The Perforators LLC

COMPENSATED DENSITY NEUTRON LOG

Company	John O Farmer Inc.
Well	Waugh A#1
Field	Wildcat
County	Wabaunsee
State	Kansas

Company John O Farmer Inc.

Well Waugh A#1

Field Wildcat

County Wabaunsee State Kansas

Location: API # : 15 197 20293

1230' FSL & 2570' FEL

SEC 7 TWP 15S RGE 12E

Permanent Datum Ground Level Elevation 1319'

Log Measured From KB 8' AGL

Drilling Measured From KB

Other Services
ML
DIL

Elevation
K.B. 1327'
D.F. 1327'
G.L. 1319'

Date	10-26-11				
Run Number	One				
Depth Driller	3144'				
Depth Logger	3140'				
Bottom Logged Interval	3114'				
Top Log Interval	2200'				
Casing Driller	305'				
Casing Logger	305'				
Bit Size	7 7/8"				
Type Fluid in Hole	Chemical Mud				
Density / Viscosity	9.3/52				
pH / Fluid Loss	9.5/9.2				
Source of Sample	Pit				
Rm @ Meas. Temp	3@71degf				
Rmf @ Meas. Temp	2.25@71degf				
Rmc @ Meas. Temp	4.8@71degf				
Source of Rmf / Rmc	Calculated				
Rm @ BHT	1.78@120degf				
Time Circulation Stopped	7:15 a.m.				
Time Logger on Bottom	10:00 a.m.				
Maximum Recorded Temperature	120				
Equipment Number	T045				
Location	Hays, KS.				
Recorded By	L. Smith				
Witnessed By	Mr. Ted Pfau				

<<< Fold Here >>>

Comments

ABHV Calculated For 5.5" Casing

6.5 S of Eskridge, 1.5 W on Elm Creek Rd.

Thank you for using The Perforators LLC
Hays, KS (785) 621-4604

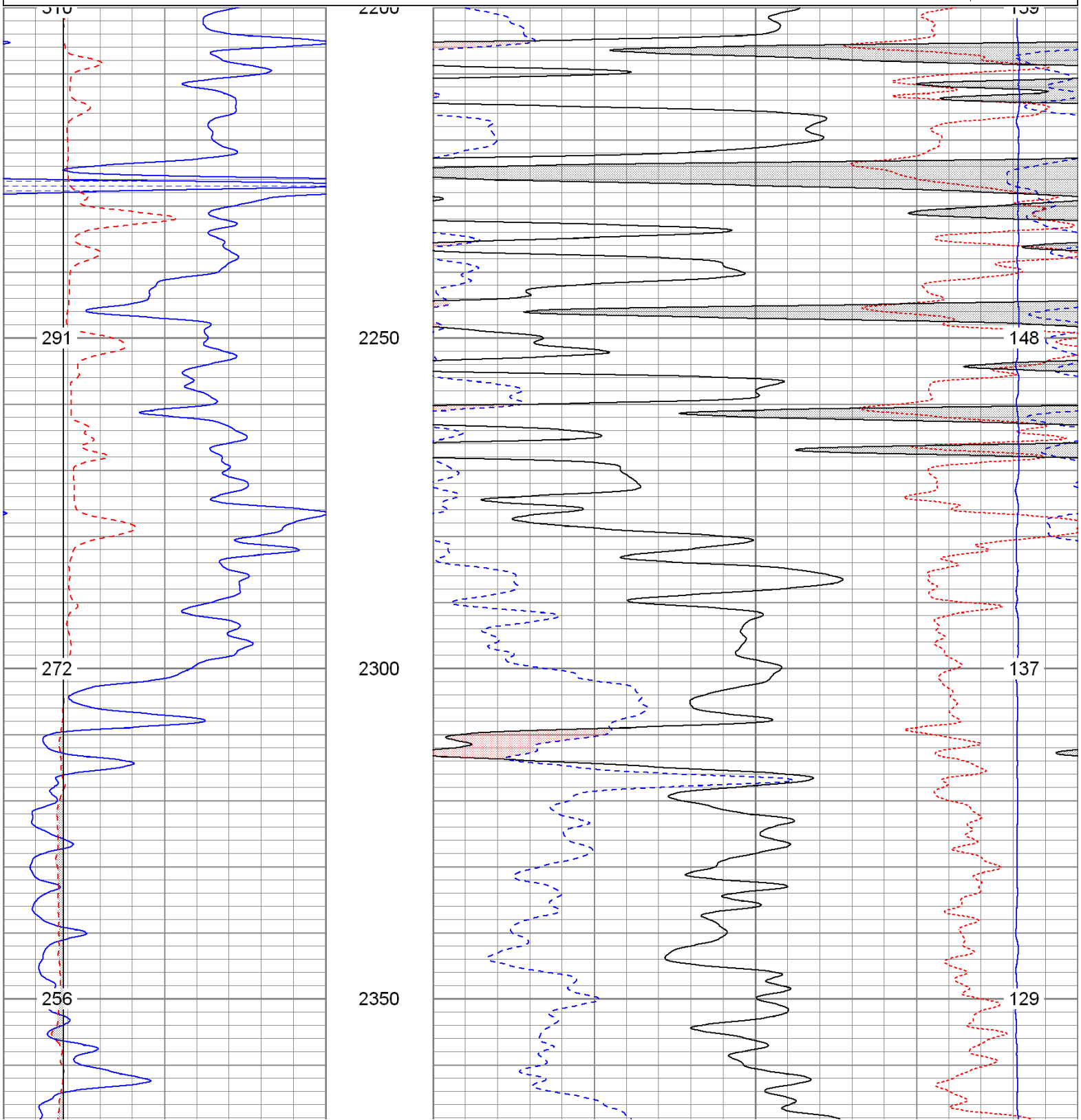
The Perforators LLC

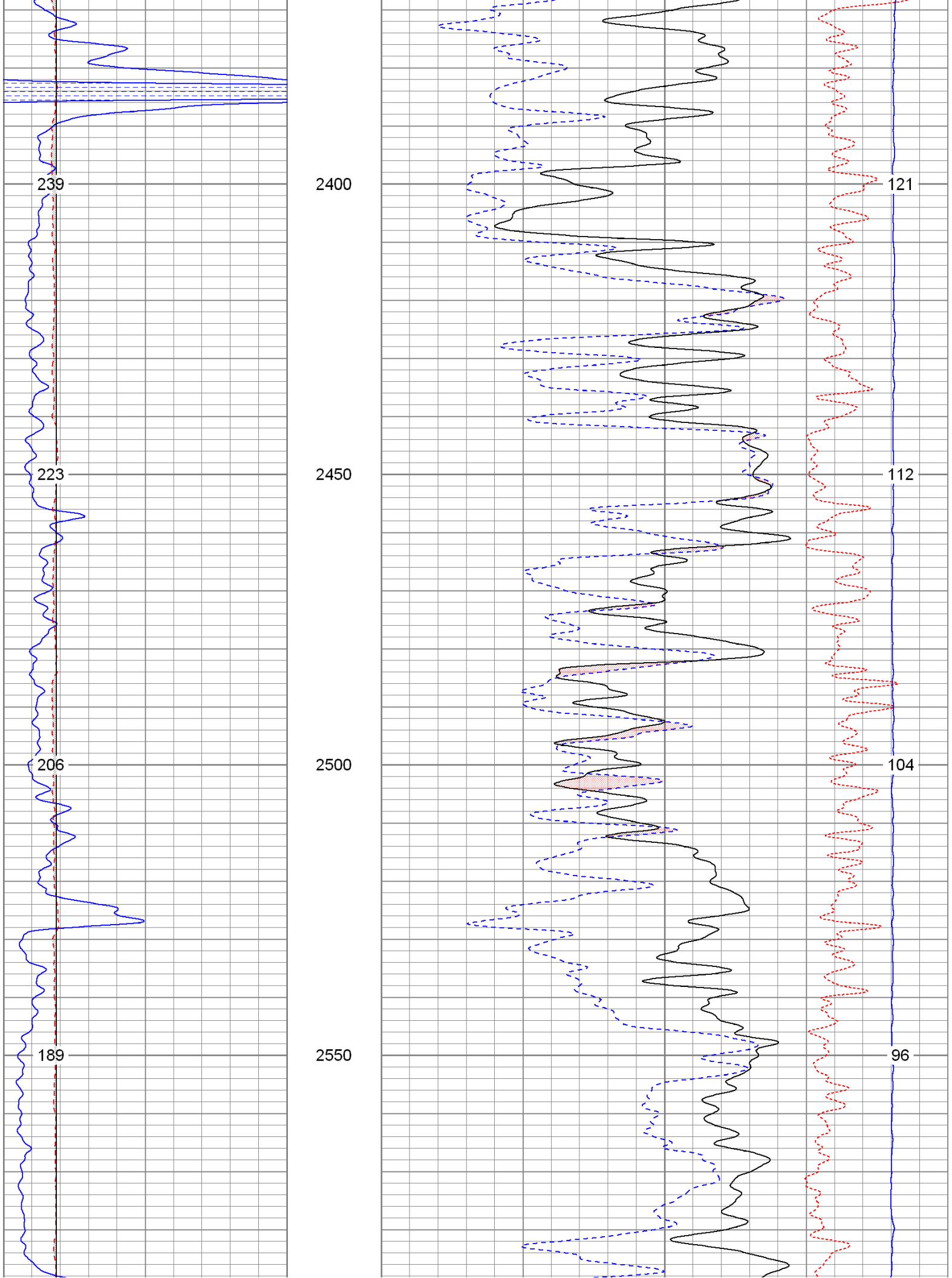
Main Pass

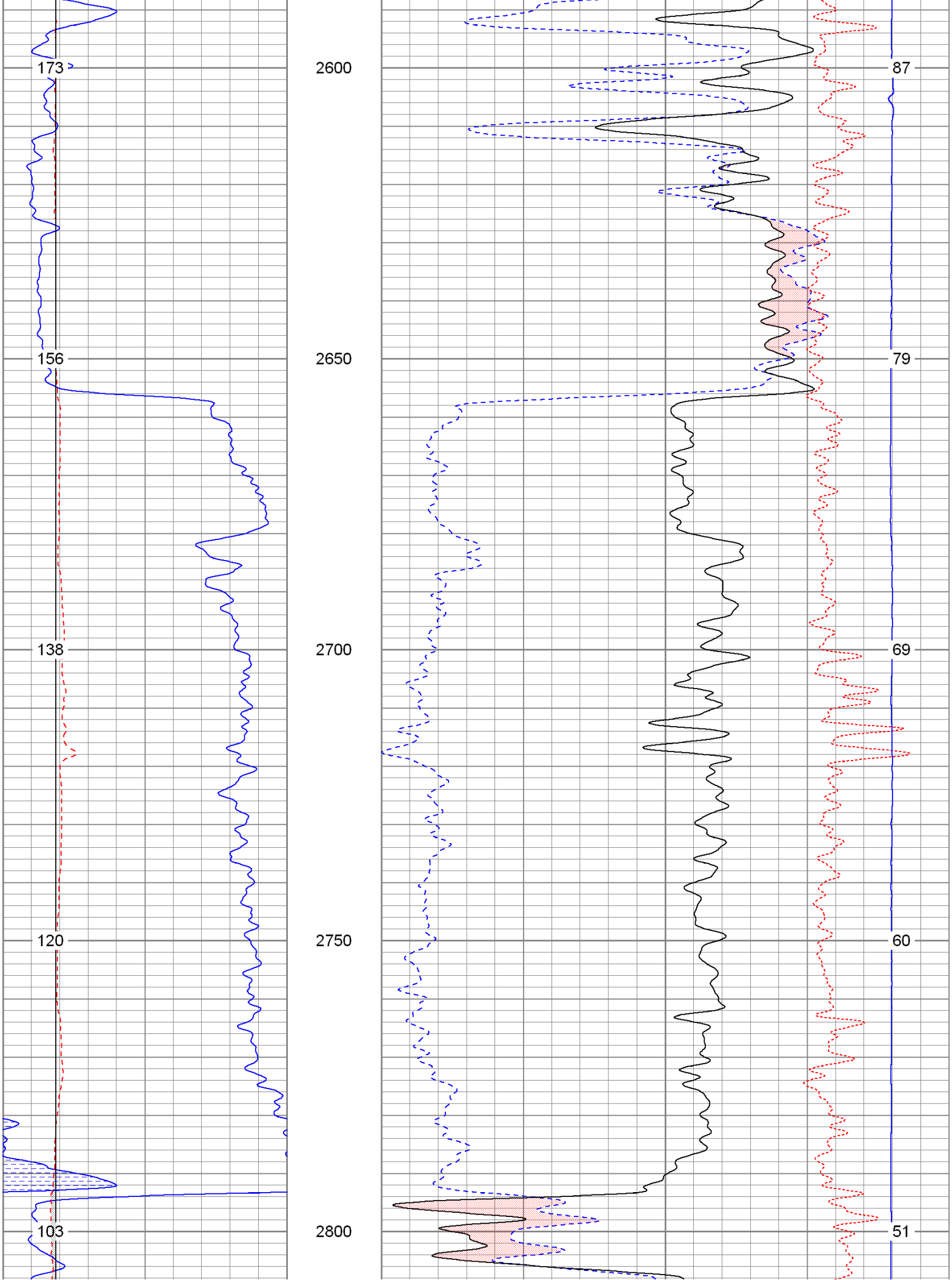
Database File:	jofwaugha#1.db
Dataset Pathname:	pass2.1
Presentation Format:	kcdnl
Dataset Creation:	Wed Oct 26 11:47:23 2011 by Calc Open-Cased 100827
Charted by:	Depth in Feet scaled 1:240

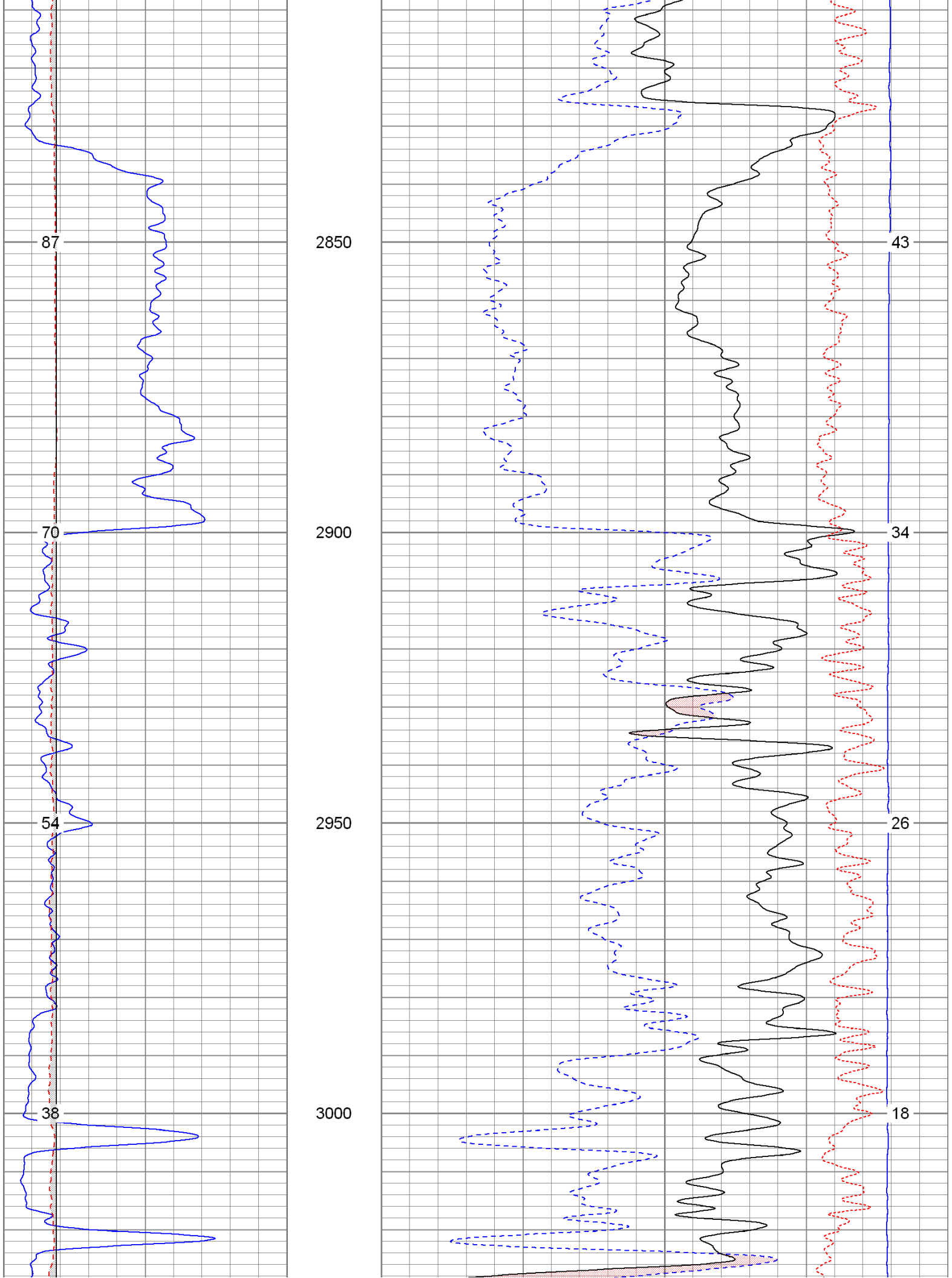
0	GR (GAPI)	150
6	DCAL (in)	16
6	BOREID (in)	16
TBHV (ft3)		

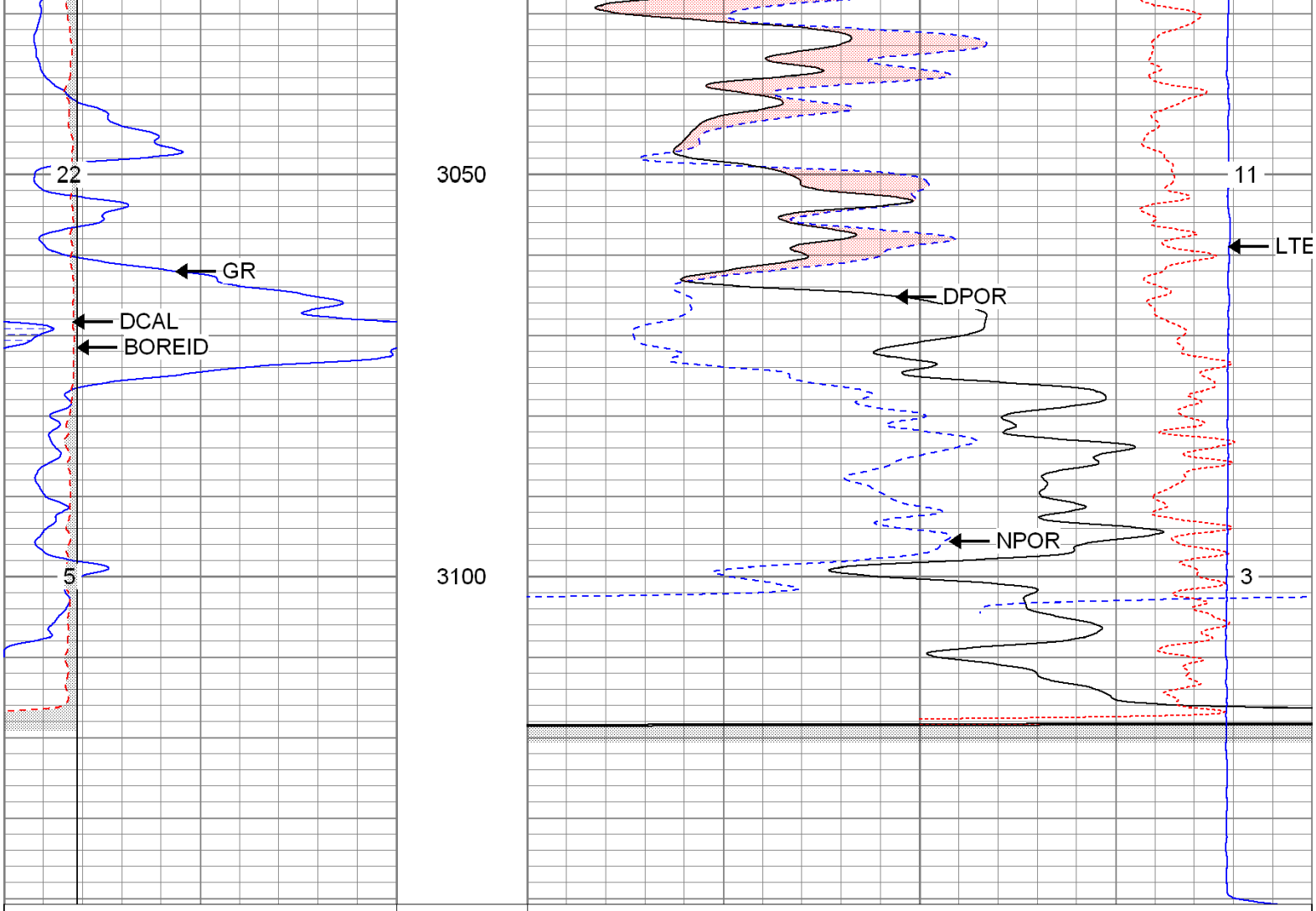
30	NPOR (pu)	-10
30	DPOR (pu)	-10
70	DPOR (pu)	30
-0.25	RHOC (g/cc)	0.25
8000	LTEN (lb)	0
	ABHV (ft3)	




239
223
206
189
2400
2450
2500
2550
121
112
104
96


173
156
138
120
103
2600
2650
2700
2750
2800
87
79
69
60
51


87
70
54
38
2850
2900
2950
3000
43
34
26
18



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

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

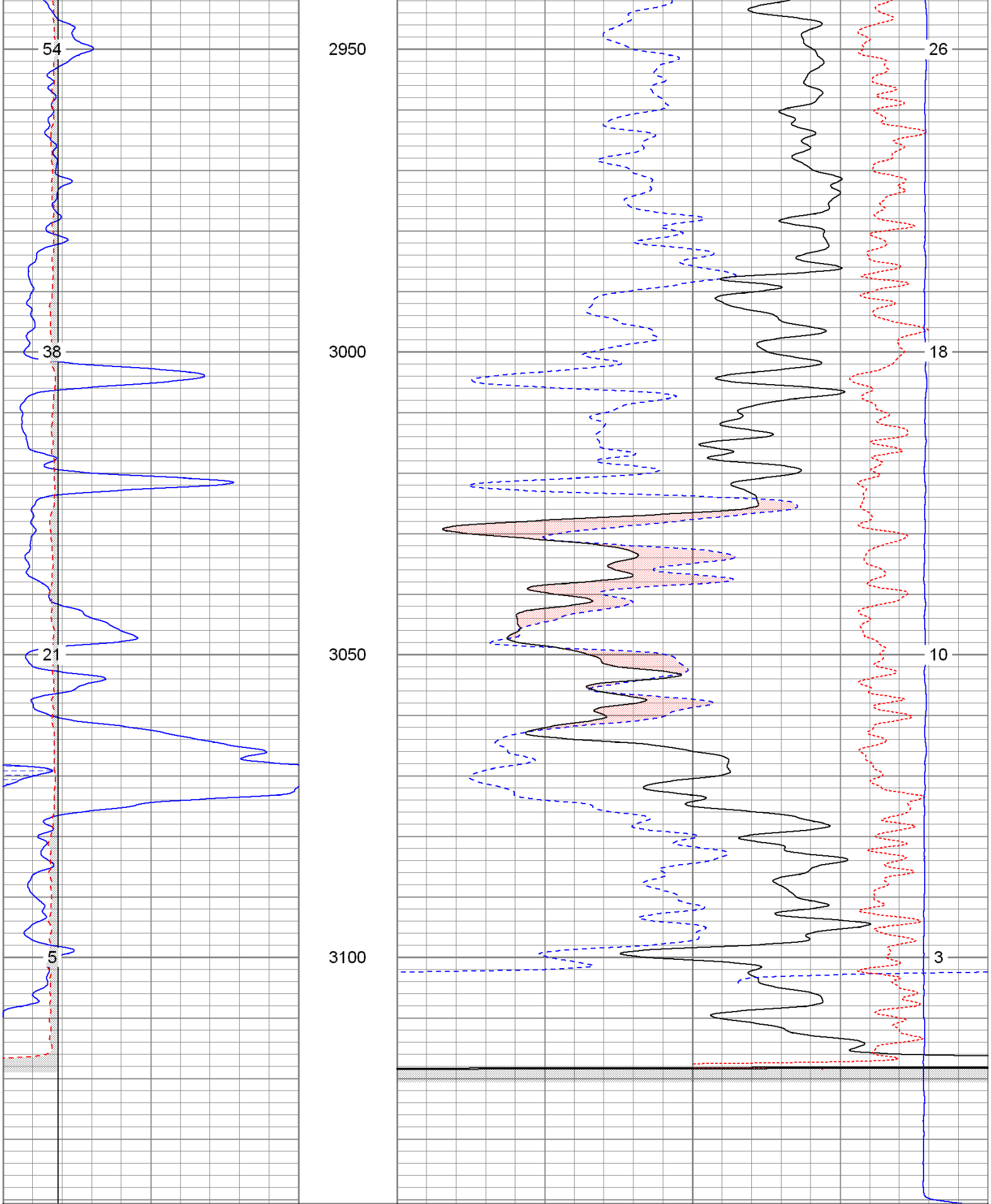
The Perforators LLC

Repeat Pass

Database File: jofwaugha#1.db
Dataset Pathname: pass1.1
Presentation Format: kcdnl
Dataset Creation: Wed Oct 26 10:28:46 2011 by Calc Open-Cased 100827
Charted by: Depth in Feet scaled 1:240

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

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



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

30	NPOR (pu)	-10
30	DPOR (pu)	-10
70	DPOR (pu)	30
-0.25	RHOC (g/cc)	0.25
8000	LTEN (lb)	0

ETEN (lb)	0
ABHV (ft3)	

Calibration Report

Database File: jofwaugha#1.db
Dataset Pathname: pass1
Dataset Creation: Wed Oct 26 10:02:33 2011 by Log Open-Cased 100827

Dual Induction Calibration Report

Serial-Model:	5375-G
Surface Cal Performed:	Thu Oct 20 12:47:11 2011
Downhole Cal Performed:	Thu Oct 20 12:47:50 2011

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.002	0.640	V	0.000	350.000	mmho/m	548.515	-0.941
Medium	0.005	0.741	V	0.000	400.000	mmho/m	543.569	-2.777
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.640	V	0.000	350.000	mmho/m	548.463	-1.028
Medium	0.005	0.742	V	0.000	550.000	mmho/m	746.572	-3.700

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.298	349.896	mmho/m	0.087	350.121	mmho/m	1.001	-0.211
Medium	0.040	400.070	mmho/m	-0.083	400.365	mmho/m	1.001	-0.123
Shallow	2.471	0.009	V	500.000	2.000	Ohm-m	180.293	0.157

Compensated Density Calibration Report

Serial-Model:	2388DHT-DHT
Source / Verifier:	/
Master Calibration Performed:	Mon Sep 26 12:42:46 2011

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	688.93	303.28	cps
Aluminum	2.670	g/cc	128.53	194.02	cps

Spine Angle = 75.10 Density/Spine Ratio = 0.530

	Size		Reading
Small Ring	8.15	in	5771.32
Large Ring	14.00	in	10165.20

Gamma Ray Calibration Report

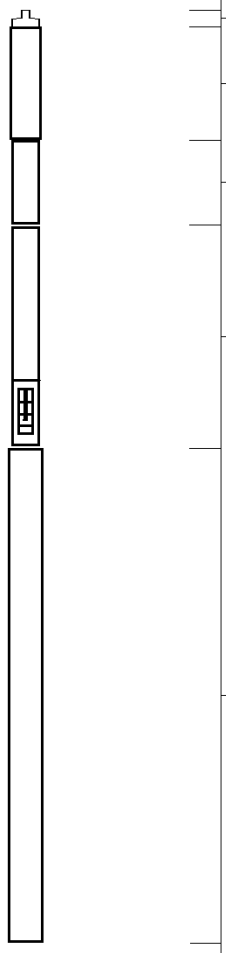
Serial Number:	2000	
Tool Model:	P2000	
Performed:	Sun Oct 23 08:45:30 2011	
Calibrator Value:	1.0	GAPI

Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.2200	GAPI/cps

Neutron Calibration Report

Serial Number:	5108	
Tool Model:	PROBE	
Performed:	Wed Oct 19 06:16:06 2011	
Calibrator Value:	1	NAPI
Calibrator Reading:	1	cps
Sensitivity:	1	NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			None	0.75	1.50	5.00
NEU	37.96		NEU-PROBE (5108) Probe	4.92	3.63	85.00
GR	32.57		GR-P2000 (2000)	3.67	3.25	40.00
			CDL-DHT (2388DHT) Digital High Temp CDL Tool	9.69	4.00	201.00
LSD	23.78					
DCAL	23.49					
SSD	23.24					
HEADVOLT	21.47					
CILD	10.60		DIL-G (5375) Gearhart	21.47	4.00	345.00
SP	10.60					
CILM	6.89					
RLL3	1.70					



Dataset:	jofwaugha#1.db: field/well/run1/pass1
Total Length:	40.49 ft
Total Weight:	676.00 lb
O.D.	4.00 in