PIONEER

Pioneer Energy Services

Dual Induction Log

Company	Bach Oil Production
Well	Candy Krafft #2
Field	Woodruff
County	Phillips
State	Kansas
API No.	15-147-20,710-00-00

Location: 2000' FSL & 330' FWL

Sec: 12 Twp: 1S Rge: 19W

Permanent Datum: Ground Level — Elevation 2073

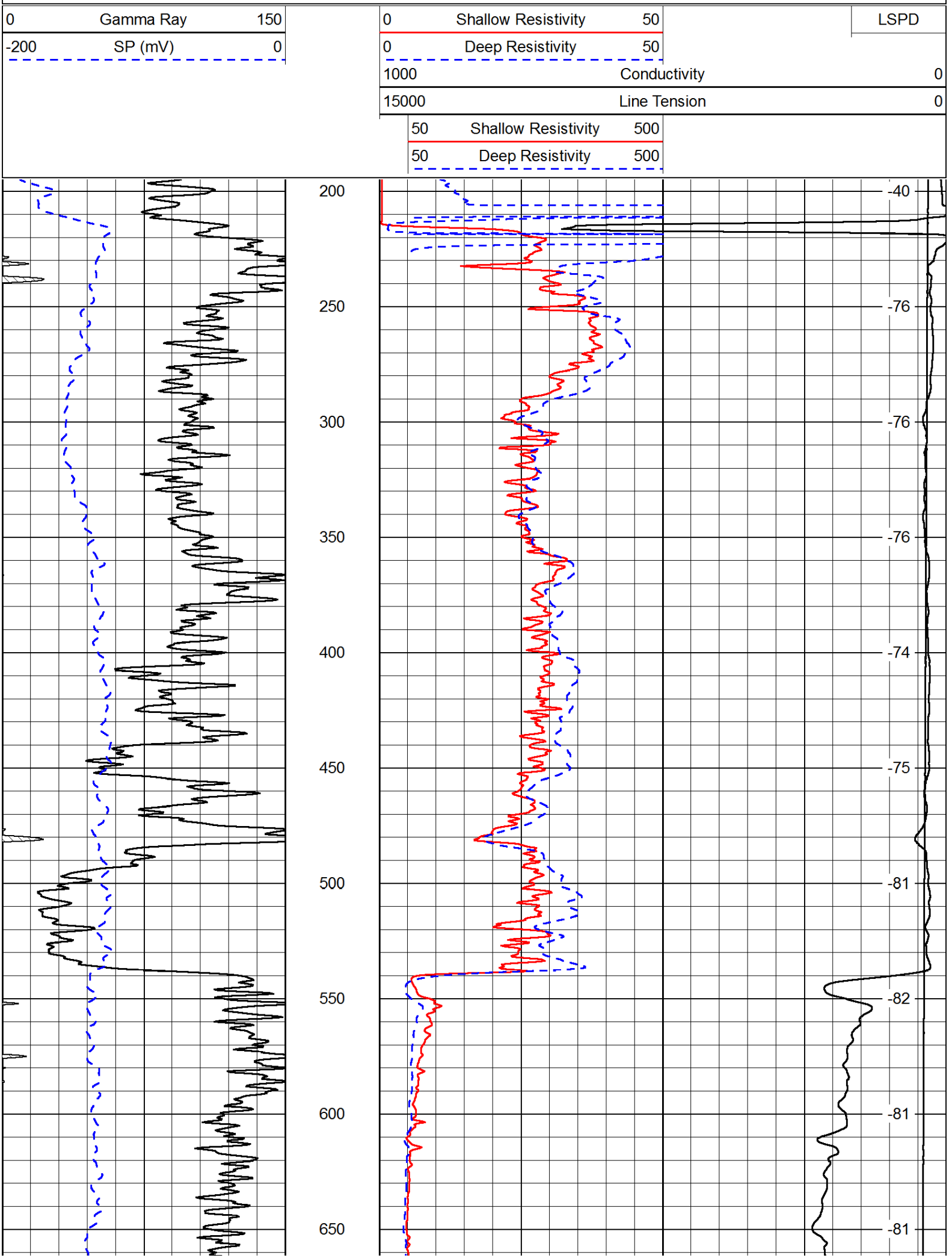
Log Measured From: Kelly Bushing — 5 Ft. Above Perm. Datum

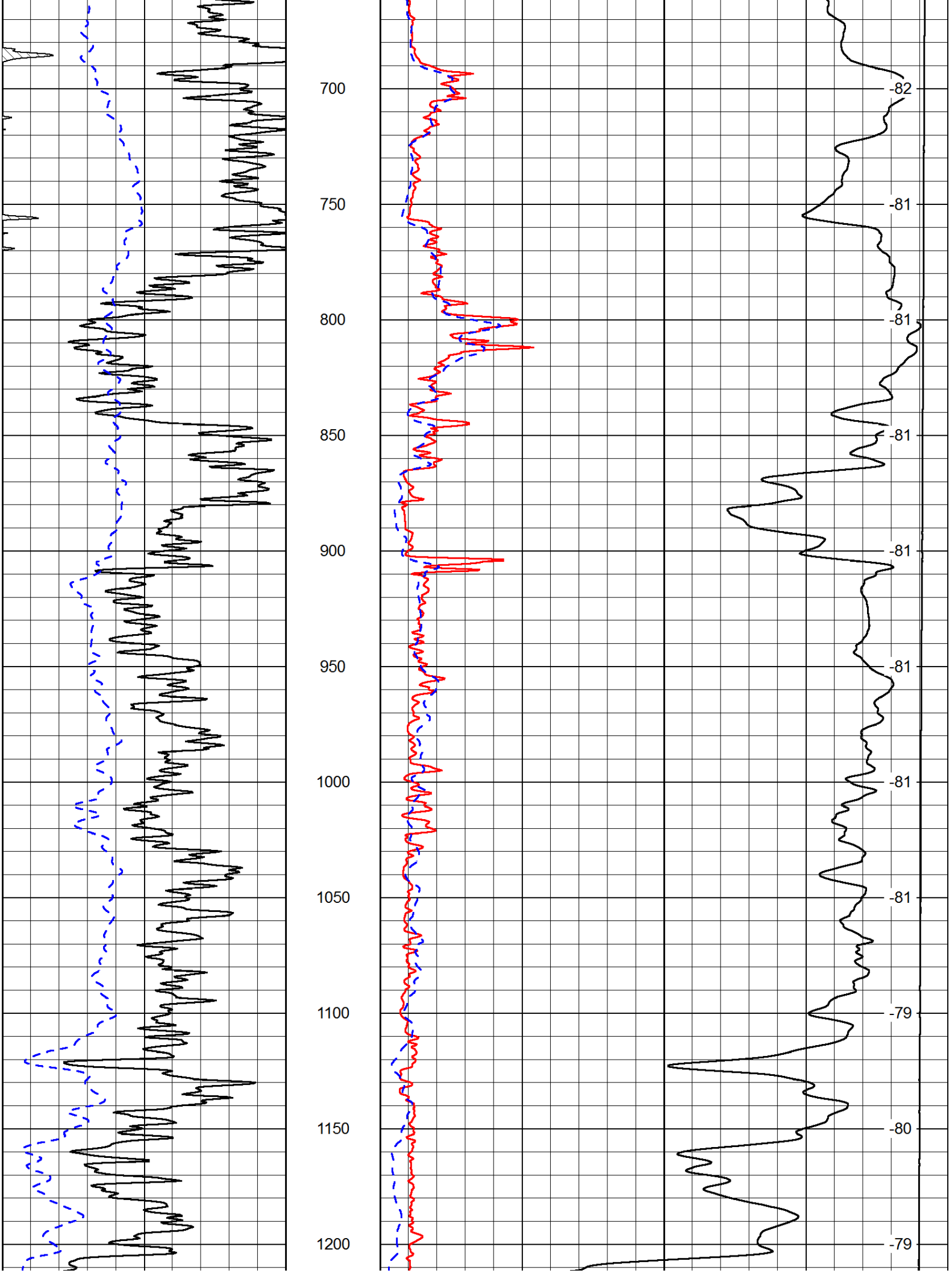
Drilling Measured From: Kelly Bushing

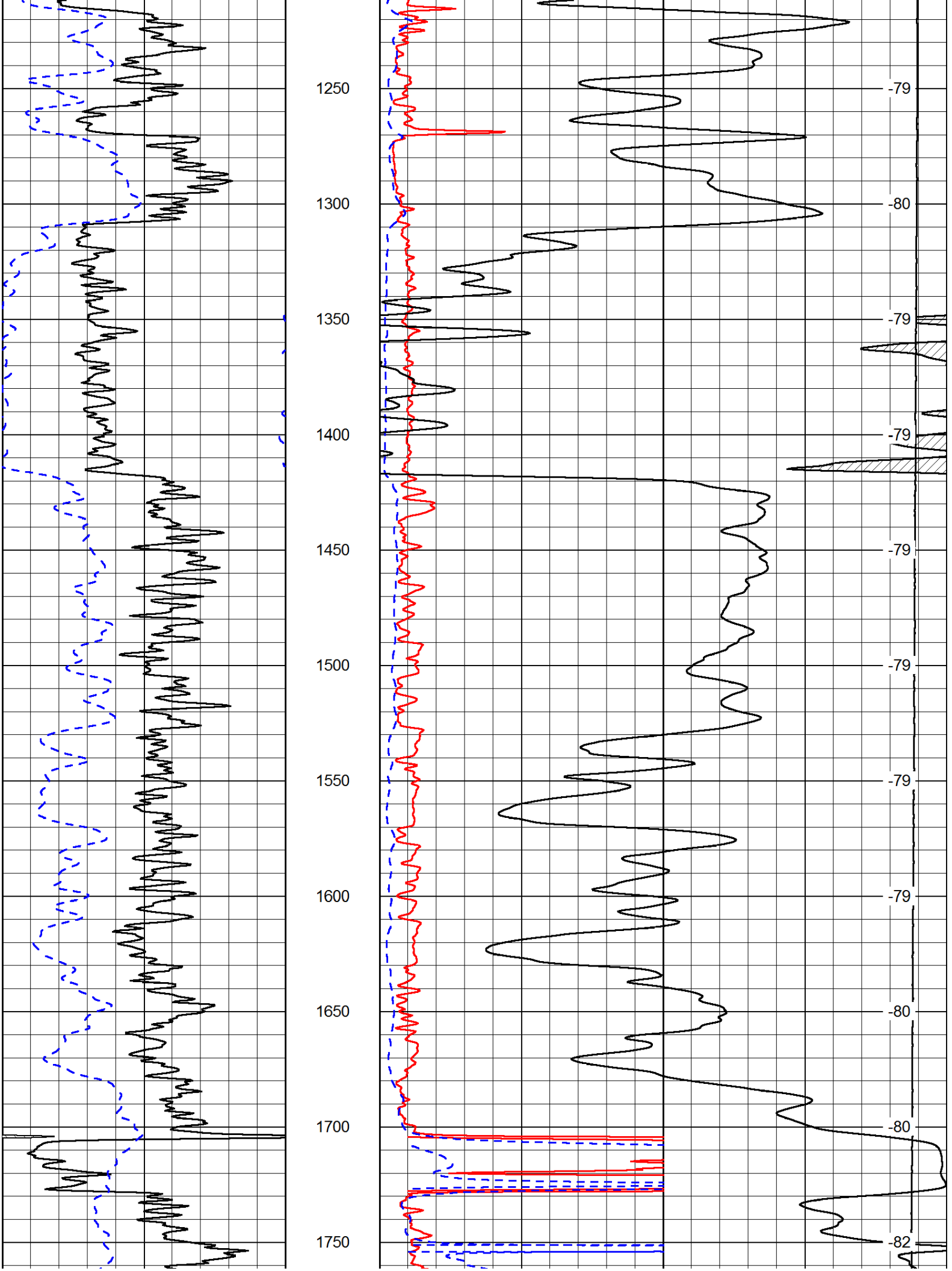
Other Services: CNL/CDL, MEL

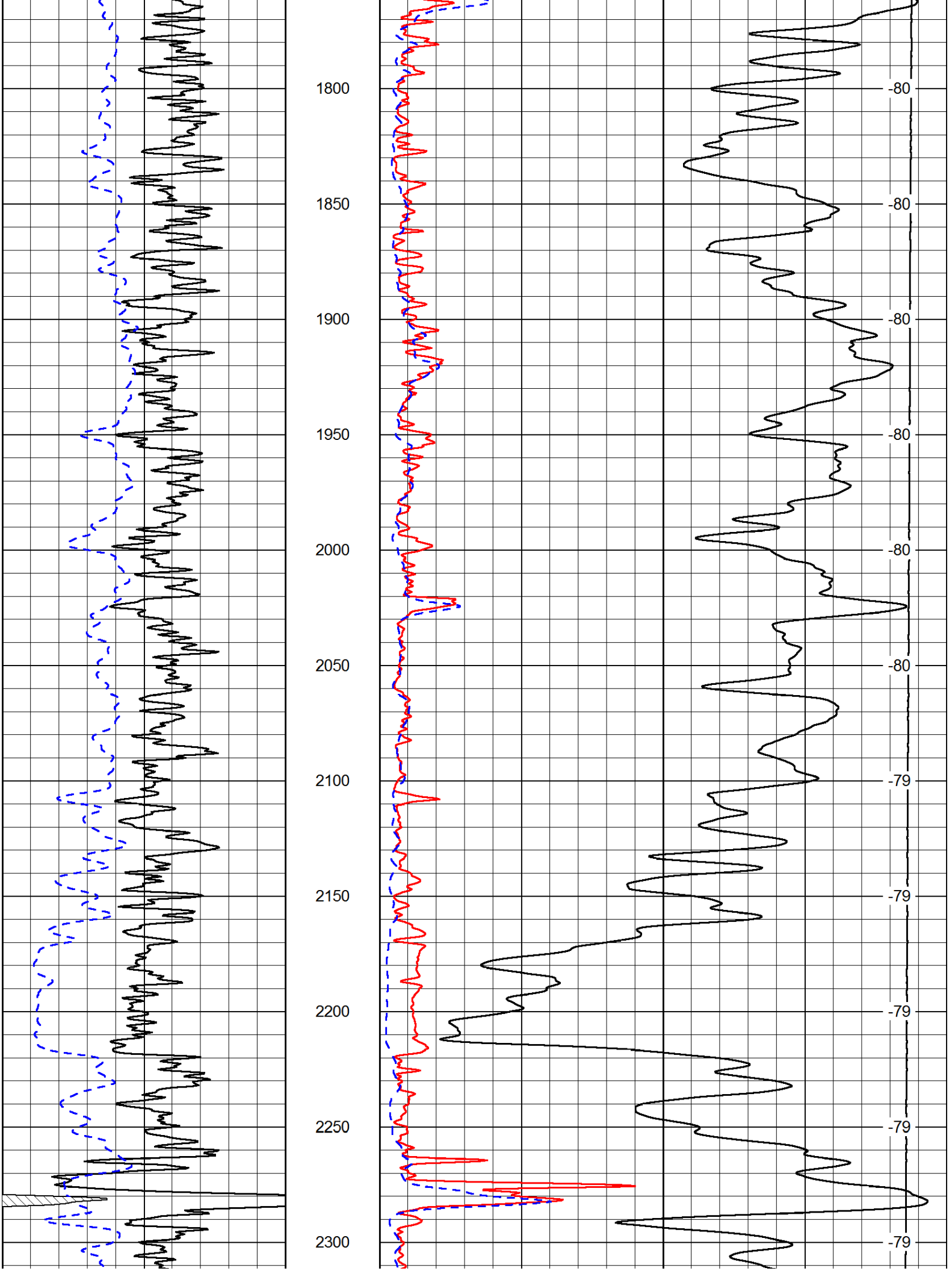
Elevation: K.B. 2078, D.F., G.L. 2073

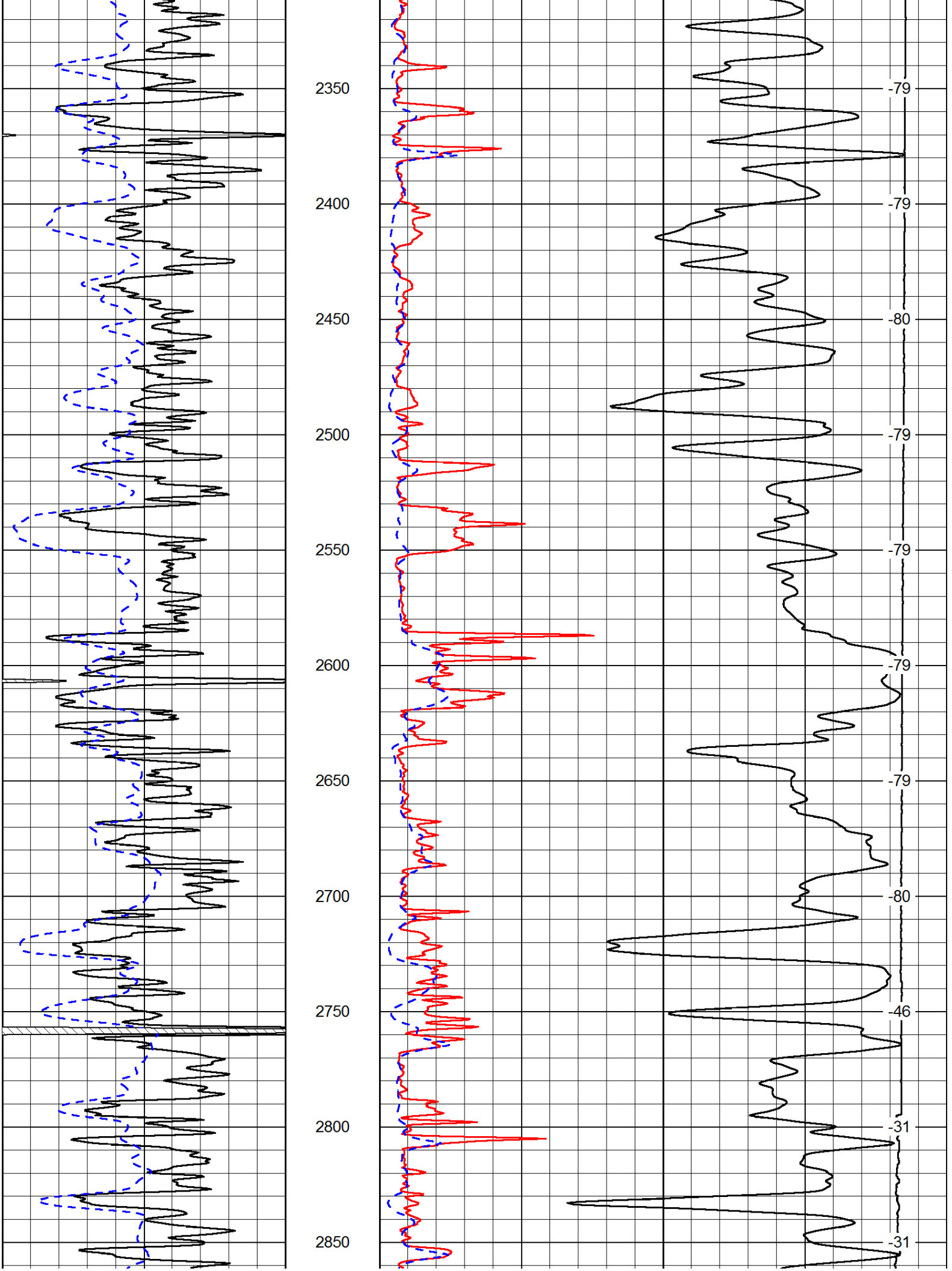
| | | |

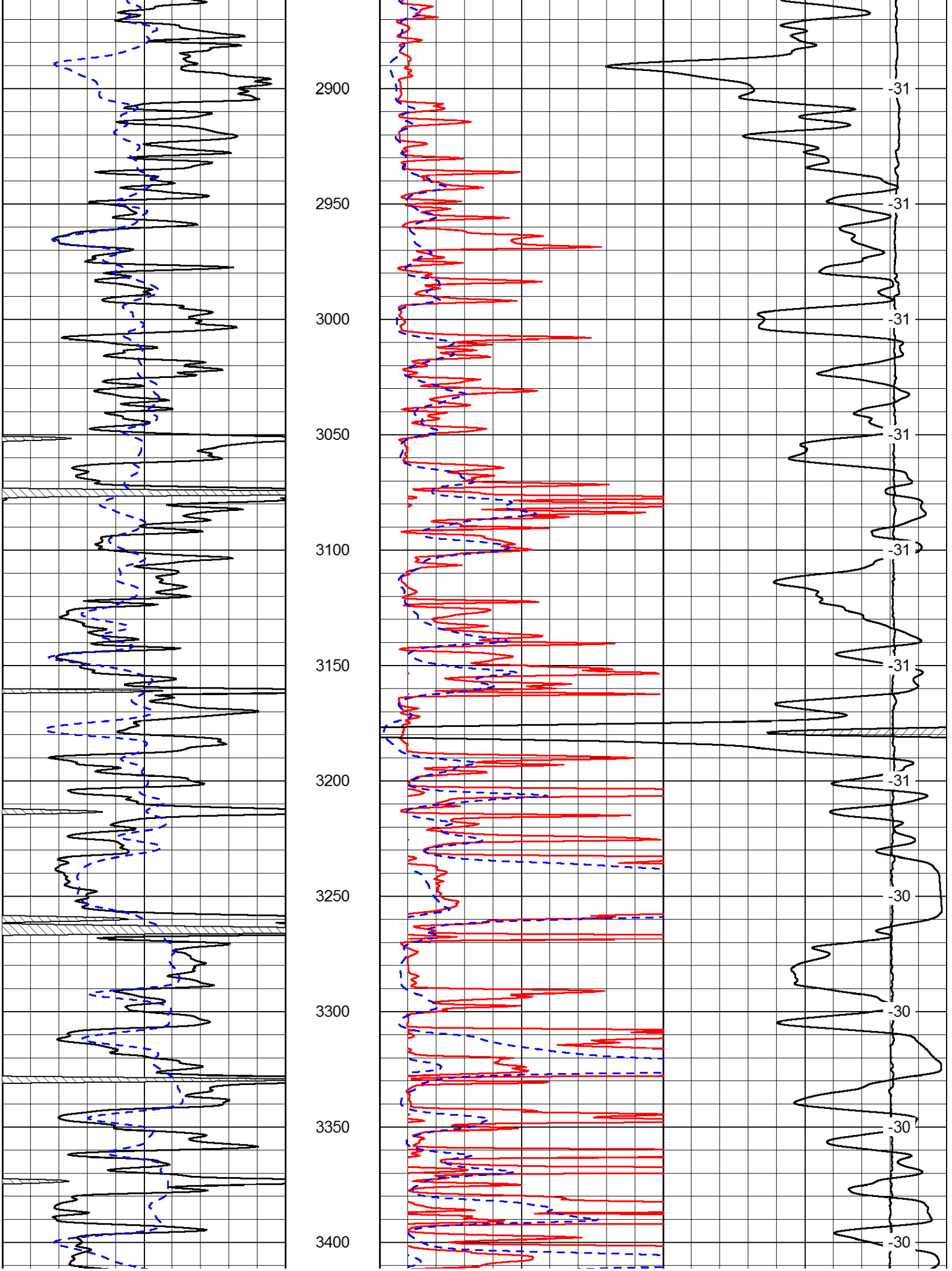

0 Gamma Ray 150
-200 SP (mV) 0
0 Shallow Resistivity 50
0 Deep Resistivity 50
1000 Conductivity 0
15000 Line Tension 0
50 Shallow Resistivity 500
50 Deep Resistivity 500
LSPD
200
250
300
350
400
450
500
550
600
650
-40
-76
-76
-76
-74
-75
-81
-82
-81
-81

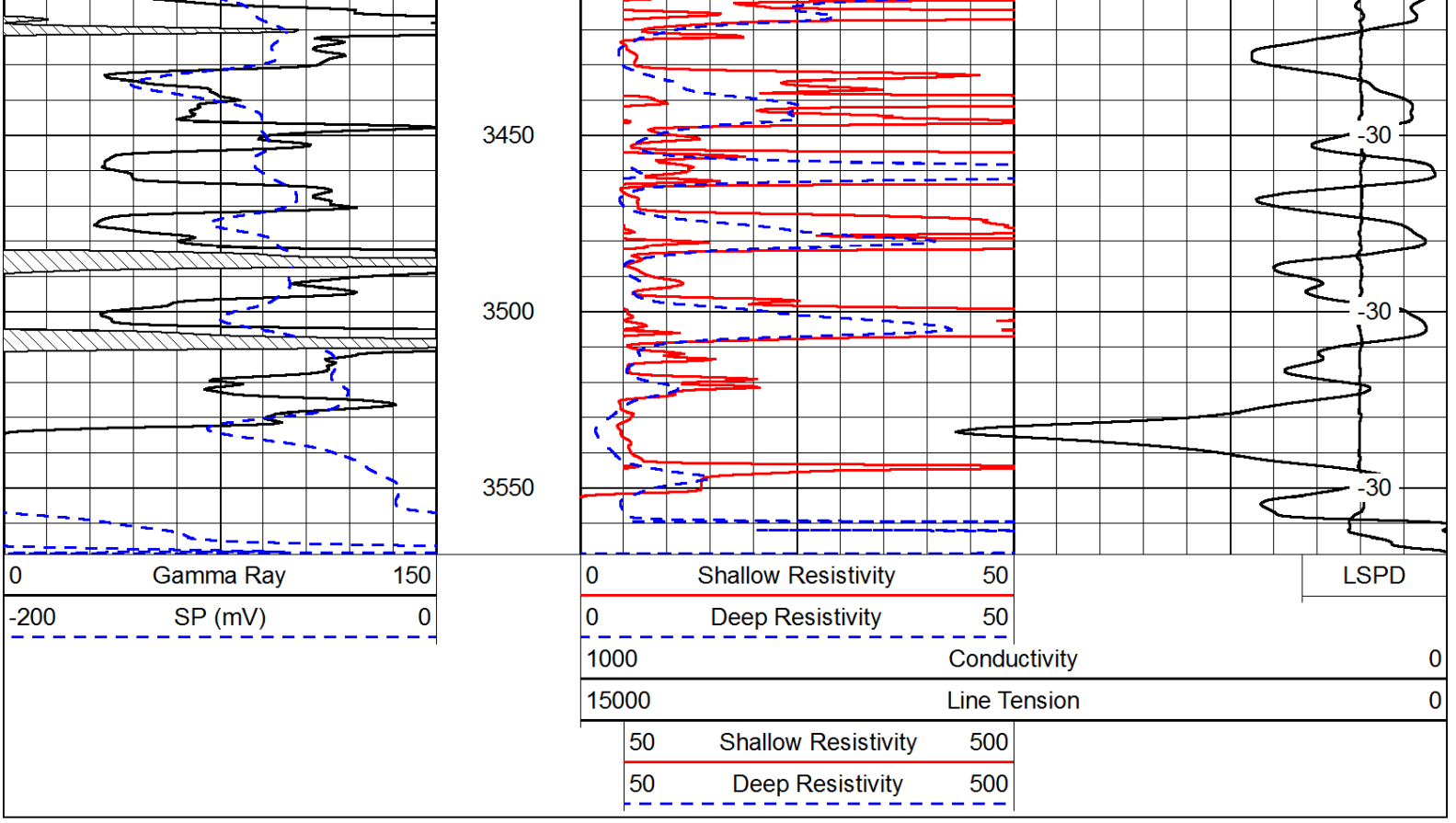

700
750
800
850
900
950
1000
1050
1100
1150
1200
-82
-81
-81
-81
-81
-81
-81
-81
-79
-80
-79


1250
1300
1350
1400
1450
1500
1550
1600
1650
1700
1750
-79
-80
-79
-79
-79
-79
-79
-80
-80
-82

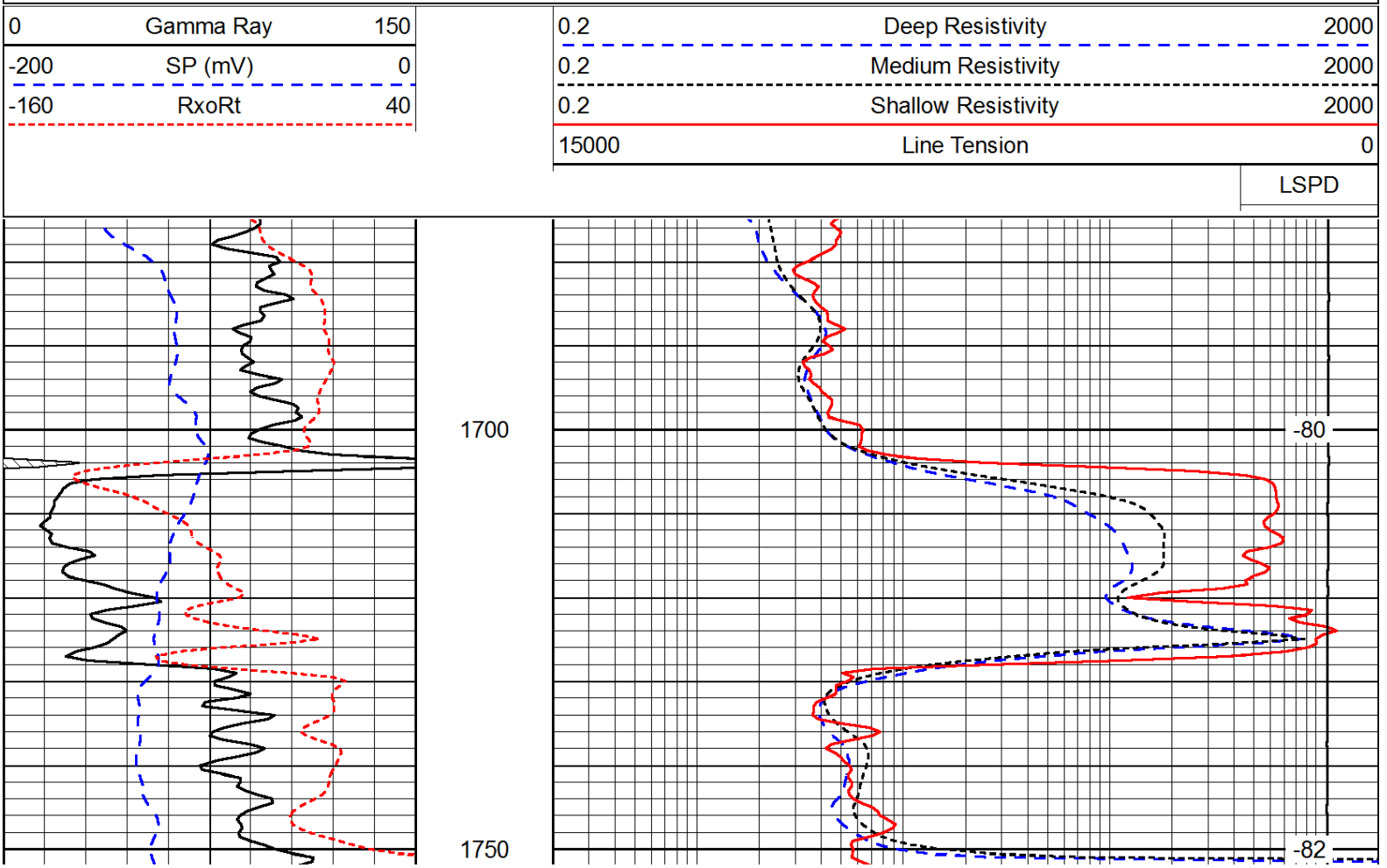

1800
1850
1900
1950
2000
2050
2100
2150
2200
2250
2300
-80
-80
-80
-80
-80
-79
-79
-79
-79

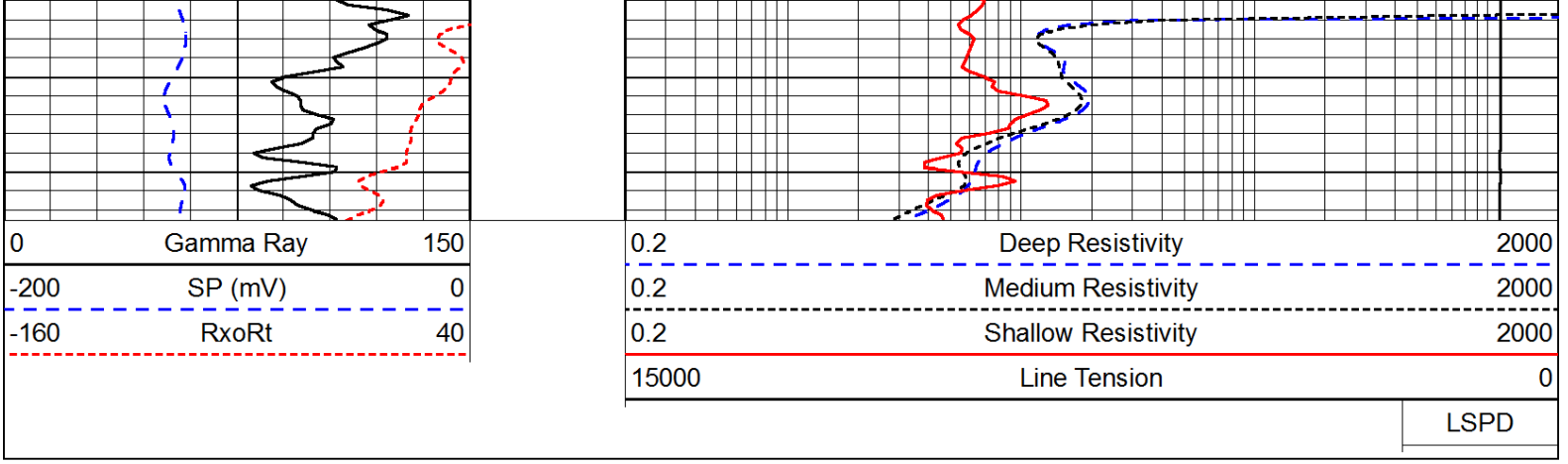

2350
2400
2450
2500
2550
2600
2650
2700
2750
2800
2850
-79
-79
-80
-79
-79
-79
-80
-46
-31
-31


2900
2950
3000
3050
3100
3150
3200
3250
3300
3350
3400
-31
-31
-31
-31
-31
-31
-30
-30
-30
-30

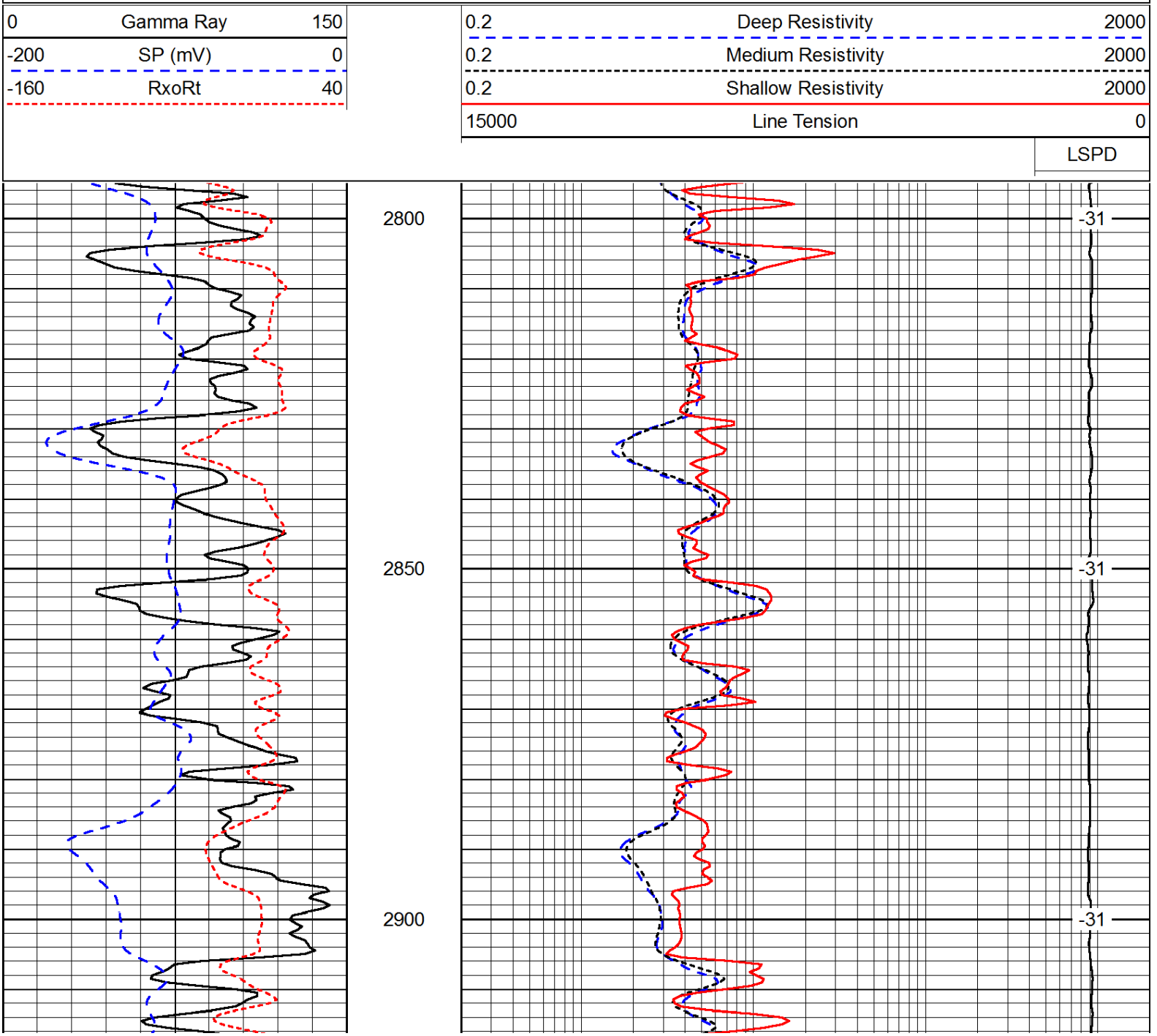


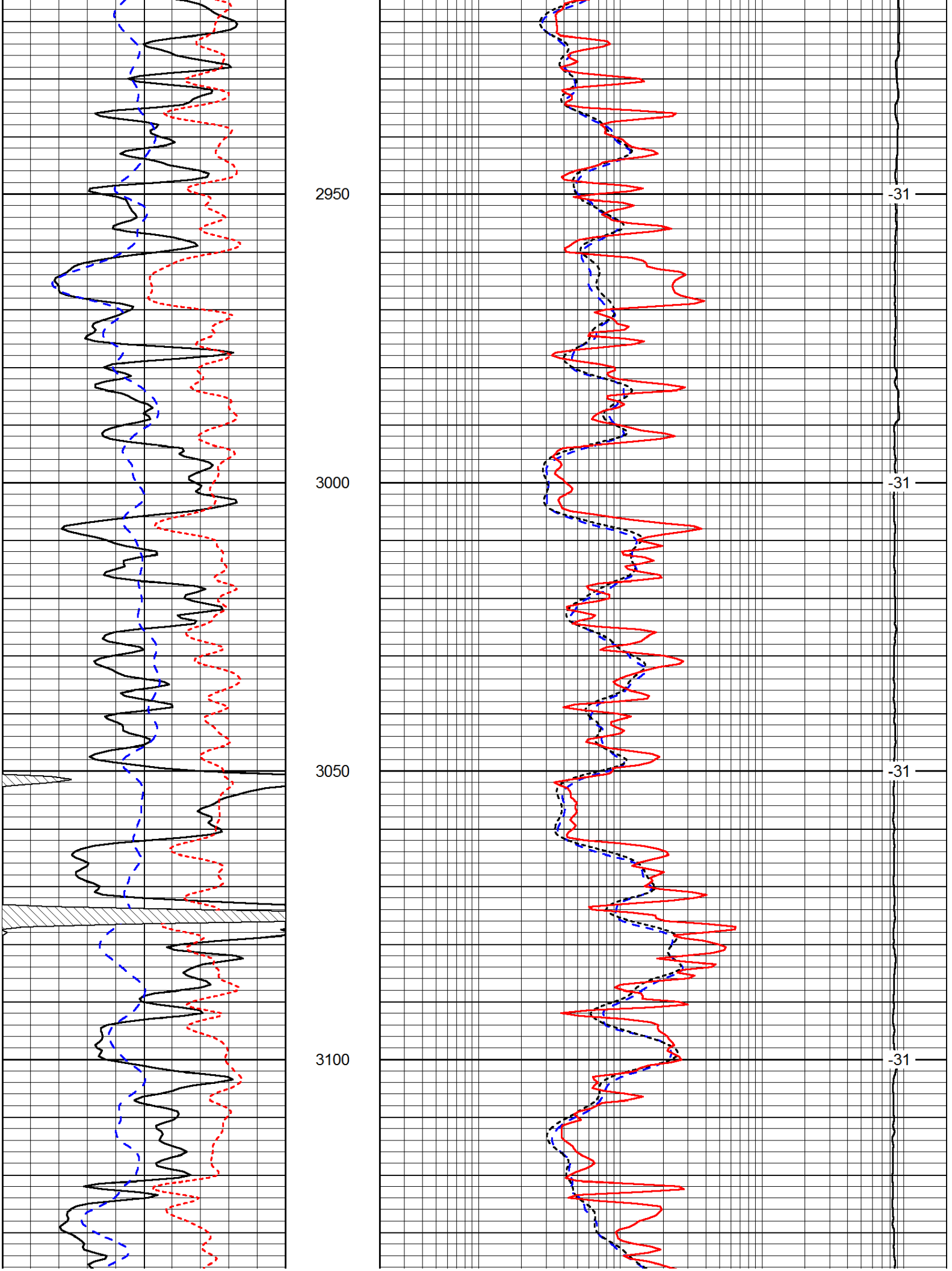
Database File: c:\warrior\data\bach_candy krafft #2\bachhd.db
Dataset Pathname: dil/bachstk
Presentation Format: dil
Dataset Creation: Sat May 18 11:10:54 2013
Charted by: Depth in Feet scaled 1:240

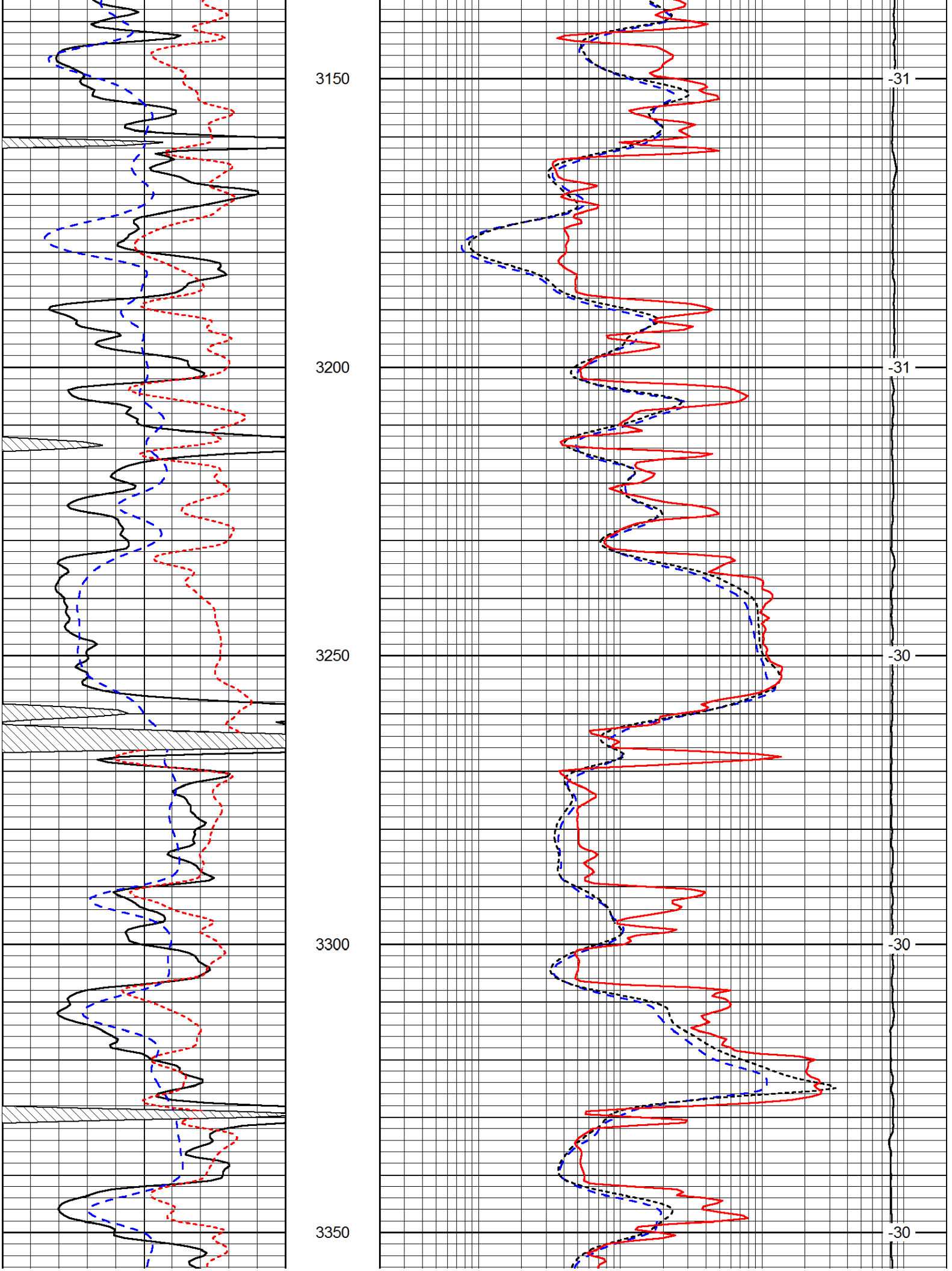


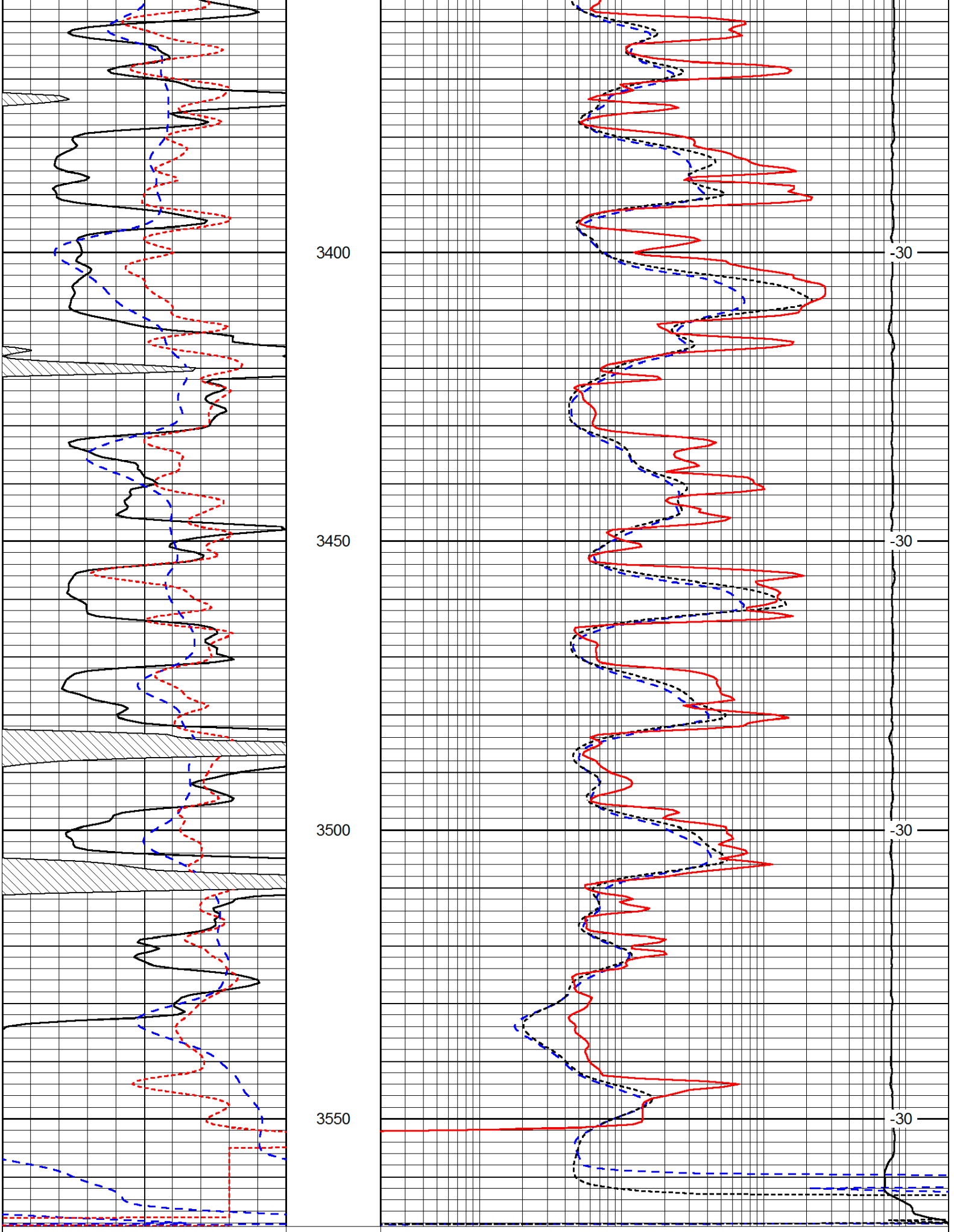


Database File: c:\warrior\data\bach_candy krafft #2\bachhd.db
Dataset Pathname: dil/bachstk
Presentation Format: dil
Dataset Creation: Sat May 18 11:10:54 2013
Charted by: Depth in Feet scaled 1:240




2950
3000
3050
3100
-31
-31
-31
-31


3150
3200
3250
3300
3350
-31
-31
-30
-30
-30


3400
3450
3500
3550
-30
-30
-30
-30
0
Gamma Ray
150
-200
SP (mV)
0
0.2
Deep Resistivity
2000
0.2
Medium Resistivity
2000

-160	RxoRt	40

0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD