PIONEER

Pioneer Energy Services

Dual Induction Log

API No. 15-179-21330-00-00

Company Culbreath Oil & Gas Company, Inc.

Well Dubois #2-36

Field Unnamed

County Sheridan State Kansas

Location 990' FSL & 1650' FWL

Sec: 36 Twp: 9 S Rge: 26 W

Other Services
CNL/CDL
MEL

Elevation
K.B. 2604
D.F.
G.L. 2594

Permanent Datum Ground Level Elevation 2594
Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date	06-08-2013			
Run Number	One			
Depth Driller	4150			
Depth Logger	4152			
Bottom Logged Interval	4151			
Top Log Interval	250			
Casing Driller	8.625 @ 265			
Casing Logger	263			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity,ppm CL	3000			
Density / Viscosity	9.3 52			
pH / Fluid Loss	8.0 8.8			
Source of Sample	Flowline			
Rm @ Meas. Temp	0.90 @ 75			
Rmf @ Meas. Temp	0.67 @ 75			
Rmc @ Meas. Temp	1.25 @ 75			
Source of Rmf / Rmc	Charts			
Rm @ BHT	0.56 @ 120			
Operating Rig Time	4 Hours			
Max. Rec. Temp. F	120			
Equipment Number	91			
Location	Hays			
Recorded By	Y. Ruiz	D. Schmidt		
Witnessed By	Pat Deenihan			

<<< Fold Here >>>

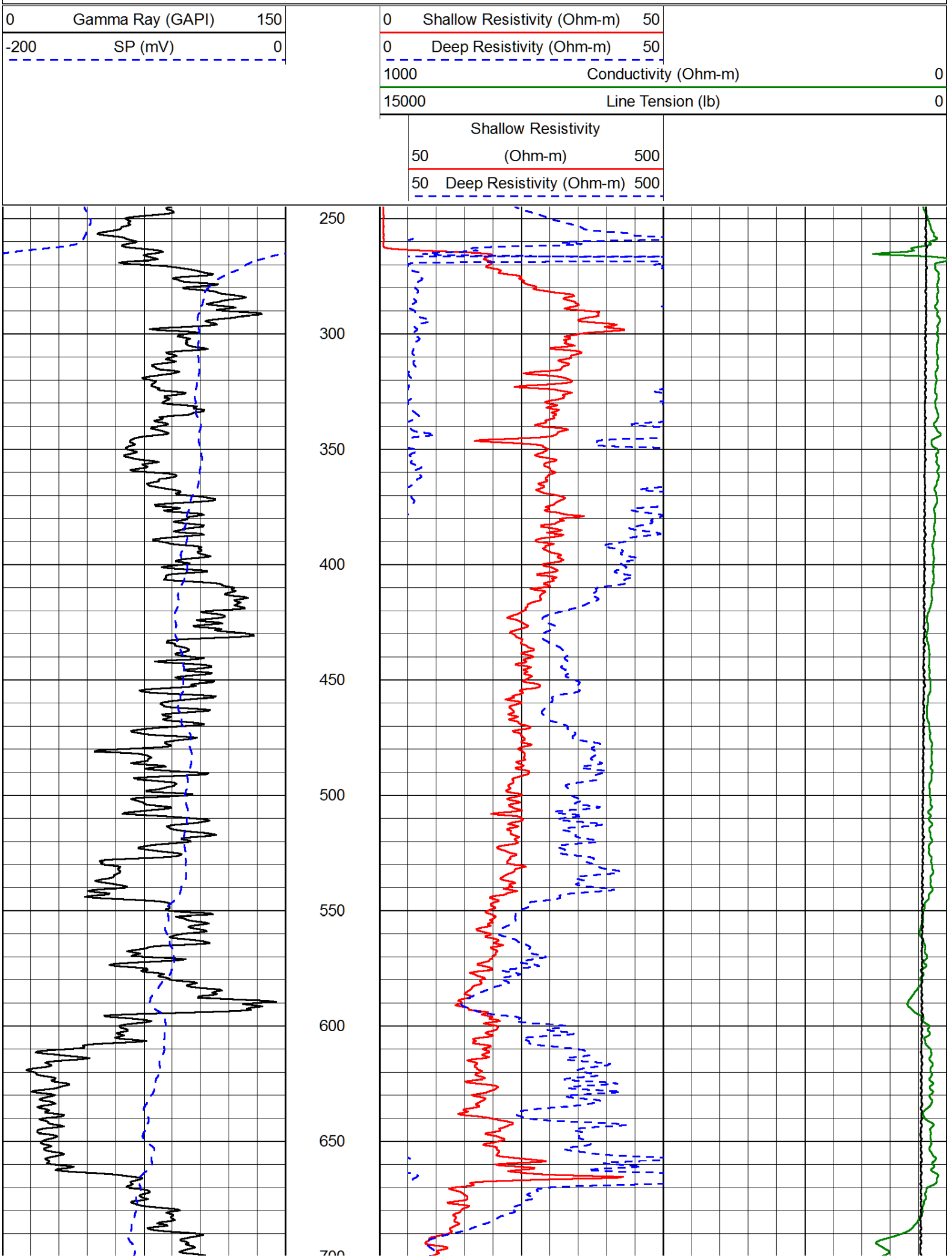
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

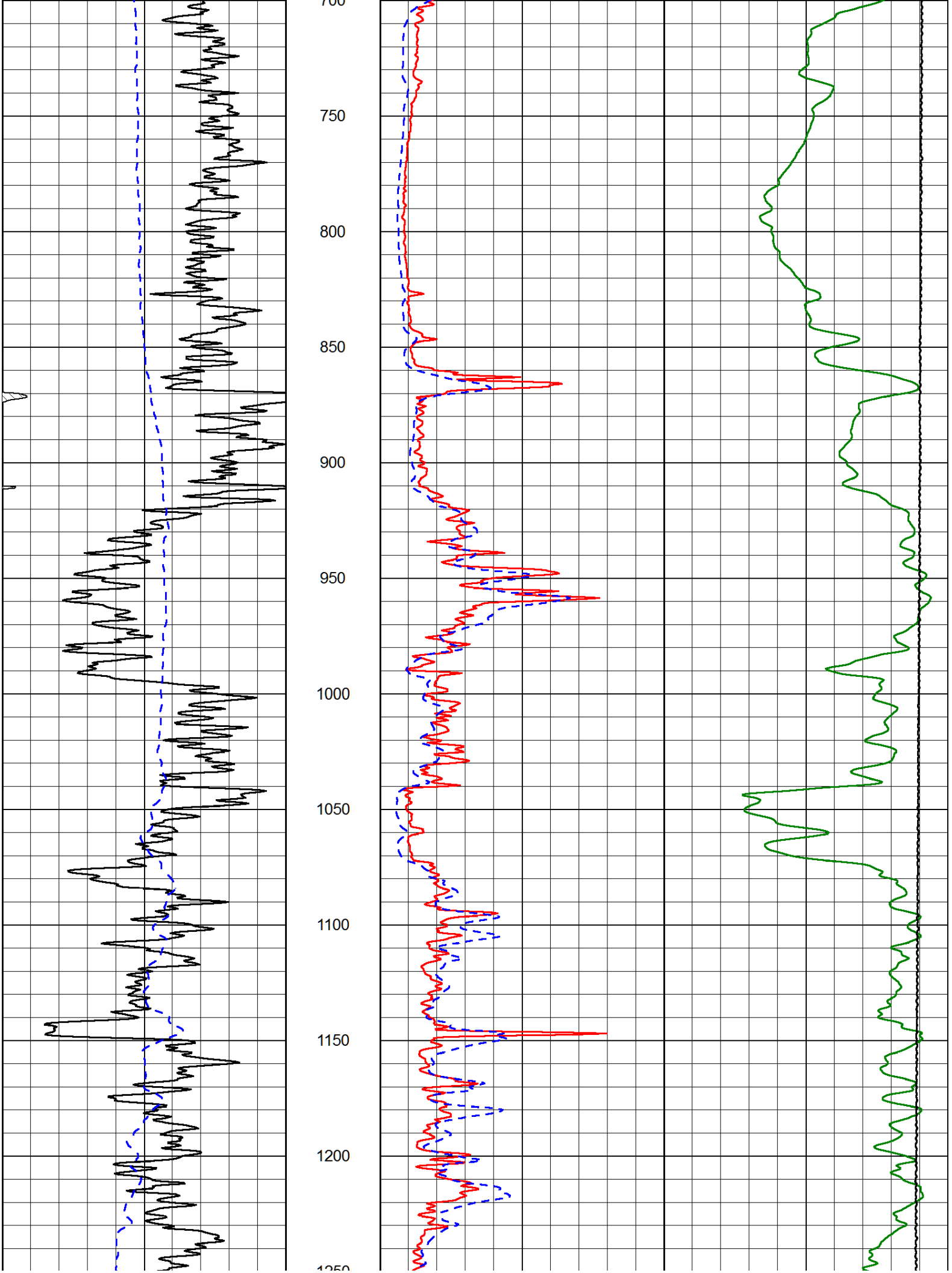
Comments

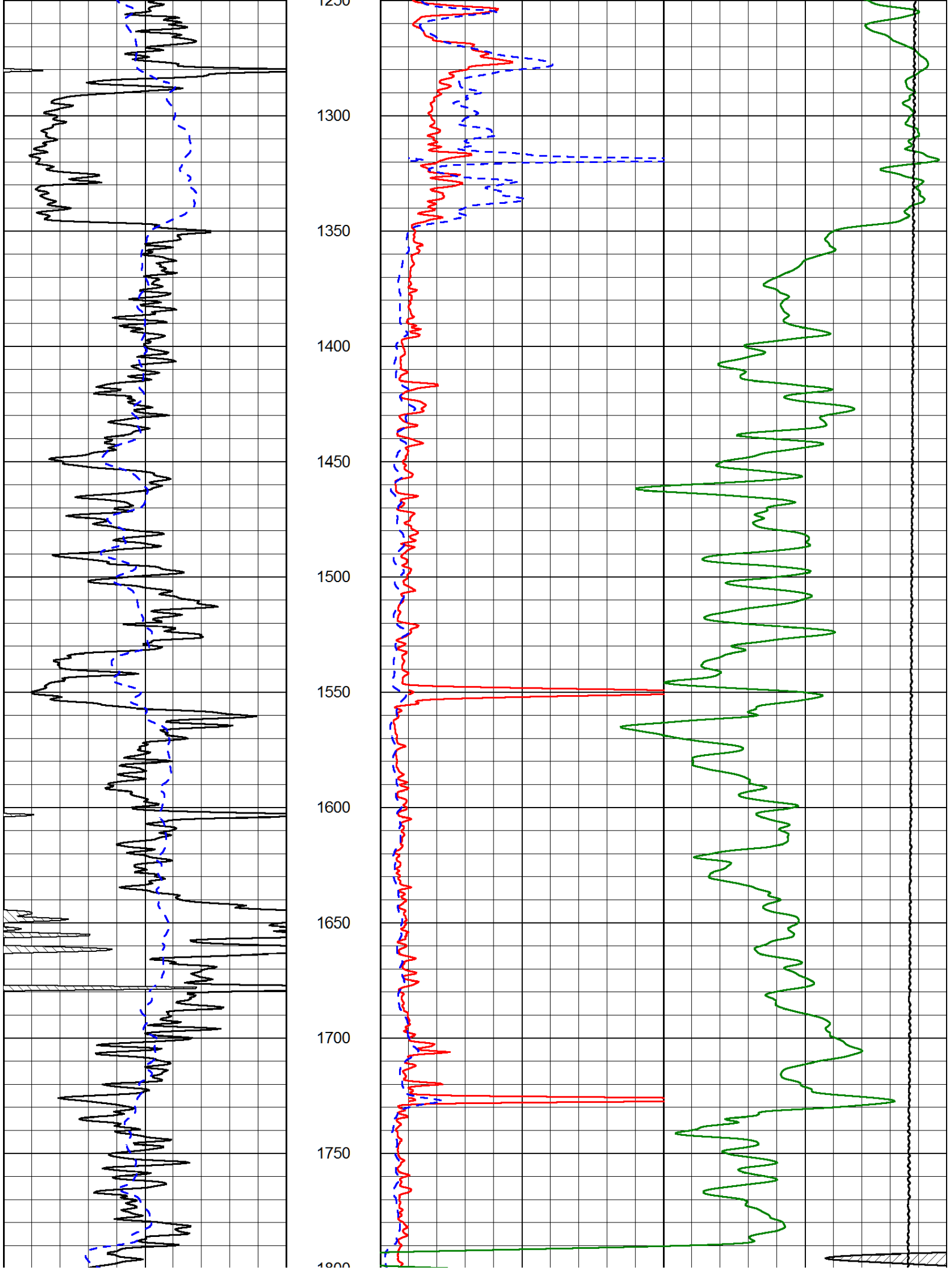
Thank you for using Log-Tech, Inc.
(785) 625-3858

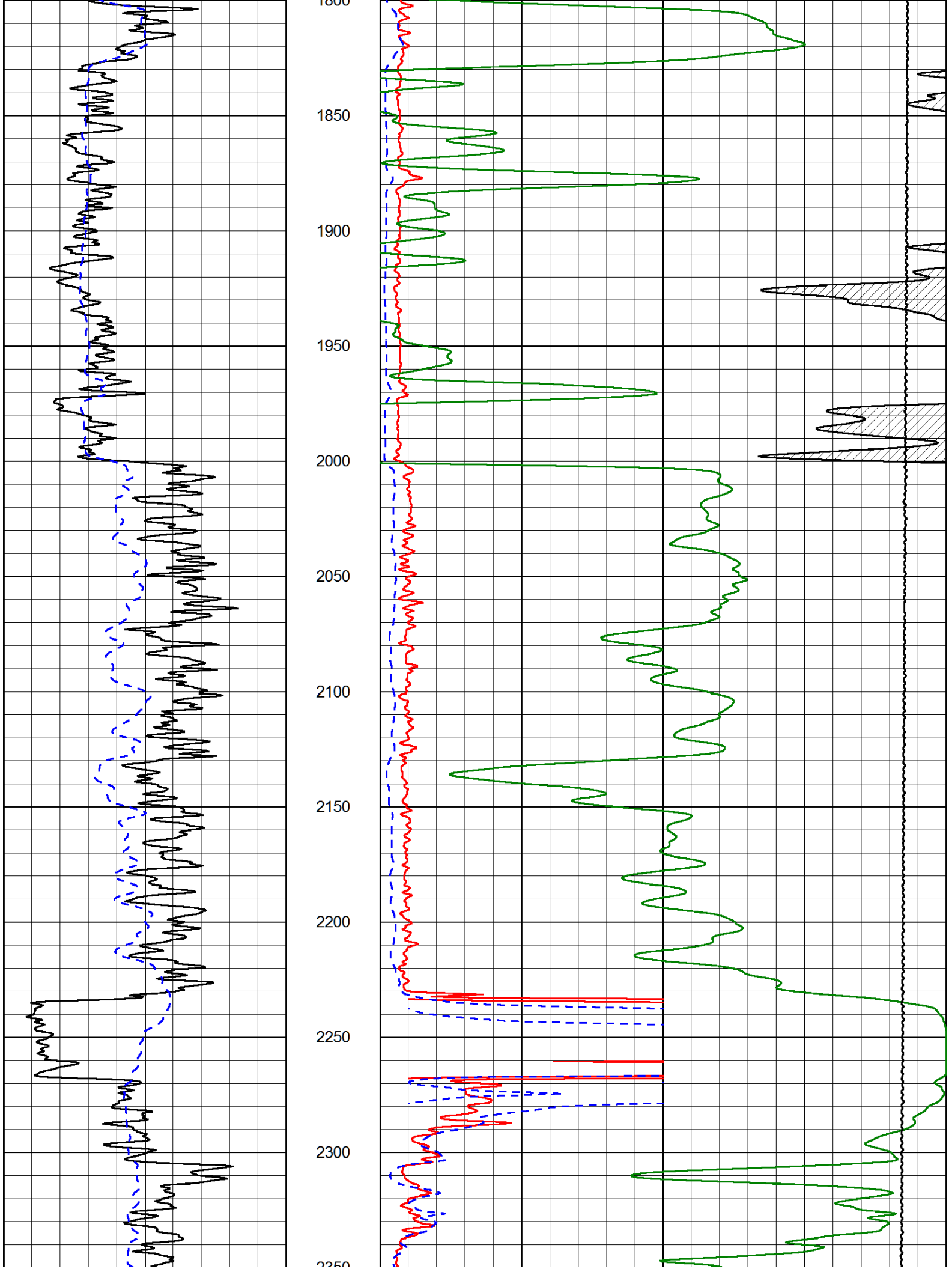
Collyer,
West on Hwy 40 to 78 Rd, 11 1/4 North to 100 Rd, 1/4 East.
North into

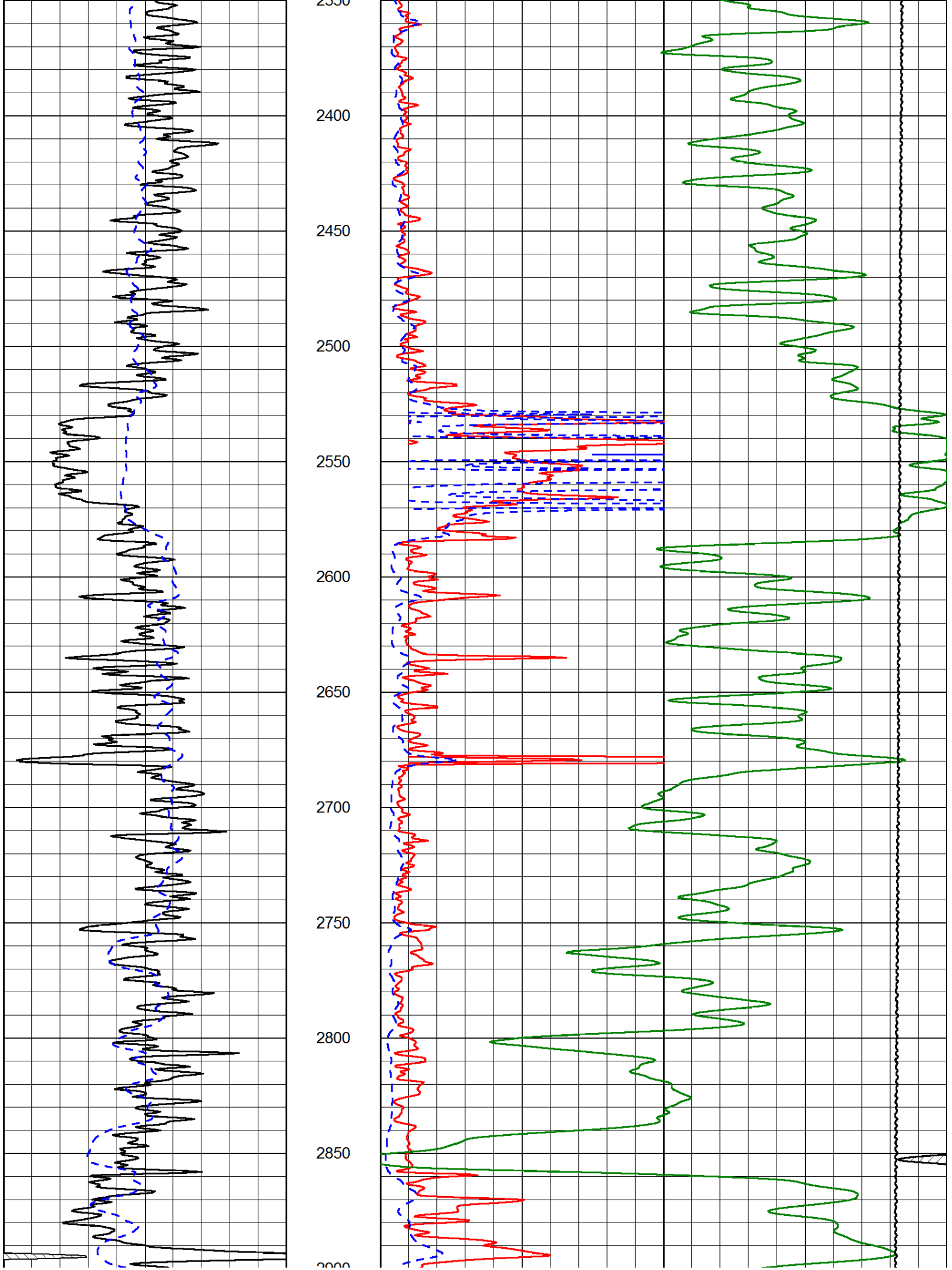
Database File: culbreath_060813hd.db
Dataset Pathname: dil/custck
Presentation Format: dil2in
Dataset Creation: Sat Jun 08 19:50:54 2013
Charted by: Depth in Feet scaled 1:600

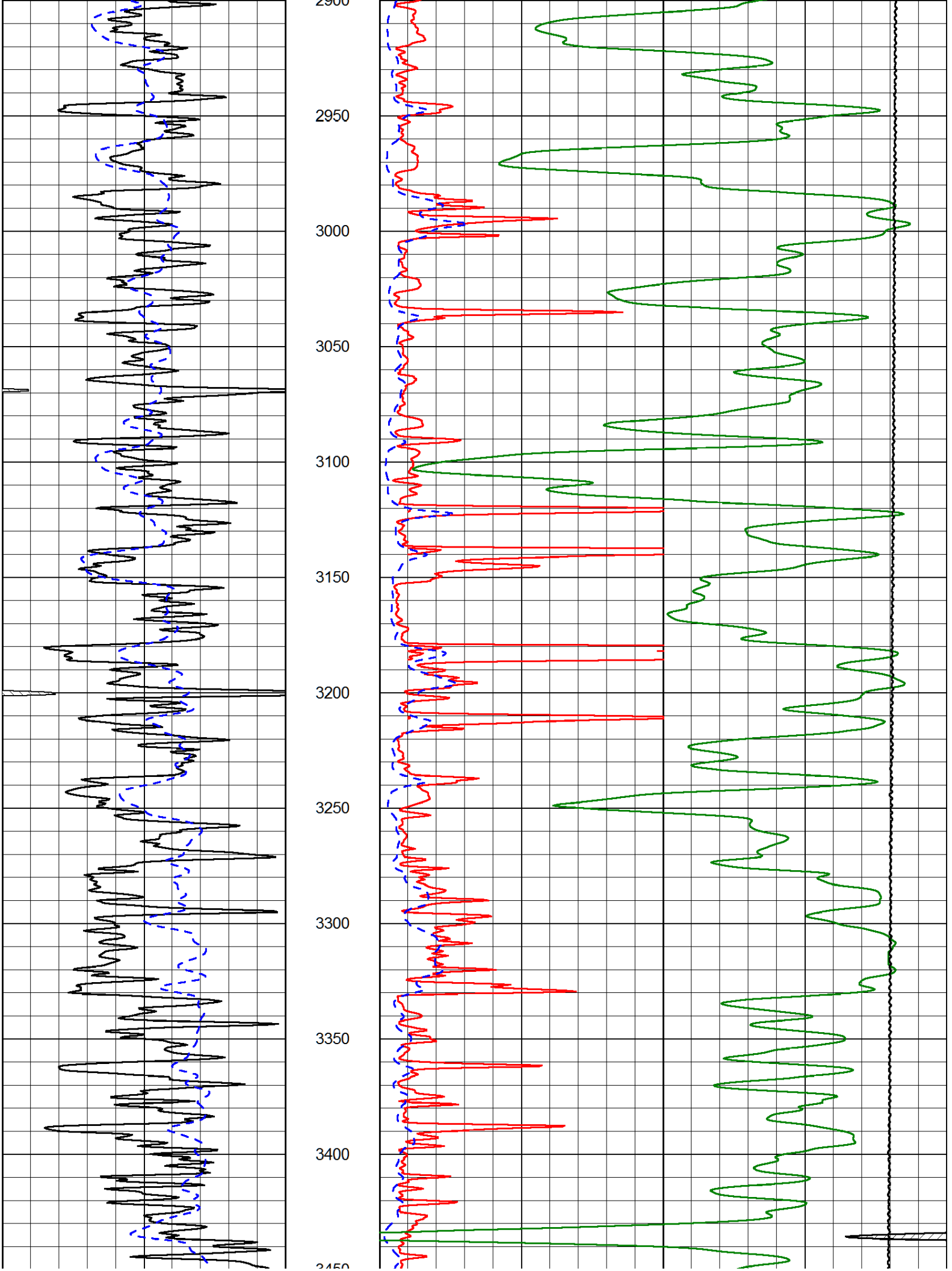

0 Gamma Ray (GAPI) 150
-200 SP (mV) 0
0 Shallow Resistivity (Ohm-m) 50
0 Deep Resistivity (Ohm-m) 50
1000 Conductivity (Ohm-m) 0
15000 Line Tension (lb) 0
Shallow Resistivity
50 (Ohm-m) 500
50 Deep Resistivity (Ohm-m) 500
250
300
350
400
450
500
550
600
650
700

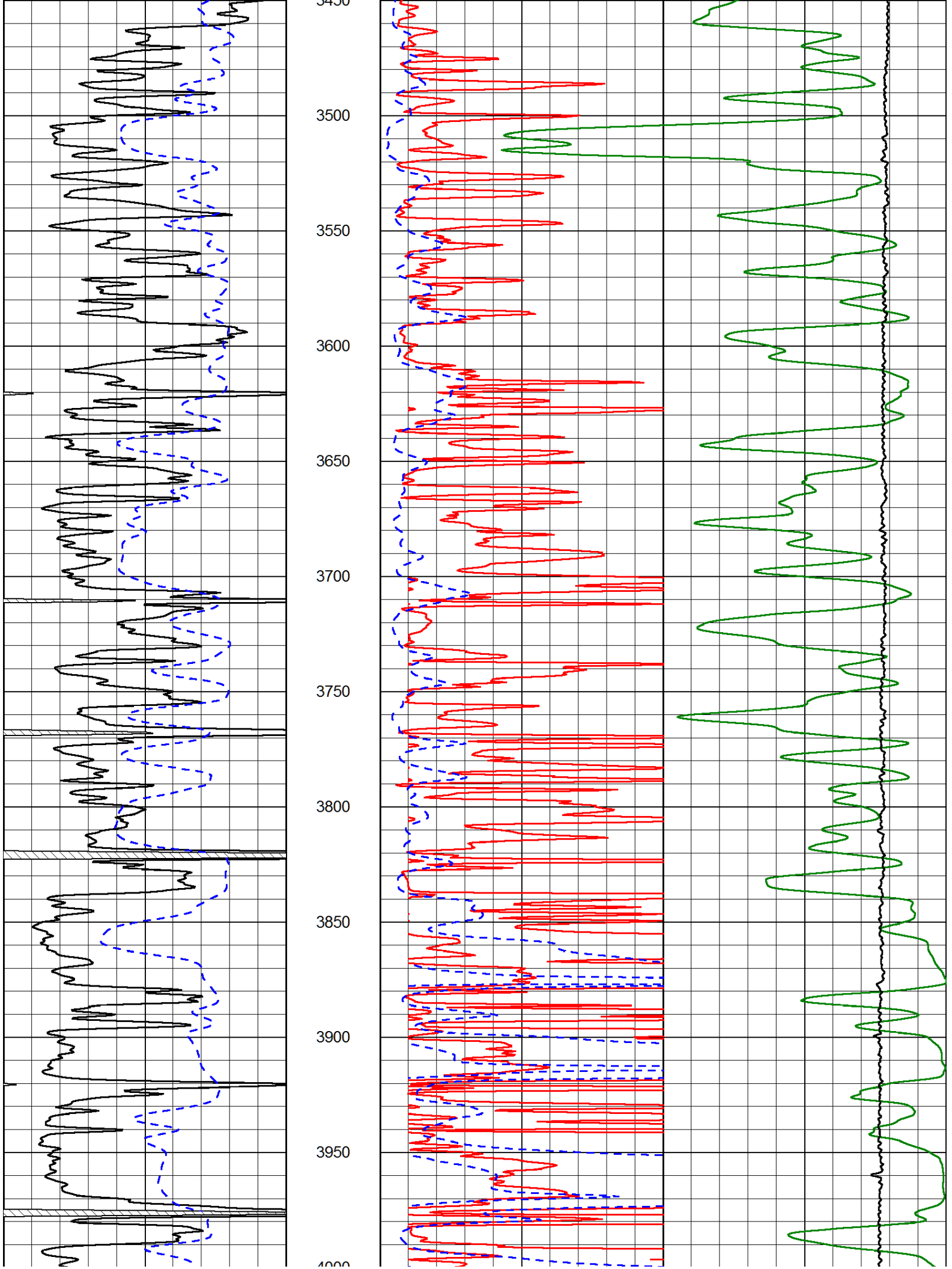

700
750
800
850
900
950
1000
1050
1100
1150
1200
1250

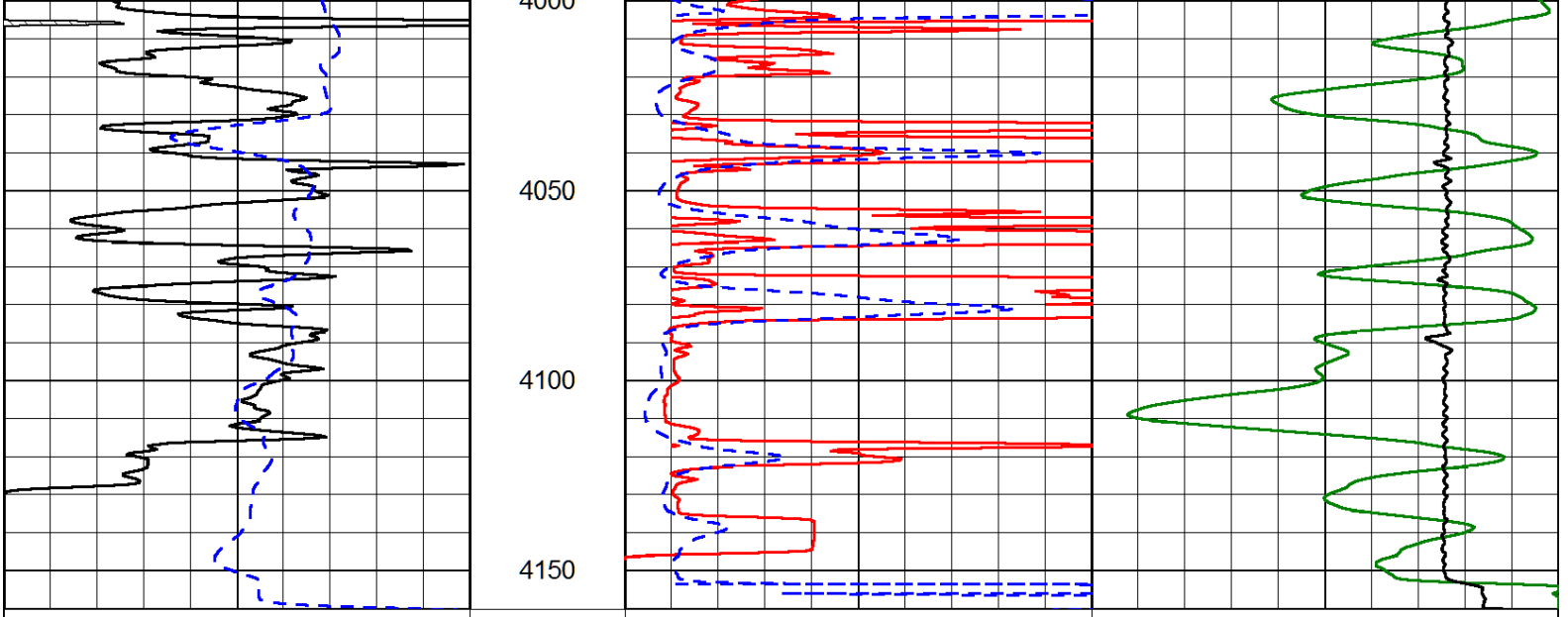

1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
1800


1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
2350


2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
2900


2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
3450


3450
3500
3550
3600
3650
3700
3750
3800
3850
3900
3950
4000



0	Gamma Ray (GAPI)	150
-200	SP (mV)	0

0	Shallow Resistivity (Ohm-m)	50
0	Deep Resistivity (Ohm-m)	50
1000	Conductivity (Ohm-m)	0
15000	Line Tension (lb)	0

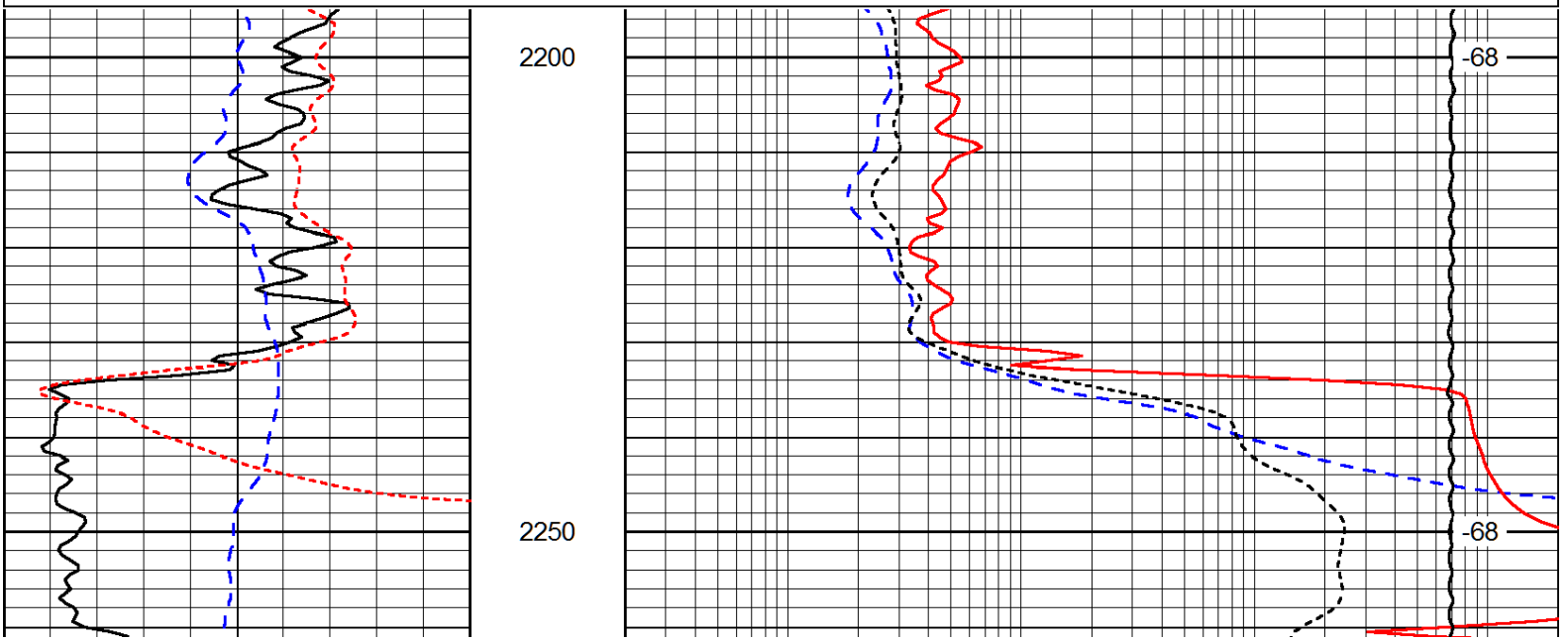
	Shallow Resistivity	
50	(Ohm-m)	500
50	Deep Resistivity (Ohm-m)	500

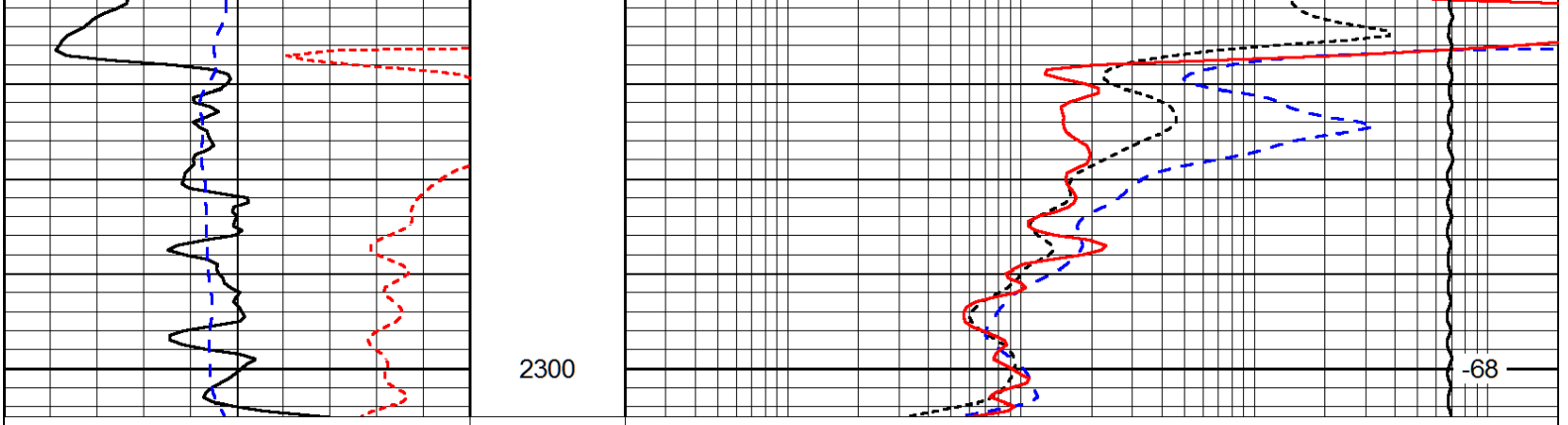
Database File:	culbreath_060813hd.db
Dataset Pathname:	dil/custck
Presentation Format:	dil
Dataset Creation:	Sat Jun 08 19:50:54 2013
Charted by:	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD (ft/min)





0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

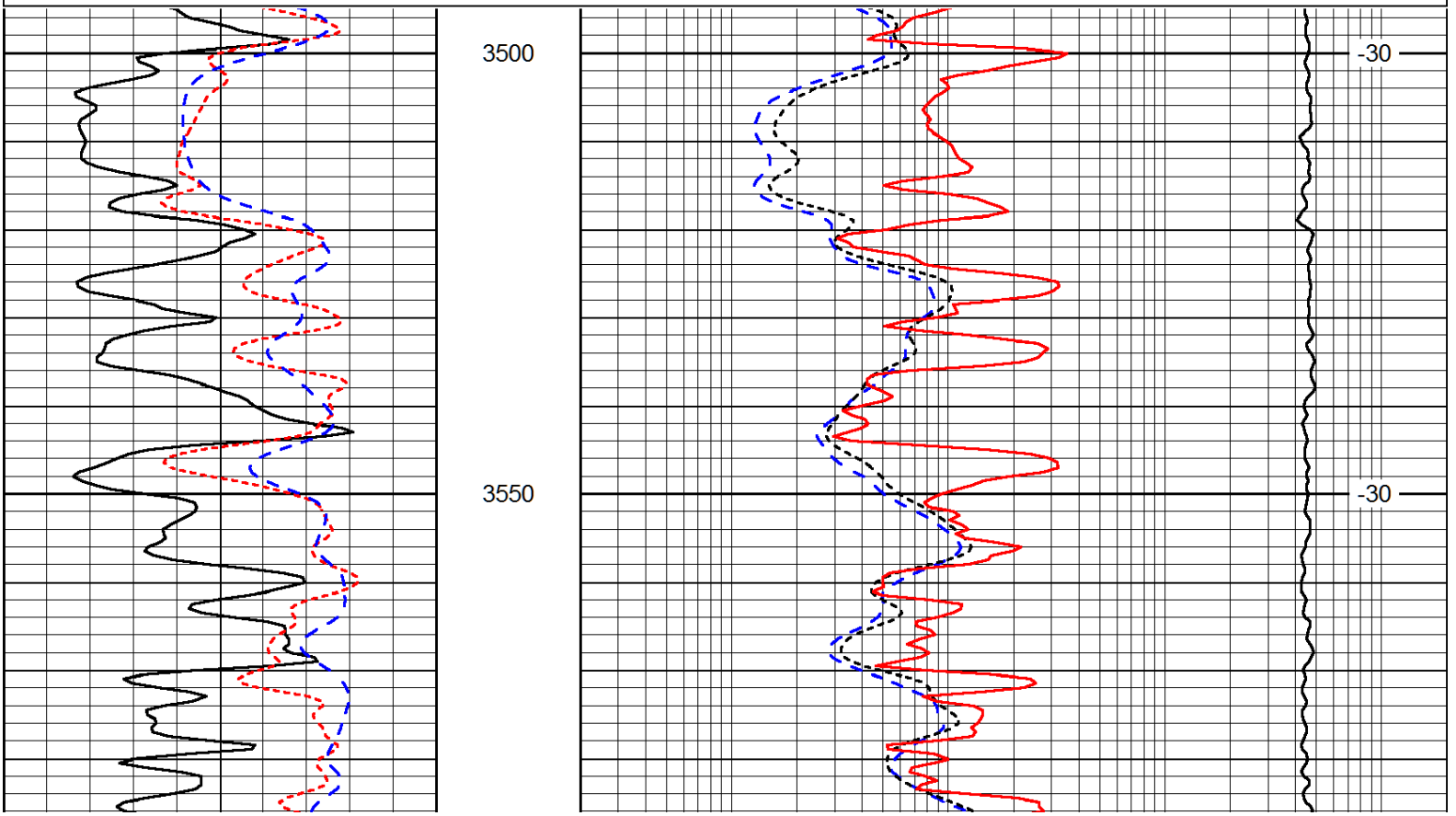
LSPD (ft/min)

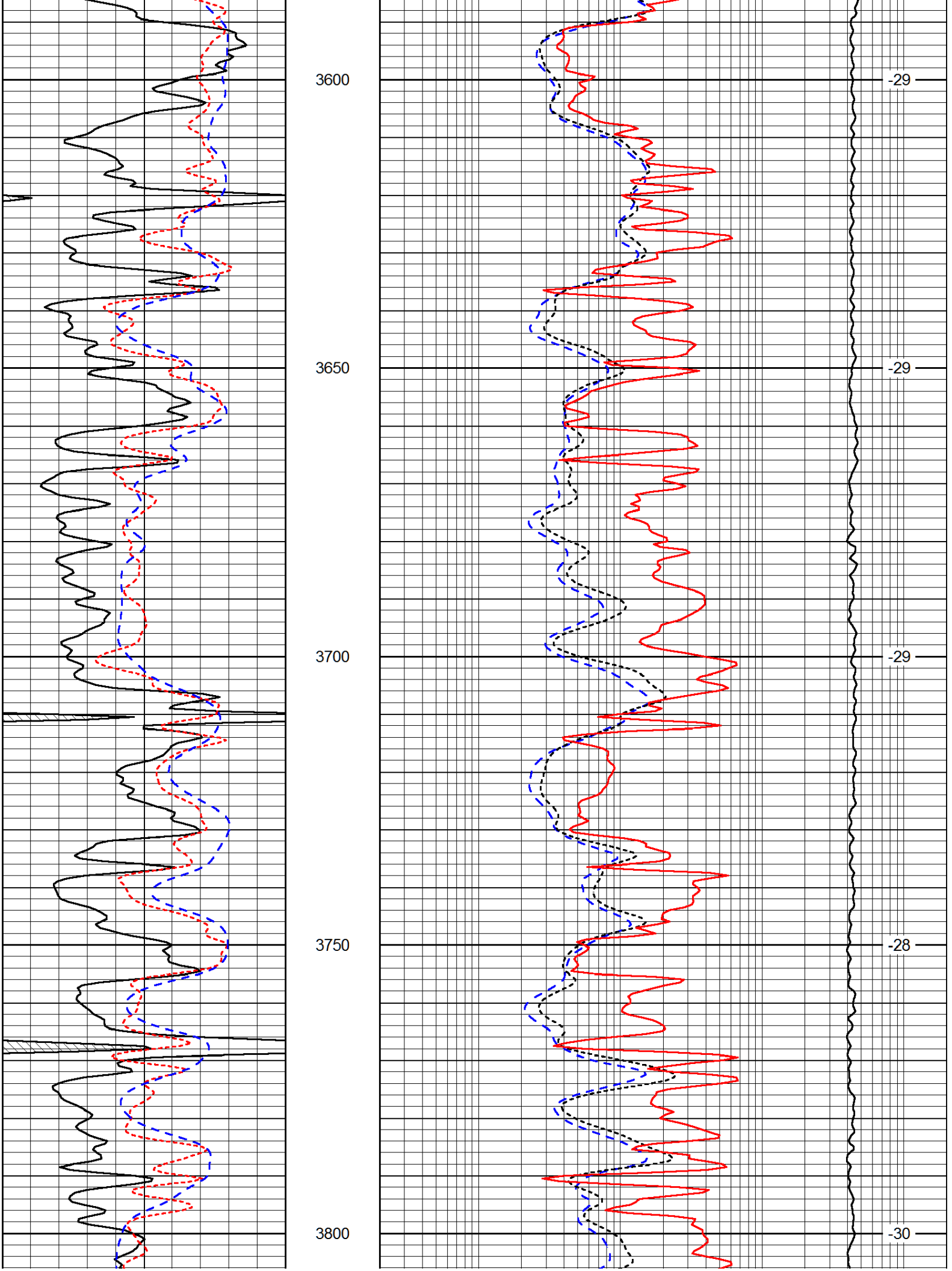
Database File:	culbreath_060813hd.db
Dataset Pathname:	dil/custck
Presentation Format:	dil
Dataset Creation:	Sat Jun 08 19:50:54 2013
Charted by:	Depth in Feet scaled 1:240

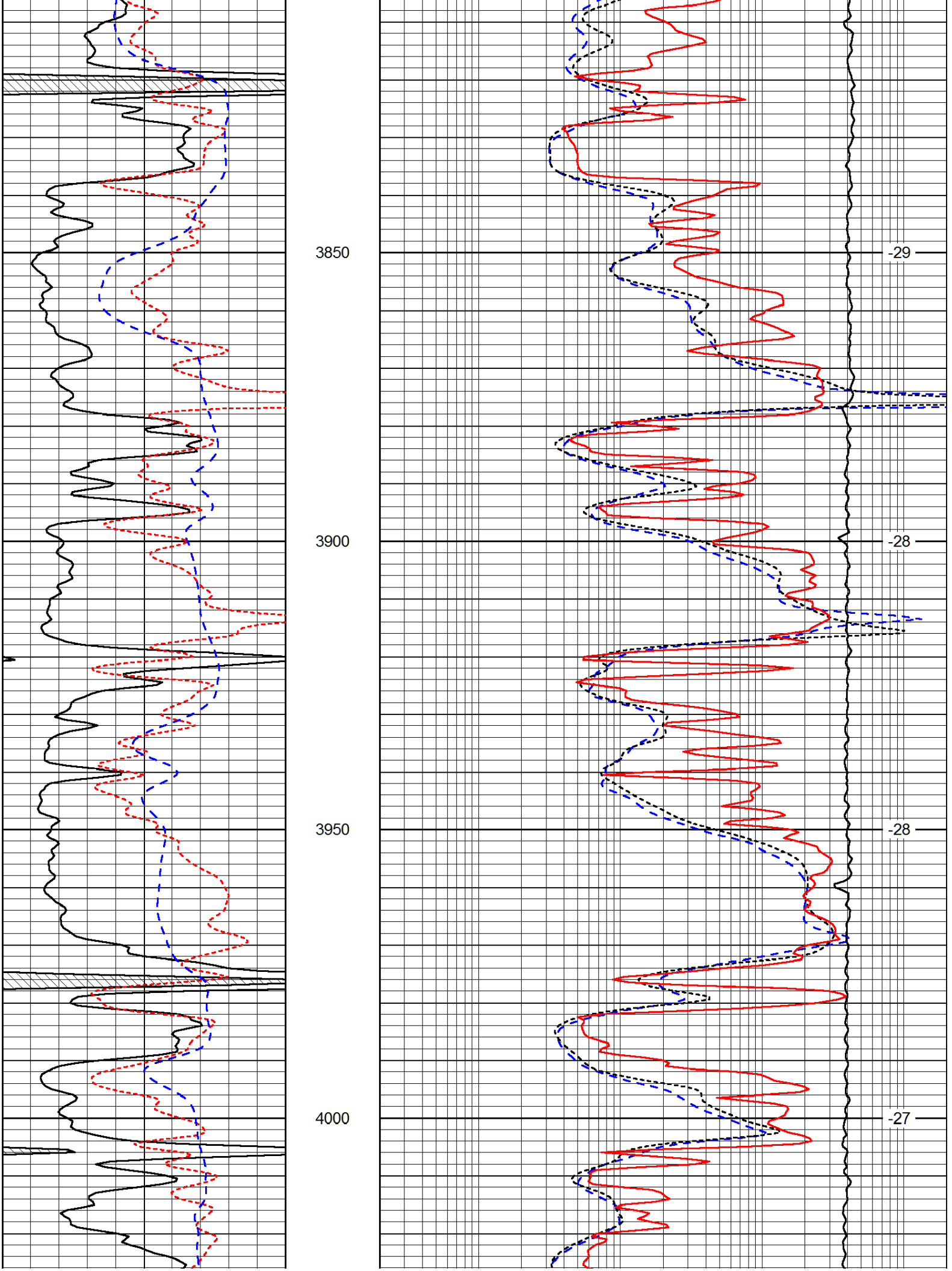
0	Gamma Ray (GAPI)	150
-160	RXO/RT	40
-200	SP (mV)	0

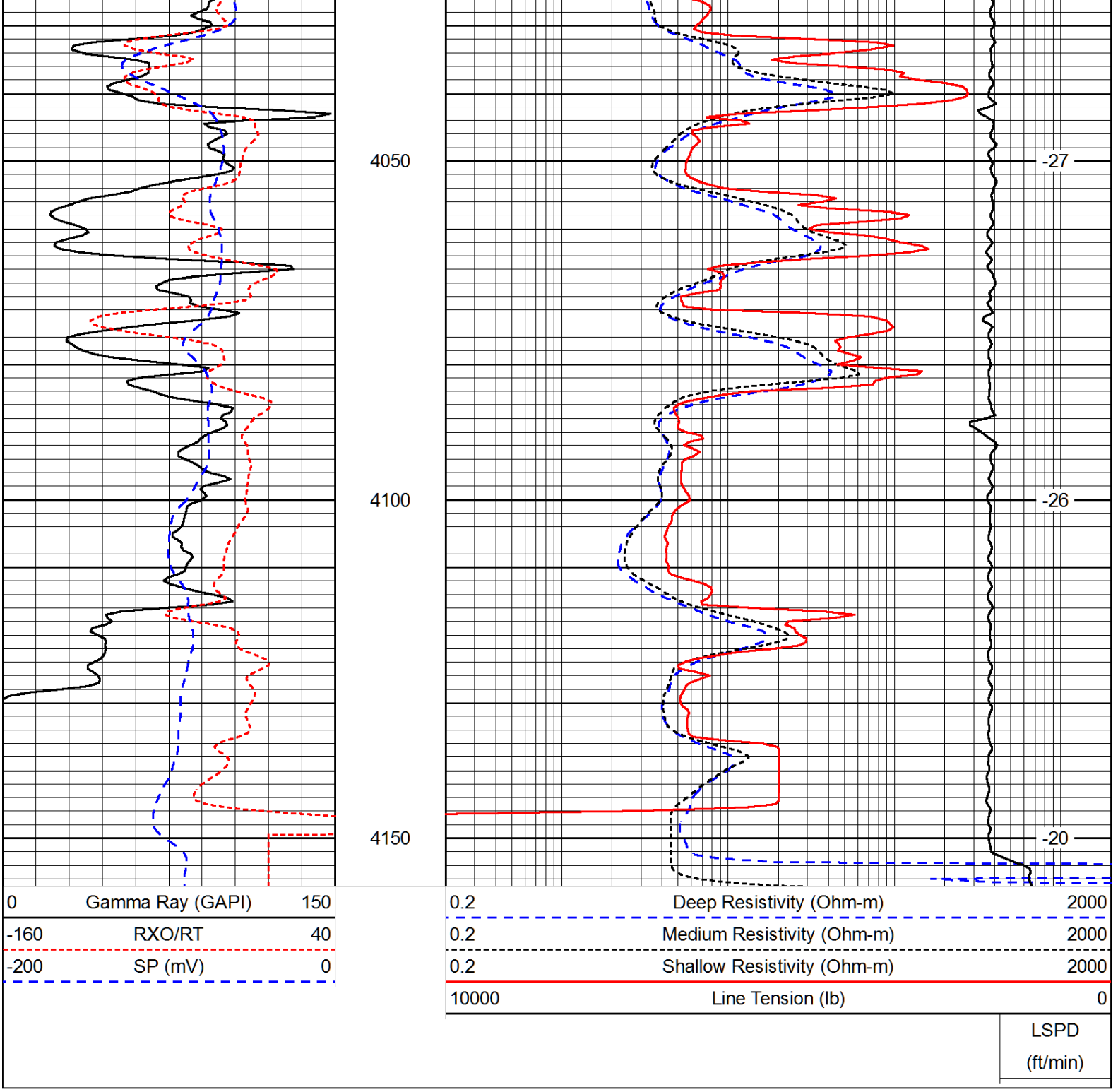
0.2	Deep Resistivity (Ohm-m)	2000
0.2	Medium Resistivity (Ohm-m)	2000
0.2	Shallow Resistivity (Ohm-m)	2000
10000	Line Tension (lb)	0

LSPD (ft/min)




3600
3650
3700
3750
3800
-29
-29
-29
-28
-30


3850
3900
3950
4000
-29
-28
-28
-27


4050
4100
4150
-27
-26
-20
0
Gamma Ray (GAPI)
150
-160
RXO/RT
40
-200
SP (mV)
0
0.2
Deep Resistivity (Ohm-m)
2000
0.2
Medium Resistivity (Ohm-m)
2000
0.2
Shallow Resistivity (Ohm-m)
2000
10000
Line Tension (lb)
0
LSPD
(ft/min)