

Company **MIDWESTERN EXPLORATION, LLC.**
Well **GOOCH #1-8**
Field **GOOCH**
County **STEVENS**
State **KANSAS**



**DUAL INDUCTION
LATEROLOG - SP
GAMMA RAY**

SEC	TWP	RGE	OTHER SERVICES:	
08	35S	35W	LDT	CNL
Location: 940' FNL & 1980' FSL			XY CALIPER	MEL BHC SONIC
SURF. SAME			ELEVATIONS	
AP# 035-189-22794			K.B. 3002	G.L. 2990
Permanent Datum . Ground Level			D.F. 3000	
Log Measured From . Kelly Bushing				
Drilling Measured From Kelly Bushing				

Date	03-APR-2013	
Run No.	ONE	
TD Driller	6800	ft
TD RECON	6796	ft
Bot Logged Interval	6795	ft
Top Logged Interval	3400	ft
Casing Depth Driller	8 5/8	in.
Casing Depth RECON	8 5/8	in.
Bit Size	7 7/8	in.
Drilling Fluid Type	LSND	
Density	9.1 ppg	50 sec/qt
Fluid Loss	7.2 cm3/30min	10.0 strip
Source Of Sample	Flowline	
RM @ Measured Temp	3.44	Ohmm @ 75
RMF @ Measured Temp	2.58	Ohmm @ 75
RMG @ Measured Temp	4.30	Ohmm @ 75
RM @ MRT	1.93	Ohmm @ 139
Max Recorded Temp	139	DegF
Time Drilling Stopped	03-APR-2013	08:15
Time Circulation Stopped	03-APR-2013	17:30
Time Logger On Bottom	03-APR-2013	22:51
Unit Num	S407	OKLAHOMA CITY, OK.
Recorded By	H. GARCIA	
Witnessed By	MR. B. DAUGHERTY	
	MR. T. WILLIAMS	

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. #6

GENERAL REMARKS SECTION

FIRST RUN IN THE HOLE

CNL AND LDT LOGGED IN A LIMESTONE MATRIX
TOP MARK - 292, BOTTOM MARK - 6698.6
CNL/LDT LOGGED MATRIX: 2.71 g/cc.

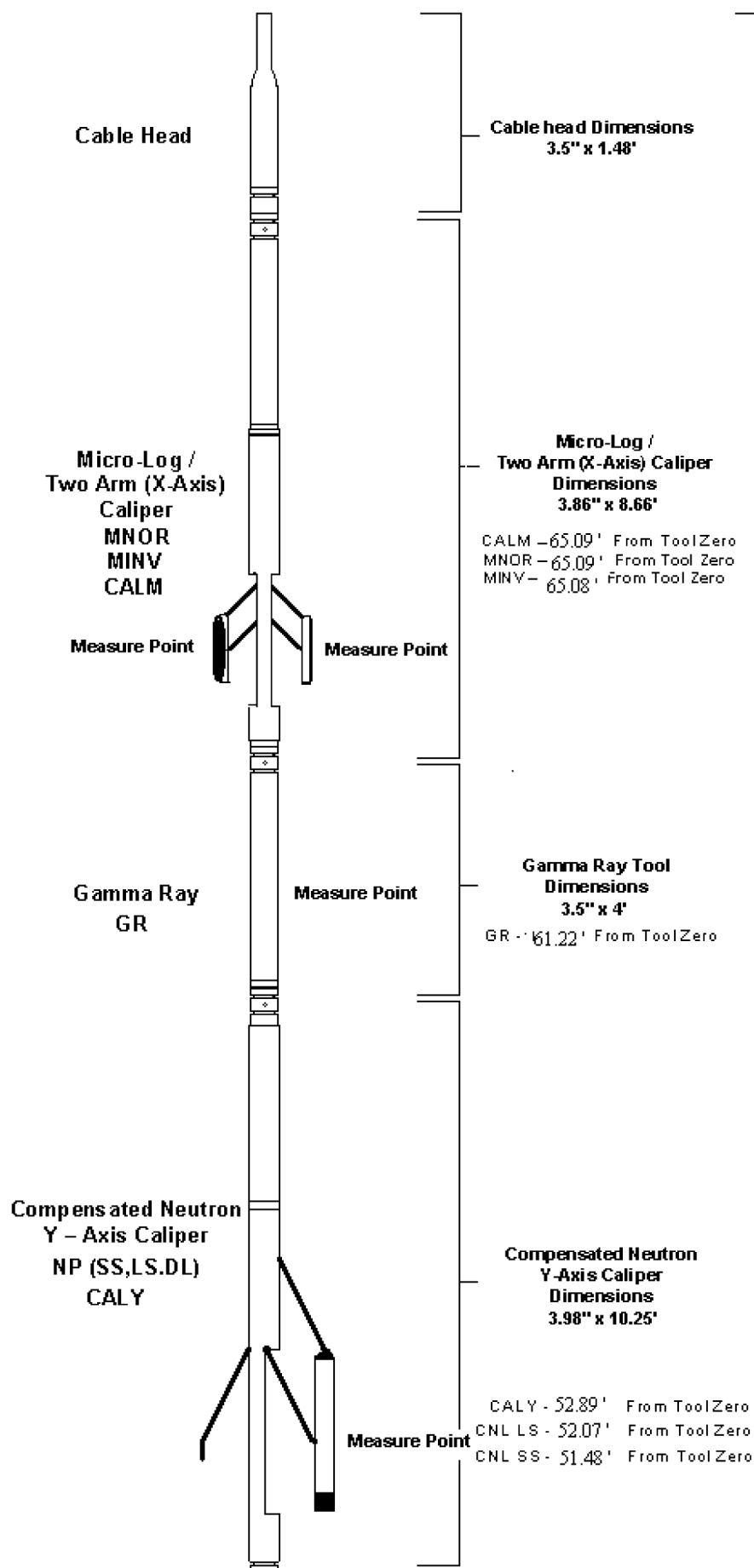
CHLORIDES: 1000 mg/l
LCM: 8 lb/bbl

AHV CALCULATED ON 5.5" PROD. CASING

THANK YOU FOR USING RECON PETROTECHNOLOGIES LTD.

CREW: J. ROSE, M. HAMILTON

**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**

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

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

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

**Tool String
Length Total**
73.64 '

**Borehole
Compensated
Sonic**

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

T-1
Transmitter 1

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

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

Dual Induction Tool Dimensions 3.62" x 21'

S.P. / CILD
Measure Point

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

CILM Measure
Point

ILM - 7.22' From Tool Zero

Tool First Reading
Point

Laterolog 3
Measure Point

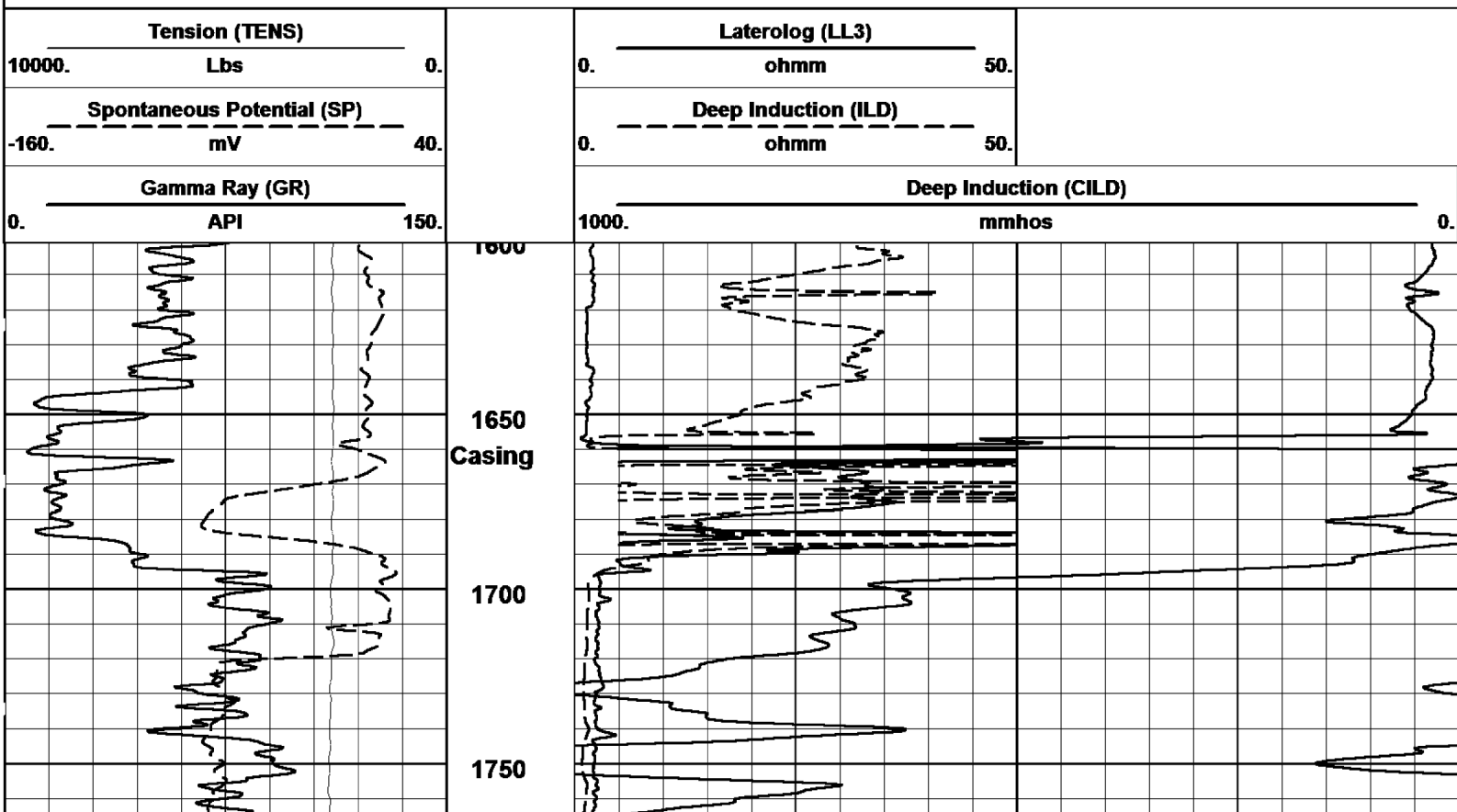
LL3 - 1.67' From ToolZero

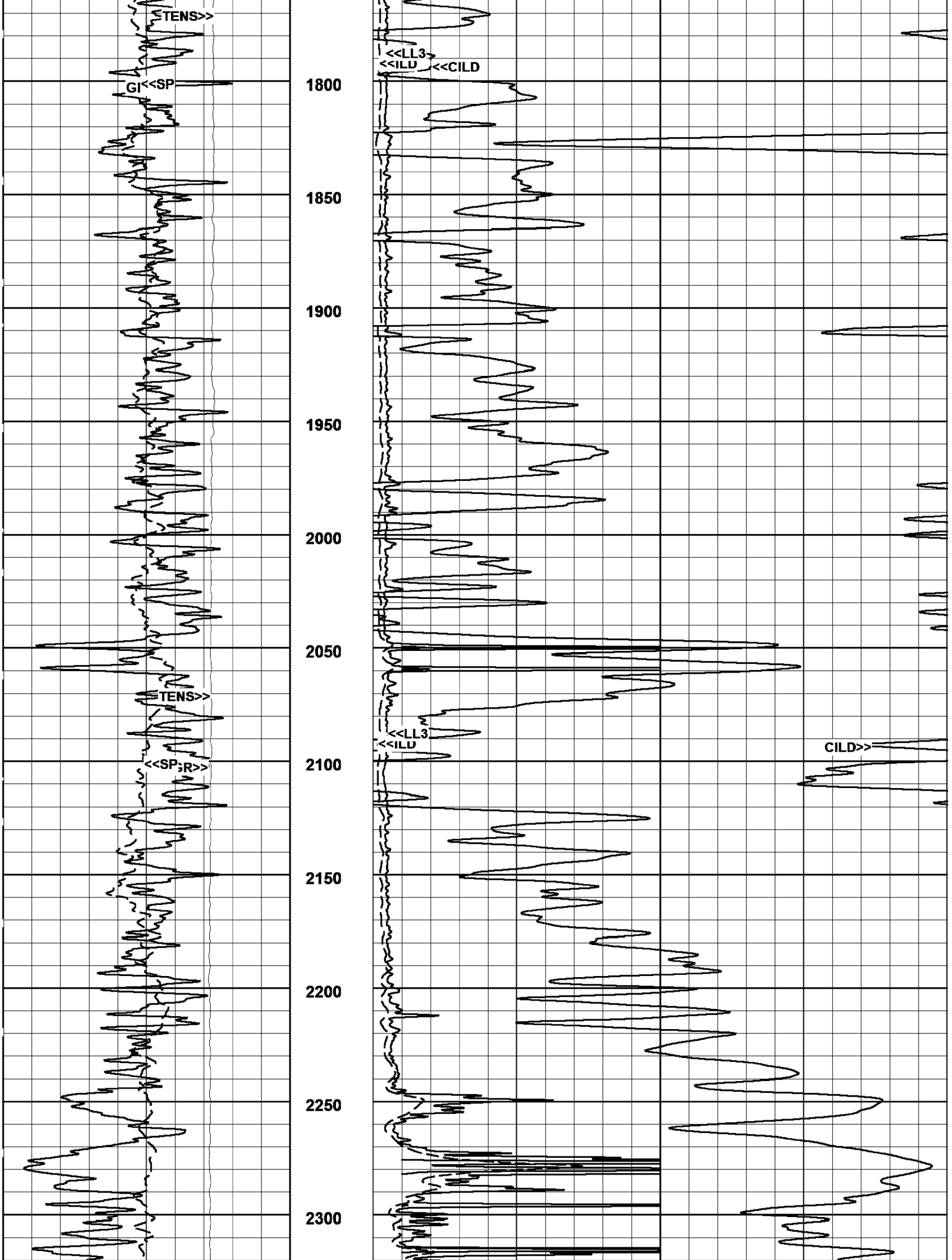
Tool Zero Point
(Tool Bottom)

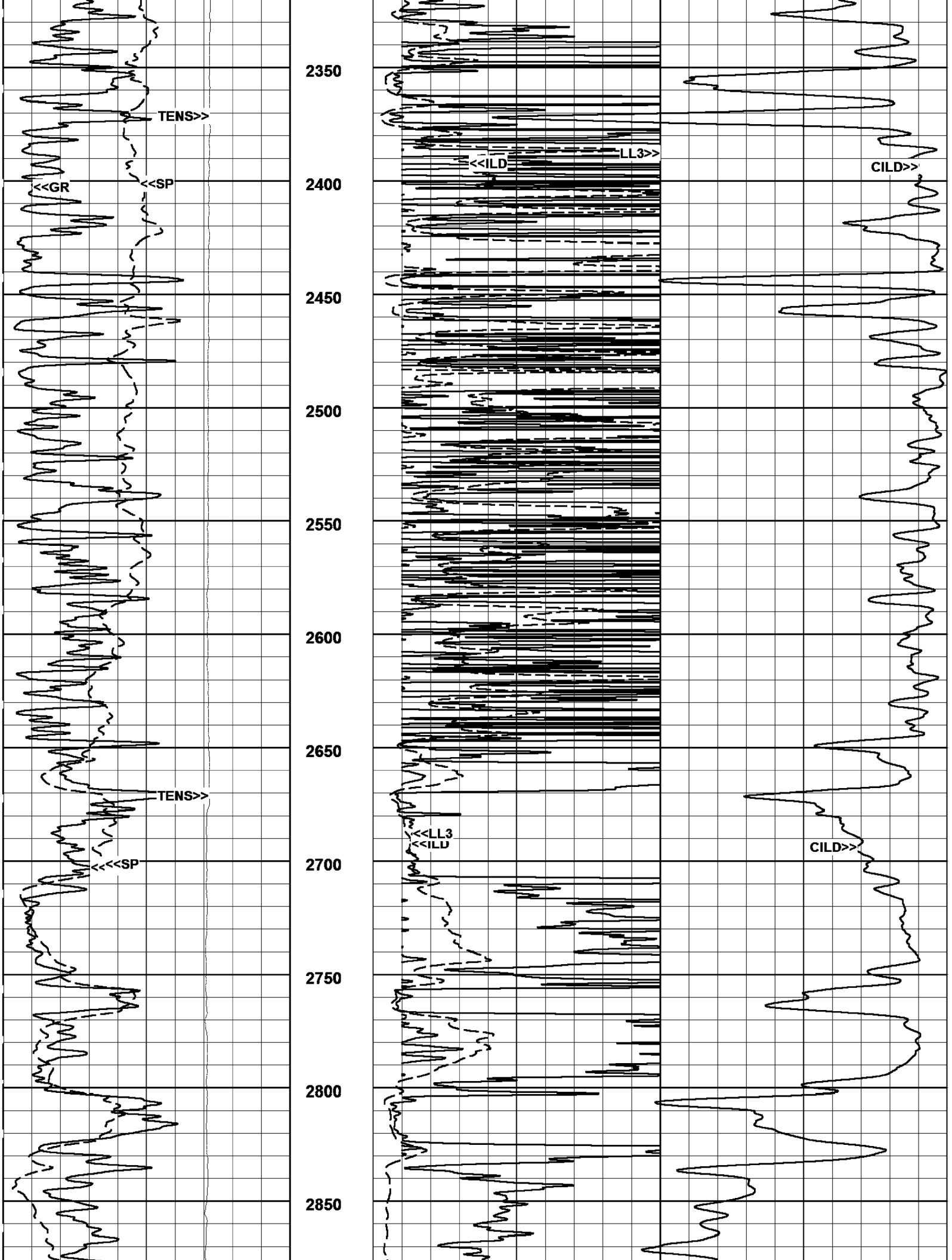
All Measurements are
taken from Tool Zero

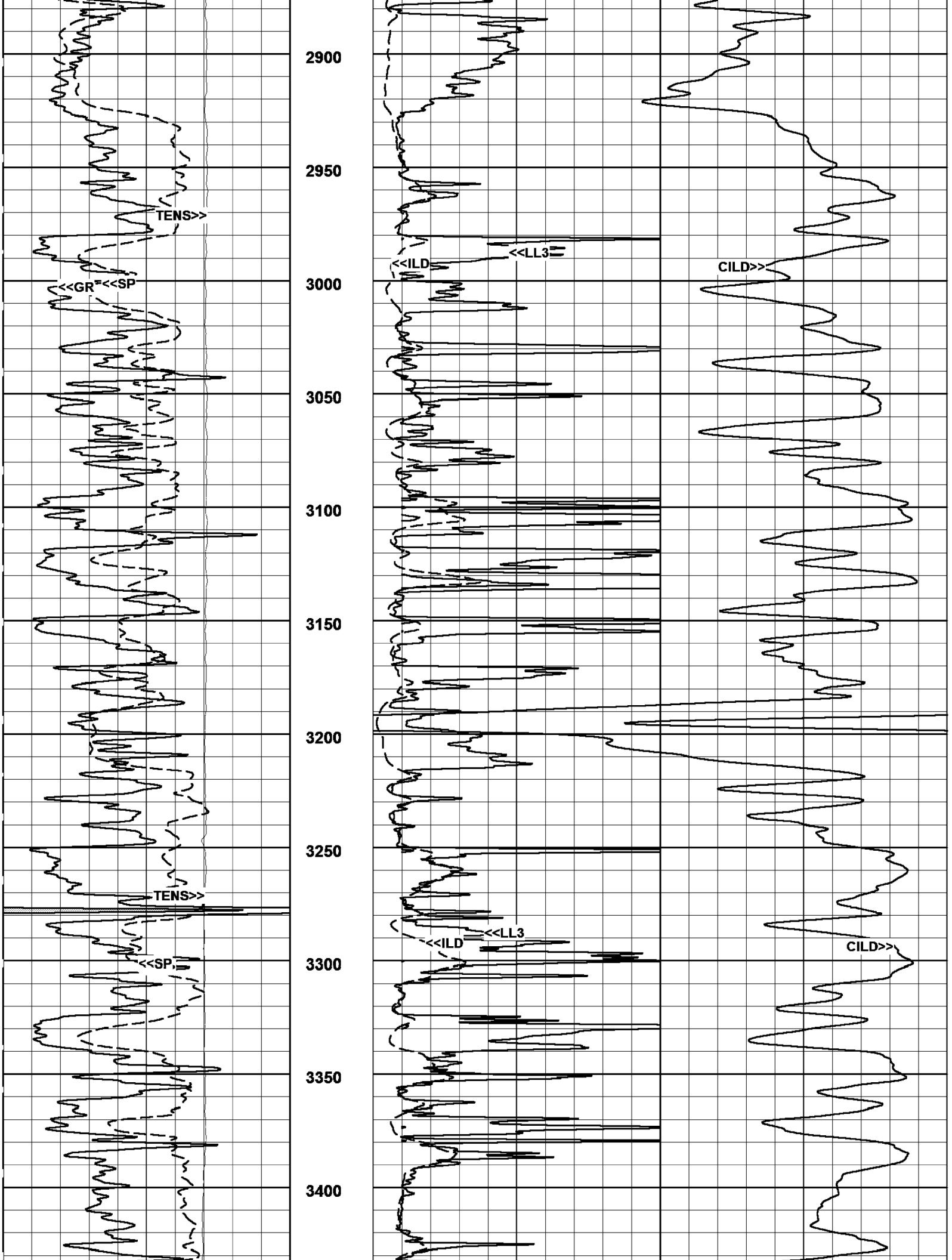
04/04/2013 Log UP - (VER 11.08)
01:25:28 => End Time End Depth=> 1601.50 Feet

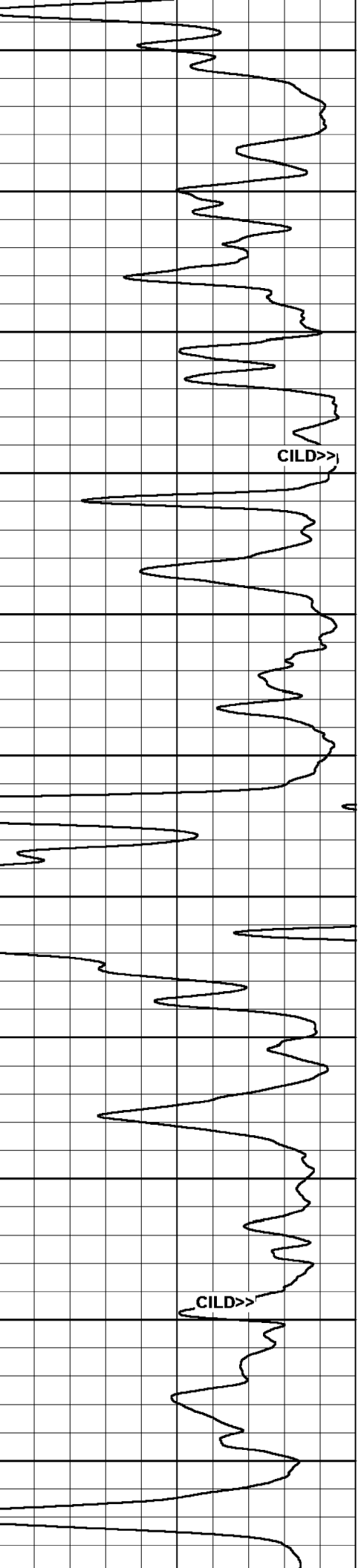
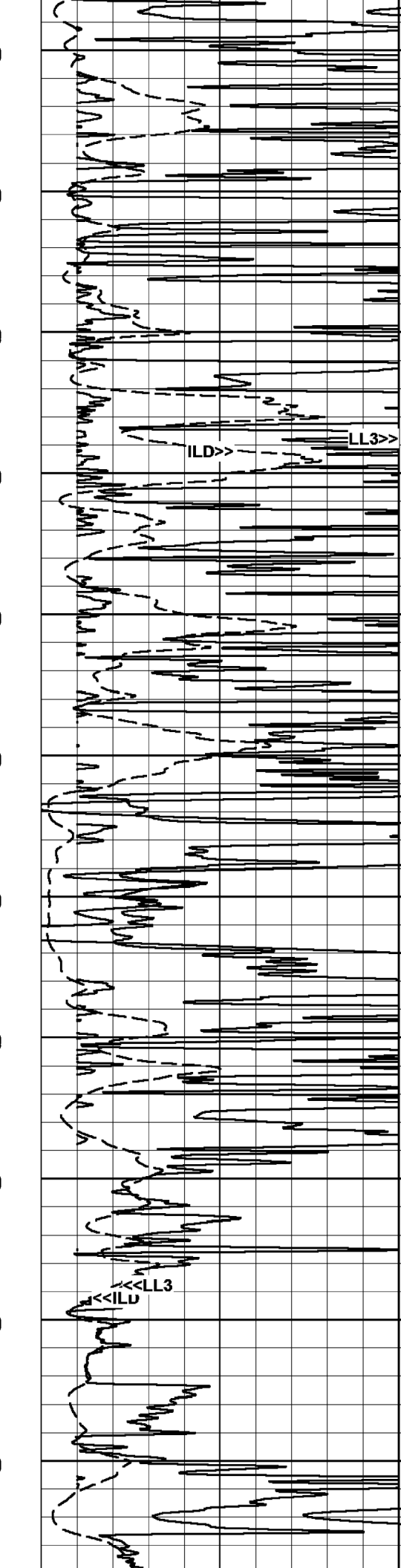
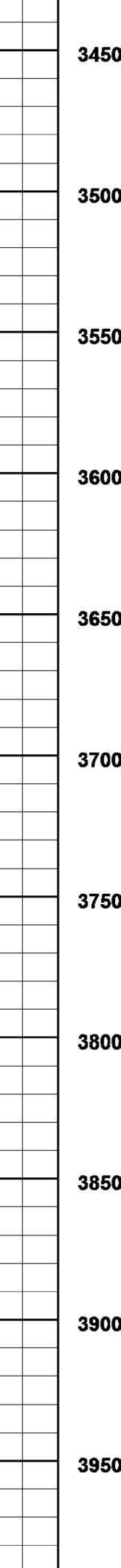
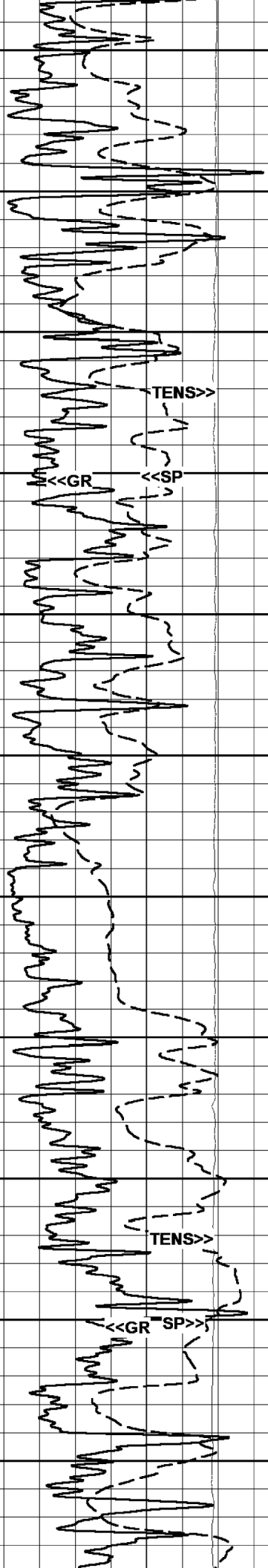
MAIN PASS (2"/100Ft)

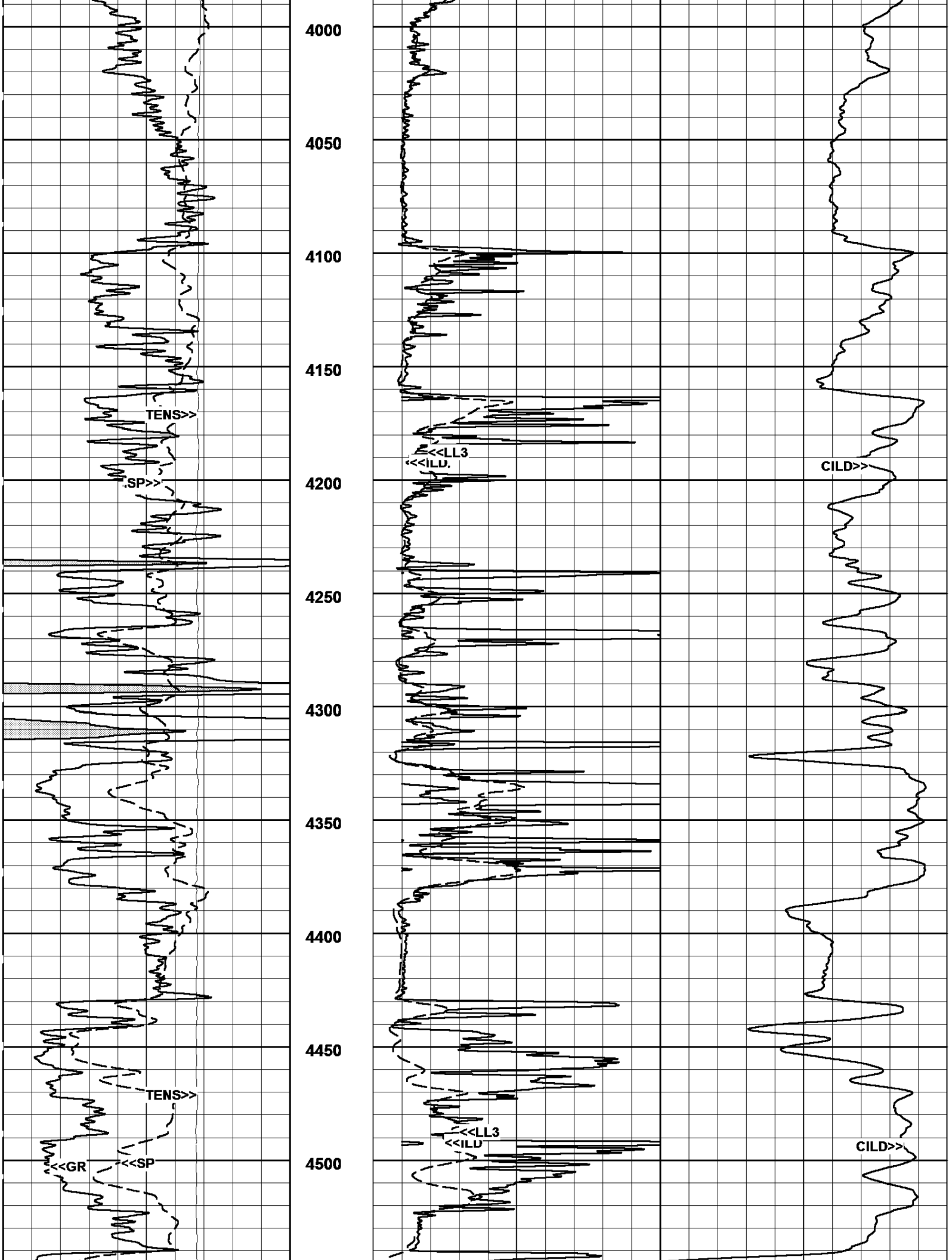


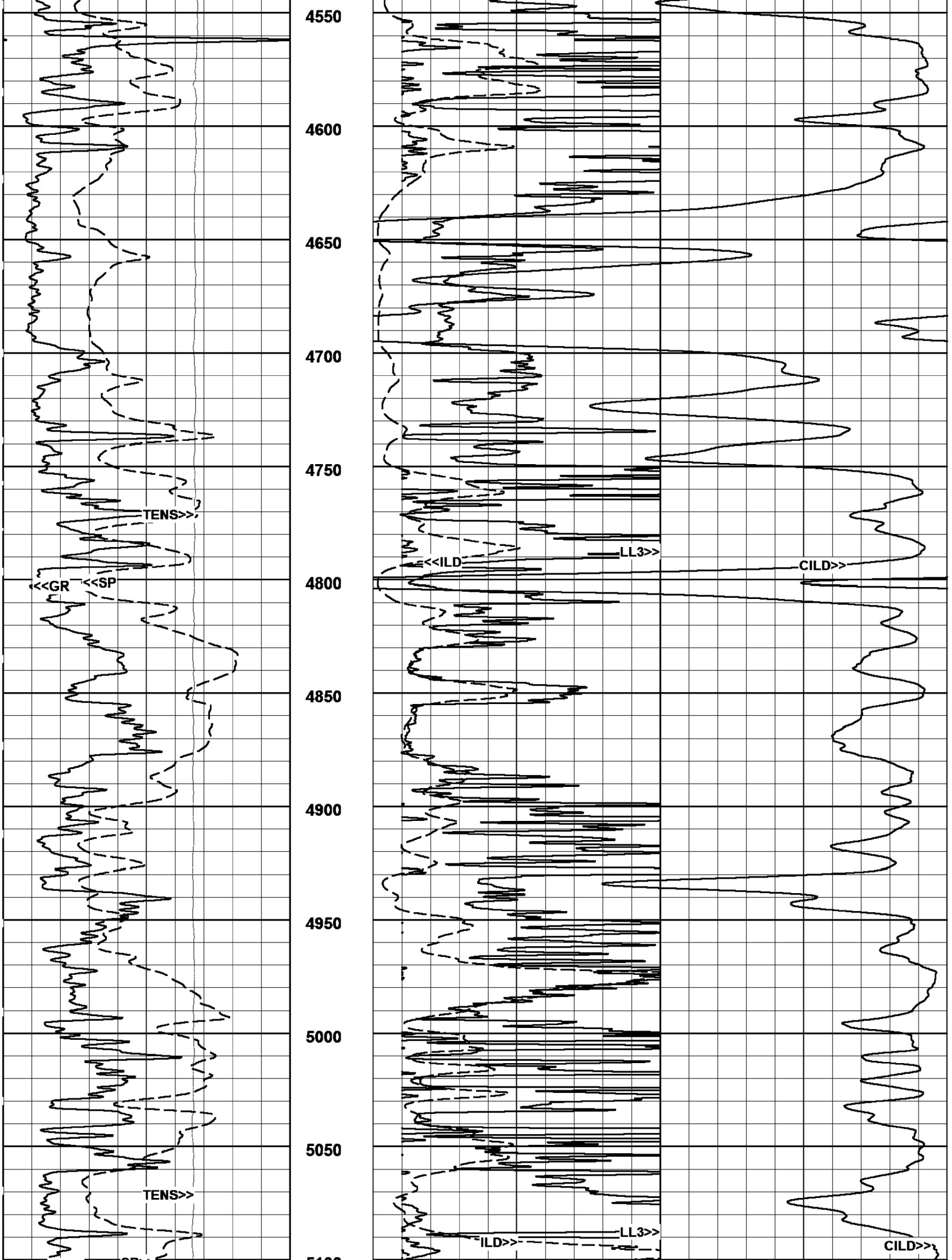


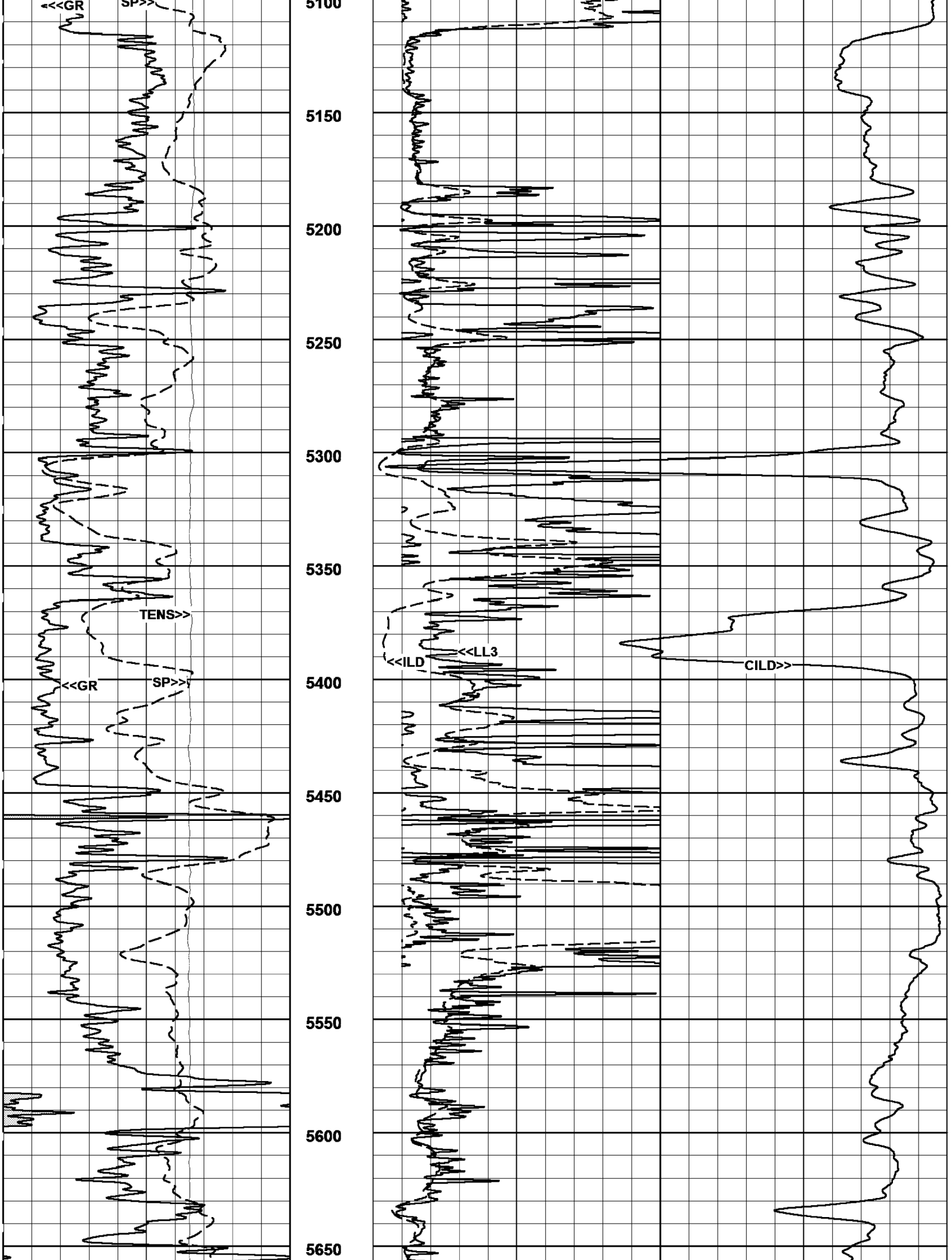


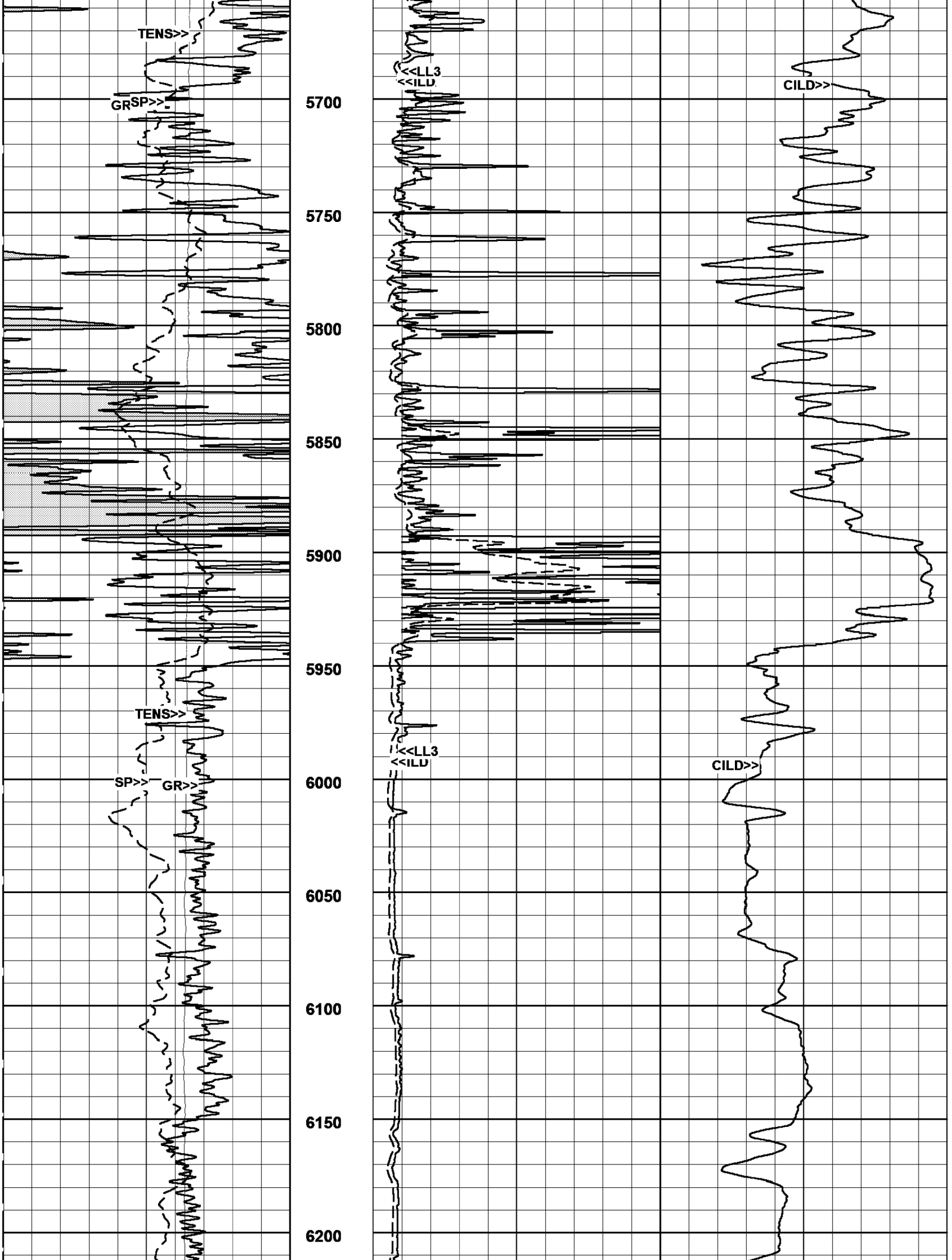


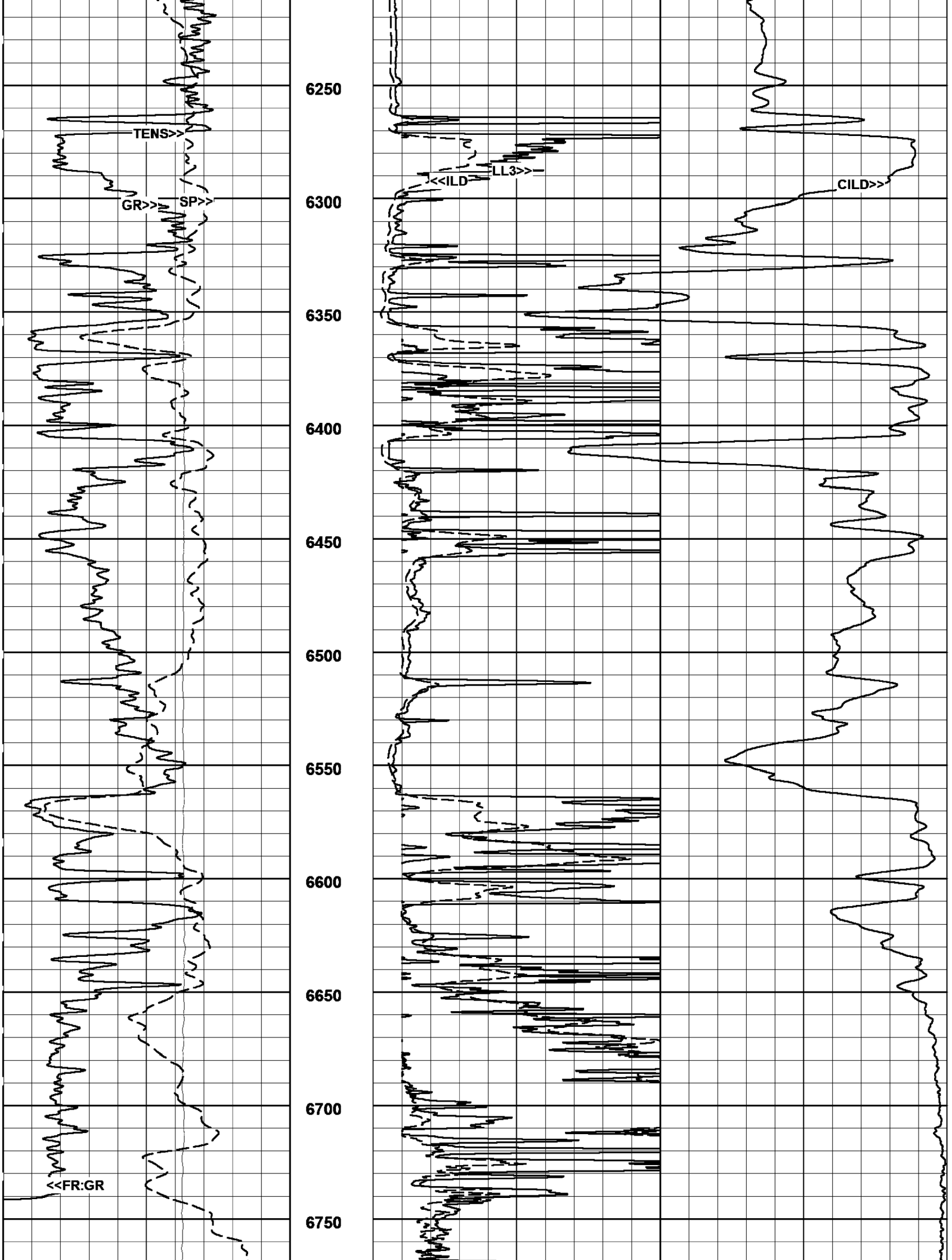


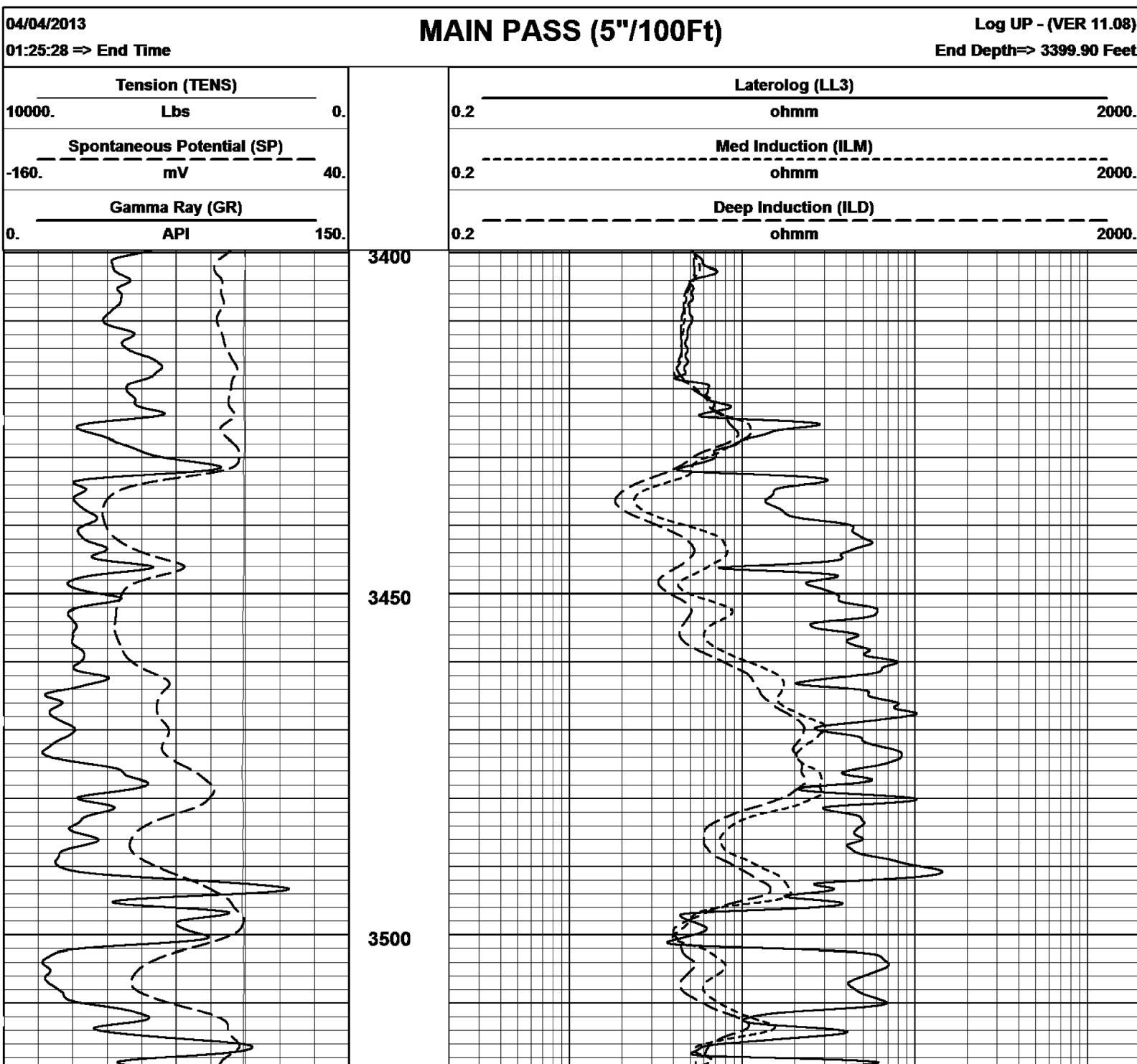
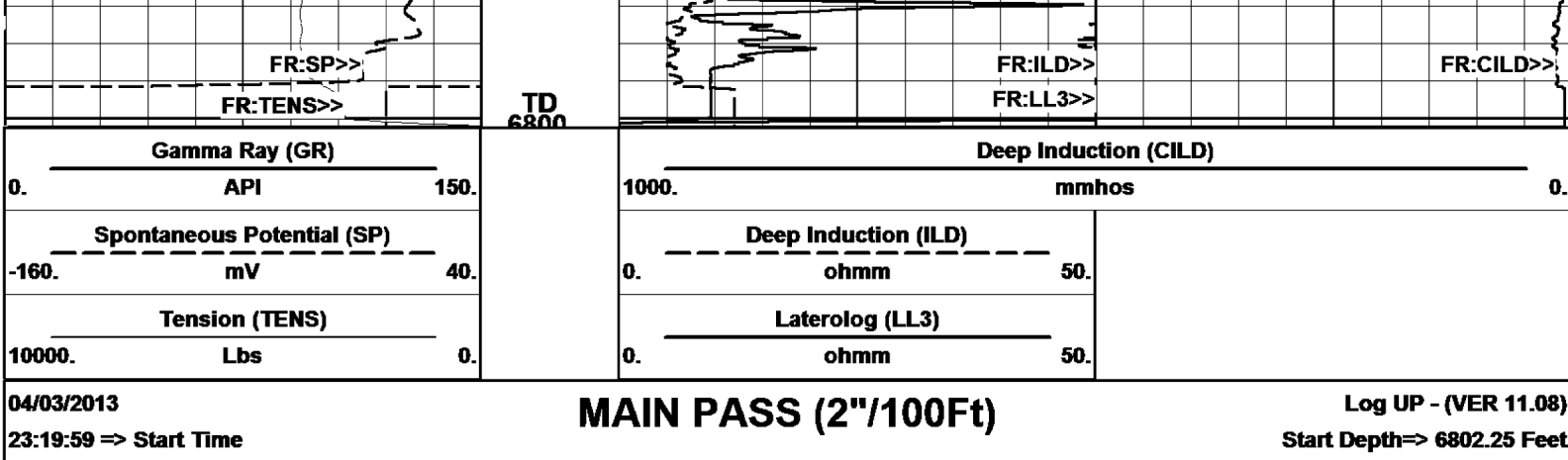












3550

<<TENS>>

3600

<<GR

<<SP

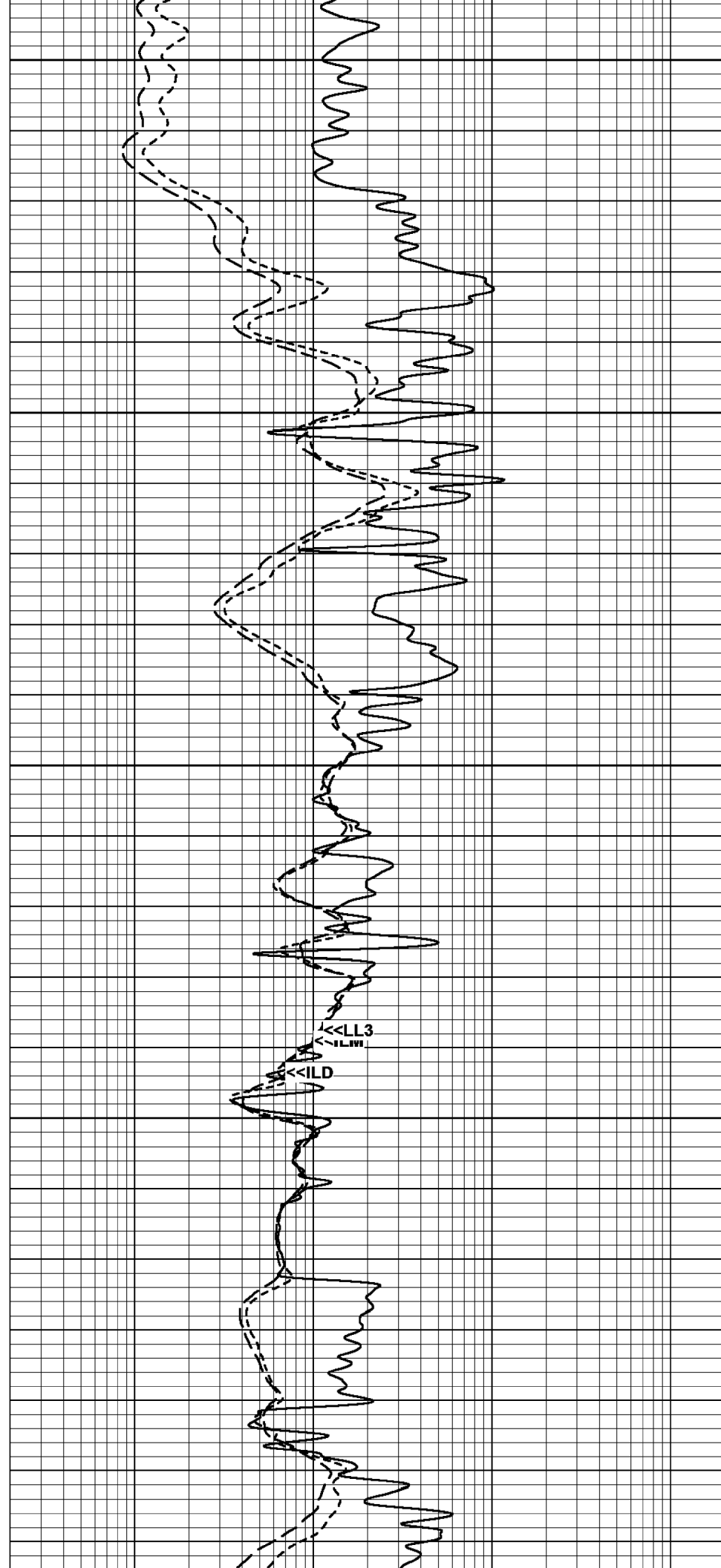
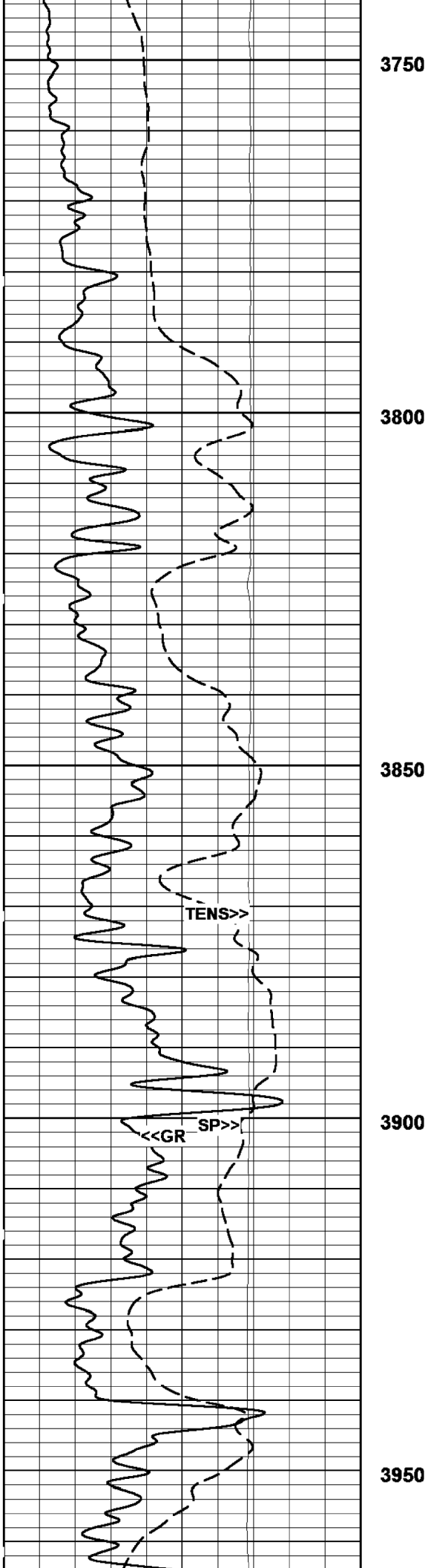
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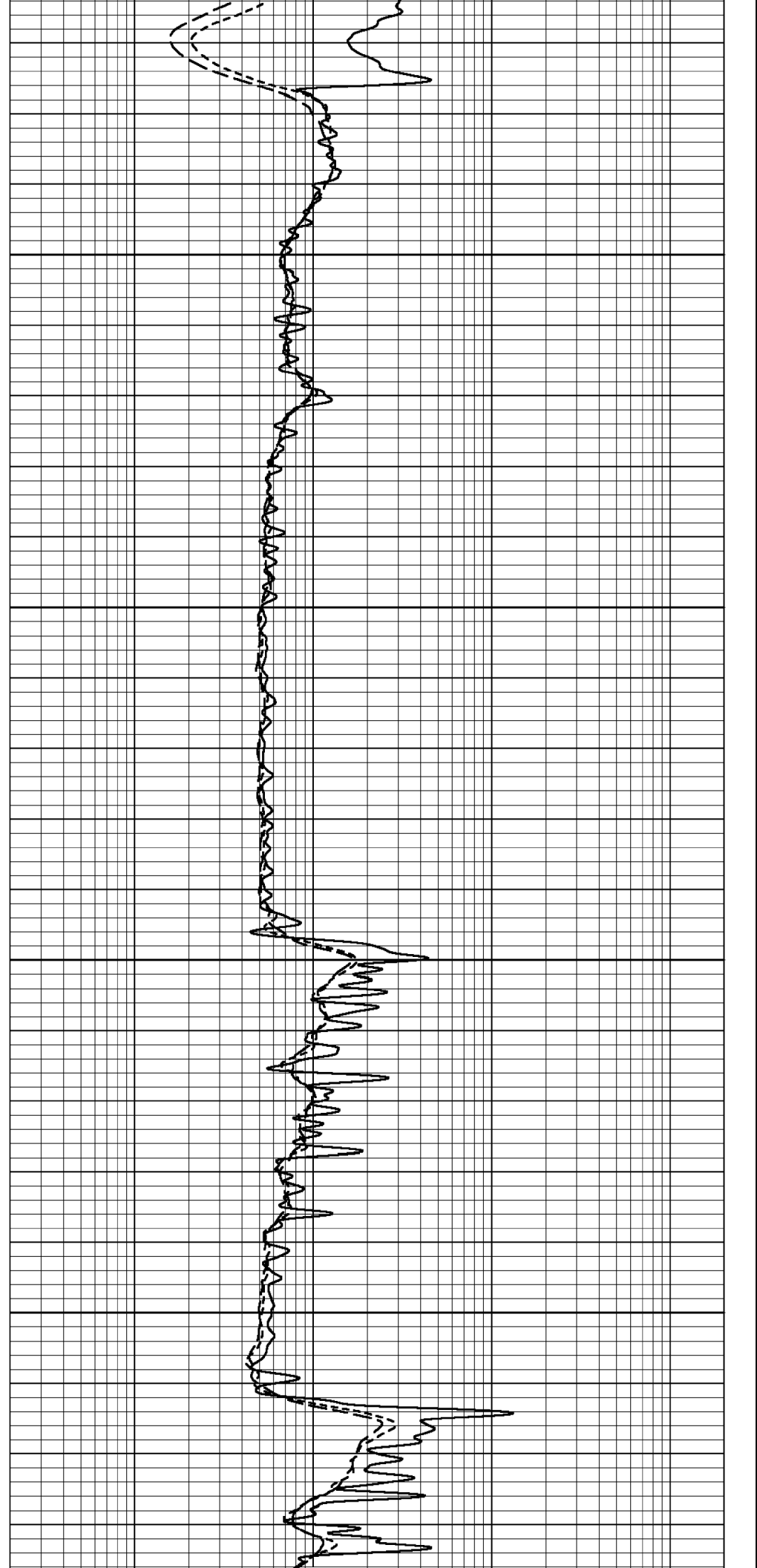
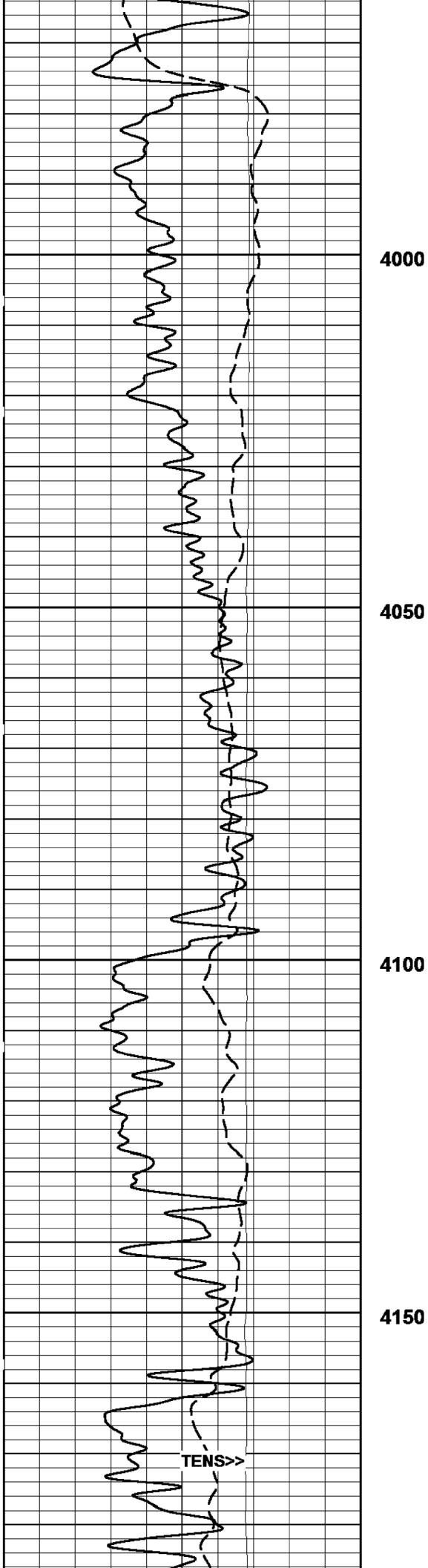
<<LL3>>

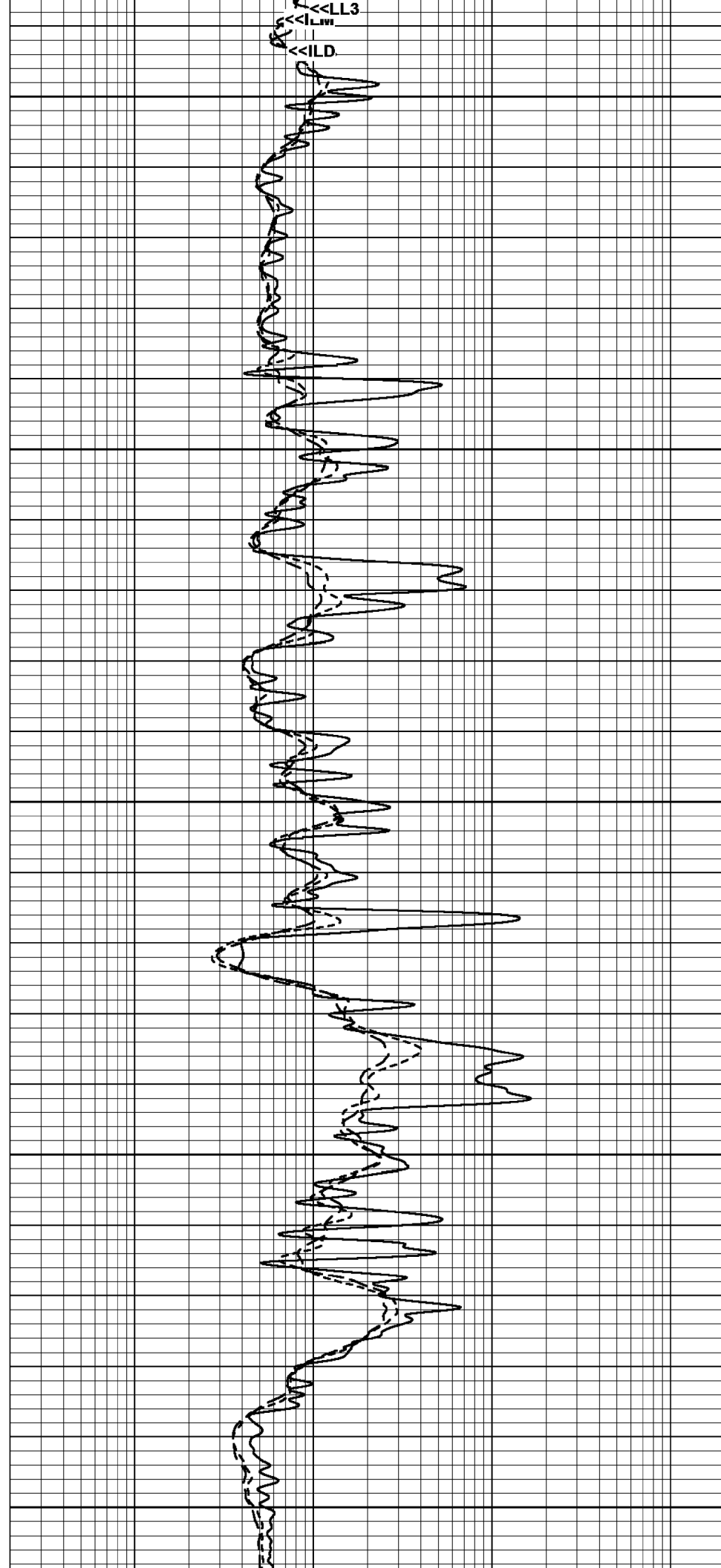
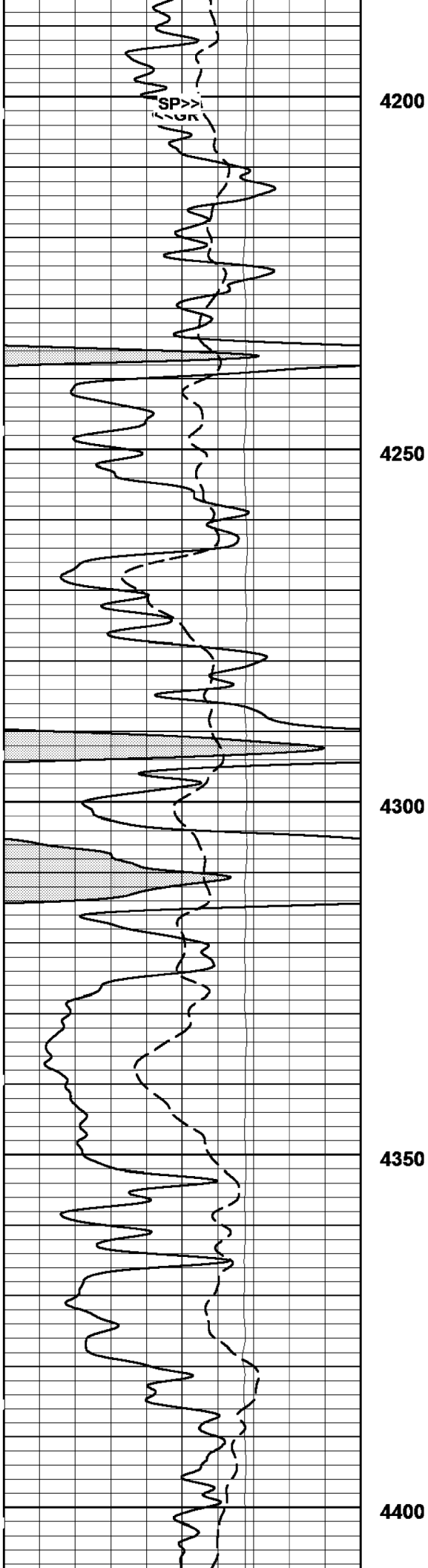
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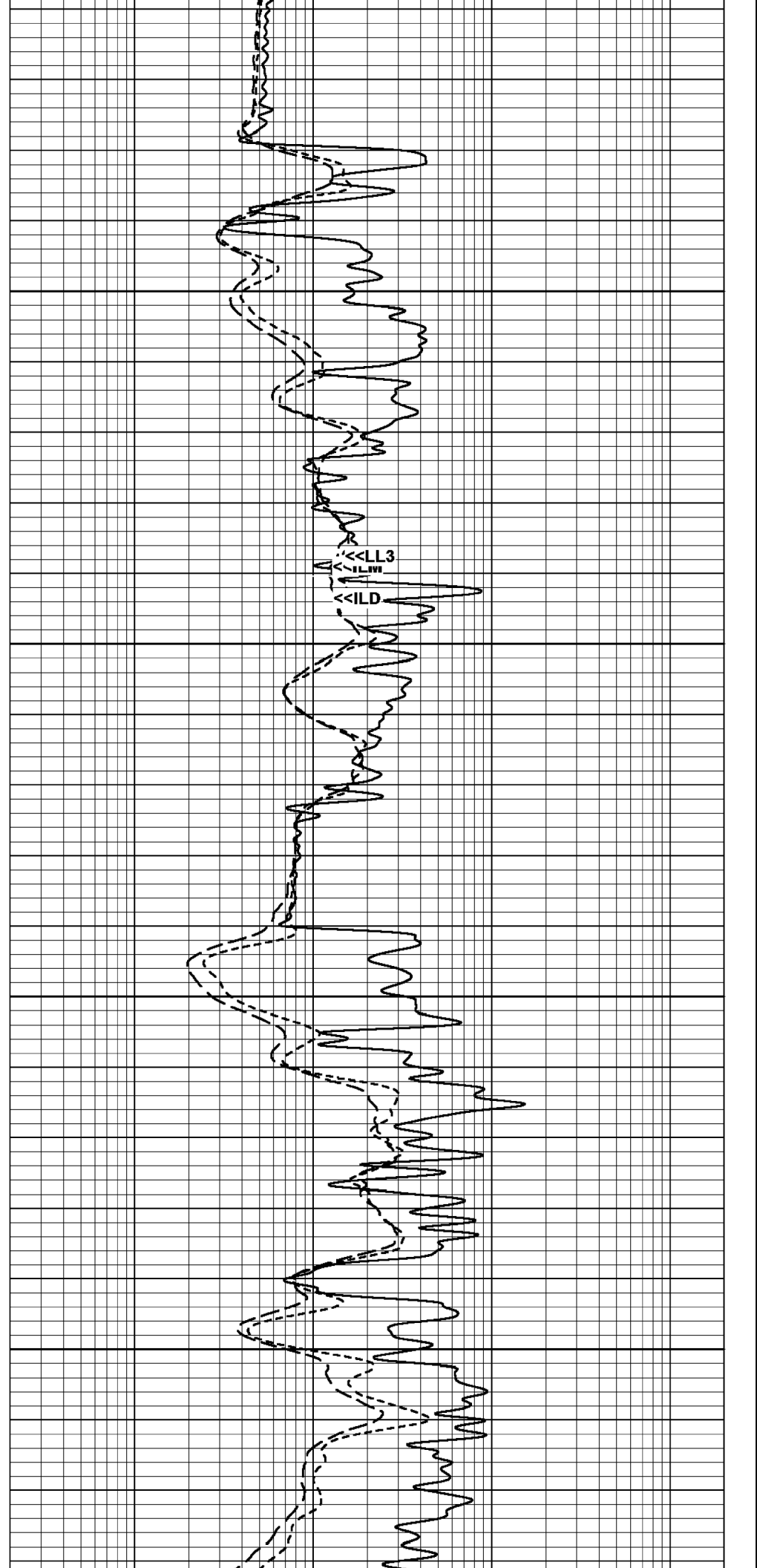
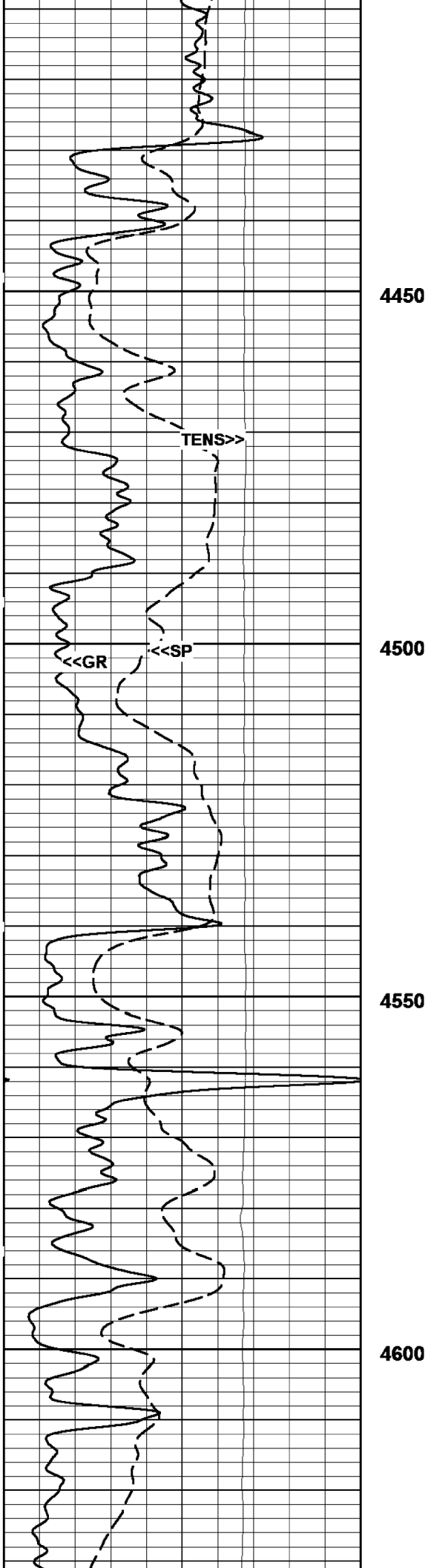
ILD>>

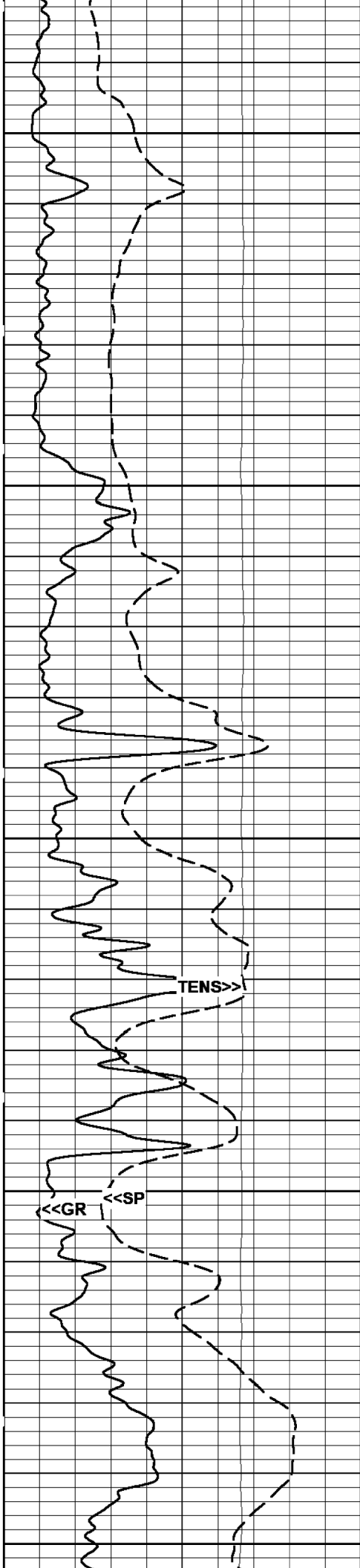
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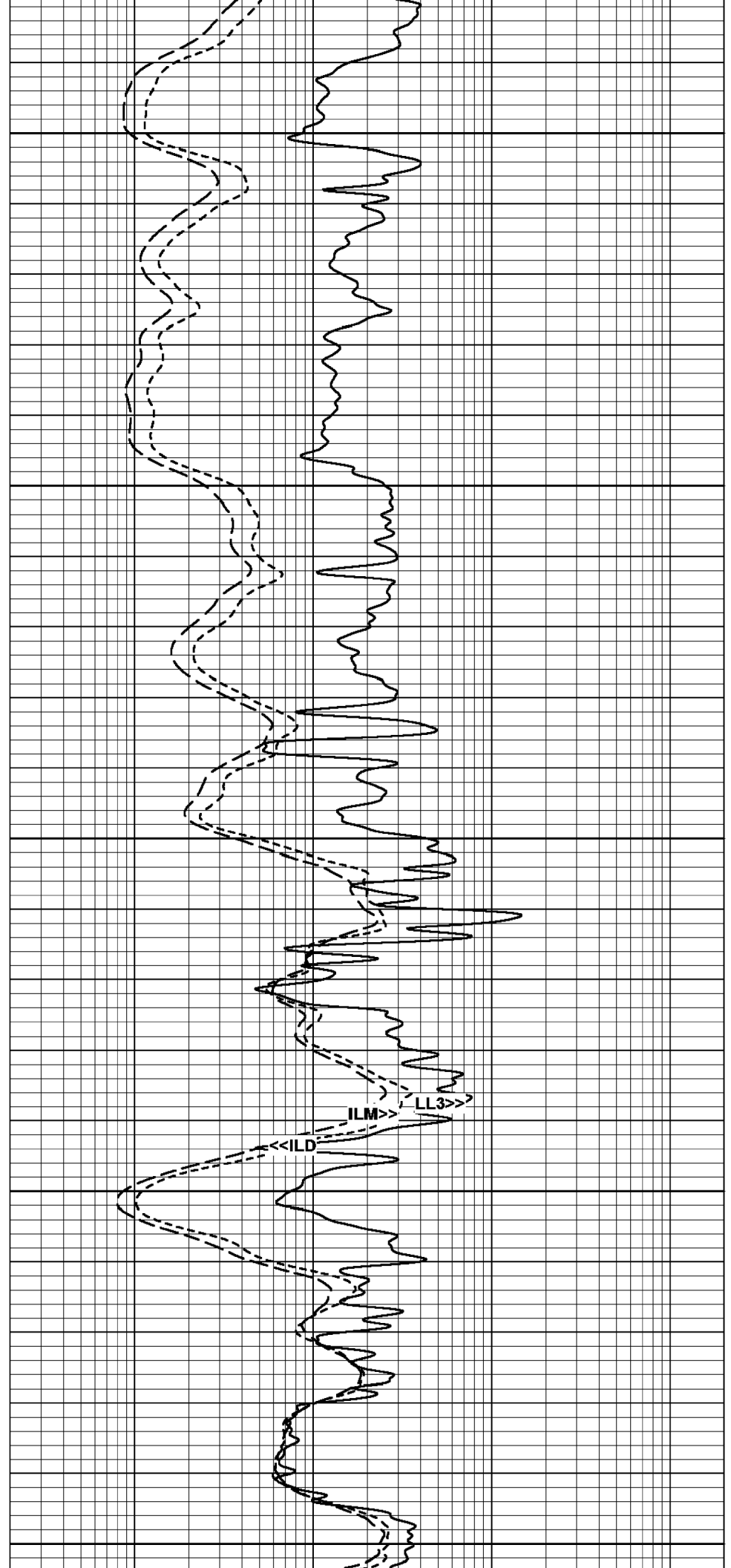
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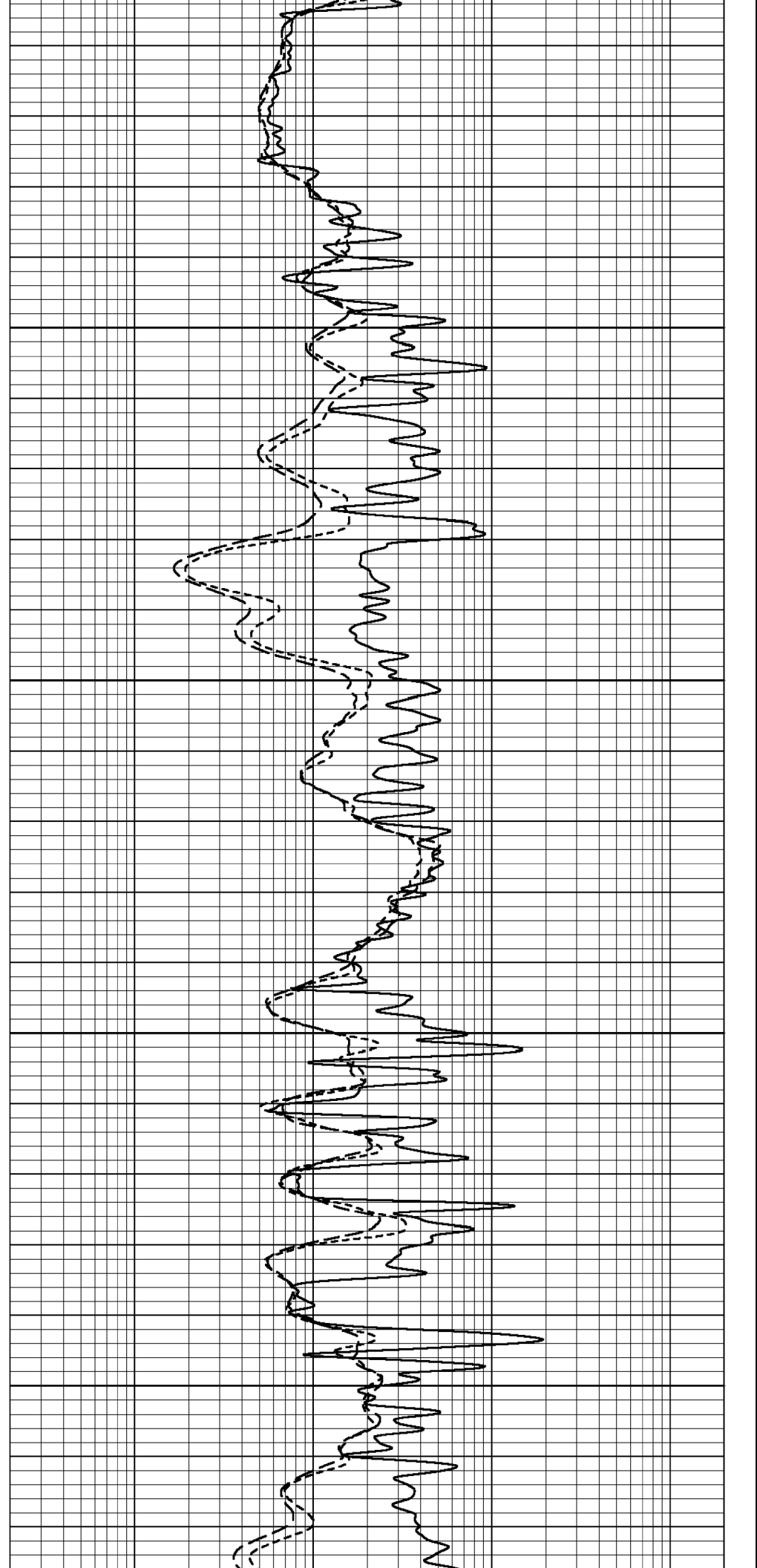
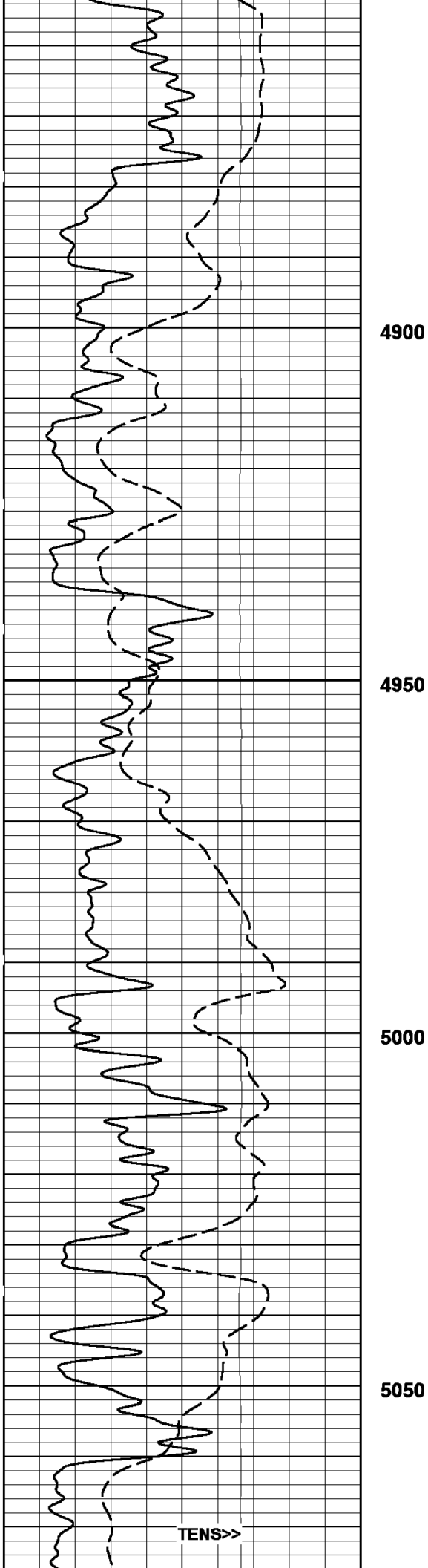
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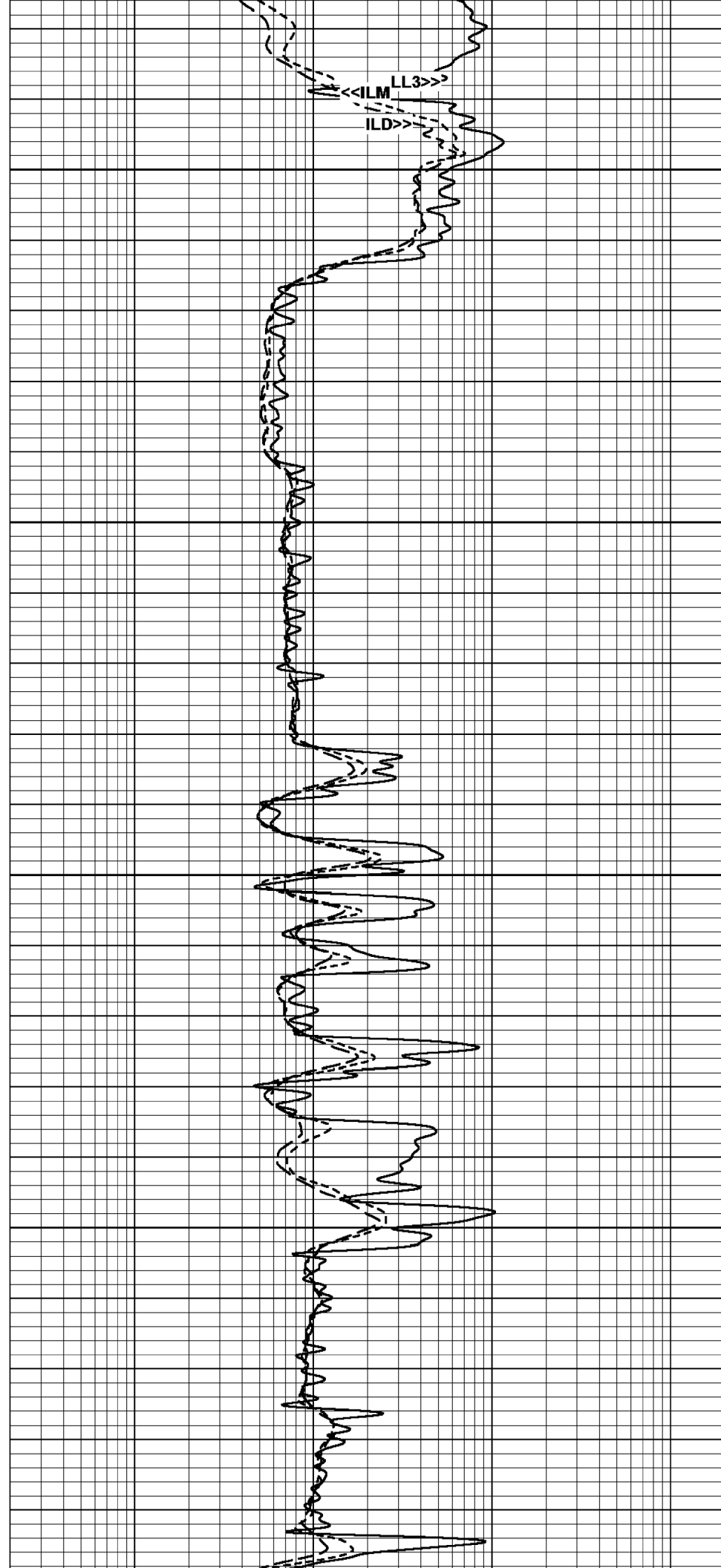
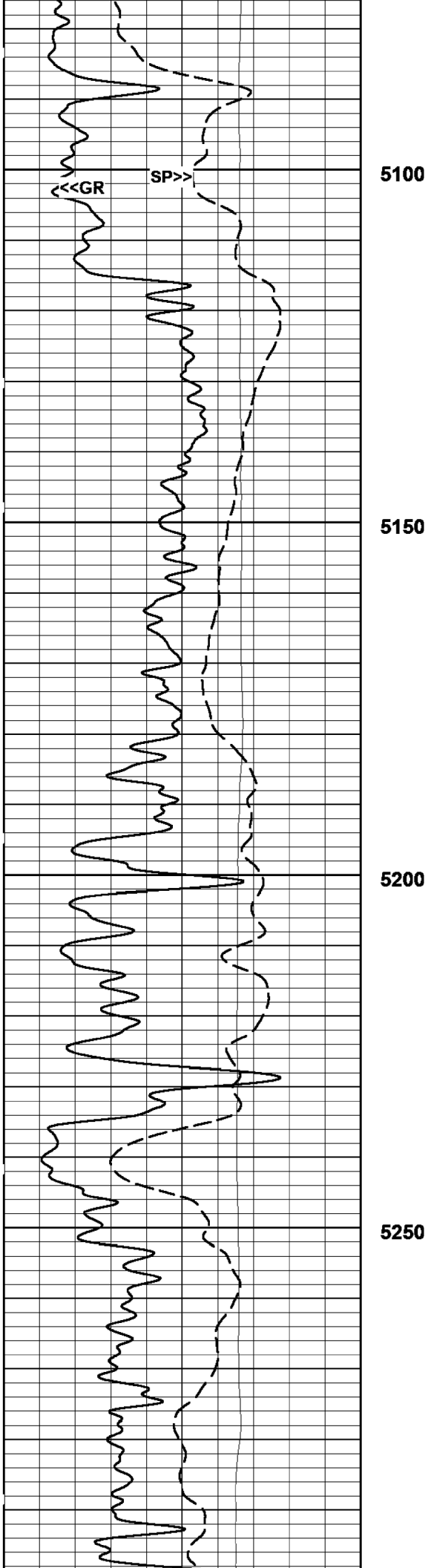
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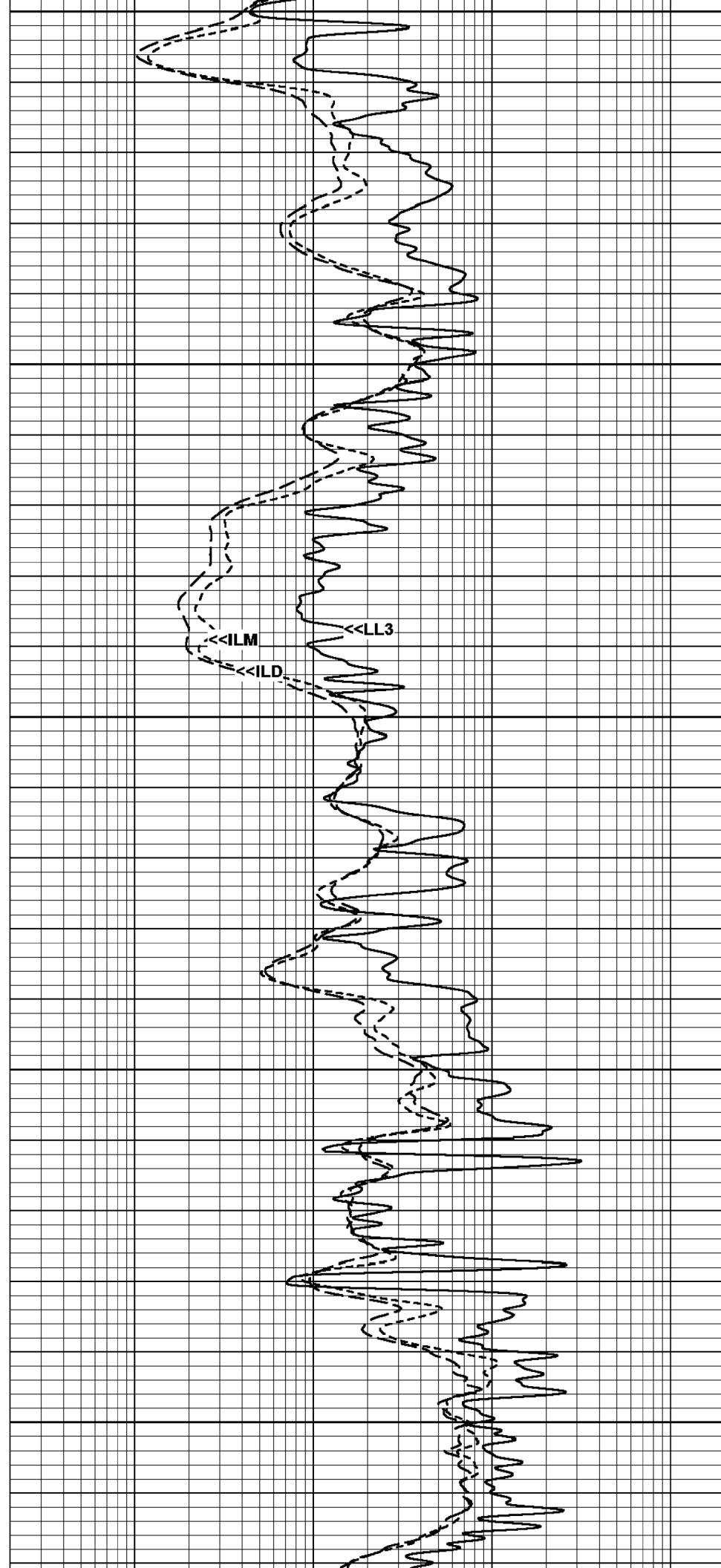
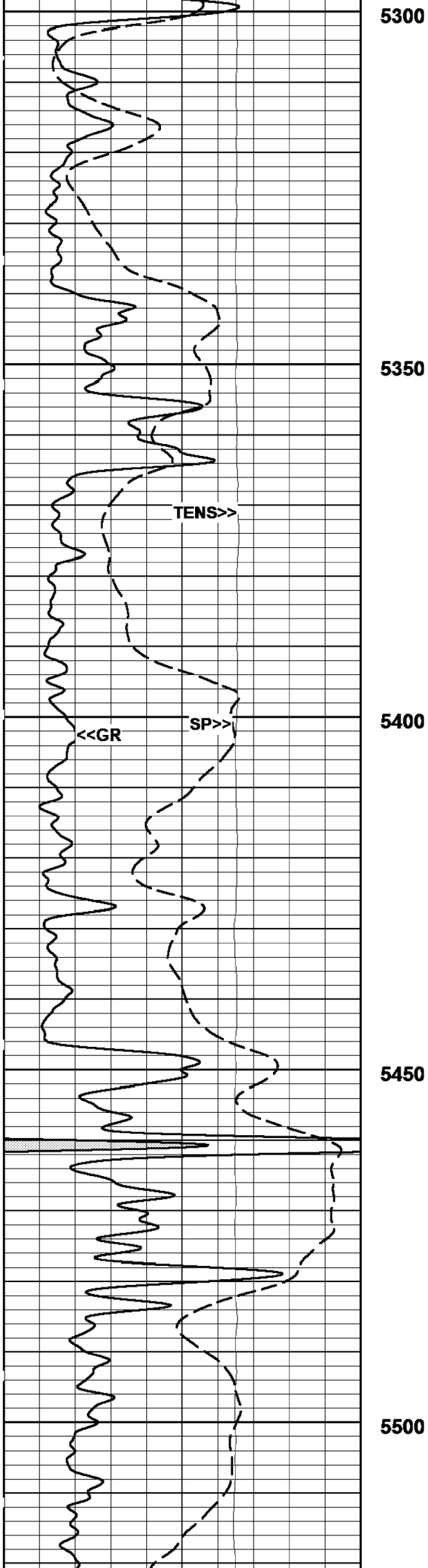
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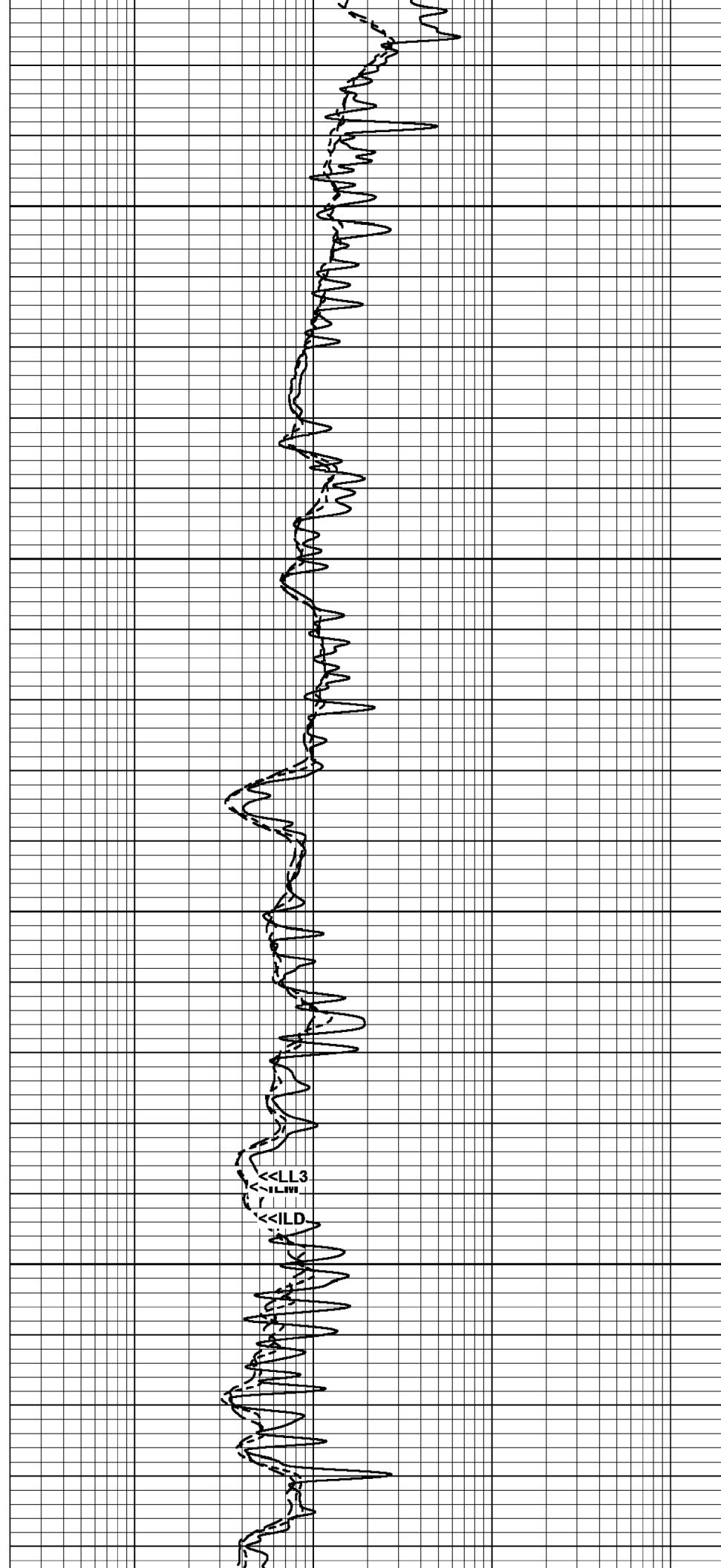
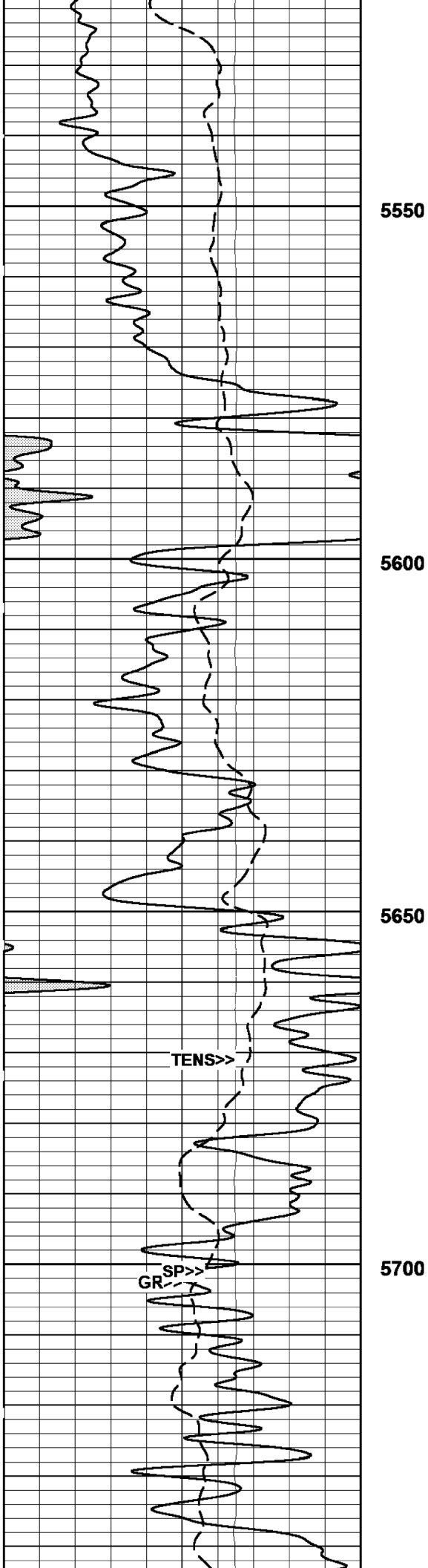
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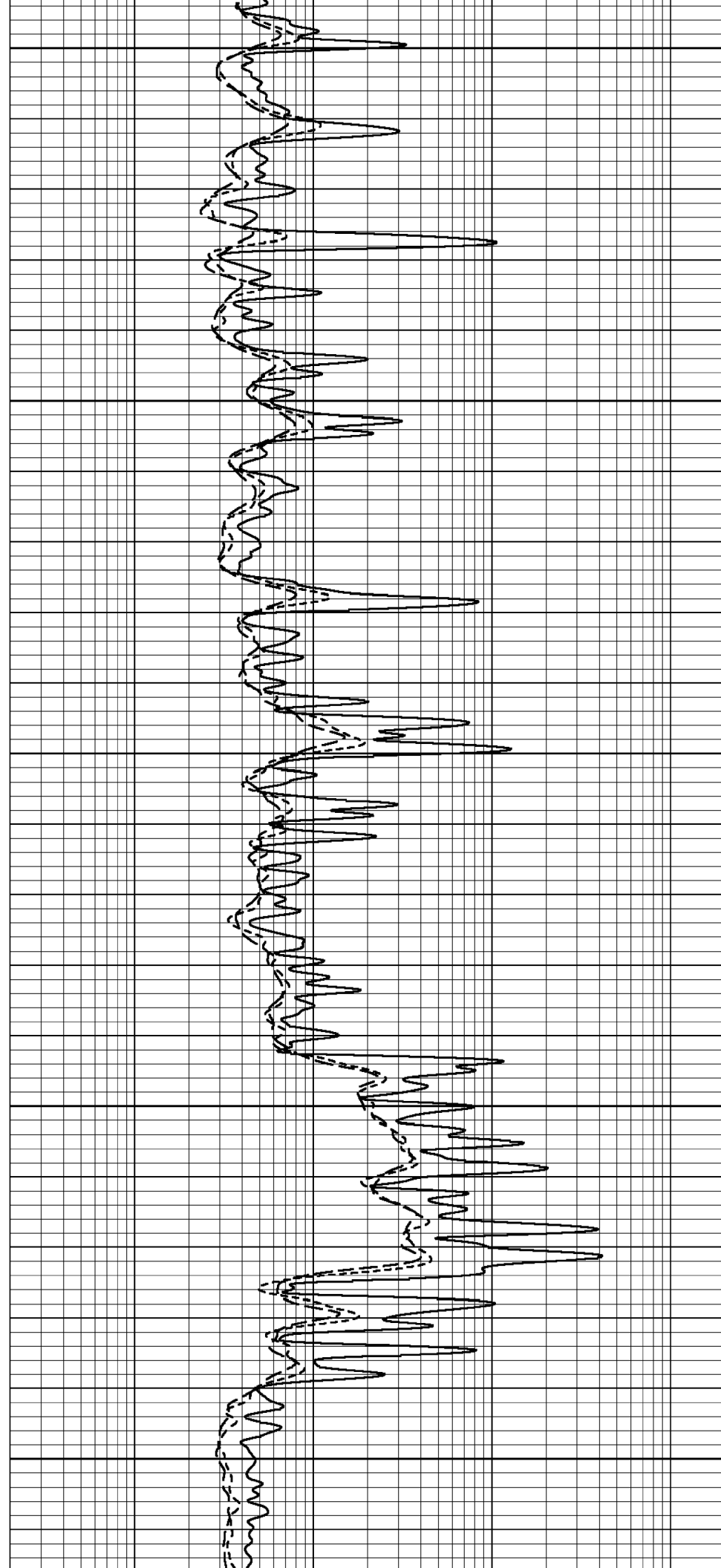
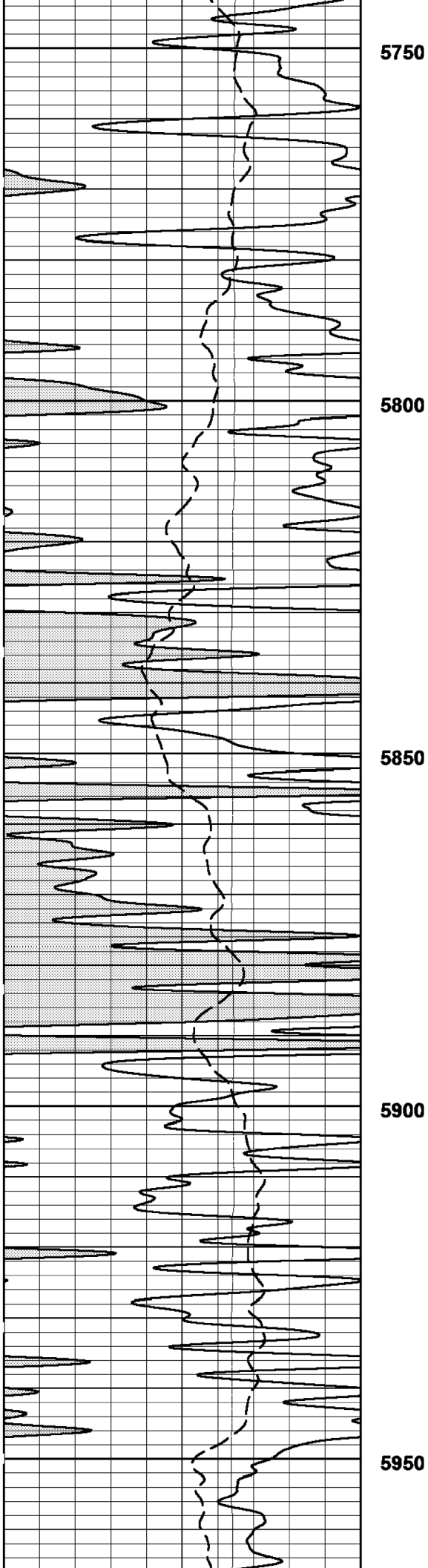


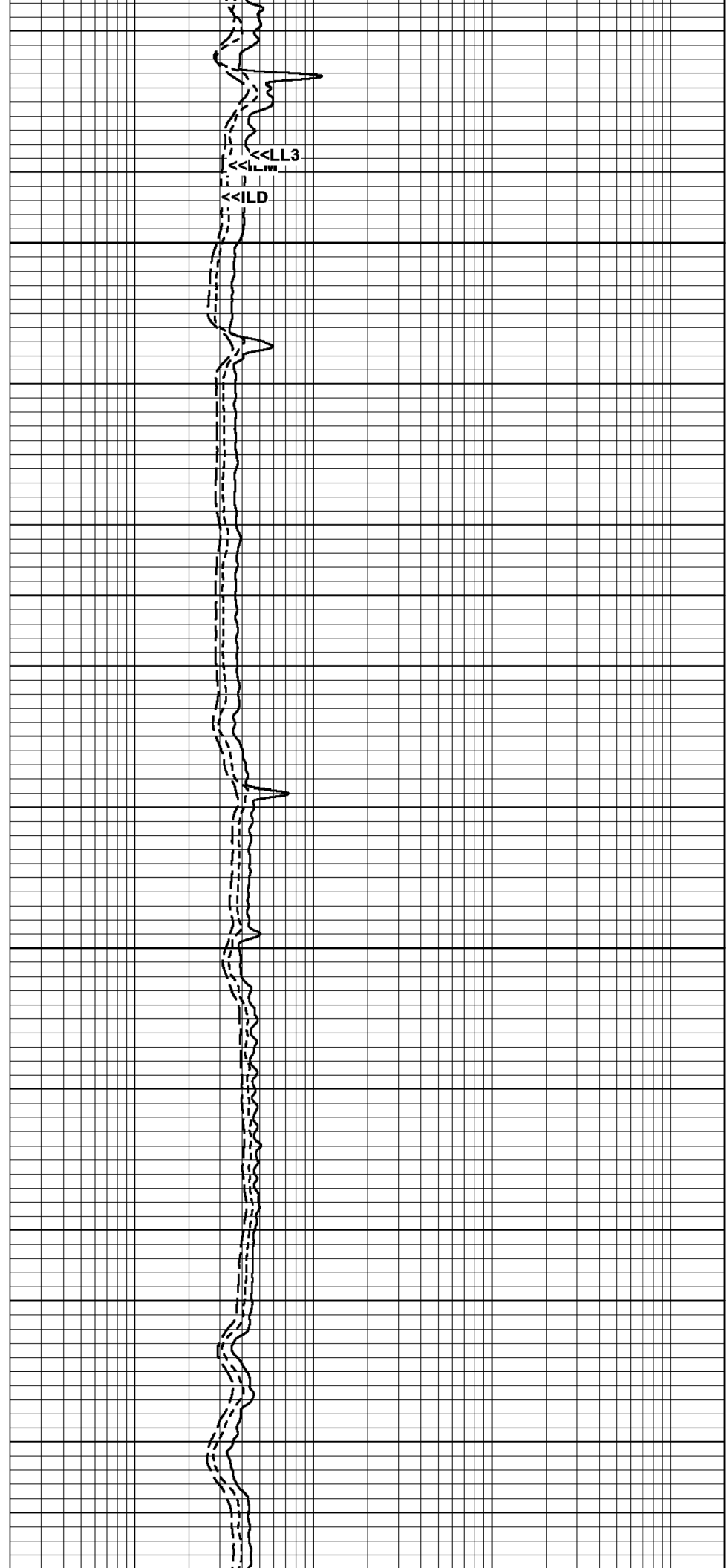
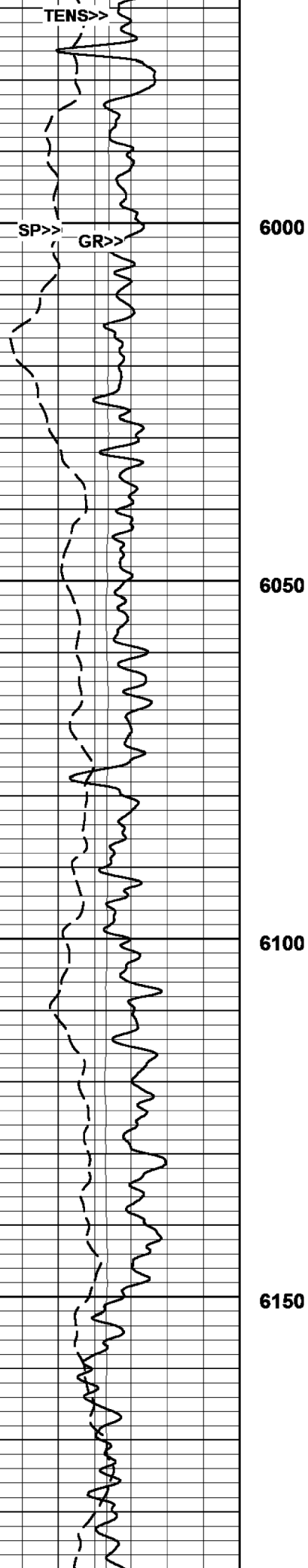


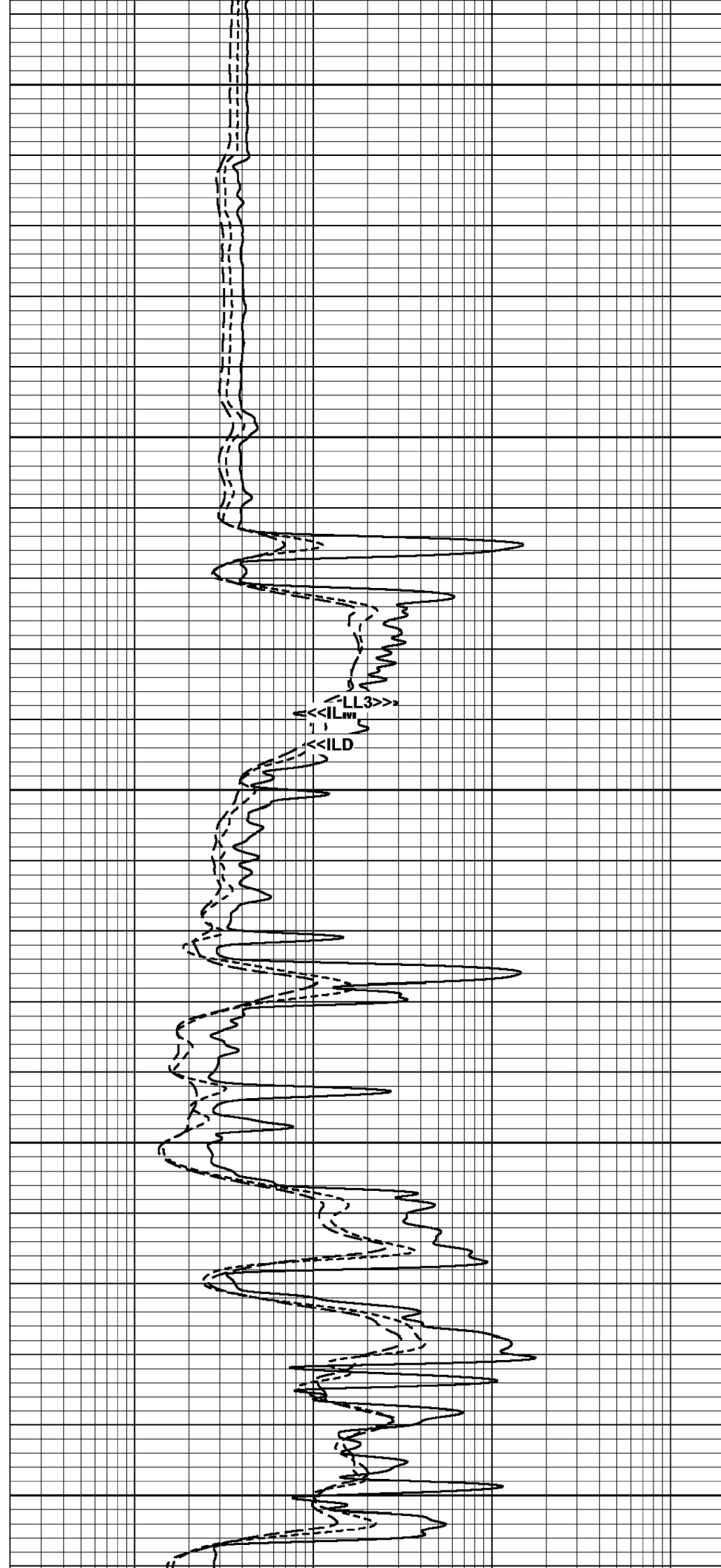
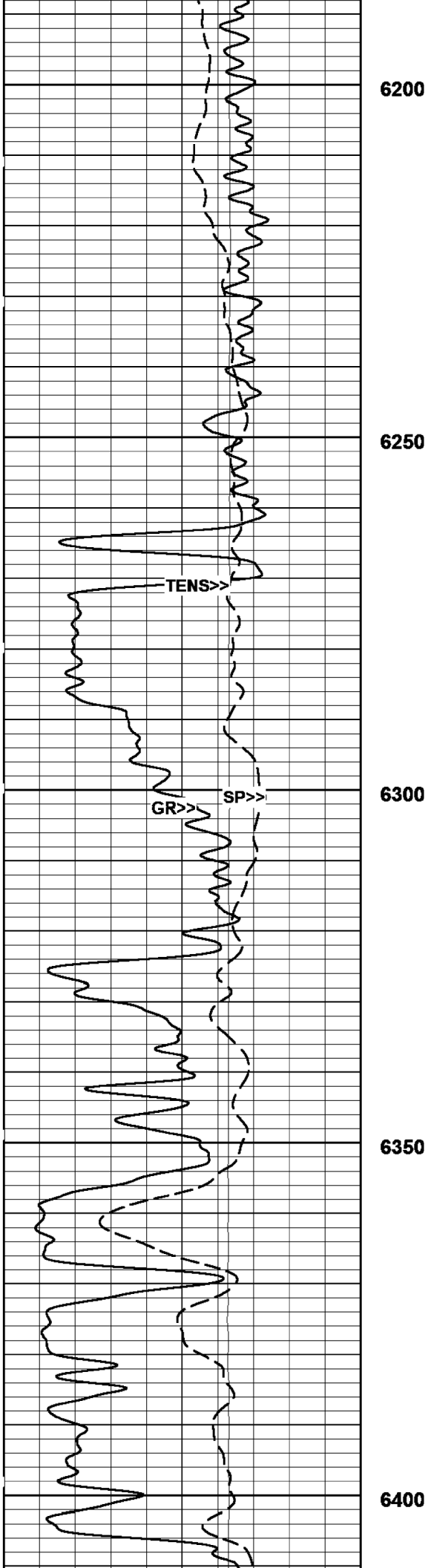


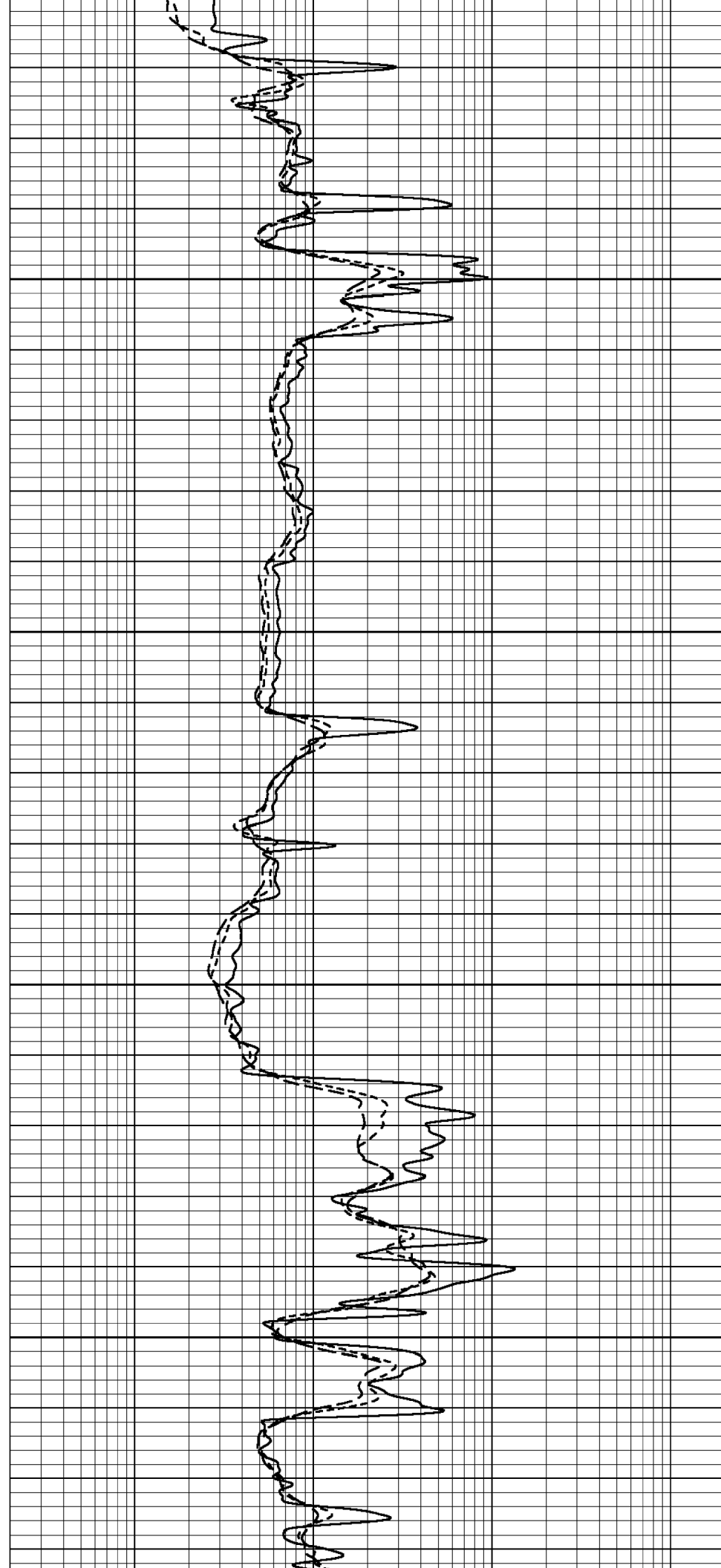
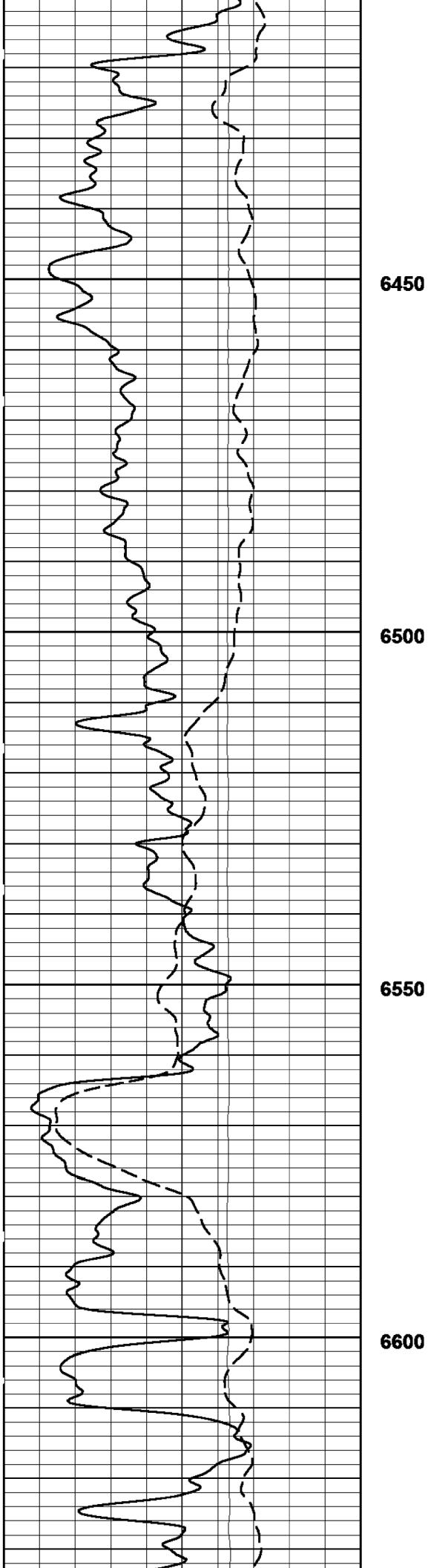


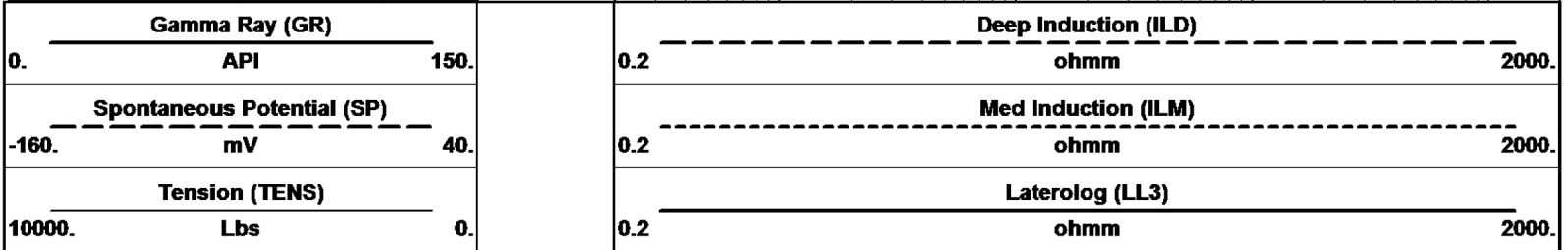
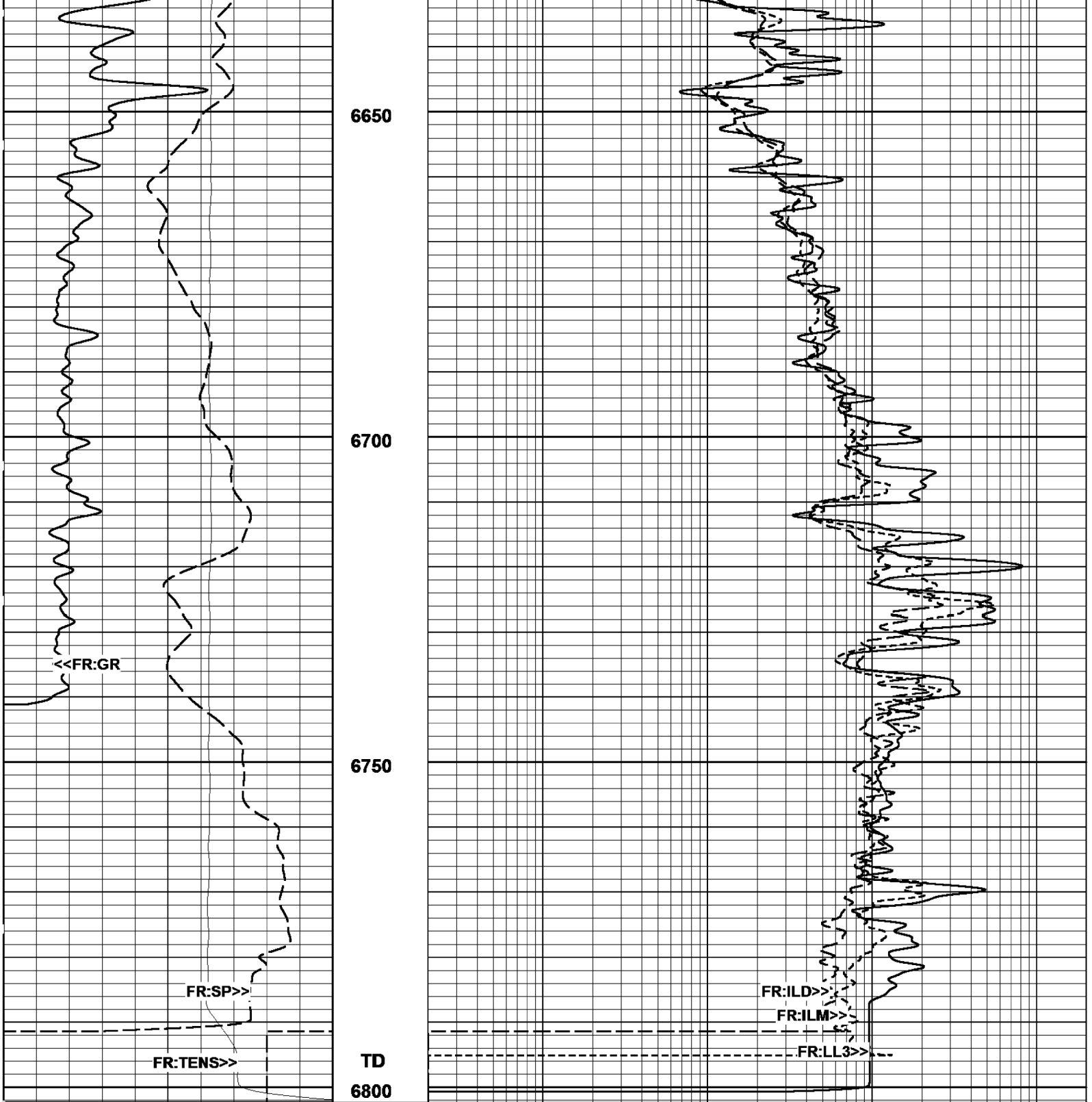


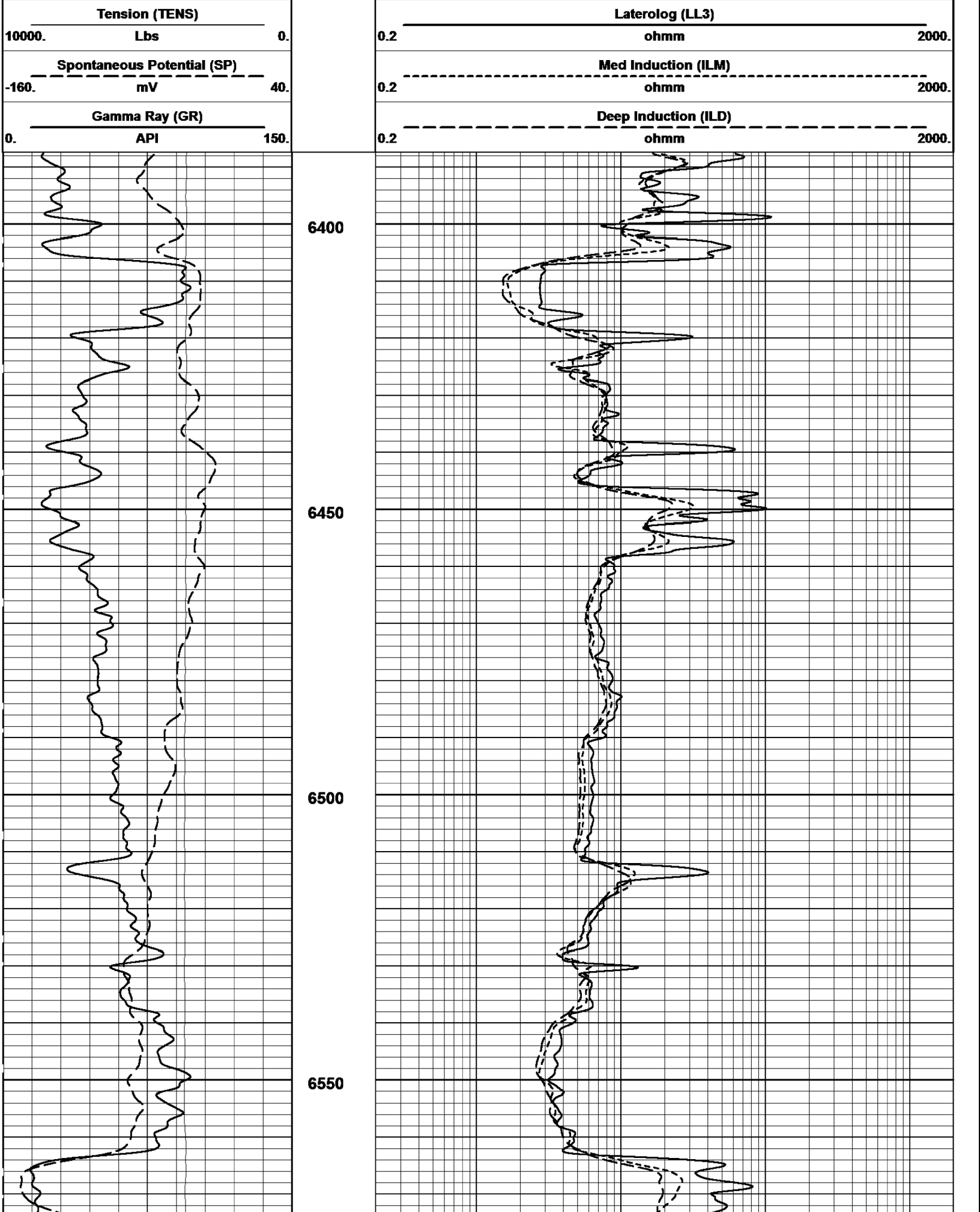


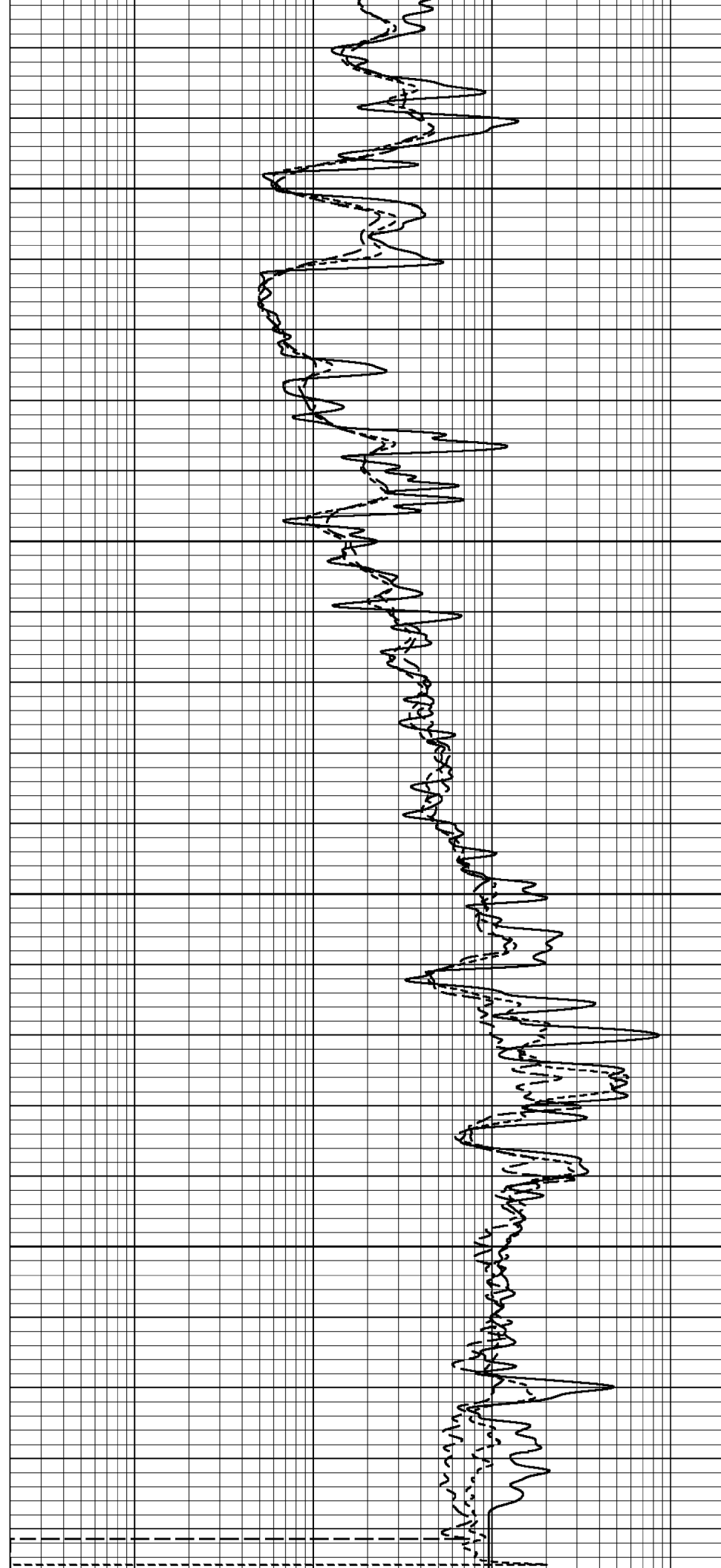
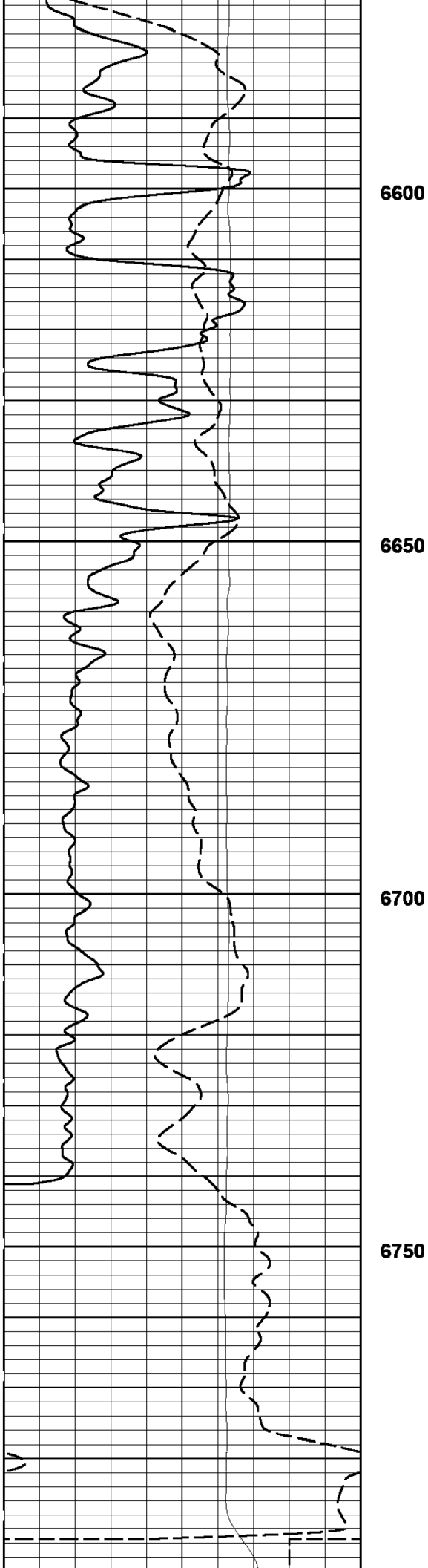


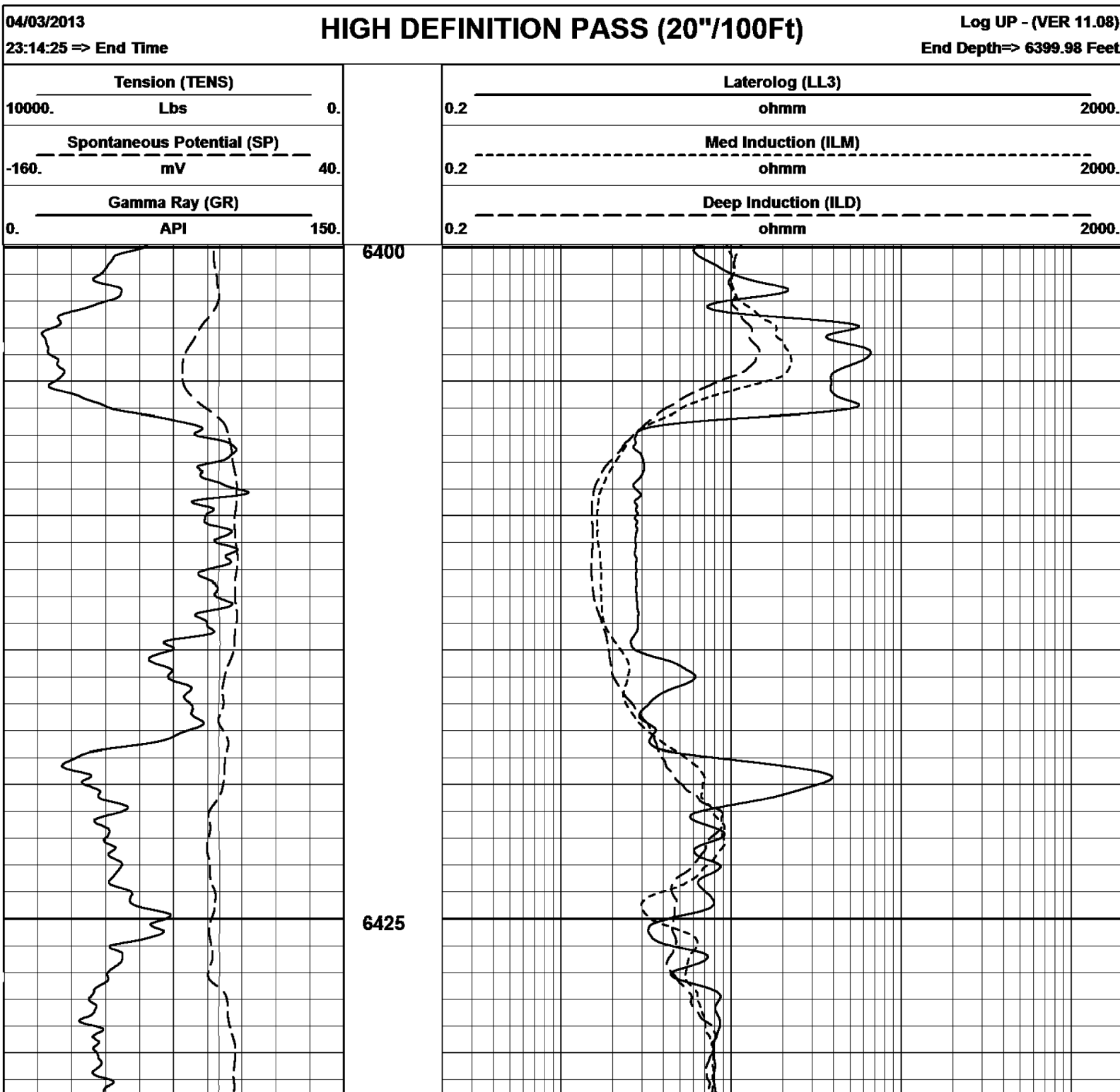
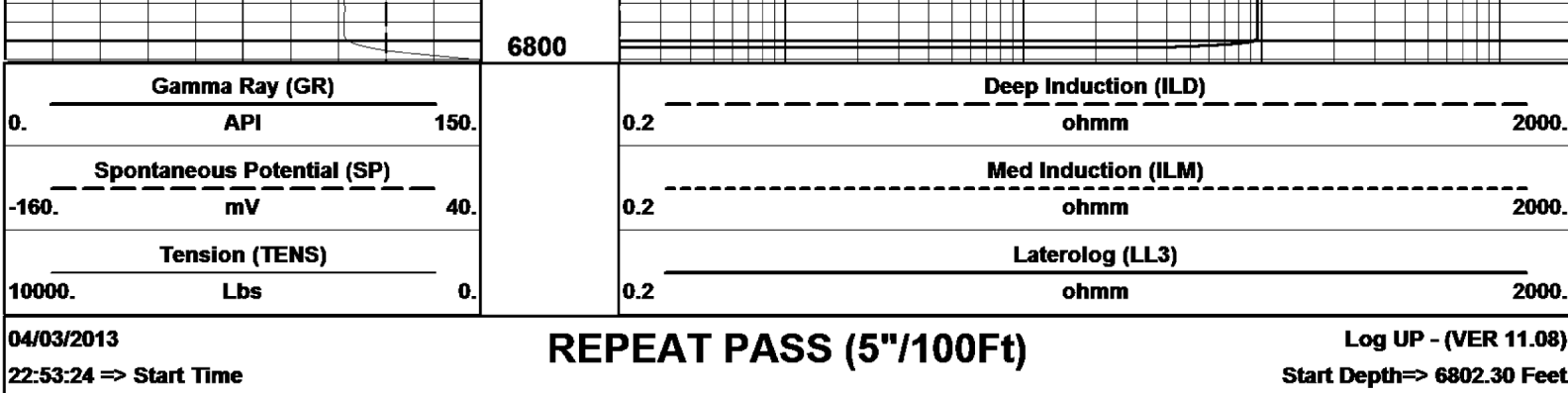


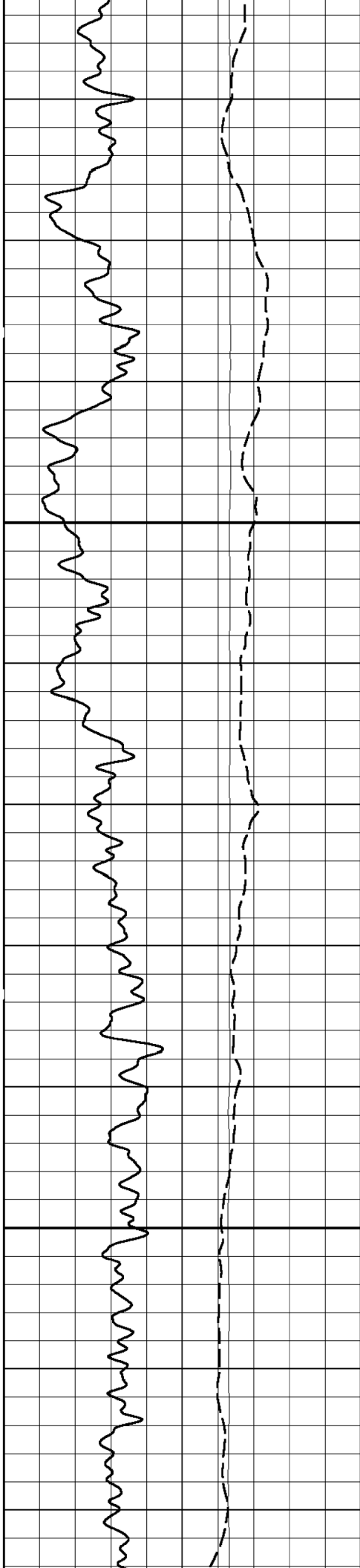






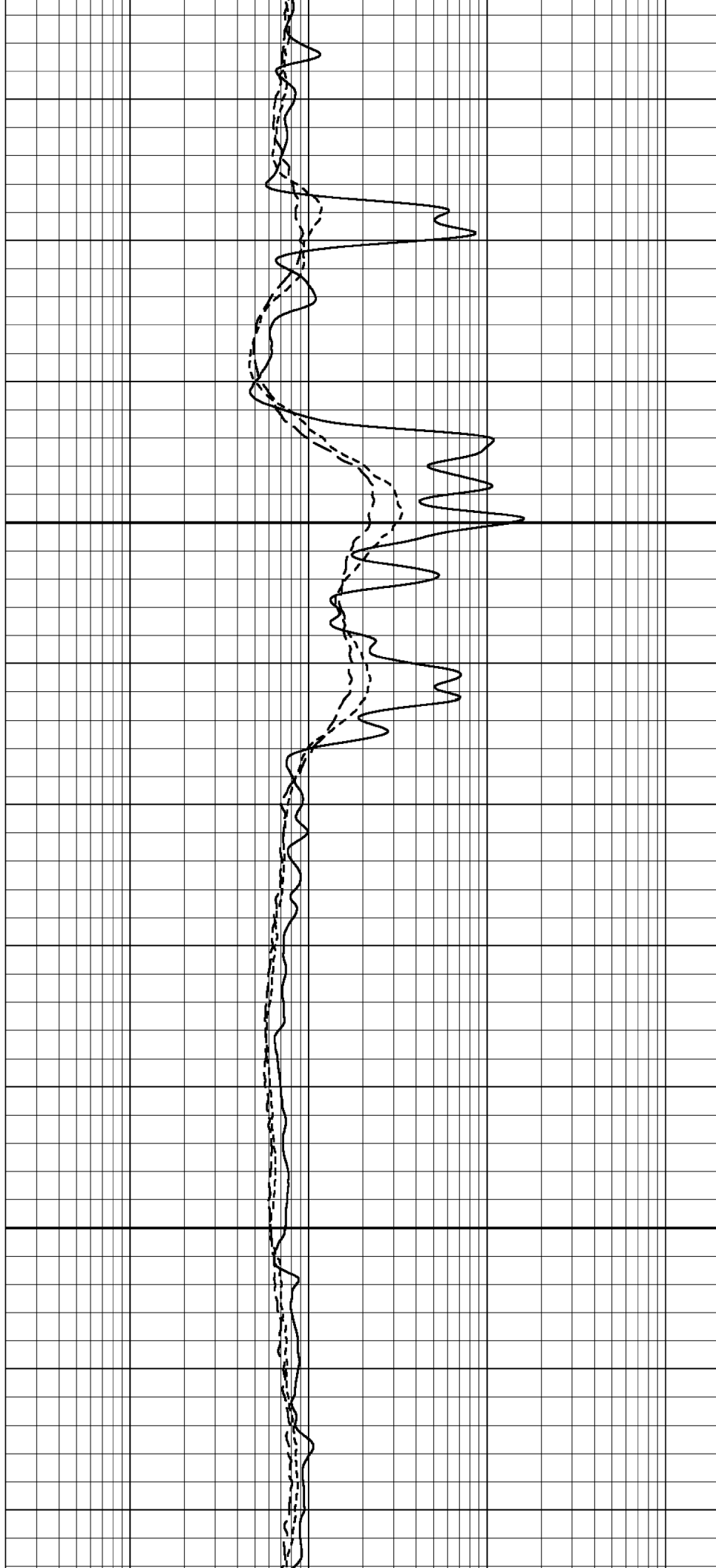


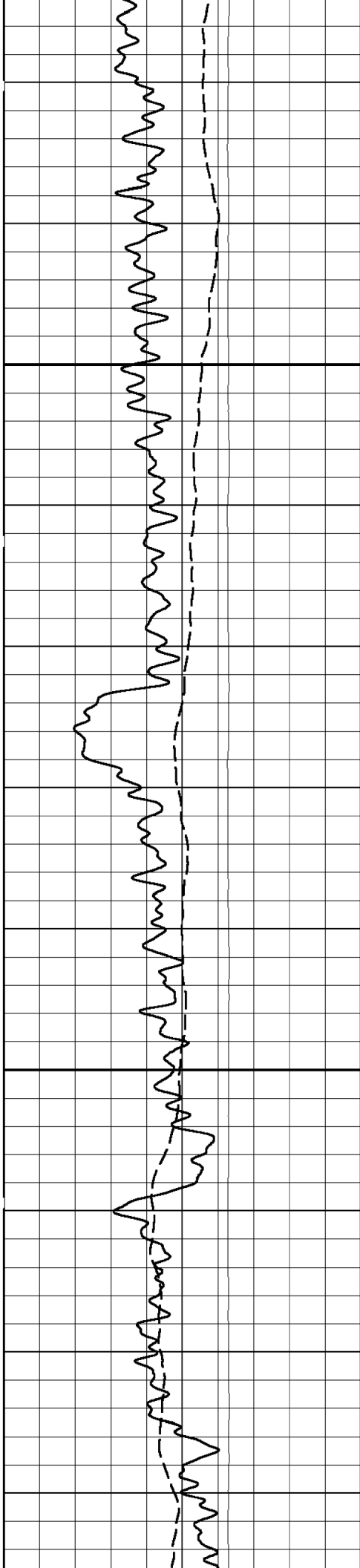




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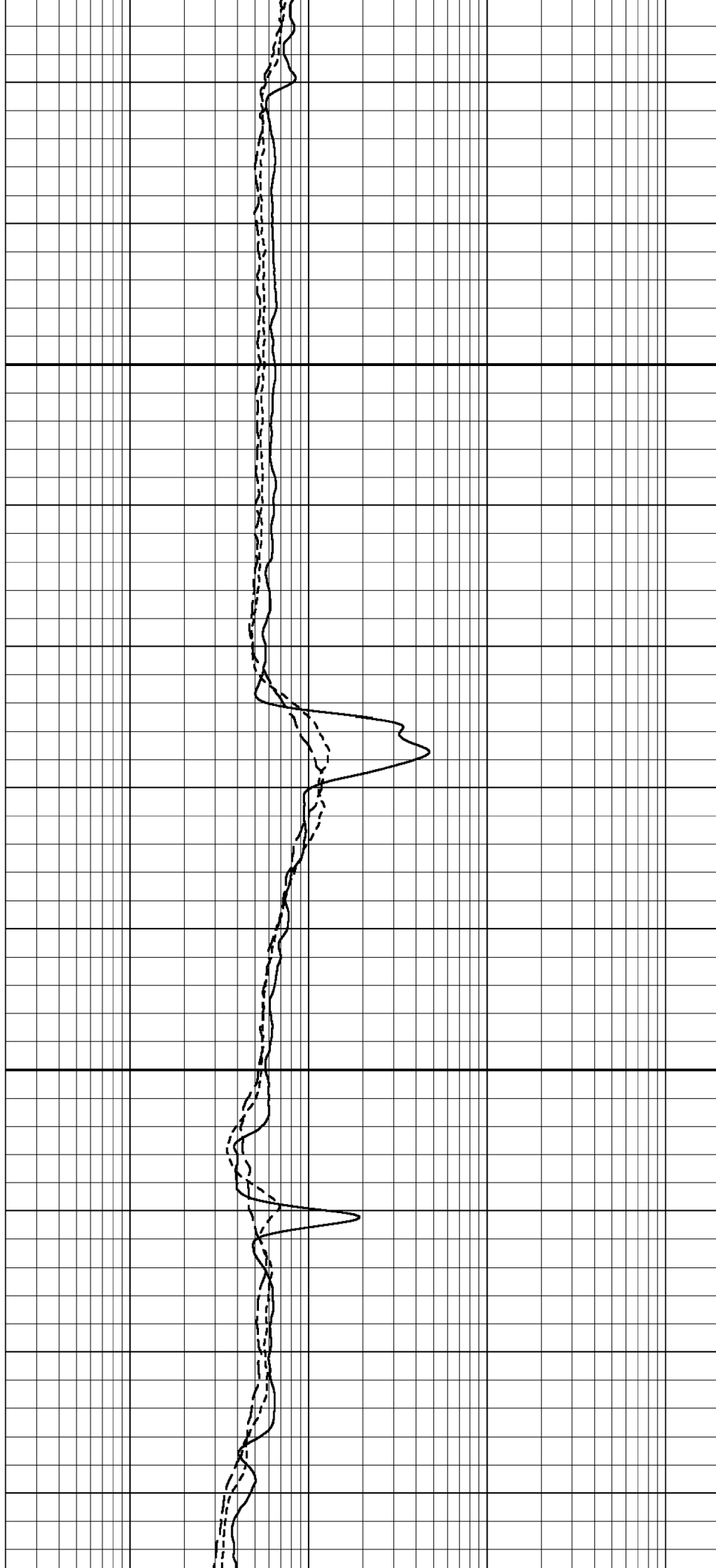
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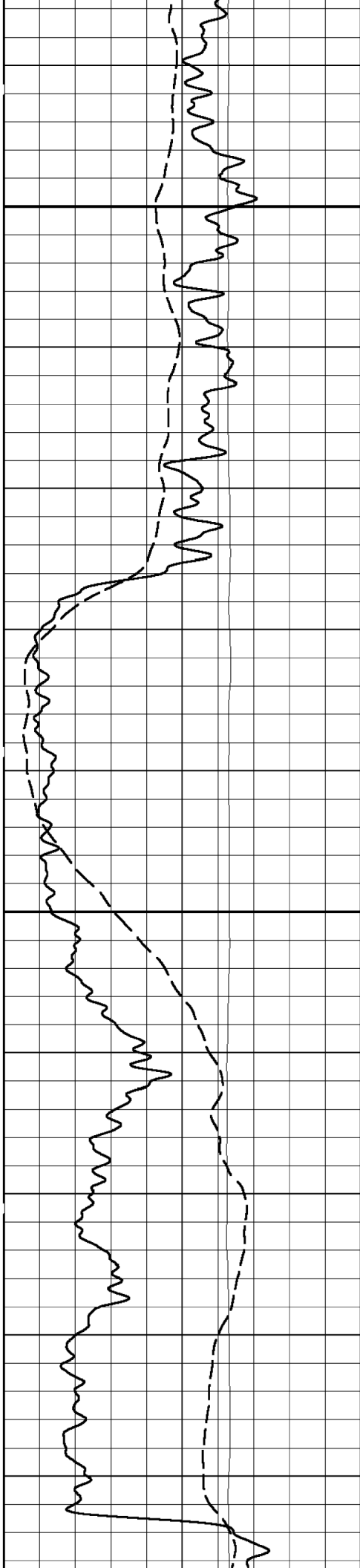




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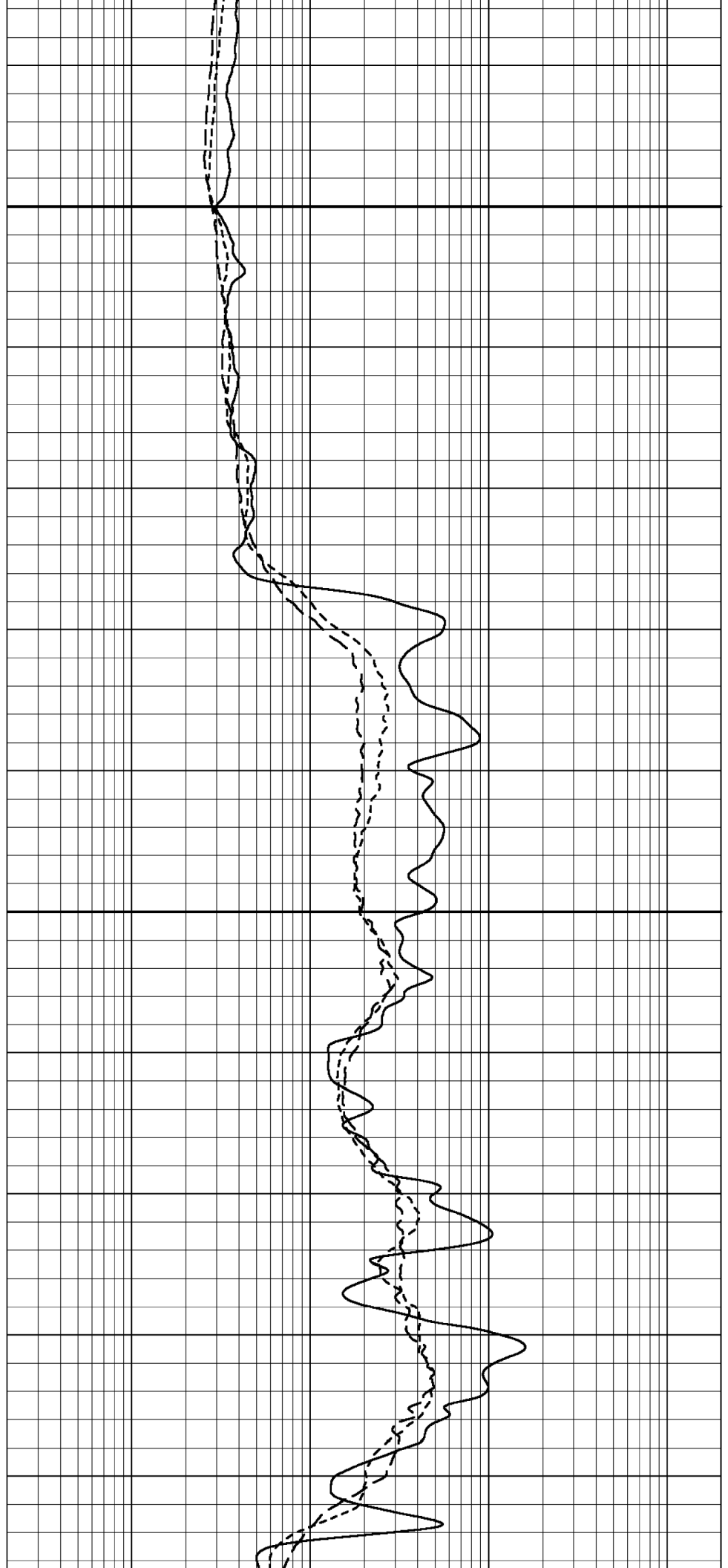
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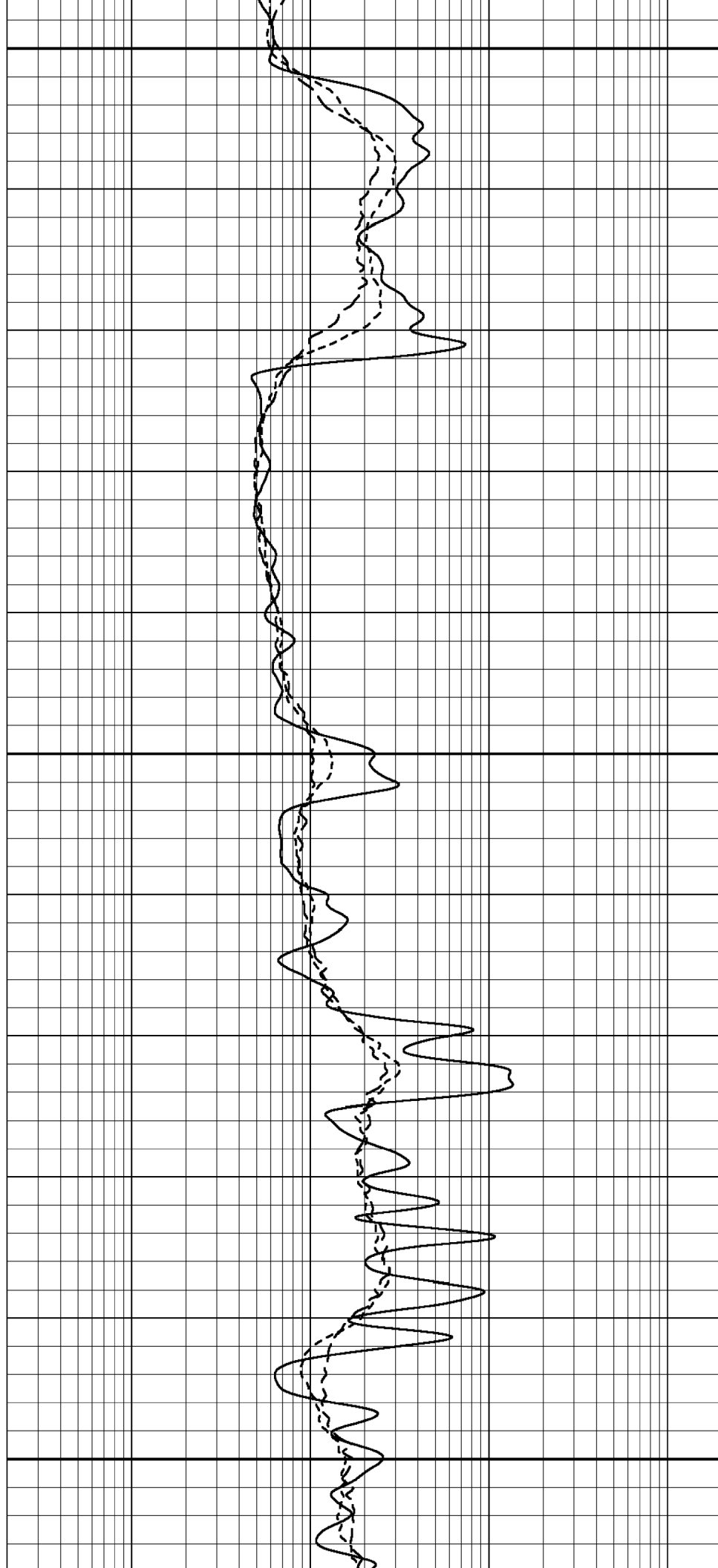
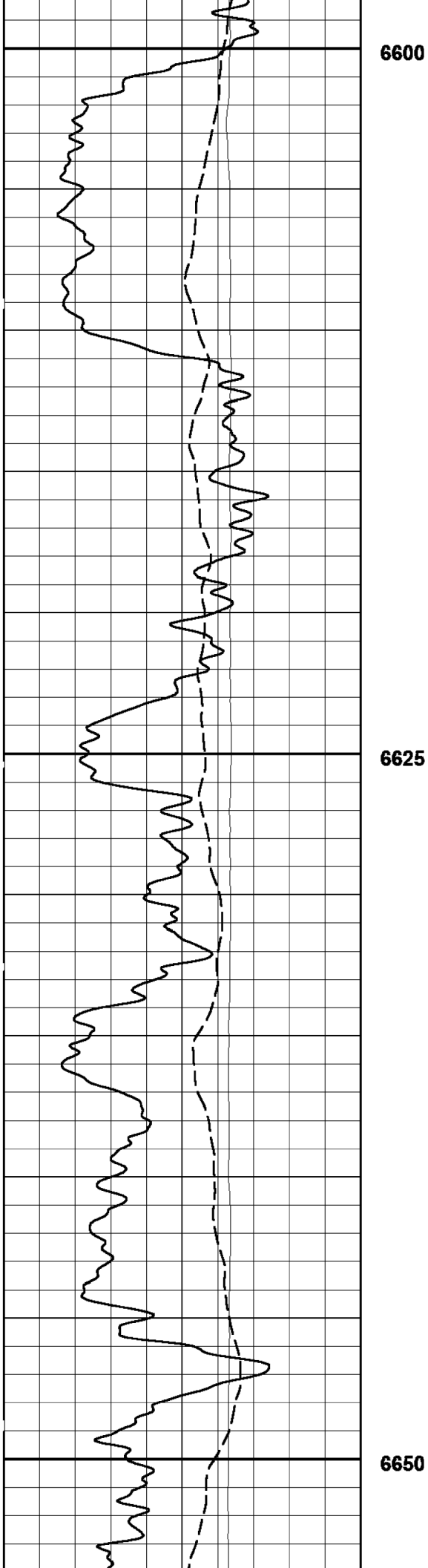


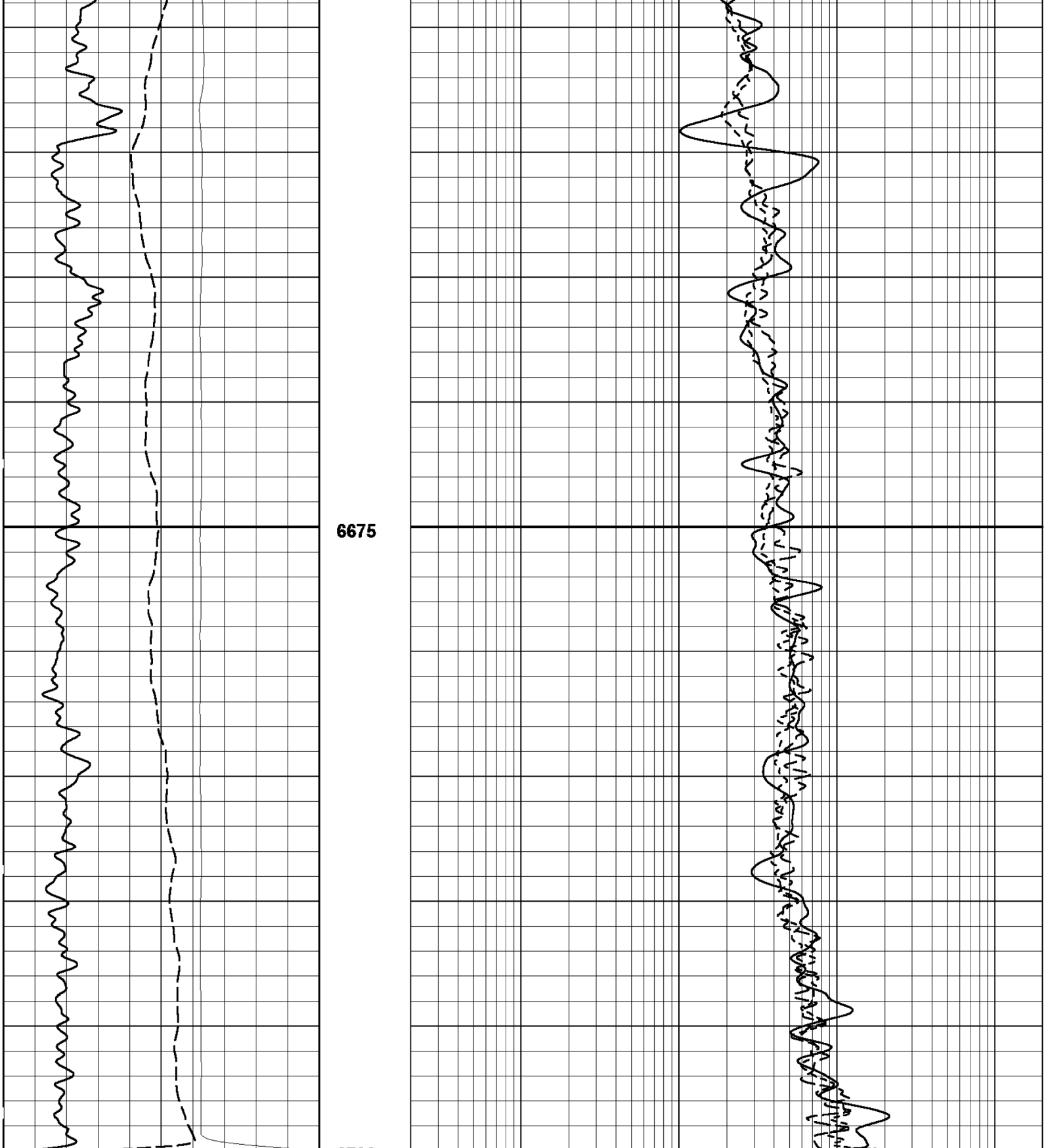


6550

6575







6675

Gamma Ray (GR)		Deep Induction (ILD)	
0.	150.	0.2	2000.
API		ohmm	
Spontaneous Potential (SP)		Med Induction (ILM)	
-160.	40.	0.2	2000.
mV		ohmm	
Tension (TENS)		Laterolog (LL3)	
10000.	0.	0.2	2000.
Lbs		ohmm	

Induction Resistivity / Conductivity Calibrations

TOOL TYPE
SERIAL NUM

Slim Hole Induction
RD1009

LOOP TYPE
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	3.914	634.365	M/D/Y> 3/8/2013	H:M:S> 11:4:12
MED INDUCTION	0.000		462.500	501.895	4.907	735.617	M/D/Y> 3/8/2013	H:M:S> 11:4:15
SHALLOW LATERLOG	CALIBRATOR LOW(ohm)		CALIBRATOR HI(ohm)		LOW(mV)	HI(mV)		
	2.000		500.000		16.196	2561.370	M/D/Y> 3/8/2013	H:M:S> 11:4:17

WELL SITE CALIBRATIONS

GAMMA RAY CALIBRATION

SERIAL NUM
BLANKET NUM

RG3011
1A

MASTER CALIBRATIONS

	BackGrnd	CalVal: 135.000 API	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	60.734 - raw	435.140 - raw	0.361 - gain 0.000 - off	M/D/Y> 2/7/2013	H:M:S> 14:15:20

Company

MIDWESTERN EXPLORATION, LLC.

Well

GOOCH #1-8

Field

GOOCH

County

STEVENS

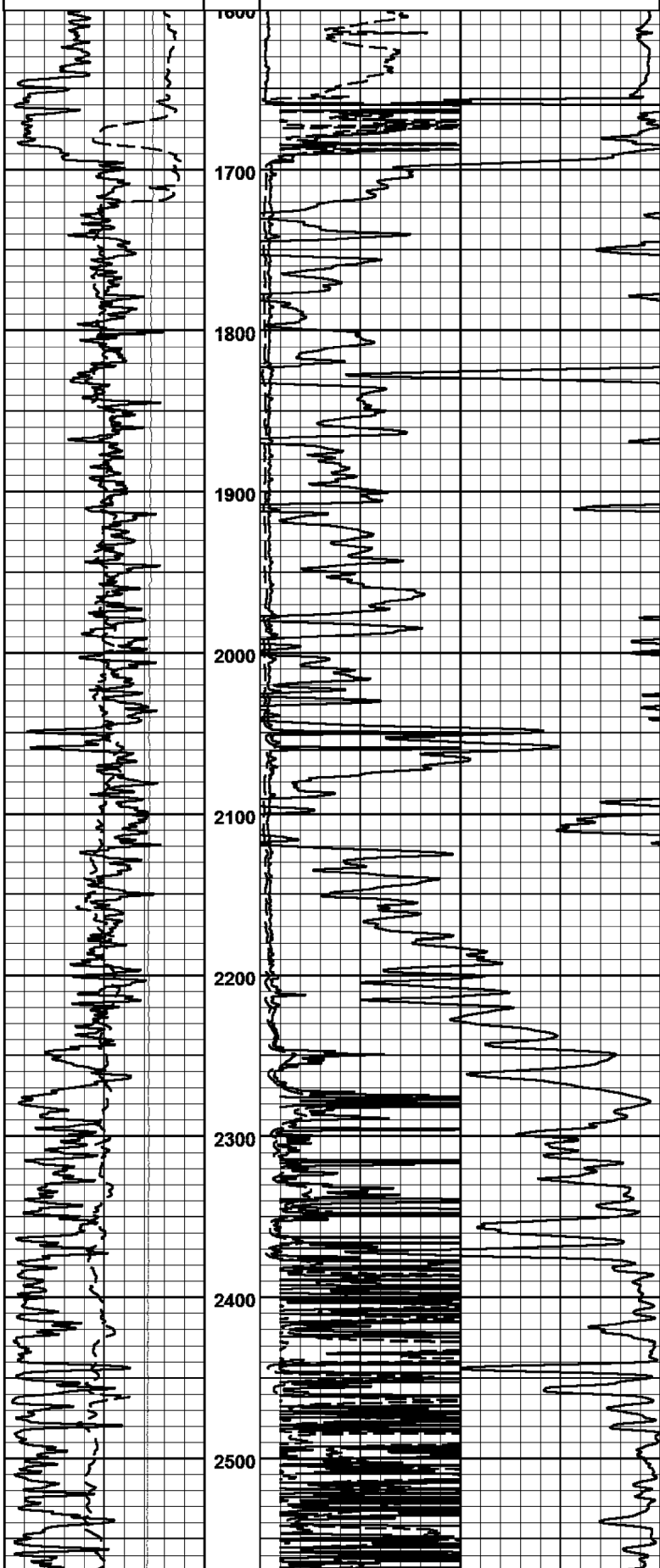
State

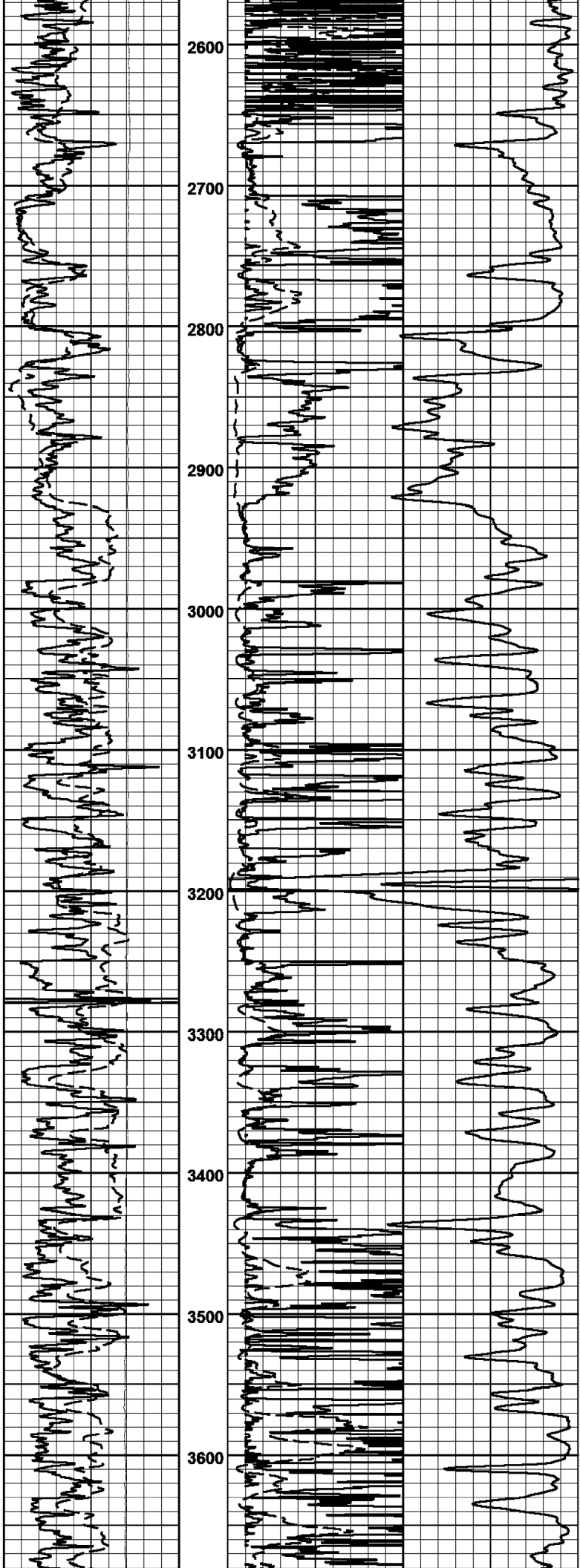
KANSAS

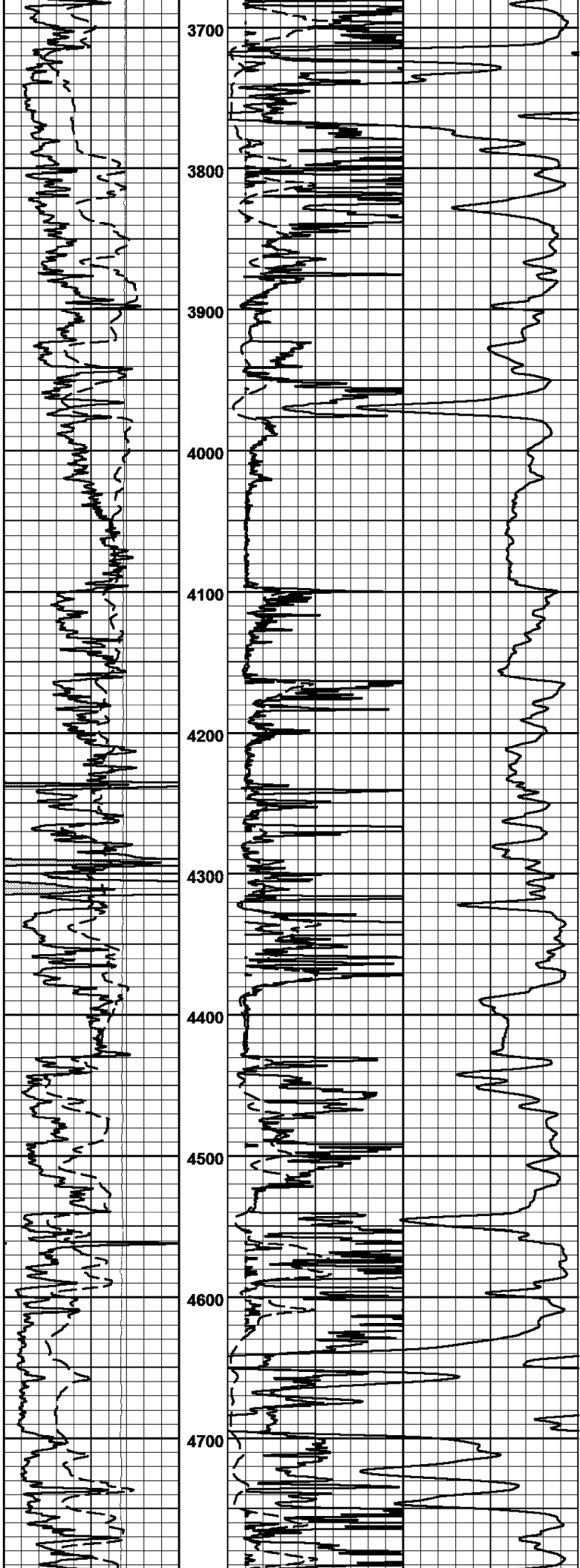
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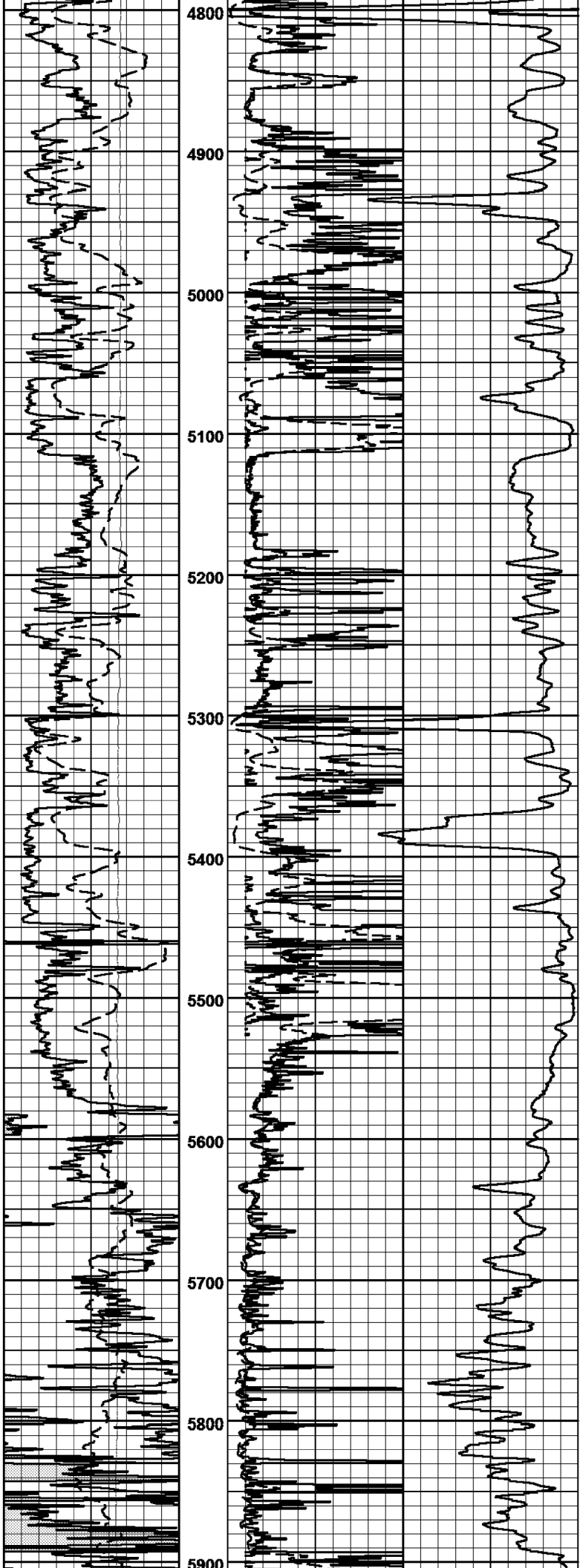
DUAL INDUCTION
LATEROLOG - SP
GAMMA RAY

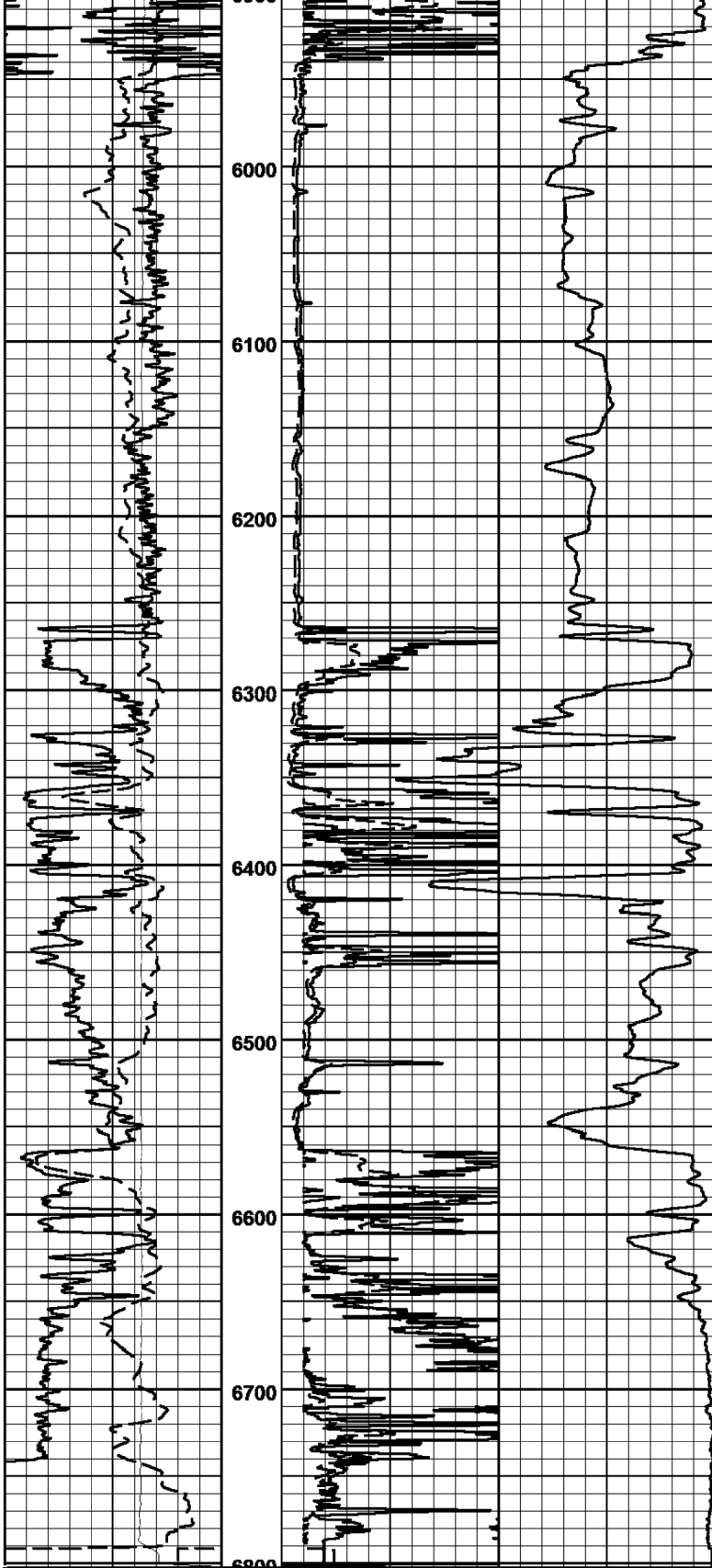
Tension (TENS)			Laterolog (LL3)		
10000.	Lbs	0.	0.	ohmm	50.
ontaneous Potential (SP)			Deep Induction (ILD)		
-160.	mV	40.	0.	ohmm	50.
Gamma Ray (GR)			Deep Induction (CILD)		
0.	API	150.	1000.	mmhos	0.











Gamma Ray (GR)		Deep Induction (CILD)	
0.	API 150.	1000.	mmhos 0.
Spontaneous Potential (SP)		Deep Induction (ILD)	
-160.	mV 40.	0.	ohmm 50.
Tension (TENS)		Laterolog (LL3)	
10000.	Lbs 0.	0.	ohmm 50.
04/03/2013 MAIN PASS (1"/100FT) Log UP - (VER 11.08)			
23:19:59 => Start Time		Start Depth=> 6802.00 Feet	



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RECON
Petrotechnologies
Ltd.