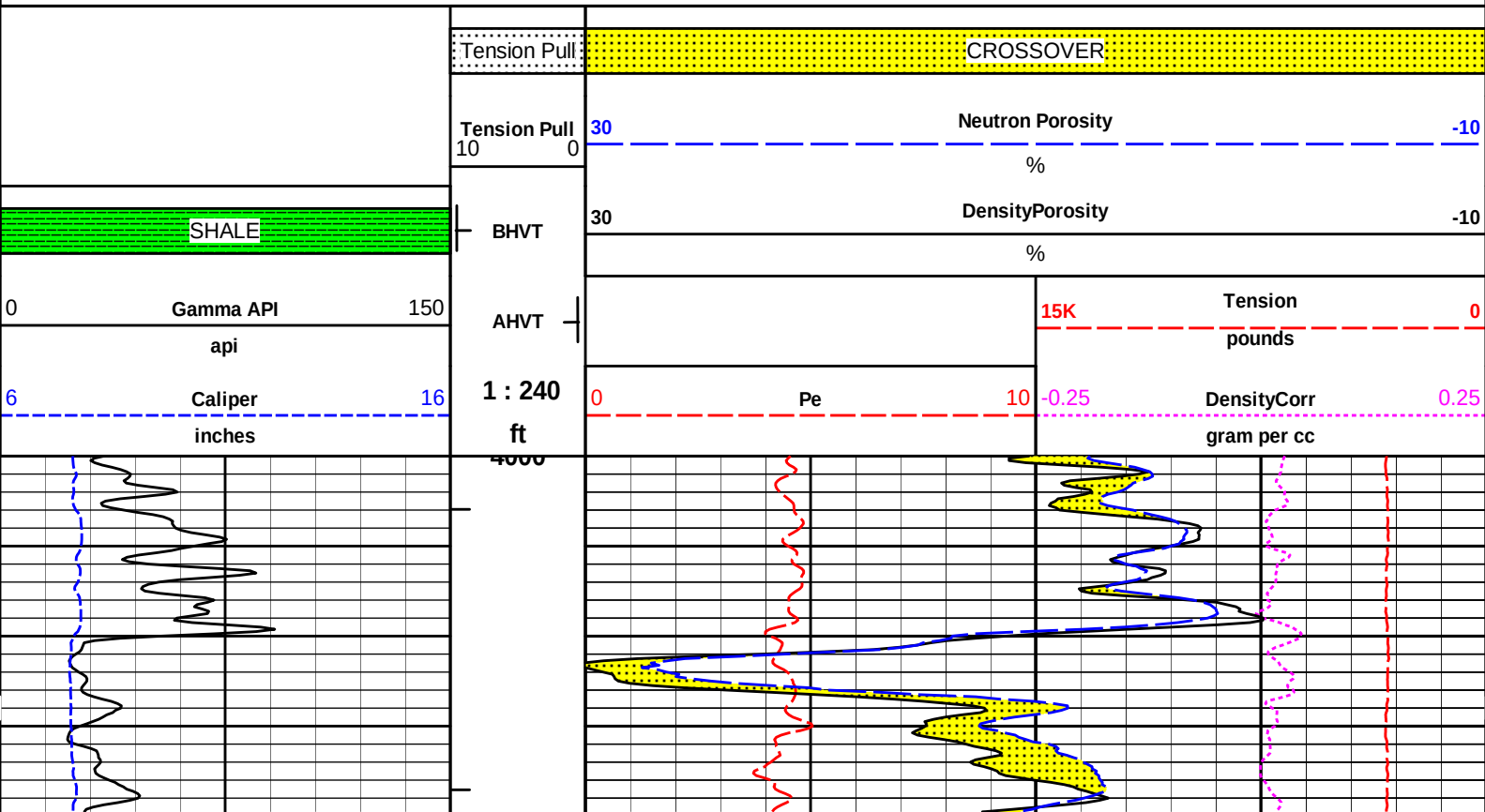


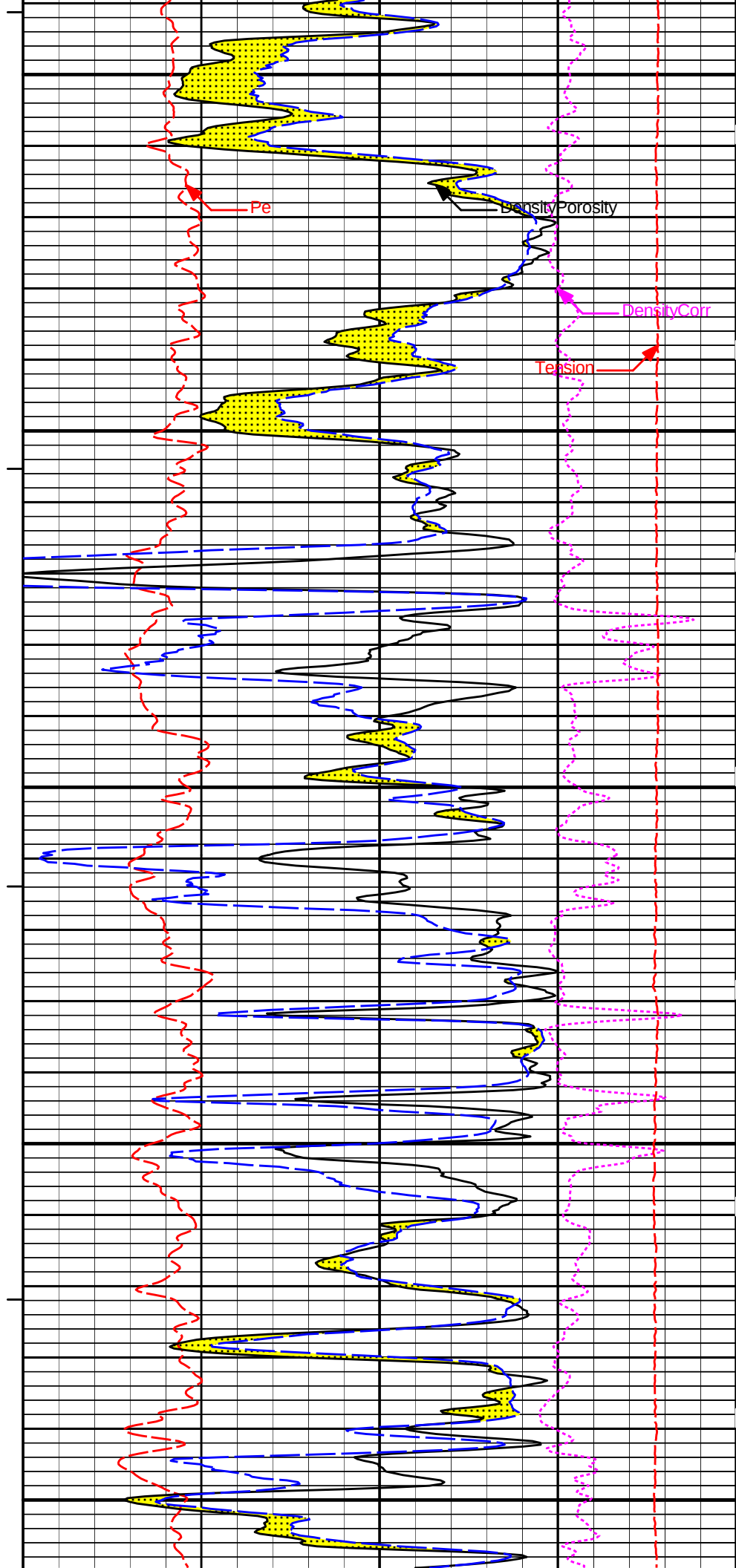
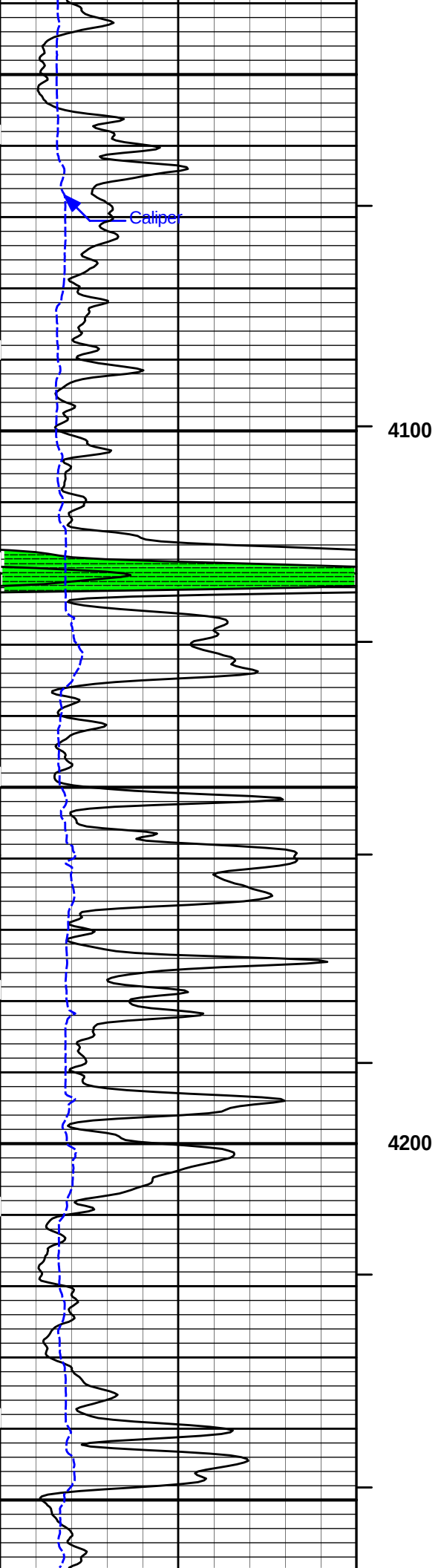
DUAL SPACED NEUTRON
SPECTRAL DENSITY
LOG

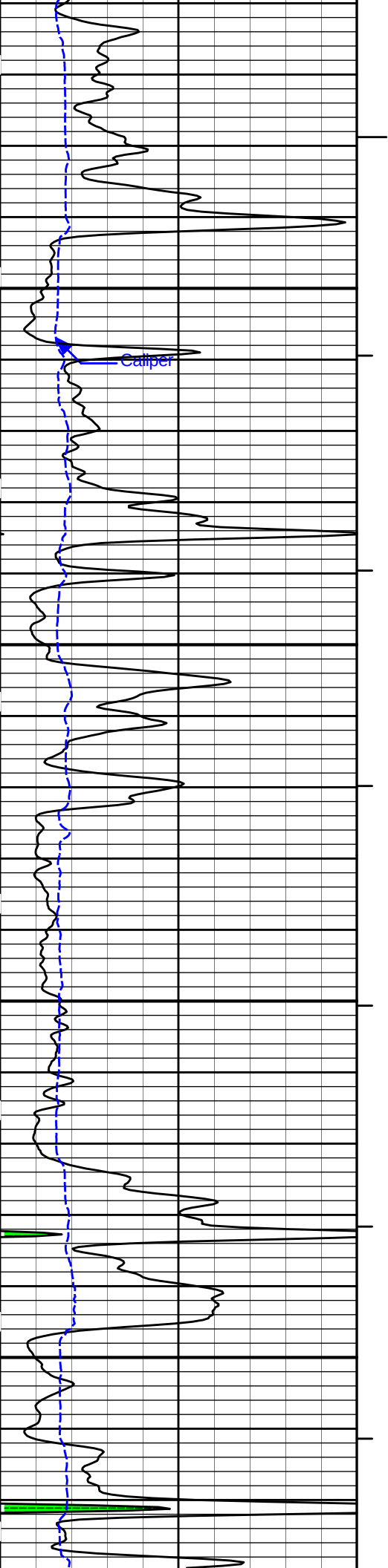
----- Fold here -----

LOGGING DATA

GENERAL			GAMMA		ACOUSTIC			DENSITY			NEUTRON			
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	5788	4000	REC	0	150				30	-10	2.71	30	-10	LIME
DIRECTIONAL INFORMATION														
Maximum Deviation @								KOP @						
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5 INCH CASING														
CHLORIDES REPORTED AT 4500 MG/L														
LCM REPORTED AT 8 PPB														
TODAY'S CREW V. JAIME J. ALBRIGHT														
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														

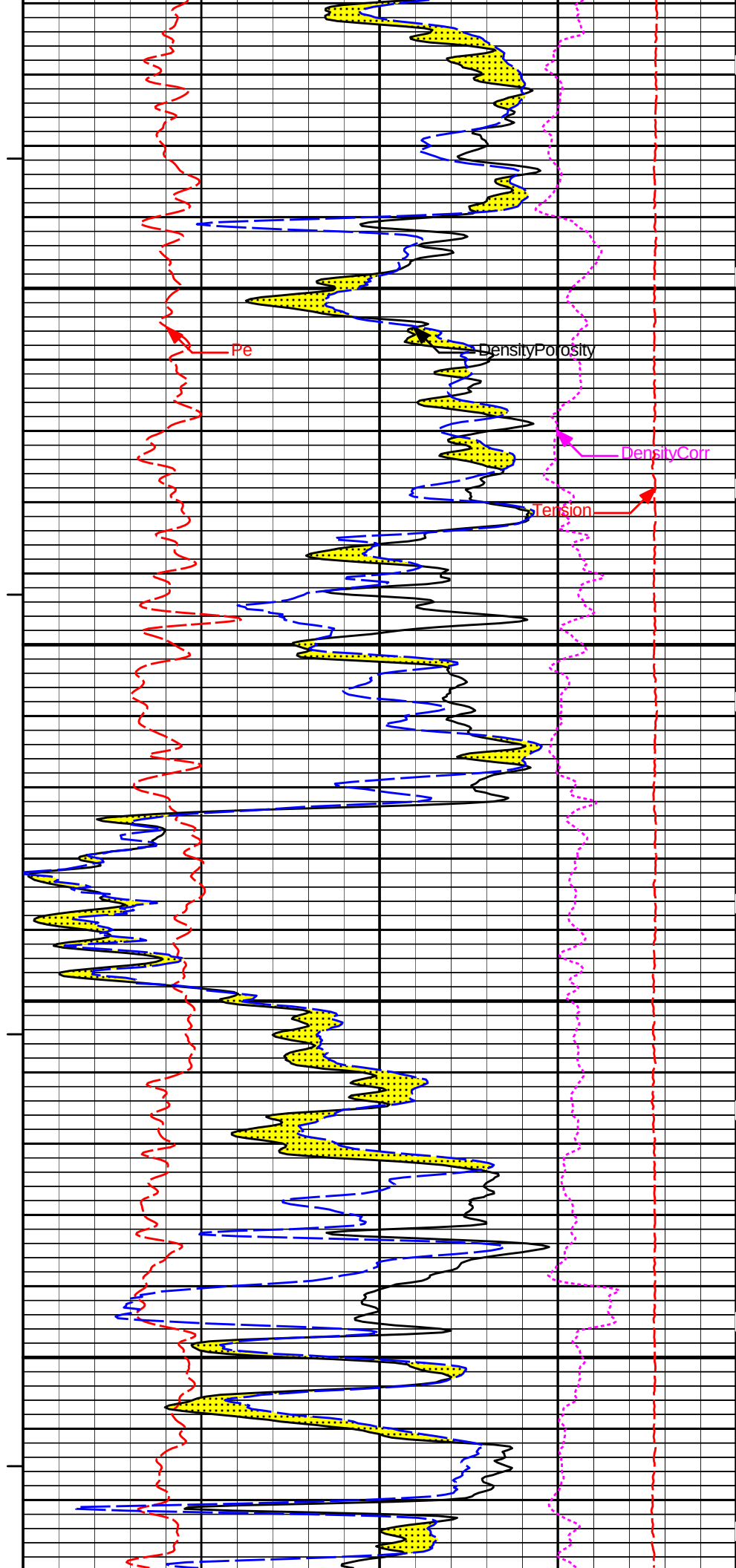


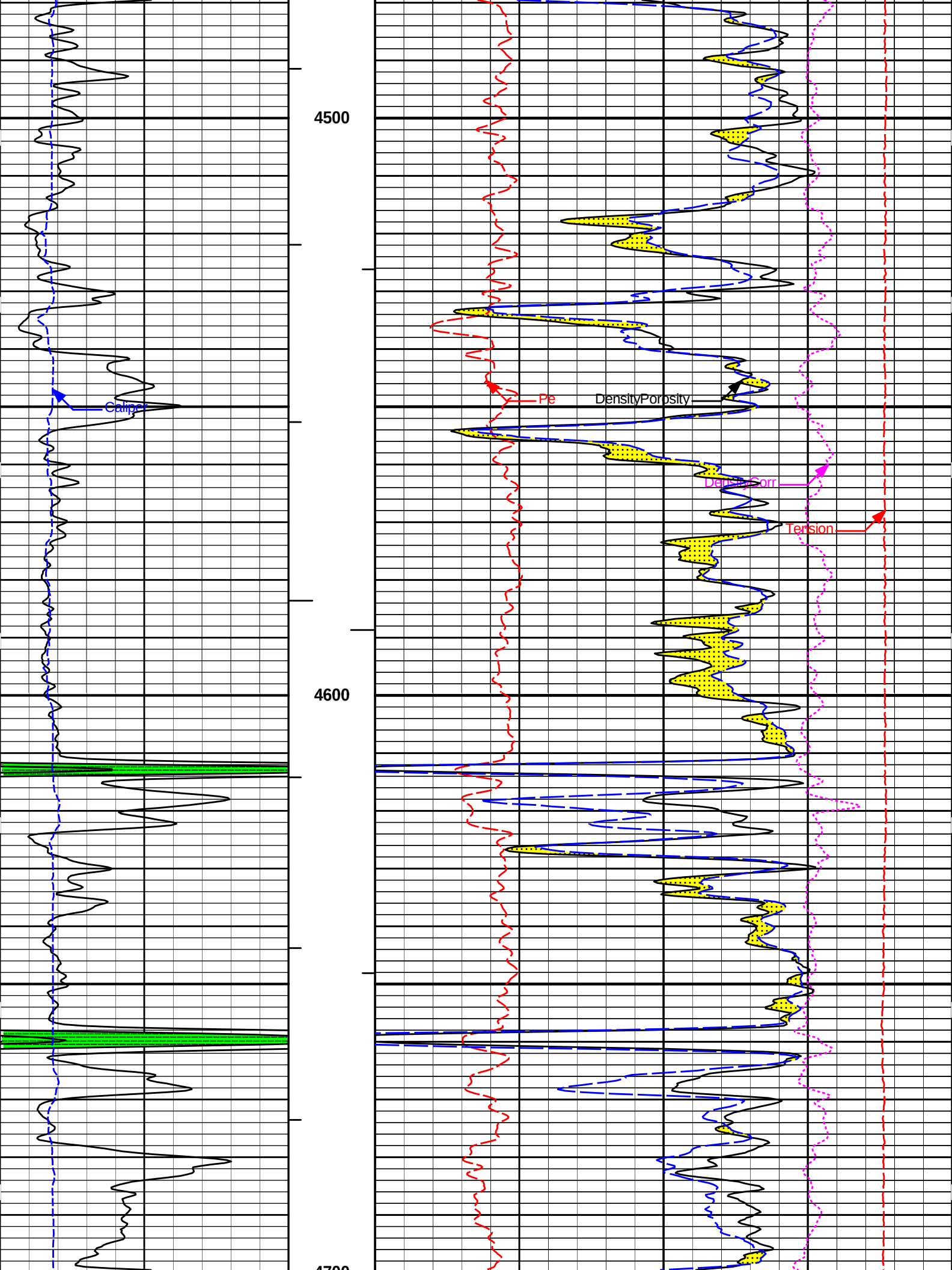


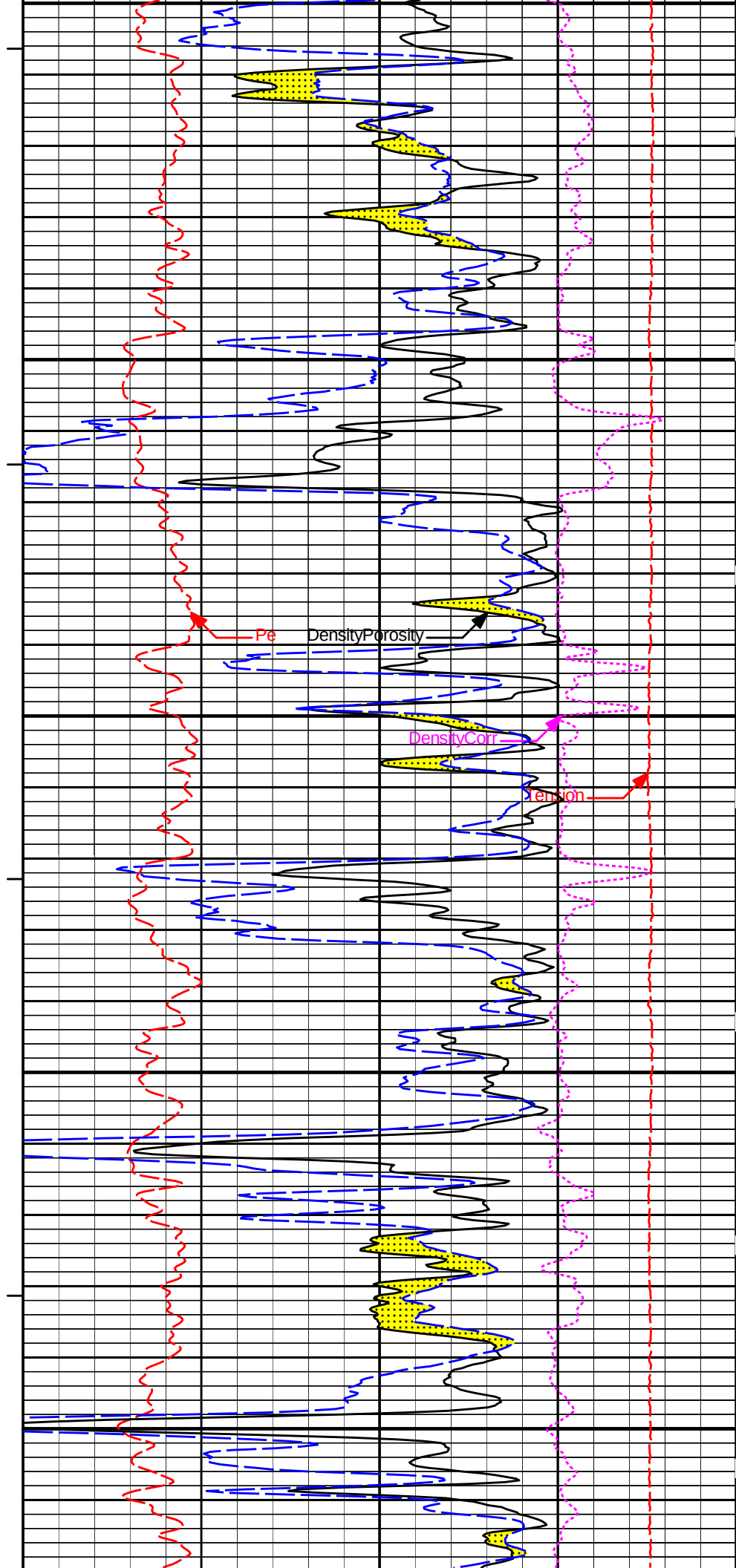
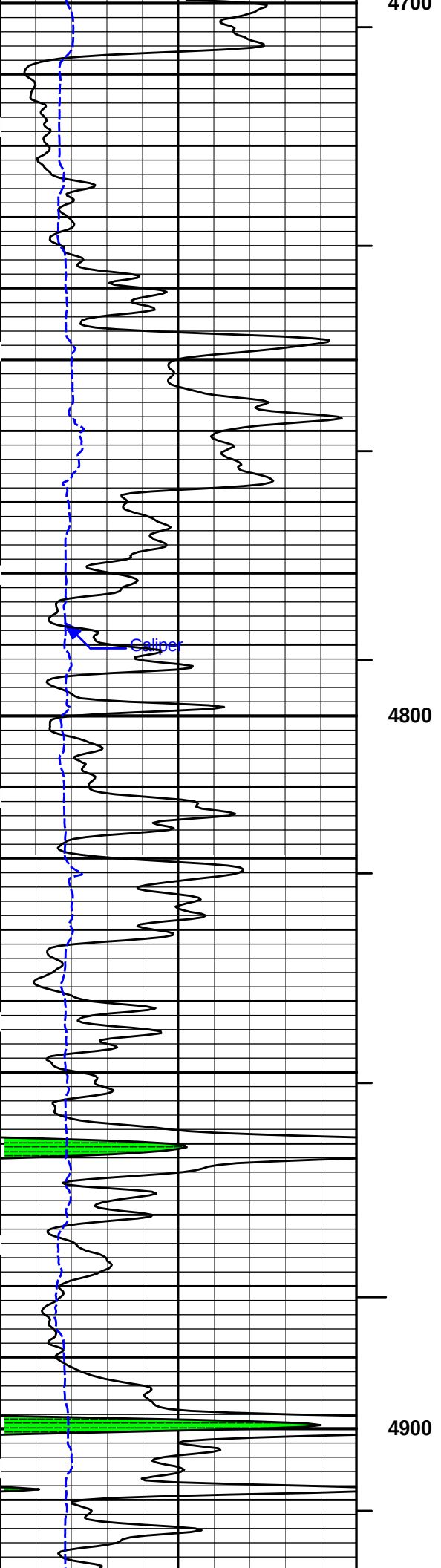


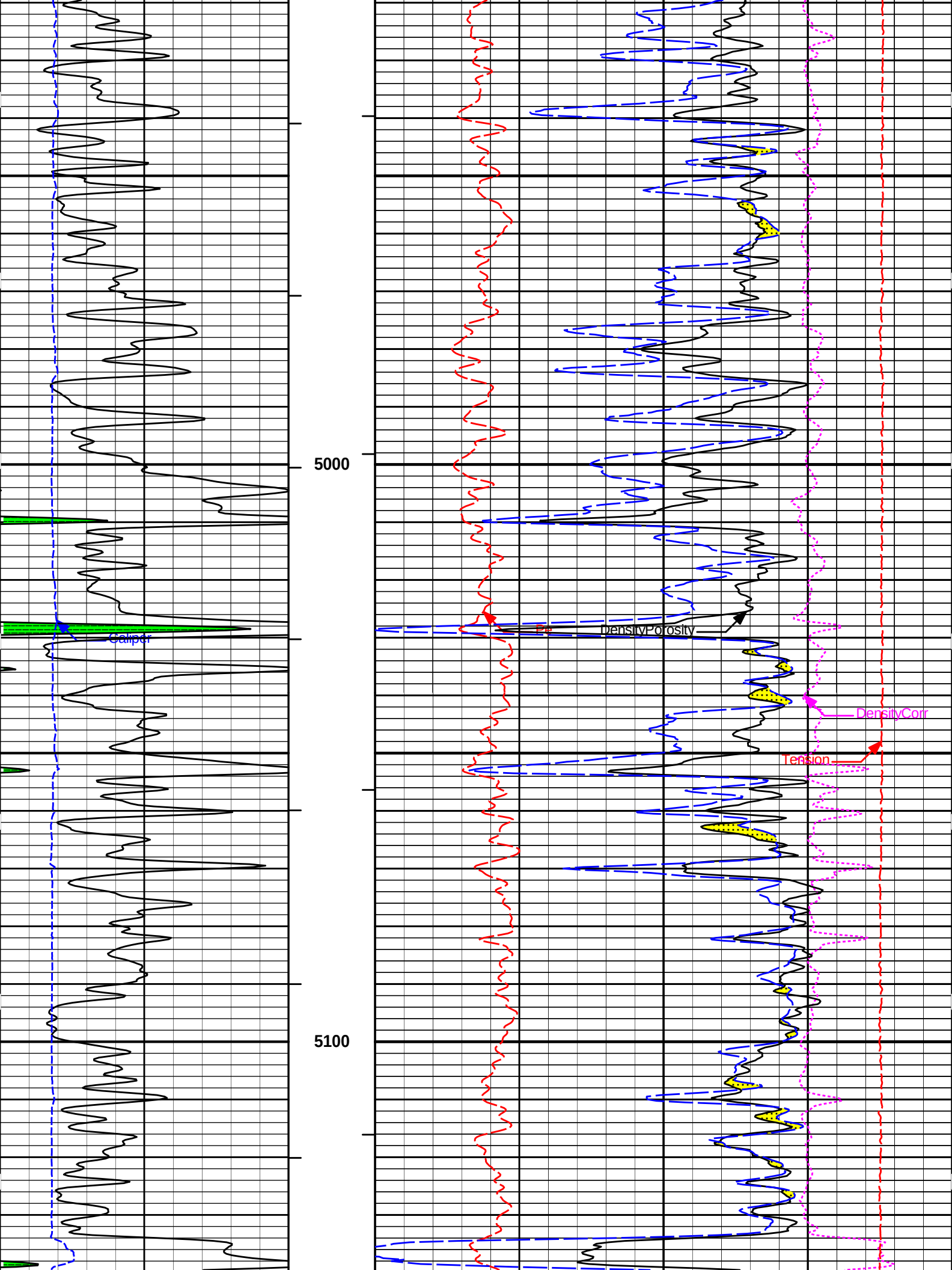
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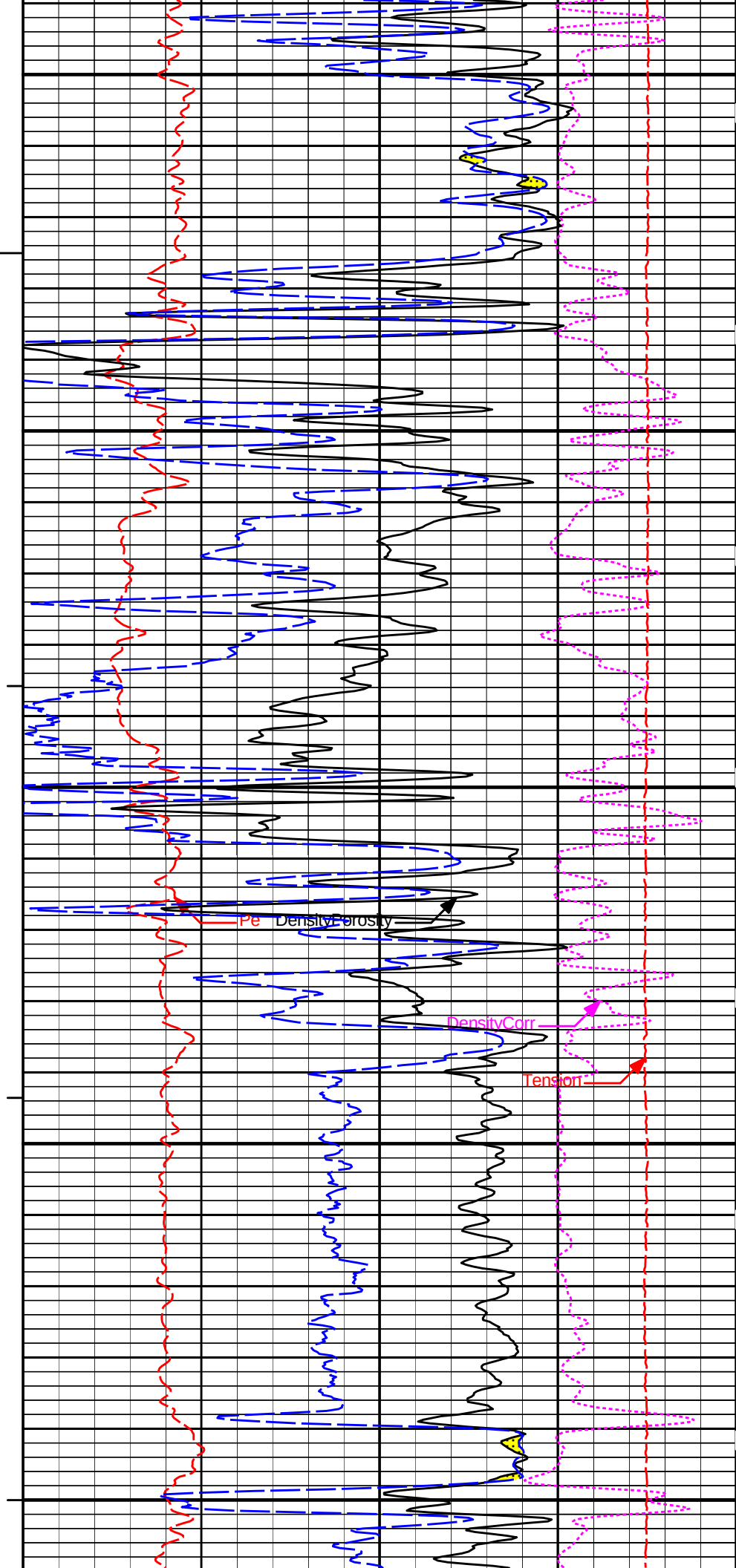
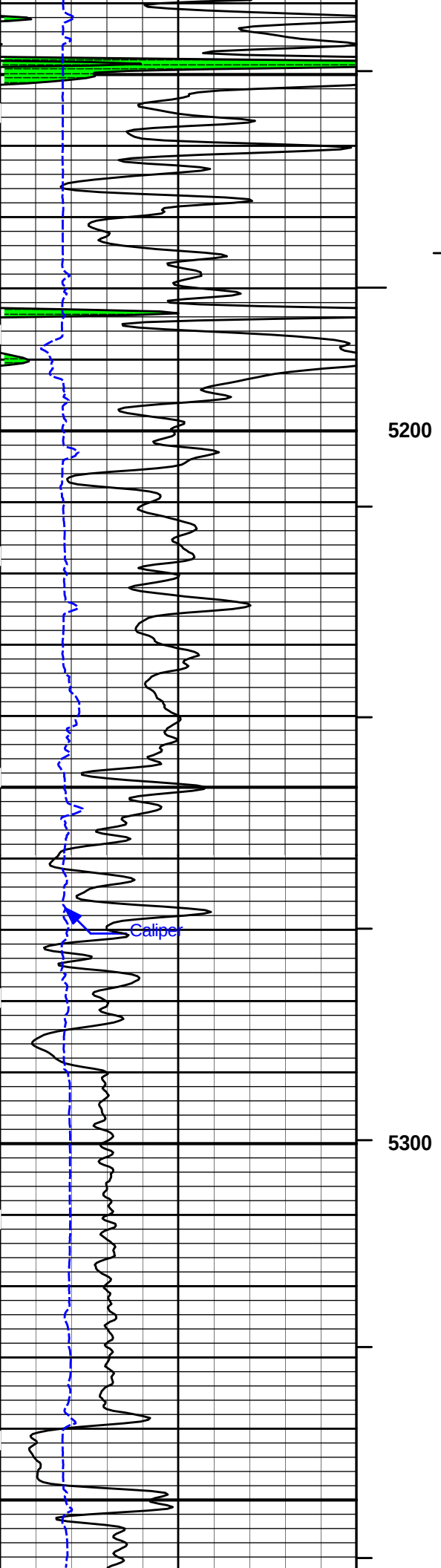
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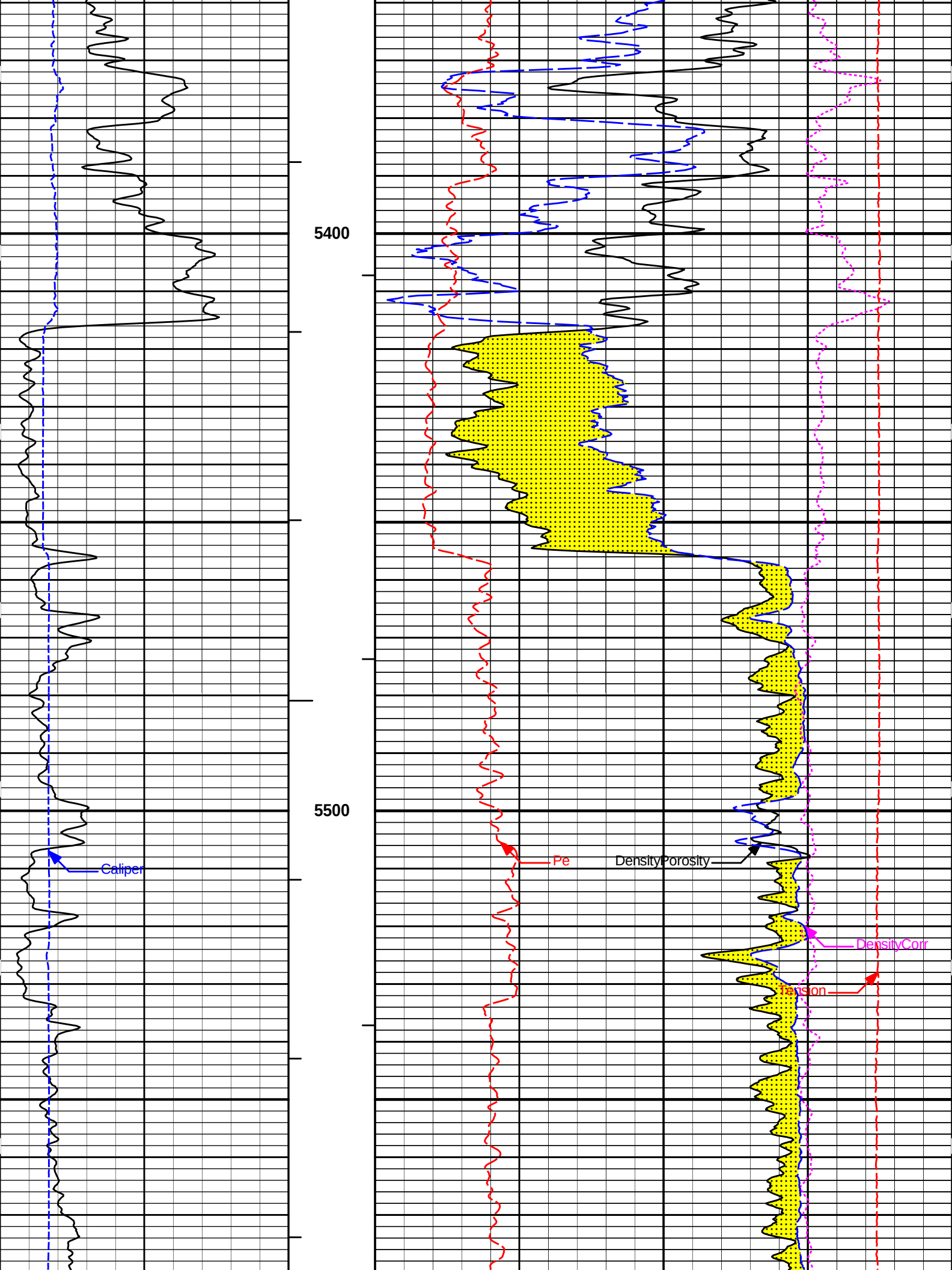


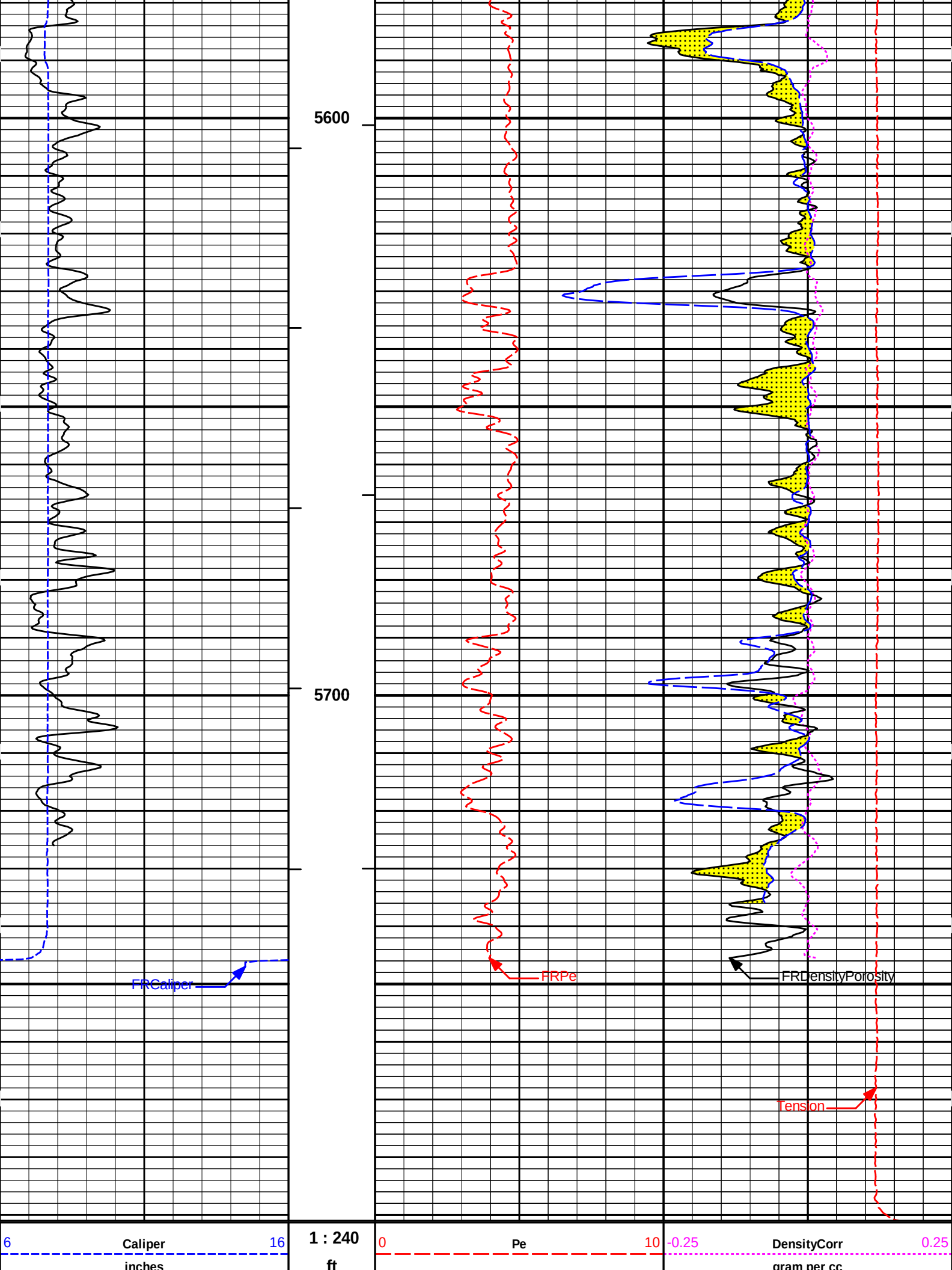


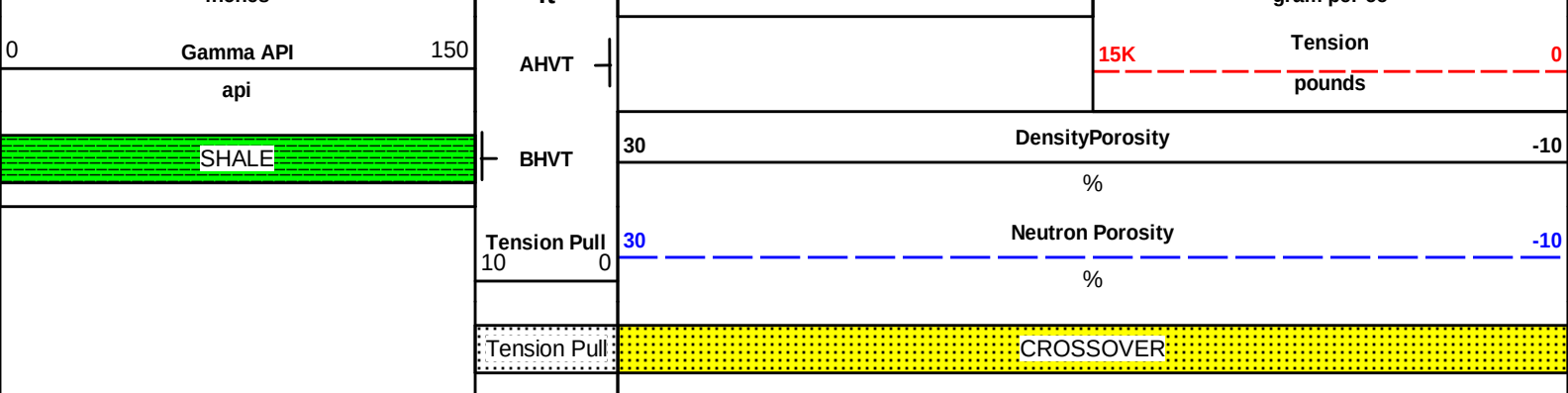












HALLIBURTON

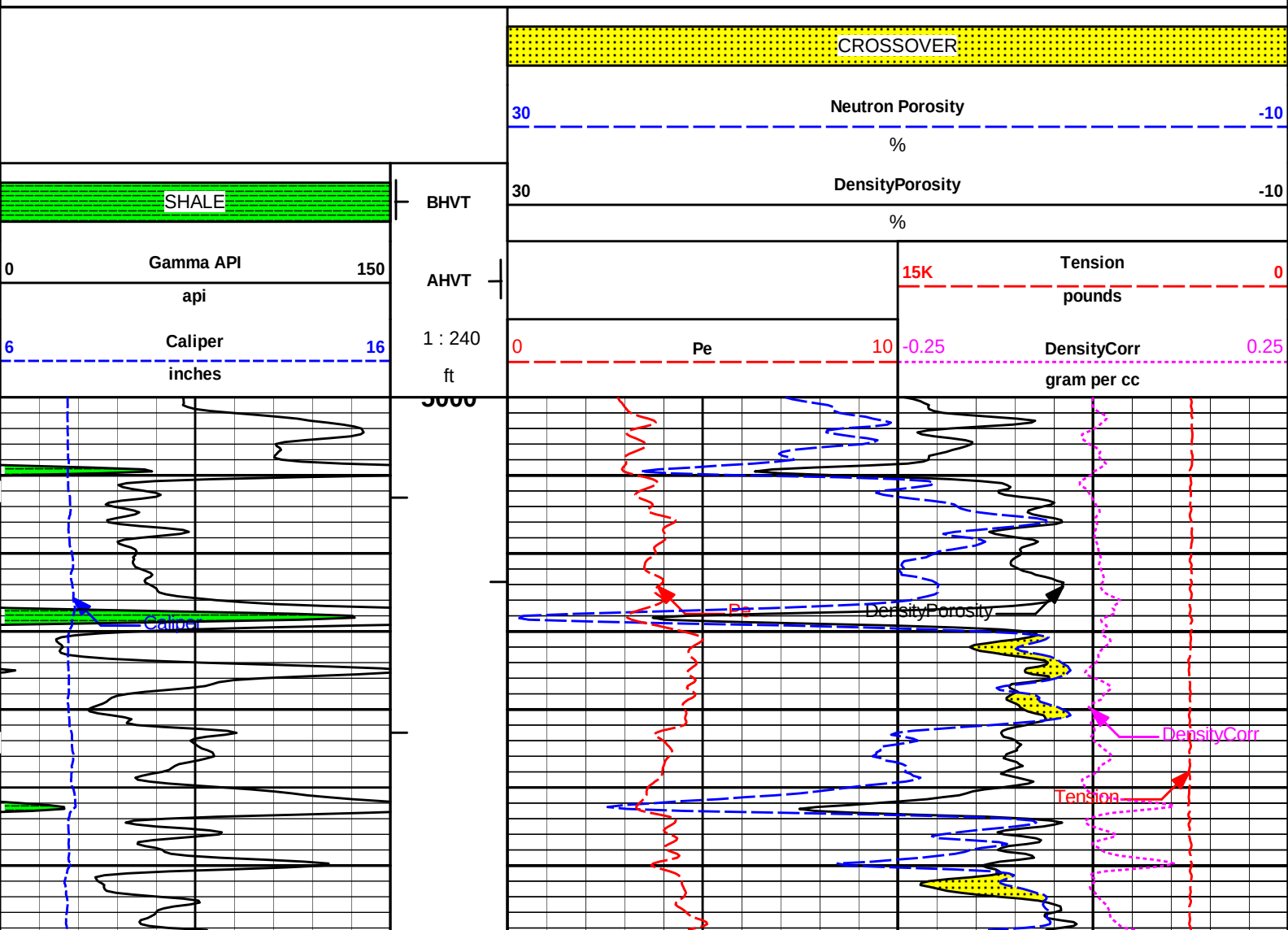
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Plot Range: 4000 ft to 5791 ft
Data: BATMAN_B_1\Well Based\DAQ-0001-003\
Plot File: \\PORO\Porosity_Q_5_MAIN_LIB

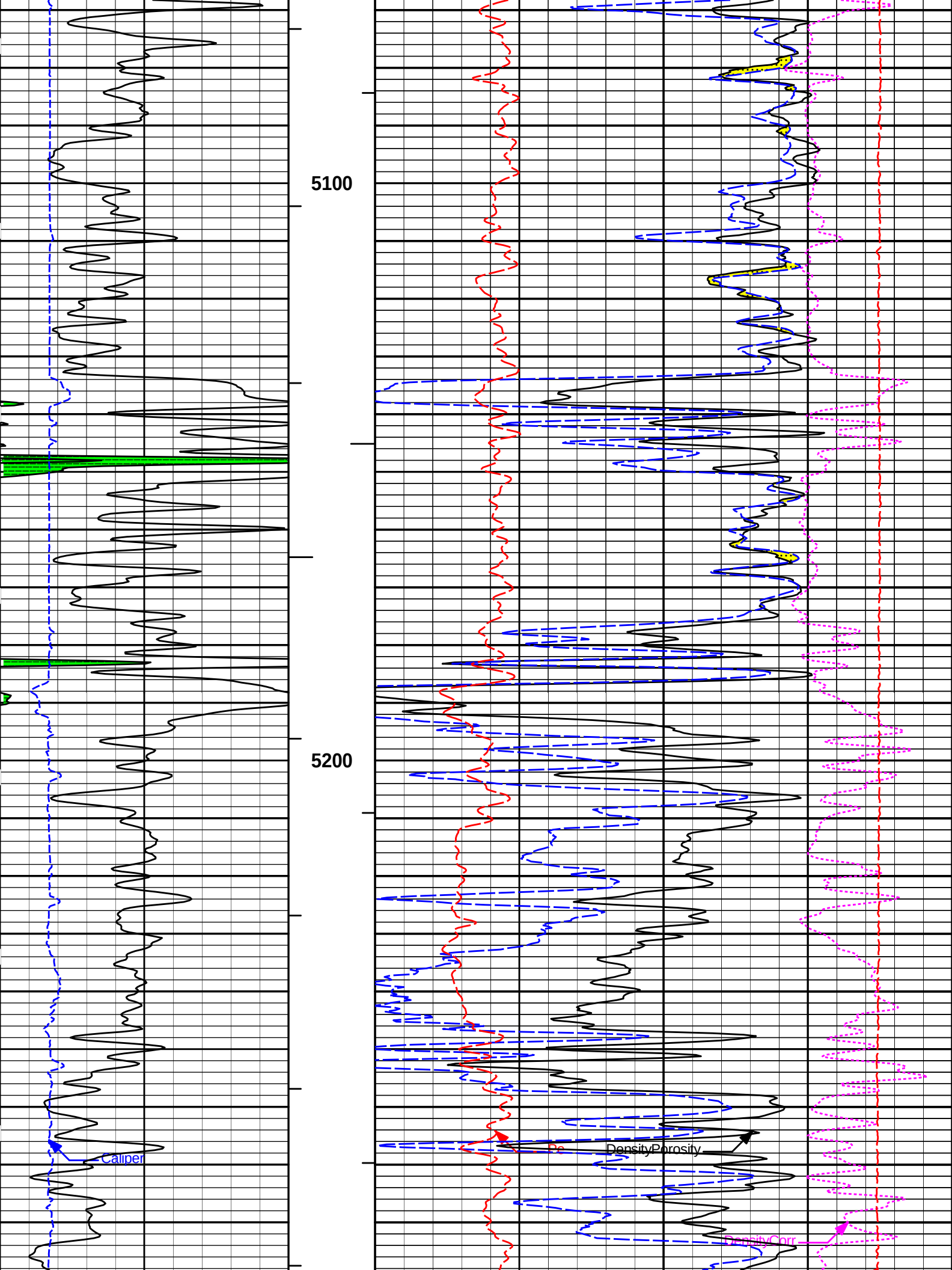
5 INCH MAIN LOG

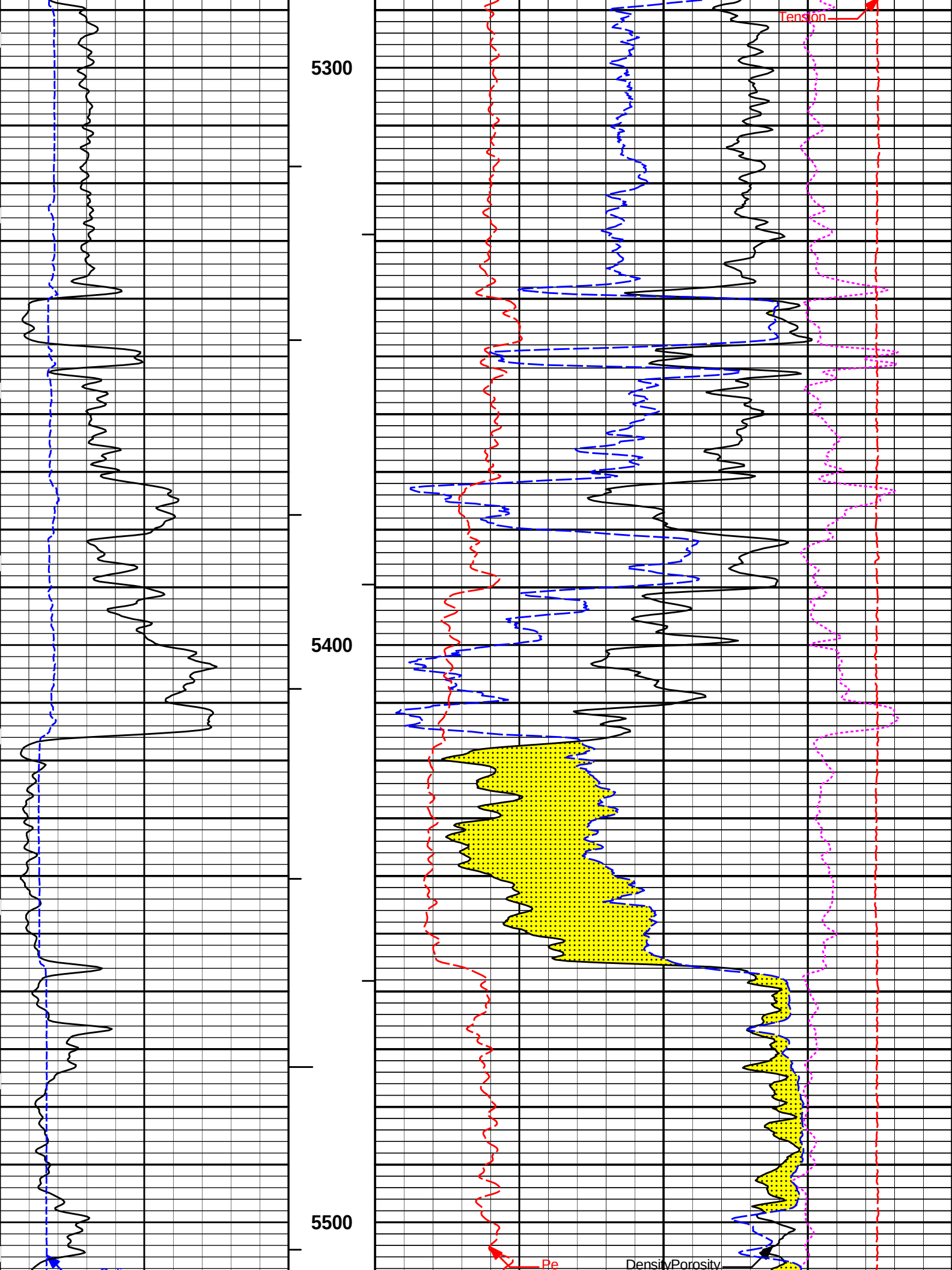
HALLIBURTON

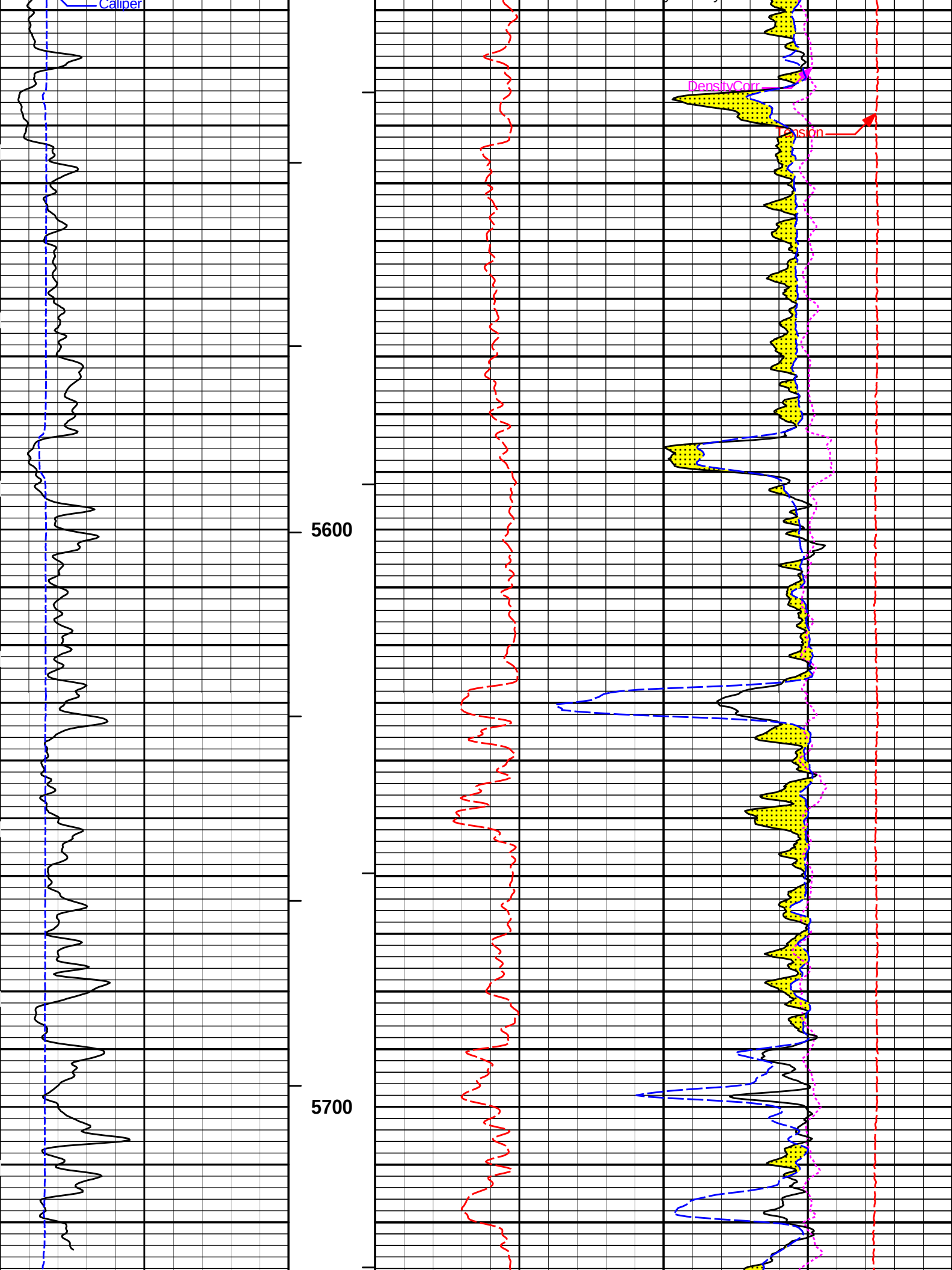
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Data: BATMAN_B_1\Well Based\DAQ-0001-002\
Plot File: \\PORO\Porosity_Q_5_REP_LIB

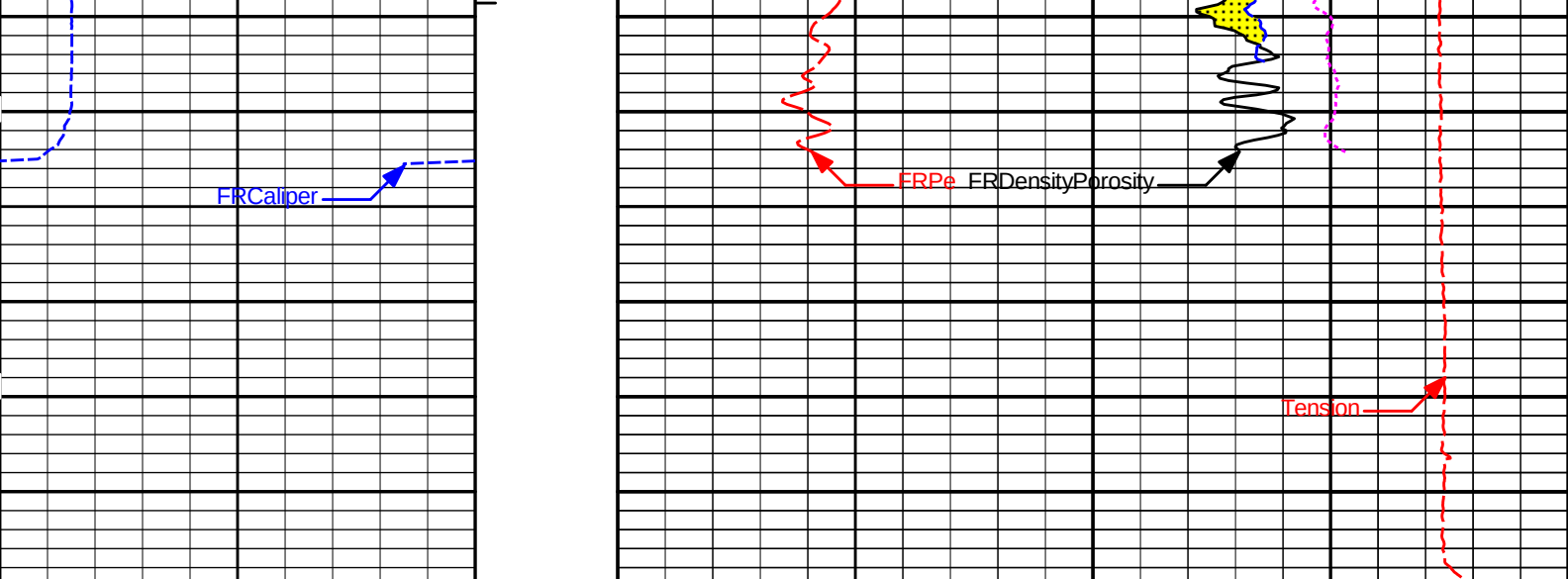
REPEAT SECTION











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

HALLIBURTON

Plot Time: 11-Mar-13 03:02:12
Plot Range: 5000 ft to 5789.75 ft
Data: BATMAN_B_1\Well Based\DAQ-0001-002\
Plot File: \\PORO\Porosity_Q_5_REP_LIB

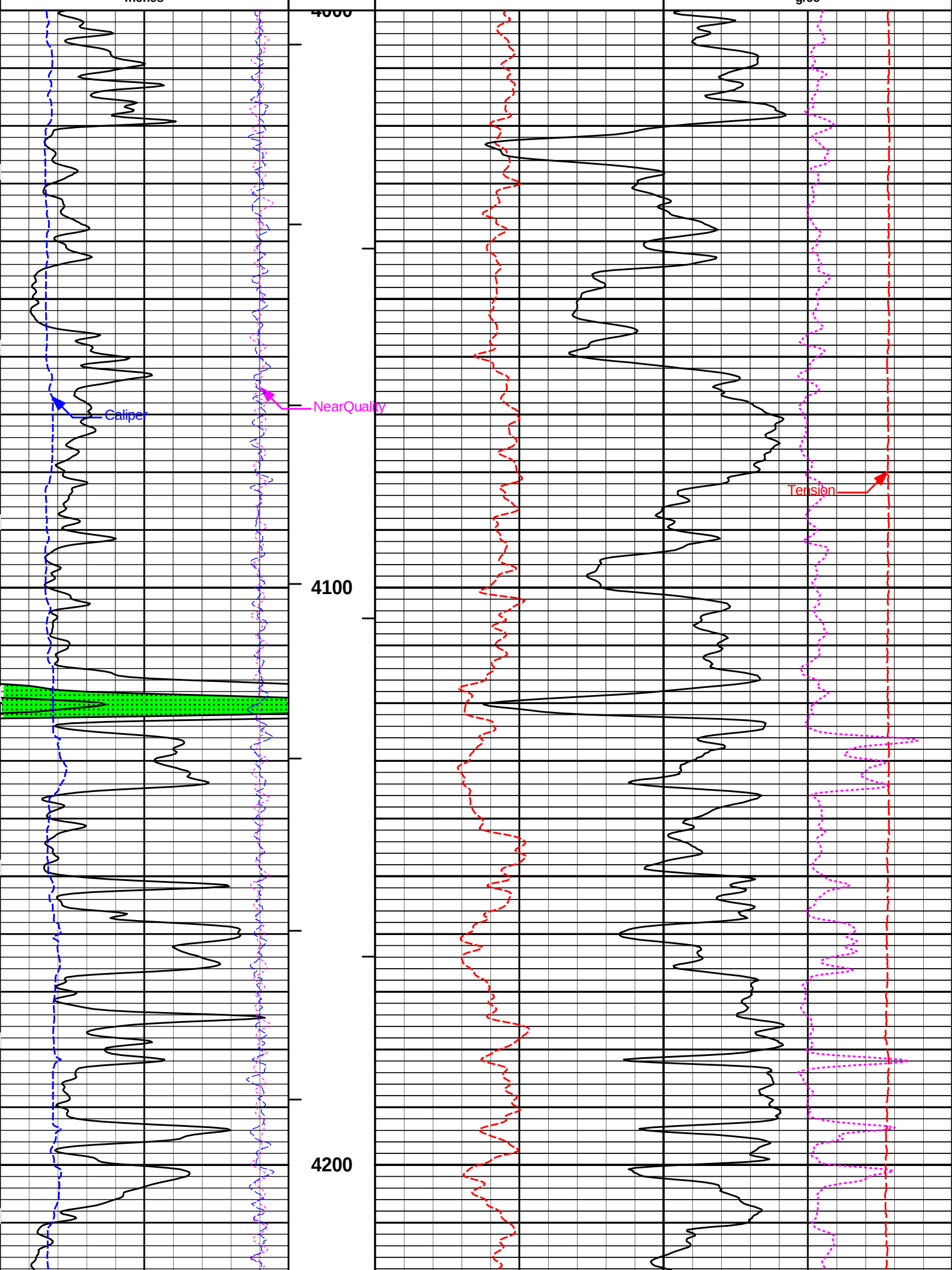
REPEAT SECTION

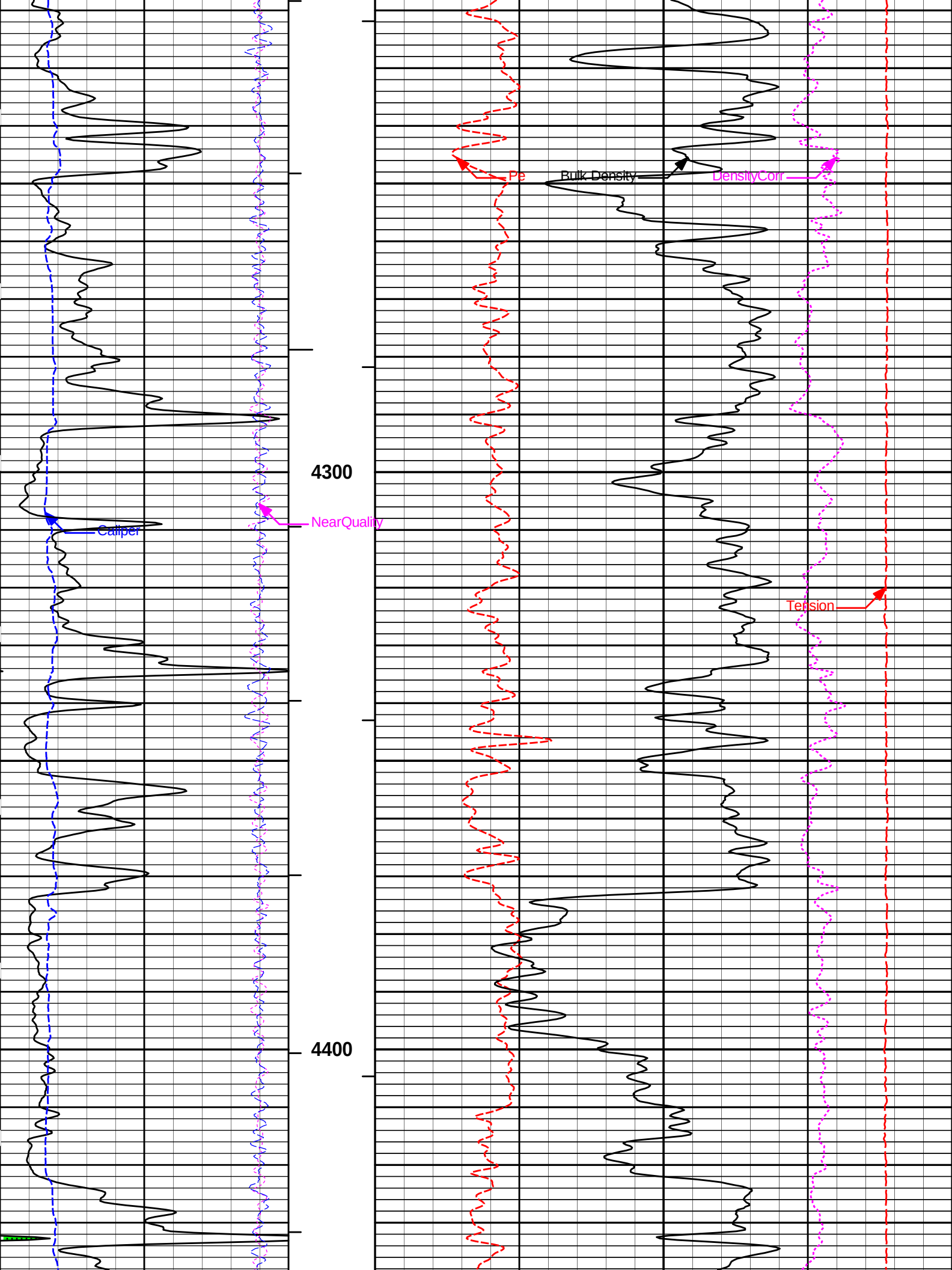
HALLIBURTON

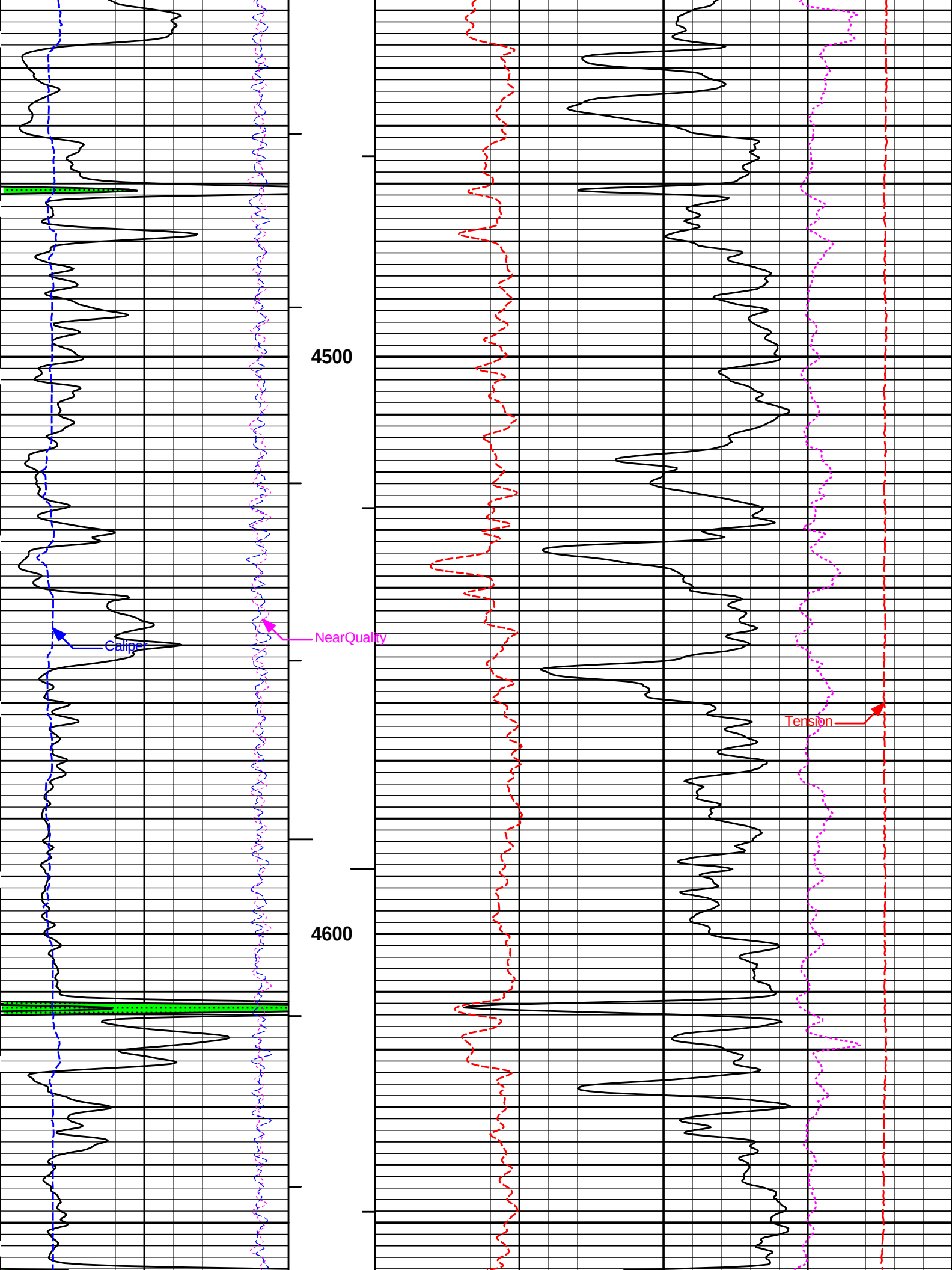
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Plot Range: 4000 ft to 5791 ft
Data: BATMAN_B_1\Well Based\DAQ-0001-003\
Plot File: \\LOCAL\BATMAN_B_1\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-BN\PORO\BULKD_5_MAIN_LIB

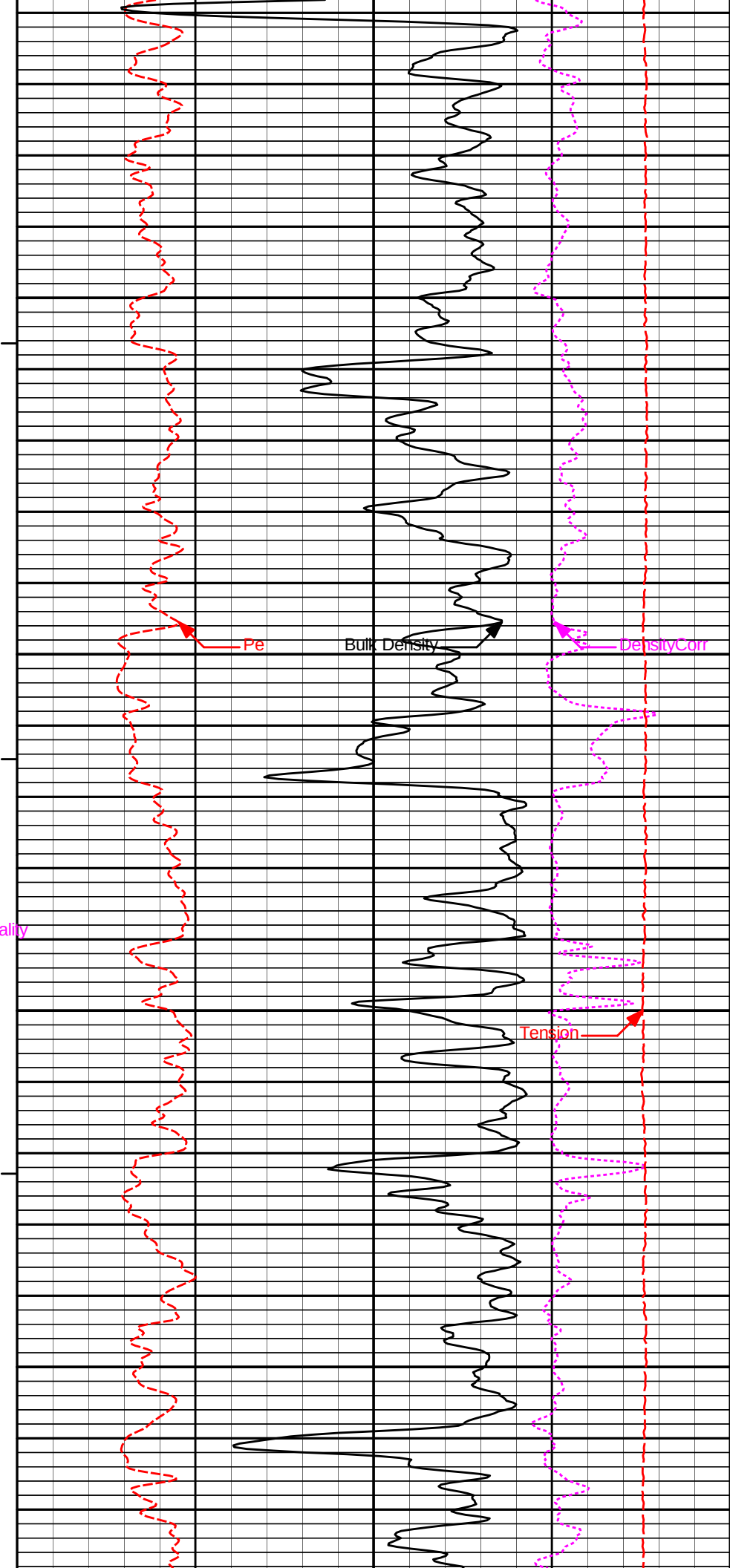
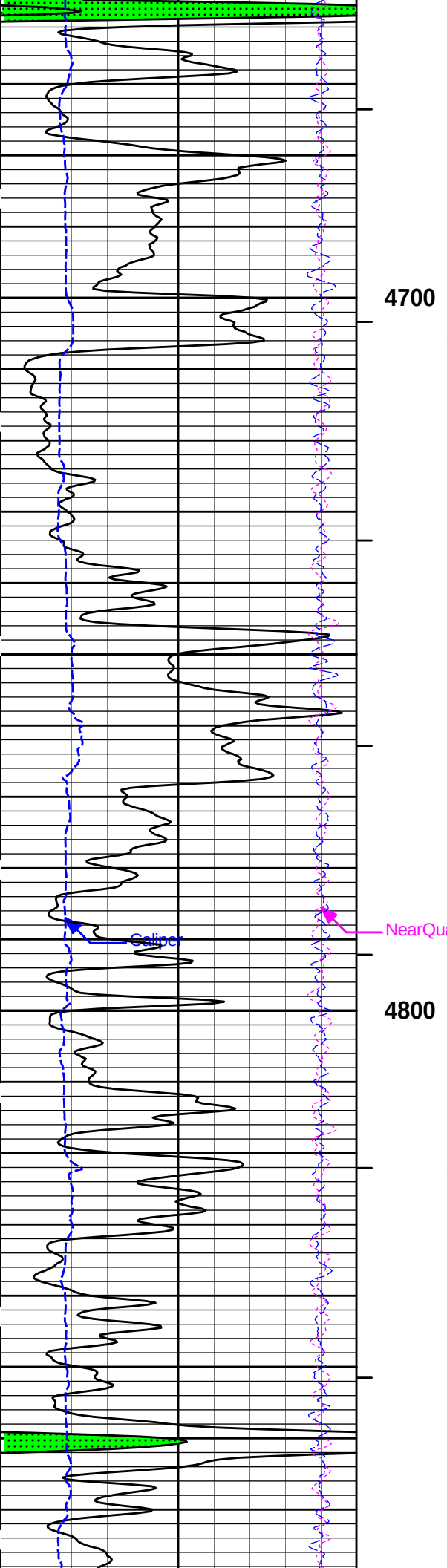
5 INCH MAIN LOG

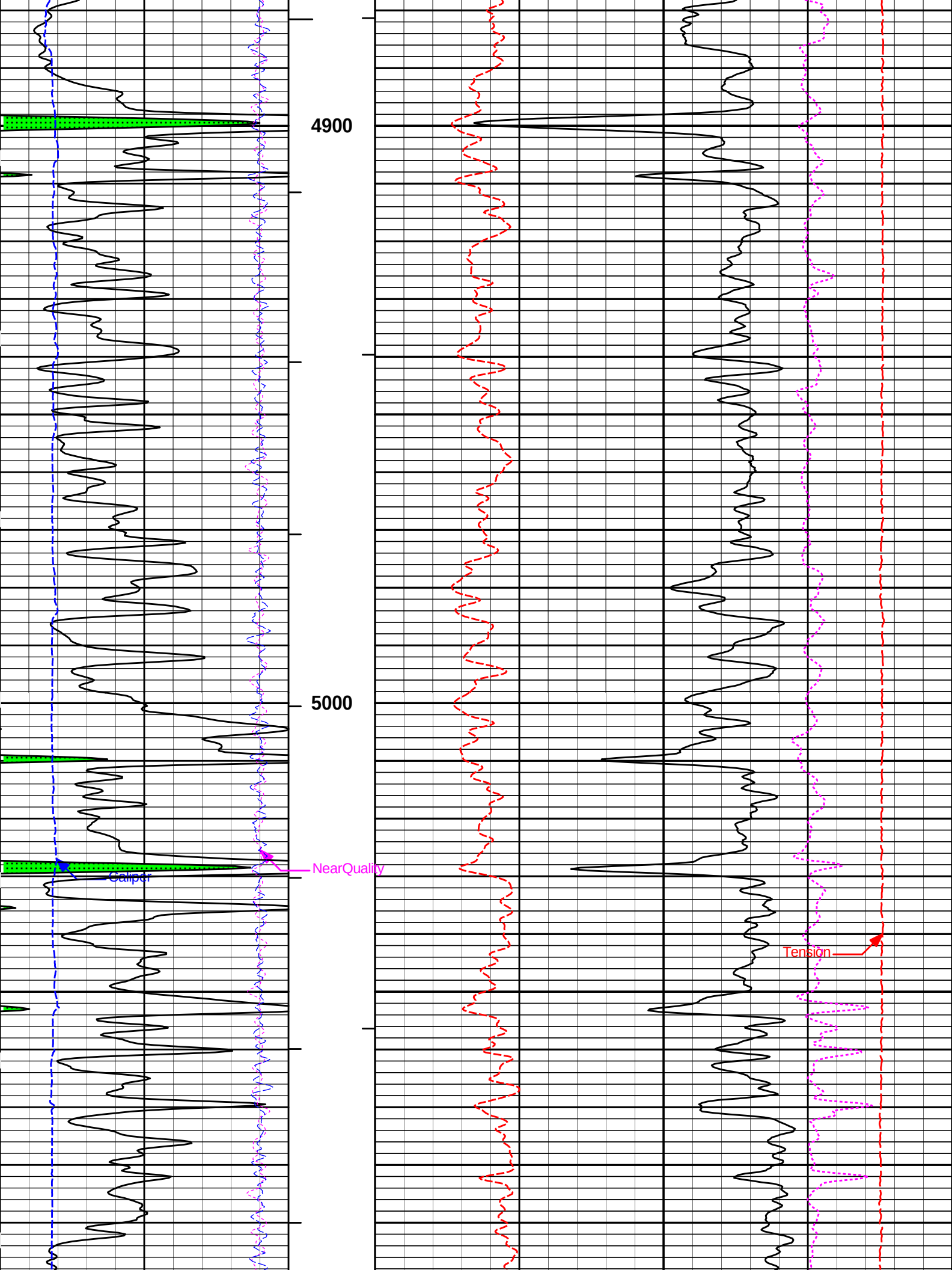
	SHALE		Tension Pull						
0	Gamma Ray	150	Tension Pull						
	api		10 0						
18	FarQuality	-2	AHV	2	Bulk Density				3
			ft3		g/cc				
-18	NearQuality	2	BHV			15K	Tension		0
			ft3				pounds		
6	Caliper	16	1 : 240	0	Pe	10	-0.25	DensityCorr	0.25
	inches		ft					g/cc	

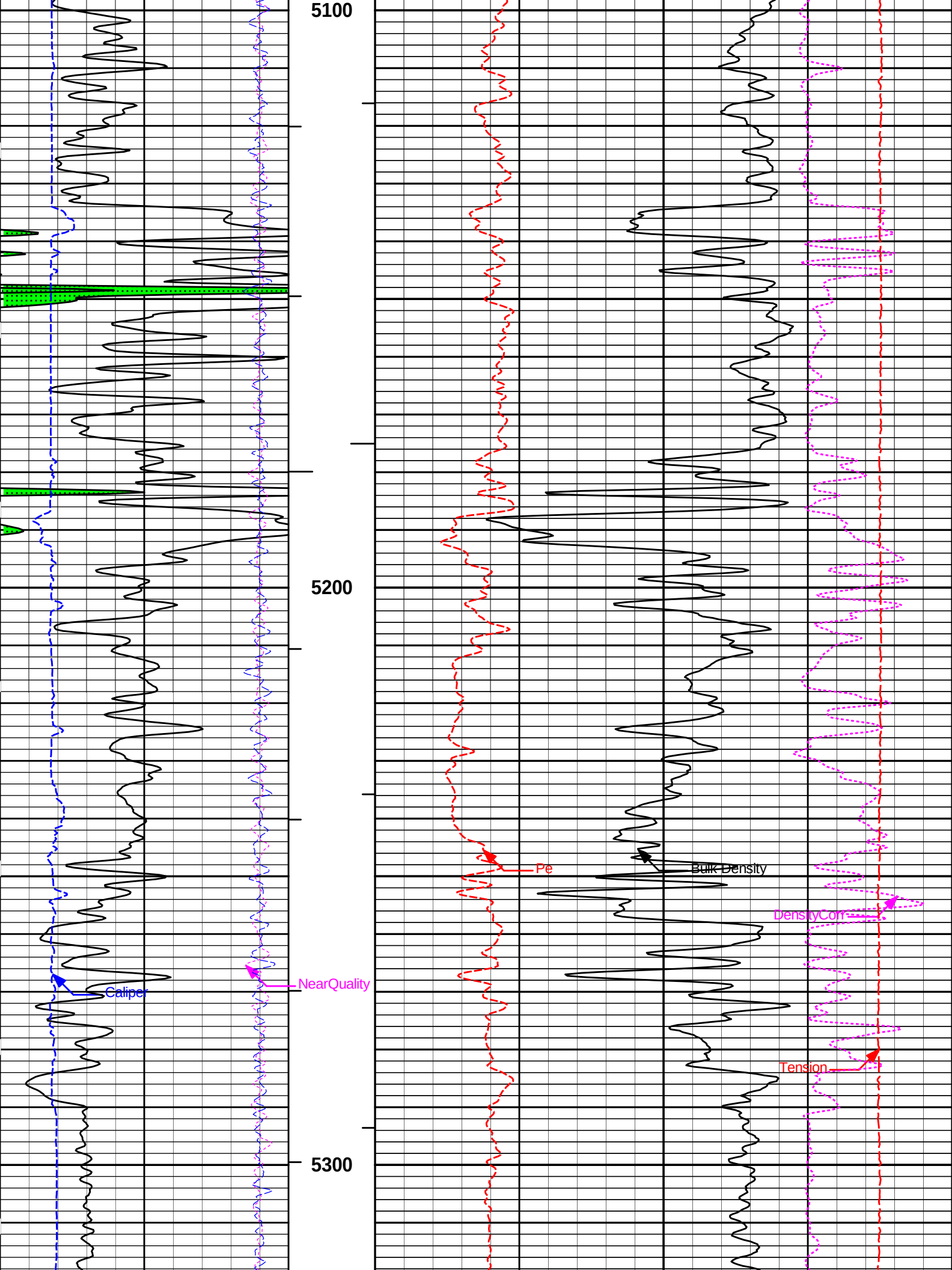


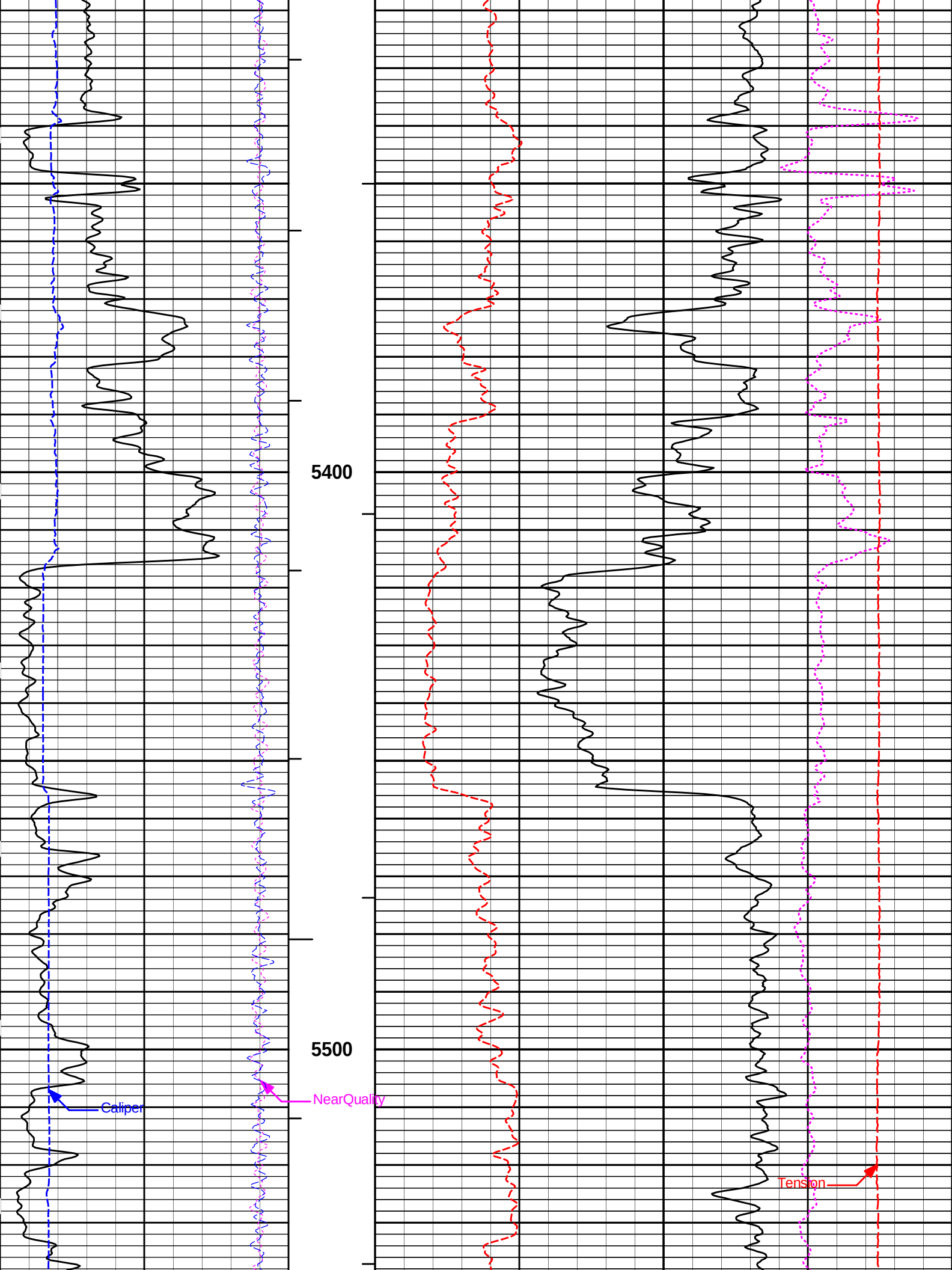


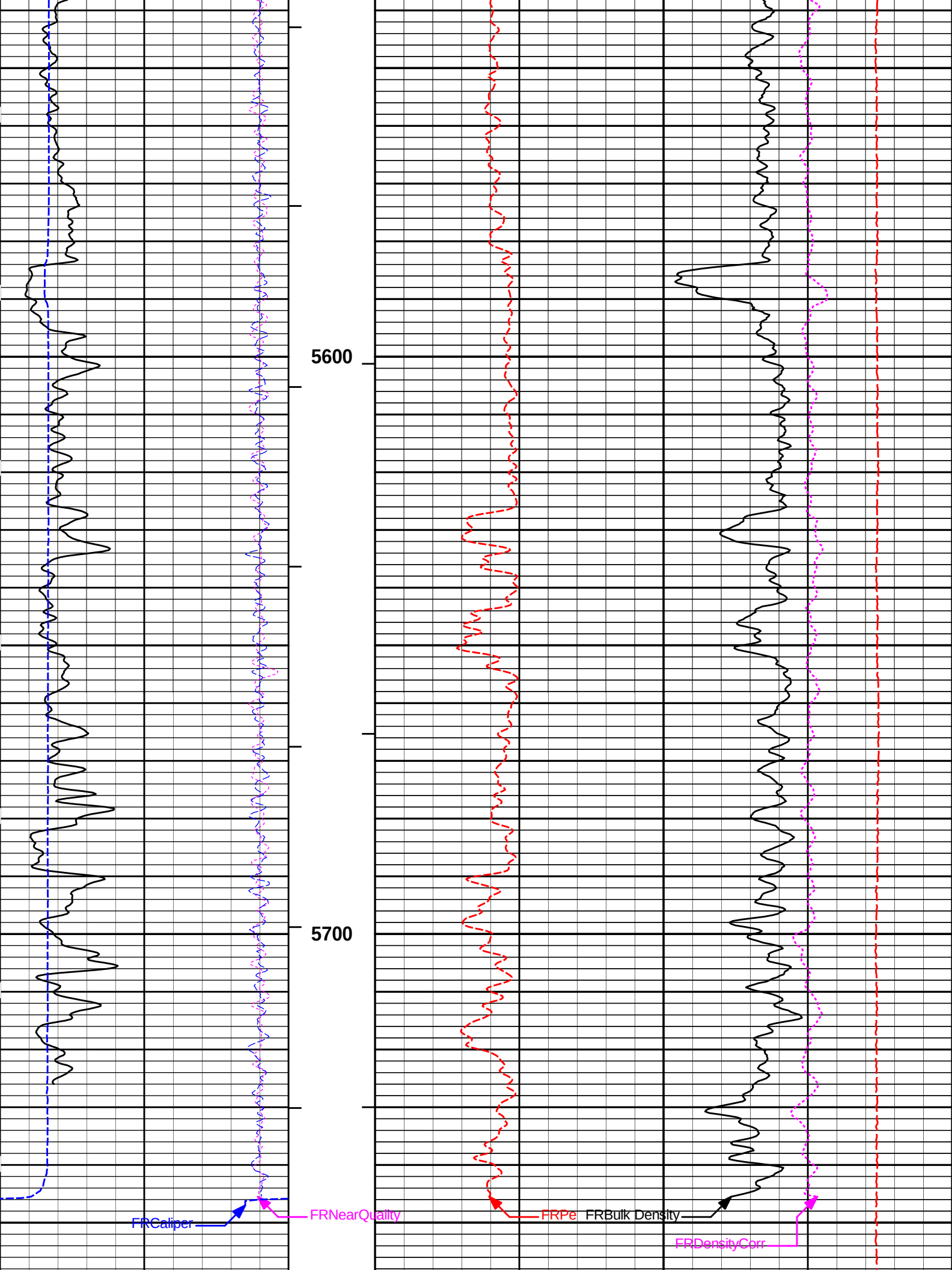


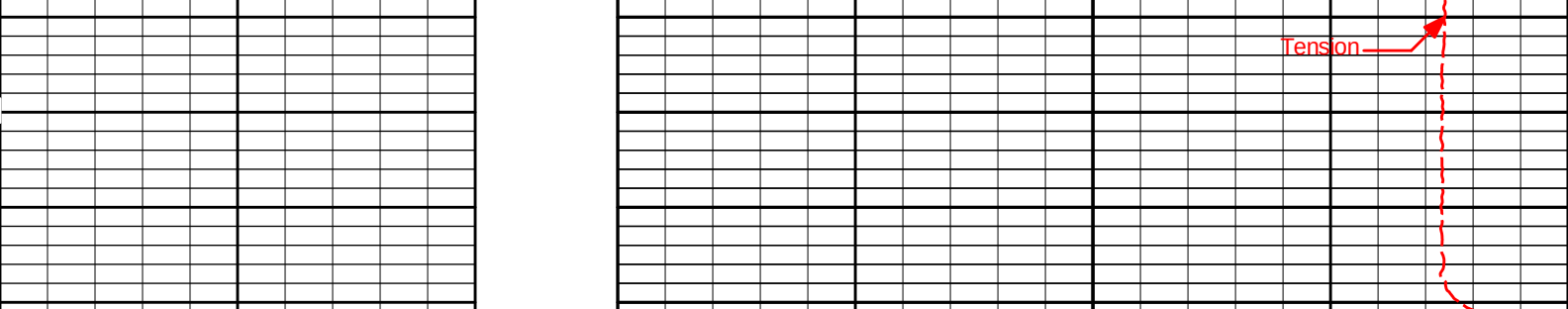












6	Caliper	16	1 : 240	0	Pe	10	-0.25	DensityCorr	0.25
	inches		ft					g/cc	
-18	NearQuality	2	BHV				15K	Tension	0
			ft3					pounds	
18	FarQuality	-2	AHV	2	Bulk Density				
			ft3		g/cc				
0	Gamma Ray	150	Tension Pull						
	api		10	0					
	SHALE		Tension Pull						

HALLIBURTON

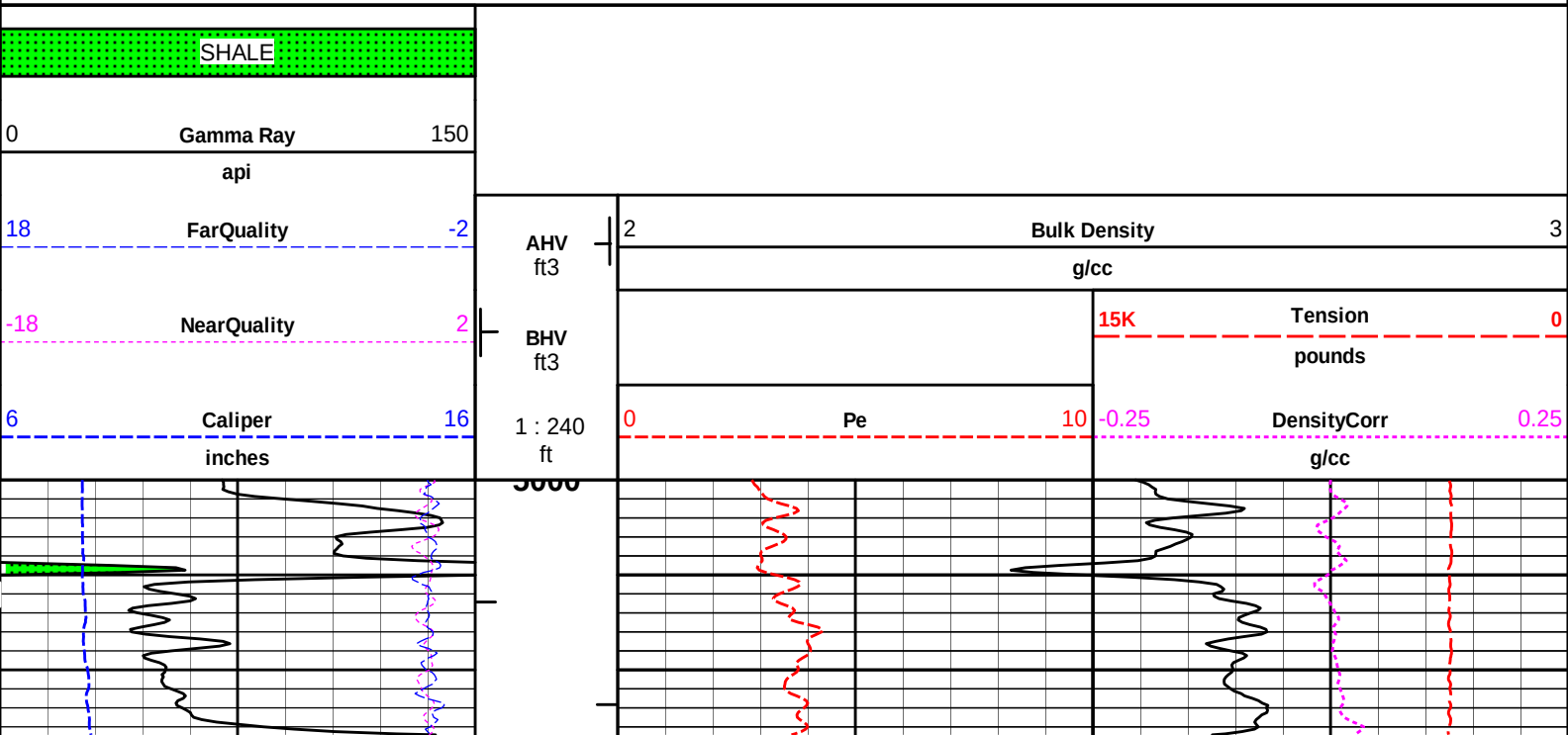
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Data: BATMAN_B_1\Well Based\DAQ-0001-003\
Plot File: \\LOCAL\BATMAN_B_1\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-BNIPORO\BULKD_5_MAIN_LIB

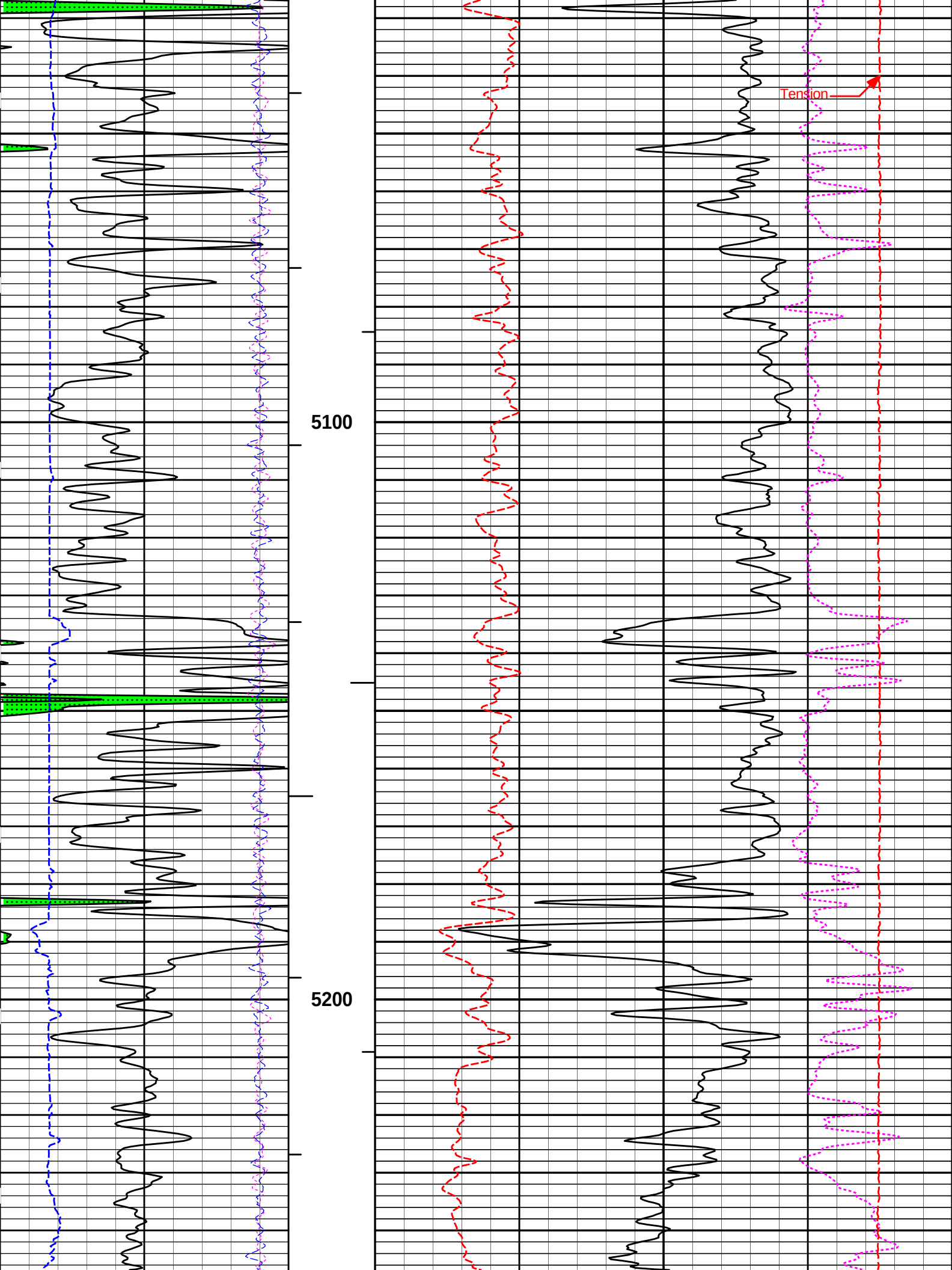
5 INCH MAIN LOG

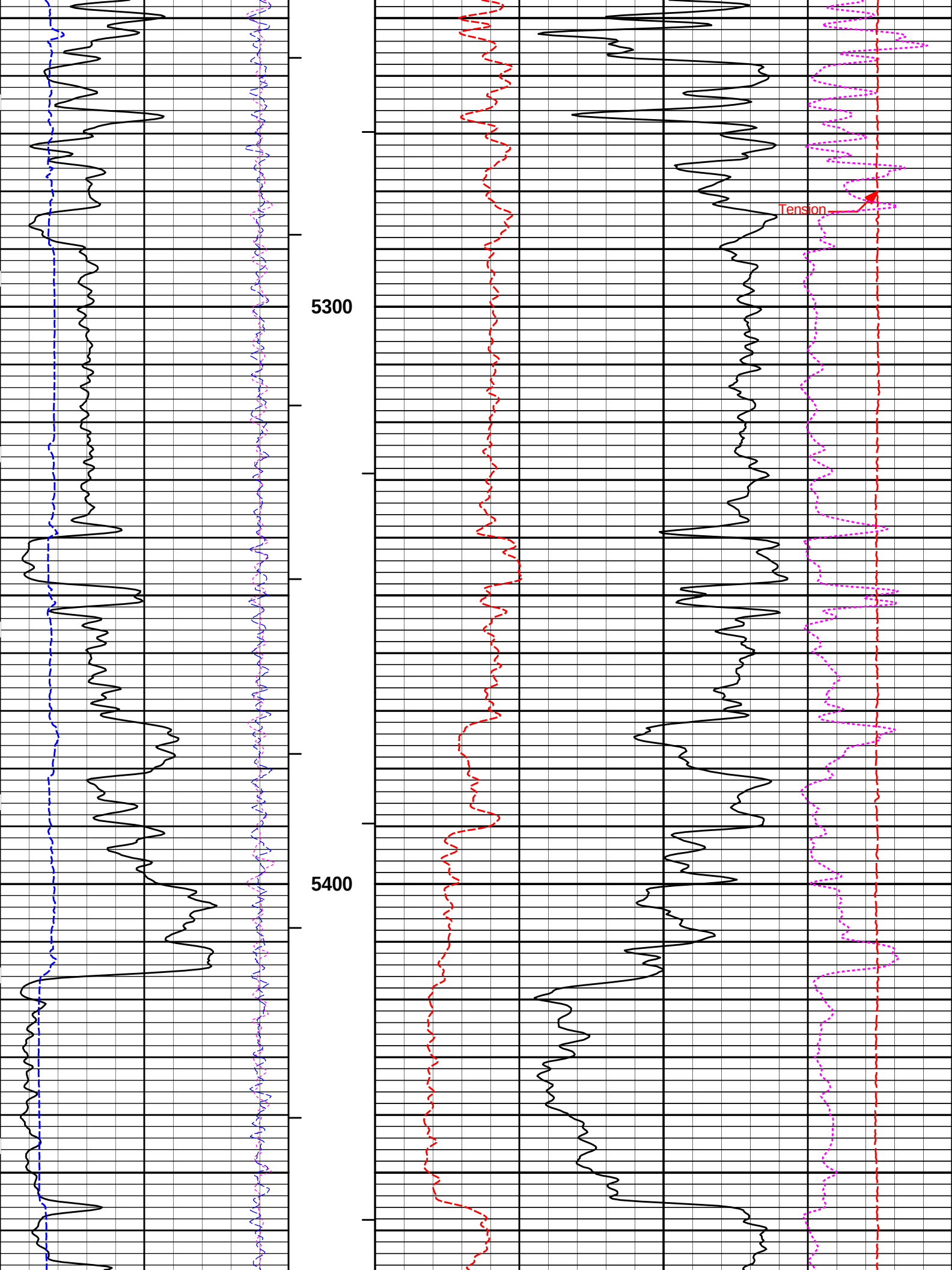
HALLIBURTON

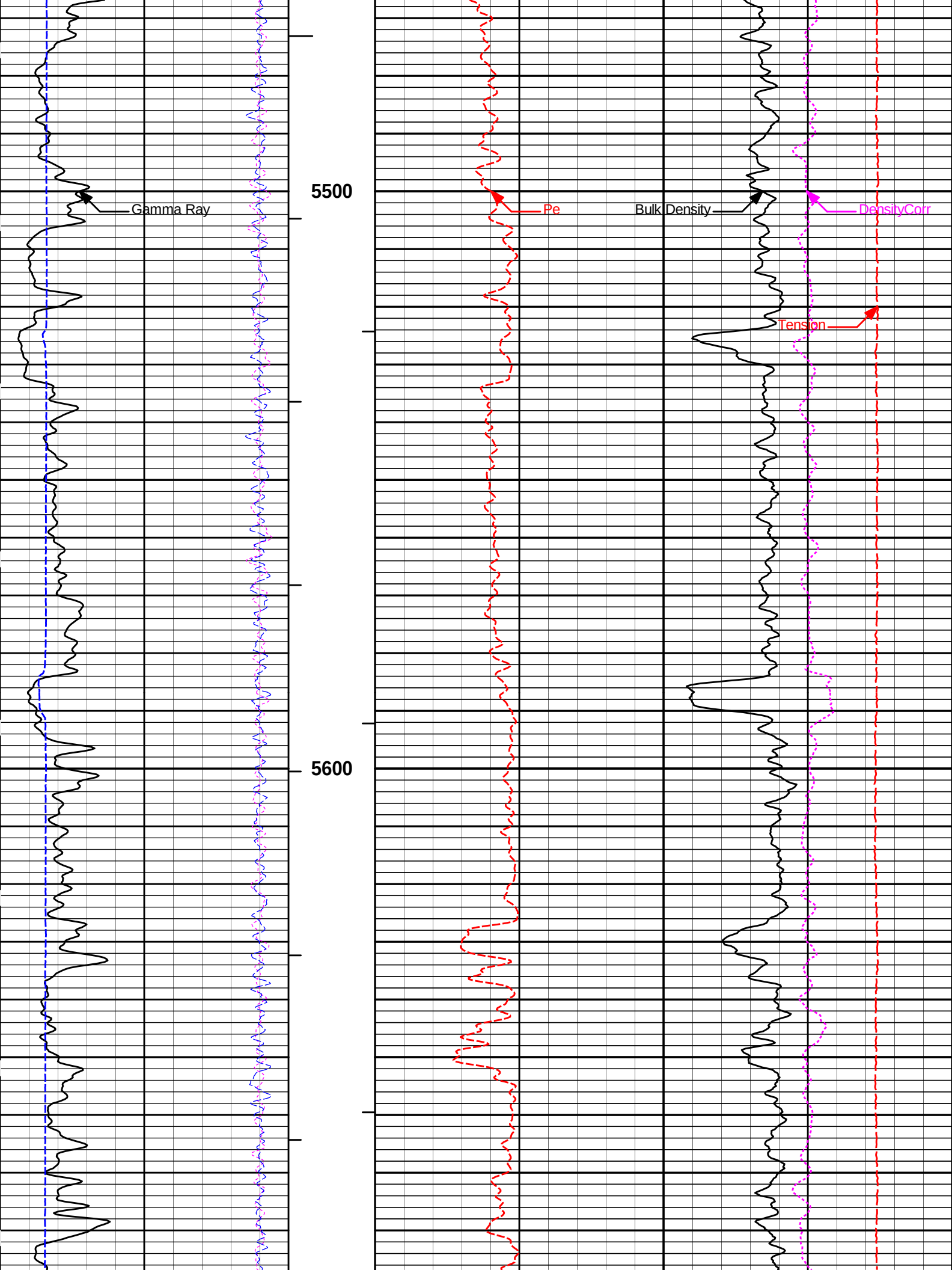
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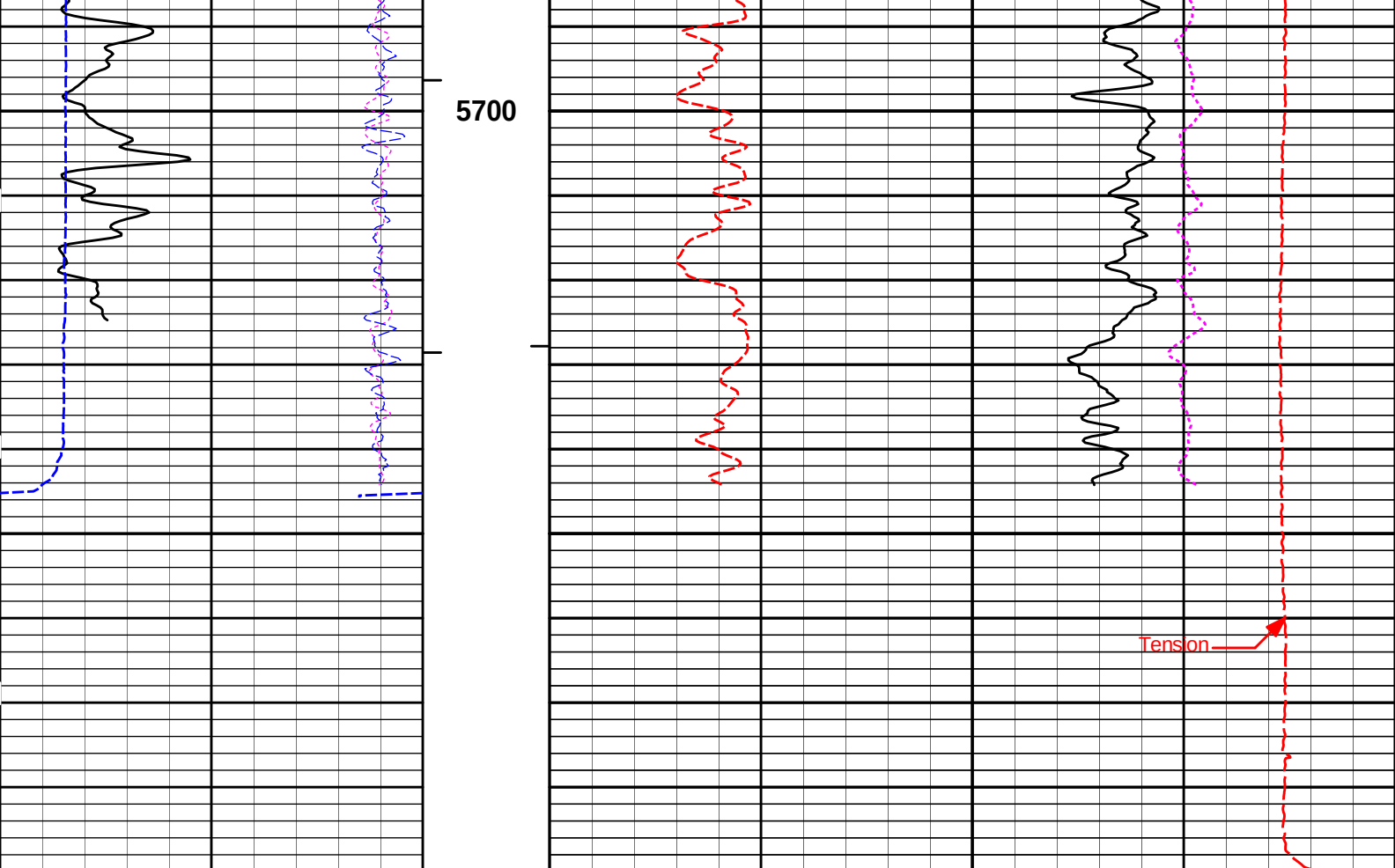
REPEAT SECTION











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

HALLIBURTON

Plot Time: 11-Mar-13 03:02:21
Plot Range: 5000 ft to 5789.75 ft
Data: BATMAN_B_1\Well Based\DAQ-0001-002\
Plot File: \\-LOCAL-IBATMAN_B_1\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-BMIPOROIBULKD_5_REP_LIB

REPEAT SECTION

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
Cable Head- PROT01 30.00 lbs		Ø 3.625 in →			1.92 ft	75.71 ft 73.79 ft

SP Sub-11441709
60.00 lbs

Ø 3.625 in →

← SP @ 72.01 ft

3.74 ft

70.05 ft

GTET-10748374
165.00 lbs

Ø 3.625 in →

8.52 ft

← GammaRay @ 63.99 ft

61.53 ft

DSNT-10755066
174.00 lbs

DSN Decentralizer-
10755066
6.60 lbs

Ø 5.000 in* →

Ø 3.625 in →

9.69 ft

← DSN Far @ 54.59 ft

← DSN Near @ 53.84 ft

51.84 ft

SDLT-10685803
360.00 lbs

SDLT Pad-10714945
65.00 lbs
Microlog Pad-10685803
8.00 lbs

Ø 4.500 in →

Ø 4.750 in* →

Ø 4.750 in* →

10.81 ft

Microlog @ 44.03 ft
SDL Caliper @ 43.84 ft
SDL @ 43.83 ft

41.03 ft

IQ Flex-954
140.00 lbs

Ø 3.625 in →

5.67 ft

35.36 ft

Centralizer 25-001
8.00 lbs

Ø 4.000 in* →

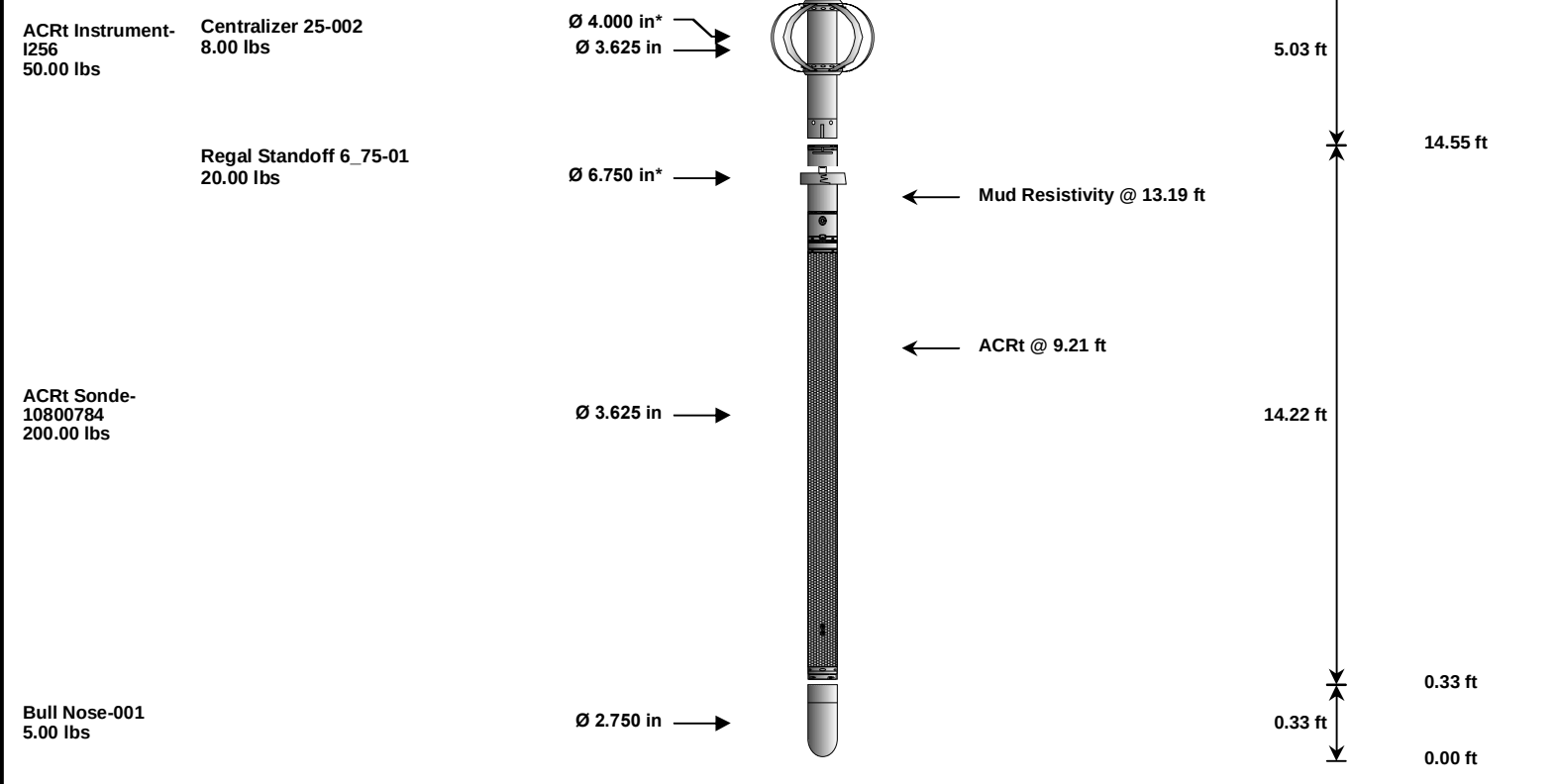
BSAT-10747684
300.00 lbs

Ø 3.625 in →

← Sonic Receivers @ 26.84 ft

15.77 ft

19.58 ft



Mnemonic		Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
CH	Standard OH Cable Head		PROT01	30.00	1.92	73.79	300.00
SP	SP Sub		11441709	60.00	3.74	70.05	300.00
GTET	Gamma Telemetry Tool		10748374	165.00	8.52	61.53	60.00
DSNT	Dual Spaced Neutron		10755066	174.00	9.69	51.84	60.00
DCNT	DSN Decentralizer		10755066	6.60	5.13	* 55.17	300.00
SDLT	Spectral Density Tool		10685803	360.00	10.81	41.03	60.00
SDLP	Density Insite Pad		10714945	65.00	2.55	* 43.24	60.00
MICP	Microlog Pad		10685803	8.00	1.00	* 43.53	60.00
IQF	IQ Flex tool		954	140.00	5.67	35.36	300.00
BSAT	Borehole Sonic Array Tool		10747684	300.00	15.77	19.58	60.00
OBCEN	Centralizer - 25 in. Overbody		001	8.00	2.08	* 32.22	300.00
ACRt	Array Compensated True Resistivity Instrument Section		I256	50.00	5.03	14.55	300.00
OBCEN	Centralizer - 25 in. Overbody		002	8.00	2.08	* 16.30	300.00
ACRt	Array Compensated True Resistivity Sonde Section		10800784	200.00	14.22	0.33	300.00
RSOF	Regal Standoff 6.75in		01	20.00	0.52	* 13.45	300.00
BLNS	Bull Nose		001	5.00	0.33	0.00	300.00
Total				1,599.60	75.71		
* Not included in Total Length and Length Accumulation.							
Data: BATMAN_B_1\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-BNIDLE							
Date: 10-Mar-13 16:39:17							

HALLIBURTON			
CALIBRATION REPORT			
NATURAL GAMMA RAY TOOL SHOP CALIBRATION			
Tool Name:	GTET - 10748374	Reference Calibration Date:	19-Dec-12 08:49:49
Engineer:	T. HYDE	Calibration Date:	17-Jan-13 13:03:23
Software Version:	WL INSITE R3.6.0 (Build 3)	Calibration Version:	1
Calibrator Source S/N: TB-185			
Calibrator API Reference:228.00 api			
Equivalent Calibrator API Reference:232.0 api			
Measurement	Measured	Calibrated	Units

Background	47.0	47.4	api
Background + Calibrator	277.4	279.4	api
Calibrator	230.4	232.0	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name: GTET - 10748374

Reference Calibration Date: 17-Jan-13 13:03:23

Engineer: THOMAS HYDE

Calibration Date: 10-Mar-13 16:28:51

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

Calibration Version: 1

Calibrator Source S/N: TB-185

Calibrator API Reference:228.00 api

Equivalent Calibrator API Reference:232.0 api

Field Verification	Shop	Field	Units
Background	47.4	47.3	api
Background + Calibrator	279.4	280.4	api
Calibrator	232.0	233.1	api

Shop	Field	Difference	Tolerance
232.0	233.1	-1.1	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name: DSNT - 10755066

Reference Calibration Date: 18-Jan-13 10:41:33

Engineer: S. INGERSOLL

Calibration Date: 05-Mar-13 18:15:26

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

Calibration Version: 1

Logging Source S/N: DSN-436

Tank Serial Number: 105060

Reference value assigned to Tank: 51.680

Snow Block S/N: TRK_954

Calibration Tank Water Temperature: 62 degF

Min. Tool Housing Outside Diameter: 3.620 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.946	0.950	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):	0.2093	0.2106	0.0014	+/- 0.0020
Calibrated Ratio:	9.67	9.72	0.047	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0660	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 - 10755066

Reference Calibration Date: 05-Mar-13 18:15:26

Engineer:THOMAS HYDE

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

Calibration Date:10-Mar-13 16:39:48

Calibration Version:1

Logging Source S/N: DSN-436

Snow Block S/N: TRK_954

NEUTRON FIELD-CHECK SUMMARY

	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decg):	0.0660	0.0723	0.0063	+/- 0.0150

PASS/FAIL SUMMARY

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

DENSITY CALIPER SHOP CALIBRATION

Tool Name:SDLT - 10685803

Reference Calibration Date:18-Jan-13 10:03:41

Engineer:S. INGERSOLL

Calibration Date:05-Mar-13 17:17:34

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

Calibration Version:1

Host Tool Name:DSNT - 10755066

CALIBRATION COEFFICIENTS

Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-4634.87	-4558.14	-7000.00 - -1000.00
Pad Gain	0.0003949	0.0003966	0.000200 - 0.000600
Arm Offset	-2519.31	-2964.89	-5000.00 - 3000.00
Arm Gain	0.0005659	0.0005807	0.000300 - 0.000700
Arm Power	-0.000008059	-0.000008381	-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)	1.96	2.00	0.04	+/- 0.20
Medium Ring (in)	3.70	3.75	0.05	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.66	6.50	-0.16	+/- 0.20
Medium Ring (in)	8.35	8.25	-0.10	+/- 0.20
Large Ring (in)	14.95	15.00	0.05	+/- 0.20

PASS/FAIL SUMMARY

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

PASS/FAIL SUMMARY

Calibration-Coefficients Range Check:Passed

SDLT CALIPER FIELD CALIBRATION

Tool Name:SDLT - 10685803

Reference Calibration Date:05-Mar-13 17:17:34

Engineer:THOMAS HYDE

Calibration Date:10-Mar-13 16:33:07

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

Calibration Version:1

MEASURED CALIPER VALUES

Measurement	Shon	Field	Change	Control Limit On
-------------	------	-------	--------	------------------

Measurement	Shop	Field	Change	New Value
Pad Extension	3.75	3.75	-0.00	+/- 0.10
Ring Diameter	8.25	8.34	0.09	+/- 0.15

PASS/FAIL SUMMARY	
Pad Extension Check:	Passed
Diameter Check:	Passed

SPECTRAL DENSITY SHOP CALIBRATION

Tool Name:	SDLT Pad - 10714945	Reference Calibration Date:	05-Mar-13 15:52:04
Engineer:	S. INGERSOLL	Calibration Date:	05-Mar-13 16:11:51
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

Logging Source S/N: 5073GW		
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	1.0319	1.0312	0.90 - 1.10
Near Dens Gain	1.0031	1.0128	0.90 - 1.10
Near Peak Gain	0.9986	1.0111	0.90 - 1.10
Near Lith Gain	0.9882	0.9834	0.90 - 1.10
Far Bar Gain	1.0074	1.0091	0.90 - 1.10
Far Dens Gain	0.9990	1.0003	0.90 - 1.10
Far Peak Gain	0.9931	0.9930	0.90 - 1.10
Far Lith Gain	0.9788	0.9739	0.90 - 1.10
Near Bar Offset	0.0243	0.0304	NONE
Near Dens Offset	0.2636	0.1791	NONE
Near Peak Offset	0.2962	0.1905	NONE
Near Lith Offset	0.3574	0.3935	NONE
Far Bar Offset	0.1349	0.1195	NONE
Far Dens Offset	0.1915	0.1780	NONE
Far Peak Offset	0.2394	0.2405	NONE
Far Lith Offset	0.3213	0.3587	NONE
Near Bar Background	977.27	974.88	700 - 1450
Near Dens Background	324.79	324.11	230 - 480
Near Peak Background	141.16	141.44	100 - 210
Near Lith Background	172.61	172.47	125 - 260
Far Bar Background	500.46	499.16	450 - 900
Far Dens Background	193.68	194.82	175 - 345
Far Peak Background	76.43	76.18	70 - 140
Far Lith Background	80.49	79.54	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.684	1.684	0.000	+/- 0.015
Pe	2.527	2.554	0.027	+/- 0.150
ALUMINUM				
Density (g/cc)	2.598	2.598	0.000	+/- 0.01500
Pe	3.170	3.170	0.000	+/- 0.150

Pe 3.099 3.122 0.023 +/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	-0.0002	+/- 0.0110	0.0007	+/- 0.0140
Magnesium Block	0.0009	+/- 0.0110	0.0007	+/- 0.0140
Aluminum Block	-0.0009	+/- 0.0110	0.0022	+/- 0.0140
Resolution	9.89	6.00 - 11.50	9.27	6.00 - 11.50
Internal Verifier(B+D+P+L)	1613	1200 - 2700	850	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 - 10714945	Reference Calibration Date:	05-Mar-13 16:11:51
Engineer:	THOMAS HYDE	Calibration Date:	10-Mar-13 16:29:00
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

Pad Temperature: 64.6 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1612.894	1614.978	2.084	16.146
Far (B+D+P+L) cps	849.708	846.840	-2.868	15.993
Near Resolution	9.89	9.83	-0.060	0.50
Far Resolution	9.27	9.46	0.190	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-10748374						
Gamma Ray Calibrator	232.0	233.1	-----	-1.1	+/- 9.00	api
DSNT-10755066						
Snow-Block Porosity	0.0660	0.0723	-----	-0.0063	+/- 0.0150	decP
SDLT-10685803						
Pad Extension	3.75	3.75	-----	0.00	+/-0.10	in
Ring Diameter	8.25	8.34	-----	-0.09	+/-0.15	in
SDLT Pad-10714945						
Near(B+D+P+L)	1612.894	1614.978	-----	-2.084	+/-16.146	cps
Far(B+D+P+L)	849.708	846.840	-----	-2.868	+/- 15.993	cps

Cal(B+D+P+L)		849.708	840.840		2.808	7715.993	ups
Data: BATMAN_B_110001.SP-GTET-DSNT-SDI T-FL EX-BSAT-ACRT-BNIDLE							Date: 10-Mar-13 17:18:32
HALLIBURTON							
PARAMETERS REPORT							
Depth (ft)	Tool Name	Mnemonic	Description	Value	Units		
TOP							
	SHARED	BS	Bit Size	7.875	in		
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No			
	SHARED	MDBS	Mud Base	Water			
	SHARED	MDWT	Borehole Fluid Weight	9.500	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	70.0	degF		
	SHARED	CSD	Logging Interval is Cased?	No			
	SHARED	ICOD	AHV Casing OD	5.500	in		
	SHARED	ST	Surface Temperature	70.0	degF		
	SHARED	TD	Total Well Depth	10000.00	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			
	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	
BSAT	MBOK	Compute BCAS Results?	Yes	
BSAT	FLLO	Frequency Filter Low Pass Value?	5000	Hz
BSAT	FLHI	Frequency Filter High Pass Value?	27000	Hz
BSAT	DTFL	Delta -T Fluid	189.00	uspf
BSAT	DTMT	Delta -T Matrix Type	User define	
BSAT	DTMA	Delta -T Matrix	47.60	uspf
BSAT	DTSH	Delta -T Shale	100.00	uspf
BSAT	SPEQ	Acoustic Porosity Equation	Wylie	
ACRt Sonde	RTOK	Process ACRt?	Yes	
ACRt Sonde	MNSO	Minimum Tool Standoff	1.50	in
ACRt Sonde	TCS1	Temperature Correction Source	FP Lwr & FP Up	
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: BATMAN_B_110001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-BNIDLE
Date: 10-Mar-13 17:19:04

HALLIBURTON

INPUTS, DELAYS AND FILTERS TABLE

Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
SP Sub				
PLTC	Plot Control Mask	72.01	NO	
SP	Spontaneous Potential	72.01	BLK	1.250
SPR	Raw Spontaneous Potential	72.01	NO	
SPO	Spontaneous Potential Offset	72.01	NO	
GTET				
TPUL	Tension Pull	63.99	NO	
GR	Natural Gamma Ray API	63.99	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	63.99	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	63.99	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
DSNT				
TPUL	Tension Pull	53.74	NO	
RNDS	Near Detector Telemetry Counts	53.84	BLK	1.417
RFDS	Far Detector Telemetry Counts	54.59	TRI	0.583
DNTT	DSN Tool Temperature	53.84	NO	

DSNS	DSN Tool Status	53.74	NO	
ERND	Near Detector Telemetry Counts EVR	53.84	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	54.59	BLK	0.000
ENTM	DSN Tool Temperature EVR	53.84	NO	
SDLT				
TPUL	Tension Pull	43.84	NO	
PCAL	Pad Caliper	43.84	TRI	0.250
ACAL	Arm Caliper	43.84	TRI	0.250
BSAT				
TPUL	Tension Pull	26.84	NO	
STAT	Status	26.84	NO	
DLYT	Delay Time	26.84	NO	
SI	Sample Interval	26.84	NO	
TXRX	Raw Telemetry 10 Receivers	26.84	NO	
FRMC	Tool Frame Count	26.84	NO	
GMOD	Gain processing mode	19.58	NO	
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

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	

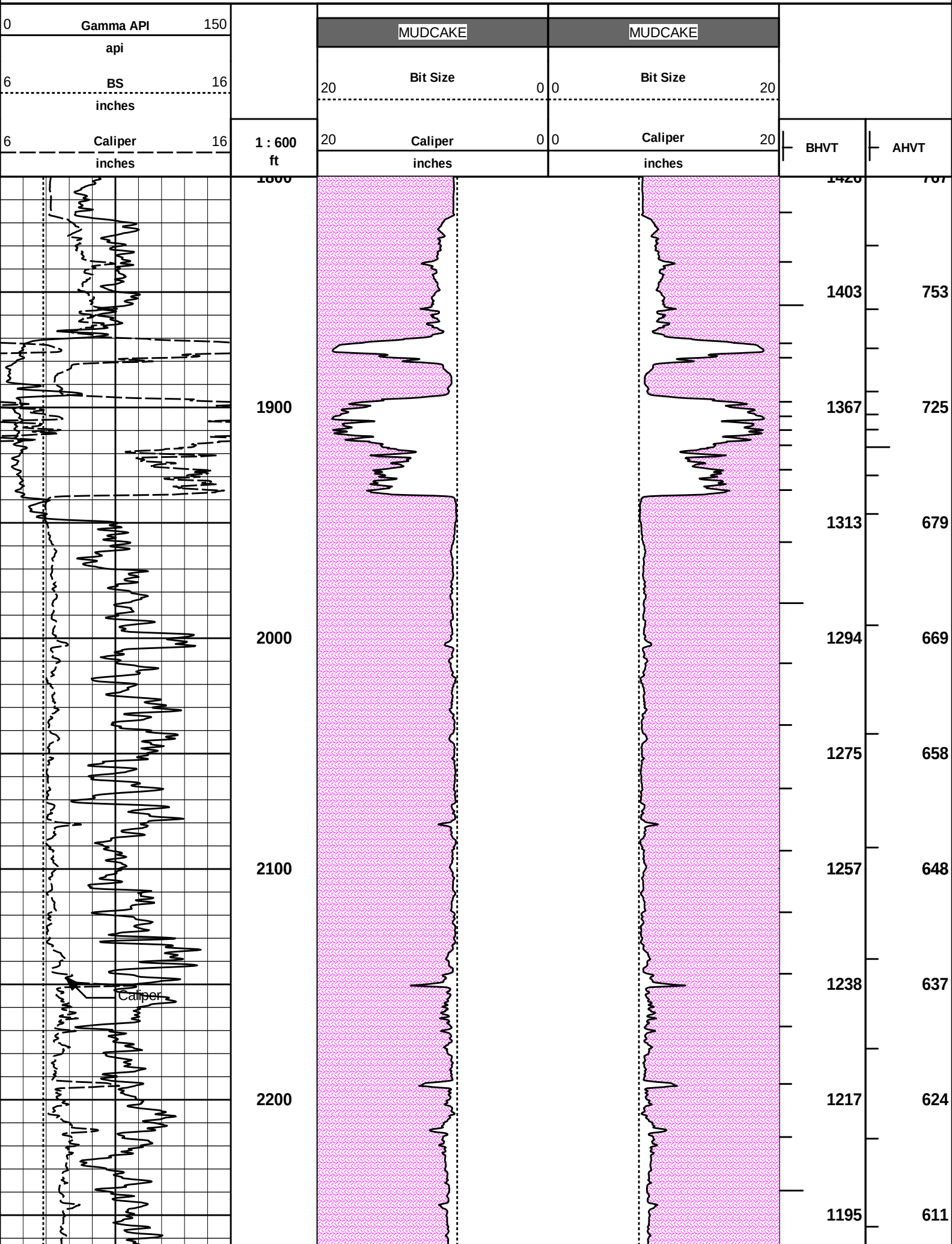
SDLT Pad				
TPUL	Tension Pull	43.83	NO	
NAB	Near Above	43.66	BLK	0.920
NHI	Near Cesium High	43.66	BLK	0.920
NLO	Near Cesium Low	43.66	BLK	0.920
NVA	Near Valley	43.66	BLK	0.920
NBA	Near Barite	43.66	BLK	0.920
NDE	Near Density	43.66	BLK	0.920
NPK	Near Peak	43.66	BLK	0.920
NLI	Near Lithology	43.66	BLK	0.920
NBAU	Near Barite Unfiltered	43.66	BLK	0.250
NLIU	Near Lithology Unfiltered	43.66	BLK	0.250
FAB	Far Above	44.01	BLK	0.250
FHI	Far Cesium High	44.01	BLK	0.250
FLO	Far Cesium Low	44.01	BLK	0.250
FVA	Far Valley	44.01	BLK	0.250
FBA	Far Barite	44.01	BLK	0.250
FDE	Far Density	44.01	BLK	0.250
FPK	Far Peak	44.01	BLK	0.250
FLI	Far Lithology	44.01	BLK	0.250
PTMP	Pad Temperature	43.84	BLK	0.920
NHV	Near Detector High Voltage	43.24	NO	
FHV	Far Detector High Voltage	43.24	NO	
ITMP	Instrument Temperature	43.24	NO	
DDHV	Detector High Voltage	43.24	NO	

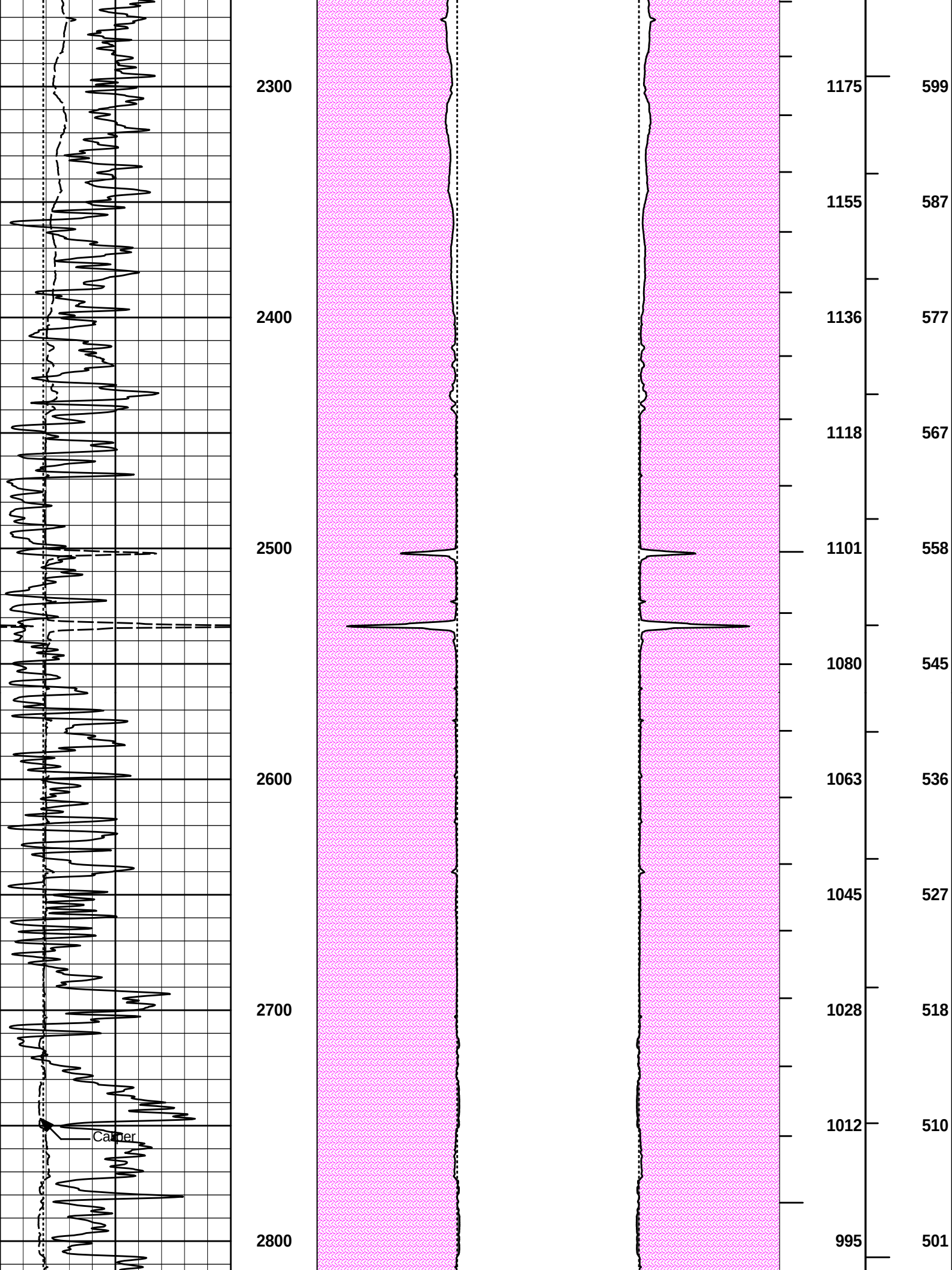
Microlog Pad				
TPUL	Tension Pull	44.03	NO	
MINV	Microlog Lateral	44.03	BLK	0.750
MNOR	Microlog Normal	44.03	BLK	0.750

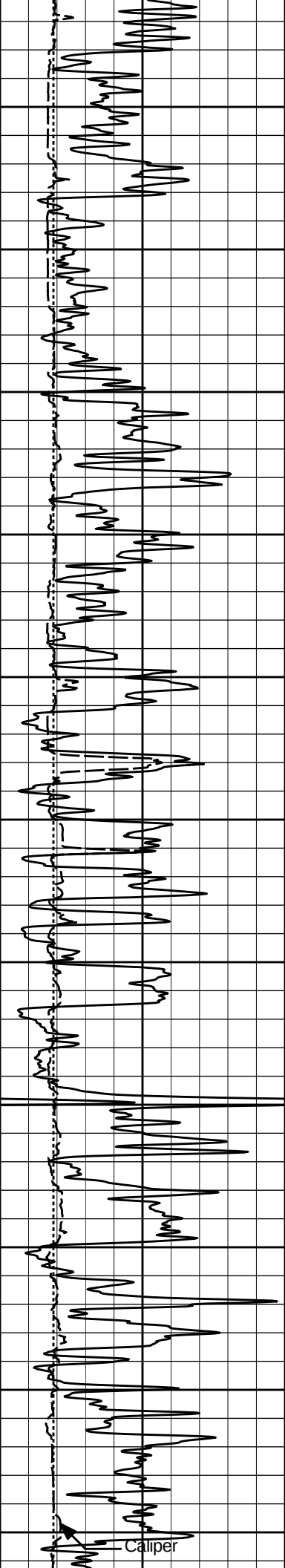
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HALLIBURTON Plot Time: 11-Mar-13 03:02:23
Plot Range: 1800 ft to 5791 ft
Data: BATMAN_B_1\Well Based\DAQ-0001-003\ Plot File: \\-LOCAL-IBATMAN_B_1\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-BN\POROIAHV_5_5_INCH_2_IQ_LIB

ANNULAR HOLE VOLUME PLOT (5.5 INCH)







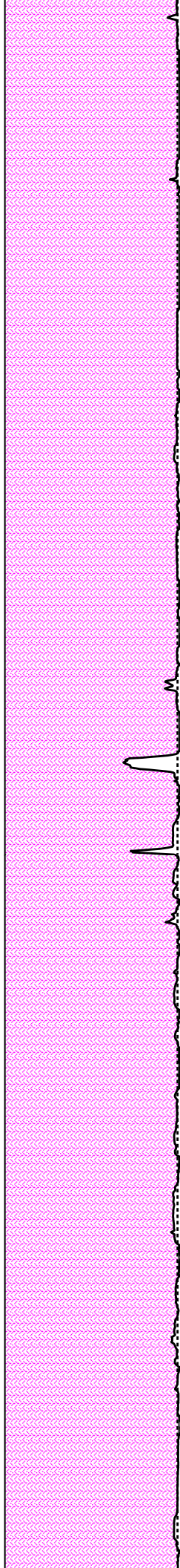
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3100

3200

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978

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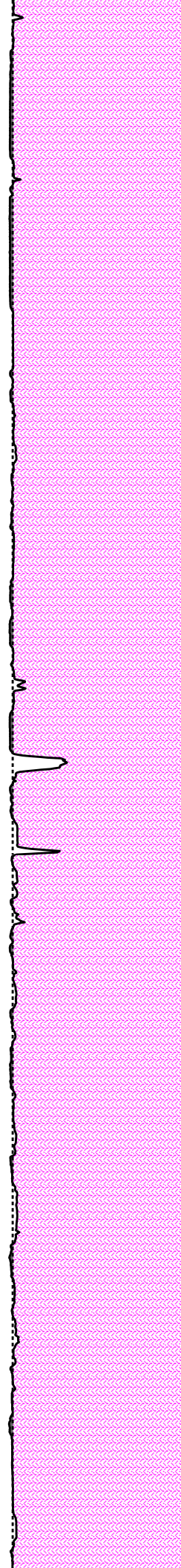
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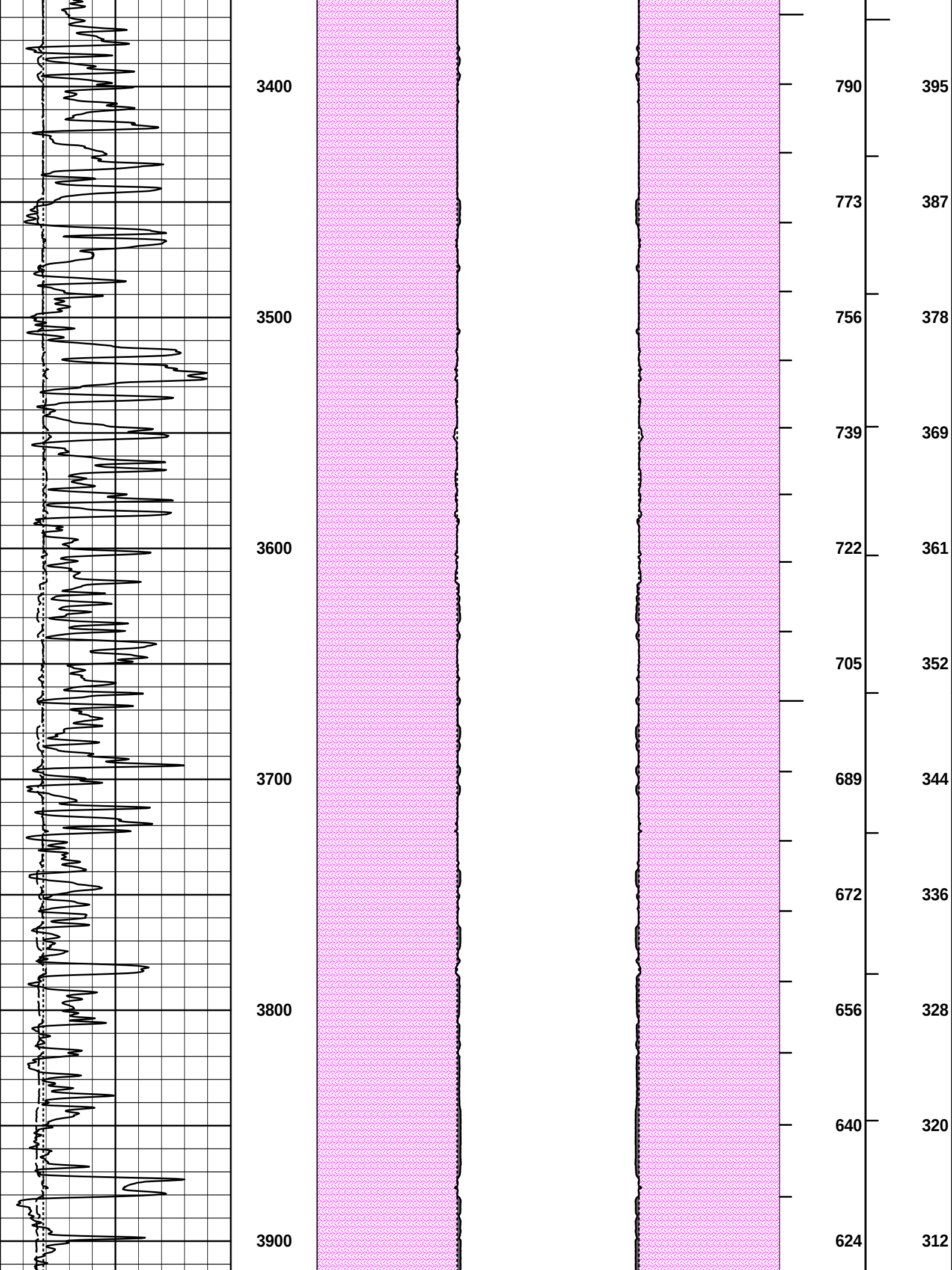
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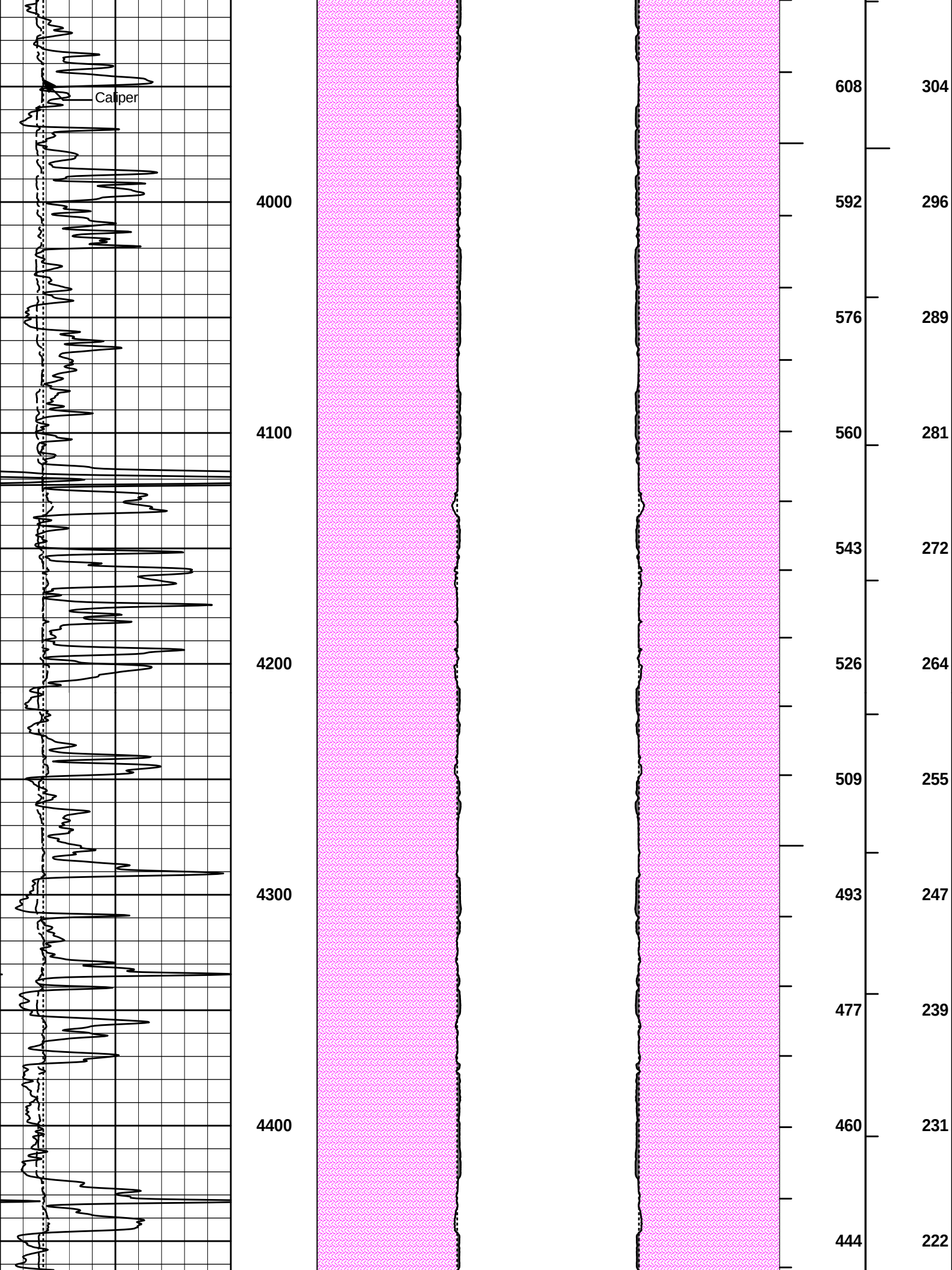
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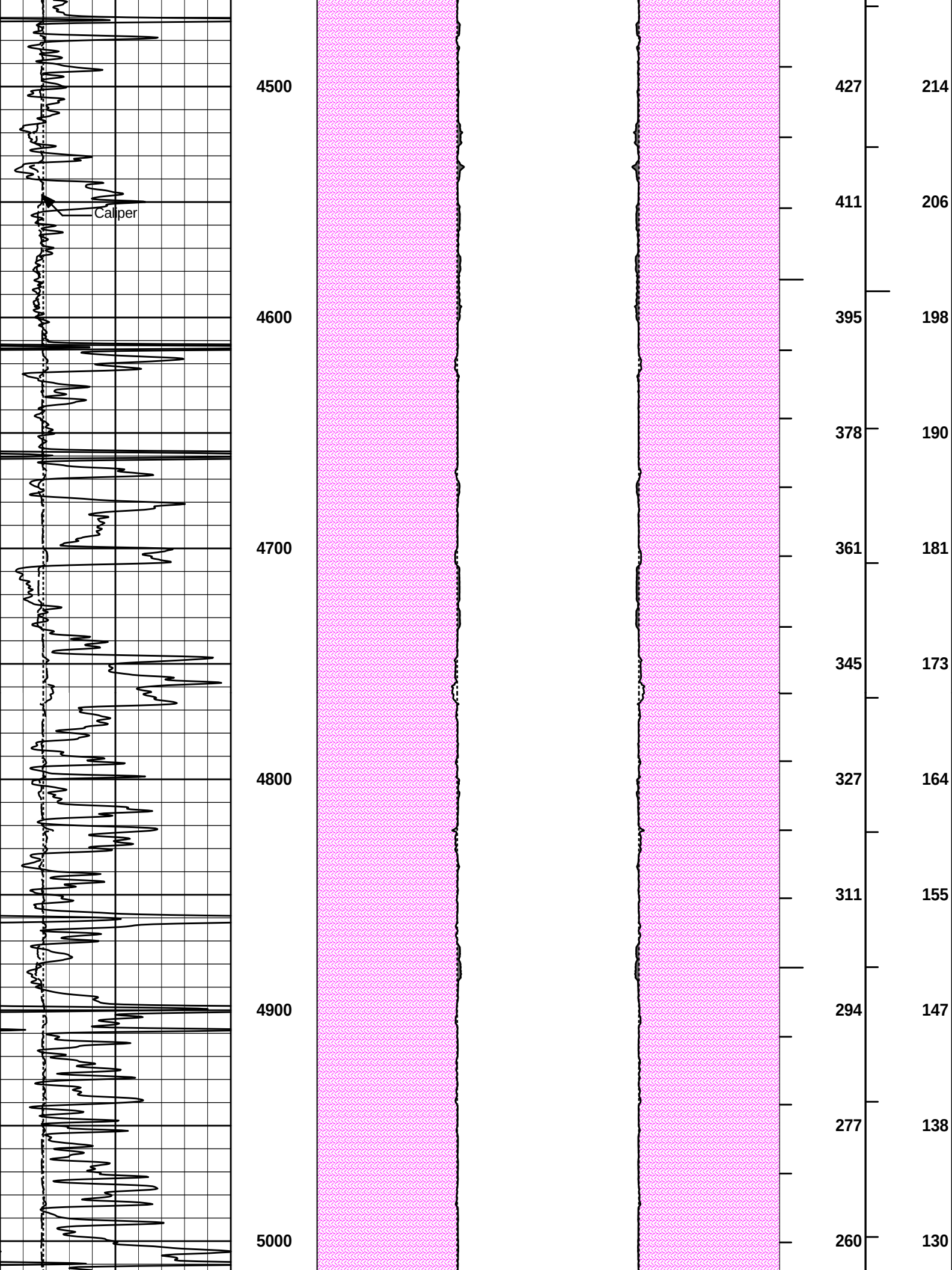
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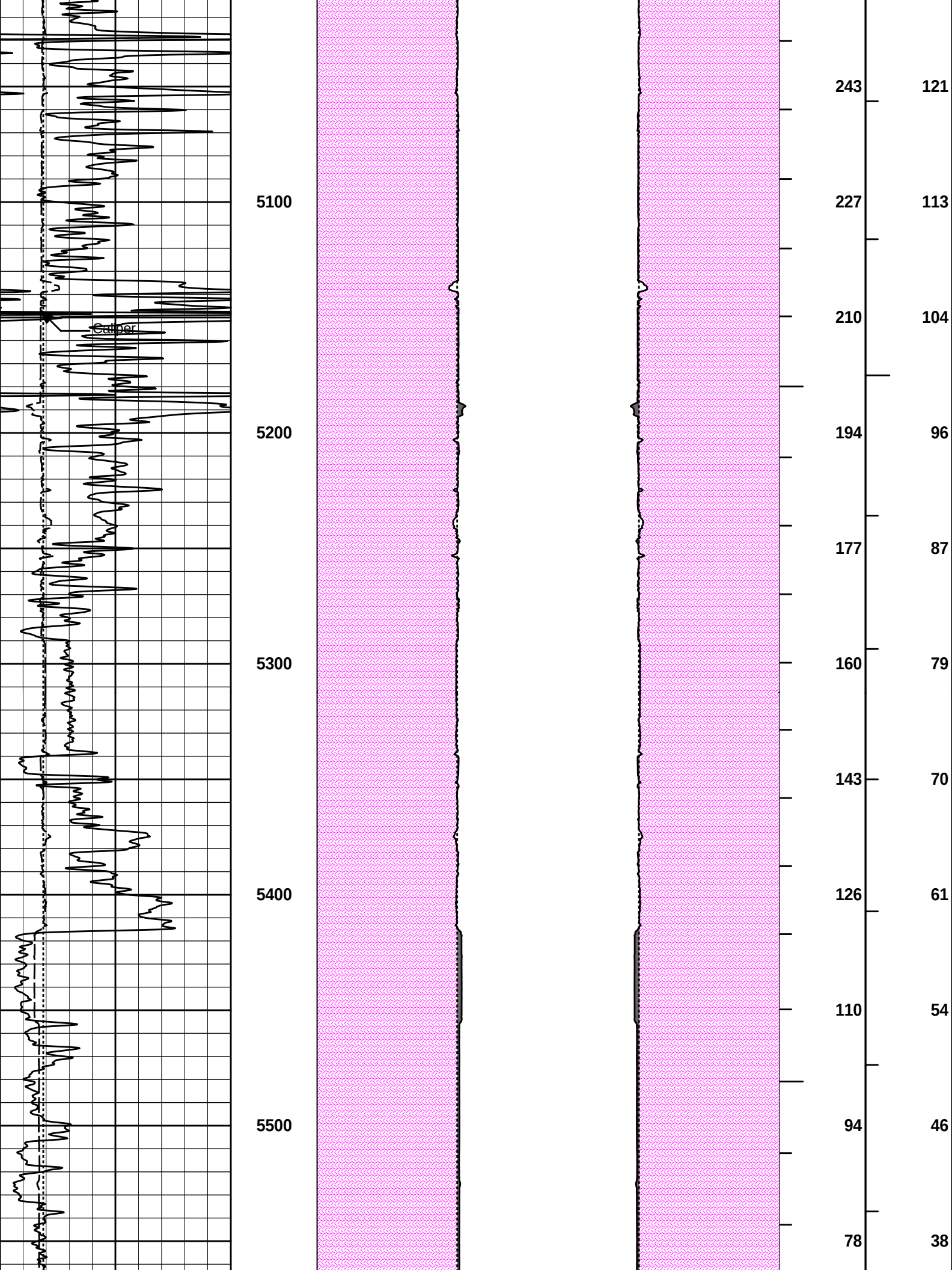
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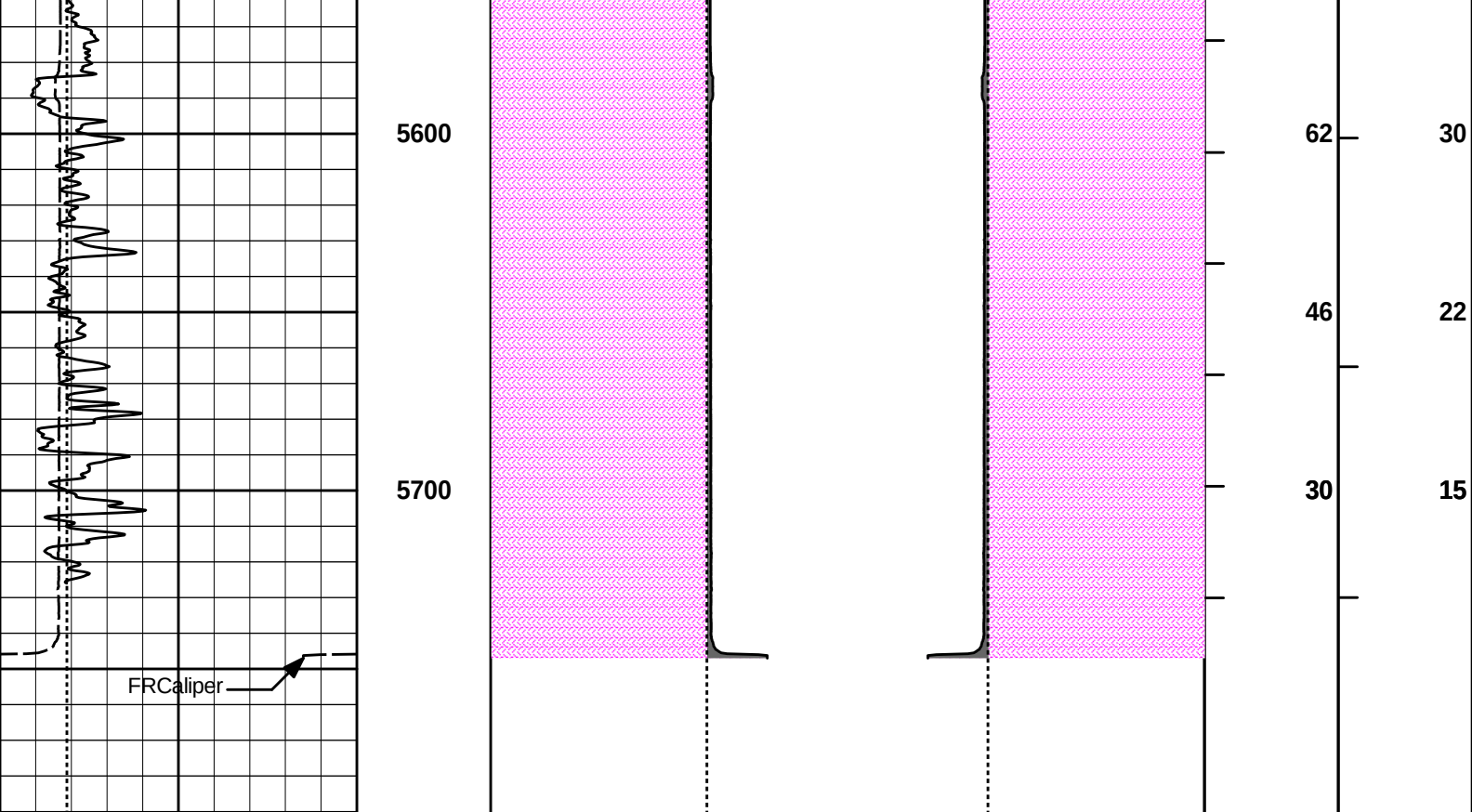
404











6	Caliper	16	1 : 600	20	Caliper	0 0	20	BHVT	AHVT
	inches		ft		inches				
6	BS	16		20	Bit Size	0 0	20		
	inches								
0	Gamma API	150			MUDCAKE		MUDCAKE		
	api								

HALLIBURTON

Plot Time: 11-Mar-13 03:02:38

Plot Range: 1800 ft to 5791 ft

Data: BATMAN_B_1\Well Based\DAQ-0001-003\

Plot File: \\LOCAL\BATMAN_B_1\0001 SP-GTET-DSNT-SDLT-FLEX-BSAT-ACRT-BNIPORO\AHV_5_5_INCH_2_IQ_LIB

ANNULAR HOLE VOLUME PLOT (5.5 INCH)

COMPANY	OXY USA		
WELL	BATMAN B-1		
FIELD	HUGOTON GAS AREA		
COUNTY	HASKELL	STATE	KANSAS
HALLIBURTON		DUAL SPACED NEUTRON SPECTRAL DENSITY LOG	