MIDWEST WIRELINE

# DUAL INDUCTION LOG

Company Cobalt Energy, LLC
Well D6 Unit #1-34
Field Pianalto South
County Cheyenne State Kansas
Location: API # : 15-023-21559-00-00
2390 FSL 330 FWL
SEC 34 TWP 4S RGE 37W

Other Services: CNL CDL MEL

Permanent Datum: Ground Level — Elevation 3336
Log Measured From: Kelly Bushing
Drilling Measured From: Kelly Bushing

Elevation: K.B. 3341, D.F., G.L. 3336

Company Cobalt Energy, LLC
Well D6 Unit #1-34
Field Pianalto South
County Cheyenne
State Kansas

| | | | |
|---|---|---|---|
| Date | 11/13/2021 | | |
| Run Number | One | | |
| Depth Driller | 5060 | | |
| Depth Logger | 5058 | | |
| Bottom Logged Interval | 5057 | | |
| Top Log Interval | 300 | | |
| Casing Driller | 8.625 @ 361 | | |
| Casing Logger | 361 | | |
| Bit Size | 7.875 | | |
| Type Fluid in Hole | Chemical | | |
| Salinity,ppm CL | 600 | | |
| Density / Viscosity | 9.0 / 60 | | |
| pH / Fluid Loss | 11.0 / 8.0 | | |
| Source of Sample | FLOWLINE | | |
| Rm @ Meas. Temp | .8 @ 60 | | |
| Rmf @ Meas. Temp | .6 @ 60 | | |
| Rmc @ Meas. Temp | 1.08 @ 60 | | |
| Source of Rmf / Rmc | CHARTS | | |
| Rm @ BHT | .38 @ 127 | | |
| Operating Rig Time | 3 Hours | | |
| Max Rec. Temp. F | 127 | | |
| Equipment Number | P-24 | | |
| Location | HAYS | | |
| Recorded By | C McLaughlin | D Schmidt | |
| Witnessed By | Larry Nicholson | | |

<<< Fold Here >>>



## Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

McDonald
West to 32 Rd., South to H Rd
1/2 South, East into

Log Measured From: Kelly Bushing 5 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

| Your Midwest Wireline Crew | This Log Record Was Witnessed By |
|---|---|
| Engineer: C McLaughlin | Primary Witness: Larry Nicholson |
| Operator: | Secondary Witness: |
| Operator: | Secondary Witness: |
| Operator: | Secondary Witness: |

| Sensor | Offset (ft) | Schematic | Description | Length (ft) | O.D. (in) | Weight (lb |
|---|---|---|---|---|---|---|

| Sensor | Offset (ft) | Schematic | Description | Length (ft) | O.D. (in) | Weight (lb |
|---|---|---|---|---|---|---|
| | | | GR-M&W (233-M&W) | 3.00 | 3.50 | 50.00 |
| GR | 40.58 | | | | | |
| CNLSC | 37.48 | | CNT-M&W (207-MW) | 5.50 | 3.50 | 100.00 |
| CNSSC | 36.73 | | | | | |
| | | | CDL-M&W (934-226) | 8.50 | 4.00 | 250.00 |
| LSD | 28.43 | | | | | |
| DCAL | 28.42 | | | | | |
| SSD | 27.93 | | | | | |
| | | | ML-PSIML (PSI-01)<br>GO Micro log tools converted to Simplec electronics | 7.58 | 4.00 | 65.00 |
| MCAL | 19.83 | | | | | |
| MI | 19.83 | | | | | |
| MN | 19.83 | | | | | |
| RLL3F | 15.80 | | | | | |
| RLL3 | 15.80 | | | | | |
| | | | DIL-M&W (1987) | 18.50 | 3.50 | 220.00 |
| CILD | 8.00 | | | | | |
| CILM | 4.70 | | | | | |
| SP | 0.20 | | | | | |

Dataset: cobalt_d6 unit_1-34.db: field/well/stkmel/pass4.3
Total length: 43.08 ft
Total weight: 685.00 lb
O.D.: 4.00 in

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\cobalt_d6 unit_1-34.db
Dataset field/well/stkmel/pass4.3/_vars_

**Top - Bottom**

| A | BOREID in | BOTTEMP degF | CASEOD in | CASETHCK in | FLUIDDEN g/cc | M | MATRXDEN g/cc |
|---|---|---|---|---|---|---|---|
| 1 | 7.875 | 100 | 5.5 | 0 | 1 | 2 | 2.71 |

| NPORSEL | PERFS | SNDERR mmho/m | SNDERRM mmho/m | SPSHIFT mV | SRFTEMP degF | SZCOR | TDEPTH ft |
|---|---|---|---|---|---|---|---|
| Limestone | 0 | 0 | 0 | 0 | 0 | Off | 0 |

**Variable Description**

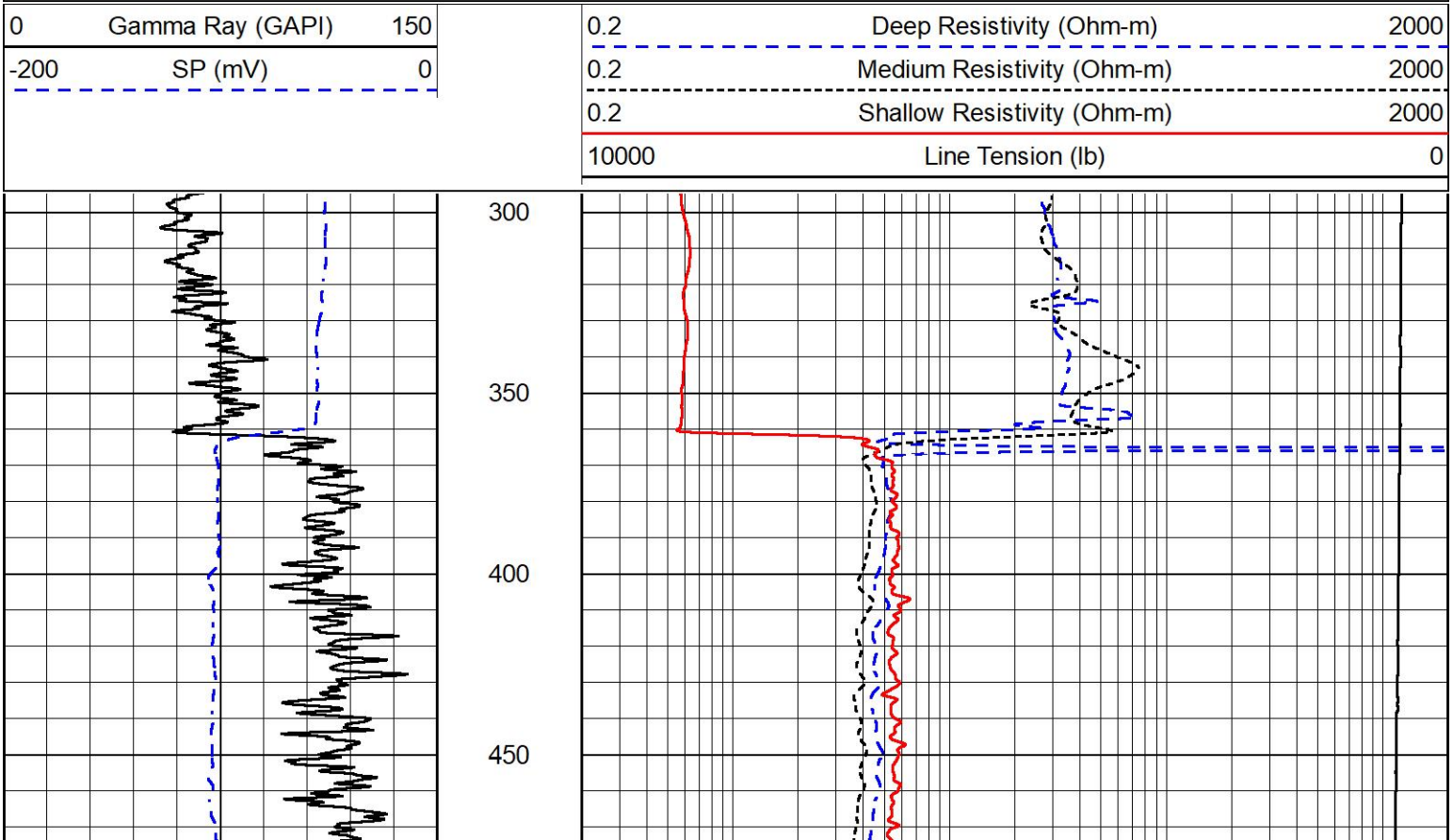
A : Cement Factor (a)
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
FLUIDDEN : Fluid Density
M : Cement Exp (m)
MATRXDEN : Matrix Density
NPORSEL : Neutron Porosity Curve Select
PERFS : Perforation Flag
SNDERR : Deep Sonde Error Correction
SNDERRM : Medium Sonde Error Correction
SPSHIFT : S.P. Baseline Offset
SRFTEMP : Surface Temperature
SZCOR : CN Size Cor. ?
TDEPTH : Total Depth

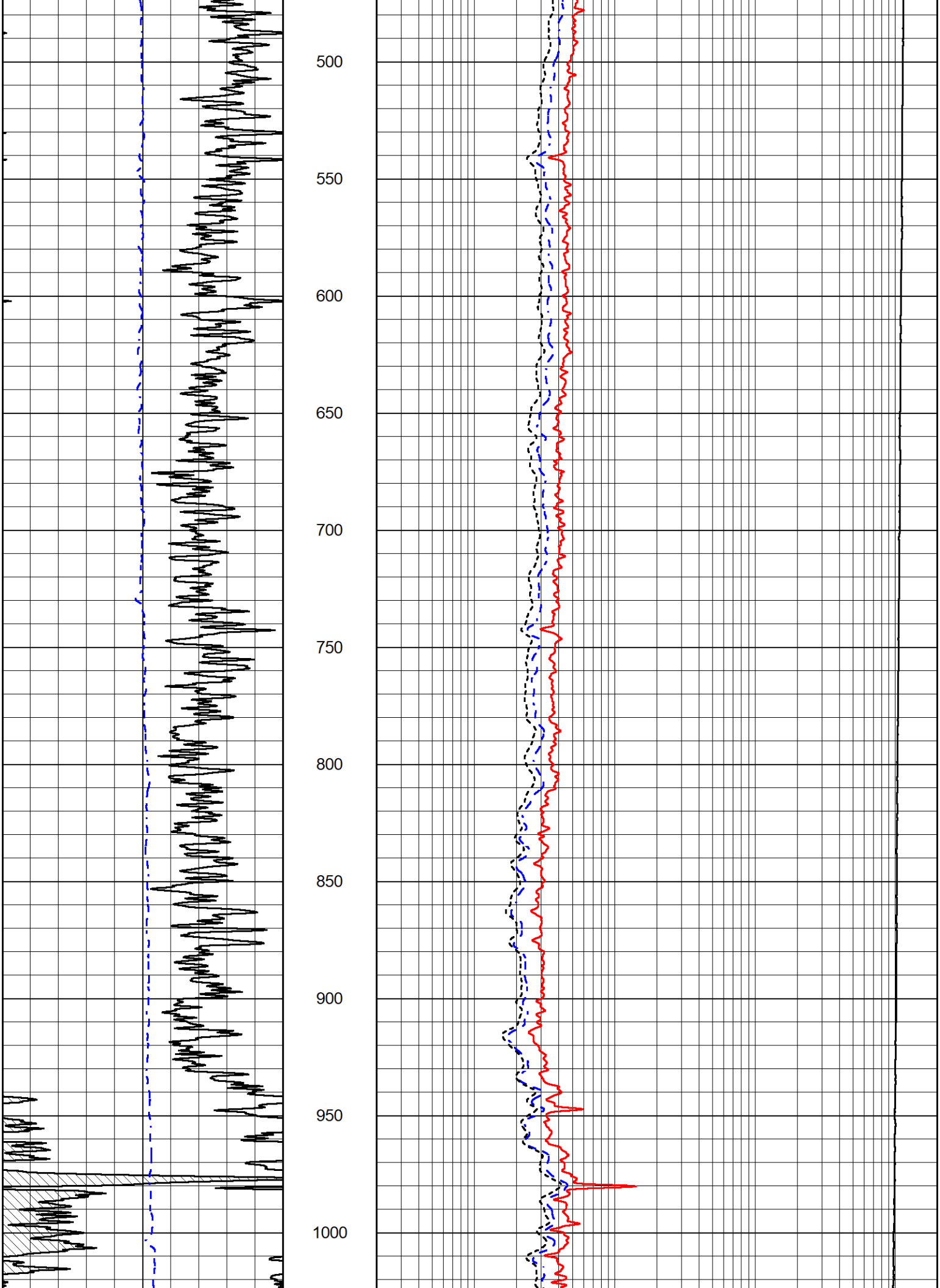
MIDWEST WIRELINE

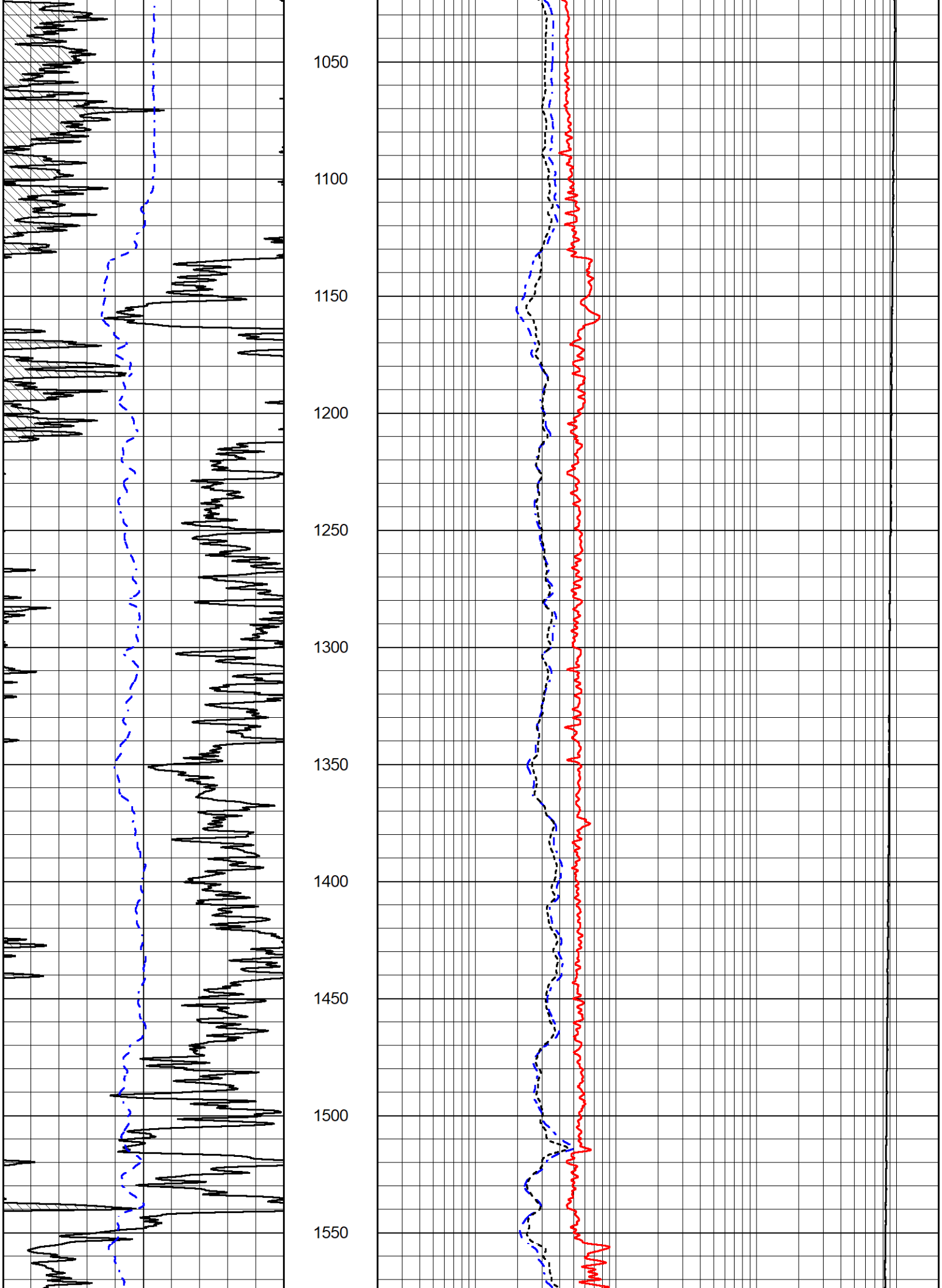
# 2" SCALE RESISTIVITY

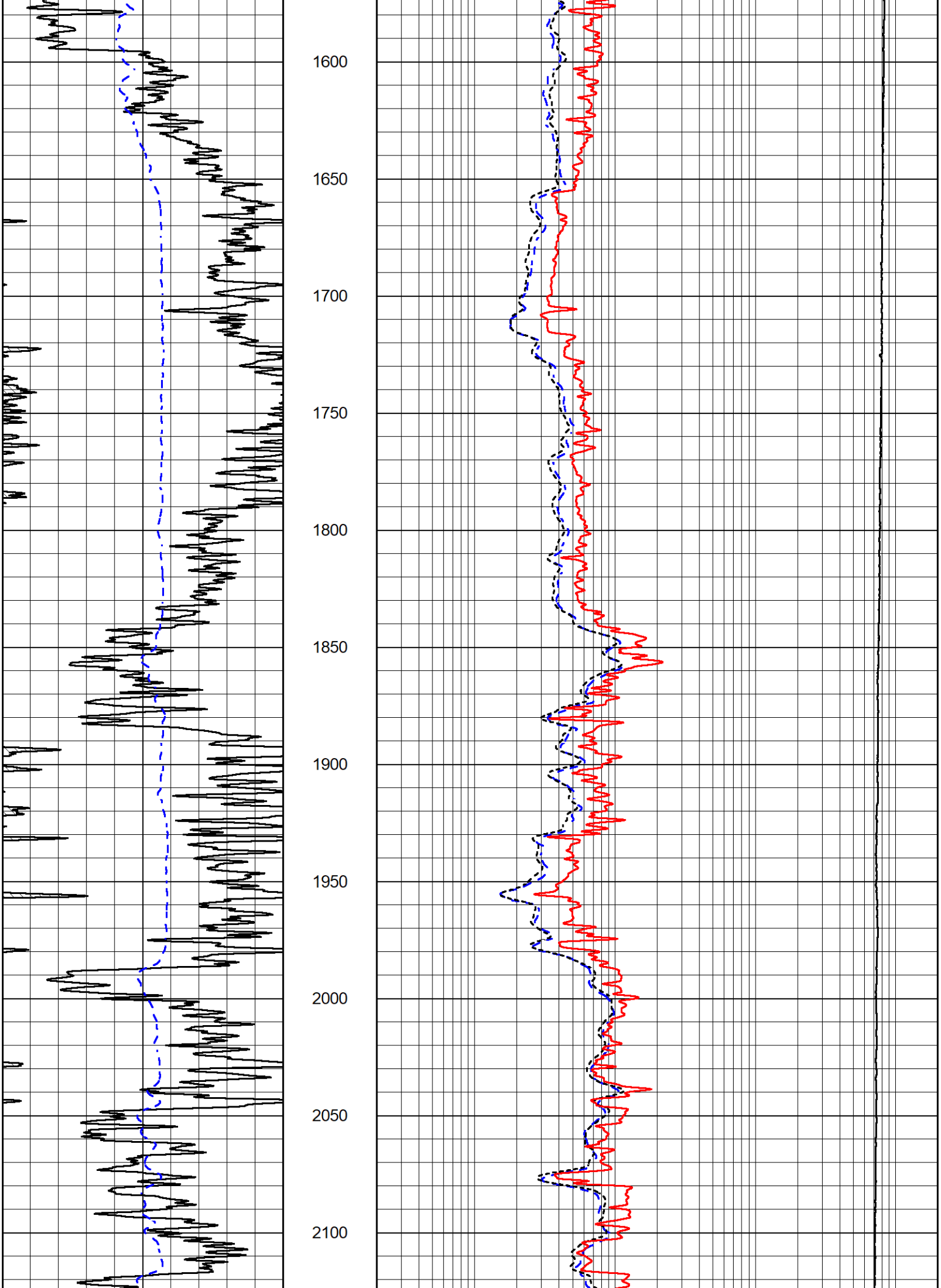
## MAIN PASS

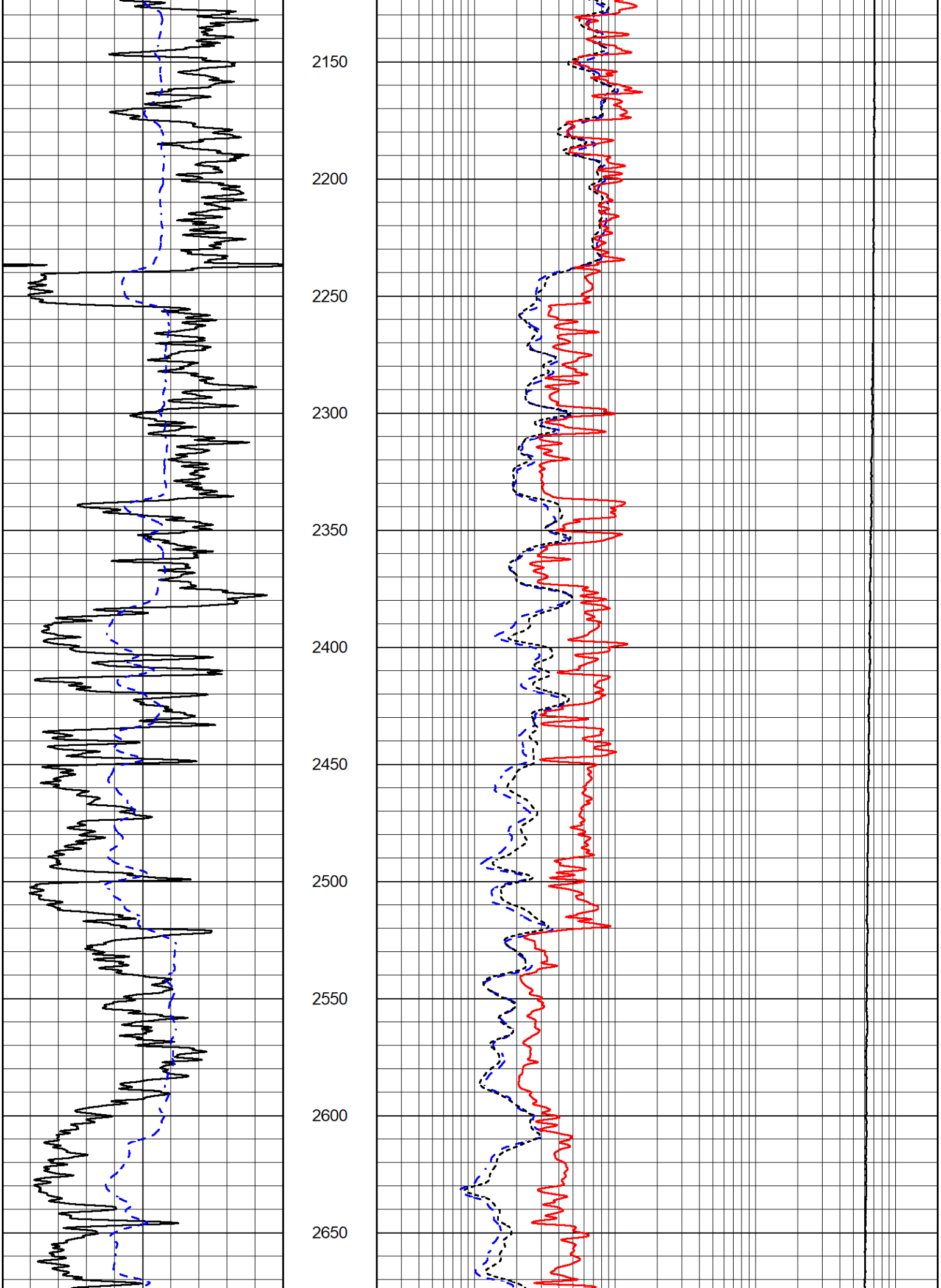
| | |
|---|---|
| Database File | cobalt_d6 unit_1-34.db |
| Dataset Pathname | stkmel/pass5.1 |
| Presentation Format | _dil2in |
| Dataset Creation | Sat Nov 13 18:55:39 2021 |
| Charted by | Depth in Feet scaled 1:600 |

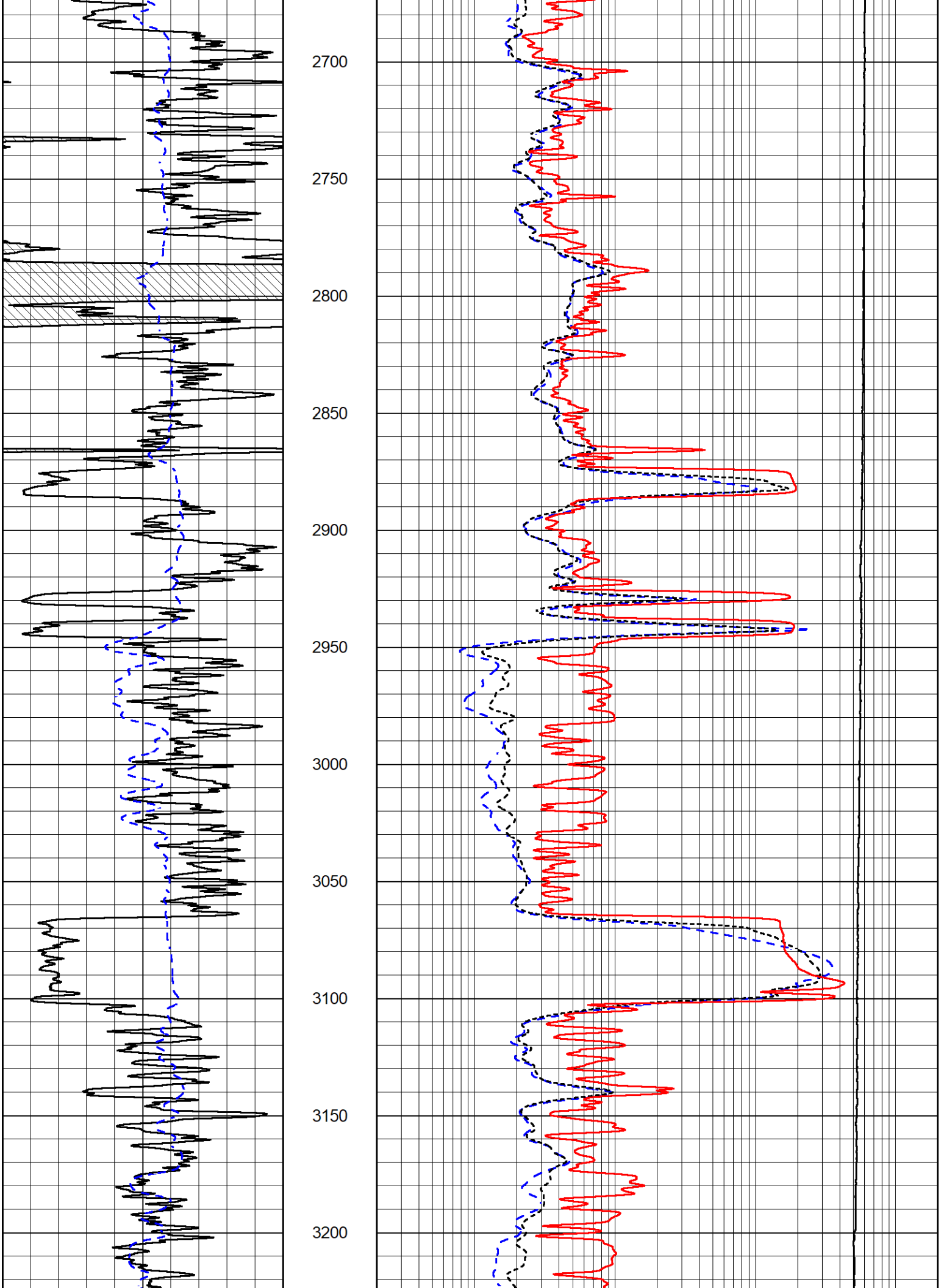


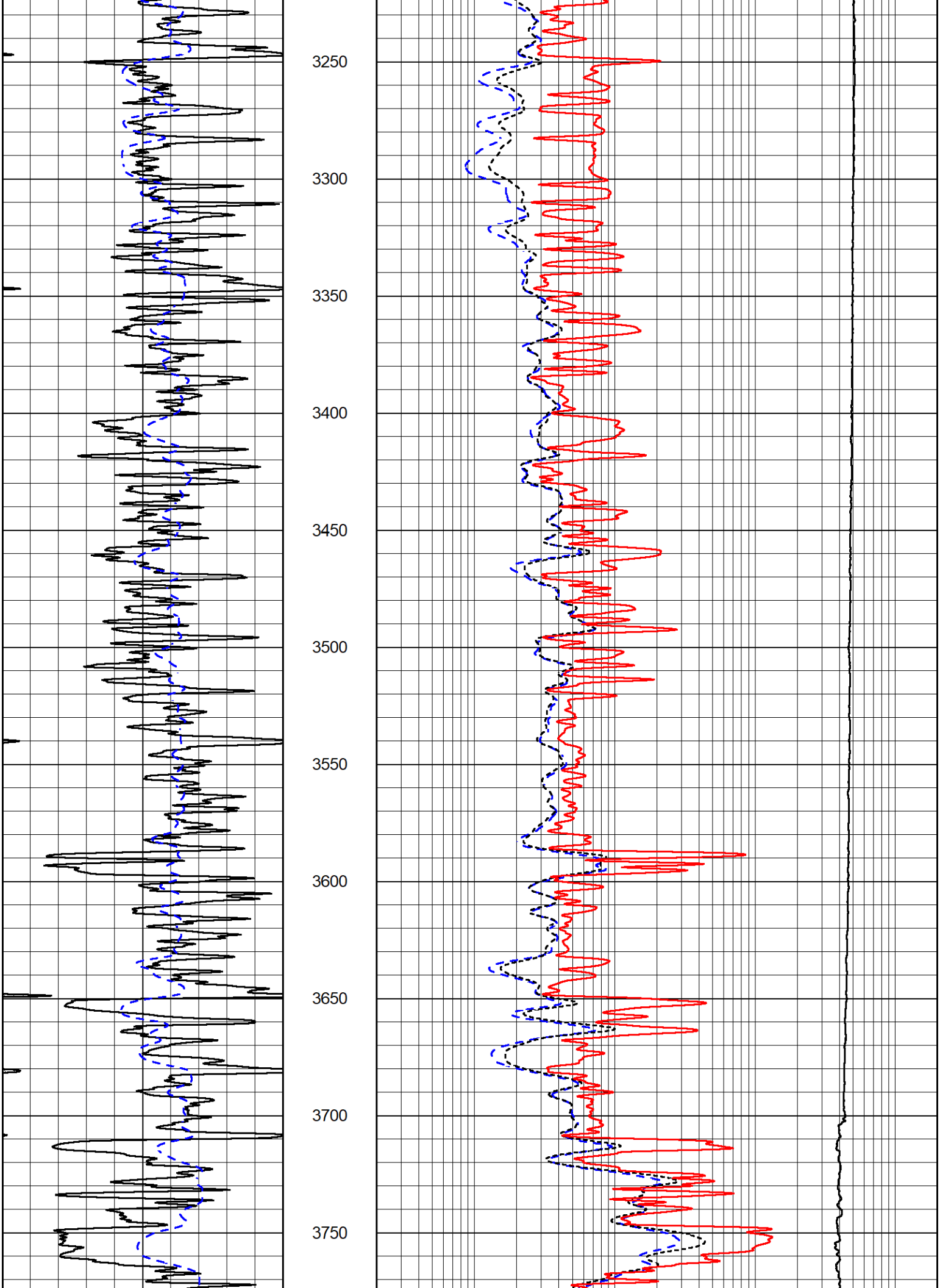

500
550
600
650
700
750
800
850
900
950
1000

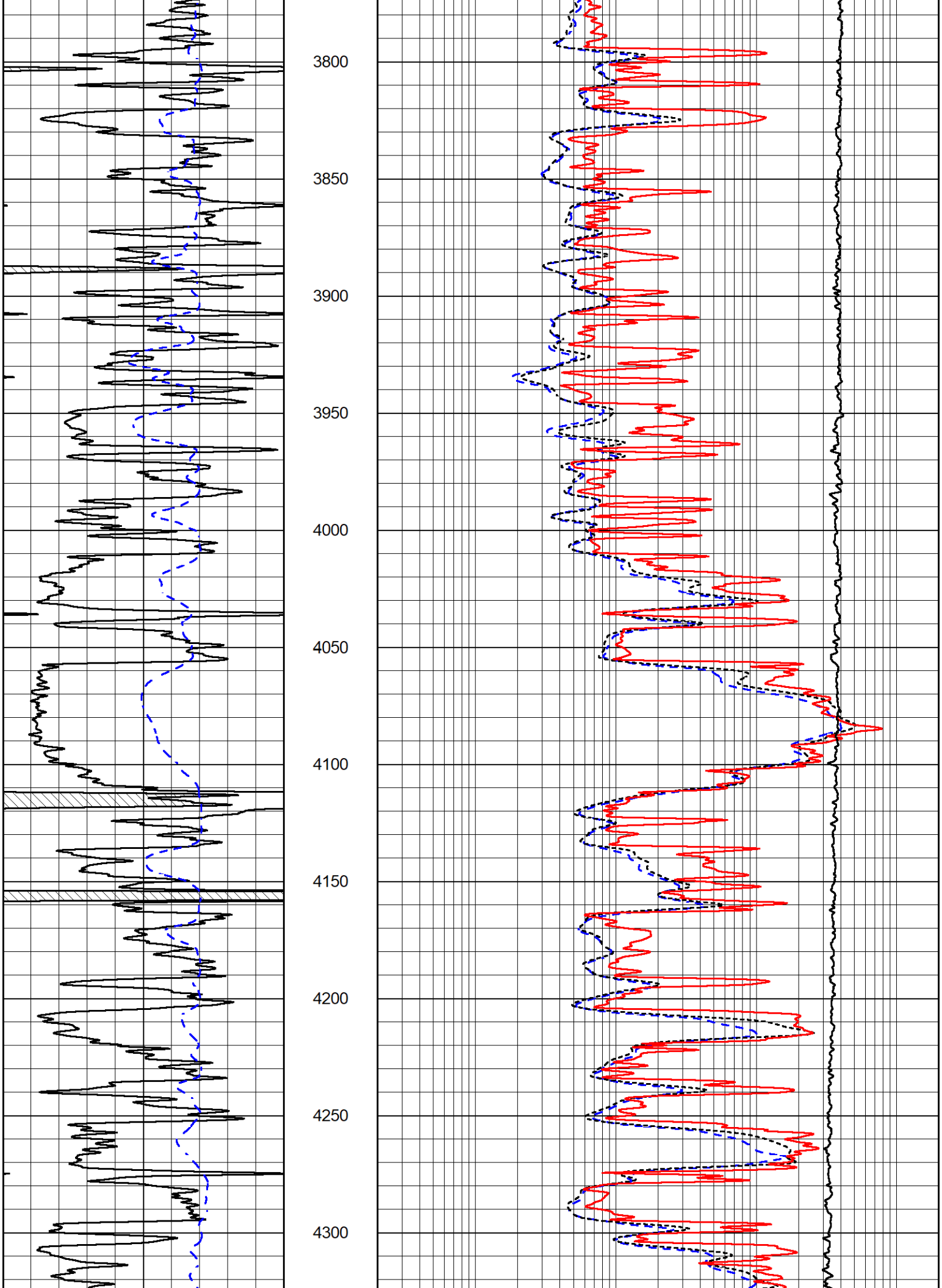

1050
1100
1150
1200
1250
1300
1350
1400
1450
1500
1550

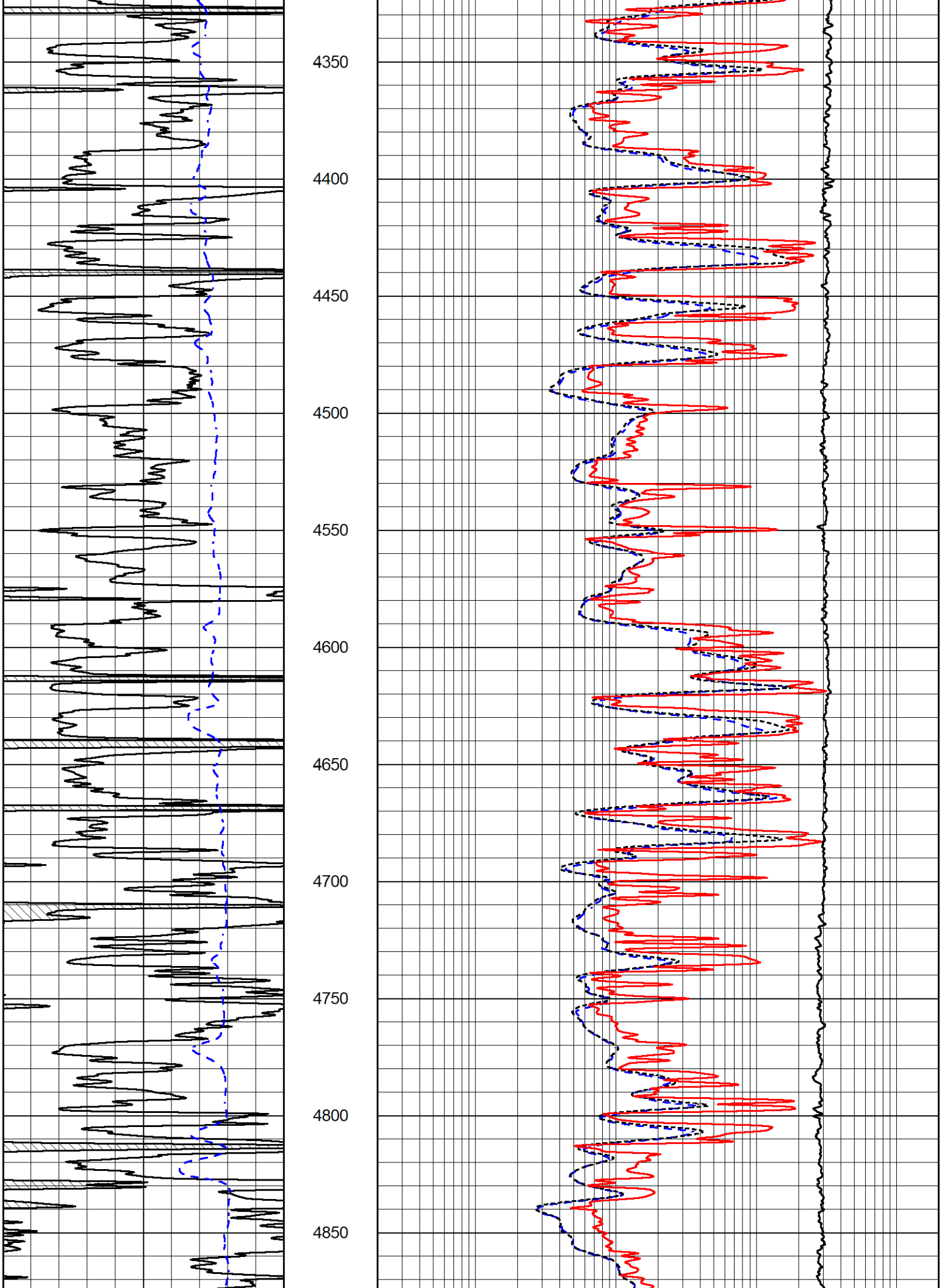

1600
1650
1700
1750
1800
1850
1900
1950
2000
2050
2100

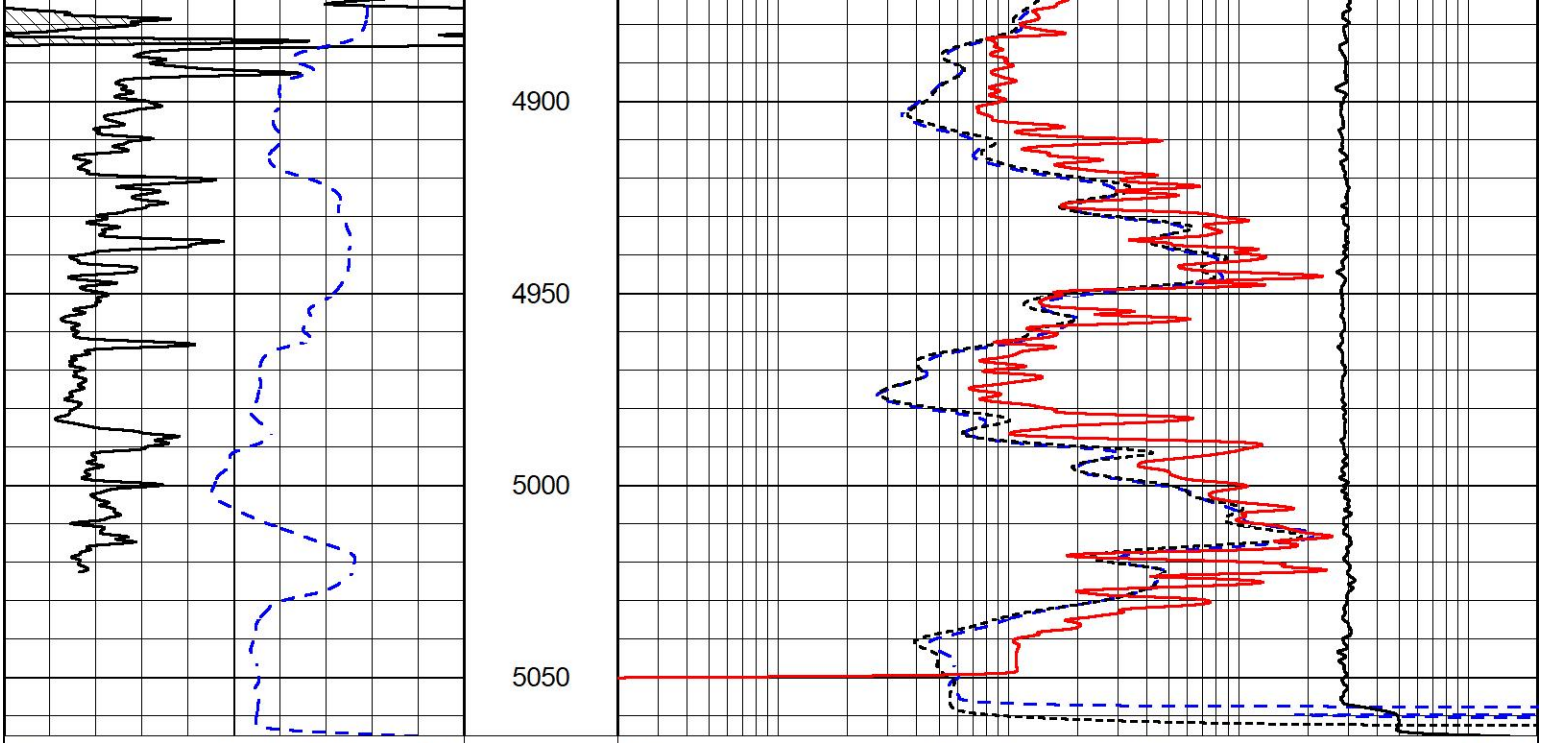

2150
2200
2250
2300
2350
2400
2450
2500
2550
2600
2650


2700
2750
2800
2850
2900
2950
3000
3050
3100
3150
3200


3250
3300
3350
3400
3450
3500
3550
3600
3650
3700
3750


3800
3850
3900
3950
4000
4050
4100
4150
4200
4250
4300


4350
4400
4450
4500
4550
4600
4650
4700
4750
4800
4850




| | | |
|---|---|---|
| 0 | Gamma Ray (GAPI) | 150 |
| -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 |

MIDWEST WIRELINE

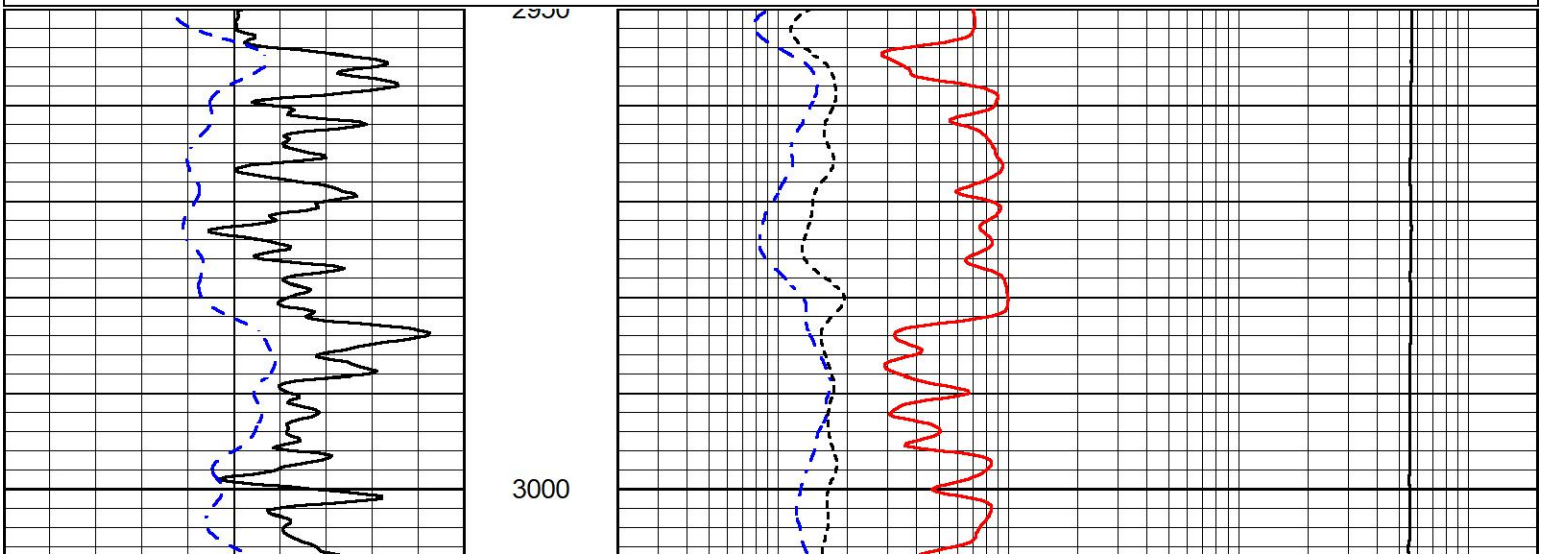
# ANHYDRITE SECTION

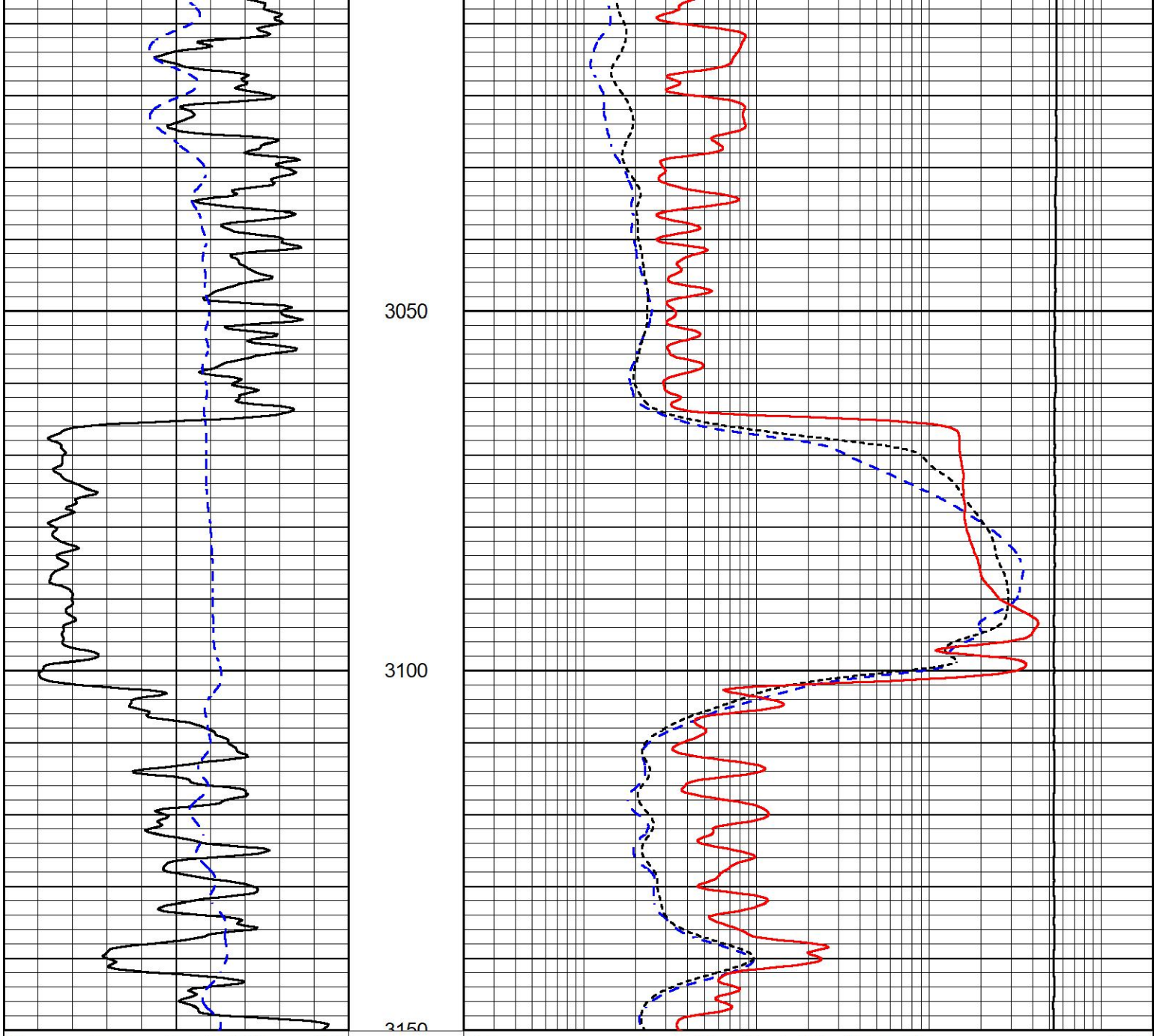
## MAIN PASS

| | |
|---|---|
| Database File | cobalt_d6 unit_1-34.db |
| Dataset Pathname | stkmel/pass6.1 |
| Presentation Format | _dil |
| Dataset Creation | Sat Nov 13 18:56:58 2021 |
| Charted by | Depth in Feet scaled 1:240 |

| | | |
|---|---|---|
| 0 | Gamma Ray (GAPI) | 150 |
| -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 |






| | | |
|---|---|---|
| 0 | Gamma Ray (GAPI) | 150 |
| -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 |

MIDWEST WIRELINE

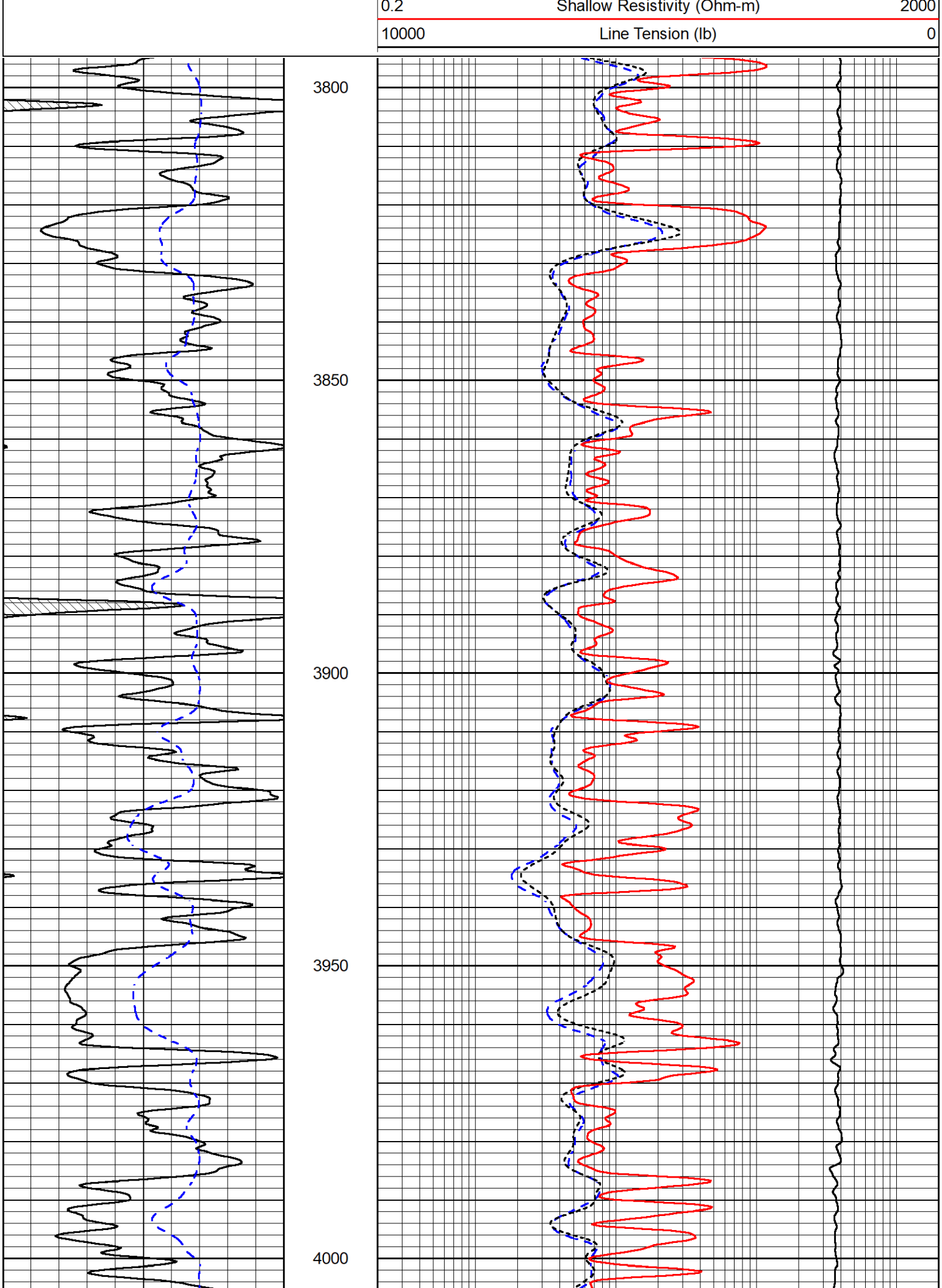
# DETAIL SECTION

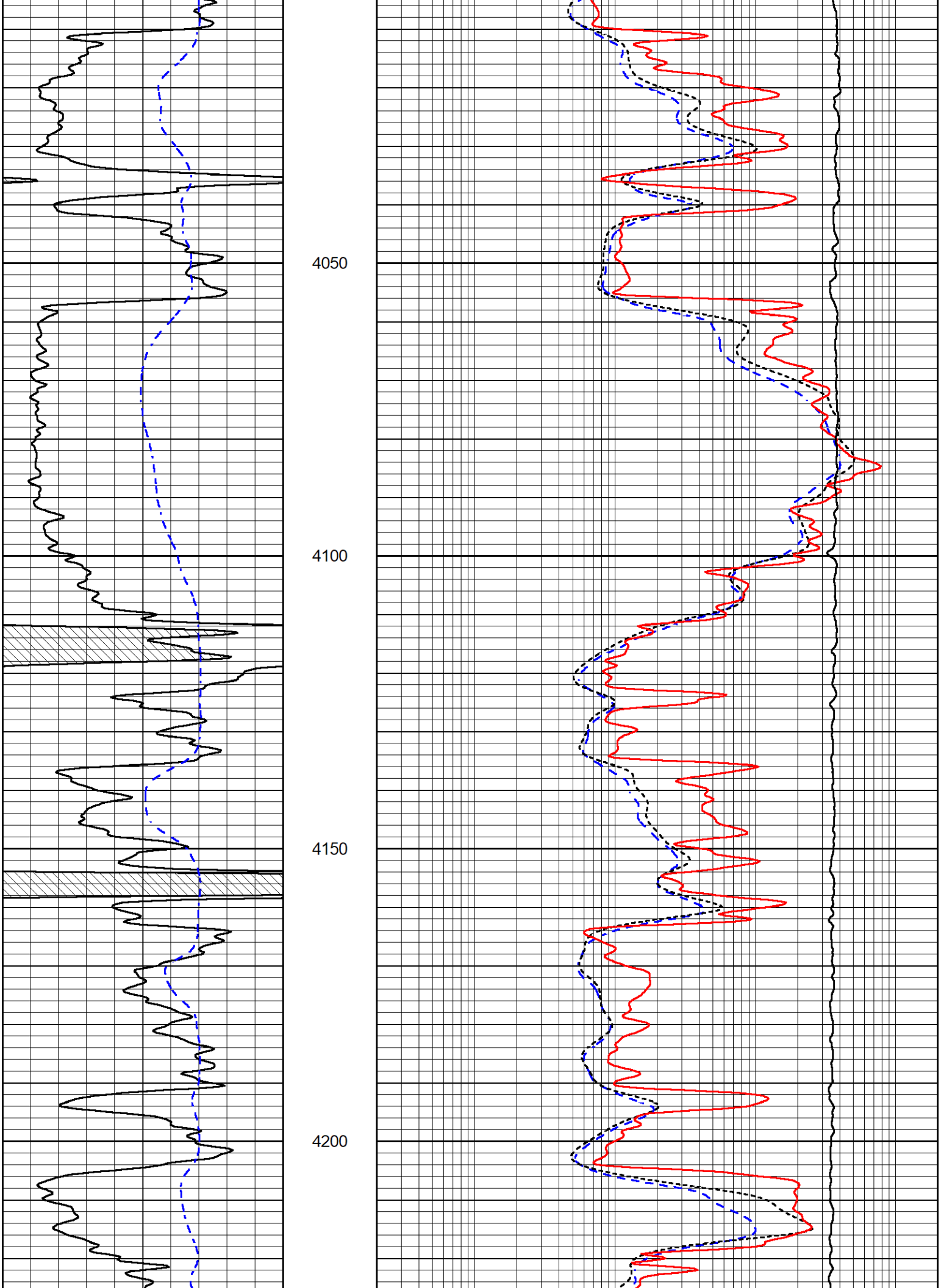
## MAIN PASS

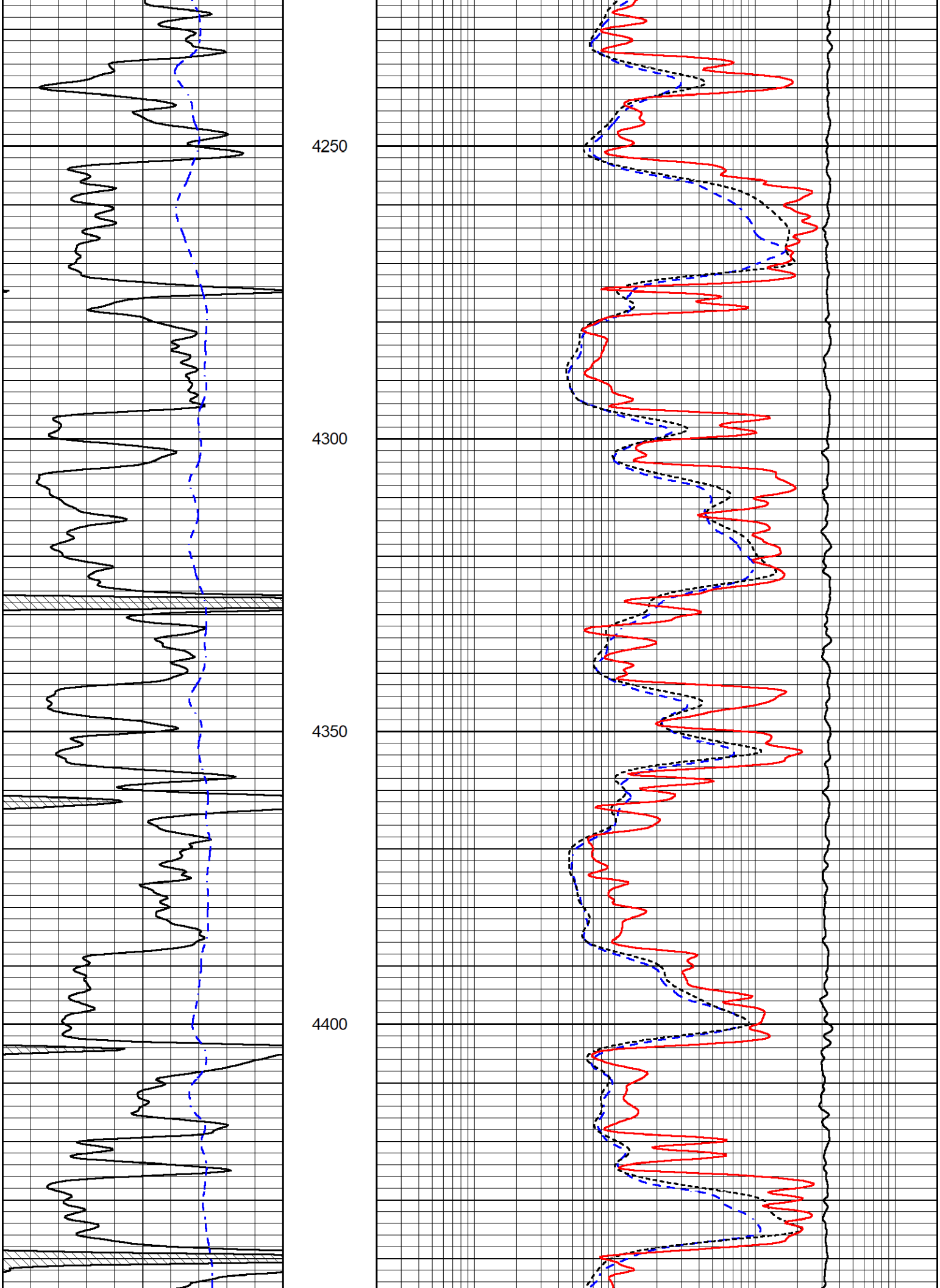
| | |
|---|---|
| Database File | cobalt_d6 unit_1-34.db |
| Dataset Pathname | stkmel/pass4.1 |
| Presentation Format | _dil |
| Dataset Creation | Sat Nov 13 18:18:41 2021 |
| Charted by | Depth in Feet scaled 1:240 |

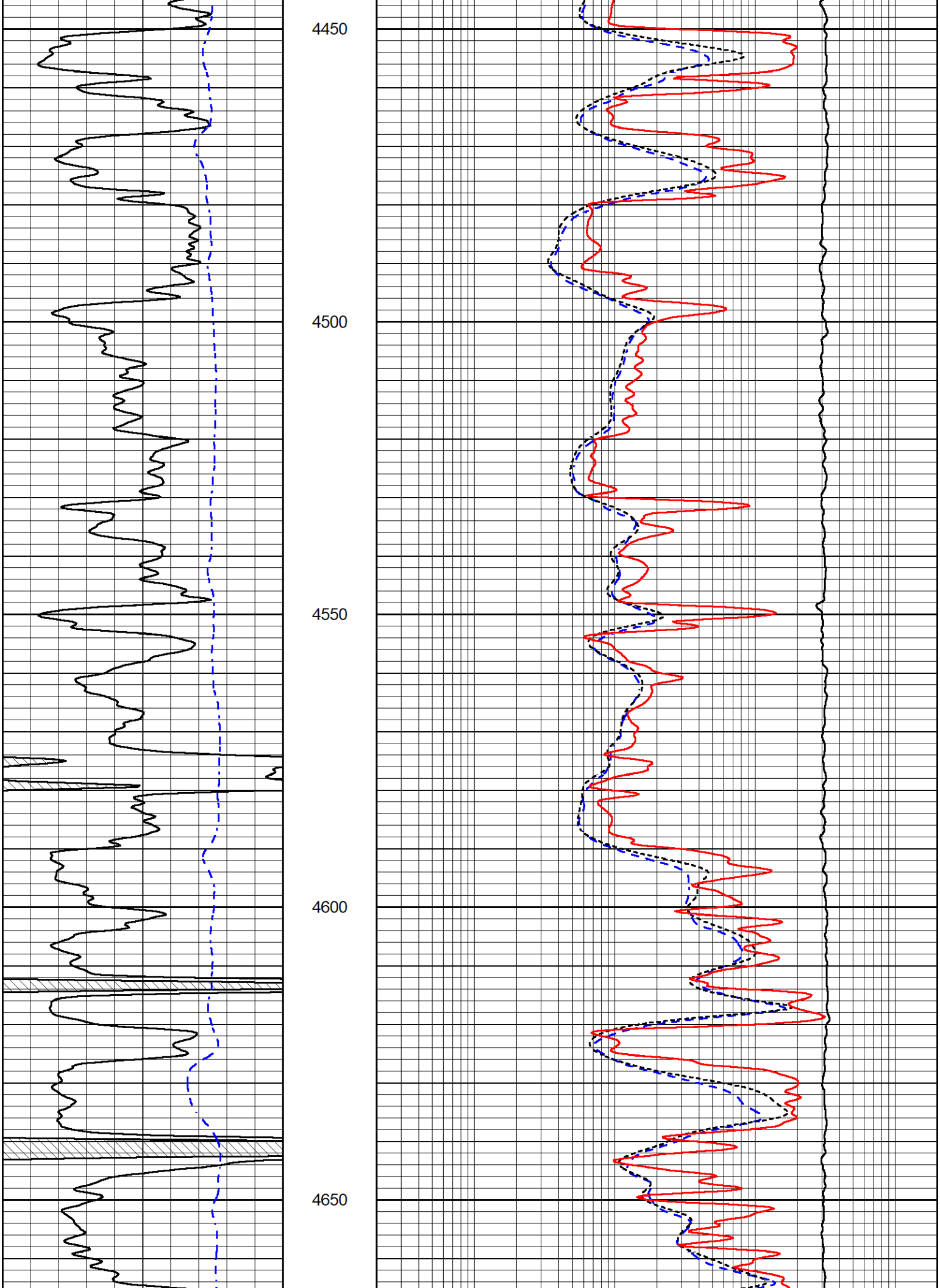
| | | |
|---|---|---|
| 0 | Gamma Ray (GAPI) | 150 |
| -200 | SP (mV) | 0 |

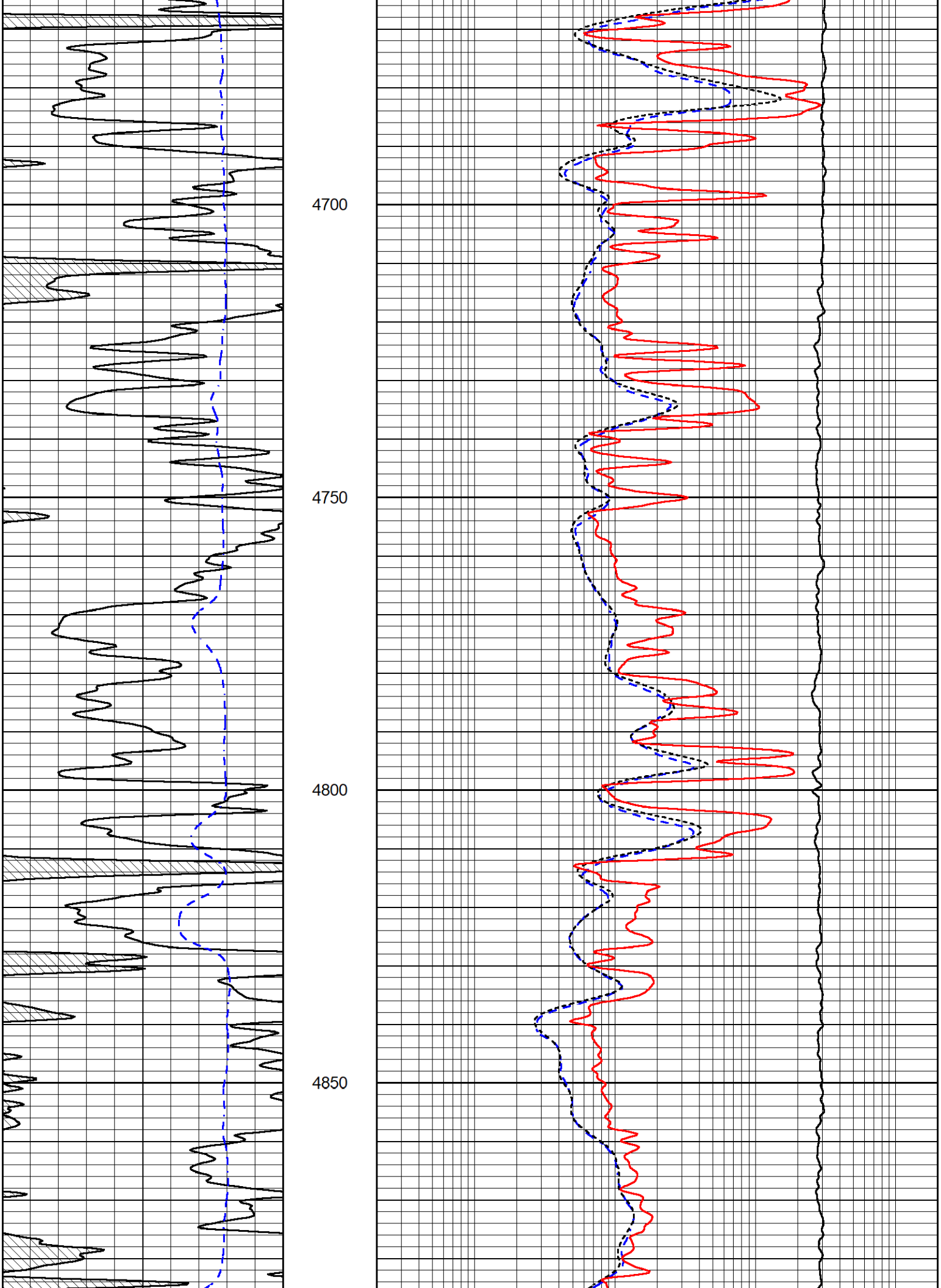
| | | |
|---|---|---|
| 0.2 | Deep Resistivity (Ohm-m) | 2000 |
| 0.2 | Medium Resistivity (Ohm-m) | 2000 |

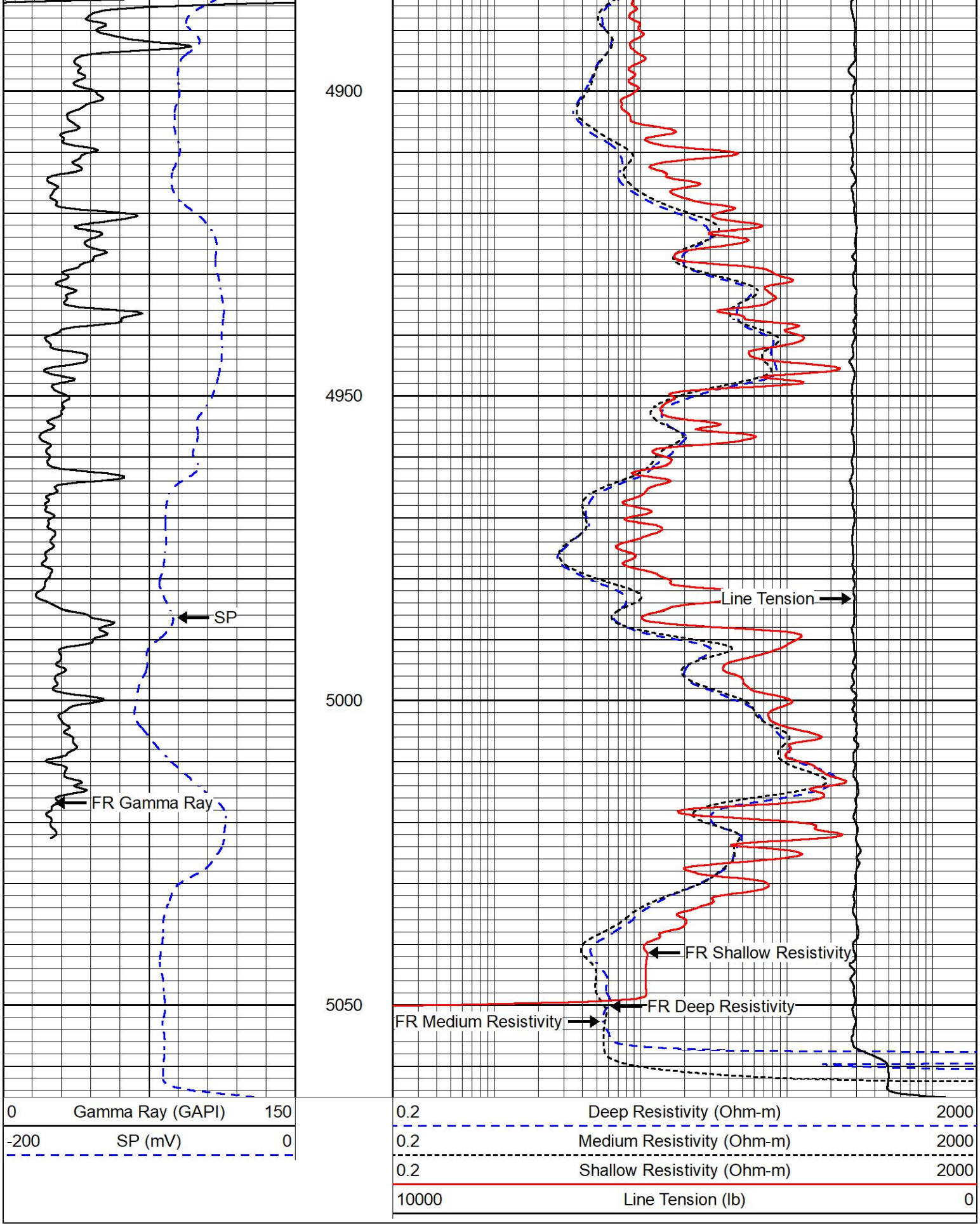

0.2
Shallow Resistivity (Ohm-m)
2000
10000
Line Tension (lb)
0
3800
3850
3900
3950
4000


4050
4100
4150
4200


4250
4300
4350
4400


4450
4500
4550
4600
4650


4700
4750
4800
4850




# REPEAT SECTION

REPEAT PASS

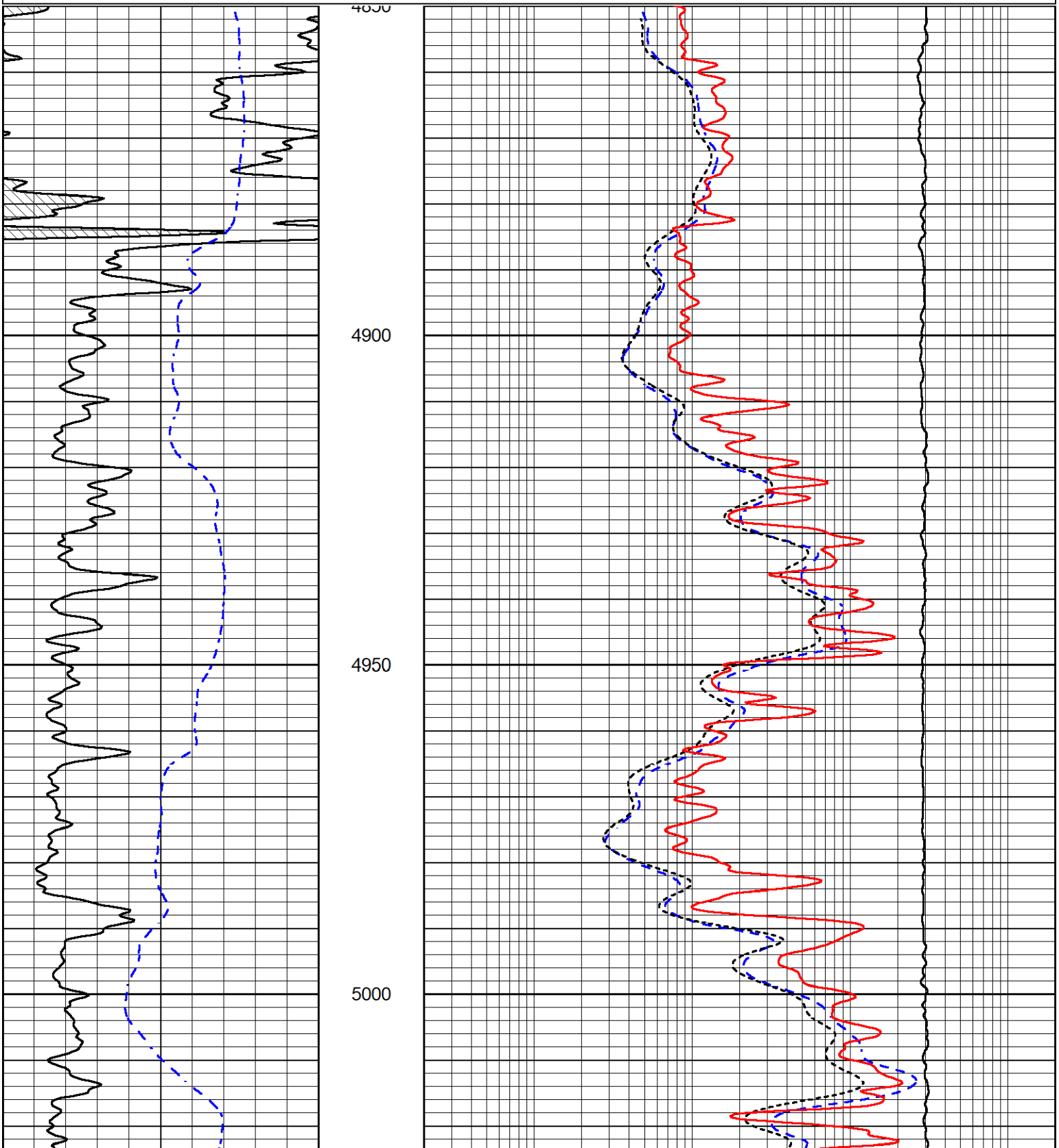
MIDWEST WIRELINE

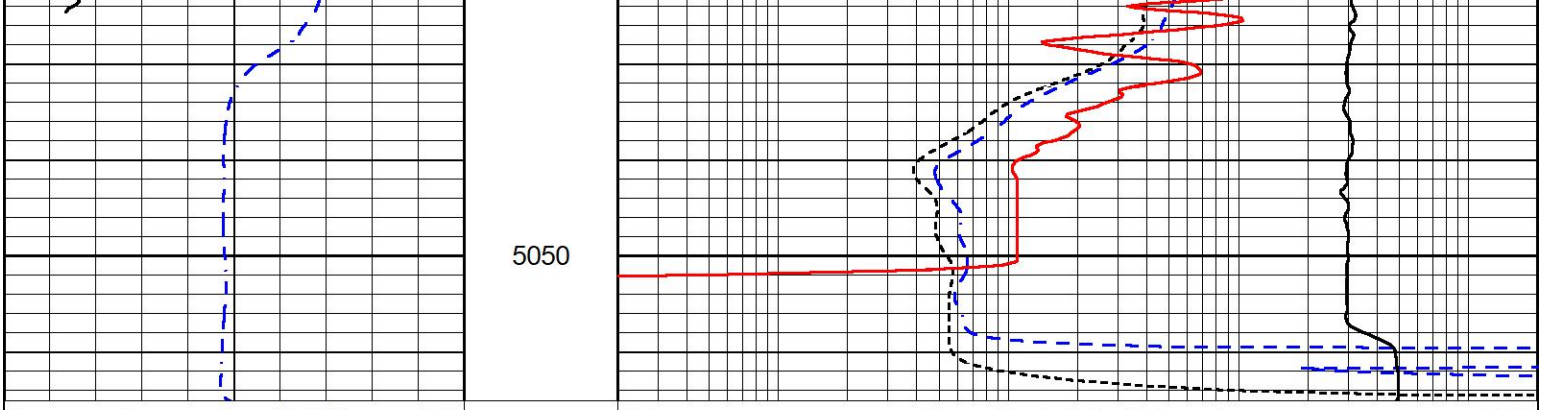
REPEAT PASS

| | |
|---|---|
| Database File | cobalt_d6 unit_1-34.db |
| Dataset Pathname | stkmel/pass3.1 |
| Presentation Format | _dil |
| Dataset Creation | Sat Nov 13 18:30:50 2021 |
| Charted by | Depth in Feet scaled 1:240 |

| | | |
|---|---|---|
| 0 | Gamma Ray (GAPI) | 150 |
| -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 |






| | | |
|---|---|---|
| 0 | Gamma Ray (GAPI) | 150 |
| -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 |

MIDWEST WIRELINE

| | |
|---|---|
| Company | Cobalt Energy, LLC |
| Well | D6 Unit #1-34 |
| Field | Pianalto South |
| County | Cheyenne |
| State | Kansas |