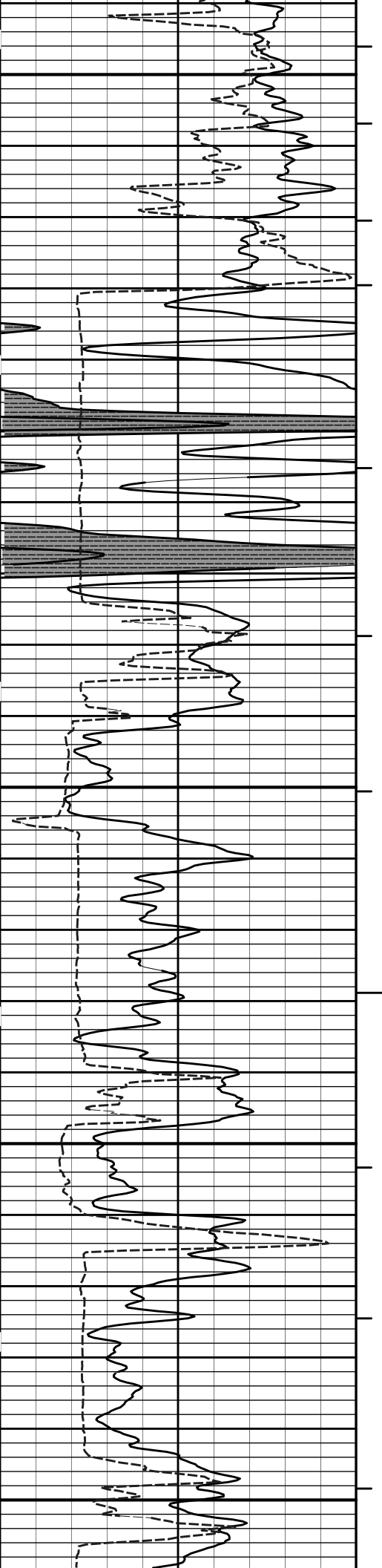


SPECTRAL DENSITY DUAL SPACED NEUTRON LOG									
HALLIBURTON									
OOLITE ENERGY CORP. LARRABEE 1-32 SINGLEY MEADE KANSAS					COMPANY OOLITE ENERGY CORP. WELL LARRABEE 1-32 FIELD/BLOCK SINGLEY COUNTY MEADE STATE KANSAS				
COMPANY WELL FIELD/BLOCK COUNTY STATE					API No. 15-119-21237-00-01 Location (SHL) 2029' FSL & 986' FEL Other Services: MICROLOG ACRT BSAT				
Permanent Datum Log measured from Drilling measured from					Sect. 32 Twp. 33S Rge. 29W Elev. 2566.0 ft G.L. D.F. G.L. 2575.0 ft 2574.0 ft 2566.0 ft				
Date Run No. Depth - Driller Depth - Logger Bottom - Logged Interval Top - Logged Interval Casing - Driller Casing - Logger Bit Size Type Fluid in Hole Density PH Source of Sample Rm @ Meas. Temperature Rmf @ Meas. Temperature Rmc @ Meas. Temperature Source Rmf Rm @ BHT Time Since Circulation Time on Bottom Max. Rec. Temperature Equipment Recorded By Witnessed By					06-Aug-13 TWO 6253.00 ft 6249.0 ft 6205.0 ft 4300.0 ft 8.625 in @ 1595.0 ft 1595.0 ft 7.875 in @ WATER BASED MUD 9.0 ppg 10.50 pH MUD PIT 0.420 ohmm @ 75.00 degF 0.35 ohmm @ 75.00 degF 0.550 ohmm @ 75.00 degF MEASURED 0.25 ohmm @ 130.0 degF 5.0 hr 06-Aug-13 20:12 130.0 degF @ 6249.0 ft 11072142 J. BOLLOM E. HESHER				

Fold here

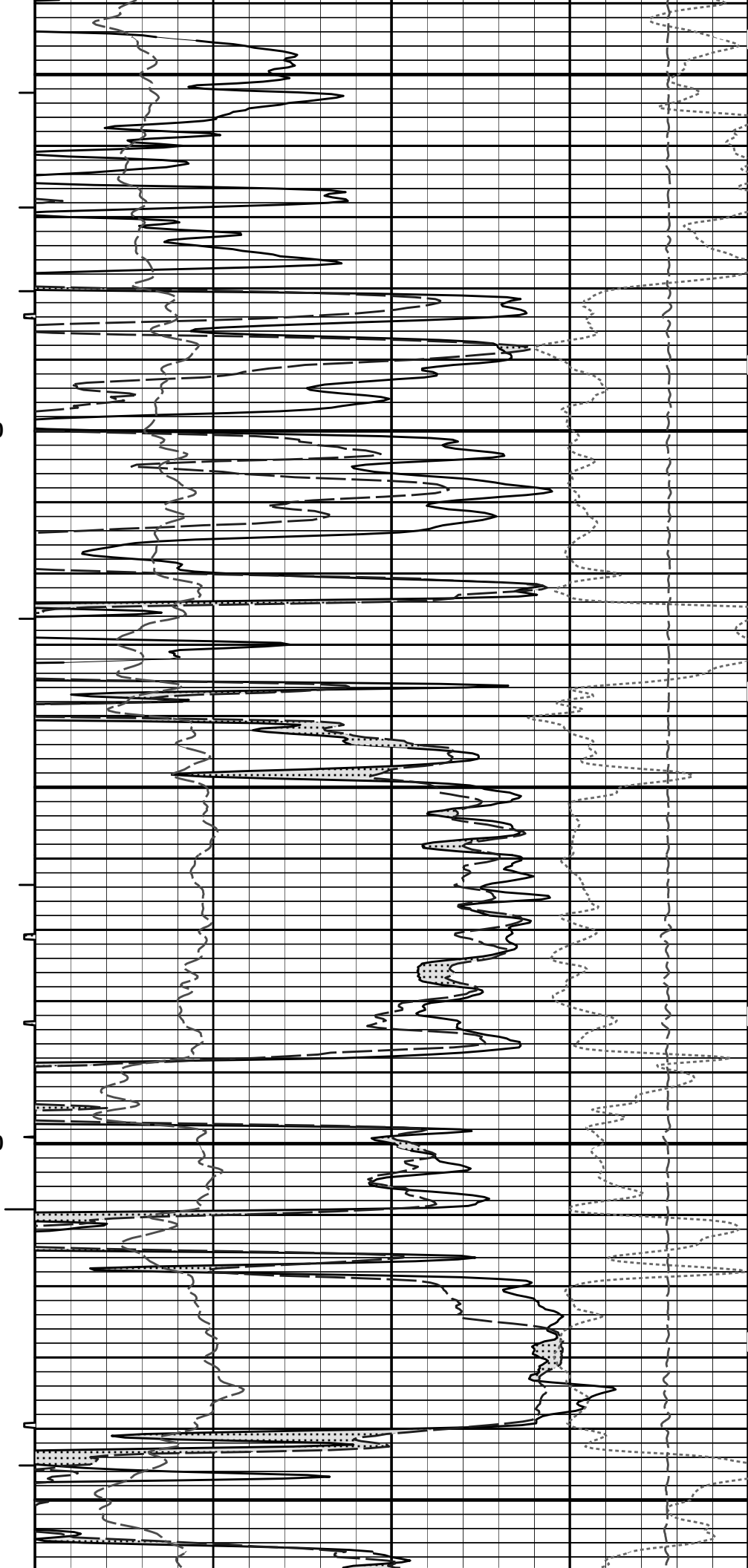
Service Ticket No.: 900646539										API Serial No.: 15-119-21237-00-01										PGM Version: WL INSITE R3.8.4 (Build 5)									
CHANGE IN MUD TYPE OR ADDITIONAL SAMPLE										RESISTIVITY SCALE CHANGES																			
Date		Sample No.								Type Log		Depth		Scale Up Hole				Scale Down Hole											
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.		11048627		Serial No.				Serial No.		10865884		Serial No.		11055304															
Model No.		GTET		Model No.				Model No.		SDLT-I		Model No.		DSNT-I															
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		10'		FWDA [Y/N]				Strength		1.5 CI		Strength		15 CI															
LOGGING DATA																													

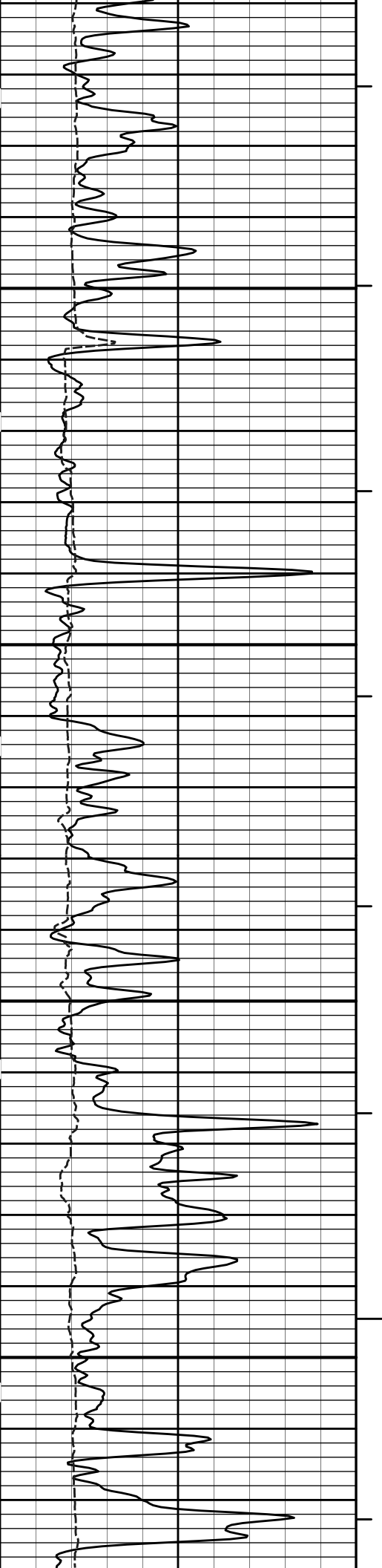
GENERAL				GAMMA		ACOUSTIC			DENSITY			NEUTRON				
Run	Depth		Speed	Scale		Scale		Matrix	Scale		Matrix	Scale		Matrix		
No.	From	To	ft/min	L	R	L	R		L	R		L	R			
ONE	6249	4300	REC	0	150				30	-10	2.71	30	-10	LIME		
DIRECTIONAL INFORMATION																
Maximum Deviation								@	KOP							@
Remarks: ANNULAR HOLE VOLUME CALCULATED FOR 5.5-INCH CASING																
CHLORIDES REPORTED AT 11,000 MG/L																
LCM REPORTED AT 8 LB/BBL																
GTET-DSNT-SDLT-BSAT-ACRT RUN IN COMBINATION																
TODAY'S CREW: F. VILLA & D. MILLER																
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																



4400

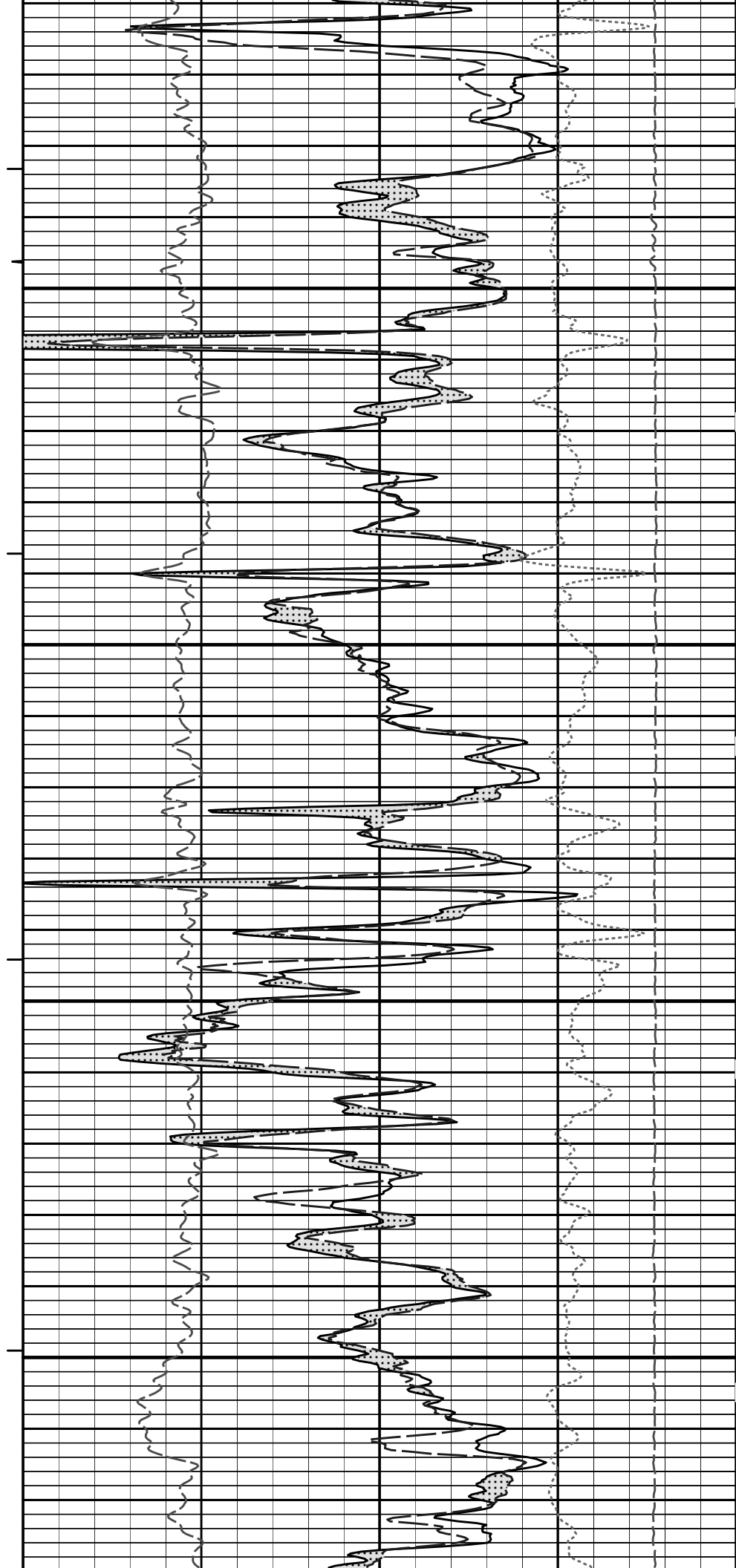
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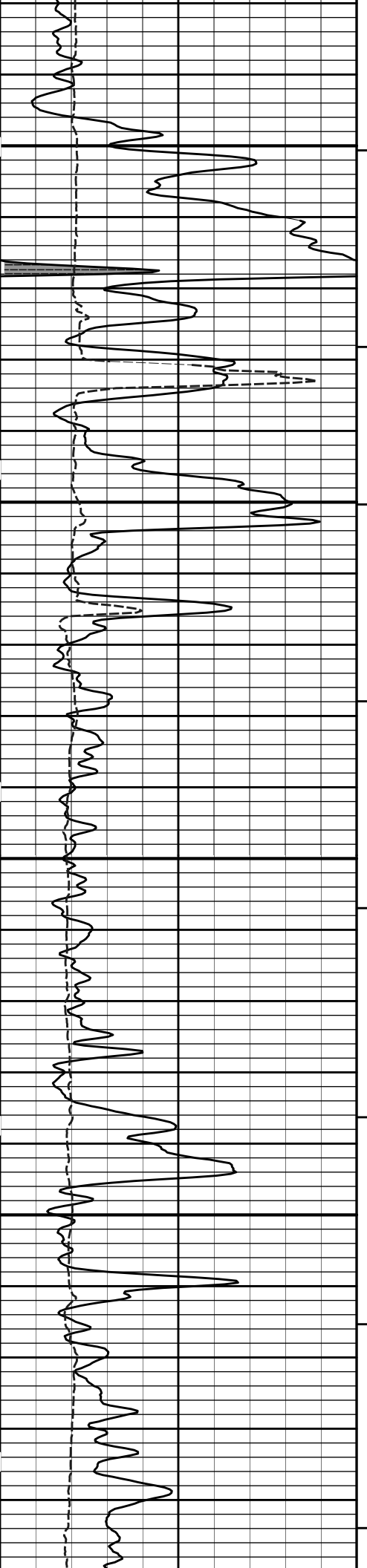




4600

4700

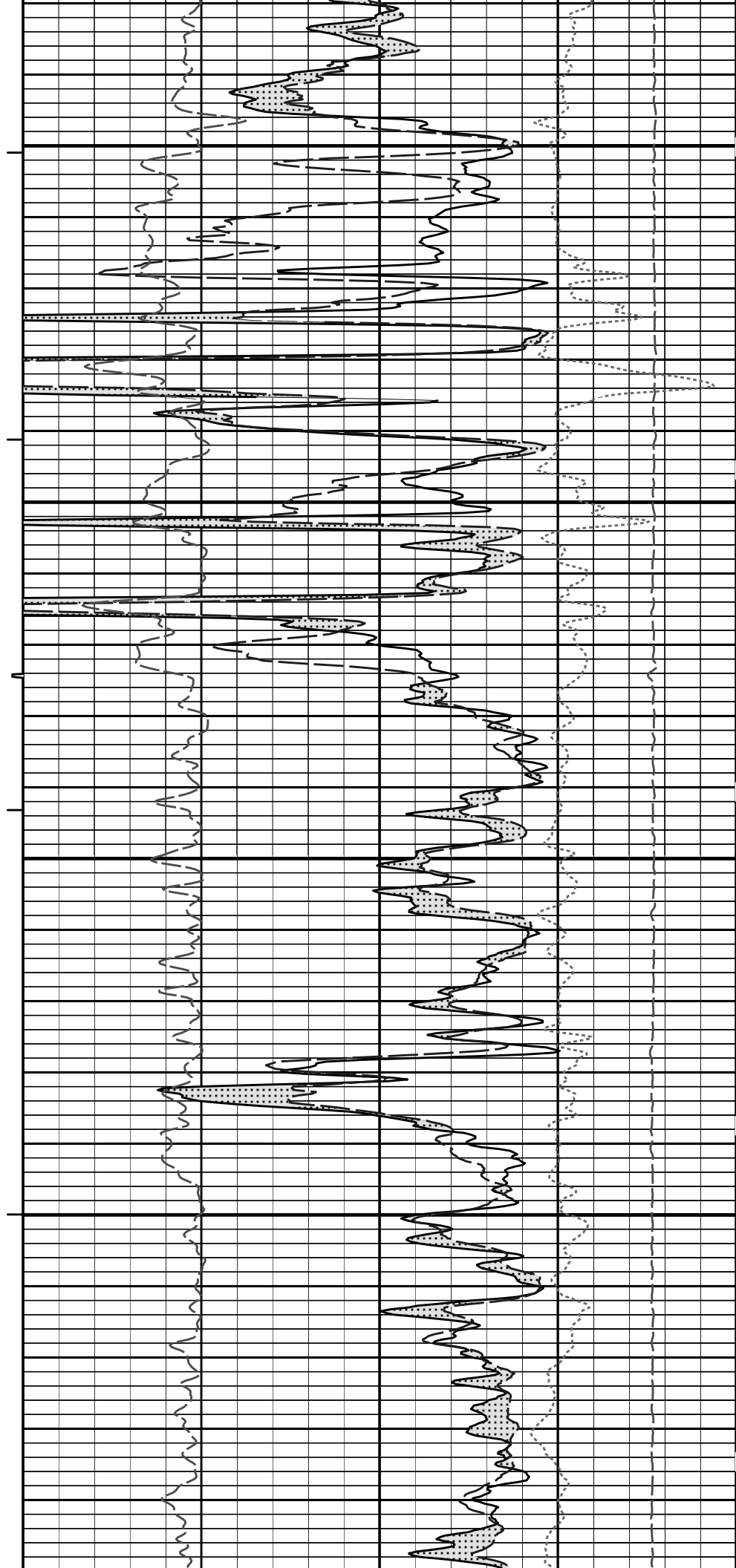


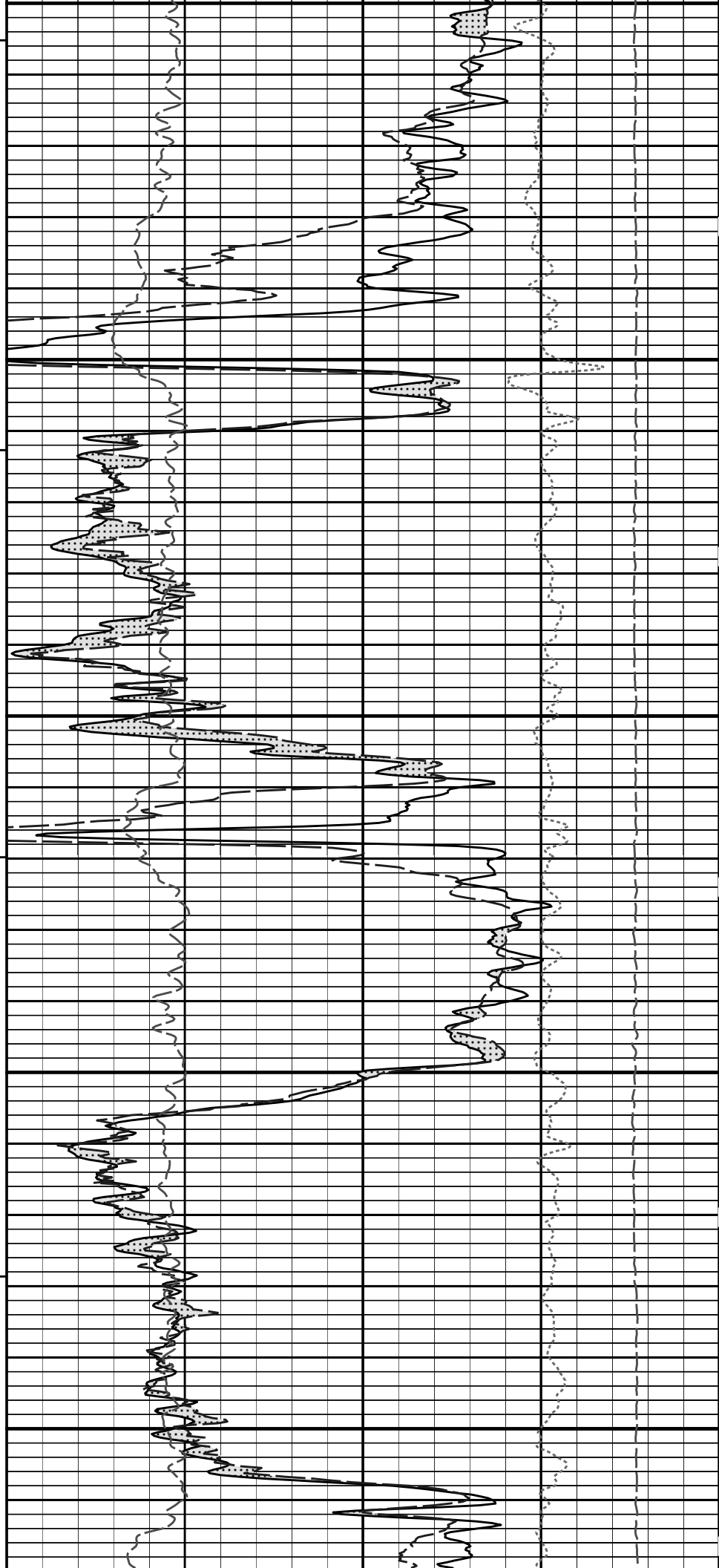
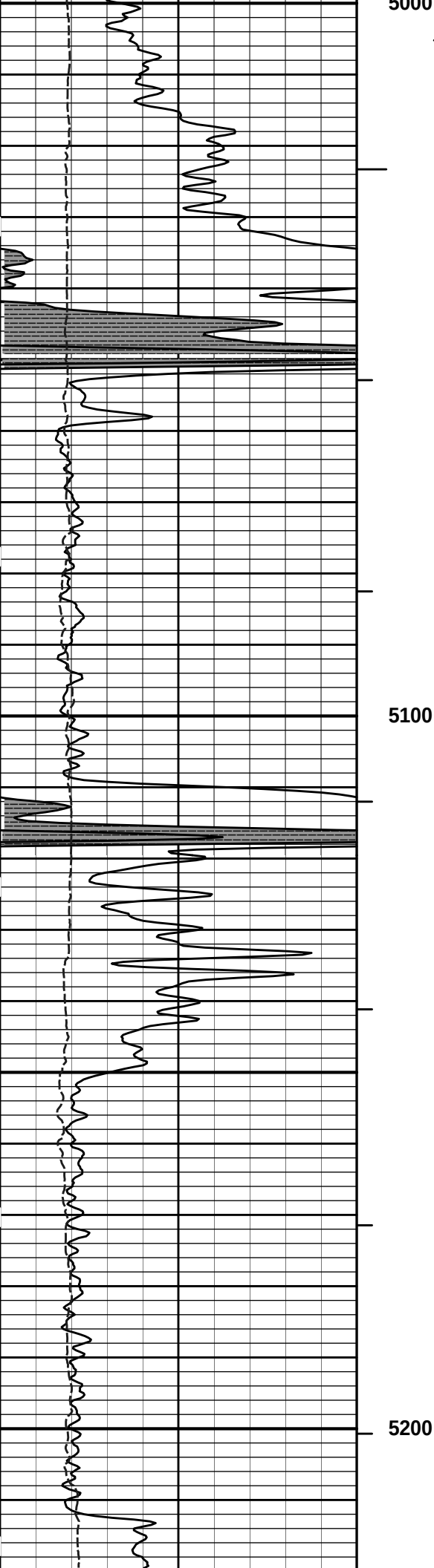


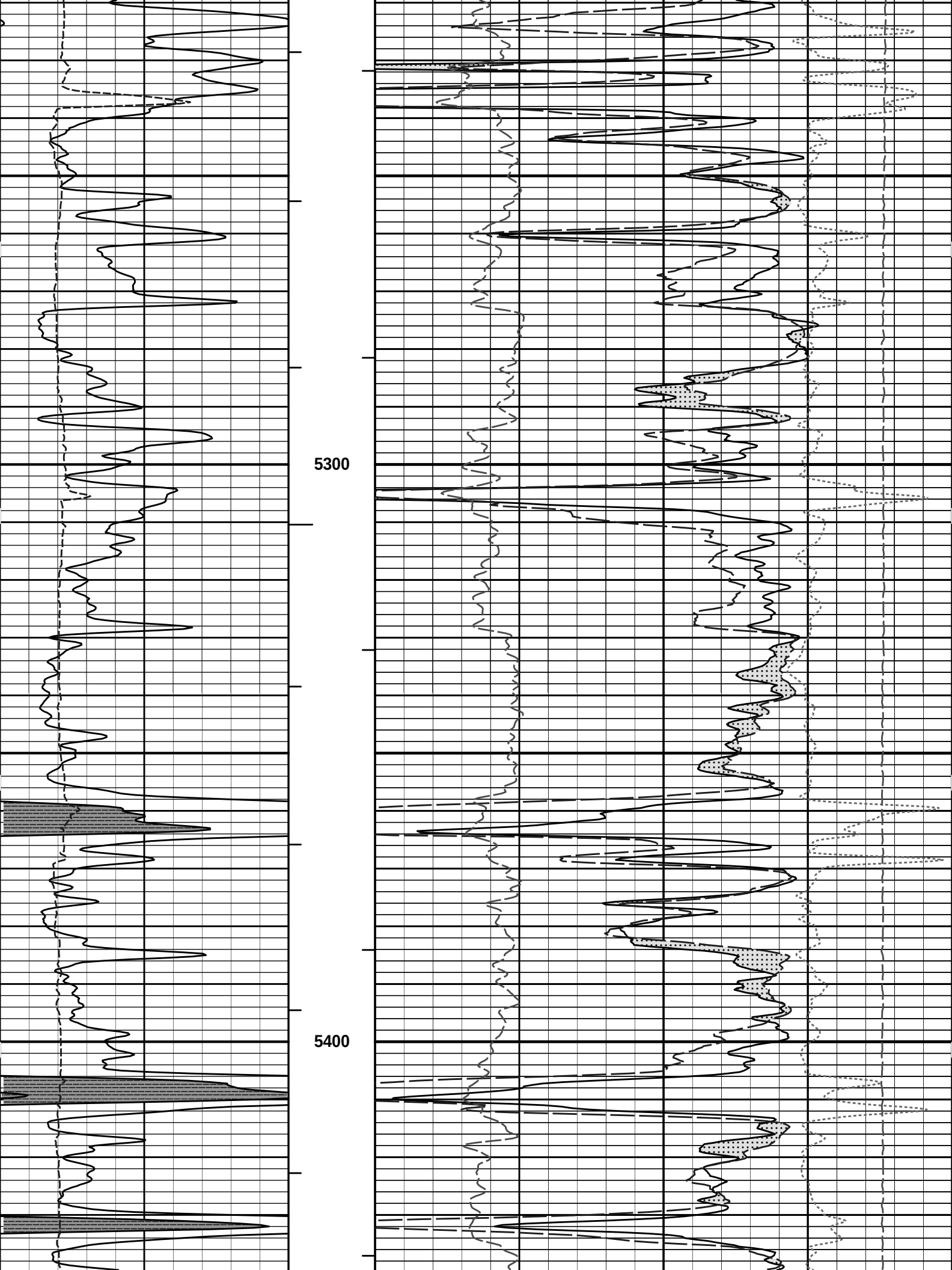
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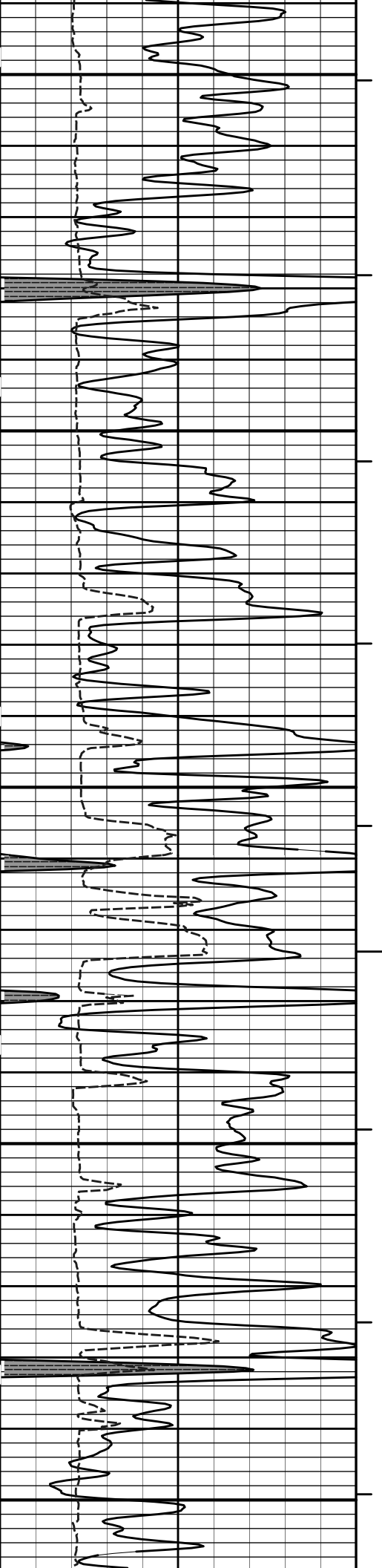
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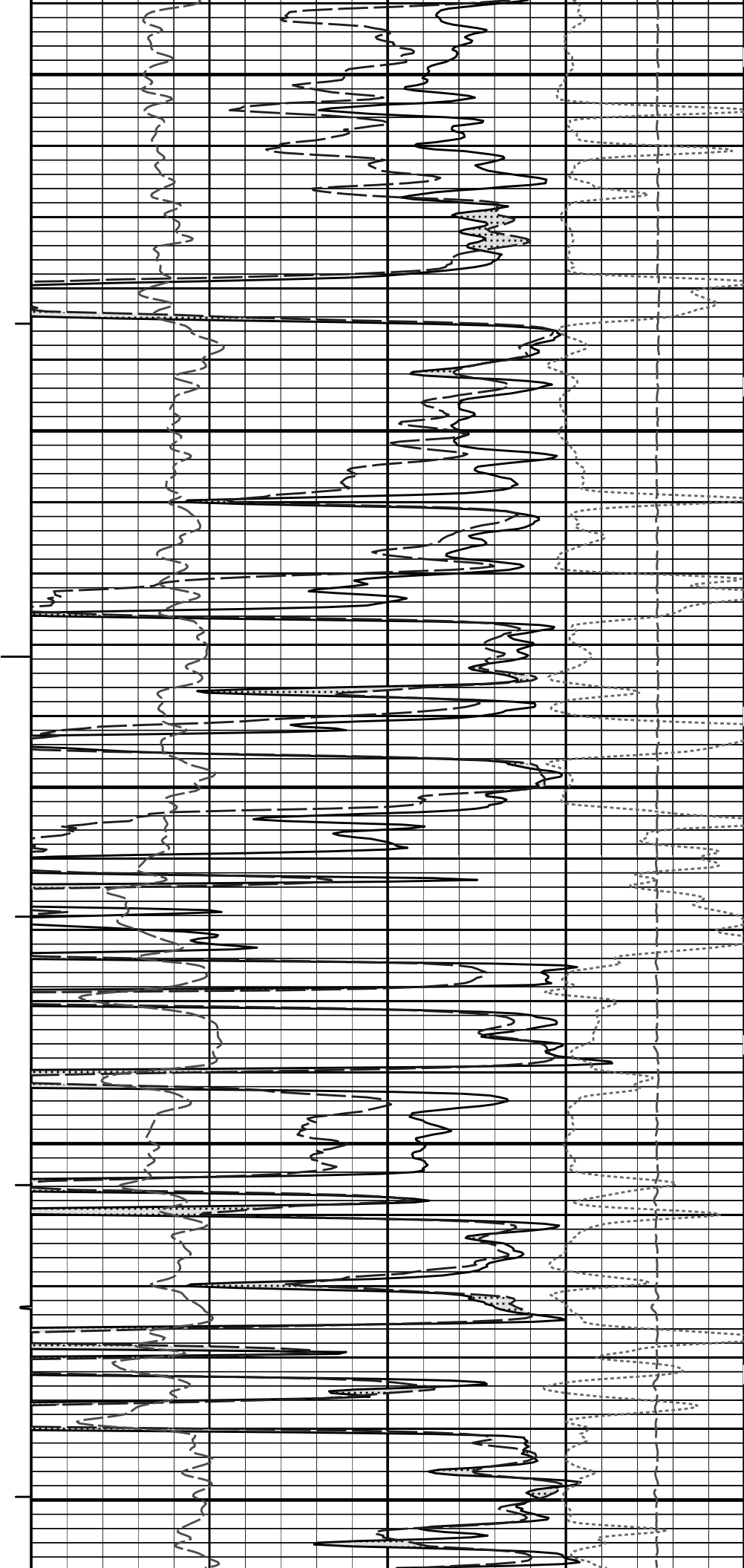


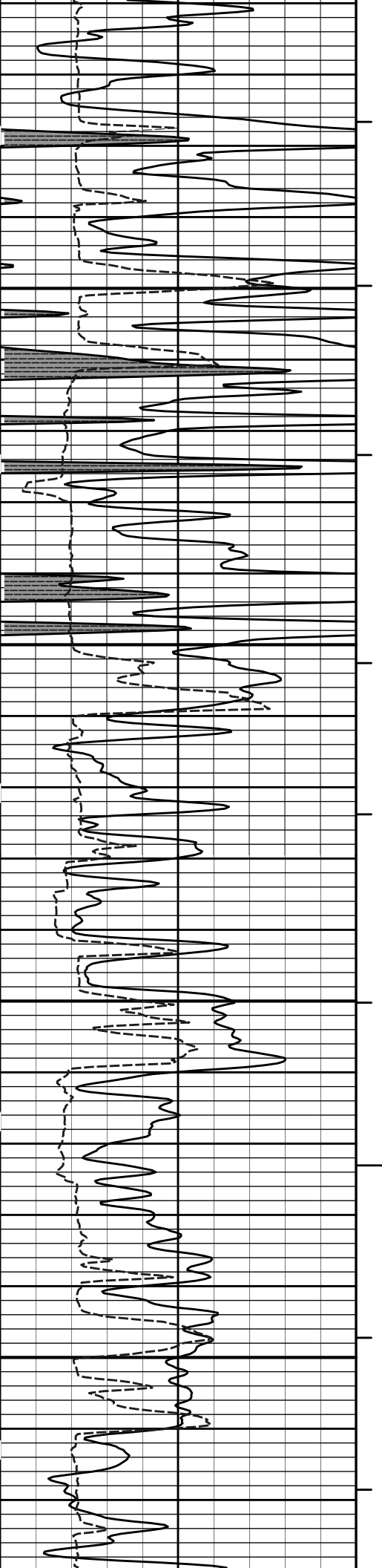




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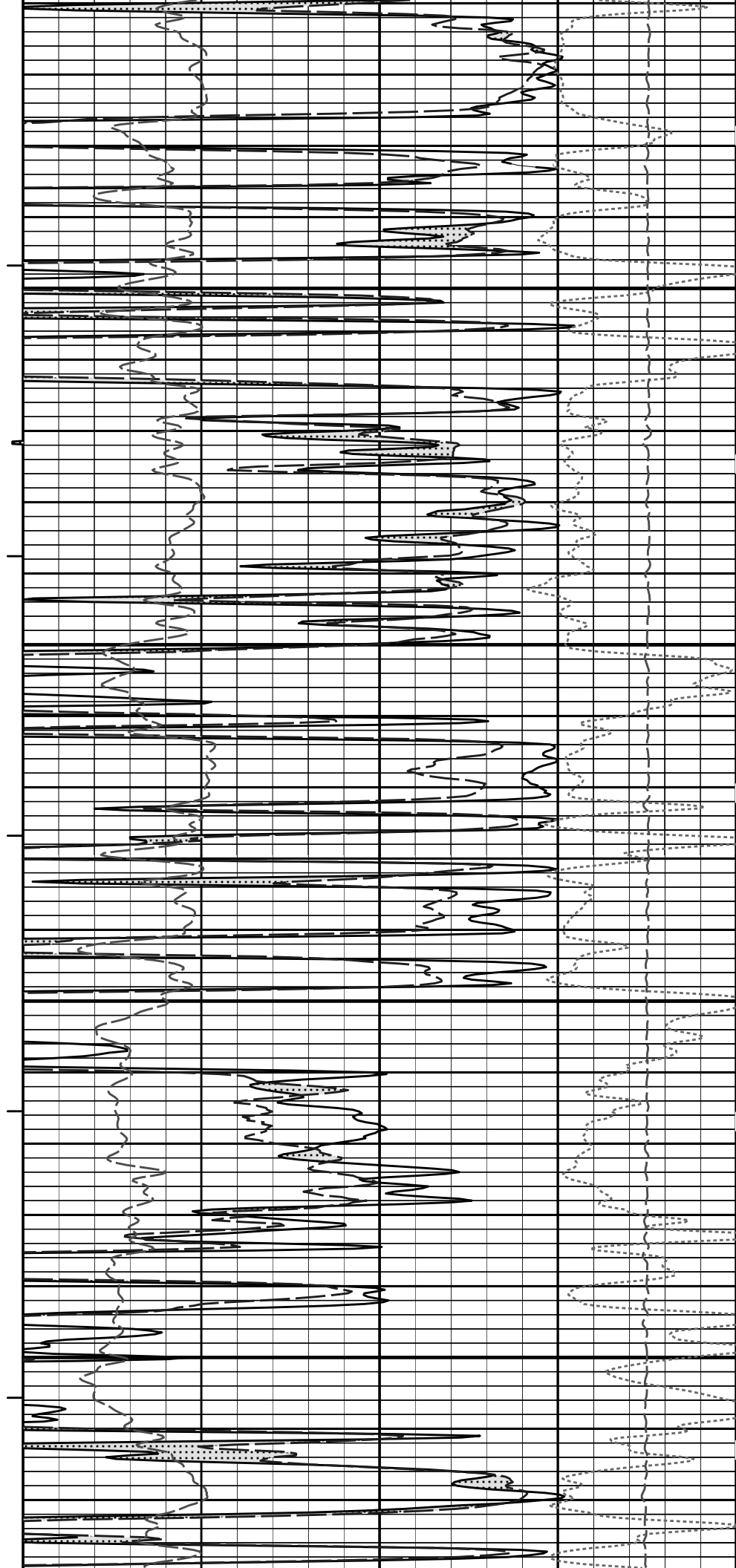
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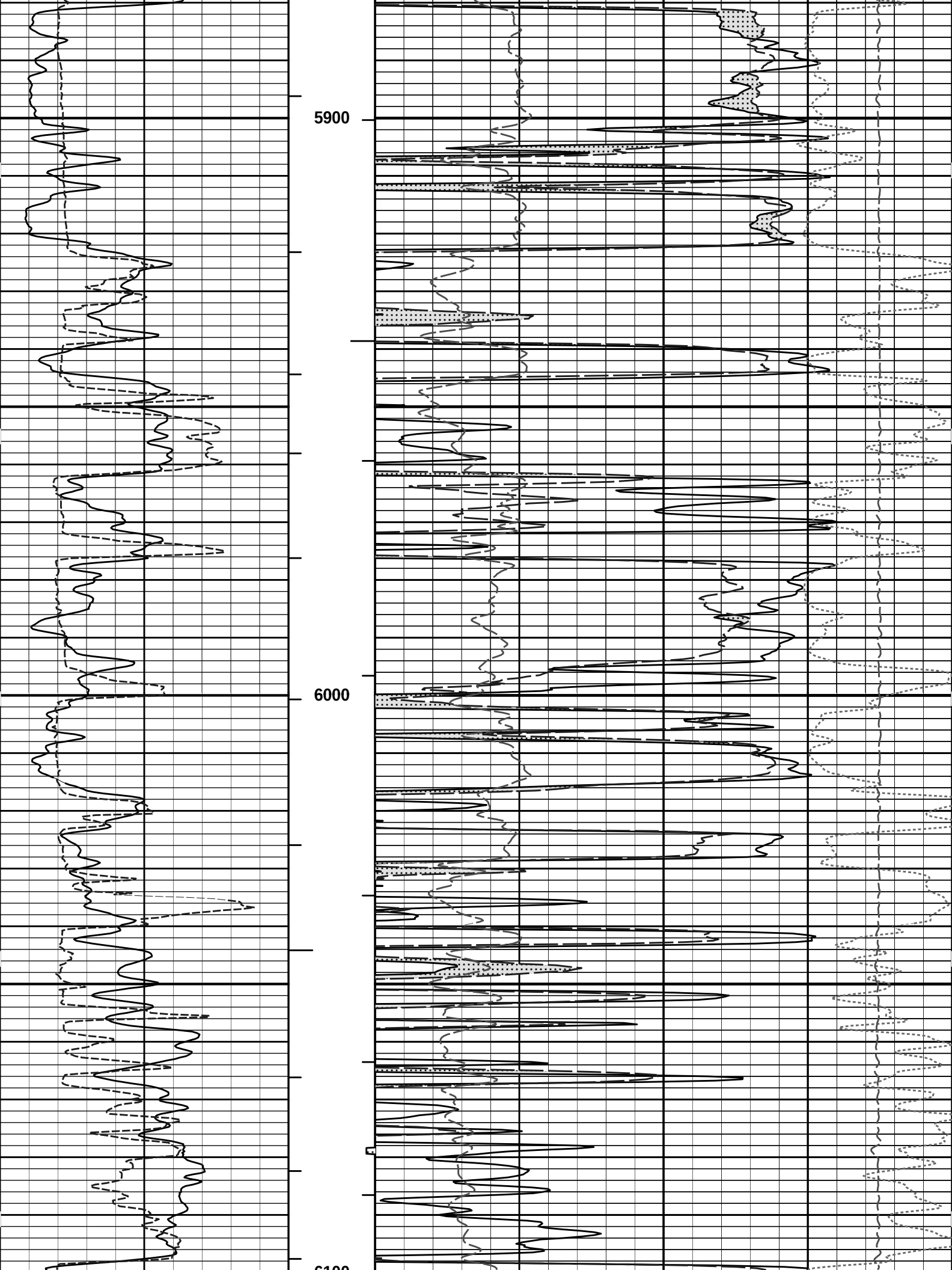


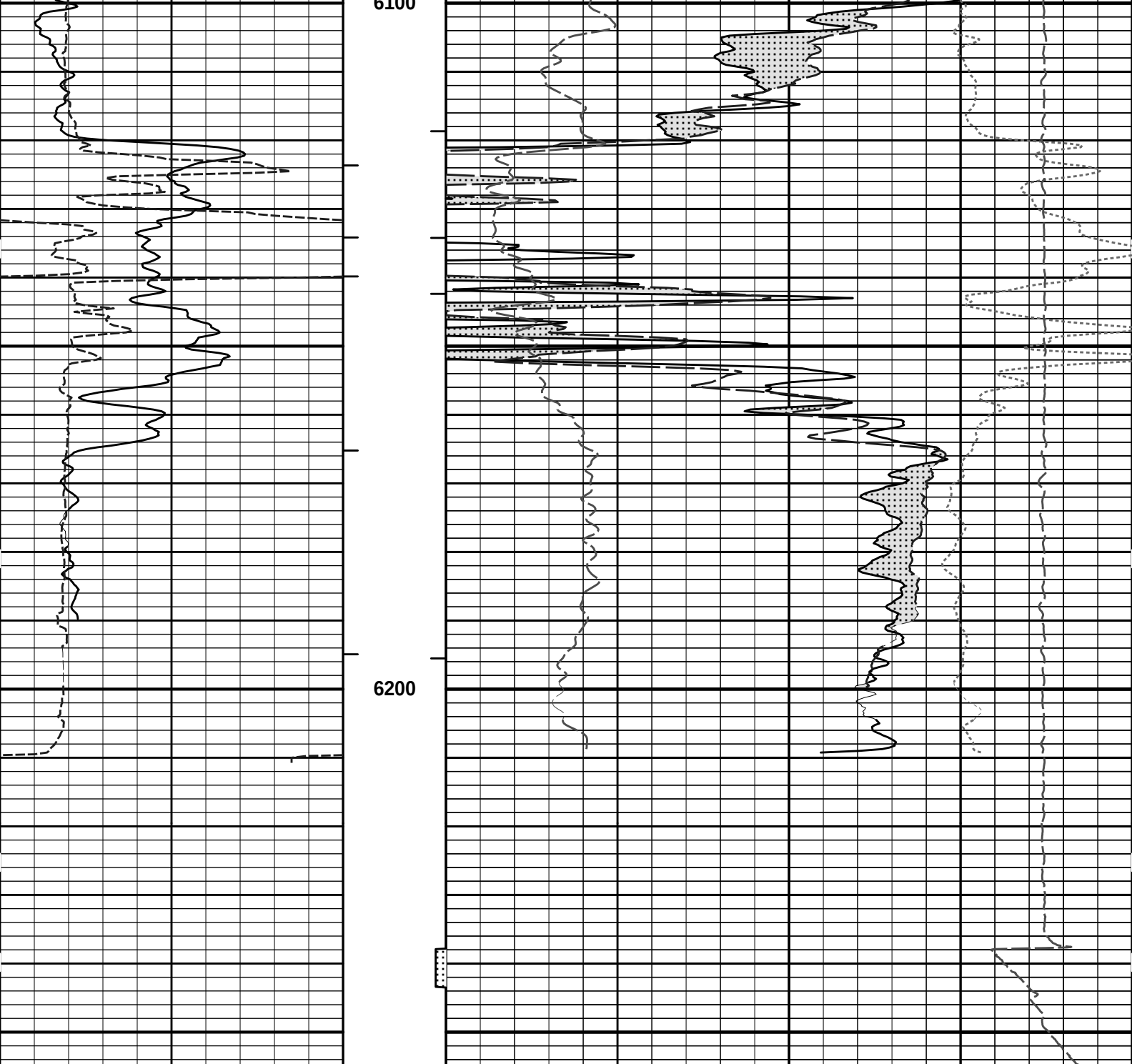


5700

5800







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

HALLIBURTON

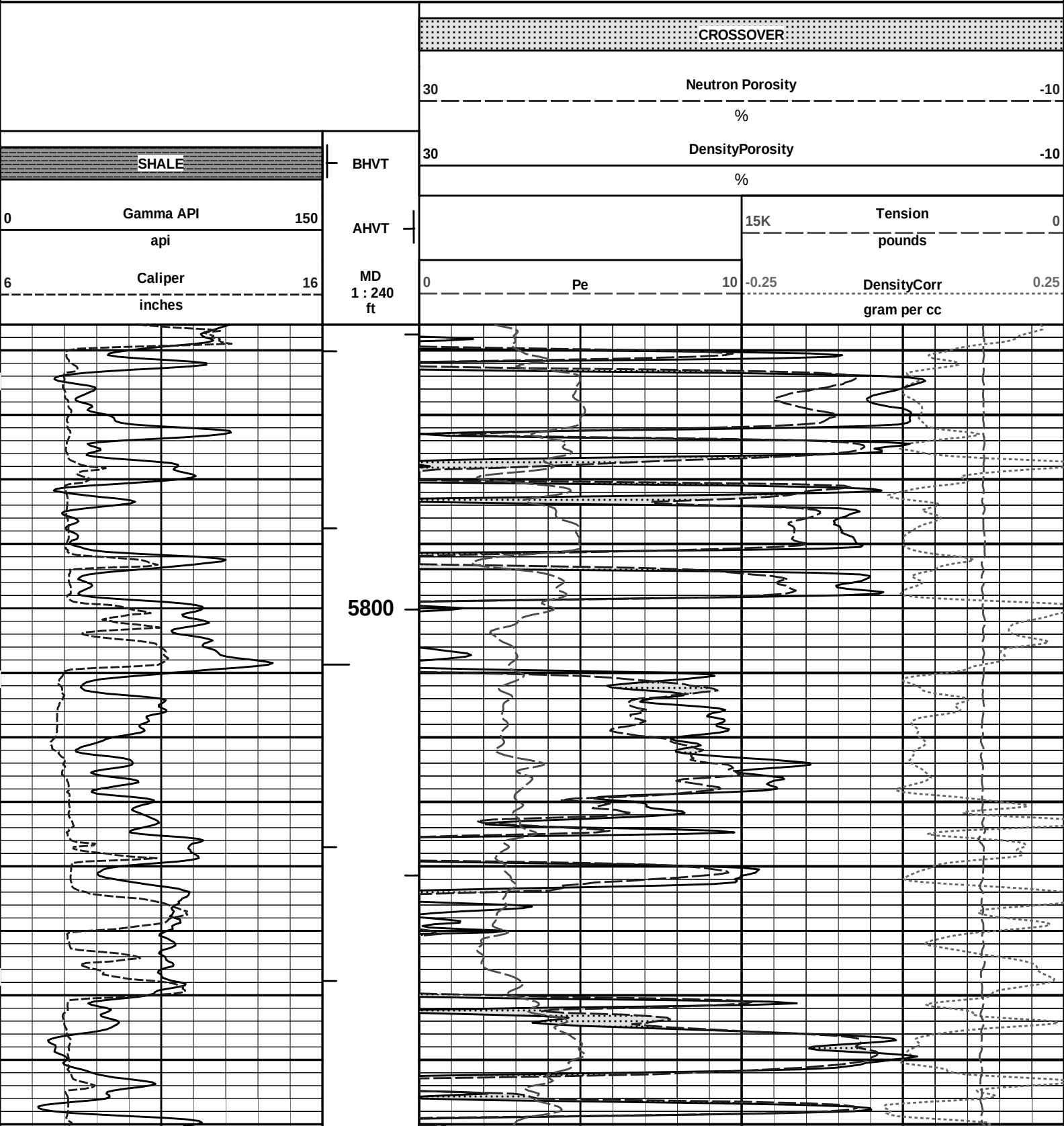
Plot Time: 06-Aug-13 22:39:21
Plot Range: 4300 ft to 6255 ft
Data: LARRABEE_1-32\Well Based\DETAIL\
Plot File: \\PORO\Porosity_IQ_5_MAIN_LIB

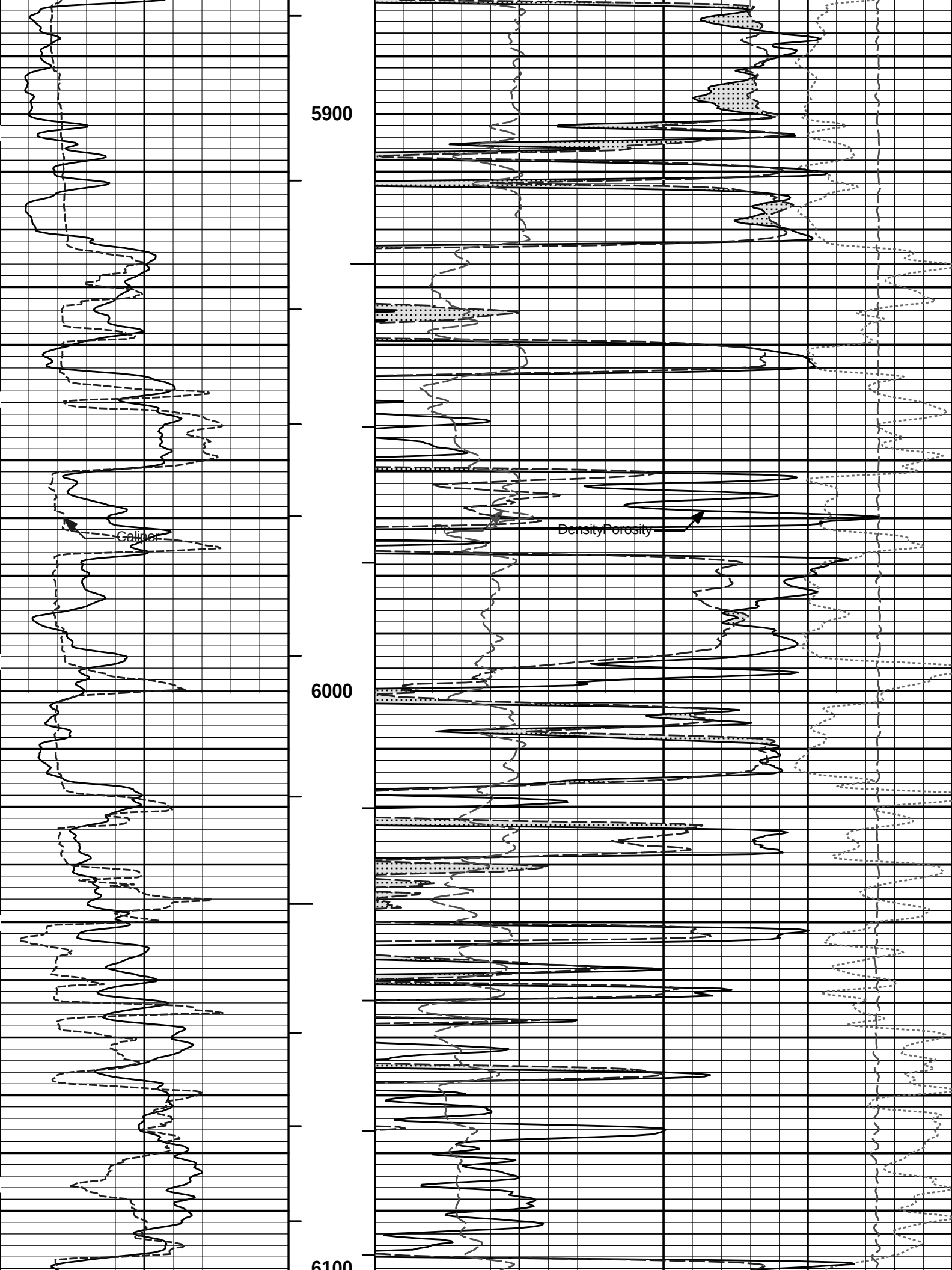
5 INCH MAIN LOG

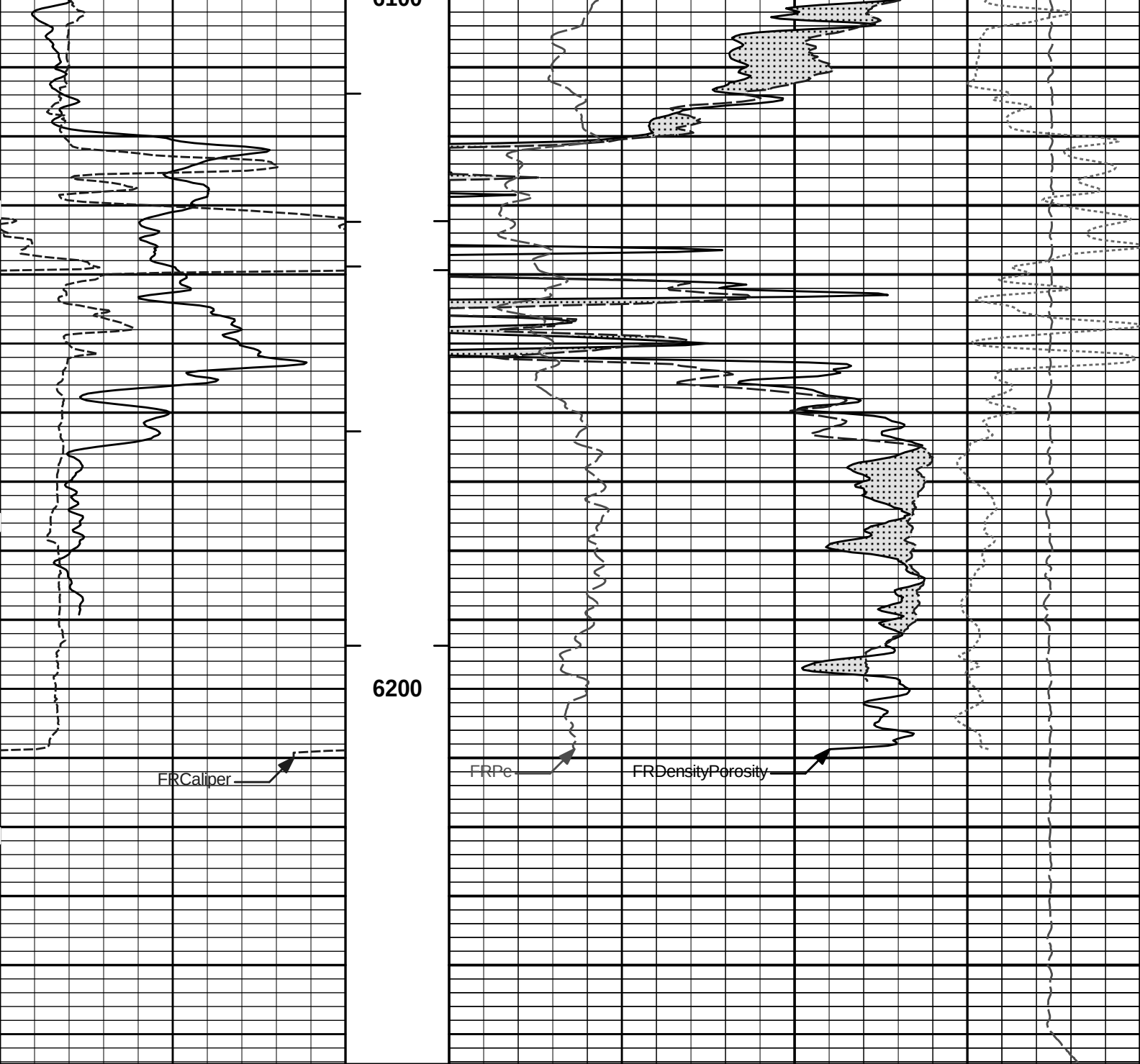
HALLIBURTON

Plot Time: 06-Aug-13 22:39:22
Plot Range: 5756 ft to 6254.33 ft
Data: LARRABEE_1-32\Well Based\REPEAT\
Plot File: \\PORO\Porosity_Q_5_REP_LIB

REPEAT SECTION







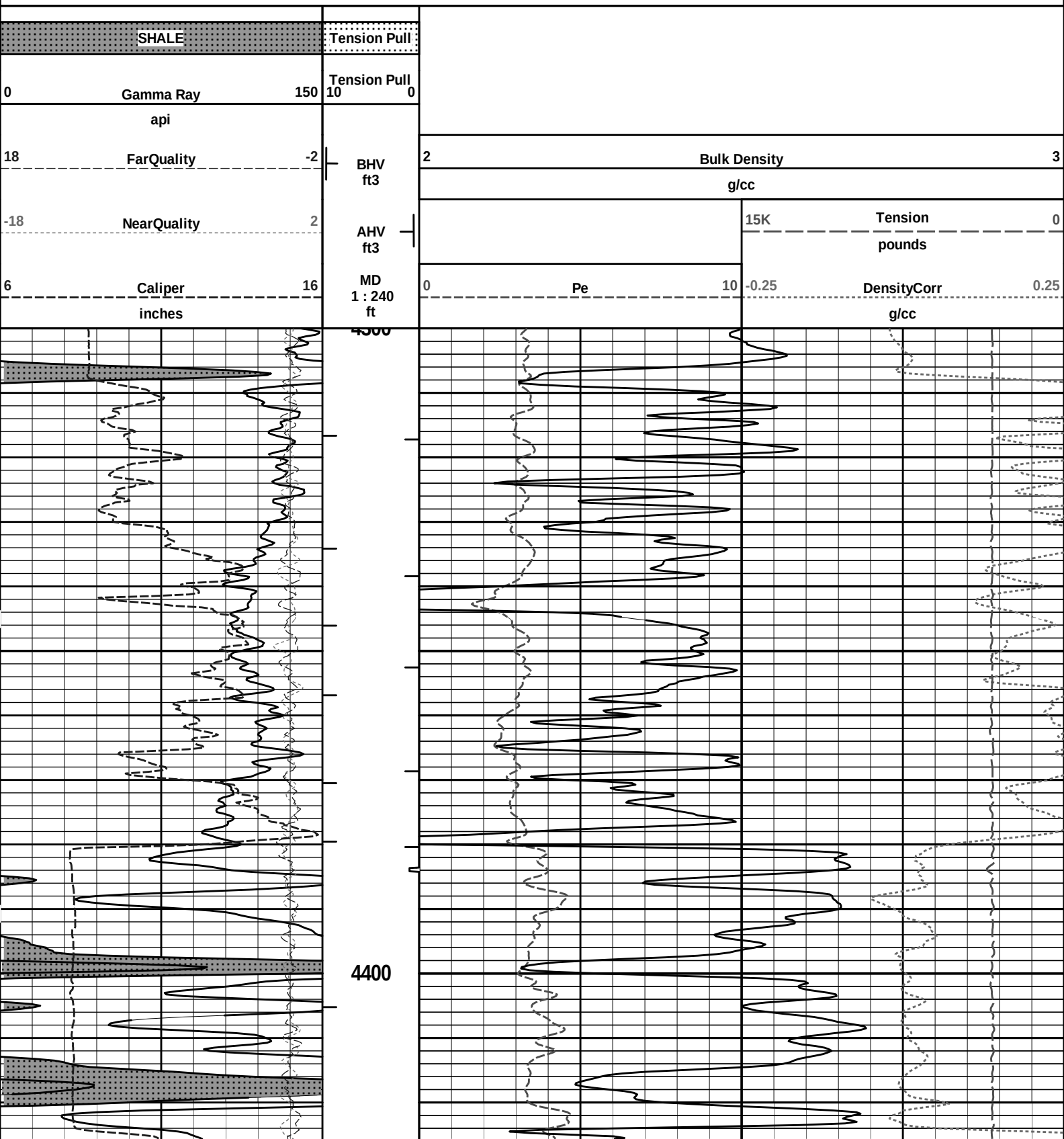
6	Caliper	16	MD	0	Pe	10	-0.25	DensityCorr	0.25
	inches		1 : 240					gram per cc	
0	Gamma API	150	ft					Tension	0
	api		AHVT			15K		pounds	
	SHALE		BHVT	30	DensityPorosity				-10
					%				
				30	Neutron Porosity				-10
					%				
					CROSSOVER				

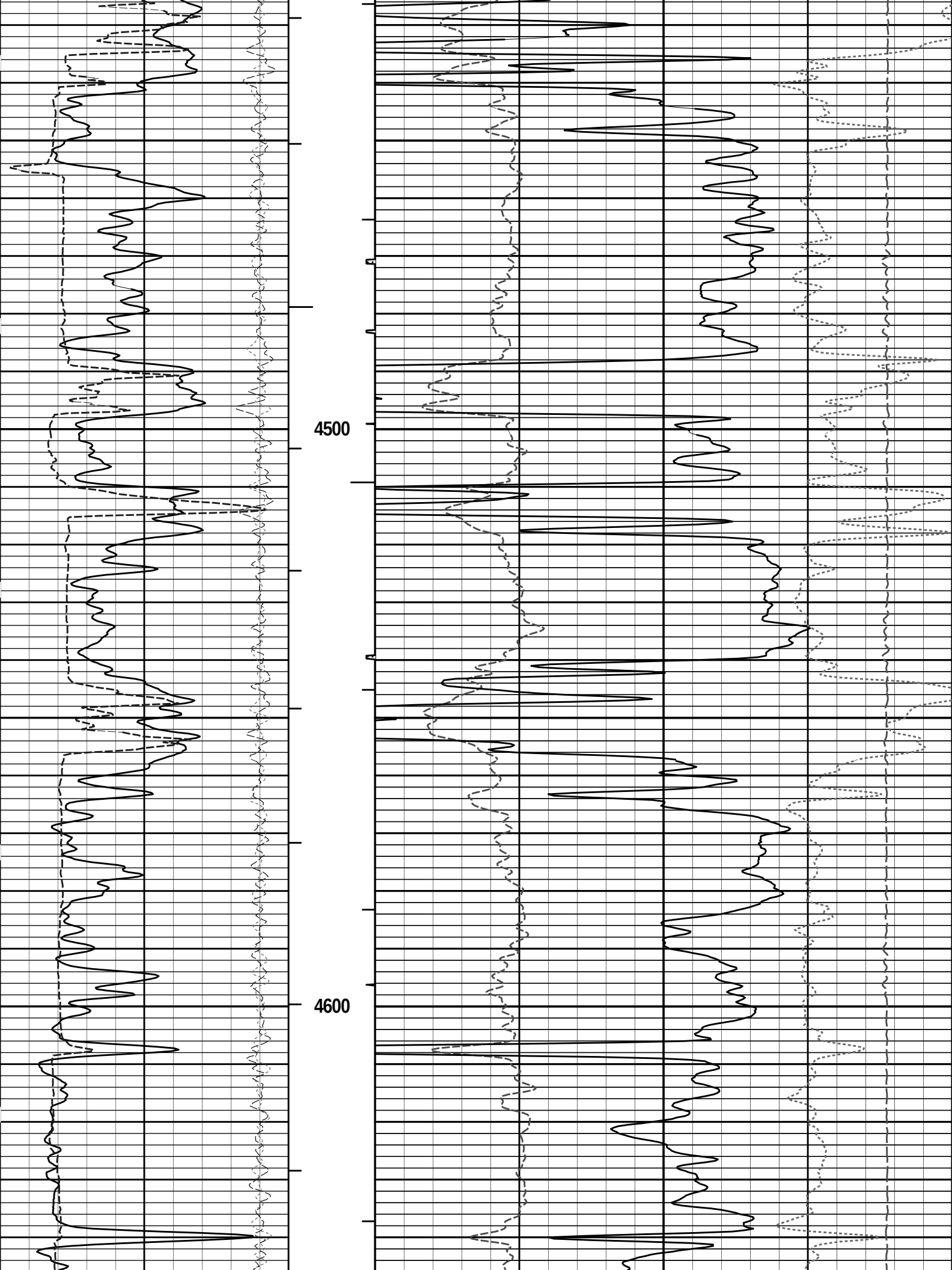
HALLIBURTON

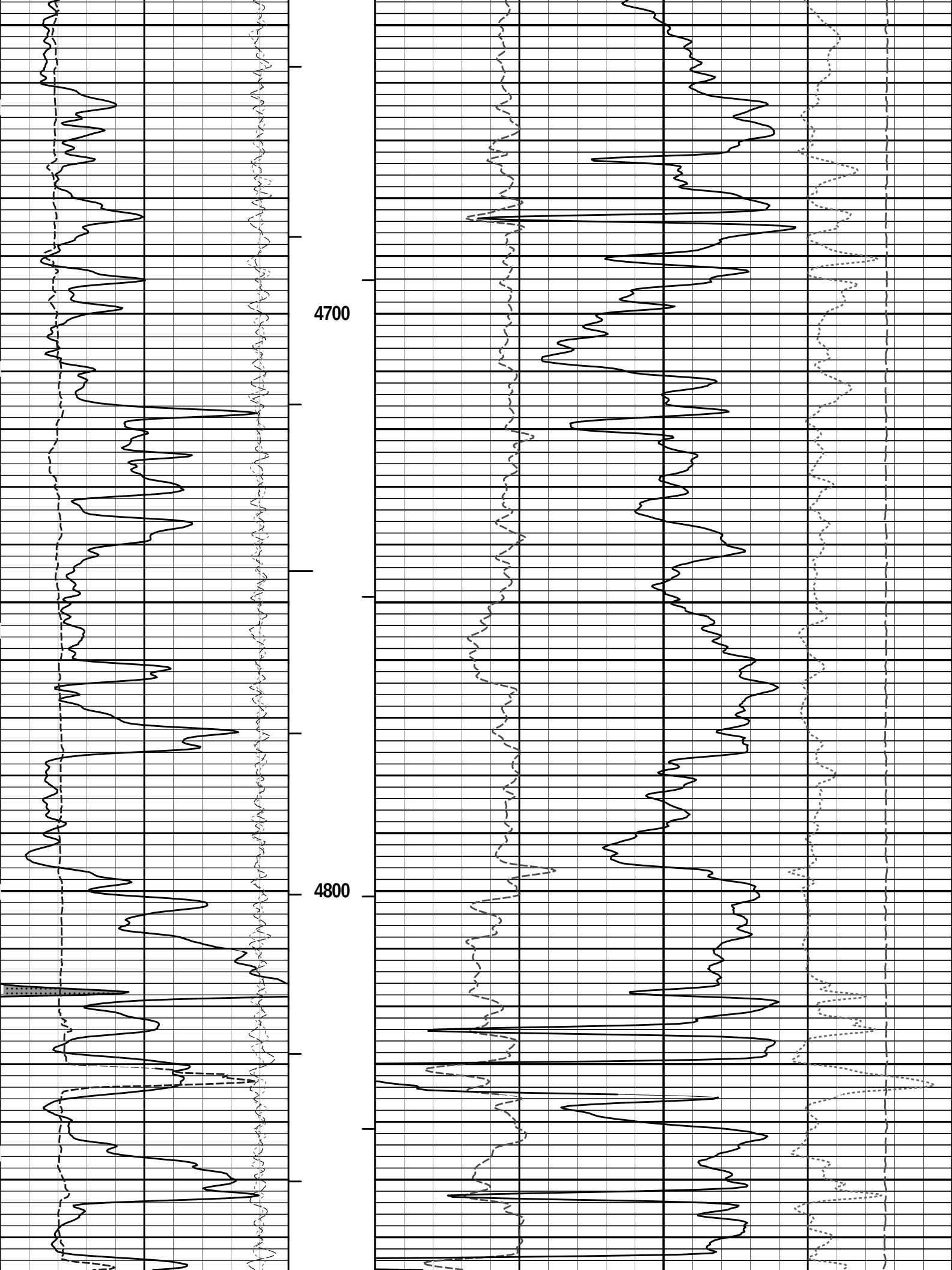
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Data: LARRABEE_1-32\Well Based\REPEAT\
Plot File: \\PORO\Porosity_Q_5_REP_LIB

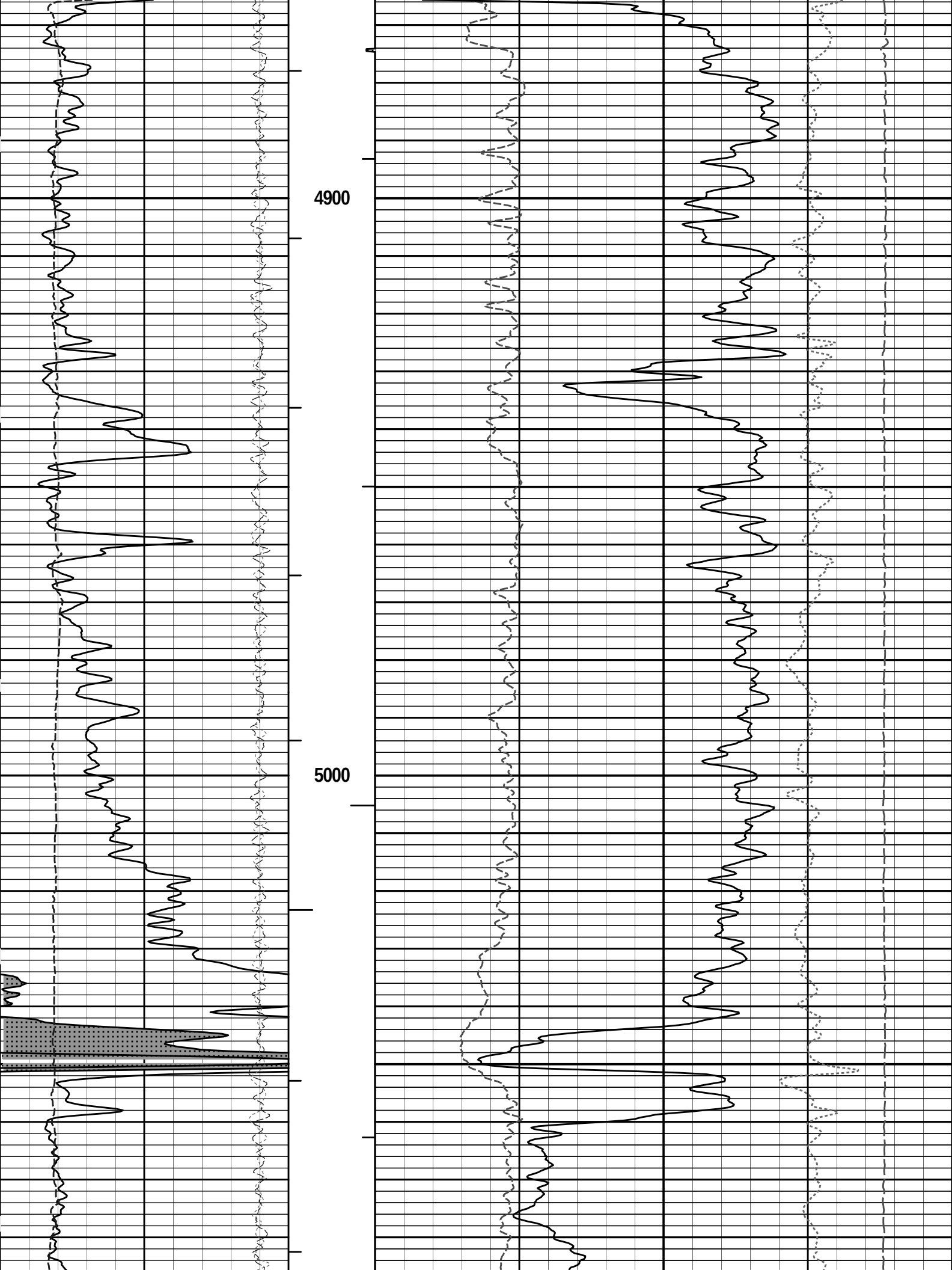
5 INCH MAIN LOG

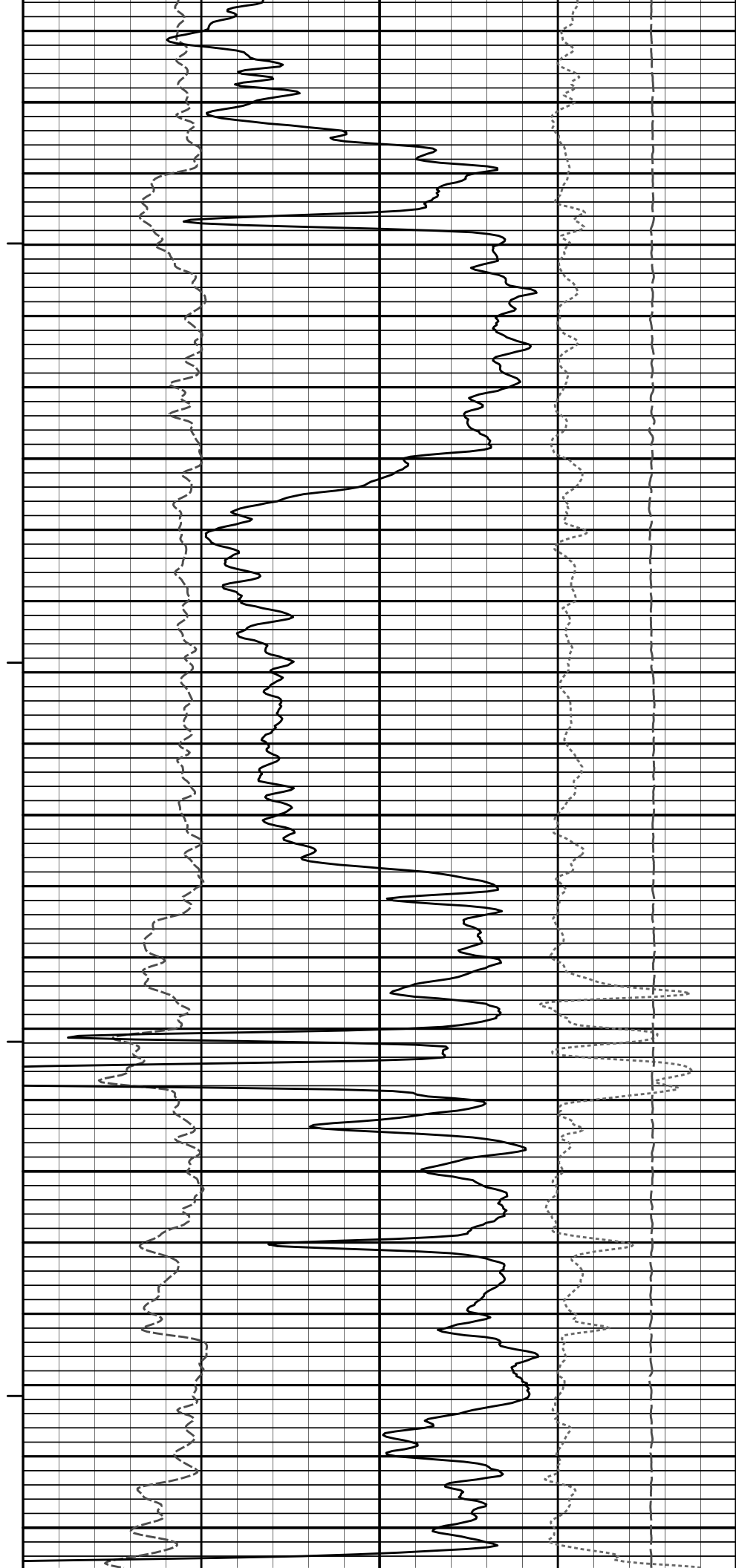
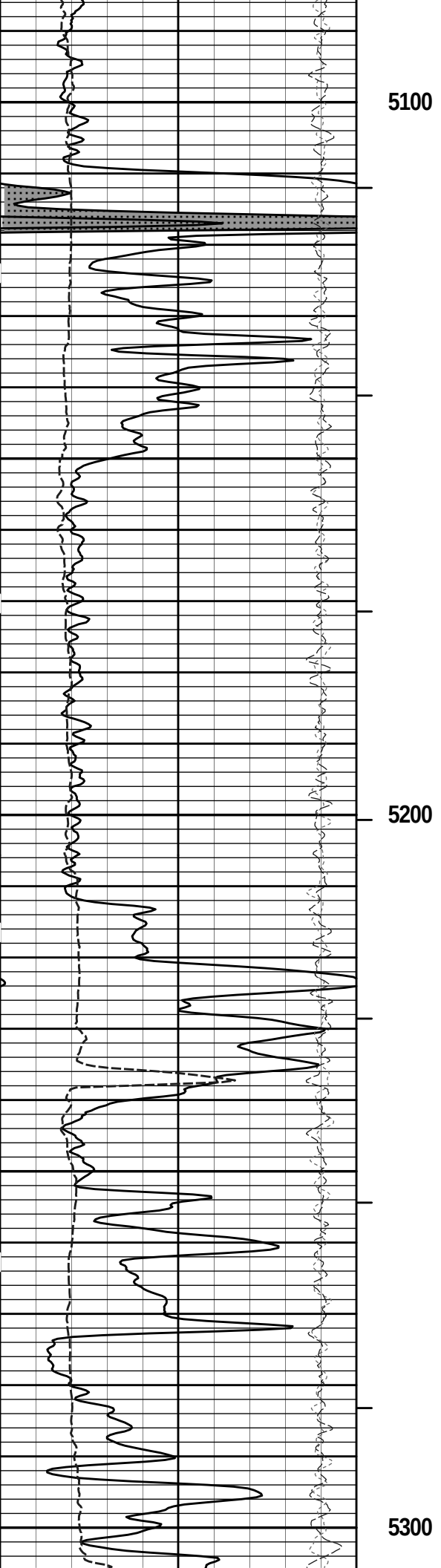
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Data: LARRABEE_1-32\Well Based\DETAIL\
Plot File: \\-LOCAL-\\LARRABEE_1-32\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\PORO\BULKD_5 MAIN LIB

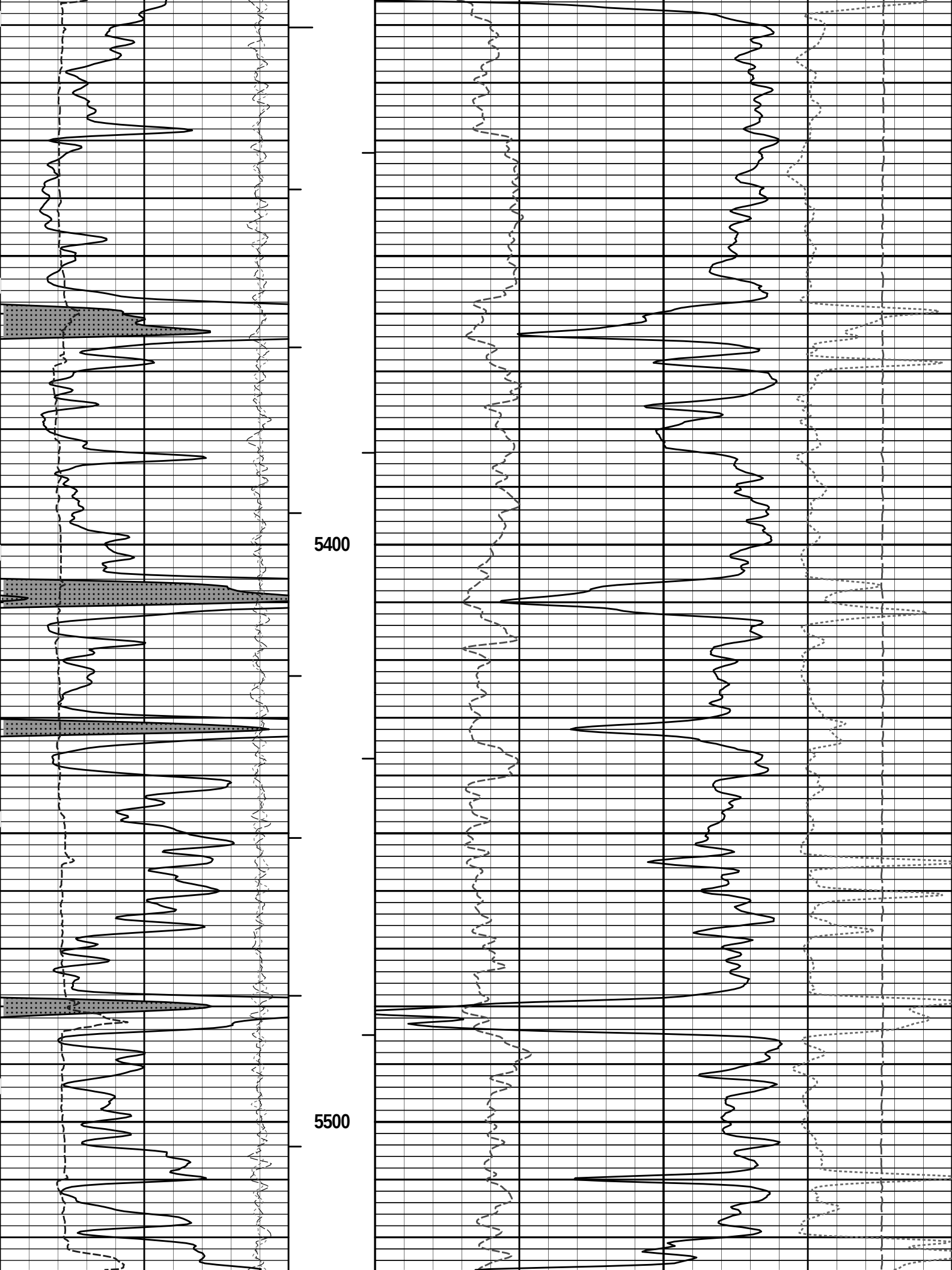


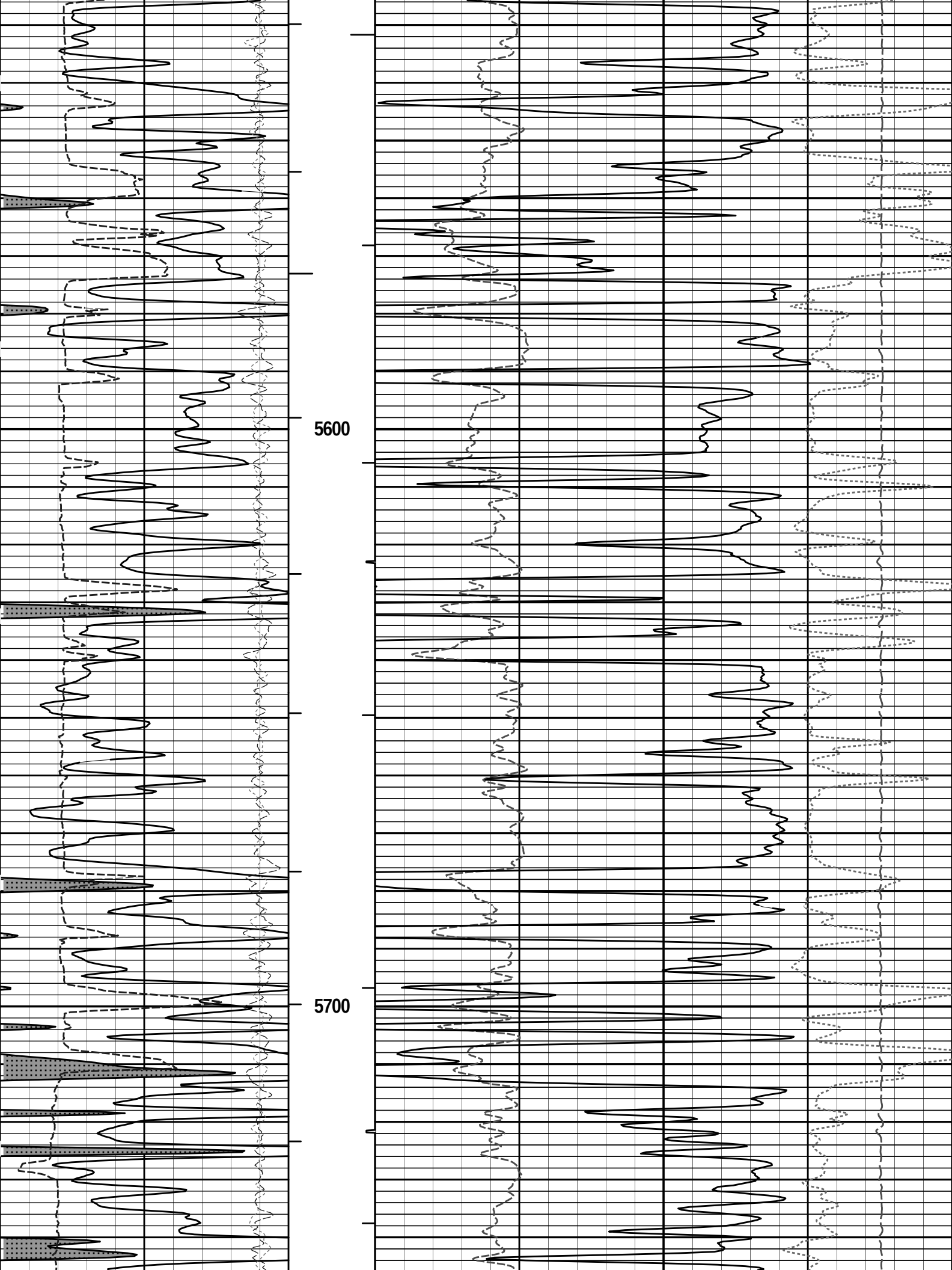


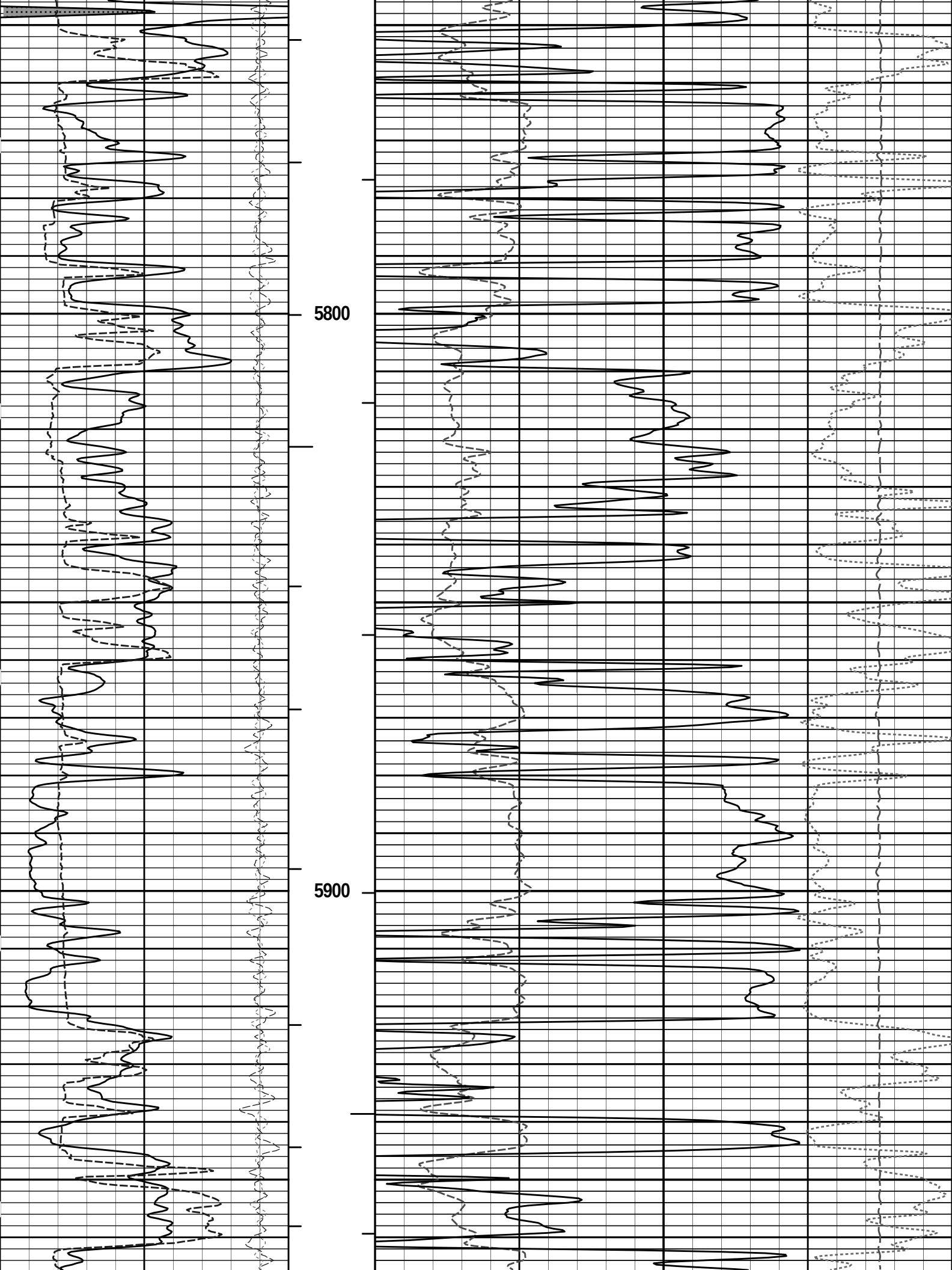


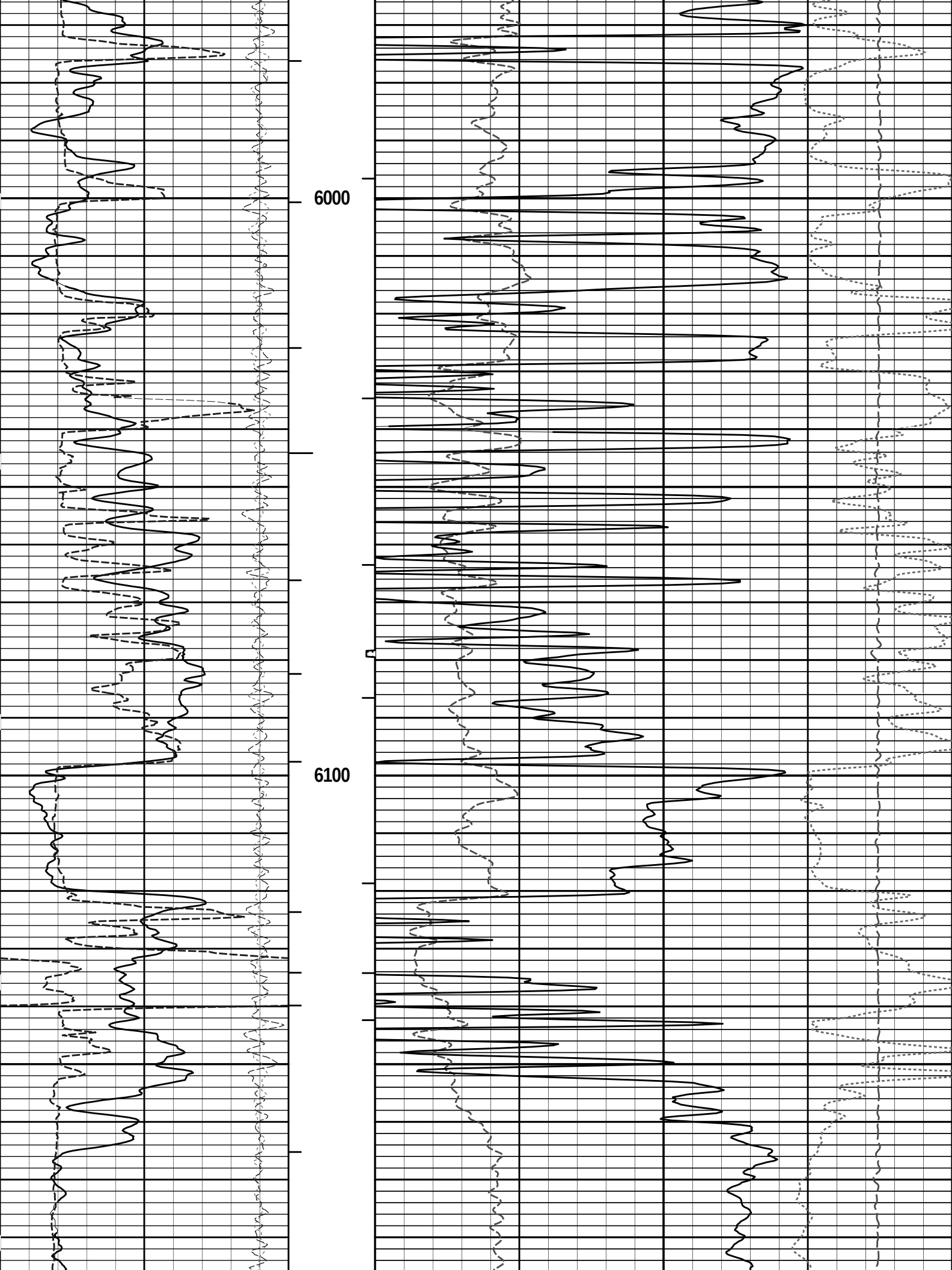


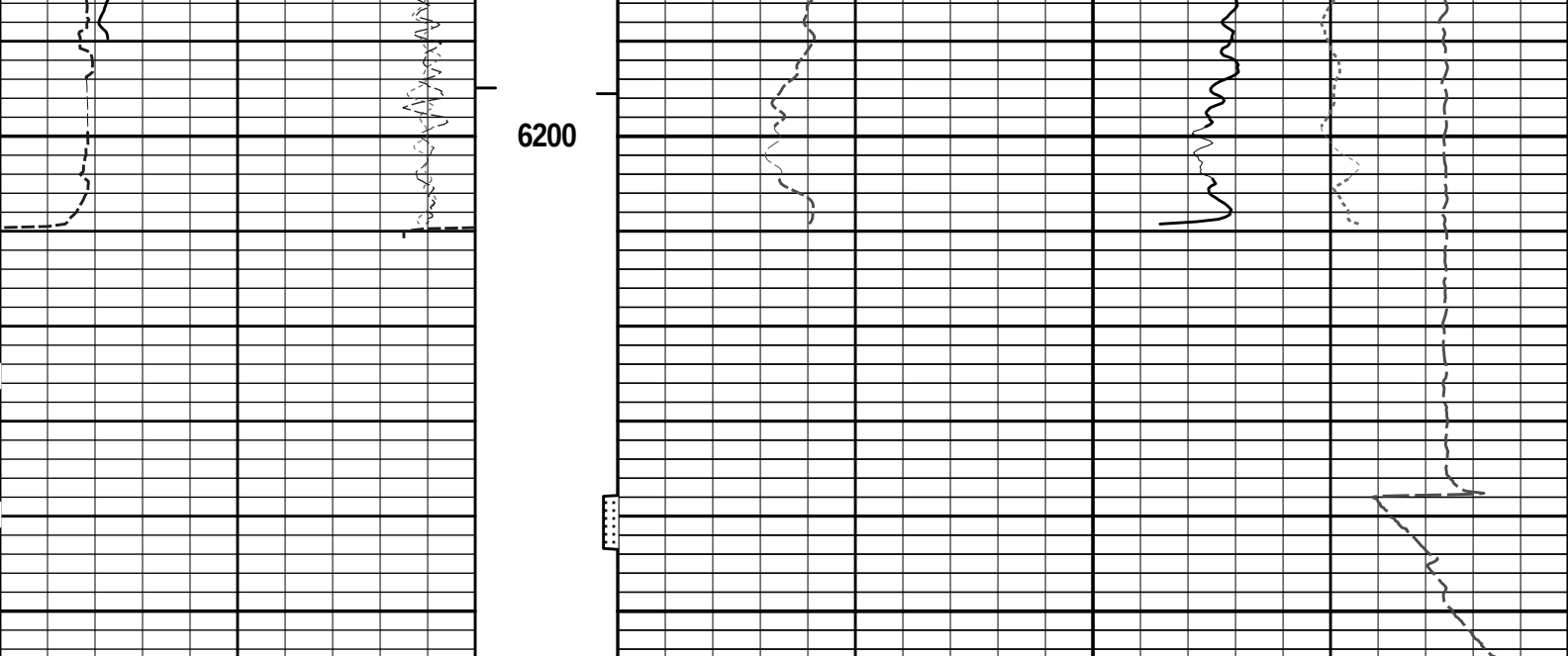












6	Caliper	16	MD	0	Pe	10	-0.25	DensityCorr	0.25
	inches		1 : 240					g/cc	
-18	NearQuality	2	AHV				15K	Tension	0
			ft3					pounds	
18	FarQuality	-2	BHV	2	Bulk Density				
			ft3		g/cc				
0	Gamma Ray	150	Tension Pull	10					
	api								
	SHALE		Tension Pull						

HALLIBURTON

Plot Time: 06-Aug-13 22:39:26
Plot Range: 4300 ft to 6255 ft
Data: LARRABEE_1-32\Well Based\DETAIL\
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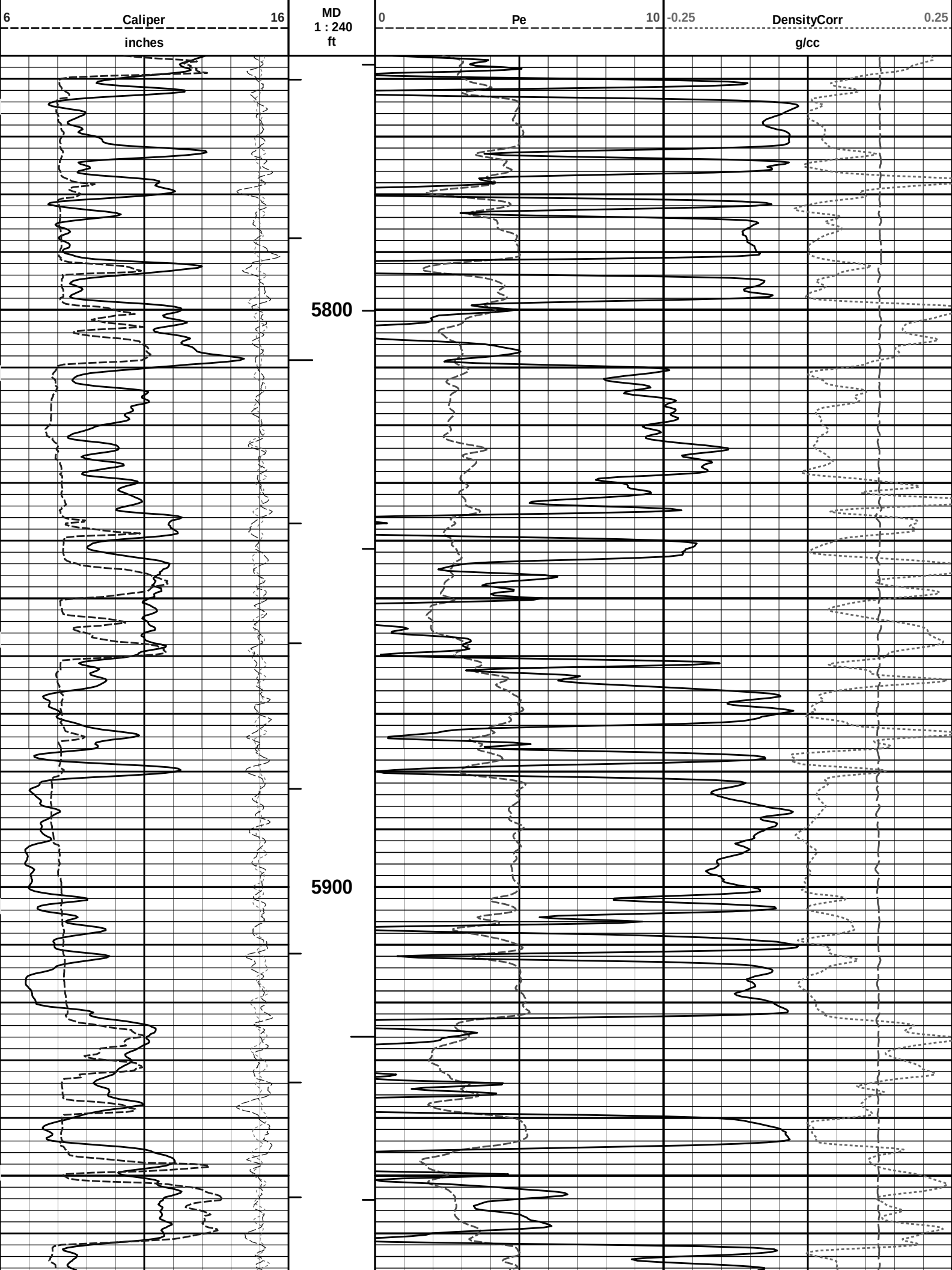
5 INCH MAIN LOG

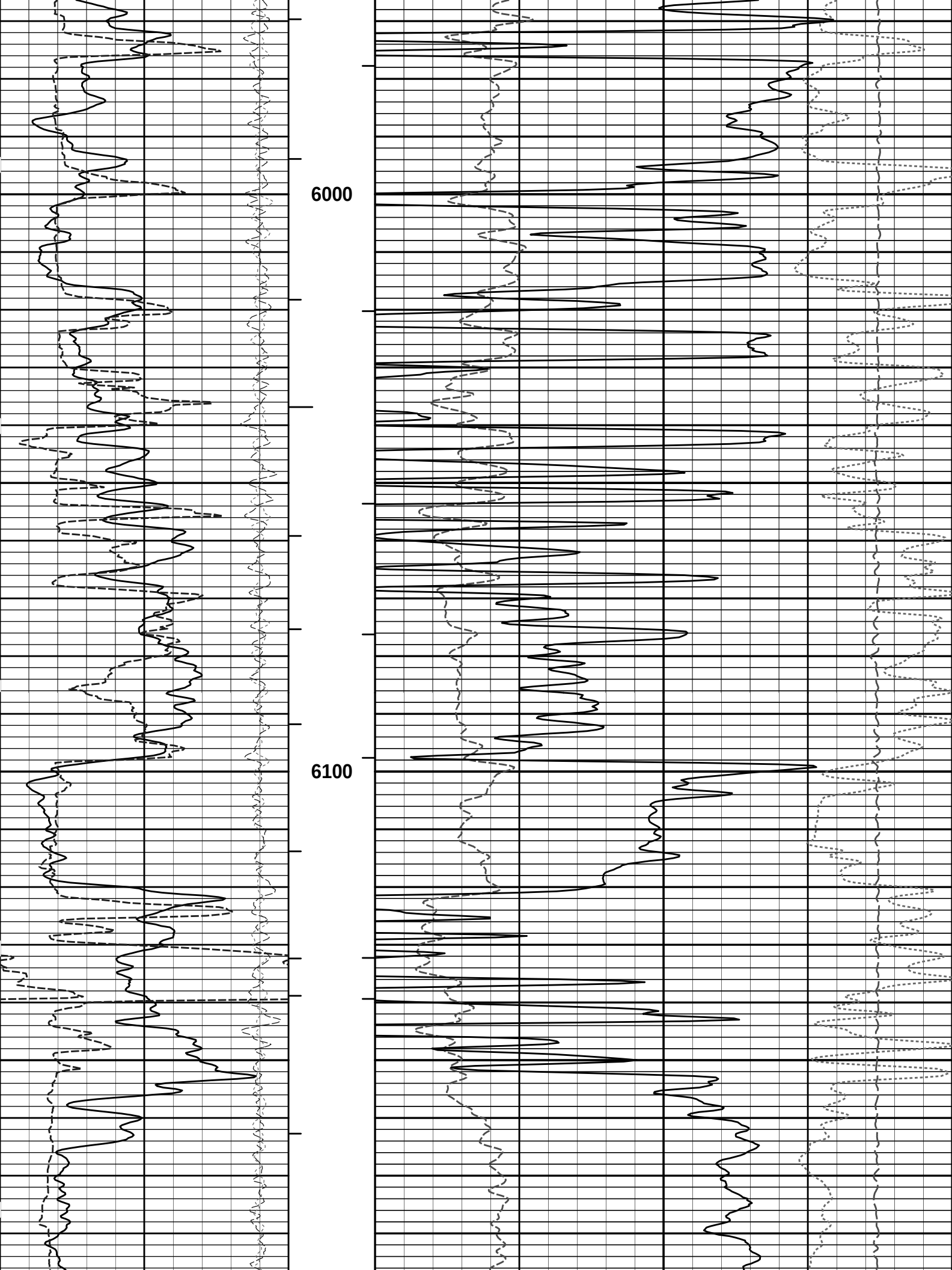
HALLIBURTON

Plot Time: 06-Aug-13 22:39:27
Plot Range: 5756 ft to 6254.33 ft
Data: LARRABEE_1-32\Well Based\REPEAT\
Plot File: \\LOCAL-ILARRABEE_1-32\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIPORO\BULKD_5_REP_LIB

REPEAT SECTION

	SHALE								
0	Gamma Ray	150							
	api								
18	FarQuality	-2	BHV	2	Bulk Density				
			ft3		g/cc				
-18	NearQuality	2	AHV			15K	Tension	0	
			ft3				pounds		





GTET-11048627
165.00 lbs

Ø 3.625 in →

8.52 ft

← GammaRay @ 64.23 ft

61.78 ft

DSNT-11055304
174.00 lbs

DSN Decentralizer-
11005605
6.60 lbs

Ø 5.000 in* →

Ø 3.625 in →

9.69 ft

← DSN Far @ 54.84 ft

← DSN Near @ 54.09 ft

52.09 ft

SDLT-11014296
360.00 lbs

SDLT Pad-10865884
65.00 lbs
Microlog Pad-11014296
8.00 lbs

Ø 4.500 in →

Ø 4.750 in* →

Ø 4.750 in* →

10.81 ft

Microlog @ 44.28 ft
SDL Caliper @ 44.09 ft
SDL @ 44.08 ft

41.28 ft

Flex Joint-001
140.00 lbs

Ø 3.625 in →

5.67 ft

Centralizer 25-00000027
8.00 lbs

Ø 4.000 in* →

35.61 ft

BSAT-10747683
300.00 lbs

Ø 3.625 in →

15.77 ft

← Sonic Receivers @ 27.09 ft

19.83 ft

ACRt Instrument-
11022962
50.00 lbs

Centralizer 25-00000028
8.00 lbs

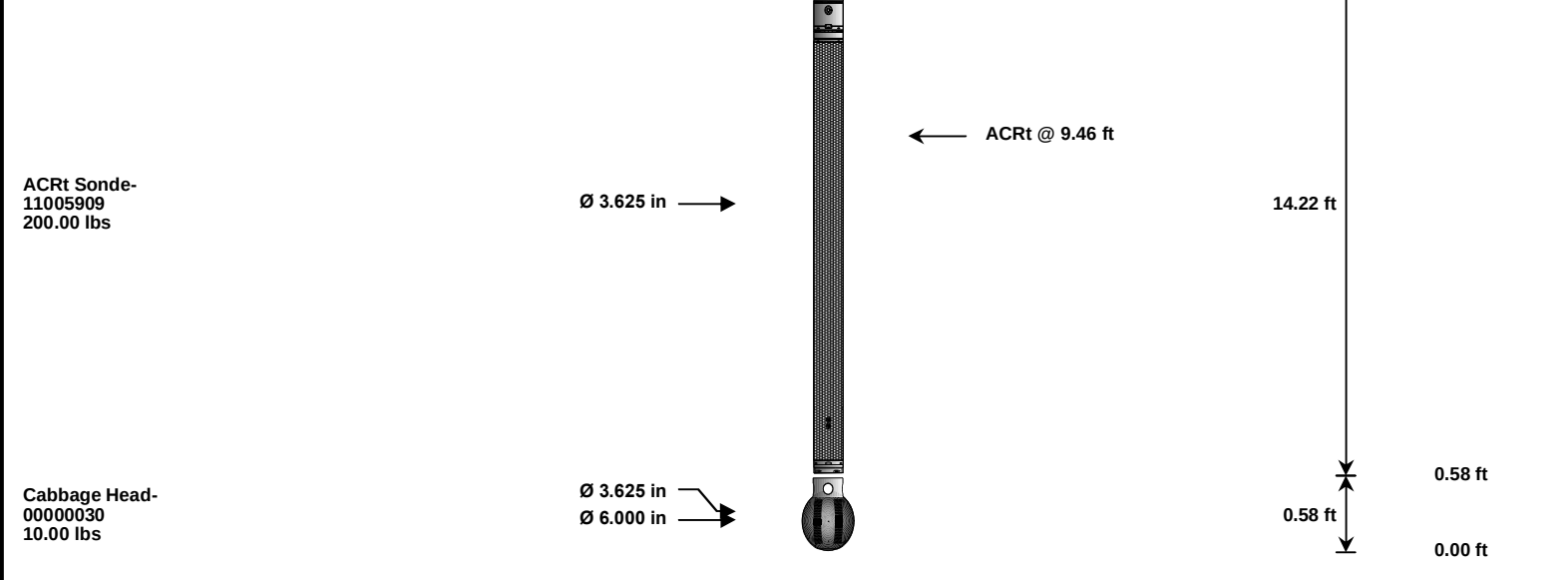
Ø 4.000 in* →

Ø 3.625 in →

5.03 ft

14.80 ft

← Mud Resistivity @ 13.44 ft



Mnemonic		Tool Name	Serial Number	Weight (lbs)	Length (ft)	Accumulated Length (ft)	Max.Log. Speed (fpm)
CH_HOS	Hostile Cable Head with Load Cell		CH_696	37.50	3.03	74.98	300.00
XOHD	Hostile to Dits Cross Over		TRK696	20.00	0.95	74.03	300.00
SP	SP Sub		11441455	60.00	3.74	70.30	300.00
GTET	Gamma Telemetry Tool		11048627	165.00	8.52	61.78	60.00
DSNT	Dual Spaced Neutron		11055304	174.00	9.69	52.09	60.00
DCNT	DSN Decentralizer		11005605	6.60	5.13	*	55.42 300.00
SDLT	Spectral Density Tool		11014296	360.00	10.81	41.28	60.00
MICP	Microlog Pad		11014296	8.00	1.00	*	43.78 60.00
SDLP	Density Insite Pad		10865884	65.00	2.55	*	43.49 60.00
FLEX	Flex Joint		001	140.00	5.67	35.61	300.00
BSAT	Borehole Sonic Array Tool		10747683	300.00	15.77	19.83	60.00
OBCEN	Centralizer - 25 in. Overbody		00000027	8.00	2.08	*	33.50 300.00
ACRt	Array Compensated True Resistivity Instrument Section		11022962	50.00	5.03	14.80	300.00
OBCEN	Centralizer - 25 in. Overbody		00000028	8.00	2.08	*	16.80 300.00
ACRt	Array Compensated True Resistivity Sonde Section		11005909	200.00	14.22	0.58	300.00
CBHD	Cabbage Head		00000030	10.00	0.58	0.00	300.00
Total				1,612.10	78.01		
* Not included in Total Length and Length Accumulation.							
Data: LARRABEE_1-32\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CH\IDLE							
Date: 06-Aug-13 19:31:54							

HALLIBURTON			
CALIBRATION REPORT			
NATURAL GAMMA RAY TOOL SHOP CALIBRATION			
Tool Name:	GTET - 11048627	Reference Calibration Date:	17-Jun-13 14:38:32
Engineer:	THOMAS HYDE	Calibration Date:	02-Jul-13 07:19:00
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	51.2	51.2	api
Background + Calibrator	320.3	320.9	api
Calibrator	269.2	269.6	api
NATURAL GAMMA RAY TOOL FIELD CALIBRATION			
Tool Name:	GTET - 11048627	Reference Calibration Date:	02-Jul-13 07:19:00

Tool Name: DSNT - 11055304

Engineer: J. BOLLLOM

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

Reference Calibration Date: 06-Aug-13 15:58:58

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	51.2	52.6	api
Background + Calibrator	320.9	322.2	api
Calibrator	269.6	269.6	api

Shop	Field	Difference	Tolerance
269.6	269.6	0.0	+/- 9.00

Tool Name: DSNT - 11055304

Engineer: THOMAS HYDE

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

Reference Calibration Date: 20-May-13 10:05:01

Calibration Date: 02-Jul-13 09:34:44

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: 72 degF

Min. Tool Housing Outside Diameter: 3.620 in

CALIBRATION CONSTANTS			
Measurement	Prev. Value	New Value	Control Limit On New Value
Gain:	0.975	0.977	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):	0.2100	0.2107	0.0007	+/- 0.0020
Calibrated Ratio:	9.70	9.72	0.022	+/- 0.050

VERIFIER		
Measurement	Value	Control Limit
Snow-Block Porosity (decp):	0.0592	0.02000 - 0.09000

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

Tool Name: DSNT - 11055304

Engineer: J. BOLLLOM

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

Reference Calibration Date: 02-Jul-13 09:34:44

Calibration Date: 06-Aug-13 16:07:19

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):	0.0592	0.0737	0.0145	+/- 0.0150

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

DENSITY CALIPER SHOP CALIBRATION

Tool Name:	SDLT - 11014296	Reference Calibration Date:	02-Aug-13 15:26:20
Engineer:	J. BOLLLOM	Calibration Date:	02-Aug-13 15:31:00
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1
Host Tool Name:	DSNT - 11055304		

CALIBRATION COEFFICIENTS			
Measurement	Previous Value	New Value	Control Limit On New Value
Pad Offset	-4398.24	-4443.05	-7000.00 - -1000.00
Pad Gain	0.0003999	0.0003982	0.000200 - 0.000600
Arm Offset	-2696.50	-2749.23	-5000.00 - 3000.00
Arm Gain	0.0005370	0.0005473	0.000300 - 0.000700
Arm Power	-0.000006547	-0.000007105	-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)	2.03	2.00	-0.03	+/- 0.20
Medium Ring (in)	3.78	3.75	-0.03	+/- 0.20
RING DIAMETER:				
Small Ring (in)	6.51	6.50	-0.01	+/- 0.20
Medium Ring (in)	8.23	8.25	0.02	+/- 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

SDLT CALIPER FIELD CALIBRATION

Tool Name:	SDLT - 11014296	Reference Calibration Date:	02-Aug-13 15:31:00
Engineer:	J. BOLLLOM	Calibration Date:	06-Aug-13 16:02:35
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	3.75	-0.00	+/- 0.10
Ring Diameter	8.25	8.39	0.14	+/- 0.15

PASS/FAIL SUMMARY	
Pad Extension Check:	Passed

SPECTRAL DENSITY SHOP CALIBRATION

Tool Name: SDLT Pad - 10865884

Reference Calibration Date: 02-Jul-13 08:02:39

Engineer: THOMAS HYDE

Calibration Date: 02-Jul-13 08:23:04

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	1.0462	1.0424	0.90 - 1.10
Near Dens Gain	1.0164	1.0151	0.90 - 1.10
Near Peak Gain	1.0269	1.0032	0.90 - 1.10
Near Lith Gain	1.0077	0.9769	0.90 - 1.10
Far Bar Gain	1.0106	1.0105	0.90 - 1.10
Far Dens Gain	0.9990	0.9990	0.90 - 1.10
Far Peak Gain	0.9932	0.9935	0.90 - 1.10
Far Lith Gain	0.9691	0.9686	0.90 - 1.10
Near Bar Offset	-0.2173	-0.1830	NONE
Near Dens Offset	0.0248	0.0348	NONE
Near Peak Offset	-0.0835	0.1140	NONE
Near Lith Offset	0.0314	0.2870	NONE
Far Bar Offset	0.0502	0.0518	NONE
Far Dens Offset	0.1209	0.1216	NONE
Far Peak Offset	0.1339	0.1302	NONE
Far Lith Offset	0.2676	0.2676	NONE
Near Bar Background	826.00	825.17	700 - 1450
Near Dens Background	273.42	273.92	230 - 480
Near Peak Background	119.55	119.89	100 - 210
Near Lith Background	145.87	145.76	125 - 260
Far Bar Background	509.93	510.22	450 - 900
Far Dens Background	197.78	199.46	175 - 345
Far Peak Background	78.17	78.04	70 - 140
Far Lith Background	81.35	81.01	75 - 145

CALIBRATION BLOCK SUMMARY

Measurement	Current Reading (Previous Coef)	Calibrated (New Coef)	Change	Control Limit On Change
MAGNESIUM				
Density (g/cc)	1.685	1.684	-0.001	+/- 0.015
Pe	2.525	2.561	0.036	+/- 0.150
ALUMINUM				
Density (g/cc)	2.597	2.598	0.001	+/- 0.01500
Pe	3.138	3.129	-0.009	+/- 0.150

TOOL SUMMARY

Measurement	Near Detector		Far Detector	
	Value	Control Limits	Value	Control Limits

QUALITY				
Background	0.0008	+/- 0.0110	0.0008	+/- 0.0140
Magnesium Block	-0.0013	+/- 0.0110	-0.0010	+/- 0.0140
Aluminum Block	0.0003	+/- 0.0110	0.0001	+/- 0.0140
Resolution	9.21	6.00 - 11.50	8.96	6.00 - 11.50
Internal Verifier(B+D+P+L)	1365	1200 - 2700	869	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 - 10865884	Reference Calibration Date:	02-Jul-13 08:23:04
Engineer:	J. BOLLUM	Calibration Date:	06-Aug-13 15:58:56
Software Version:	WL INSITE R3.8.4 (Build 5)	Calibration Version:	1

Pad Temperature: 92.9 degF

DENSITY FIELD CALIBRATION SUMMARY				
Measurement	Shop	Field	Change	Control Limit +/-
Near (B+D+P+L) cps	1364.751	1367.757	3.006	14.932
Far (B+D+P+L) cps	868.728	869.779	1.051	16.115
Near Resolution	9.21	9.24	0.030	0.50
Far Resolution	8.96	8.92	-0.040	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-11048627						
Gamma Ray Calibrator	269.6	269.6	-----	0.0	+/- 9.00	api
DSNT-11055304						
Snow-Block Porosity	0.0592	0.0737	-----	-0.0145	+/- 0.0150	decp
SDLT-11014296						
Pad Extension	3.75	3.75	-----	0.00	+/-0.10	in
Ring Diameter	8.25	8.39	-----	-0.14	+/-0.15	in
SDLT Pad-10865884						
Near(B+D+P+L)	1364.751	1367.757	-----	-3.006	+/-14.932	cps
Far(B+D+P+L)	868.728	869.779	-----	-1.051	+/-16.115	cps

Data: IARRABEE 1-32\0001 SP-GTET-DSN-SDLI-FLEX-BSAT-ACRT-CHUDDLE Date: 06-Aug-13 19:34:22

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	9.000	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	6253.00	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: LARRABEE_1-3210001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIDLE				Date: 06-Aug-13 19:32:33	

HALLIBURTON					
INPUTS, DELAYS AND FILTERS TABLE					
Mnemonic		Input Description	Delay (ft)	Filter Type	Filter Length (ft)
Depth Panel					
TENS	Tension		0.00	NO	
CH_HOS					
DHTN	DownholeTension		0.00	BLK	0.000
SP Sub					
PLTC	Plot Control Mask		72.25	NO	
SP	Spontaneous Potential		72.25	BLK	1.250
SPR	Raw Spontaneous Potential		72.25	NO	
SPO	Spontaneous Potential Offset		72.25	NO	
GTET					
TPUL	Tension Pull		64.23	NO	
GR	Natural Gamma Ray API		64.23	TRI	1.750
GRU	Unfiltered Natural Gamma Ray API		64.23	NO	
EGR	Natural Gamma Ray API with Enhanced Vertical Resolution		64.23	W	1.416 , 0.750
ACCZ	Accelerometer Z		0.00	BLK	0.083
DEVI	Inclination		0.00	NO	
DSNT					
TPUL	Tension Pull		53.99	NO	
RNDS	Near Detector Telemetry Counts		54.09	BLK	1.417
RFDS	Far Detector Telemetry Counts		54.84	TRI	0.583
DNTT	DSN Tool Temperature		54.09	NO	
DSNS	DSN Tool Status		53.99	NO	
ERND	Near Detector Telemetry Counts EVR		54.09	BLK	0.000
ERFD	Far Detector Telemetry Counts EVR		54.84	BLK	0.000

ENTM	Far Detector Telemetry Counts EVR	54.09	NO	0.000
ENTM	DSN Tool Temperature EVR	54.09	NO	
SDLT				
TPUL	Tension Pull	44.09	NO	
PCAL	Pad Caliper	44.09	TRI	0.250
ACAL	Arm Caliper	44.09	TRI	0.250
BSAT				
TPUL	Tension Pull	27.09	NO	
STAT	Status	27.09	NO	
DLYT	Delay Time	27.09	NO	
SI	Sample Interval	27.09	NO	
TXRX	Raw Telemetry 10 Receivers	27.09	NO	
FRMC	Tool Frame Count	27.09	NO	
GMOD	Gain processing mode	19.83	NO	
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 Current Raw 12K X Receiver	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	
TRBD	Receiver Board Temperature	2.97	NO	

SDLT Pad				
TPUL	Tension Pull	44.08	NO	
NAB	Near Above	43.90	BLK	0.920
NHI	Near Cesium High	43.90	BLK	0.920
NLO	Near Cesium Low	43.90	BLK	0.920
NVA	Near Valley	43.90	BLK	0.920
NBA	Near Barite	43.90	BLK	0.920
NDE	Near Density	43.90	BLK	0.920
NPK	Near Peak	43.90	BLK	0.920
NLI	Near Lithology	43.90	BLK	0.920
NBAU	Near Barite Unfiltered	43.90	BLK	0.250
NLIU	Near Lithology Unfiltered	43.90	BLK	0.250
FAB	Far Above	44.26	BLK	0.250
FHI	Far Cesium High	44.26	BLK	0.250
FLO	Far Cesium Low	44.26	BLK	0.250
FVA	Far Valley	44.26	BLK	0.250
FBA	Far Barite	44.26	BLK	0.250
FDE	Far Density	44.26	BLK	0.250
FPK	Far Peak	44.26	BLK	0.250
FLI	Far Lithology	44.26	BLK	0.250
PTMP	Pad Temperature	44.09	BLK	0.920
NHV	Near Detector High Voltage	43.49	NO	
FHV	Far Detector High Voltage	43.49	NO	
ITMP	Instrument Temperature	43.49	NO	
DDHV	Detector High Voltage	43.49	NO	

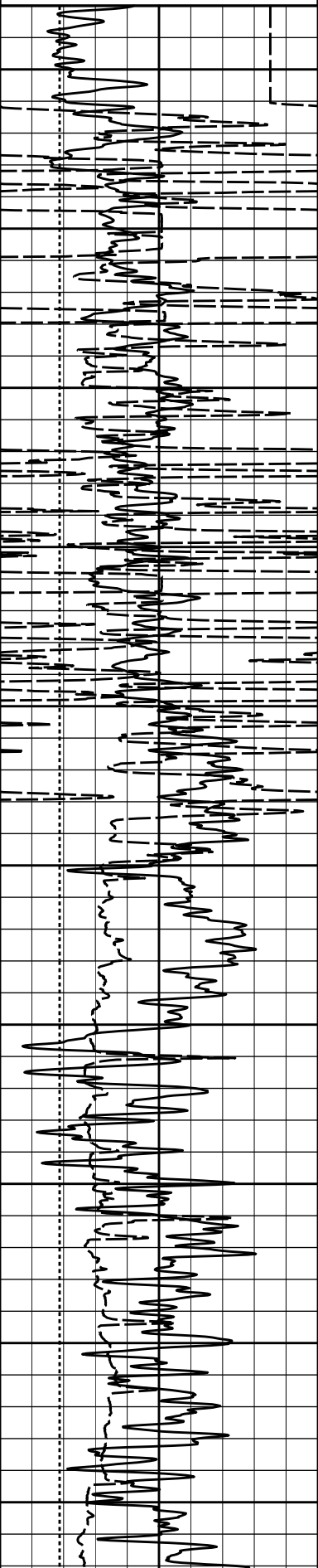
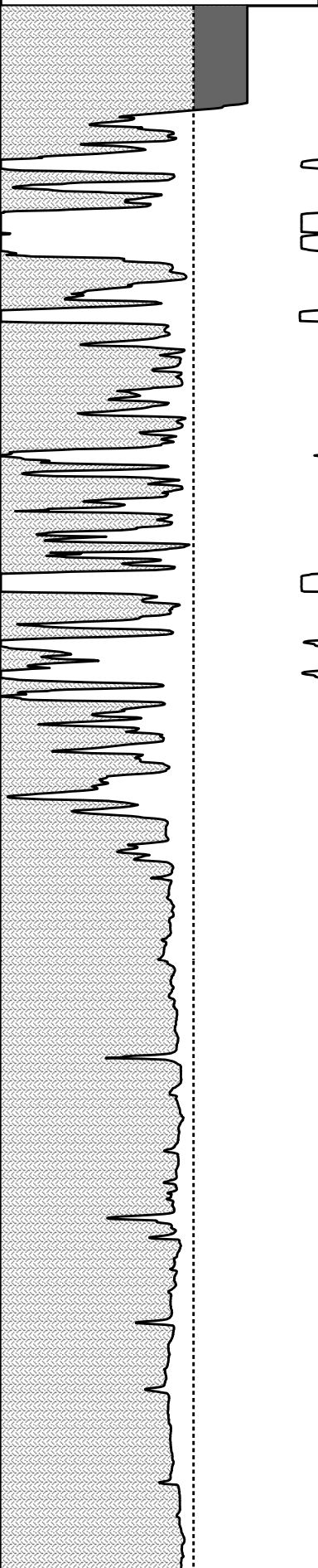
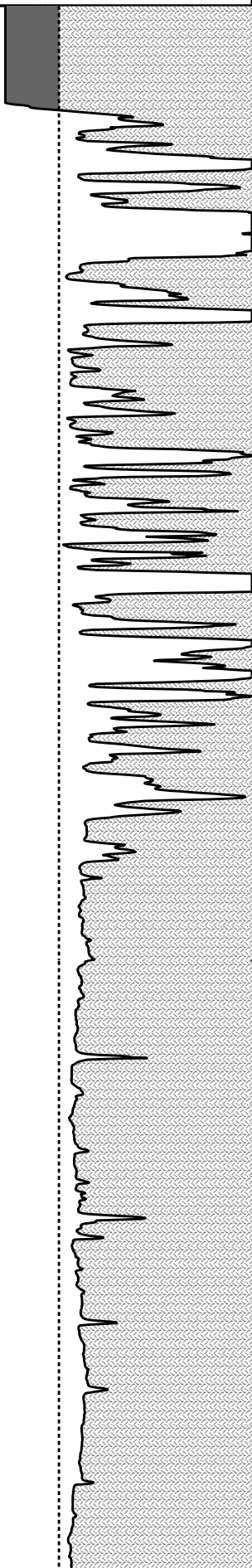
Microlog Pad				
TPUL	Tension Pull	44.28	NO	
MINV	Microlog Lateral	44.28	BLK	0.750
MNOR	Microlog Normal	44.28	BLK	0.750

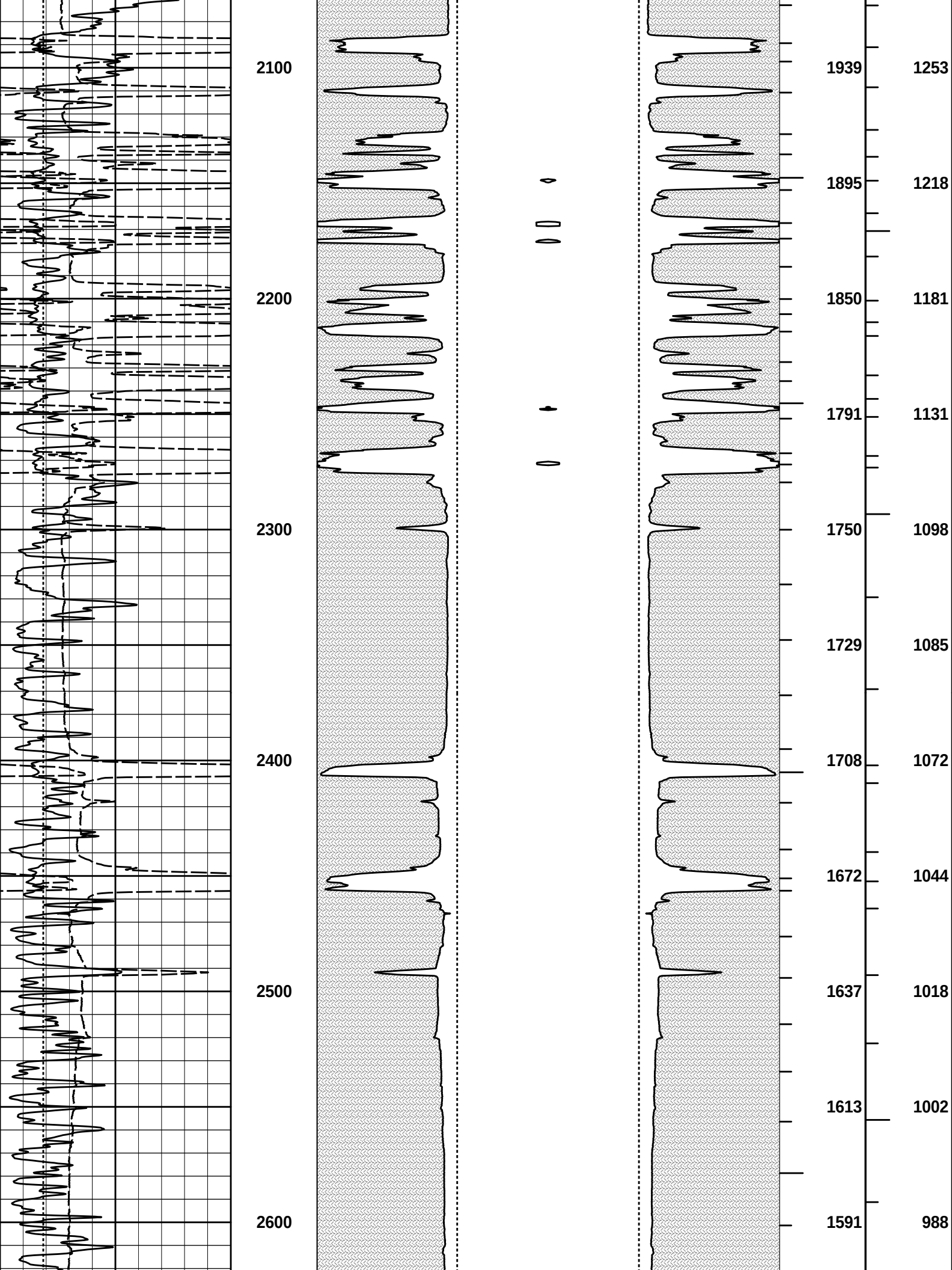
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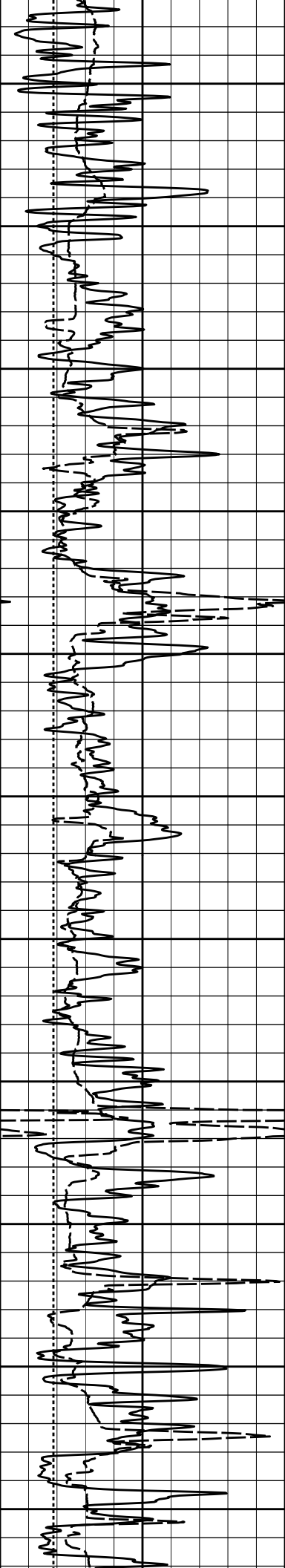
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ANNULAR HOLE VOLUME PLOT

0	Gamma API	150		MUDCAKE	MUDCAKE	
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api			MD 1 : 600 ft	20		0 0		20		BHVT	AHVT			
6	Bit Size	16		20		0 0		20						
inches				Caliper		0 0		Caliper						
6	inches		20	inches		inches		inches						
				1600									2318	1550
													2270	1510
				1700									2216	1464
													2172	1429
				1800									2105	1370
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				1900									2040	1321
													2017	1307
				2000									1993	1291
													1969	1276





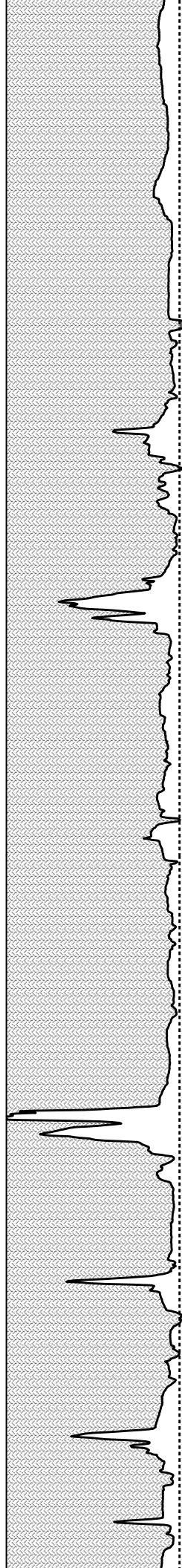
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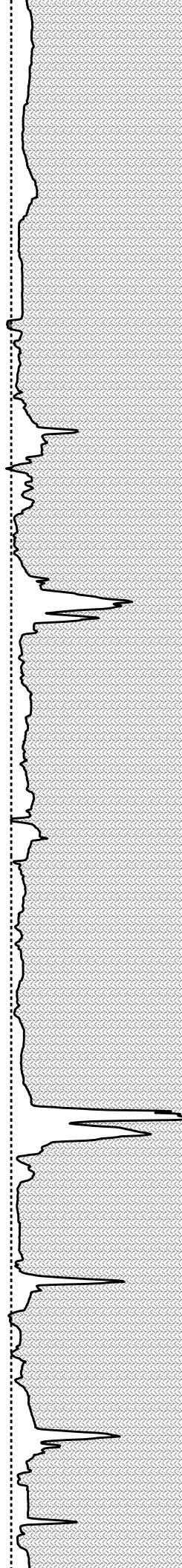
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3100



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1568

1546

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1503

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1454

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1413

1379

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933

914

901

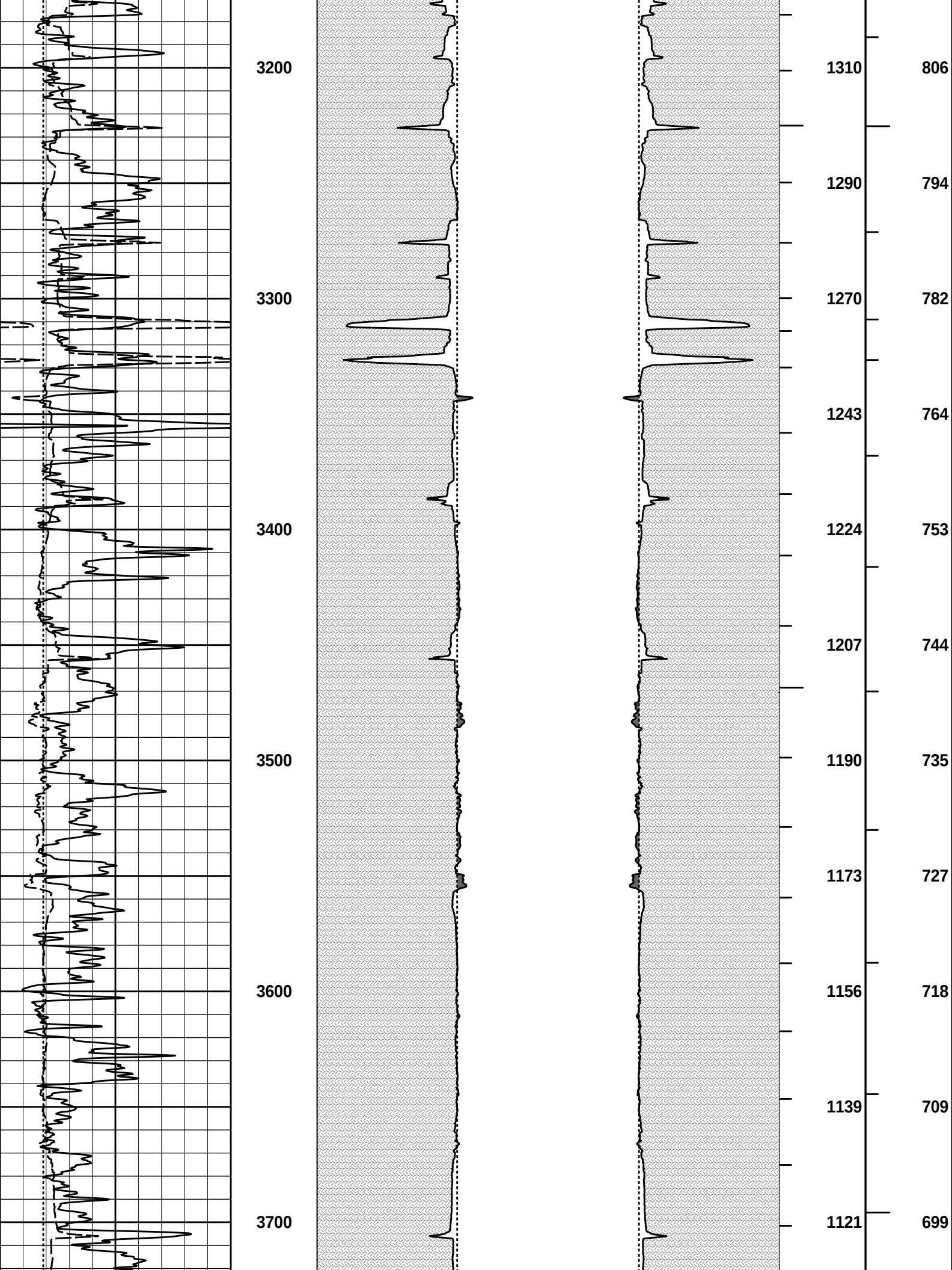
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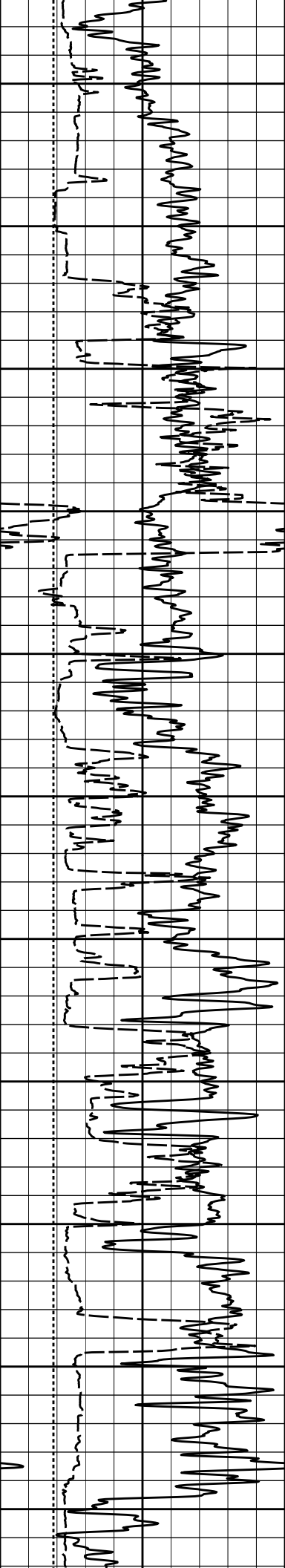
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820





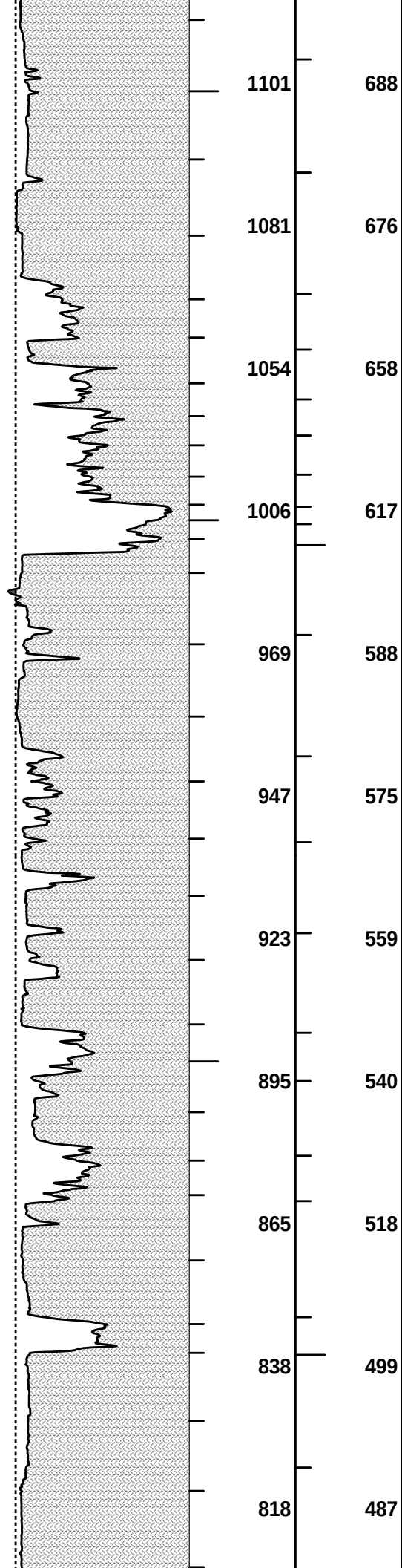
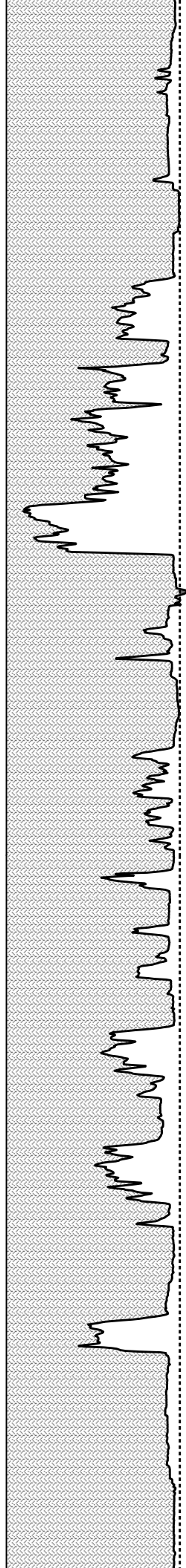
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3900

4000

4100

4200



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1054

658

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617

969

588

947

575

923

559

895

540

865

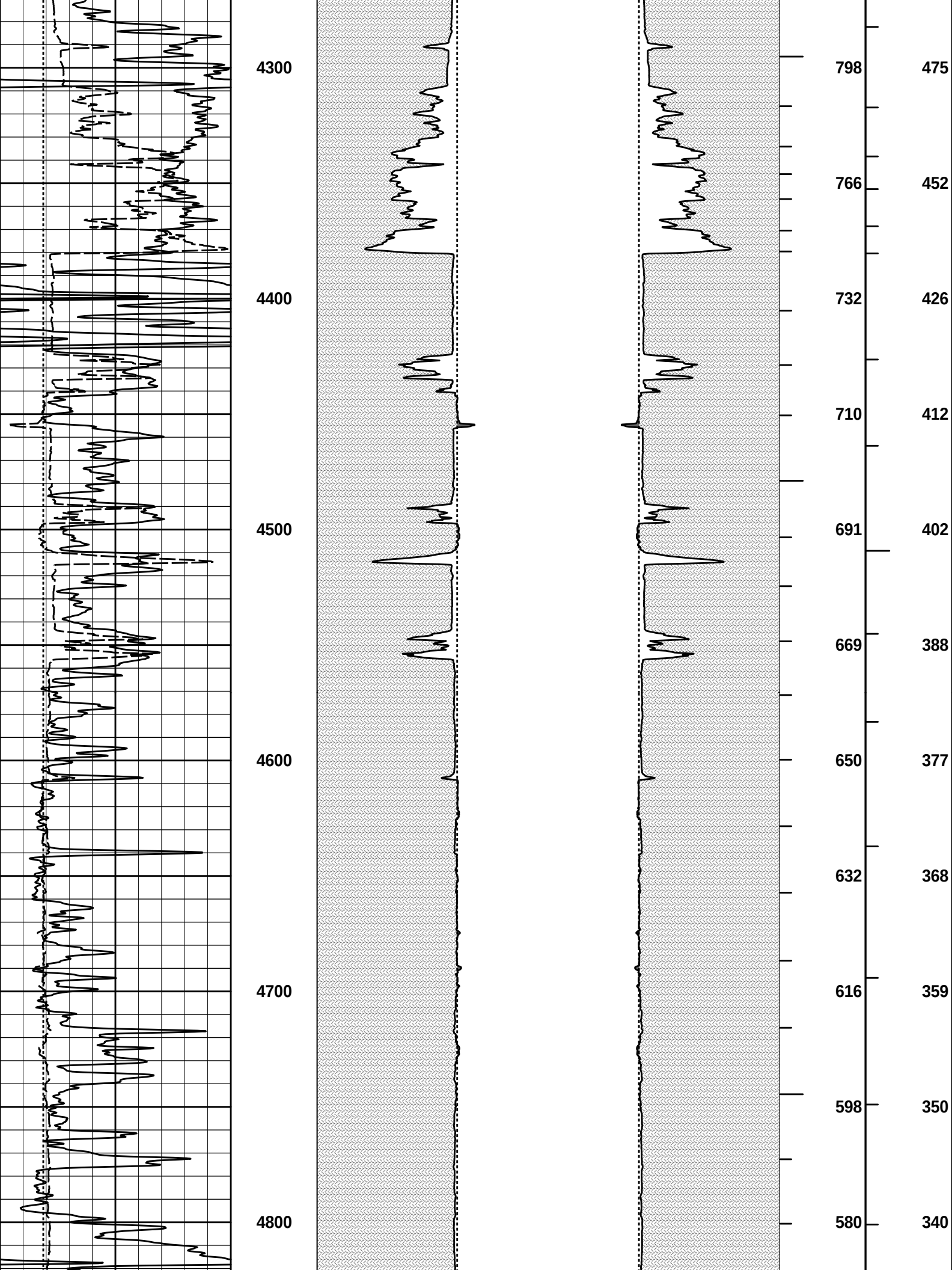
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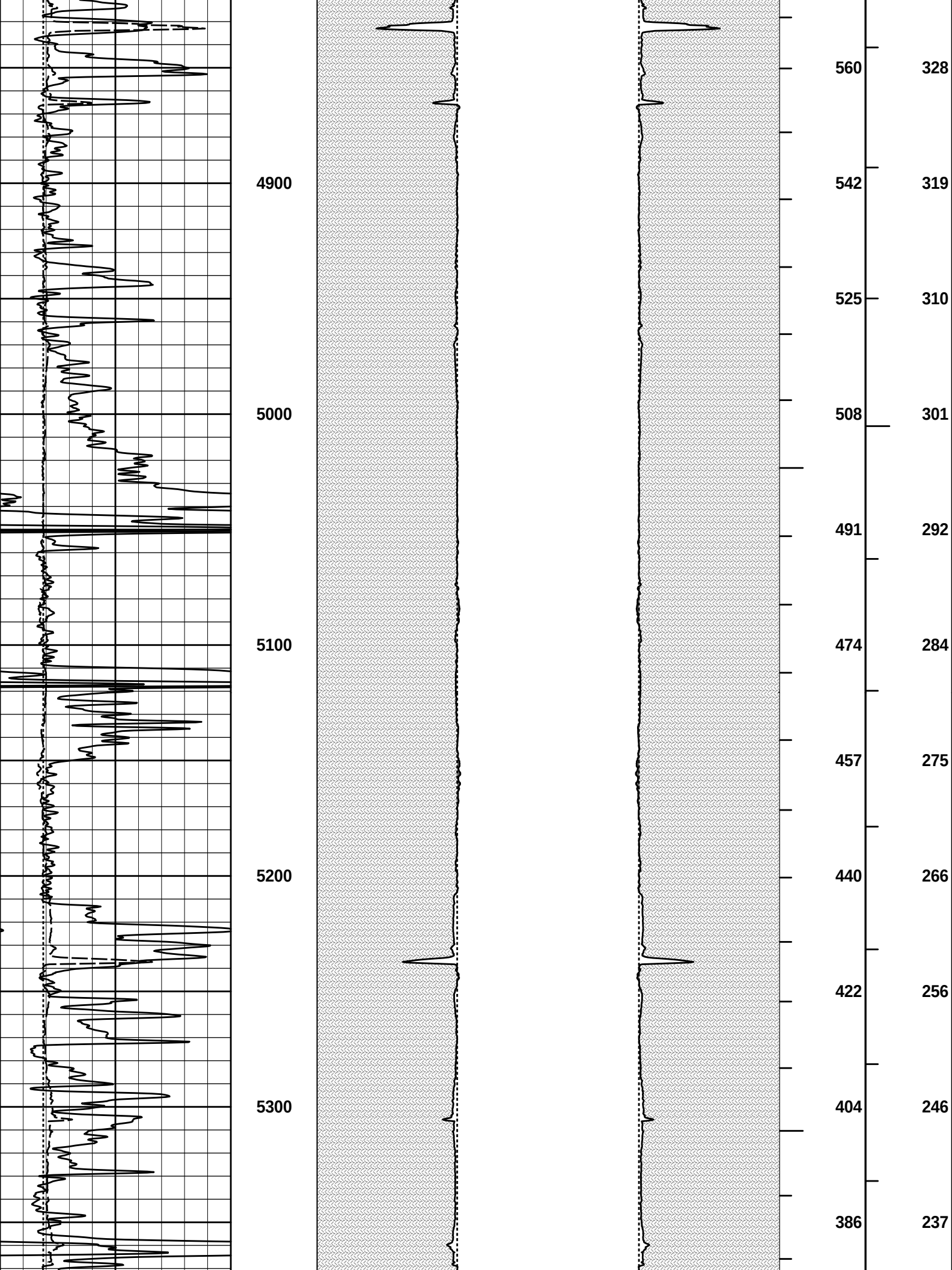
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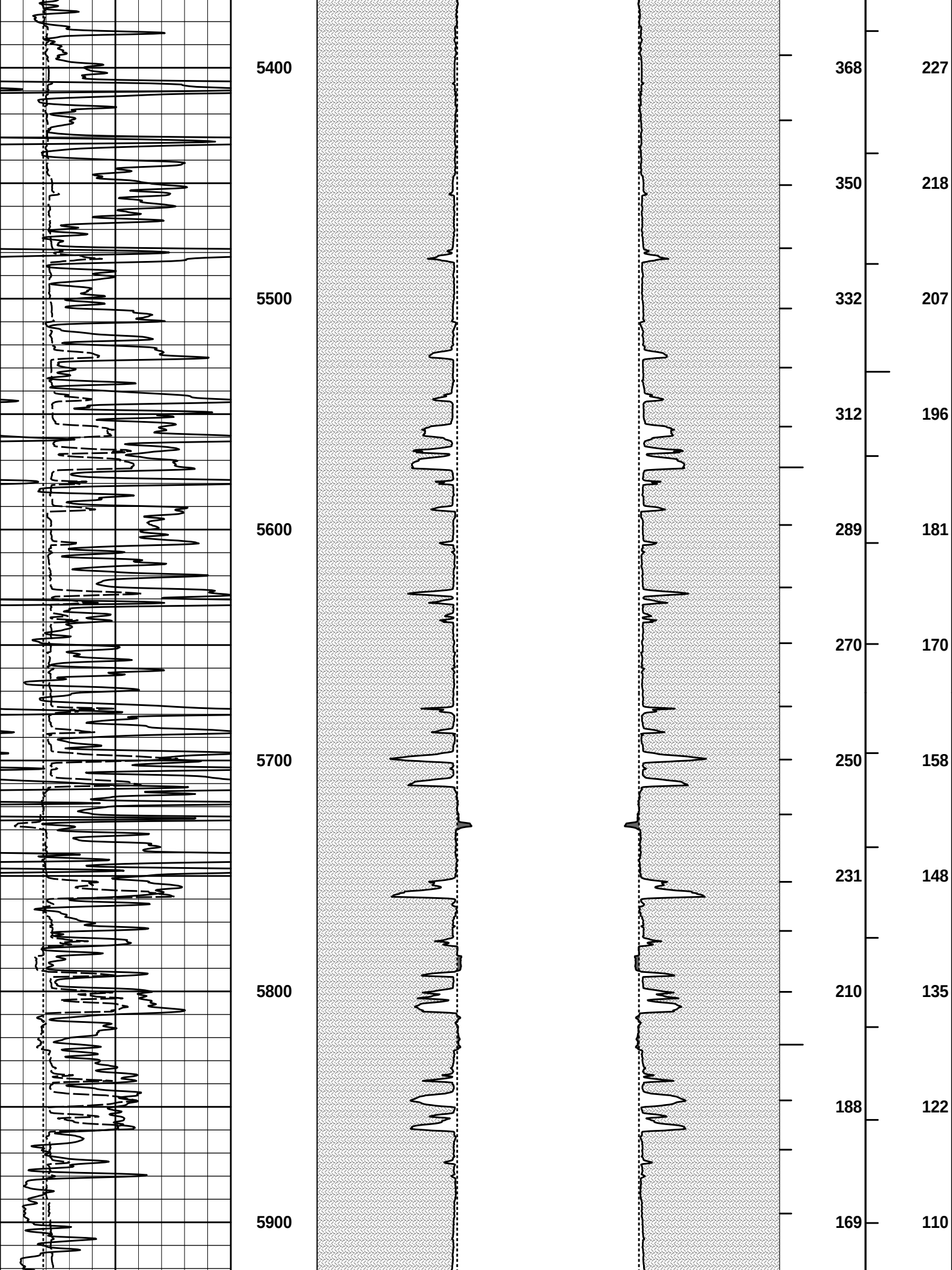
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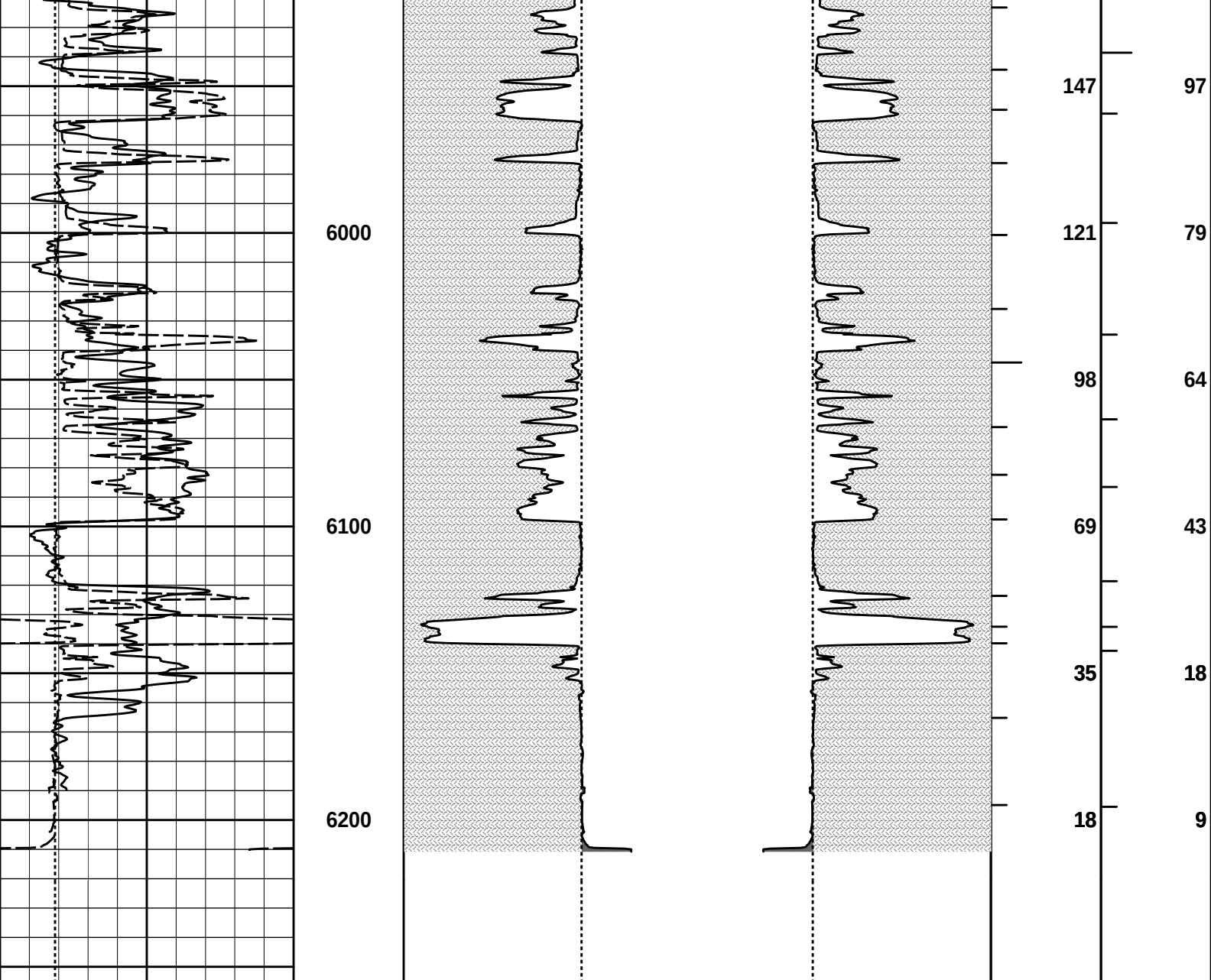
818

487









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

HALLIBURTON

Plot Time: 06-Aug-13 22:39:33
Plot Range: 1580 ft to 6255 ft
Data: LARRABEE_1-32\Well Based\CASING\
Plot File: \\LOCAL-LARRABEE_1-32\0001 SP-GTET-DSN-SDL-FLEX-BSAT-ACRT-CHIPORO\AHV_2_IQ_LIB

ANNULAR HOLE VOLUME PLOT

COMPANY OOLITE ENERGY CORP.
WELL LARRABEE 1-32
FIELD SINGLEY

COUNTY	MEADE	STATE	KANSAS
HALLIBURTON		SPECTRAL DENSITY DUAL SPACED NEUTRON LOG	