



# DUAL INDUCTION LOG

|                              |                           |           |                                     |
|------------------------------|---------------------------|-----------|-------------------------------------|
| Company                      | VESS OIL CORPORATION      |           |                                     |
| Well                         | OSWALD, ED B. #11         |           |                                     |
| Field                        | FAIRPORT                  |           |                                     |
| County                       | RUSSELL                   | State     | KANSAS                              |
| Location:                    | API # : 15-167-24096-0000 |           | Other Services<br>CDL/CNL/PE<br>MEL |
|                              | 1980' FSL & 660' FWL      |           |                                     |
| Permanent Datum              | SEC 8                     | TWP 12S   | RGE 15W                             |
| Log Measured From            | GROUND LEVEL              |           | Elevation 1844                      |
| Drilling Measured From       | KELLY BUSHING 5' A.G.L    |           | K.B. 1849<br>D.F. 1847<br>G.L. 1844 |
| Date                         | 10/15/19                  |           |                                     |
| Run Number                   | ONE                       |           |                                     |
| Depth Driller                | 3254                      |           |                                     |
| Depth Logger                 | 3253                      |           |                                     |
| Bottom Logged Interval       | 3251                      |           |                                     |
| Top Log Interval             | 00                        |           |                                     |
| Casing Driller               | 8 5/8" @ 346'             |           |                                     |
| Casing Logger                | 345'                      |           |                                     |
| Bit Size                     | 7 7/8                     |           |                                     |
| Type Fluid in Hole           | CHEMICAL MUD              | CHLORIDES | 6500 PPM                            |
| Density / Viscosity          | 8.9/64                    |           |                                     |
| pH / Fluid Loss              | 8.0/10.8                  |           |                                     |
| Source of Sample             | FLOWLINE                  |           |                                     |
| Rm @ Meas. Temp              | 1.30 @ 76F                |           |                                     |
| Rmf @ Meas. Temp             | 0.97 @ 76F                |           |                                     |
| Rmc @ Meas. Temp             | 1.56 @ 76F                |           |                                     |
| Source of Rmf / Rmc          | MEASUREMENT               |           |                                     |
| Rm @ BHT                     | 0.90 @ 109F               |           |                                     |
| Time Circulation Stopped     | 2 HOURS                   |           |                                     |
| Time Logger on Bottom        | ////                      |           |                                     |
| Maximum Recorded Temperature | 109F                      |           |                                     |
| Equipment Number             | 3802                      |           |                                     |
| Location                     | HAYS, KANSAS              |           |                                     |
| Recorded By                  | JASON CAPPELLUCCI         |           |                                     |
| Witnessed By                 | ROGER MARTIN              |           |                                     |

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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.

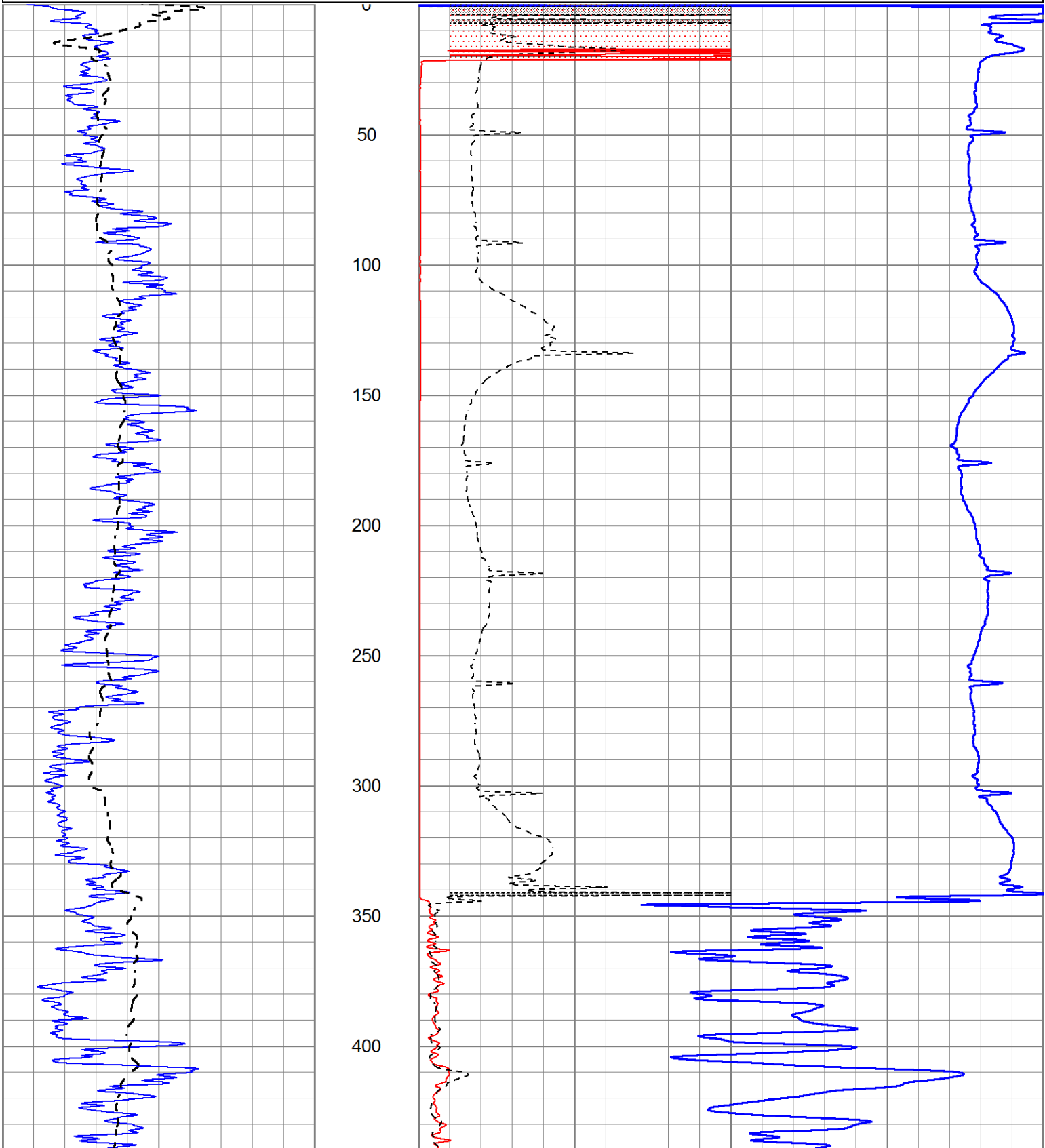
## Comments

THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. ( 785 ) 628-6395  
DIRECTIONS  
GORHAM, KS, - 9 NORTH ON FAIRPORT BLACKTOP TO BEATTY RD.  
1/4 WEST TO CURVE - KEEP WEST TO NEXT ROAD NORTH - 1/4 NORTH - WEST INTO

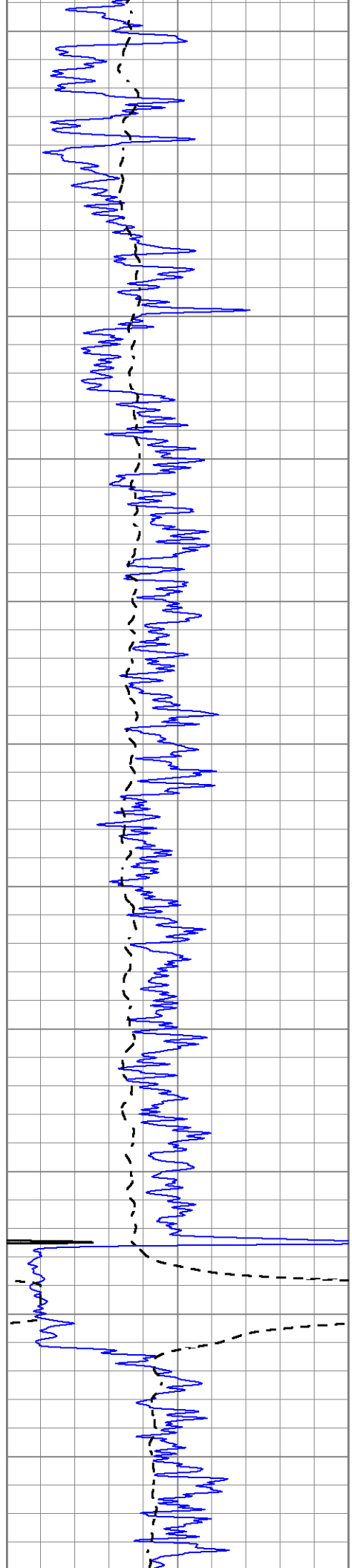
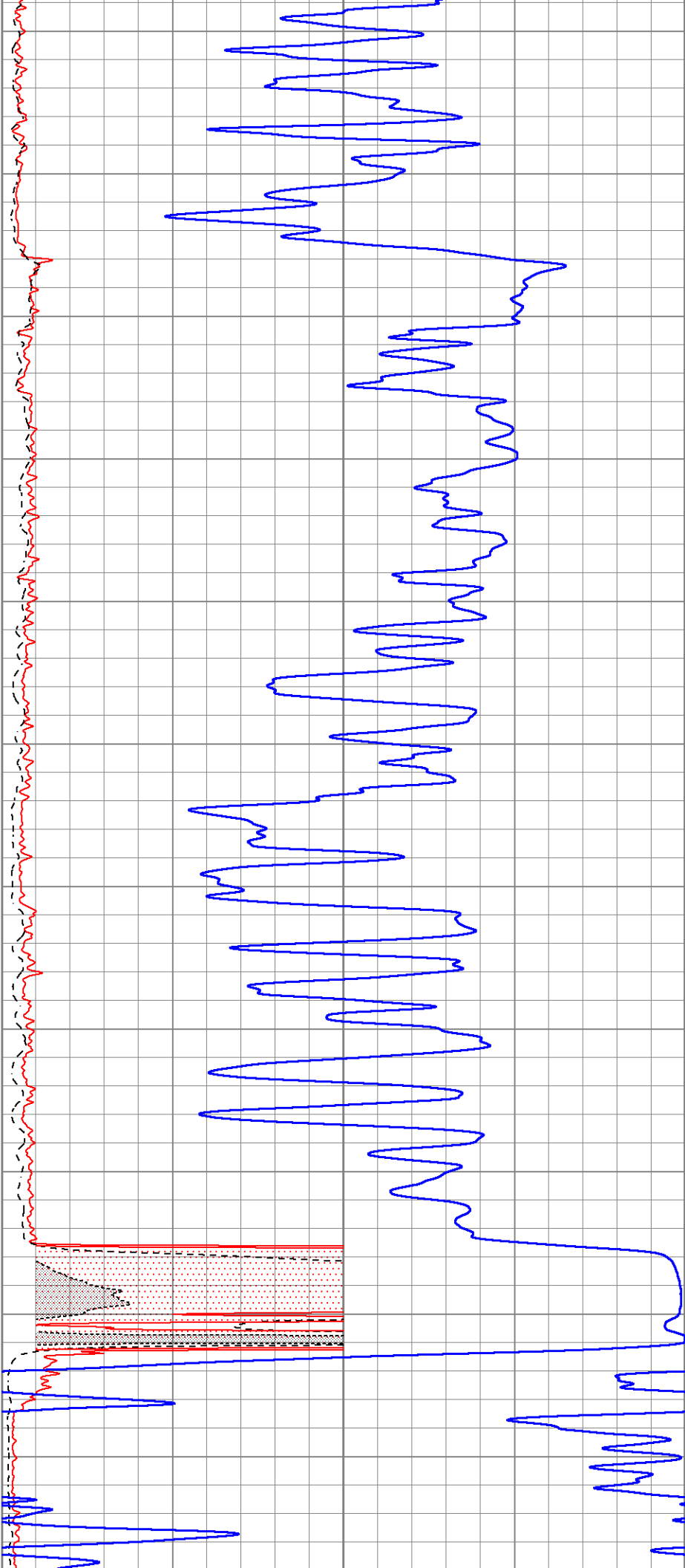


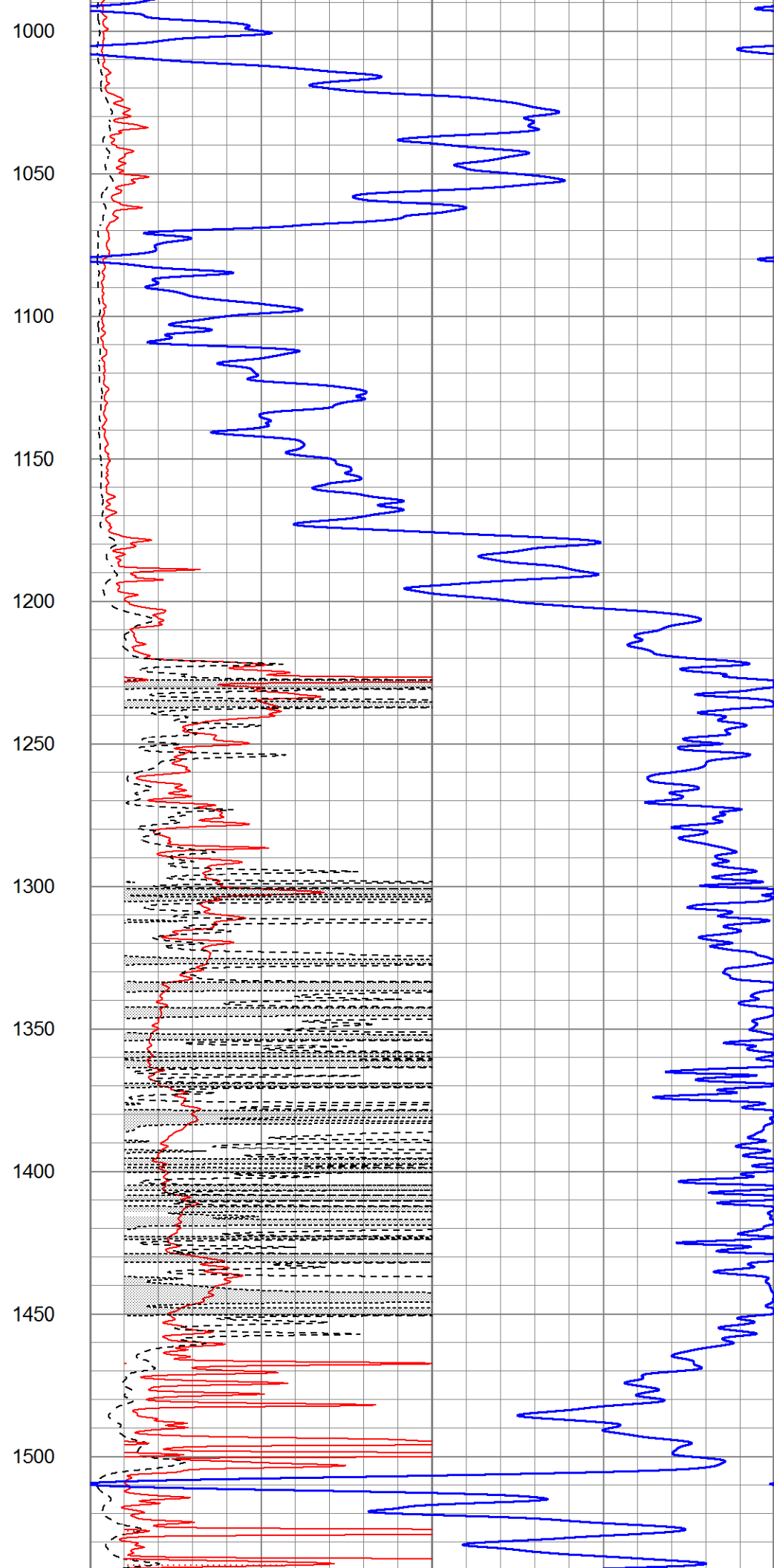
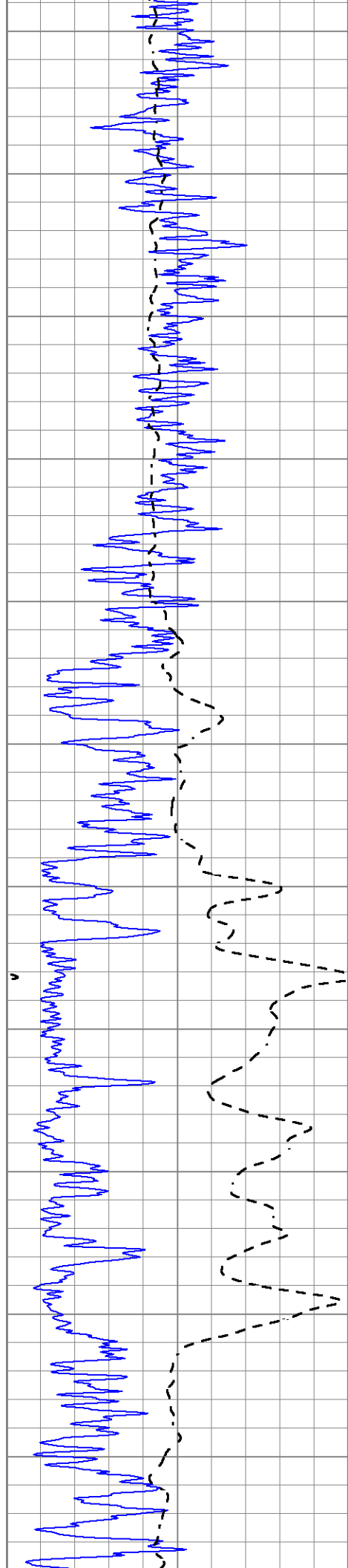
# MAIN SECTION

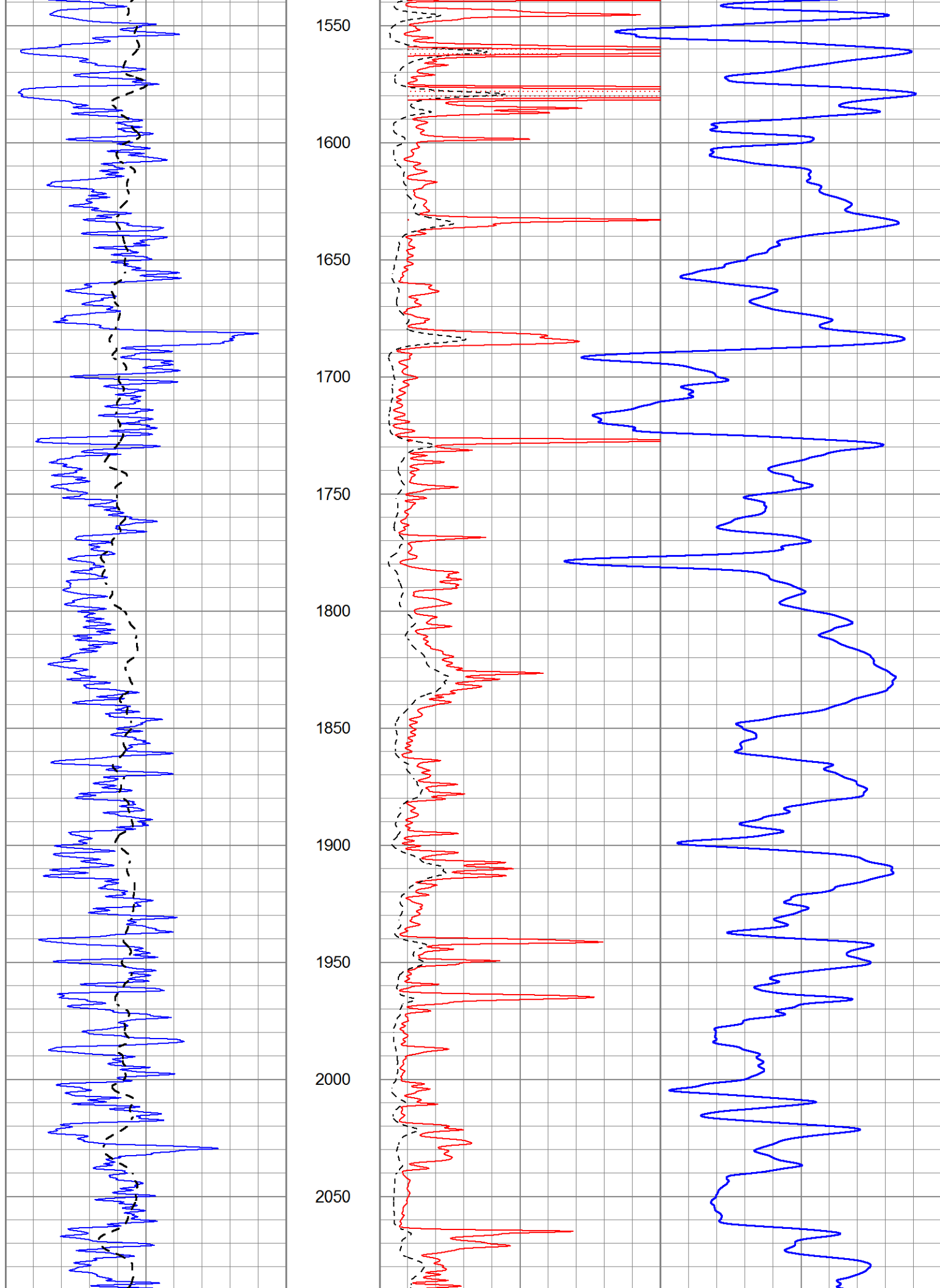
|       |                  |     |      |                        |     |
|-------|------------------|-----|------|------------------------|-----|
| 0     | Gamma Ray (GAPI) | 150 | 1000 | CILD (mmho/m)          | 0   |
| -100  | SP (mV)          | 100 | 0    | RLL3 (Ohm-m)           | 50  |
| ----- |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

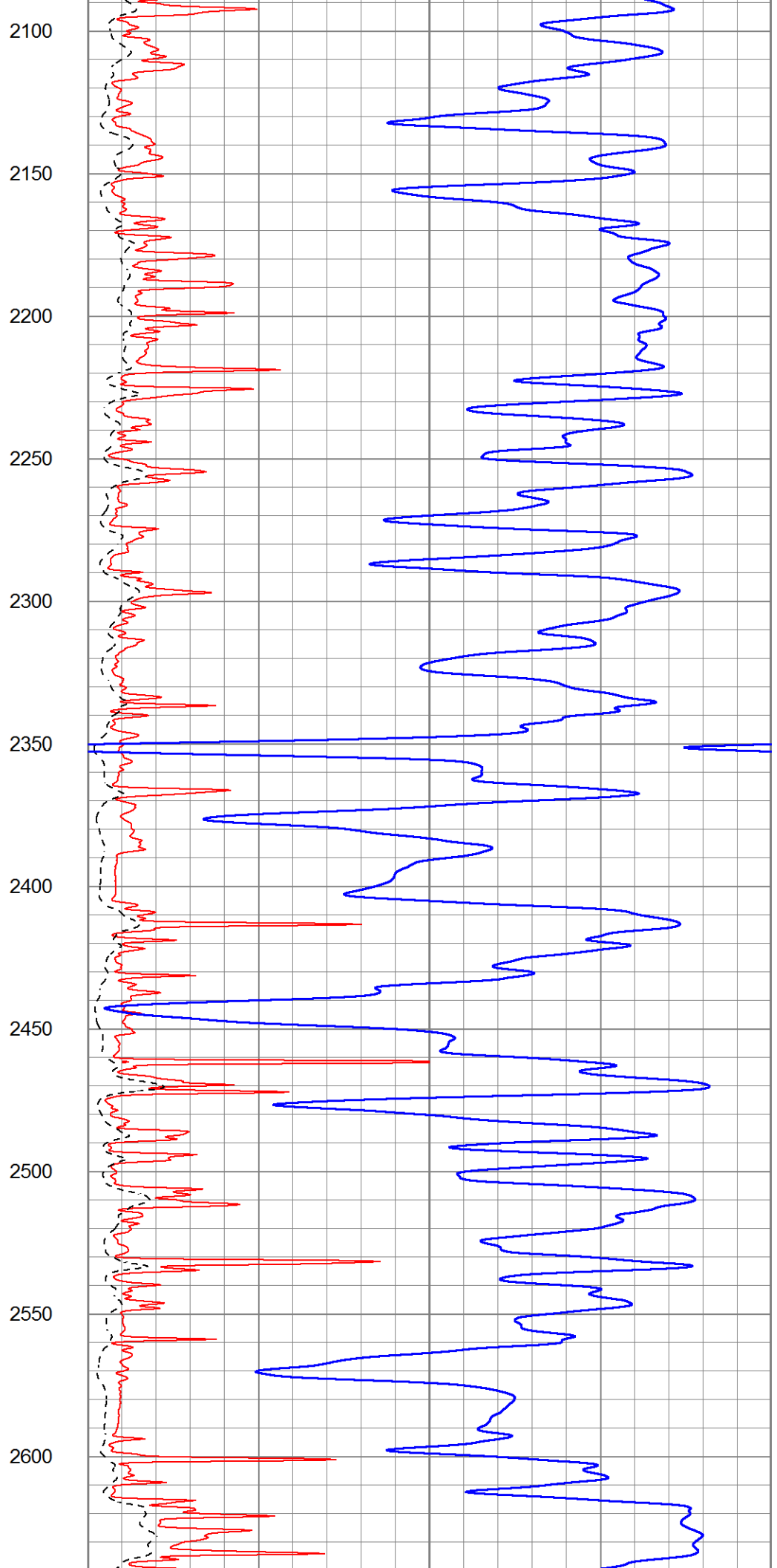
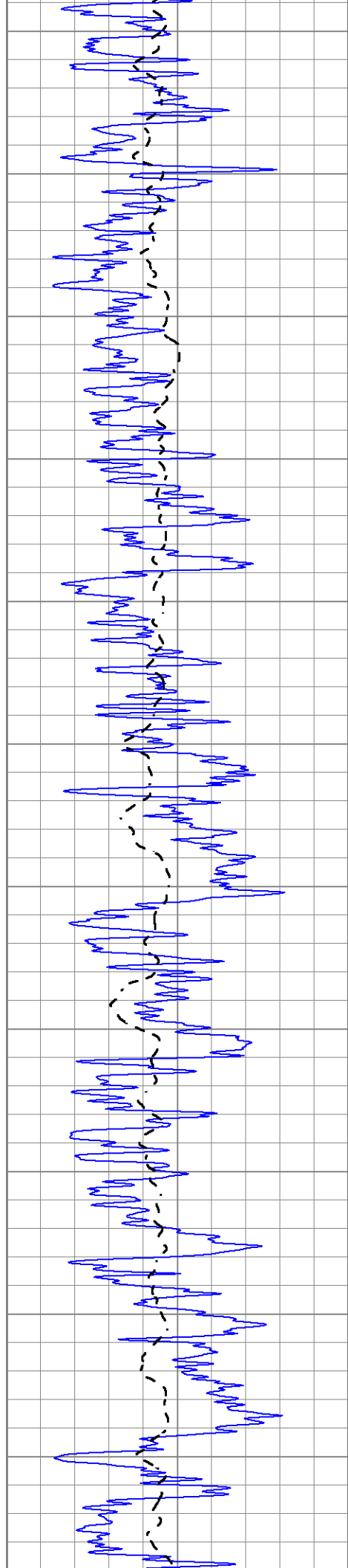


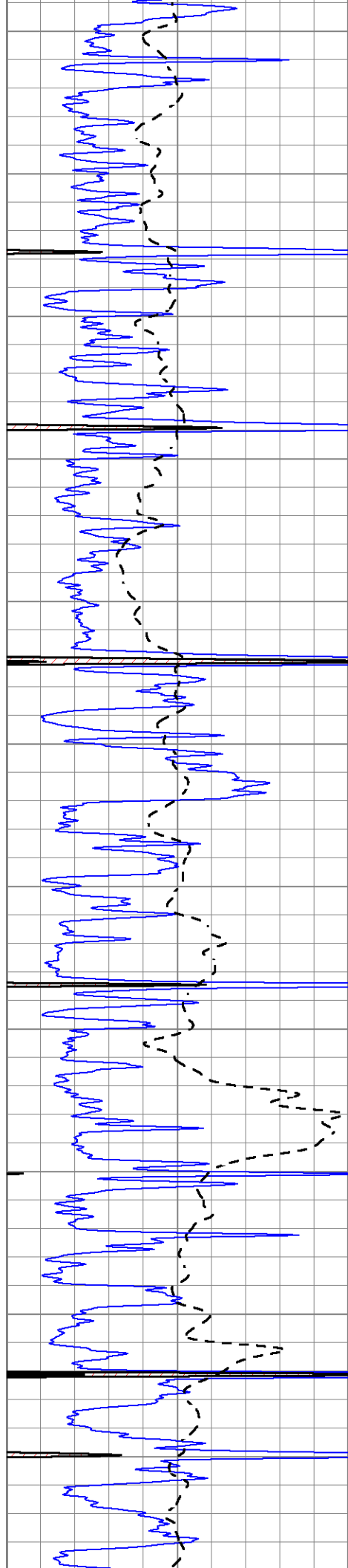
450  
500  
550  
600  
650  
700  
750  
800  
850  
900  
950



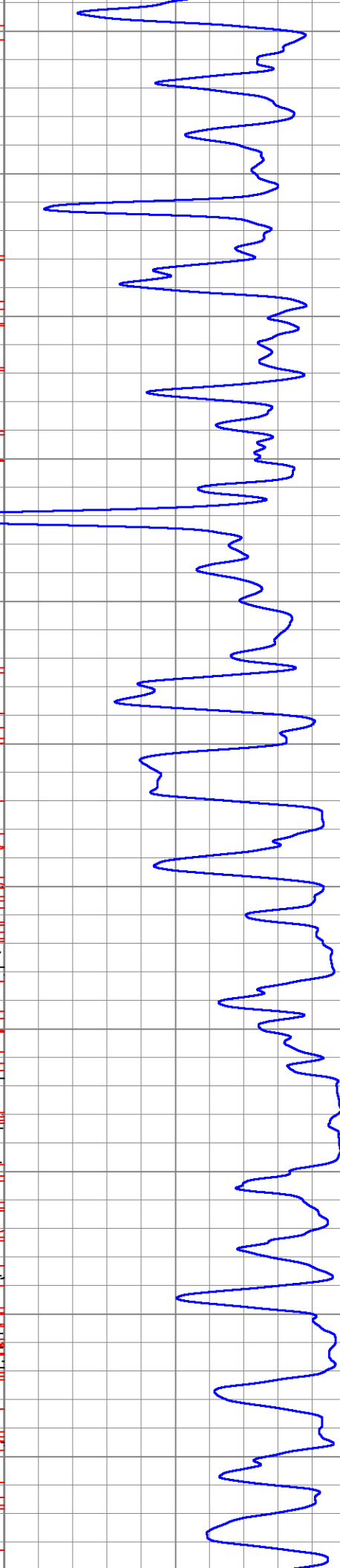
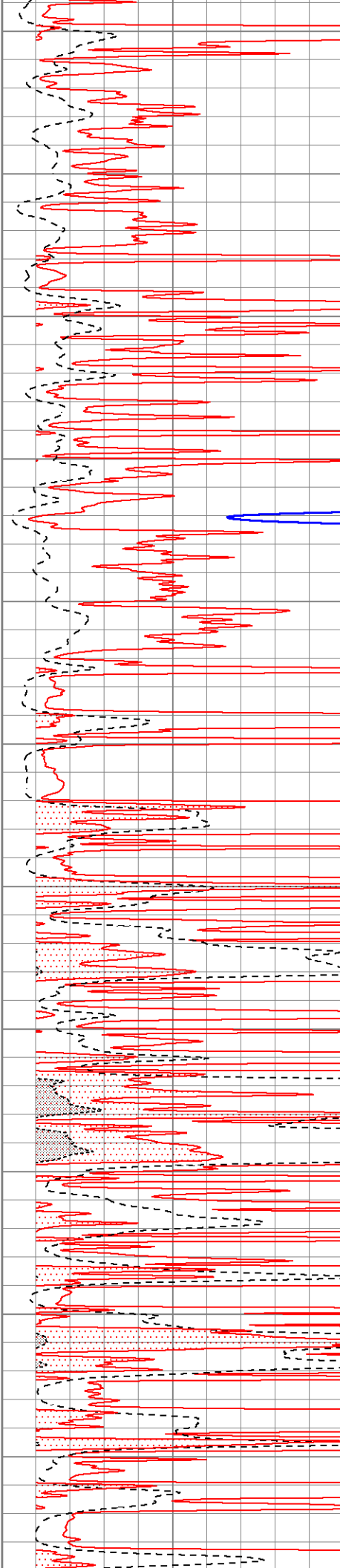




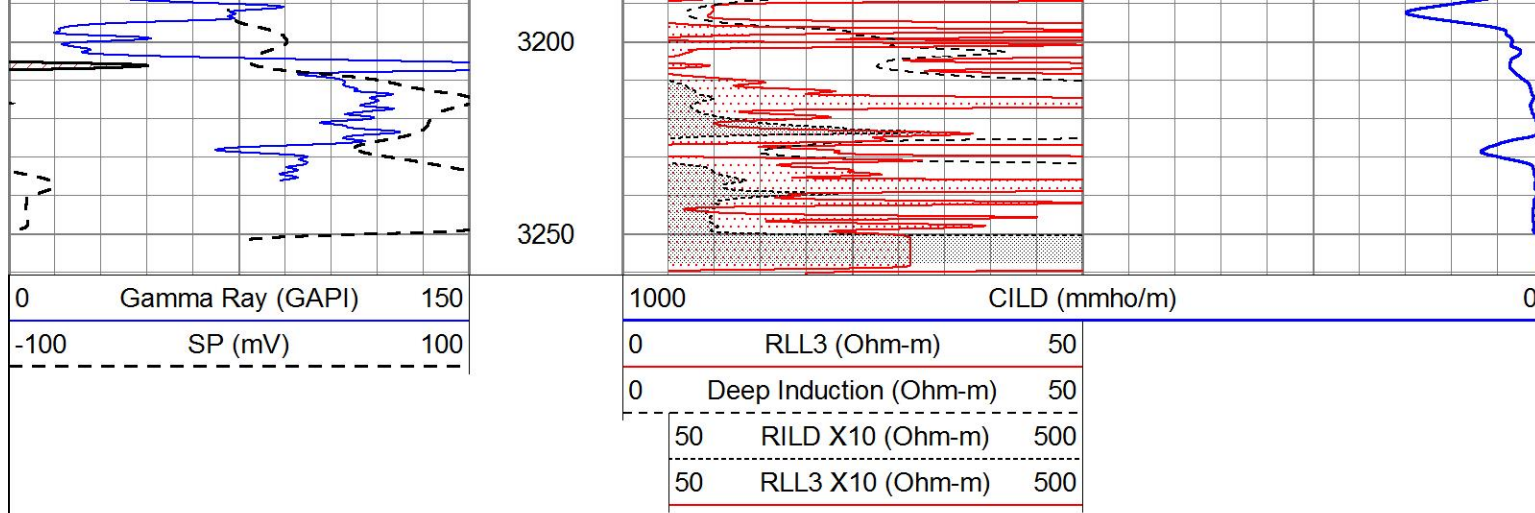




2650  
2700  
2750  
2800  
2850  
2900  
2950  
3000  
3050  
3100  
3150



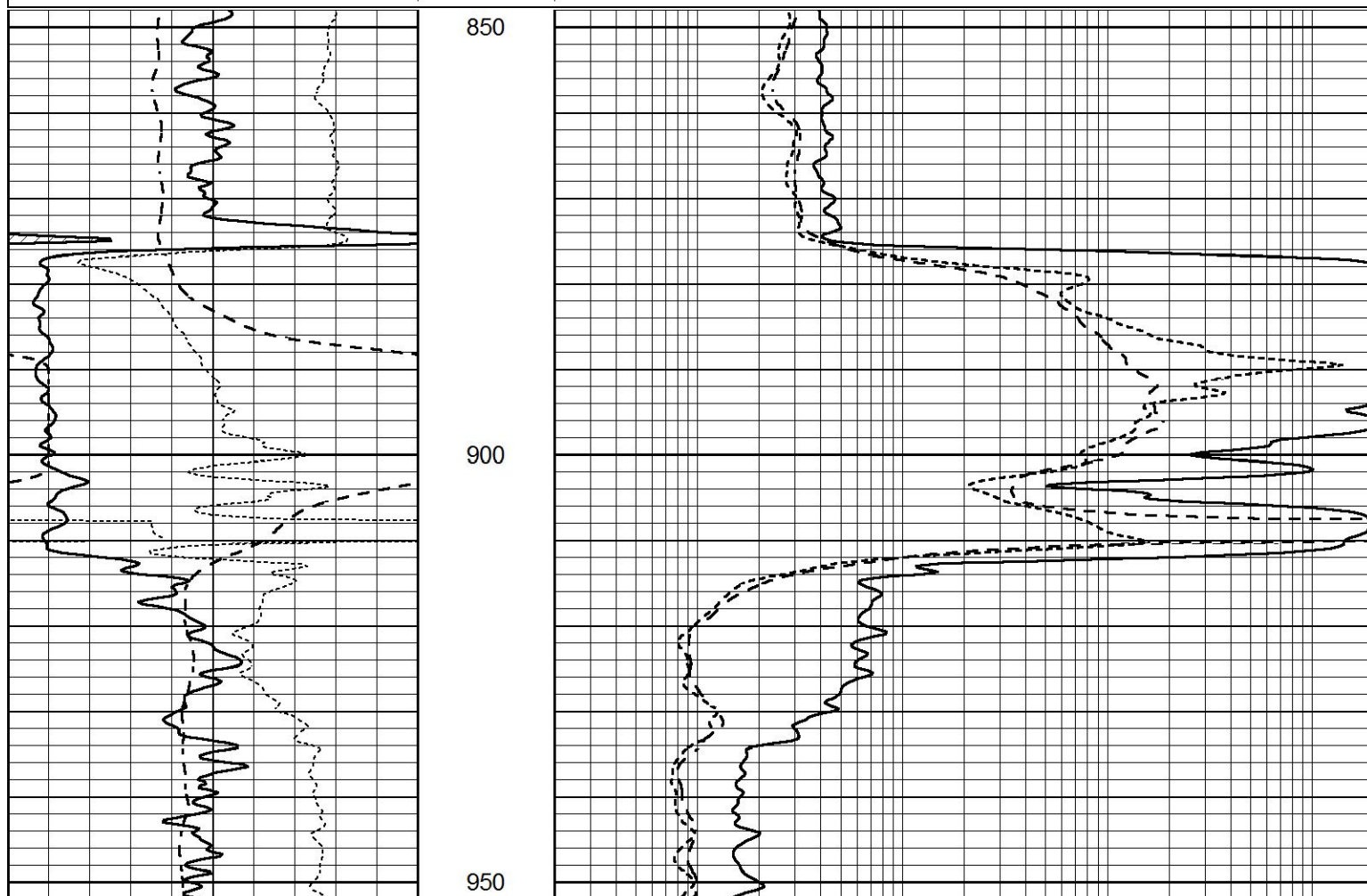




# ANHYDRITE

Database File 3998ddn8.db  
 Dataset Pathname pass3.2  
 Presentation Format \_dil  
 Dataset Creation Wed Oct 16 00:01:56 2019  
 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 | MEDIUM INDUCTION (Ohm-m) | 2000 |
| -250 | Rxo/Rt           | 50  | 0.2 | DEEP INDUCTION (Ohm-m)   | 2000 |





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

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

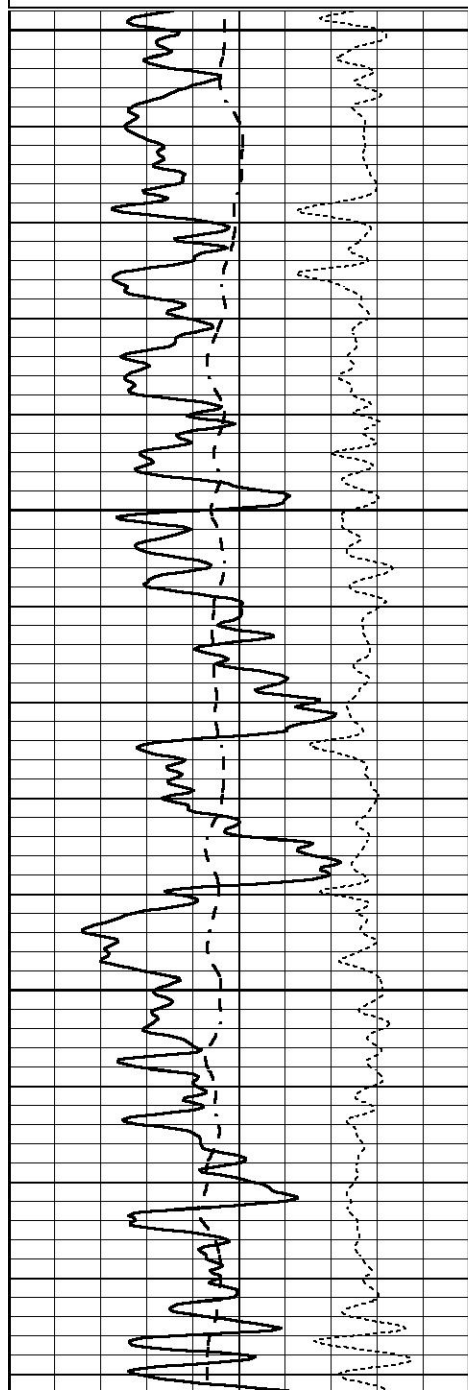


# MAIN SECTION

Database File 3998ddn8.db  
 Dataset Pathname pass3.1  
 Presentation Format \_dil  
 Dataset Creation Wed Oct 16 00:01:06 2019  
 Charted by Depth in Feet scaled 1:240

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

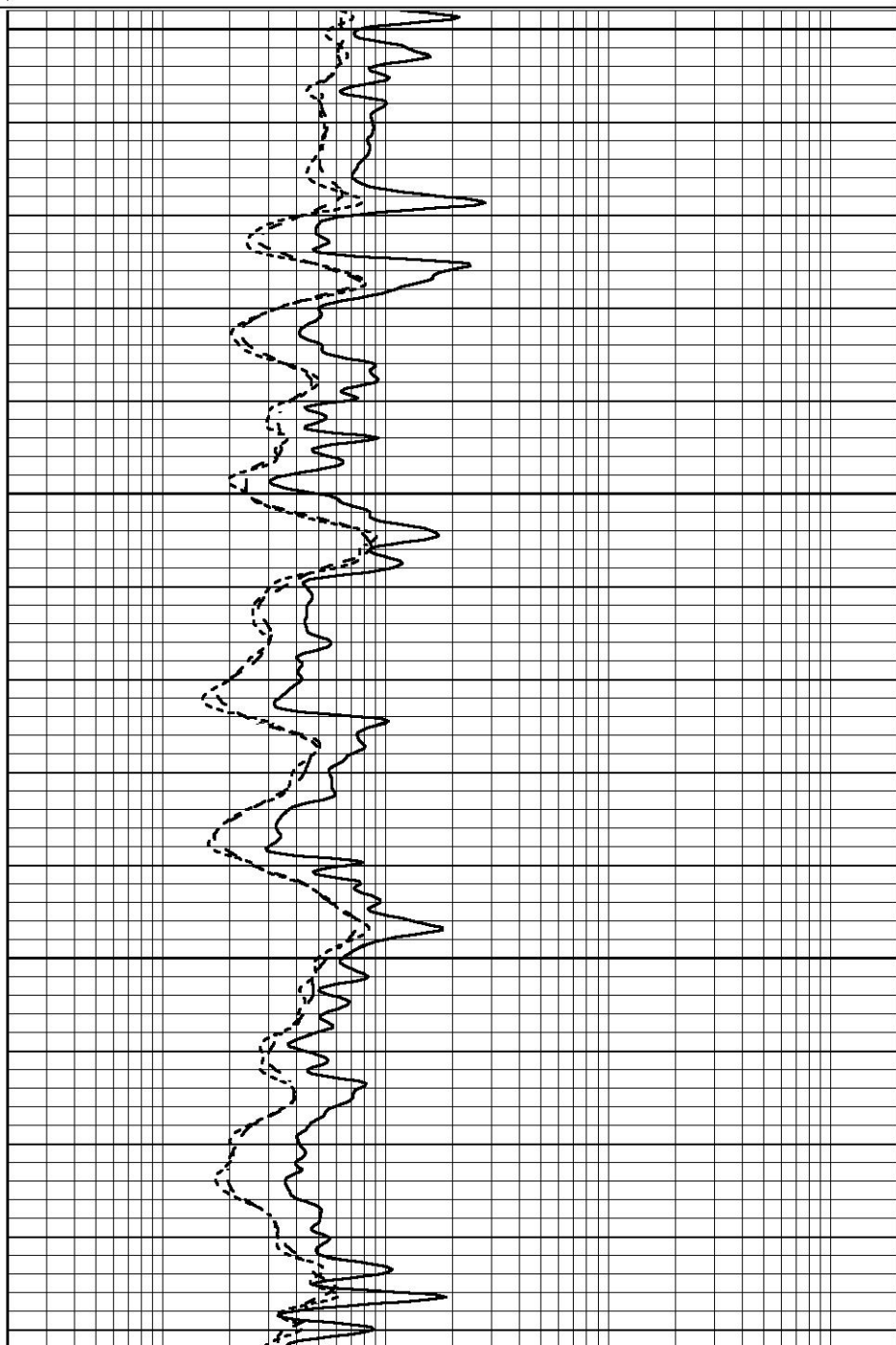
|     |                          |      |
|-----|--------------------------|------|
| 0.2 | SHALLOW GUARD (Ohm-m)    | 2000 |
| 0.2 | MEDIUM INDUCTION (Ohm-m) | 2000 |
| 0.2 | DEEP INDUCTION (Ohm-m)   | 2000 |

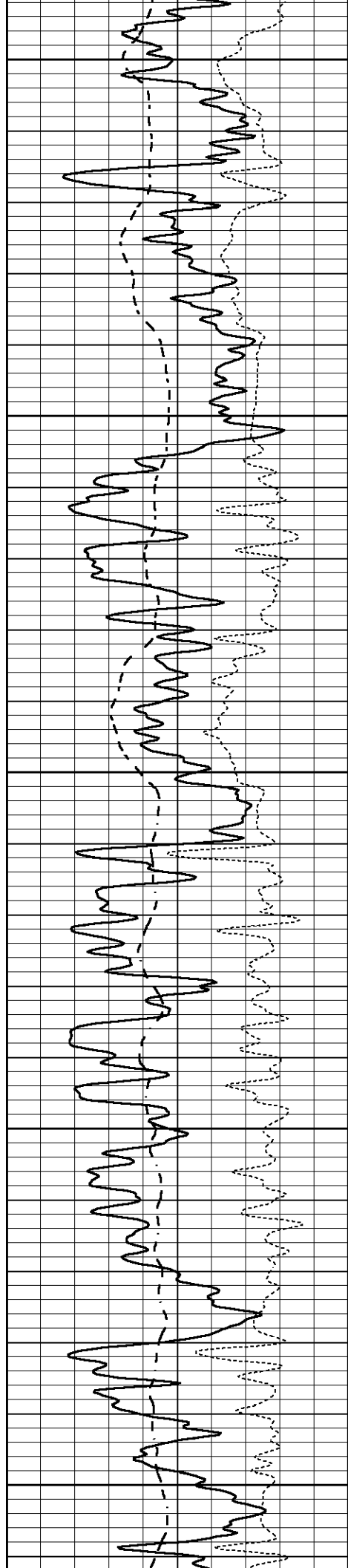


2200

2250

2300





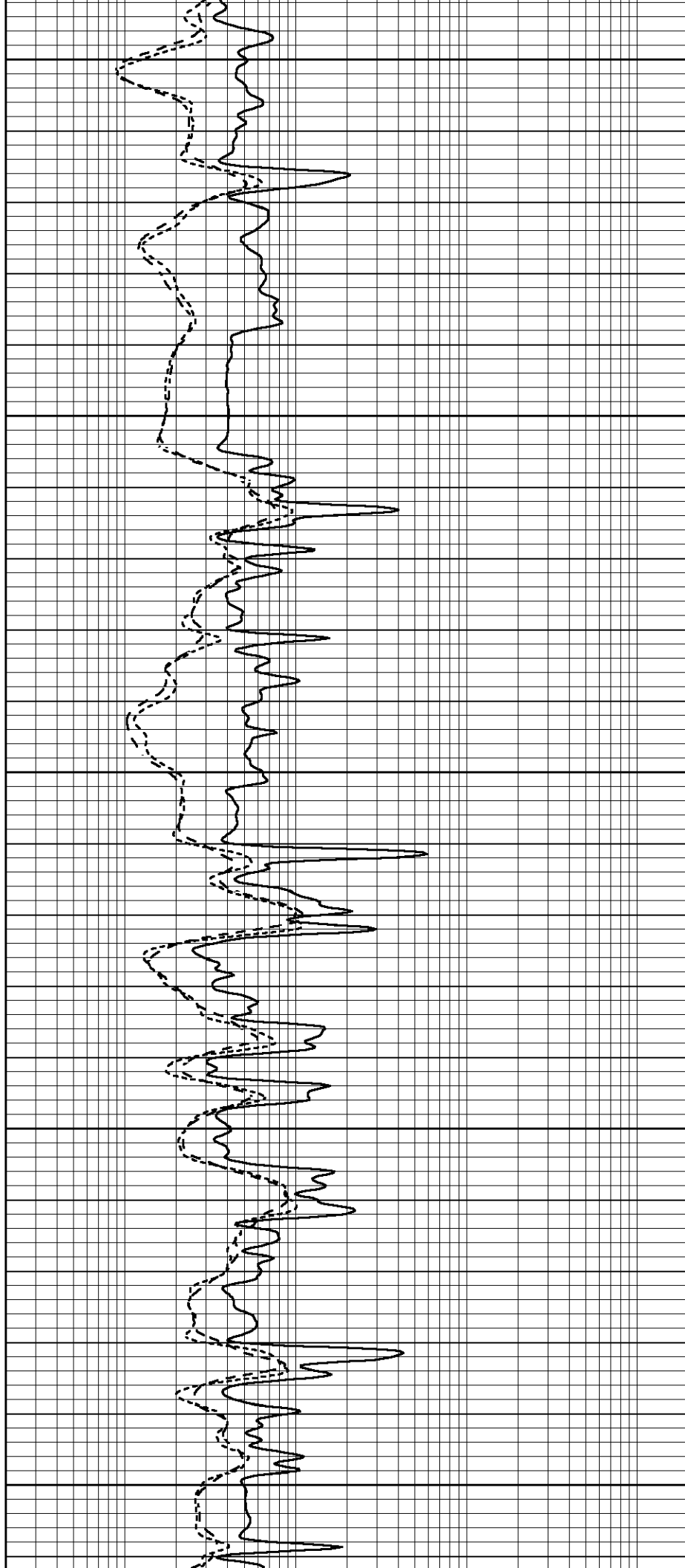
2350

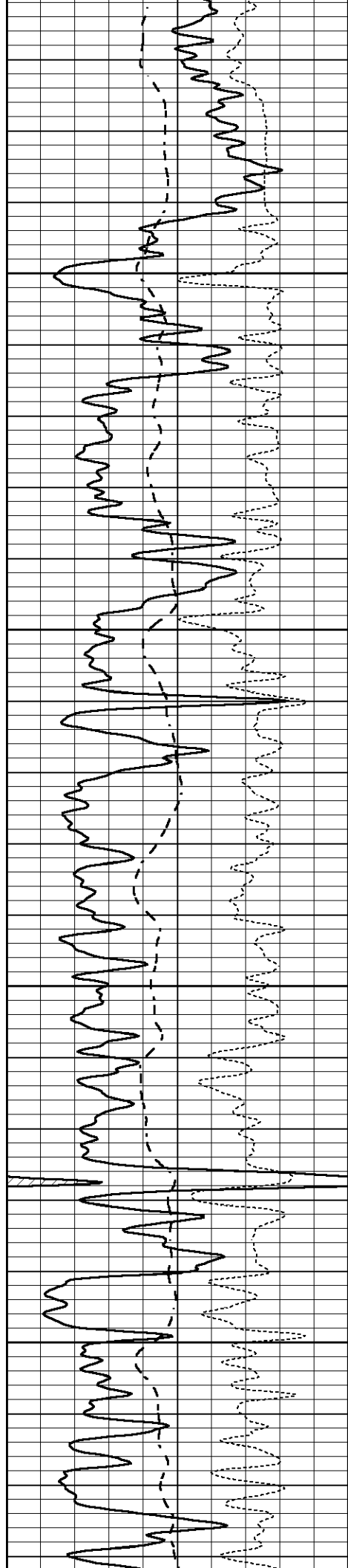
2400

2450

2500

2550



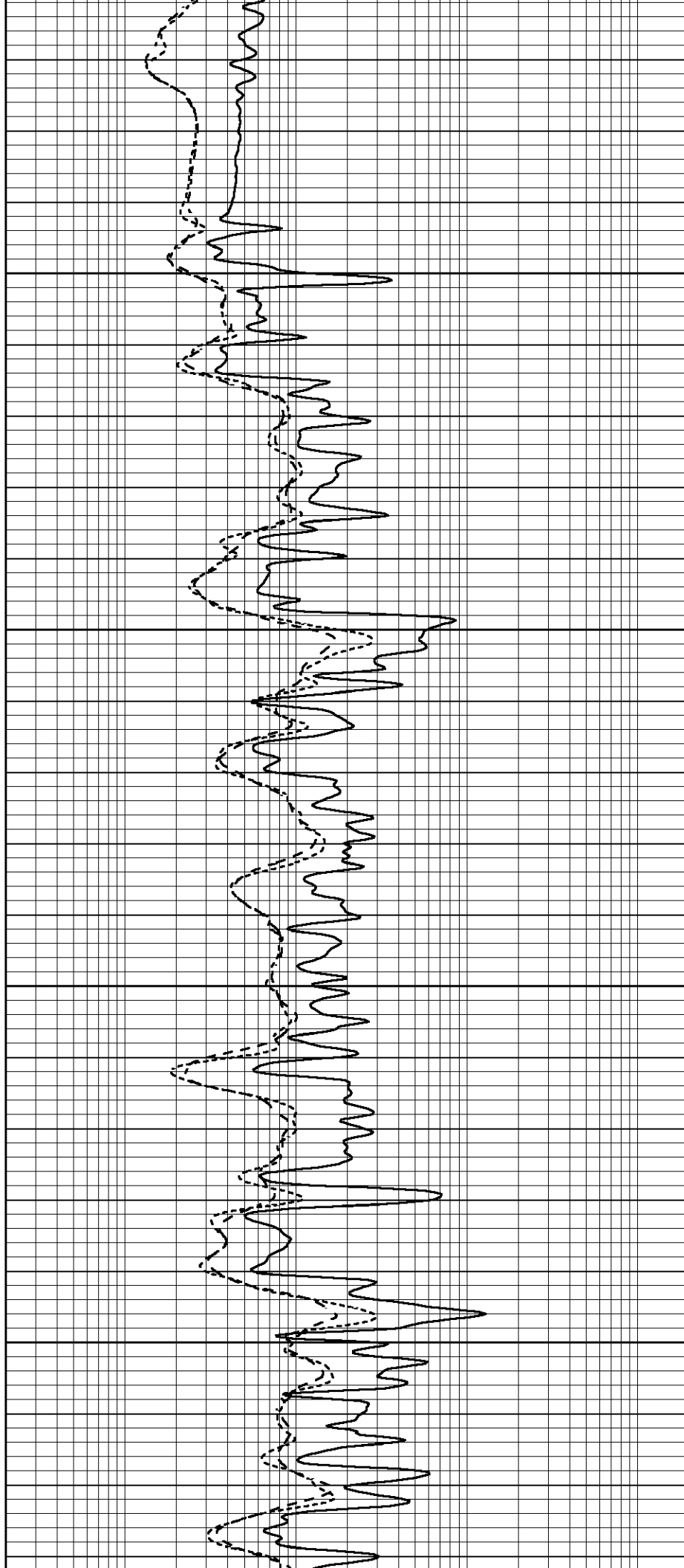


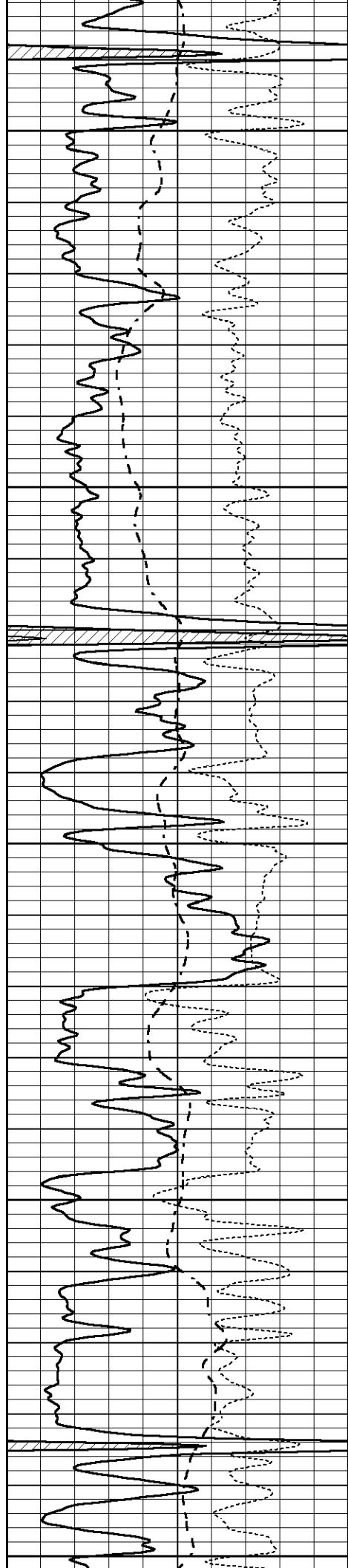
2600

2650

2700

2750





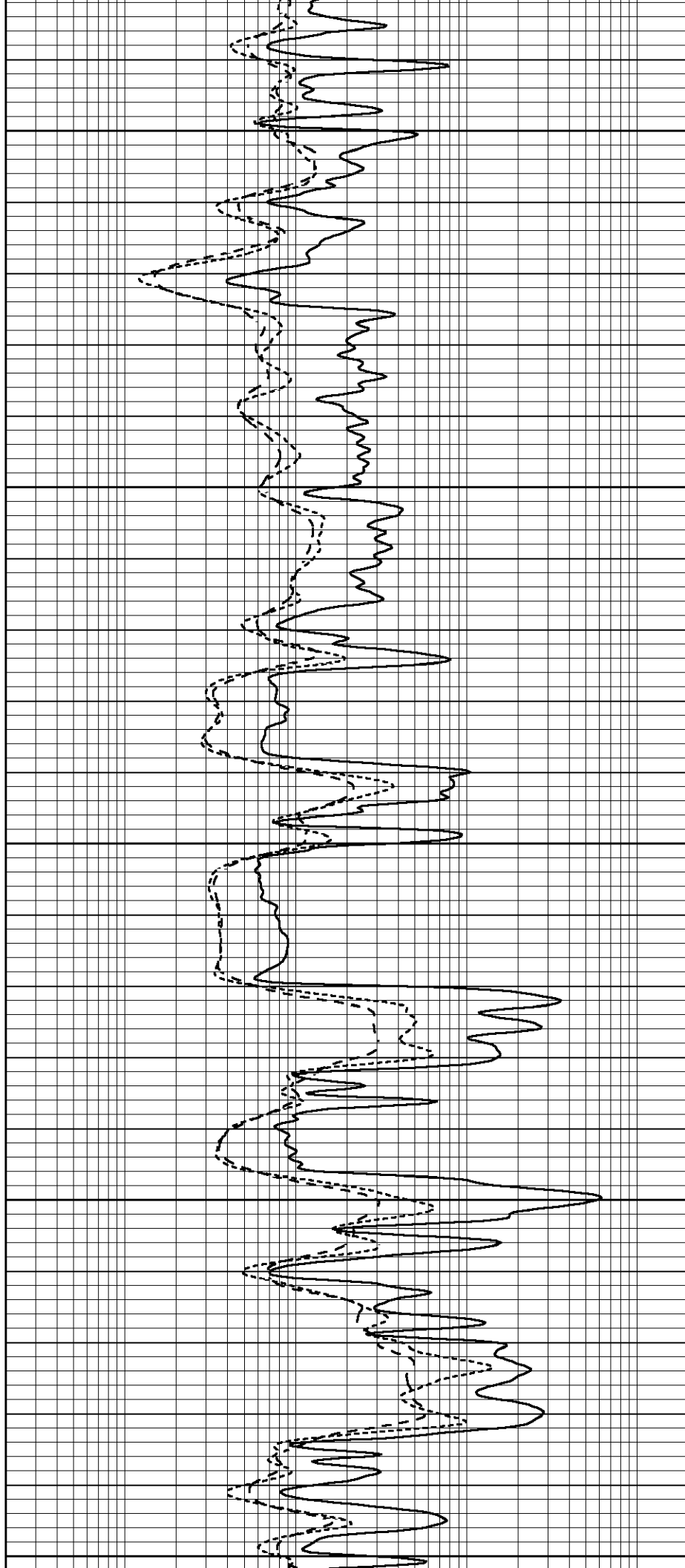
2800

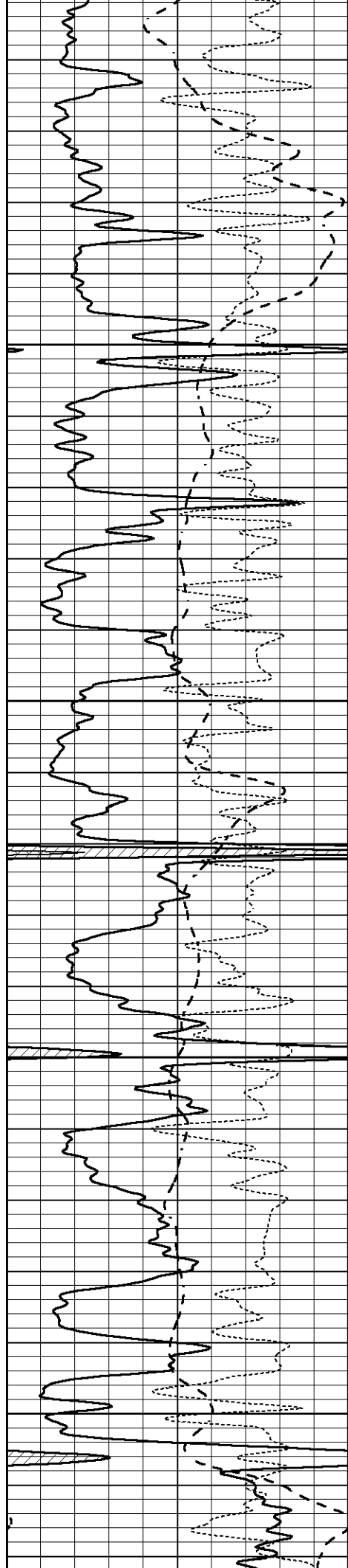
2850

2900

2950

3000



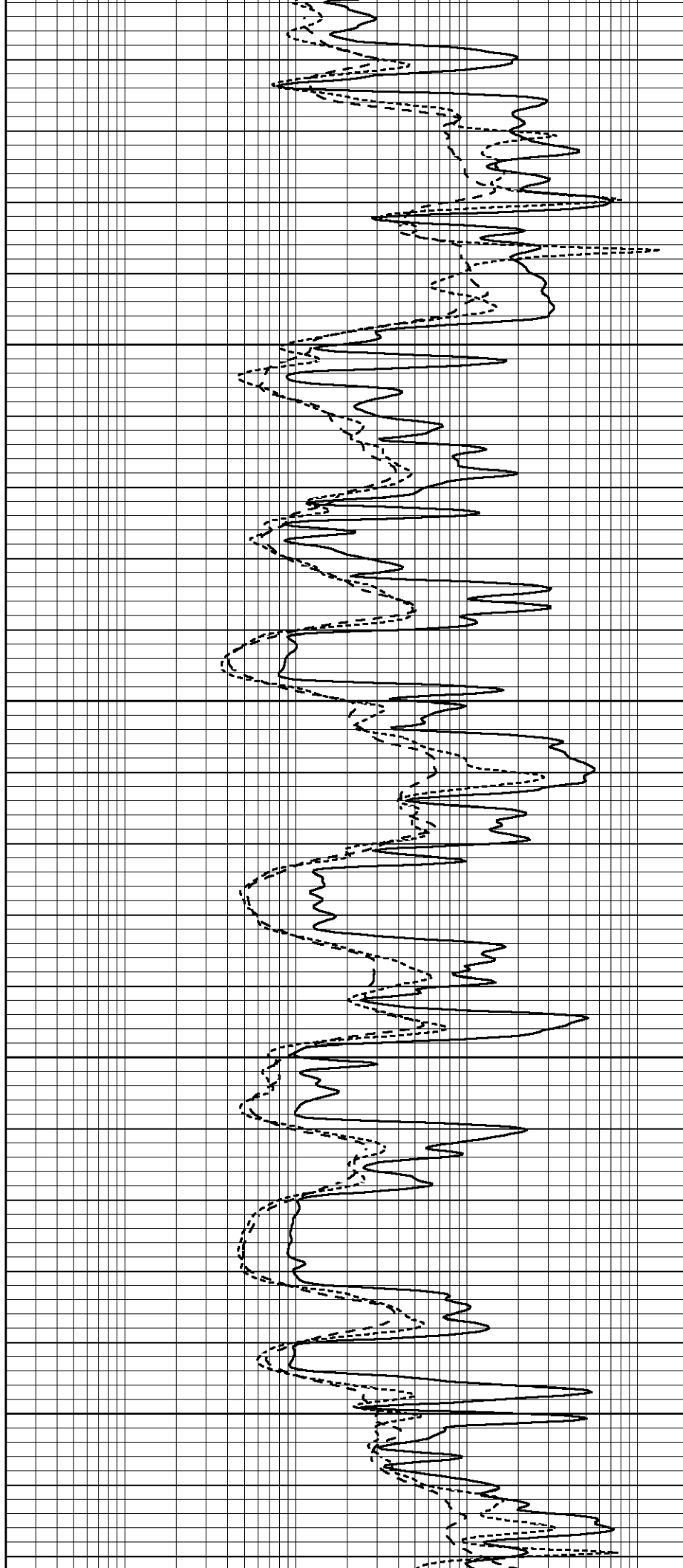


3050

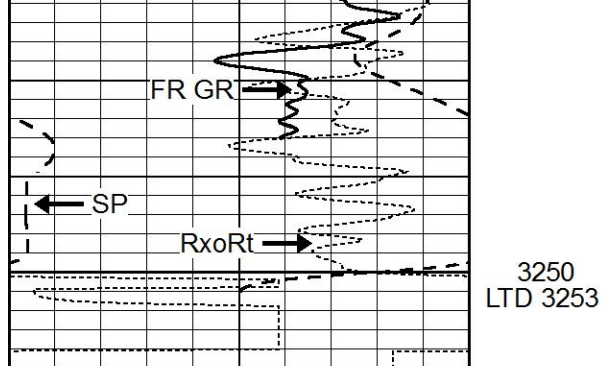
3100

3150

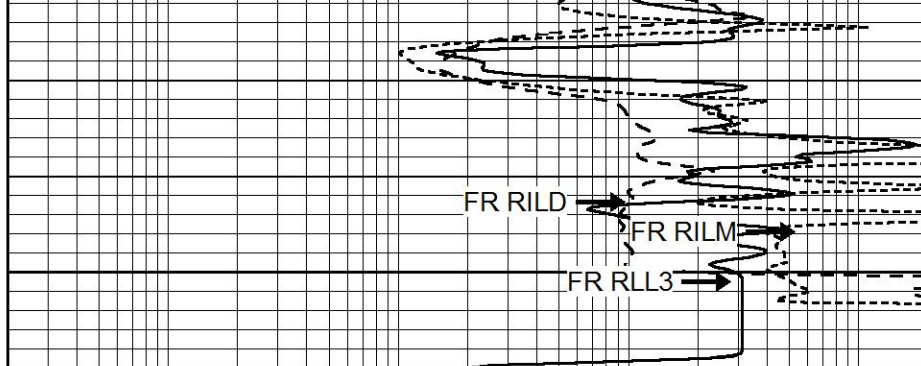
3200







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



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

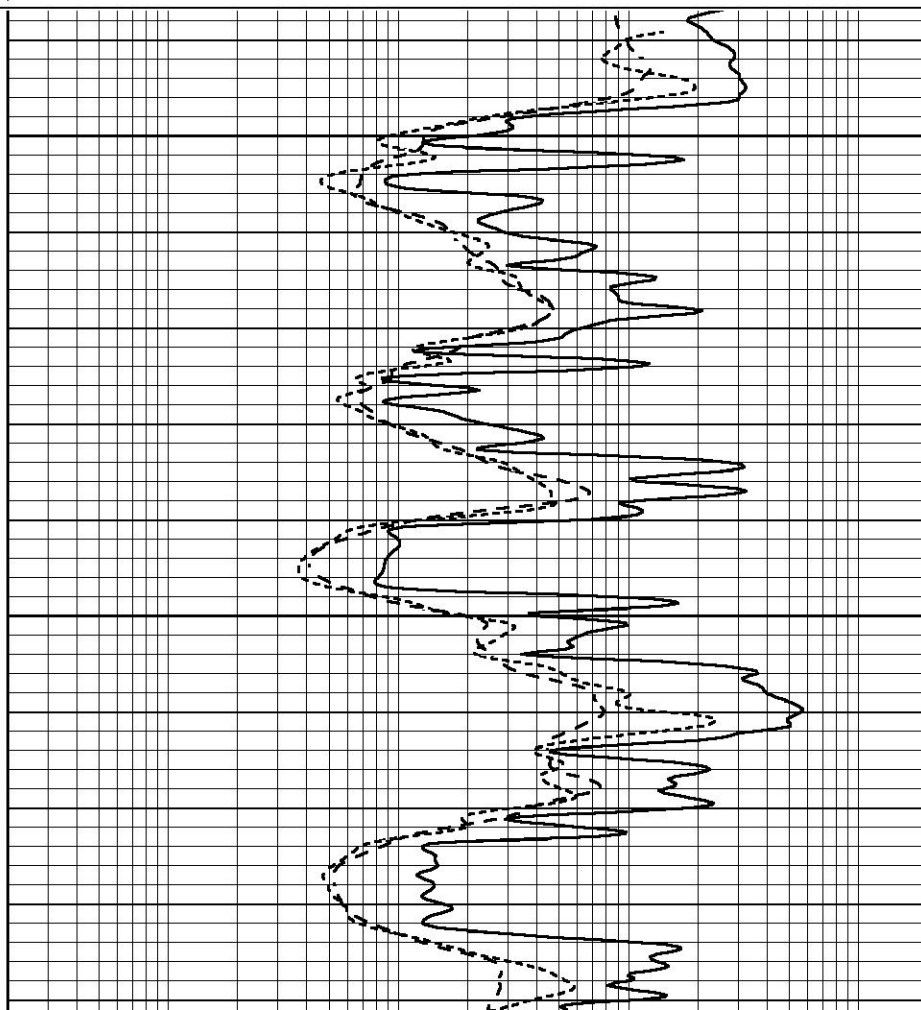
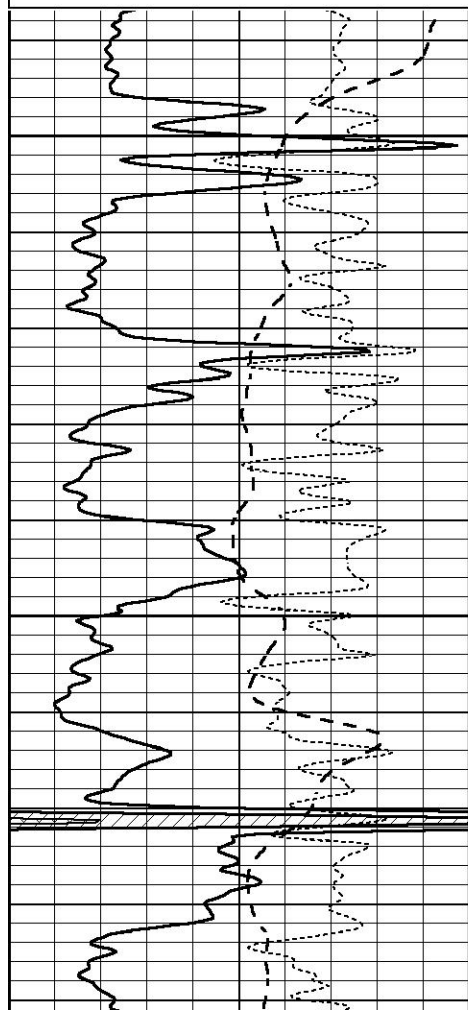


# REPEAT SECTION

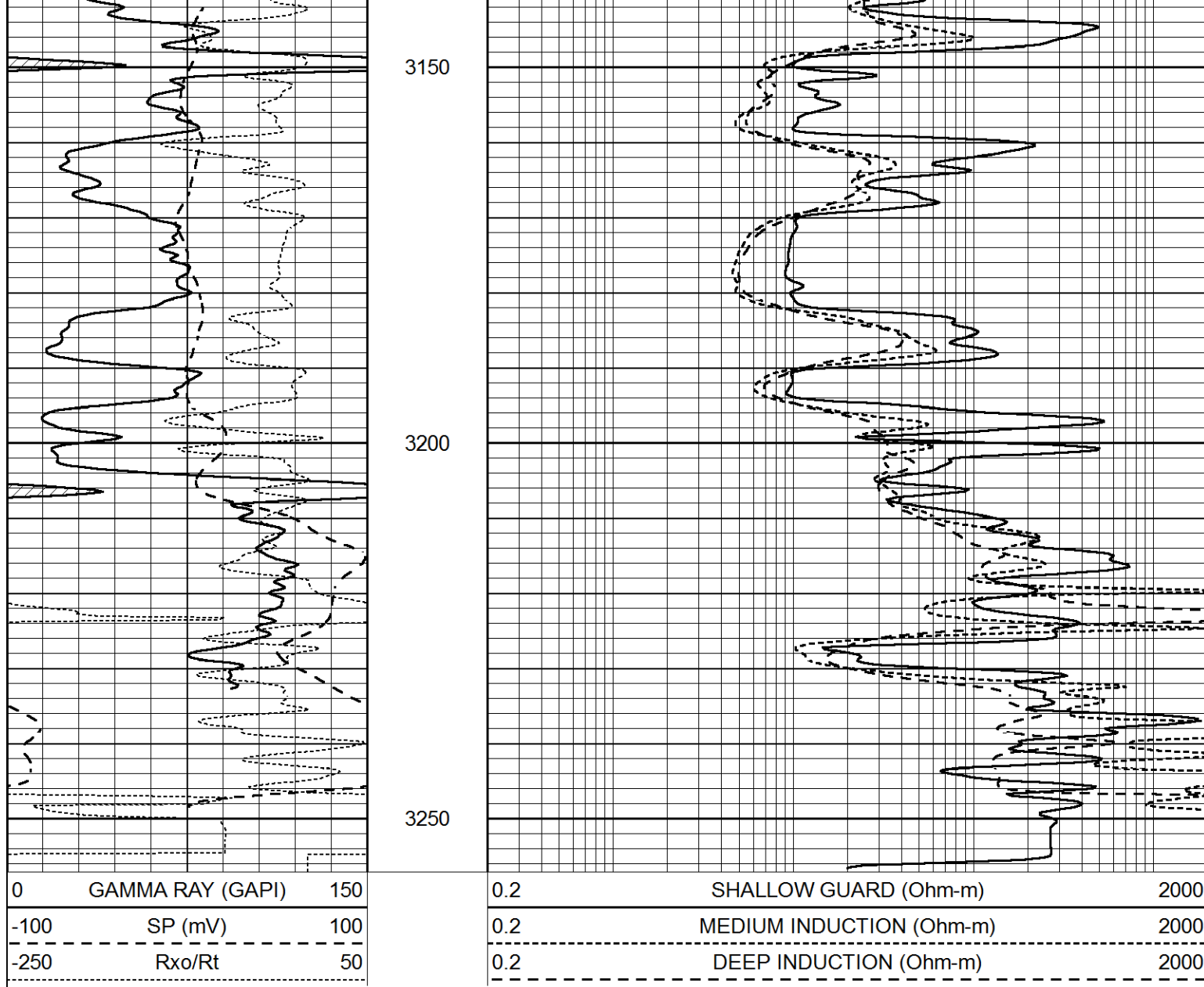
Database File 3998ddn8.db  
 Dataset Pathname pass2.1  
 Presentation Format \_dil  
 Dataset Creation Wed Oct 16 00:00:04 2019  
 Charted by Depth in Feet scaled 1:240

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

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







| Calibration Report                   |                          |                          |   |       |            |        |         |         |  |
|--------------------------------------|--------------------------|--------------------------|---|-------|------------|--------|---------|---------|--|
| Database File                        | 3998ddn8.db              |                          |   |       |            |        |         |         |  |
| Dataset Pathname                     | pass2.1                  |                          |   |       |            |        |         |         |  |
| Dataset Creation                     | Wed Oct 16 00:00:04 2019 |                          |   |       |            |        |         |         |  |
| Dual Induction Calibration Report    |                          |                          |   |       |            |        |         |         |  |
| Serial-Model:                        |                          | FW1410-55-Probe          |   |       |            |        |         |         |  |
| Surface Cal Performed:               |                          | Tue Feb 19 11:44:18 2019 |   |       |            |        |         |         |  |
| Downhole Cal Performed:              |                          | Tue Feb 19 11:44:24 2019 |   |       |            |        |         |         |  |
| After Survey Verification Performed: |                          | Tue Feb 19 11:44:27 2019 |   |       |            |        |         |         |  |
| Surface Calibration                  |                          |                          |   |       |            |        |         |         |  |
|                                      |                          | Readings                 |   |       | References |        |         | Results |  |
| Loop:                                | Air                      | Loop                     |   | Air   | Loop       |        | m       | b       |  |
| Deep                                 | 0.011                    | 0.656                    | V | 1.000 | 400.000    | mmho/m | 618.595 | -5.524  |  |
| Medium                               | -0.000                   | 0.731                    | V | 1.000 | 464.000    | mmho/m | 632.856 | 1.197   |  |
| Internal:                            | Zero                     | Cal                      |   | Zero  | Cal        |        | m       | b       |  |
| Deep                                 | 0.007                    | 0.649                    | V | 0.000 | 400.000    | mmho/m | 623.784 | -4.595  |  |
| Medium                               | 0.004                    | 0.743                    | V | 0.000 | 464.000    | mmho/m | 627.284 | -2.251  |  |

| Downhole Calibration         |                          |         | Readings |         | References |        | Results |        |
|------------------------------|--------------------------|---------|----------|---------|------------|--------|---------|--------|
|                              | Zero                     | Cal     |          | Zero    | Cal        |        | m'      | b'     |
| Deep                         | -0.824                   | 395.917 | mmho/m   | -0.976  | 397.550    | mmho/m | 1.004   | -0.149 |
| Medium                       | 3.565                    | 471.327 | mmho/m   | 3.468   | 471.590    | mmho/m | 1.001   | -0.099 |
| LL3                          |                          | 7.503   | V        |         | 1500.000   | Ohm-m  |         |        |
|                              |                          | 0.001   | V        |         | 20.000     | Ohm-m  |         |        |
|                              |                          | -7.481  | V        |         | 3745.000   | mmho-m |         |        |
| After Survey Verification    |                          |         |          |         |            |        |         |        |
|                              | Readings                 |         |          | Targets |            |        | Results |        |
|                              | Zero                     | Cal     |          | Zero    | Cal        |        | m'      | b'     |
| Deep                         | 0.000                    | 0.000   | mmho/m   | -0.824  | 395.917    | mmho/m | 1.000   | 0.000  |
| Medium                       | 0.000                    | 0.000   | mmho/m   | 3.565   | 471.327    | mmho/m | 1.000   | 0.000  |
| LL3                          |                          | 0.000   | Ohm-m    |         | 1500.000   | Ohm-m  |         |        |
|                              |                          | 0.000   | Ohm-m    |         | 20.000     | Ohm-m  |         |        |
|                              |                          | 0.000   | mmho-m   |         | 3745.000   | mmho-m |         |        |
| Gamma Ray Calibration Report |                          |         |          |         |            |        |         |        |
| Serial Number:               | 7                        |         |          |         |            |        |         |        |
| Tool Model:                  | Probe1                   |         |          |         |            |        |         |        |
| Performed:                   | Tue Feb 19 11:45:10 2019 |         |          |         |            |        |         |        |
| Calibrator Value:            | 1.0                      |         | GAPI     |         |            |        |         |        |
| Background Reading:          | 0.0                      |         | cps      |         |            |        |         |        |
| Calibrator Reading:          | 1.0                      |         | cps      |         |            |        |         |        |
| Sensitivity:                 | 0.4300                   |         | GAPI/cps |         |            |        |         |        |