



## Dual Induction Log

DIGITAL LOG (785) 625-3858

|                        |                              |                                      |                         |
|------------------------|------------------------------|--------------------------------------|-------------------------|
| API No.                | Company Larson Operating Co. |                                      |                         |
| 15-171-20816-00-00     | Well York #1-12              |                                      |                         |
|                        | Field Wildcat                |                                      |                         |
|                        | County Scott                 | State                                | Kansas                  |
|                        | Location                     | SE SE NE NW<br>1175' FNL / 2534' FWL |                         |
|                        | Sec: 12                      | Twp: 16S                             | Rge: 31W                |
|                        | Permanent Datum              | Ground Level                         | Elevation 2817          |
|                        | Log Measured From            | Kelly Bushing                        | 7 Ft. Above Perm. Datum |
|                        | Drilling Measured From       | Kelly Bushing                        |                         |
| Date                   |                              | 7/12/2011                            |                         |
| Run Number             |                              | One                                  |                         |
| Depth Driller          |                              | 4560                                 |                         |
| Depth Logger           |                              | 4560                                 |                         |
| Bottom Logged Interval |                              | 4559                                 |                         |
| Top Log Interval       |                              | 250                                  |                         |
| Casing Driller         |                              | 8.625 @ 252                          |                         |
| Casing Logger          |                              | 254                                  |                         |
| Bit Size               |                              | 7.875                                |                         |
| Type Fluid in Hole     |                              | Chemical                             |                         |
| Salinity, ppm CL       |                              | 3200                                 |                         |
| Density / Viscosity    |                              | 9.3 56                               |                         |
| pH / Fluid Loss        |                              | 10.5 7.6                             |                         |
| Source of Sample       |                              | Flowline                             |                         |
| Rm @ Meas. Temp        |                              | 1.20 @ 80                            |                         |
| Rmf @ Meas. Temp       |                              | 0.90 @ 80                            |                         |
| Rmc @ Meas. Temp       |                              | 1.62 @ 80                            |                         |
| Source of Rmf / Rmc    |                              | Charts                               |                         |
| Rm @ BHT               |                              | 0.79 @ 122                           |                         |
| Operating Rig Time     |                              | 4 Hours                              |                         |
| Max Rec. Temp. F       |                              | 122                                  |                         |
| Equipment Number       |                              | 15                                   |                         |
| Location               |                              | Hays                                 |                         |
| Recorded By            |                              | R. Barnhart                          |                         |
| Witnessed By           |                              | Bob Lewellyn                         |                         |

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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 Log-Tech, Inc.  
(785) 625-3858

Healey, KS:  
2W to Bison Rd., 3 1/2N, 3/4W, 1 1/2N,  
1/2W, 1N to 290, 1W, S into

Database File: c:\warrior\data\larson\_york #1-12\larsonhd.db  
Dataset Pathname: dil\larmain  
Presentation Format: dil2in  
Dataset Creation: Tue Jul 12 06:27:05 2011  
Charted by: Depth in Feet scaled 1:600

Charted by: Depth in Feet scaled 1:500

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

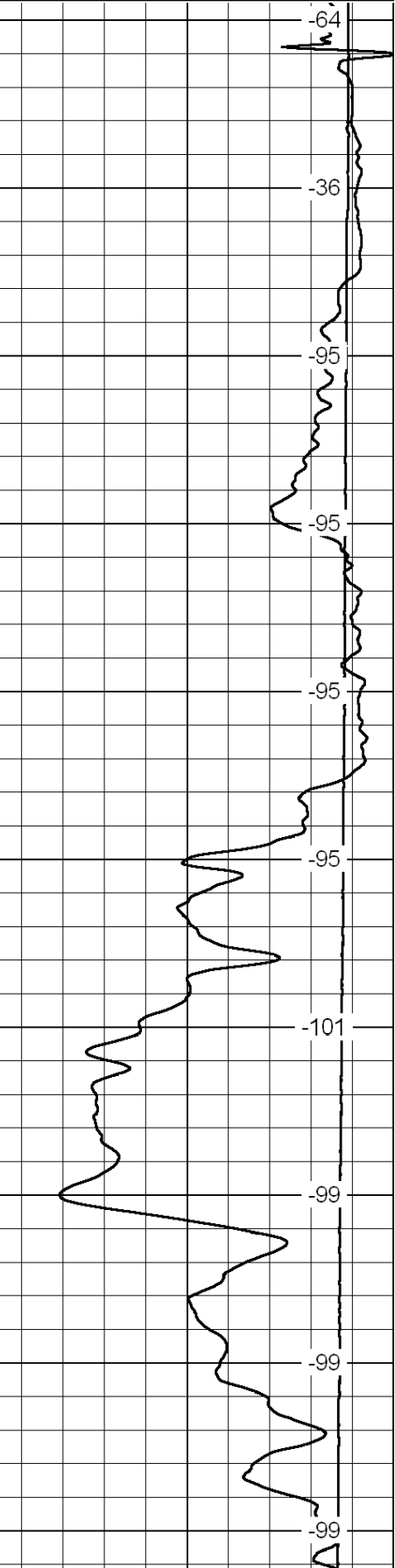
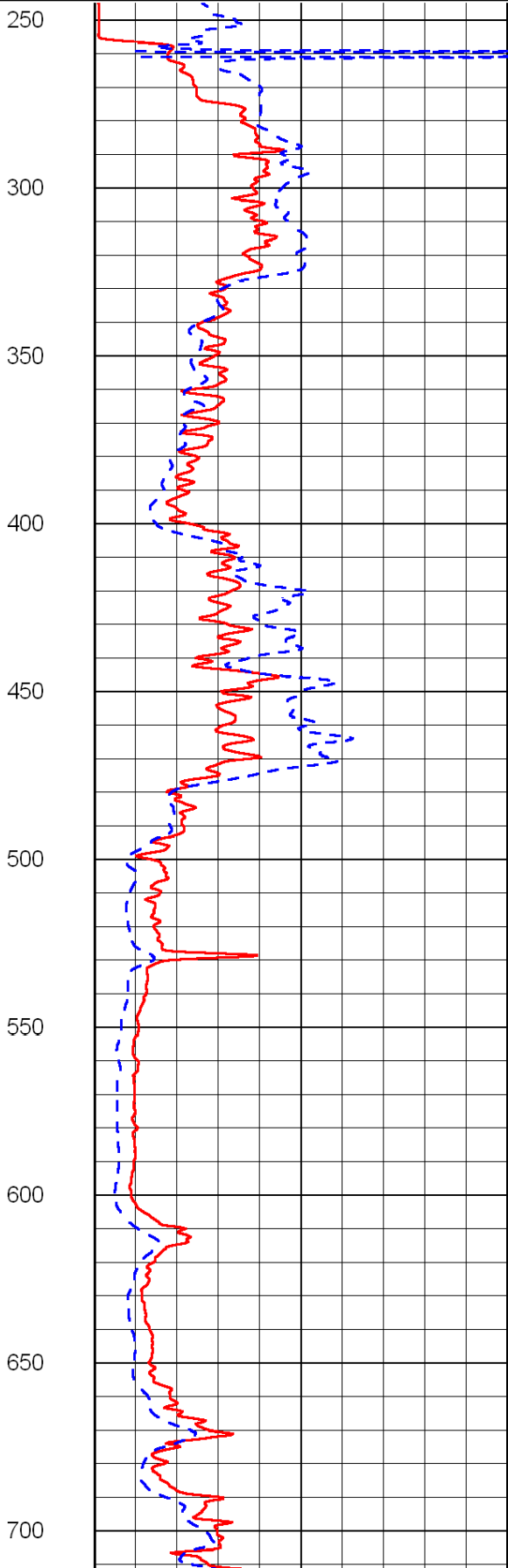
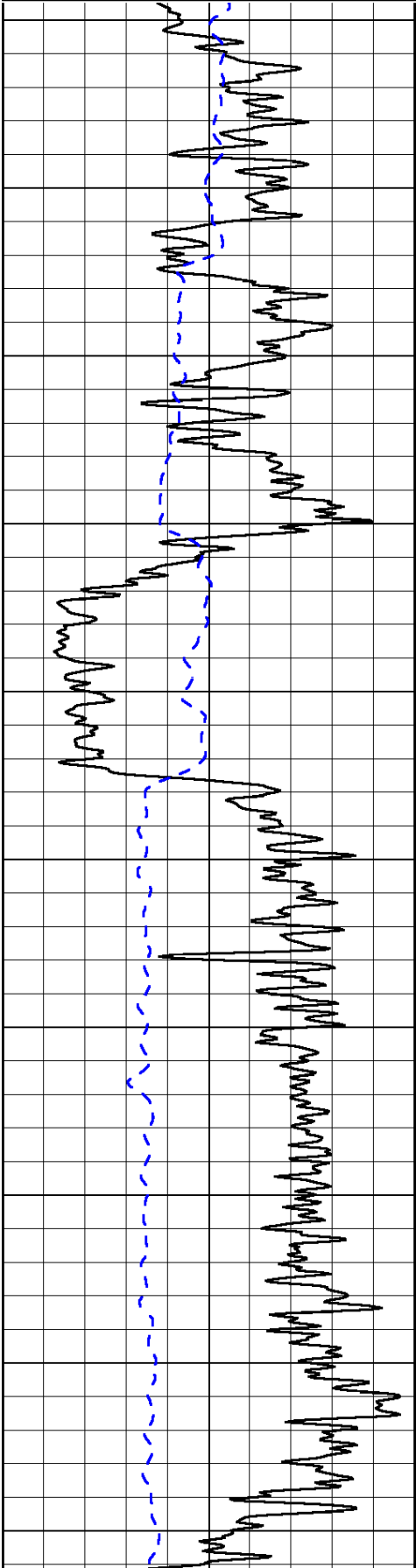
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|---|---------------------|----|
| 0 | Shallow Resistivity | 50 |
| 0 | Deep Resistivity    | 50 |

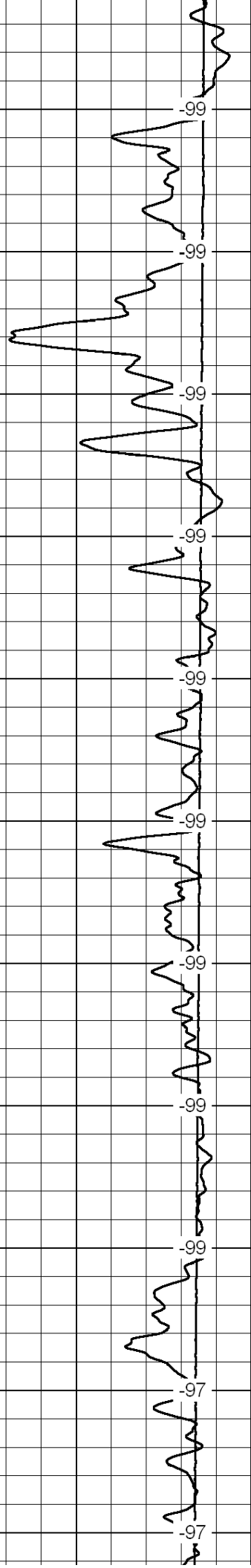
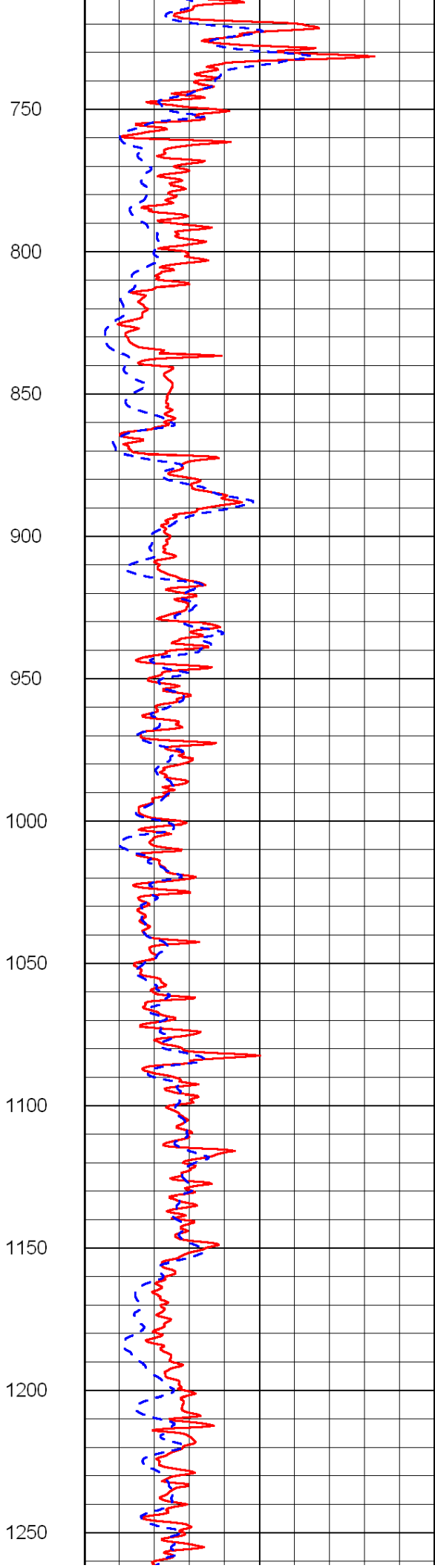
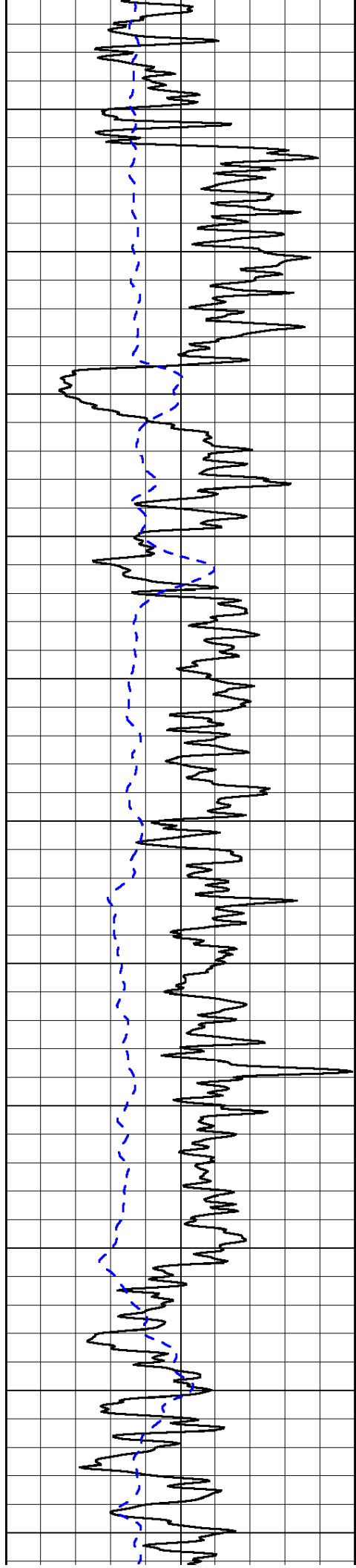
|      |
|------|
| LSPD |
|------|

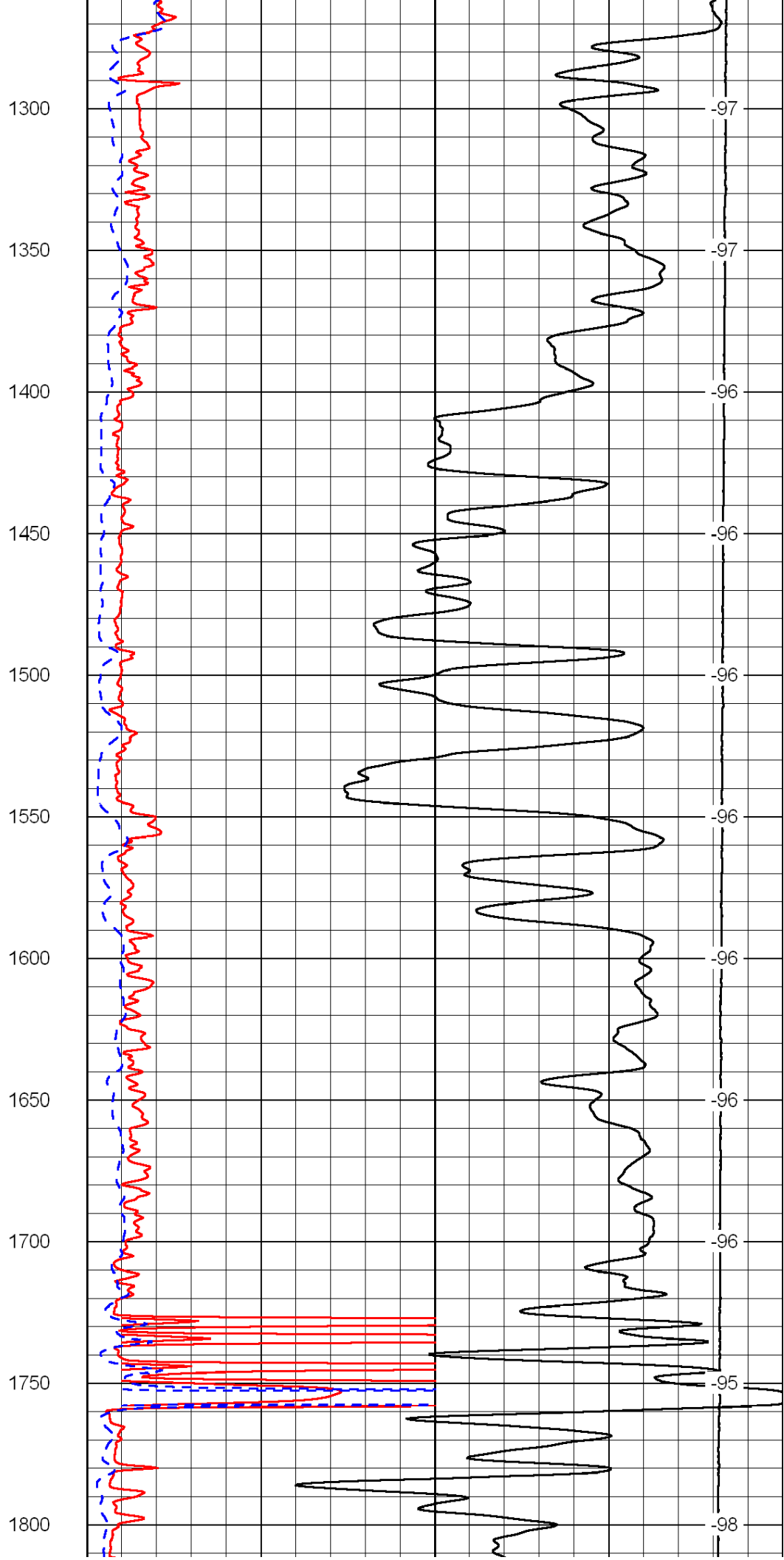
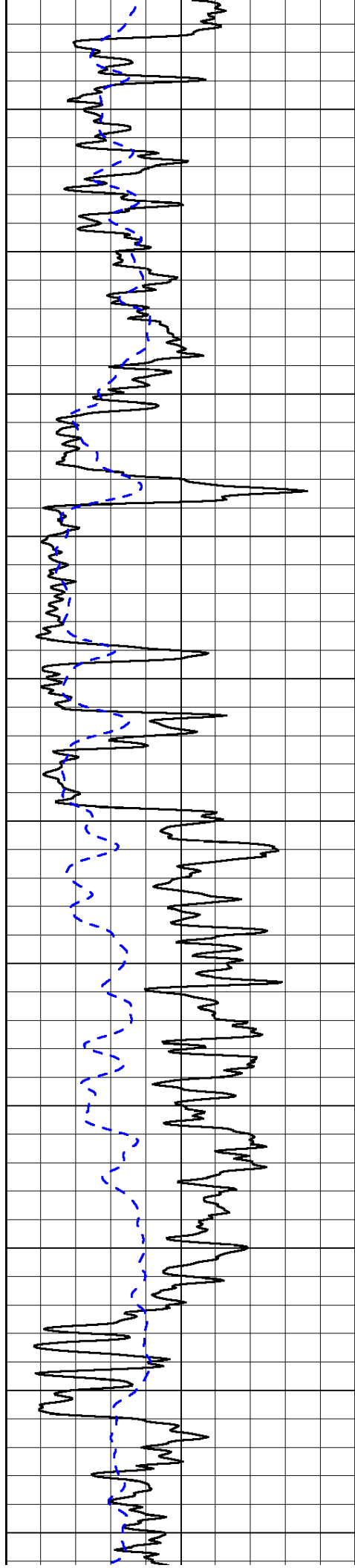
|      |              |   |
|------|--------------|---|
| 1000 | Conductivity | 0 |
|------|--------------|---|

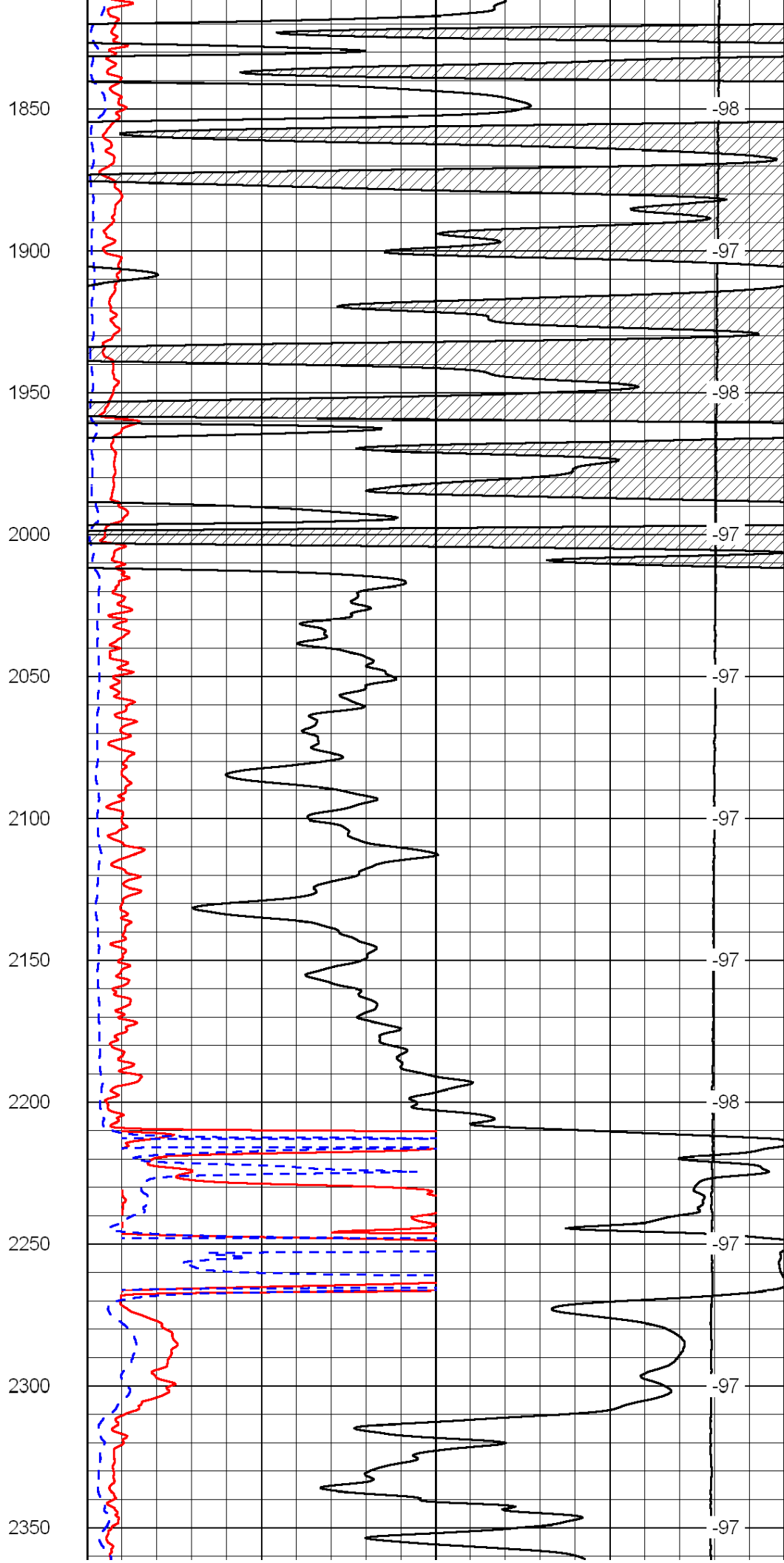
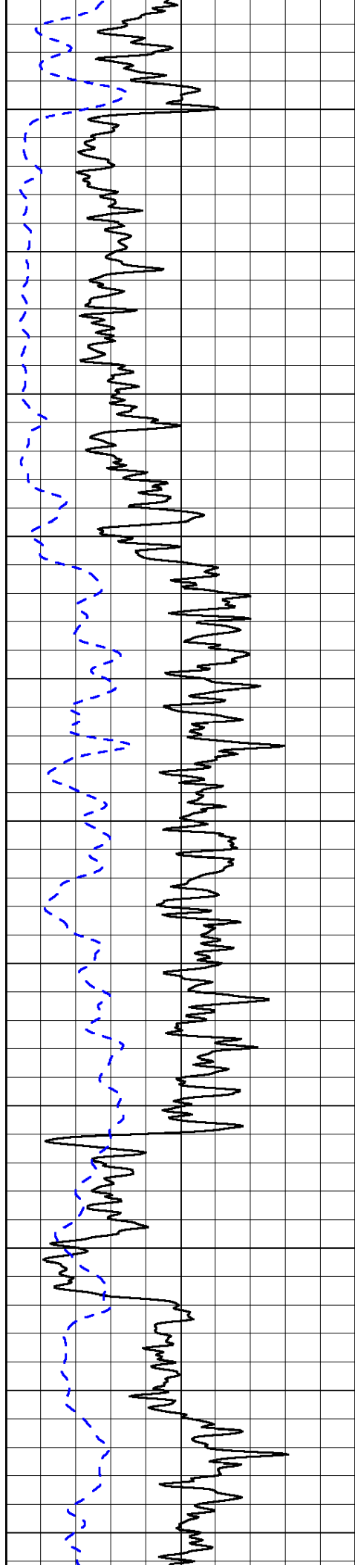
|       |              |   |
|-------|--------------|---|
| 15000 | Line Tension | 0 |
|-------|--------------|---|

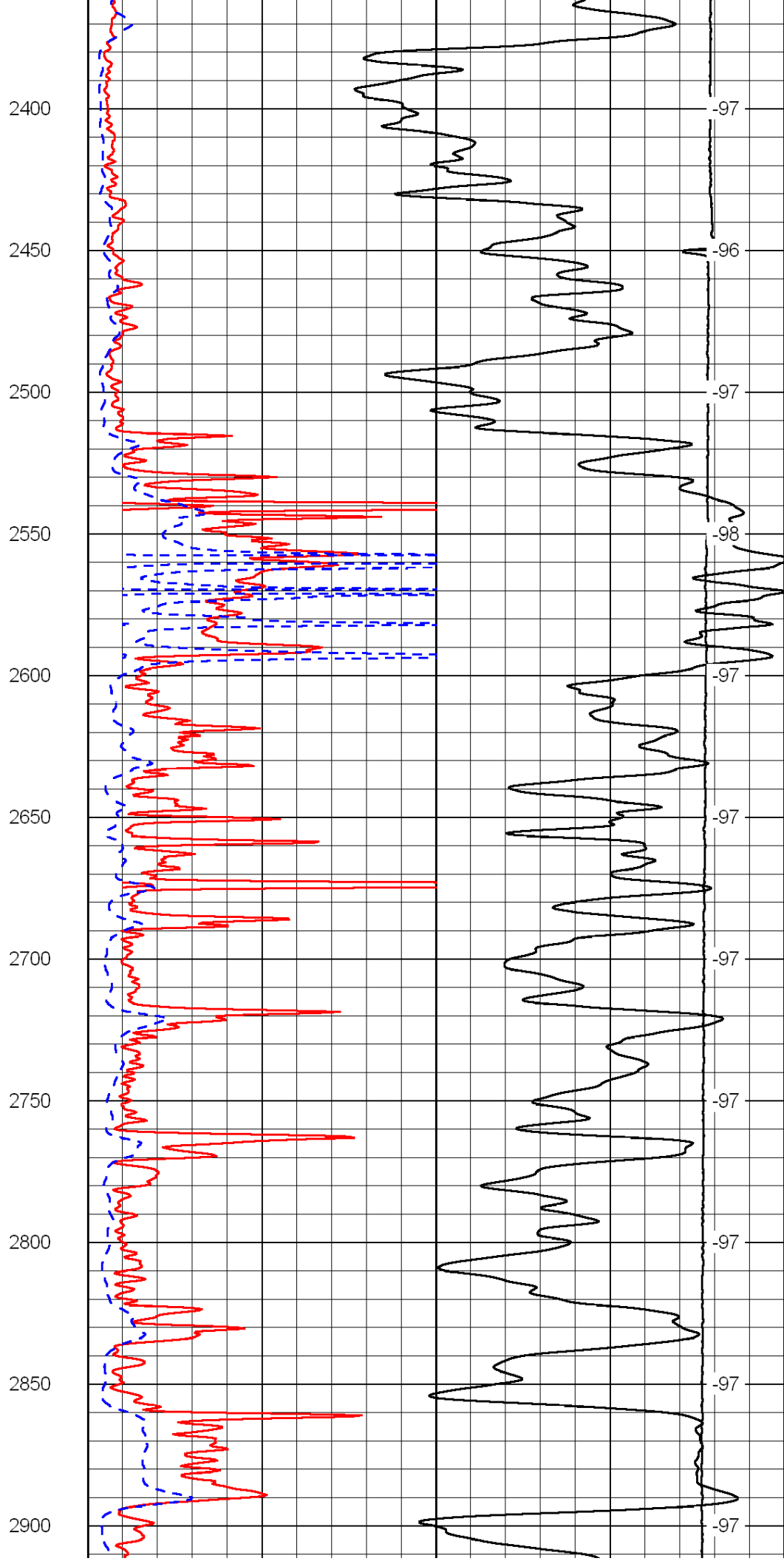
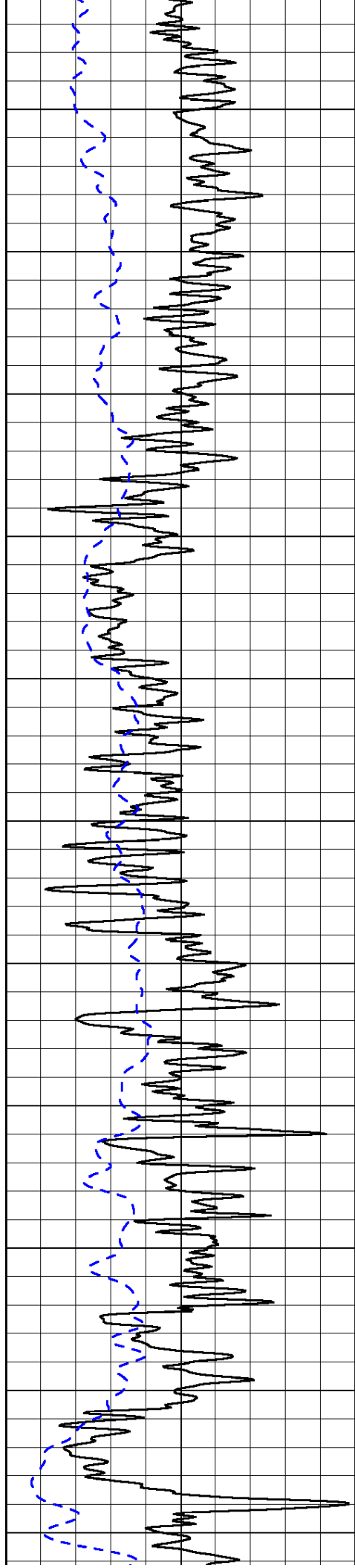
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|----|---------------------|-----|
| 50 | Shallow Resistivity | 500 |
| 50 | Deep Resistivity    | 500 |

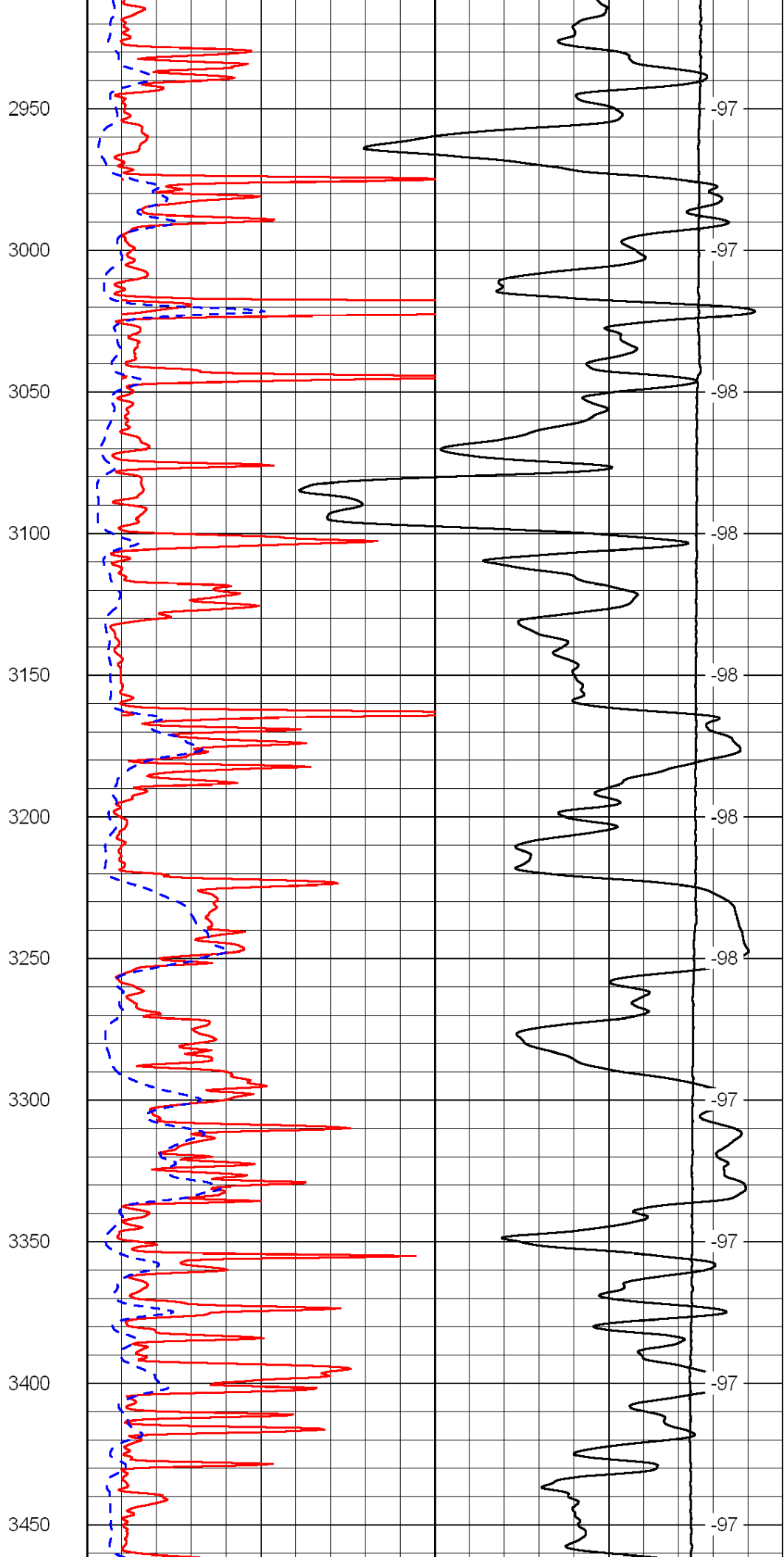
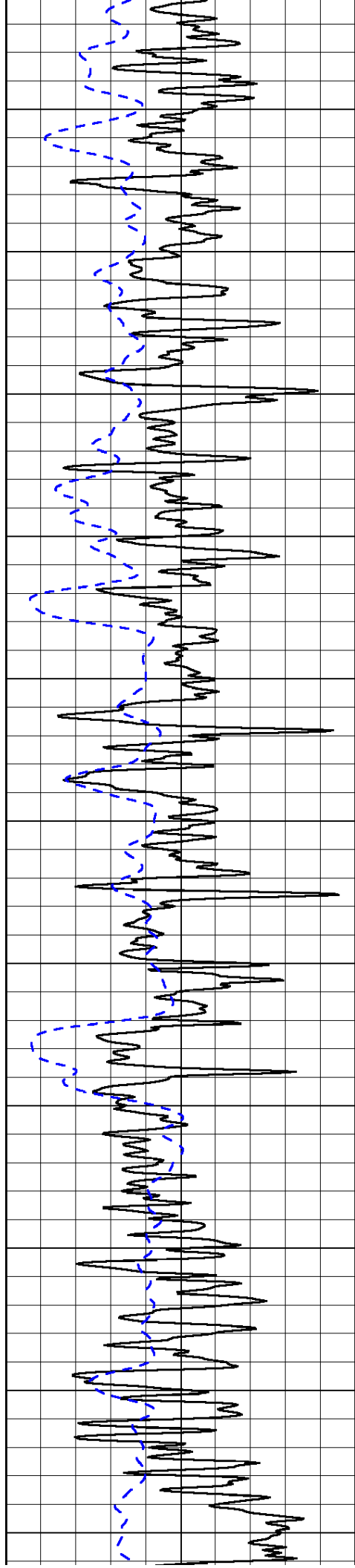


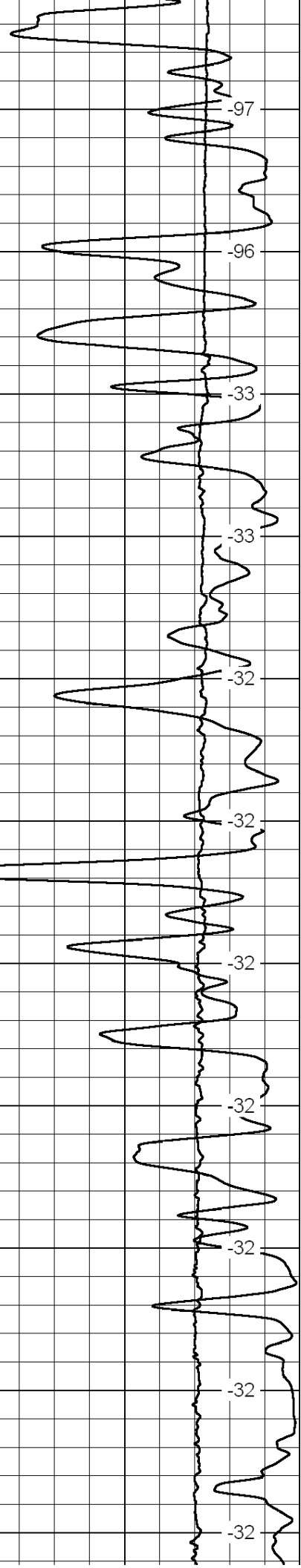
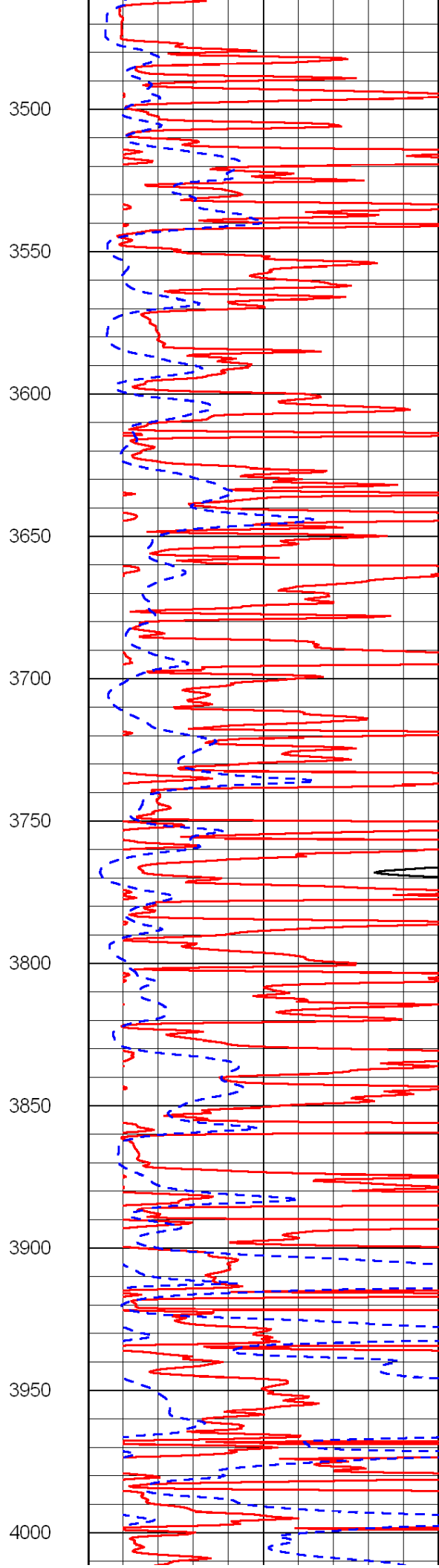
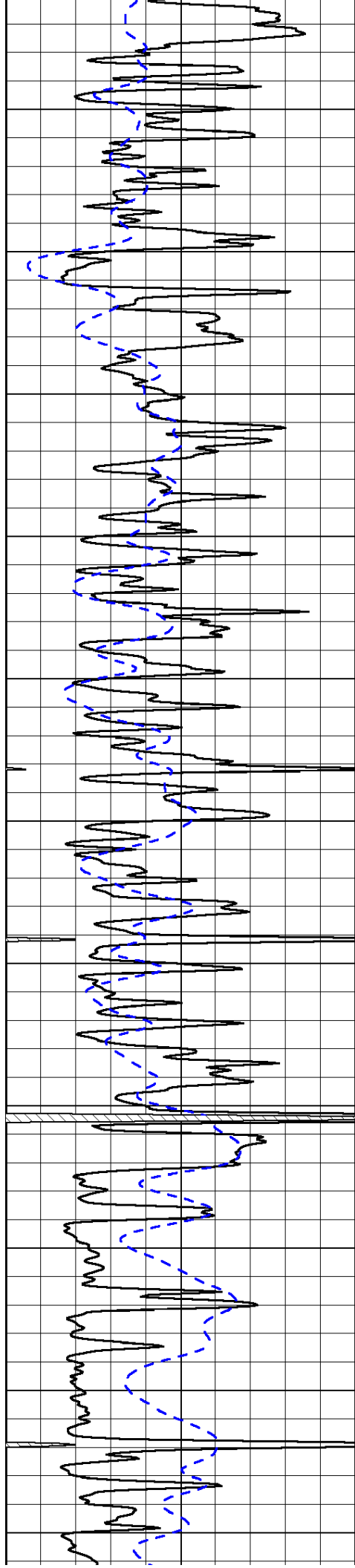


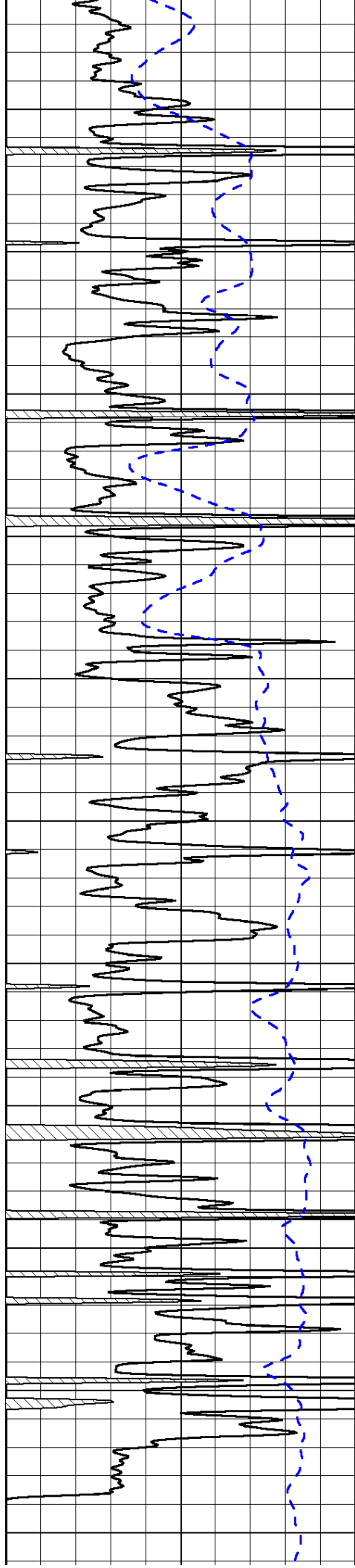












4050

4100

4150

4200

4250

4300

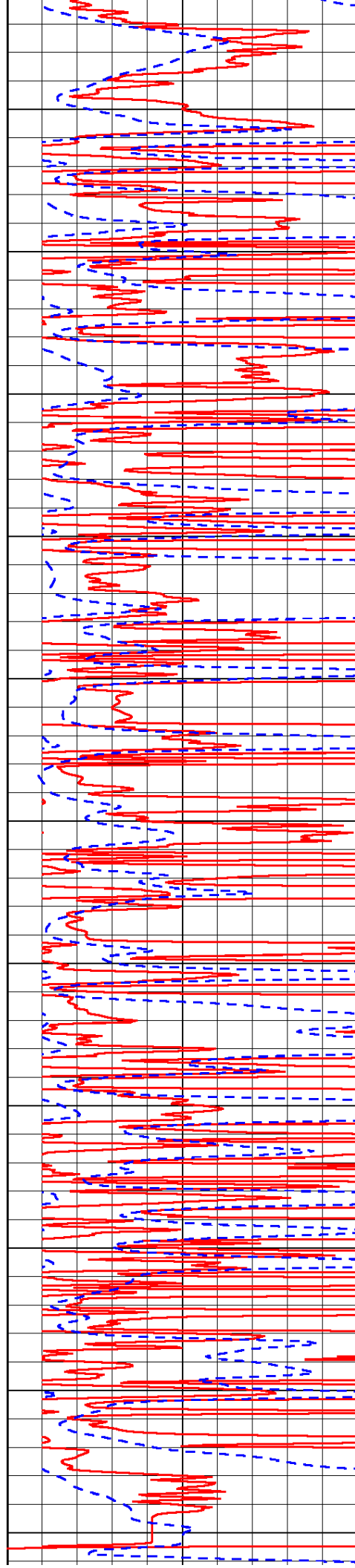
4350

4400

4450

4500

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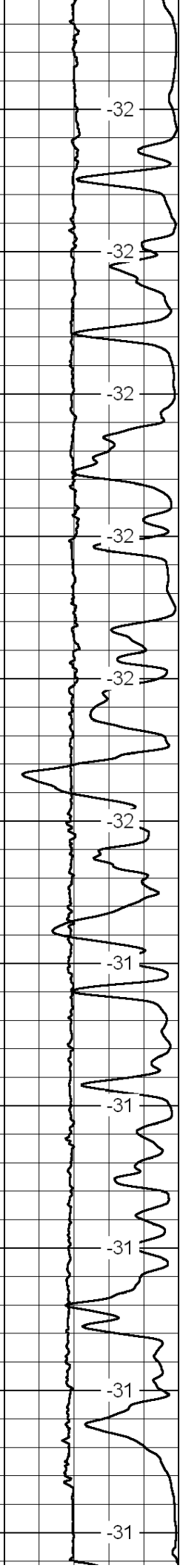
-31

-31

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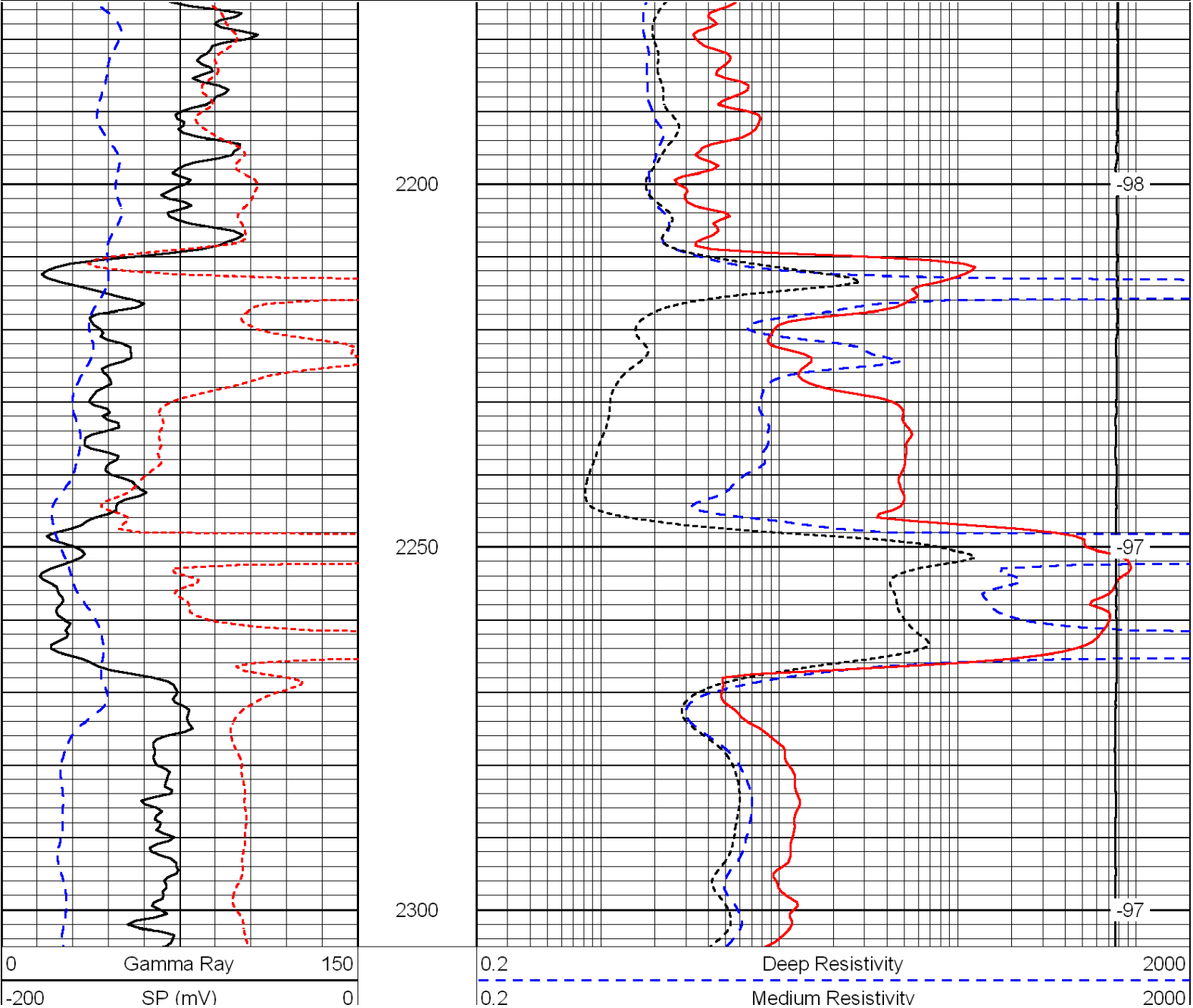
-31

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|      |           |     |       |                     |     |      |
|------|-----------|-----|-------|---------------------|-----|------|
| 0    | Gamma Ray | 150 | 0     | Shallow Resistivity | 50  | LSPD |
| -200 | SP (mV)   | 0   | 0     | Deep Resistivity    | 50  |      |
|      |           |     | 1000  | Conductivity        |     | 0    |
|      |           |     | 15000 | Line Tension        |     | 0    |
|      |           |     | 50    | Shallow Resistivity | 500 |      |
|      |           |     | 50    | Deep Resistivity    | 500 |      |

|                                                               |  |  |                              |  |  |  |  |  |      |
|---------------------------------------------------------------|--|--|------------------------------|--|--|--|--|--|------|
| Database File: c:\warrior\data\larson_ york #1-12\larsonhd.db |  |  |                              |  |  |  |  |  |      |
| Dataset Pathname: dil\larmain                                 |  |  |                              |  |  |  |  |  |      |
| Presentation Format: dil                                      |  |  |                              |  |  |  |  |  |      |
| Dataset Creation: Tue Jul 12 06:27:05 2011                    |  |  |                              |  |  |  |  |  |      |
| Charted by: Depth in Feet scaled 1:240                        |  |  |                              |  |  |  |  |  |      |
| 0 Gamma Ray 150                                               |  |  | 0.2 Deep Resistivity 2000    |  |  |  |  |  |      |
| -200 SP (mV) 0                                                |  |  | 0.2 Medium Resistivity 2000  |  |  |  |  |  |      |
| -160 Rxo / Rt 40                                              |  |  | 0.2 Shallow Resistivity 2000 |  |  |  |  |  |      |
|                                                               |  |  | 15000 Line Tension 0         |  |  |  |  |  |      |
|                                                               |  |  |                              |  |  |  |  |  | LSPD |



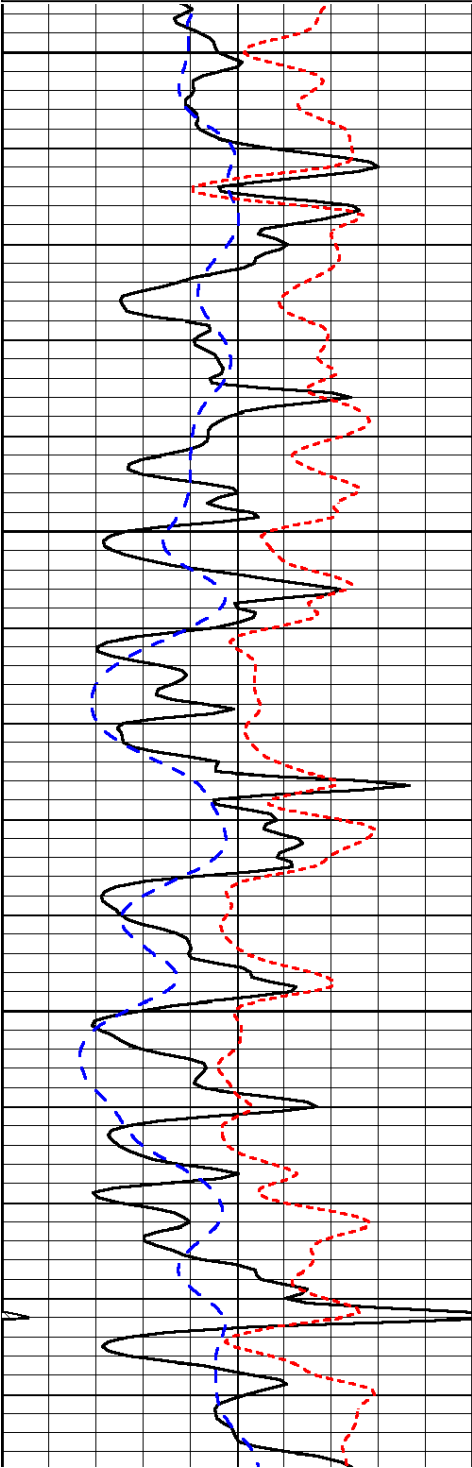
|      |          |    |
|------|----------|----|
| -160 | Rxo / Rt | 40 |
|      |          |    |

|       |                     |      |
|-------|---------------------|------|
| 0.2   | Shallow Resistivity | 2000 |
| 15000 | Line Tension        | 0    |
|       |                     | LSPD |

|                      |                                                |
|----------------------|------------------------------------------------|
| Database File:       | c:\warrior\data\larson_ york #1-12\larsonhd.db |
| Dataset Pathname:    | dil\larmain                                    |
| Presentation Format: | dil                                            |
| Dataset Creation:    | Tue Jul 12 06:27:05 2011                       |
| Charted by:          | Depth in Feet scaled 1:240                     |

|      |           |     |
|------|-----------|-----|
| 0    | Gamma Ray | 150 |
| -200 | SP (mV)   | 0   |
| -160 | Rxo / Rt  | 40  |

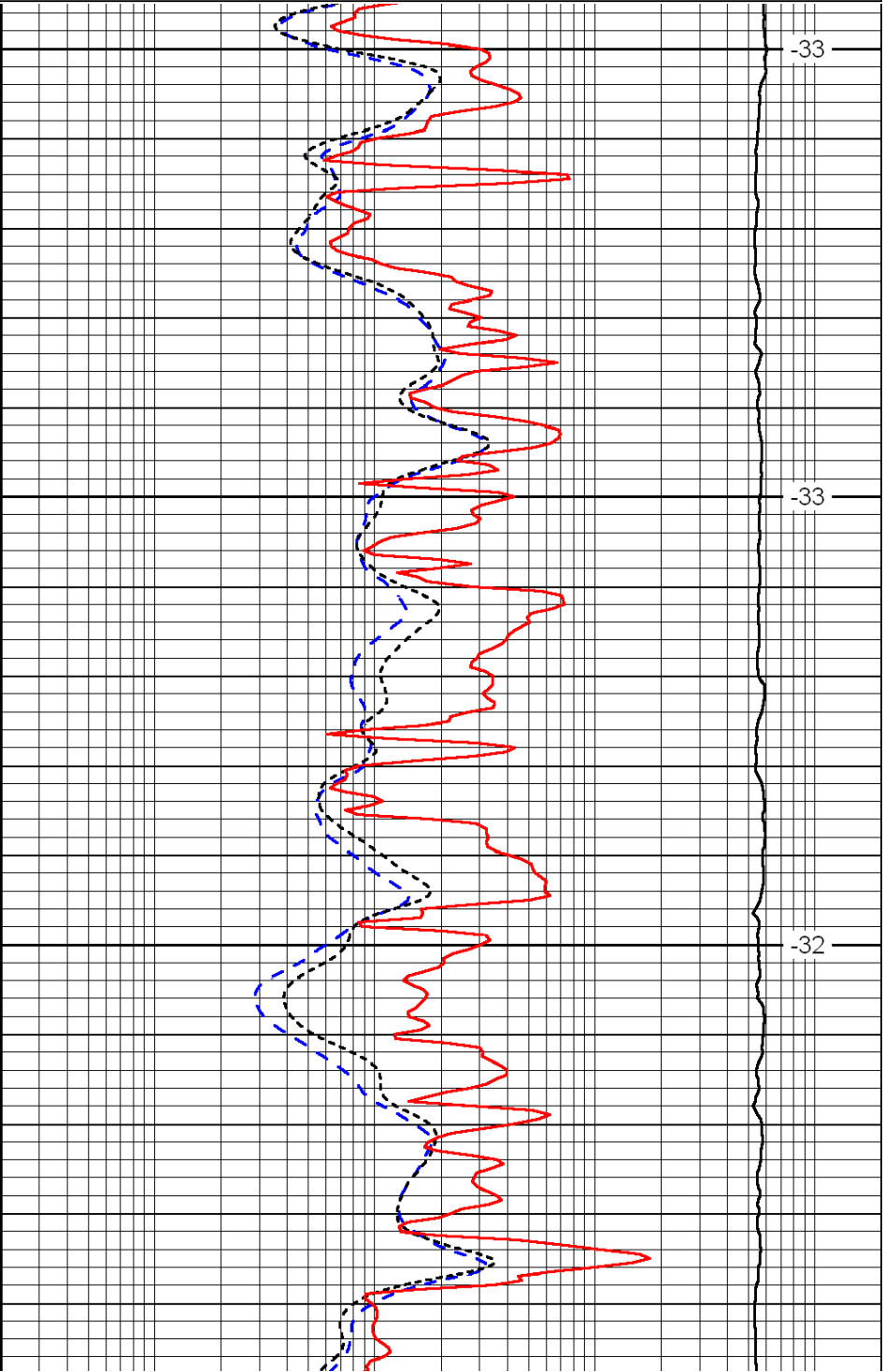
|       |                     |      |
|-------|---------------------|------|
| 0.2   | Deep Resistivity    | 2000 |
| 0.2   | Medium Resistivity  | 2000 |
| 0.2   | Shallow Resistivity | 2000 |
| 15000 | Line Tension        | 0    |
|       |                     | LSPD |



3600

3650

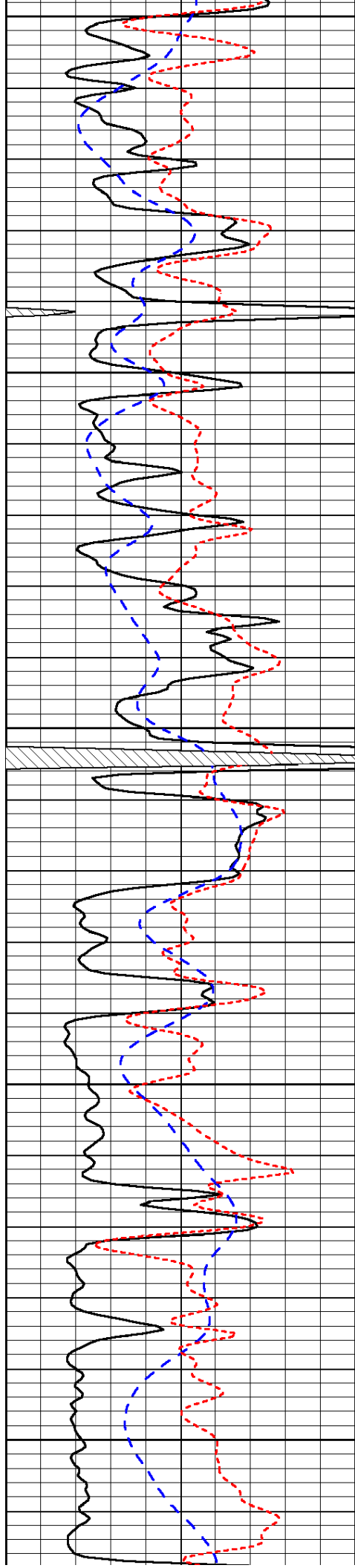
3700



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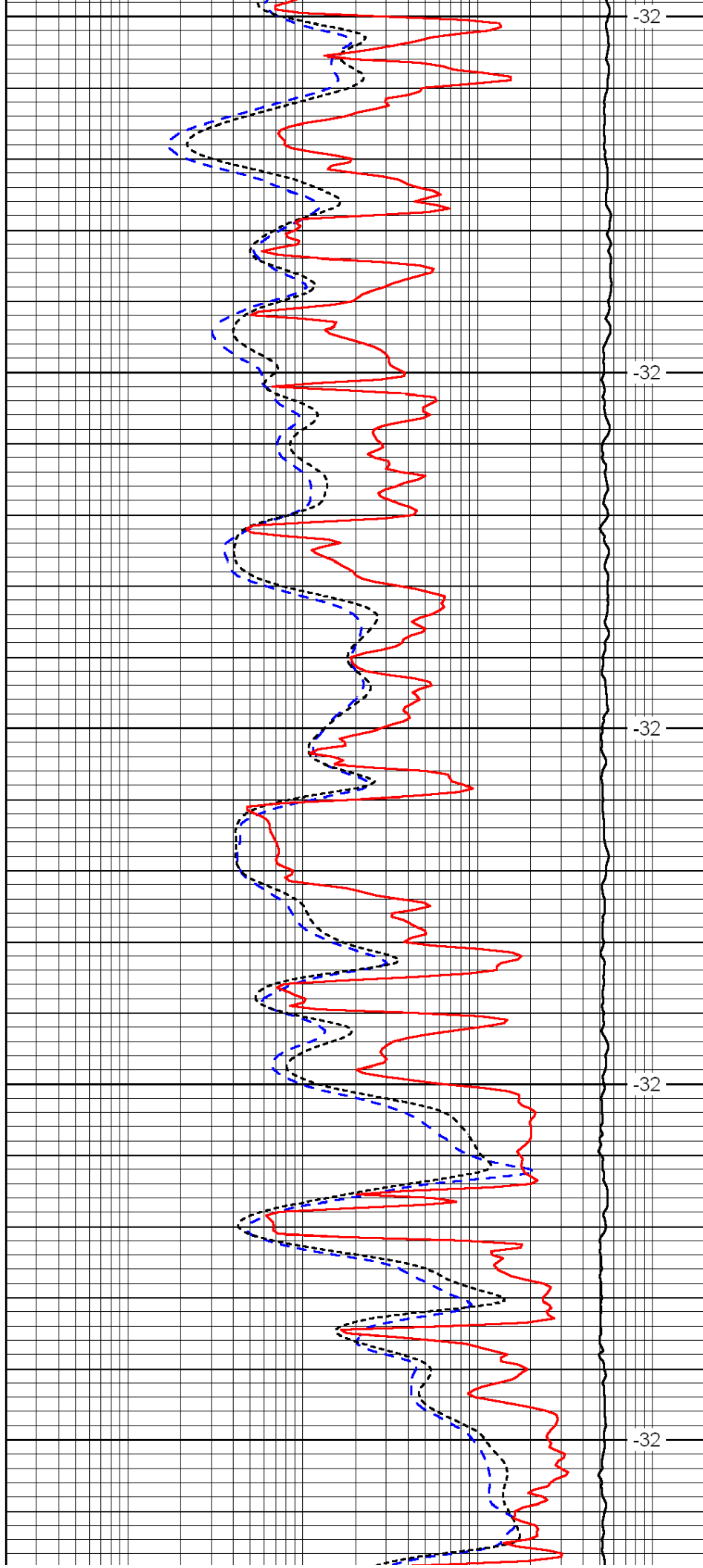
3750

3800

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3900

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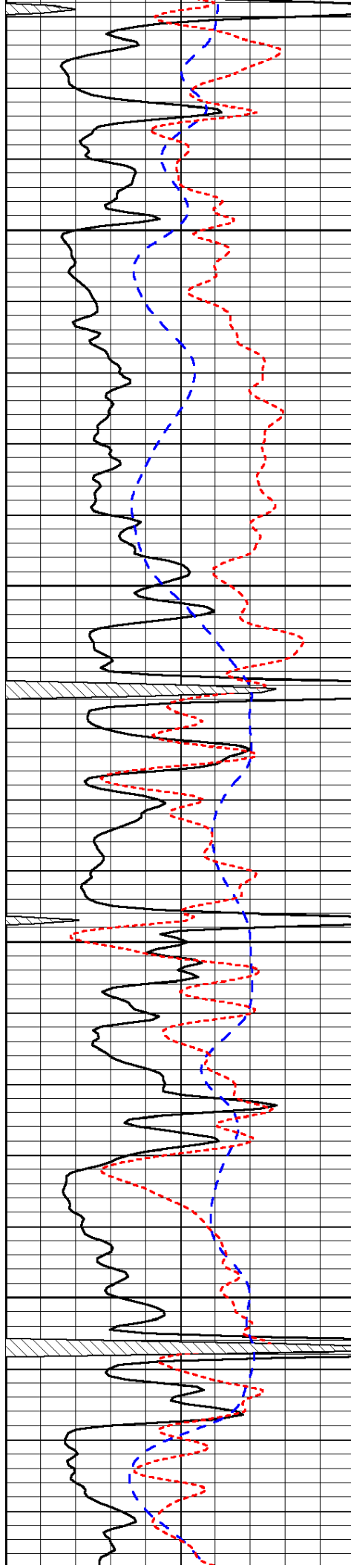
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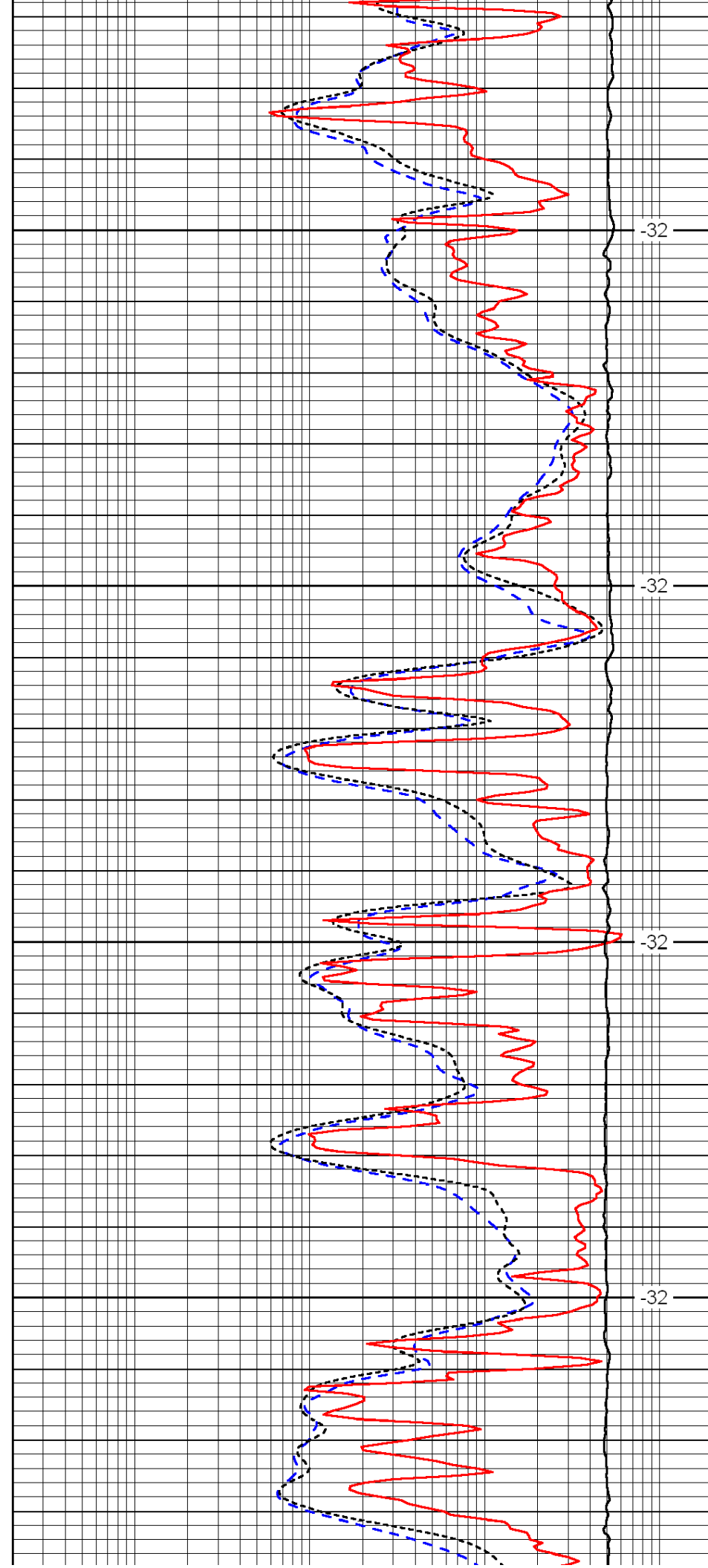


4000

4050

4100

4150

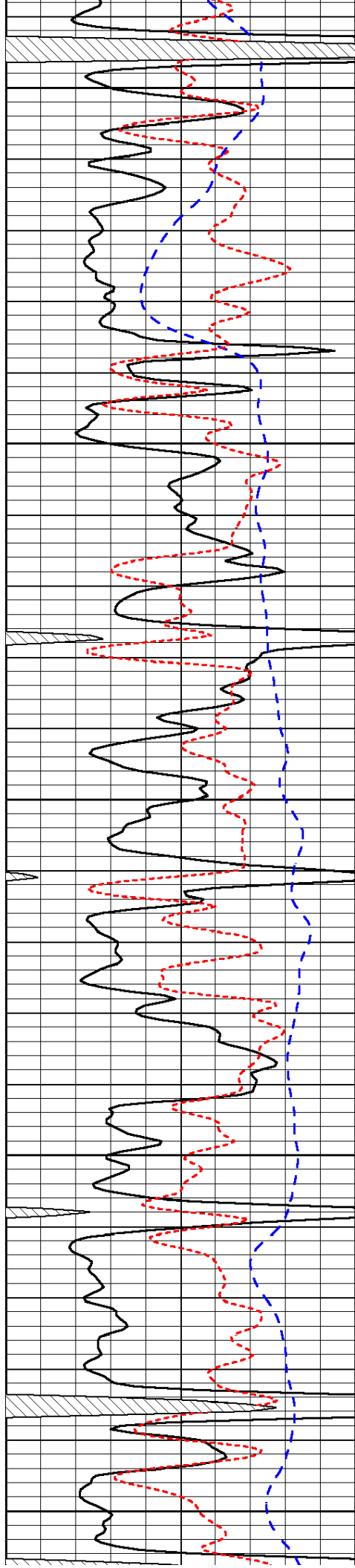


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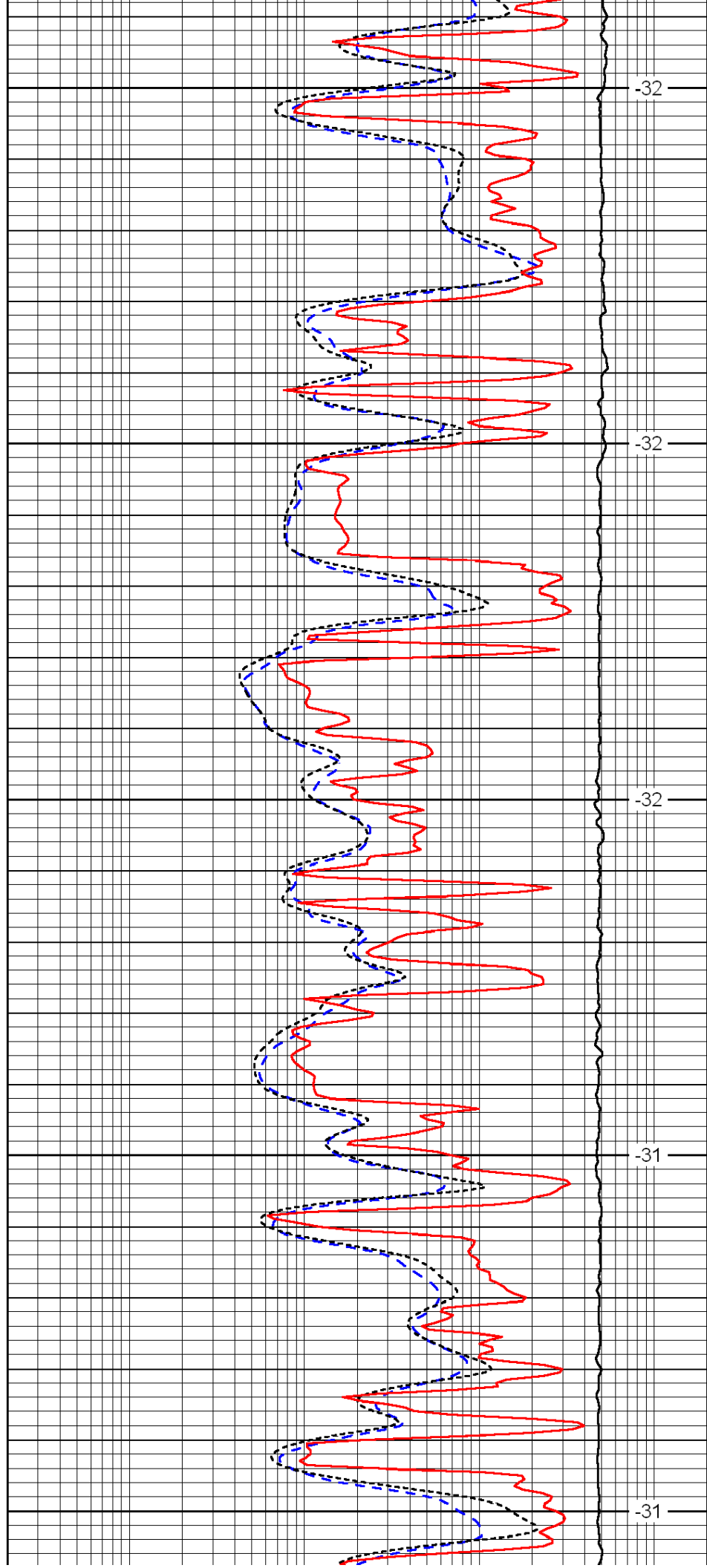
4200

4250

4300

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4400



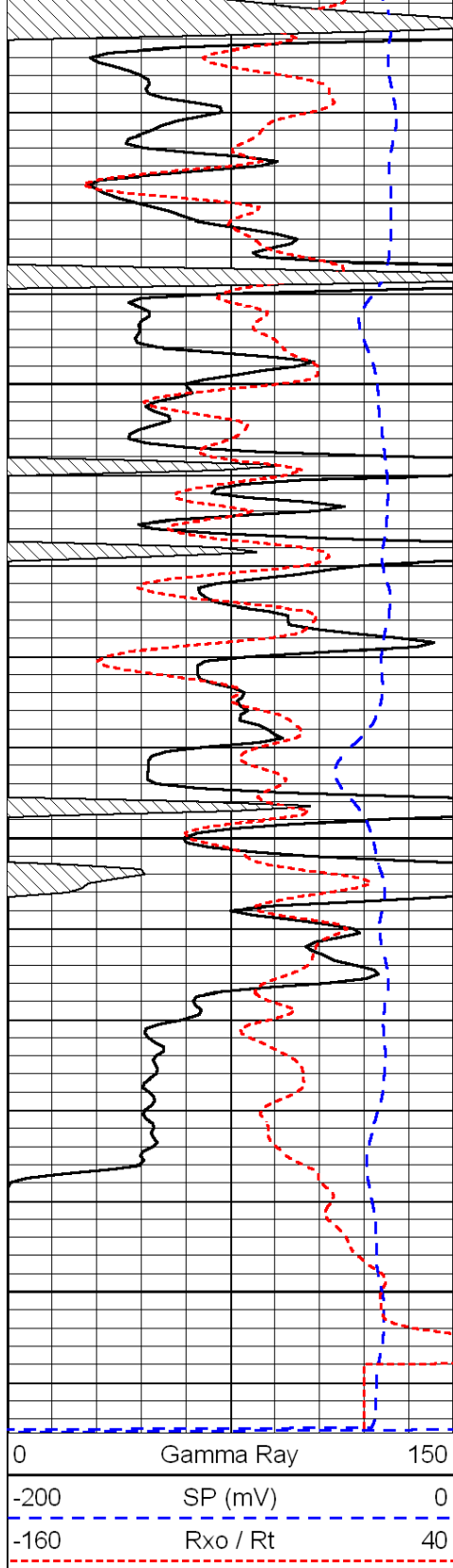
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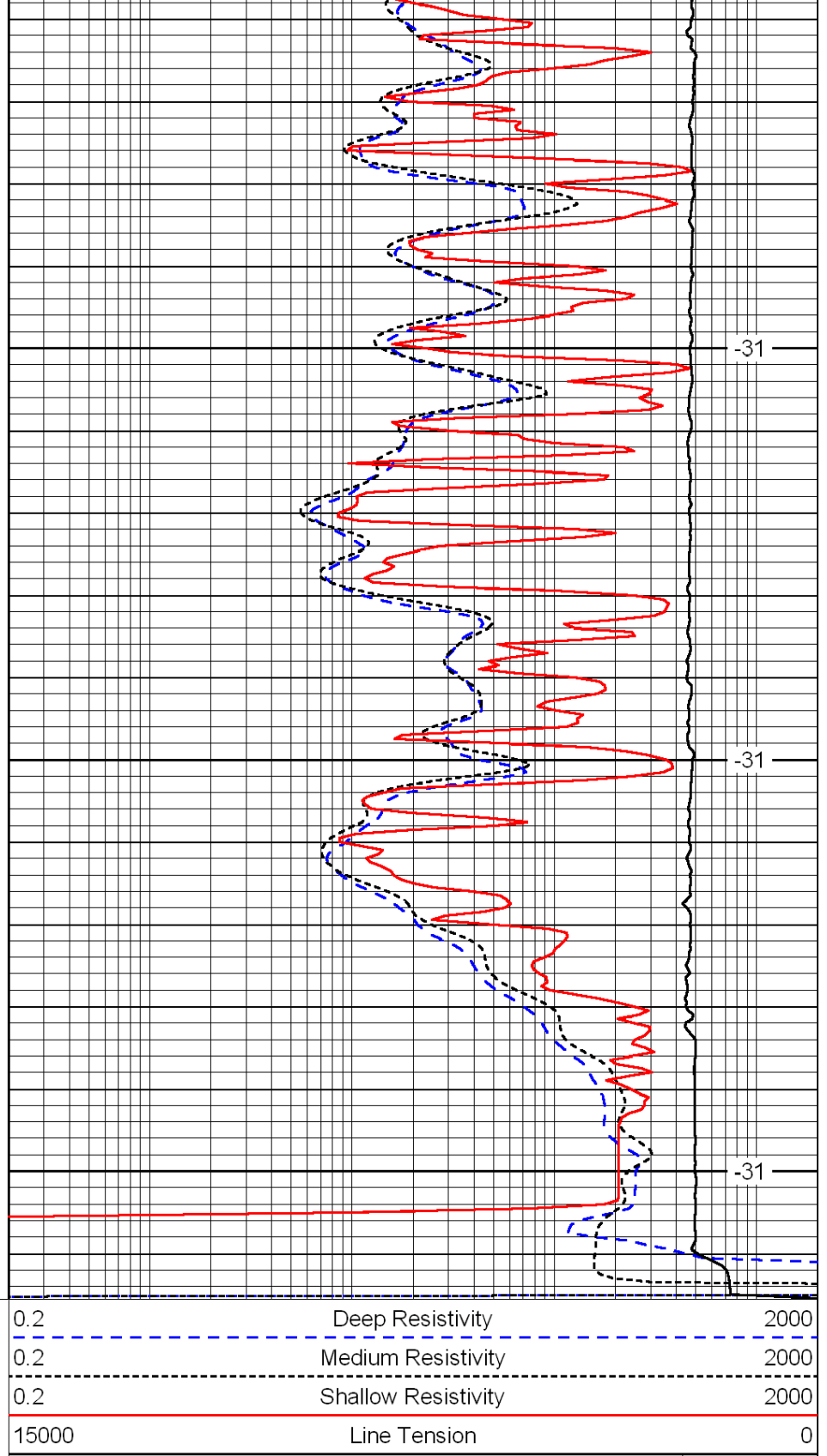
-31



4450

4500

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LSPD