

Company Well Field County State				MIDWESTERN EXPLORATION COMPANY L&L #1-3 WIDE AWAKE STEVENS KANSAS			
RECON				DUAL INDUCTION - SP COMPENSATED NEUTRON DENSITY - SONIC GAMMA - MICROLOG			
SEC 3		TWP 35S		RGE 35W		OTHER SERVICES:	
Location: 1530 FSL & 2305 FWL S2 SE NE SW							
SURF. SAME		API #: 15-189-22862					
Permanent Datum Log Measured From Drilling Measured From		Ground Level Kelly Bushing Kelly Bushing		Elevation: 2979 Latitude: 37.02898N Longitude: 101.11372W		ELEVATIONS K.B. 2991 G.L. 2979 D.F. N/A	
Date		17-Aug-2021					
Run No.		ONE					
TD Driller		6690 ft.		ft.			
TD RECON		6684 ft.		ft.			
Bot Logged Interval		6683 ft.		ft.			
Top Logged Interval		1680 ft.		ft.			
Casing Depth Driller		8 5/8 in.		@ 1680		in. @	
Casing Depth RECON		8 5/8 in.		@ 1680		in. @	
Bit Size		7 7/8 in.		in.			
Drilling Fluid Type		GEL/CHEM					
Density		Viscosity 8.9		56			
Fluid Loss		PH 5.6		10.5			
Source Of Sample		Flowline					
RM @ Measured Temp		1.6 Ohmm		@ 75°F		Ohmm @	
RMF @ Measured Temp		1.3 Ohmm		@ 75°F		Ohmm @	
RMC @ Measured Temp		2.0 Ohmm		@ 75°F		Ohmm @	
RM @ MRT		0.8 Ohmm		@ 148°F		Ohmm @	
Max Recorded Temp		148°F					
Time Drilling Stopped		17-AUG-2021		01:30			
Time Circulation Stopped		17-AUG-2021		07:45			
Time Logger On Bottom		17-AUG-2021		12:30			
Unit Num		Location S406		ALVARADO, TX			
Recorded By		J.WAL TERS					
Witnessed By		B.DAUGHERTY					

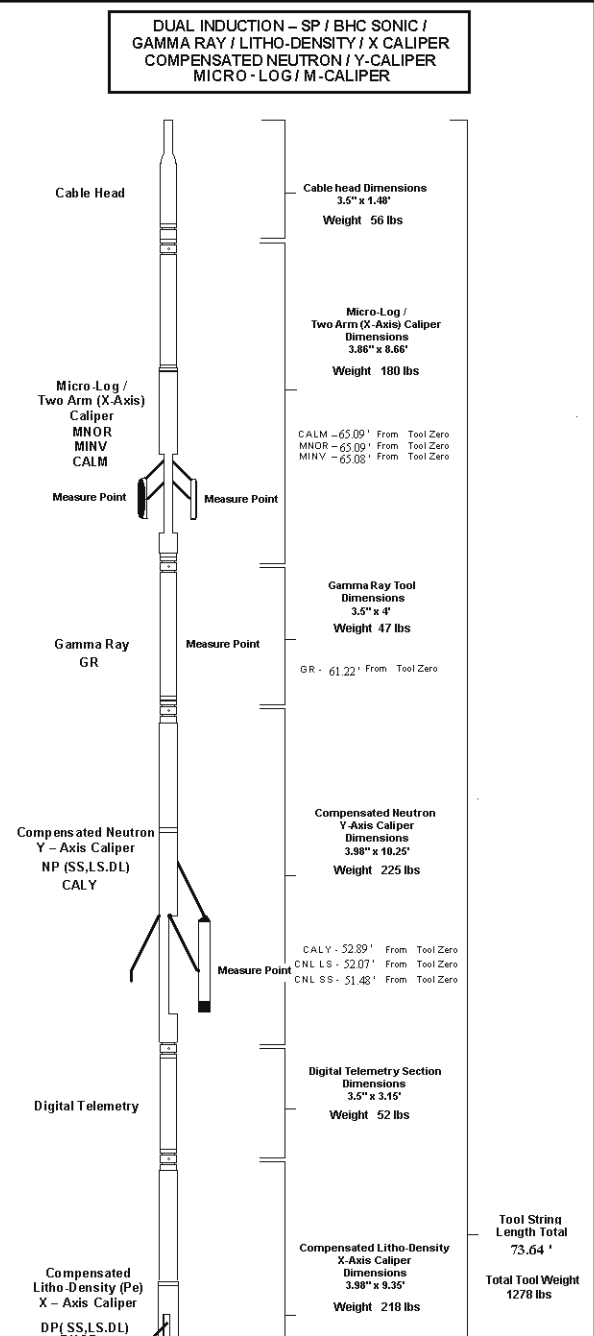
FINAL PRINT

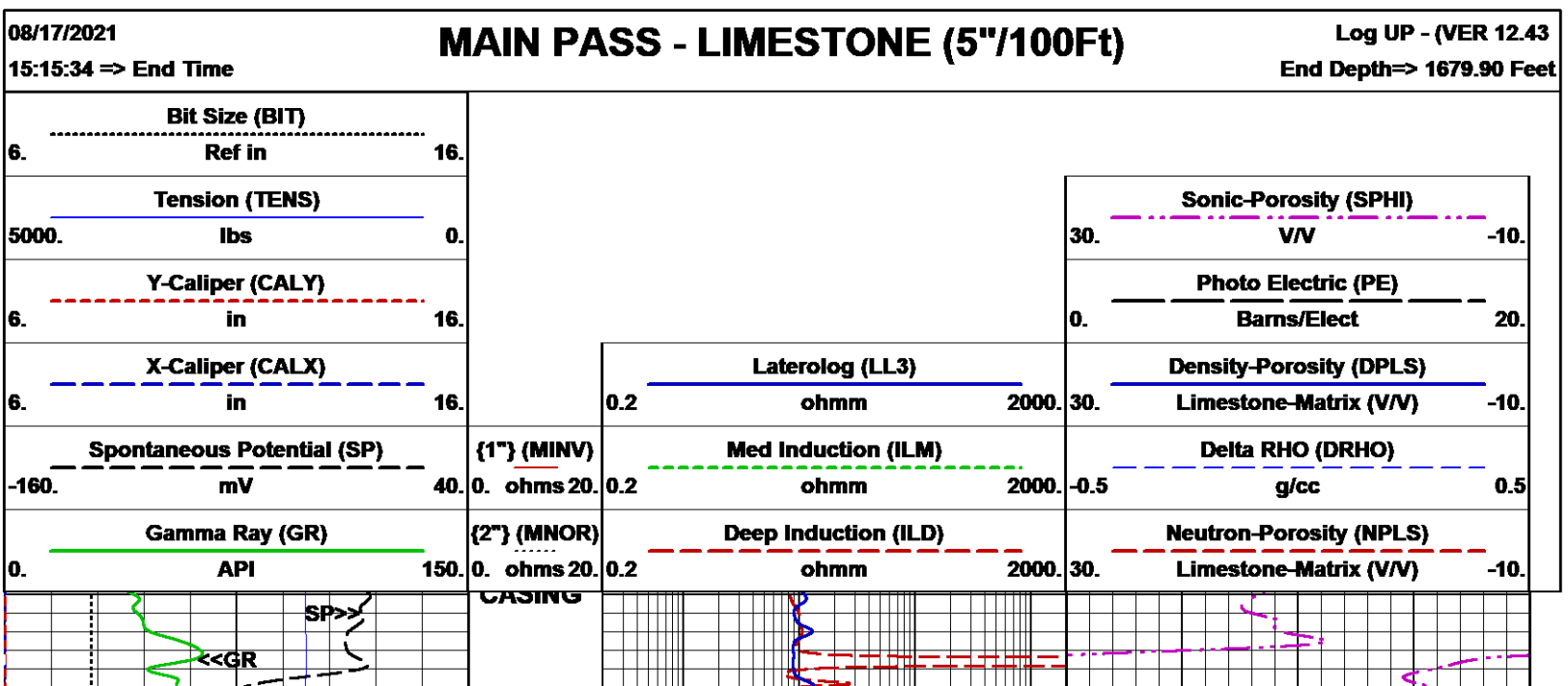
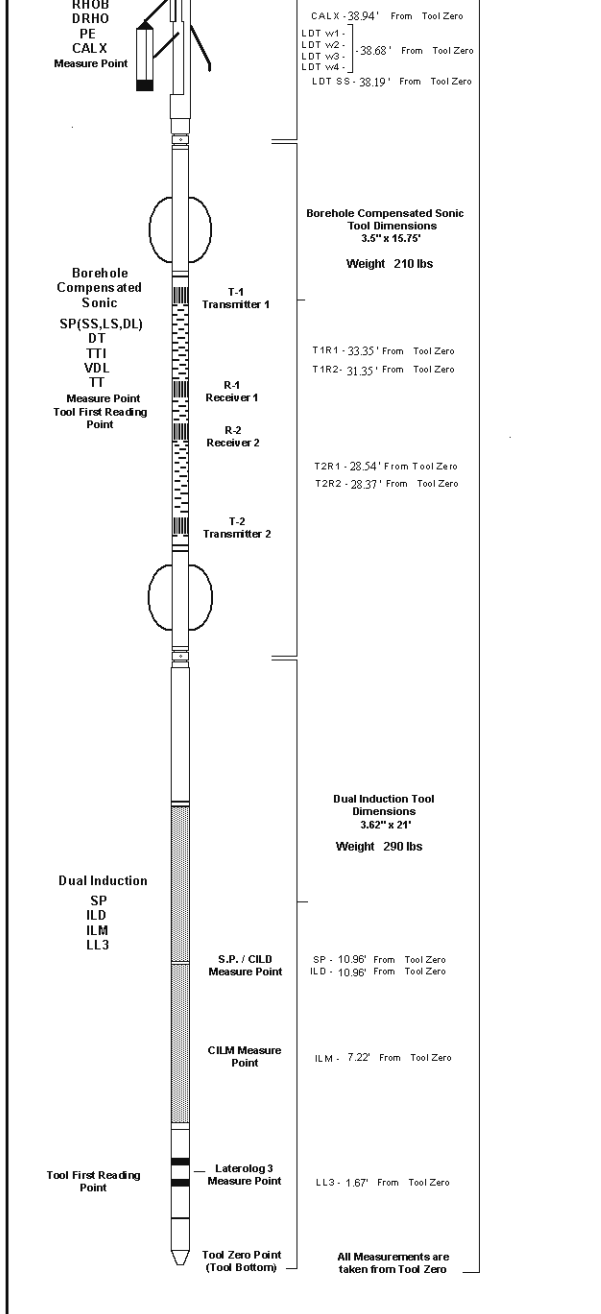
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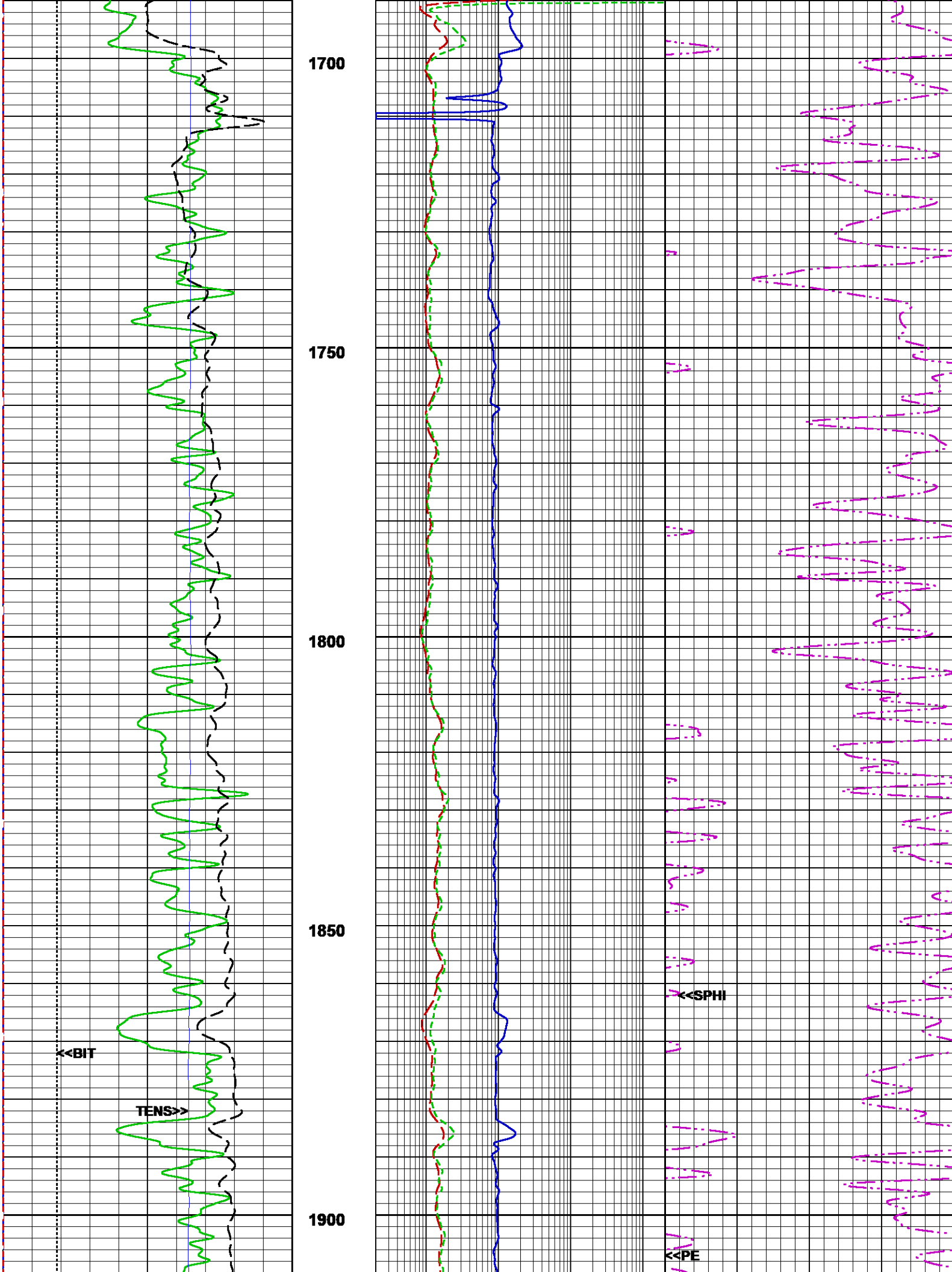
All interpretations are based on inferences from electrical or other readings, and therefore, RECON cannot and will not guarantee the accuracy of any interpretations of log data. RECON shall not be liable for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from		interpretations 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 RIG 1	
GENERAL REMARKS SECTION			
FIRST RUN IN THE HOLE CNL AND LDT LOGGED IN A LIMESTONE MATRIX CNL/LDT LOGGED MATRIX: 2.71 g/cc. CHLORIDES: 2000 GAMMA RAY DATA DROPS OUT FROM 3496' TO 3498'		DISPATCH 24 HR: 682-628-4841 AHV CALCULATED ON A 5.5 IN OD CASING LOGS RAN AND PRESENTED AS REQUESTD POROSITY DATA CUT OFF @ 3400' ALL CALIPERS CLOSED @ 3400'	

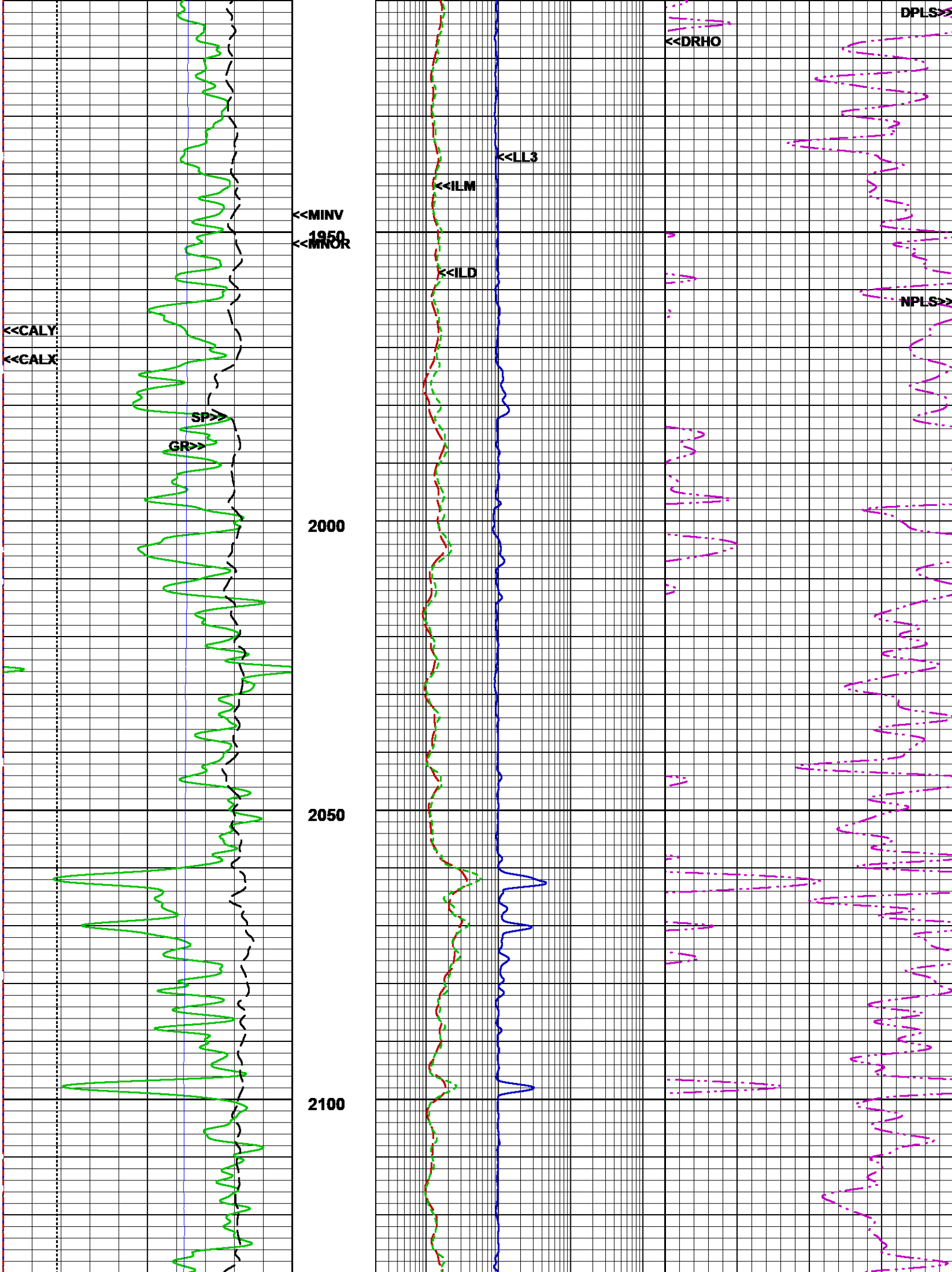
CEMENT VOLUME CALCULATIONS SUMMARY

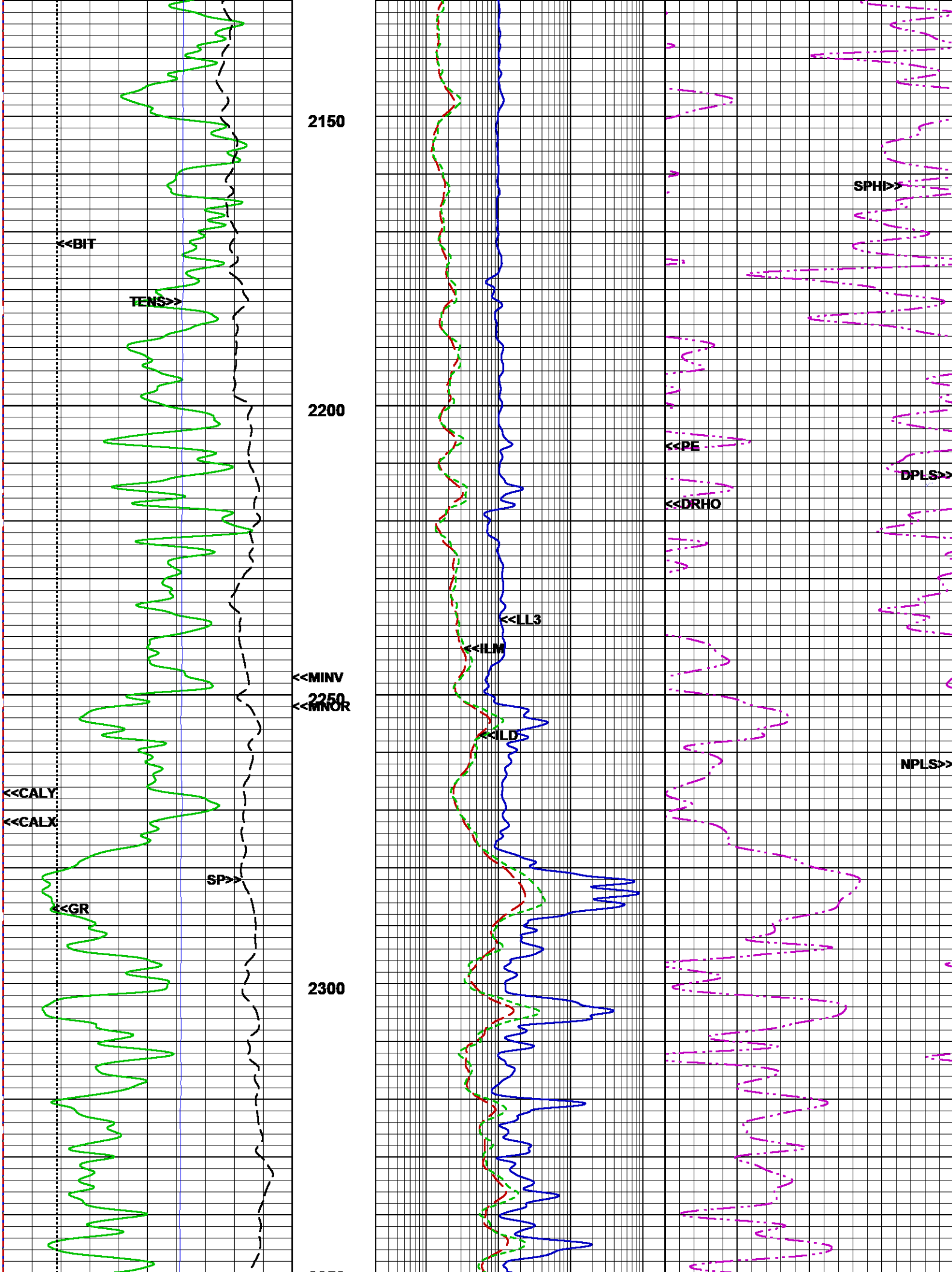
Tool Type Tool Serial #	LDT-CNT	Caliper Type	X-Y CALIPERS			
	RN2004 / RL4116					
	Borehole Total	Annular Volume with Casing	From Depth (MKb)	To Depth (MKb)		
VOLUMES	1130 Cubic Feet	580 Cubic Feet	3400	TD		
CASING INFORMATION						
	SIZE (in)	GRADE	WEIGHT (lbs/ft)	ID (in)	TOP DEPTH	BOT DEPTH
SURFACE CASING	8 5/8	N/A	N/A	N/A	Surface	1680
INTERMEDIATE CASING	N/A	N/A	N/A	N/A	N/A	N/A
PRODUCTION CASING	5 1/2	N/A	N/A	N/A	Surface	TD

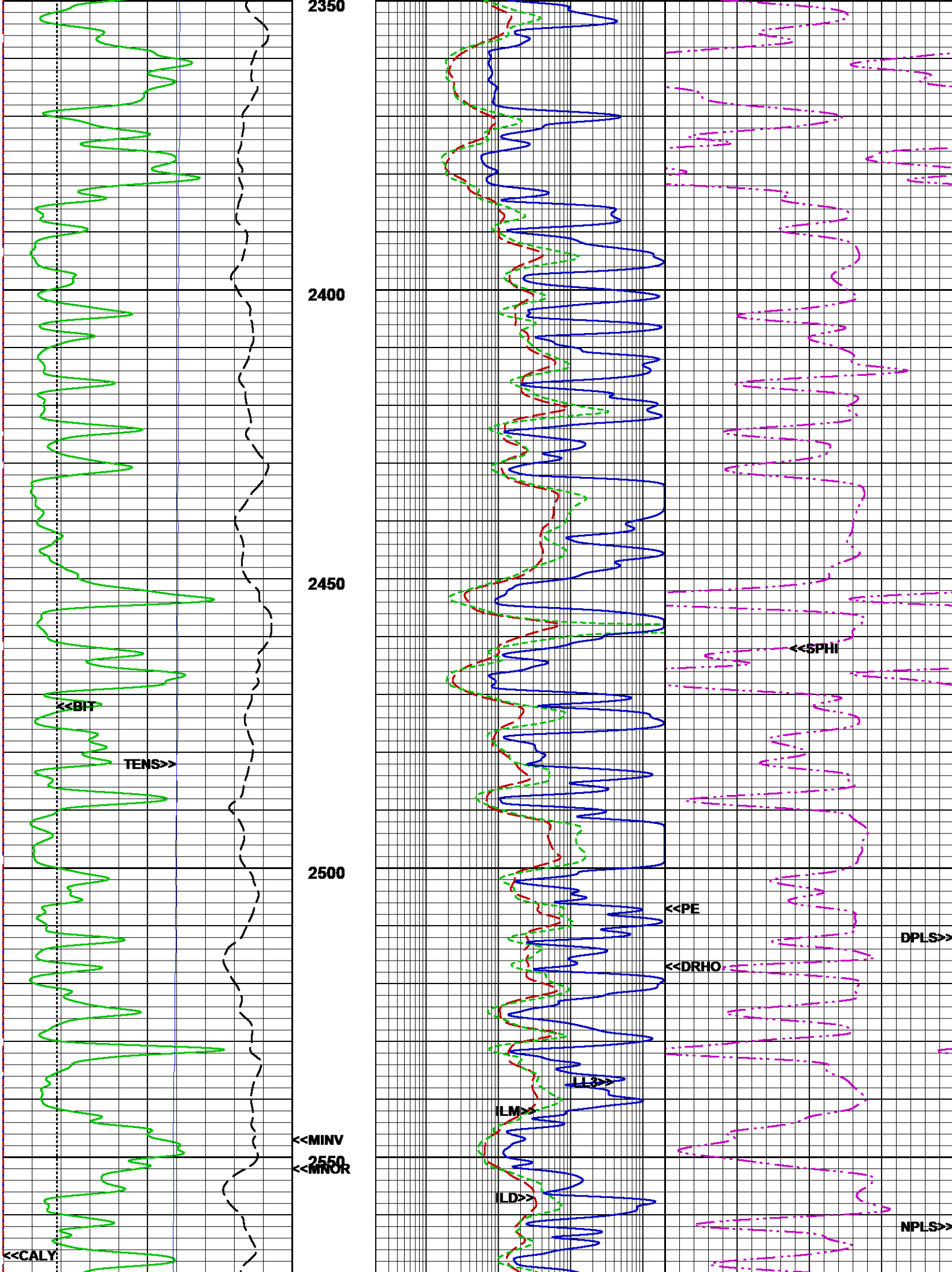


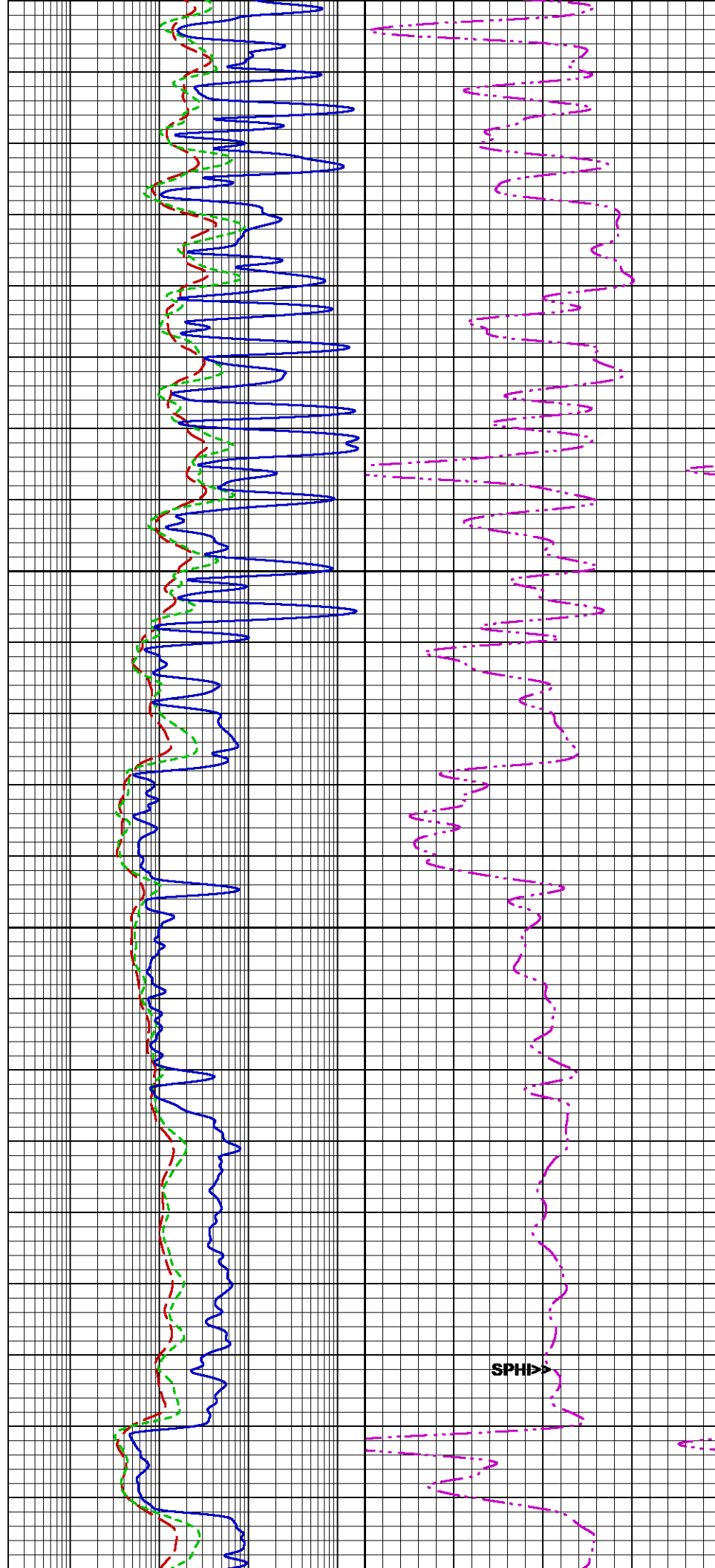
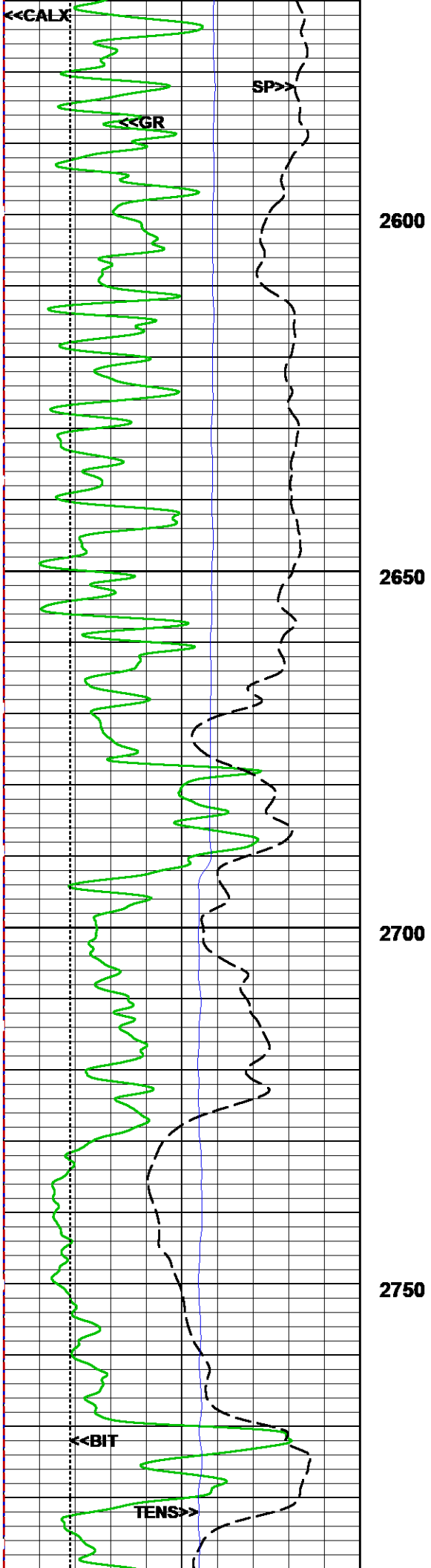


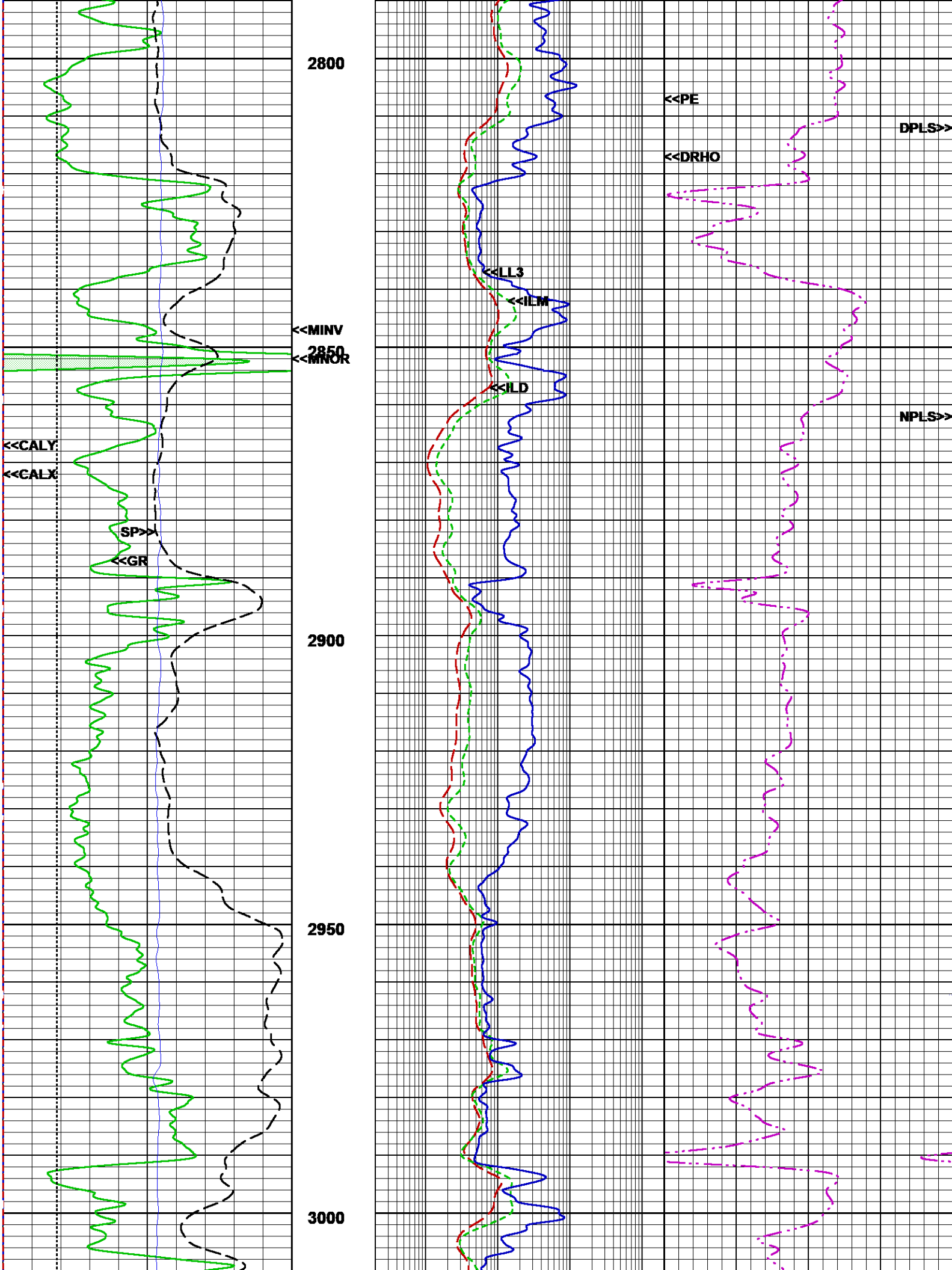


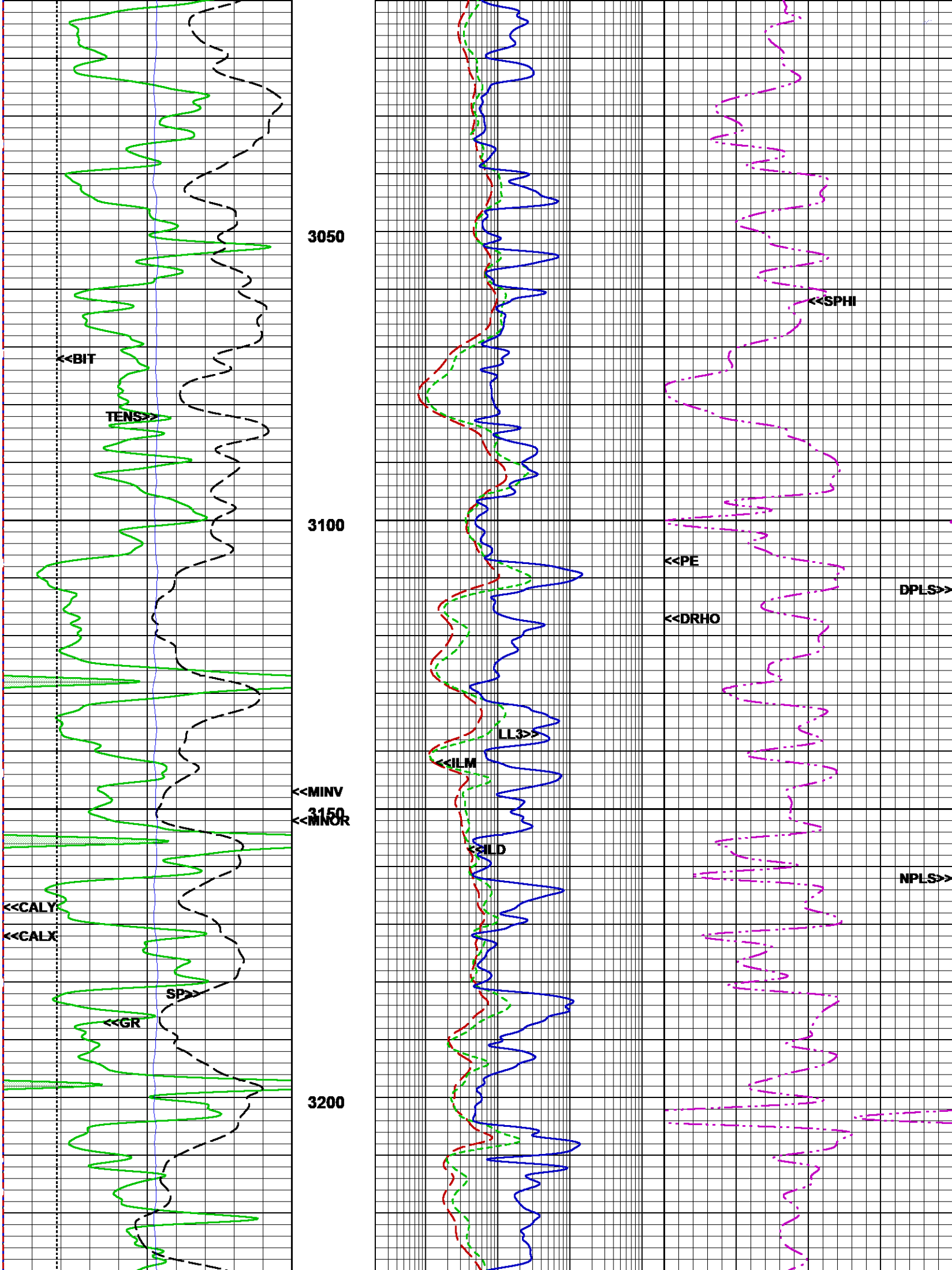


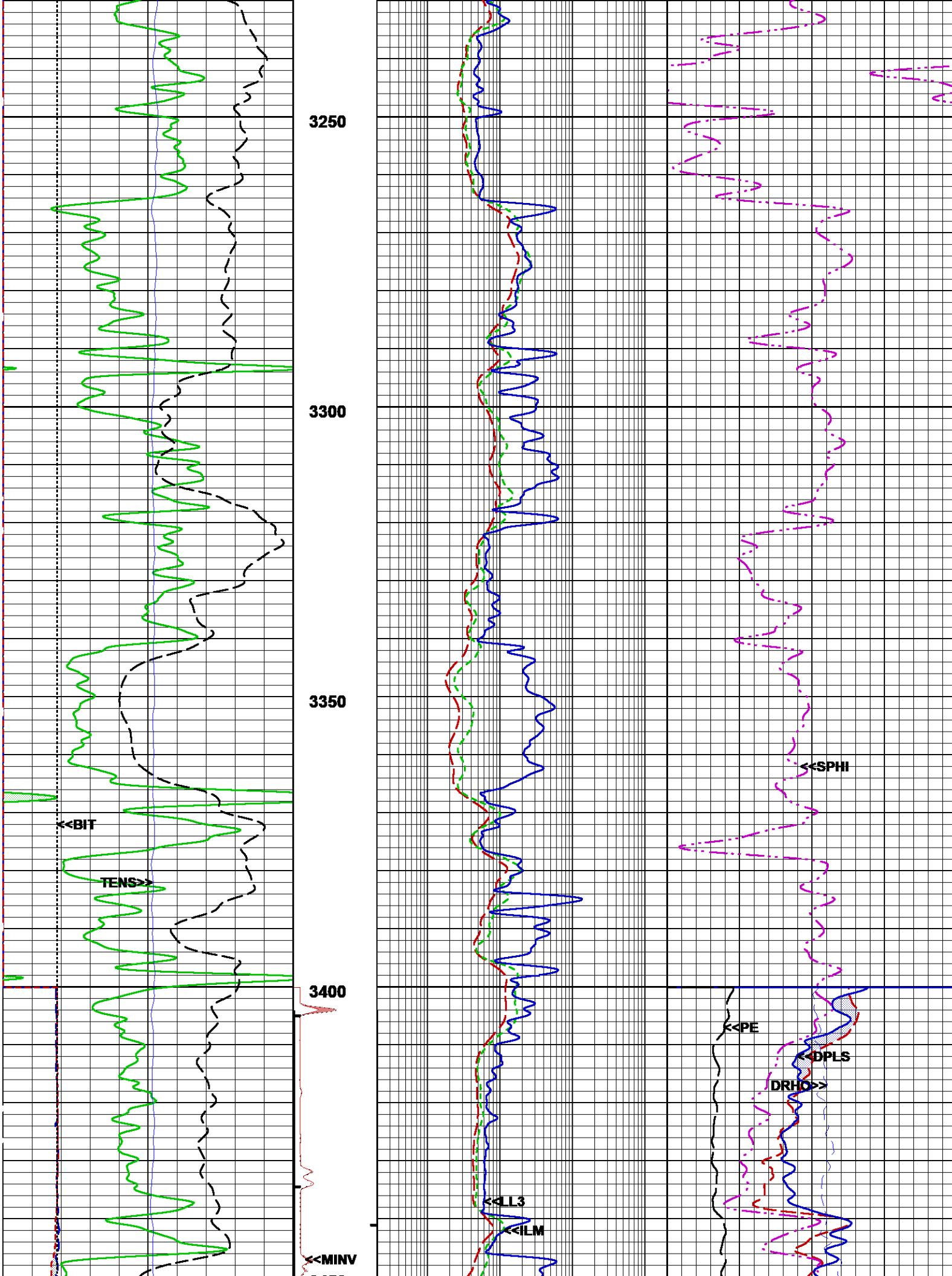


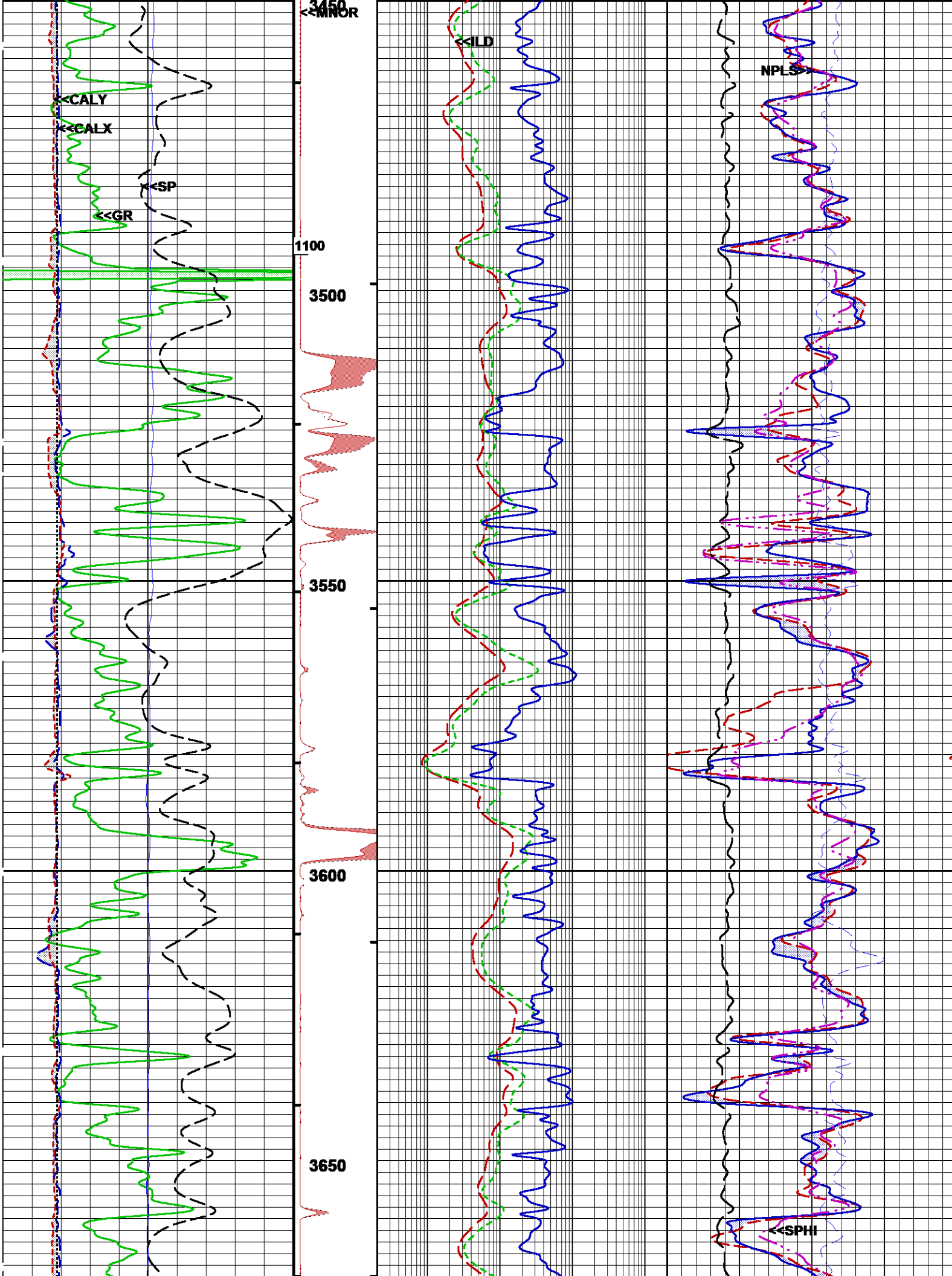


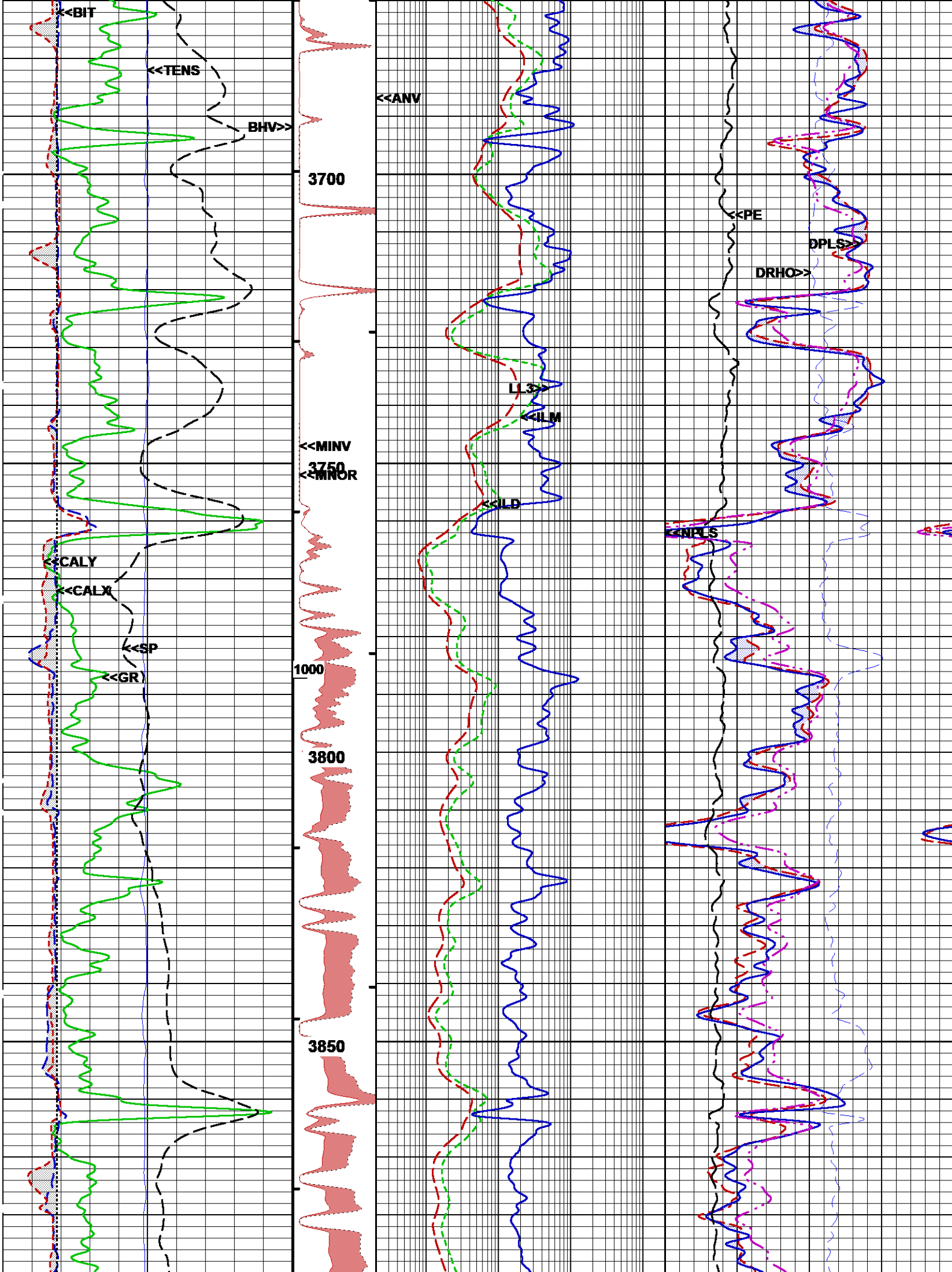


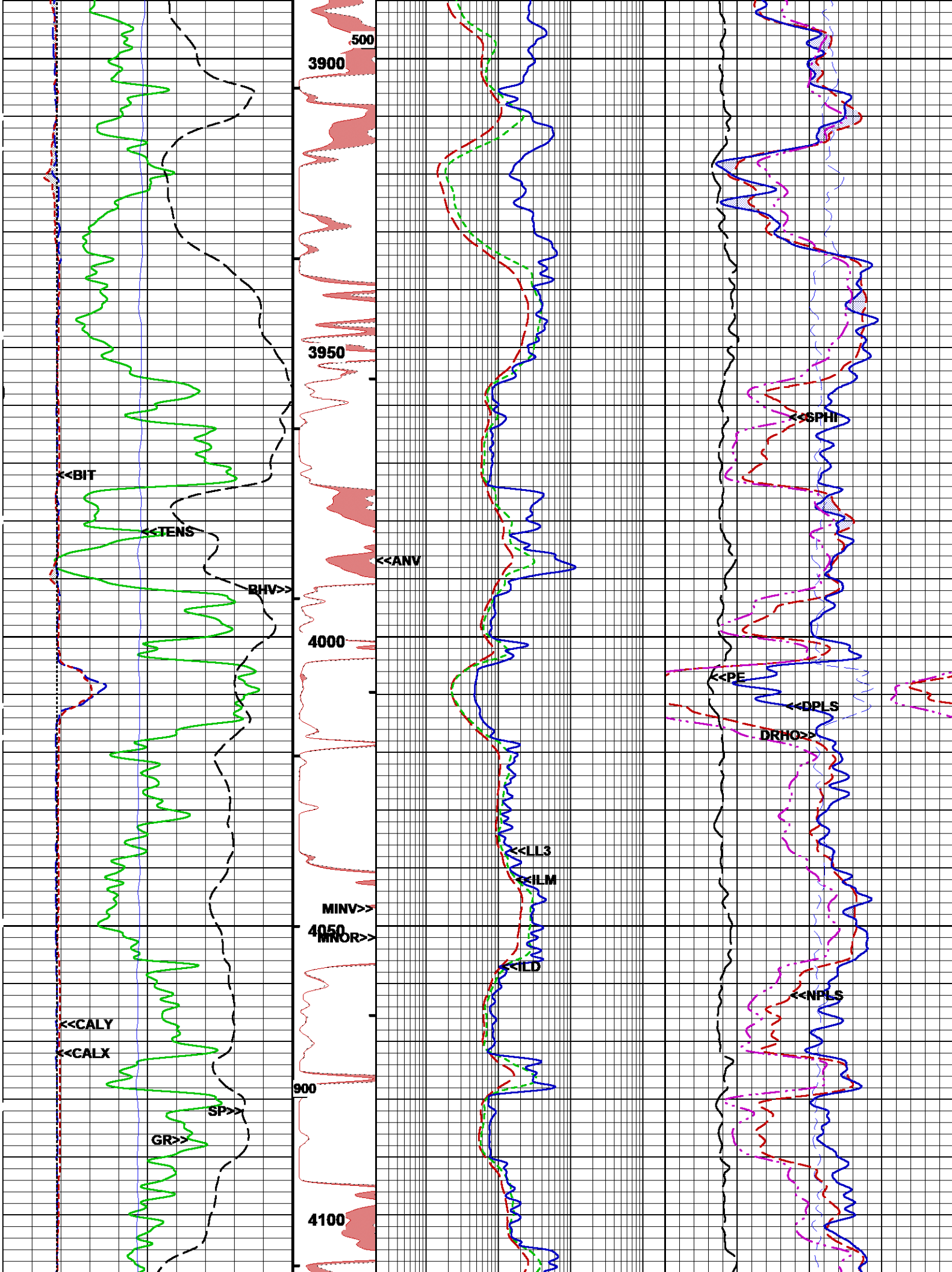


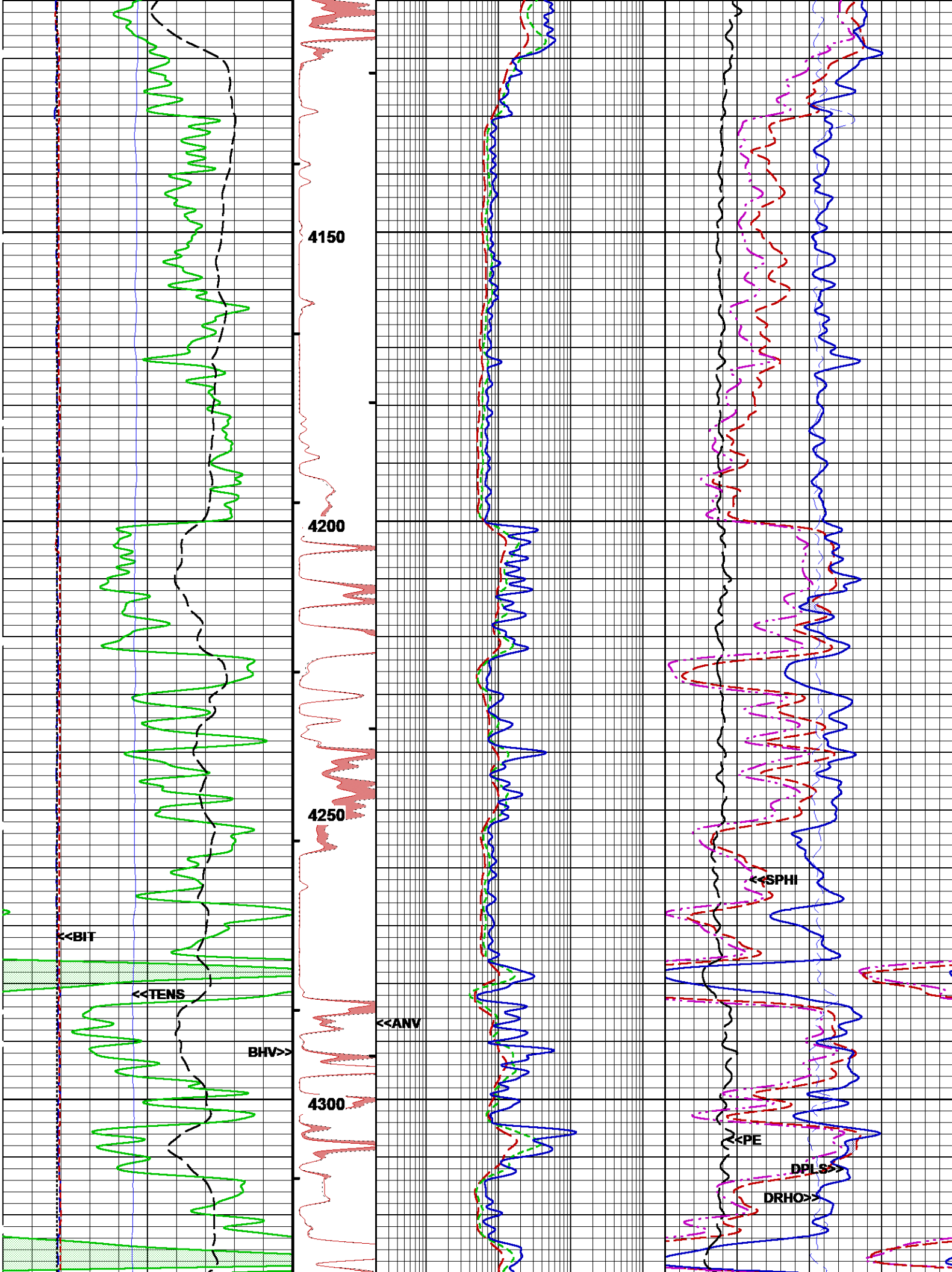


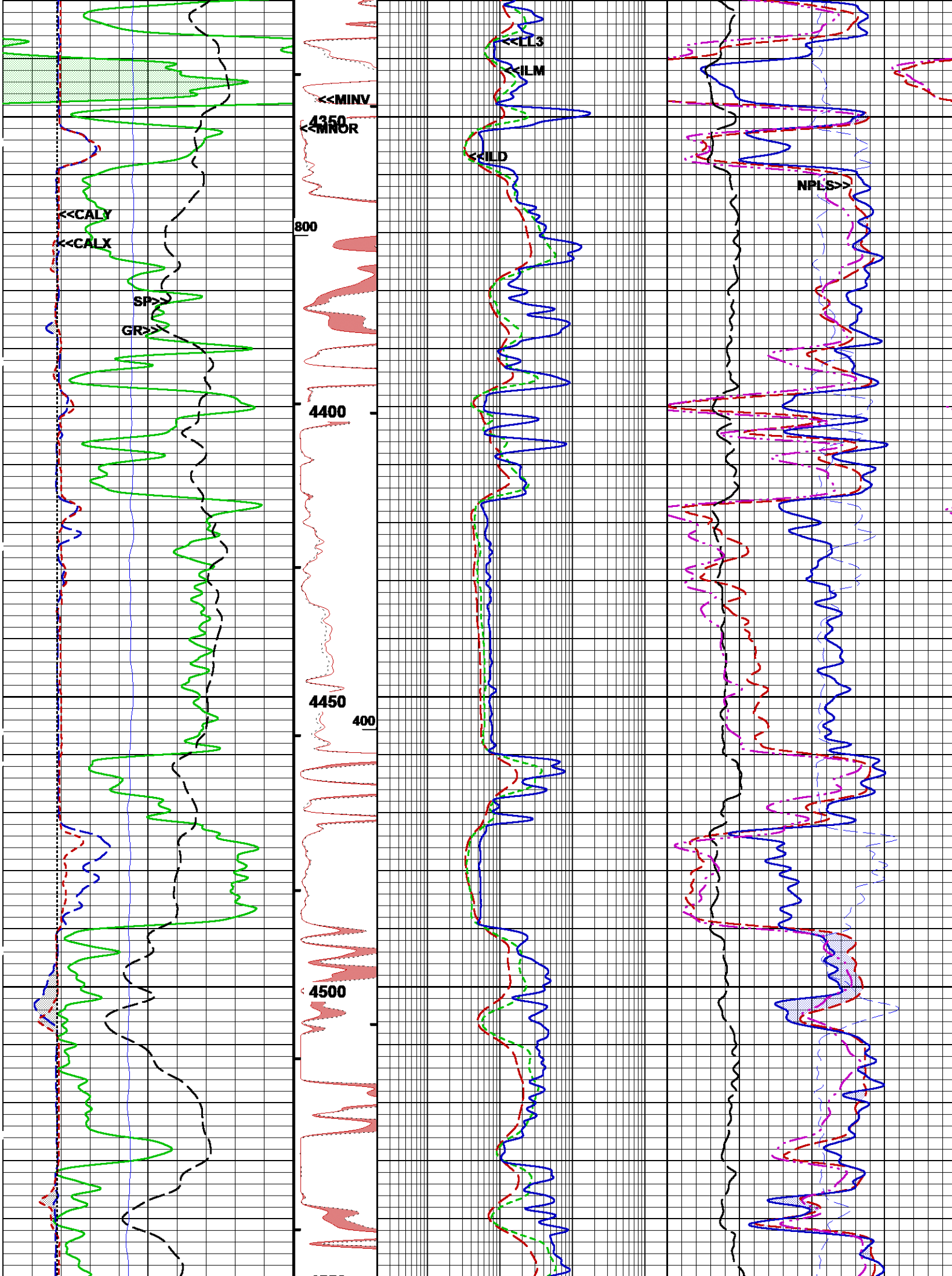


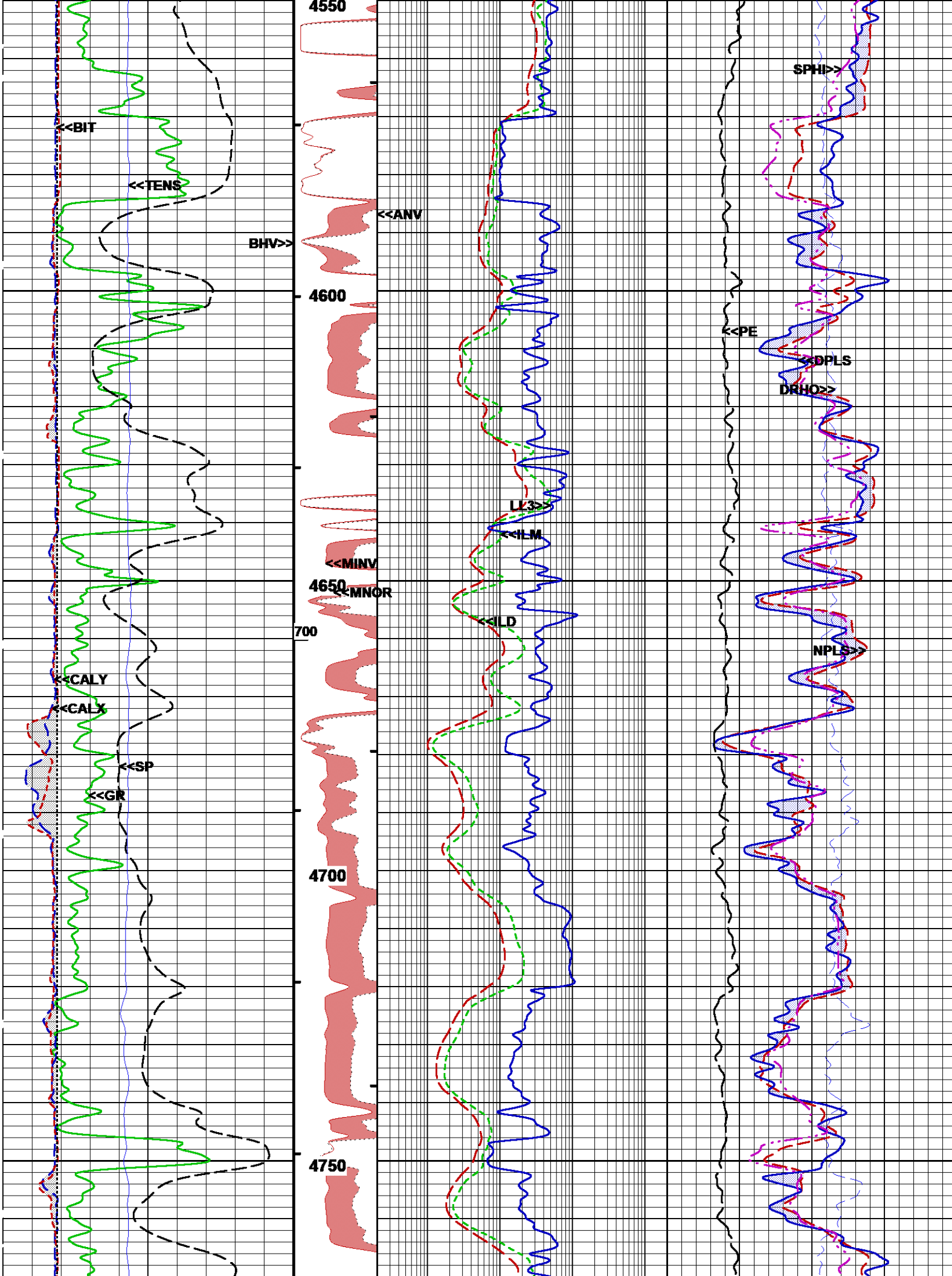


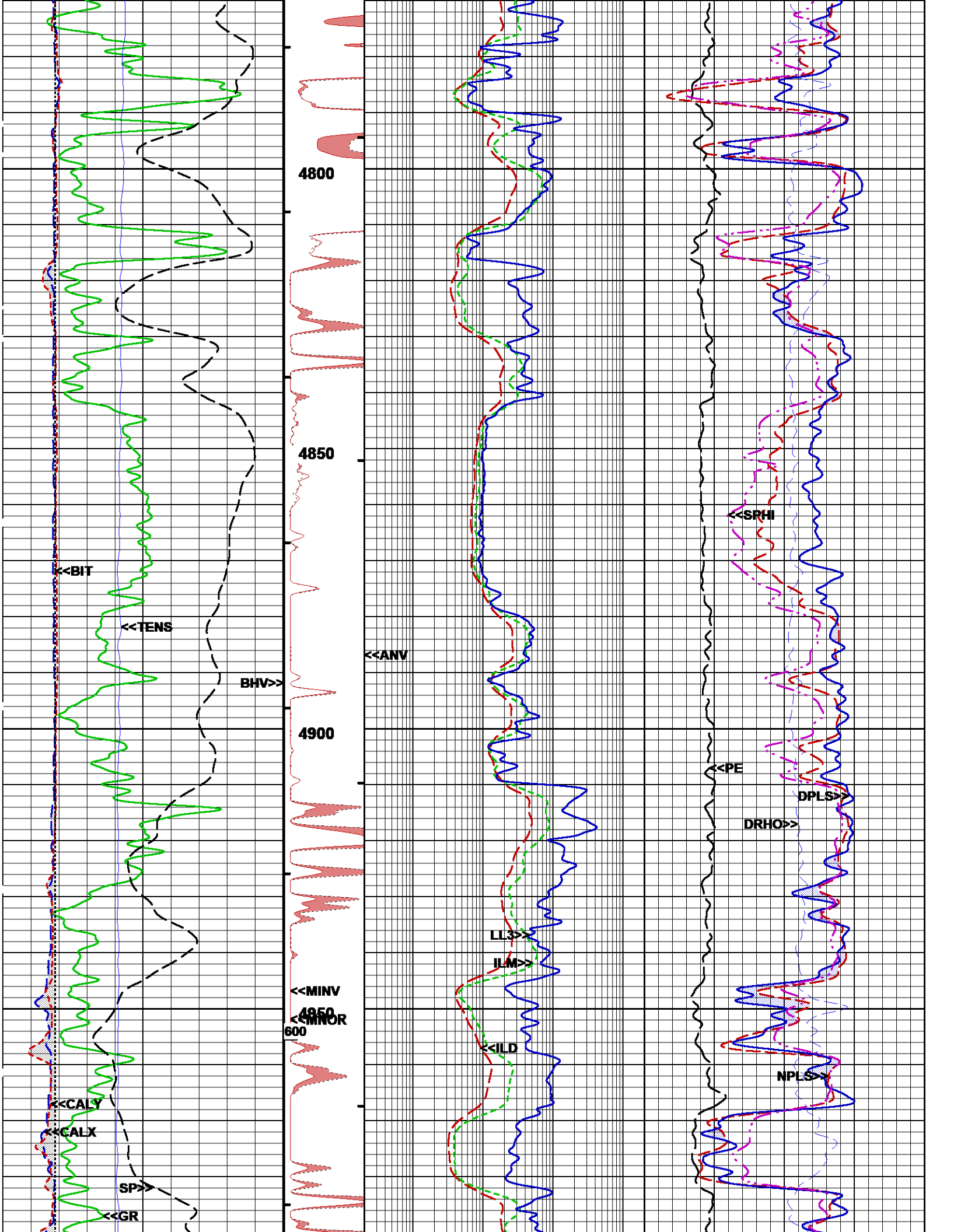


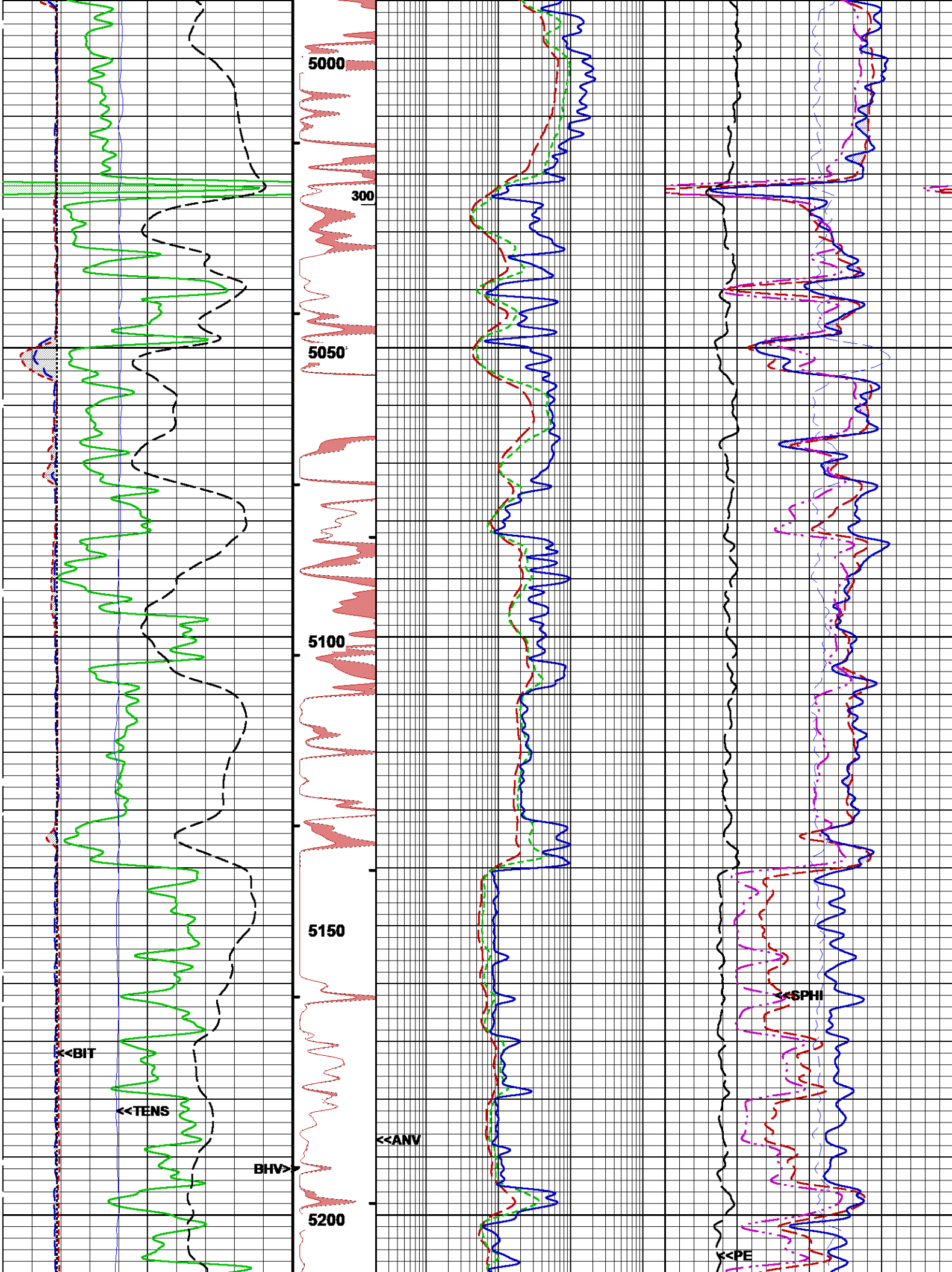


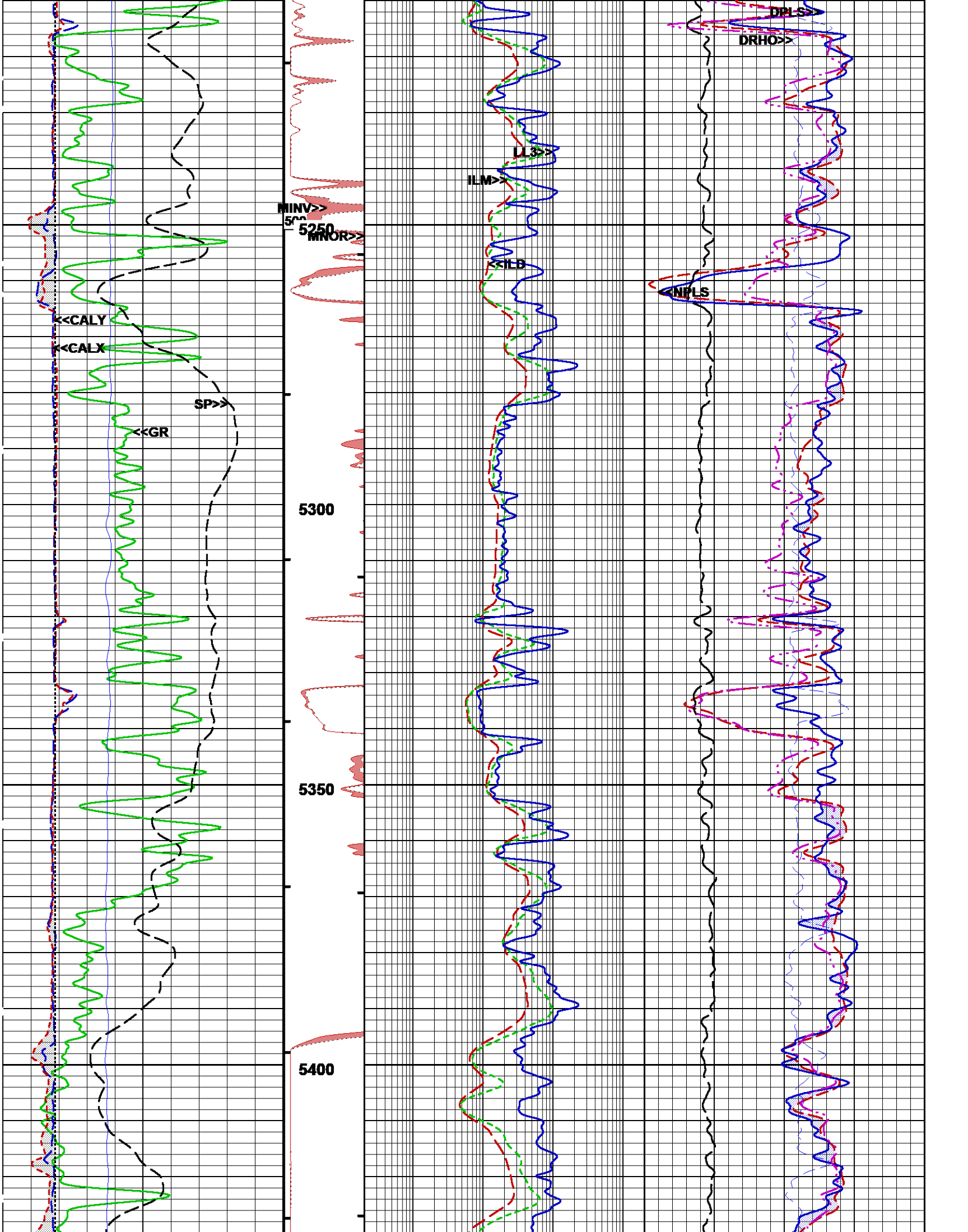


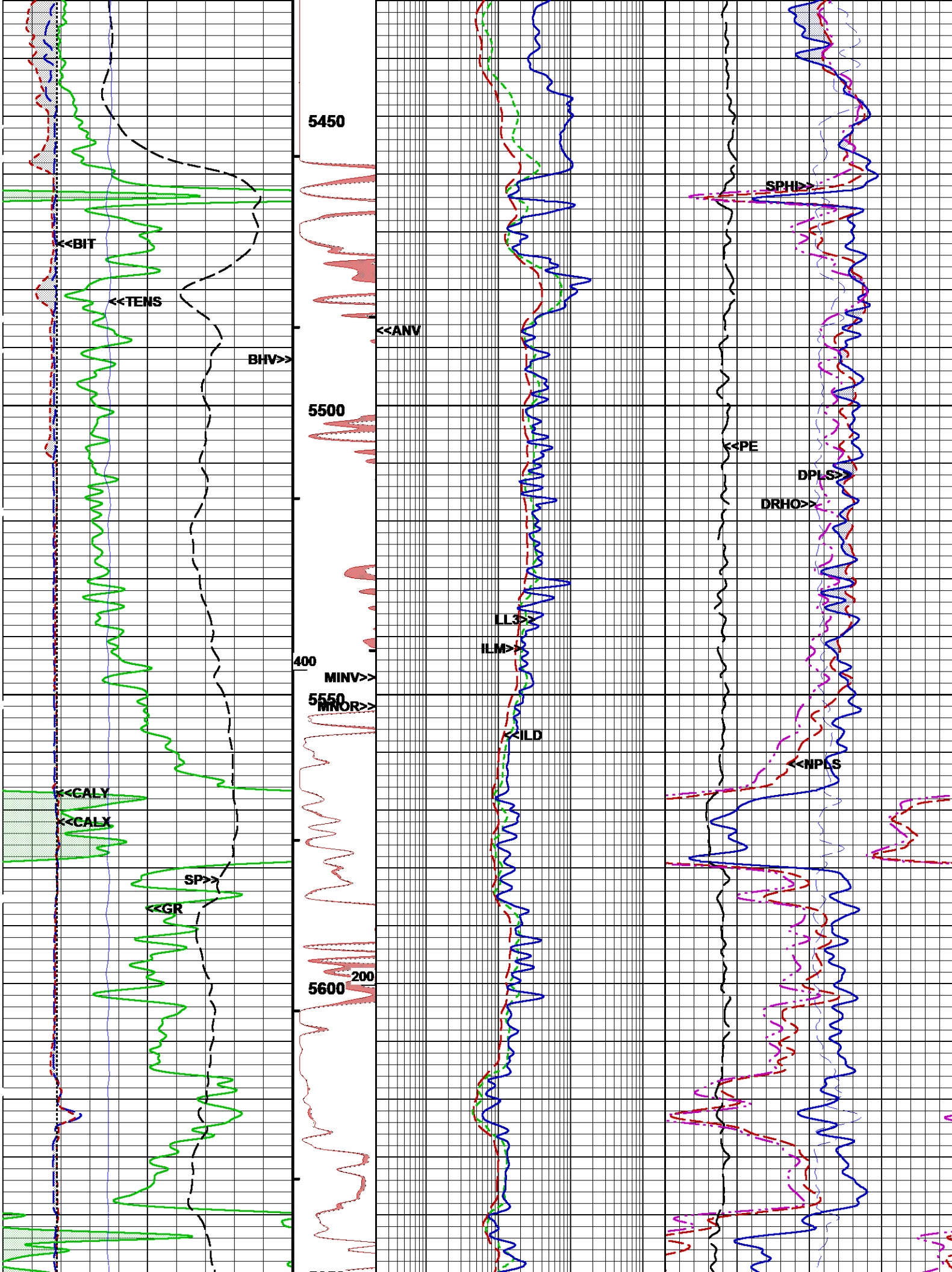


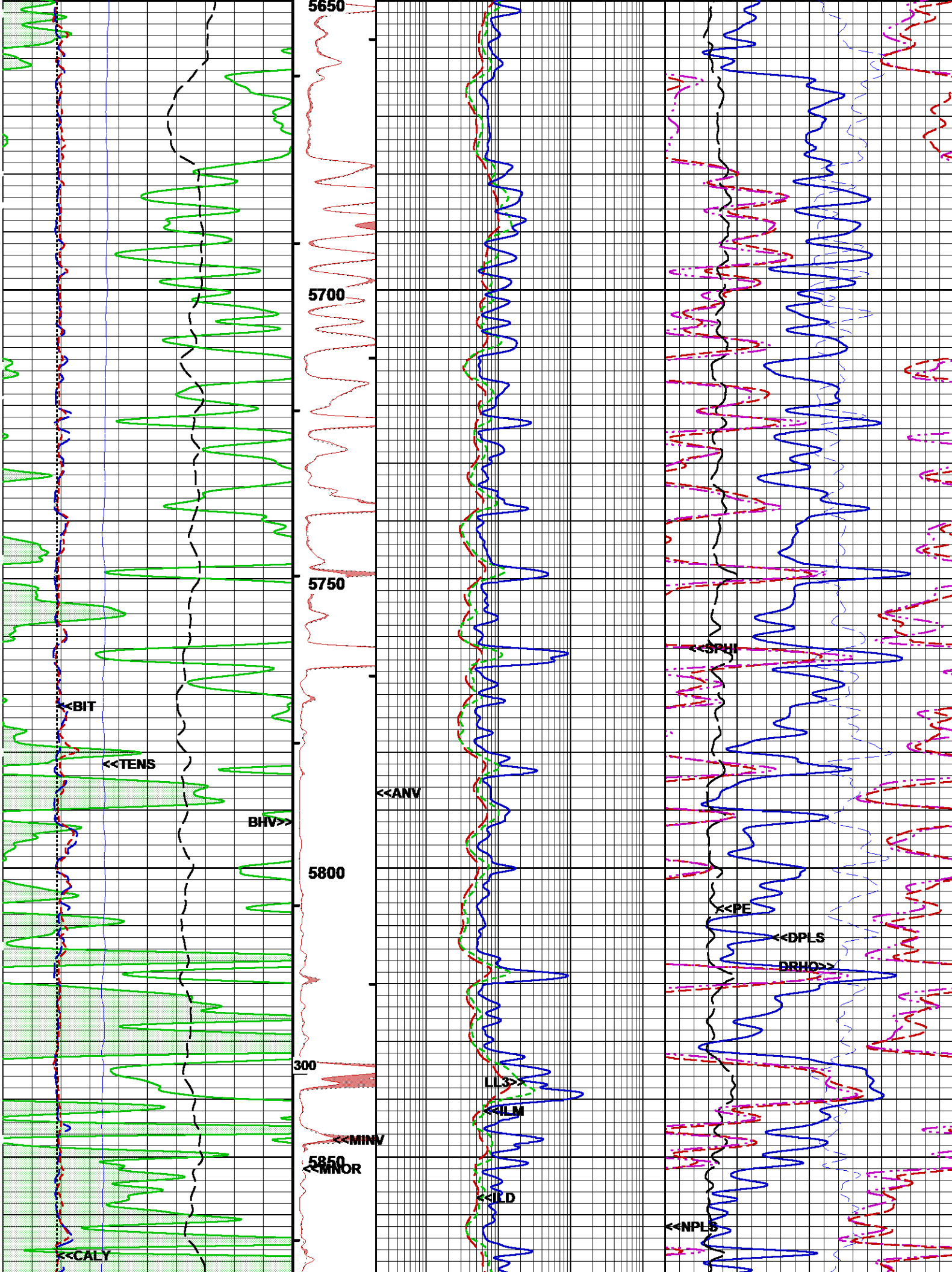


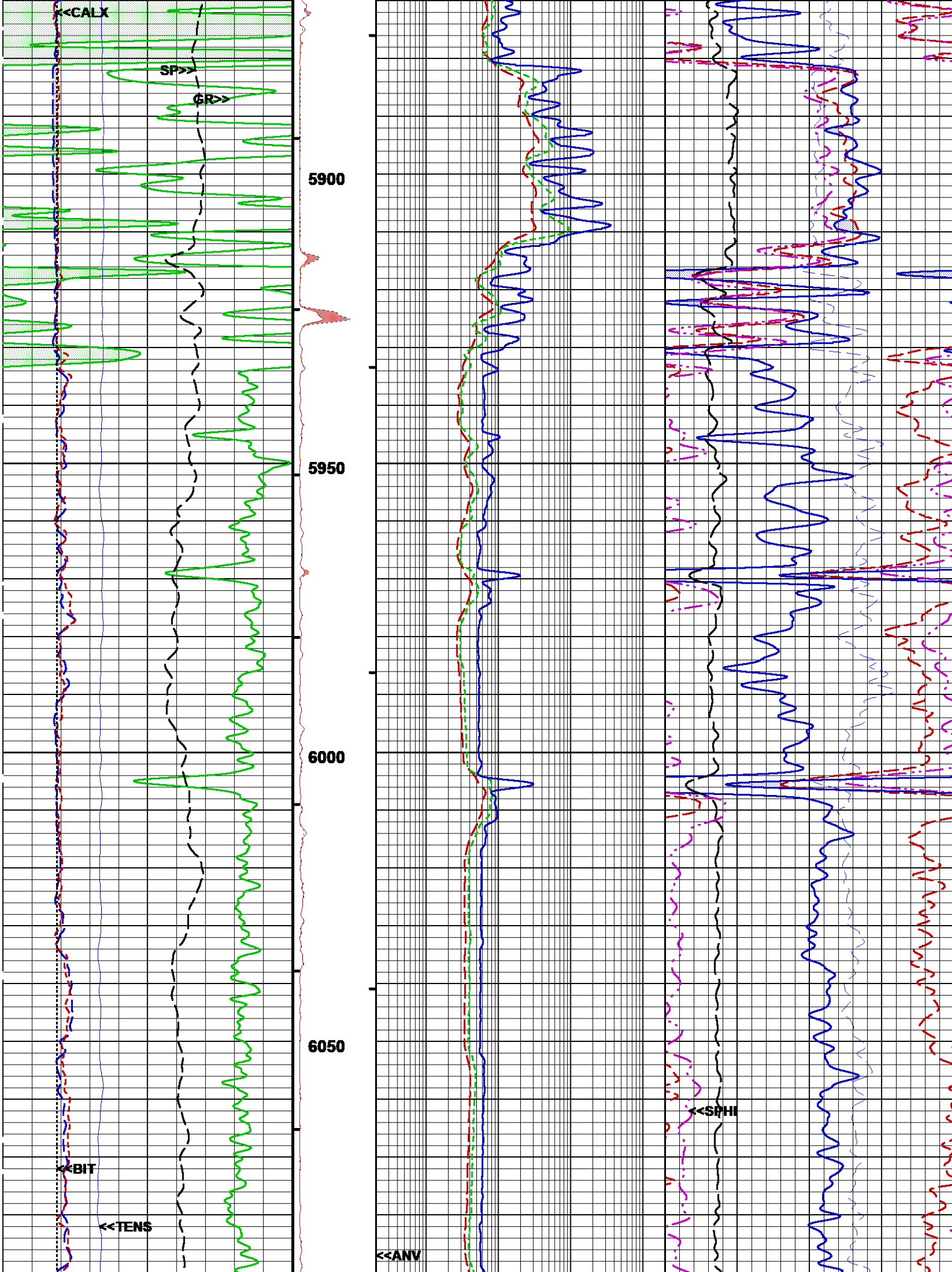


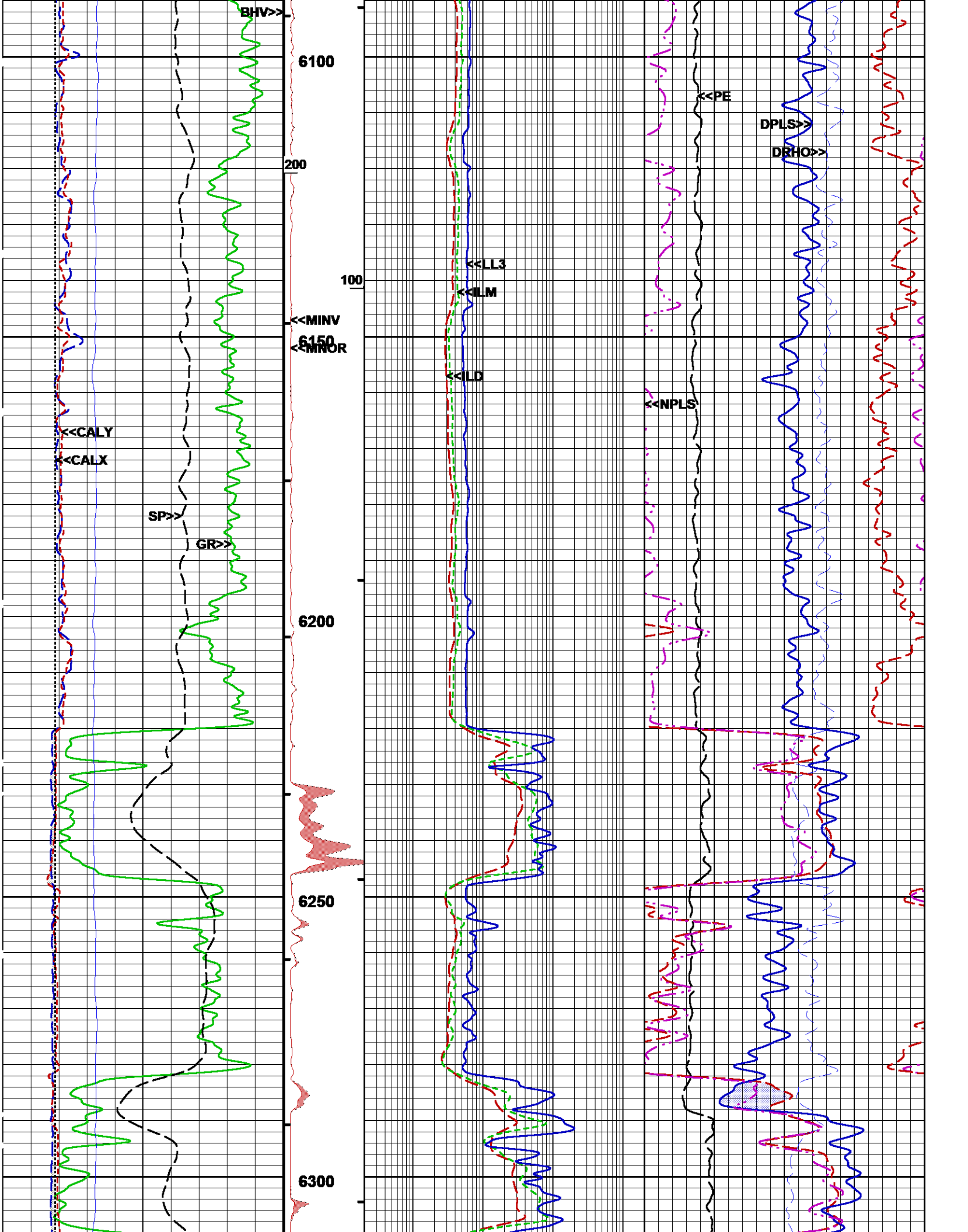


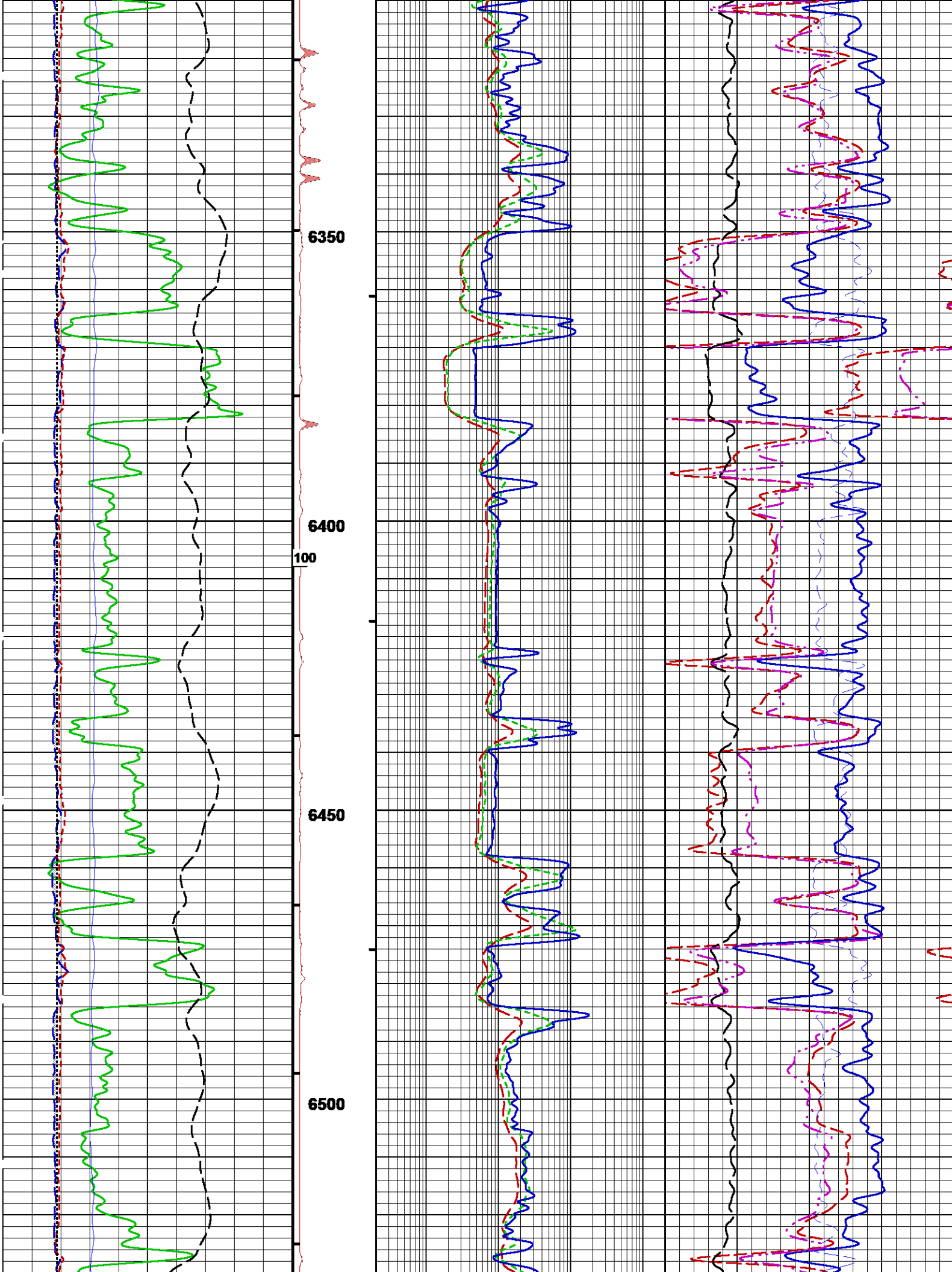


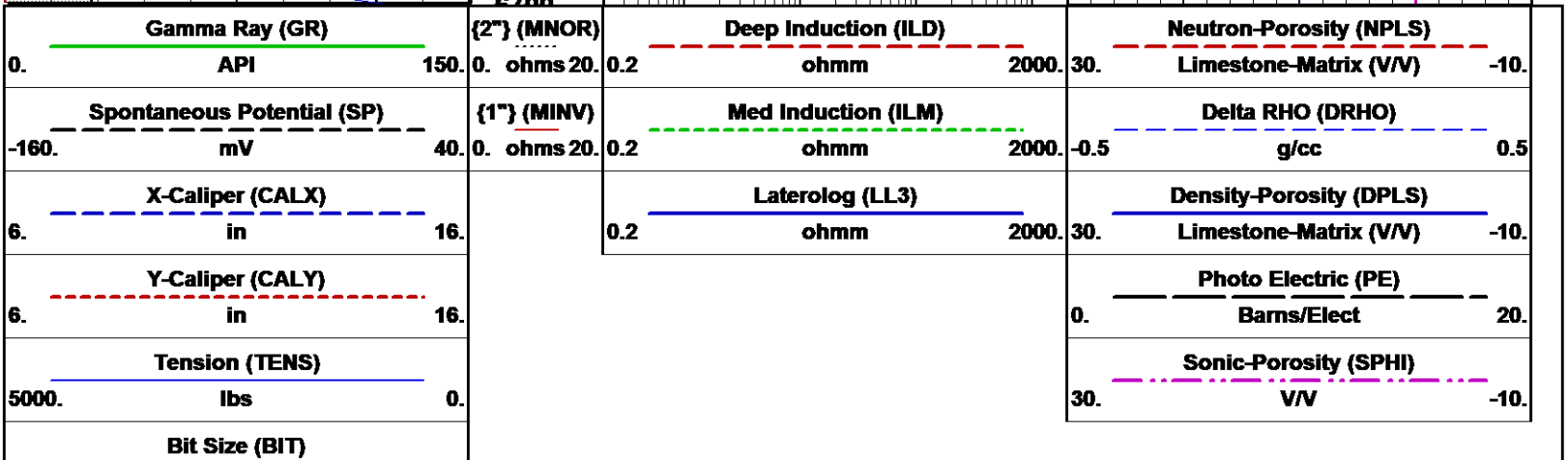
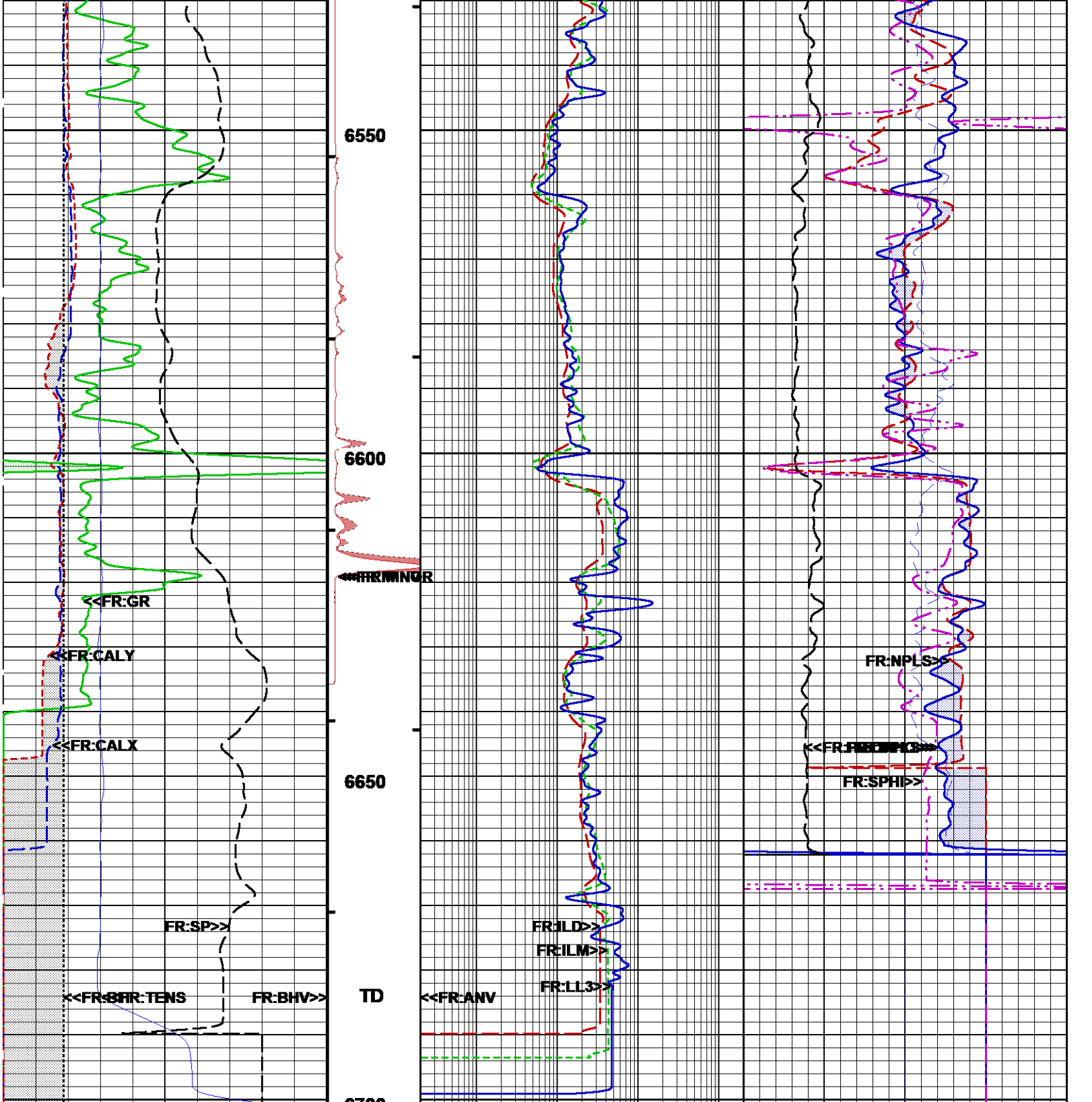


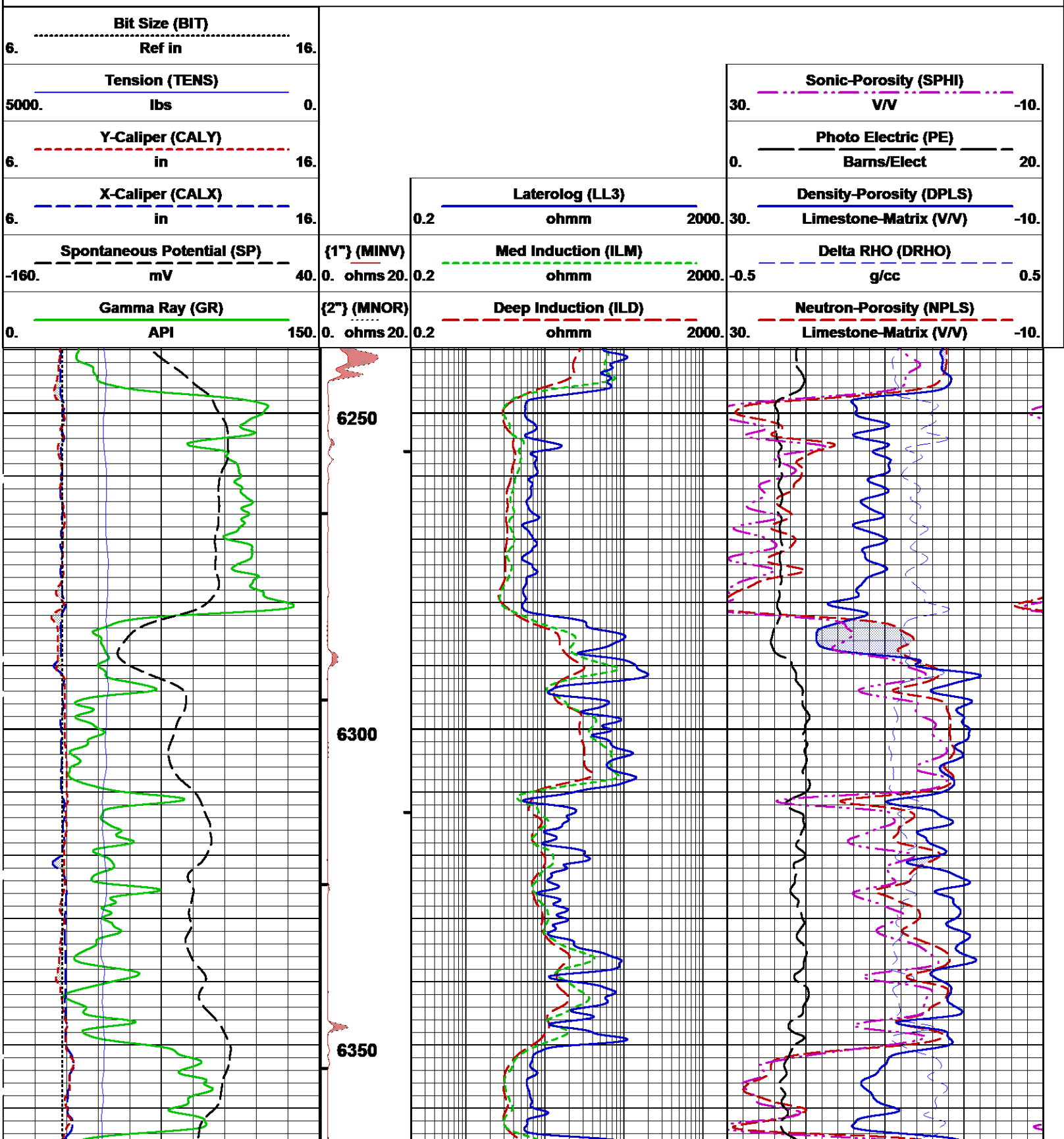


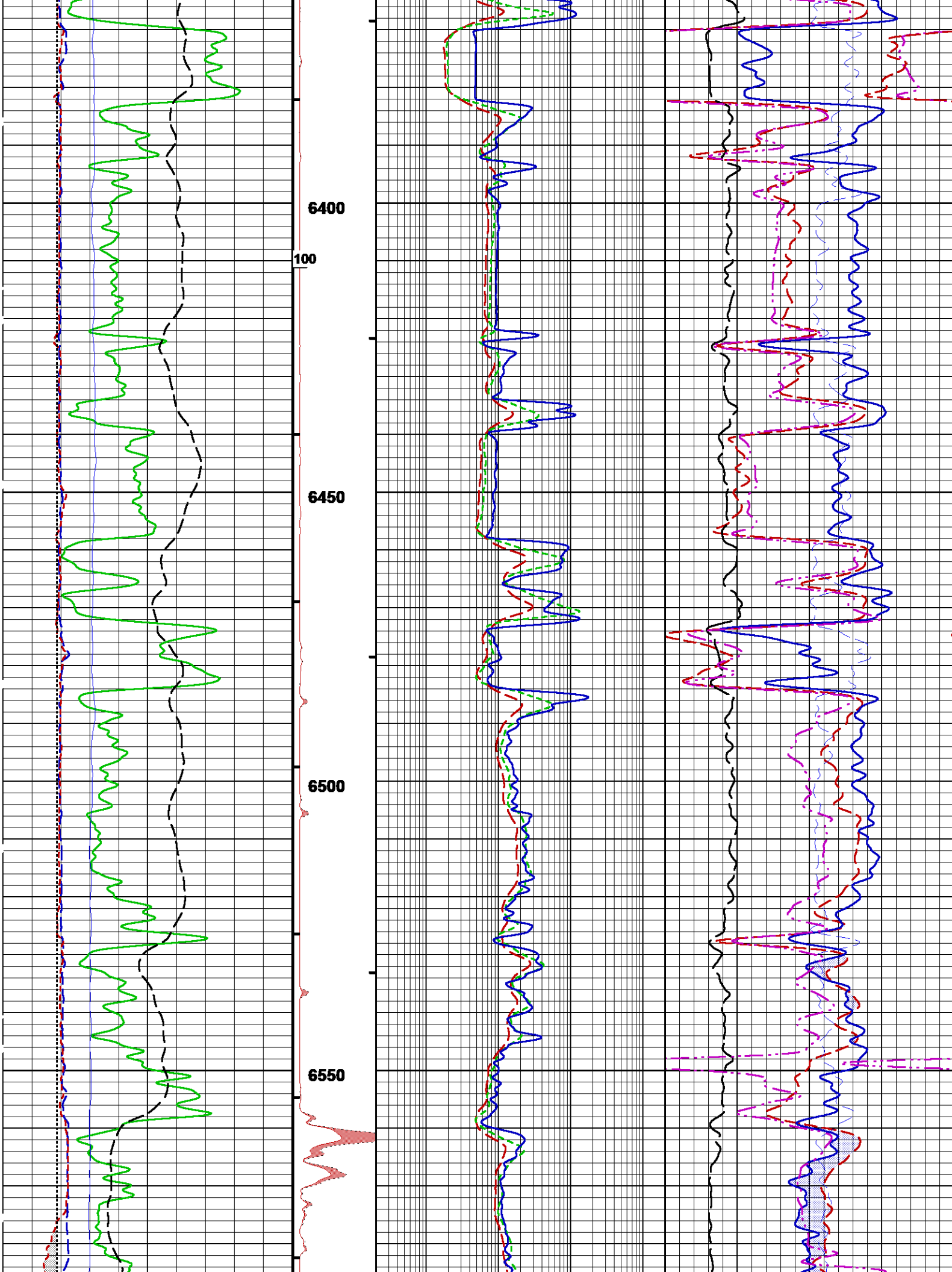


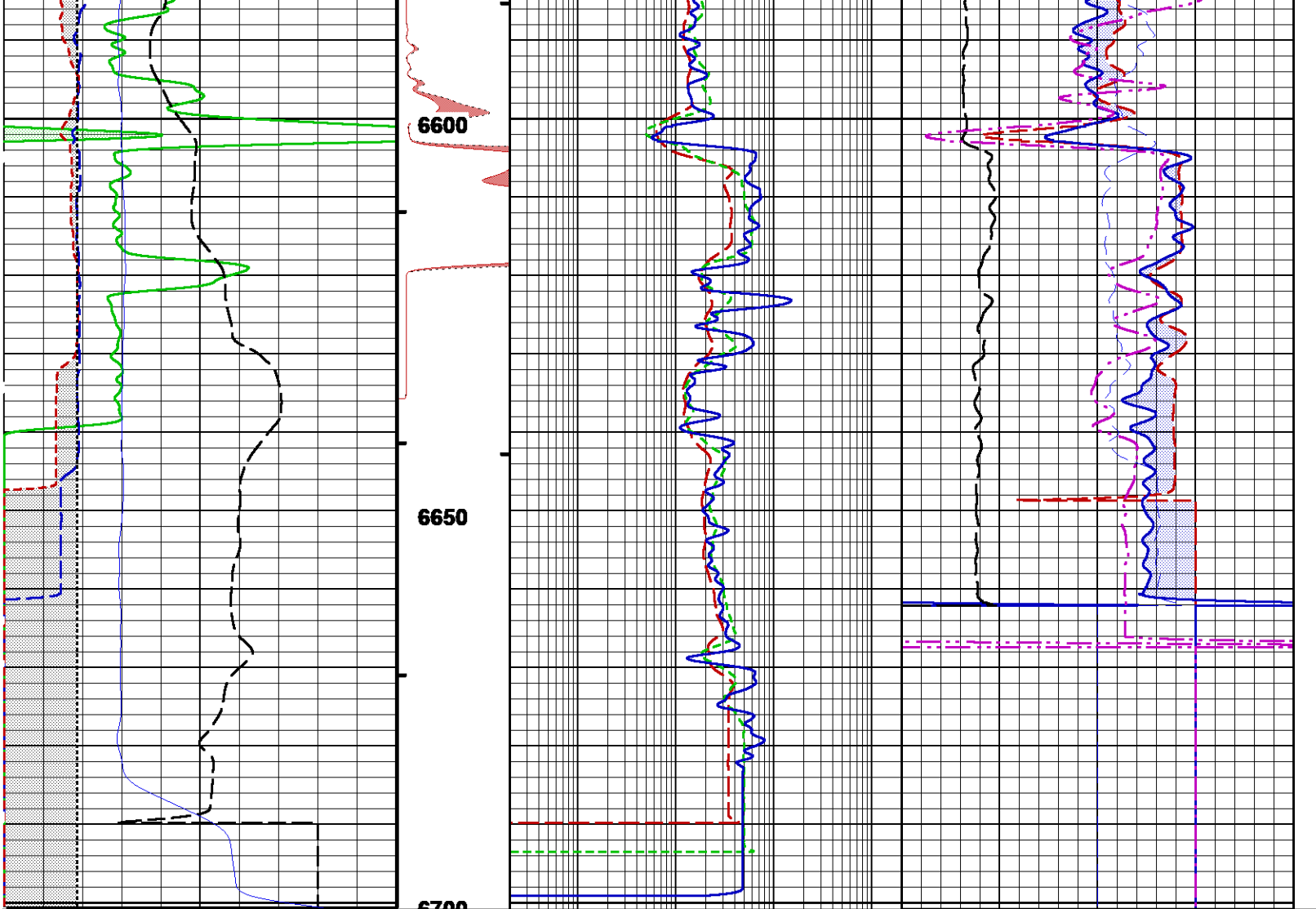












Gamma Ray (GR)		{2"} (MNOR)		Deep Induction (ILD)		Neutron-Porosity (NPLS)	
API		ohms 20.		ohmm		Limestone-Matrix (V/V)	
-160.		0.2		0.2		-0.5	
Spontaneous Potential (SP)		{1"} (MINV)		Med Induction (ILM)		Delta RHO (DRHO)	
mV		ohms 20.		ohmm		g/cc	
40.		0.2		0.2		-10.	
X-Caliper (CALX)				Laterolog (LL3)		Density-Porosity (DPLS)	
in				ohmm		Limestone-Matrix (V/V)	
6.				0.2		30.	
Y-Caliper (CALY)						Photo Electric (PE)	
in						Barns/Elect	
6.						0.	
Tension (TENS)						Sonic-Porosity (SPHI)	
lbs						V/V	
5000.						30.	
Bit Size (BIT)							
Ref in							
6.							

08/17/2021
12:16:55 => Start Time

REPEAT PASS - LIMESTONE (5"/100ft)

Log UP - (VER 12.43
Start Depth=> 6700.70 Feet

Induction Resistivity / Conductivity Calibrations

TOOL TYPE
SERIAL NUM

Slim Hole Induction
RD1006

LOOP TYPE
LOOP NUM

TX
001

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	-9.669	674.580	M/D/Y> 6/2/2021	H:M:S> 12:26:55
MED INDUCTION	-0.000		462.500	501.895	-4.591	745.350	M/D/Y> 6/2/2021	H:M:S> 12:28:42
SHALLOW LATER LOG	CALIBRATOR LOW(ohm)	CALIBRATOR HI(ohm)	LOW(mV)	HI(mV)				
	2.000	500.000	11.679	2510.322	M/D/Y> 6/2/2021	H:M:S> 12:30:16		
WELL SITE CALIBRATIONS								

Gamma Ray Calibration

SERIAL NUM RG3010 BLANKET NUM 1A					
MASTER CALIBRATIONS					
	BackGrnd	CalVal: 159.000 API	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	189.420 - raw	672.689 - raw	0.329 - gain 0.000 - off	M/D/Y> 7/24/2021	H:M:S> 13:34:56

Litho-Density/PE Calibrations

TOOL TYPE SERIAL NUM		LFDC/Pe		SOURCE TYPE SOURCE NUM		CESIUM 137		SOURCE STRGTH		2 CURIE	
		RL4116									
MASTER BLOCK CALIBRATIONS											
		W1(cps)	W2(cps)	W3(cps)	W4(cps)	SS	UNITS	CALIBRATION DATE		CALIBRATION TIME	
ALUMINUM		5415.327	4406.596	2026.204	6.658	4486.8730	2.508g/cc	M/D/Y> 7/27/2021		H:M:S> 8:50:56	
MAGNESIUM		17148.155	13530.543	5555.973	7.514	6447.5442	1.693g/cc				
BACKGROUND		1223.420	1079.791	748.084	6.803	4.7458					
SAND		17137.654	13519.483	5545.957	7.318		1.500(PE)				
IRON		4522.410	3805.621	1841.485	5.810		4.500(PE)				
FIELD VERIFIER(cps)		1259.906	1109.743	759.057	7.714	5.0865					
VER NUM	RL										
WELL SITE CALIBRATIONS											
VER NUM	RL	W1(cps)	W2(cps)	W3(cps)	W4(cps)	SS		CALIBRATION DATE		CALIBRATION TIME	

Compensated Neutron Calibrations

TOOL TYPE SERIAL NUM	CNT-B	SOURCE TYPE SOURCE NUM	AM241BE	SOURCE STRGTH	20 CURIE
	RN2004				

MASTER TANK CALIBRATIONS							
		NEAR(cps)	FAR(cps)	RATIO	K VALUE	CALIBRATION DATE	CALIBRATION TIME
LOW PHI	3.150			0.6287	0.9570	M/D/Y> 12/23/2020	H:M:S> 12:28:55
MED PHI	19.130			1.0772	0.9570		
HIGH PHI	31.300			1.2913	0.9571		
FIELD VERIFIER(cps)		195.495	179.242	1.0907			
VER NUM	7430						

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

X-CALIPER CALIBRATION

SERIAL NUM	RL4116

MASTER CALIBRATIONS					
	ZeroVal: 6.000 IN	CalVal: 10.000 IN	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	1244.531 - raw	2418.874 - raw	0.003 - gain 1.761 - off	M/D/Y> 7/27/2021	H:M:S> 9:27:49

Y CALIPER CALIBRATIONS

SERIAL NUM	RN2004

MASTER CALIBRATIONS					
	ZeroVal: 6.000 IN	CalVal: 10.000 IN	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	1167.280 - raw	1876.901 - raw	0.006 - gain -0.580 - off	M/D/Y> 12/23/2020	H:M:S> 12:55:4

MICRO INVERSE CALIBRATION

SERIAL NUM	RM8009

MASTER CALIBRATIONS					
	ZeroVal: 0.010 mVs	CalVal: 10.000 mVs	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	8.735 - raw	198.798 - raw	0.053 - gain -0.449 - off	M/D/Y> 9/12/2019	H:M:S> 14:20:2

MICRO NORMAL CALIBRATION

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SERIAL NUM	RM8009				
MASTER CALIBRATIONS					
	ZeroVal: 0.010 mVs	CalVal: 10.000 mVs	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	8.034 - raw	133.591 - raw	0.080 - gain -0.629 - off	M/D/Y> 9/12/2019	H:M:S> 14:15:38

MICRO CALIPER CALIBRATION					
SERIAL NUM	RM8009				
MASTER CALIBRATIONS					
	ZeroVal: 6.000 mVs	CalVal: 10.000 mVs	Gain/Offset	CALIBRATION DATE	CALIBRATION TIME
BASE CALS	1798.233 - raw	3870.588 - raw	0.002 - gain 2.529 - off	M/D/Y> 9/12/2019	H:M:S> 14:10:10

Company	MIDWESTERN EXPLORATION COMPANY
Well	L&L #1-3
Field	WIDE AWAKE
County	STEVENS
State	KANSAS

	DUAL INDUCTION - SP COMPENSATED NEUTRON DENSITY - SONIC GAMMA - MICROLOG
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