COMPENSATED DENSITY NEUTRON LOG

Company Castle Resources, Inc.
Well Carter #1
Field Wildcat
County Decatur State Kansas

Location: API # : 15 039 21236

1950' FSL & 1100' FEL

SEC 28 TWP 5S RGE 27W

Other Services
DIL
ML

Elevation
K.B. 2703'
D.F. 2702'
G.L. 2698'

Permanent Datum Ground Level Elevation 2698'
Log Measured From KB 5' AGL
Drilling Measured From KB

Company Castle Resources, Inc.
Well Carter #1
Field Wildcat
County Decatur
State Kansas

Date	10-19-16		
Run Number	One		
Depth Driller	4450'		
Depth Logger	4449'		
Bottom Logged Interval	4426'		
Top Log Interval	3300'		
Casing Driller	8 5/8" @ 282'		
Casing Logger	282'		
Bit Size	7 7/8"		
Type Fluid in Hole	Chemical		
Density / Viscosity	9.3/54		
pH / Fluid Loss	9/7.2		
Source of Sample	Pit		
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	1.06@114degf		
Time Circulation Stopped	4:30 p.m.		
Time Logger on Bottom	5:30 p.m.		
Maximum Recorded Temperature	114degf		
Equipment Number	T127		
Location	Hays, KS		
Recorded By	Gus Pfanenstiel		
Witnessed By	Mr. Jerry Green		

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Comments

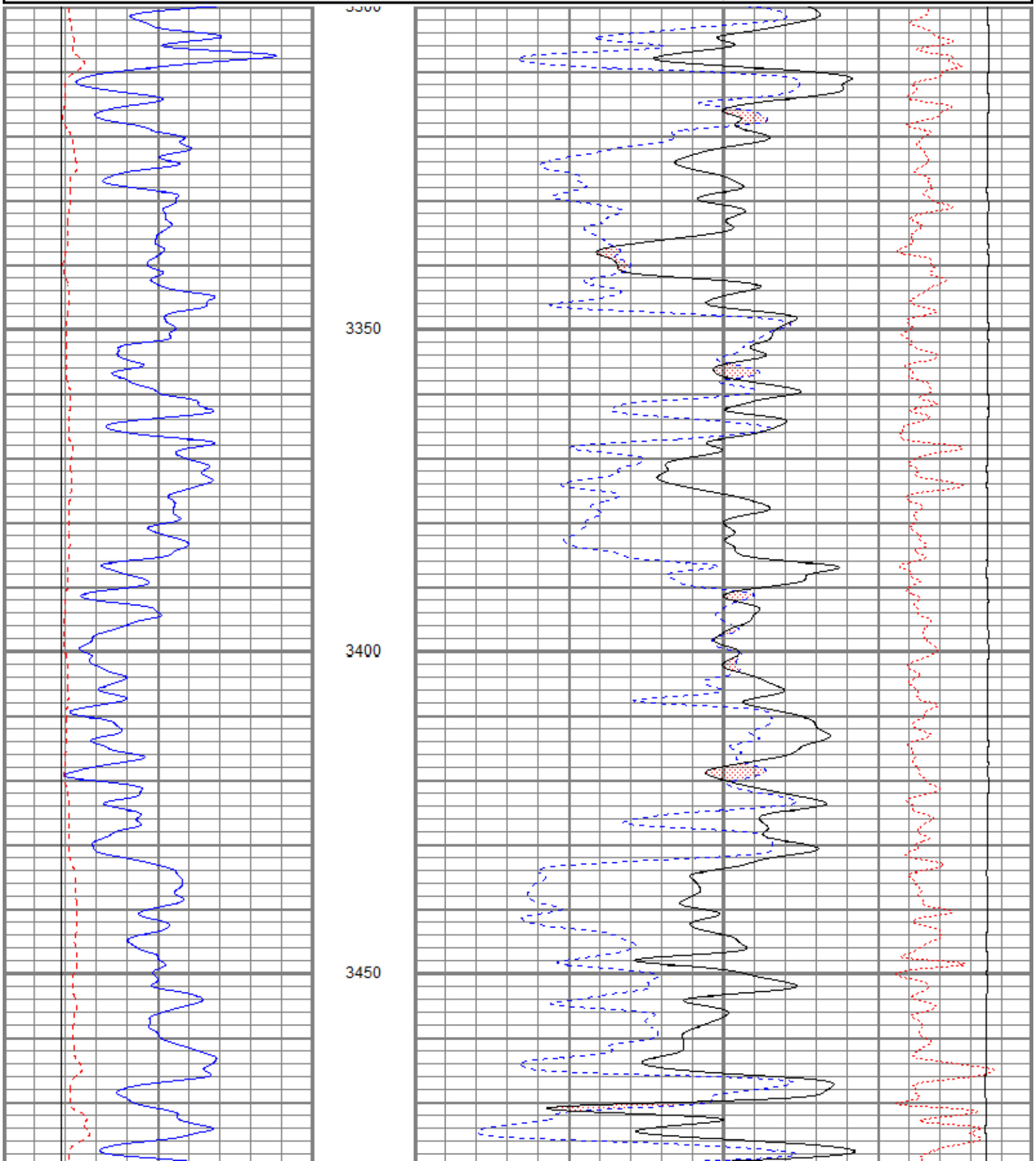
Main Pass

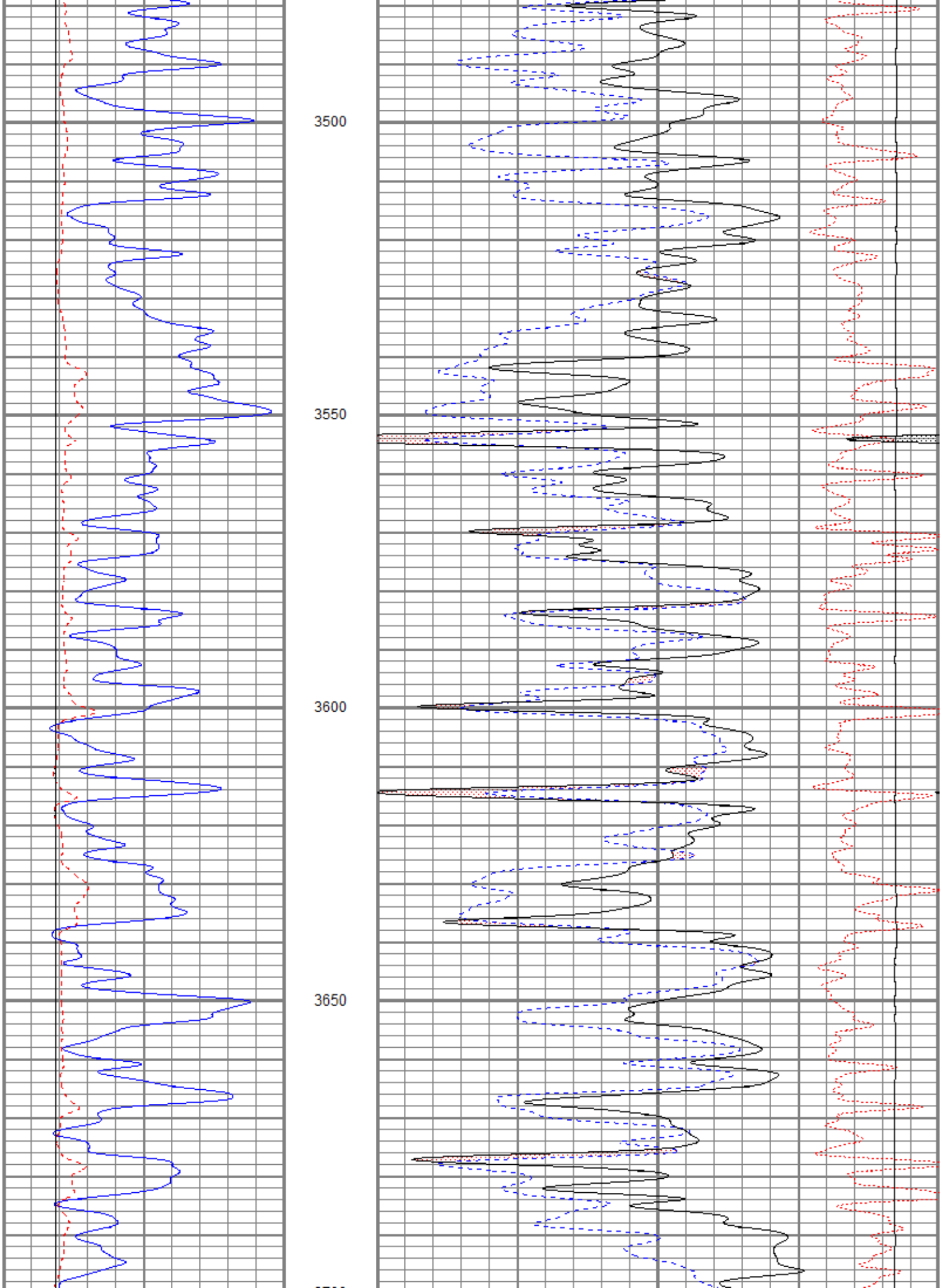
Database File	crcarter#1oh.db
Dataset Pathname	pass6.1
Presentation Format	kcdnl
Dataset Creation	Fri Oct 21 08:20:52 2016
Charted by	Depth in Feet scaled 1:240

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

30	NPOR (pu)	-10
30	DPOR (pu)	-10
70	DPOR (pu)	30

-0.25	RHOC (g/cc)	0.25
8000	LTEN (lb)	0

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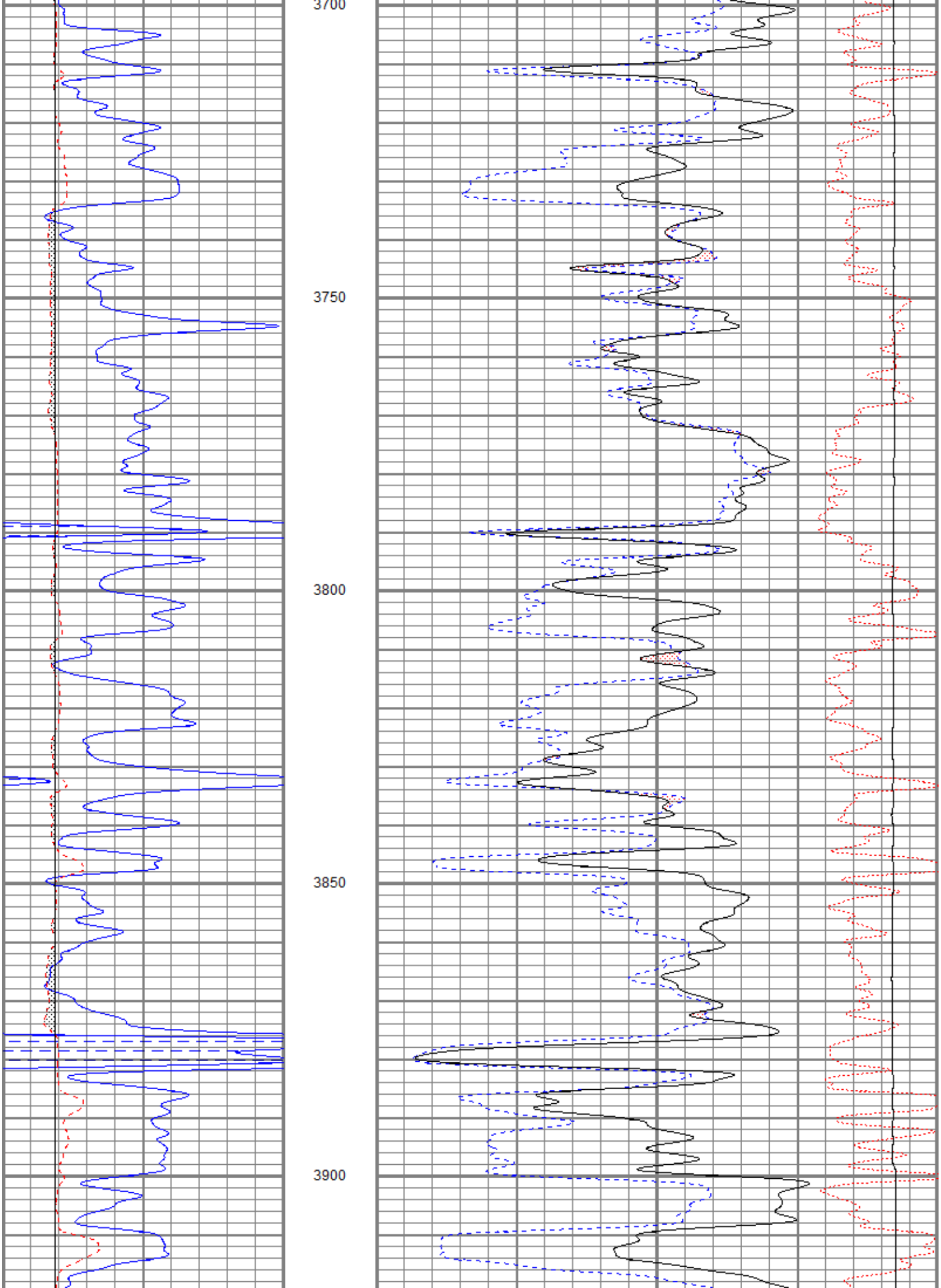
3550
3600
3650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3800
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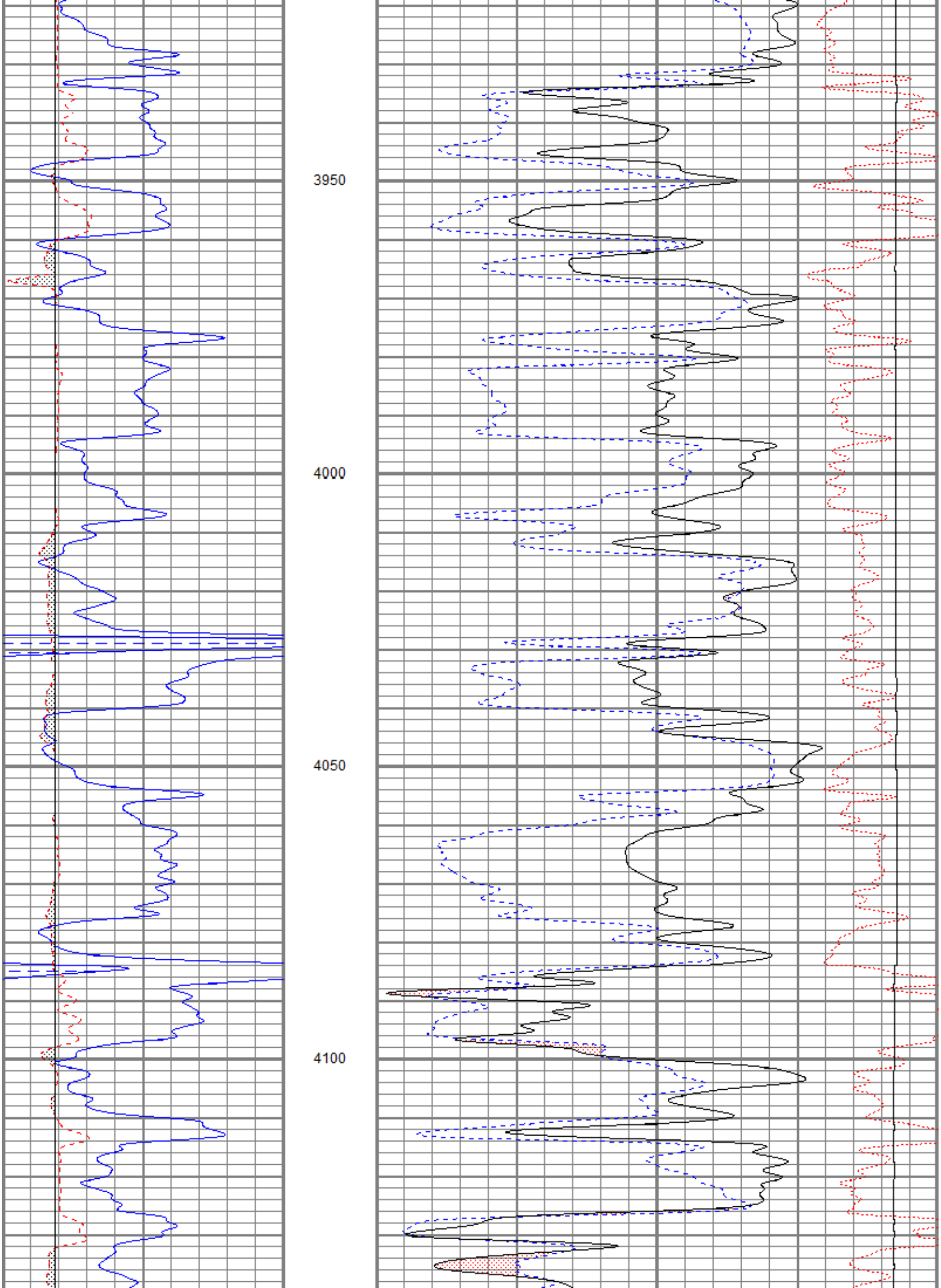
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4050
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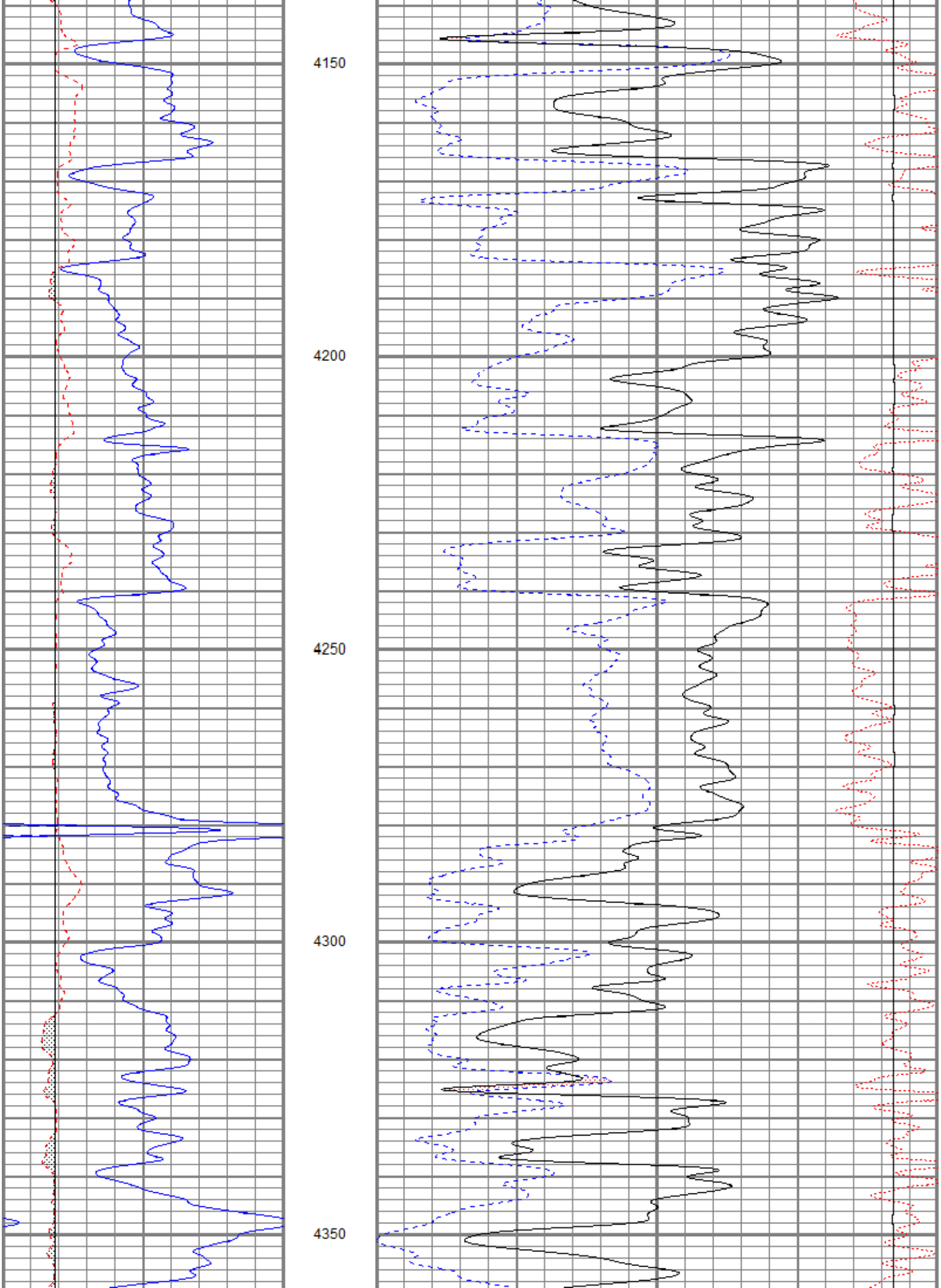
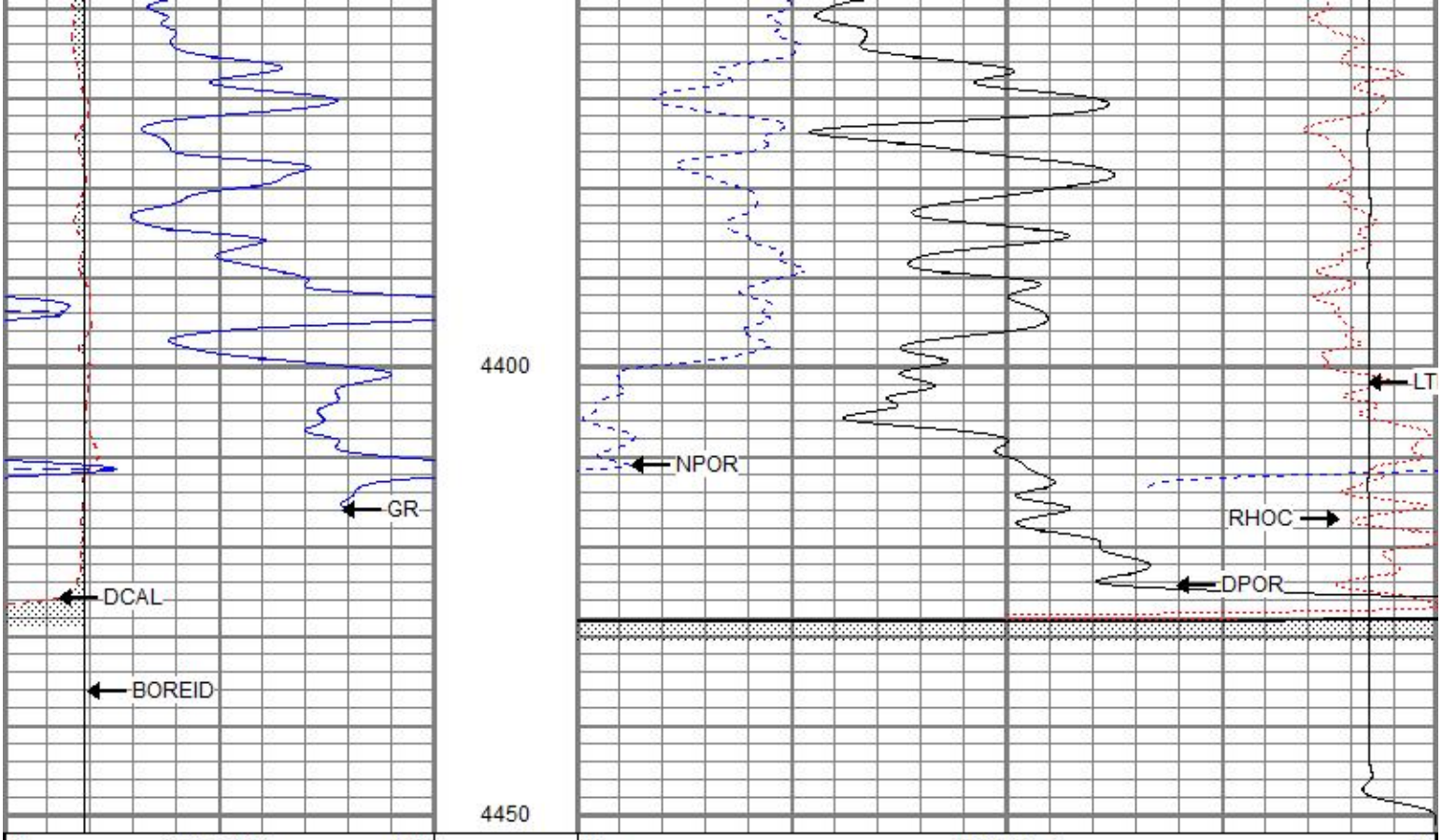

4150
4200
4250
4300
4350



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

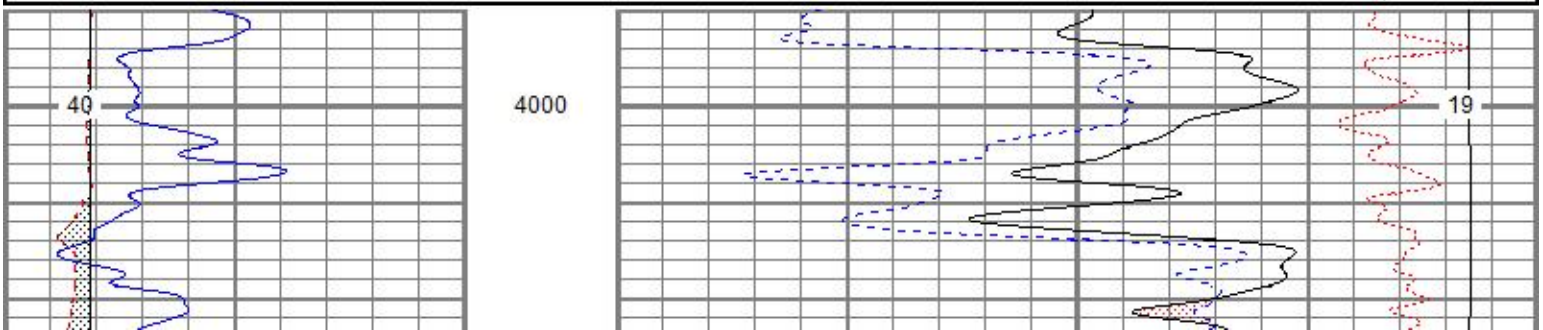
30	NPOR (pu)	-10
30	DPOR (pu)	-10
70	DPOR (pu)	30
-0.25	RHOC (g/cc)	0.25
8000	LTEN (lb)	0

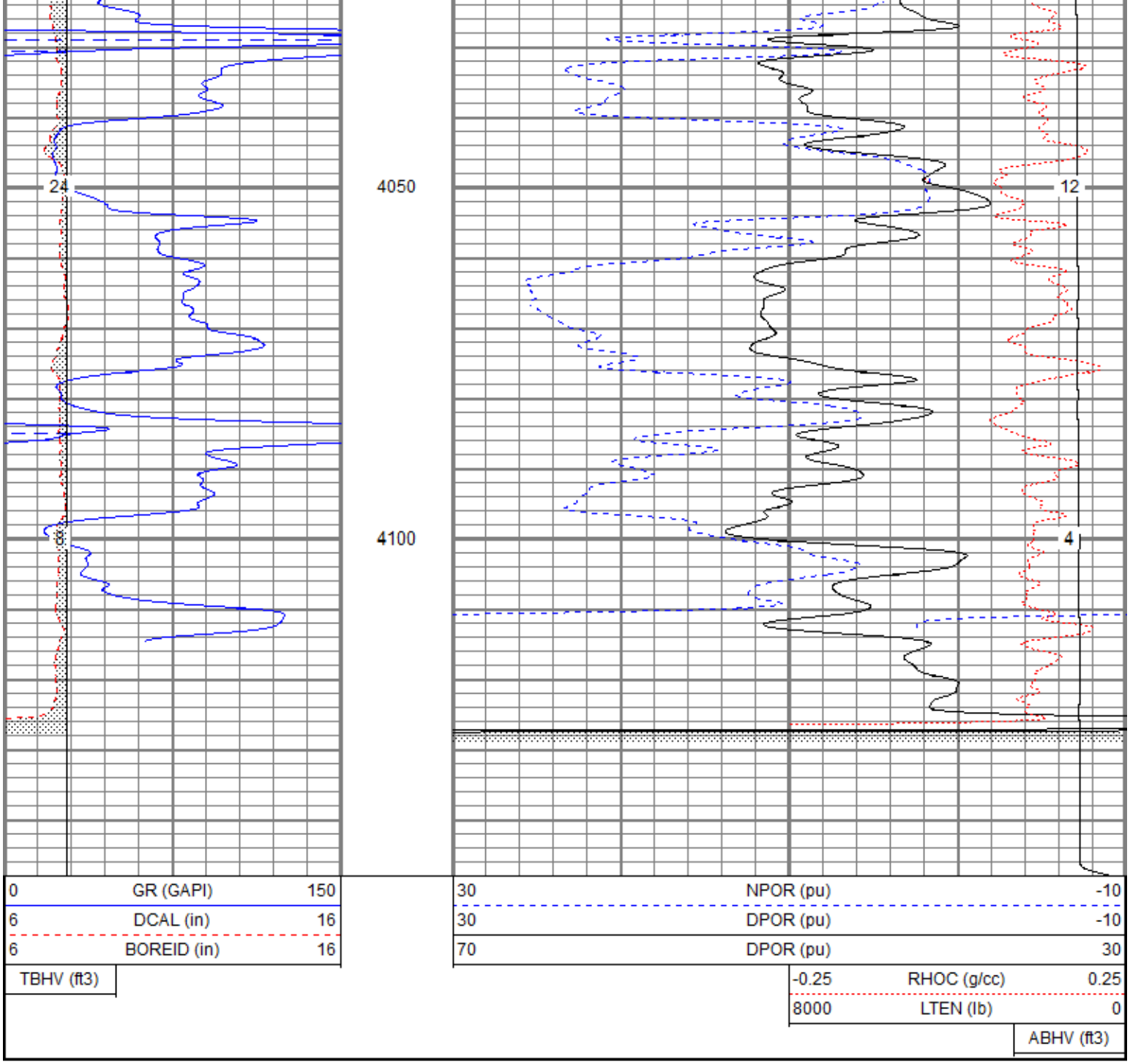
Repeat Pass

Database File	crcarter#1oh.db
Dataset Pathname	pass1.1
Presentation Format	kcdnl
Dataset Creation	Tue Oct 18 10:59:50 2016
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)





Calibration Report

Database File	crcarter#1oh.db
Dataset Pathname	pass1.1
Dataset Creation	Tue Oct 18 10:59:50 2016

Dual Induction Calibration Report

Serial-Model:	1989-ADM
Surface Cal Performed:	Mon Jul 11 21:35:42 2016
Downhole Cal Performed:	Mon Jul 11 21:36:11 2016
After Survey Verification Performed:	Mon Jul 11 21:36:11 2016

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.002	0.656	V	0.000	350.000	mmho/m	535.560	-1.118
Medium	0.003	0.745	V	0.000	400.000	mmho/m	538.828	-1.427

Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.002	0.656	V	0.000	350.000	mmho/m	535.220	-1.003
Medium	0.003	0.745	V	0.000	550.000	mmho/m	741.357	-2.036

Downhole Calibration

	Readings			References			Results	
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	-0.036	349.993	mmho/m	-0.114	350.108	mmho/m	1.001	-0.078
Medium	0.039	400.181	mmho/m	0.053	399.799	mmho/m	0.999	0.013
Shallow	2.503	0.015	V	500.000	2.000	Ohm-m	200.177	-15.046

After Survey Verification

	Readings			Targets			Results	
Internal:	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.036	349.993	mmho/m	1.001	-0.078
Medium	0.000	0.000	mmho/m	0.039	400.181	mmho/m	0.999	0.013
Shallow	0.000	0.000	Ohm-m	500.000	2.000	Ohm-m	1.000	0.000

Compensated Density Calibration Report

Serial-Model: 2501DHT-DHT
Source / Verifier: csv-j12 /
Master Calibration Performed: Thu Jan 21 09:35:41 2016
Before Survey Verification Performed:
After Survey Verification Performed:

Master Calibration

	Density		Far Detector	Near Detector	
Magnesium	1.750	g/cc	711.36	284.22	cps
Aluminum	2.660	g/cc	133.07	180.42	cps

Spine Angle = 74.83 Density/Spine Ratio = 0.524

	Size		Reading
Small Ring	8.15	in	5979.71
Large Ring	14.00	in	9974.72

Before Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

After Survey Verification

Target		Measured	
	g/cc		g/cc
	g/cc		g/cc
	g/cc		g/cc

Gamma Ray Calibration Report

Serial Number: 2000
Tool Model: P2000
Performed: Sun Dec 13 16:43:47 2015

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Calibrator Reading:	1.0	cps
Sensitivity:	0.2200	GAPI/cps

Neutron Calibration Report

Serial Number:	5108	
Tool Model:	PROBE	
Performed:	Thu Jan 21 09:36:17 2016	
Calibrator Value:	1	NAPI
Calibrator Reading:	1	cps
Sensitivity:	1	NAPI/cps

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CHD-None	0.75	1.50	5.00
NEU	36.60		NEU-PROBE (5108) Probe	4.92	3.63	85.00
GR	30.81		GR-P2000 (2000)	3.67	3.25	40.00
			CDL-DHT (2501DHT) Digital High Temp CDL Tool	9.69	4.00	201.00
LSD	22.02					
DCAL	21.73					
SSD	21.48					
HEADVOLT	19.71					
SP	10.60		DIL-ADM (1989) Dual Induction	19.71	4.00	300.00
CILD	10.60					
CILM	6.89					
RLL3	1.70					

Dataset:	crcarter#1oh.db: field/well/run1/pass1.1
Total length:	38.73 ft
Total weight:	631.00 lb
O.D.:	4.00 in