Company	VAUGHN GOOD OIL COMPANY
Well	NUSSER #3-16
Field	S.E. HARDTNER
County	BARBER
State	KANSAS

RECON

DUAL INDUCTION
LATEROLOG - SP
GAMMA RAY

SEC	TWP	RGE
16	35N	12W

Location. 990' FSL & 2100' FWL SW
SURF. SAME API#. 015-007-24016

Permanent Datum . Ground Level Elev 1389
Log Measured From . Kelly Bushing
Drilling Measured From Kelly Bushing

OTHER SERVICES:
LDT CNL
XY CALIPER MEL

ELEVATIONS K.B. 1402
G.L. 1389
D.F. 1400

Date		07-MAY-2013					
Run No.		ONE					
TD Driller		5600	ft.			ft.	
TD RECON		5592	ft.			ft.	
Bot Logged Interval		5591	ft.			ft.	
Top Logged Interval		351	ft.			ft.	
Casing Depth Driller		8 5/8	in.	@ 357		in.	@
Casing Depth RECON		8 5/8	in.	@ 351		in.	@
Bit Size		7 7/8	in.			in.	
Drilling Fluid Type		CHEMICAL					
Density	Viscosity	9.4 ppg		65 sec/qt			
Fluid Loss	PH	10.6 ml/30min		10.5 strip			
Source Of Sample		Flowline					
RM @ Measured Temp		1.49	Ohmm	@ 75		Ohmm	@
RMF @ Measured Temp		1.12	Ohmm	@ 75		Ohmm	@
RMC @ Measured Temp		1.86	Ohmm	@ 75		Ohmm	@
RM @ MRT		0.86	Ohmm	@ 135		Ohmm	@
Max Recorded Temp		135	DegF			DegF	
Time Drilling Stopped		06-MAY-2013		22:30			
Time Circulation Stopped		07-MAY-2013		03:00			
Time Logger On Bottom		07-MAY-2013		08:08			
Unit Num	Location	S407		OKLAHOMA CITY, OK.			
Recorded By		H. GARCIA					
Witnessed By		MR. V. GOOD					

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# MENDENHALL DRLG. #3

GENERAL REMARKS SECTION

FIRST RUN IN THE HOLE
CNL AND LDT LOGGED IN A LIMESTONE MATRIX
TOP MARK - 342, BOTTOM MARK - 5545.9
CNL/LDT LOGGED MATRIX: 2.71 g/cc.

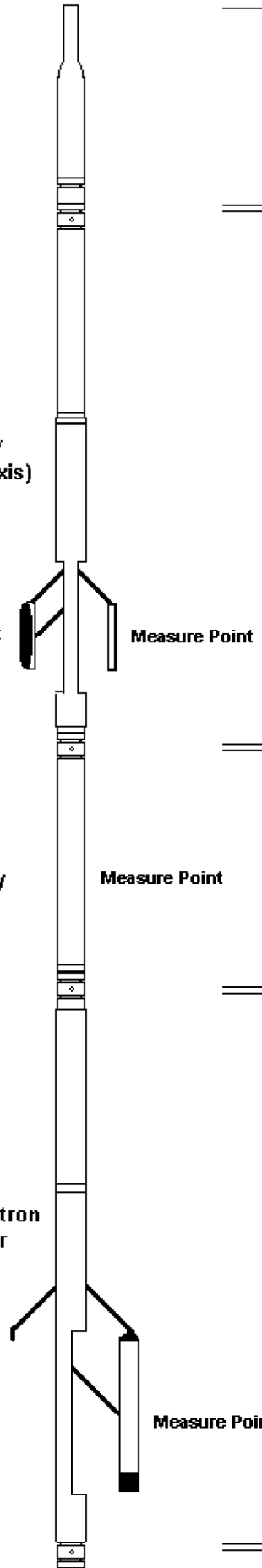
CHLORIDES: 7000 ppm
LCM: 8 lb/bbl

AHV CALCULATED ON 5.5" PROD. CASING

THANK YOU FOR USING RECON PETROTECHNOLOGIES LTD.

CREW: J. ROSE, C. PENNARTZ

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



Cable Head

Cable head Dimensions
3.5" x 1.48'

Tool Zero Offset
56.40'

Micro-Log /
Two Arm (X-Axis)
Caliper
MNOR
MINV
CALM

Micro-Log /
Two Arm (X-Axis) Caliper
Dimensions
3.86" x 8.66'

Measure Point

Measure Point

CALM – 49.34' From Tool Zero
MNOR – 49.34' From Tool Zero
MINV – 49.31' From Tool Zero

Gamma Ray
GR

Measure Point

Gamma Ray Tool
Dimensions
3.5" x 4'

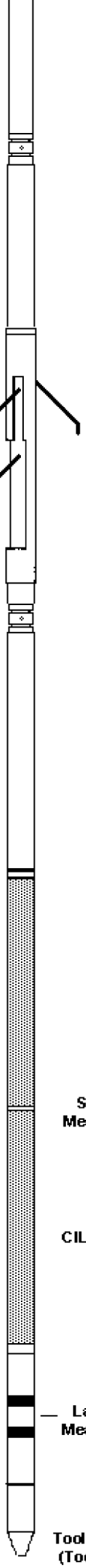
GR - 45.14' From Tool Zero

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

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

Measure Point

CALY - 37.14' From Tool Zero
CNL LS - 36.32' From Tool Zero
CNL SS - 35.73' From Tool Zero



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 Tool Zero

LDT w1 -
LDT w2 -
LDT w3 -
LDT w4 - 22.93 ' From Tool Zero

LDT SS - 22.44 ' From Tool Zero

Dual Induction

SP
ILD
ILM
LL3

Dual Induction Tool
Dimensions
3.62" x 21'

S.P. / CILD
Measure Point

SP - 10.96' From Tool Zero
ILD - 10.96' From Tool Zero

CILM Measure
Point

ILM - 7.22' From Tool Zero

Tool First Reading
Point

Laterolog 3
Measure Point

LL3 - 1.67' From Tool Zero

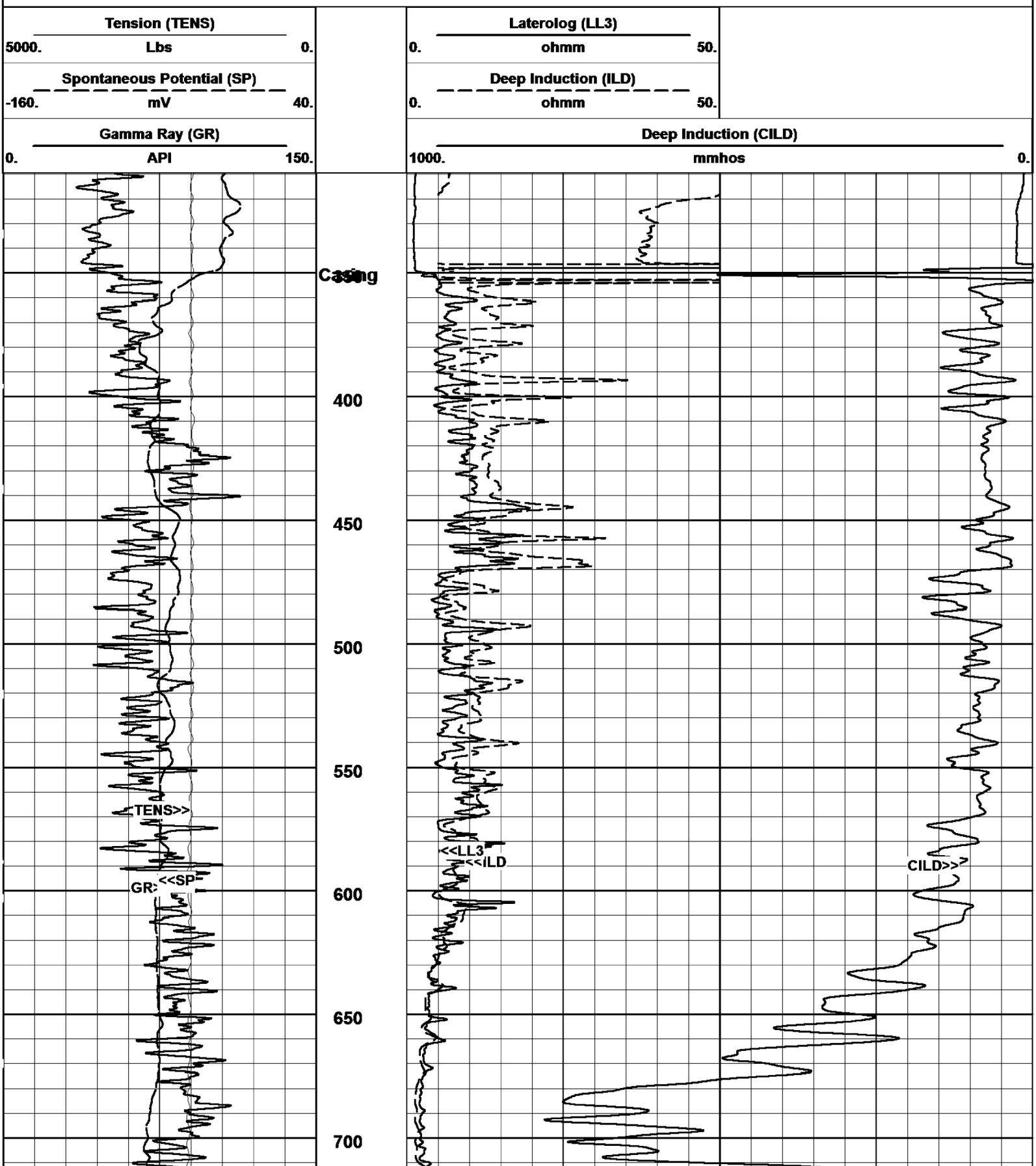
Tool Zero Point
(Tool Bottom)

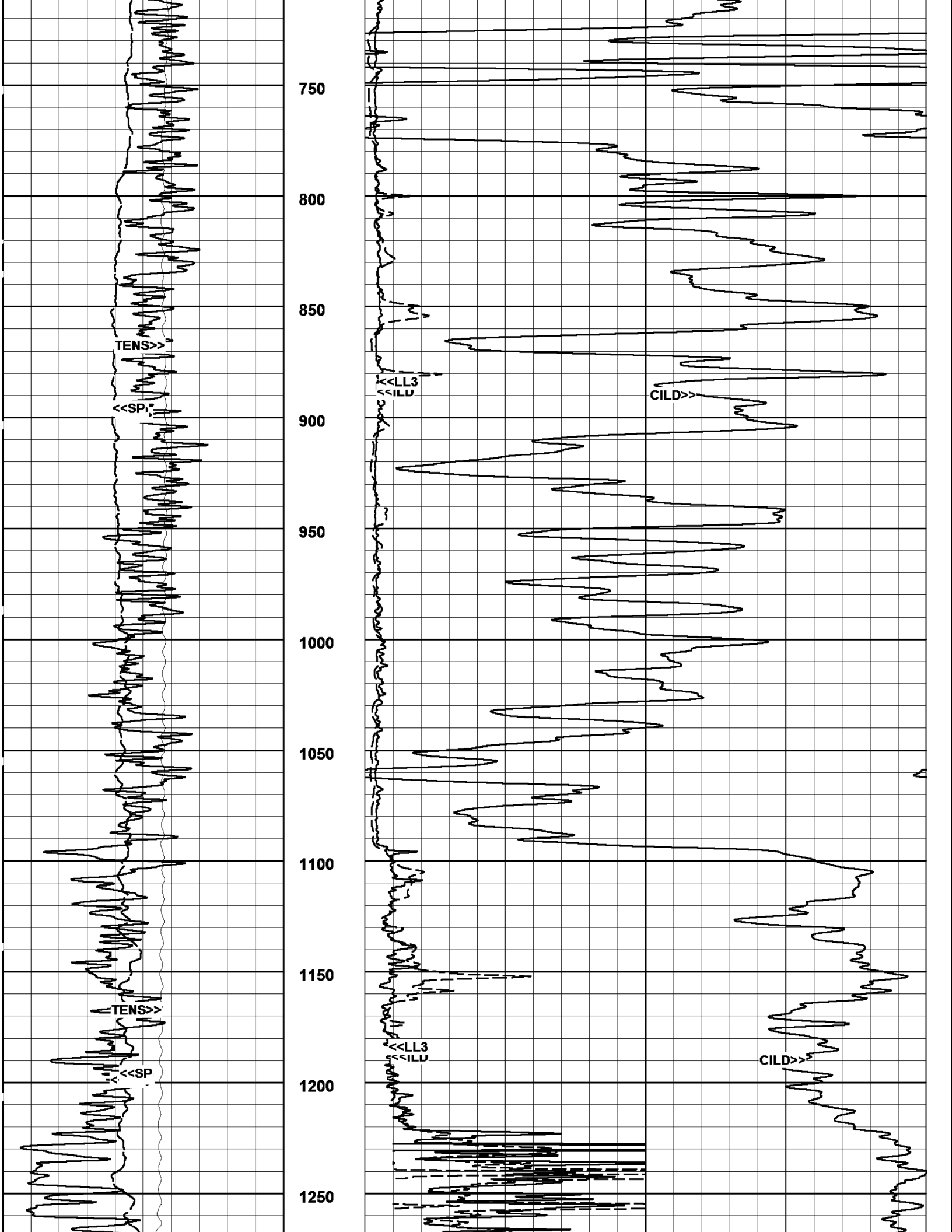
All Measurements are
taken from Tool Zero

05/07/2013
10:00:58 => End Time

MAIN PASS (2"/100Ft)

Log UP - (VER 11.14a)
End Depth=> 310.00 Feet

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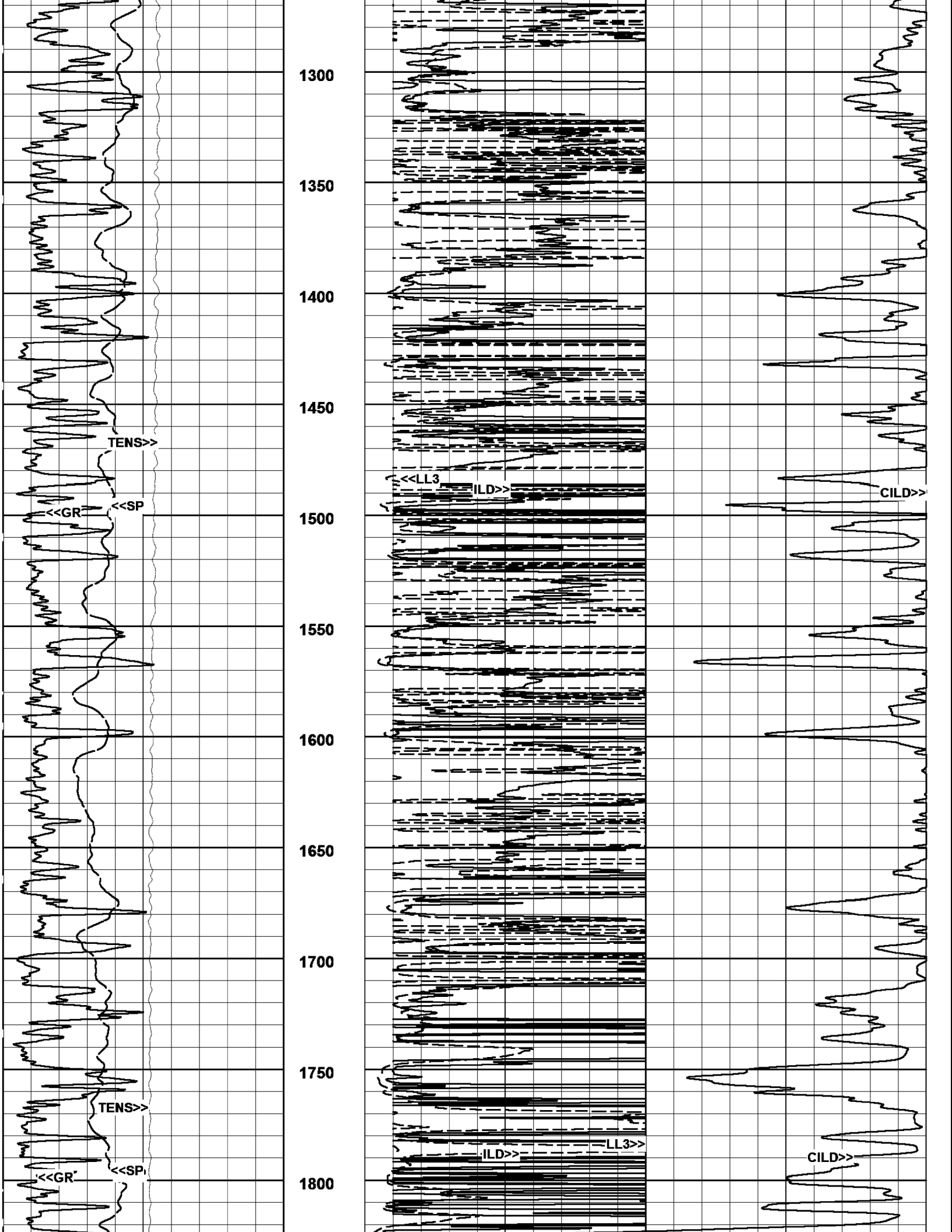
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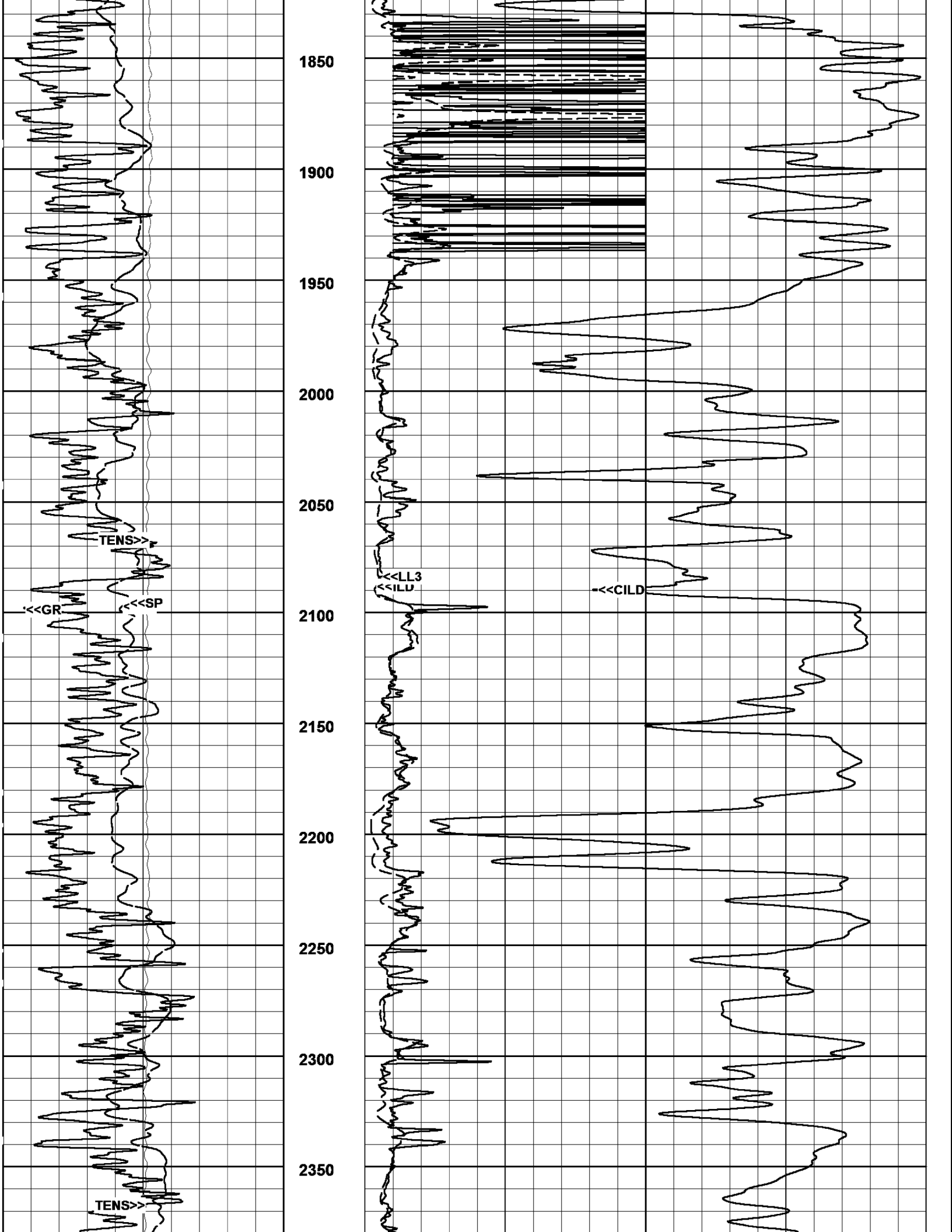
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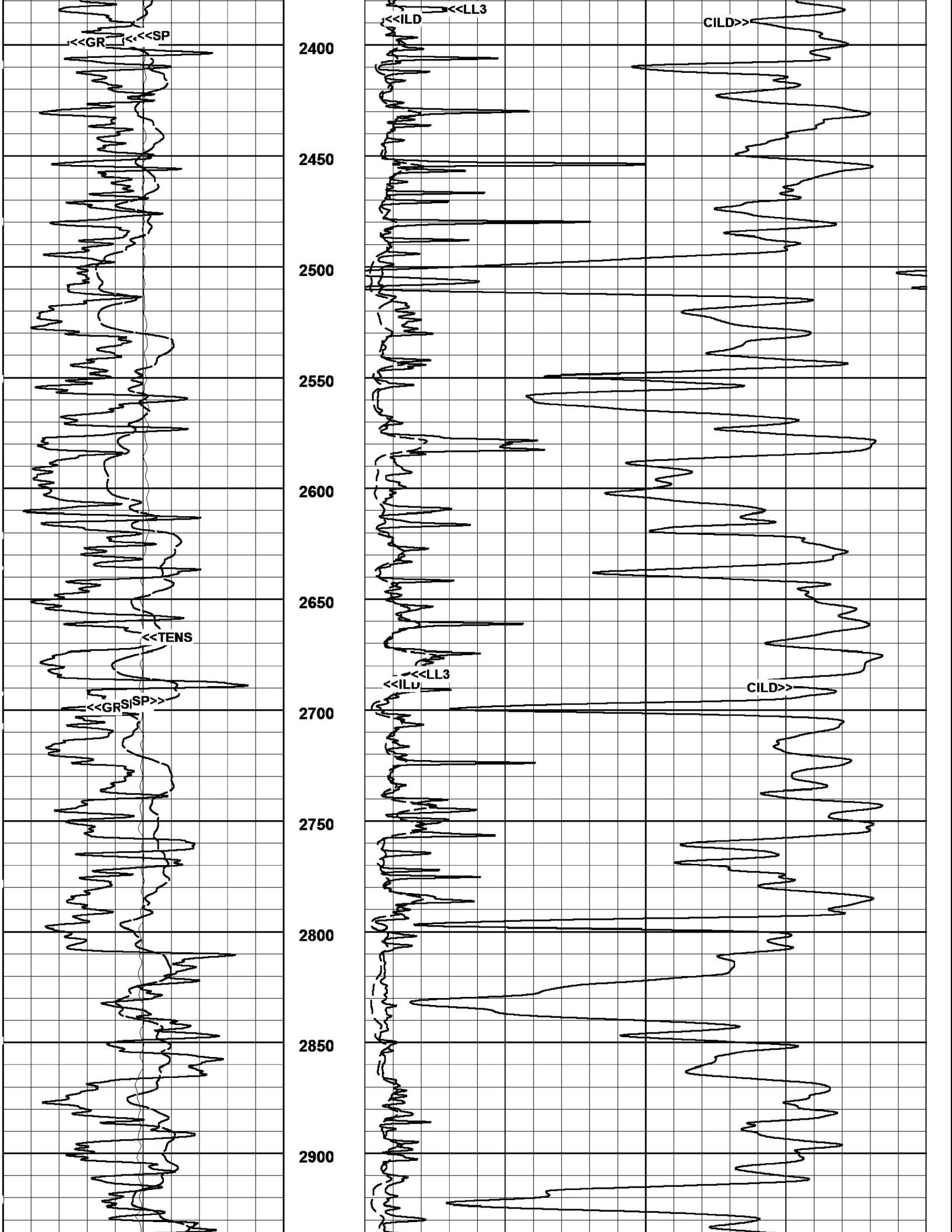
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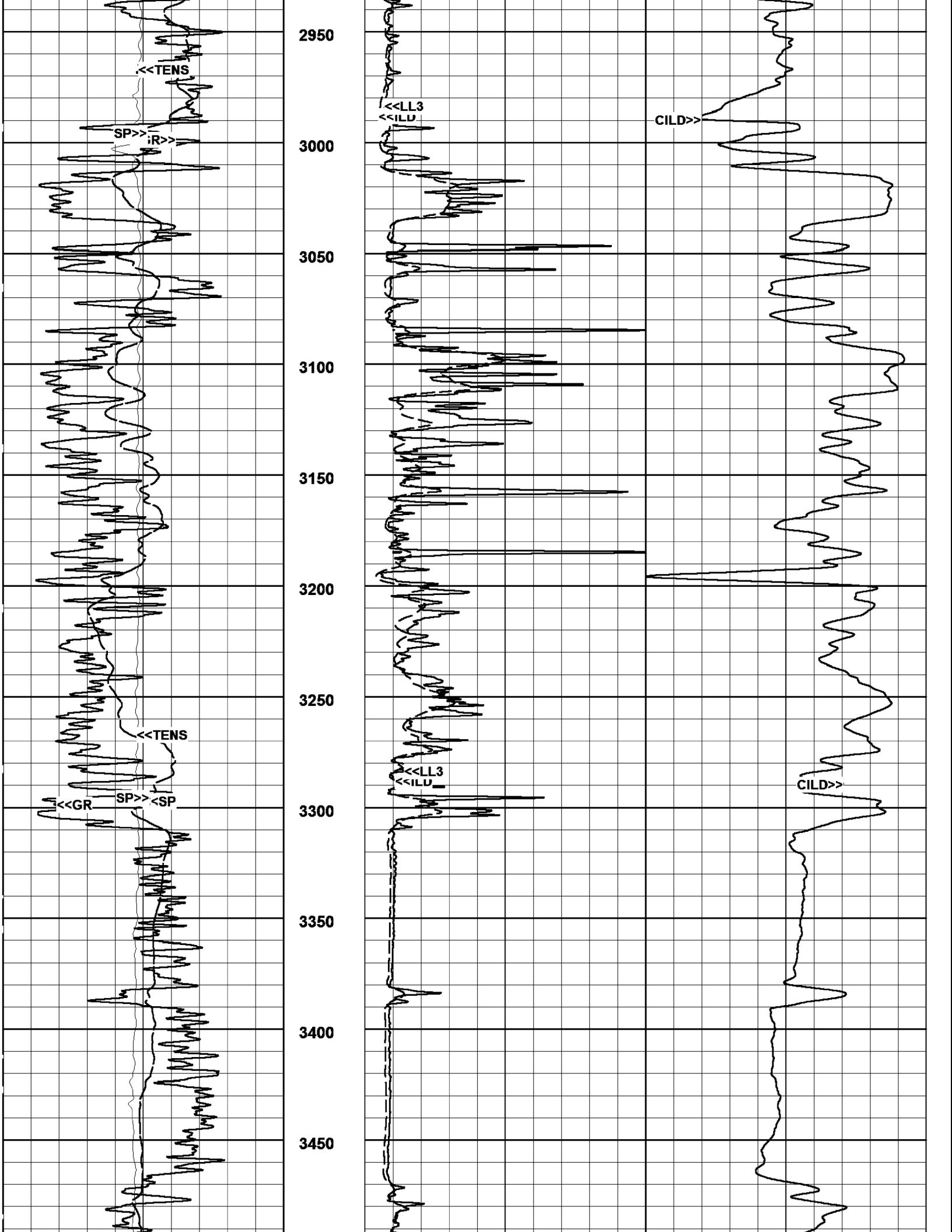
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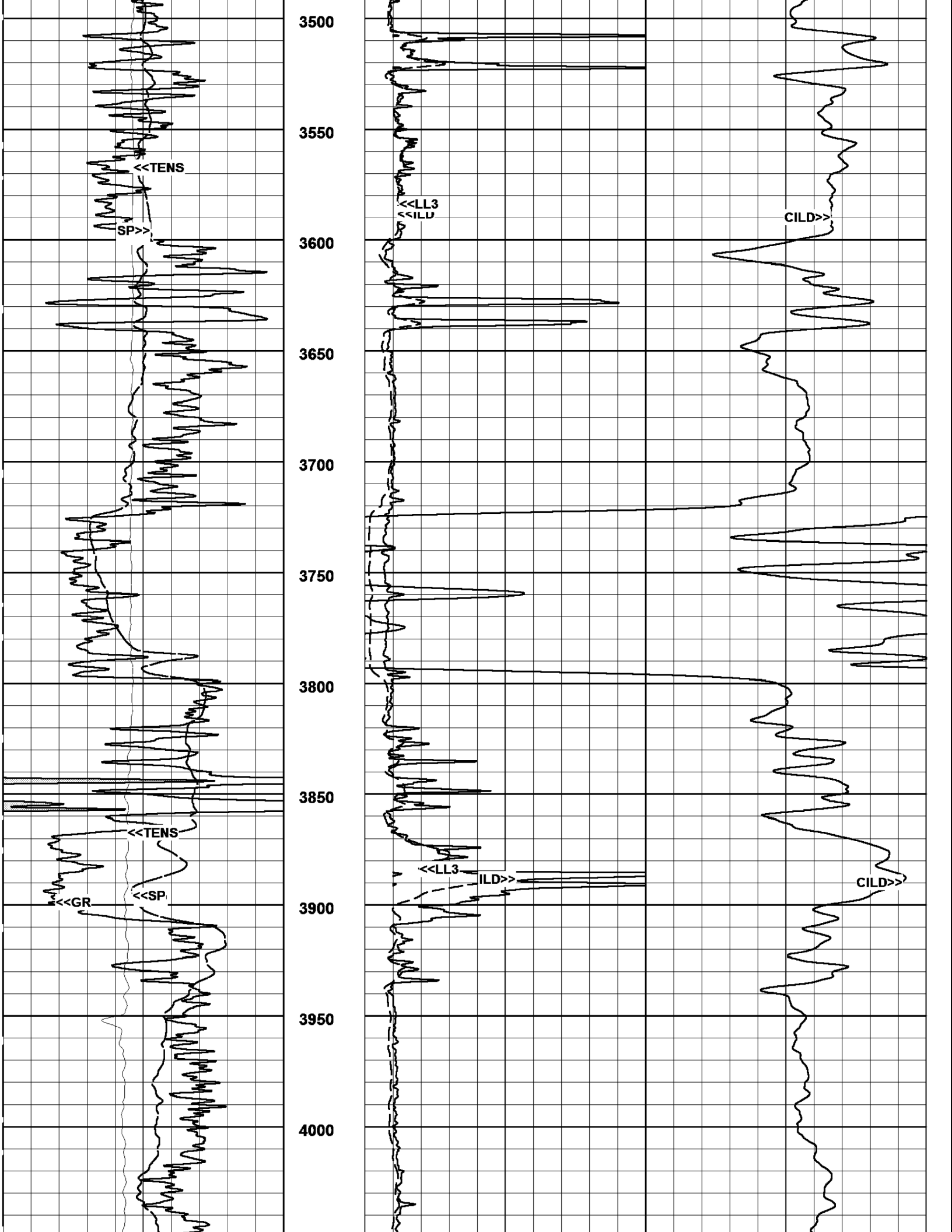
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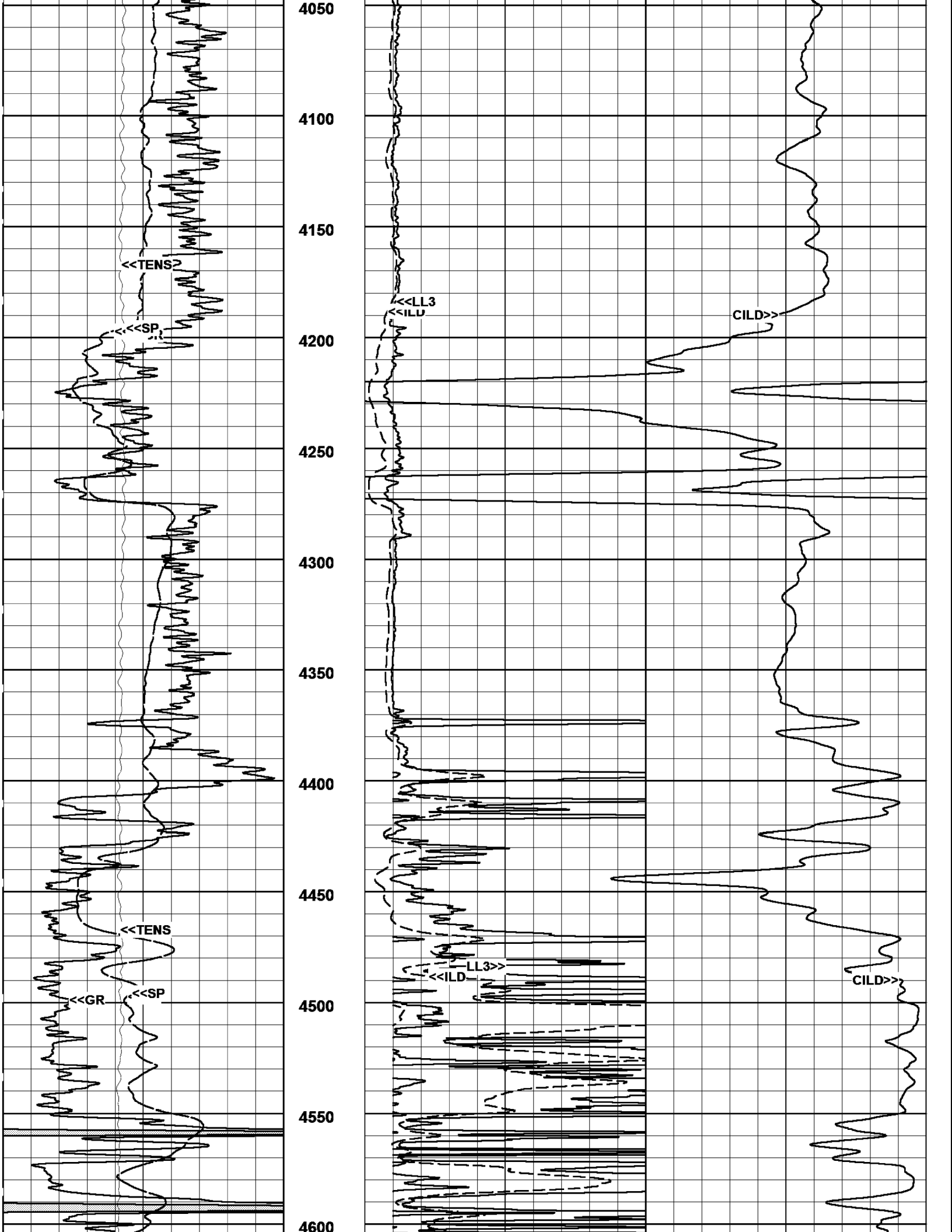
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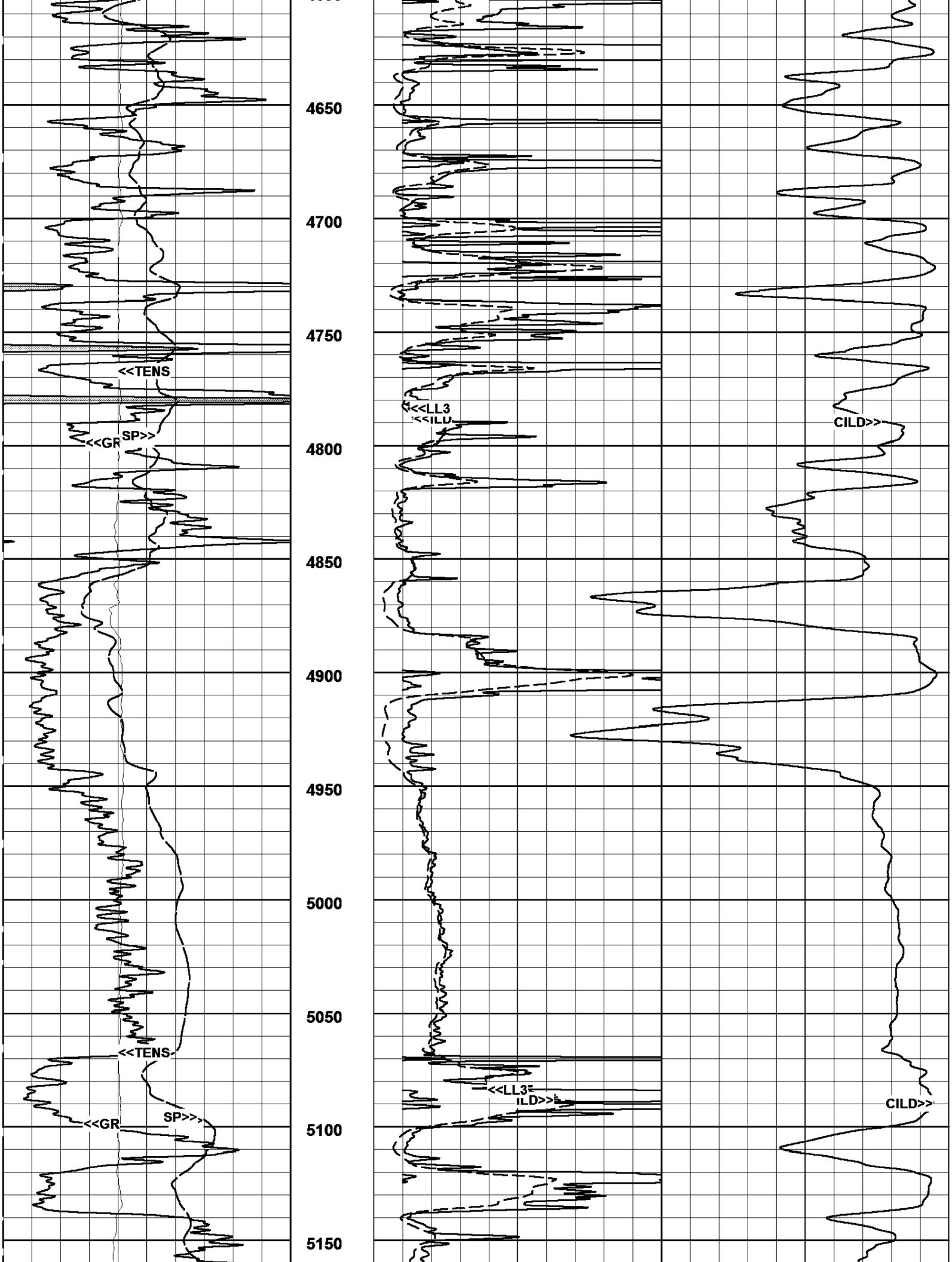
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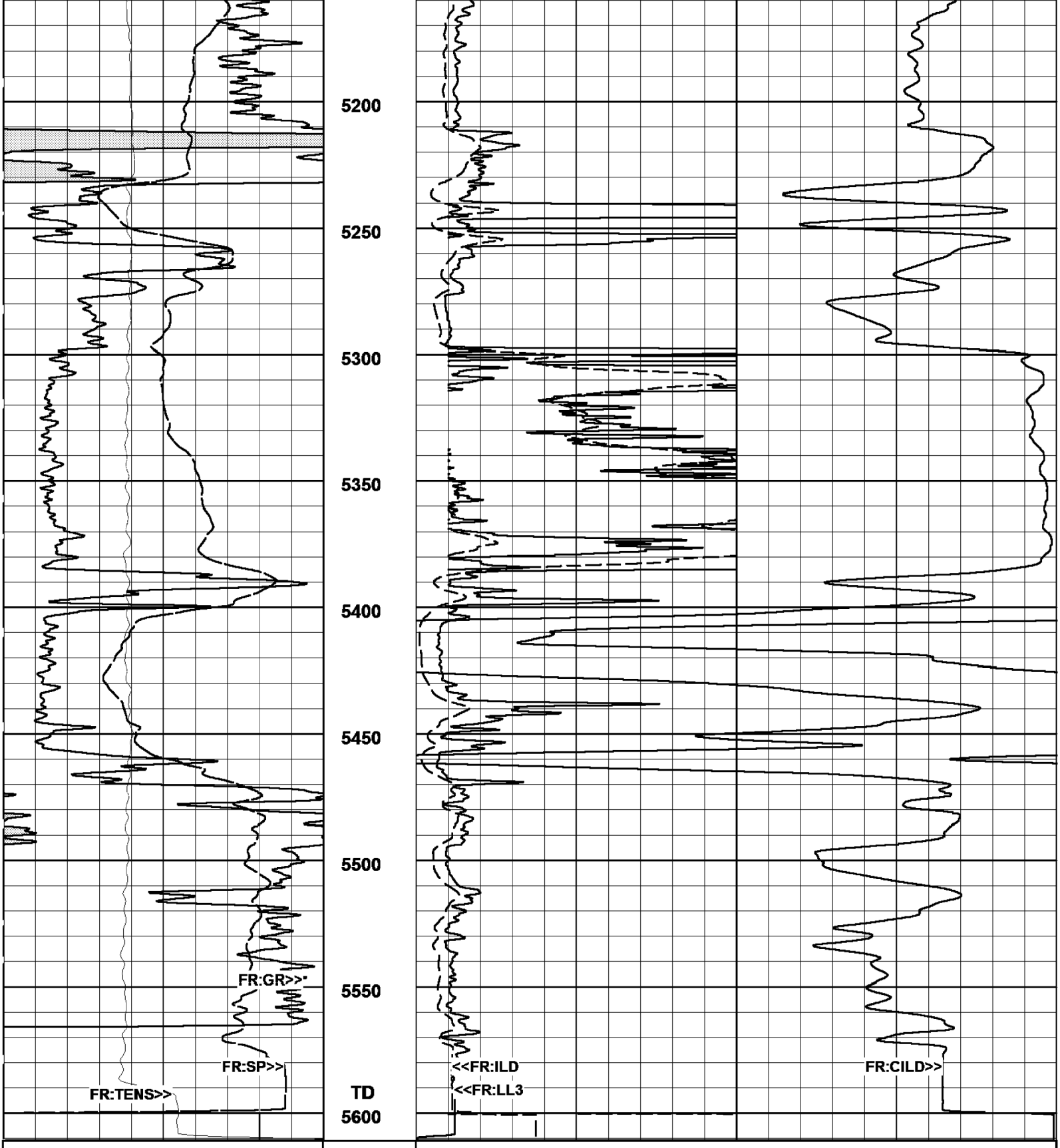


Gamma Ray (GR)		
0.	API	150.
Spontaneous Potential (SP)		
-160.	mV	40.
Tension (TENS)		
5000.	Lbs	0.

Deep Induction (CILD)		
1000.	mmhos	0.
Deep Induction (ILD)		
0.	ohmm	50.
Laterolog (LL3)		
0.	ohmm	50.

05/07/2013
08:31:17 => Start Time

MAIN PASS (2"/100Ft)

Log UP - (VER 11.14a)
Start Depth=> 5610.75 Feet

05/07/2013
10:00:58 => End Time

MAIN PASS (5"/100Ft)

Log UP - (VER 11.14a)
End Depth=> 3999.90 Feet

Tension (TENS)		
5000.	Lbs	0.

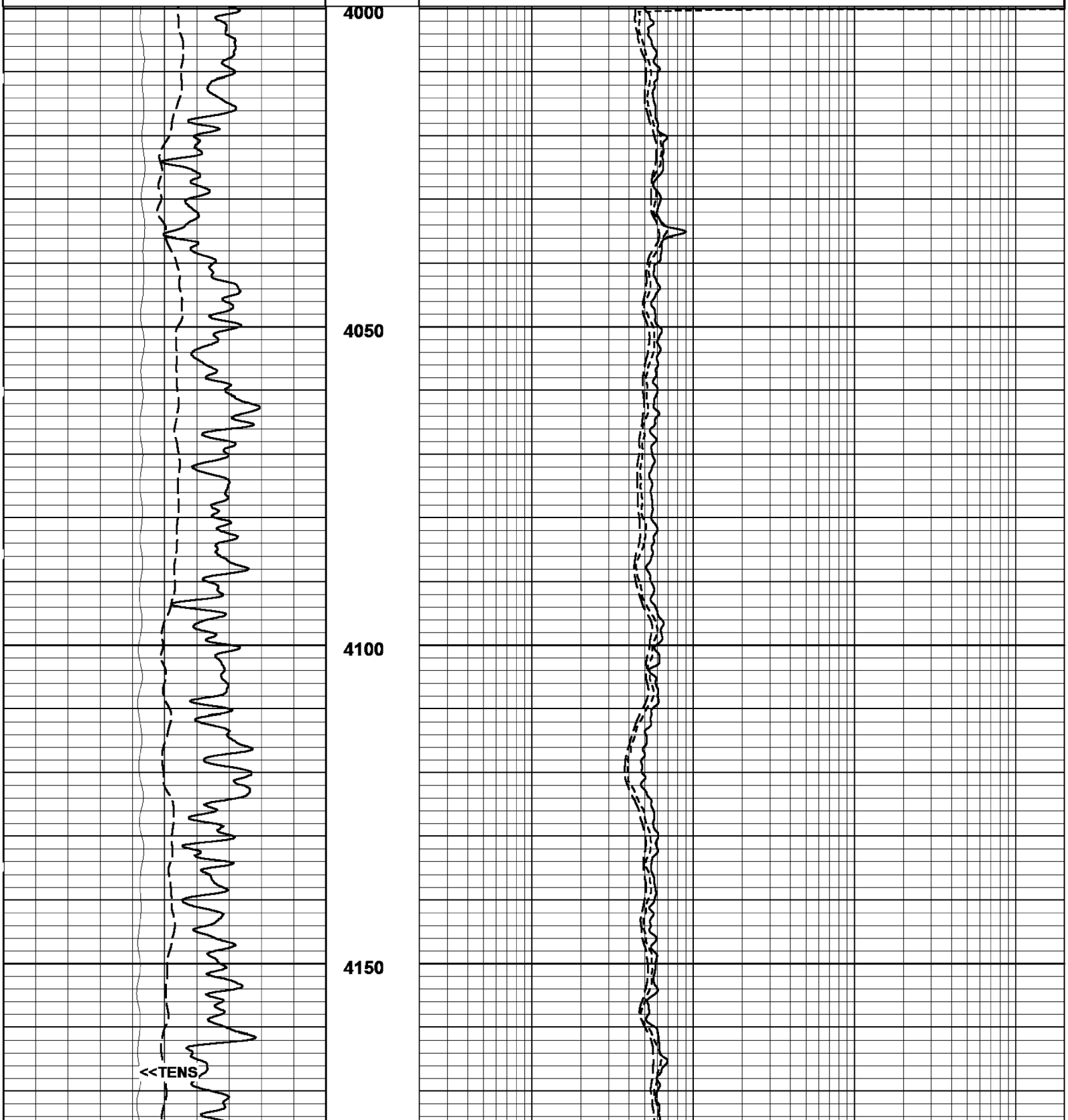
Spontaneous Potential (SP)		
-160.	mV	40.

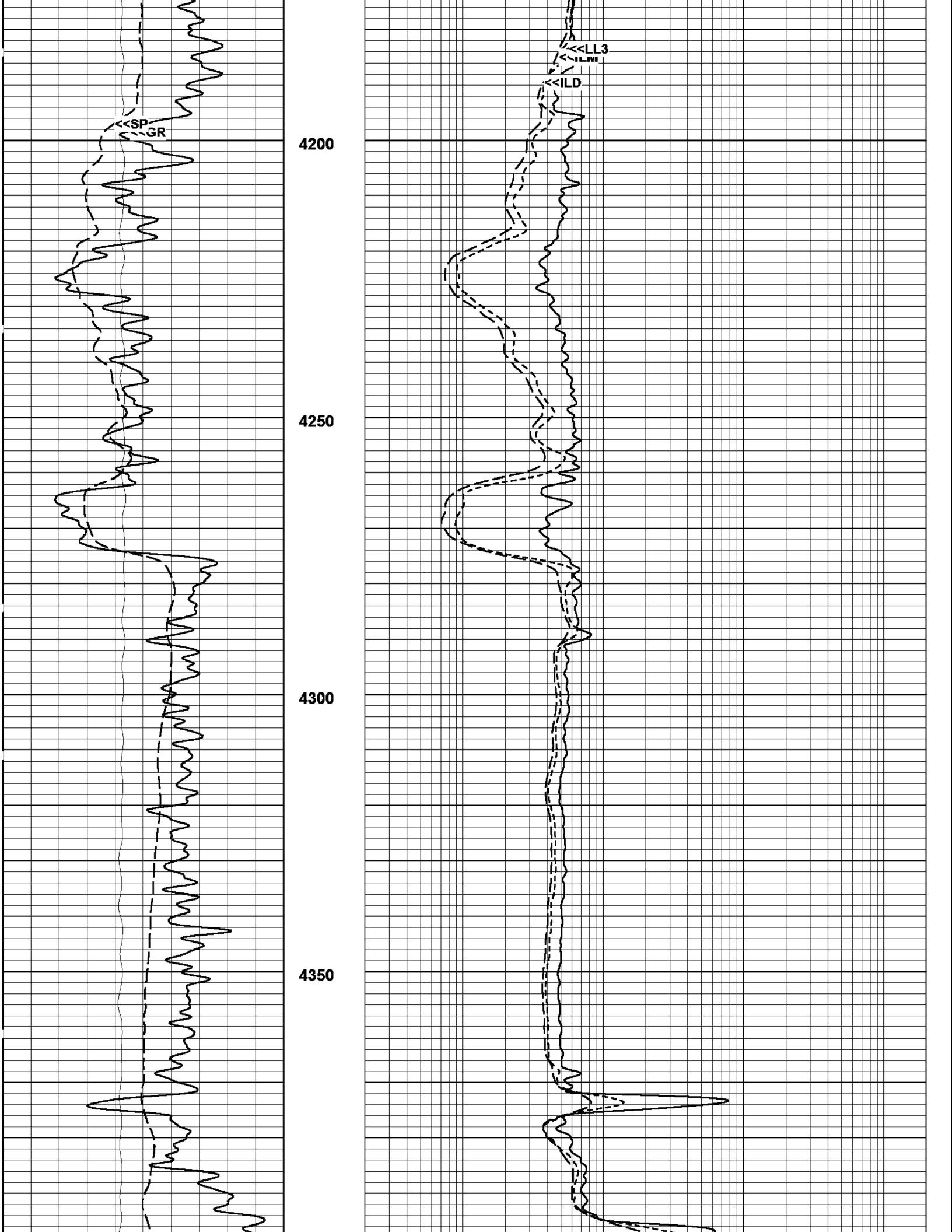
Gamma Ray (GR)		
0.	API	150.

Laterolog (LL3)		
0.2	ohmm	2000.

Med Induction (ILM)		
0.2	ohmm	2000.

Deep Induction (ILD)		
0.2	ohmm	2000.

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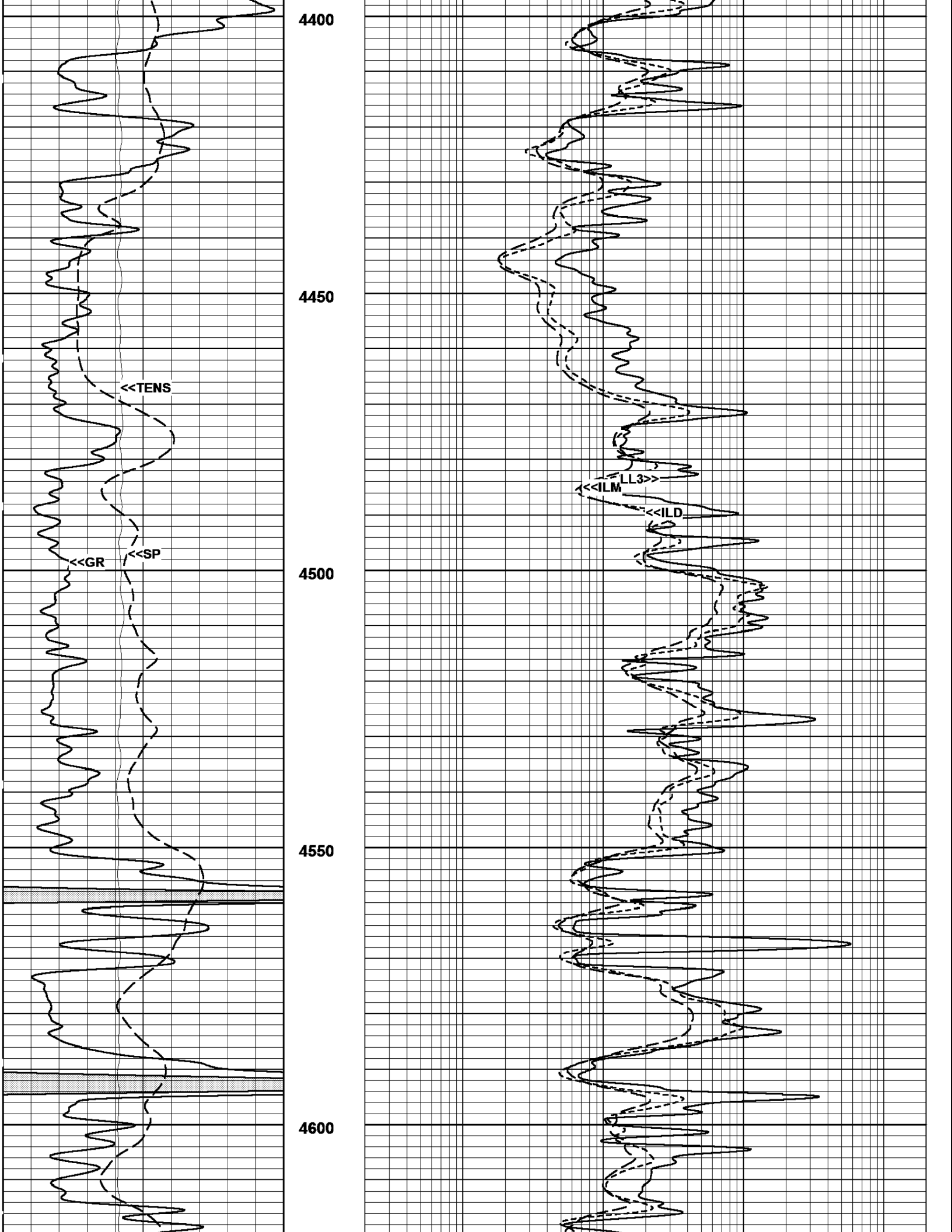
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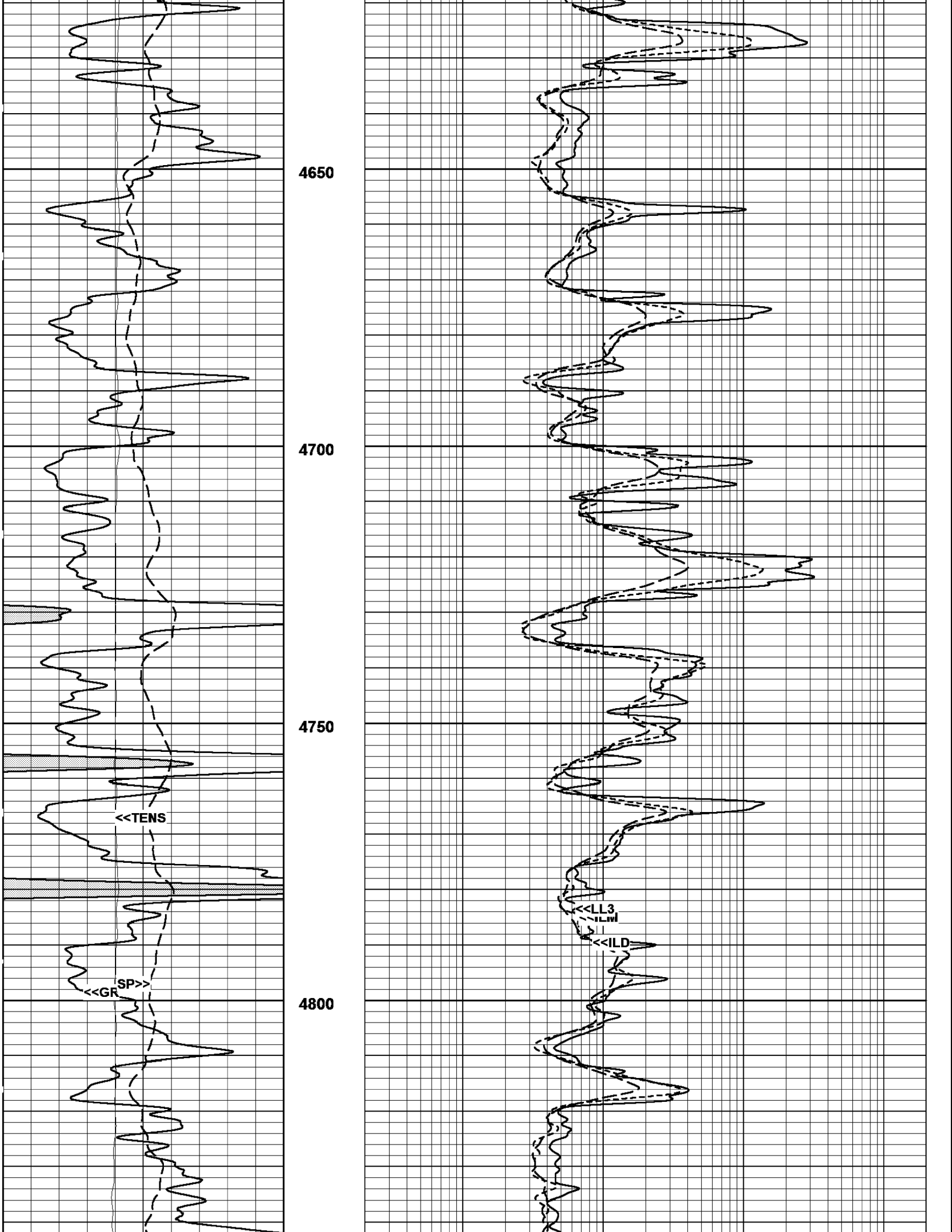
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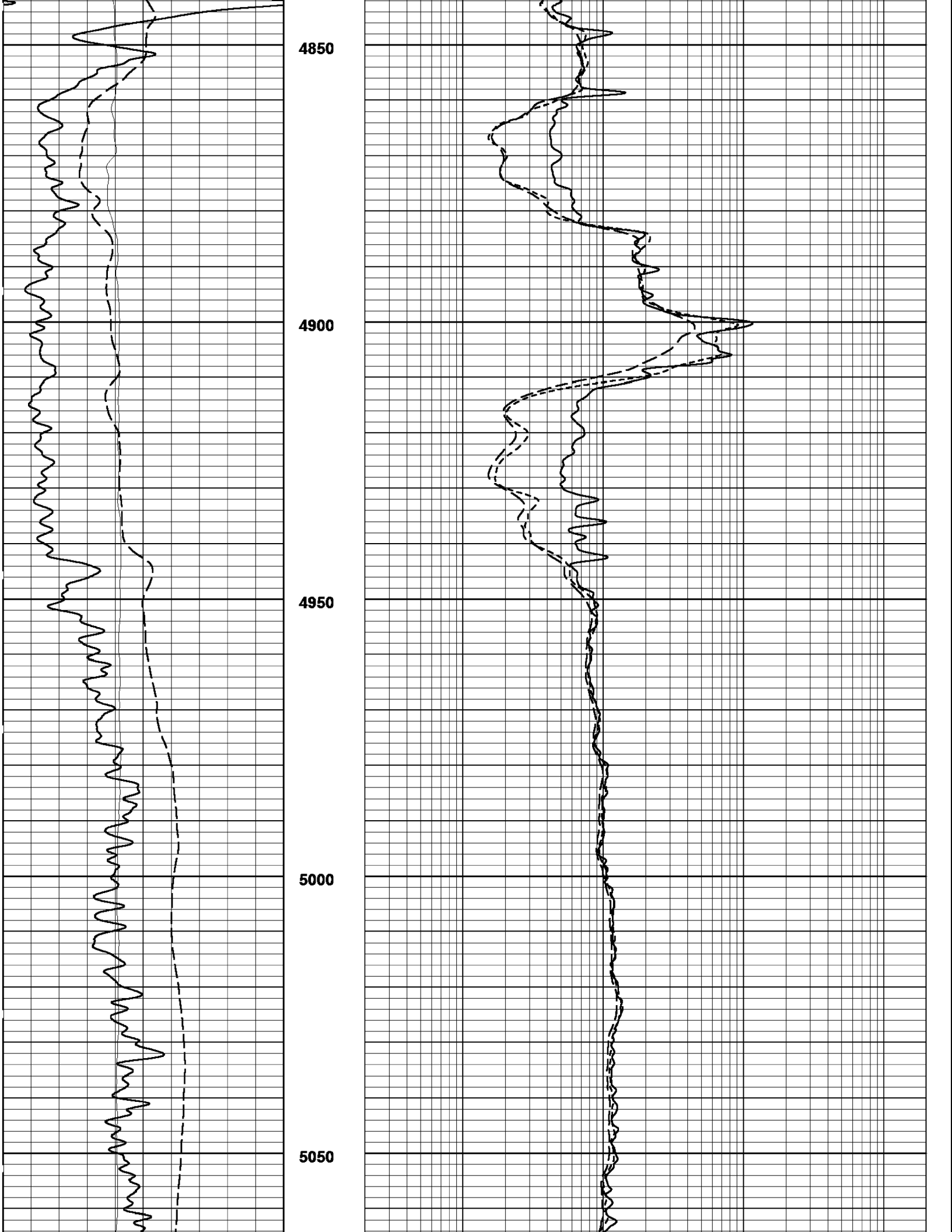
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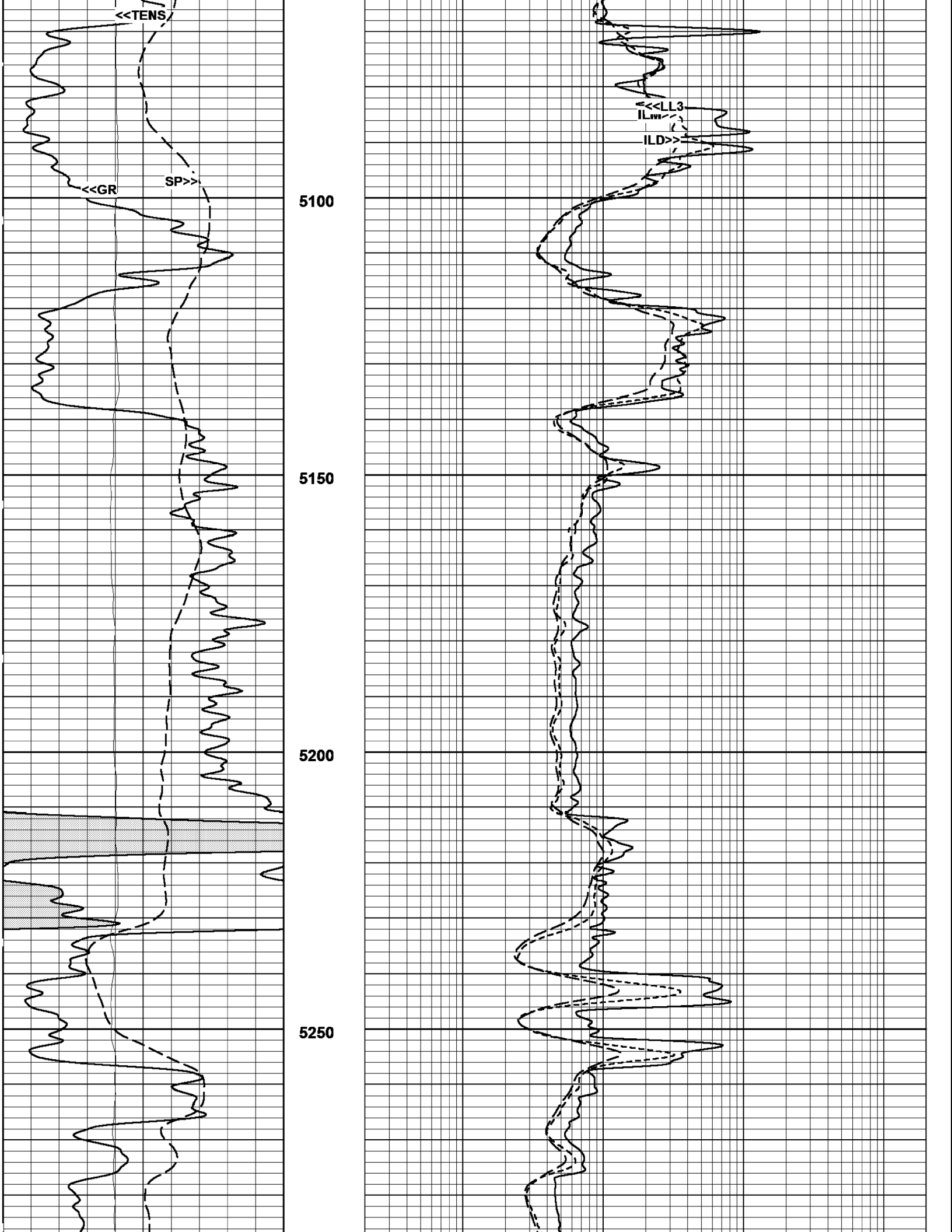
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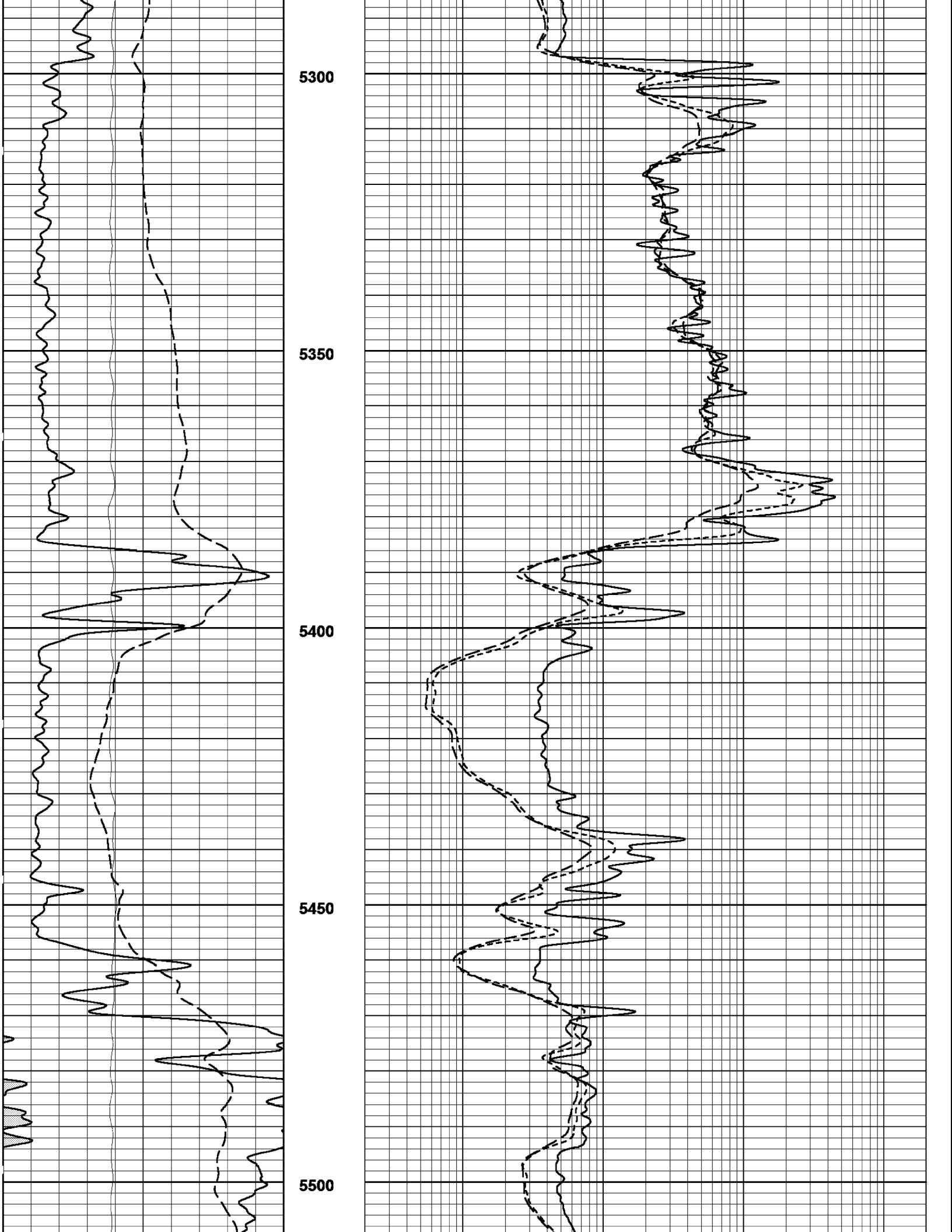
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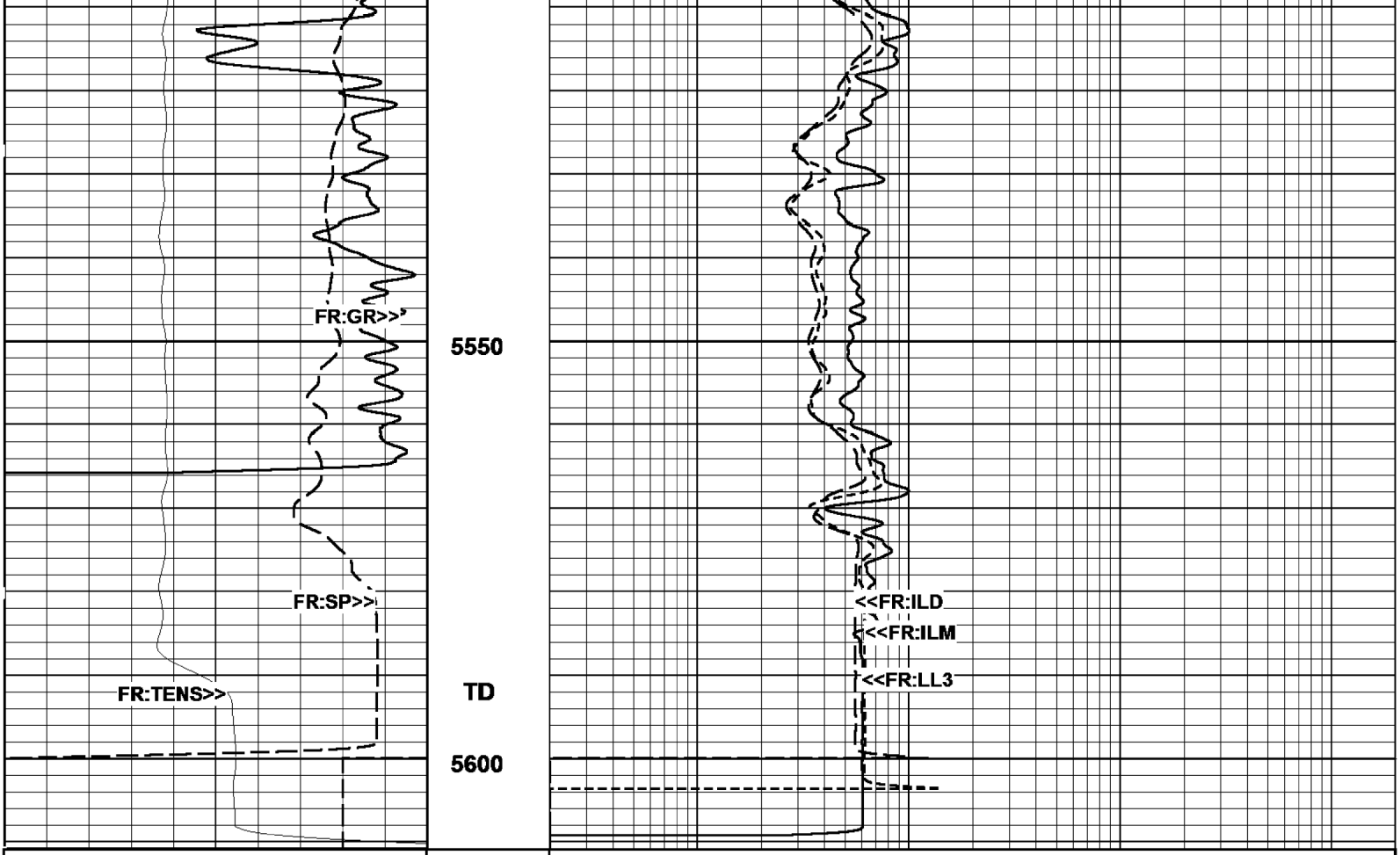


Gamma Ray (GR)			Deep Induction (ILD)		
0.	API	150.	0.2	ohmm	2000.
Spontaneous Potential (SP)			**Med Induction (ILM)**		
-160.	mV	40.	0.2	ohmm	2000.
Tension (TENS)			**Laterolog (LL3)**		
5000.	Lbs	0.	0.2	ohmm	2000.

05/07/2013
08:31:17 => Start Time

MAIN PASS (5"/100Ft)

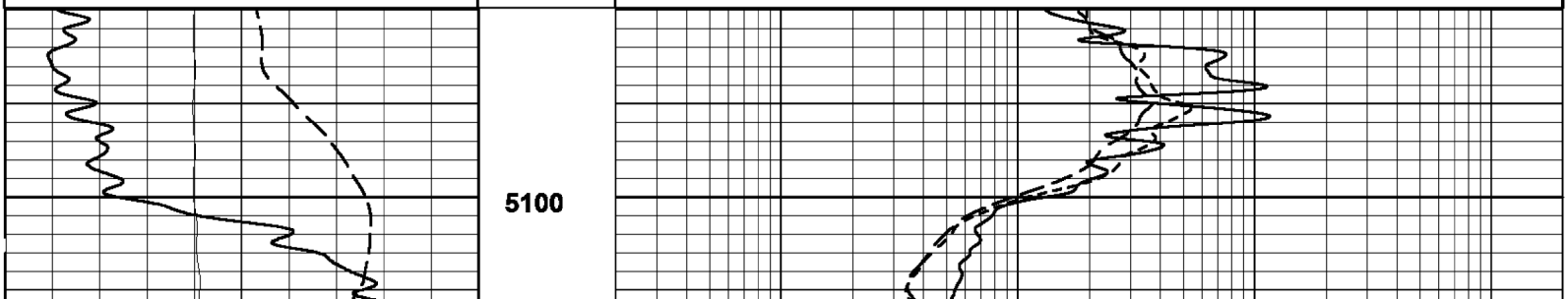
Log UP - (VER 11.14a)
Start Depth=> 5610.80 Feet

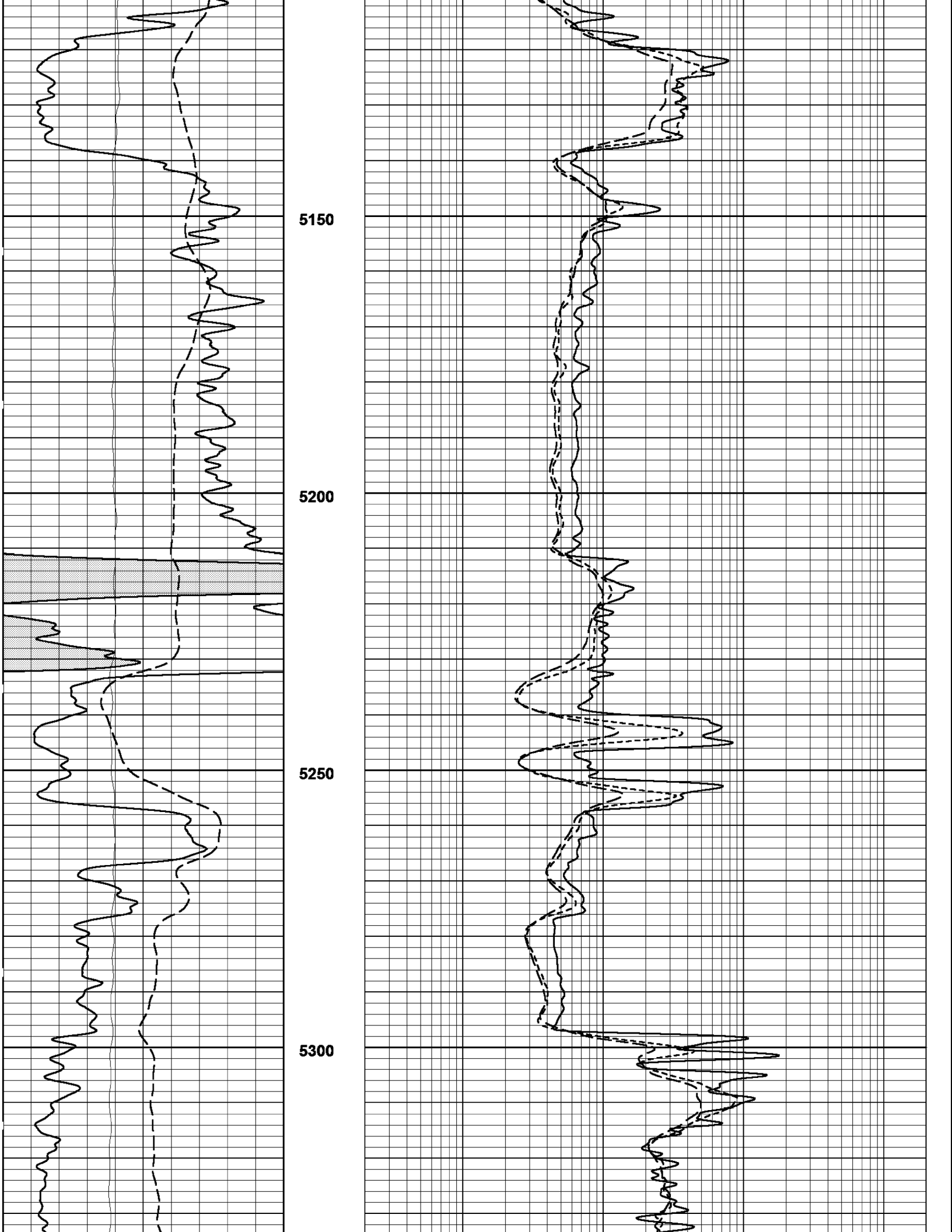
05/07/2013
08:22:35 => End Time

REPEAT PASS (5"/100Ft)

Log UP - (VER 11.14a)
End Depth=> 5080.00 Feet

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

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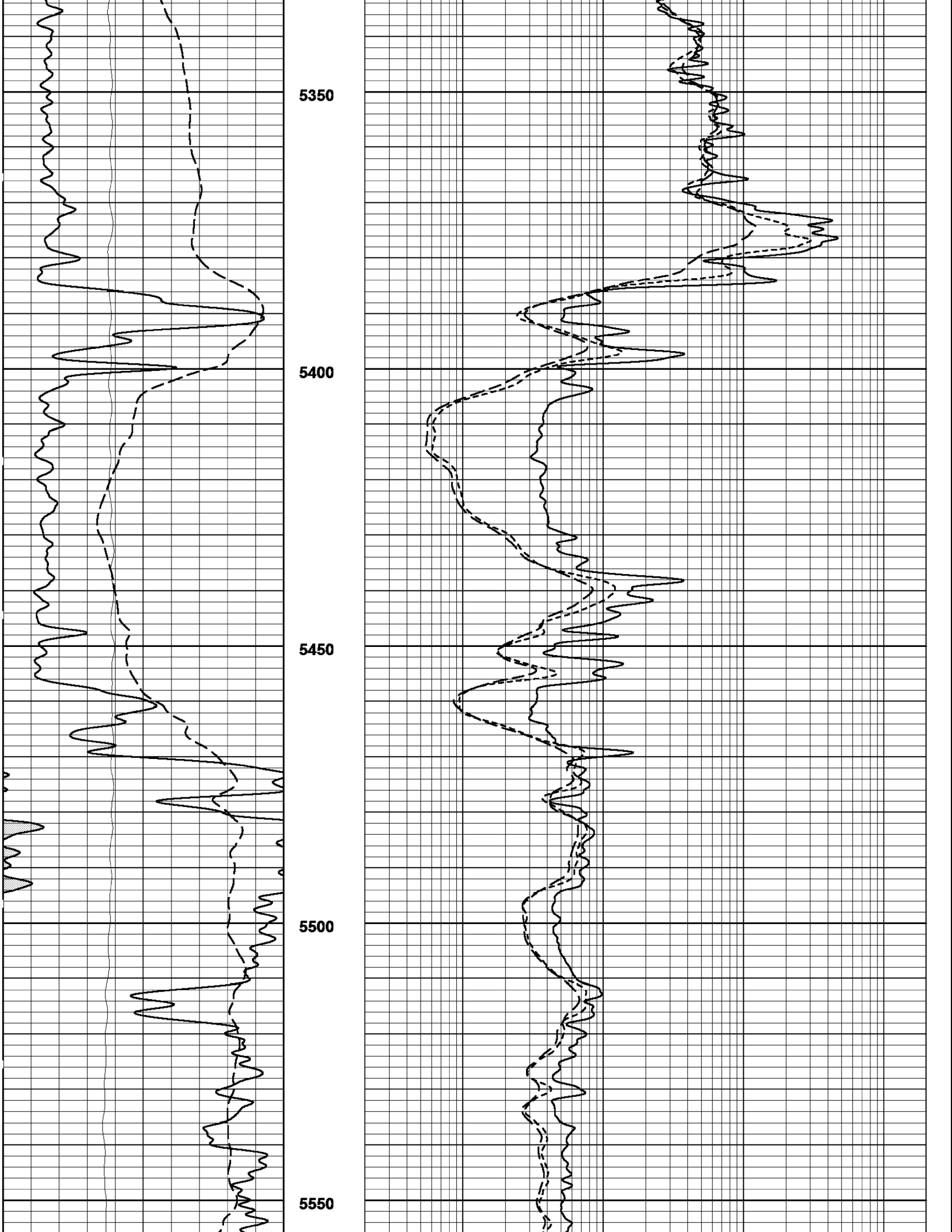
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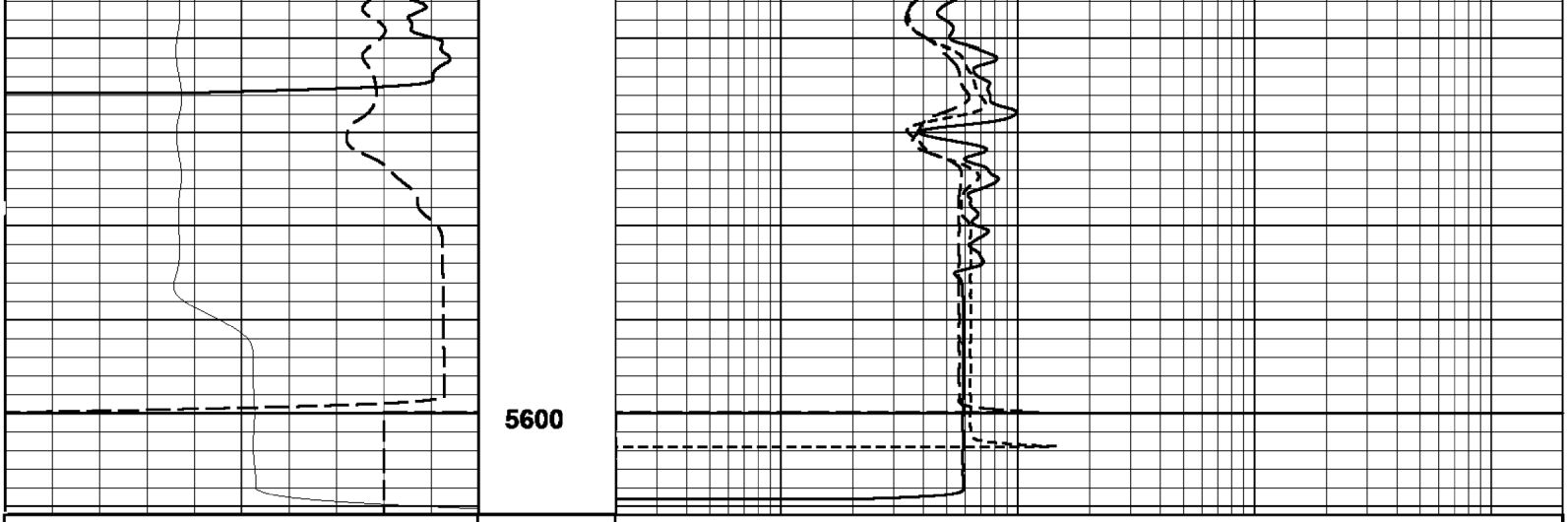


Gamma Ray (GR)		Deep Induction (ILD)
0. API 150.		0.2 ohmm 2000.
Spontaneous Potential (SP)		Med Induction (ILM)
-160. mV 40.		0.2 ohmm 2000.
Tension (TENS)		Laterolog (LL3)
5000. Lbs 0.		0.2 ohmm 2000.

05/07/2013
08:09:55 => Start Time

REPEAT PASS (5"/100Ft)

Log UP - (VER 11.14a)
Start Depth=> 5610.80 Feet

Induction Resistivity / Conductivity Calibrations

TOOL TYPE	Slim Hole Induction	LOOP TYPE	
SERIAL NUM	RD1002	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	-7.799	643.238	M/D/Y> 1/17/2013	H:M:S> 13:30:23
MED INDUCTION	0.000		462.500	501.895	9.899	793.105	M/D/Y> 1/17/2013	H:M:S> 13:30:36
	CALIBRATOR LOW(ohm)		CALIBRATOR HI(ohm)		LOW(mV)	HI(mV)		
SHALLOW LATERLOG	2.000		500.000		11.463	2497.944	M/D/Y> 1/17/2013	H:M:S> 13:30:41

WELL SITE CALIBRATIONS

GAMMA RAY CALIBBRATIONS

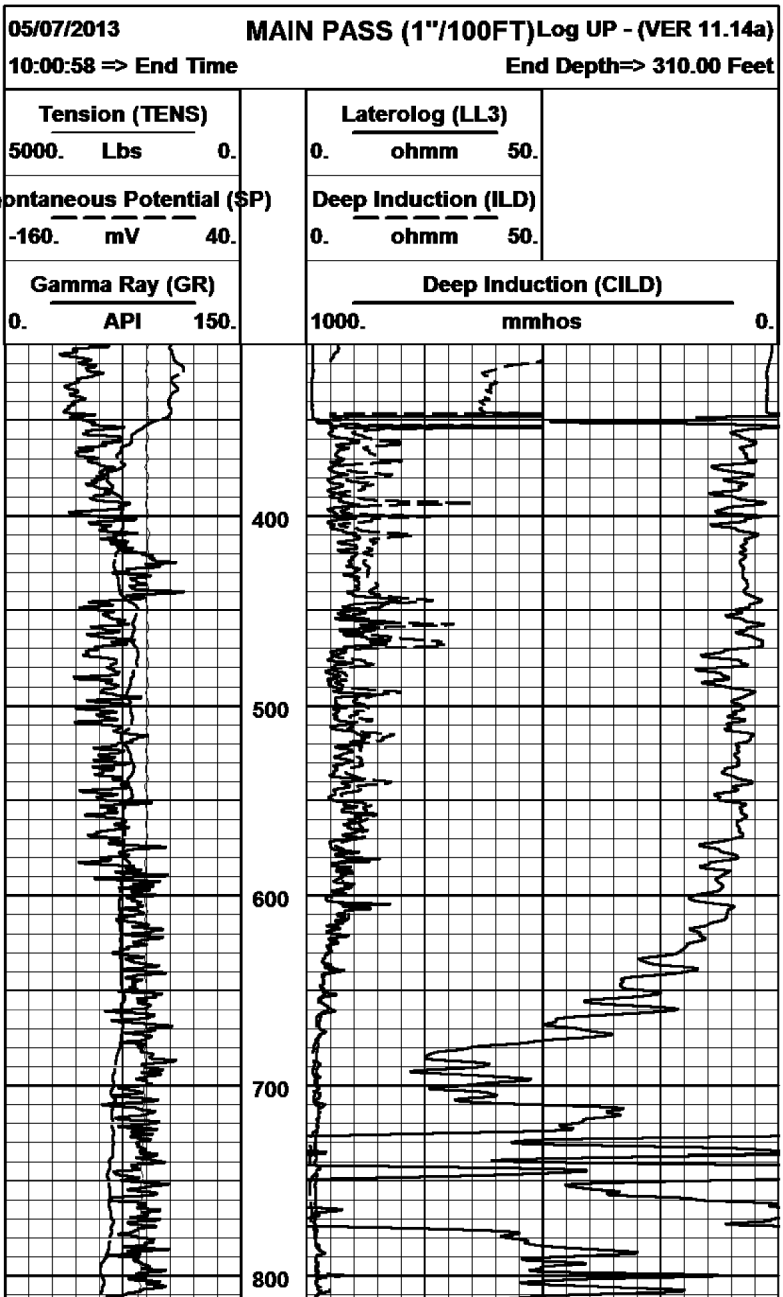
SERIAL NUM	RG3007
BLANKET NUM	1A

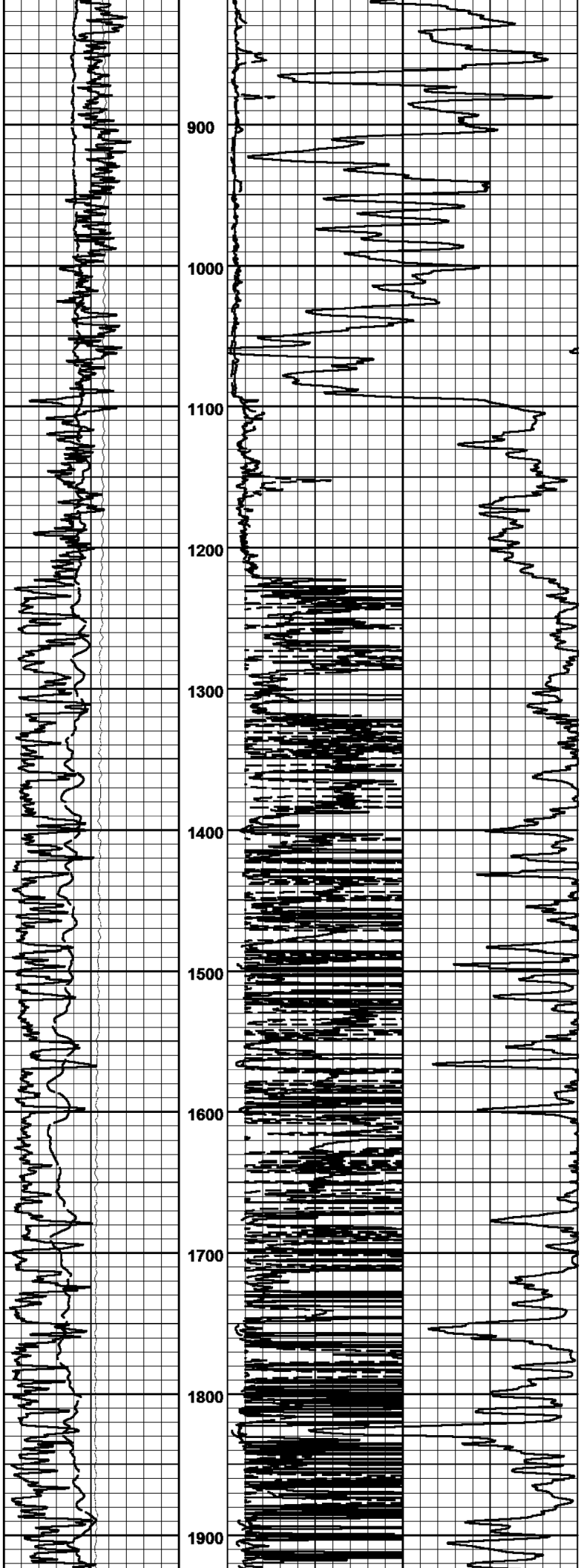
MASTER CALIBRATIONS					
	LowVal: 0.000 API	HighVal: 135.000 API	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	0.000 - raw	382.147 - raw	0.415 - gain 0.000 - off	M/D/Y> 1/27/2012	H:M:S> 14:23:8

Company	VAUGHN GOOD OIL COMPANY
Well	NUSSER #3-16
Field	S.E. HARDTNER
County	BARBER
State	KANSAS

RECON

DUAL INDUCTION
LATEROLOG - SP
GAMMA RAY

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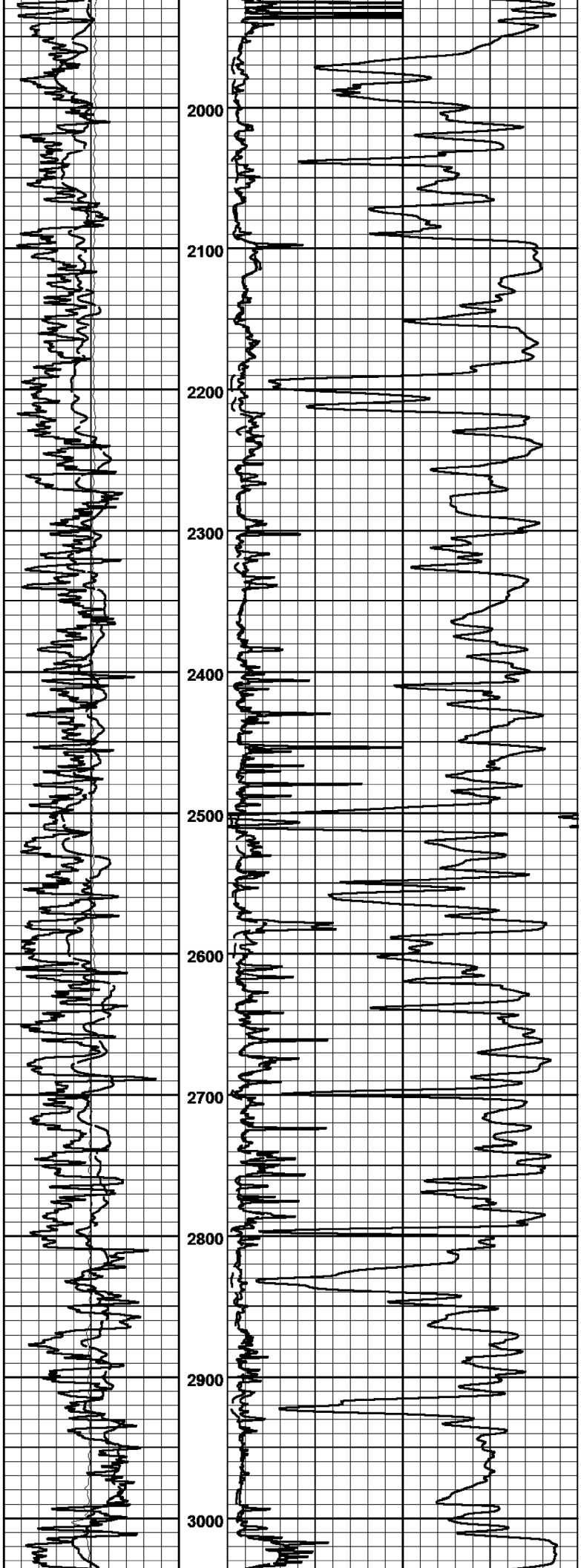
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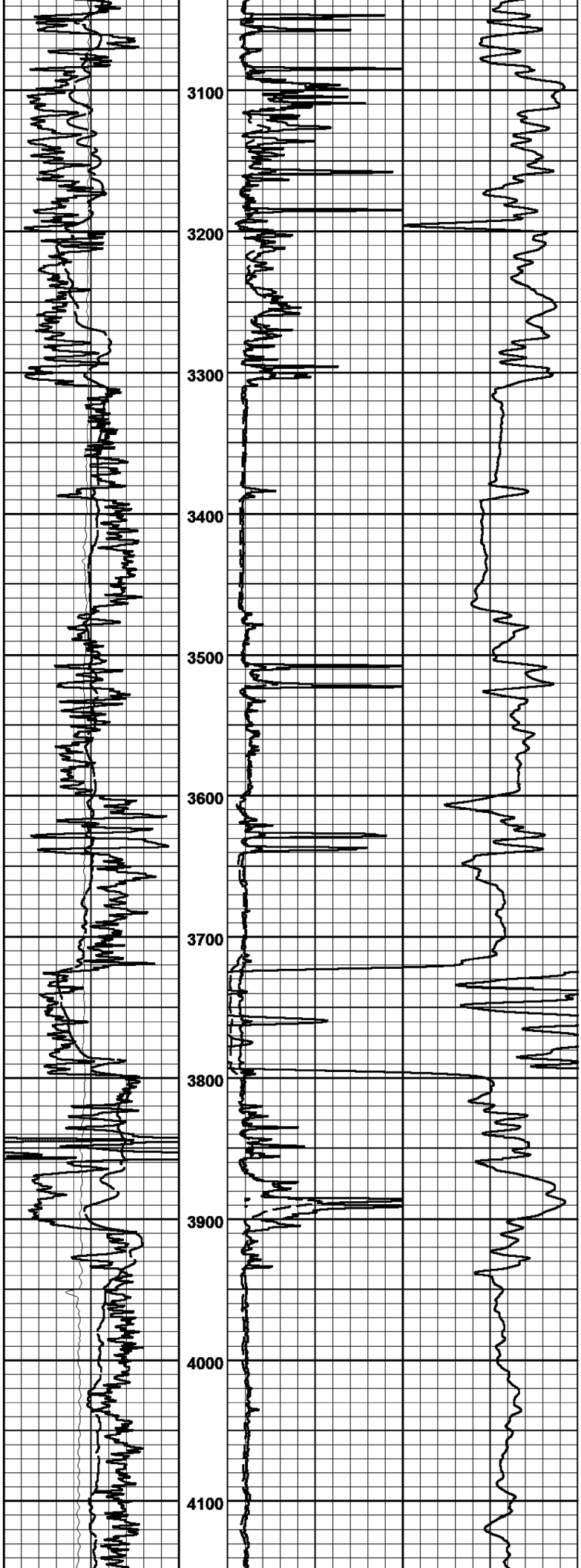
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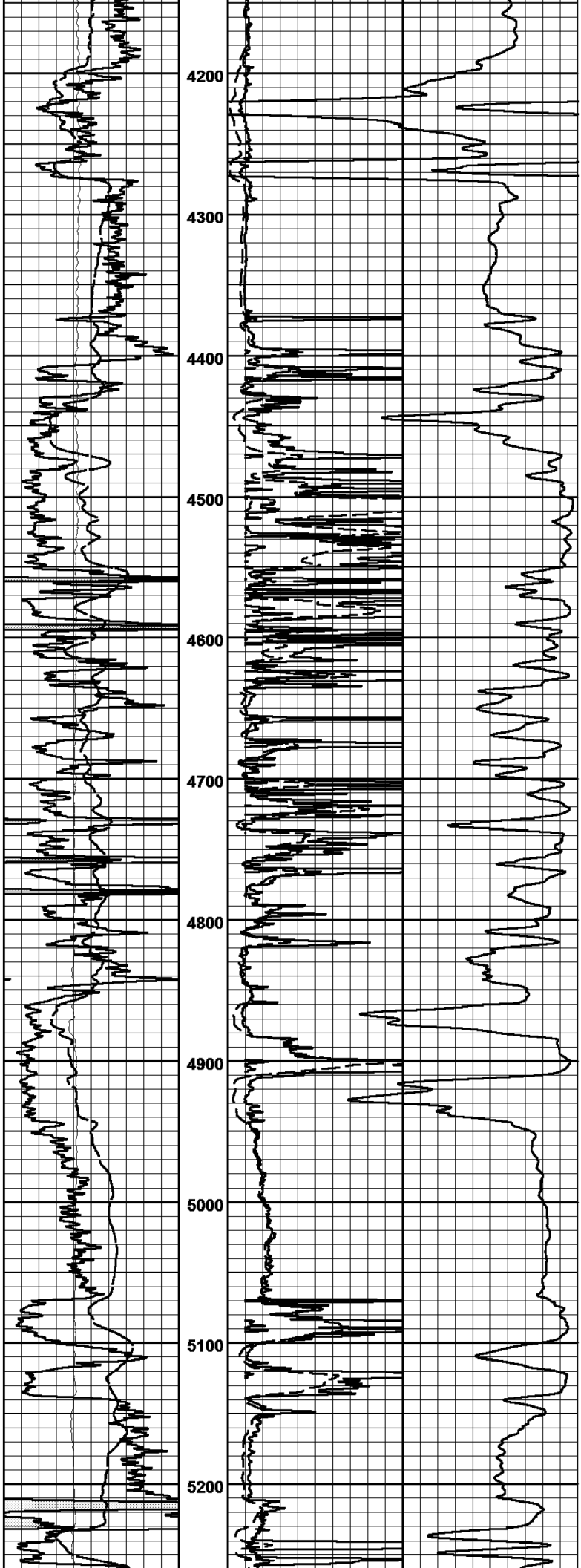
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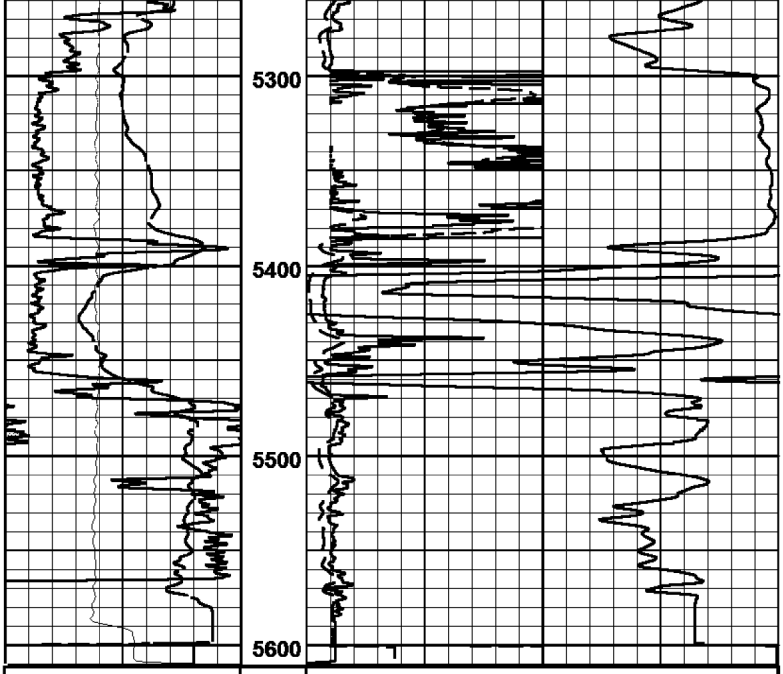

Gamma Ray (GR) 0. API 150.		Deep Induction (CILD) 1000. mmhos 0.
ontaneous Potential (SP) -160. mV 40.		Deep Induction (ILD) 0. ohmm 50.
Tension (TENS) 5000. Lbs 0.		Laterolog (LL3) 0. ohmm 50.

05/07/2013 MAIN PASS (1"/100FT) Log UP - (VER 11.14a)

08:31:17 => Start Time Start Depth=> 5610.50 Feet

RECON PETROTECHNOLOGIES LTD

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Petrotechnologies
Ltd.