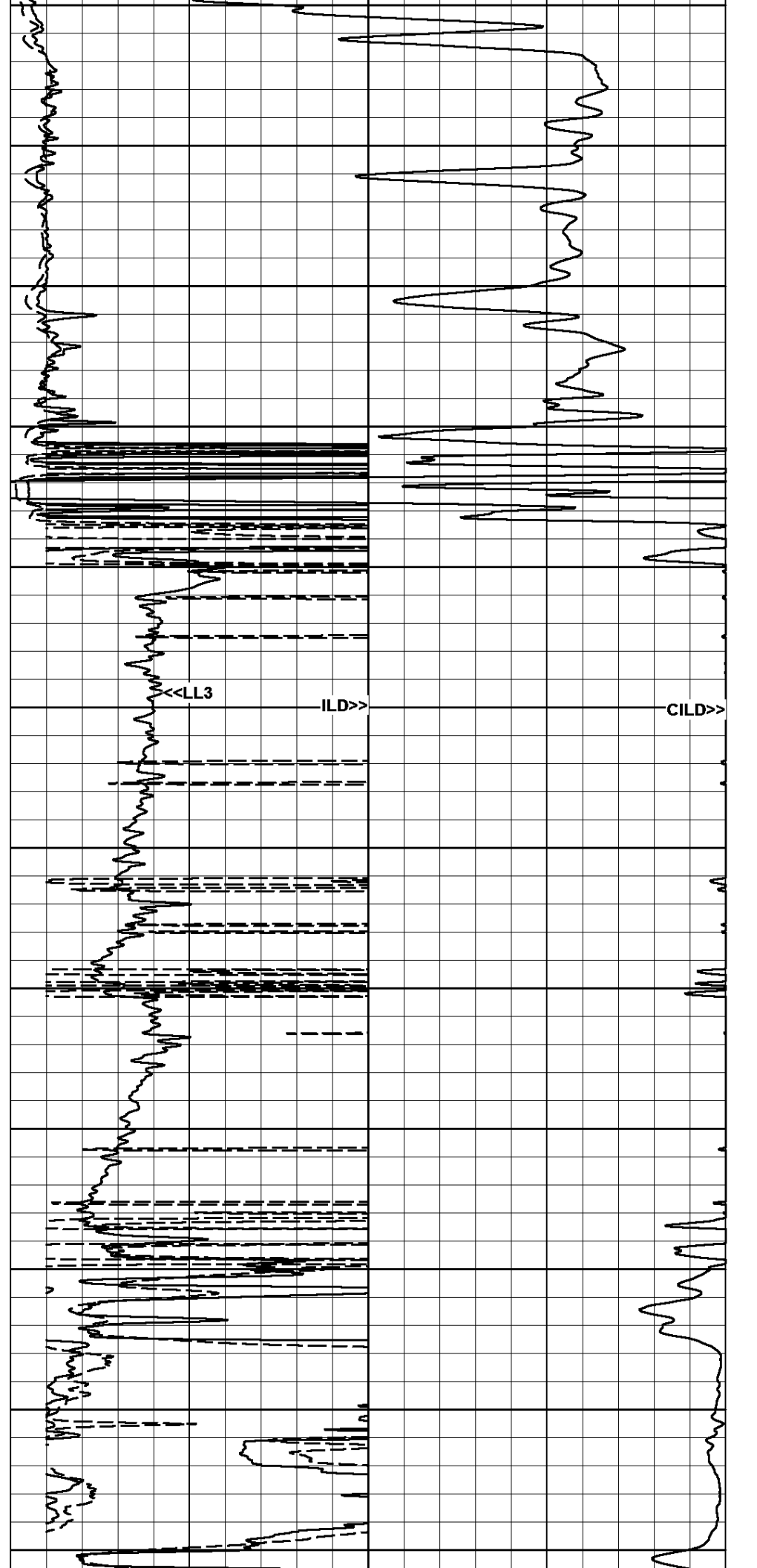
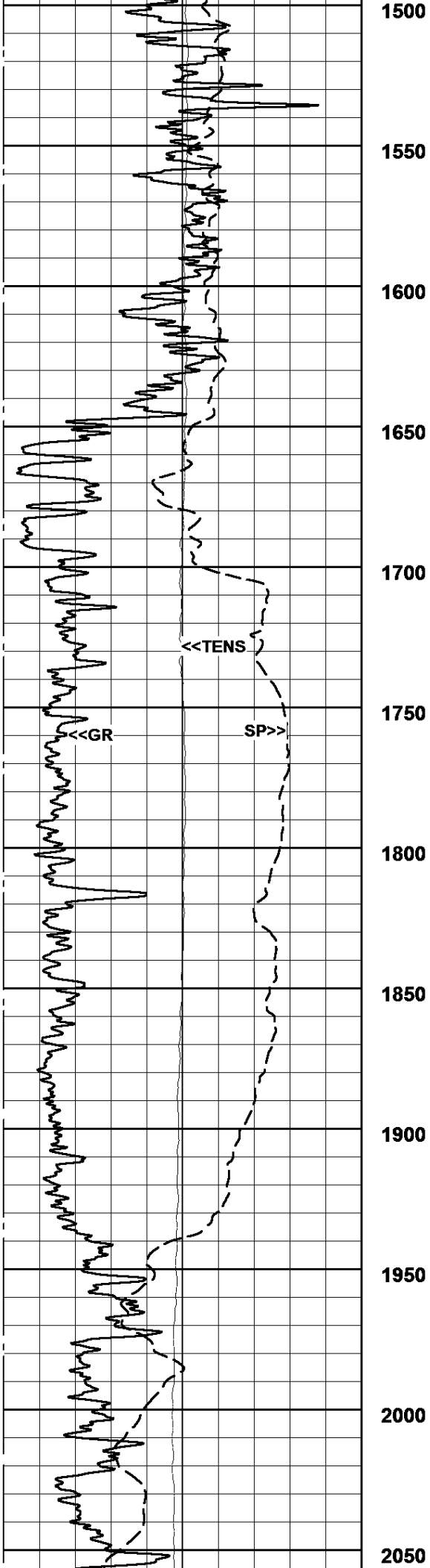
All Measurements are
taken from Tool Zero

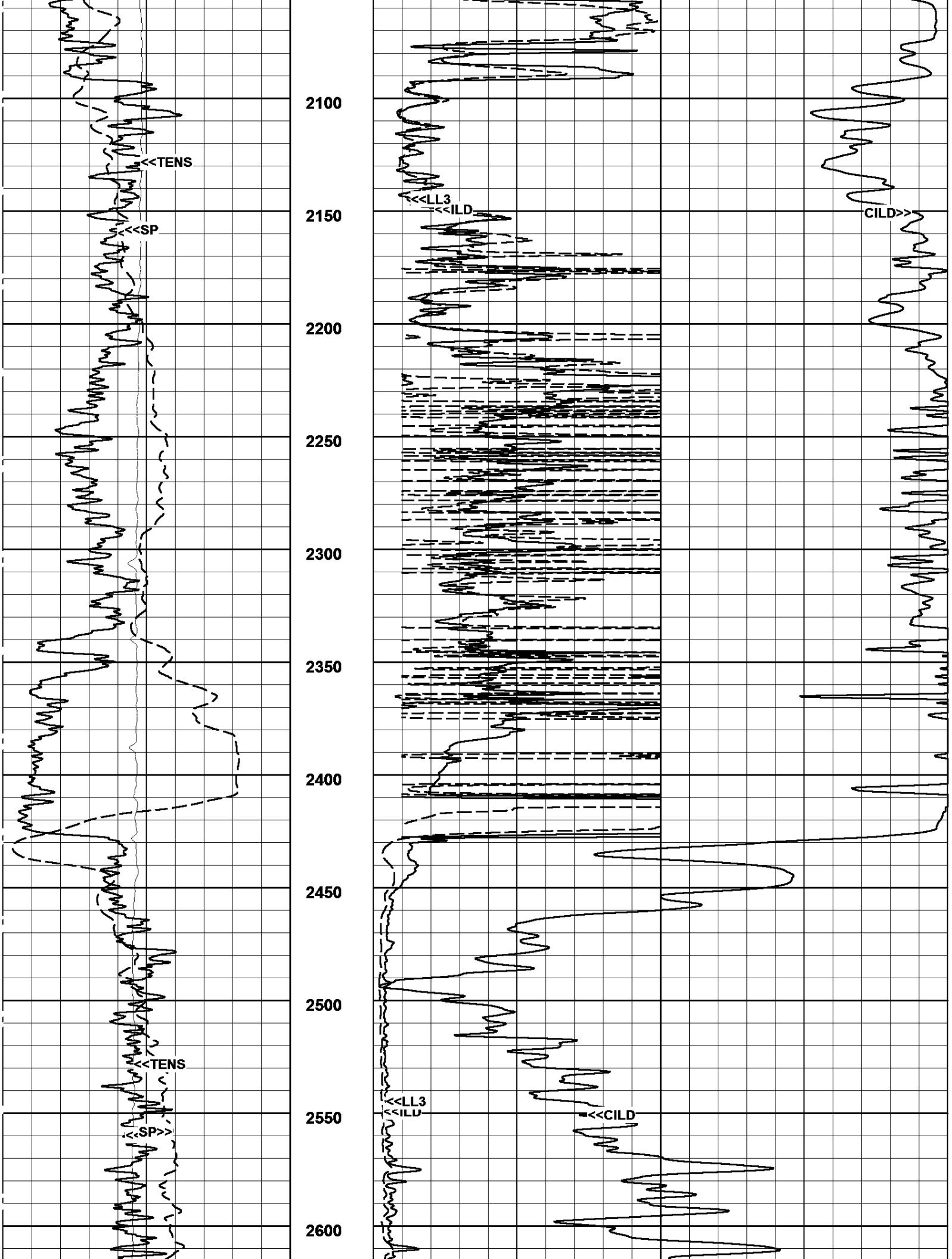
Tool First Reading
Point

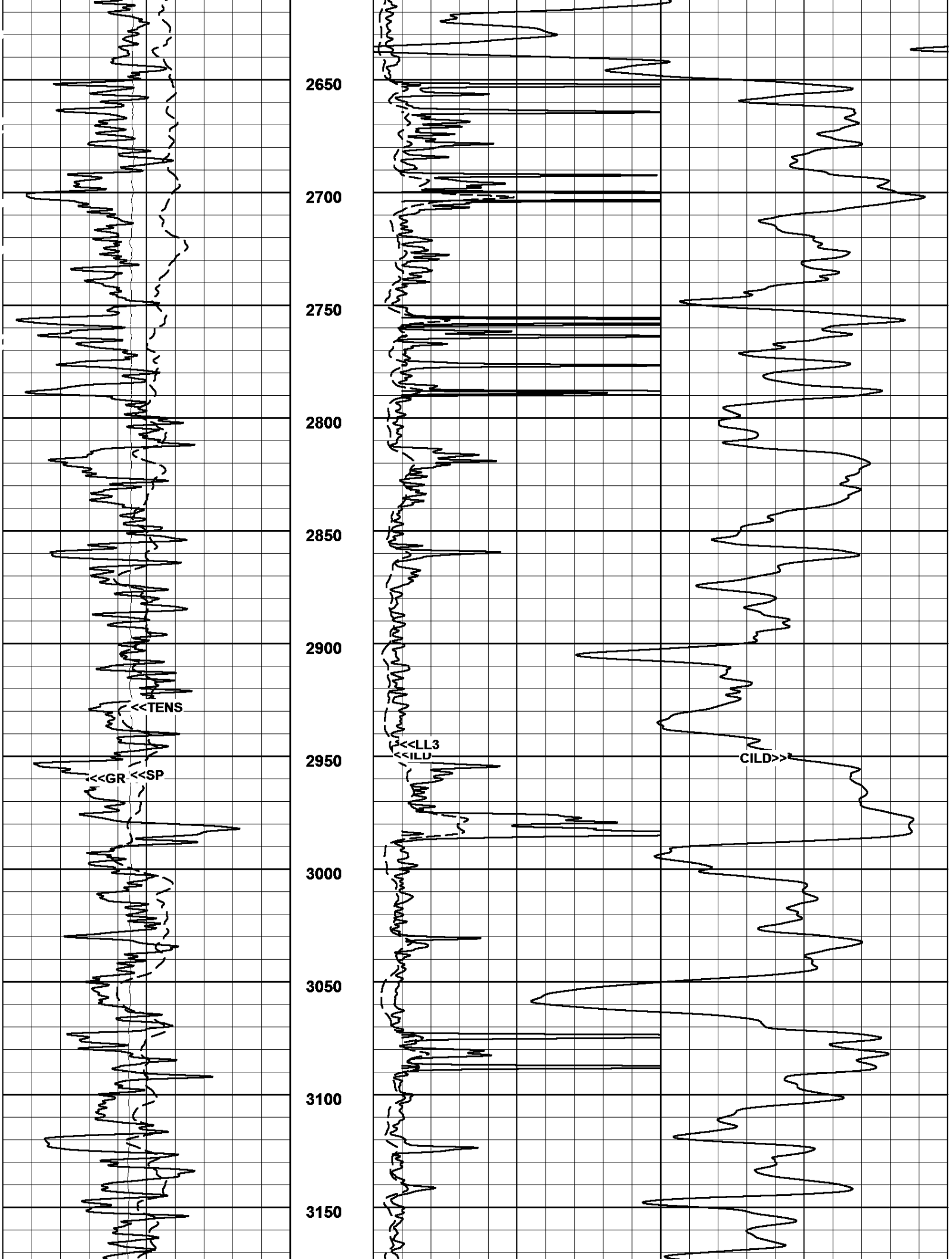


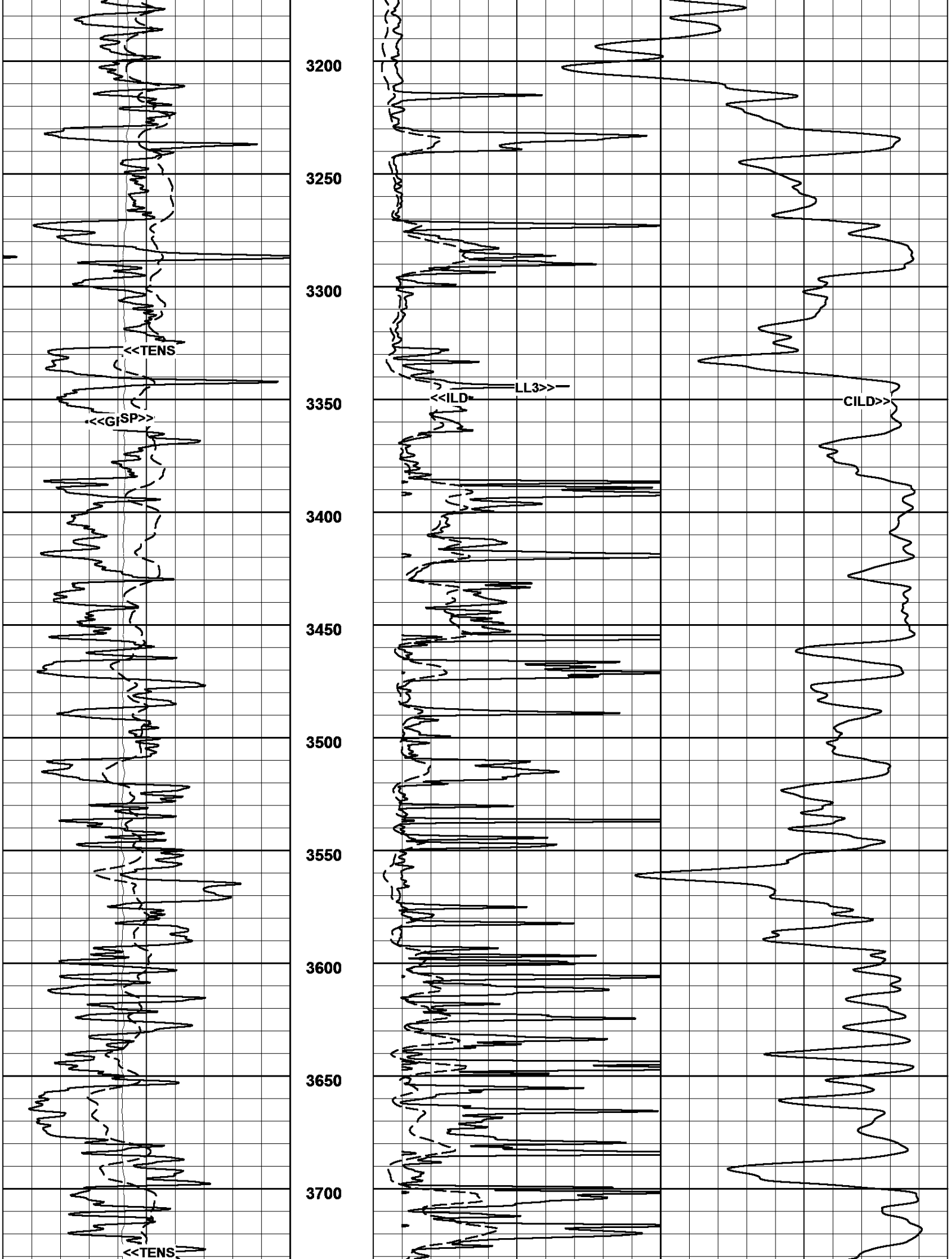


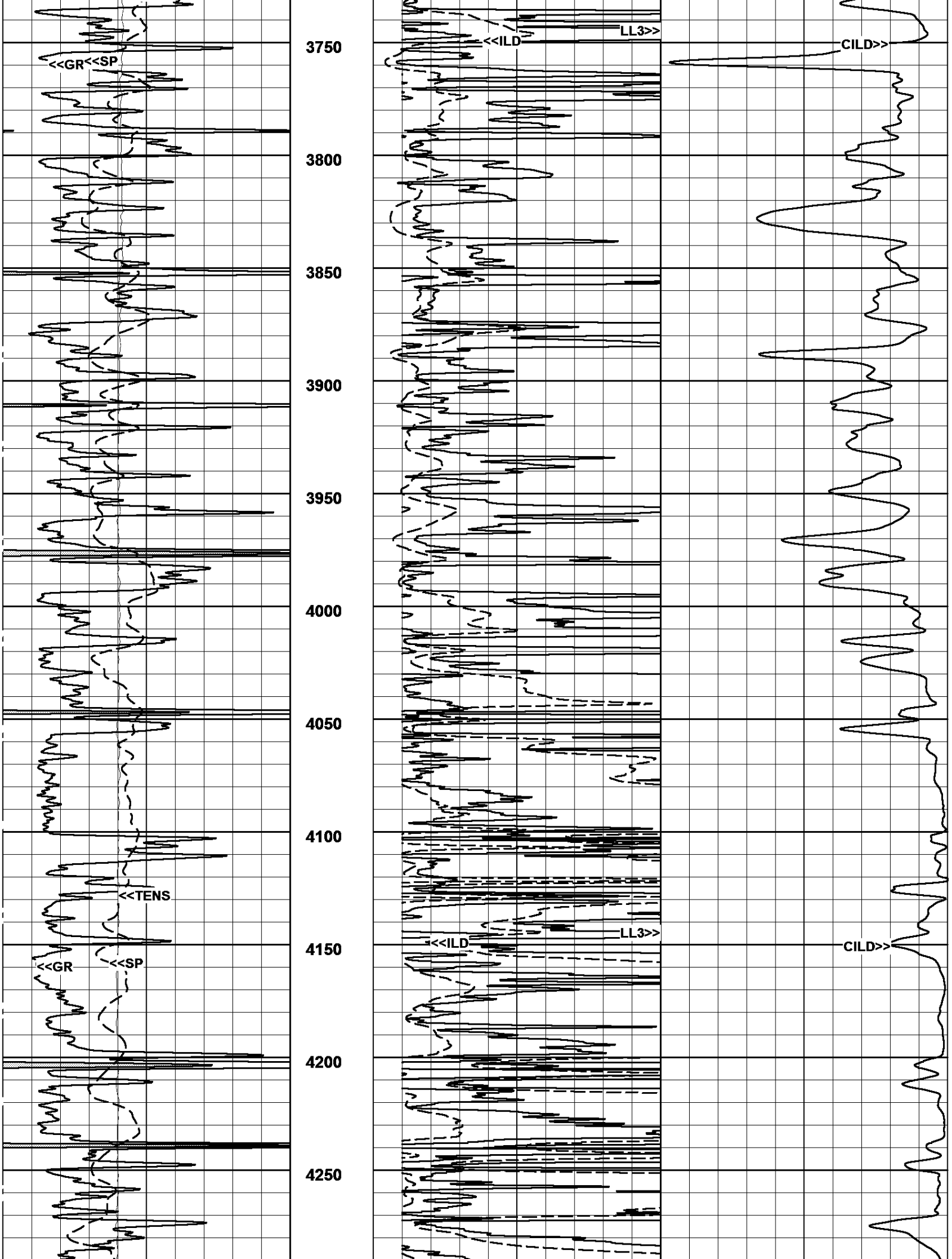


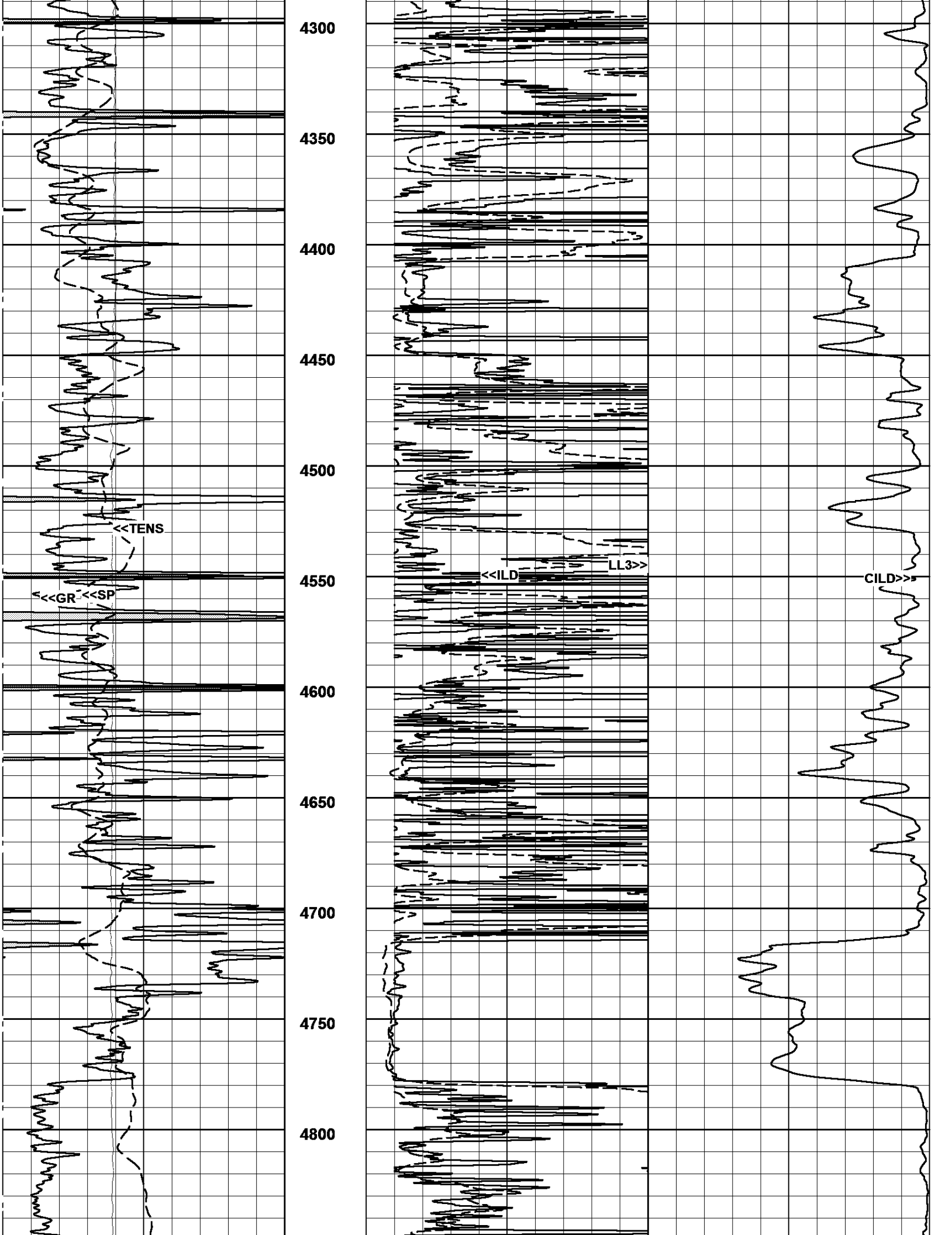


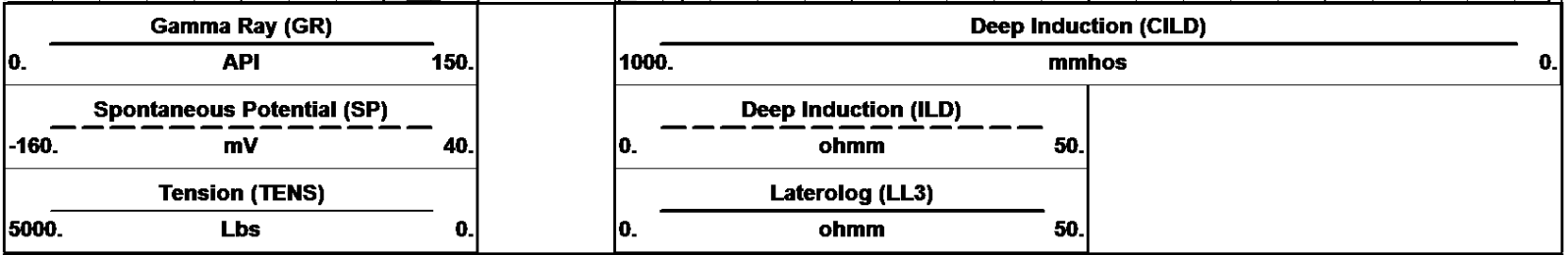
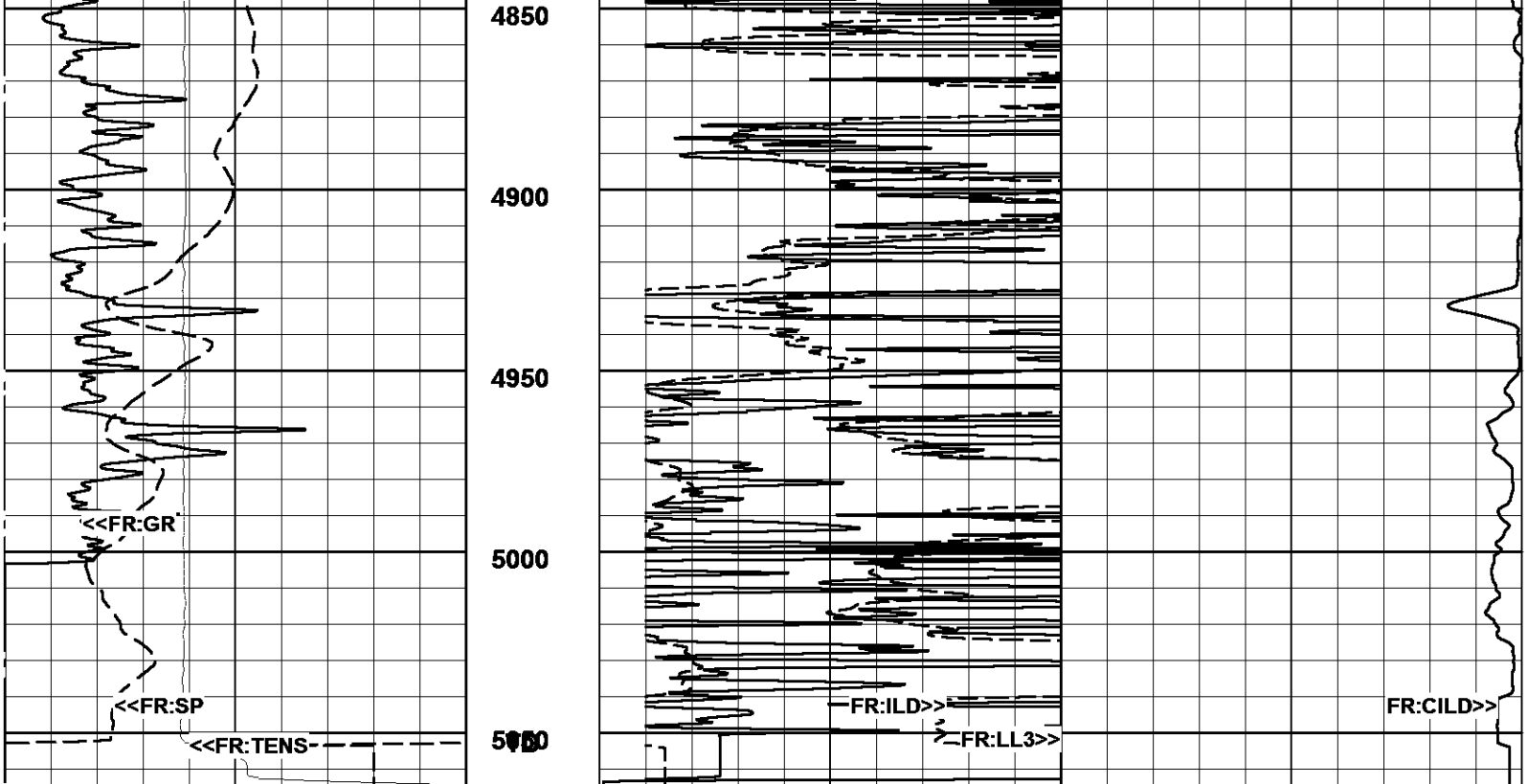






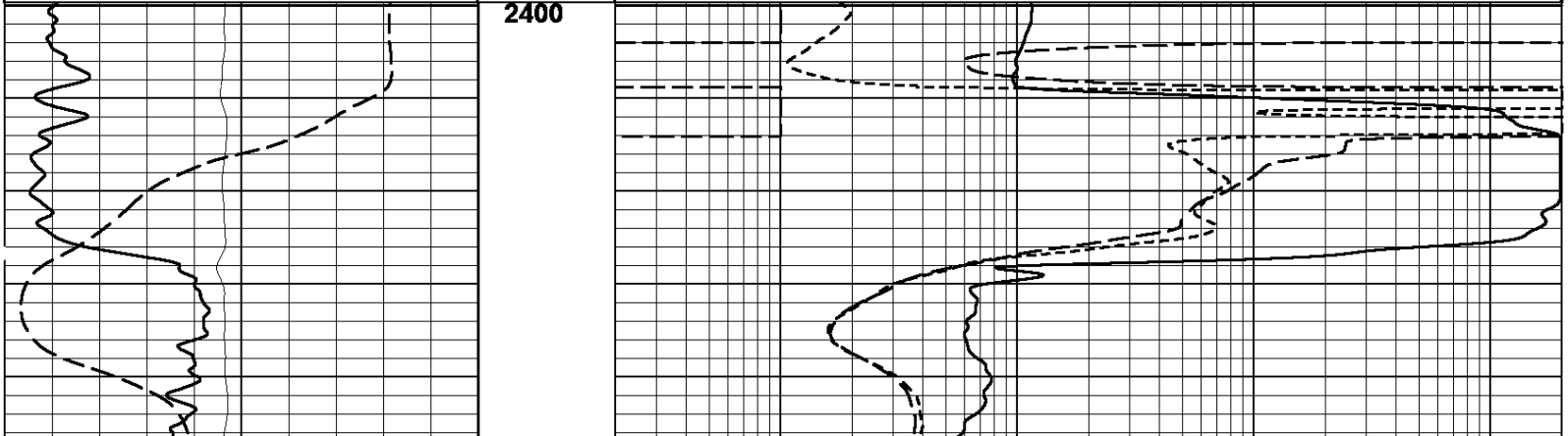
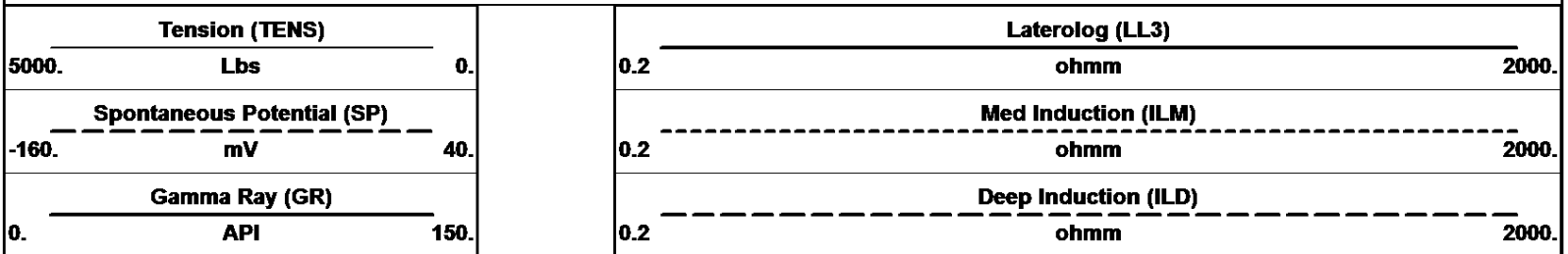






10/30/2014 **MAIN PASS (2"/100ft)** Log UP - (VER 11.19)
 01:59:04 ⇒ Start Time Start Depth⇒ 5064.25 Feet

10/30/2014 **MAIN PASS (5"/100ft)** Log UP - (VER 11.19)
 02:33:40 ⇒ End Time End Depth⇒ 2399.90 Feet



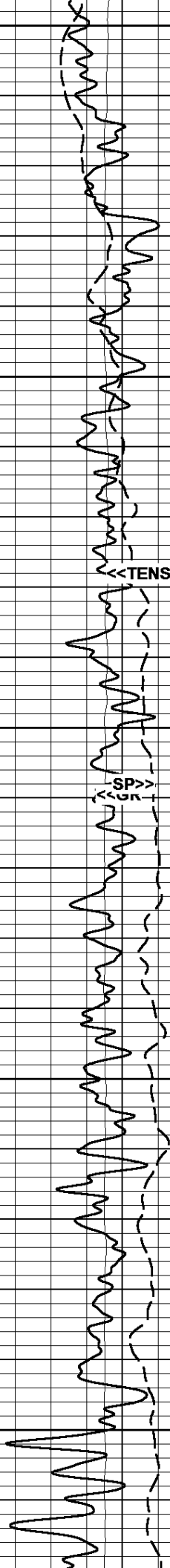
2450

2500

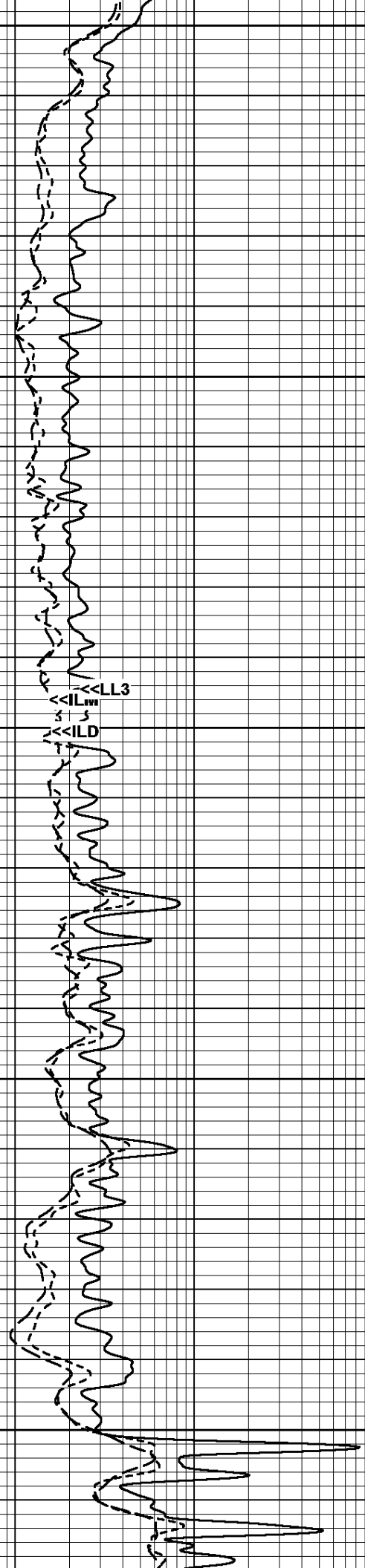
2550

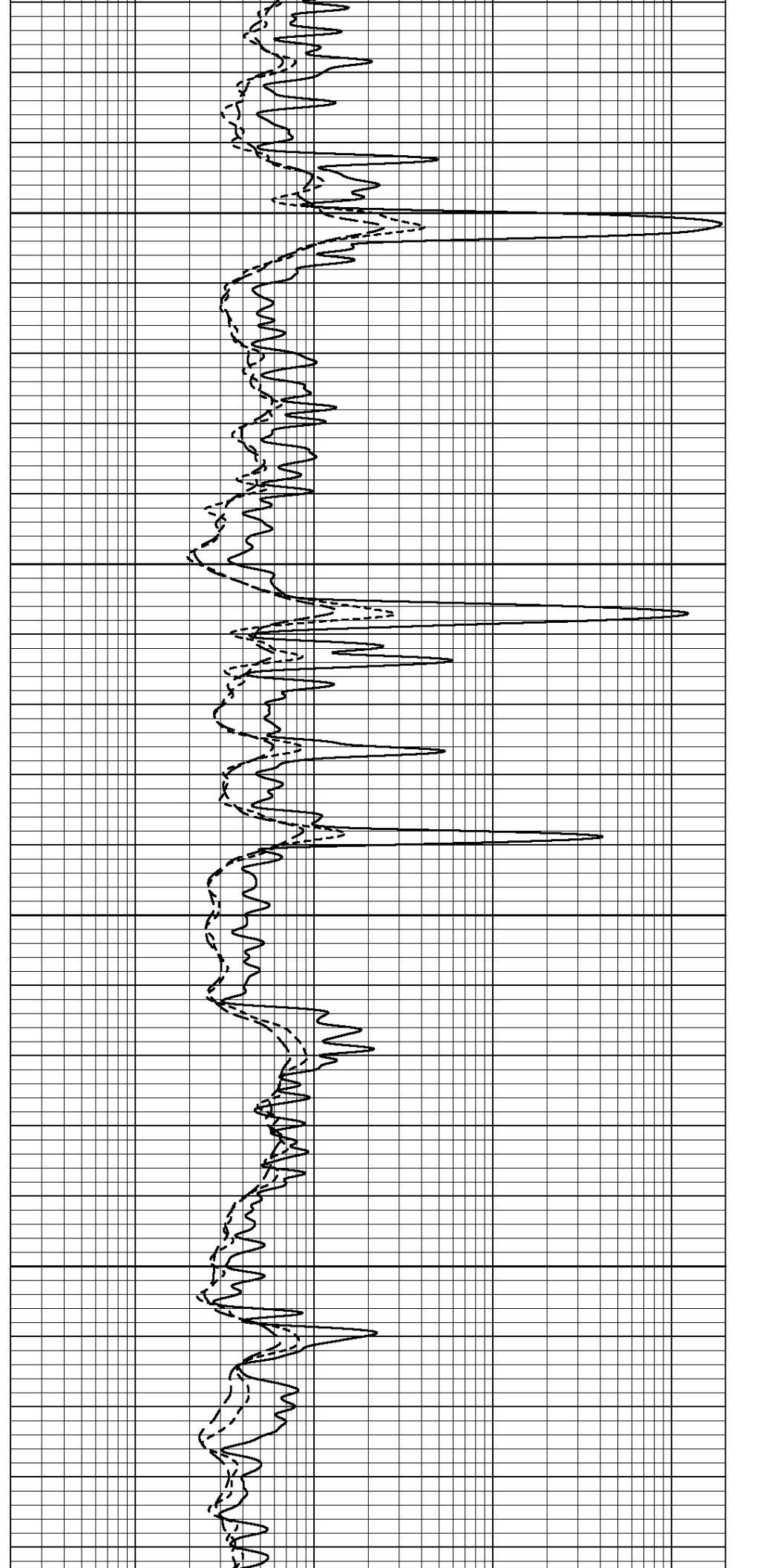
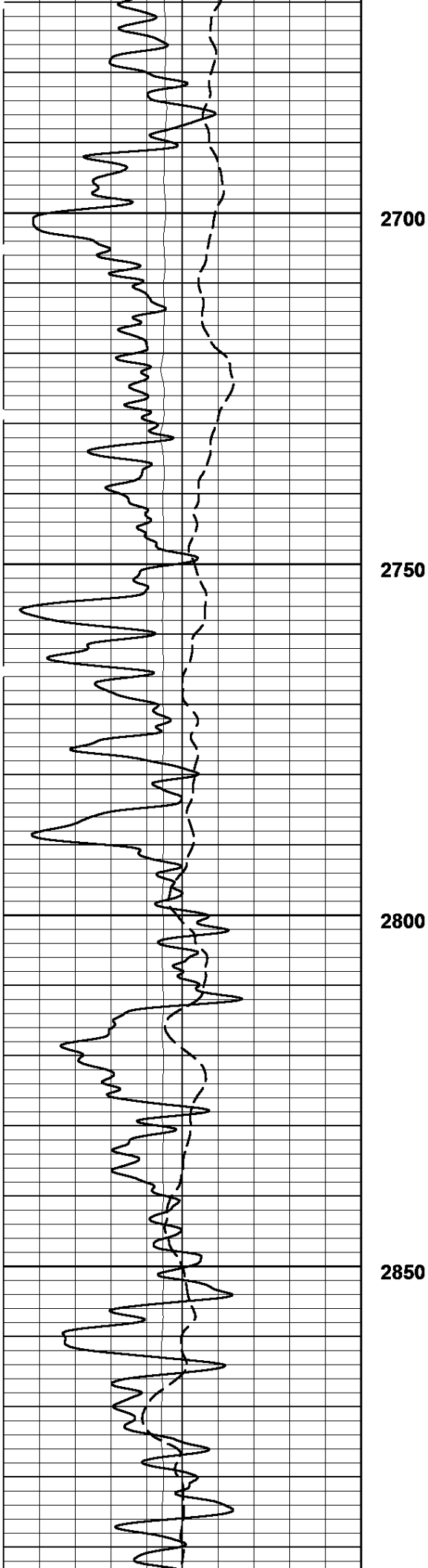
2600

2650



TENS





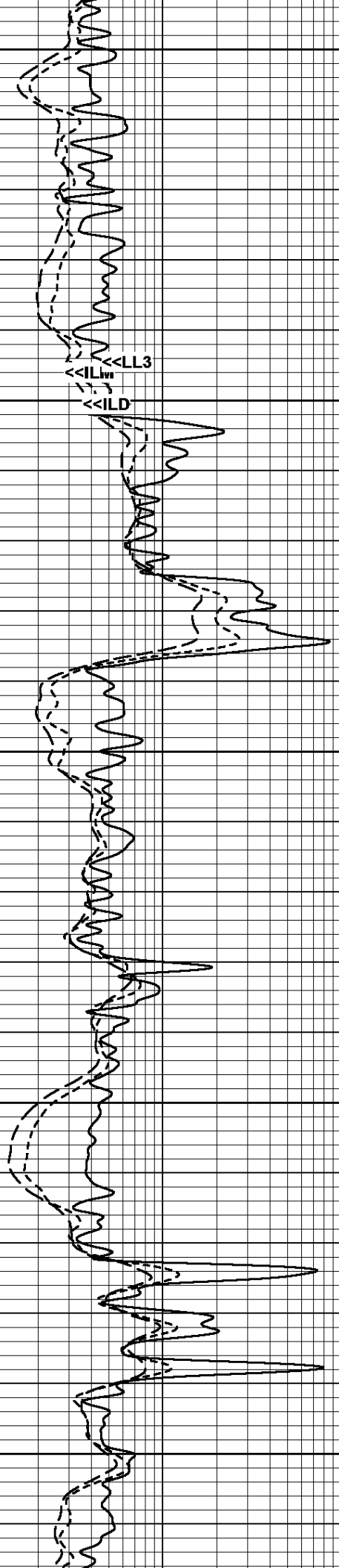
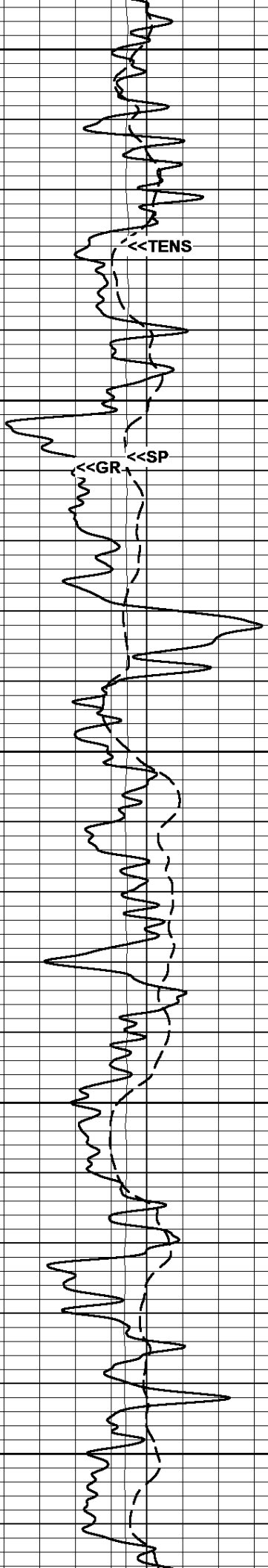
2900

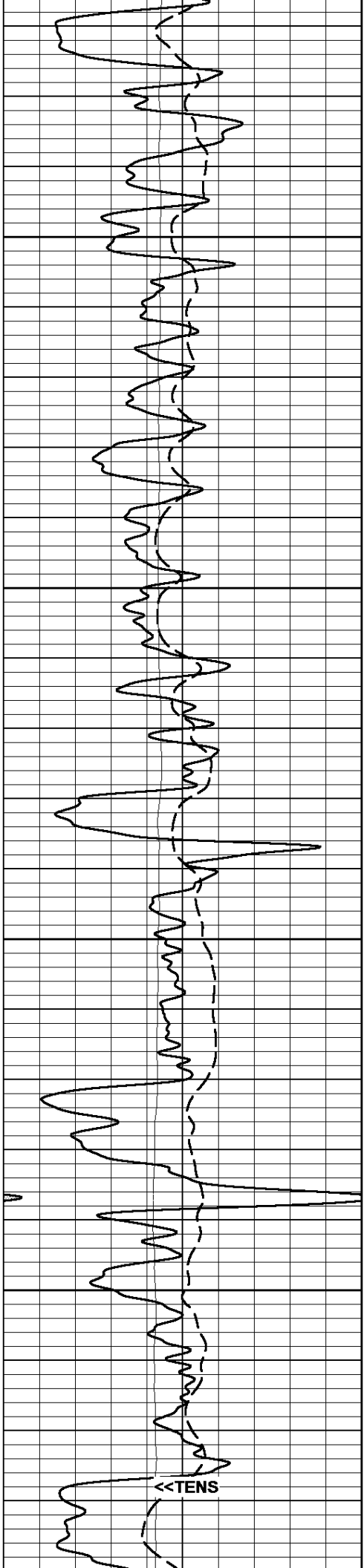
2950

3000

3050

3100



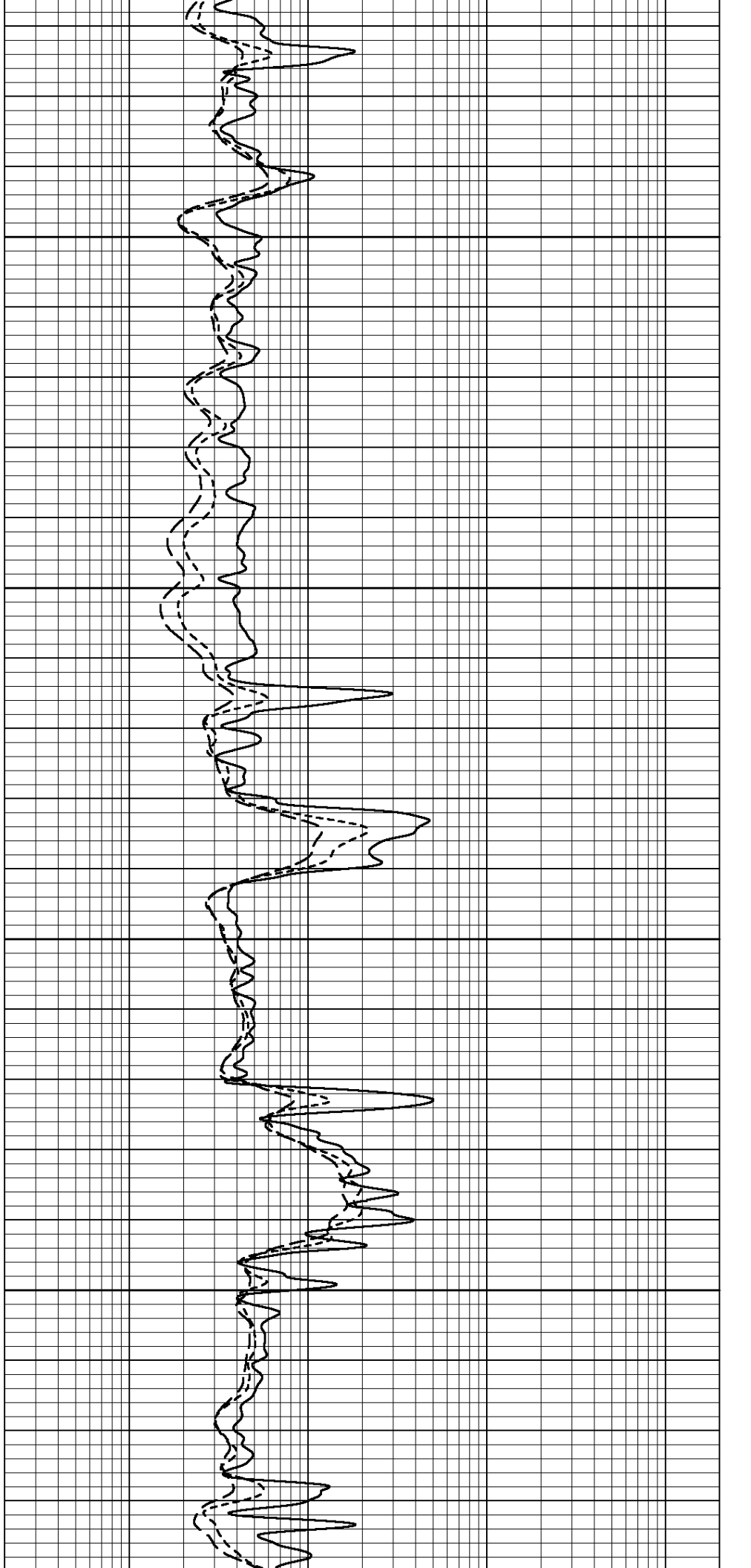


3150

3200

3250

3300



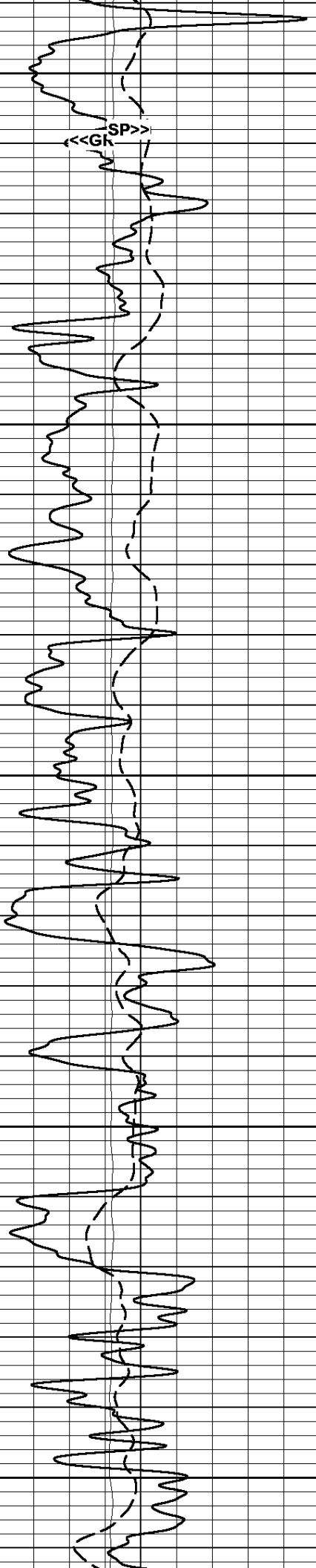
3350

3400

3450

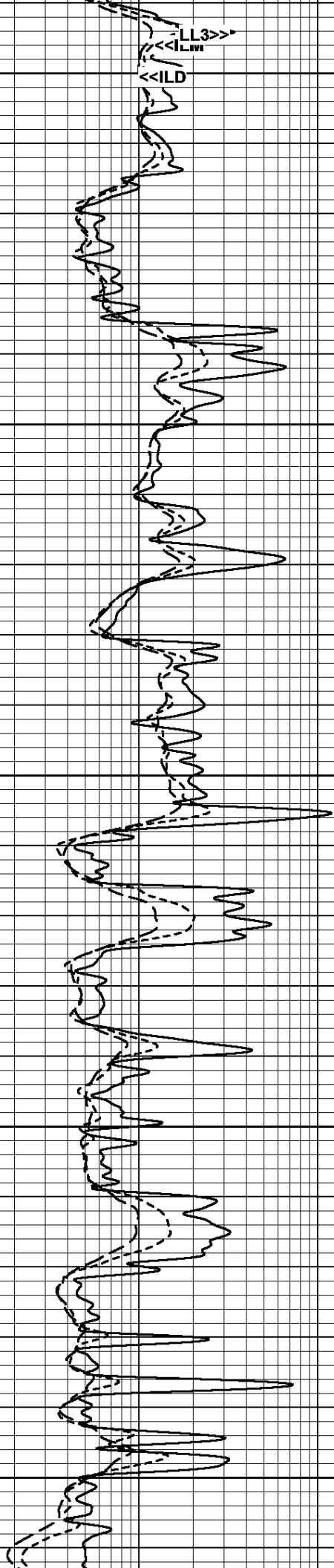
3500

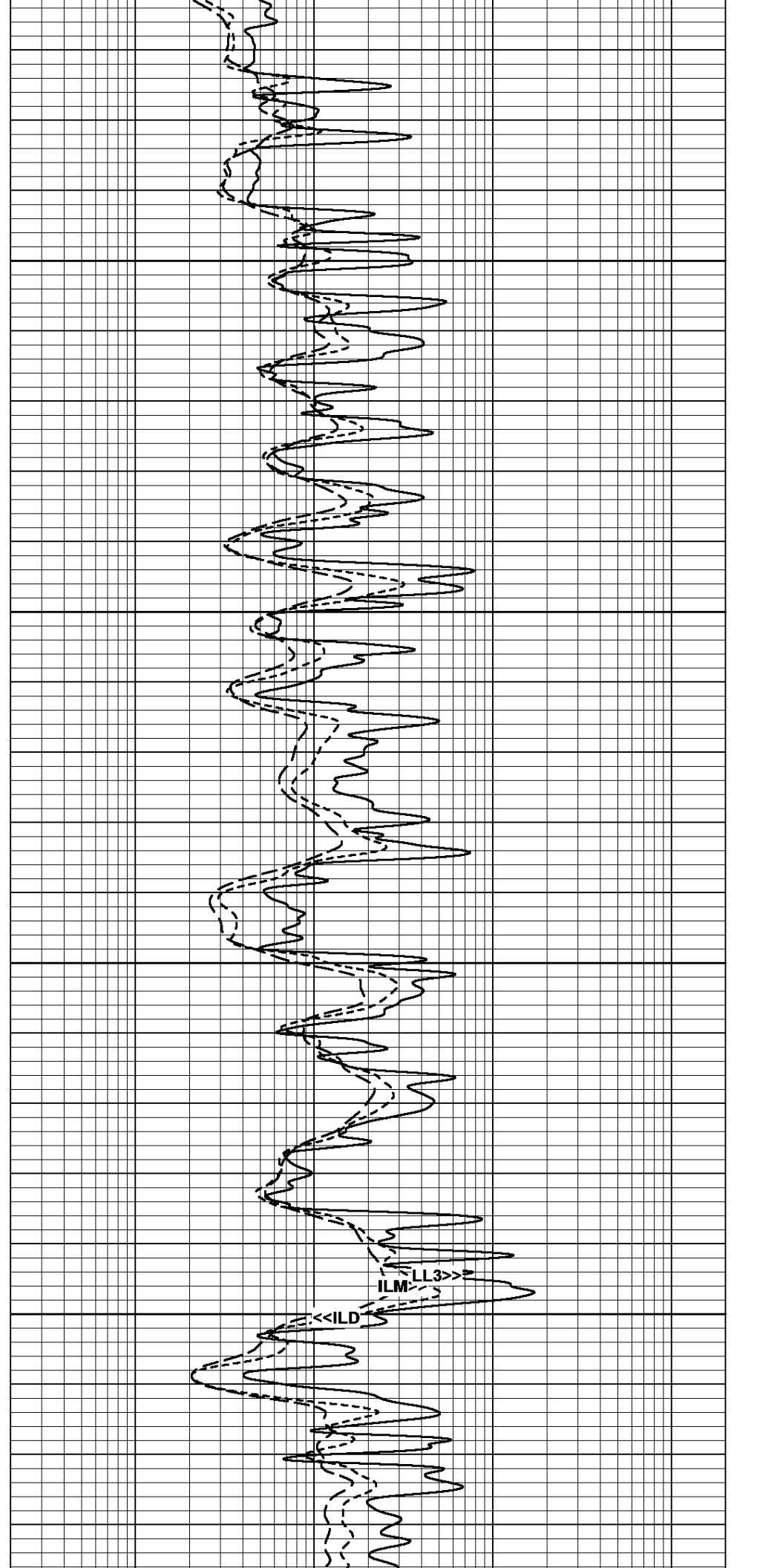
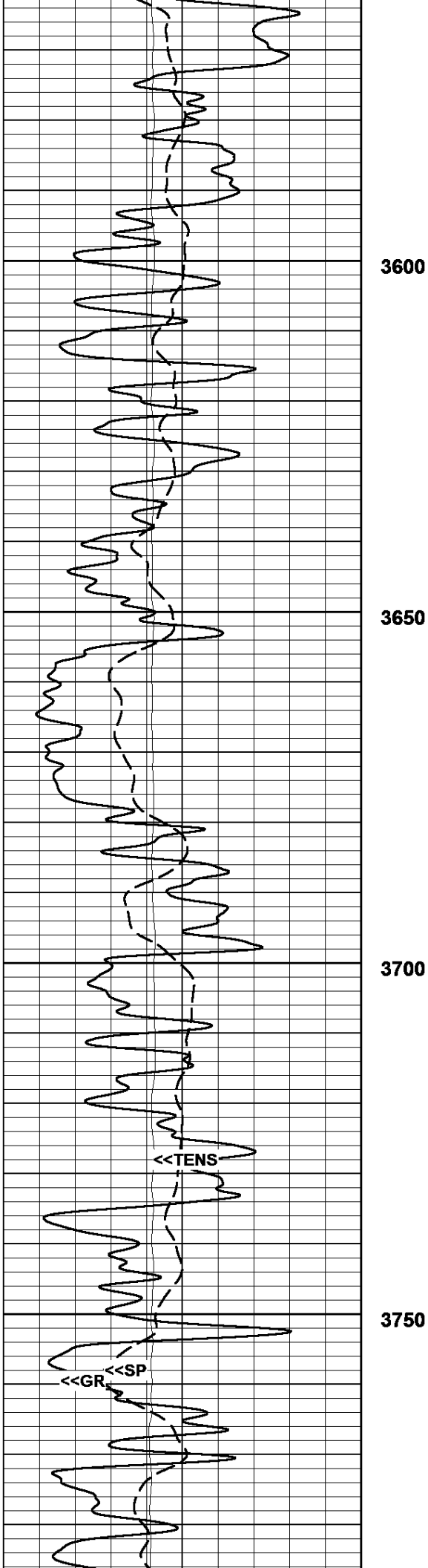
3550

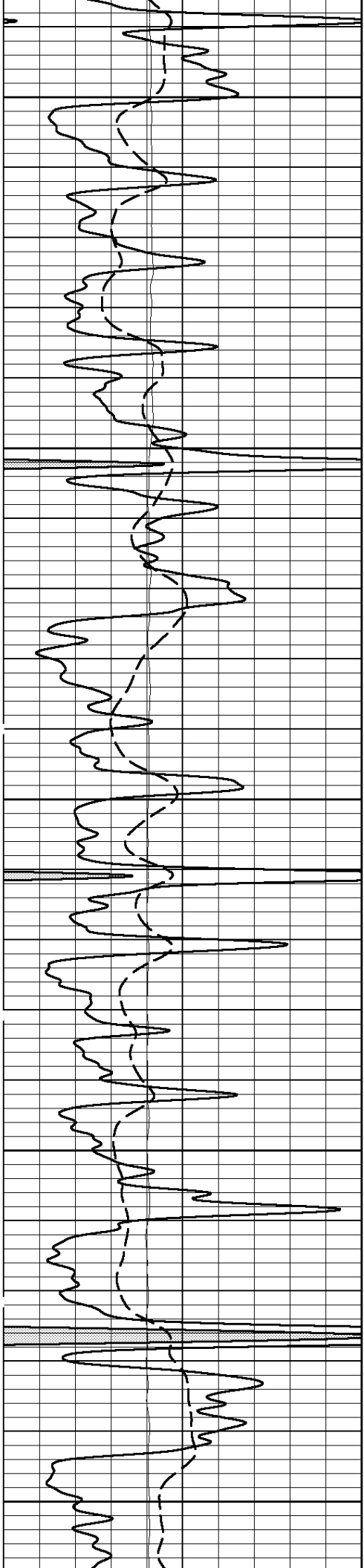


<<GR>>

<<LL3>>
<<ILW>>
<<ILD>>







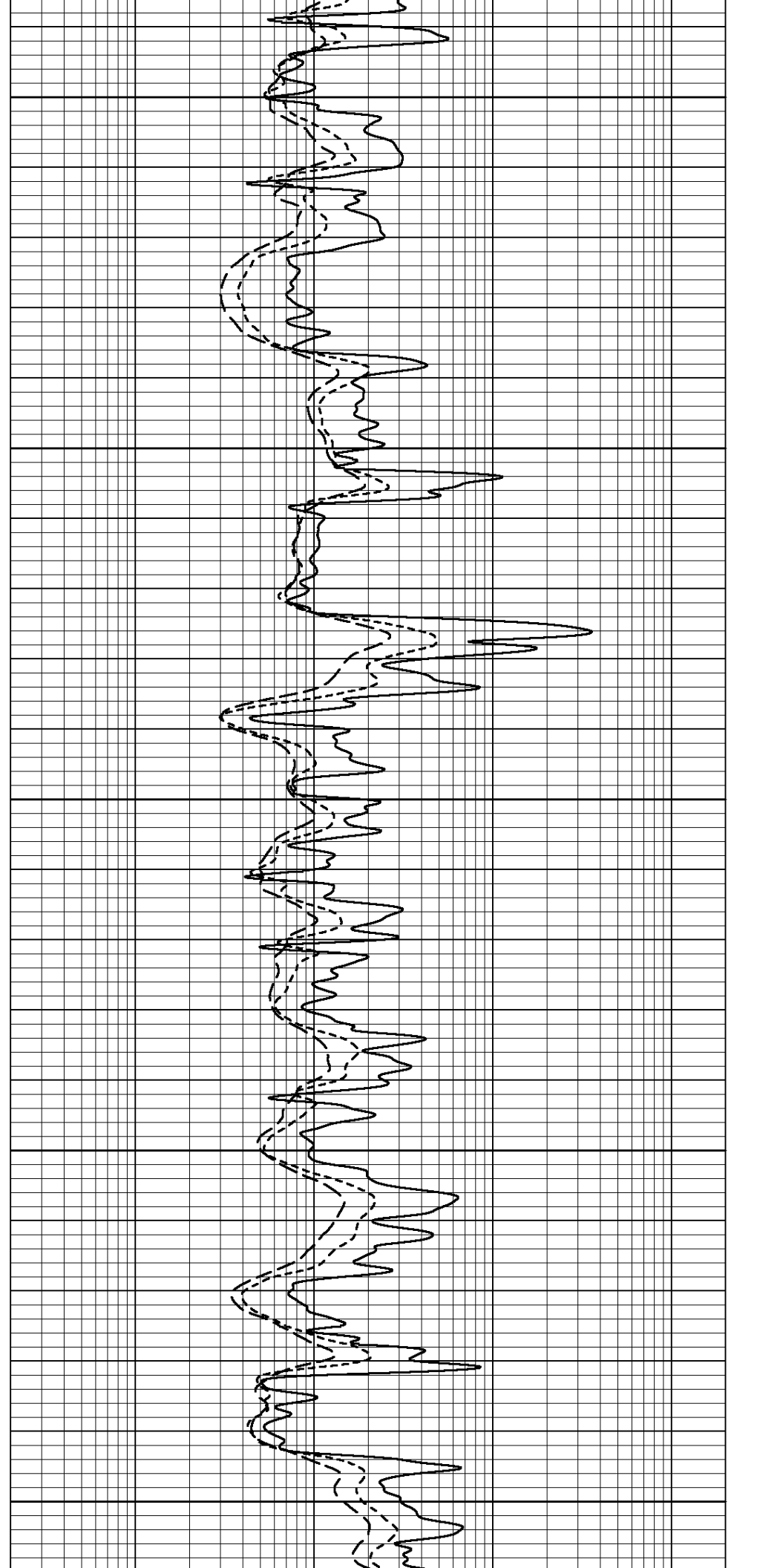
3800

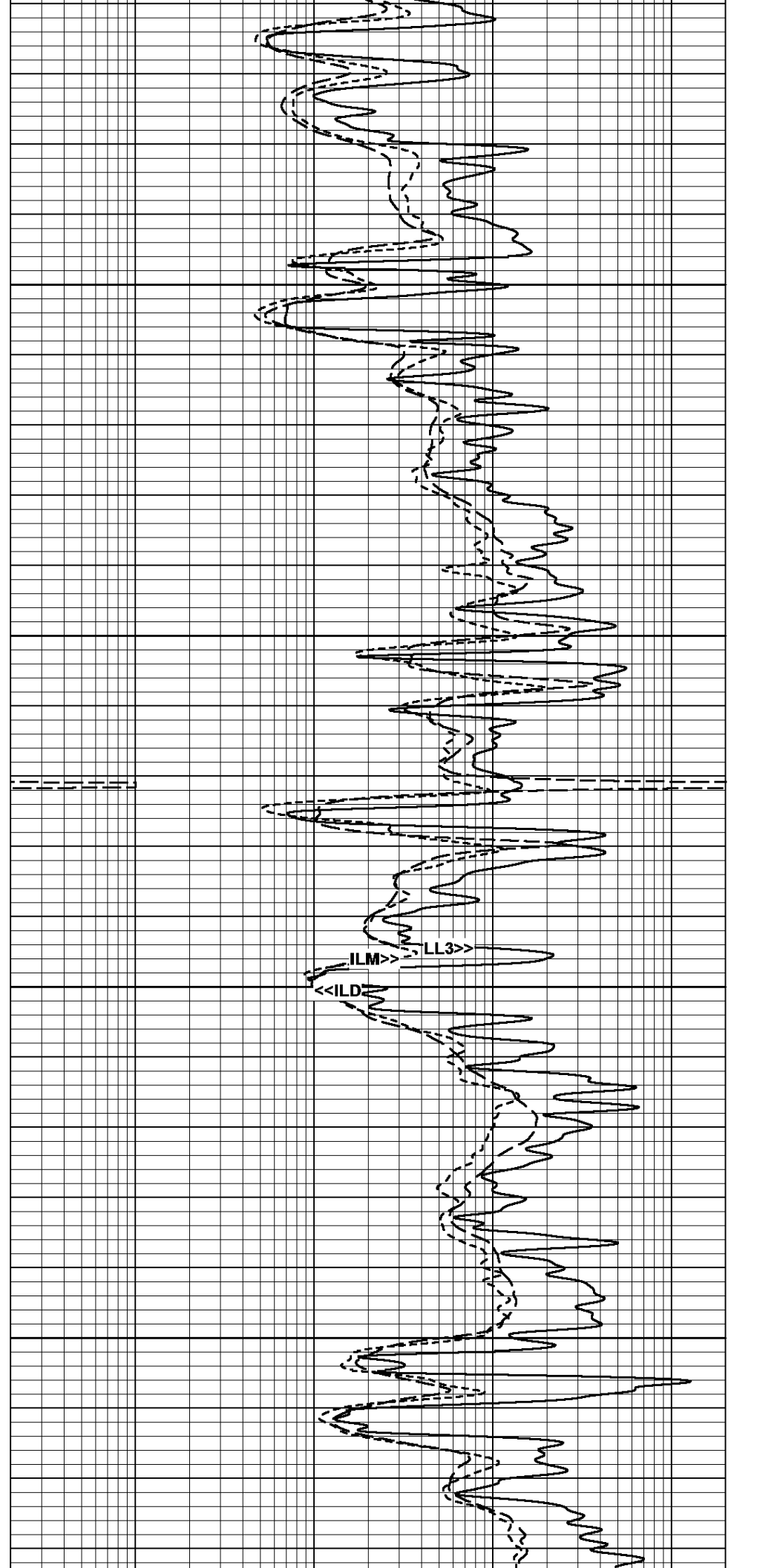
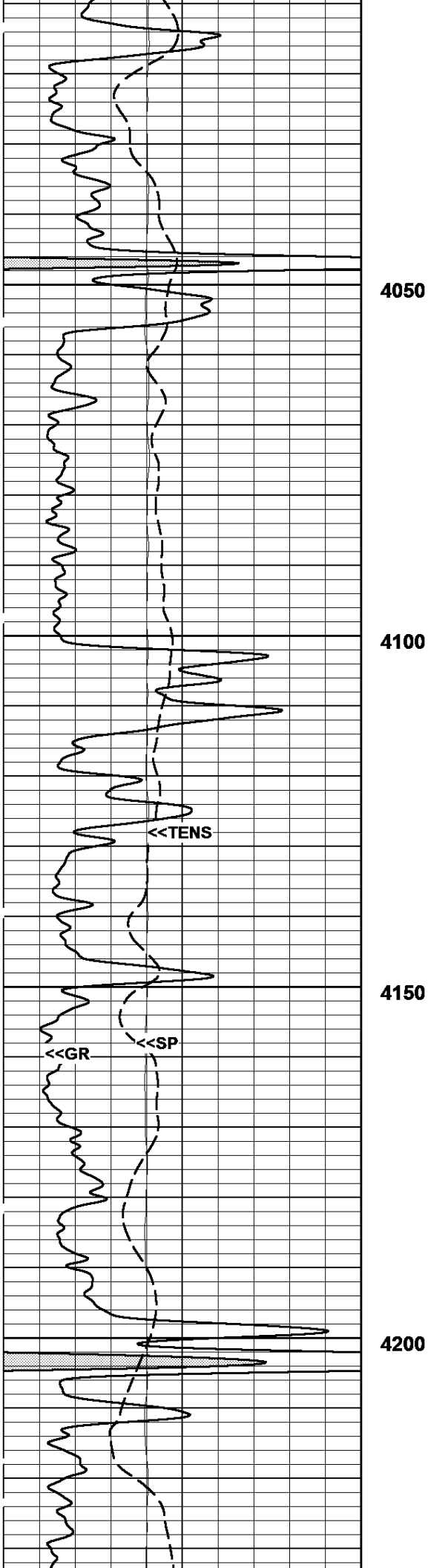
3850

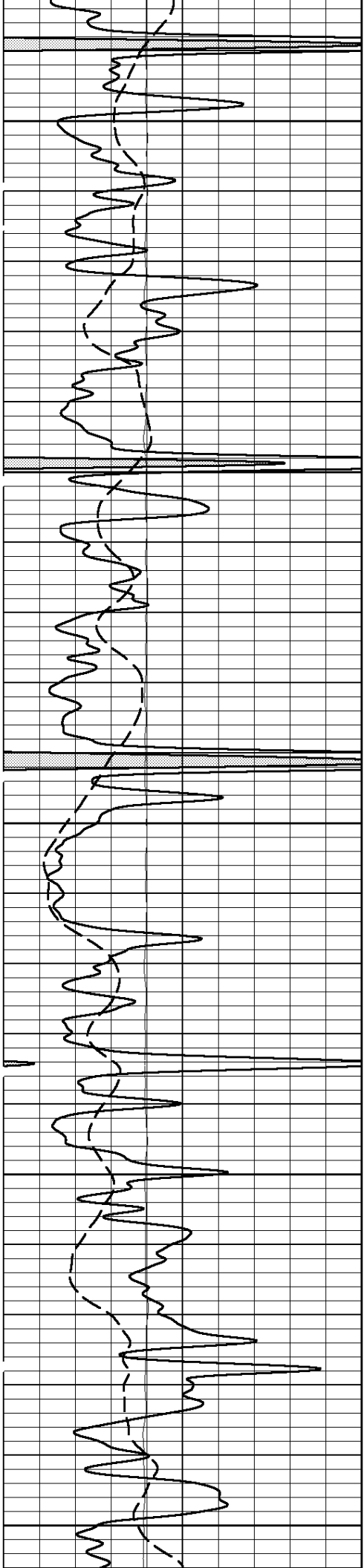
3900

3950

4000







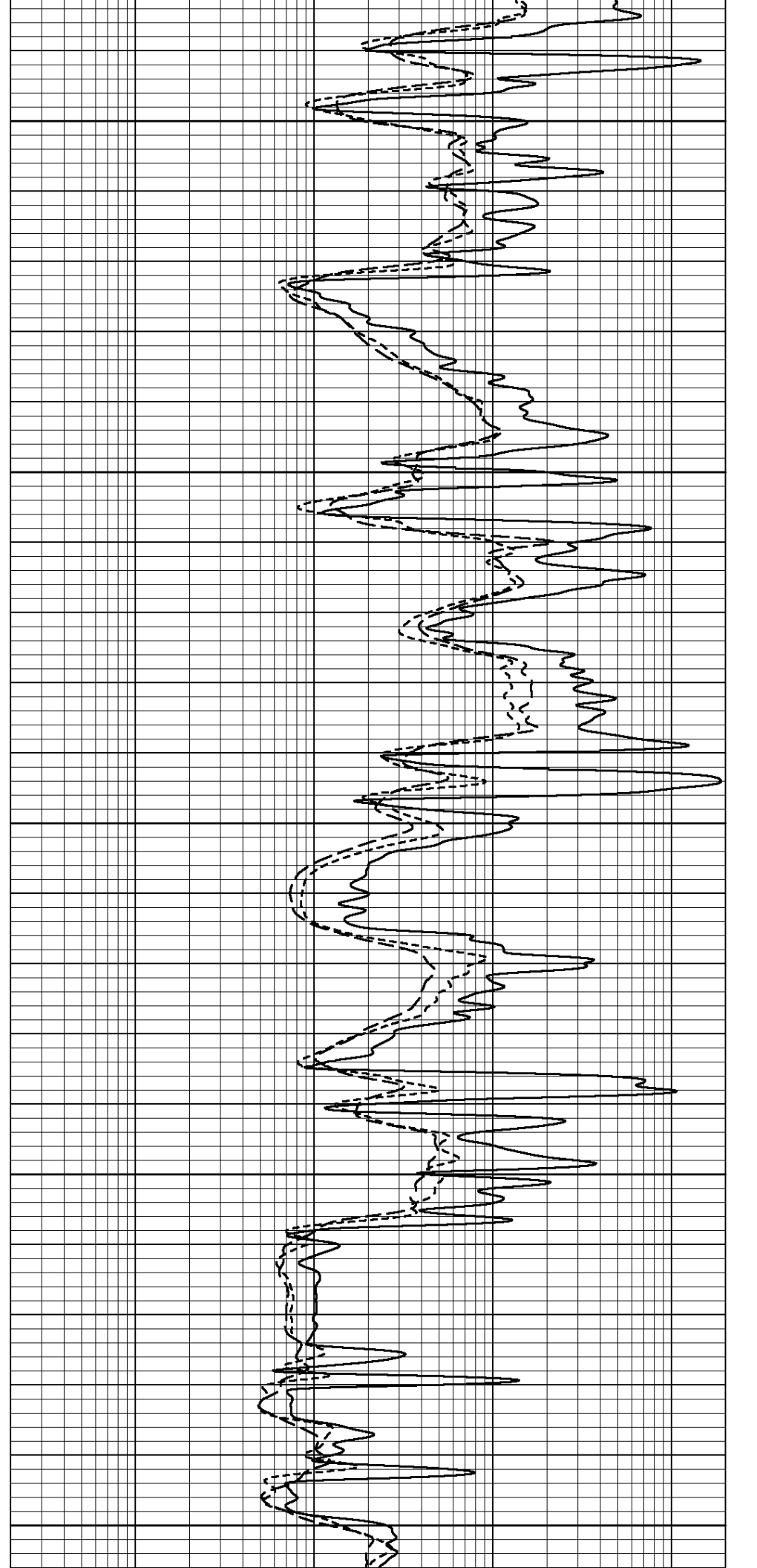
4250

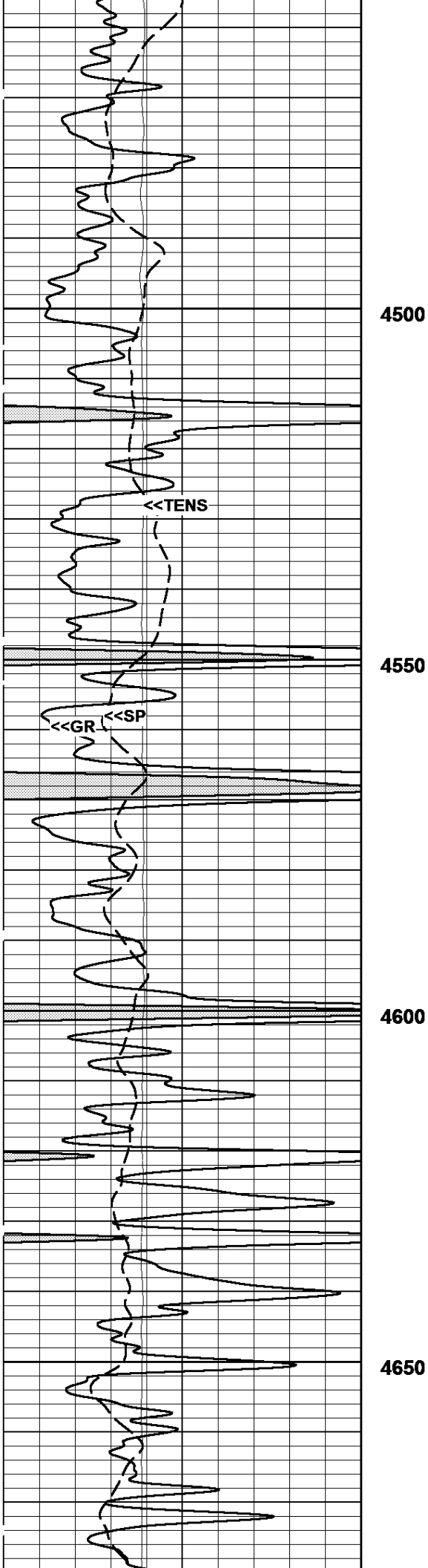
4300

4350

4400

4450



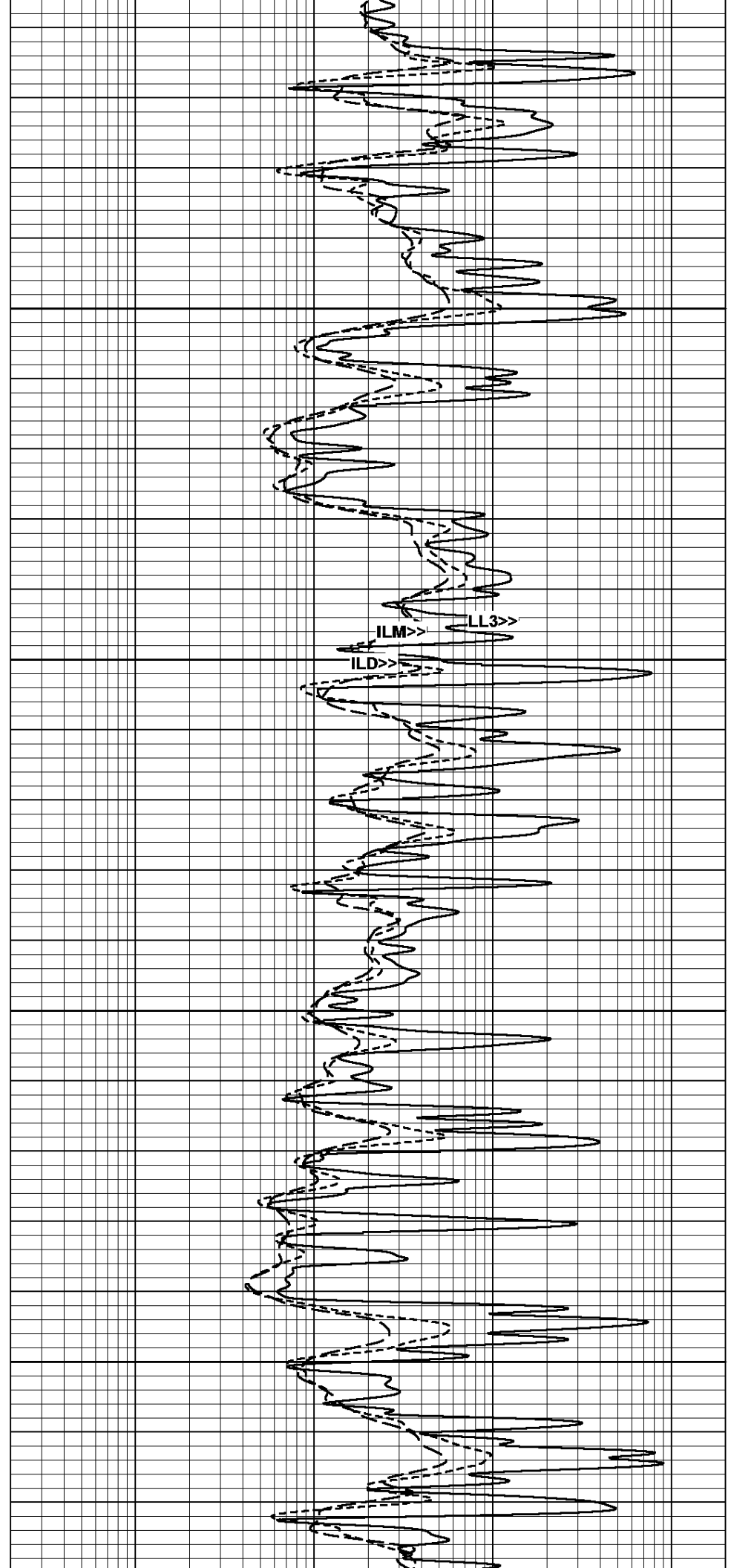


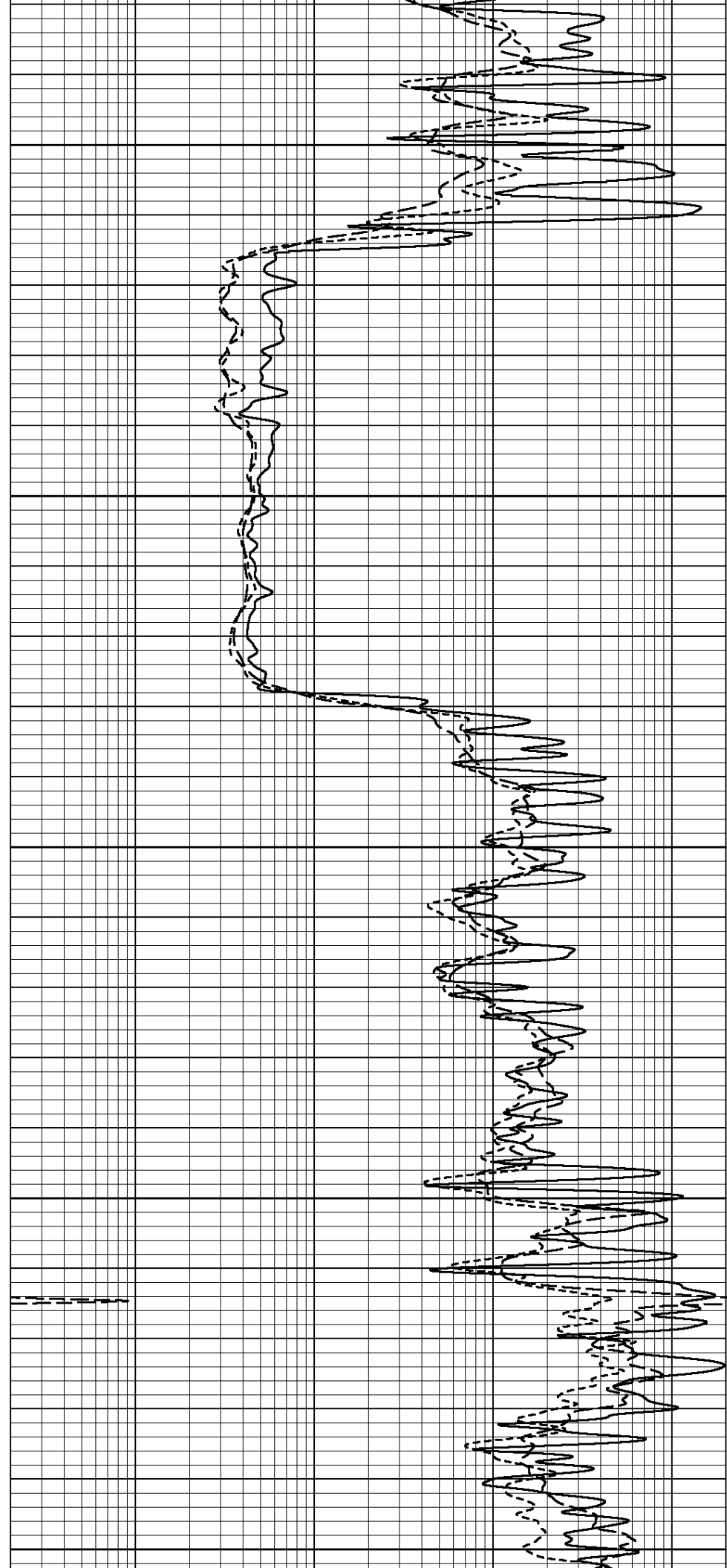
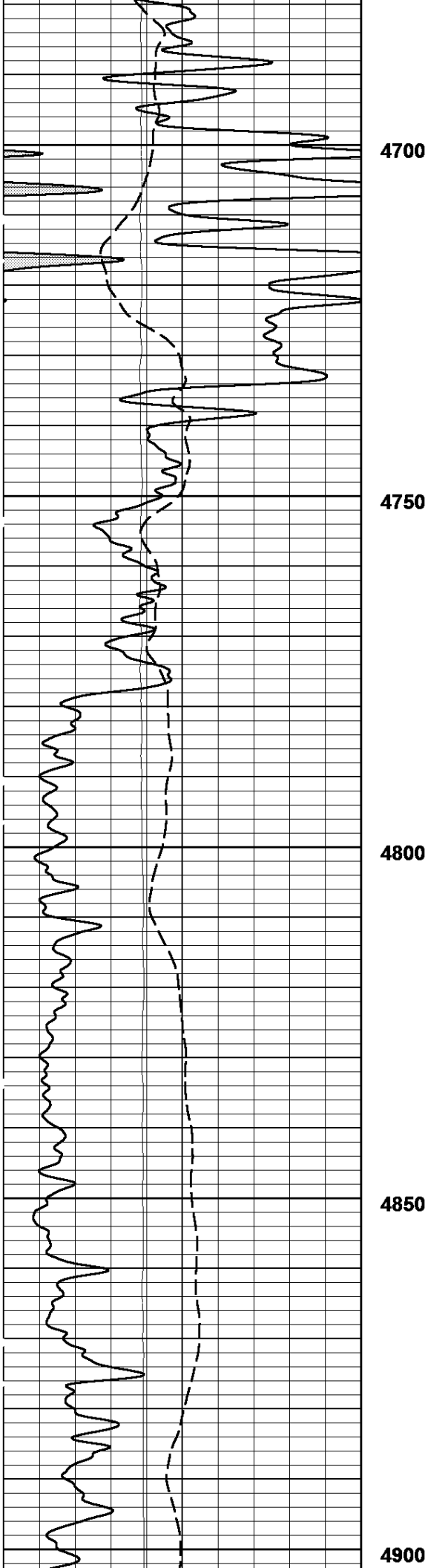
4500

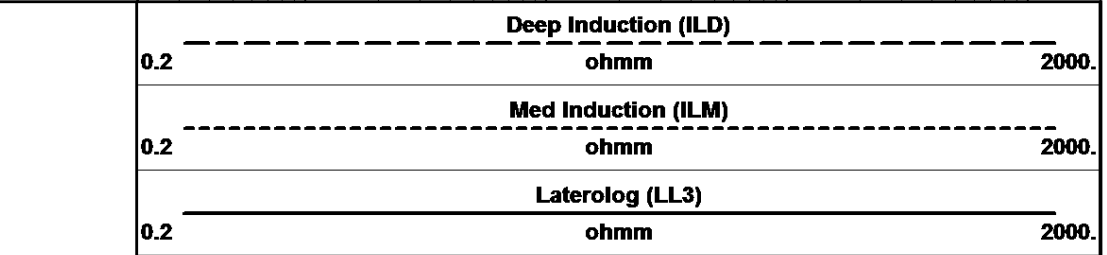
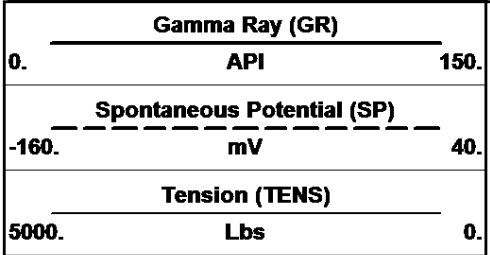
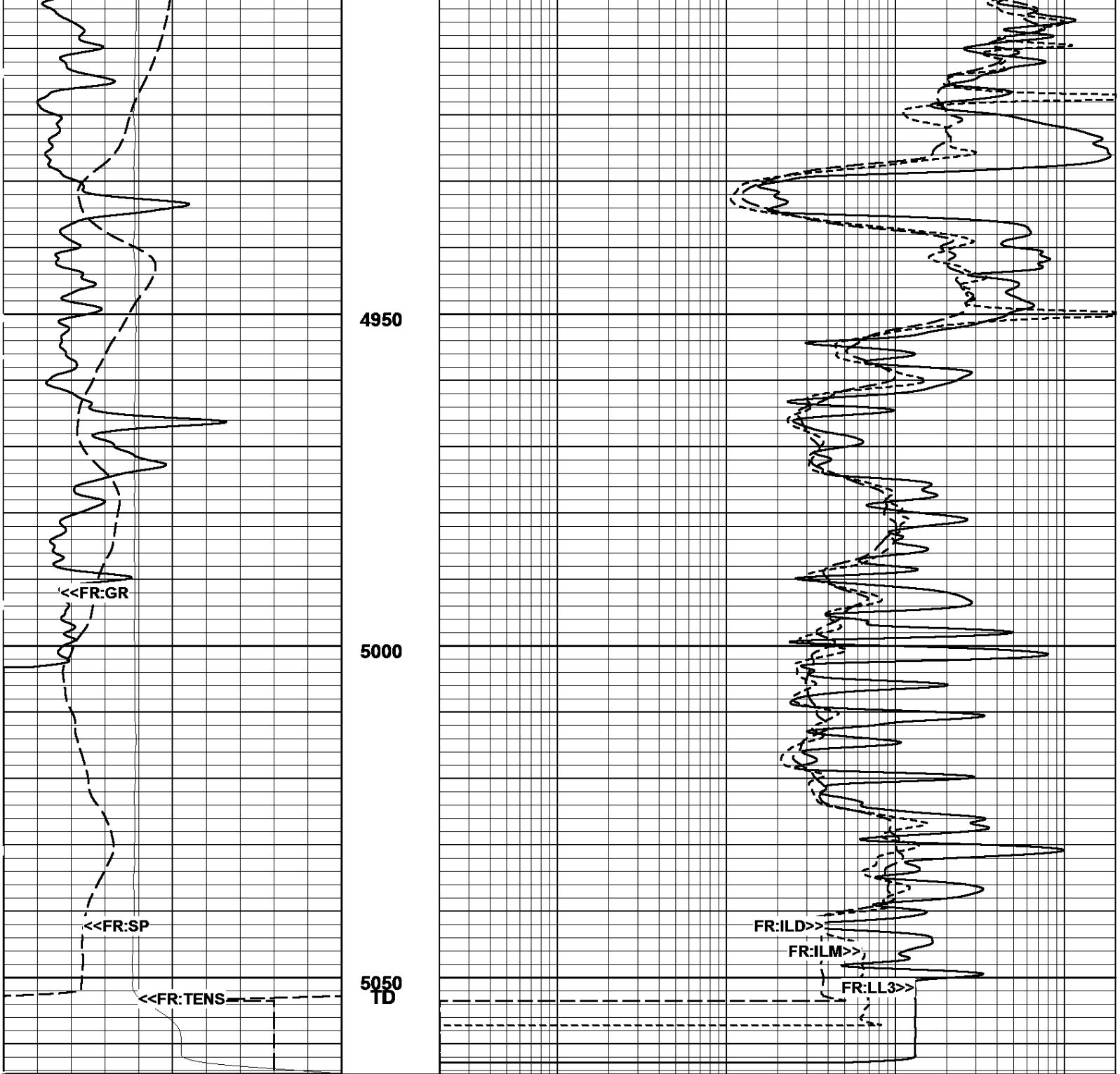
4550

4600

4650

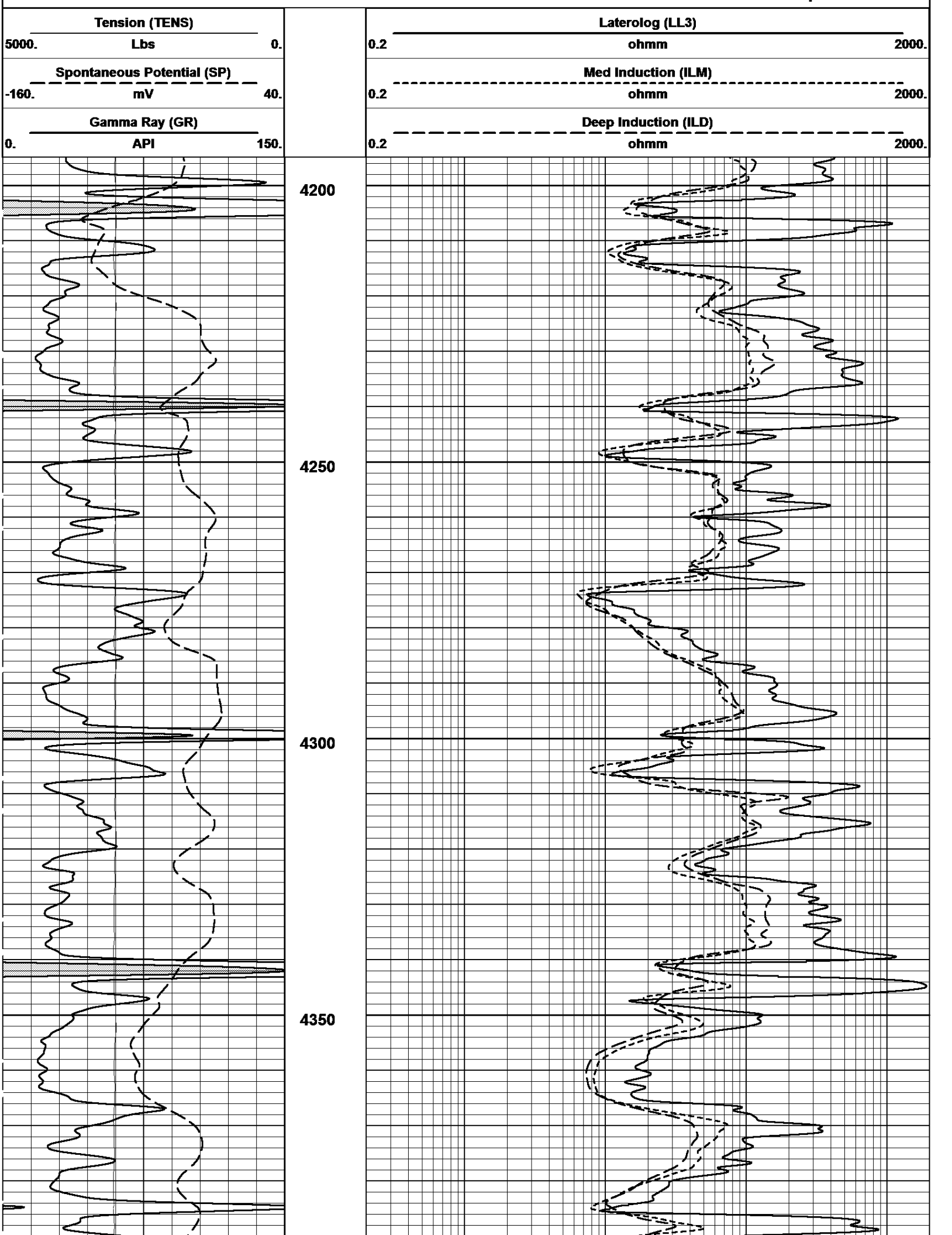


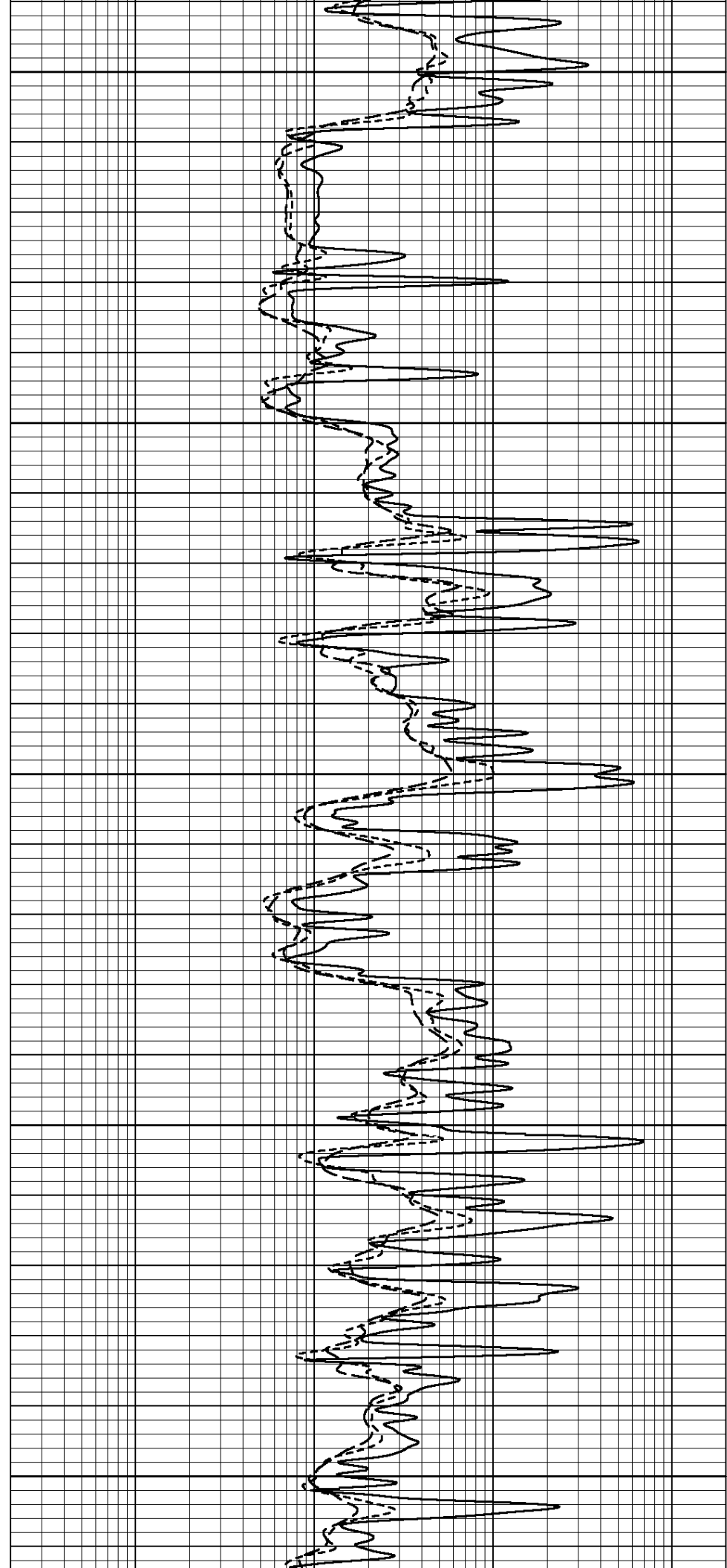
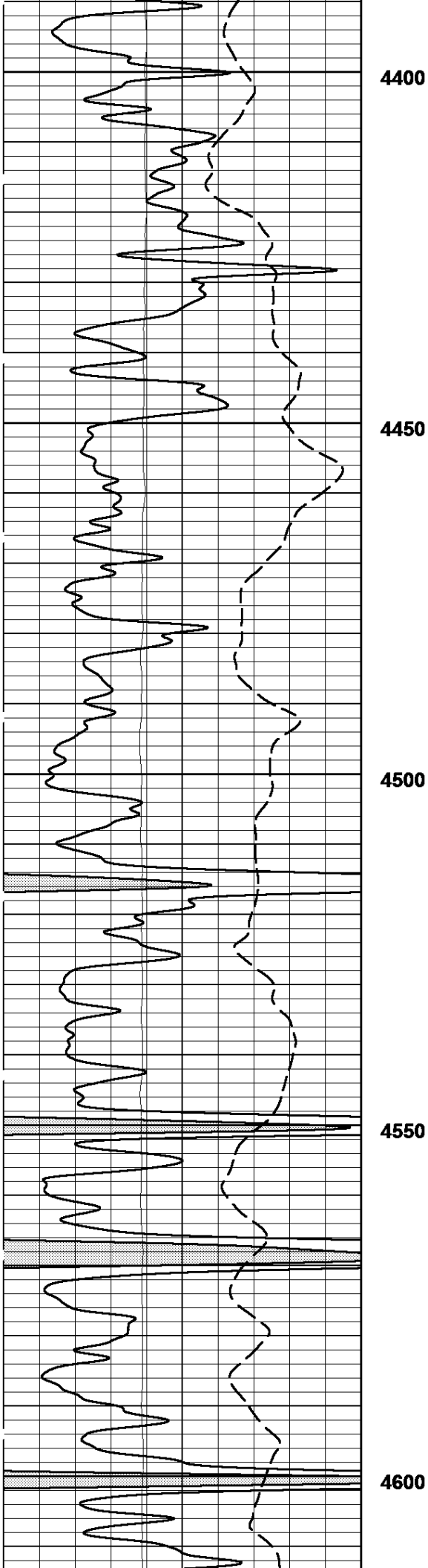


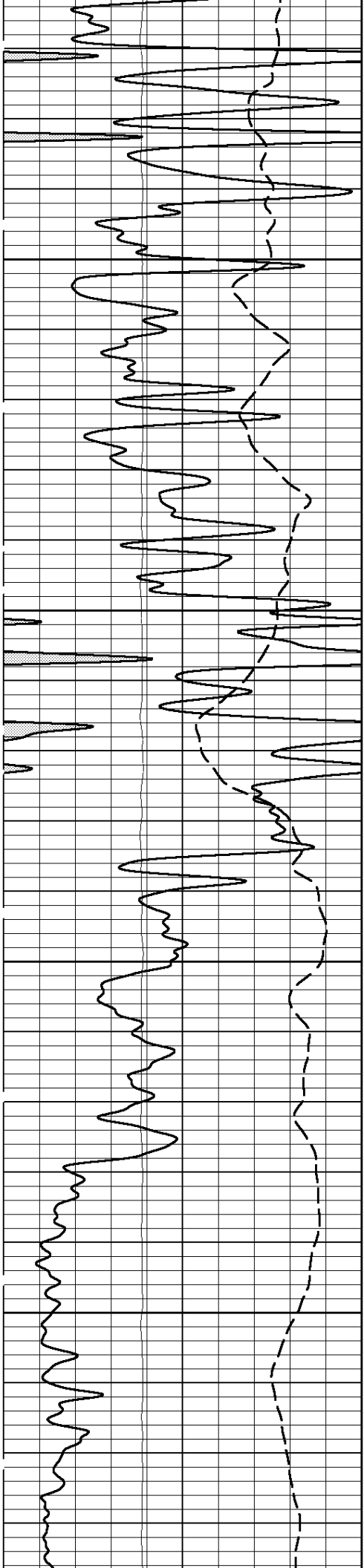


10/30/2014 01:59:04 => Start Time **MAIN PASS (5"/100ft)** Log UP - (VER 11.19) Start Depth=> 5064.40 Feet

10/30/2014 02:33:40 => End Time **REPEAT PASS (5"/100ft)** Log UP - (VER 11.19) End Depth=> 4195.10 Feet





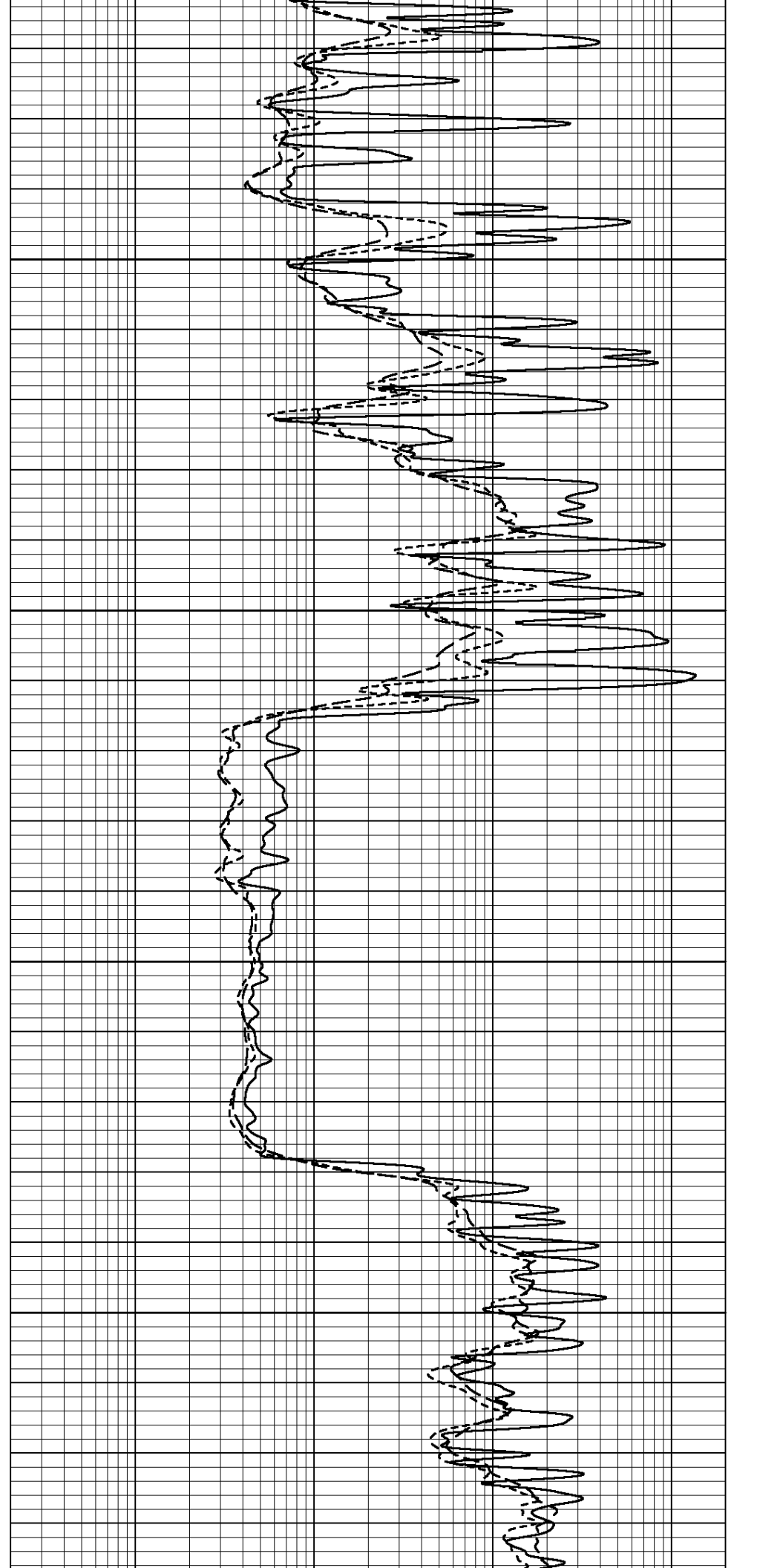


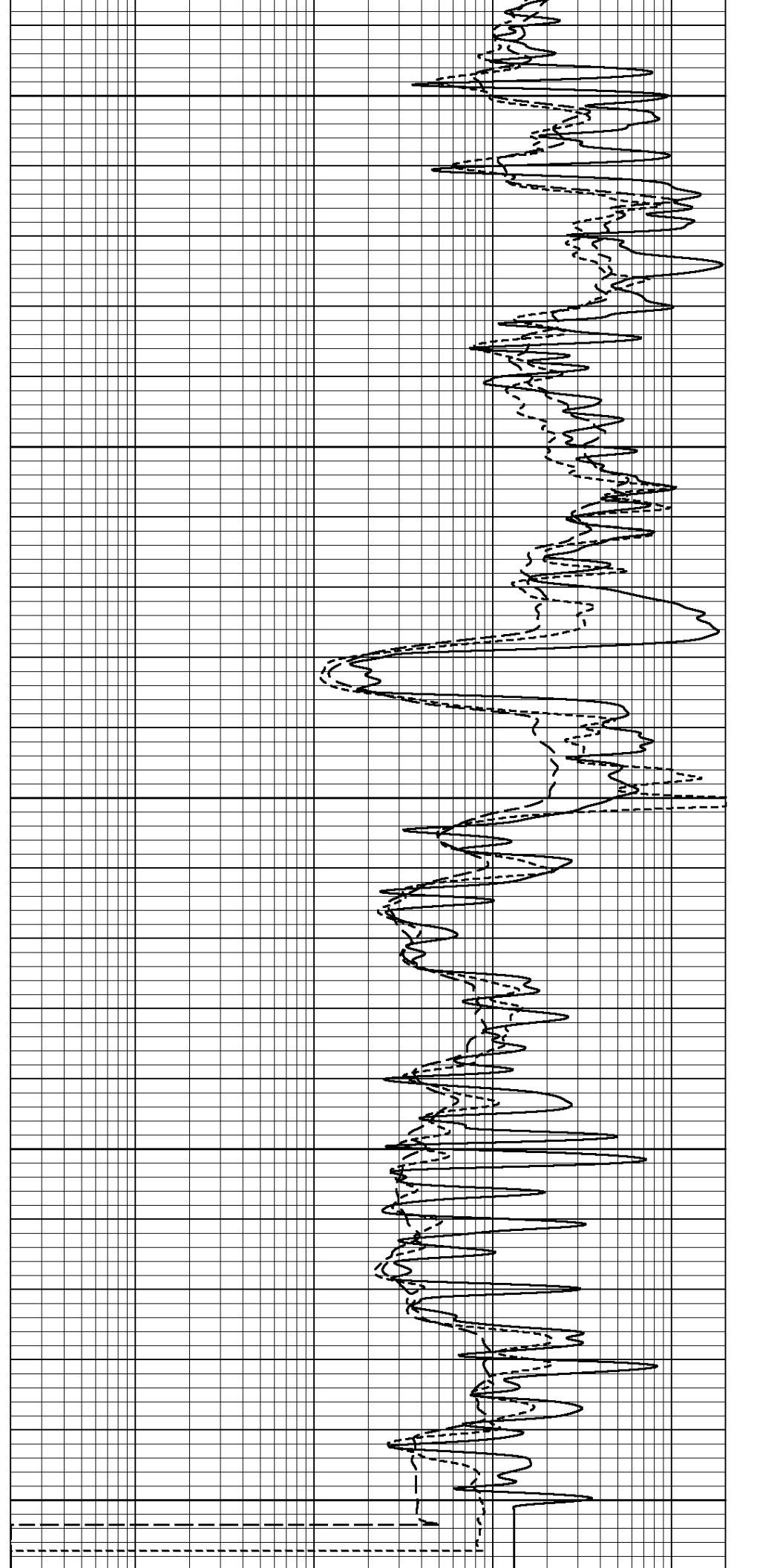
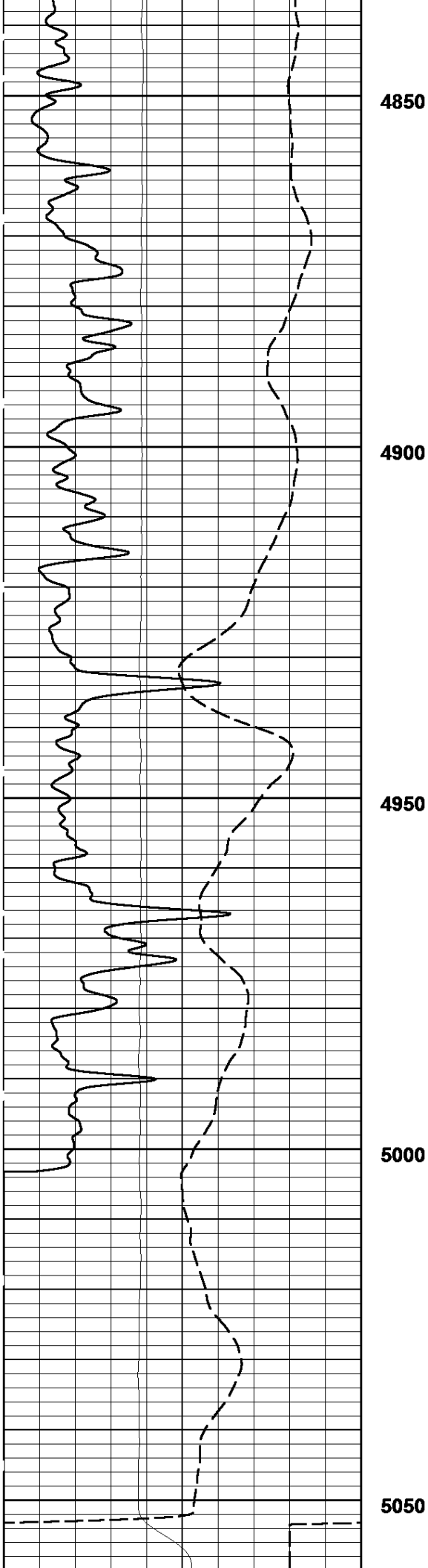
4650

4700

4750

4800





0. Gamma Ray (GR) 150.	0.2 Deep Induction (ILD) 2000.
API	ohmm
-160. Spontaneous Potential (SP) 40.	0.2 Med Induction (ILM) 2000.
mV	ohmm
Tension (TENS)	0.2 Laterolog (LL3) 2000.
5000. Lbs 0.	ohmm

10/30/2014 **REPEAT PASS (5"/100ft)** Log UP - (VER 11.19)
01:59:04 => Start Time Start Depth=> 5064.40 Feet

Induction Resistivity / Conductivity Calibrations

TOOL TYPE Slim Hole Induction **LOOP TYPE**
SERIAL NUM RD1007 **LOOP NUM**

MASTER CALIBRATIONS

	OPEN LOOP(mmho)		CLOSED LOOP(mmho)		LOOP VERIFIER(mV)		CALIBRATION DATE	CALIBRATION TIME
	NO SKIN		NO SKIN	W/ SKIN	ZERO(mV)	SPAN(mV)		
DEEP INDUCTION	0.000		400.000	499.231	-15.301	671.962	M/D/Y> 9/21/2012	H:M:S> 11:54:16
MED INDUCTION	0.000		462.500	501.895	-37.349	785.102	M/D/Y> 9/21/2012	H:M:S> 11:59:24
SHALLOW LATERLOG	CALIBRATOR LOW(ohm)		CALIBRATOR HI(ohm)		LOW(mV)	HI(mV)	CALIBRATION DATE	CALIBRATION TIME
	2.000		500.000		11.881	2513.165		

WELL SITE CALIBRATIONS

GAMMA RAY CALIBRATION

SERIAL NUM RG3005
BLANKET NUM 1A

MASTER CALIBRATIONS

	BackGrnd	CalVal: 159.000 API	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	61.816 - raw	466.230 - raw	0.393 - gain 0.000 - off	M/D/Y> 10/14/2014	H:M:S> 11:20:56

Company	GRAND MESA OPERATING CO.
Well	PARKINSON-GOUGH #1-8
Field	WILDCAT
County	SCOTT
State	KANSAS

RECON

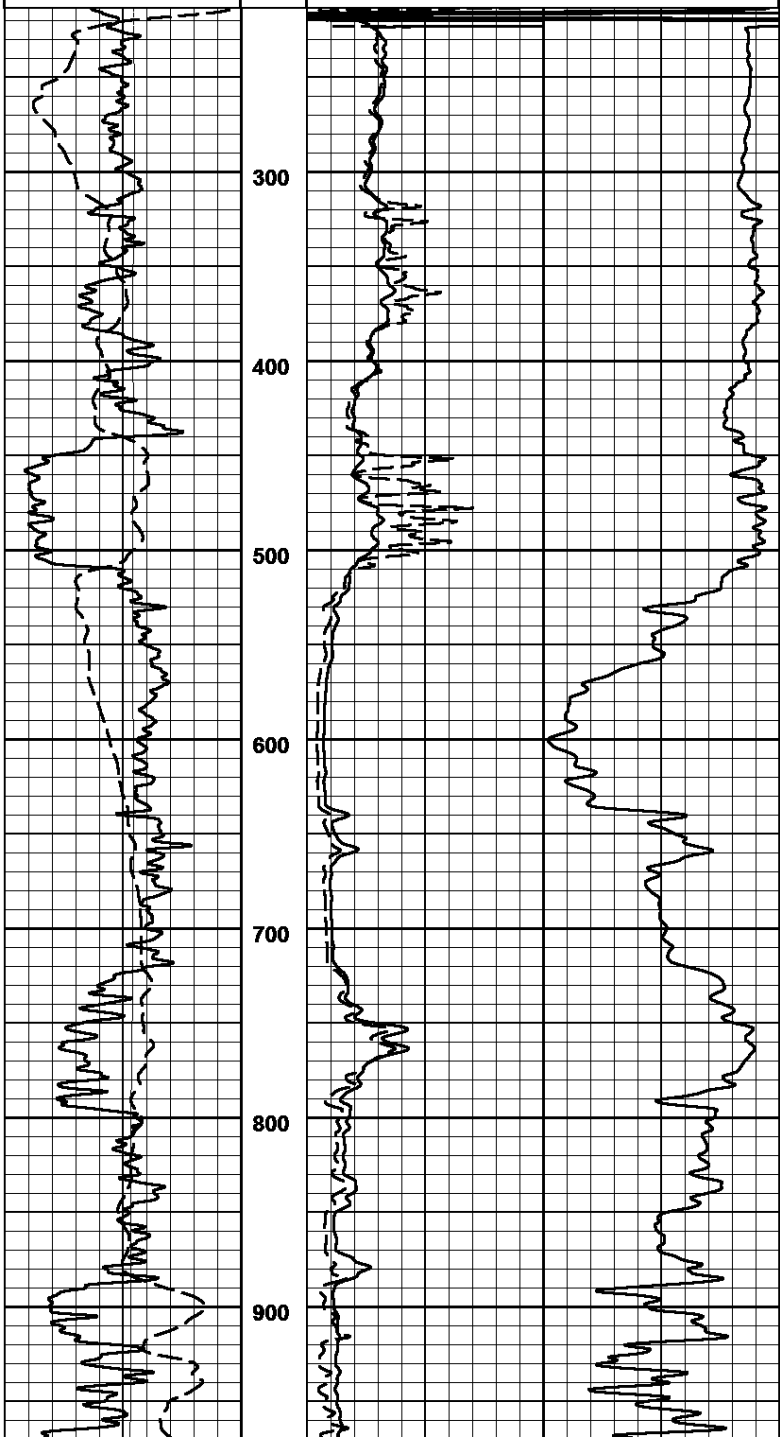
DUAL INDUCTION LATEROLOG - SP GAMMA RAY

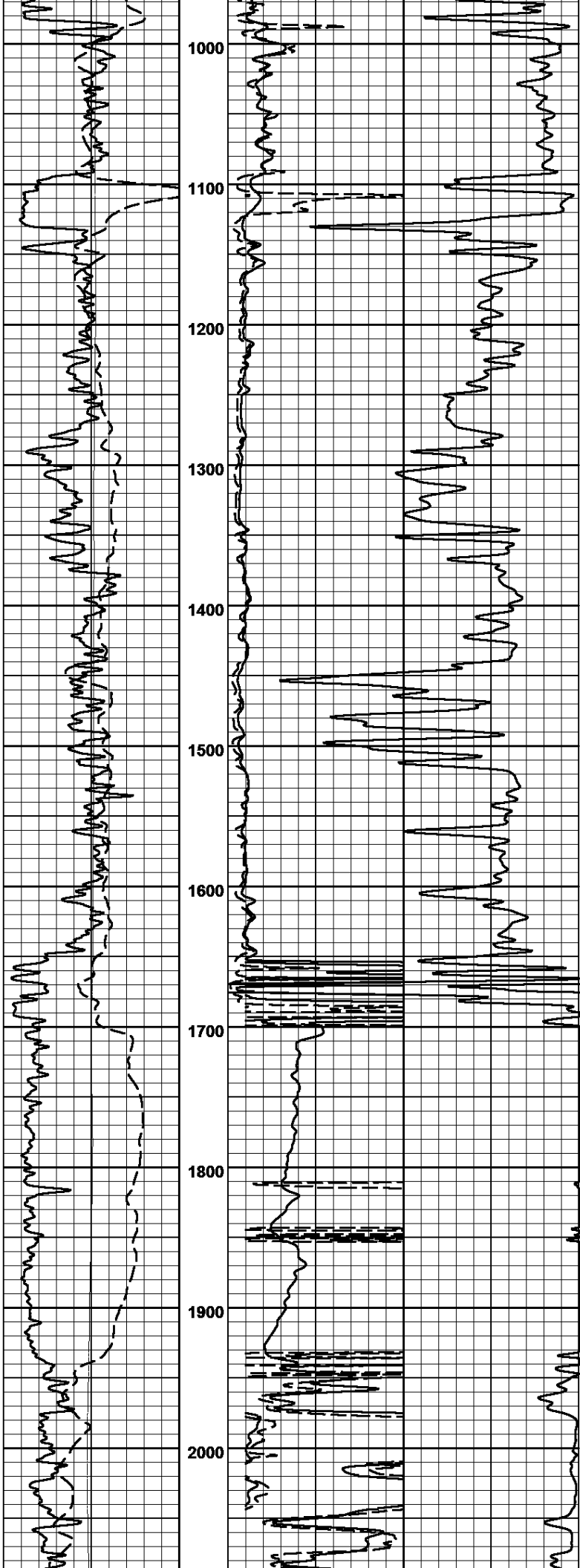
10/30/2014 MAIN PASS (1"/100FT) Log UP - (VER 11.19)

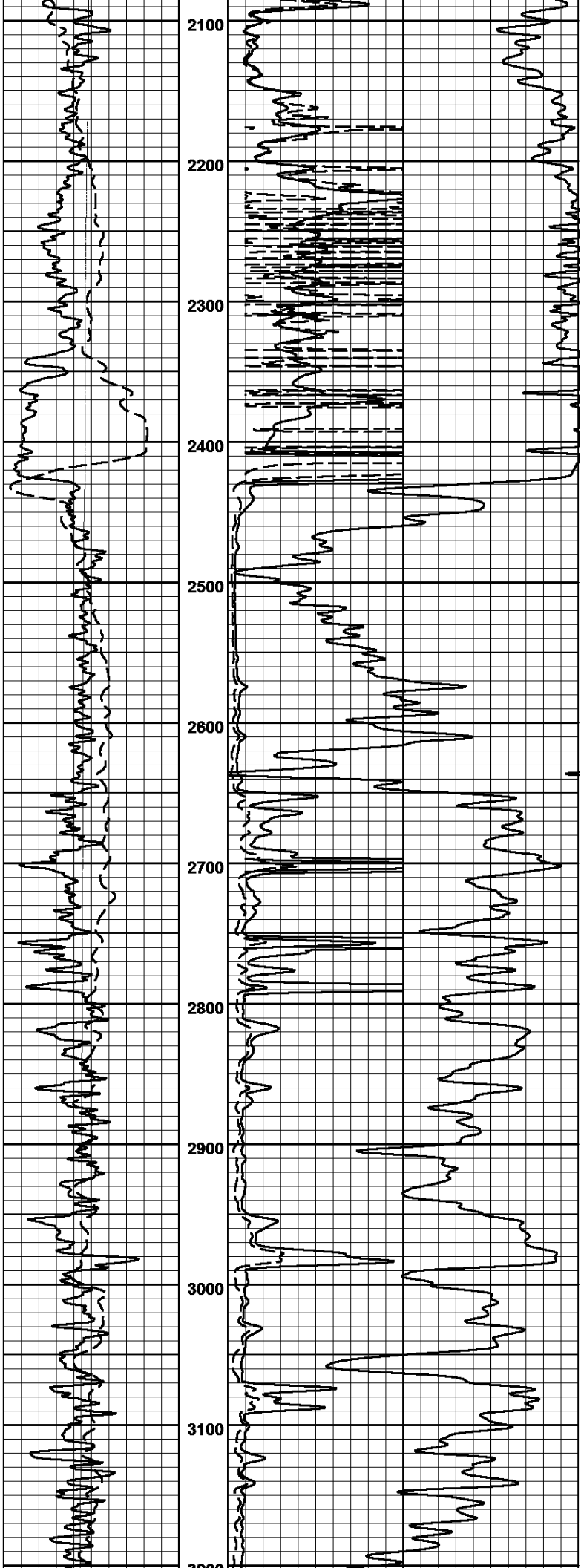
02:33:40 => End Time

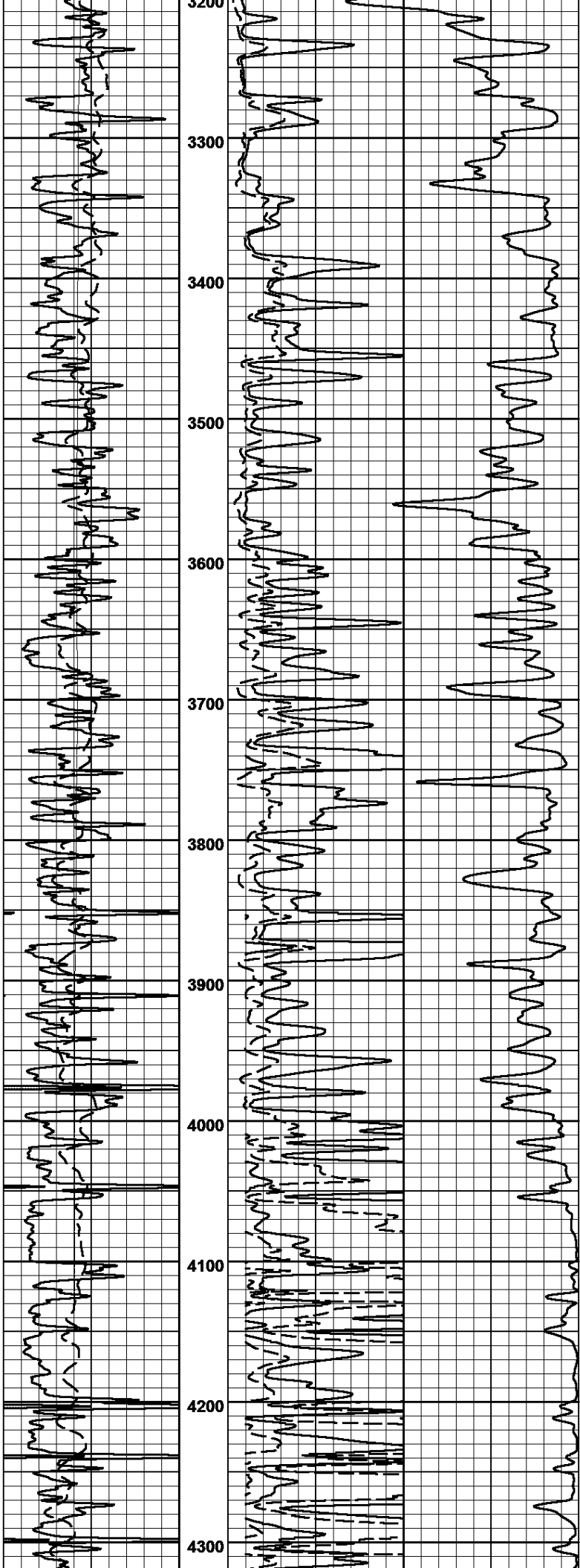
End Depth=> 214.50 Feet

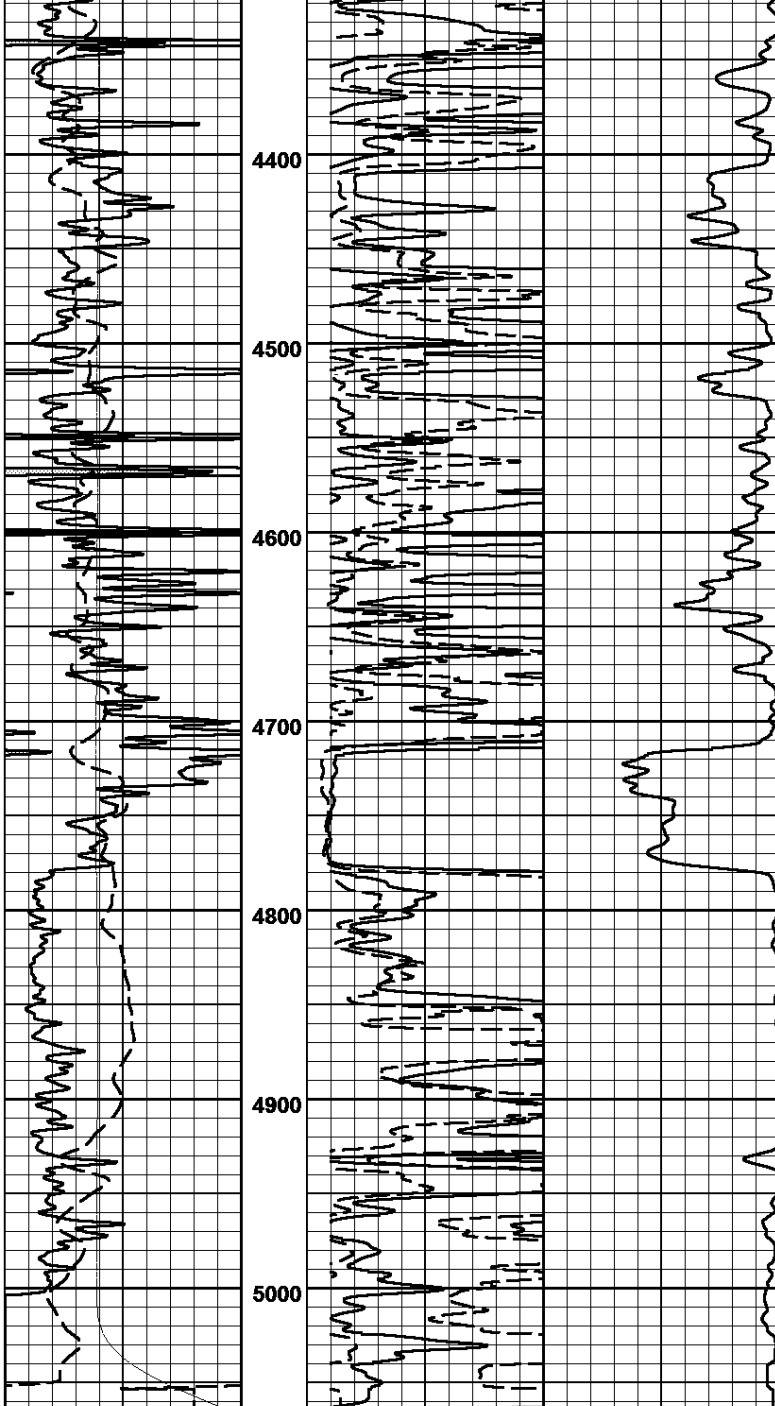
Tension (TENS)			Laterolog (LL3)		
5000.	Lbs	0.	0.	ohmm	50.
Spontaneous Potential (SP)			Deep Induction (ILD)		
-160.	mV	40.	0.	ohmm	50.
Gamma Ray (GR)			Deep Induction (CILD)		
0.	API	150.	1000.	mmhos	0.











Gamma Ray (GR) 0. API 150.	Deep Induction (CILD) 1000. mmhos 0.	
Spontaneous Potential (SP) -160. mV 40.	Deep Induction (ILD) 0. ohmm 50.	
Tension (TENS) 5000. Lbs 0.	Laterolog (LL3) 0. ohmm 50.	

10/30/2014 MAIN PASS (1"/100FT) Log UP - (VER 11.19)
 01:59:04 => Start Time Start Depth=> 5064.00 Feet