Company	CMX INCORPORATED
Well	CLAFLIN #1-34
Field	KRAFT-PRUSA
County	BARTON
State	KANSAS

RECON

COMPENSATED NEUTRON
LITHOLOGY DENSITY
GAMMA RAY X-Y CALIPER
MICROLOG

SEC	TWP	RGE	
34	16S	11W	

OTHER SERVICES:
DIL

Location. 1320' FNL & 1470' FWL — W2/W2/E2/NW
SURF. SAME — API#. 015-009-26090-0000

Permanent Datum . Ground Level — Elev 1933
Log Measured From . Kelly Bushing
Drilling Measured From Kelly Bushing

ELEVATIONS K.B. 1946
G.L. 1933
D.F. N/A

Date		01-APR-2015					
Run No.		ONE					
TD Driller		3388	ft.			ft.	
TD RECON		3387	ft.			ft.	
Bot Logged Interval		3386	ft.			ft.	
Top Logged Interval		460	ft.			ft.	
Casing Depth Driller		8 5/8	in.	@ 478		in.	@
Casing Depth RECON		8 5/8	in.	@ 478		in.	@
Bit Size		7 7/8	in.			in.	
Drilling Fluid Type		WBM					
Density	Viscosity	9.0		65			
Fluid Loss	PH	6.0		11.4			
Source Of Sample		Flowline					
RM @ Measured Temp		1.67	Ohmm	@ 75		Ohmm	@
RMF @ Measured Temp		1.25	Ohmm	@ 75		Ohmm	@
RMC @ Measured Temp		2.09	Ohmm	@ 75		Ohmm	@
RM @ MRT		1.19	Ohmm	@ 107		Ohmm	@
Max Recorded Temp		107	DegF			DegF	
Time Drilling Stopped		01-APR-2015		12:00			
Time Circulation Stopped		01-APR-2015		13:00			
Time Logger On Bottom		02-APR-2015		01:38			
Unit Num	Location	S406		OKLAHOMA CITY, OK			
Recorded By		K.HELDERMON					
Witnessed By		K.LEBLANC					

FIELD PRINT

FIELD PRINT

RIG INFORMATION

Drill Contr/Rig# DUKE #7

GENERAL REMARKS SECTION

FIRST RUN IN THE HOLE
CNL AND LDT LOGGED IN A LIMESTONE MATRIX
TOP MARK - 525, BOTTOM MARK - 3227.6
CNL/LDT LOGGED MATRIX: 2.71 g/cc.

CHLORIDES: 3400
LCM: 2

AHV CALCULATED ON 5.5" PROD. CASING

THANK YOU FOR USING RECON PETROTECHNOLOGIES LTD.	CREW: J.ROSE, J.MEGET

CEMENT VOLUME CALCULATIONS SUMMARY

Tool Type	LDT-CNT			
Tool Serial #	RN2007 / RL4101	Caliper Type	X-Y CALIPERS	
	Borehole Total	Annular Volume with Casing	From Depth (MKb)	To Depth (MKb)
VOLUMES	1296 Cubic Feet	811 Cubic Feet	460	3387

CASING INFORMATION

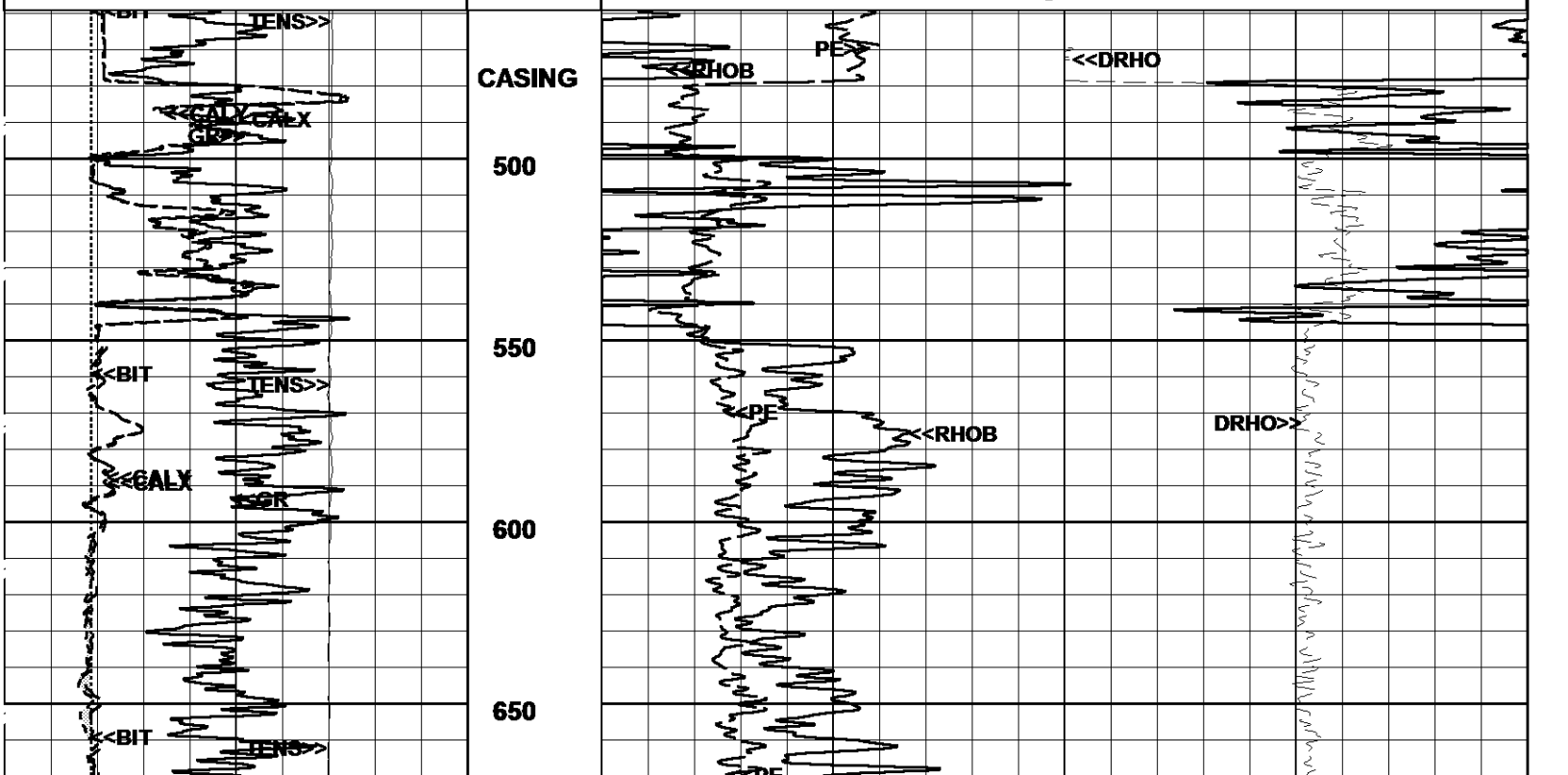
	SIZE (in)	GRADE	WEIGHT (lbs/ft)	ID (in)	TOP DEPTH	BOT DEPTH
SURFACE CASING	8 5/8	J-55	24	8.098	Surface	478
INTERMEDIATE CASING	N/A	N/A	N/A	N/A	Surface	N/A
PRODUCION CASING	5 1/2	J-55	15.5	4.950	Surface	3388

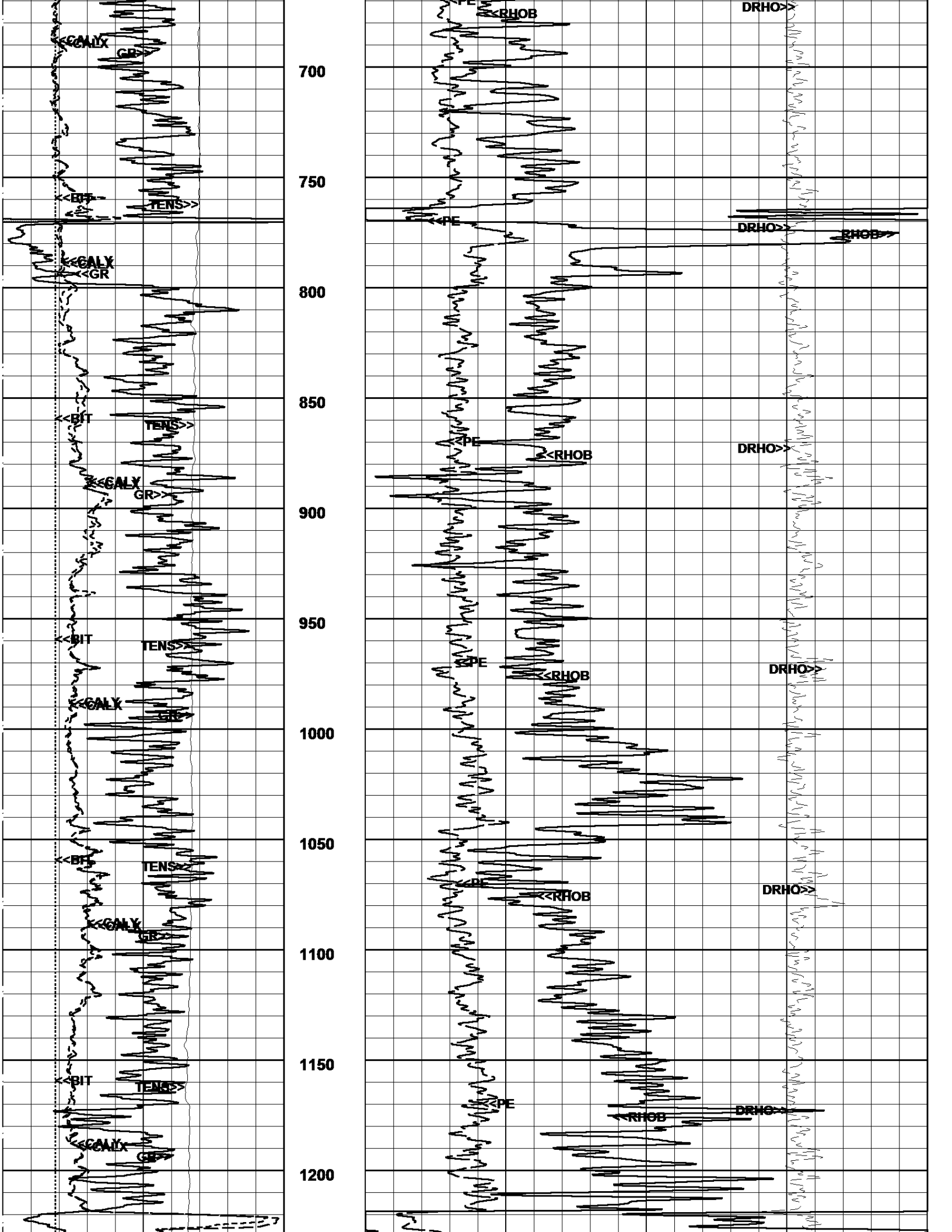
04/02/2015
04:22:02 => End Time

MAIN PASS - RHOB (2"/100Ft)

Log UP - (VER 11.19)
End Depth=> 459.75 Feet

Bit Size (BIT) 6. Ref in 16.
Tension (TENS) 5000. Lbs 0.
Y-Caliper (CALY) 6. in 16.
X-Caliper (CALX) 6. in 16.
Gamma Ray (GR) 0. API 150.
Photo Electric (PE) 0. Barns/Elect 10.
Delta RHO (DRHO) -0.5 g/cc 0.5
Bulk Density (RHOB) 2. g/cc 3.

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850
900
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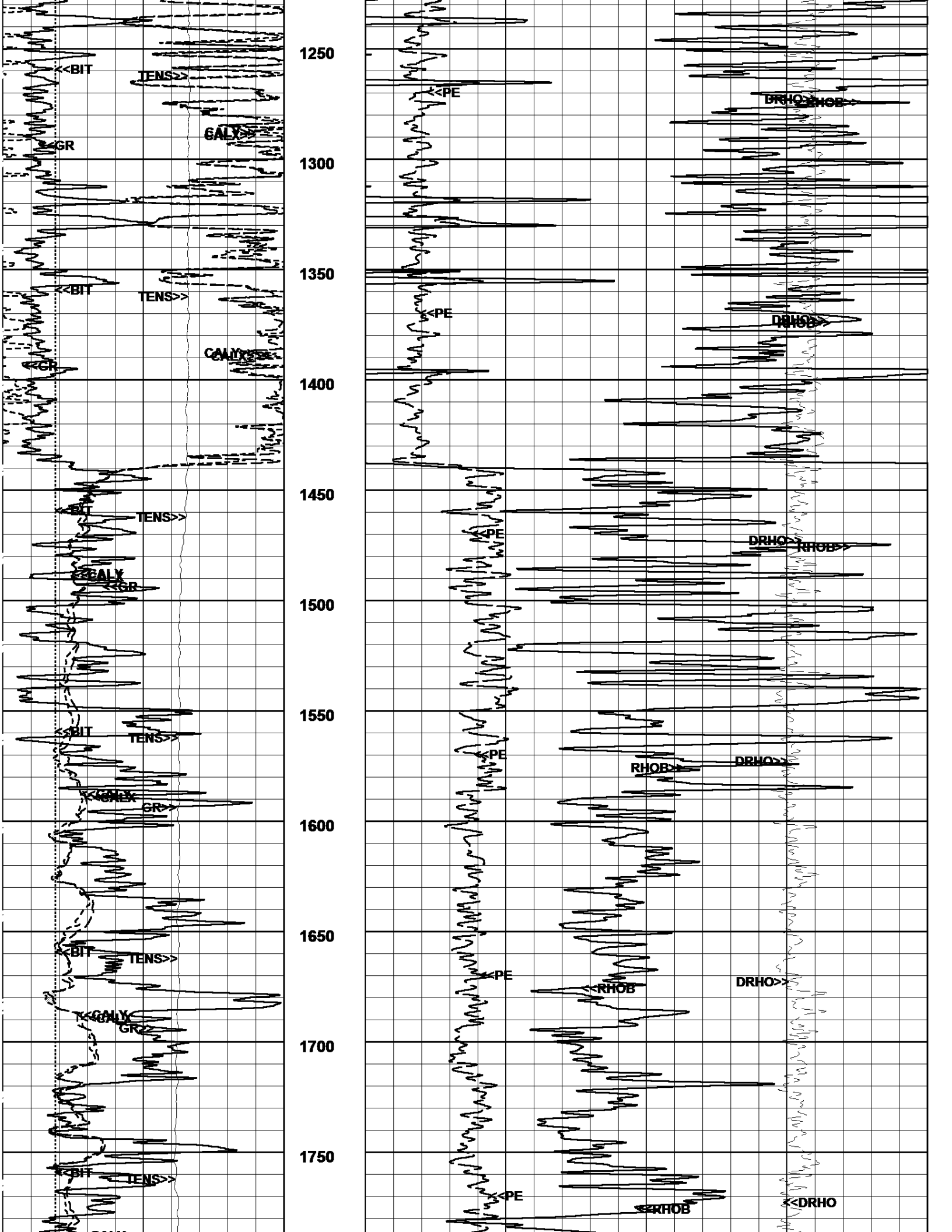
1150
1200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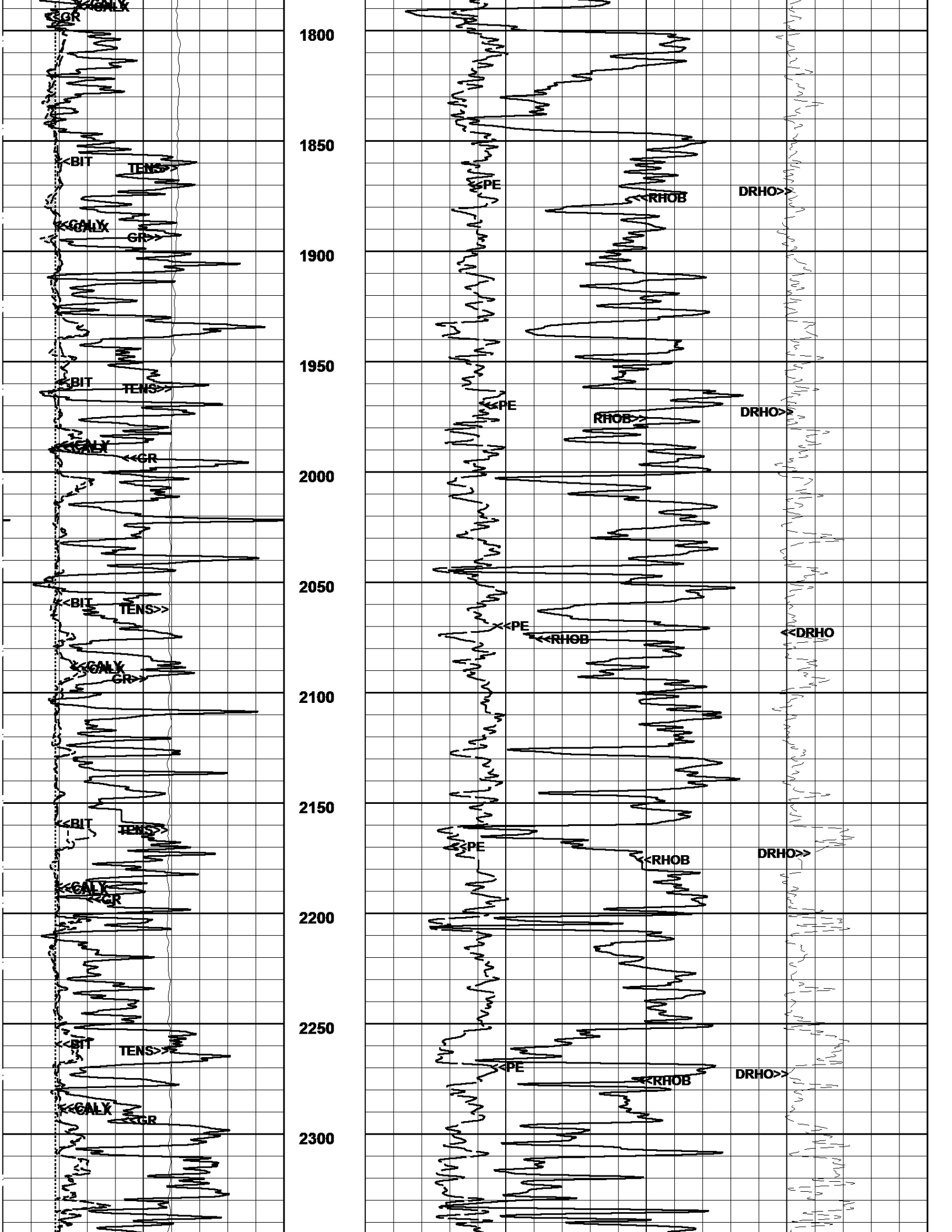
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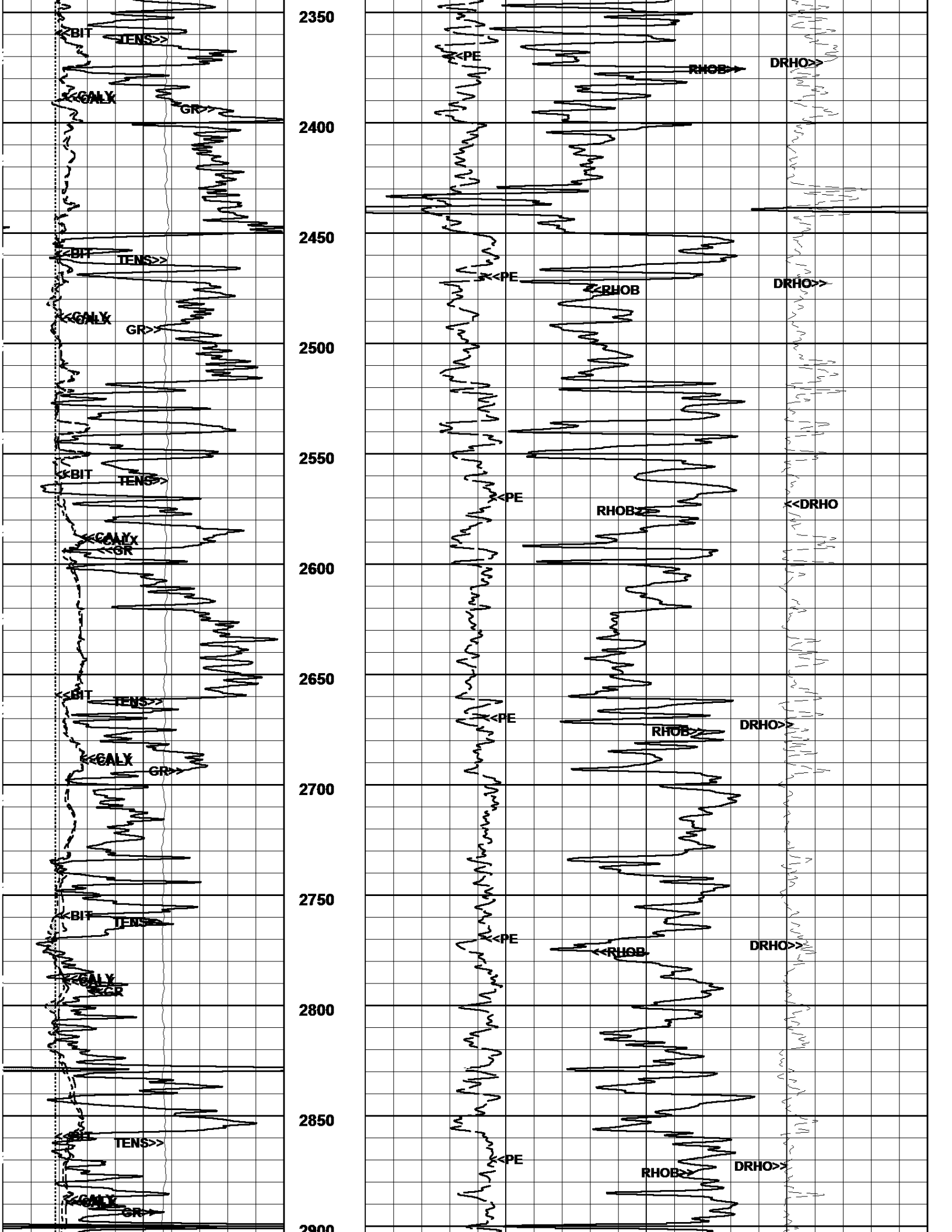
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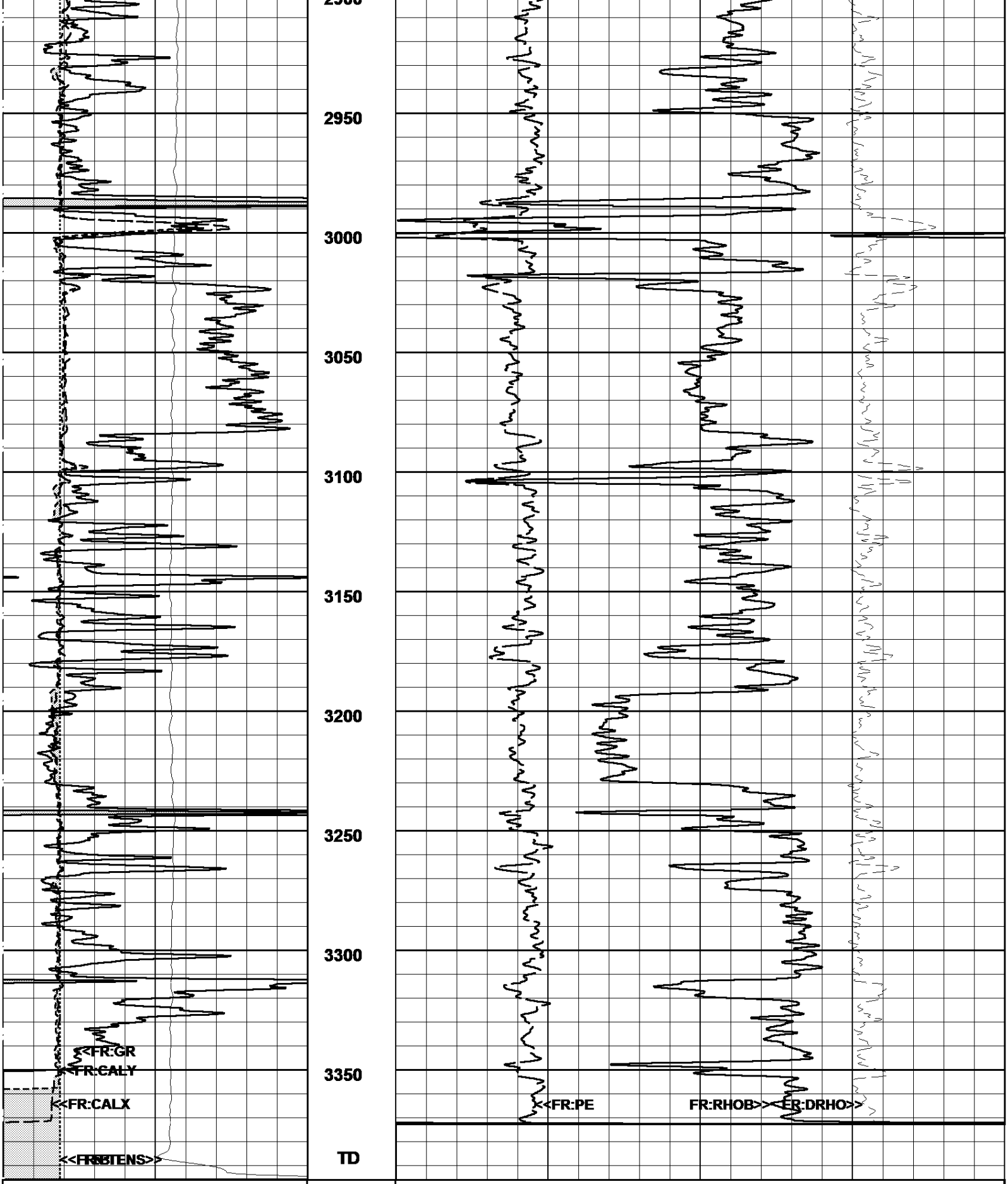


Gamma Ray (GR)		
0. API 150.		
X-Caliper (CALX)	Bulk Density (RHOB)	
6. in 16.	2. g/cc 3.	
Y-Caliper (CALY)	Photo Electric (PE)	Delta RHO (DRHO)
6. in 16.	0. Barns/Elect 10.	-0.5 g/cc 0.5

Tension (TENS)
5000. Lbs 0.

Bit Size (BIT)
6. Ref in 16.

04/02/2015
02:53:17 => Start Time

MAIN PASS - RHOB (2"/100Ft)

Log UP - (VER 11.19)
Start Depth=> 3395.50 Feet

04/02/2015
04:22:02 => End Time

ANHYDRITE MARKER (5"/100Ft)

Log UP - (VER 11.19)
End Depth=> 699.90 Feet

Microlog-Caliper
6. in 16.

Bit Size (BIT)
6. Ref in 16.

Tension (TENS)
5000. Lbs 0.

Y-Caliper (CALY)
6. in 16.

X-Caliper (CALX)
6. in 16.

Gamma Ray (GR)
0. API 150.

Micro-Normal{2"} (MNOR)
-40. ohms 40.

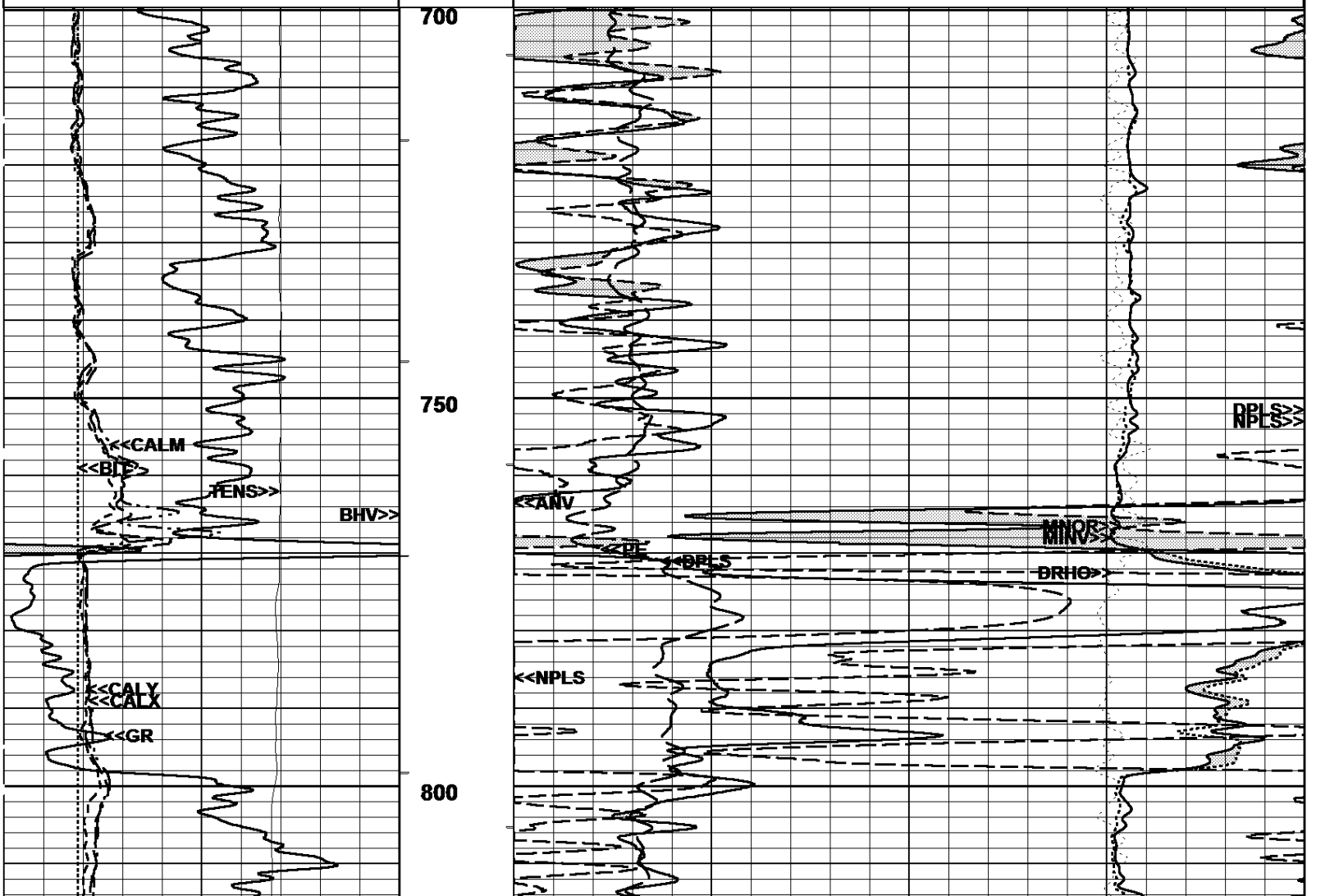
Micro-Inverse{1"} (MINV)
-40. ohms 40.

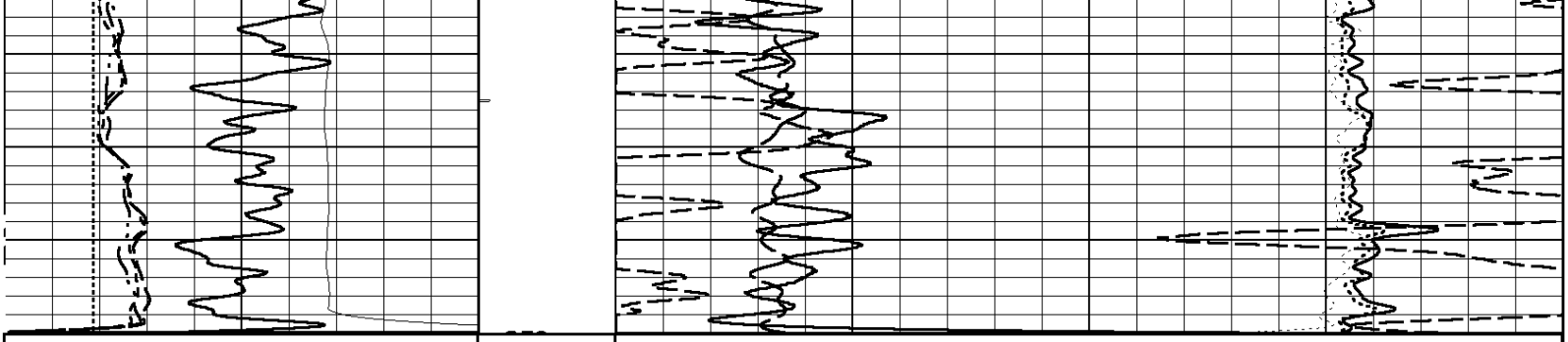
Photo Electric (PE)
0. Barns/Elect 10.

Delta RHO (DRHO)
-0.5 g/cc 0.5

Density-Porosity (DPLS)
30. Limestone-Matrix (V/V) -10.

Neutron-Porosity (NPLS)
30. Limestone-Matrix (V/V) -10.





Gamma Ray (GR)		
0.	API	150.
X-Caliper (CALX)		
6.	in	16.
Y-Caliper (CALY)		
6.	in	16.
Tension (TENS)		
5000.	Lbs	0.
Bit Size (BIT)		
6.	Ref in	16.
Microlog-Caliper		
6.	in	16.

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.

04/02/2015
02:53:17 => Start Time

ANHYDRITE MARKER (5"/100Ft)

Log UP - (VER 11.19)
Start Depth=> 849.90 Feet

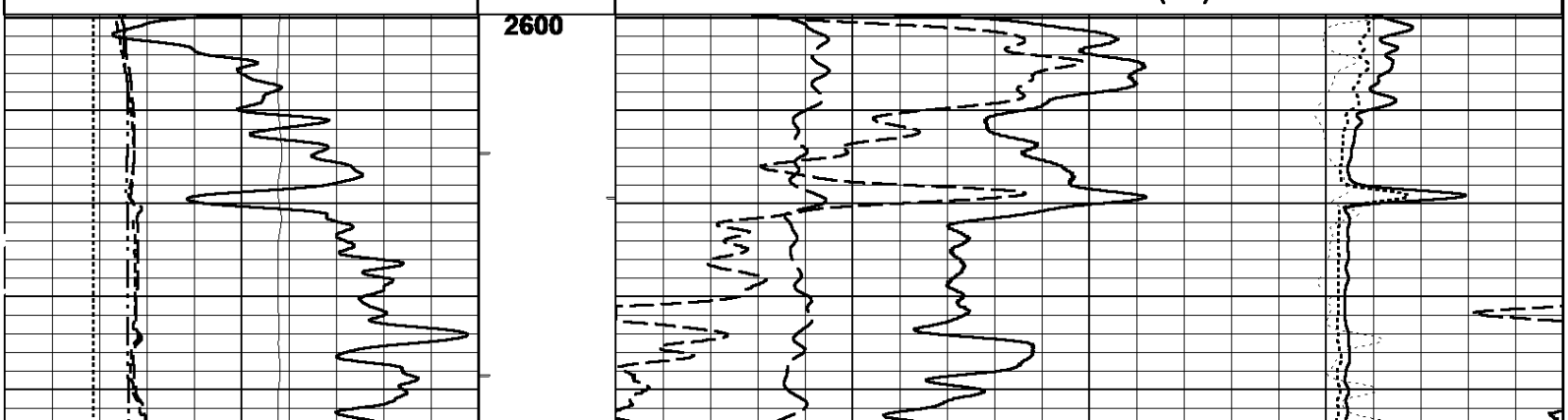
04/02/2015
04:22:02 => End Time

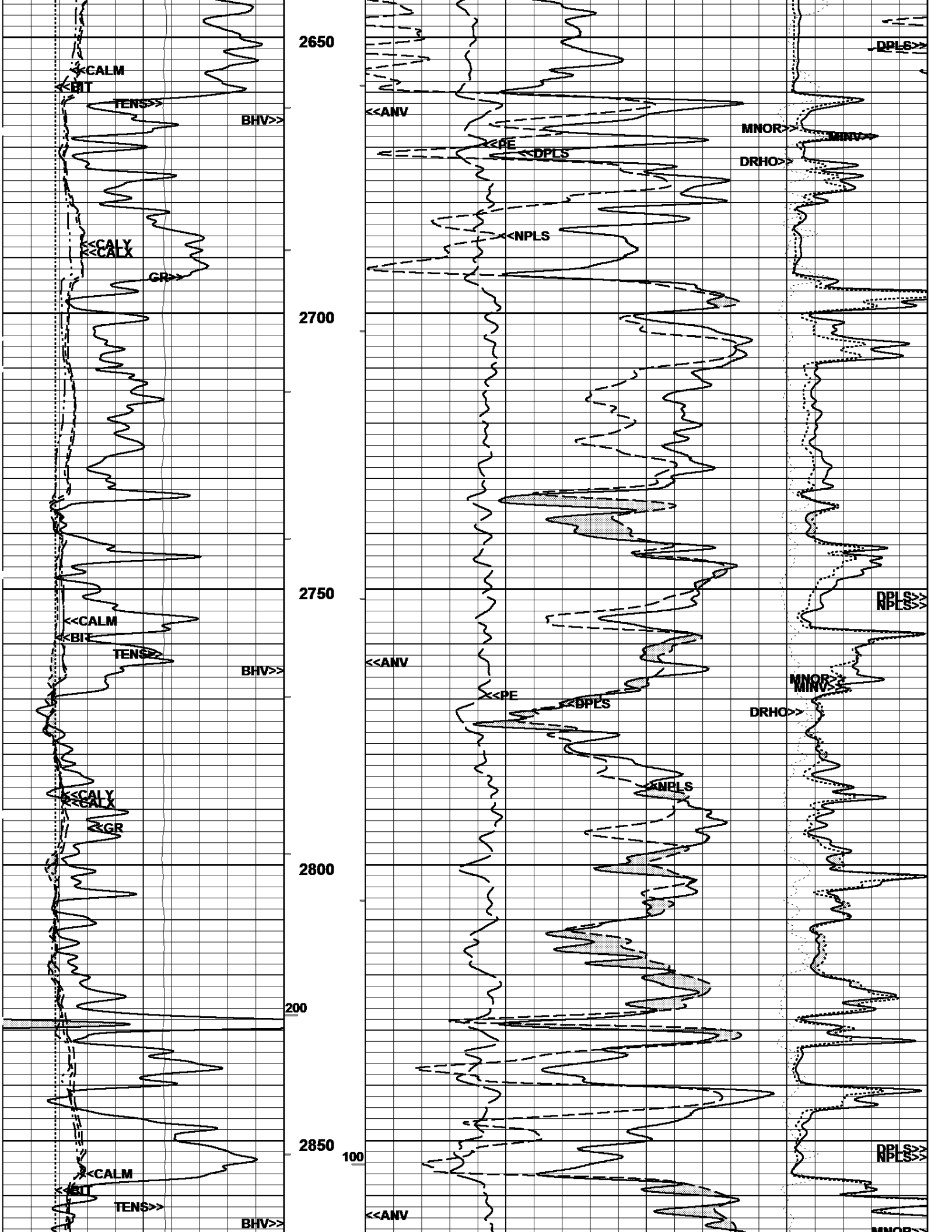
MAIN PASS - LIMESTONE (5"/100Ft)

Log UP - (VER 11.19)
End Depth=> 2599.90 Feet

Microlog-Caliper		
6.	in	16.
Bit Size (BIT)		
6.	Ref in	16.
Tension (TENS)		
5000.	Lbs	0.
Y-Caliper (CALY)		
6.	in	16.
X-Caliper (CALX)		
6.	in	16.
Gamma Ray (GR)		
0.	API	150.

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

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2700
2750
2800
2850
200
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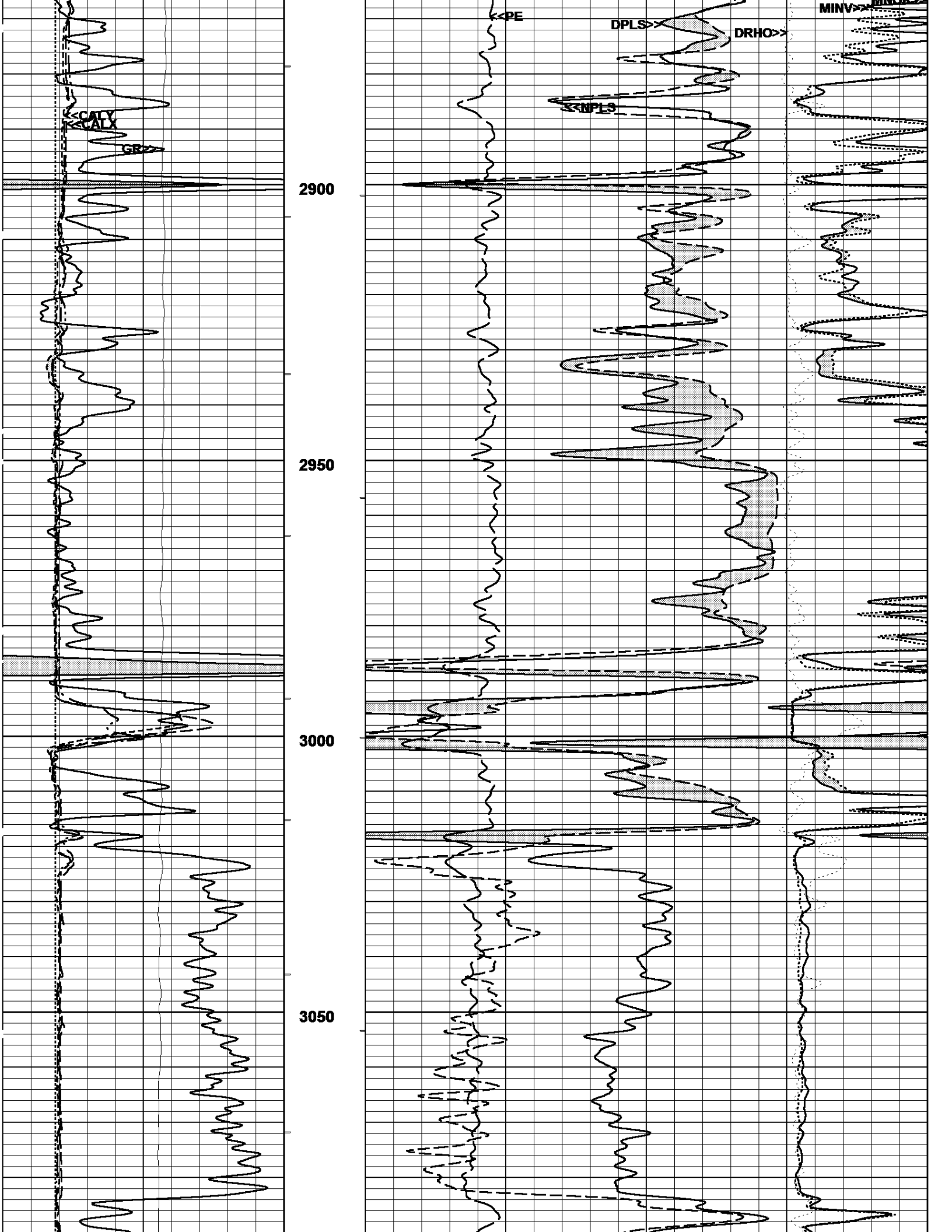
MINV>>
DRHO>>
NPLS>>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GR
PE
DPLS
DRHO
NPLS
MINV
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3000
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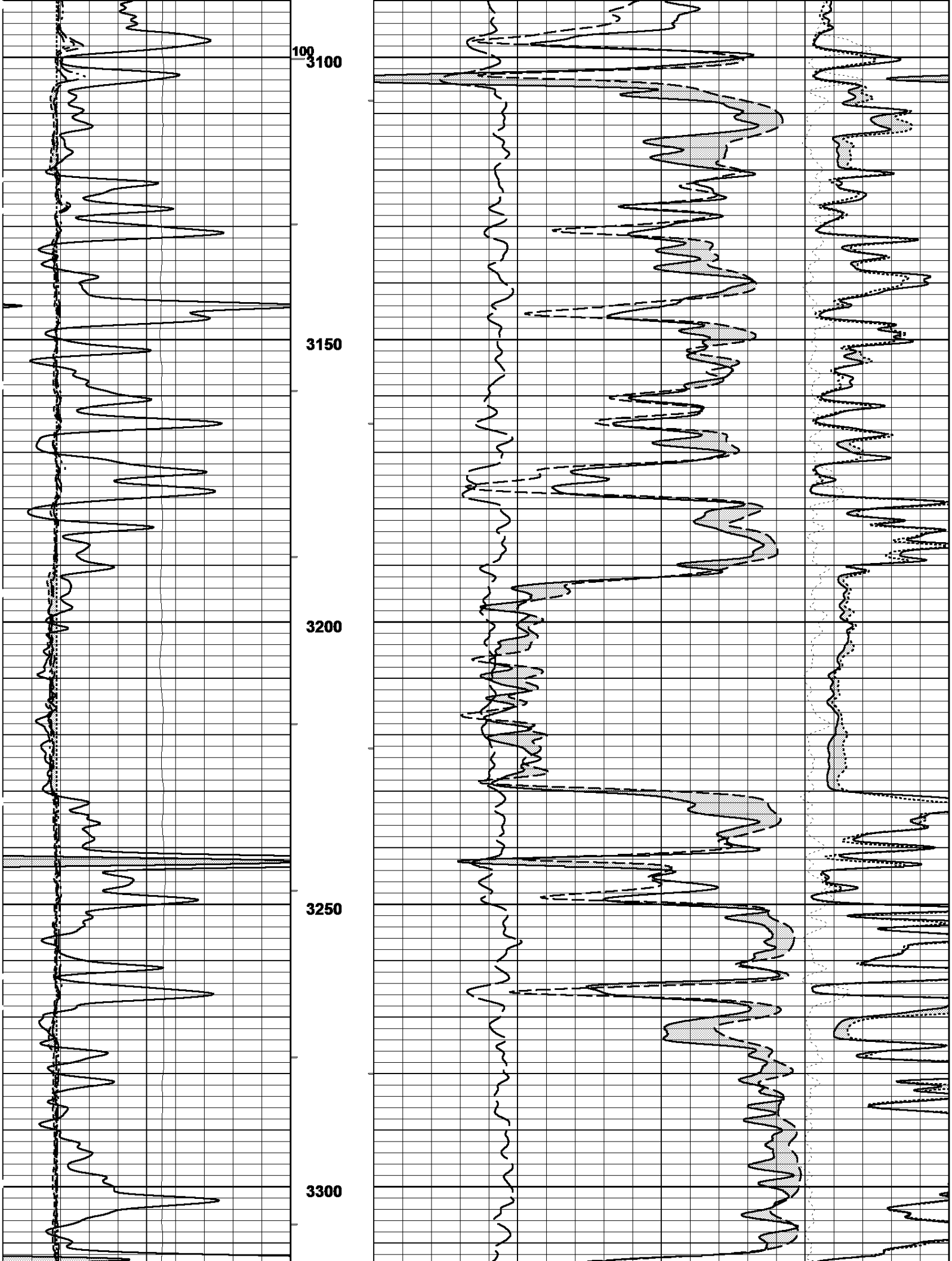
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3100
3150
3200
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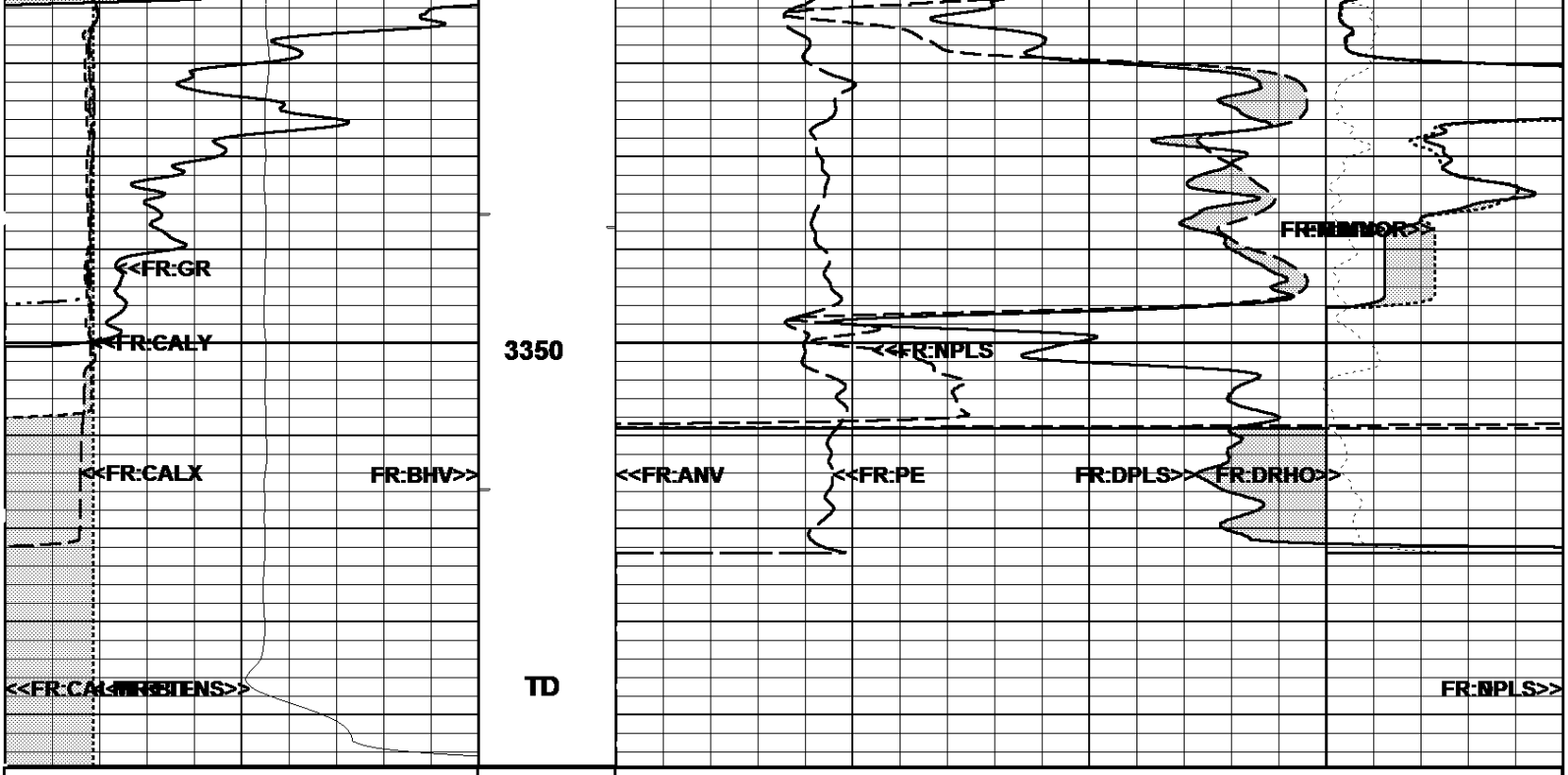


Gamma Ray (GR)		Neutron-Porosity (NPLS)
0. API 150.		30. Limestone-Matrix (V/V) -10.
X-Caliper (CALX)		Density-Porosity (DPLS)
6. in 16.		30. Limestone-Matrix (V/V) -10.
Y-Caliper (CALY)		Photo Electric (PE) / Delta RHO (DRHO)
6. in 16.		0. Barns/Elect 10. / -0.5 g/cc 0.5
Tension (TENS)		Micro-Inverse{1"} (MINV)
5000. Lbs 0.		-40. ohms 40.
Bit Size (BIT)		Micro-Normal{2"} (MNOR)
6. Ref in 16.		-40. ohms 40.
Microlog-Caliper		
6. in 16.		

04/02/2015
02:53:17 => Start Time

MAIN PASS - LIMESTONE (5"/100Ft)

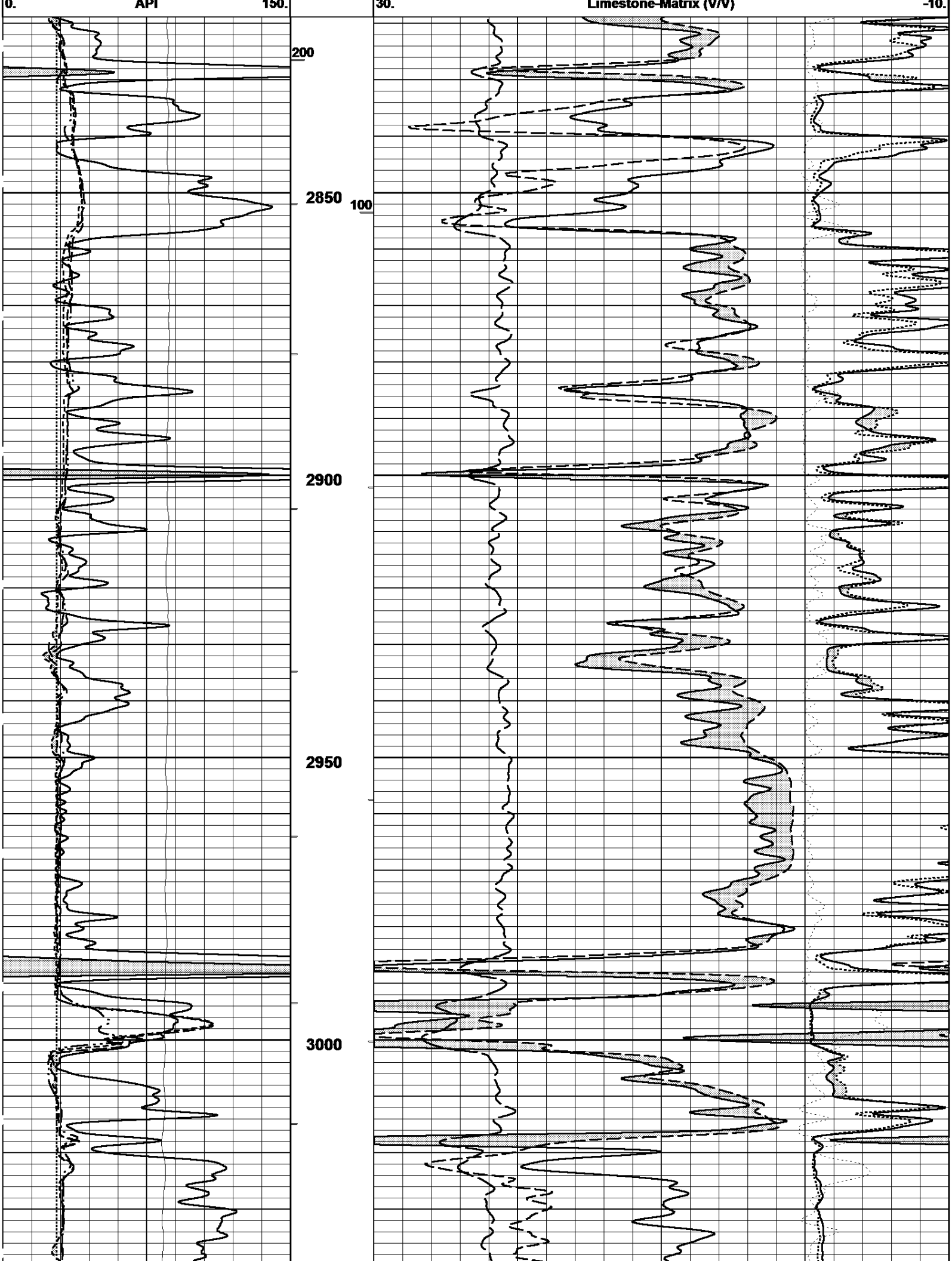
Log UP - (VER 11.19)
Start Depth=> 3395.50 Feet

04/02/2015
02:03:22 => End Time

REPEAT PASS - LIMESTONE (5"/100Ft)

Log UP - (VER 11.19)
End Depth=> 2818.70 Feet

Microlog-Caliper		
6. in 16.		
Bit Size (BIT)		Micro-Normal{2"} (MNOR)
6. Ref in 16.		-40. ohms 40.
Tension (TENS)		Micro-Inverse{1"} (MINV)
5000. Lbs 0.		-40. ohms 40.
Y-Caliper (CALY)		Photo Electric (PE) / Delta RHO (DRHO)
6. in 16.		0. Barns/Elect 10. / -0.5 g/cc 0.5
X-Caliper (CALX)		Density-Porosity (DPLS)
6. in 16.		30. Limestone-Matrix (V/V) -10.
Gamma Ray (GR)		Neutron-Porosity (NPLS)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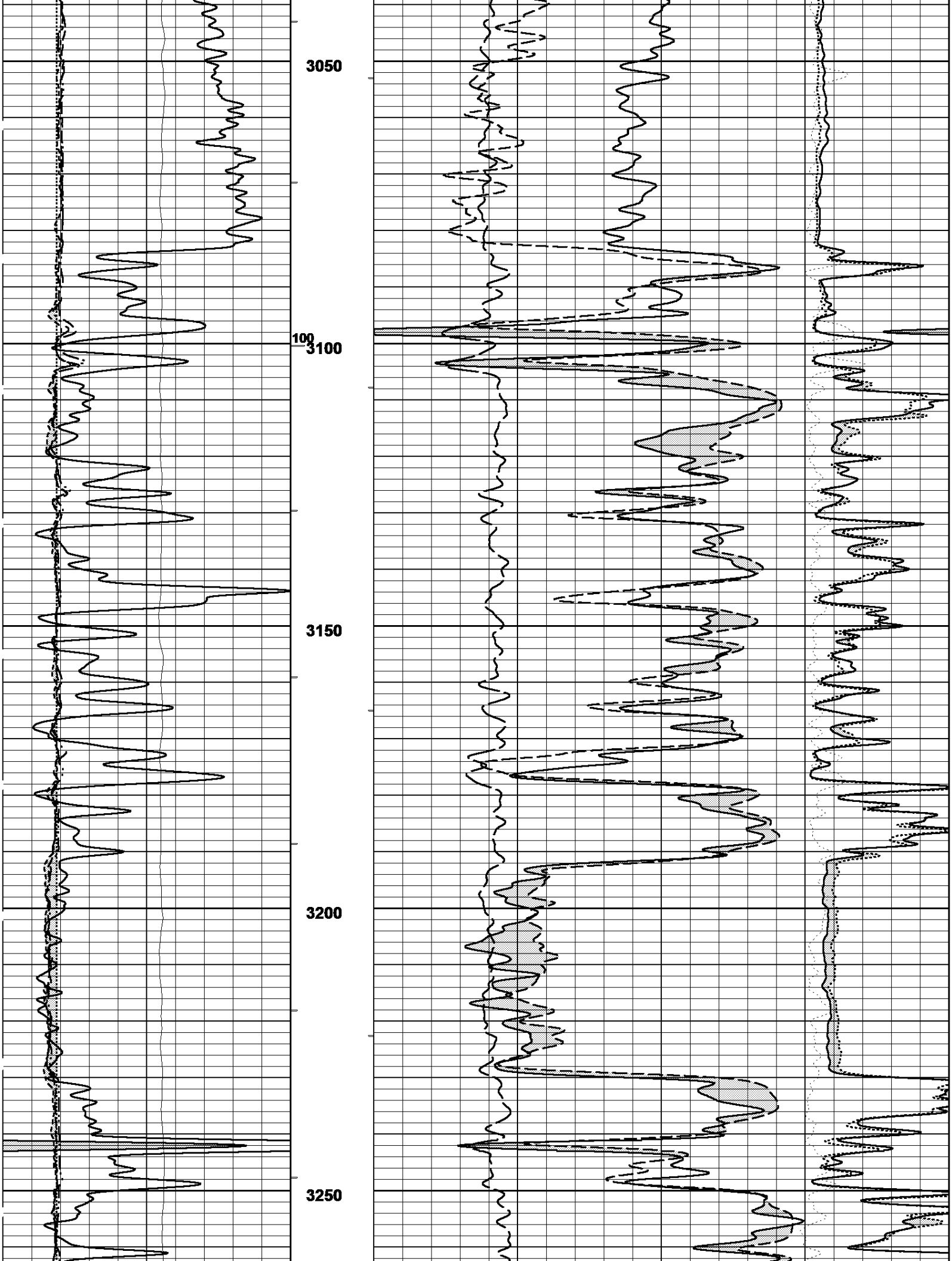
API
150.
30.
Limestone-Matrix (V/V)
-10.
200
100
2850
2900
2950
3000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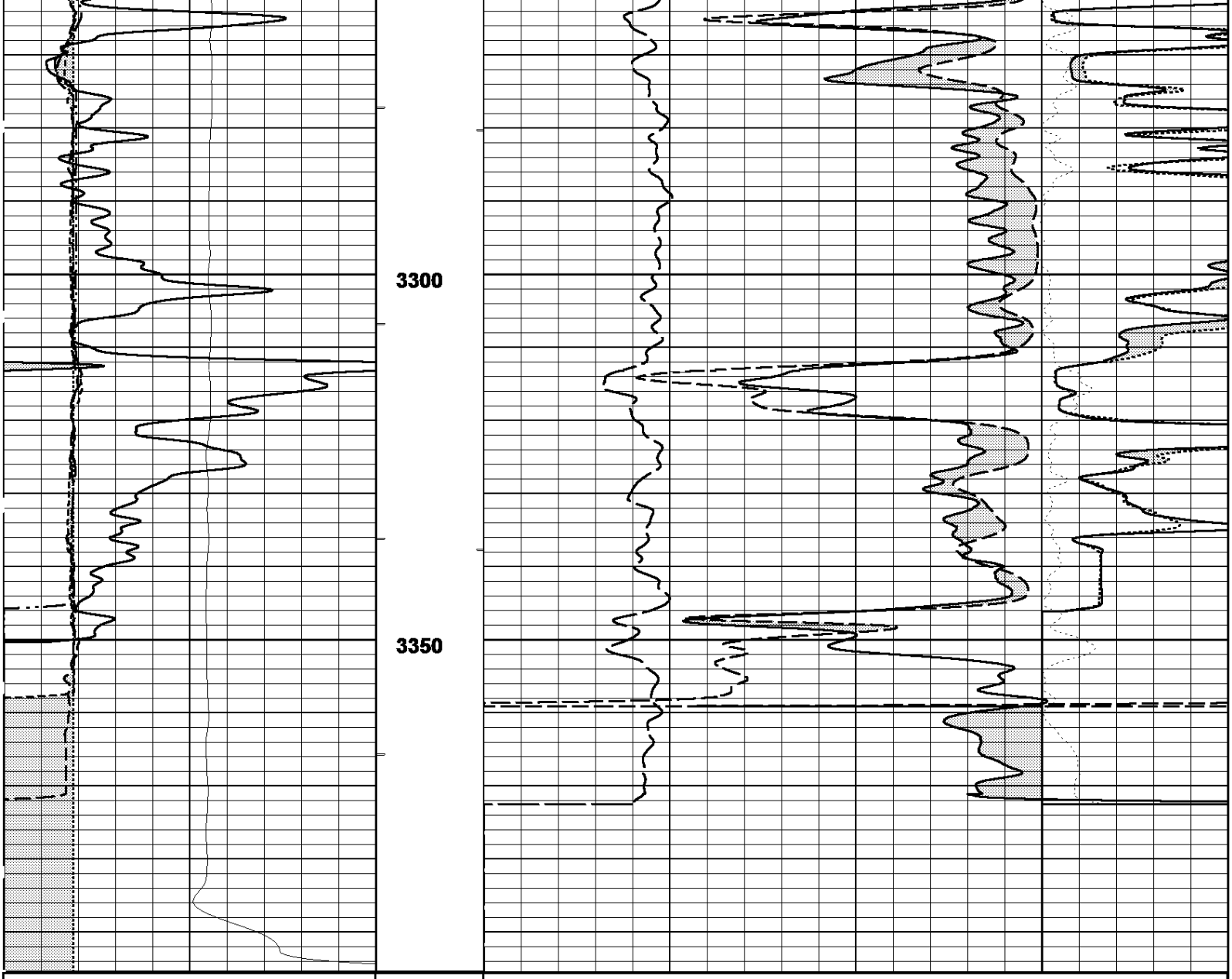


Gamma Ray (GR)		
0.	API	150.
X-Caliper (CALX)		
6.	in	16.
Y-Caliper (CALY)		
6.	in	16.
Tension (TENS)		
5000.	Lbs	0.
Bit Size (BIT)		
6.	Ref in	16.
Microlog-Caliper		
6.	in	16.

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.

04/02/2015
01:38:48 => Start Time

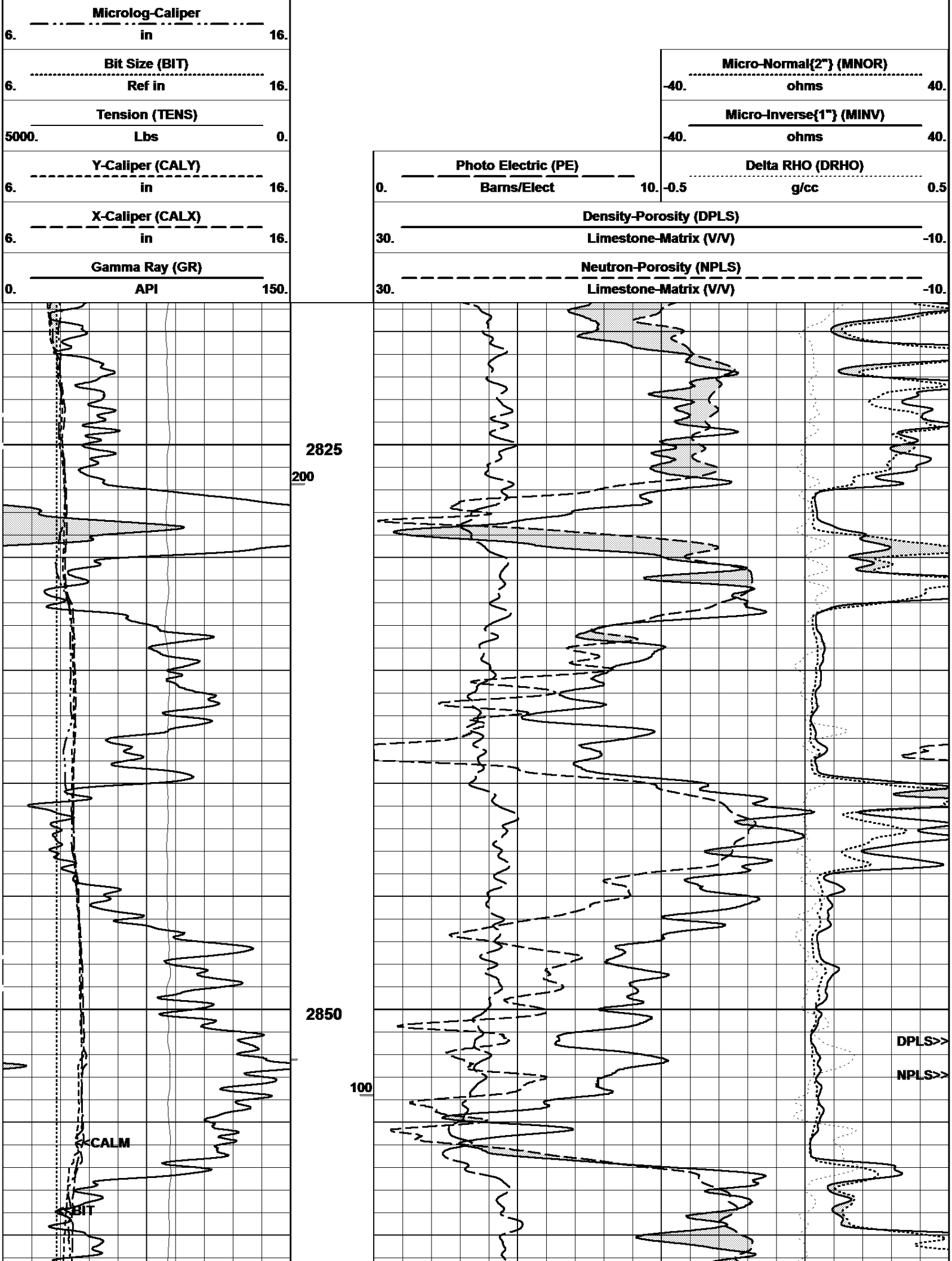
REPEAT PASS - LIMESTONE (5"/100Ft)

Log UP - (VER 11.19)
Start Depth=> 3395.40 Feet

04/02/2015
02:03:22 => End Time

HIGH DEFINITION PASS - LIMESTONE (20"/100Ft)

Log UP - (VER 11.19)
End Depth=> 2818.70 Feet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in
16.
Bit Size (BIT)
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Ref in
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Tension (TENS)
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Lbs
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Y-Caliper (CALY)
6.
in
16.
X-Caliper (CALX)
6.
in
16.
Gamma Ray (GR)
0.
API
150.
Micro-Normal{2"} (MNOR)
-40.
ohms
40.
Micro-Inverse{1"} (MINV)
-40.
ohms
40.
Photo Electric (PE)
0.
Barns/Elect
10.
Delta RHO (DRHO)
-0.5
g/cc
0.5
Density-Porosity (DPLS)
30.
Limestone-Matrix (V/V)
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Limestone-Matrix (V/V)
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NPLS>>
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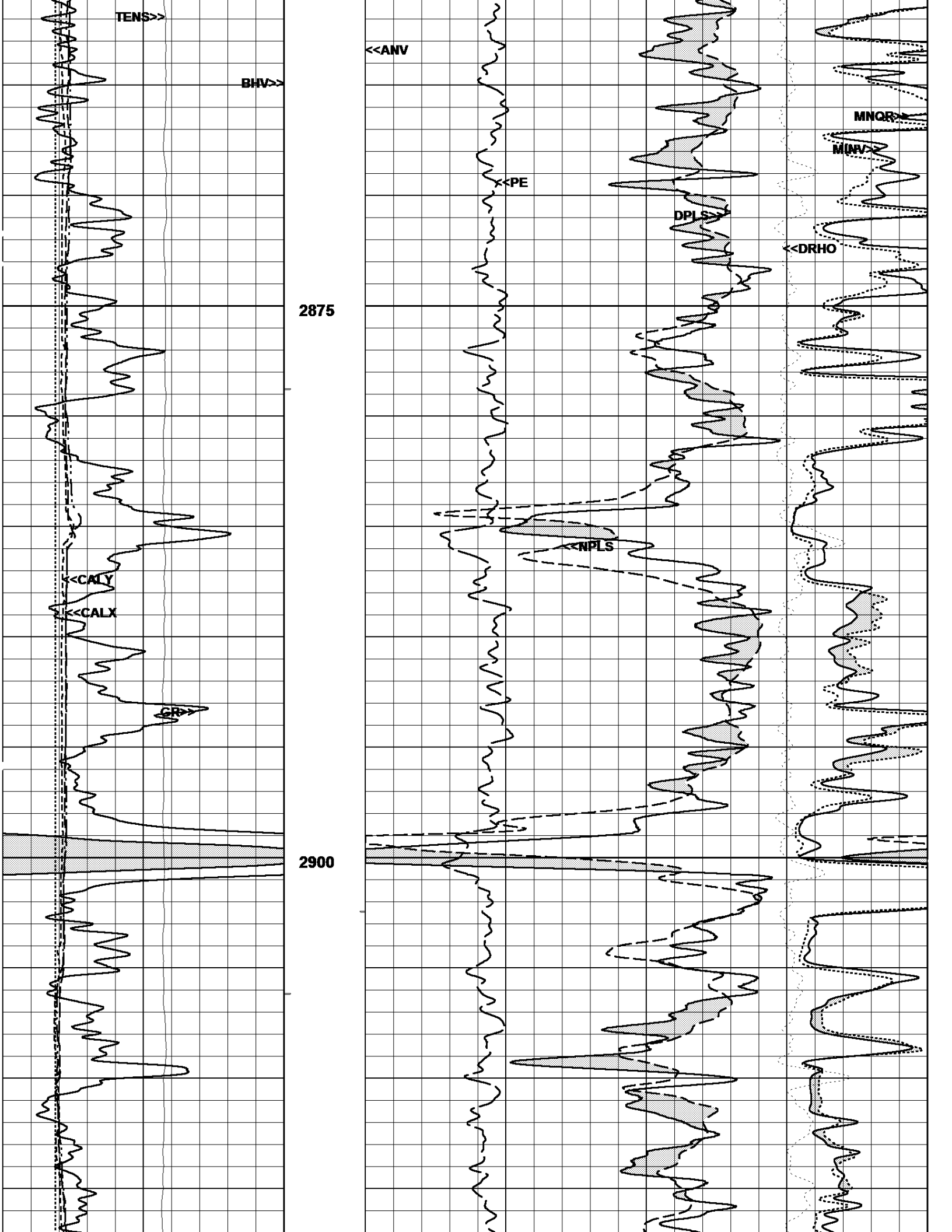
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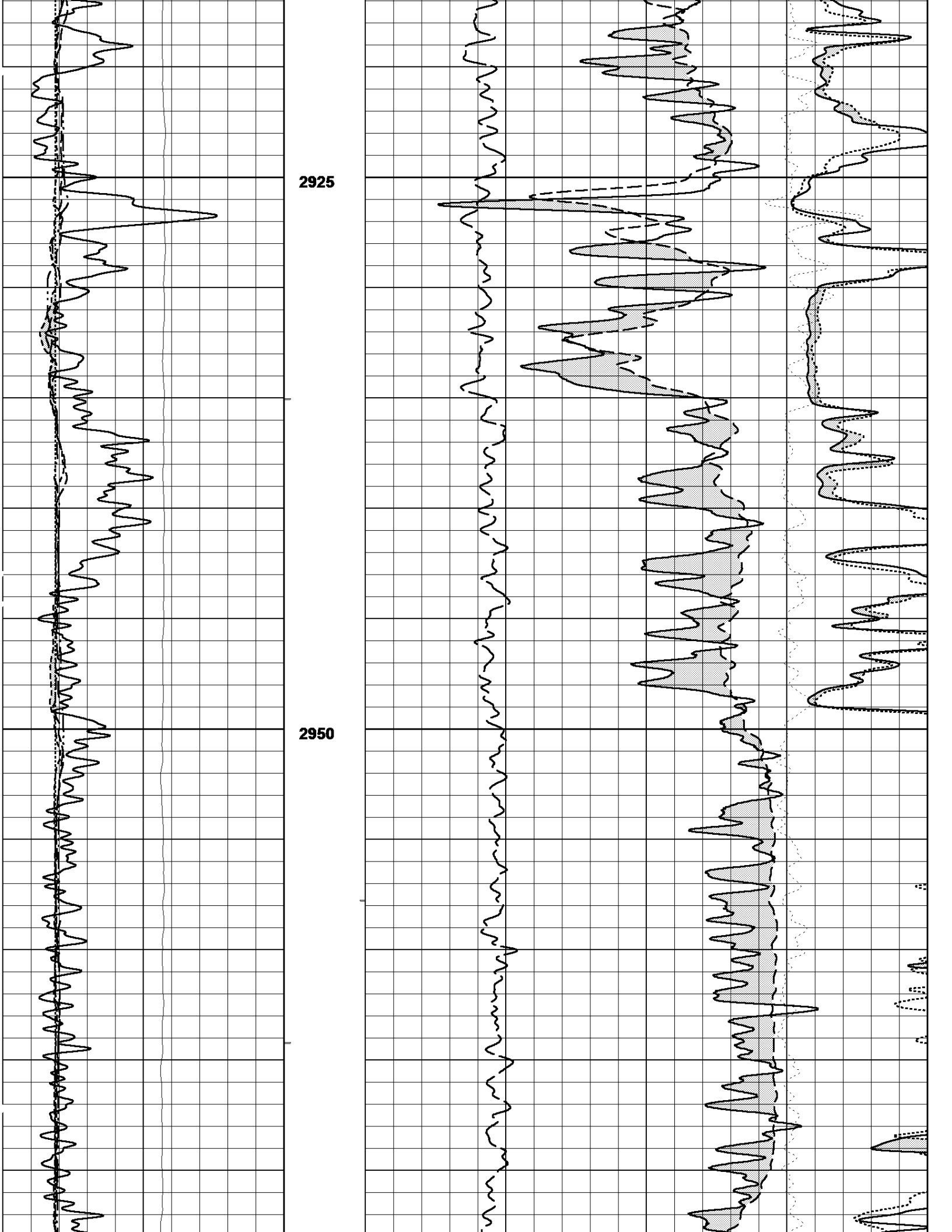
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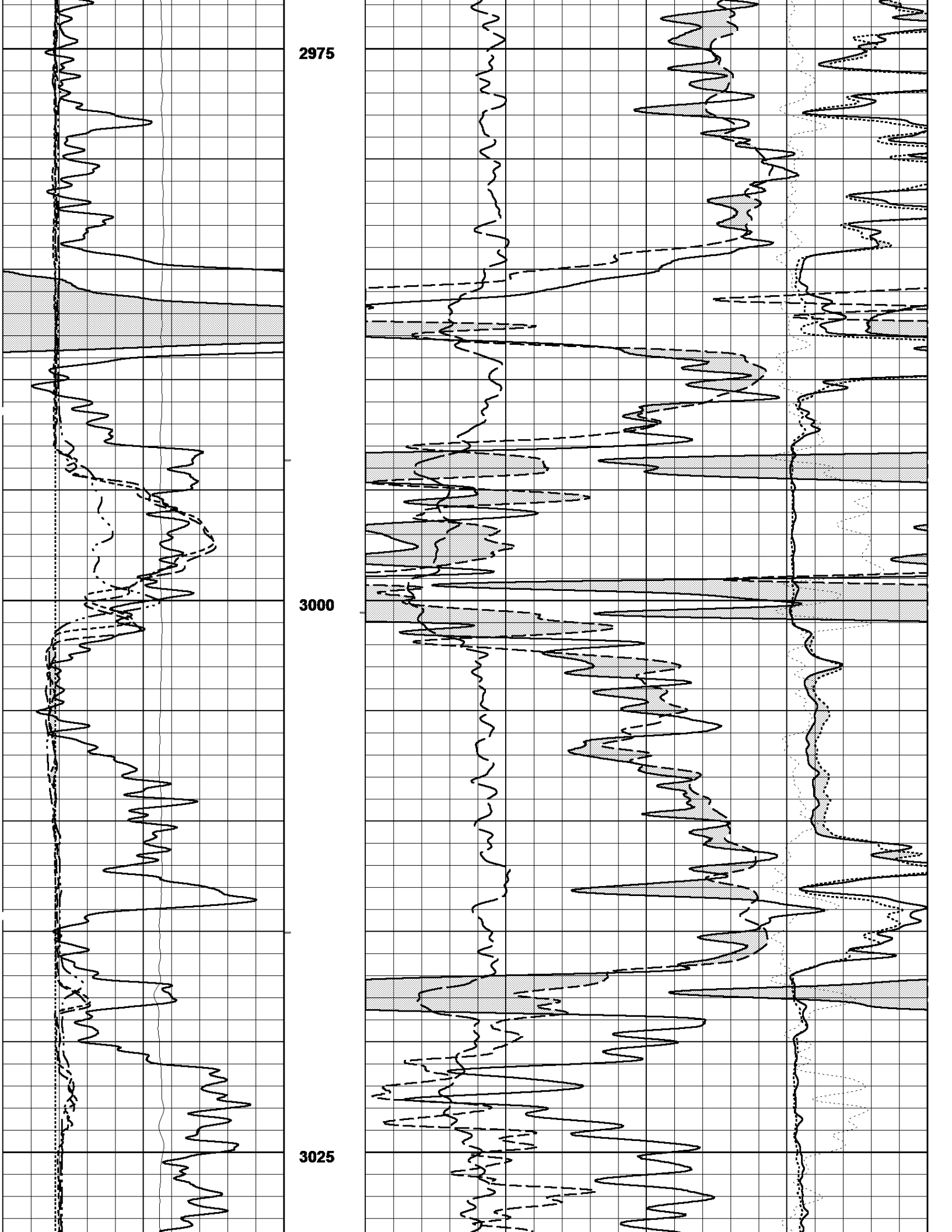
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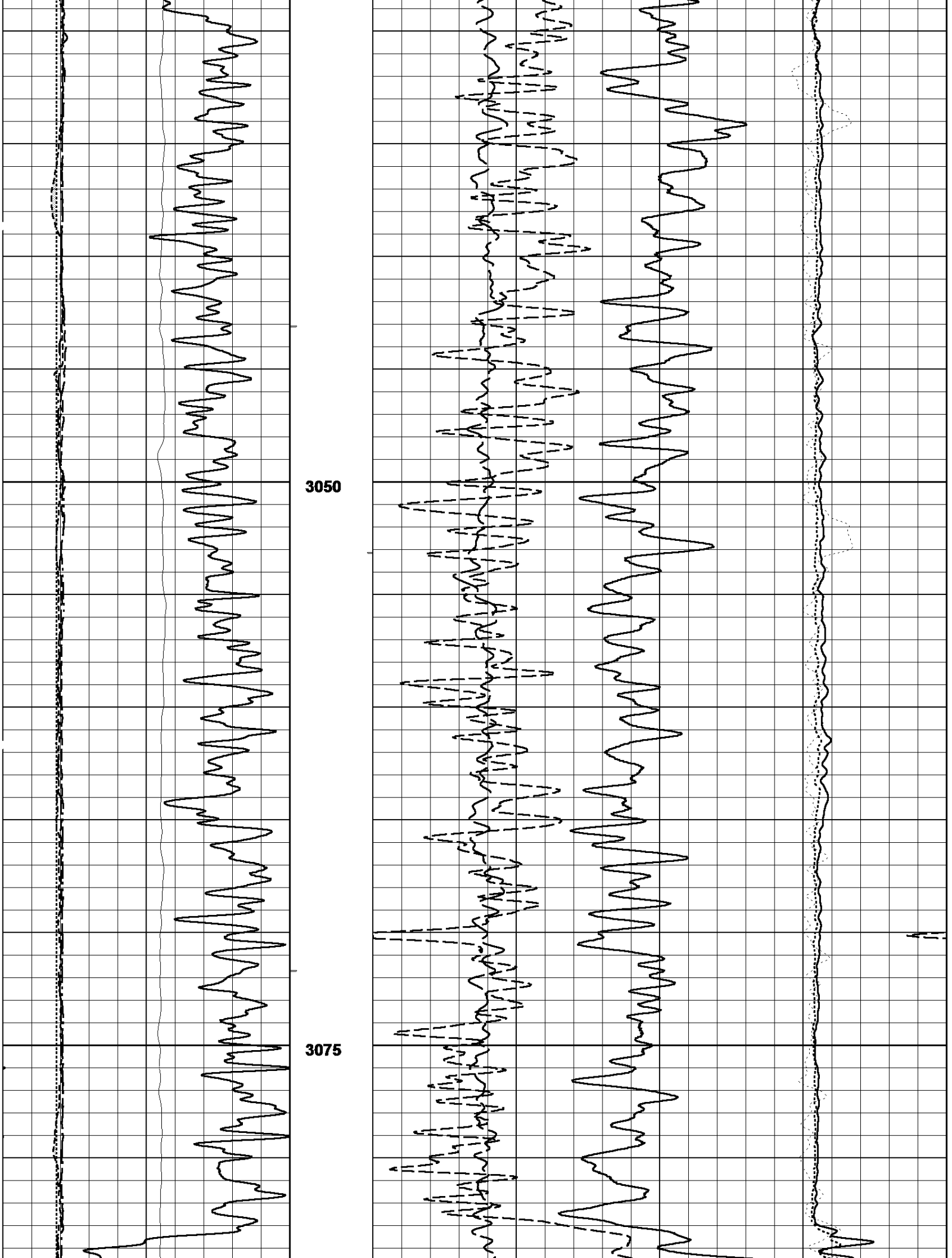
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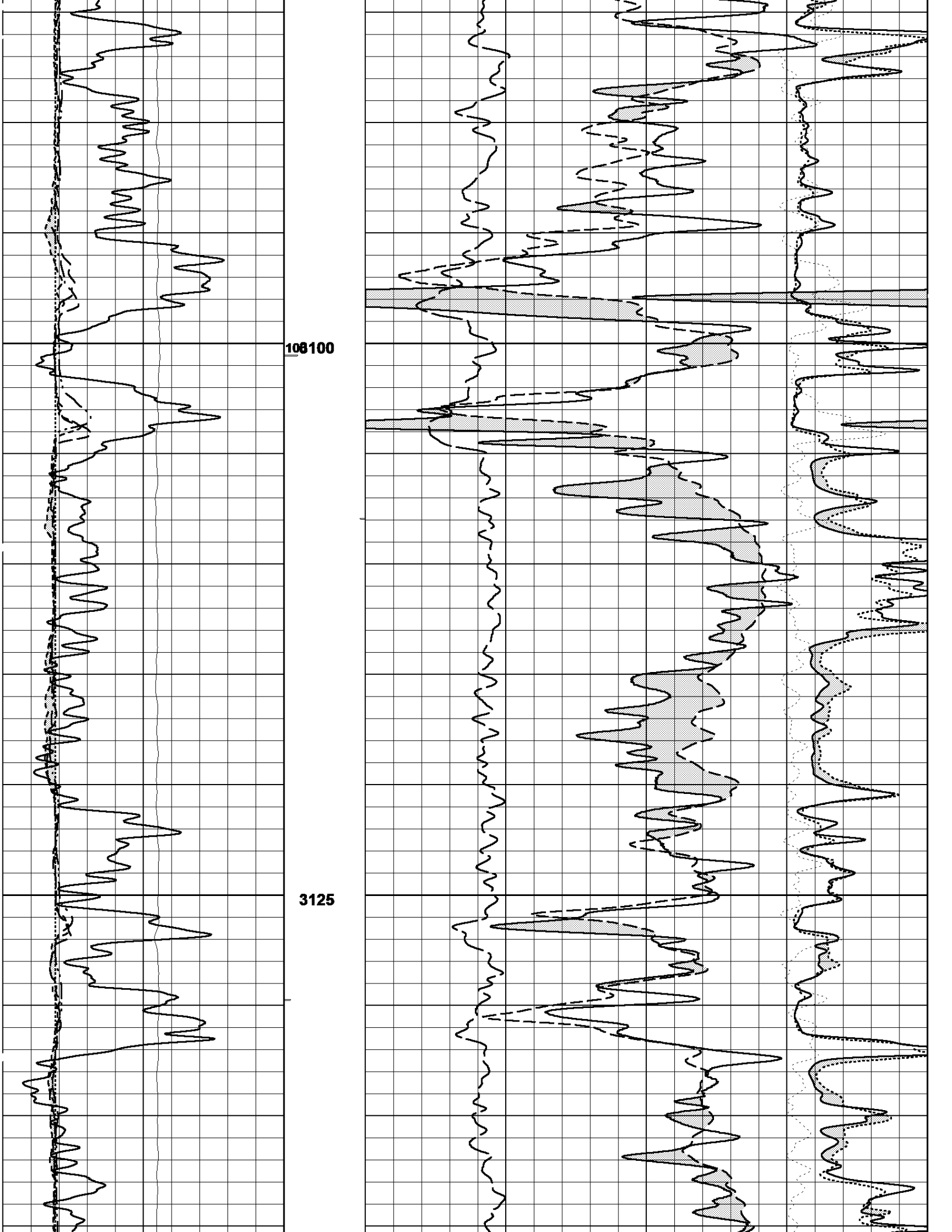
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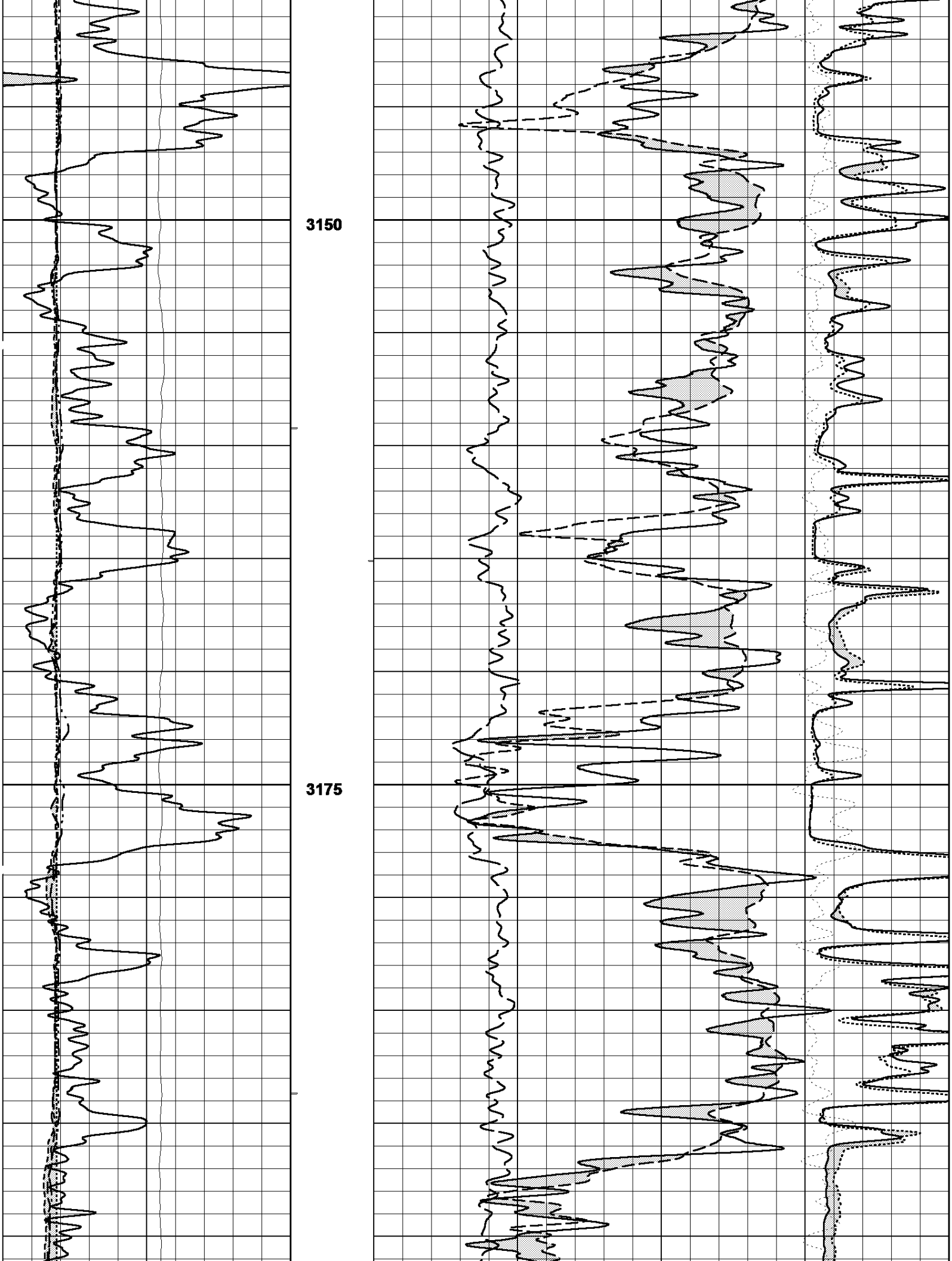
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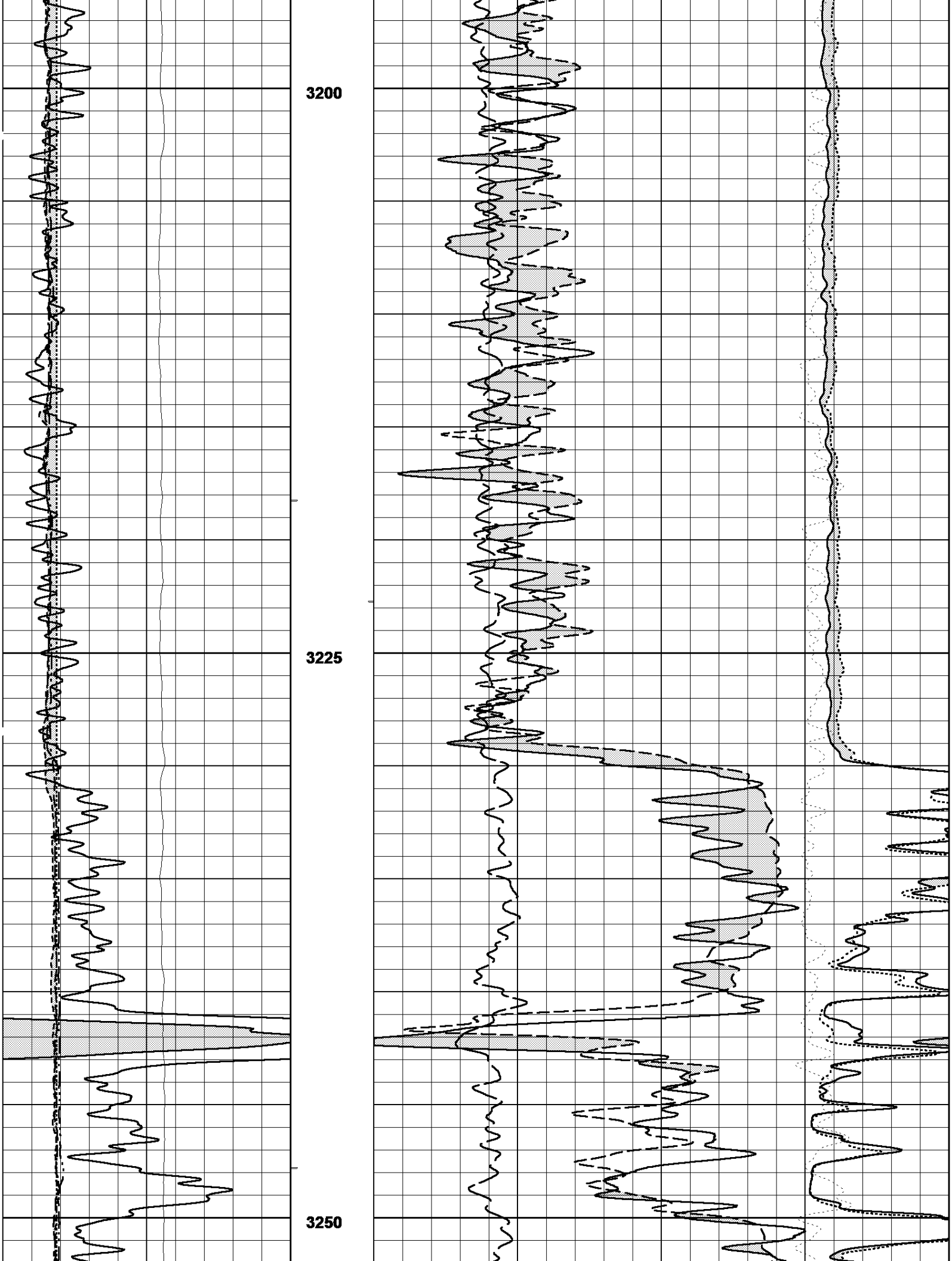
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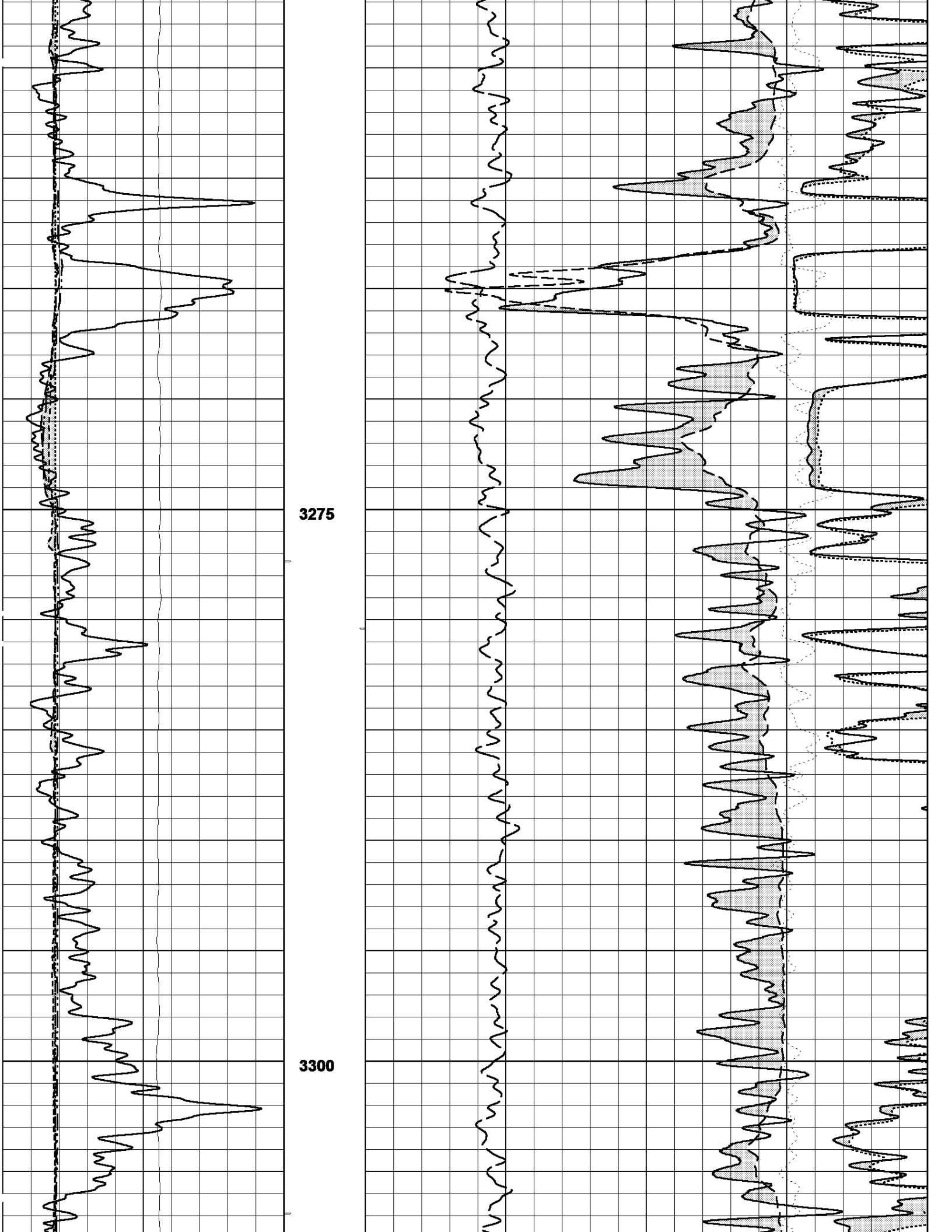
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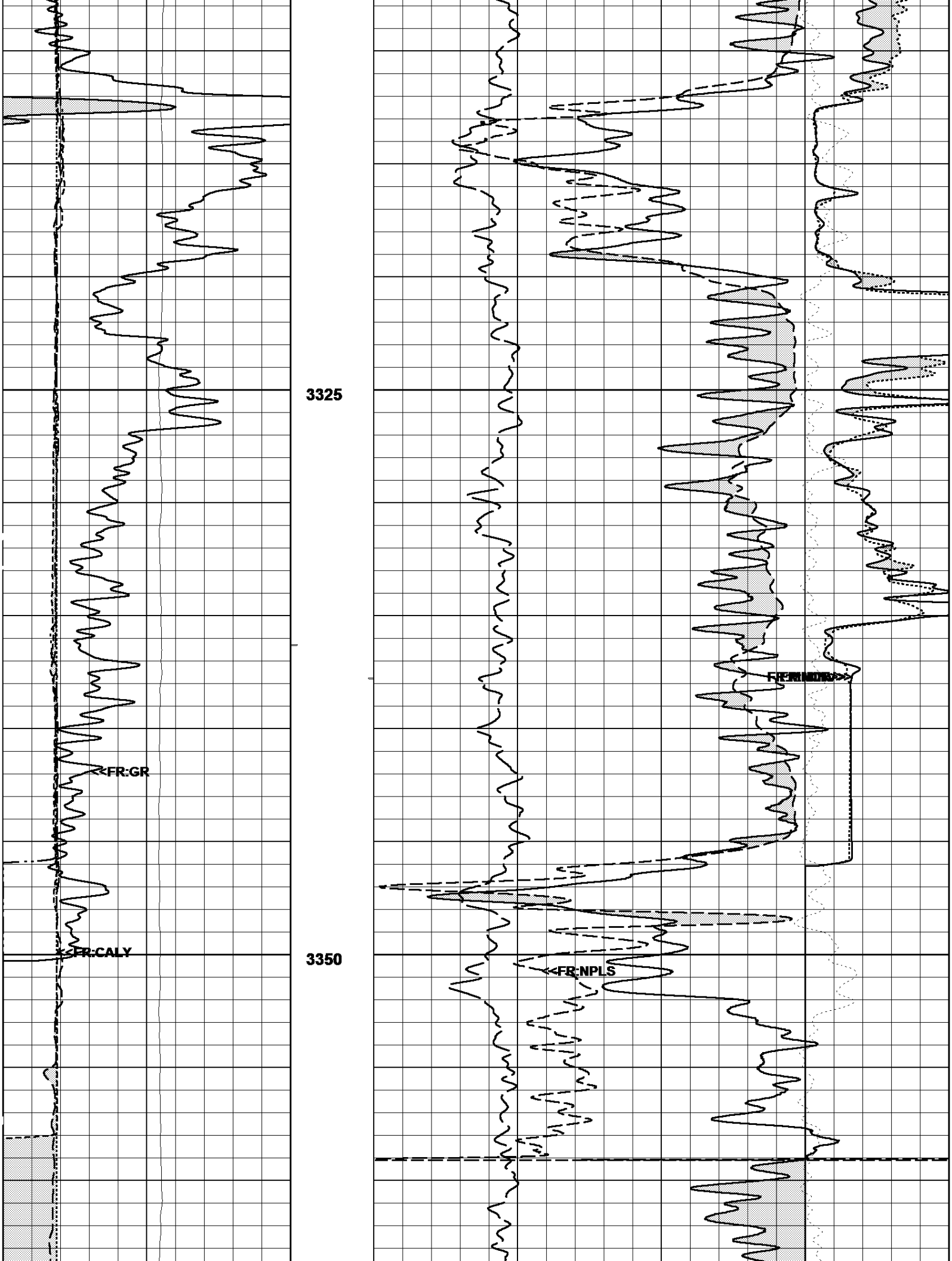
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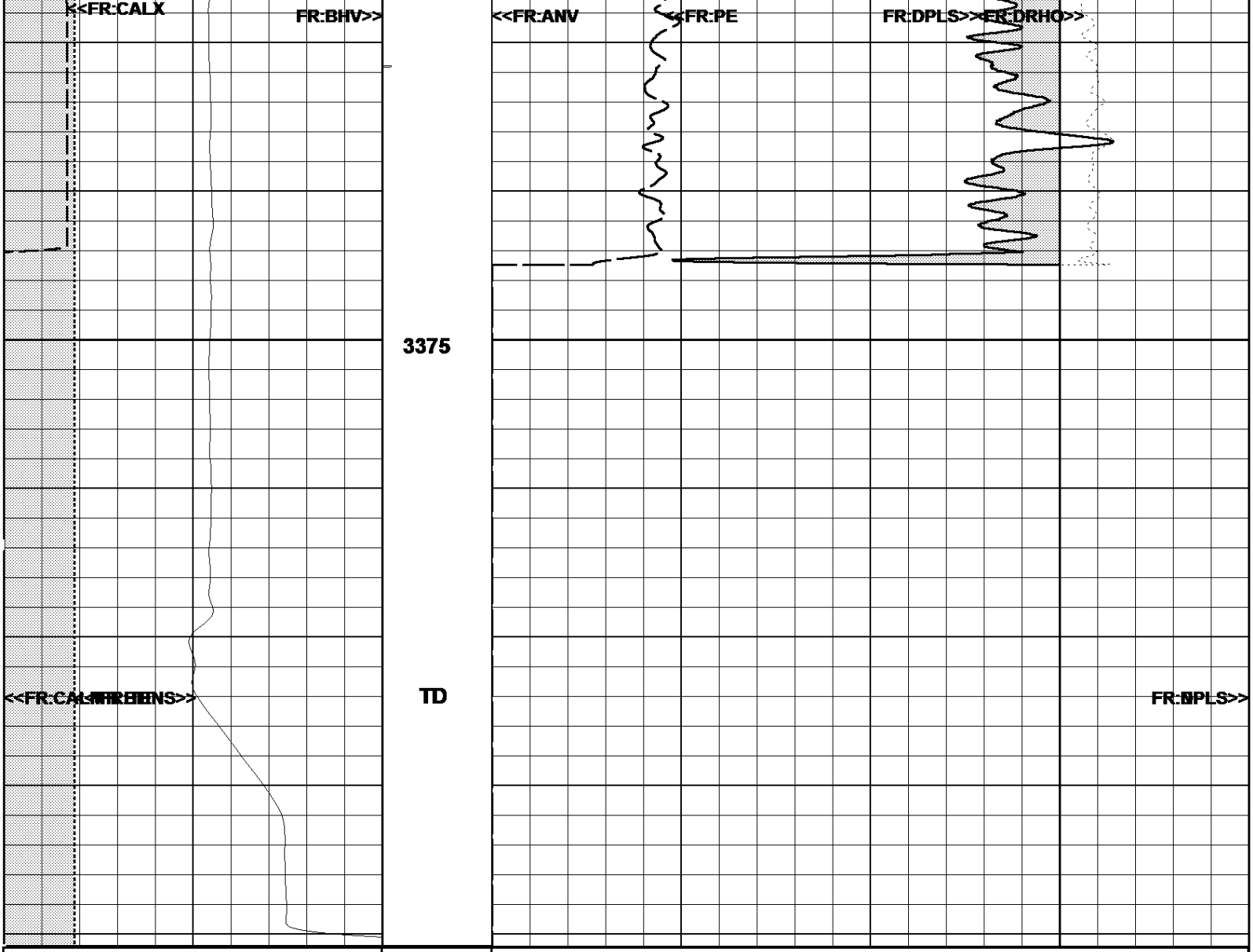

Gamma Ray (GR)		
0.	API	150.
X-Caliper (CALX)		
6.	in	16.
Y-Caliper (CALY)		
6.	in	16.
Tension (TENS)		
5000.	Lbs	0.
Bit Size (BIT)		
6.	Ref in	16.
Microlog-Caliper		
6.	in	16.

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.

04/02/2015
01:38:48 => Start Time

HIGH DEFINITION PASS - LIMESTONE (20"/100Ft)

Log UP - (VER 11.19)
Start Depth=> 3395.40 Feet

Litho-Density/PE Calibrations

TOOL TYPE	LFDC/Pe	SOURCE TYPE	CESIUM 137	SOURCE STRGTH	2 CURIE
SERIAL NUM	RL4101	SOURCE NUM			

MASTER BLOCK CALIBRATIONS

	W1(cps)	W2(cps)	W3(cps)	W4(cps)	SS	UNITS	CALIBRATION DATE	CALIBRATION TIME
ALUMINUM	4319.513	3739.580	1913.353	3.963	3312.6183	2.523(g/cc)	M/D/Y> 3/13/2015	H:M:S> 13:38:31
MAGNESIUM	12790.189	10883.634	4889.902	4.273	4853.9815	1.679(g/cc)		
BACKGROUND	1395.798	1234.616	858.899	3.788	4.2428			
SAND	12790.047	10889.672	4898.519	4.075		1.739(PE)		
IRON	3879.644	3400.750	1803.010	3.924		4.530(PE)		
FIELD VERIFIER(cps)	1614.960	1433.200	973.680	4.560	5.1200			
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	RN2007	SOURCE NUM			

MASTER TANK CALIBRATIONS

		NEAR(cps)	FAR(cps)	RATIO	K VALUE	CALIBRATION DATE	CALIBRATION TIME
LOW PHI	3.150			0.5943	0.9045	M/D/Y> 3/13/2015	H:M:S> 11:5:47
MED PHI	19.130			1.0181	0.9045		
HIGH PHI	31.300			1.2205	0.9046		
FIELD VERIFIER(cps)		294.161	282.345	1.0418			
VER NUM	7430						

WELL SITE CALIBRATIONS

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

GAMMA RAY CALIBRATION

SERIAL NUM	RG3007
BLANKET NUM	1A

MASTER CALIBRATIONS

	BackGrnd	CalVal: 175.000 API	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	29.340 - raw	207.814 - raw	0.981 - gain 0.000 - off	M/D/Y> 3/12/2015	H:M:S> 12:17:54

X CALIPER

SERIAL NUM	RL4101

MASTER CALIBRATIONS					
	ZeroVal: 6.000 In	CalVal: 10.000 In	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	2693.410 - raw	4852.950 - raw	0.002 - gain 1.011 - off	M/D/Y> 3/13/2015	H:M:S> 13:58:58

Y CALIPER CALIBRATIONS

SERIAL NUM: RN2007

MASTER CALIBRATIONS					
	ZeroVal: 6.000 in	CalVal: 10.000 in	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	738.301 - raw	1455.113 - raw	0.006 - gain 1.880 - off	M/D/Y> 3/13/2015	H:M:S> 10:16:22

MICRO NORMAL CALIBRATIONS

SERIAL NUM: RM8003

MASTER CALIBRATIONS					
	ZeroVal: 0.020 ohmm	CalVal: 10.000 ohmm	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	37.619 - raw	394.686 - raw	0.028 - gain -1.031 - off	M/D/Y> 3/17/2015	H:M:S> 11:57:31

MICRO INVERSE CALIBRATIONS

SERIAL NUM: RM8003

MASTER CALIBRATIONS					
	ZeroVal: 0.020 ohmm	CalVal: 10.000 ohmm	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	17.550 - raw	274.753 - raw	0.039 - gain -0.661 - off	M/D/Y> 3/17/2015	H:M:S> 11:54:0

MICRO CALIPER CALIBRATIONS

SERIAL NUM: RM8003

MASTER CALIBRATIONS					
	ZeroVal: 6.000 In	CalVal: 10.000 In	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	2470.188 - raw	4533.491 - raw	0.002 - gain 1.211 - off	M/D/Y> 3/17/2015	H:M:S> 12:3:53

Company	CMX INCORPORATED
Well	CLAFLIN #1-34
Field	KRAFT-PRUSA
County	BARTON
State	KANSAS

State	KANSAS

RECON

COMPENSATED NEUTRON
LITHOLOGY DENSITY
GAMMA RAY X-Y CALIPER
MICROLOG

FIELD PRINT FIELD PRINT