



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1077968  
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
-----------------------------------	-----------------	---

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: \_\_\_\_\_

1077968

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 <i>(Attach Additional Sheets)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Log	Formation (Top), Depth and Datum	<input type="checkbox"/> Sample
Samples Sent to Geological Survey	<input type="checkbox"/> Yes <input type="checkbox"/> No	Name	Top	Datum
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:				

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:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

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> _____ _____
--	--	---

Form	ACO1 - Well Completion
Operator	Credo Petroleum Corporation
Well Name	Schipper 1-8
Doc ID	1077968

All Electric Logs Run

Borehole Compensated Sonic Log
Microresistivity Log
Dual Induction 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 03, 2012

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

Re: ACO1  
API 15-109-21083-00-00  
Schipper 1-8  
NW/4 Sec.08-11S-32W  
Logan 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: Charlie Sturdavant

### **Schipper #1-8**

#### **S8-11s-32w Logan,KS**

Start Date: 2012.03.17 @ 00:41:00

End Date: 2012.03.17 @ 07:27:20

Job Ticket #: 45092                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.03.22 @ 16:04:57



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

ATTN: Charlie Sturdavant

Job Ticket: 45092

**DST#: 1**

Test Start: 2012.03.17 @ 00:41:00

## GENERAL INFORMATION:

Formation: **Lansing 'F'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:36:00

Time Test Ended: 07:27:20

Test Type: Conventional Bottom Hole (Initial)

Tester: Chuck Smith

Unit No: 37

**Interval: 4128.00 ft (KB) To 4156.00 ft (KB) (TVD)**

Reference Elevations: 3094.00 ft (KB)

Total Depth: 4156.00 ft (KB) (TVD)

3089.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8018**

**Inside**

Press @ Run Depth: 207.38 psig @ 4132.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.17

End Date:

2012.03.17

Last Calib.:

2012.03.17

Start Time: 00:41:02

End Time:

07:27:19

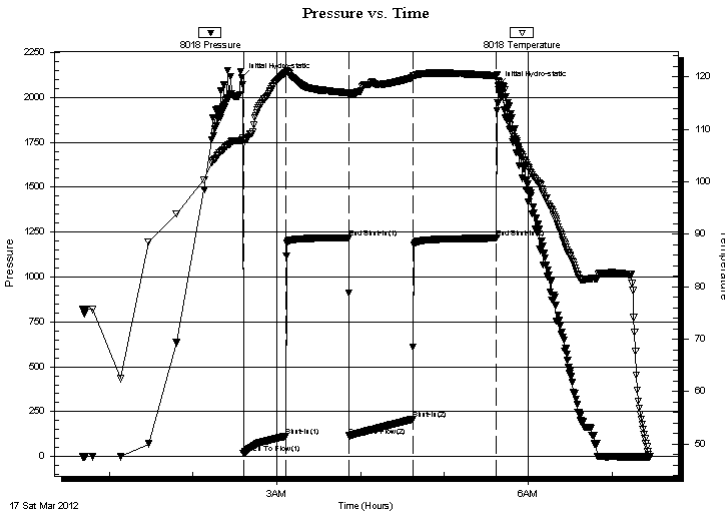
Time On Btm:

2012.03.17 @ 02:34:50

Time Off Btm:

**TEST COMMENT:** B.O.B. @ 29 min.  
Weak surface return died @ 5 min.  
B.O.B. @ 35 min.  
No return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2110.01	108.03	Initial Hydro-static
2	17.80	107.35	Open To Flow (1)
32	113.73	120.74	Shut-In(1)
77	1219.16	116.90	End Shut-In(1)
77	115.51	116.39	Open To Flow (2)
123	207.38	119.80	Shut-In(2)
183	1216.11	120.18	End Shut-In(2)
184	2065.46	119.04	Initial Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
250.00	MW 5m 95w Popping gas	2.37
170.00	WM 40w 60m	2.38
0.00	Oil spots in tool.	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

Job Ticket: 45092

**DST#: 1**

ATTN: Charlie Sturdavant

Test Start: 2012.03.17 @ 00:41:00

## Tool Information

Drill Pipe:	Length: 3982.00 ft	Diameter: 3.80 inches	Volume: 55.86 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 24000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 56.47 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.50 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	4128.00 ft			Final 47000.00 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			4101.50	
Shut In Tool	5.00			4106.50	
Hydraulic tool	5.00			4111.50	
Jars	5.00			4116.50	
Safety Joint	2.50			4119.00	
Packer	5.00			4124.00	27.50 Bottom Of Top Packer
Packer	4.00			4128.00	
Stubb	1.00			4129.00	
Perforations	3.00			4132.00	
Recorder	0.00	8018	Inside	4132.00	
Recorder	0.00	6751	Outside	4132.00	
Perforations	21.00			4153.00	
Bullnose	3.00			4156.00	28.00 Bottom Packers & Anchor

**Total Tool Length: 55.50**





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

Job Ticket: 45092

**DST#: 1**

ATTN: Charlie Sturdavant

Test Start: 2012.03.17 @ 00:41:00

## 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:

60000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.17 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
250.00	MW 5m 95w Popping gas	2.368
170.00	WM 40w 60m	2.385
0.00	Oil spots in tool.	0.000

Total Length: 420.00 ft      Total Volume: 4.753 bbl

Num Fluid Samples: 0

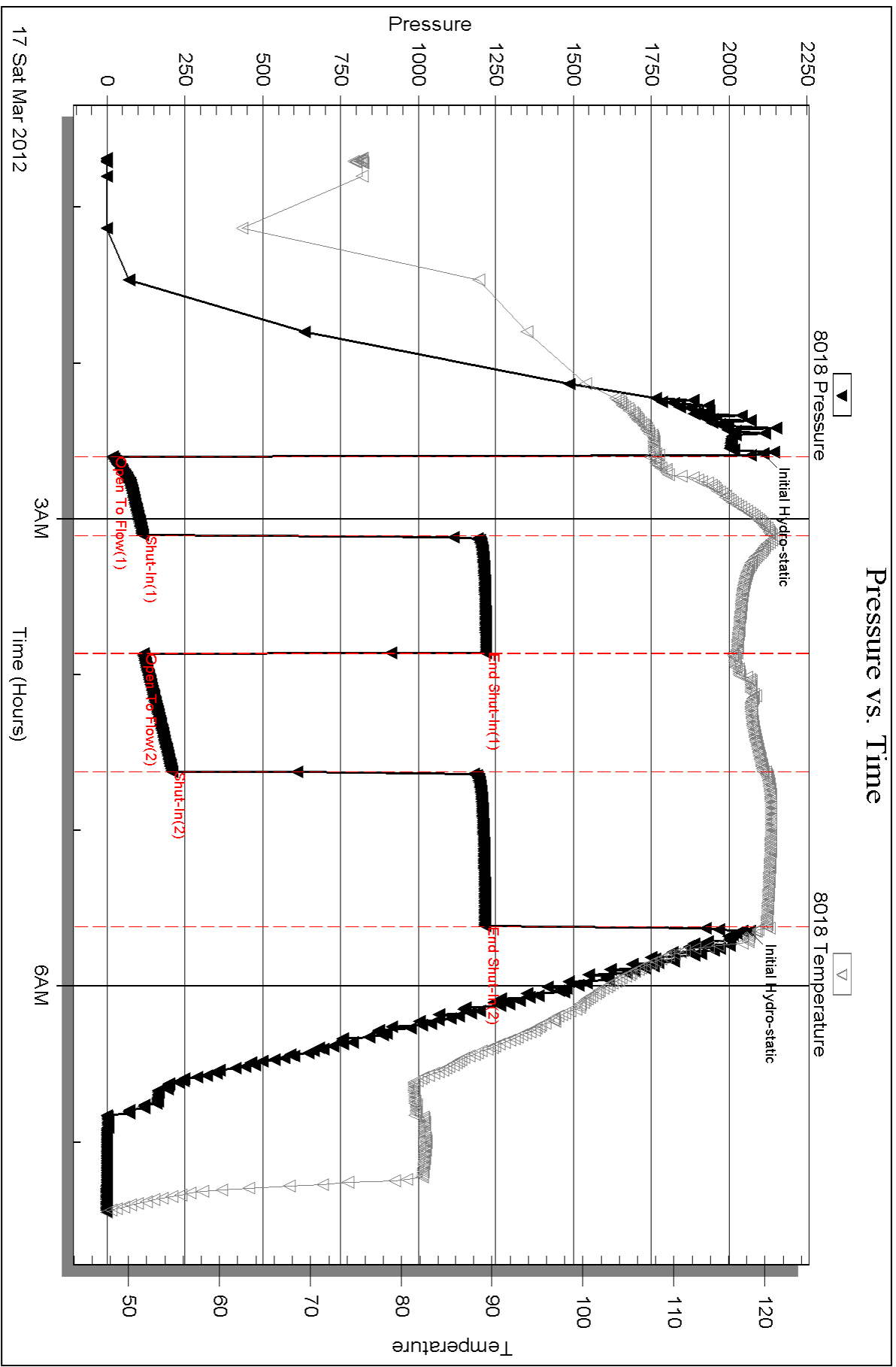
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .200 @ 43 Degrees F = 60000 PPM

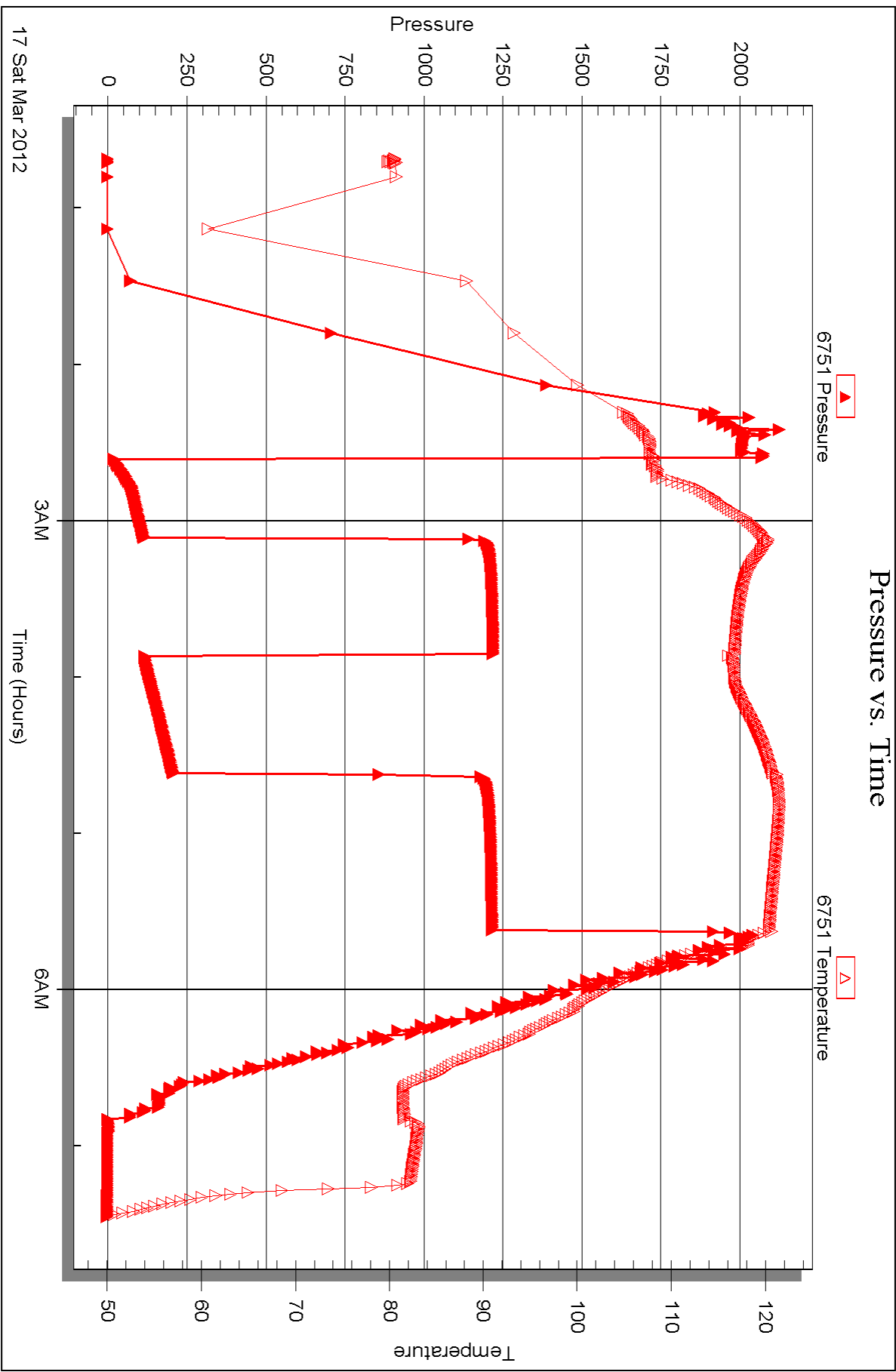


Serial #: 6751

Outside Credo Petroleum Corp.

Schipper #1-8

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900  
Denver, CO 80202

ATTN: Charlie Sturdavant

### **Schipper #1-8**

### **S8-11s-32w Logan,KS**

Start Date: 2012.03.17 @ 22:12:00

End Date: 2012.03.18 @ 05:03:50

Job Ticket #: 45093                      DST #: 2

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

Printed: 2012.03.22 @ 16:03:54



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

ATTN: Charlie Sturdavant

Job Ticket: 45093

**DST#: 2**

Test Start: 2012.03.17 @ 22:12:00

## GENERAL INFORMATION:

Formation: **Lansing 'H- K'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 23:46:50

Time Test Ended: 05:03:50

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 37

**Interval: 4188.00 ft (KB) To 4295.00 ft (KB) (TVD)**

Reference Elevations: 3094.00 ft (KB)

Total Depth: 4295.00 ft (KB) (TVD)

3089.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8018**

**Inside**

Press @ Run Depth: 152.59 psig @ 4192.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.03.17

End Date: 2012.03.18

Last Calib.: 2012.03.18

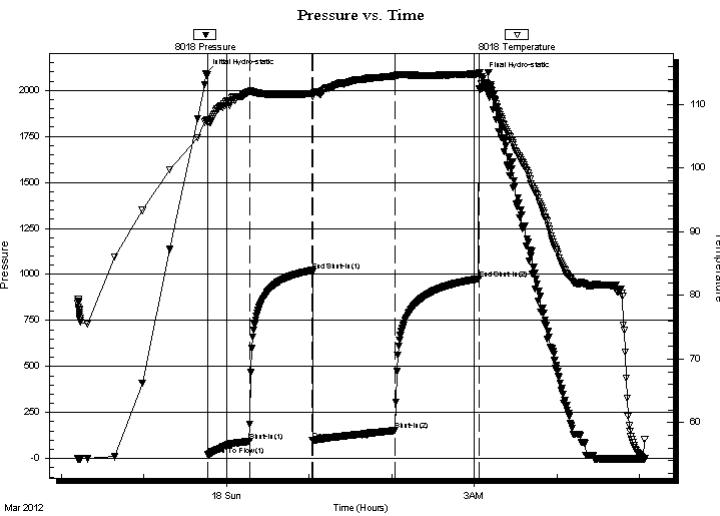
Start Time: 22:12:02

End Time: 05:03:49

Time On Btm: 2012.03.17 @ 23:45:10

Time Off Btm: 2012.03.18 @ 03:05:50

**TEST COMMENT:** 6 1/2" Blow .  
No return.  
9" Blow .  
No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2089.70	107.51	Initial Hydro-static
2	20.10	107.16	Open To Flow (1)
32	92.87	112.01	Shut-In(1)
78	1021.71	111.74	End Shut-In(1)
78	98.49	111.28	Open To Flow (2)
138	152.59	114.46	Shut-In(2)
199	976.65	114.85	End Shut-In(2)
201	2076.52	112.60	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
125.00	OSWM 5w 95m	0.61
155.00	OSM 100o	2.17

\* 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.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

Job Ticket: 45093

**DST#: 2**

ATTN: Charlie Sturdavant

Test Start: 2012.03.17 @ 22:12:00

## Tool Information

Drill Pipe:	Length: 4042.00 ft	Diameter: 3.80 inches	Volume: 56.70 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 57.31 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	6.50 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	4188.00 ft			Final 45000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	107.00 ft			
Tool Length:	134.50 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			4161.50	
Shut In Tool	5.00			4166.50	
Hydraulic tool	5.00			4171.50	
Jars	5.00			4176.50	
Safety Joint	2.50			4179.00	
Packer	5.00			4184.00	27.50 Bottom Of Top Packer
Packer	4.00			4188.00	
Stubb	1.00			4189.00	
Perforations	3.00			4192.00	
Recorder	0.00	8018	Inside	4192.00	
Recorder	0.00	6751	Outside	4192.00	
Perforations	35.00			4227.00	
Change Over Sub	1.00			4228.00	
Drill Pipe	63.00			4291.00	
Change Over Sub	1.00			4292.00	
Bullnose	3.00			4295.00	107.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>134.50</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

Job Ticket: 45093

**DST#: 2**

ATTN: Charlie Sturdavant

Test Start: 2012.03.17 @ 22:12:00

## 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:

49000 ppm

Viscosity: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
125.00	OSWM 5w 95m	0.615
155.00	OSM 100o	2.174

Total Length: 280.00 ft      Total Volume: 2.789 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

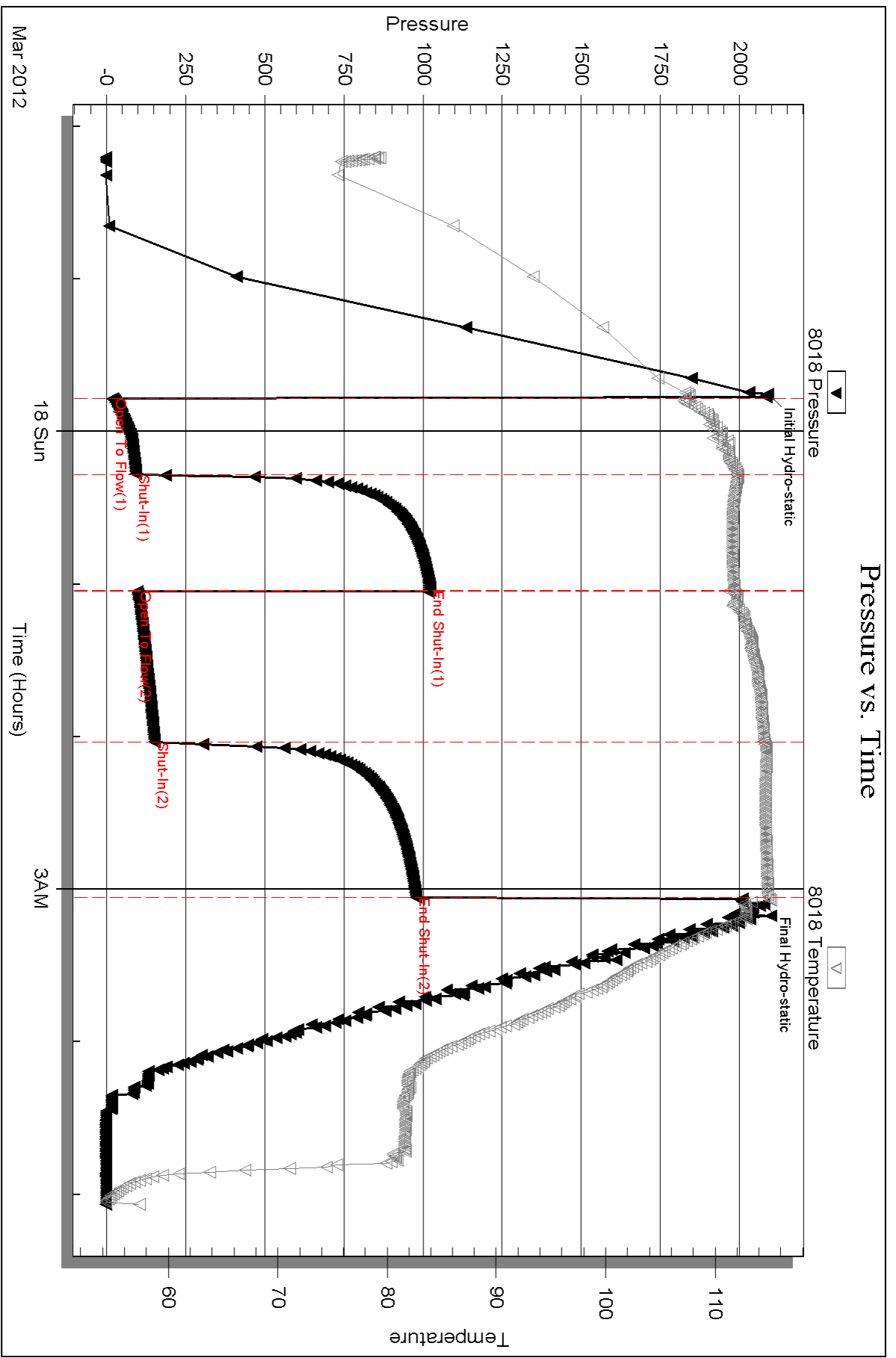
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .215 @ 52 Degrees F = 49000 PPM



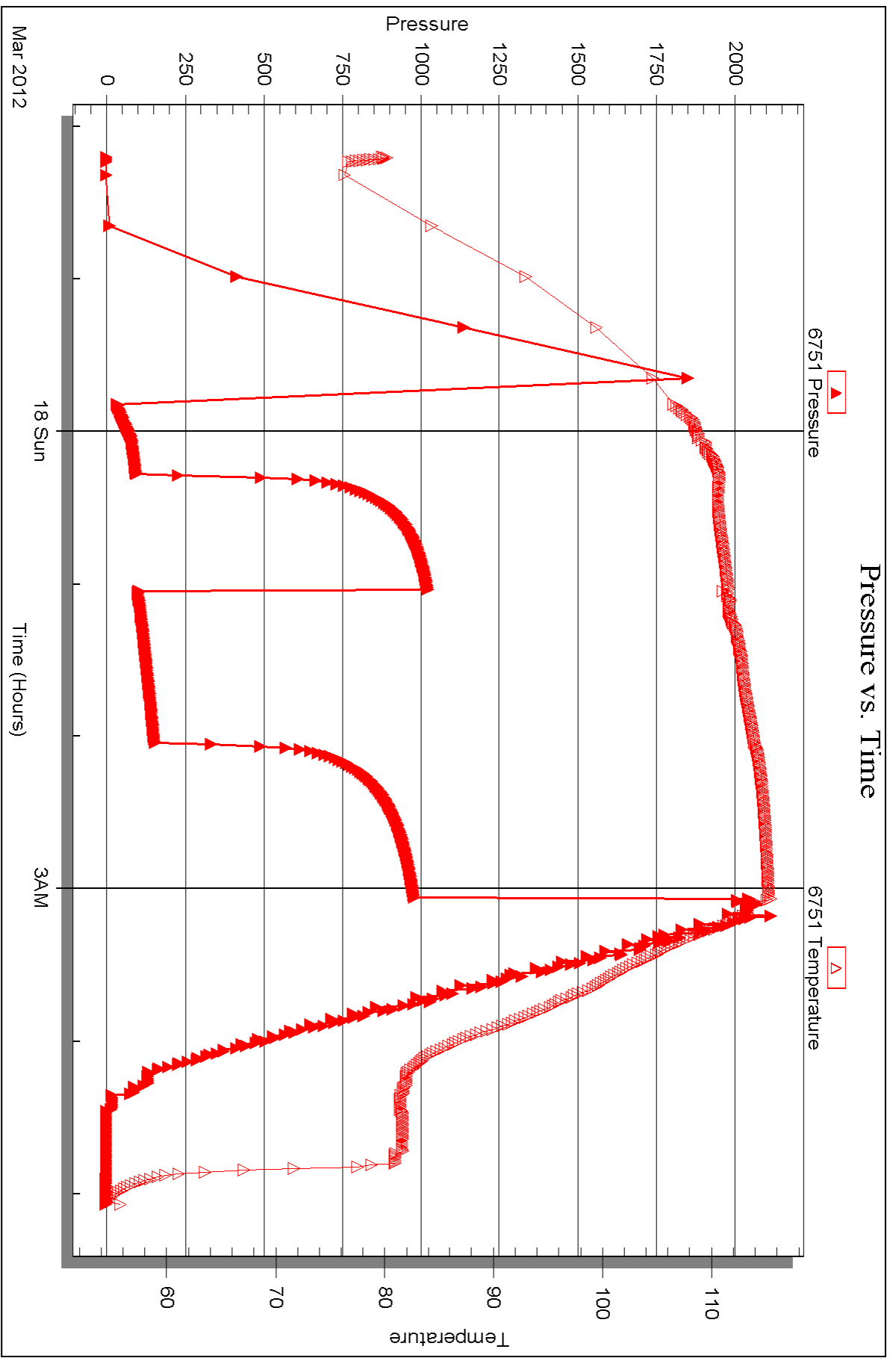


Serial #: 6751

Outside Credo Petroleum Corp.

Schipper #1-8

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 45093

Printed: 2012.03.22 @ 16:03:57



## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900  
Denver, CO 80202

ATTN: Charlie Sturdavant

### **Schipper #1-8**

### **S8-11s-32w Logan,KS**

Start Date: 2012.03.19 @ 00:30:00

End Date: 2012.03.19 @ 07:35:39

Job Ticket #: 45094                      DST #: 3

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

Printed: 2012.03.22 @ 16:02:57



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

ATTN: Charlie Sturdavant

Job Ticket: 45094

**DST#: 3**

Test Start: 2012.03.19 @ 00:30:00

## GENERAL INFORMATION:

Formation: **'K' - Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:38:20

Time Test Ended: 07:35:39

Test Type: Conventional Bottom Hole (Reset)

Tester: Chuck Smith

Unit No: 37

**Interval: 4286.00 ft (KB) To 4520.00 ft (KB) (TVD)**

Total Depth: 4520.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3094.00 ft (KB)

3089.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8018**

**Inside**

Press @ Run Depth: 171.26 psig @ 4290.00 ft (KB)

Start Date: 2012.03.19

End Date:

2012.03.19

Start Time: 00:30:02

End Time:

07:35:40

Capacity: 8000.00 psig

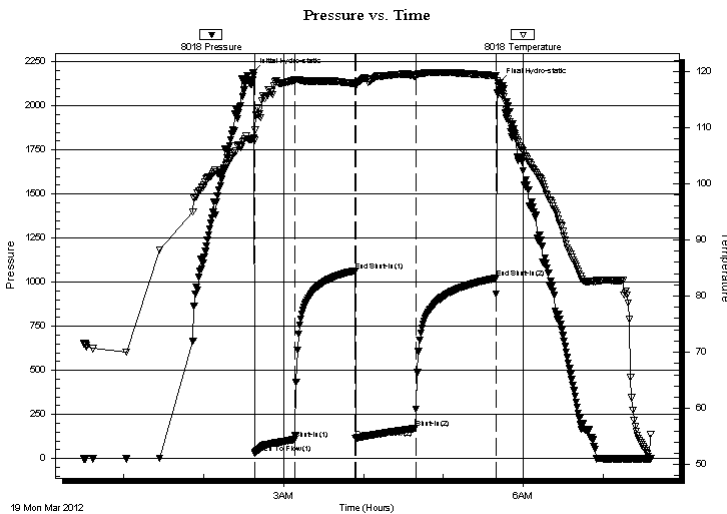
Last Calib.: 2012.03.19

Time On Btm: 2012.03.19 @ 02:37:10

Time Off Btm: 2012.03.19 @ 05:42:00

**TEST COMMENT:** 11" Blow .  
No return.  
10" Blow .  
No return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2189.41	108.06	Initial Hydro-static
2	30.16	107.75	Open To Flow (1)
32	109.19	118.43	Shut-In(1)
77	1064.72	117.80	End Shut-In(1)
77	116.17	117.35	Open To Flow (2)
122	171.26	119.11	Shut-In(2)
183	1022.34	119.24	End Shut-In(2)
185	2133.43	116.40	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
187.00	MW 50m 50w	1.48
154.00	WM 15w 85m	2.16
0.00	Oil spots in tool.	0.00

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

Job Ticket: 45094

**DST#: 3**

ATTN: Charlie Sturdavant

Test Start: 2012.03.19 @ 00:30:00

## Tool Information

Drill Pipe:	Length: 4136.00 ft	Diameter: 3.80 inches	Volume: 58.02 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 55000.00 lb
			<u>Total Volume: 58.63 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	2.50 ft			String Weight: Initial 47000.00 lb
Depth to Top Packer:	4286.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	234.00 ft			
Tool Length:	261.50 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			4259.50	
Shut In Tool	5.00			4264.50	
Hydraulic tool	5.00			4269.50	
Jars	5.00			4274.50	
Safety Joint	2.50			4277.00	
Packer	5.00			4282.00	27.50 Bottom Of Top Packer
Packer	4.00			4286.00	
Stubb	1.00			4287.00	
Perforations	3.00			4290.00	
Recorder	0.00	8018	Inside	4290.00	
Recorder	0.00	6751	Outside	4290.00	
Perforations	6.00			4296.00	
Change Over Sub	1.00			4297.00	
Drill Pipe	219.00			4516.00	
Change Over Sub	1.00			4517.00	
Bullnose	3.00			4520.00	234.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>261.50</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

Job Ticket: 45094

**DST#: 3**

ATTN: Charlie Sturdavant

Test Start: 2012.03.19 @ 00:30:00

## 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:

51000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.97 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2400.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
187.00	MW 50m 50w	1.484
154.00	WM 15w 85m	2.160
0.00	Oil spots in tool.	0.000

Total Length: 341.00 ft      Total Volume: 3.644 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .220 @ 48 Degrees F = 51000 PPM

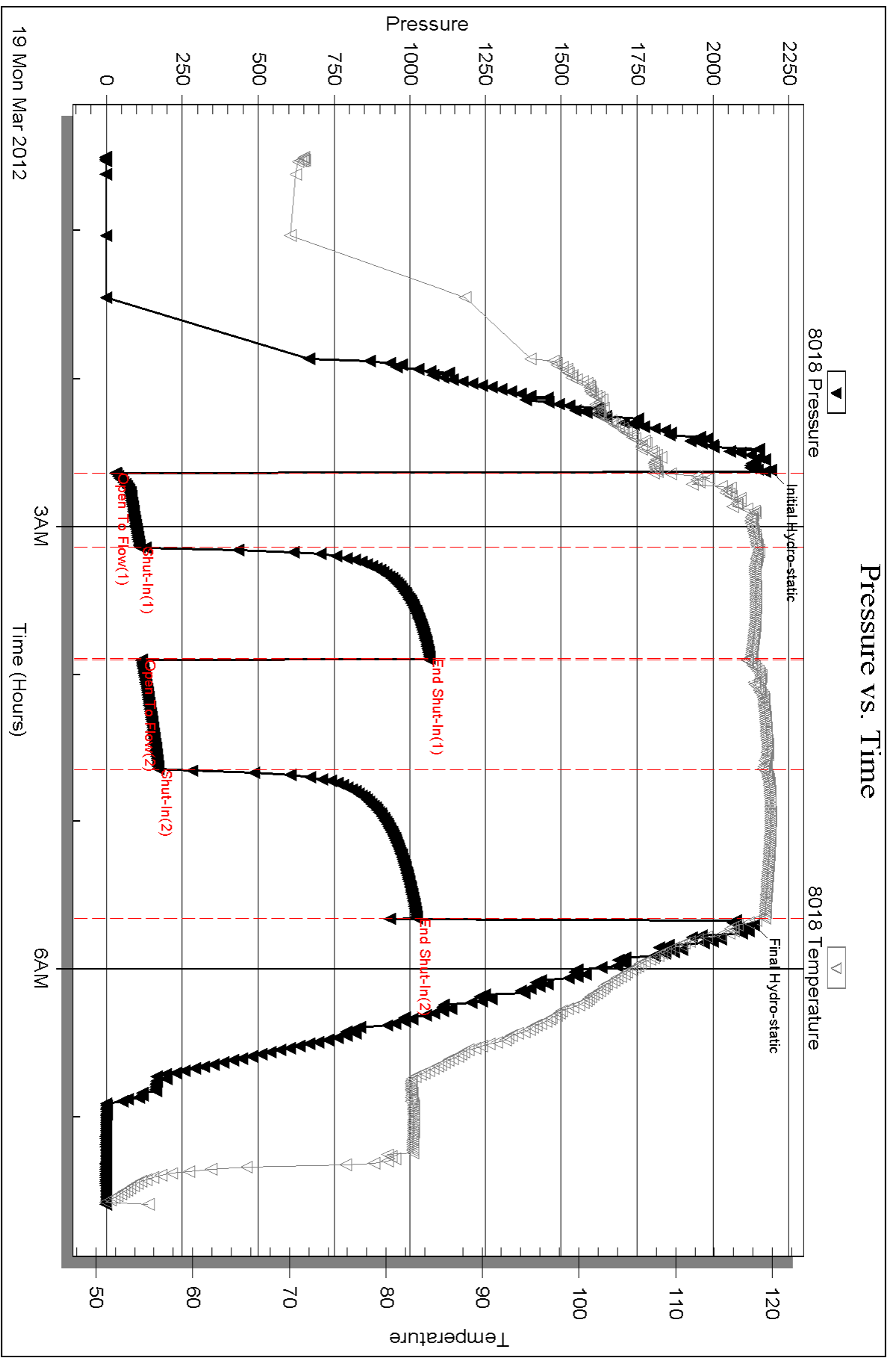
Serial #: 8018

Inside

Crede Petroleum Corp.

Schipper #1-8

DST Test Number: 3



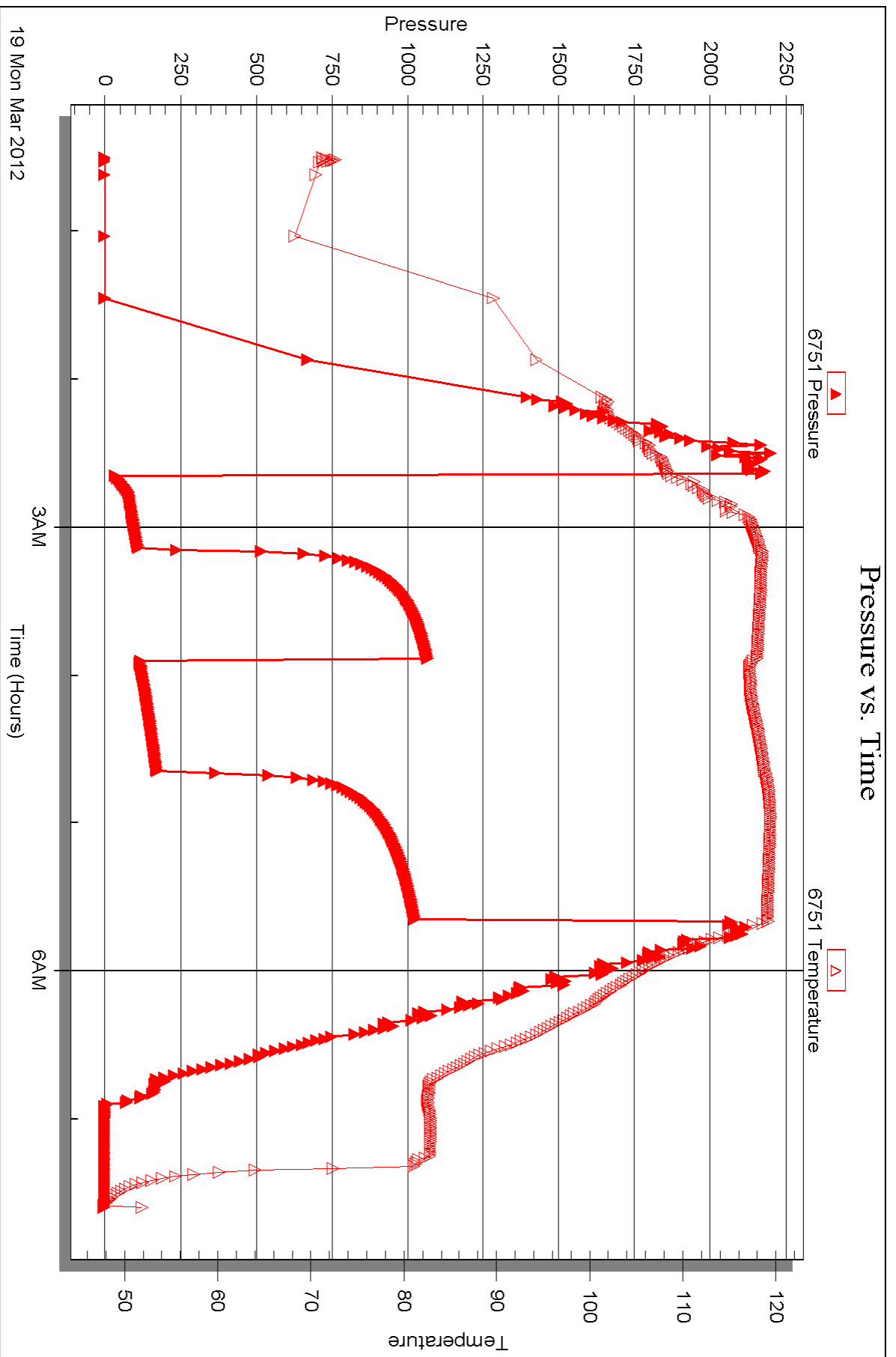


Serial #: 6751

Outside Credo Petroleum Corp.

Schipper #1-8

DST Test Number: 3





## DRILL STEM TEST REPORT

Prepared For: **Credo Petroleum Corp.**

1801 Broadway #900  
Denver, CO 80202

ATTN: Charlie Sturdavant

### **Schipper #1-8**

### **S8-11s-32w Logan,KS**

Start Date: 2012.03.19 @ 22:34:00

End Date: 2012.03.20 @ 05:54:39

Job Ticket #: 45095                      DST #: 4

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

Printed: 2012.03.22 @ 16:01:54



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

Job Ticket: 45095

**DST#: 4**

ATTN: Charlie Sturdavant

Test Start: 2012.03.19 @ 22:34:00

## GENERAL INFORMATION:

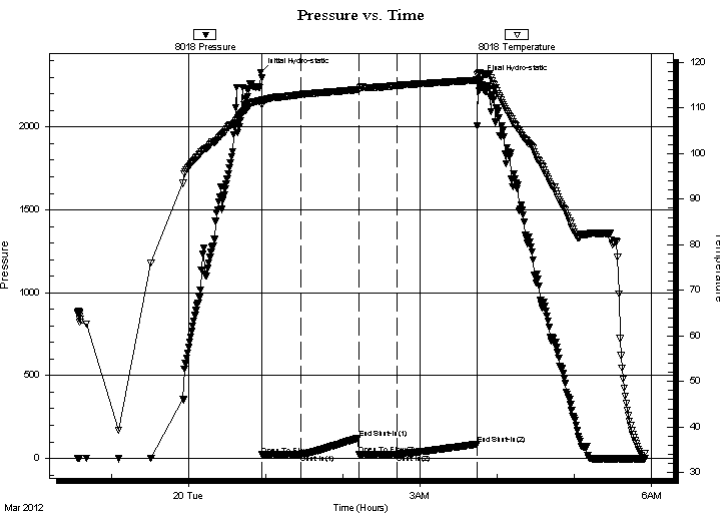
Formation: **Johnson**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 00:57:20  
 Time Test Ended: 05:54:39  
 Interval: **4516.00 ft (KB) To 4650.00 ft (KB) (TVD)**  
 Total Depth: 4650.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Chuck Smith  
 Unit No: 37  
 Reference Elevations: 3094.00 ft (KB)  
 3089.00 ft (CF)  
 KB to GR/CF: 5.00 ft

## Serial #: 8018

Inside

Press @ Run Depth: 26.20 psig @ 4520.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2012.03.19 End Date: 2012.03.20 Last Calib.: 2012.03.20  
 Start Time: 22:34:02 End Time: 05:54:40 Time On Btm: 2012.03.20 @ 00:56:00  
 Time Off Btm: 2012.03.20 @ 03:46:39

TEST COMMENT: 1/2" Blow .  
 No return.  
 No blow .  
 No return.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2330.21	111.64	Initial Hydro-static
2	21.28	110.78	Open To Flow (1)
32	24.54	112.94	Shut-In(1)
77	123.71	114.02	End Shut-In(1)
77	24.94	113.93	Open To Flow (2)
107	26.20	114.90	Shut-In(2)
169	86.29	116.10	End Shut-In(2)
171	2287.12	117.74	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	M100m	0.07

\* 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.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

Job Ticket: 45095

**DST#: 4**

ATTN: Charlie Sturdavant

Test Start: 2012.03.19 @ 22:34:00

## Tool Information

Drill Pipe:	Length: 4390.00 ft	Diameter: 3.80 inches	Volume: 61.58 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 125.00 ft	Diameter: 2.25 inches	Volume: 0.61 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 62.19 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.50 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	4516.00 ft			Final 49000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	134.00 ft			
Tool Length:	161.50 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			4489.50	
Shut In Tool	5.00			4494.50	
Hydraulic tool	5.00			4499.50	
Jars	5.00			4504.50	
Safety Joint	2.50			4507.00	
Packer	5.00			4512.00	27.50 Bottom Of Top Packer
Packer	4.00			4516.00	
Stubb	1.00			4517.00	
Perforations	3.00			4520.00	
Recorder	0.00	8018	Inside	4520.00	
Recorder	0.00	6751	Outside	4520.00	
Perforations	31.00			4551.00	
Change Over Sub	1.00			4552.00	
Drill Pipe	94.00			4646.00	
Change Over Sub	1.00			4647.00	
Bullnose	3.00			4650.00	134.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>161.50</b>				



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Credo Petroleum Corp.

**S8-11s-32w Logan,KS**

1801 Broadway #900  
Denver, CO 80202

**Schipper #1-8**

Job Ticket: 45095

**DST#: 4**

ATTN: Charlie Sturdavant

Test Start: 2012.03.19 @ 22:34:00

## 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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	M100m	0.074

Total Length: 15.00 ft      Total Volume: 0.074 bbl

Num Fluid Samples: 0

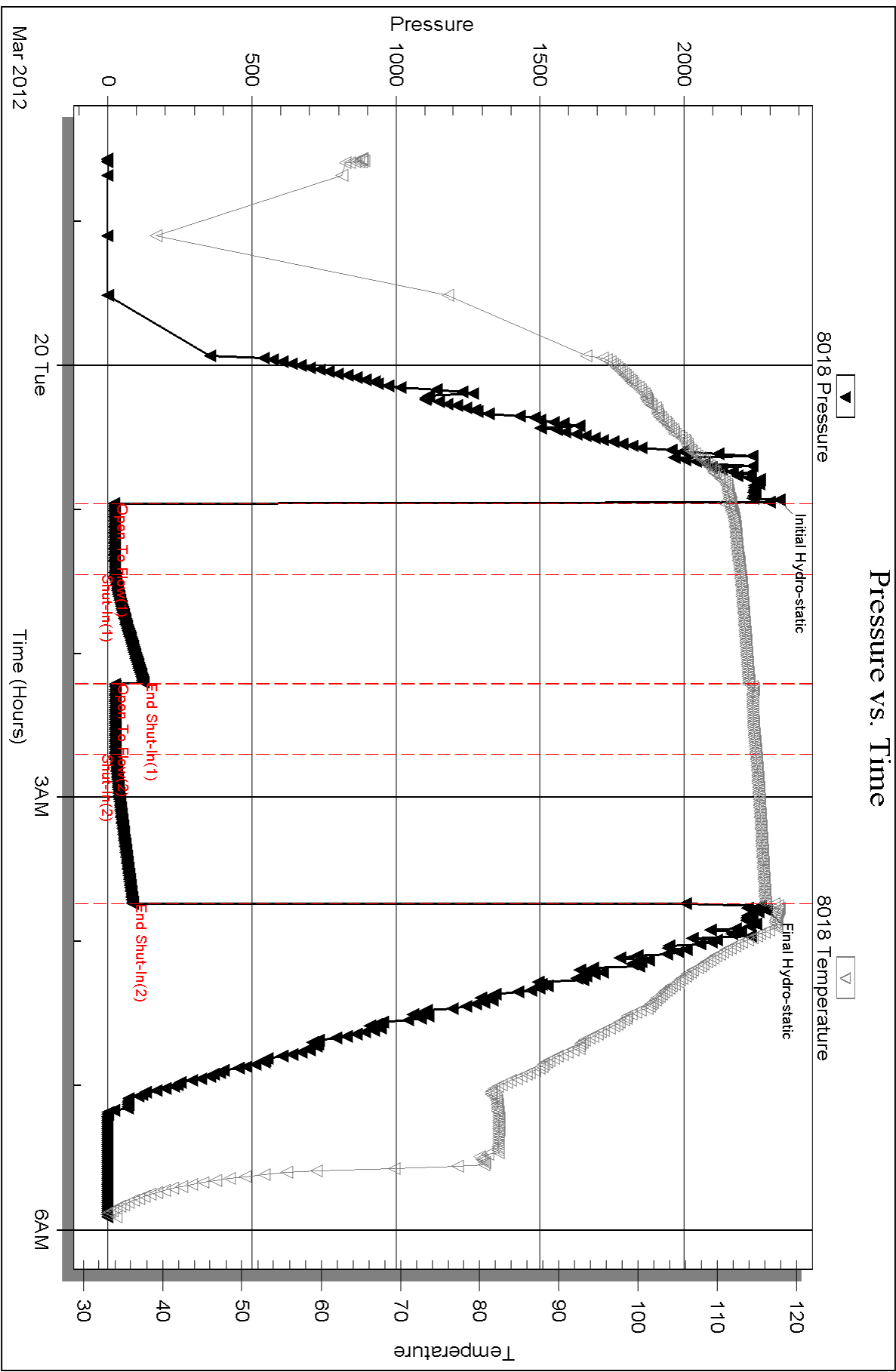
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



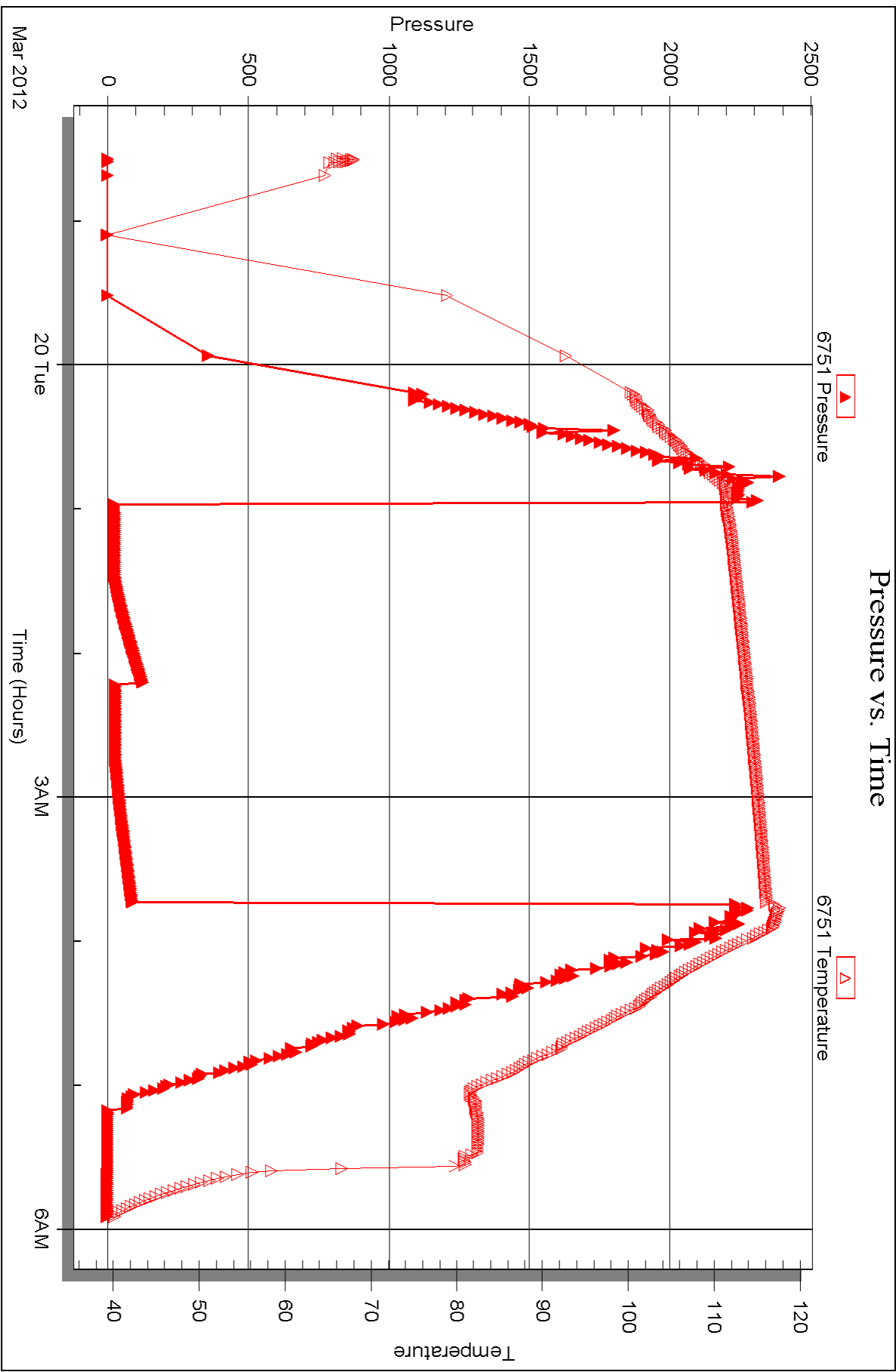
Serial #: 6751

Outside

Crede Petroleum Corp.

Schipper #1-8

DST Test Number: 4







# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
MAR 20 2012  
BY: \_\_\_\_\_

## Test Ticket

NO. 45092

Well Name & No. Schipper #1-8 Test No. 1 Date 3-16-12  
 Company Credo Petroleum Corp Elevation 3094 KB 3089 GL  
 Address 1801 Broadway #900 Denver, Co. 80202  
 Co. Rep / Geo. Charlie Sturdavant Rig WW#4  
 Location: Sec. 8 Twp. 11s Rge. 32w Co. \_\_\_\_\_ State Ks

Interval Tested 4128-4156 Zone Tested Lansing 'F'  
 Anchor Length 28 Drill Pipe Run 3982 Mud Wt. 9.2  
 Top Packer Depth 4124 Drill Collars Run 125 Vis 50  
 Bottom Packer Depth 4128 Wt. Pipe Run 0 WL 7.2  
 Total Depth 4156 Chlorides 2500 ppm System LCM 1/2

Blow Description B.O.B. @ 29 min.  
Weak surface return died @ 5 min.  
B.O.B. @ 35 min.  
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>170</u>	Feet of <u>WM</u>	%gas	%oil	<u>40%</u> water	<u>60%</u> mud
Rec <u>250</u>	Feet of <u>MW Popping gas</u>	%gas	%oil	<u>95%</u> water	<u>5%</u> mud
Rec <u>-</u>	Feet of <u>Oil spots in tool.</u>	%gas	%oil	%water	%mud
Rec _____	Feet of _____	%gas	%oil	%water	%mud

Rec Total 420 BHT 120 Gravity - API RW 1200 @ 43 °F Chlorides 60,000 ppm

(A) Initial Hydrostatic 2110  Test 1225 T-On Location 23:45  
 (B) First Initial Flow 18  Jars 250 T-Started 00:41  
 (C) First Final Flow 114  Safety Joint 75 T-Open 2:36  
 (D) Initial Shut-In 1219  Circ Sub N/C T-Pulled 5:37  
 (E) Second Initial Flow 116  Hourly Standby \_\_\_\_\_ T-Out 7:28  
 (F) Second Final Flow 207  Mileage 99RT 138.60 Comments \_\_\_\_\_  
 (G) Final Shut-In 1216  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2065  Straddle \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  
 Ruined Shale Packer \_\_\_\_\_

Initial Open 30  Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Initial Shut-In 45  Extra Recorder \_\_\_\_\_ Sub Total 8  
 Final Flow 45  Day Standby \_\_\_\_\_ Total 11,688.60  
 Final Shut-In 60  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 11,688.60

Approved By Charlie Sturdavant Our Representative Chuck Amis

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 20 2012

## Test Ticket

NO. 45093

4/10

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

Well Name & No. Schipper #1-8 Test No. 2 Date 3-17-12  
 Company Credo Petroleum, Corp. Elevation 3094 KB 3089 GL  
 Address 1801 Broadway #900 Denver, CO 80202  
 Co. Rep / Geo. Charlie Sturdavant Rig WW #4  
 Location: Sec. 8 Twp. 11s Rge. 32w Co. Logan State KS

Interval Tested 4188-4295 Zone Tested Lansing 'H-K'  
 Anchor Length 107 Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.2  
 Top Packer Depth 4184 Drill Collars Run 125 Vis 50  
 Bottom Packer Depth 4188 Wt. Pipe Run 0 WL 6.4  
 Total Depth 4295 Chlorides 2500 ppm System LCM 2  
 Blow Description 6 1/2" Blow.  
No return.  
9" Blow.  
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec	<u>155</u> Feet of <u>OSM</u>			<u>100</u>	<u>%mud</u>
Rec	<u>125</u> Feet of <u>OSWM</u>			<u>5</u>	<u>%water 95 %mud</u>
Rec	Feet of _____	%gas	%oil	%water	%mud
Rec	Feet of _____	%gas	%oil	%water	%mud

Rec Total 280 BHT 115 Gravity — API RW .215 @ 52 °F Chlorides 49000 ppm

(A) Initial Hydrostatic <u>2090</u>	<input checked="" type="checkbox"/> Test <u>1225'</u>	T-On Location <u>22:00</u>
(B) First Initial Flow <u>20</u>	<input checked="" type="checkbox"/> Jars <u>250'</u>	T-Started <u>22:12</u>
(C) First Final Flow <u>93</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>23:47</u>
(D) Initial Shut-In <u>1022</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>3:03</u>
(E) Second Initial Flow <u>98</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>5:04</u>
(F) Second Final Flow <u>153</u>	<input checked="" type="checkbox"/> Mileage <u>99RT 138.60</u>	Comments _____
(G) Final Shut-In <u>977</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2077</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>11688.00</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>11688.00</u>	

Approved By Charlie Sturdavant Our Representative Chuck Smith

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 20 2012  
BY: \_\_\_\_\_

## Test Ticket

NO. 45094

Well Name & No. Schipper #1-8 Test No. 3 Date 3-19-12  
 Company Credo Petroleum Corp. Elevation 3094 KB 3089 GL  
 Address 1801 Broadway #900 Denver, CO 80202  
 Co. Rep / Geo. Charlie Sturdavant Rig WW#4  
 Location: Sec. 8 Twp. 11s Rge. 32w Co. Logan State K5

Interval Tested 4286-4520 Zone Tested FT. Scott  
 Anchor Length 234 Drill Pipe Run 4136 Mud Wt. 9.3  
 Top Packer Depth 4282 Drill Collars Run 125 Vis 51  
 Bottom Packer Depth 4286 Wt. Pipe Run 0 WL 9.0  
 Total Depth 4520 Chlorides 2400 ppm System LCM 1  
 Blow Description 11" Blow.  
No return.  
10" Blow.  
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>154</u>	Feet of <u>WM</u>	%gas	%oil	<u>15</u> %water	<u>85</u> %mud
Rec <u>187</u>	Feet of <u>MW</u>	%gas	%oil	<u>50</u> %water	<u>50</u> %mud
Rec	Feet of <u>Oil spots in tool.</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 341 BHT 119 Gravity - API RW .220 @ 48 °F Chlorides 51,000 ppm

(A) Initial Hydrostatic 2189  Test 1225 T-On Location 00:00  
 (B) First Initial Flow 30  Jars 250' T-Started 00:30  
 (C) First Final Flow 109  Safety Joint 75' T-Open 2:38  
 (D) Initial Shut-In 1065  Circ Sub NIC T-Pulled 5:39  
 (E) Second Initial Flow 116  Hourly Standby T-Out 7:36  
 (F) Second Final Flow 171  Mileage 99RT 138.60 Comments \_\_\_\_\_  
 (G) Final Shut-In 1022  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2133  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Initial Open 30  Extra Recorder \_\_\_\_\_ Sub Total 8  
 Initial Shut-In 45  Day Standby \_\_\_\_\_ Total 11088.100  
 Final Flow 45  Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Final Shut-In 60 Sub Total 11088.100

Approved By Charlie Sturdavant Our Representative Chuck Smith

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 22 2012

## Test Ticket

NO. 45095

4/10

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

Well Name & No. Schipper #1-8 Test No. 4 Date 3-19-12  
 Company Credo Petroleum Corp. Elevation 3094 KB 3089 GL \_\_\_\_\_  
 Address 1801 Broadway #900 Denver, CO 80202  
 Co. Rep / Geo. Charlie Sturdavant Rig WW#4  
 Location: Sec. 8 Twp. 11s Rge. 32w Co. Logan State KS

Interval Tested 4516-4650 Zone Tested Johnson  
 Anchor Length 134 Drill Pipe Run 4390 Mud Wt. 9.3  
 Top Packer Depth 4512 Drill Collars Run 125 Vis 50  
 Bottom Packer Depth 4514 Wt. Pipe Run 0 WL 8.0  
 Total Depth 4650 Chlorides 3200 ppm System LCM 1  
 Blow Description 1/2" Blow  
No return.  
No blow.  
No return.

Rec	Feet of	%gas	%oil	%water	%mud
Rec <u>15</u>	Feet of <u>M</u>				<u>100</u>
Rec _____	Feet of _____				
Rec _____	Feet of _____				
Rec _____	Feet of _____				

Rec Total 15 BHT 116 Gravity - API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides - ppm

(A) Initial Hydrostatic <u>2230</u>	<input checked="" type="checkbox"/> Test <u>1225'</u>	T-On Location <u>22:00</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>22:34</u>
(C) First Final Flow <u>25</u>	<input checked="" type="checkbox"/> Safety Joint <u>75'</u>	T-Open <u>00:57</u>
(D) Initial Shut-In <u>124</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>3:44</u>
(E) Second Initial Flow <u>25</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>5:55</u>
(F) Second Final Flow <u>26</u>	<input checked="" type="checkbox"/> Mileage <u>99R x2 198 - 277.20</u>	Comments <u>B Picked up</u>
(G) Final Shut-In <u>86</u>	<input type="checkbox"/> Sampler _____	<u>tools after logging</u>
(H) Final Hydrostatic <u>2287</u>	<input type="checkbox"/> Straddle _____	<u>1:15am 3:21</u>

Initial Open 30  Shale Packer \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Initial Shut-In 45  Extra Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Final Flow 30  Extra Recorder \_\_\_\_\_ Sub Total 0  
 Final Shut-In 60  Day Standby \_\_\_\_\_ Total 1827.20  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1827.20

Approved By Charlie Sturdavant Our Representative Chuck Smith

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.



DIGITAL LOG (785) 625-3858

Dual Induction Log

15-109-21,083-00-00

API No.

Company Credo Petroleum Corporation
Well Schipper No. 1-8
Field Wildcat
County Logan State Kansas

Location SE NW NW NW
355' FNL & 460' FWL

Sec: 8 Twp: 11 S Rge: 32 W

Other Services
CNL/CDL
MEL/BHCS

Elevation

Permanent Datum Ground Level Elevation 3089
Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

K.B. 3094
D.F.
G.L. 3089

Table with columns: Date, Run Number, Depth Driller, Depth Logger, Bottom Logged Interval, Top Log Interval, Casing Driller, Casing Logger, Bit Size, Type Fluid in Hole, Salinity, ppm CL, Density / Viscosity, pH / Fluid Loss, Source of Sample, Rm @ Meas. Temp, Rmf @ Meas. Temp, Rmc @ Meas. Temp, Source of Rmf / Rmc, Rm @ BHT, Operating Rig Time, Max Rec. Temp. F, Equipment Number, Location, Recorded By, Witnessed By

<<< 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
Oakley KS, 2 West,
On Old 40,
South Into

Database File: c:\warrior\data\credo\_schipper no. 1-8\credo\_schipper\_1\_8hd.db
Dataset Pathname: DIL/credstk
Presentation Format: dil2in
Dataset Creation: Tue Mar 20 20:43:46 2012
Charted by: Depth in Feet scaled 1:600

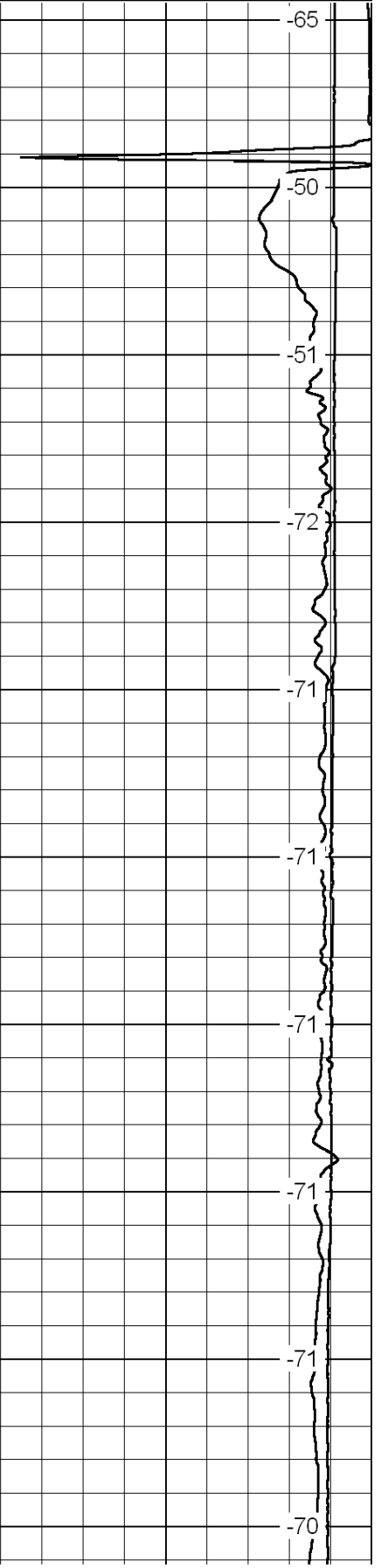
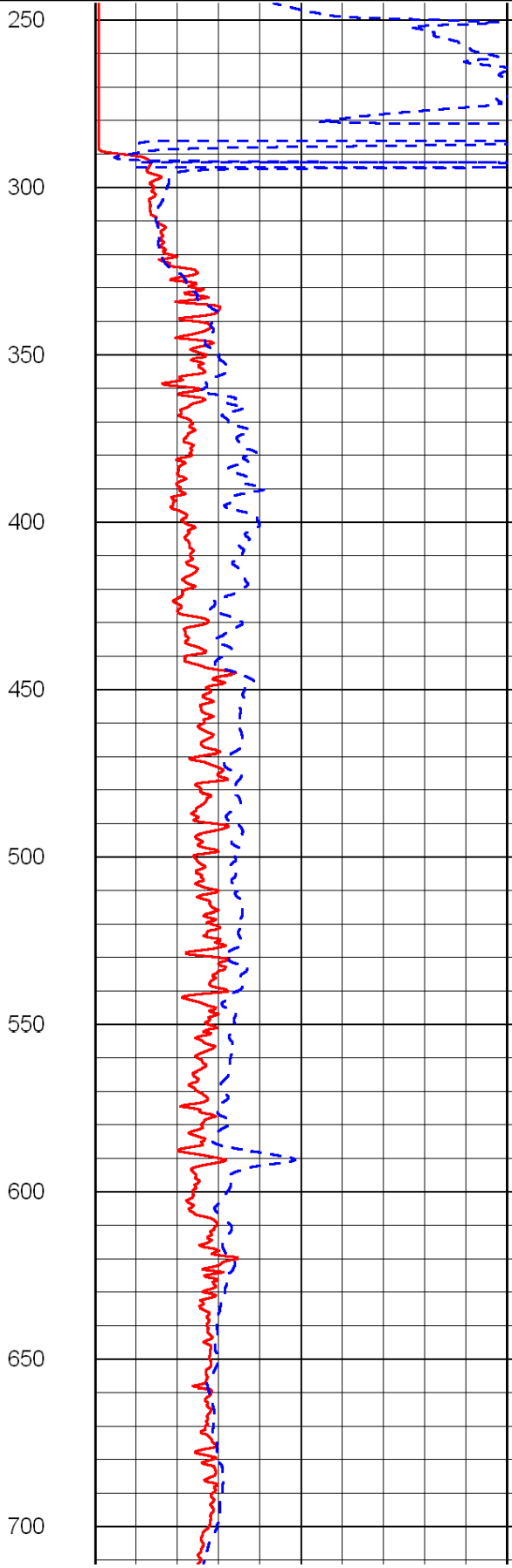
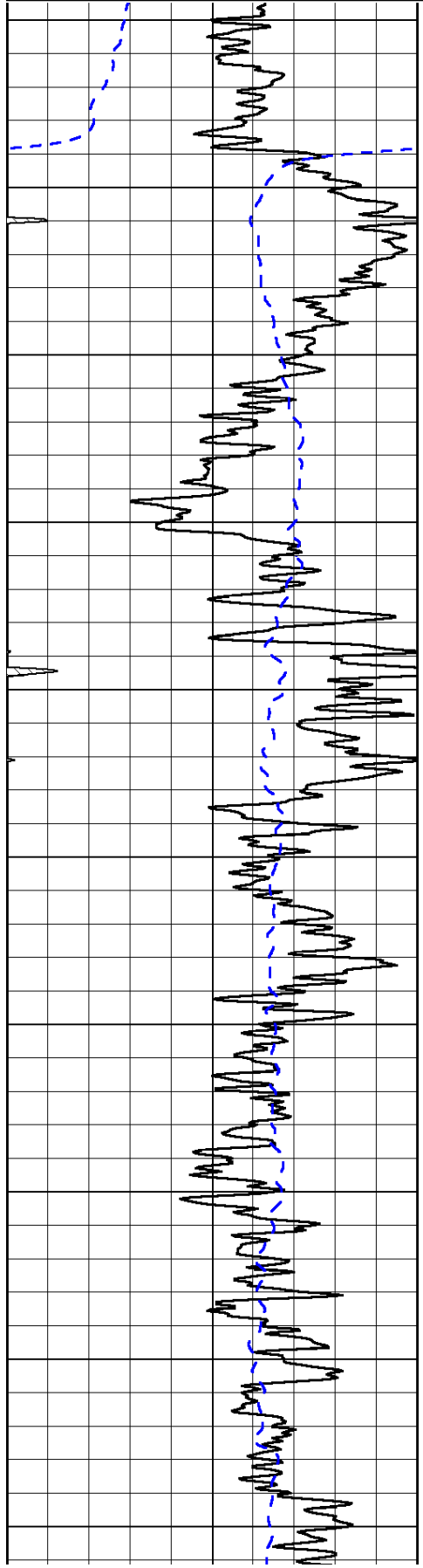
0	Gamma Ray	150
-200	SP (mV)	0

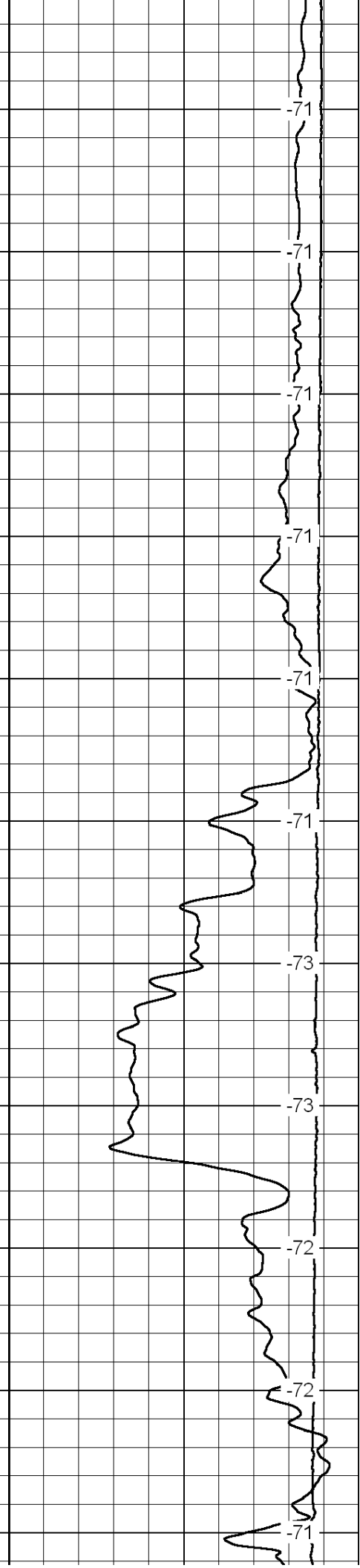
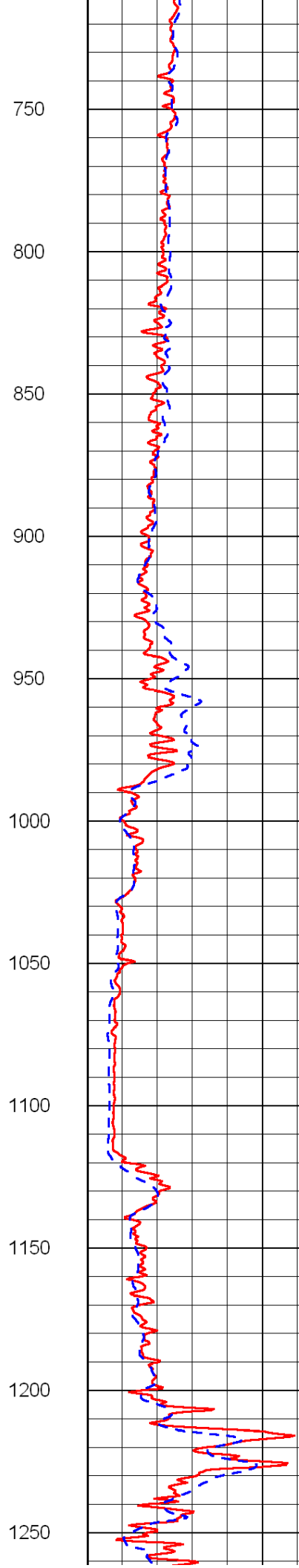
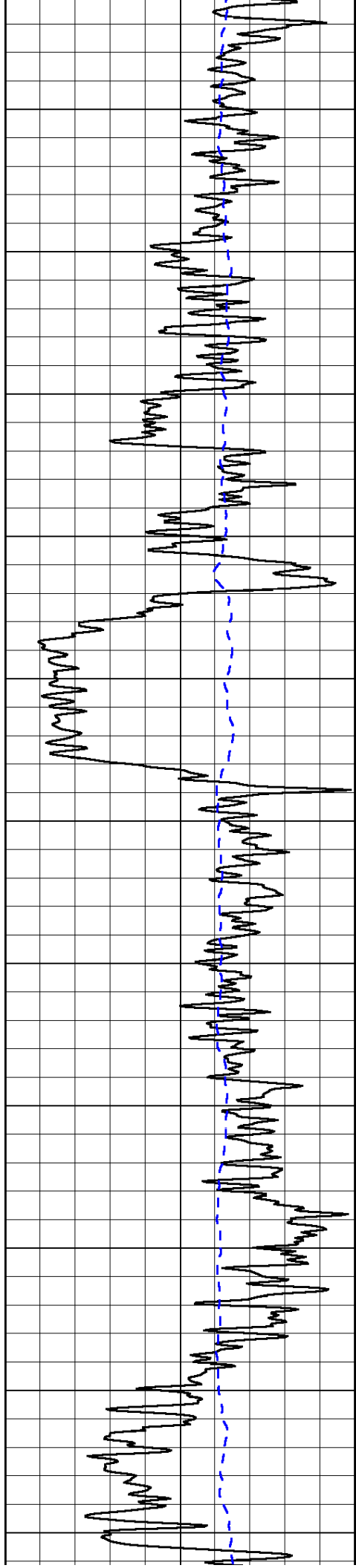
0	Shallow Resistivity	50
0	Deep Resistivity	50

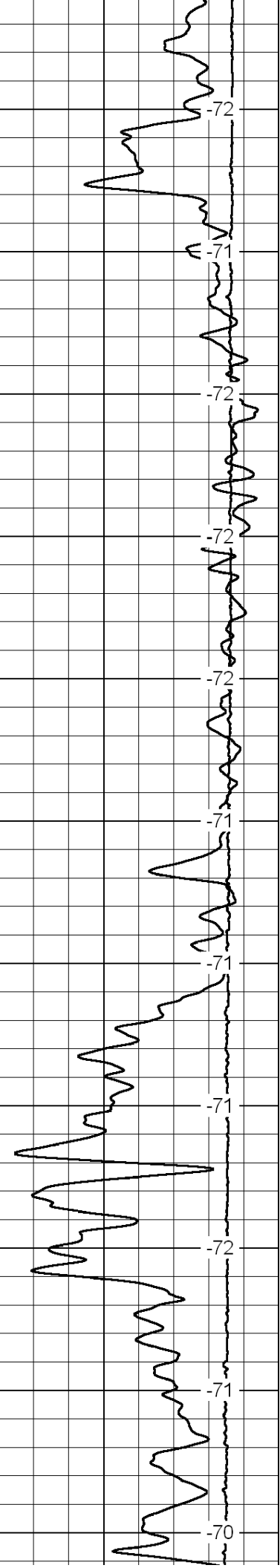
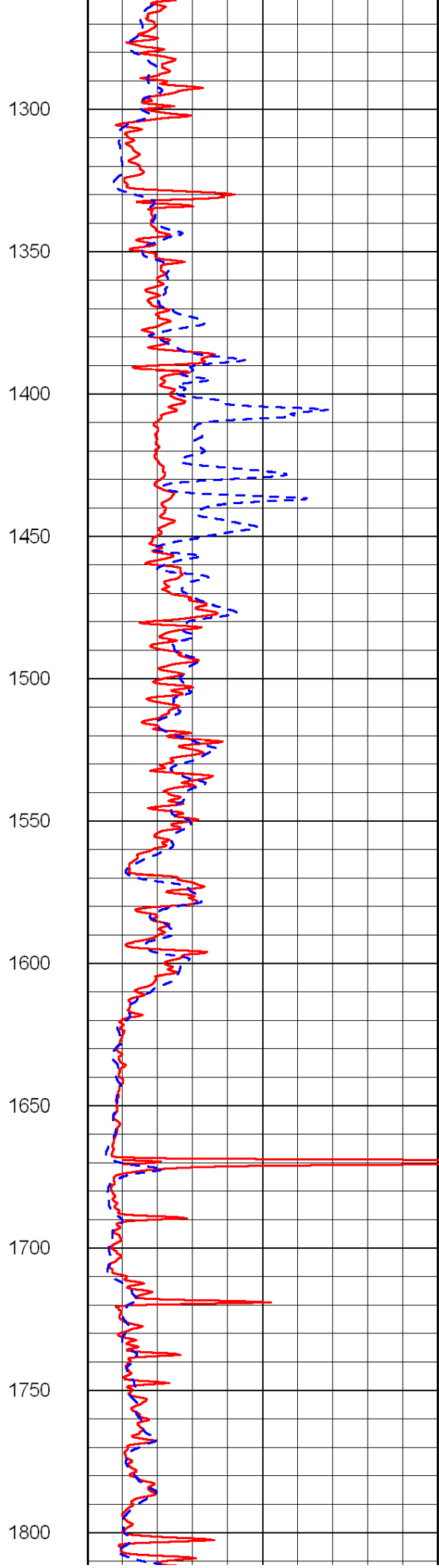
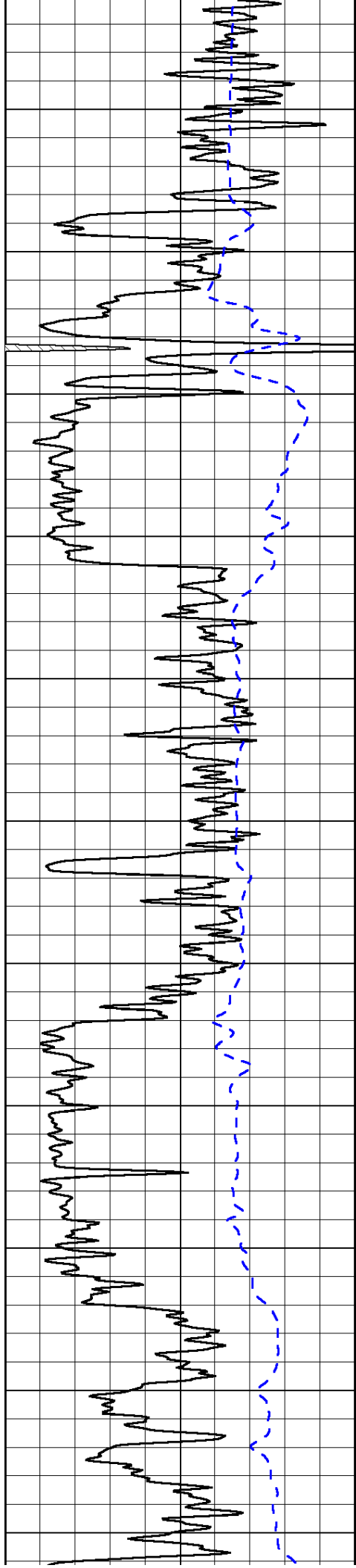
LSPD

1000	Conductivity	0
15000	Line Tension	0

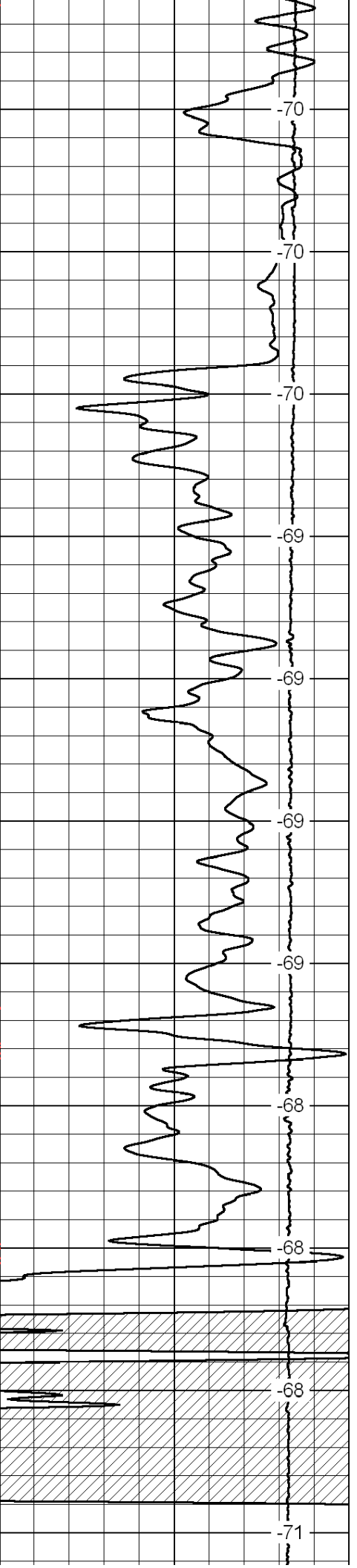
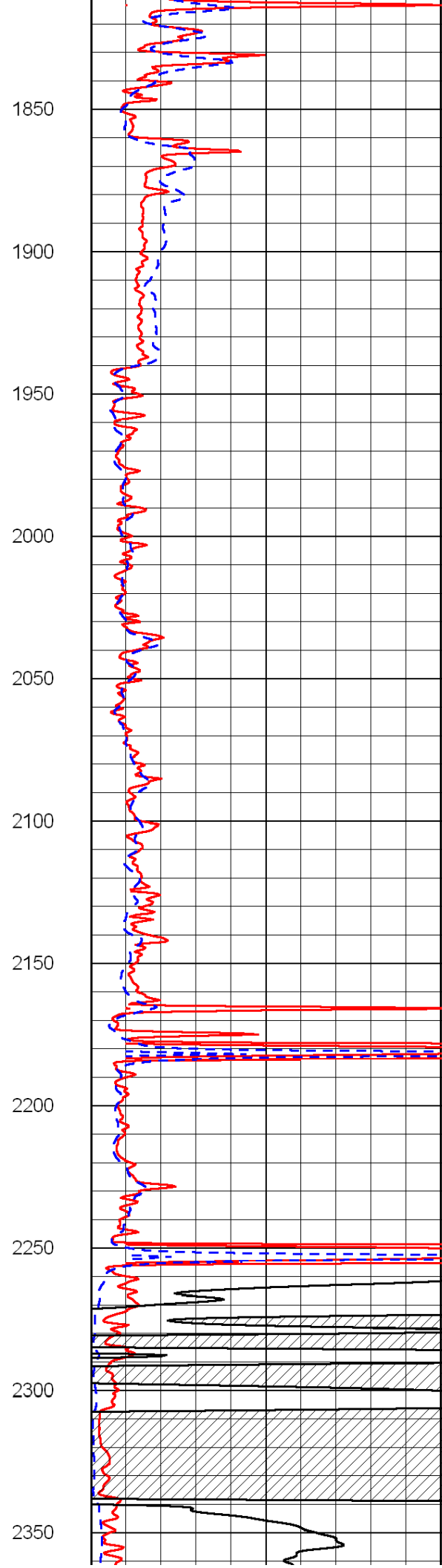
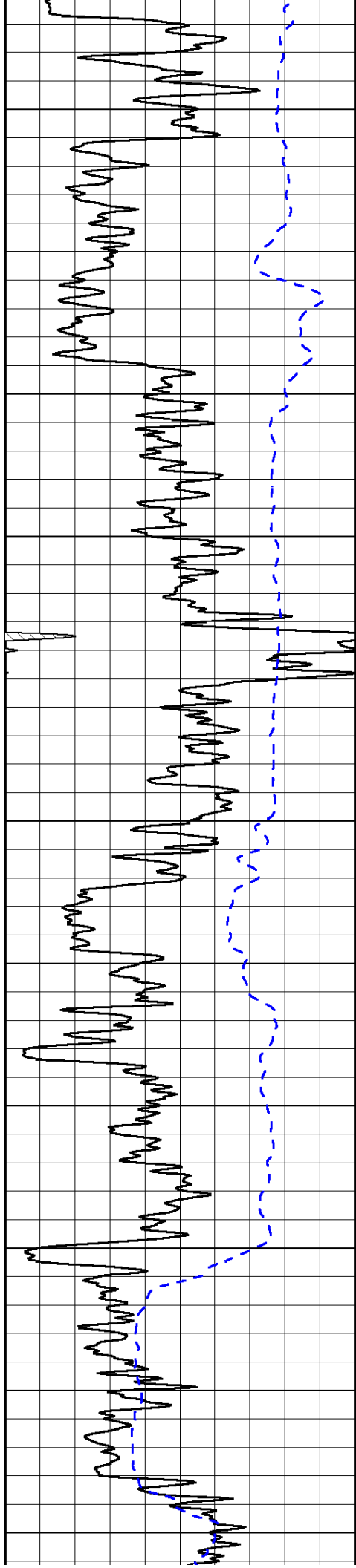
50	Shallow Resistivity	500
50	Deep Resistivity	500

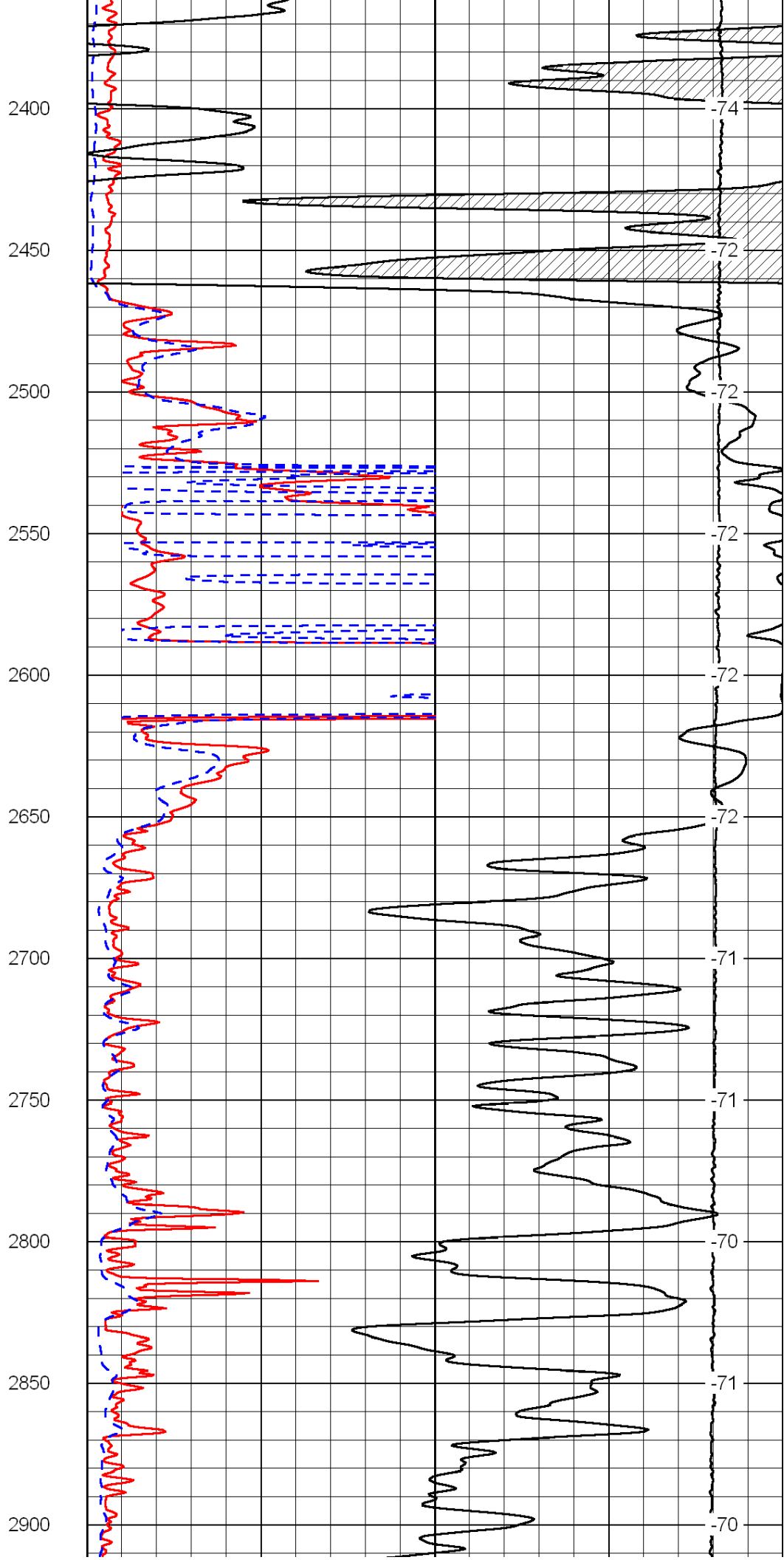
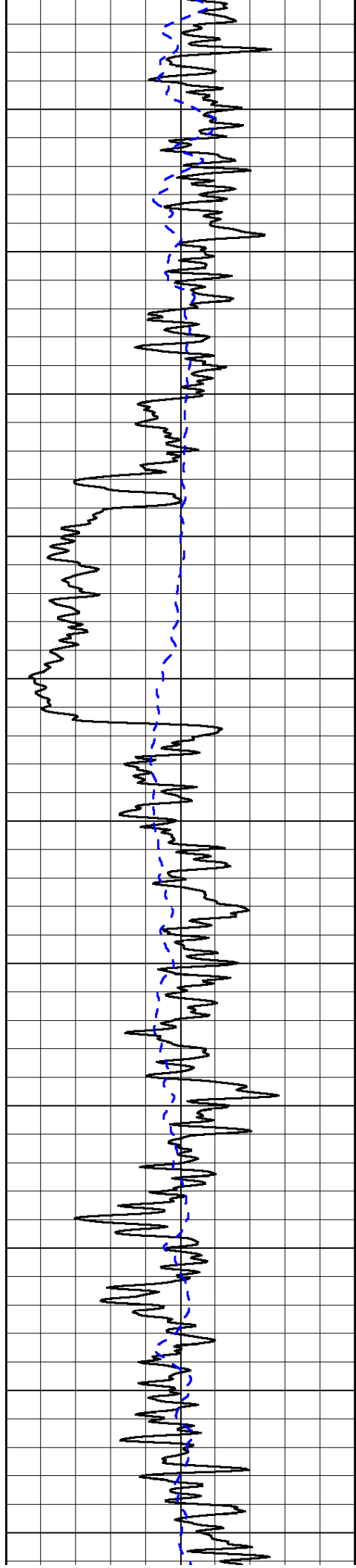


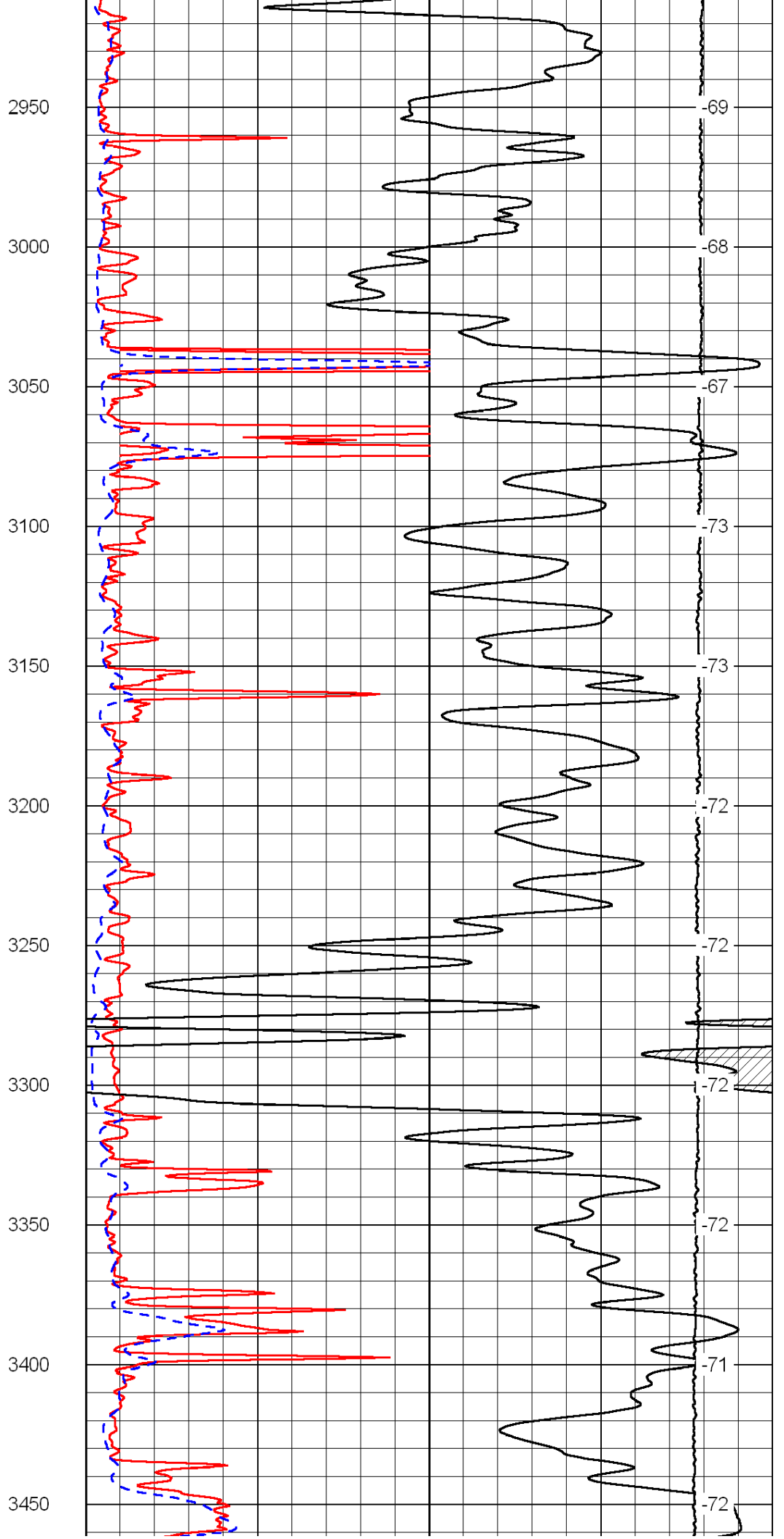
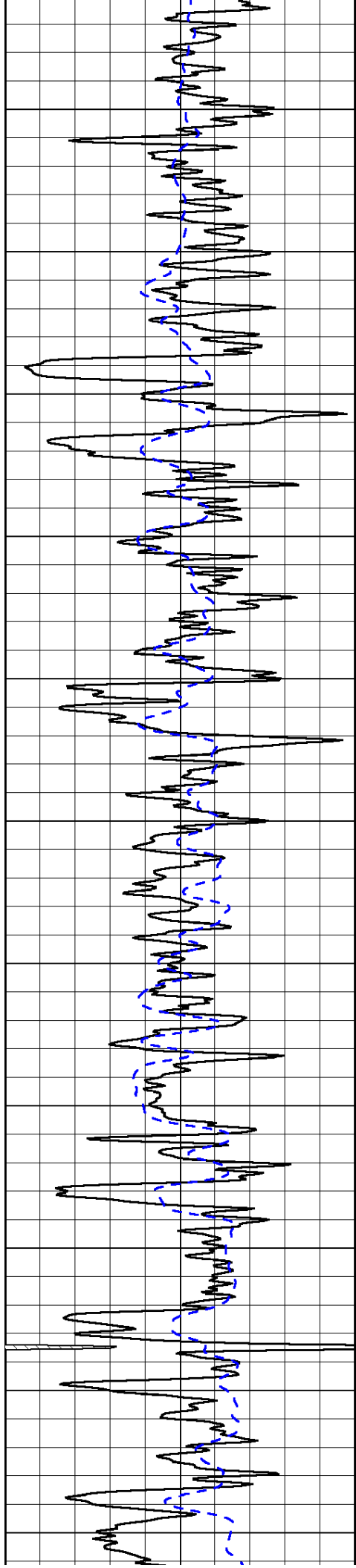


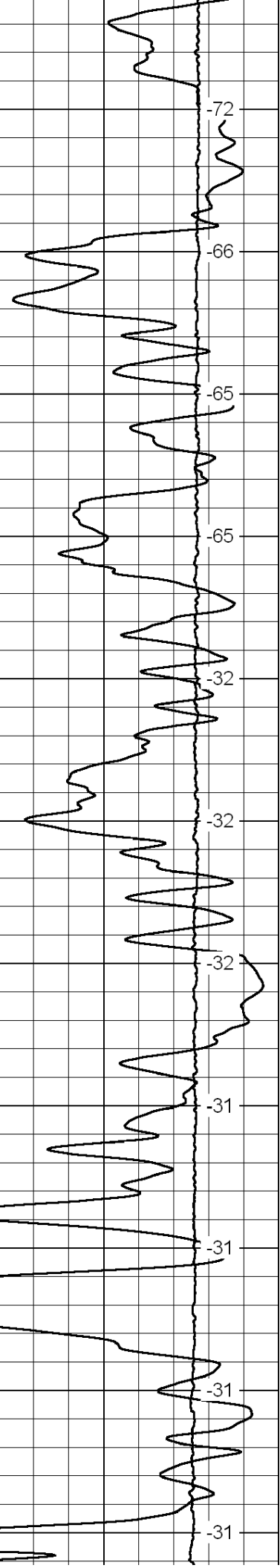
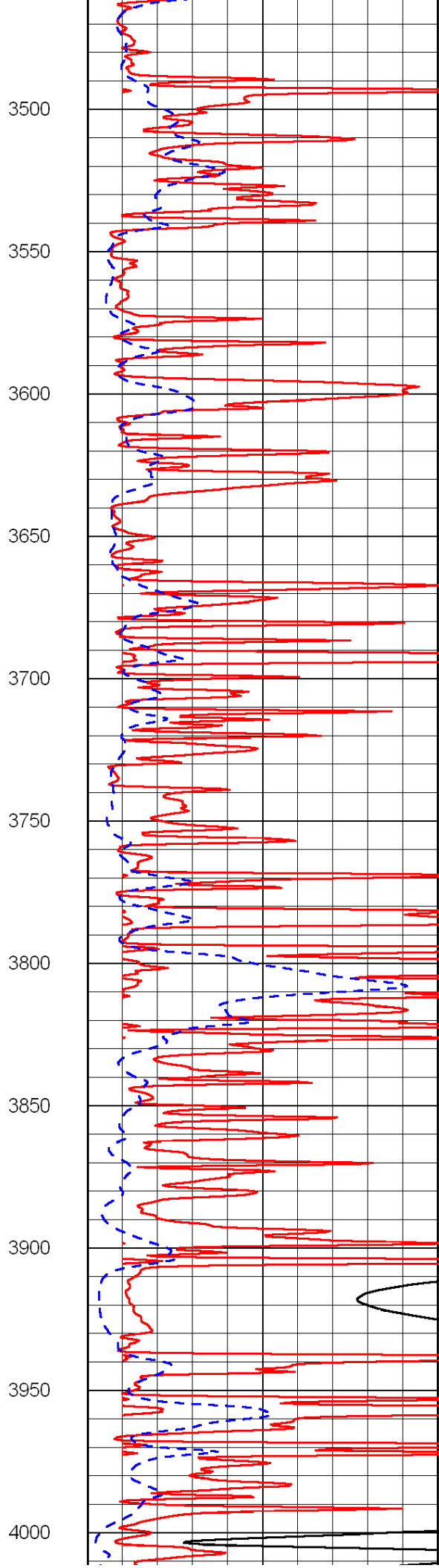
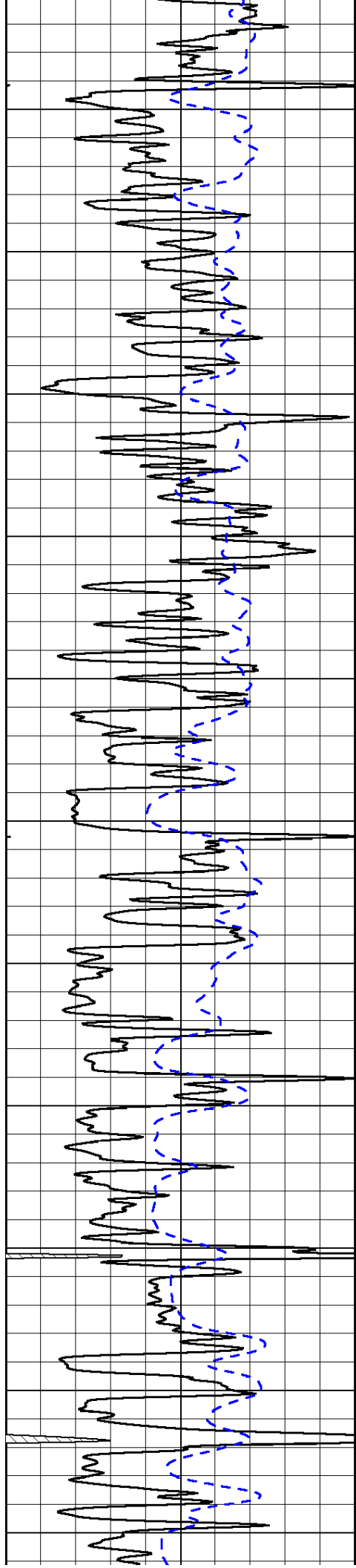


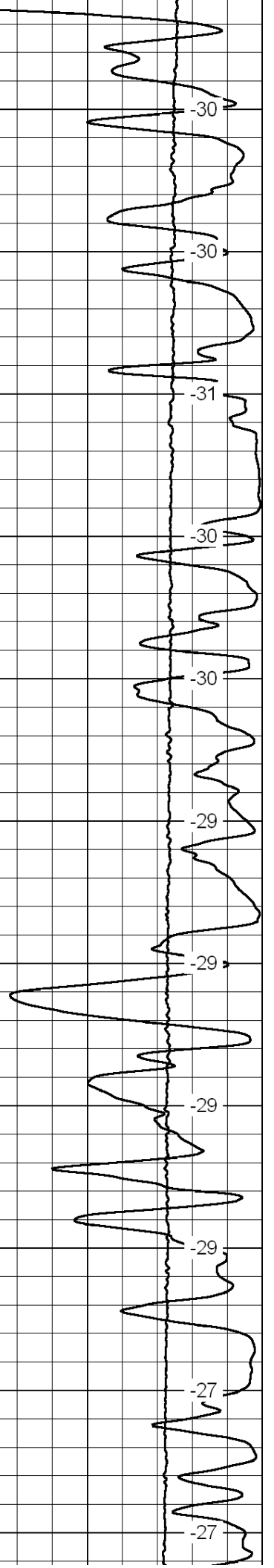
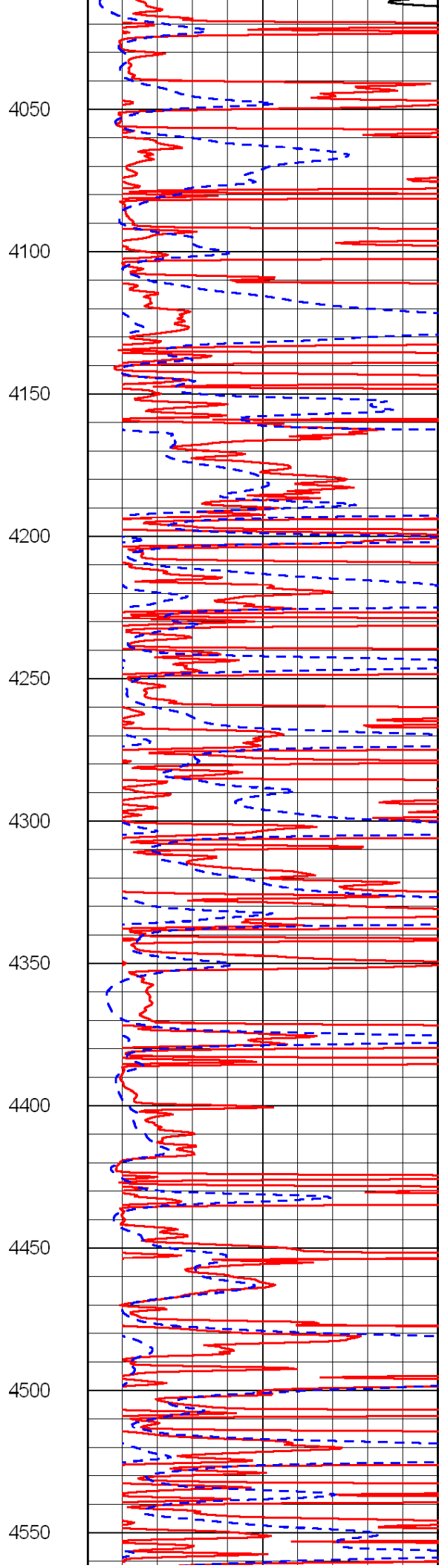
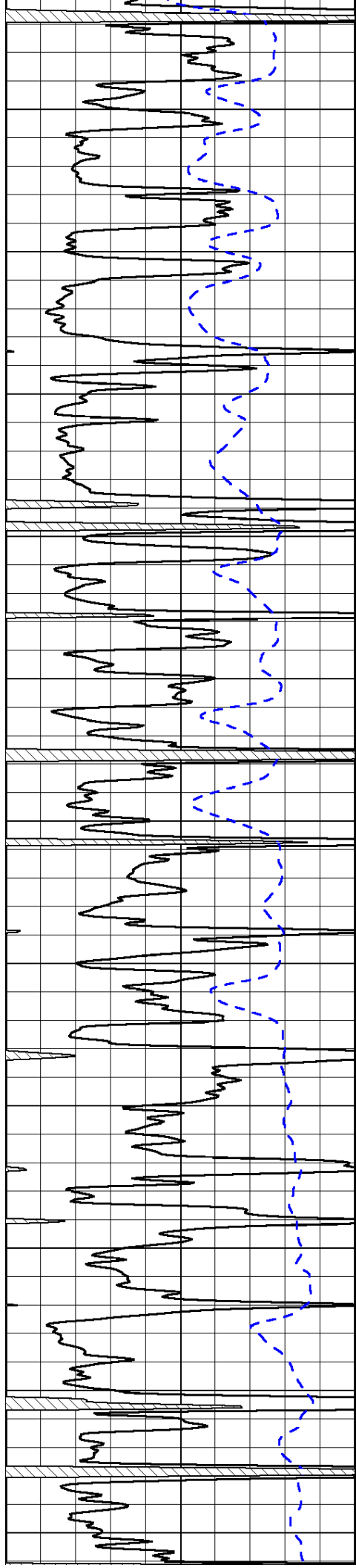


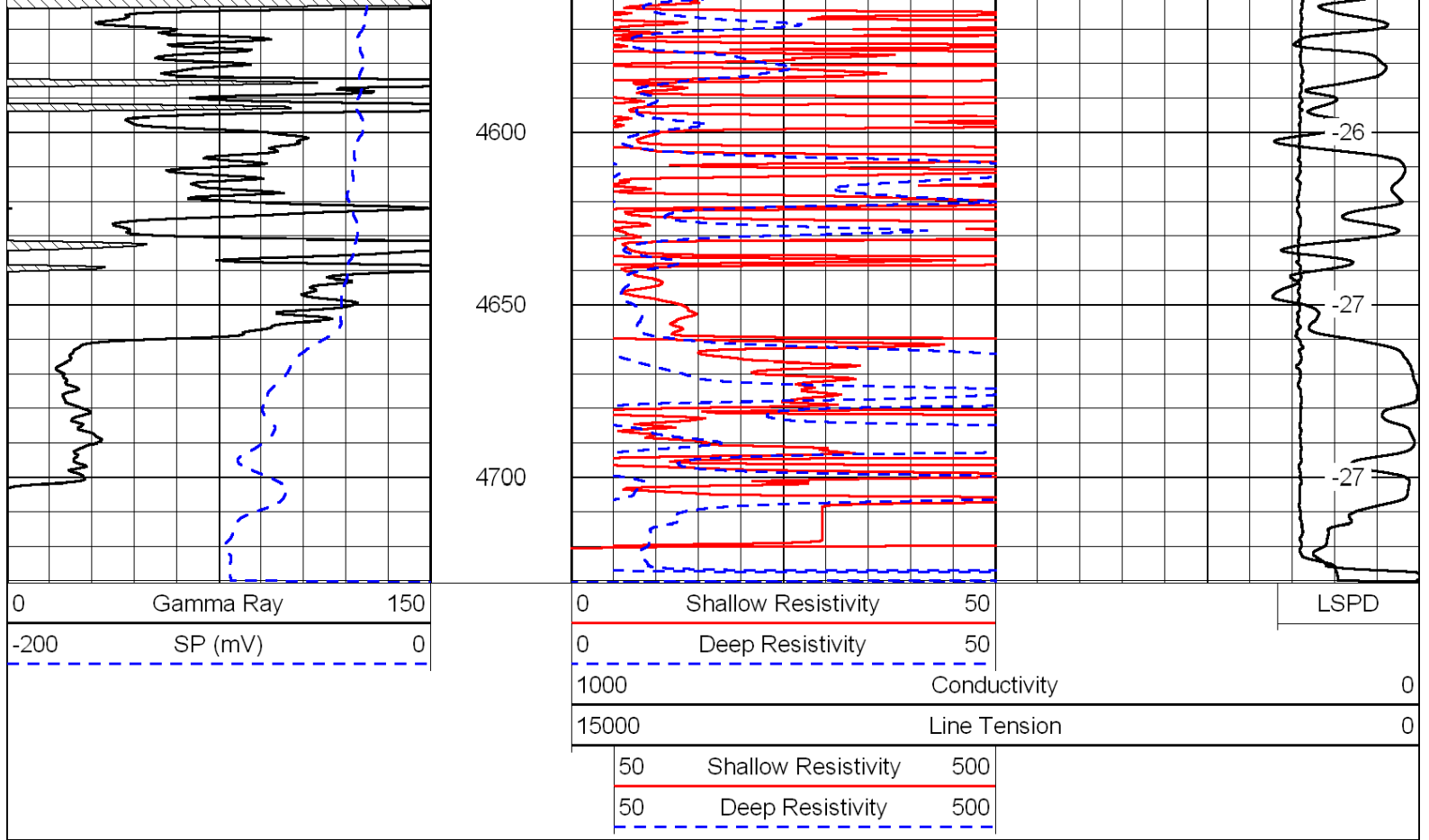




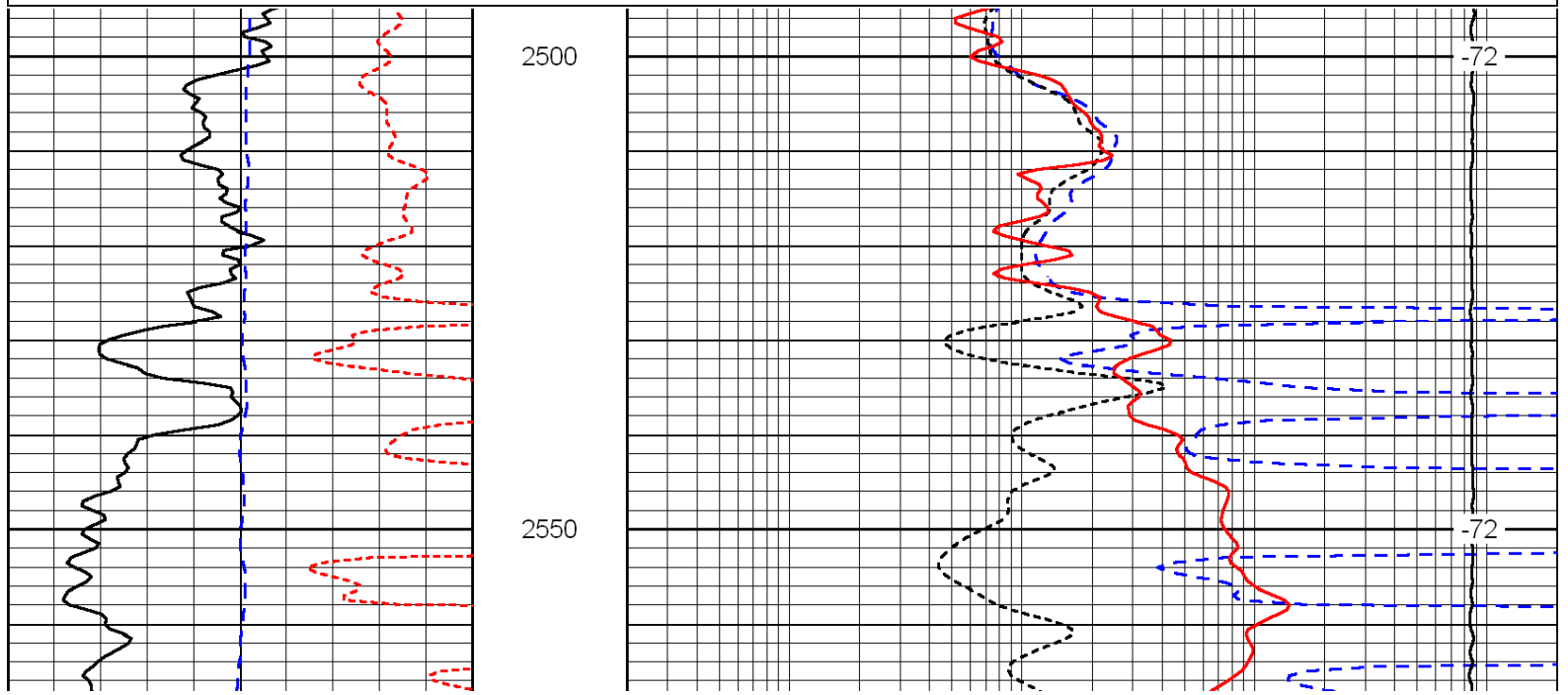
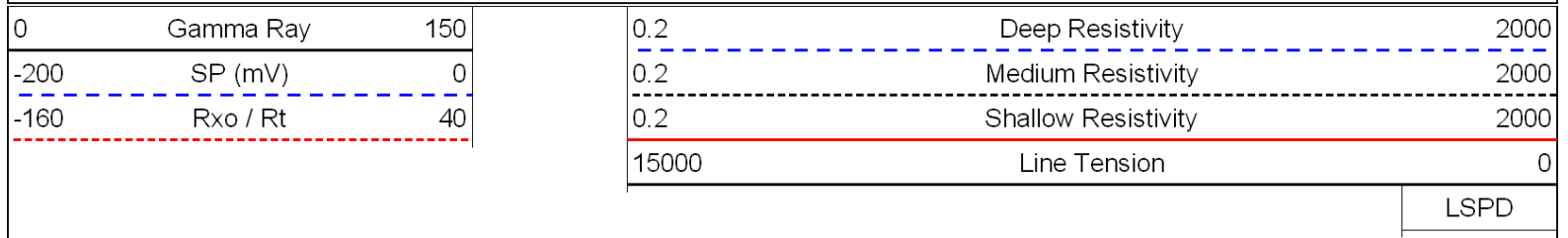


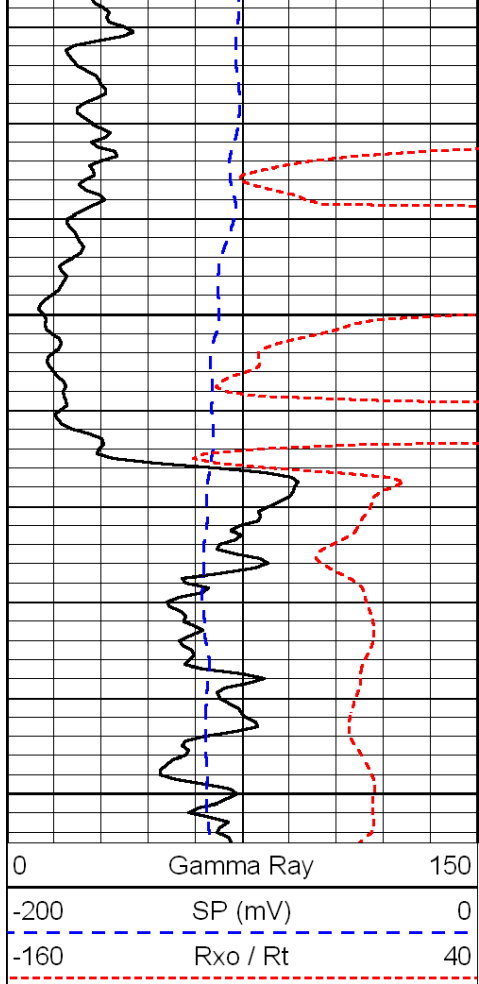






Database File: c:\warrior\data\credo\_schipper no. 1-8\credo\_schipper\_1\_8hd.db  
 Dataset Pathname: DIL/credstk  
 Presentation Format: dil  
 Dataset Creation: Tue Mar 20 20:43:46 2012  
 Charted by: Depth in Feet scaled 1:240

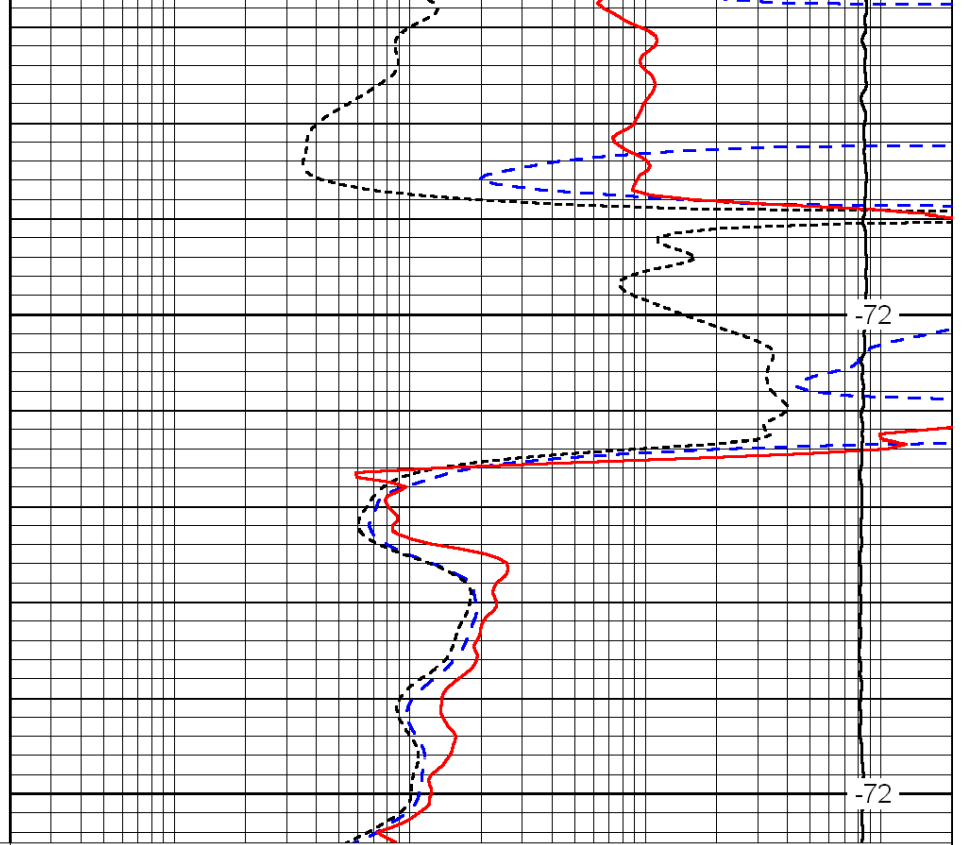




2600

2650

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



-72

-72

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

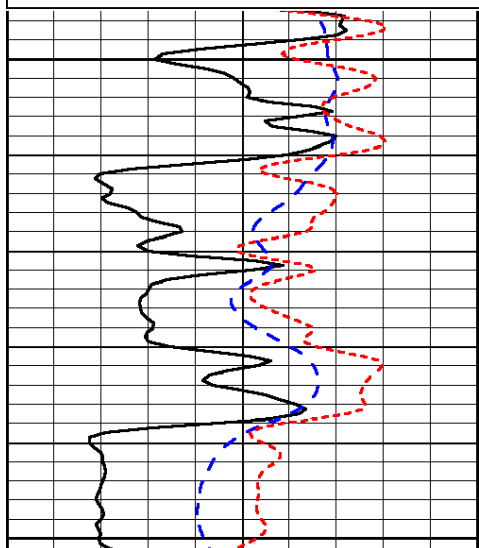
LSPD

Database File: c:\warrior\data\credo\_schipper no. 1-8\credo\_schipper\_1\_8hd.db  
 Dataset Pathname: DIL/credstk  
 Presentation Format: dil  
 Dataset Creation: Tue Mar 20 20:43:46 2012  
 Charted by: Depth in Feet scaled 1:240

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

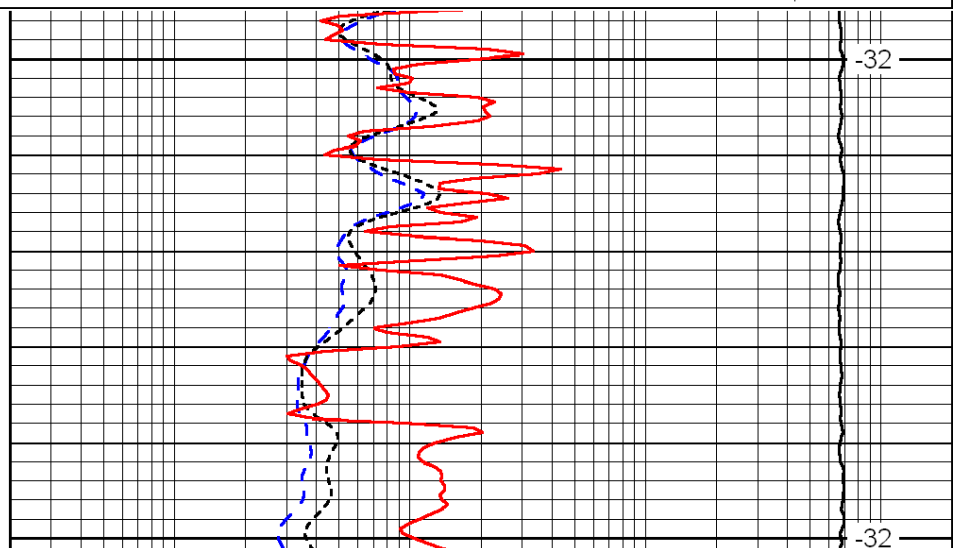
0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD



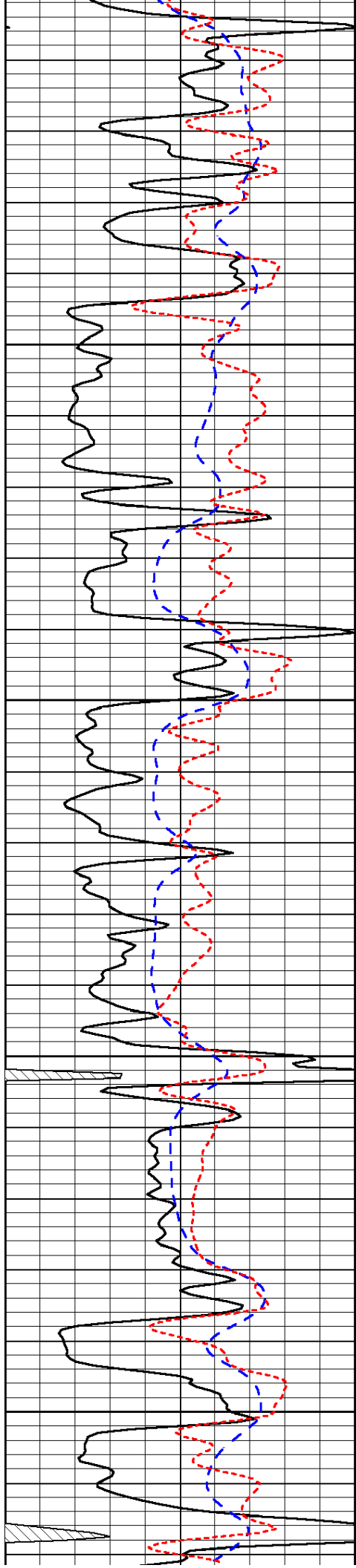
3700

3750



-32

-32

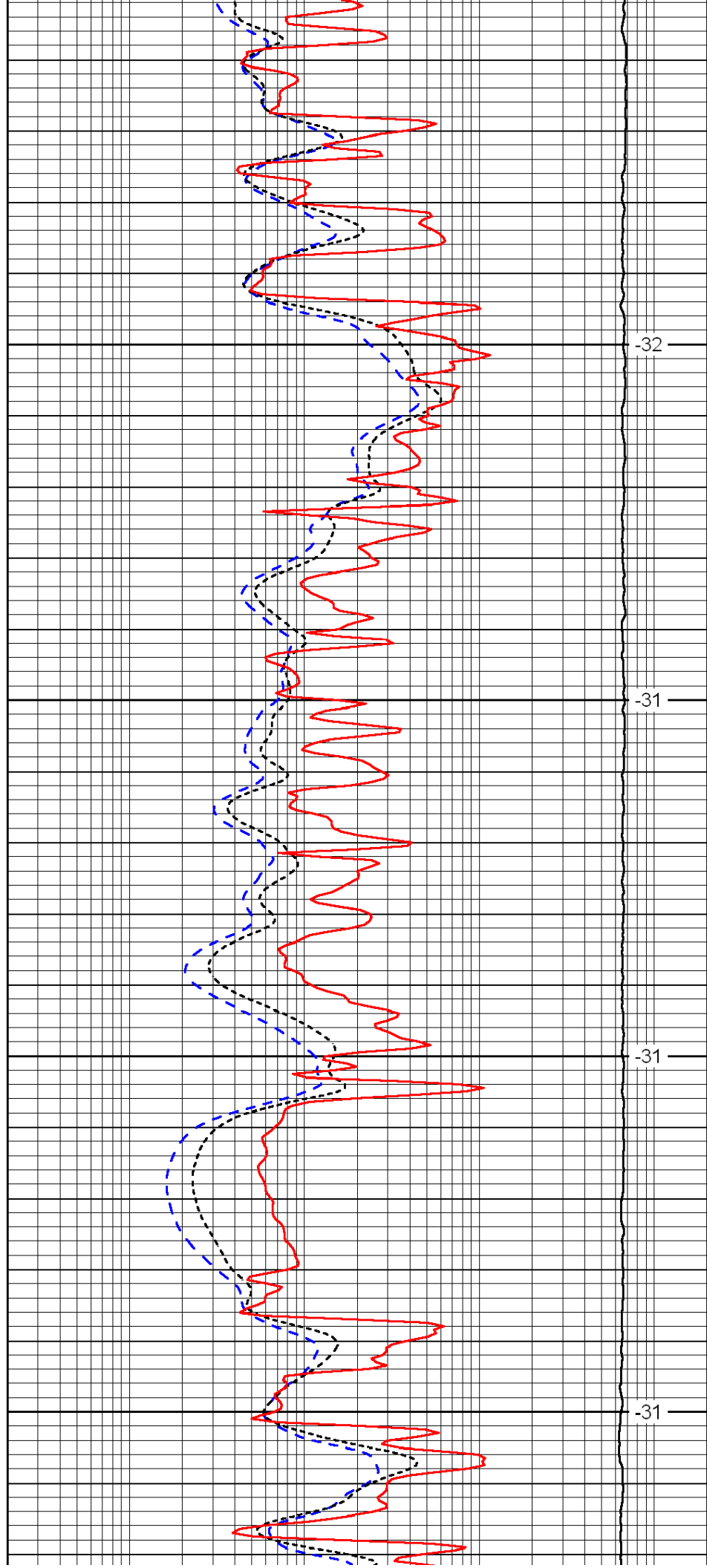


3800

3850

3900

3950



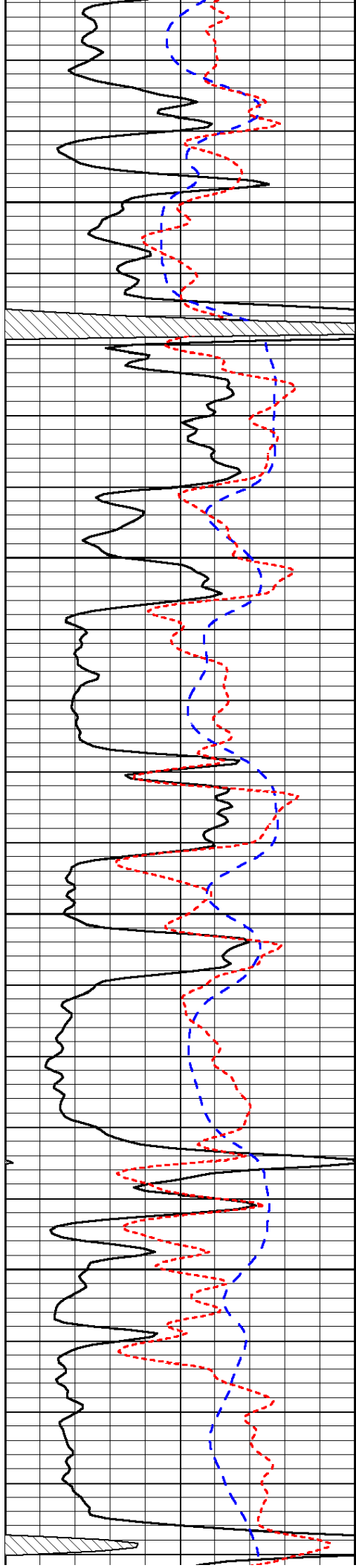
-32

-31

-31

-31



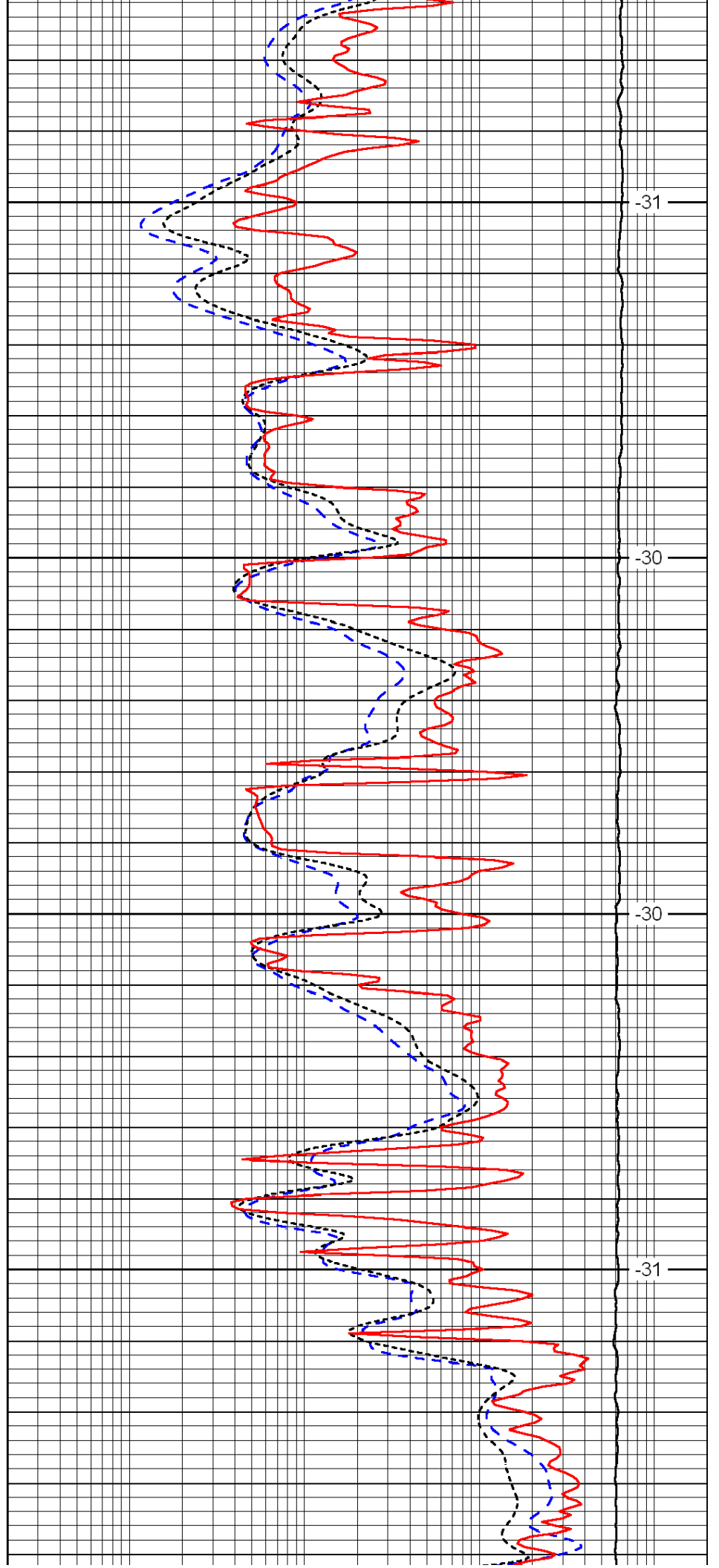


4000

4050

4100

4150

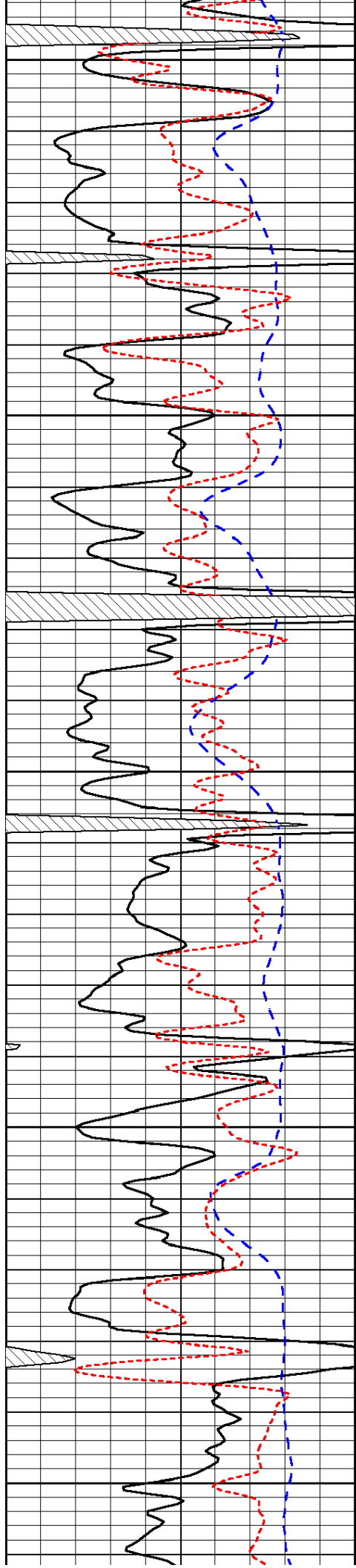


-31

-30

-30

-31



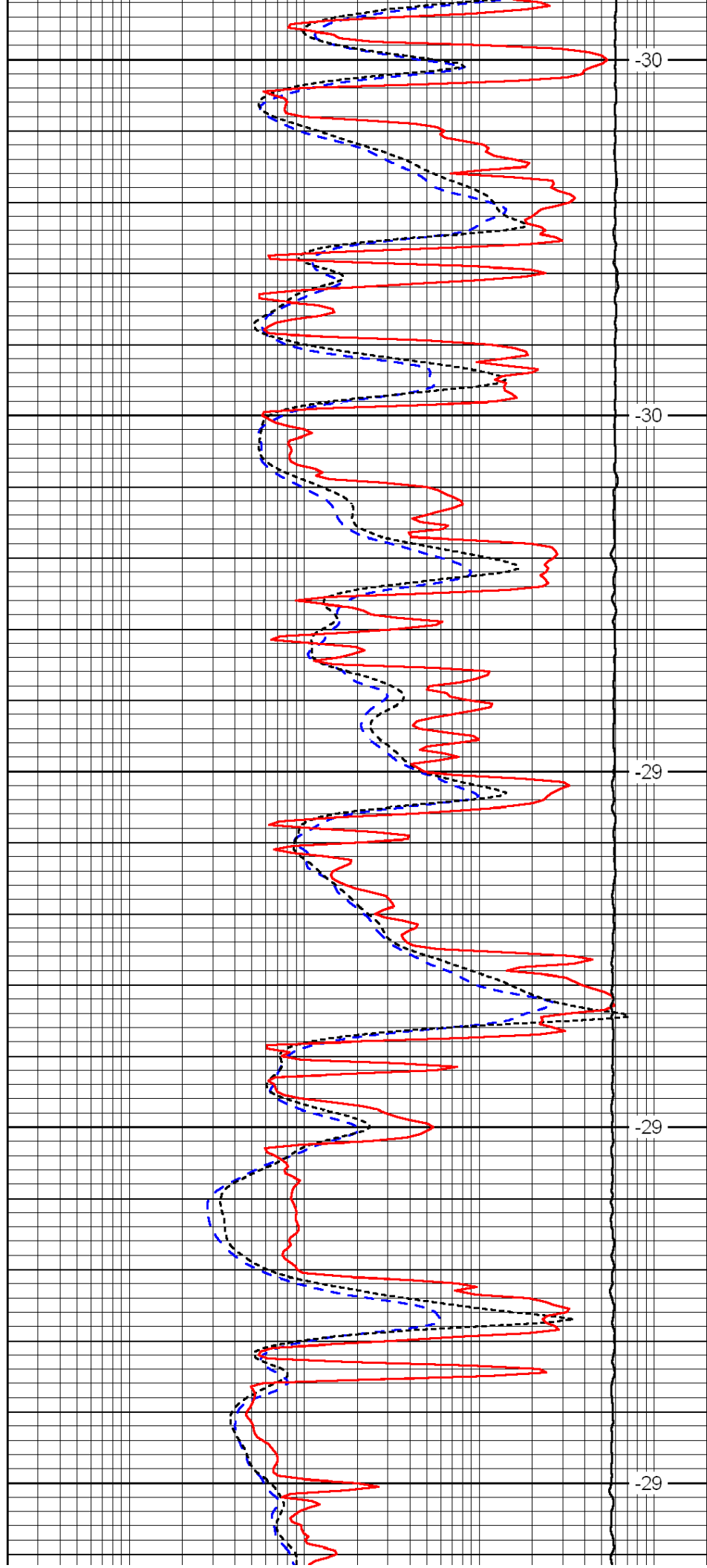
4200

4250

4300

4350

4400



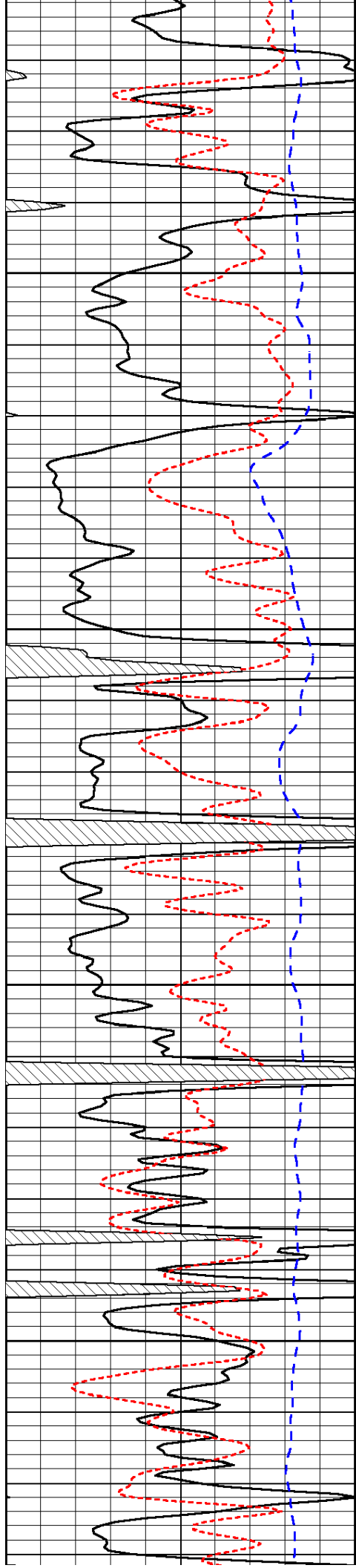
-30

-30

-29

-29

-29

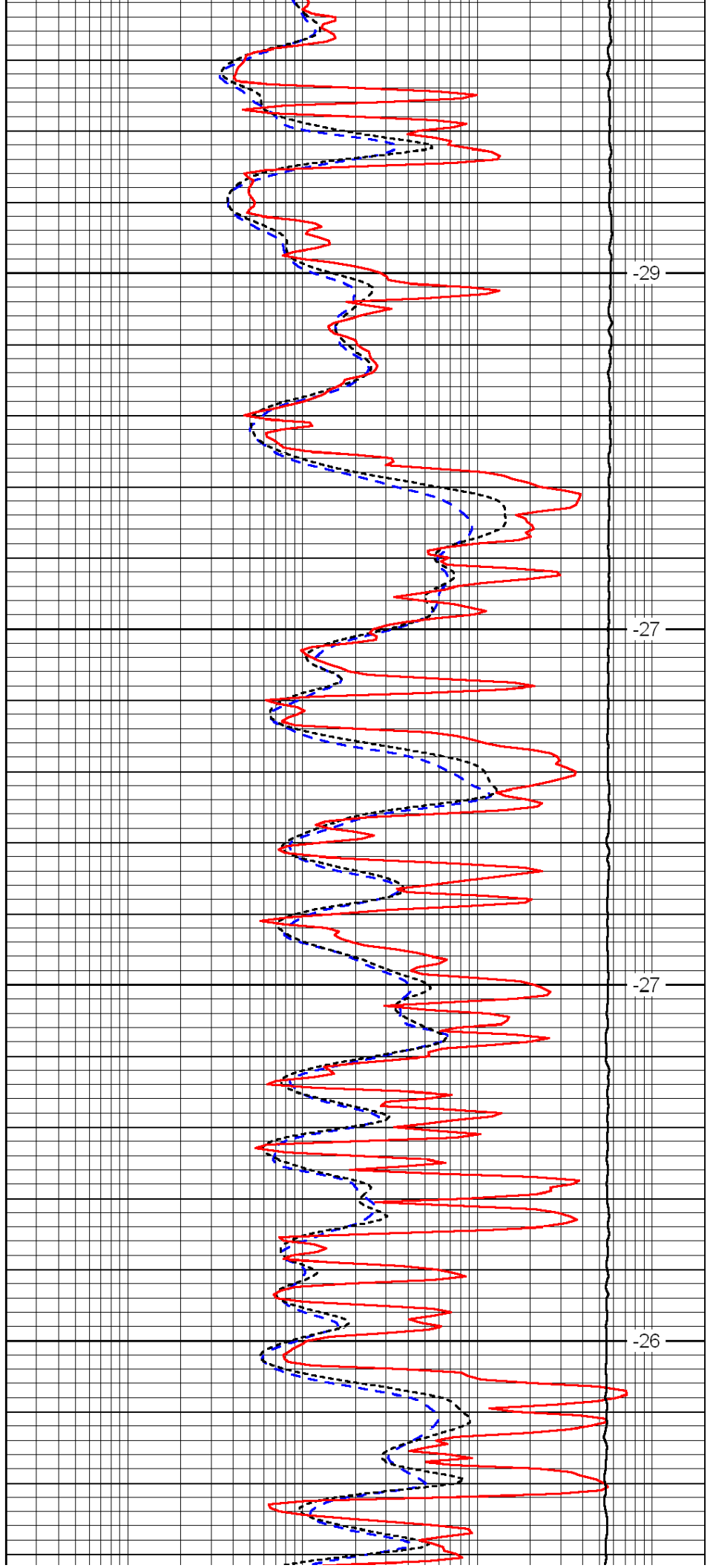


4450

4500

4550

4600

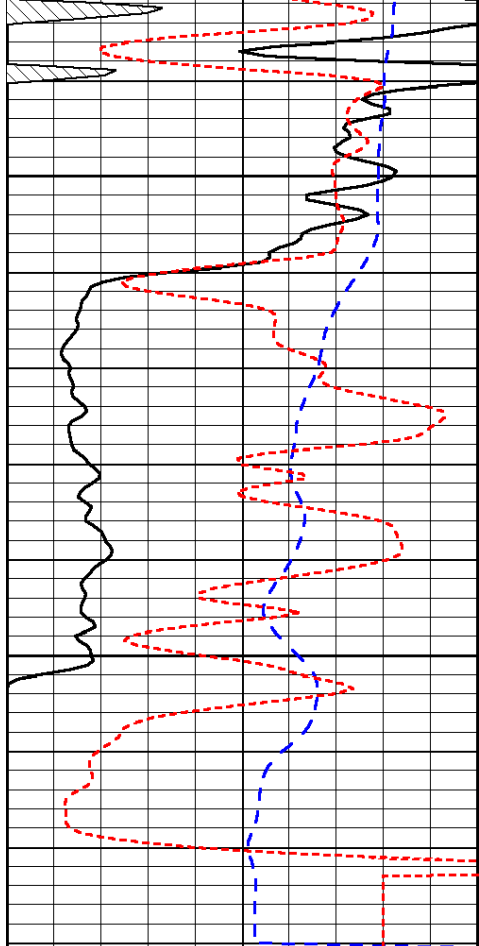


-29

-27

-27

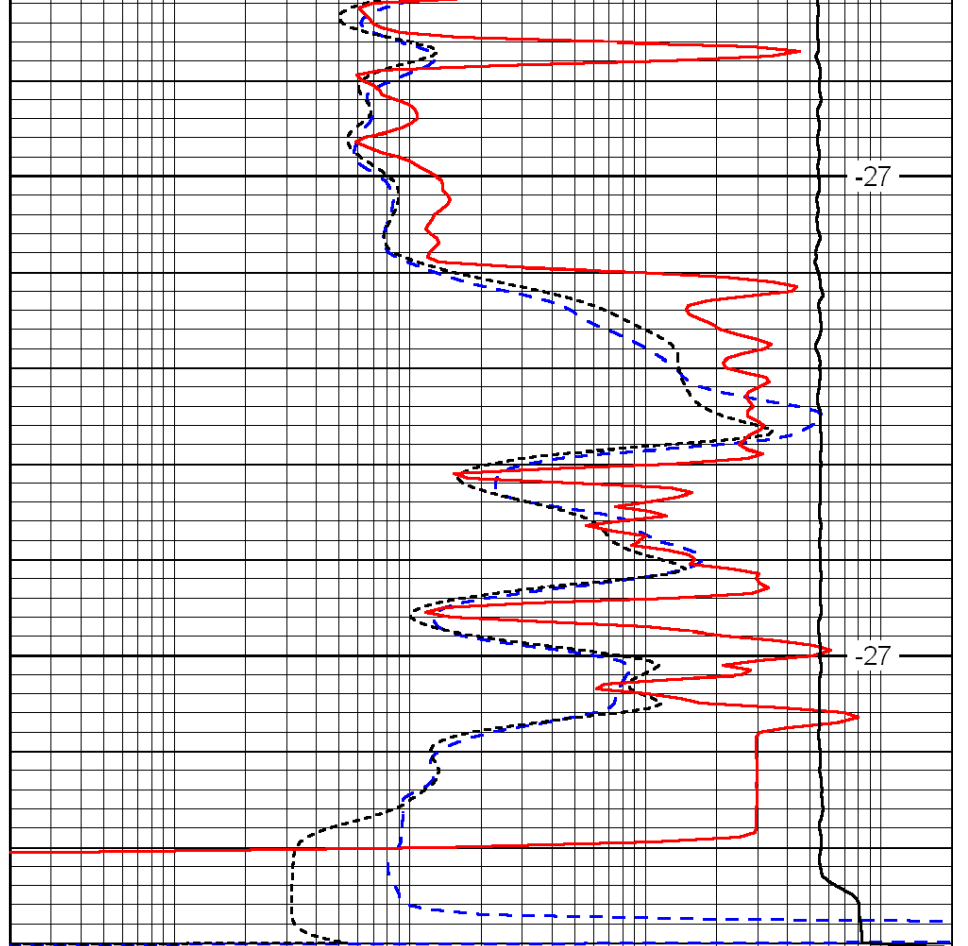
-26



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

4650

4700



-27

-27

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

15-109-21,083-00-00

API No. 15-109-21,083-00-00

Company: Credo Petroleum Corporation  
 Well: Schipper No. 1-8  
 Field: Wildcat  
 County: Logan State Kansas

Location: SE NW/ NW/ NW  
 355' FNL & 460' FWL

Sec: 8 Twp: 11 S Rge: 32 W

Other Services: DIL, MEL/BHCS

Permanent Datum: Ground Level Elevation 3089  
 Log Measured From: Kelly Bushing 5 Ft. Above Perm. Datum  
 Drilling Measured From: Kelly Bushing

Elevation: K.B. 3094, D.F., G.L. 3089

Date	3/20/2012	
Run Number	One	
Type Log	CNL / CDL	
Depth Driller	4725	
Depth Logger	4724	
Bottom Logged Interval	4703	
Top Logged Interval	3700	
Type Fluid In Hole	Chemical	
Salinity, PPM CL	3000	
Density Level	9.3	
Max. Rec. Temp. F	125	
Operating Rig Time	4 1/2 Hours	
Equipment -- Location	91 Hays	
Recorded By	D Kerr	
Witnessed By	Charlie Sturdavant	

Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	290	8.625	24#	00	290
2	7.875	290	4725				

<<< 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.

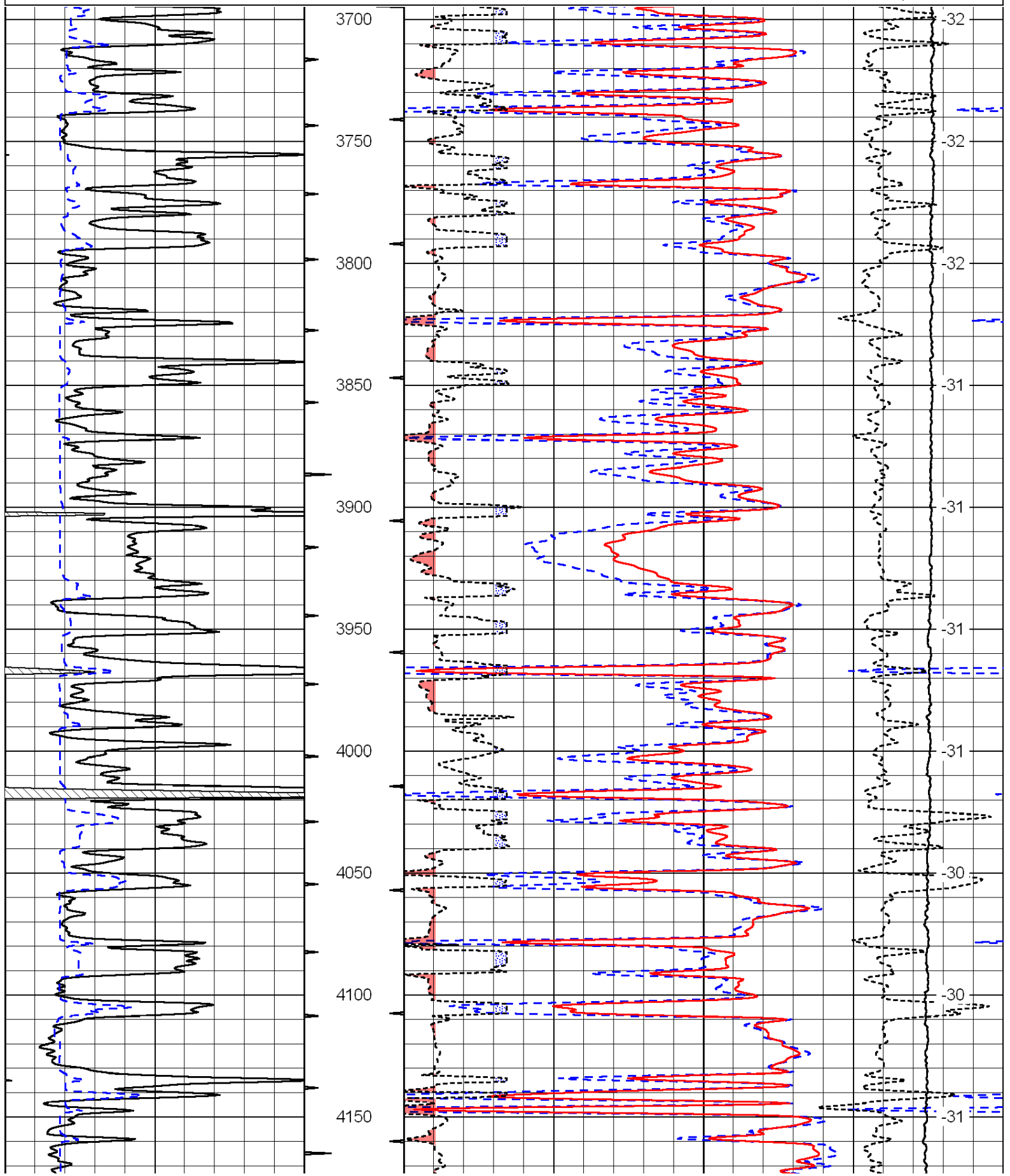
Comments

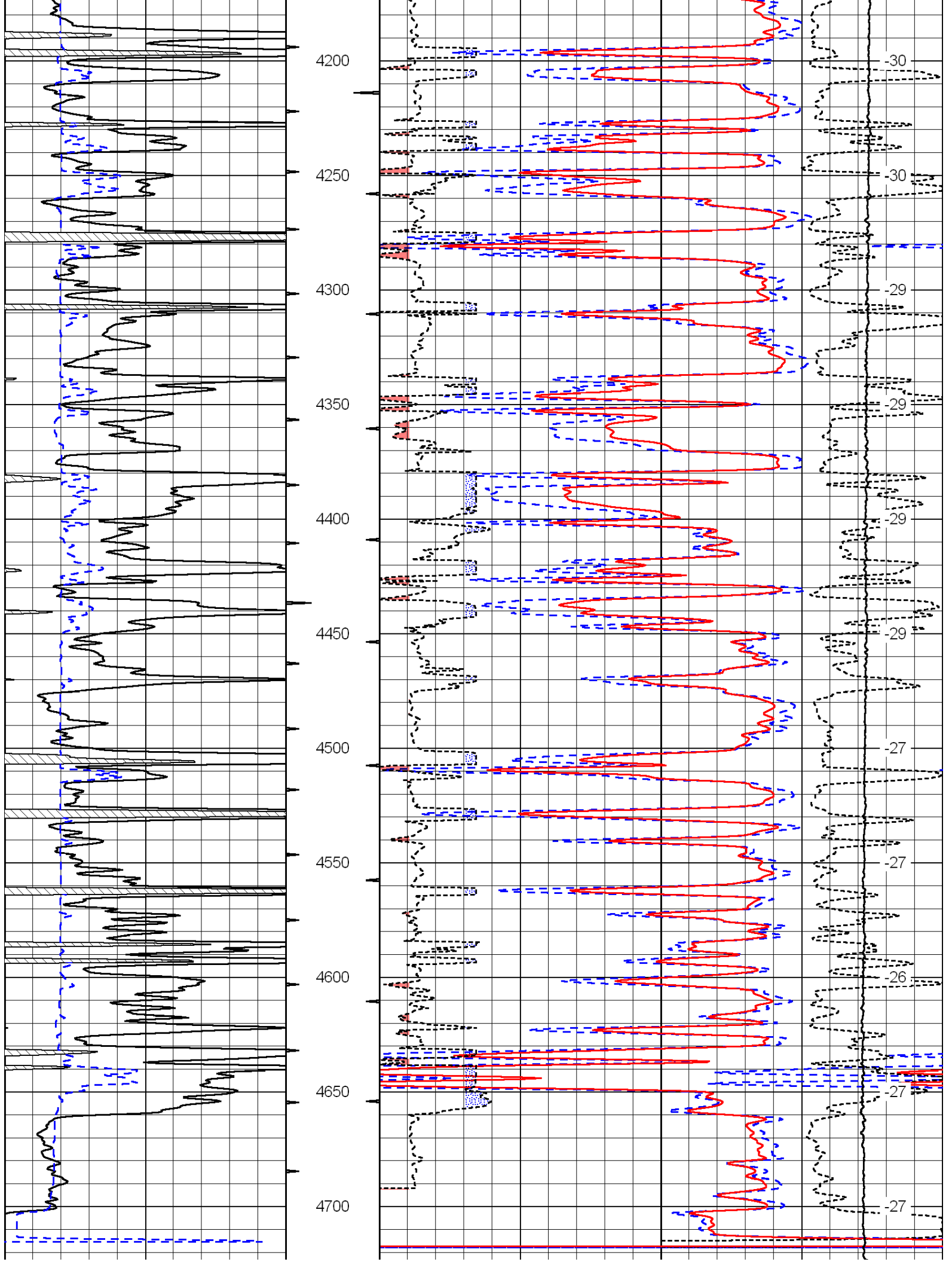
Thank you for using Log-Tech, Inc.  
 (785) 625-3858

Oakley KS, 2 West,  
 On Old 40,  
 South 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			

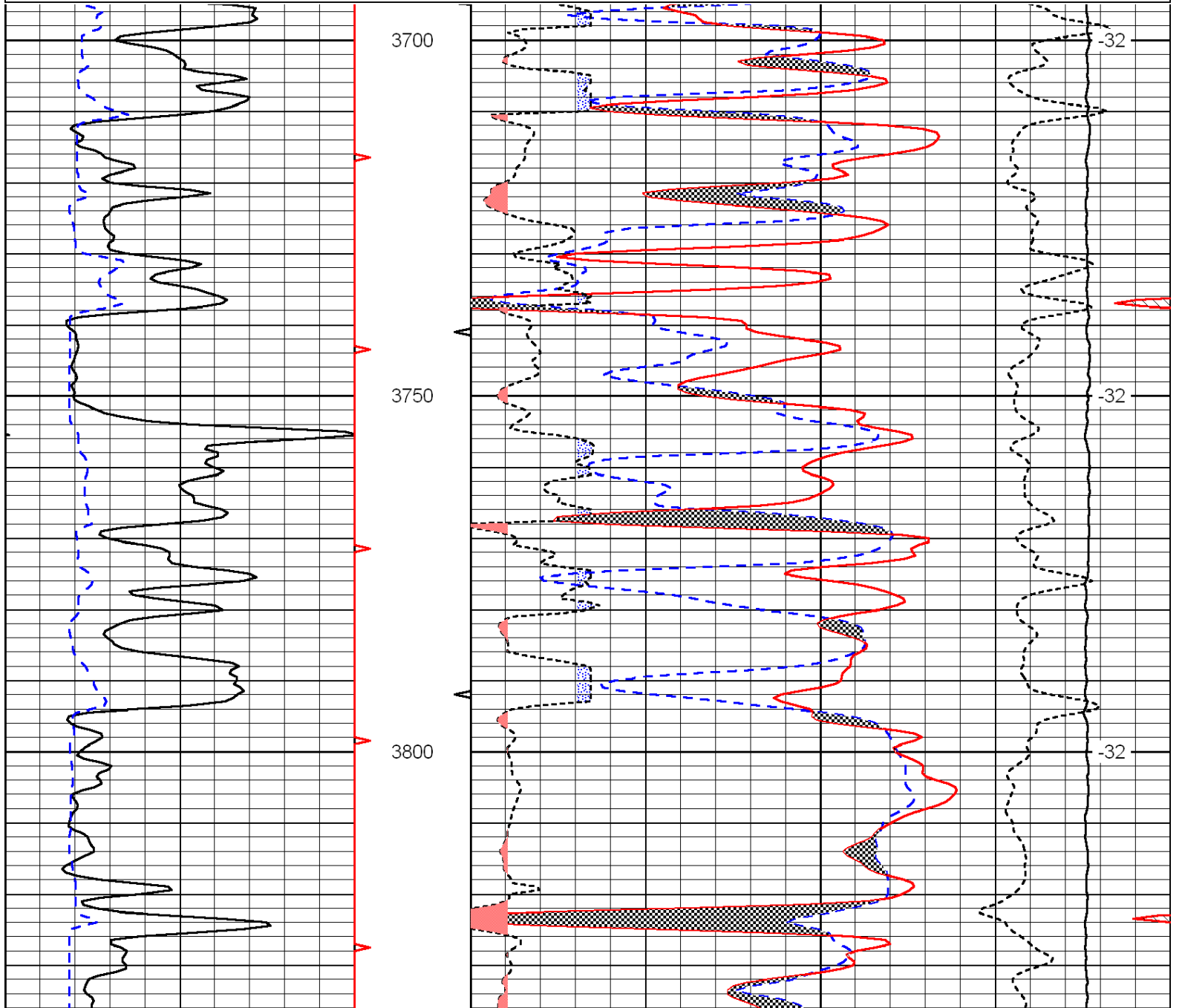




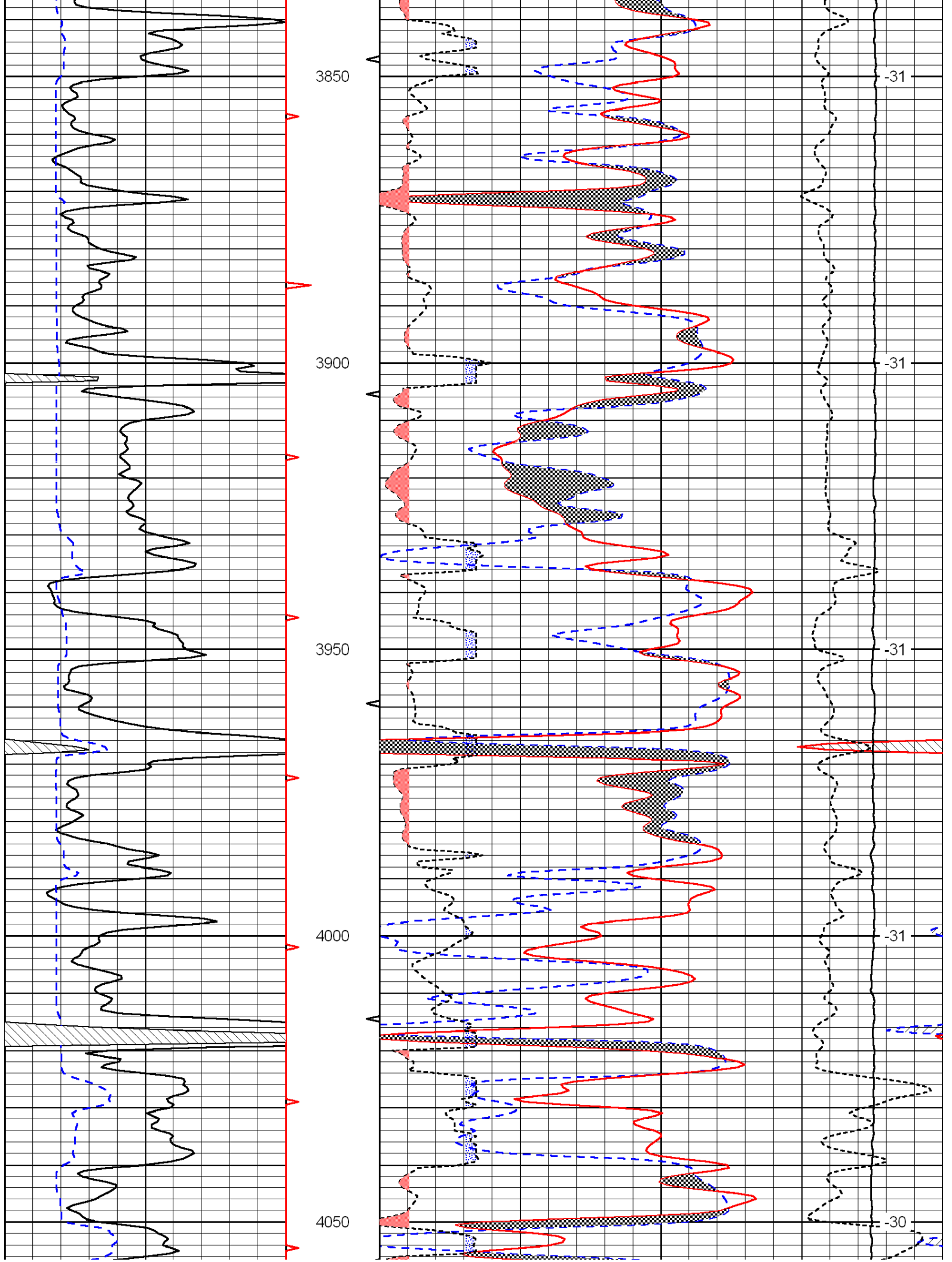
0	Gamma Ray	150	30	Compensated Density		-10
6	Caliper (GAPI)	16	2	Bulk Density		3
			15000	Line Tension		0
	2.625	DGA	3.425	-0.25	Correction	0.25
						LSPD

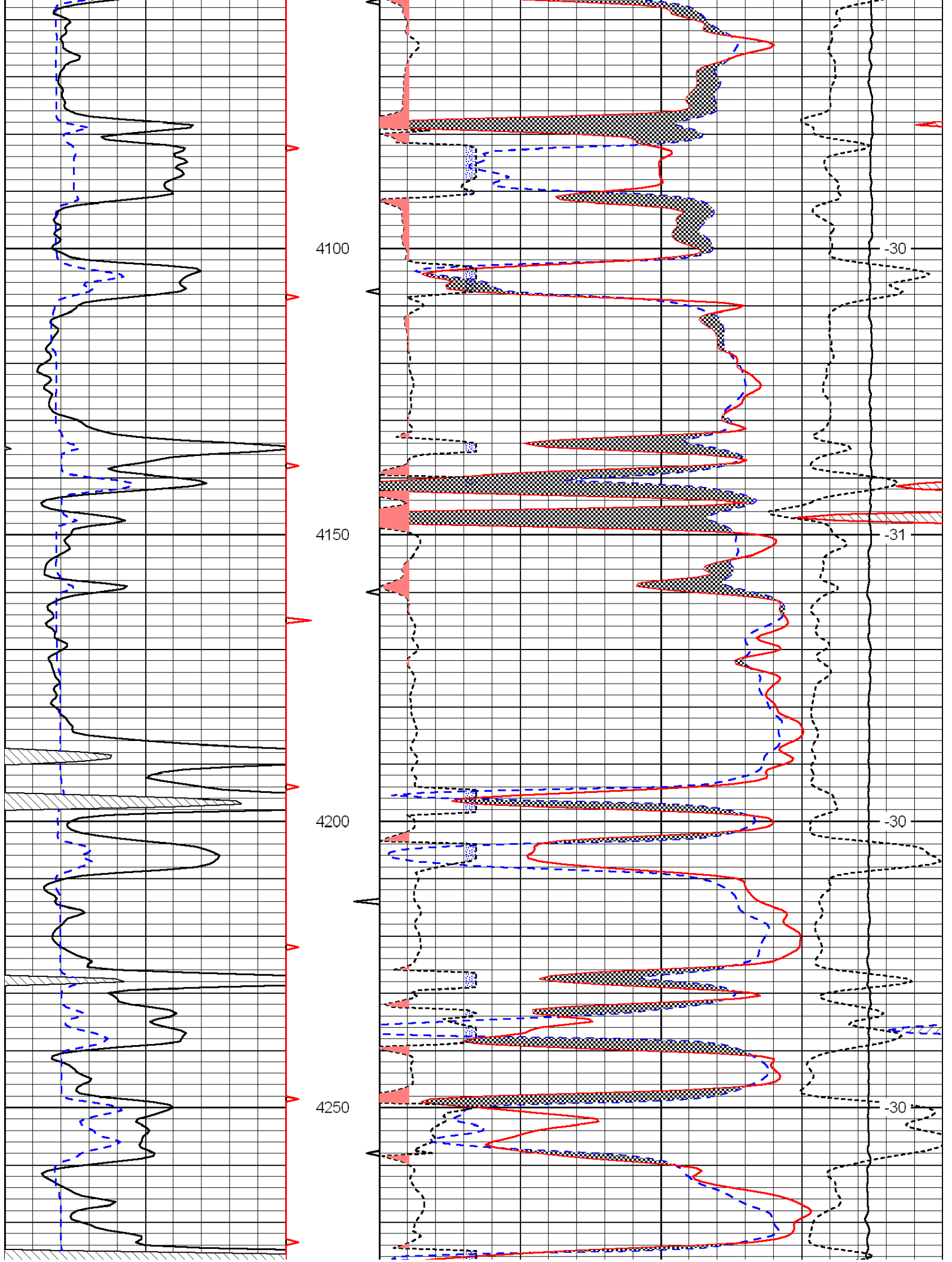
Database File: c:\warrior\data\credo\_schipper no. 1-8\credo\_schipper\_1\_8hd.db  
 Dataset Pathname: DIL/credstk  
 Presentation Format: cndlspec  
 Dataset Creation: Tue Mar 20 20:43:46 2012  
 Charted by: Depth in Feet scaled 1:240

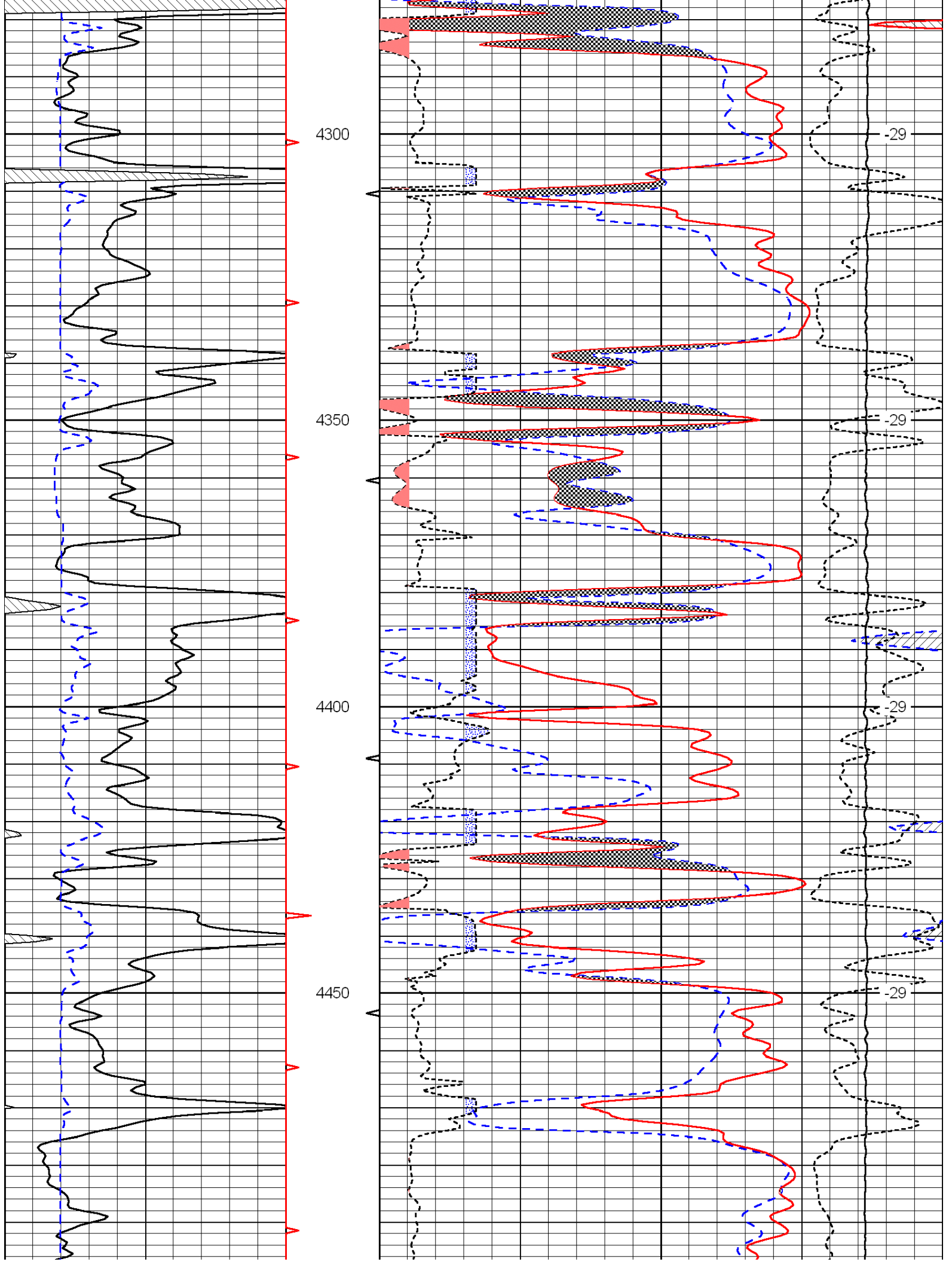
0	Gamma Ray	150	30	Compensated Neutron (Limestone)		-10
6	Caliper (GAPI)	16	30	Compensated Density (Limestone)		-10
	2.625	DGA	3.425	-0.25	Correction	0.25
			15000	Line Tension		0
						LSPD

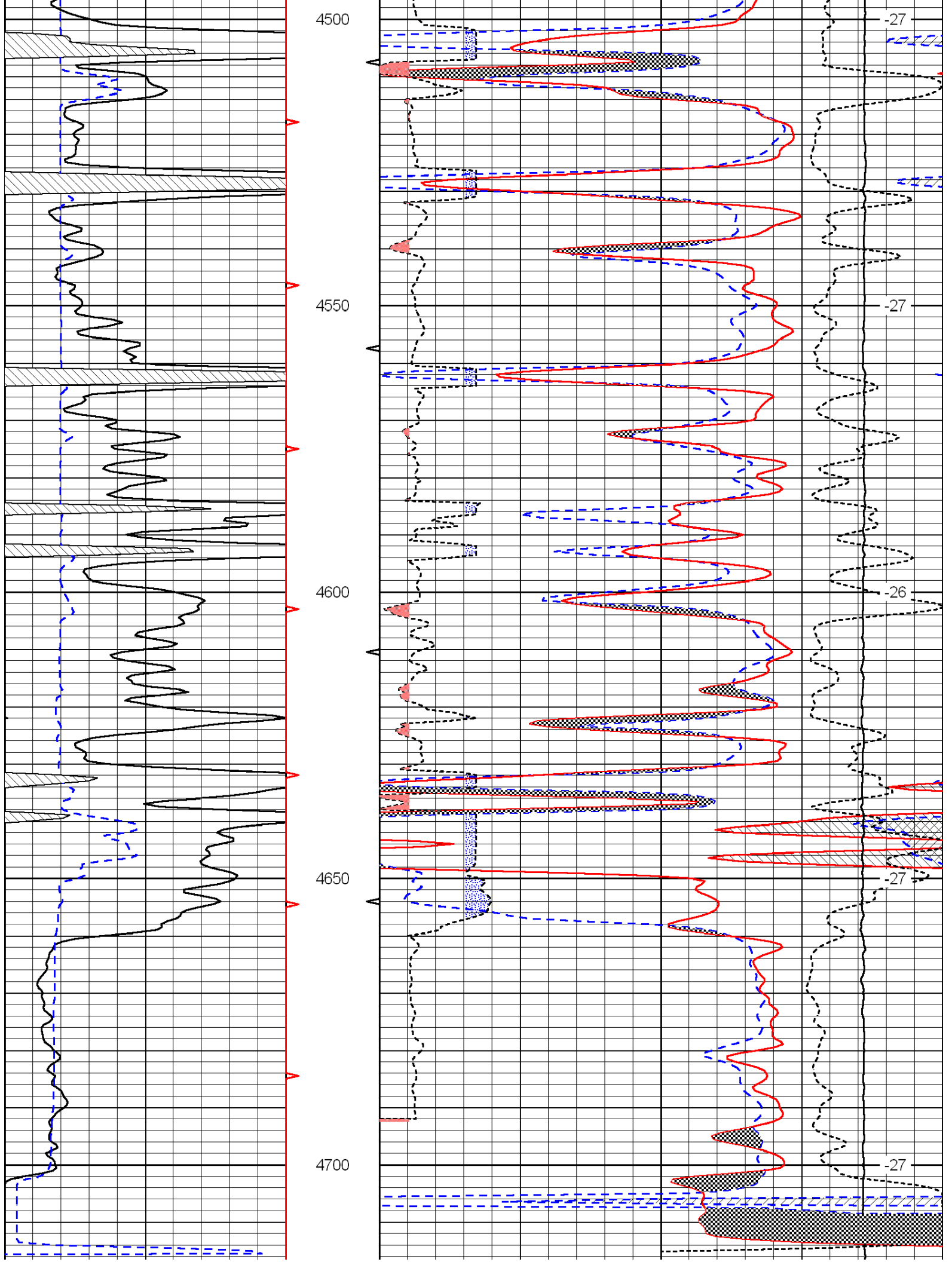


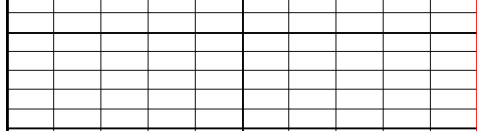






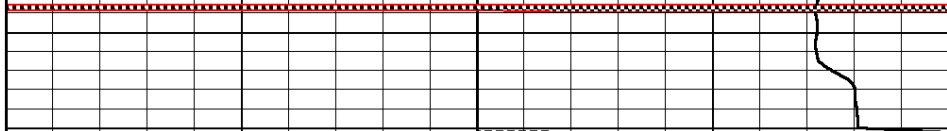






0	Gamma Ray	150
---	-----------	-----

6	Caliper (GAPI)	16
---	----------------	----



30	Compensated Neutron (Limestone)	-10
----	---------------------------------	-----

30	Compensated Density (Limestone)	-10
----	---------------------------------	-----

2.625	DGA	3.425	-0.25	Correction	0.25
-------	-----	-------	-------	------------	------

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

LSPD
------



DIGITAL LOG (785) 625-3858

Microresistivity Log

15-109-21,083-00-00

API No.	Company	Credo Petroleum Corporation
	Well	Schipper No. 1-8
	Field	Wildcat
	County	Logan
	State	Kansas
Location	SE NW/NW/NW 355' FNL & 460' FWL	
Sec: 8	Twp: 11 S	Rge: 32 W
Other Services	CNL/CDL DIL/BHCS	
Elevation	K.B. 3094 D.F. 3089 G.L. 3089	

Permanent Datum	Ground Level	Elevation 3089
Log Measured From	Kelly Bushing	5 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing	
Date	3/20/2012	
Run Number	Two	
Depth Driller	4725	
Depth Logger	4724	
Bottom Logged Interval	4723	
Top Log Interval	3700	
Casing Driller	8.625 @ 290	
Casing Logger	289	
Bit Size	7.875	
Type Fluid in Hole	Chemical	
Salinity, ppm CL	3000	
Density / Viscosity	9.3	54
pH / Fluid Loss	10.0	7.2
Source of Sample	Flowline	
Rm @ Meas. Temp	.9	@ 70
Rmf @ Meas. Temp	.67	@ 70
Rmc @ Meas. Temp	1.21	@ 70
Source of Rmf / Rmc	Charts	
Rm @ BHT	.5	@ 125
Operating Rig Time	4 1/2 Hours	
Max Rec. Temp. F	125	
Equipment Number	91	
Location	Hays	
Recorded By	D. Kerr	
Witnessed By	Charlie Sturdavant	

<<< 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

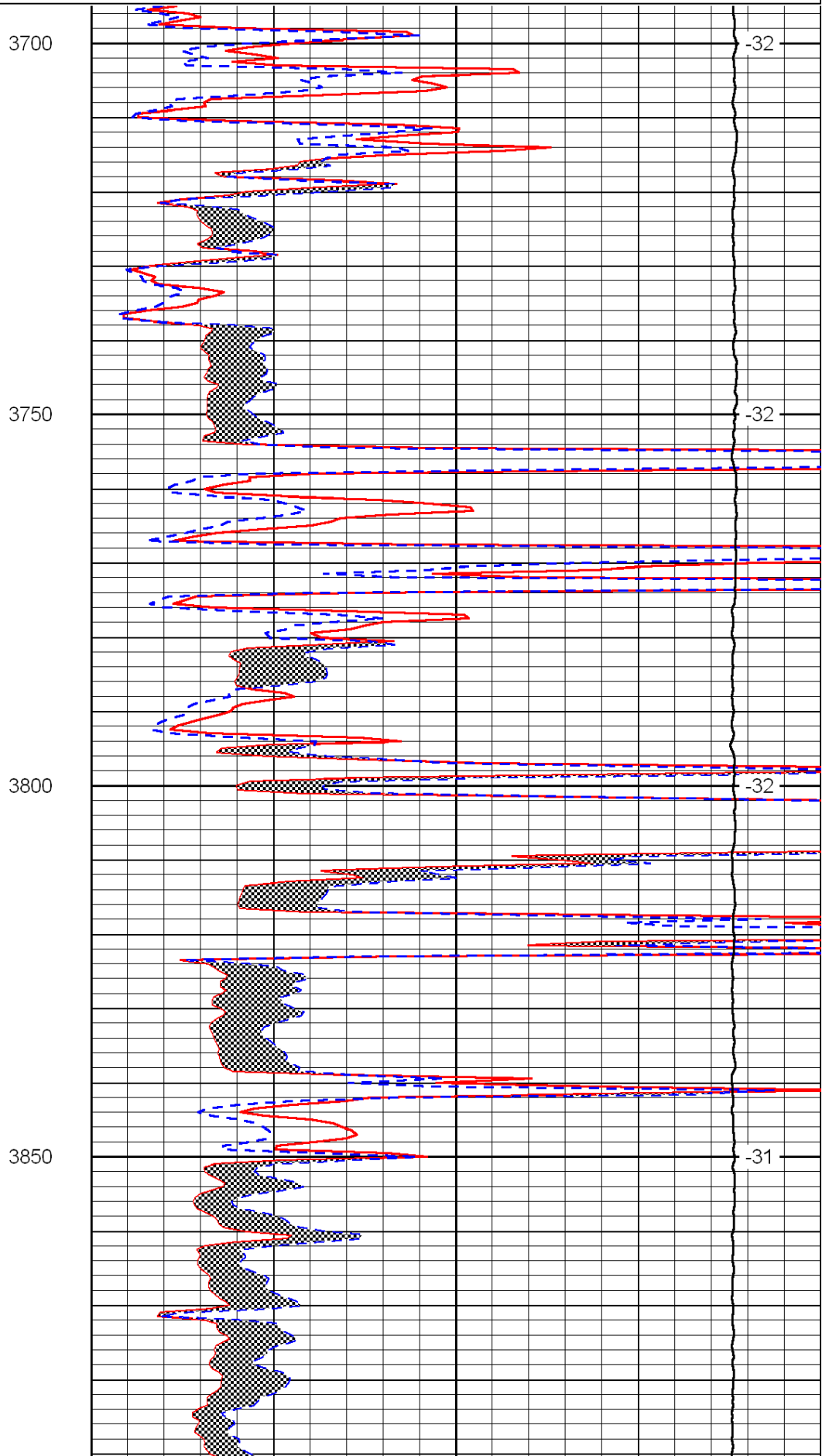
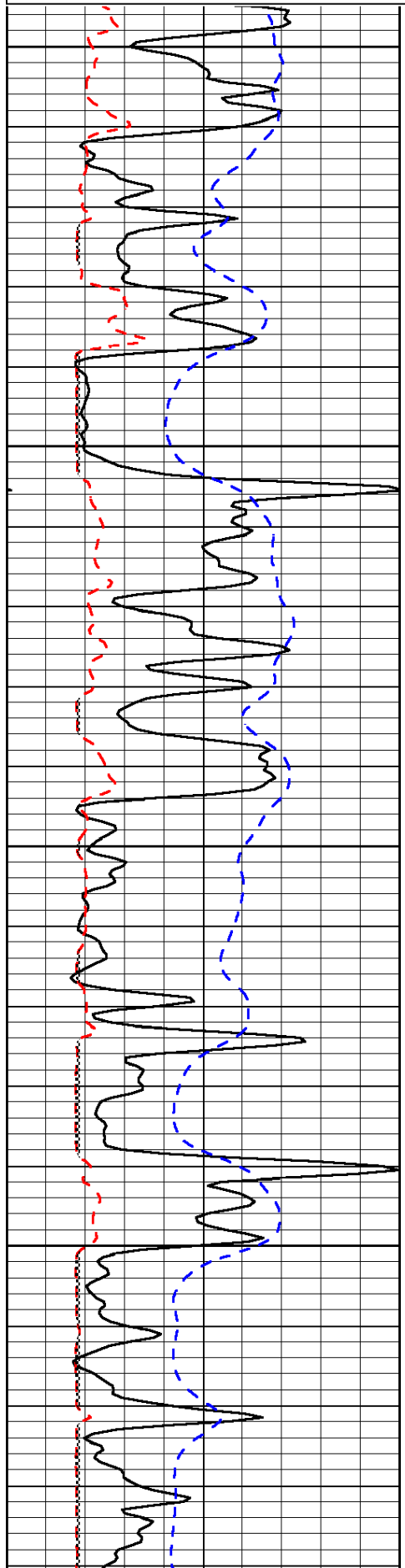
Thank you for using Log-Tech, Inc.  
 (785) 625-3858  
 Oakley KS, 2 West,  
 On Old 40,  
 South Into

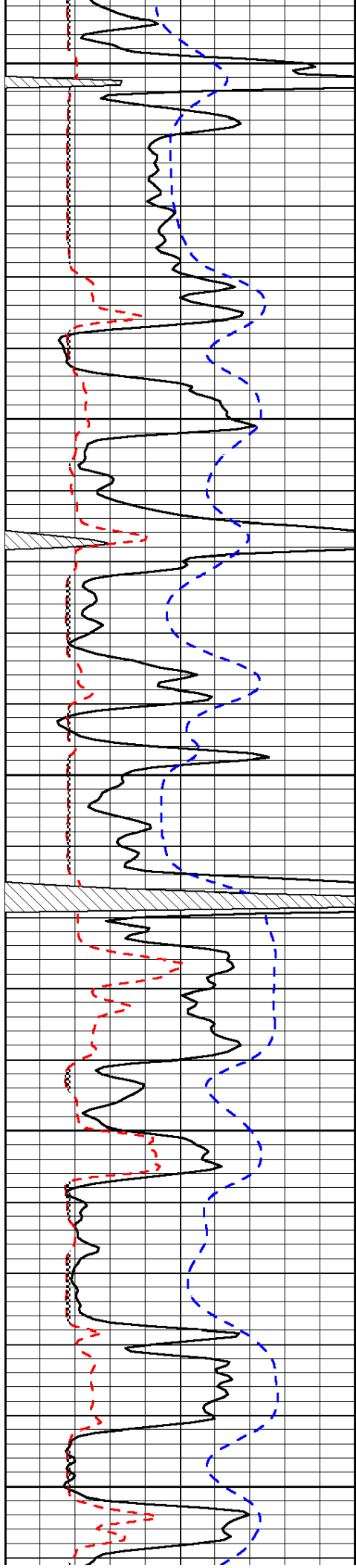
Database File: c:\warrior\data\credo\_schipper no. 1-8\credo\_schipper\_1\_8hd.db  
 Dataset Pathname: DIL/credstk  
 Presentation Format: micro  
 Dataset Creation: Tue Mar 20 20:43:46 2012  
 Charted by: Depth in Feet scaled 1:240

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





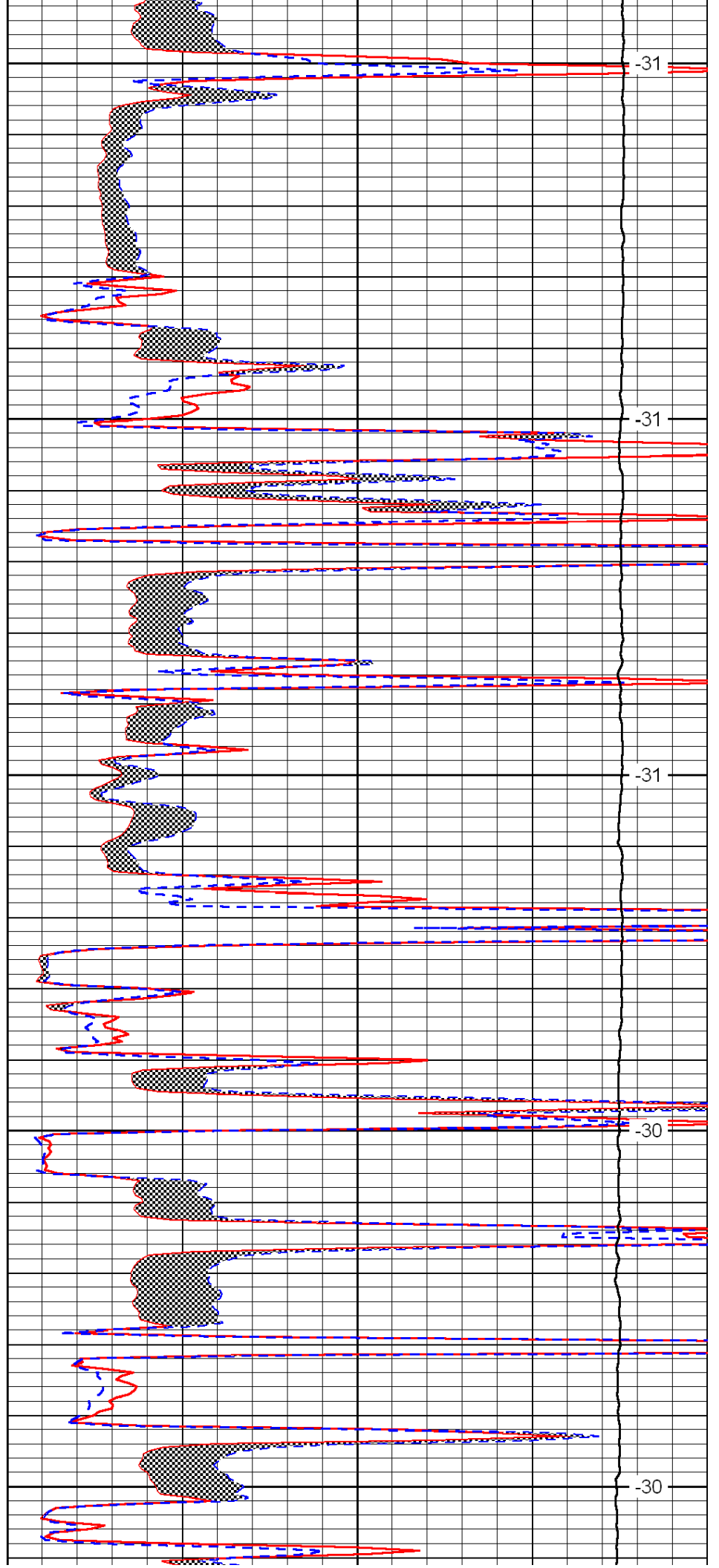
3900

3950

4000

4050

4100



-31

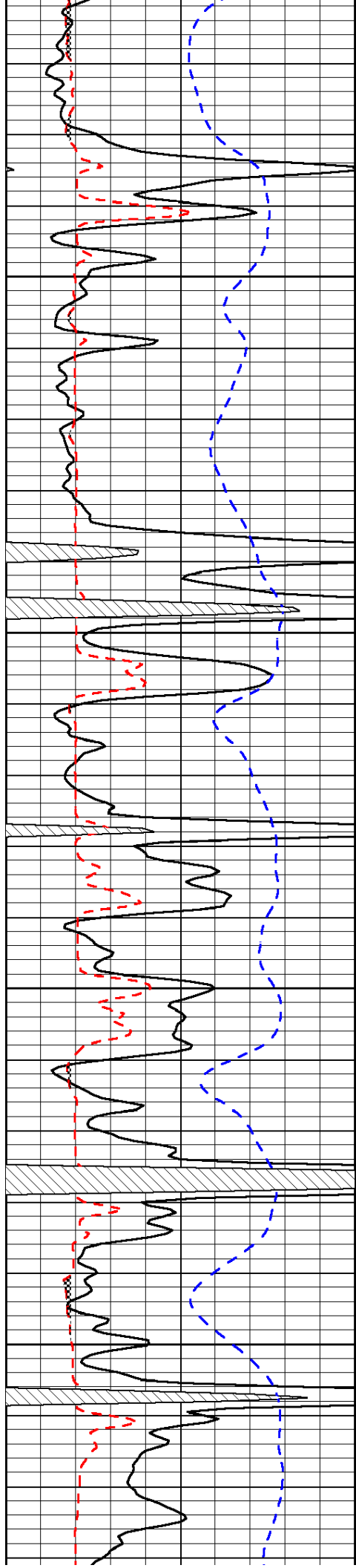
-31

-31

-30

-30



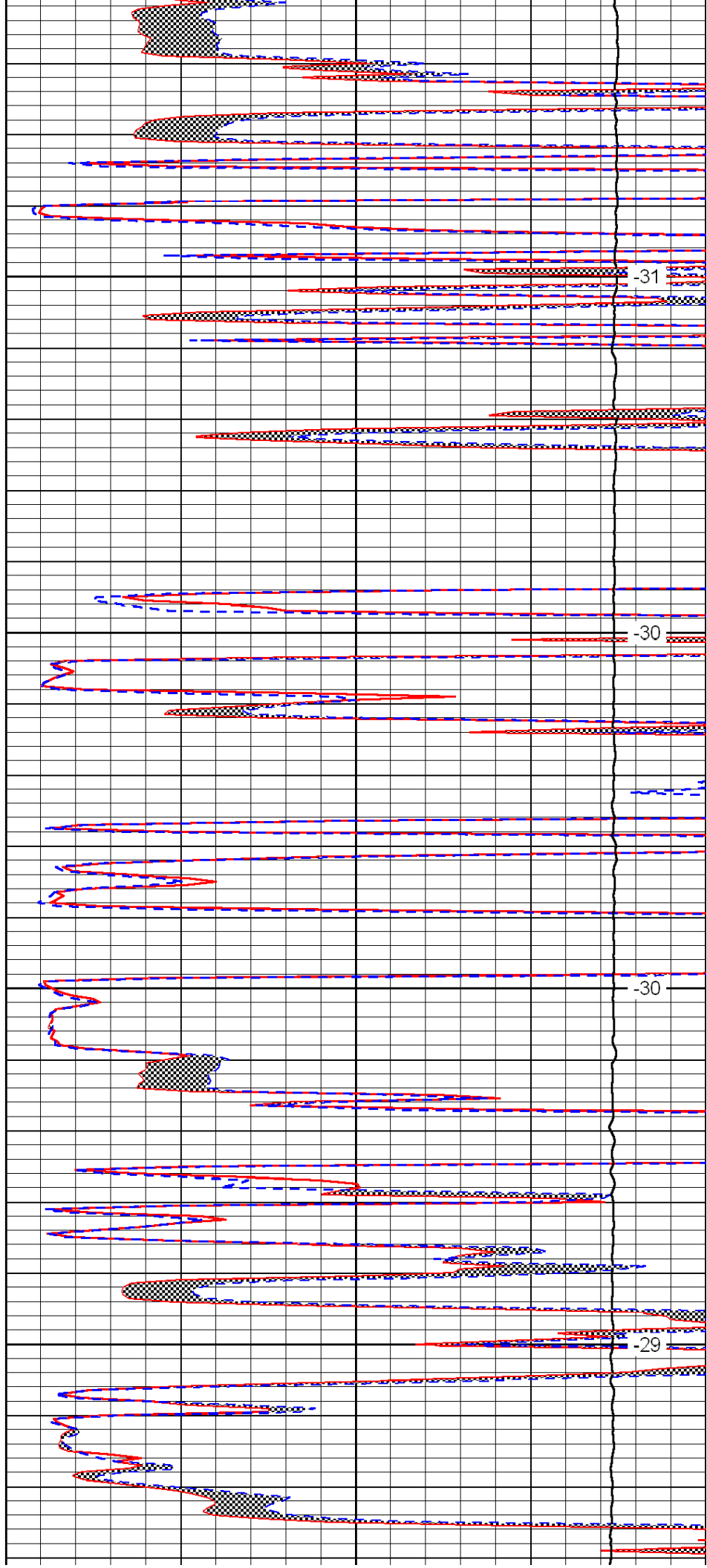


4150

4200

4250

4300

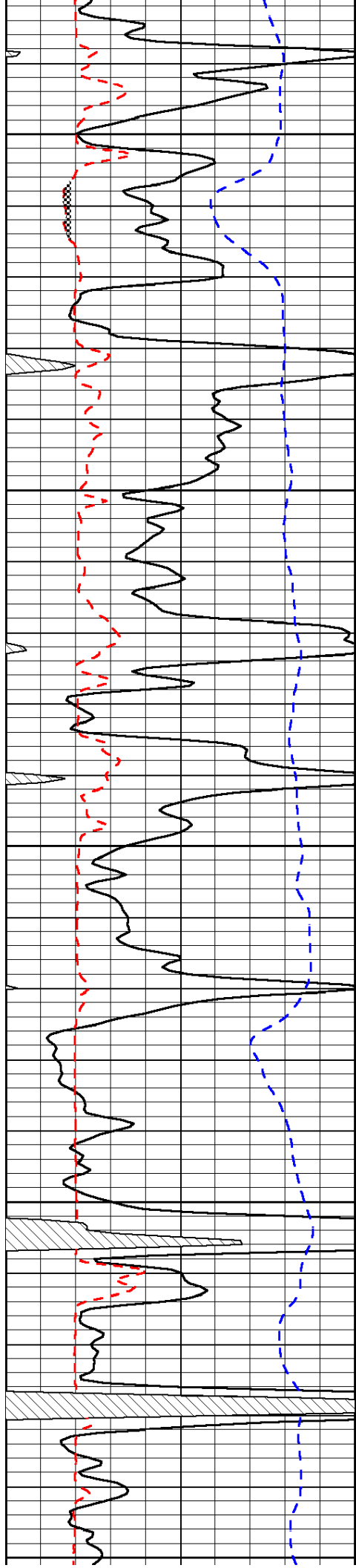


-31

-30

-30

-29



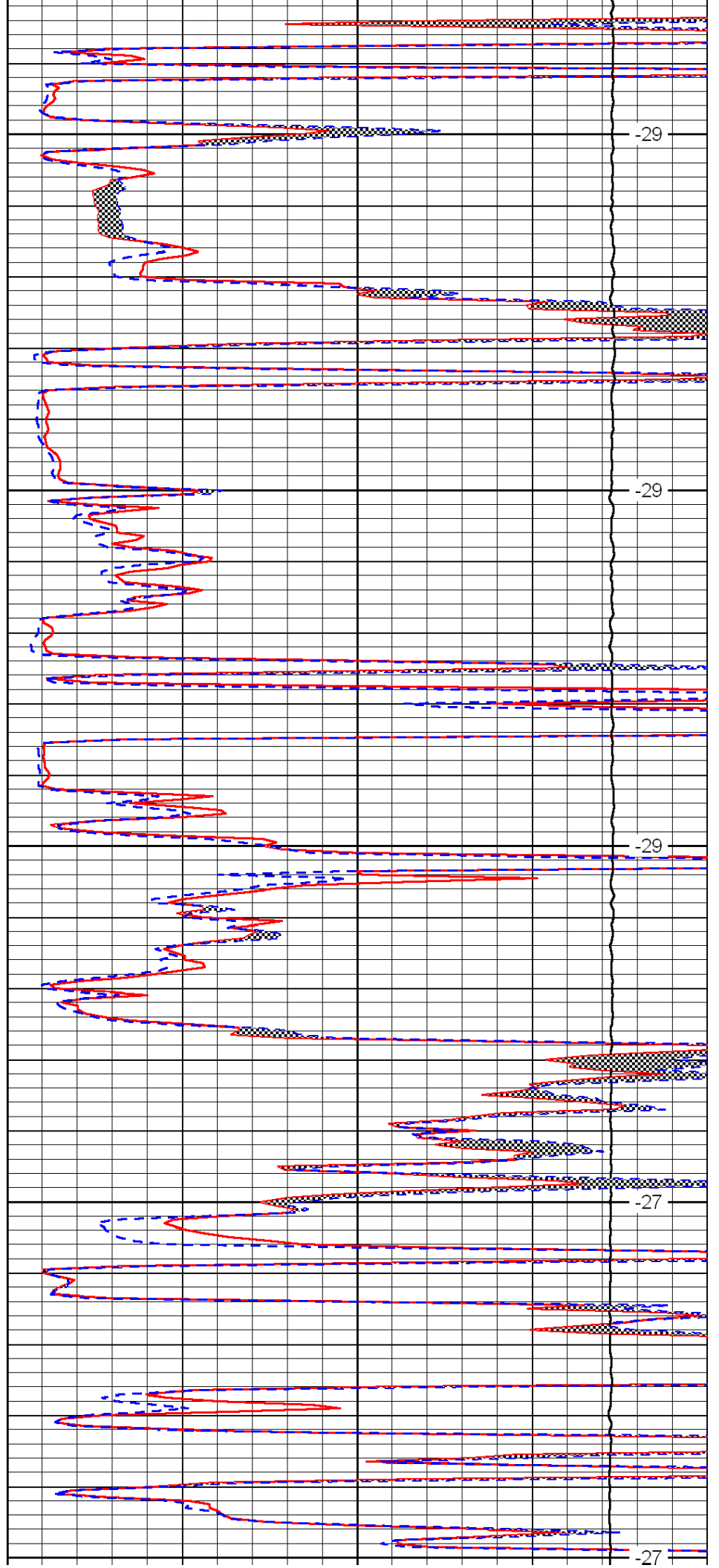
4350

4400

4450

4500

4550



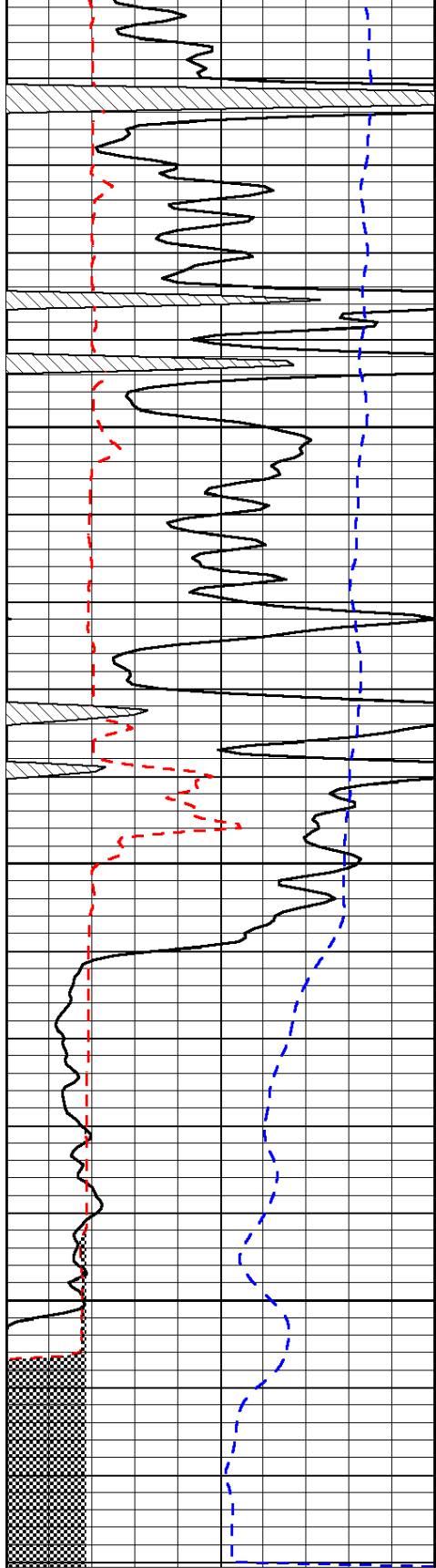
-29

-29

-29

-27

-27

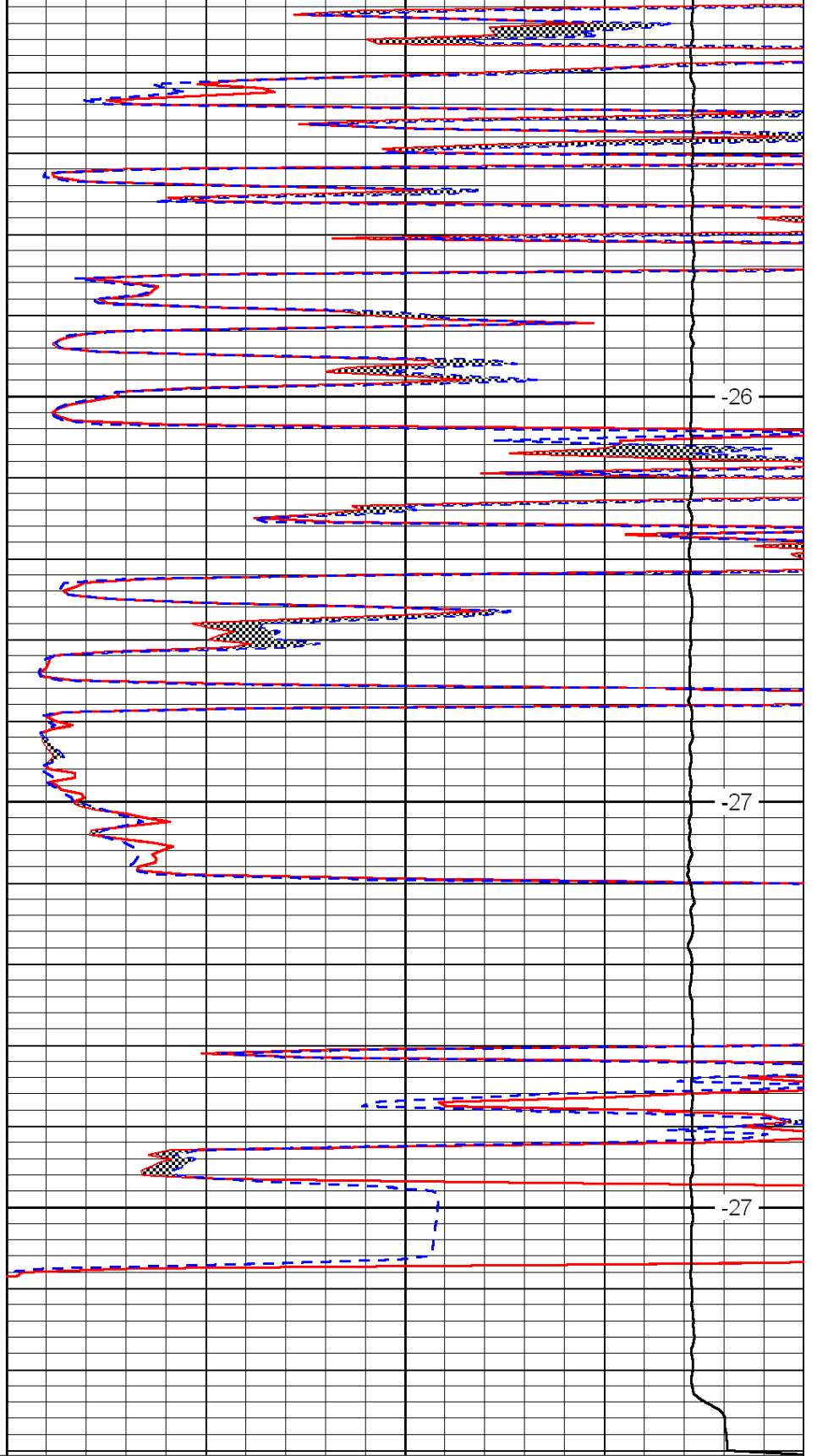


0	Gamma Ray	150
6	Micro Log Caliper (GAPI)	16
-200	SP (mV)	0

4600

4650

4700



0	Micro Inverse 1 X 1	40
0	Micro Normal 2''	40
15000	Line Weight	0

-26

-27

-27

LSPD



DIGITAL LOG (785) 625-3858

Borehole Compensated  
Sonic Log

15-109-21,083-00-00

API No.

Company **Credo Petroleum Corporation**  
Well **Schipper No. 1-8**  
Field **Wildcat**  
County **Logan** State **Kansas**

Location **SE NW/NW/NW  
355' FNL & 460' FWL**

Sec: **8** Twp: **11 S** Rge: **32 W**

Other Services  
CNL/CDL  
MEL/DIL

Permanent Datum **Ground Level** Elevation **3089**  
Log Measured From **Kelly Bushing** **5** Ft. Above Perm. Datum  
Drilling Measured From **Kelly Bushing**

Elevation  
K.B. 3094  
D.F. G.L. 3089

Date	3/20/2012	
Run Number	Two	
Type Log	BHC Sonic	
Depth Driller	4725	
Depth Logger	4724	
Bottom Logged Interval	4713	
Top Logged Interval	250	
Type Fluid In Hole	Chemical	
Salinity, PPM CL	3000	
Density Level	9.3	
Level	Full	
Max. Rec. Temp. F	125	
Operating Rig Time	4 1/2 Hours	
Equipment -- Location	91 Hays	
Recorded By	D Kerr	
Witnessed By	Charlie Sturdavant	

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	290	8.625	24#	00	290
2	7.875	290	4725				

<<< 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.

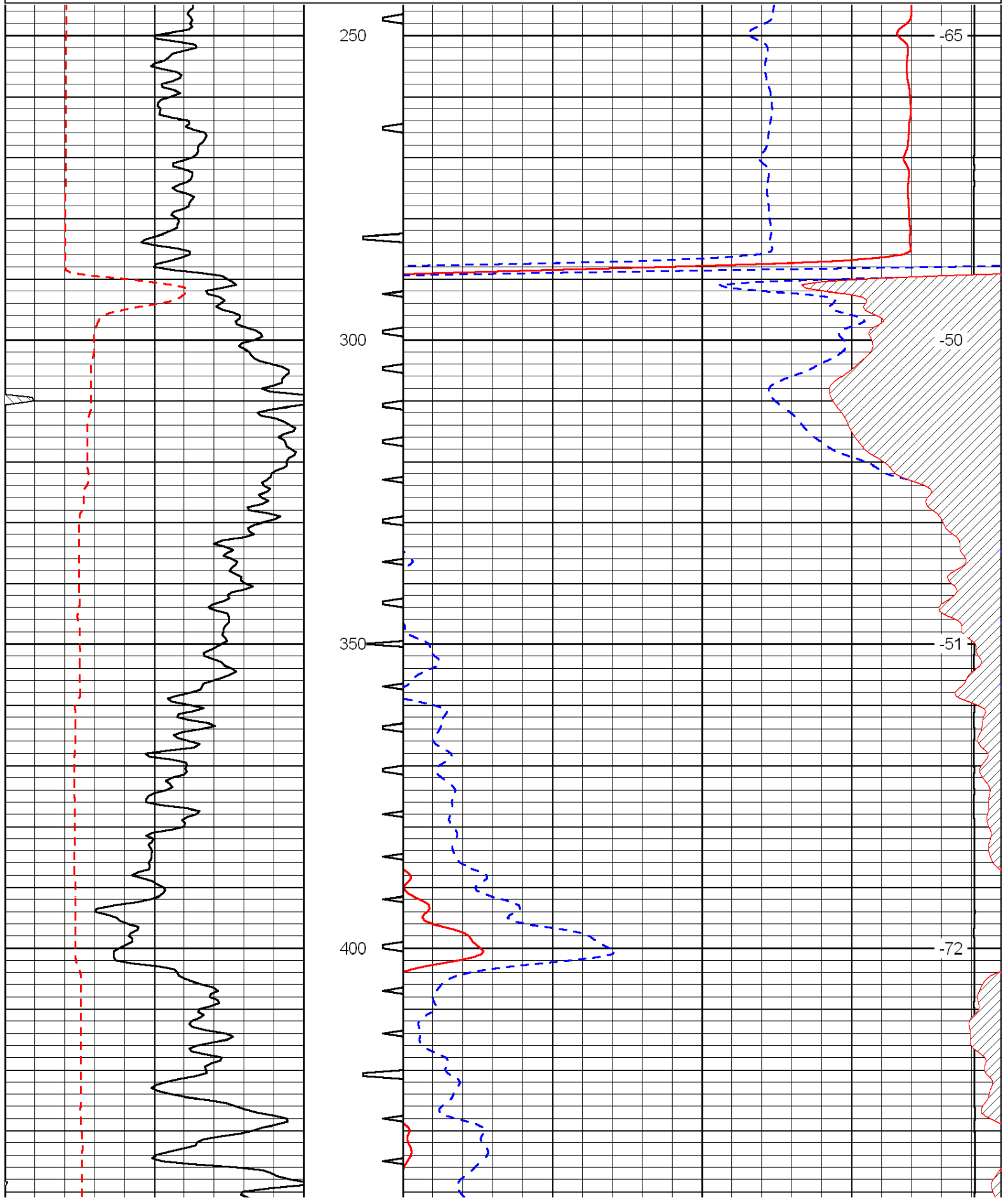
Comments

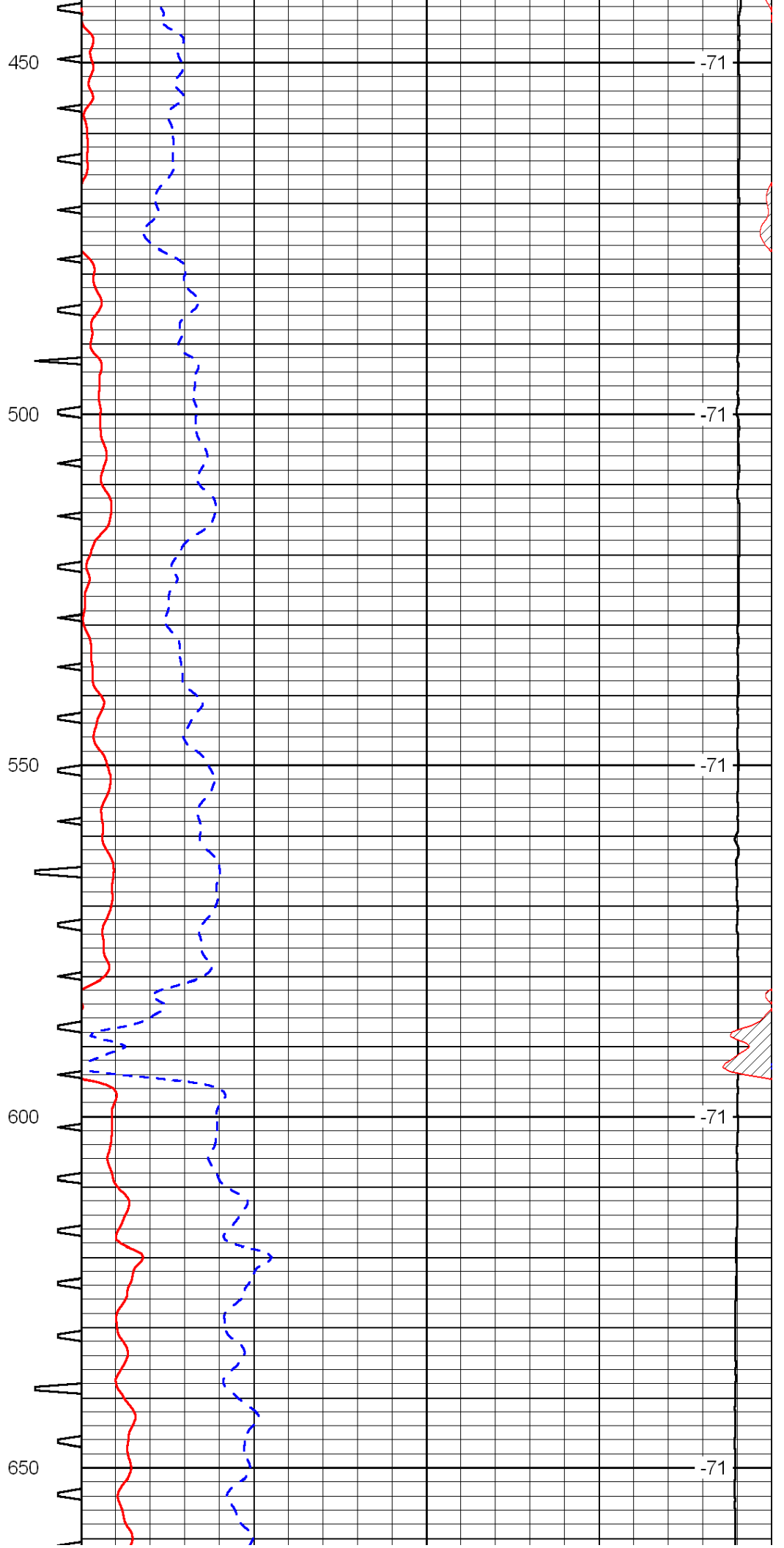
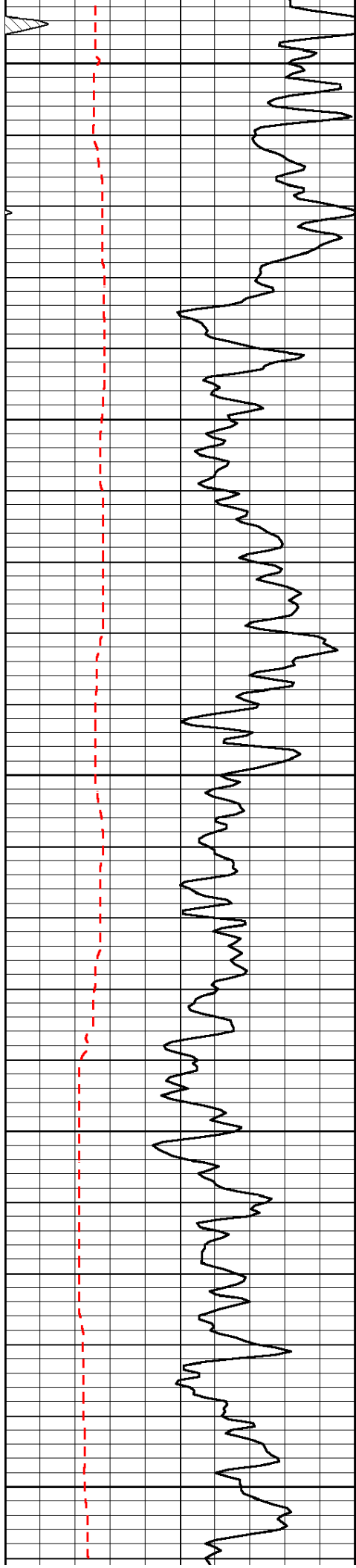
Thank you for using Log-Tech, Inc.  
(785) 625-3858

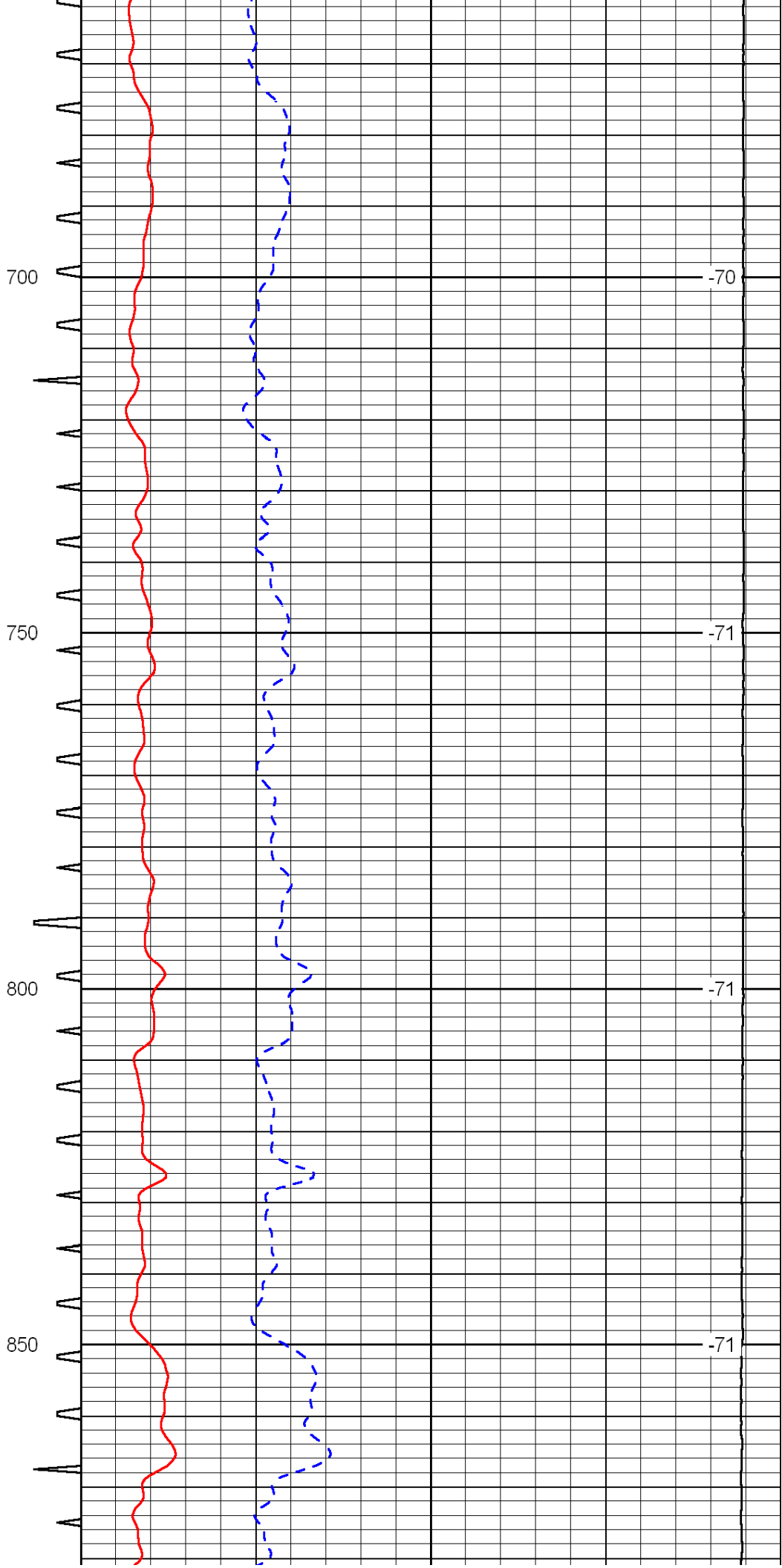
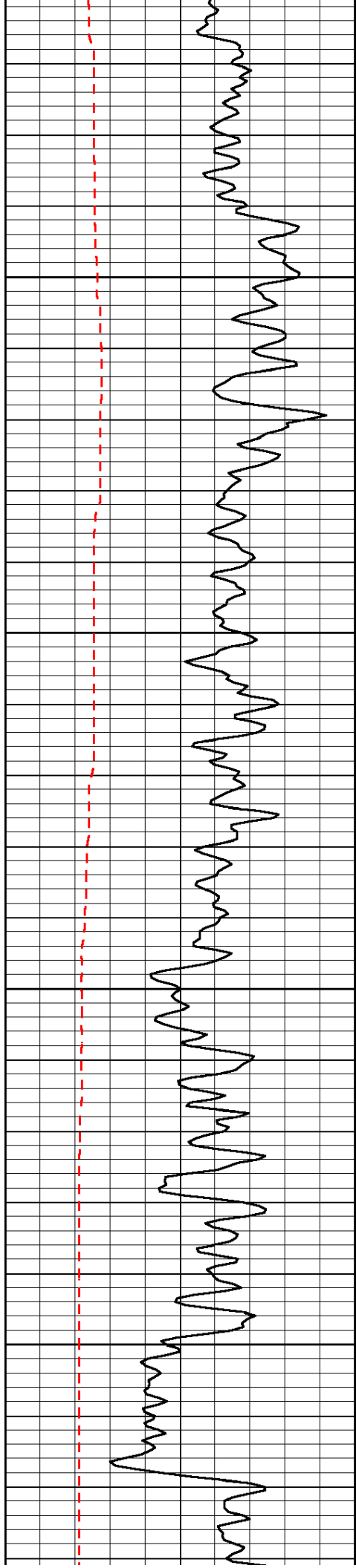
Oakley KS, 2 West,  
On Old 40,  
South Into

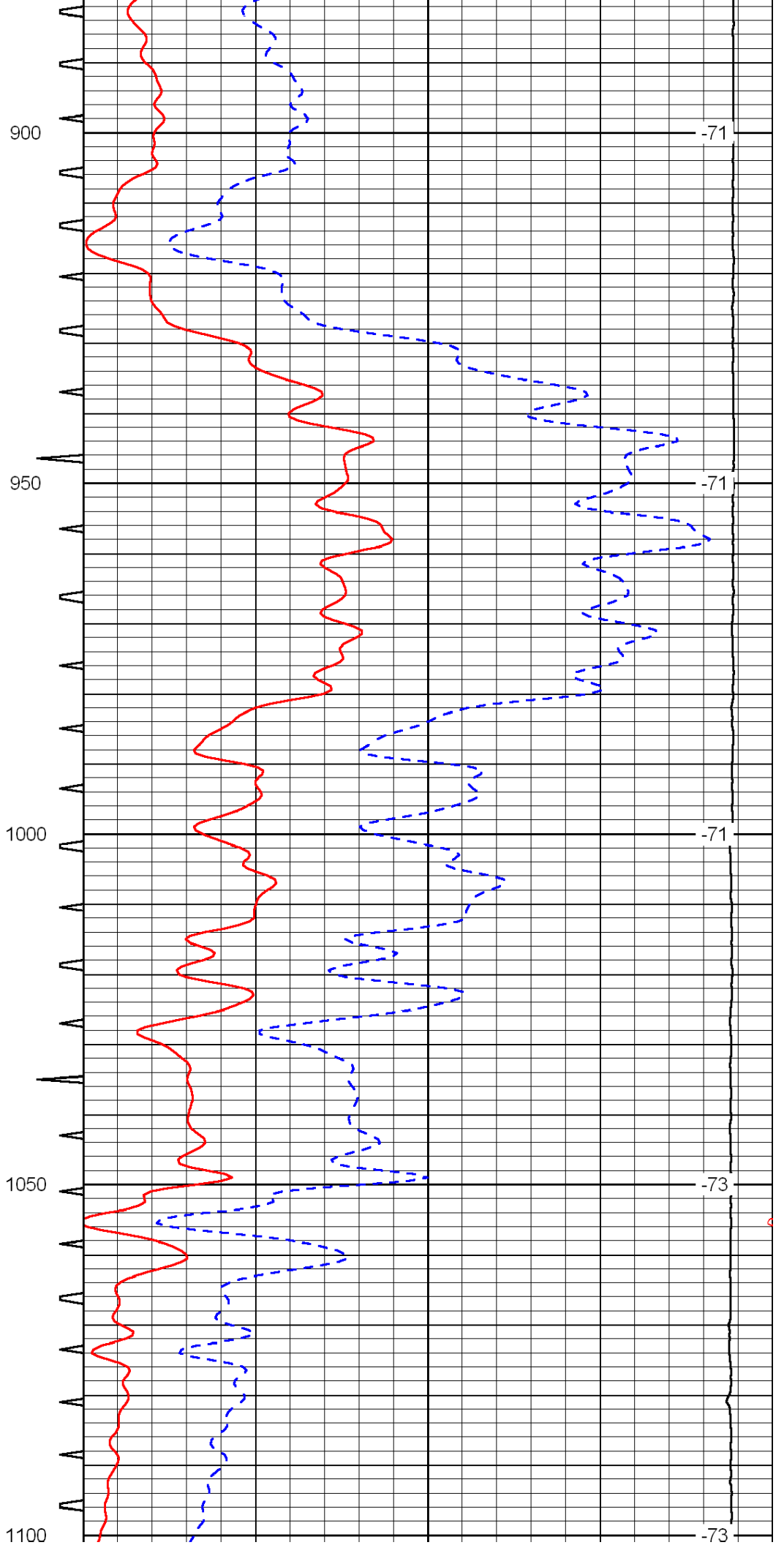
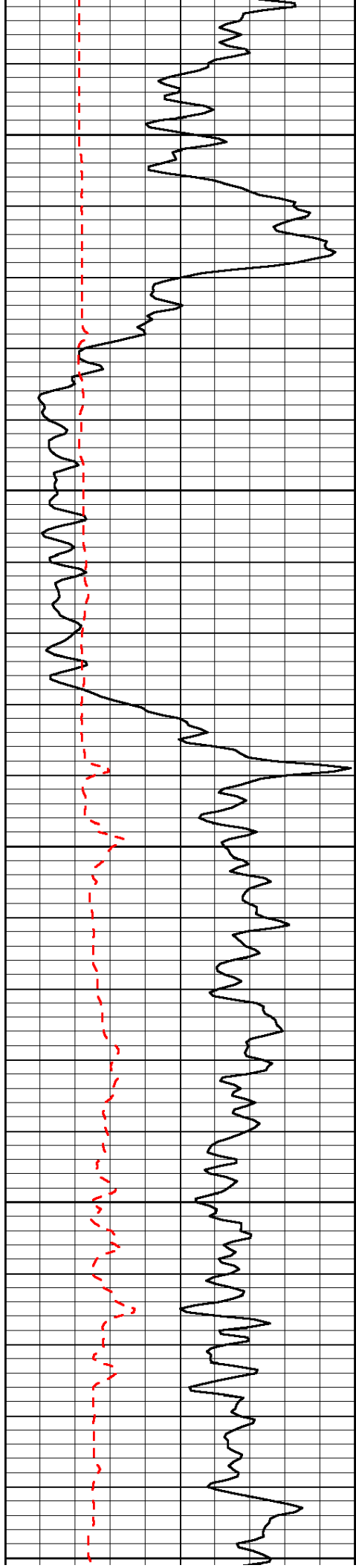
0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300	5	0	SPOR	-10
6	Caliper (GAPI)	16		15000	LTEN (lb)	0

LSPD

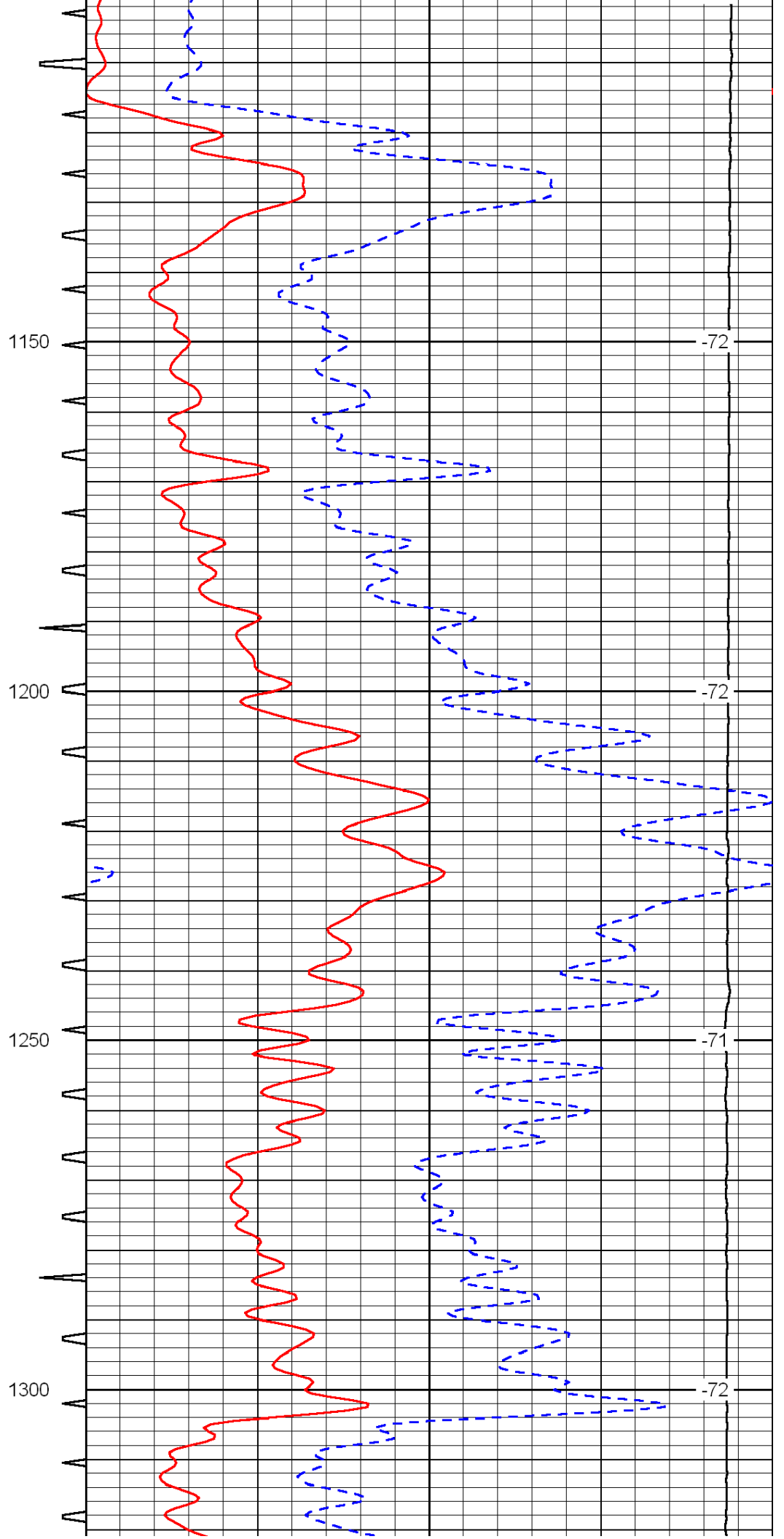
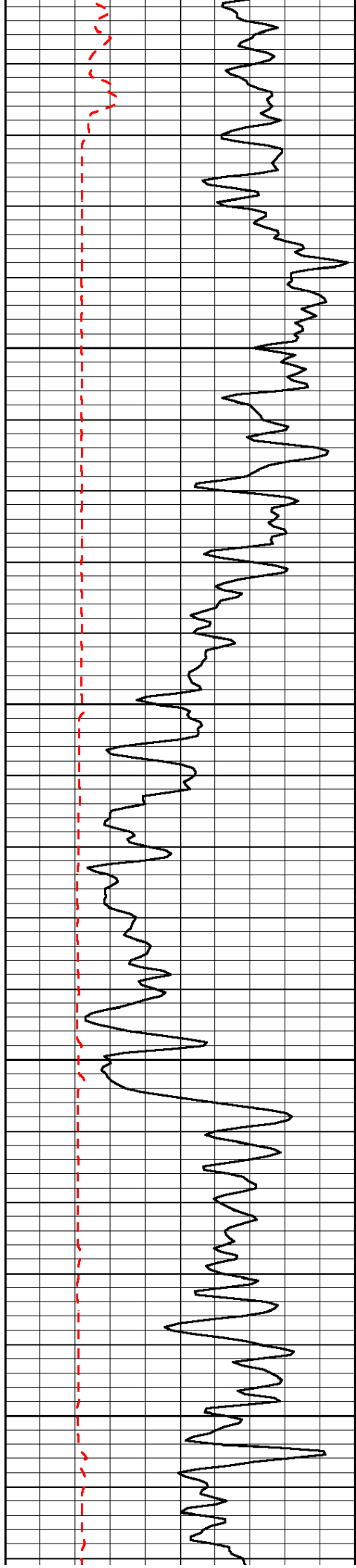


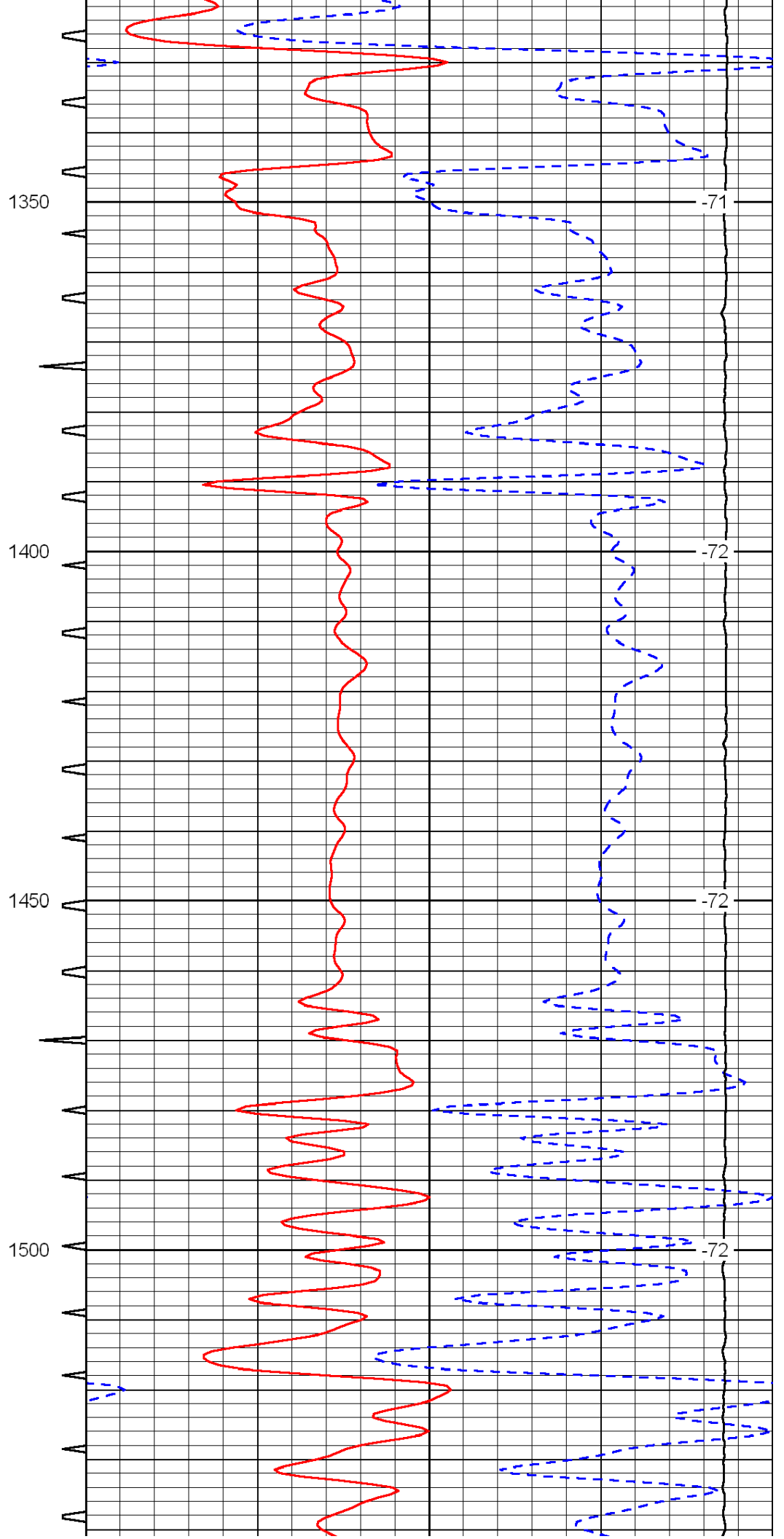
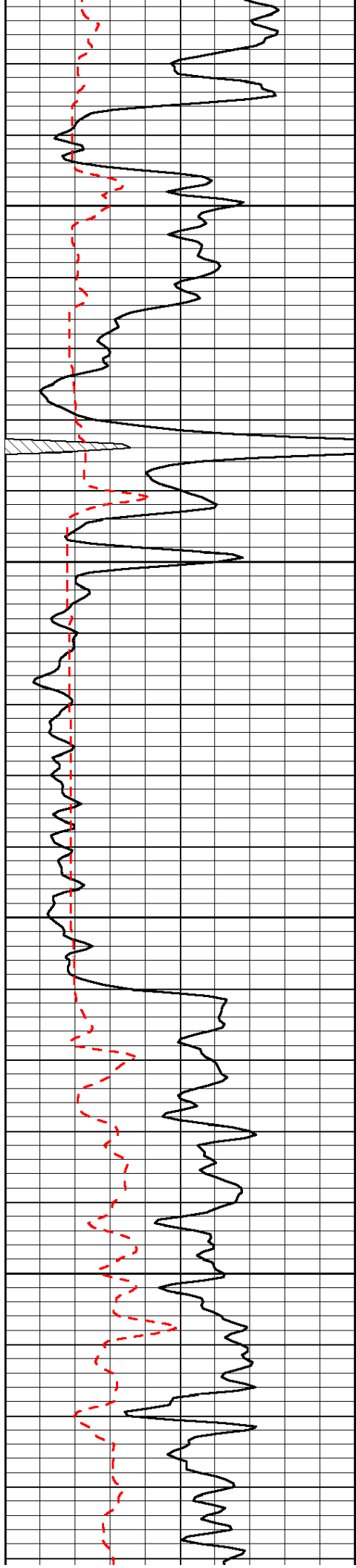


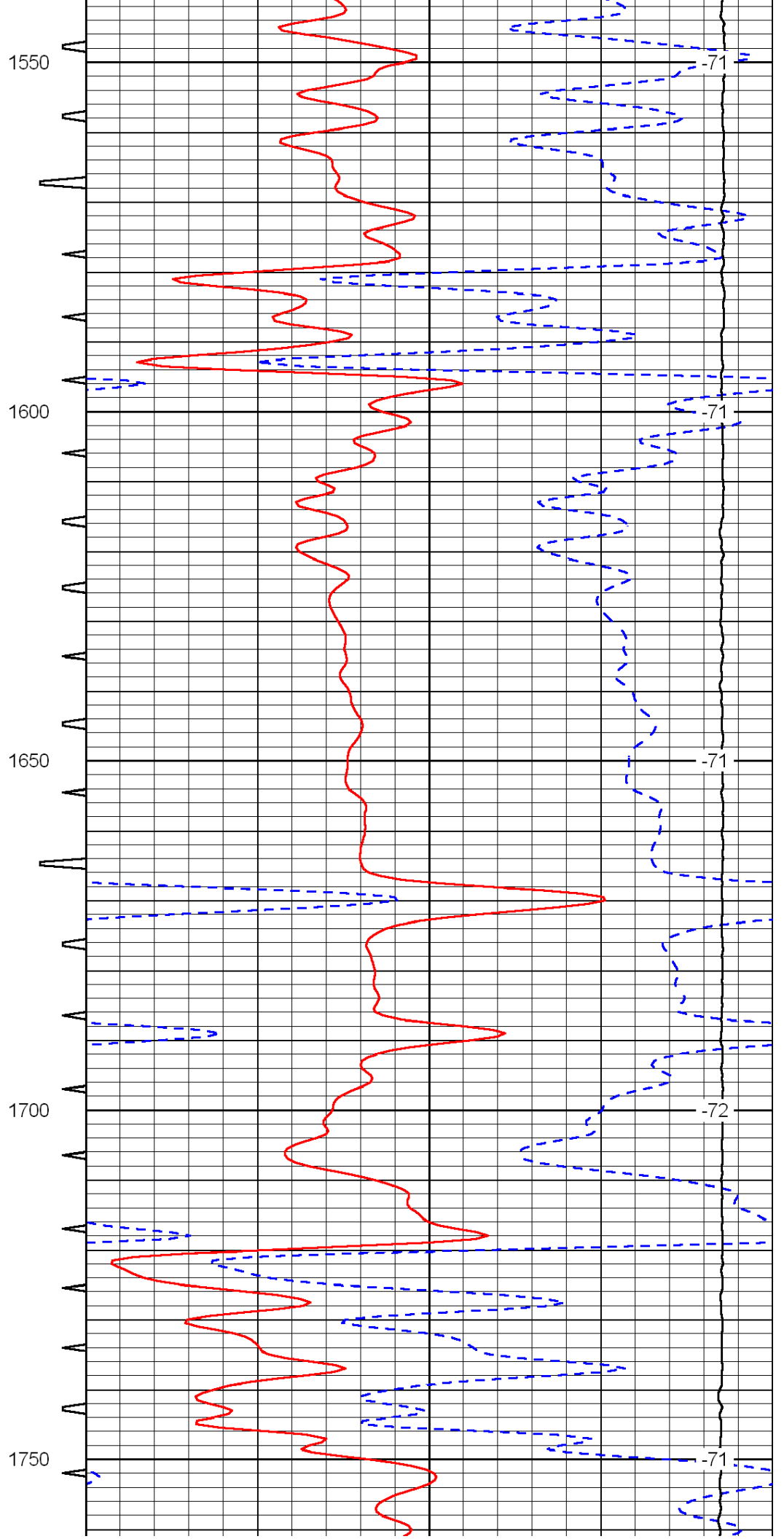
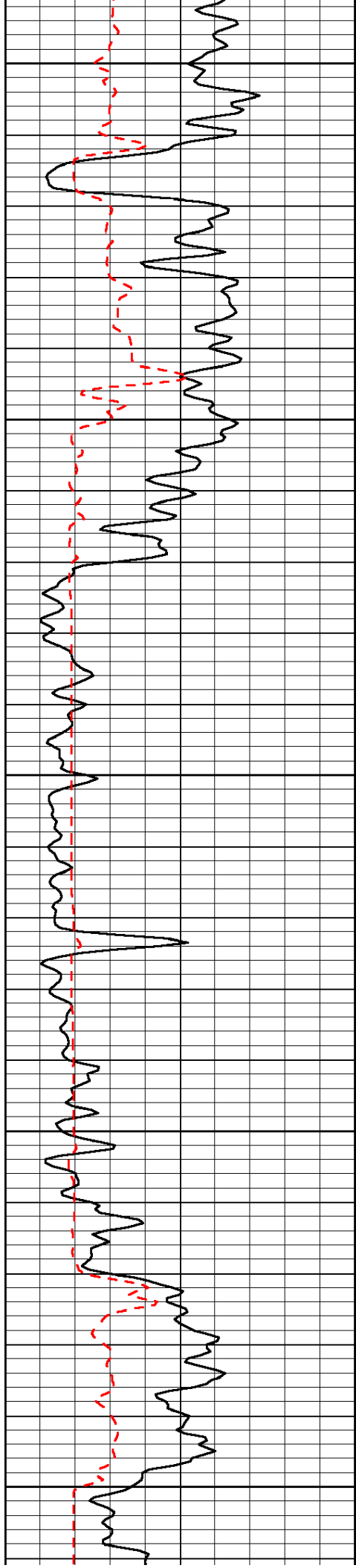


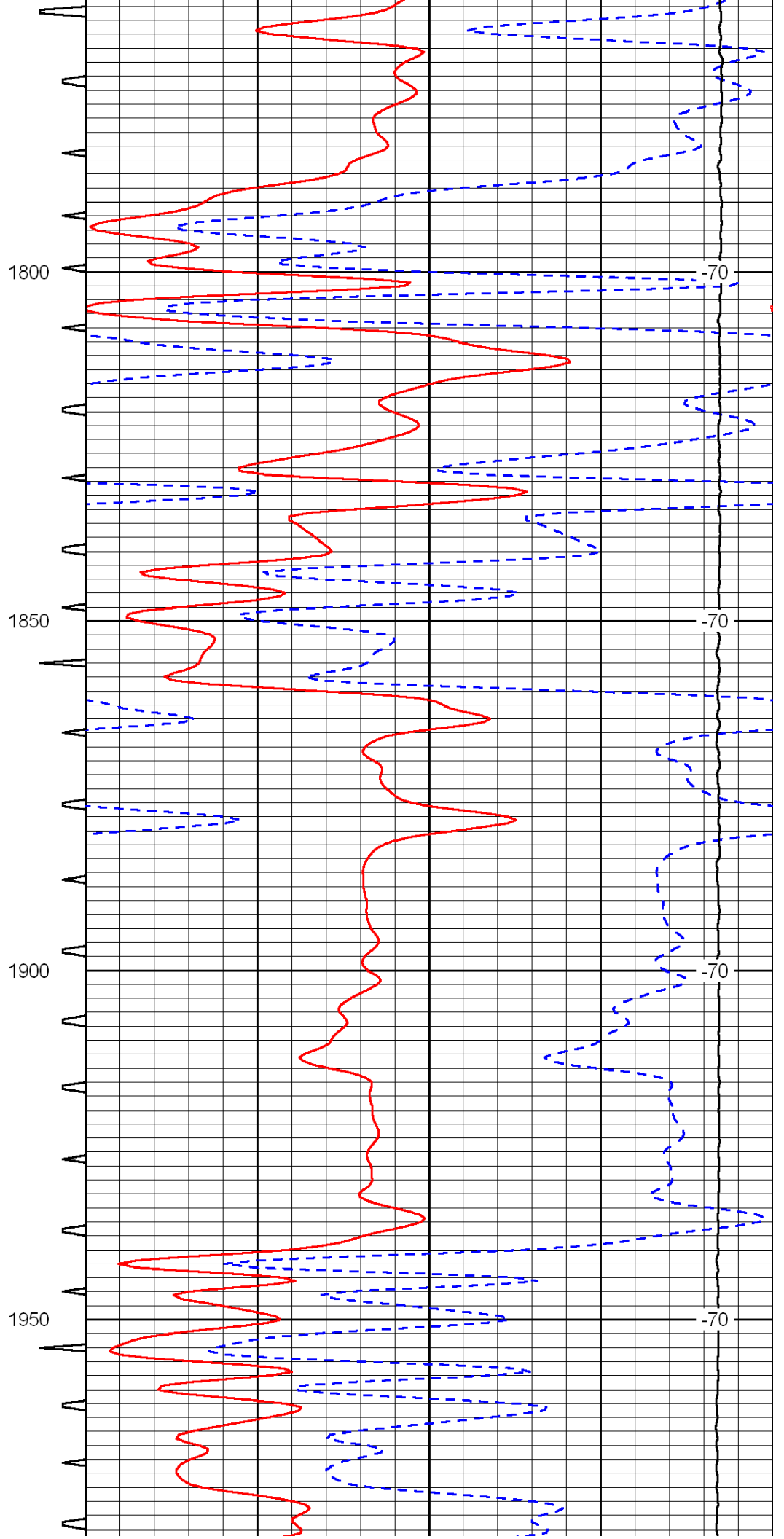
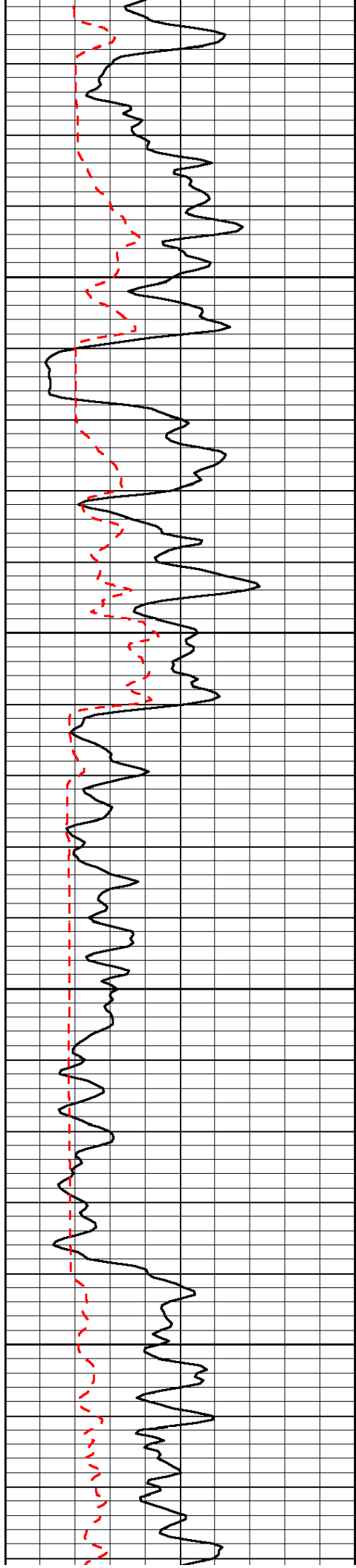


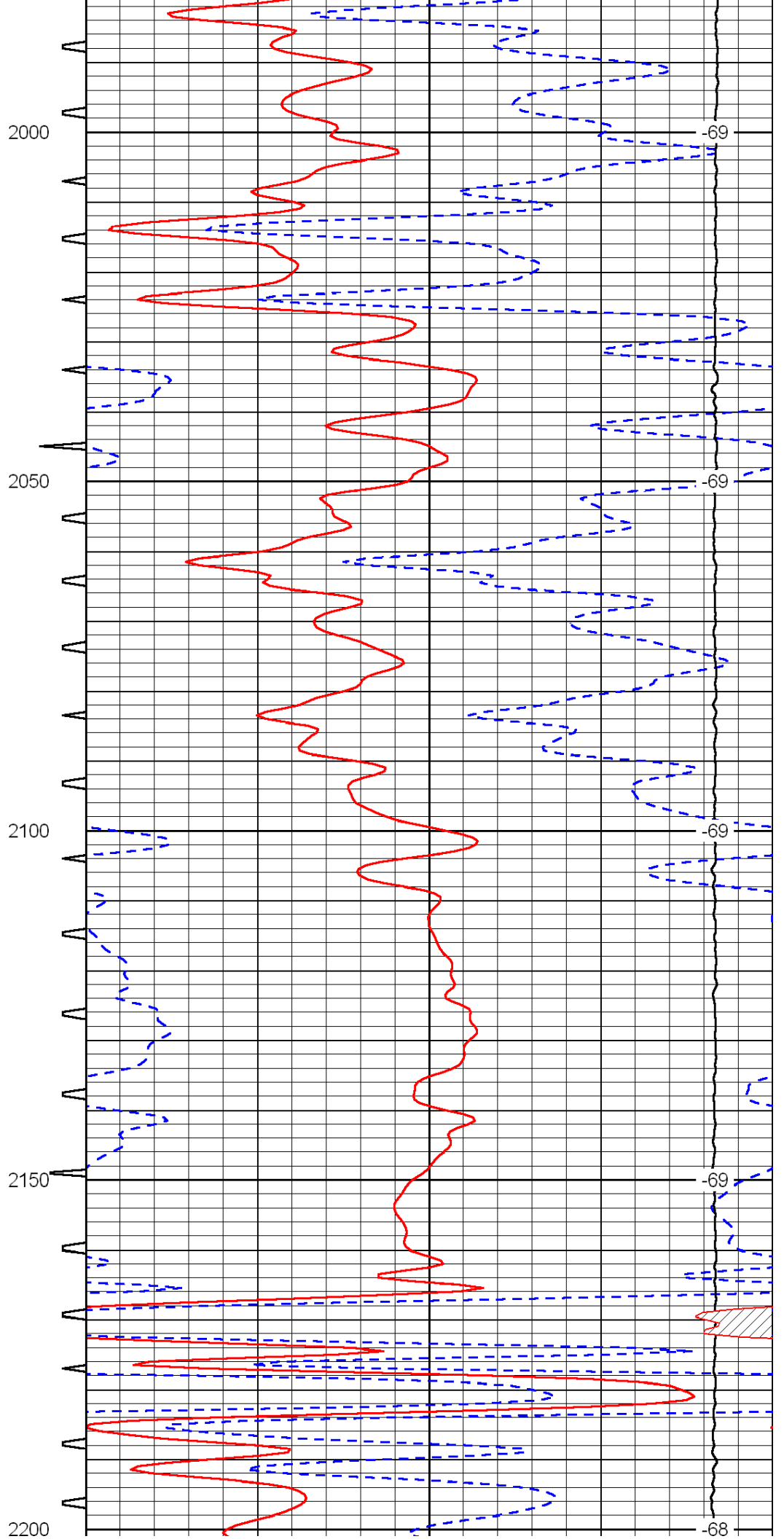
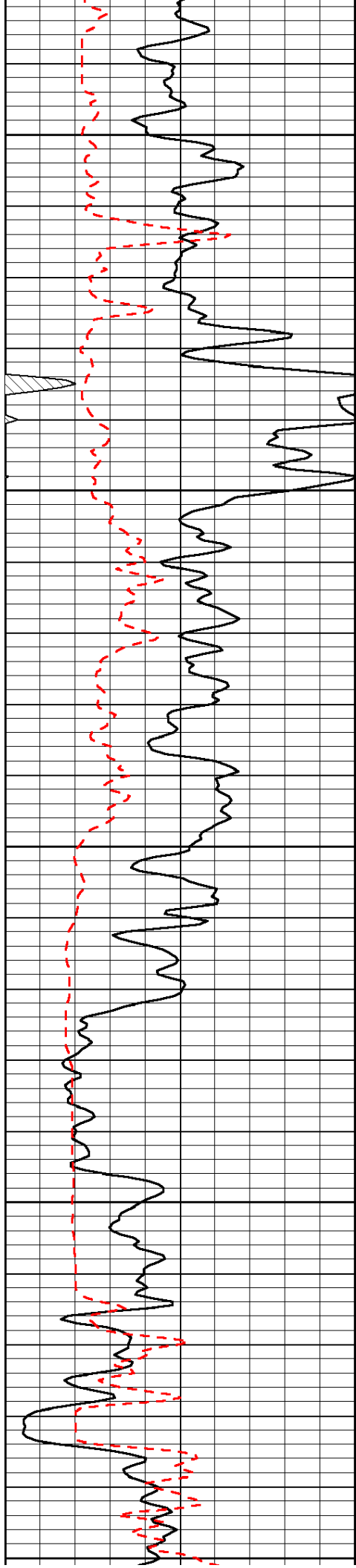


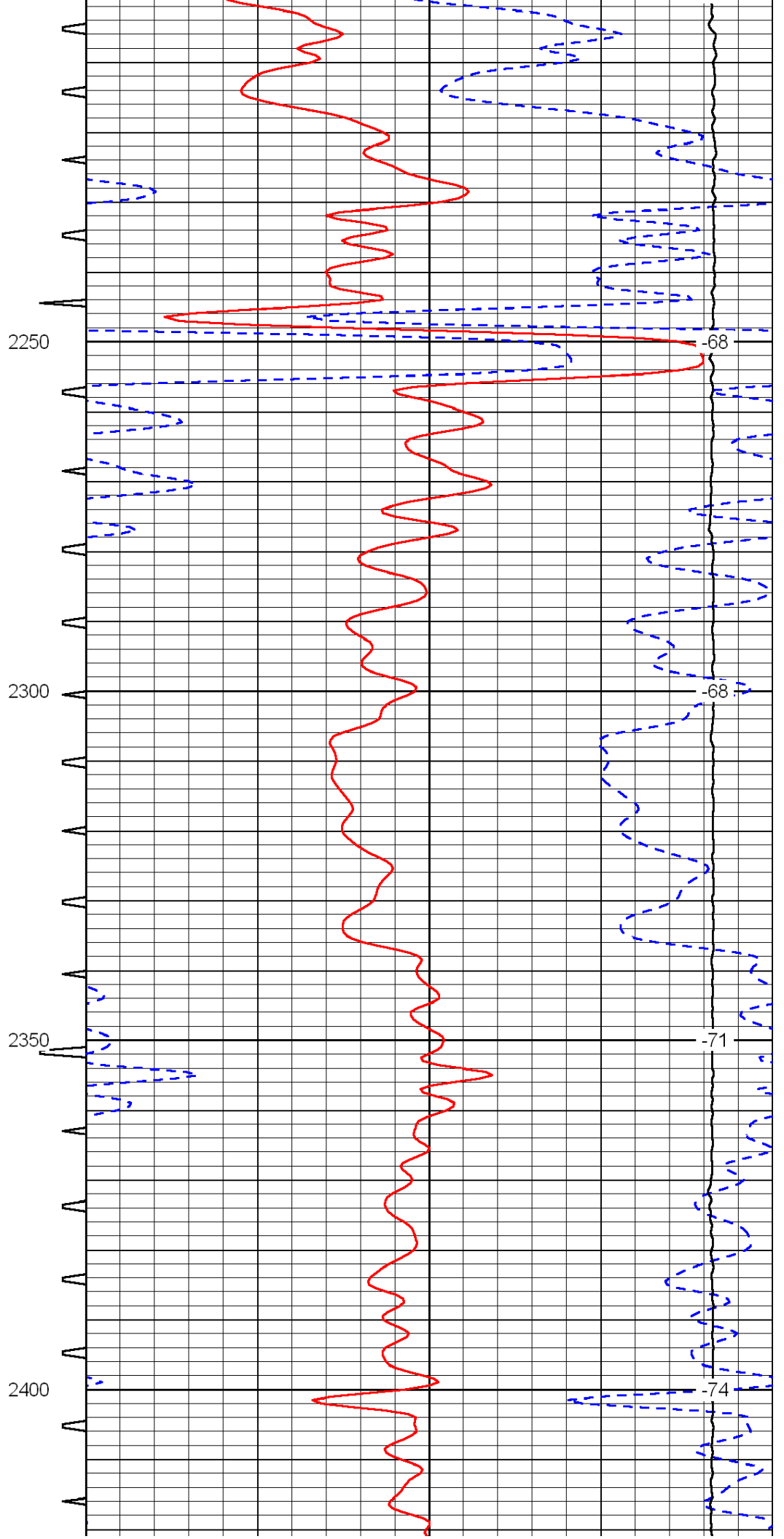
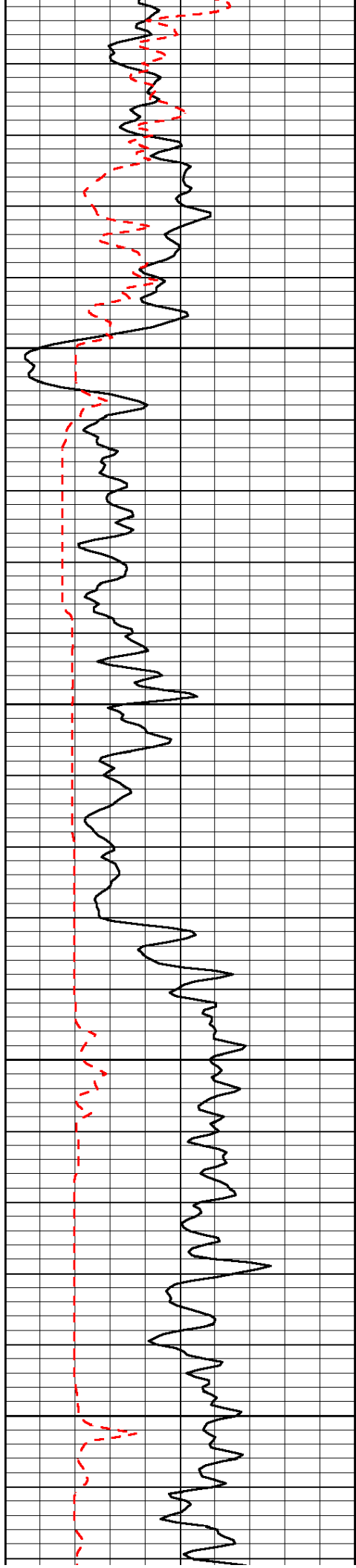


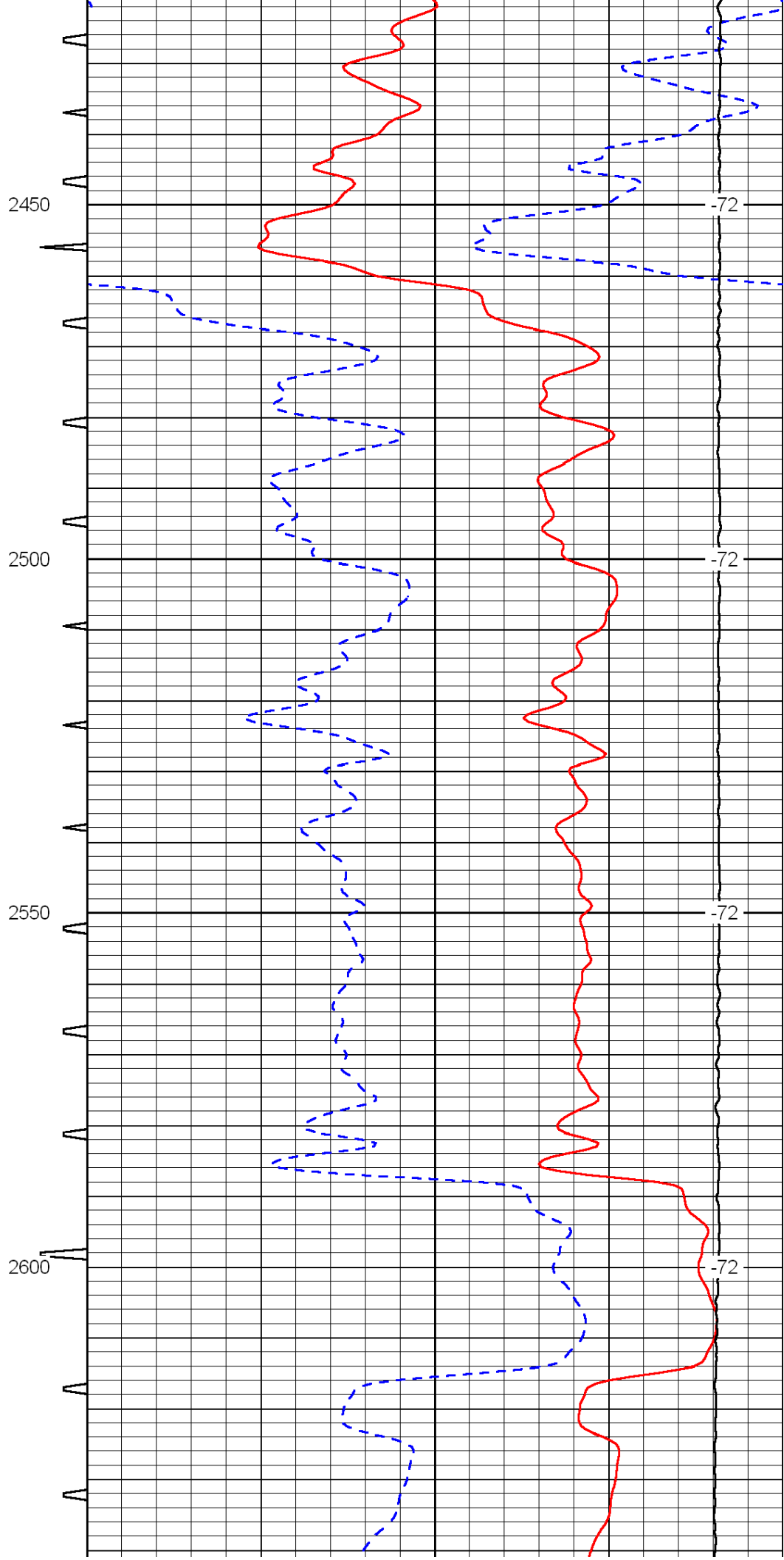
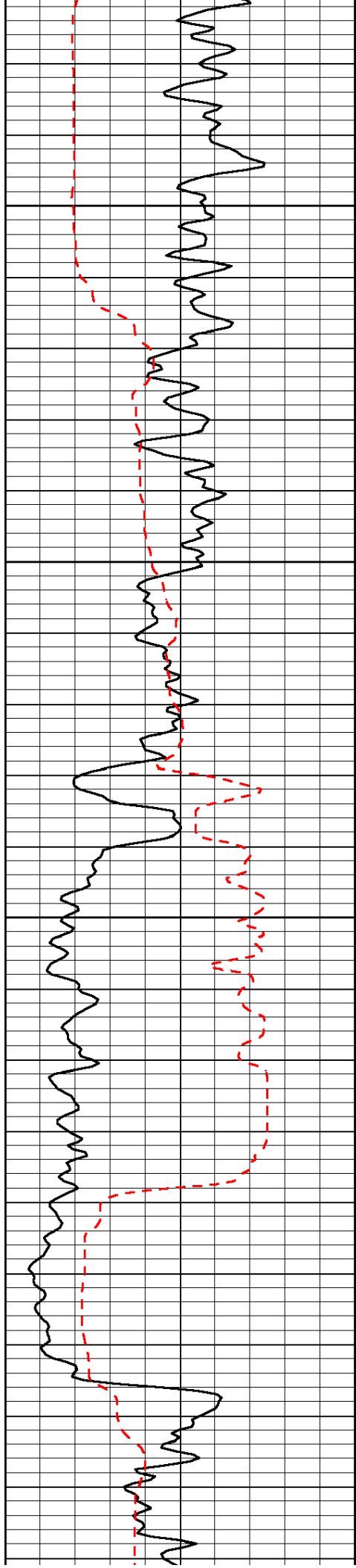


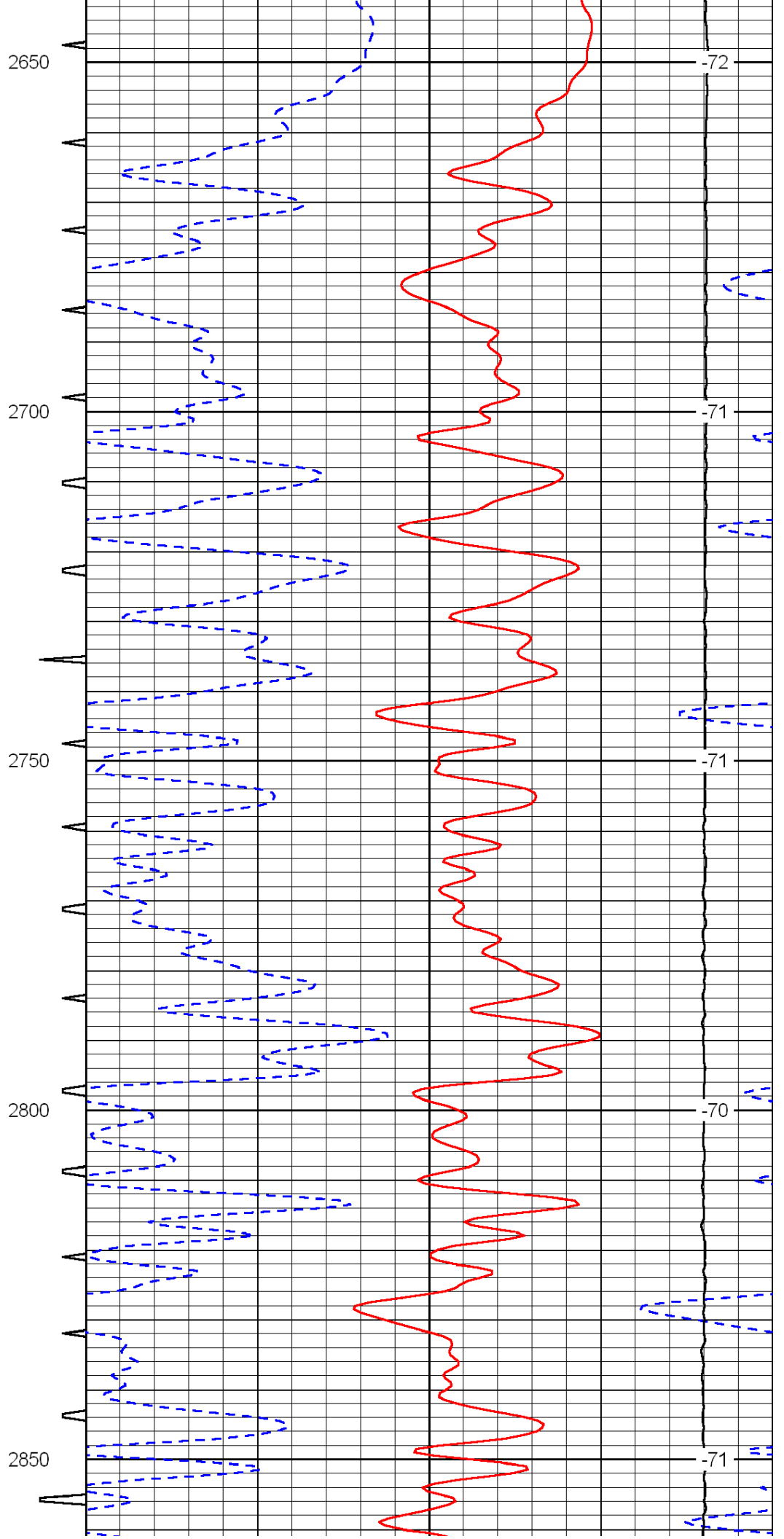
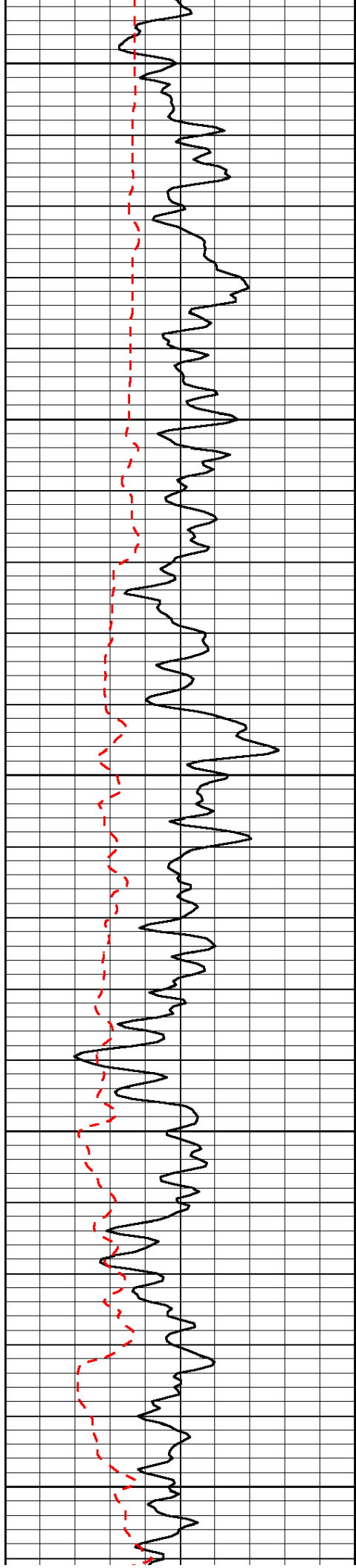




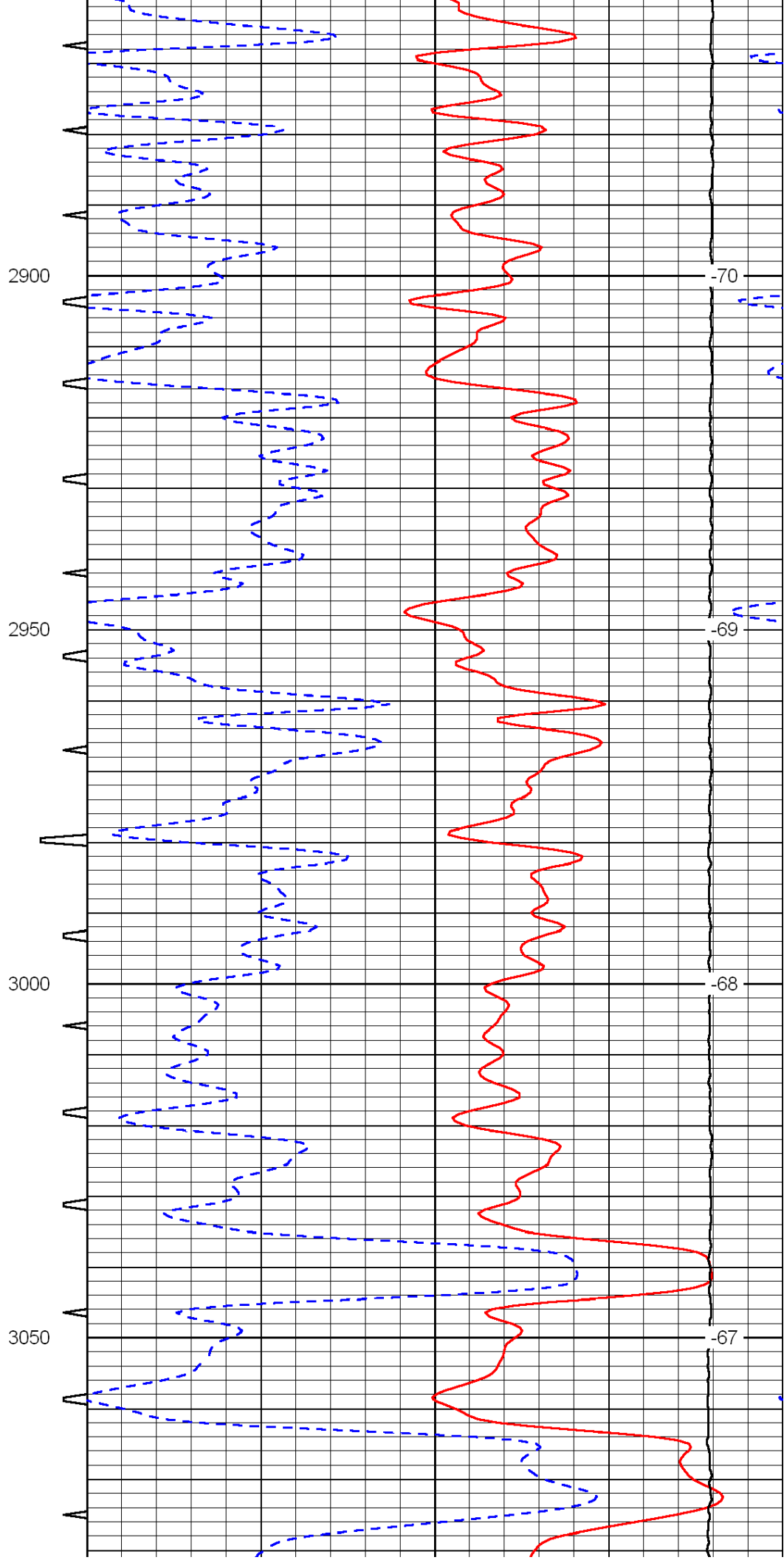
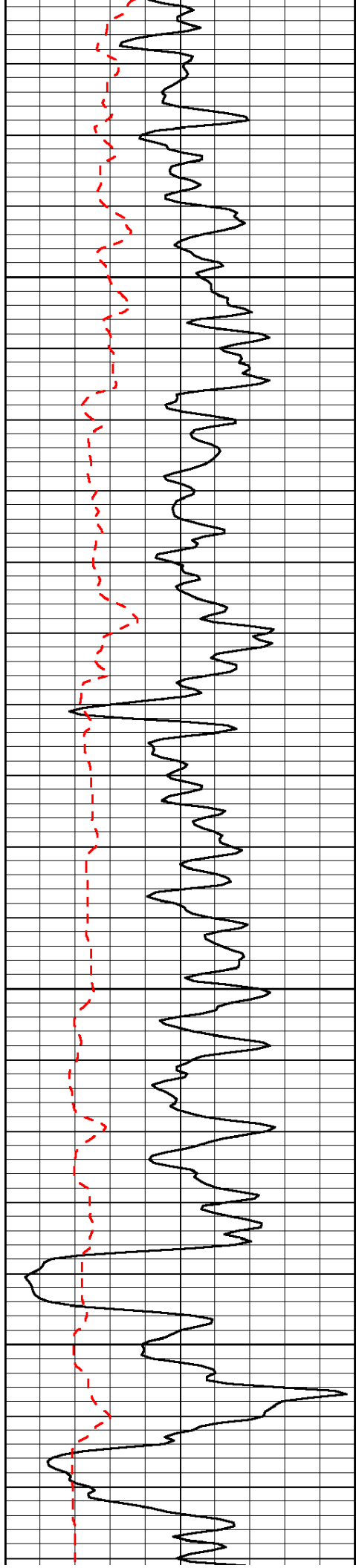


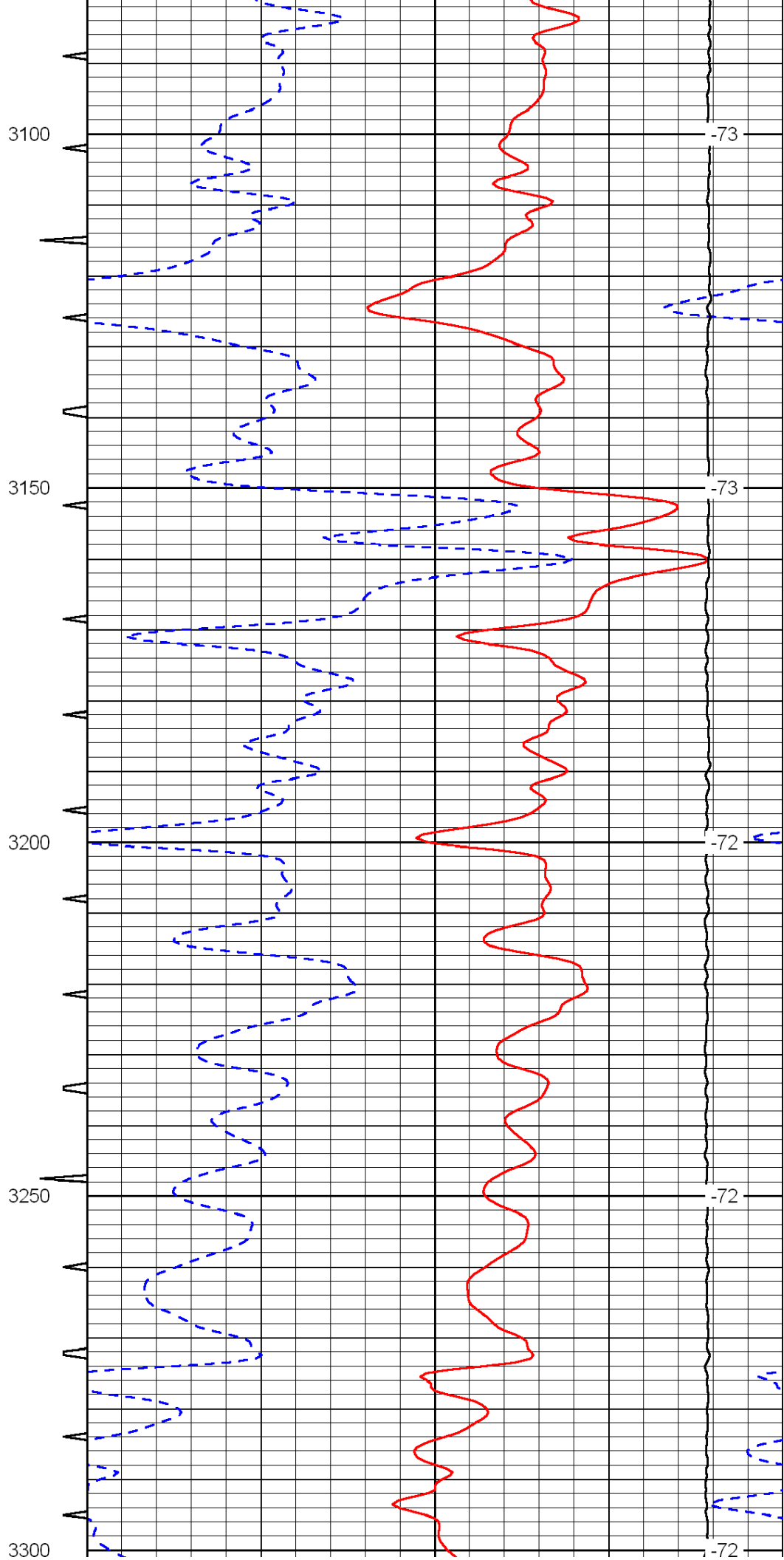
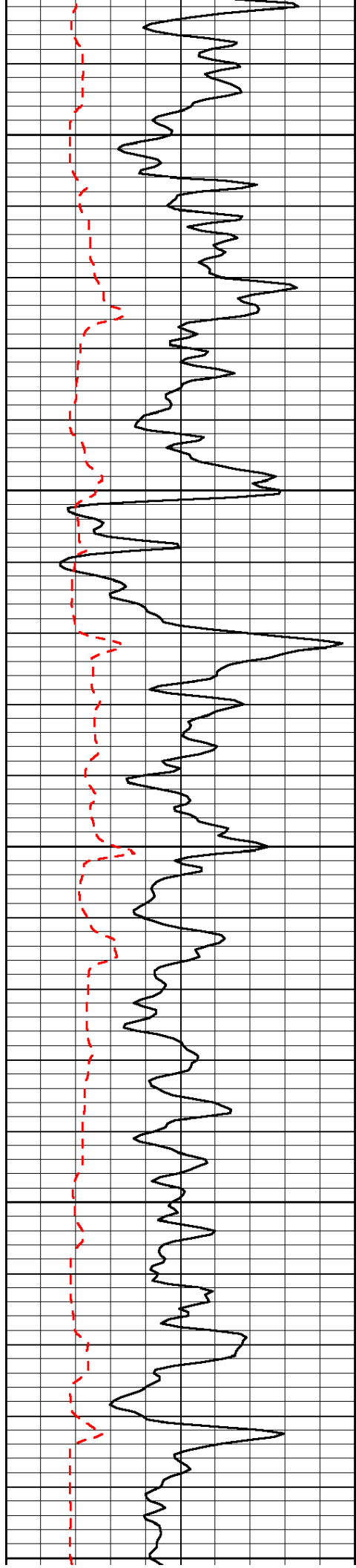


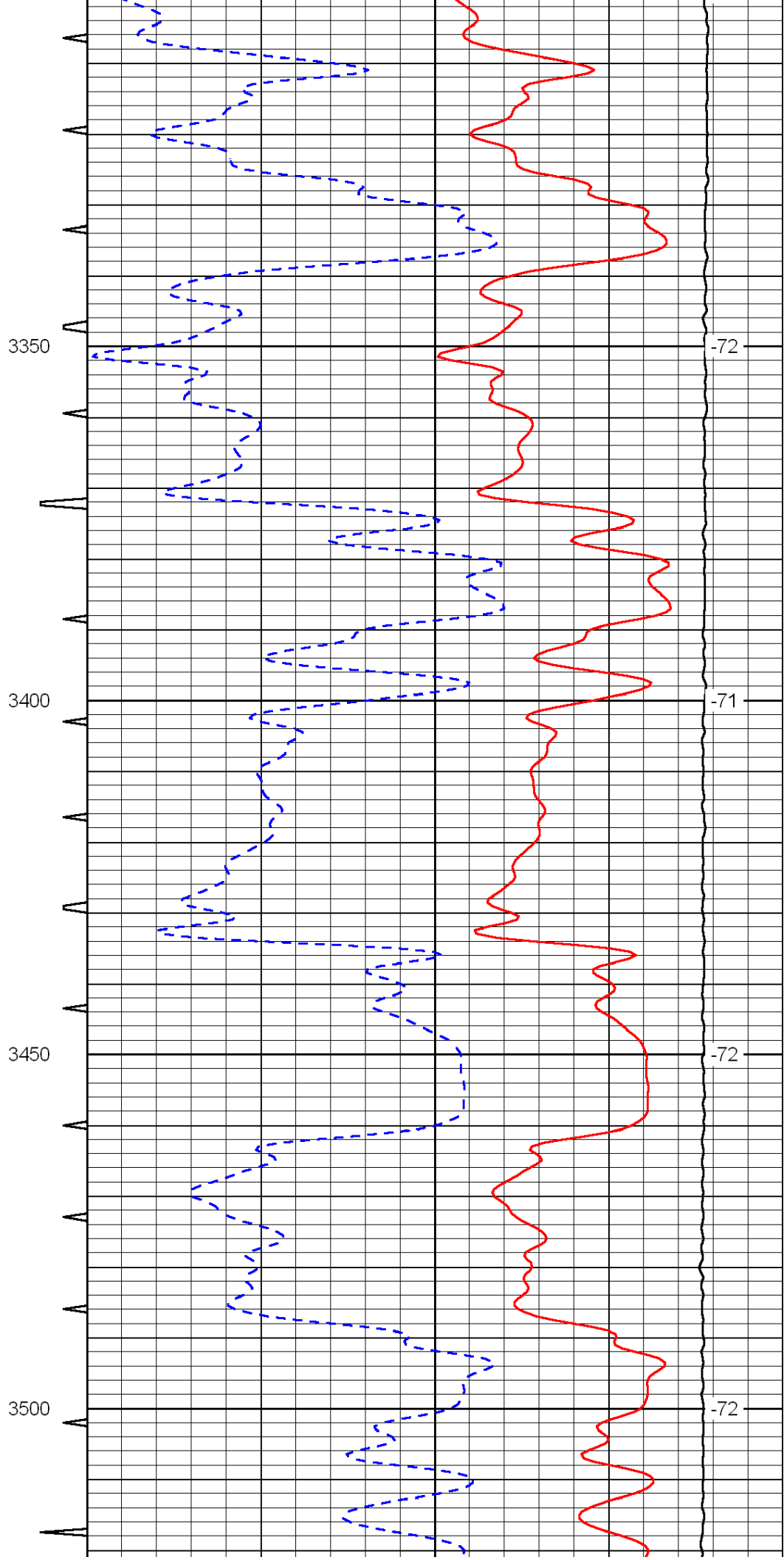
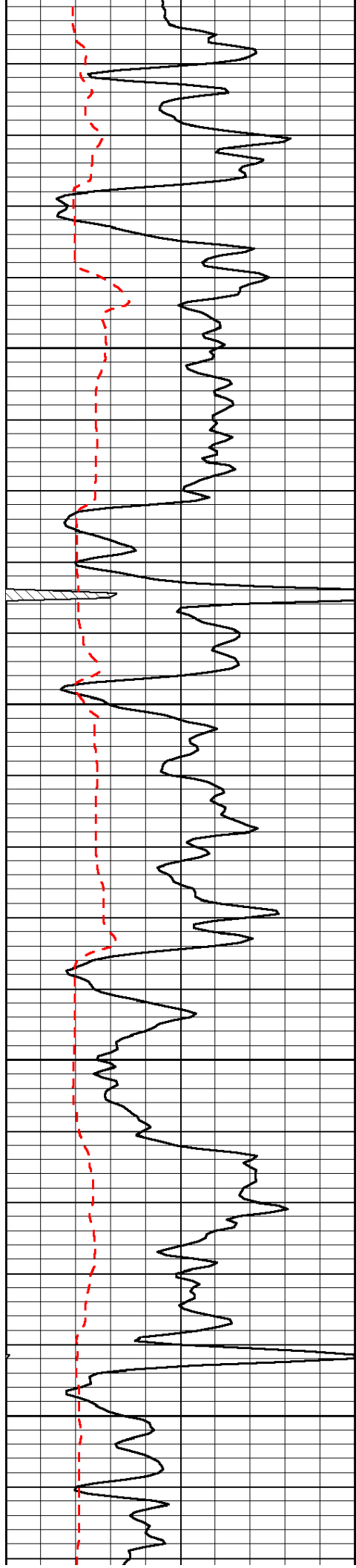


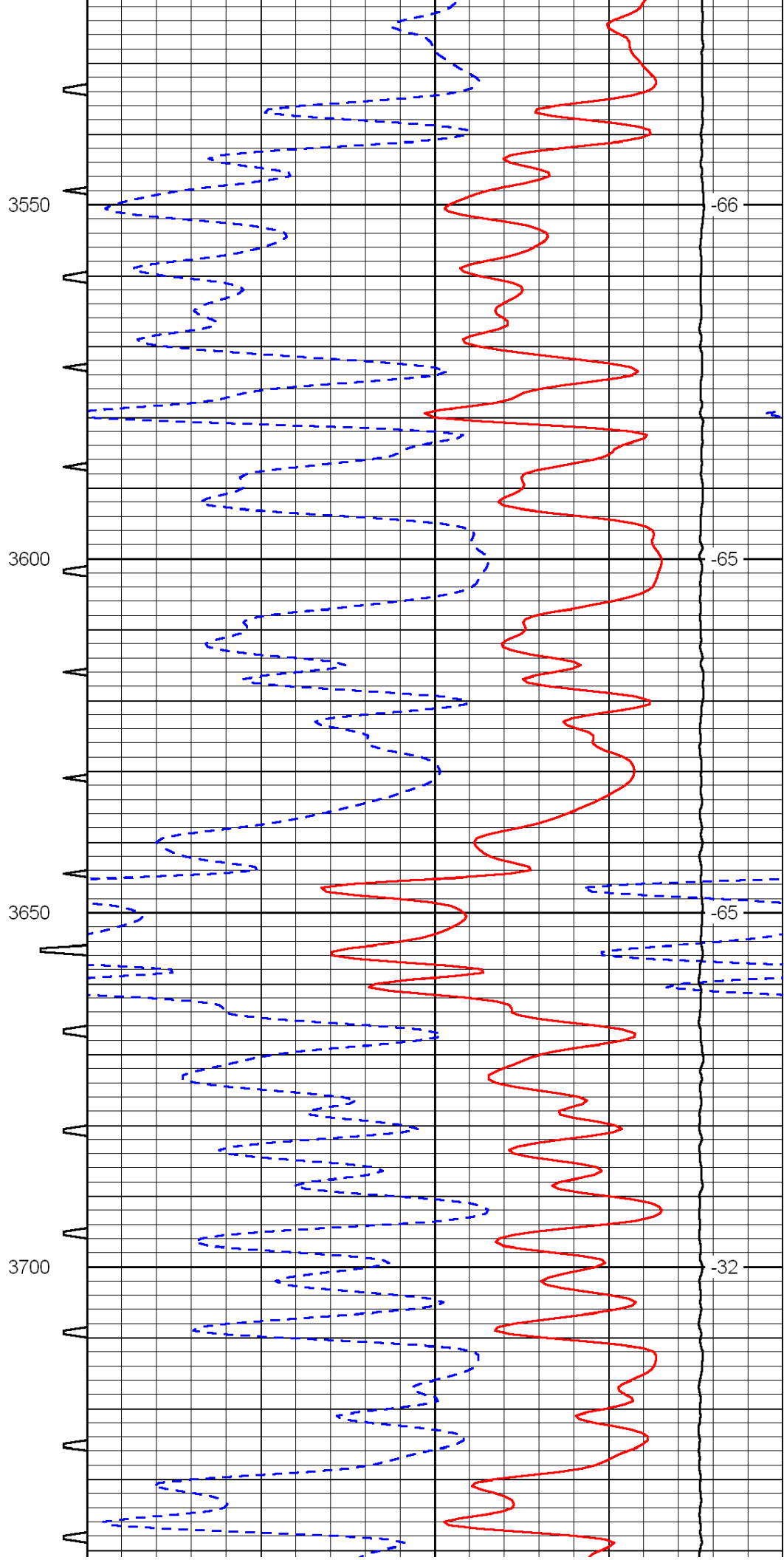
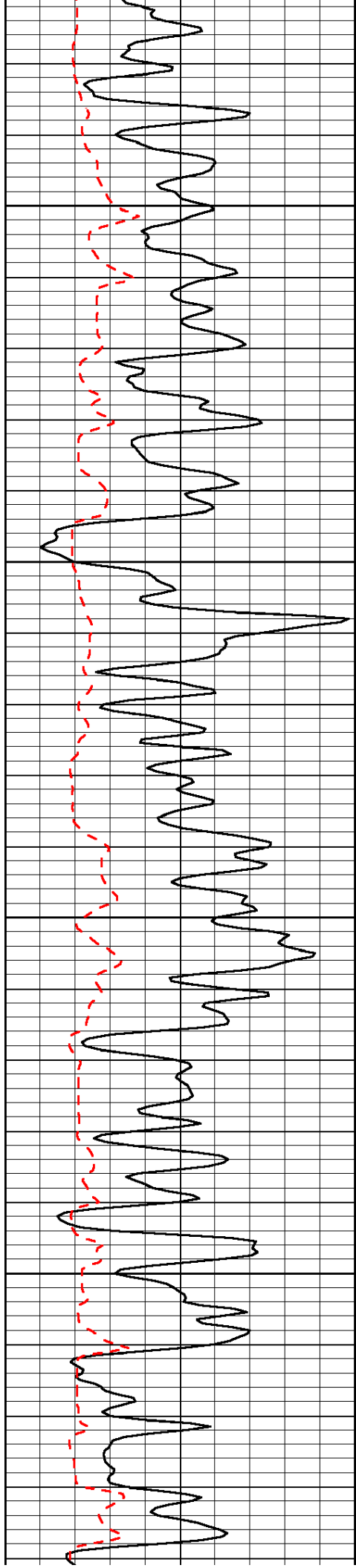


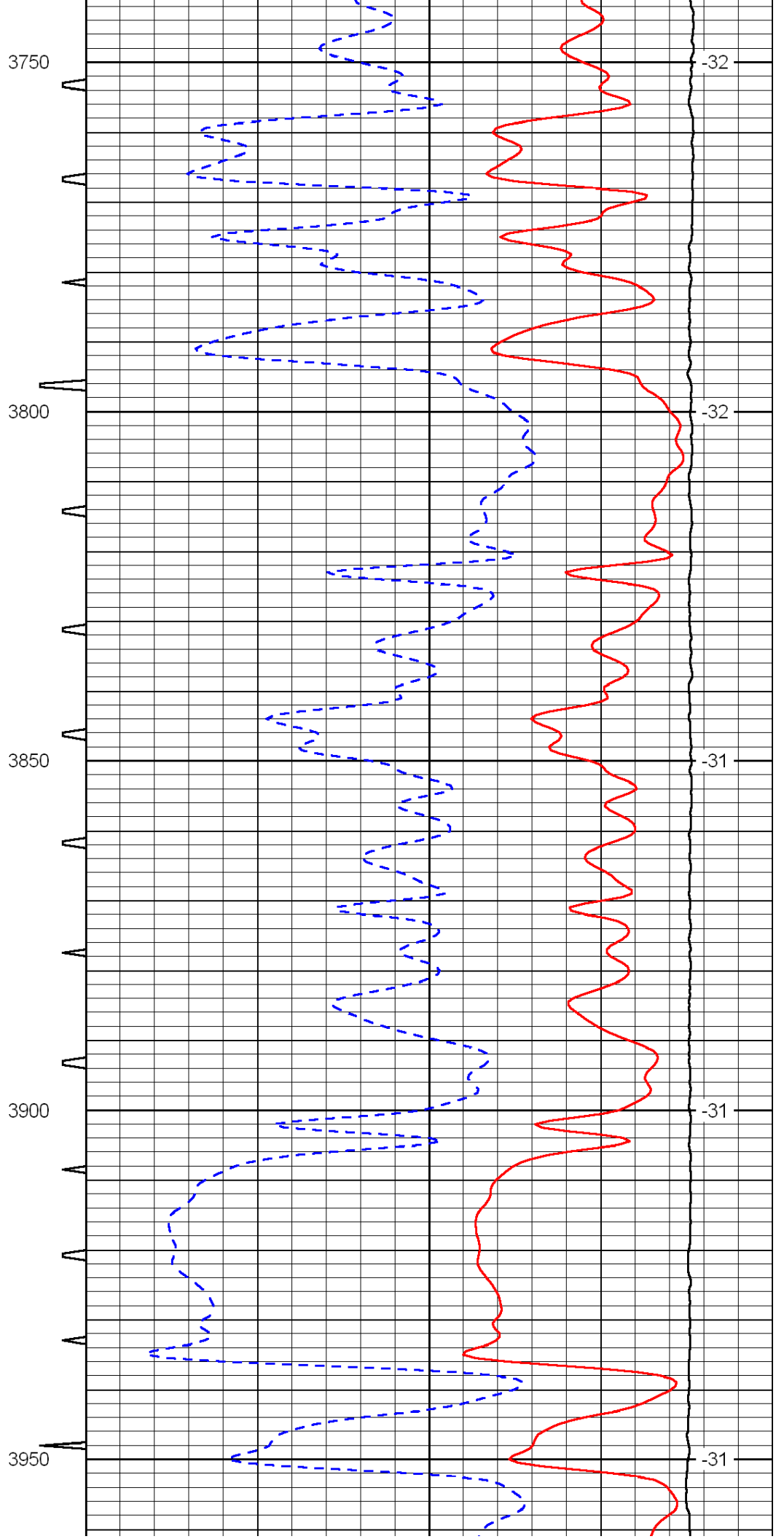
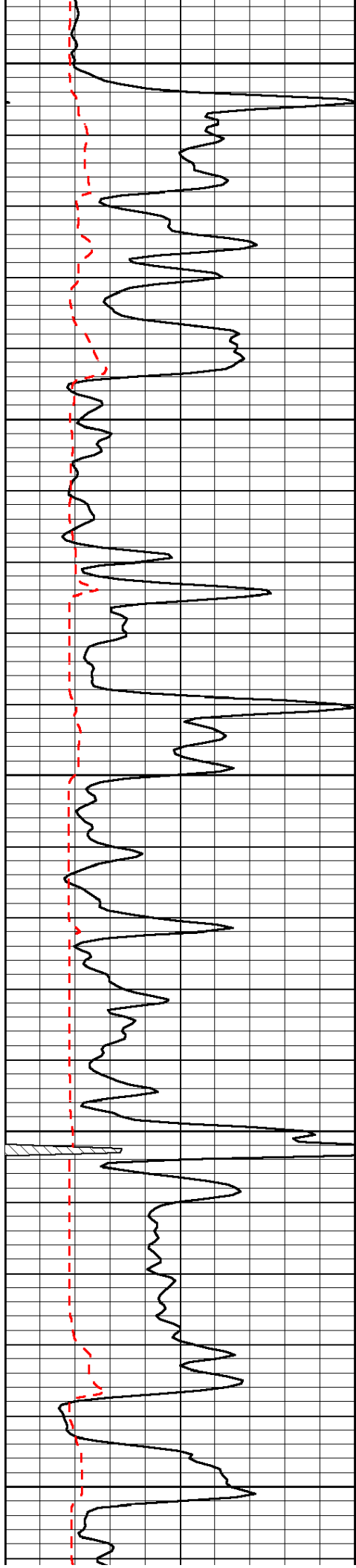


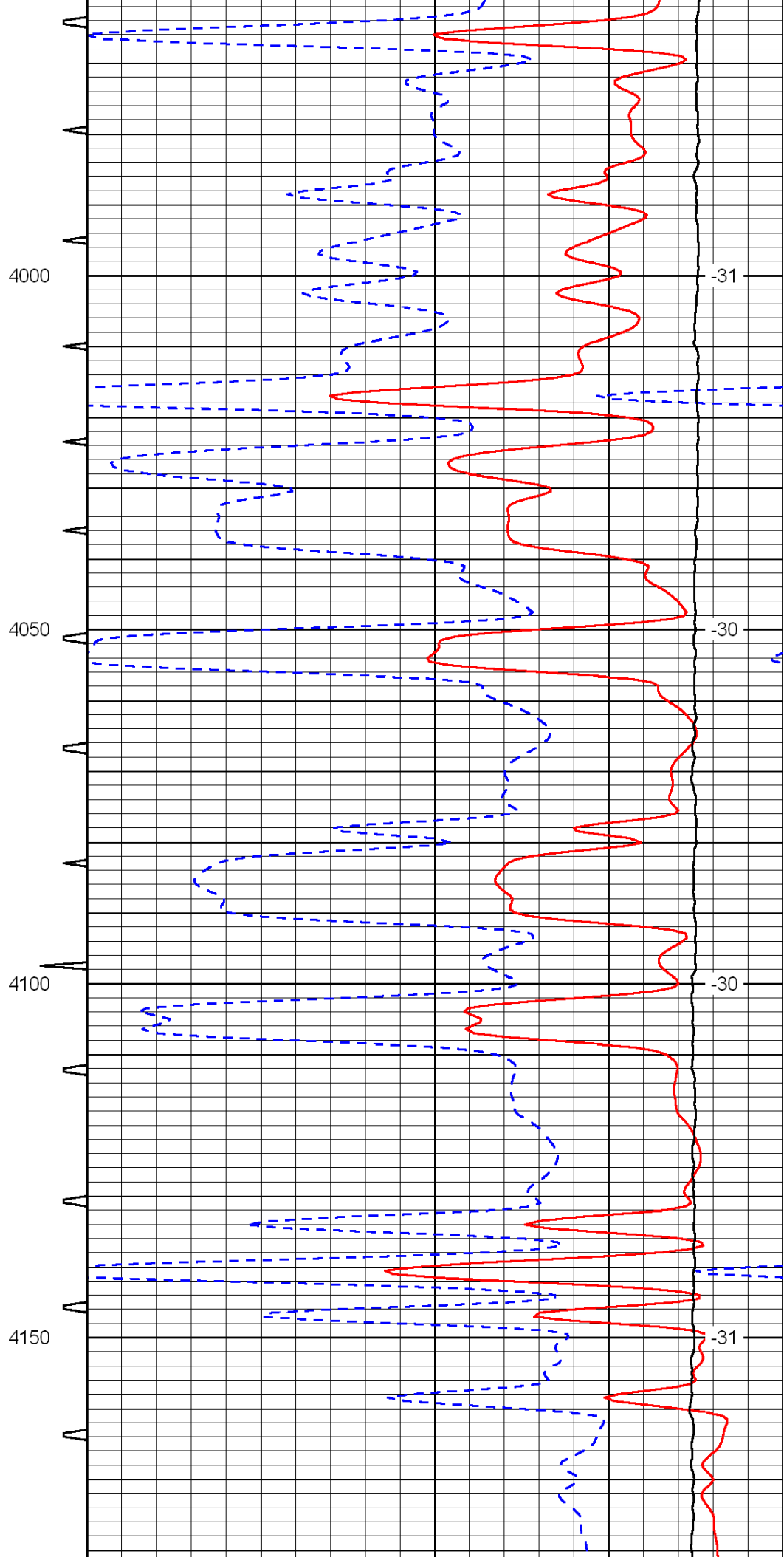
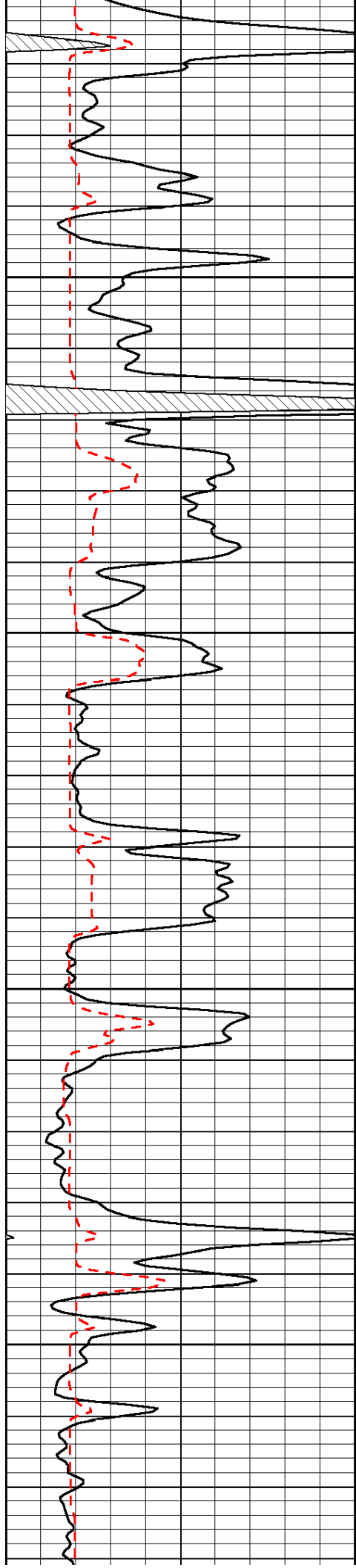


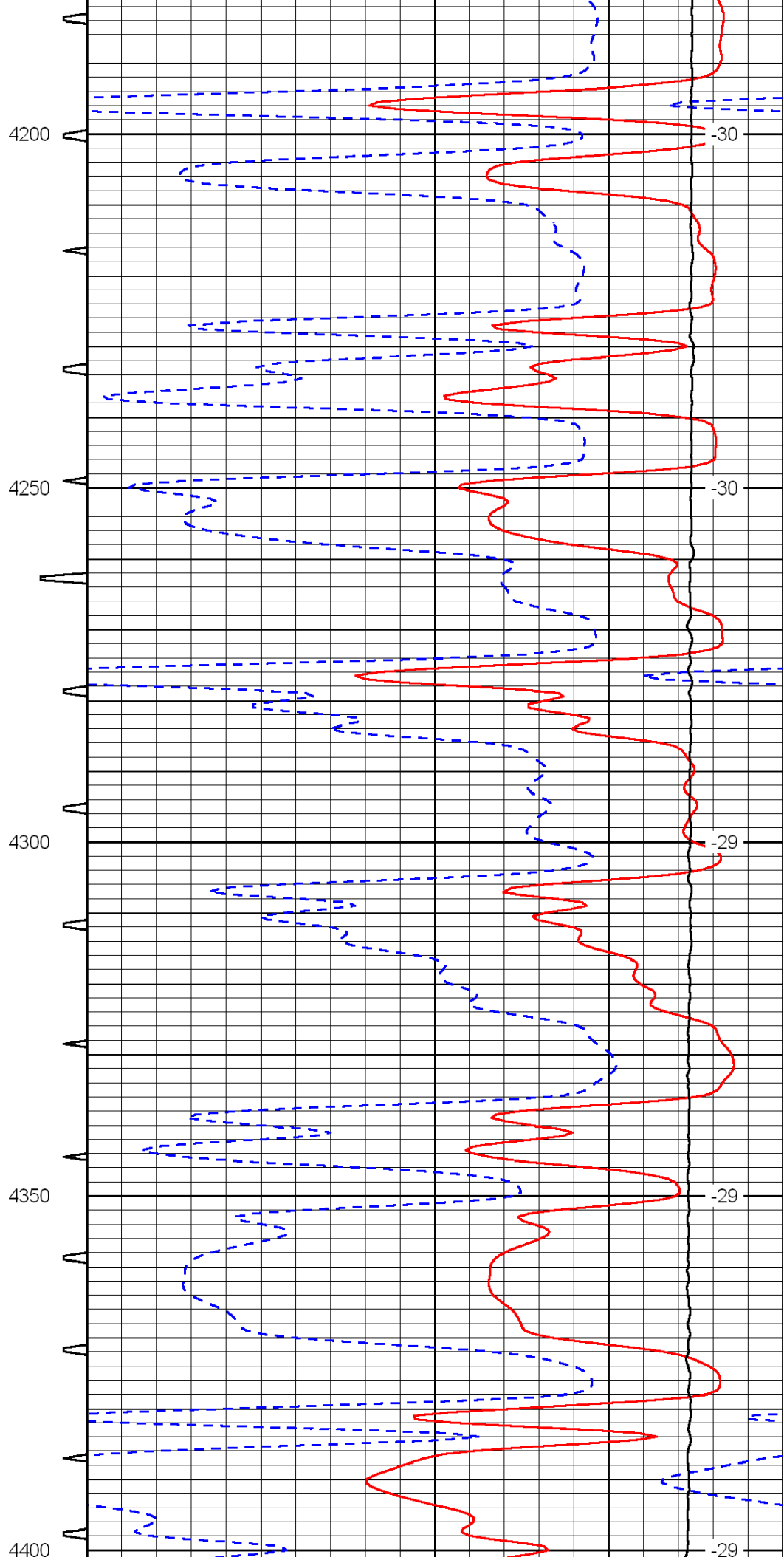
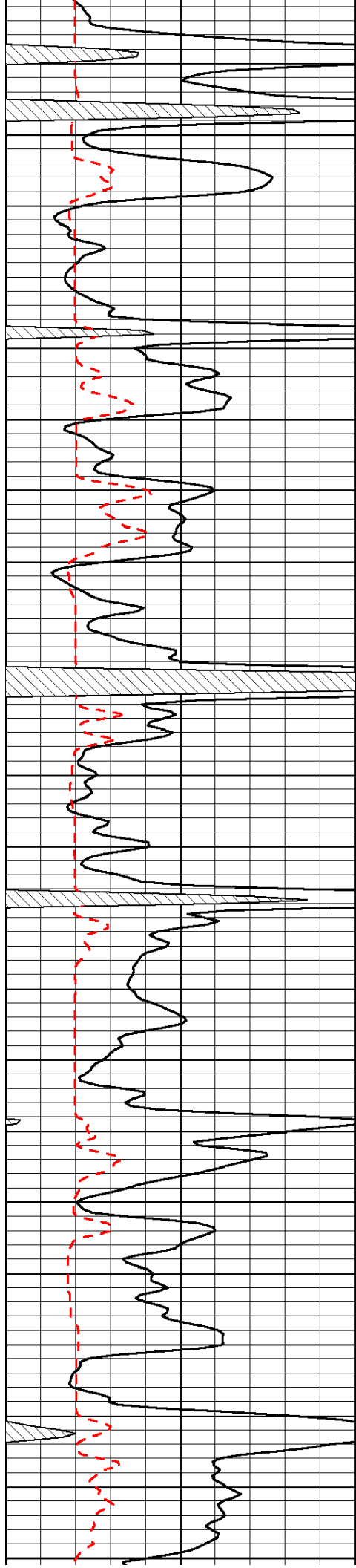


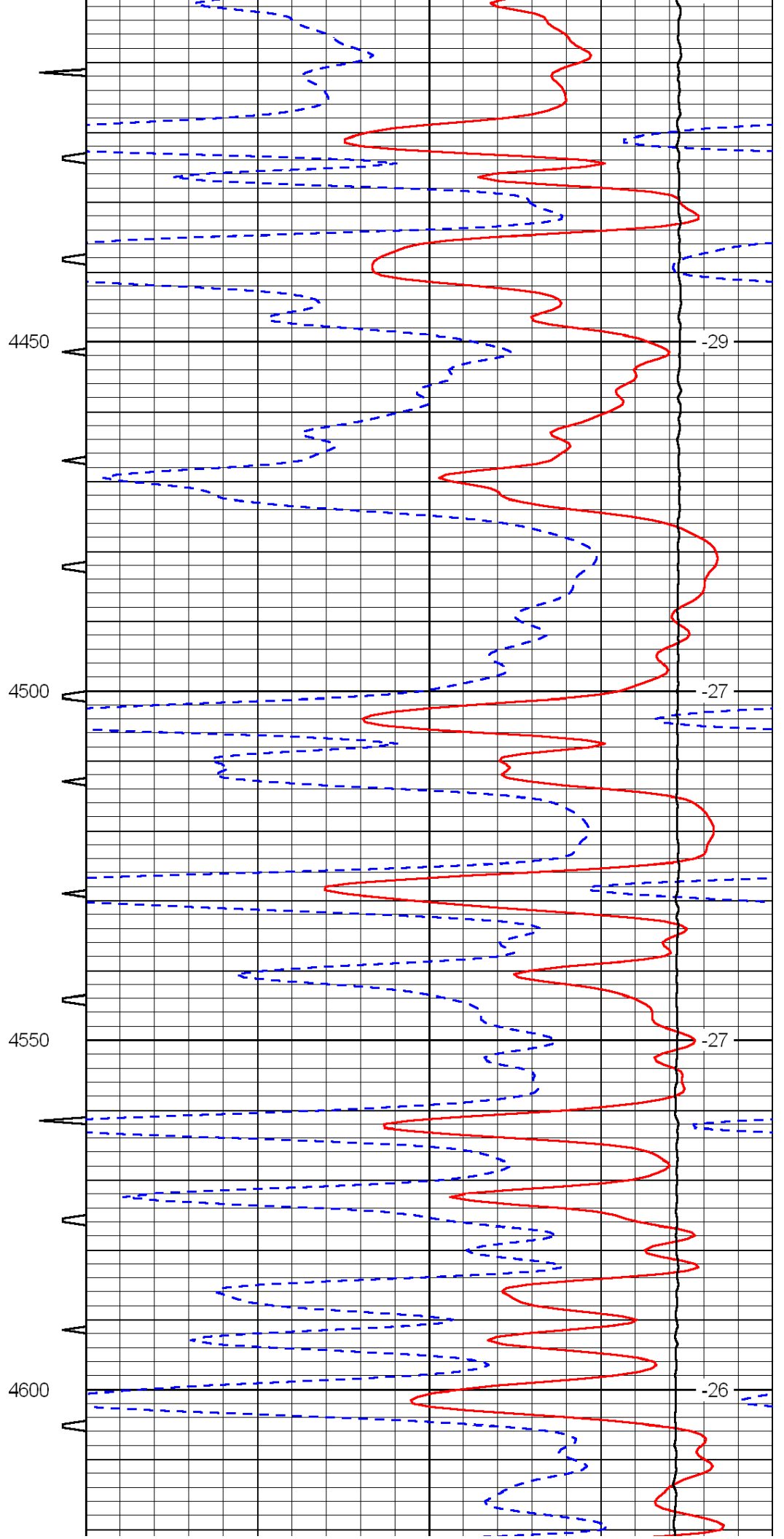
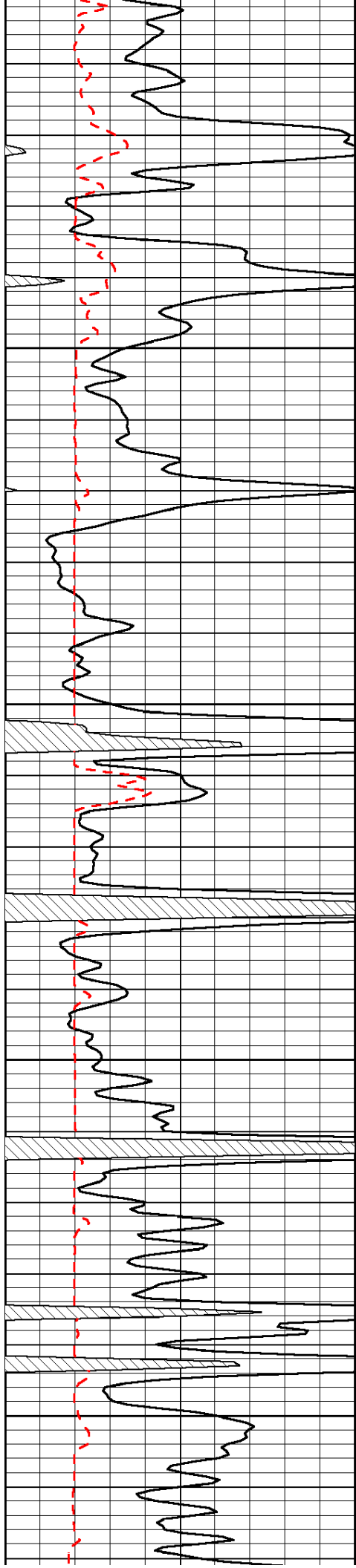




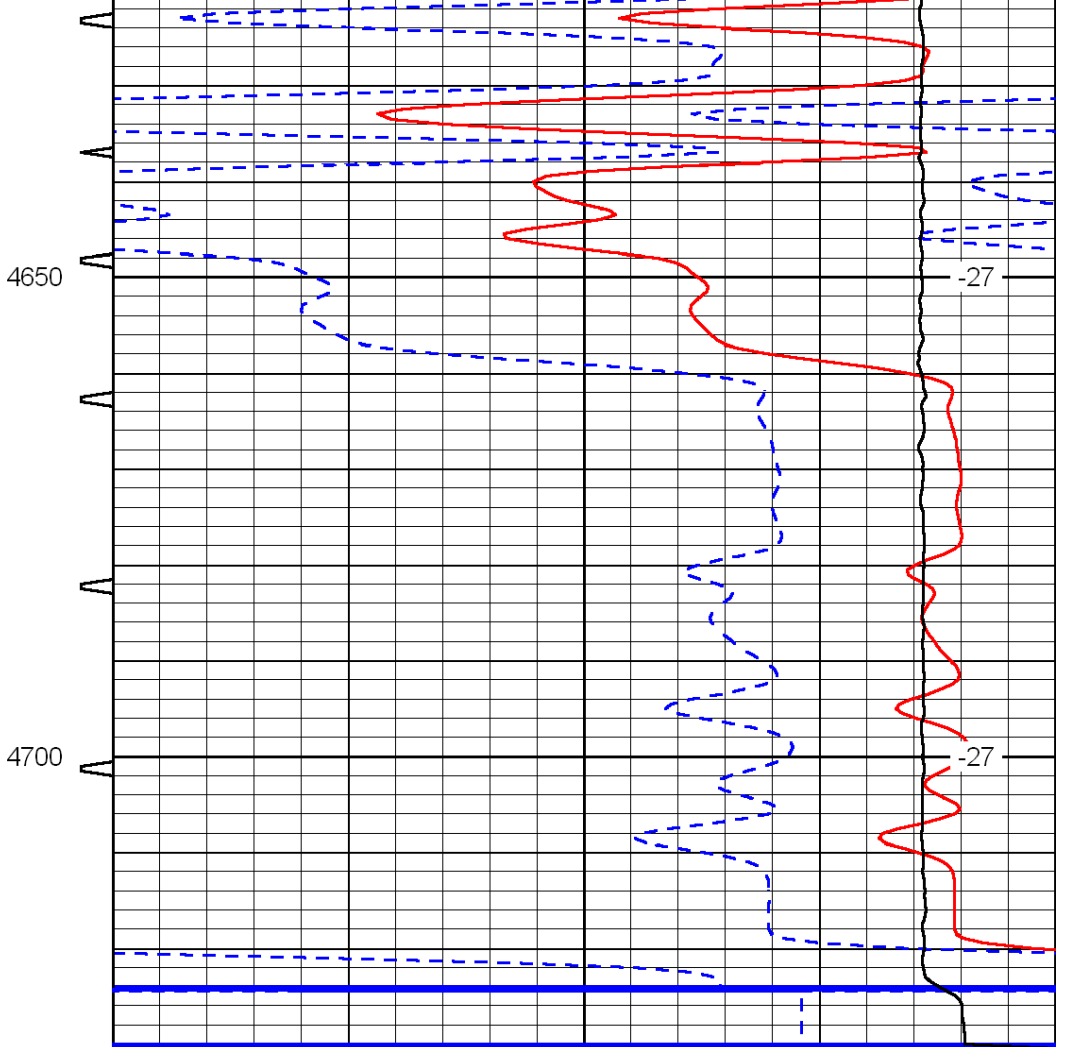
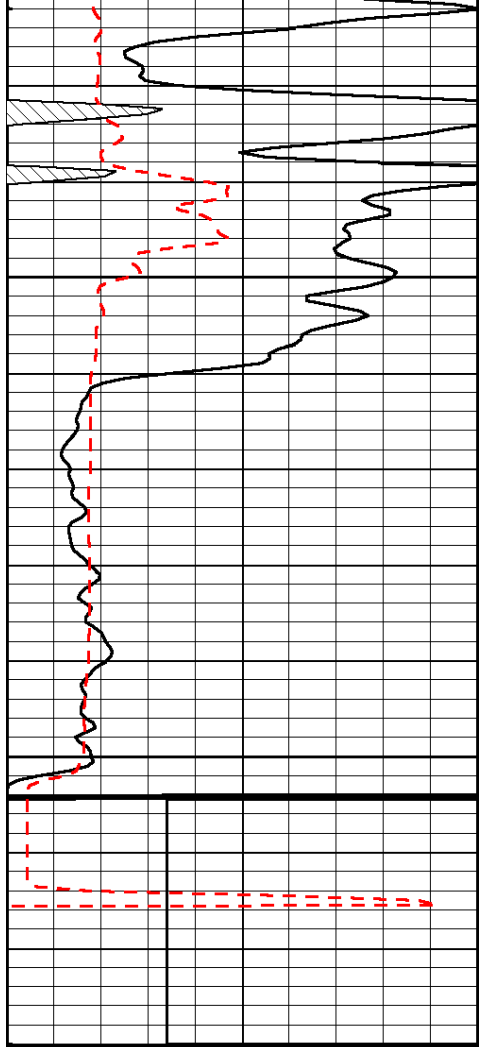












0	Gamma Ray	150	Sonic Int	140	Delta Time (usec/ft)	40
150	Gamma Ray	300	5	0	SPOR	-10
6	Caliper (GAPI)	16		15000	LTEN (lb)	0
LSPD						

# ALLIED CEMENTING CO., LLC. 035253

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

Oakley

DATE <u>3-13-12</u>	SEC. <u>8</u>	TWP <u>11</u>	RANGE <u>32W</u>	CALLED OUT	ON LOCATION	JOB START <u>5:00pm</u>	JOB FINISH <u>5:30pm</u>
BASE <u>Schipper</u>		WELL# <u>1-8</u>	LOCATION <u>Oakley 3w into</u>		COUNTY <u>Logan</u>	STATE <u>KS</u>	
OLD OR (NEW) (Circle one)							

CONTRACTOR wtw 4

TYPE OF JOB Surface

SOLE SIZE 12 1/4 T.D. 290'

CASING SIZE 8 5/8 DEPTH 290'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

FOOL DEPTH

RES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 17.51 BAL

OWNER same

CEMENT

AMOUNT ORDERED 180 sks com

390cc 2 1/2 gal

COMMON	<u>180 sks</u>	@	<u>16.25</u>	<u>2925.00</u>
POZMIX		@		
GEL	<u>3 sks</u>	@	<u>21.25</u>	<u>63.75</u>
CHLORIDE	<u>6 sks</u>	@	<u>58.20</u>	<u>349.20</u>
ASC		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
		@		
HANDLING	<u>189 sks</u>	@	<u>2.25</u>	<u>425.25</u>
MILEAGE	<u>114 sk/mile</u>			<u>63.37</u>
				TOTAL <u>3825.57</u>

EQUIPMENT

PUMP TRUCK CEMENTER Andrew

1423-281 HELPER Jerry

BULK TRUCK

1347 DRIVER Billy

BULK TRUCK DRIVER

REMARKS:

Cement did circulate

Thank you

CHARGE TO: Credo

TREET

CITY STATE ZIP

SERVICE

DEPTH OF JOB	<u>290'</u>		
PUMP TRUCK CHARGE			<u>1125.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>3 miles</u>	@	<u>21.00</u>
MANIFOLD		@	
<u>Light vehicle</u>		@	<u>4.00</u>
		@	
TOTAL <u>1158.00</u>			

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL		

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS

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 Justin Hamlin

SIGNATURE [Signature]

# ALLIED CEMENTING CO., LLC. 035257

Federal Tax I.D.# 20-5975804

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

SERVICE POINT:

*Oakley*

DATE <i>3-20-12</i>	SEC <i>8</i>	TWP <i>11S</i>	RANGE <i>32W</i>	CALLED OUT	ON LOCATION	JOB START <i>5:00 AM</i>	JOB FINISH <i>6:00 AM</i>
Schipper LEASE		WELL# <i>1-8</i>	LOCATION <i>Oakley 3w sinto</i>	COUNTY <i>Logan</i>	STATE <i>Ks</i>		
OLD OR (NEW) (Circle one)							

CONTRACTOR <i>W + W 4</i>	OWNER <i>same</i>
TYPE OF JOB <i>PTA</i>	
HOLE SIZE <i>7 7/8</i>	T.D. <i>4725'</i>
CASING SIZE	DEPTH
TUBING SIZE	DEPTH
DRILL PIPE <i>4 1/2</i>	DEPTH <i>2606'</i>
TOOL	DEPTH
PRES. MAX	MINIMUM
MEAS. LINE	SHOE JOINT
CEMENT LEFT IN CSG.	
PERFS.	
DISPLACEMENT	

CEMENT	
AMOUNT ORDERED <i>205 sks 69404892</i>	
<i>14 flo-seal</i>	
COMMON <i>123 sks @ 16.25 = 1998.25</i>	
POZMIX <i>82 sks @ 8.50 = 697.00</i>	
GEL <i>7 sks @ 21.25 = 148.75</i>	
CHLORIDE @	
ASC @	
<i>Flo-seal 51 # @ 2.70 = 137.70</i>	
HANDLING <i>214 sks @ 2.25 = 481.50</i>	
MILEAGE <i>114 sk/mile = 2616.2</i>	
TOTAL <i>3534.32</i>	

EQUIPMENT

PUMP TRUCK	CEMENTER <i>Andrew</i>
# <i>423-281</i>	HELPER <i>Jerry</i>
BULK TRUCK	
# <i>409</i>	DRIVER <i>Billy</i>
BULK TRUCK	
#	DRIVER

REMARKS:

*25 sks @ 2606'*  
*20 sks @ 1389'*  
*40 sks @ 340'*  
*10 sks @ 40'*  
*30 sks Ret hole*

*Thank you*

CHARGE TO: *Credo Petroleum corp*  
STREET \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SERVICE

DEPTH OF JOB <i>2606'</i>	
PUMP TRUCK CHARGE	<i>1250.00</i>
EXTRA FOOTAGE @	
MILEAGE <i>3 miles @ 7.00 = 21.00</i>	
MANIFOLD @	
<i>Light vehicle @ 4.00 = 12.00</i>	
TOTAL <i>1283.00</i>	

PLUG & FLOAT EQUIPMENT

<i>8 7/8</i>	
<i>1 day hole plug @ 92.00</i>	
TOTAL <i>92.00</i>	

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 *MARY HERSHKOWITZ*

SIGNATURE *Mary Herskowitz*

SALES TAX (If Any) \_\_\_\_\_  
TOTAL CHARGES \_\_\_\_\_  
DISCOUNT \_\_\_\_\_ IF PAID IN 30 DAYS