

## DUAL INDUCTION LOG

Company SHAKESPEARE OIL COMPANY, INC.

Well CALE #3-27

Field CALE

County GOVE State KANSAS

Location: API #: 15-063-22412-0000

1940' FNL & 1965' FEL  
SW - NE - SW - NE

SEC 27 TWP 11S RGE 31W

Permanent Datum GROUND LEVEL Elevation 2919  
Log Measured From KELLY BUSHING 11' A.G.L.  
Drilling Measured From KELLY BUSHING

Other Services  
CDL/CNL/PE  
MEL

Elevation

K.B. 2930  
D.F. 2928  
G.L. 2919

Date 6/25/22

Run Number ONE

Depth Driller 4600

Depth Logger 4598

Bottom Logged Interval 4596

Top Log Interval 00

Casing Driller 8 5/8" @ 266'

Casing Logger 266

Bit Size 7 7/8"

Type Fluid in Hole CHEMICAL MUD

Density / Viscosity 9.2/56

pH / Fluid Loss 10.5/8.0

Source of Sample FLOWLINE

Rm @ Meas. Temp 1.40 @ 73F

Rmf @ Meas. Temp 1.05 @ 73F

Rmc @ Meas. Temp 1.68 @ 73F

Source of Rmf / Rmc MEASURED

Rm @ BHT .845 @ 121F

Time Circulation Stopped 2 HOURS

Time Logger on Bottom 10:45 P.M.

Maximum Recorded Temperature 121F

Equipment Number 8916

Location HAYS, KANSAS

Recorded By JEFF LUEBBERS

Witnessed By KENT MATSON

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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

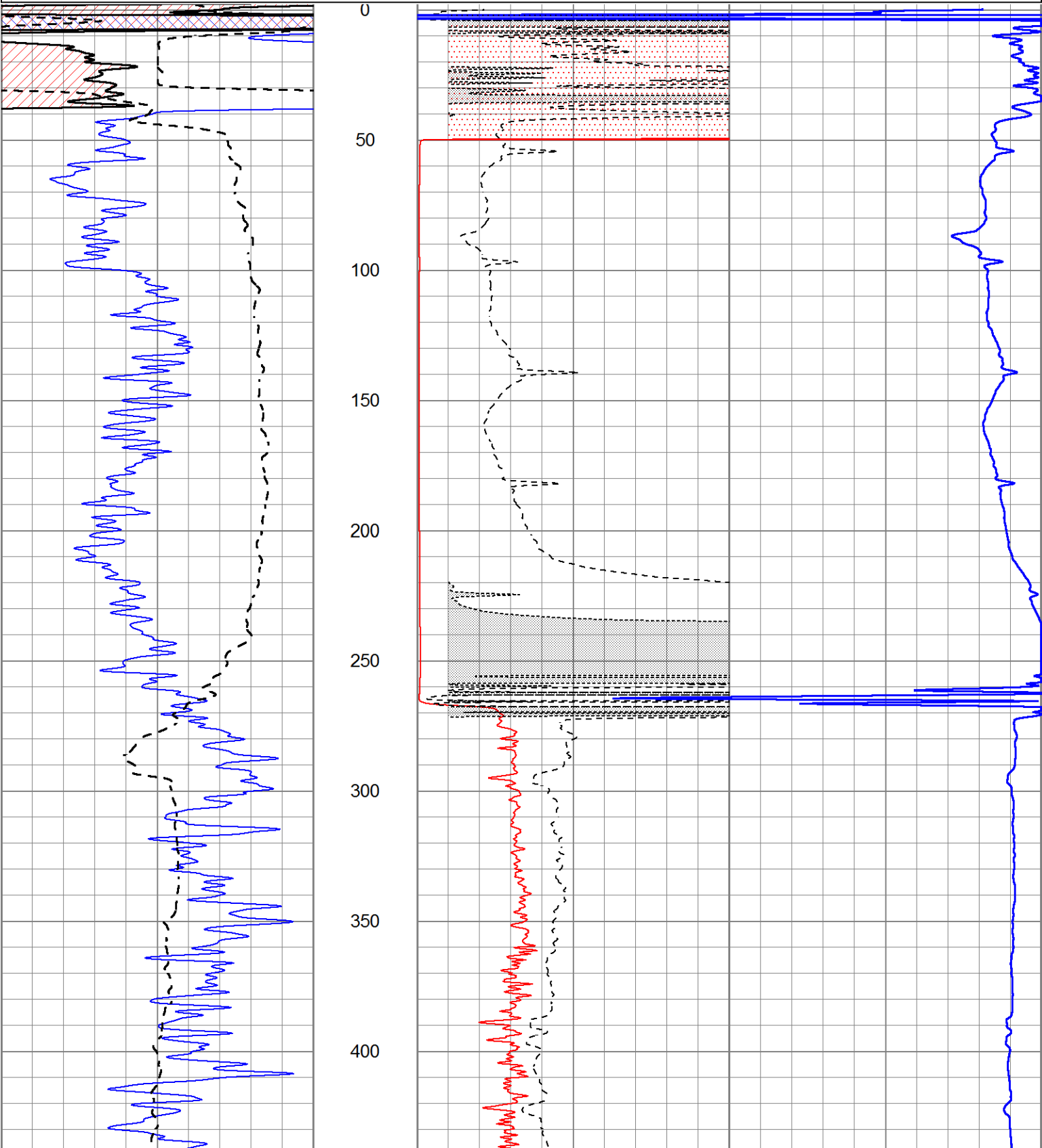
THANK YOU FOR USING ELI WIRELINE, HAYS, KS. (785) 628-6395  
DIRECTIONS:  
I-70 & CAMPUS EXIT, 2 1/2 S., 1W., S. INTO

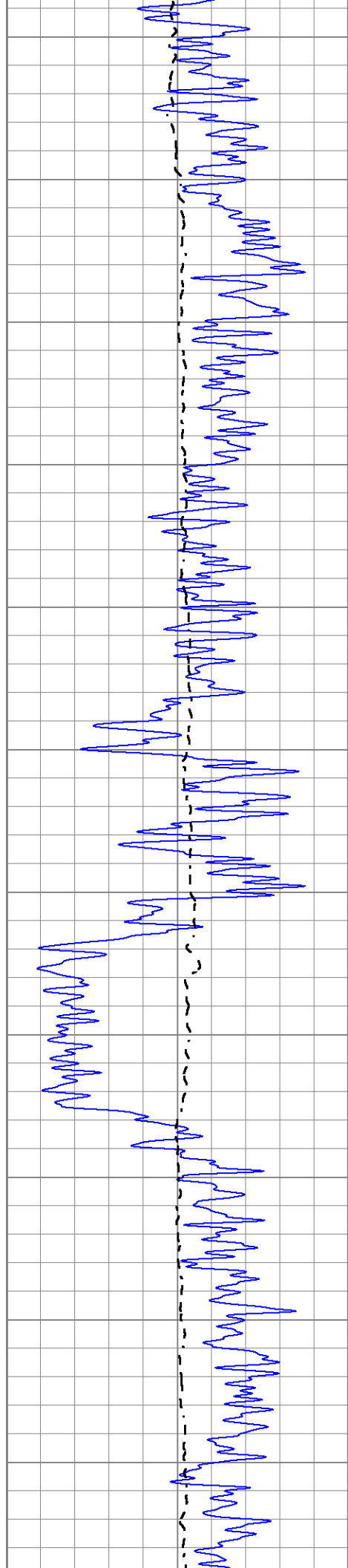


## MAIN SECTION

|                     |                            |
|---------------------|----------------------------|
| Database File       | 6573pe.db                  |
| Dataset Pathname    | pass3.1M                   |
| Presentation Format | dil2                       |
| Dataset Creation    | Sun Jun 26 00:34:56 2022   |
| Charted by          | Depth in Feet scaled 1:600 |

|       |                  |     |      |                  |     |
|-------|------------------|-----|------|------------------|-----|
| 0     | Gamma Ray (GAPI) | 150 | 1000 | CILD (mmho/m)    | 0   |
| -100  | SP (mV)          | 100 | 0    | RLL3 (Ohm-m)     | 50  |
| ----- |                  |     | 0    | RILD (Ohm-m)     | 50  |
|       |                  |     | 50   | RILD X10 (Ohm-m) | 500 |
|       |                  |     | 50   | RLL3 X10 (Ohm-m) | 500 |





450

500

550

600

650

700

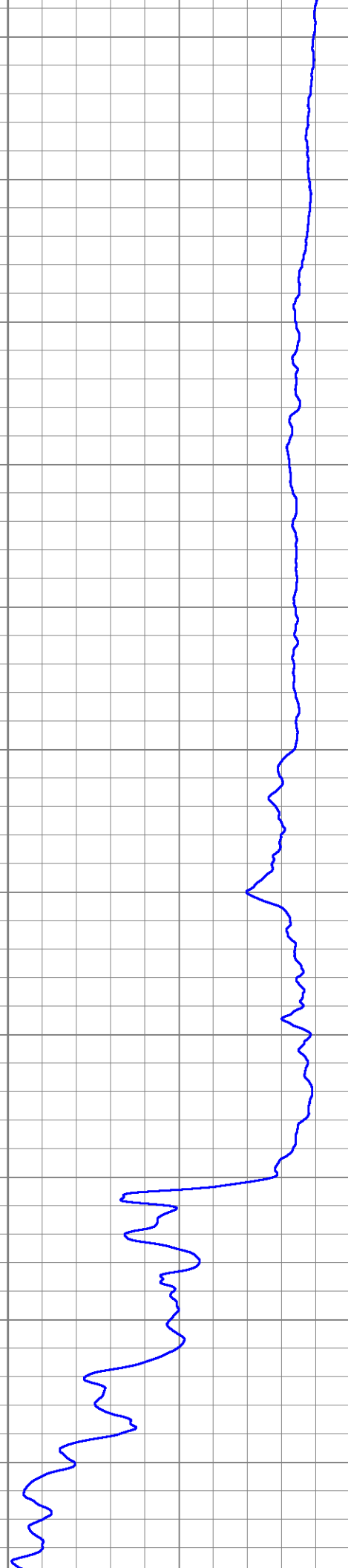
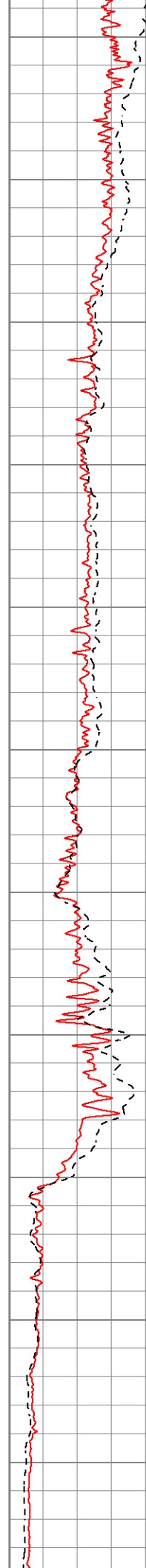
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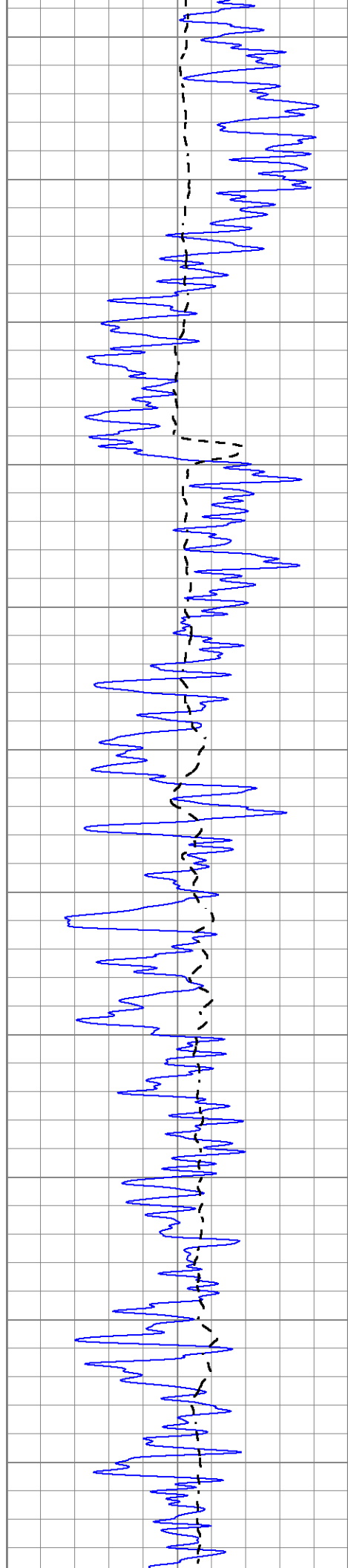
800

850

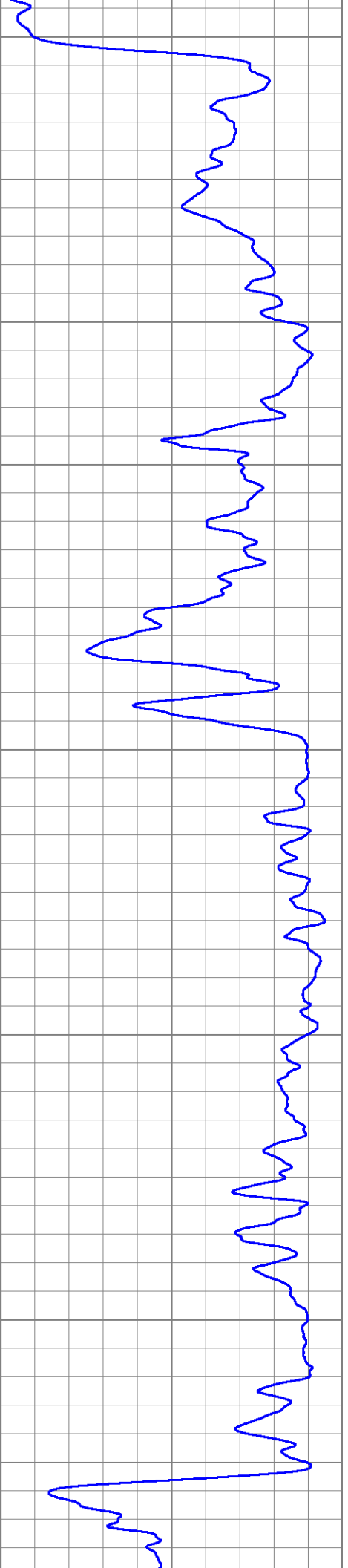
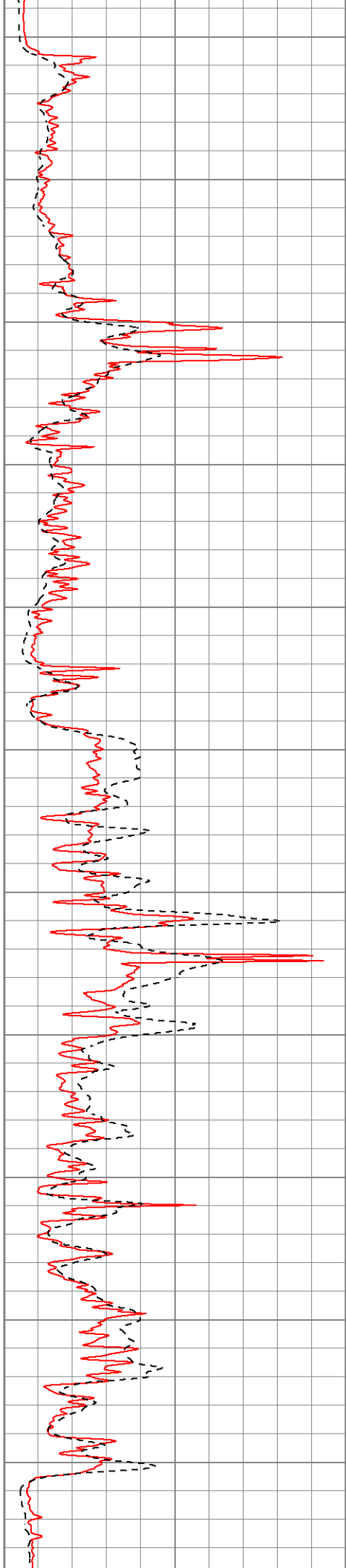
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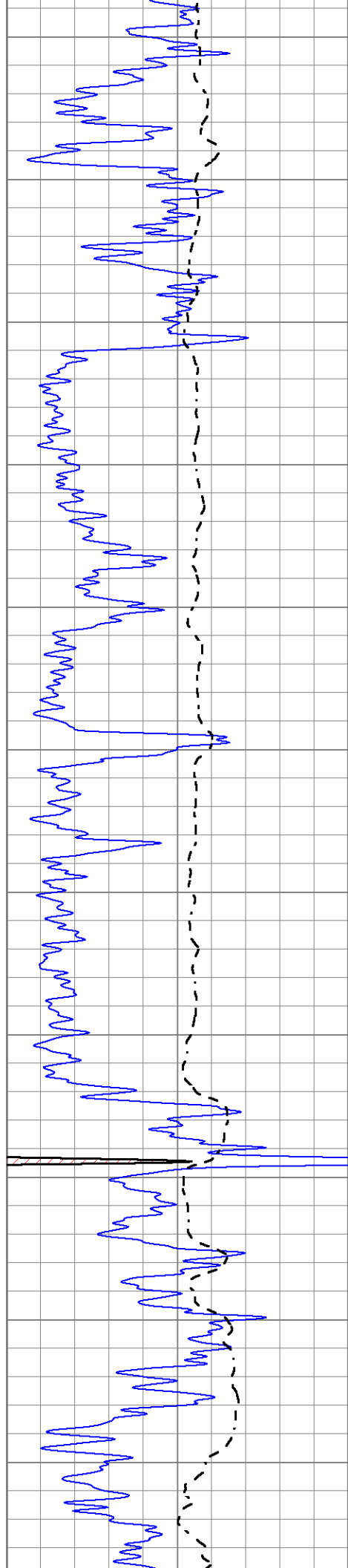
950





1000  
1050  
1100  
1150  
1200  
1250  
1300  
1350  
1400  
1450  
1500





1550

1600

1650

1700

1750

1800

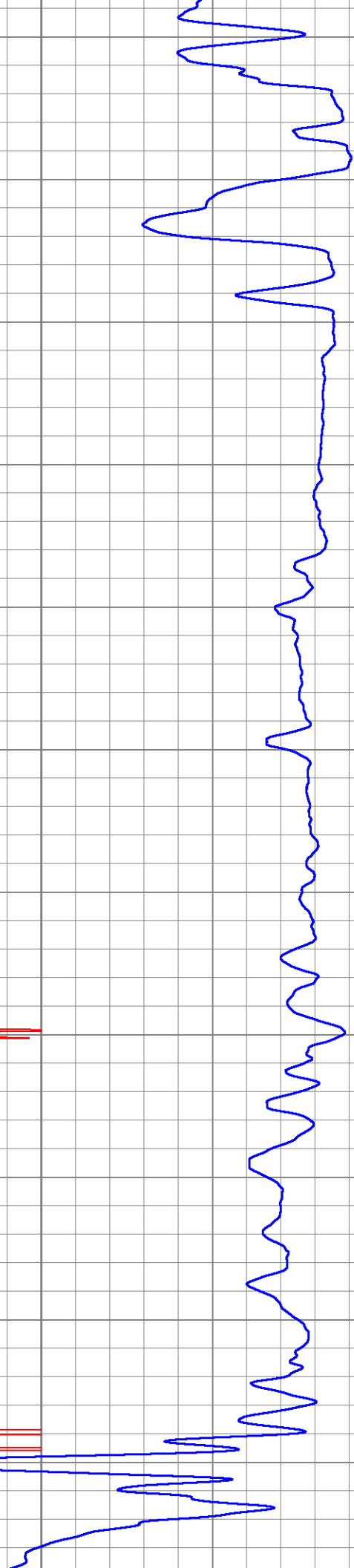
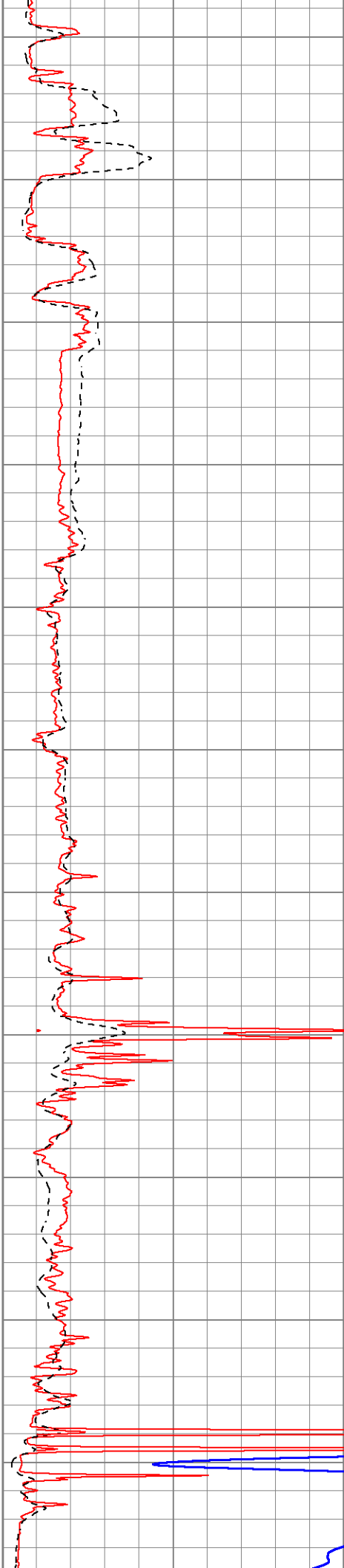
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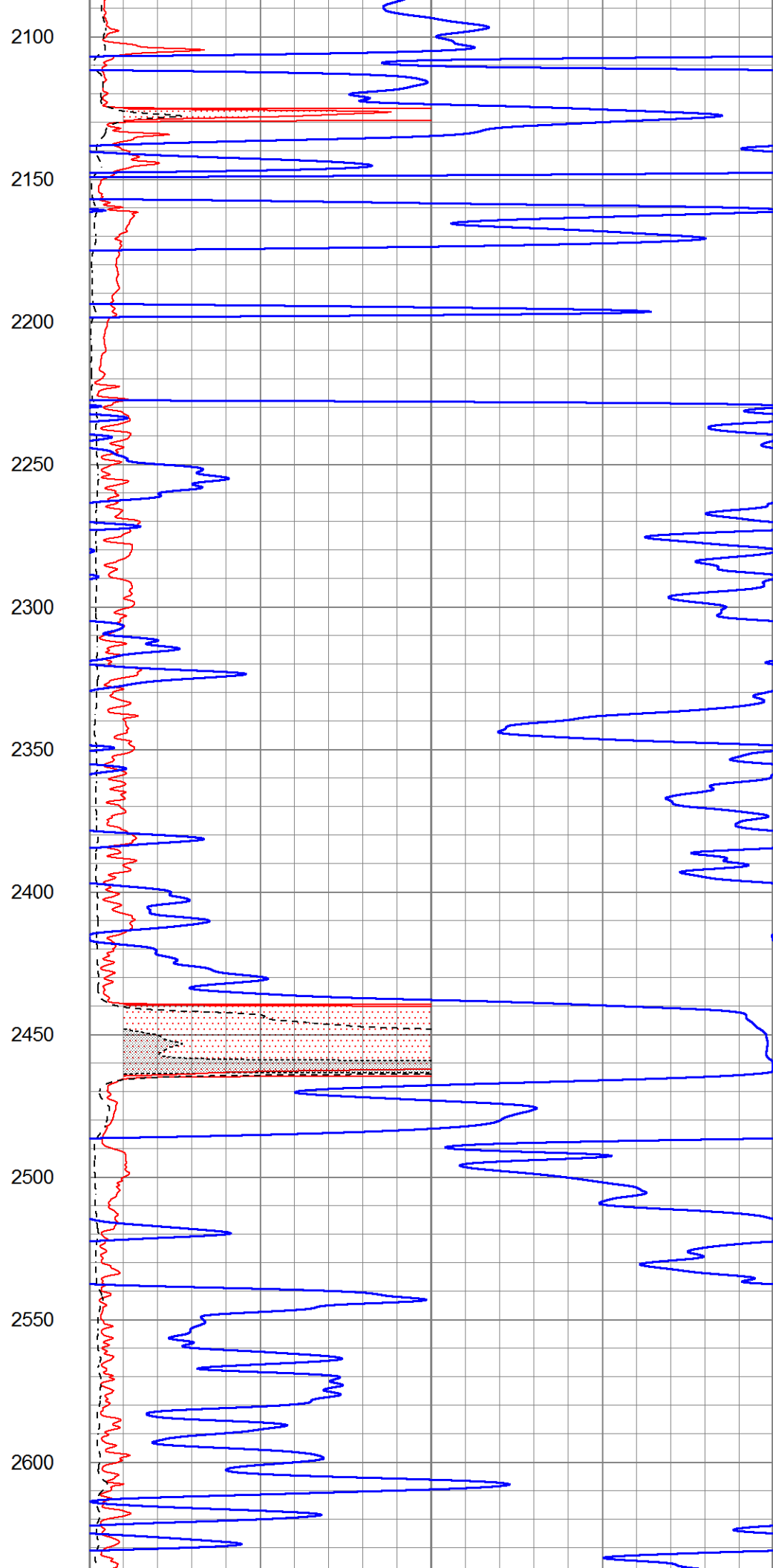
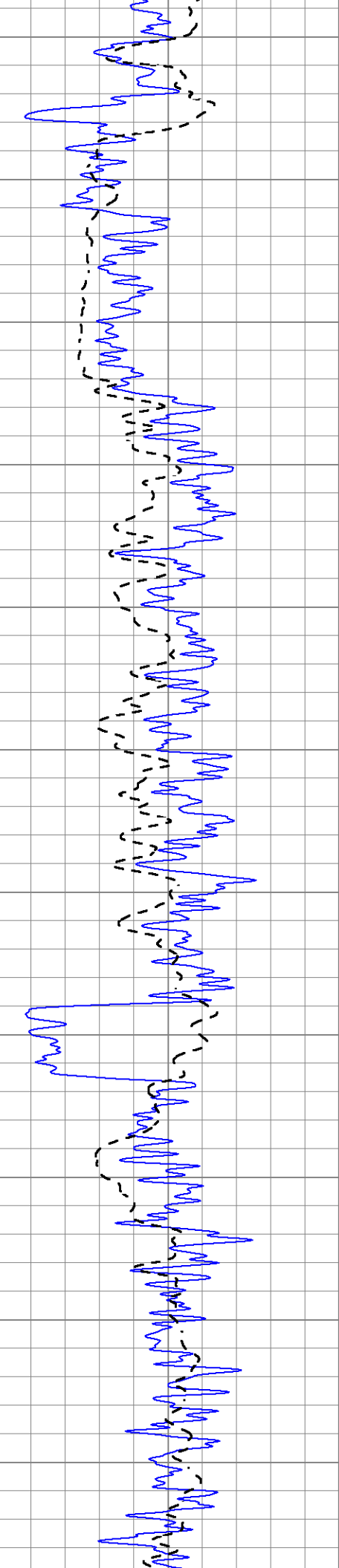
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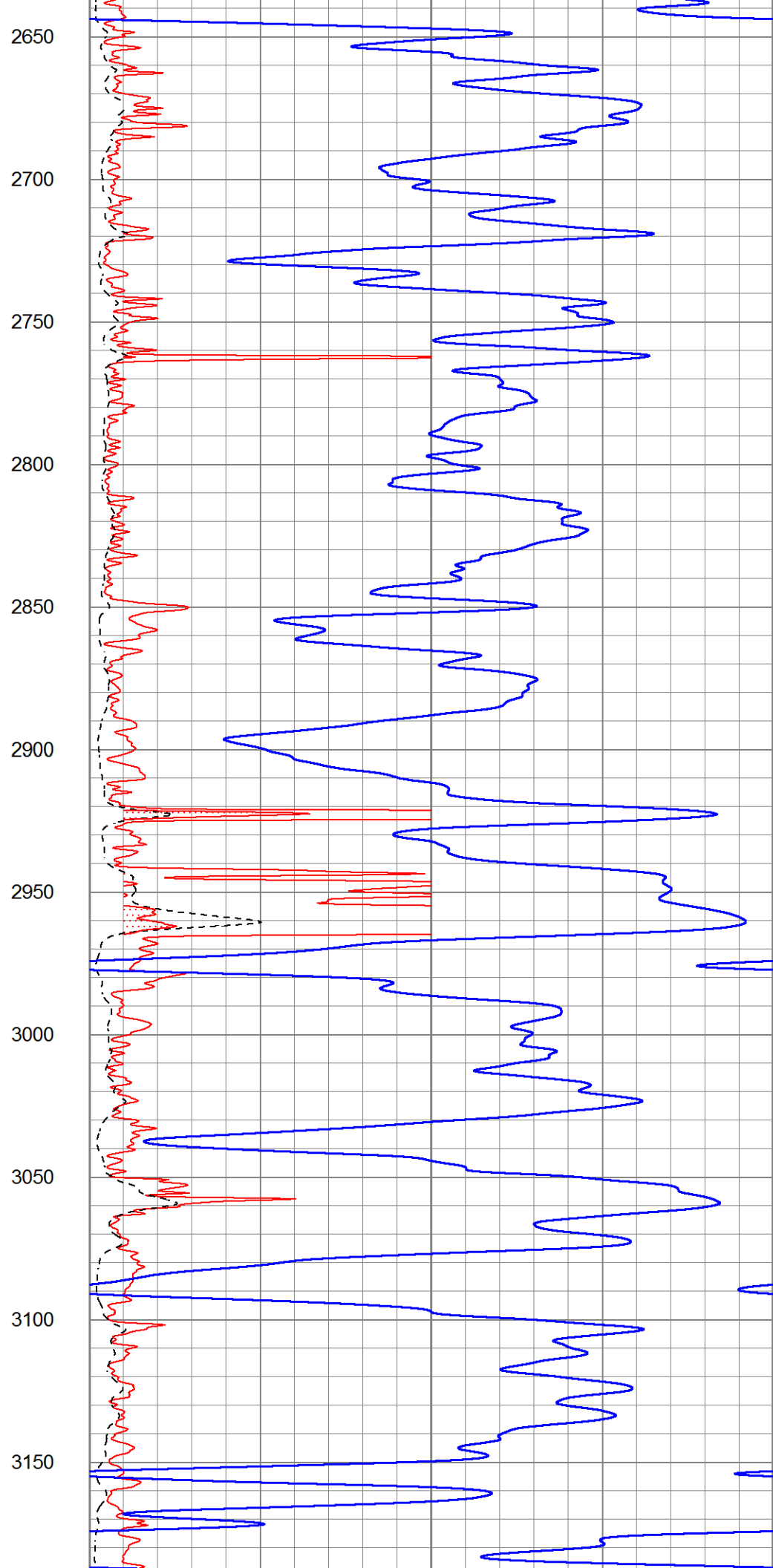
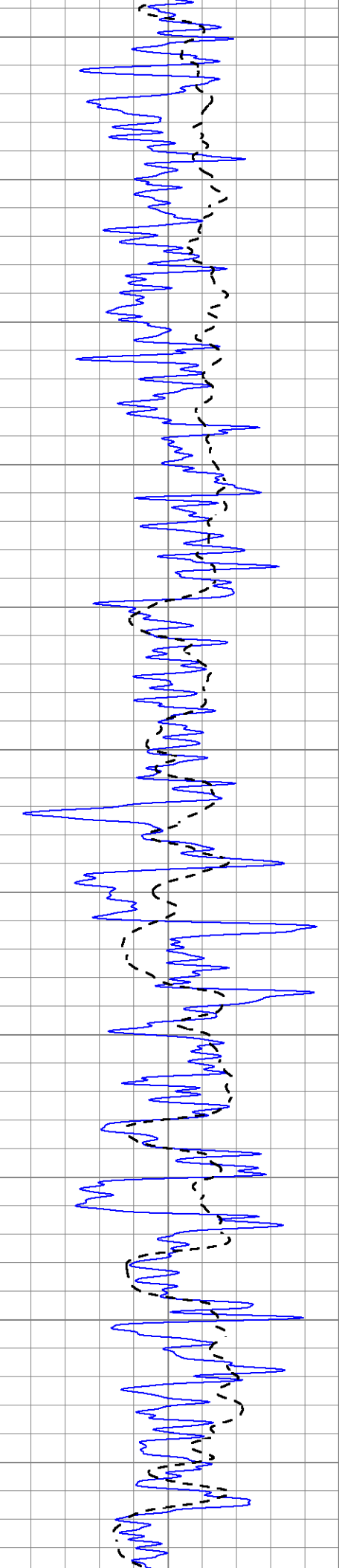
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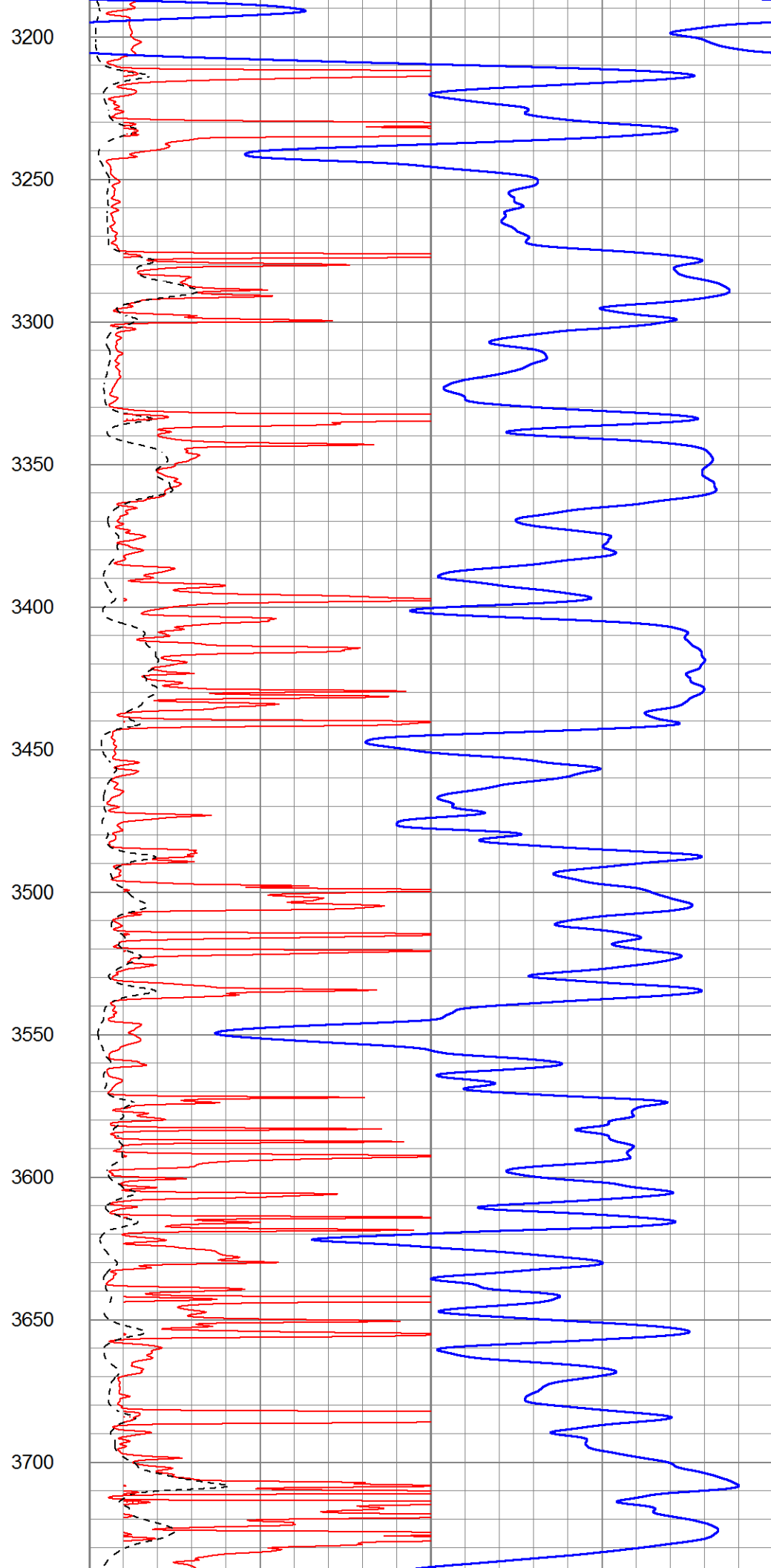
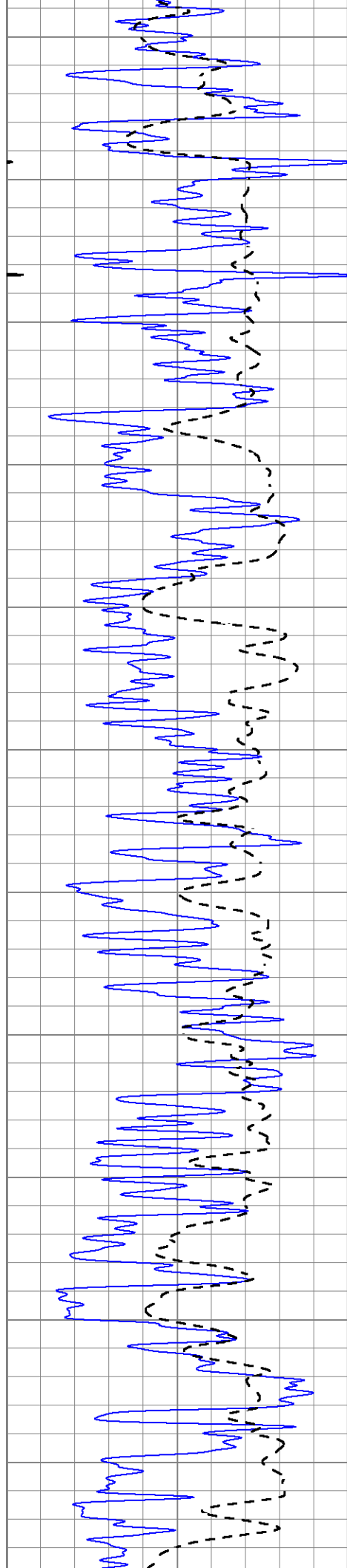
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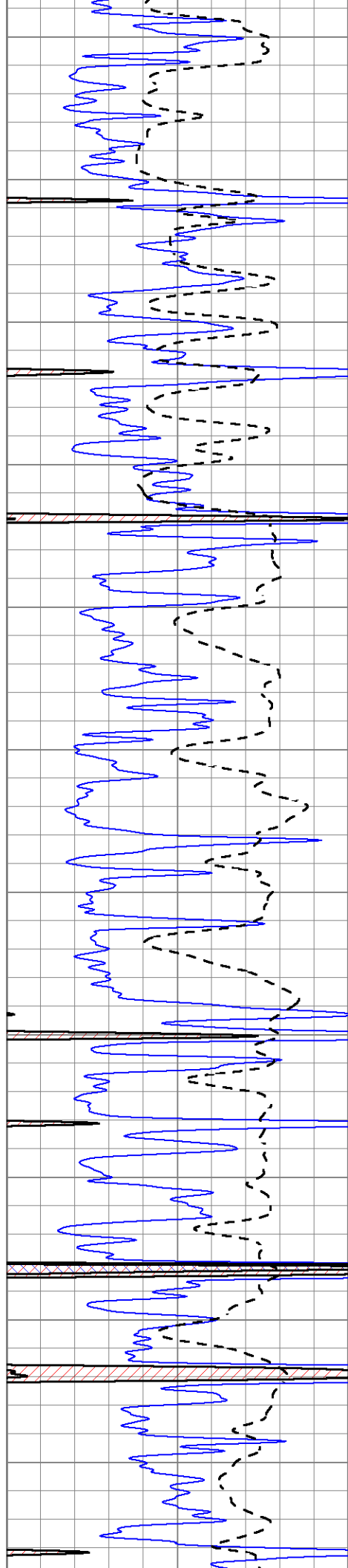
2050











3750

3800

3850

3900

3950

4000

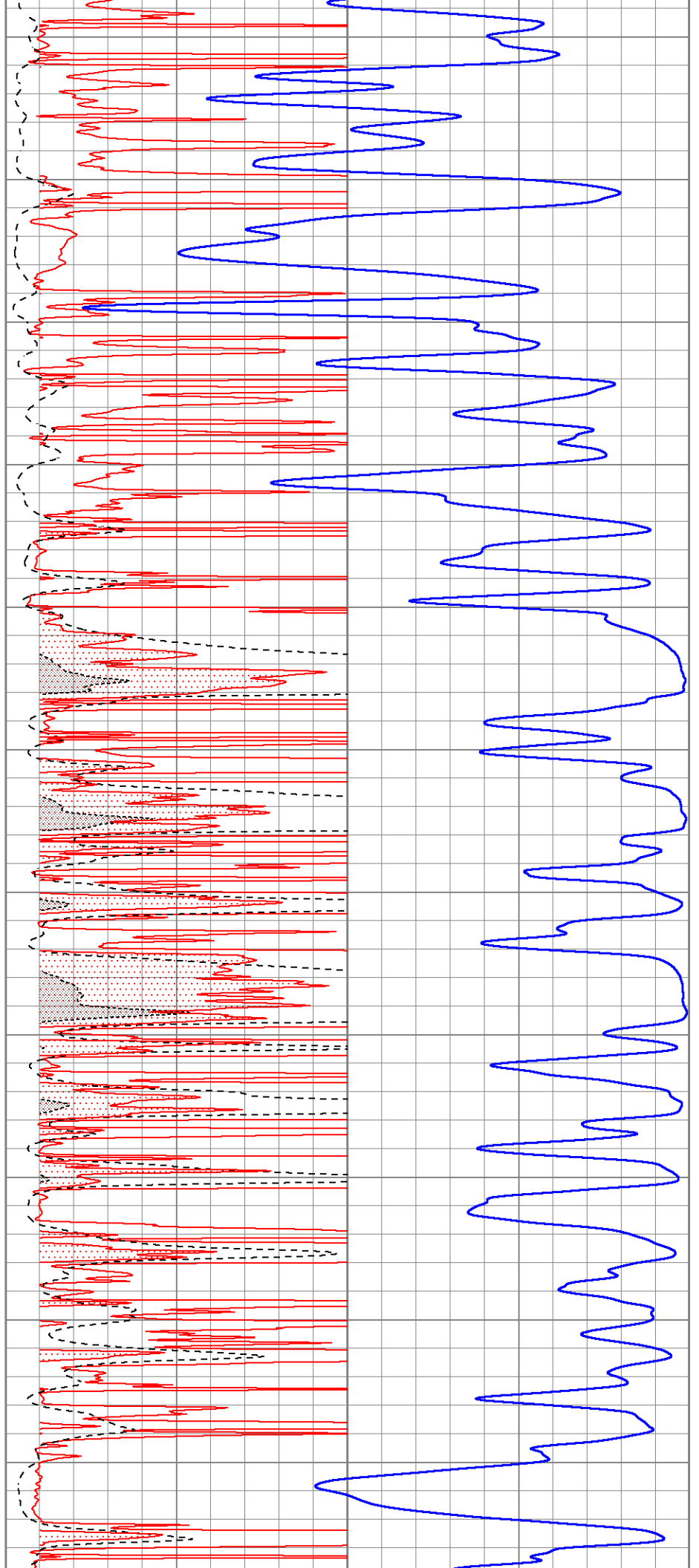
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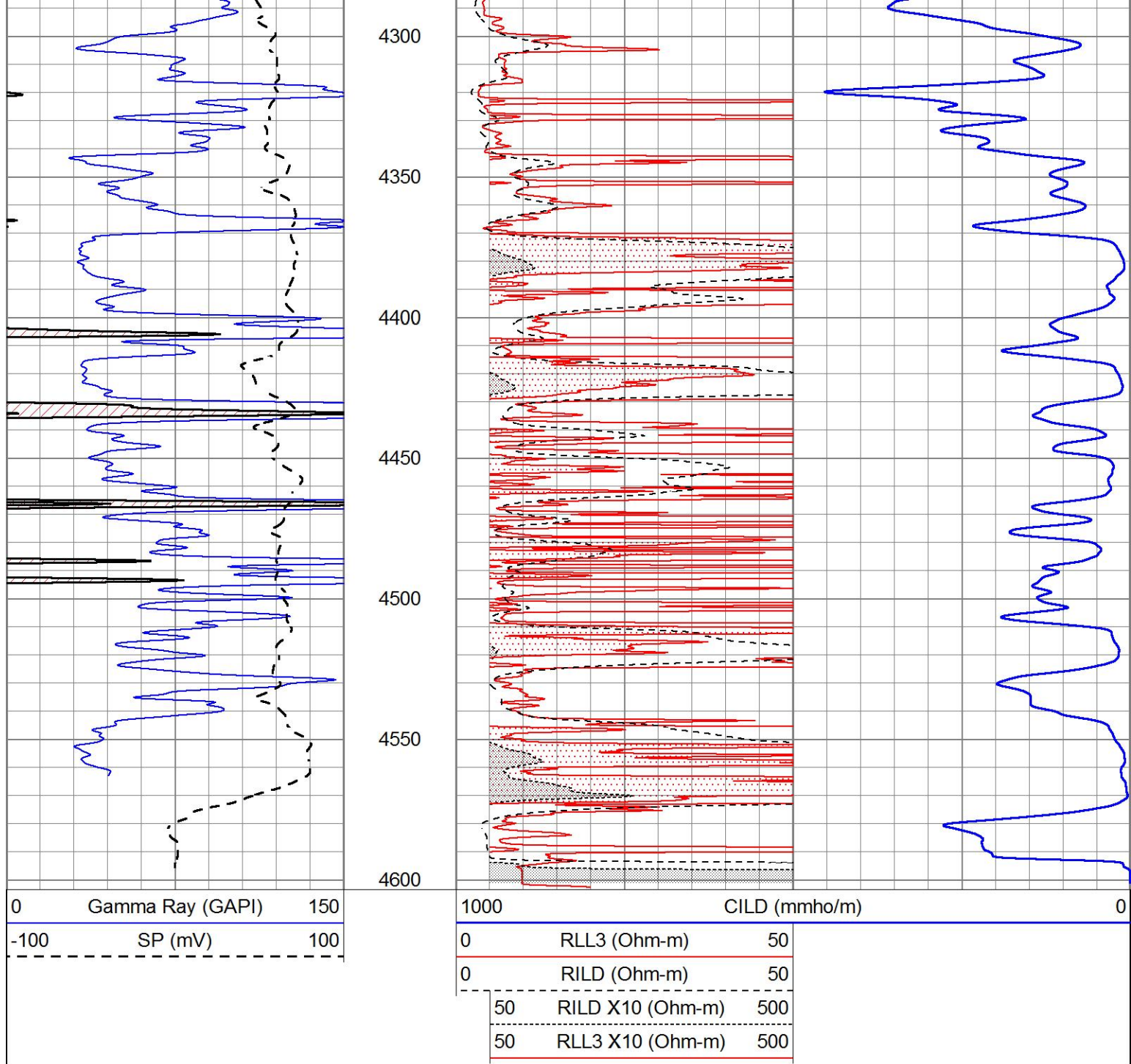
4100

4150

4200

4250

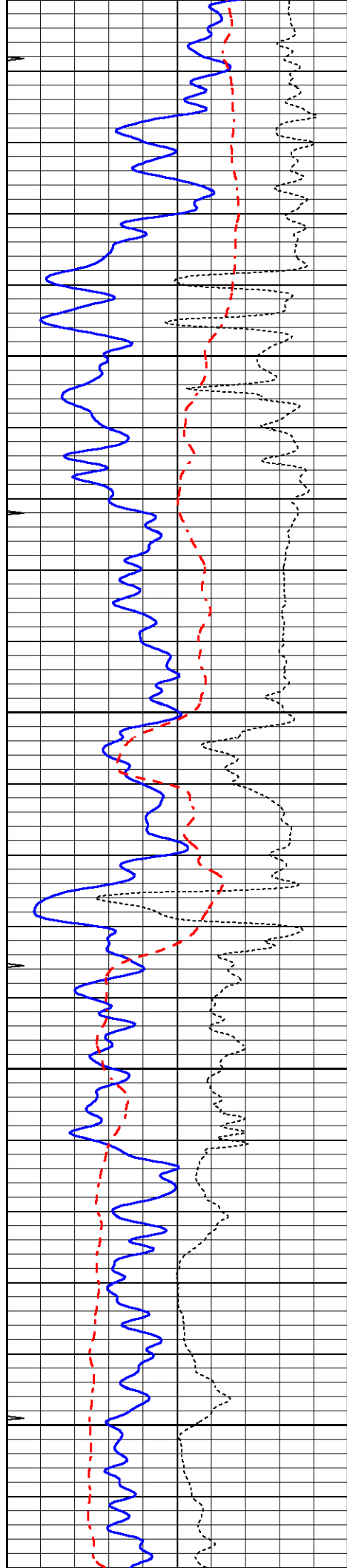




# ANHYDRITE

Database File 6573pe.db  
Dataset Pathname pass3.1A  
Presentation Format \_dil  
Dataset Creation Sun Jun 26 00:35:52 2022  
Charted by Depth in Feet scaled 1:240

|      |                  |     |     |                          |      |
|------|------------------|-----|-----|--------------------------|------|
| 0    | GAMMA RAY (GAPI) | 150 | 0.2 | SHALLOW GUARD (Ohm-m)    | 2000 |
| -100 | SP (mV)          | 100 | 0.2 | DEEP INDUCTION (Ohm-m)   | 2000 |
| -250 | Rxo/Rt           | 50  | 0.2 | MEDIUM INDUCTION (Ohm-m) | 2000 |
| 0    | MINMK            | 20  |     |                          |      |



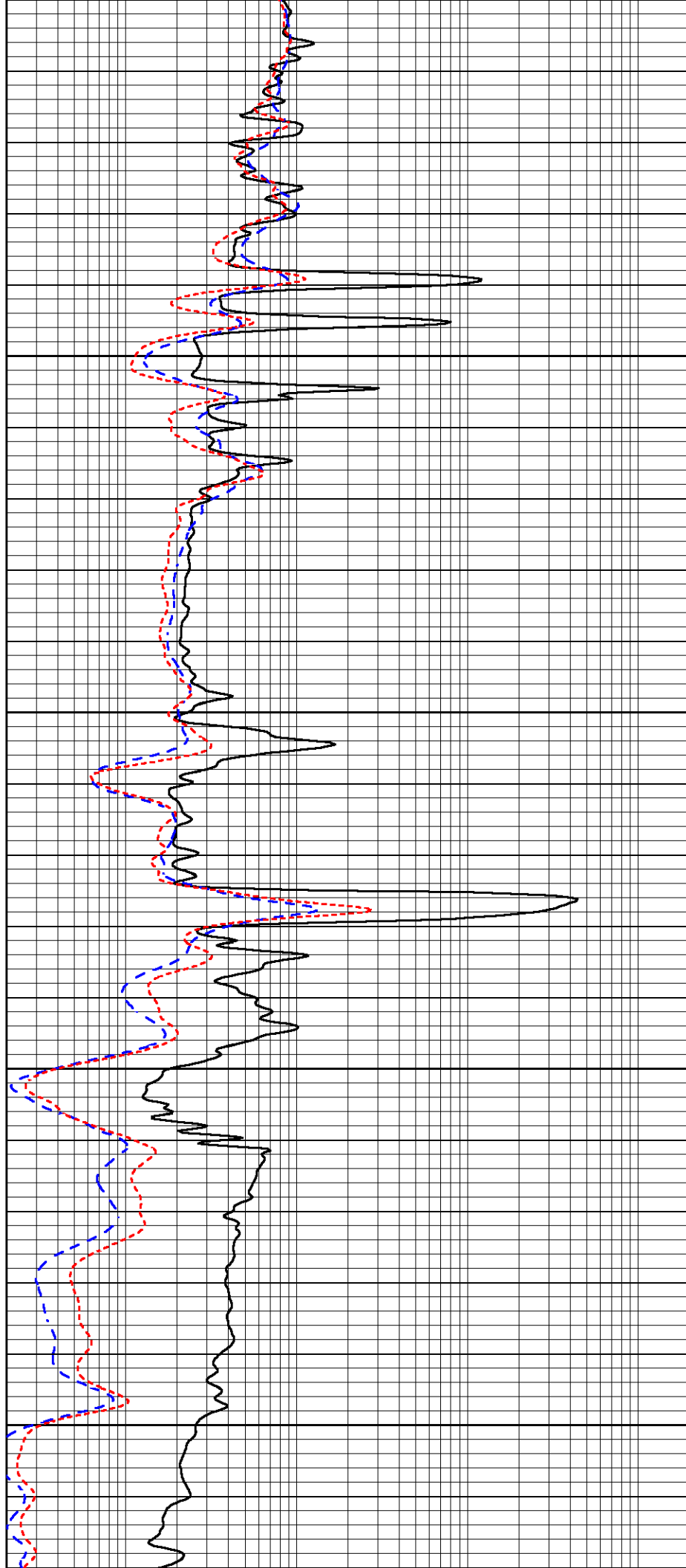
2000

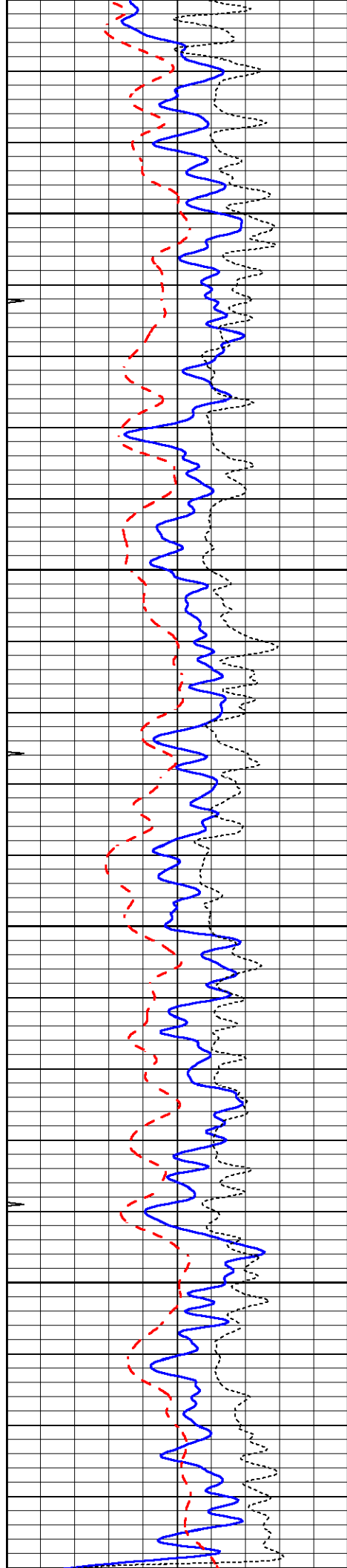
2050

2100

2150

2200



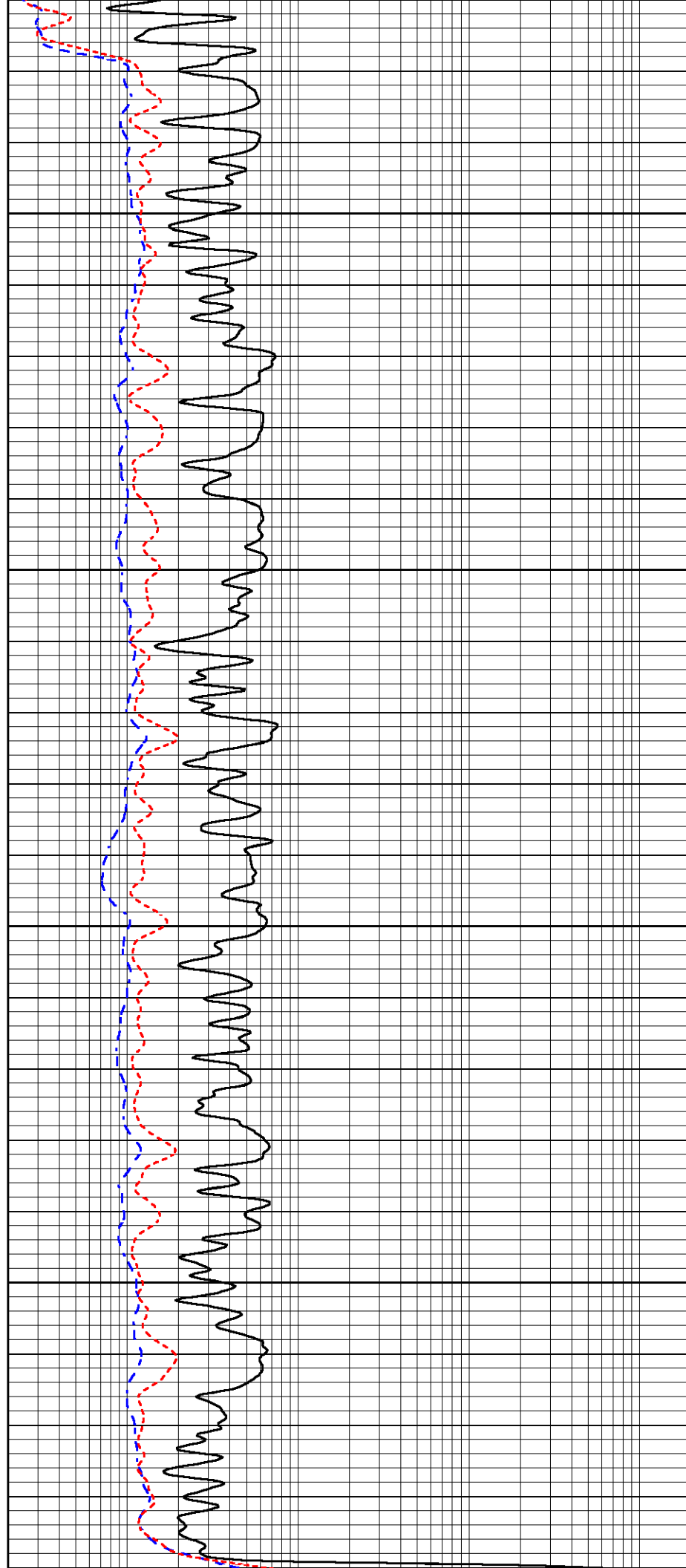


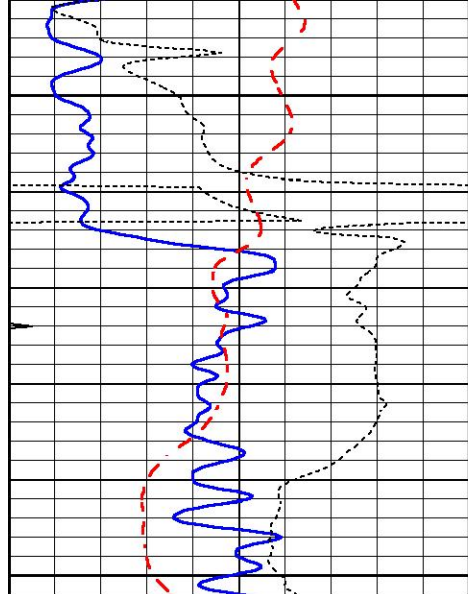
2250

2300

2350

2400

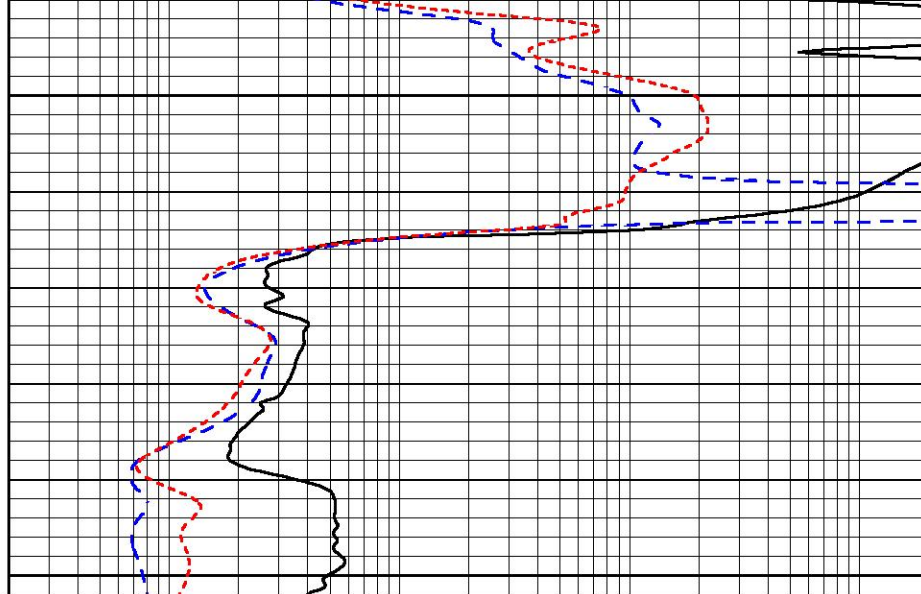




2450

2500

|      |                  |     |
|------|------------------|-----|
| 0    | GAMMA RAY (GAPI) | 150 |
| -100 | SP (mV)          | 100 |
| -250 | Rxo/Rt           | 50  |
| 0    | MINMK            | 20  |



|     |                          |      |
|-----|--------------------------|------|
| 0.2 | SHALLOW GUARD (Ohm-m)    | 2000 |
| 0.2 | DEEP INDUCTION (Ohm-m)   | 2000 |
| 0.2 | MEDIUM INDUCTION (Ohm-m) | 2000 |

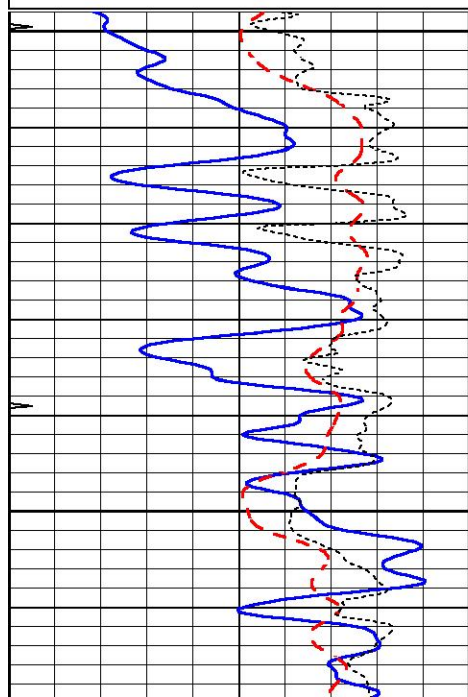


# MAIN SECTION

Database File 6573pe.db  
 Dataset Pathname pass3.1M  
 Presentation Format \_dil  
 Dataset Creation Sun Jun 26 00:34:56 2022  
 Charted by Depth in Feet scaled 1:240

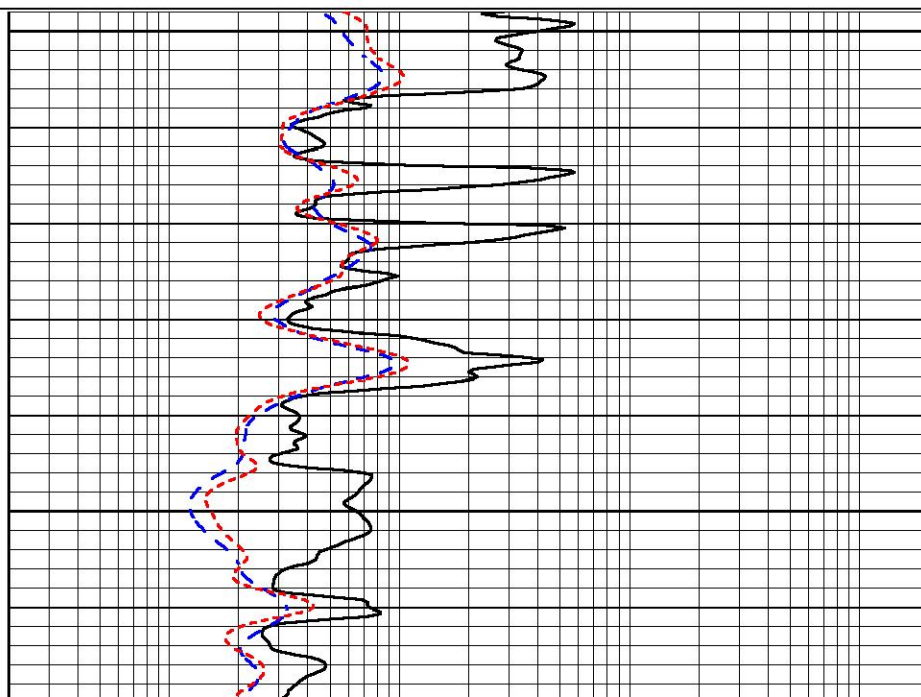
|      |                  |     |
|------|------------------|-----|
| 0    | GAMMA RAY (GAPI) | 150 |
| -100 | SP (mV)          | 100 |
| -250 | Rxo/Rt           | 50  |
| 0    | MINMK            | 20  |

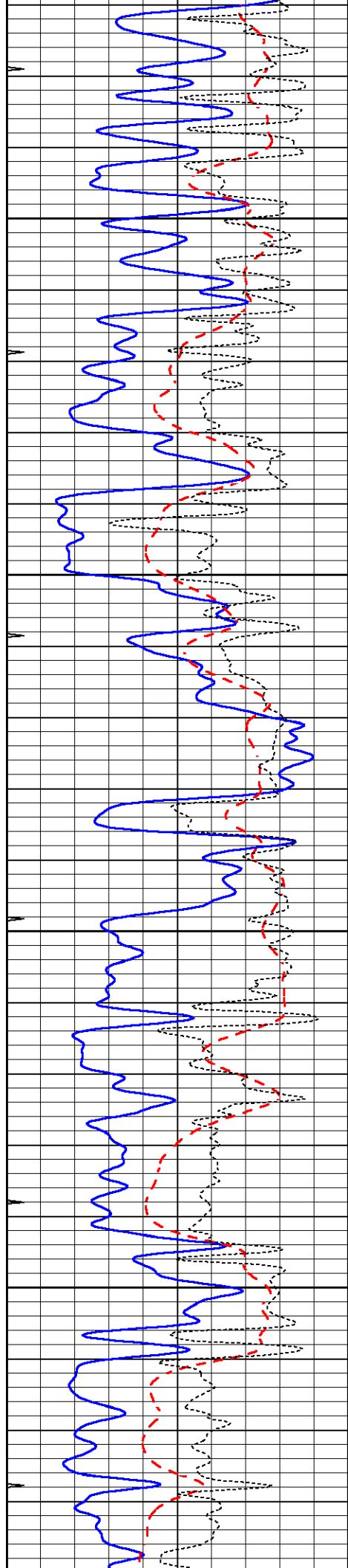
|     |                          |      |
|-----|--------------------------|------|
| 0.2 | SHALLOW GUARD (Ohm-m)    | 2000 |
| 0.2 | DEEP INDUCTION (Ohm-m)   | 2000 |
| 0.2 | MEDIUM INDUCTION (Ohm-m) | 2000 |



3500

3550



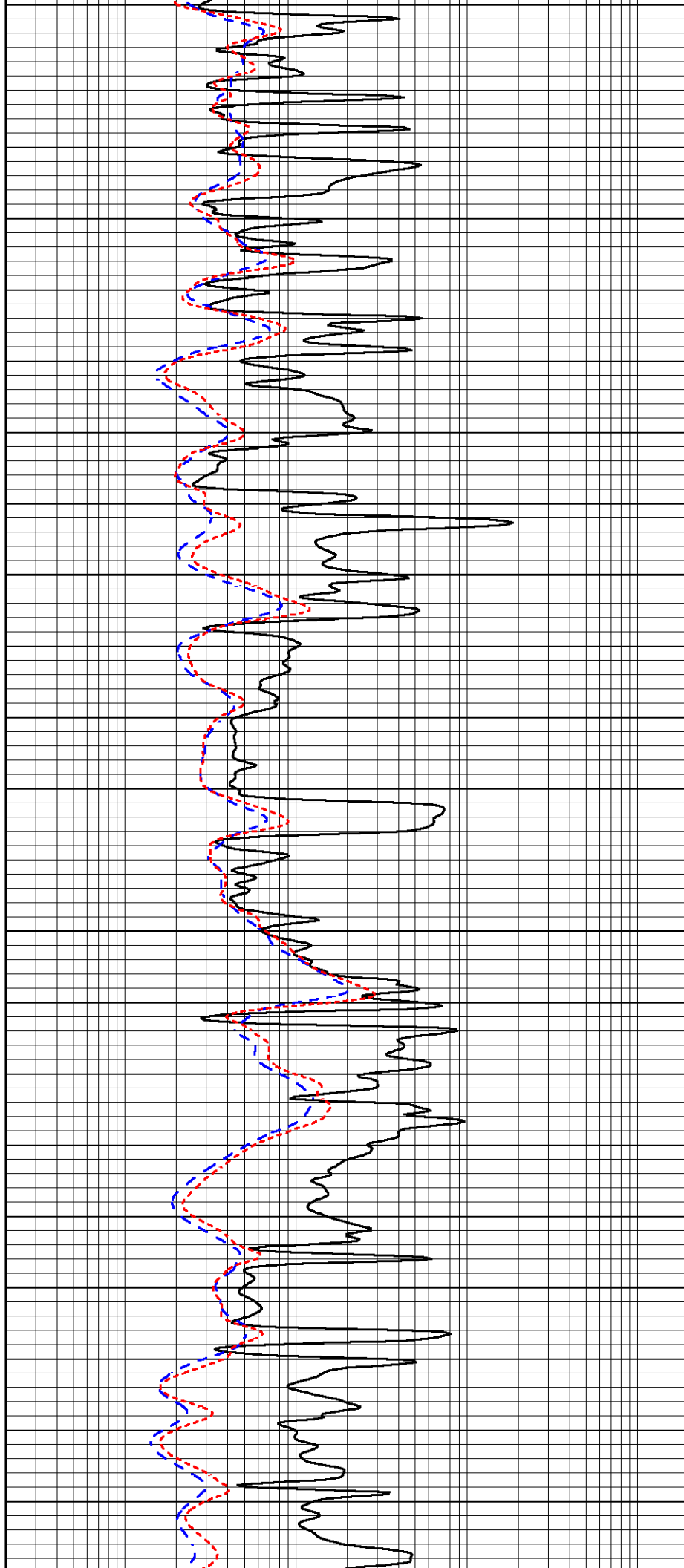


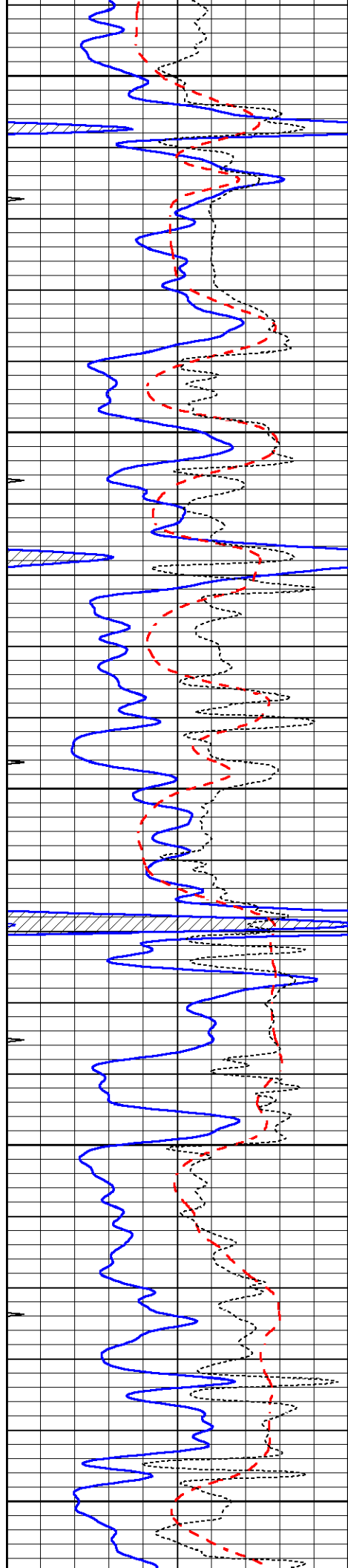
3600

3650

3700

3750





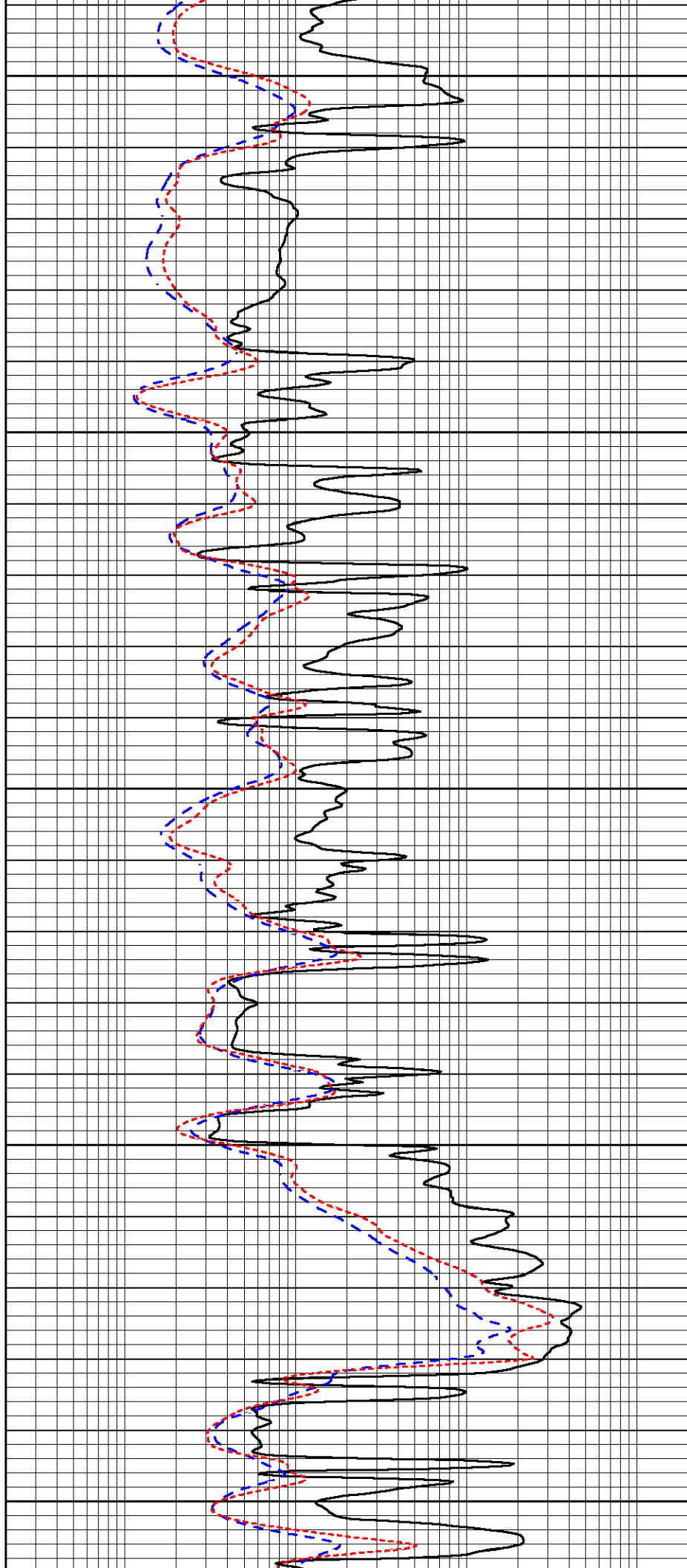
3800

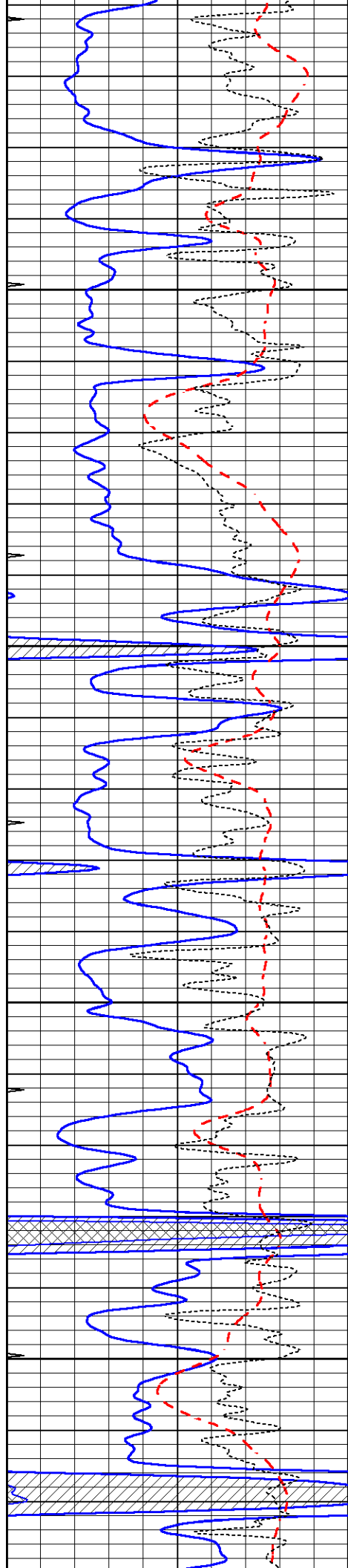
3850

3900

3950

4000



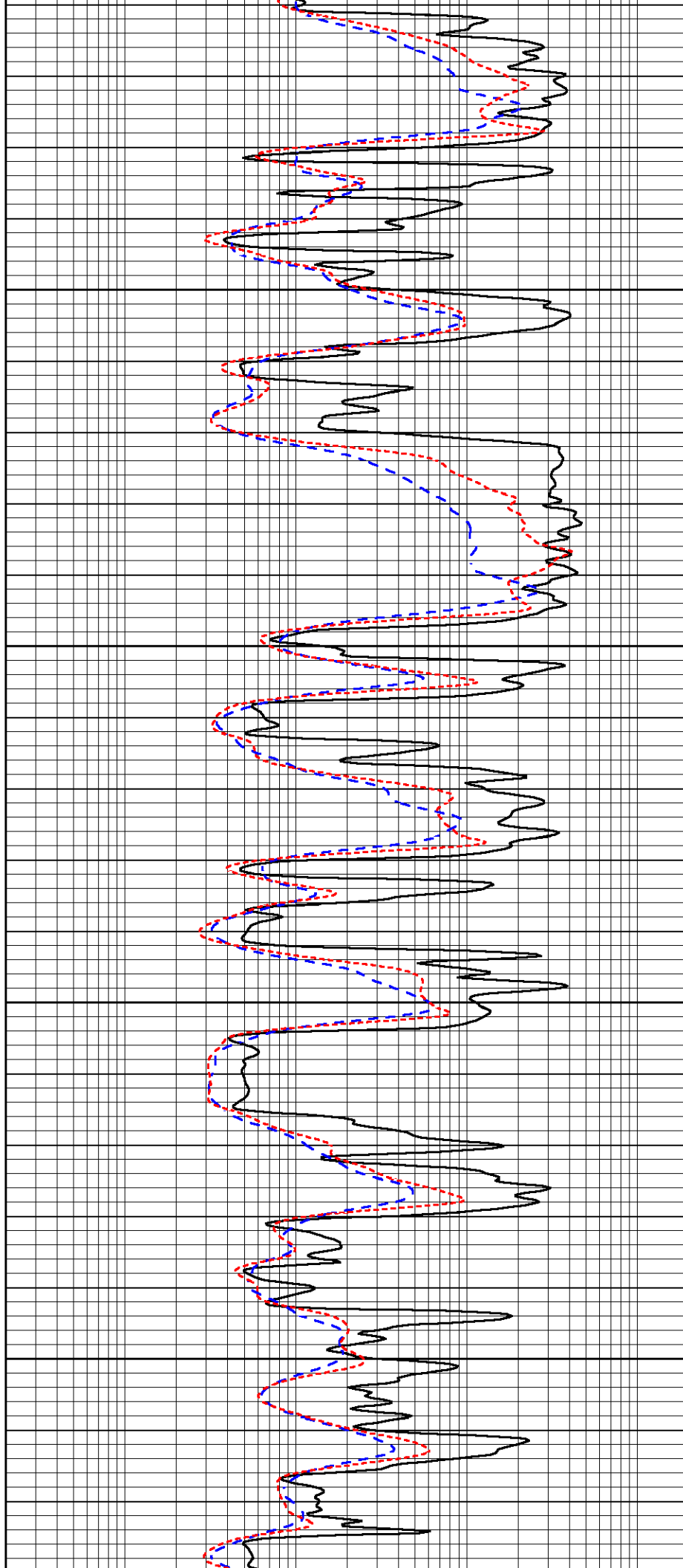


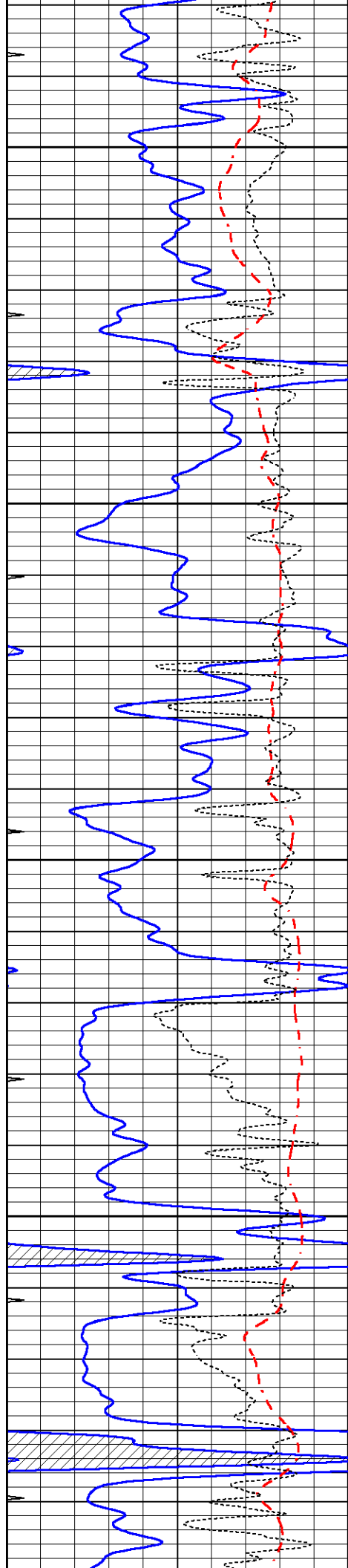
4050

4100

4150

4200





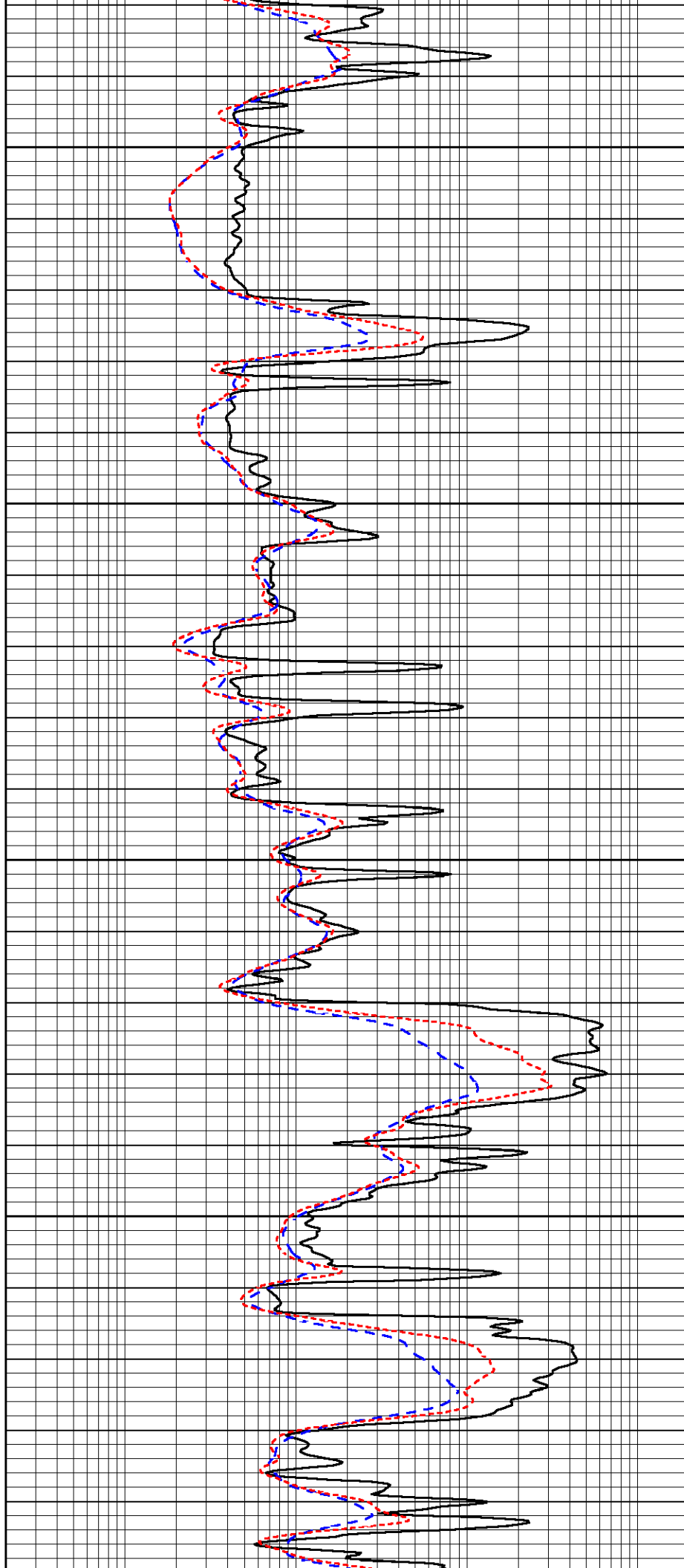
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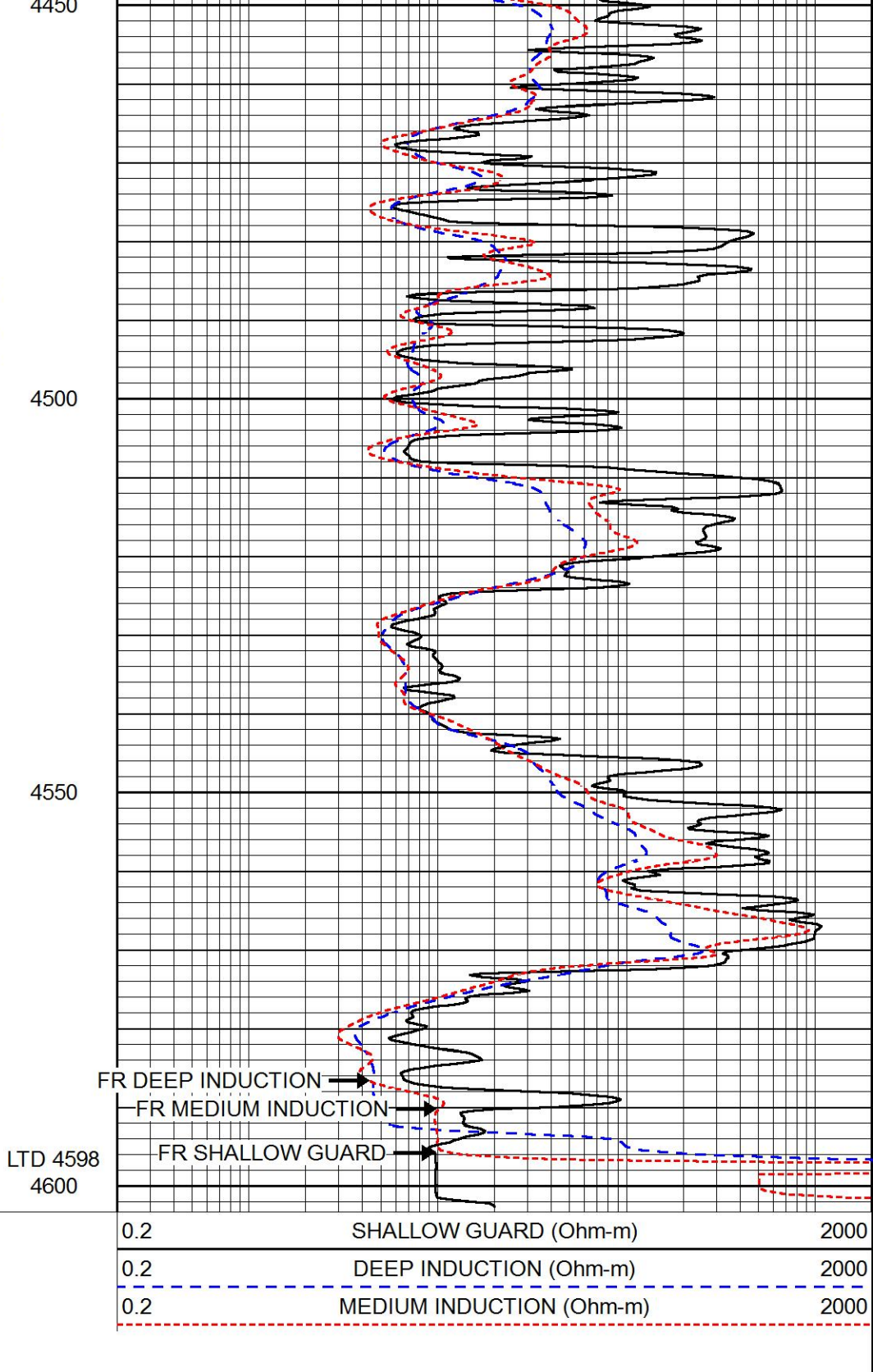
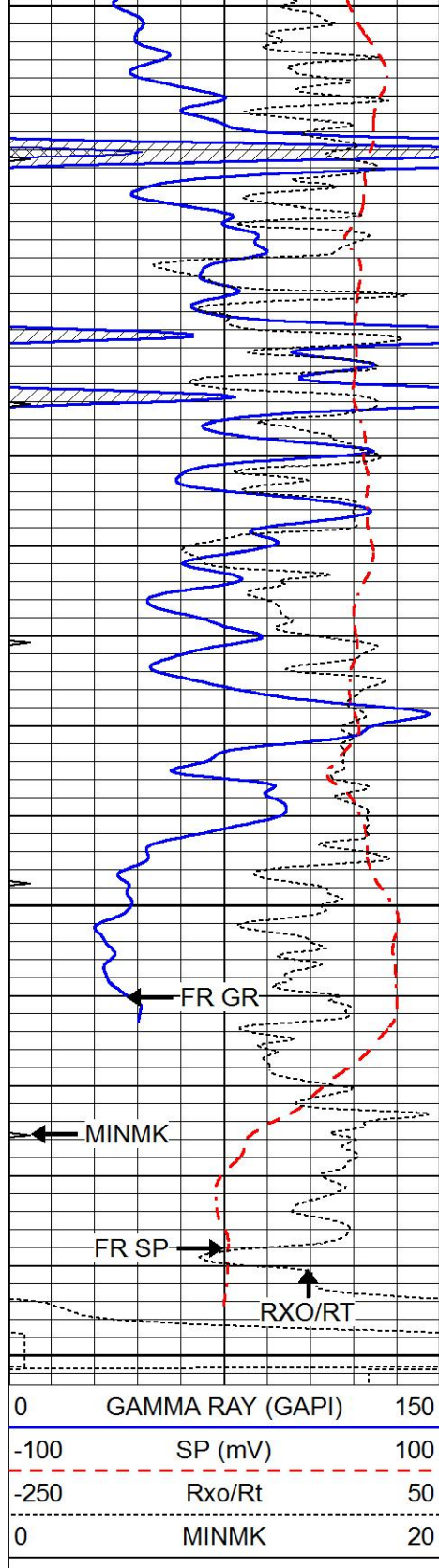
4300

4350

4400

4450

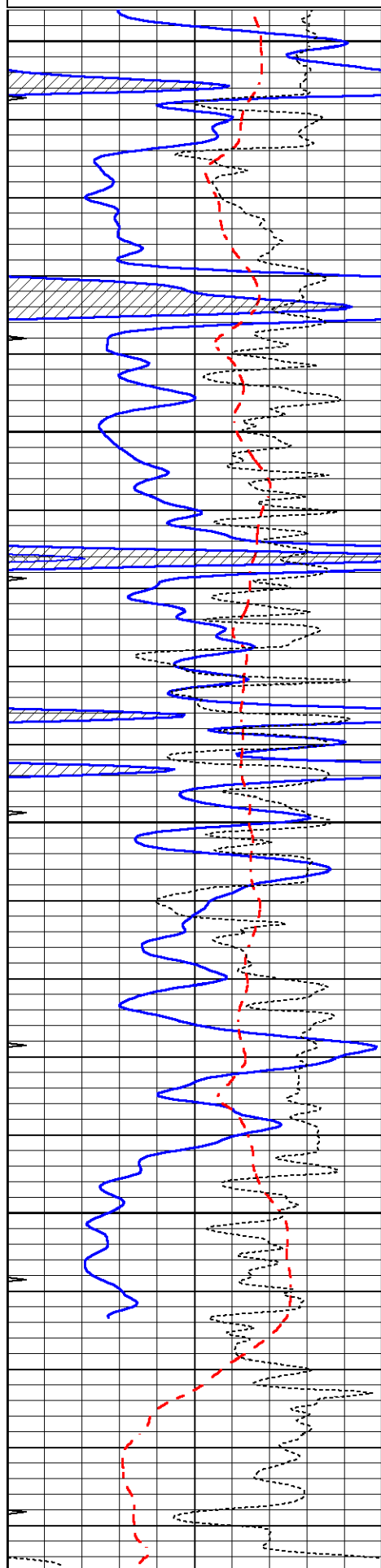




# REPEAT SECTION

Database File 6573pe.db  
 Dataset Pathname pass2.1R  
 Presentation Format \_dil  
 Dataset Creation Sun Jun 26 00:44:06 2022  
 Charted by Depth in Feet scaled 1:240

|      |                  |     |
|------|------------------|-----|
| 0    | GAMMA RAY (GAPI) | 150 |
| -100 | SP (mV)          | 100 |
| -250 | Rxo/Rt           | 50  |
| 0    | MINMK            | 20  |



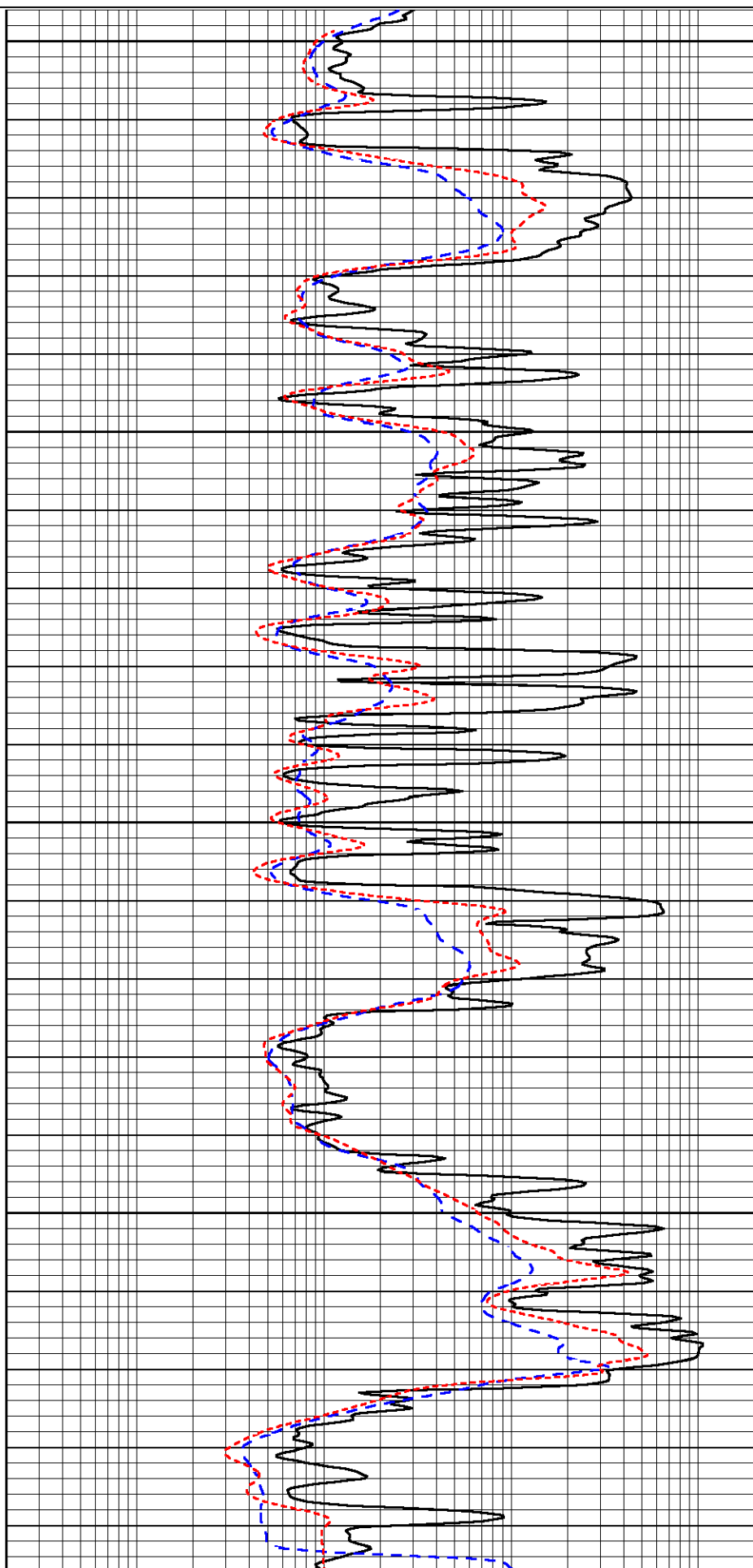
4400

4450

4500

4550

|     |                          |      |
|-----|--------------------------|------|
| 0.2 | SHALLOW GUARD (Ohm-m)    | 2000 |
| 0.2 | DEEP INDUCTION (Ohm-m)   | 2000 |
| 0.2 | MEDIUM INDUCTION (Ohm-m) | 2000 |





|             |        |             |         |                     |         |
|-------------|--------|-------------|---------|---------------------|---------|
| Window 4    | 172.8  | 175.7       | 175.3   | 173.5               | cps     |
| Long Space  | 0.0    | 5179.6      | 1095.2  | 945.5               | cps     |
| Short Space | 1.1    | 1228.6      | 821.2   | 690.4               | cps     |
| Rho         |        | 1.7100      | 2.5900  | 0.0000              | g/cc    |
| Pe          |        | 2.0000      | 2.7500  | 5.7900              |         |
|             |        |             |         |                     |         |
| Rib Angle   | : 45.5 | Rib Slope   | : 1.016 | Density/Spine Ratio | : 0.548 |
| Spine Angle | : 75.5 | Spine Slope | : 3.857 | Spine Intercept     | : -18.9 |

| Before Survey Verification |     | Performed Wed Dec 31 18:00:00 1969 |        |        |      |
|----------------------------|-----|------------------------------------|--------|--------|------|
|                            |     |                                    |        |        |      |
| Window 1                   | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Window 2                   | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Window 3                   | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Window 4                   | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Long Space                 | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Short Space                | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Measured Rho               |     | 0.0000                             | 0.0000 | 0.0000 | g/cc |
| Measured Correction        |     | 0.0000                             | 0.0000 | 0.0000 | g/cc |
| Measured Pe                |     |                                    | 0.0000 | 0.0000 |      |

| After Survey Verification |     | Performed Wed Dec 31 18:00:00 1969 |        |        |      |
|---------------------------|-----|------------------------------------|--------|--------|------|
|                           |     |                                    |        |        |      |
| Window 1                  | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Window 2                  | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Window 3                  | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Window 4                  | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Long Space                | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Short Space               | 0.0 | 0.0                                | 0.0    | 0.0    | cps  |
| Measured Rho              |     | 0.0000                             | 0.0000 | 0.0000 | g/cc |
| Measured Correction       |     | 0.0000                             | 0.0000 | 0.0000 | g/cc |
| Measured Pe               |     |                                    | 0.0000 | 0.0000 |      |

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

|                                        |  |  |  |  |  |
|----------------------------------------|--|--|--|--|--|
| Compensated Neutron Calibration Report |  |  |  |  |  |
|----------------------------------------|--|--|--|--|--|

|                |  |    |  |  |  |
|----------------|--|----|--|--|--|
| Serial Number: |  | 6I |  |  |  |
| Tool Model:    |  | G  |  |  |  |

|             |  |          |     |        |               |
|-------------|--|----------|-----|--------|---------------|
| CALIBRATION |  |          |     |        |               |
| Detector    |  | Readings |     | Target | Normalization |
| Short Space |  | 1.00     | cps | 1.00   | cps           |
| Long Space  |  | 1.00     | cps | 1.00   | cps           |

|                         |             |          |     |          |        |
|-------------------------|-------------|----------|-----|----------|--------|
| PRE-SURVEY VERIFICATION |             |          |     |          |        |
| Detector                |             | Readings |     | Measured | Target |
| 1)                      | Short Space |          | cps |          |        |
|                         | Long Space  |          | cps | pu       | pu     |
| 2)                      | Short Space |          | cps |          |        |
|                         | Long Space  |          | cps | pu       |        |
| 3)                      | Short Space |          | cps |          |        |
|                         | Long Space  |          | cps | pu       |        |

|                          |  |          |  |          |        |
|--------------------------|--|----------|--|----------|--------|
| POST-SURVEY VERIFICATION |  |          |  |          |        |
| Detector                 |  | Readings |  | Measured | Target |

|    |                           |            |    |    |
|----|---------------------------|------------|----|----|
| 1) | Short Space<br>Long Space | cps<br>cps | pu | pu |
| 2) | Short Space<br>Long Space | cps<br>cps | pu | pu |
| 3) | Short Space<br>Long Space | cps<br>cps | pu | pu |

|                              |
|------------------------------|
| Gamma Ray Calibration Report |
|------------------------------|

|                     |                          |          |
|---------------------|--------------------------|----------|
| Serial Number:      | GR6                      |          |
| Tool Model:         | OPEN                     |          |
| Performed:          | Mon Jun 20 01:31:16 2022 |          |
| Calibrator Value:   | 150.0                    | GAPI     |
| Background Reading: | 0.0                      | cps      |
| Calibrator Reading: | 276.0                    | cps      |
| Sensitivity:        | 0.8500                   | GAPI/cps |