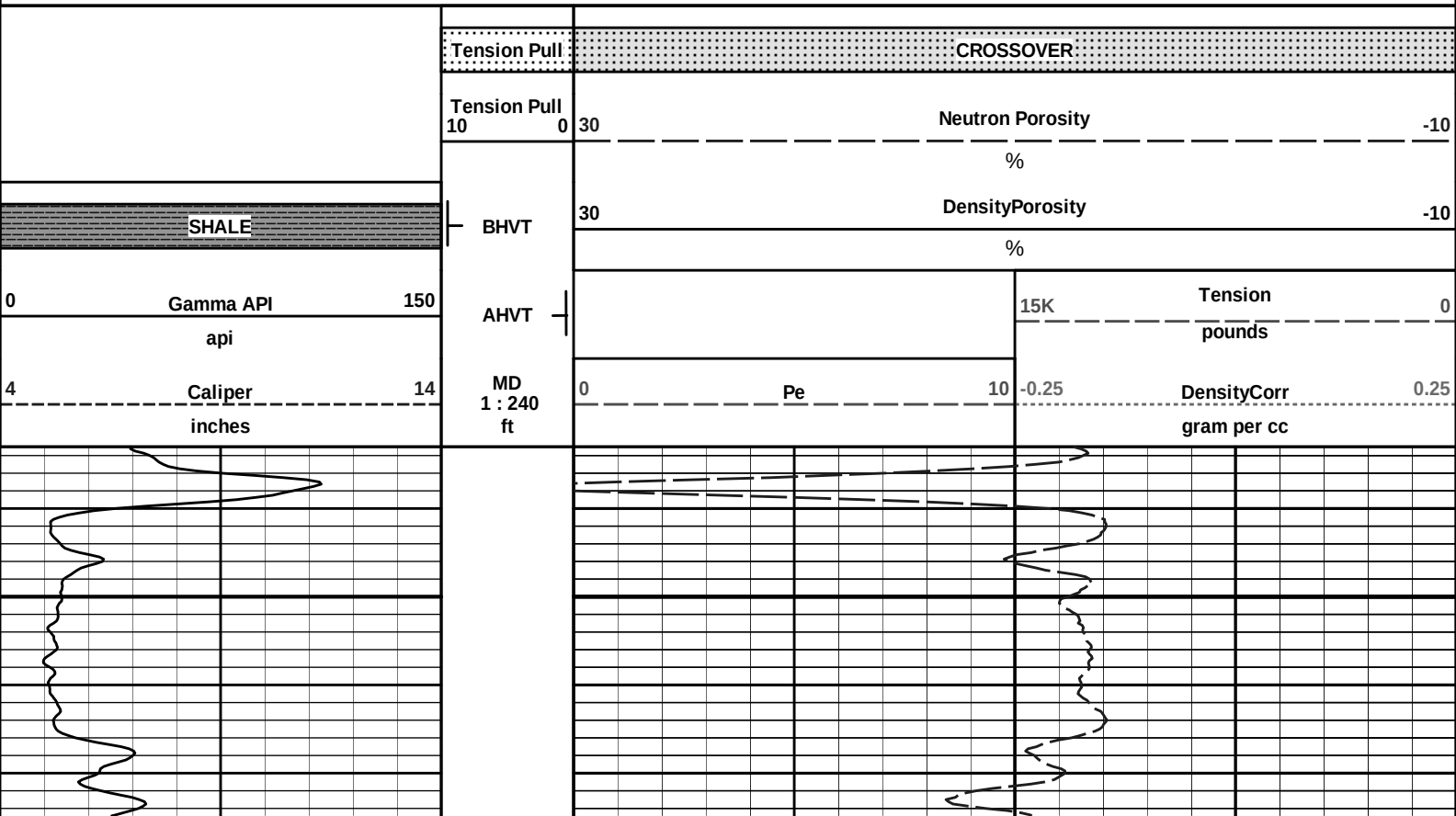


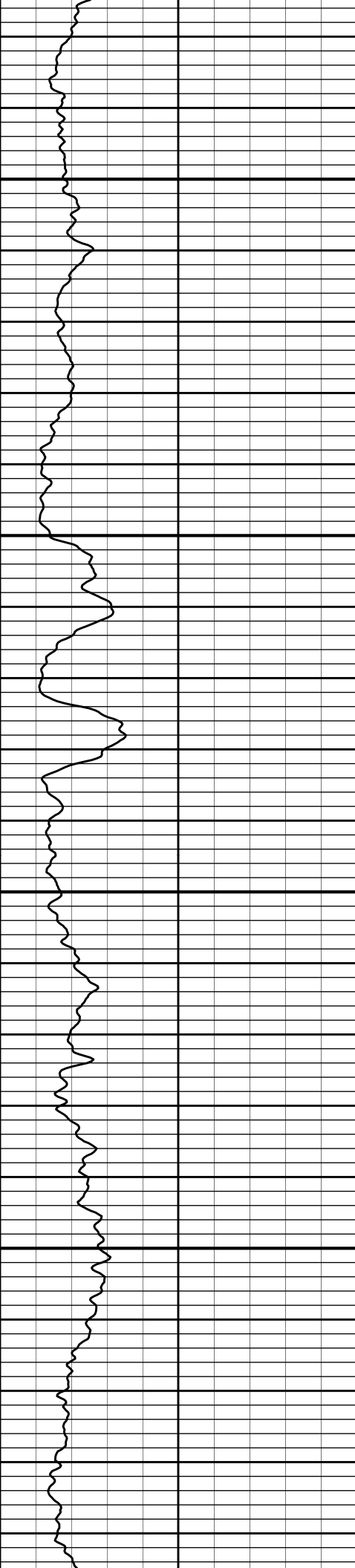
HALIBURTON

SPECTRAL DENSITY DUAL SPACED NEUTRON LOG

COMPANY		SANDRIDGE ENERGY	
WELL		TOEWS 2629 1-21H	
FIELD		GRAY	
COUNTY		KANSAS	
STATE		KANSAS	
Permanent Datum		GL	
Log measured from		KB	
Drilling measured from		KB	
Date		22-Jul-12	
Run No.		ONE	
Depth - Driller		9366.00 ft	
Depth - Logger		9366.0 ft	
Bottom - Logged Interval		9308.0 ft	
Top - Logged Interval		5133.0 ft	
Casing - Driller		7.000 in @ 5410.0 ft	
Casing - Logger		5428.0 ft	
Bit Size		6.125 in @	
Type Fluid in Hole		WATER BASED MUD	
Density		8.7 ppq 30.00 s/qt	
PH		7.50 pH 10.0 cp/m	
Source of Sample		MUD PIT	
Rm @ Meas. Temperature		0.350 ohmm @ 85.00 degF @	
Rmf @ Meas. Temperature		0.35 ohmm @ 80.00 degF @	
Rmc @ Meas. Temperature		0.400 ohmm @ 80.00 degF @	
Source Rmf		MEAS	
Rm @ BHT		0.20 ohmm @ 142.0 degF @	
Time Since Circulation		21.3 hr	
Time on Bottom		23-Jul-12 09:33	
Max. Rec. Temperature		142.0 degF @ 9336.0 ft @	
Equipment		10546696 LIBERAL	
Recorded By		C. HAVERKAMP	
Witnessed By		O. ESPARZA	

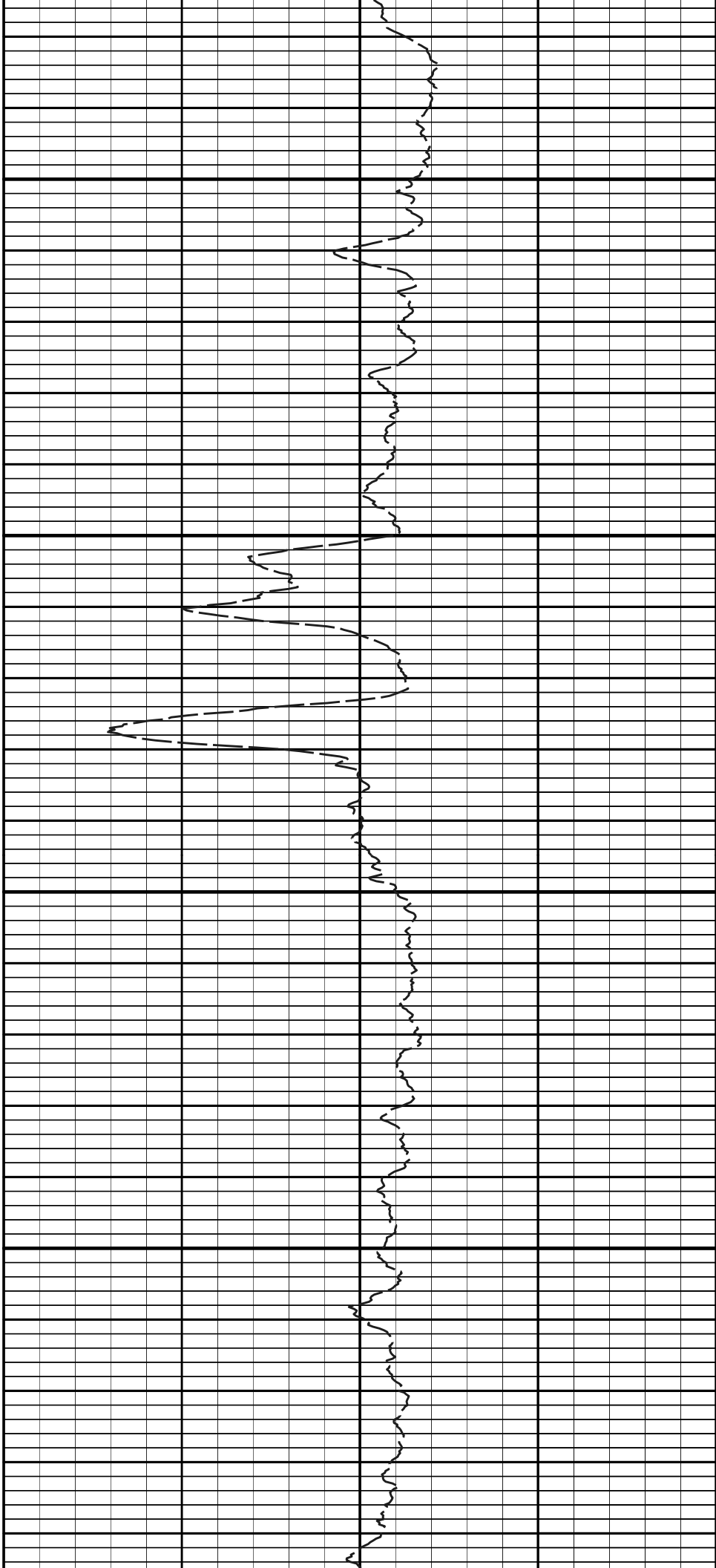
Service Ticket No.: 9687450		API Serial No.: 15-069-20378		PGM Version: WL INSITE R3.6.0 (Build 3)			
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE				RESISTIVITY SCALE CHANGES			
Date	Sample No.			Type Log	Depth	Scale Up Hole	Scale Down Hole
Depth-Driller							
Type Fluid in Hole							
Density	Viscosity						
Ph	Fluid Loss						
Source of Sample				RESISTIVITY EQUIPMENT DATA			
Rm @ Meas. Temp	@	@		Run No.	Tool Type & No.	Pad Type	Tool Pos.
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.	11039640	Serial No.		Serial No.	P81	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.	5168 GW	Serial No.	DSN-424
Distance to Source	10'	FWDA [Y/N]		Strength	1.5 CI	Strength	15 CI

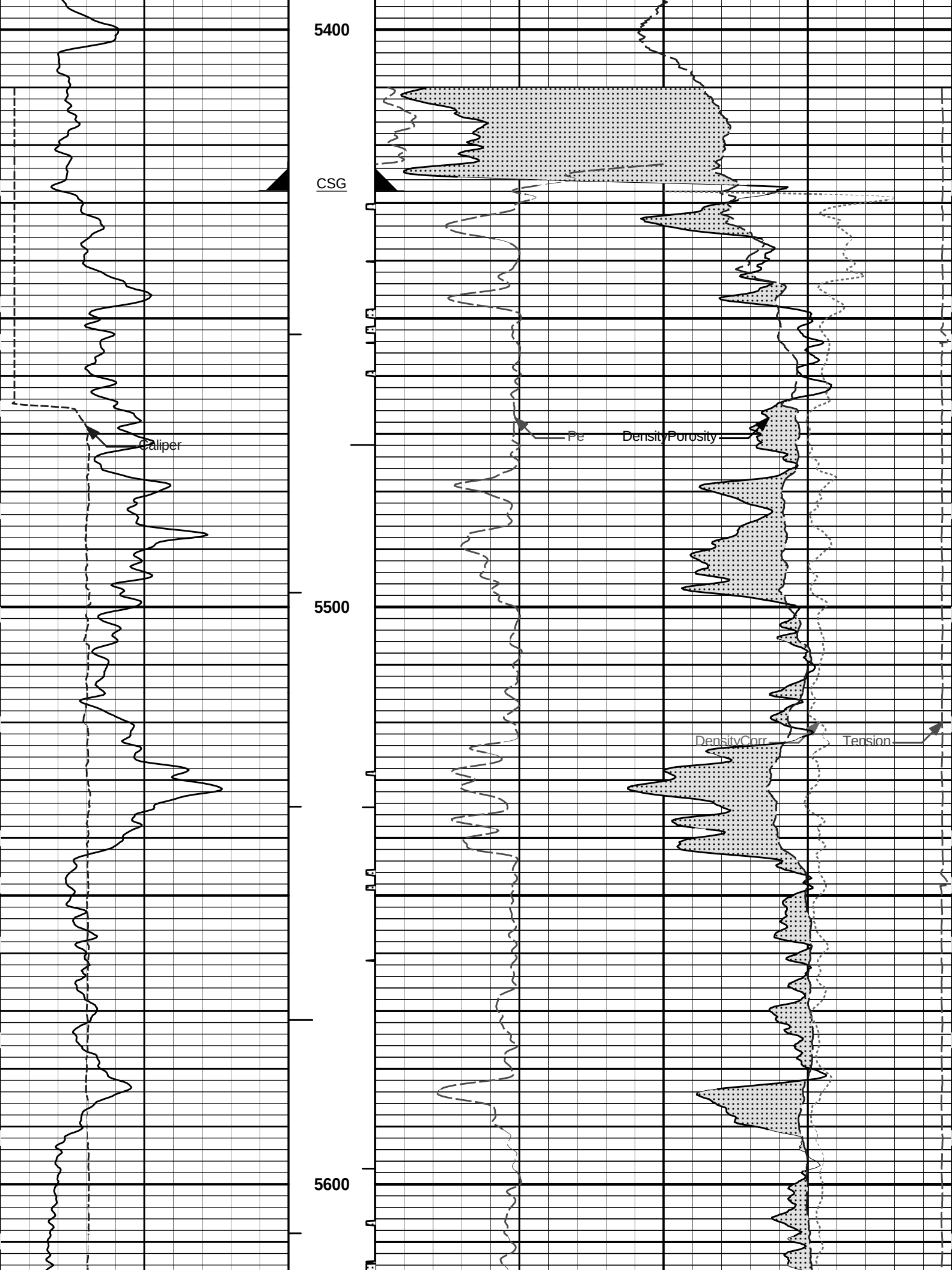


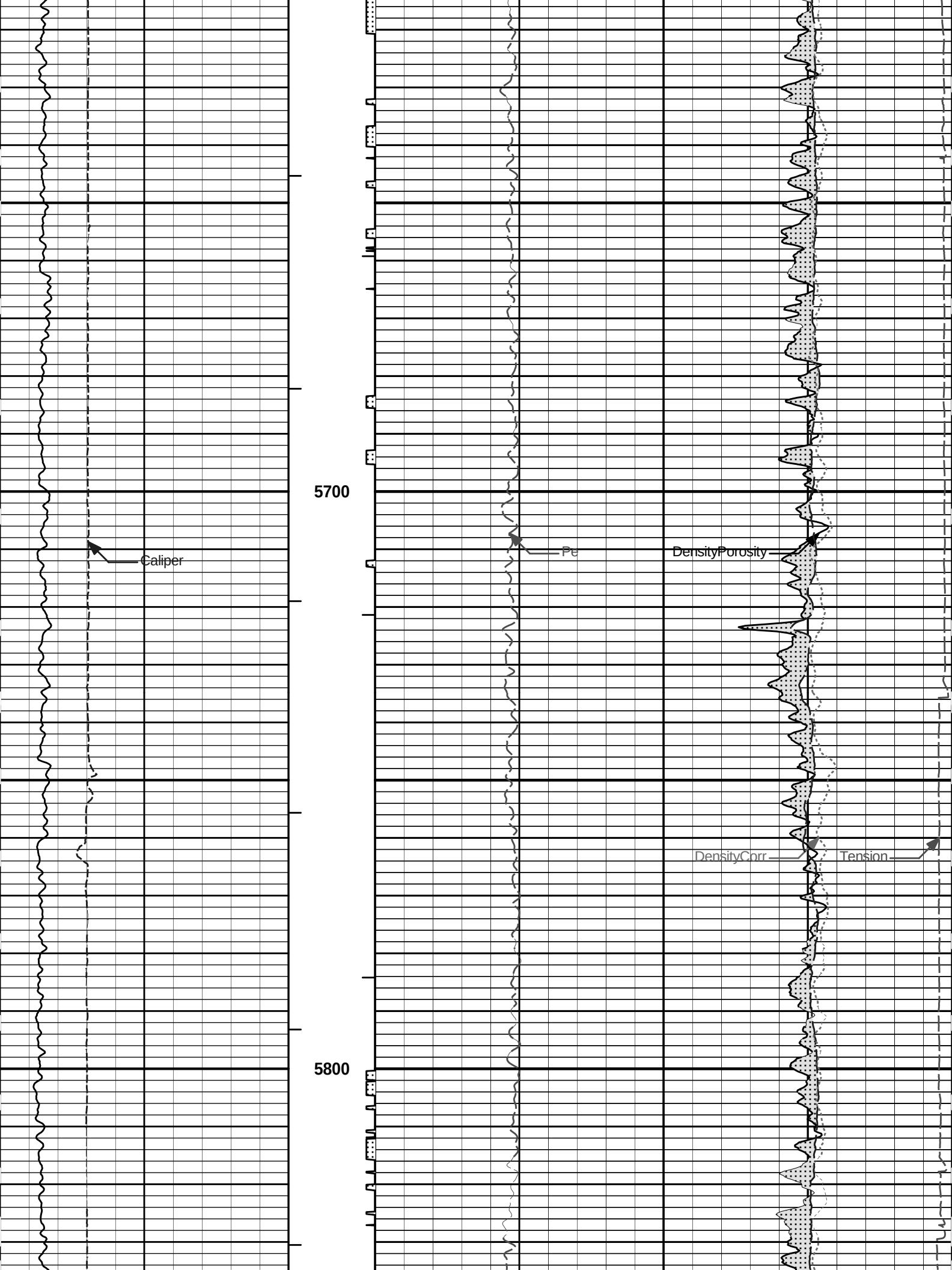


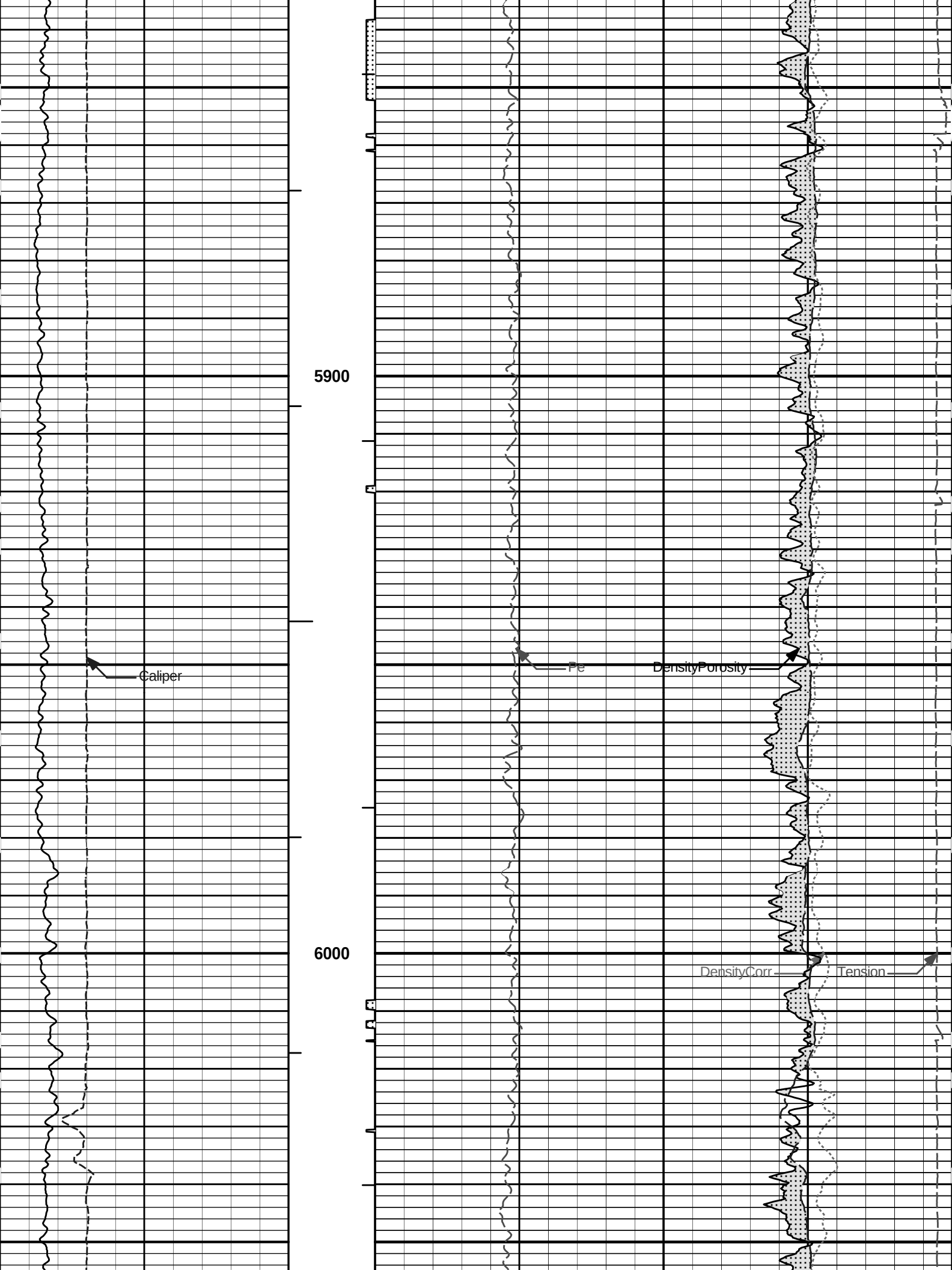
5200

5300

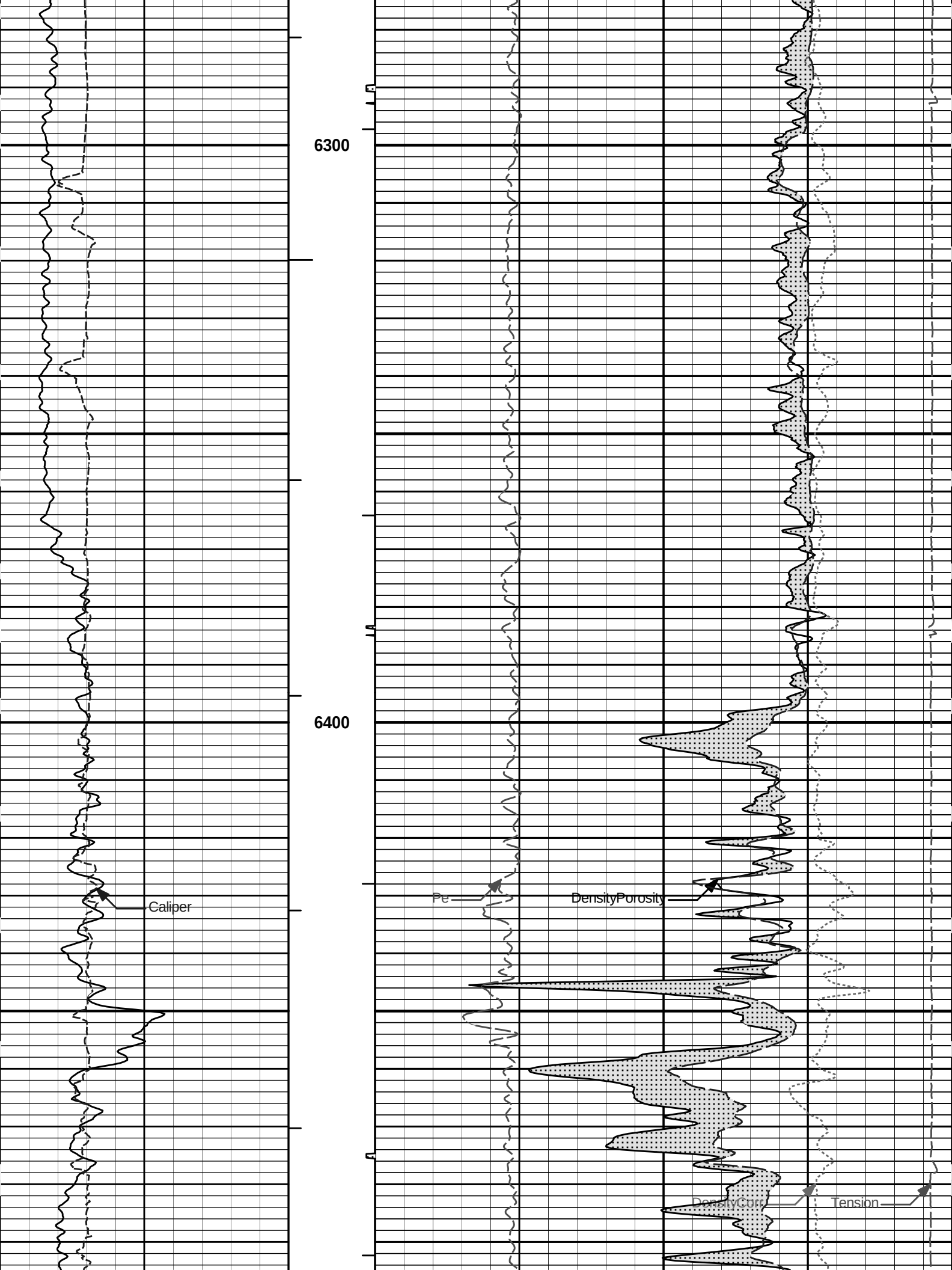


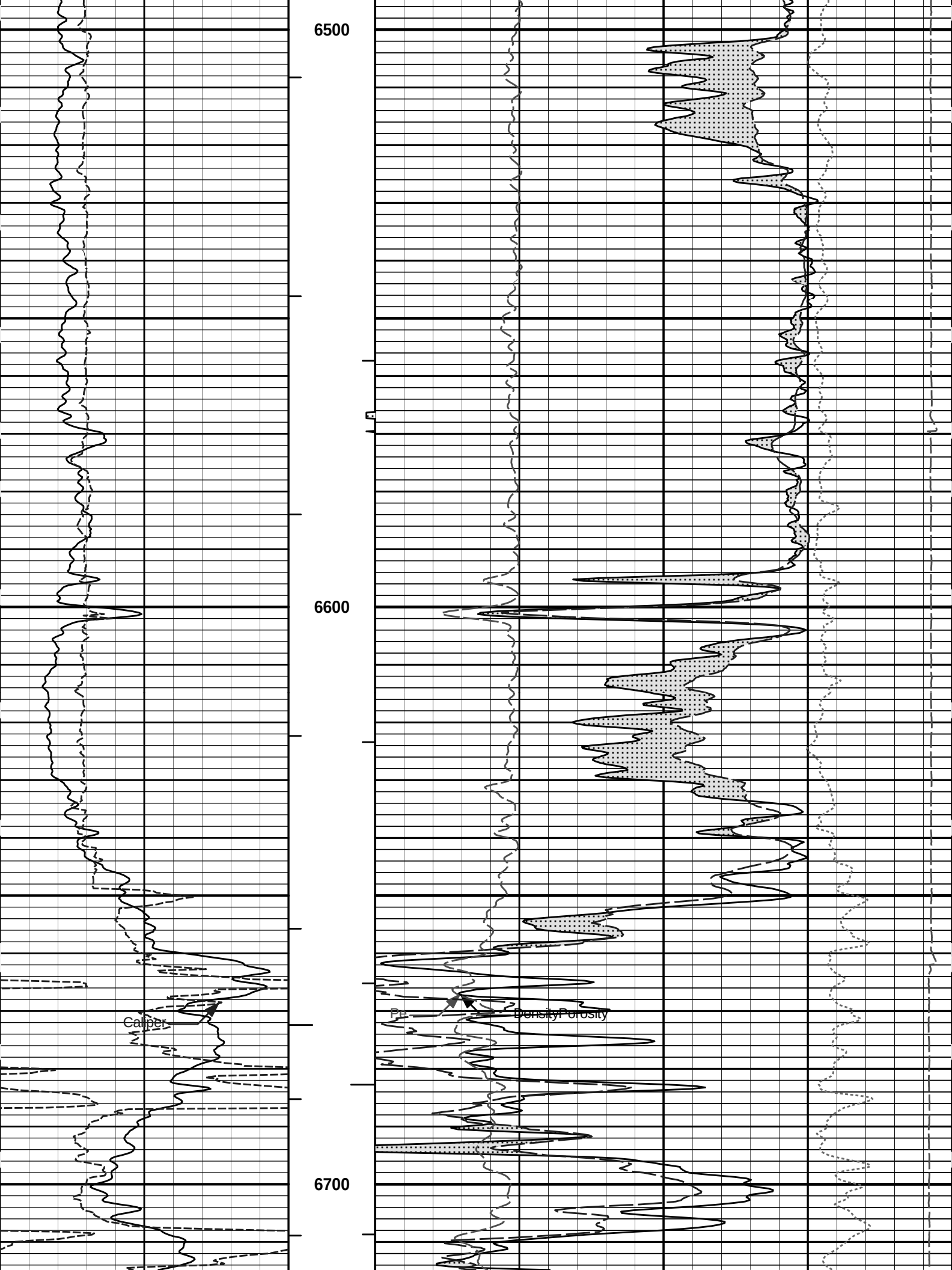


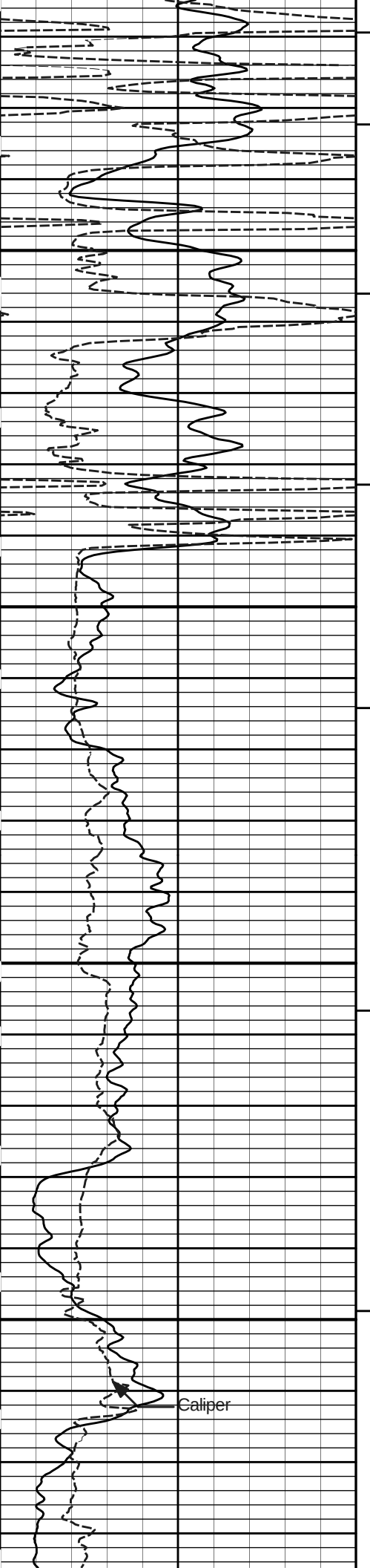








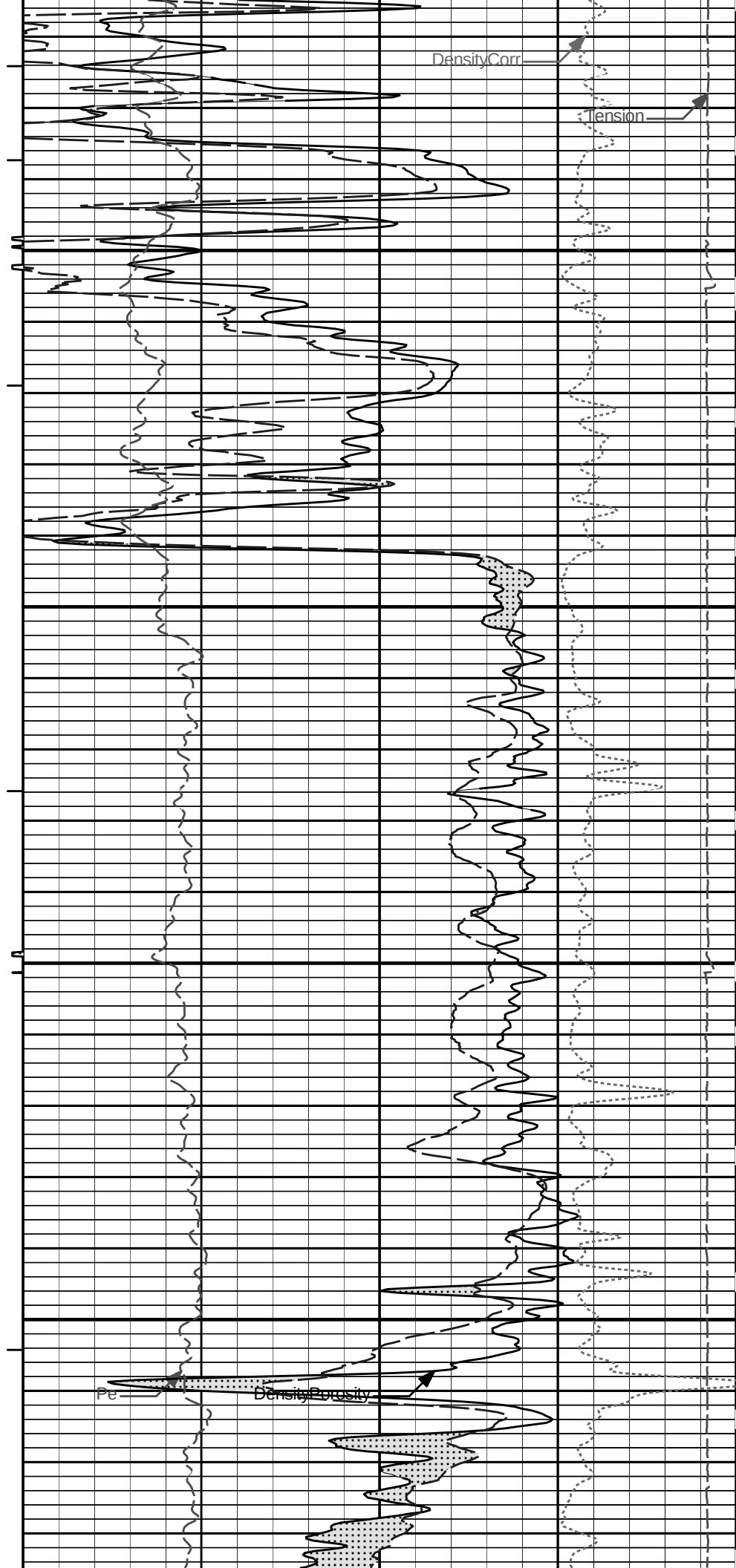




6800

6900

Caliper

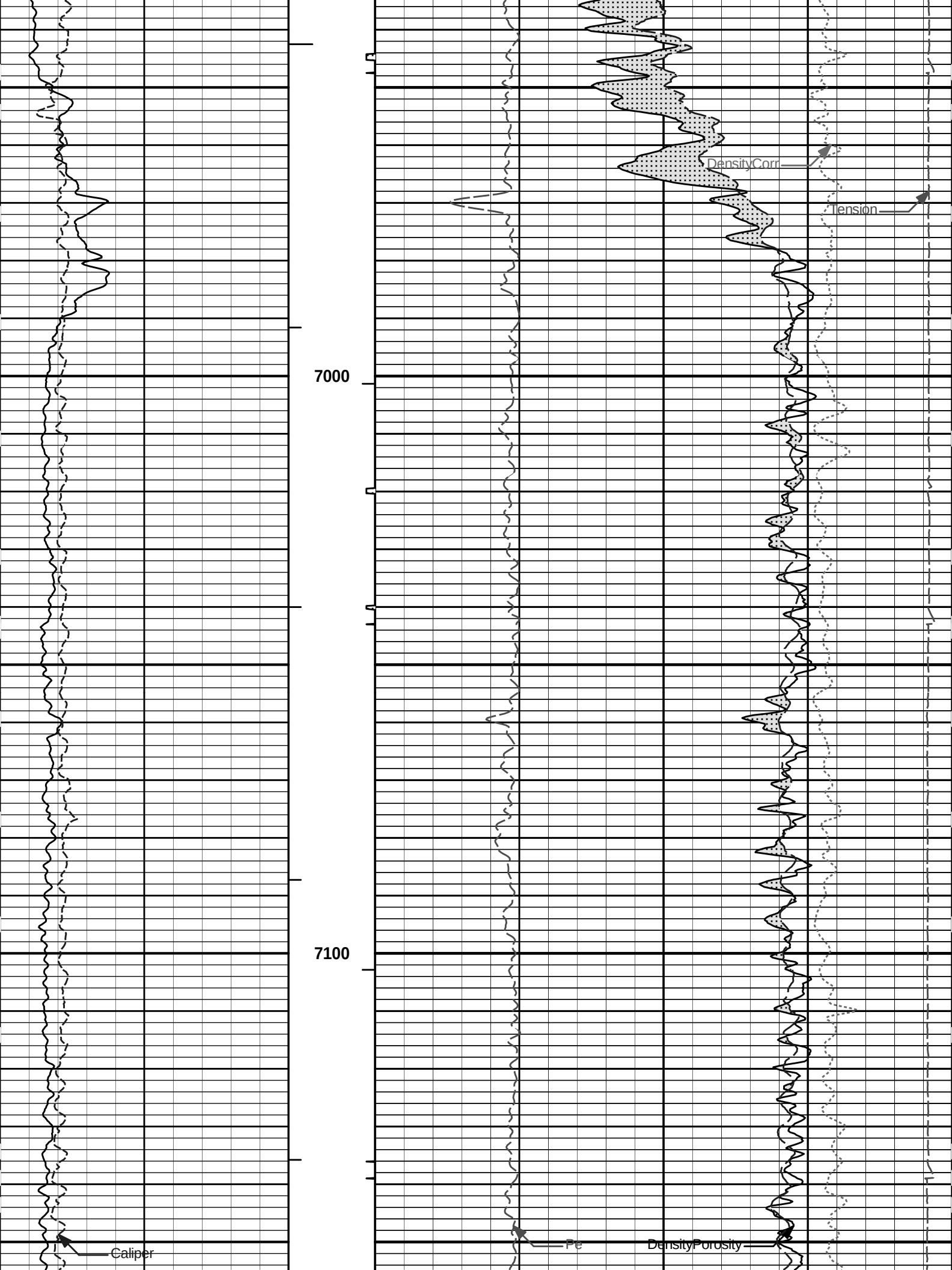


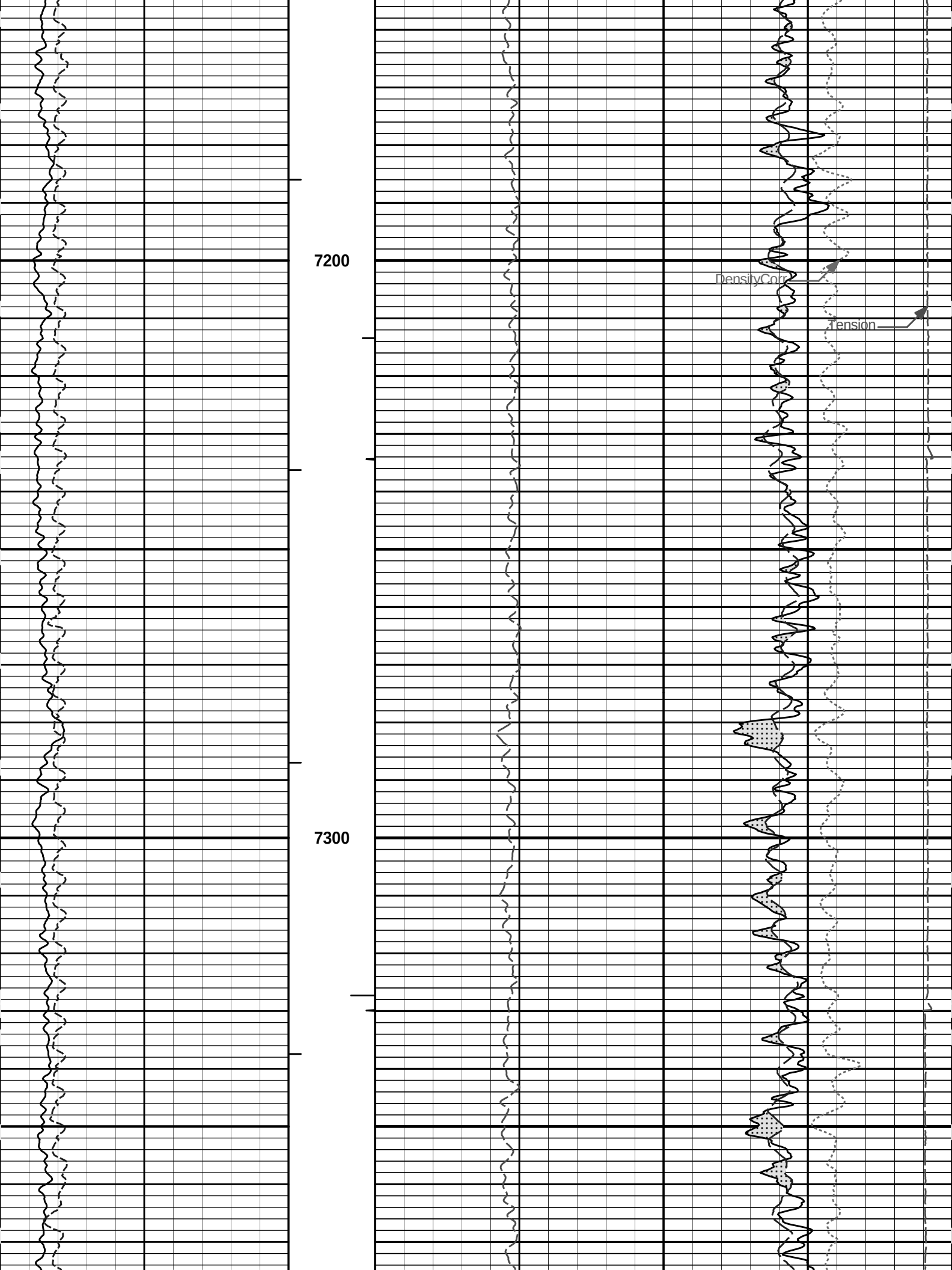
DensityCorr

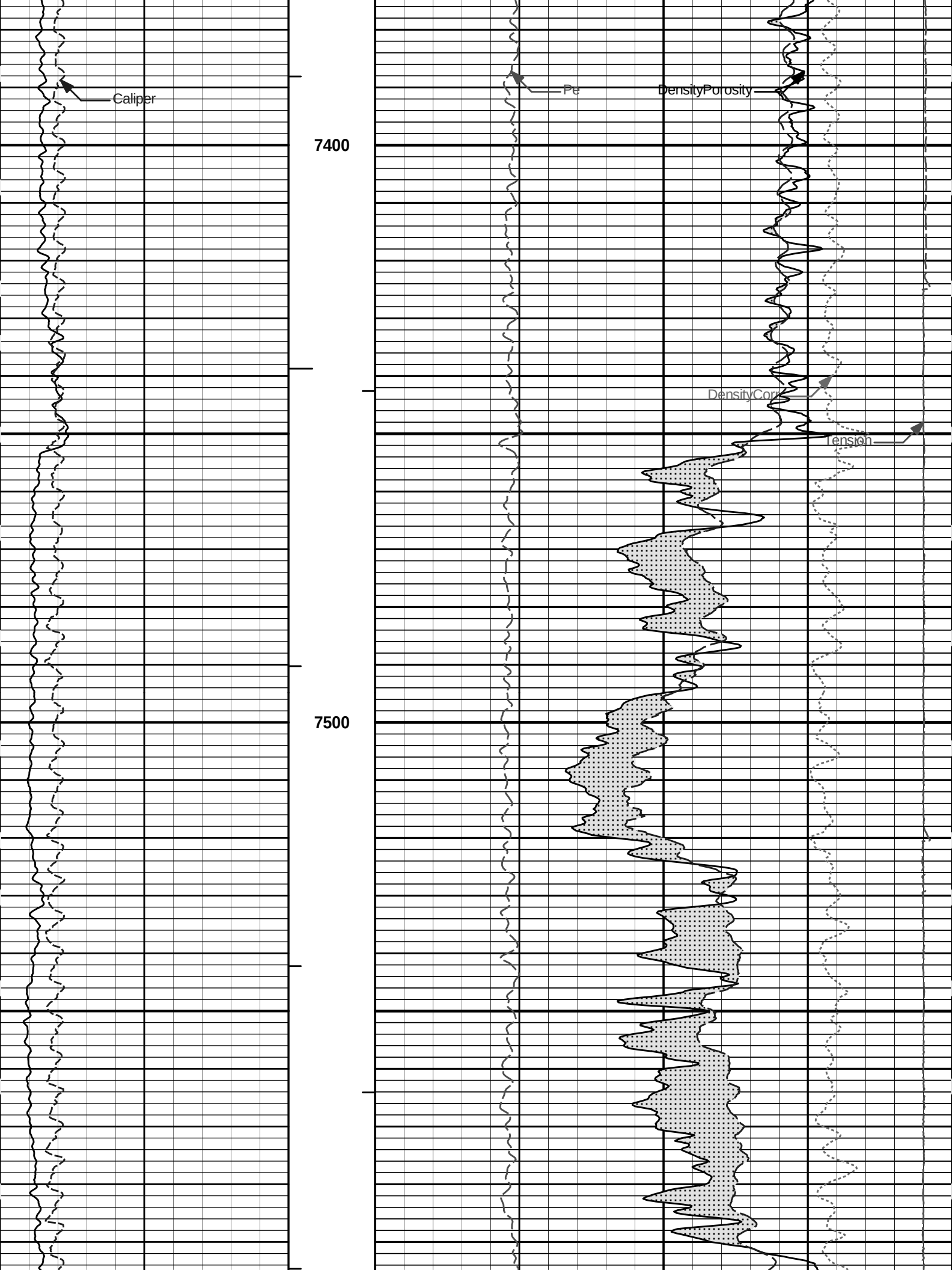
Tension

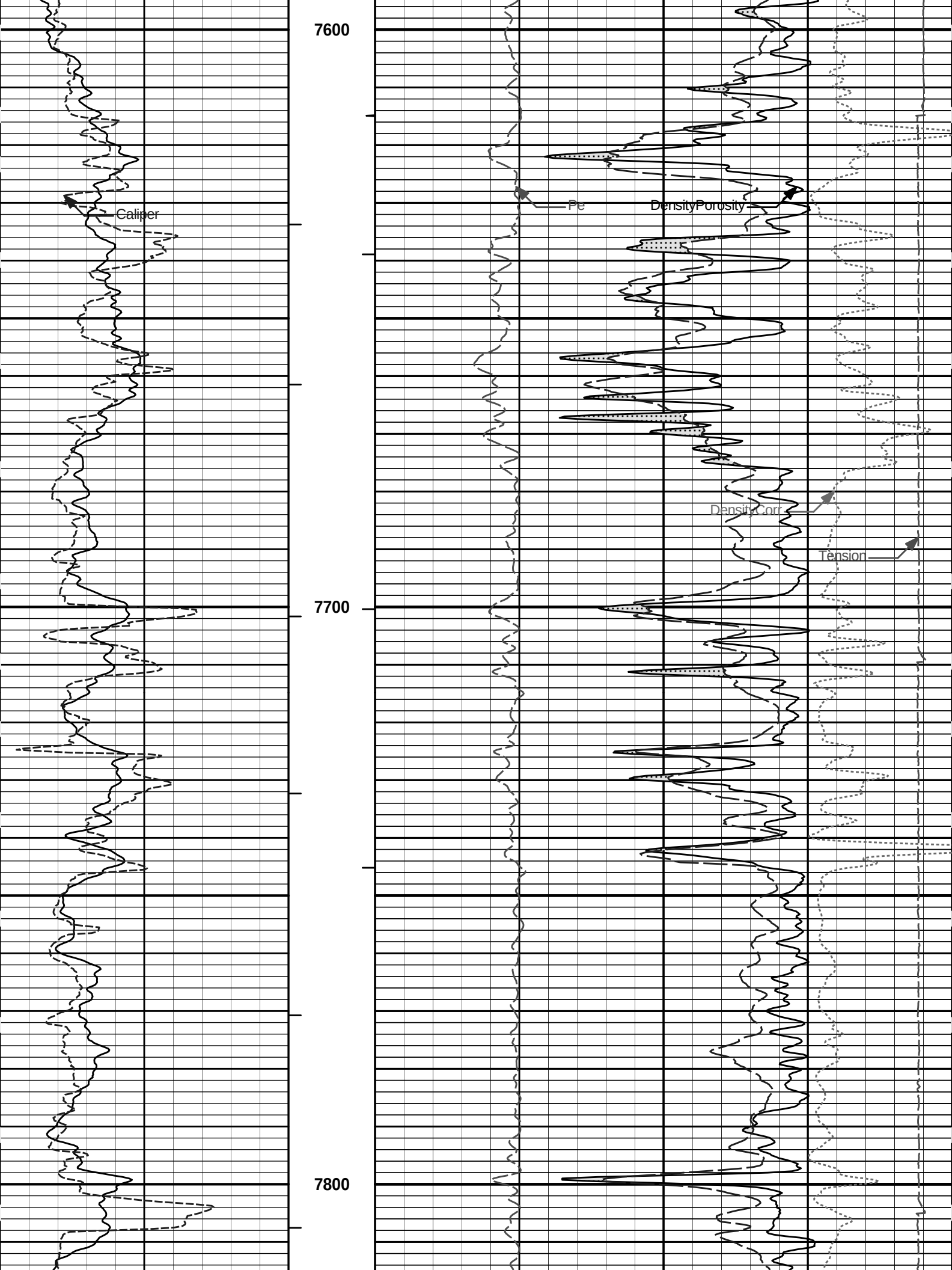
PE

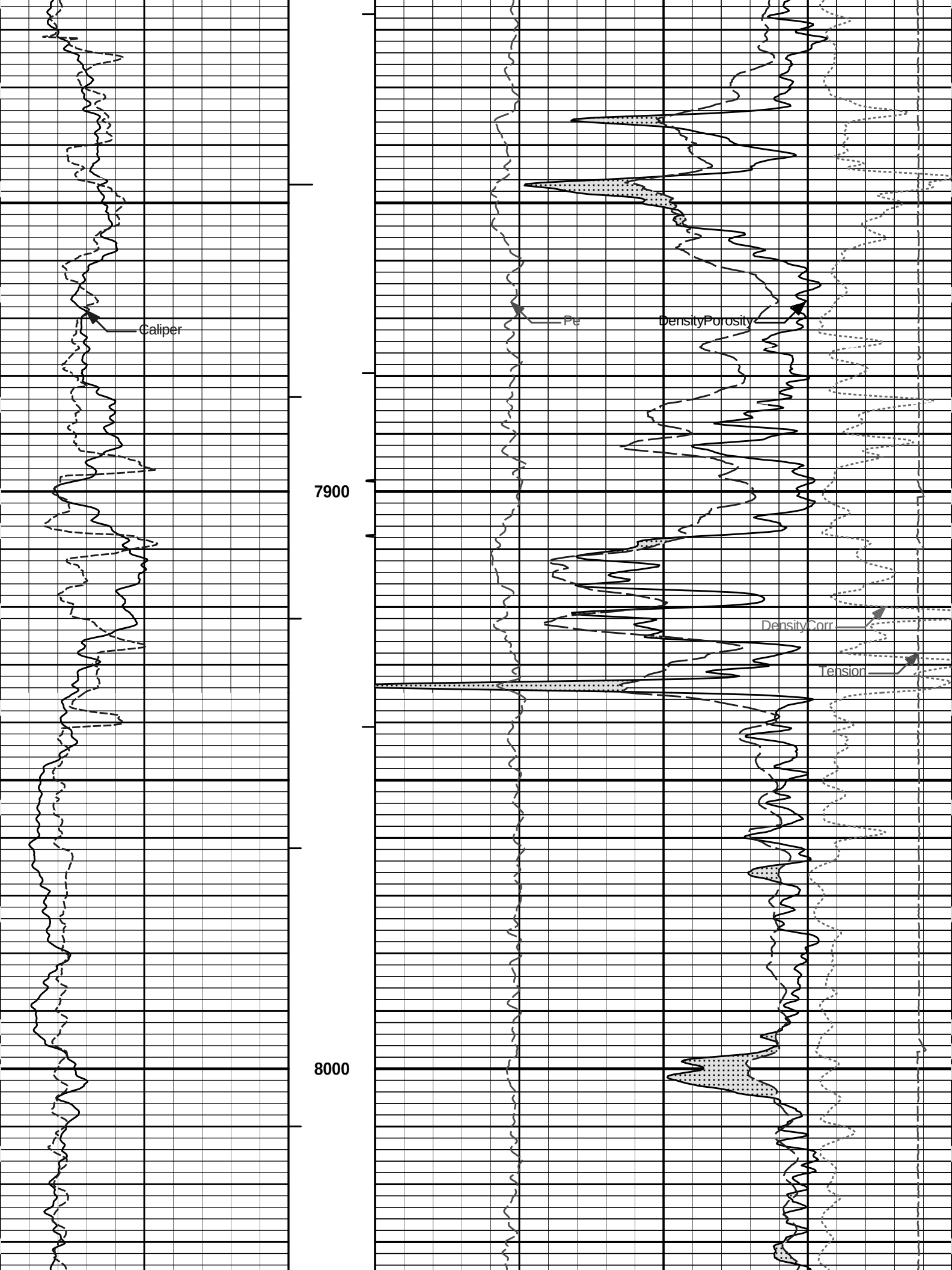
DensityPorosity

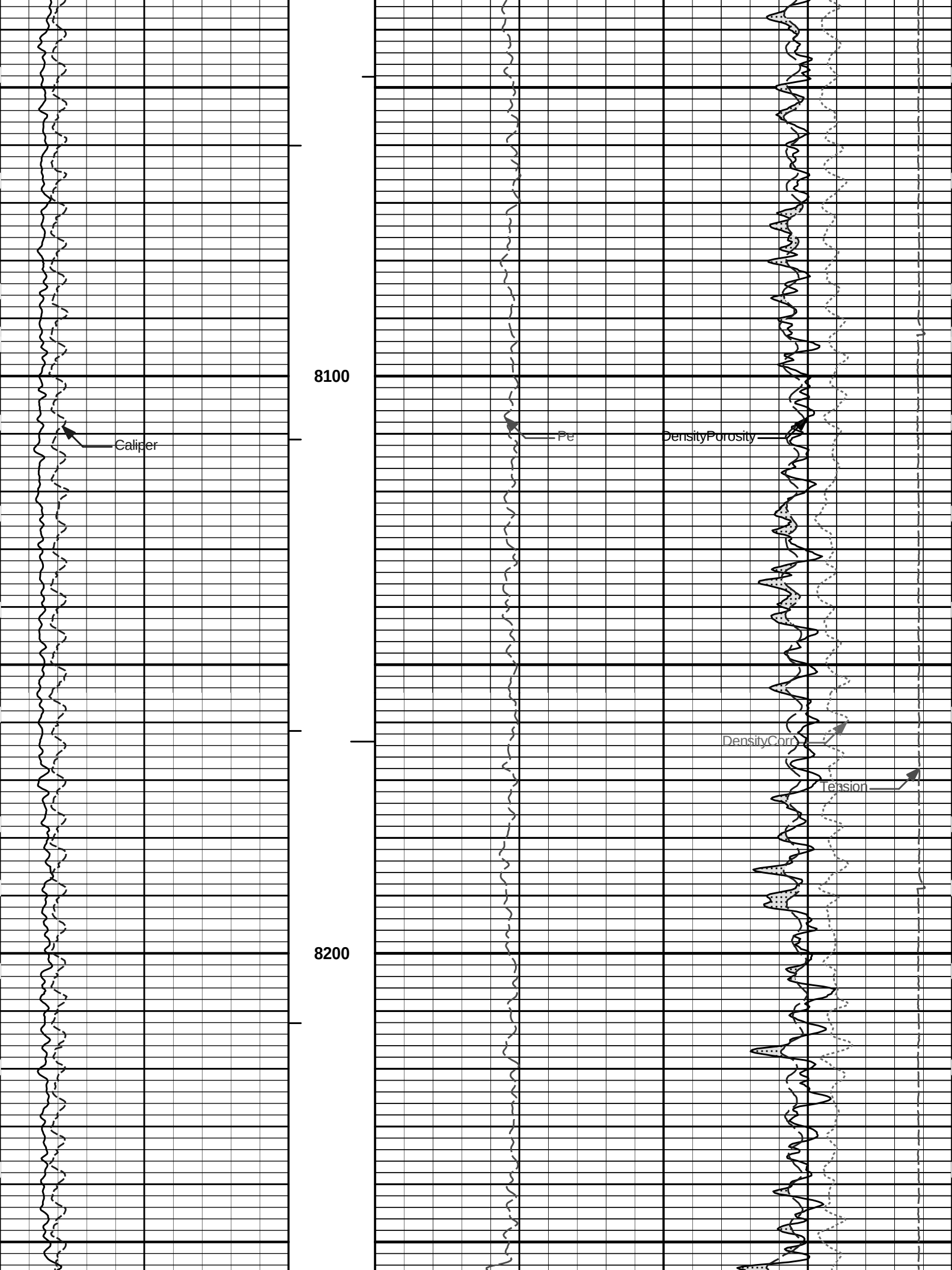




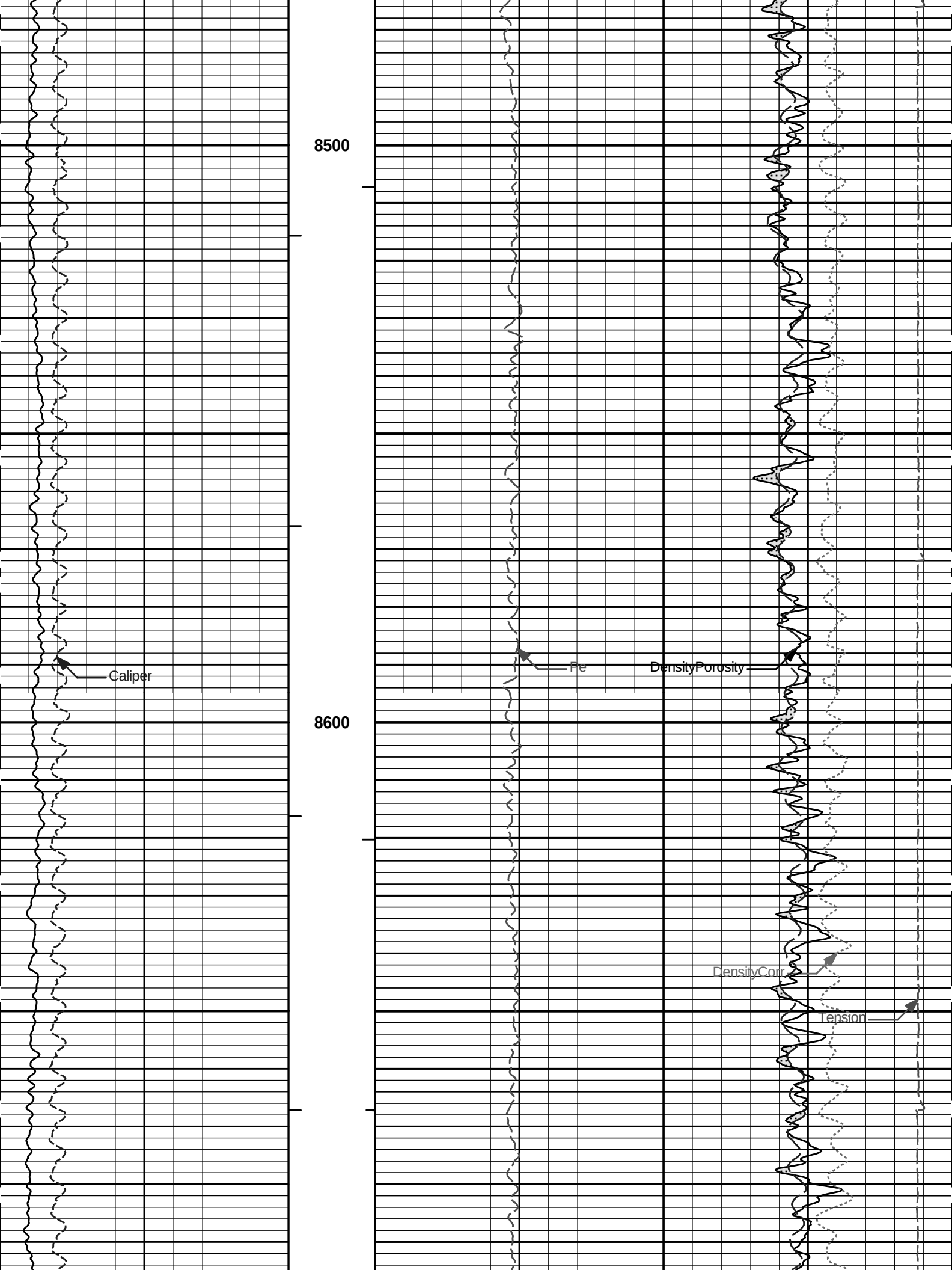


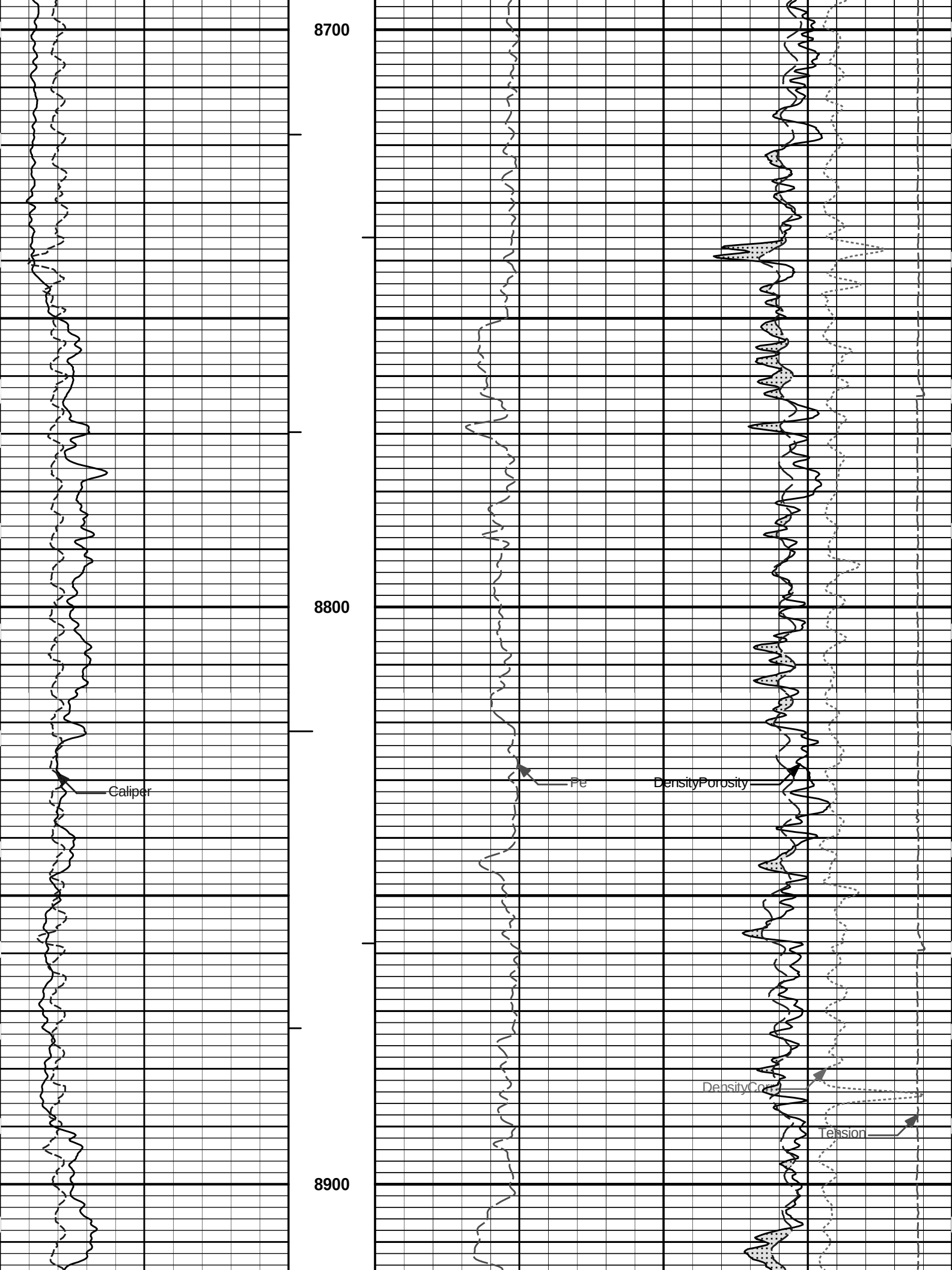


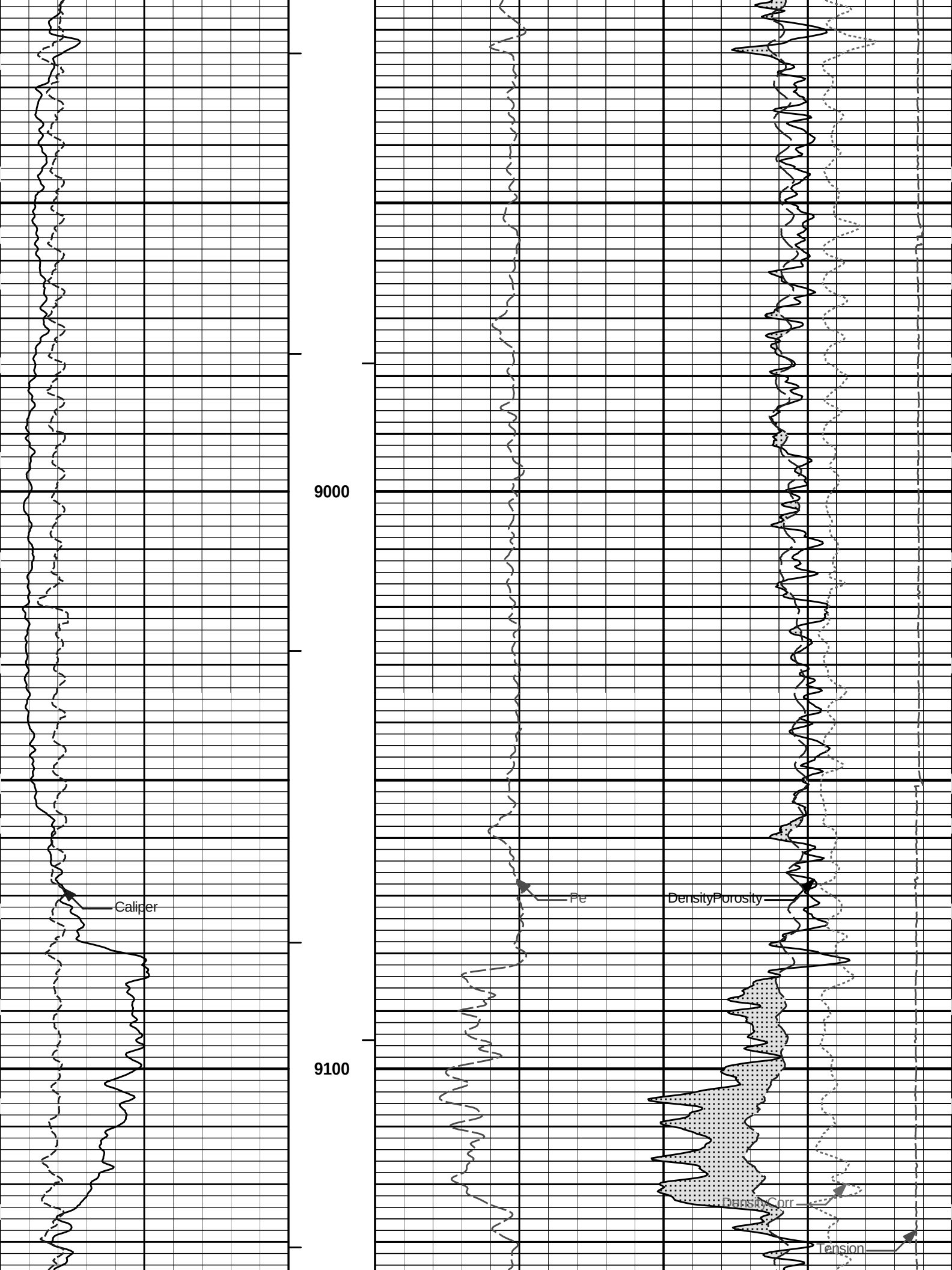


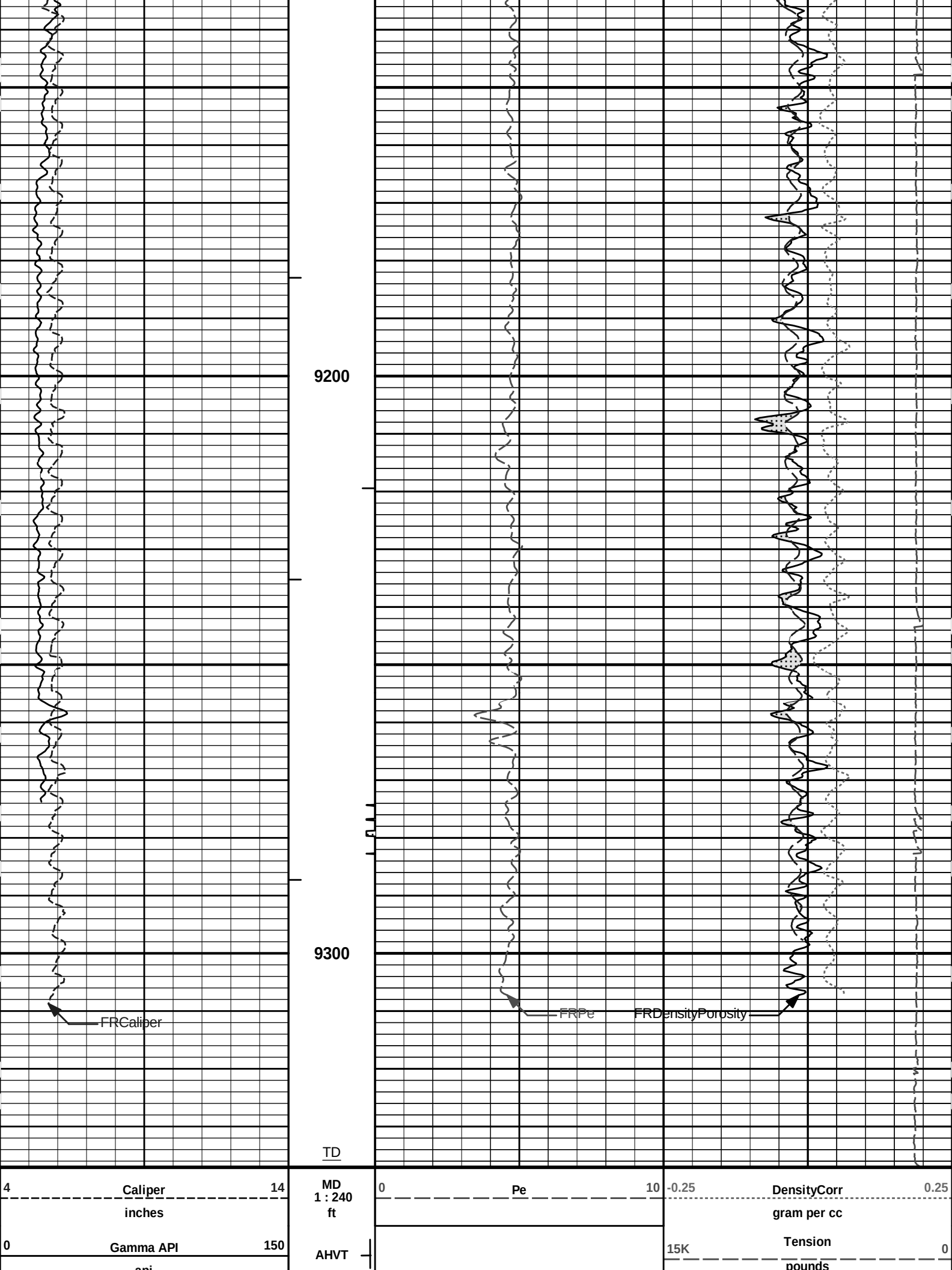












9200

9300

TD

FRCaliper

FRPe

FRDensityPorosity

4 Caliper 14
inches

0 Gamma API 150
api

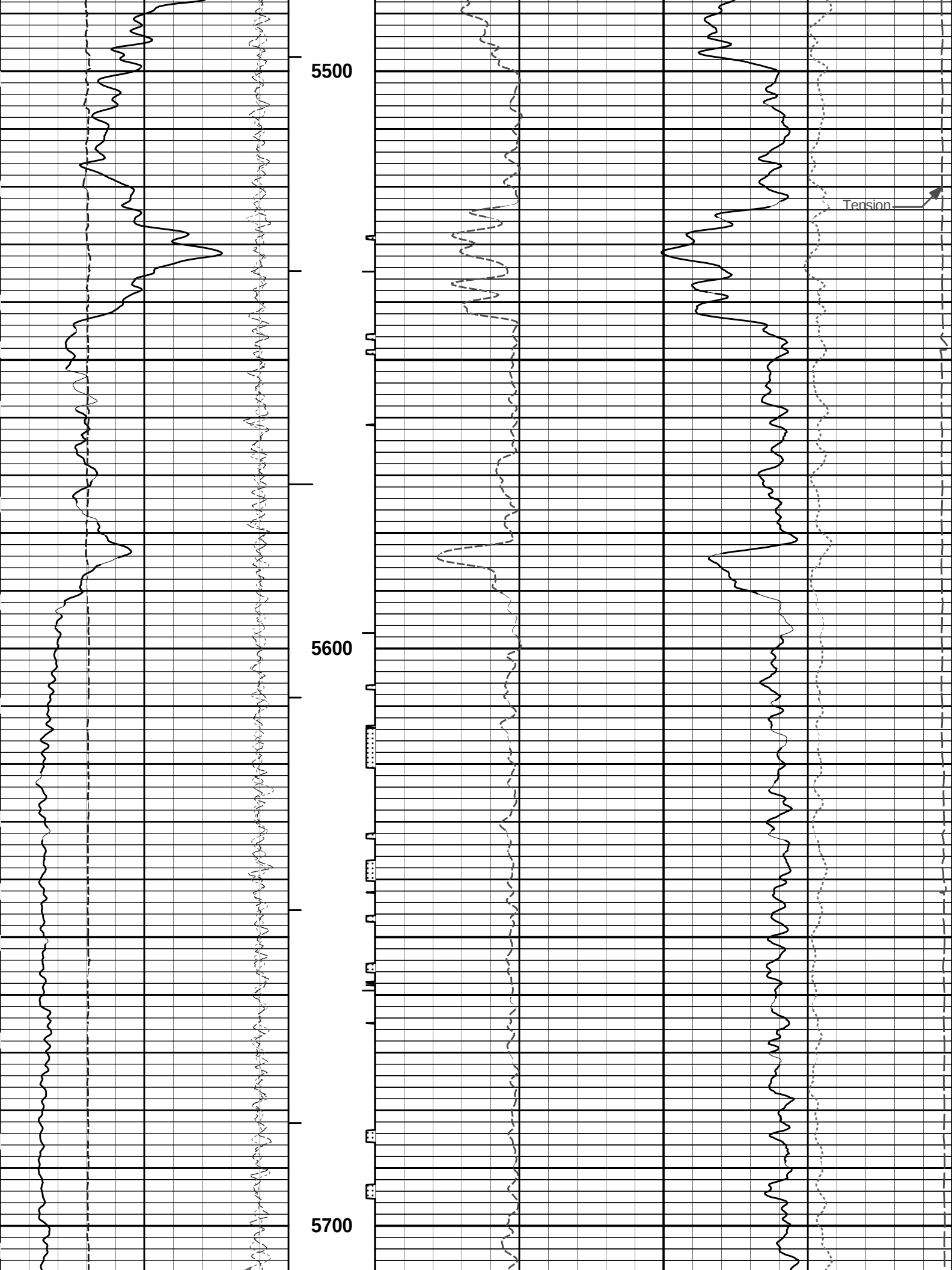
MD
1 : 240
ft

AHVT

0 Pe 10

-0.25 DensityCorr 0.25

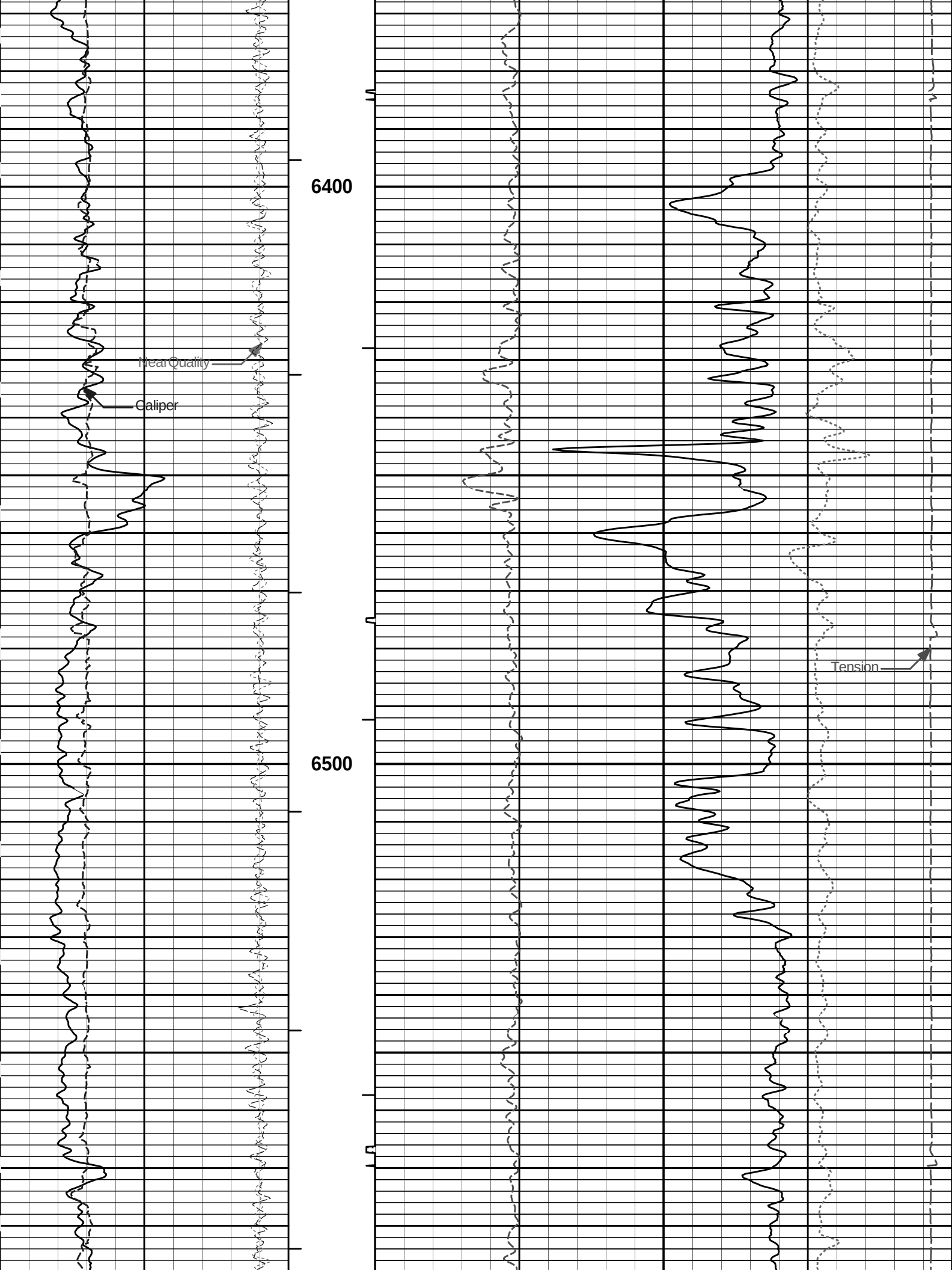
15K Tension 0
pounds

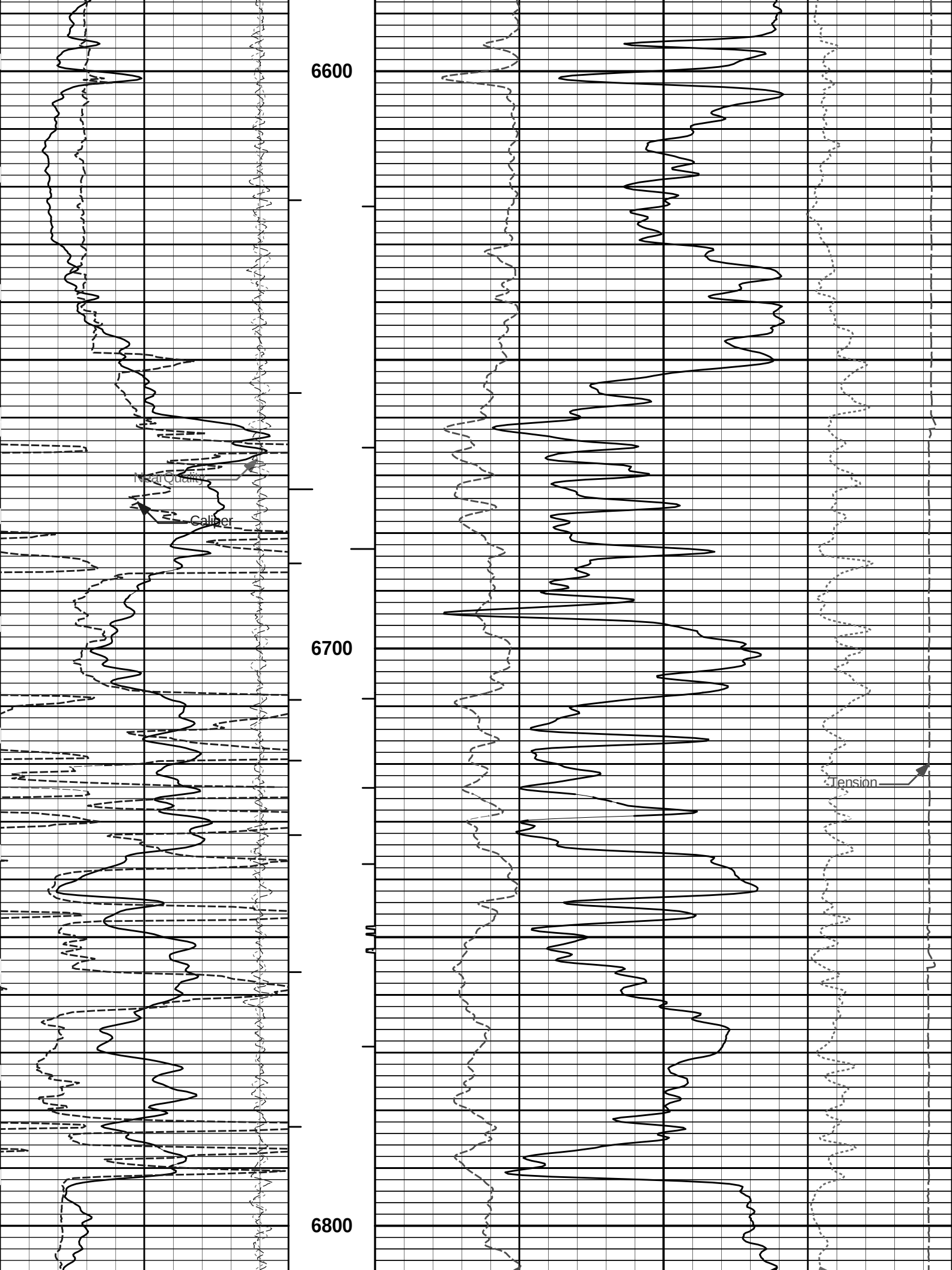


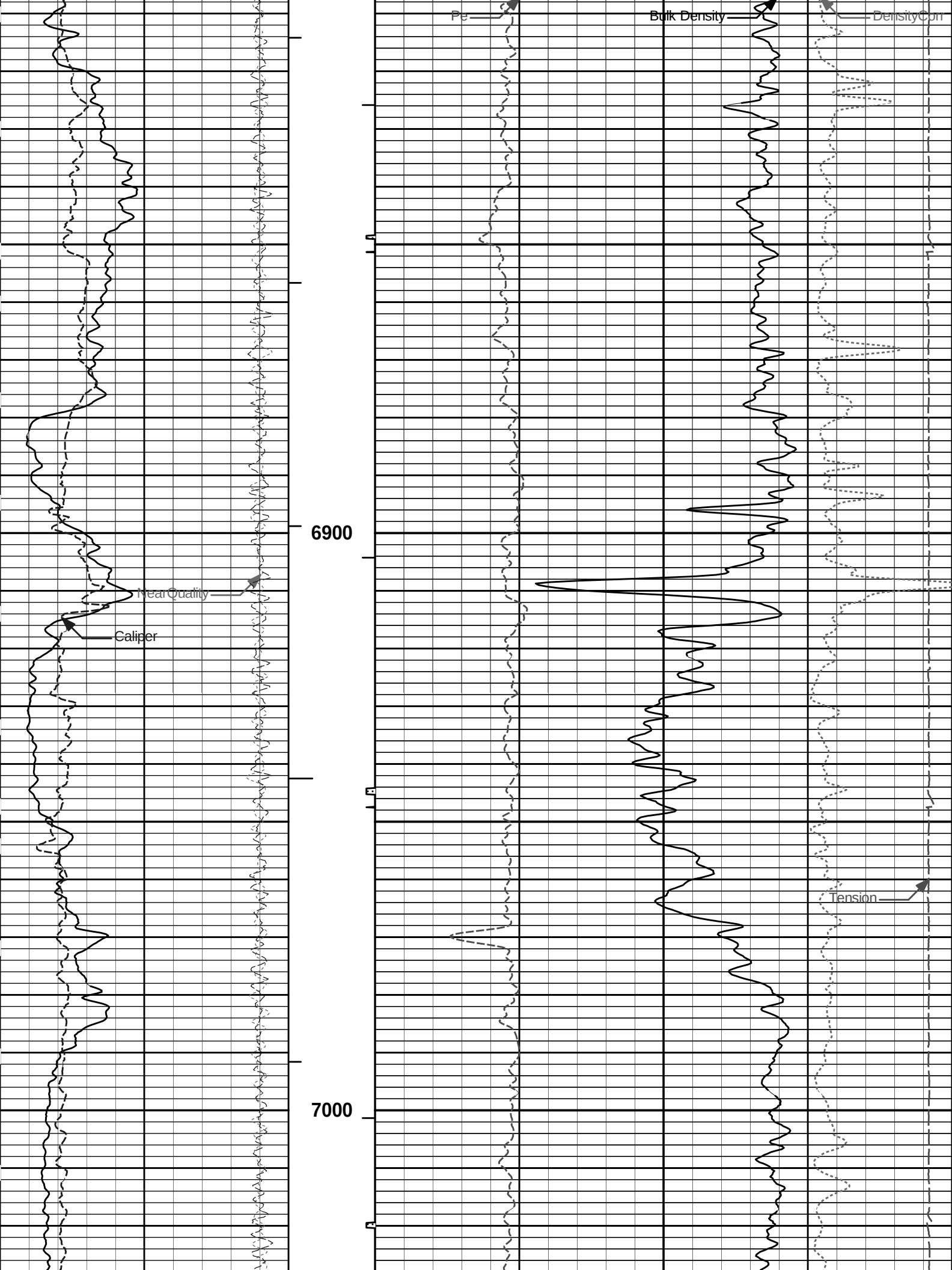


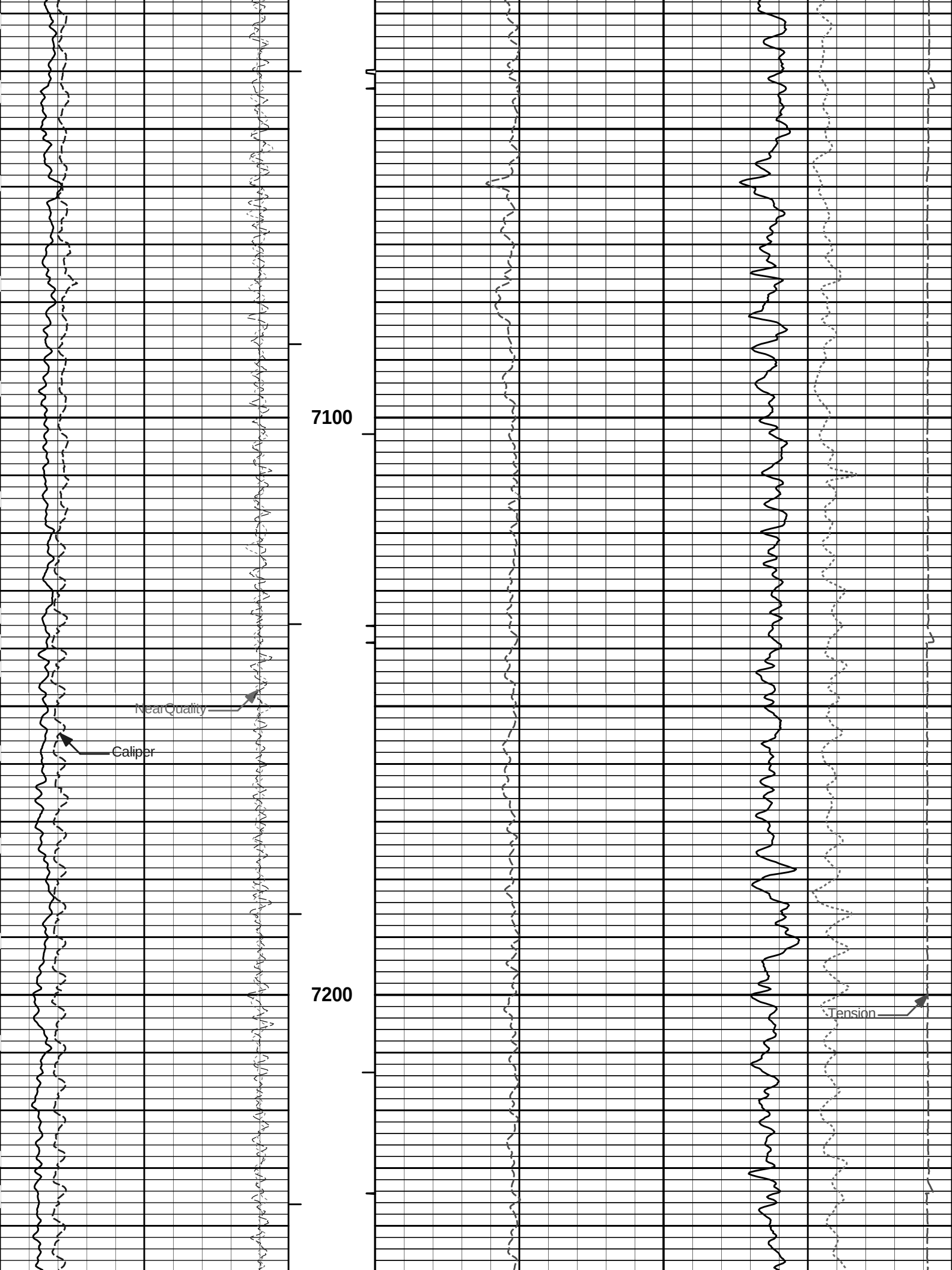


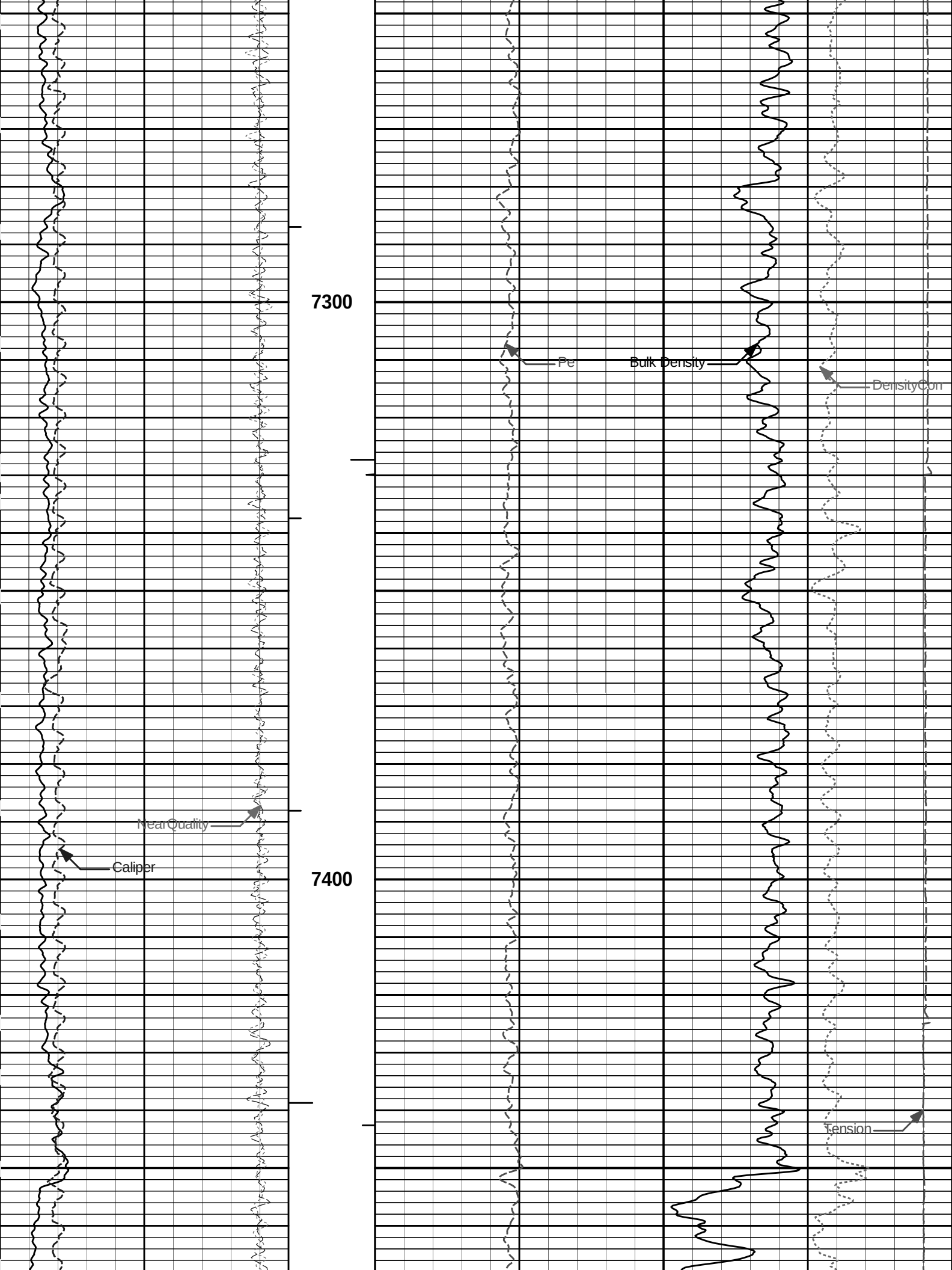


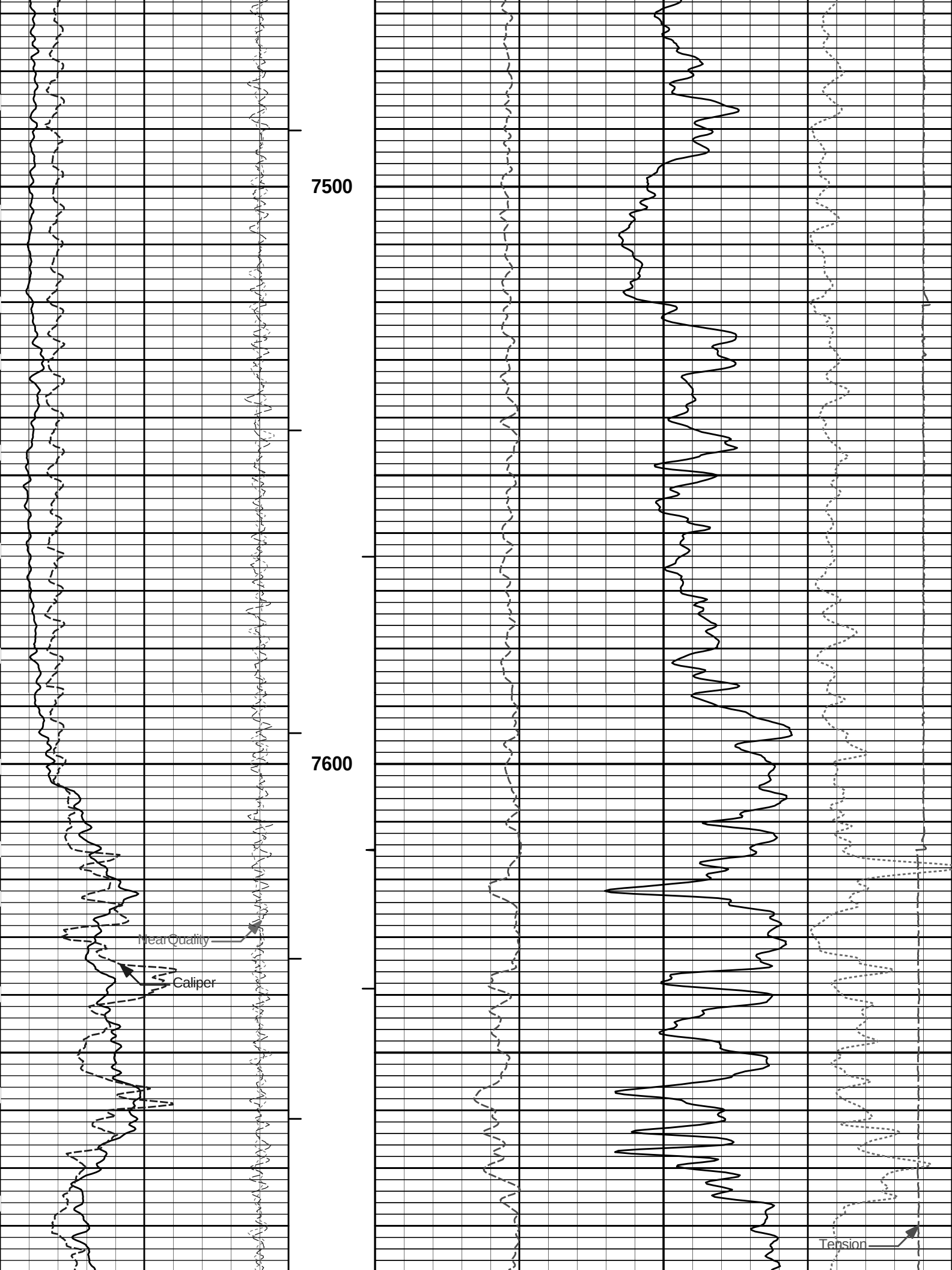


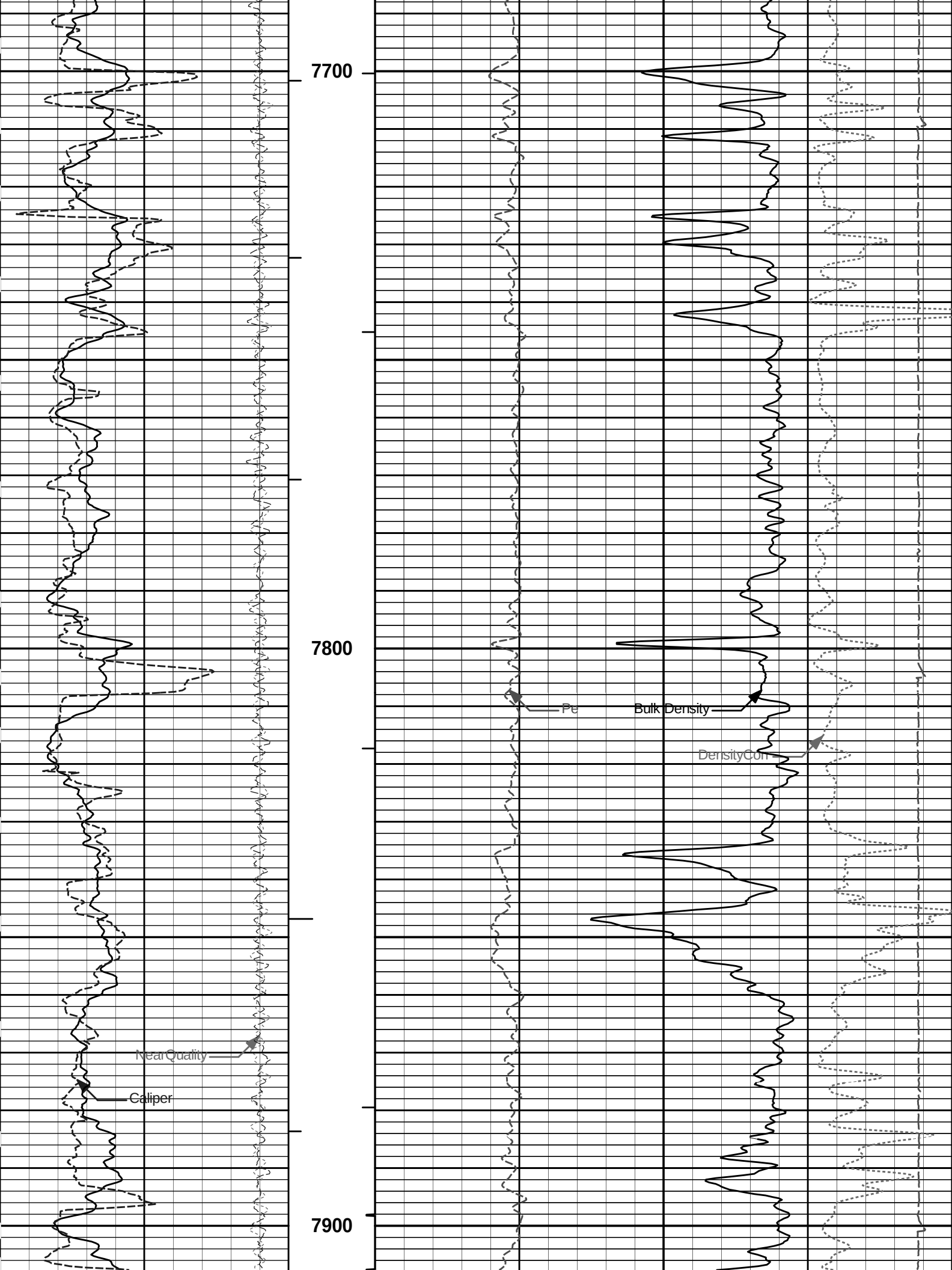


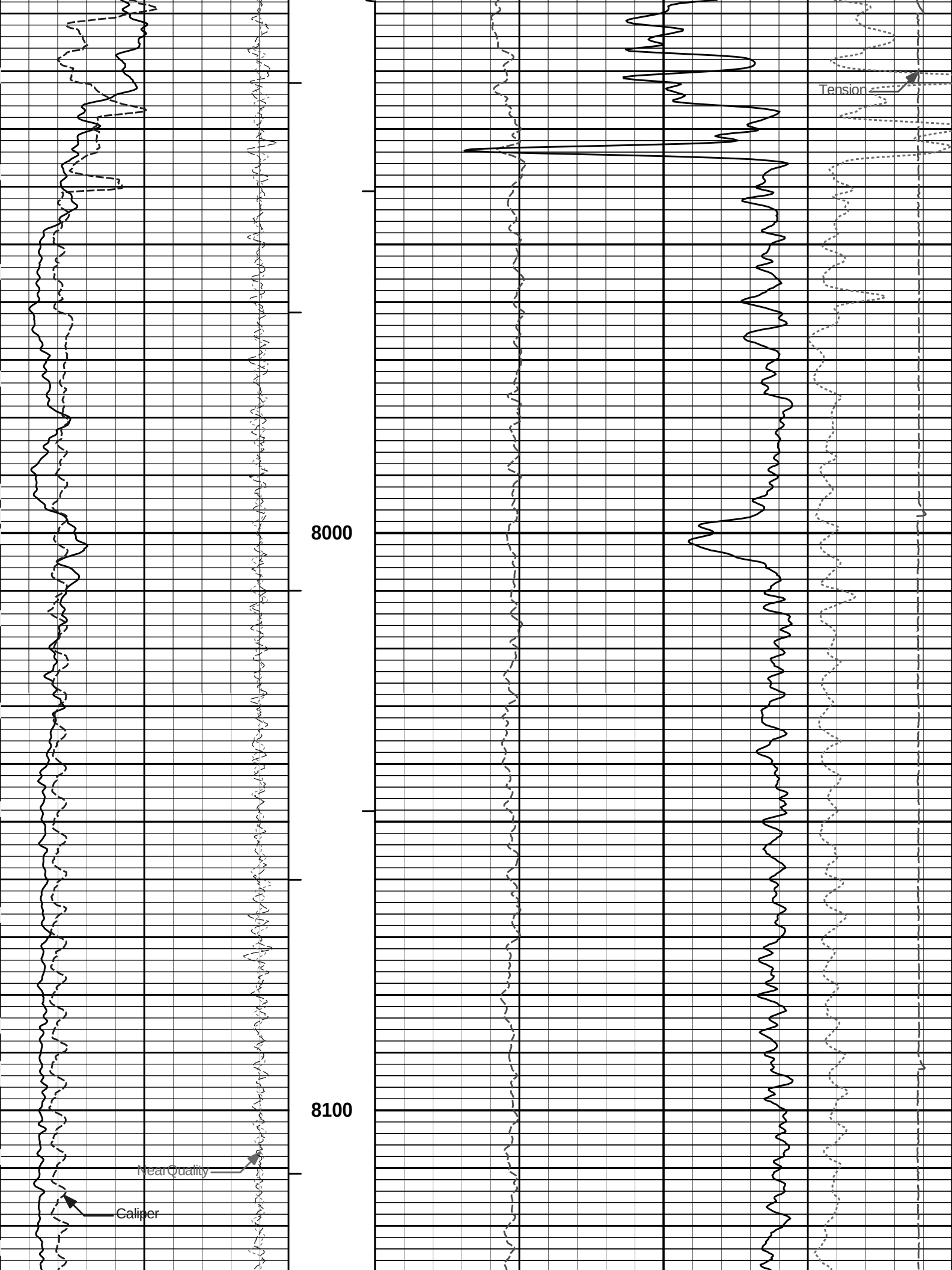


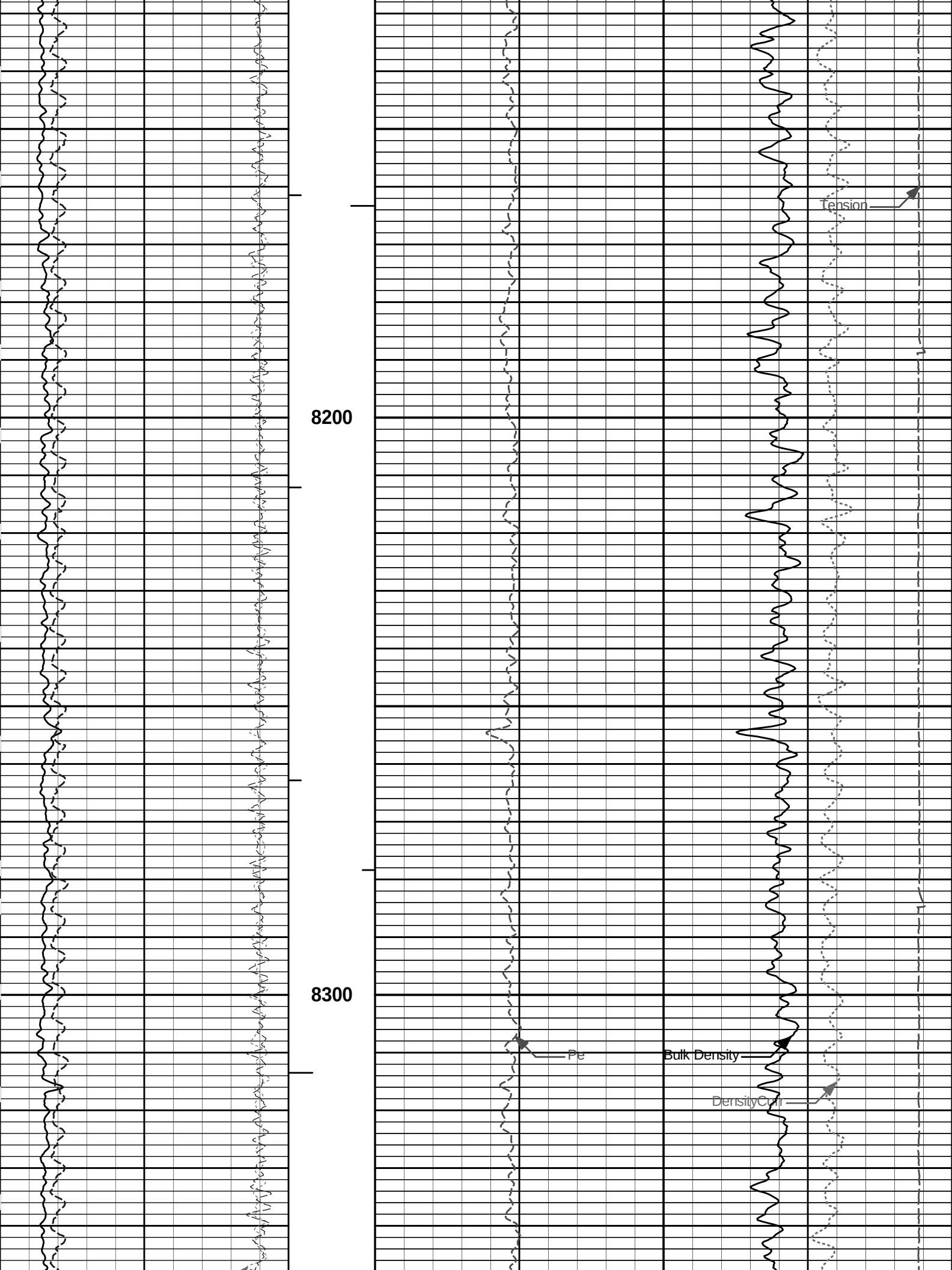


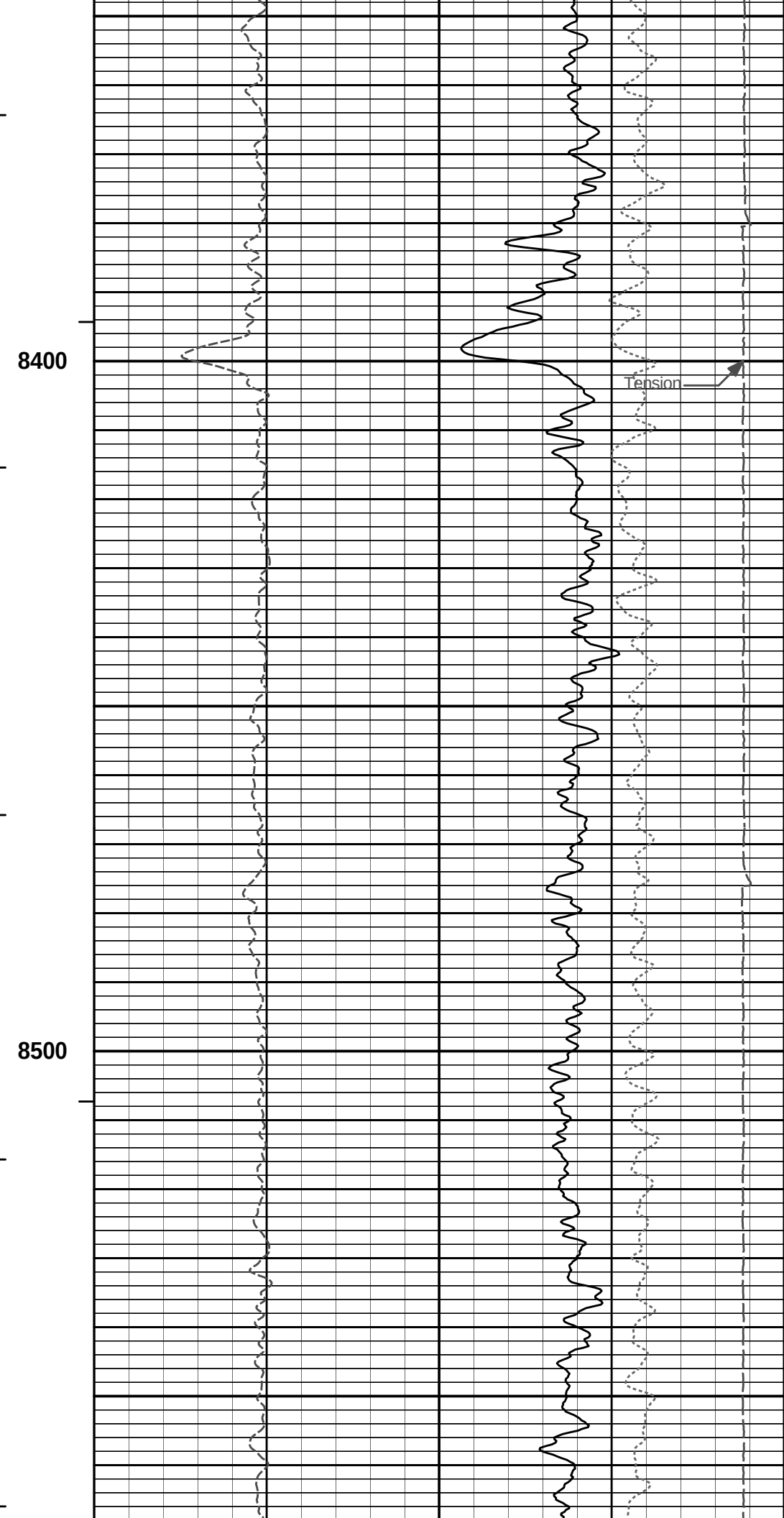
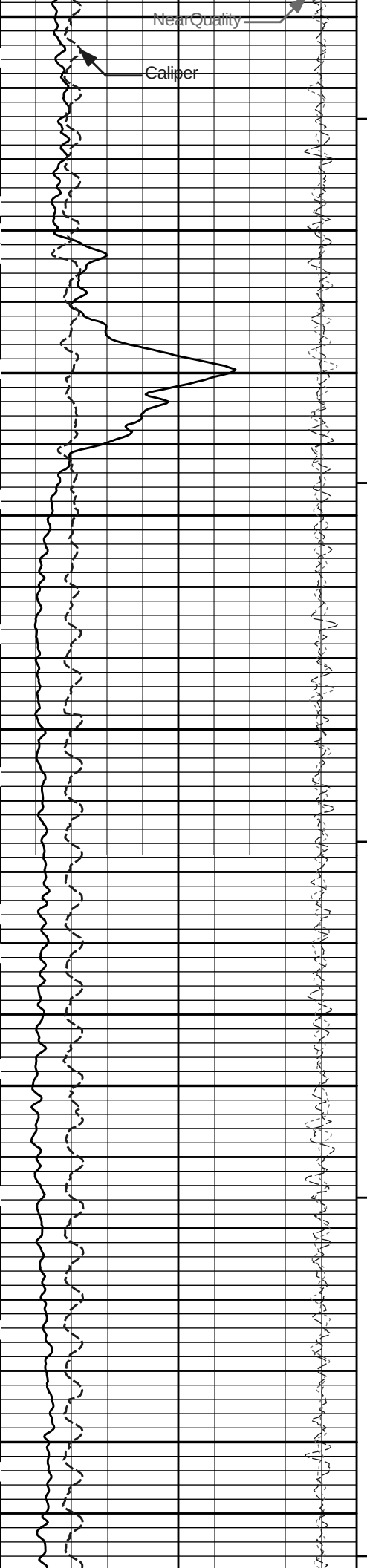


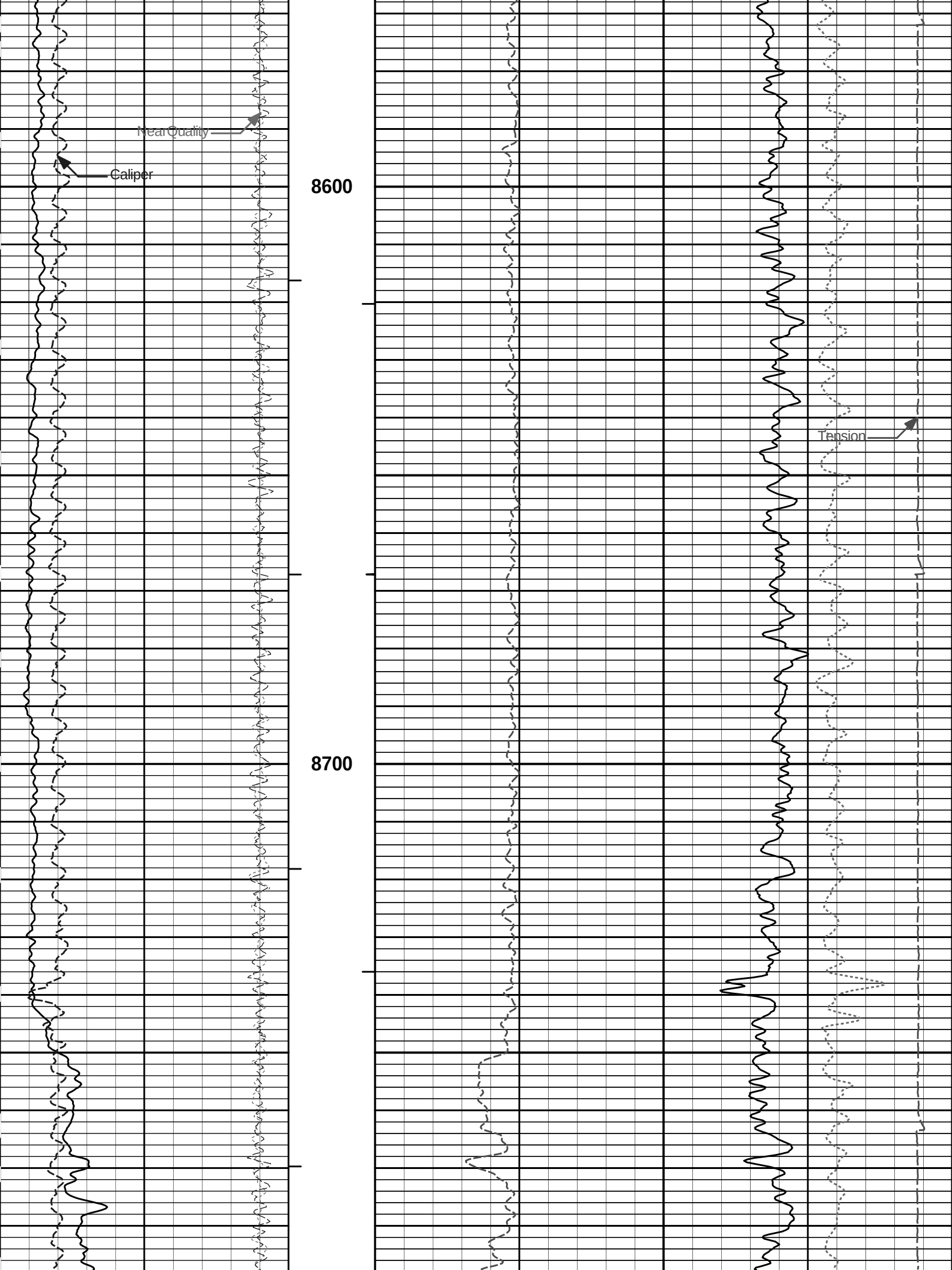


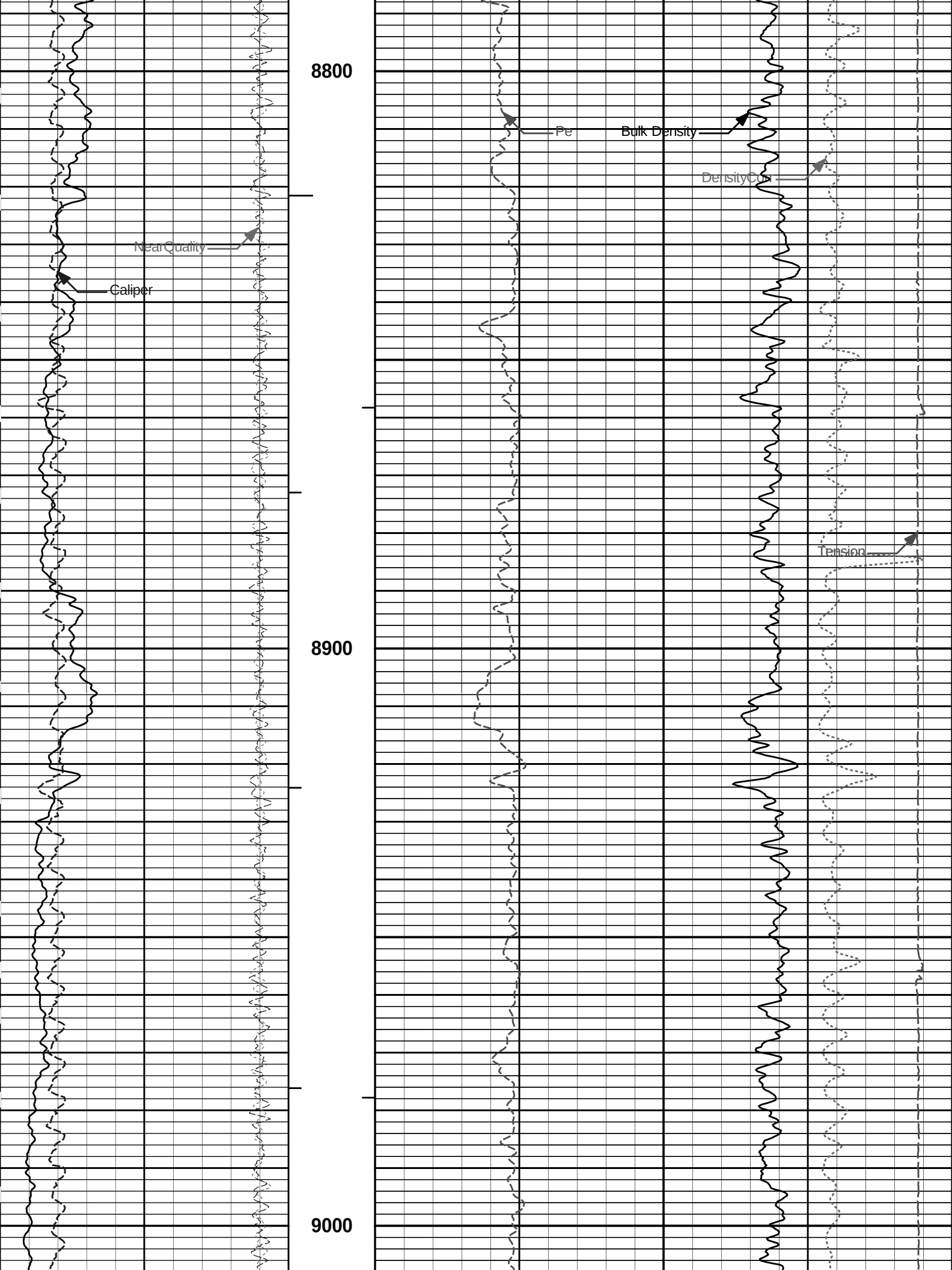


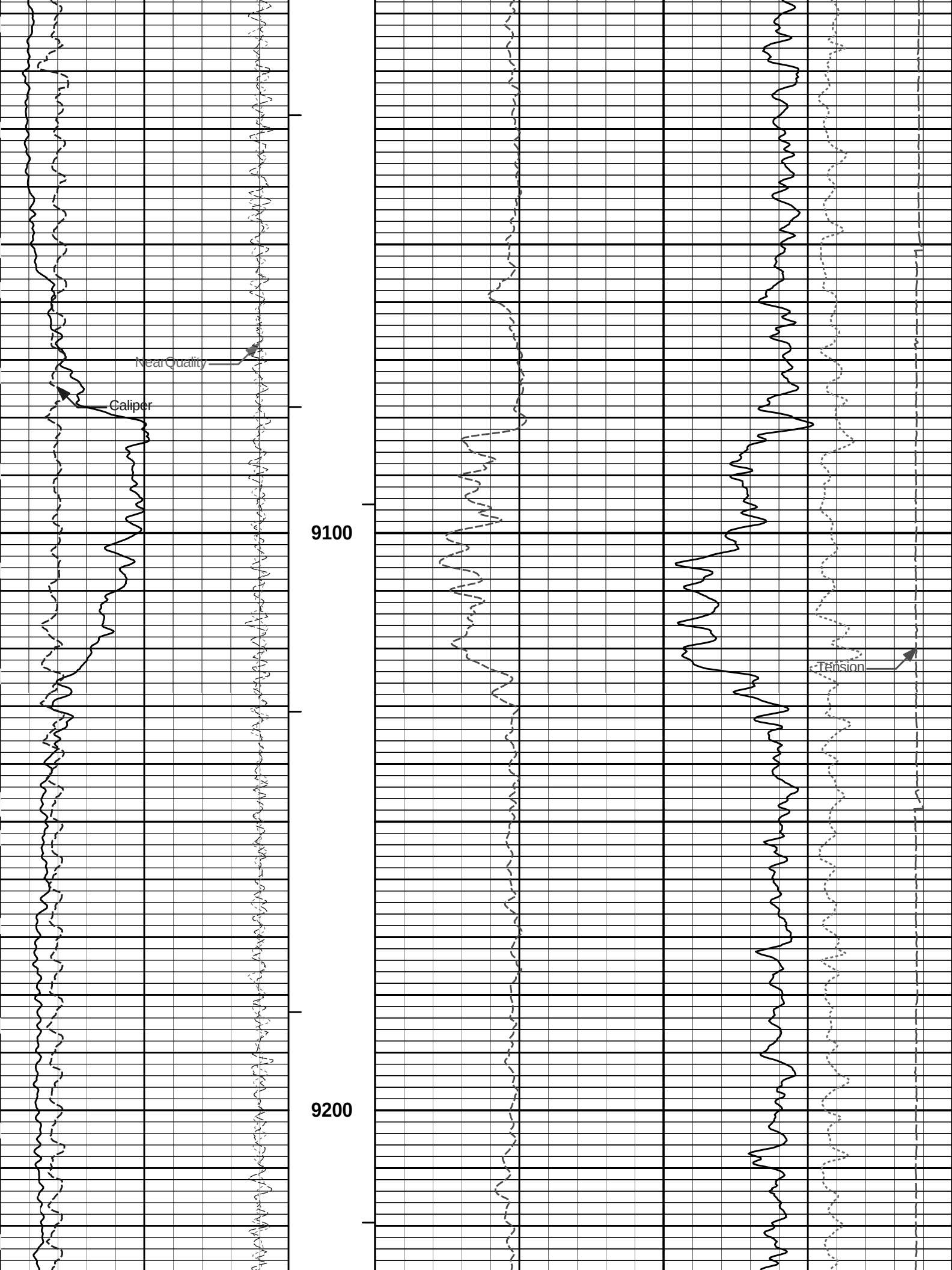


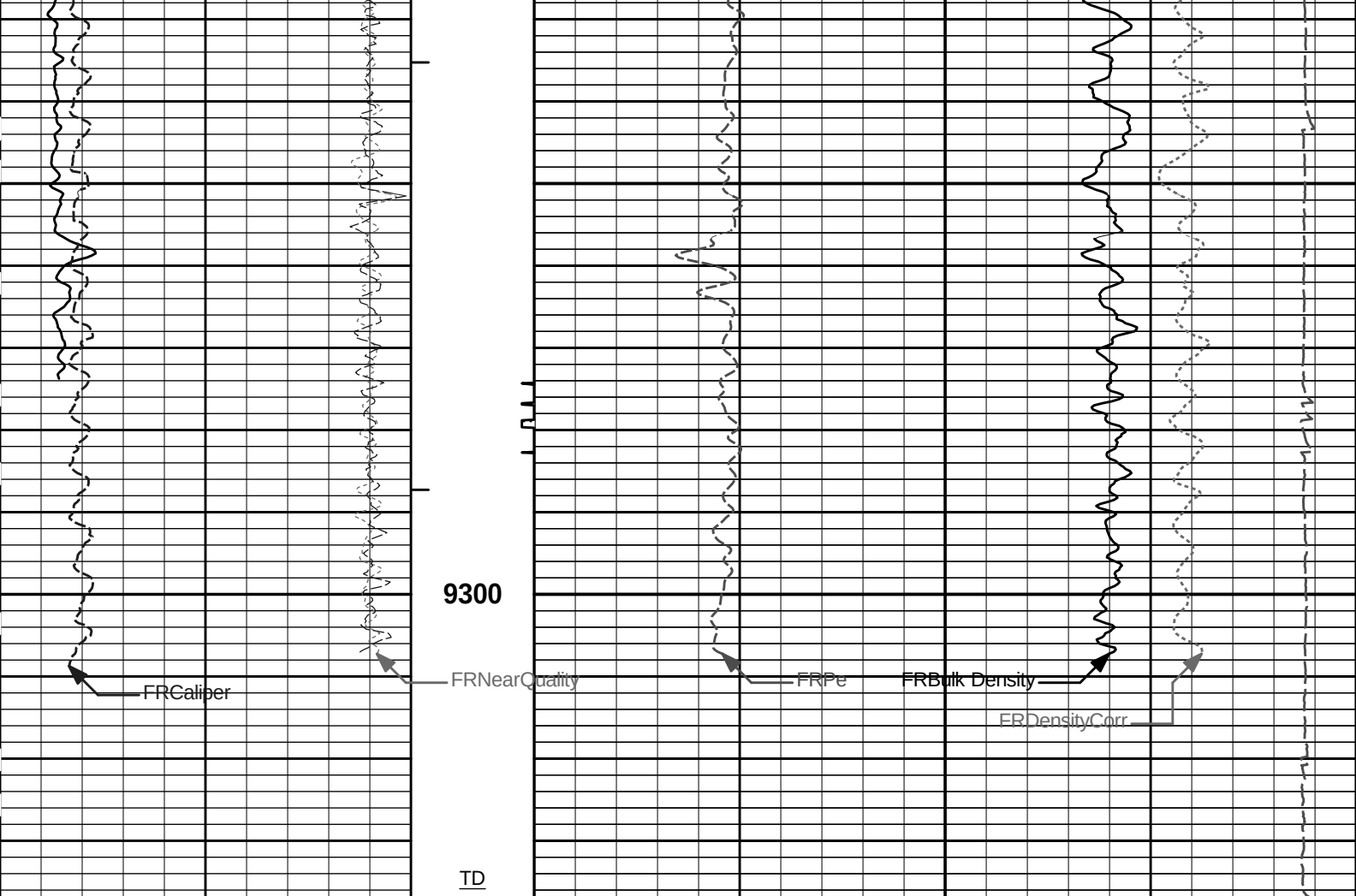












4	Caliper	14	MD	0	Pe	10	-0.25	DensityCorr	0.25
	inches		1 : 240					g/cc	
-18	NearQuality	2	AHV				15K	Tension	0
			ft3					pounds	
18	FarQuality	-2	BHV	2	Bulk Density				
			ft3		g/cc				
0	Gamma Ray	150	Tension Pull						
	api		10						
	SHALE		Tension Pull						

HALLIBURTON

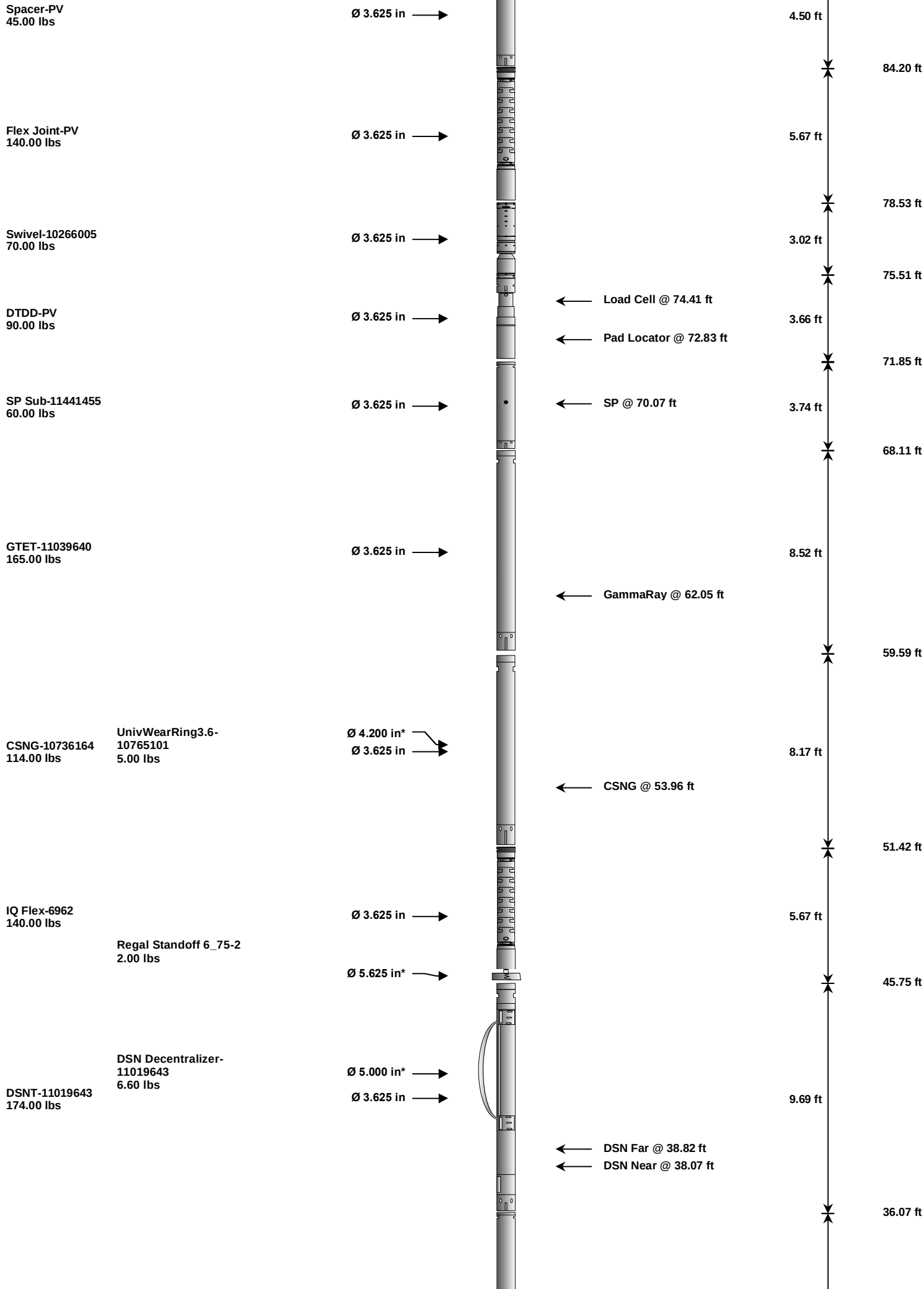
Plot Time: 23-Jul-12 18:05:17
Plot Range: 5410 ft to 9336.92 ft
Data: TOEWS_2629_1_21\Well Based\IR1_CASING\
Plot File: \\-LOCAL-TOEWS_2629_1_21\0001 TRIPLE-CSNG-TOOLPUSH\PORO\BULKD_5_MAIN_LIB

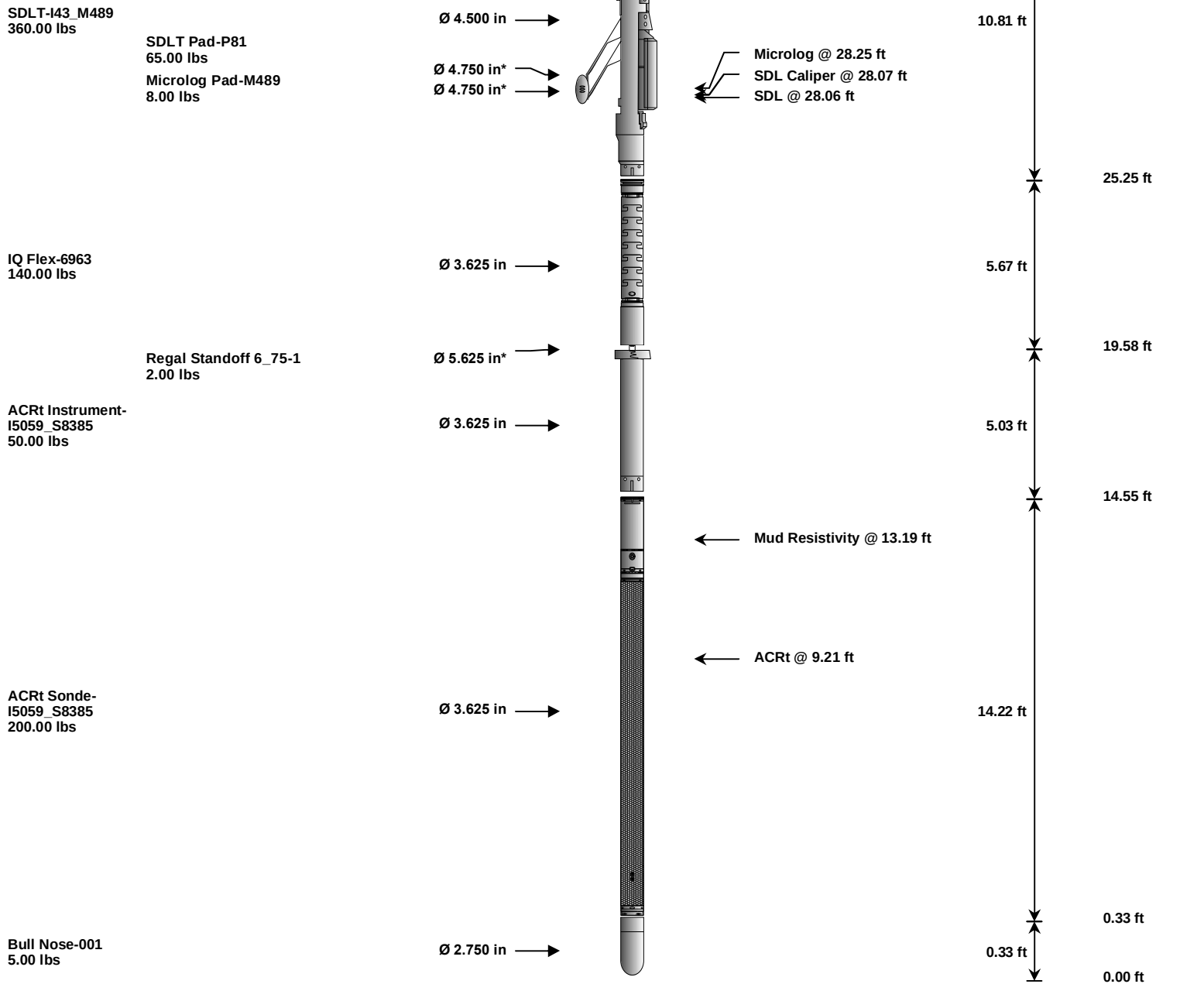
5 INCH MAIN LOG

HALLIBURTON

TOOL STRING DIAGRAM REPORT

Description	Overbody Description	O.D.	Diagram	Sensors @ Delays	Length	Accumulated Length
						88.70 ft





Mnemonic		Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
SPC	Test		PV	45.00	4.50	84.20	100.00
FLEX	Flex Joint		PV	140.00	5.67	78.53	300.00
SWVL	MCSA-D Multiconductor Swivel		10266005	70.00	3.02	75.51	300.00
DTDD	Downhole Tension Device		PV	90.00	3.66	71.85	300.00
SP	SP Sub		11441455	60.00	3.74	68.11	300.00
GTET	Gamma Telemetry Tool		11039640	165.00	8.52	59.59	60.00
CSNG	Compensated Spectral Natural Gamma		10736164	114.00	8.17	51.42	15.00
UWR3P6	Universal Wear Ring 3 5-8 inch		10765101	5.00	0.35	* 55.50	300.00
IQF	IQ Flex tool		6962	140.00	5.67	45.75	300.00
RSOF	Regal Standoff 6.75in		2	2.00	0.52	* 45.75	300.00
DSNT	Dual Spaced Neutron		11019643	174.00	9.69	36.07	60.00
DCNT	DSN Decentralizer		11019643	6.60	5.13	* 39.40	300.00
SDLT	Spectral Density Tool		I43_M489	360.00	10.81	25.25	60.00
MICP	Microlog Pad		M489	8.00	1.00	* 27.75	60.00
SDLP	Density Insite Pad		P81	65.00	2.55	* 27.46	60.00
IQF	IQ Flex tool		6963	140.00	5.67	19.58	300.00
ACRt	Array Compensated True Resistivity Instrument Section		I5059_S8385	50.00	5.03	14.55	300.00
RSOF	Regal Standoff 6.75in		1	2.00	0.52	* 19.06	300.00
ACRt	Array Compensated True Resistivity Sonde Section		I5059_S8385	200.00	14.22	0.33	300.00
BLNS	Bull Nose		001	5.00	0.33	0.00	300.00

Total **1.841.60** **88.70**

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION

Tool Name:	GTET - 11039640	Reference Calibration Date:	14-Jun-12 08:57:44
Engineer:	C. HAVERKAMP	Calibration Date:	22-Jul-12 14:39:10
Software Version:	WL INSITE R3.6.0 (Build 3)	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	42.8	42.1	api
Background + Calibrator	316.9	311.7	api
Calibrator	274.1	269.6	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:	GTET - 11039640	Reference Calibration Date:	22-Jul-12 14:39:10
Engineer:	C. HAVERKAMP	Calibration Date:	22-Jul-12 14:44:11
Software Version:	WL INSITE R3.6.0 (Build 3)	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	42.1	46.7	api
Background + Calibrator	311.7	310.1	api
Calibrator	269.6	263.3	api

Shop	Field	Difference	Tolerance
269.6	263.3	6.3	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name:	DSNT - 11019643	Reference Calibration Date:	13-Jul-12 10:27:47
Engineer:	T. HYDE	Calibration Date:	13-Jul-12 10:44:01
Software Version:	WL INSITE R3.6.0 (Build 3)	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: 78 degF
Min. Tool Housing Outside Diameter: 3.625 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.949	0.947	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):	0.2113	0.2110	0.0003	+/- 0.0020
Calibrated Ratio:	9.74	9.73	0.011	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0636	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:	13-Jul-12 10:44:01
Engineer:	C. HAVERKAMP	Calibration Date:	22-Jul-12 15:22:39
Software Version:	WL INSITE R3.6.0 (Build 3)	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):	0.0636	0.0698	0.0062	+/- 0.0150

PASS/FAIL SUMMARY	
Block Change Check:	Passed
Snow Block Stat Check:	Passed
Temperature Check:	Passed

DENSITY CALIPER SHOP CALIBRATION			
Tool Name:	SDLT - I43_M489	Reference Calibration Date:	12-Jul-12 11:52:19
Engineer:	T. HYDE	Calibration Date:	12-Jul-12 11:56:20
Software Version:	WL INSITE R3.6.0 (Build 3)	Calibration Version:	1
Host Tool Name:	DSNT - 11019643		

CALIBRATION COEFFICIENTS			
Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-1931.94	-2130.51	-7000.00 - -1000.00
Pad Gain	0.0003956	0.0004016	0.000200 - 0.000600
Arm Offset	-746.21	-714.63	-5000.00 - 3000.00
Arm Gain	0.0005387	0.0005524	0.000300 - 0.000700
Arm Power	-0.000007005	-0.000007671	-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)	2.05	2.00	-0.05	+/- 0.20
Medium Ring (in)	3.77	3.75	-0.02	+/- 0.20
RING DIAMETER:				

Small Ring (in)	6.52	6.50	-0.02	+/- 0.20
Medium Ring (in)	8.24	8.25	0.01	+/- 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

SPECTRAL DENSITY SHOP CALIBRATION				
Tool Name:	SDLT Pad - P81	Reference Calibration Date:	12-Jul-12 11:10:03	
Engineer:	T. HYDE	Calibration Date:	12-Jul-12 11:29:25	
Software Version:	WL INSITE R3.6.0 (Build 3)	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	1.0494	1.0276	0.90 - 1.10
Near Dens Gain	1.0245	1.0237	0.90 - 1.10
Near Peak Gain	1.0209	1.0117	0.90 - 1.10
Near Lith Gain	0.9944	0.9741	0.90 - 1.10
Far Bar Gain	1.0166	1.0157	0.90 - 1.10
Far Dens Gain	1.0025	1.0013	0.90 - 1.10
Far Peak Gain	0.9952	0.9951	0.90 - 1.10
Far Lith Gain	0.9728	0.9724	0.90 - 1.10
Near Bar Offset	-0.2421	-0.0440	NONE
Near Dens Offset	-0.0236	-0.0173	NONE
Near Peak Offset	0.0150	0.0901	NONE
Near Lith Offset	0.2244	0.3908	NONE
Far Bar Offset	0.0031	0.0070	NONE
Far Dens Offset	0.1122	0.1198	NONE
Far Peak Offset	0.1497	0.1484	NONE
Far Lith Offset	0.2992	0.3010	NONE
Near Bar Background	820.30	817.64	700 - 1450
Near Dens Background	268.11	268.51	230 - 480
Near Peak Background	118.01	117.58	100 - 210
Near Lith Background	145.20	145.39	125 - 260
Far Bar Background	532.97	531.83	450 - 900
Far Dens Background	209.40	210.36	175 - 345
Far Peak Background	84.28	85.05	70 - 140
Far Lith Background	86.17	86.29	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.683	1.684	0.001	+/- 0.015
Pe	2.552	2.564	0.012	+/- 0.150

ALUMINUM				
Density (g/cc)	2.595	2.598	0.003	+/- 0.01500
Pe	3.127	3.133	0.006	+/- 0.150

TOOL SUMMARY				
Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	-0.0001	+/- 0.0110	0.0021	+/- 0.0140
Magnesium Block	0.0001	+/- 0.0110	-0.0011	+/- 0.0140
Aluminum Block	-0.0010	+/- 0.0110	0.0004	+/- 0.0140
Resolution	9.41	6.00 - 11.50	8.86	6.00 - 11.50
Internal Verifier(B+D+P+L)	1349	1200 - 2700	914	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 - P81	Reference Calibration Date:	12-Jul-12 11:29:25
Engineer:	C. HAVERKAMP	Calibration Date:	22-Jul-12 14:32:55
Software Version:	WL INSITE R3.6.0 (Build 3)	Calibration Version:	1

Pad Temperature: 92.9 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1349.120	1349.585	0.465	14.852
Far (B+D+P+L) cps	913.515	914.011	0.496	16.398
Near Resolution	9.41	9.43	0.020	0.50
Far Resolution	8.86	8.88	0.020	1.00

PASS/FAIL SUMMARY	
Bkg Quality Check:	Passed
Bkg Resolution Check:	Passed
Bkg Verification Check:	Passed

SDLT CALIPER FIELD CALIBRATION

Tool Name:	SDLT - I43_M489	Reference Calibration Date:	12-Jul-12 11:56:20
Engineer:	C. HAVERKAMP	Calibration Date:	22-Jul-12 14:41:17
Software Version:	WL INSITE R3.6.0 (Build 3)	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	8.15	-0.10	+/- 0.15

PASS/FAIL SUMMARY						
Pad Extension Check:				Passed		
Diameter Check:				Passed		
CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-11039640						
Gamma Ray Calibrator	269.6	263.3	-----	6.3	+/- 9.00	api
DSNT-11019643						
Snow-Block Porosity	0.0636	0.0698	-----	-0.0062	+/- 0.0150	decp
SDLT-I43_M489						
Pad Extension	3.75	3.73	-----	0.02	+/-0.10	in
Ring Diameter	8.25	8.15	-----	0.10	+/-0.15	in
SDLT Pad-P81						
Near(B+D+P+L)	1349.120	1349.585	-----	-0.465	+/-14.852	cps
Far(B+D+P+L)	913.515	914.011	-----	-0.496	+/-16.398	cps
Data: TOEWS_2629_1_21\0001 TRIPLE-CSNG-TOOLPUSH\IDLE					Date: 23-Jul-12 12:24:59	

HALLIBURTON

PARAMETERS REPORT

Depth (ft))	Tool Name	Mnemonic	Description	Value	Units
TOP					
	SHARED	BS	Bit Size	6.125	in
	SHARED	UBS	Use Bit Size instead of Caliper for all applications.	No	
	SHARED	MDBS	Mud Base	Water	
	SHARED	MDWT	Borehole Fluid Weight	8.650	ppg
	SHARED	WAGT	Weighting Agent	Natural	
	SHARED	BSAL	Borehole salinity	10000.00	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	4.500	in
	SHARED	ST	Surface Temperature	75.0	degF
	SHARED	TD	Total Well Depth	9366.00	ft
	SHARED	BHT	Bottom Hole Temperature	140.0	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	
	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: TOEWS_2629_1_2110001 TRIPLE-CSNG-TOOLPUSHIDLE			Date: 23-Jul-12 12:26:05	

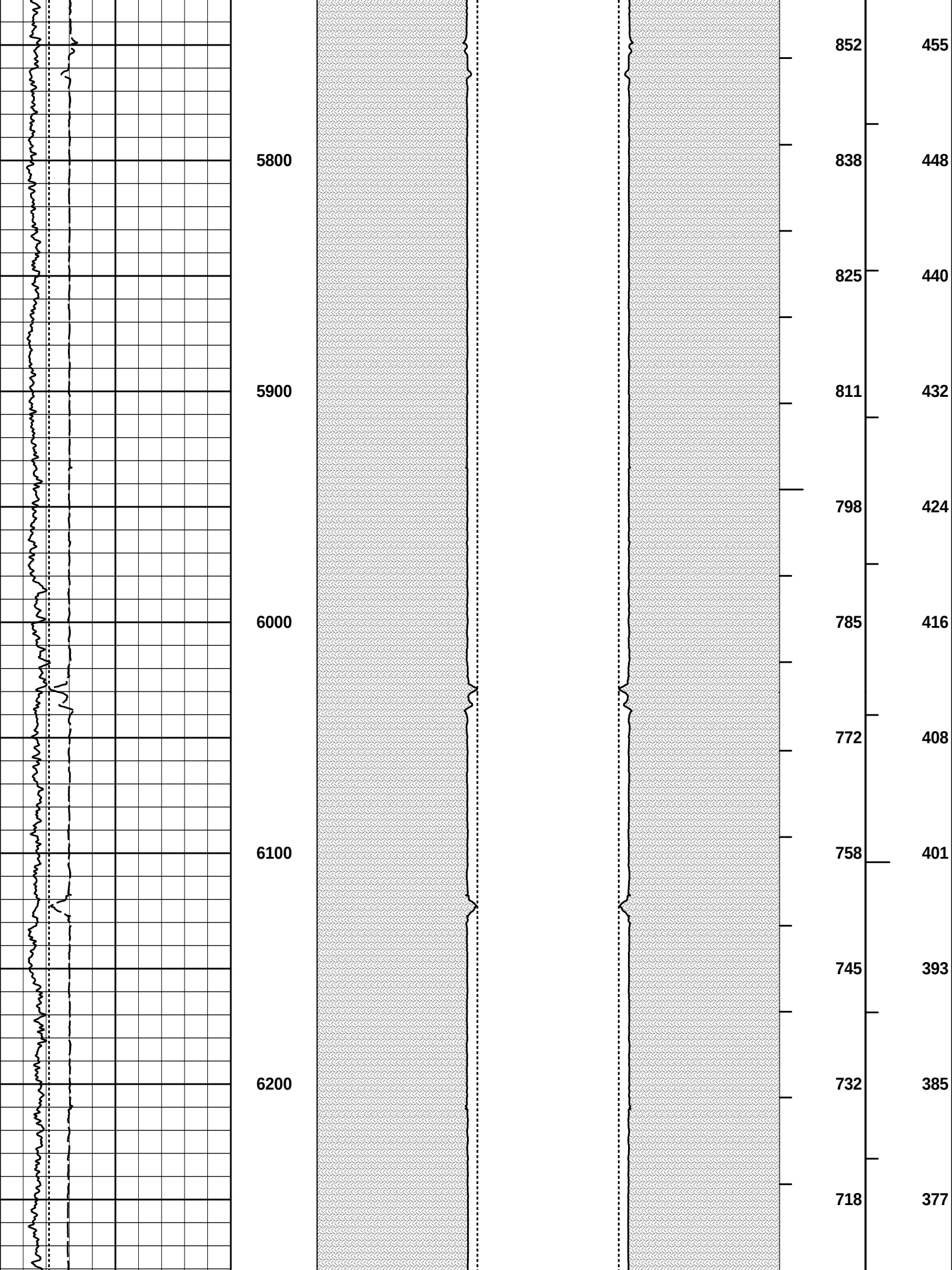
HALLIBURTON				
INPUTS, DELAYS AND FILTERS TABLE				
Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
DTDD				
DHTN	DownholeTension	0.00	BLK	0.000
SP Sub				
PLTC	Plot Control Mask	70.07	NO	
SP	Spontaneous Potential	70.07	BLK	1.250
SPR	Raw Spontaneous Potential	70.07	NO	
SPO	Spontaneous Potential Offset	70.07	NO	
GTET				
TPUL	Tension Pull	62.05	NO	
GR	Natural Gamma Ray API	62.05	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	62.05	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	62.05	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Deviation	0.00	NO	

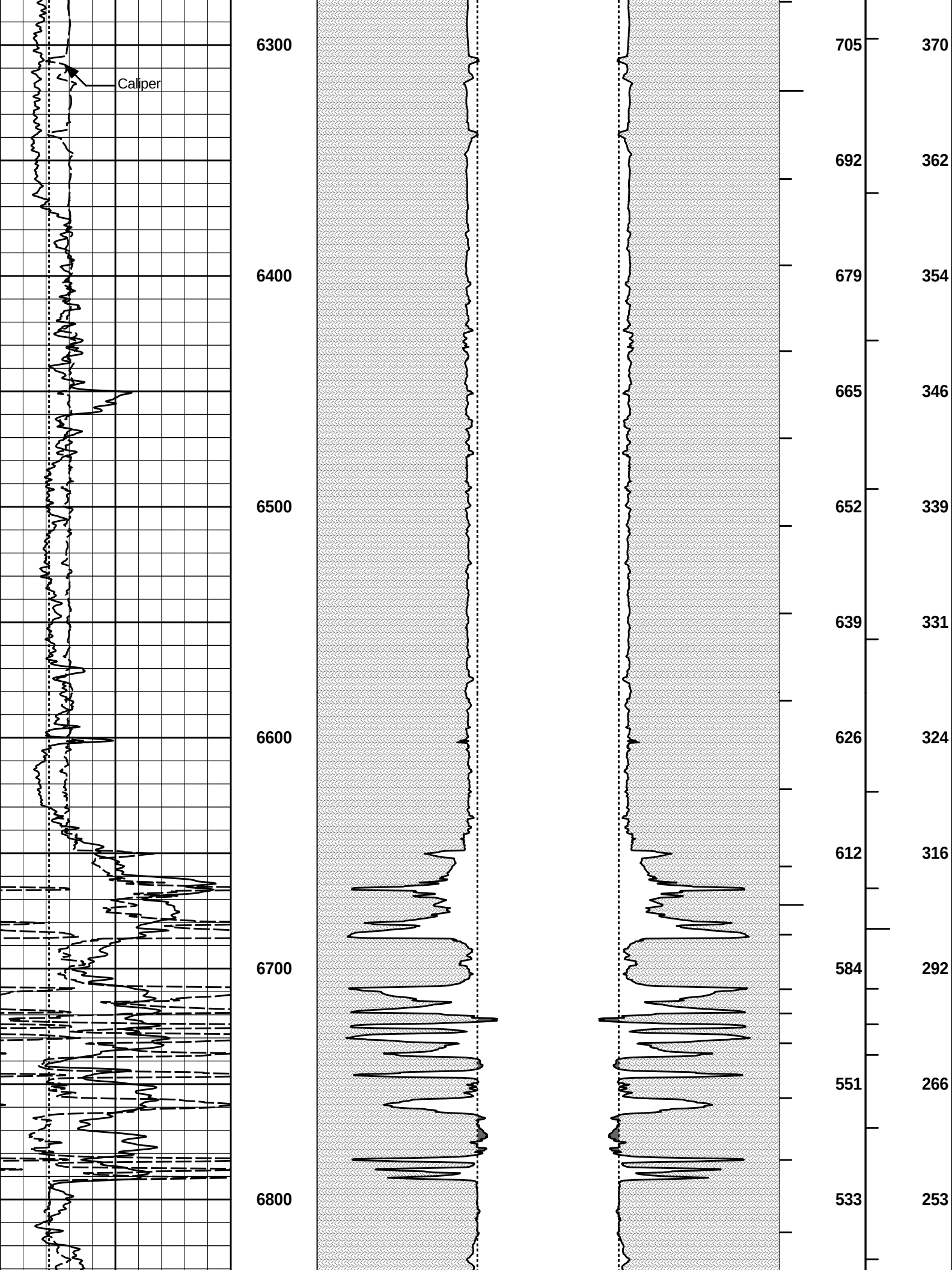
DEVI	Inclination	0.00	NO	
CSNG				
TPUL	Tension Pull	53.96	NO	
STAT	Status	53.96	NO	
FRMC	Tool Frame Count	53.96	BLK	0.250
TFRM	Total Frames	53.96	NO	
LSPD	Line Speed	53.96	BLK	0.250
CTIM	Accumulation time for sample	53.96	BLK	0.250
NOIS	Spectral Noise	53.96	BLK	0.250
STAB	Stabilizer Voltage in mv	53.96	BLK	0.250
STBP	Stabilizer 60 KEV Peak	53.96	BLK	0.250
AMER	Americium	53.96	BLK	0.250
FTMP	Flask PCB Temperature	53.96	BLK	0.250
SPEL	Low Energy Spectrum	53.96	BLK	0.250
SPEH	High Energy Spectrum	53.96	BLK	0.250
SSP	Stabilization Energy Spectrum	53.96	BLK	0.250
CSPC	CSNG Lo Hi Spectrum Data	53.96	NO	
DSNT				
TPUL	Tension Pull	37.97	NO	
RNDS	Near Detector Telemetry Counts	38.07	BLK	1.417
RFDS	Far Detector Telemetry Counts	38.82	TRI	0.583
DNTT	DSN Tool Temperature	38.07	NO	
DSNS	DSN Tool Status	37.97	NO	
ERND	Near Detector Telemetry Counts EVR	38.07	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	38.82	BLK	0.000
ENTM	DSN Tool Temperature EVR	38.07	NO	
SDLT				
TPUL	Tension Pull	28.07	NO	
PCAL	Pad Caliper	28.07	TRI	0.250
ACAL	Arm Caliper	28.07	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

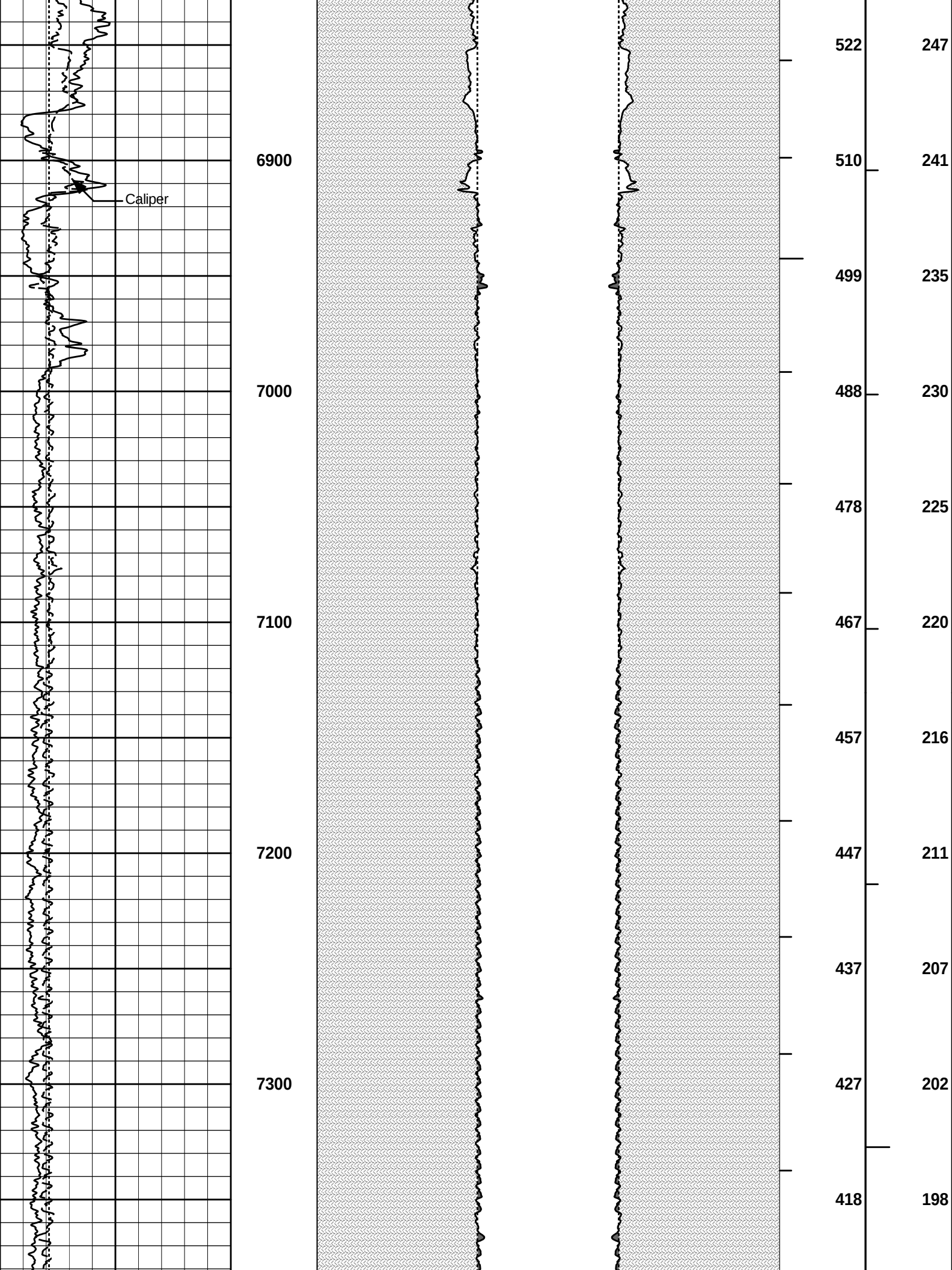
F2X5	ACRT 36KHz - 10in X value	3.48	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.23	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.23	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	8.98	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	8.98	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.48	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	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
RMUD	Mud Resistivity	12.52	BLK	0.000
F1RT	Transmitter Reference 12 KHz Real Signal	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	28.06	NO	
NAB	Near Above	27.88	BLK	0.920
NHI	Near Cesium High	27.88	BLK	0.920
NLO	Near Cesium Low	27.88	BLK	0.920
NVA	Near Valley	27.88	BLK	0.920
NBA	Near Barite	27.88	BLK	0.920
NDE	Near Density	27.88	BLK	0.920
NPK	Near Peak	27.88	BLK	0.920
NLI	Near Lithology	27.88	BLK	0.920
NBAU	Near Barite Unfiltered	27.88	BLK	0.250
NLIU	Near Lithology Unfiltered	27.88	BLK	0.250
FAB	Far Above	28.23	BLK	0.250
FHI	Far Cesium High	28.23	BLK	0.250
FLO	Far Cesium Low	28.23	BLK	0.250
FVA	Far Valley	28.23	BLK	0.250
FBA	Far Barite	28.23	BLK	0.250
FDE	Far Density	28.23	BLK	0.250
FPK	Far Peak	28.23	BLK	0.250
FLI	Far Lithology	28.23	BLK	0.250
PTMP	Pad Temperature	28.07	BLK	0.920
NHV	Near Detector High Voltage	27.46	NO	
FHV	Far Detector High Voltage	27.46	NO	
ITMP	Instrument Temperature	27.46	NO	
DDHV	Detector High Voltage	27.46	NO	

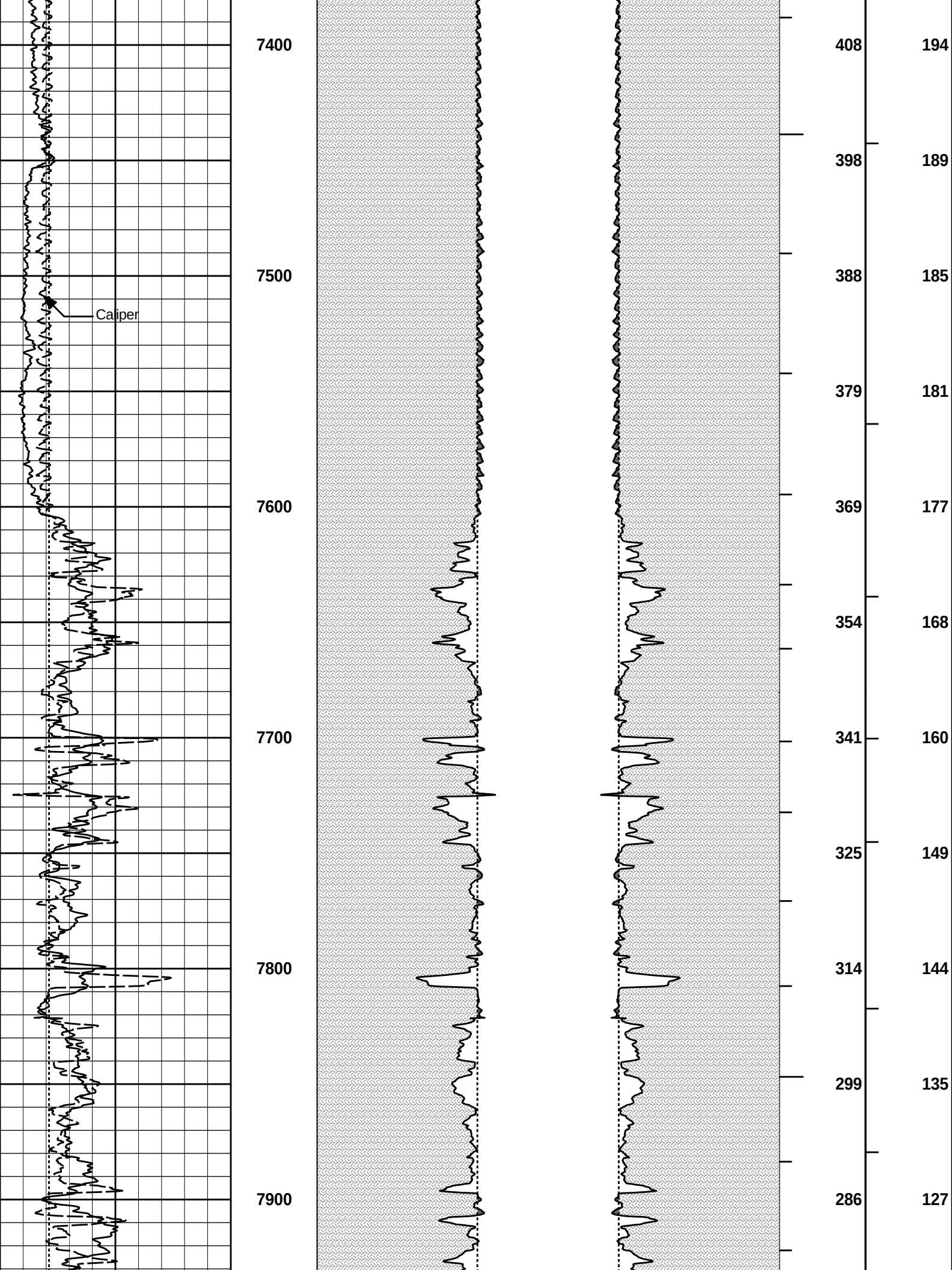
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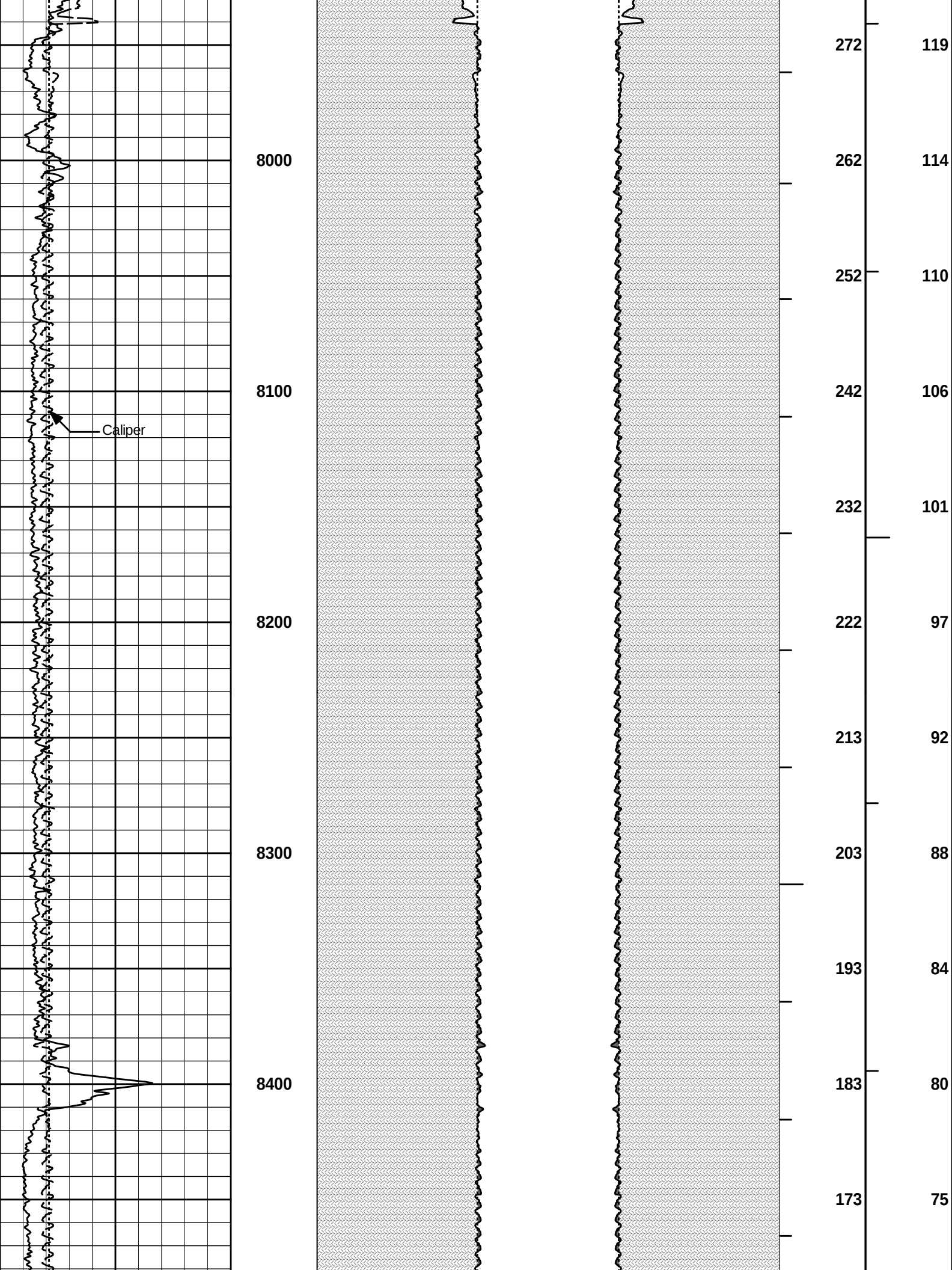
0 Gamma API 150										
api					MUDCAKE		MUDCAKE			
4 Bit Size 14					20 Bit Size 0 0		20 Bit Size 20			
inches										
4 Caliper 14			MD 1 : 600 ft		20 Caliper 0 0		20 Caliper 20		BHVT	AHVT
inches					inches		inches			
			5500					930	501	
								919	496	
								906	488	
								892	480	
								879	471	
5700								865	463	

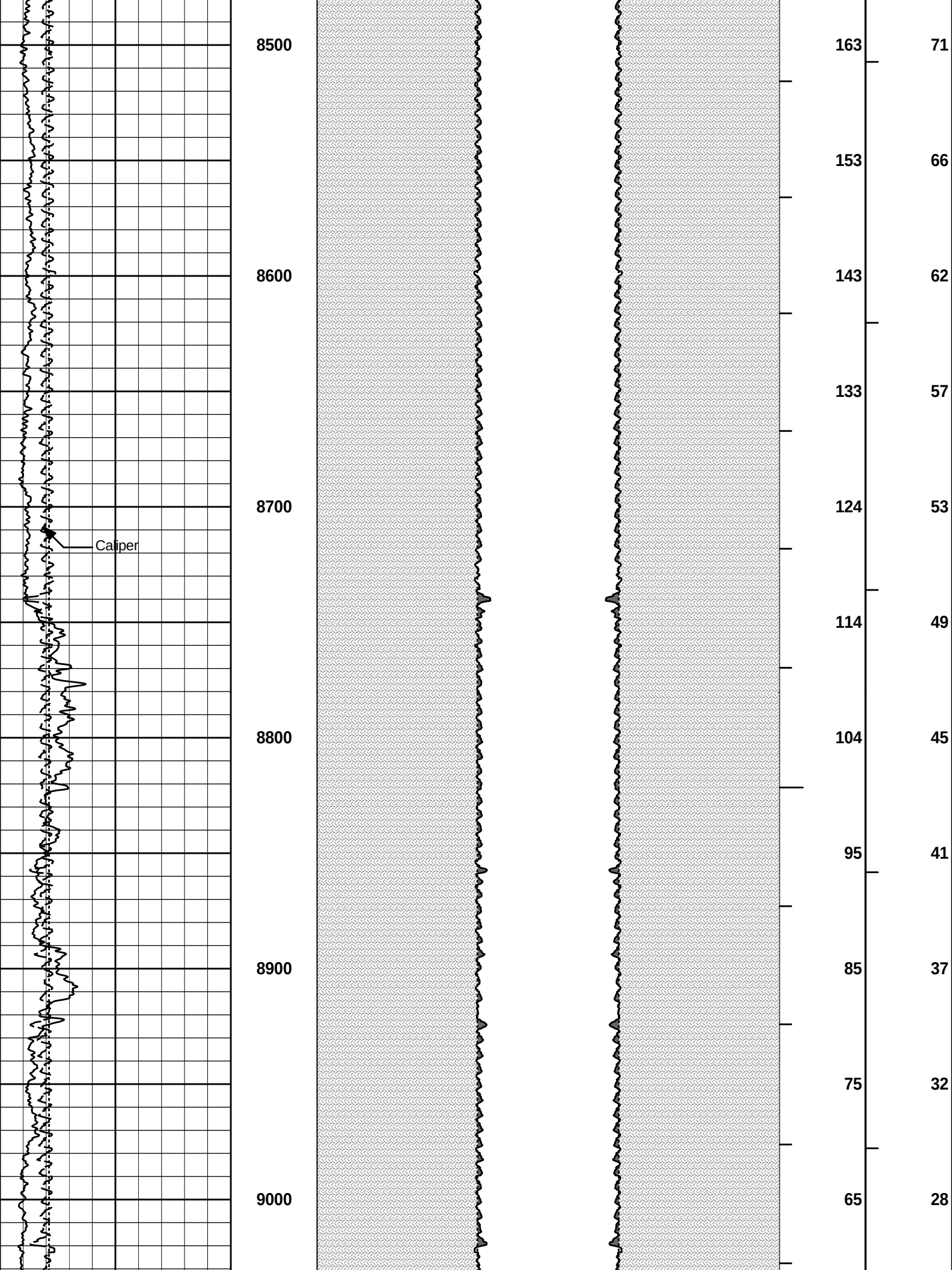


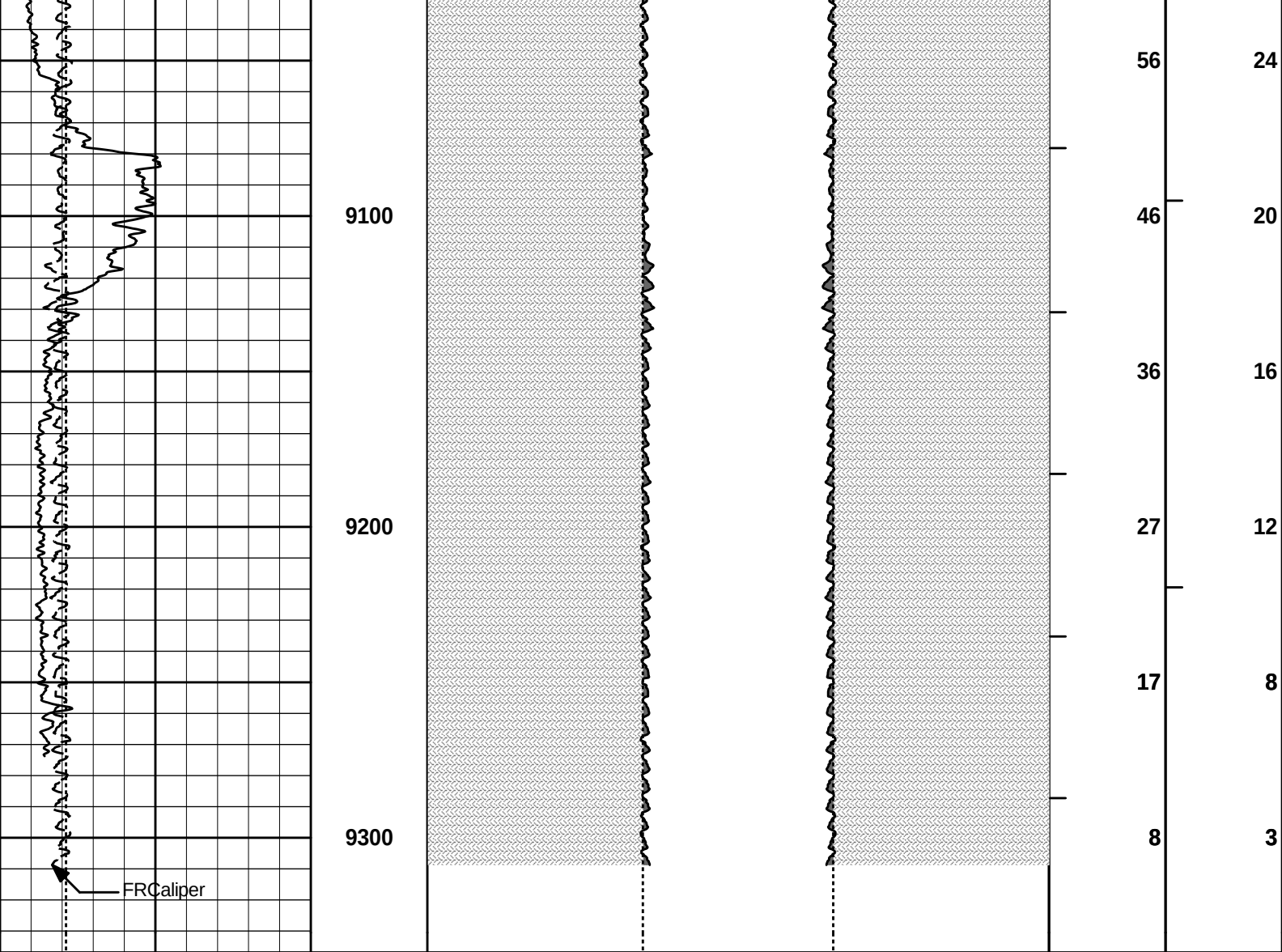












4	Caliper	14	MD 1 : 600 ft	20	Caliper	0 0	20	BHVT	AHVT
	inches				inches				
4	Bit Size	14		20	Bit Size	0 0	20		
	inches								
0	Gamma API	150			MUDCAKE		MUDCAKE		
	api								

HALLIBURTON

Plot Time: 23-Jul-12 18:05:22
Plot Range: 5410 ft to 9336.92 ft
Data: TOEWS_2629_1_21\Well Based\R1_CASING\
Plot File: \\LOCAL\TOEWS_2629_1_21\0001 TRIPLE-CSNG-TOOLPUSH\PORO\AHV_2_IQ_LIB

ANNULAR HOLE VOLUME PLOT

COMPANY	SANDRIDGE ENERGY
WELL	TOEWS 2629 1-21H
FIELD	
COUNTY	GRAY
STATE	KANSAS

HALLIBURTON	SPECTRAL DENSITY
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HALLIBURTON

SPECTRAL DENSITY
DUAL SPACED NEUTRON
LOG