



## Dual Induction Log

DIGITAL LOG (785) 625-3858

|                        |                                                                                                              |                                       |  |  |
|------------------------|--------------------------------------------------------------------------------------------------------------|---------------------------------------|--|--|
| API No.                | Company H&C Oil Operating, Inc.<br>Well Sheryl Roberts No. 8-1<br>Field J.A.B.<br>County Graham State Kansas |                                       |  |  |
| 15-065-23,637-00-00    | Location NW SW NE SW<br>1,750' FSL & 1,400' FWL                                                              | Other Services<br>CNL/CDL<br>MEL/BHCS |  |  |
|                        | Sec: 8 Twp: 7S Rge: 23W                                                                                      | Elevation                             |  |  |
| Permanent Datum        | Ground Level                                                                                                 | Elevation 2427                        |  |  |
| Log Measured From      | Kelly Bushing                                                                                                | 5 Ft. Above Perm. Datum               |  |  |
| Drilling Measured From | Kelly Bushing                                                                                                | K.B. 2432<br>D.F. 2427<br>G.L. 2427   |  |  |
| Date                   | 4/29/2010                                                                                                    |                                       |  |  |
| Run Number             | One                                                                                                          |                                       |  |  |
| Depth Driller          | 3936                                                                                                         |                                       |  |  |
| Depth Logger           | 3940                                                                                                         |                                       |  |  |
| Bottom Logged Interval | 3939                                                                                                         |                                       |  |  |
| Top Log Interval       | 250                                                                                                          |                                       |  |  |
| Casing Driller         | 8.625 @ 262                                                                                                  |                                       |  |  |
| Casing Logger          | 257                                                                                                          |                                       |  |  |
| Bit Size               | 7.875                                                                                                        |                                       |  |  |
| Type Fluid in Hole     | Chemical                                                                                                     |                                       |  |  |
| Salinity, ppm CL       | 1900                                                                                                         |                                       |  |  |
| Density / Viscosity    | 9.1 52                                                                                                       |                                       |  |  |
| pH / Fluid Loss        | 10.5 7.8                                                                                                     |                                       |  |  |
| Source of Sample       | Flowline                                                                                                     |                                       |  |  |
| Rm @ Meas. Temp        | 1.40 @ 64                                                                                                    |                                       |  |  |
| Rmf @ Meas. Temp       | 1.05 @ 64                                                                                                    |                                       |  |  |
| Rmc @ Meas. Temp       | 1.89 @ 64                                                                                                    |                                       |  |  |
| Source of Rmf / Rmc    | Charts                                                                                                       |                                       |  |  |
| Rm @ BHT               | .76 @ 117                                                                                                    |                                       |  |  |
| Operating Rig Time     | 4 Hours                                                                                                      |                                       |  |  |
| Max Rec. Temp. F       | 117                                                                                                          |                                       |  |  |
| Equipment Number       | 10                                                                                                           |                                       |  |  |
| Location               | Hays                                                                                                         |                                       |  |  |
| Recorded By            | J. Long                                                                                                      |                                       |  |  |
| Witnessed By           | Marc Downing                                                                                                 |                                       |  |  |

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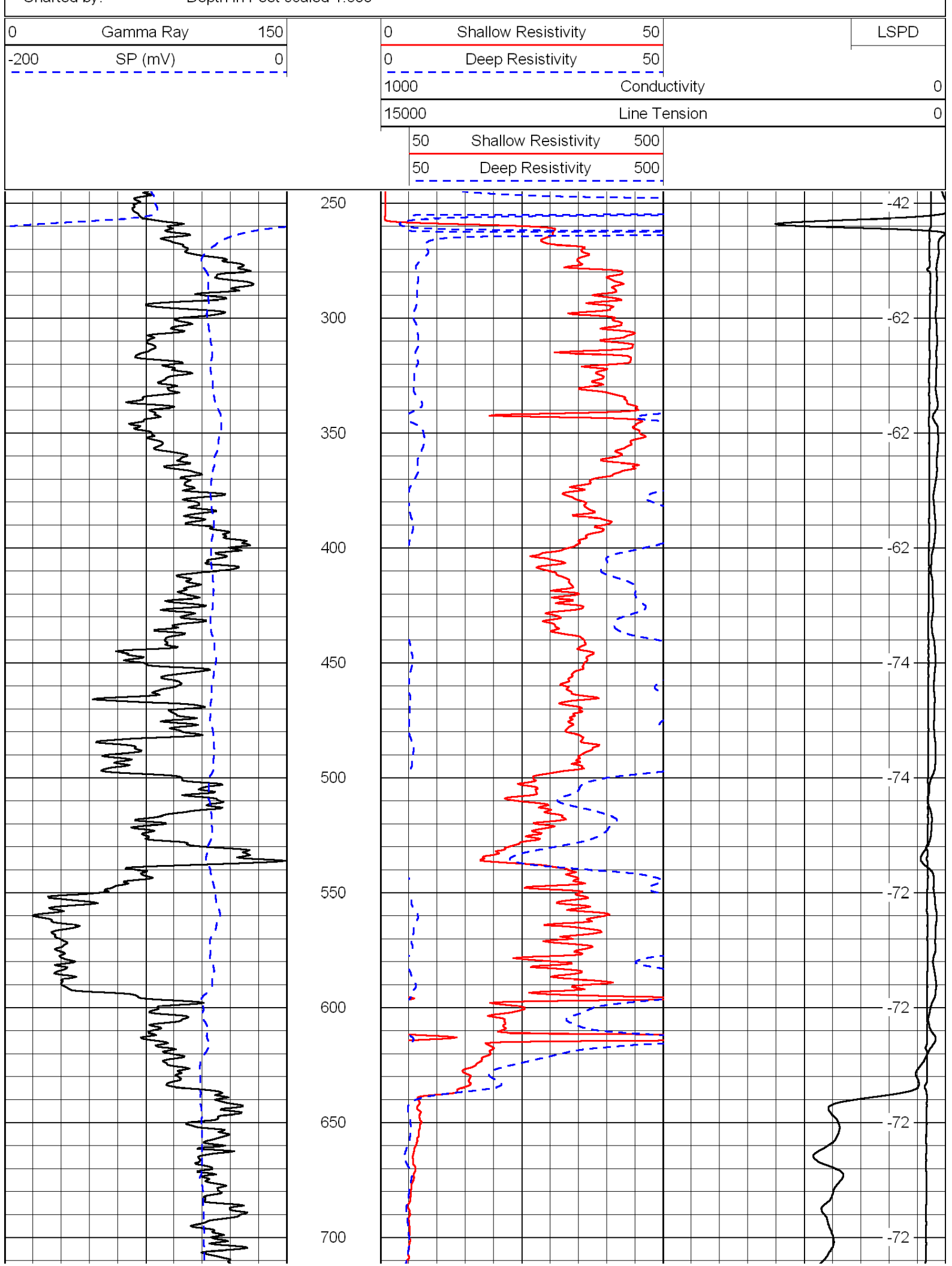
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

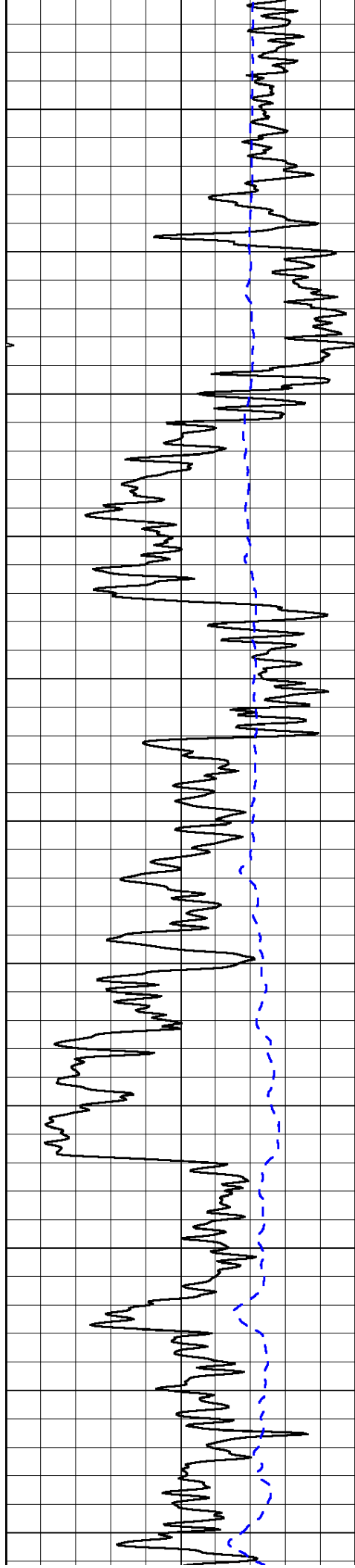
### Comments

Thank you for using Log-Tech, Inc.  
(785) 625-3858

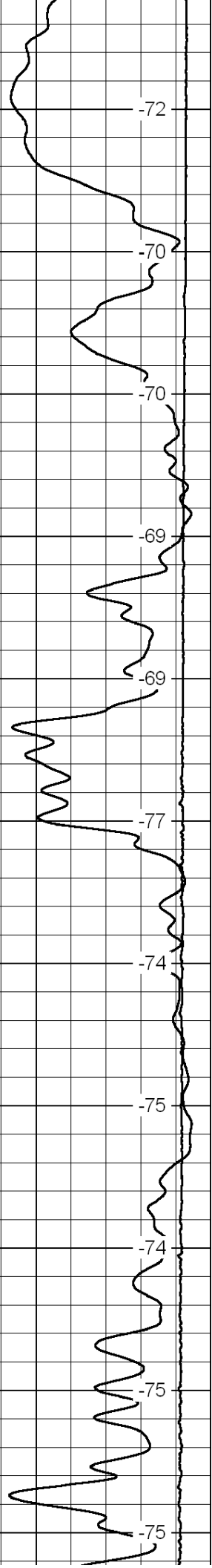
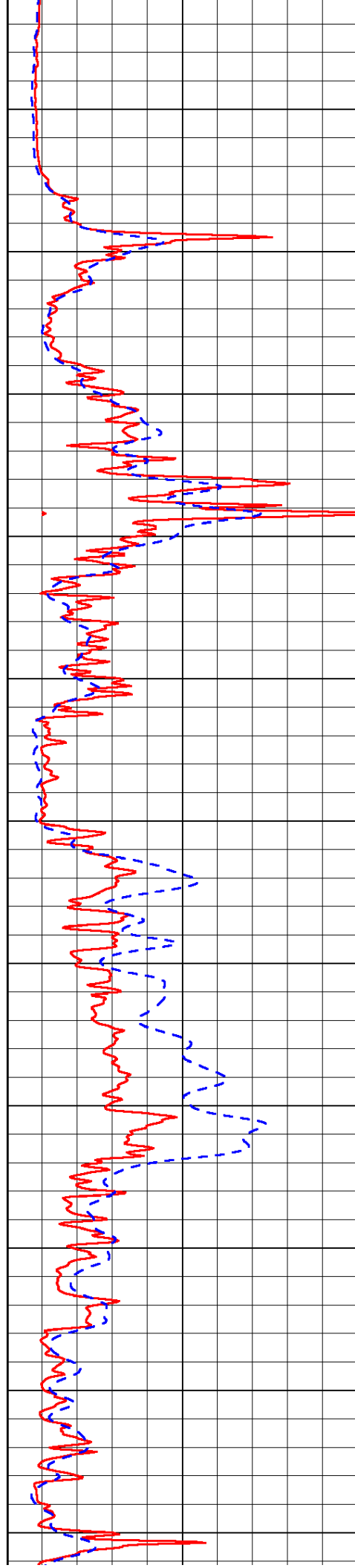
Hill City, 2 1/2 West to 240 Rd, North to V Rd, West to 230 Rd, 1 1/2 North, East Into

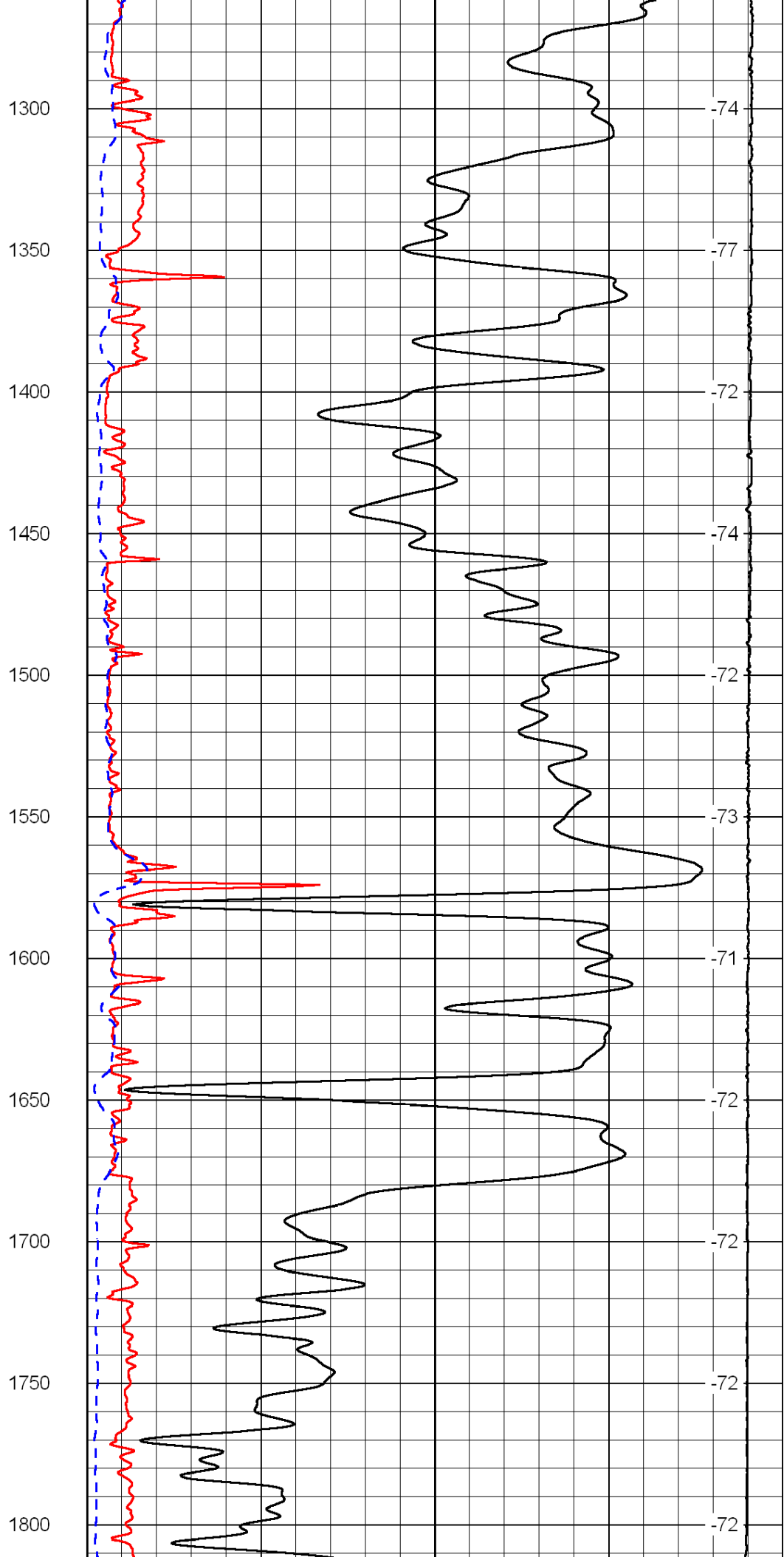
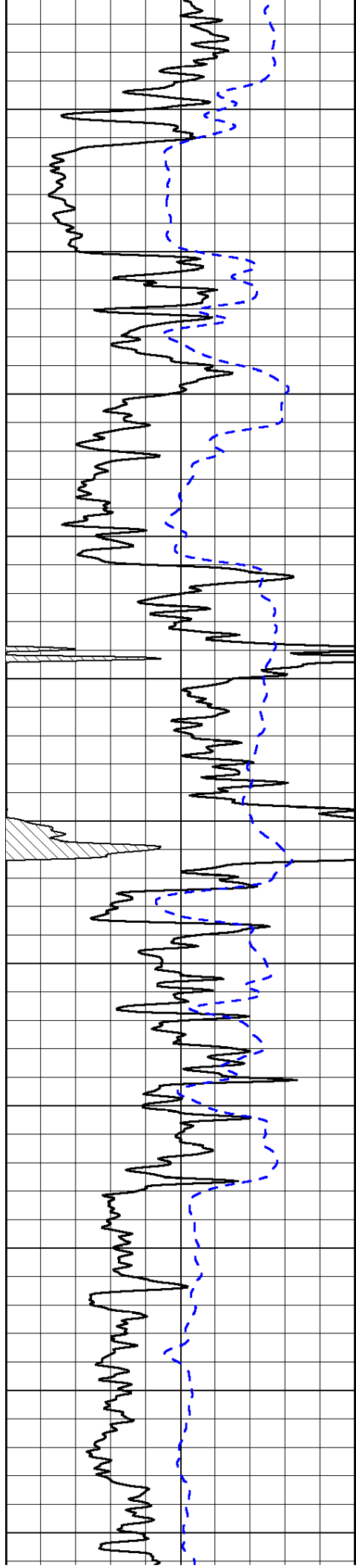
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Presentation Format: dil2in  
Dataset Creation: Thu Apr 29 07:00:35 2010  
Charted by: Depth in Feet scaled 1:600

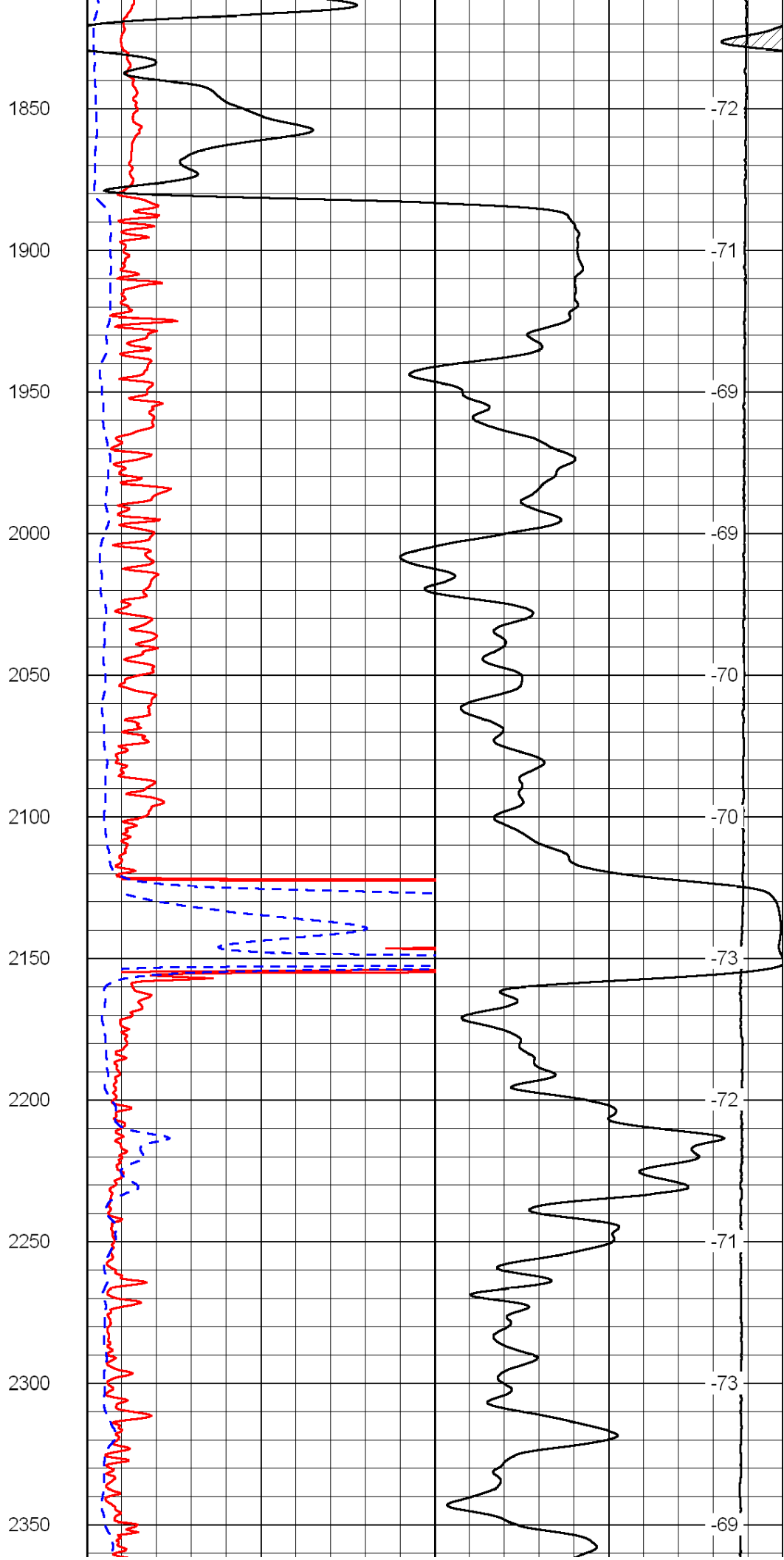
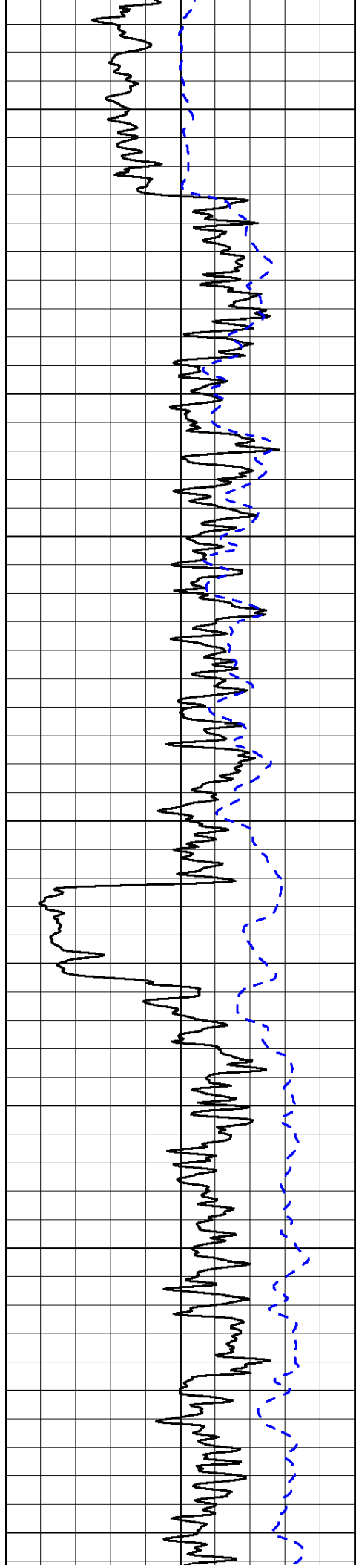


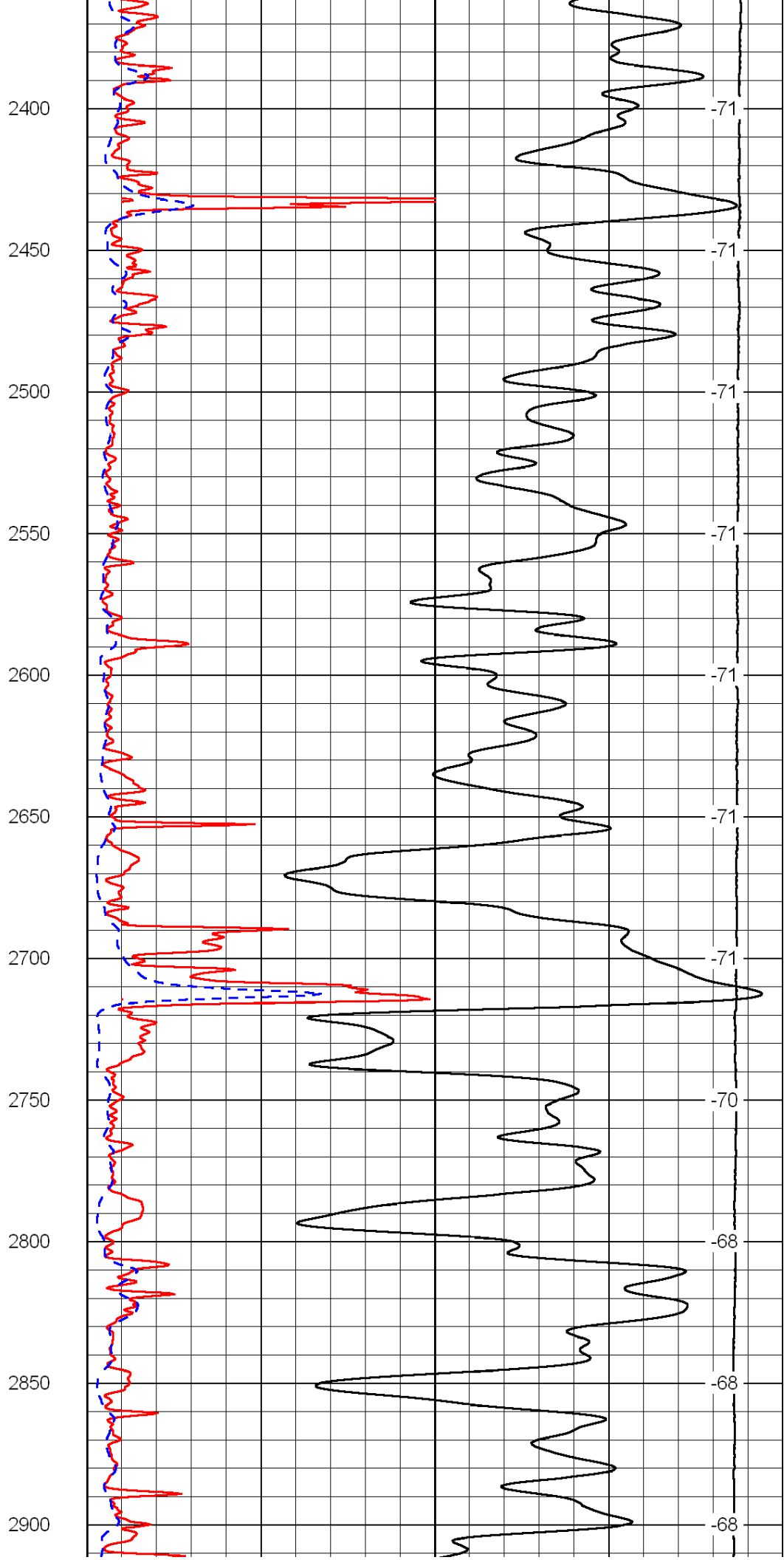
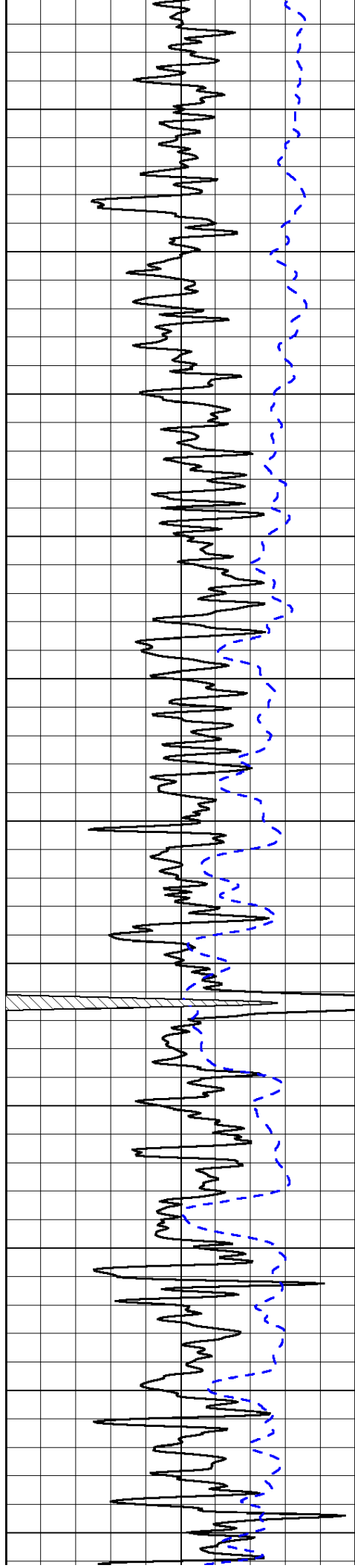


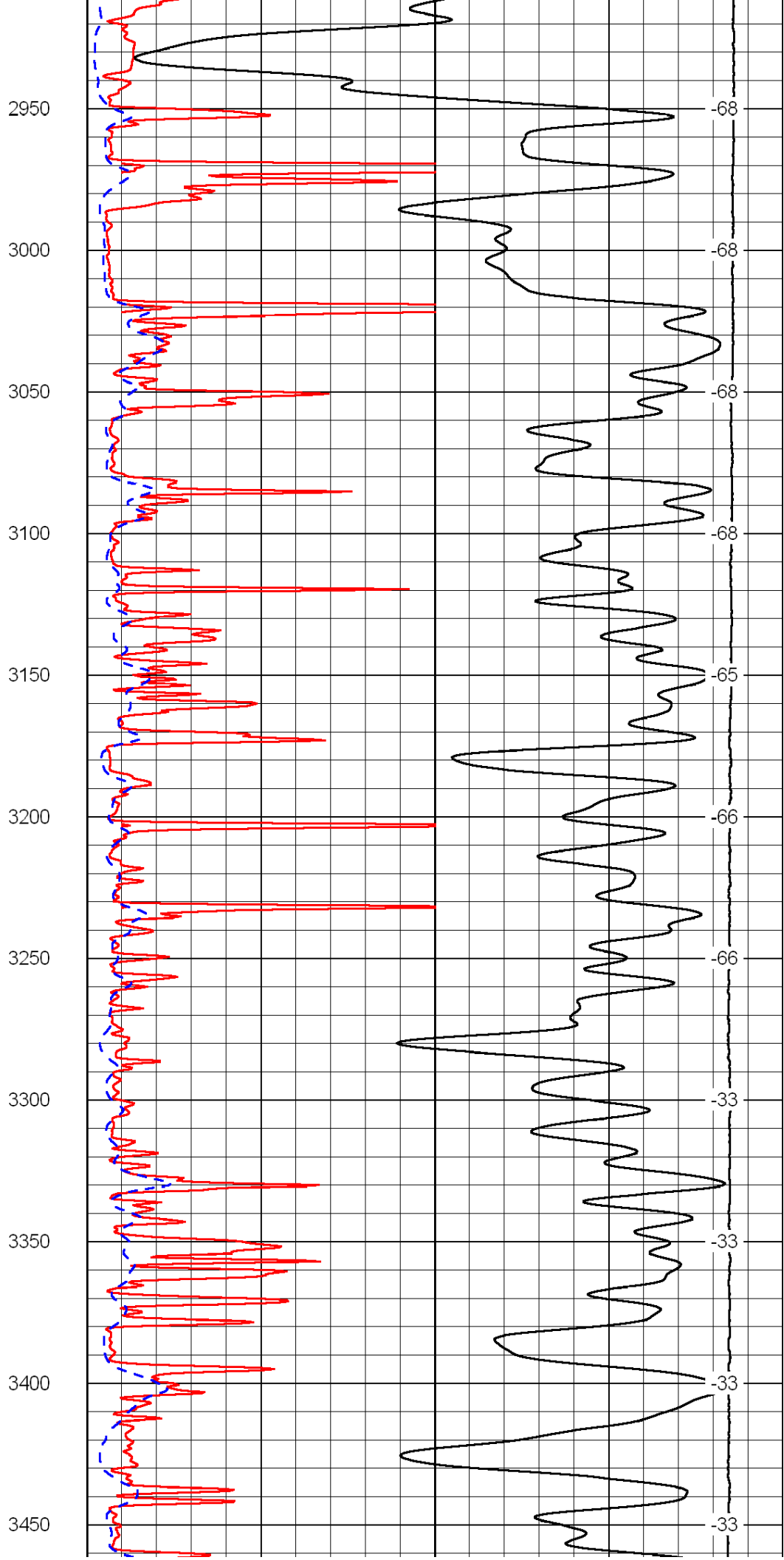
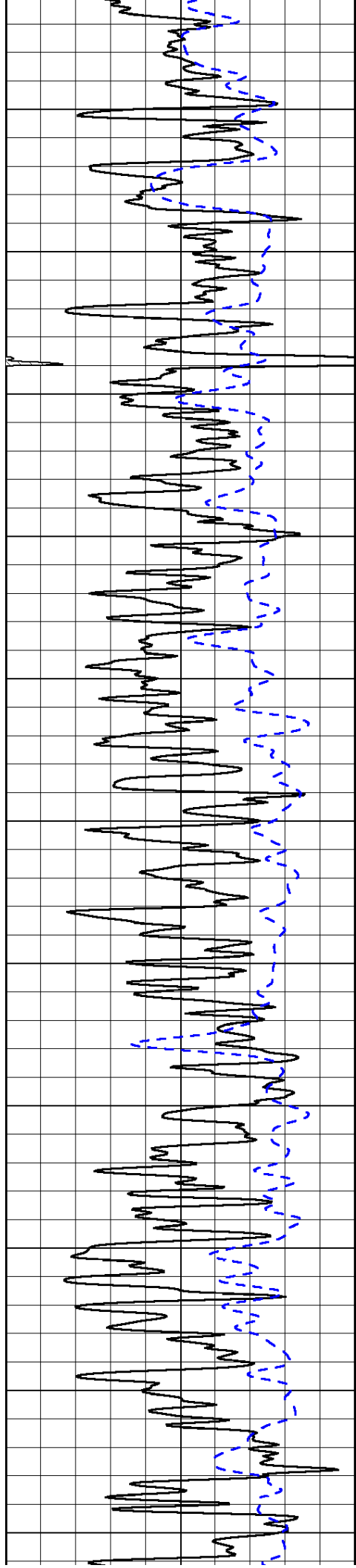
750  
800  
850  
900  
950  
1000  
1050  
1100  
1150  
1200  
1250

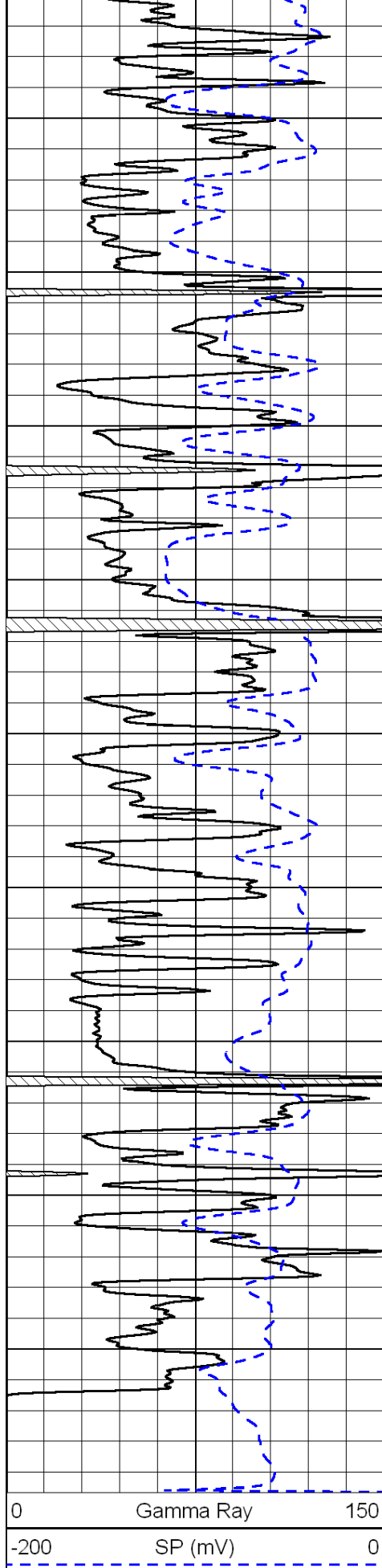




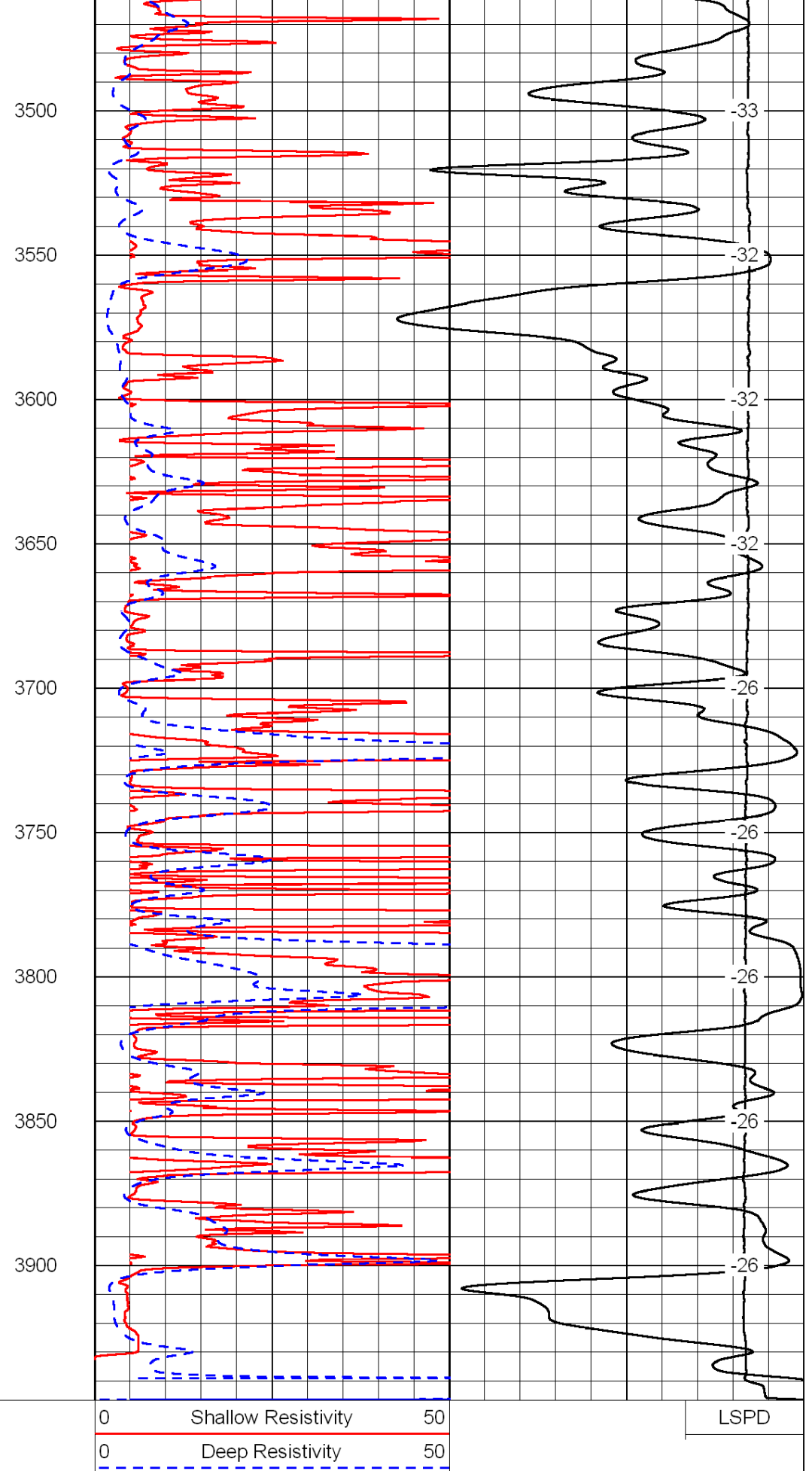








0      Gamma Ray      150  
-200      SP (mV)      0



0      Shallow Resistivity      50  
0      Deep Resistivity      50  
1000      Conductivity      0  
15000      Line Tension      0

50      Shallow Resistivity      500  
50      Deep Resistivity      500

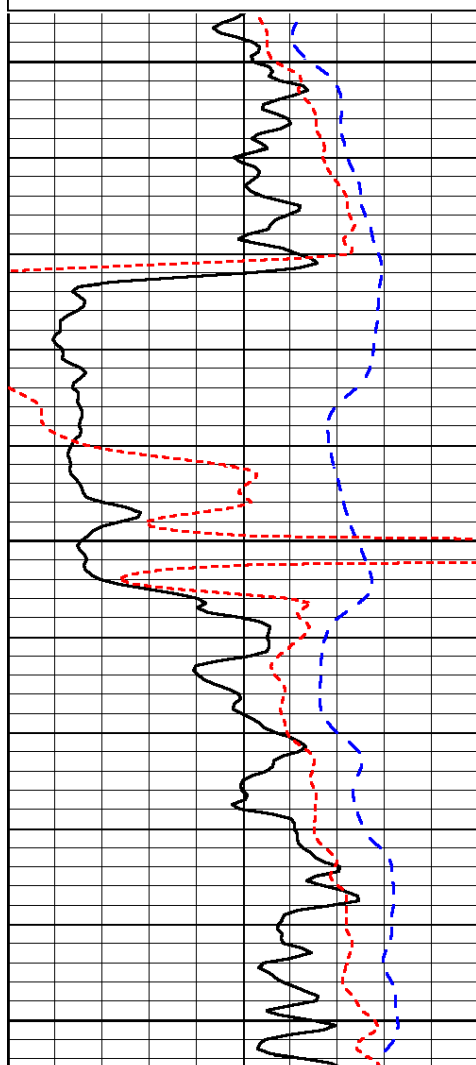
50 Deep Resistivity 500

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Dataset Pathname: dil/h&cstck  
Presentation Format: dil  
Dataset Creation: Thu Apr 29 07:00:35 2010  
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    |

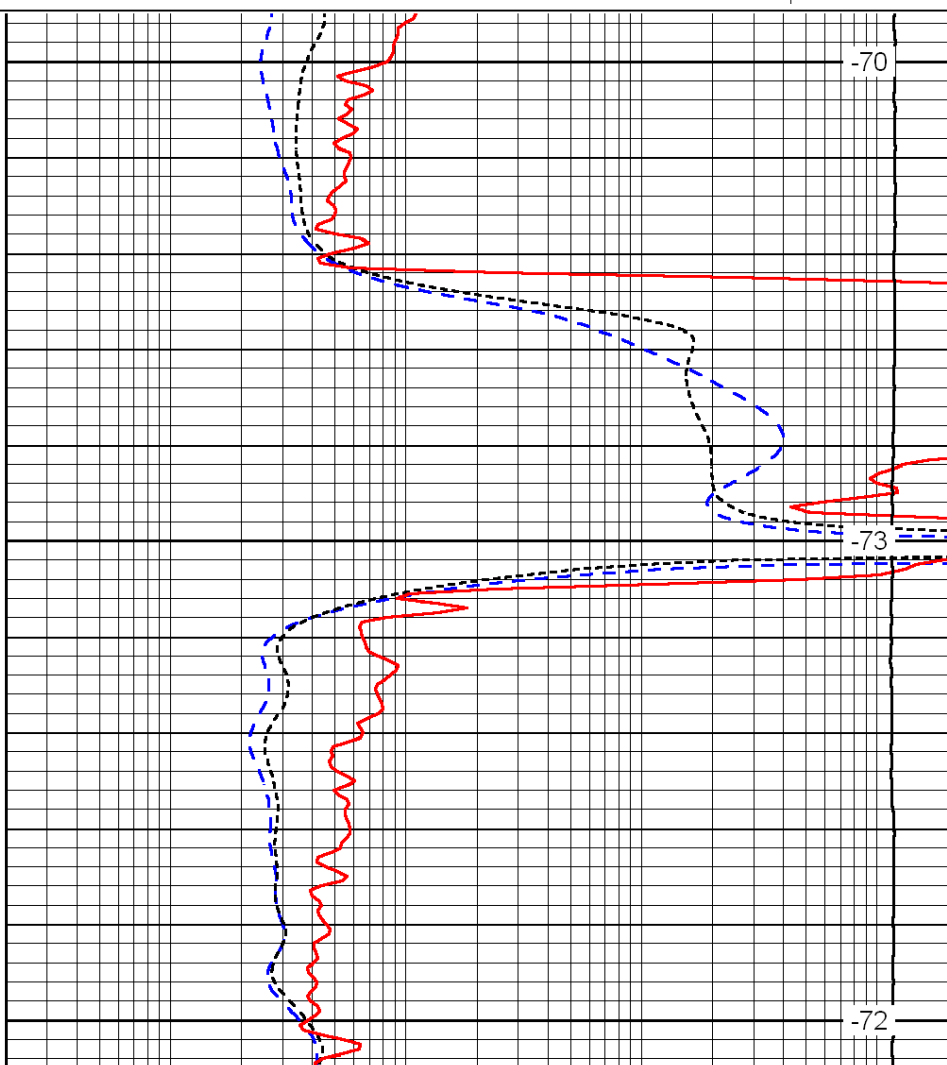
LSPD



2100

2150

2200



-70

-73

-72

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

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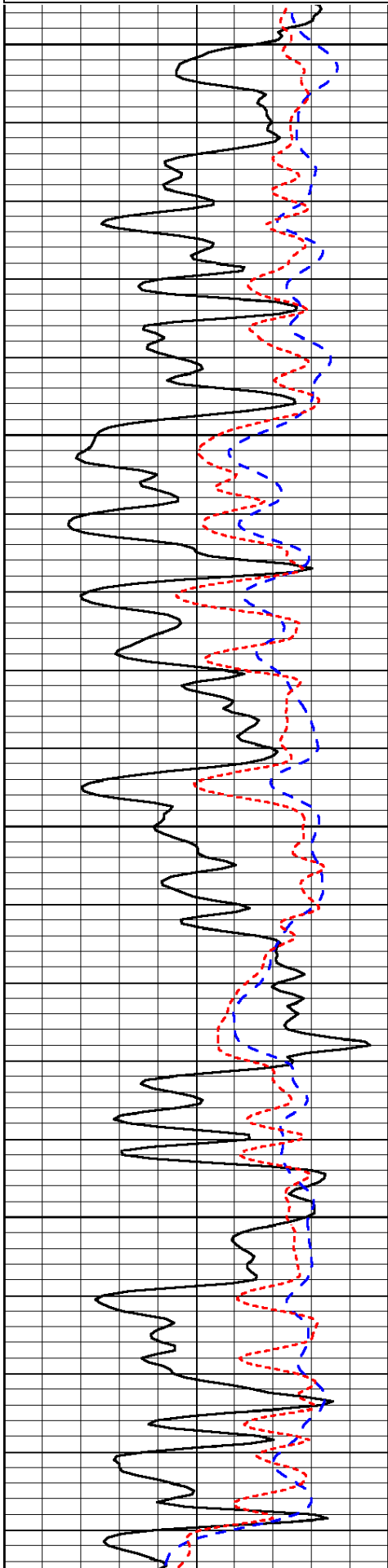
|   |           |     |
|---|-----------|-----|
| 0 | Gamma Ray | 150 |
|---|-----------|-----|

|     |                  |      |
|-----|------------------|------|
| 0.2 | Deep Resistivity | 2000 |
|-----|------------------|------|

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

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

LSPD

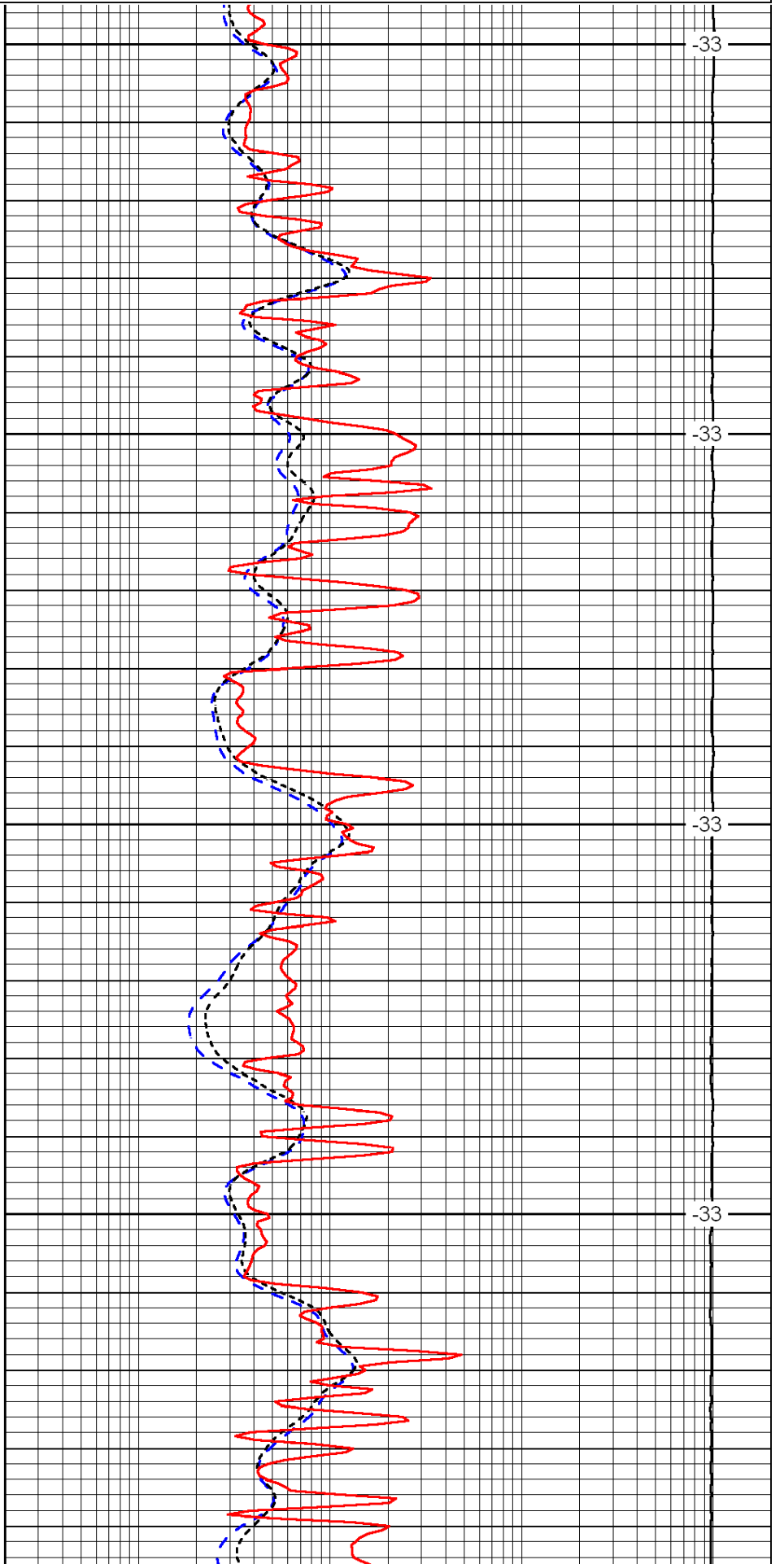


3300

3350

3400

3450

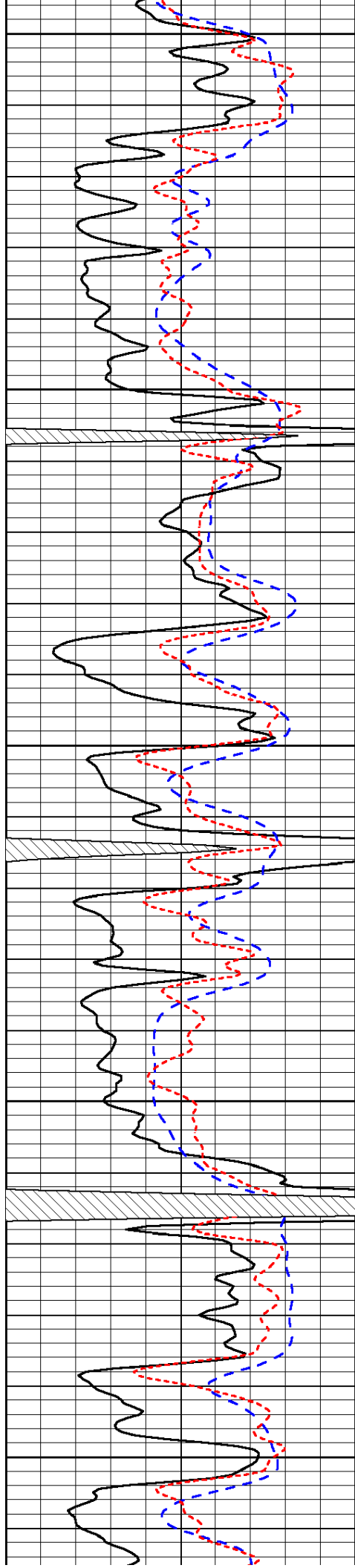


-33

-33

-33

-33



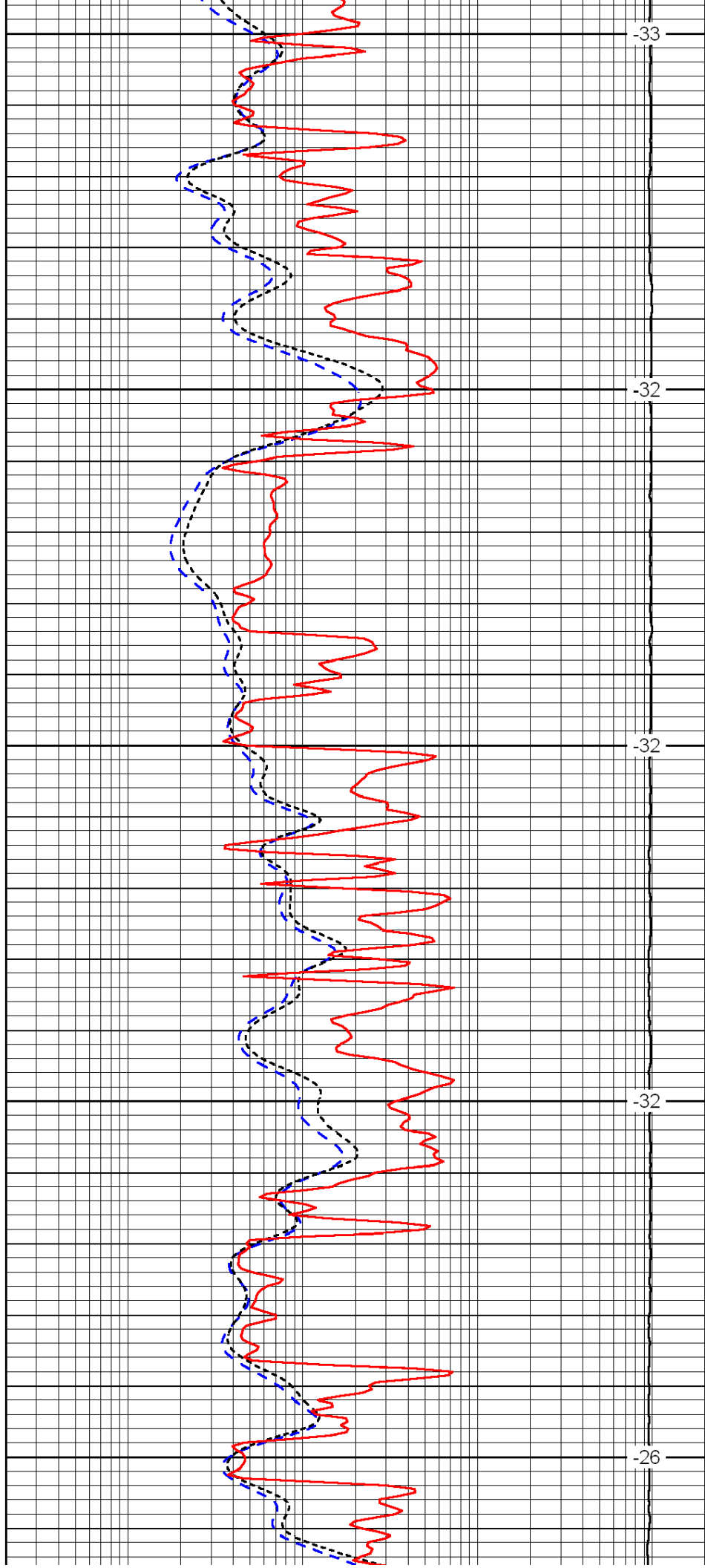
3500

3550

3600

3650

3700



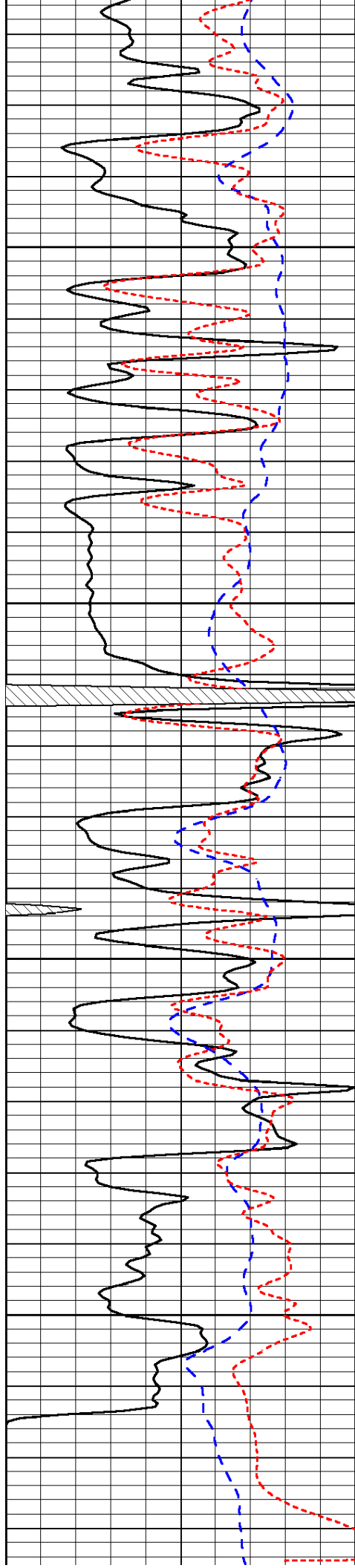
-33

-32

-32

-32

-26

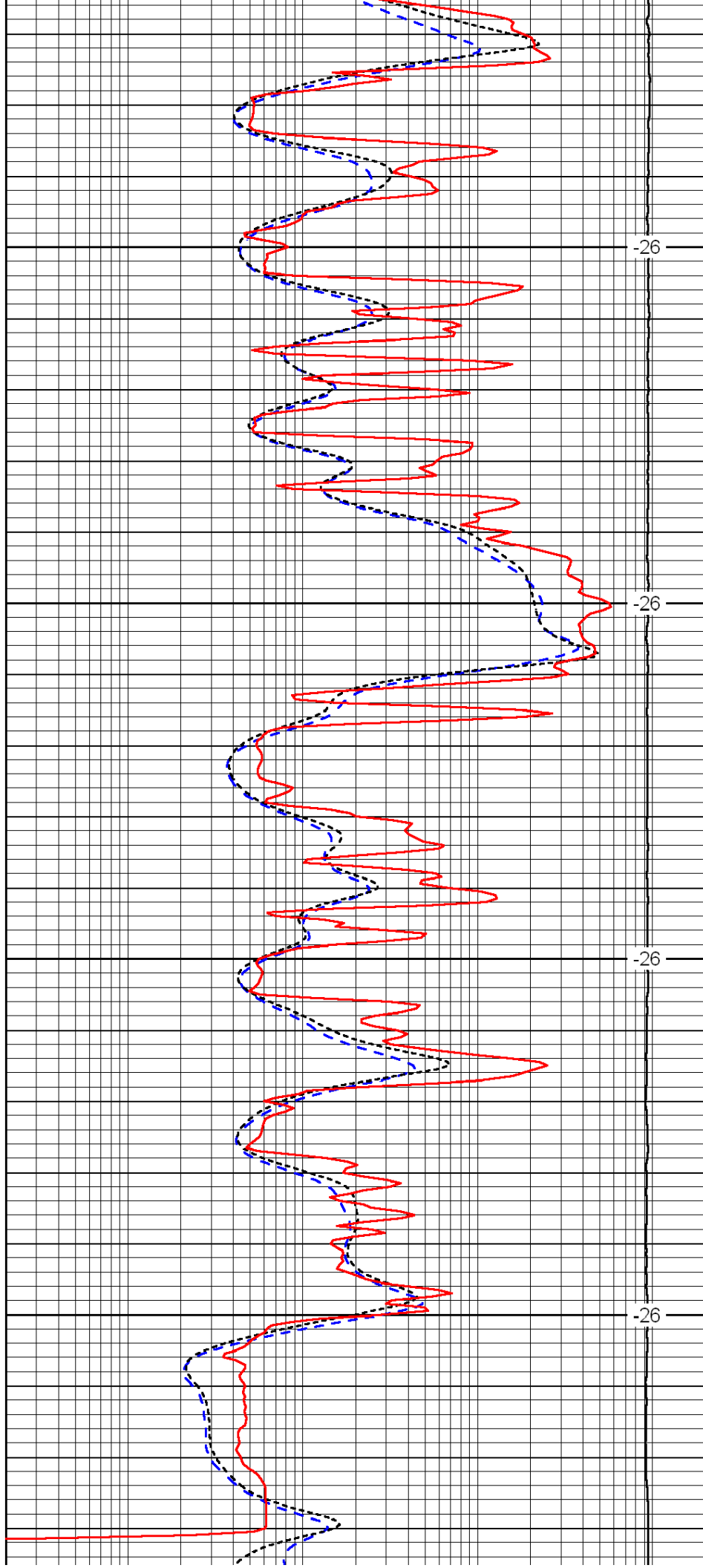


3750

3800

3850

3900

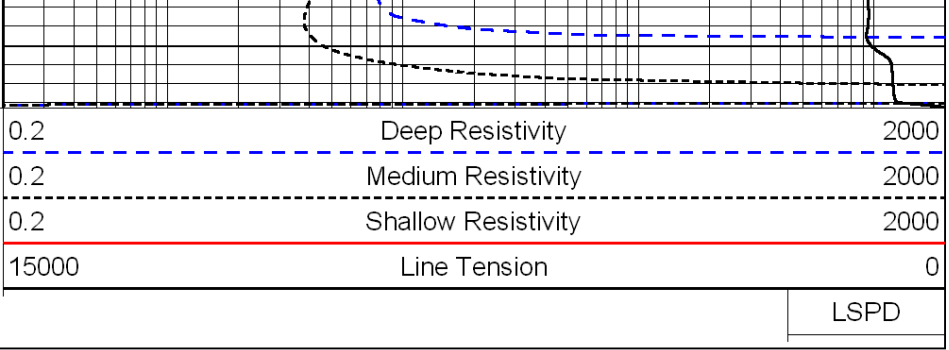
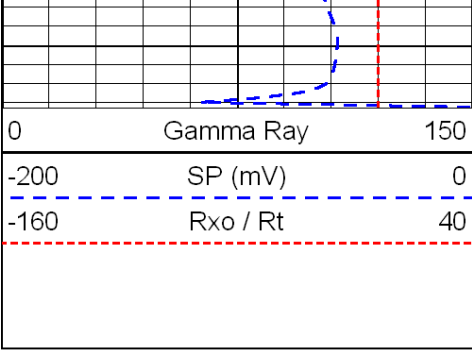


-26

-26

-26

-26



LSPD