



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1078075  
OIL & GAS CONSERVATION DIVISION

Form ACO-1

August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic       Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

- Deepening       Re-perf.       Conv. to ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

- Confidentiality Requested  
Date: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1078075

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**INSTRUCTIONS:** Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry?  Yes  No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
---	--

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	Credo Petroleum Corporation
Well Name	Deidre 1-9
Doc ID	1078075

All Electric Logs Run

Dual Induction Log
Microresistivity Log
Borehole Compensated Sonic Log
Dual Compensated Porosity Log

Conservation Division  
Finney State Office Building  
130 S. Market, Rm. 2078  
Wichita, KS 67202-3802



Phone: 316-337-6200  
Fax: 316-337-6211  
<http://kcc.ks.gov/>

Mark Sievers, Chairman  
Ward Loyd, Commissioner  
Thomas E. Wright, Commissioner

Sam Brownback, Governor

April 04, 2012

Jack Renfro  
Credo Petroleum Corporation  
1801 BROADWAY # 900  
DENVER, CO 80202-3858

Re: ACO1  
API 15-101-22360-00-00  
Deidre 1-9  
NW/4 Sec.09-17S-29W  
Lane County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,  
Jack Renfro



## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900  
Denver CO 80202

ATTN: Bruce Ard

**Deidre #1-9**

**9-17s-29w Lane,KS**

Start Date: 2012.03.22 @ 09:50:11

End Date: 2012.03.22 @ 18:03:41

Job Ticket #: 46044                      DST #: 1

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.03.28 @ 15:29:59



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Credo Petroleum Corp.

**9-17s-29w Lane, KS**

1801 Broadway #900  
Denver CO 80202

**Deidre #1-9**

Job Ticket: 46044

**DST#: 1**

ATTN: Bruce Ard

Test Start: 2012.03.22 @ 09:50:11

## GENERAL INFORMATION:

Formation: **KC"H-K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 12:42:11

Time Test Ended: 18:03:41

Test Type: Conventional Bottom Hole (Initial)

Tester: Brett Dickinson

Unit No: 59

**Interval: 4134.00 ft (KB) To 4262.00 ft (KB) (TVD)**

Reference Elevations: 2830.00 ft (KB)

Total Depth: 4262.00 ft (KB) (TVD)

2825.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6753**

**Inside**

Press @ Run Depth: 274.03 psig @ 4135.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.22

End Date:

2012.03.22

Last Calib.:

2012.03.22

Start Time: 09:50:16

End Time:

18:03:40

Time On Btm:

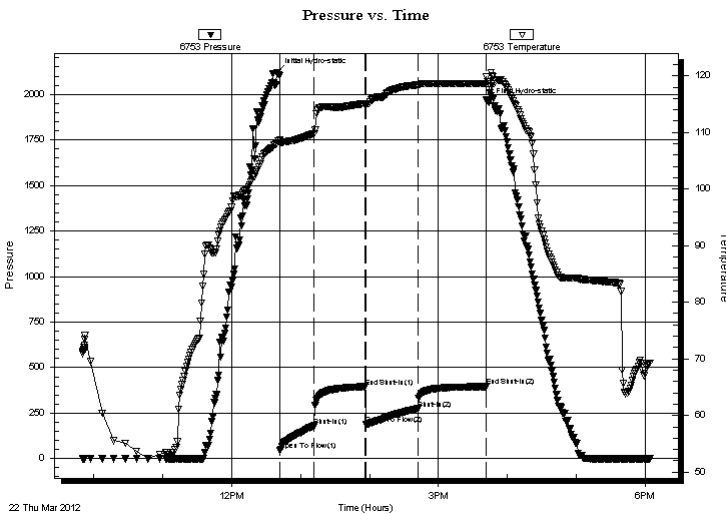
2012.03.22 @ 12:39:41

Time Off Btm:

2012.03.22 @ 15:43:41

**TEST COMMENT:** IF-BOB in 11 min  
ISI-No blow  
FF-BOB in 43 min  
FSI-No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2120.66	108.22	Initial Hydro-static
3	45.70	108.12	Open To Flow (1)
32	179.76	109.81	Shut-In(1)
77	395.13	115.14	End Shut-In(1)
78	186.96	115.06	Open To Flow (2)
122	274.03	118.39	Shut-In(2)
182	395.47	118.64	End Shut-In(2)
184	1953.02	117.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
180.00	WCM 40%W 60%M	1.41
200.00	SWCM 10%W 90%M	2.81
160.00	Mud	2.24

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Credo Petroleum Corp.

**9-17s-29w Lane,KS**

1801 Broadway #900  
Denver CO 80202

**Deidre #1-9**

Job Ticket: 46044

**DST#: 1**

ATTN: Bruce Ard

Test Start: 2012.03.22 @ 09:50:11

## Tool Information

Drill Pipe:	Length: 4022.00 ft	Diameter: 3.80 inches	Volume: 56.42 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	38.00 ft			String Weight: Initial	65000.00 lb
Depth to Top Packer:	4134.00 ft			Final	67000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	128.00 ft				
Tool Length:	156.00 ft				
Number of Packers:	2	Diameter:	6.75 inches		
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4107.00	
Shut In Tool	5.00			4112.00	
Hydraulic tool	5.00			4117.00	
Jars	5.00			4122.00	
Safety Joint	2.00			4124.00	
Packer	5.00			4129.00	28.00 Bottom Of Top Packer
Packer	5.00			4134.00	
Stubb	1.00			4135.00	
Recorder	0.00	6753	Inside	4135.00	
Recorder	0.00	8319	Outside	4135.00	
Perforations	4.00			4139.00	
Change Over Sub	1.00			4140.00	
Drill Pipe	95.00			4235.00	
Change Over Sub	1.00			4236.00	
Perforations	23.00			4259.00	
Bullnose	3.00			4262.00	128.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>156.00</b>				





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Credo Petroleum Corp.

**9-17s-29w Lane,KS**

1801 Broadway #900  
Denver CO 80202

**Deidre #1-9**

Job Ticket: 46044

**DST#: 1**

ATTN: Bruce Ard

Test Start: 2012.03.22 @ 09:50:11

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

54000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
180.00	WCM 40%W 60%M	1.414
200.00	SWCM 10%W 90%M	2.805
160.00	Mud	2.244

Total Length: 540.00 ft      Total Volume: 6.463 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .18 @ 65

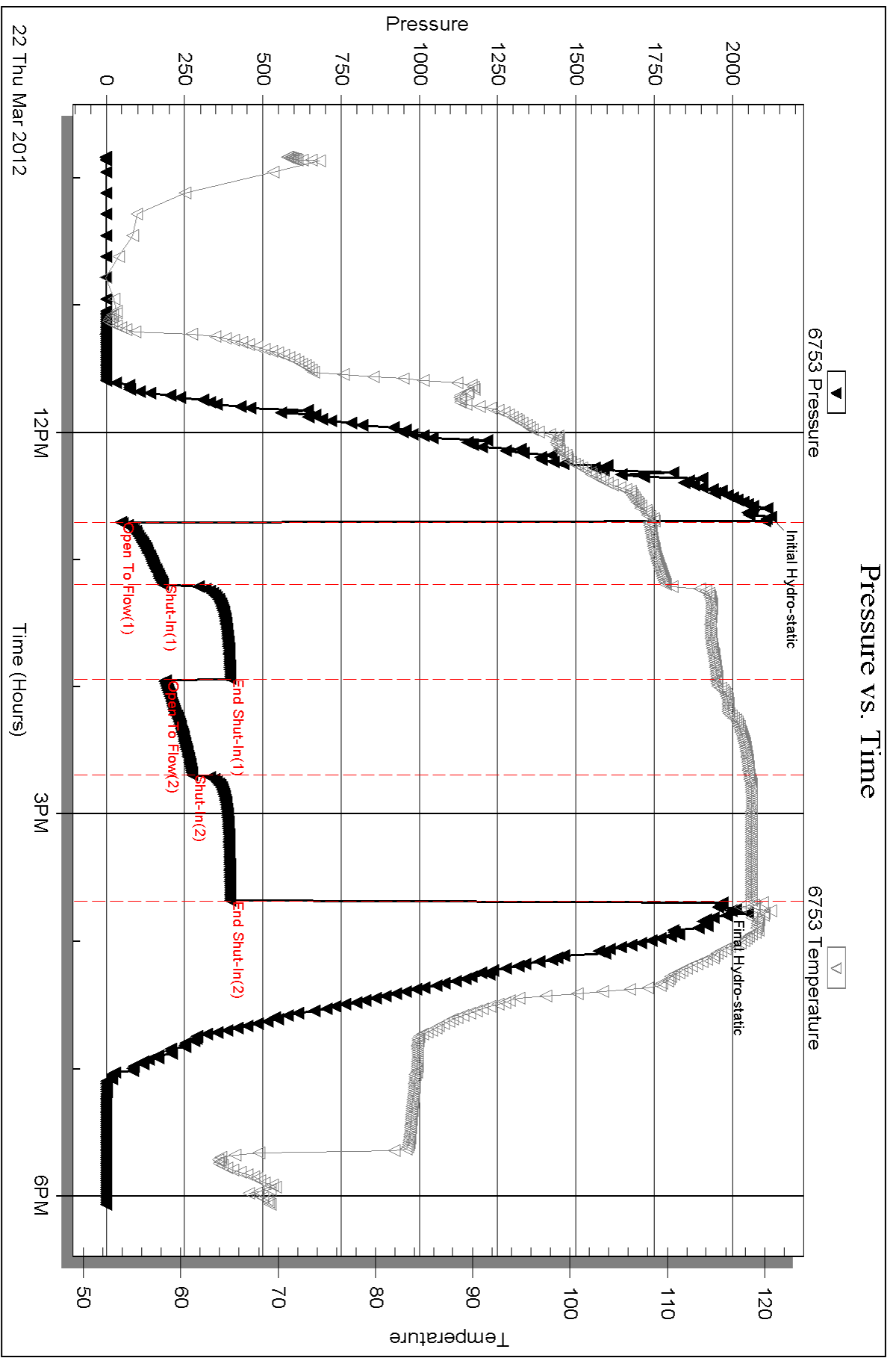
Serial #: 6753

Inside

Crede Petroleum Corp.

Deide #1-9

DST Test Number: 1

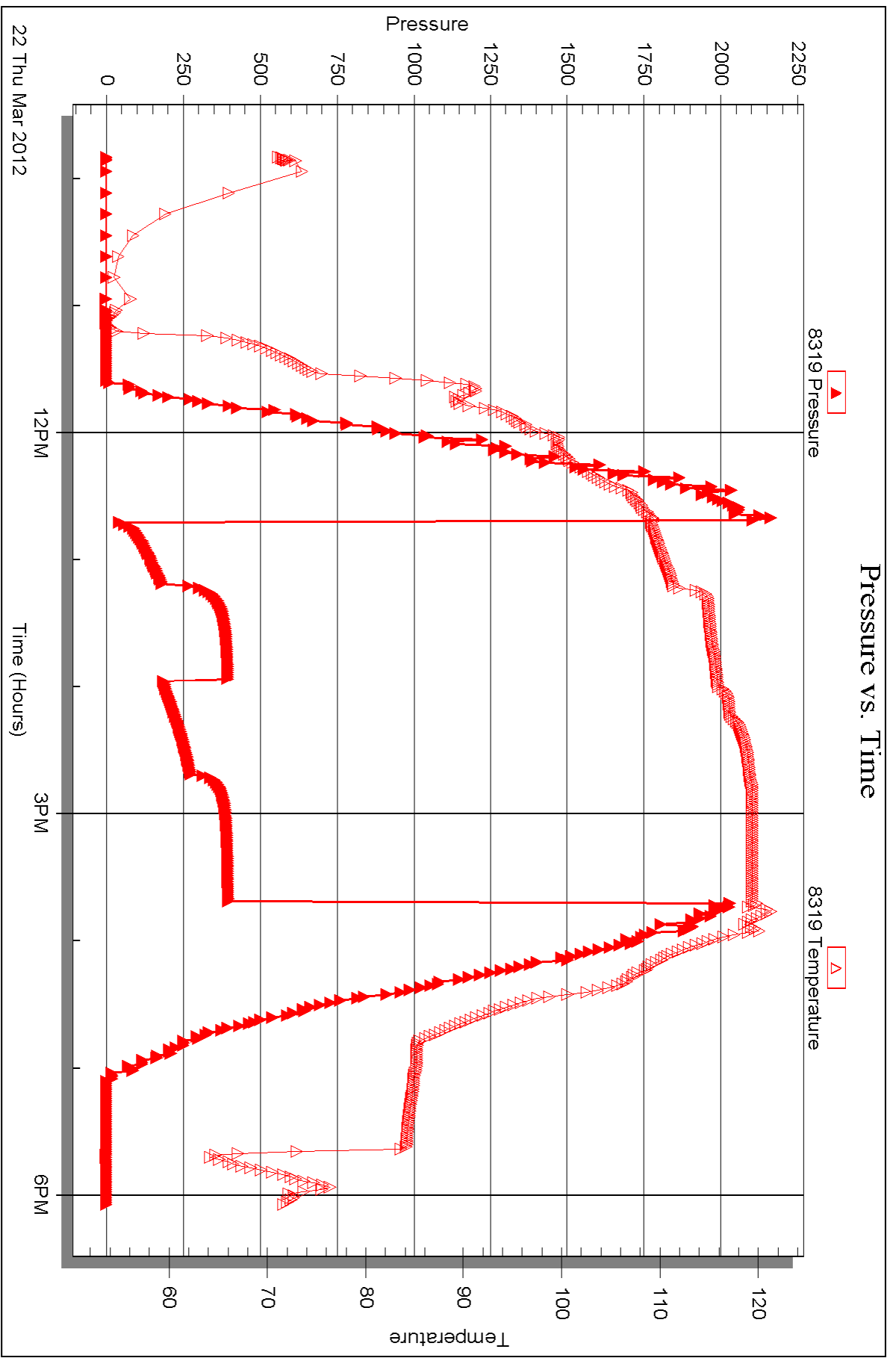


Serial #: 8319

Outside Credo Petroleum Corp.

Deidre #1-9

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 46044

Printed: 2012.03.28 @ 15:30:03



## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900  
Denver CO 80202

ATTN: Bruce Ard

**Deidre #1-9**

**9-17s-29w Lane,KS**

Start Date: 2012.03.23 @ 15:05:14

End Date: 2012.03.23 @ 22:45:44

Job Ticket #: 46045                      DST #: 2

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.03.28 @ 15:29:15







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Credo Petroleum Corp.

**9-17s-29w Lane,KS**

1801 Broadway #900  
Denver CO 80202

**Deidre #1-9**

Job Ticket: 46045

**DST#: 2**

ATTN: Bruce Ard

Test Start: 2012.03.23 @ 15:05:14

## Tool Information

Drill Pipe:	Length: 4113.00 ft	Diameter: 3.80 inches	Volume: 57.69 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose:	80000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial	66000.00 lb
Depth to Top Packer:	4258.00 ft			Final	68000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	210.00 ft				
Tool Length:	238.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4231.00	
Shut In Tool	5.00			4236.00	
Hydraulic tool	5.00			4241.00	
Jars	5.00			4246.00	
Safety Joint	2.00			4248.00	
Packer	5.00			4253.00	28.00 Bottom Of Top Packer
Packer	5.00			4258.00	
Stubb	1.00			4259.00	
Recorder	0.00	6753	Inside	4259.00	
Recorder	0.00	8319	Outside	4259.00	
Perforations	4.00			4263.00	
Change Over Sub	1.00			4264.00	
Drill Pipe	190.00			4454.00	
Change Over Sub	1.00			4455.00	
Perforations	10.00			4465.00	
Bullnose	3.00			4468.00	210.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>238.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Credo Petroleum Corp.

**9-17s-29w Lane,KS**

1801 Broadway #900  
Denver CO 80202

**Deidre #1-9**

Job Ticket: 46045

**DST#: 2**

ATTN: Bruce Ard

Test Start: 2012.03.23 @ 15:05:14

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 10.00 lb/gal

Cushion Length:

ft

Water Salinity:

48000 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
360.00	water	3.938
180.00	w cm 20%w 80%m	2.525
40.00	Mud	0.561

Total Length: 580.00 ft      Total Volume: 7.024 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .2 @ 55



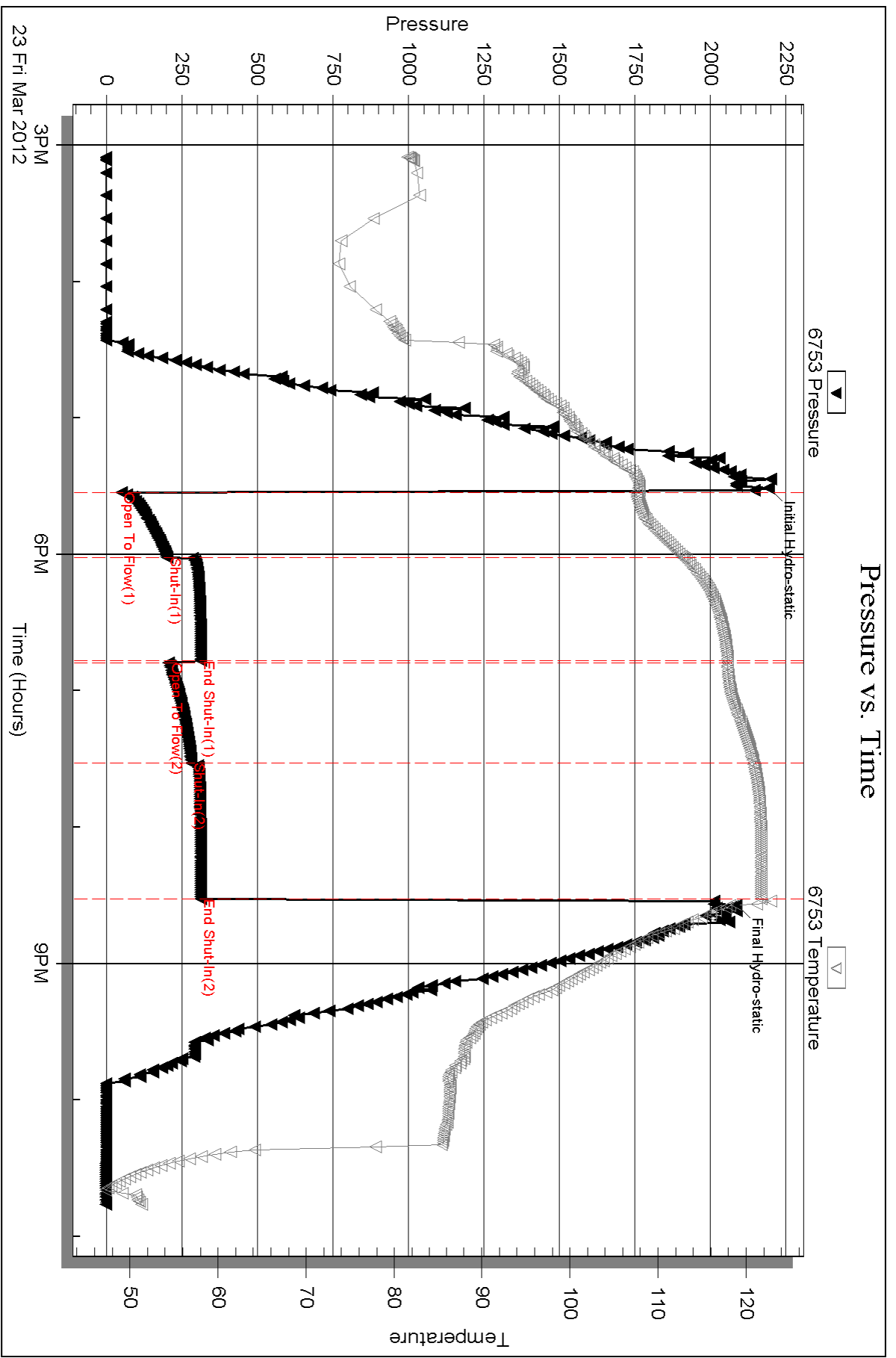
Serial #: 6753

Inside

Crede Petroleum Corp.

Deidre #1-9

DST Test Number: 2

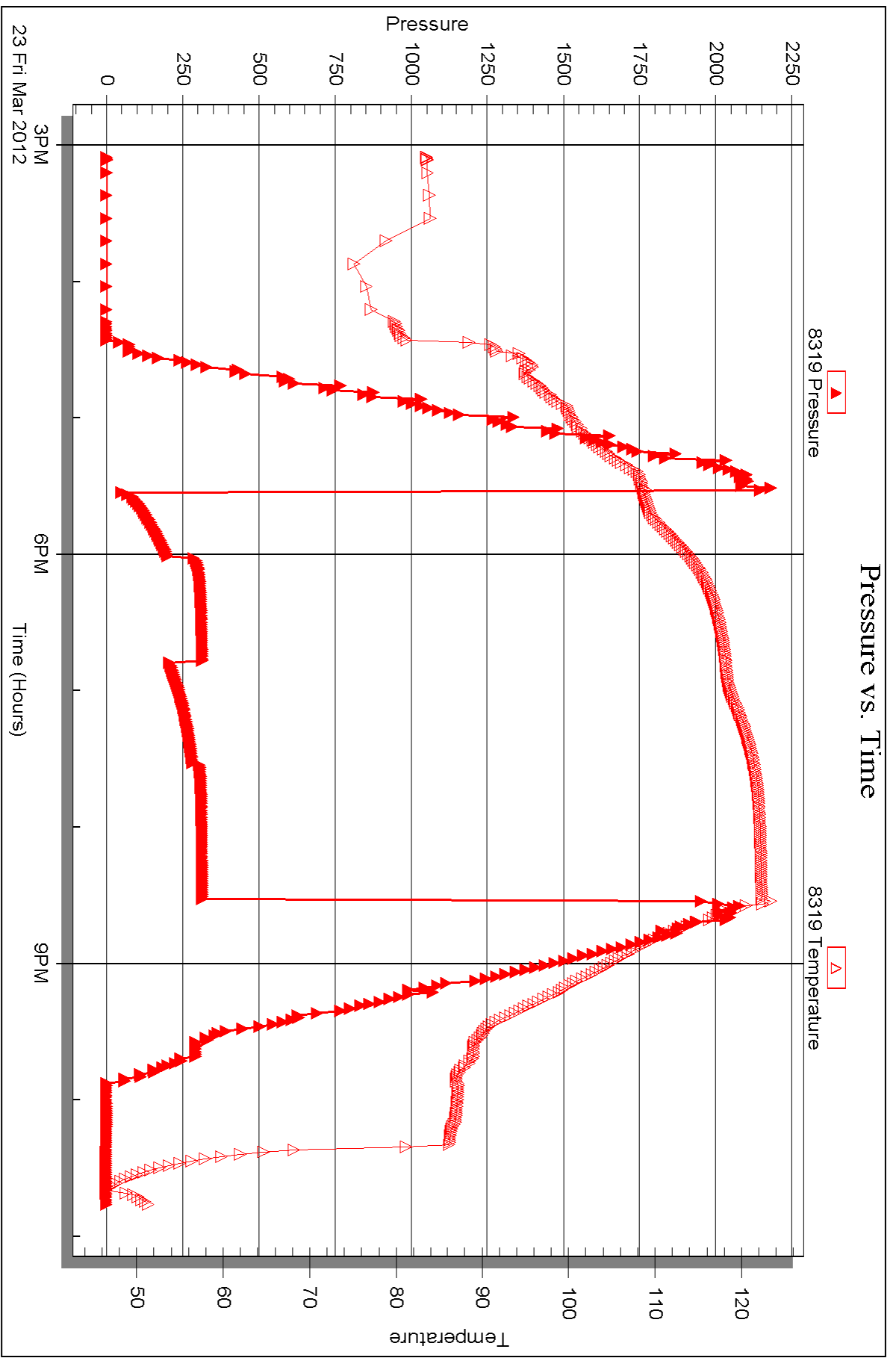


Serial #: 8319

Outside Credo Petroleum Corp.

Deidre #1-9

DST Test Number: 2





## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900  
Denver CO 80202

ATTN: Bruce Ard

**Deidre #1-9**

**9-17s-29w Lane,KS**

Start Date: 2012.03.24 @ 09:30:41

End Date: 2012.03.24 @ 16:33:41

Job Ticket #: 46046                      DST #: 3

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.03.28 @ 15:28:22



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Credo Petroleum Corp.  
 1801 Broadway #900  
 Denver CO 80202  
 ATTN: Bruce Ard

**9-17s-29w Lane, KS**  
**Deidre #1-9**  
 Job Ticket: 46046 **DST#: 3**  
 Test Start: 2012.03.24 @ 09:30:41

## GENERAL INFORMATION:

Formation: **Cherokee, Johnson**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 11:29:41 Tester: Brett Dickinson  
 Time Test Ended: 16:33:41 Unit No: 59  
 Interval: **4465.00 ft (KB) To 4546.00 ft (KB) (TVD)** Reference Elevations: 2830.00 ft (KB)  
 Total Depth: 4546.00 ft (KB) (TVD) 2825.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

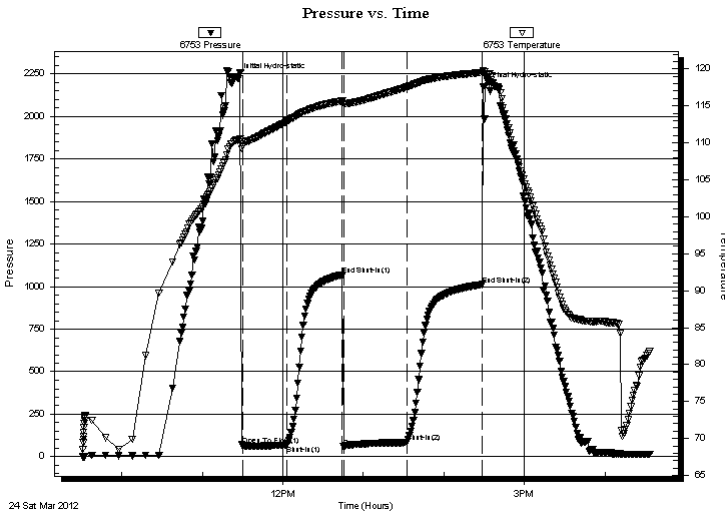
## Serial #: 6753

Inside

Press @ Run Depth: 85.38 psig @ 4466.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.03.24 End Date: 2012.03.24 Last Calib.: 2012.03.24  
 Start Time: 09:30:46 End Time: 16:33:40 Time On Btm: 2012.03.24 @ 11:25:11  
 Time Off Btm: 2012.03.24 @ 14:30:41

TEST COMMENT: IF-10.5" blow  
 ISI-No blow  
 FF-BOB in 27min  
 FSI-No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2226.84	110.35	Initial Hydro-static
5	65.53	110.13	Open To Flow (1)
38	70.35	112.87	Shut-In(1)
79	1068.46	115.65	End Shut-In(1)
80	57.95	115.30	Open To Flow (2)
127	85.38	117.53	Shut-In(2)
183	1011.77	119.50	End Shut-In(2)
186	2174.63	119.20	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	mco 85%O 15%M	0.07
107.00	ocm 30%O 70%M	0.53
5.00	vsgo 5%G 95%O	0.07
0.00	360ft GIP	0.00

\* Recovery from multiple tests

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Credo Petroleum Corp.

**9-17s-29w Lane,KS**

1801 Broadway #900  
Denver CO 80202

**Deidre #1-9**

Job Ticket: 46046

**DST#: 3**

ATTN: Bruce Ard

Test Start: 2012.03.24 @ 09:30:41

## Tool Information

Drill Pipe:	Length: 4335.00 ft	Diameter: 3.80 inches	Volume: 60.81 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.70 inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	4465.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	81.00 ft			
Tool Length:	109.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4438.00	
Shut In Tool	5.00			4443.00	
Hydraulic tool	5.00			4448.00	
Jars	5.00			4453.00	
Safety Joint	2.00			4455.00	
Packer	5.00			4460.00	28.00 Bottom Of Top Packer
Packer	5.00			4465.00	
Stubb	1.00			4466.00	
Recorder	0.00	6753	Inside	4466.00	
Recorder	0.00	8319	Outside	4466.00	
Perforations	2.00			4468.00	
Change Over Sub	1.00			4469.00	
Drill Pipe	63.00			4532.00	
Change Over Sub	1.00			4533.00	
Perforations	10.00			4543.00	
Bullnose	3.00			4546.00	81.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>109.00</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Credo Petroleum Corp.

**9-17s-29w Lane,KS**

1801 Broadway #900  
Denver CO 80202

**Deidre #1-9**

Job Ticket: 46046

**DST#: 3**

ATTN: Bruce Ard

Test Start: 2012.03.24 @ 09:30:41

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

35 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
15.00	mco 85%O 15%M	0.074
107.00	ocm 30%O 70%M	0.526
5.00	vsgo 5%G 95%O	0.070
0.00	360ft GIP	0.000

Total Length: 127.00 ft

Total Volume: 0.670 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

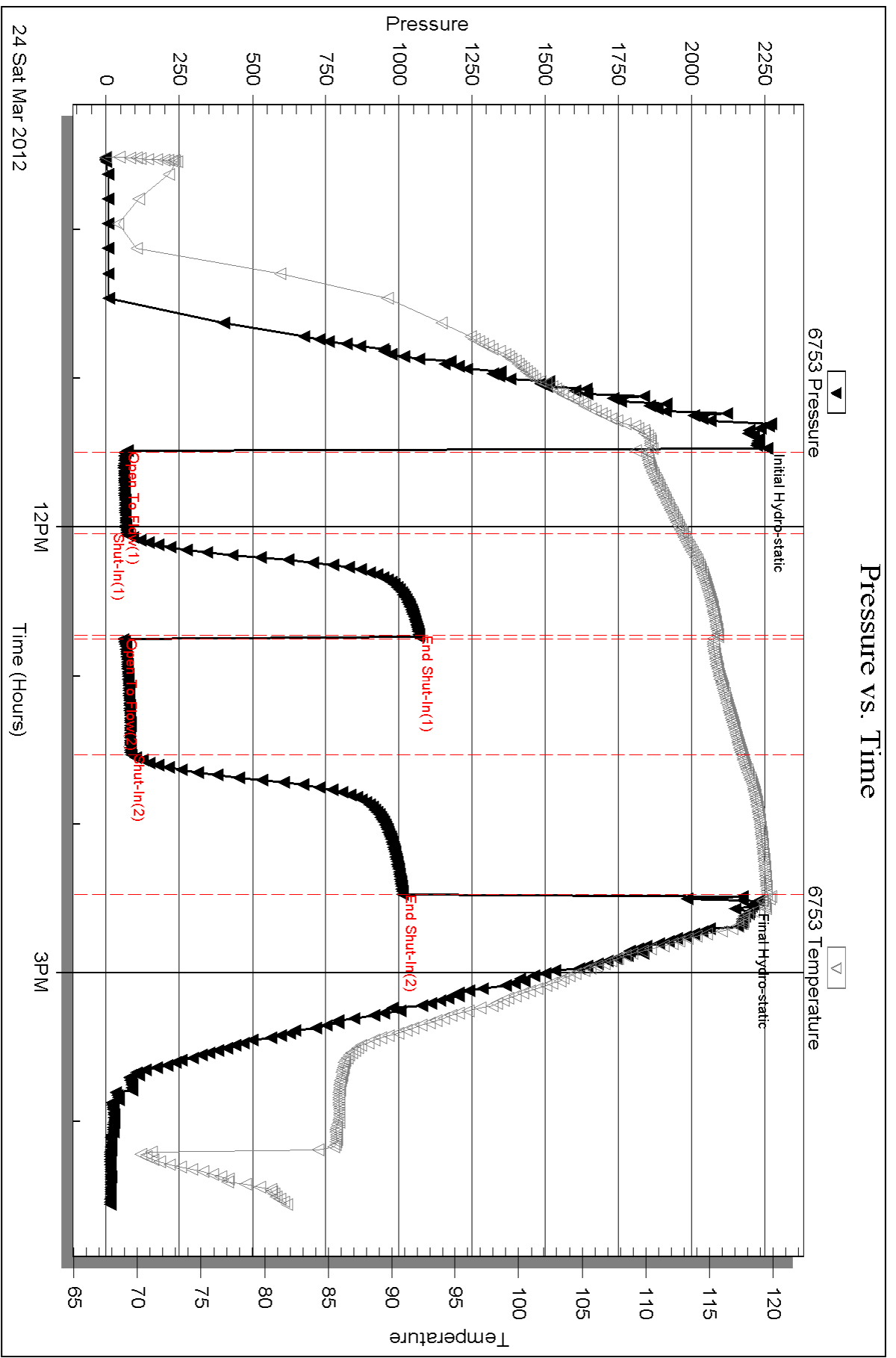
Serial #: 6753

Inside

Crede Petroleum Corp.

Deidre #1-9

DST Test Number: 3



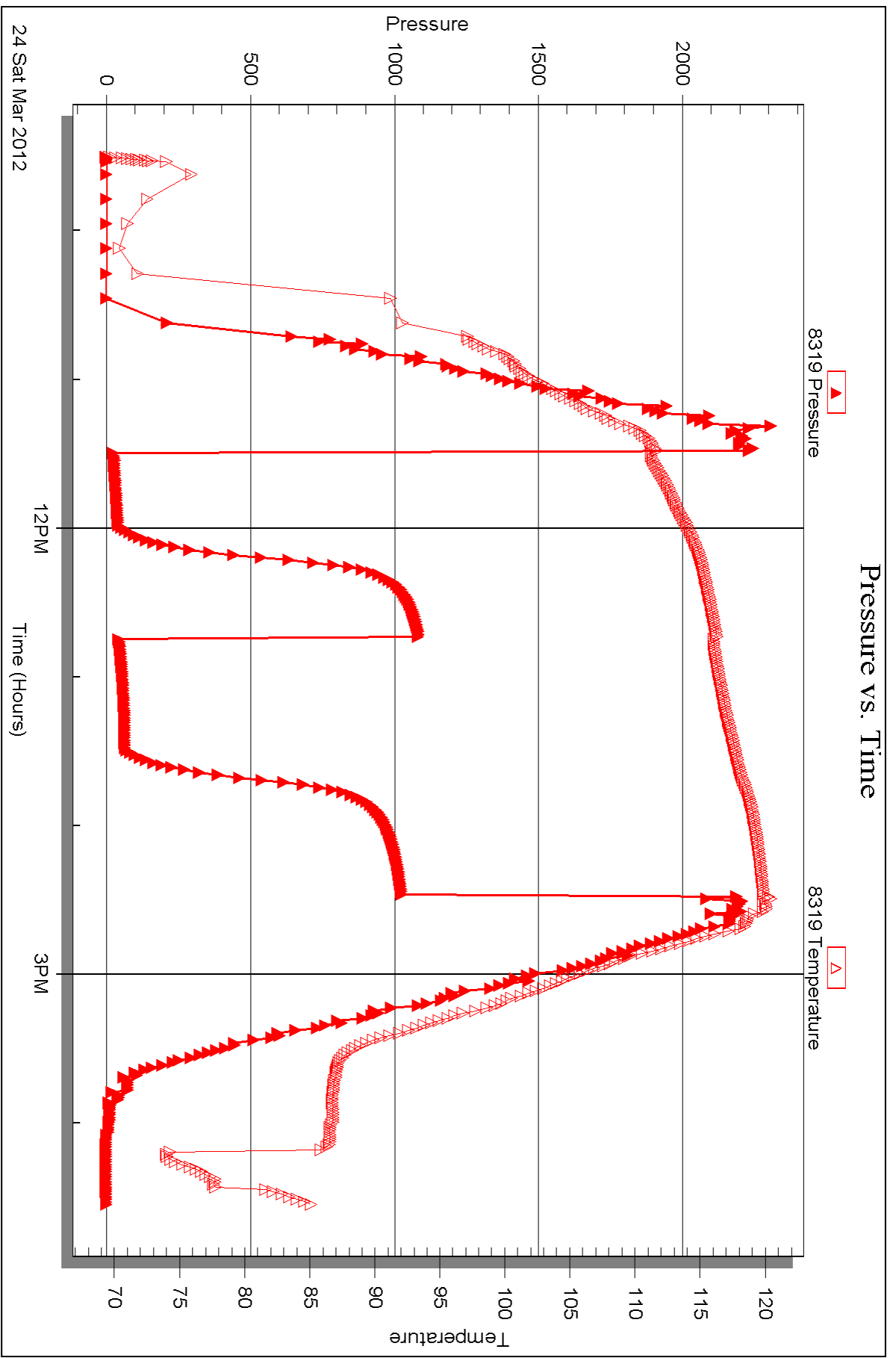


Serial #: 8319

Outside Credo Petroleum Corp.

Deidre #1-9

DST Test Number: 3



Triobite Testing, Inc

Ref. No: 46046

Printed: 2012.03.28 @ 15:28:25



## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900  
Denver CO 80202

ATTN: Bruce Ard

**Deidre #1-9**

**9-17s-29w Lane,KS**

Start Date: 2012.03.25 @ 00:32:00

End Date: 2012.03.25 @ 07:12:39

Job Ticket #: 45097                      DST #: 4

Trilobite Testing, Inc  
PO Box 362 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.03.28 @ 15:27:40



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Credo Petroleum Corp.

9-17s-29w Lane, KS

1801 Broadway #900  
Denver CO 80202

Deidre #1-9

Job Ticket: 45097

DST#: 4

ATTN: Bruce Ard

Test Start: 2012.03.25 @ 00:32:00

## GENERAL INFORMATION:

Formation: **Mississippian**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:26:50

Time Test Ended: 07:12:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 37

Interval: **4564.00 ft (KB) To 4592.00 ft (KB) (TVD)**

Reference Elevations: 2830.00 ft (KB)

Total Depth: 4592.00 ft (KB) (TVD)

2825.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: **8018**

Inside

Press @ Run Depth: 16.73 psig @ 4568.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.25

End Date:

2012.03.25

Last Calib.:

2012.03.25

Start Time: 00:32:02

End Time:

07:12:40

Time On Btm:

2012.03.25 @ 02:24:40

Time Off Btm:

2012.03.25 @ 05:13:30

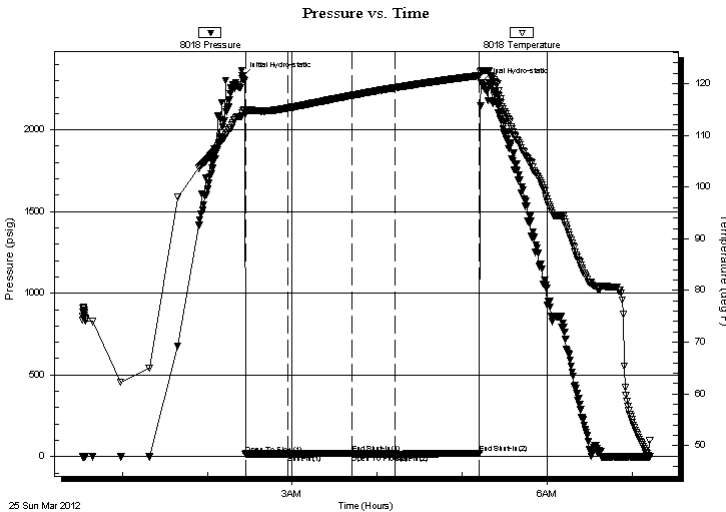
TEST COMMENT: 1/2" Blow receded to surface blow .

No return.

No blow .

No return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2328.62	114.28	Initial Hydro-static
3	15.83	114.28	Open To Flow (1)
32	17.39	115.27	Shut-In(1)
78	20.72	117.73	End Shut-In(1)
78	16.02	117.74	Open To Flow (2)
108	16.73	119.20	Shut-In(2)
168	20.33	121.58	End Shut-In(2)
169	2287.90	122.52	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	OSM 100m	0.01

\* Recovery from multiple tests

## Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Credo Petroleum Corp.

**9-17s-29w Lane,KS**

1801 Broadway #900  
Denver CO 80202

**Deidre #1-9**

Job Ticket: 45097

**DST#: 4**

ATTN: Bruce Ard

Test Start: 2012.03.25 @ 00:32:00

## Tool Information

Drill Pipe:	Length: 4430.00 ft	Diameter: 3.80 inches	Volume: 62.14 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 122.00 ft	Diameter: 2.25 inches	Volume: 0.60 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 62.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.50 ft			String Weight: Initial 66000.00 lb
Depth to Top Packer:	4564.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	55.50 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			4537.50	
Shut In Tool	5.00			4542.50	
Hydraulic tool	5.00			4547.50	
Jars	5.00			4552.50	
Safety Joint	2.50			4555.00	
Packer	5.00			4560.00	27.50 Bottom Of Top Packer
Packer	4.00			4564.00	
Stubb	1.00			4565.00	
Perforations	3.00			4568.00	
Recorder	0.00	8018	Inside	4568.00	
Recorder	0.00	6751	Outside	4568.00	
Perforations	21.00			4589.00	
Bullnose	3.00			4592.00	28.00 Bottom Packers & Anchor

**Total Tool Length: 55.50**



**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

**FLUID SUMMARY**

Credo Petroleum Corp.

**9-17s-29w Lane,KS**

1801 Broadway #900  
Denver CO 80202

**Deidre #1-9**

Job Ticket: 45097

**DST#: 4**

ATTN: Bruce Ard

Test Start: 2012.03.25 @ 00:32:00

**Mud and Cushion Information**

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2200.00 ppm

Filter Cake: 1.00 inches

**Recovery Information**

Recovery Table

Length ft	Description	Volume bbl
2.00	OSM 100m	0.010

Total Length: 2.00 ft      Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 8018

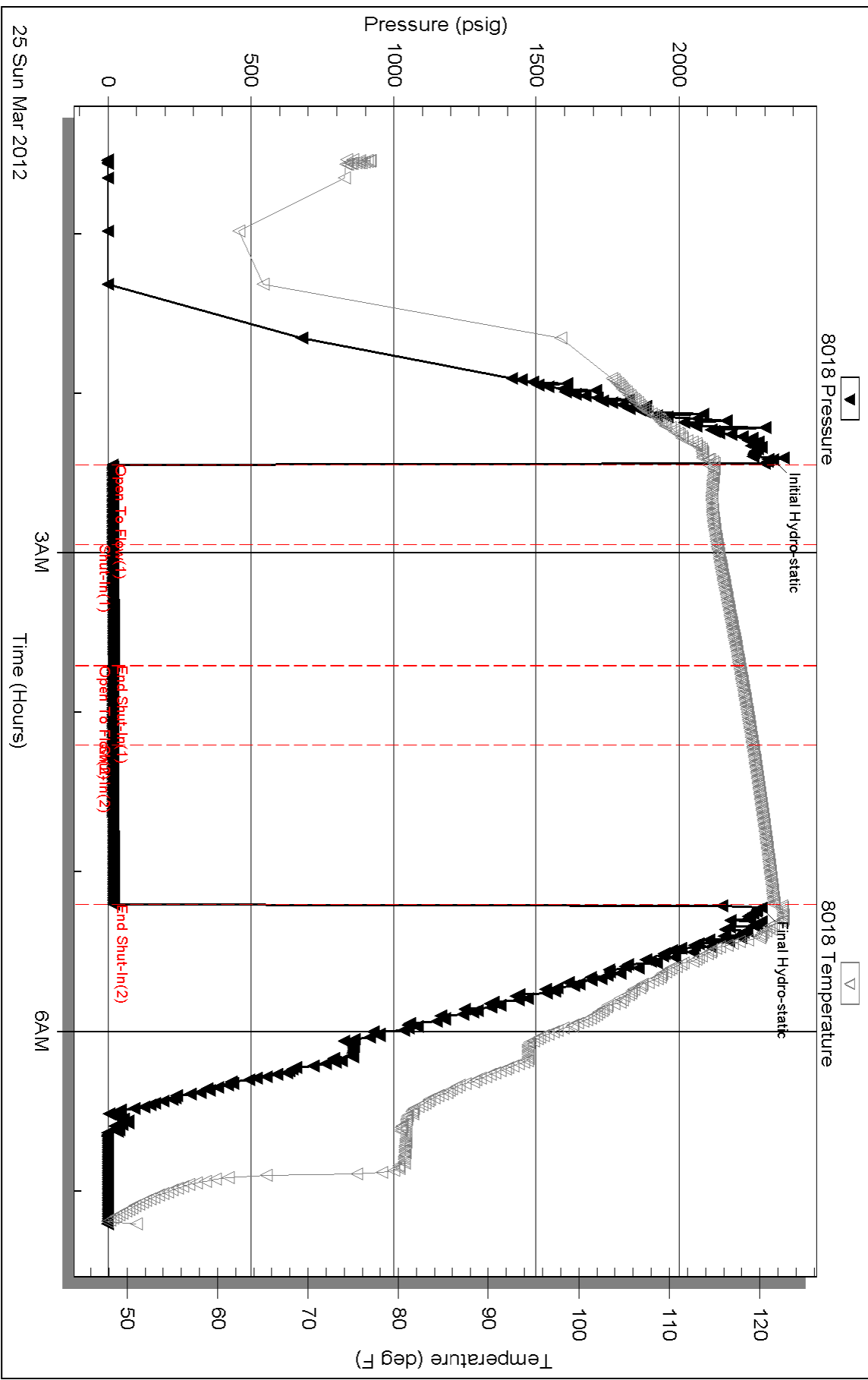
Inside

Crede Petroleum Corp.

Deidre #1-9

DST Test Number: 4

# Pressure vs. Time



Triobite Testing, Inc

Ref. No: 45097

Printed: 2012.03.28 @ 15:27:42

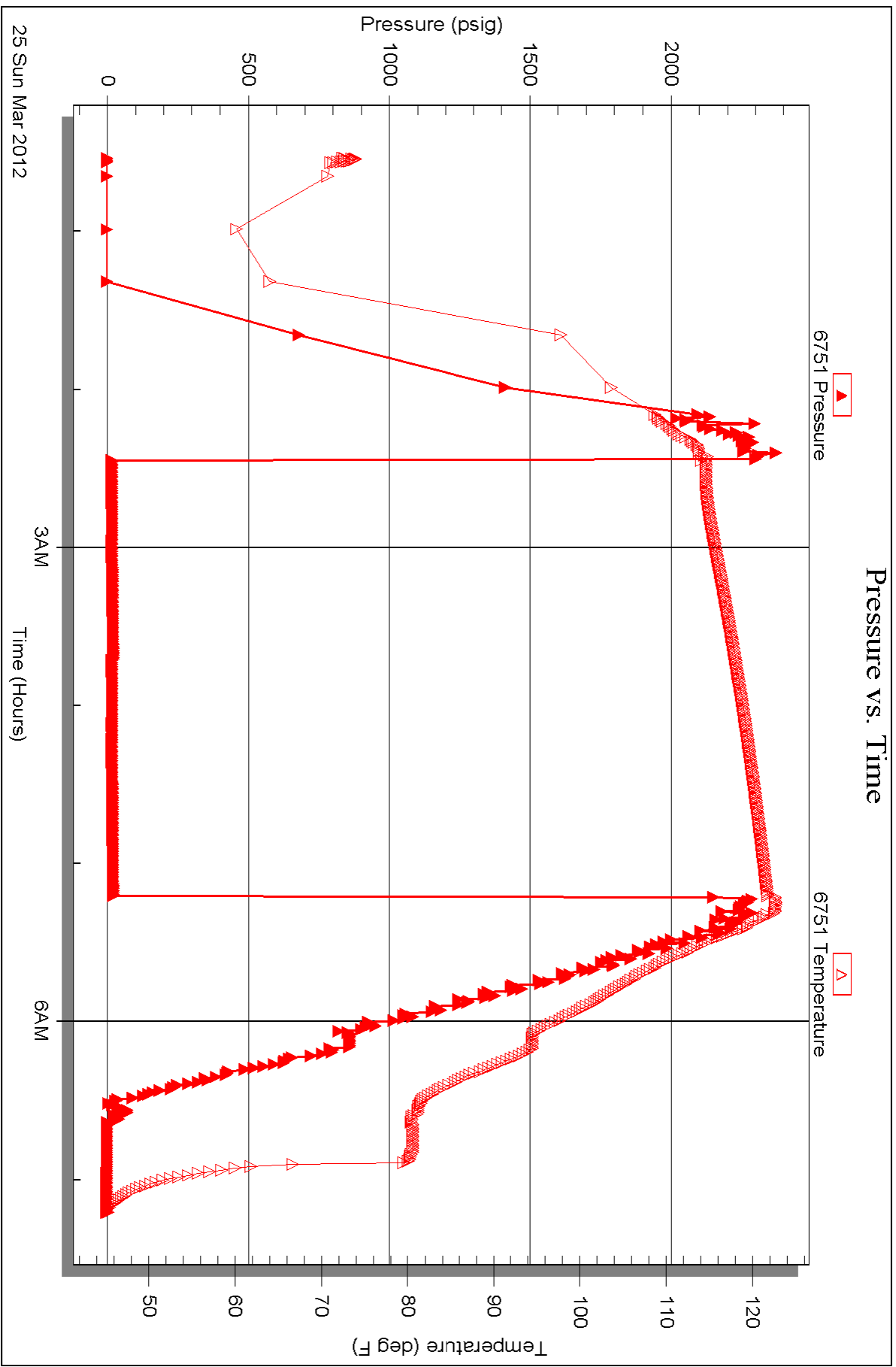
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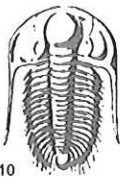
Crede Petroleum Corp.

Deidre #1-9

DST Test Number: 4







# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
MAR 26 2012

## Test Ticket

NO. 46044

Well Name & No. Deidre #1-9 Test No. 1 Date 3/22/12  
 Company Credo Petroleum Corp Elevation 2830 KB 2825 GL  
 Address 1801 Broadway #900 Denver CO 80202  
 Co. Rep / Geo. Bruce Ard Rig WW #10  
 Location: Sec. 9 Twp. 17S Rge. 29W Co. Lane State KS

Interval Tested 4134 - 4262 Zone Tested KC<sup>U</sup> H-K  
 Anchor Length 128 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.5  
 Top Packer Depth 4129 Drill Collars Run 122 Vis 54  
 Bottom Packer Depth 4134 Wt. Pipe Run \_\_\_\_\_ WL 7.6  
 Total Depth 4262 Chlorides 2,000 ppm System LCM 2

Blow Description FF - BOB in 11 min  
FSI - No blow  
FF - BOB in 43 min  
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
160	Mud				
200	SWCM		10	90	
180	WCM		40	60	

Rec Total 540 BHT 119 Gravity \_\_\_\_\_ API RW .18 @ 65 °F Chlorides 54,000 ppm

(A) Initial Hydrostatic 2,121  Test 1225' T-On Location 9:15  
 (B) First Initial Flow 46  Jars 250' T-Started 9:50  
 (C) First Final Flow 180  Safety Joint 75' T-Open 12:42  
 (D) Initial Shut-In 395  Circ Sub \_\_\_\_\_ T-Pulled 15:42  
 (E) Second Initial Flow 187  Hourly Standby \_\_\_\_\_ T-Out 18:05  
 (F) Second Final Flow 274  Mileage 60RT 81' Comments \_\_\_\_\_  
 (G) Final Shut-In 395  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1,953  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_

Initial Open 30  Ruined Shale Packer \_\_\_\_\_  
 Initial Shut-In 45  Ruined Packer \_\_\_\_\_  
 Final Flow 45  Extra Copies \_\_\_\_\_  
 Final Shut-In 60 Sub Total 8  
 Total 1634'  
 Sub Total 1634' MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative Bruce Ard

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
MAR 26 2012

## Test Ticket

NO. 46045

BY: \_\_\_\_\_

Well Name & No. Deidre #1-9 Test No. 2 Date 3/23/12  
 Company Credo Petroleum Corp Elevation 2830 KB 2825 GL  
 Address 1801 Broadway #900 Denver CO 80202  
 Co. Rep / Geo. Bruce Ard Rig WW #10  
 Location: Sec. 9 Twp. 17S Rge. 29W Co. Lane State KS

Interval Tested 4258 - 4468 Zone Tested "L - Fort. Scott"  
 Anchor Length 210 Drill Pipe Run 4113 Mud Wt. 9.5  
 Top Packer Depth 4253 Drill Collars Run 122 Vis 54  
 Bottom Packer Depth 4258 Wt. Pipe Run - WL 2.6  
 Total Depth 4468 Chlorides 2,000 ppm System LCM 2  
 Blow Description IF - BOBin 7 1/2 min  
ISI - No blow  
FF - BOBin 27 min  
FSI - No blow

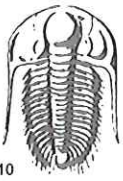
Rec	Feet of	%gas	%oil	%water	%mud
<del>360</del> <u>360</u>	<u>water</u>				
<del>180</del> <u>180</u>	<u>wcm</u>			<u>20</u>	<u>80</u>
<u>40</u>	<u>Mud</u>				

Rec Total 580 BHT 122 Gravity API RW .20 @ 55 ° F Chlorides 48,000 ppm

(A) Initial Hydrostatic <u>2,192</u>	<input checked="" type="checkbox"/> Test <u>1225"</u>	T-On Location <u>13:00</u>
(B) First Initial Flow <u>50</u>	<input checked="" type="checkbox"/> Jars <u>250"</u>	T-Started <u><del>12:30</del> 15:05</u>
(C) First Final Flow <u>201</u>	<input checked="" type="checkbox"/> Safety Joint <u>75"</u>	T-Open <u>17:35</u>
(D) Initial Shut-In <u>313</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>20:35</u>
(E) Second Initial Flow <u>207</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>22:50</u>
(F) Second Final Flow <u>281</u>	<input checked="" type="checkbox"/> Mileage <u>60 RT 84"</u>	Comments _____
(G) Final Shut-In <u>313</u>	<input type="checkbox"/> Sampler	<input type="checkbox"/> Ruined Shale Packer
(H) Final Hydrostatic <u>2,086</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer	Sub Total <u>0</u>
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder	Total <u>11034</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility	
	Sub Total <u>11034</u>	

Approved By \_\_\_\_\_ Our Representative Bruce Ard

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# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
MAR 26 2012

## Test Ticket

NO. 46046

4/10

Well Name & No. Deidre #1-9 BY: \_\_\_\_\_ Test No. 3 Date 3/24/12  
 Company Credo Petroleum Corp Elevation 2830 KB 2825 GL  
 Address 1801 Broadway #900 Denver CO 80202  
 Co. Rep / Geo. Bruce Ard Rig WW #10  
 Location: Sec. 9 Twp. 17s Rge. 29w Co. Lane State KS

Interval Tested 4465 - 4546 Zone Tested "Cherokee Johnson"  
 Anchor Length 81 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.4  
 Top Packer Depth 4460 Drill Collars Run 122 Vis 54  
 Bottom Packer Depth 4465 Wt. Pipe Run \_\_\_\_\_ WL 7.2  
 Total Depth 4546 Chlorides 2,200 ppm System LCM 1  
 Blow Description IF - 10 1/2 in blow  
FSI - No blow  
FF - BOB in 27 min  
FSI - No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>MCO</u>	<u>85</u>	<u>15</u>	<u>15</u>	<u>15</u>
<u>107</u>	<u>OCM</u>	<u>30</u>	<u>70</u>	<u>70</u>	<u>70</u>
<u>5</u>	<u>AVS60</u>	<u>95</u>	<u>5</u>	<u>5</u>	<u>5</u>
<u>360 ft GIP</u>					

Rec Total 127 BHT 120 Gravity 35 API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic 2,227  Test 1225' T-On Location 9:15  
 (B) First Initial Flow 66  Jars 250' T-Started 9:30  
 (C) First Final Flow 70  Safety Joint 75' T-Open 11:35  
 (D) Initial Shut-In 1,068  Circ Sub \_\_\_\_\_ T-Pulled 14:35  
 (E) Second Initial Flow 58  Hourly Standby \_\_\_\_\_ T-Out 16:40  
 (F) Second Final Flow 85  Mileage 60 RT - 84' Comments \_\_\_\_\_  
 (G) Final Shut-In 1,012  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2,175  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1634'  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1634'

Initial Open 30  
 Initial Shut-In 45  
 Final Flow 45  
 Final Shut-In 60

Approved By \_\_\_\_\_ Our Representative Bruce Ard

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# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
MAR 27 2012  
BY: \_\_\_\_\_

## Test Ticket

NO. 45097

Well Name & No. Deidre 1-9 Test No. 4 Date 3-25-12  
 Company Credo Petroleum Corp. Elevation 2830 KB 2825 GL  
 Address 1801 Broadway #900 Denver, CO 80202  
 Co. Rep / Geo. Bruce Ard Rig WW# 10  
 Location: Sec. 9 Twp. 17s Rge. 29w Co. Lane State KS

Interval Tested 4564-4592 Zone Tested Mississippian  
 Anchor Length 28 Drill Pipe Run 4430 Mud Wt. 9.0  
 Top Packer Depth 4560 Drill Collars Run 122 Vis 55  
 Bottom Packer Depth 4564 Wt. Pipe Run 0 WL 7.2  
 Total Depth 4592 Chlorides 2200 ppm System LCM 1  
 Blow Description 1/2" Blow receded to surface blow.  
No return.  
No blow  
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>2</u>	Feet of <u>OSM</u>	%gas	%oil	%water <u>100</u>	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 2 BHT 122 Gravity — API RW @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2329  Test 1225' T-On Location 00:00  
 (B) First Initial Flow 16  Jars 250' T-Started 00:32  
 (C) First Final Flow 17  Safety Joint 75 T-Open 02:27  
 (D) Initial Shut-In 21  Circ Sub NIC T-Pulled 05:12  
 (E) Second Initial Flow 16  Hourly Standby \_\_\_\_\_ T-Out 07:13  
 (F) Second Final Flow 17  Mileage 61RT x 2 122RT 170<sup>80</sup> Comments Picked up tool 3:26:25  
 (G) Final Shut-In 20  Sampler \_\_\_\_\_ 11:45pm No test  
 (H) Final Hydrostatic 2288  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Initial Shut-In 45  Day Standby \_\_\_\_\_ Total 1720.80  
 Final Flow 30  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 60  Sub Total 1720.80

Approved By Bruce B. Ard Our Representative Chuck Smith

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DIGITAL LOG (785) 625-3858

Dual Induction Log

API No. 15-101-22,360-00-00

Company Credo Petroleum Corporation

Well Deidre No. 1-9

Field

County Lane

State

Kansas

Location 1600' FNL & 750' FWL

Other Services  
CNL/CDL  
MEL/BHCS

Sec: 9 Twp: 17 S Rge: 29 W

Permanent Datum Ground Level Elevation 2825

Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Date 3/25/2012

Run Number One

Depth Driller 4675

Depth Logger 4678

Bottom Logged Interval 4677

Top Log Interval 200

Casing Driller 8.625 @ 251

Casing Logger 249

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 2600

Density / Viscosity 9.55 52

pH / Fluid Loss 9.0 6.8

Source of Sample Flowline

Rm @ Meas. Temp .85 @ 70

Rmf @ Meas. Temp .64 @ 70

Rmc @ Meas. Temp 1.15 @ 70

Source of Rmf / Rmc Charts

Rm @ BHT .48 @ 123

Operating Rig Time 5 Hours

Max Rec. Temp. F 123

Equipment Number 15

Location Hays

Recorded By D.Kerr

Witnessed By Bruce Ard

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

Healy KS, 4 East,  
1 South, SoutEast Into

Database File: c:\warrior\data\credo\_deidre no. 1-9\credo\_deidre\_1\_9hd.db  
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Presentation Format: dil2in  
Dataset Creation: Sun Mar 25 19:41:56 2012  
Charted by: Depth in Feet scaled 1:600

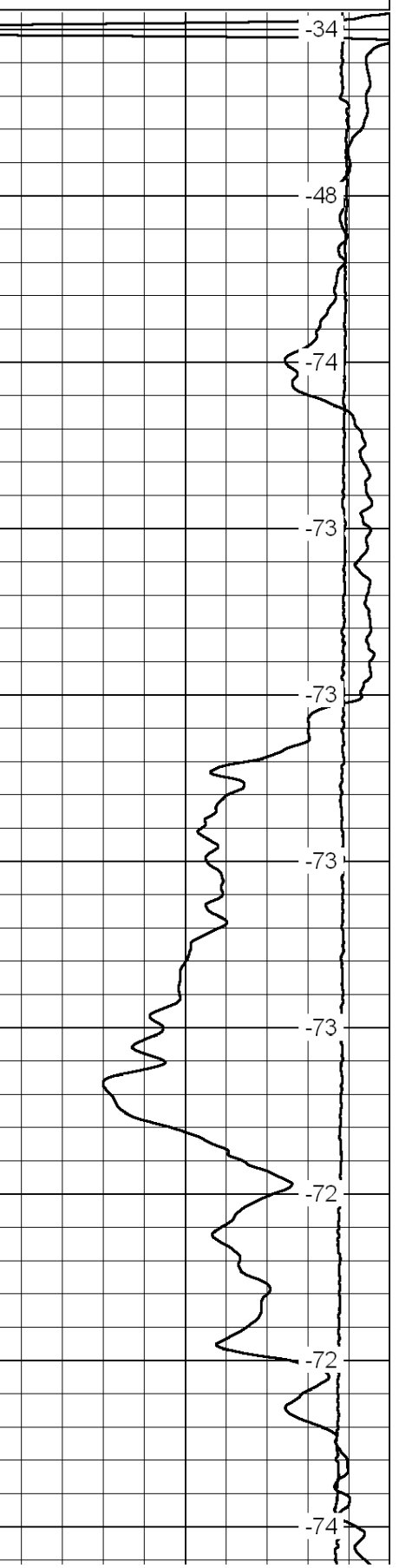
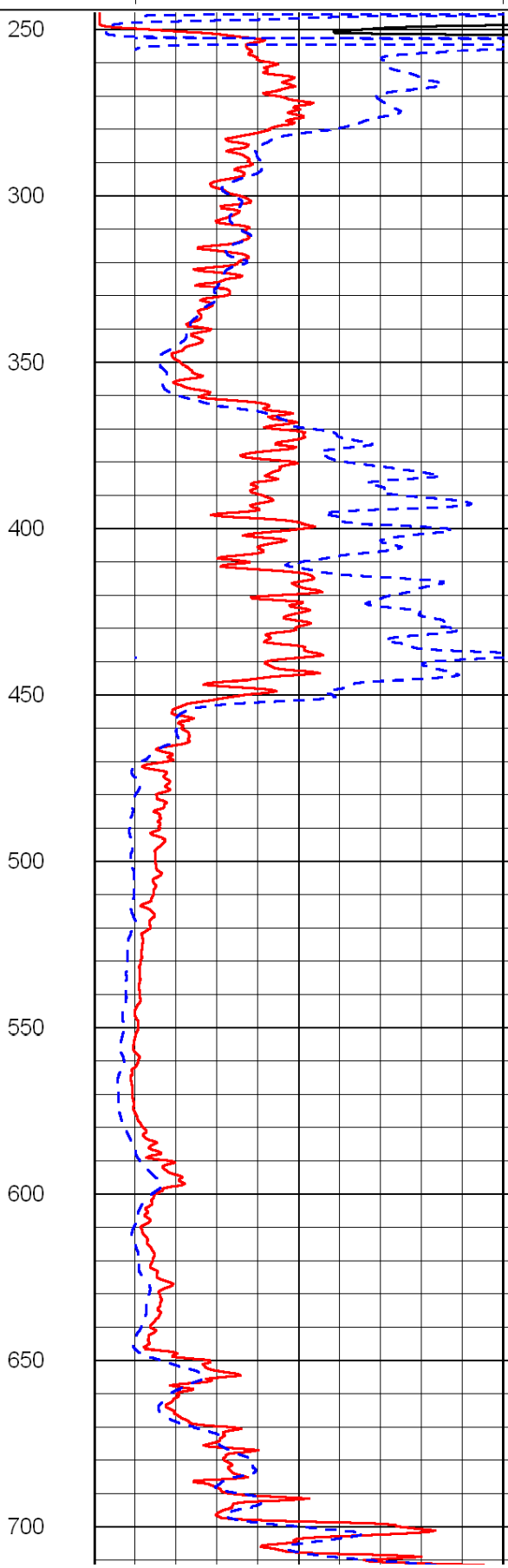
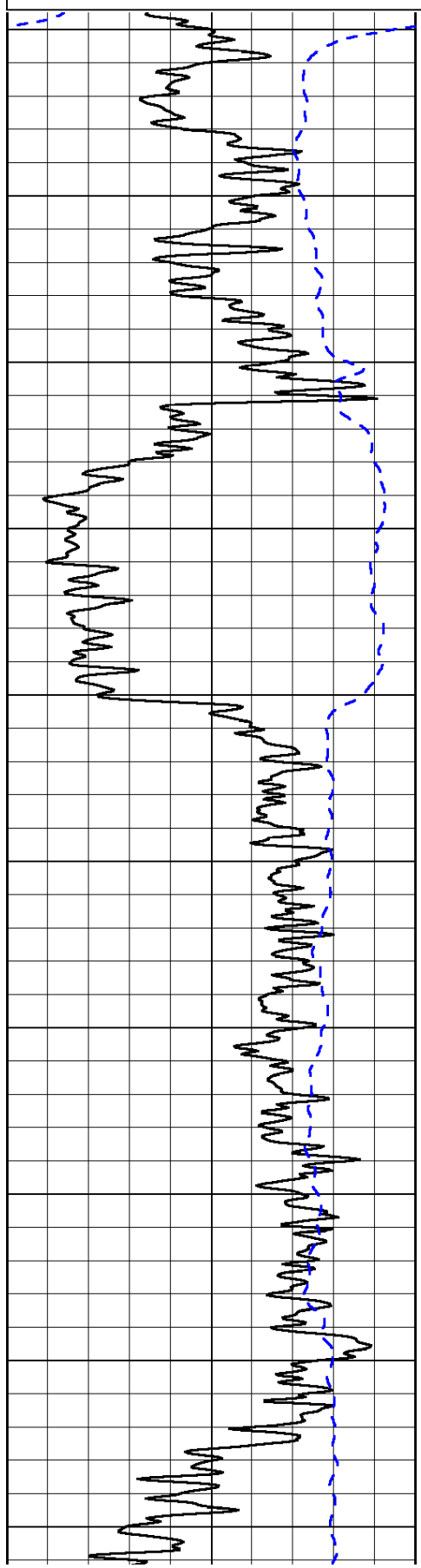
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-200	SP (mV)	0

0	Shallow Resistivity	50
0	Deep Resistivity	50

LSPD

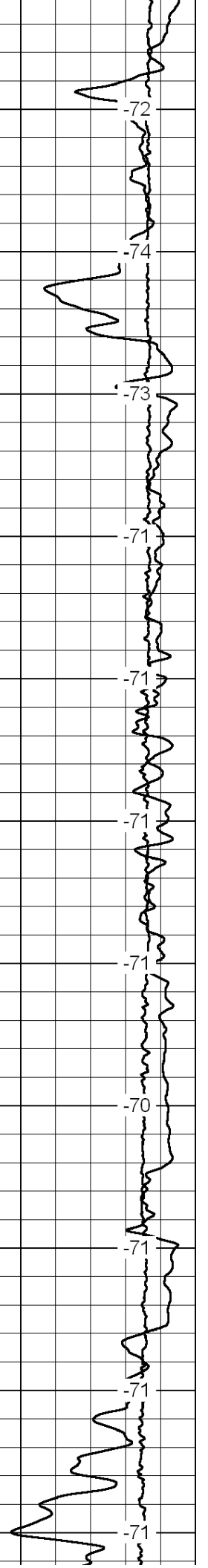
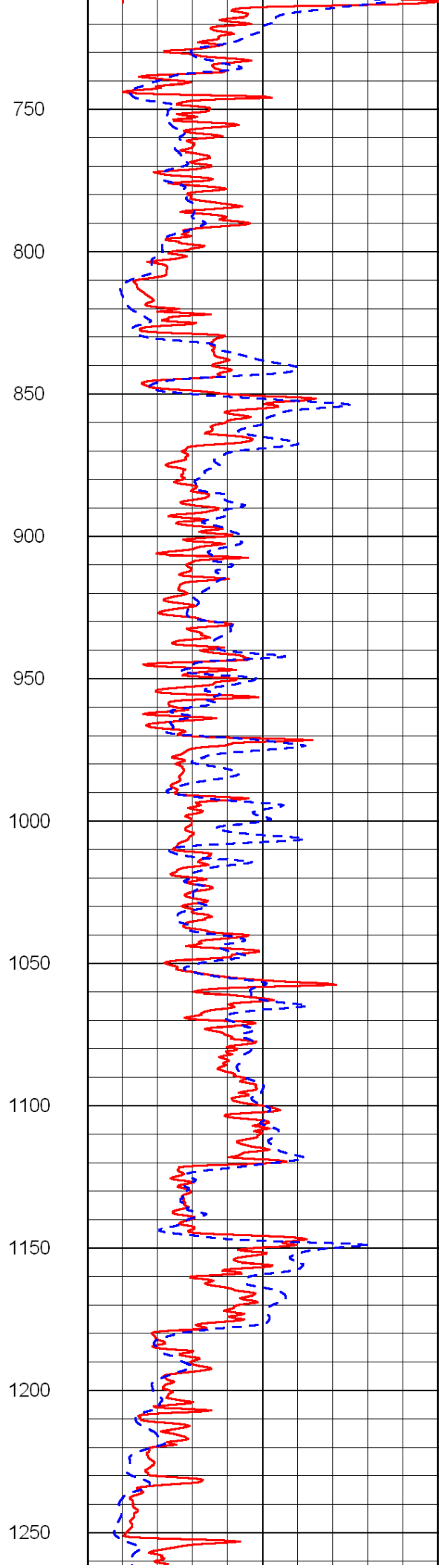
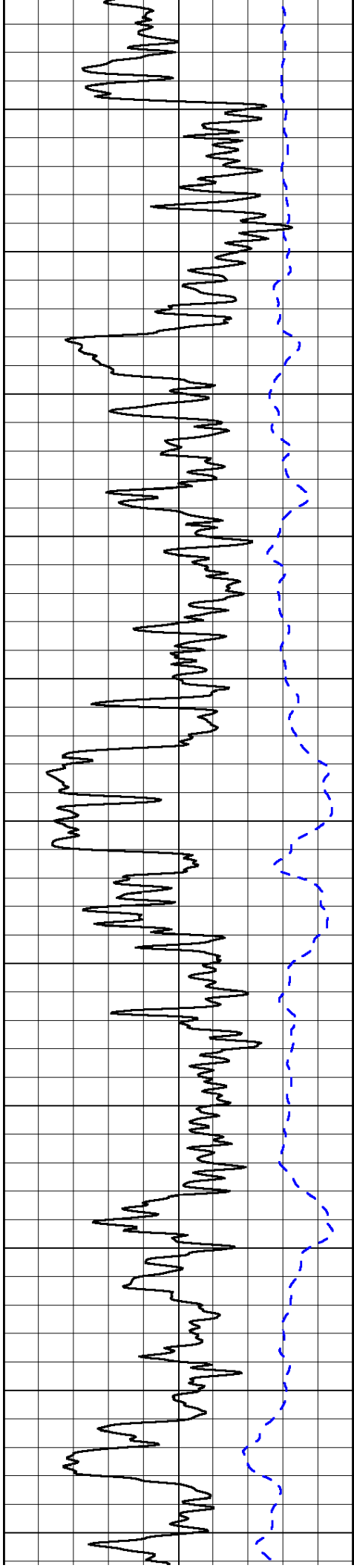
1000	Conductivity	0
15000	Line Tension	0

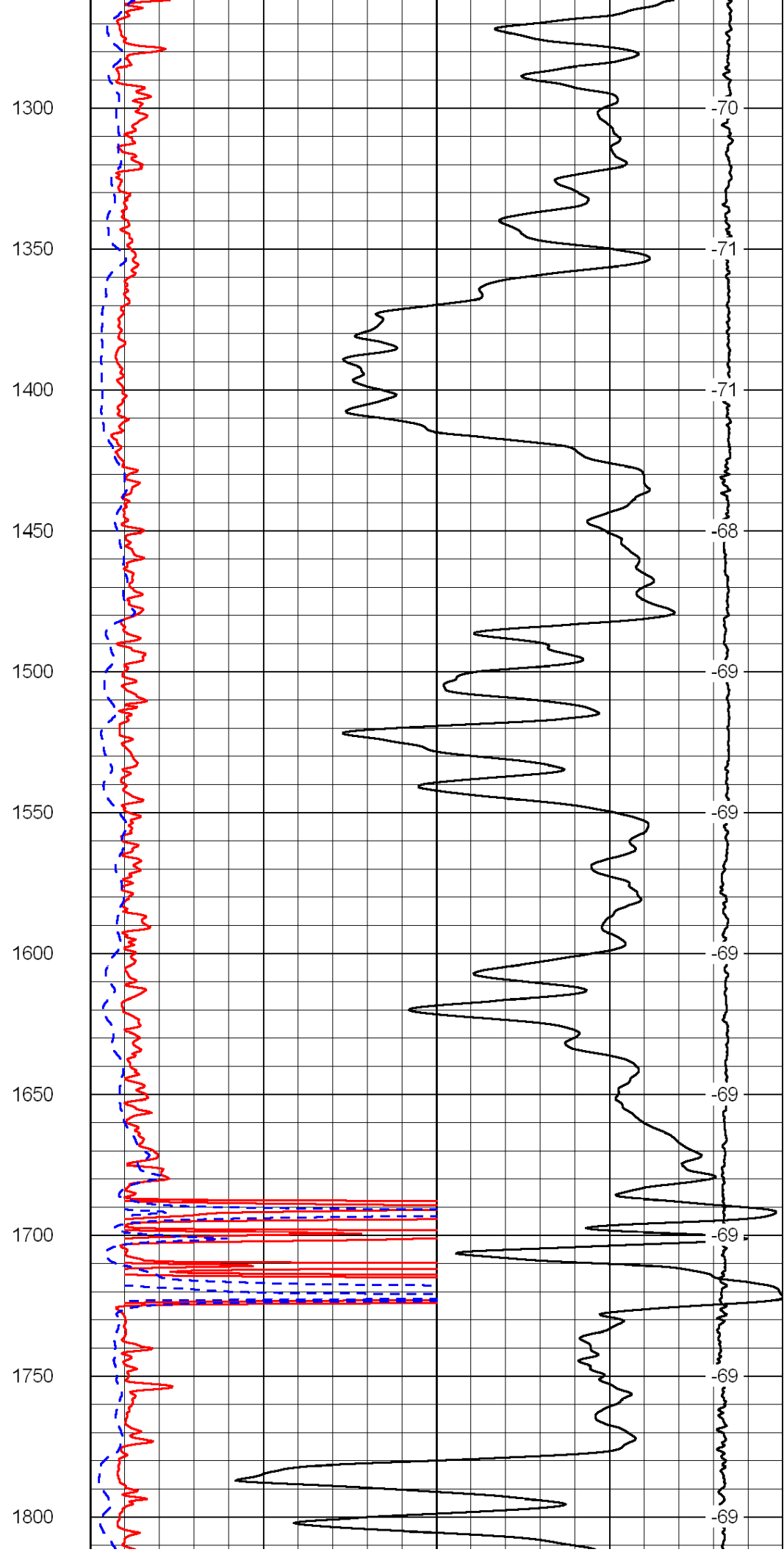
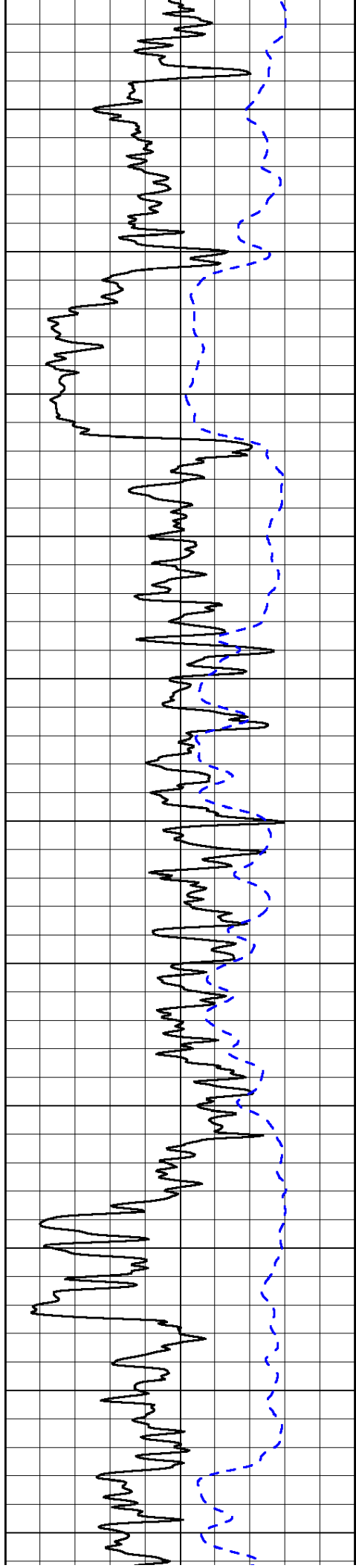
50	Shallow Resistivity	500
50	Deep Resistivity	500



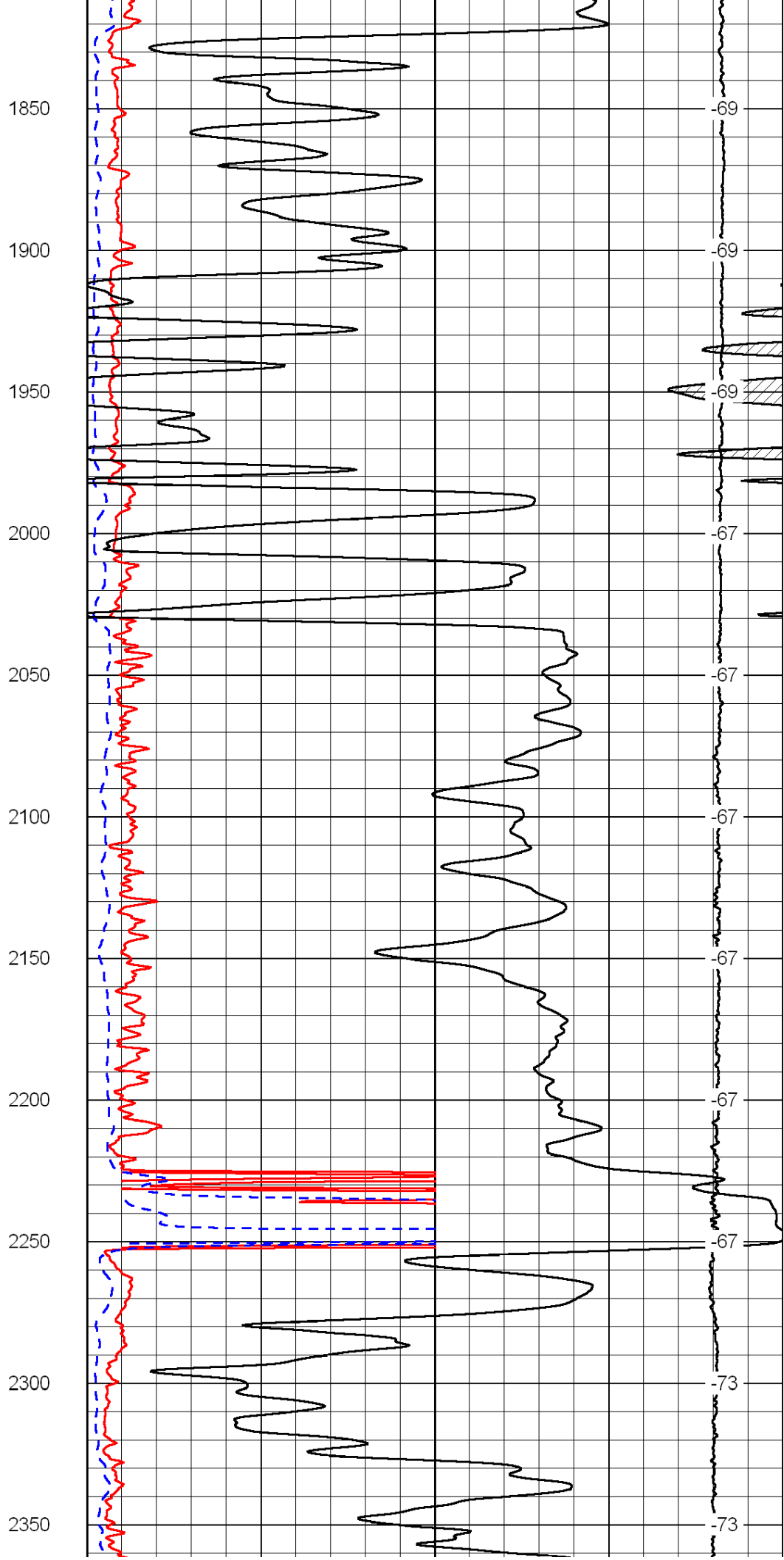
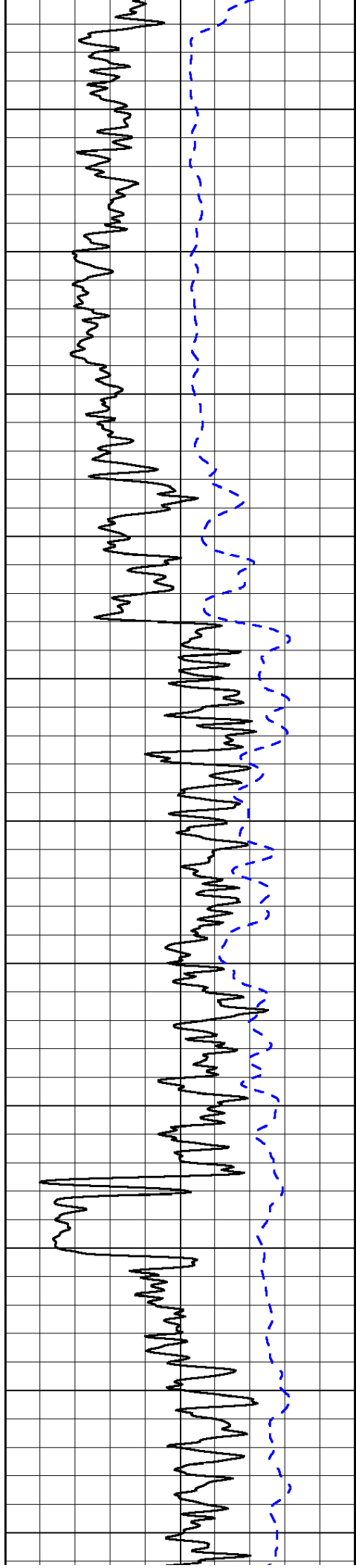
250  
300  
350  
400  
450  
500  
550  
600  
650  
700

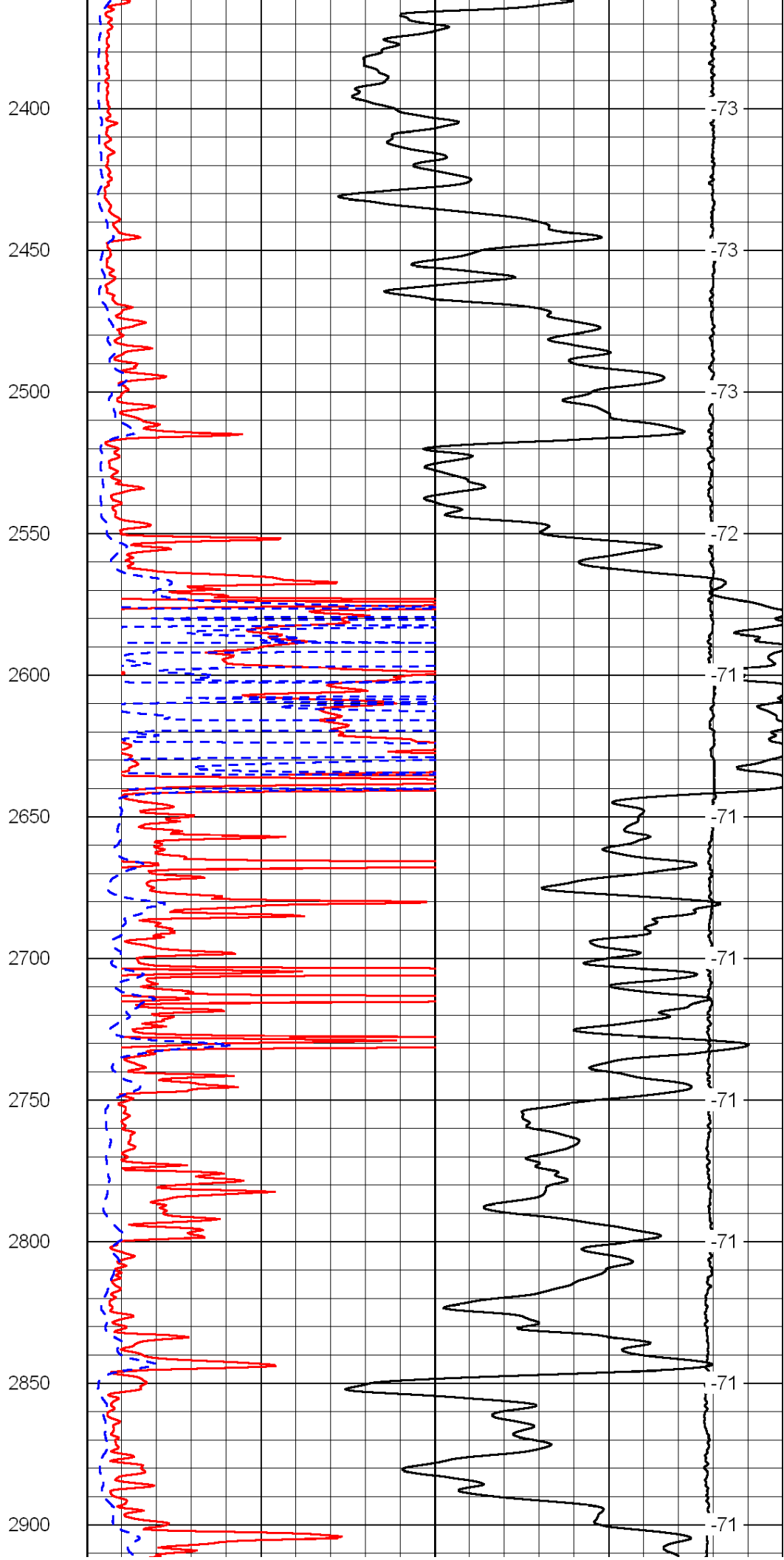
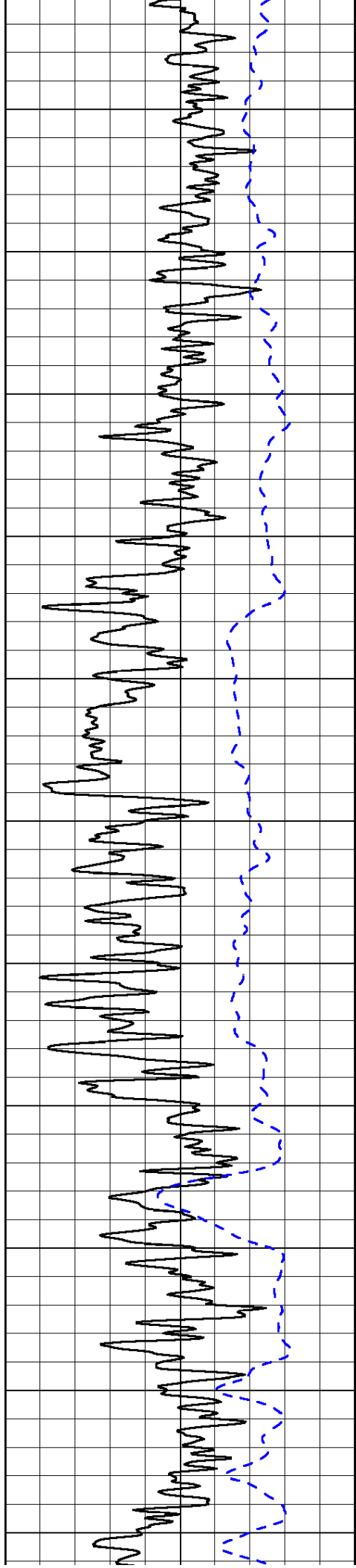
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-48  
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-74

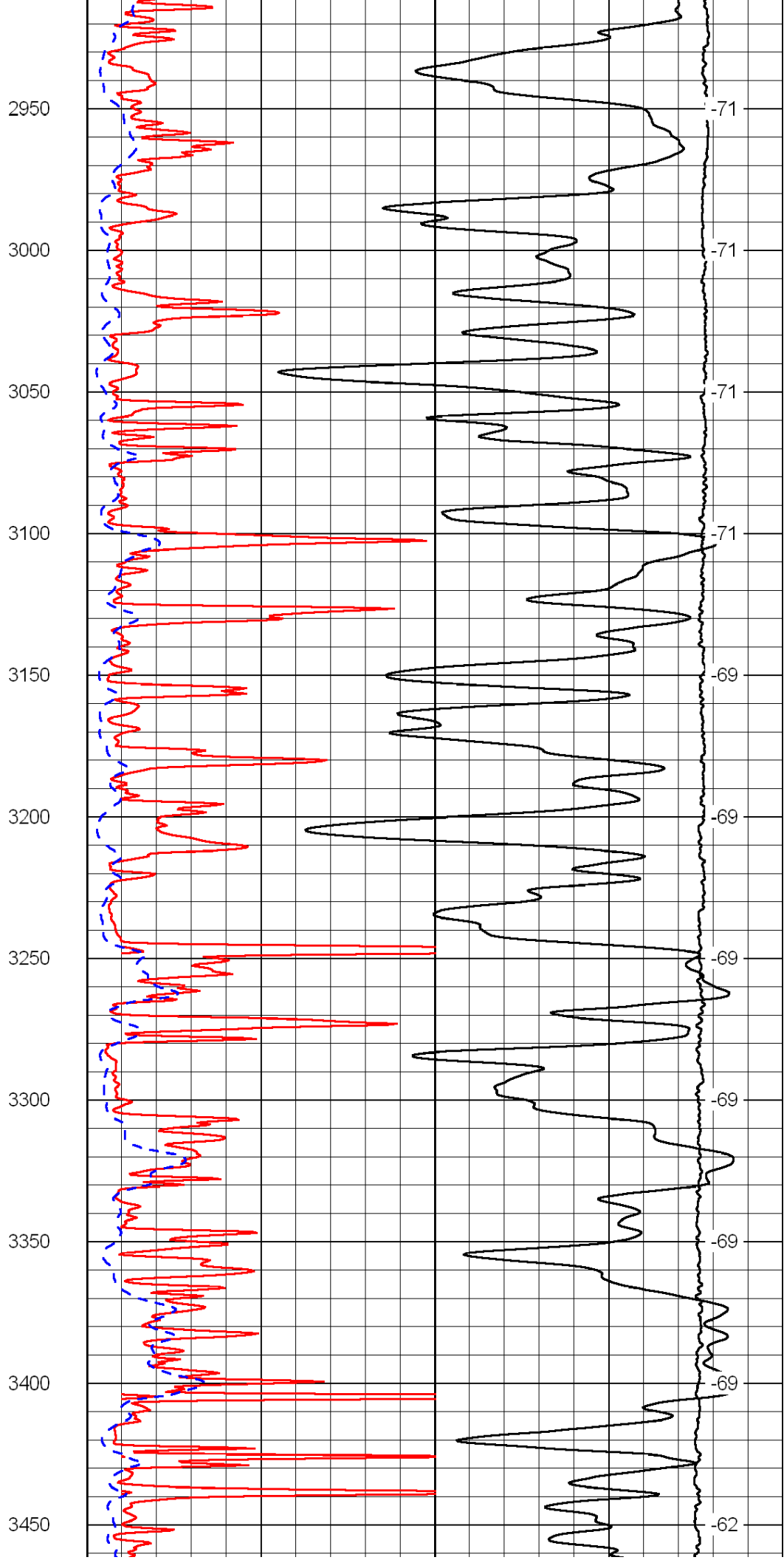
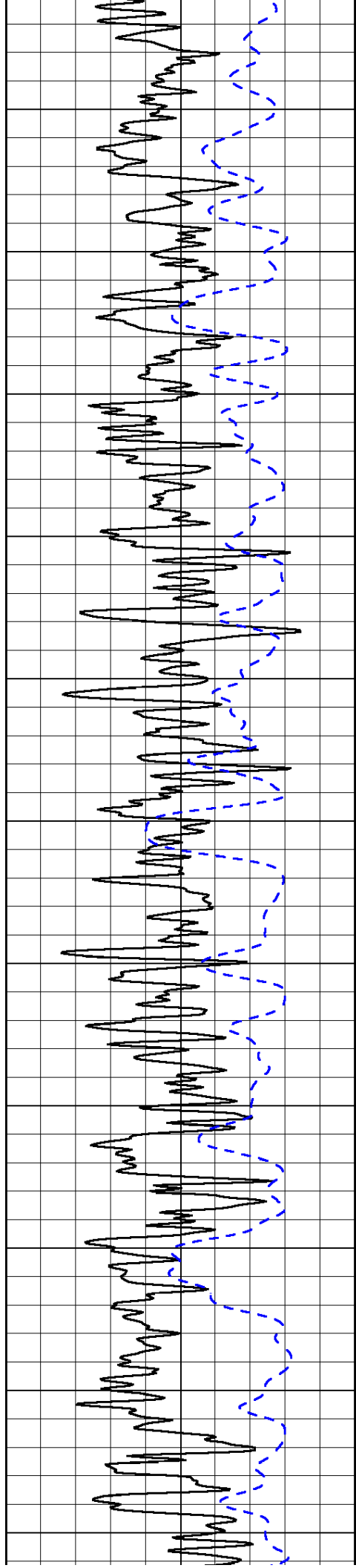


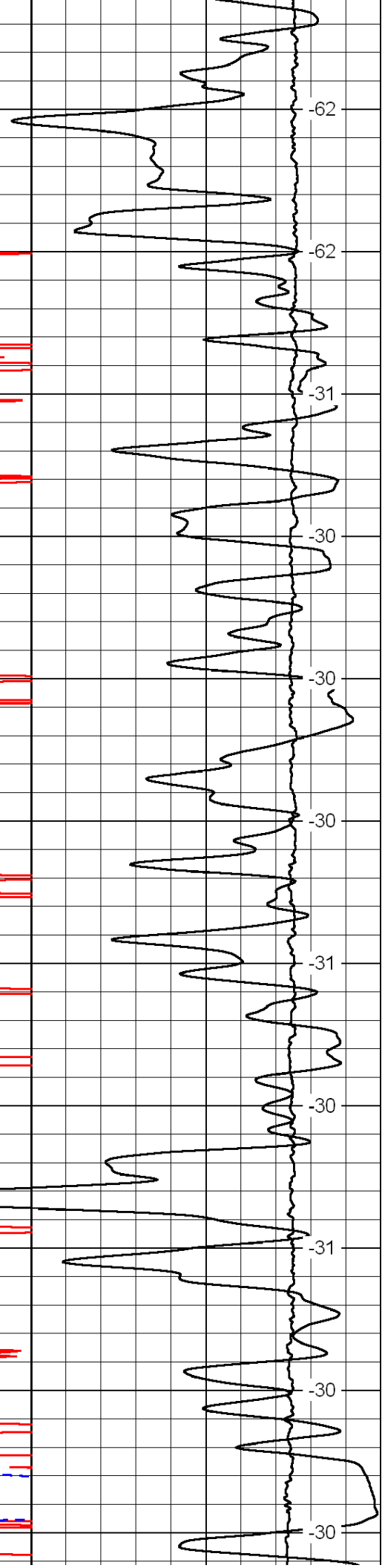
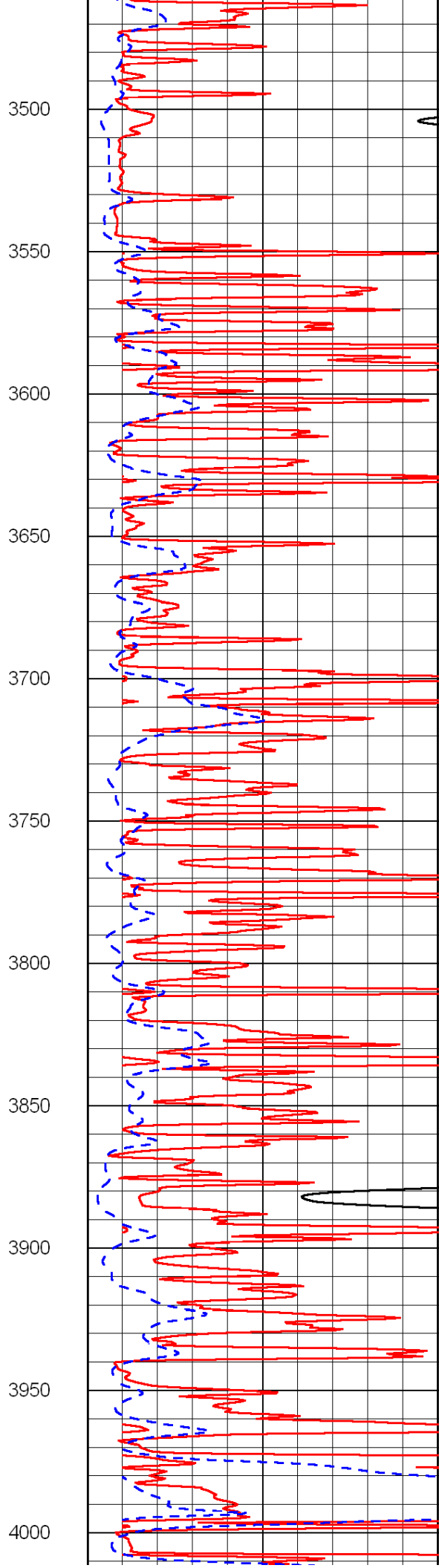
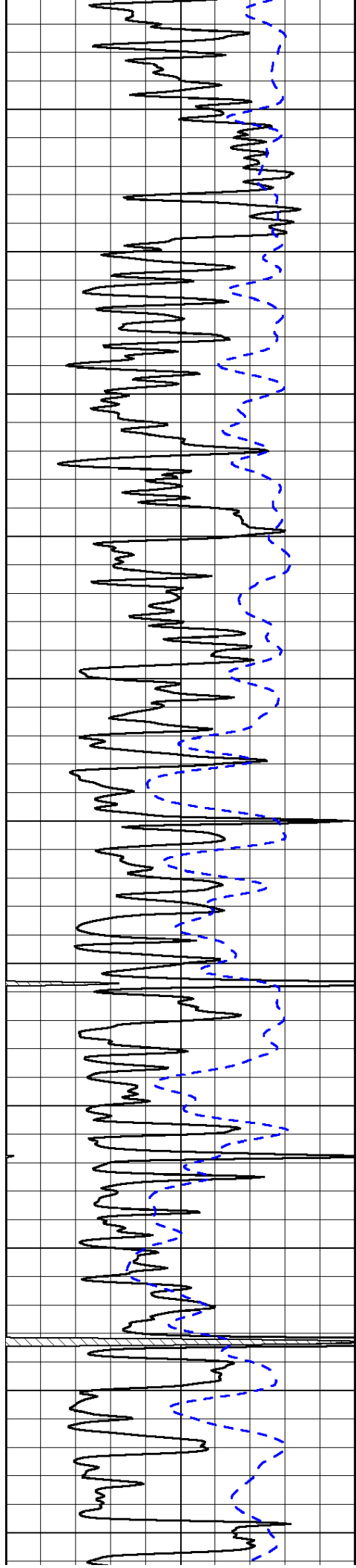


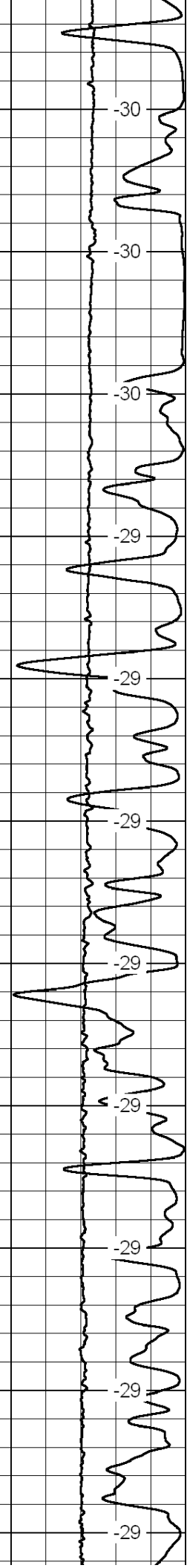
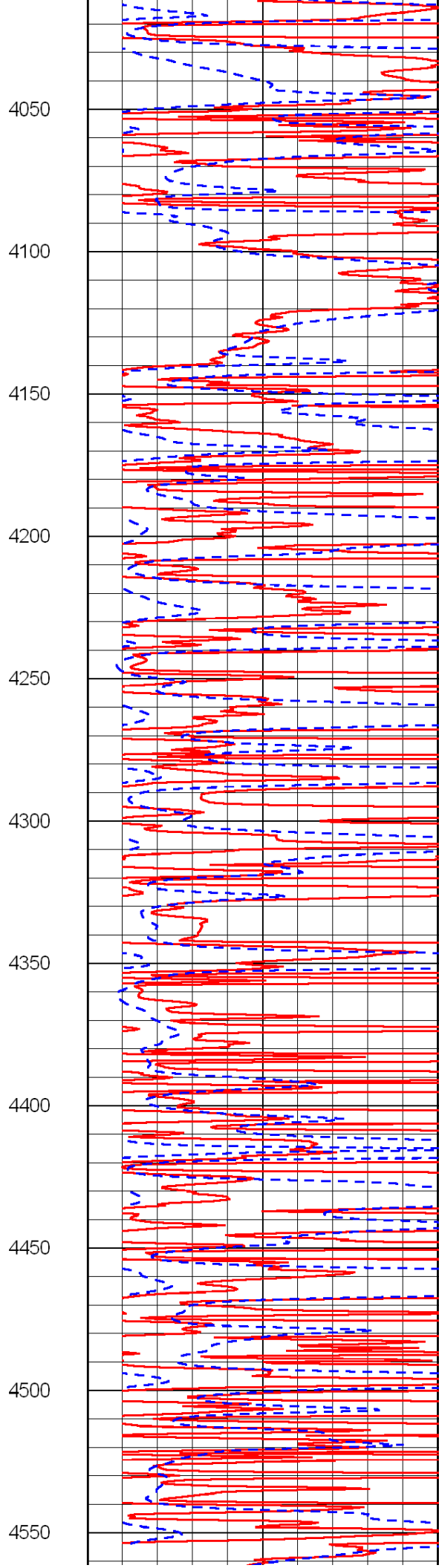
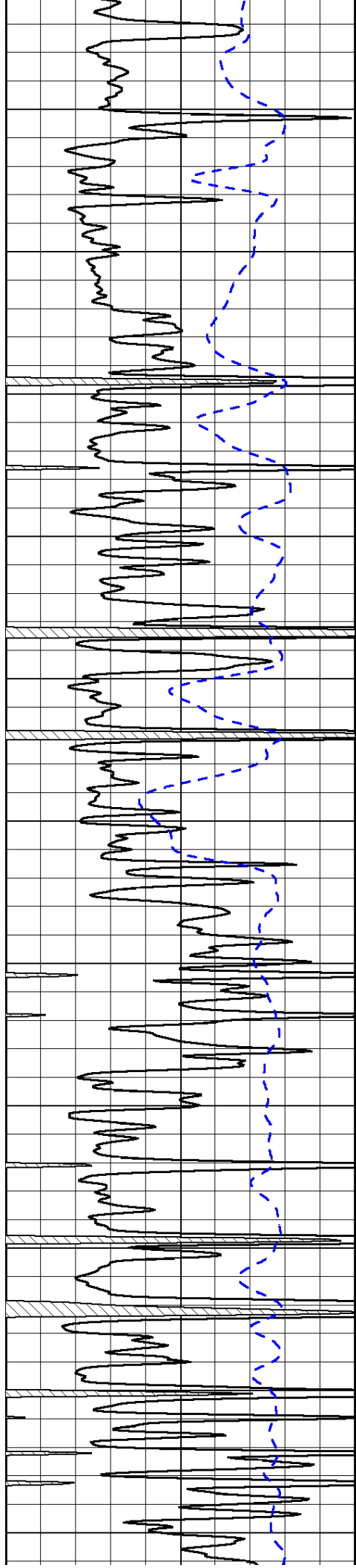


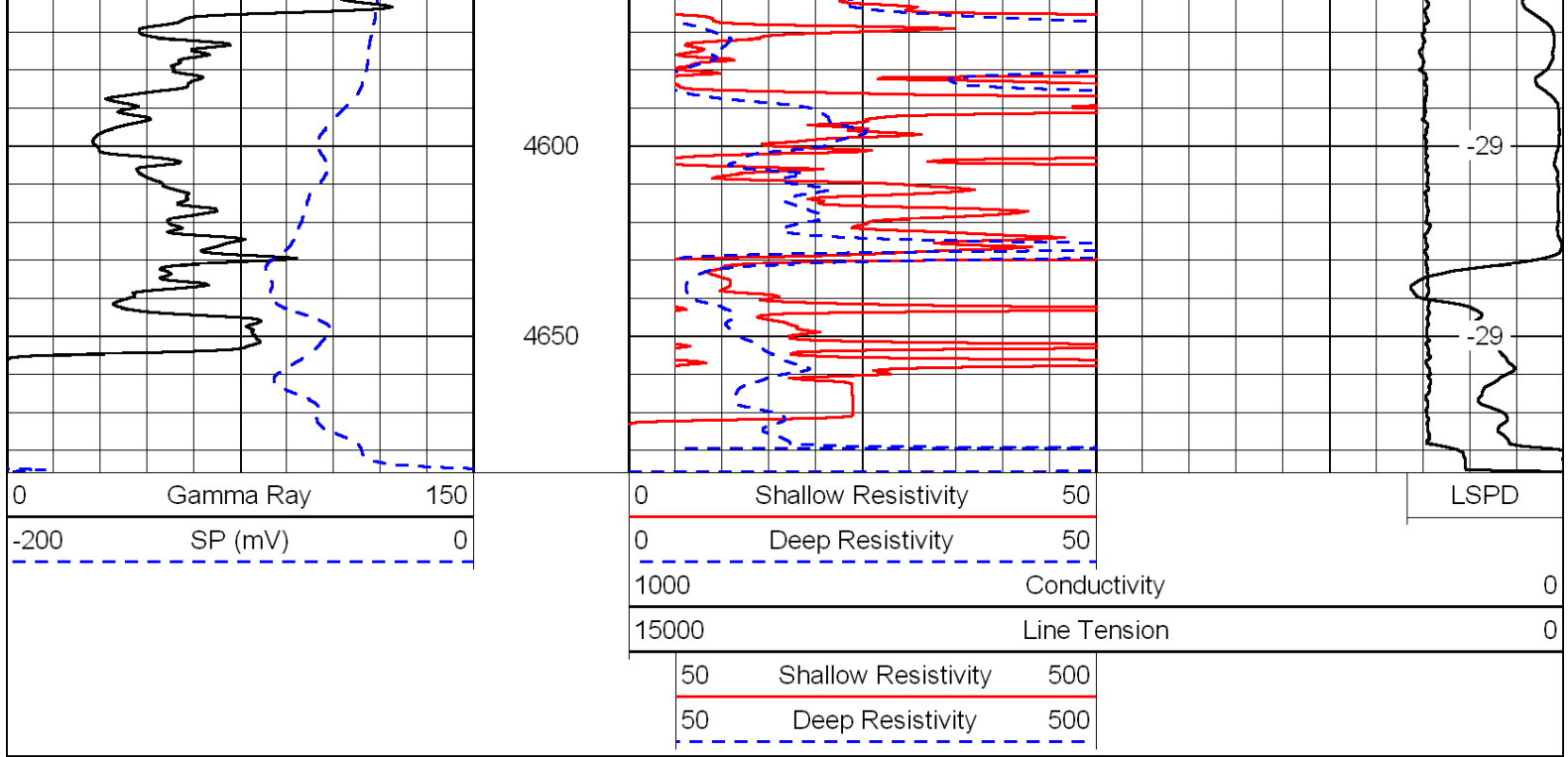




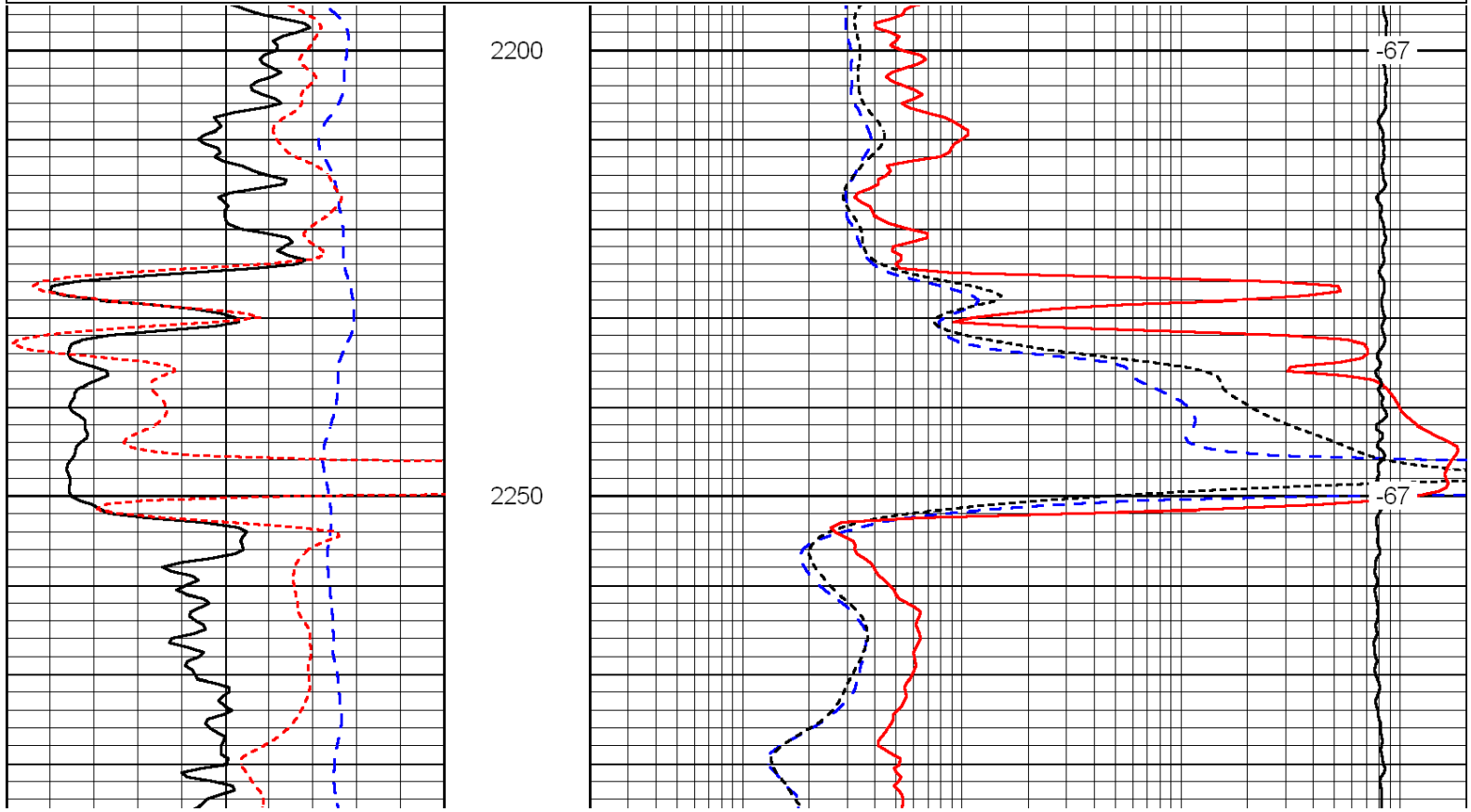
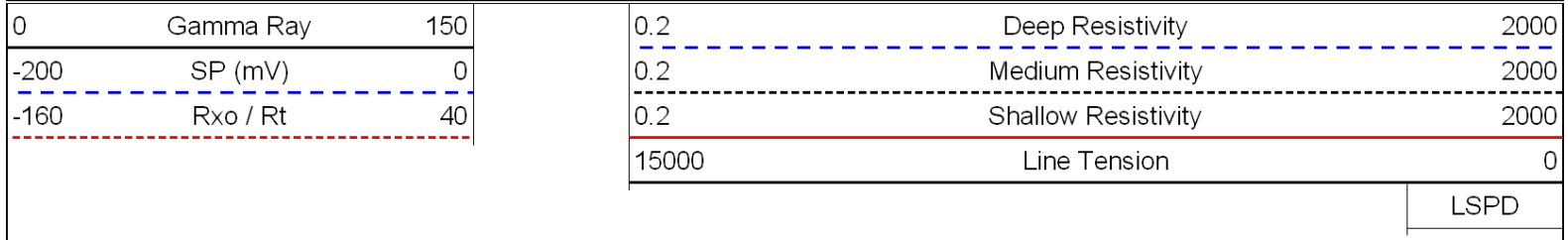


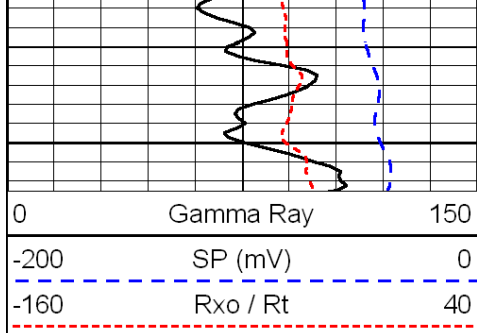




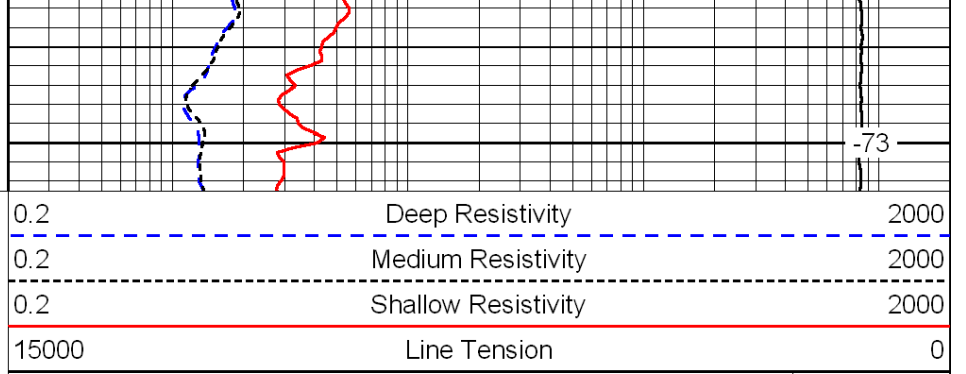


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 Dataset Creation: Sun Mar 25 19:41:56 2012  
 Charted by: Depth in Feet scaled 1:240





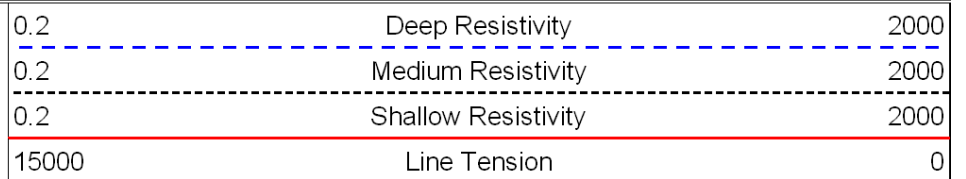
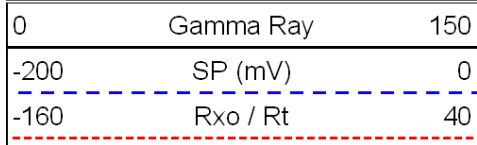
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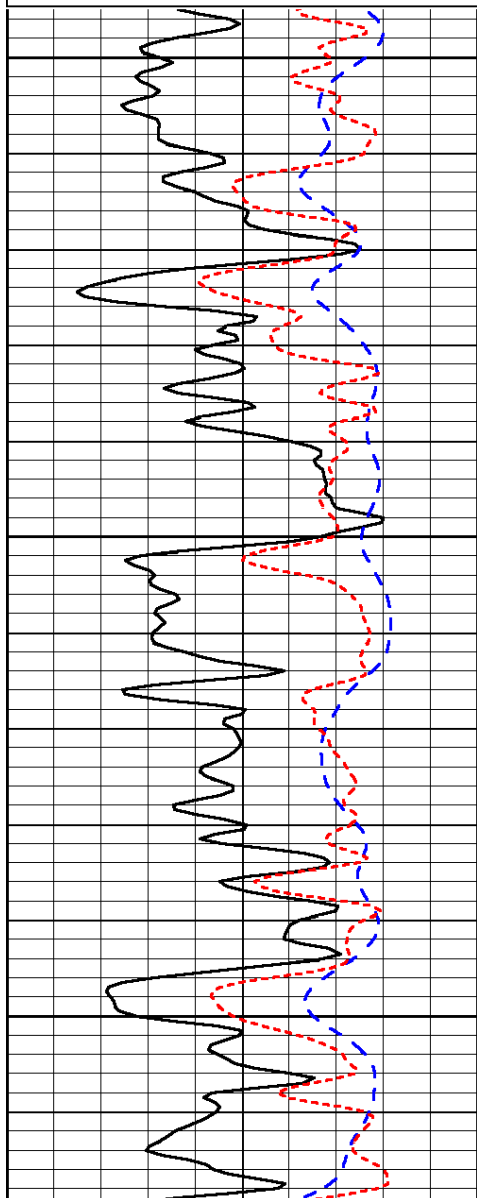
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LSPD

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 Charted by: Depth in Feet scaled 1:240



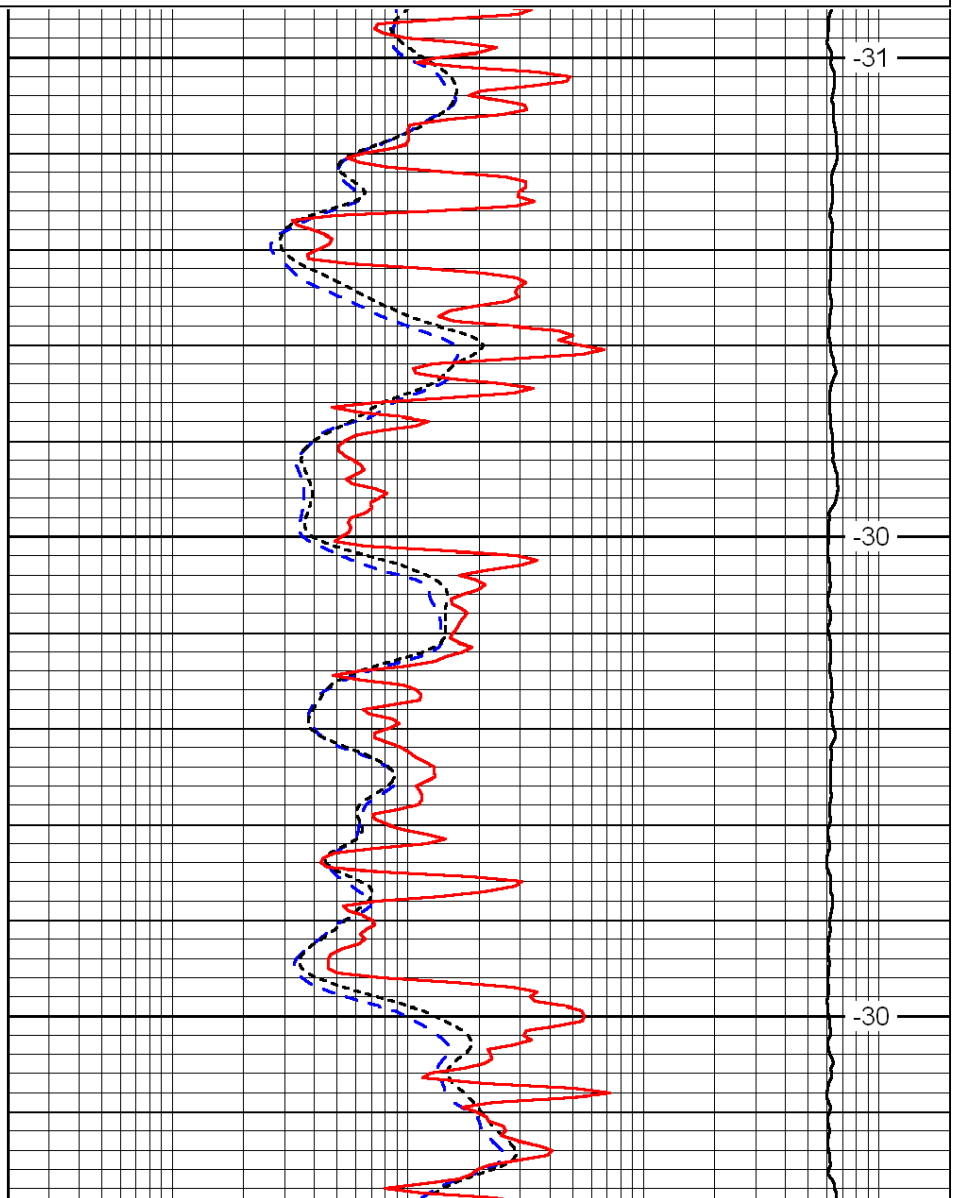
LSPD



3600

3650

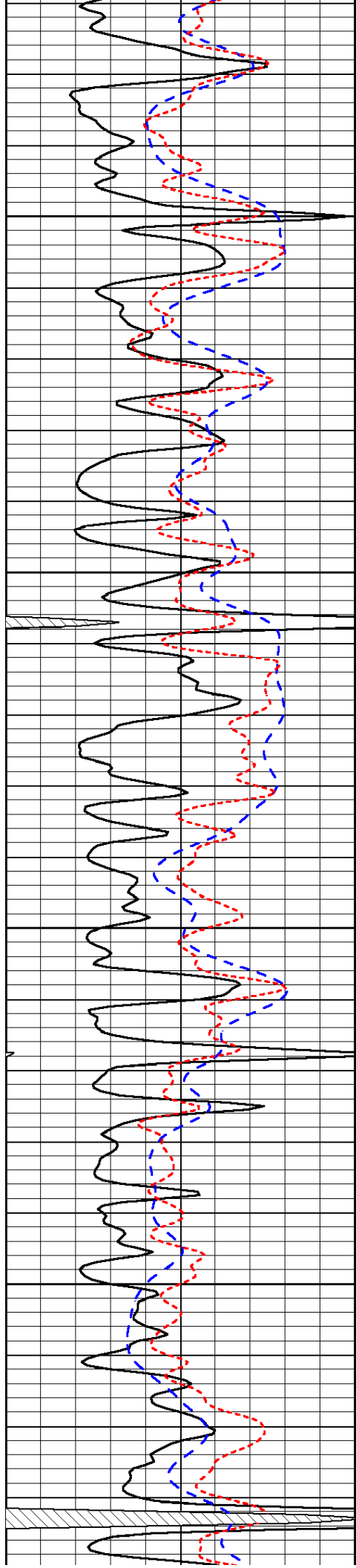
3700



-31

-30

-30

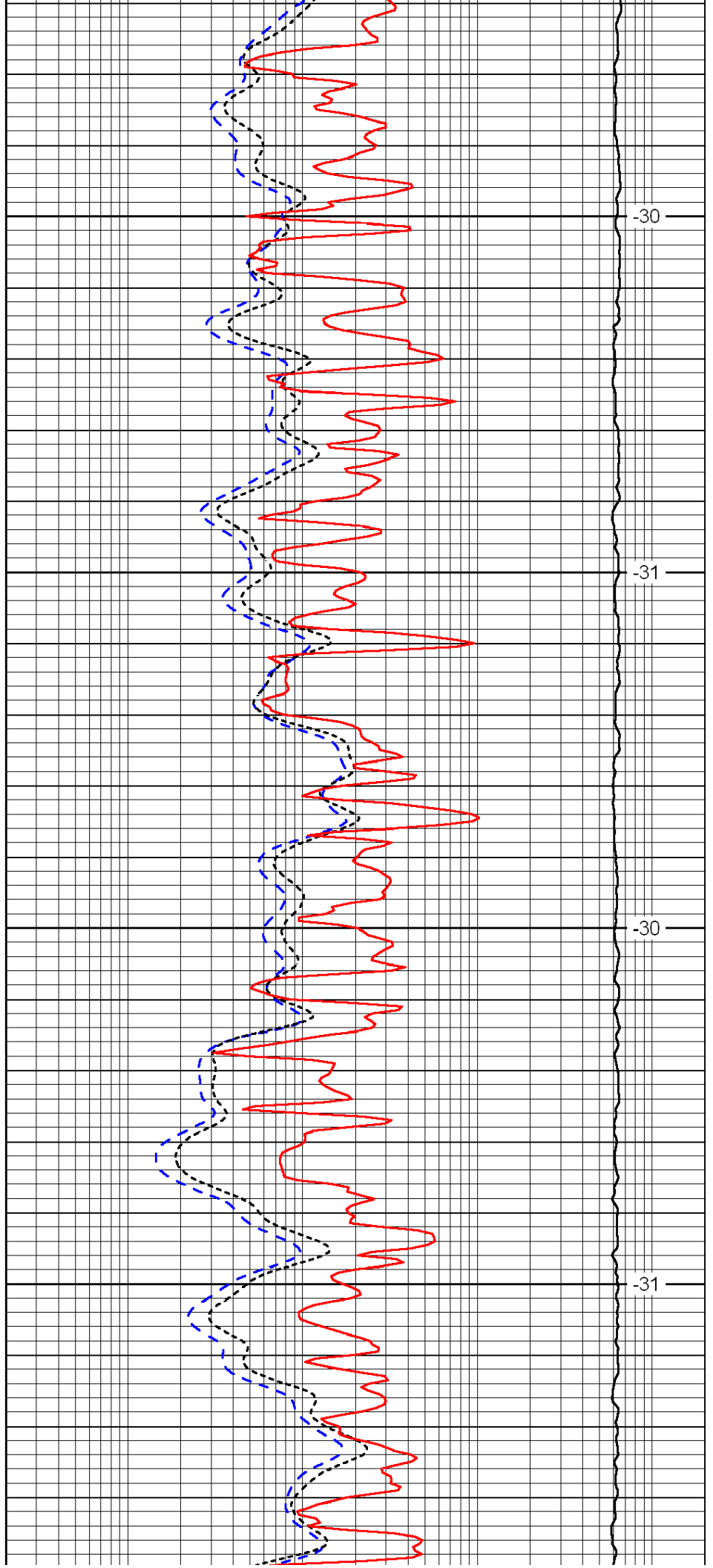


3750

3800

3850

3900



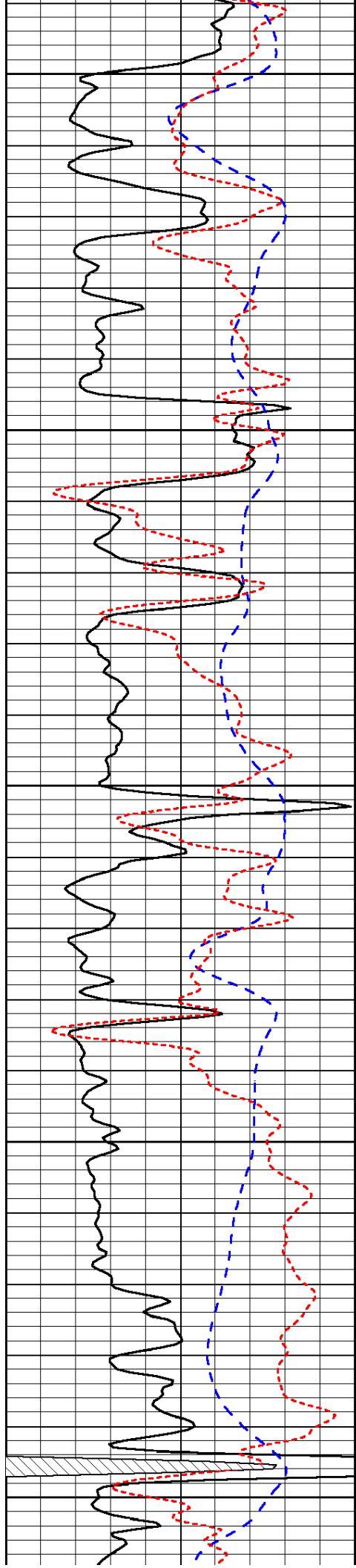
-30

-31

-30

-31





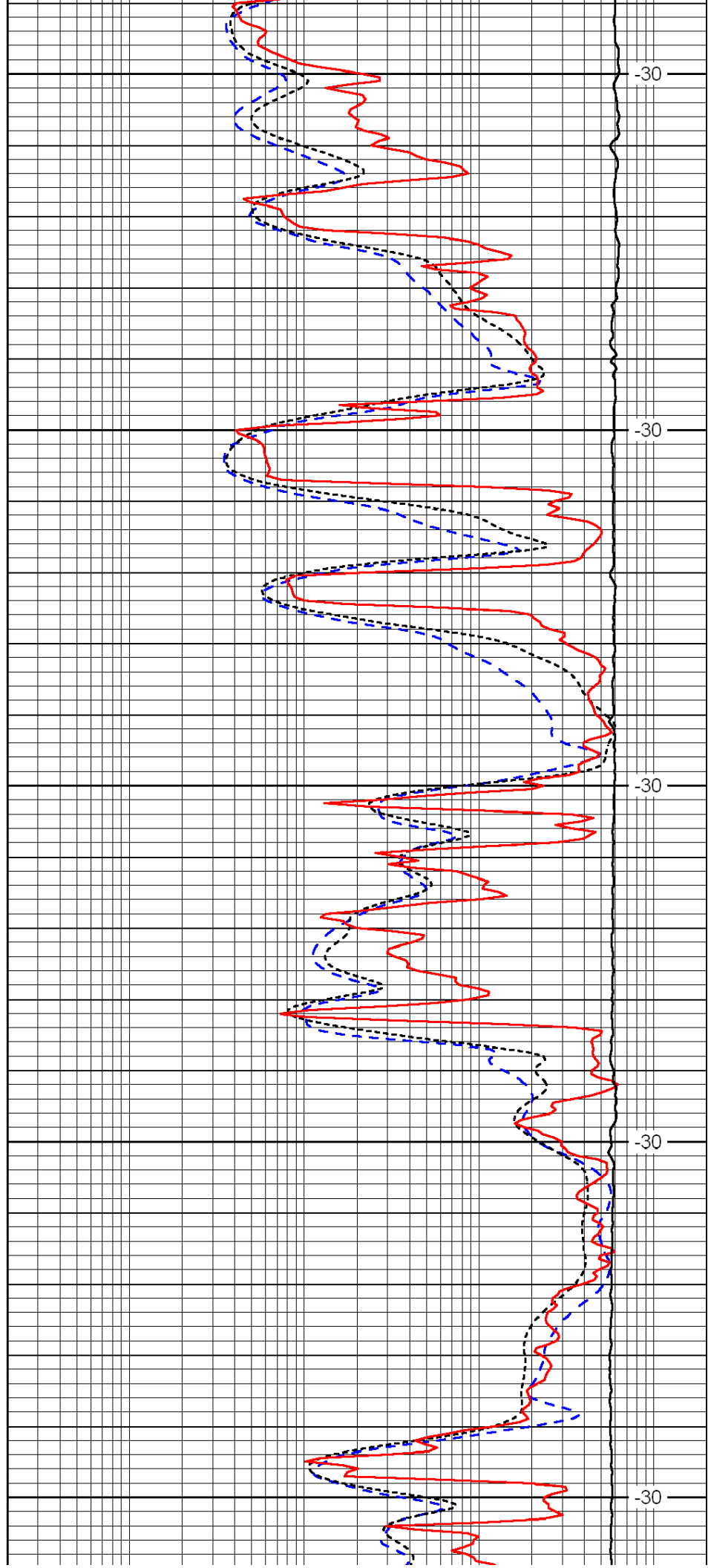
3950

4000

4050

4100

4150



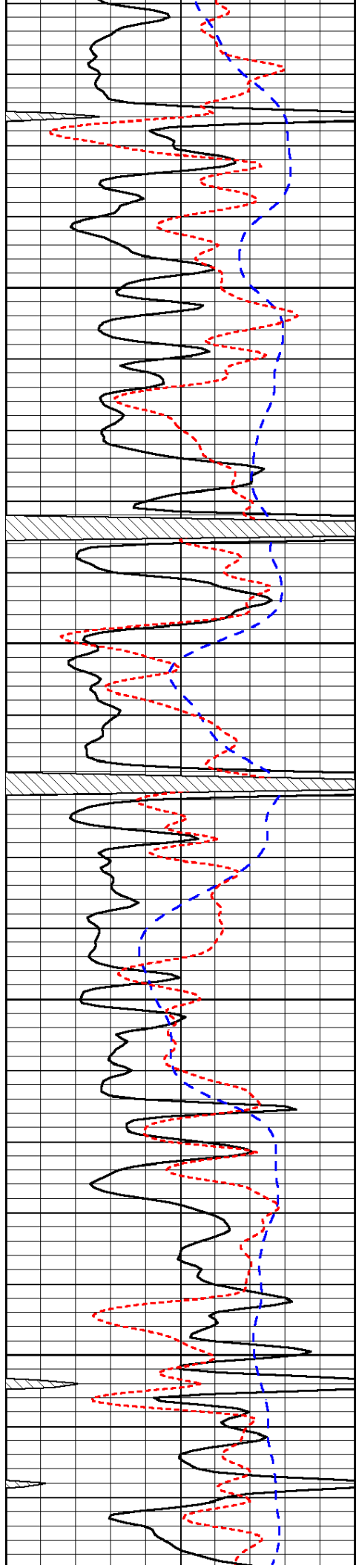
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-30

-30

-30

-30

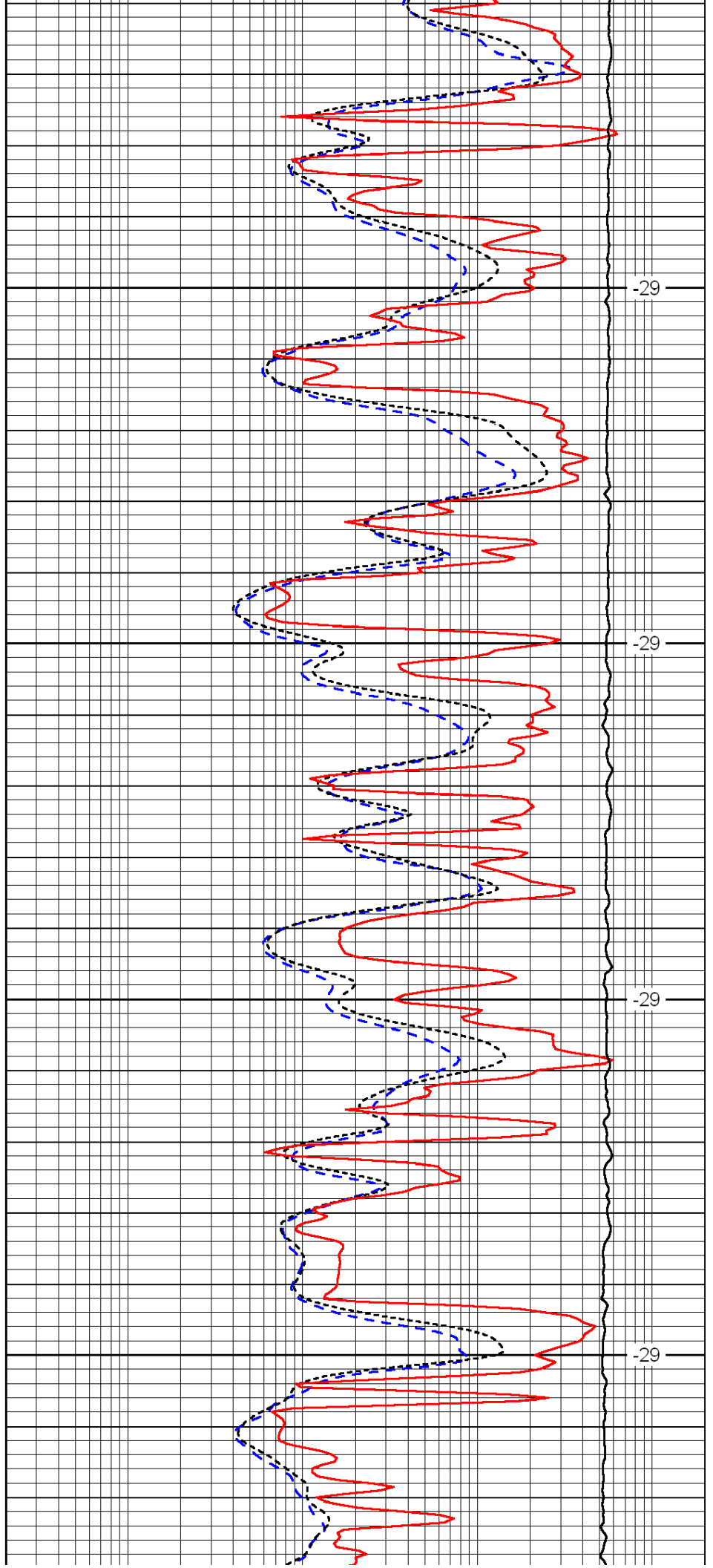


4200

4250

4300

4350

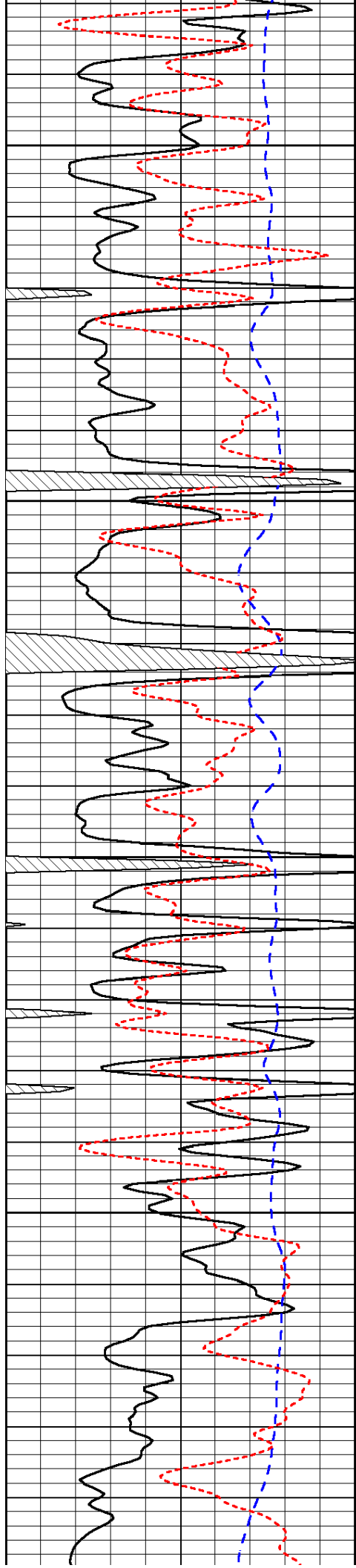


-29

-29

-29

-29



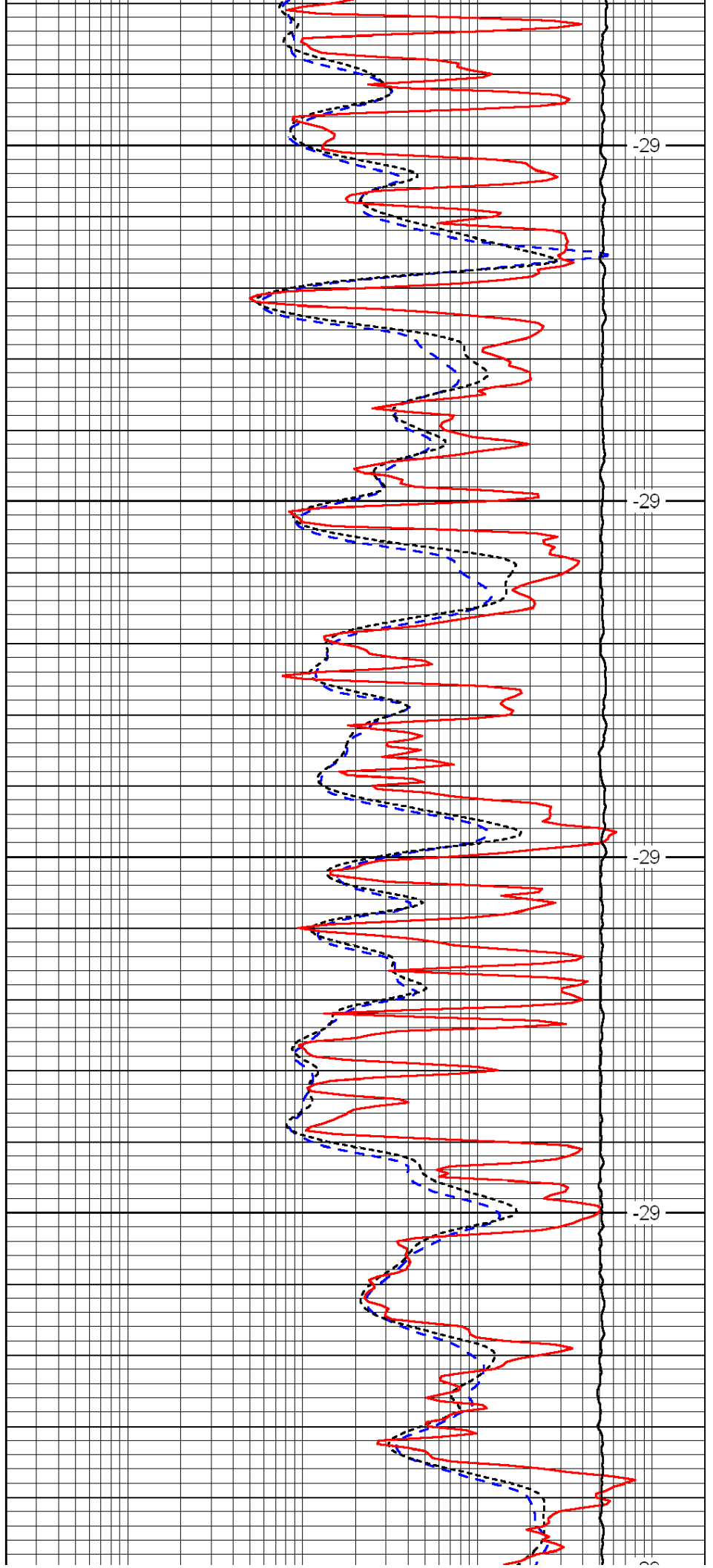
4400

4450

4500

4550

4600



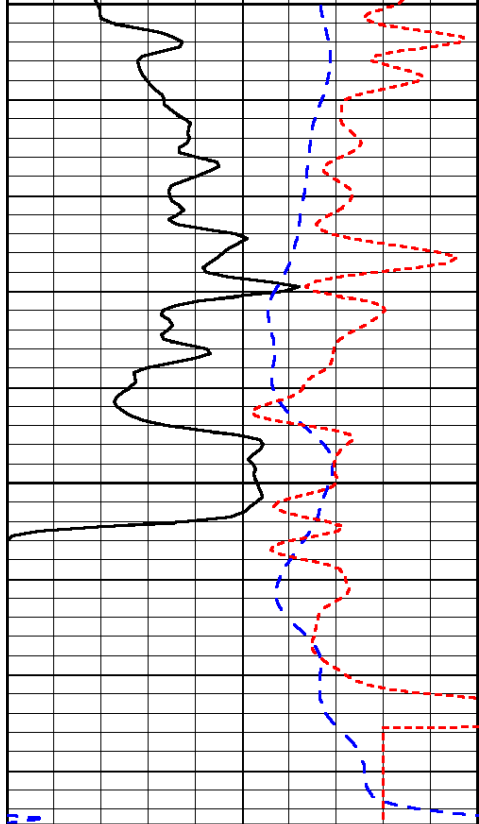
-29

-29

-29

-29

-29



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



DIGITAL LOG (785) 625-3858

Dual Compensated Porosity Log

15-101-22,360-00-00

API No.

Company Credo Petroleum Corporation

Well Deidre No. 1-9

Field

County Lane

State Kansas

Location

1600' FNL & 750' FWL

Other Services  
DIL  
MEI/BHCS

Sec: 9 Twp: 17 S Rge: 29 W

Permanent Datum Ground Level Elevation 2825

Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Elevation  
K.B. 2830  
D.F.  
G.L. 2825

Date 3/25/2012

Run Number One

Type Log CNL / CDL

Depth Driller 4675

Depth Logger 4678

Bottom Logged Interval 4657

Top Logged Interval 3600

Type Fluid In Hole Chemical

Salinity, PPM CL 2600

Density 9.55

Level Full

Max. Rec. Temp. F 123

Operating Rig Time 5 Hours

Equipment -- Location 15 Days

Recorded By D Kerr

Witnessed By Bruce Ard

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	251	8.625	24#	00	251
2	7.875	251	4675				

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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

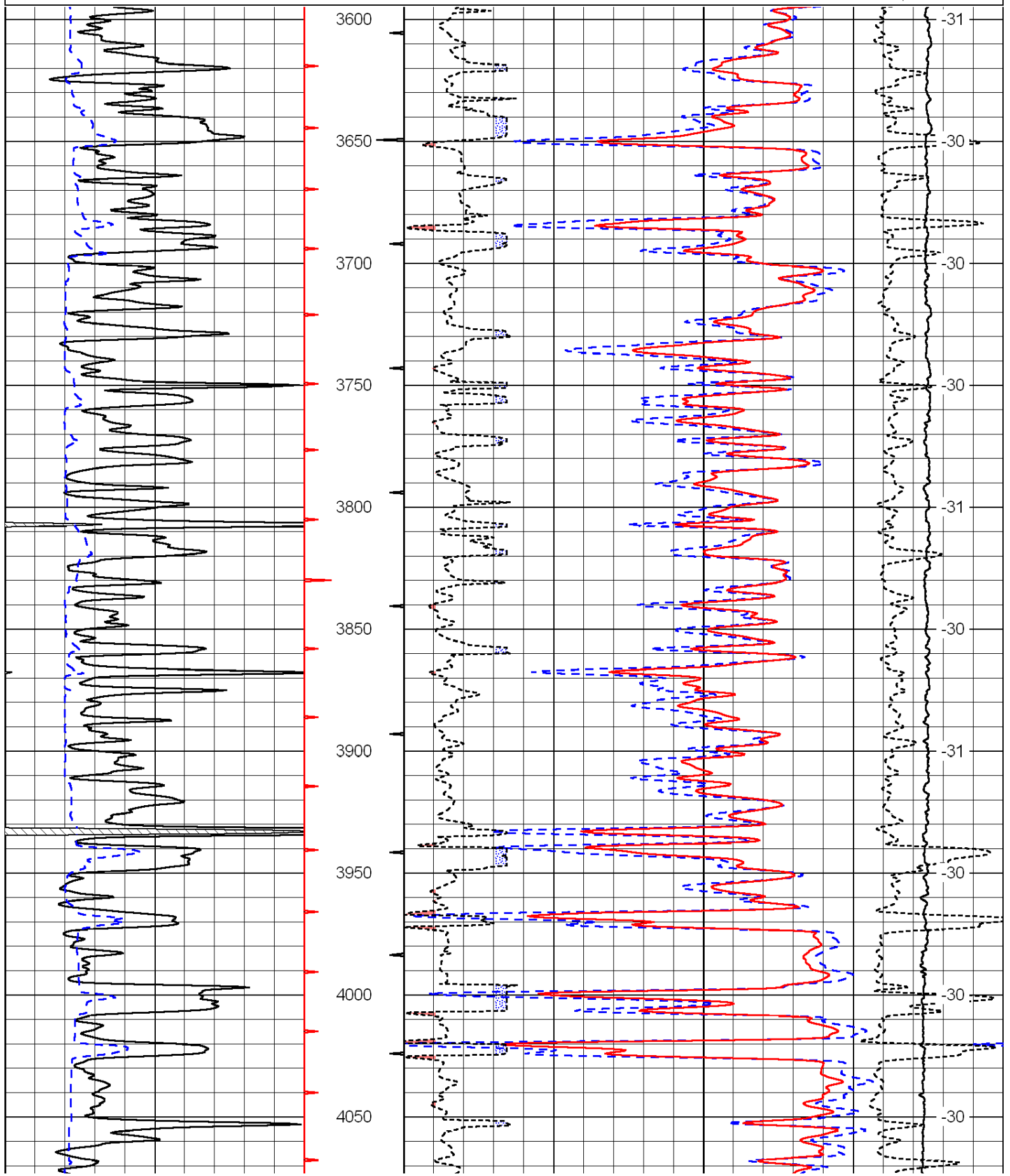
Thank you for using Log-Tech, Inc.  
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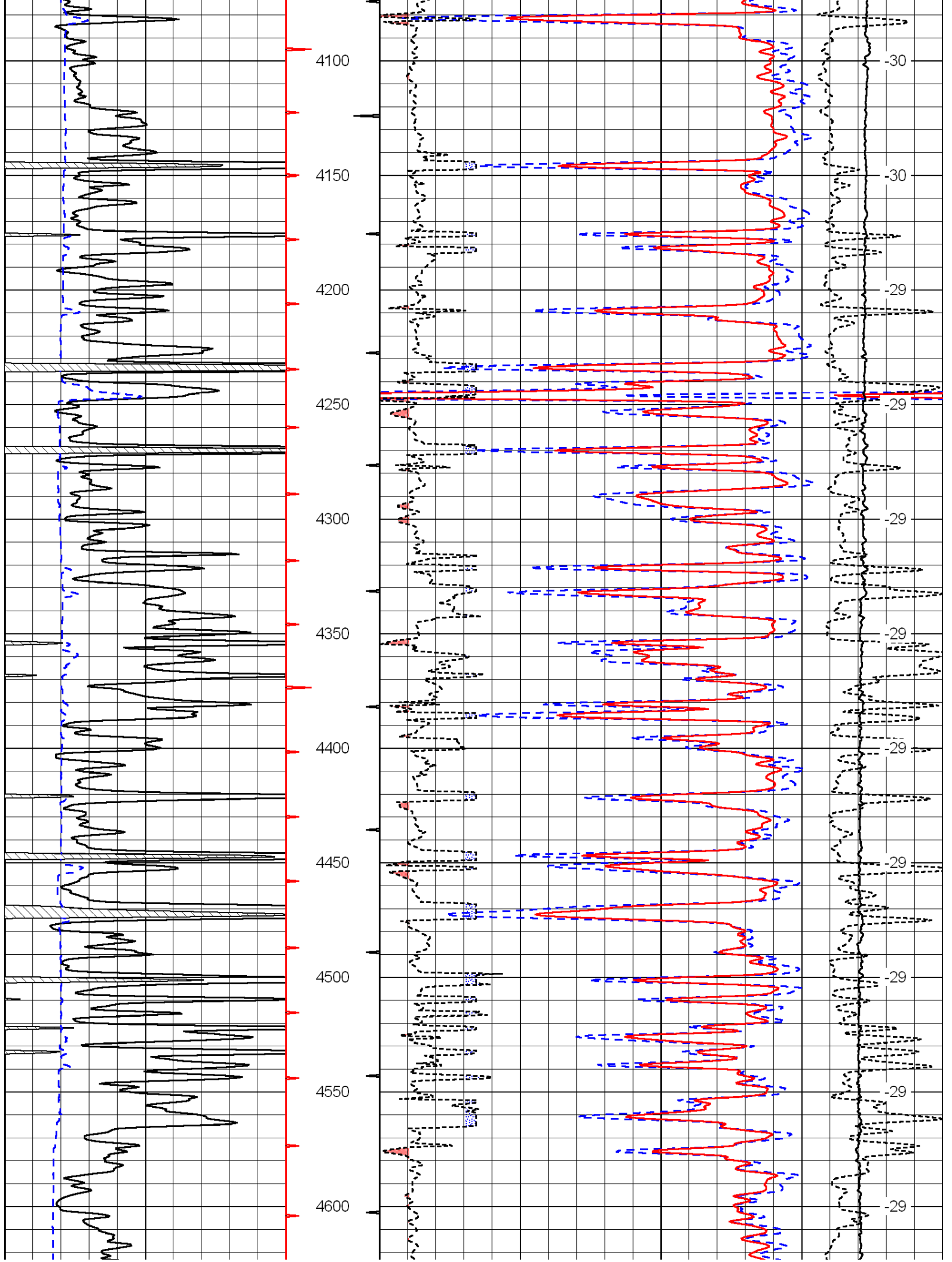
Healy KS, 4 East,  
1 South, SoutEast Into

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 Dataset Pathname: DIL/cdstk  
 Presentation Format: cdl  
 Dataset Creation: Sun Mar 25 19:41:56 2012  
 Charted by: Depth in Feet scaled 1:600

0	Gamma Ray	150
6	Caliper (GAPI)	16

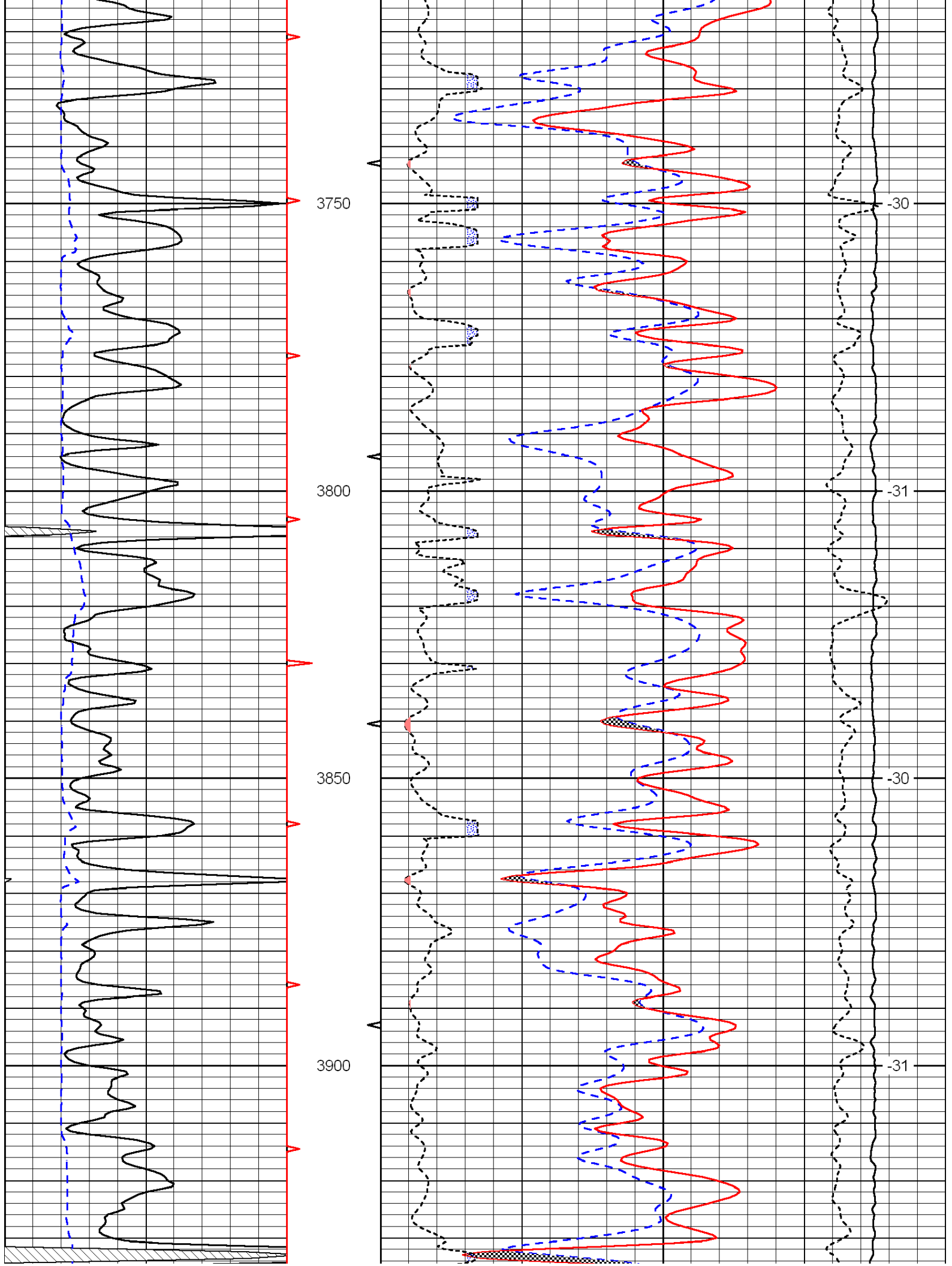
30	Compensated Density		-10
2	Bulk Density		3
15000	Line Tension		0
2.625	DGA	3.425	-0.25
			Correction
			0.25
LSPD			

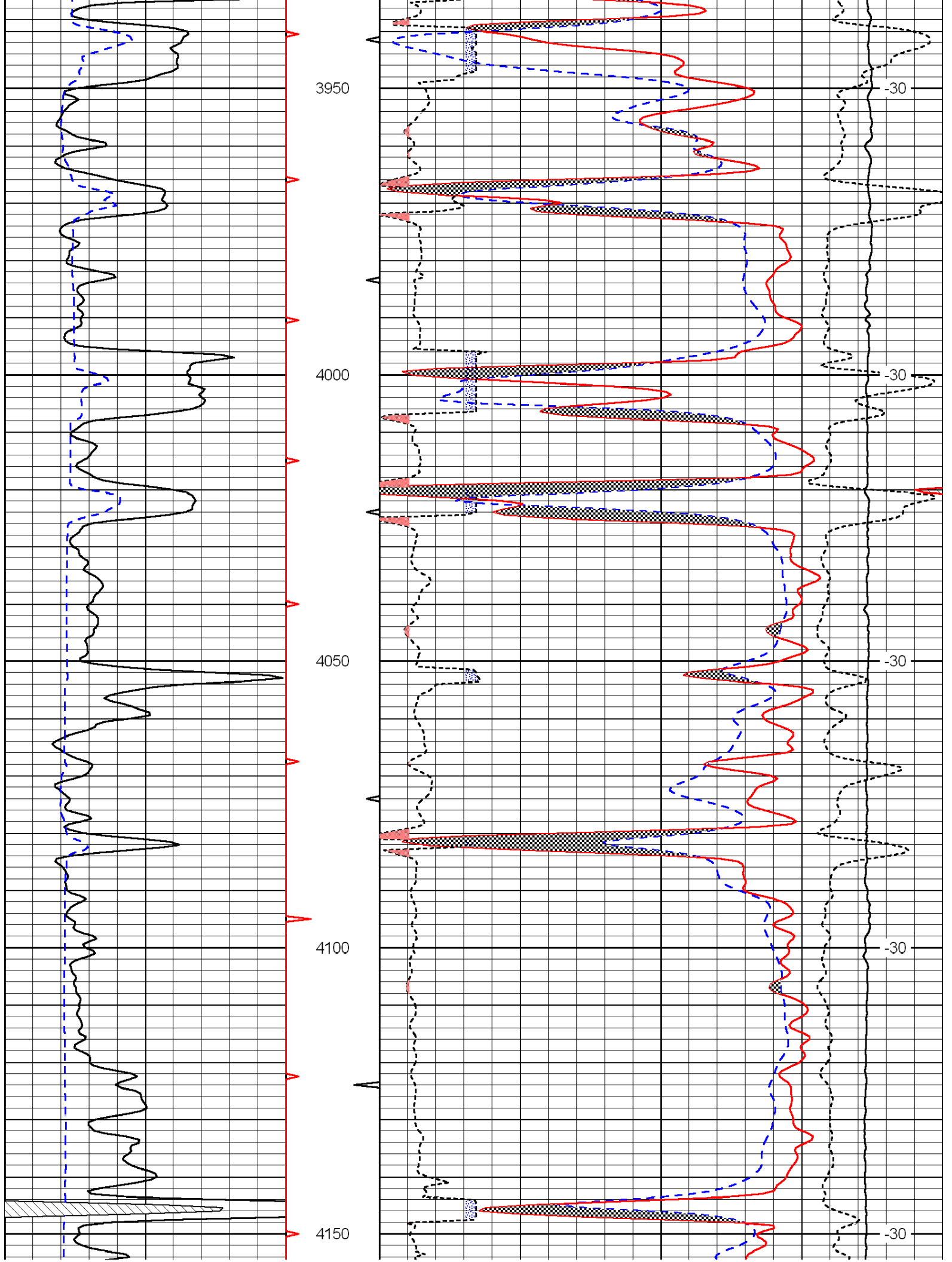


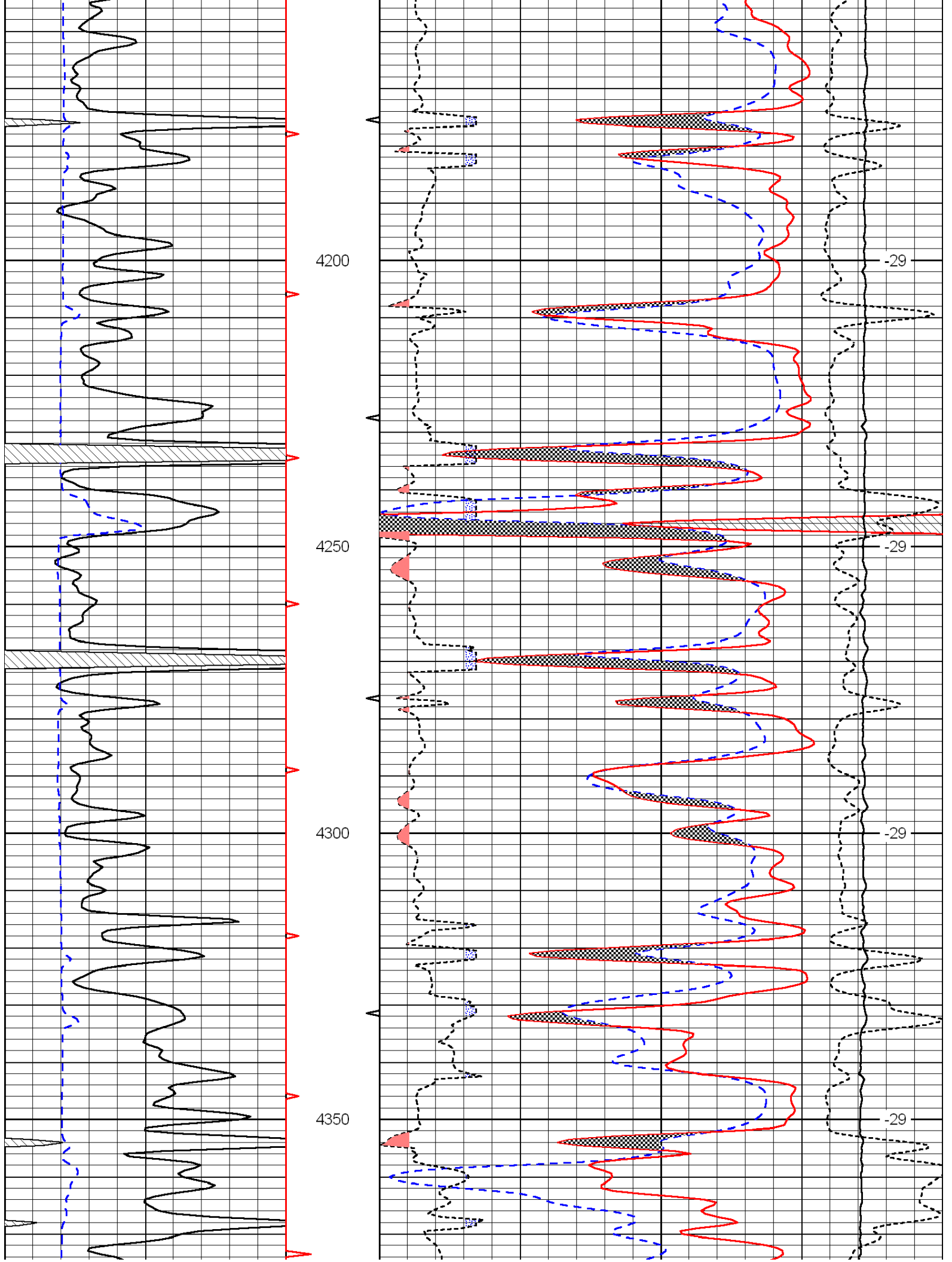


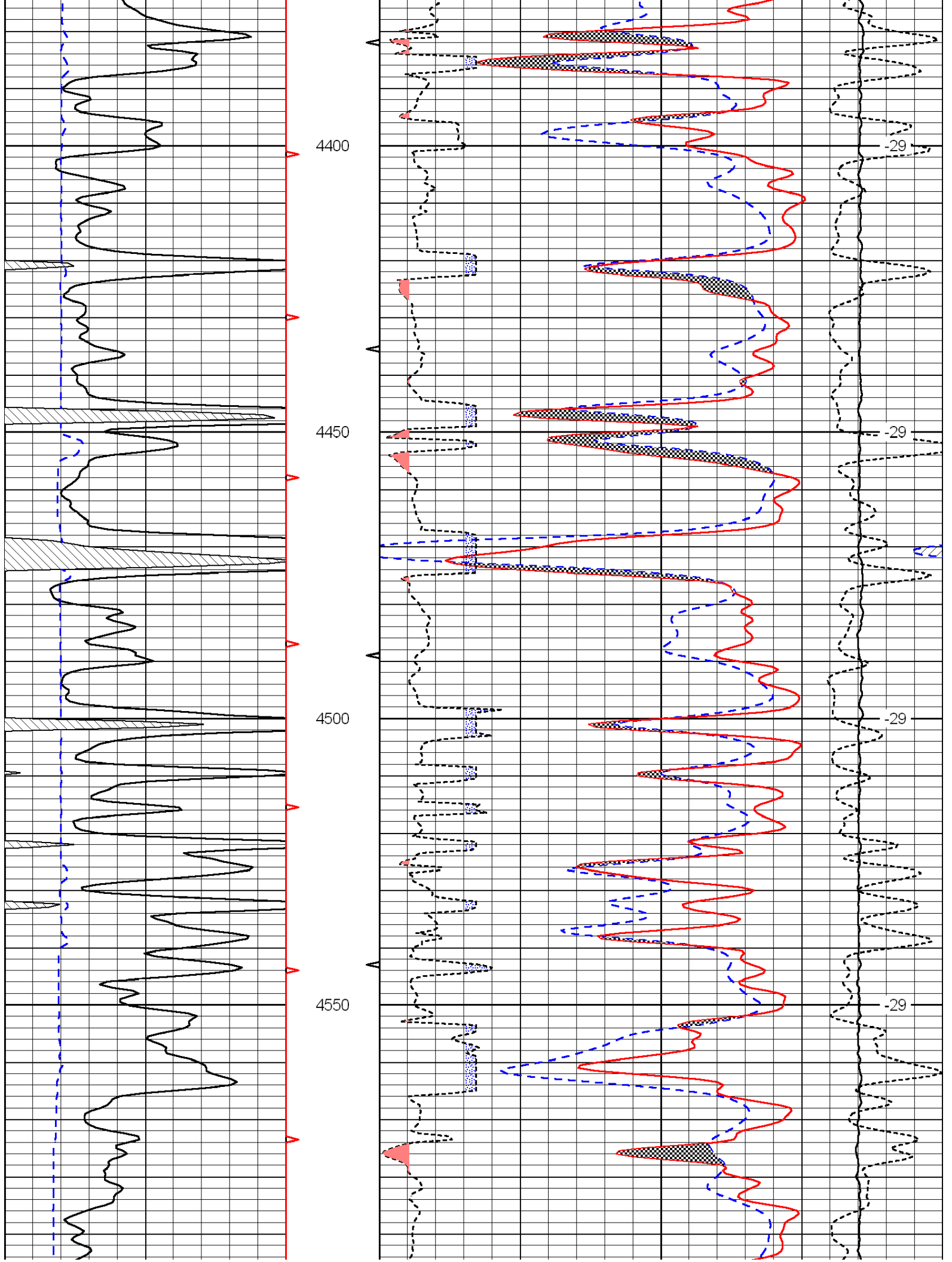


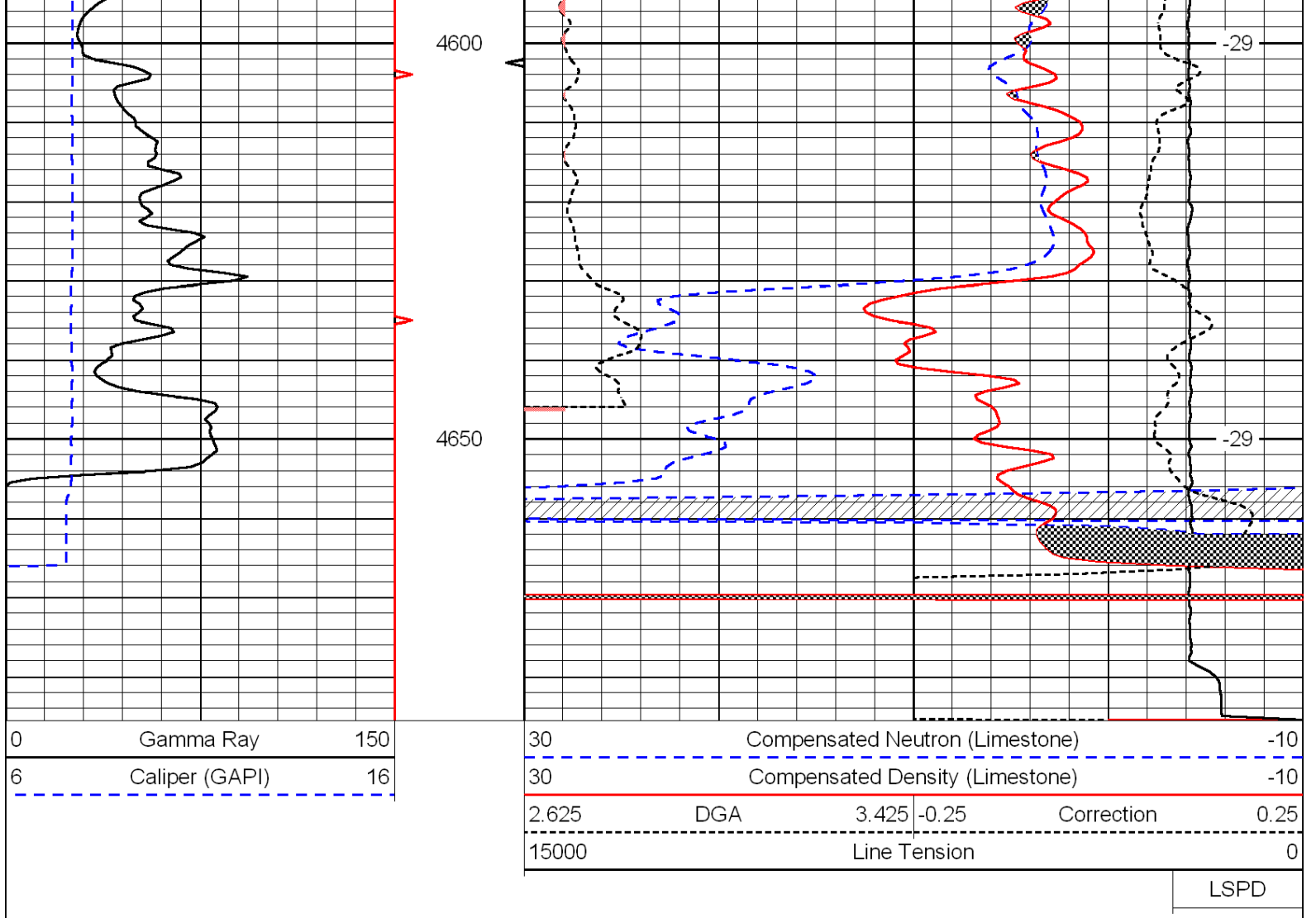














DIGITAL LOG (785) 625-3858

Microresistivity Log

15-101-22,360-00-00

API No.

Company Credo Petroleum Corporation

Well Deidre No. 1-9

Field

County Lane State Kansas

Location 1600' FNL & 750' FWL

Sec: 9 Twp: 17 S Rge: 29 W

Permanent Datum Ground Level Elevation 2825

Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Other Services

CNL/CDL

DIL/BHCS

Elevation

K.B. 2830

D.F. 2825

G.L. 2825

Date 3/25/2012

Run Number Two

Depth Driller 4675

Depth Logger 4678

Bottom Logged Interval 4677

Top Log Interval 3600

Casing Driller 8.625 @ 251

Casing Logger 249

Bit Size 7.875

Type Fluid in Hole Chemical

Salinity, ppm CL 2600

Density / Viscosity 9.55 52

pH / Fluid Loss 9.0 6.8

Source of Sample Flowline

Rm @ Meas. Temp .85 @ 70

Rmf @ Meas. Temp .64 @ 70

Rmc @ Meas. Temp 1.15 @ 70

Source of Rmf / Rmc Charts

Rm @ BHT .48 @ 123

Operating Rig Time 5 Hours

Max Rec. Temp. F 123

Equipment Number 15

Location Hays

Recorded By D.Kerr

Witnessed By Bruce Ard

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Comments

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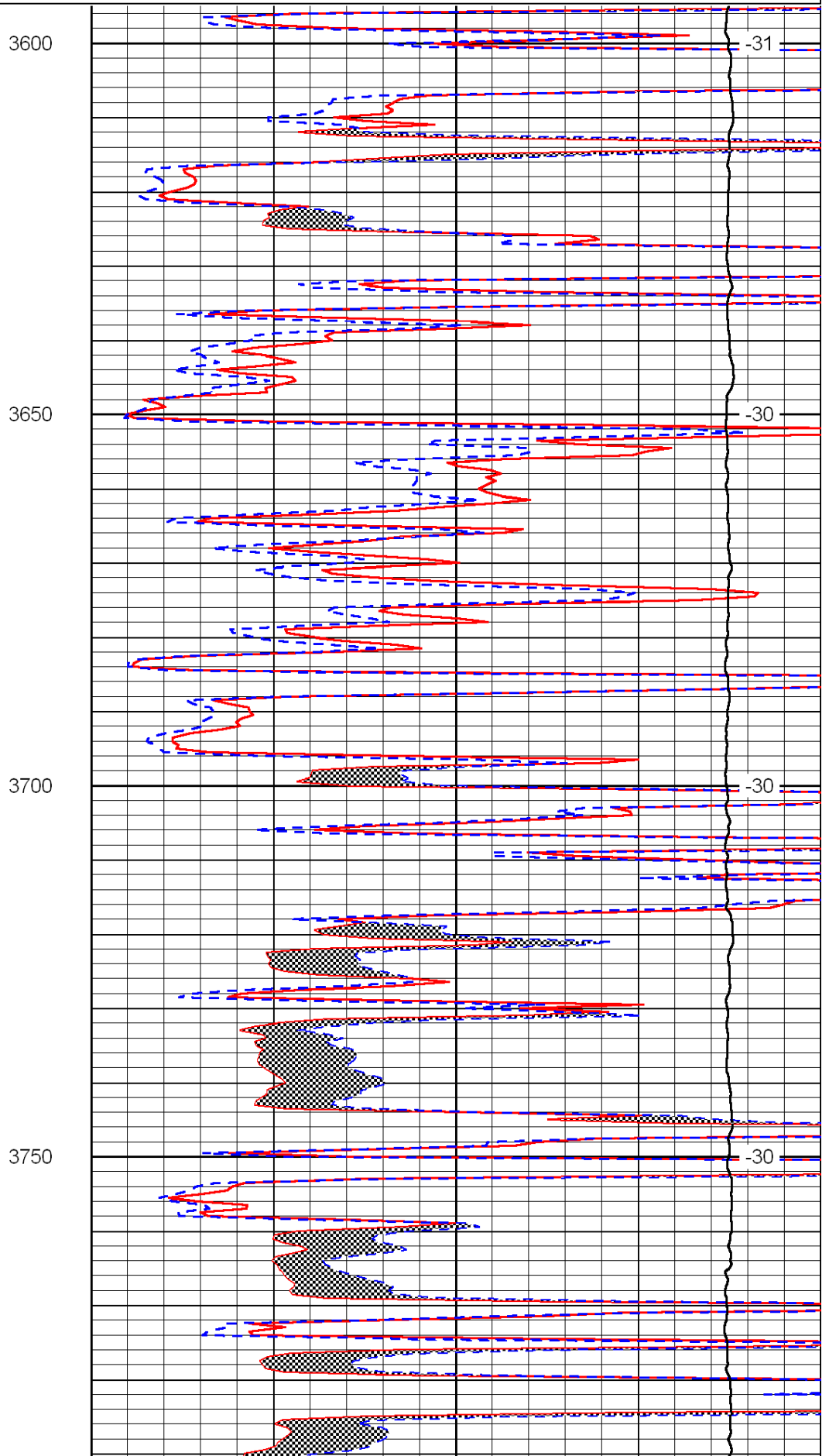
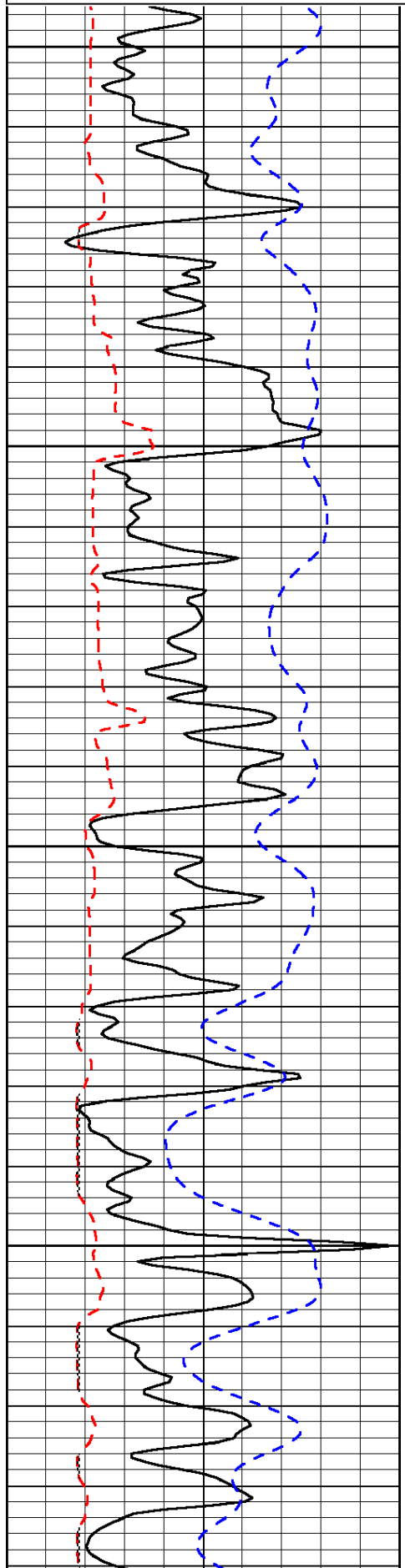
Healy KS, 4 East, 1 South, SoutEast Into

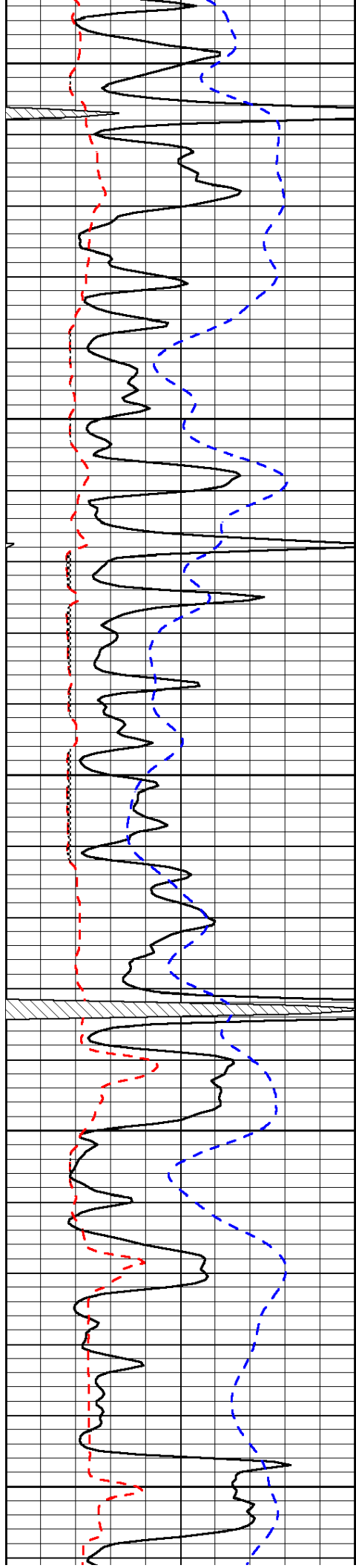
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Dataset Pathname: DIL/cdstk
Presentation Format: micro
Dataset Creation: Sun Mar 25 19:41:56 2012
Charted by: Depth in Feet scaled 1:240

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





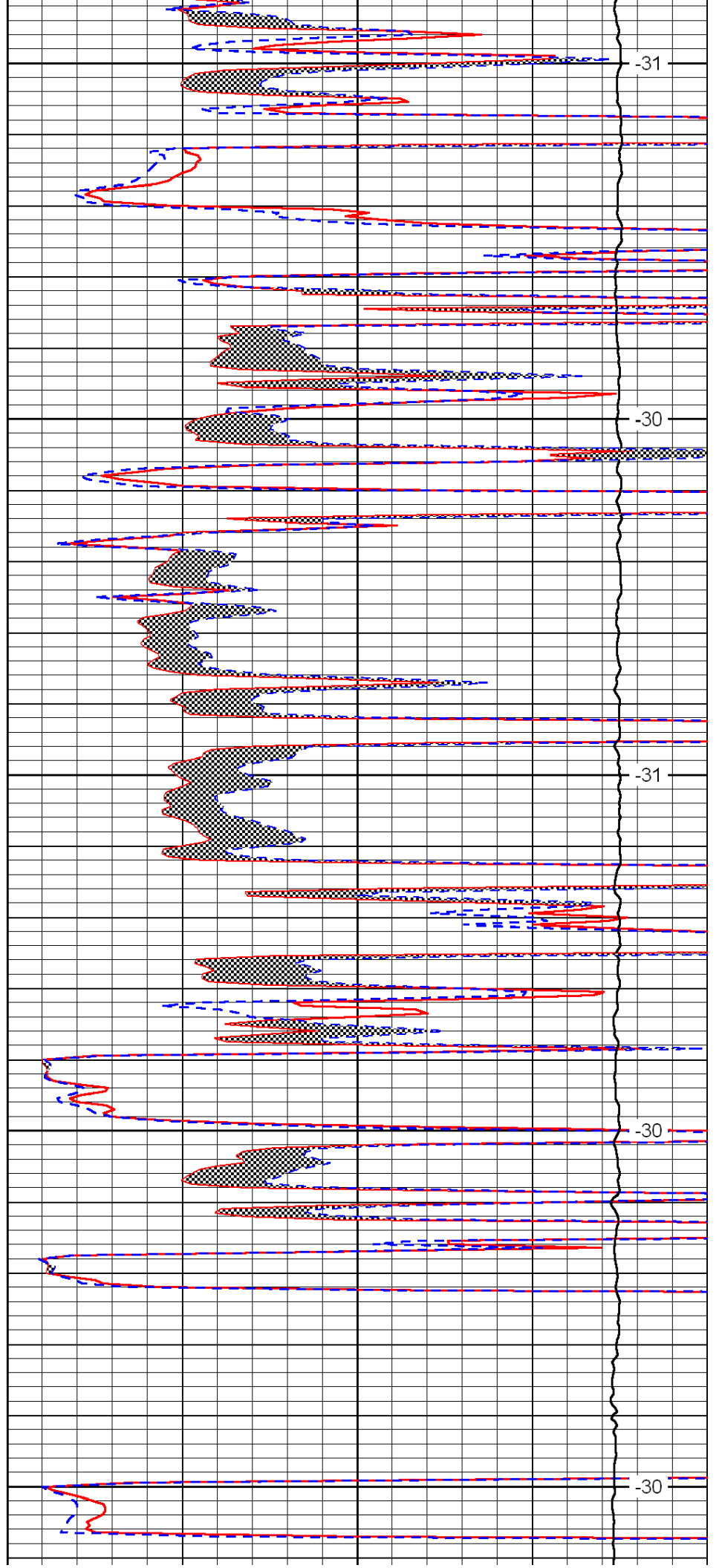
3800

3850

3900

3950

4000



-31

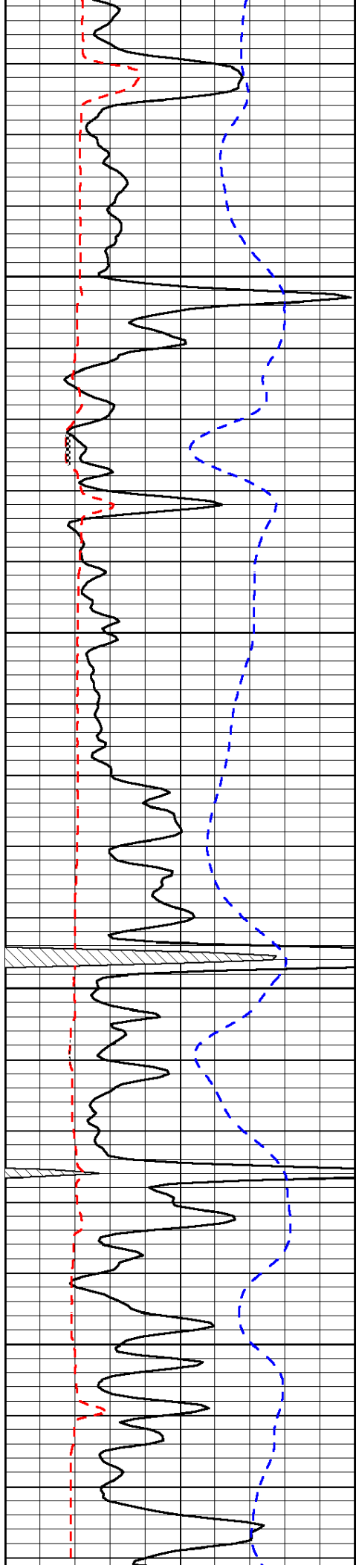
-30

-31

-30

-30



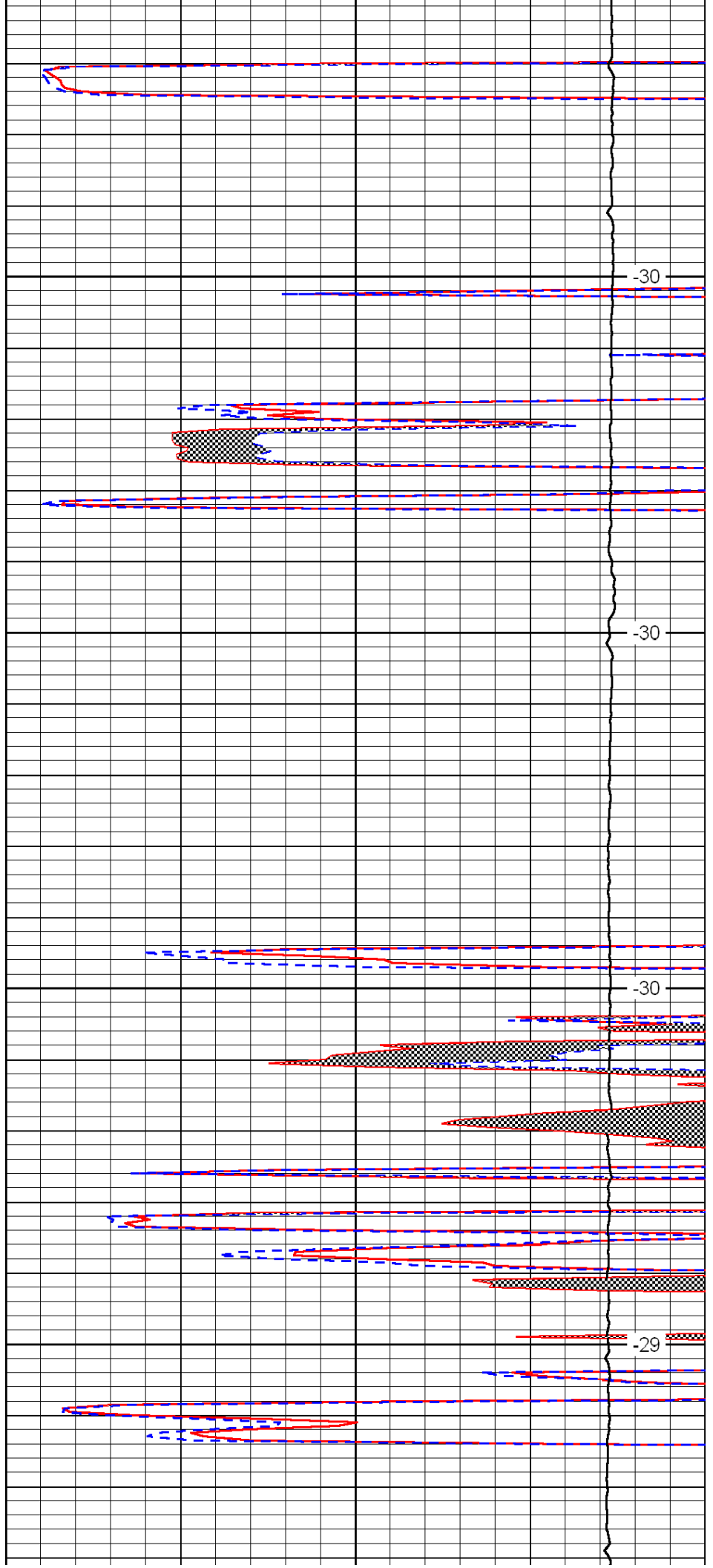


4050

4100

4150

4200

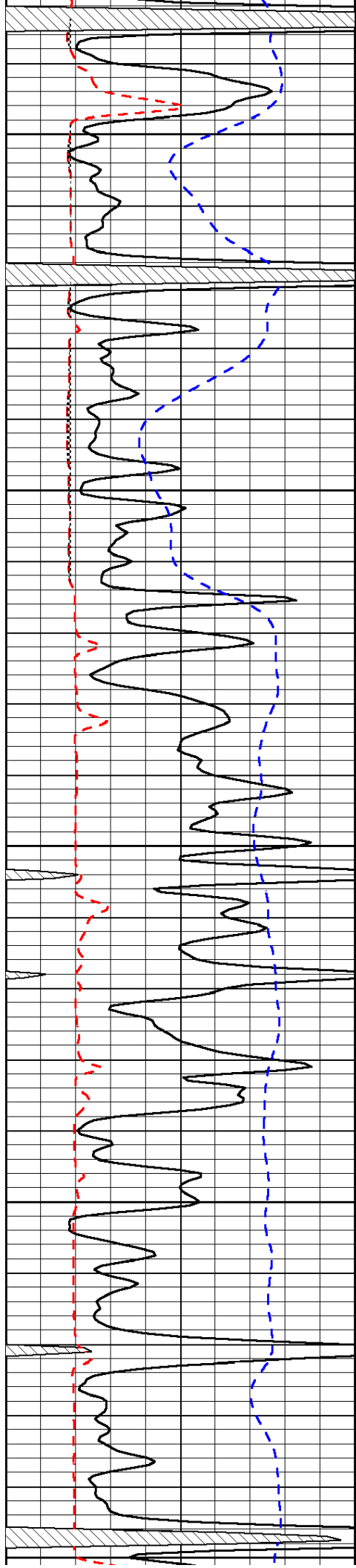


-30

-30

-30

-29



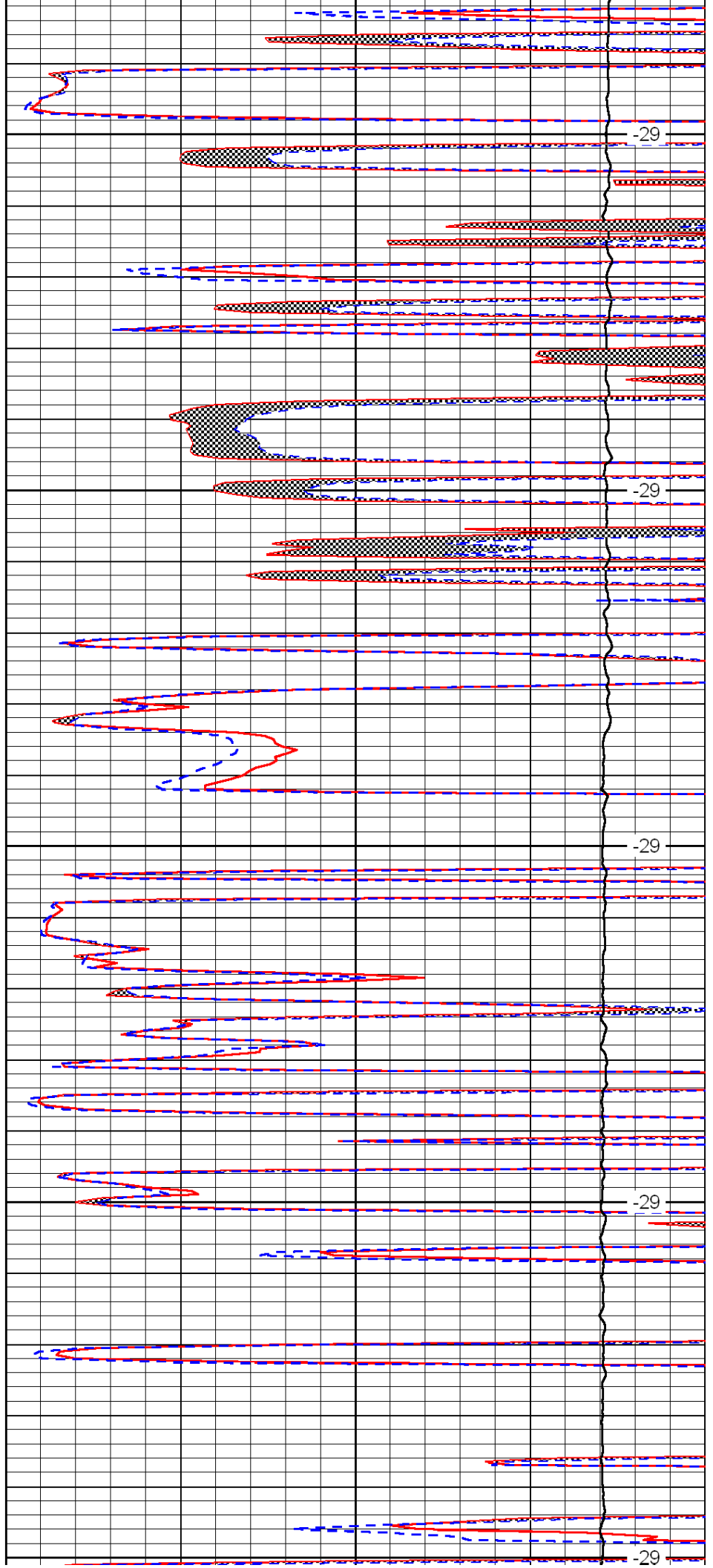
4250

4300

4350

4400

4450



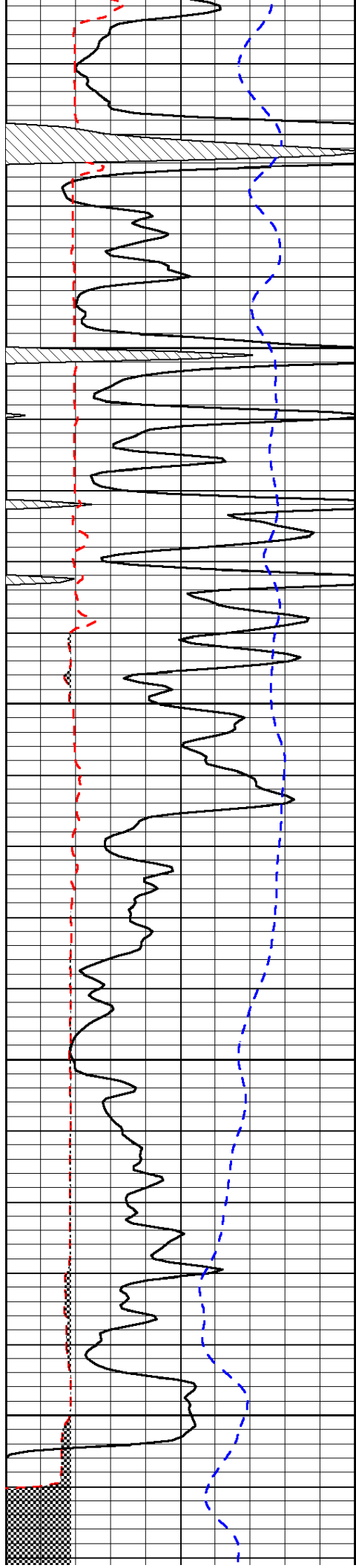
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-29

-29

-29

-29

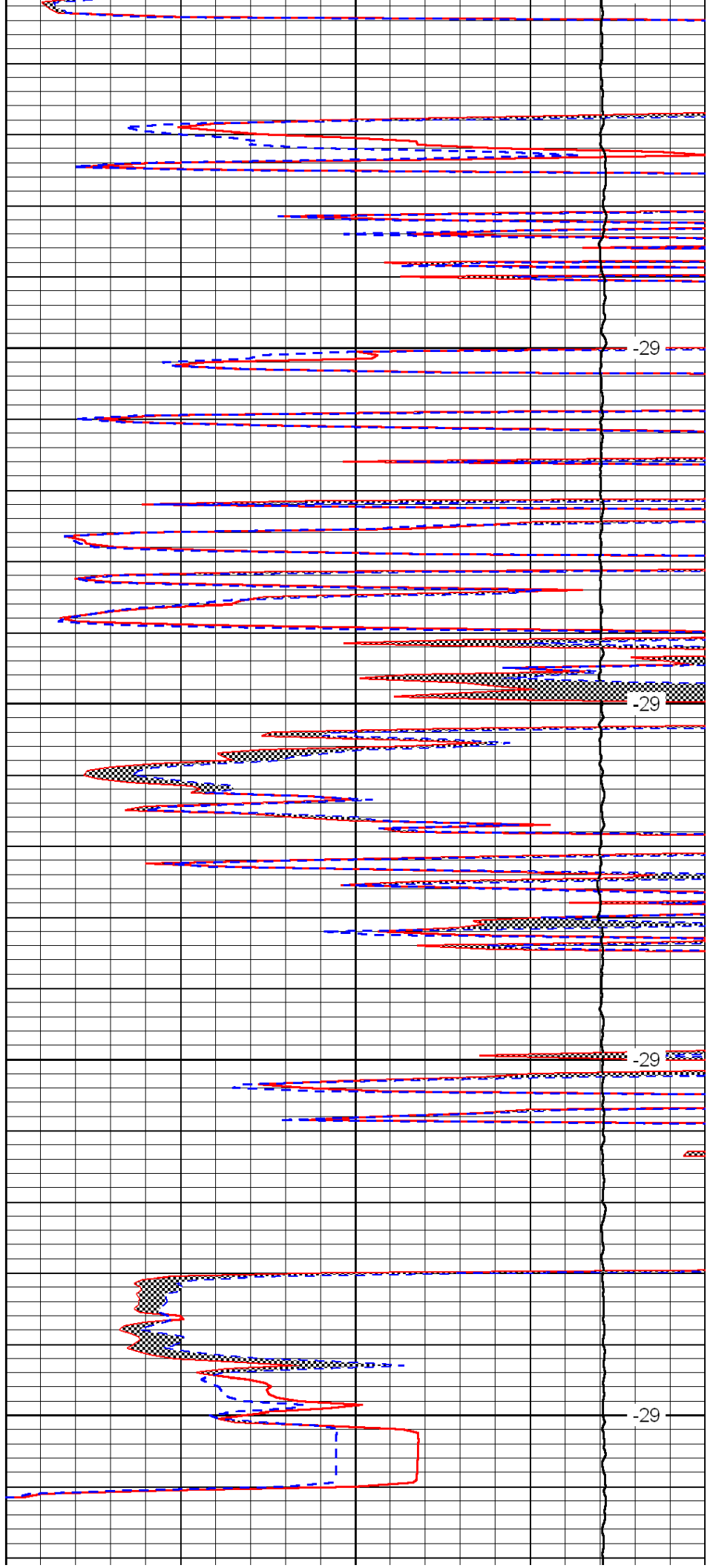


4500

4550

4600

4650

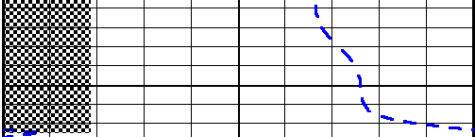


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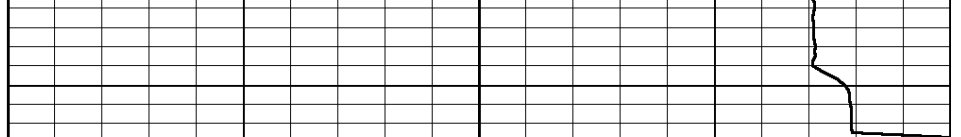
-29

-29

-29



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



DIGITAL LOG (785) 625-3858

Borehole Compensated  
Sonic Log

15-101-22,360-00-00

API No.

Company Credo Petroleum Corporation

Well Deidre No. 1-9

Field

County Lane

State Kansas

Location

1600' FNL & 750' FWL

Other Services  
CNL/CDL  
MEL/DIL

Sec: 9 Twp: 17 S Rge: 29 W

Permanent Datum Ground Level Elevation 2825

Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum

Drilling Measured From Kelly Bushing

Elevation  
K.B. 2830  
D.F.  
G.L. 2825

Date 3/25/2012

Run Number Two

Type Log BHC Sonic

Depth Driller 4675

Depth Logger 4678

Bottom Logged Interval 4667

Top Logged Interval 200

Type Fluid In Hole Chemical

Salinity, PPM CL 2600

Density 9.55

Level Full

Max. Rec. Temp. F 123

Operating Rig Time 5 Hours

Equipment -- Location 15 Days

Recorded By D Kerr

Witnessed By Bruce Ard

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	251	8.625	24#	00	251
2	7.875	251	4675				

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Comments

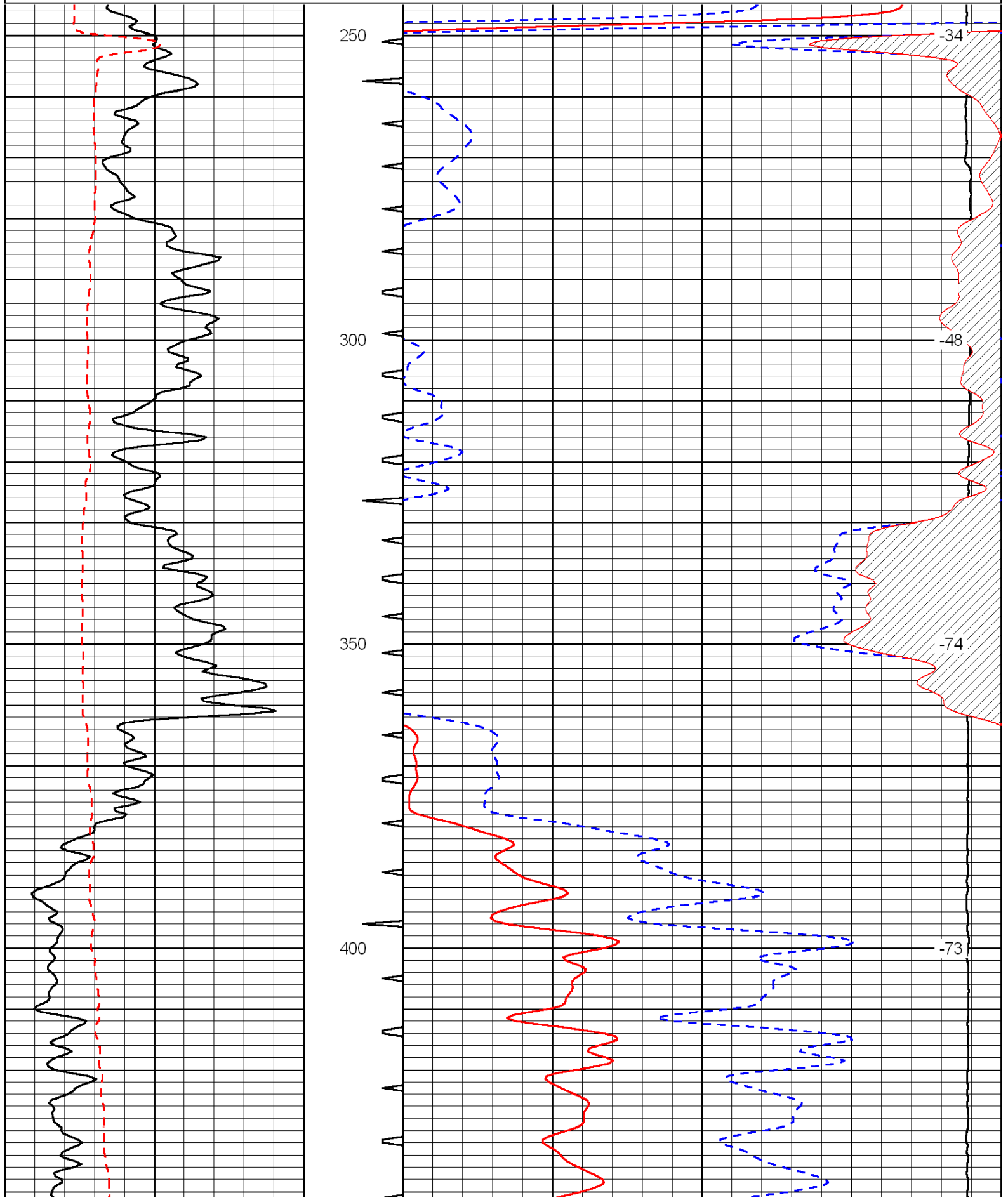
Thank you for using Log-Tech, Inc.  
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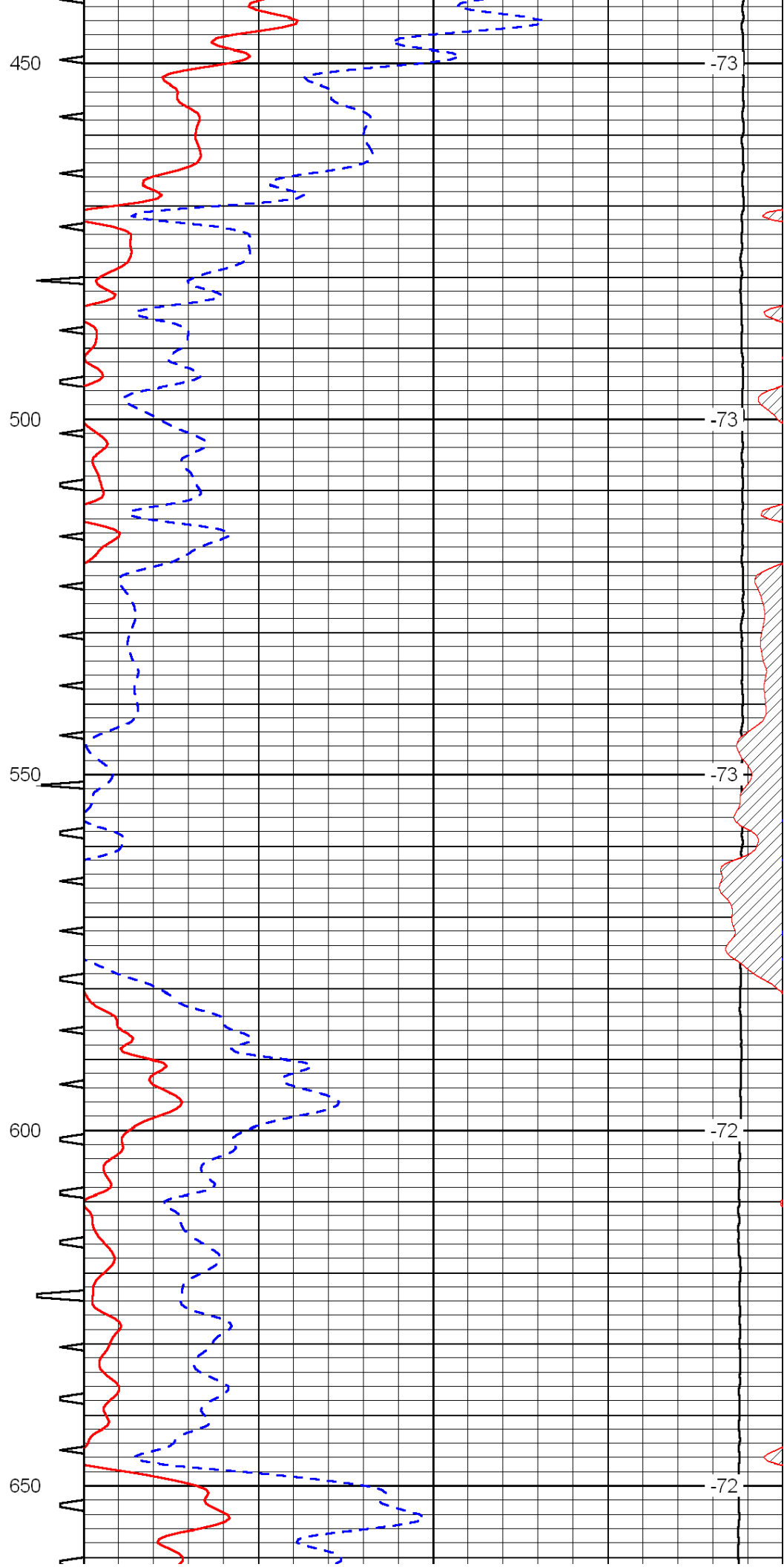
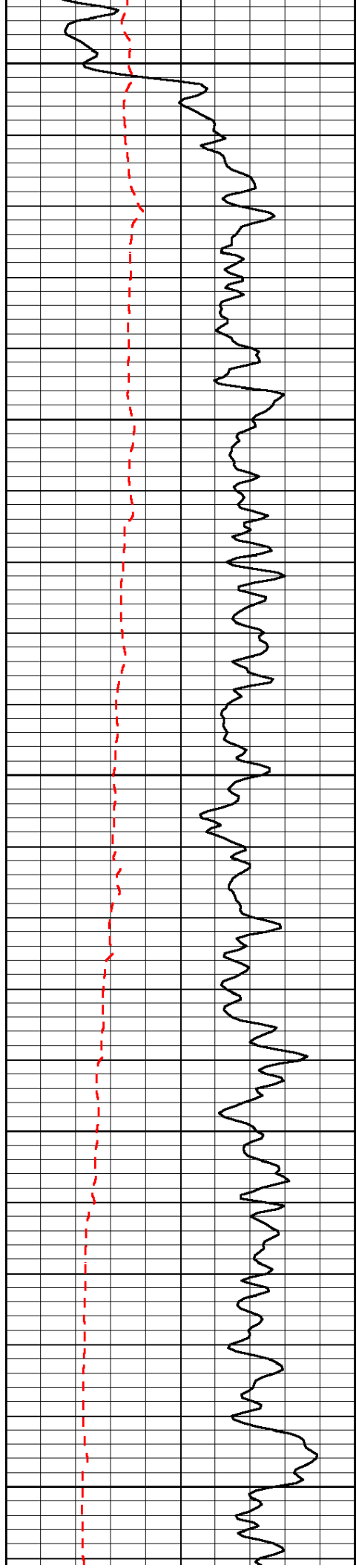
Healy KS, 4 East,  
1 South, SoutEast Into

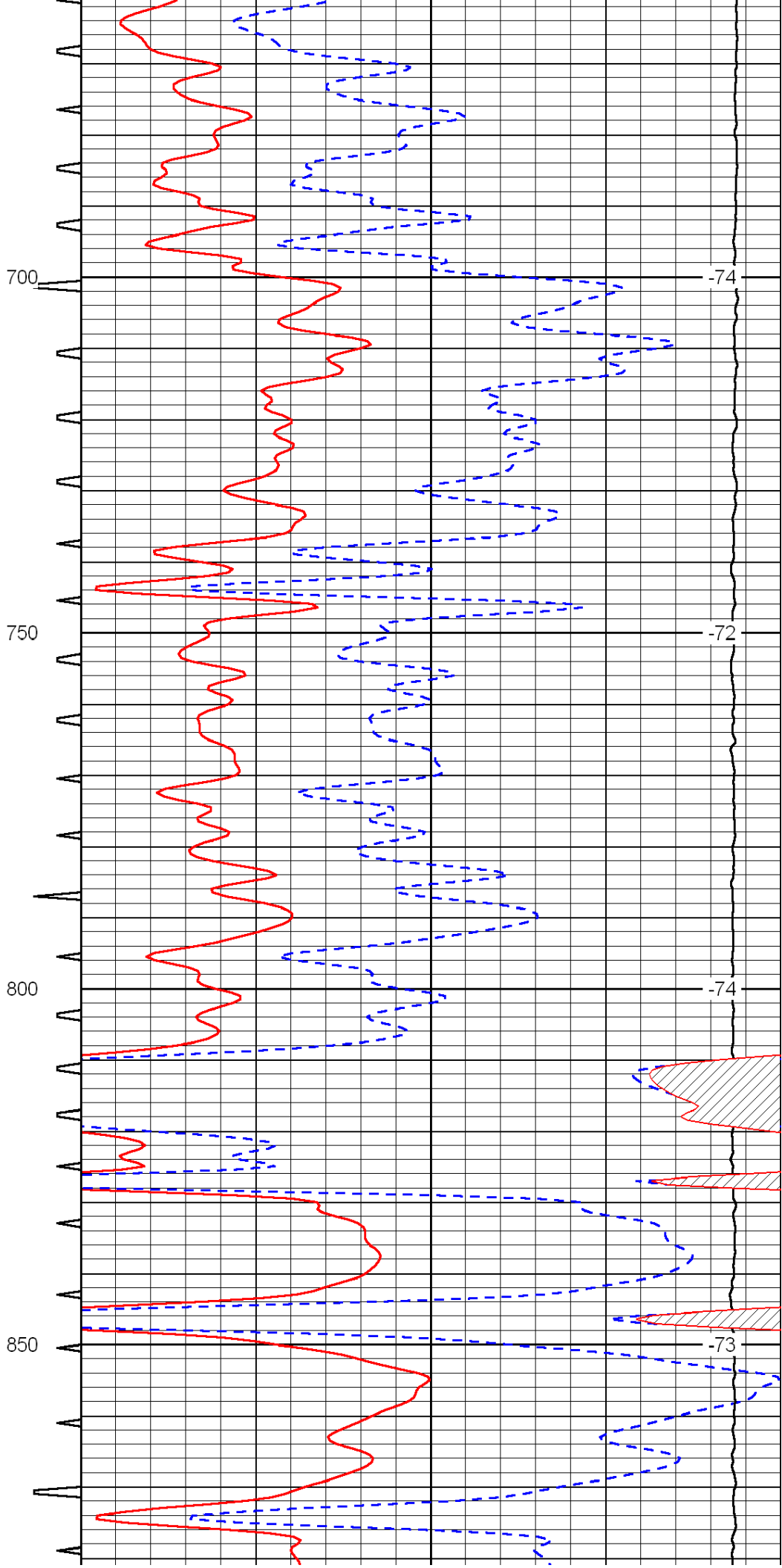
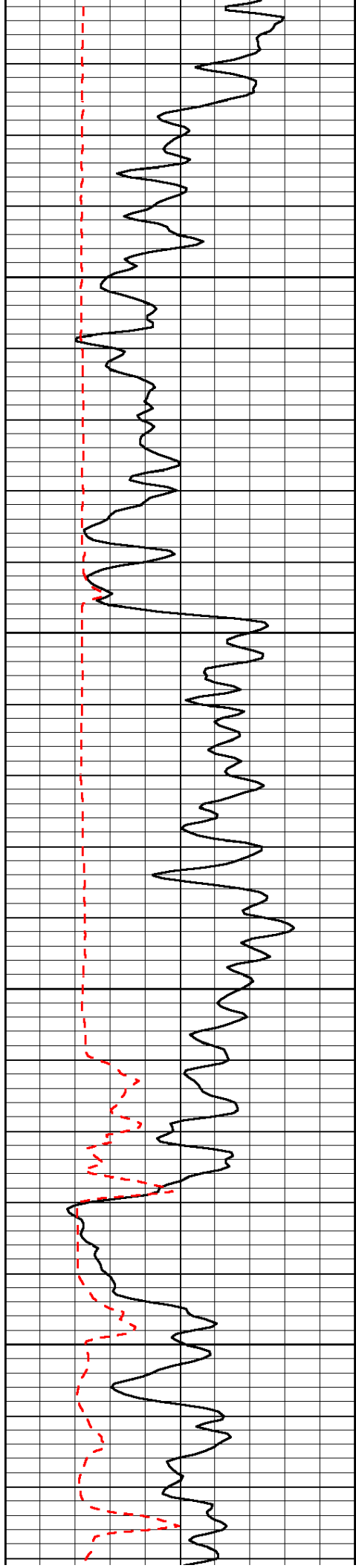
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 Dataset Creation: Sun Mar 25 19:41:56 2012  
 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300	5	0	SPOR	-10
6	Caliper (GAPI)	16		15000	LTEN (lb)	0

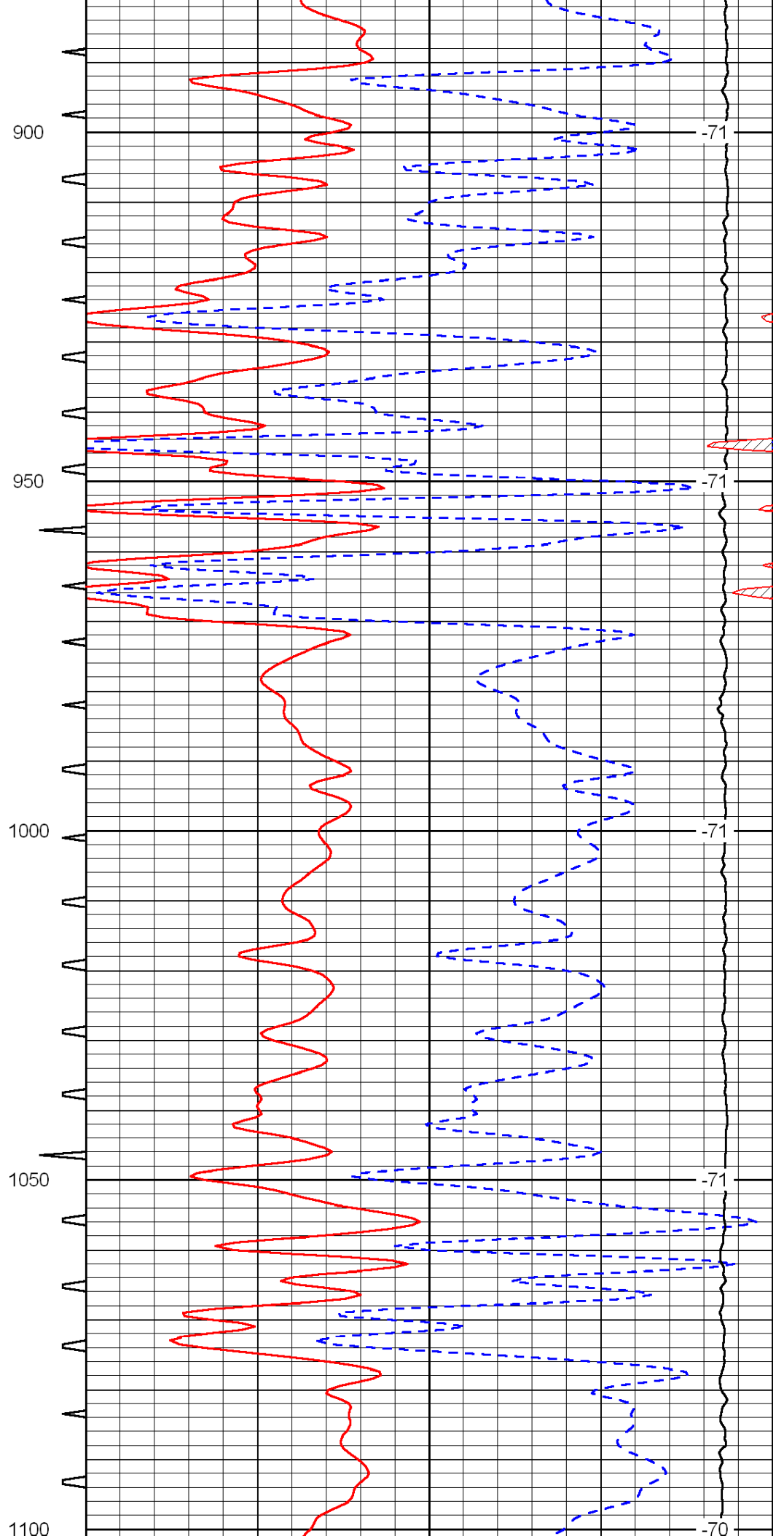
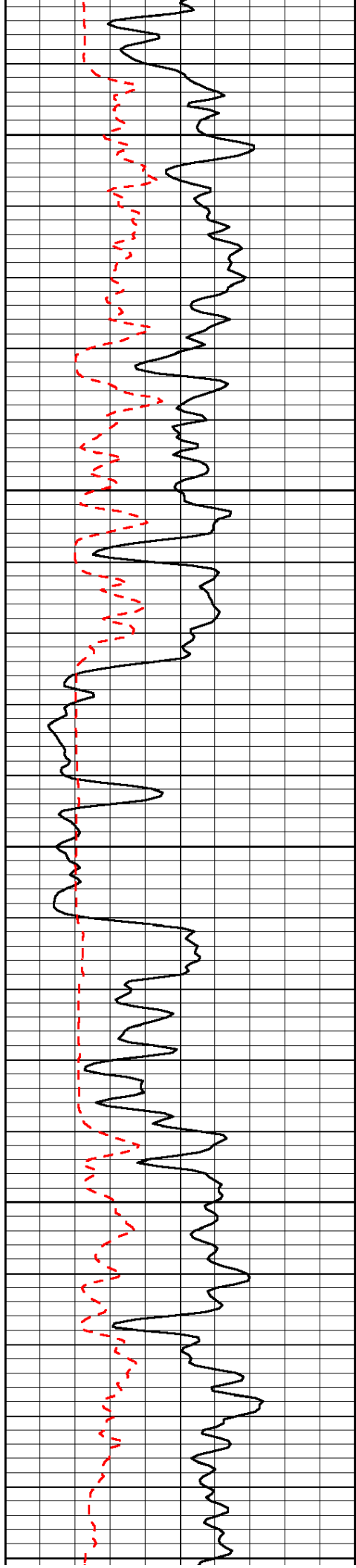
LSPD

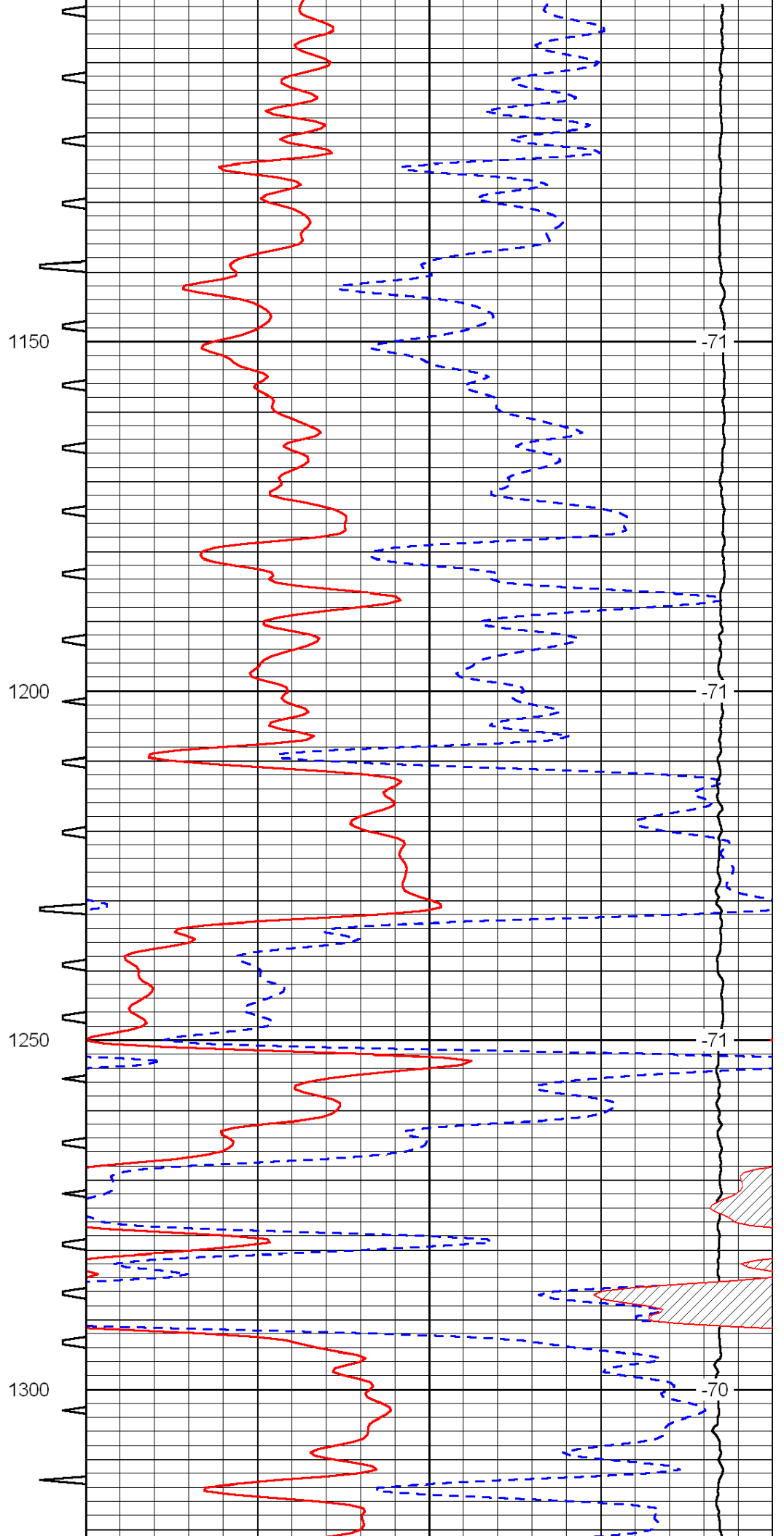
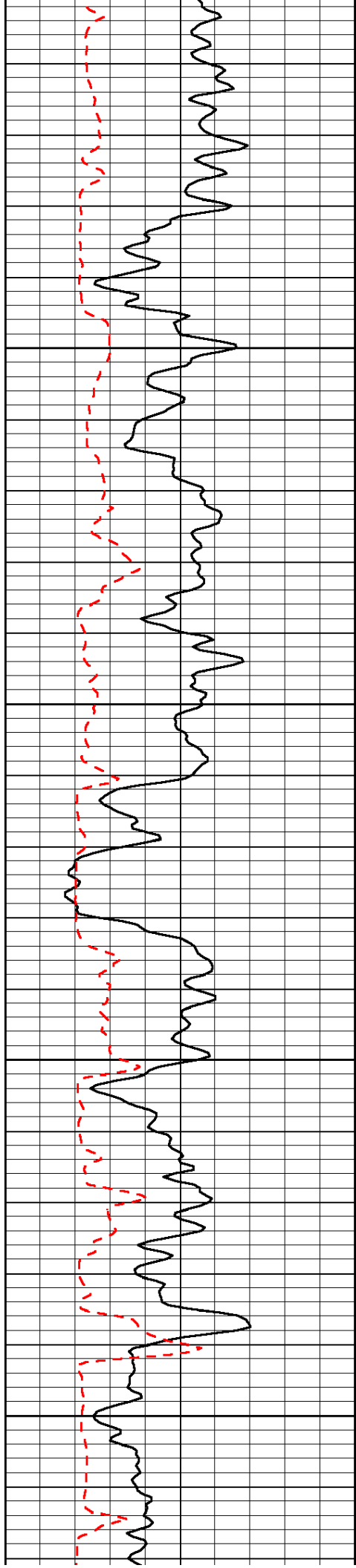


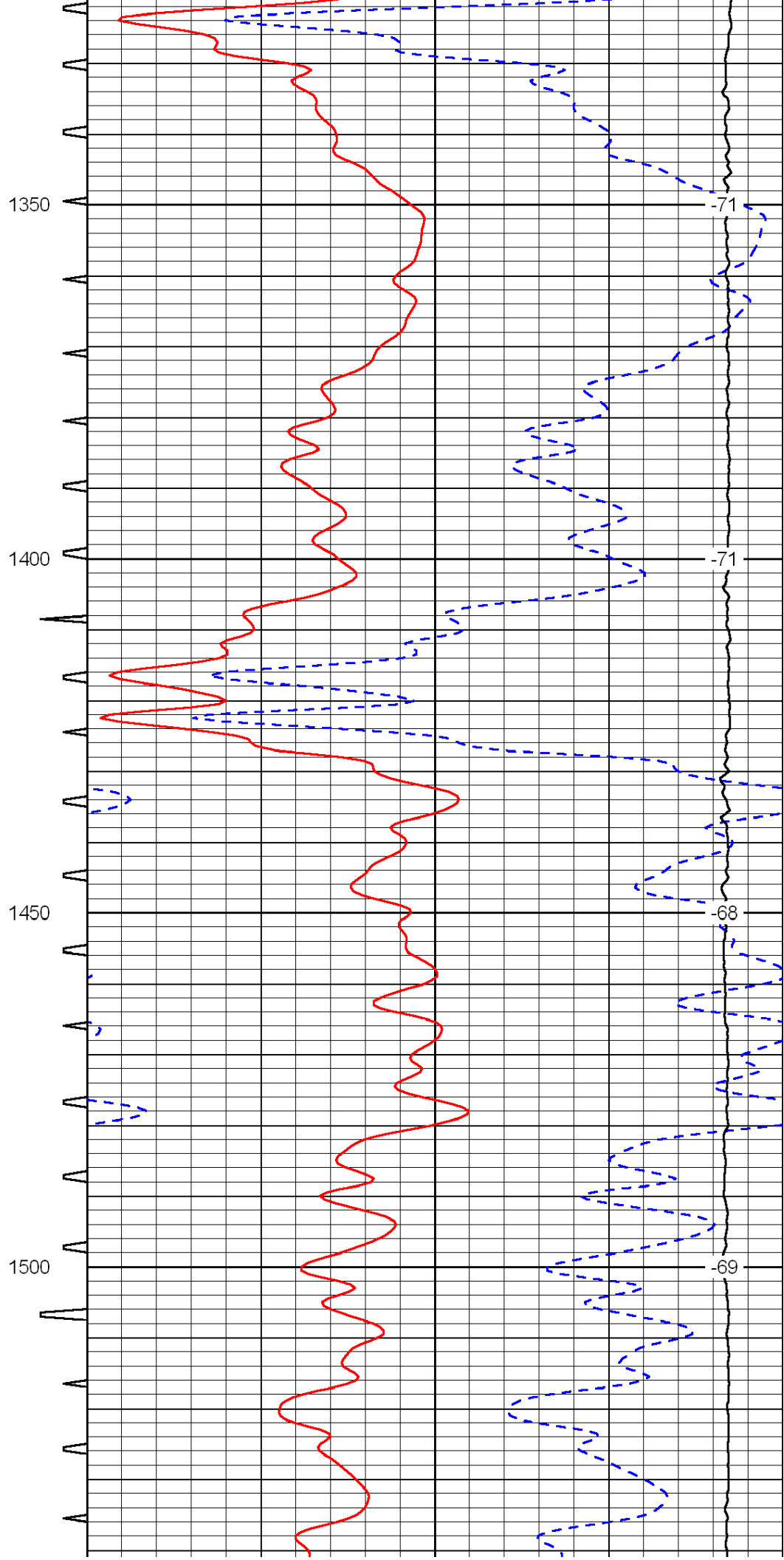
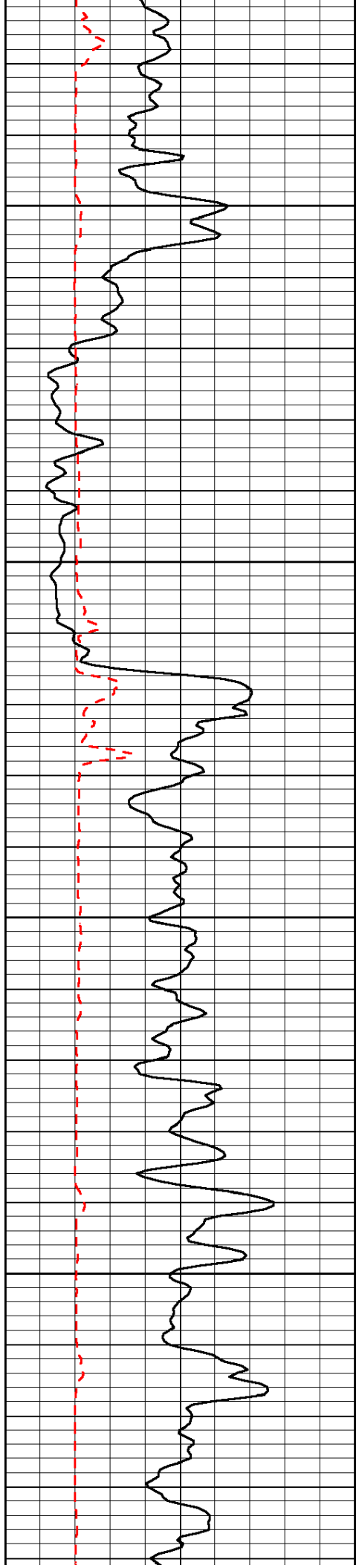


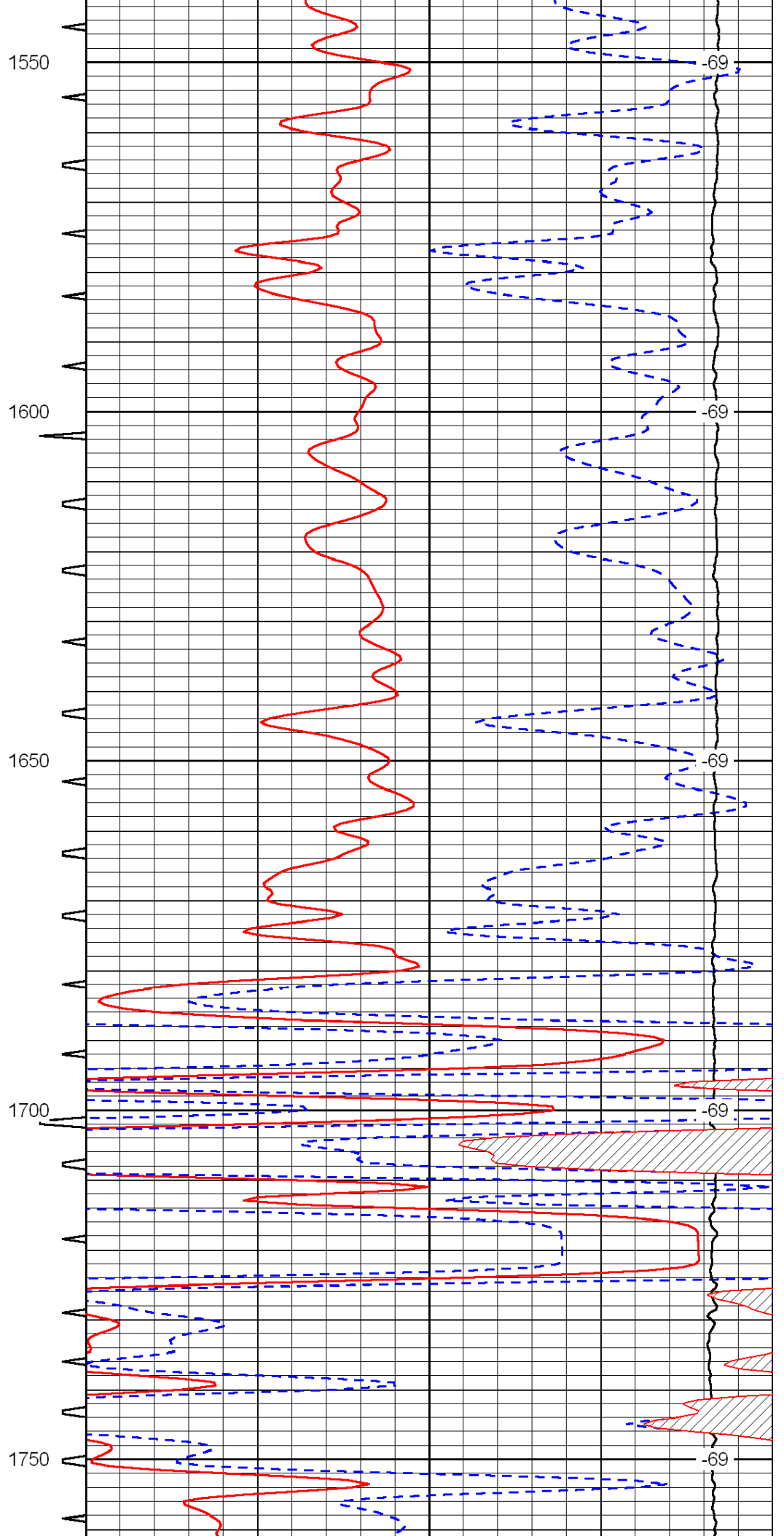
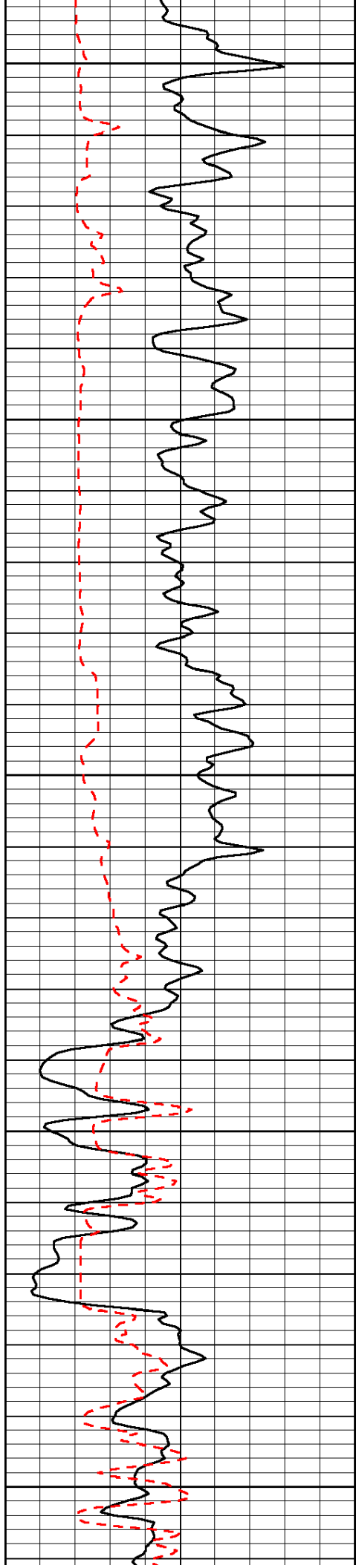


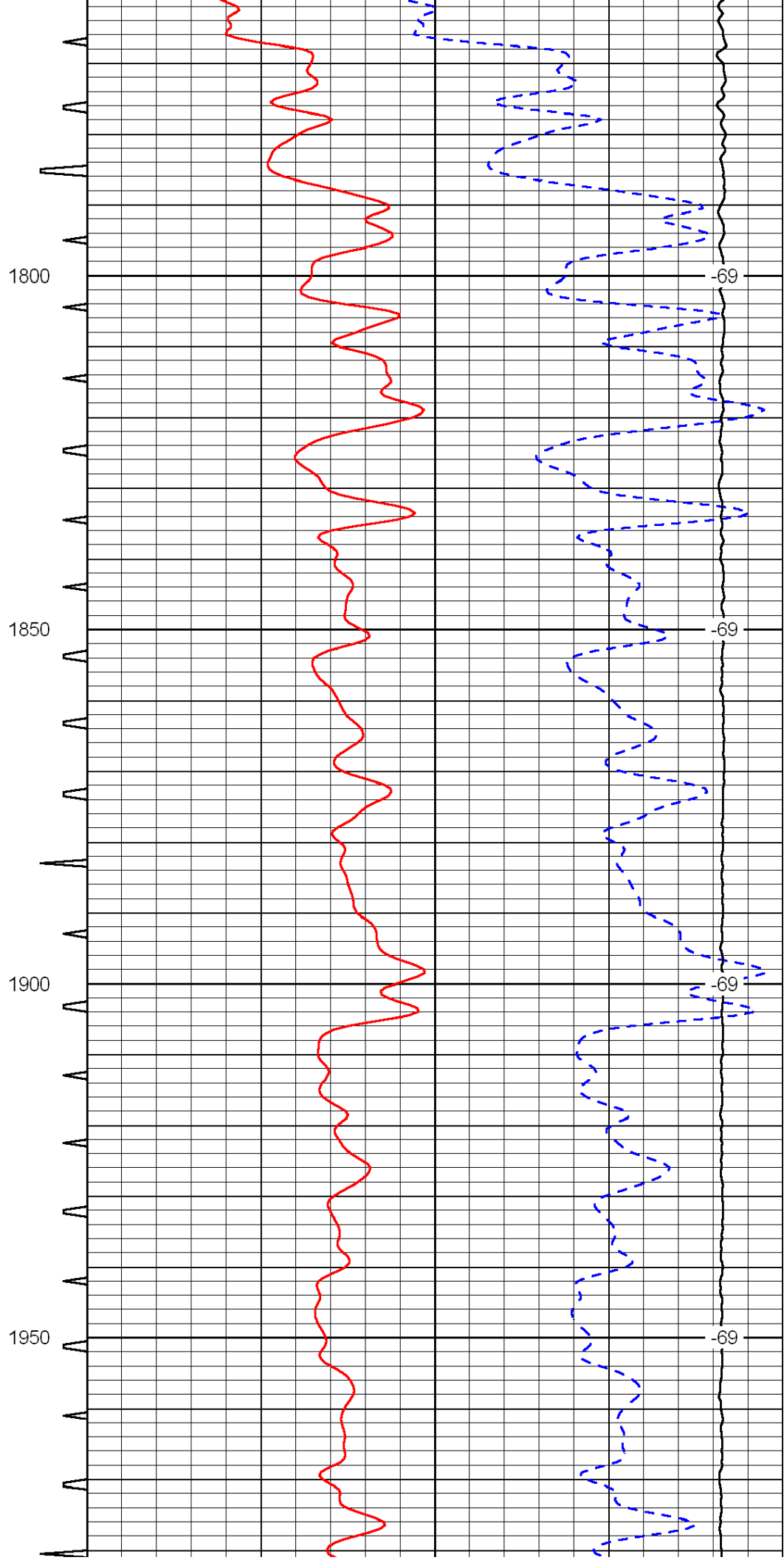
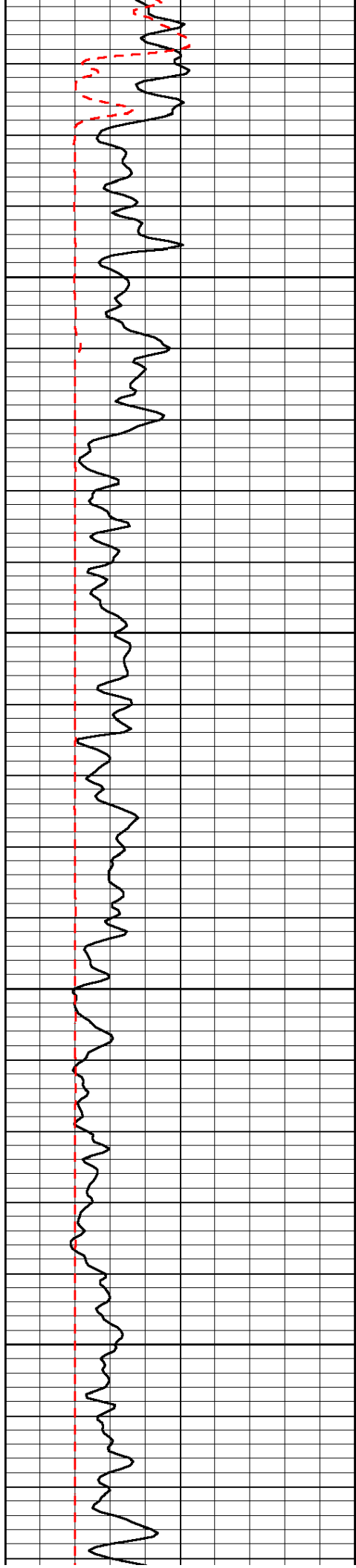


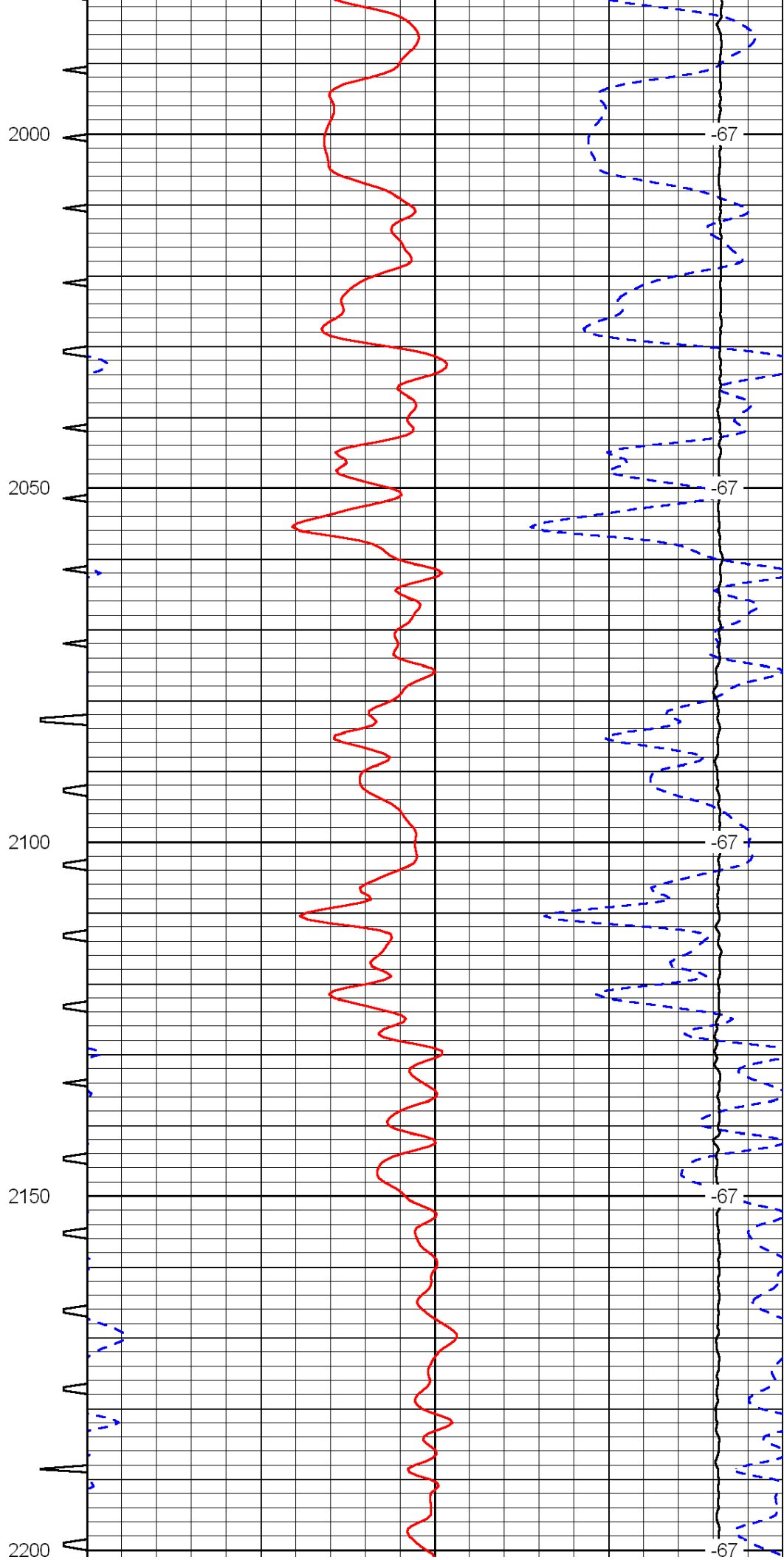
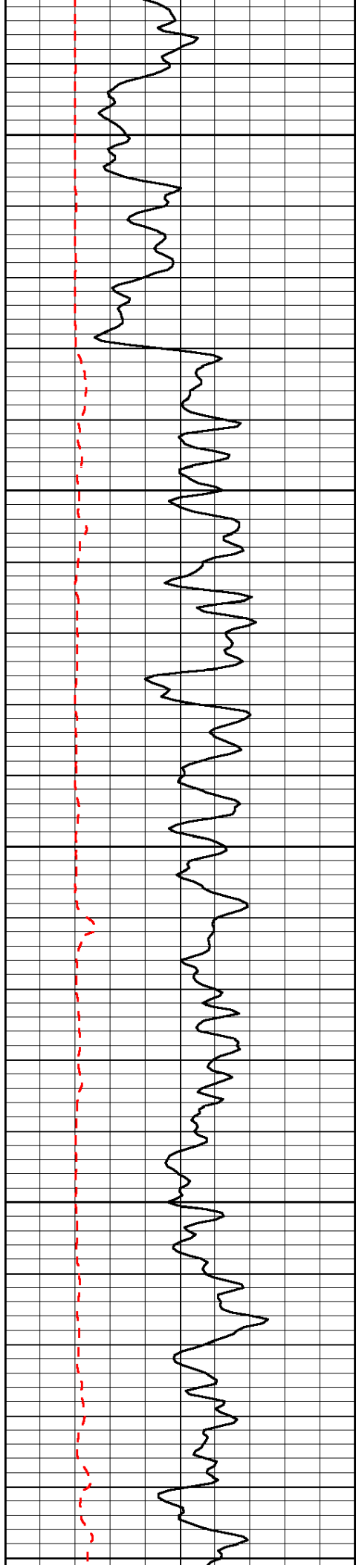


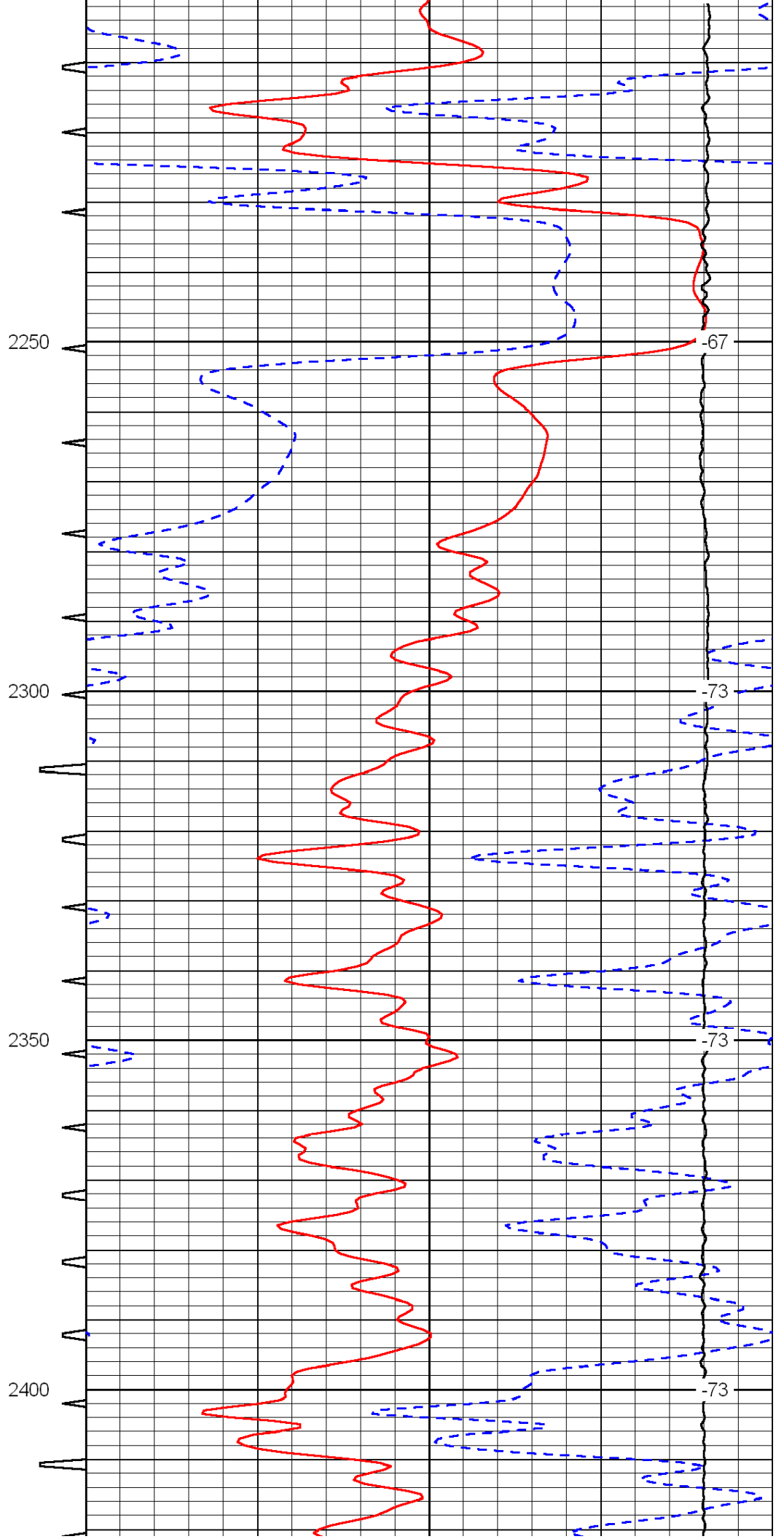
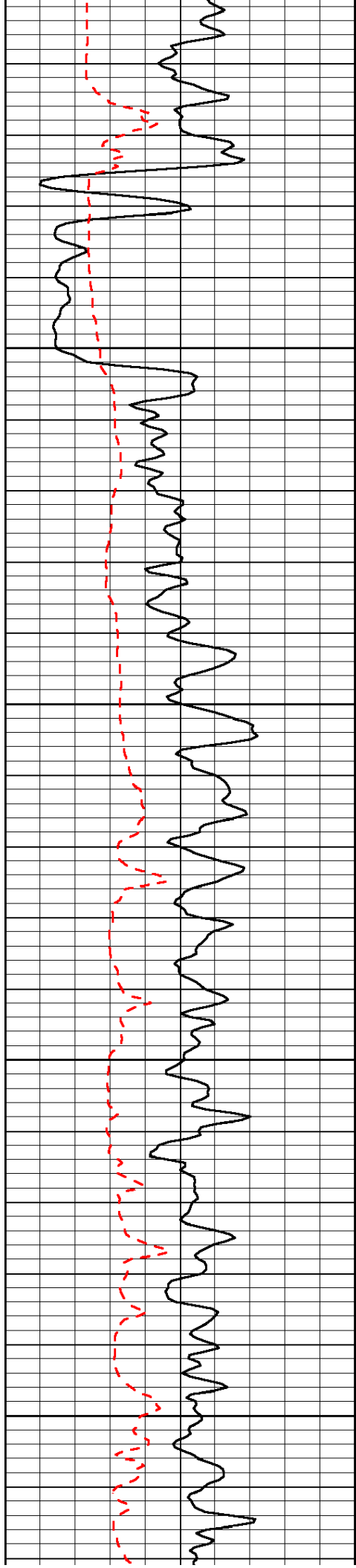


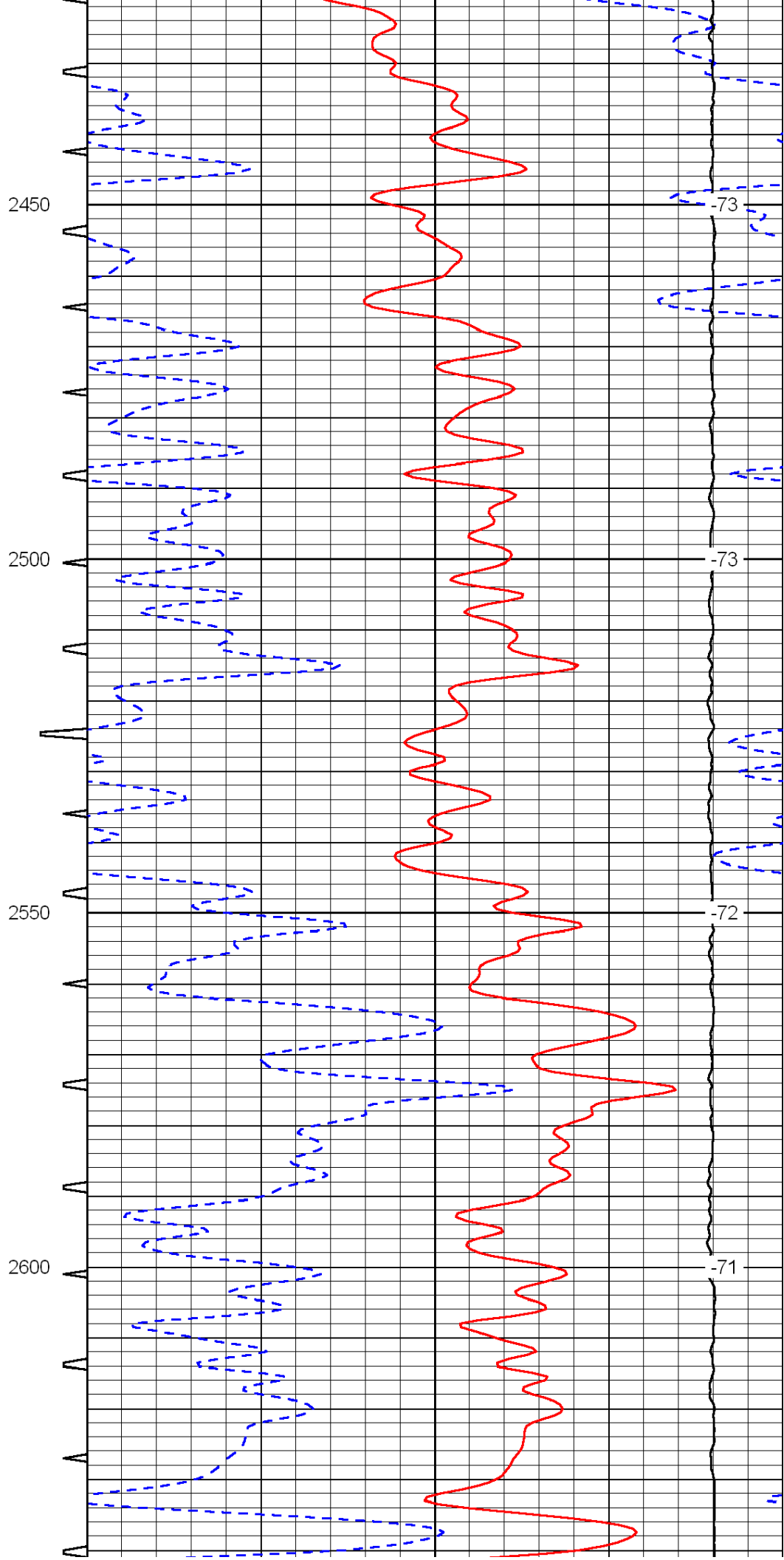
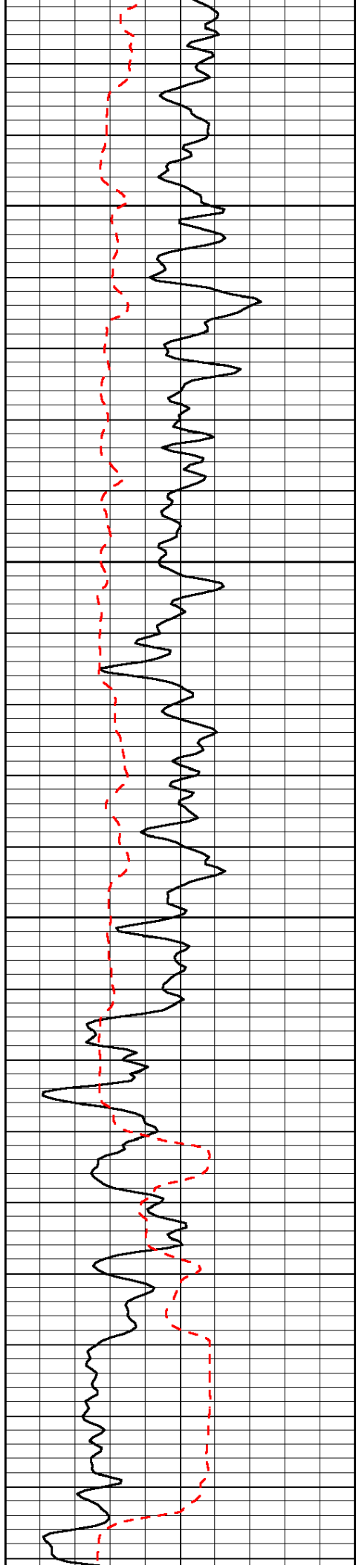




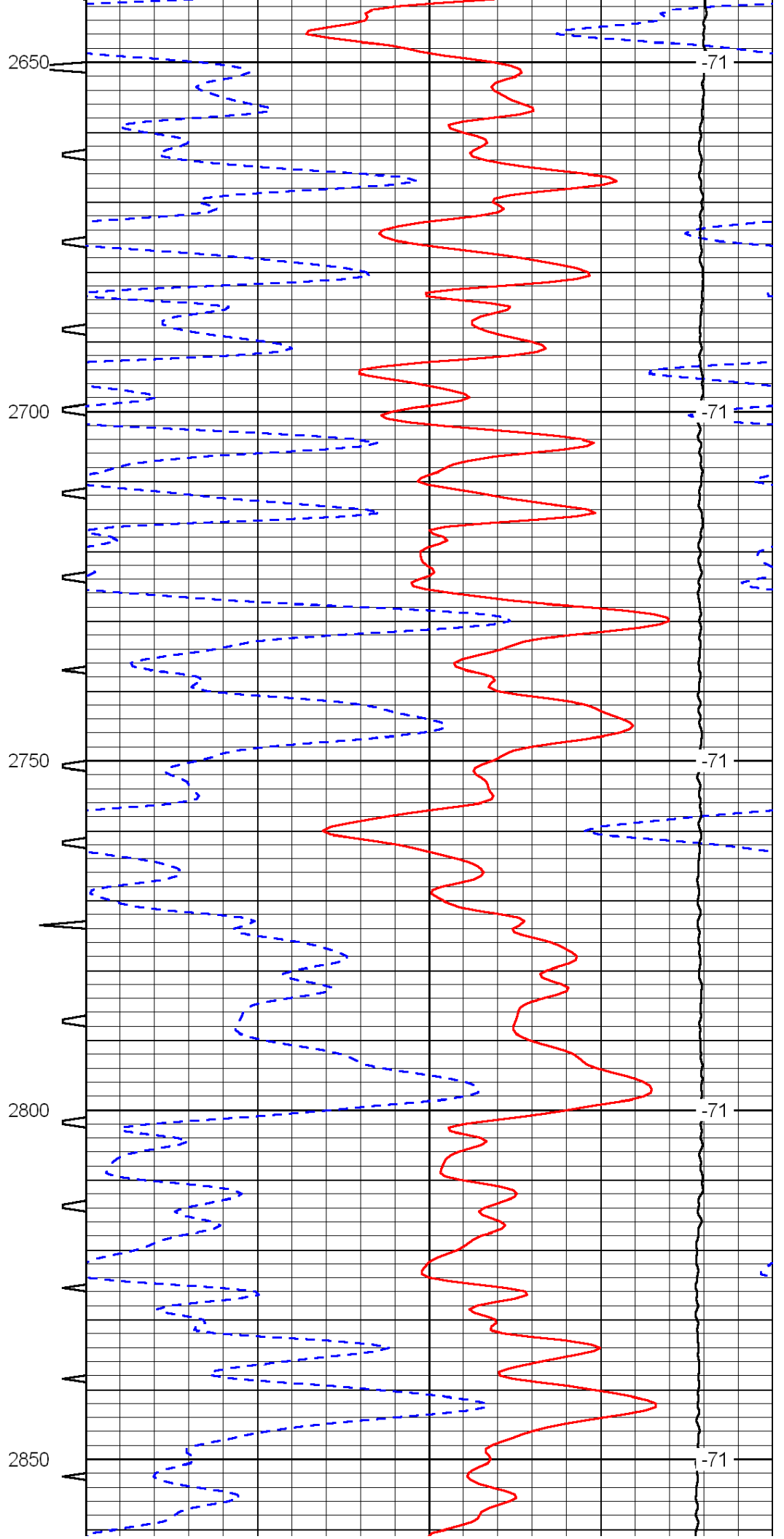
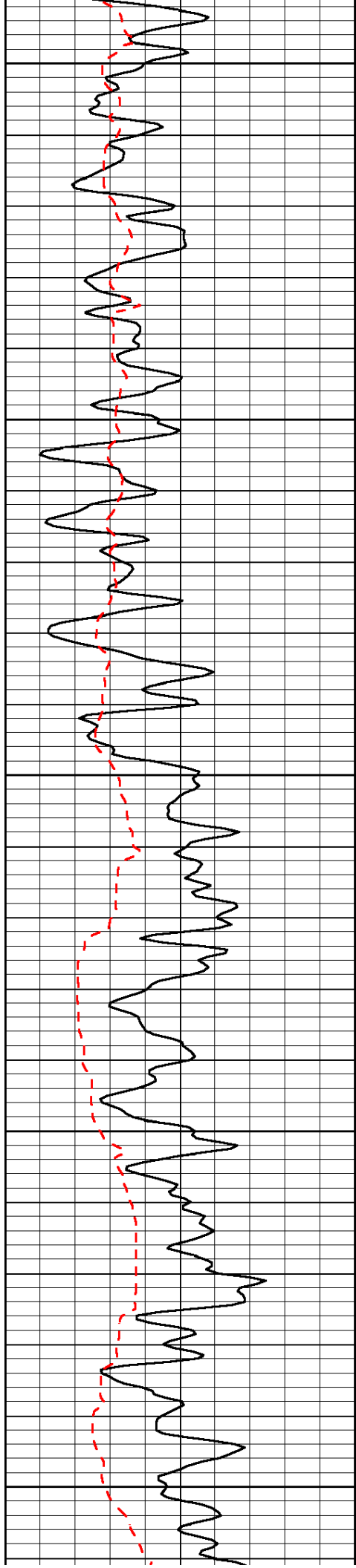


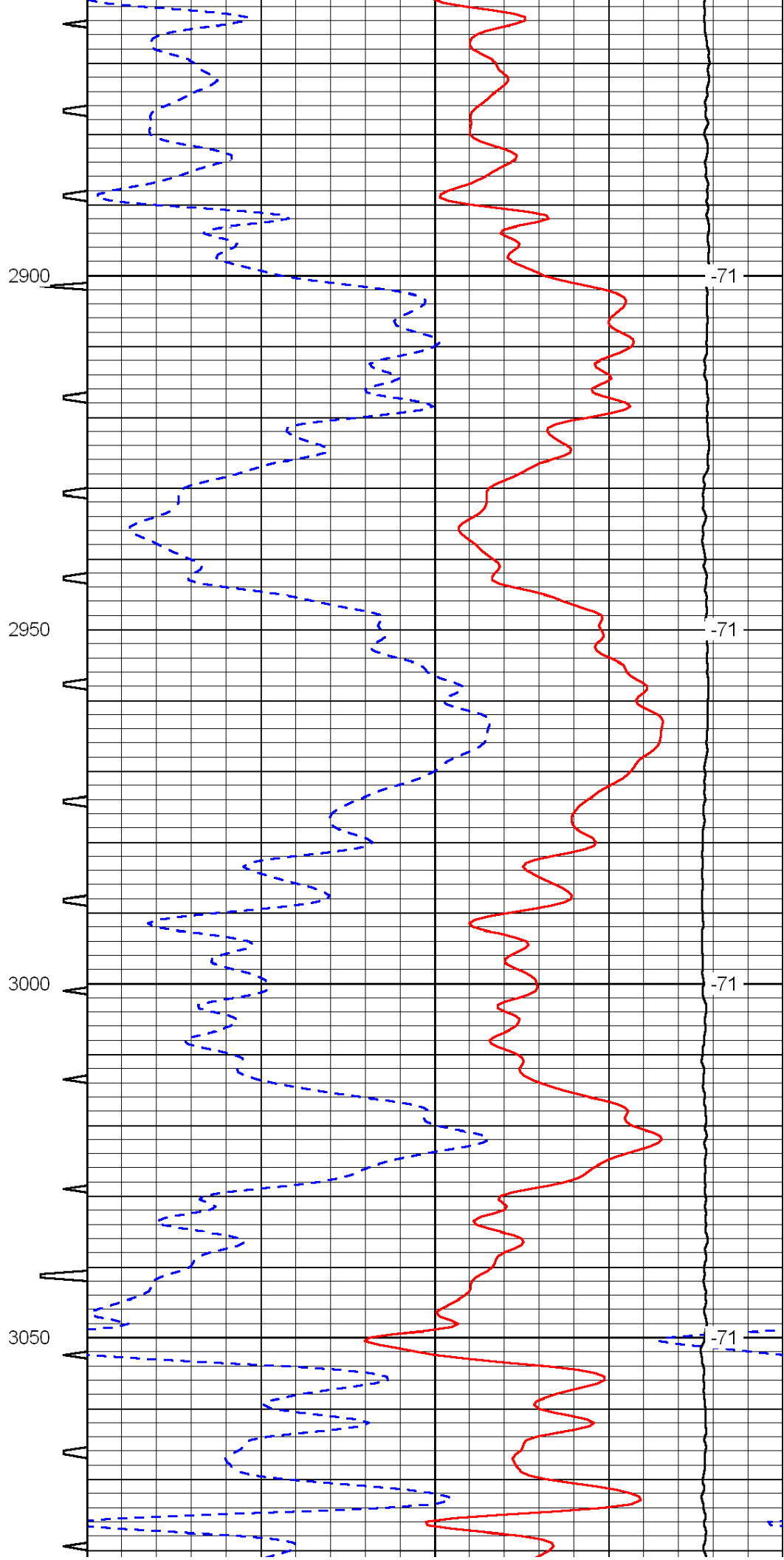
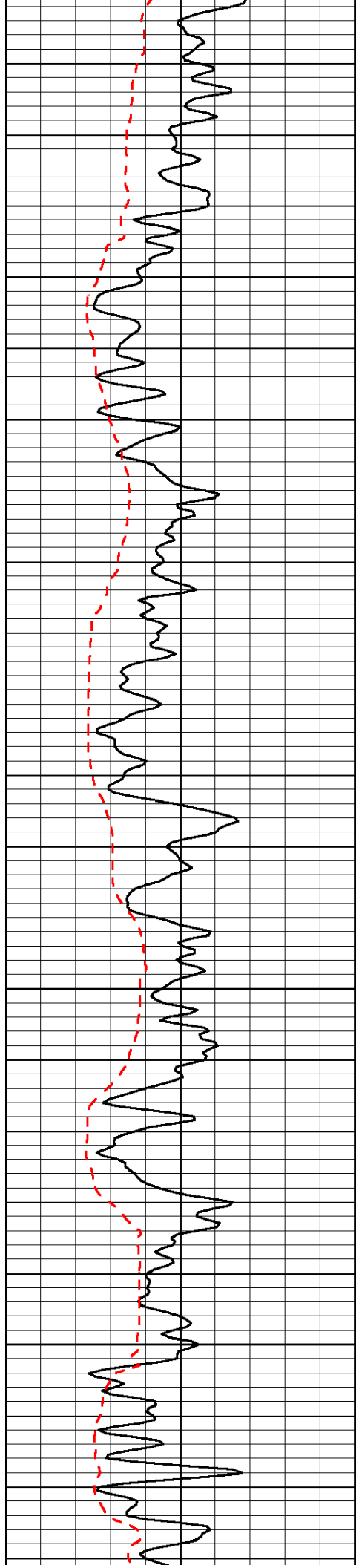


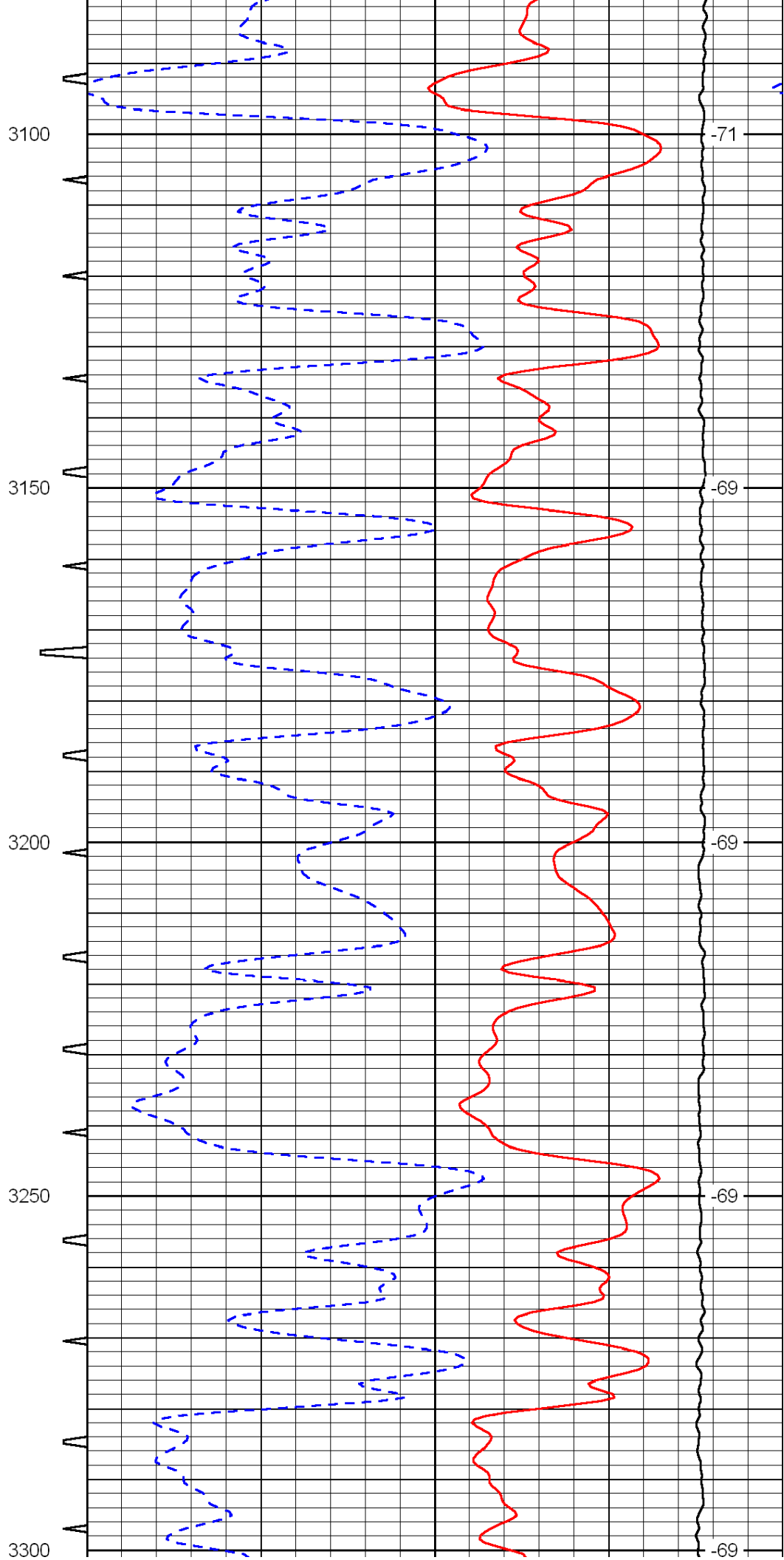
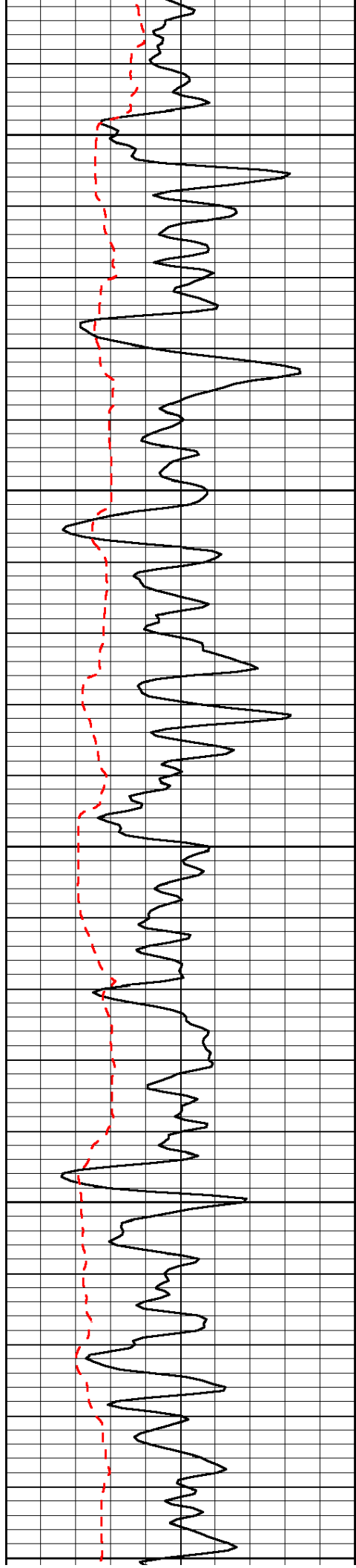


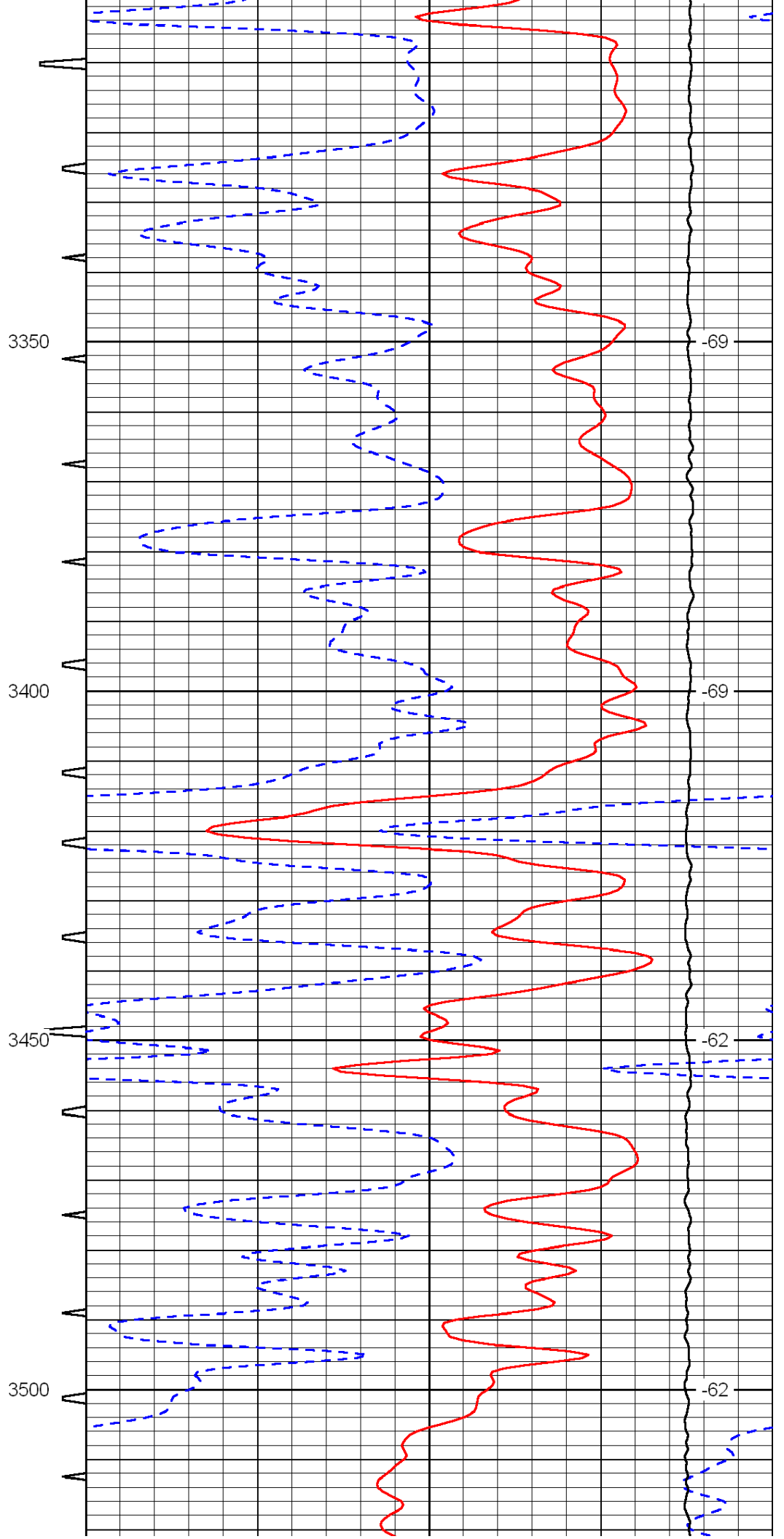
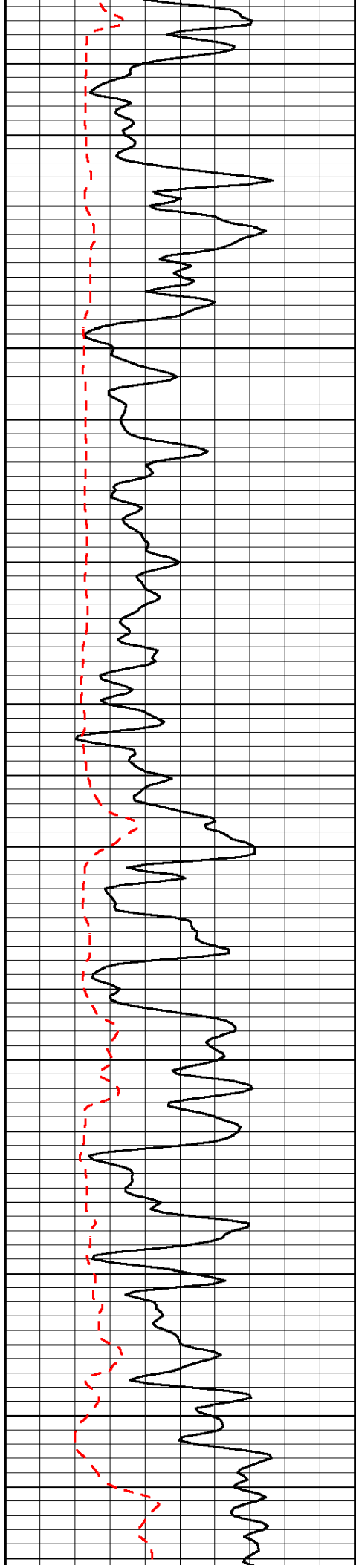


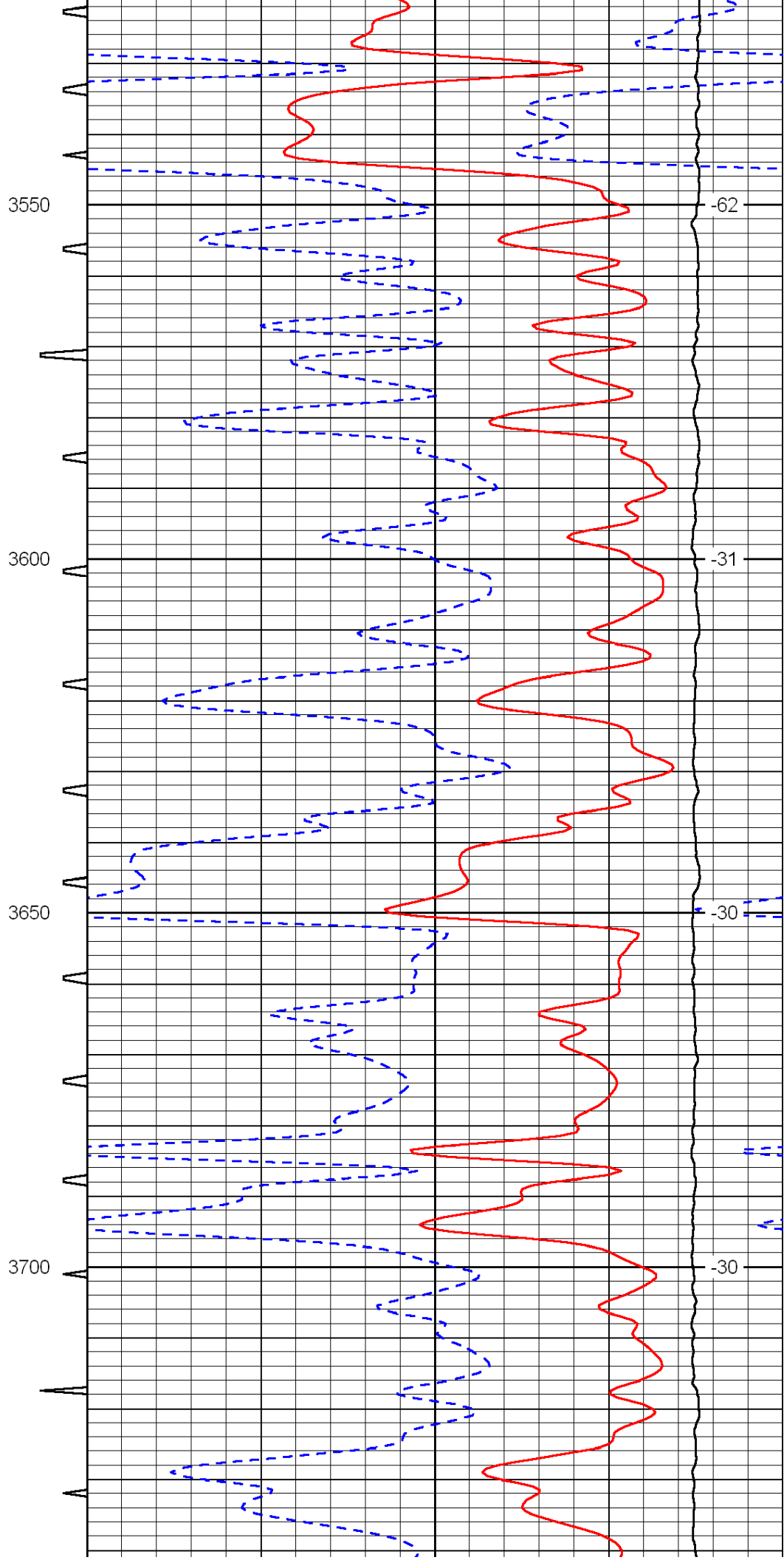
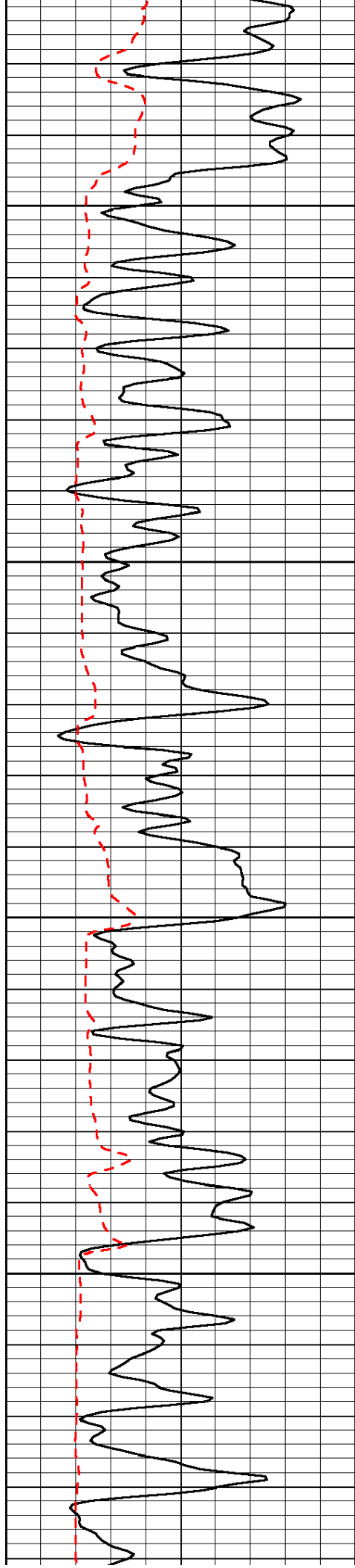


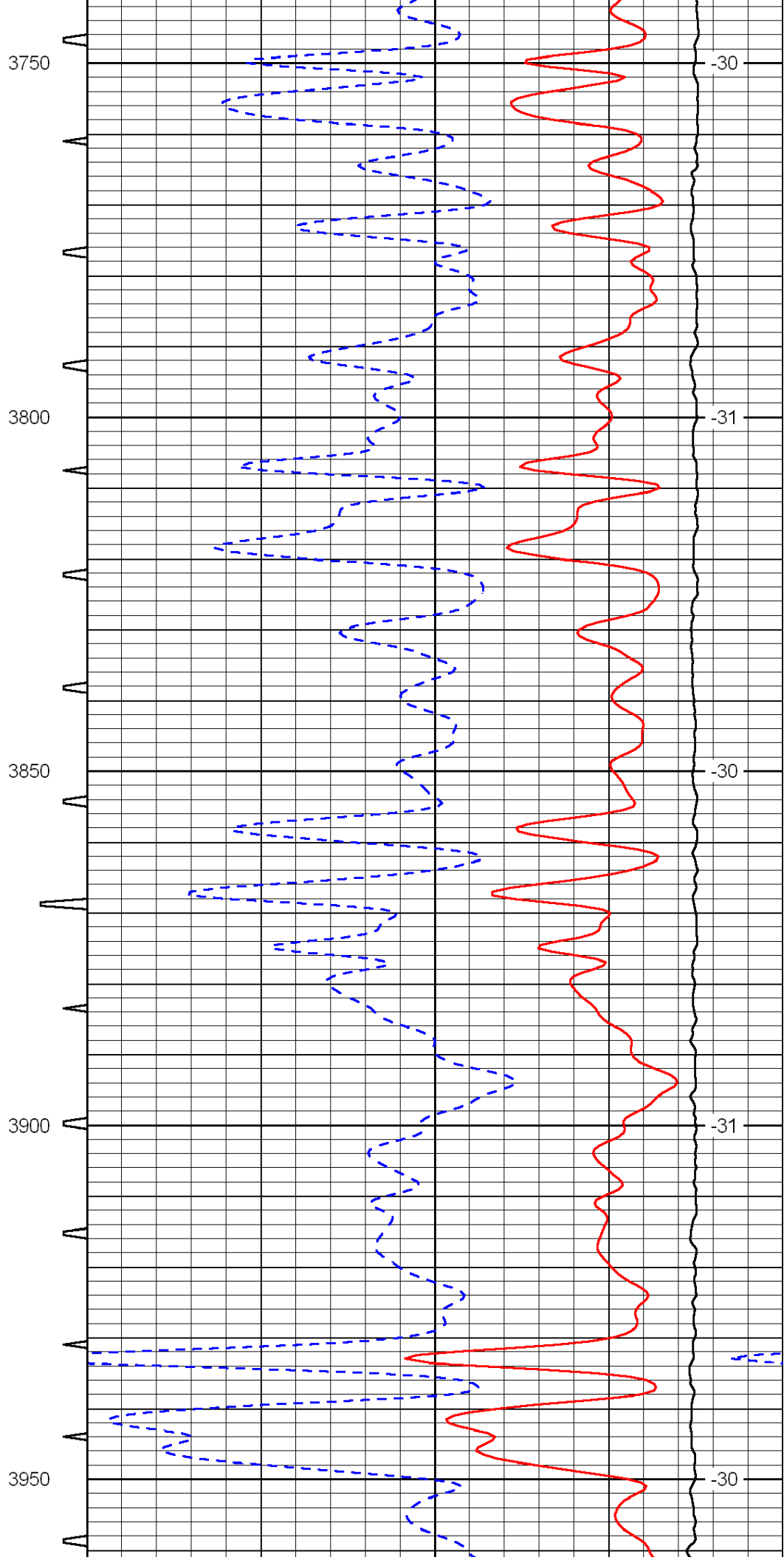
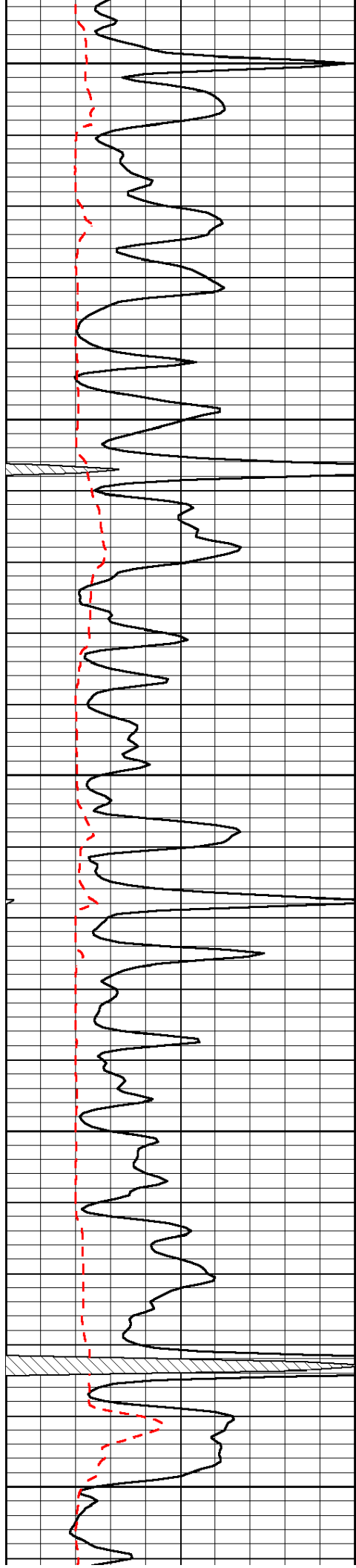


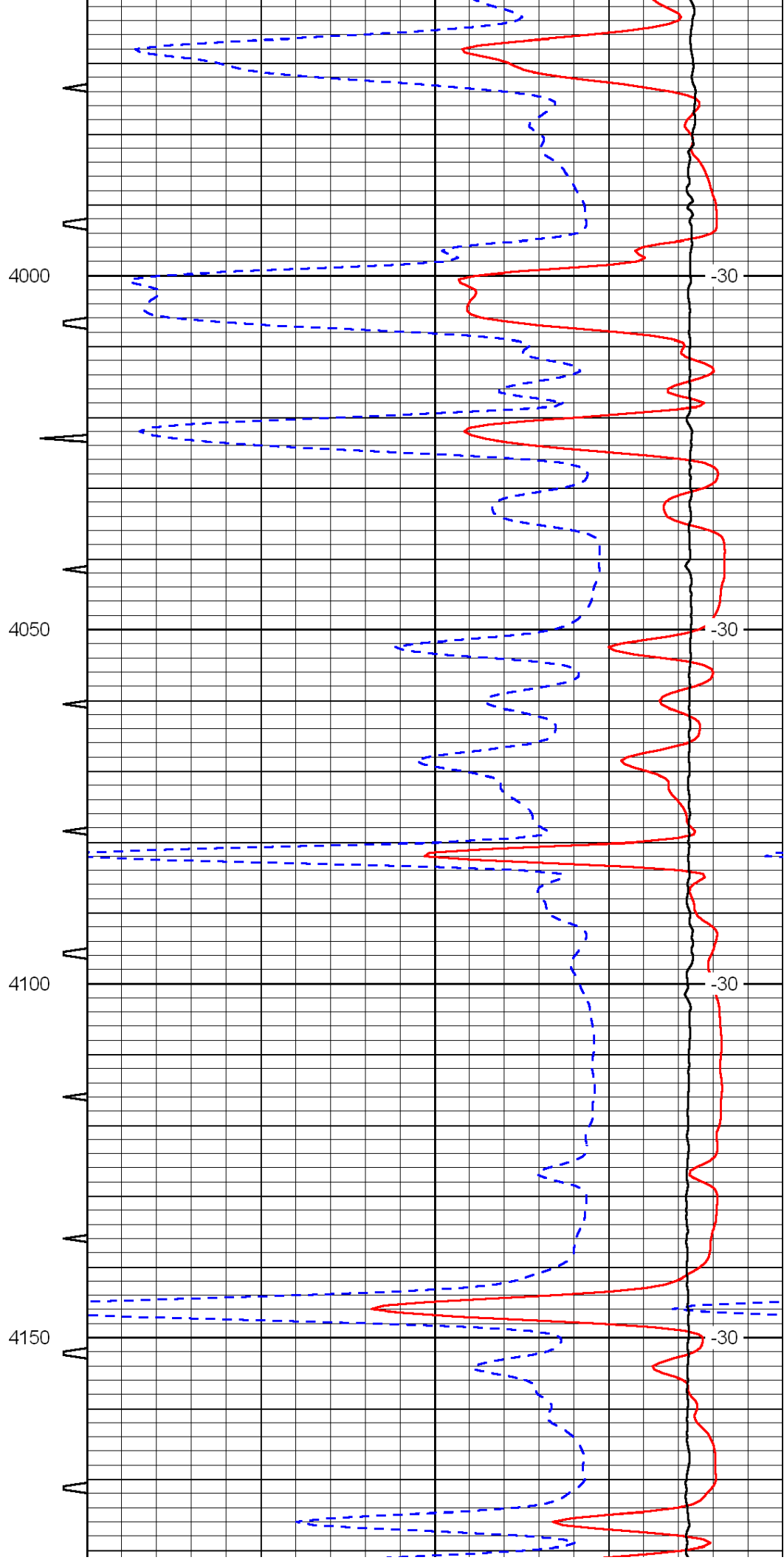
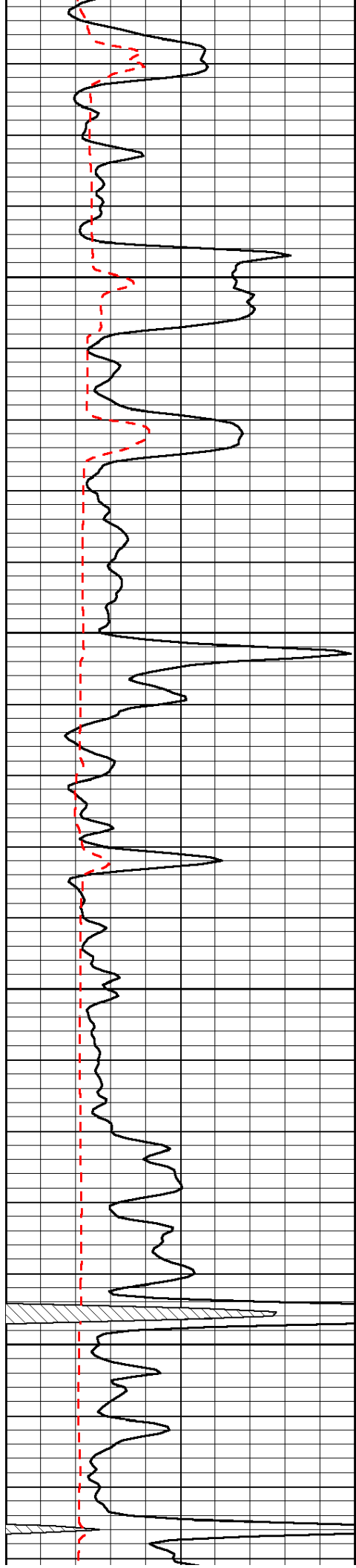


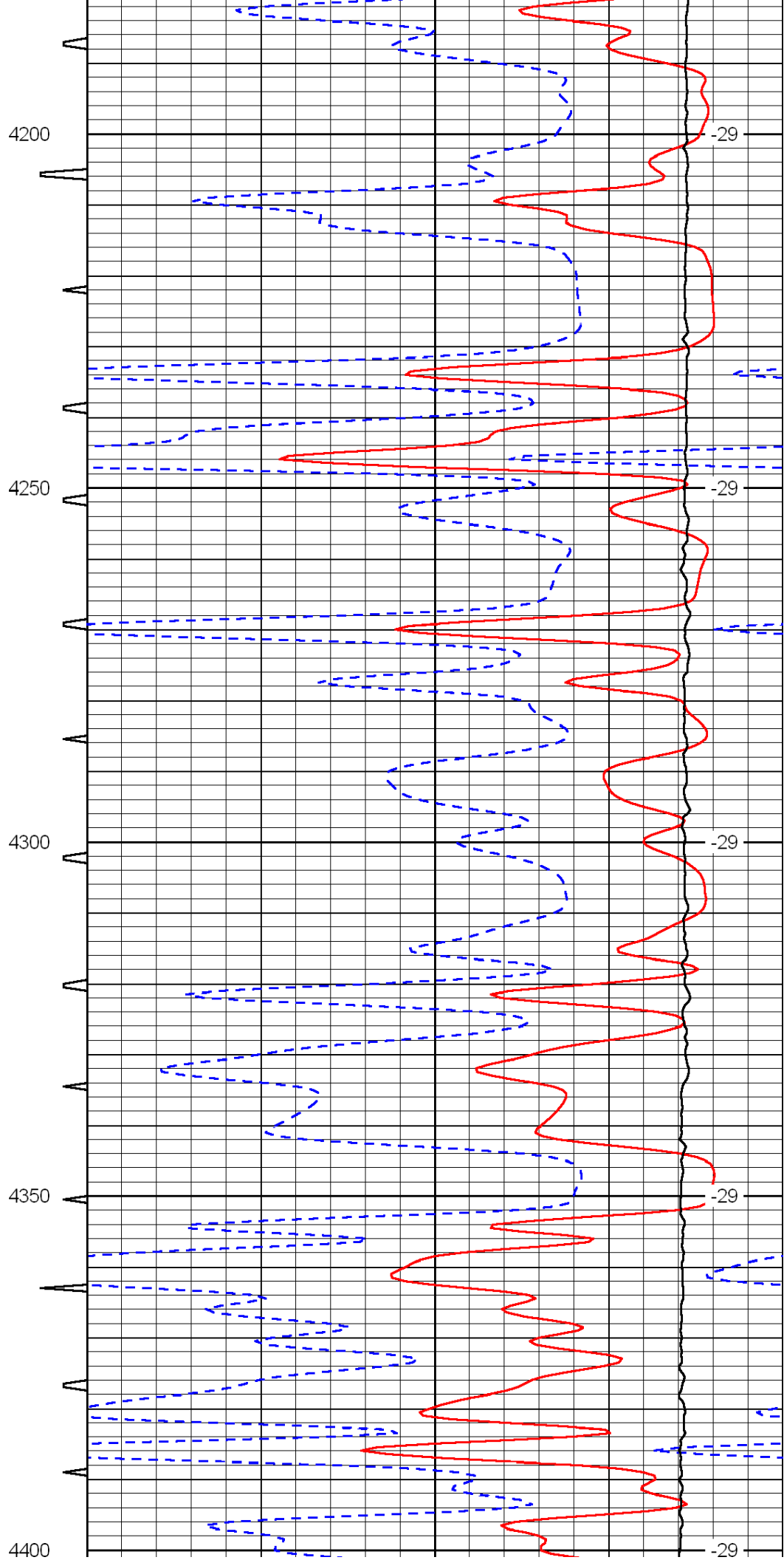
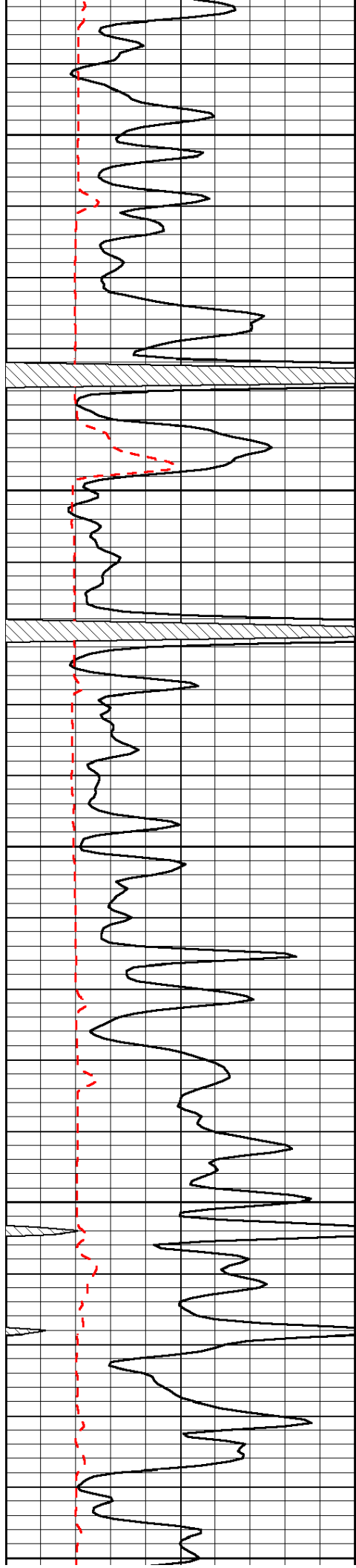




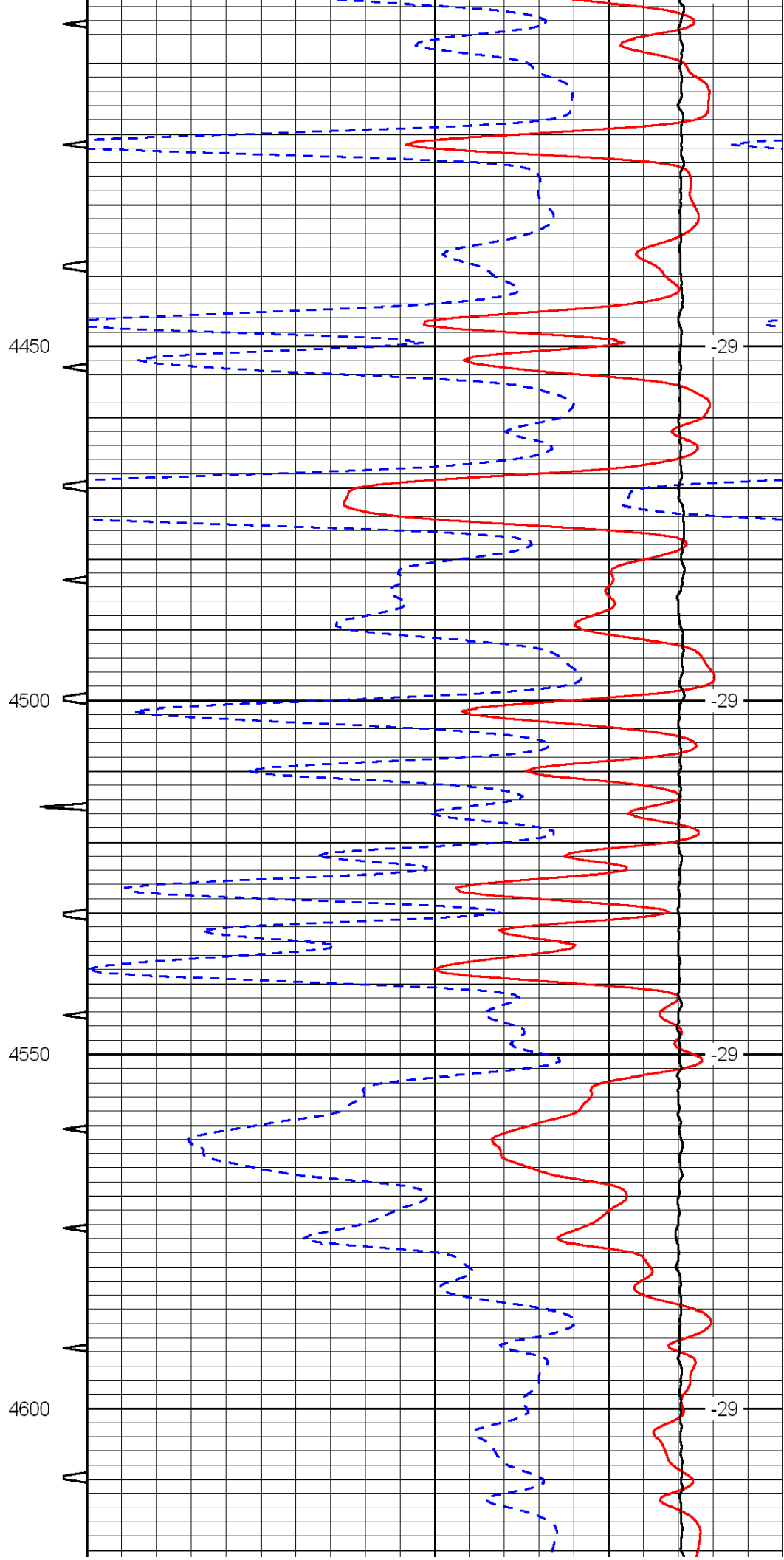
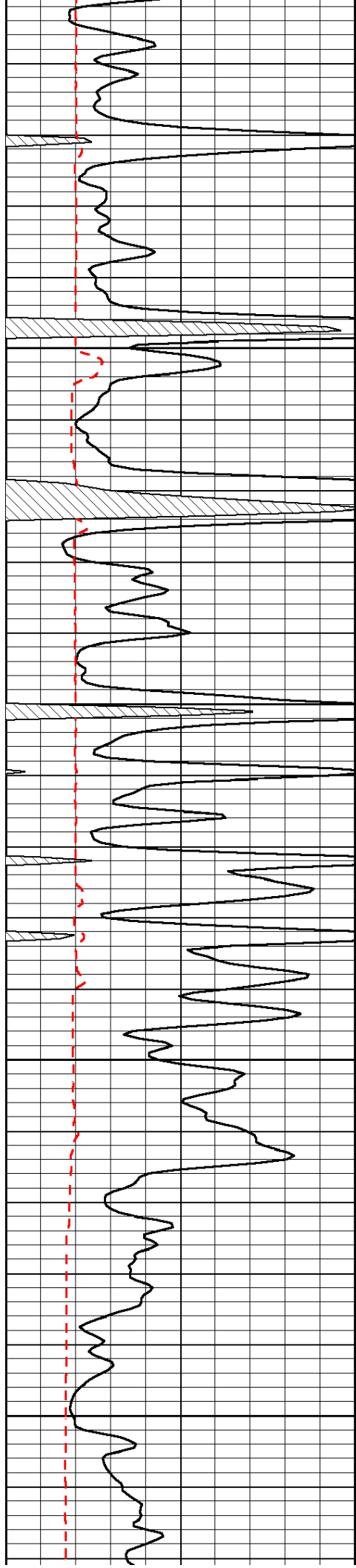


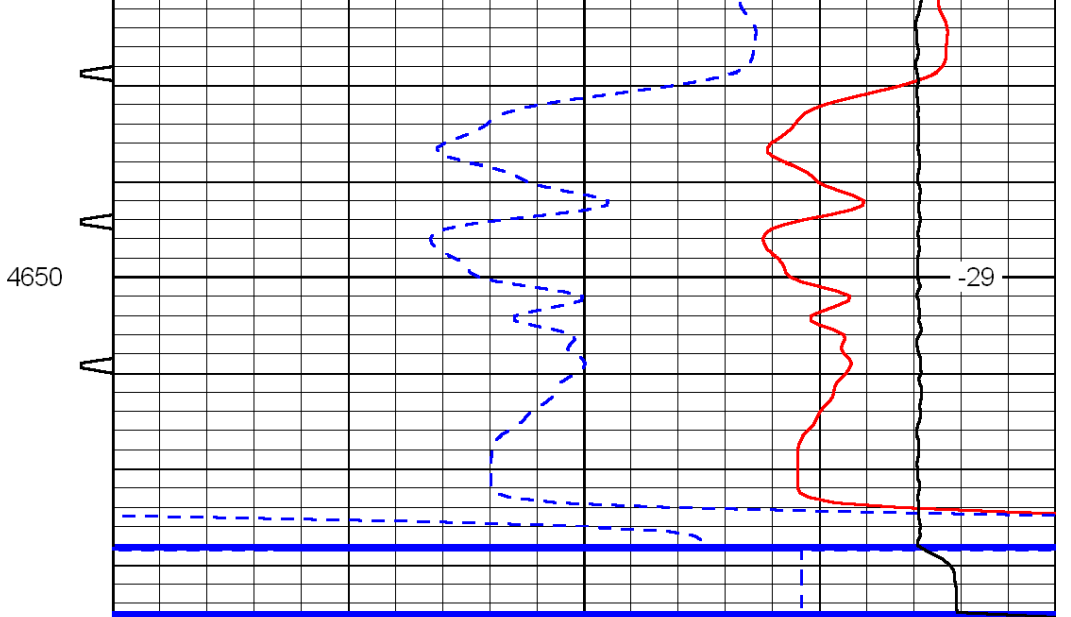
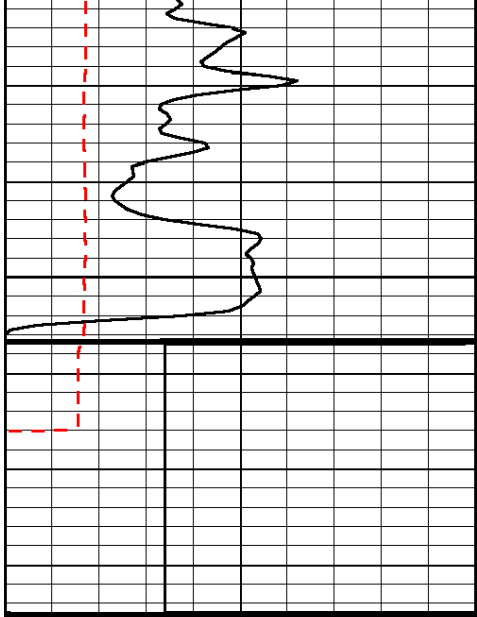












0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300	5	0	SPOR	-10
6	Caliper (GAPI)	16		15000	LTEN (lb)	0
LSPD						

# ALLIED CEMENTING CO., LLC. 042455

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
Great Bend, KS

DATE <u>3-26-12</u>	SEC. <u>9</u>	TWP. <u>17S</u>	RANGE <u>29W</u>	CALLED OUT	ON LOCATION	JOB START <u>8:30</u>	JOB FINISH <u>9:30</u>
LEASE <u>Deidre</u>	WELL# <u>1-9</u>	LOCATION <u>Dighton, KS #23 N to K4 west</u>			COUNTY <u>Lane</u>	STATE <u>Kansas</u>	
OLD OR <input checked="" type="radio"/> NEW (Circle one)			<u>6miles South East into</u>				

CONTRACTOR LW Drilling Rig 10  
 TYPE OF JOB Rotary Plug  
 HOLE SIZE 12 1/4 T.D.  
 CASING SIZE 8 5/8 DEPTH  
 TUBING SIZE DEPTH  
 DRILL PIPE 4 1/2 DEPTH 2230  
 TOOL DEPTH  
 PRES. MAX MINIMUM  
 MEAS. LINE SHOE JOINT  
 CEMENT LEFT IN CSG.  
 PERFS.  
 DISPLACEMENT

OWNER  
 CEMENT  
 AMOUNT ORDERED 280 60% class A 40% po2 4% gel 1/4 flo-seal

EQUIPMENT

PUMP TRUCK CEMENTER Rustin C  
 # 398 HELPER Kerry R  
 BULK TRUCK  
 # 462177 DRIVER Jon P  
 BULK TRUCK  
 # DRIVER

COMMON <u>168</u>	@ <u>16.25</u>	<u>2730.00</u>
POZMIX <u>112</u>	@ <u>8.50</u>	<u>952.00</u>
GEL <u>10</u>	@ <u>21.25</u>	<u>212.50</u>
CHLORIDE	@	
ASC	@	
<u>flo seal 1/4</u>	@ <u>2.70</u>	<u>189.00</u>
HANDLING <u>293</u>	@ <u>2.25</u>	<u>659.25</u>
MILEAGE <u>293 x 43 x 11</u>		<u>1385.85</u>
TOTAL		<u>6128.64</u>

**REMARKS:**

fill hole with rig mud  
1st plug 2230 ft 50 SKS  
2nd plug 1430 ft 80 SKS  
3rd plug 700 ft 50 SKS  
4th plug 280 ft 50 SKS  
5th plug 60 ft 20 SKS  
RH 30 SKS  
plug down 9:30

CHARGE TO: Credo Petroleum Corp  
 STREET \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

To Allied Cementing Co., LLC.  
 You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME X MARY WALK  
 SIGNATURE X [Signature]

Thank You!!

**SERVICE**

DEPTH OF JOB <u>2230</u>		
PUMP TRUCK CHARGE	<u>1250.00</u>	
EXTRA FOOTAGE	@	
MILEAGE <u>HUM 86</u>	@ <u>7.00</u>	<u>602.00</u>
MANIFOLD	@	
<u>LUM 86</u>	@ <u>4.00</u>	<u>344.00</u>
TOTAL		<u>2196.00</u>

**PLUG & FLOAT EQUIPMENT**

	@	
	@	
	@	
	@	
	@	
TOTAL		_____

SALES TAX (If Any) \_\_\_\_\_  
 TOTAL CHARGES 8324.64  
70% 2070 2830.87  
 DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS  
5493.77

# ALLIED CEMENTING CO., LLC. 042503

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31  
RUSSELL, KANSAS 67665

SERVICE POINT:  
G-ced Bend

DATE <u>3-17-12</u>	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START <u>6:30</u>	JOB FINISH <u>7:00 PM</u>
LEASE <u>Devide</u>	WELL# <u>1-9</u>		LOCATION <u>Shield west To Hick</u>		COUNTY <u>Law</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)			COCK RD 1 South South East 1/4				

CONTRACTOR in w Rig 10

TYPE OF JOB Surface

HOLE SIZE <u>12 1/4</u>	T.D. <u>251</u>
CASING SIZE <u>8 7/8</u>	DEPTH
TUBING SIZE	DEPTH
DRILL PIPE	DEPTH
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG. <u>20</u>	
PERFS.	
DISPLACEMENT <u>15 BBLs</u>	

OWNER \_\_\_\_\_

CEMENT AMOUNT ORDERED 275 cu class A + 38 cc + 290 gal

COMMON <u>275</u>	@ <u>16.25</u>	<u>4,468.75</u>
POZMIX	@	
GEL <u>5</u>	@ <u>21.25</u>	<u>106.25</u>
CHLORIDE <u>10</u>	@ <u>58.20</u>	<u>582.00</u>
ASC	@	
	@	
	@	
	@	
	@	
	@	
	@	
HANDLING <u>290</u>	@ <u>2.25</u>	<u>652.50</u>
MILEAGE <u>290 x 50 x .11</u>		<u>137.70</u>
		TOTAL <u>7,181.20</u>

EQUIPMENT

PUMP TRUCK CEMENTER Wayne

# 366 HELPER Kevin E.

BULK TRUCK

# 482/144 DRIVER John

BULK TRUCK

# DRIVER

REMARKS:

Pipe on Bottom Break circulation  
with Rig mud  
Run 3 BBLs Ahead  
Mix 275 cu class A + 38 cc + 290 gal  
Displace 15 BBLs 4-col water-  
Cement displ circulate  
Shut in  
Rig Down

CHARGE TO: G-ced

STREET \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

To Allied Cementing Co., LLC.  
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Mandy Mills

SIGNATURE [Signature]

SERVICE

DEPTH OF JOB <u>251</u>		
PUMP TRUCK CHARGE		<u>1125.00</u>
EXTRA FOOTAGE	@	
MILEAGE <u>HUM 86</u>	@ <u>7.00</u>	<u>602.00</u>
MANIFOLD	@	
<u>LUM 86</u>	@ <u>4.00</u>	<u>344.00</u>
	@	
		TOTAL <u>2071.00</u>

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
		TOTAL _____

SALES TAX (If Any) \_\_\_\_\_

TOTAL CHARGES 9,252.20

~~700.28~~ ~~2,479.70~~ 3009.29

DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS

~~6,773.00~~ 6,242.91