

HALIBURTON				DUAL SPACED NEUTRON SPECTRAL DENSITY LOG			
COMPANY VAL ENERGY INC. WELL WHELAN 1-32 FIELD COUNTY BARBER STATE KANSAS				COMPANY VAL ENERGY INC. WELL WHELAN 1-32 FIELD COUNTY BARBER STATE KANSAS			
Permanent Datum	GL	Sect. 32	Twp. 31S	Rge. 11W	Other Services: ACRT MICRO MRIL		
Log measured from	KB	Location 940 FNL 990 FWL			Elev. 1562.0 ft		
Drilling measured from	KB				D.F. 1572.0 ft		
Date	04-Mar-12				G.L. 1562.0 ft		
Run No.	ONE						
Depth - Driller	4760.00 ft						
Depth - Logger	4778.0 ft						
Bottom - Logged Interval	4755.0 ft						
Top - Logged Interval	3300.0 ft						
Casing - Driller	8.625 in @ 225.0 ft						
Casing - Logger	223.0 ft						
Bit Size	7.875 in						
Type Fluid in Hole	WATER BASED MUD						
Density	9.2 ppq						
PH	10.50 pH						
Source of Sample	FLOWLINE						
Rm @ Meas. Temperature	0.400 ohmm @ 75.00 degF						
Rmf @ Meas. Temperature	0.34 ohmm @ 75.00 degF						
Rmc @ Meas. Temperature	0.456 ohmm @ 75.00 degF						
Source Rmf	MEASURED						
Rm @ BHT	0.28 ohmm @ 110.0 degF						
Time Since Circulation	8.0 hr						
Time on Bottom	04-Mar-12 14:42						
Max. Rec. Temperature	110.0 degF @ 4778.0 ft						
Equipment	10782954 LIBERAL						
Recorded By	T. HYDE						
Witnessed By	ZEB						

Fold here

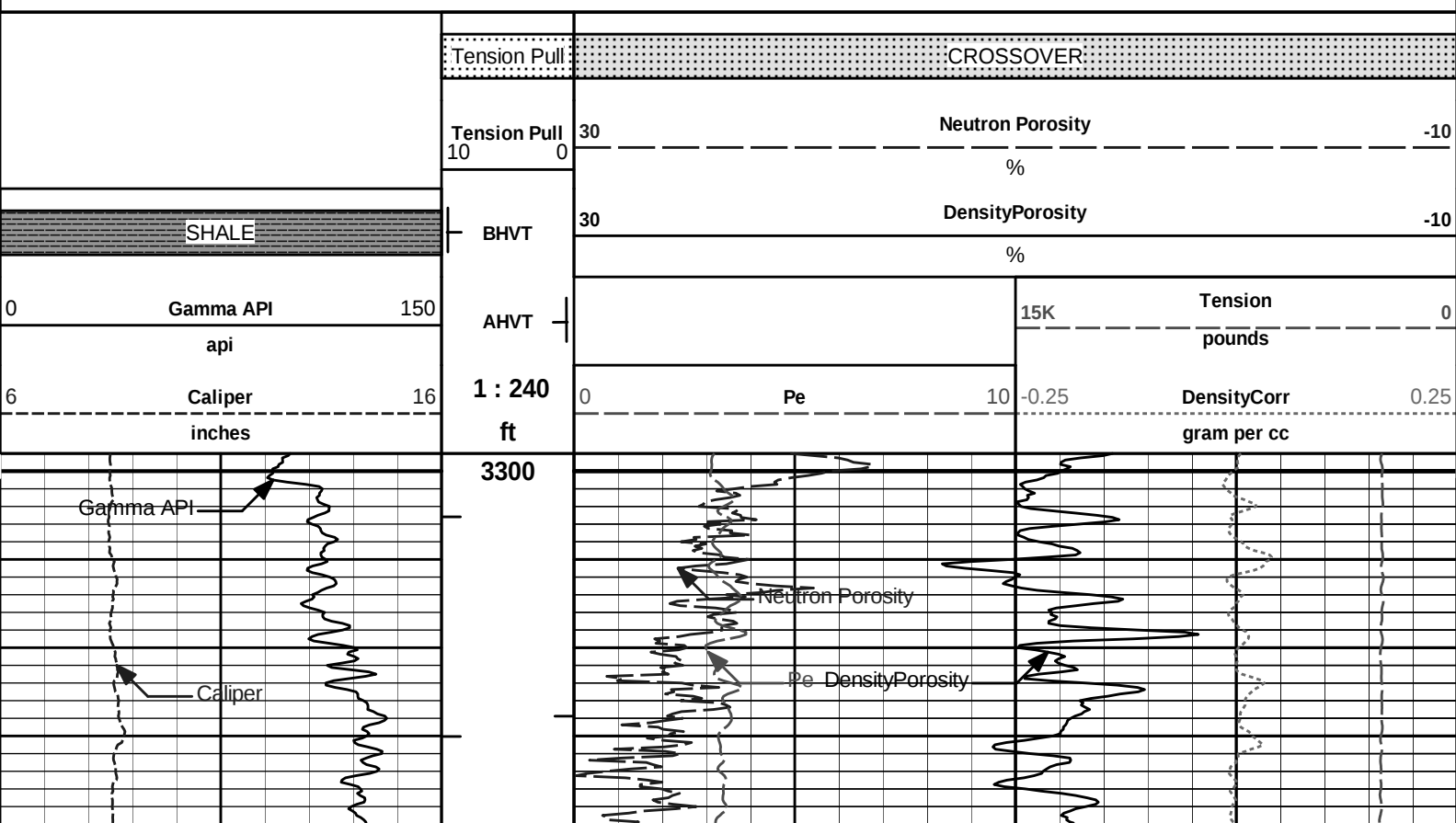
Service Ticket No.: 9327304						API Serial No.: 15-007-23842						PGM Version: WL INSITE R3.4.2 (Build 2)											
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE												RESISTIVITY SCALE CHANGES											
Date		Sample No.										Type Log		Depth		Scale Up Hole		Scale Down Hole					
Depth-Driller																							
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.				@				@				ONE		ACRT		N/A		1.5" S.O.		N/A			
Rmc @ Meas. Temp.				@				@						I1256_S0784									
Source Rmf		Rmc										ONE		MICRO		RUBBER		ADJ		N/A			
Rm @ BHT				@				@						I066_M85803_									
Rmf @ BHT				@				@						P45									
Rmc @ BHT				@				@															
EQUIPMENT DATA																							
GAMMA				ACOUSTIC								DENSITY				NEUTRON							
Run No.		ONE		Run No.				Run No.		ONE		Run No.		ONE		Run No.		ONE					
Serial No.		10811258		Serial No.				Serial No.		I066_M85803_P45		Serial No.		10755066		Serial No.							
Model No.		GTET		Model No.				Model No.		SDLT		Model No.		DSNT		Model No.							
Diameter		3.625"		No. of Cent.				Diameter		4.5"		Diameter		3.625		Diameter							
Detector Model No.		T-102		Spacing				Log Type		GAM-GAM		Log Type		NEU-NEU		Log Type							
Type		SCINT						Source Type		Cs137		Source Type		Am241Be		Source Type							
Length		8"		LSA [Y/N]				Serial No.		5073GW		Serial No.		DSN-436		Serial No.							
Distance to Source		10'		FWDA [Y/N]				Strength		1.5 Ci		Strength		15 Ci		Strength							

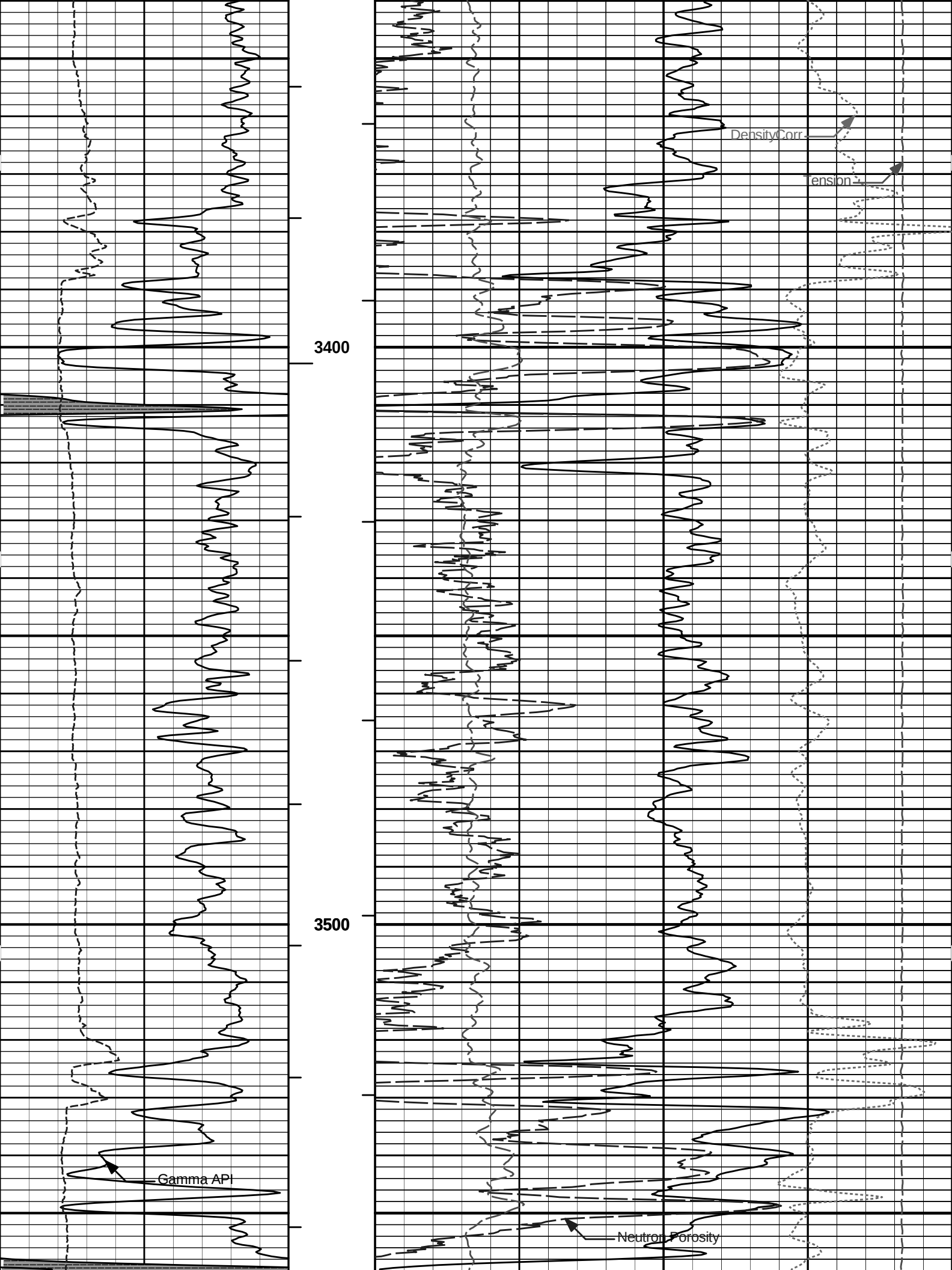
GENERAL				GAMMA		ACOUSTIC		DENSITY		NEUTRON				
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix
No.	From	To	ft/min	L	R	L	R		L	R		L	R	
ONE	4778	3300	REC	0	150				30	-10	2.71	30	-10	LIME
DIRECTIONAL INFORMATION														
Maximum Deviation @									KOP @					
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 4.5 INCH CASING														
CLIENT REQUEST NO POST CALIBRATIONS														
LCM 3 #/BBL														
CHLORIDES 8400 MG/L														
TODAY'S CREW A. VAQUERA B. TERRELL														
THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES LIBERAL, KS 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														

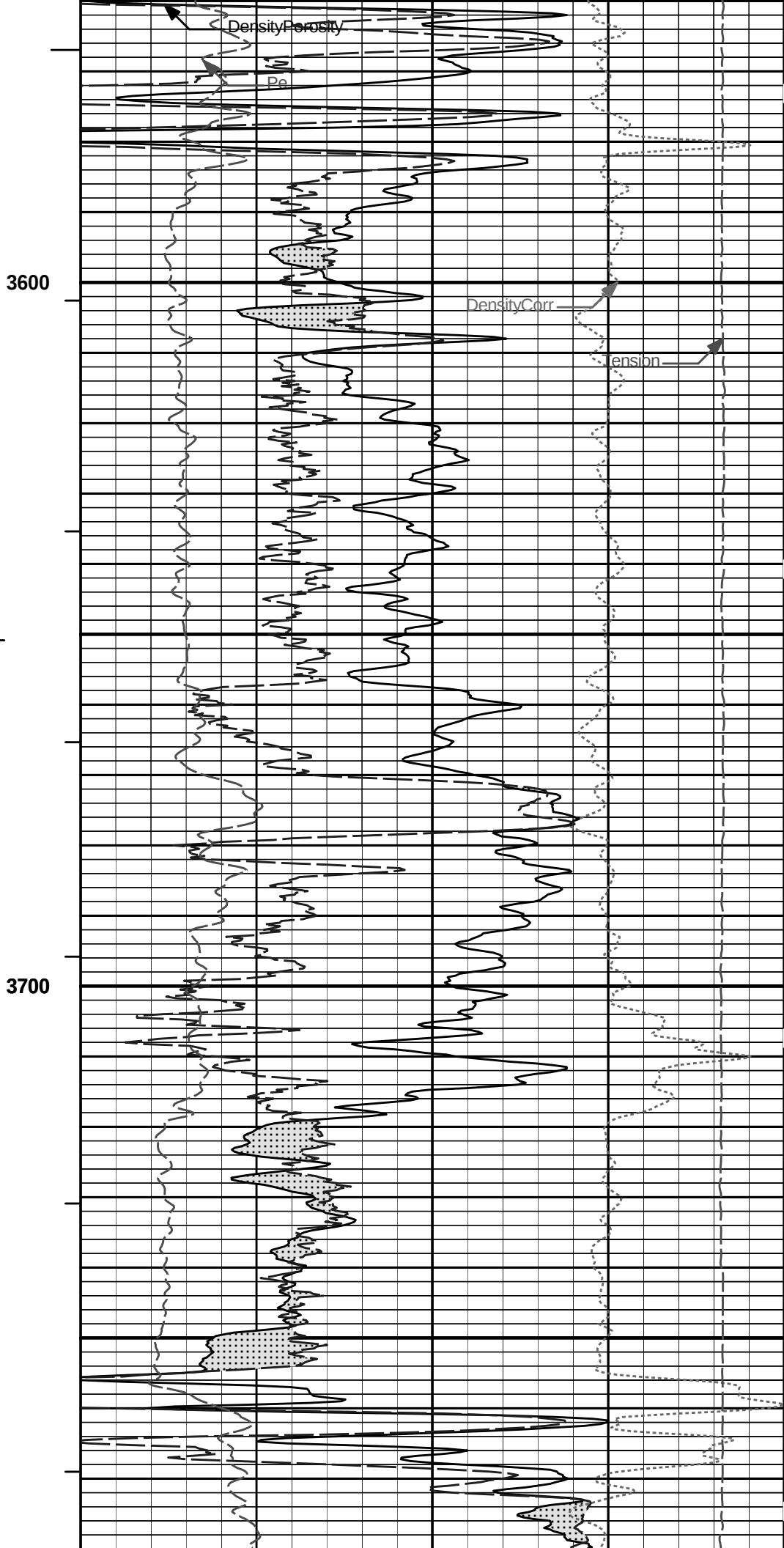
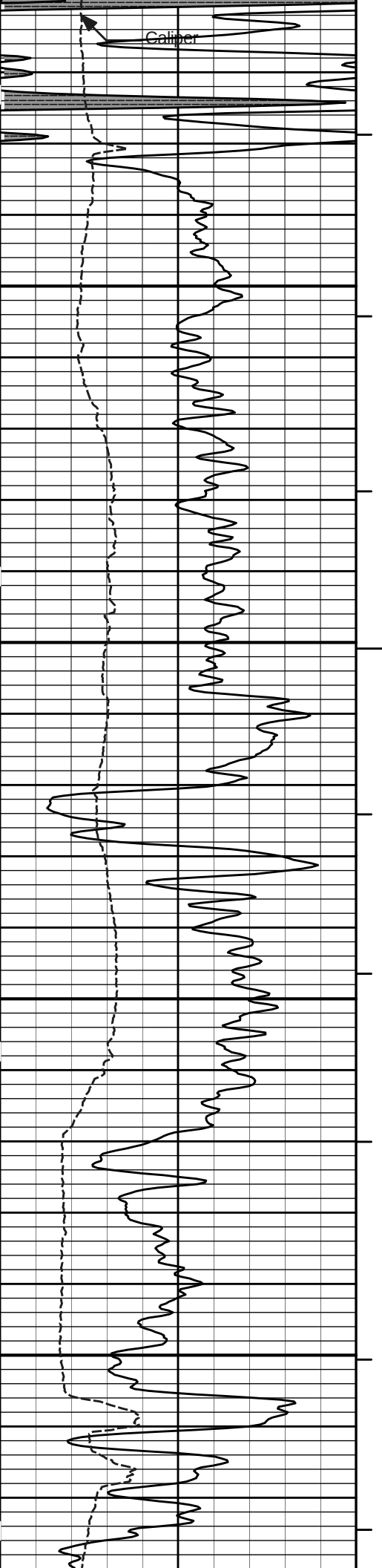
HALLIBURTON

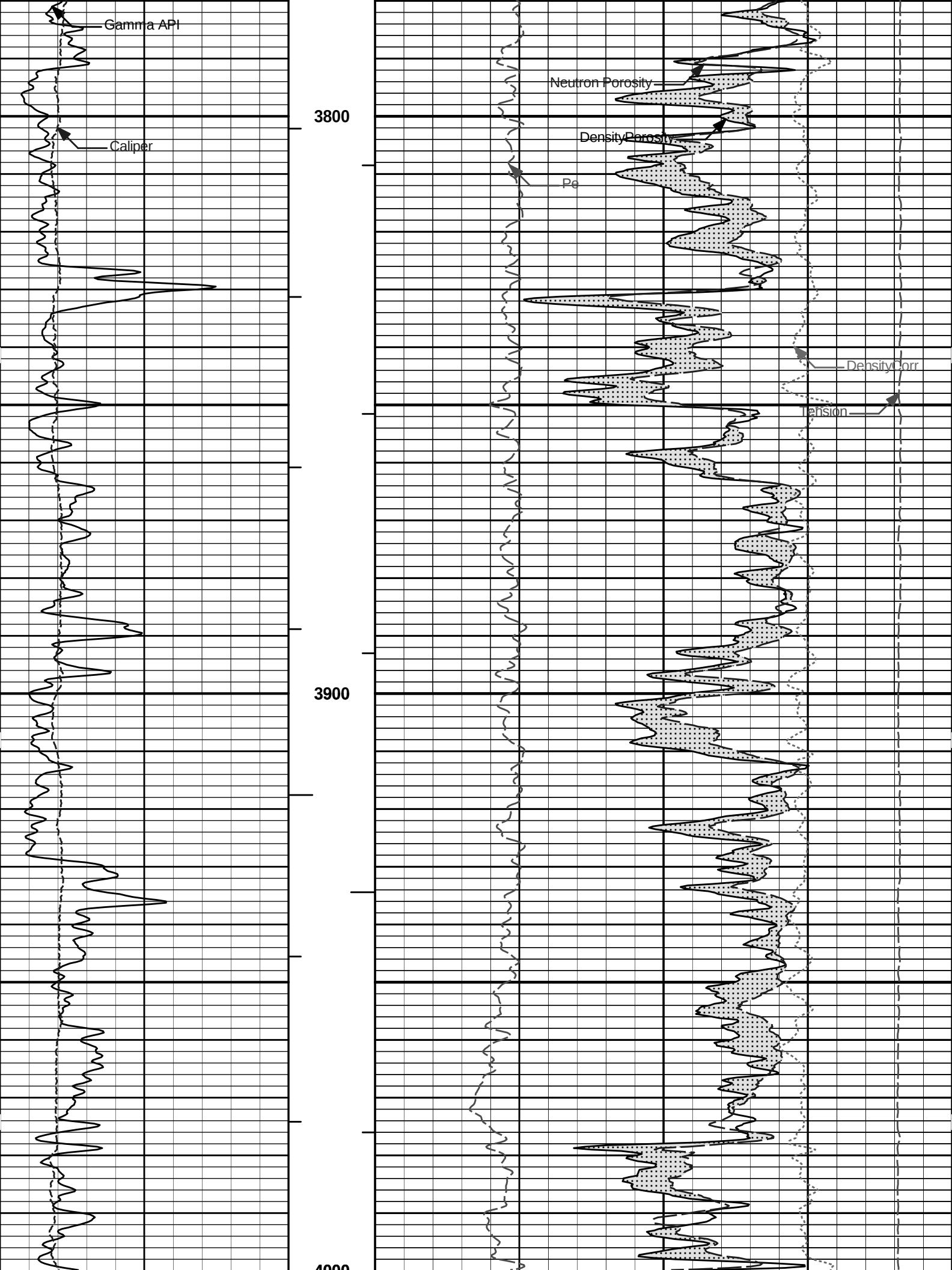
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Data: WHELAN_1_32\Well Based\SDL\
Plot File: \\PORO\Poro IQ 5 MAIN LIB

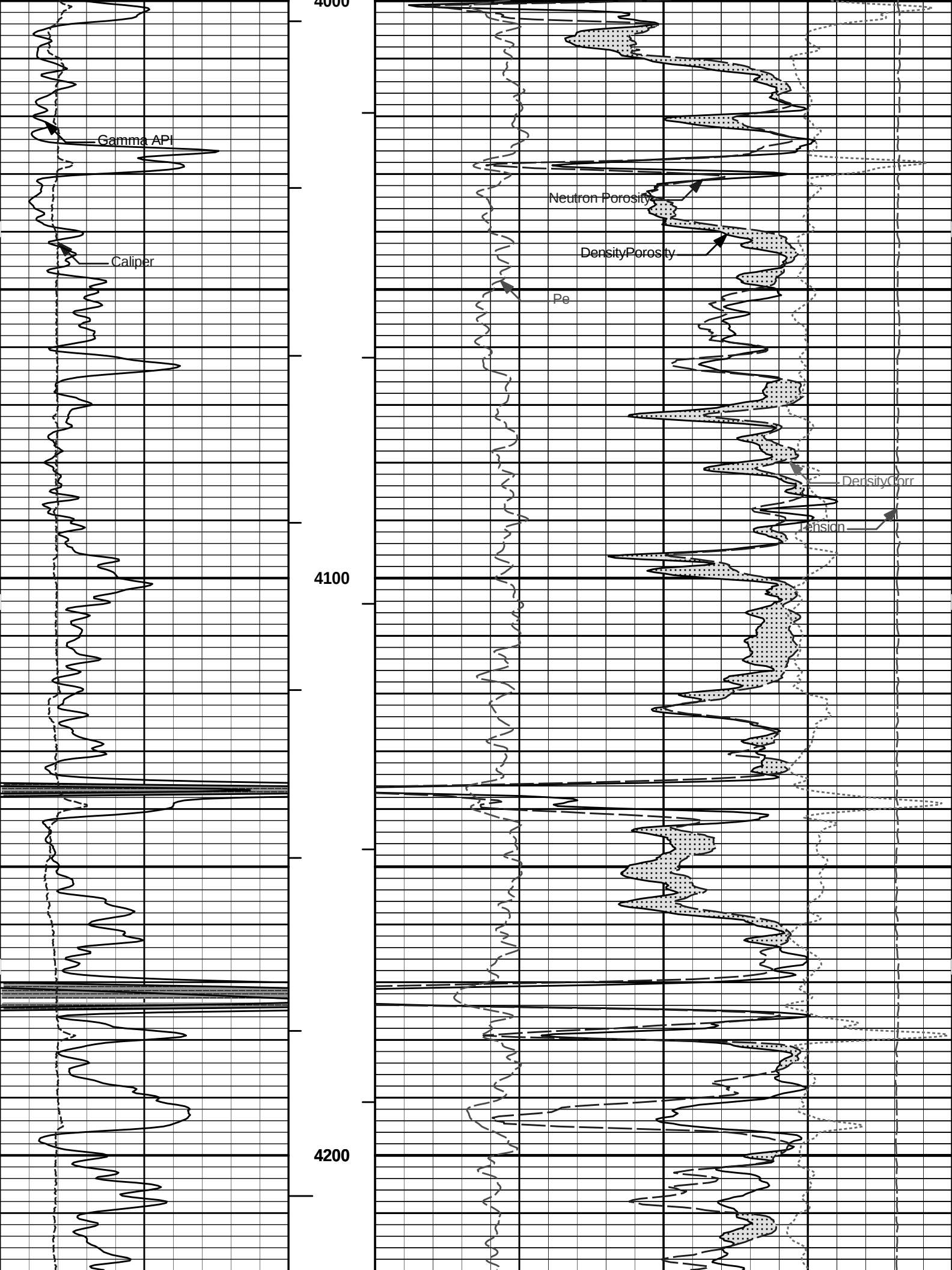
5 INCH MAIN LOG

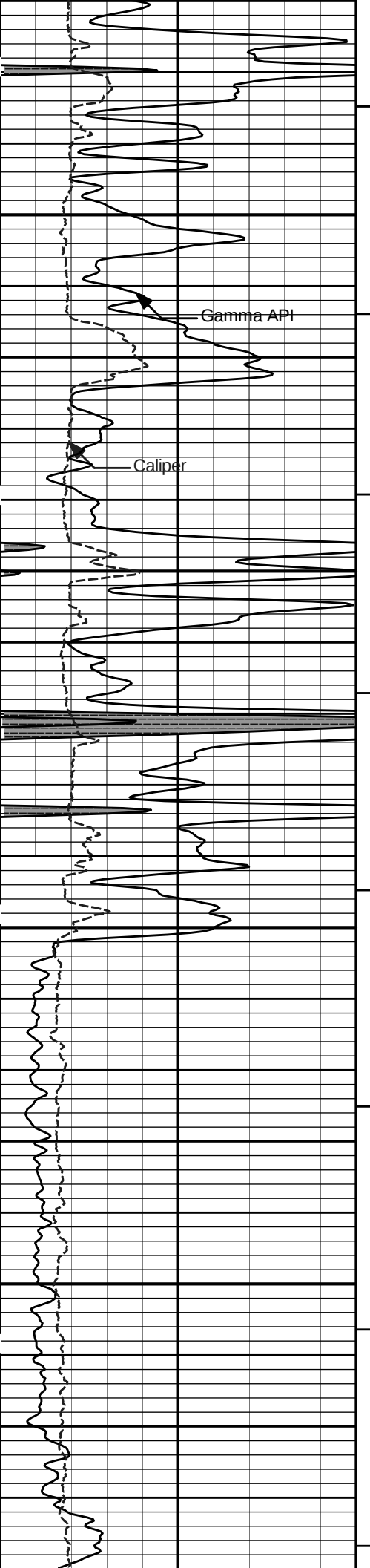






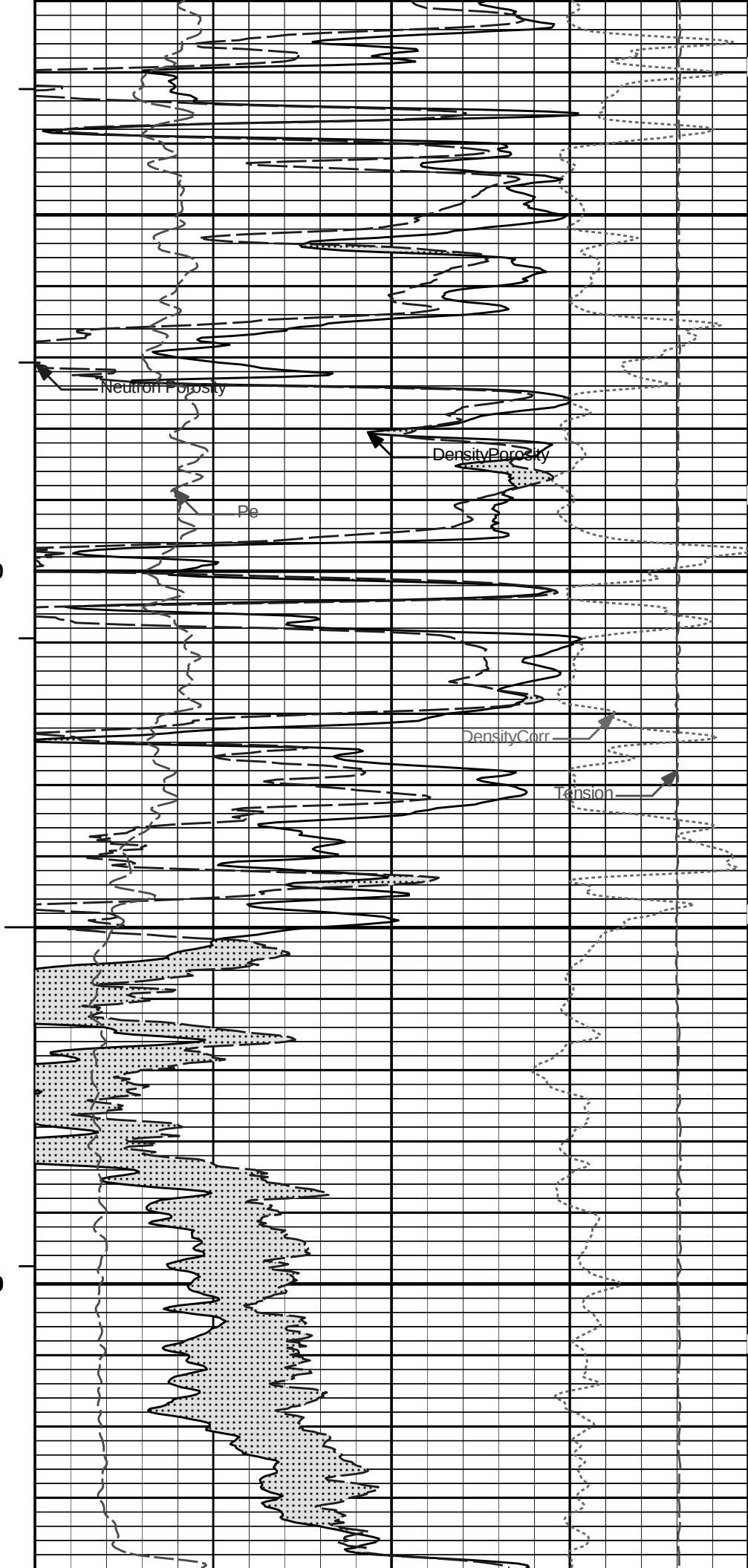


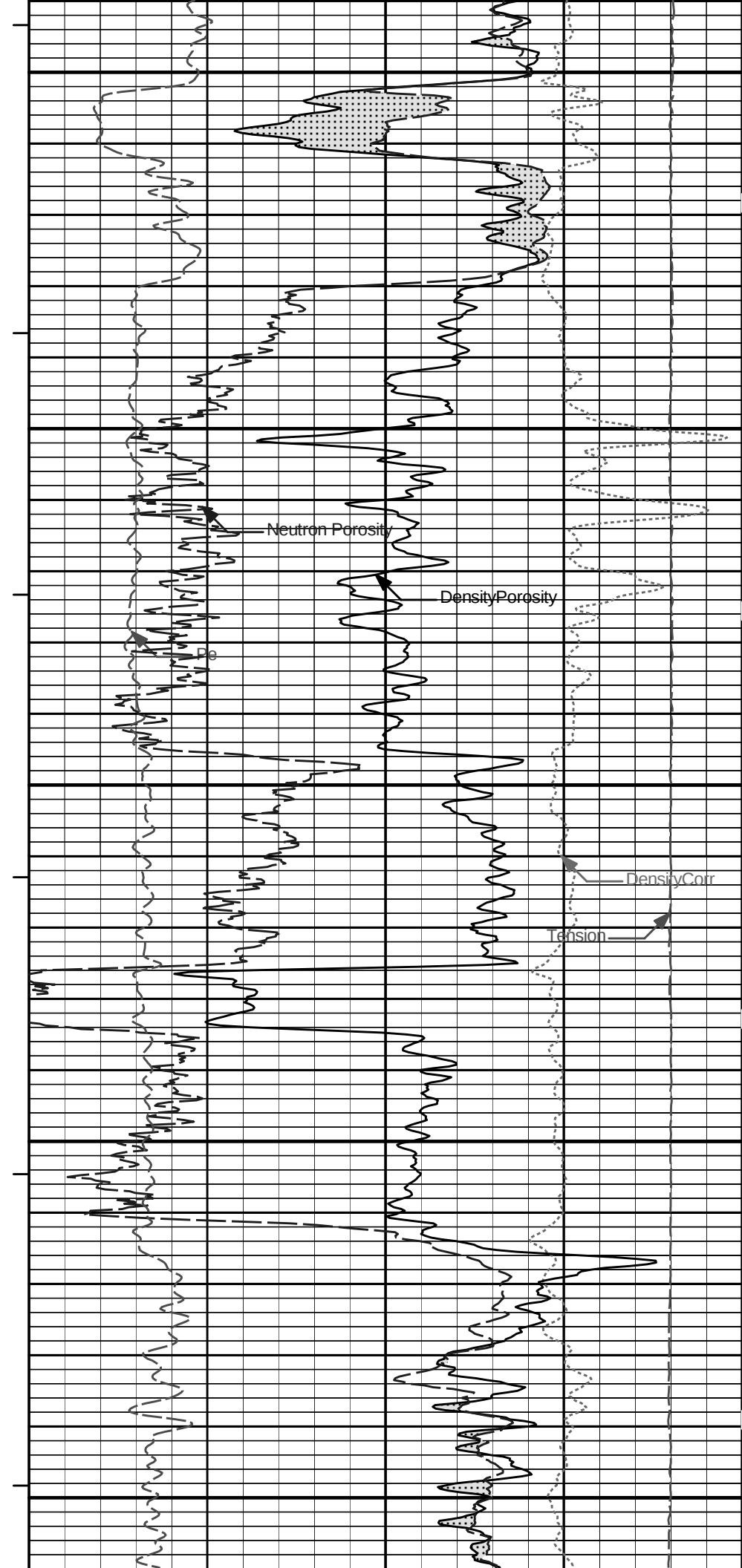
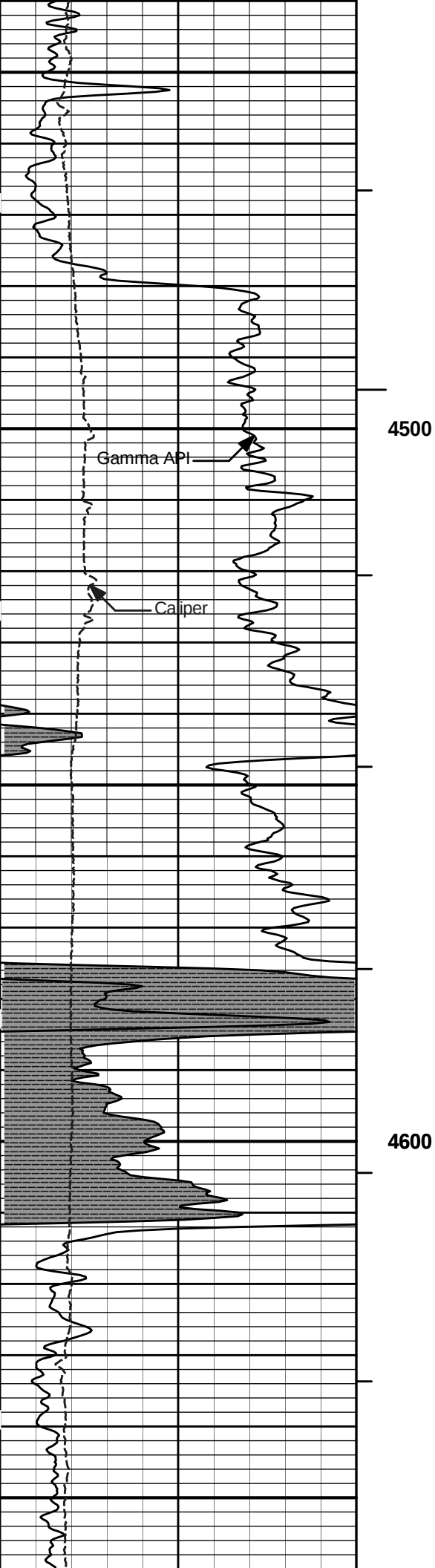


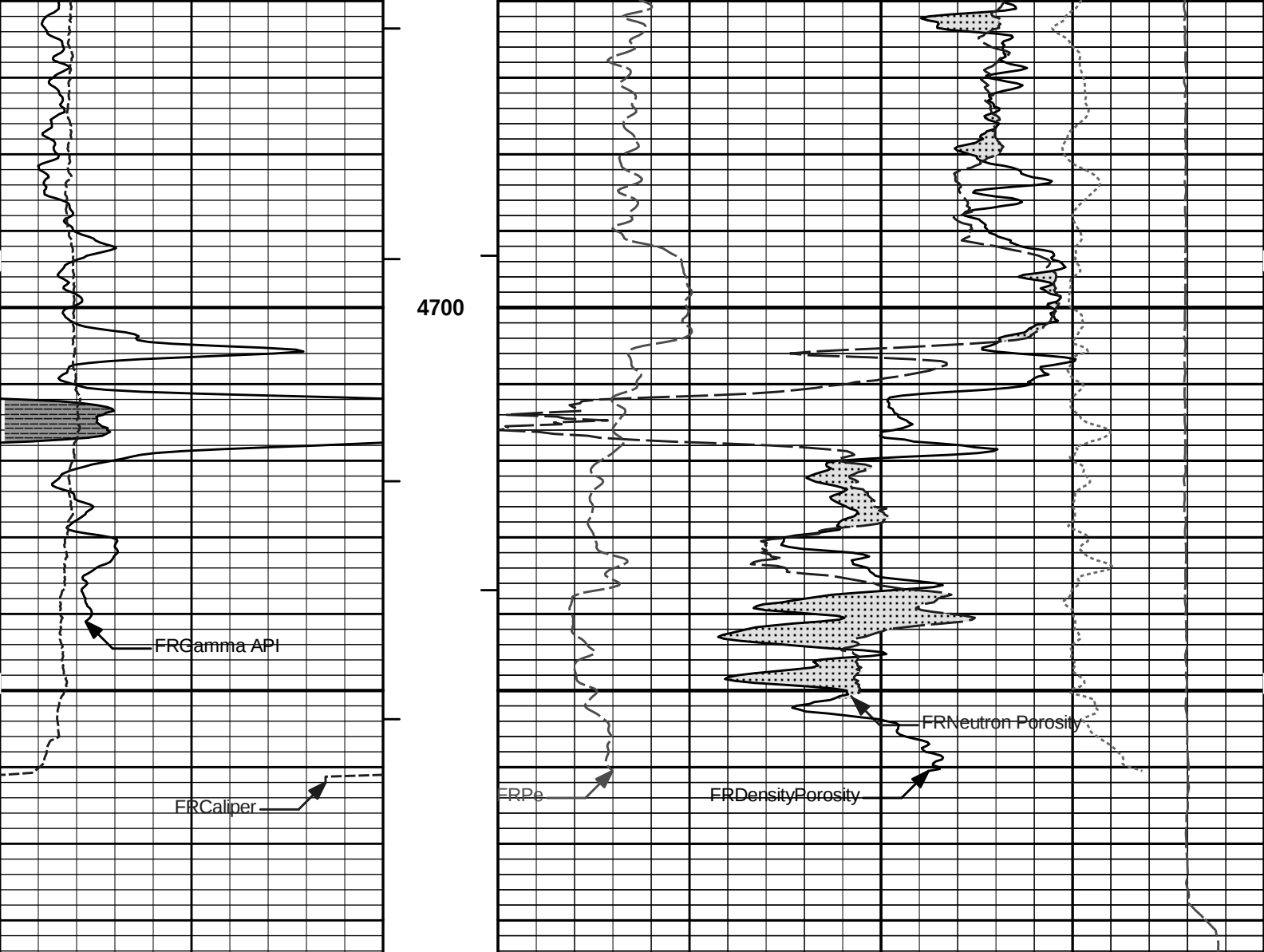


4300

4400







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
					%				
			Tension Pull	30	Neutron Porosity				-10
			10 0		%				
			Tension Pull		CROSSOVER				

HALLIBURTON

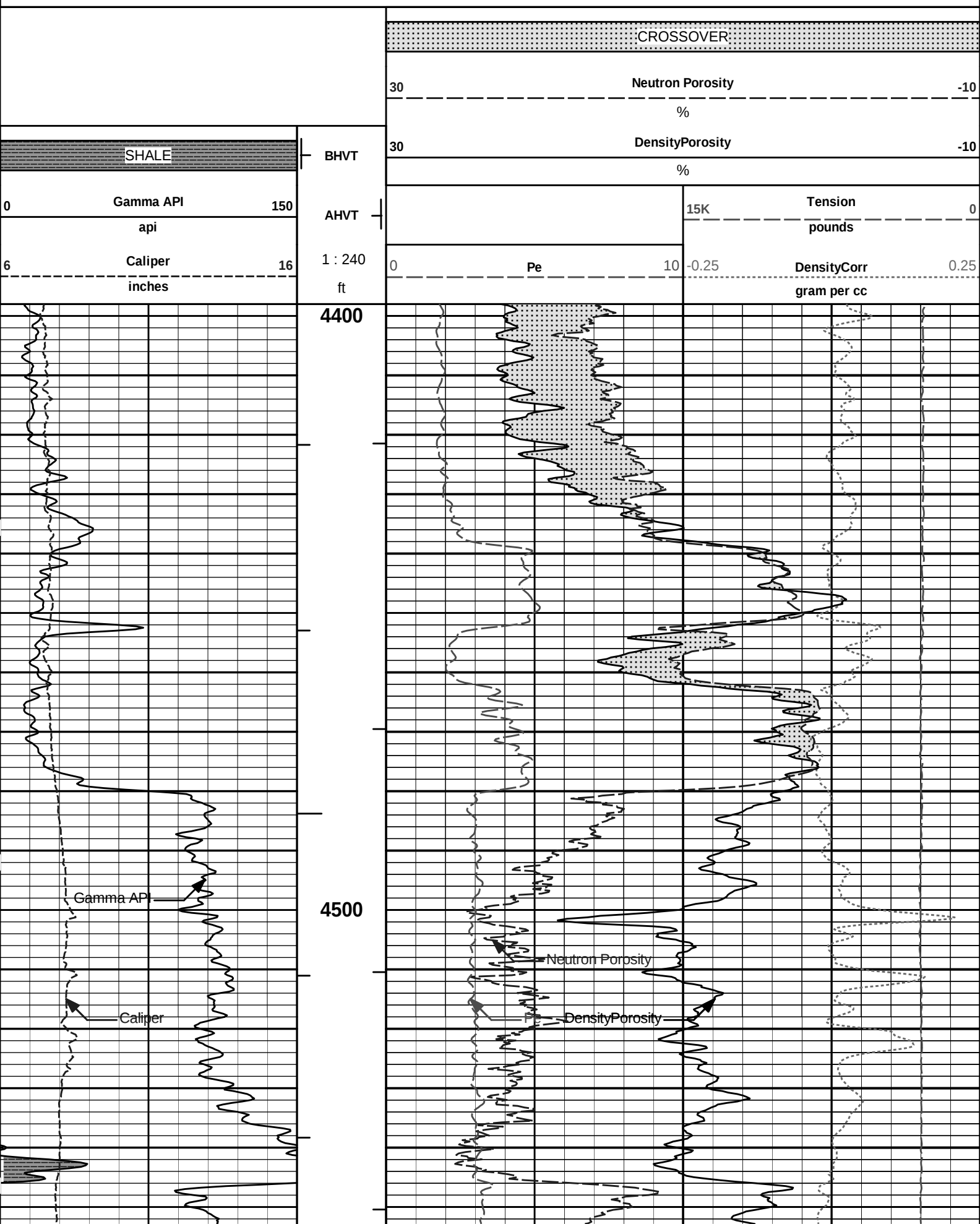
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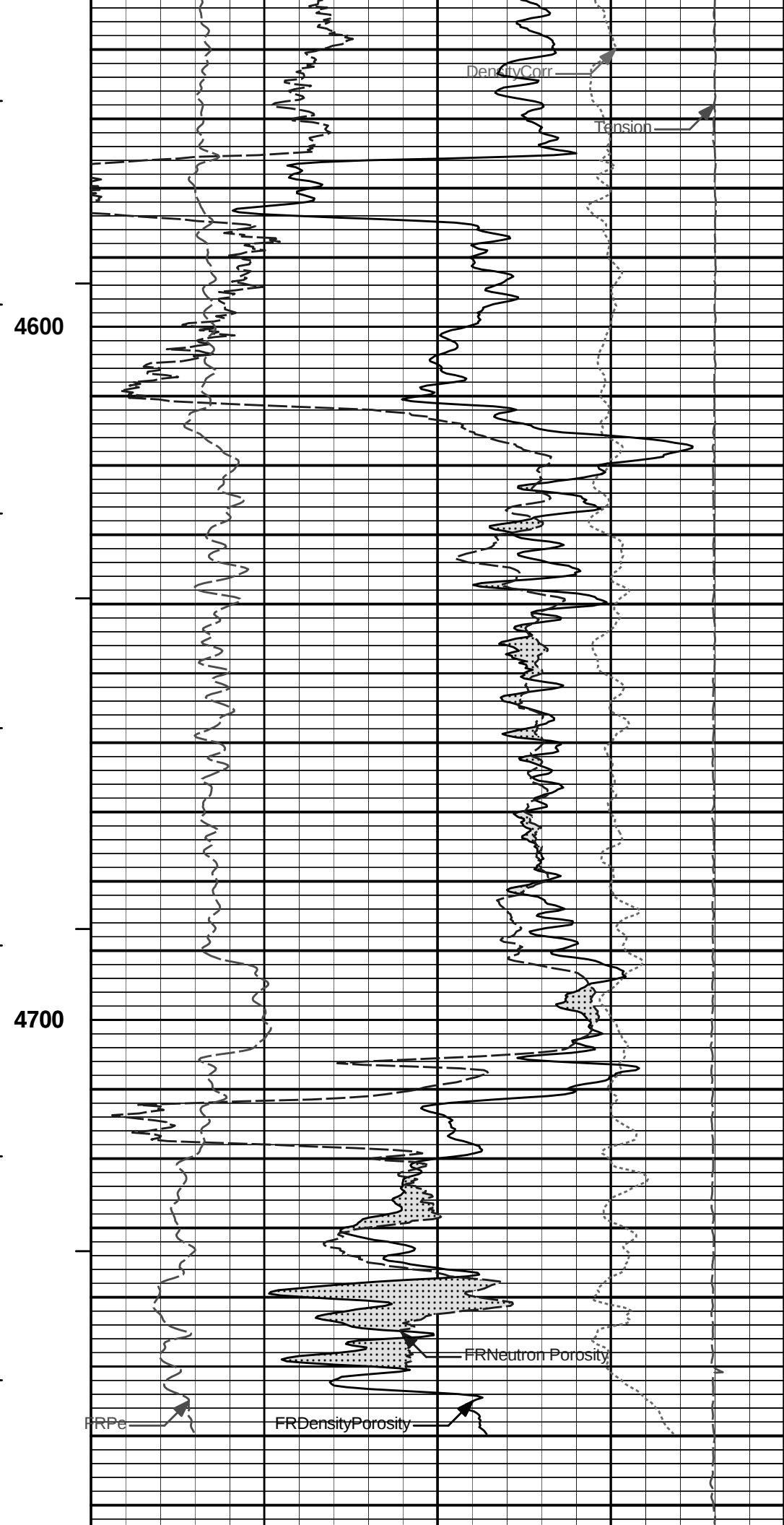
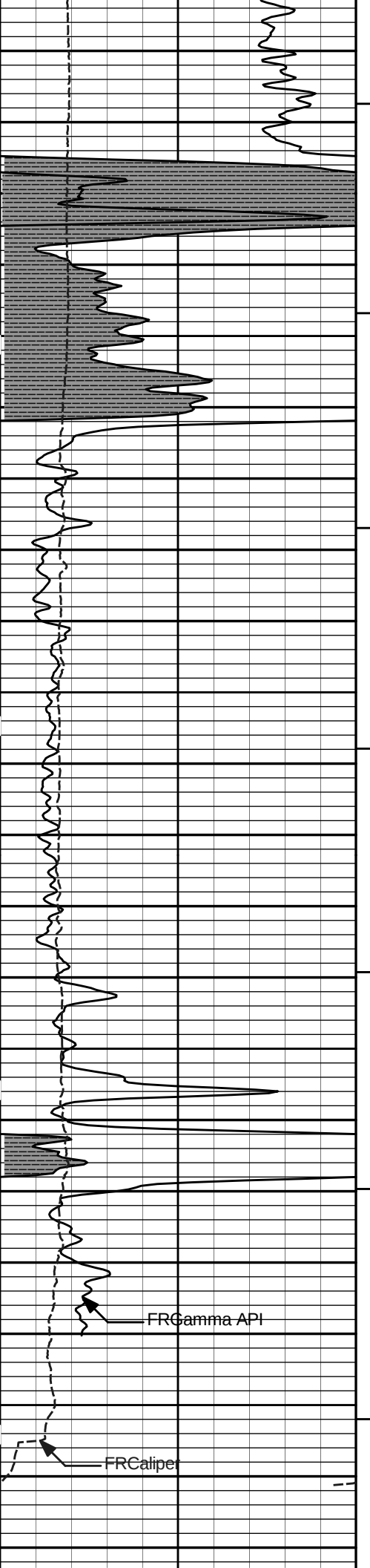
5 INCH MAIN LOG

HALLIBURTON

Plot Time: 04-Mar-12 16:32:35
 Plot Range: 4398 ft to 4783.17 ft
 Data: WHELAN_1_32\Well Based\REPEAT\
 Plot File: \\PORO\Poros_IQ_5_REP_LIB

REPEAT SECTION



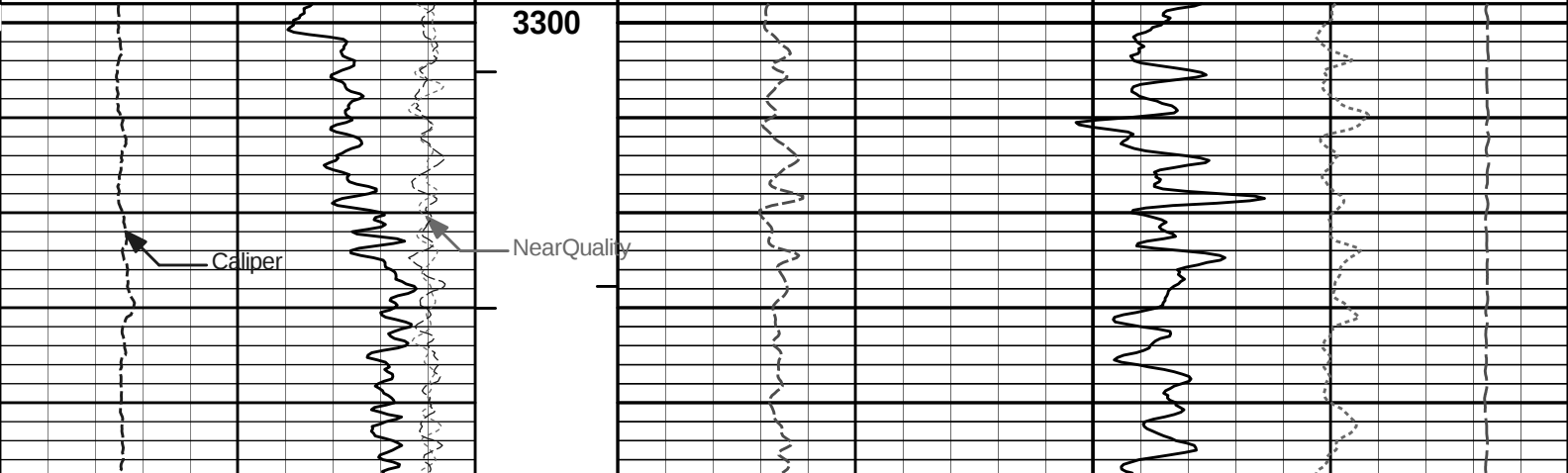


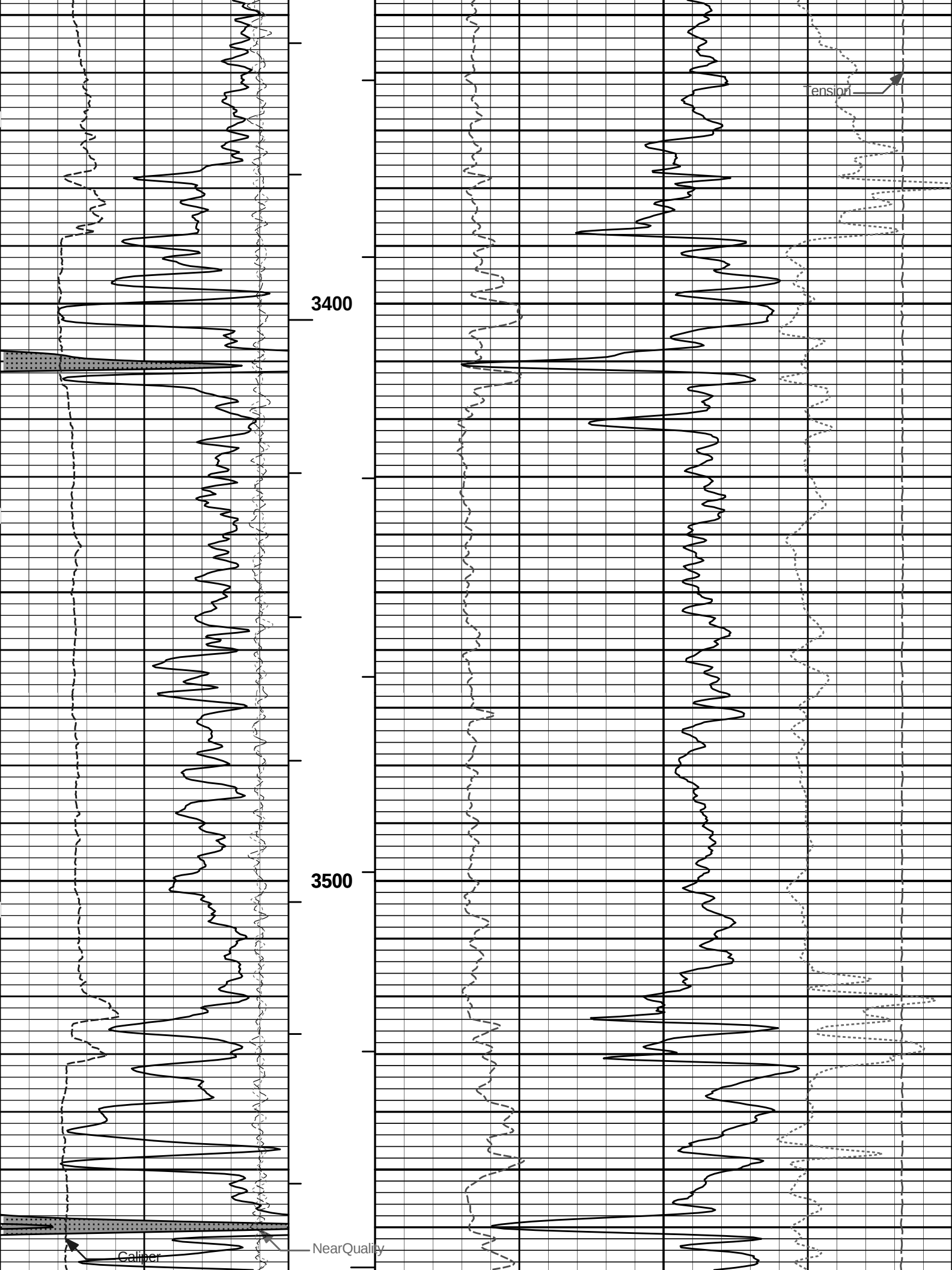
HALLIBURTON

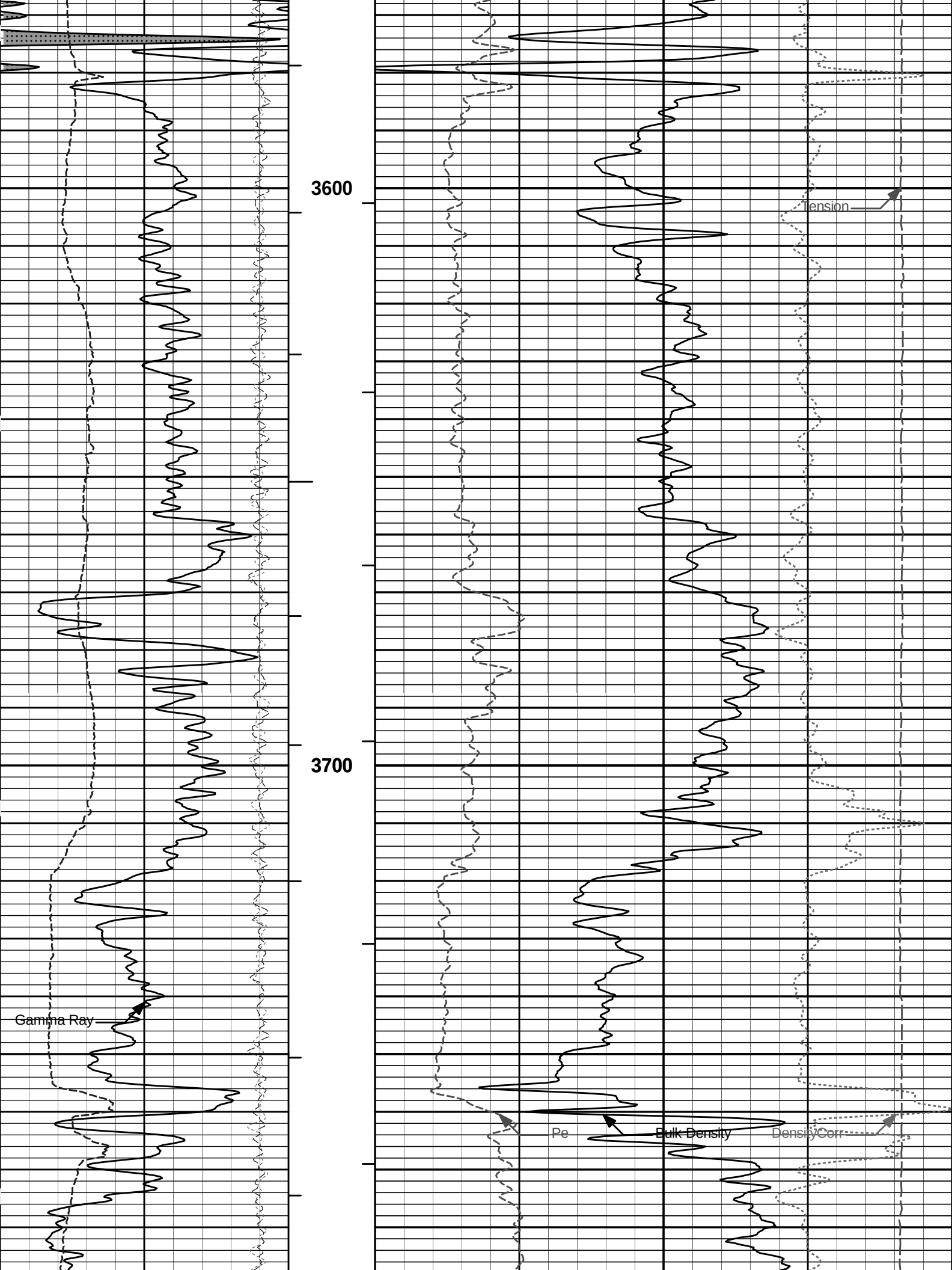
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Data: WHELAN_1_32\Well Based\REPEAT\
Plot File: \\PORO\Poros_IQ_5_REP_LIB

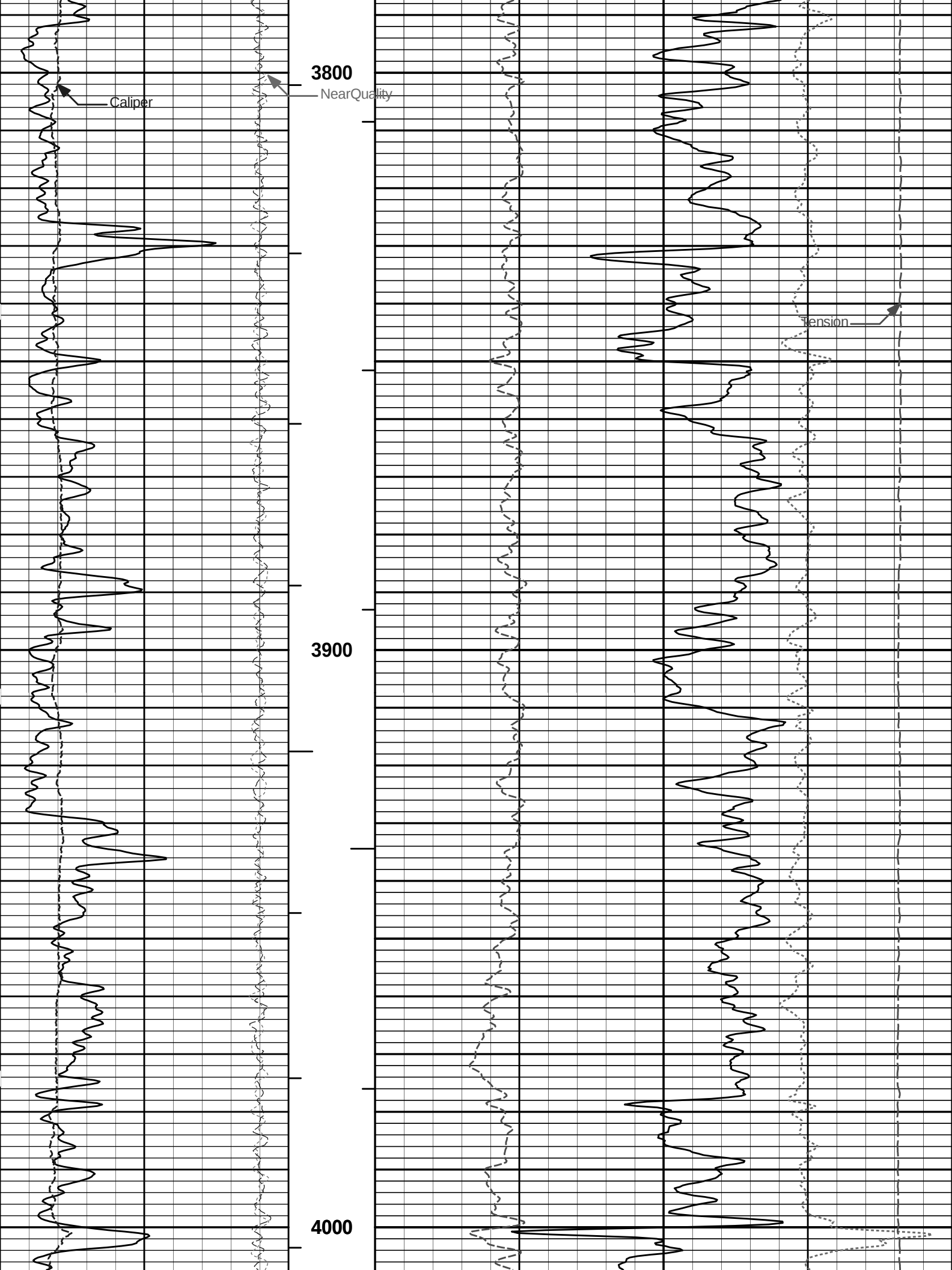
REPEAT SECTION

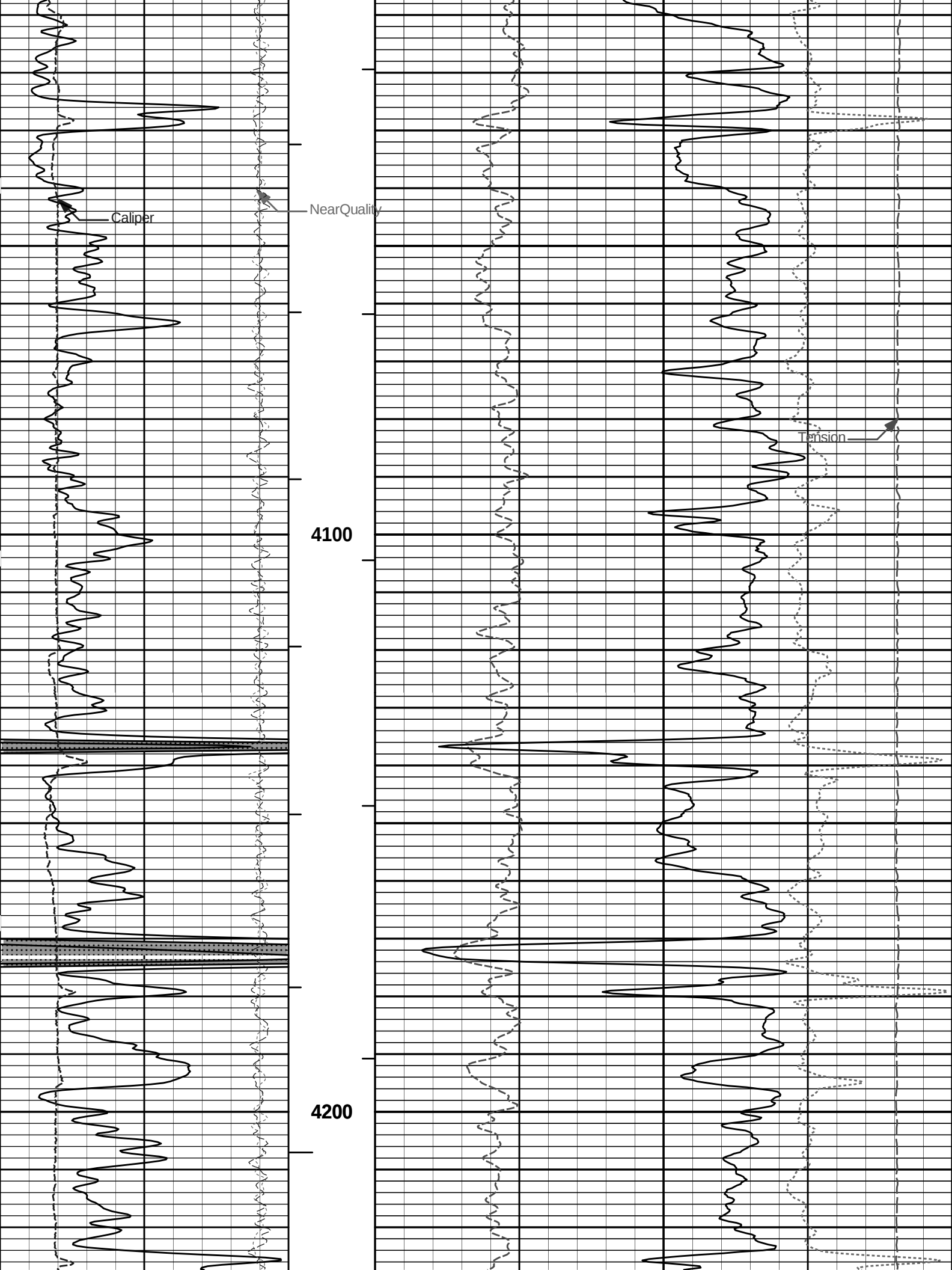
SHALE		Tension Pull		
0	Gamma Ray	150	Tension Pull	0
api				
18	FarQuality	-2	AHV ft3	2
			Bulk Density	
			g/cc	
-18	NearQuality	2	BHV ft3	15K
			Tension	
			pounds	
6	Caliper	16	1 : 240	0
inches			ft	Pe
			10	-0.25
			DensityCorr	
			g/cc	
			0.25	

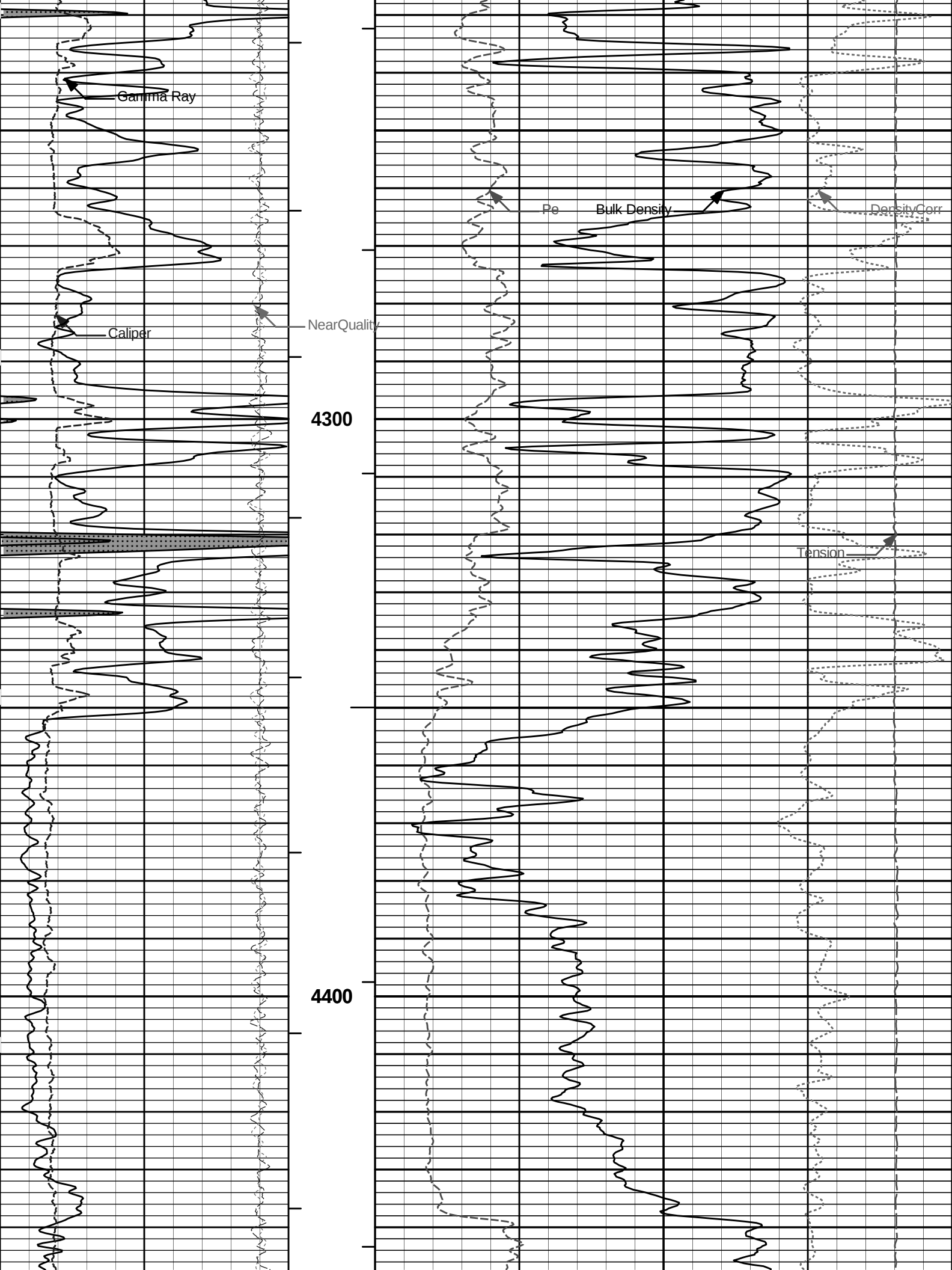


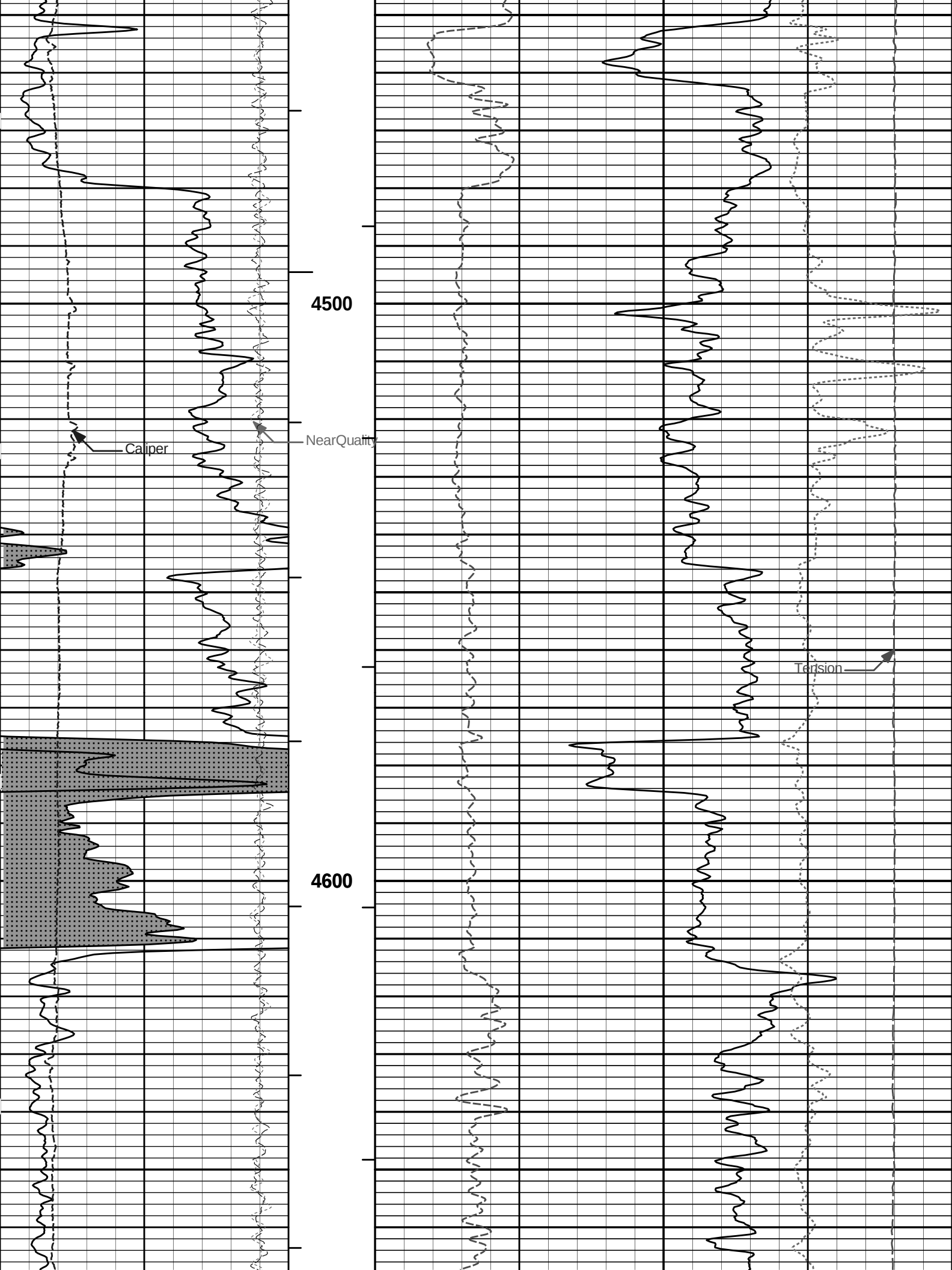


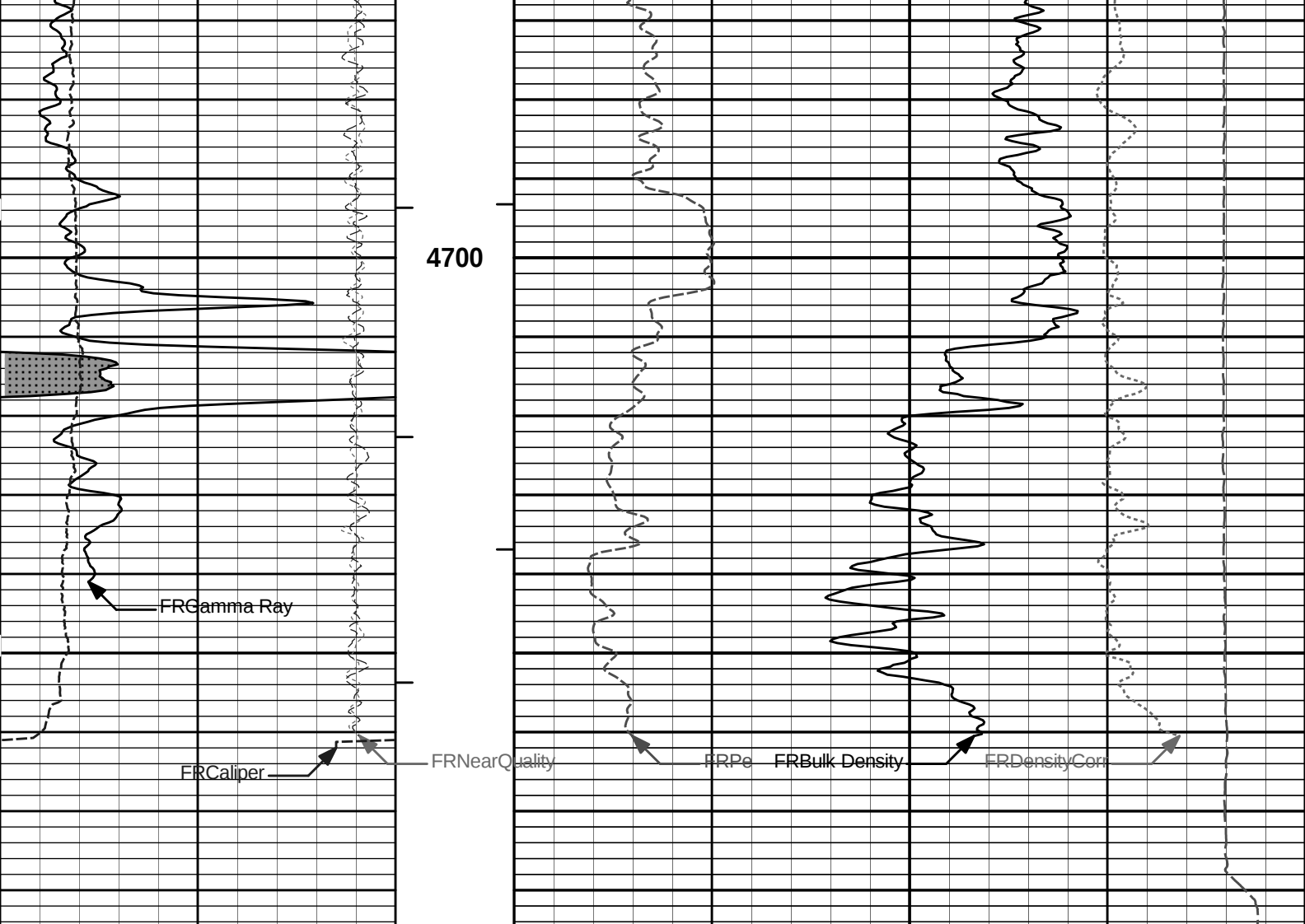












6	Caliper	16	1 : 240	0	Pe	10	-0.25	DensityCorr	0.25
	inches		ft					g/cc	
-18	NearQuality	2	BHV			15K		Tension	0
			ft3					pounds	
18	FarQuality	-2	AHV						
			ft3						
0	Gamma Ray	150	Tension Pull						
	api		10	0					
	SHALE		Tension Pull						

HALLIBURTON

Plot Time: 04-Mar-12 16:32:39
Plot Range: 3298 ft to 4784.67 ft
Data: WHELAN_1_32\Well Based\SDL\
Plot File: \\-LOCAL-WHELAN_1_32\0001 SP-GTET-DSNT-SDLT-ACRT-CHIPORO\BULKD_5_MAIN_LIB

5 INCH MAIN LOG

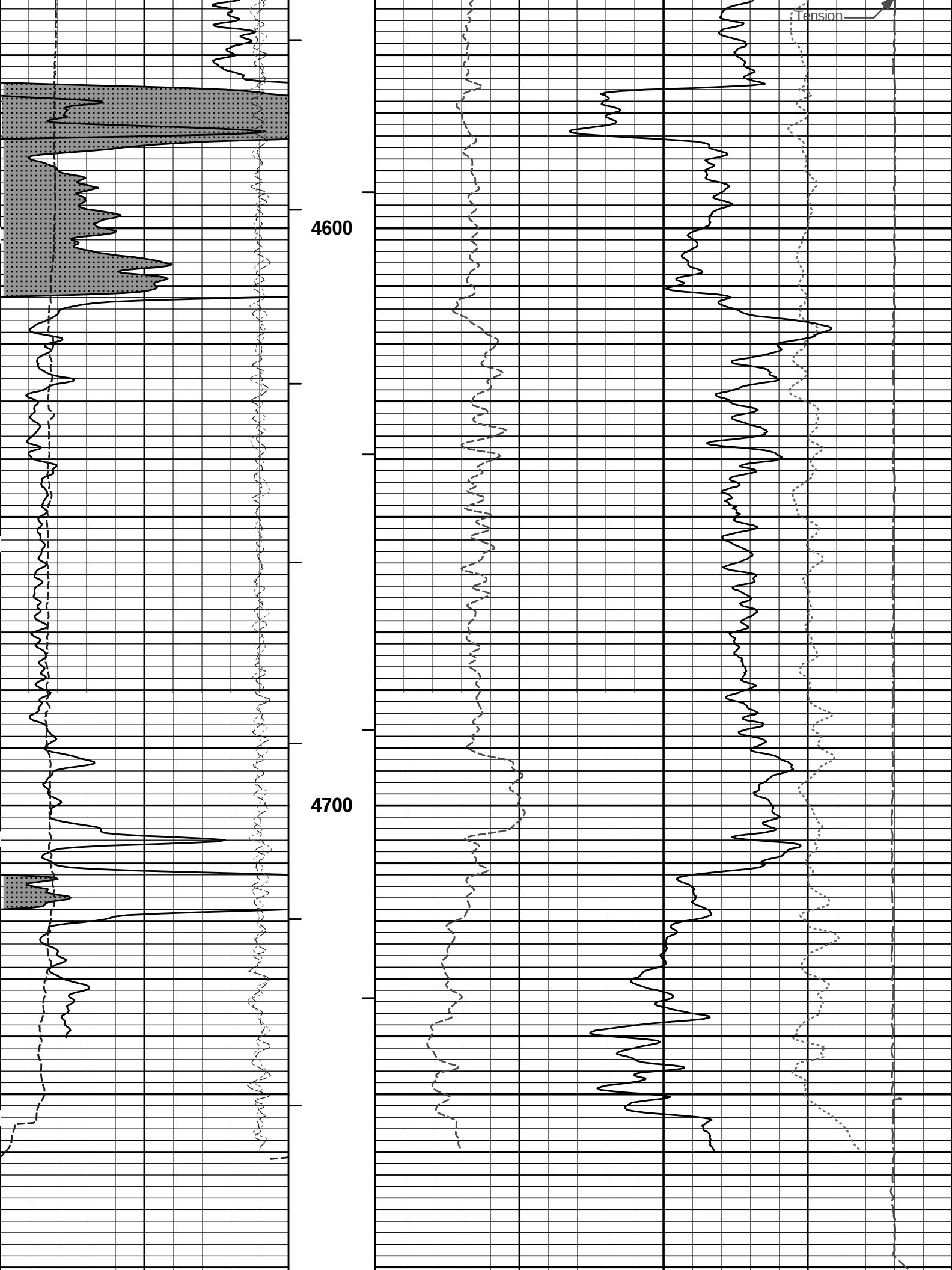
HALLIBURTON

Plot Time: 04-Mar-12 16:32:40
Plot Range: 4398 ft to 4783.17 ft
Data: WHELAN_1_32\Well Based\REPEAT\
Plot File: \\-LOCAL-WHELAN_1_32\0001 SP-GTET-DSNT-SDLT-ACRT-CHIPORO\BULKD_5_REP_LIB

REPEAT SECTION

REPEAT SECTION

SHALE					
0	Gamma Ray	150			
api					
18	FarQuality	-2	AHV ft3	Bulk Density	
			g/cc		
-18	NearQuality	2	BHV ft3	15K	Tension
			pounds		
6	Caliper	16	1 : 240 ft	Pe	DensityCorr
inches			g/cc		
4400			4500		
Gamma Ray			Pe Bulk Density DensityCorr		



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HALLIBURTON

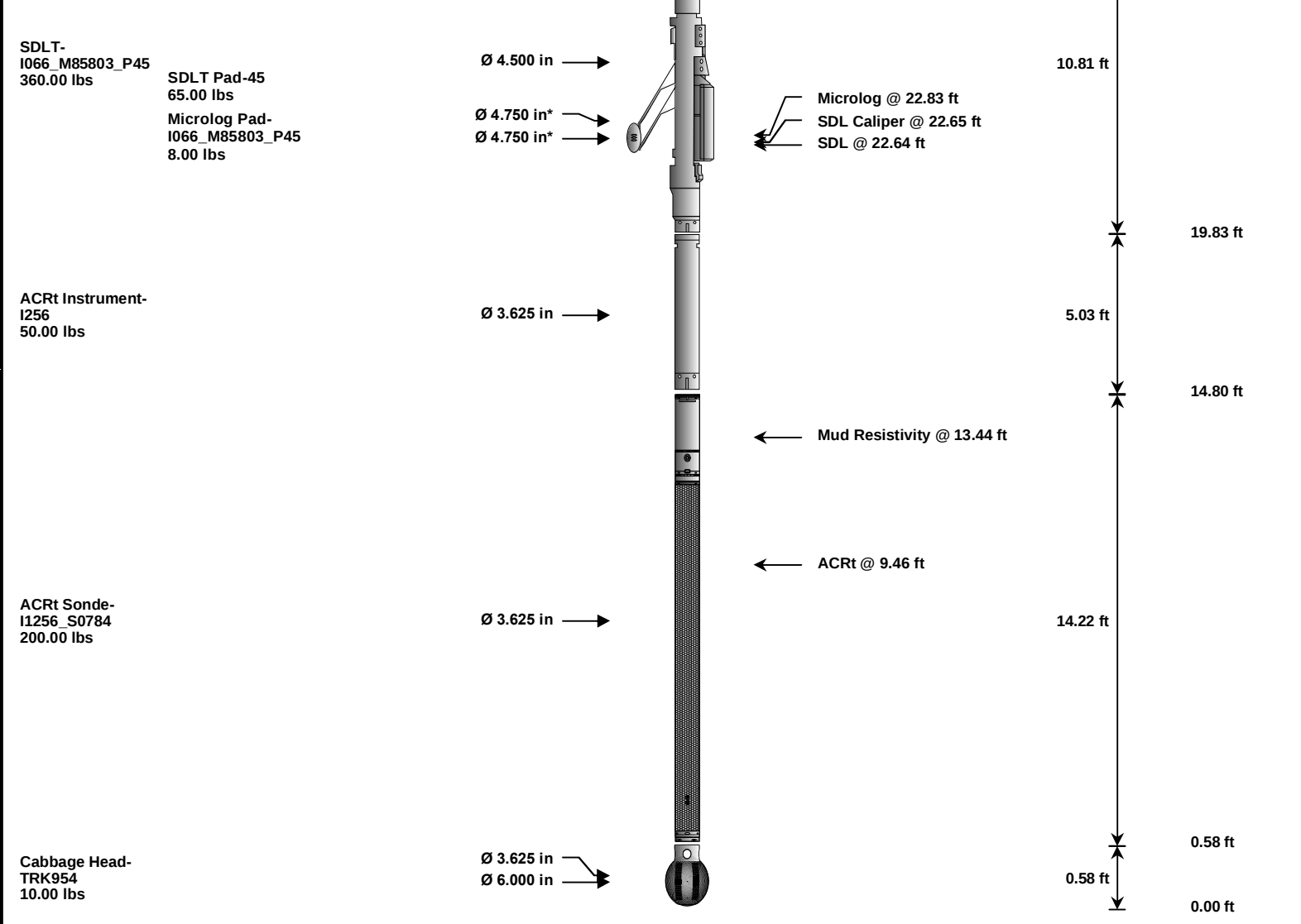
Plot Time: 04-Mar-12 16:32:41
Plot Range: 4398 ft to 4783.17 ft
Data: WHELAN_1_32\Well Based\REPEAT\
Plot File: \\-LOCAL-WHELAN_1_32\0001 SP-GTET-DSNT-SDLT-ACRT-CH\PORO\BULKD_5_REP_LIB

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	54.51 ft
SP Sub-PROT01 60.00 lbs		Ø 3.625 in →		← SP @ 50.81 ft	3.74 ft	52.59 ft
						48.85 ft
GTET-10811258 165.00 lbs		Ø 3.625 in →		← GammaRay @ 42.79 ft	8.52 ft	
						40.33 ft
DSNT-10755066 174.00 lbs	DSN Decentralizer- 10735145 6.60 lbs	Ø 5.000 in* → Ø 3.625 in →		← DSN Far @ 33.39 ft ← DSN Near @ 32.64 ft	9.69 ft	
						30.64 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	52.59	300.00
SP	SP Sub		PROT01	60.00	3.74	48.85	300.00
GTET	Gamma Telemetry Tool		10811258	165.00	8.52	40.33	60.00
DSNT	Dual Spaced Neutron		10755066	174.00	9.69	30.64	60.00
DCNT	DSN Decentralizer		10735145	6.60	5.13	*	33.97
SDLT	Spectral Density Tool		I066_M85803_P45	360.00	10.81	19.83	60.00
MICP	Microlog Pad		I066_M85803_P45	8.00	1.00	*	22.33
SDLP	Density Insite Pad		45	65.00	2.55	*	22.04
ACRt	Array Compensated True Resistivity Instrument Section		I256	50.00	5.03	14.80	300.00
ACRt	Array Compensated True Resistivity		I1256_S0784	200.00	14.22	0.58	300.00
CBHD	Cabbage Head		TRK954	10.00	0.58	0.00	300.00
Total				1,128.60	54.51		
* Not included in Total Length and Length Accumulation.							
Data: WHELAN_1_32\0001 SP-GTET-DSNT-SDLT-ACRT-CHIDLE							Date: 04-Mar-12 13:47:57

HALLIBURTON

CALIBRATION REPORT

NATURAL GAMMA RAY TOOL SHOP CALIBRATION			
Tool Name:	GTET - 10811258	Reference Calibration Date:	27-Feb-12 10:42:34
Engineer:	T. HYDE	Calibration Date:	27-Feb-12 10:45:14
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

Calibrator Source S/N: TB185
Calibrator API Reference:228.00 api
Equivalent Calibrator API Reference:232.0 api

Measurement	Measured	Calibrated	Units
Background	43.9	44.1	api
Background + Calibrator	275.0	276.1	api
Calibrator	231.1	232.0	api

NATURAL GAMMA RAY TOOL FIELD CALIBRATION

Tool Name:	GTET - 10811258	Reference Calibration Date:	27-Feb-12 10:45:14
Engineer:	T. HYDE	Calibration Date:	04-Mar-12 08:18:15
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

Calibrator Source S/N: TB185
Calibrator API Reference:228.00 api
Equivalent Calibrator API Reference:232.0 api

Field Verification	Shop	Field	Units
Background	44.1	48.7	api
Background + Calibrator	276.1	277.3	api
Calibrator	232.0	228.7	api

Shop	Field	Difference	Tolerance
232.0	228.7	3.3	+/- 9.00

DUAL SPACED NEUTRON SHOP CALIBRATION

Tool Name:	DSNT - 10755066	Reference Calibration Date:	26-Jan-12 13:31:41
Engineer:	J. BOLLLOM	Calibration Date:	03-Mar-12 12:13:38
Software Version:	WL INSITE R3.4.2 (Build 2)	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_10782954
Calibration Tank Water Temperature: 62 degF
Min. Tool Housing Outside Diameter: 3.615 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.945	0.945	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	0.2103	0.0000	+/- 0.0020
Calibrated Ratio:	9.70	9.70	0.000	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0560	0.02000 - 0.09000

PASS/FAIL SUMMARY	
Background Check:	Passed
Gain-Range Check:	Passed

DUAL SPACED NEUTRON FIELD CALIBRATION**Tool Name:** DSNT - 10755066**Reference Calibration Date:** 03-Mar-12 12:13:38**Engineer:** T. HYDE**Calibration Date:** 04-Mar-12 08:30:48**Software Version:** WL INSITE R3.4.2 (Build 2)**Calibration Version:** 1

Logging Source S/N: DSN-436

Snow Block S/N: TRK_10782954

NEUTRON FIELD-CHECK SUMMARY

	Shop	Field	Difference	Control Limit On Change
Snow-Block Porosity (decp):	0.0560	0.0616	0.0057	+/- 0.0150

PASS/FAIL SUMMARY

Block Change Check: Passed

Snow Block Stat Check: Passed

Temperature Check: Passed

DENSITY CALIPER SHOP CALIBRATION**Tool Name:** SDLT - I066_M85803_P45**Reference Calibration Date:** 09-Nov-11 16:14:16**Engineer:** C. MARLOWE**Calibration Date:** 31-Jan-12 19:54:02**Software Version:** WL INSITE R3.4.2 (Build 2)**Calibration Version:** 1**CALIBRATION COEFFICIENTS**

Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-5583.09	-5136.31	-7000.00 - -1000.00
Pad Gain	0.0003781	0.0003673	0.000200 - 0.000600
Arm Offset	-1197.87	-1566.02	-5000.00 - 3000.00
Arm Gain	0.0004938	0.0004838	0.000300 - 0.000700
Arm Power	-0.000003039	-0.000002176	-0.000010 - 0.000010

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)	1.89	2.00	0.11	+/- 0.20
Medium Ring (in)	3.69	3.75	0.06	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.54	6.50	-0.04	+/- 0.20
Medium Ring (in)	8.31	8.25	-0.06	+/- 0.20
Large Ring (in)	14.98	15.00	0.02	+/- 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 - I066_M85803_P45**Reference Calibration Date:** 31-Jan-12 19:54:02**Engineer:** T. HYDE**Calibration Date:** 04-Mar-12 08:21:53**Software Version:** WL INSITE R3.4.2 (Build 2)**Calibration Version:** 1

MEASURED CALIPER VALUES				
Measurement	Shop	Field	Change	Control Limit On New Value
Pad Extension	3.75	3.75	-0.00	+/- 0.10
Ring Diameter	8.25	8.38	0.13	+/- 0.15
PASS/FAIL SUMMARY				
Pad Extension Check:			Passed	
Diameter Check:			Passed	

SPECTRAL DENSITY SHOP CALIBRATION				
Tool Name:	SDLT Pad - 45	Reference Calibration Date:	23-Jan-12 14:46:25	
Engineer:	C. MARLOWE	Calibration Date:	03-Mar-12 17:30:06	
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1	

Logging Source S/N: 5073GW

Aluminum Block S/N: 63061

Magnesium Block S/N: 63393

Density: 2.591g/cc

Density: 1.690g/cc

Pe: 3.170

Pe: 2.594

DENSITY CALIBRATION SUMMARY			
Measurement	Previous Value	New Value	Control Limit
Near Bar Gain	0.9638	0.9720	0.90 - 1.10
Near Dens Gain	0.9694	0.9694	0.90 - 1.10
Near Peak Gain	0.9714	0.9715	0.90 - 1.10
Near Lith Gain	0.9507	0.9331	0.90 - 1.10
Far Bar Gain	0.9884	0.9863	0.90 - 1.10
Far Dens Gain	0.9795	0.9773	0.90 - 1.10
Far Peak Gain	0.9754	0.9717	0.90 - 1.10
Far Lith Gain	0.9495	0.9499	0.90 - 1.10
Near Bar Offset	0.5546	0.4726	NONE
Near Dens Offset	0.4701	0.4611	NONE
Near Peak Offset	0.4173	0.4081	NONE
Near Lith Offset	0.5566	0.6911	NONE
Far Bar Offset	0.2316	0.2474	NONE
Far Dens Offset	0.2881	0.3031	NONE
Far Peak Offset	0.2860	0.3145	NONE
Far Lith Offset	0.4258	0.4156	NONE
Near Bar Background	1005.32	1008.03	700 - 1450
Near Dens Background	333.52	332.13	230 - 480
Near Peak Background	145.48	145.56	100 - 210
Near Lith Background	177.09	178.08	125 - 260
Far Bar Background	514.45	518.28	450 - 900
Far Dens Background	198.02	199.69	175 - 345
Far Peak Background	77.75	78.25	70 - 140
Far Lith Background	82.34	82.69	75 - 145

CALIBRATION BLOCK SUMMARY				
Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.694	1.690	-0.004	+/- 0.015
Pe	2.480	2.550	0.070	+/- 0.150

Measurement	TOOL SUMMARY			
	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits
QUALITY				
Background	0.0010	+/- 0.0110	0.0017	+/- 0.0140
Magnesium Block	-0.0006	+/- 0.0110	-0.0025	+/- 0.0140
Aluminum Block	0.0009	+/- 0.0110	0.0004	+/- 0.0140
Resolution	9.79	6.00 - 11.50	9.22	6.00 - 11.50
Internal Verifier(B+D+P+L)	1664	1200 - 2700	879	800 - 1700

SPECTRAL DENSITY FIELD CHECK			
Tool Name:	SDLT Pad - 45	Reference Calibration Date:	03-Mar-12 17:30:06
Engineer:	T. HYDE	Calibration Date:	04-Mar-12 08:25:22
Software Version:	WL INSITE R3.4.2 (Build 2)	Calibration Version:	1

Density Field Calibration Summary				
Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1663.809	1655.696	-8.113	16.383
Far (B+D+P+L) cps	878.898	870.652	-8.246	16.180
Near Resolution	9.79	9.83	0.040	0.50
Far Resolution	9.22	9.42	0.200	1.00

CALIBRATION SUMMARY						
Sensor	Shop	Field	Post	Difference	Tolerance	Units
GTET-10811258						
Gamma Ray Calibrator	232.0	228.7	-----	3.3	+/- 9.00	api
DSNT-10755066						
Snow-Block Porosity	0.0560	0.0616	-----	-0.0056	+/- 0.0150	decg
SDLT-I066_M85803_P45						
Pad Extension	3.75	3.75	-----	0.00	+/-0.10	in
Ring Diameter	8.25	8.38	-----	-0.130	+/-0.15	in
SDLT Pad-45						

Near(B+D+P+L)	1663.809	1655.696	-----	8.113	+/-16.383	cps
Far(B+D+P+L)	878.898	870.652	-----	8.246	+/-16.180	cps
Data: WHELAN_1_32\0001 SP-GTET-DSNT-SDLT-ACRT-CH\IDLE						Date: 04-Mar-12 14:16:44

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	9.200	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	0.400	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	4778.00	ft
	SHARED	BHT	Bottom Hole Temperature	110.0	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	

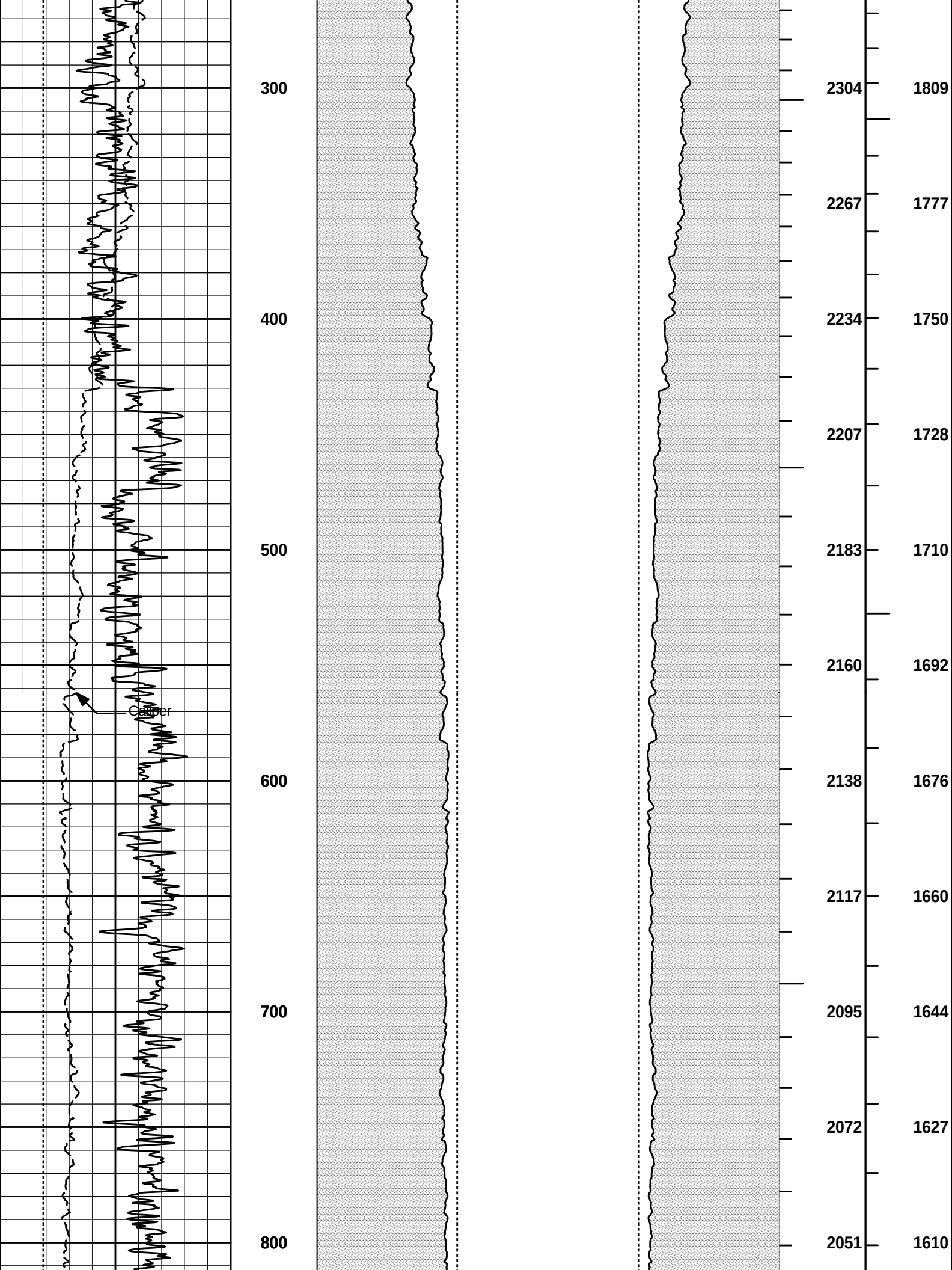
SDLT	CLOK	Process Caliper Outputs?	Yes	
SDLT Pad	DNOK	Process Density?	Yes	
SDLT Pad	DNOK	Process Density EVR?	No	
SDLT Pad	CB	Logging Calibration Blocks?	No	
SDLT Pad	SPVT	SDLT Pad Temperature Valid?	Yes	
SDLT Pad	DTWN	Disable temperature warning	No	
SDLT Pad	DMA	Formation Density Matrix	2.710	g/cc
SDLT Pad	DFL	Formation Density Fluid	1.000	g/cc
Microlog Pad	MLOK	Process MicroLog Outputs?	Yes	
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	
BOTTOM				
Data: WHELAN_1_32\0001 SP-GTET-DSNT-SDLT-ACRT-CH\004 04-Mar-12 14:42 Up @4784.8f			Date: 04-Mar-12 15:16:56	

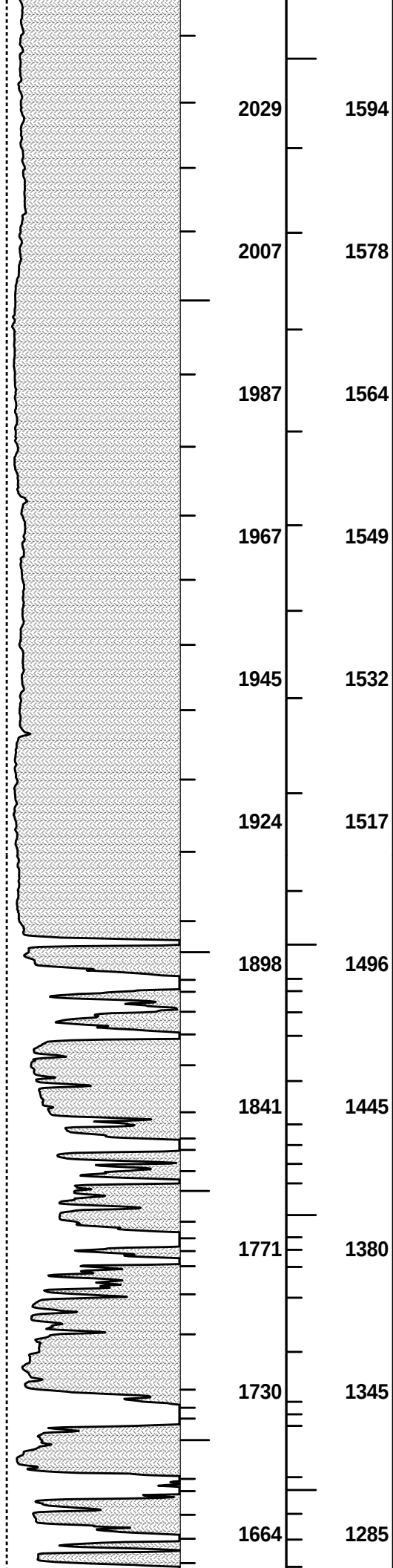
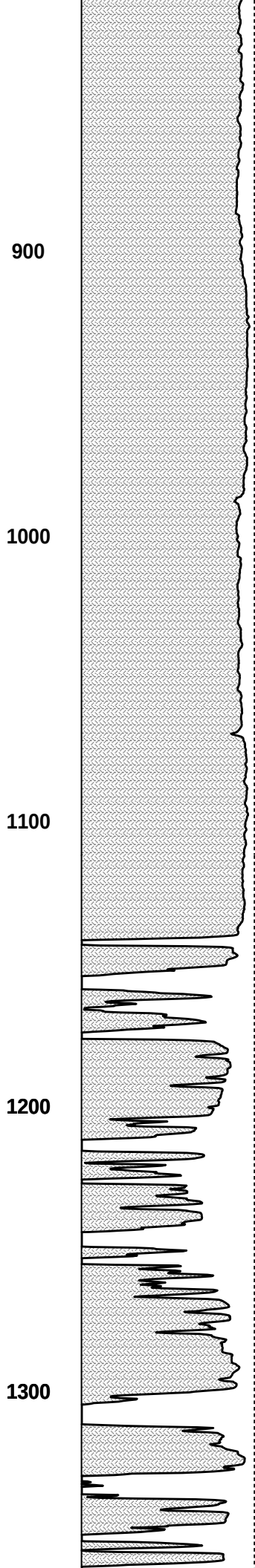
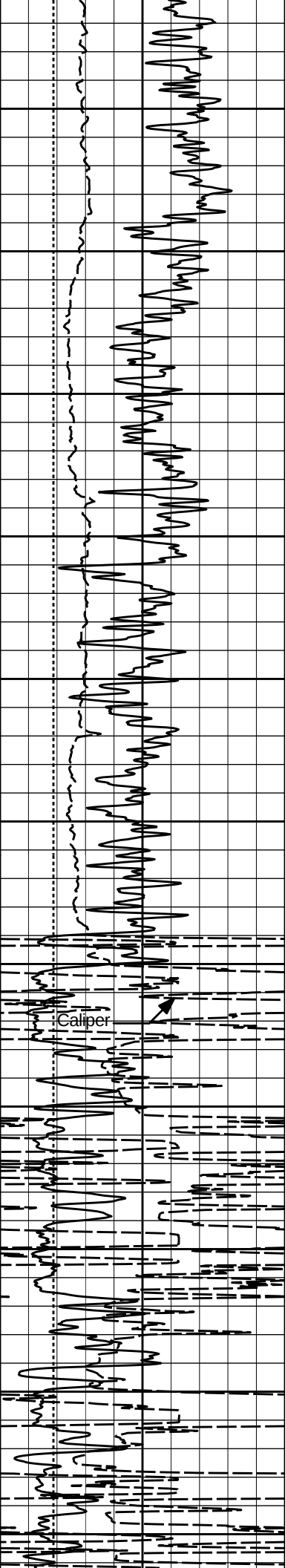
HALLIBURTON				
INPUTS, DELAYS AND FILTERS TABLE				
Mnemonic	Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel				
TENS	Tension	0.00	NO	
SP Sub				
PLTC	Plot Control Mask	50.81	NO	
SP	Spontaneous Potential	50.81	BLK	1.250
SPR	Raw Spontaneous Potential	50.81	NO	
SPO	Spontaneous Potential Offset	50.81	NO	
GTET				
TPUL	Tension Pull	42.79	NO	
GR	Natural Gamma Ray API	42.79	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API	42.79	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution	42.79	W	1.416 , 0.750
ACCZ	Accelerometer Z	0.00	BLK	0.083
DEVI	Inclination	0.00	NO	
DSNT				
TPUL	Tension Pull	32.54	NO	
RNDS	Near Detector Telemetry Counts	32.64	BLK	1.417
RFDS	Far Detector Telemetry Counts	33.39	TRI	0.583
DNTT	DSN Tool Temperature	32.64	NO	
DSNS	DSN Tool Status	32.54	NO	
ERND	Near Detector Telemetry Counts EVR	32.64	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR	33.39	BLK	0.000
ENTM	DSN Tool Temperature EVR	32.64	NO	
SDLT				

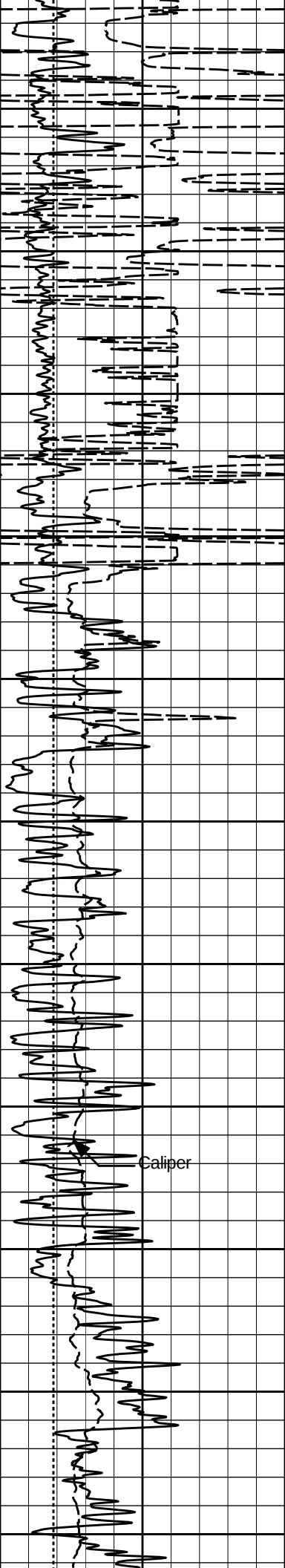
TPUL	Tension Pull	22.65	NO	
PCAL	Pad Caliper	22.65	TRI	0.250
ACAL	Arm Caliper	22.65	TRI	0.250
ACRt Sonde				
TPUL	Tension Pull	2.97	NO	
F1R1	ACRT 12KHz - 80in R value	9.22	BLK	0.000
F1X1	ACRT 12KHz - 80in X value	9.22	BLK	0.000
F1R2	ACRT 12KHz - 50in R value	6.72	BLK	0.000
F1X2	ACRT 12KHz - 50in X value	6.72	BLK	0.000
F1R3	ACRT 12KHz - 29in R value	5.22	BLK	0.000
F1X3	ACRT 12KHz - 29in X value	5.22	BLK	0.000
F1R4	ACRT 12KHz - 17in R value	4.22	BLK	0.000
F1X4	ACRT 12KHz - 17in X value	4.22	BLK	0.000
F1R5	ACRT 12KHz - 10in R value	3.72	BLK	0.000
F1X5	ACRT 12KHz - 10in X value	3.72	BLK	0.000
F1R6	ACRT 12KHz - 6in R value	3.47	BLK	0.000
F1X6	ACRT 12KHz - 6in X value	3.47	BLK	0.000
F2R1	ACRT 36KHz - 80in R value	9.22	BLK	0.000
F2X1	ACRT 36KHz - 80in X value	9.22	BLK	0.000
F2R2	ACRT 36KHz - 50in R value	6.72	BLK	0.000
F2X2	ACRT 36KHz - 50in X value	6.72	BLK	0.000
F2R3	ACRT 36KHz - 29in R value	5.22	BLK	0.000
F2X3	ACRT 36KHz - 29in X value	5.22	BLK	0.000
F2R4	ACRT 36KHz - 17in R value	4.22	BLK	0.000
F2X4	ACRT 36KHz - 17in X value	4.22	BLK	0.000
F2R5	ACRT 36KHz - 10in R value	3.72	BLK	0.000
F2X5	ACRT 36KHz - 10in X value	3.72	BLK	0.000
F2R6	ACRT 36KHz - 6in R value	3.47	BLK	0.000
F2X6	ACRT 36KHz - 6in X value	3.47	BLK	0.000
F3R1	ACRT 72KHz - 80in R value	9.22	BLK	0.000
F3X1	ACRT 72KHz - 80in X value	9.22	BLK	0.000
F3R2	ACRT 72KHz - 50in R value	6.72	BLK	0.000
F3X2	ACRT 72KHz - 50in X value	6.72	BLK	0.000
F3R3	ACRT 72KHz - 29in R value	5.22	BLK	0.000
F3X3	ACRT 72KHz - 29in X value	5.22	BLK	0.000
F3R4	ACRT 72KHz - 17in R value	4.22	BLK	0.000
F3X4	ACRT 72KHz - 17in X value	4.22	BLK	0.000
F3R5	ACRT 72KHz - 10in R value	3.72	BLK	0.000
F3X5	ACRT 72KHz - 10in X value	3.72	BLK	0.000
F3R6	ACRT 72KHz - 6in R value	3.47	BLK	0.000
F3X6	ACRT 72KHz - 6in X value	3.47	BLK	0.000
RMUD	Mud Resistivity	12.76	BLK	0.000
F1RT	Transmitter Reference 12 KHz Real Signal	2.97	BLK	0.000
F1XT	Transmitter Reference 12 KHz Imaginary Signal	2.97	BLK	0.000
F2RT	Transmitter Reference 36 KHz Real Signal	2.97	BLK	0.000
F2XT	Transmitter Reference 36 KHz Imaginary Signal	2.97	BLK	0.000
F3RT	Transmitter Reference 72 KHz Real Signal	2.97	BLK	0.000
F3XT	Transmitter Reference 72 KHz Imaginary Signal	2.97	BLK	0.000
TFPU	Upper Feedpipe Temperature Calculated	2.97	BLK	0.000
TFPL	Lower Feedpipe Temperature Calculated	2.97	BLK	0.000
ITMP	Instrument Temperature	2.97	BLK	0.000
TCVA	Temperature Correction Values Loop Off	2.97	NO	
TIDV	Instrument Temperature Derivative	2.97	NO	
TUDV	Upper Temperature Derivative	2.97	NO	
TLDV	Lower Temperature Derivative	2.97	NO	

HALLIBURTON	Plot Time: 04-Mar-12 16:32:42 Plot Range: 200 ft to 4784.67 ft Data: WHELAN_1_32\Well Based\MAIN\ Plot File: \\LOCAL-WHELAN_1_32\0001 SP-GTET-DSNT-SDLT-ACRT-CHIPOROIAHV_4_5_INCH_2_IQ_LIB
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0	Gamma API	150	1 : 600 ft	MUDCAKE		MUDCAKE		BHVT	AHVT
api									
6	BS	16		20	0	0	20		
inches									
6	CALI	16	20	0	0	CALI	20		
inches			inches		inches				
							2370	1005	
							2342	1841	







1400

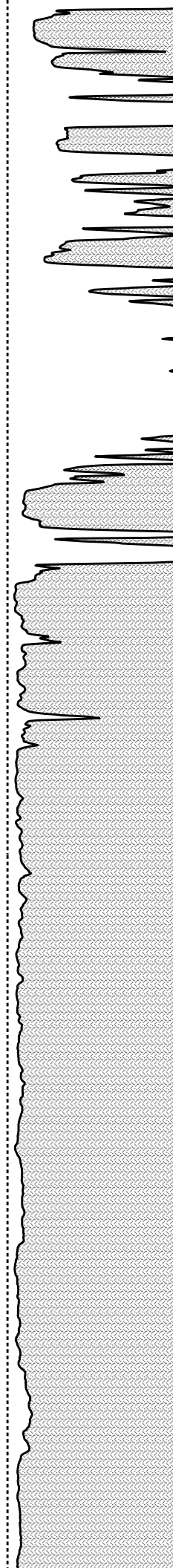
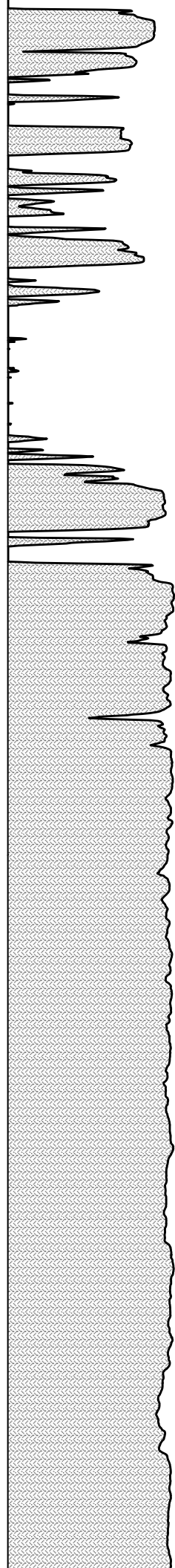
1500

1600

1700

1800

1900



1597

1513

1402

1324

1285

1263

1242

1221

1200

1179

1157

1223

1145

1040

967

933

917

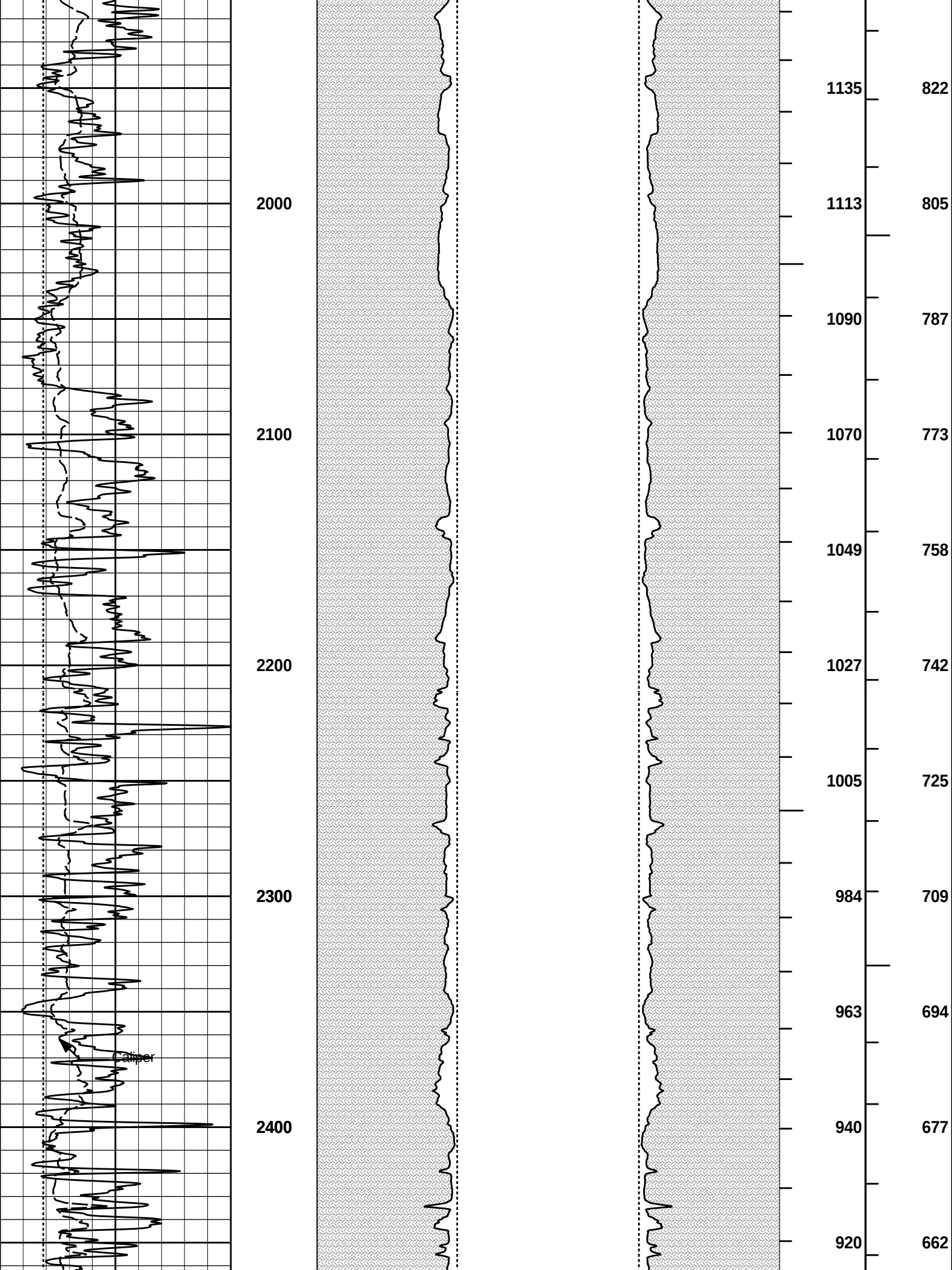
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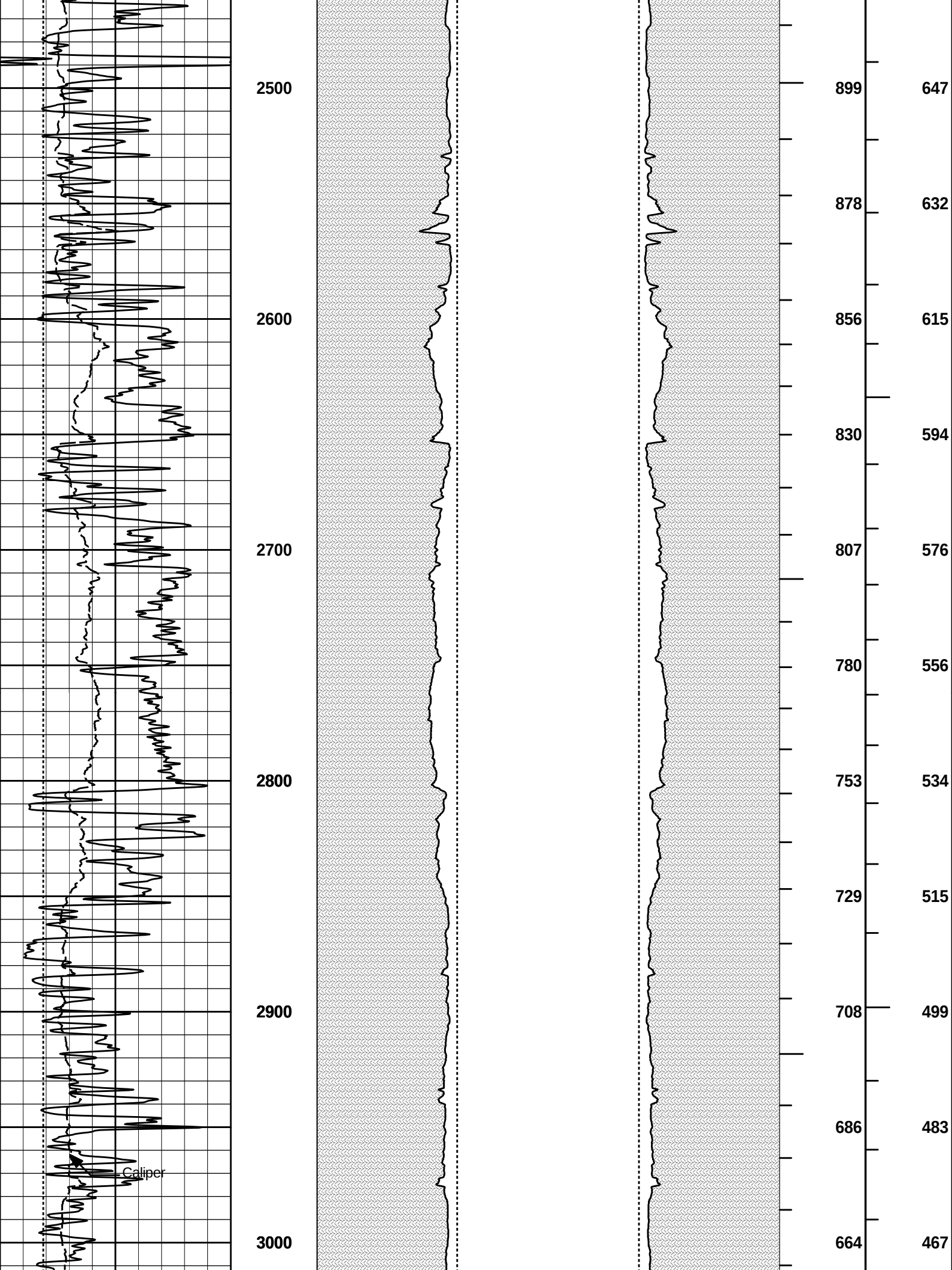
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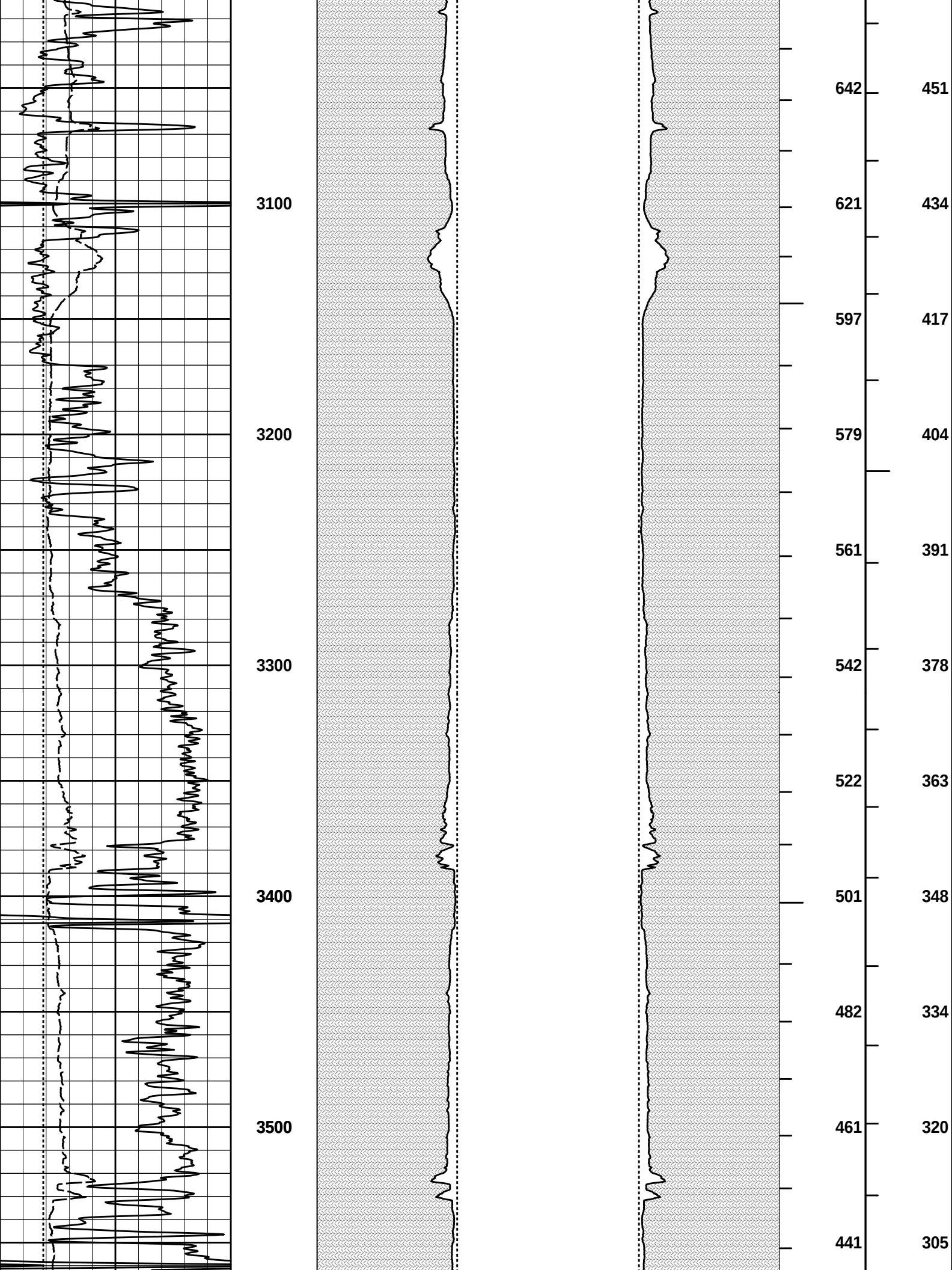
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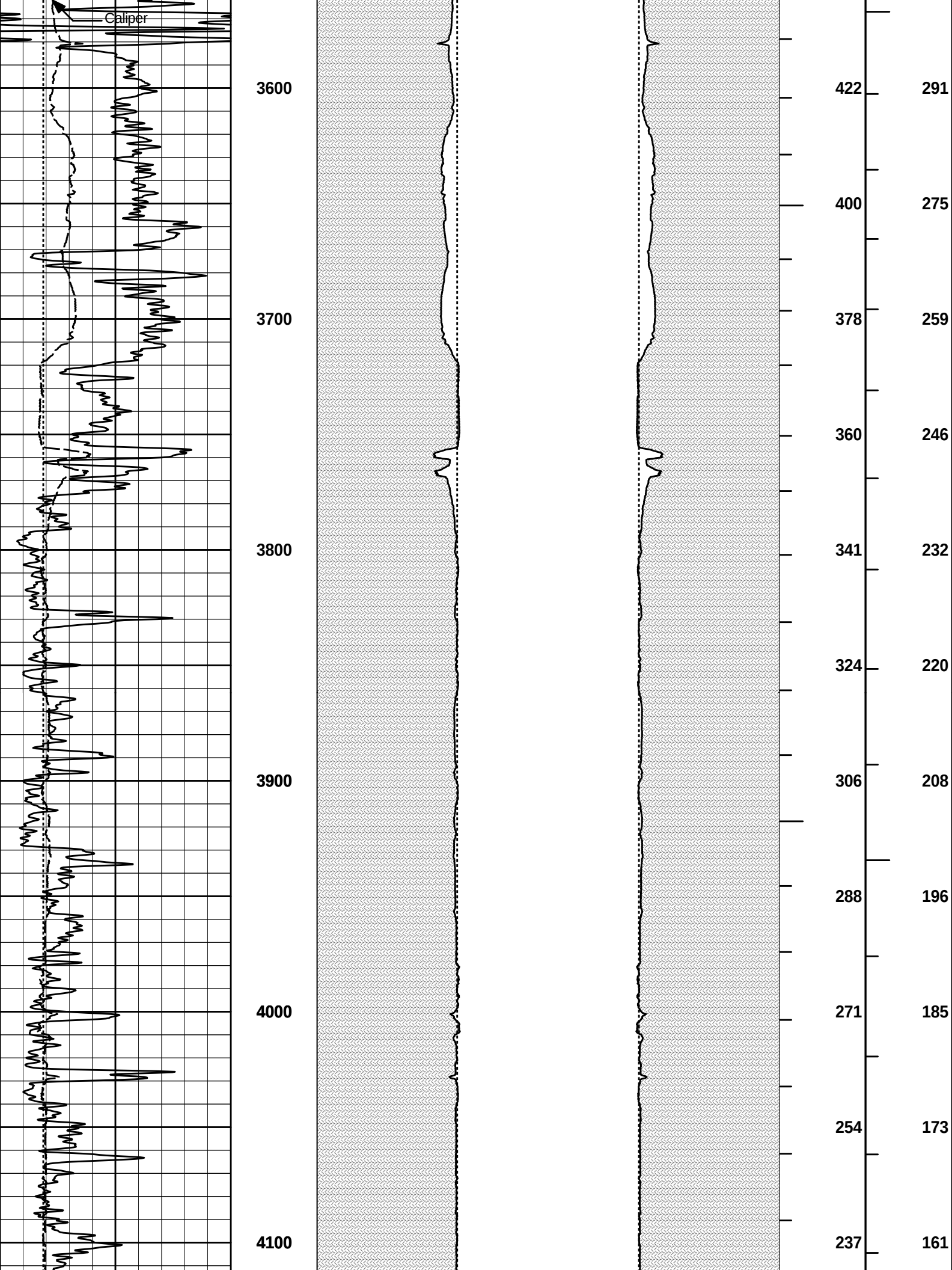
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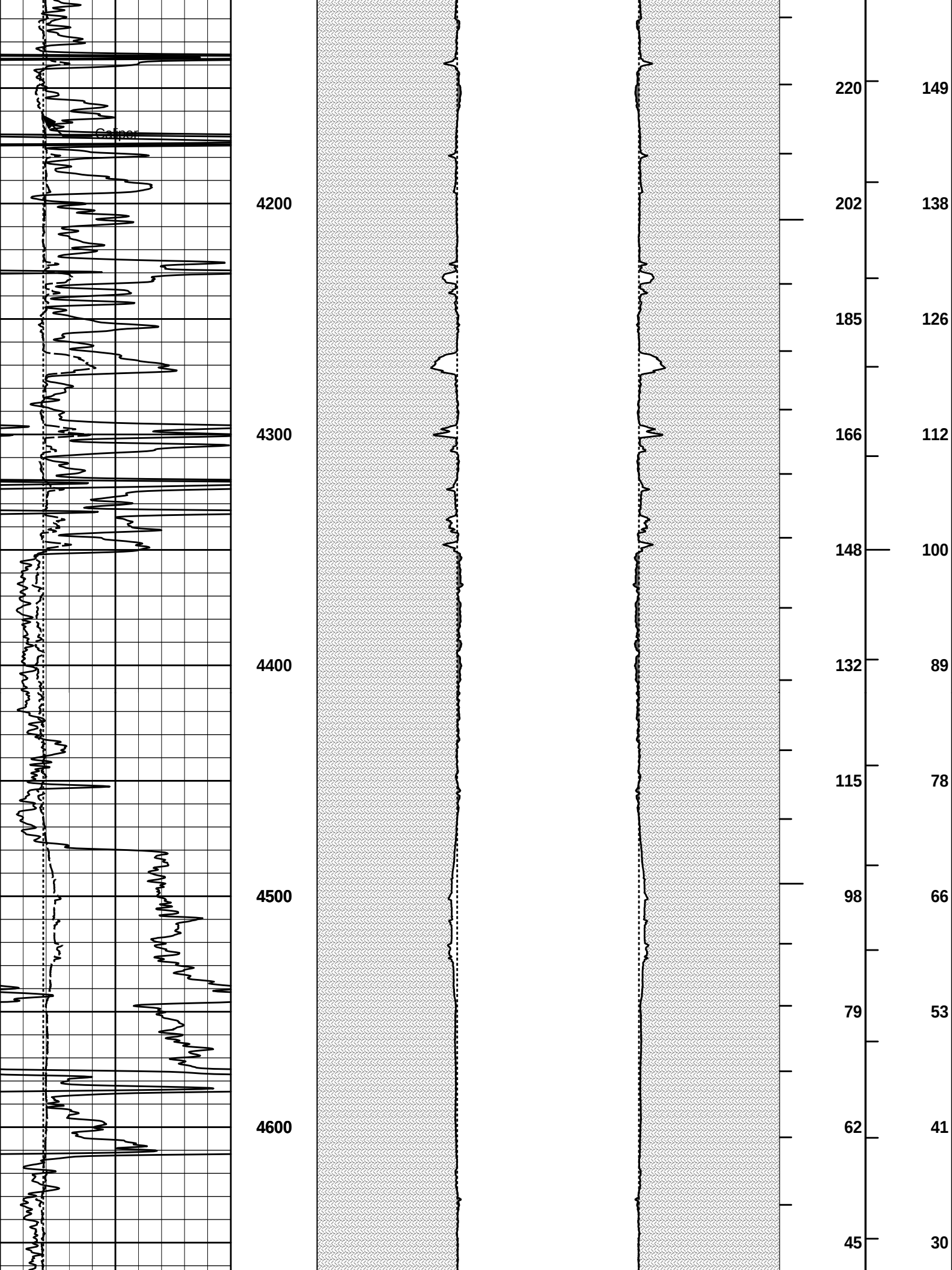
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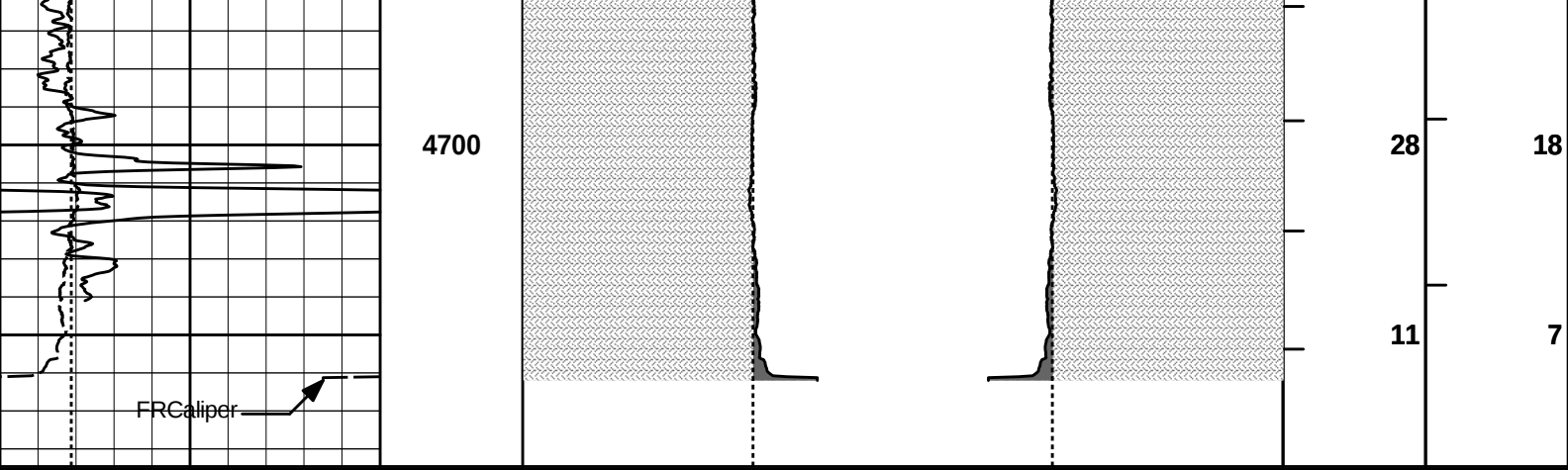












6	CALI	16	1 : 600 ft	20	CALI	0 0	20	BHVT	AHVT
	inches				inches				
6	BS	16		20	Bit Size	0 0	20		
	inches								
0	Gamma API	150			MUDCAKE		MUDCAKE		
	api								

HALLIBURTON

Plot Time: 04-Mar-12 16:32:46
Plot Range: 200 ft to 4784.67 ft
Data: WHELAN_1_32\Well Based\MAIN
Plot File: \\-LOCAL-WHELAN_1_32\0001 SP-GTET-DSNT-SDLT-ACRT-CHIPORO\AHV_4_5_INCH_2_IQ_LIB

ANNULAR HOLE VOLUME PLOT (4.5 INCH)

COMPANY	VAL ENERGY INC.		
WELL	WHELAN 1-32		
FIELD			
COUNTY	BARBER	STATE	KANSAS
HALLIBURTON		DUAL SPACED NEUTRON SPECTRAL DENSITY LOG	