



LITHO DENSITY NEUTRON LOG

Company	Palomino Petroleum	Company	Palomino Petroleum
Well	Christians #3	Well	Christians #3
Field	Beaver South	Field	Beaver South
County	Barton	County	Barton
State	Kansas	State	Kansas
Location:	API #: 15 009 26252	Other Services	DIL ML BCS
Permanent Datum	SEC 20 TWP 16S RGE 12W	Elevation	
Log Measured From	1150' FSL & 2008' FEL	K.B. 1932'	
Drilling Measured From	KB 11' AGL	D.F. 1931'	
		G.L. 1921'	
Date	3-1-19		
Run Number	One		
Depth Driller	3520'		
Depth Logger	3520'		
Bottom Logged Interval	3498'		
Top Log Interval	2600'		
Casing Driller	8 5/8" @ 413'		
Casing Logger	413'		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical		
Density / Viscosity	9.148		
pH / Fluid Loss	9.5/8.8		
Source of Sample	Pit	Chlorides 6,000 PPM	
Rm @ Meas. Temp	1.6@76degf		
Rmf @ Meas. Temp	1.2@76degf		
Rmc @ Meas. Temp	1.92@76degf		
Source of Rmf / Rmc	Calculated		
Rm @ BHT	1.17@104degf		
Time Circulation Stopped	10:15 a.m		
Time Logger on Bottom	5:15 p.m		
Maximum Recorded Temperature	104degf		
Equipment Number	T-605		
Location	Hays, KS		
Recorded By	C. Patterson		
Witnessed By	Mr. Eli J Felts		

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Beaver,KS @ 4 way stop NE 190 And NE 60 Ave,
North on NE 60 Ave for 0.3 mi to 3RD Ave.,
Then West on 3RD AVE. for 0.3 mi.
West Through cattle Guard @ end Of Street Into Location

Thanks for using Gemini Wireline LLC
785-625-1182

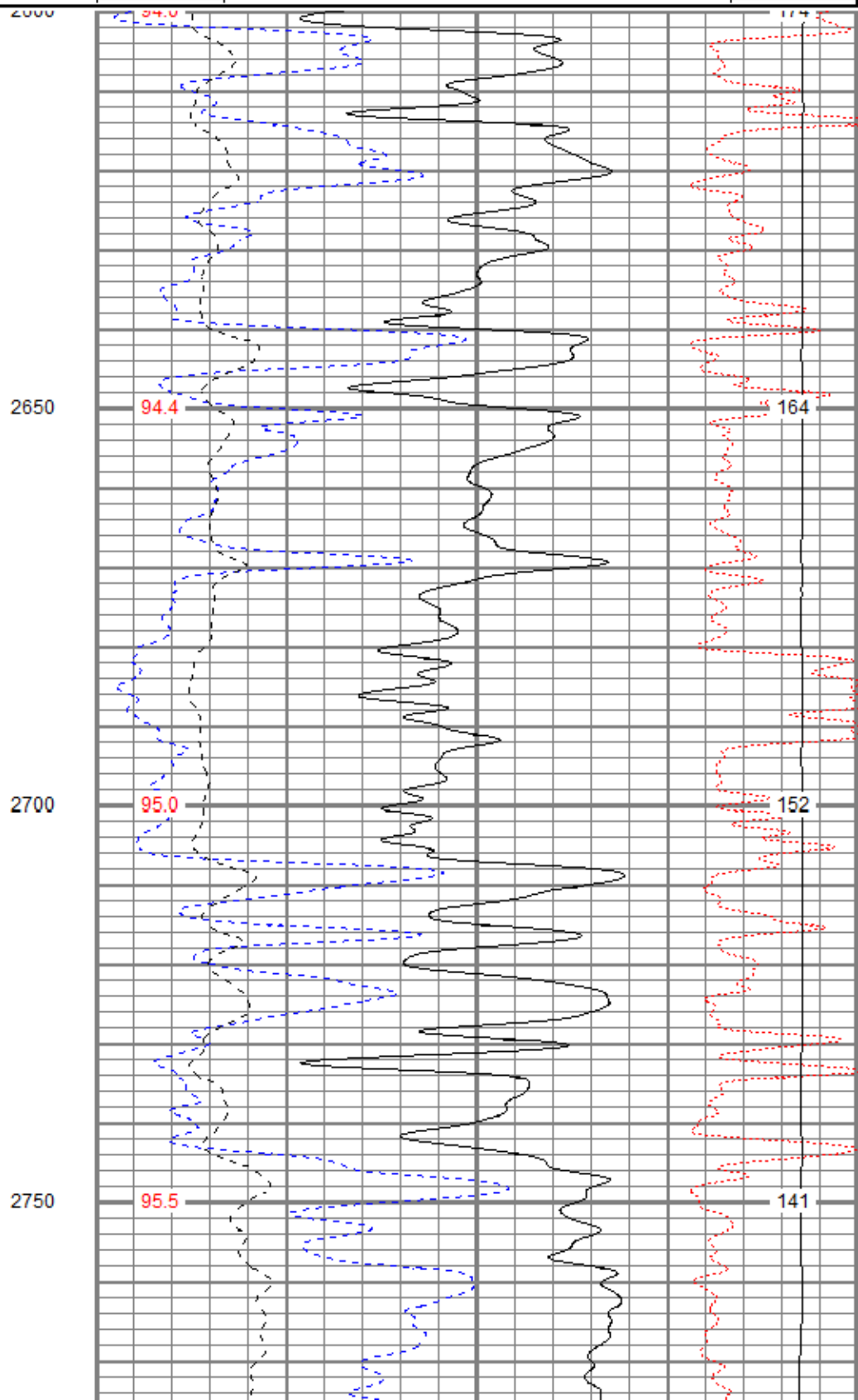
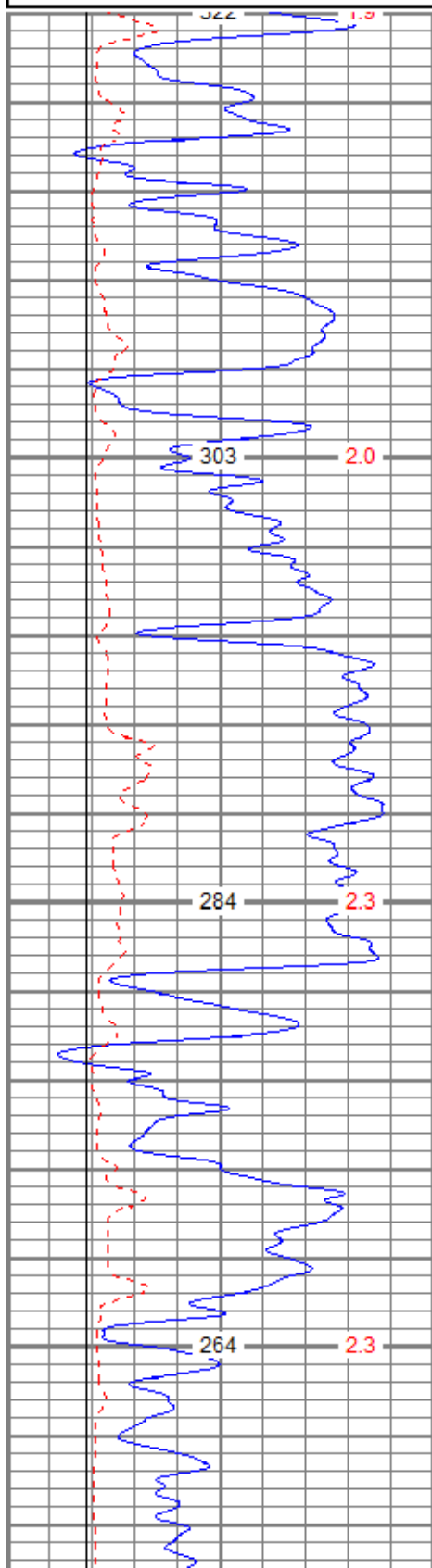


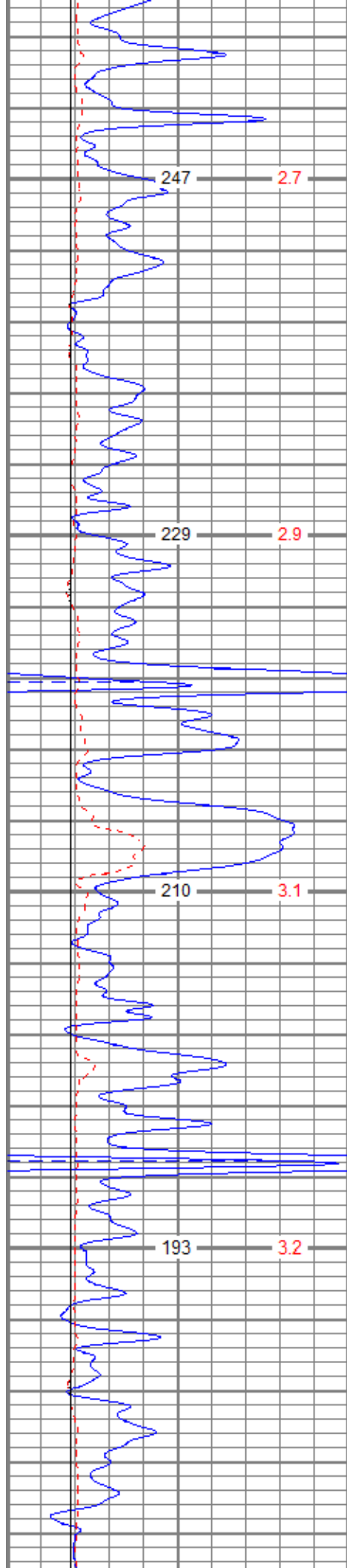
MAIN PASS

Database File ppchristians#3oh.db
 Dataset Pathname pass3.1
 Presentation Format digital_kcdnl
 Dataset Creation Fri Mar 01 18:21:46 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)



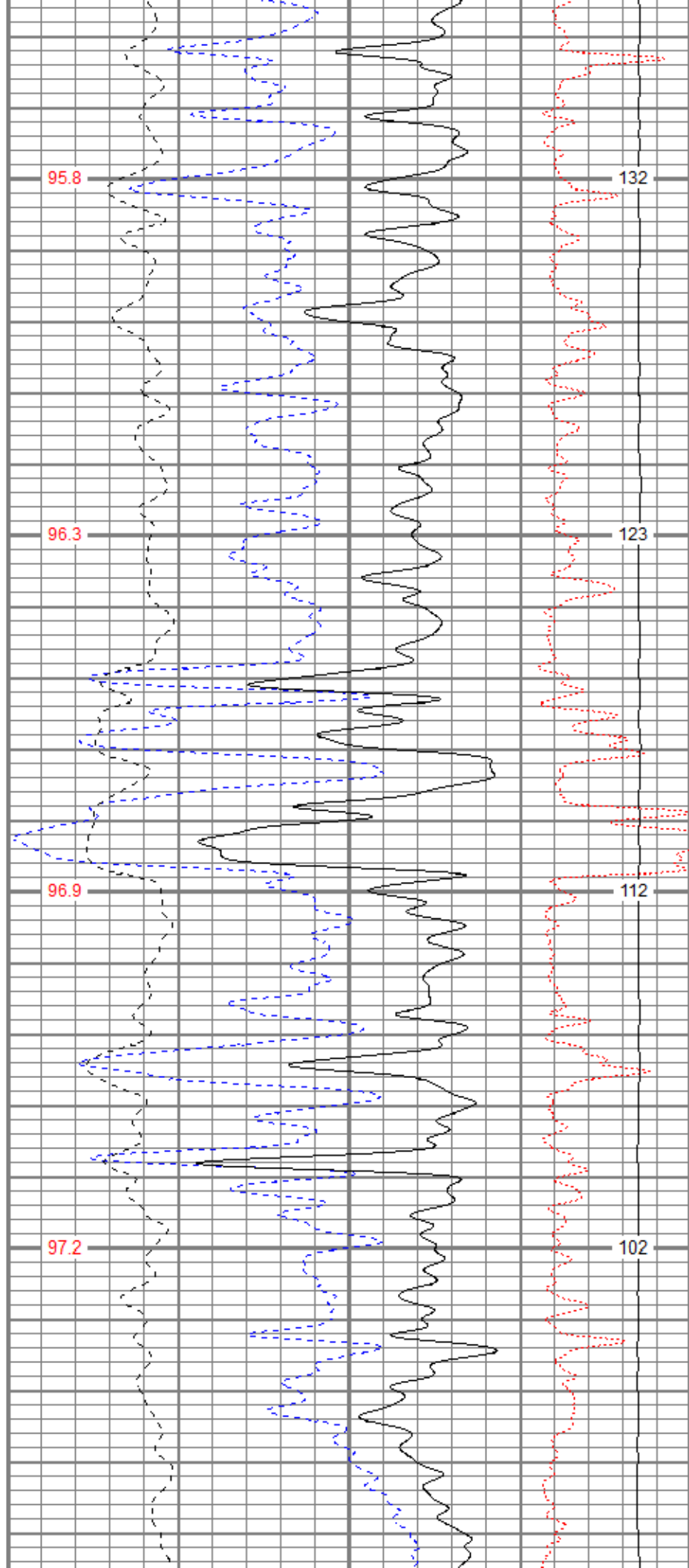


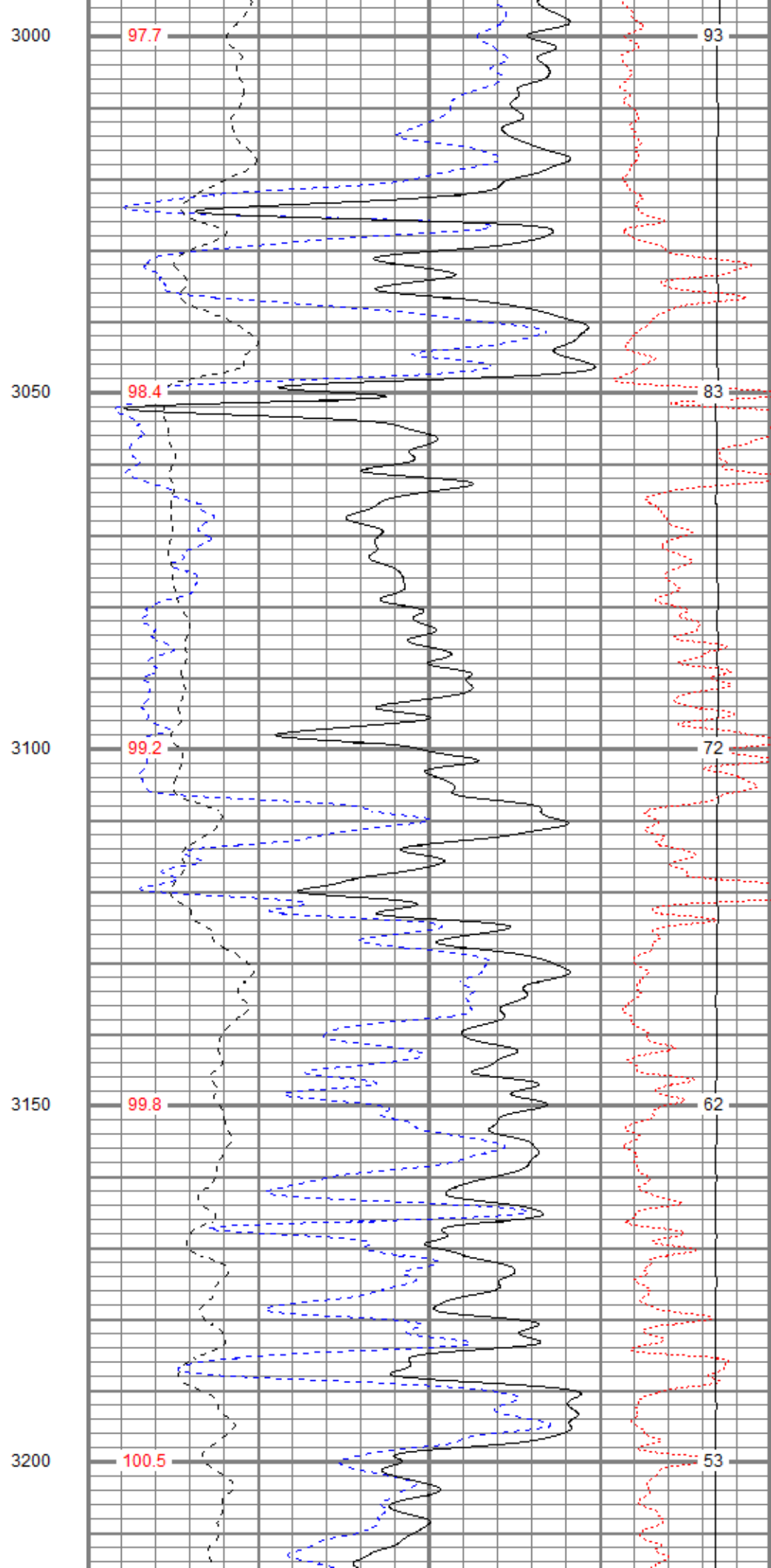
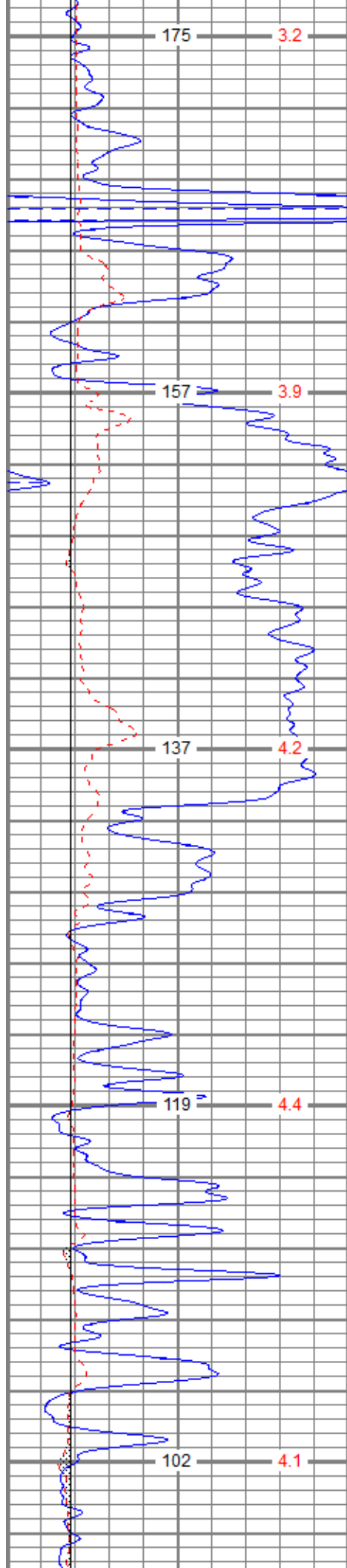
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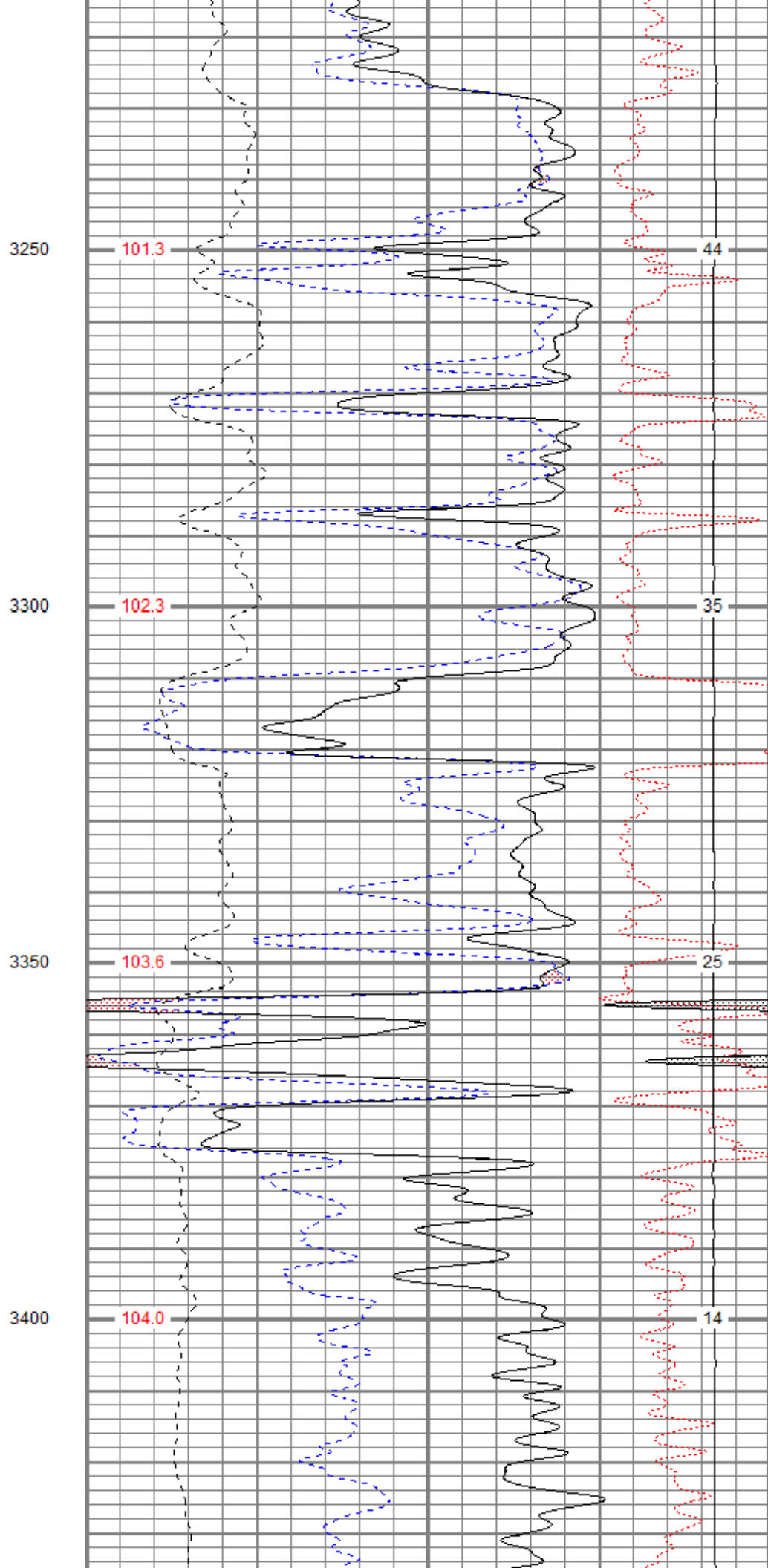
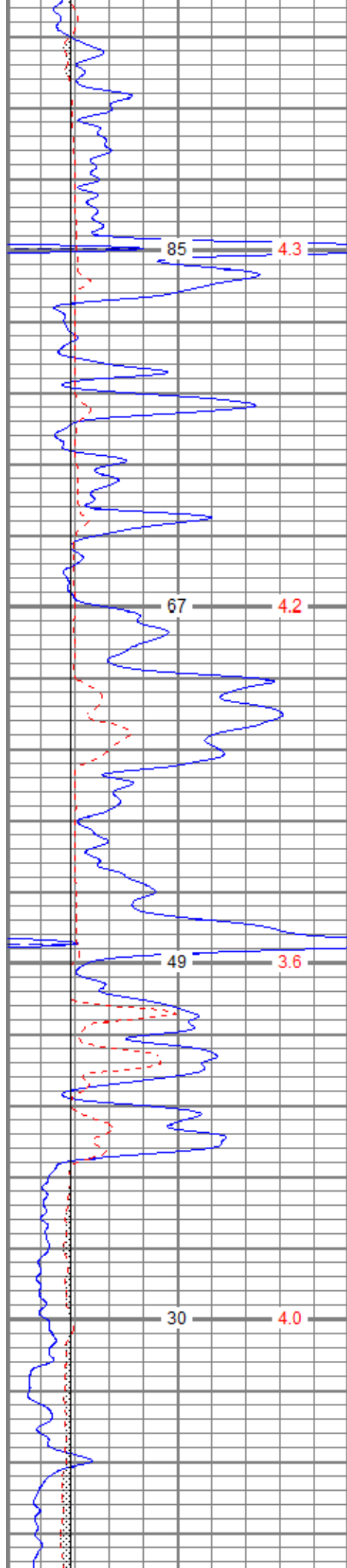
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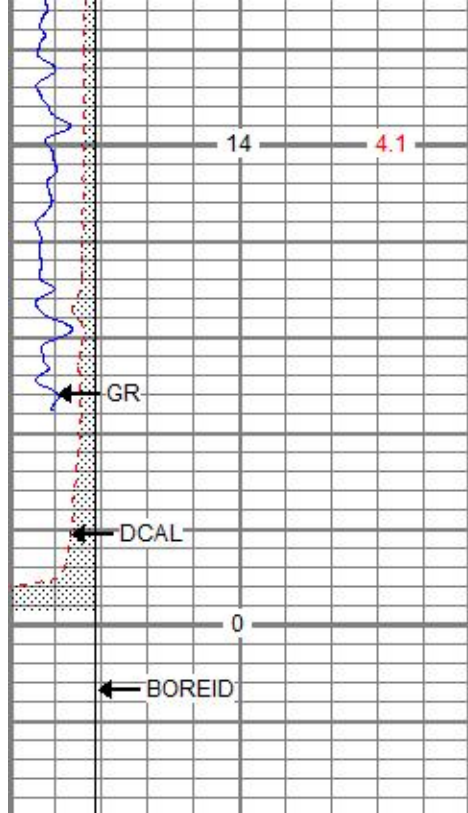
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2950

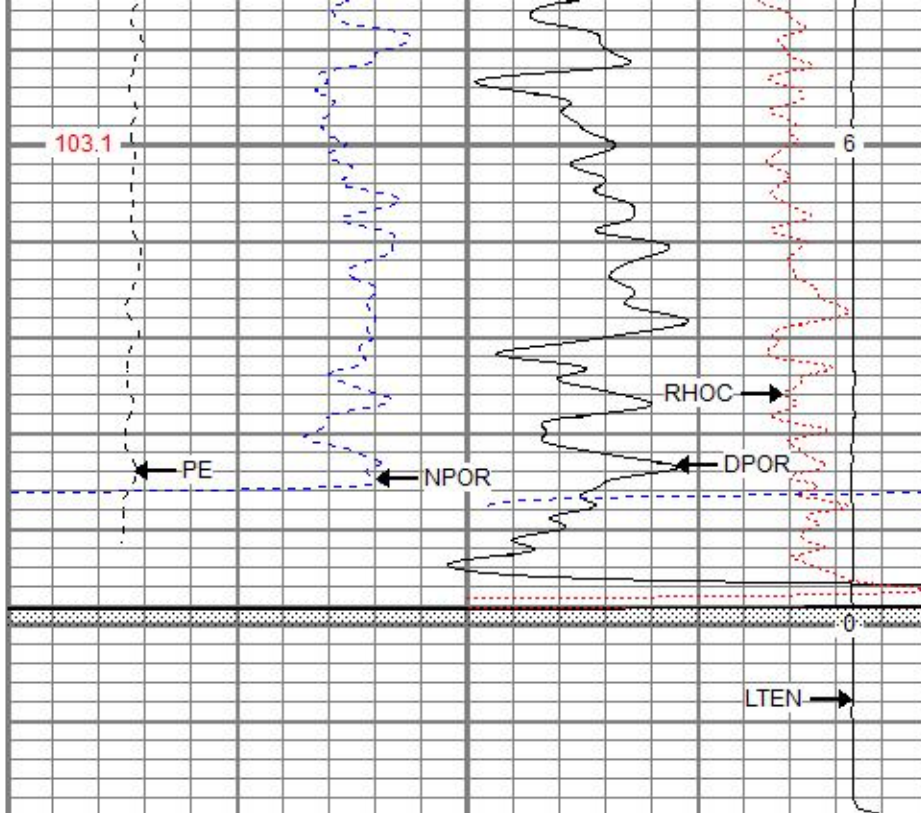








3450



3500

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	
TEMP		-0.25		RHOC (g/cc)	
(degF)		8000		LTEN (lb)	
				0	
				ABHV (ft3)	



REPEAT SECTION

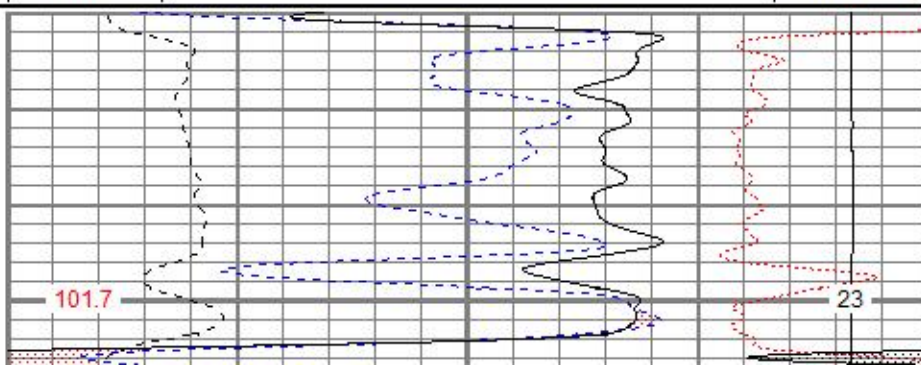
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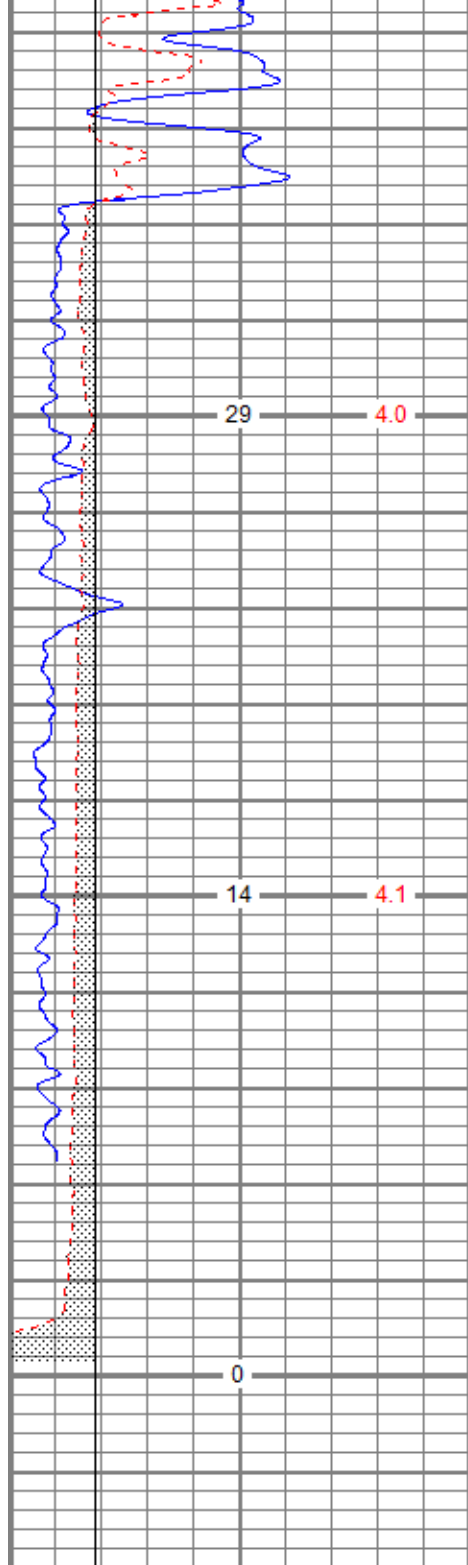
0	GR (GAPI)	150
6	DCAL (in)	16
6	BOREID (in)	16
	TBHV (ft3)	DEVI (deg)

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)		

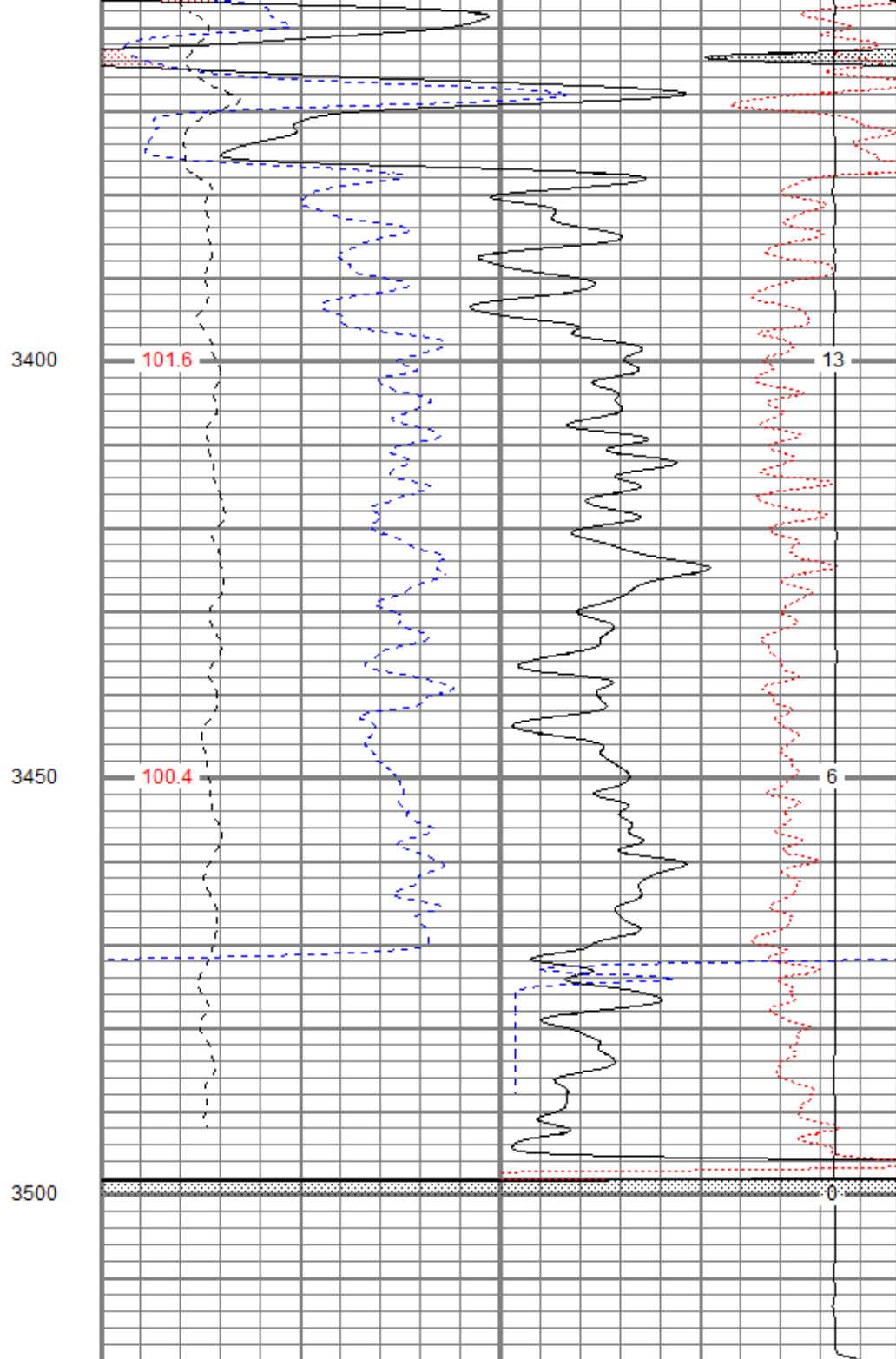


3350





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			8000	LTEN (lb)	0
(degF)					ABHV (ft3)

Calibration Report

Database File ppchristians#3oh.db
 Dataset Pathname pass3.1
 Dataset Creation Fri Mar 01 18:21:46 2019

Dual Induction Calibration Report

Serial-Model:

5375-G

General Note: Surface Cal Performed: Tue Jan 22 08:45:42 2019
 Downhole Cal Performed: Tue Jan 22 08:46:17 2019
 After Survey Verification Performed: Tue Jan 22 08:46:17 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	547.166	-1.056
Medium	0.004	0.724	V	0.000	400.000	mmho/m	555.498	-2.413
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.642	V	0.000	350.000	mmho/m	547.349	-1.170
Medium	0.004	0.725	V	0.000	550.000	mmho/m	763.497	-3.249

Downhole Calibration

Readings				References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.089	349.955	mmho/m	0.113	349.997	mmho/m	1.000	0.024
Medium	-0.171	400.157	mmho/m	-0.049	400.115	mmho/m	1.000	0.122
Shallow	2.429	0.011	V	500.000	2.000	Ohm-m	200.929	1.282

After Survey Verification

Readings				Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	0.089	349.955	mmho/m	1.000	0.024
Medium	0.000	0.000	mmho/m	-0.171	400.157	mmho/m	1.000	0.122
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Neutron Calibration Report

Serial Number: 2017
 Tool Model: lithogearhart
 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-Axis Inclinometer

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		ADT-WOMC (WithOutMC) Telemetry Without Mud Cell	4.58	3.50	120.00
ACCX	38.91					
SSTAT	38.49		NEU-lithogearhart (2017)	5.65	3.50	85.00
PSTAT	37.66					
ASTAT	37.66					
GRD	36.82		ADT1LITH-A (1) Admyr Litho Density Tool	9.29	3.50	240.00
TEMP	36.82					
NEU	33.46					
LStat	24.30					
LS8	23.64					
LS7	23.64					
LS6	23.64					
LS5	23.64					
LS4	23.64					
LS3	23.64					
LS2	23.64		DIL-G (5375) Gearhart	21.47	4.00	345.00
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					
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	Dataset:	ppchristians#3oh.db: field/well/run1/pass3.1
TR Mon	0.00		

Wt_mom 0.00

Total length: 41.49 ft
Total weight: 791.00 lb
O.D.: 4.00 in