Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1078660

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 # 31652
Name: Norstar Petroleum, Inc.
Address 1: 88 Inverness Cir E, Unti F104
Address 2:
City: Englewood State: CO Zip: 80112 + __ __ __ __
Contact Person: Clark D. Parrott
Phone: (303) 925-0696
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: Bob Elder
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 #:

1/25/2012	2/2/2012	3/12/2012
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-193-20831-00-00
Spot Description:
SE - NE - SW - NW Sec. 33 Twp. 10 S. R. 34 ☐ East ☑ West
1658 Feet from ☑ North / ☐ South Line of Section
1234 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Thomas
Lease Name: Epard Well #: 1-33
Field Name:
Producing Formation: LK/C, Johnson
Elevation: Ground: 3253 Kelly Bushing: 3264
Total Vertical Depth: 4870 Plug Back Total Depth: 4811
Amount of Surface Pipe Set and Cemented at: 267 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 2780 Feet
If Alternate II completion, cement circulated from: 2780
feet depth to: 0 w/ 280 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 19200 ppm Fluid volume: 900 bbls
Dewatering method used: Evaporated

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: 04/17/2012
☑ **Confidential Release Date:** 04/17/2014
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 04/17/2012

1078660

Operator Name: Norstar Petroleum, Inc. Lease Name: Epard Well #: 1-33

Sec. 33 Twp. 10 S. R. 34 ☐ East ☑ West County: Thomas

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 ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:

CNL/CDL
DIL
MEL

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	267	Common	175	3% cc, 2% gel
Production	7.875	5.5	15.5	4869	ASC	175	10% salt, 1/4 floseal

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
___ Perforate ___ Protect Casing ___ Plug Back TD ___ 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 *(Amount and Kind of Material Used)*	Depth
4	"H": 4411-4417	500 gal, 15% MCA	4411-4417
4	Johnson: 4724-4732	500 gal, 15% MCA	4724-4732

TUBING RECORD: Size: 2.875 Set At: 4799 Packer At: Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 3/19/2012

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	102		75		33

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:
4411-4417
4724-4732

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Norstar Petroleum, Inc.
Well Name	Epard 1-33
Doc ID	1078660

Tops

Name	Top	Datum
Anhydrite	2756	+508
Topeka	3975	-711
Heebner	4134	-870
Toronto	4154	-890
Lansing	4176	-912
Stark Shale	4399	-1135
BK/C	4460	-1196
Ft. Scott	4626	-1362
Johnson	4721	-1457
Miss	4804	-1540

LOG-TECH

DIGITAL LOG (785) 625-3858

API No. 15-193-20831-00-00

Dual Induction Log

Company	Norstar Petroleum, Inc.
Well	Epard #1-33
Field	Unnamed
County	Thomas
State	Kansas
Location	SE NE SW NW 1658' FNL & 1234' FWL
Sec:	33
Twp:	10S
Rge:	34W
Other Services	CNL/CDL MEL
Permanent Datum	Ground Level, Elevation 3253
Log Measured From	Kelly Bushing, 11 Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing
Elevation	K.B. 3264 D.F. G.L. 3253

Date	2/2/2012		
Run Number	One		
Depth Driller	4870		
Depth Logger	4875		
Bottom Logged Interval	4874		
Top Log Interval	250		
Casing Driller	8.625 @ 276		
Casing Logger	273		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	4400		
Density / Viscosity	9.2 / 69		
pH / Fluid Loss	10.5 / 8.0		
Source of Sample	Flowline		
Rm @ Meas. Temp	.55 @ 50		
Rmf @ Meas. Temp	.4125 @ 50		
Rmc @ Meas. Temp	.7425 @ 50		
Source of Rmf / Rmc	Charts		
Rm @ BHT	.22 @ 127		
Operating Rig Time	4 Hours		
Max Rec. Temp. F	127		
Equipment Number	91		
Location	Hays		
Recorded By	D. Schmidt	K. Bange	
Witnessed By	Bob Elder		

<<< Fold Here >>>

Comments

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

Monument,
2 W to Hwy 25,
2 N to county line, 4 W,
3/4 N, E into

Database File:	norstar_epard1-33hd.db
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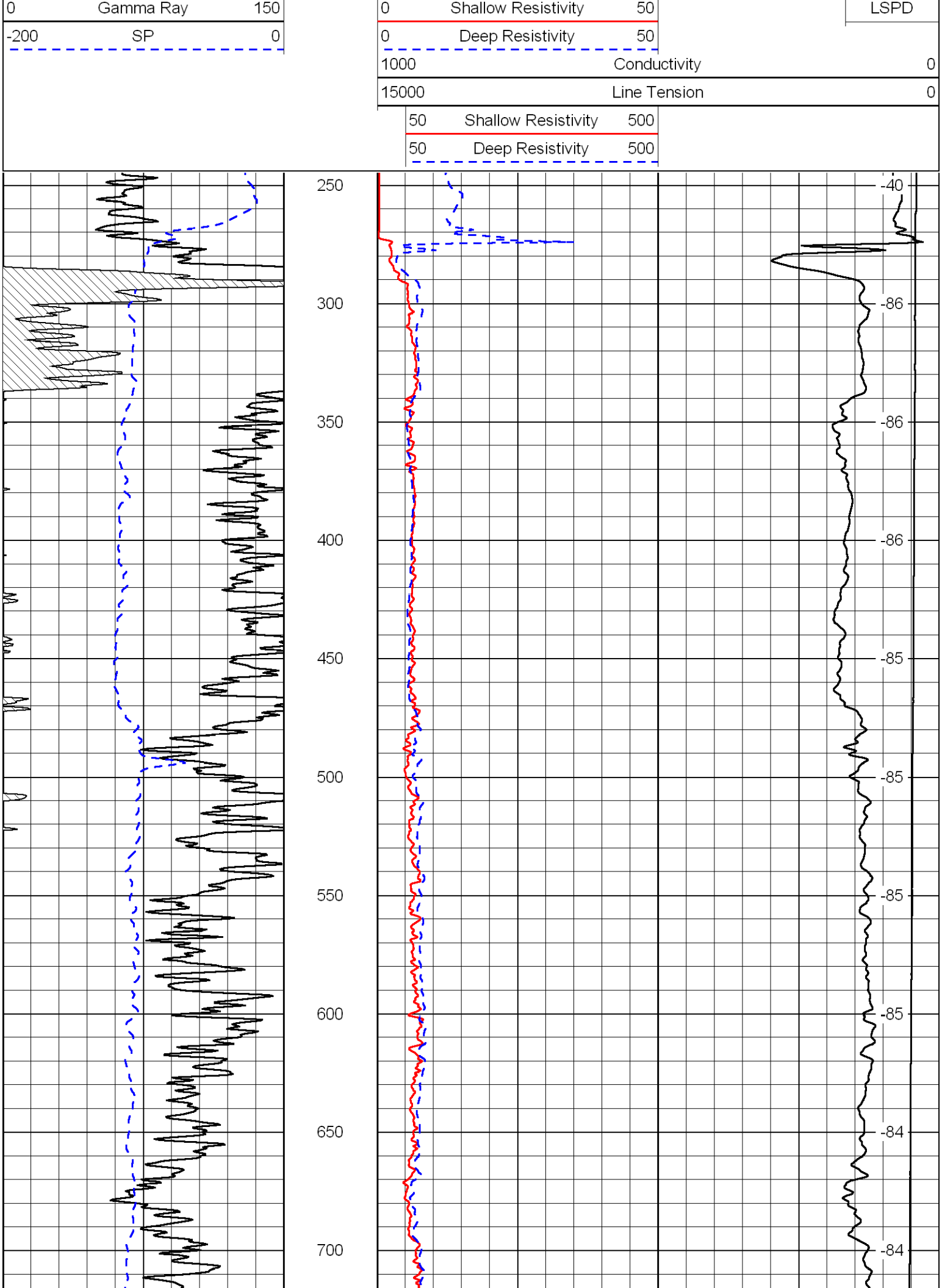
Presentation Format:	dil2in
Dataset Creation:	Thu Feb 02 12:59:11 2012
Charted by:	Depth in Feet scaled 1:600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0 Deep Resistivity 50
1000 Conductivity 0
15000 Line Tension 0
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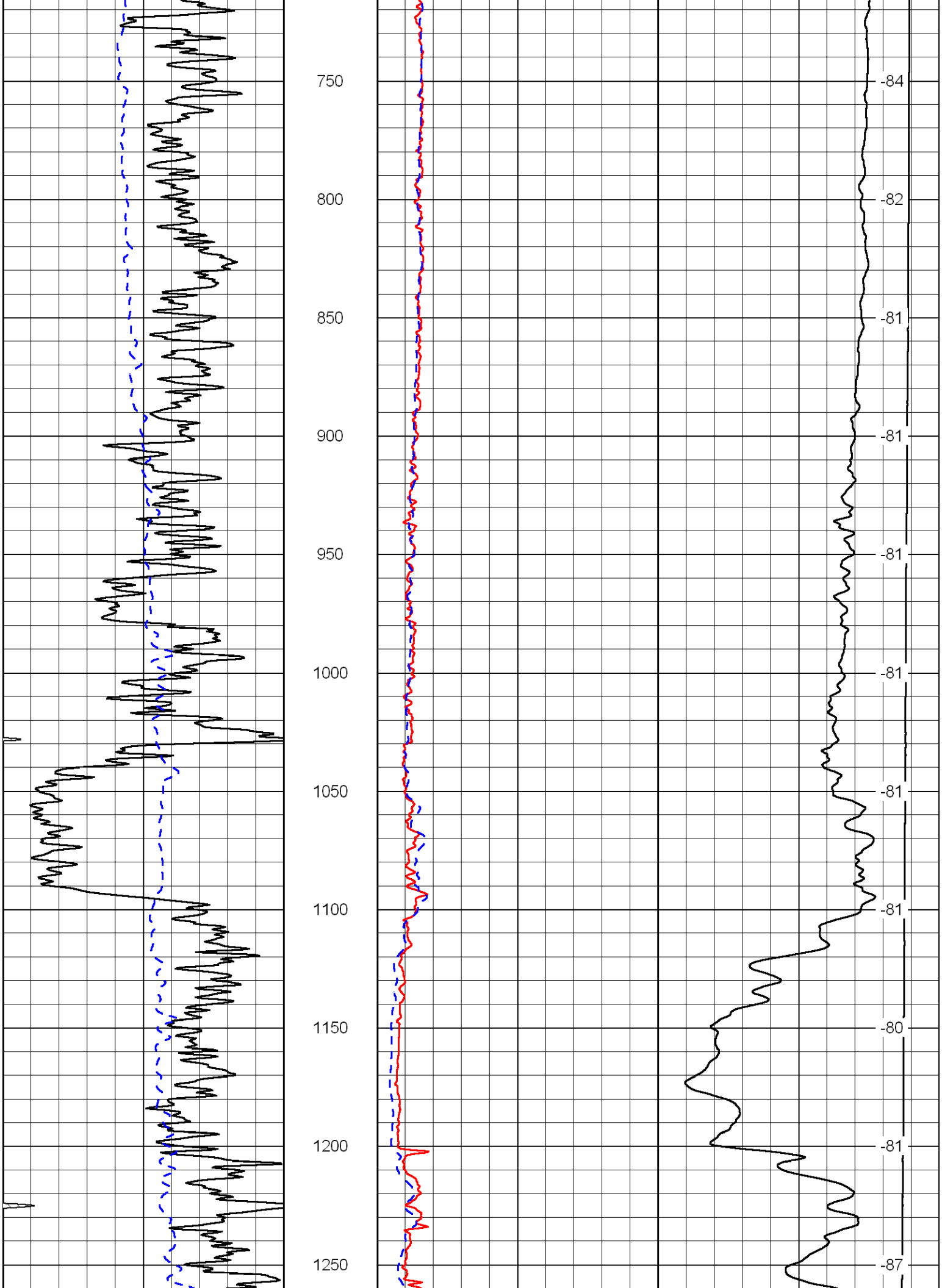
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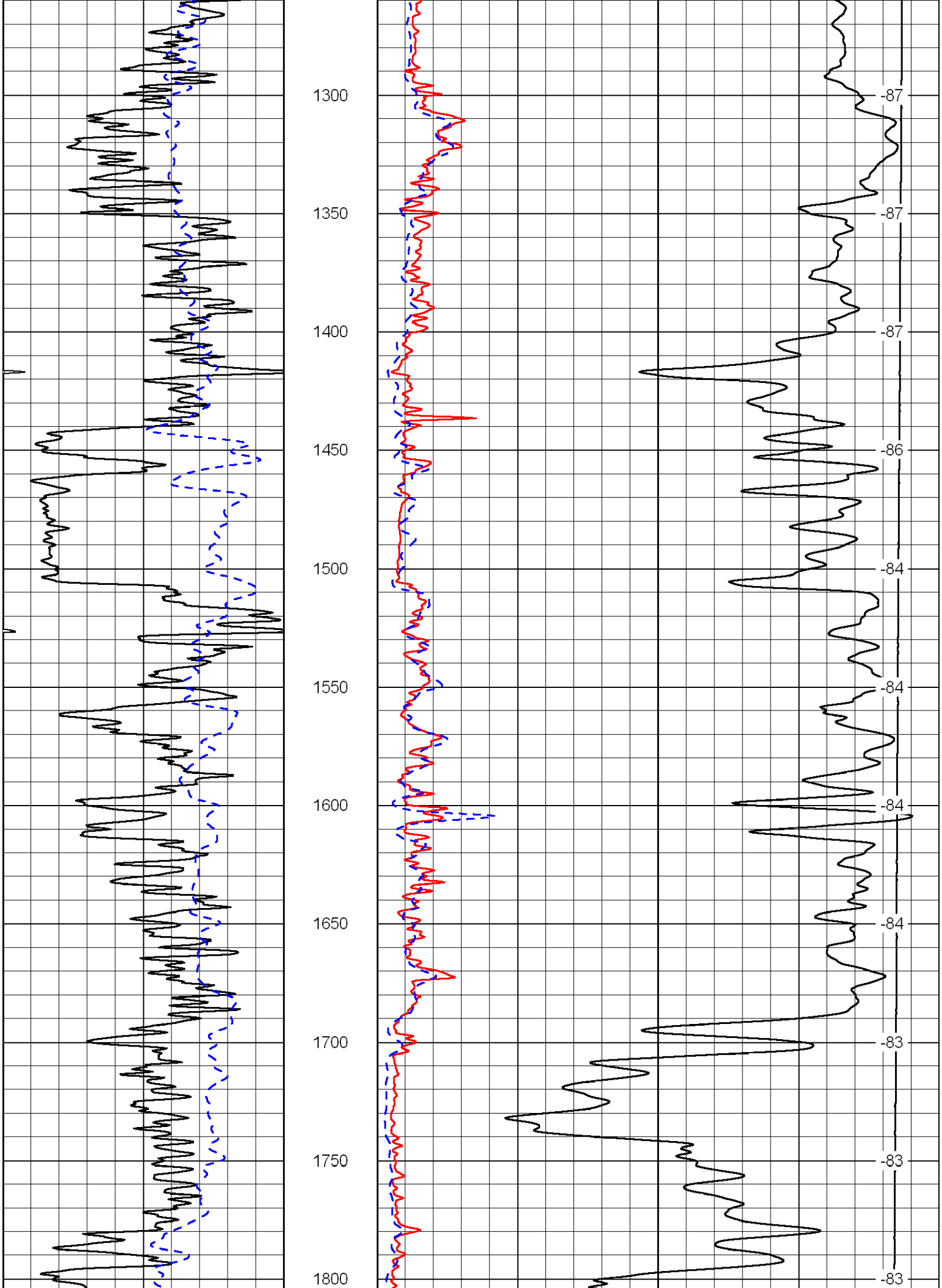
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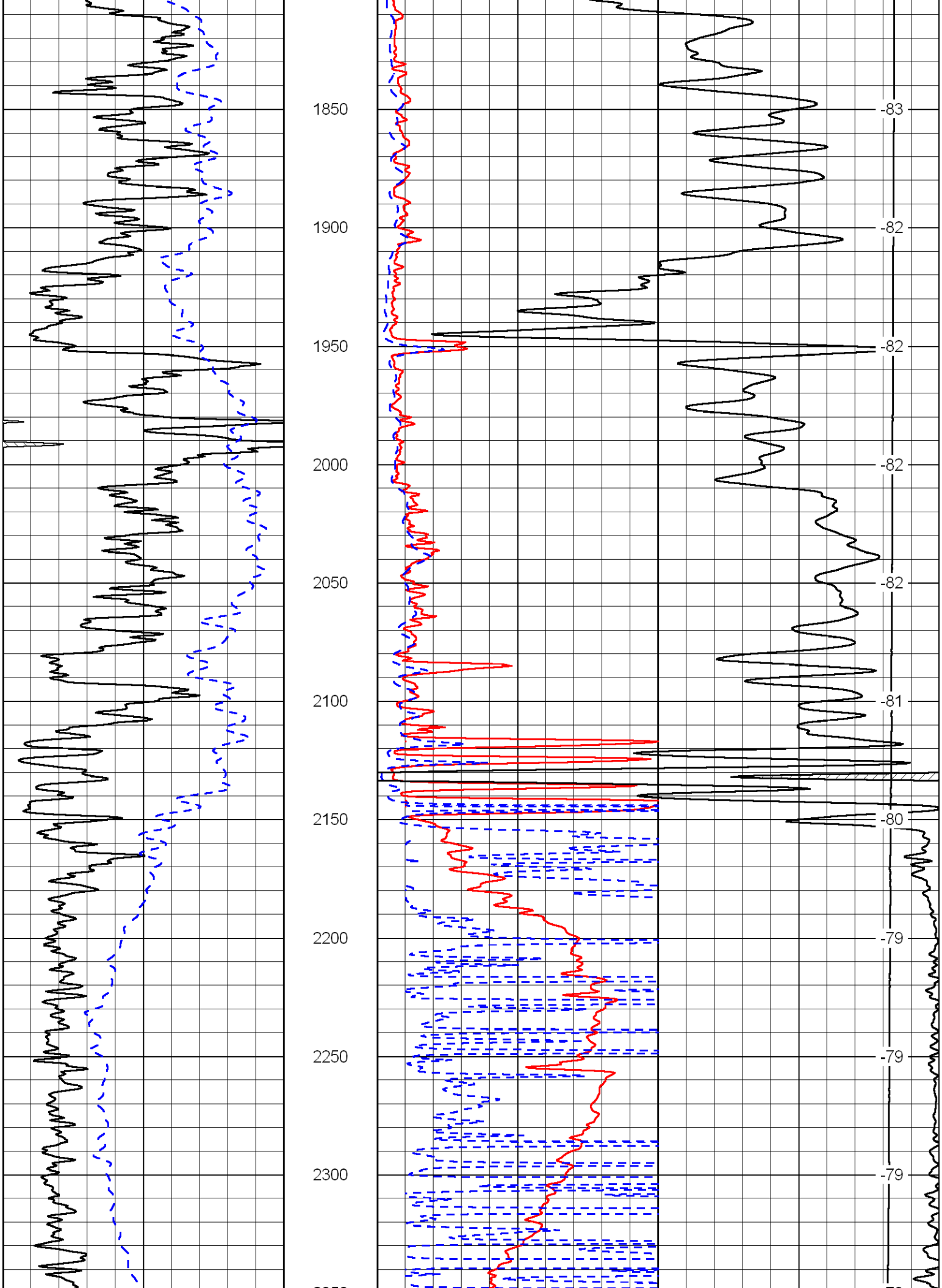
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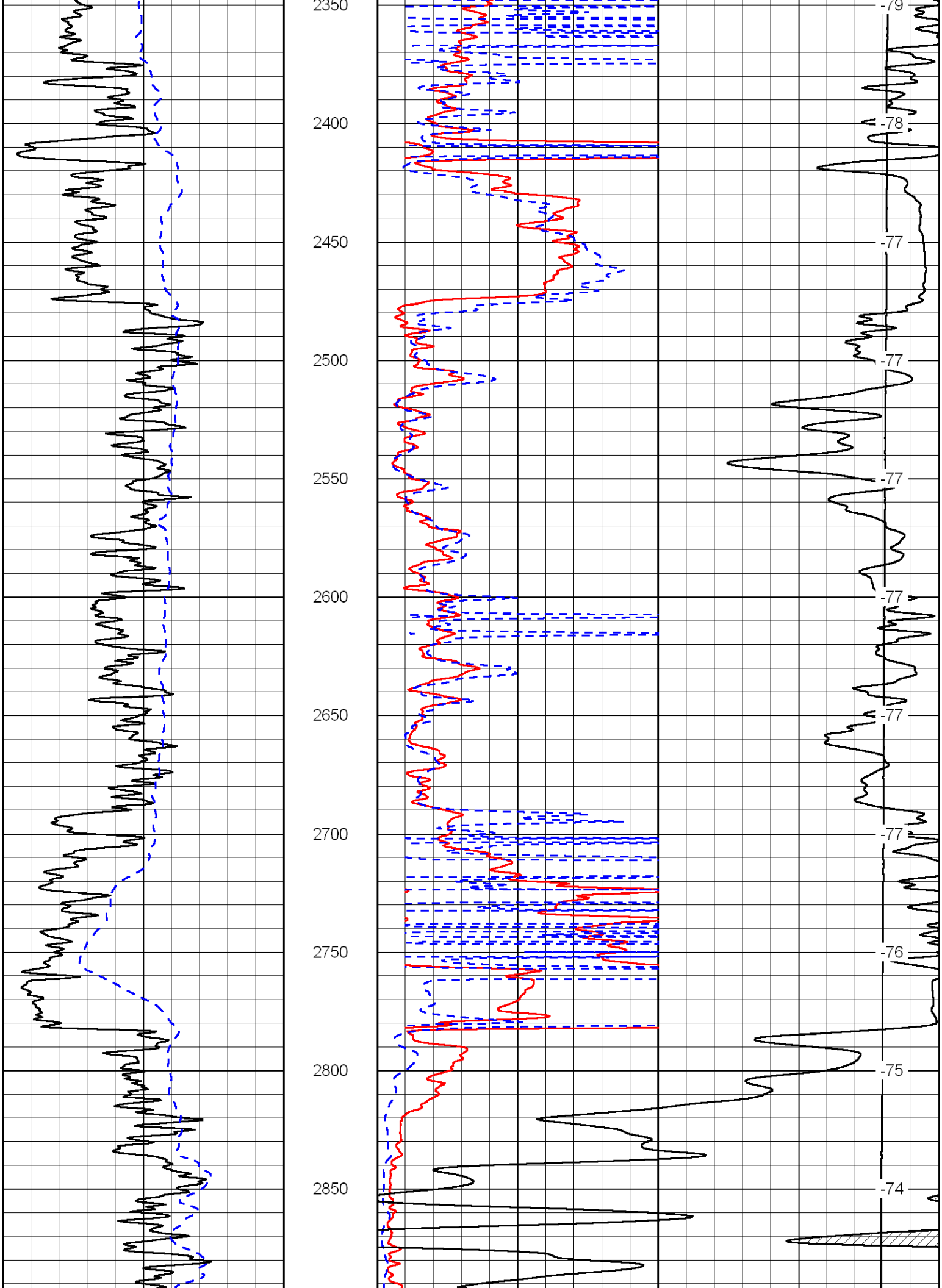
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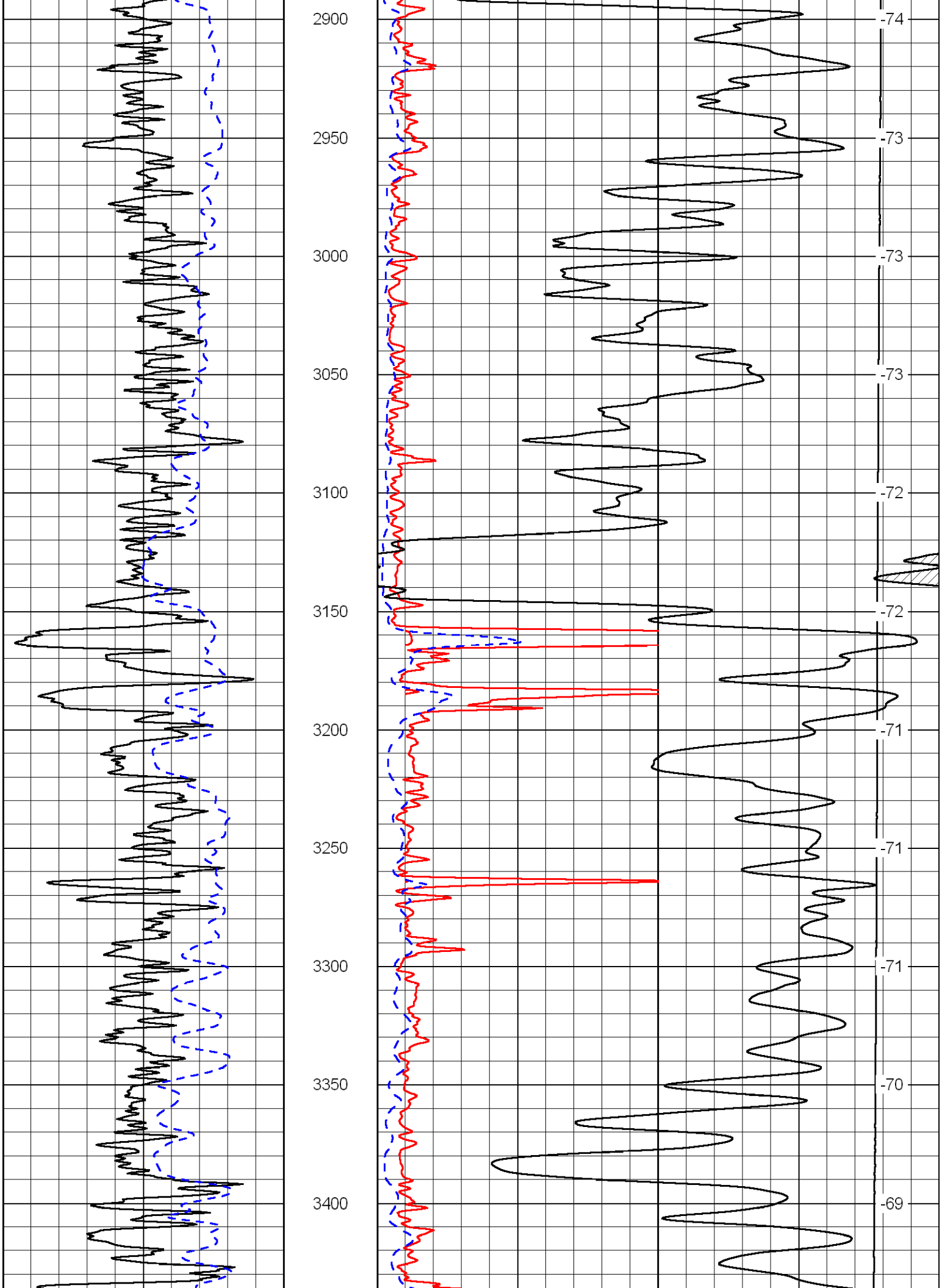
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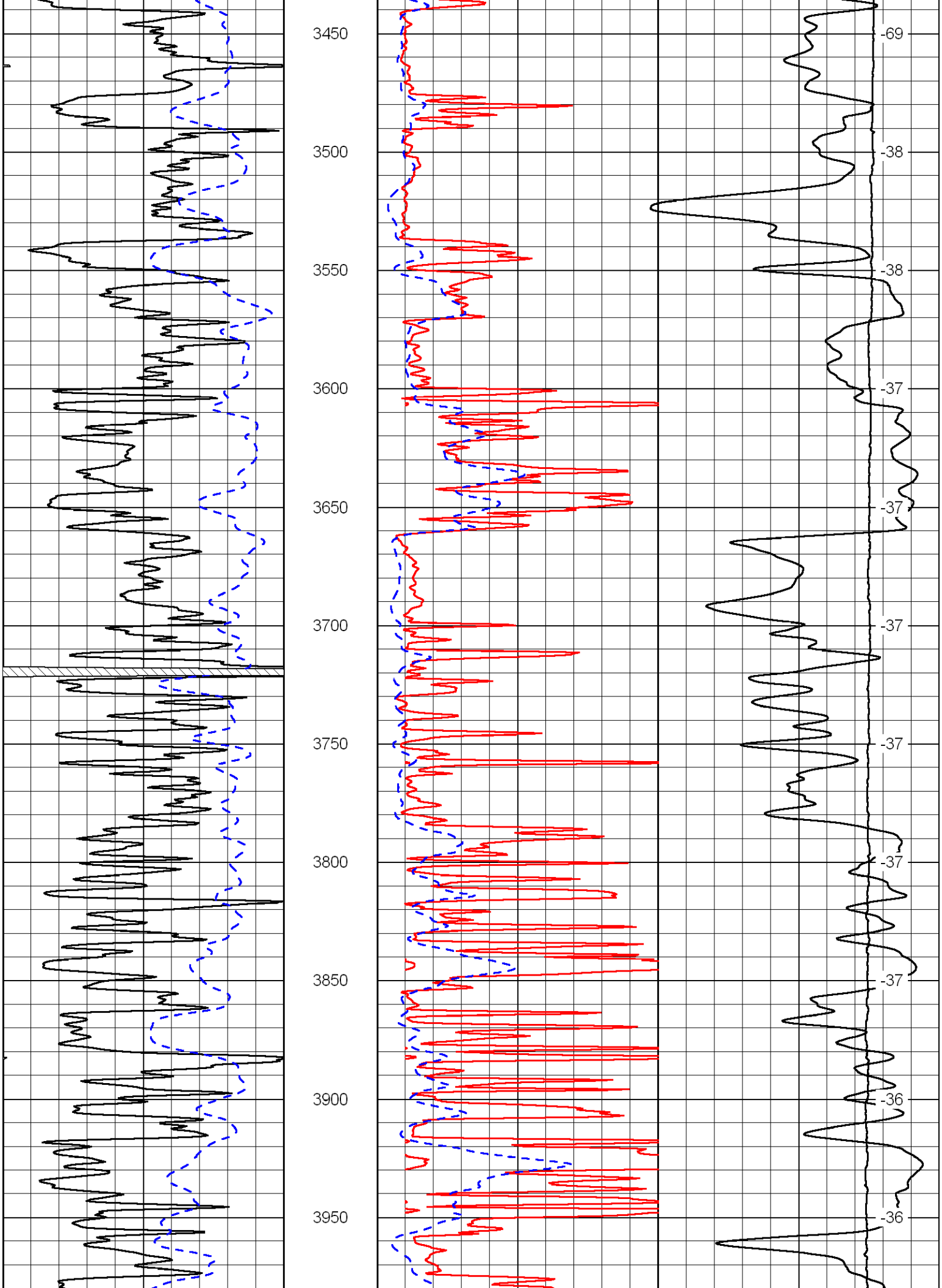
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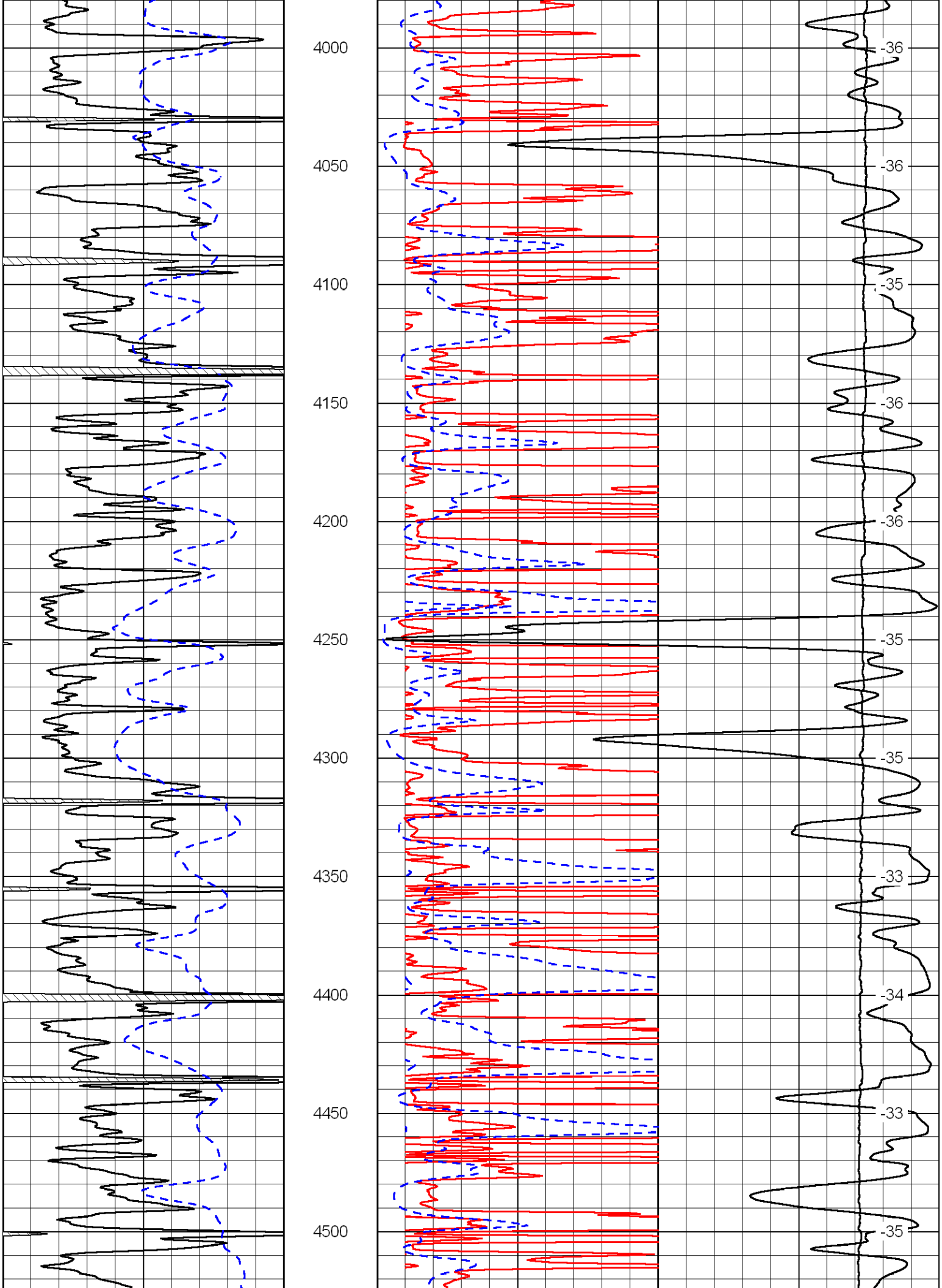
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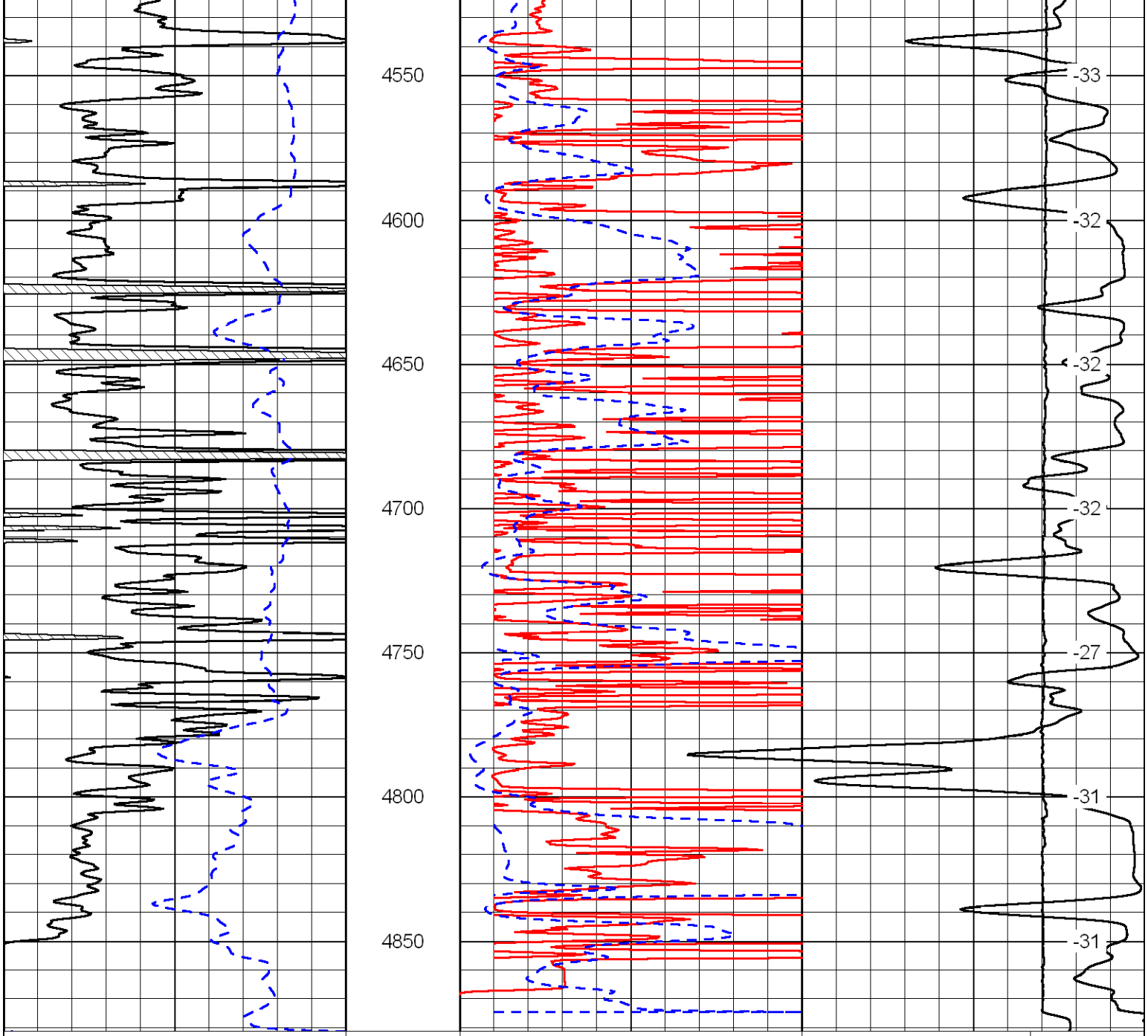

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-160	RXO/RT	40
-200	SP	0

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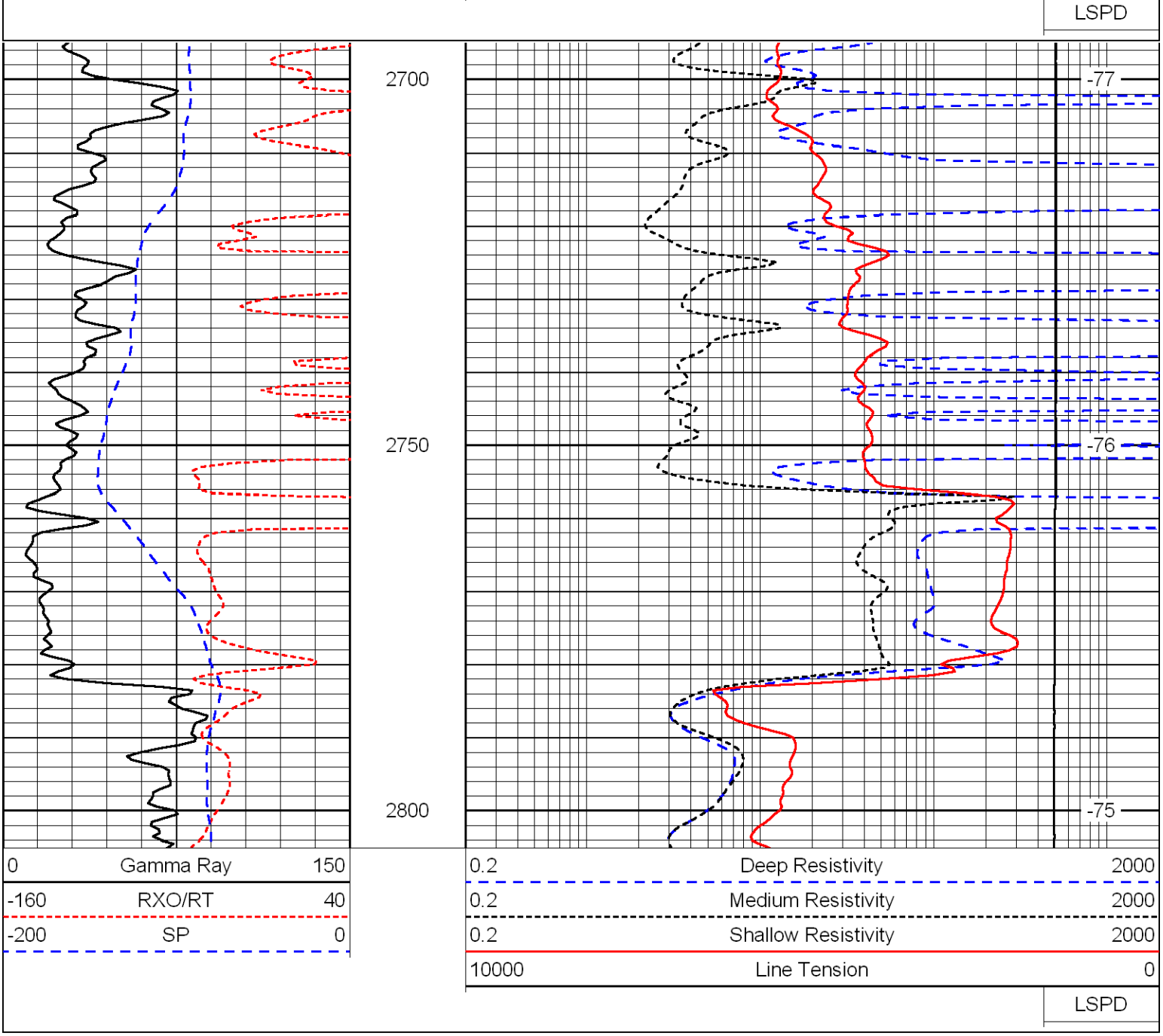
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0



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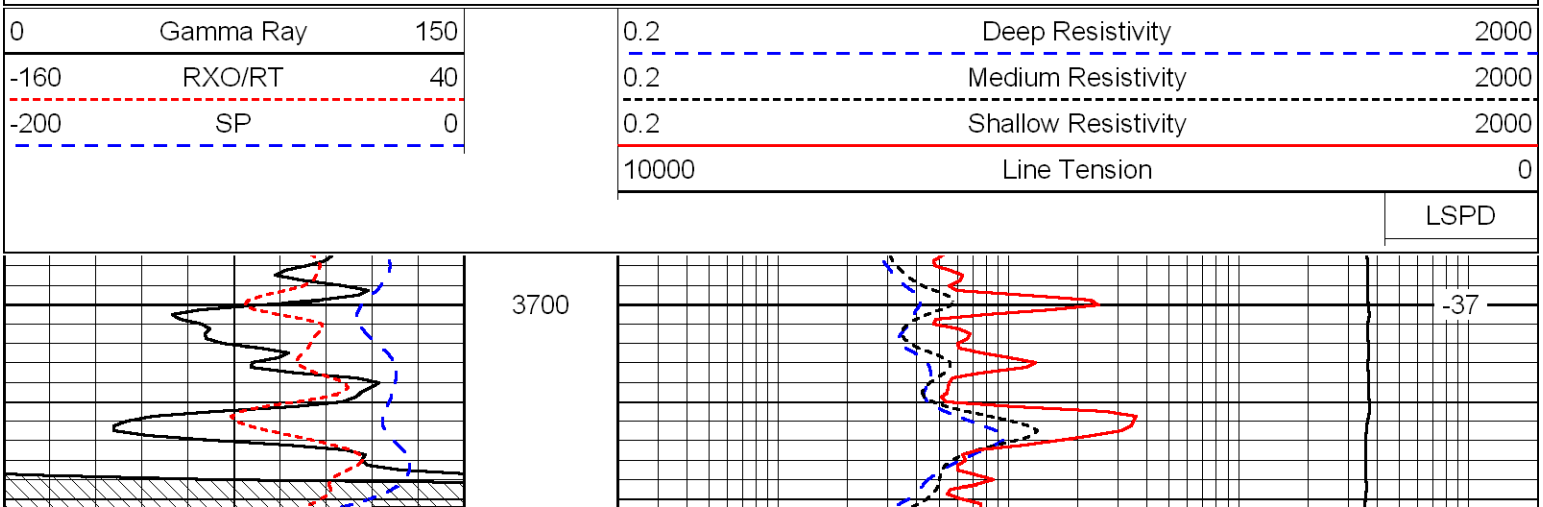

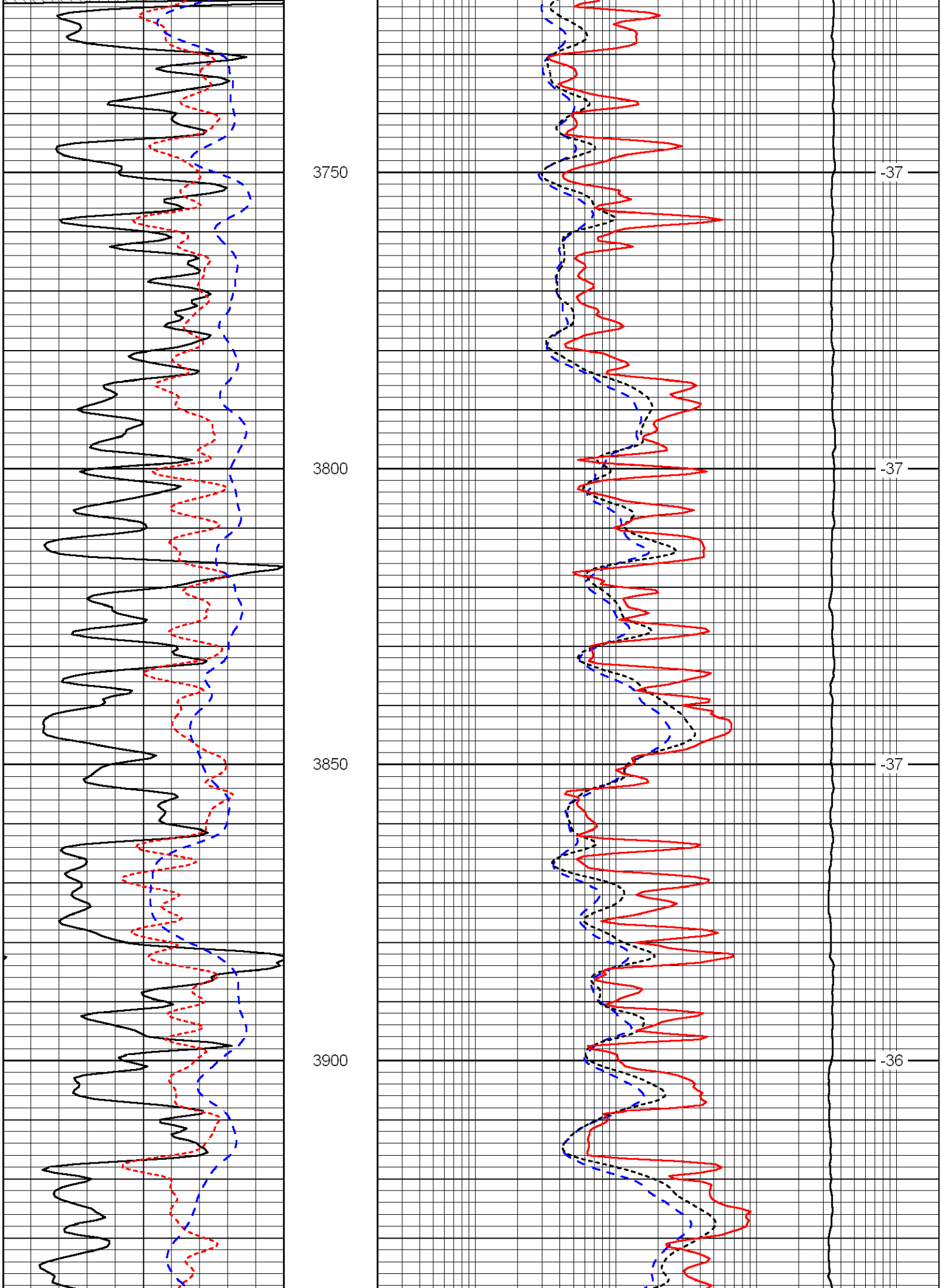
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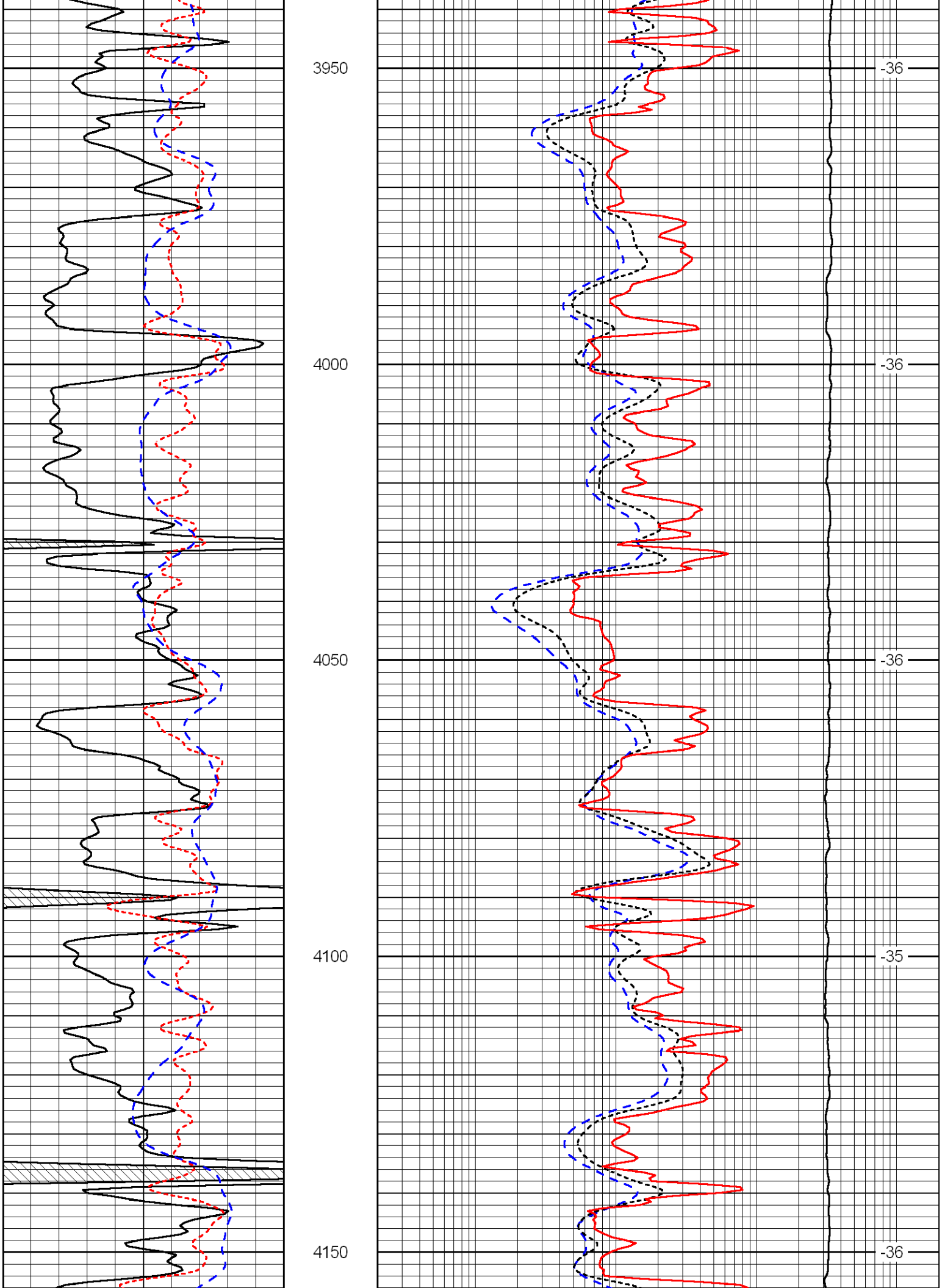
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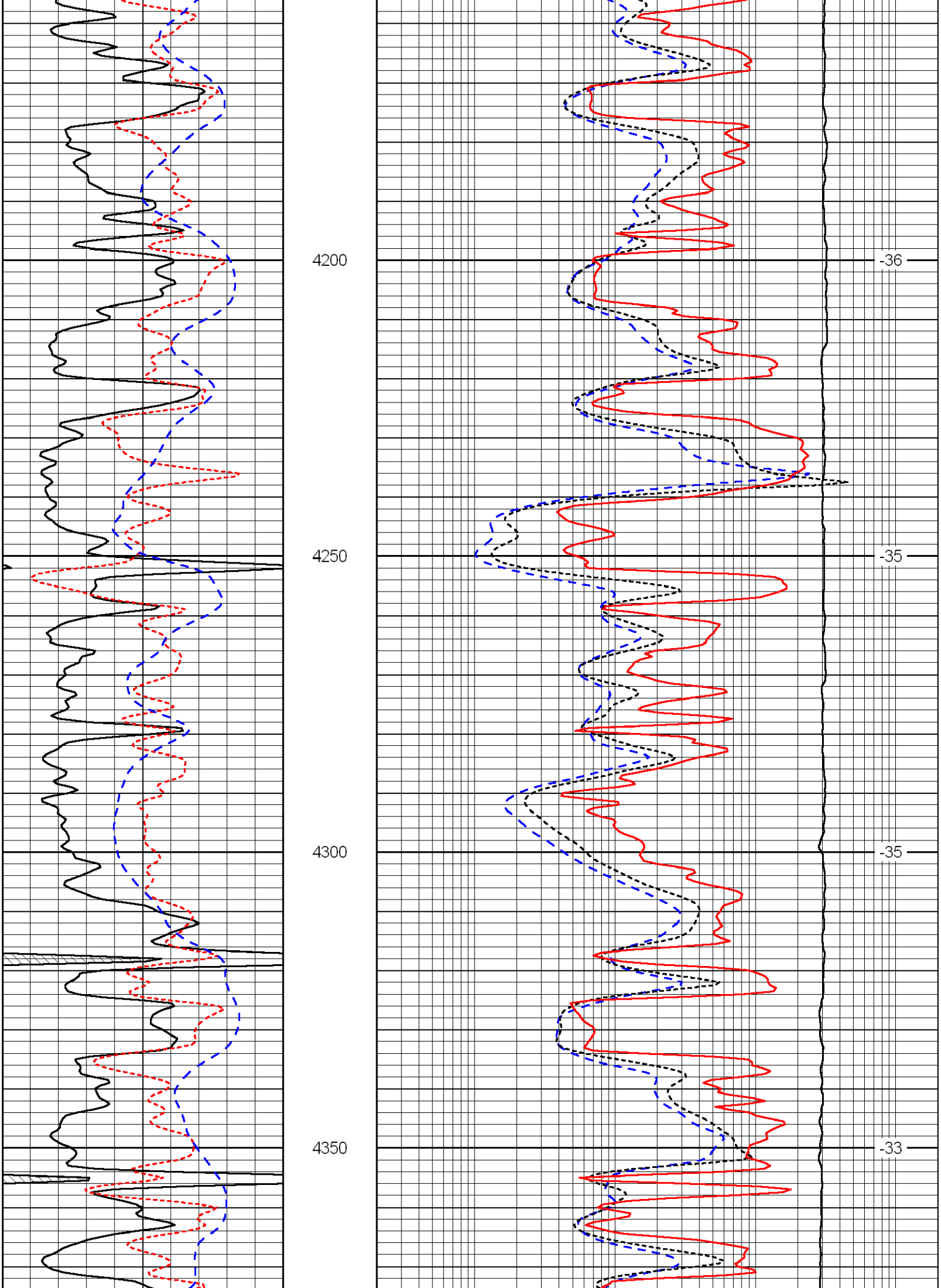
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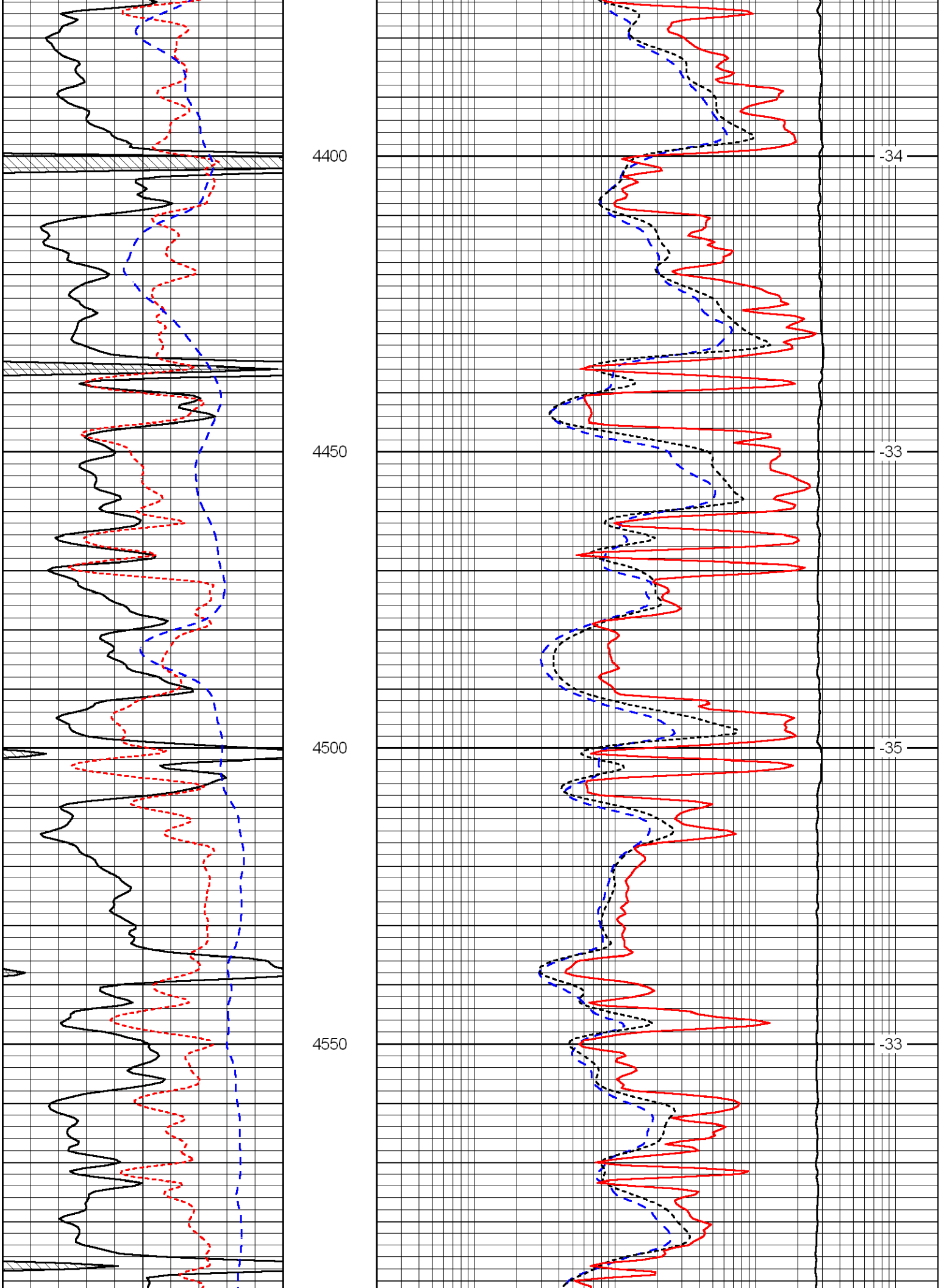
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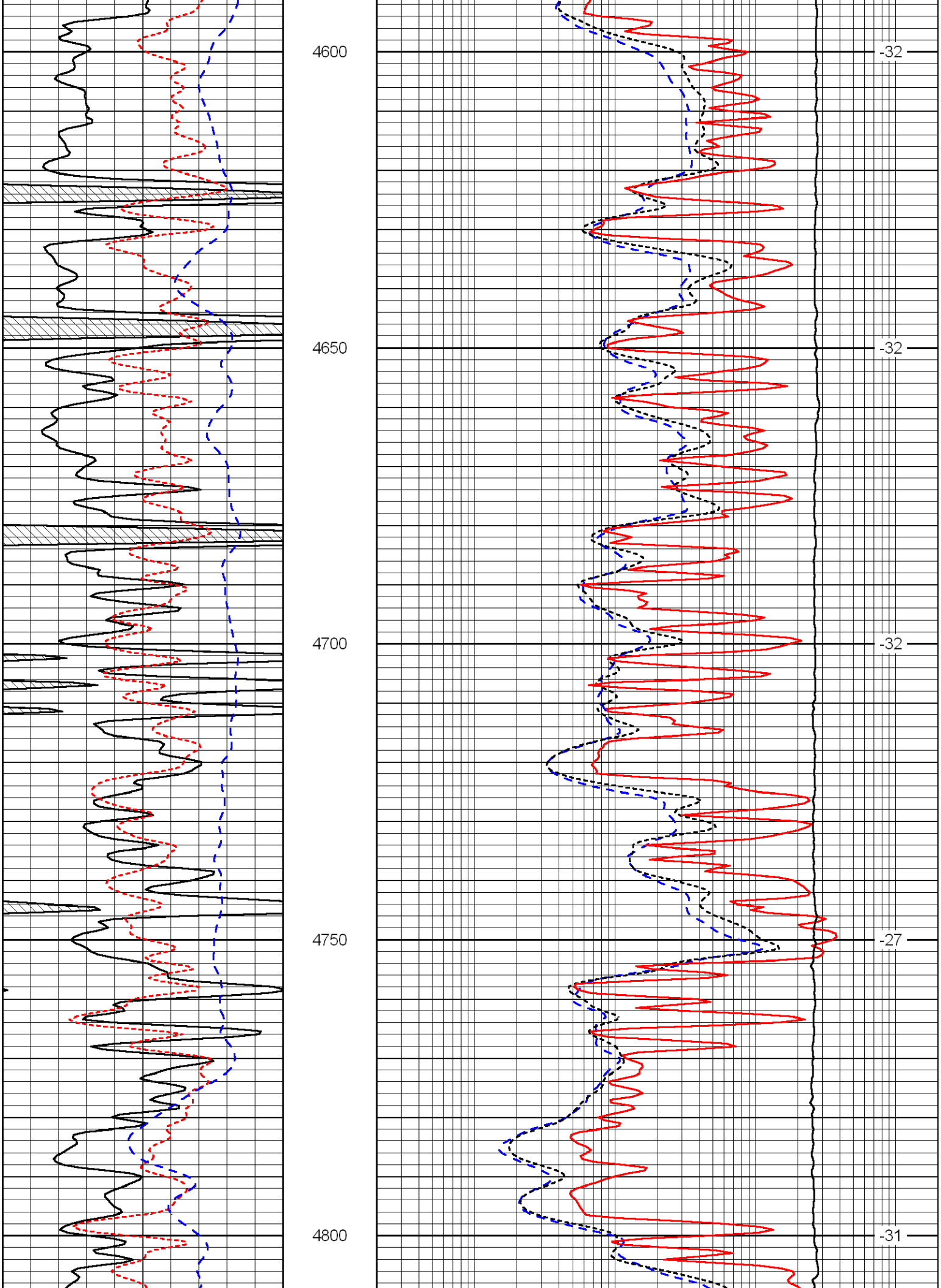
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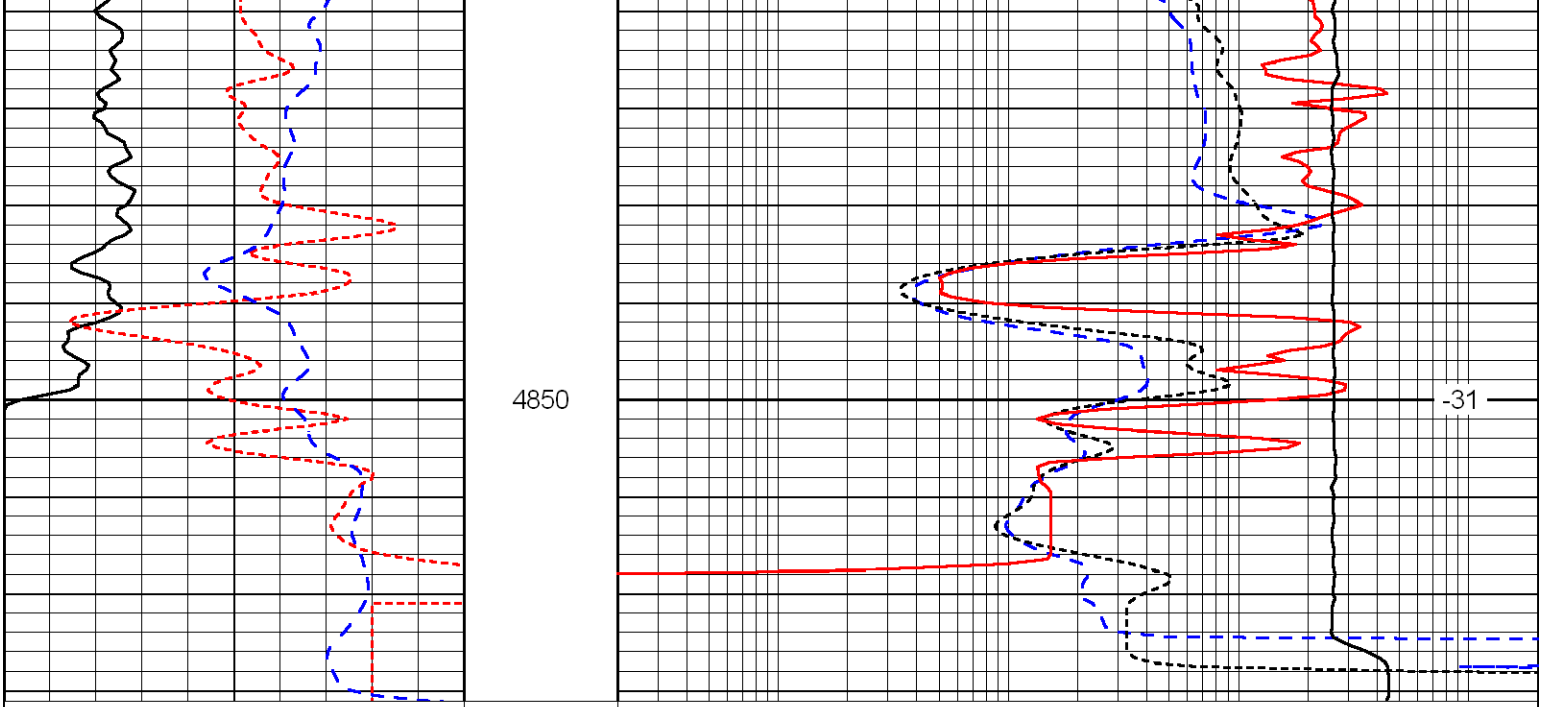

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-160	RXO/RT	40
-200	SP	0

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD

LOG-TECH

DIGITAL LOG (785) 625-3858

Dual Compensated Porosity Log

API No. 15-193-20831-00-00

Company Norstar Petroleum, Inc.

Well Epard #1-33

Field Unnamed

County Thomas State Kansas

Location
SE NE SW NW
1658' FNL & 1234' FWL
Sec: 33 Twp: 10S Rge: 34W

Other Services
DIL/MEL

Elevation
K.B. 3264
D.F.
G.L. 3253

Permanent Datum	Ground Level
Log Measured From	Kelly Bushing
Drilling Measured From	Kelly Bushing
	11 Ft. Above Perm. Datum
	Elevation 3253
Date	2/2/2012
Run Number	One
Type Log	CNL / CDL
Depth Driller	4870
Depth Logger	4875
Bottom Logged Interval	4854
Top Logged Interval	3700
Type Fluid In Hole	Chemical
Salinity, PPM CL	4400
Density	9.2
Level	Full
Max. Rec. Temp. F	127
Operating Rig Time	4 Hours
Equipment -- Location	91 Hays
Recorded By	D. Schmidt
Witnessed By	Bob Elder

Borehole Record

Run No	Bit	From	To
One	12.25	00	276
Two	7.875	276	TD

Casing Record

Size	Wgt.	From	To
8.625	23#	00	276

K. Bange

<<< Fold Here >>>

Comments

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

Monument,
2 W to Hwy 25,
2 N to county line, 4 W,
3/4 N, E into

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Presentation Format:	cdl
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Charted by:	Depth in Feet scaled 1:600

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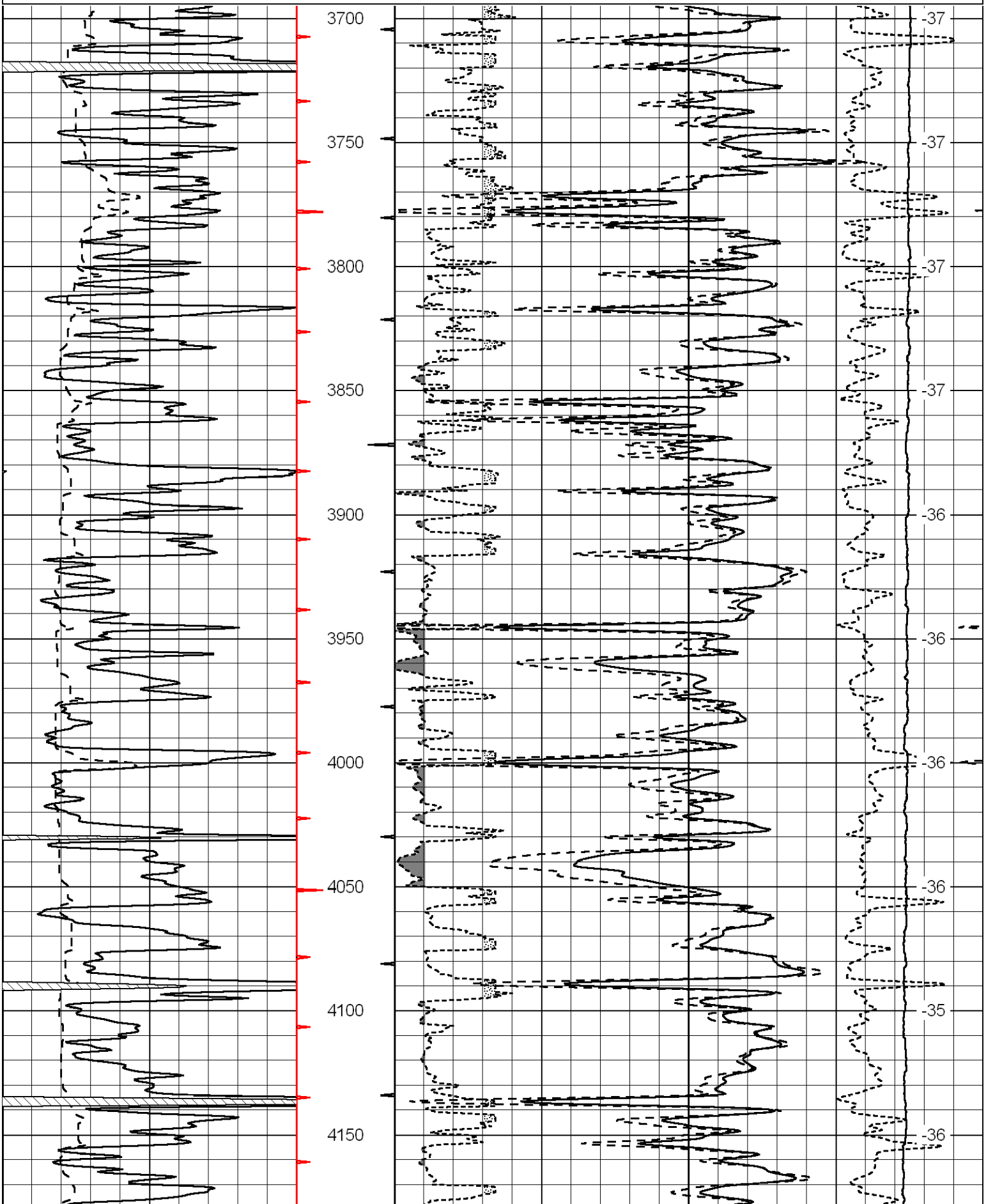
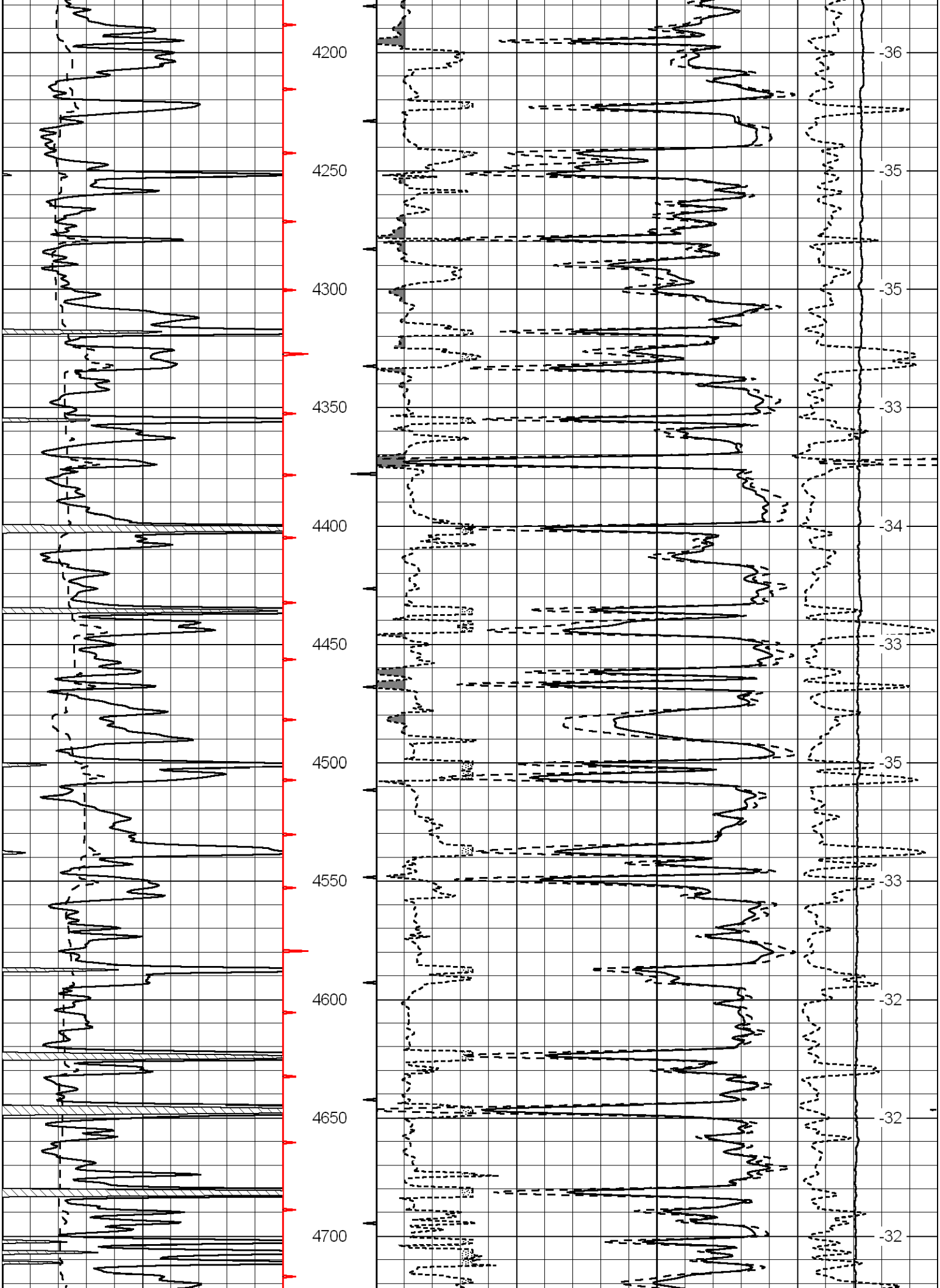
30	Compensated Density				-10
2	Bulk Density				3
15000	Line Tension				0
2.625	DGA	3.425	-0.25	Correction	0.25

LSPD

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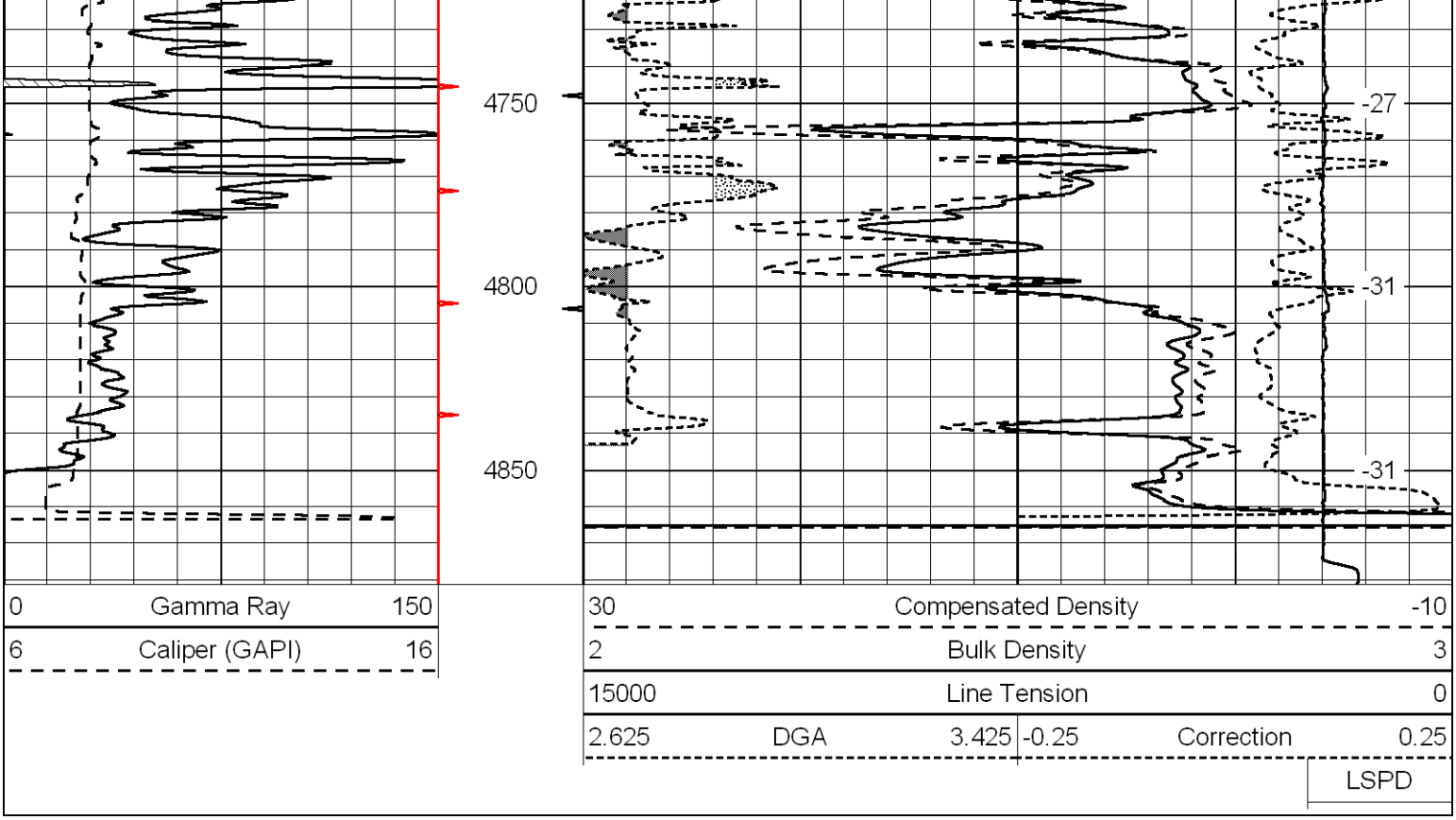

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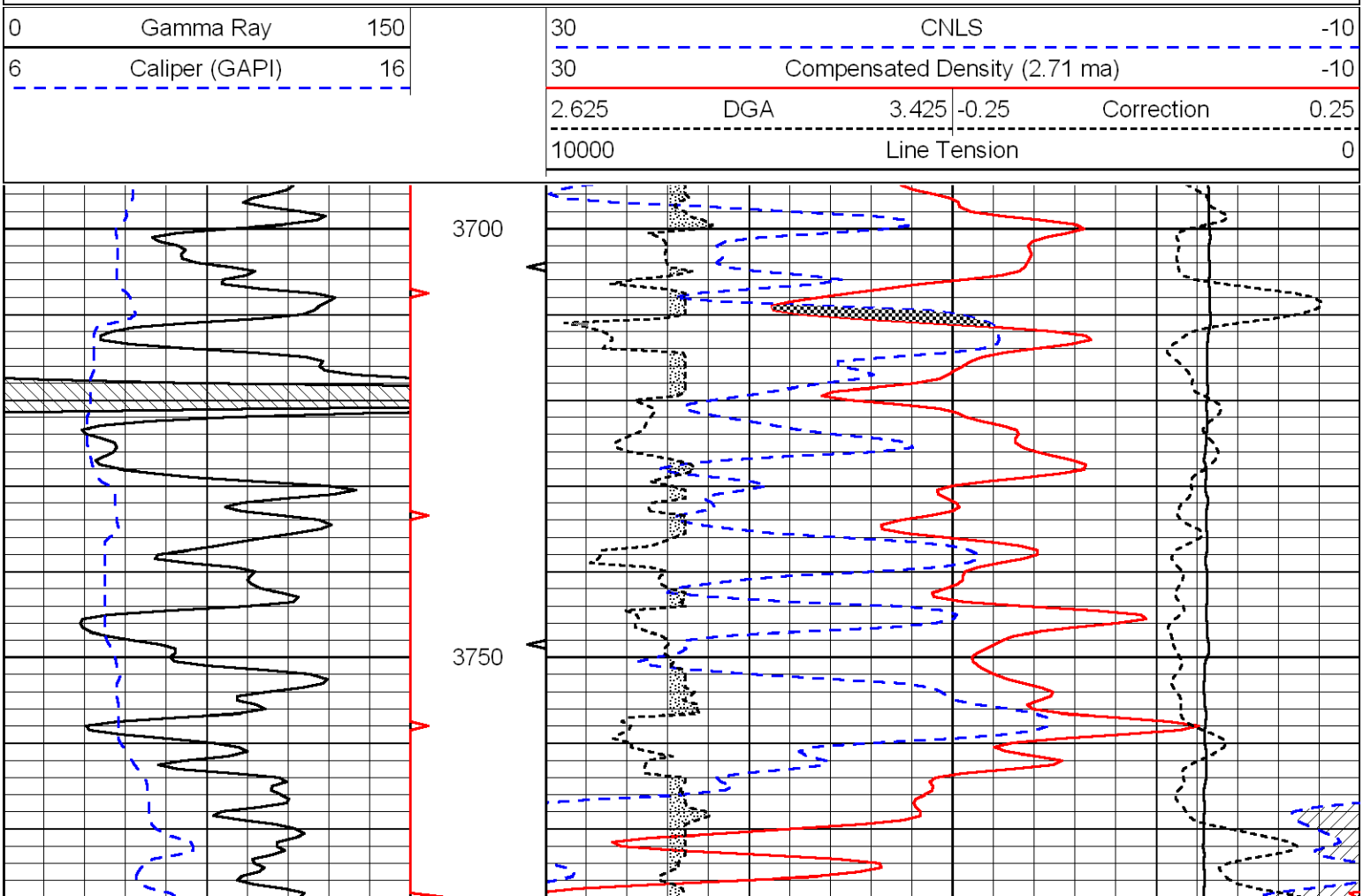

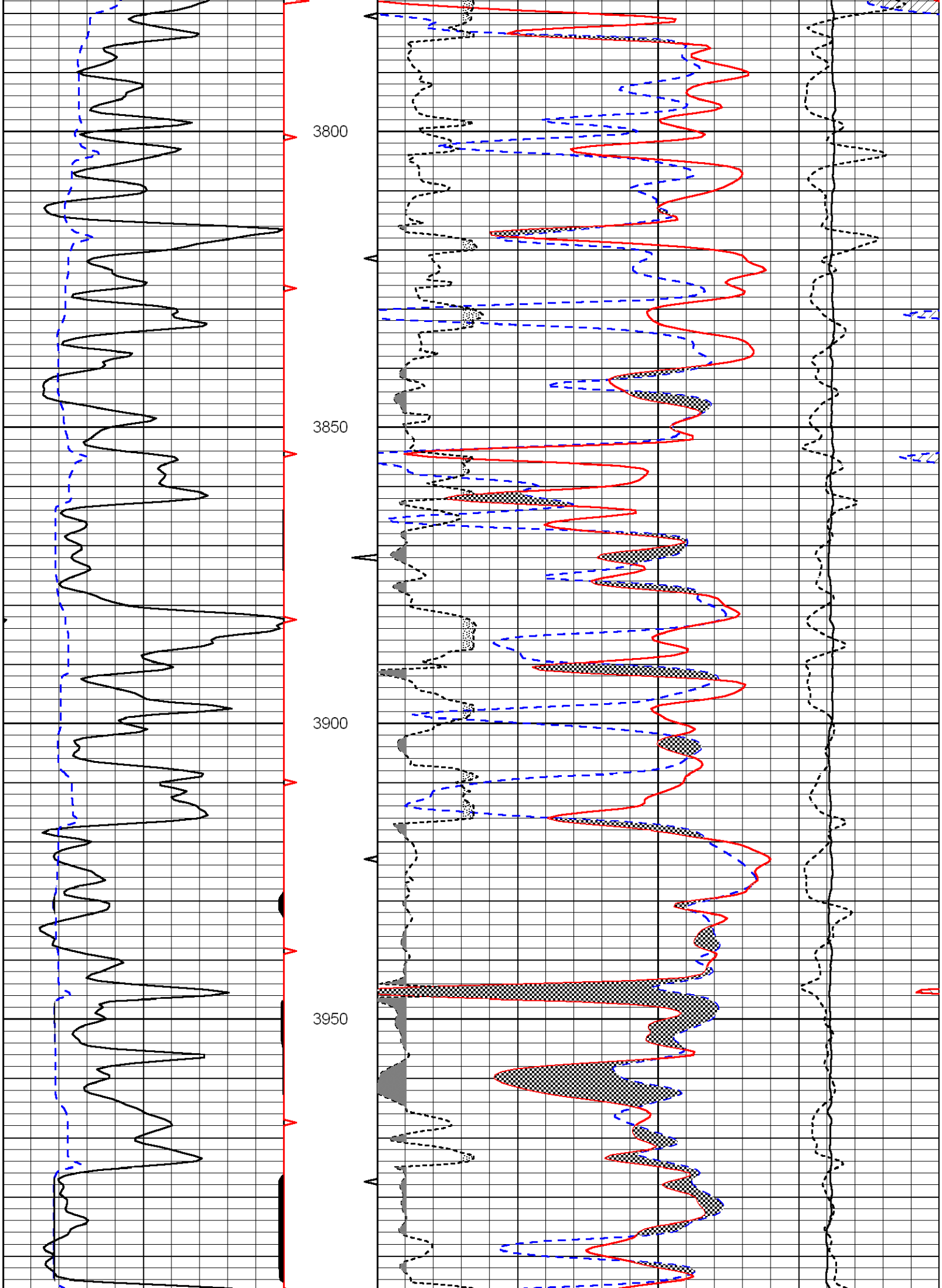
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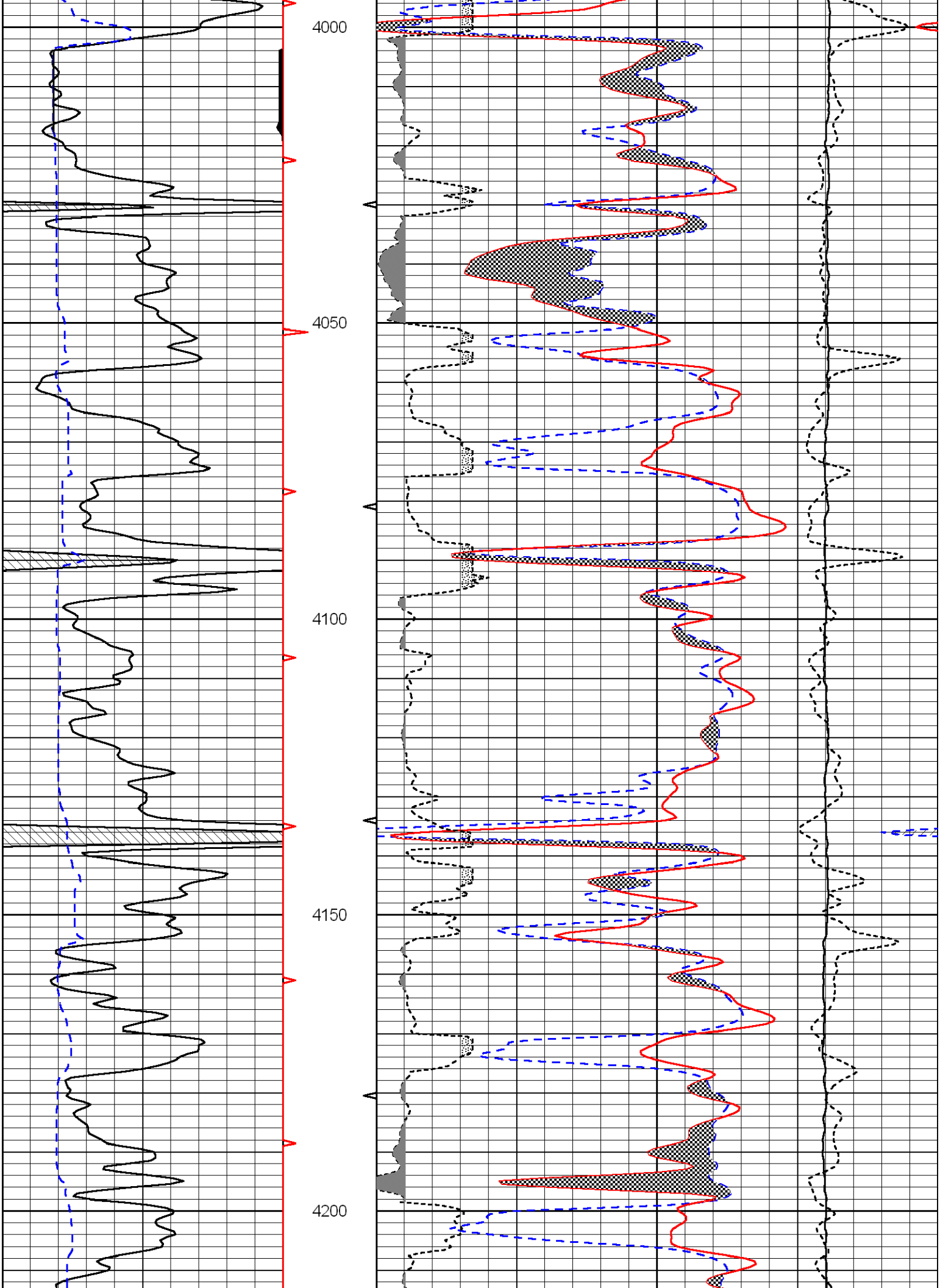
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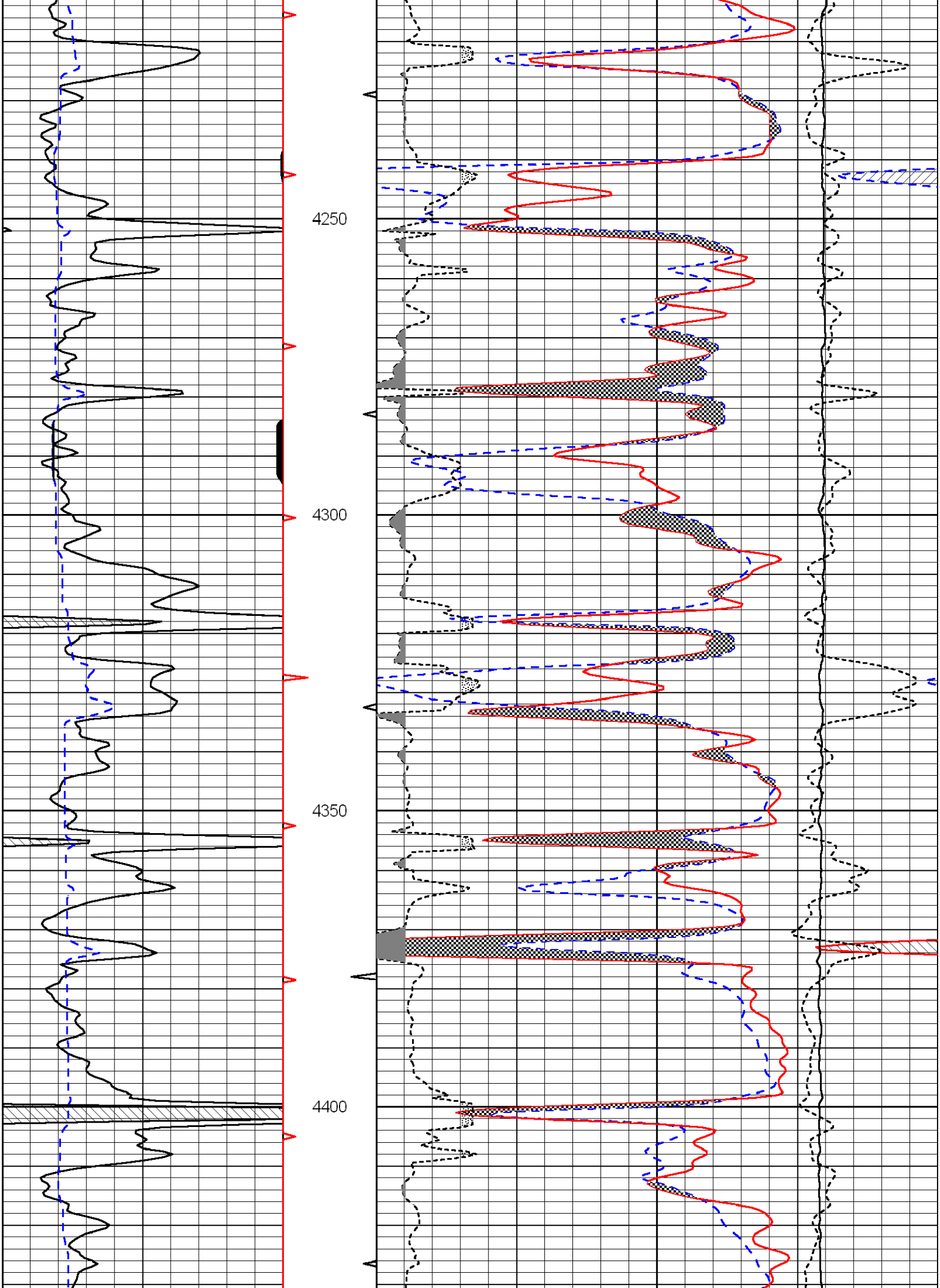
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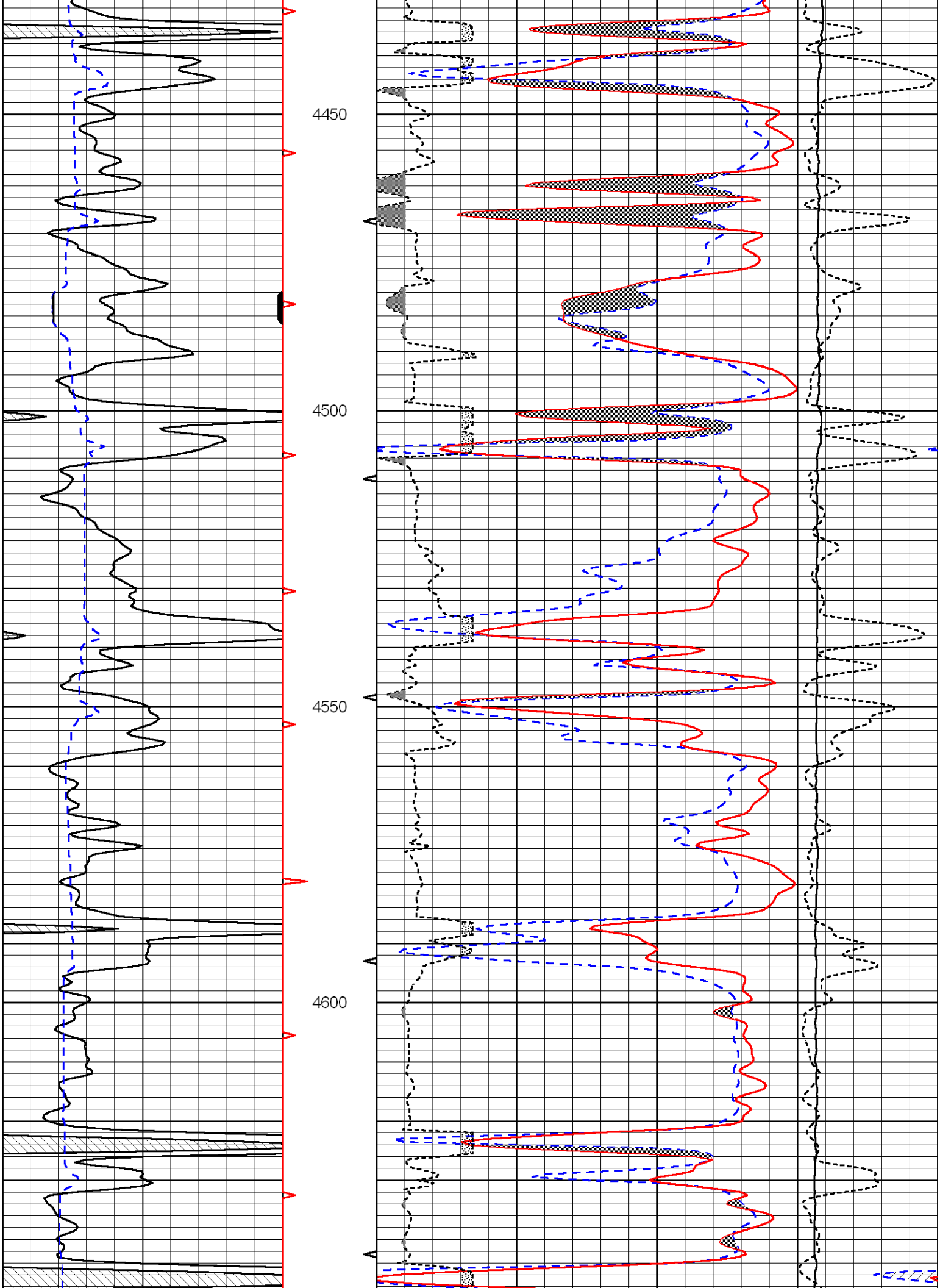
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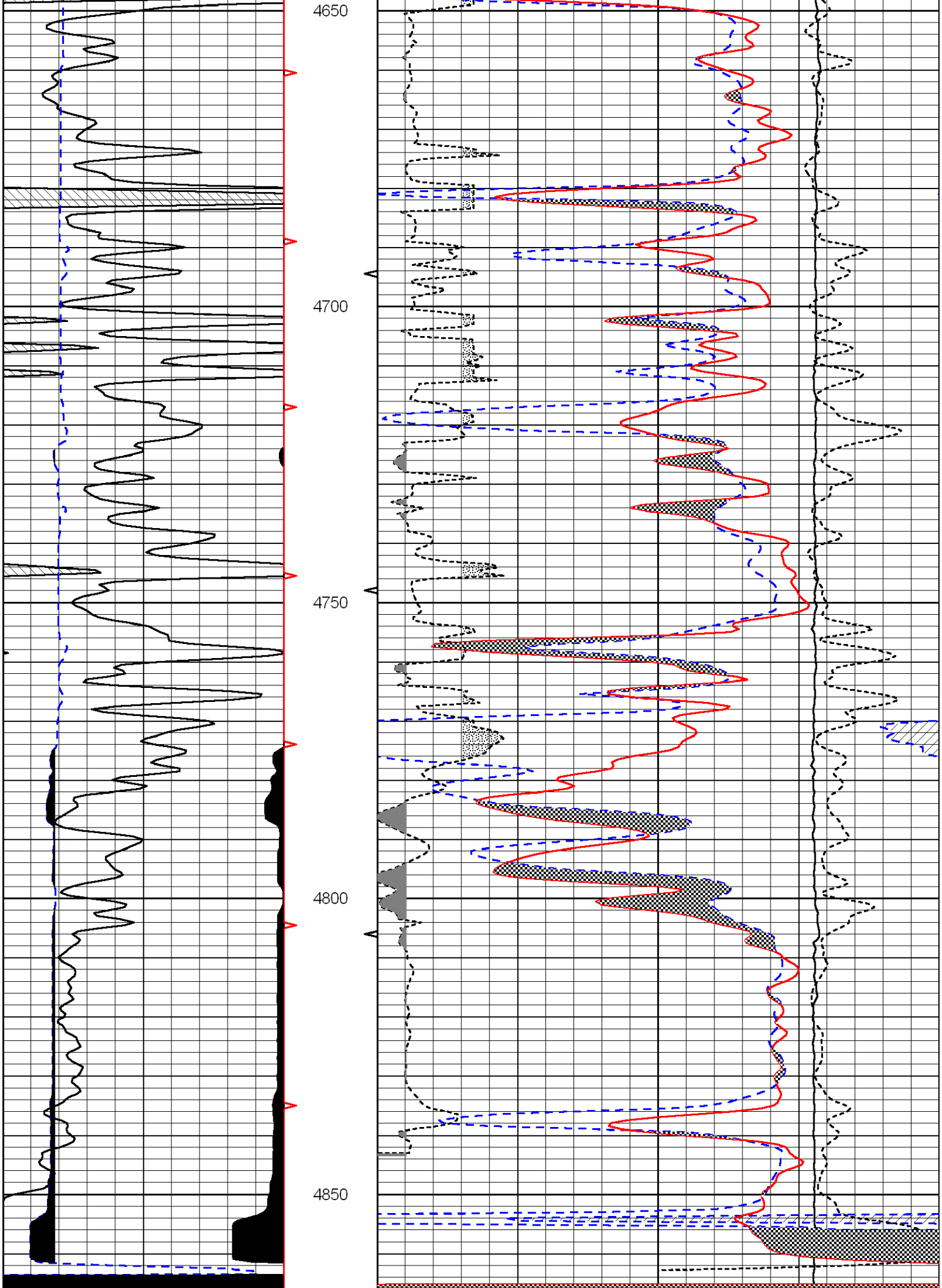
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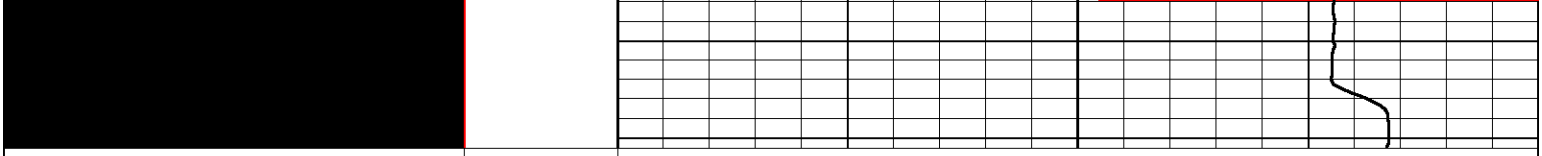


0	Gamma Ray	150
6	Caliper (GAPI)	16

30	CNLS				-10
30	Compensated Density (2.71 ma)				-10
2.625	DGA	3.425	-0.25	Correction	0.25
10000	Line Tension				0

LOG-TECH

DIGITAL LOG (785) 625-3858

Microresistivity Log

API No. 15-193-20831-00-00

Company Norstar Petroleum, Inc.

Well Epard #1-33

Field Unnamed

County Thomas State Kansas

Location SE NE SW NW
1658' FNL & 1234' FWL
Sec: 33 Twp: 10S Rge: 34W

Other Services
CNL/CDL
DIL

Elevation
K.B. 3264
D.F.
G.L. 3253

Permanent Datum	Ground Level	Elevation 3253	
Log Measured From	Kelly Bushing	11 Ft. Above Perm. Datum	
Drilling Measured From	Kelly Bushing		
Date	2/2/2012		
Run Number	Two		
Depth Driller	4870		
Depth Logger	4875		
Bottom Logged Interval	4874		
Top Log Interval	3700		
Casing Driller	8.625 @ 276		
Casing Logger	273		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	4400		
Density / Viscosity	9.2 / 69		
pH / Fluid Loss	10.5 / 8.0		
Source of Sample	Flowline		
Rm @ Meas. Temp	.55 @ 50		
Rmf @ Meas. Temp	.4125 @ 50		
Rmc @ Meas. Temp	.7425 @ 50		
Source of Rmf / Rmc	Charts		
Rm @ BHT	.22 @ 127		
Operating Rig Time	4 Hours		
Max Rec. Temp. F	127		
Equipment Number	91		
Location	Hays		
Recorded By	D. Schmidt	K. Bange	
Witnessed By	Bob Elder		

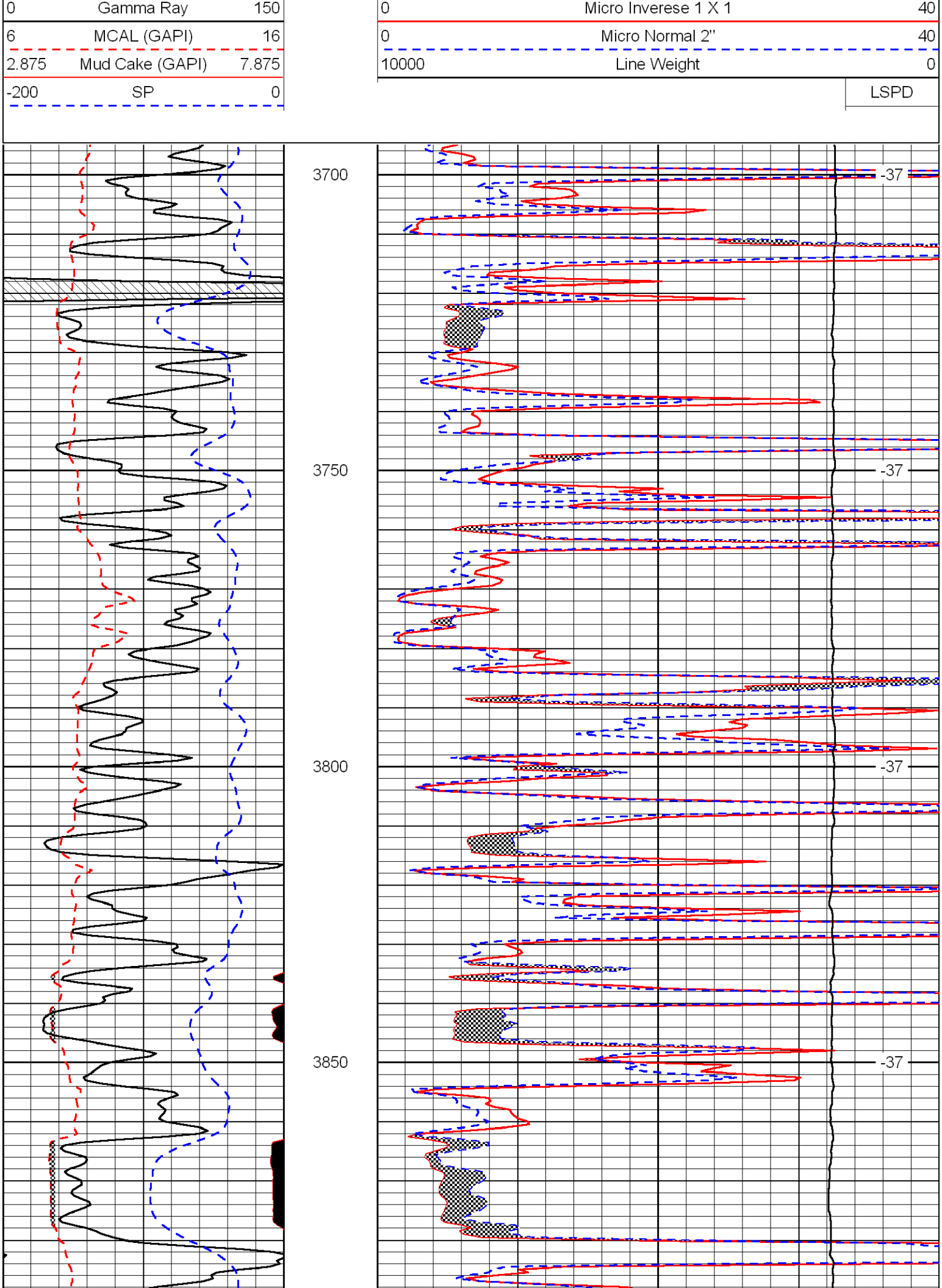
<<< Fold Here >>>

Comments

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

Monument,
2 W to Hwy 25,
2 N to county line, 4 W,
3/4 N, E into

Database File:	norstar_epard1-33hd.db
Dataset Pathname:	dil/norstack
Presentation Format:	micro
Dataset Creation:	Thu Feb 02 12:59:11 2012
Charted by:	Depth in Feet scaled 1:240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6 MCAL (GAPI) 16
2.875 Mud Cake (GAPI) 7.875
-200 SP 0
0 Micro Inverese 1 X 1 40
0 Micro Normal 2" 40
10000 Line Weight 0
LSPD
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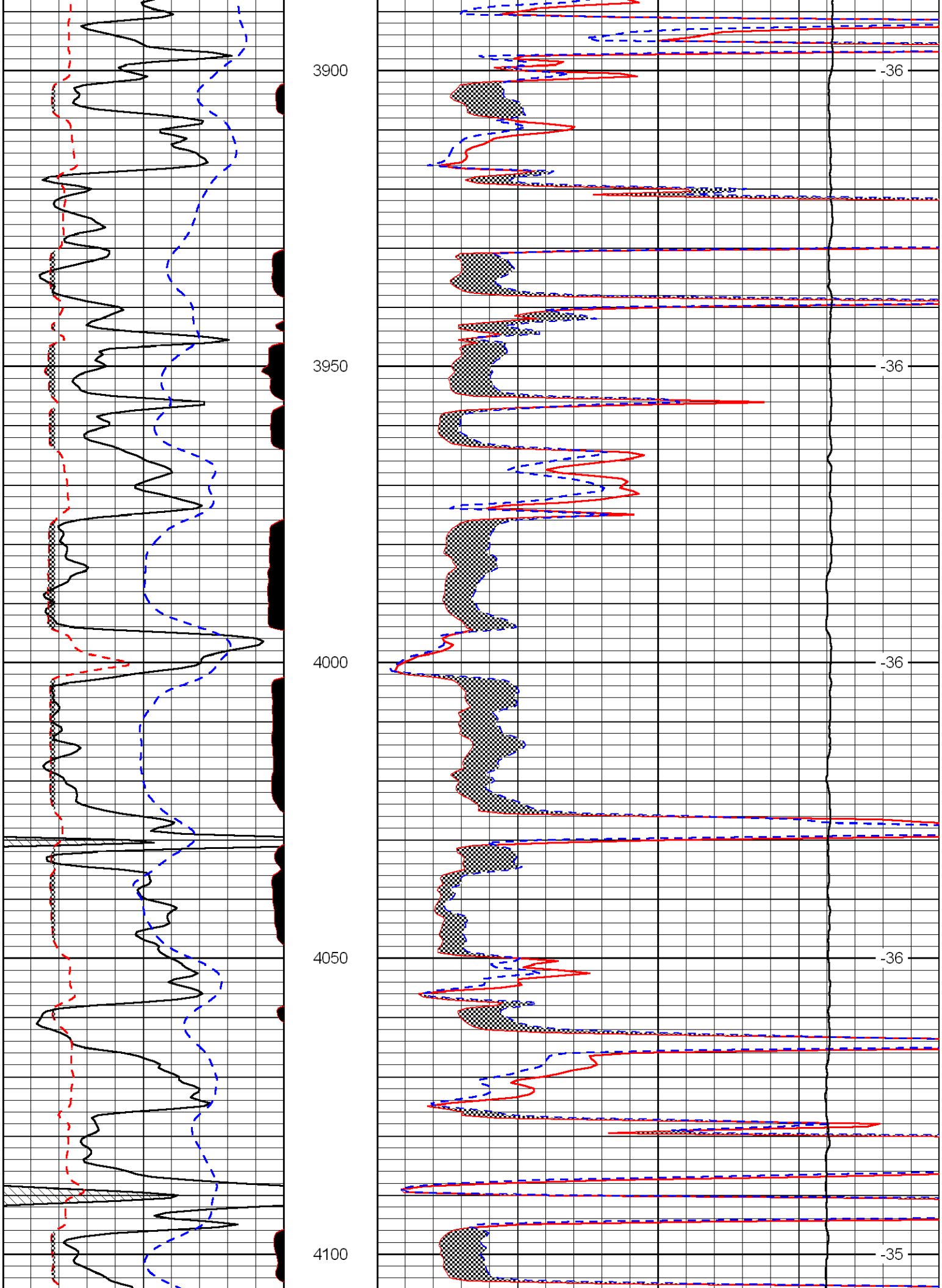
3750
3800
3850
-37
-37
-37
-37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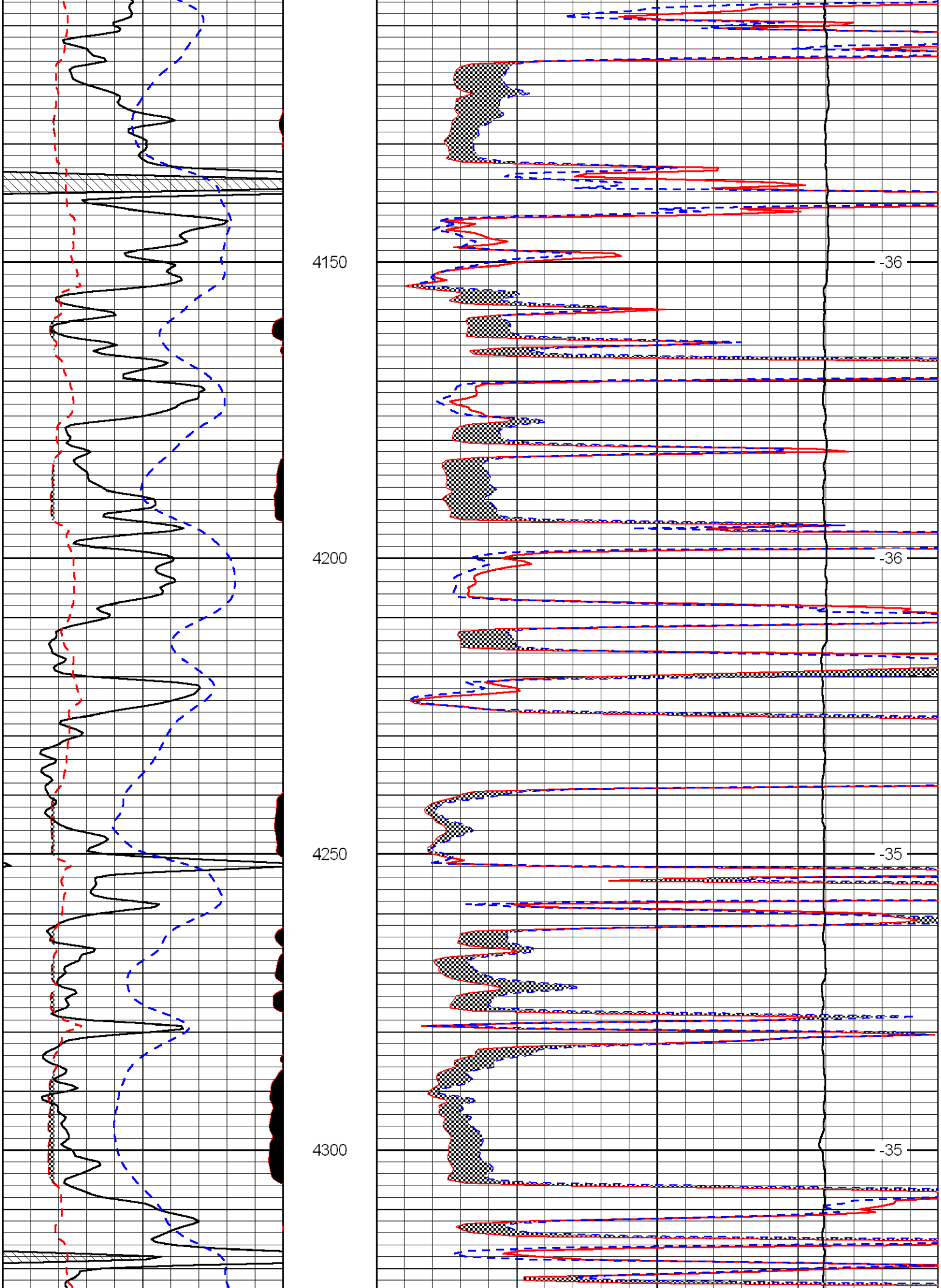
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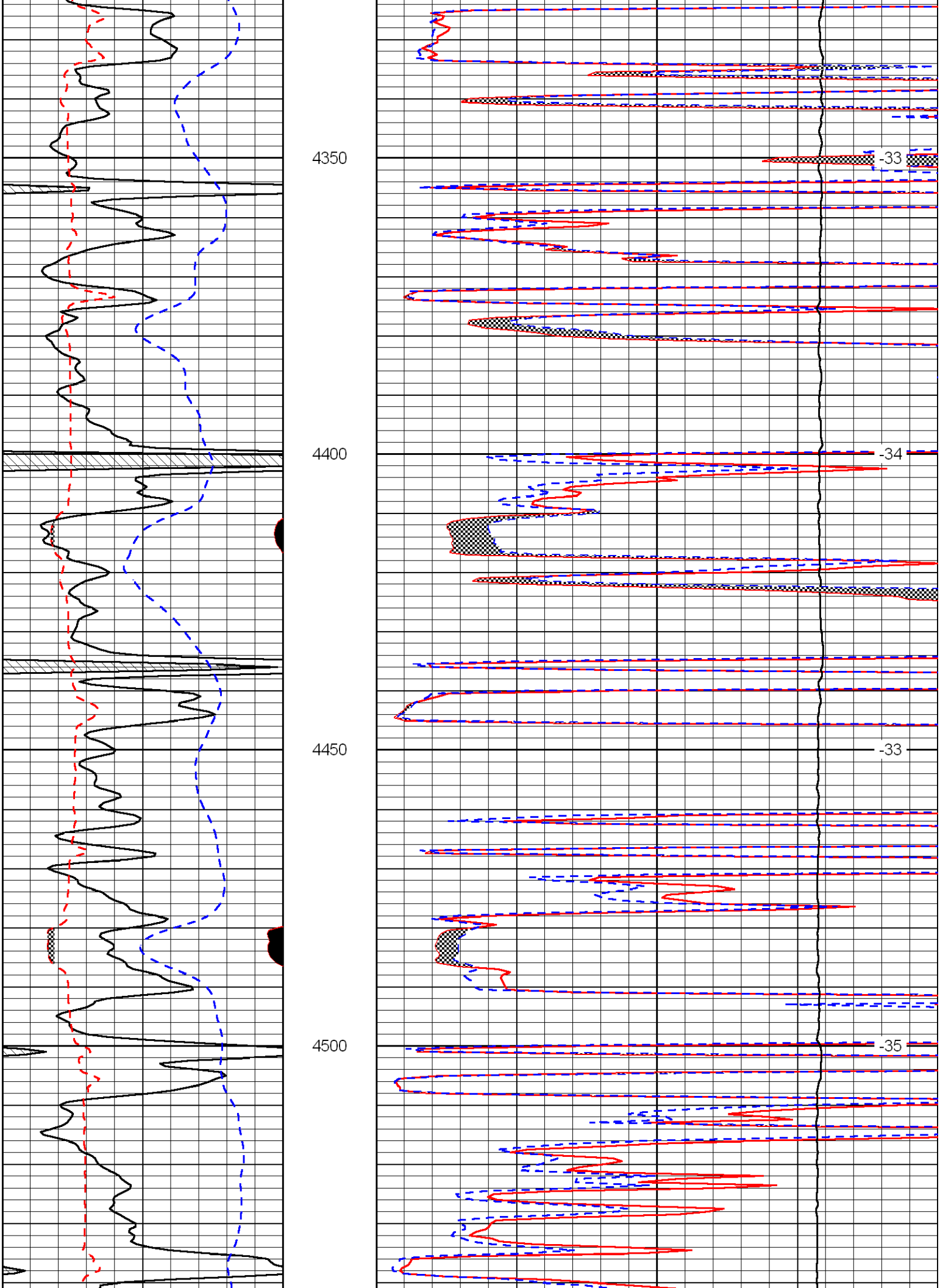
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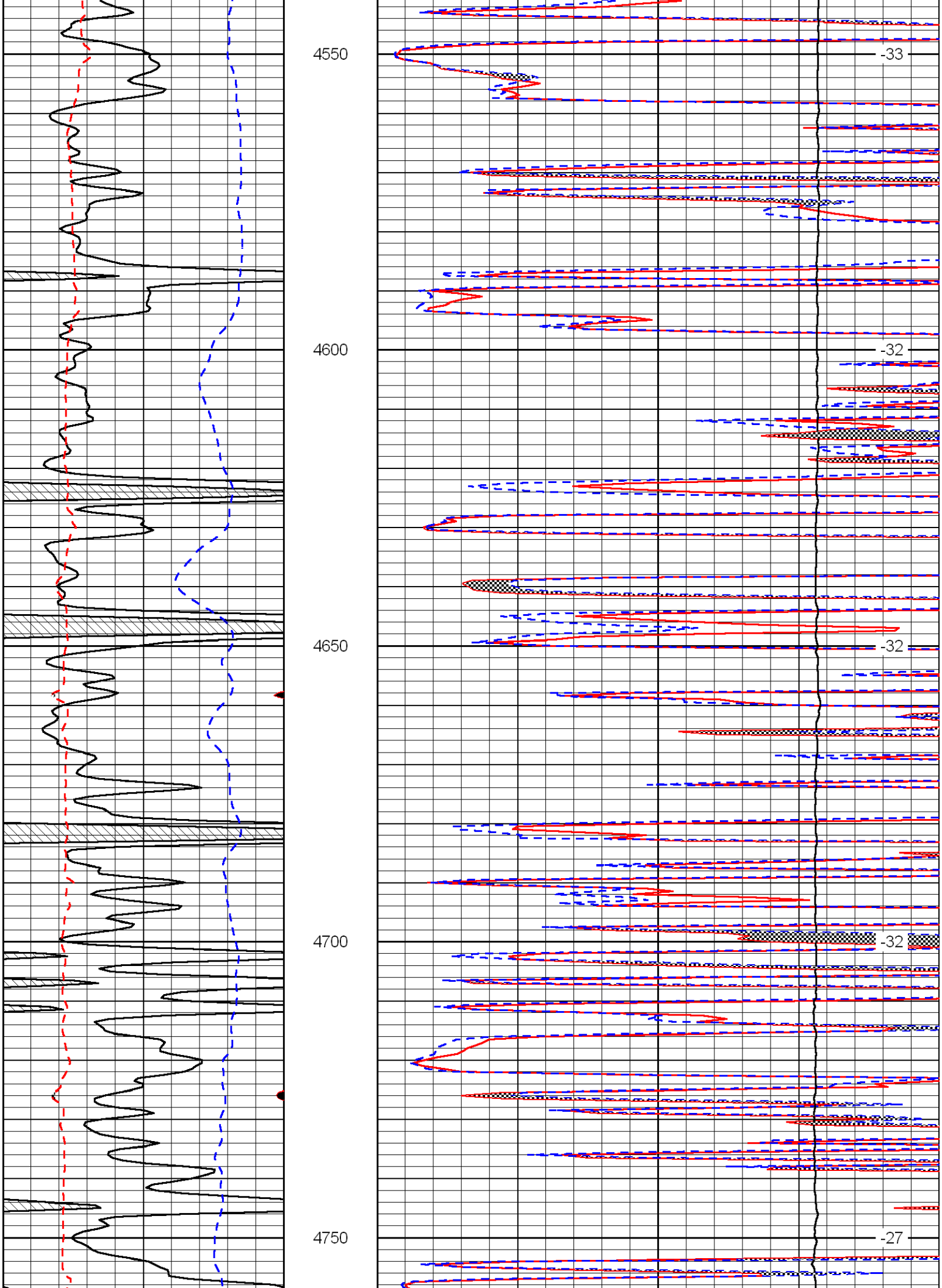
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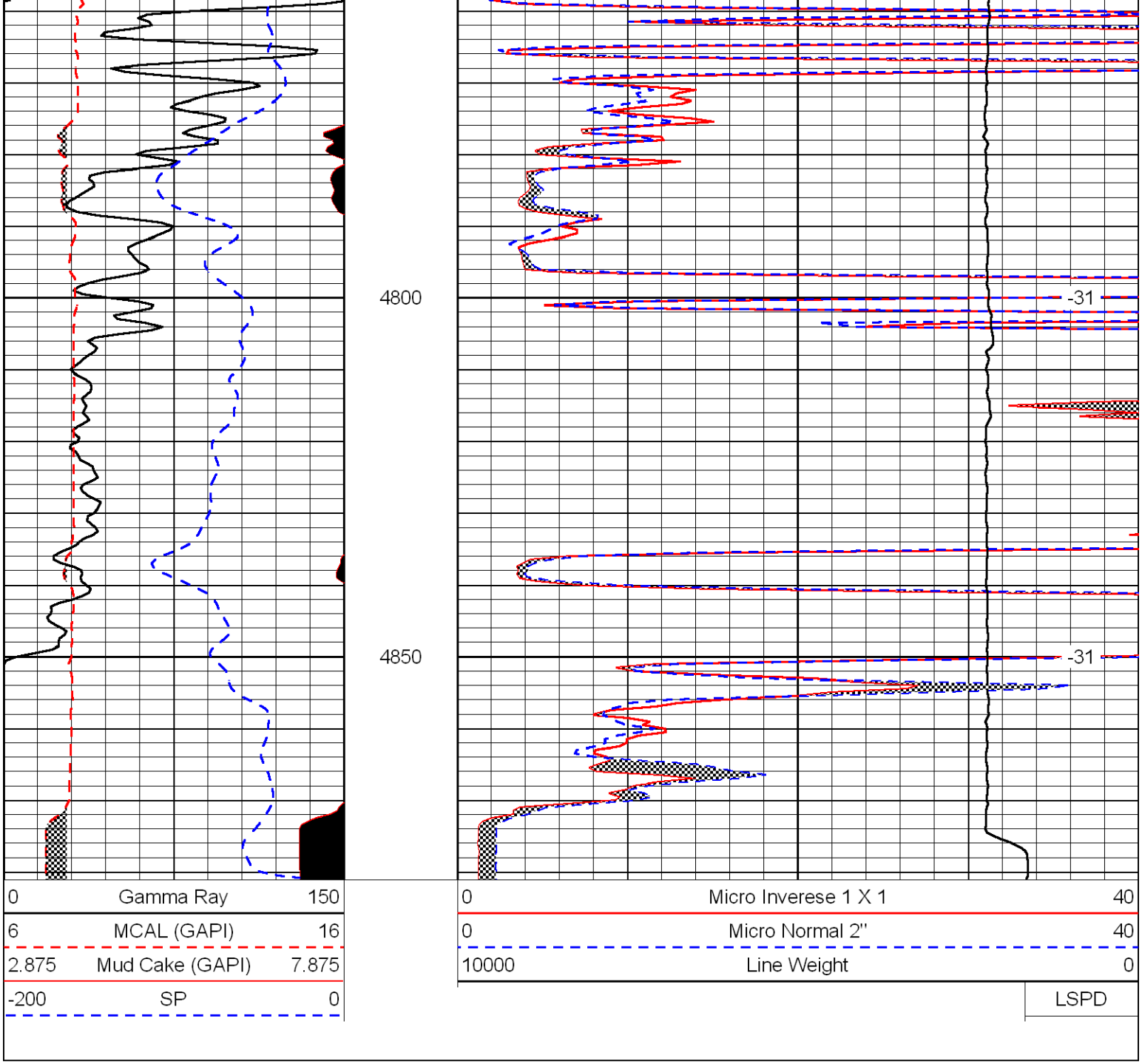
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Gamma Ray
150
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MCAL (GAPI)
16
2.875
Mud Cake (GAPI)
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SP
0
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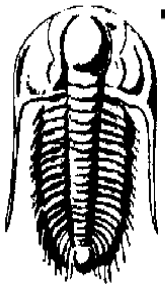
Micro Inverese 1 X 1
40
0
Micro Normal 2"
40
10000
Line Weight
0
LSPD



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc**

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

Epard #1-33

33-10-34w Thomas,KS

Start Date: 2012.01.29 @ 17:21:06
End Date: 2012.01.30 @ 00:30:06
Job Ticket #: 44944 DST #: 1

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

Printed: 2012.02.07 @ 12:05:51

DRILL STEM TEST REPORT

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44944 **DST#: 1**

Test Start: 2012.01.29 @ 17:21:06

GENERAL INFORMATION:

Formation: **H**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 19:45:06
Time Test Ended: 00:30:06

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane McBride
Unit No: 55

Interval: 4310.00 ft (KB) To 4344.00 ft (KB) (TVD)
Total Depth: 4344.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

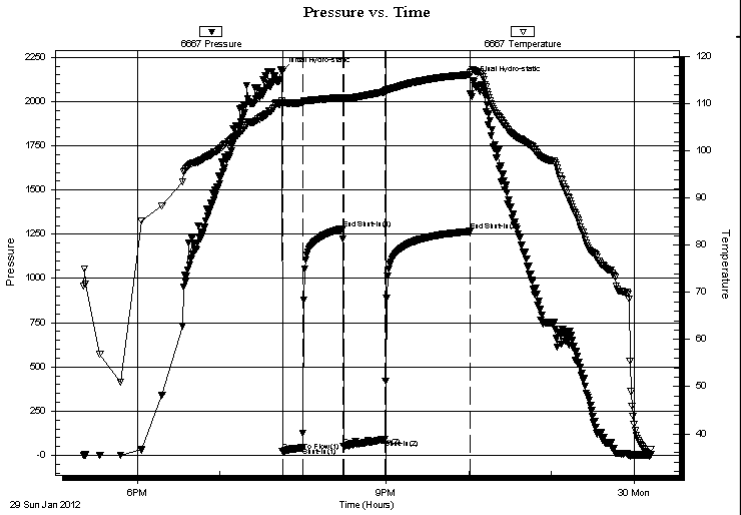
Reference Elevations: 3264.00 ft (KB)
3253.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6667 **Outside**

Press@RunDepth: 89.69 psig @ 4311.00 ft (KB)
Start Date: 2012.01.29 End Date: 2012.01.30
Start Time: 17:21:06 End Time: 00:12:06

Capacity: 8000.00 psig
Last Calib.: 2012.01.30
Time On Btm: 2012.01.29 @ 19:44:51
Time Off Btm: 2012.01.29 @ 22:02:51

TEST COMMENT: 1 3/4" blow
No return
2" blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2168.87	110.61	Initial Hydro-static
1	21.62	110.11	Open To Flow (1)
15	44.27	110.27	Shut-In(1)
44	1280.57	111.41	End Shut-In(1)
45	52.23	111.09	Open To Flow (2)
75	89.69	112.59	Shut-In(2)
137	1266.17	116.23	End Shut-In(2)
138	2116.66	117.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
120.00	mud w/oil spots	0.59

Gas Rates

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

DRILL STEM TEST REPORT

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44944 **DST#: 1**

Test Start: 2012.01.29 @ 17:21:06

GENERAL INFORMATION:

Formation: **H**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 19:45:06
Time Test Ended: 00:30:06

Test Type: Conventional Bottom Hole (Initial)
Tester: Shane McBride
Unit No: 55

Interval: 4310.00 ft (KB) To 4344.00 ft (KB) (TVD)
Total Depth: 4344.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

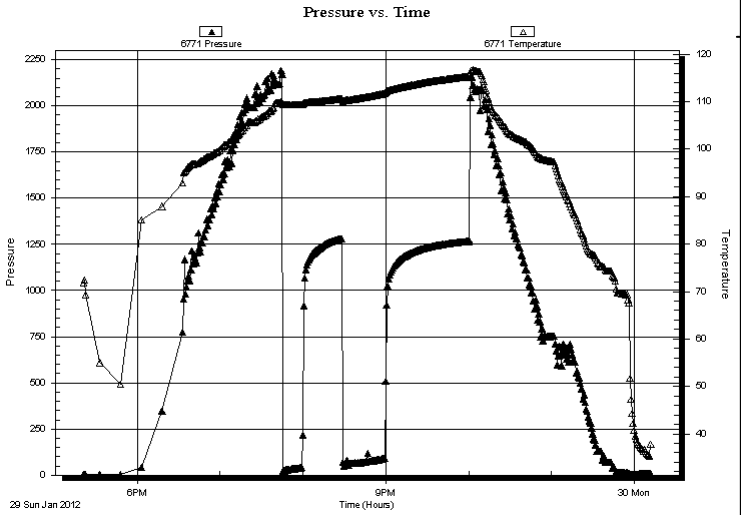
Reference Elevations: 3264.00 ft (KB)
3253.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: psig @ 4311.00 ft (KB)
Start Date: 2012.01.29 End Date: 2012.01.30
Start Time: 17:21:06 End Time: 00:11:51

Capacity: 8000.00 psig
Last Calib.: 2012.01.30
Time On Btm:
Time Off Btm:

TEST COMMENT: 1 3/4" blow
No return
2" blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
120.00	mud w/oil spots	0.59

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44944 **DST#: 1**

Test Start: 2012.01.29 @ 17:21:06

Tool Information

Drill Pipe:	Length:	4057.00 ft	Diameter:	3.80 inches	Volume:	56.91 bbl	Tool Weight:		1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	242.00 ft	Diameter:	2.25 inches	Volume:	1.19 bbl	Weight to Pull Loose:		90000.00 lb
					Total Volume:	58.10 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		9.00 ft					String Weight:	Initial	68000.00 lb
Depth to Top Packer:		4310.00 ft						Final	69000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		34.00 ft							
Tool Length:		54.00 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			4291.00		
Shut In Tool	5.00			4296.00		
Hydraulic tool	5.00			4301.00		
Packer	5.00			4306.00	20.00	Bottom Of Top Packer
Packer	4.00			4310.00		
Stubb	1.00			4311.00		
Recorder	0.00	6771	Inside	4311.00		
Recorder	0.00	6667	Outside	4311.00		
Perforations	28.00			4339.00		
Bullnose	5.00			4344.00	34.00	Bottom Packers & Anchor
Total Tool Length:	**54.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44944 **DST#: 1**

Test Start: 2012.01.29 @ 17:21:06

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	59.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.17 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4200.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

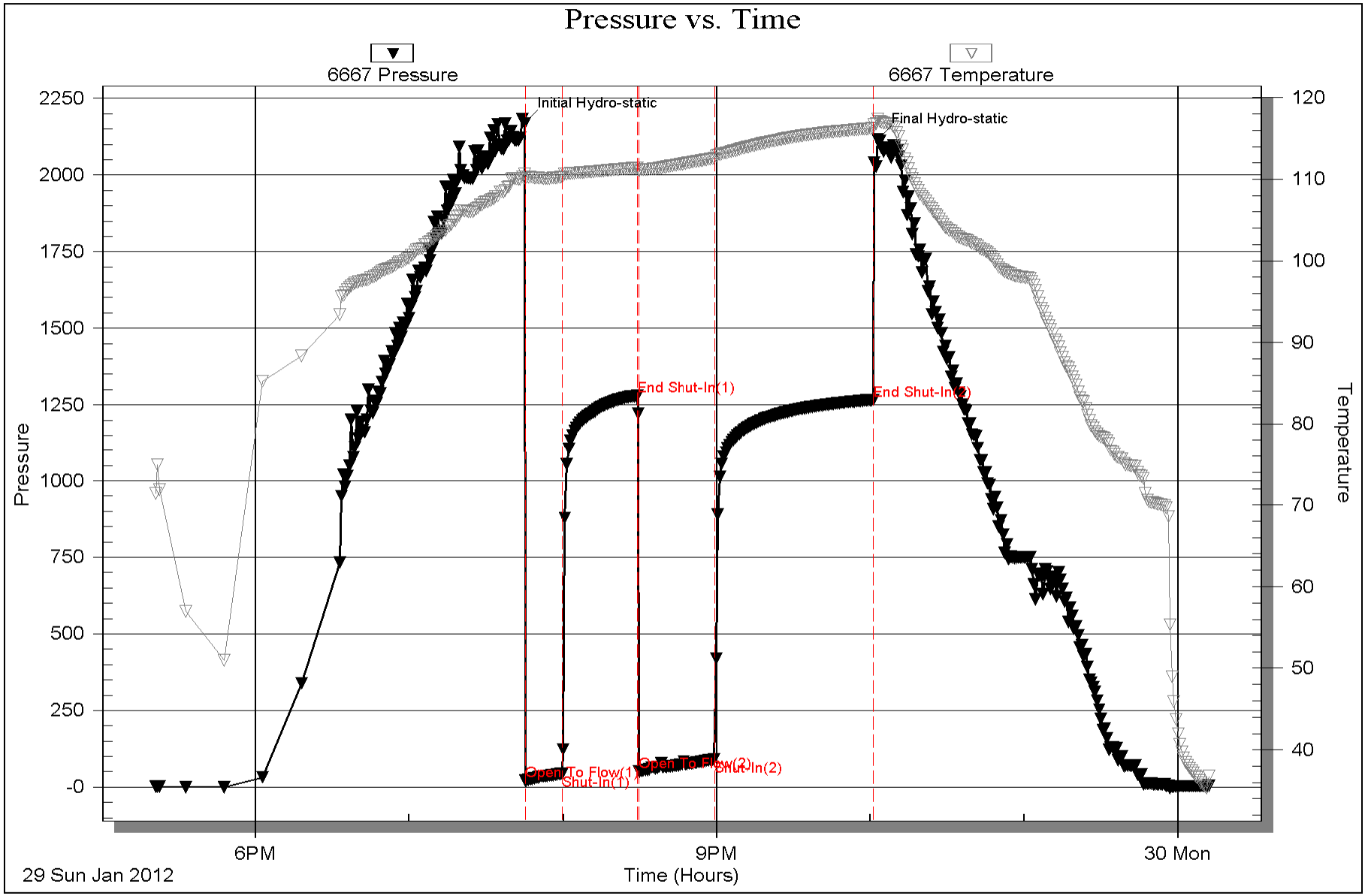
Recovery Table

Length ft	Description	Volume bbl
120.00	mud w/oil spots	0.590

Total Length: 120.00 ft Total Volume: 0.590 bbl

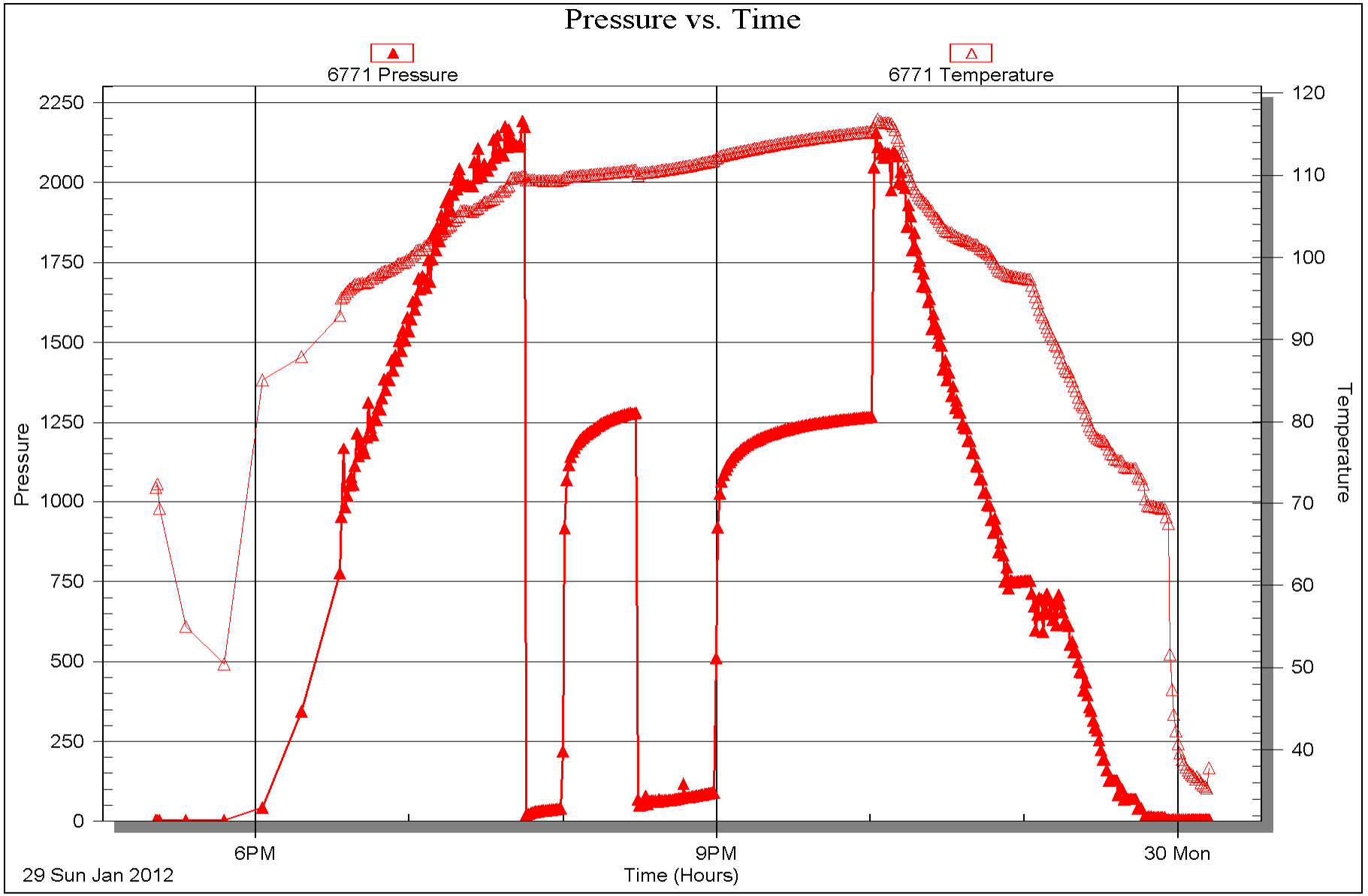
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6667 **Outside** Norstar Petroleum Inc Epard #1-33 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 44944 Printed: 2012.02.07 @ 12:05:53

Serial #: 6771 **Inside** Norstar Petroleum Inc Epard #1-33 DST Test Number: 1



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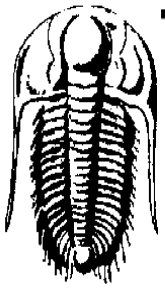


TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc**

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

Epard #1-33

33-10-34w Thomas,KS

Start Date: 2012.01.30 @ 10:11:05
End Date: 2012.01.30 @ 16:58:50
Job Ticket #: 44945 DST #: 2

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

Printed: 2012.02.07 @ 12:04:42

DRILL STEM TEST REPORT

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44945 **DST#: 2**

Test Start: 2012.01.30 @ 10:11:05

GENERAL INFORMATION:

Formation: **I-J**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 12:08:50
Time Test Ended: 16:58:50

Test Type: Conventional Bottom Hole (Reset)
Tester: Shane McBride
Unit No: 55

Interval: 4350.00 ft (KB) To 4406.00 ft (KB) (TVD)
Total Depth: 4406.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

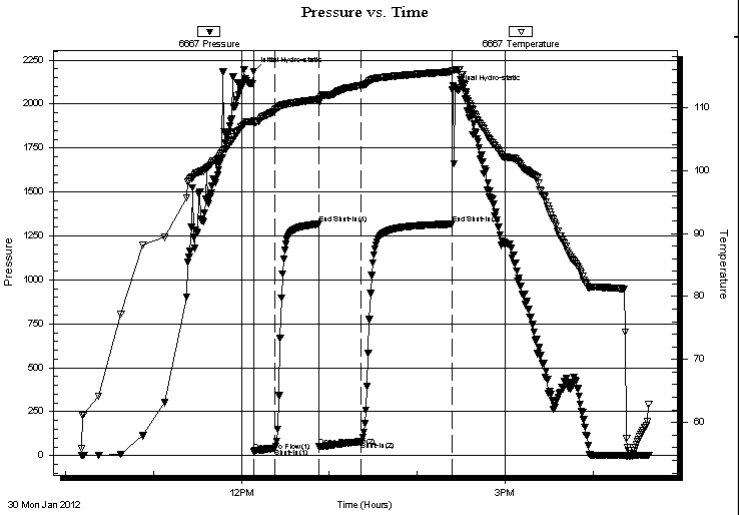
Reference Elevations: 3264.00 ft (KB)
3253.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6667 **Outside**

Press@RunDepth: 79.49 psig @ 4351.00 ft (KB)
Start Date: 2012.01.30 End Date: 2012.01.30
Start Time: 10:11:05 End Time: 16:37:50

Capacity: 8000.00 psig
Last Calib.: 2012.01.30
Time On Btm: 2012.01.30 @ 12:08:35
Time Off Btm: 2012.01.30 @ 14:24:05

TEST COMMENT: 1 3/4"in blow
No return
2 3/4"in blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2185.45	107.85	Initial Hydro-static
1	26.32	107.48	Open To Flow (1)
15	43.59	109.61	Shut-In(1)
45	1318.14	111.29	End Shut-In(1)
45	51.14	110.84	Open To Flow (2)
74	79.49	113.49	Shut-In(2)
135	1317.53	115.65	End Shut-In(2)
136	2083.86	115.83	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	o c m 35%o 65%m	0.15
120.00	o c m 20%o 80%m	0.59

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44945 **DST#: 2**

Test Start: 2012.01.30 @ 10:11:05

GENERAL INFORMATION:

Formation: **I-J**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 12:08:50
Time Test Ended: 16:58:50

Test Type: Conventional Bottom Hole (Reset)
Tester: Shane McBride
Unit No: 55

Interval: 4350.00 ft (KB) To 4406.00 ft (KB) (TVD)
Total Depth: 4406.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

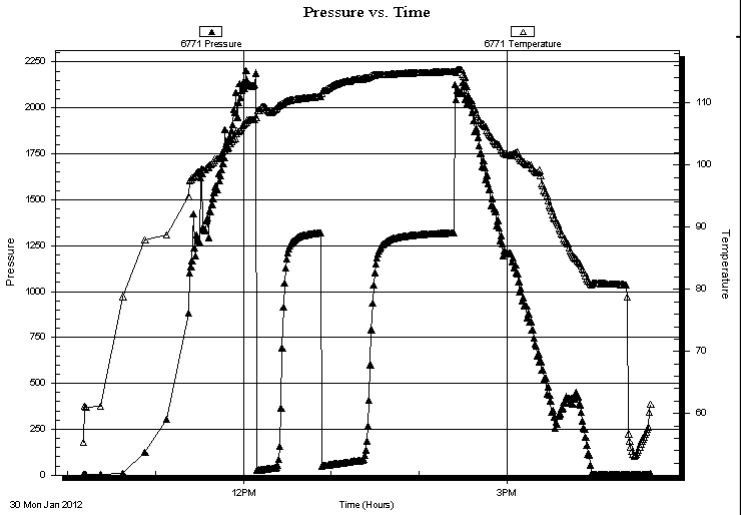
Reference Elevations: 3264.00 ft (KB)
3253.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: psig @ 4351.00 ft (KB)
Start Date: 2012.01.30 End Date: 2012.01.30
Start Time: 10:11:05 End Time: 16:37:50

Capacity: 8000.00 psig
Last Calib.: 2012.01.30
Time On Btm:
Time Off Btm:

TEST COMMENT: 1 3/4"in blow
No return
2 3/4"in blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
30.00	o c m 35%o 65%m	0.15
120.00	o c m 20%o 80%m	0.59

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44945 **DST#: 2**

Test Start: 2012.01.30 @ 10:11:05

Tool Information

Drill Pipe:	Length:	4113.00 ft	Diameter:	3.80	inches	Volume:	57.69	bbl	
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00	inches	Volume:	0.00	bbl	
Drill Collar:	Length:	242.00 ft	Diameter:	2.25	inches	Volume:	1.19	bbl	
						Total Volume:	58.88	bbl	

Drill Pipe Above KB:	25.00 ft
Depth to Top Packer:	4350.00 ft
Depth to Bottom Packer:	ft
Interval between Packers:	56.00 ft
Tool Length:	76.00 ft
Number of Packers:	2
Diameter:	6.75 inches

Tool Weight:		1500.00 lb
Weight set on Packer:		25000.00 lb
Weight to Pull Loose:		95000.00 lb
Tool Chased		0.00 ft
String Weight:	Initial	70000.00 lb
	Final	71000.00 lb

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths	
Change Over Sub	1.00			4331.00		
Shut In Tool	5.00			4336.00		
Hydraulic tool	5.00			4341.00		
Packer	5.00			4346.00	20.00	Bottom Of Top Packer
Packer	4.00			4350.00		
Stubb	1.00			4351.00		
Recorder	0.00	6771	Inside	4351.00		
Recorder	0.00	6667	Outside	4351.00		
Perforations	16.00			4367.00		
Change Over Sub	1.00			4368.00		
Drill Pipe	32.00			4400.00		
Change Over Sub	1.00			4401.00		
Bullnose	5.00			4406.00	56.00	Bottom Packers & Anchor
Total Tool Length:	**76.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44945 **DST#: 2**

Test Start: 2012.01.30 @ 10:11:05

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	0 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	59.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.16 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4200.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

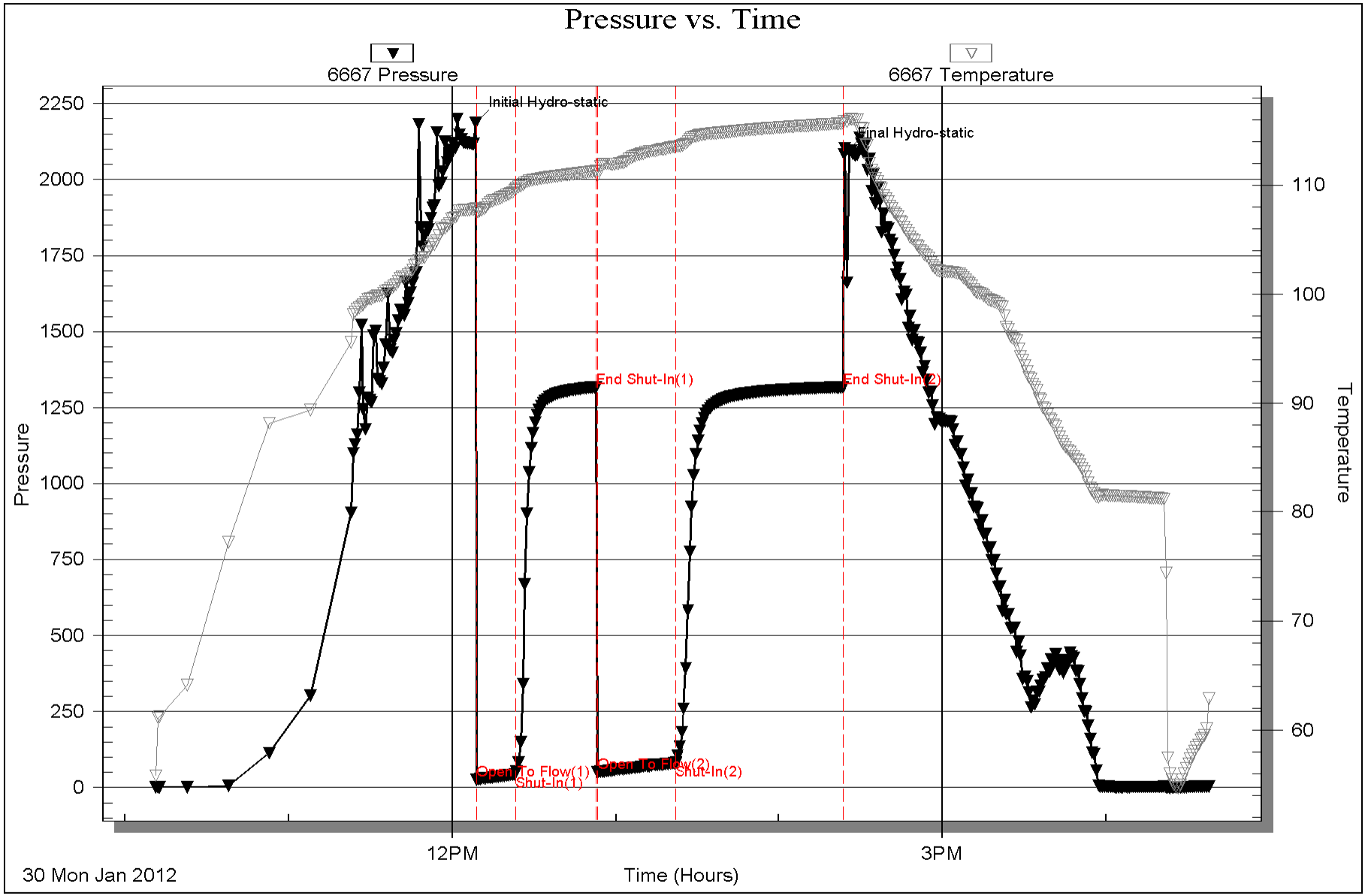
Recovery Table

Length ft	Description	Volume bbl
30.00	o c m 35%o 65%m	0.148
120.00	o c m 20%o 80%m	0.590

Total Length: 150.00 ft Total Volume: 0.738 bbl

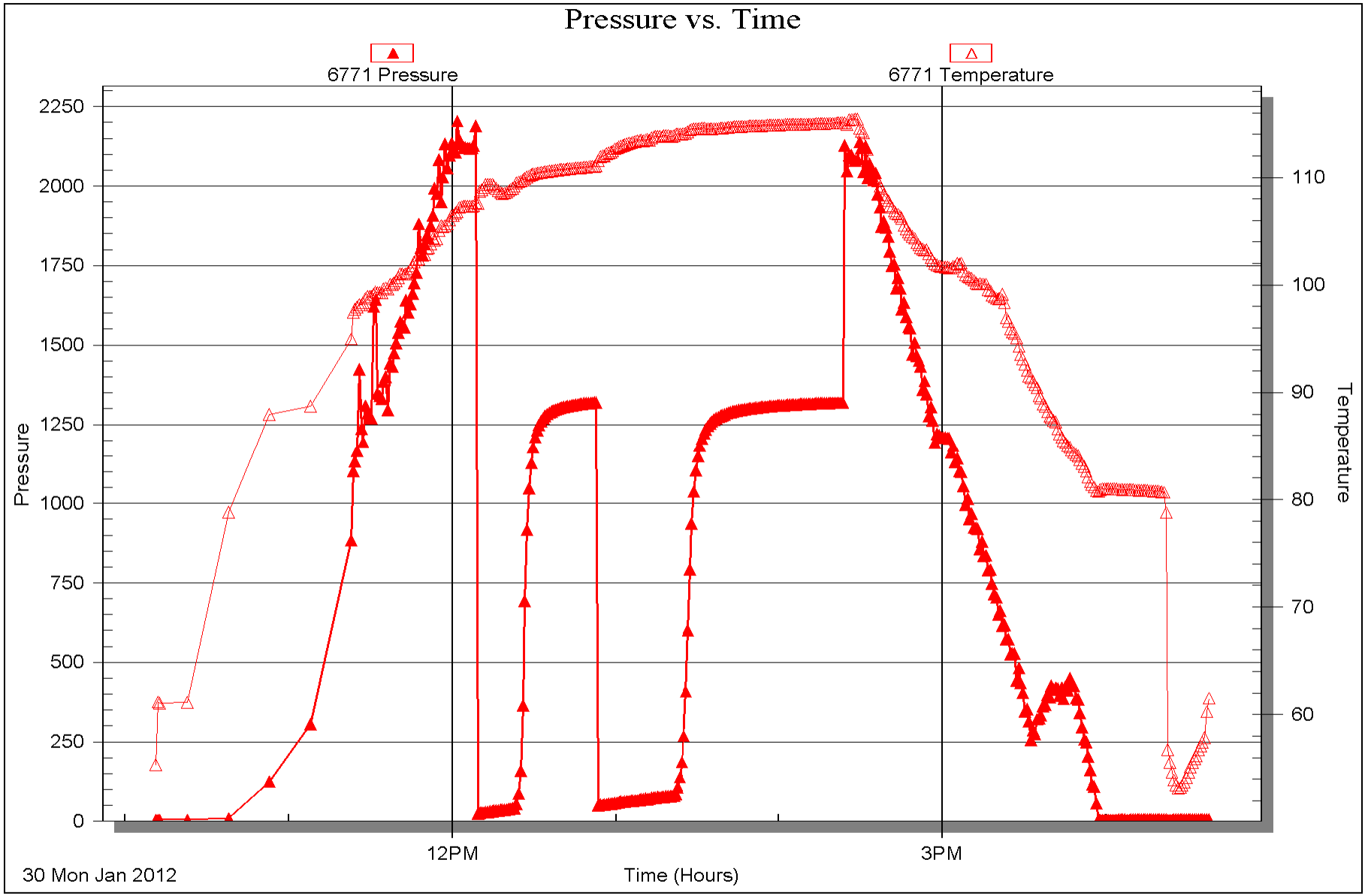
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6667 **Outside** Norstar Petroleum Inc Epard #1-33 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 44945 Printed: 2012.02.07 @ 12:04:44

Serial #: 6771 **Inside** Norstar Petroleum Inc Epard #1-33 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 44945 Printed: 2012.02.07 @ 12:04:45

DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc**

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

Epard #1-33

33-10-34w Thomas,KS

Start Date: 2012.01.31 @ 00:30:44
End Date: 2012.01.31 @ 07:25:29
Job Ticket #: 44946 DST #: 3

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

Printed: 2012.02.07 @ 12:03:37

DRILL STEM TEST REPORT

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44946 **DST#: 3**

Test Start: 2012.01.31 @ 00:30:44

GENERAL INFORMATION:

Formation: **K**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 02:46:44
Time Test Ended: 07:25:29

Test Type: Conventional Bottom Hole (Reset)
Tester: Shane McBride
Unit No: 55

Interval: 4395.00 ft (KB) To 4430.00 ft (KB) (TVD)
Total Depth: 4430.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

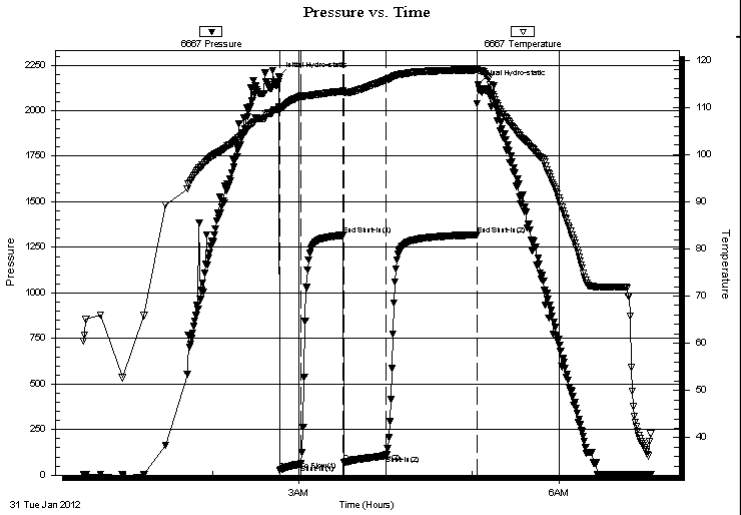
Reference Elevations: 3264.00 ft (KB)
3253.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6667 **Outside**

Press@RunDepth: 108.45 psig @ 4396.00 ft (KB)
Start Date: 2012.01.31 End Date: 2012.01.31
Start Time: 00:30:44 End Time: 07:03:29

Capacity: 8000.00 psig
Last Calib.: 2012.01.31
Time On Btm: 2012.01.31 @ 02:45:59
Time Off Btm: 2012.01.31 @ 05:03:59

TEST COMMENT: 2" blow
No return
2 3/4" blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2187.34	109.93	Initial Hydro-static
1	27.12	109.59	Open To Flow (1)
15	60.55	112.37	Shut-In(1)
45	1316.62	113.43	End Shut-In(1)
45	70.13	113.13	Open To Flow (2)
75	108.45	115.77	Shut-In(2)
138	1319.10	117.96	End Shut-In(2)
138	2141.40	117.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	free oil 100%o	0.10
40.00	o c m 25%o 75%o	0.20
120.00	s o c m 5%o 95%m	0.59

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44946 **DST#: 3**

Test Start: 2012.01.31 @ 00:30:44

GENERAL INFORMATION:

Formation: **K**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 02:46:44
Time Test Ended: 07:25:29

Test Type: Conventional Bottom Hole (Reset)
Tester: Shane McBride
Unit No: 55

Interval: 4395.00 ft (KB) To 4430.00 ft (KB) (TVD)
Total Depth: 4430.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

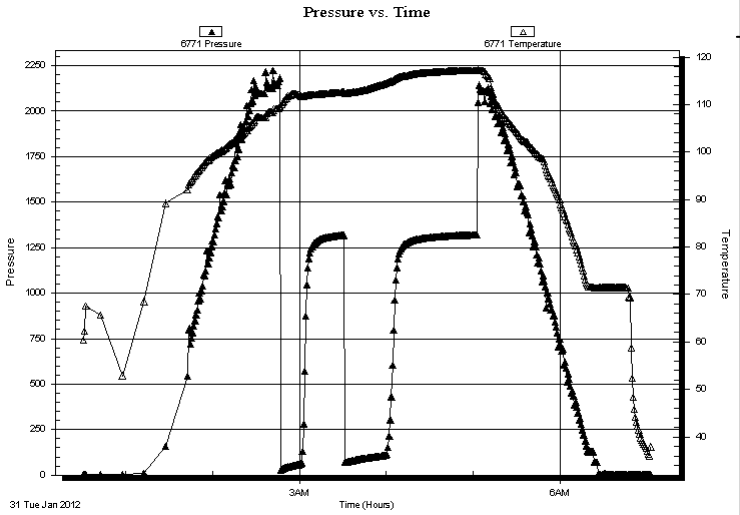
Reference Elevations: 3264.00 ft (KB)
3253.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: psig @ 4396.00 ft (KB)
Start Date: 2012.01.31 End Date: 2012.01.31
Start Time: 00:30:44 End Time: 07:03:14

Capacity: 8000.00 psig
Last Calib.: 2012.01.31
Time On Btm:
Time Off Btm:

TEST COMMENT: 2" blow
No return
2 3/4" blow
No return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
20.00	free oil 100%o	0.10
40.00	o c m 25%o 75%o	0.20
120.00	s o c m 5%o 95%m	0.59

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44946 **DST#: 3**

Test Start: 2012.01.31 @ 00:30:44

Tool Information

Drill Pipe:	Length:	4147.00 ft	Diameter:	3.80 inches	Volume:	58.17 bbl	Tool Weight:		1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	242.00 ft	Diameter:	2.25 inches	Volume:	1.19 bbl	Weight to Pull Loose:		95000.00 lb
					Total Volume:	59.36 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		14.00 ft					String Weight:	Initial	70000.00 lb
Depth to Top Packer:		4395.00 ft						Final	71000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		35.00 ft							
Tool Length:		55.00 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			4376.00		
Shut In Tool	5.00			4381.00		
Hydraulic tool	5.00			4386.00		
Packer	5.00			4391.00	20.00	Bottom Of Top Packer
Packer	4.00			4395.00		
Stubb	1.00			4396.00		
Recorder	0.00	6771	Inside	4396.00		
Recorder	0.00	6667	Outside	4396.00		
Perforations	29.00			4425.00		
Bullnose	5.00			4430.00	35.00	Bottom Packers & Anchor
Total Tool Length:	**55.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44946 **DST#: 3**

Test Start: 2012.01.31 @ 00:30:44

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	30 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	6.38 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	3500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

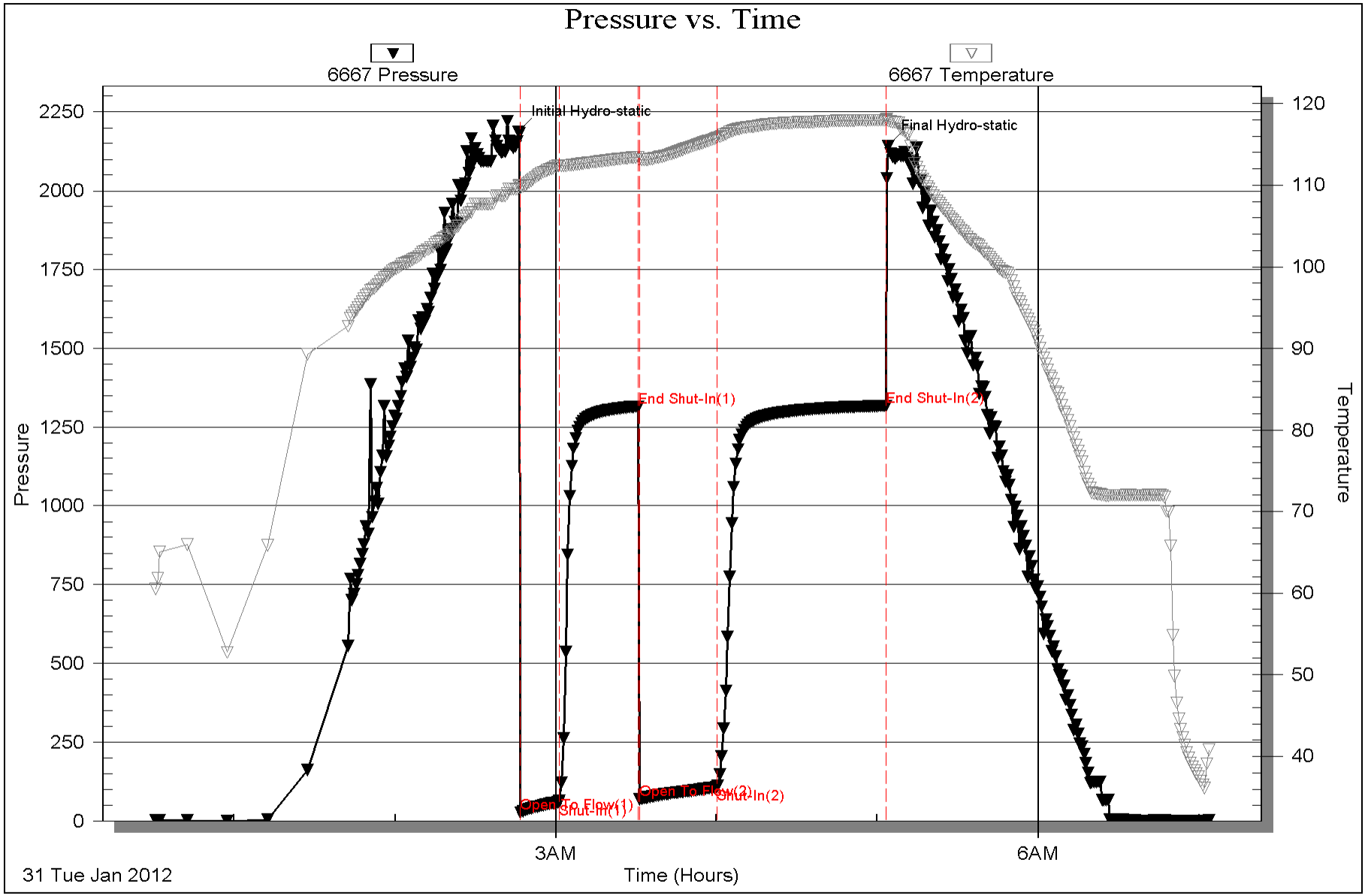
Recovery Table

Length ft	Description	Volume bbl
20.00	free oil 100%o	0.098
40.00	o c m 25%o 75%o	0.197
120.00	s o c m 5%o 95%m	0.590

Total Length: 180.00 ft Total Volume: 0.885 bbl

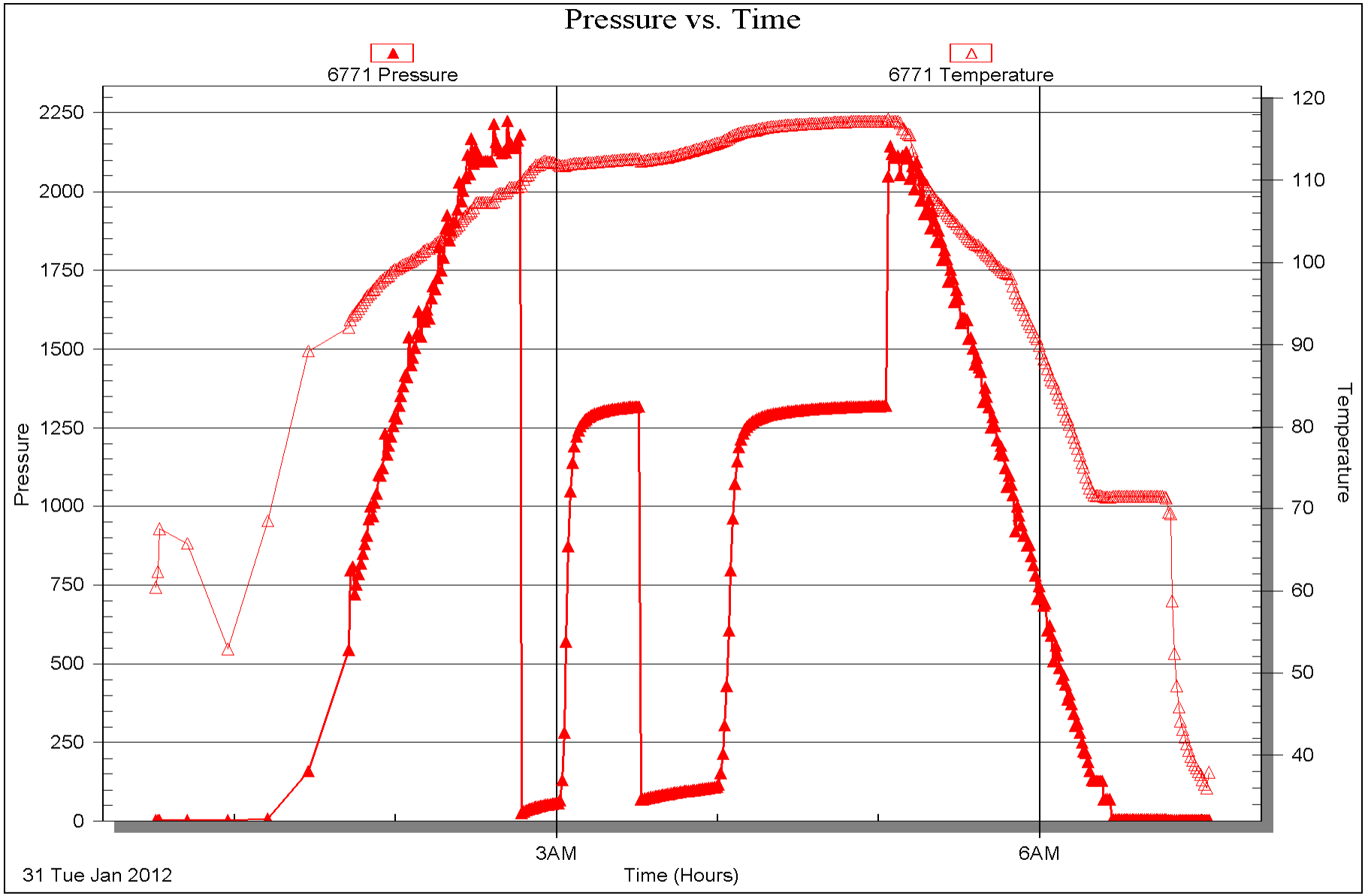
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6667 **Outside** Norstar Petroleum Inc Epard #1-33 DST Test Number: 3

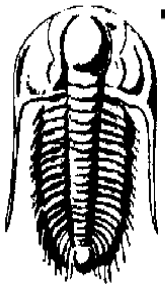


Trilobite Testing, Inc Ref. No: 44946 Printed: 2012.02.07 @ 12:03:40

Serial #: 6771 **Inside** Norstar Petroleum Inc Epard #1-33 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 44946 Printed: 2012.02.07 @ 12:03:40



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Prepared For: **Norstar Petroleum Inc**

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

Epard #1-33

33-10-34w Thomas,KS

Start Date: 2012.02.01 @ 10:40:23
End Date: 2012.02.01 @ 19:10:53
Job Ticket #: 44947 DST #: 4

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

Printed: 2012.02.07 @ 12:02:31

DRILL STEM TEST REPORT

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44947 **DST#: 4**

Test Start: 2012.02.01 @ 10:40:23

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 12:50:08
Time Test Ended: 19:10:53

Test Type: Conventional Bottom Hole (Reset)
Tester: Shane McBride
Unit No: 55

Interval: 4694.00 ft (KB) To 4747.00 ft (KB) (TVD)
Total Depth: 4747.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

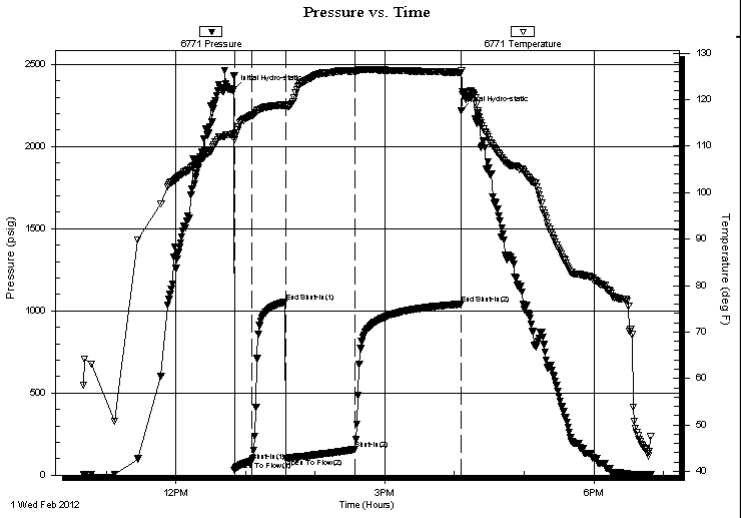
Reference Elevations: 3264.00 ft (KB)
3253.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6771 **Inside**

Press@RunDepth: 156.69 psig @ 4695.00 ft (KB)
Start Date: 2012.02.01 End Date: 2012.02.01
Start Time: 10:40:23 End Time: 18:48:53

Capacity: 8000.00 psig
Last Calib.: 2012.02.01
Time On Btm: 2012.02.01 @ 12:49:23
Time Off Btm: 2012.02.01 @ 16:05:53

TEST COMMENT: 5 1/4" blow
1/2" return
B.O.B. in 19 min.
6" return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2348.99	112.55	Initial Hydro-static
1	29.26	111.41	Open To Flow (1)
16	86.97	116.65	Shut-In(1)
45	1054.50	118.89	End Shut-In(1)
46	103.84	118.57	Open To Flow (2)
105	156.69	126.10	Shut-In(2)
196	1041.15	125.88	End Shut-In(2)
197	2218.67	126.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	m c g o 5g 35m 60o	0.30
60.00	m c g o 5g 15m 80o	0.30
247.00	c g o 10g 90o	2.35
0.00	355' w eak gas in pipe	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44947 **DST#: 4**

Test Start: 2012.02.01 @ 10:40:23

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: 0.00 ft (KB)
Time Tool Opened: 12:50:08
Time Test Ended: 19:10:53

Test Type: Conventional Bottom Hole (Reset)
Tester: Shane McBride
Unit No: 55

Interval: 4694.00 ft (KB) To 4747.00 ft (KB) (TVD)
Total Depth: 4747.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

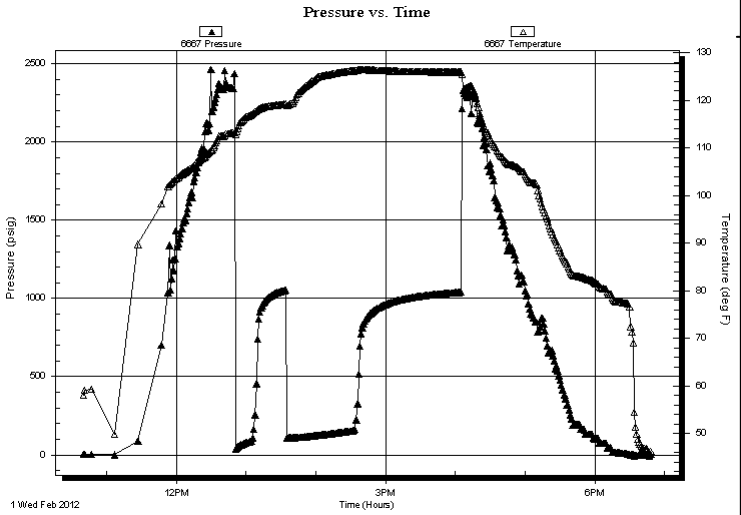
Reference Elevations: 3264.00 ft (KB)
3253.00 ft (CF)
KB to GR/CF: 11.00 ft

Serial #: 6667 **Outside**

Press@RunDepth: psig @ 4695.00 ft (KB)
Start Date: 2012.02.01 End Date: 2012.02.01
Start Time: 10:40:23 End Time: 18:48:38

Capacity: 8000.00 psig
Last Calib.: 2012.02.01
Time On Btm:
Time Off Btm:

TEST COMMENT: 5 1/4" blow
1/2" return
B.O.B. in 19 min.
6" return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
60.00	m c g o 5g 35m 60o	0.30
60.00	m c g o 5g 15m 80o	0.30
247.00	c g o 10g 90o	2.35
0.00	355' w eak gas in pipe	0.00

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

TOOL DIAGRAM

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44947 **DST#: 4**

Test Start: 2012.02.01 @ 10:40:23

Tool Information

Drill Pipe:	Length:	4464.00 ft	Diameter:	3.80 inches	Volume:	62.62 bbl	Tool Weight:		1500.00 lb
Heavy Wt. Pipe:	Length:	0.00 ft	Diameter:	0.00 inches	Volume:	0.00 bbl	Weight set on Packer:		25000.00 lb
Drill Collar:	Length:	242.00 ft	Diameter:	2.25 inches	Volume:	1.19 bbl	Weight to Pull Loose:		98000.00 lb
					Total Volume:	63.81 bbl	Tool Chased		0.00 ft
Drill Pipe Above KB:		32.00 ft					String Weight:	Initial	72000.00 lb
Depth to Top Packer:		4694.00 ft						Final	75000.00 lb
Depth to Bottom Packer:		ft							
Interval between Packers:		53.00 ft							
Tool Length:		73.00 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			4675.00		
Shut In Tool	5.00			4680.00		
Hydraulic tool	5.00			4685.00		
Packer	5.00			4690.00	20.00	Bottom Of Top Packer
Packer	4.00			4694.00		
Stubb	1.00			4695.00		
Recorder	0.00	6771	Inside	4695.00		
Recorder	0.00	6667	Outside	4695.00		
Perforations	13.00			4708.00		
Change Over Sub	1.00			4709.00		
Drill Pipe	32.00			4741.00		
Change Over Sub	1.00			4742.00		
Bullnose	5.00			4747.00	53.00	Bottom Packers & Anchor
Total Tool Length:	**73.00**					

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum Inc

88 Inverness Cir E Unit F104
Englewood CO 80112-5514

ATTN: Bob Elder

33-10-34w Thomas,KS

Epard #1-33

Job Ticket: 44947 **DST#: 4**

Test Start: 2012.02.01 @ 10:40:23

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	18 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	0 ppm
Viscosity:	61.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.17 in³	Gas Cushion Type:			
Resistivity:	0.00 ohm.m	Gas Cushion Pressure:	psig		
Salinity:	4000.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

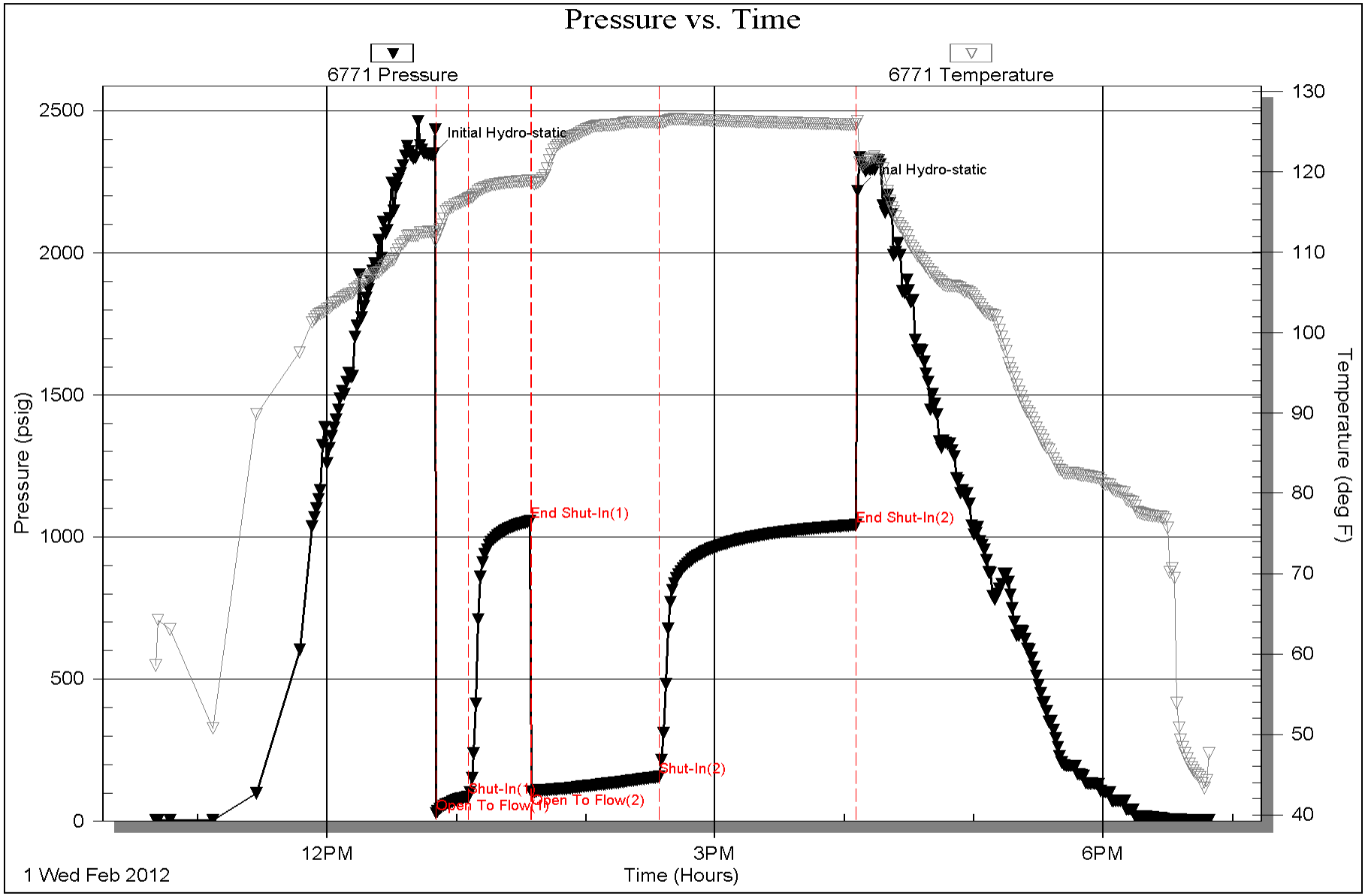
Recovery Table

Length ft	Description	Volume bbl
60.00	m c g o 5g 35m 60o	0.295
60.00	m c g o 5g 15m 80o	0.295
247.00	c g o 10g 90o	2.353
0.00	355' weak gas in pipe	0.000

Total Length: 367.00 ft Total Volume: 2.943 bbl

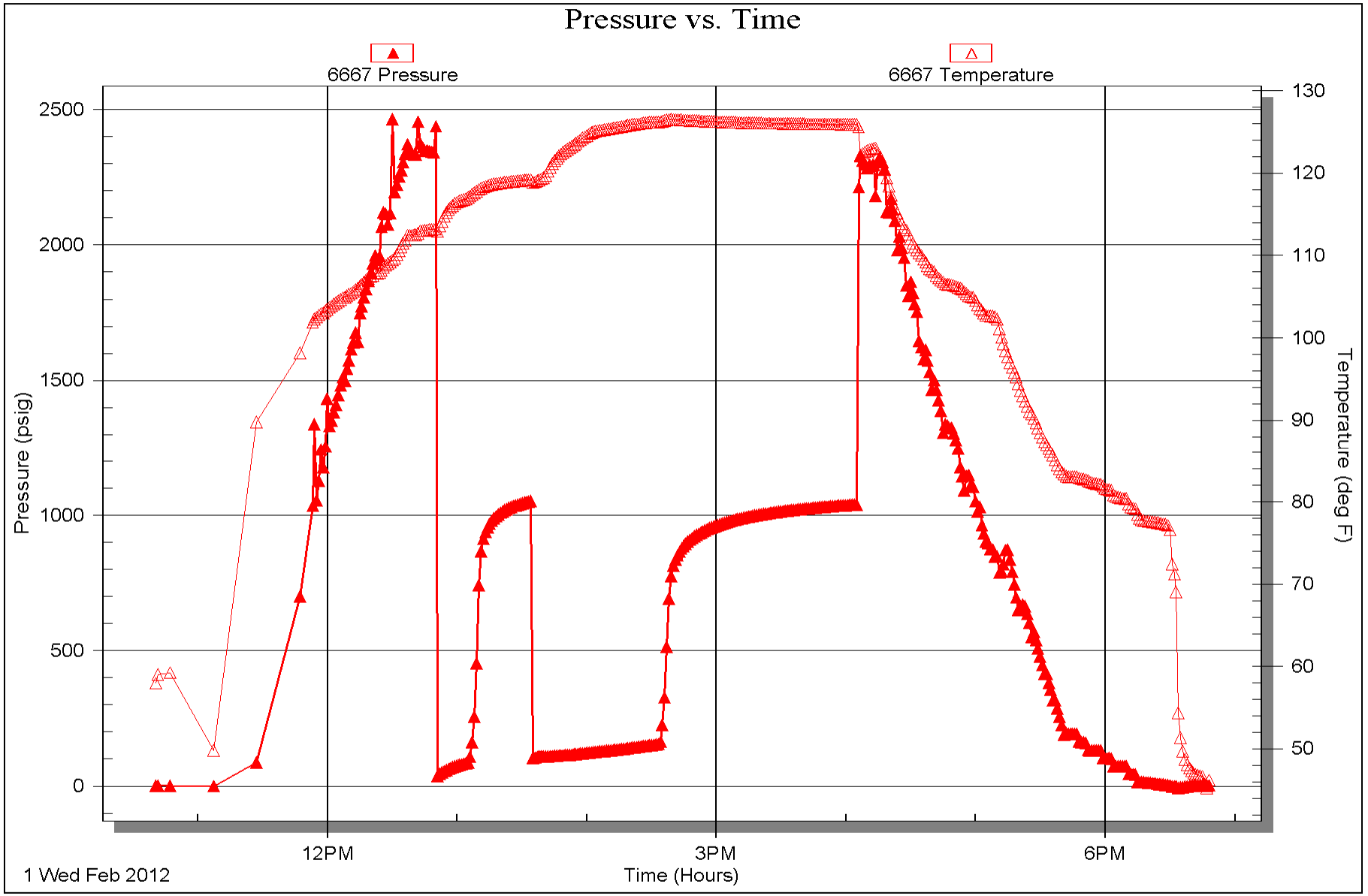
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 6771 **Inside** Norstar Petroleum Inc Epard #1-33 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 44947 Printed: 2012.02.07 @ 12:02:33

Serial #: 6667 **Outside** Norstar Petroleum Inc Epard #1-33 DST Test Number: 4



TRILOBITE TESTING INC.
P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 06 2012
BY:

Test Ticket
NO. 44944

4/10

Well Name & No. Eppard #1-33 Test No. #1 Date 1/29/12
Company Norstar Petroleum Inc Elevation 3264 KB 3253 GL
Address Englewood Co 80112
Co. Rep / Geo. Bob Elder Rig Murfin #2
Location: Sec. 33 Twp. 10 Rge. 34w Co. Thomas State Ks

Interval Tested 4310 4344 Zone Tested H
Anchor Length 34 Drill Pipe Run 4057' Mud Wt. 9.3
Top Packer Depth 4305 Drill Collars Run 242' XH Vis 59
Bottom Packer Depth 4310 Wt. Pipe Run WL 7.2
Total Depth 4344 Chlorides ppm System LCM #2

Blow Description 1 3/4" in Blow
No return
2" in blow
No return

Rec 120' Feet of Mud w/oil spots %gas Spots %oil %water 100 %mud
Rec Feet of %gas %oil %water %mud
Rec Feet of Show of free oil in Tool %gas %oil %water %mud
Rec Feet of %gas %oil %water %mud
Rec Feet of %gas %oil %water %mud

Rec Total 120' BHT 117° Gravity API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 2168	☒ Test 1225	T-On Location 16:20
(B) First Initial Flow 21	☐ Jars	T-Started 17:07
(C) First Final Flow 44	☐ Safety Joint	T-Open 19:45
(D) Initial Shut-In 1280	☒ Circ Sub N/C	T-Pulled 22:00
(E) Second Initial Flow 32	☐ Hourly Standby	T-Out 00:30
(F) Second Final Flow 89	☒ Mileage 130 RT 182	Comments
(G) Final Shut-In 1266	☐ Sampler	
(H) Final Hydrostatic 2116	☐ Straddle	☐ Ruined Shale Packer
	☐ Shale Packer	☐ Ruined Packer
Initial Open 15	☐ Extra Packer	☐ Extra Copies
Initial Shut-In 30	☐ Extra Recorder	Sub Total 0
Final Flow 30	☐ Day Standby	Total 1407
Final Shut-In 60	☐ Accessibility	MP/DST Disc't
	Sub Total 1407	

Approved By Our Representative

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
FEB 06 2012
BY:

Test Ticket

NO. 44945

4/10

Well Name & No. Eppard #1-33 Test No. #2 Date 1/30/12
Company MorStar Petroleum Inc. Elevation 3264 KB 3253 GL
Address Englewood Colo 80112
Co. Rep / Geo. Bob Elder Rig Murfin #2
Location: Sec. 33 Twp. 10 Rge. 34w Co. Thomas State KS

Interval Tested 4350 4406. Zone Tested F-J
Anchor Length 56 Drill Pipe Run 4113' Mud Wt. 9.2
Top Packer Depth 4345 Drill Collars Run 242' XH Vis 60
Bottom Packer Depth 4350 Wt. Pipe Run — WL 8.0
Total Depth 4406 Chlorides 4000 ppm System LCM #2

Blow Description 1 3/4" in blow
No return
2 3/4" in blow
No return

Rec 30	Feet of OCM	Tr	%gas	35	%oil	%water	65 %mud
Rec 120	Feet of OCM	Tr	%gas	20	%oil	%water	80 %mud
Rec	Feet of		%gas		%oil	%water	%mud
Rec	Feet of		%gas		%oil	%water	%mud
Rec	Feet of		%gas		%oil	%water	%mud

Rec Total 150' BHT 116° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	2185	☒ Test	1225	T-On Location	09:40
(B) First Initial Flow	26	☐ Jars		T-Started	10:10
(C) First Final Flow	43	☐ Safety Joint		T-Open	12:08
(D) Initial Shut-In	1318	☒ Circ Sub	N/C	T-Pulled	14:23
(E) Second Initial Flow	51	☐ Hourly Standby		T-Out	16:58
(F) Second Final Flow	79	☒ Mileage	130 RT 182	Comments	
(G) Final Shut-In	1317	☐ Sampler			
(H) Final Hydrostatic	2083	☐ Straddle		☐ Ruined Shale Packer	
		☐ Shale Packer		☐ Ruined Packer	
Initial Open	15	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	30	☐ Extra Recorder		Sub Total	0
Final Flow	30	☐ Day Standby		Total	1407
Final Shut-In	60	☐ Accessibility		MP/DST Disc't	
		Sub Total	1407		

Approved By Rock Elder Our Representative

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

4/10

RECEIVED FEB 0 6 2012 BY:

Test Ticket

NO. 44946

Well Name & No. Epard #1-33 Test No. #3 Date 1/31/12

Company Norstar Petroleum Inc Elevation 3269 KB 3253 GL

Address Englewood Colo 80112

Co. Rep / Geo. Bob Elder Rig Murfin #2

Location: Sec. 33 Twp. 10 Rge. 34w Co. Thomas State Ks

Interval Tested 4395 4430 Zone Tested K

Anchor Length 35 Drill Pipe Run 4147' Mud Wt. 9.0

Top Packer Depth 4390 Drill Collars Run 242' XH Vis 50

Bottom Packer Depth 4395 Wt. Pipe Run — WL 6.4

Total Depth 4430 Chlorides 3500 ppm System LCM #2

Blow Description 2 in blow
No return
2 3/4 in blow
No return

Rec	Feet of		%gas	%oil	%water	%mud
20'	Free Oil	Tl		100		
40'	OCM	Tl		25		75
120'	SOCM			5		95

Rec Total 180' BHT 118° Gravity 30 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	2187	☒ Test	1225	T-On Location	23:45
(B) First Initial Flow	27	☐ Jars		T-Started	00:30
(C) First Final Flow	60	☐ Safety Joint		T-Open	02:45
(D) Initial Shut-In	1366	☒ Circ Sub	N/C	T-Pulled	05:00
(E) Second Initial Flow	70	☐ Hourly Standby		T-Out	07:25
(F) Second Final Flow	108	☒ Mileage	130 RT 182	Comments	
(G) Final Shut-In	1319	☐ Sampler			
(H) Final Hydrostatic	2141	☐ Straddle		☐ Ruined Shale Packer	
		☐ Shale Packer		☐ Ruined Packer	
Initial Open	15	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	30	☐ Extra Recorder		Sub Total	Ø
Final Flow	30	☐ Day Standby		Total	1407
Final Shut-In	60	☐ Accessibility		MP/DST Disc't	
		Sub Total	1407		

Approved By [signature] Our Representative [signature]

TRILOBITE TESTING INC.
P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 06 2012
BY:

Test Ticket

NO. 44947

4/10

Well Name & No. Eppard #1-33 Test No. #1 Date 2/1/12
Company NorStar Petroleum Inc Elevation 3264 KB 3253 GL
Address Englewood Colo 80112
Co. Rep / Geo Bob Elder Rig Murfin #2
Location: Sec. 33 Twp. 10 Rge. 34W Co. Thomas State KS

Interval Tested 4694 4747 Zone Tested Johnson
Anchor Length 53 Drill Pipe Run 4464 Mud Wt. 9.3
Top Packer Depth 4689 Drill Collars Run 242' XH Vis 61
Bottom Packer Depth 4694 Wt. Pipe Run — WL 7.2
Total Depth 4747 Chlorides 4,000 ppm System LCM #2

Blow Description 5 1/4" in blow
1/2" in Return
B.O.B. in 19 min
6" in Return

Rec 240	Feet of CGO	10 %gas	90 %oil	%water	%mud
Rec 60	Feet of MCGO	5 %gas	80 %oil	%water	15 %mud
Rec 60	Feet of MCGO	5 %gas	60 %oil	%water	35 %mud
Rec	Feet of 355' weak Gas in pipe	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 367' BHT 127° Gravity 18 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic	2348	☒ Test	1225	T-On Location	09:50
(B) First Initial Flow	29	☐ Jars		T-Started	10:40
(C) First Final Flow	86	☐ Safety Joint		T-Open	12:48
(D) Initial Shut-In	1054	☒ Circ Sub	N/C	T-Pulled	16:03
(E) Second Initial Flow	103	☐ Hourly Standby		T-Out	19:10
(F) Second Final Flow	150	☒ Mileage	130 RT 182	Comments	
(G) Final Shut-In	1041	☐ Sampler			
(H) Final Hydrostatic	2218	☐ Straddle			
		☐ Shale Packer		☐ Ruined Shale Packer	
				☒ Ruined Packer	x2 640
Initial Open	15	☐ Extra Packer		☐ Extra Copies	
Initial Shut-In	30	☐ Extra Recorder		Sub Total	640
Final Flow	60	☐ Day Standby		Total	2047
Final Shut-In	90	☐ Accessibility		MP/DST Disc't	
		Sub Total	1407		

Approved By Ron Elder Our Representative

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Norstar Petroleum Inc.
LEASE Epard #1-33
FIELD Wildcat
LOCATION 1,234' FWL & 1,658' FNL
SEC 33 TWSP 10s RGE 34w
COUNTY Thomas STATE Kansas

ELEVATIONS
KB 3264'
DF
GL 3253'
Measurements Are All From KB

CONTRACTOR Murfin Drilling Co. Rig #2
SPUD 1-25-12 COMP 2-3-12
RTD 4870' LTD 4875'
MUD UP 3600' TYPE MUD Chemical

CASING
SURFACE 8 5/8" @ 267'
PRODUCTION

ELECTRICAL SURVEYS
CNL/CDL, DIL, MEL

SAMPLES SAVED FROM 3900' TO TD
DRILLING TIME KEPT FROM 3800' TO TD
SAMPLES EXAMINED FROM 3900' TO TD
GEOLOGICAL SUPERVISION FROM 3800' TO TD
GEOLOGIST ON WELL Bob Elder

FORMATION TOPS	LOG		SAMPLES	
Anhydrite	2756	+508	2757	+507
Topeka	3975	-711	3977	-713
Heebner	4134	-870	4136	-872
Toronto	4154	-890	4156	-892
Lansing	4176	-912	4176	-912
Stark Shale	4399	-1135	4397	-1133
Ft. Scott	4626	-1362	4621	-1357
Cherokee Shale	4644	-1380	4642	-1378
Johnson Zone	4721	-1457	4719	-1455
Mississippi	4804	-1540	4800	-1536

33

Based on oil recovered from the LKC "K" zone & Johnson Zone during DSTs, the Co[illegible] elected to run production casing to further evaluate this well.

Deviation survey @ 271' - 1/2°
@ 3694' - 3/4°
@ 4344' - 1/2°
@ 4870' - 1/4°

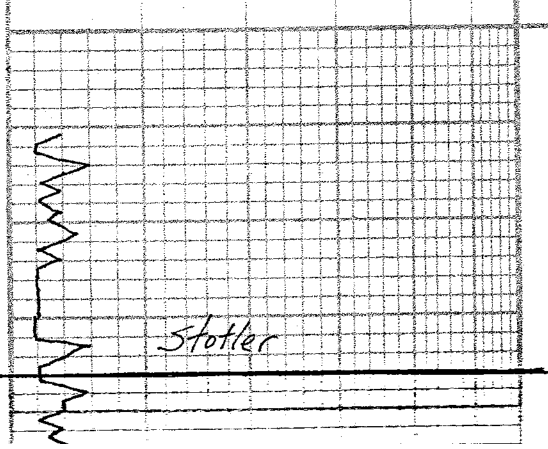
LEGEND

Anhydrite | Salt | Sandstone | Shale | Carb sh | Limestone | Ool. Lime | Chert | Dolomite

DRILLING TIME IN MINUTES PER FOOT
Rate of Penetration Decreases

5" 10" 15" 20" 25"

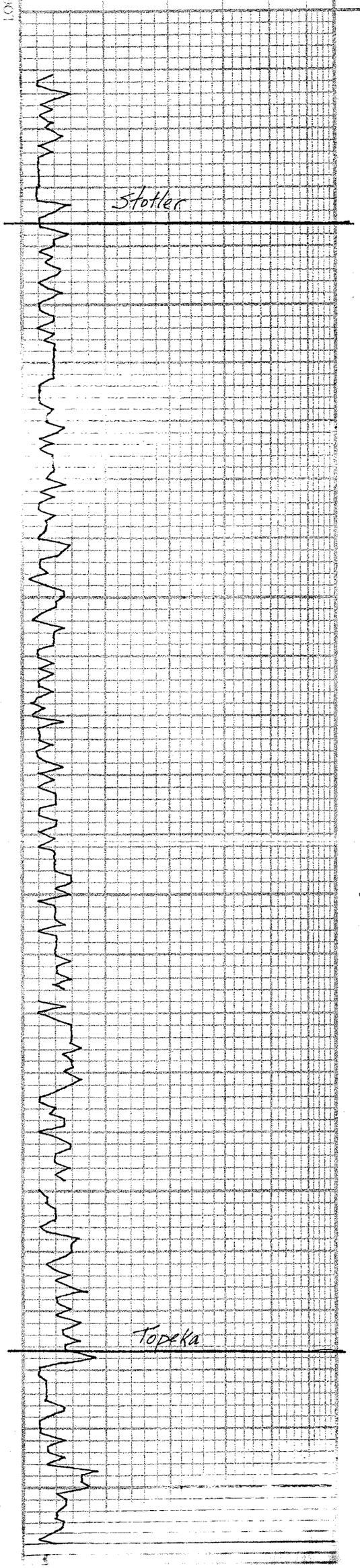
DEPTH | LITHOLOGY | SAMPLE DESCRIPTIONS | OIL SHOWS | REM[illegible]



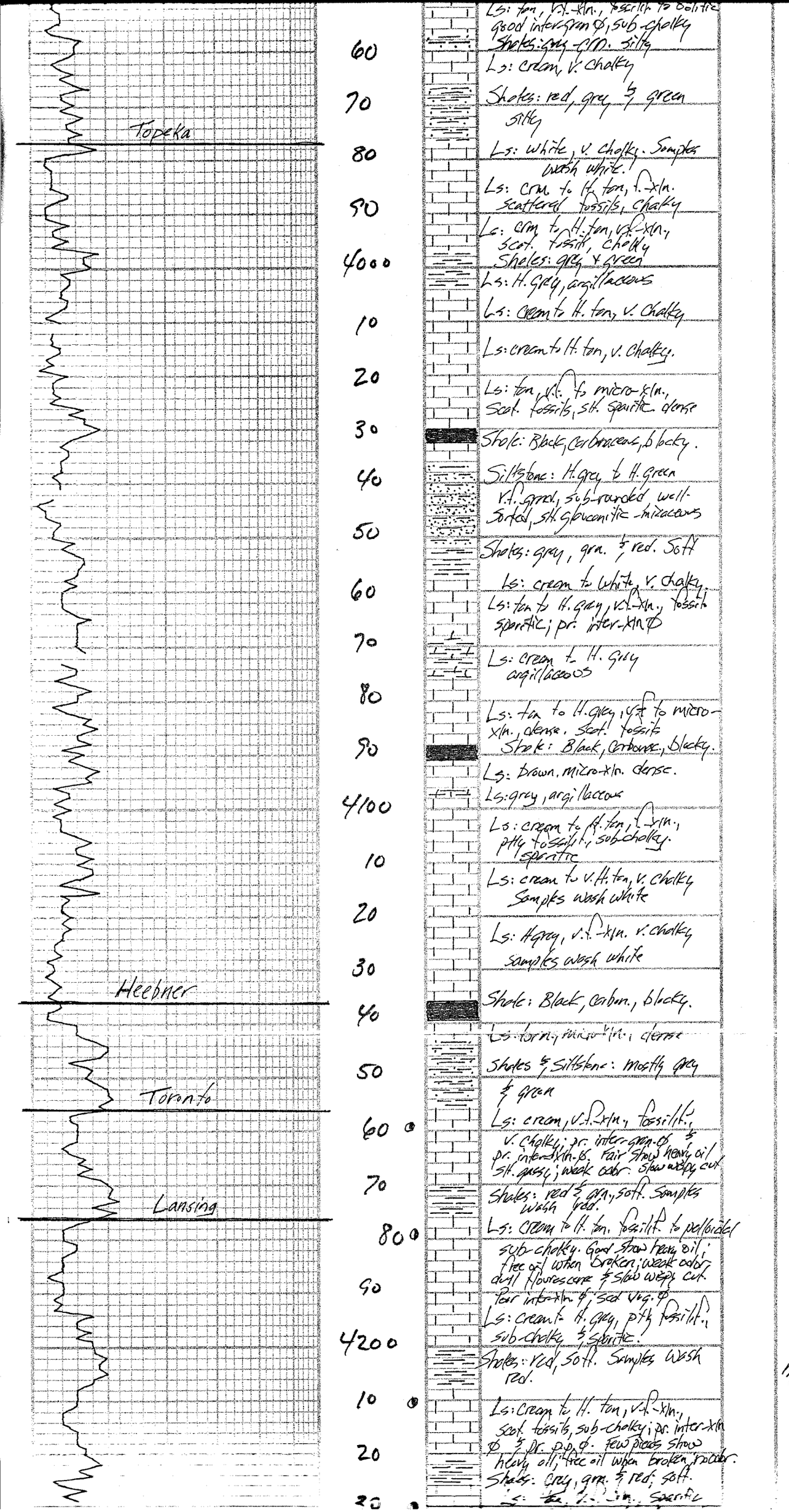
Bit trip @ 36[illegible]
Strap - 3[illegible]
[illegible]

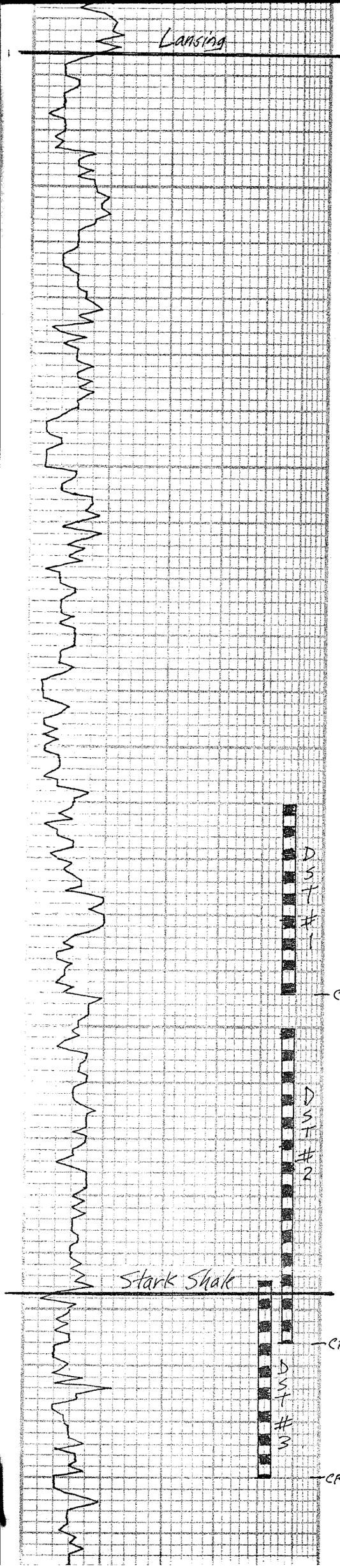
Mudco @ 3692
vis. 56
wt. 8.9
w.l. 6.0
Lcm 3#

LOG 7710



DEPTH	SAMPLE DESCRIPTIONS	REMARKS
		Bit trip @ 3694 Strap -3.74' + board.
		Mudco @ 3692' vis. 56 wt. 8.9 w.l. 6.4 LCM 3#
3800		
10		
20		
30		
40		
50		
60		
70		
80		
90	Shales: mostly grey & green silty, micaceous	
	Ls: crm. v.f.-xln. chalky	
3900	Shales: grey, green & red	
	Ls: crm. to H. tan, v.f.-xln., oölitic to fossilif., p. inter-gran. ϕ	
10	Shales: mostly red & green, soft. Samples wash red.	
20	Ls: cream to H. tan, v.f.-xln., partly v. fossilif., sub-chalky	
	Ls: tan, v.f.-xln. scat fossils clean; no vis ϕ	
30	Ls: white, v. chalky. Samples wash white.	
40	Ls: tan & H. grey, chalky, scat. fossils, sub-chalky	
	Shales: grey & red.	
50	Ls: tan, v.f.-xln., fossilif to oölitic good intergran ϕ, sub-chalky	
	Shales: grey-crm. silty	
60	Ls: cream, v. chalky	
70	Shales: red, grey & green silty	
80	Ls: white [illegible]	
90	Ls: crm. [illegible]	
4000		


Topeka
Heebner
Toronto
Lansing
60
70
80
90
4000
10
20
30
40
50
60
70
80
90
4100
10
20
30
40
50
60
70
80
90
4200
10
20
30
Ls: tan, v.f.-xln., fossilif. to oolitic good intergran Φ, sub-chalky
Shales: grey-grn. silty
Ls: cream, v. chalky
Shales: red, grey & green silty
Ls: white, v. chalky. Samples wash white.
Ls: cream to lt. tan, f.-xln. scattered fossils, chalky
Ls: cream to lt. tan, v.f.-xln., scat. fossils, chalky
Shales: grey & green
Ls: lt. grey, argillaceous
Ls: cream to lt. tan, v. chalky
Ls: cream to lt. tan, v. chalky.
Ls: tan, v.f. to micro-xln., scat. fossils, slt. spartic. dense
Shale: Black, carbonaceous, blocky.
Siltstone: lt. grey to lt. green v.f. grnd., sub-rounded well-sorted, slt. glauconitic micaceous
Shales: grey, grn. & red. Soft
Ls: cream to white, v. chalky.
Ls: tan to lt. grey, v.f.-xln., fossils spartic; pr. inter-xln Φ
Ls: cream to lt. grey argillaceous
Ls: tan to lt. grey, v.f. to micro-xln., dense. Scat. fossils
Shale: Black, carbon., blocky.
Ls: brown, micro-xln. dense.
Ls: grey, argillaceous
Ls: cream to lt. tan, f.-xln., pthy fossilif., sub-chalky. spartic
Ls: cream to v. lt. tan, v. chalky Samples wash white
Ls: lt grey, v.f.-xln. v. chalky samples wash white
Shale: Black, carbon., blocky.
Ls: tan, micro-xln., dense
Shales & Siltstone: mostly grey & green
Ls: cream, v.f.-xln., fossilif., v. chalky; pr. inter-gran-Φ & pr. inter-xln-Φ. Fair show heavy oil/ slt. gassy; weak odor. Slow wispy cut
Shales: red & grn., soft. Samples wash red.
Ls: cream to lt. tan, fossilif. to pelloidal sub-chalky. Good show heavy oil; free oil when broken; weak odor, dull flourescence & slow wispy cut. Poor inter-xln. Φ; scat vug. Φ
Ls: cream to lt. grey, pthy fossilif., sub-chalky & spartic.
Shales: red, soft. Samples wash red.
Ls: Cream to lt. tan, v.f.-xln., scat. fossils, sub-chalky; pr. inter-xln Φ & pr. p.p. Φ. Few pieces show heavy oil; free oil when broken, poor.
Shales: grey, grn. & red; soft.
Ls: [illegible] Spartic
Mudco @ 42
Vis. 59
wt. 9.3
W.L. 7.2
LCM 2#



70 Sli. gassy, weak odor. Slow wispy cut.
Shales: red & grn, soft. Samples wash red.
80 Ls: Cream to lt. tan, fossilif. to pelloidal sub-chalky. Good show heavy oil; free oil when broken; weak odor, dull flourescence & slow wispy cut.
90 Poor inter-xln. & scat vug. Φ
4200 Ls: Cream - lt. grey, pty fossilif., sub-chalky, & spiritic.
Shales: red, soft. Samples wash red.
10 Ls: Cream to lt. tan, v.f.-xln., scat. fossils, sub-chalky; pr. inter-xln Φ & pr. p.p.Φ. Few pieces show heavy oil, free oil when broken, no odor.
20 Shales: Grey, grn. & red; soft.
30 Ls: tan, v.f.-xln., Spiritic v.pr. inter-xln. Φ; scat. vug. Φ fair show heavy oil, free oil when broken; no odor. Slow streaming cut.
40 Ls: Cream to lt. tan, pty. fossilif. mostly v. chalky; cherty: lt. grey, translucent, fresh
50 Shale: grey & green; firm.
Ls: tan to cream, v.f.-xln., fossilif, sub-chalky, cherty & white, fresh. pr. inter-xln. Φ; scat. vug. Φ. Fair show heavy free oil
60 Sli. Gassy, weak odor. Slow wispy cut.
70 Ls: tan, v.f.-xln, sub-chalky; cherty
Shale: Grey, grn. & red, soft
80 Ls: tan to cream, v.f.-xln., sub-chalky, pyritic
90 Ls: white to v. lt. tan, v. chalky, pyritic. Samples wash white.
4300 Ls: cream to lt. tan, v.f.-xln., mostly chalky; cherty, lt. grey fresh
Ls: tan, micro-xln., scat. fossils
10 spiritic, dense
Shale: Black, Carbonaceous, blocky
20 Ls: brown, v.f.-xln., scat. fossils spiritic, pyritic; v. pr. inter-xln-Φ
Shales: red-brn. silty
30 Ls: lt. tan, v.f.-xln., fossilif., spiritic to sub-chalky; poor inter-xln. Φ & rare vug Φ. Gd. Show lt. brn oil stain & free oil. Moderate odor, slow wispy cut. w. flourescence
40 CFS
50 Ls: tan & grey, v.f. to micro-xln. dense
Shale: Black, Carbonac., blocky
Shales: mostly green; silty.
60 Ls: tan to cream, v.f.-xln., pty fossilif., sub-chalky; poor inter-xln. Φ & pr p.p.Φ. Gd. Show lt. brn oil stain & F.O. gassy; mod. odor, v. slow wispy cut.
70 Shales: Mostly Green & Grey
80 Ls: tan, v.f.-xln., pelloidal; v.pr inter-xln. Φ & poor p.p. Φ w/ rare vug. Φ. Gd. show F.O., mod. odor slow wispy cut.
90 Ls: tan, v. f. micro-xln. dense
4400 Shale: Black, Carbonaceous, blocky
Ls: grey, argillaceous
10 Ls: Cream, v.f.-xln., v. fossilif., fragmented sub-chalky; poor intercrystal Φ; fair vug Φ & fair p.p.Φ. Gd. Show lt. Brown oil stain & F.O.; Gd. flowers & fair streaming cut.
20 Ls: tan, micro-xln., dense
30 Shale: Black, Carbonaceous, blocky.
Ls: brn., micro-xln. dense
40 Shales: grey & green, silty
Ls: brown & grey micro-xln.

Mudco @ 4209
Vis. 59
wt. 9.3
W.L. 7.2
LCM 2#

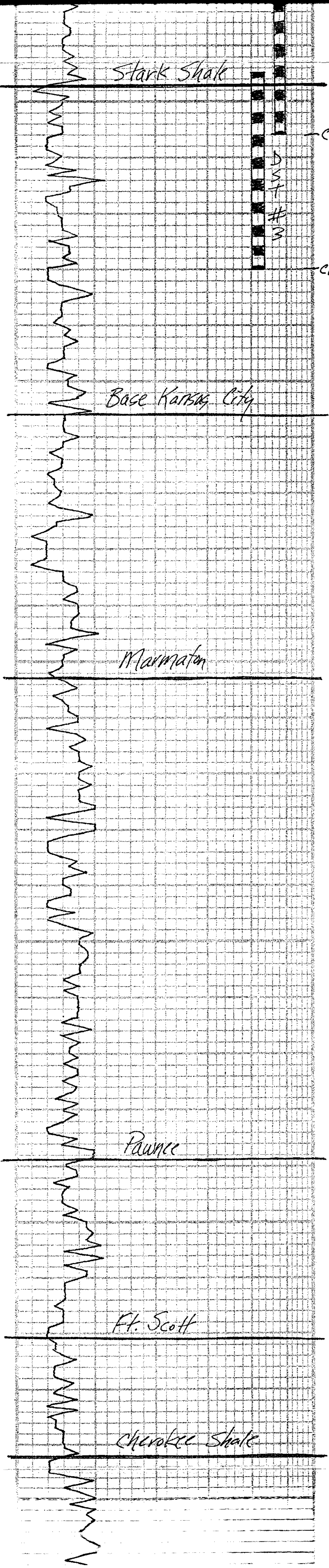
Pipe Strap @ 4346
0.00 ft. to
(A 3.66' error
on board tal
be 3.66' deep

Mudco @ 4362'
Vis. 50
wt. 9.0
W.L. 6.4
LCM 2#

D.S.T. #1
4310-4344
LKC "H"
initial: 1 3/4" blow
final: 2" blow
15-30-30-60
Recovered:
120' mud w oil sp
(free oil in tool)
IFP: 21-44
FFP: 52-89
SIP: 1280-1266

D.S.T. #2
4350-4406
LKC "I" & "J"
initial: 1 3/4"
final: 2"
15-30-30-60
Recovered:
30' OCM (35% o
120' OCM (20% o
IFP: 26-43
FFP: 51-79
SIP: 1318-1317

D.S.T. #3
4395-4430
LKC "K"
initial: 2"
final: 2 3/4"
15-30-30-60
Recovered:
20' free oil
40' OCM (25% oi
120' SOCM (5% o
FP: 29-60 70-108
SIP: 3[illegible]-2[illegible]



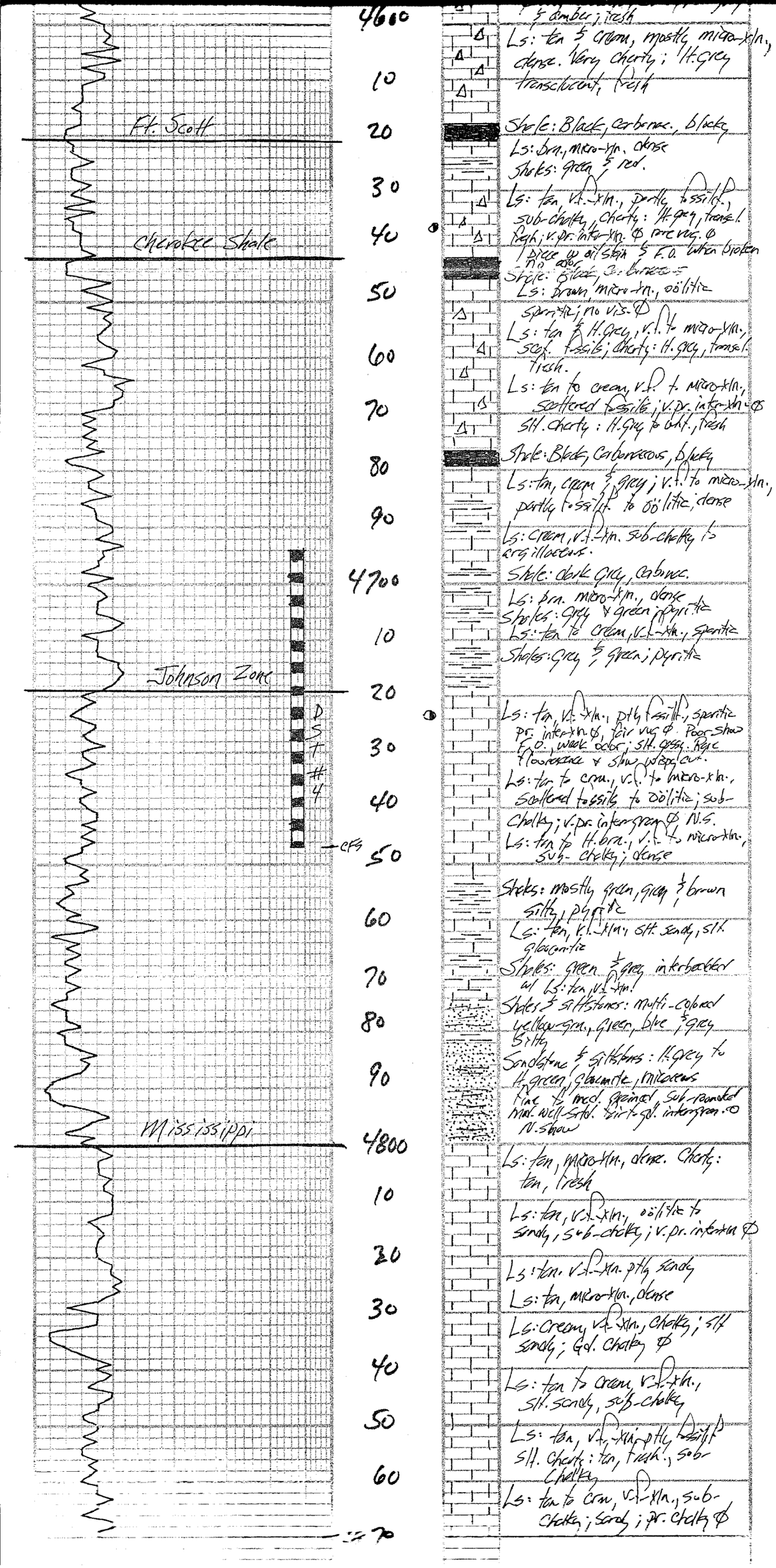
90 — Vug. Φ. Gd. show F.O., mod. odor, slow wispy cut.
Ls: tan, v.f.-xln., micro-xln. dense

4400 — Shale: Black, carbonaceous, blocky
Ls: grey, argillaceous
10 — Ls: cream, v.f.-xln., v. fossilif., fragmented, sub-chalky; poor intergran Φ, fair Vug Φ & fair p.p.Φ. Gd. show lt. brown oil stain & F.O.; Gd. fluores. & fair streaming cut.
20 — Ls: tan, micro-xln., dense
30 — Shale: Black, carbonaceous, blocky.
Ls: brn., micro-xln. dense
40 — Shales: grey & green, silty
Ls: brown & grey, micro-xln. v. fossilif., sparite, dense.
50 — Ls: tan, v.f.-xln., scat. fossils, sub-chalky.
60 — Shales: green.
Ls: cream, lt. tan & lt. grey, v.f.-xln., scat. fossils, sub-chalky
70 — Shales: Green, purple, grey & red
80 — Sandstone: lt. green, v.f. to f.-grnd. mod. well-srtd. sub-rnd.; glaucon.
90 — Ls: tan to cream, v.f. to micro-xln., scattered fossils, sub-chalky, v.pr. inter-xln. Φ
Shales: green & red, conglomeritic with Ls clasts
4500 — Ls: tan, v.f. to micro-xln., dense, no vis. Φ
10 — Ls: cream to lt. tan, v.f.-xln., sub-chalky
20 — Ls: cream to lt. grey, v.f.-xln. sub-chalky to argillaceous
30 — Shale: dark grey
40 — Ls: grey, argillaceous
Shales: green, grey & red; soft, partly conglomerite with Ls clasts
50 — Ls: lt. grey & tan, v.f.-xln to micro-xln.; v. fossilif. to pelloidal, sparite to sub-chalky.
60 — Ls: tan, micro-xln. dense, partly cherty: lt. grey, & amber, fresh
70 — Ls: tan, micro-xln. dense
80 — Shale: Black, carbonaceous, blocky
90 — Ls: grey, argillaceous
Ls: tan to cream, v.f. to micro-xln., partly fossilif., cherty, lt. grey & amber; fresh
4600 — Ls: tan & cream, mostly micro-xln., dense. Very cherty; lt. grey translucent, fresh
10 —
20 — Shale: Black, carbonac., blocky
Ls: brn., micro-xln. dense
Shales: green & red.
30 — Ls: tan, v.f.-xln., partly fossilif., sub-chalky, cherty: lt. grey, transl. fresh; v.pr. inter-xln. Φ rare vug. Φ
40 — 1 piece w oil stain & F.O. when broken, no odor.
Shale: Black, carbonaceous
50 — Ls: brown, micro-xln., oölitic sparite, no vis. Φ
60 — Ls: tan & lt. grey, v.f. to micro-xln., scat. fossils; cherty: lt. grey, transl.

20' OCM (20%
IFP: 26-43
FFP: 51-79
SIP: 1318-1317

D.S.T. #3
4395-4430
LKC "K"
initial: 2"
final: 2 3/4"
15-30-30-60
Recovered:
20' free oil
40' OCM (25%
120' SOCM (5%
FP: 27-60, 70-108
SIP: 1316-1319

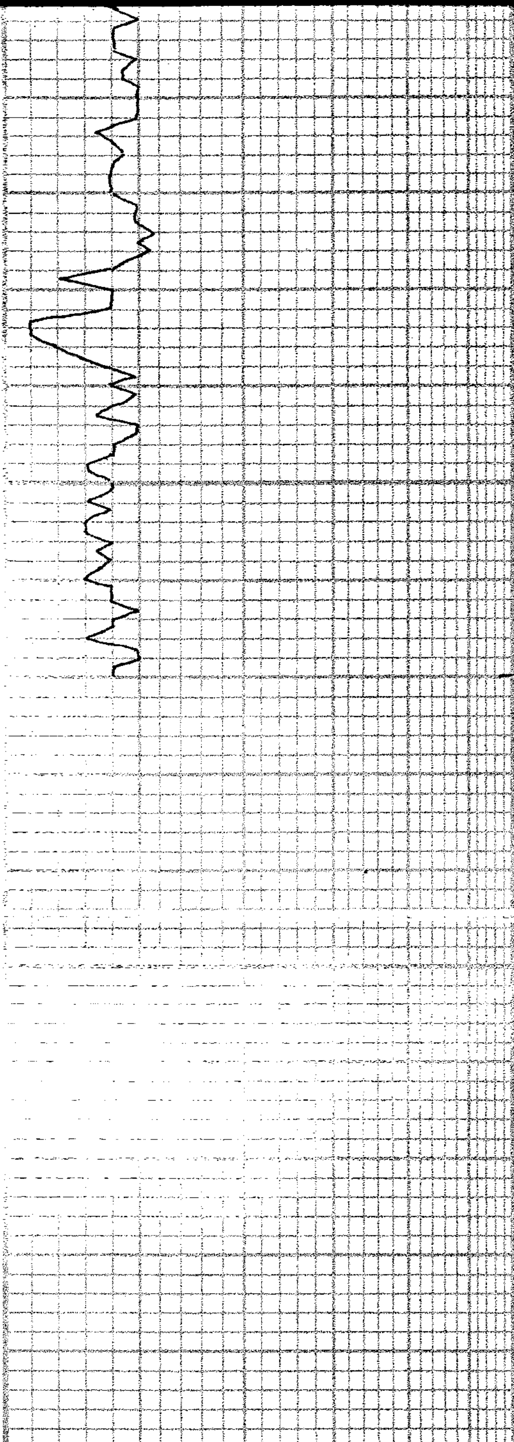
Mudco @ 4434'
Vis. 46
wt. 9.0
W.L. 7.2
LCM 2#



D.S.T. #4
4694-4747
Johnson Zone
initial: 5 1/4" (1/2
final: BOB 19"
15-30-60-90
Recovered:
355' GIP
247' oil
60' MCGO (80%
66' MCGO (60%
18 gravity
IFP: 29-86
FFP: 103-156
SIP: 1054-1041

Mudco @ 4746'
VIS 61
wt. 9.3
W.L. 7.2
LCM 2

RTD 4870'
LTD 4875'



Depth	Sample Descriptions	Oil Shows	Remarks
10	Ls: tan, microxln, dense. Cherty: tan, fresh		
20	Ls: tan, v.f.-xln, oolitic to sandy, sub-chalky; v.pr. interxln Ø		
30	Ls: tan, v.f.-xln. ptly sandy		
	Ls: tan, microxln., dense		
40	Ls: Cream, v.f.-xln., chalky; slt sandy; Gd. chalky Ø		
50	Ls: tan to cream, v.f.-xln., slt. sandy, sub-chalky		
60	Ls: tan, v.f.-xln, ptly fossil, slt. Cherty: tan, fresh., sub-chalky		
70 (CS)	Ls: tan to crm, v.f.-xln., sub-chalky; sandy; pr. chalky Ø		RTD 4870' LTD 4875'
80			
90			
4900			

5" 10" 15" 20" 25"

DRILLING TIME Minutes/Foot

Rate of Penetration Decreases

DEPTH | LITHOLOGY | SAMPLE DESCRIPTIONS | OIL SHOWS | REMARKS

CONTRACTOR Murfin Drilling C. Rig #2

LEASE Epard #1-33 IP

ELEVATION 3264 RTD 4870

LOCATION 1658' FNL & 1234' FWL

SEC 33 TWP 10s RNG 34w

COUNTY Thomas STATE Kansas

ALLIED CEMENTING CO., LLC. 035322

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Oakley

DATE 1-25-12	SEC. 33	TWP. 10	RANGE 34	CALLED OUT	ON LOCATION	JOB START 4:30pm	JOB FINISH 10:00pm
LEASE Eppard	WELL # 1-33		LOCATION Monument 2W 2N 4W 3/4N E into			COUNTY Thomas	STATE KS
OLD OR (NEW) (Circle one)							

CONTRACTOR Murfin 2
TYPE OF JOB Surface
HOLE SIZE 12¼ T.D. 226'
CASING SIZE 8 5/8 DEPTH 226'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15
PERFS.
DISPLACEMENT 16.62 BBL

OWNER Same

CEMENT
AMOUNT ORDERED 175 sks com 3%cc 2%gel

EQUIPMENT

PUMP TRUCK # 420-281 CEMENTER Andrew
HELPER Jerry
BULK TRUCK # 347 DRIVER Chris
BULK TRUCK # DRIVER

COMMON	175 sks	@ 16.25	2843.25
POZMIX		@	
GEL	3 sks	@ 21.25	63.75
CHLORIDE	6 sks	@ 58.20	349.20
ASC		@	
HANDLING	184 sks	@ 2.25	414.00
MILEAGE	114 sk/mile		364.32
		TOTAL	4035.02

REMARKS:

Cement Did Circulate

Thank you

SERVICE

DEPTH OF JOB	226'		
PUMP TRUCK CHARGE			1125.00
EXTRA FOOTAGE		@	
MILEAGE	18 miles	@ 7.00	126.00
MANIFOLD	head &	@	200.00
	light vehicle	@ 4.00	72.00
		@	
		TOTAL	1523.00

CHARGE TO: Norstar Petroleum Inc
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
	TOTAL	

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.

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

PRINTED NAME
SIGNATURE

ALLIED CEMENTING CO., LLC. 035226

Federal Tax I.D.# 20-5975804

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

SERVICE POINT: Oakley

ATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
2-2-12	33	10	34			4:00Am 8:30	4:30Am 9:30Am

EASE Epard WELL # 1-33 LOCATION monument 2W 2N 4W 3/4N e into

COUNTY Thomas STATE KS

LD OR (NEW) (Circle one)

ONTRACTOR Murfin 2 OWNER same

YPE OF JOB Production (2 stage)

OLE SIZE 7 7/8 T.D. 4820'

ASING SIZE 5 1/2 DEPTH 4869.07'

UBING SIZE DEPTH

RILL PIPE DEPTH

OOL OV DEPTH 2780'

RES. MAX MINIMUM

IEAS. LINE SHOE JOINT 42.15

EMENT LEFT IN CSG. 42.15

ERFS. water mud TOP

ISPLACEMENT 114.88 BBL 48.71 66.17 66.16

CEMENT

AMOUNT ORDERED 125 sks ASC 10% salt 2% gel 325 sks AmD 1/4# Flo-seal 500 gal WFR-2

		@	
COMMON		@	
POZMIX		@	
GEL	3 sks	@ 21.25	63.75
CHLORIDE		@	
ASC	125 sks	@ 19.00	3325.00
		@	
AmD 325 sks		@ 23.55	7653.25
		@	
Flo-seal 81#		@ 2.70	218.70
		@	
salt 17 sks		@ 23.95	407.15
WFR-2 500 gal		@ 1.27	635.00
		@	
HANDLING	560 sks	@ 2.25	1260.00
MILEAGE	11¢ sk/mile		1108.80

TOTAL 14672.15

EQUIPMENT

UMP TRUCK 422 CEMENTER Andrew HELPER Jerry

ULK TRUCK 347 DRIVER Brandon

ULK TRUCK 396 DRIVER Billy steven

REMARKS:

Pump 500 gal WFR-2 mix 125 sks ASC, wash pump and line clean Release plug and Displace 650# lift pressure lost circulation 20 BBL to Displace plug did not land, open OV Tool 1000# plug Rat hole 30 sks mouse hole 15 mix 280 sks AmD down 5 1/2 casing, wash pump and line clean Release plug start Displacement 600# lift, cement circulated plug landed 1500# Tool closed
Thank you

SERVICE

DEPTH OF JOB	4869.07'		
PUMP TRUCK CHARGE			2405.00
EXTRA FOOTAGE		@	
MILEAGE	18 miles	@ 7.00	126.00
MANIFOLD	head	@	200.00
Light vehicle		@ 4.00	72.00
		@	

TOTAL 2803.00

HARGE TO: Nor star petroleum inc

TREET

ITY STATE ZIP

5 1/2 PLUG & FLOAT EQUIPMENT

1 AFU Float-shoe	@	349.00
1 latchdown plug Assy	@	277.00
2 Baskets	@ 337.00	674.00
11 centralizers	@ 49.00	539.00
1 DV Tool	@	3721.00

TOTAL 5560.00

o Allied Cementing Co., LLC.
'ou are hereby requested to rent cementing equipment nd furnish cementer and helper(s) to assist owner or ontractor to do work as is listed. The above work was one to satisfaction and supervision of owner agent or ontractor. I have read and understand the "GENERAL 'ERMS AND CONDITIONS" listed on the reverse side.

SALES TAX (If Any)

TOTAL CHARGES

DISCOUNT IF PAID IN 30 DAYS

RINTED NAME David Paul

IGNATURE [signature]

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

Kansas
Corporation Commission

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

April 12, 2012

Clark D. Parrott

88 Inverness Cir E, Unti F104
Englewood, CO 80112

Re: ACO1
API 15-193-20831-00-00
Epard 1-33
NW/4 Sec.33-10S-34W
Thomas 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,
Clark D. Parrott