LITHO DENSITY NEUTRON LOG

Company O'Brien Energy Resources Corp.
Well Rexfords #1-32
Field Angell
County Meade
State Kansas

Company O'Brien Energy Resources Corp.
Well Rexfords #1-32
Field Angell
County Meade State Kansas

Location: API # : 15 119 21442
990' FSL & 335' FEL
SEC 32 TWP 32S RGE 29W

Other Services
DIL
ML

Elevation
K.B. 2708'
D.F. 2707'
G.L. 2696'

Permanent Datum	Ground Level	Elevation	2696'
Log Measured From	KB 12' AGL		
Drilling Measured From	KB		

Date	12-18-19		
Run Number	One		
Depth Driller	6200'		
Depth Logger	6200'		
Bottom Logged Interval	6178'		
Top Log Interval	1650'		
Casing Driller	8 5/8" @ 1571'		
Casing Logger	1571'		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical	Chlorides 8500 PPM	
Density / Viscosity	9.3/65		
pH / Fluid Loss	9.5/7.2		
Source of Sample	Calculated		
Rm @ Meas. Temp	0.8@60degf		
Rmf @ Meas. Temp	0.6@60degf		
Rmc @ Meas. Temp	1.0@60degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	0.4@120degf		
Time Circulation Stopped	11:00 am		
Time Logger on Bottom	4:30 pm		
Maximum Recorded Temperature	120degf		
Equipment Number	T605		
Location	Hays, KS		
Recorded By	C. Patterson		
Witnessed By	Mr. Pete Debenham		

<<< Fold Here >>>

Comments

Meade,KS West to 9 RD, Then South on 9 RD 4.9 mi.,
Then East into Location down existing Lease RD 1/4 mi.

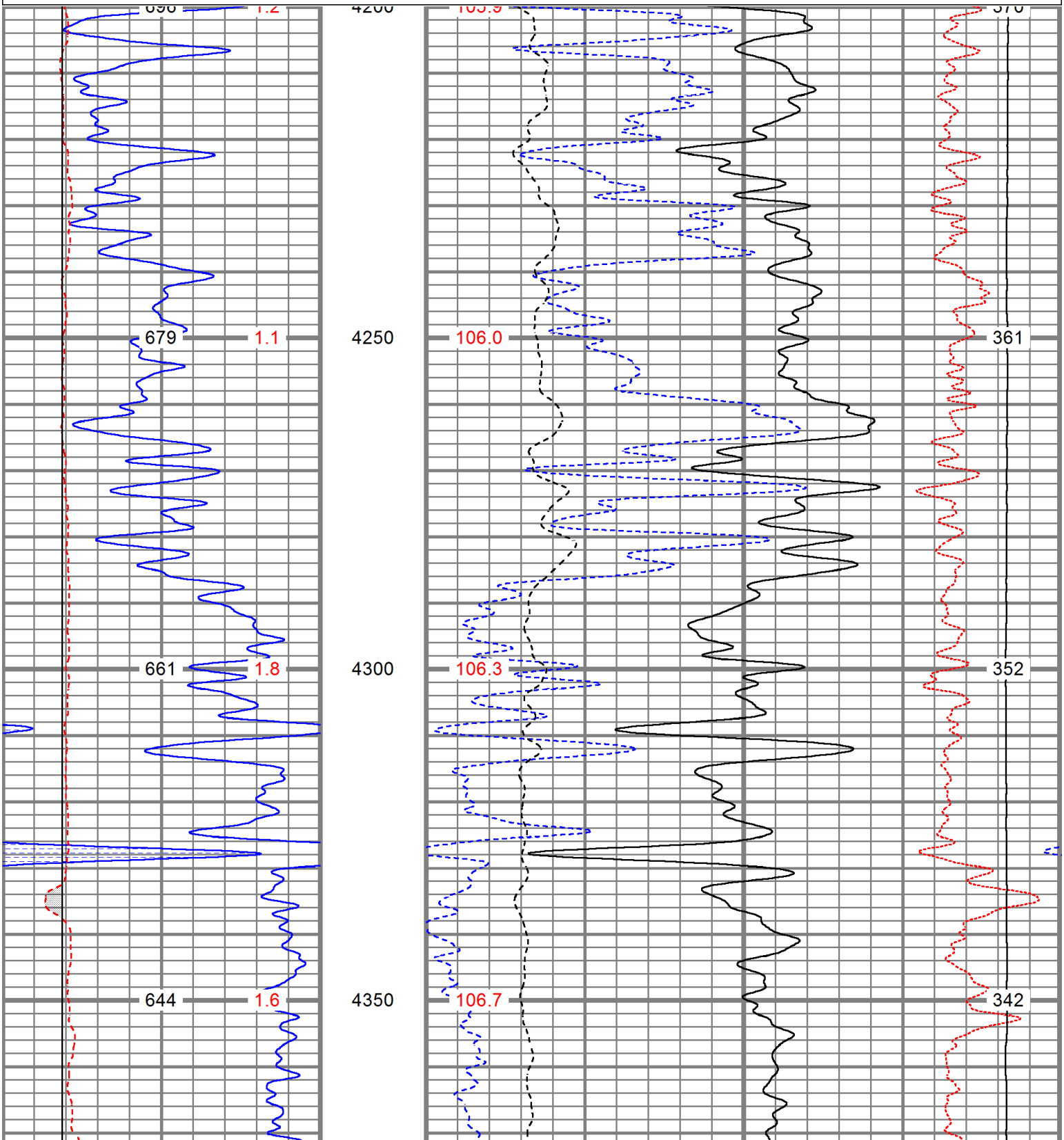
Thank you for using Gemini Wireline
785-625-1182

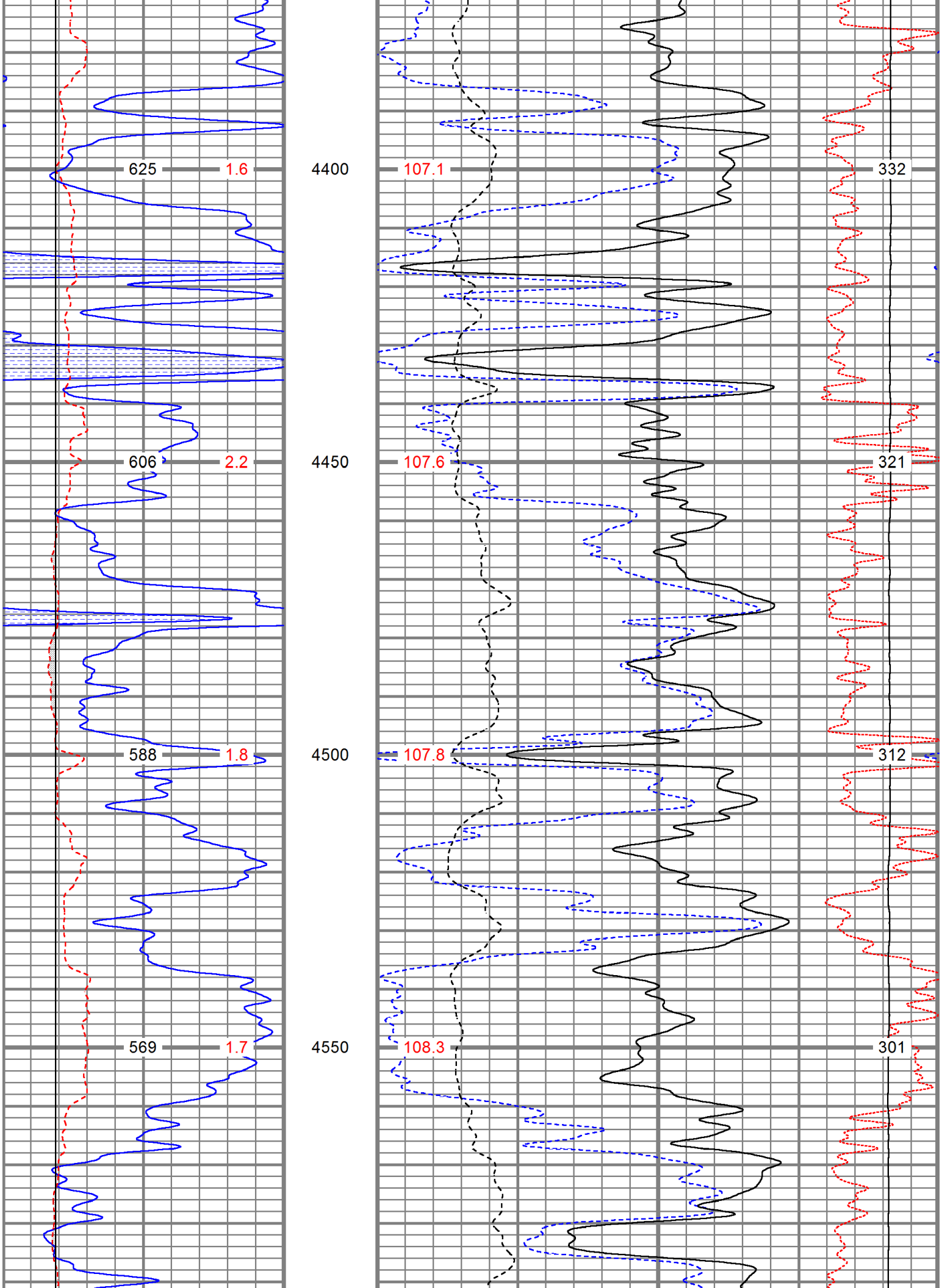
MAIN PASS

Database File	oberexfords#1-32oh.db
Dataset Pathname	pass3.1
Presentation Format	digital_kcdnl
Dataset Creation	Wed Dec 18 20:40:27 2019
Charted by	Depth in Feet scaled 1:240

0	GR (GAPI)	150
6	DCAL (in)	16
6	BOREID (in)	16
	TBHV (ft3)	DEVI (deg)

30	NPOR (pu)	-10			
30	DPOR (pu)	-10			
70	DPOR (pu)	30			
0	Pe (barn)	10	-0.25	RHOC (g/cc)	0.25
TEMP (degF)			8000	LTEN (lb)	0
					ABHV (ft3)

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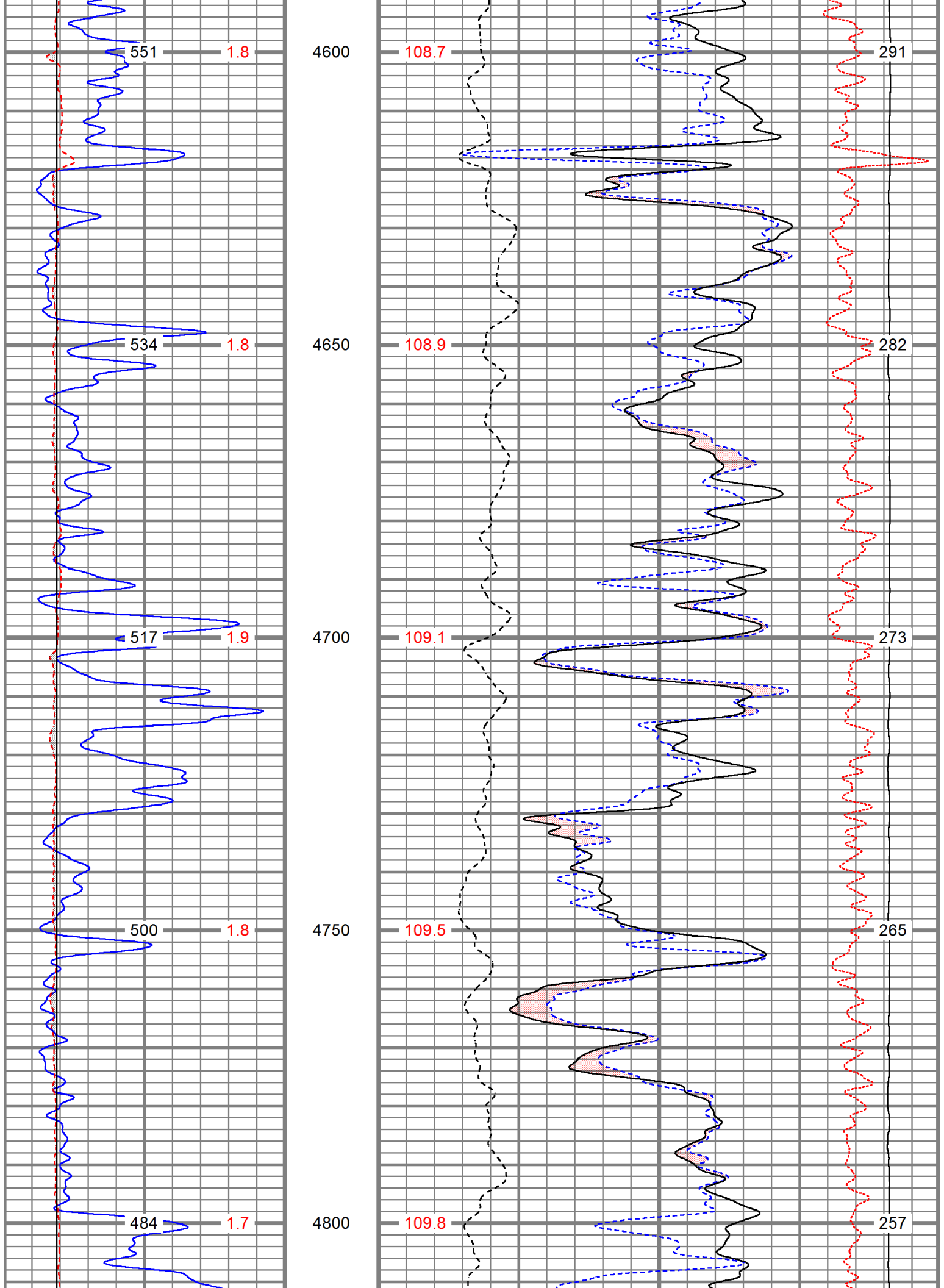
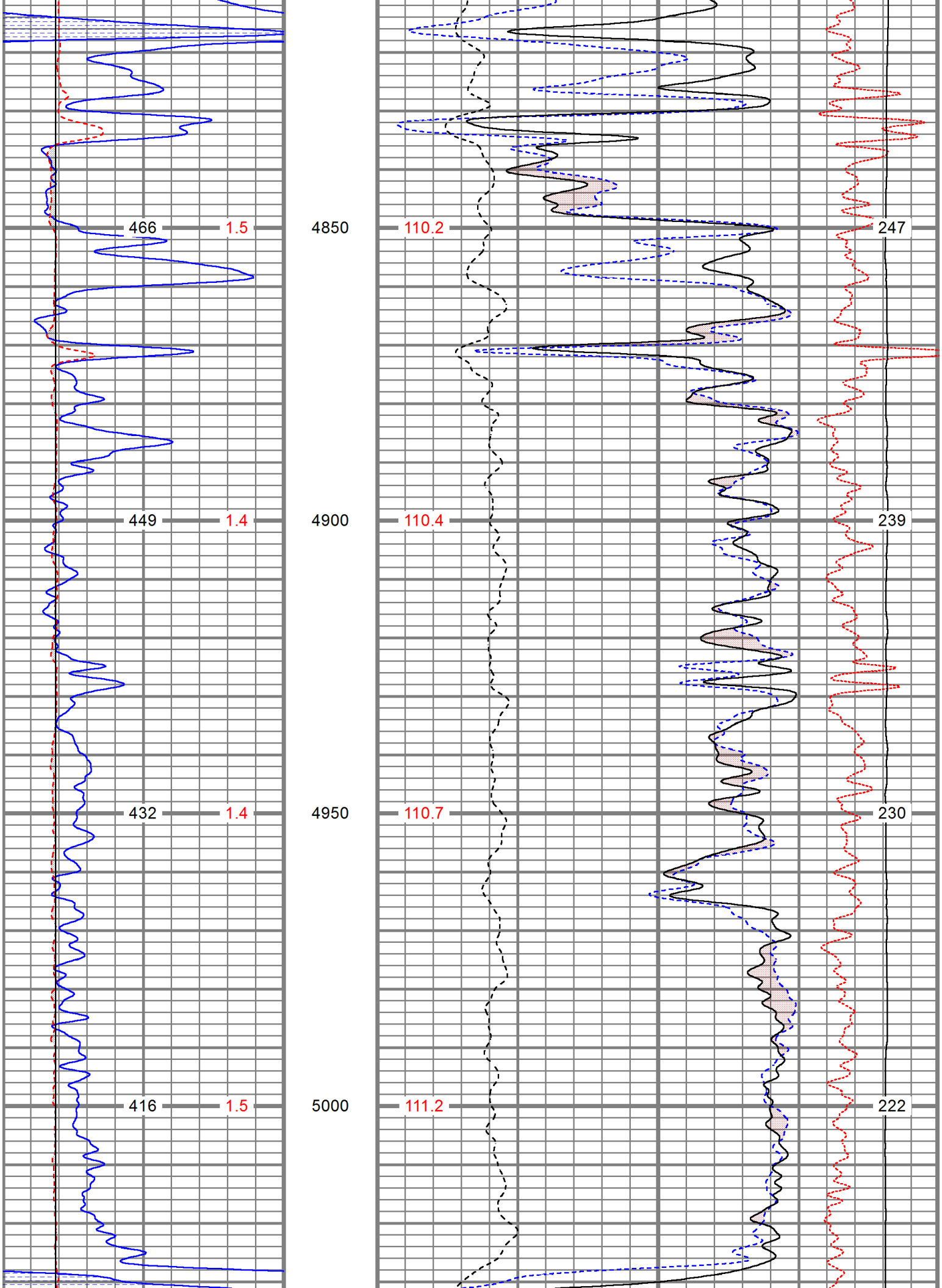
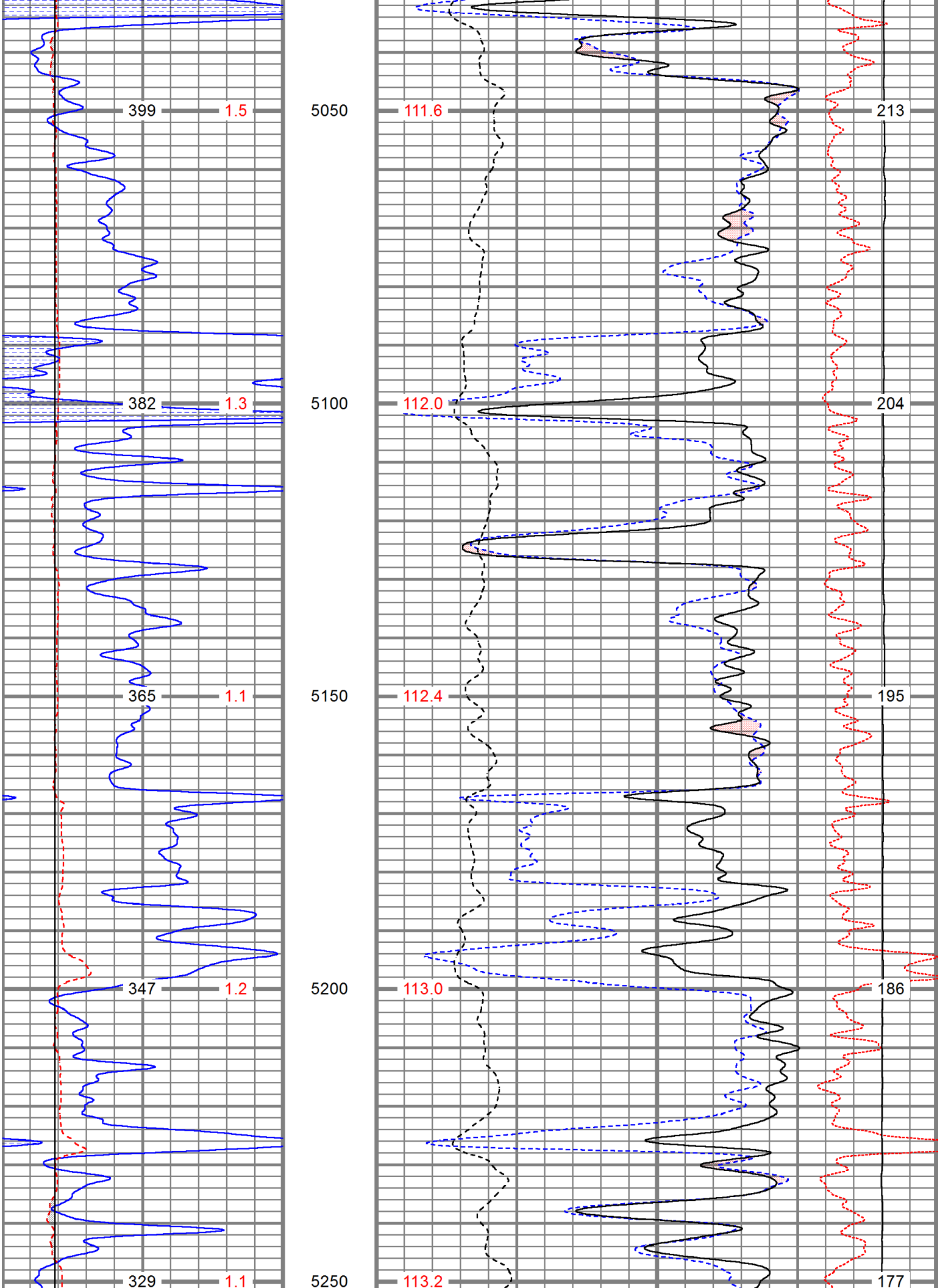
1.6
4400
107.1
332
606
2.2
4450
107.6
321
588
1.8
4500
107.8
312
569
1.7
4550
108.3
301


551
1.8
4600
108.7
291
534
1.8
4650
108.9
282
517
1.9
4700
109.1
273
500
1.8
4750
109.5
265
484
1.7
4800
109.8
257


466
1.5
4850
110.2
247
449
1.4
4900
110.4
239
432
1.4
4950
110.7
230
416
1.5
5000
111.2
222


399
1.5
5050
111.6
213
382
1.3
5100
112.0
204
365
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112.4
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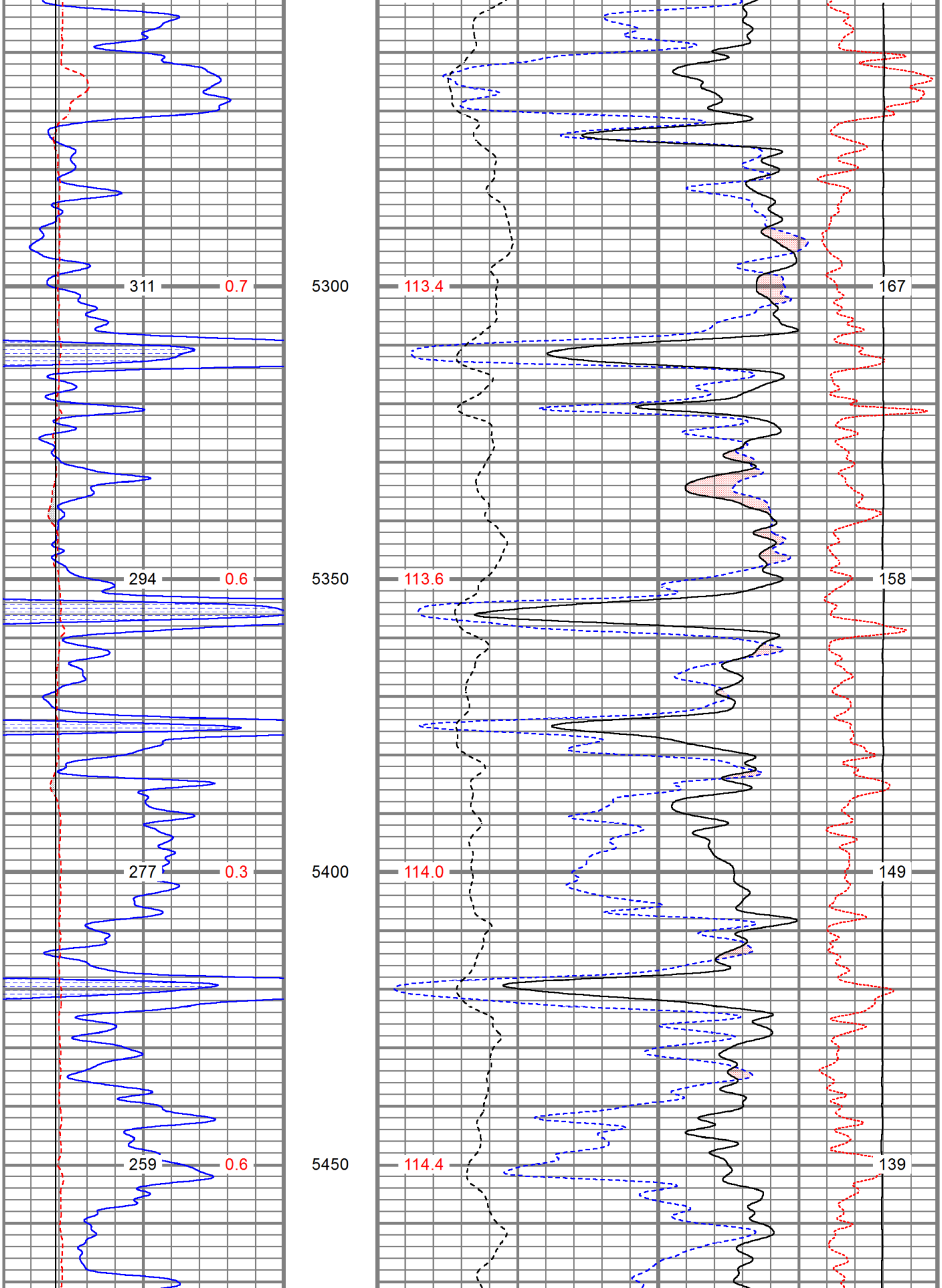
347
1.2
5200
113.0
186
329
1.1
5250
113.2
177


311
0.7
5300
113.4
167
294
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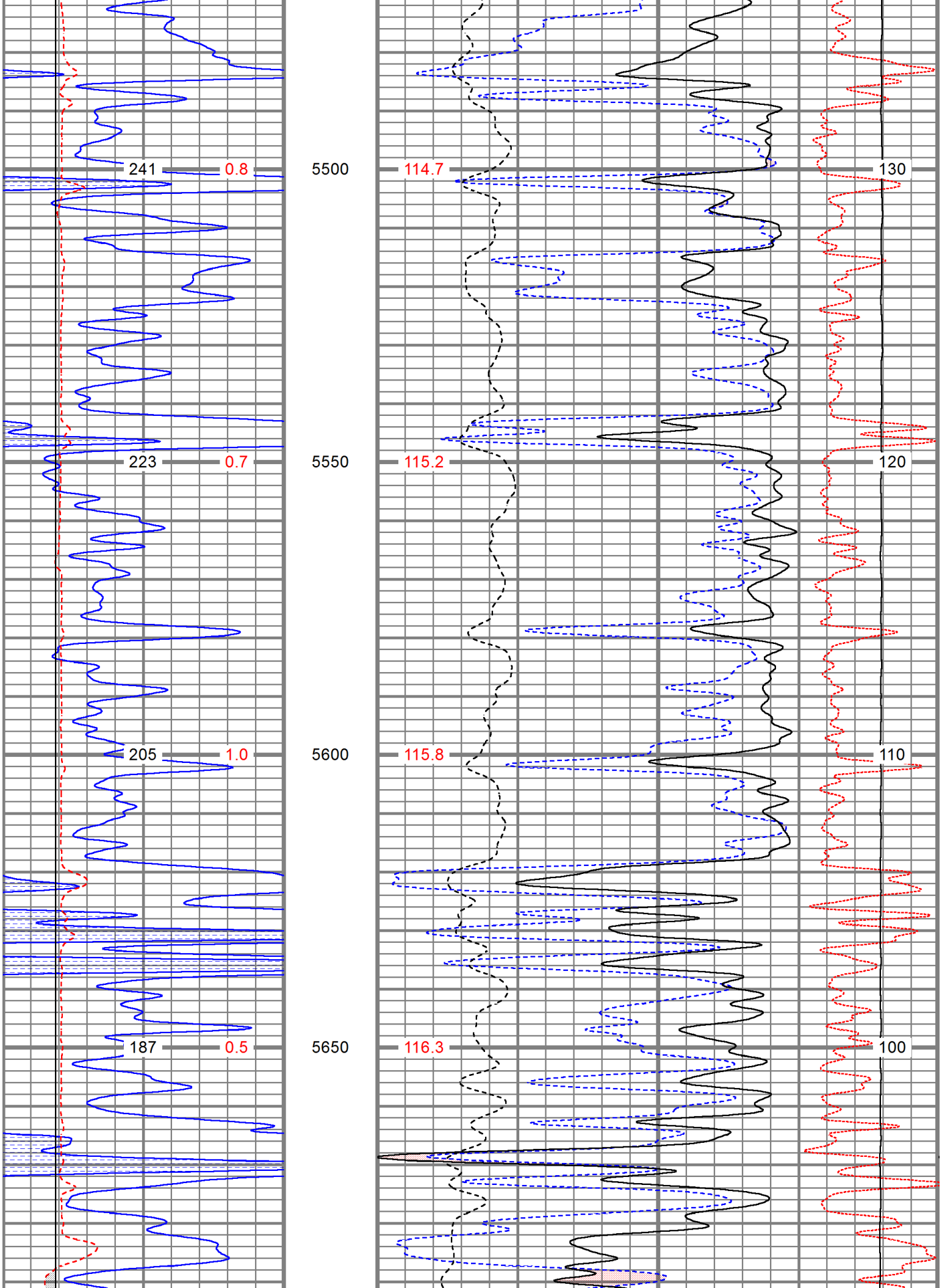
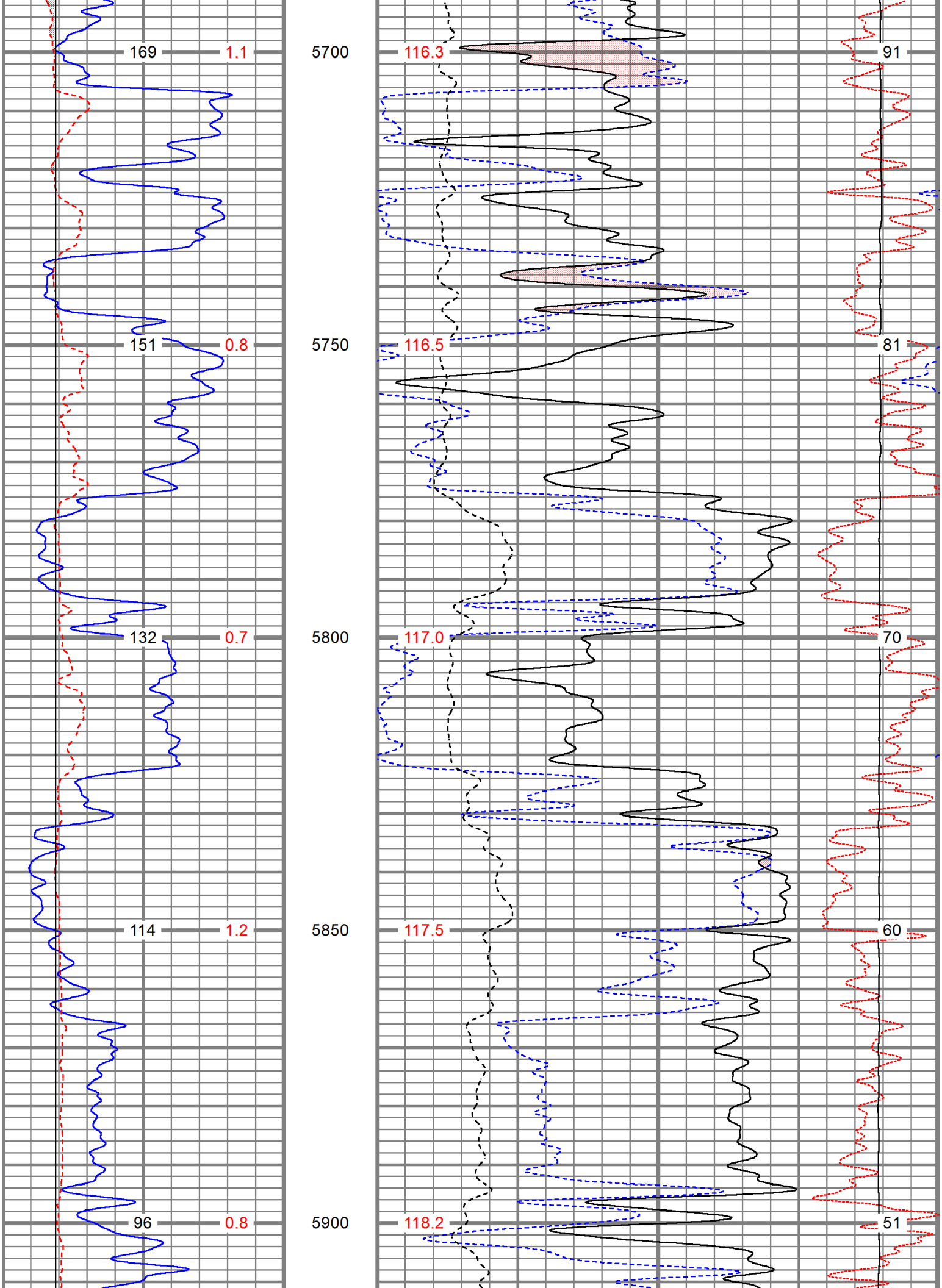
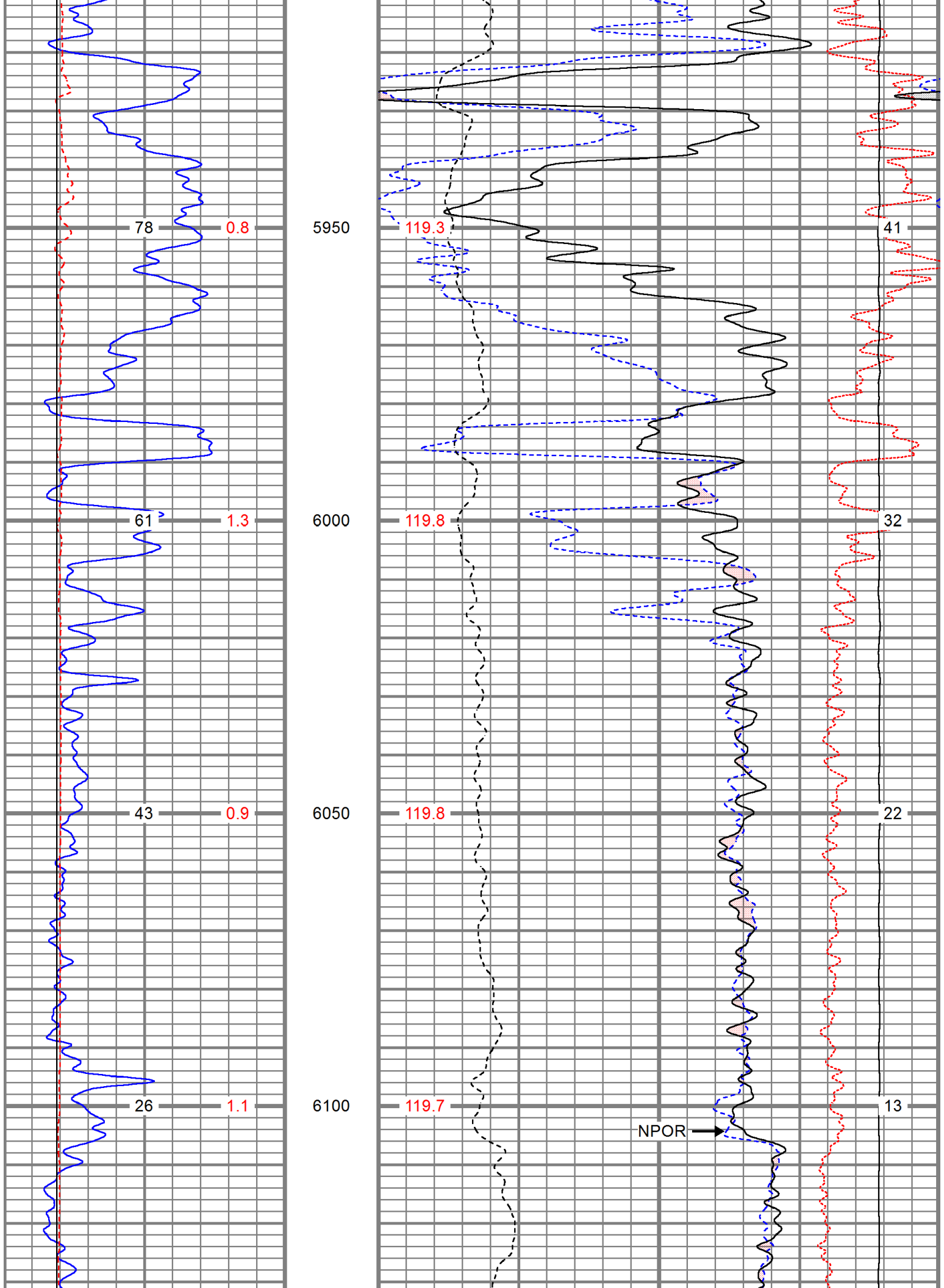
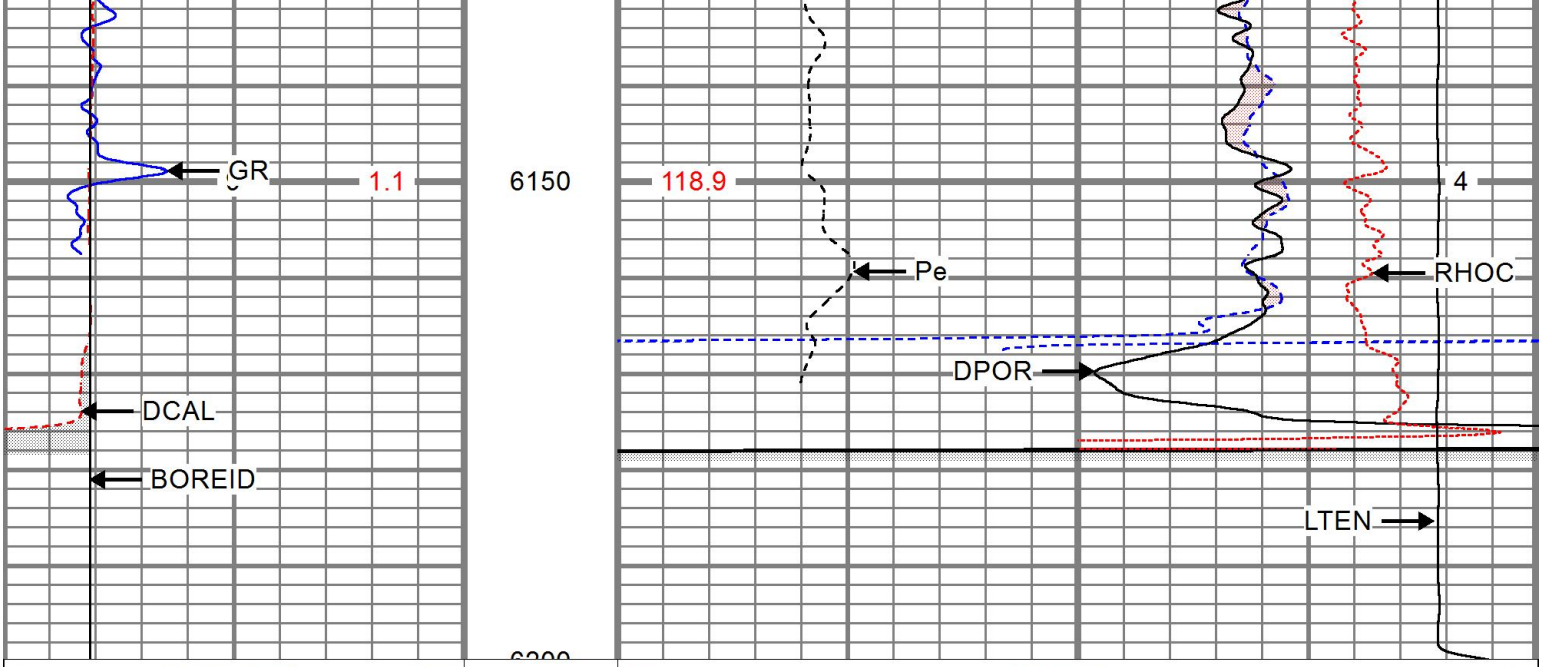
5350
113.6
158
277
0.3
5400
114.0
149
259
0.6
5450
114.4
139


241
0.8
5500
114.7
130
223
0.7
5550
115.2
120
205
1.0
5600
115.8
110
187
0.5
5650
116.3
100


169
1.1
5700
116.3
91
151
0.8
5750
116.5
81
132
0.7
5800
117.0
70
114
1.2
5850
117.5
60
96
0.8
5900
118.2
51


78
0.8
5950
119.3
41
61
1.3
6000
119.8
32
43
0.9
6050
119.8
22
26
1.1
6100
119.7
13
NPOR



0	GR (GAPI)	150
6	DCAL (in)	16
6	BOREID (in)	16
	TBHV (ft3)	DEVI (deg)

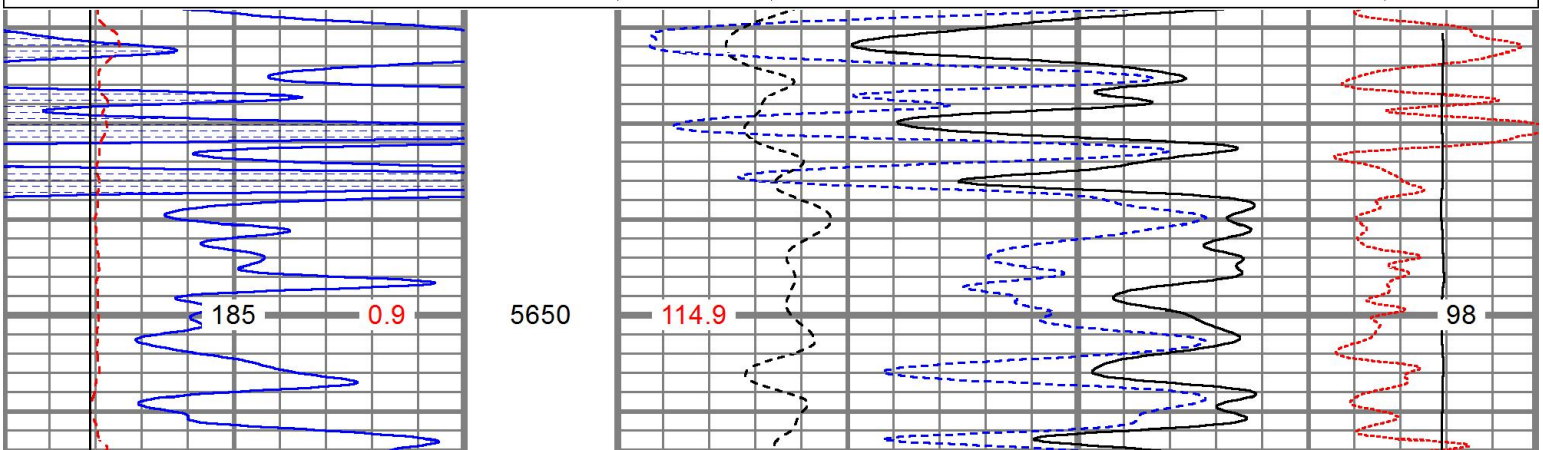
30	NPOR (pu)			-10
30	DPOR (pu)			-10
70	DPOR (pu)			30
0	Pe (barn)	10	-0.25 RHOC (g/cc)	0.25
TEMP (degF)			8000 LTEN (lb)	0
				ABHV (ft3)

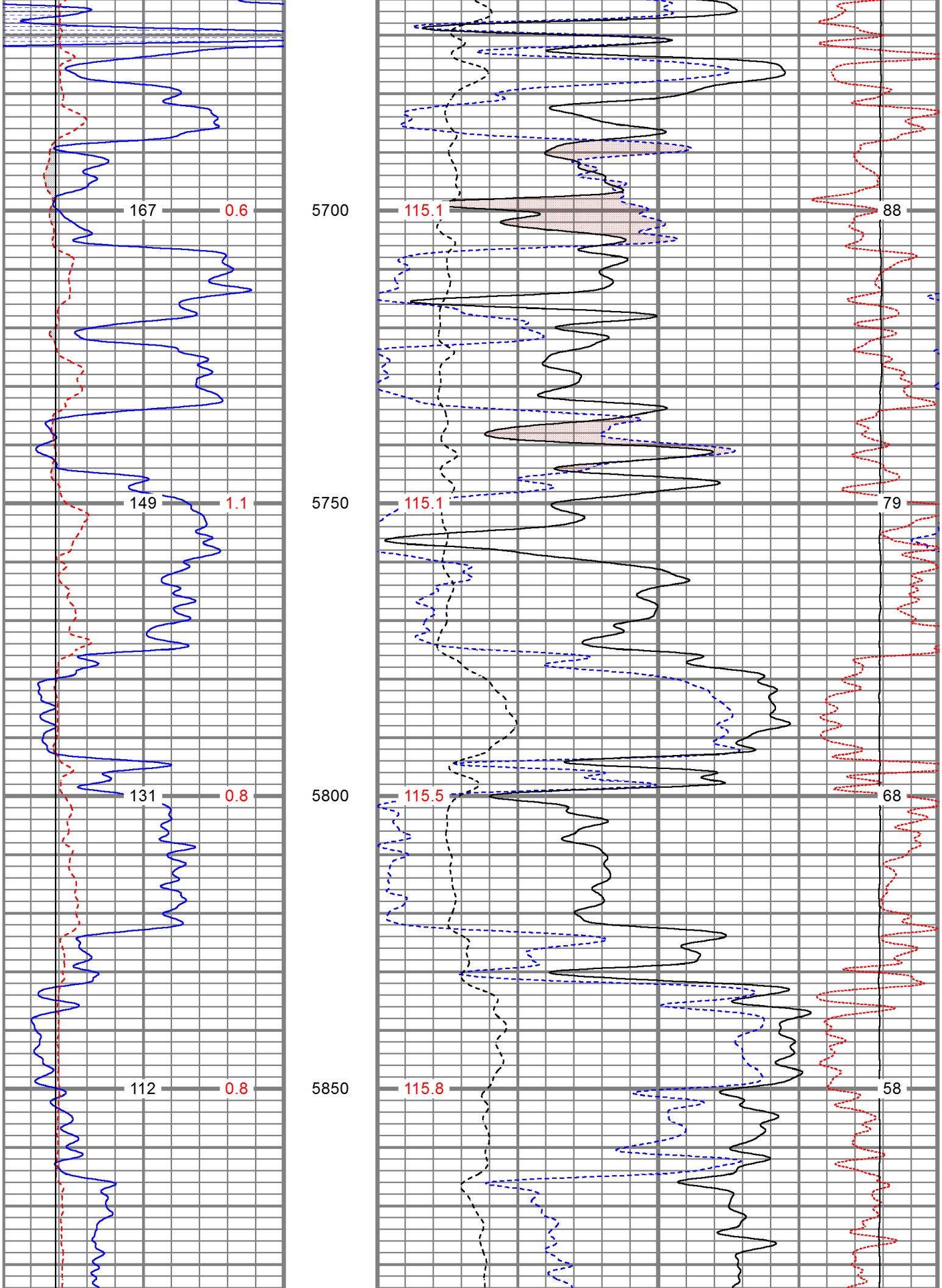
REPEAT SECTION

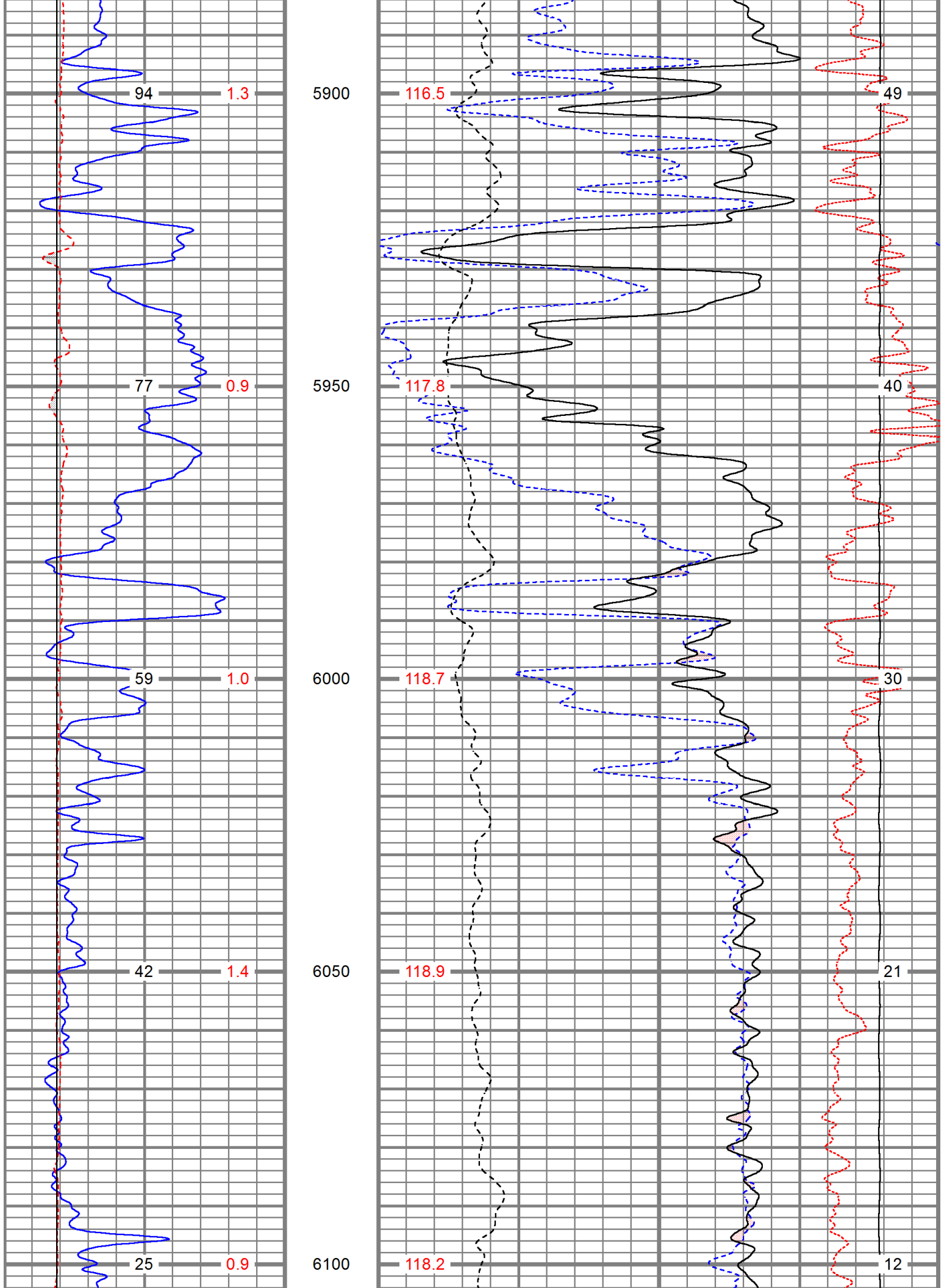
Database File	oberexfords#1-32oh.db
Dataset Pathname	pass2.2
Presentation Format	digital_kcdnl
Dataset Creation	Wed Dec 18 20:32:51 2019
Charted by	Depth in Feet scaled 1:240

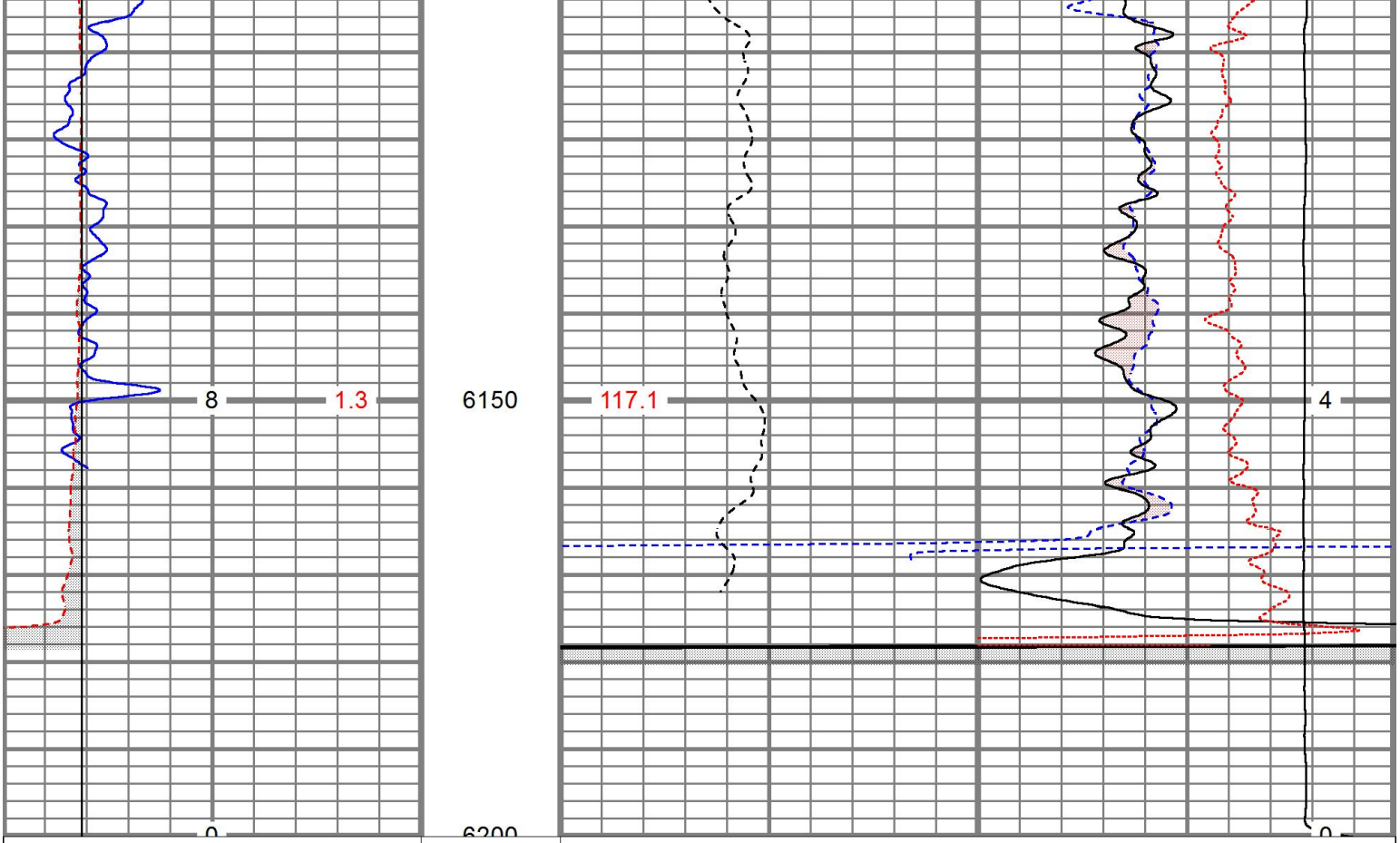
0	GR (GAPI)	150
6	DCAL (in)	16
6	BOREID (in)	16
	TBHV (ft3)	DEVI (deg)

30	NPOR (pu)			-10
30	DPOR (pu)			-10
70	DPOR (pu)			30
0	Pe (barn)	10	-0.25 RHOC (g/cc)	0.25
TEMP (degF)			8000 LTEN (lb)	0
				ABHV (ft3)




167
0.6
5700
115.1
88
149
1.1
5750
115.1
79
131
0.8
5800
115.5
68
112
0.8
5850
115.8
58


94
1.3
5900
116.5
49
77
0.9
5950
117.8
40
59
1.0
6000
118.7
30
42
1.4
6050
118.9
21
25
0.9
6100
118.2
12

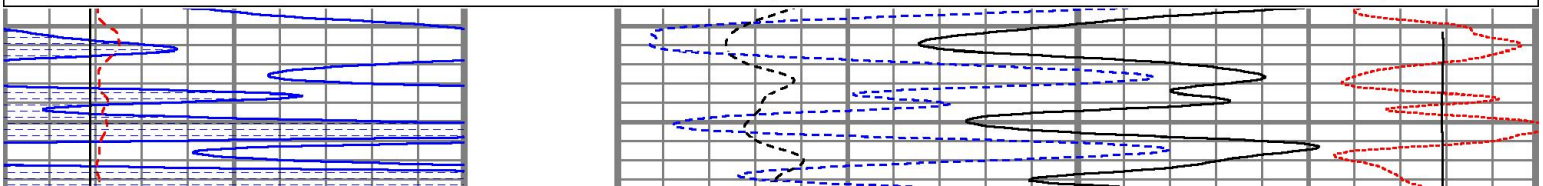


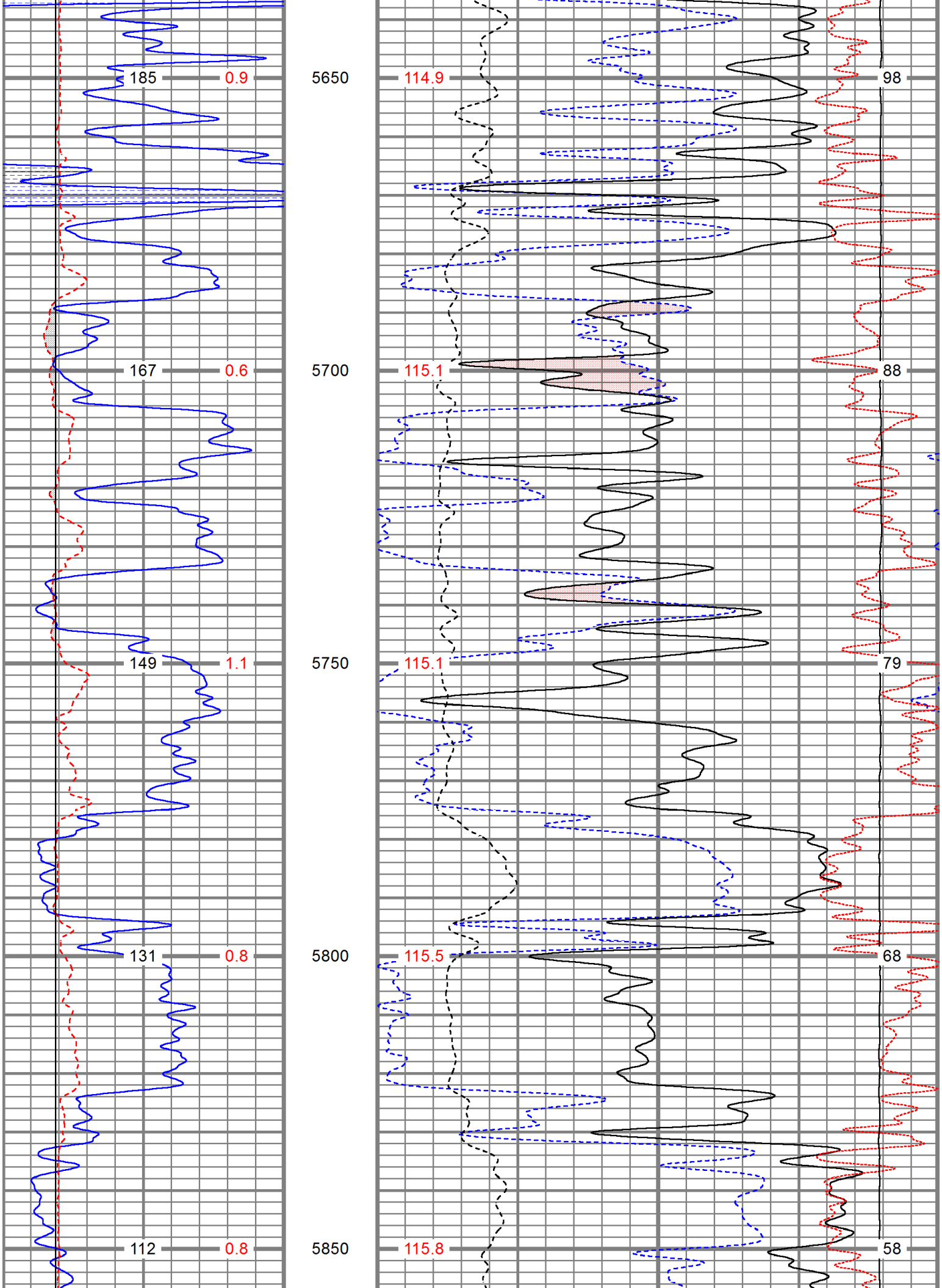
0	GR (GAPI)	150	30	NPOR (pu)	-10			
6	DCAL (in)	16	30	DPOR (pu)	-10			
6	BOREID (in)	16	70	DPOR (pu)	30			
	TBHV (ft3)	DEVI (deg)	0	Pe (barn) 10	-0.25	RHOC (g/cc)	0.25	
			TEMP (degF)		8000	LTEN (lb)	0	
							ABHV (ft3)	

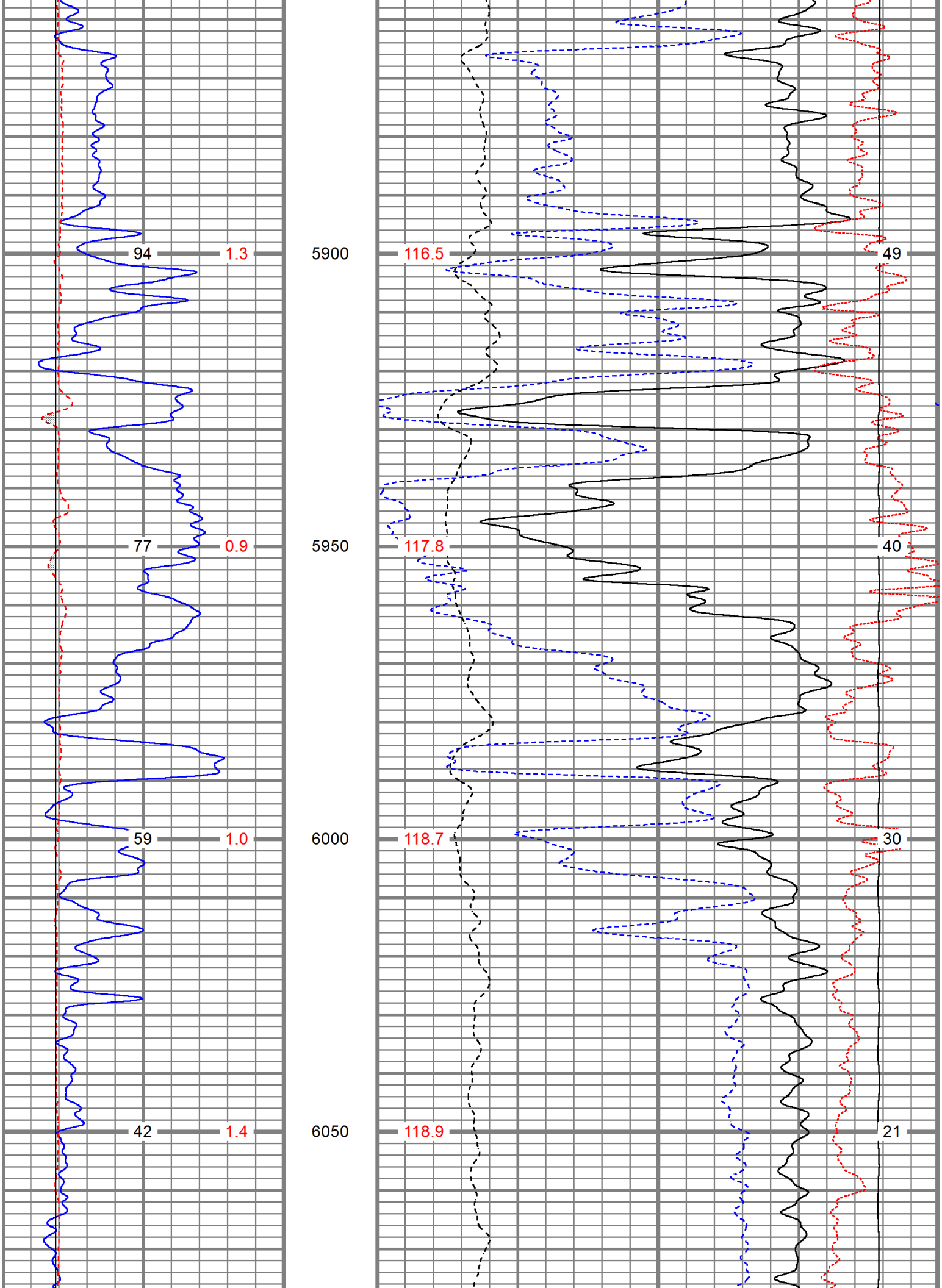
SANDSTONE MATRIX 2.65

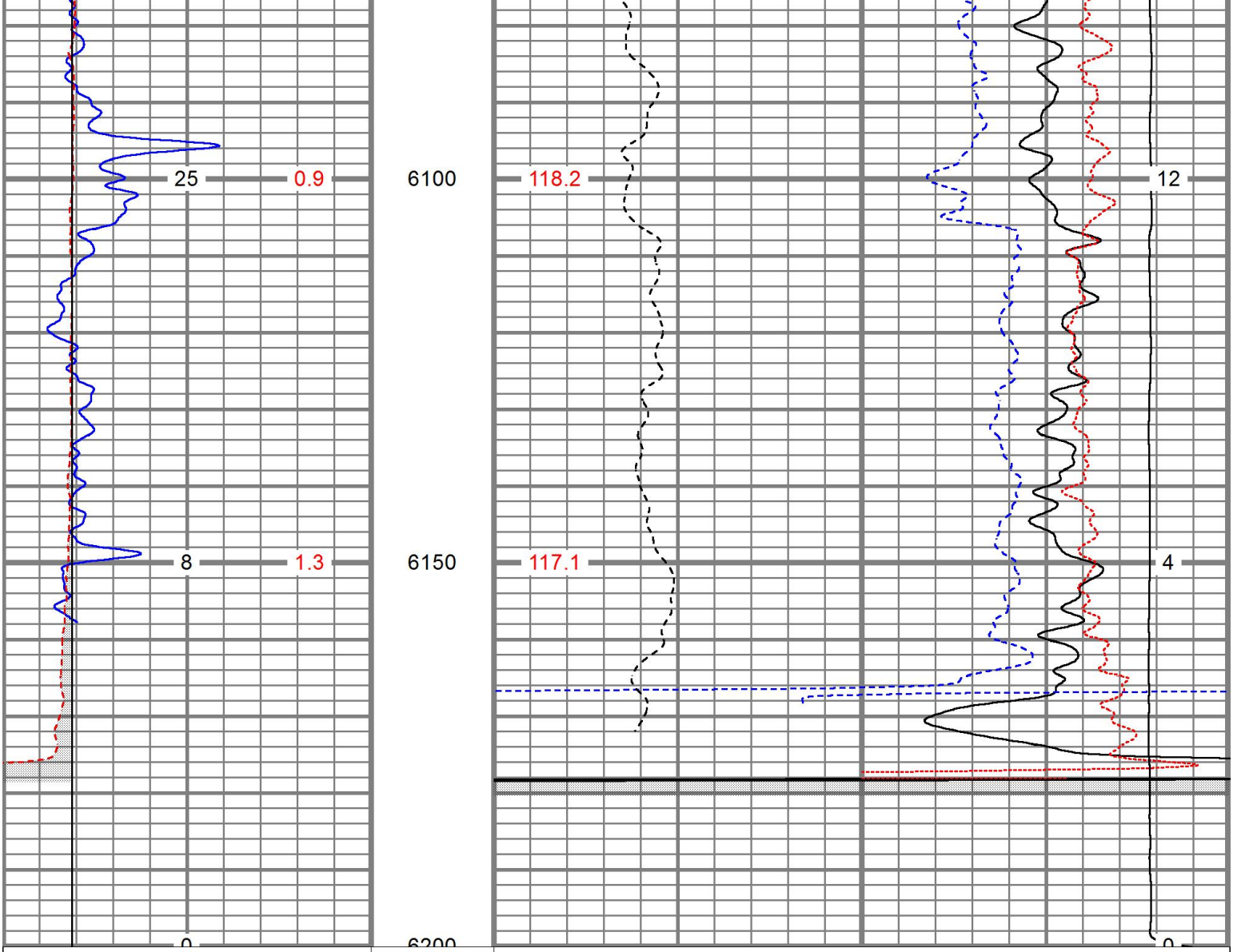
Database File	oberexfords#1-32oh.db
Dataset Pathname	pass2.1
Presentation Format	digital_kcdnl
Dataset Creation	Wed Dec 18 20:26:50 2019
Charted by	Depth in Feet scaled 1:240

0	GR (GAPI)	150	30	NPOR (pu)	-10			
6	DCAL (in)	16	30	DPOR (pu)	-10			
6	BOREID (in)	16	70	DPOR (pu)	30			
	TBHV (ft3)	DEVI (deg)	0	Pe (barn) 10	-0.25	RHOC (g/cc)	0.25	
			TEMP (degF)		8000	LTEN (lb)	0	
							ABHV (ft3)	




185
0.9
5650
114.9
98
167
0.6
5700
115.1
88
149
1.1
5750
115.1
79
131
0.8
5800
115.5
68
112
0.8
5850
115.8
58


94
1.3
5900
116.5
49
77
0.9
5950
117.8
40
59
1.0
6000
118.7
30
42
1.4
6050
118.9
21

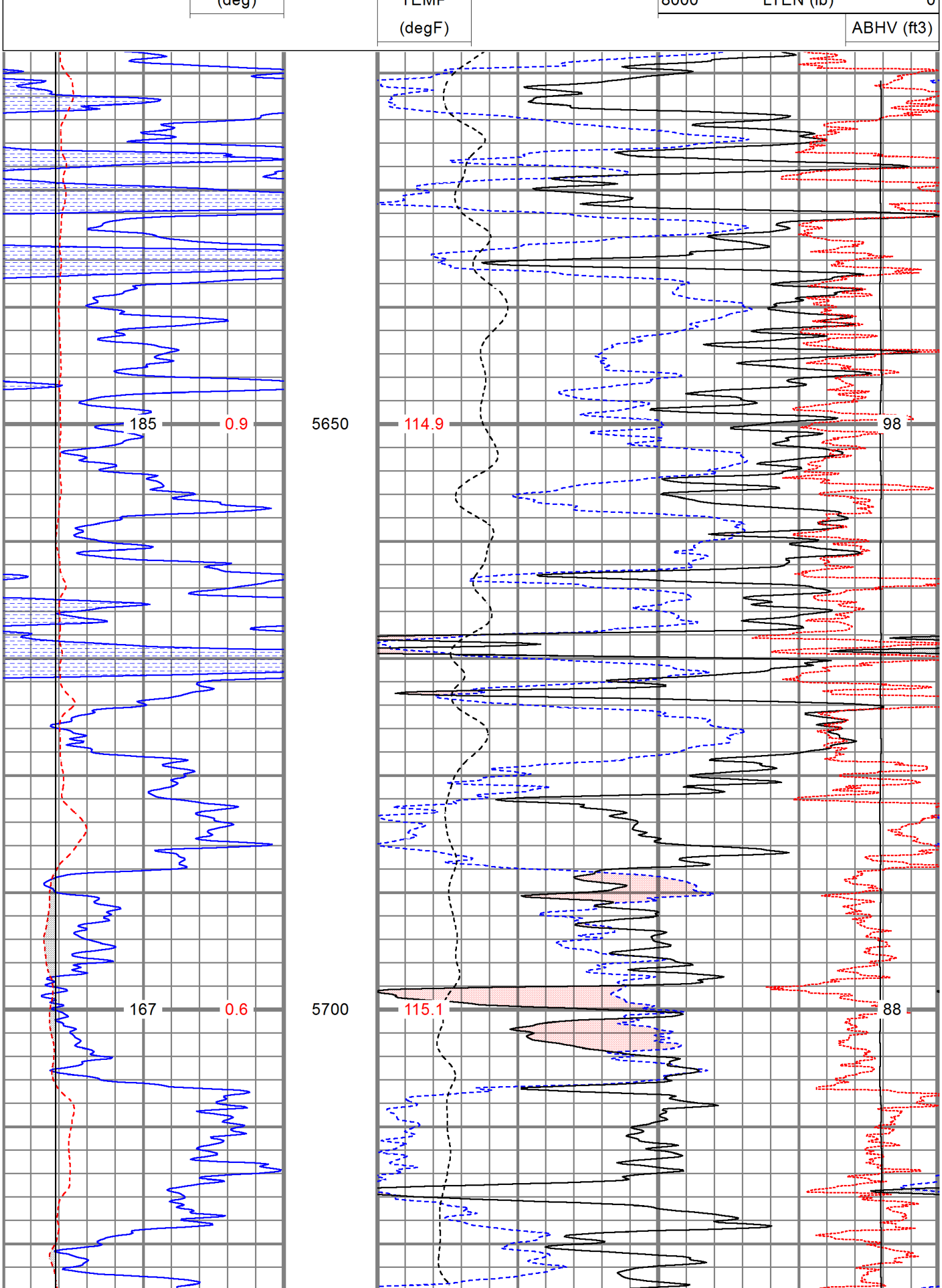


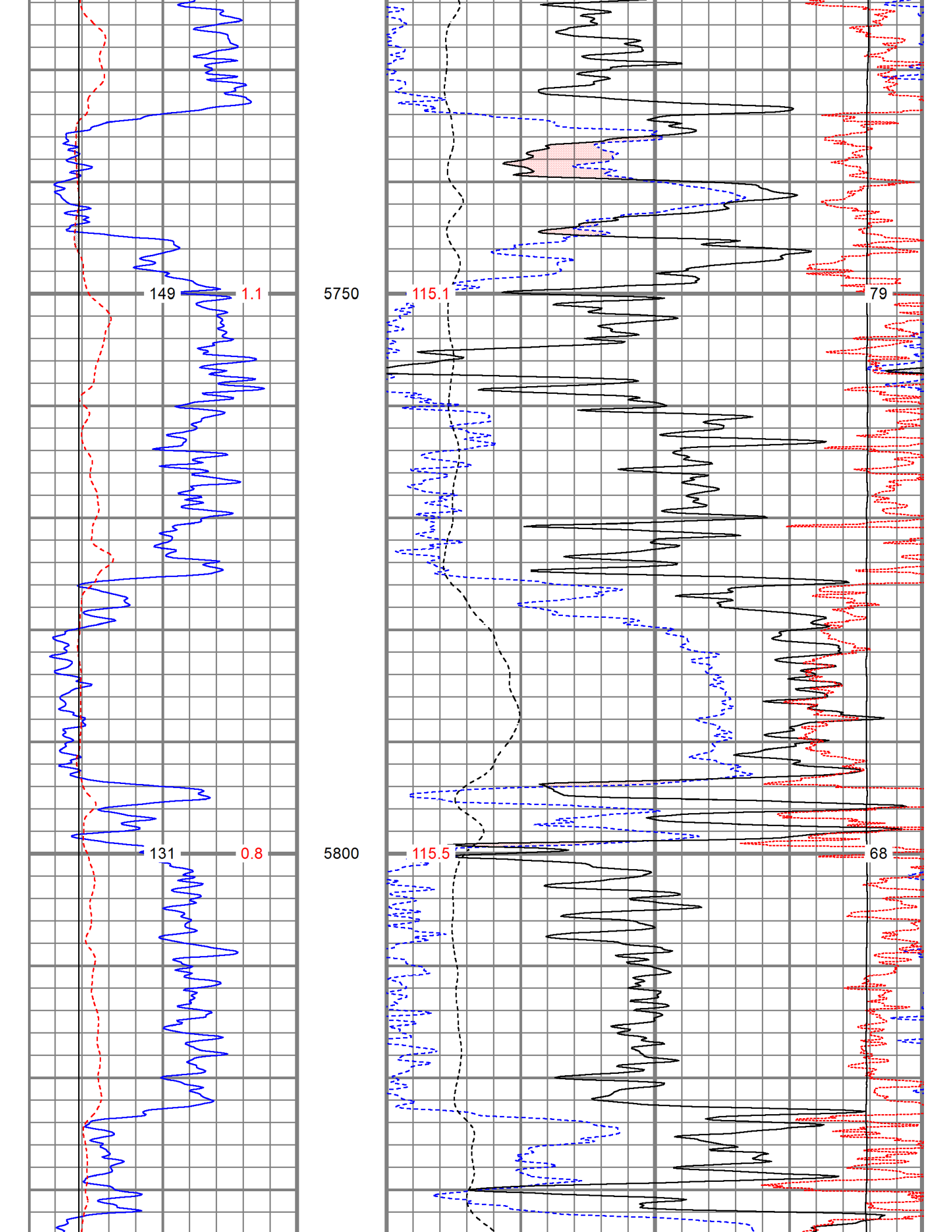
0	GR (GAPI)	150	30	NPOR (pu)	-10			
6	DCAL (in)	16	30	DPOR (pu)	-10			
6	BOREID (in)	16	70	DPOR (pu)	30			
TBHV (ft3)	DEVI (deg)		0	Pe (barn) 10	-0.25	RHOC (g/cc)	0.25	
			TEMP (degF)		8000	LTEN (lb)	0	
						ABHV (ft3)		

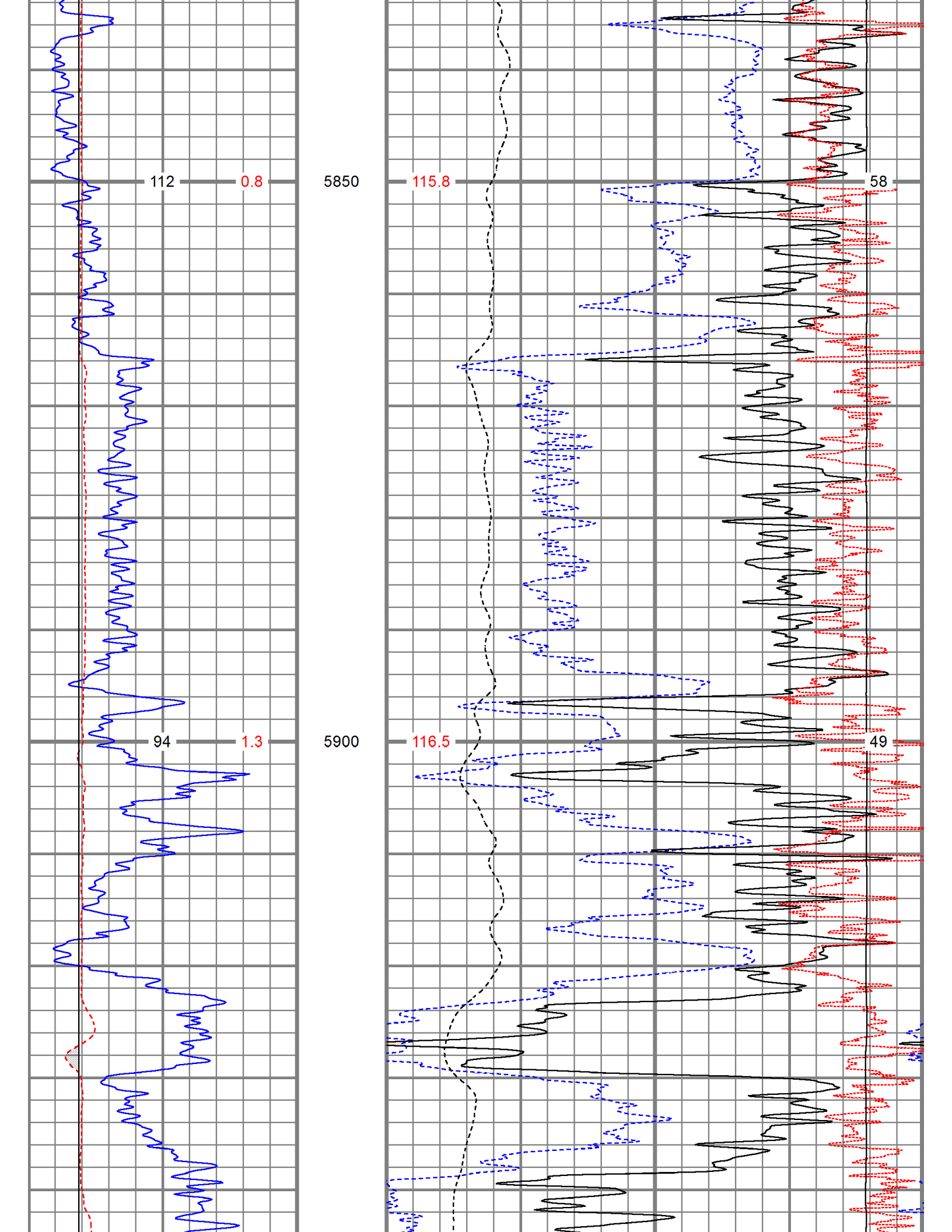
HI RES SANDSTONE 2.65

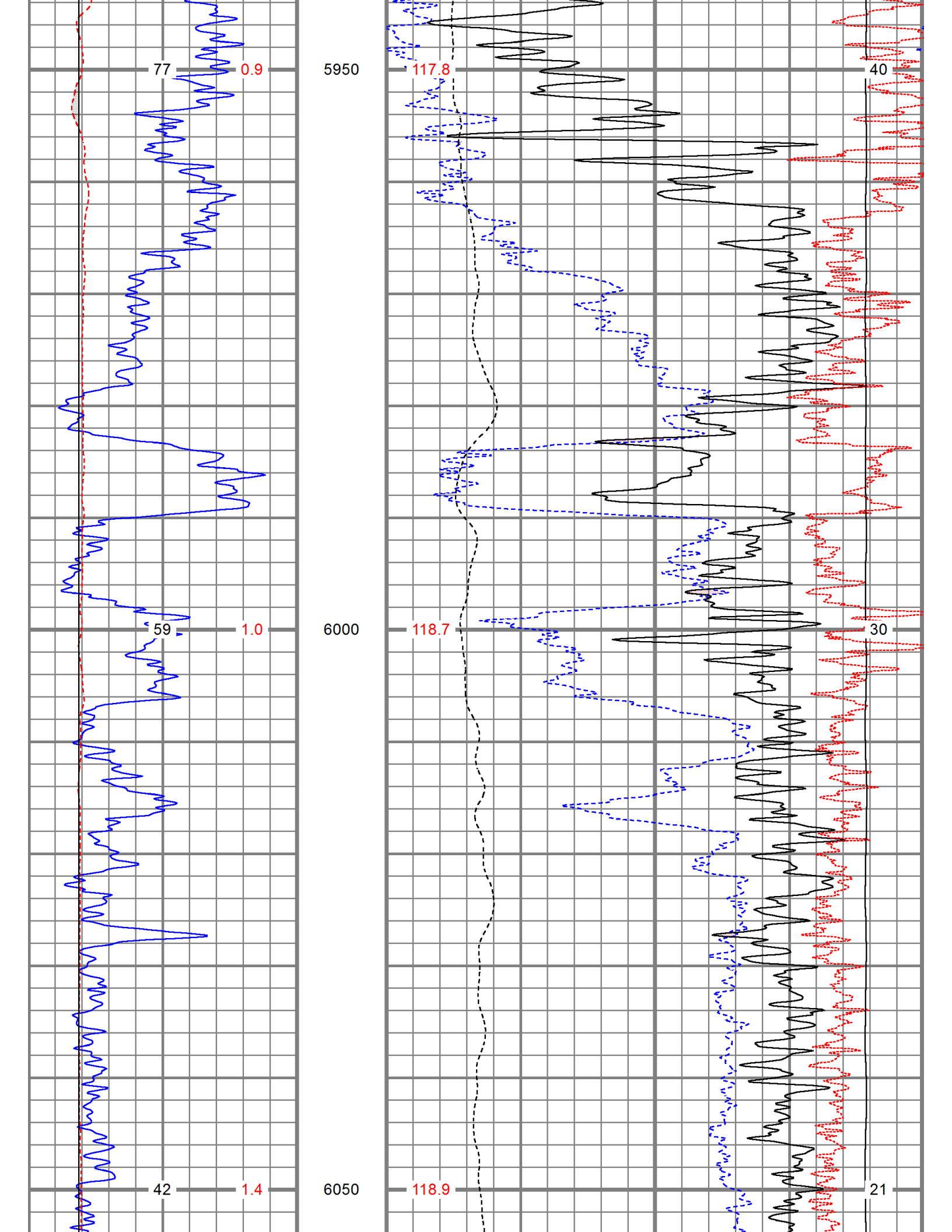
Database File	oberexfords#1-32oh.db
Dataset Pathname	pass2.4
Presentation Format	digital_kcdnl
Dataset Creation	Wed Dec 18 20:35:40 2019
Charted by	Depth in Feet scaled 1:120

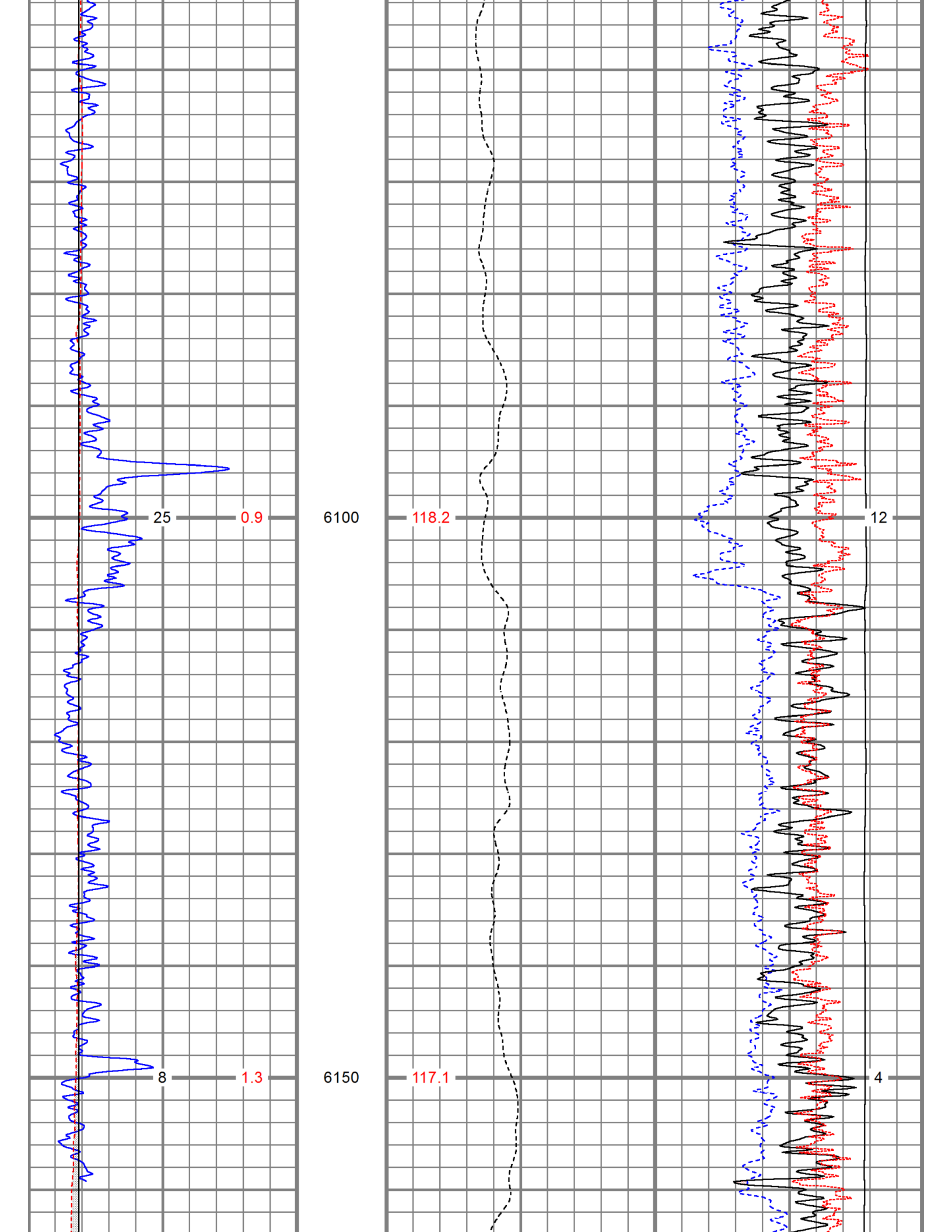
0	GR (GAPI)	150	30	NPOR (pu)	-10			
6	DCAL (in)	16	30	DPOR (pu)	-10			
6	BOREID (in)	16	70	DPOR (pu)	30			
TBHV (ft3)	DEVI (deg)		0	Pe (barn) 10	-0.25	RHOC (g/cc)	0.25	
			TEMP (degF)		8000	LTEN (lb)	0	
						ABHV (ft3)		

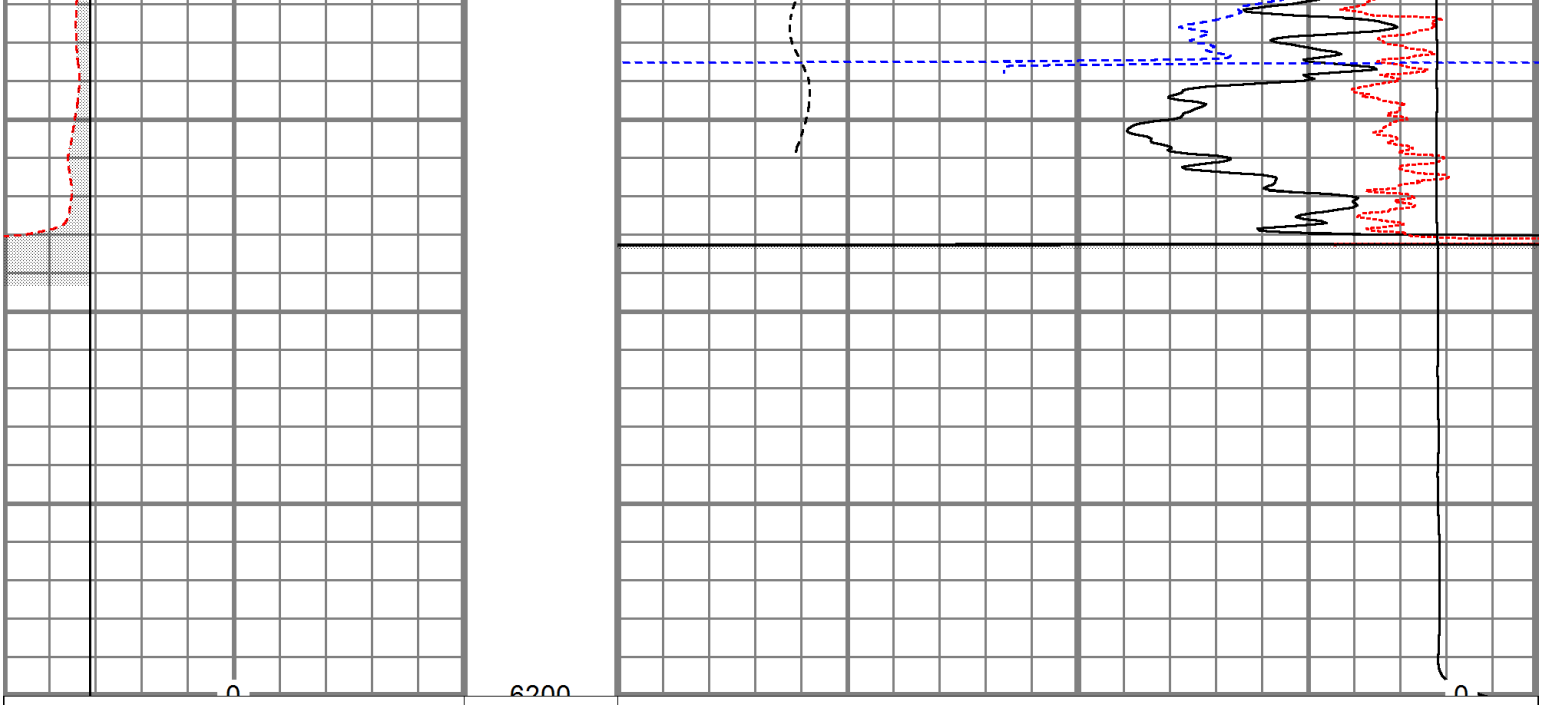

(deg)
TEMP
(degF)
8000
LTEN (lb)
0
ABHV (ft3)
185
0.9
5650
114.9
98
167
0.6
5700
115.1
88


149
1.1
5750
115.1
79
131
0.8
5800
115.5
68


112
0.8
5850
115.8
58
94
1.3
5900
116.5
49


77
0.9
5950
117.8
40
59
1.0
6000
118.7
30
42
1.4
6050
118.9
21


25
0.9
6100
118.2
12
8
1.3
6150
117.1
4



Calibration Report

Database File	oberexfords#1-32oh.db
Dataset Pathname	pass3.1
Dataset Creation	Wed Dec 18 20:40:27 2019

Dual Induction Calibration Report

Serial-Model:	5375-G
Surface Cal Performed:	Fri Apr 19 12:45:28 2019
Downhole Cal Performed:	Fri Apr 19 12:45:28 2019
After Survey Verification Performed:	Fri Apr 19 12:45:28 2019

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.002	0.642	V	0.000	350.000	mmho/m	546.631	-1.028
Medium	0.006	0.727	V	0.000	400.000	mmho/m	555.208	-3.897
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.642	V	0.000	350.000	mmho/m	546.502	-0.822
Medium	0.006	0.727	V	0.000	550.000	mmho/m	763.570	-4.829

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.000	0.000	mmho/m	-0.206	349.877	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	0.014	399.930	mmho/m	1.000	0.000

Shallow	2.429	0.011	V	500.000	2.000	Ohm-m	200.929	0.882

After Survey Verification

	Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.000	0.000	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	0.000	0.000	mmho/m	1.000	0.000
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Neutron Calibration Report

Serial Number:	AD5139	
Tool Model:	ADMY5139	
Performed:	(Not Performed)	
Calibrator Value:	1	NAPI
Calibrator Reading:	1	cps
Sensitivity:	1	NAPI/cps

Temperature Calibration Report

Serial Number:	WithOutMC			
Tool Model:	WOMC			
Performed:	(Not Performed)			
	Reference		Reading	
Low Reference:	0.00	degF	0.00	degF
High Reference:	1.00	degF	1.00	degF
Gain:	1.00			
Offset:	0.00			
Delta Spacing	1			

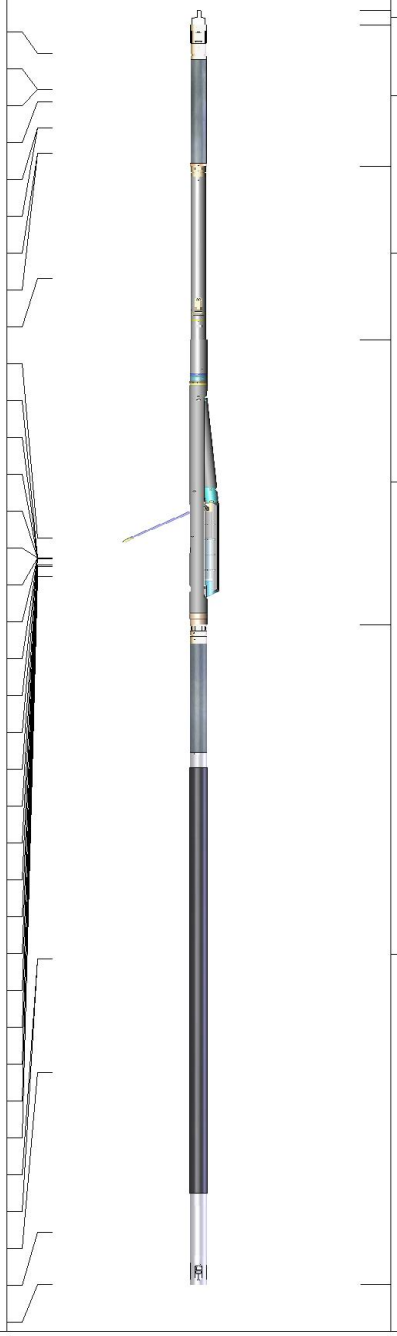
Inclinometer Calibration Report

Performed: Thu Oct 25 16:29:34 2018

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	205.00	1843.00	-1.00	1.00	gee
Y Accelerometer	205.00	1843.00	-1.00	1.00	gee
Z Accelerometer					gee

Gamma Ray Calibration Report

Serial Number:	WithOutMC	
Tool Model:	WOMC	
Performed:	Wed Dec 06 22:30:58 2017	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.07		CHD-STD	0.50	1.69	1.00
ACCY	38.91					
ACCX	38.91		ADT-WOMC (WithOutMC) Telemetry Without Mud Cell	4.58	3.50	120.00
SSTAT	38.49					
PSTAT	37.66					
ASTAT	37.66					
GRD	36.82		NEU-ADMY5139 (AD5139) Admyer NEU DIGITAL	5.65	3.50	50.00
TEMP	36.82					
NEU	32.76					
LStat	24.30					
LS8	23.64					
LS7	23.64					
LS6	23.64		ADT1LITH-A (1) Admyr Litho Density Tool	9.29	3.50	240.00
LS5	23.64					
LS4	23.64					
LS3	23.64					
LS2	23.64					
LS1	23.64					
LSV	23.64					
LSD	23.62					
SSV	23.43					
SS8	23.43					
SS7	23.43					
SS6	23.43					
SS5	23.43					
SS4	23.43		DIL-G (5375) Gearhart	21.47	4.00	345.00
SS3	23.43					
SS2	23.43					
SS1	23.43					
DCAL	23.37					
SSD	23.04					
SP	10.60					
CILD	10.60					
CILM	6.89					
RLL3	1.70					
TR_Mon	0.00					

Dataset:	oberexfords#1-32oh.db: field/well/run1/pass3.1
Total length:	41.49 ft
Total weight:	756.00 lb
O.D.:	4.00 in