

HALLIBURTON

DUAL SPACED NEUTRON SPECTRAL DENSITY LOG

COMPANY	SANDRIDGE ENERGY		
WELL	ALEXANDER 3114 1-1		
FIELD/BLOCK	SKINNER		
COUNTY	BARBER		
STATE	KANSAS		
COMPANY	SANDRIDGE ENERGY	WELL	ALEXANDER 3114 1-1
FIELD/BLOCK	SKINNER	COUNTY	BARBER
STATE	KANSAS		
API No.	15007241200000		
Location	SW-SW-SE-SE 200' FSL 1056' FEL		
Sect.	1	Twp.	31S
Rge.	14W		
Other Services:	ACRT CSNG MICRO MRIL		
Permanent Datum	GL	Elev.	1685.0 ft
Log measured from	KB	D.F.	1683.0 ft
Drilling measured from	KB	G.L.	1668.0 ft

Date	02-Feb-14		
Run No.	ONE		
Depth - Driller	4782.00 ft		
Depth - Logger	4776.0 ft		
Bottom - Logged Interval	4753.0 ft		
Top - Logged Interval	1048.0 ft		
Casing - Driller	9.625 in @ 1052.0 ft		
Casing - Logger	1048.0 ft		
Bit Size	8.750 in @		
Type Fluid in Hole	WATER BASED MUD		
Density	9.3 ppg	Viscosity	50.00 s/qt
PH	10.50 pH	Fluid Loss	5.2 cphm
Source of Sample	MUD PIT		
Rm @ Meas. Temperature	0.450 ohmm	@	60.00 degF
Rmf @ Meas. Temperature	0.40 ohmm	@	60.00 degF
Rmc @ Meas. Temperature	0.520 ohmm	@	60.00 degF
Source Rmf	Rmc	MEASURED	MEASURED
Rm @ BHT	0.26 ohmm	@	108.0 degF
Time Since Circulation	5.0 hr		
Time on Bottom	03-Feb-14 03:50		
Max. Rec. Temperature	108.0 degF	@	4776.0 ft
Equipment	11072142	LIBERAL	
Recorded By	THOMAS HYDE		
Witnessed By	B. TOMLISON		
		T. BOARDMAN	

Fold here

Service Ticket No.: 901088163 API Serial No.: 15007241200000 PGM Version: WL INSITE R3.8.4 (Build 5)

CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE					RESISTIVITY SCALE CHANGES				
Date	Sample No.				Type Log	Depth	Scale Up Hole	Scale Down Hole	
Depth-Driller									
Type Fluid in Hole									
Density	Viscosity								
Ph	Fluid Loss								
Source of Sample					RESISTIVITY EQUIPMENT DATA				
Rm @ Meas. Temp		@		@	Run No.	Tool Type & No.	Pad Type	Tool Pos.	Other
Rmf @ Meas. Temp.		@		@					
Rmc @ Meas. Temp.		@		@					
Source Rmf	Rmc								
Rm @ BHT		@		@					
Rmf @ BHT		@		@					
Rmc @ BHT		@		@					

EQUIPMENT DATA

GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.		Run No.	ONE	Run No.	ONE
Serial No.	11021139	Serial No.		Serial No.	10950489	Serial No.	11019643
Model No.	GTET	Model No.		Model No.	SDLT	Model No.	DSNT
Diameter	3.625"	No. of Cent.		Diameter	4.5"	Diameter	3.625"
Detector Model No.	T-102	Spacing		Log Type	GAM-GAM	Log Type	NEU-NEU
Type	SCINT			Source Type	Cs137	Source Type	Am241Be
Length	8"	LSA [Y/N]		Serial No.	5168GW	Serial No.	DSN-424
Distance to Source	18'	FWDA [Y/N]		Strength	1.5 Ci	Strength	15 Ci

LOGGING DATA

GENERAL			GAMMA		ACOUSTIC		DENSITY			NEUTRON				
Run No.	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	4776	1048	REC	0	150				30	-10	2.71	30	-10	LIME

DIRECTIONAL INFORMATION

Maximum Deviation @ KOP @

Remarks: CHLORIDES REPORTED AT 4000 MG/L

TODAY'S CREW M. GRAHAM F. VILLA

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KANSAS 620-624-8123

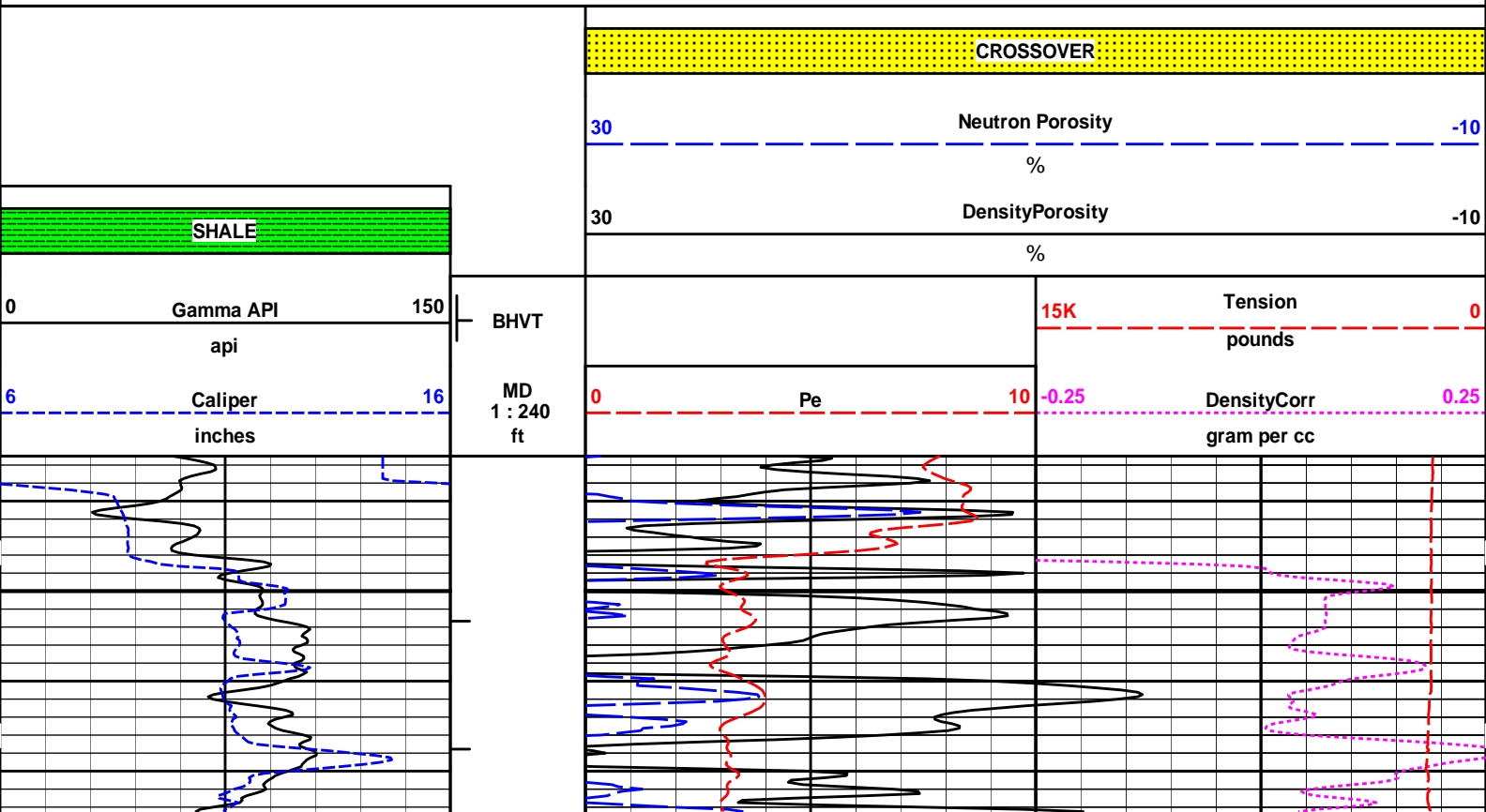
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHICH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

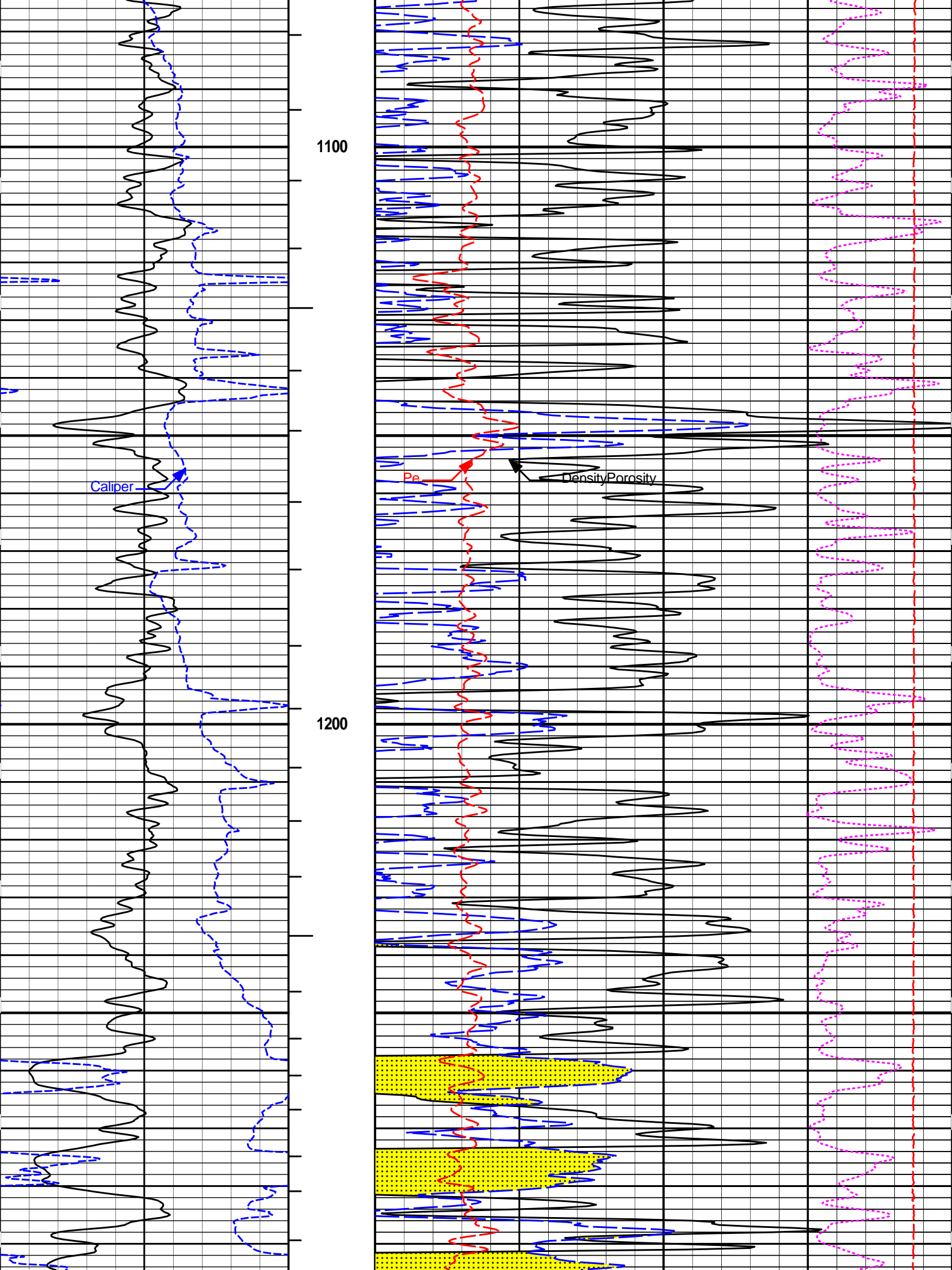
HALLIBURTON

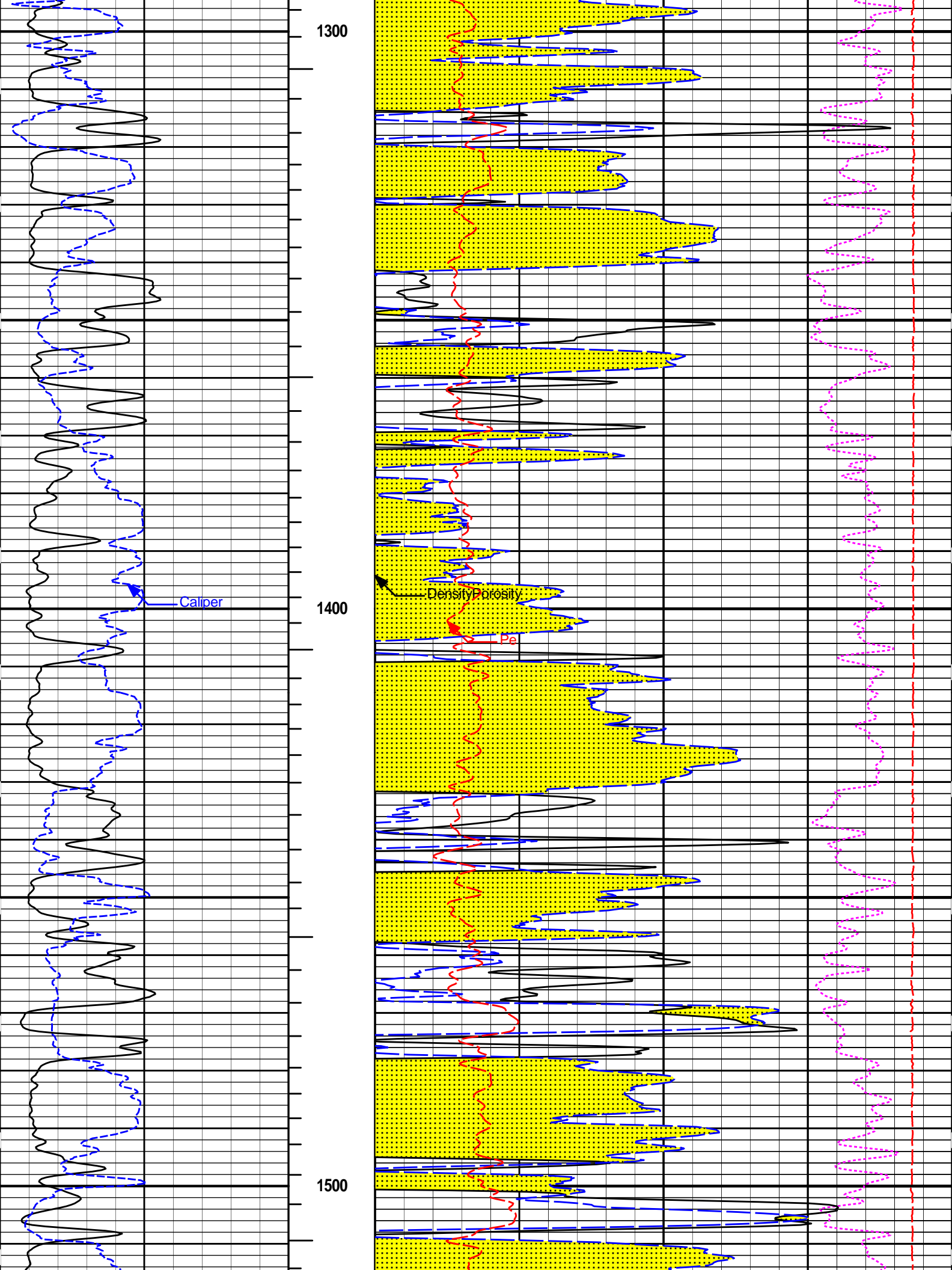


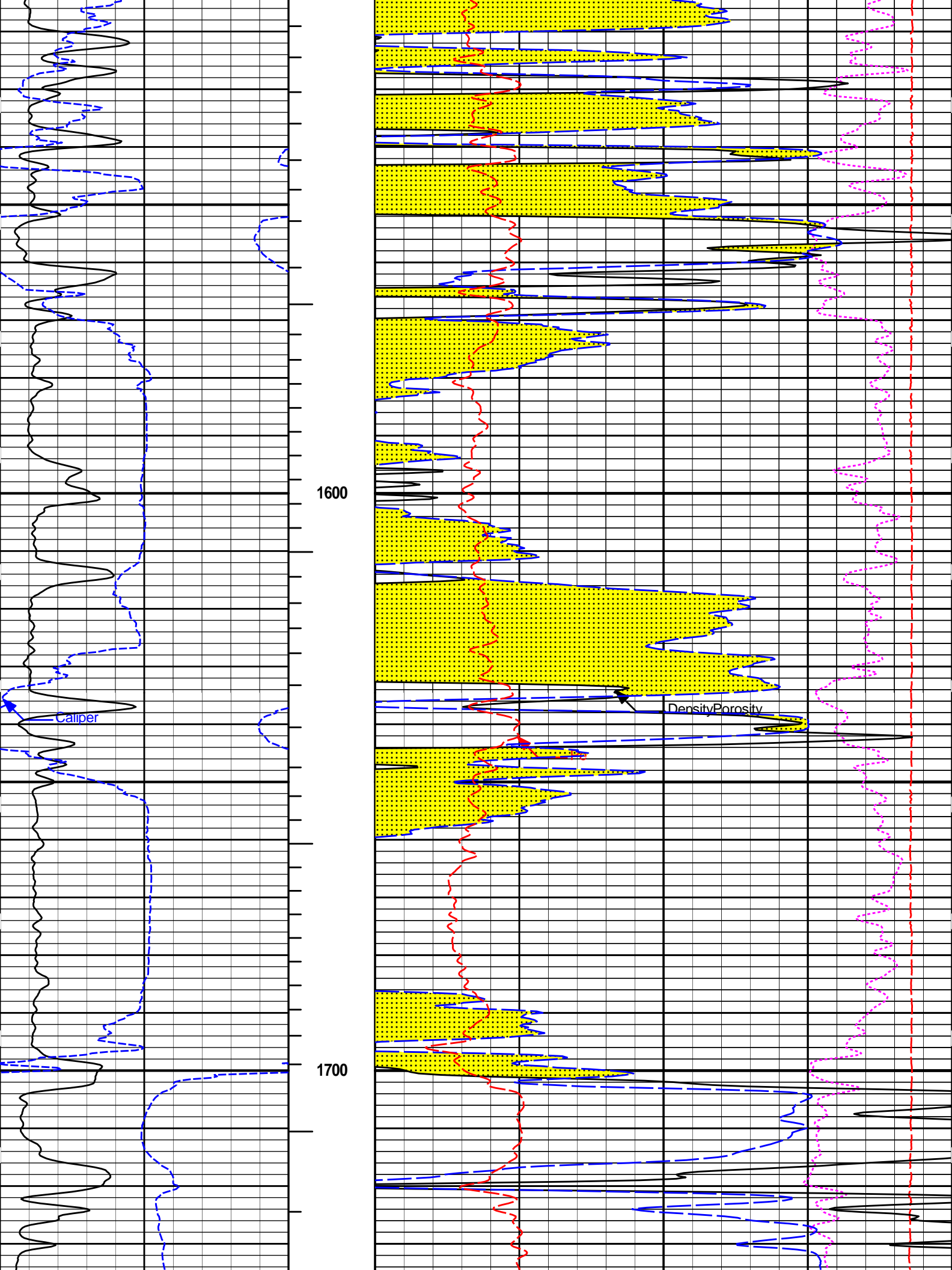
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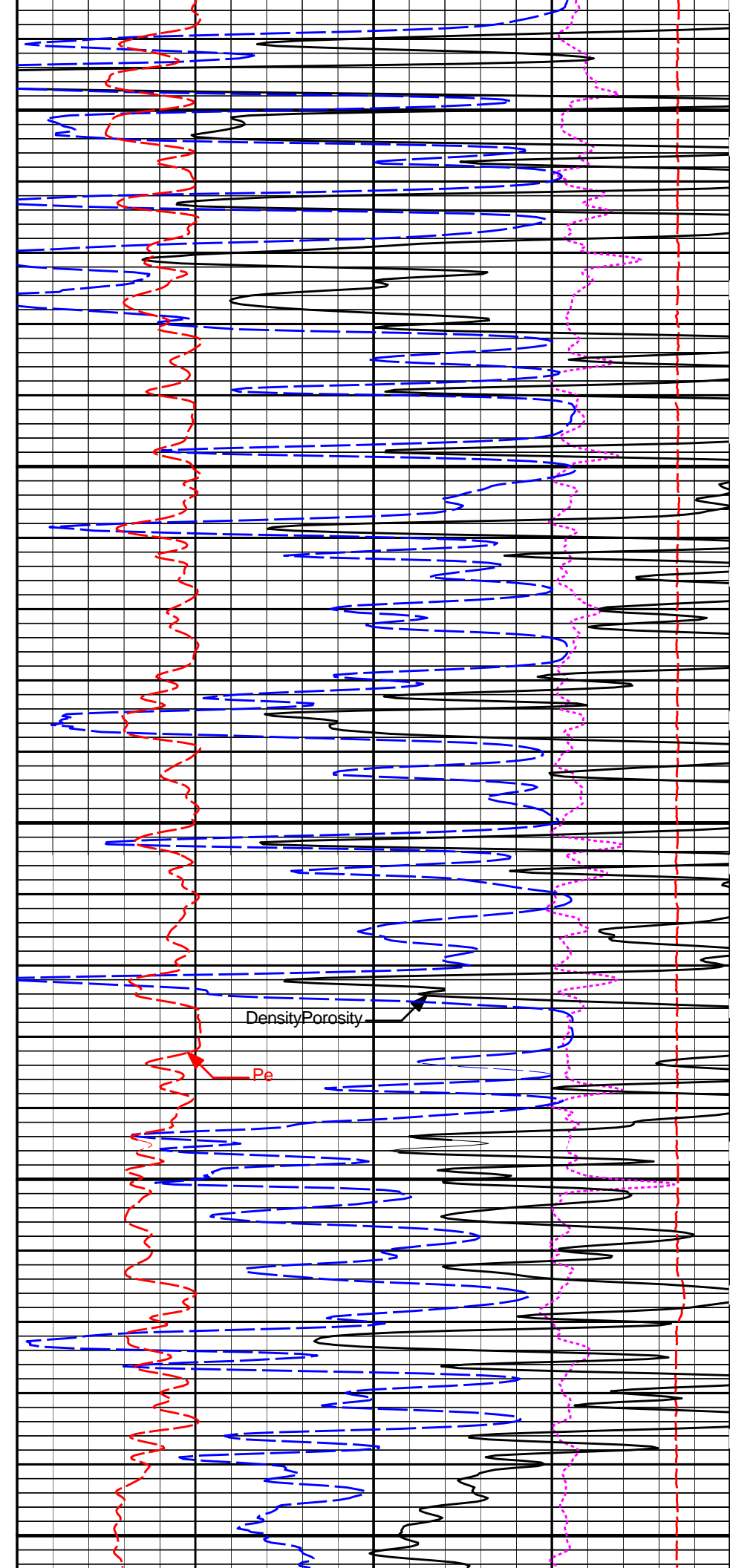
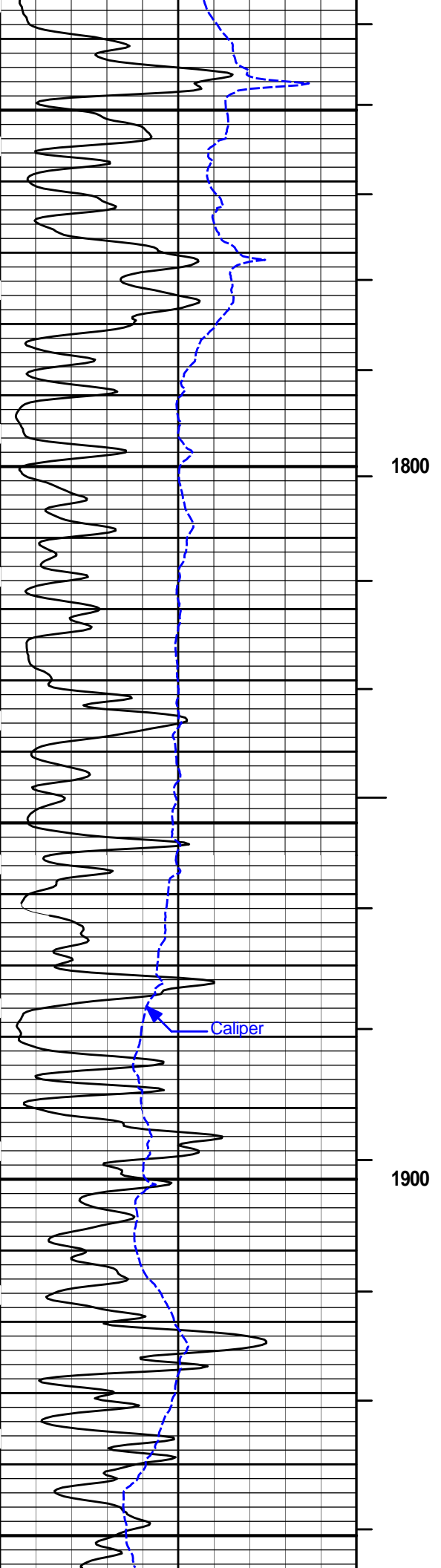
5 INCH MAIN LOG

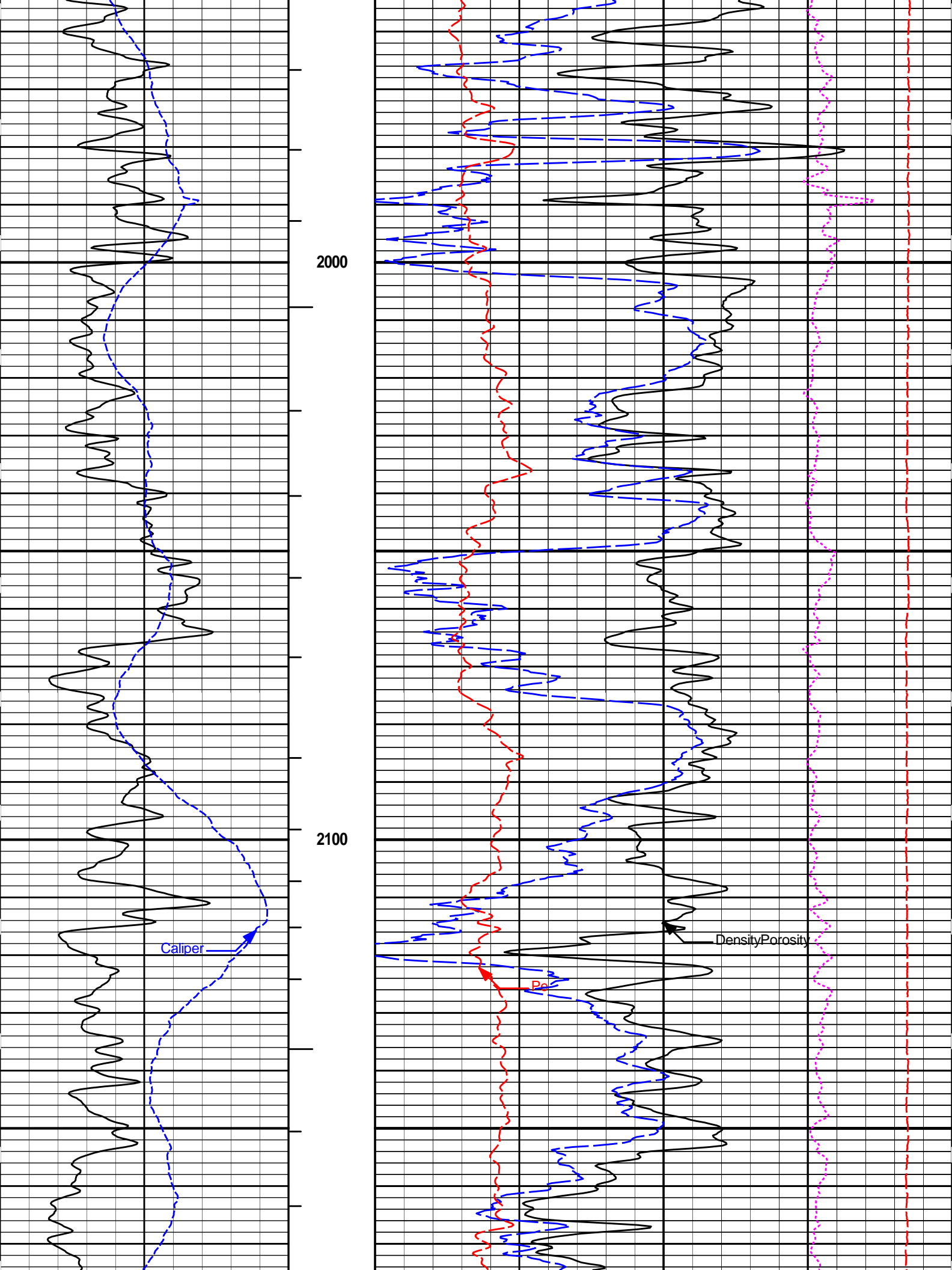


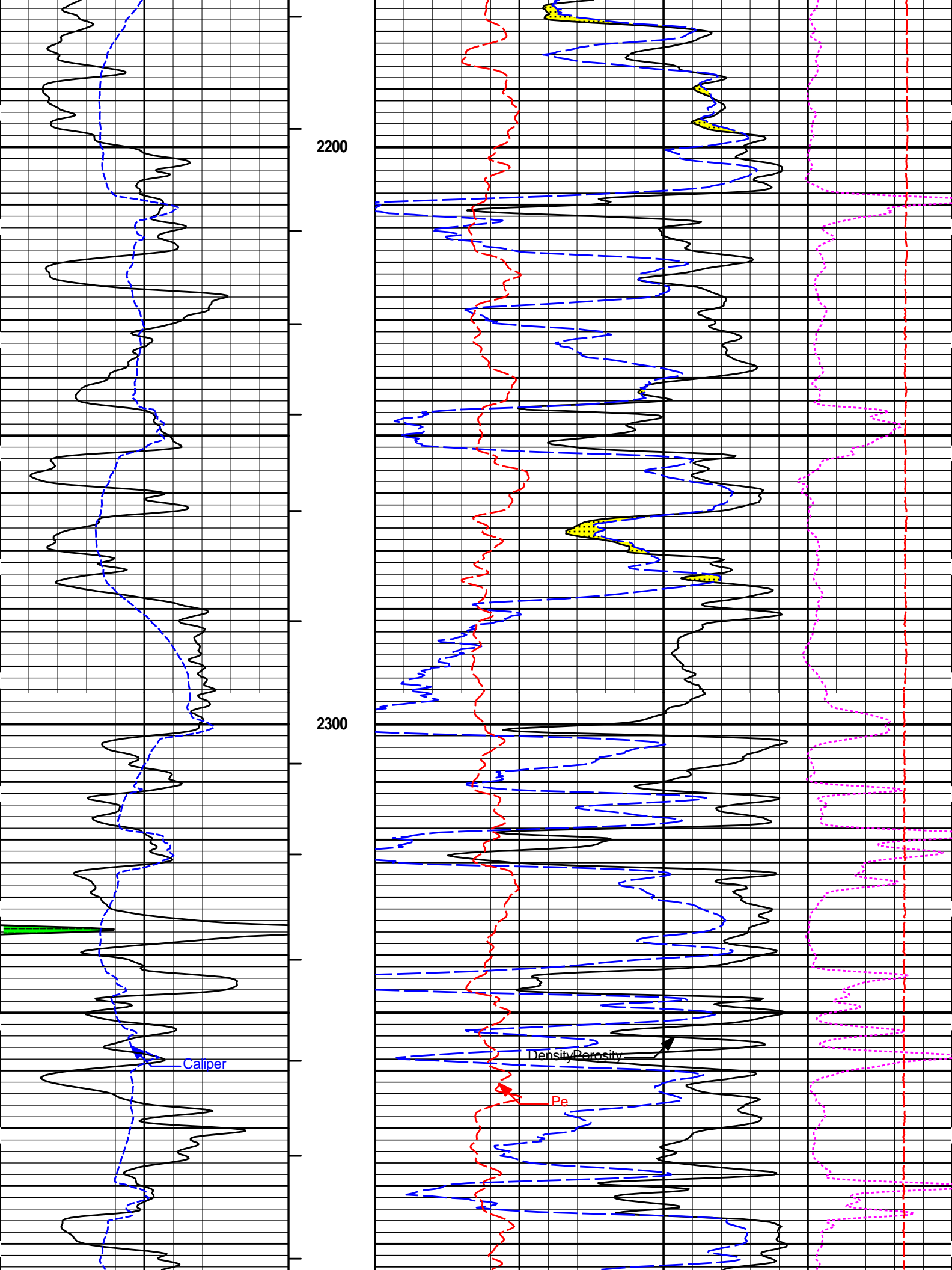


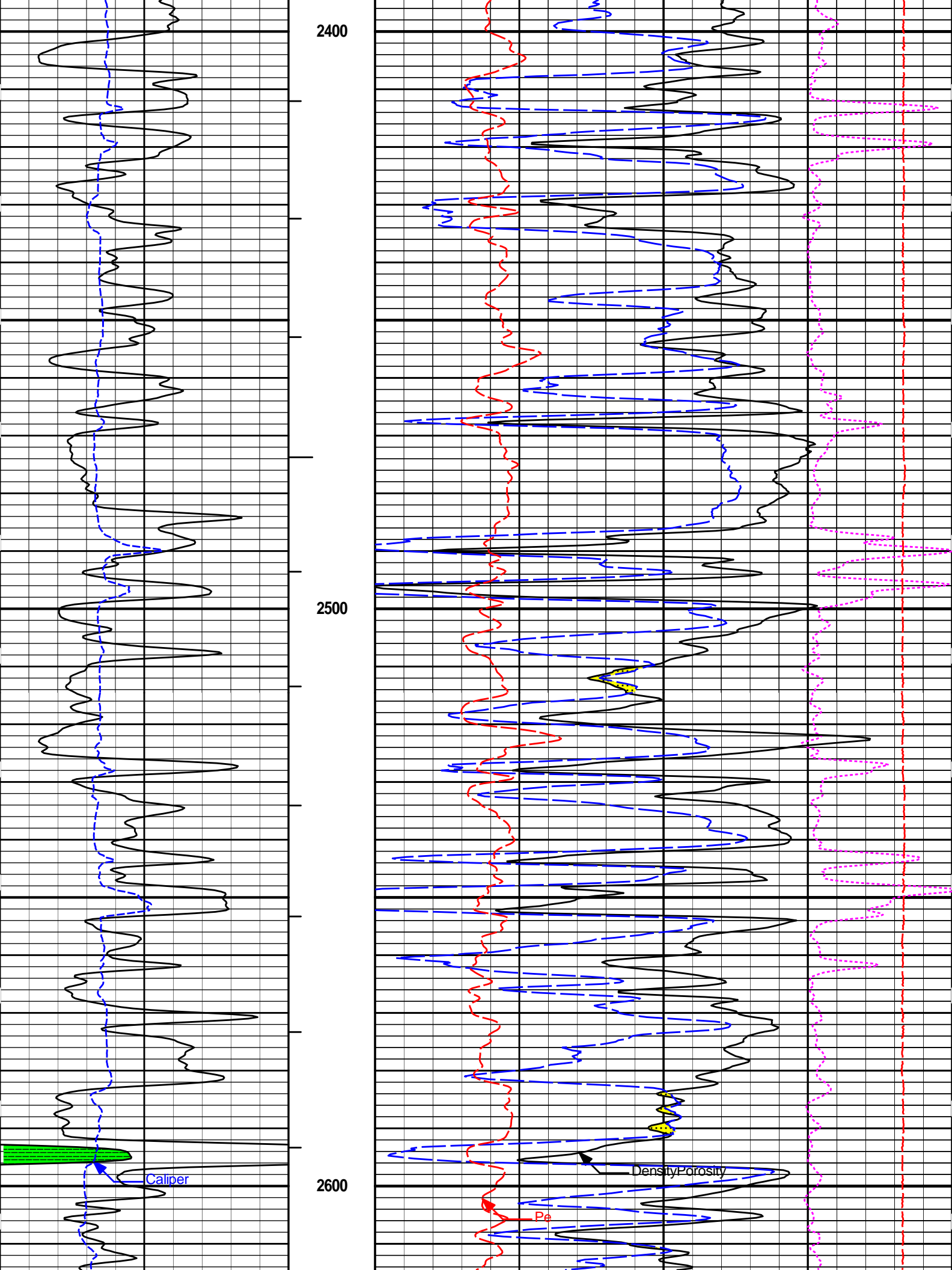












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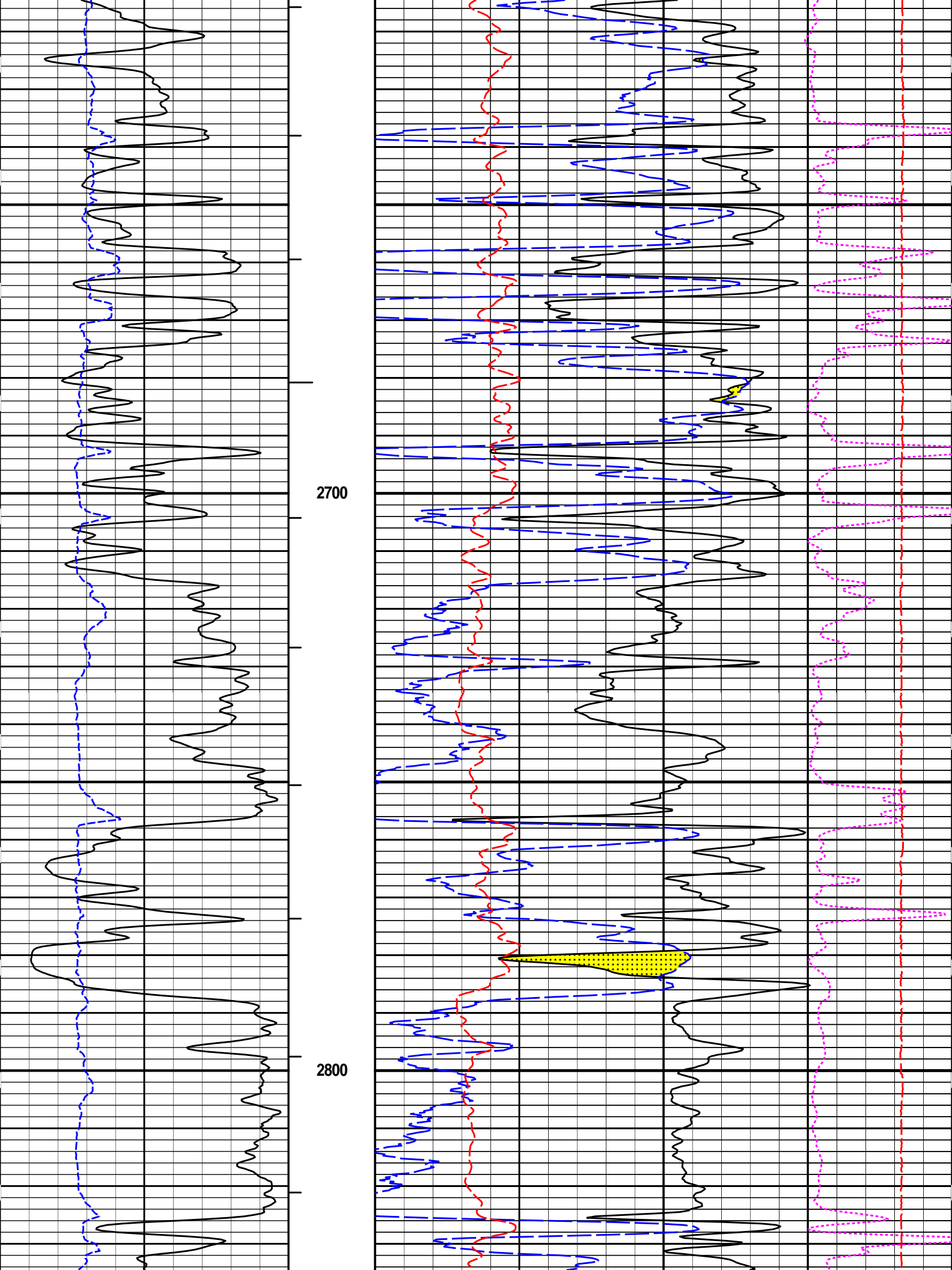
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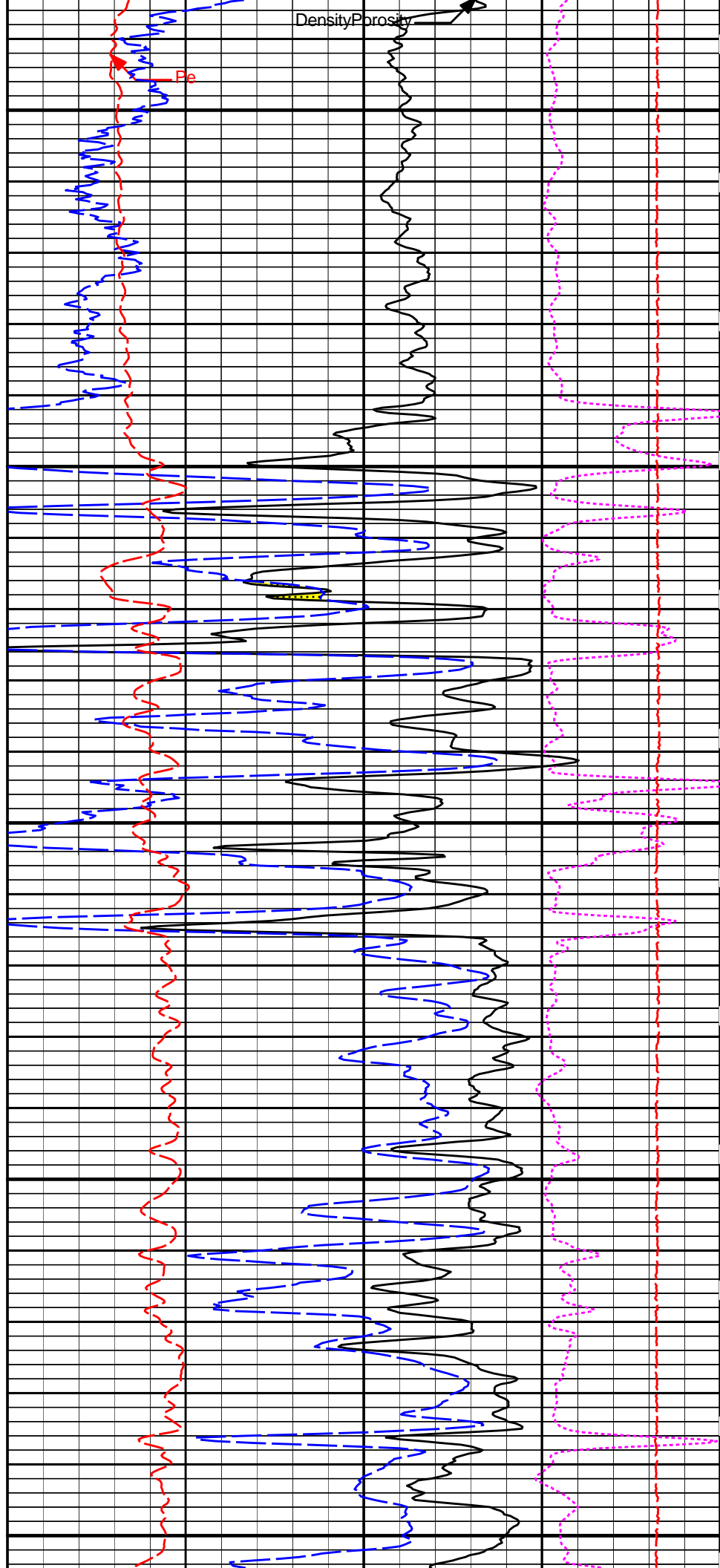
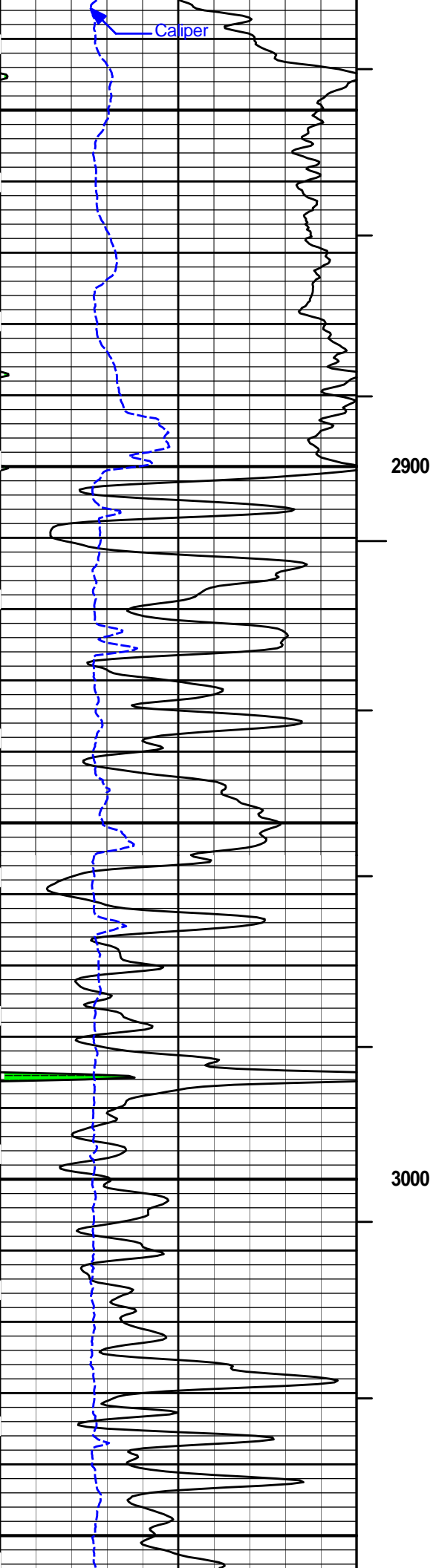
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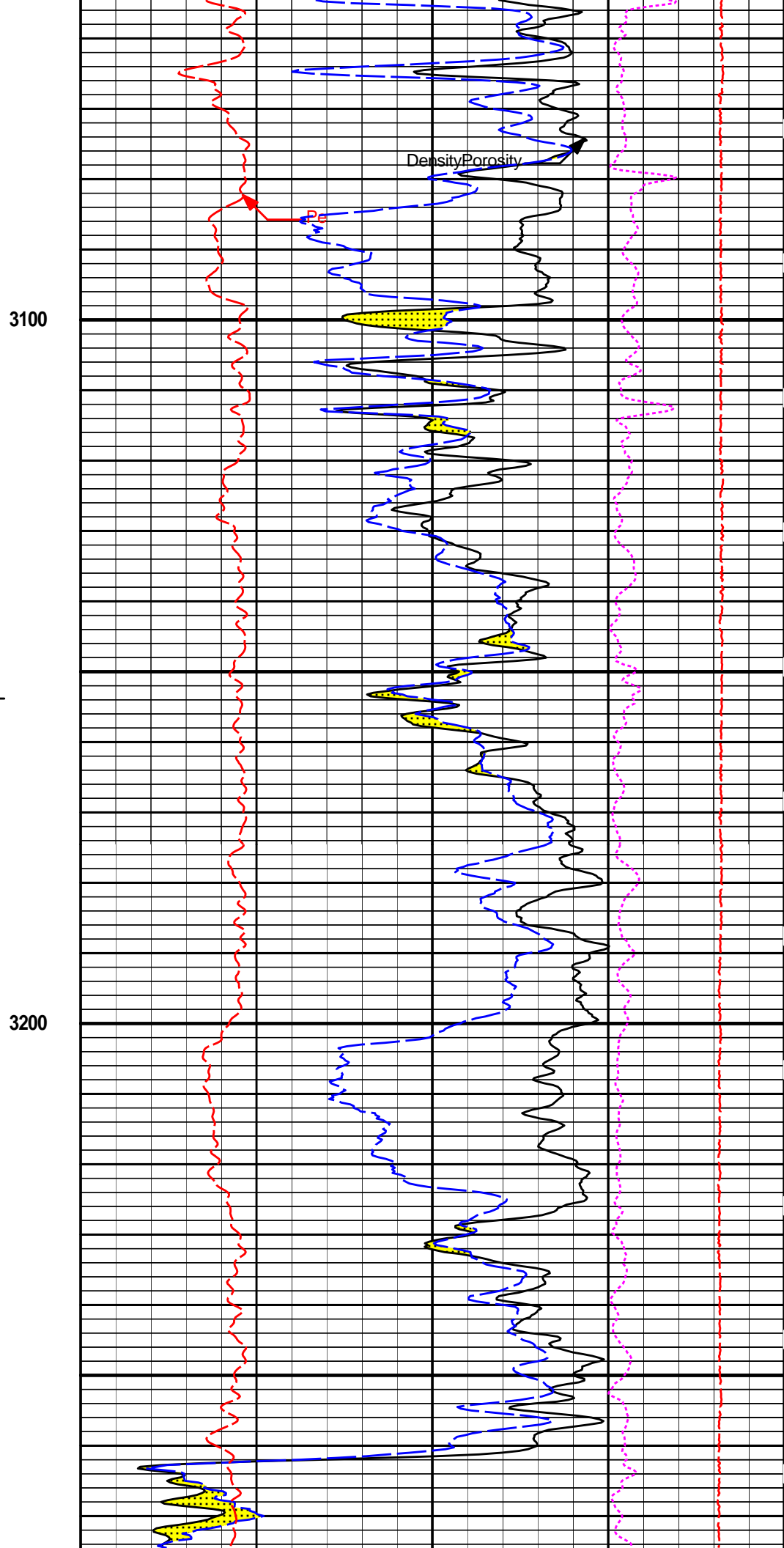
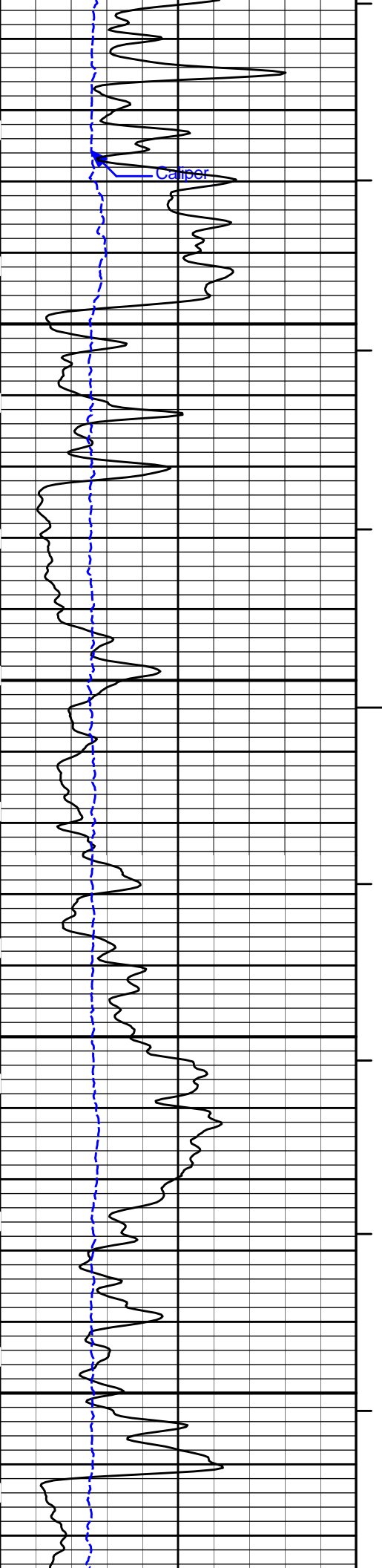
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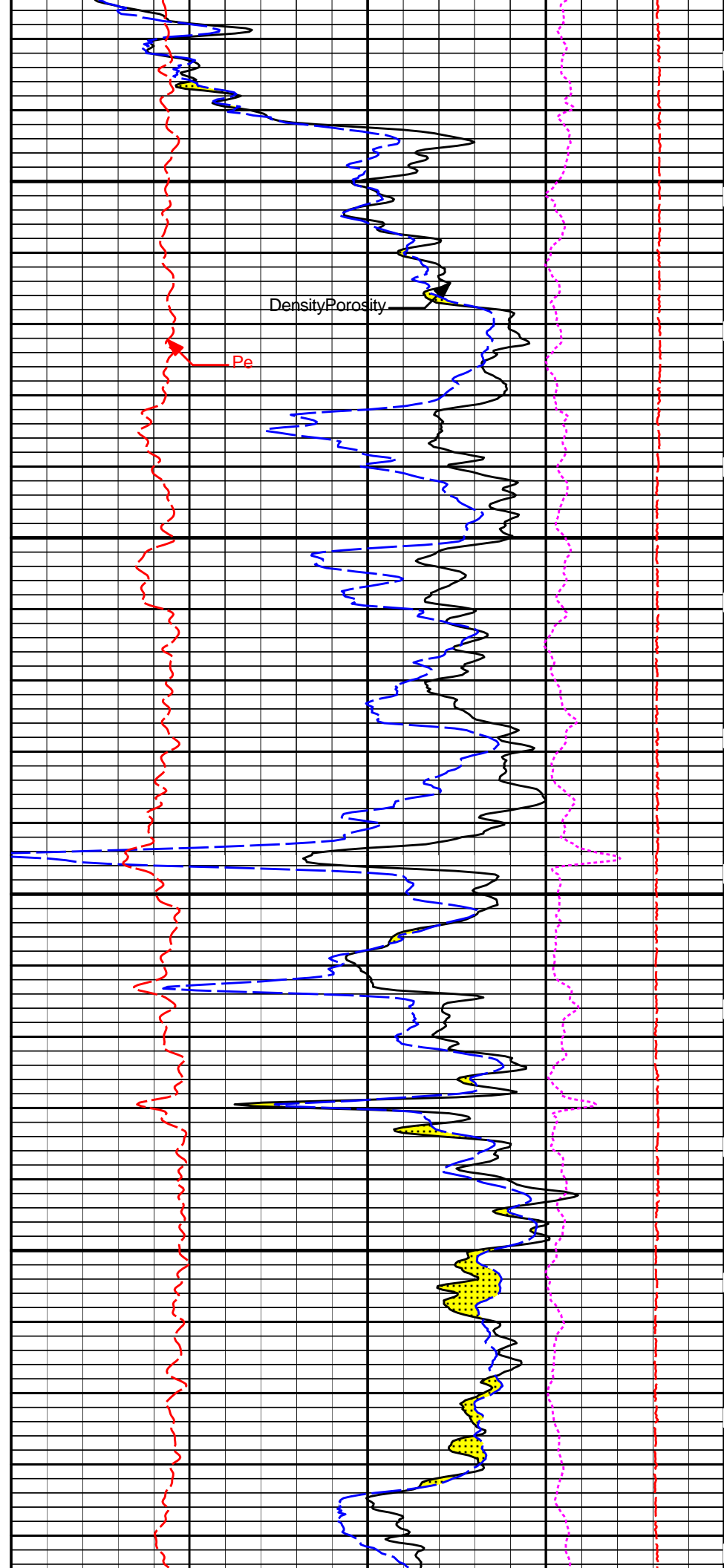
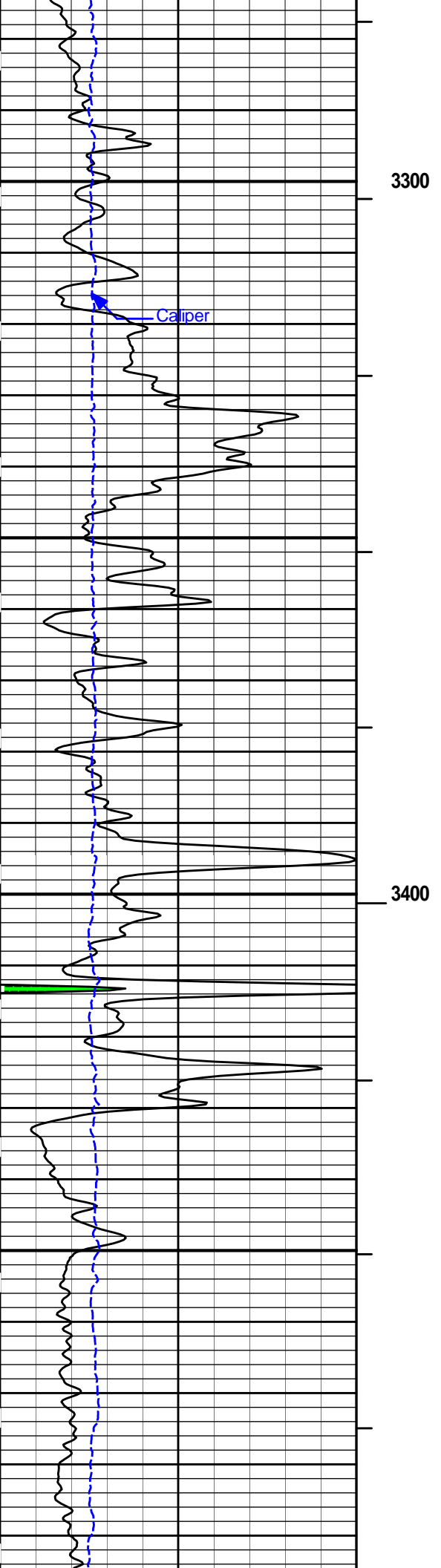
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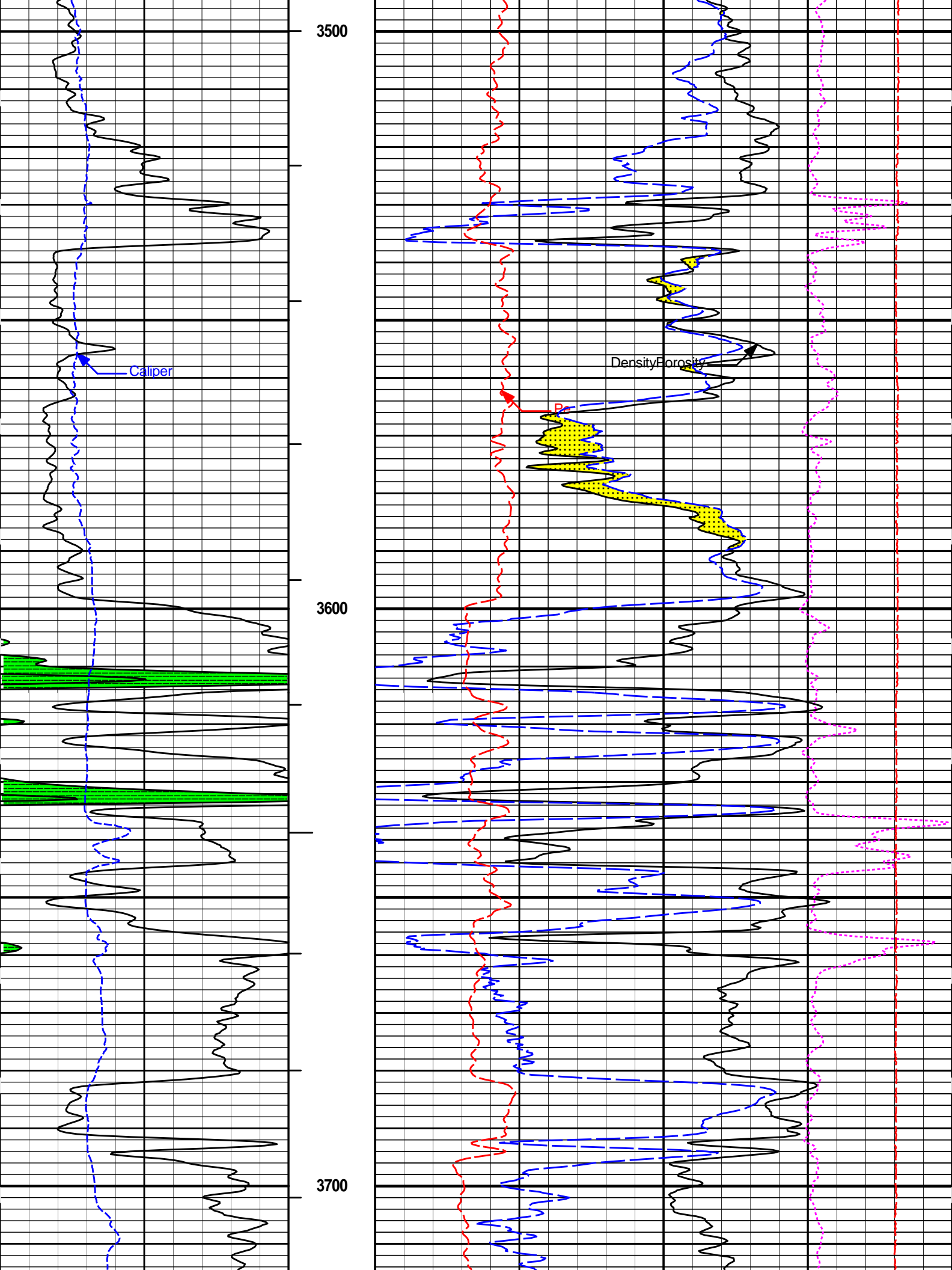
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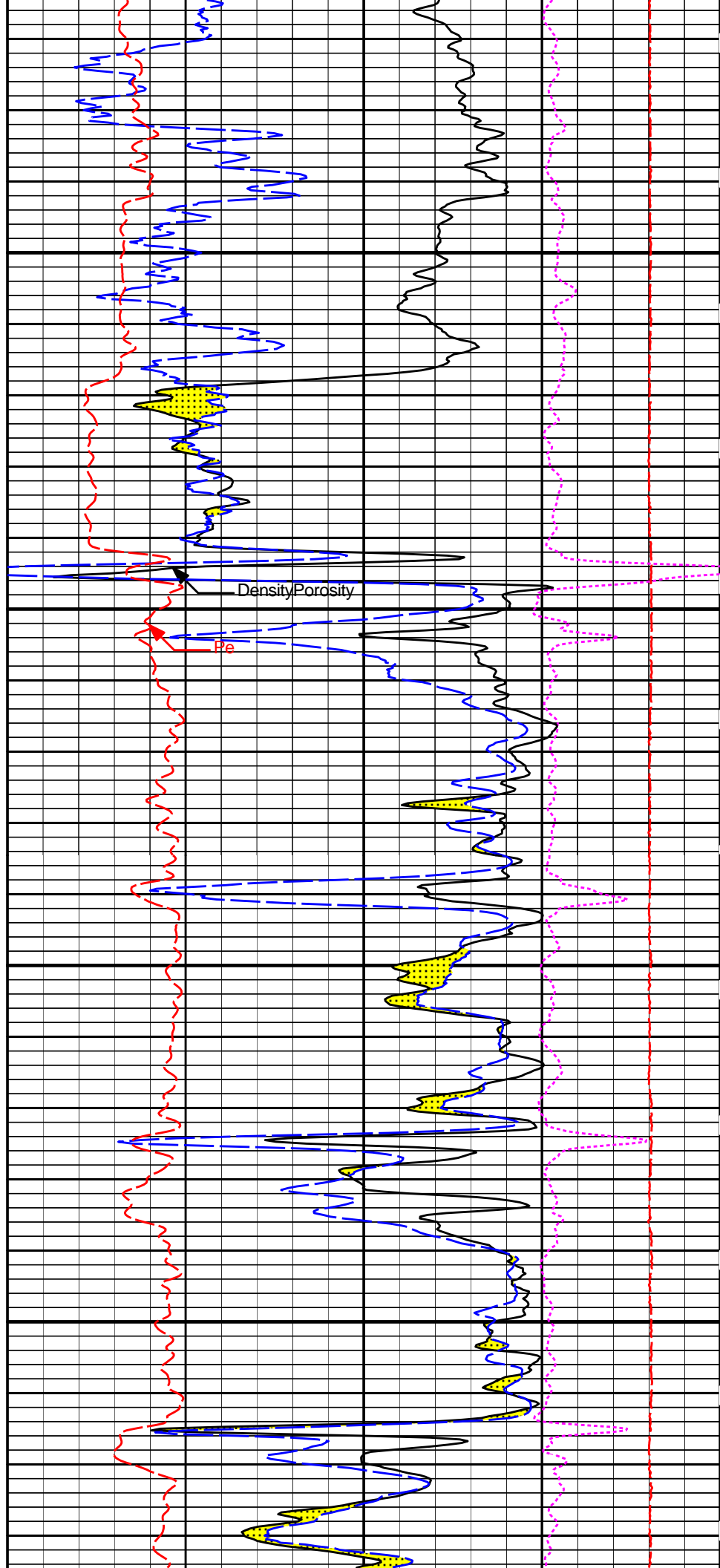
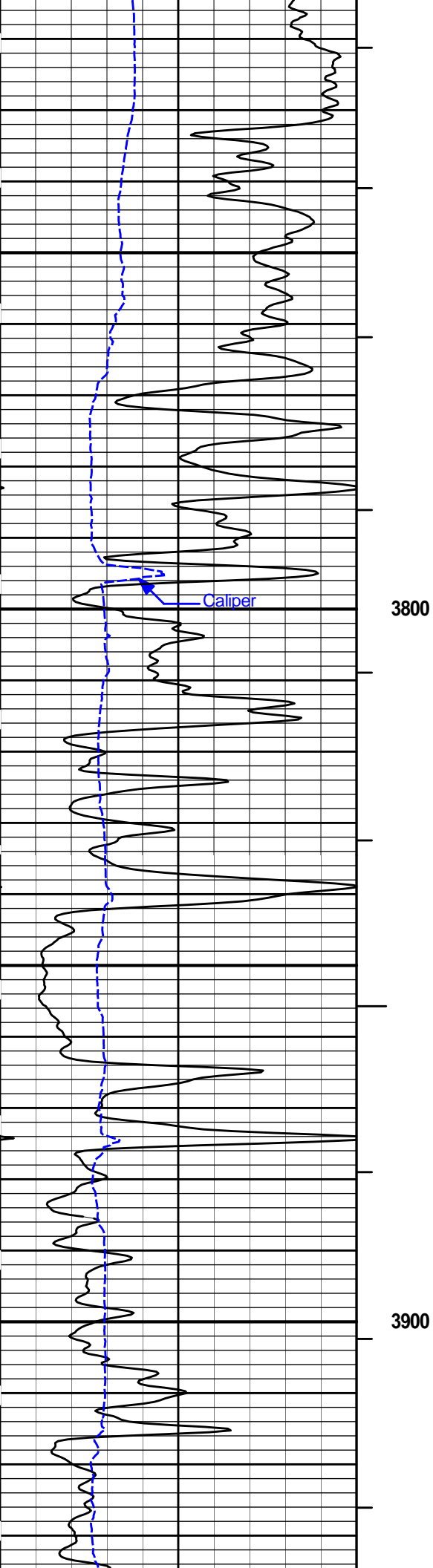


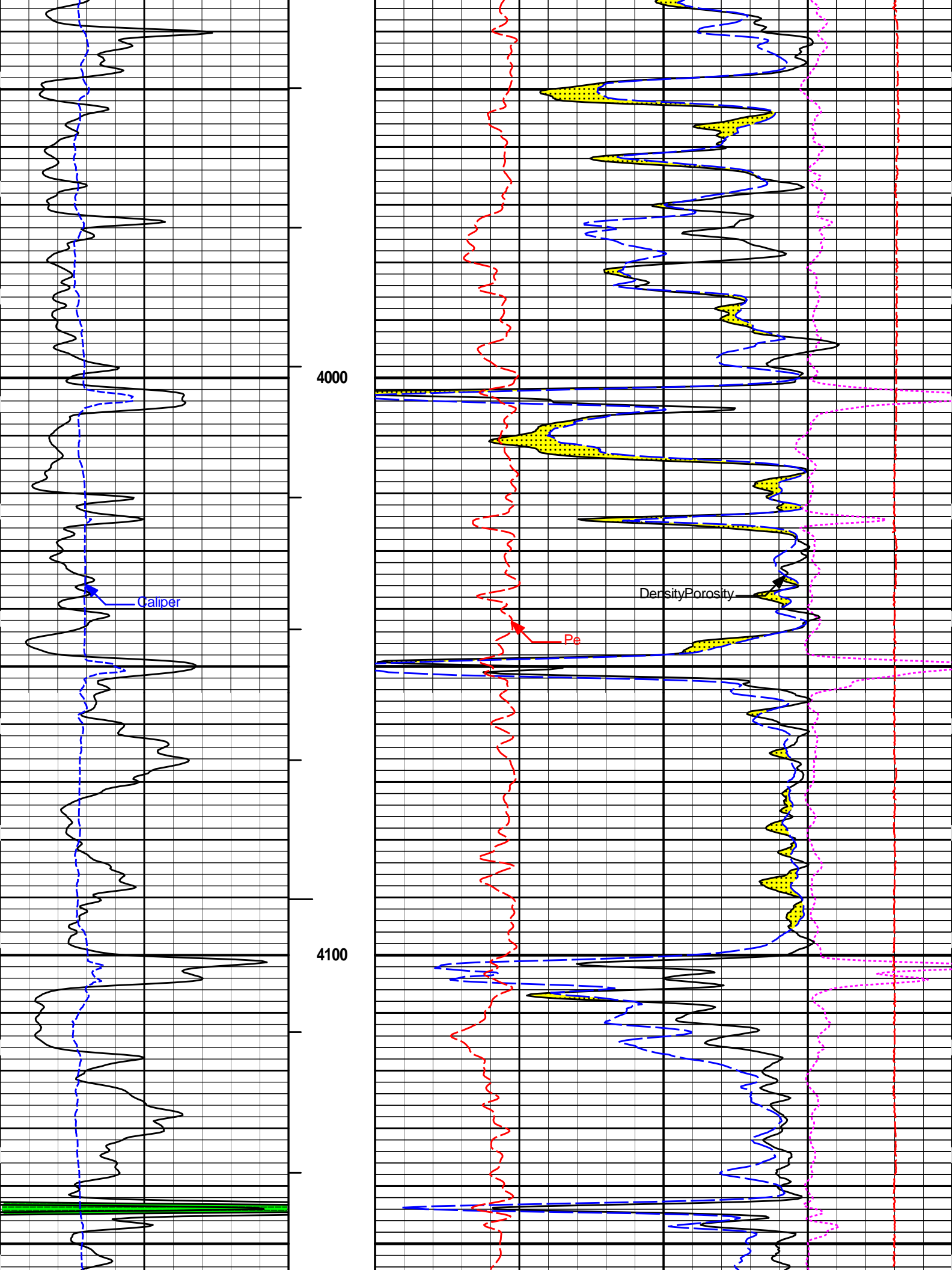


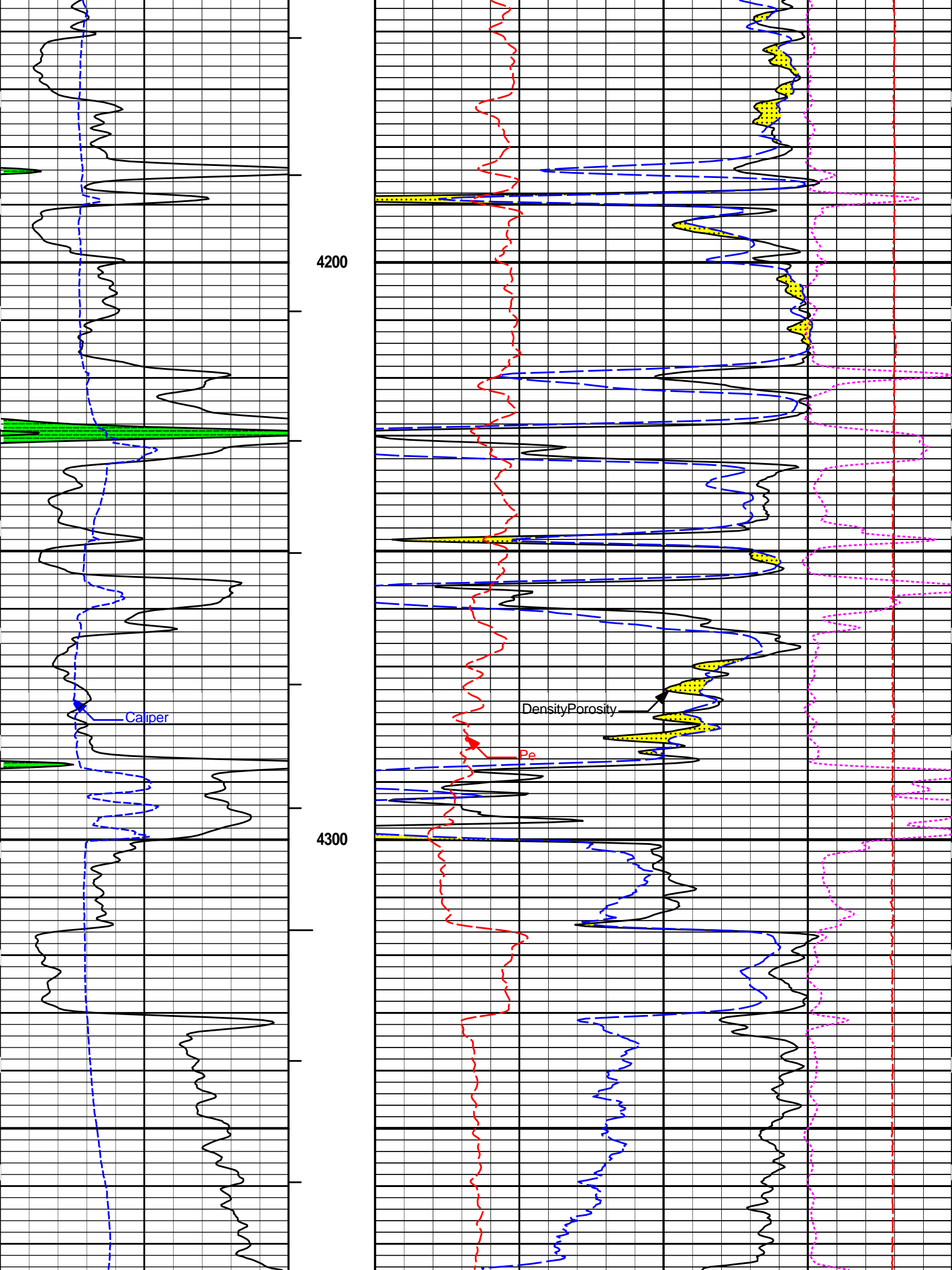


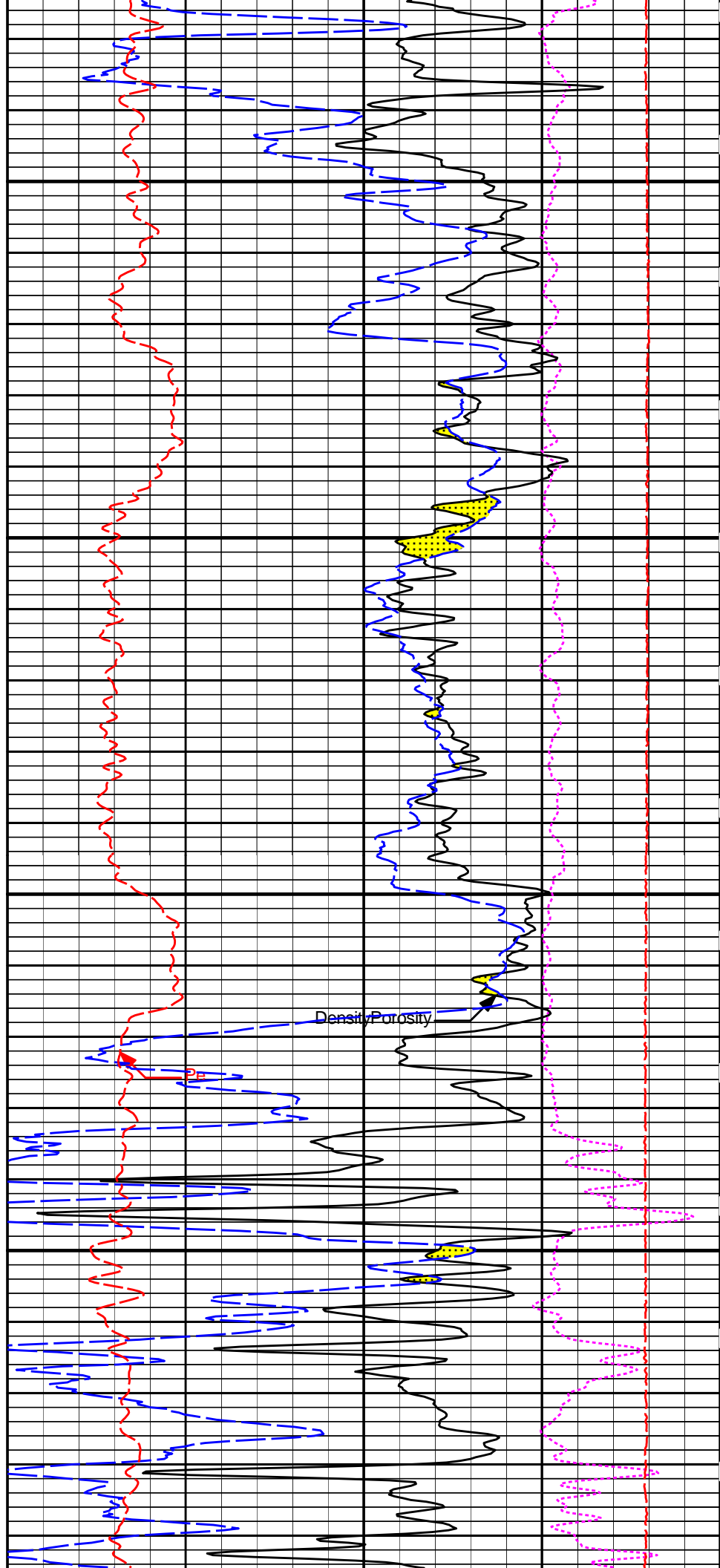
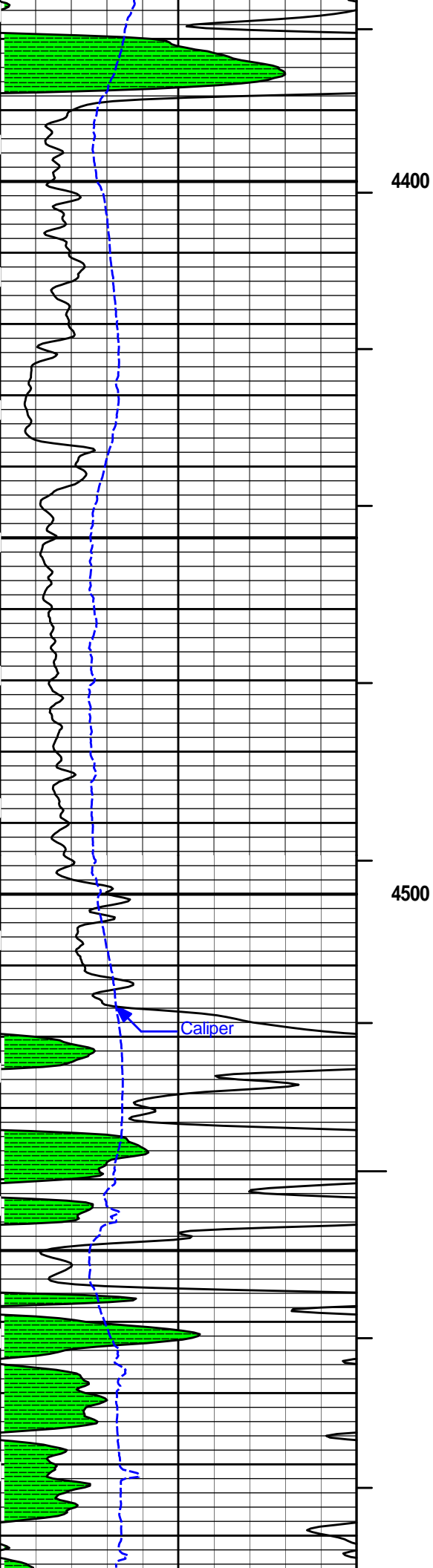












HALLIBURTON

Plot Time: 03-Feb-14 07:06:06
Plot Range: 1035 ft to 4778.33 ft
Data: ALEXANDER_3114\Well Based\DAQ-0001-004\
Plot File: \\PORO\Poro_IQ_5_MAIN_LIB

5 INCH MAIN LOG

HALLIBURTON

Plot Time: 03-Feb-14 07:06:07
Plot Range: 4500 ft to 4779.17 ft
Data: ALEXANDER_3114\Well Based\DAQ-0001-002\
Plot File: \\PORO\Poro_IQ_5_REP_LIB

REPEAT SECTION

30 Neutron Porosity -10

%

30 DensityPorosity -10

%

0 Gamma API 150
api
6 Caliper 16
inches

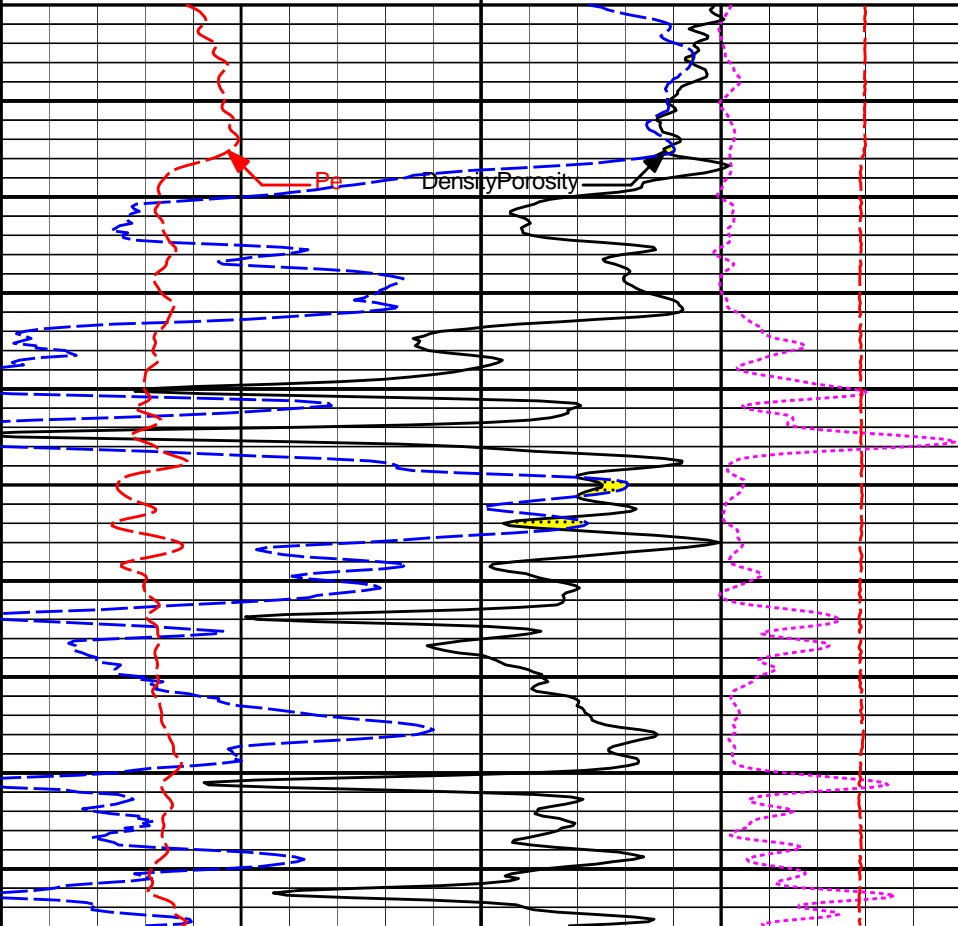
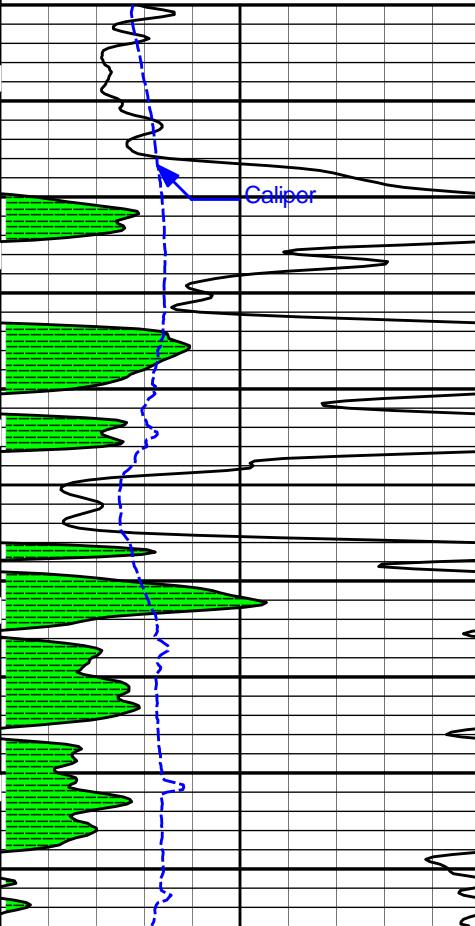
BHVT

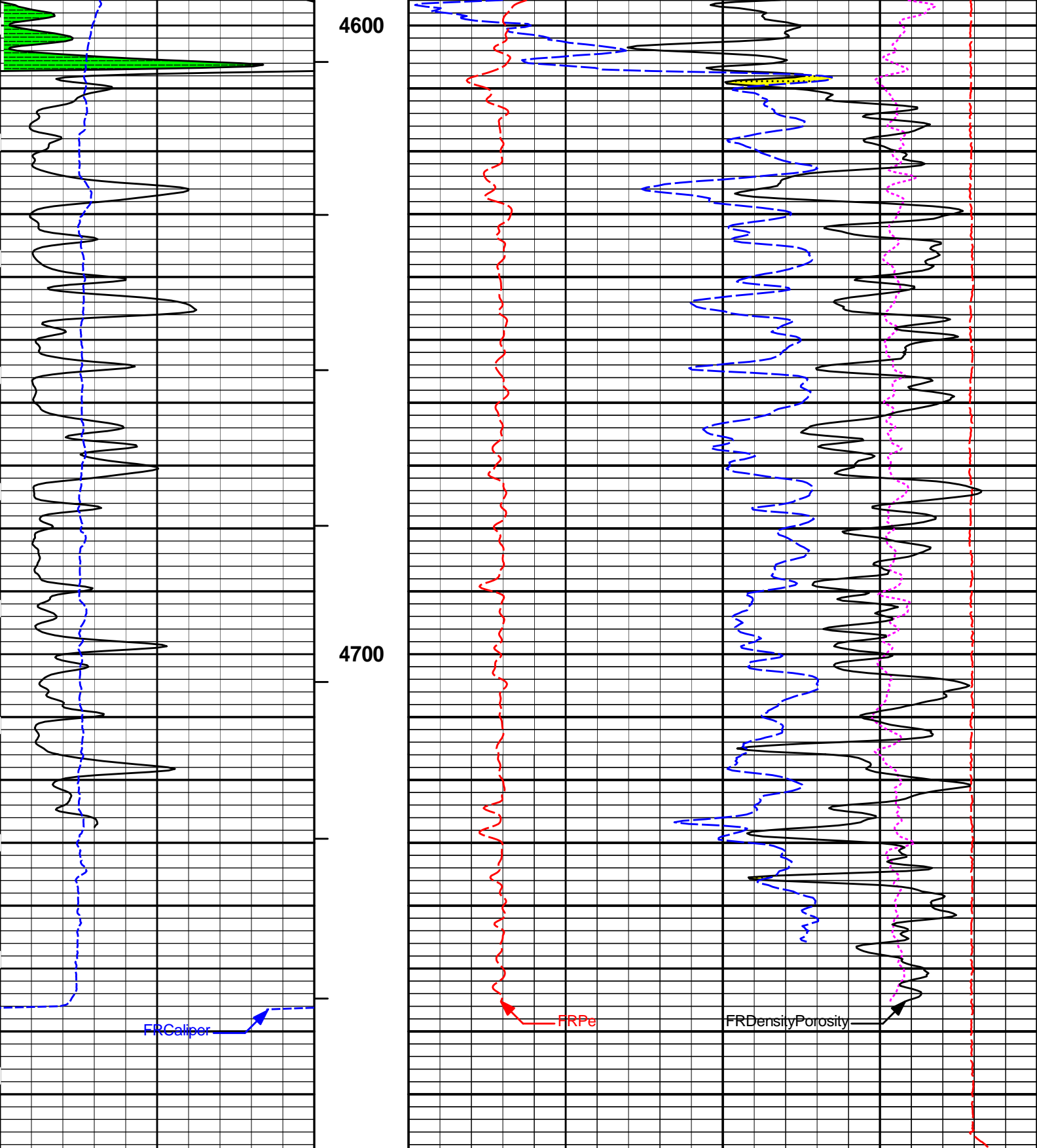
MD
1 : 240
ft

15K Tension 0
pounds

0 Pe 10 -0.25 DensityCorr 0.25

gram per cc





6	Caliper	16	MD	0	Pe	10	-0.25	DensityCorr	0.25
	inches		1 : 240					gram per cc	
0	Gamma API	150	BHVT				15K	Tension	0
	api							pounds	
	SHALE			30	DensityPorosity				-10
					%				
				30	Neutron Porosity				-10

CROSSOVER

HALLIBURTON

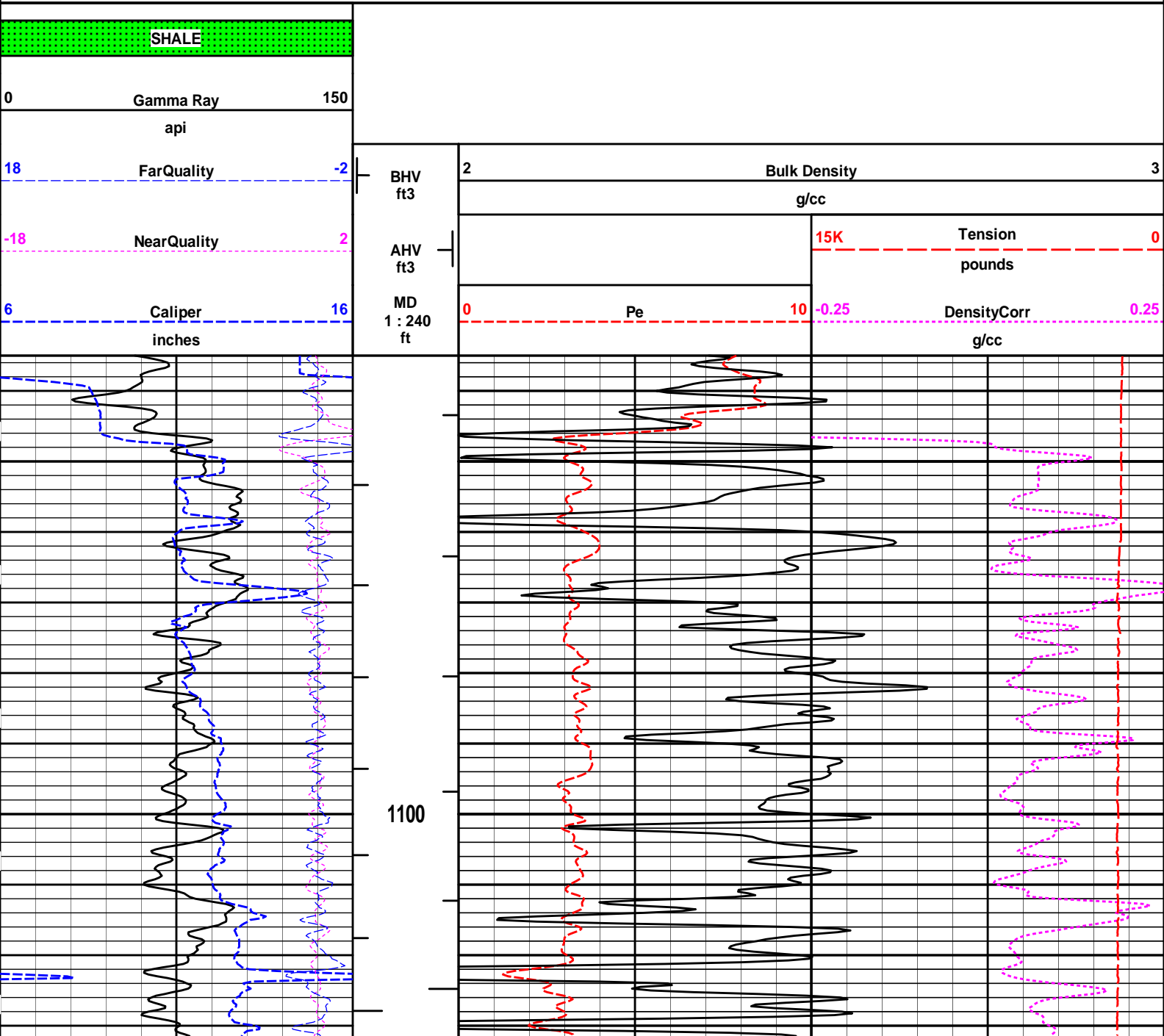
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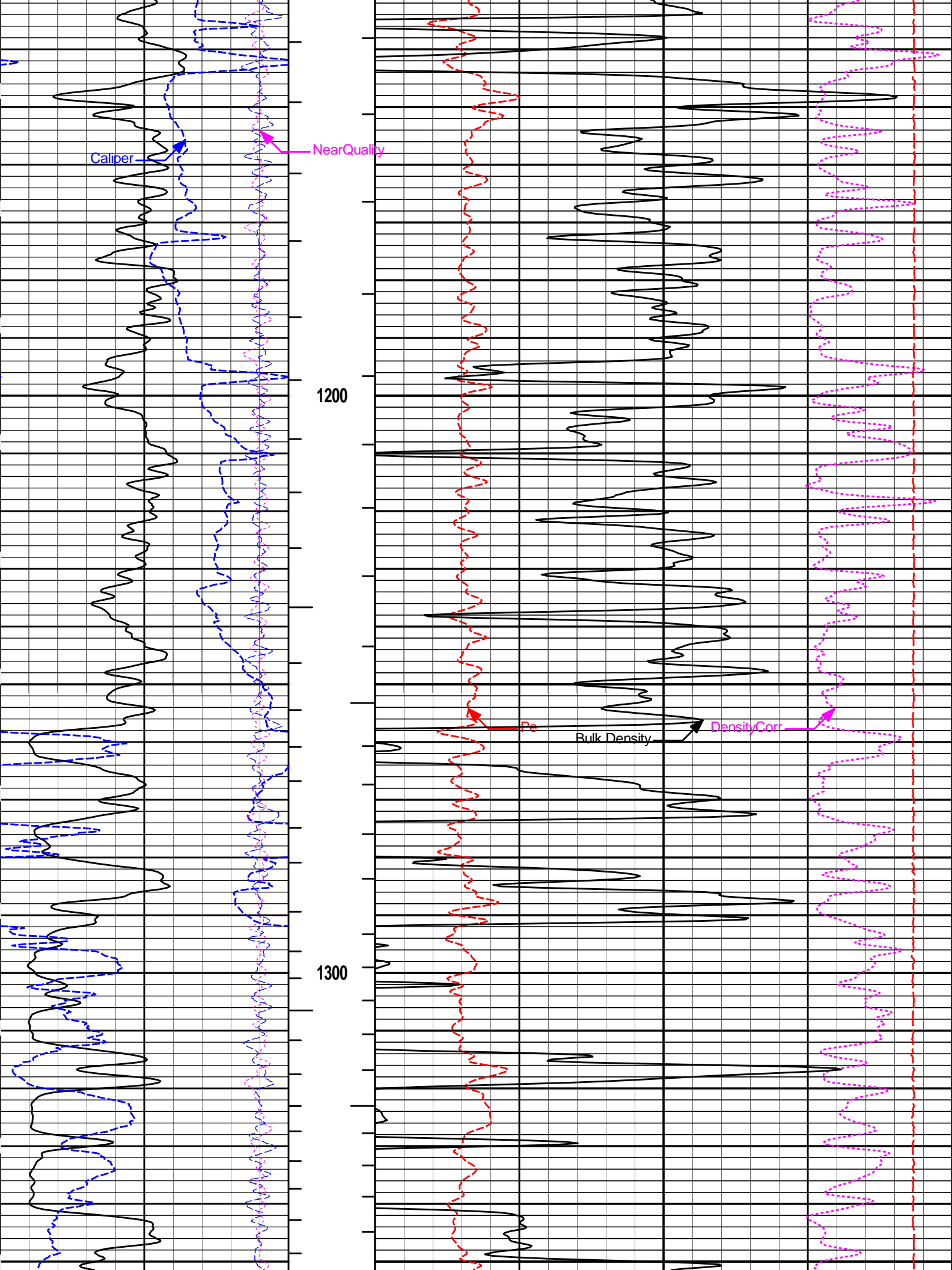
REPEAT SECTION

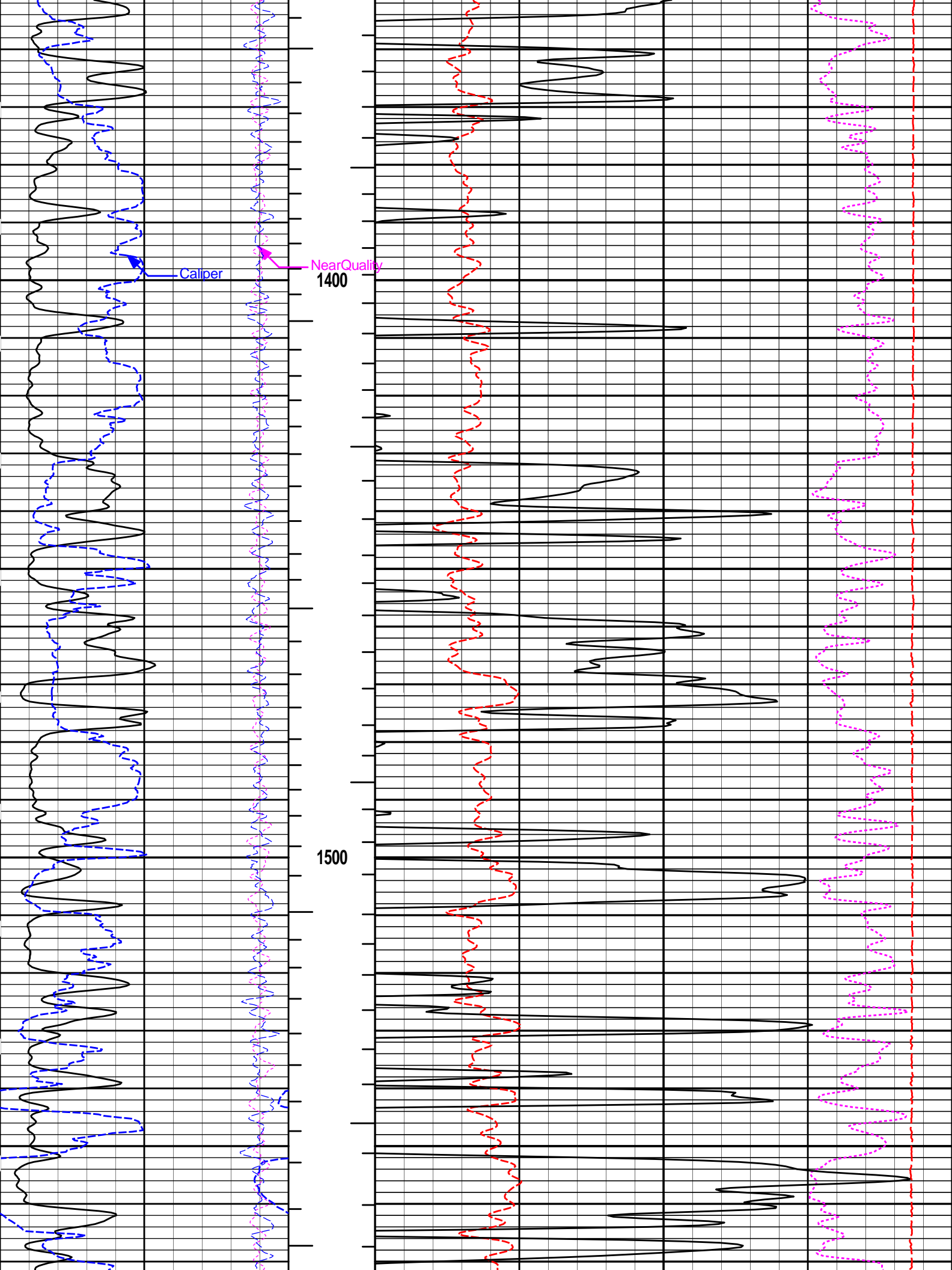
HALLIBURTON

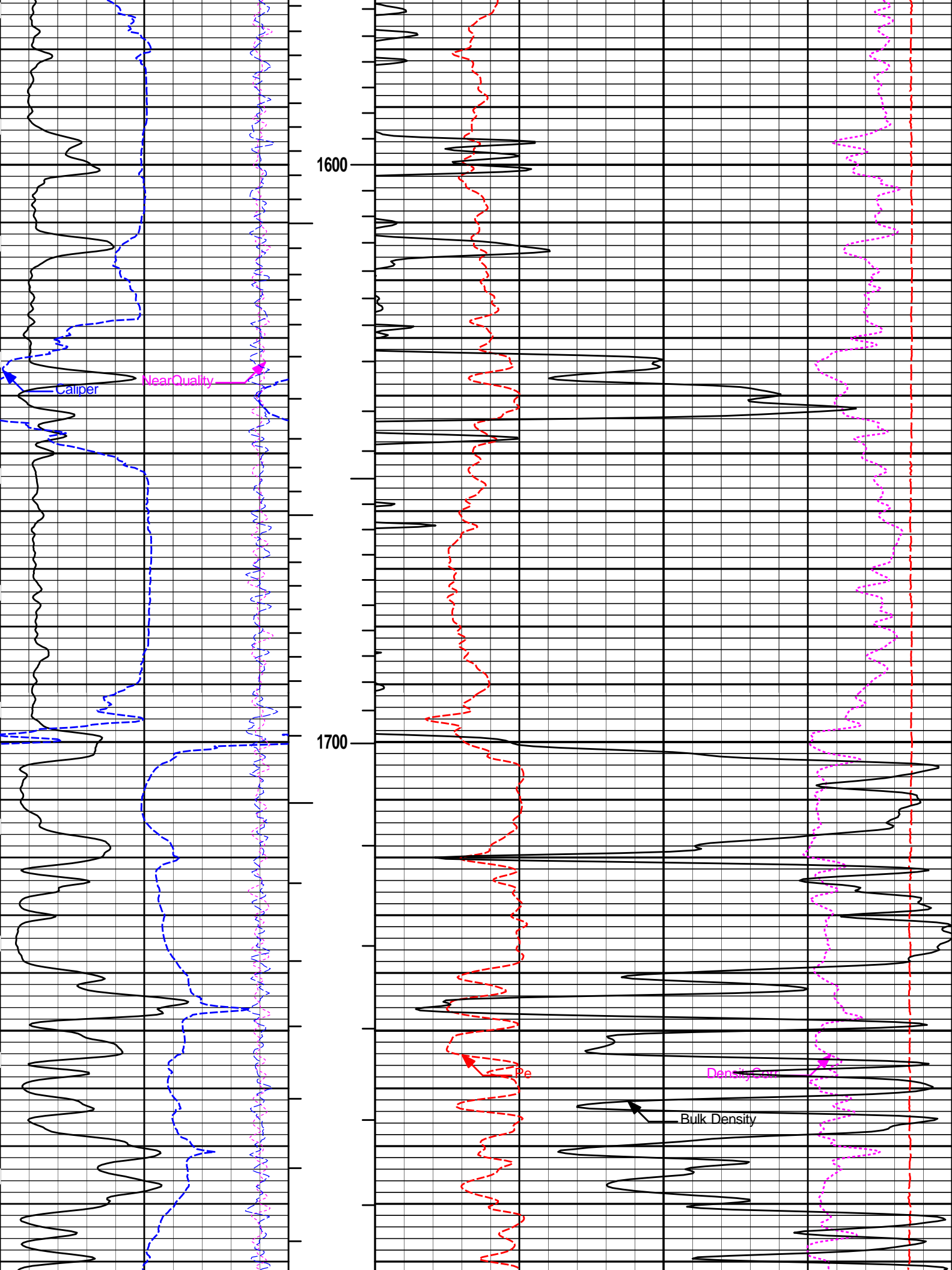
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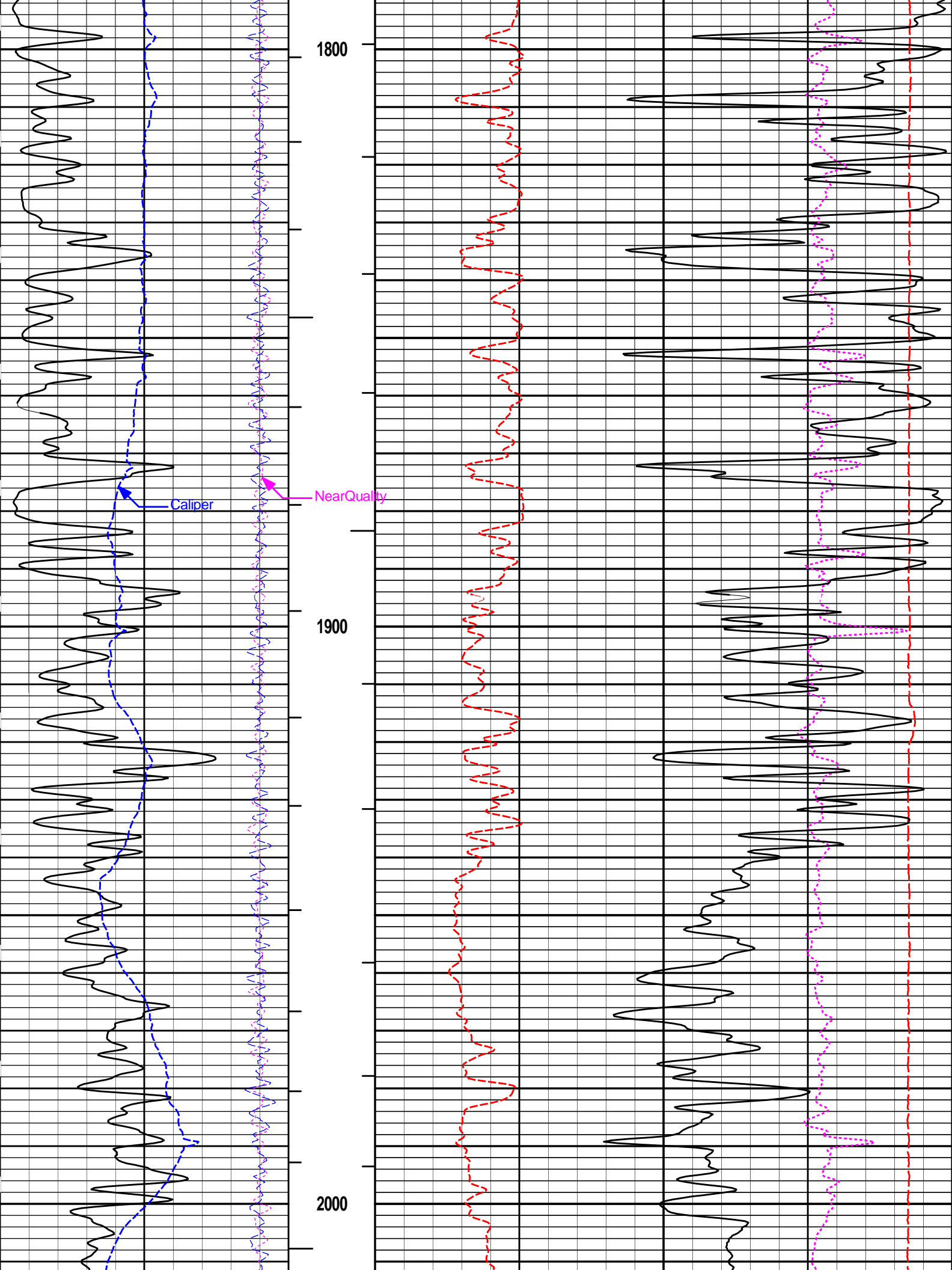
5 INCH MAIN LOG

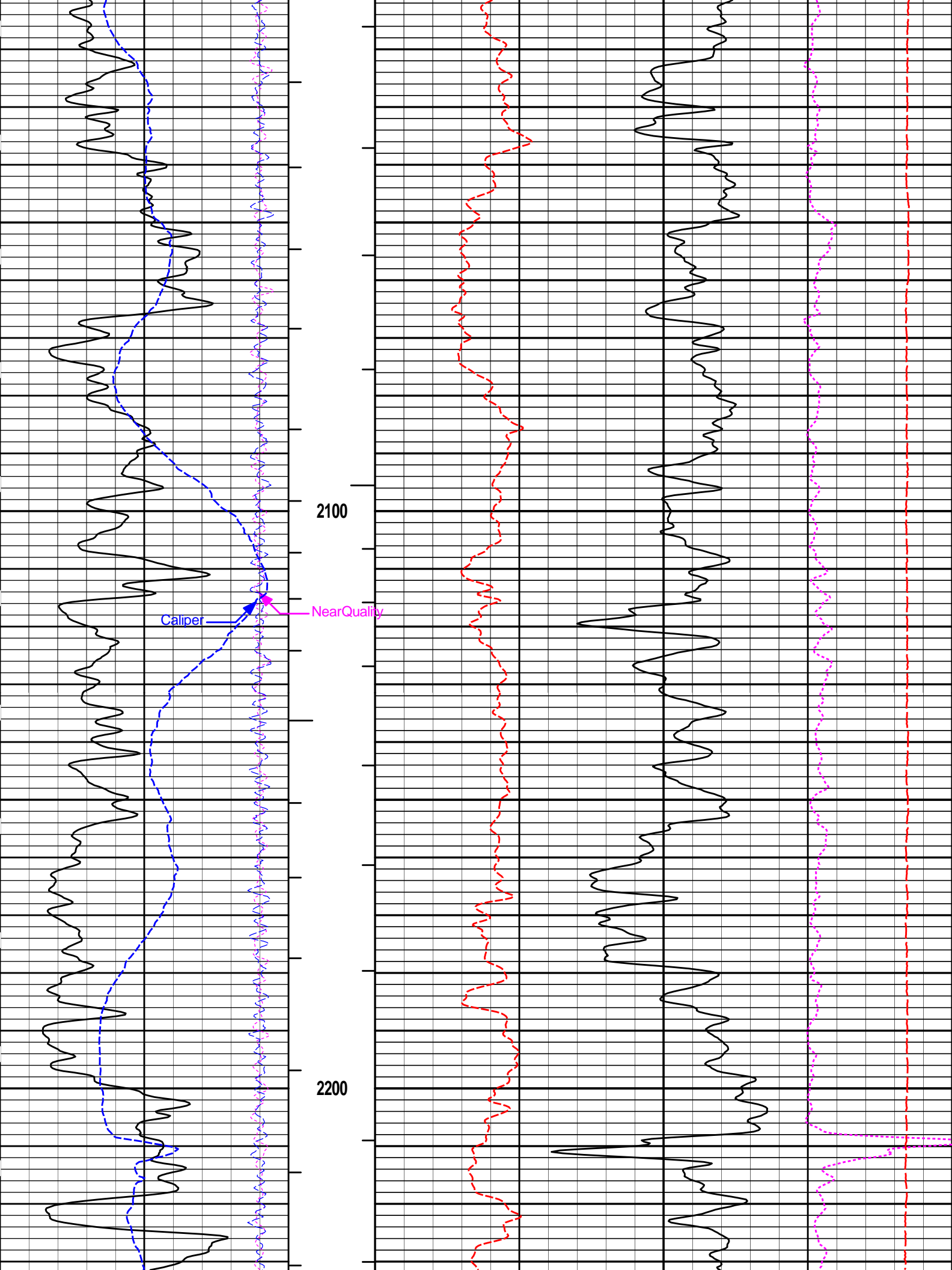


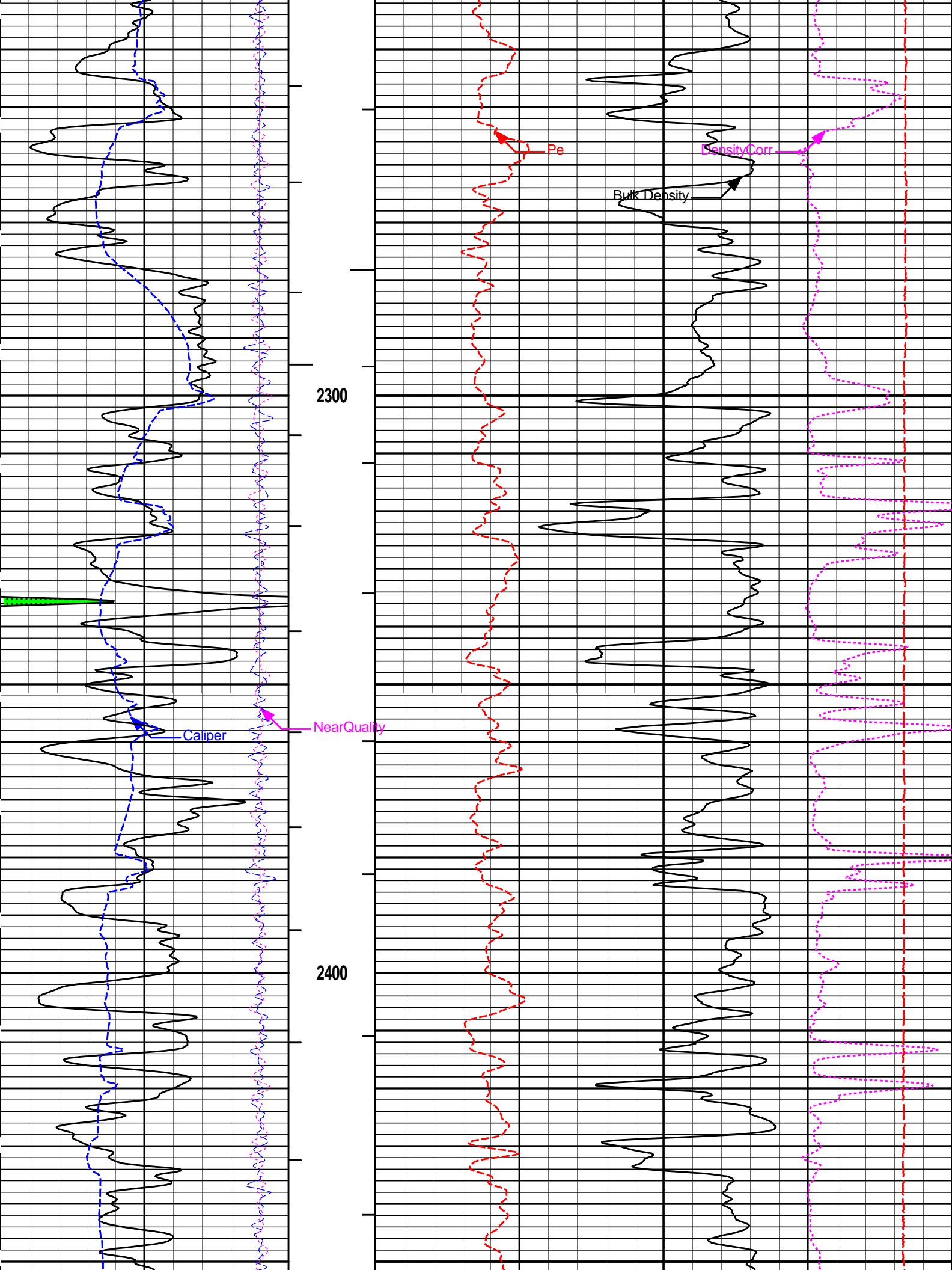


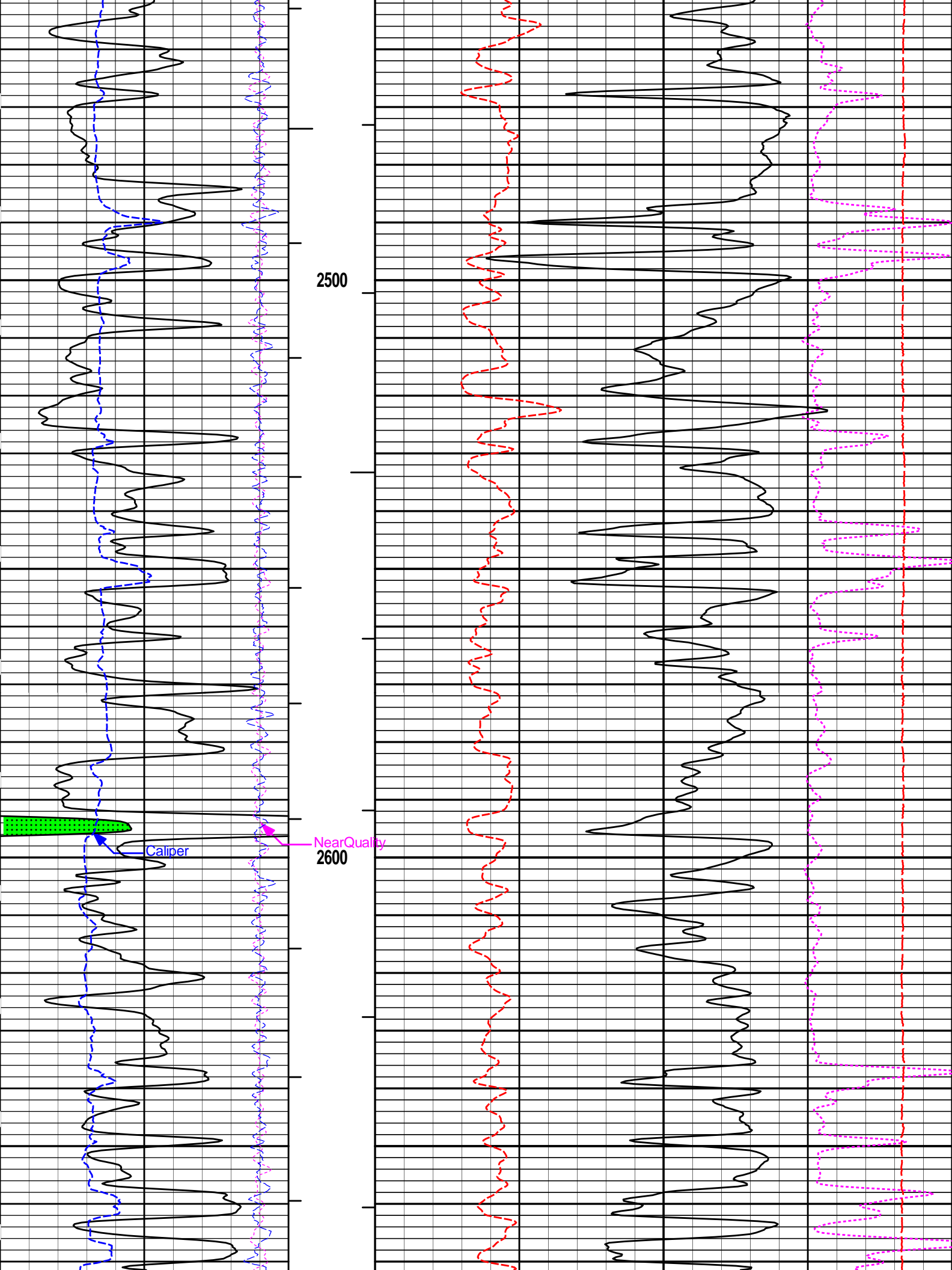


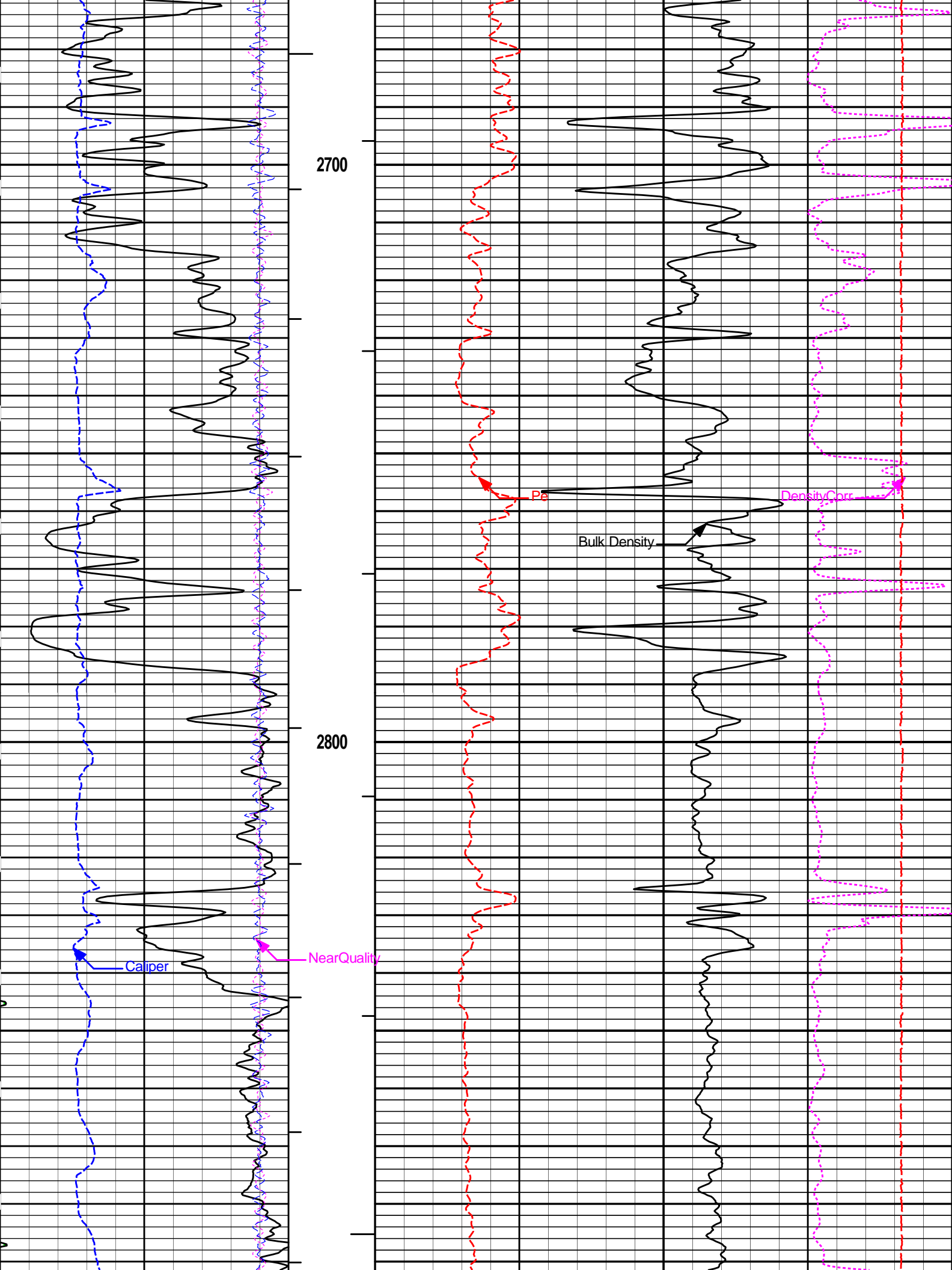


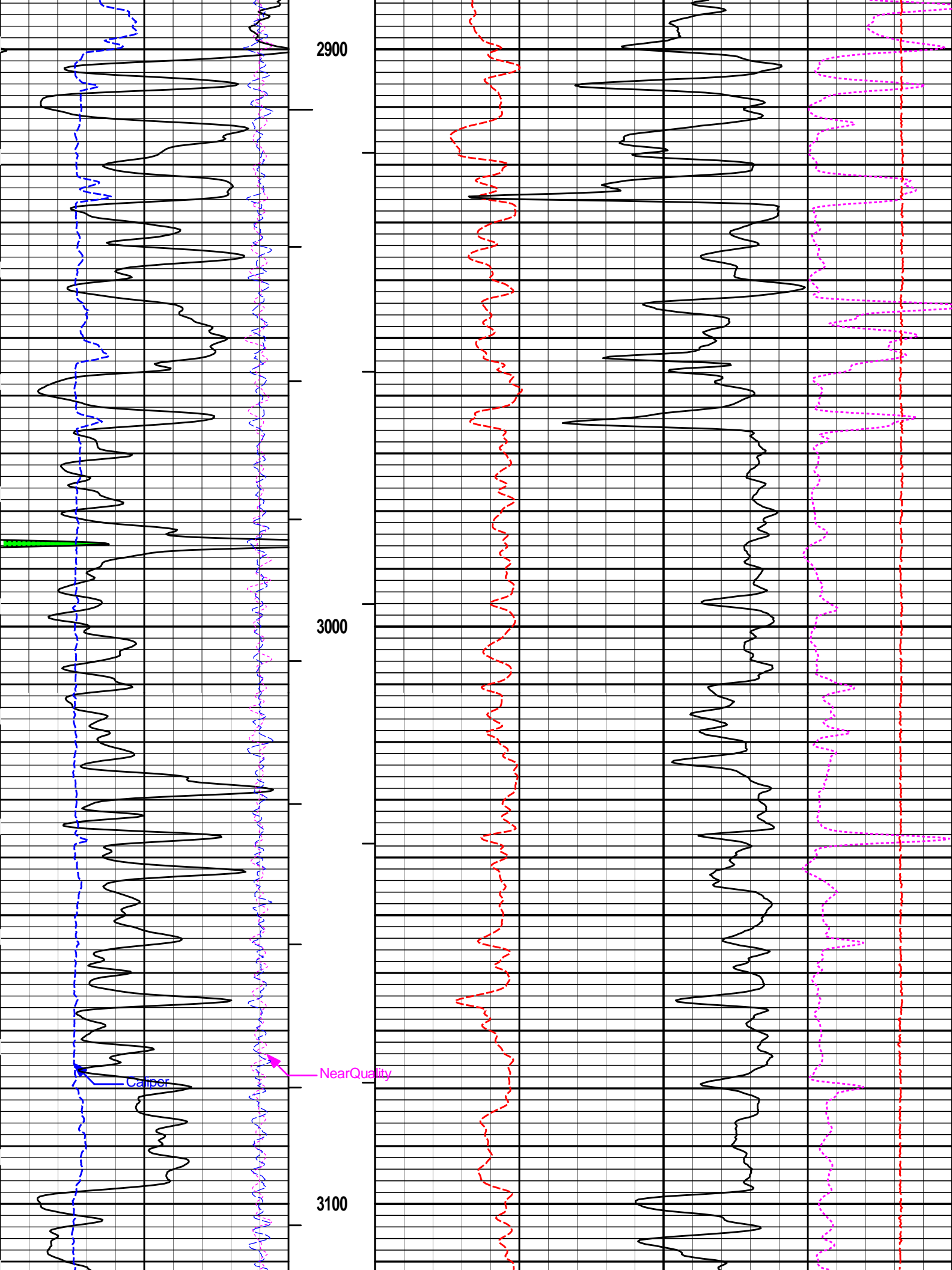


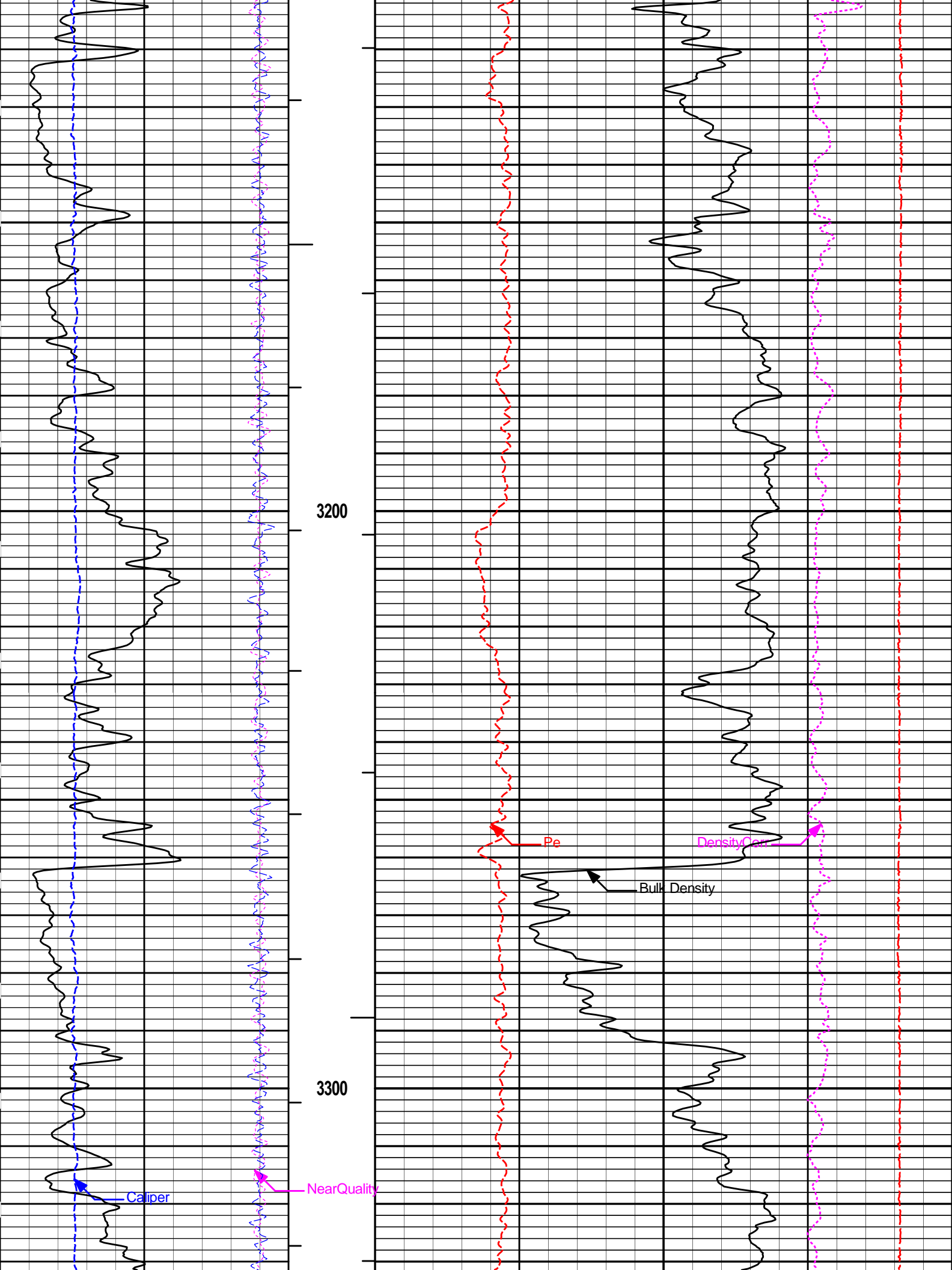


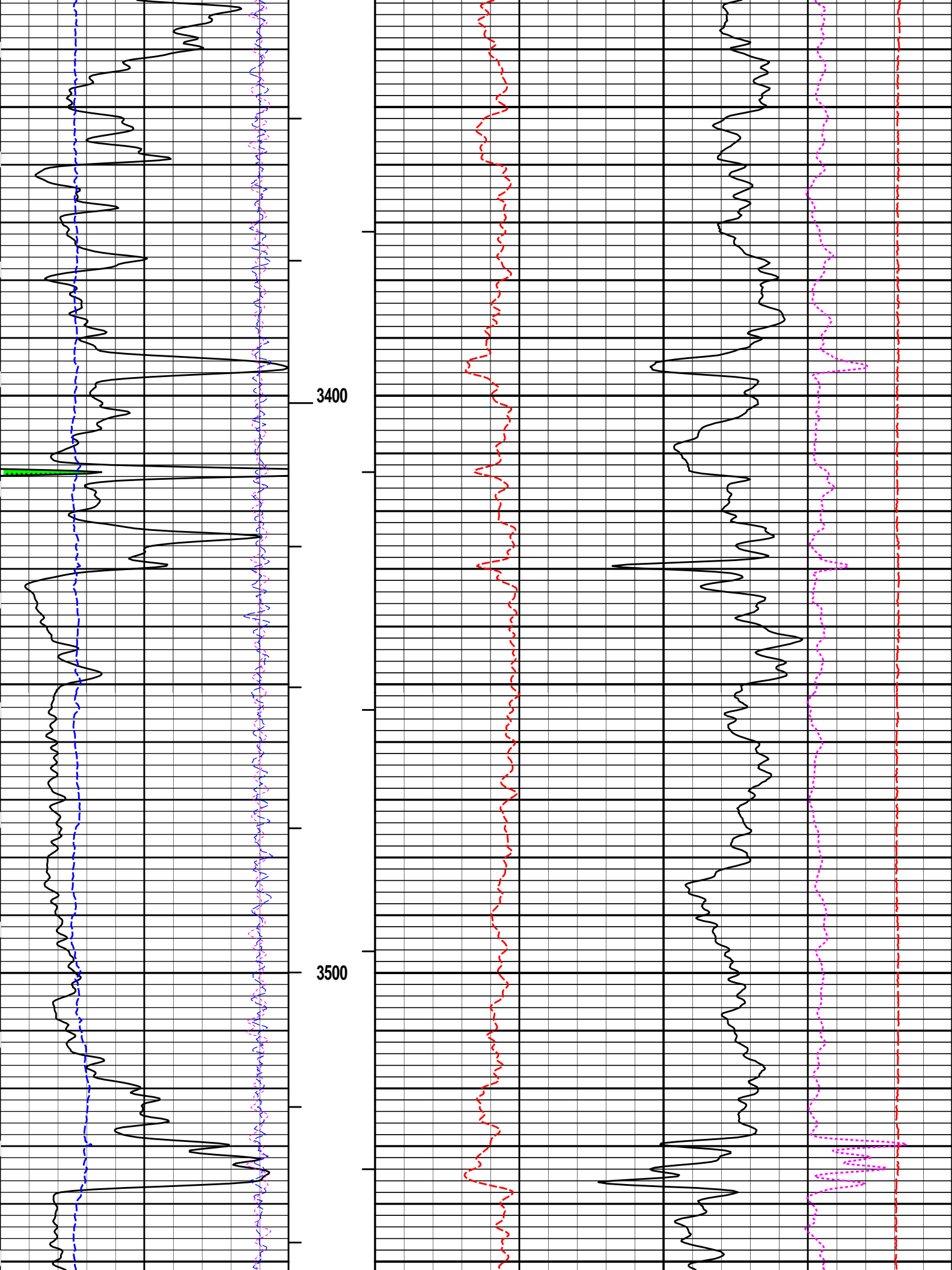


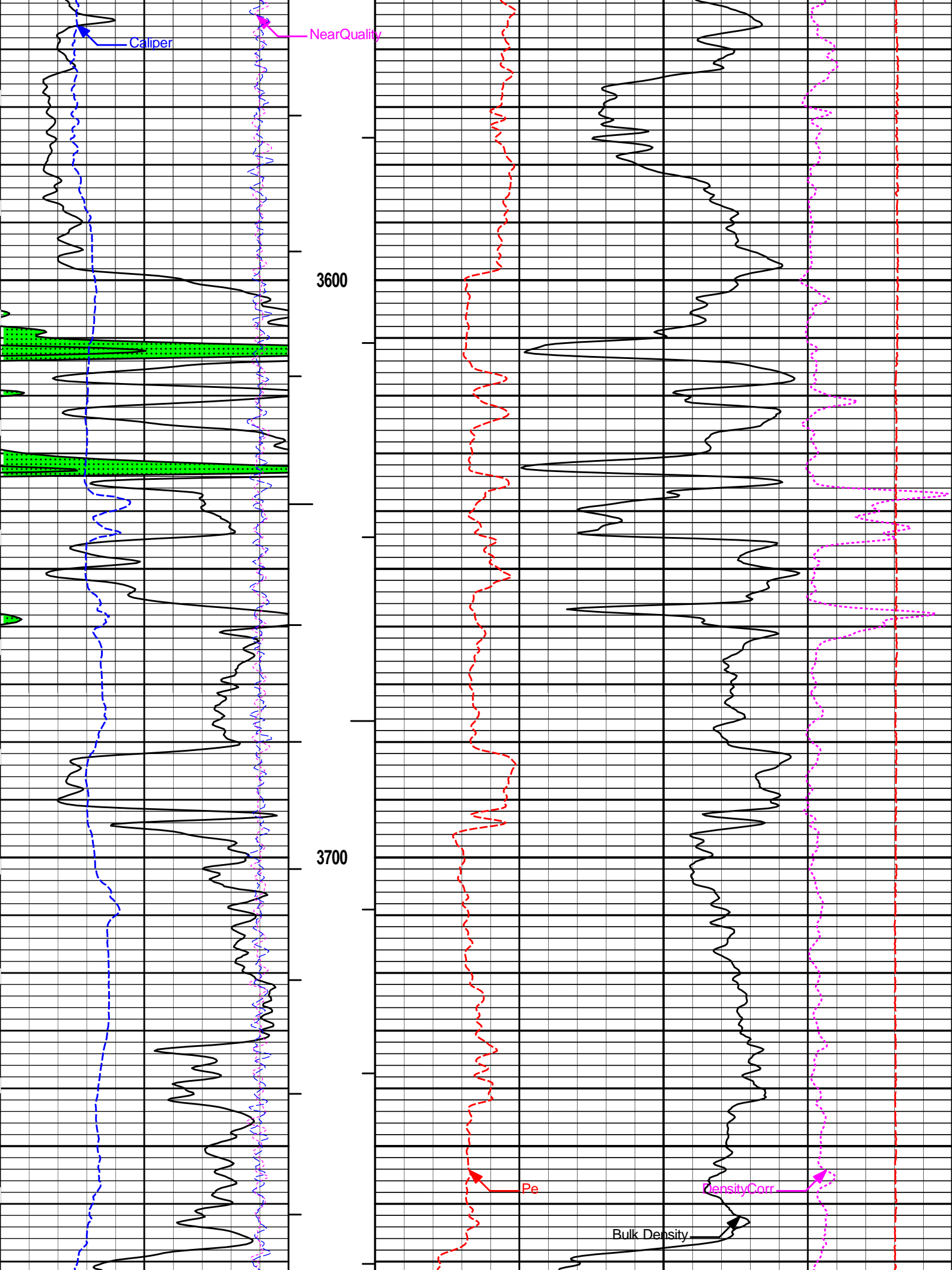


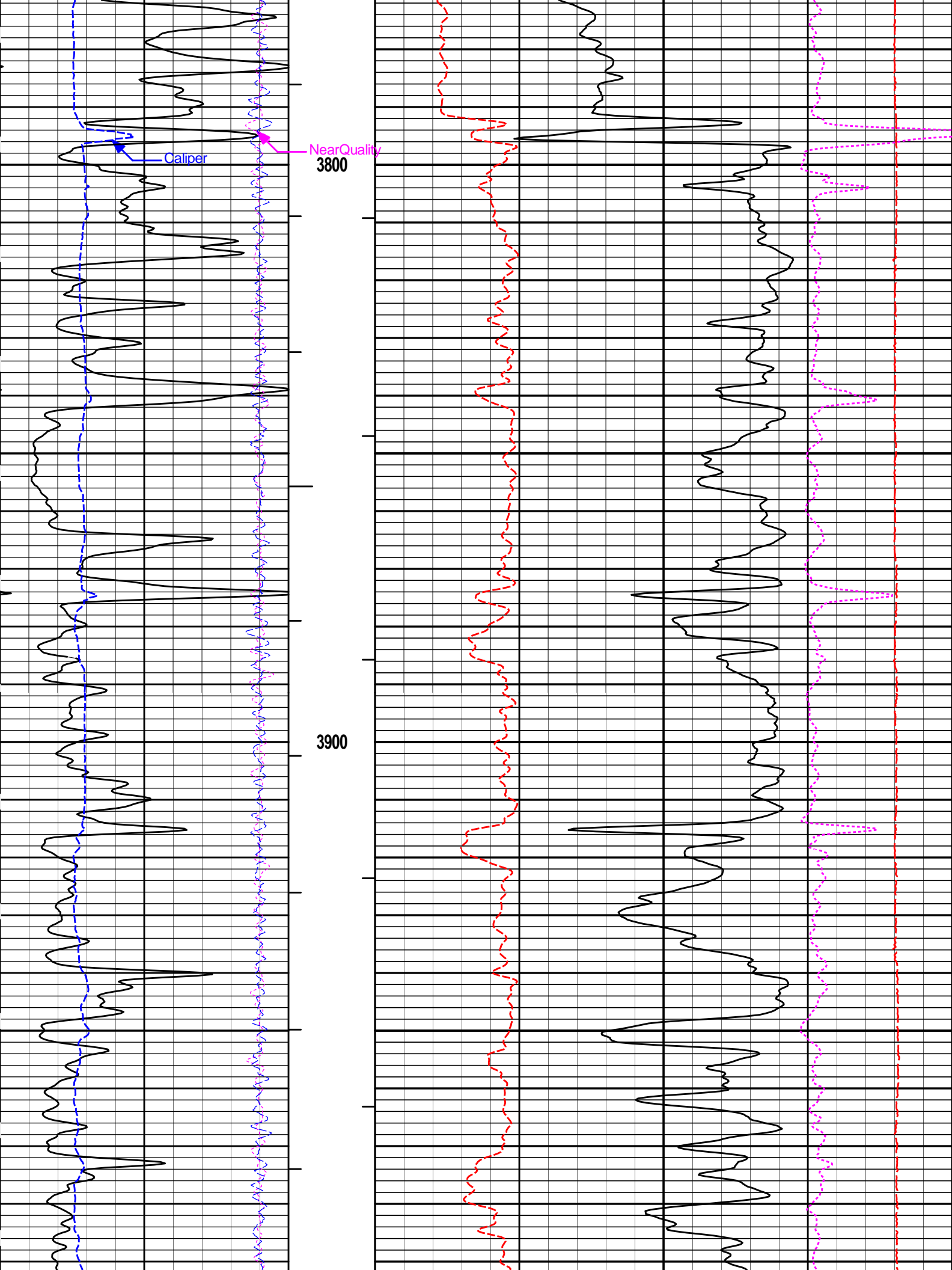


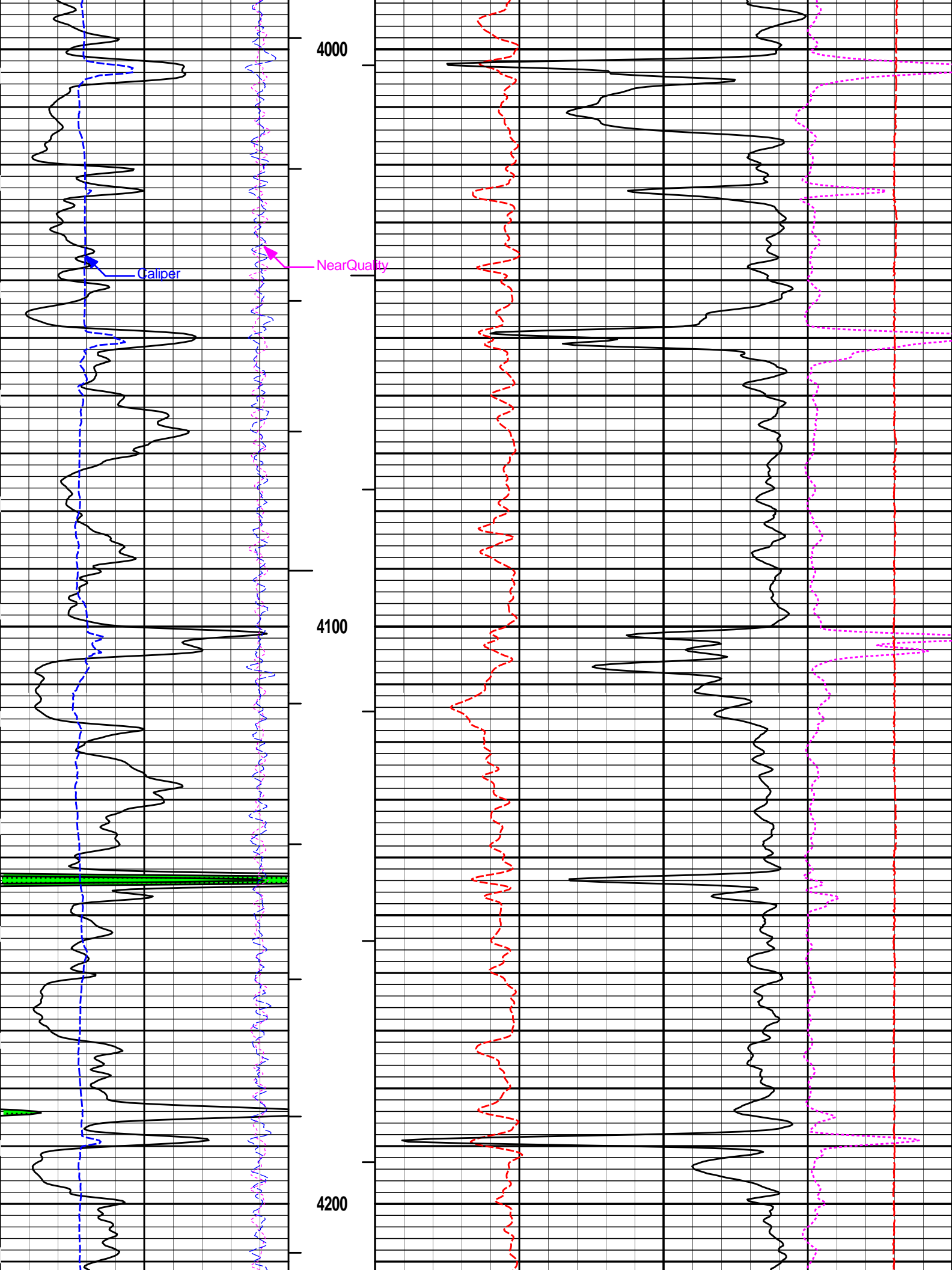


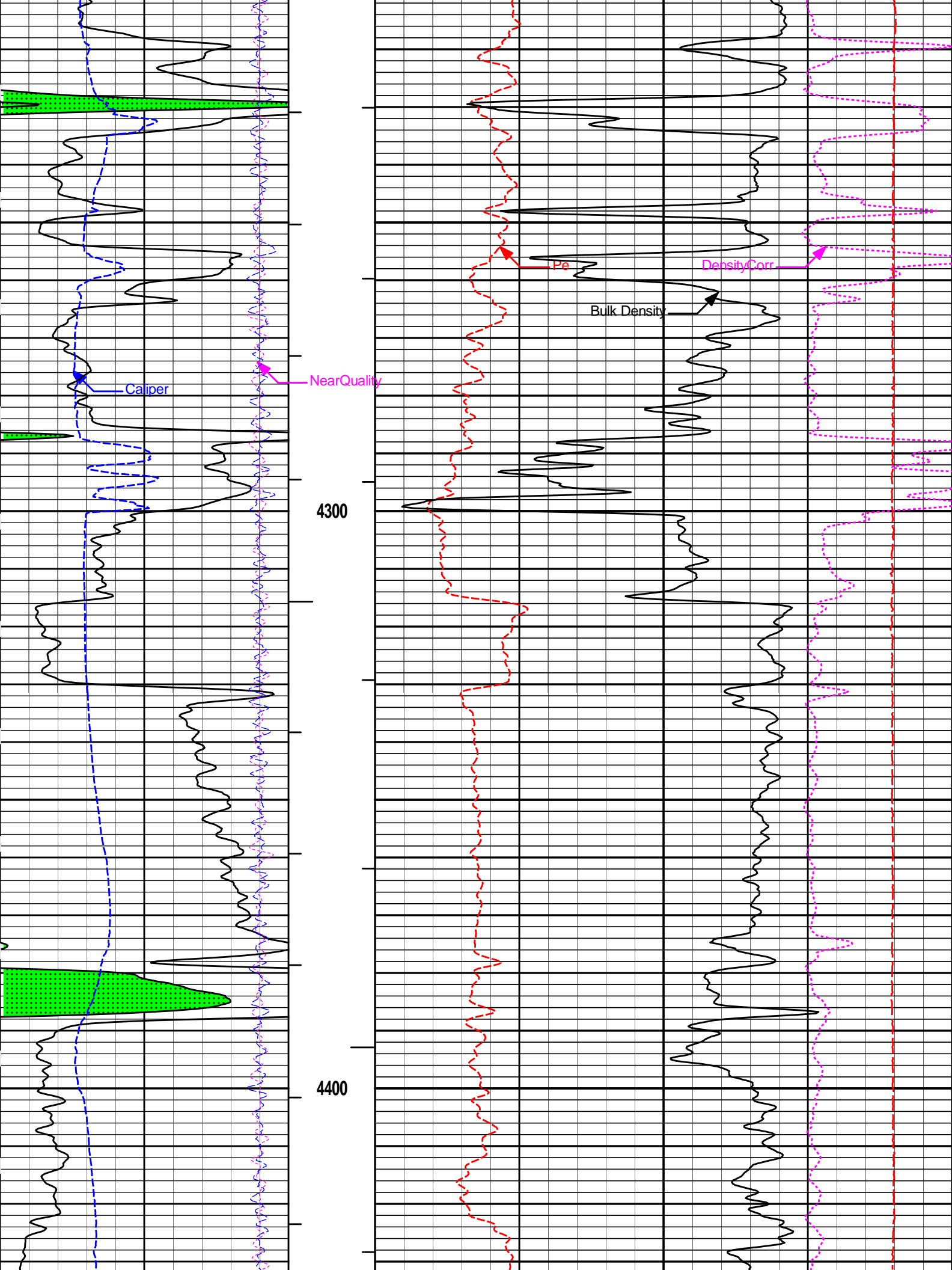


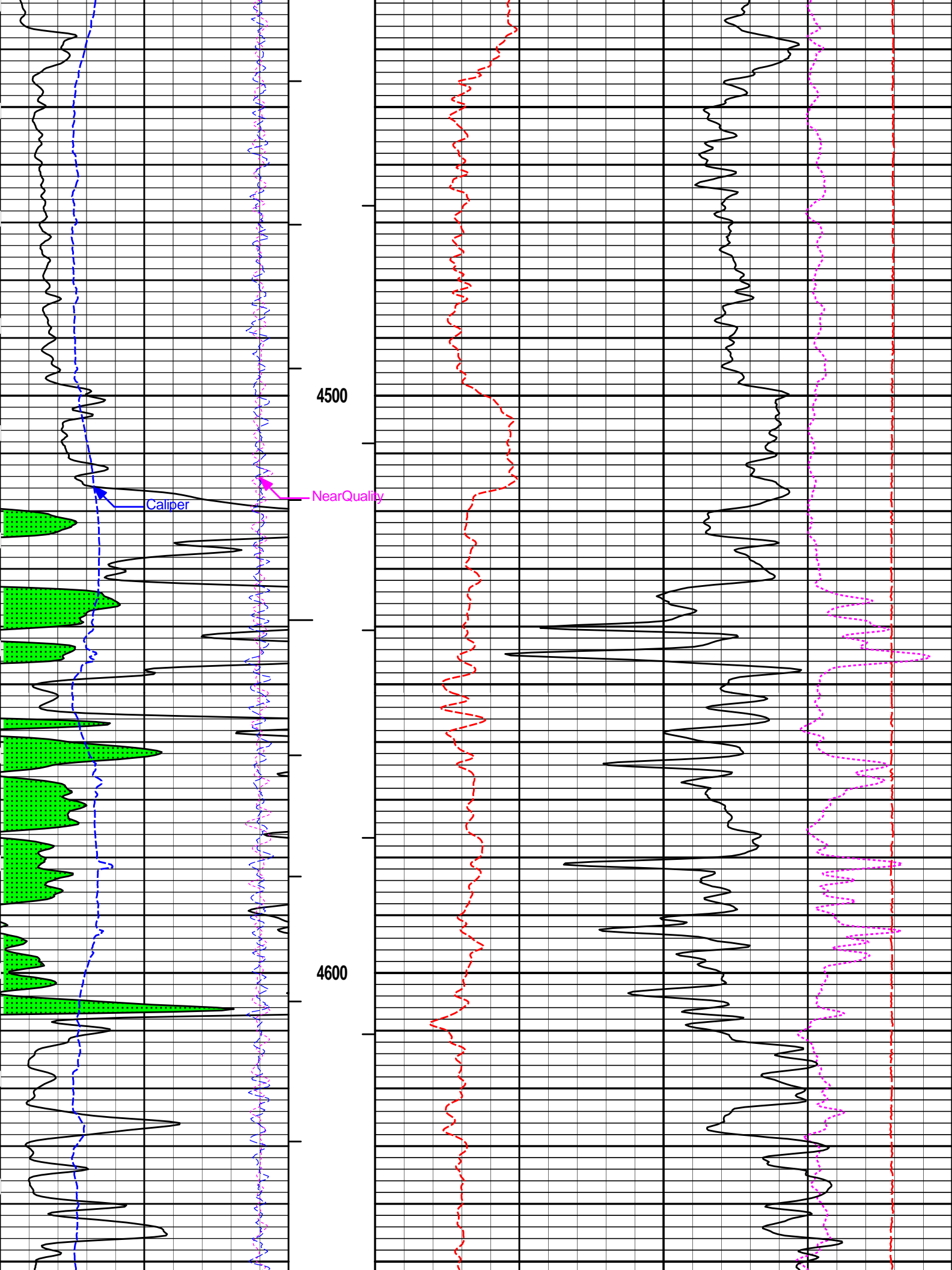


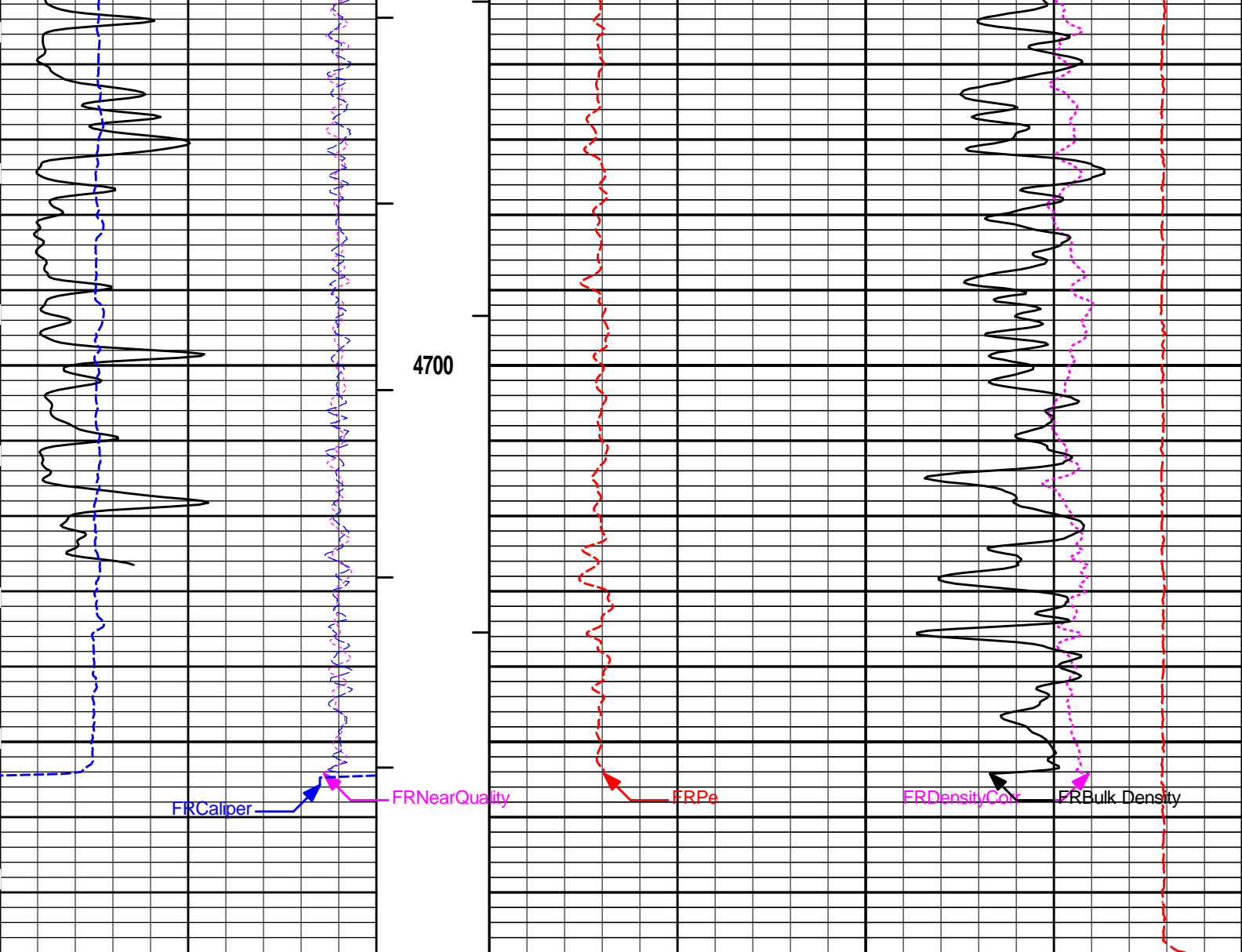












6	Caliper	16	MD	1 : 240	ft	0	Pe	10	-0.25	DensityCorr	0.25
	inches		AHV	ft3					15K	Tension	0
-18	NearQuality	2	BHV	ft3		2	Bulk Density			g/cc	
18	FarQuality	-2									3
0	Gamma Ray	150									
	api										

SHALE

HALLIBURTON

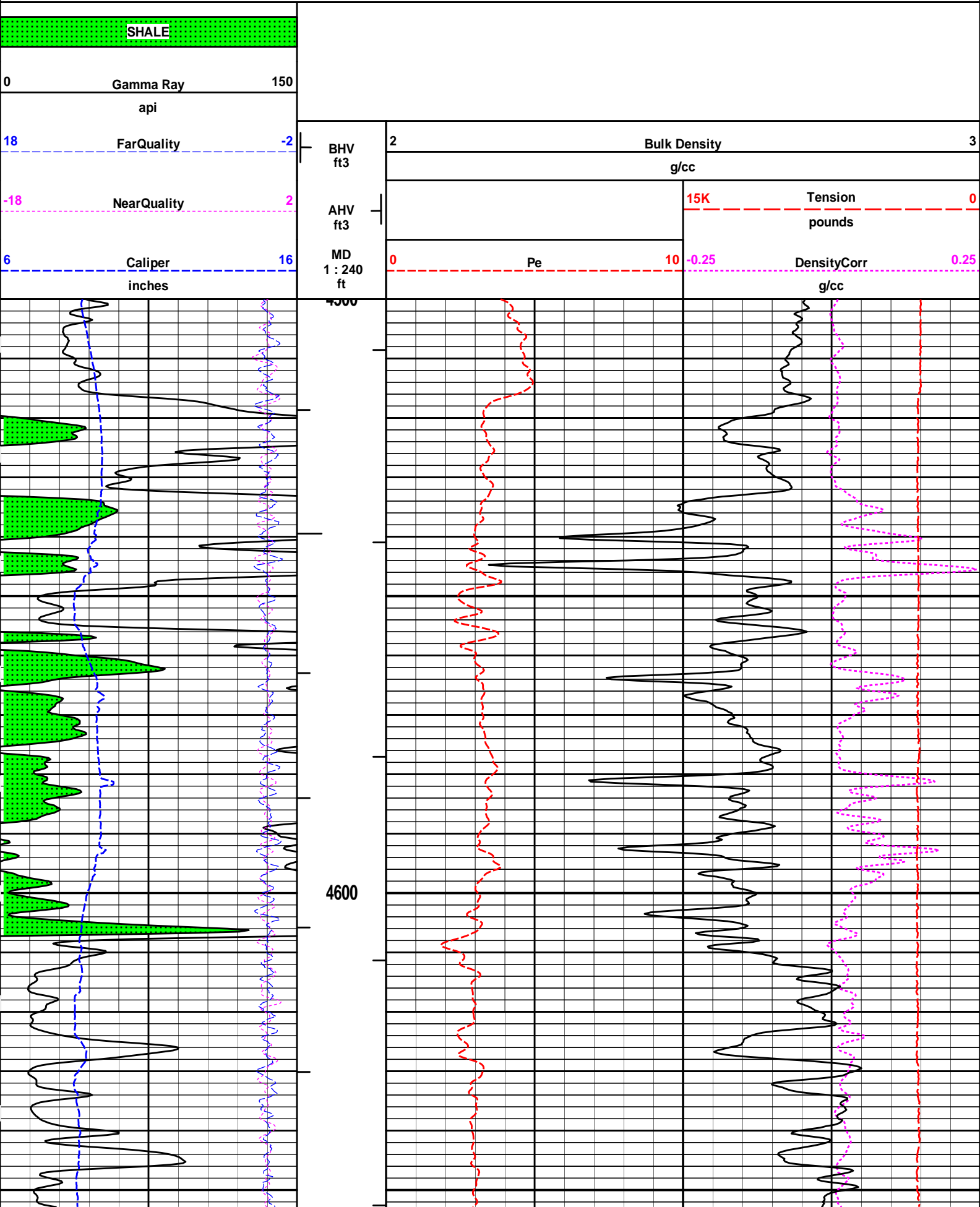
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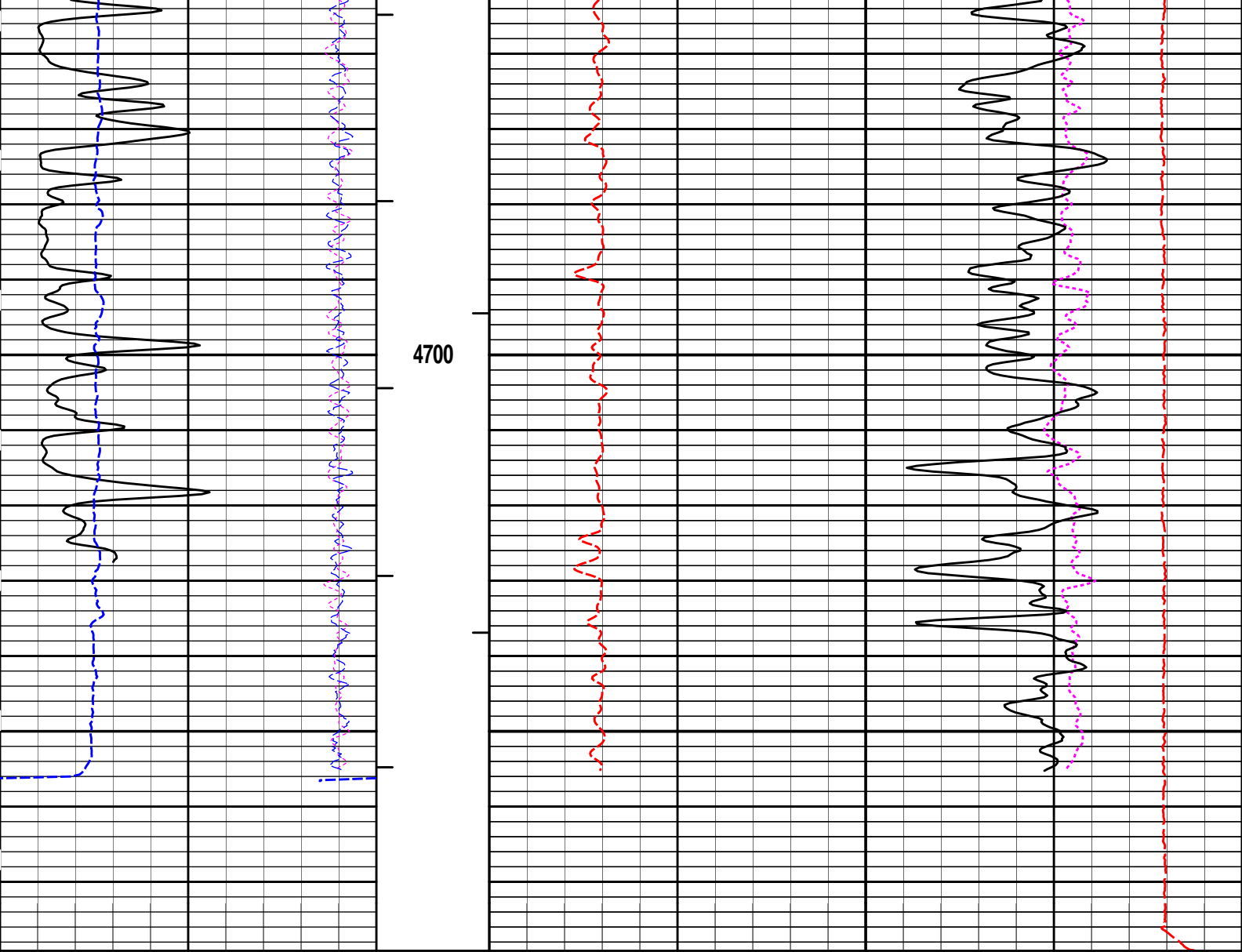
5 INCH MAIN LOG

HALLIBURTON

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REPEAT SECTION





6	Caliper	16	MD	0	Pe	10	-0.25	DensityCorr	0.25
	inches		1 : 240					g/cc	
			ft						
-18	NearQuality	2	AHV				15K	Tension	0
			ft3					pounds	
18	FarQuality	-2	BHV	2	Bulk Density				3
			ft3		g/cc				
0	Gamma Ray	150							
	api								

SHALE

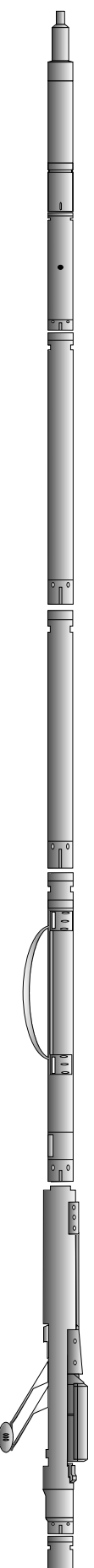
HALLIBURTON

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REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
						66.76 ft
RWCH-12156658 135.00 lbs		Ø 3.625 in →		← Load Cell @ 63.07 ft ← BH Temperature @ 62.51 ft	6.25 ft	60.51 ft
SP Sub-00000029 60.00 lbs		Ø 3.625 in →		← SP @ 58.73 ft	3.74 ft	56.77 ft
GTET-11021139 165.00 lbs		Ø 3.625 in →		← GammaRay @ 50.71 ft	8.52 ft	48.25 ft
CSNG-10965402 114.00 lbs		Ø 3.625 in →		← CSNG @ 42.62 ft	8.17 ft	40.08 ft
DSNT-11019643 174.00 lbs	DSN Decentralizer- 11005605 6.60 lbs	Ø 5.000 in* → Ø 3.625 in →		← DSN Far @ 33.15 ft ← DSN Near @ 32.40 ft	9.69 ft	30.40 ft
SDLT-10950489 360.00 lbs	SDLT Pad-10844781 65.00 lbs Microlog Pad-10950489 8.00 lbs	Ø 4.500 in → Ø 4.750 in* → Ø 4.750 in* →		← Microlog @ 22.58 ft ← SDL Caliper @ 22.40 ft ← SDL @ 22.39 ft	10.81 ft	19.58 ft
ACRt Instrument- 11055059 50.00 lbs		Ø 3.625 in →			5.03 ft	

Regal Standoff 6_75-0000044
20.00 lbs

Ø 6.750 in* →

← Mud Resistivity @ 13.19 ft

14.55 ft

ACRt Sonde-11038385
200.00 lbs

Ø 3.625 in →

← ACRt @ 9.21 ft

14.22 ft

Bull Nose-00000029
5.00 lbs

Ø 2.750 in →

0.33 ft

0.33 ft

0.00 ft



Mnemonic	Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
RWCH	Releasable Wireline Cable Head	12156658	135.00	6.25	60.51	300.00
SP	SP Sub	00000029	60.00	3.74	56.77	300.00
GTET	Gamma Telemetry Tool	11021139	165.00	8.52	48.25	60.00
CSNG	Compensated Spectral Natural Gamma	10965402	114.00	8.17	40.08	15.00
DSNT	Dual Spaced Neutron	11019643	174.00	9.69	30.40	60.00
DCNT	DSN Decentralizer	11005605	6.60	5.13 *	33.73	300.00
SDLT	Spectral Density Tool	10950489	360.00	10.81	19.58	60.00
SDLP	Density Insite Pad	10844781	65.00	2.55 *	21.79	60.00
MICP	Microlog Pad	10950489	8.00	1.00 *	22.08	60.00
ACRt	Array Compensated True Resistivity Instrument Section	11055059	50.00	5.03	14.55	300.00
ACRt	Array Compensated True Resistivity Sonde Section	11038385	200.00	14.22	0.33	300.00
RSOF	Regal Standoff 6.75in	00000044	20.00	0.52 *	13.48	300.00
BLNS	Bull Nose	00000029	5.00	0.33	0.00	300.00
Total			1,362.60	66.76		

* Not included in Total Length and Length Accumulation.

Data: ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BNIDLE Date: 02-Feb-14 22:30:32

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name: GTET - 11021139

Reference Calibration Date: 16-Nov-13 17:40:06

Engineer: SHELDON INGERSOLL

Calibration Date: 10-Jan-14 15:05:07

Software Version: WL INSITE R3.8.4 (Build 5)

Calibration Version: 1

Calibrator Source S/N: TB146

Calibrator API Reference:265.00 api

Equivalent Calibrator API Reference:269.6 api

Measurement	Measured	Calibrated	Units
Background	82.2	84.2	api
Background + Calibrator	345.4	353.9	api
Calibrator	263.2	269.6	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 11021139

Reference Calibration Date: 10-Jan-14 15:05:07

Engineer: THOMAS HYDE

Calibration Date: 02-Feb-14 07:30:28

Software Version: WL INSITE R3.8.4 (Build 5)

Calibration Version: 1

Calibrator Source S/N: TB146

Calibrator API Reference:265.00 api

Equivalent Calibrator API Reference:269.6 api

Field Verification	Shop	Field	Units
Background	84.2	52.9	api
Background + Calibrator	353.9	320.1	api
Calibrator	269.6	267.2	api

Shop	Field	Difference	Tolerance
269.6	267.2	2.4	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name: DSNT - 11019643

Reference Calibration Date: 10-Jan-14 13:59:41

Engineer: SHELDON INGERSOLL

Calibration Date: 10-Jan-14 14:17:41

Software Version: WL INSITE R3.8.4 (Build 5)

Calibration Version: 1

Logging Source S/N: 696

Tank Serial Number: LIBERAL_NEUTRON

Reference value assigned to Tank: 51.680

Snow Block S/N: 696

Calibration Tank Water Temperature: 68 degF

Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS

Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.964	0.966	0.900 - 1.100

WATER TANK SUMMARY (Horizontal Water Tank)

Measurement	Current Reading (Previous Coef.)	Calibrated (New Coef.)	Change	Control Limit On Change
Porosity (decp):	0.2103	0.2110	0.0007	+/- 0.0020
Calibrated Ratio:	9.70	9.73	0.023	+/- 0.050

VERIFIER

Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0576	0.02000 - 0.09000

PASS/FAIL SUMMARY

Background Check:	Passed
Gain-Range Check:	Passed
Snow-Block Check:	Passed

DUAL SPACED NEUTRON FIELD CALIBRATION

Tool Name: DSNT - 11019643

Reference Calibration Date: 10-Jan-14 14:17:41

Engineer: THOMAS HYDE

Calibration Date: 02-Feb-14 07:40:32

Software Version: WL INSITE R3.8.4 (Build 5)

Calibration Version: 1

Logging Source S/N: 696

Snow Block S/N: 696

NEUTRON FIELD-CHECK SUMMARY

	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0576	0.0636	0.0060	+/- 0.0150

PASS/FAIL SUMMARY

Block Change Check:	Passed
Snow Block Stat Check:	Passed
Temperature Check:	Passed

DENSITY CALIPER SHOP CALIBRATION

Tool Name:	SDLT - 10950489	Reference Calibration Date:	02-Feb-14 07:35:33
Engineer:	THOMAS HYDE	Calibration Date:	02-Feb-14 07:42:15
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1
Host Tool Name:	DSNT - 11019643		

CALIBRATION COEFFICIENTS			
Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-2170.50	-2174.37	-7000.00 - -1000.00
Pad Gain	0.0004041	0.0004043	0.000200 - 0.000600
Arm Offset	24.47	25.26	-5000.00 - 3000.00
Arm Gain	0.0004311	0.0004313	0.000300 - 0.000700
Arm Power	0.000000525	0.000000509	-0.000010000 - 0.000010000

The ring diameter is computed from: $DIAMETER = PAD\ EXTENSION + ARM\ EXTENSION + TOOL\ DIAMETER$
 Tool Diameter: 4.50 in

CALIBRATION RINGS				
Measurement	Current Reading (Previous Coeff.)	Calibrated (New Coeff.)	Change	Control Limit On New Value
PAD EXTENSION:				
Small Ring (in)	2.00	2.00	0.00	+/- 0.20
Medium Ring (in)	3.75	3.75	0.00	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.50	6.50	0.00	+/- 0.20
Medium Ring (in)	8.25	8.25	0.00	+/- 0.20
Large Ring (in)	15.00	15.00	0.00	+/- 0.20

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check:	Passed
Ring-Measurement Check:	Passed

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check:	Passed
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SDLT CALIPER FIELD CALIBRATION

Tool Name:	SDLT - 10950489	Reference Calibration Date:	02-Feb-14 07:42:15
Engineer:	THOMAS HYDE	Calibration Date:	02-Feb-14 07:42:46
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

MEASURED CALIPER VALUES				
Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	3.75	3.73	-0.02	+/- 0.10
Ring Diameter	8.25	8.18	-0.07	+/- 0.15

PASS/FAIL SUMMARY

Pad Extension Check:	Passed
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SPECTRAL DENSITY SHOP CALIBRATION

Tool Name: SDLT Pad - 10844781

Reference Calibration Date: 08-Nov-13 10:05:41

Engineer: SHELDON INGERSOLL

Calibration Date: 10-Jan-14 10:59:42

Software Version: WL INSITE R3.8.4 (Build 5)

Calibration Version: 1

Logging Source S/N: 5168GW

Aluminum Block S/N: LIBERAL

Density: 2.598g/cc

Pe: 3.170

Magnesium Block S/N: LIBERAL

Density: 1.684g/cc

Pe: 2.598

DENSITY CALIBRATION SUMMARY

Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	1.0179	1.0056	0.90 - 1.10
Near Dens Gain	0.9989	1.0041	0.90 - 1.10
Near Peak Gain	0.9752	0.9928	0.90 - 1.10
Near Lith Gain	0.9615	0.9569	0.90 - 1.10
Far Bar Gain	1.0136	1.0128	0.90 - 1.10
Far Dens Gain	1.0012	1.0002	0.90 - 1.10
Far Peak Gain	0.9944	0.9941	0.90 - 1.10
Far Lith Gain	0.9681	0.9700	0.90 - 1.10
<hr/>			
Near Bar Offset	0.0449	0.1618	NONE
Near Dens Offset	0.2054	0.1586	NONE
Near Peak Offset	0.3959	0.2484	NONE
Near Lith Offset	0.5005	0.5371	NONE
Far Bar Offset	0.0131	0.0257	NONE
Far Dens Offset	0.1099	0.1239	NONE
Far Peak Offset	0.1252	0.1325	NONE
Far Lith Offset	0.2818	0.2753	NONE
<hr/>			
Near Bar Background	795.85	793.46	700 - 1450
Near Dens Background	260.91	257.81	230 - 480
Near Peak Background	112.96	111.90	100 - 210
Near Lith Background	140.87	139.80	125 - 260
Far Bar Background	515.50	513.43	450 - 900
Far Dens Background	202.70	202.49	175 - 345
Far Peak Background	82.02	80.96	70 - 140
Far Lith Background	83.66	84.12	75 - 145

CALIBRATION BLOCK SUMMARY

Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.686	1.684	-0.002	+/- 0.015
Pe	2.527	2.554	0.027	+/- 0.150
ALUMINUM				
Density (g/cc)	2.601	2.598	-0.003	+/- 0.01500
Pe	3.080	3.122	0.042	+/- 0.150

TOOL SUMMARY

Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits

QUALITY				
Background	-0.0004	+/- 0.0110	-0.0020	+/- 0.0140
Magnesium Block	-0.0011	+/- 0.0110	-0.0017	+/- 0.0140
Aluminum Block	-0.0007	+/- 0.0110	-0.0000	+/- 0.0140
Resolution	9.37	6.00 - 11.50	8.84	6.00 - 11.50
Internal Verifier(B+D+P+L)	1303	1200 - 2700	881	800 - 1700

PASS/FAIL SUMMARY

Background Quality Check:	Passed
Background Range Check:	Passed
Background Resolution Check:	Passed
Background Verification Check:	Passed
Magnesium Quality Check:	Passed
Aluminum Quality Check:	Passed
Gains Check:	Passed
Changes in Calibration Blocks:	Passed

SPECTRAL DENSITY FIELD CHECK

Tool Name: SDLT Pad - 10844781

Reference Calibration Date: 10-Jan-14 10:59:42

Engineer: THOMAS HYDE

Calibration Date: 02-Feb-14 07:28:10

Software Version: WL INSITE R3.8.4 (Build 5)

Calibration Version: 1

Pad Temperature: 48.1 degF

DENSITY FIELD CALIBRATION SUMMARY

Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1302.967	1297.661	-5.306	14.613
Far (B+D+P+L) cps	881.000	878.991	-2.009	16.194
Near Resolution	9.37	9.44	0.070	0.50
Far Resolution	8.84	9.23	0.390	1.00

PASS/FAIL SUMMARY

Bkg Quality Check:	Passed
Bkg Resolution Check:	Passed
Bkg Verification Check:	Passed

CALIBRATION SUMMARY

Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11021139						
Gamma Ray Calibrator	269.6	267.2	-----	2.4	+/- 9.00	api
DSNT-11019643						
Snow-Block Porosity	0.0576	0.0636	-----	-0.0060	+/- 0.0150	decp
SDLT-10950489						
Pad Extension	3.75	3.73	-----	0.02	+/-0.10	in
Ring Diameter	8.25	8.18	-----	0.07	+/-0.15	in
SDLT Pad-10844781						
Near(B+D+P+L)	1302.967	1297.661	-----	5.306	+/-14.613	cps
Far(B+D+P+L)	881.000	878.991	-----	2.009	+/-16.194	cps

Data: ALEXANDER_3114\0001_SP-GTET-CSNG-DSN-SDL-ACRT-BNIDLE

Date: 02-Feb-14 22:44:28

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PARAMETERS REPORT

Depth (ft)	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	8.750	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	9.300	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	0.00	ppm
	SHARED	FSAL	Formation Salinity NaCl	0.00	ppm
	SHARED	KPCT	Percent K in Mud by Weight?	0.00	%
	SHARED	RMUD	Mud Resistivity	2.000	ohmm
	SHARED	TRM	Temperature of Mud	75.0	degF
	SHARED	CSD	Logging Interval is Cased?	No	
	SHARED	ICOD	AHV Casing OD	5.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	4672.00	ft
	SHARED	BHT	Bottom Hole Temperature	200.0	degF
	SHARED	SVTM	Navigation and Survey Master Tool	NONE	
	SHARED	AZTM	High Res Z Accelerometer Master Tool	GTET	
	SHARED	TEMM	Temperature Master Tool	NONE	
	SHARED	BHSM	Borehole Size Master Tool	NONE	
	Rwa / CrossPlot	XPOK	Process Crossplot?	Yes	
	Rwa / CrossPlot	FCHO	Select Source of F	Automatic	
	Rwa / CrossPlot	AFAC	Archie A factor	0.6200	
	Rwa / CrossPlot	MFAC	Archie M factor	2.1500	
	Rwa / CrossPlot	RMFR	Rmf Reference	0.10	ohmm
	Rwa / CrossPlot	TMFR	Rmf Ref Temp	75.00	degF
	Rwa / CrossPlot	RWA	Resistivity of Formation Water	0.05	ohmm
	Rwa / CrossPlot	ADP	Use Air Porosity to calculate CrossplotPhi	No	
	GTET	GROK	Process Gamma Ray?	Yes	
	GTET	GRSO	Gamma Tool Standoff	0.000	in
	GTET	GEOK	Process Gamma Ray EVR?	No	
	GTET	TPOS	Tool Position for Gamma Ray Tools.	Eccentered	
	CSNG	CGOK	Process CSNG Data?	Yes	
	CSNG	CENT	Is Tool Centralized?	No	
	CSNG	GBOK	Gamma Enviromental Corrections?	Yes	
	CSNG	BARF	Barite Correction Factor	1.00	
	CSNG	ORDG	Use Fixed Gain	No	
	CSNG	ORDO	Use Fixed Offset	No	
	CSNG	ORDR	Use Fixed Resolution Degradation Factor	No	
	DSNT	DNOK	Process DSN?	Yes	
	DSNT	DEOK	Process DSN EVR?	No	
	DSNT	NLIT	Neutron Lithology	Limestone	
	DSNT	DNSO	DSN Standoff - 0.25 in (6.35 mm) Recommended	0.250	in
	DSNT	DNTP	Temperature Correction Type	None	
	DSNT	DPRS	DSN Pressure Correction Type	None	
	DSNT	SHCO	View More Correction Options	No	
	DSNT	UTVD	Use TVD for Gradient Corrections?	No	
	DSNT	LHWT	Logging Horizontal Water Tank?	No	
	SDLT	CLOK	Process Caliper Outputs?	Yes	

SDLT Pad	DNOK	Process Density?	Yes	
SDLT Pad	DNOK	Process Density EVR?	No	
SDLT Pad	CB	Logging Calibration Blocks?	No	
SDLT Pad	SPVT	SDLT Pad Temperature Valid?	Yes	
SDLT Pad	DTWN	Disable temperature warning	No	
SDLT Pad	DMA	Formation Density Matrix	2.710	g/cc
SDLT Pad	DFL	Formation Density Fluid	1.000	g/cc
Microlog Pad	MLOK	Process MicroLog Outputs?	Yes	
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Upr	
ACRt Sonde	TPOS	Tool Position	Free Hanging	
ACRt Sonde	RMOP	Rmud Source	Mud Cell	
ACRt Sonde	RMIN	Minimum Resistivity for MAP	0.20	ohmm
ACRt Sonde	RMIN	Maximum Resistivity for MAP	200.00	ohmm
ACRt Sonde	THQY	Threshold Quality	0.50	
ACRt Sonde	MRFX	Fixed mud resistivity	2000	ohmm

BOTTOM

Data: ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BNIDLE

Date: 02-Feb-14 22:44:42

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INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
RWCH				
DHTN	DownholeTension	0.00	BLK	0.000
SP Sub				
PLTC	Plot Control Mask	58.73	NO	
SP	Spontaneous Potential	58.73	BLK	1.250
SPR	Raw Spontaneous Potential	58.73	NO	
SPO	Spontaneous Potential Offset	58.73	NO	
GTET				
TPUL	Tension Pull	50.71	NO	
GR	Natural Gamma Ray API	50.71	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	50.71	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	50.71	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
CSNG				
TPUL	Tension Pull	42.62	NO	
STAT	Status	42.62	NO	
FRMC	Tool Frame Count	42.62	BLK	0.250
TFRM	Total Frames	42.62	NO	
LSPD	Line Speed	42.62	BLK	0.250
CTIM	Accumulation time for sample	42.62	BLK	0.250
NOIS	Spectral Noise	42.62	BLK	0.250
STAB	Stabilizer Voltage in mv	42.62	BLK	0.250

STBP	Stabilizer 60 KEV Peak	42.62	BLK	0.250
AMER	Americium	42.62	BLK	0.250
FTMP	Flask PCB Temperature	42.62	BLK	0.250
SPEL	Low Energy Spectrum	42.62	BLK	0.250
SPEH	High Energy Spectrum	42.62	BLK	0.250
SSP	Stabilization Energy Spectrum	42.62	BLK	0.250
CSPC	CSNG Lo Hi Spectrum Data	42.62	NO	
DSNT				
TPUL	Tension Pull	32.30	NO	
RNDS	Near Detector Telemetry Counts	32.40	BLK	1.417
RFDS	Far Detector Telemetry Counts	33.15	TRI	0.583
DNTT	DSN Tool Temperature	32.40	NO	
DSNS	DSN Tool Status	32.30	NO	
ERND	Near Detector Telemetry Counts EVR	32.40	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	33.15	BLK	0.000
ENTM	DSN Tool Temperature EVR	32.40	NO	
SDLT				
TPUL	Tension Pull	22.40	NO	
PCAL	Pad Caliper	22.40	TRI	0.250
ACAL	Arm Caliper	22.40	TRI	0.250
ACRt Sonde				
TPUL	Tension Pull	2.73	NO	
F1R1	ACRT 12KHz - 80in R value	8.98	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	8.98	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.48	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.48	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	4.98	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	4.98	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	3.98	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	3.98	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.48	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.48	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.23	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.23	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	8.98	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	8.98	BLK	0.000
F2R2	ACRT 36KHz - 50in R value	6.48	BLK	0.000
F2X2	ACRT 36KHz - 50in X value	6.48	BLK	0.000
F2R3	ACRT 36KHz - 29in R value	4.98	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	4.98	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	3.98	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	3.98	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.48	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.48	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.23	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.23	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	8.98	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	8.98	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.48	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.48	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	4.98	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	4.98	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	3.98	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	3.98	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.48	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.48	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.23	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.23	BLK	0.000

F3R4	ACRT 72KHz - 17in R value	3.98	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	3.98	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.48	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.48	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.23	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.23	BLK	0.000
RMUD	Mud Resistivity	12.52	BLK	0.000
F1RT	Transmitter Current Raw 12K X Receiver	2.73	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.73	BLK	0.000
F2RT	Transmitter Reference 36 KHz Real Signal	2.73	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.73	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.73	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.73	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.73	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.73	BLK	0.000
ITMP	Instrument Temperature	2.73	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.73	NO	
TIDV	Instrument Temperature Derivative	2.73	NO	
TUDV	Upper Temperature Derivative	2.73	NO	
TLDV	Lower Temperature Derivative	2.73	NO	
TRBD	Receiver Board Temperature	2.73	NO	

SDLT Pad

TPUL	Tension Pull	22.39	NO	
NAB	Near Above	22.21	BLK	0.920
NHI	Near Cesium High	22.21	BLK	0.920
NLO	Near Cesium Low	22.21	BLK	0.920
NVA	Near Valley	22.21	BLK	0.920
NBA	Near Barite	22.21	BLK	0.920
NDE	Near Density	22.21	BLK	0.920
NPK	Near Peak	22.21	BLK	0.920
NLI	Near Lithology	22.21	BLK	0.920
NBAU	Near Barite Unfiltered	22.21	BLK	0.250
NLIU	Near Lithology Unfiltered	22.21	BLK	0.250
FAB	Far Above	22.56	BLK	0.250
FHI	Far Cesium High	22.56	BLK	0.250
FLO	Far Cesium Low	22.56	BLK	0.250
FVA	Far Valley	22.56	BLK	0.250
FBA	Far Barite	22.56	BLK	0.250
FDE	Far Density	22.56	BLK	0.250
FPK	Far Peak	22.56	BLK	0.250
FLI	Far Lithology	22.56	BLK	0.250
PTMP	Pad Temperature	22.40	BLK	0.920
NHV	Near Detector High Voltage	21.79	NO	
FHV	Far Detector High Voltage	21.79	NO	
ITMP	Instrument Temperature	21.79	NO	
DDHV	Detector High Voltage	21.79	NO	

Microlog Pad

TPUL	Tension Pull	22.58	NO	
MINV	Microlog Lateral	22.58	BLK	0.750
MNOR	Microlog Normal	22.58	BLK	0.750

Data: ALEXANDER_3114\0001 SP-GTET-CSNG-DSN-SDL-ACRT-BNIDLE

Date: 02-Feb-14 22:44:49

WELL	ALEXANDER 3114 1-1		
FIELD	SKINNER		
COUNTY	BARBER	STATE	KANSAS
HALLIBURTON		DUAL SPACED NEUTRON SPECTRAL DENSITY LOG	