



Pioneer Energy Services

Dual Induction Log

15-051-26,387-00-00

API No.

Company **TDI, Inc.**

Well **Moore Pond No.1**

Field

County **Ellis**

State

Kansas

Location

1660' FSL & 980' FWL

Sec: **8**

Twp: **15S**

Rge: **19W**

Elevation

Permanent Datum **Ground Level**

10 Ft. Above Perm. Datum

Elevation 1991

Log Measured From **Kelly Bushing**

10 Ft. Above Perm. Datum

K.B. 2001

Drilling Measured From **Kelly Bushing**

10 Ft. Above Perm. Datum

D.F. 1991

Date **10/3/2012**

Run Number **One**

Depth Driller **3700**

Depth Logger **3700**

Bottom Logged Interval **3699**

Top Log Interval **1250**

Casing Driller **8.625 @ 1254**

Casing Logger **1249**

Bit Size **7.875**

Type Fluid in Hole **Chemical**

Salinity,ppm CL **4.000**

Density / Viscosity **9.3 54**

pH / Fluid Loss **10.5 8.0**

Source of Sample **Flowline**

Rm @ Meas. Temp **.8 @ 77**

Rmf @ Meas. Temp **.6 @ 77**

Rmc @ Meas. Temp **1.08 @ 77**

Source of Rmf / Rmc **Charts**

Rm @ BHT **.55 @ 113**

Operating Rig Time **3 Hours**

Max Rec. Temp. F **113**

Equipment Number **17**

Location **Hays**

Recorded By **C. Desaire**

Witnessed By **Tom Denning**

Herb Deines

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Comments

Thank you for using Pioneer Energy Services
www.pioneerenergy.com
 785 625 3858

Antonino KS, 3 W, 2 S,
 3/4 W, N Into

Database File: c:\warrior\data\tdi_moore pond #1\tdihd.db
 Dataset Pathname: dil\tdistk
 Presentation Format: dil2in
 Dataset Creation: Wed Oct 03 14:22:04 2012
 Charted by: Depth in Feet scaled 1:600

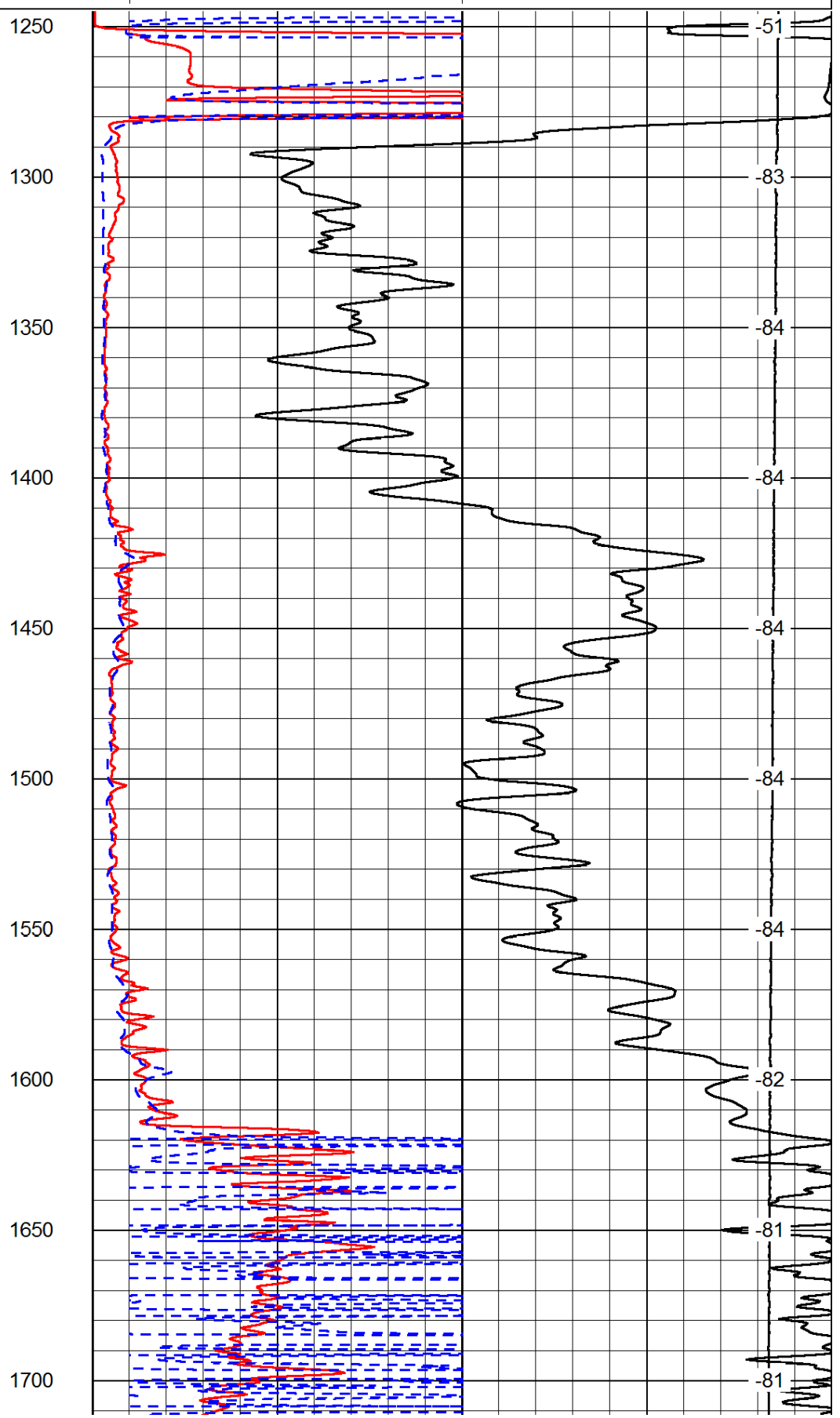
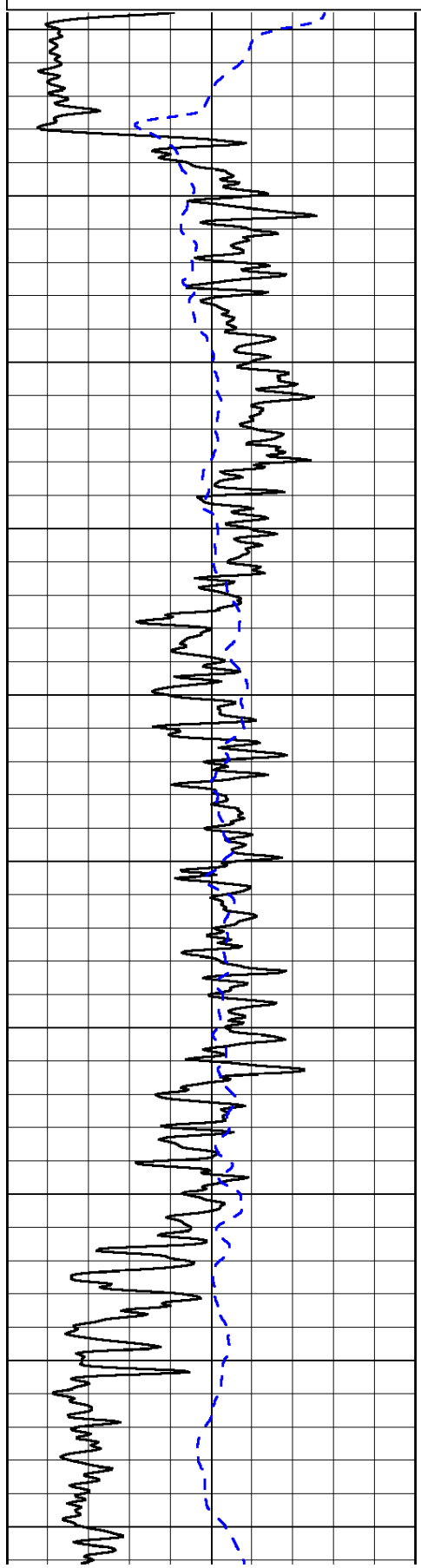
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|------|-----------|-----|
| 0 | Gamma Ray | 150 |
| -200 | SP (mV) | 0 |

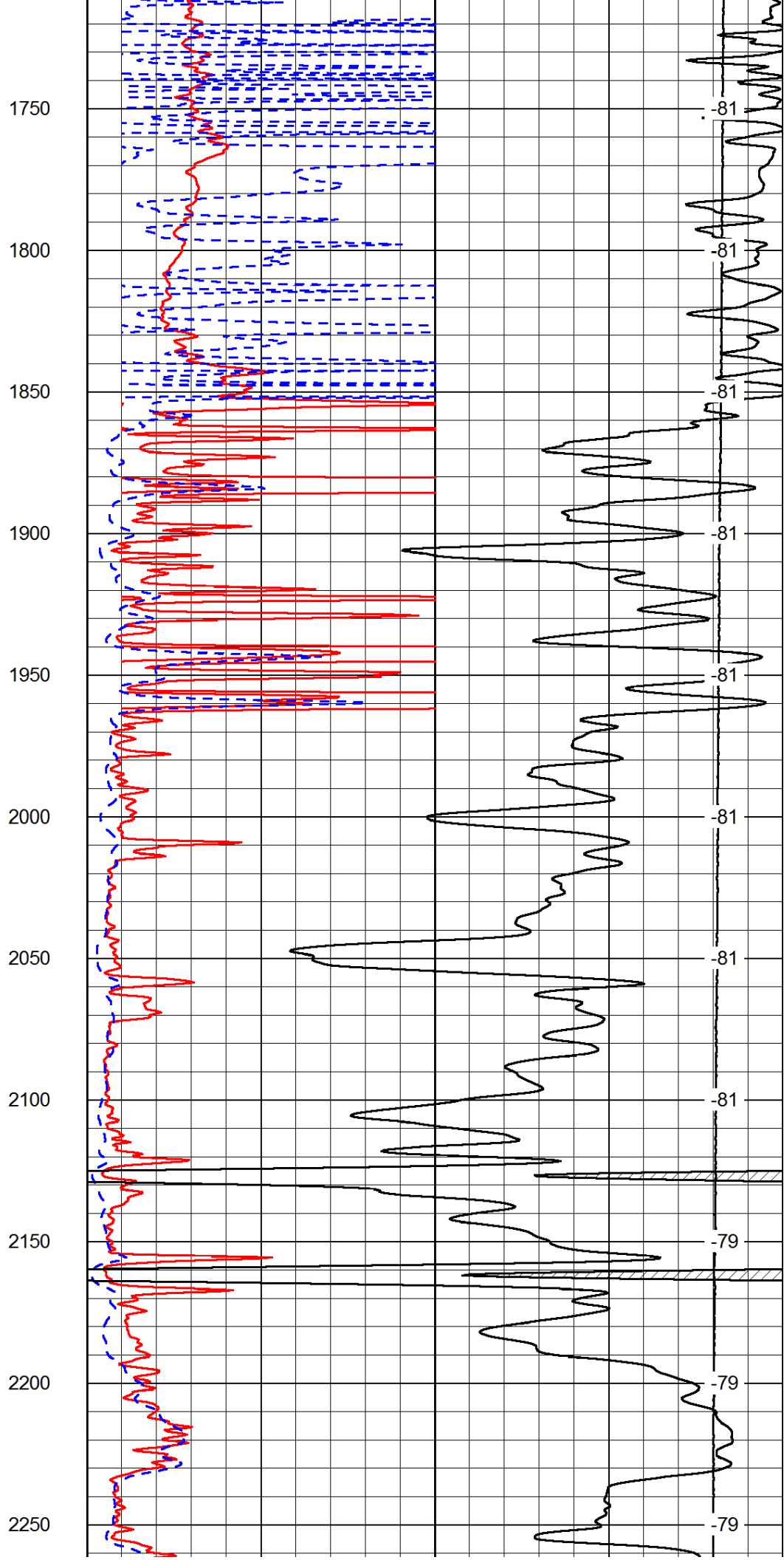
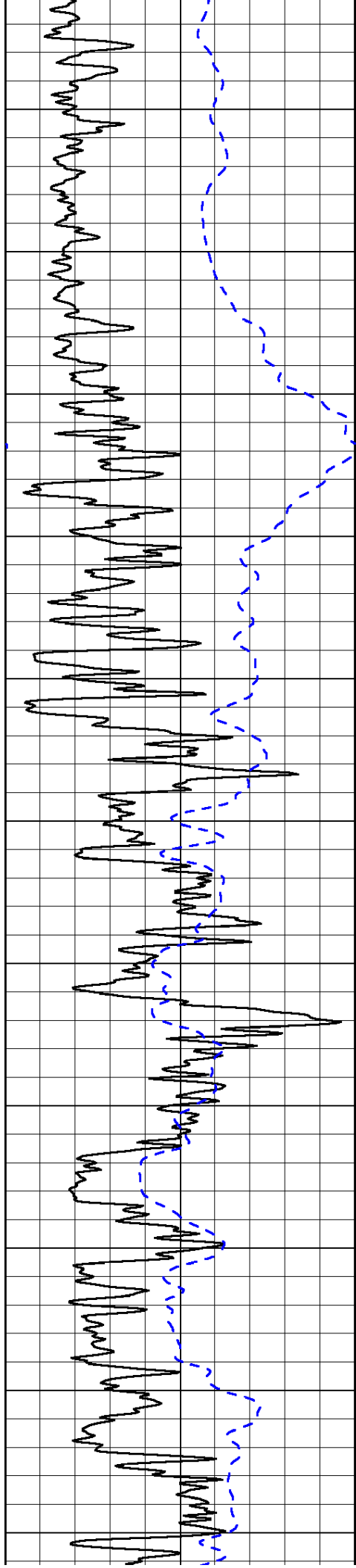
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|---|---------------------|----|
| 0 | Shallow Resistivity | 50 |
| 0 | Deep Resistivity | 50 |

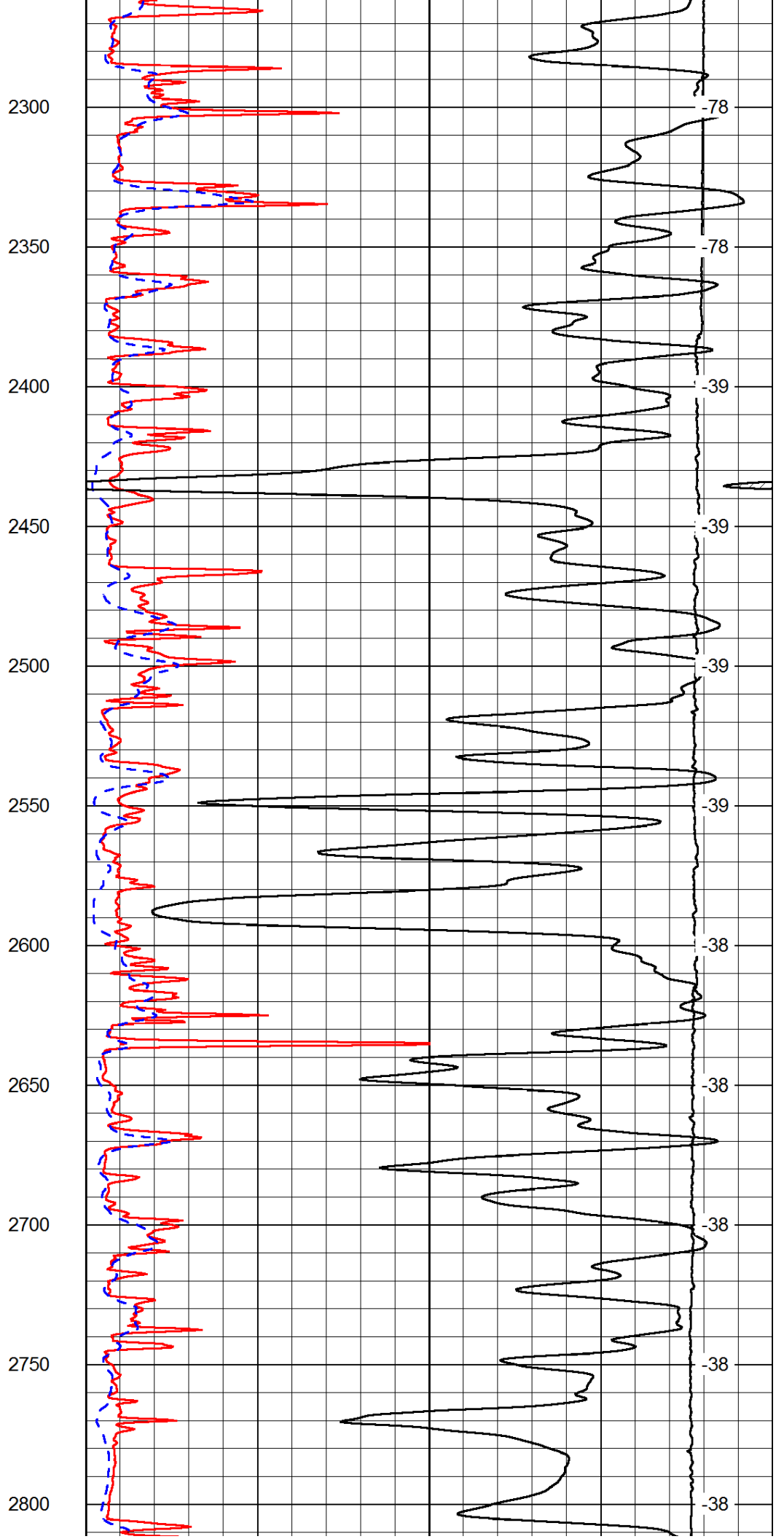
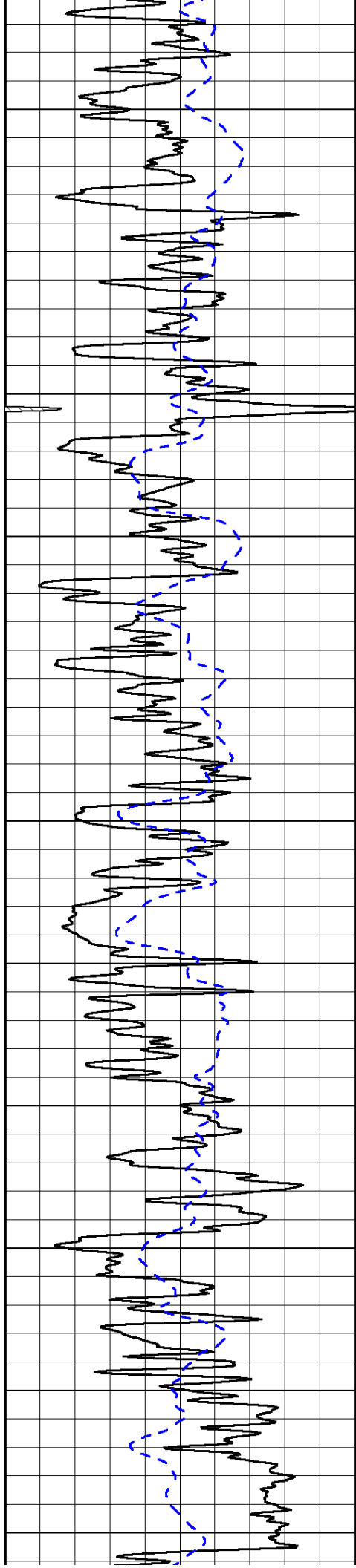
LSPD

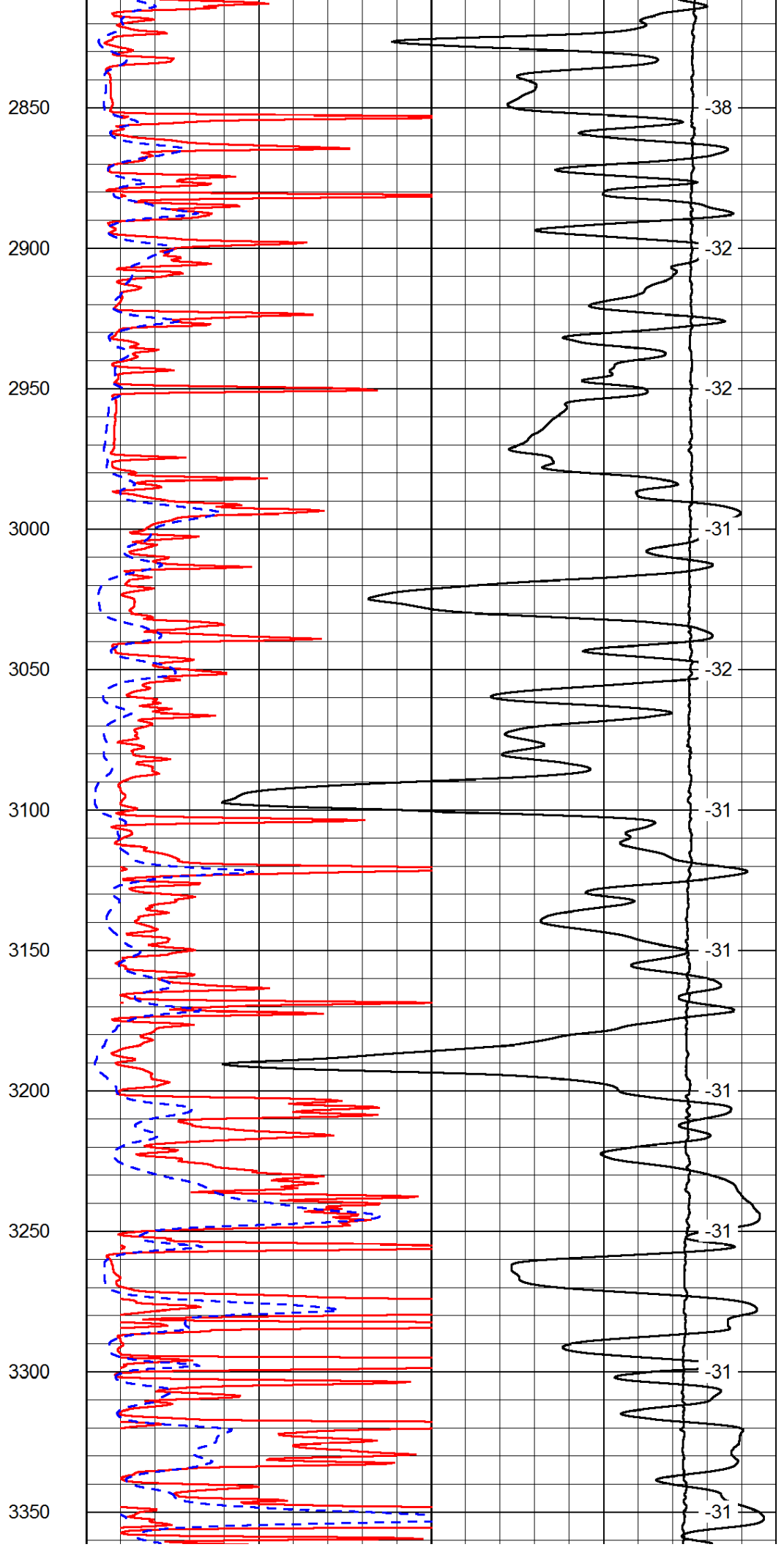
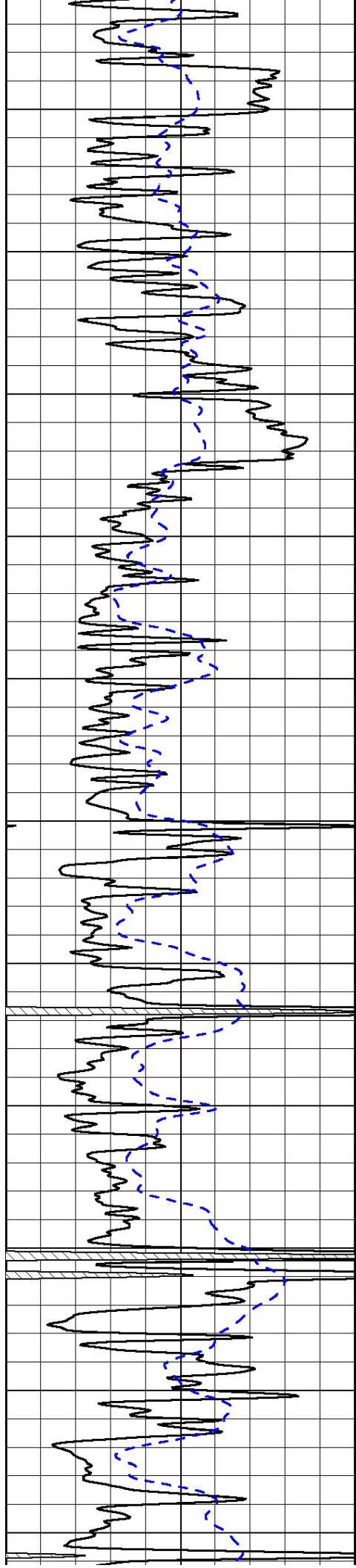
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|-------|--------------|---|
| 1000 | Conductivity | 0 |
| 15000 | Line Tension | 0 |

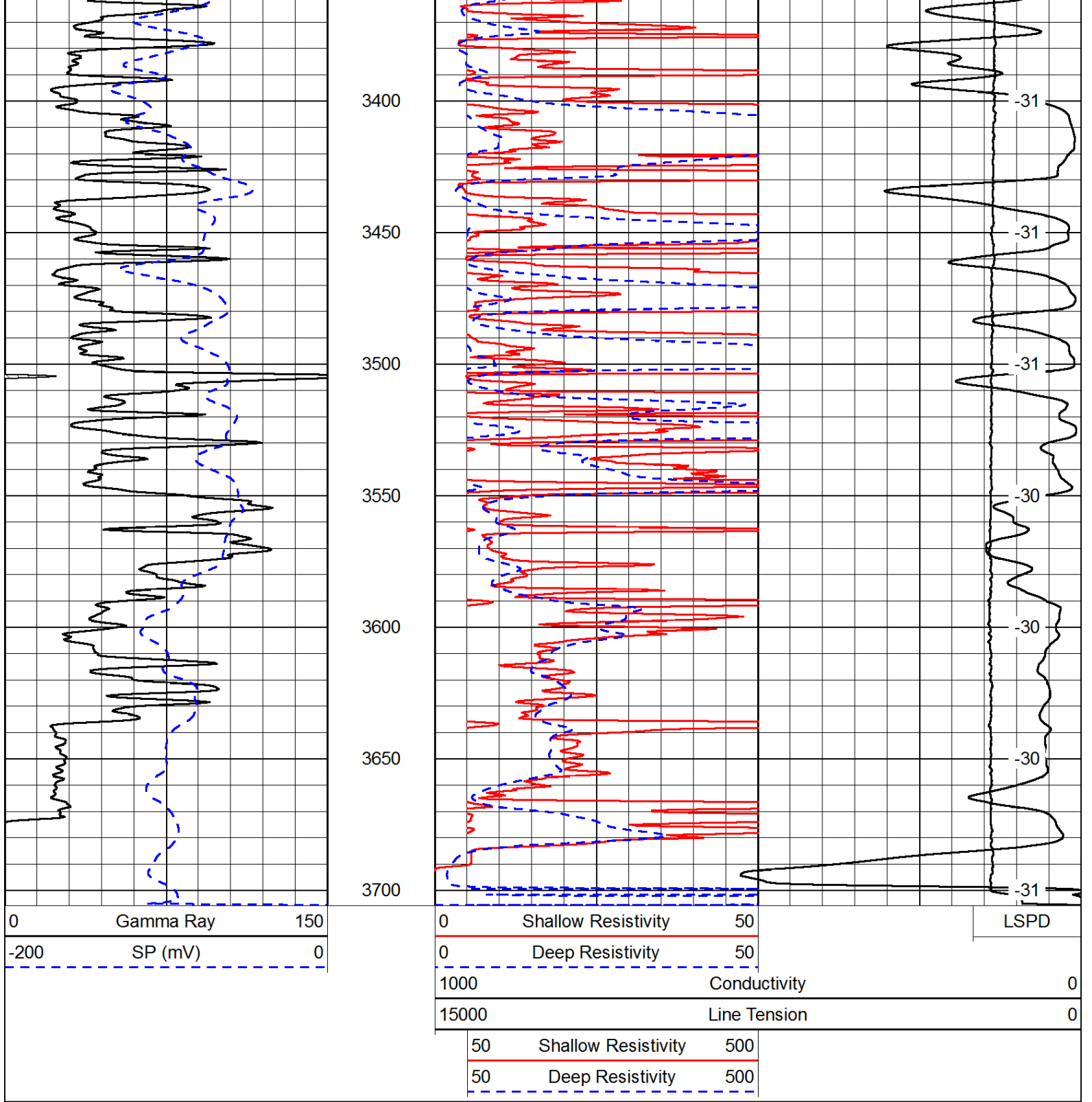
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| 50 | Shallow Resistivity | 500 |
| 50 | Deep Resistivity | 500 |



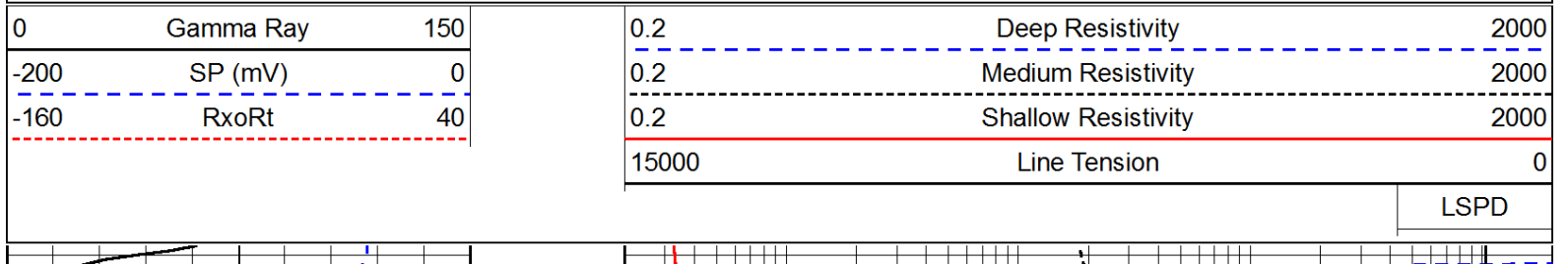


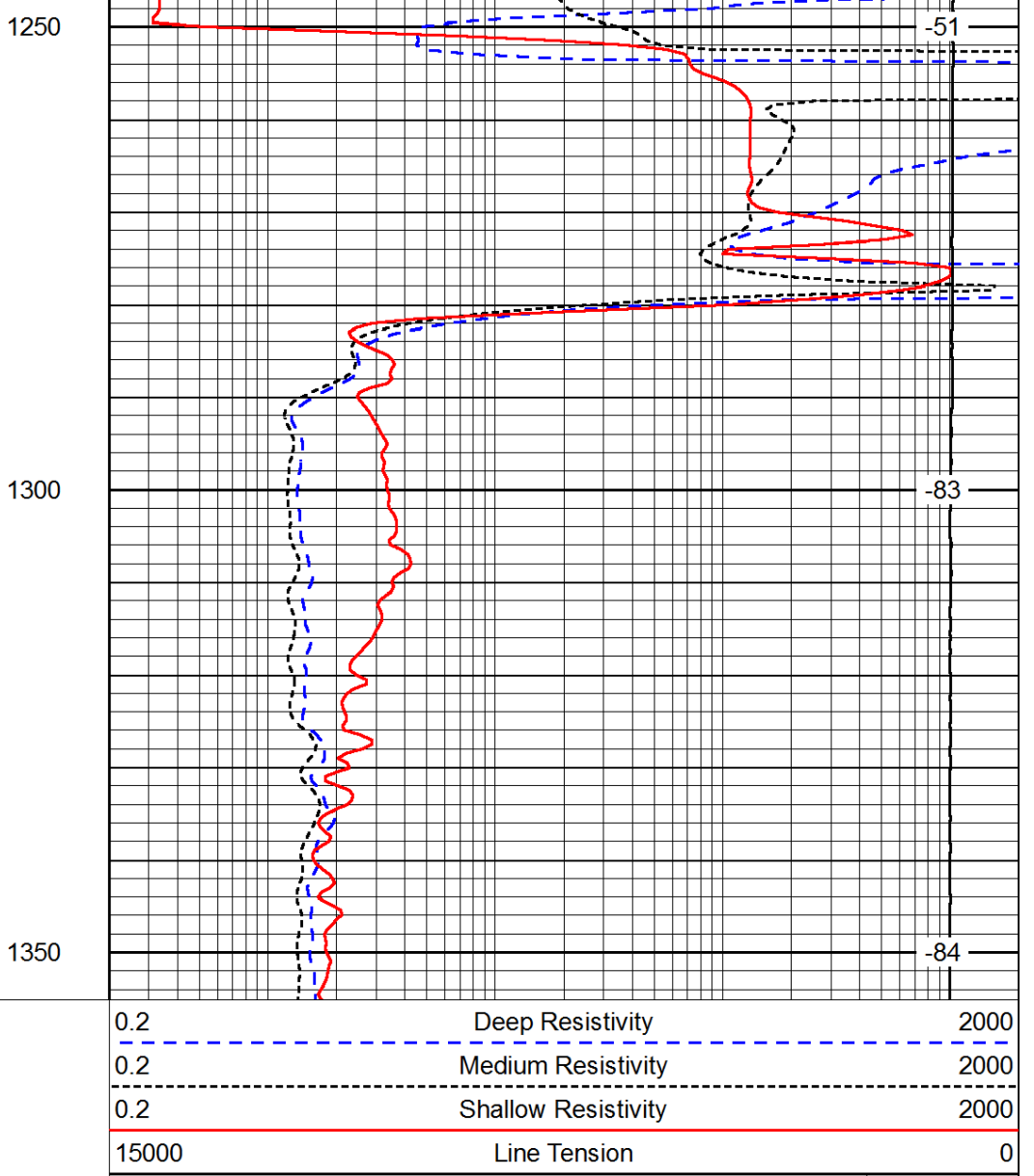
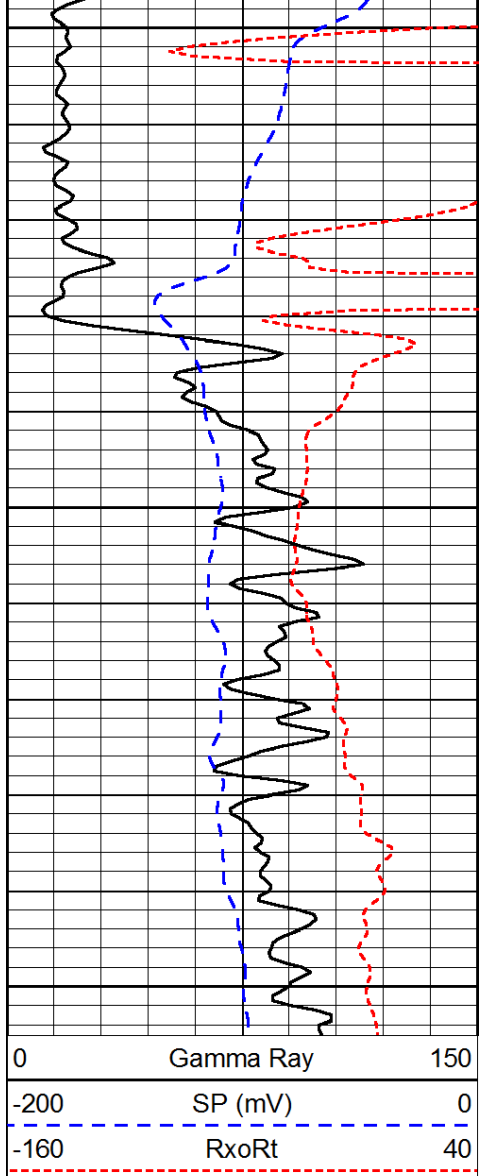






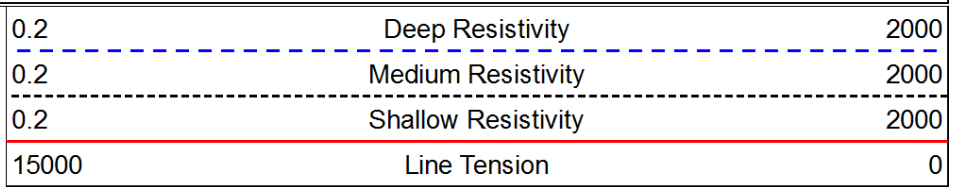
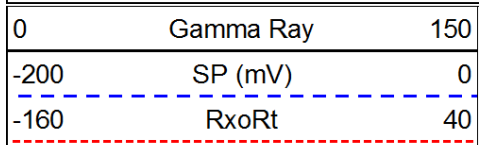
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 Charted by: Depth in Feet scaled 1:240



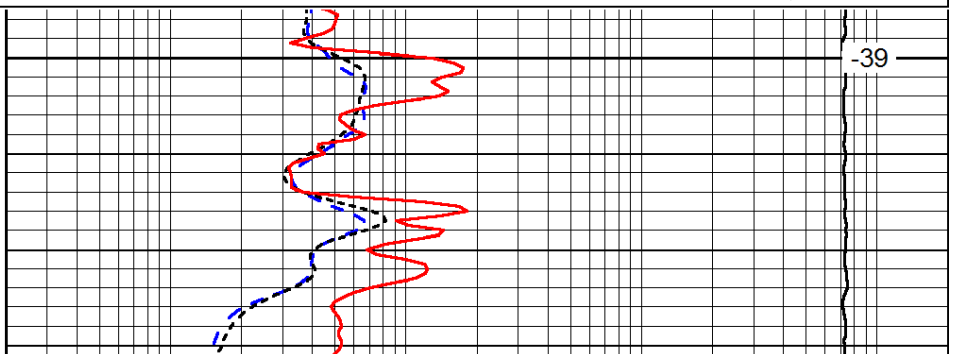
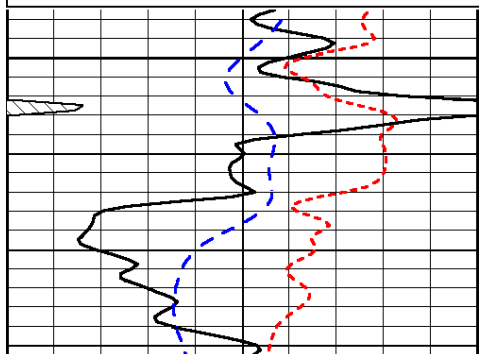


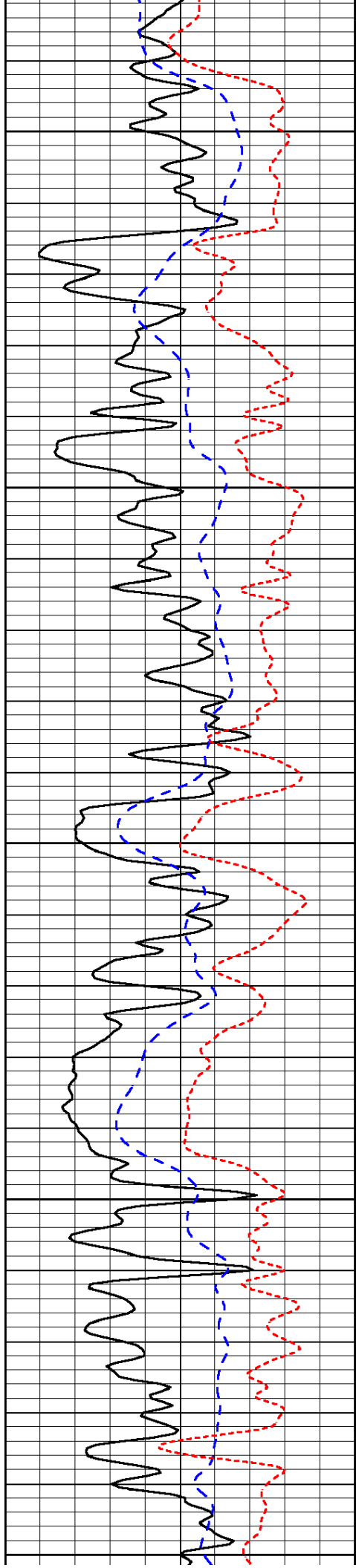
LSPD

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 Presentation Format: dil
 Dataset Creation: Wed Oct 03 14:22:04 2012
 Charted by: Depth in Feet scaled 1:240



LSPD





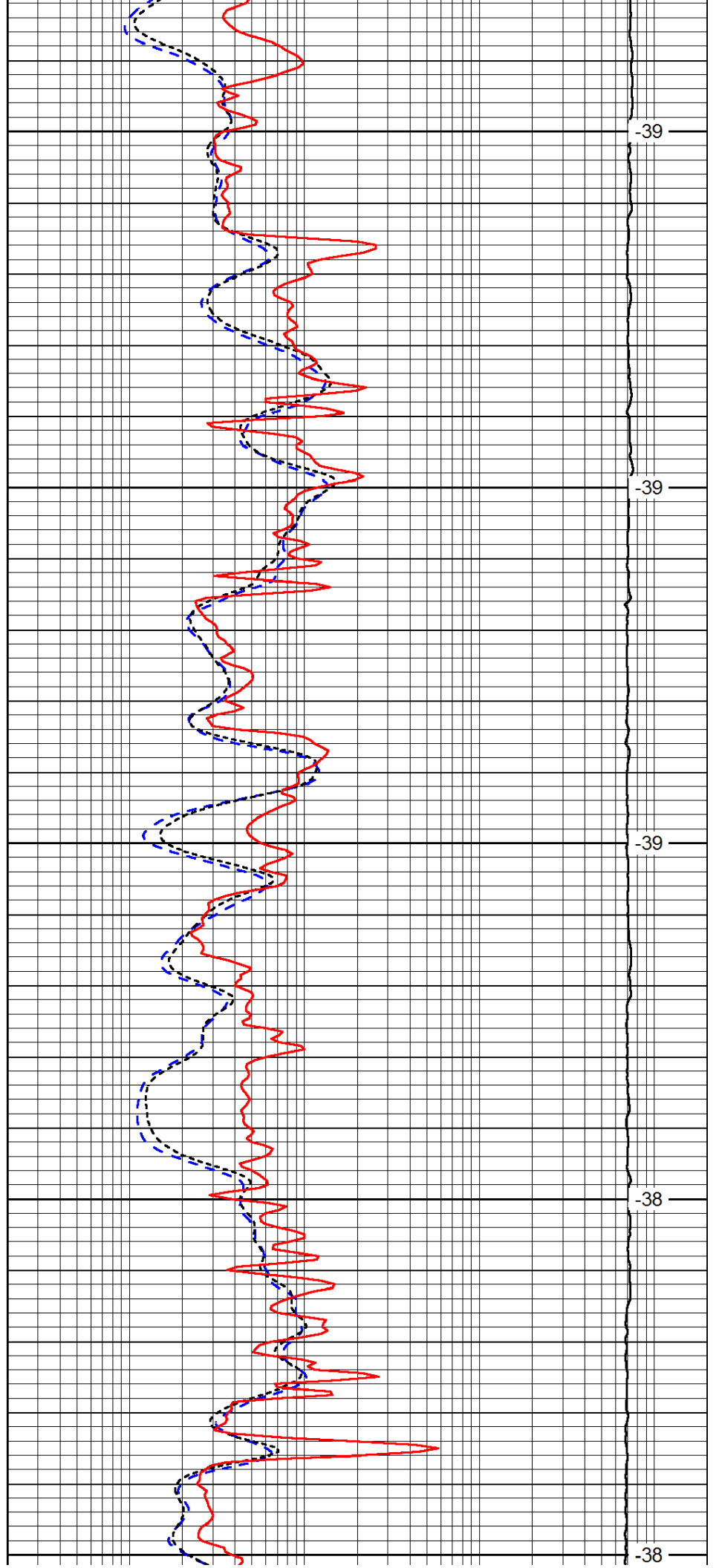
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2500

2550

2600

2650



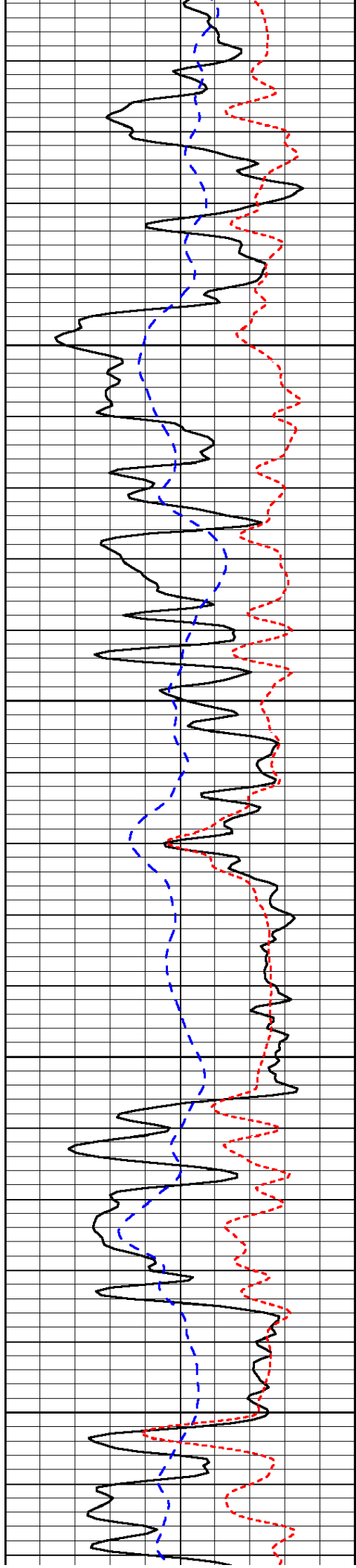
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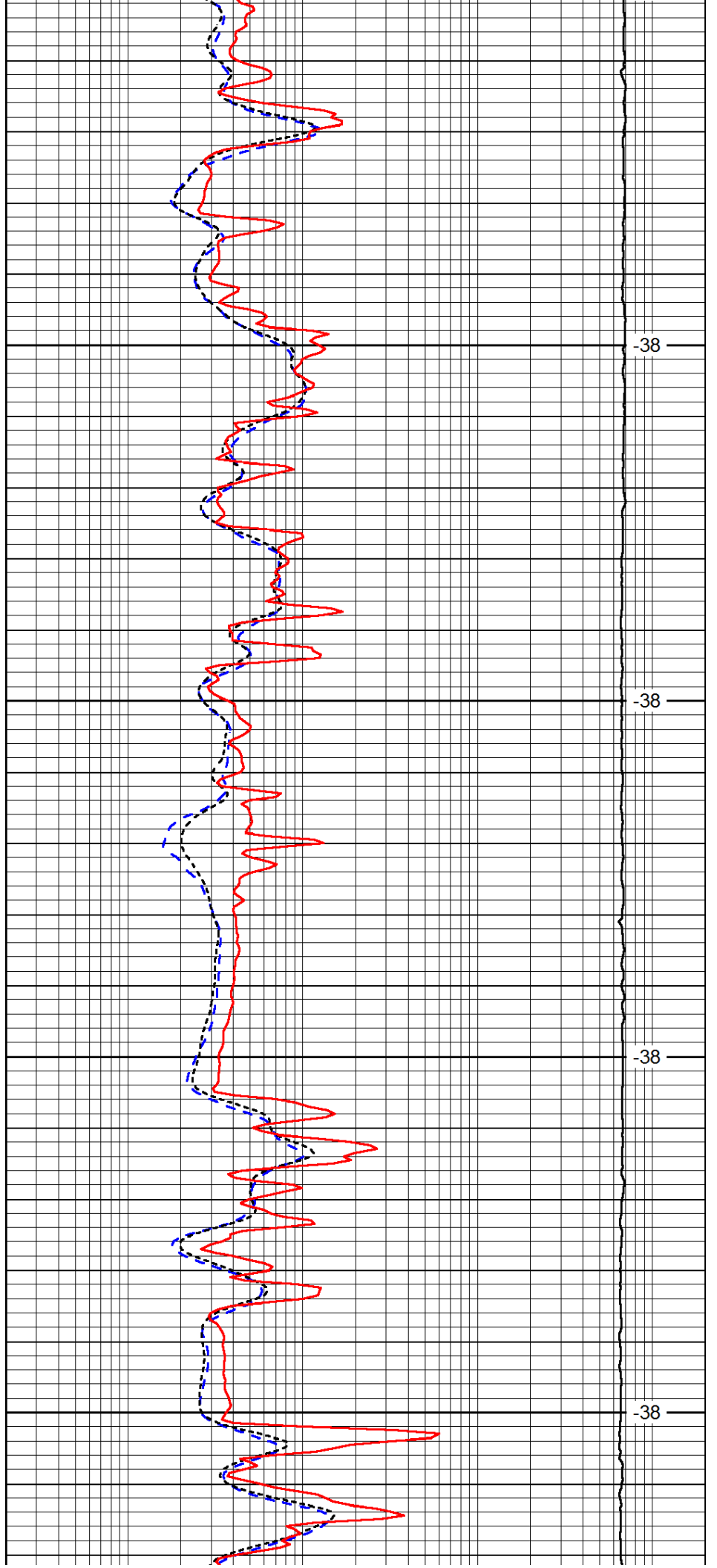


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2750

2800

2850

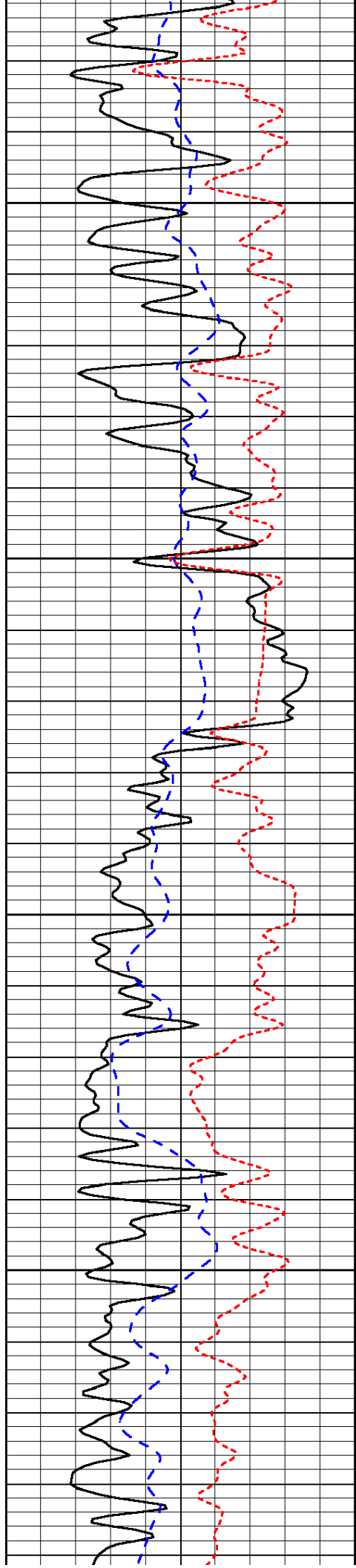


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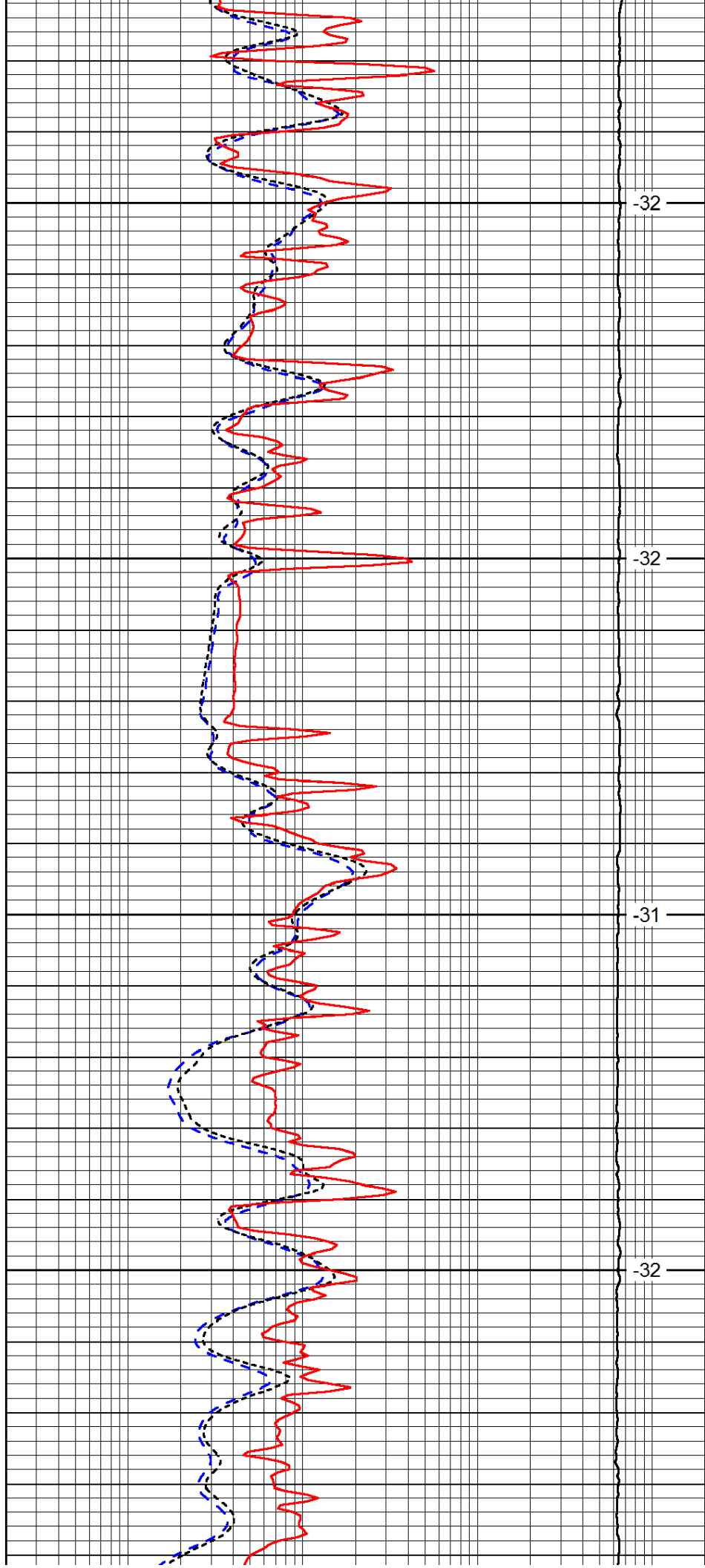


2900

2950

3000

3050

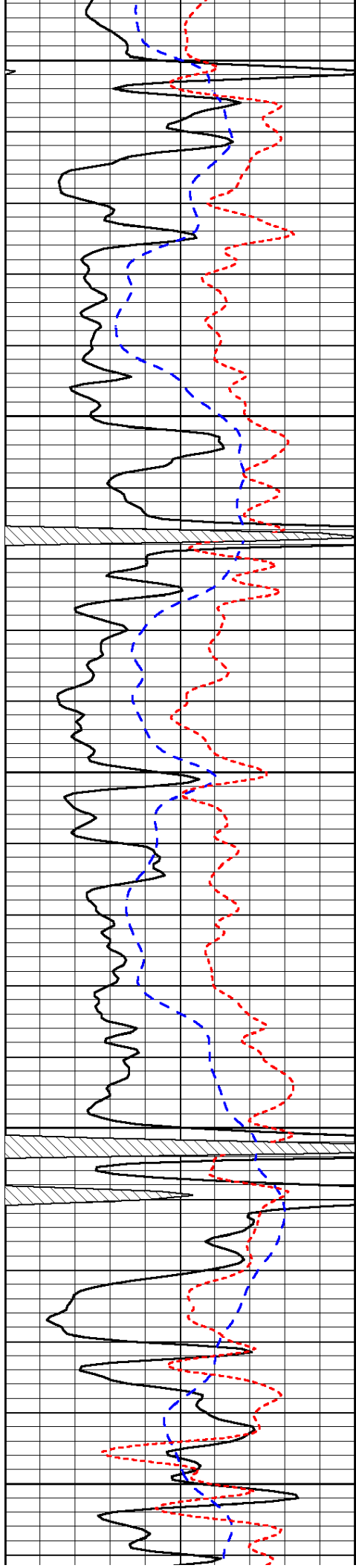


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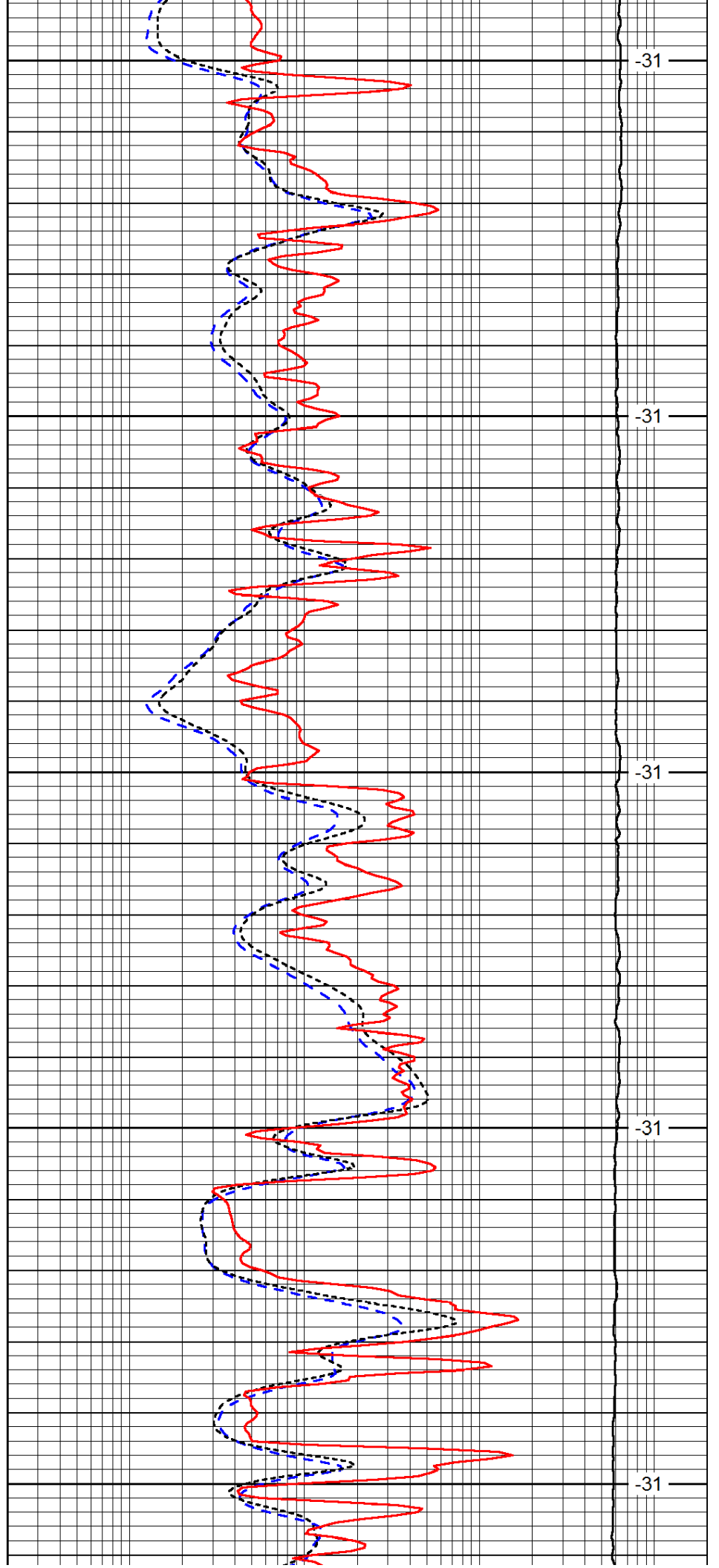
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3150

3200

3250

3300



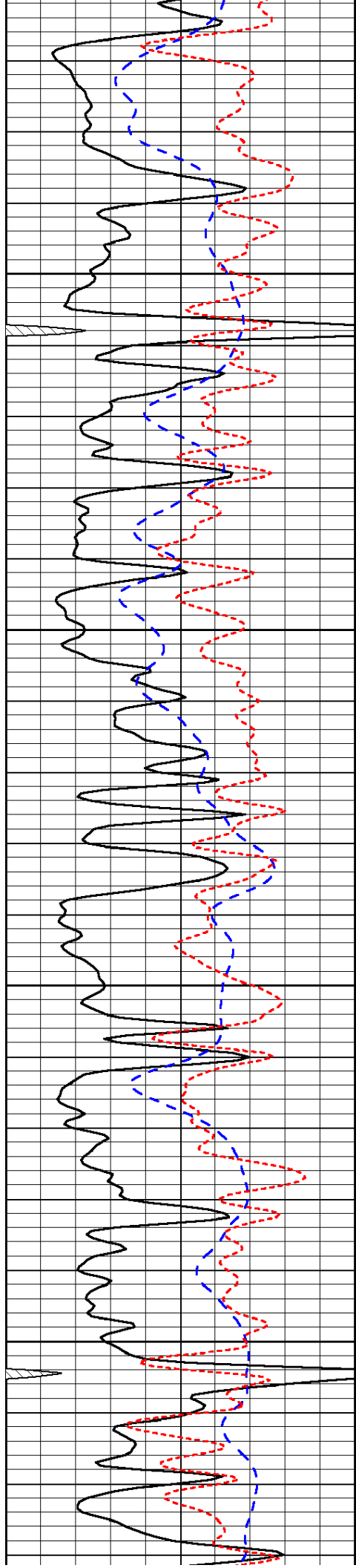
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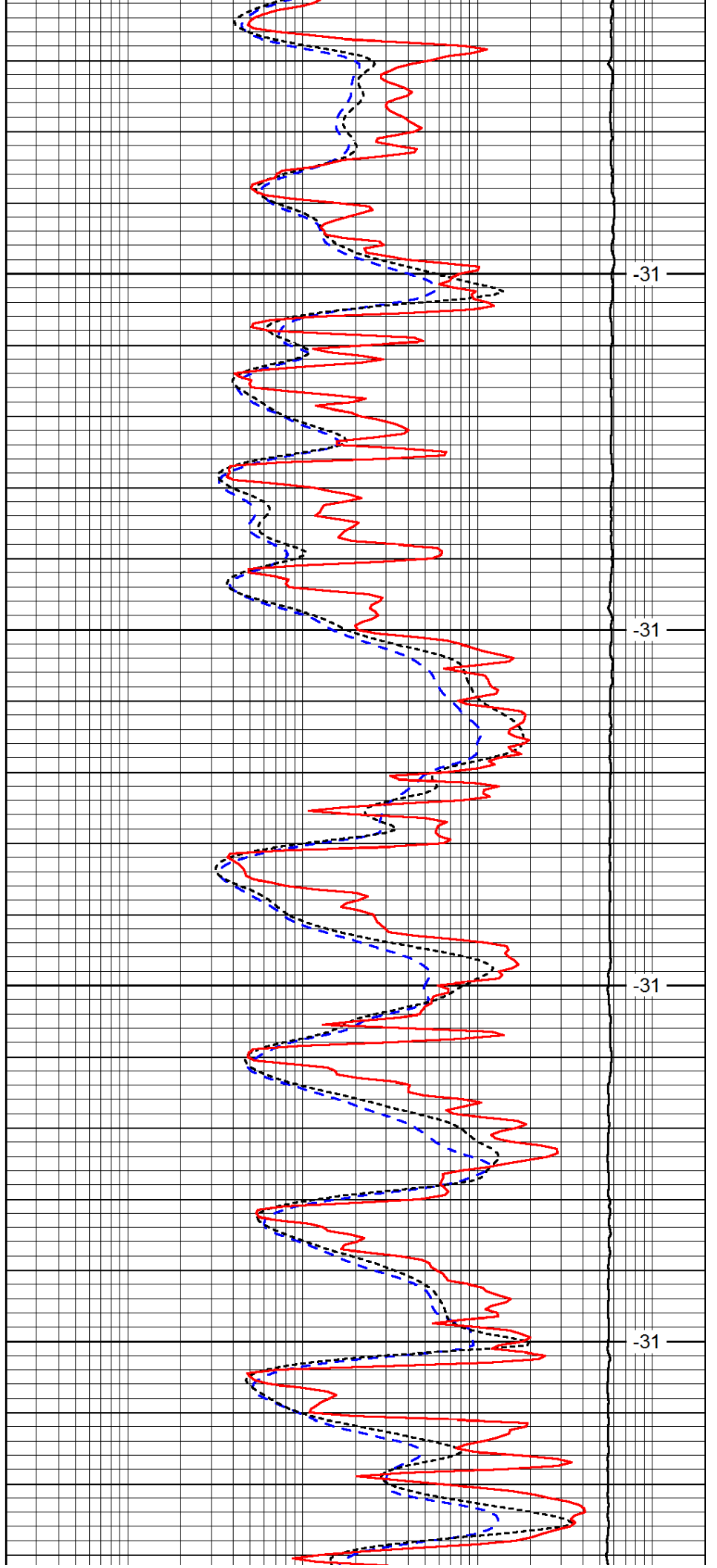


3350

3400

3450

3500

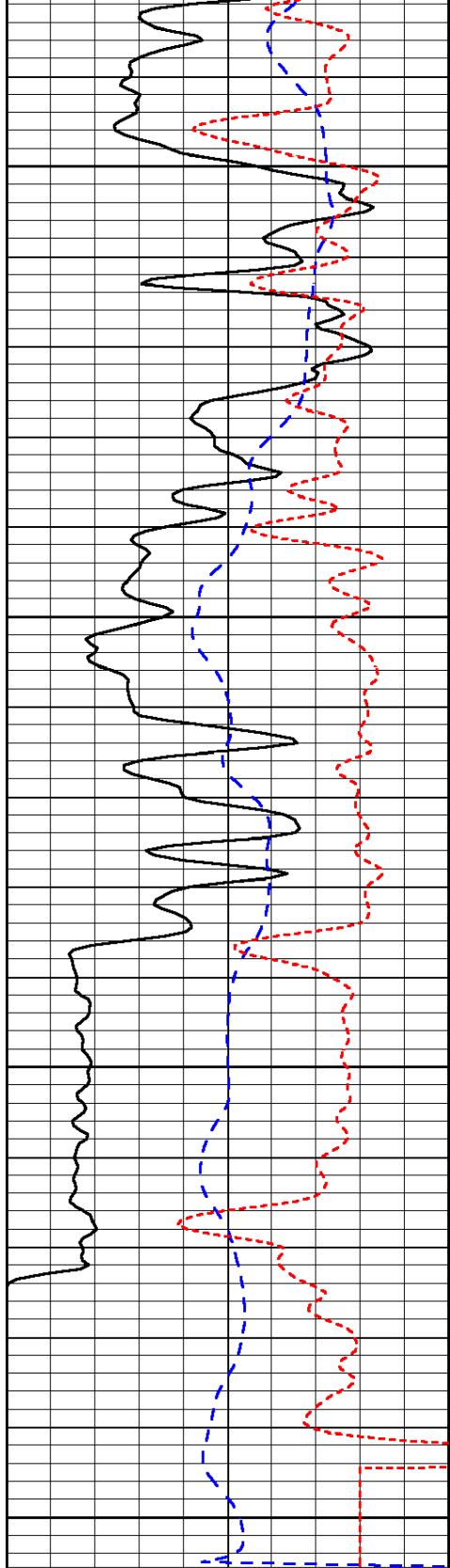


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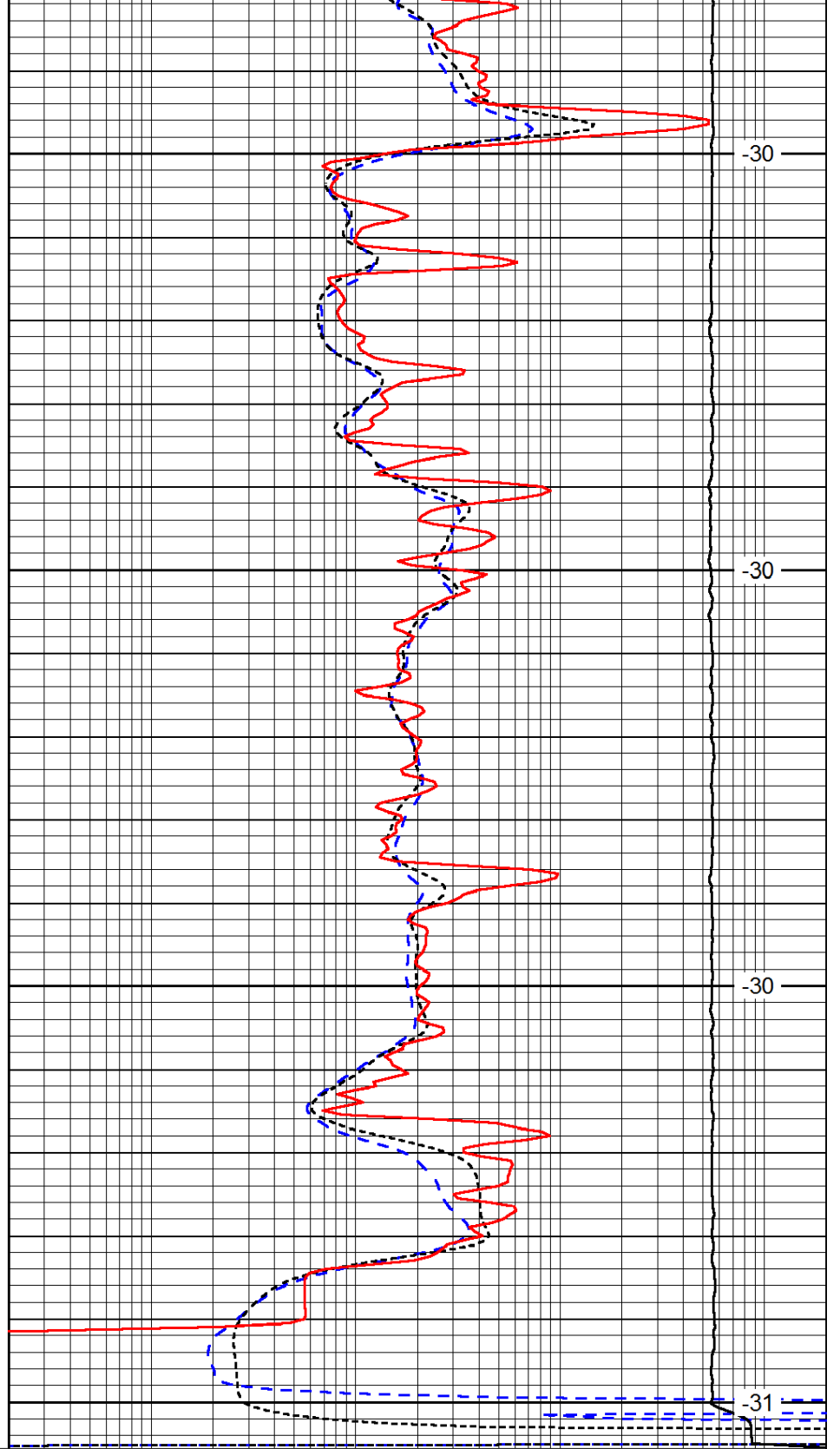
-31

-31



3550
3600
3650
3700

| | | |
|------|-----------|-----|
| 0 | Gamma Ray | 150 |
| -200 | SP (mV) | 0 |
| -160 | RxoRt | 40 |



-30
-30
-30
-31

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

LSPD



Pioneer Energy Services

Dual Compensated Porosity Log

15-051-26,387-00-00

API No.

Company **TDI, Inc.**

Well **Moore Pond No.1**

Field

County **Eljis**

State **Kansas**

Location **1660' FSL & 980' FWL**

Sec: **8** Twp: **15S** Rge: **19W**

Other Services
DIL
MEL

Permanent Datum Ground Level Elevation 1991
Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation
K.B. 2001
D.F.
G.L. 1991

Date 10/3/2012

Run Number One

Type Log CNL / CDL

Depth Driller 3700

Depth Logger 3700

Bottom Logged Interval 3679

Top Logged Interval 2400

Type Fluid In Hole Chemical

Salinity, PPM CL 4,000

Density 9.3

Level Full

Max. Rec. Temp. F 113

Operating Rig Time 3 Hours

Equipment -- Location 17 Hays

Recorded By C. Desaire

Witnessed By Tom Denning

Borehole Record

Casing Record

| Run No. | Bit | From | To | Size | Wgt. | From | To |
|---------|-------|------|------|-------|------|------|------|
| 1 | 12.25 | 00 | 1254 | 8.625 | 24# | 00 | 1254 |
| 2 | 7.875 | 1254 | 3700 | | | | |
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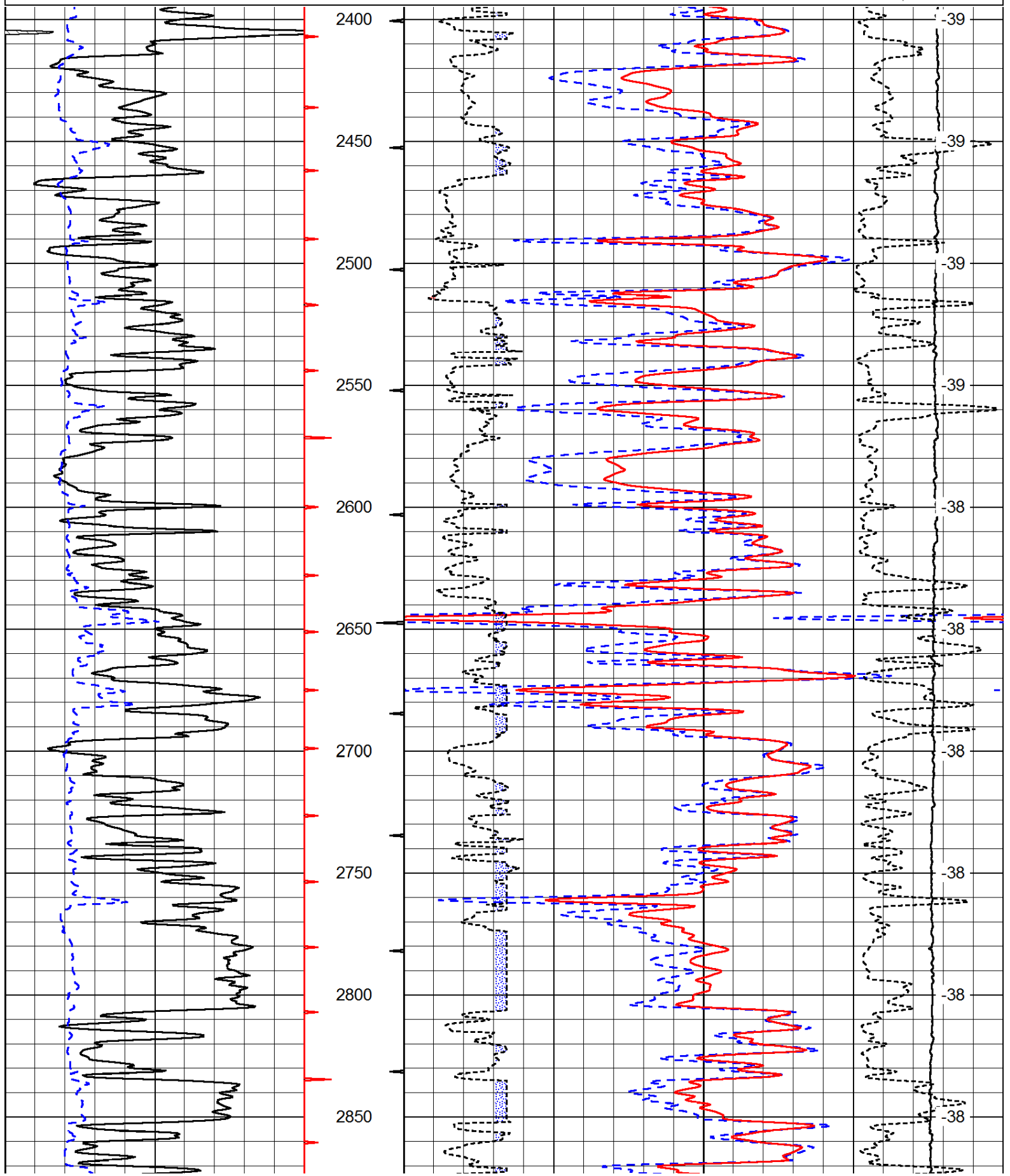
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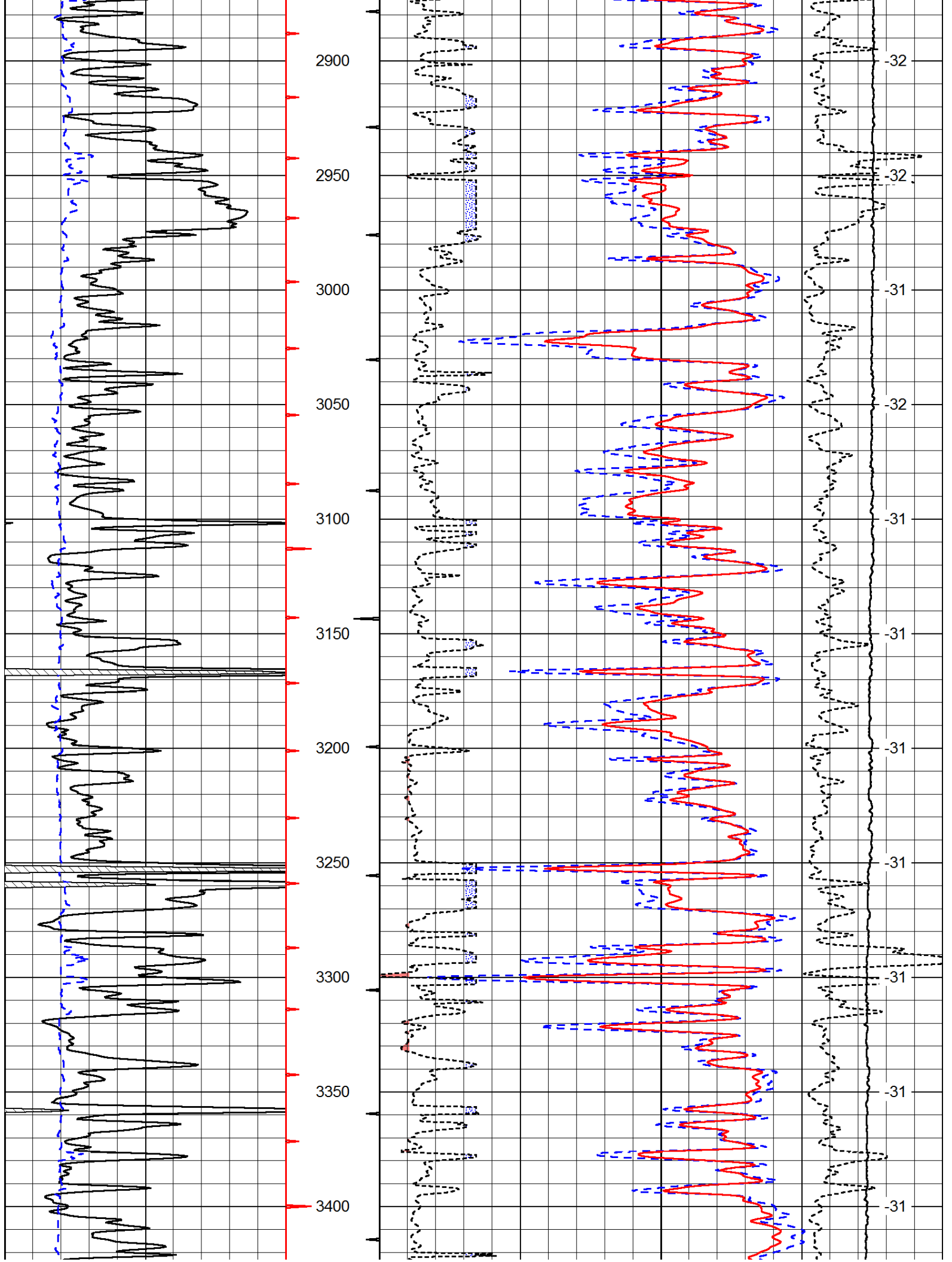
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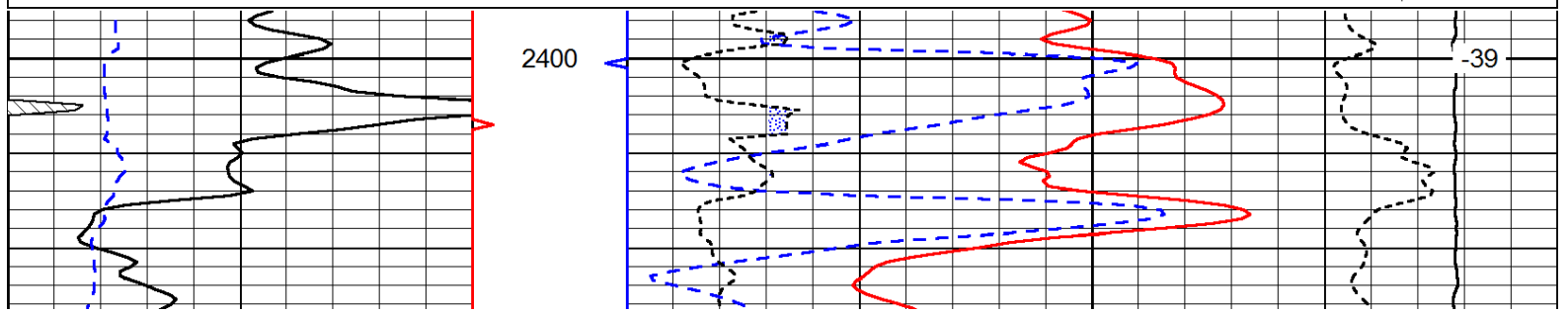
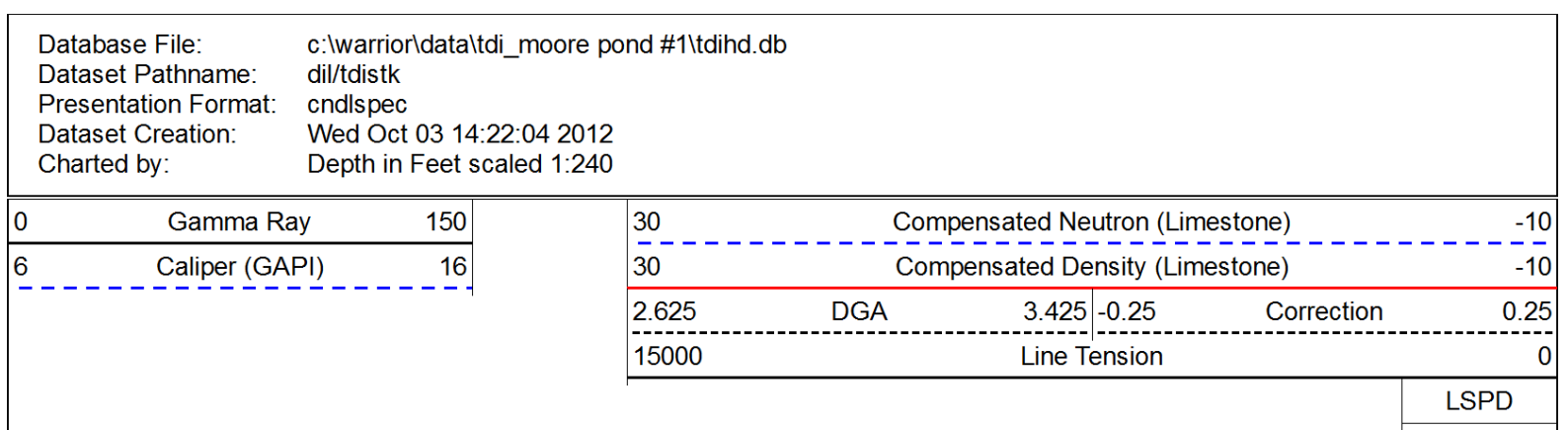
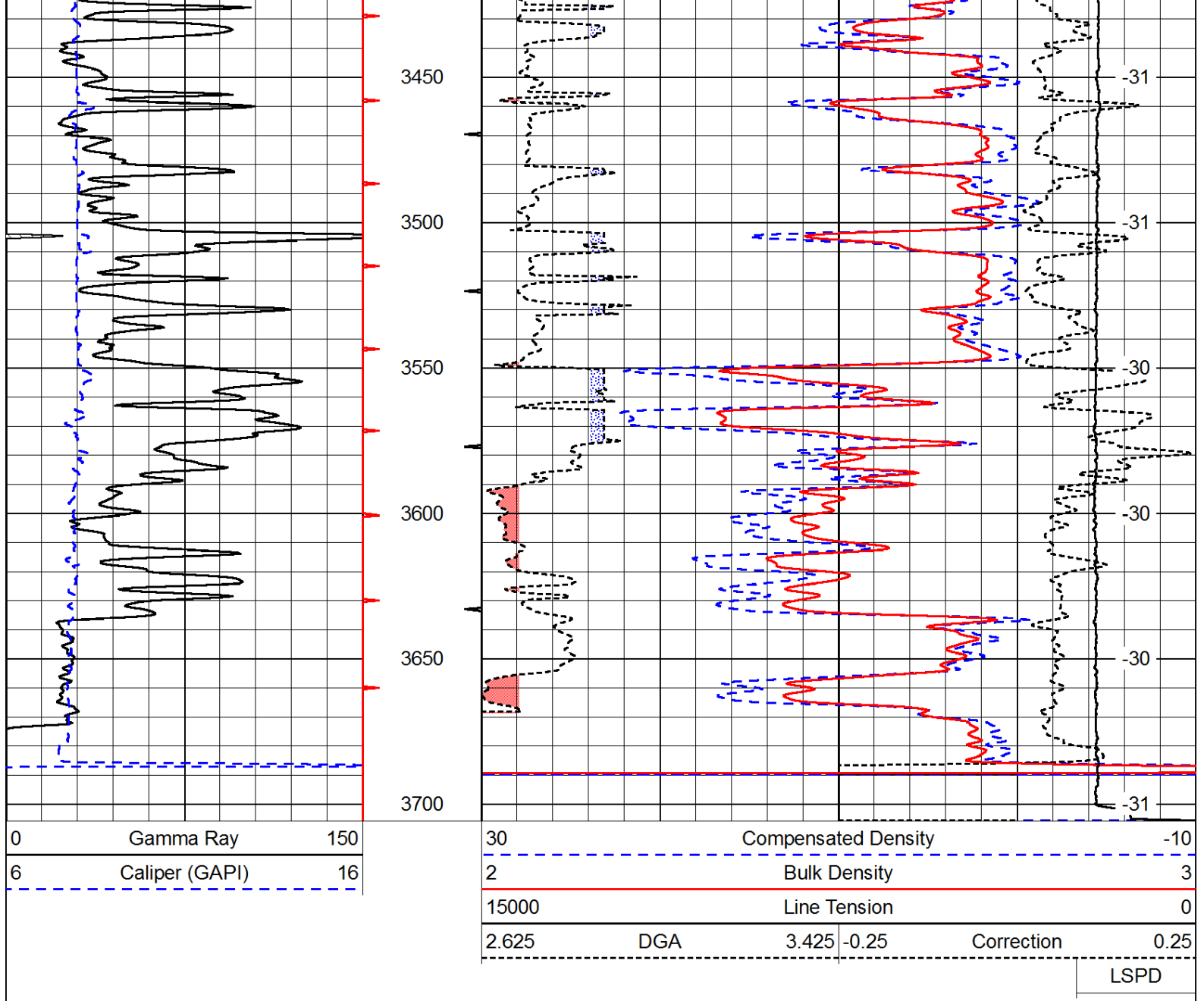
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 3/4 W, N Into

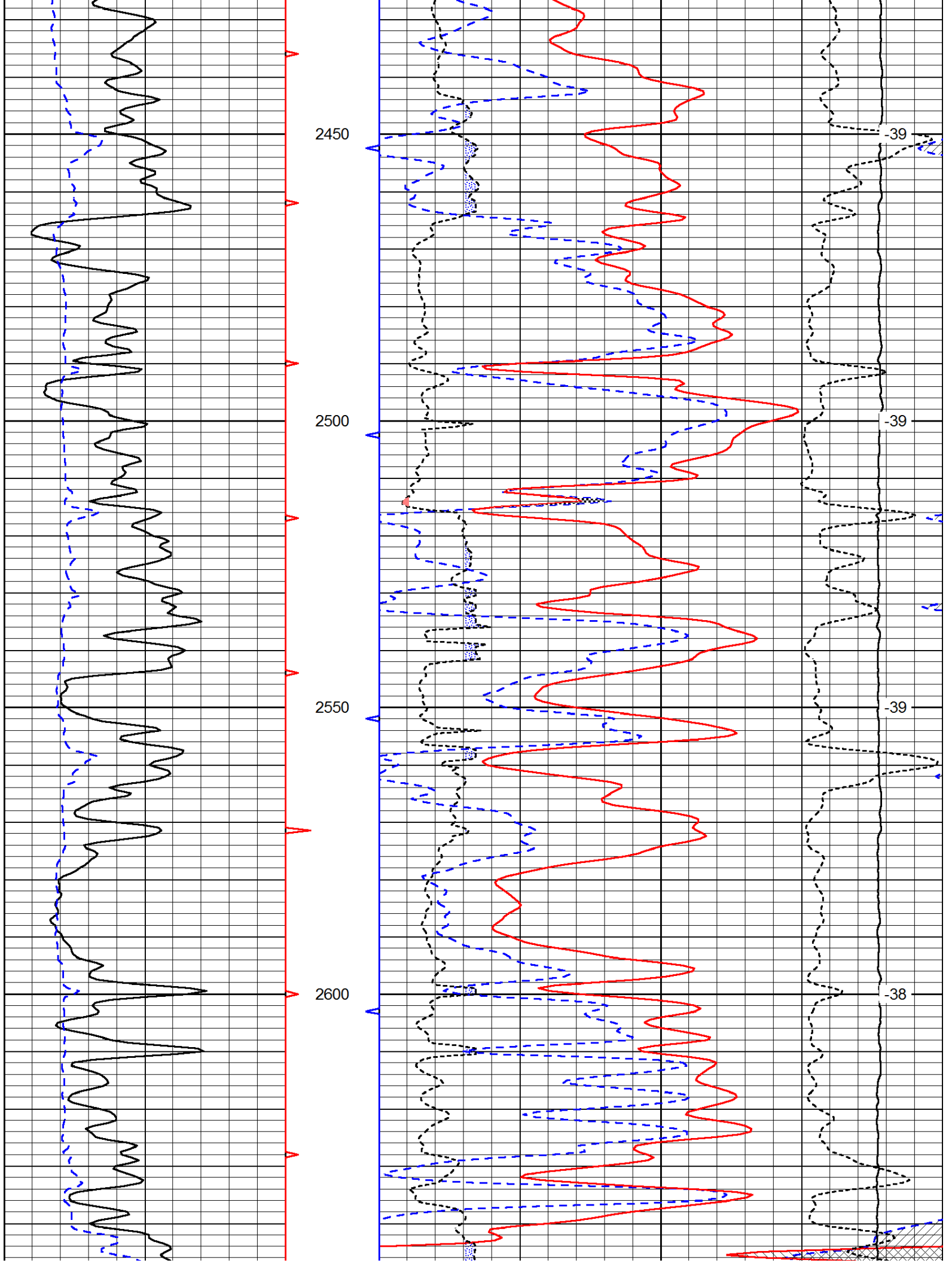
| | | |
|---|----------------|-----|
| 0 | Gamma Ray | 150 |
| 6 | Caliper (GAPI) | 16 |

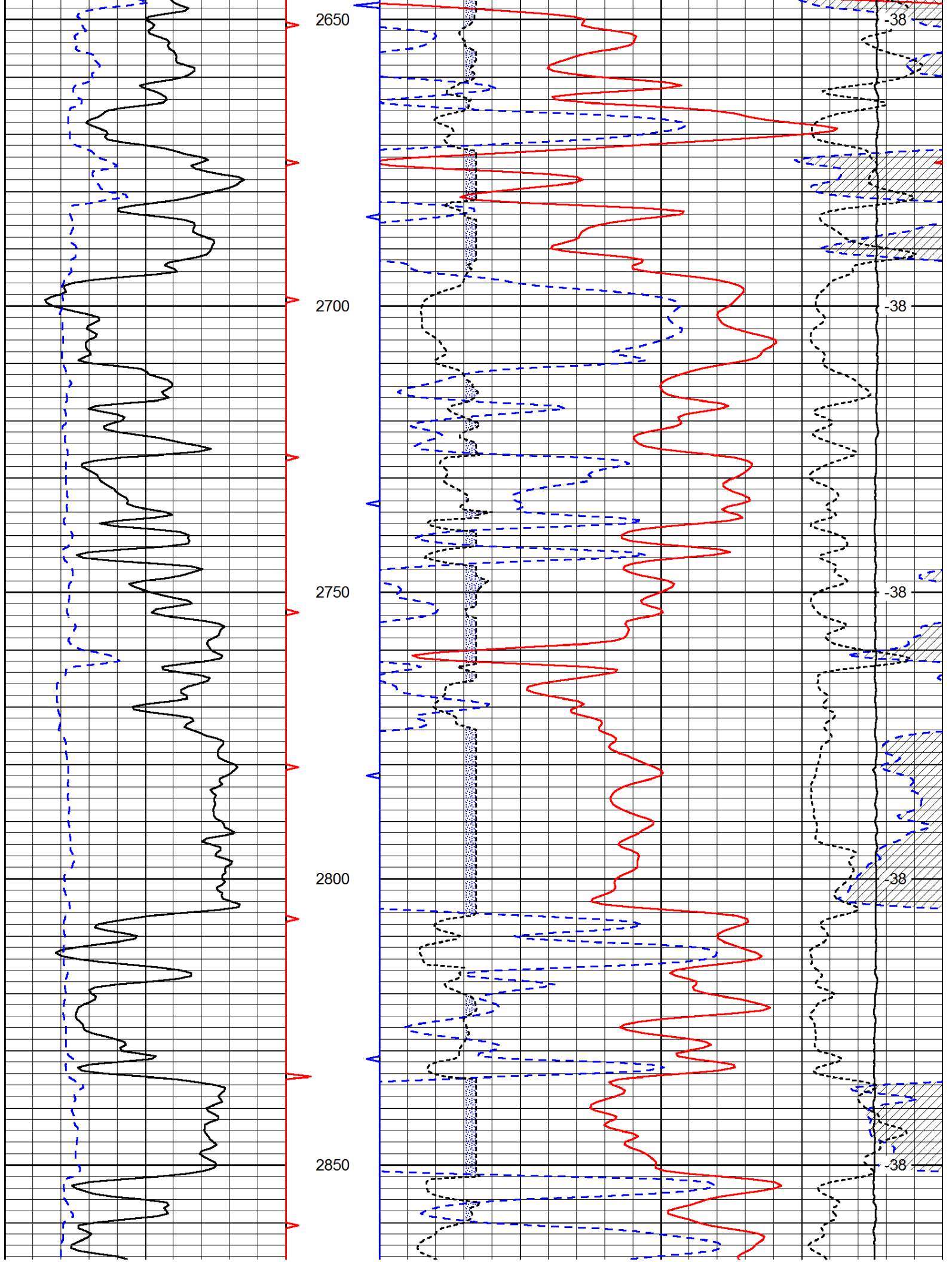
| | | | |
|-------|---------------------|-------|------------|
| 30 | Compensated Density | | -10 |
| 2 | Bulk Density | | 3 |
| 15000 | Line Tension | | 0 |
| 2.625 | DGA | 3.425 | -0.25 |
| | | | Correction |
| | | | 0.25 |
| LSPD | | | |

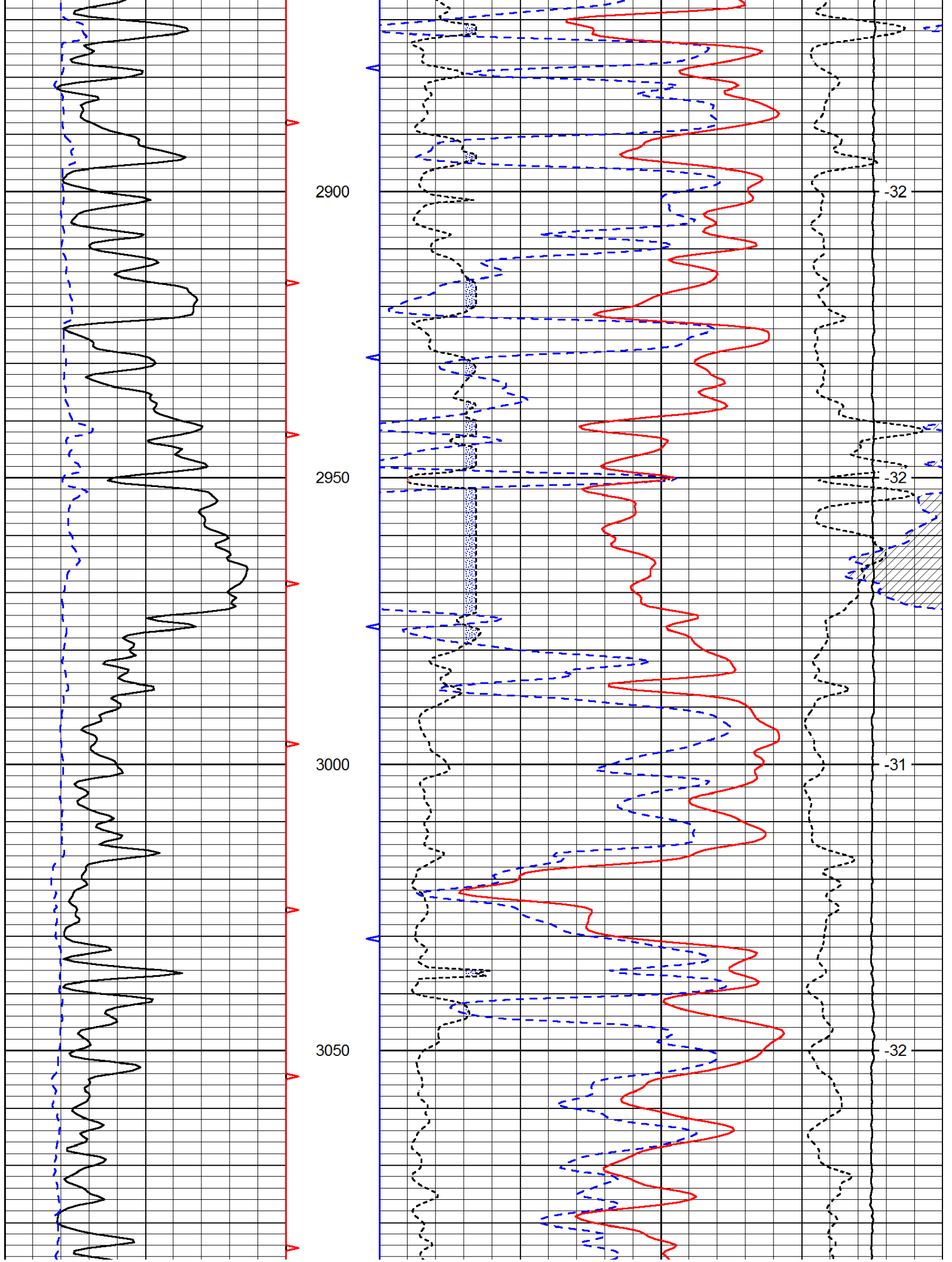


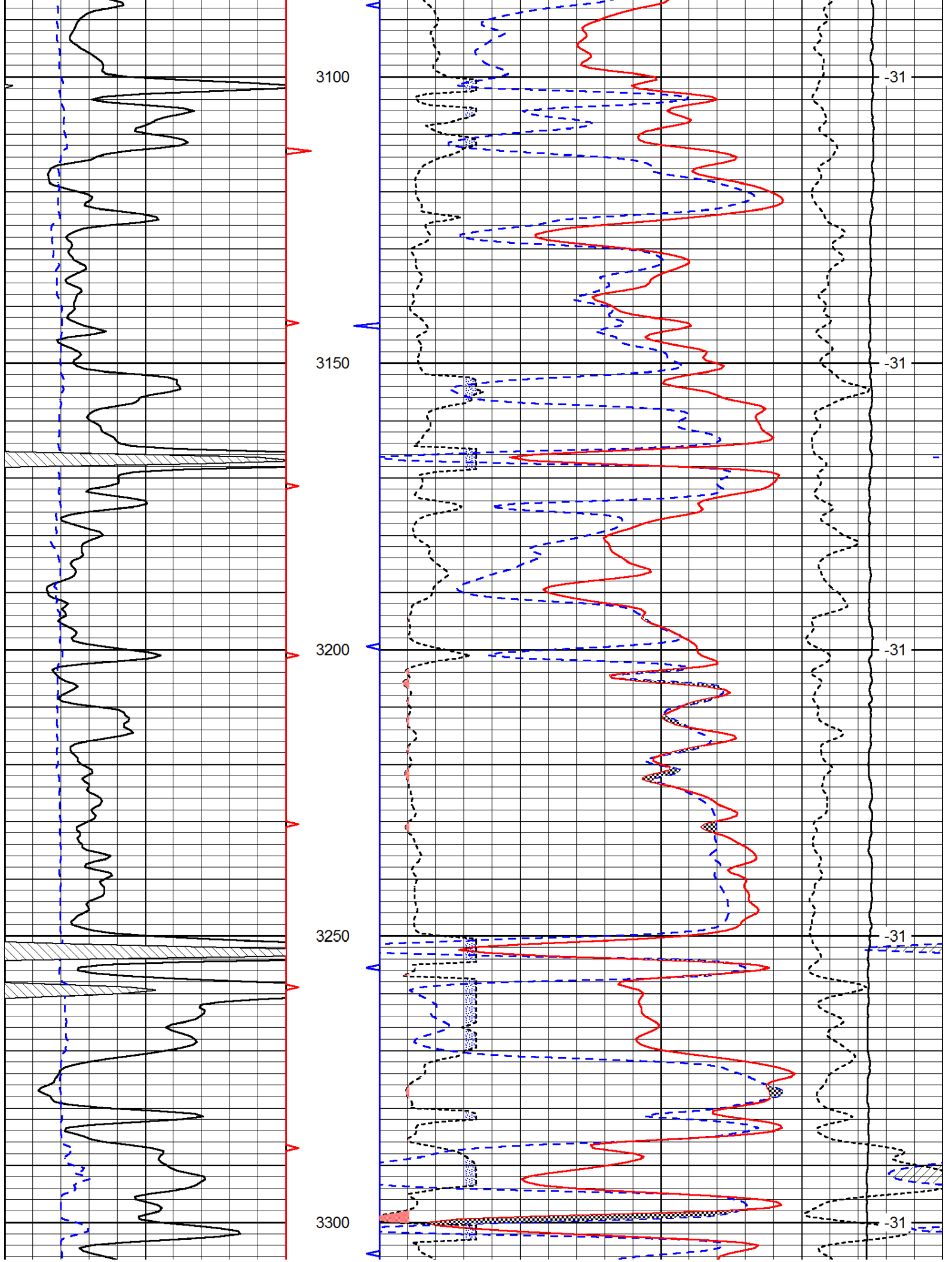


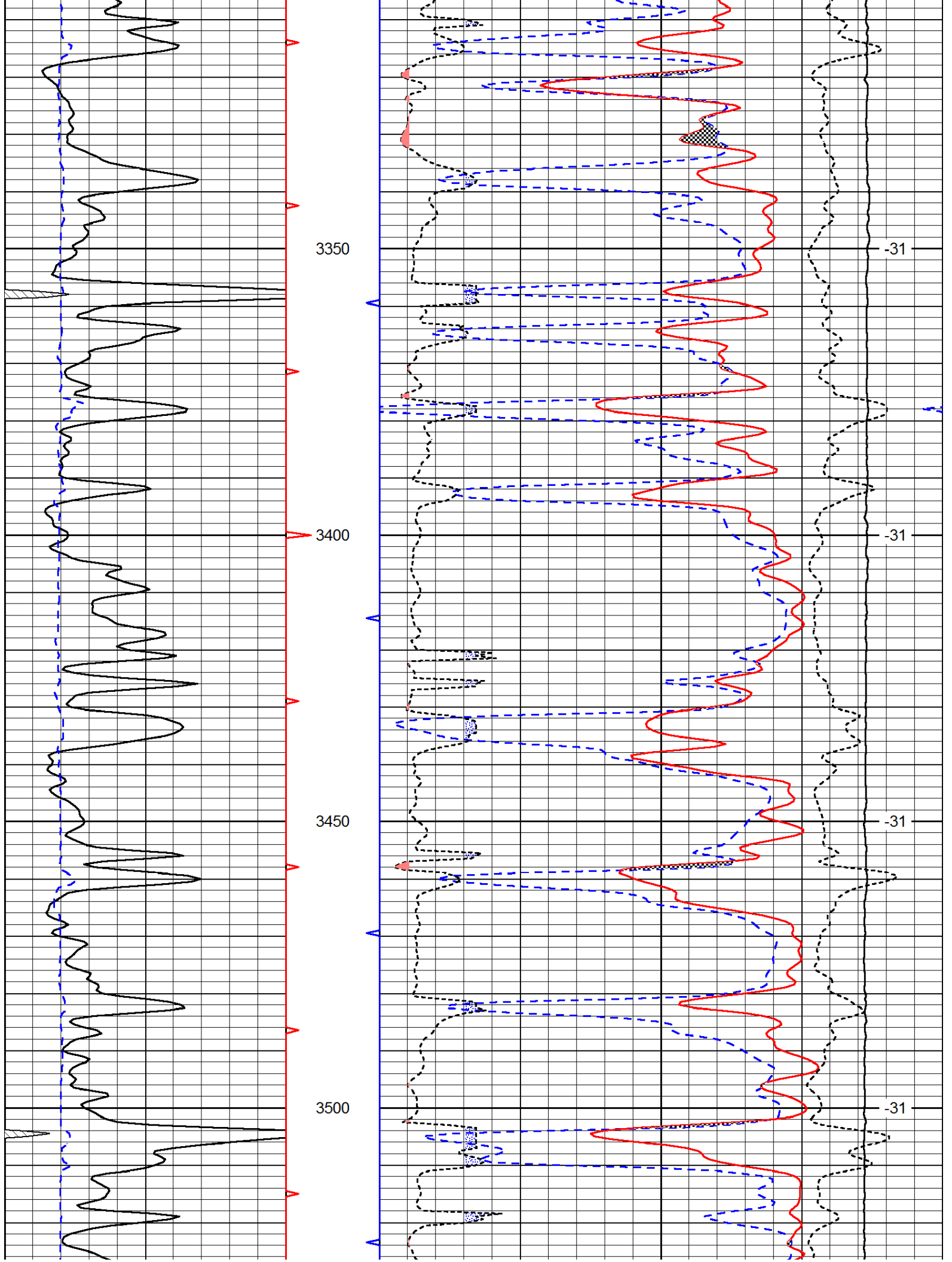


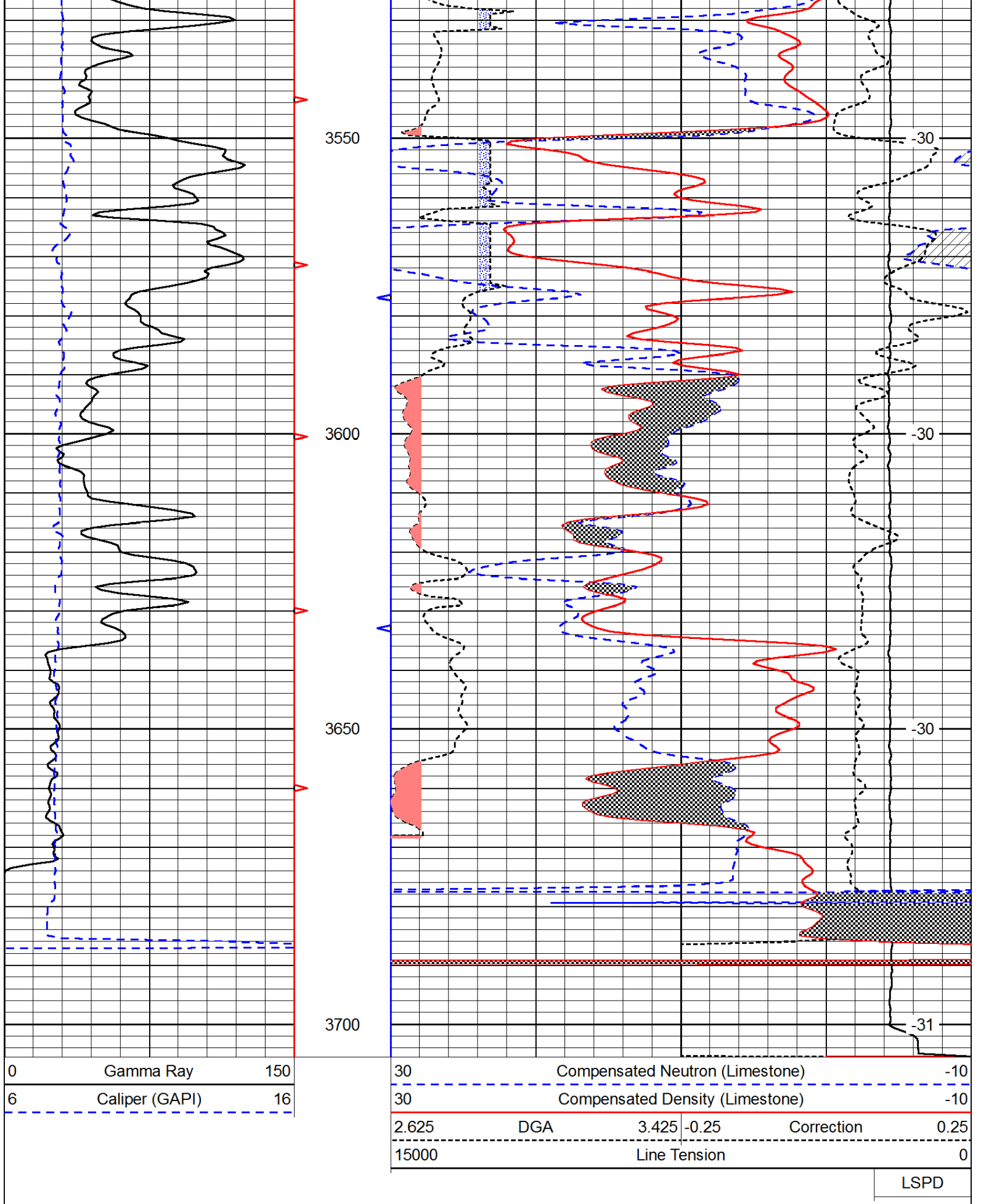














Pioneer Energy Services

Microresistivity Log

15-051-26,387-00-00

API No.

Company **TDI, Inc.**

Well **Moore Pond No.1**

Field

County **Eljis**

State

Kansas

Location

1660' FSL & 980' FWL

Sec: **8**

Twp: **15S**

Rge: **19W**

Other Services
CNL/CDL
DIL

Elevation

K.B. 2001
D.F.
G.L. 1991

Permanent Datum Ground Level Elevation 1991
Log Measured From Kelly Bushing 10 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Date 10/3/2012

Run Number Two

Depth Driller 3700

Depth Logger 3700

Bottom Logged Interval 3699

Top Log Interval 2400

Casing Driller 8.625 @ 1254

Casing Logger 1249

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity,ppm CL 4,000

Density / Viscosity 9.3 54

pH / Fluid Loss 10.5 8.0

Source of Sample Flowline

Rm @ Meas. Temp .8 @ 77

Rmf @ Meas. Temp .6 @ 77

Rmc @ Meas. Temp 1.08 @ 77

Source of Rmf / Rmc Charts

Rm @ BHT .55 @ 113

Operating Rig Time 3 Hours

Max Rec. Temp. F 113

Equipment Number 17

Location Hays

Recorded By C. Desaire

Witnessed By Tom Denning

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Comments

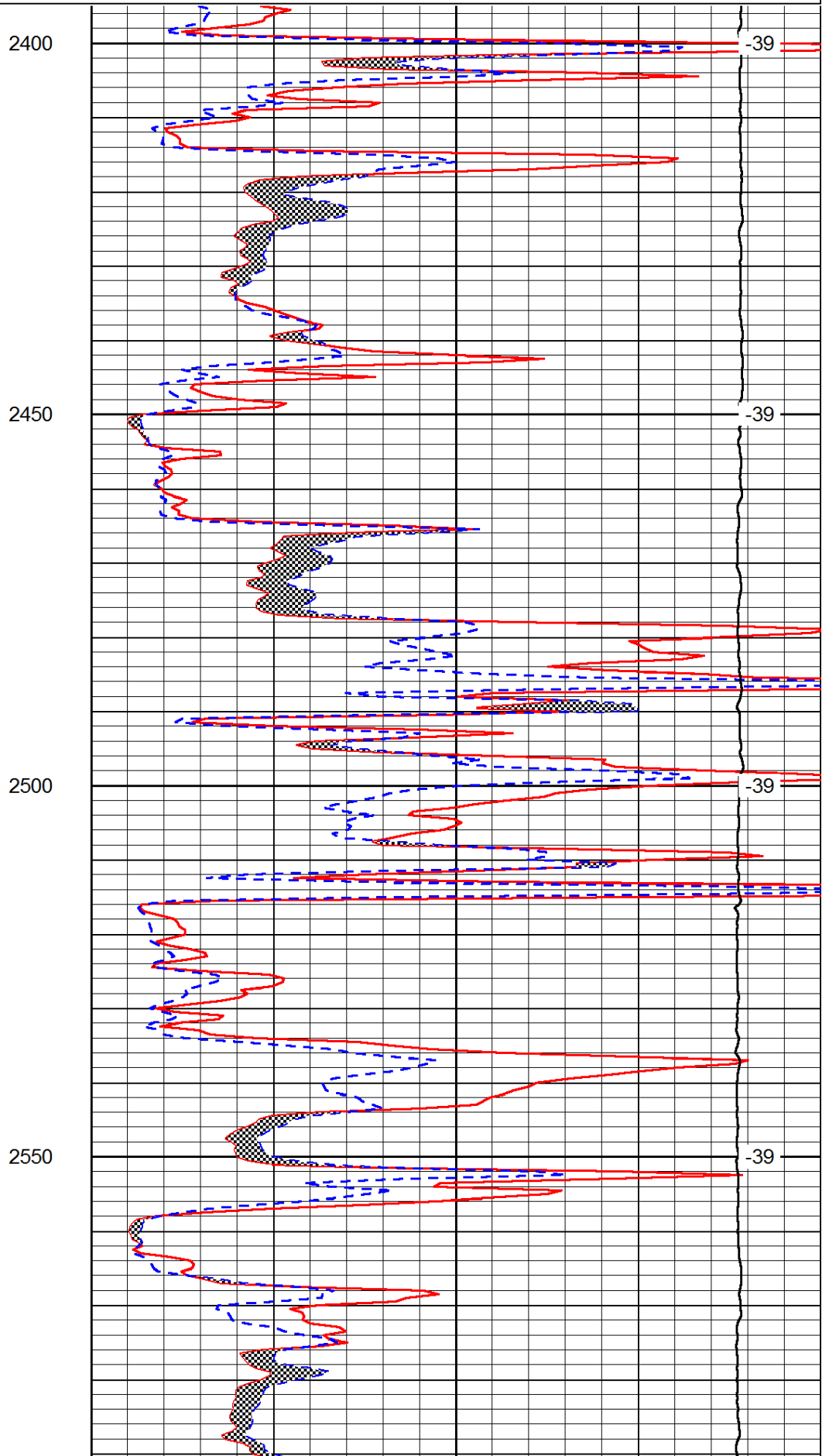
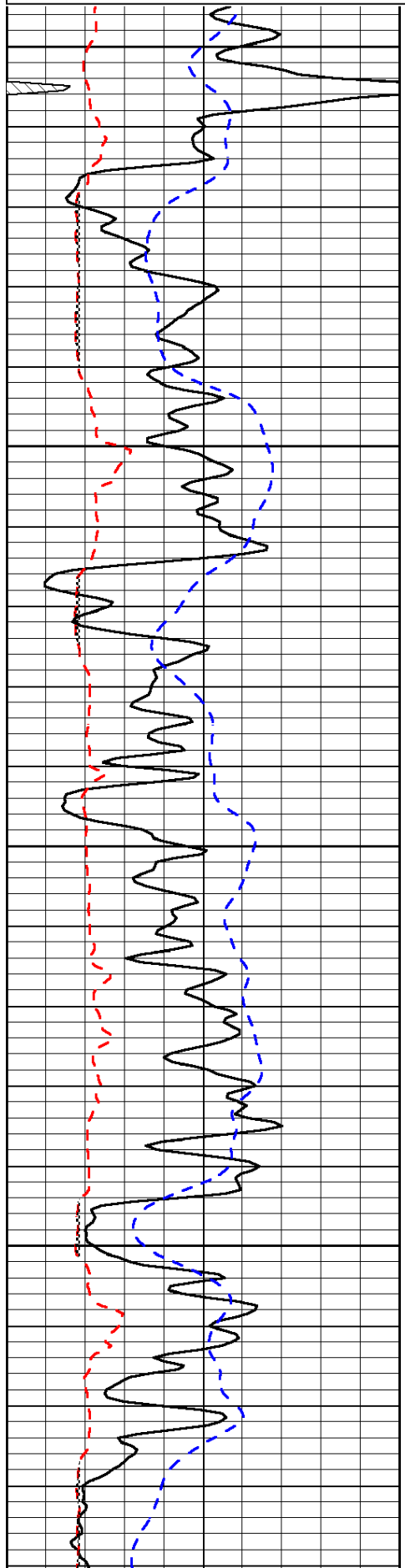
Thank you for using Pioneer Energy Services
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 785 625 3858
 Antonino KS, 3 W, 2 S,
 3/4 W, N Into

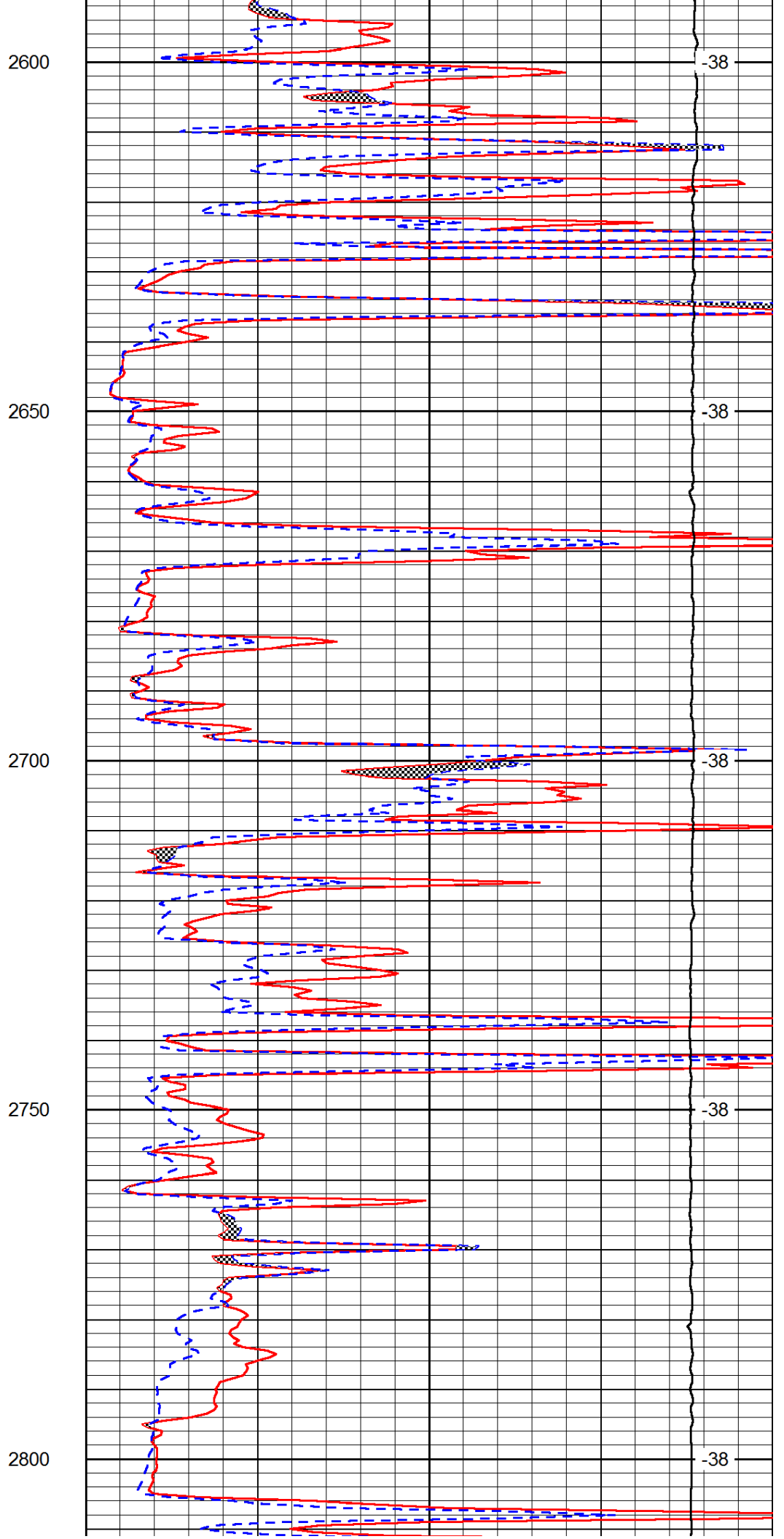
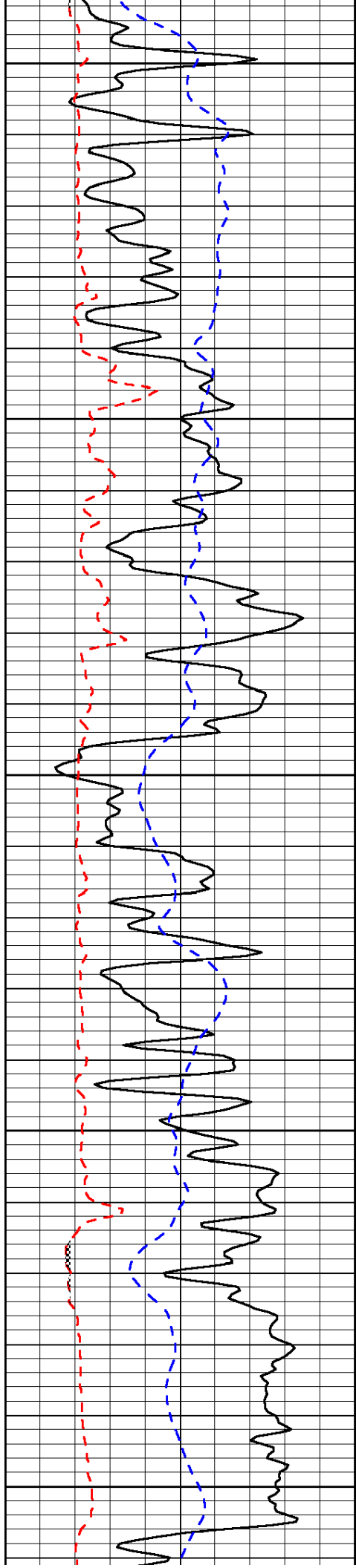
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 Presentation Format: micro
 Dataset Creation: Wed Oct 03 14:22:04 2012
 Charted by: Depth in Feet scaled 1:240

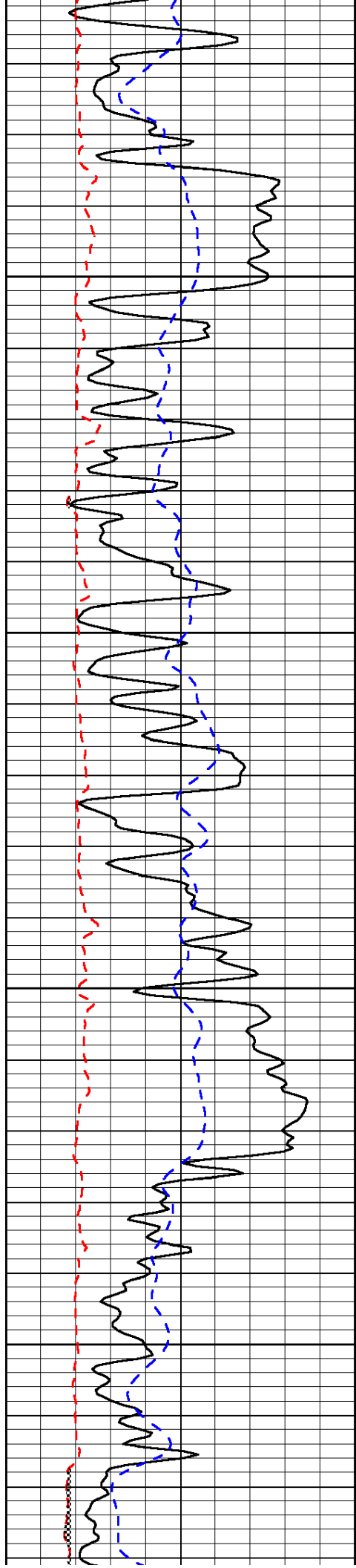
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|------|--------------------------|-----|
| 0 | Gamma Ray | 150 |
| 6 | Micro Log Caliper (GAPI) | 16 |
| -200 | SP (mV) | 0 |

| | | |
|-------|---------------------|----|
| 0 | Micro Inverse 1 X 1 | 40 |
| 0 | Micro Normal 2" | 40 |
| 15000 | Line Weight | 0 |

LSPD





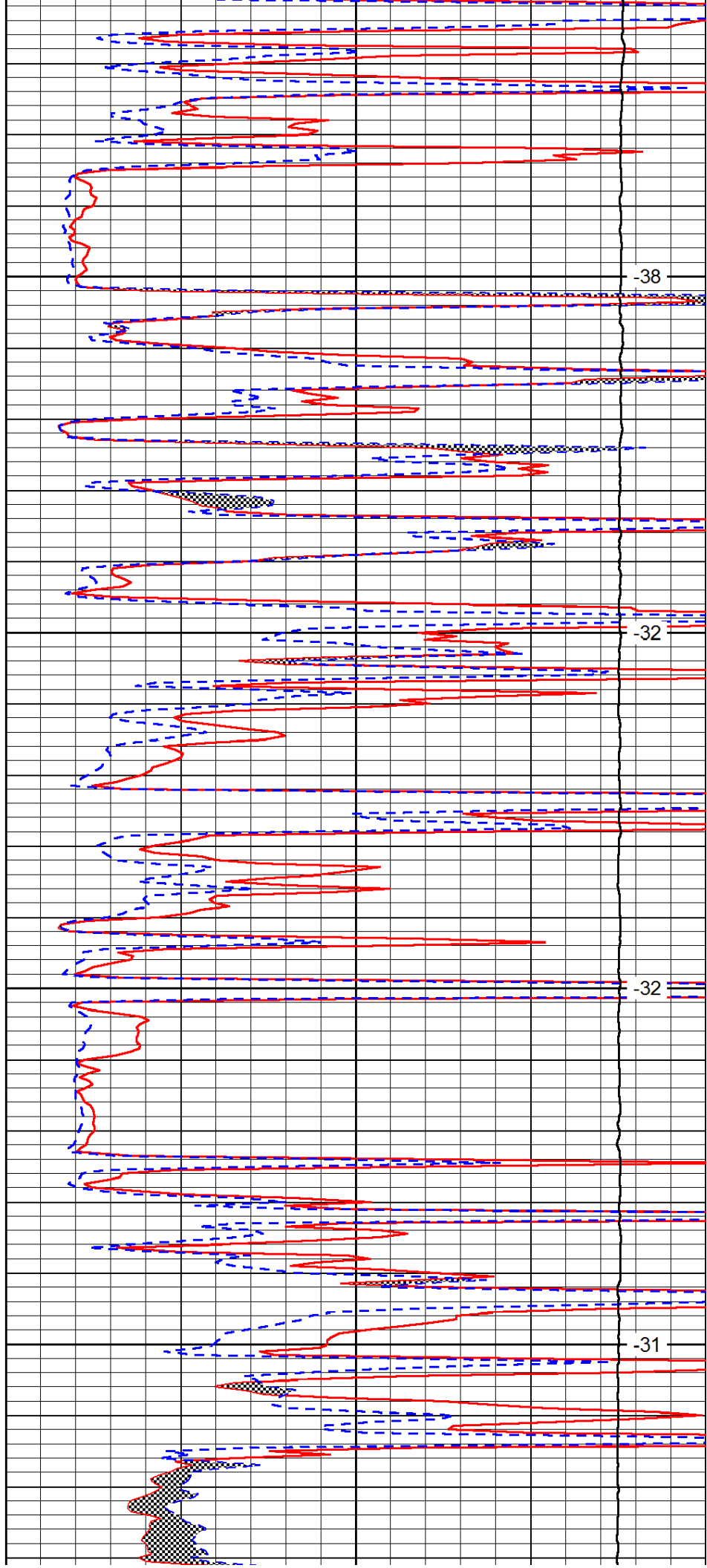


2850

2900

2950

3000

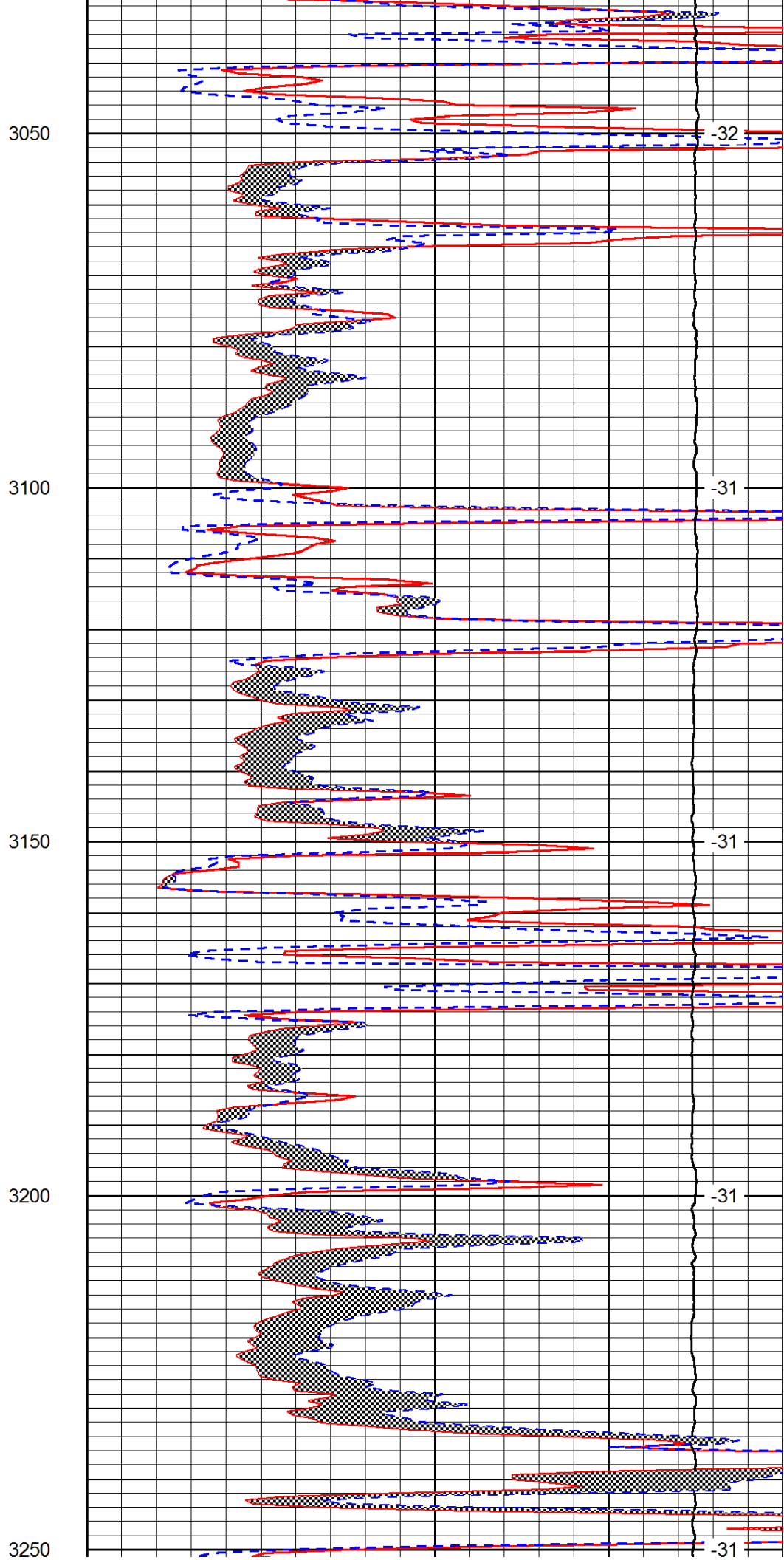
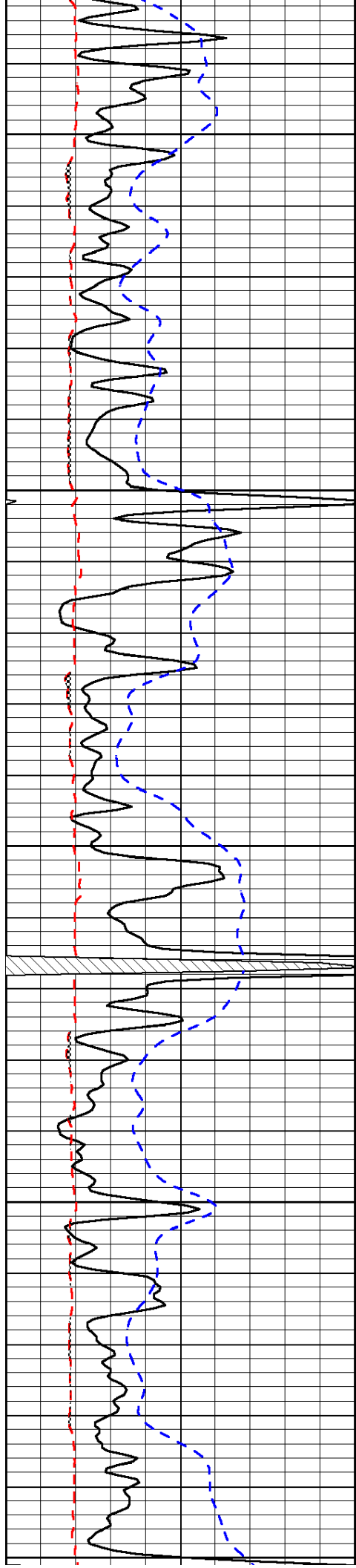


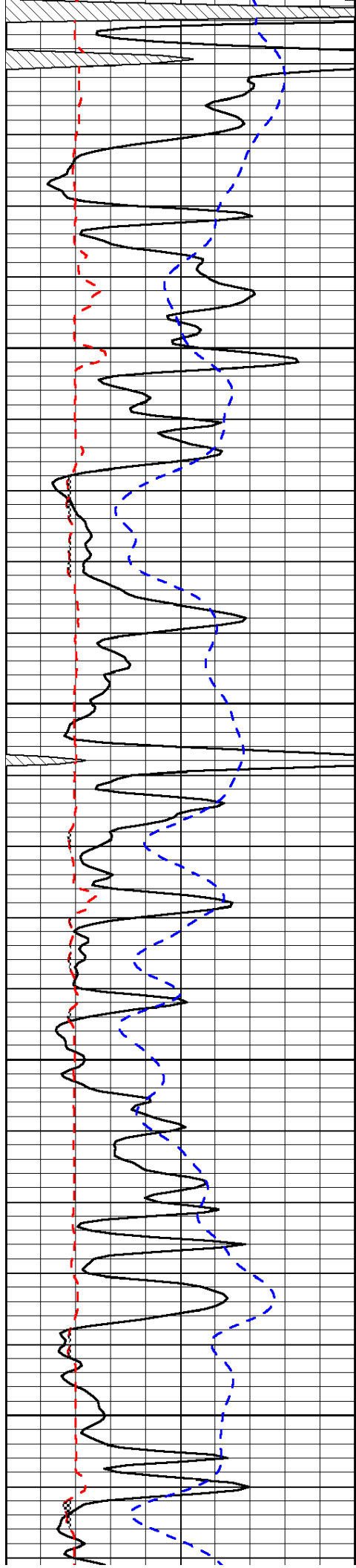
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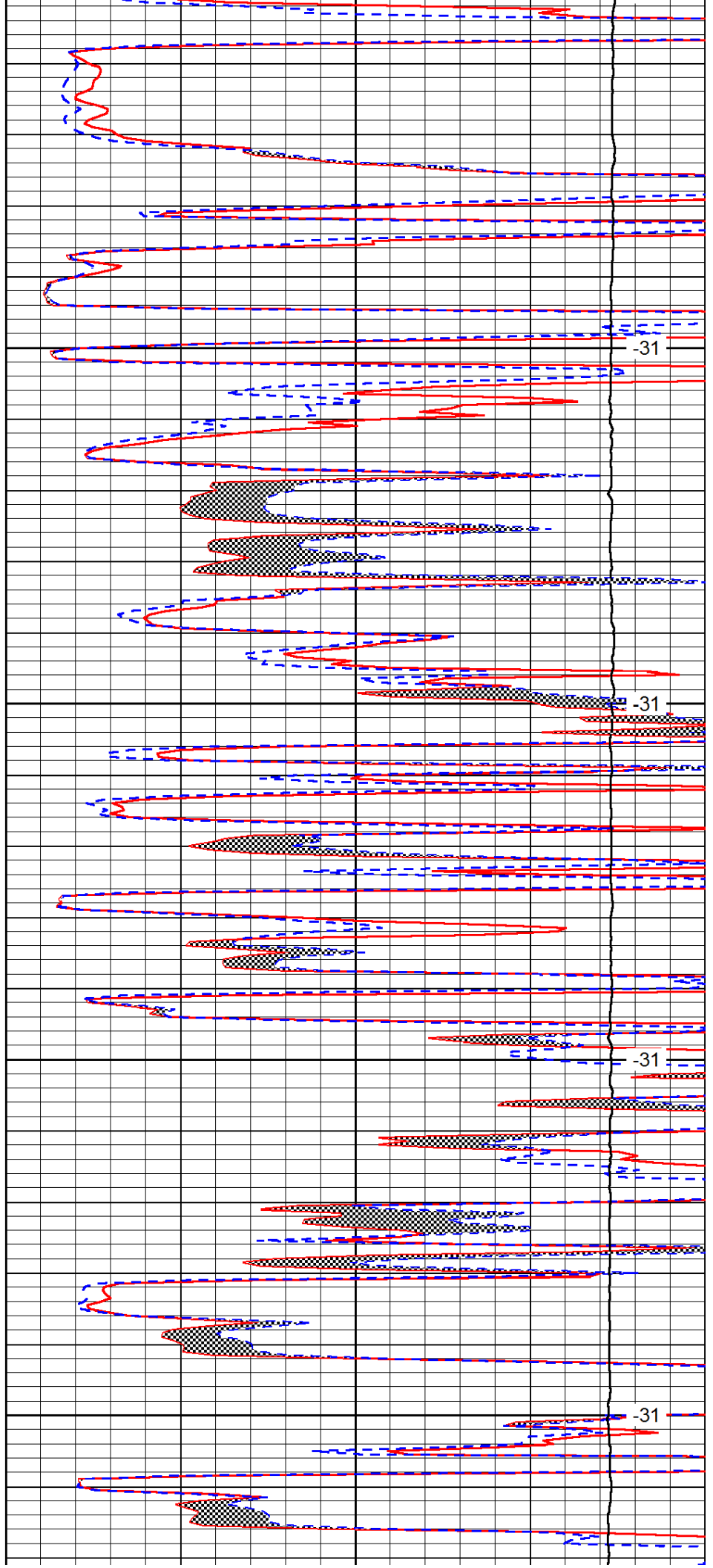


3300

3350

3400

3450

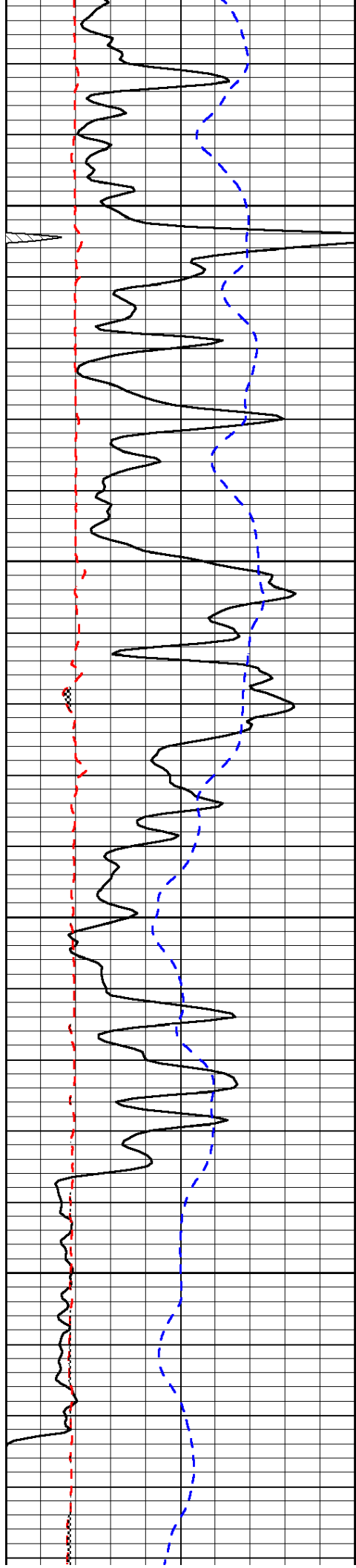


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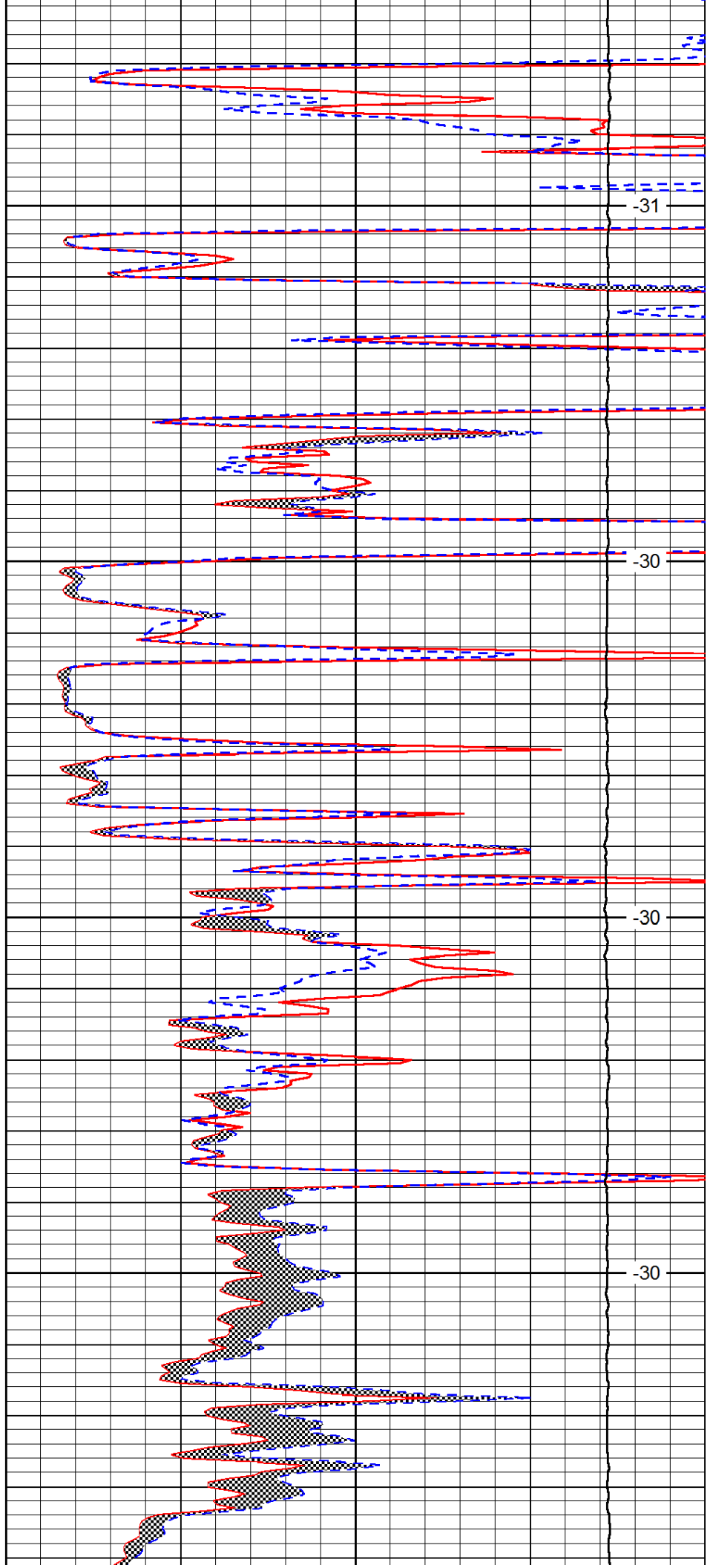


3500

3550

3600

3650

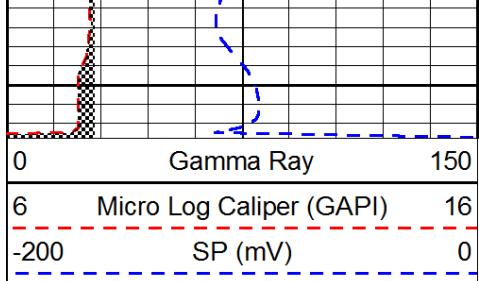


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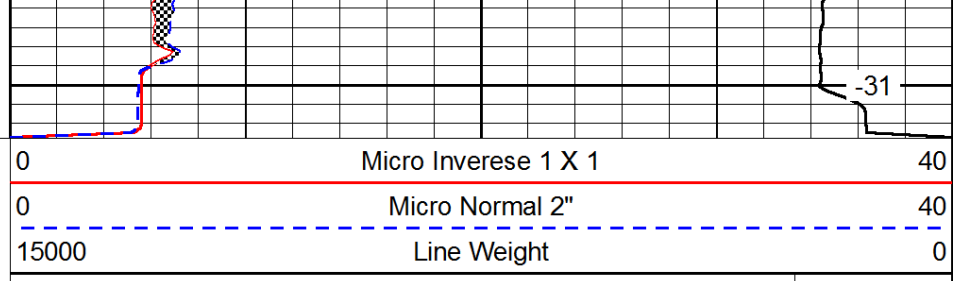
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3700



LSPD