



# DUAL INDUCTION LOG

|                              |                           |                     |                                  |
|------------------------------|---------------------------|---------------------|----------------------------------|
| Company                      | CASTLE RESOURCES, INC.    |                     |                                  |
| Well                         | KRILEY #2                 |                     |                                  |
| Field                        | HARMONY HILL              |                     |                                  |
| County                       | ROOKS                     | State               | KANSAS                           |
| Location:                    | APL # : 15-163-24320-0000 |                     | Other Services<br>CDL/CNL<br>MEL |
| Permanent Datum              | GROUND LEVEL              | Elevation           | 1918                             |
| Log Measured From            | KELLY BUSHING 5' A.G.L.   |                     |                                  |
| Drilling Measured From       | KELLY BUSHING             |                     |                                  |
| Date                         | 9/2/16                    |                     |                                  |
| Run Number                   | ONE                       |                     |                                  |
| Depth Driller                | 3425                      |                     |                                  |
| Depth Logger                 | 3426                      |                     |                                  |
| Bottom Logged Interval       | 3424                      |                     |                                  |
| Top Log Interval             | 00                        |                     |                                  |
| Casing Driller               | 8 5/8"@210'               |                     |                                  |
| Casing Logger                | 212                       |                     |                                  |
| Bit Size                     | 7 7/8"                    |                     |                                  |
| Type Fluid in Hole           | CHEMICAL MUD              | CHLORIDES 3,000 PPM |                                  |
| Density / Viscosity          | 9.4/53                    |                     |                                  |
| pH / Fluid Loss              | 9.0/8.0                   |                     |                                  |
| Source of Sample             | FLOWLINE                  |                     |                                  |
| Rim @ Meas. Temp             | .850@90F                  |                     |                                  |
| Rmf @ Meas. Temp             | .638@90F                  |                     |                                  |
| Rmc @ Meas. Temp             | 1.02@90F                  |                     |                                  |
| Source of Rmf / Rmc          | MEASUREMENT               |                     |                                  |
| Rim @ BHT                    | .689@111F                 |                     |                                  |
| Time Circulation Stopped     | 2 HOURS                   |                     |                                  |
| Time Logger on Bottom        | 1:15 P.M.                 |                     |                                  |
| Maximum Recorded Temperature | 111F                      |                     |                                  |
| Equipment Number             | 922339                    |                     |                                  |
| Location                     | HAYS, KANSAS              |                     |                                  |
| Recorded By                  | JEFF LUEBBERS             |                     |                                  |
| Witnessed By                 | JERRY GREEN               | KEN WALKER          |                                  |

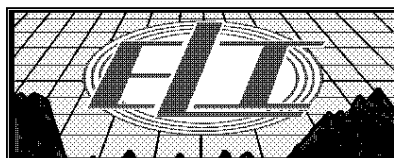
<<< Fold Here >>>

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, KANSAS (785) 628-6395  
DIRECTIONS

PLAINVILLE, KS., 7N. OF 4 WAY STOP ON HWY 183 TO "RD. Q", W. TO FIRST INTERSECTION, 1/2N.,  
1/4W., S. INTO



# MAIN SECTION

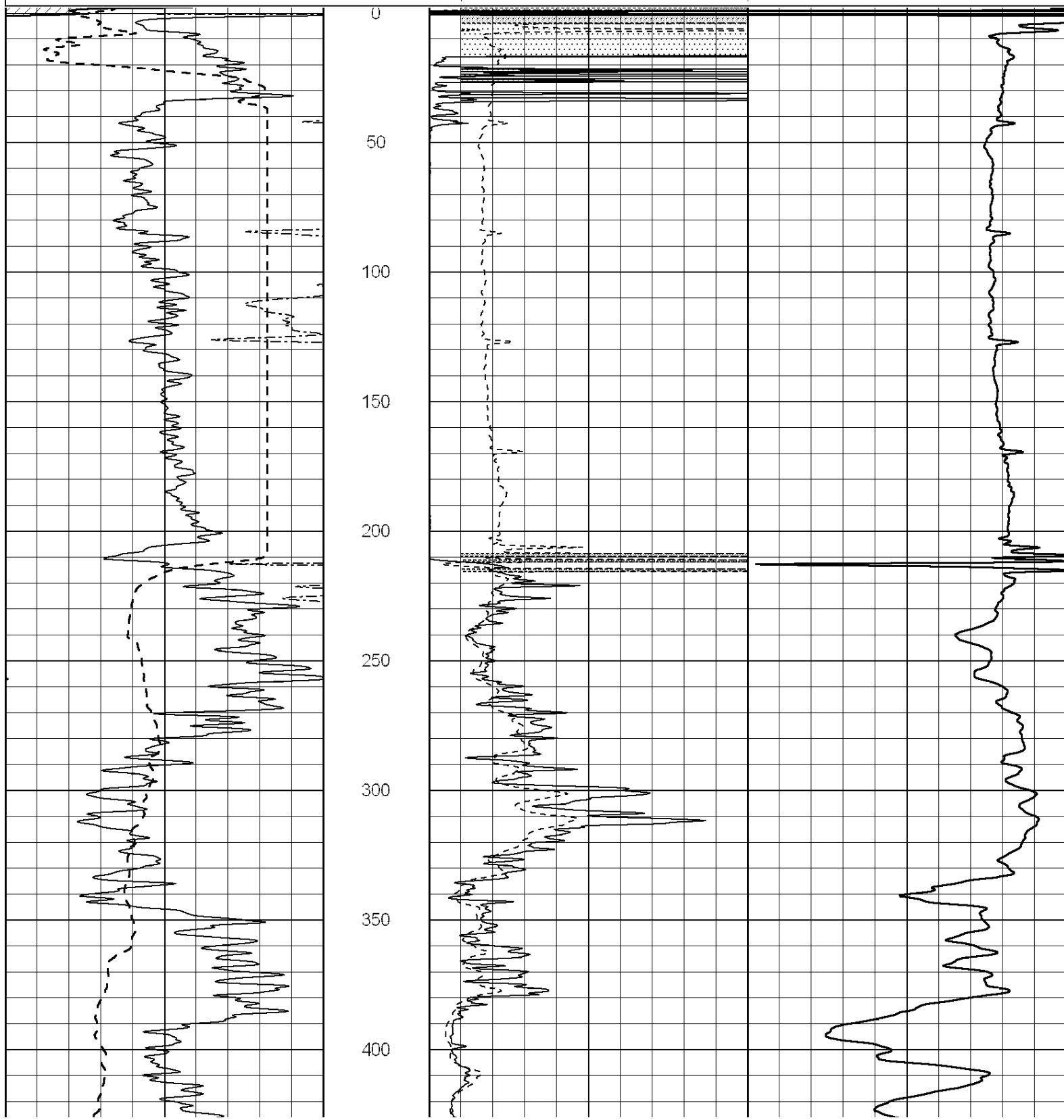
Database File: 30768ddn.db  
Dataset Pathname: pass3.10  
Presentation Format: dil2  
Dataset Creation: Fri Sep 02 14:31:44 2016  
Charted by: Depth in Feet scaled 1:600

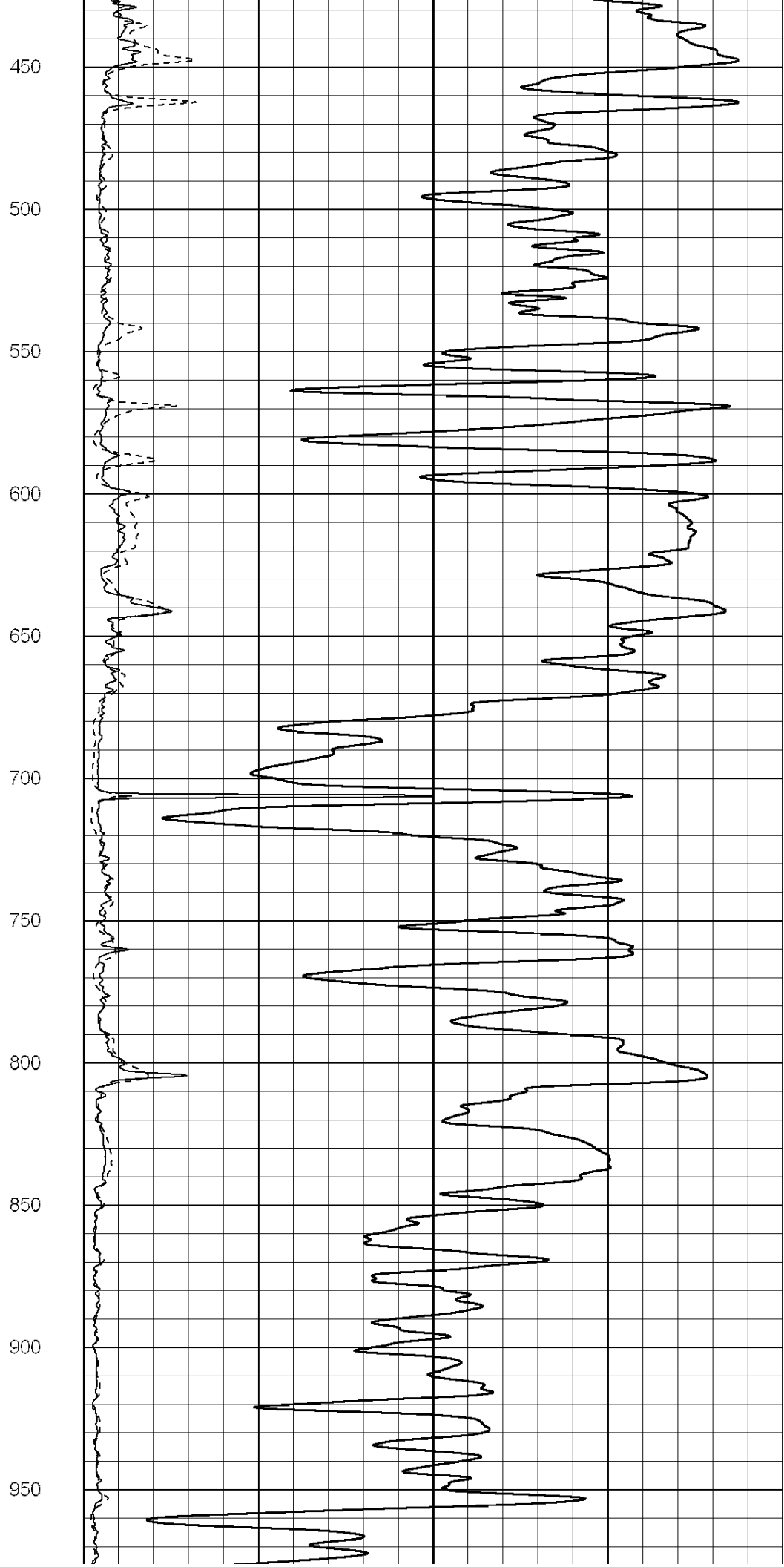
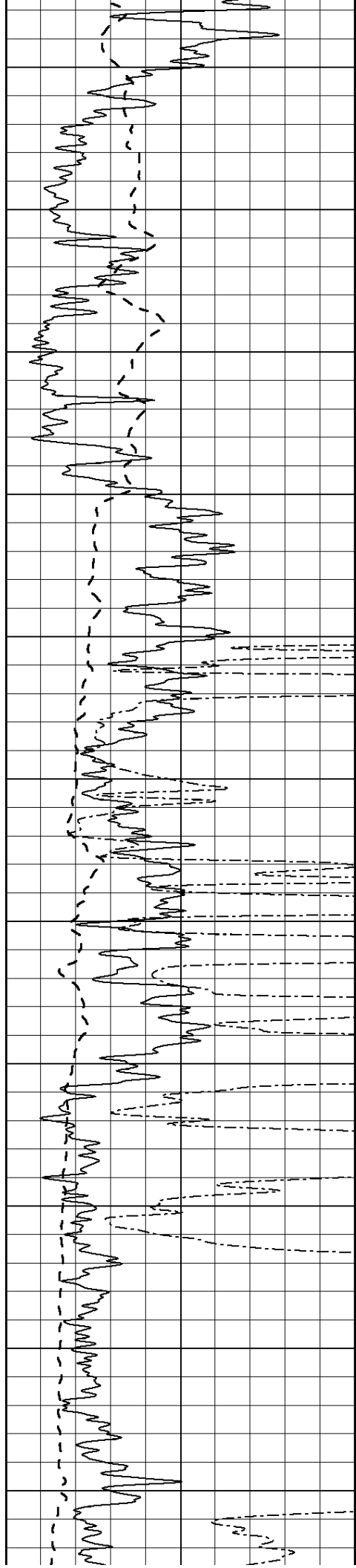
|      |                  |     |
|------|------------------|-----|
| 0    | Gamma Ray (GAPI) | 150 |
| -100 | SP (mV)          | 100 |
| 0    | RWA (Ohm-m)      | 1   |

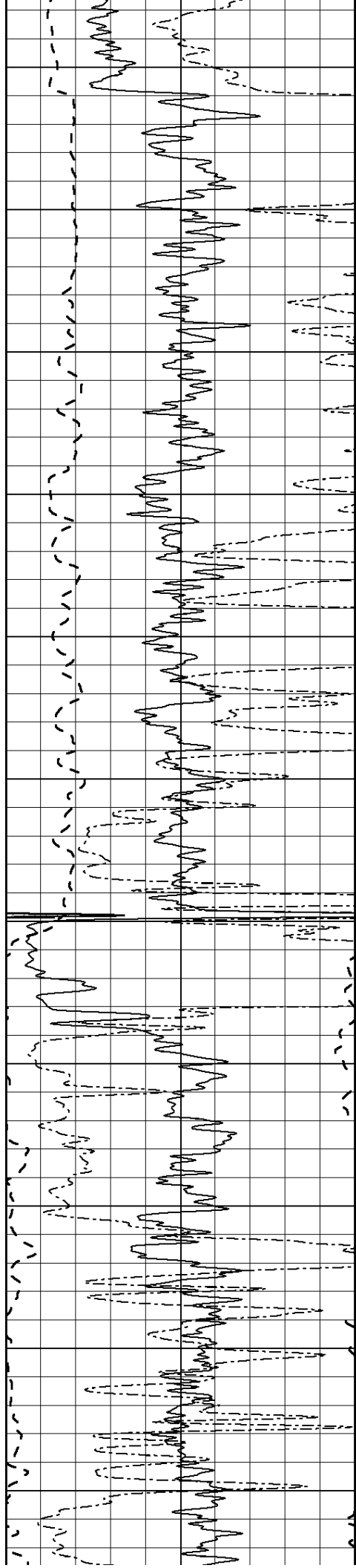
|   |              |    |
|---|--------------|----|
| 0 | RLL3 (Ohm-m) | 50 |
| 0 | RILD (Ohm-m) | 50 |

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

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







1000

1050

1100

1150

1200

1250

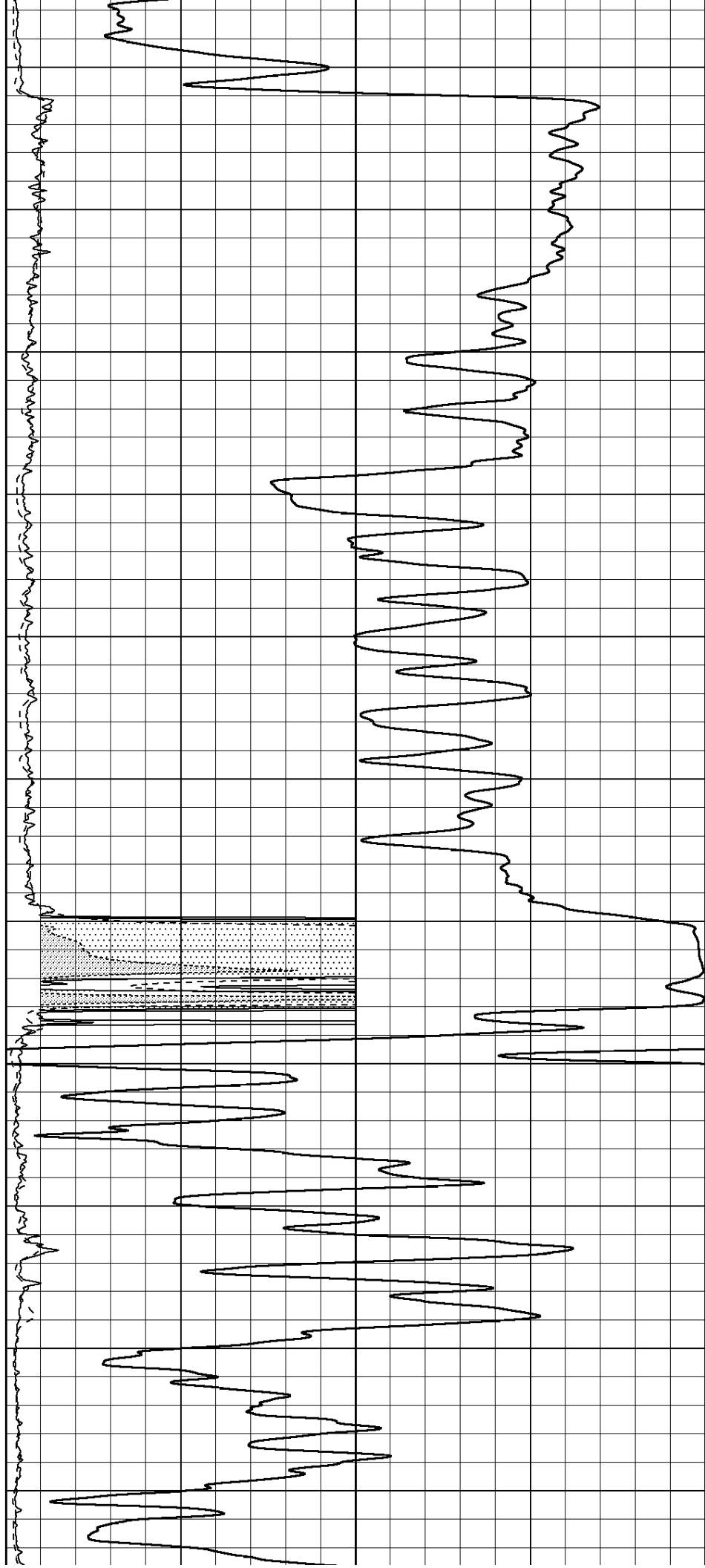
1300

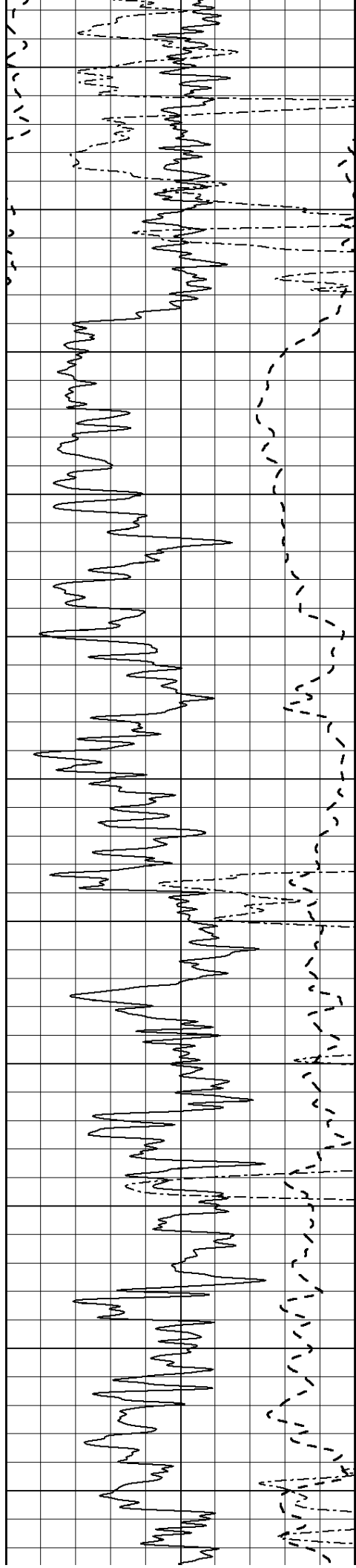
1350

1400

1450

1500





1550

1600

1650

1700

1750

1800

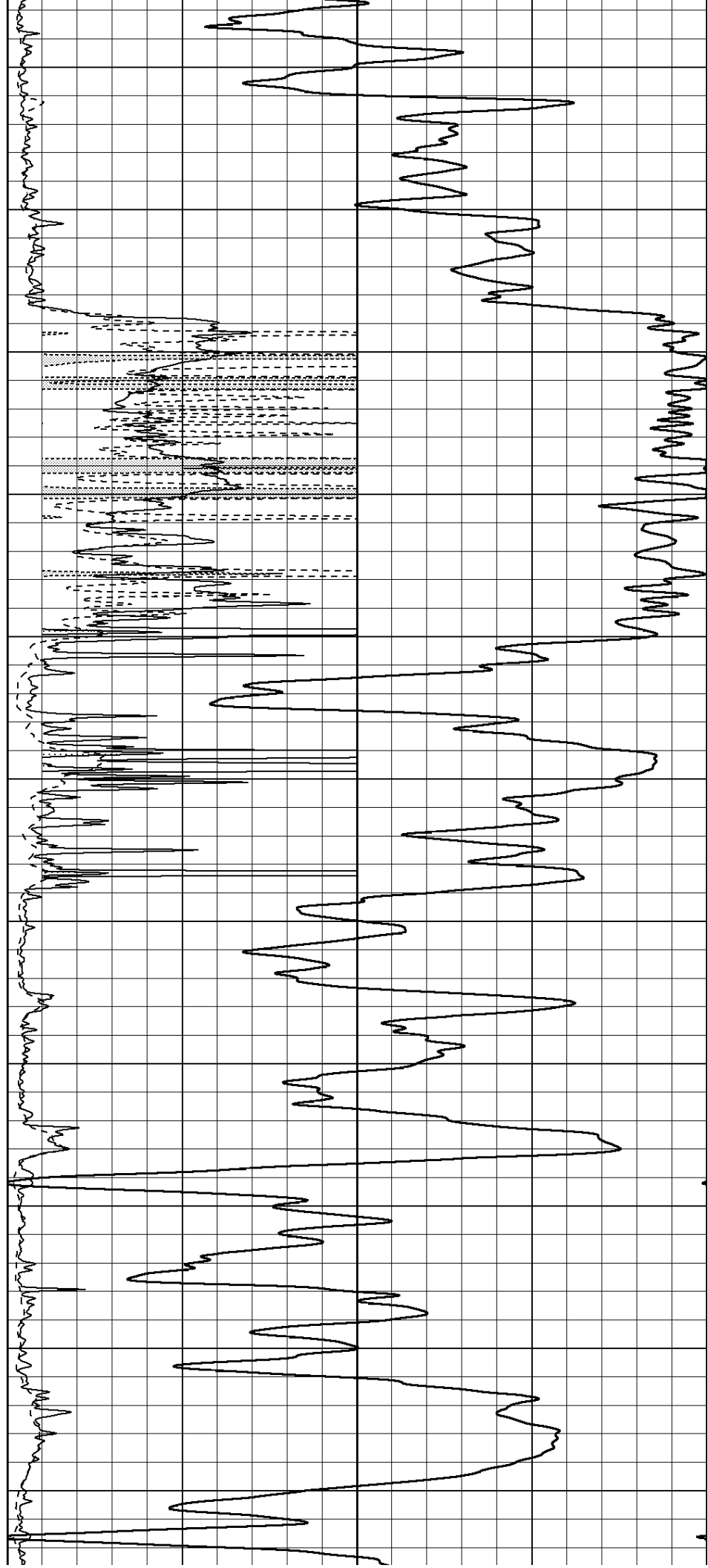
1850

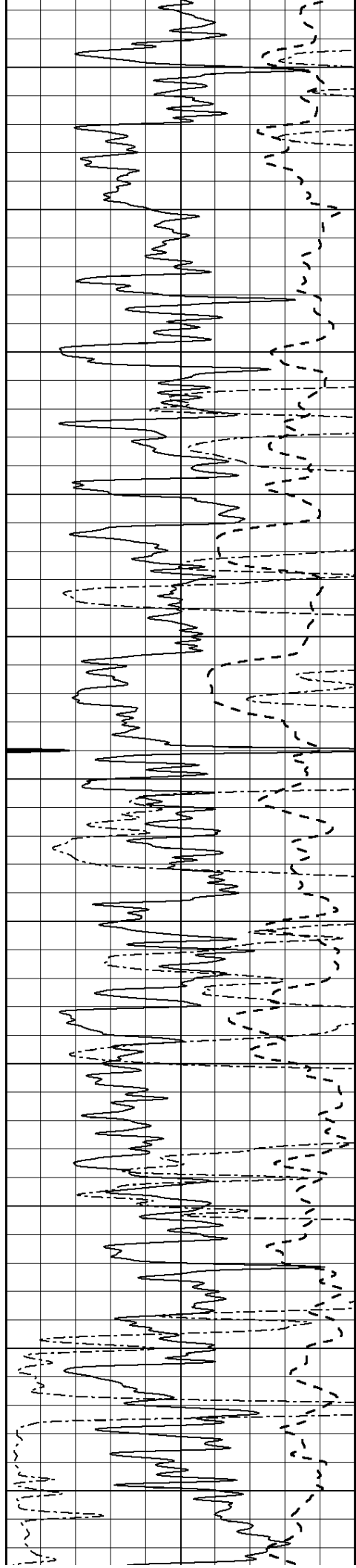
1900

1950

2000

2050





2100

2150

2200

2250

2300

2350

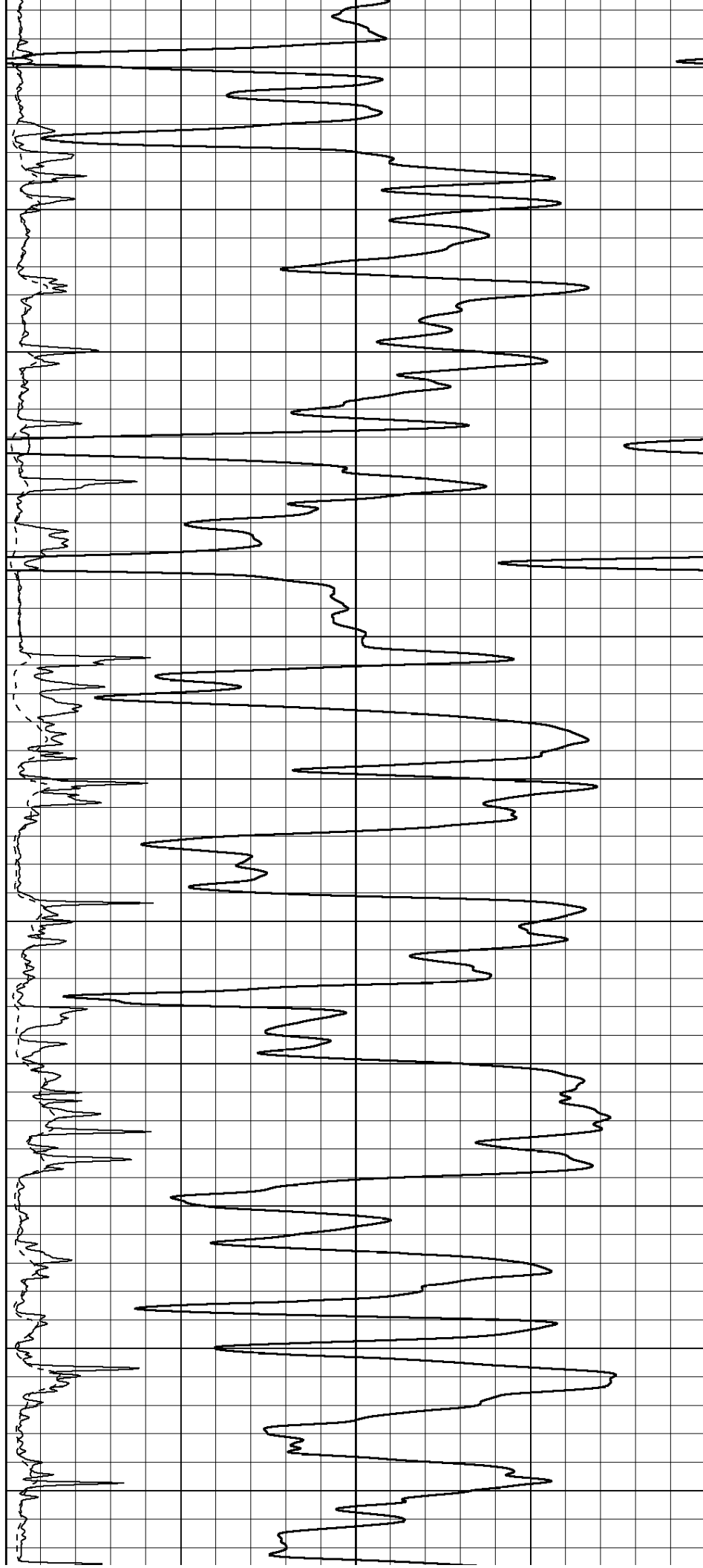
2400

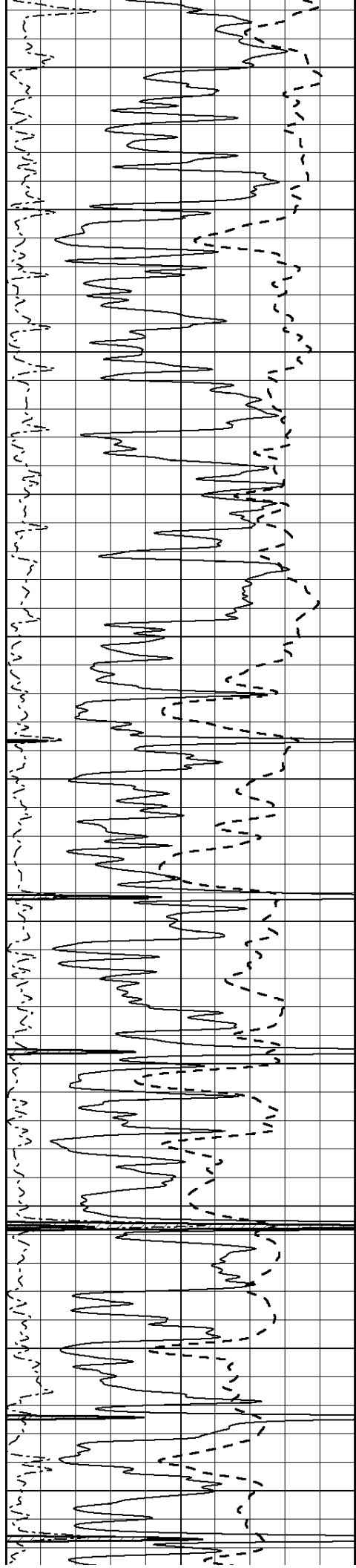
2450

2500

2550

2600





2650

2700

2750

2800

2850

2900

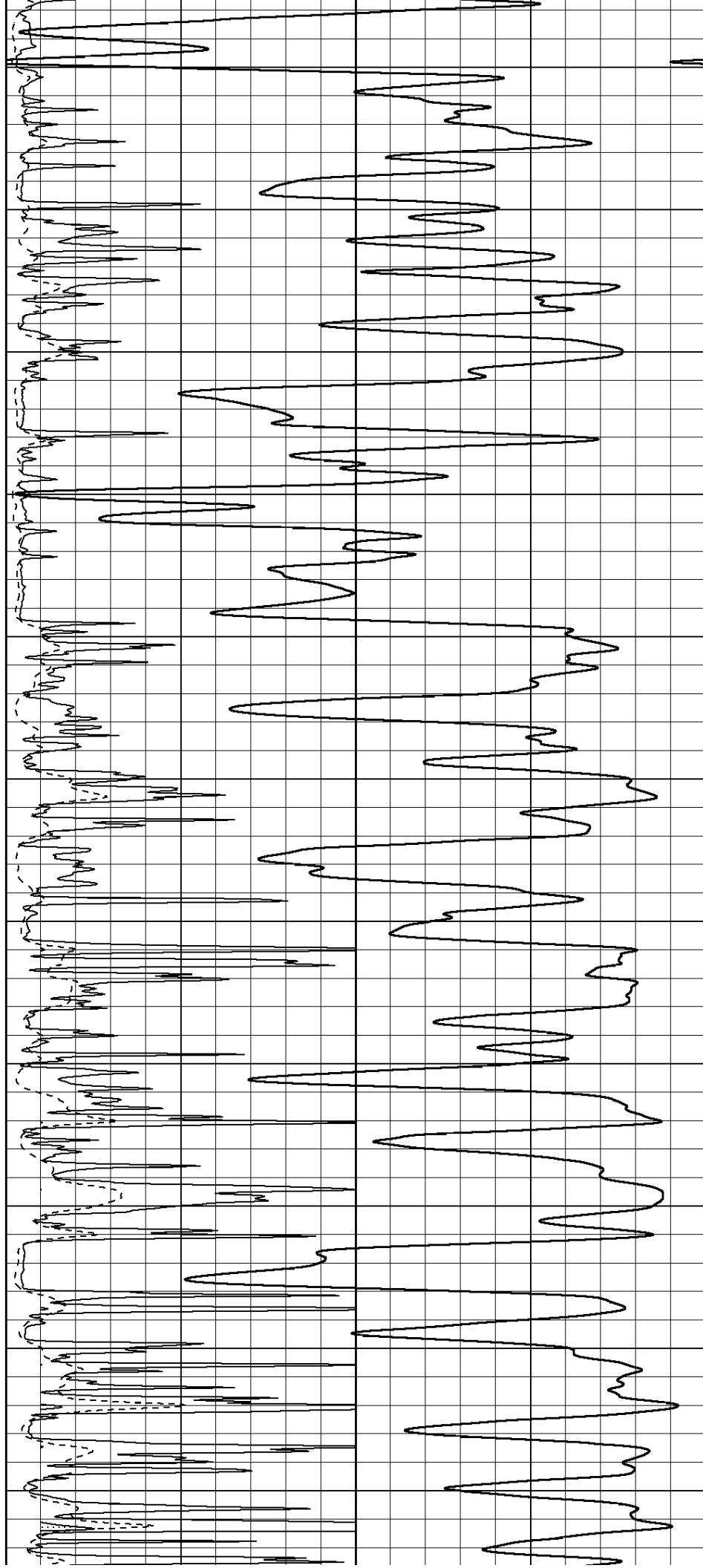
2950

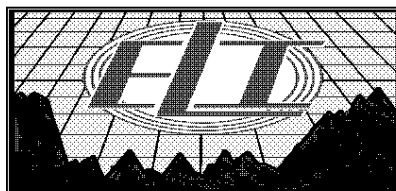
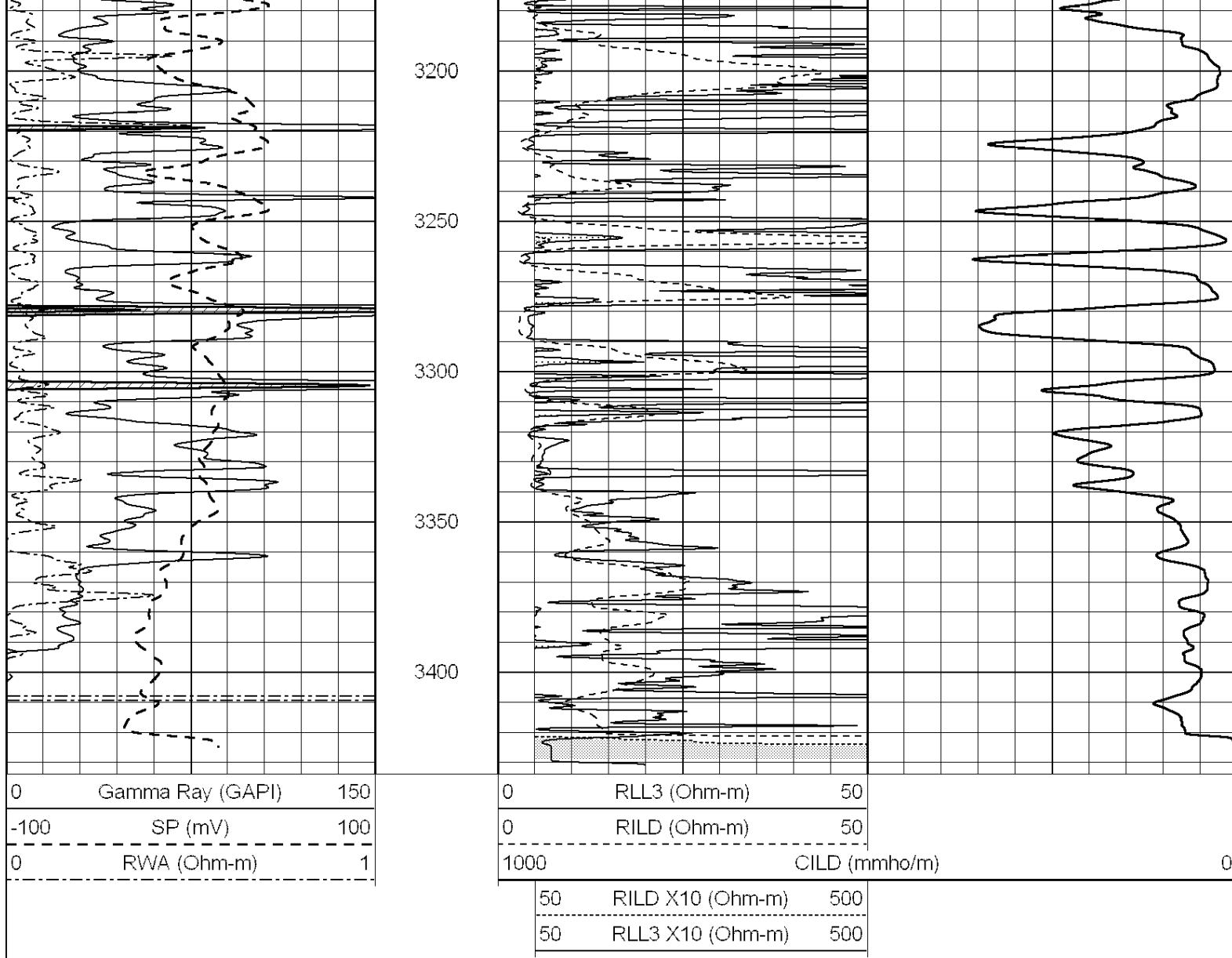
3000

3050

3100

3150

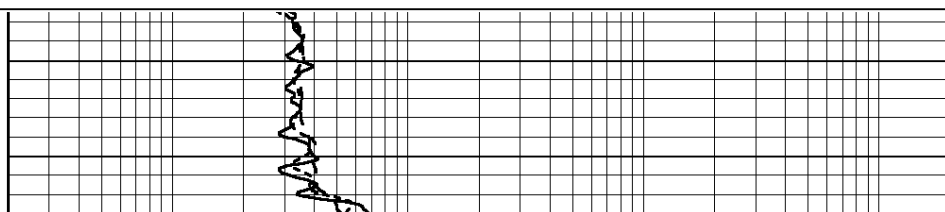
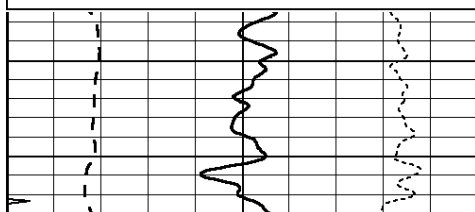


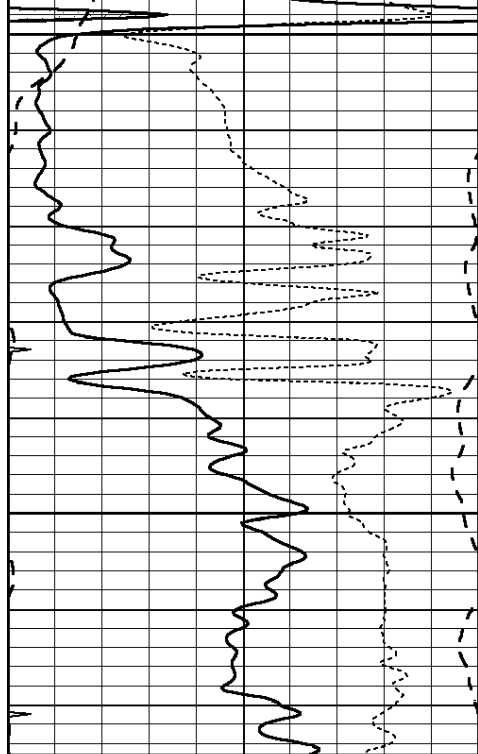


# ANHYDRITE

Database File: 30768ddn.db  
 Dataset Pathname: pass3.11  
 Presentation Format: \_dil  
 Dataset Creation: Fri Sep 02 14:32:01 2016  
 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  |     |                          |      |

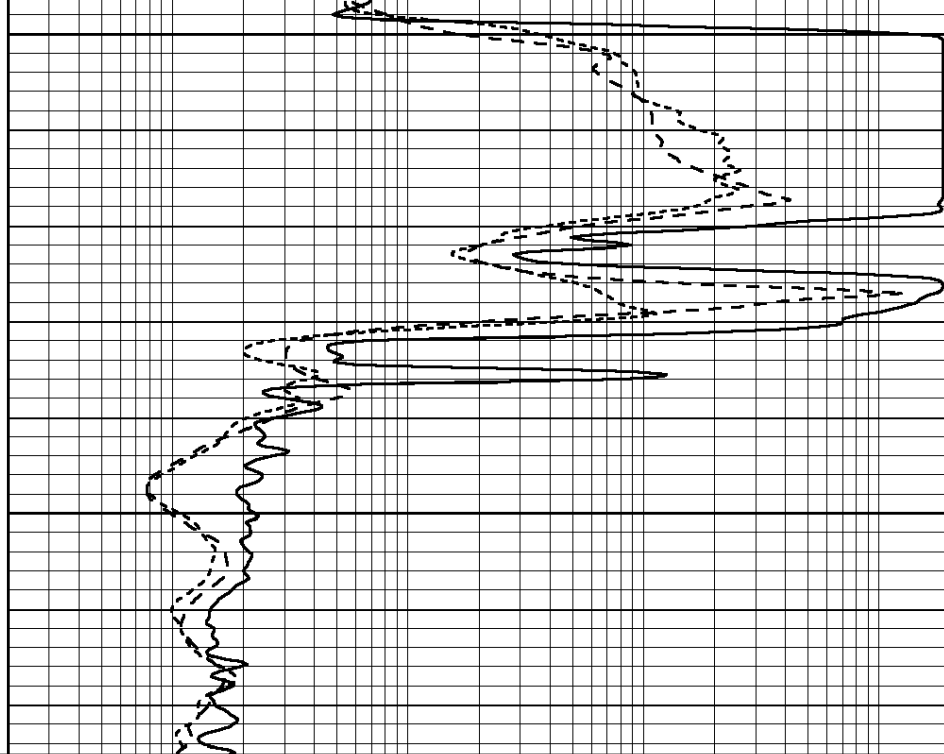




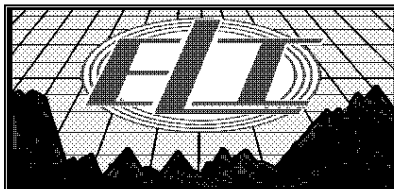
1300

1350

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

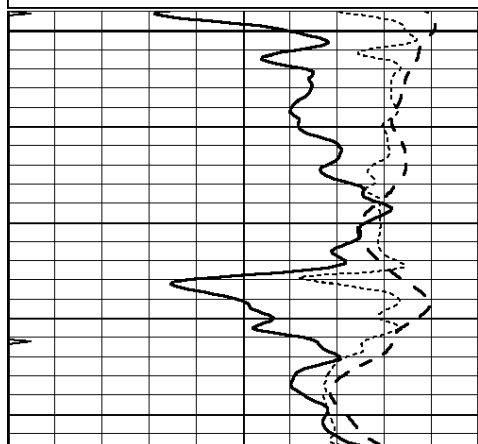


# MAIN SECTION

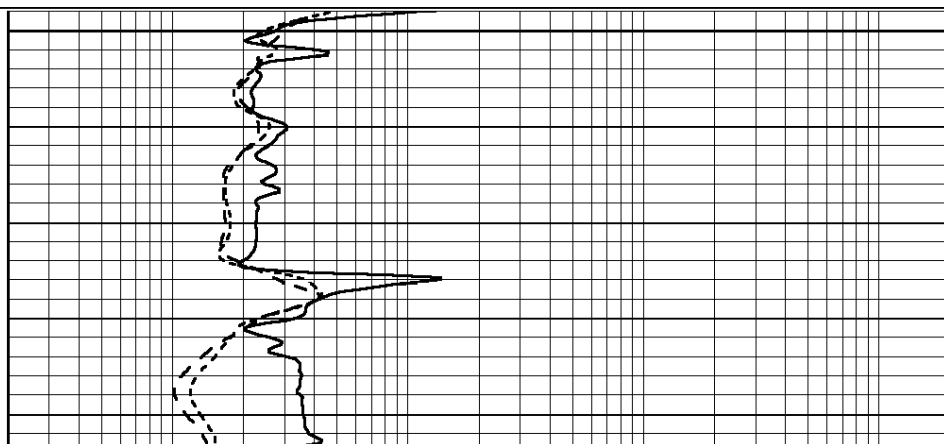
Database File: 30768ddn.db  
 Dataset Pathname: pass3.10  
 Presentation Format: \_dil  
 Dataset Creation: Fri Sep 02 14:31:44 2016  
 Charted by: Depth in Feet scaled 1:240

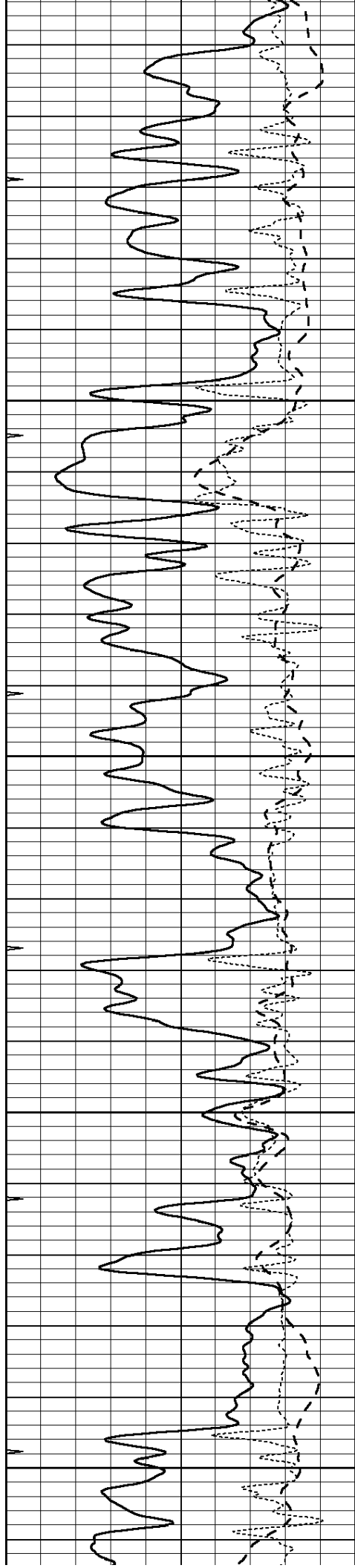
|      |                  |     |
|------|------------------|-----|
| 0    | GAMMA RAY (GAPI) | 150 |
| -100 | SP (mV)          | 100 |
| -250 | Rxo/Rt           | 50  |
| 0    | MINMK            | 20  |

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



2600





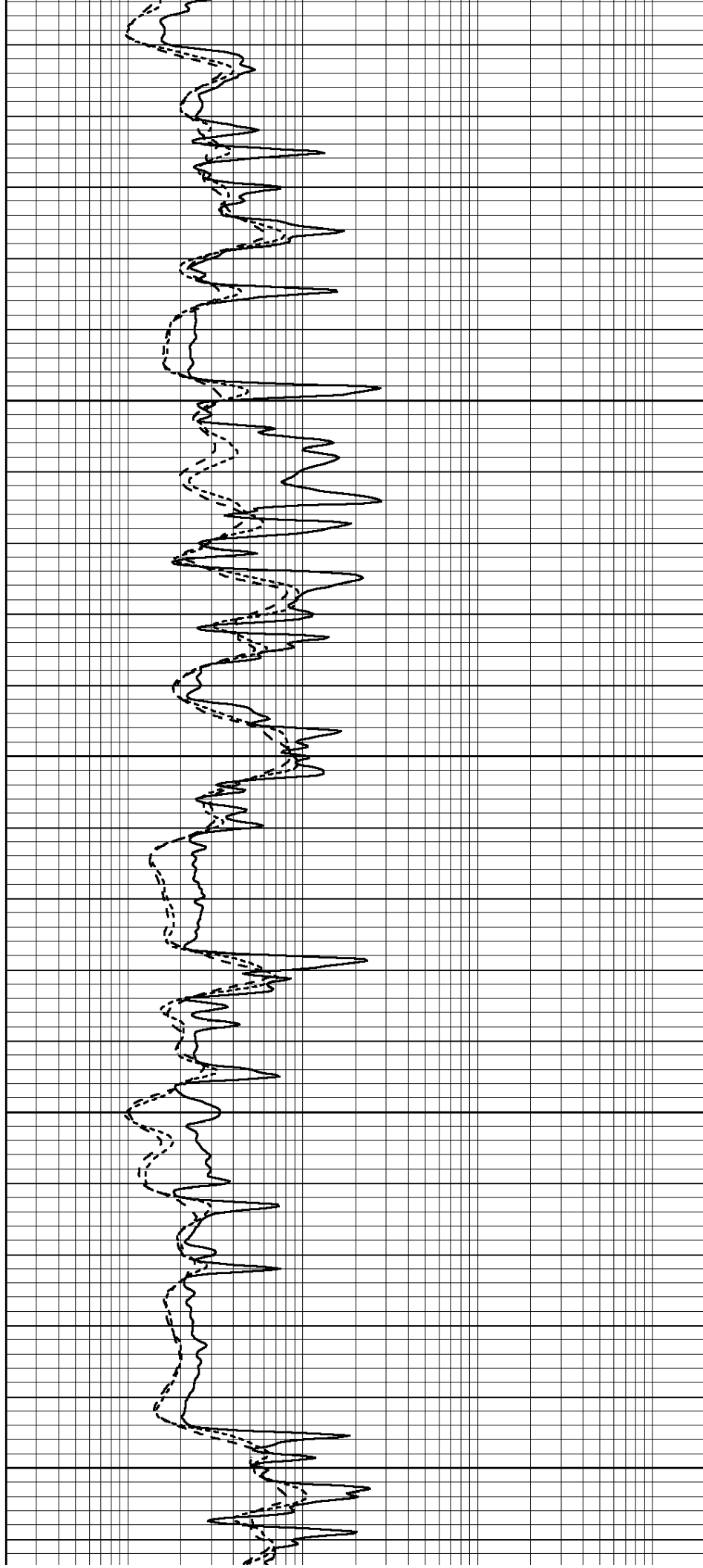
2650

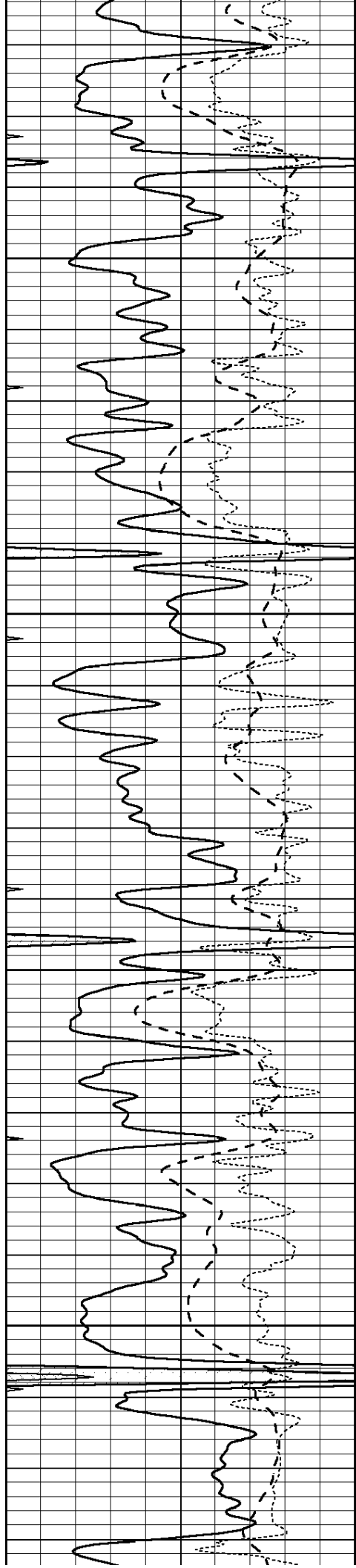
2700

2750

2800

2850



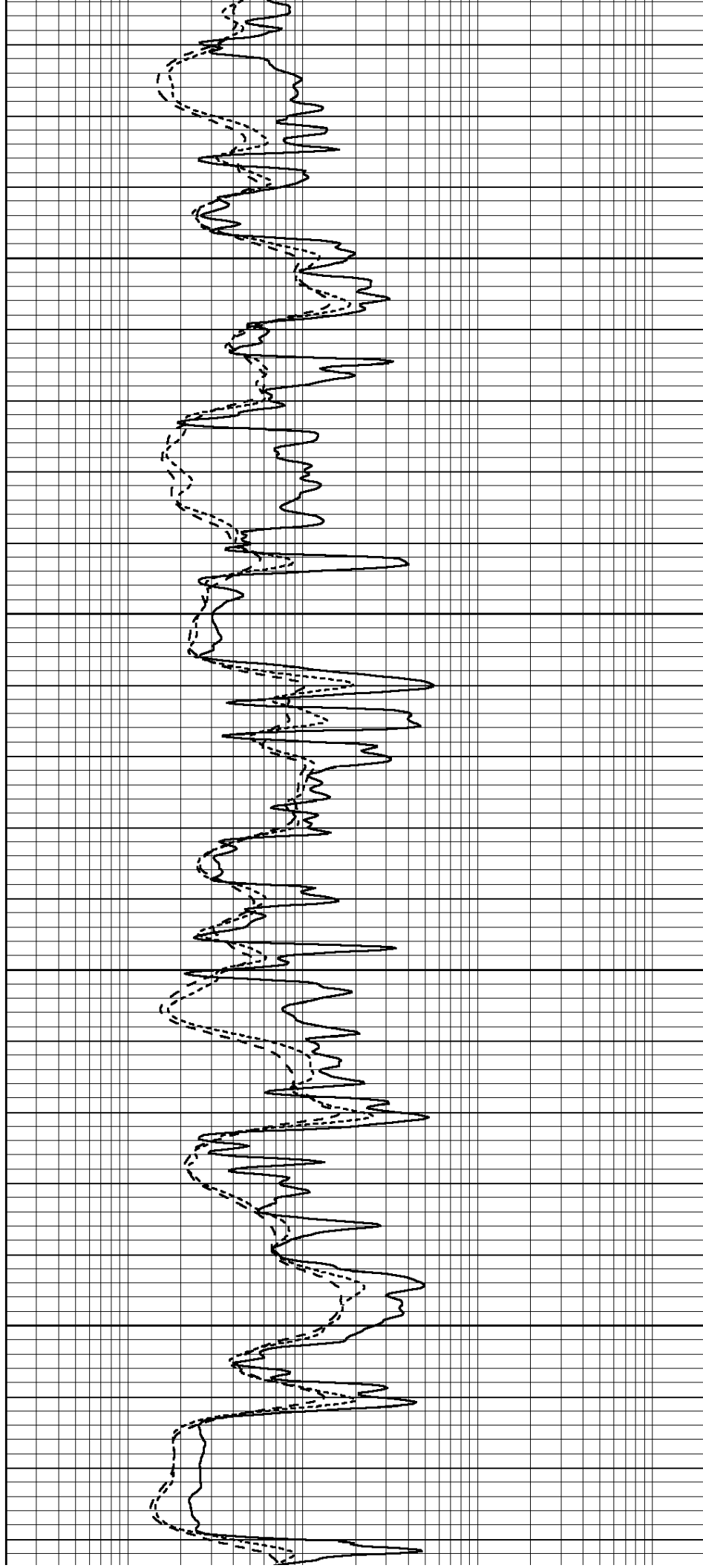


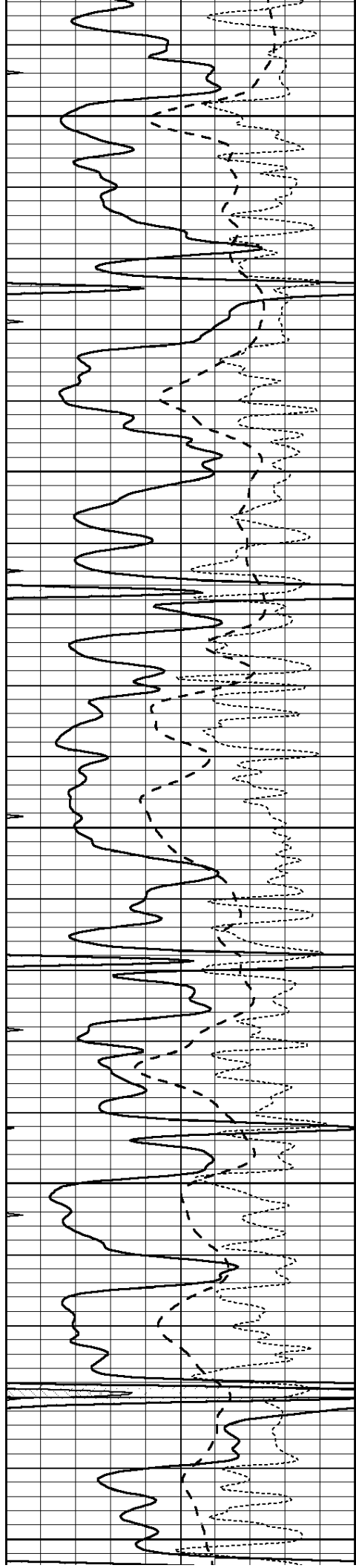
2900

2950

3000

3050





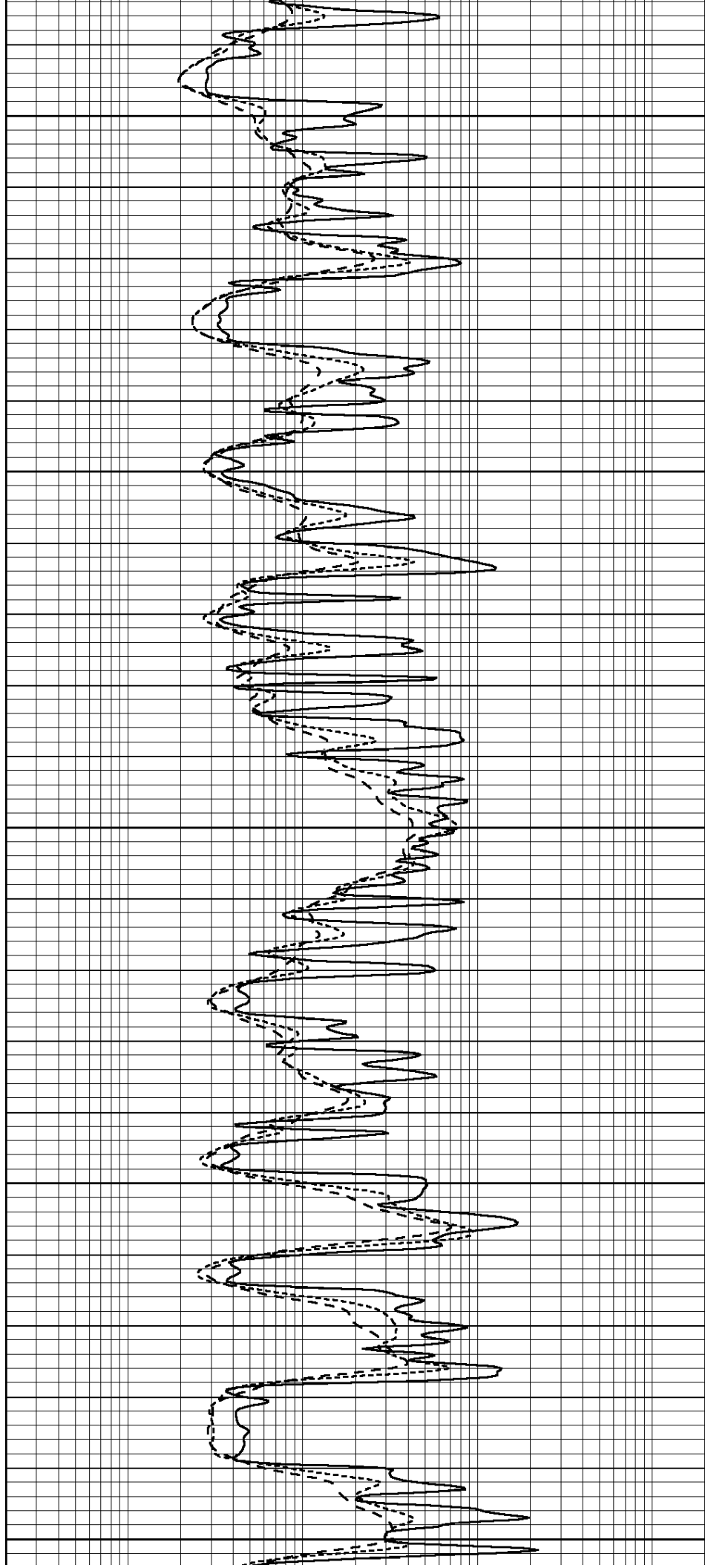
3100

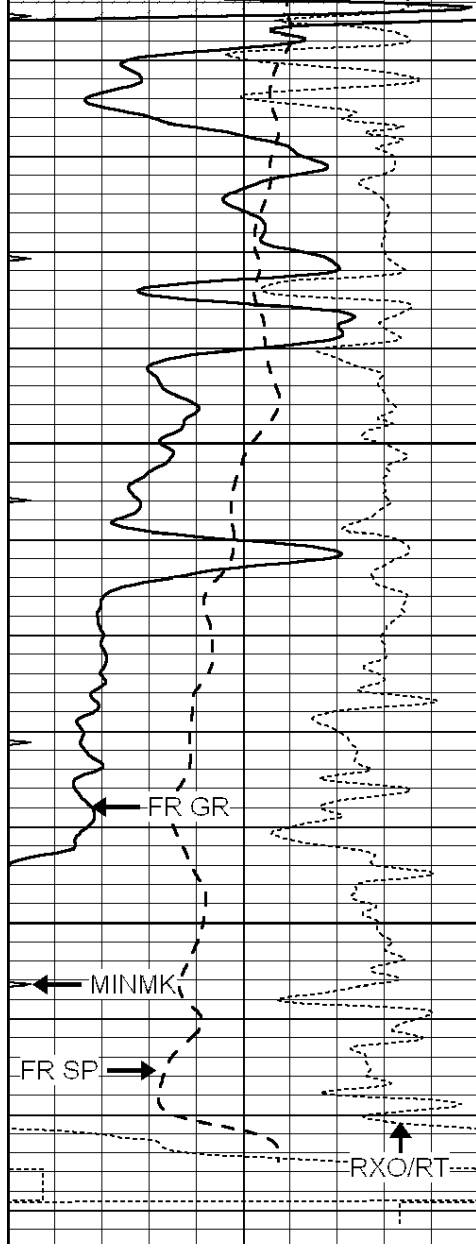
3150

3200

3250

3300



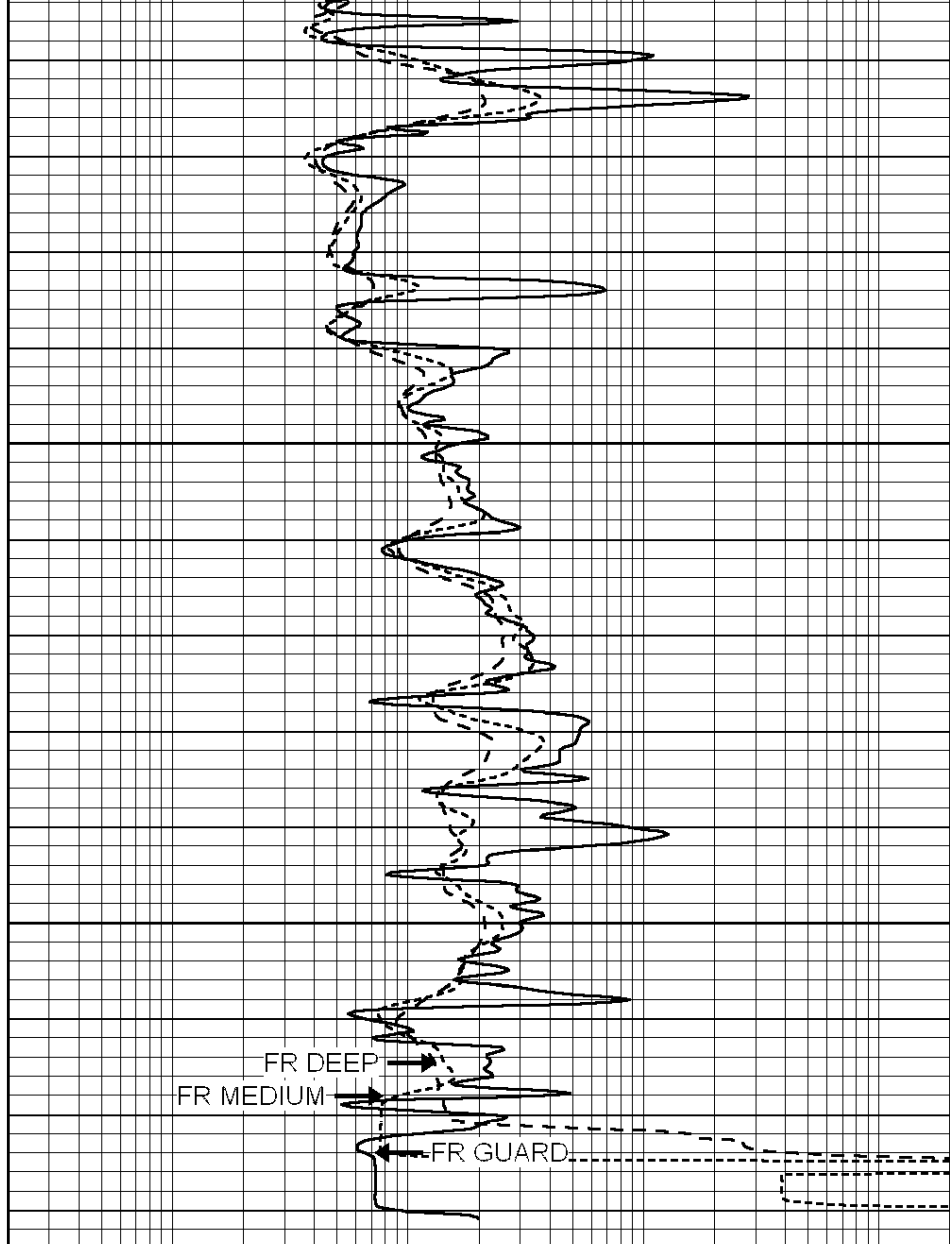


|      |                  |     |
|------|------------------|-----|
| 0    | GAMMA RAY (GAPI) | 150 |
| -100 | SP (mV)          | 100 |
| -250 | Rxo/Rt           | 50  |
| 0    | MINMK            | 20  |

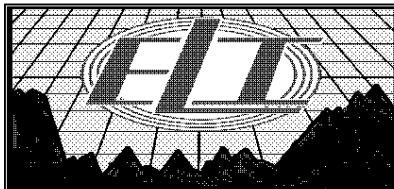
3350

3400

LTD 3426



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

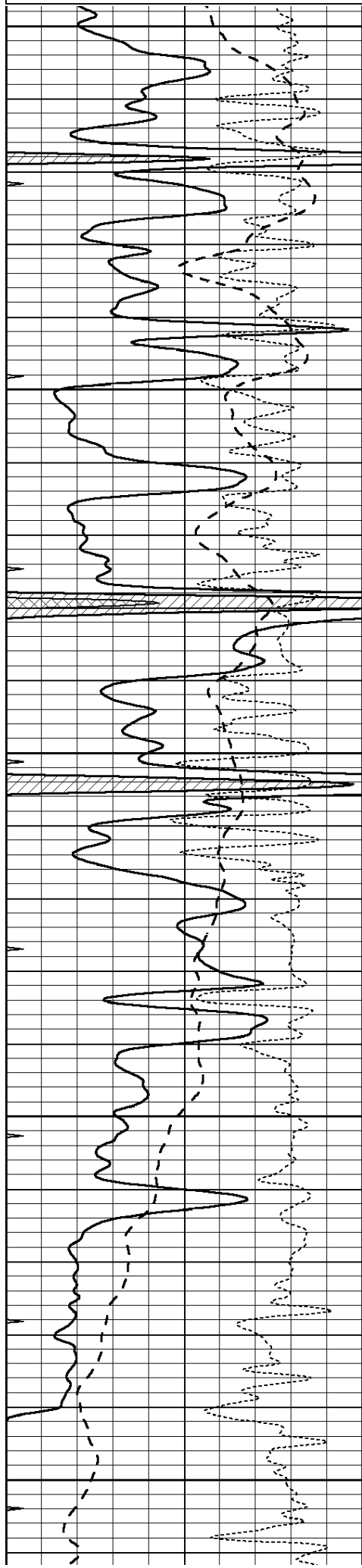


## REPEAT SECTION

Database File: 30768ddn.db  
 Dataset Pathname: pass2.4  
 Presentation Format: \_dil  
 Dataset Creation: Fri Sep 02 13:20:19 2016 by Calc SOC 120430  
 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 |



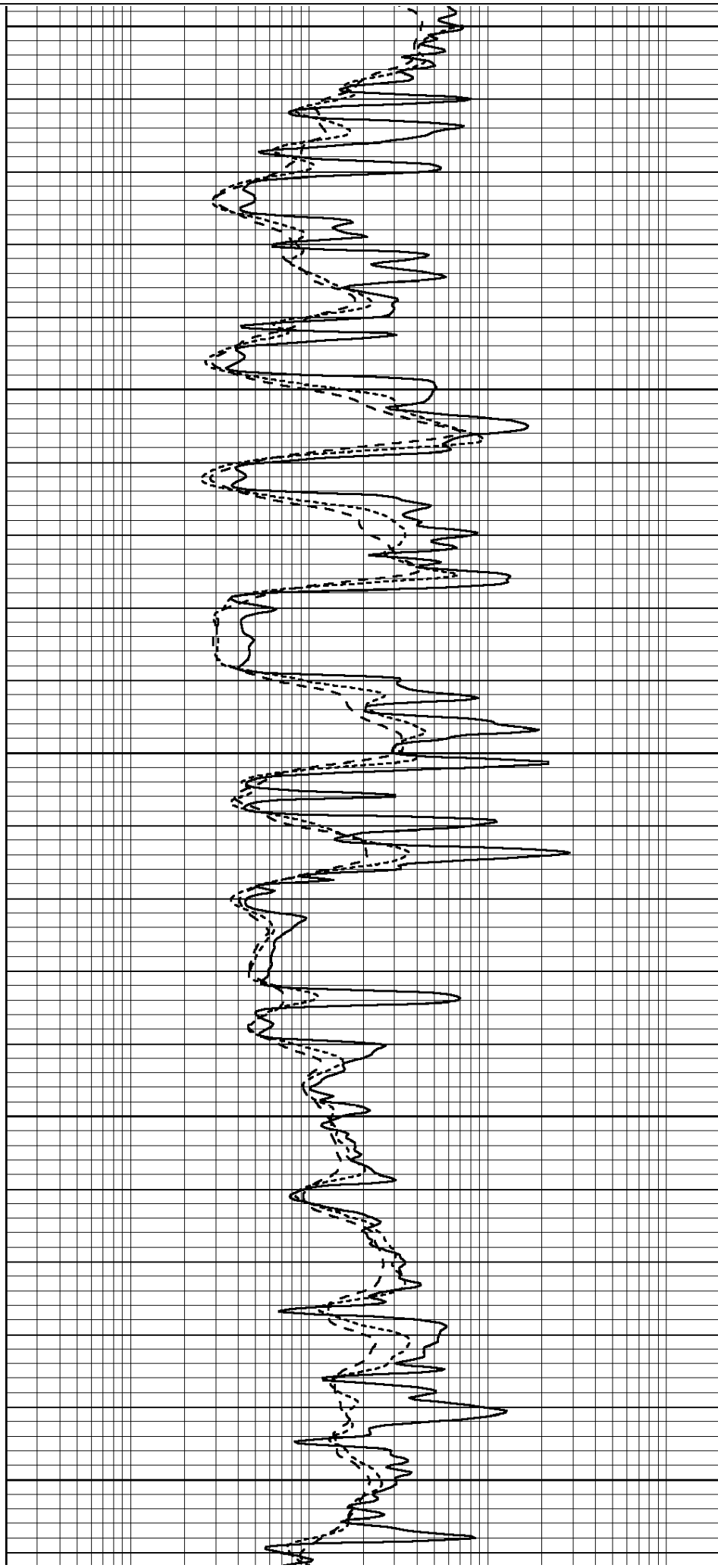
3200

3250

3300

3350

3400



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

| Calibration Report |                          |
|--------------------|--------------------------|
| Database File:     | 30768ddn.db              |
| Dataset Pathname:  | pass3.10                 |
| Dataset Creation:  | Fri Sep 02 14:31:44 2016 |

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

|                                      |                          |
|--------------------------------------|--------------------------|
| Serial-Model:                        | PROBE7-DILG              |
| Surface Cal Performed:               | Fri Sep 02 12:18:17 2016 |
| 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 | 625.000 | 2.000   |
| Medium              | 0.039  | 0.728 | V | 0.000      | 464.000 | mmho/m | 675.000 | -44.000 |
| 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: 003N                     | Model: PRB |

| Master Calibration |           | Performed Mon Mar 14 08:48:13 2016 |           |  |  |
|--------------------|-----------|------------------------------------|-----------|--|--|
| Background         | Magnesium | Aluminum                           | Sandstone |  |  |

|             |        |             |         |                     |         |
|-------------|--------|-------------|---------|---------------------|---------|
| Window 1    | 1751.3 | 11741.0     | 3857.3  | 12907.8             | cps     |
| Window 2    | 1589.4 | 9536.2      | 3267.6  | 10282.0             | cps     |
| Window 3    | 1413.4 | 6466.1      | 2463.2  | 6828.7              | cps     |
| Window 4    | 399.5  | 407.1       | 405.1   | 406.5               | cps     |
| Long Space  | 0.0    | 7946.7      | 1678.1  | 8692.6              | cps     |
| Short Space | 2.2    | 3366.2      | 2134.1  | 3410.2              | cps     |
| Rho         |        | 1.7100      | 2.5900  | 1.3800              | g/cc    |
| Pe          |        | 0.0000      | 2.5700  | 1.5500              |         |
|             |        |             |         |                     |         |
| Rib Angle   | : 43.7 | Rib Slope   | : 0.954 | Density/Spine Ratio | : 0.543 |
| Spine Angle | : 73.7 | Spine Slope | : 3.412 | Spine Intercept     | : -18.7 |

|                            |     |                                    |        |        |      |
|----------------------------|-----|------------------------------------|--------|--------|------|
| 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: | 070808 |
| Tool Model:    | Probe  |

|                         |          |          |        |  |
|-------------------------|----------|----------|--------|--|
| PRE-SURVEY VERIFICATION |          |          |        |  |
| Detector                | Readings | Measured | Target |  |
| Short Space             | cps      |          |        |  |
| Long Space              | cps      | pu       | pu     |  |

|                          |          |          |        |  |
|--------------------------|----------|----------|--------|--|
| POST-SURVEY VERIFICATION |          |          |        |  |
| Detector                 | Readings | Measured | Target |  |
| Short Space              | cps      |          |        |  |
| Long Space               | cps      | pu       | pu     |  |

Gamma Ray Calibration Report

|                   |                          |
|-------------------|--------------------------|
| Serial Number:    | 070558                   |
| Tool Model:       | OPEN_GR                  |
| Performed:        | Mon Aug 22 01:00:15 2016 |
| Calibrator Value: | 1.0                      |
|                   | CAL                      |

|                     |        |          |
|---------------------|--------|----------|
| Calibrator Value:   | 1.0    | GAPI     |
| Background Reading: | 0.0    | cps      |
| Calibrator Reading: | 1.0    | cps      |
| Sensitivity:        | 0.2800 | GAPI/cps |