



**SUPERIOR**  
**Hays,**  
**Kansas**

**DUAL**  
**INDUCTION**  
**LOG**

|                                   |                         |                                           |                                     |
|-----------------------------------|-------------------------|-------------------------------------------|-------------------------------------|
| Company LOTUS OPERATING CO., LLC. |                         | Company LOTUS OPERATING CO., LLC.         |                                     |
| Well #5 SUZIE                     | Well #5 SUZIE           |                                           |                                     |
| Field                             | Field                   |                                           |                                     |
| County BARBER                     | County BARBER           |                                           |                                     |
| State KANSAS                      | State KANSAS            |                                           |                                     |
| Location: 400' FSL & 1485' FEL    |                         | API # : 15-007-23721-0000                 |                                     |
| SEC 30 TWP 34S RGE 11W            |                         | Other Services<br>CDL/CNL/PE<br>MEL/SONIC |                                     |
| Permanent Datum                   | GROUND LEVEL            | Elevation                                 | 1386                                |
| Log Measured From                 | KELLY BUSHING 9' A.G.L. | Elevation                                 | K.B. 1395<br>D.F. 1393<br>G.L. 1386 |
| Drilling Measured From            | KELLY BUSHING           |                                           |                                     |
| Date 7/1/11                       |                         |                                           |                                     |
| Run Number ONE                    |                         |                                           |                                     |
| Depth Driller 5400                |                         |                                           |                                     |
| Depth Logger 5396                 |                         |                                           |                                     |
| Bottom Logged Interval 5394       |                         |                                           |                                     |
| Top Log Interval 00               |                         |                                           |                                     |
| Casing Driller 10 3/4" @ 266      |                         |                                           |                                     |
| Casing Logger 268                 |                         |                                           |                                     |
| Bit Size 7 7/8"                   |                         |                                           |                                     |
| Type Fluid in Hole CHEMICAL MUD   | CHLORIDES 4500 PPM      |                                           |                                     |
| Density / Viscosity 9.4/43        |                         |                                           |                                     |
| pH / Fluid Loss 9.0/11.2          |                         |                                           |                                     |
| Source of Sample FLOWLINE         |                         |                                           |                                     |
| Rin @ Meas. Temp .70 @ 89F        |                         |                                           |                                     |
| Rinf @ Meas. Temp .52 @ 89F       |                         |                                           |                                     |
| Rinc @ Meas. Temp .84 @ 89F       |                         |                                           |                                     |
| Source of Rinf / Rinc MEASUREMENT |                         |                                           |                                     |
| Rin @ BHT .48 @ 128F              |                         |                                           |                                     |
| Time Circulation Stopped 2 HOURS  |                         |                                           |                                     |
| Time Logger on Bottom             |                         |                                           |                                     |
| Maximum Recorded Temperature 128F |                         |                                           |                                     |
| Equipment Number 0836             |                         |                                           |                                     |
| Location HAYS, KANSAS             |                         |                                           |                                     |
| Recorded By JASON CAPPELLUCCI     |                         |                                           |                                     |
| Witnessed By TIM HELLMAN          |                         |                                           |                                     |

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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 SUPERIOR WELL SERVICE HAYS, KANSAS (785) 628-6395  
DIRECTIONS  
MEDICINE LODGE KS., - 16 S. TO RATTLESNAKE RD. - 3/4 E. - N. INTO



**SUPERIOR**  
**Hays,**  
**Kansas**

**MAIN SECTION**

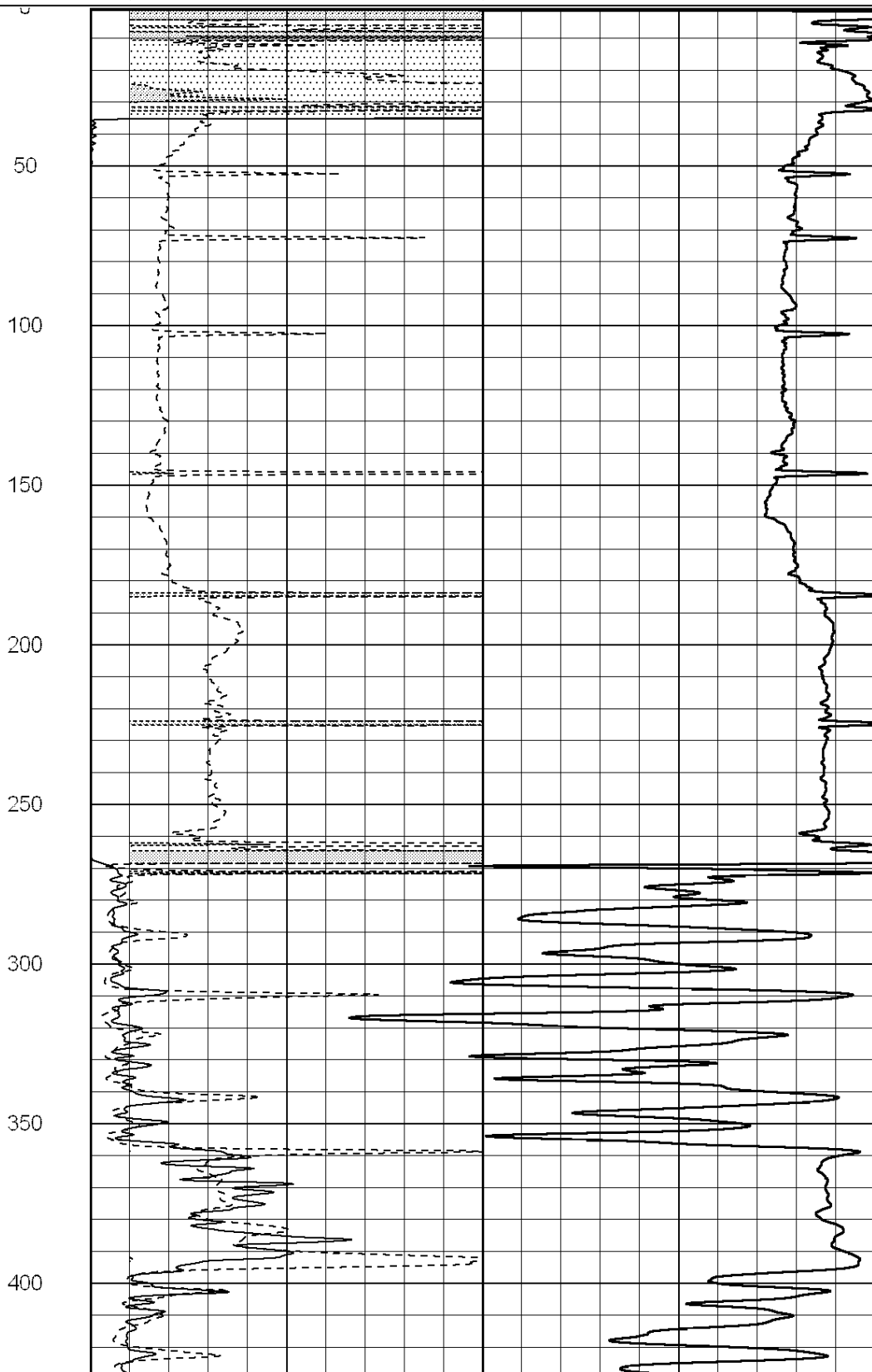
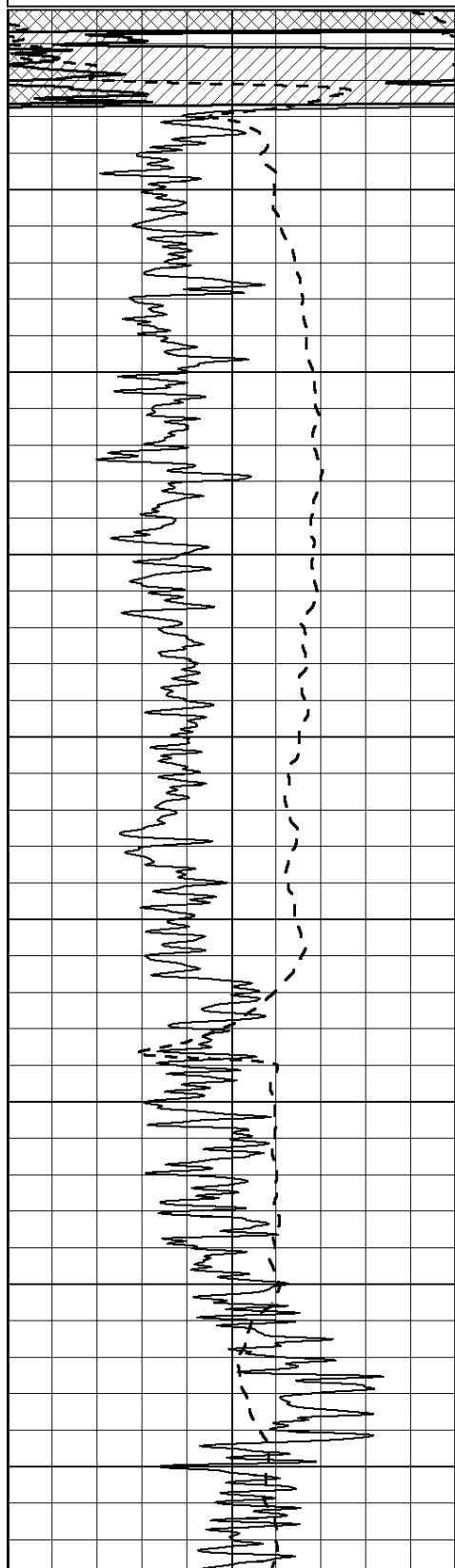
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 Dataset Pathname: pass3.2  
 Presentation Format: dil2  
 Dataset Creation: Fri Jul 01 09:29:56 2011 by Calc Open-Cased 110302  
 Charted by: Depth in Feet scaled 1:600

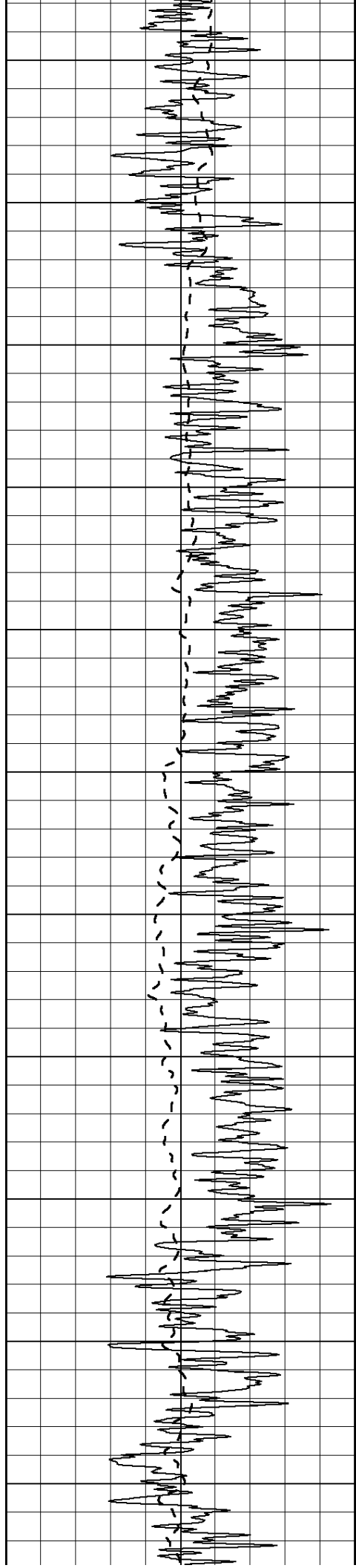
|      |                  |     |
|------|------------------|-----|
| 0    | Gamma Ray (GAPI) | 150 |
| -100 | SP (mV)          | 100 |

|   |              |    |
|---|--------------|----|
| 0 | RLL3 (Ohm-m) | 50 |
| 0 | RILD (Ohm-m) | 50 |

|      |               |   |
|------|---------------|---|
| 1000 | CILD (mmho/m) | 0 |
|------|---------------|---|

|    |                  |     |
|----|------------------|-----|
| 50 | RILD X10 (Ohm-m) | 500 |
| 50 | RLL3 X10 (Ohm-m) | 500 |





450

500

550

600

650

700

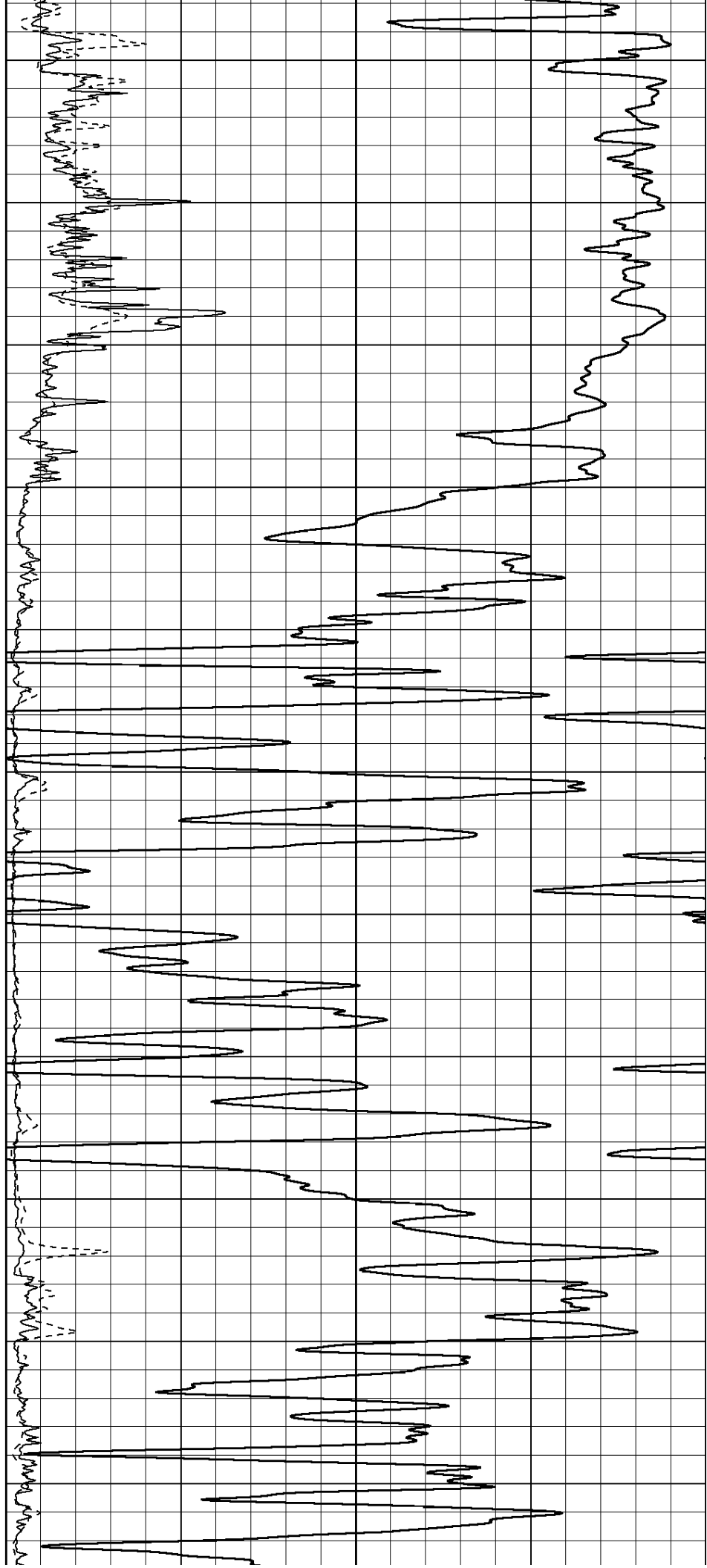
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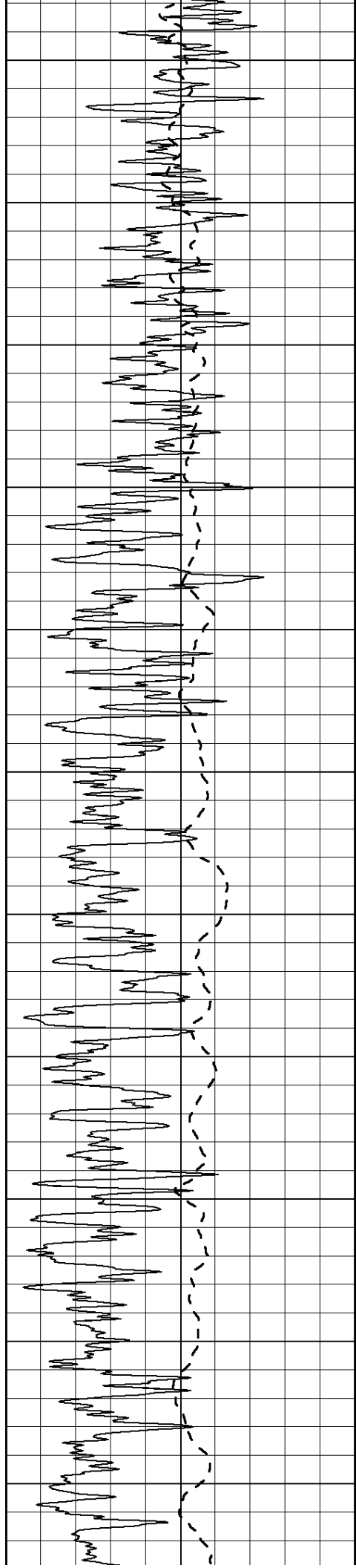
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850

900

950





1000

1050

1100

1150

1200

1250

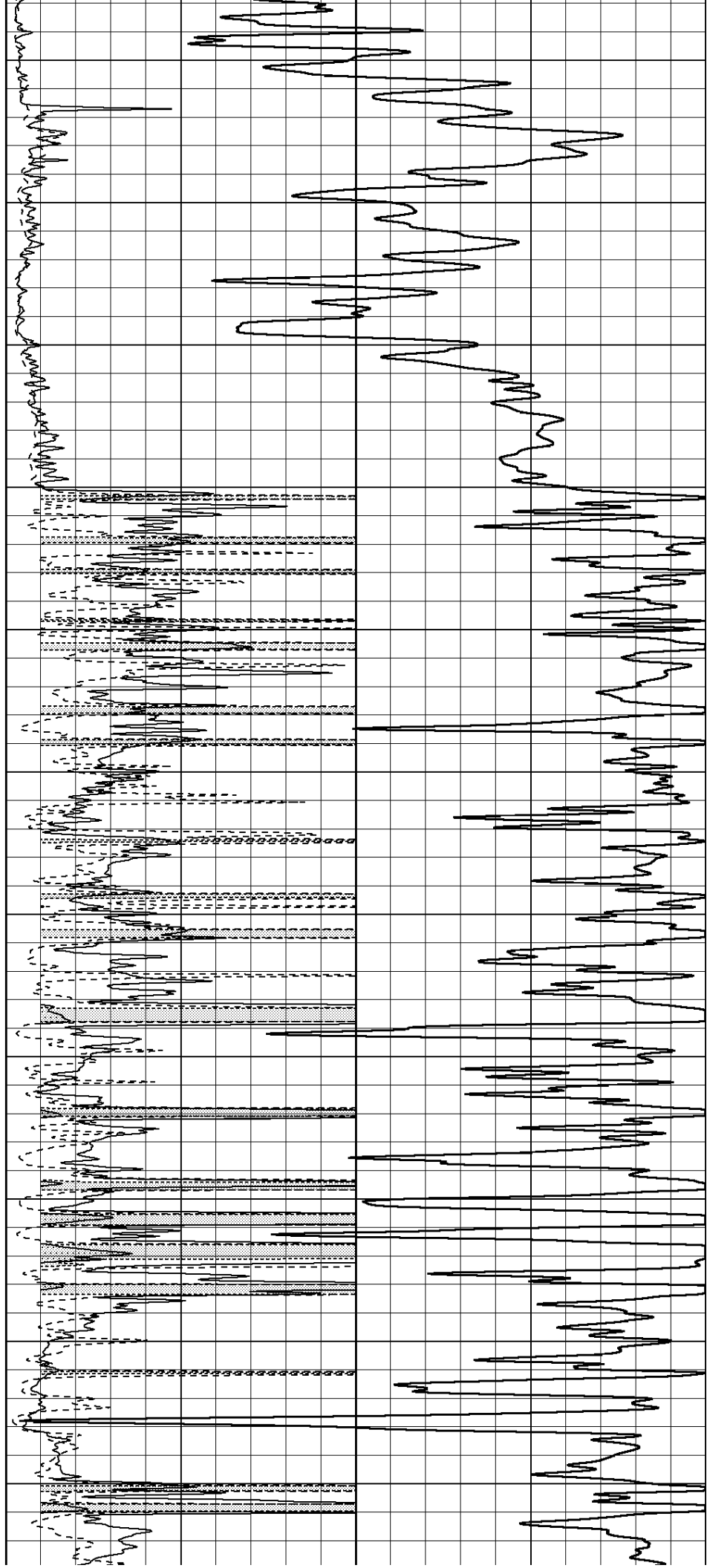
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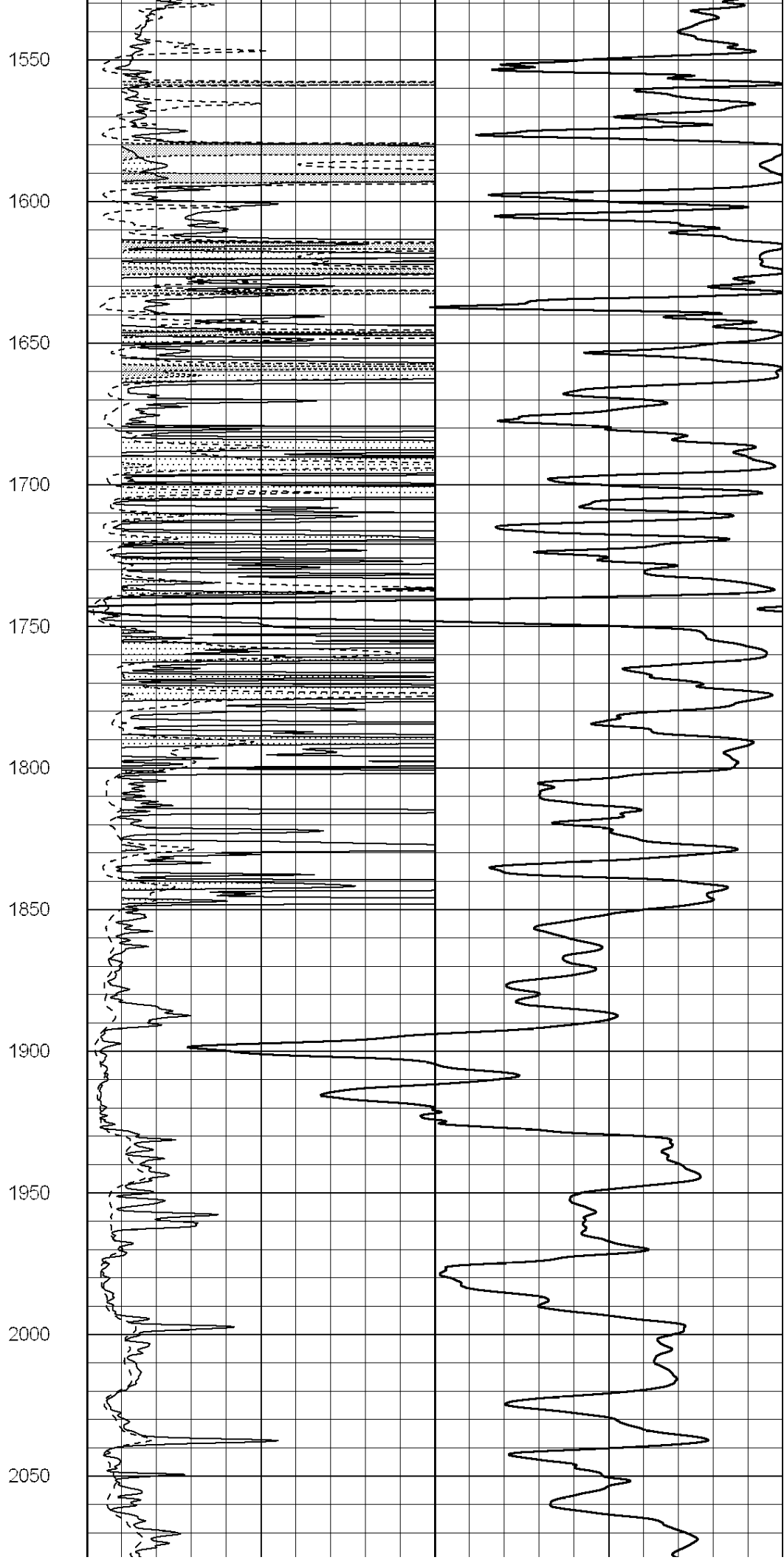
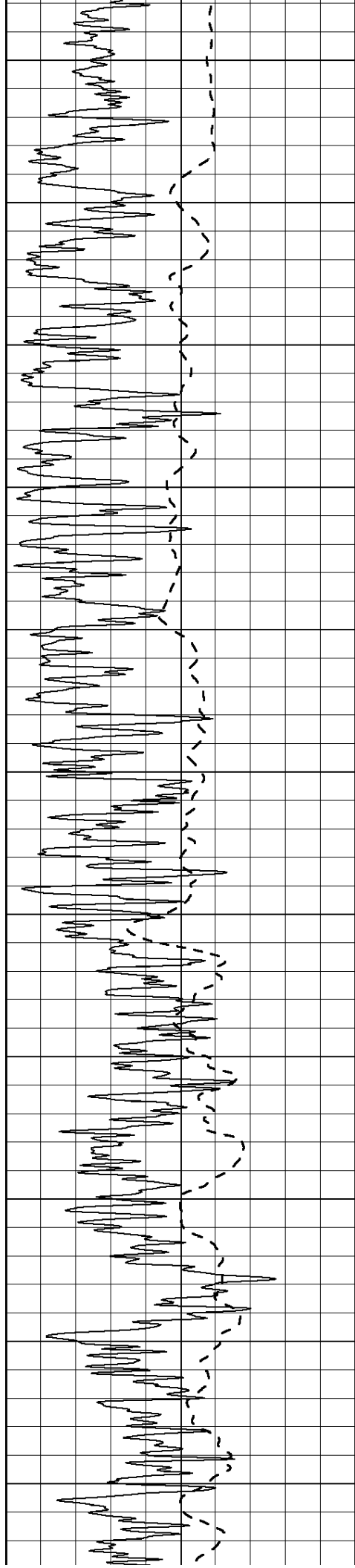
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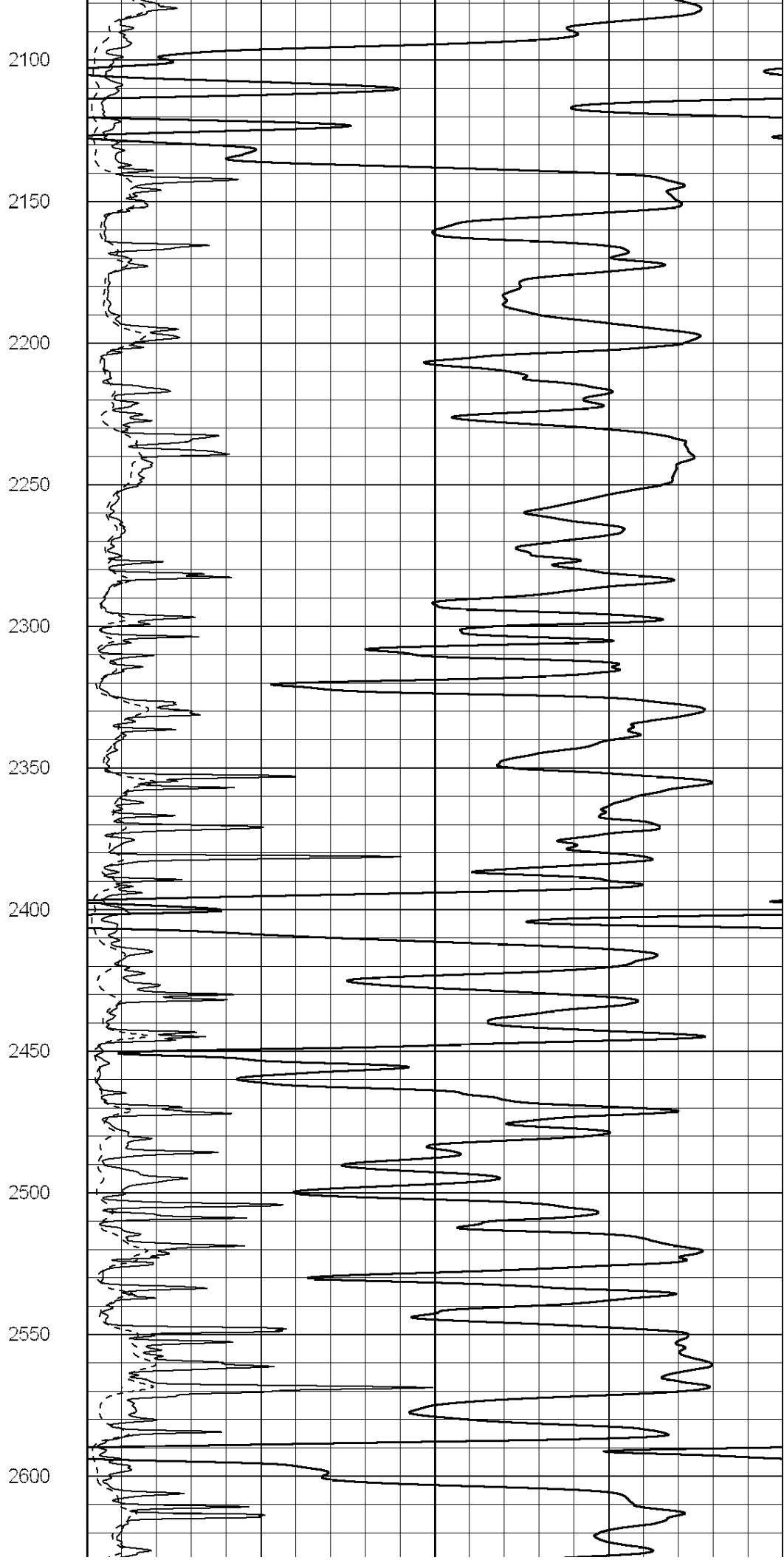
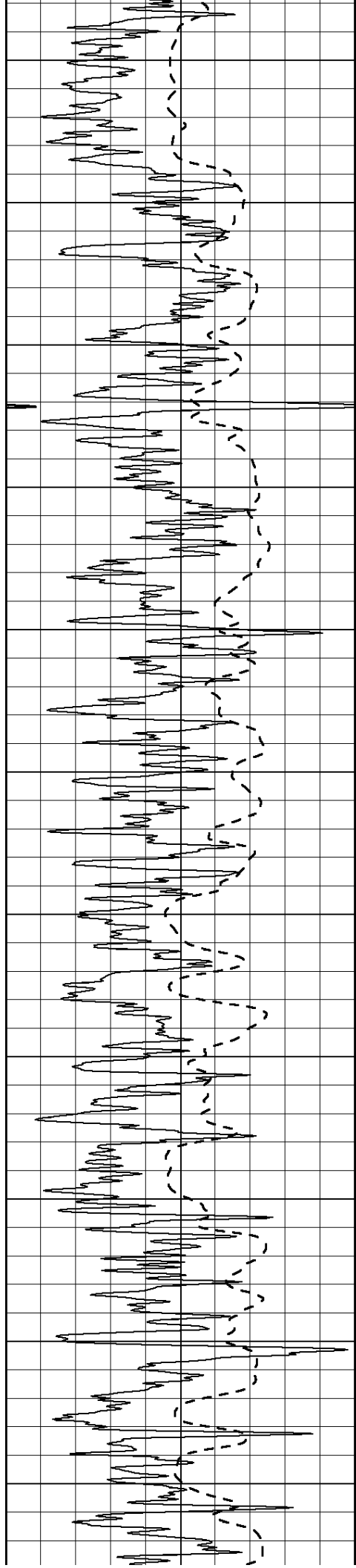
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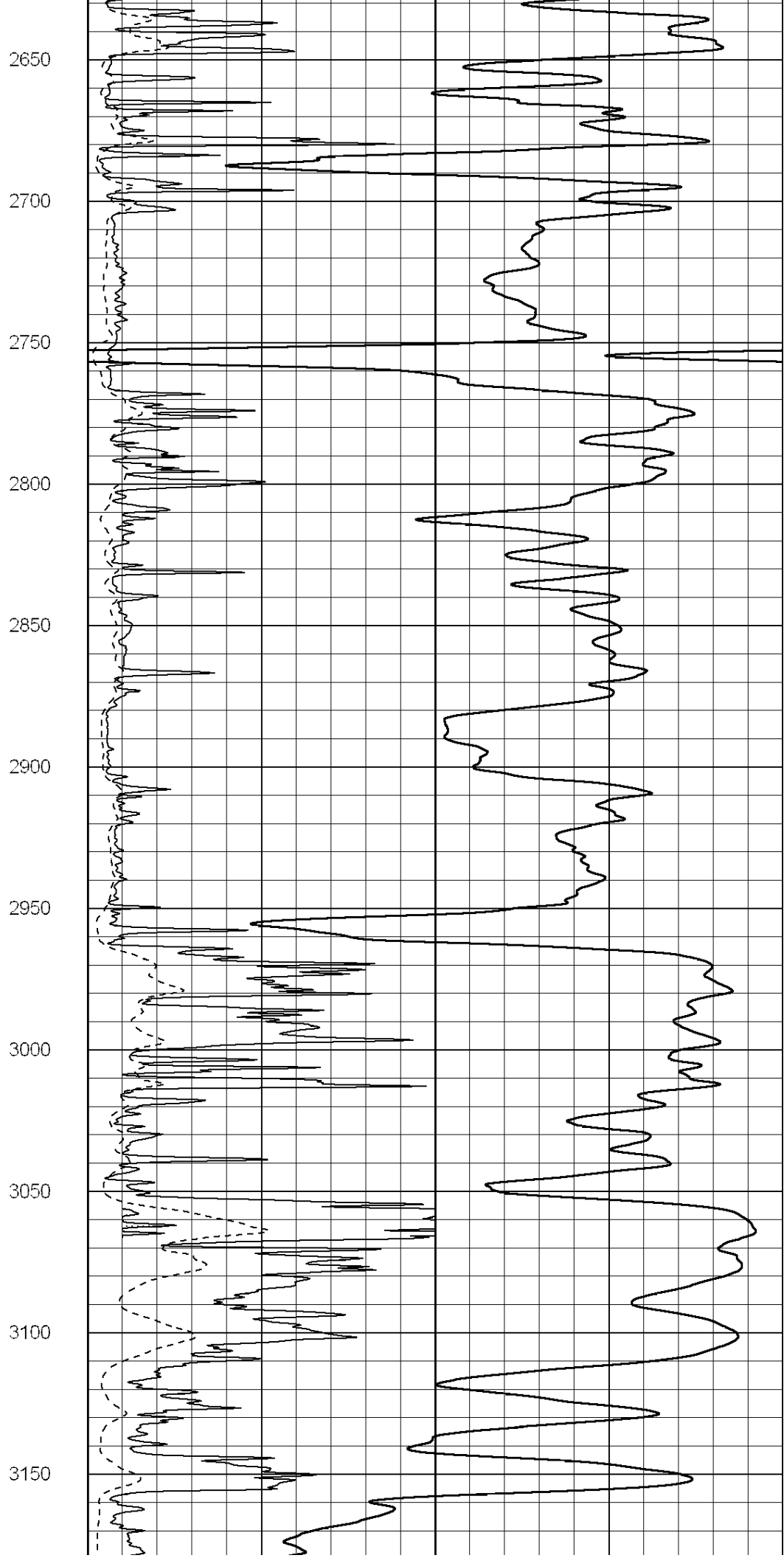
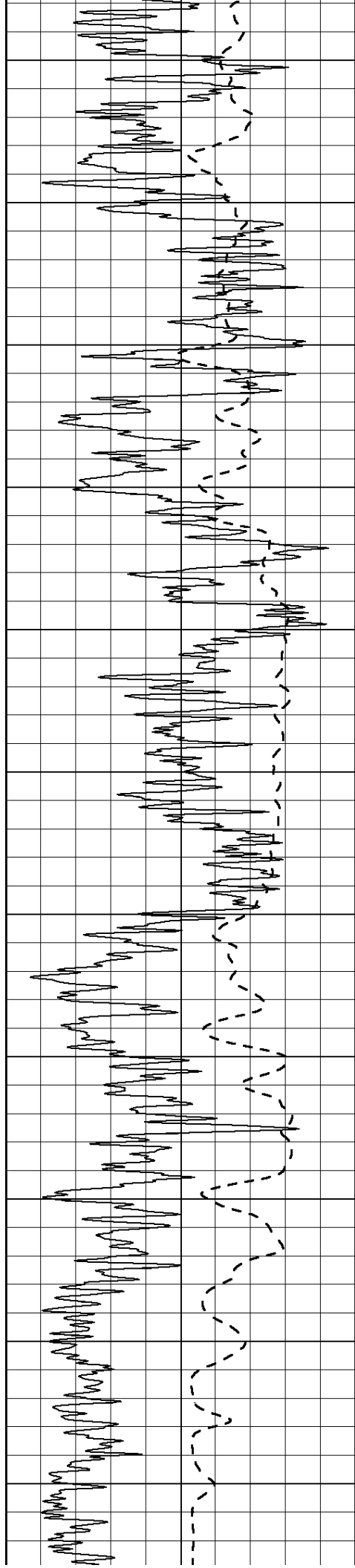
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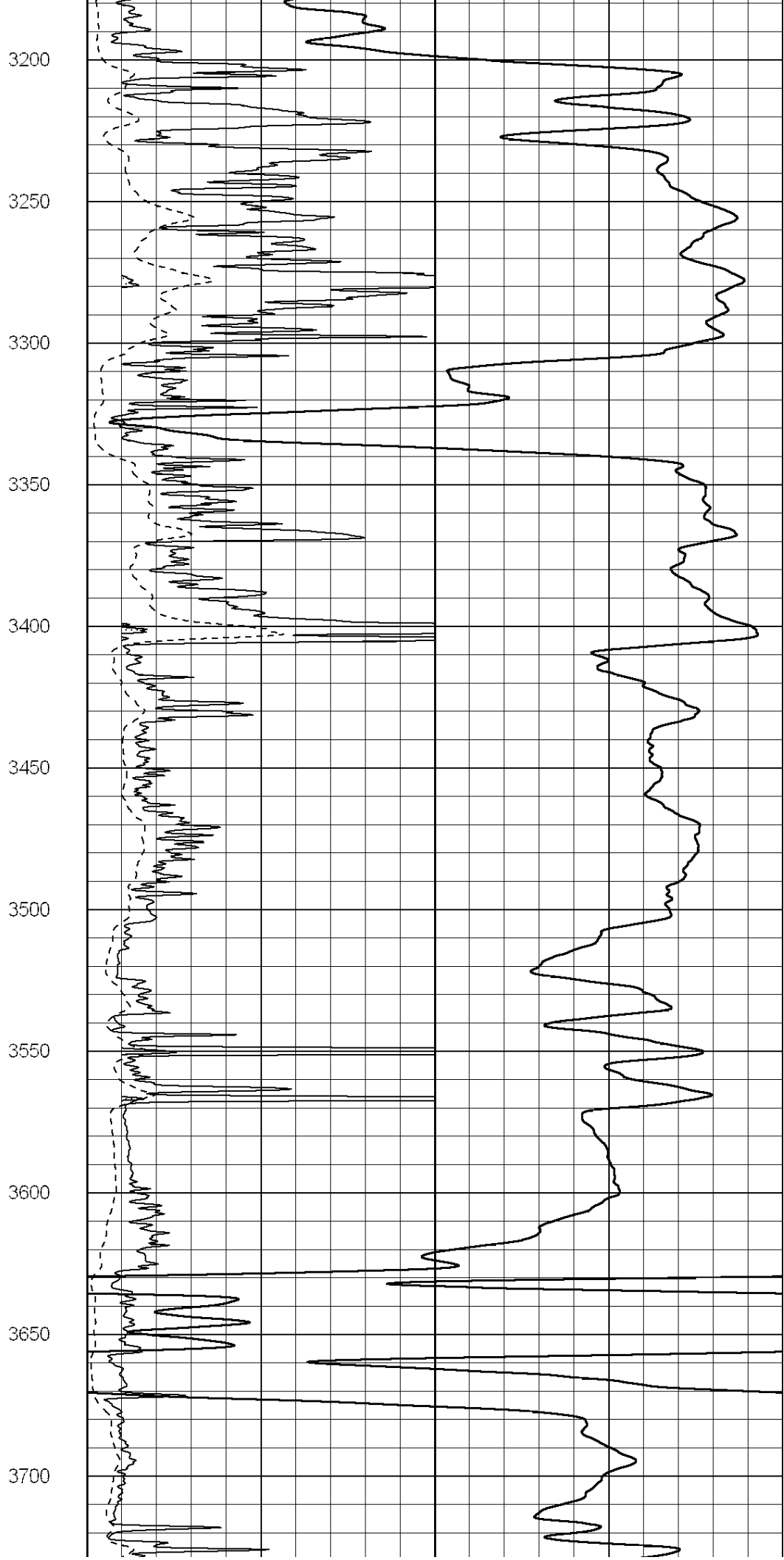
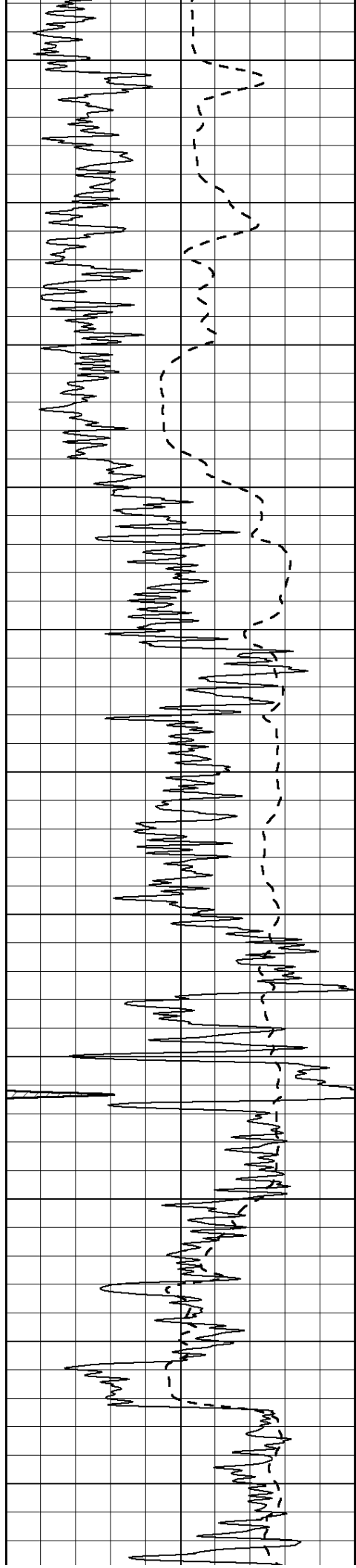
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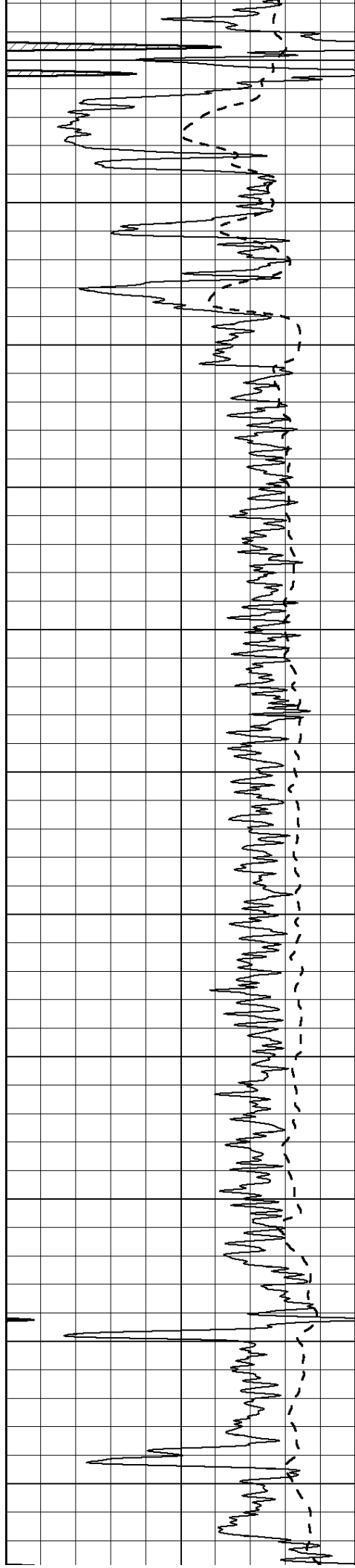












3750

3800

3850

3900

3950

4000

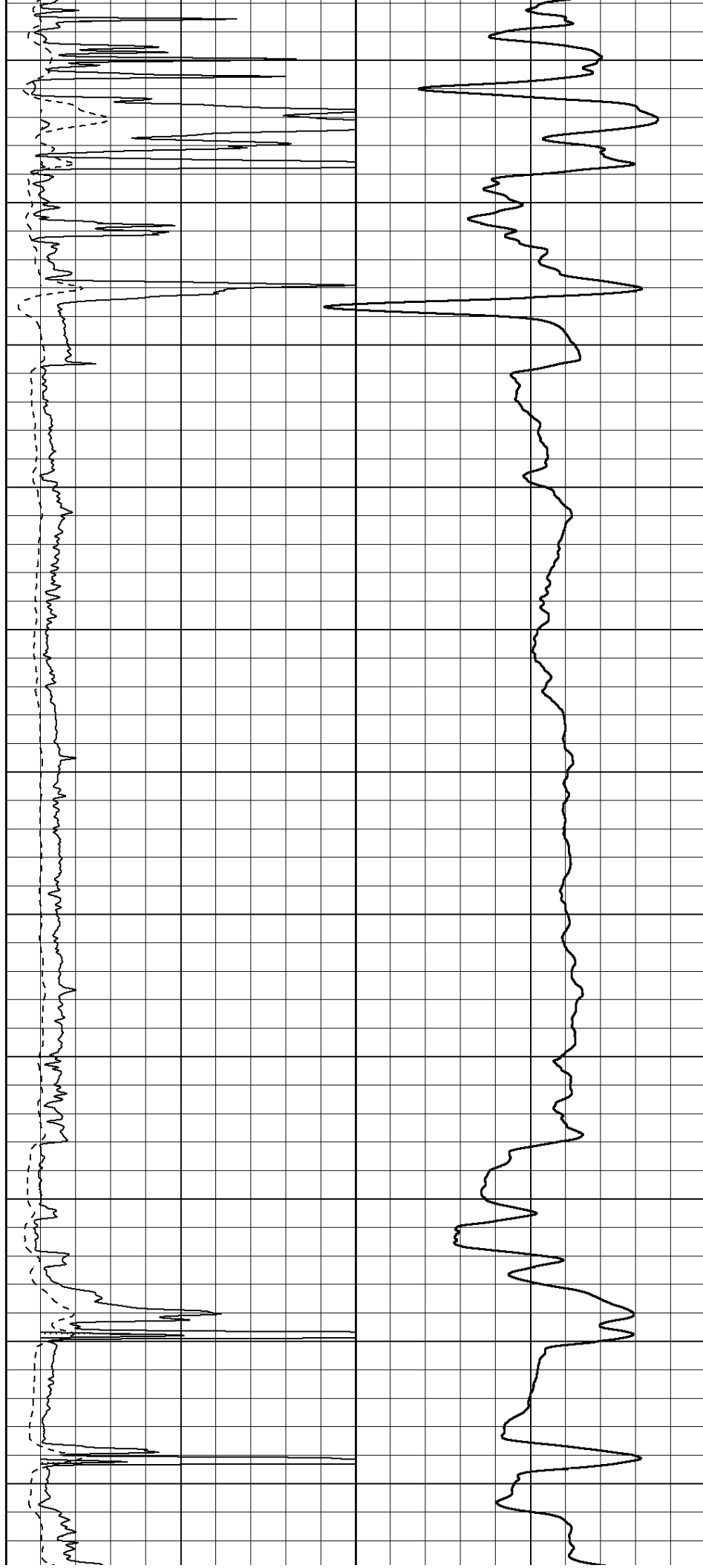
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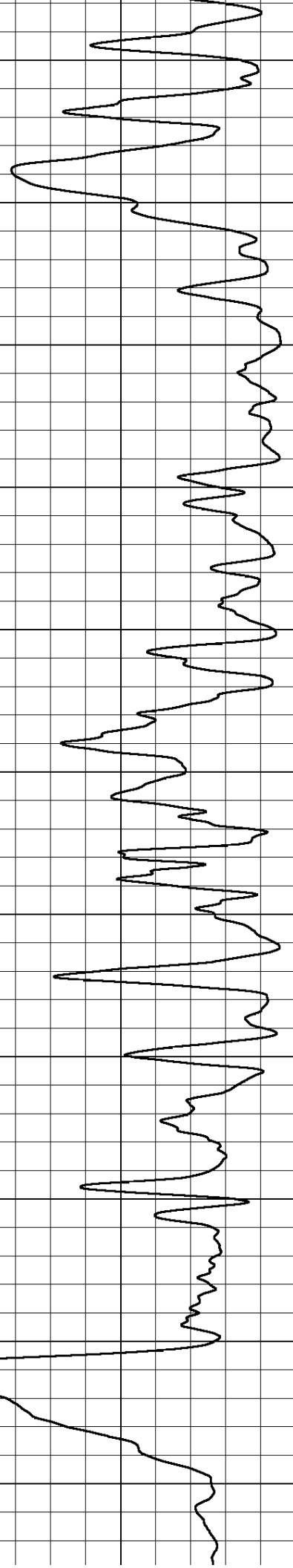
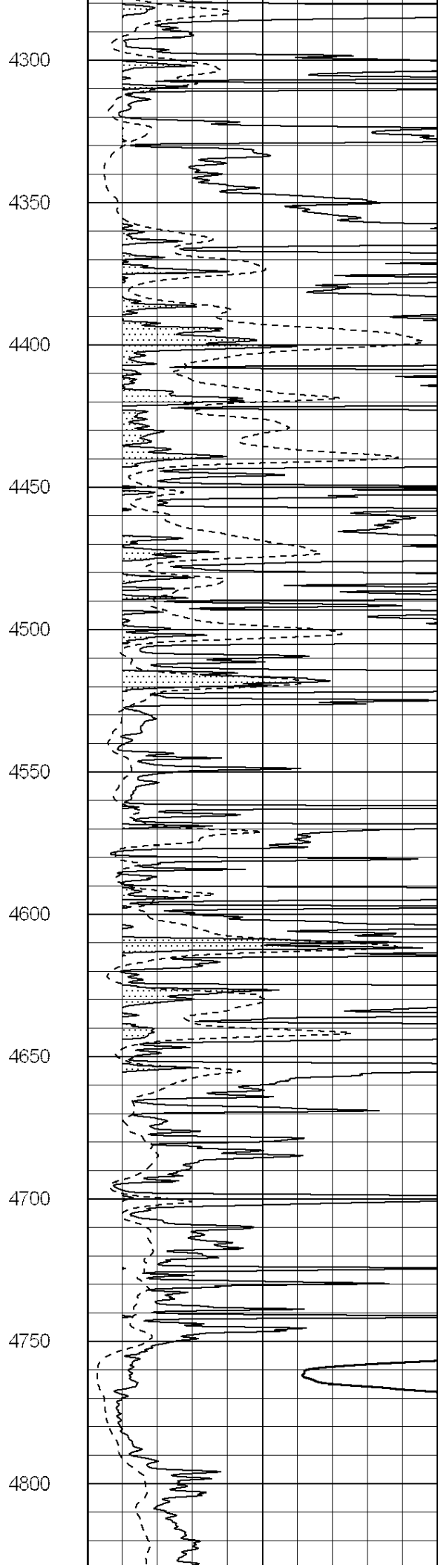
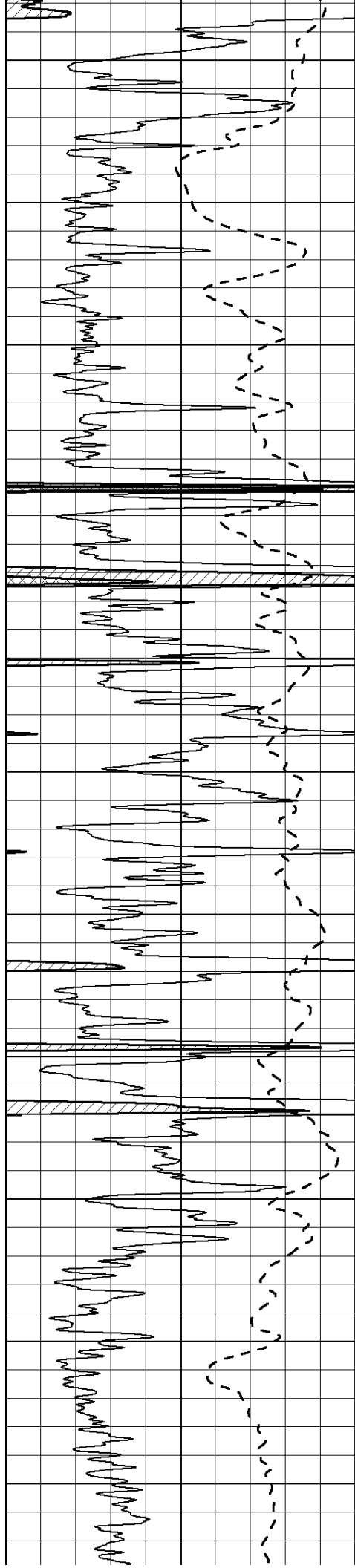
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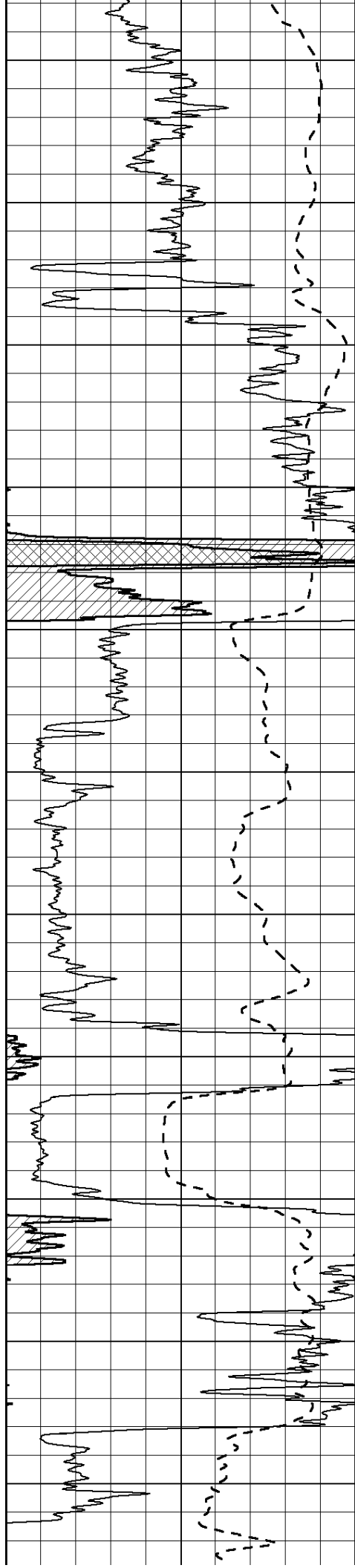
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4200

4250







4850

4900

4950

5000

5050

5100

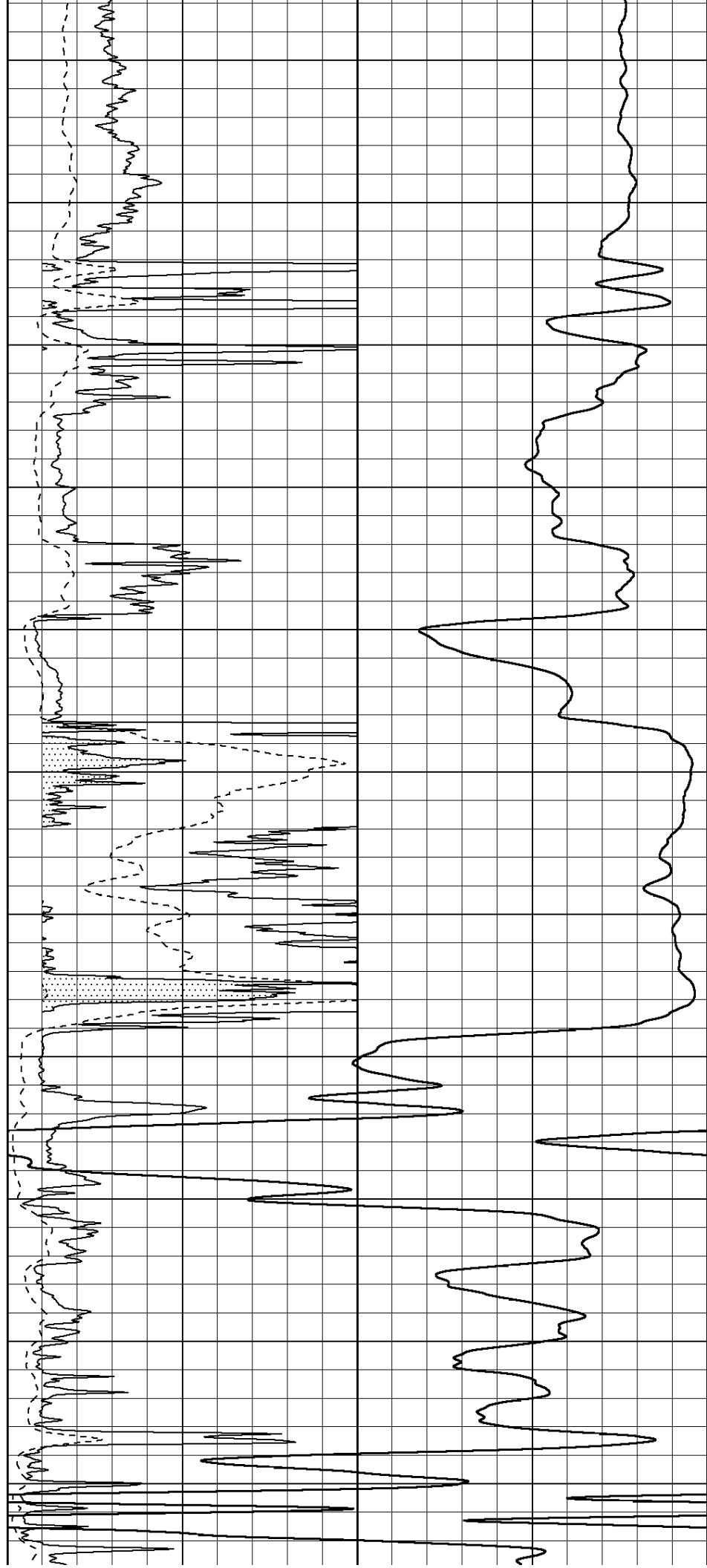
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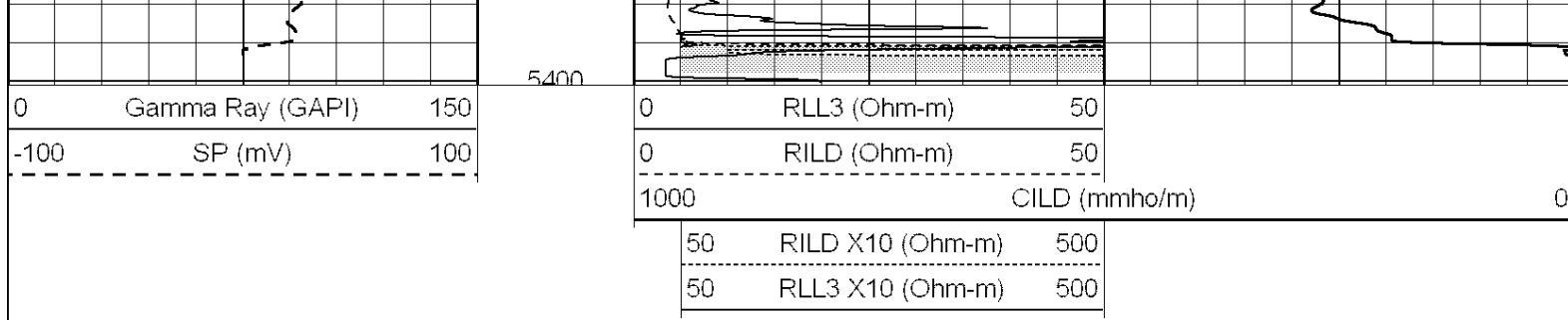
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5250

5300

5350



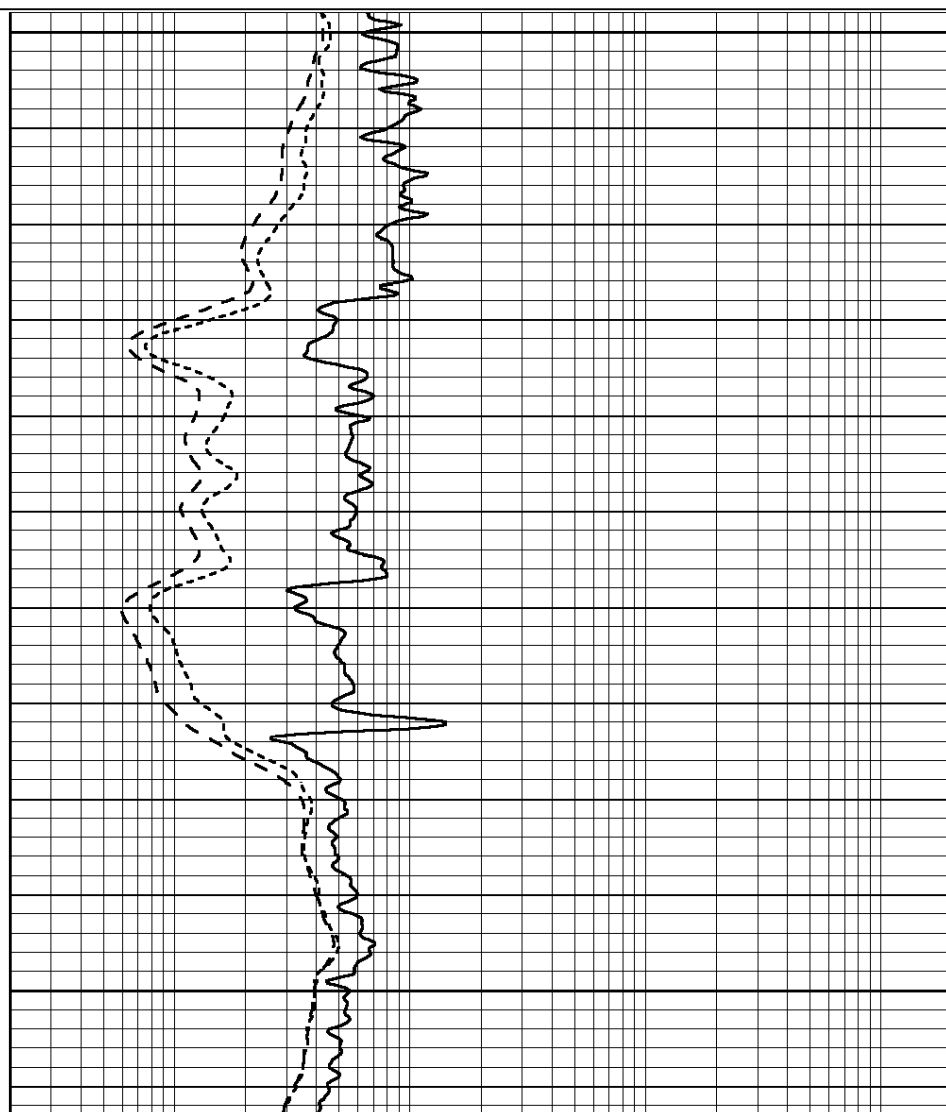
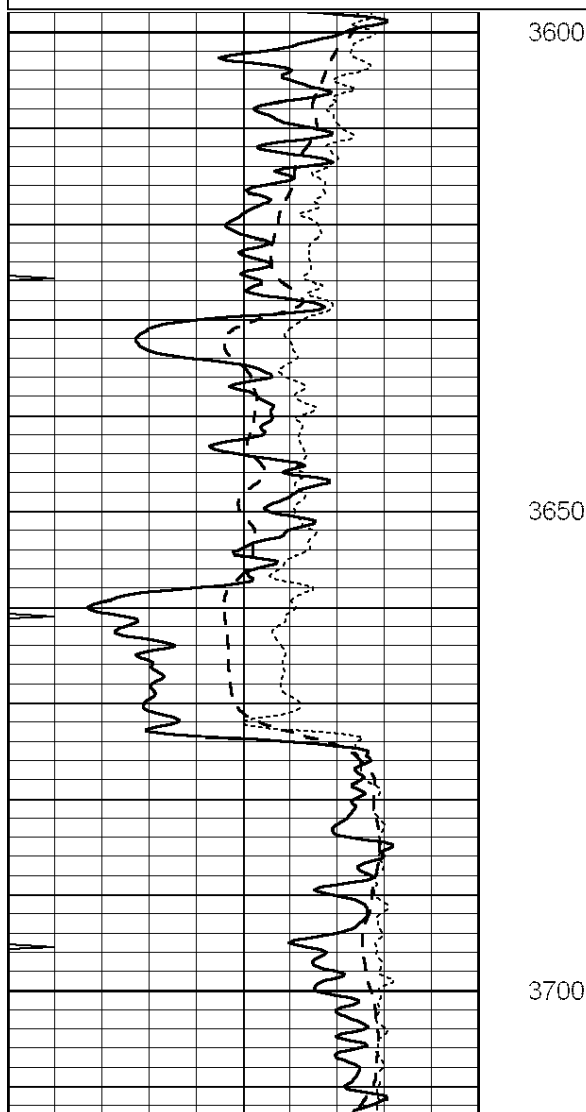


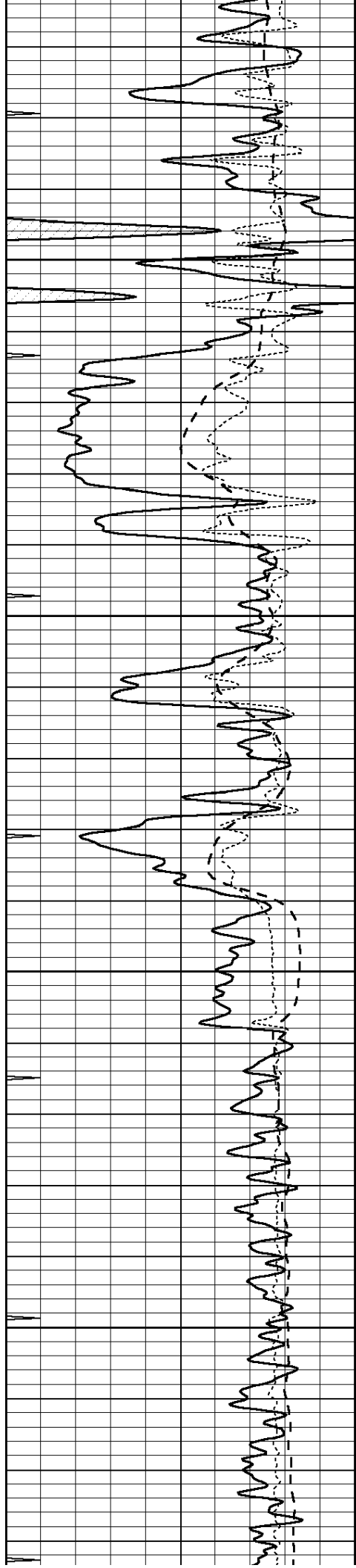
SUPERIOR  
Hays,  
Kansas

# MAIN SECTION

Database File: 006582pe.db  
 Dataset Pathname: pass3.1  
 Presentation Format: dil  
 Dataset Creation: Fri Jul 01 08:46:47 2011 by Calc Open-Cased 110302  
 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            | 10  |     |                          |      |



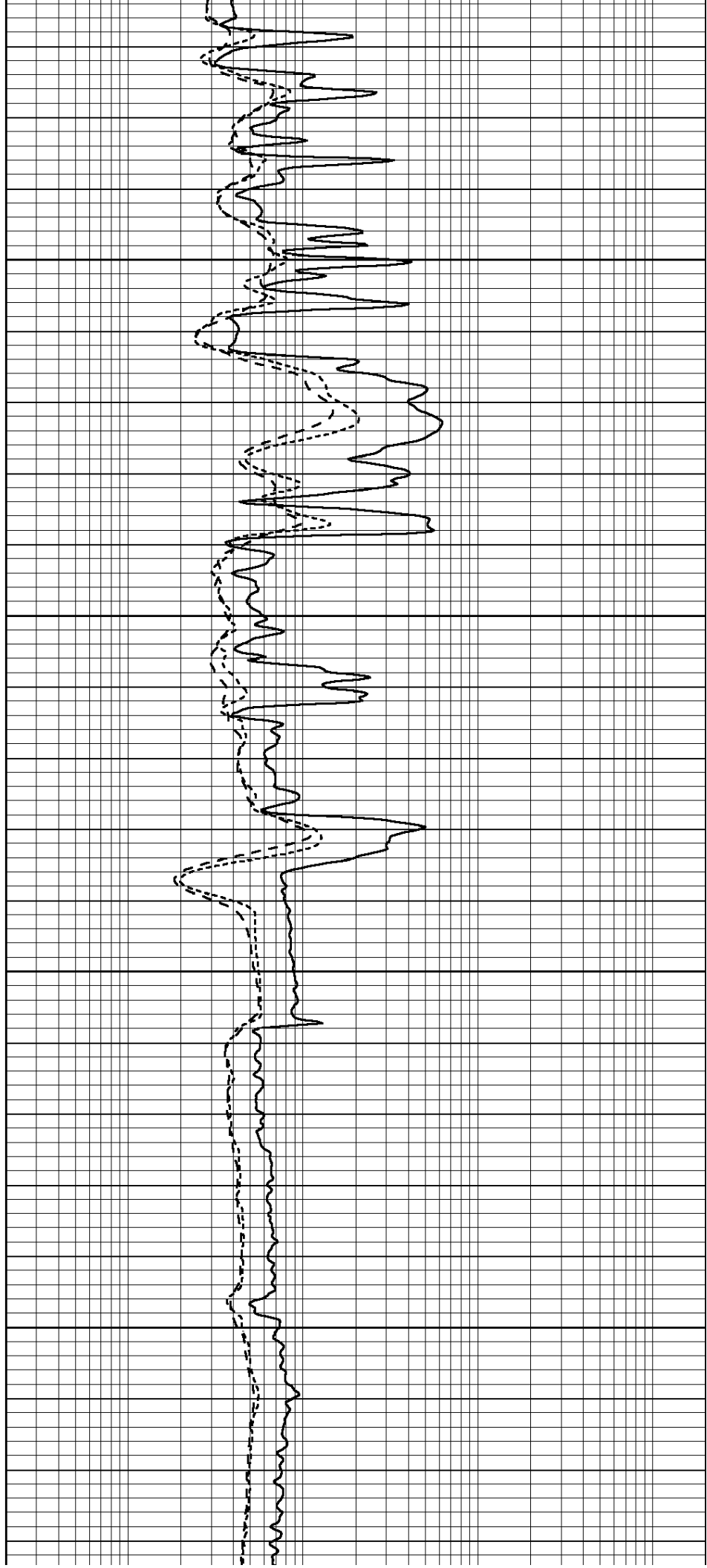


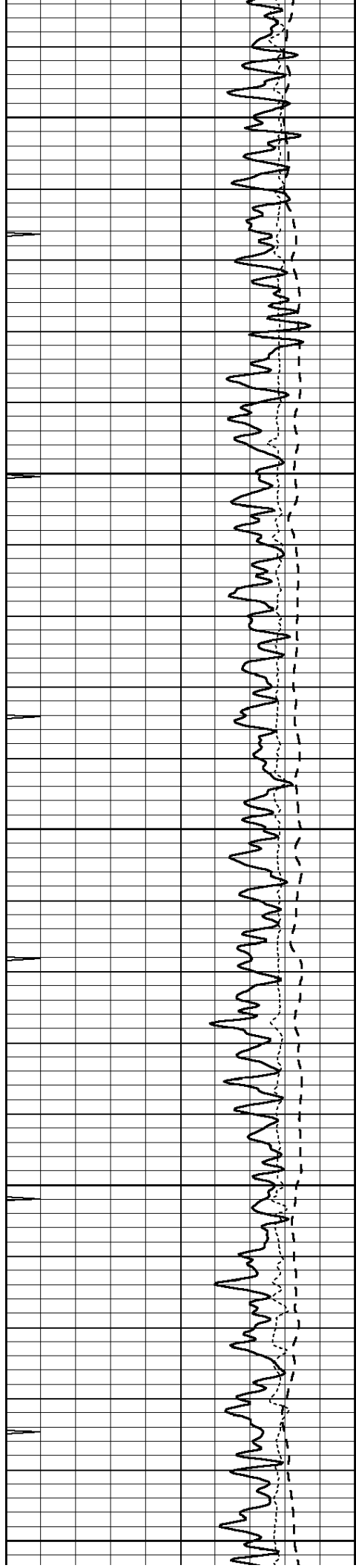
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3800

3850

3900





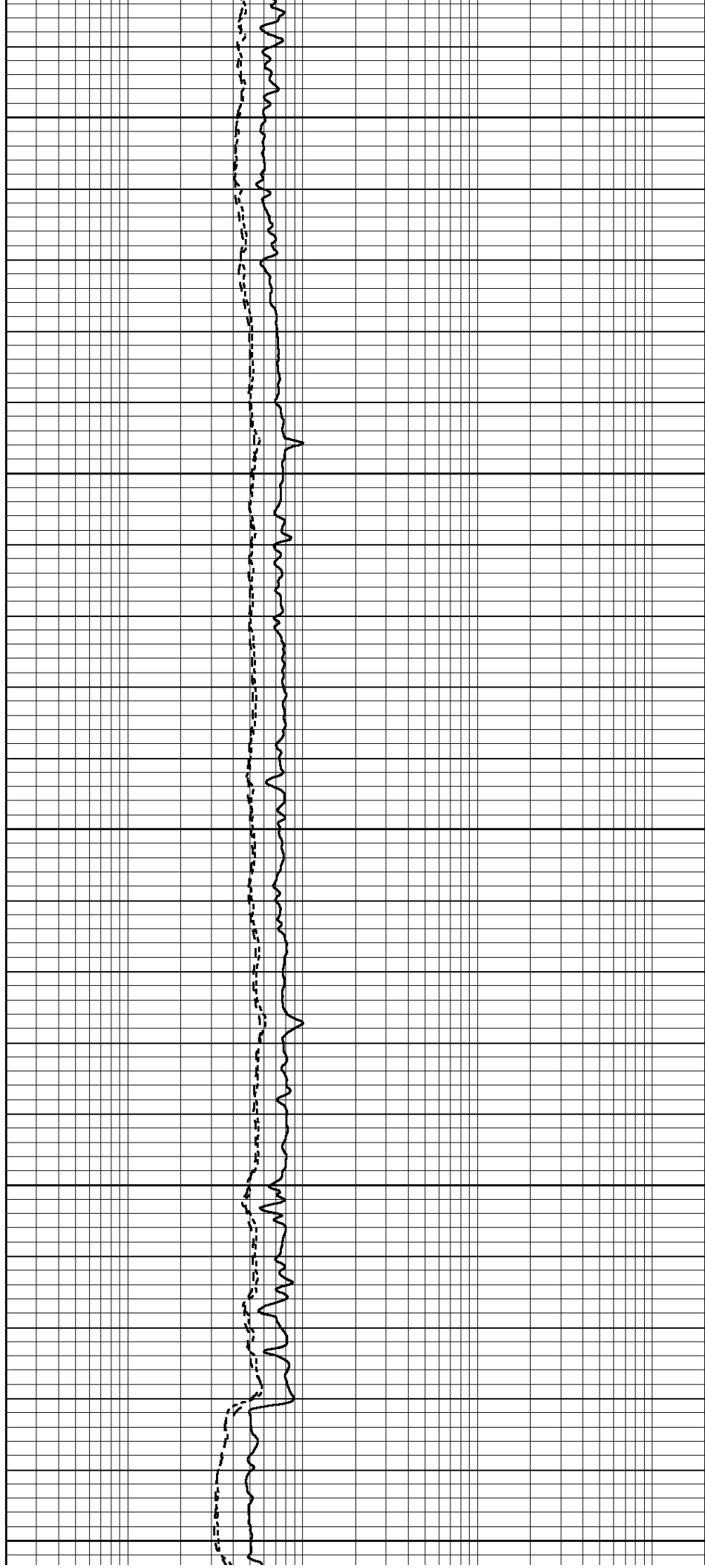
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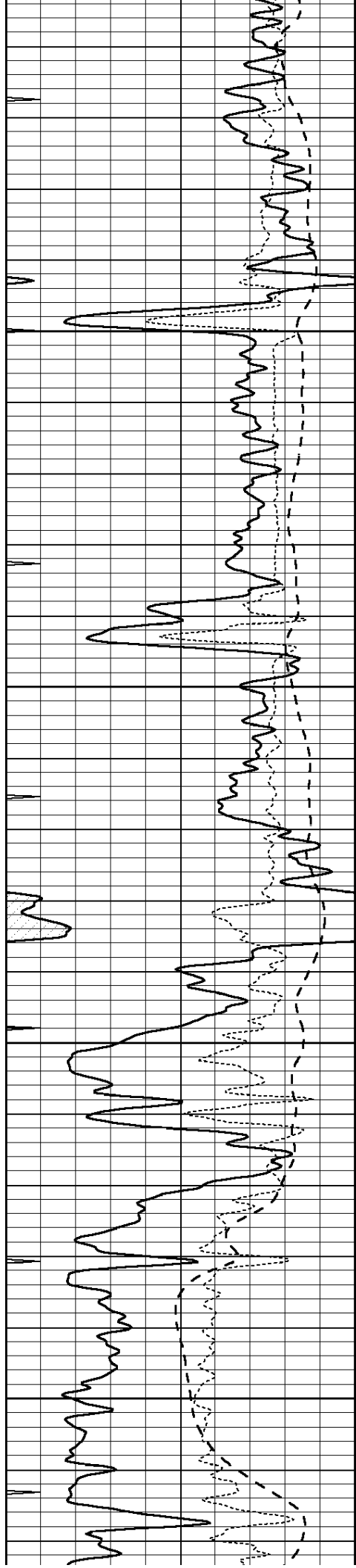
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4050

4100

4150



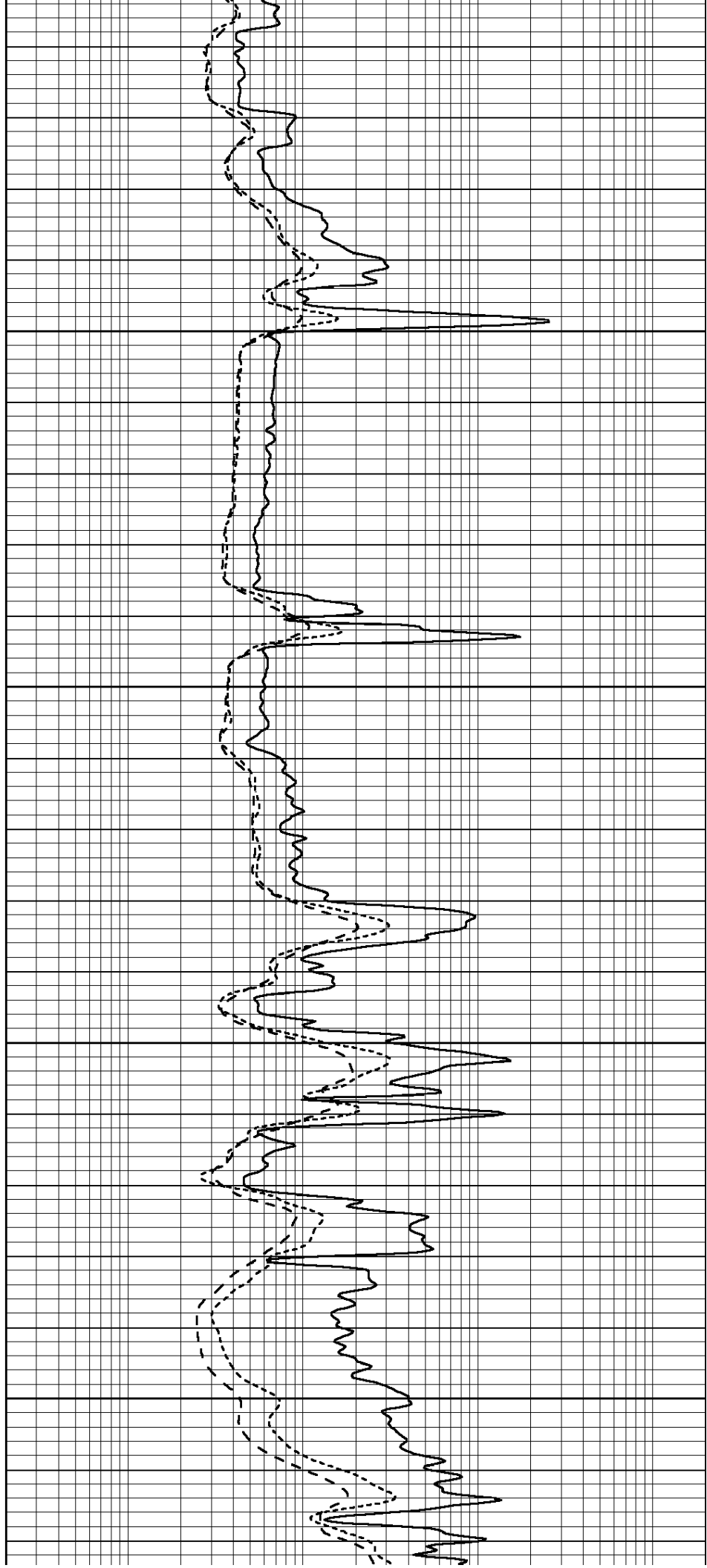


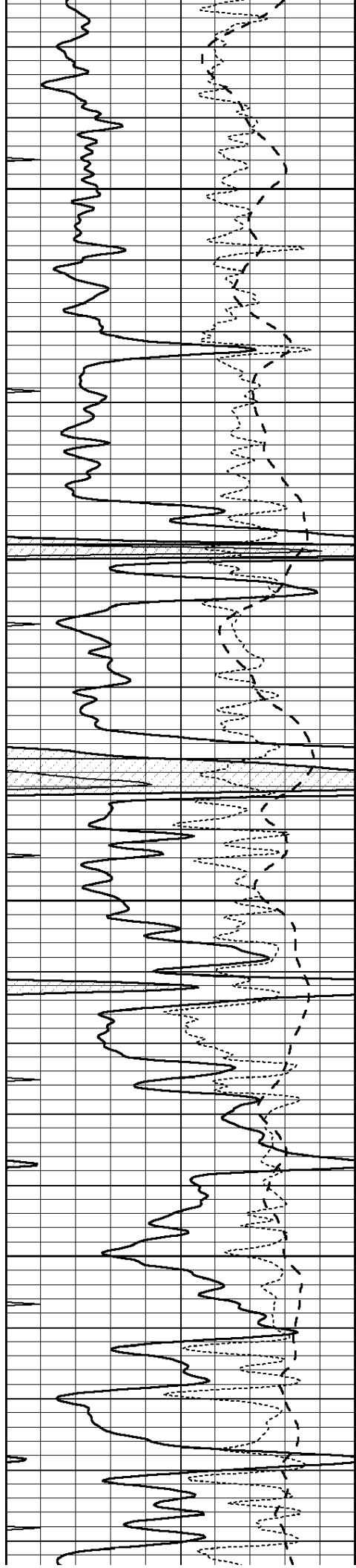
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4250

4300

4350



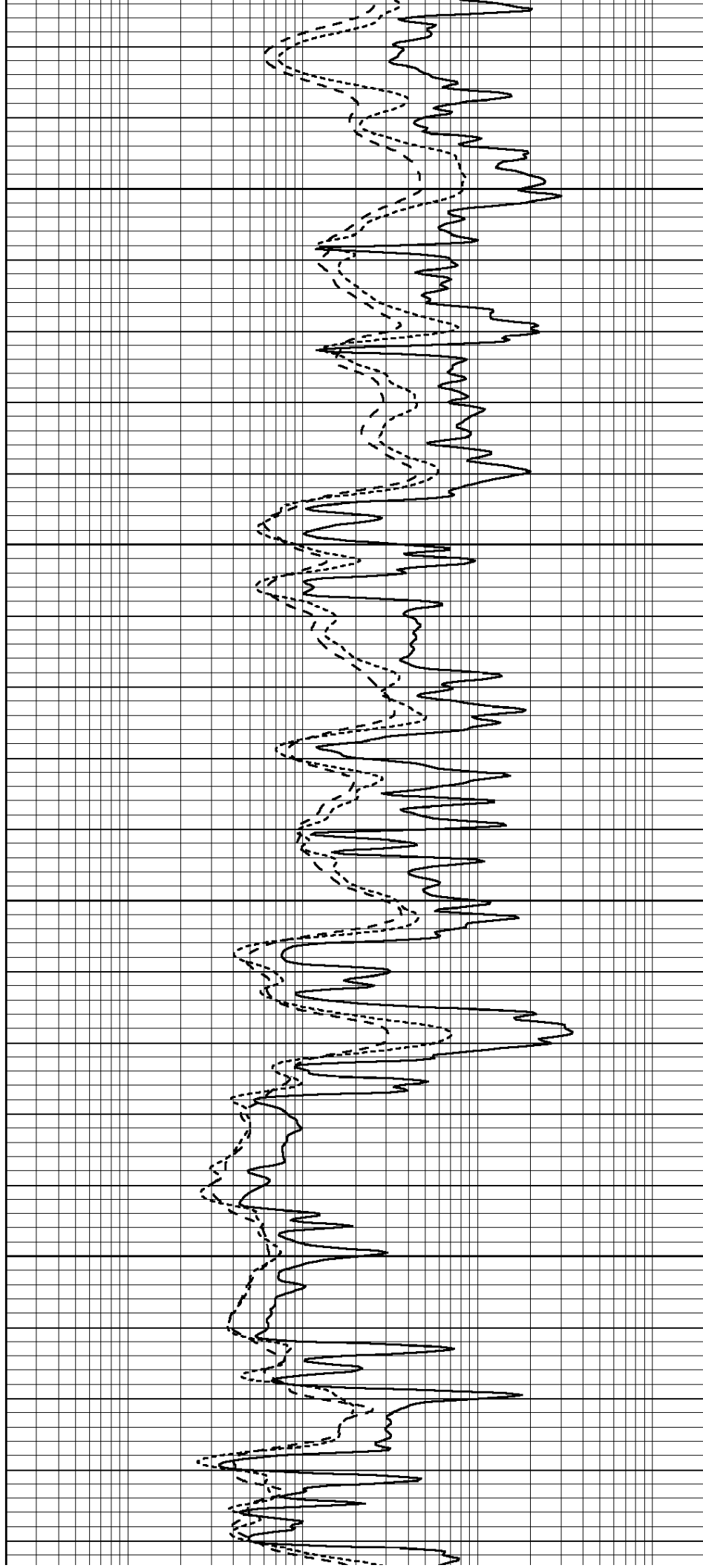


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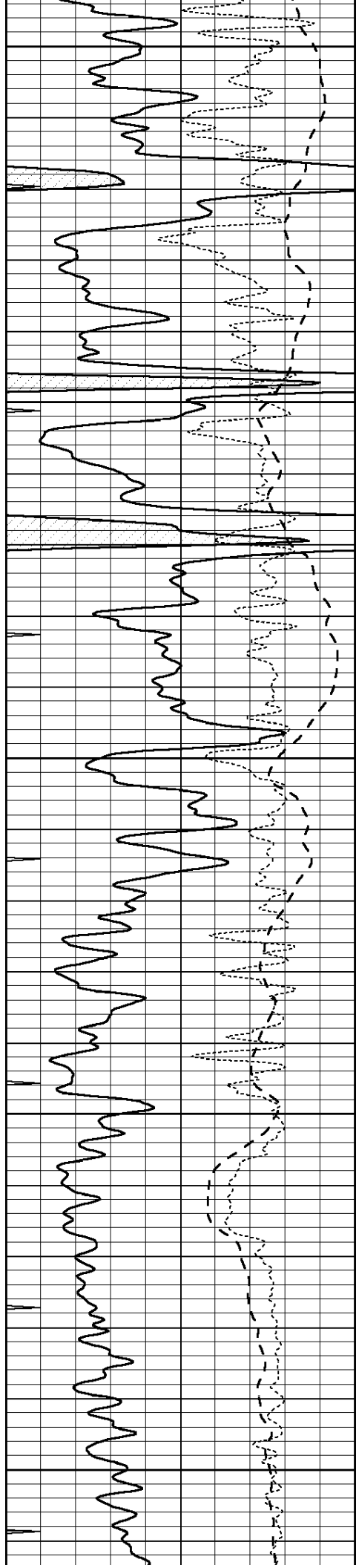
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4500

4550







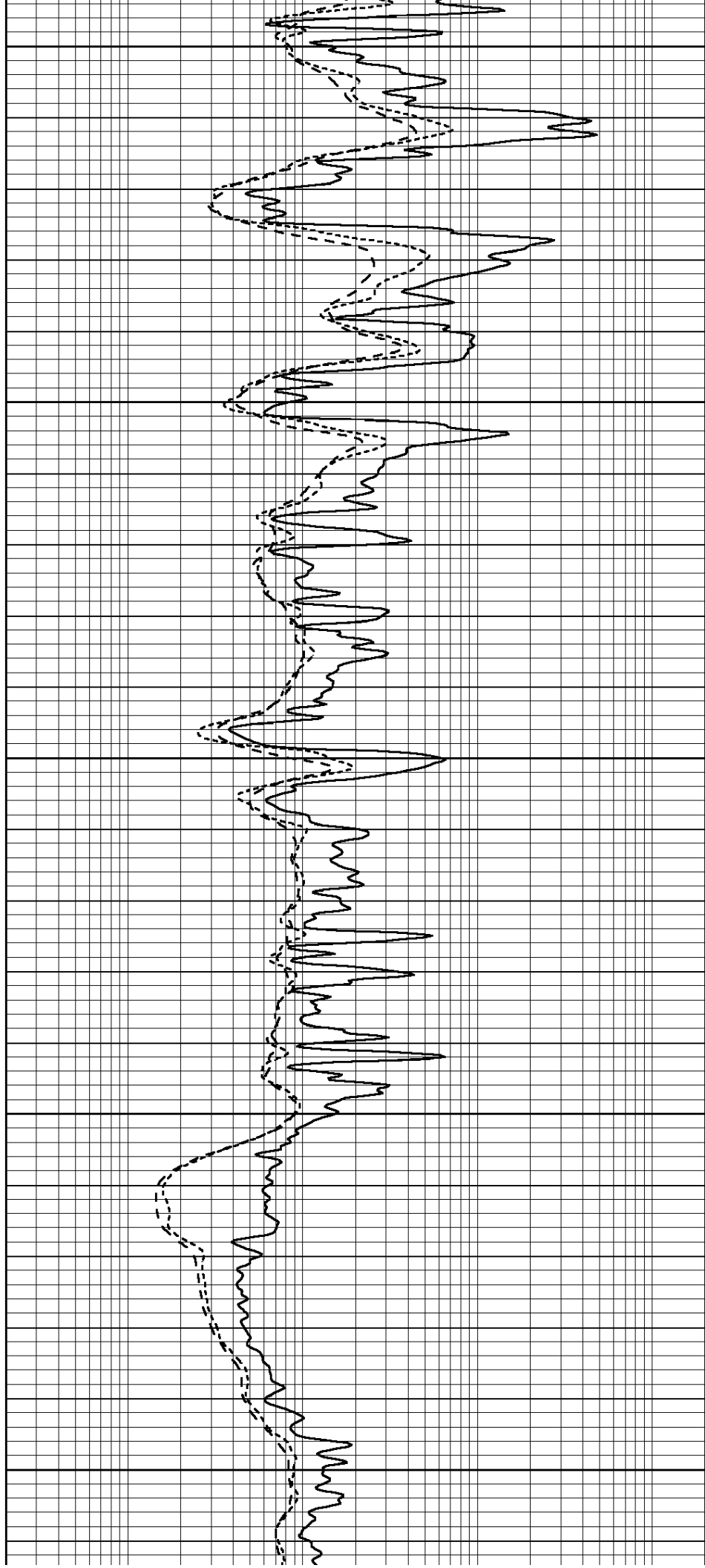
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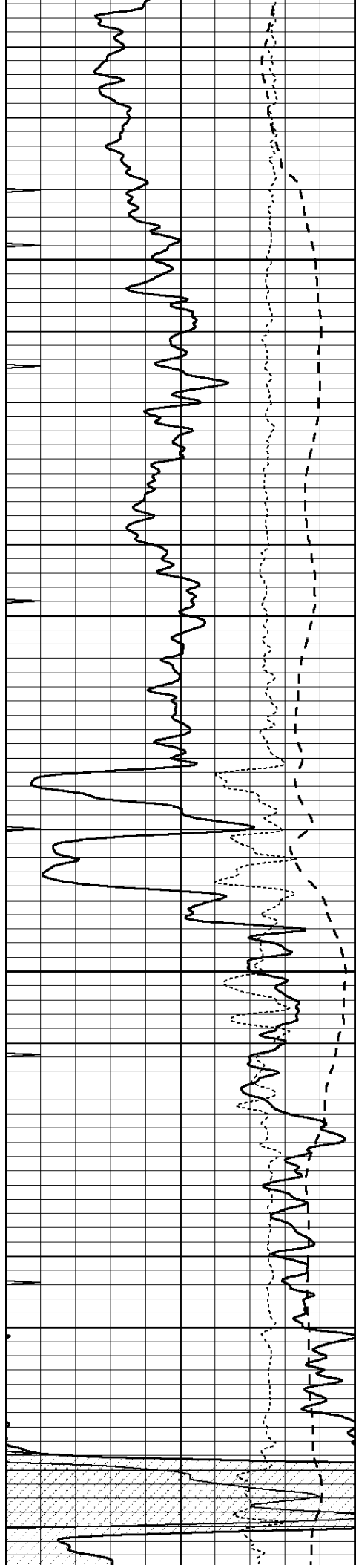
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4700

4750

4800



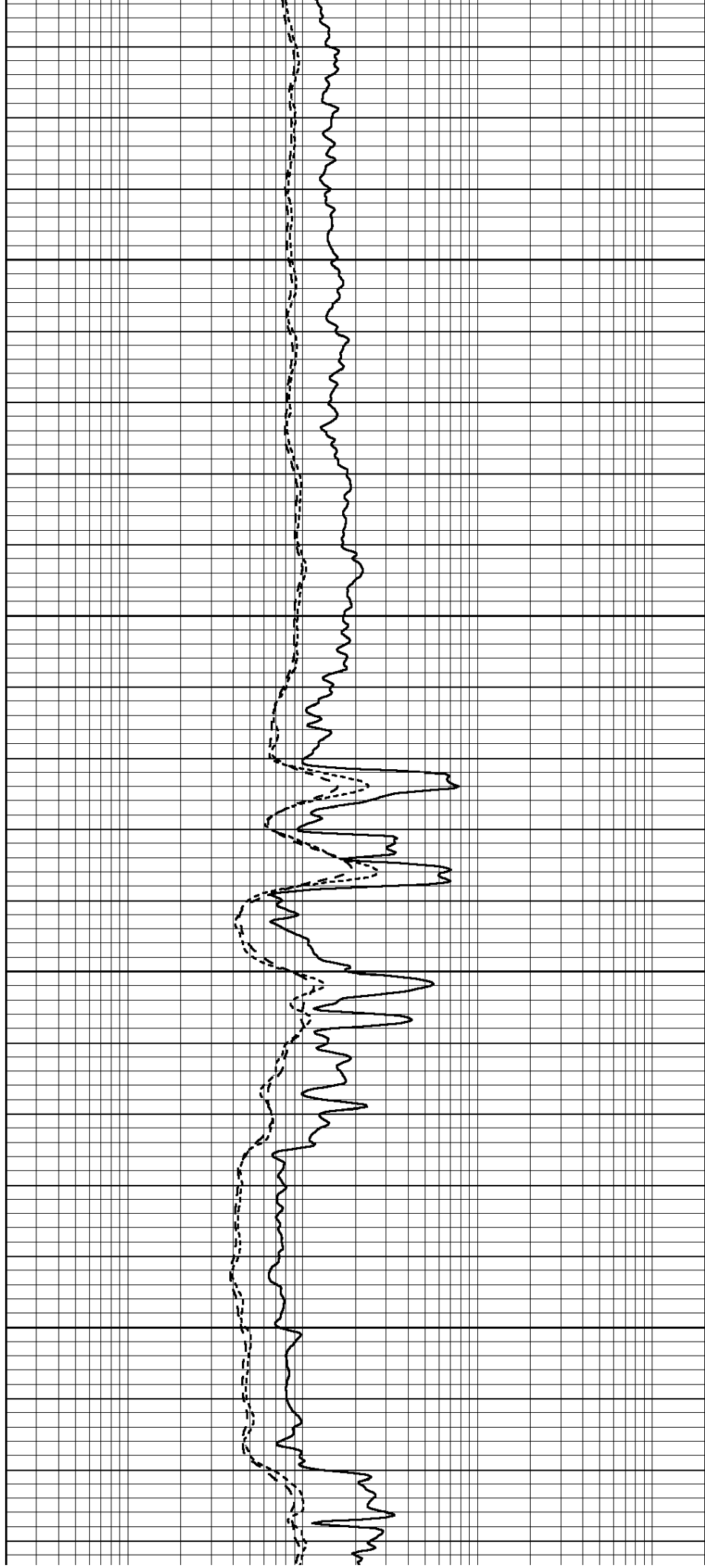


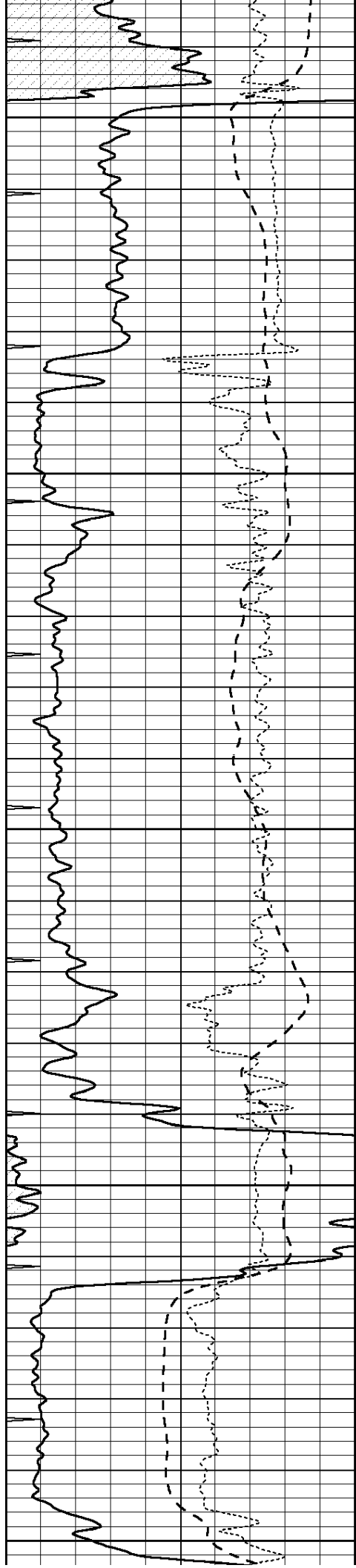
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4900

4950

5000





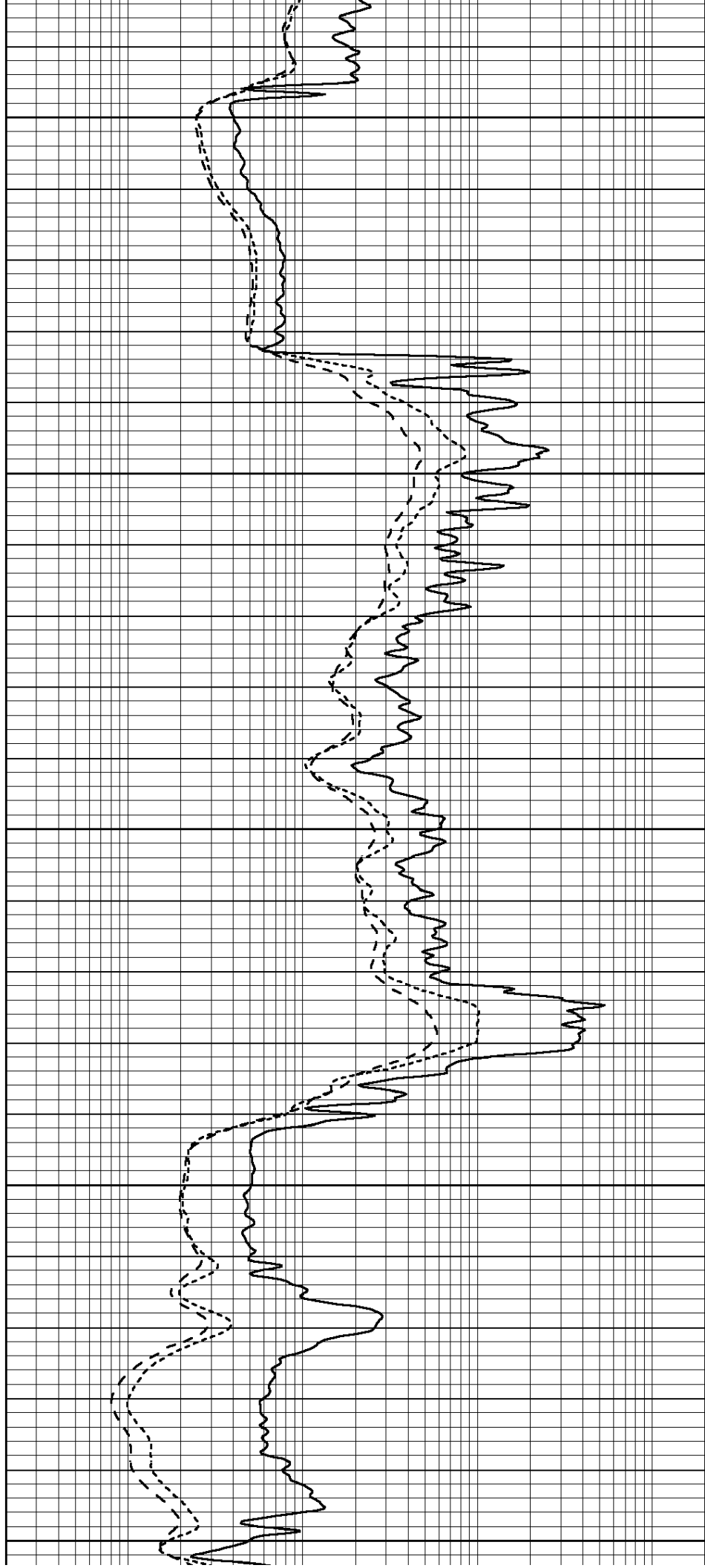
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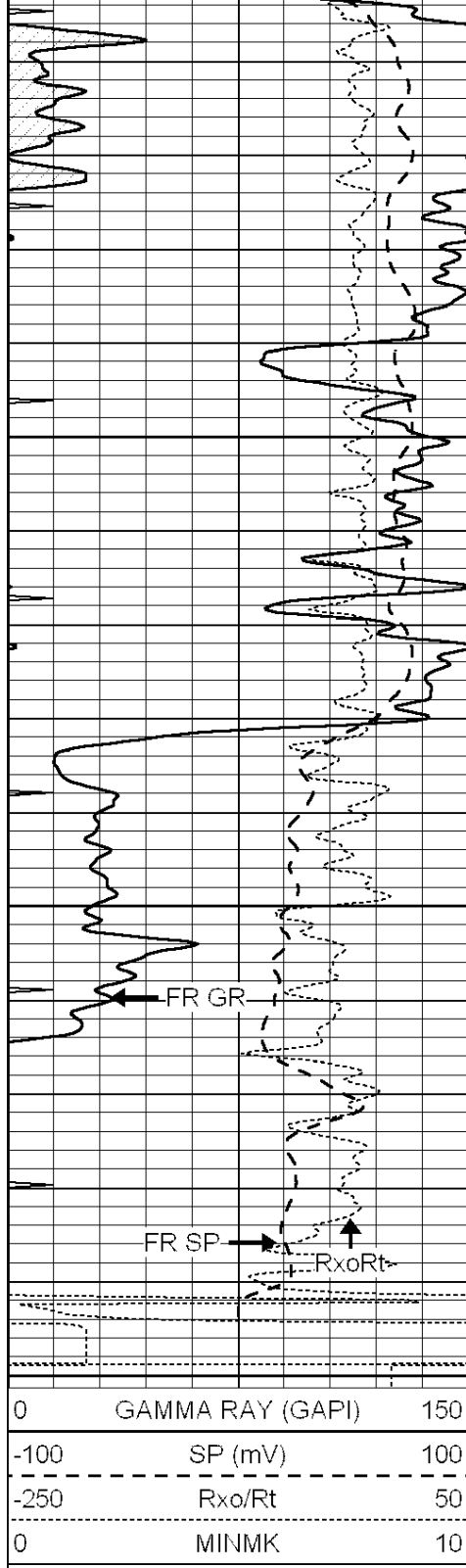
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5150

5200

5250

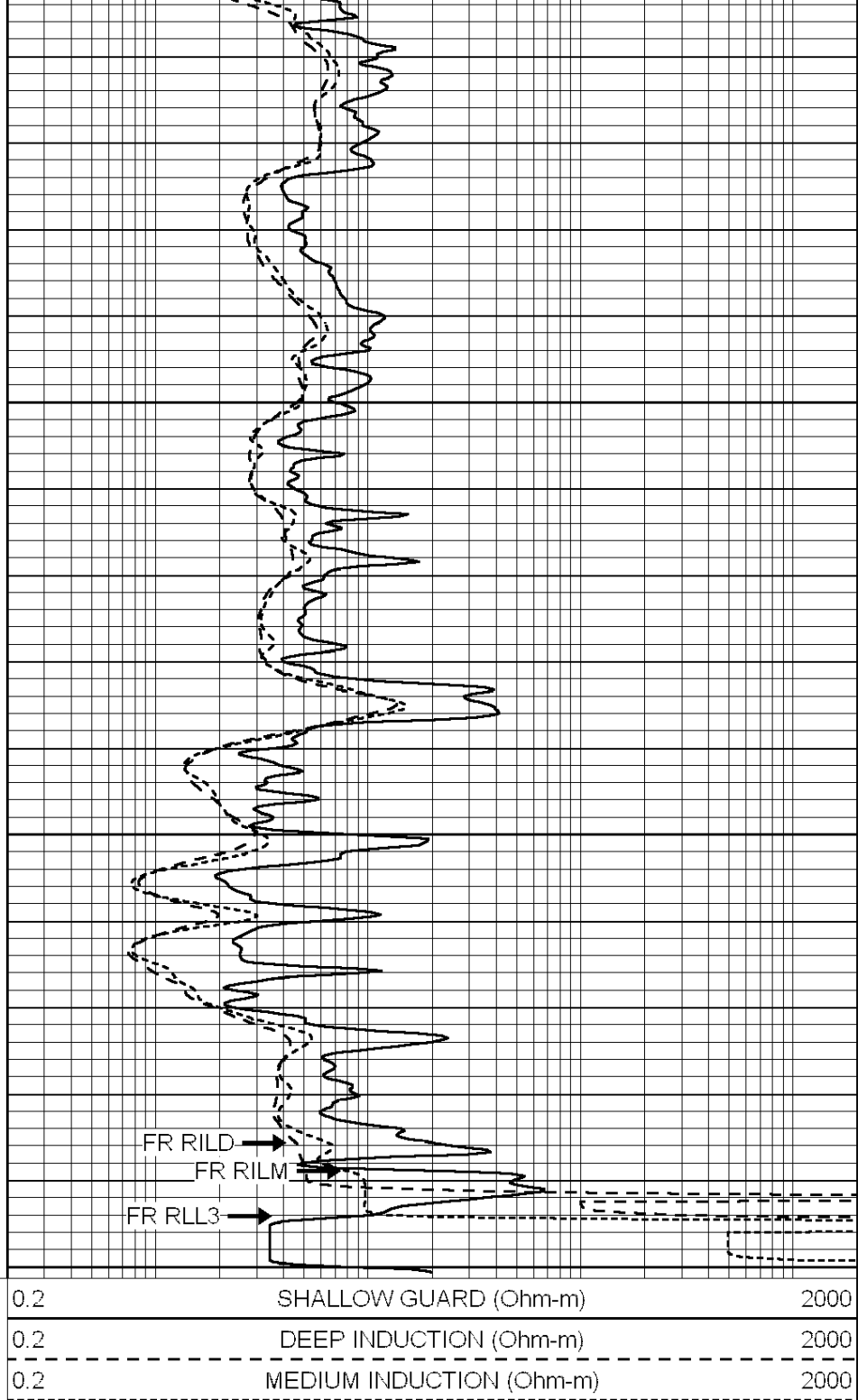




5300

5350

LTD 5396  
5400

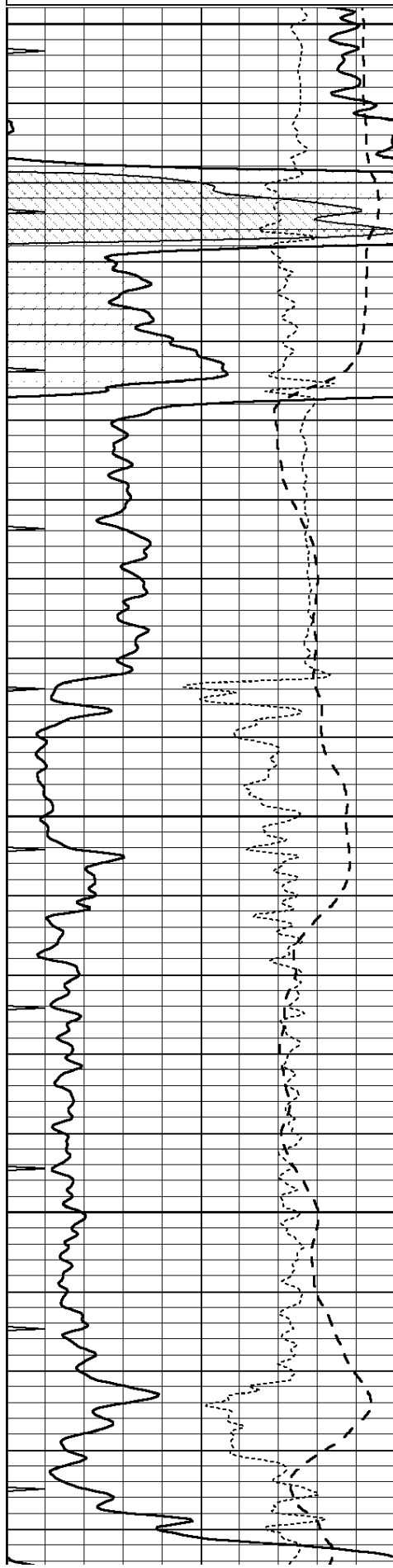


**SUPERIOR**  
WELL SERVICES  
**Hays,**  
**Kansas**

# REPEAT SECTION

Database File: 006582pe.db  
 Dataset Pathname: pass2.1  
 Presentation Format: dil  
 Dataset Creation: Fri Jul 01 08:49:14 2011 by Calc Open-Cased 110302  
 Charted by: Depth in Feet scaled 1:240

|      |                  |     |
|------|------------------|-----|
|      | GAMMA RAY (GAPI) | 150 |
| -100 | SP (mV)          | 100 |
| -250 | Rxo/Rt           | 50  |
| 0    | MINMK            | 10  |



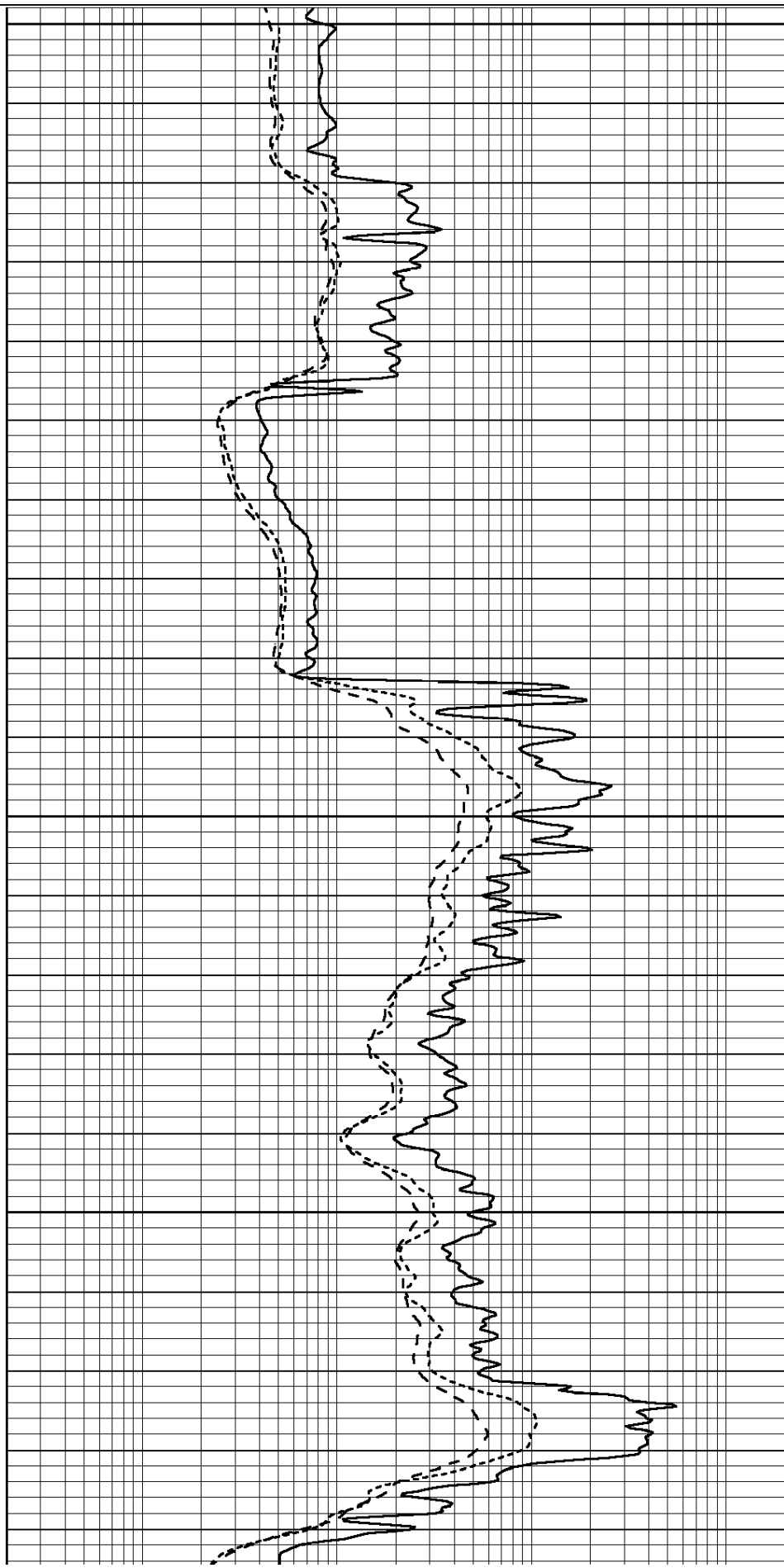
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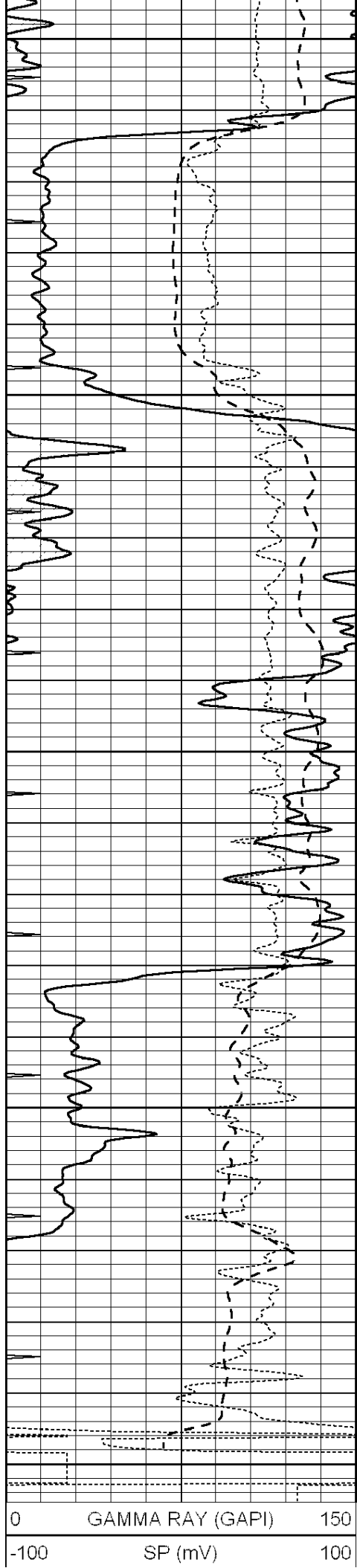
5050

5100

5150

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





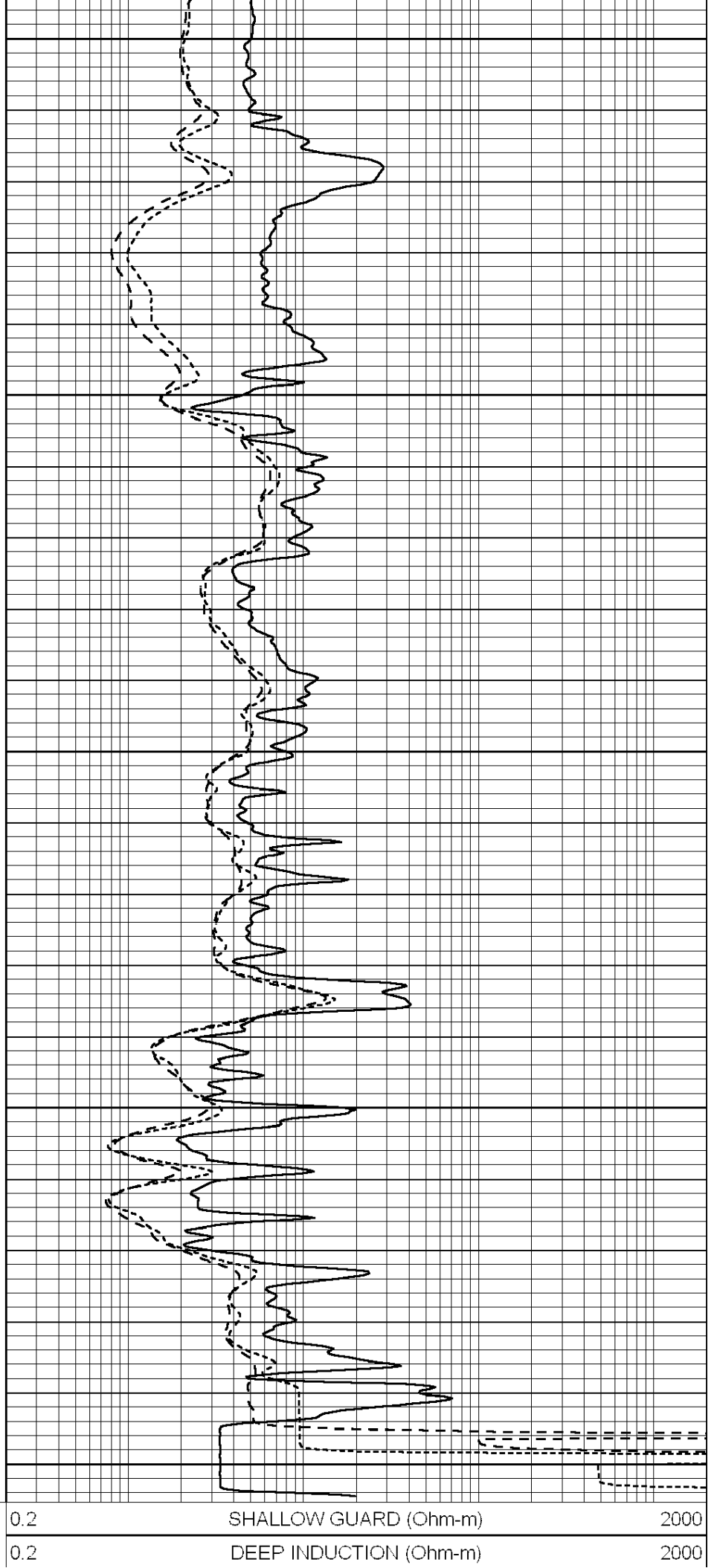
5200

5250

5300

5350

5400



|      |        |    |     |                          |      |
|------|--------|----|-----|--------------------------|------|
| -250 | Rxo/Rt | 50 | 0.2 | MEDIUM INDUCTION (Ohm-m) | 2000 |
| 0    | MINMK  | 10 |     |                          |      |

| Calibration Report |                                                    |  |  |  |  |
|--------------------|----------------------------------------------------|--|--|--|--|
| Database File:     | 006582pe.db                                        |  |  |  |  |
| Dataset Pathname:  | pass2.1                                            |  |  |  |  |
| Dataset Creation:  | Fri Jul 01 08:49:14 2011 by Calc Open-Cased 110302 |  |  |  |  |

| Dual Induction Calibration Report |  |  |  |  |  |
|-----------------------------------|--|--|--|--|--|
|-----------------------------------|--|--|--|--|--|

|                                      |                          |
|--------------------------------------|--------------------------|
| Serial-Model:                        | PROBE7-DILG              |
| Surface Cal Performed:               | Wed Jul 30 06:14:24 2008 |
| Downhole Cal Performed:              | Mon Jul 28 12:02:56 2008 |
| After Survey Verification Performed: | Mon Jul 28 12:02:56 2008 |

| Surface Calibration |        |       |            |       |         |        |         |         |
|---------------------|--------|-------|------------|-------|---------|--------|---------|---------|
| Readings            |        |       | References |       |         |        | Results |         |
| Loop:               | Air    | Loop  |            | Air   | Loop    |        | m       | b       |
| Deep                | -0.014 | 0.629 | V          | 0.000 | 400.000 | mmho/m | 621.923 | 8.759   |
| Medium              | 0.039  | 0.728 | V          | 0.000 | 464.000 | mmho/m | 673.322 | -26.058 |
| Internal:           | Zero   | Cal   |            | Zero  | Cal     |        | m       | b       |
| Deep                | 0.011  | 0.610 | V          | 0.000 | 400.000 | mmho/m | 667.135 | -7.256  |
| Medium              | 0.005  | 0.712 | V          | 0.000 | 464.000 | mmho/m | 655.677 | -3.102  |

| Downhole Calibration |       |        |            |         |          |        |         |       |
|----------------------|-------|--------|------------|---------|----------|--------|---------|-------|
| Readings             |       |        | References |         |          |        | Results |       |
|                      | Zero  | Cal    |            | Zero    | Cal      |        | m'      | b'    |
| Deep                 | 0.000 | 0.000  | mmho/m     | 14.508  | 388.384  | mmho/m | 1.000   | 0.000 |
| Medium               | 0.000 | 0.000  | mmho/m     | 166.367 | 504.400  | mmho/m | 1.000   | 0.000 |
| LL3                  |       | 7.500  | V          |         | 1400.000 | Ohm-m  |         |       |
|                      |       | 0.000  | V          |         | 20.000   | Ohm-m  |         |       |
|                      |       | -7.200 | V          |         | 4000.000 | mmho-m |         |       |

| After Survey Verification |       |       |         |       |       |        |         |       |
|---------------------------|-------|-------|---------|-------|-------|--------|---------|-------|
| Readings                  |       |       | Targets |       |       |        | Results |       |
|                           | Zero  | Cal   |         | Zero  | Cal   |        | m'      | b'    |
| Deep                      | 0.000 | 0.000 | mmho/m  | 0.000 | 0.000 | mmho/m | 0.000   | 0.000 |
| Medium                    | 0.000 | 0.000 | mmho/m  | 0.000 | 0.000 | mmho/m | 0.000   | 0.000 |
| LL3                       |       | 1.000 | Ohm-m   |       | 1.000 | Ohm-m  |         |       |
|                           |       | 0.000 | Ohm-m   |       | 0.000 | Ohm-m  |         |       |
|                           |       | 1.000 | mmho-m  |       | 1.000 | mmho-m |         |       |

| Litho Density Calibration Report |                          |        |     |  |  |
|----------------------------------|--------------------------|--------|-----|--|--|
| Serial:                          | 002                      | Model: | PRB |  |  |
| Performed                        | Mon Oct 29 15:40:49 2007 |        |     |  |  |

| Litho Density Calibration |            |           |          |           |      |
|---------------------------|------------|-----------|----------|-----------|------|
|                           | Background | Magnesium | Aluminum | Sandstone |      |
| Window 1                  | 1056.3     | 9118.0    | 2809.7   | 10378.4   | cps  |
| Window 2                  | 969.9      | 7671.9    | 2431.6   | 8565.8    | cps  |
| Window 3                  | 683.8      | 2939.8    | 1161.0   | 3161.8    | cps  |
| Window 4                  | 231.4      | 231.6     | 226.7    | 230.8     | cps  |
| Long Space                | 0.0        | 6702.0    | 1461.7   | 7595.9    | cps  |
| Short Space               | 1.2        | 1433.6    | 959.4    | 1568.6    | cps  |
| Rho                       |            | 1.7100    | 2.5900   | 1.3800    | g/cc |

|                                        |             |                          |          |                     |         |
|----------------------------------------|-------------|--------------------------|----------|---------------------|---------|
| Pe                                     |             | 2.5700                   |          | 1.5500              |         |
| Rib Angle                              | : 45.2      | Rib Slope                | : 1.008  | Density/Spine Ratio | : 0.559 |
| Spine Angle                            | : 75.2      | Spine Slope              | : 3.791  | Spine Intercept     | : -18.7 |
| Caliper                                |             |                          |          |                     |         |
|                                        | Readings    | Reference                |          |                     |         |
| Low Ref                                | 2.8         | 8.0                      |          |                     |         |
| High Ref                               | 5.0         | 14.0                     |          |                     |         |
|                                        | Gain: 2.7   | Offset: -0.9             |          |                     |         |
| 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     |
| Gamma Ray Calibration Report           |             |                          |          |                     |         |
| Serial Number:                         |             | #8                       |          |                     |         |
| Tool Model:                            |             | OPEN                     |          |                     |         |
| Performed:                             |             | Fri Feb 18 03:07:29 2011 |          |                     |         |
| Calibrator Value:                      |             | 150.0                    | GAPI     |                     |         |
| Background Reading:                    |             | 0.0                      | cps      |                     |         |
| Calibrator Reading:                    |             | 175.0                    | cps      |                     |         |
| Sensitivity:                           |             | 0.8971                   | GAPI/cps |                     |         |