Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1071499

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. Unit F104
Address 2:
City: ENGLEWOOD State: CO Zip: 80112 + _ _ _ _
Contact Person: Clark D. Parrott
Phone: (303) 925-0696
CONTRACTOR: License # 4958
Name: Mallard, J. V., Inc.
Wellsite Geologist: Robert E. Elder
Purchaser: NCRA

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 #:

10/13/2011	10/21/2011	11/8/2011
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-193-20823-00-00
Spot Description:
NW - SW - NE - SW Sec. 32 Twp. 10 S. R. 34 ☐ East ☑ West
1797 Feet from ☐ North / ☑ South Line of Section
1489 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: T. Schertz Well #: 1-32
Field Name:
Producing Formation: Lansing/KC, Johnson
Elevation: Ground: 3278 Kelly Bushing: 3283
Total Vertical Depth: 4900 Plug Back Total Depth: 4850
Amount of Surface Pipe Set and Cemented at: 291 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 2789 Feet
If Alternate II completion, cement circulated from: 2789
feet depth to: 0 w/ 280 sx cmt.

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

Chloride content: 41000 ppm Fluid volume: 800 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: 01/11/2012
☑ **Confidential Release Date:** 01/10/2014
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ **I** ☑ **II** ☐ **III** **Approved by:** NAOMI JAMES **Date:** 01/12/2012

Operator Name: Norstar Petroleum, Inc.
Lease Name: T. Schertz
Well #: 1-32

Sec. 32 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
Micro

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

Name	Top	Datum
Attached	Attached	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	291	Common	180	3% cc, 2% gel
Production	7.875	5.5	15.5	4897	EA-2	175	flocele

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	4352-4356 "H"	250 g 15% MCA, 750 g 15% NE	
4	4384-4388 "I"	250 g 15% MCA	
4	4432-4440 "K"	1000 g 15% MCA, 2000 g 15% NE	
4	4742-4754 "Johnson"	500 g 15% MCA, 1250 g 15% NE	

TUBING RECORD: Size: 2.875 Set At: 4778 Packer At:

Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR: 11/21/2011

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

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	110		90		29

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:
4352-4754 OA

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

Form	ACO1 - Well Completion
Operator	Norstar Petroleum, Inc.
Well Name	T. Schertz 1-32
Doc ID	1071499

Tops

Name	Top	Datum
Anhydrite	2770	513
Heebner	4149	-866
Toronto	4170	-887
Lansing	4190	-907
Stark Shale	4419	-1136
B/KC	4480	-1197
Ft. Scott	4642	-1359
Cherokee Shale	4661	-1378
Johnson	4739	-1456
Miss	4819	-1536

ALLIED CEMENTING CO., LLC. 043510

Federal Tax I.D.# 20-5975804

.ITO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Oakley

DATE	SEC.	TWP.	RANGE	CALLED OUT	ON LOCATION	JOB START	JOB FINISH
10-13-11	32	10s	34w			5:00 Am	5:30 pm

LEASE T Schertz WELL # 1-32 LOCATION Page city 3N 1/6 W N,into
COUNTY Thomas STATE ks

OLD OR [✓ NEW] (Circle one)

CONTRACTOR Mallard
OWNER same
TYPE OF JOB surface
HOLE SIZE 12¼ T.D. 291'
CASING SIZE 8⅝ DEPTH 291'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 17.58 BBL

EQUIPMENT

PUMP TRUCK CEMENTER Andrew
422 HELPER Jerry
BULK TRUCK
347 DRIVER Earl
BULK TRUCK
DRIVER

REMARKS:

Cement Did circulate

Thank you

CHARGE TO: Norstar Petroleum inc
STREET
CITY STATE ZIP

CEMENT

AMOUNT ORDERED 180 sks com
3%cc 2%gel

COMMON	180 sks	@ 16.25	2925.00
POZMIX		@	
GEL	3 sks	@ 21,25	63,25
CHLORIDE	6 sks	@ 58.20	349.20
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
HANDLING	189 sks	@ 2,25	425,25
MILEAGE	11¢ sks/mile		374,22

TOTAL 4137.42

SERVICE

DEPTH OF JOB	291		
PUMP TRUCK CHARGE			1125.00
EXTRA FOOTAGE		@	
MILEAGE	18 miles x 2	@ 7.00	252.00
MANIFOLD	head	@	200.00
Light vehicle		@ 4.00	144.00
		@	

TOTAL 1721.00

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 Lyle Juergensen

SIGNATURE Lyle Juergensen

SWIFT
Services, Inc.

CHARGE TO: Noestar Petroleum
ADDRESS
CITY, STATE, ZIP CODE

TICKET
№ 22345

PAGE 1 OF 2

SERVICE LOCATIONS
1. Ness City KS
2.
3.
4.
REFERRAL LOCATION

WELL/PROJECT NO. 1-32
LEASE T. Scheetz
COUNTY/PARISH Thomas
STATE KS
CITY Page City
DATE 22 OCT 11
OWNER
TICKET TYPE ☐ SERVICE ☐ SALES
CONTRACTOR MALLARD
RIG NAME/NO.
SHIPPED VIA CT
DELIVERED TO location
ORDER NO.
WELL TYPE oil
WELL CATEGORY Development
JOB PURPOSE cement long string
WELL PERMIT NO.
WELL LOCATION 32-10-34
INVOICE INSTRUCTIONS

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING			DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
		LOC	ACCT	DF							
575		1			MILEAGE TRK 114	80	mi.			6 00	480 00
579		1			Pump Charge	1	ea			1850 00	1850 00
402		1			Centralizer	5½	in	[illegible]		~~1850~~ 70 00	770 00
403		1			Cement Basket	5½	in	2	ea	250 00	500 00
407		1			insert Float Shoe w/ AUTO FILL	5½	in	1	ea	350 00	350 00
408		1			DV tool	5½	in	1	ea	3000 00	3000 00
417		1			DV latch down plug & baffle	5½	in	1	ea	200 00	200 00
281		1			MUDFLUSH	500	gal			1 25	625 00
221		1			KCL liquid	4	gal			25 00	100 00
419		1			Rotating head rental	5½	in	1	ea	200 00	200 00

LEGAL TERMS: Customer hereby acknowledges and agrees to the terms and conditions on the reverse side hereof which include, but are not limited to, **PAYMENT, RELEASE, INDEMNITY,** and **LIMITED WARRANTY** provisions.

MUST BE SIGNED BY CUSTOMER OR CUSTOMER'S AGENT PRIOR TO START OF WORK OR DELIVERY OF GOODS

SIGNED
TIME SIGNED ☐ A.M. ☐ P.M.

REMIT PAYMENT TO:

SWIFT SERVICES, INC.
P.O. BOX 466
NESS CITY, KS 67560
785-798-2300

SURVEY	AGREE	UN-DECIDED	DIS-AGREE
OUR EQUIPMENT PERFORMED WITHOUT BREAKDOWN?			
WE UNDERSTOOD AND MET YOUR NEEDS?			
OUR SERVICE WAS PERFORMED WITHOUT DELAY?			
WE OPERATED THE EQUIPMENT AND PERFORMED JOB CALCULATIONS SATISFACTORILY?			

ARE YOU SATISFIED WITH OUR SERVICE? ☐ YES ☐ NO

☐ CUSTOMER DID NOT WISH TO RESPOND

PAGE TOTAL 1	8075 00
2	11936 63
subtotal	20,011 63
Thomas TAX 7.3%	1069 82
TOTAL	21,081 45

CUSTOMER ACCEPTANCE OF MATERIALS AND SERVICES The customer hereby acknowledges receipt of the materials and services listed on this ticket.

APPROVAL

Thank You!

SWIFT Services, Inc.

PO Box 466.
Ness City, KS 67560
Off: 785-798-2300

TICKET CONTINUATION

TICKET No. 22345

CUSTOMER	WELL	DATE	PAGE	OF
NORSTAR	T. Schartz 1-32	22 OCT 11	2	2

PRICE REFERENCE	SECONDARY REFERENCE/ PART NUMBER	ACCOUNTING LOC	ACCT	DF	TIME	DESCRIPTION	QTY.	U/M	QTY.	U/M	UNIT PRICE	AMOUNT
~~325~~	330	1				SMD cement	325	sk			16 50 ~~13 50~~	5362 50
325		1				STANDARD cement (For EA-2)	175	sk			13 50	2362 50
284		1				calseal	800	lb	8	sk	35 00	280 00
283		1				salt	900	lb			0 20	180 00
285		1				CFR-1	100	00			4 00	400 00
276		1				Flocele	75	lb			2 00	150 00
290		1				D-AIR	5	gal			35 00	175 00
							~~5~~	~~gal~~				
581						SERVICE CHARGE 500	CUBIC FEET				2 00	1000 00
3						MILEAGE CHARGE TOTAL WEIGHT 50665.75 LOADED MILES 40	TON MILES 2026.63				1 00	2026 63

CONTINUATION TOTAL 11936 63

SWIFT Services, Inc.

DATE 22 OCT 11 | PAGE NO. 1

Norstar Petroleum | WELL NO. 1-32 | LEASE T. Schertz | JOB TYPE Cement long string | TICKET NO. 22345

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) ~~TUBING~~ Casing	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
								175 EA-2 cement, 325 sks SM w/ flocele
								5½" 15.5# casing DV tool #51 @ 2789'
								Centralizers 1,3,5,7,9,11,13,15,17 Basket 15, 50
								total pipe 4898' 117 joints shoe jt 43.5'
	0500							on loc TRK 114
	0540							start 5½" 15.5# casing in well
	0715							circulate 10 min
	0820							Drop ball - circulate - ROTATE
	0900	4¾	12			200		Pump 500 gal mudflush
		4¾	20			200		Pump 20 bbl KCL H_2O
	0920	4¾	42			250		mix 175 sks EA-2 cement @ 15.3 ppg
								Drop 1st stage latch down plug
								wash pump & lines
	0940	6¾	49			200		Displace plug w/ H_2O
			66			550		Displace with drilling mud / 115 bbl total
	1000					1500		Land Plug
								Release pressure to truck - dried up
	~~1015~~					~~1200~~		~~open DV total~~ Drop bomb
								wash truck
	1015		3			1200		Open DV tool - circulate well w/ mud
	1300	4¾				700		Pump 20 bbl KCL H_2O
		4	24					Plug RH - MH 30 sk - 15 sk
	1315	4¾	155			200		mix 280 sks SMD @ 11.2 ppg
	1330							Drop 2nd stage plug
		5¾				200		Displace plug
			55			600		→ cement surface ←
	1400		66			1800		Land Plug - Close DV tool
								Release pressure to truck - dried up
	1410							wash truck
								Rack up
	1445							job complete

1st 175 sks
2nd 280 sks
RH-MH 45 sks
25 sks top it

Thanks
Blaine, Dave, Joe & Cal

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Norstar Petroleum Inc.

LEASE T. Schertz #1-32

FIELD Wildcat

LOCATION 1797' FSL & 1489' FWL

SEC 32 TWSP 10s RGE 34w

COUNTY Thomas STATE Kansas

ELEVATIONS

KB 3283'

DF

GL 3278'

Measurements Are All From KB

CONTRACTOR Mallard Drlg.

SPUD 10-13-11 COMP 10-22-2011

RTD 4900' LTD 4901'

MUD UP 3600' TYPE MUD Chemical

CASING

SURFACE 8 5/8 @ 291'

PRODUCTION 5 1/2" @ 4897'

ELECTRICAL SURVEYS

CNL/CDL, DIL, MEL

SAMPLES SAVED FROM 3900' TO TD

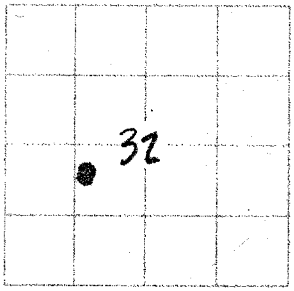
DRILLING TIME KEPT FROM 3800' TO TD

SAMPLES EXAMINED FROM 3900' TO TD

GEOLOGICAL SUPERVISION FROM 3800' TO TD

GEOLOGIST ON WELL Bob Elder

FORMATION TOPS	LOG		SAMPLES	
Anhydrite	2770	+513	2769	+514
Topeka	3990	-707	3985	-702
Heebner	4149	-866	4149	-866
Toronto	4170	-887	4170	-887
Lansing	4190	-907	4190	-907
Stark Shale	4419	-1136	4418	-1135
Ft. Scott	4642	-1359	4641	-1358
Cherokee Shale	4661	-1378	4661	-1378
Johnson Zone	4739	-1456	4738	-1455
Mississippi	4819	-1536	4819	-1536



7505

REMARKS

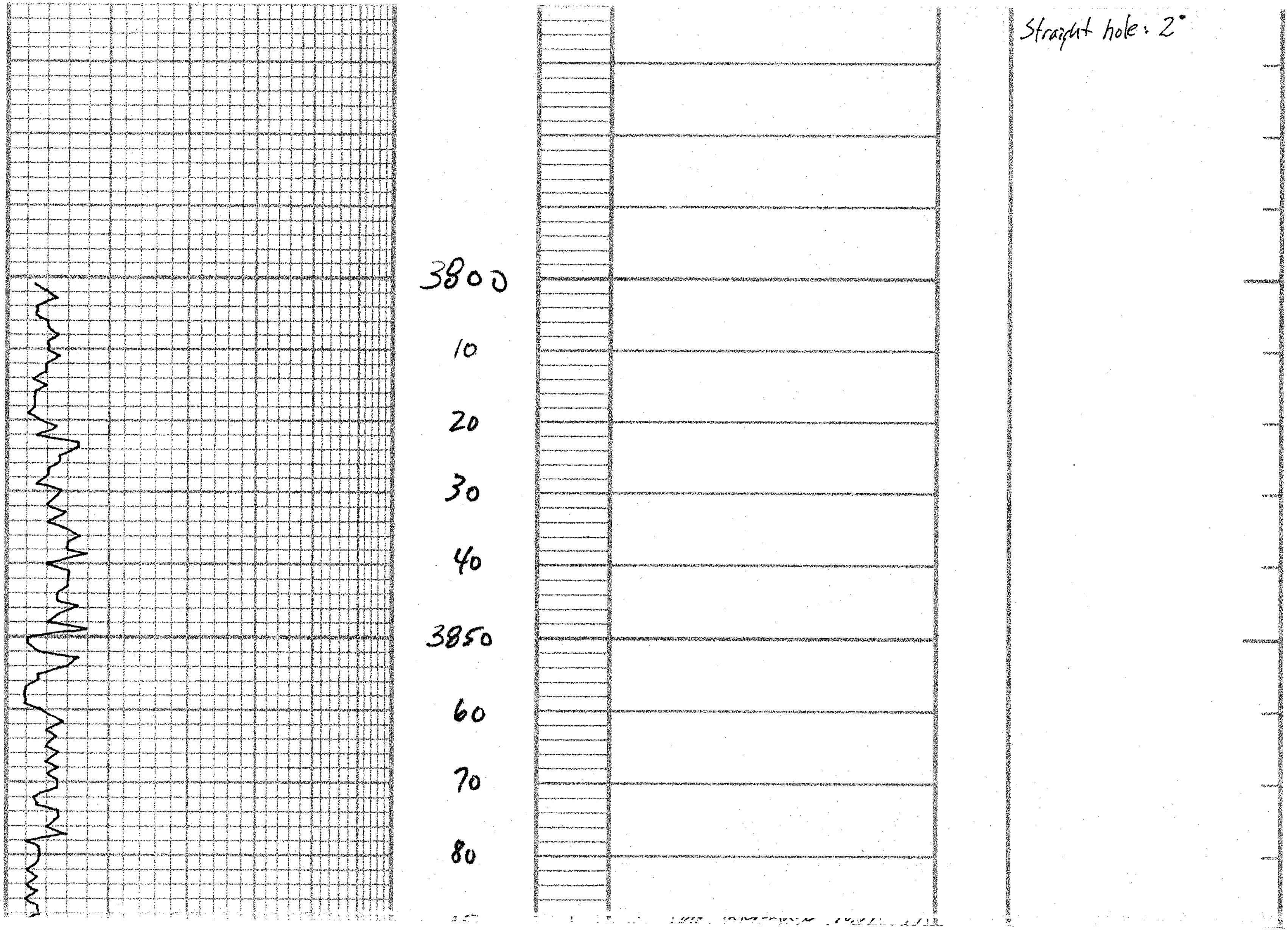
Based on oil recoveries during DSTs across the Lansing-Kansas City and Johnson Zone the Operator decided to run production casing to further test this well.

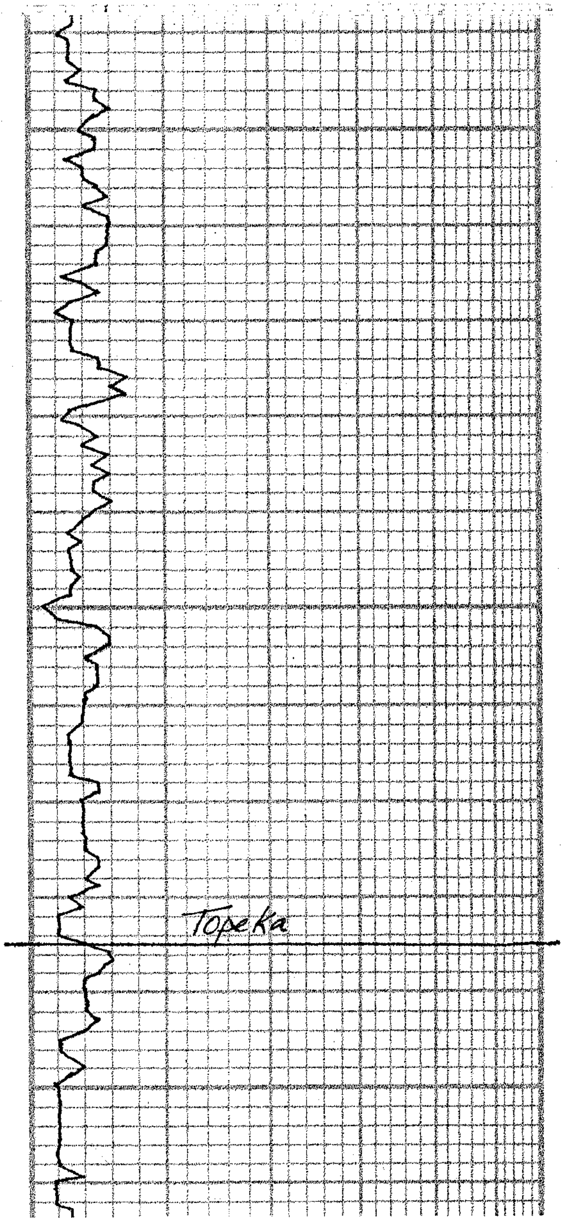
LEGEND

▥	▦	▤	▤	■	▦	▦	△	▨
Anhydrite	Salt	Sandstone	Shale	Carb sh	Limestone	Ool.Lime	Chert	Dolomite

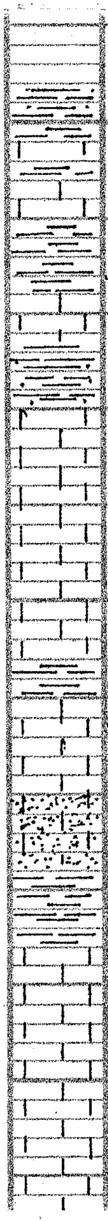
DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Decreases 5" 10" 15" 20" 25"	DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
					Pipe Strap @ 4417' 0.16' short to board

LOG 7710


Straight hole: 2°
3800
10
20
30
40
3850
60
70
80



90
3900
10
20
30
40
3950
60
70
80
90
4000
10



Shales: grey & green, silty

Ls: cream to white, v. chalky to argillaceous,

Ls: brn, fossilif., mealy texture v.f.-xln. ptly. argil.

Shales: red-brown

Ls: tan, v.f.-xln, partly fossilif. sparitic, pr. interxln ∅

Shales: red-orange, maroon & green silty

Ls: cream to lt. tan, v.f.-xln chalky

Ls: tan & cream v.f.-xln., scat. fossils, mostly chalky

Ls: tan, f.-xln, mostly chalky scat. fossils

Shale: green, silty

Ls: cream & grey, mostly chalky to argillaceous

Sandstone: lt. grey, v.f.-grained well-sorted, subang., good inter-gran ∅ N.S.

Shales: mostly red-brown, soft

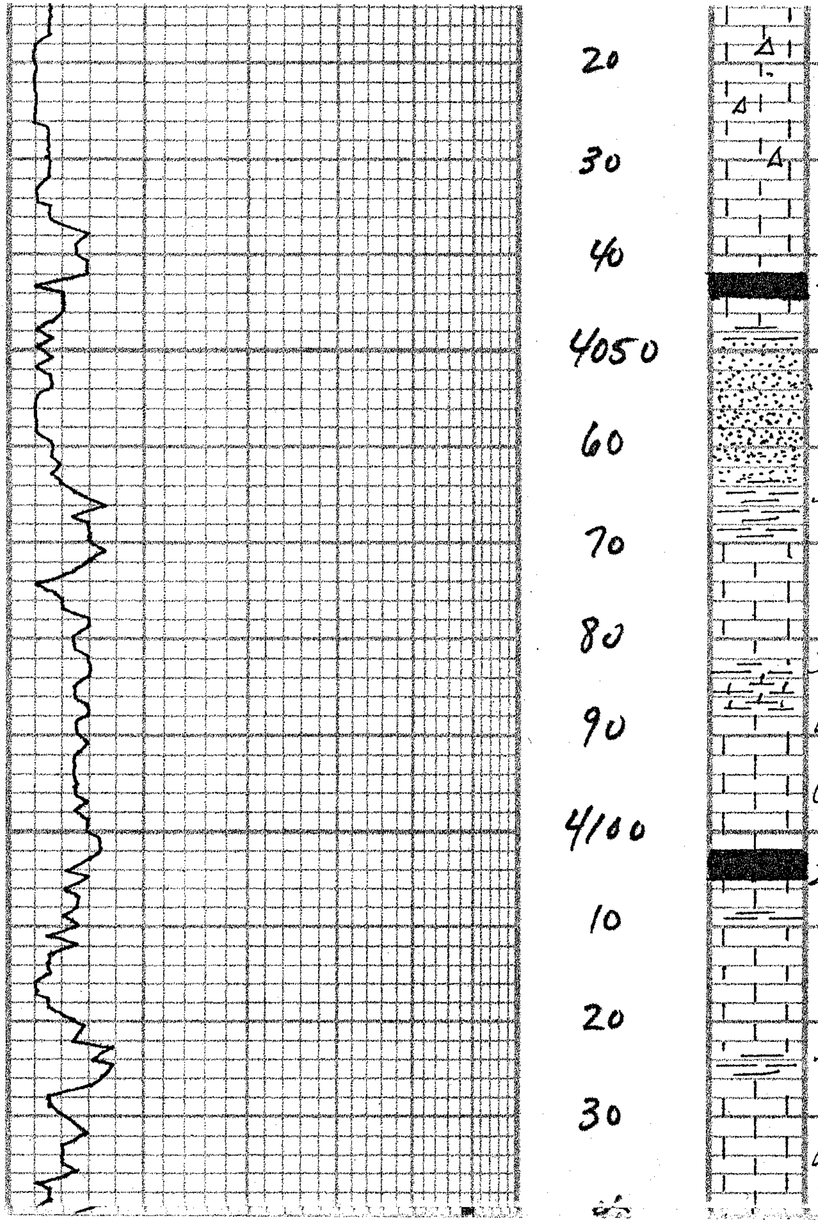
Ls: tan, v.f.-xln., partly fossilif., fair inter-xln ∅

Ls: cream to lt. tan, partly fossilif. very chalky

Ls: tan to creamy v.f. to f.-xln., partly v. fossilif., very chalky

Cherty: white, fossilif., fresh

Mudco (4011')
Vis. 51
wt. 8.8



good inter-xln.

Ls: tan, v.f.-xln., fossiliferous partly chalky; trace chert: white, fresh

Ls: tan, v.f.-xln., scat. fossils poor inter-xln. Ø, dense

Shale: dk. grey, carbon., blocky.

Sandstone: lt. gray to lt. green, v.f.-grained, slt. glauconitic, well-sorted, sub-angular, v. good inter-gran. Ø N.S.

Shales: red-brn., silty

Ls: tan to lt. grey, v.f.-xln. partly v. fossilf., sparitic poor inter-xln. Ø

Shales: gray & green

Ls: lt. grey, f.-xln. chalky to argillaceous

Ls: tan to lt. grey, v.f.-xln., ptly v. fossilf., sparitic, pr. inter-xln. Ø

Shale: Black, carbonaceous, blocky

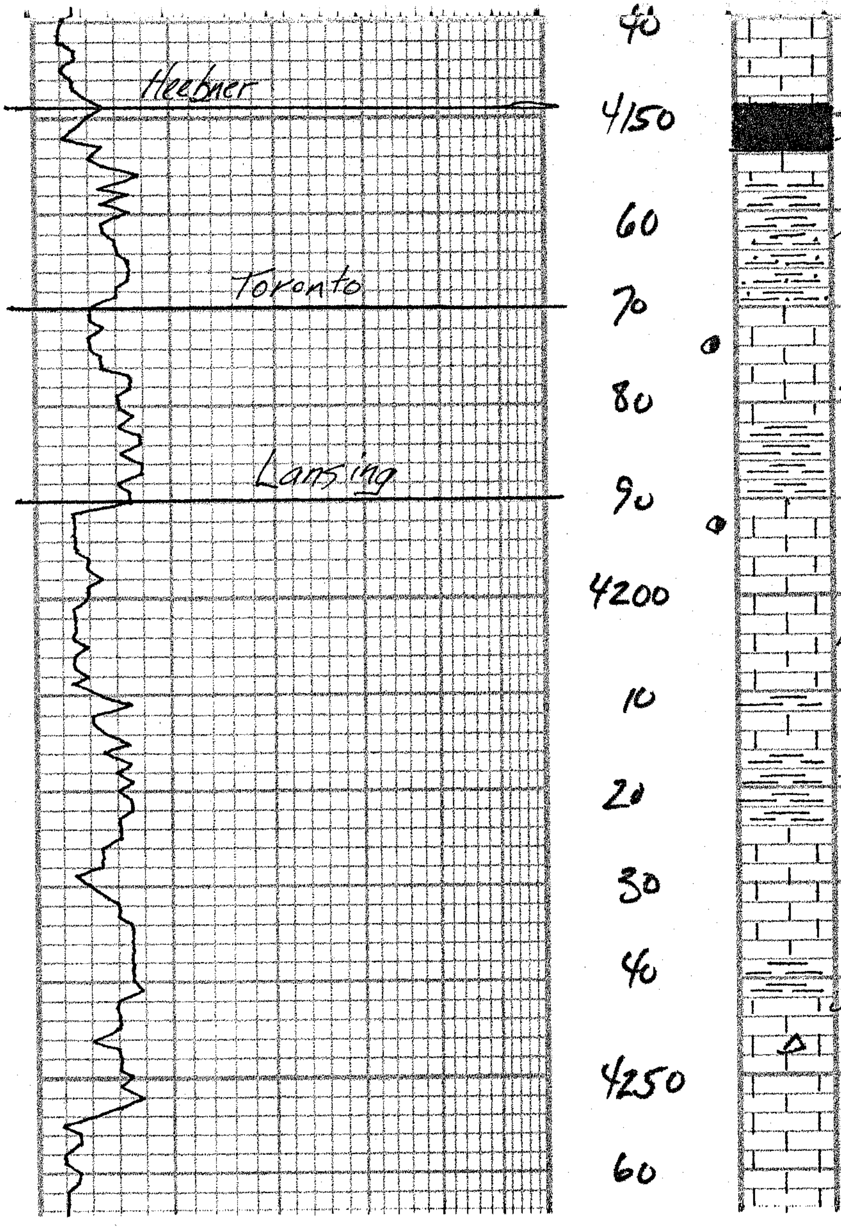
Ls: tan to cream, v.f.-xln., partly v. fossilf., chalky fair inter-xln. Ø

Shales: red-brn., rounded

Ls: tan, v.f.-xln., fossilf., sparitic

Ls: cream to lt. tan, fossilf., sparitic to sub-chalky fair inter-xln. Ø N.S.

W.L. 9.6
L.C.M. 1lb.



Ls: cream to lt. tan, slt. fossilif., v. chalky

Shale: Black, carbon., blocky

Ls: brown, micro-xln., dense

Shales: red-brown & green, soft.
Siltstones: lt. green, glauconitic v.f.-grained

Ls: cream to white, v.f.-xln. fossilif. fragmented, sub-chalky; poor inter-xln. Ø
Scat. vug. Ø GSHO, free oil when broken weak odor, dull flour, slow wispy cut.
Shales: red-brn., soft, rounded

Ls: lt. tan, f.-xln, v. fossilif. & oolitic; fair to good fossil, moldic Ø fair inter-xln. Ø
GSHO; faint odor, dull flores. weak strmg. cut.

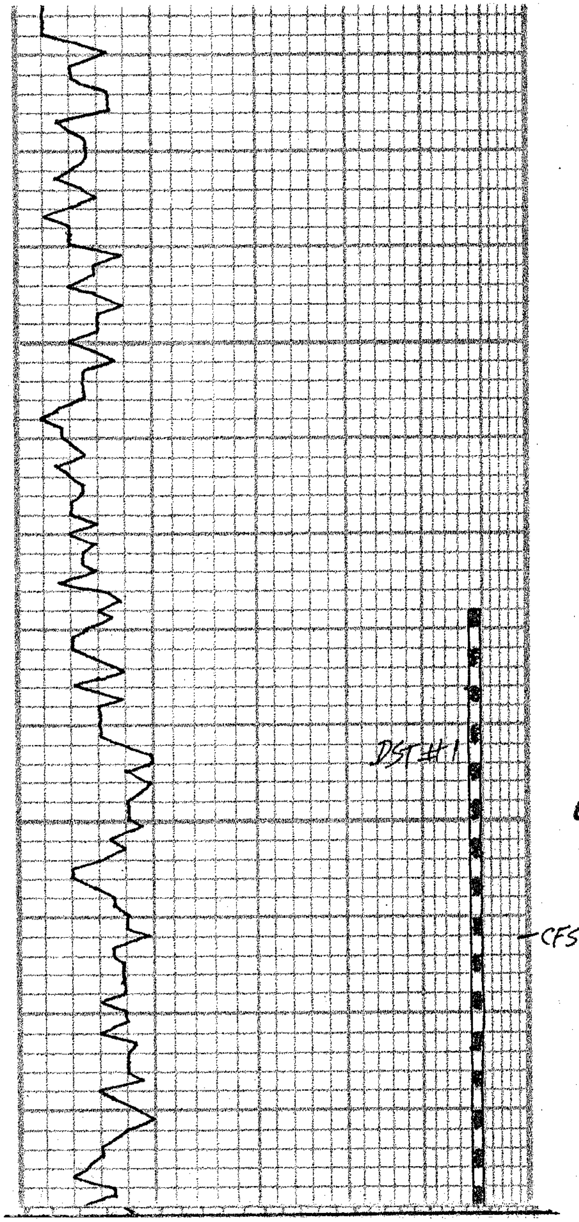
Ls: lt. tan, v.f.-xln., scat. fossils. fair inter-xln Ø scat fossil. moldic Ø, Cherty

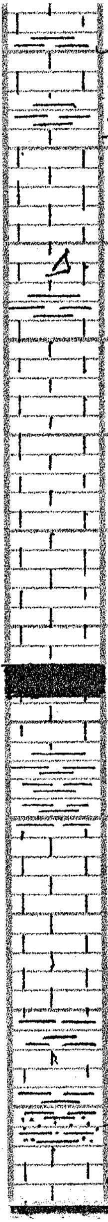
fresh; white
Ls: cream, f.-xln., chalky.
Shales: grey & green, calc., soft

Shales: red-orange, soft

Ls: cream to lt. tan, v.f.-xln to micro-xln
scat. fossils, p.r. inter-xln. Ø N.S.
Ls: lt. tan, v.f. to micro-xln, scat. sparite, dense, no vis Ø
Shale: grey & green
Ls: cream to lt. tan, v.f.-xln. pttly fossilif., sub chalky, trace Chert:
White, fresh
Dolomite: lt. tan, f.-xln. sucrosic fair to good inter-xln. Ø
No Show

Note: Samples from 4190-4300± corric'd cuttings with shows observed in Toronto & Lansing 'A'.





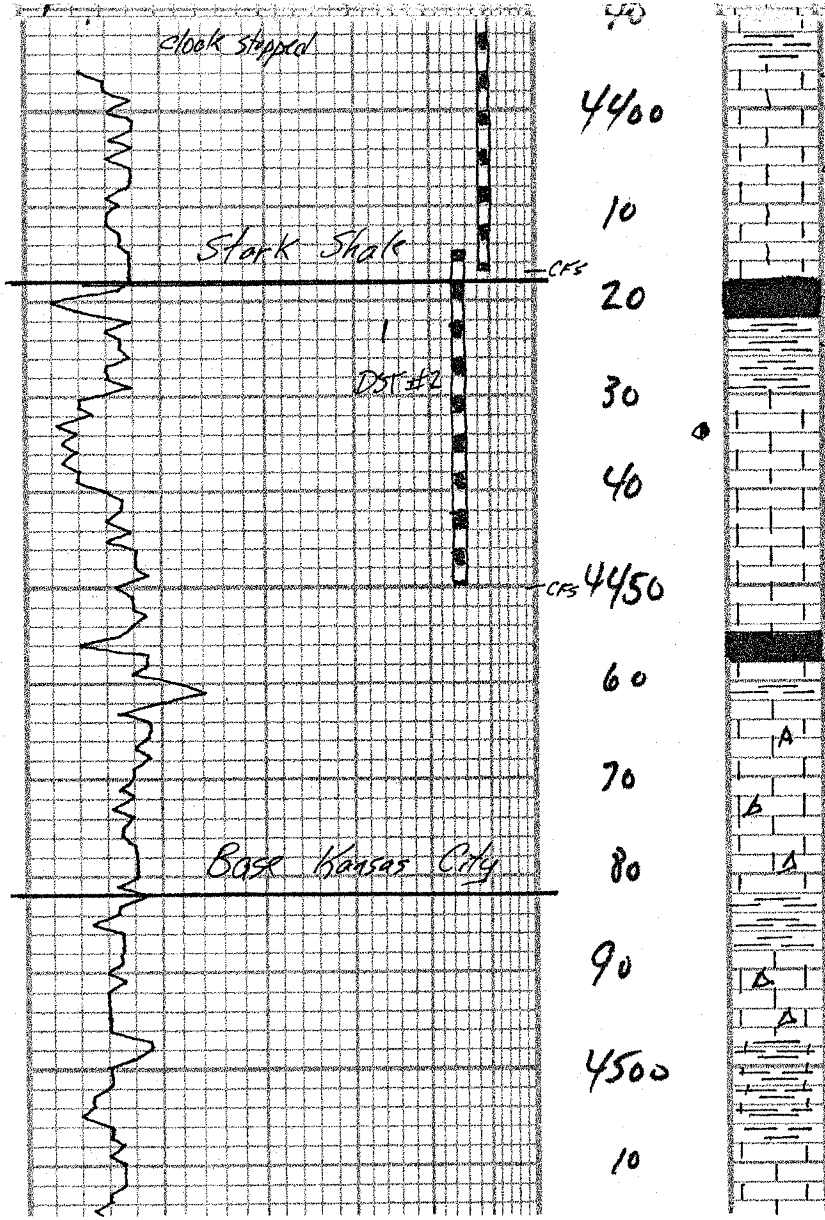
70
80
90
4300
10
20
30
40
4350
●
60
70
80
●
9

Shales: dark grey, blocky
Ls: dk. brown, micro-xln. sparitic
Shales: red-orange & green, rounded
Ls: tan v.f.-xln., sub-chalky, cherty: white fresh
Ls: cream to white, v.f. to f.-xln
Chalky, Cherty: white, fresh
Shales: red-orange & green, soft.
Ls: tan, v.f. to micro-xln., sub-chalky dense
Ls: Cream, v.f.-xln., chalky
Ls: cream to lt. grey, v. chalky
Ls: lt. tan, micro-xln., dense

Shale: Black, carbonaceous, blocky
Ls: brown, micro-xln., dense
Shales: lt. green, red-orange calc. soft.
Ls: cream to off-white, v.f.-xln., sub-chalky, pr. inter-xln Ø & scat v.g. Ø, FSFO, mod. odor, dull flouresc. & weak streaming cut.
Ls: tan to lt. grey, v.f. to micro-xln dense
dark grey, blocky
Ls: brn. micro-xln., dense
Shales: lt. grey, calc., soft.
Siltstone: lt. grey, v.f.-grnd.
Ls: lt. cream, v.f.-xln., fossilif., fragmental fair inter-gran. Ø, scat. v.g. Ø, show

D.S.T. #1
4328-4417
LKC "H," "I" & "J" zones
15-60-60-90
initial: 5" blow (no return)
final: BOB 59" (surface blow)
Recovered:
20' oil (25 gravity)
80' MCO 50% oil
65' OCM 40% oil
125' OCM 10% oil
IFP: 36-94
FFP: 98-161
SIP: 1289-1238

Mudco (4414')
Vis. 50
Wt. 9.0
W.L. 11.2
LCM 1 lb.



tr. oil, slt gassy, weak odor, dull fluores, slow streaming cut.
Shale: grey
Ls: cream to lt. tan, v.f.-xln. scat. fossils.
sub-chalky, poor inter-xln. ø
Ls: cream to lt. grey, micro-xln.
scat. fossils. dense

Shale: Black, carbon., blocky

Shales: gray, green & red-brn.

Ls: tan to lt. cream, v. fossilif., fragmented
sparitic, fair inter-xln ø & good show
Oil Staining with free oil when broken
fair to good vug. ø. Strong odor, dull
fluores. & wkspy cut.
Ls: tan, v.f.-xln., partly fossilif.,
sub-chalky, poor inter-xln. ø

Shale: Black, carbonaceous, blocky

Ls: tan to lt. brn., v.f. to micro-xln
fossilif., sparitic, cherty: white to
translucent, fossilif. N.S.
Ls: cream to lt. grey, v.f.-xn.,
pyritic, sub-chalky, Cherty: lt. gray
fresh, fossilif.
Shales: green & red-brn.

Ls: lt. grey & tan, v.f. to micro-xln.,
scattered fossils, trace chert: white
to transl., fresh, fossilif. N.S.
Shales: grey
Ls: cream to lt. tan, v.f.-xn., scattered
fossils, sub-chalky, minor
chert: white, to transl., fresh

D.S.T. #2
4415'-4450'
LKC "K" zone

15-30-60-90

initial: BOB in 10"
1" return

final: BOB 7"
2½" return, died
in 60"

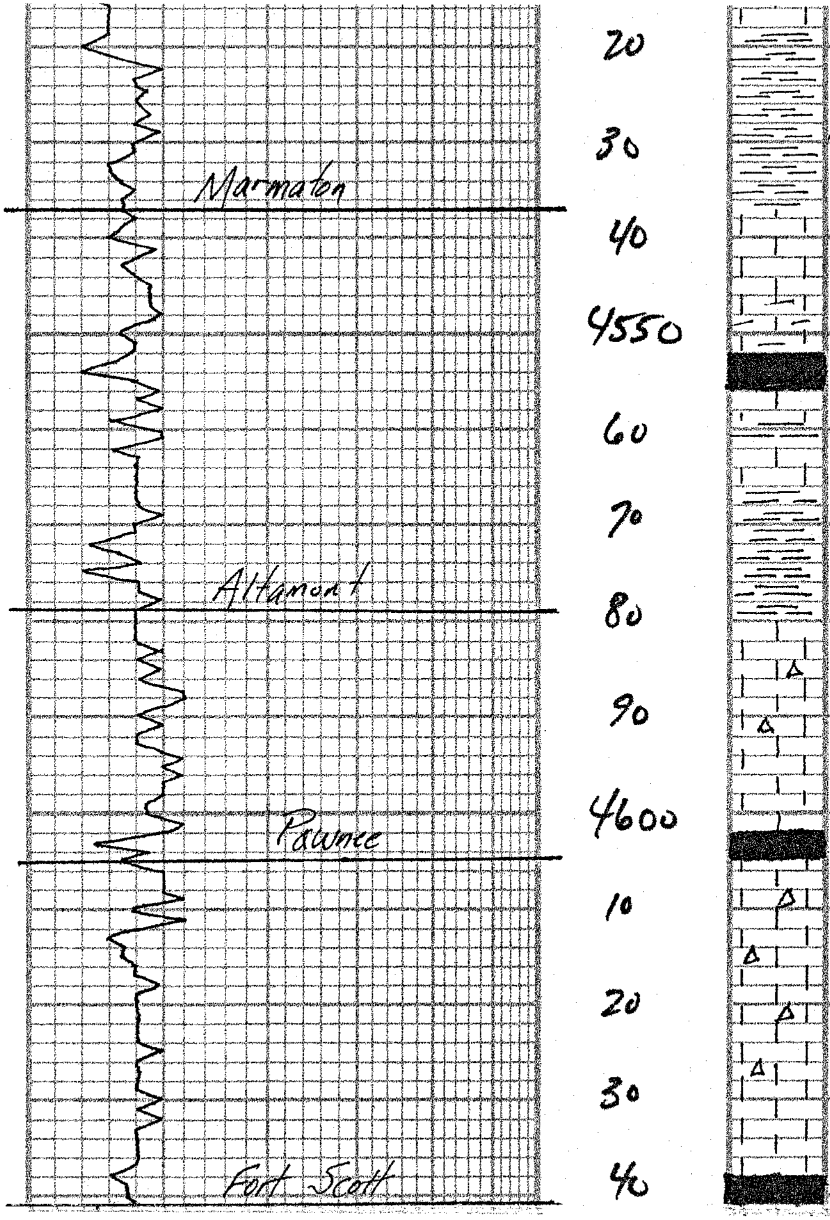
Recovered:
620' GIP
340' GMCO 65% oil
250' OCM 10% oil

IFP: 34-118

FFP: 133-237
SIP: 1322-1303

oil: 31 gravity

Mudco (4450')
Vis. 61
Wt. 9.2
W.L. 10.4
LCM 1 16.



Ls: cream
fossils, sub-chalky

Shales: green, waxy, rounded.

Shales: red-orange; samples wash red.

Ls: cream to lt. grey, v.f.-xln.
Chalky to argillaceous.

Ls: cream, v.f.-xln., sub-chalky to argillaceous

Shale: dark grey, carbonaceous

Ls: cream, v. chalky; samples wash creamy-white

Shales: mostly red, v. soft
Samples wash red-brn.

Ls: cream to lt. grey, v. chalky.

Ls: lt. grey, micro-xln., dense
trace chert: orange & translucent
Partly fossilif.

Ls: tan, v.f. to micro-xln., dense

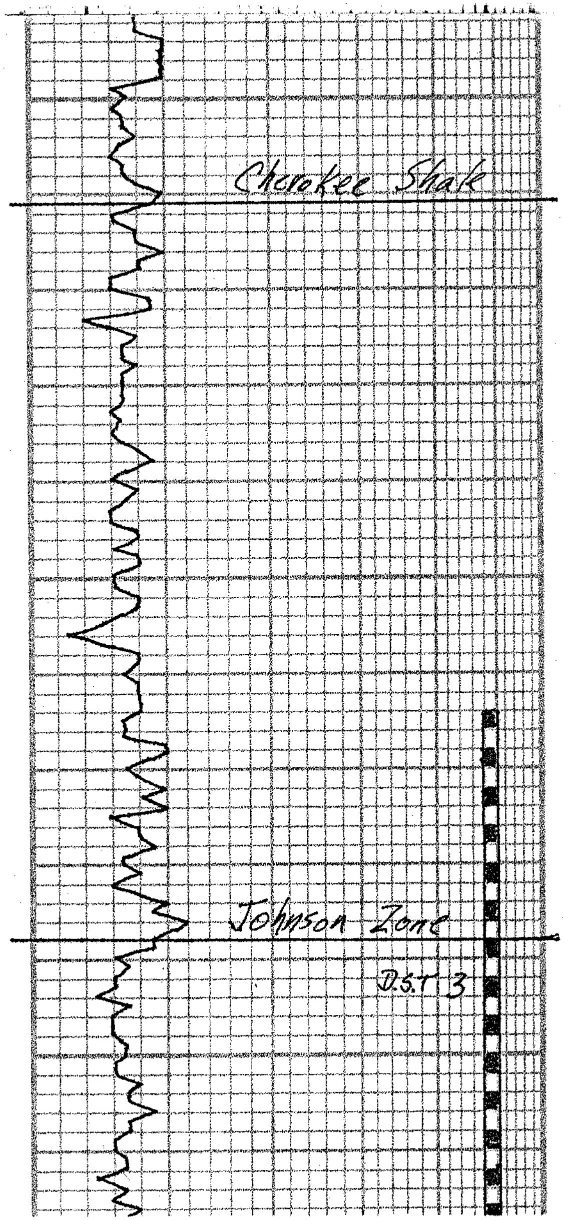
Shale: dark grey, soft.

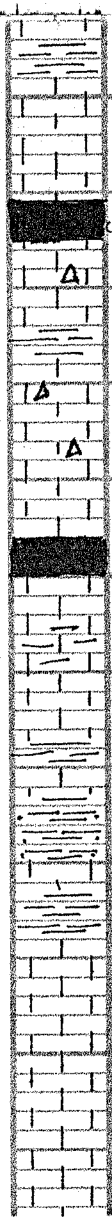
Ls: lt. grey & tan, v.f. to micro-xln
dense, scat. fossils, cherty:
tan & grey, fresh, fossilif.

Ls: tan & lt. grey, v.f. to micro-xln.
dense, cherty: lt. grey, transl. fresh.

Ls: tan to lt. grey, v.f.-micro-xln.
scat. fossils., cherty: grey, fresh

Shale: Black, carbonac., blocky





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Ls: brn, micro-xln, dense

Shales: grey, green & red-orange

Ls: tan, v.f. to micro-xln, scat. fossils, sub-chalky, v. pr. inter-xln. ∅ N.S.

Shale: Black, Carbon., blocky

Ls: tan & grey, v.f. to micro-xln., scattered fossils, sparfic, cherty: grey, transcl., fresh, fossilif.

Ls: cream to tan, v.f.-xln., scat. fossils, sub-chalky, cherty: grey, transcl., fresh, fossilif.

Ls: tan, & grey, v.f. to micro-xln., dense

Shale: Black, carbonac., blocky

Ls: tan & lt. grey, v.f. to micro-xln., cherty: grey & white, fresh

Ls: grey, chalky to argillaceous

Ls: tan & grey, v.f. to micro-xln., sub-chalky, scat. fossils

Shales: red-orange

Shales: grey, green & red; silty

Ls: tan & grey, v.f. to micro-xln., sub-chalky, pyritic

Shales: red, grn. & grey, silty

Ls: tan, f. to v.f.-xln., sparfic, poor inter-xln. ∅ with scat. vug. ∅ (GSHO, v. little free oil), weak odor slt. gassy when broken, dull flour. weak, wispy cut

Ls: cream to lt. tan, v.f.-xln., scattered fossils, sub-chalky, pr. inter-xln ∅, No Show.

Mudco (4694')
Vis. 56
wt. 9.2
W.L. 12.0
L.C.M. 1 lb.

D.S.T. #3
4714-4770
Johnson Zone

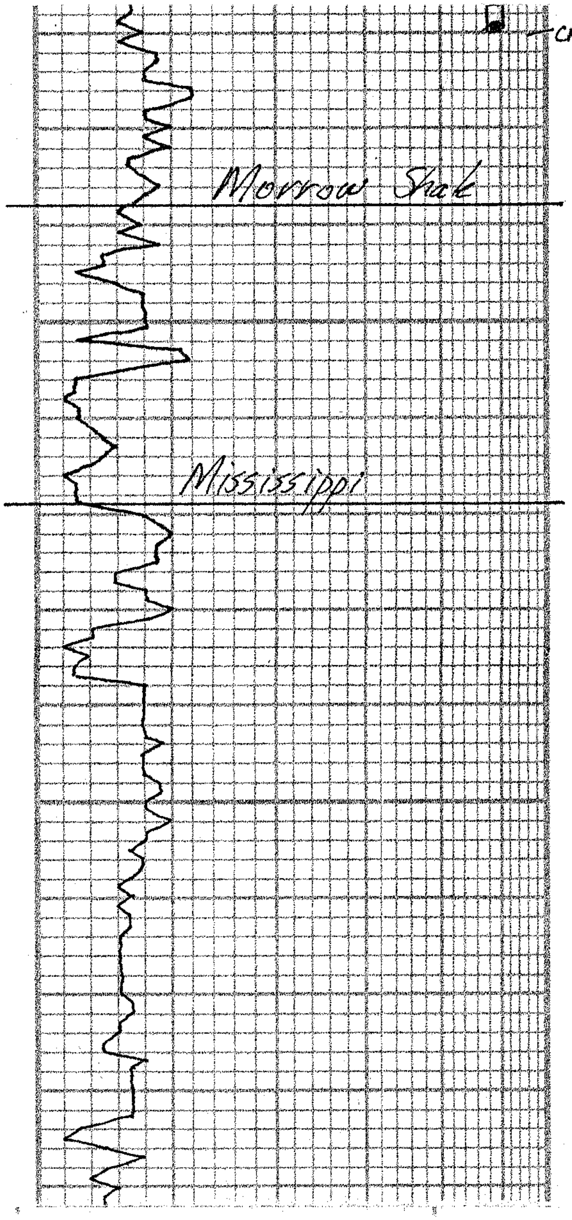
15-30-45-60

initial: 1" (no return)
final: 3" (no return)

Recovered:

240' GMCO	45% oil
120' GMCO	40% oil

IFP: 27-96
FFP: 107-182
SIP: 1101-1089



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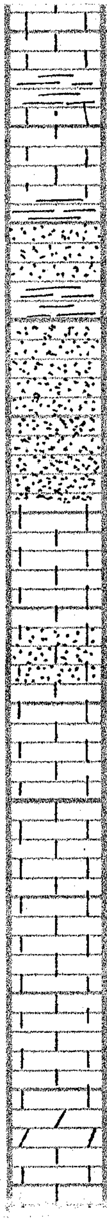


Ls: tan, v.f. to micro-xln., sub-chalky dense; no vis ϕ

Shales: grey & green.

Ls: cream, grey & tan, v.f.-xln., scat. fossils, pelloidal, sub-chalky

Shale: grey & green, silty

Sst: lt. green, v.f. to f.-grnd., well-srtd., sub-ang., gd. inter-gran. ϕ N.S.

Shales: yellow-grn., waxy, firm

Sst: clear to lt grey, v.f. to med.-grnd., moderately sorted, sub-ang. to sub-rnd. slt. glauconitic, calc.

Sst: clear to lt. grey, v.f. to med. grnd. med. srtd., sub-ang to sub-rnd., slt. glaucon. calc. fair gd. inter-gran. ϕ N.S.

Ls: white to cream, f. to med.-xln. sandy: f.-grnd., rounded, slt. glauconitic v.pr. inter-xln. ϕ N.S.

Ls: tan to cream, v.f.-xln., v. sandy: v.f. to f.-grnd. rounded, sub-chalky fair inter-xln. ϕ N.S.

Ls: tan, v.f. to micro-xln., trace sand; no vis. ϕ

Ls: cream to lt. tan, v.f.-xln., scattered sand grains, f.-grnd. rounded, sub-chalky. N.S.

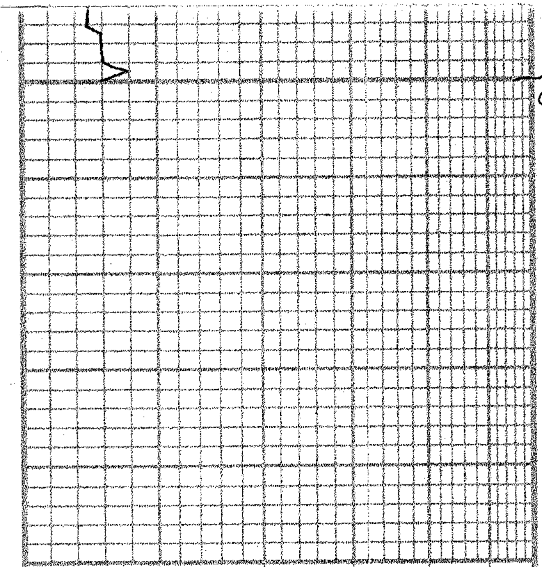
Ls: tan, v.f.-xln., scat. sand grains sub-chalky, v.pr. inter-xln. ϕ N.S.

Ls: cream to lt. tan, v.f.-xln., scat. sand grns. rounded sub-chalky; v.pr. inter-xln. ϕ

Dolomite: tan, f.-xln., sucrosic; fair inter-xln. ϕ; N. Show

Ls: lt. tan to cream, v.f.-xln.,

Mudco (4802')
Vis. 61
Wt. 9.2
W.L. 11.2
L.C.M. 2



DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS
4900		Scat. fossils & peloids; pr. inter-xln. φ No Show.		RTD 2pm 10-21-2011 LTD: 4901

CONTRACTOR Mallard Drlg.

LEASE T. Schertz 1-32 IP

ELEVATION 3283' RTD 4900'

LOCATION 1797' FSL & 1489' FWL

SEC 32 TWP 10S RNG 34W

COUNTY Thomas STATE Kansas

LOG-TECH

DIGITAL LOG (785) 625-3858

Dual Compensated Porosity Log

API No.	15-193-20,823-00-00
Company	Norstar Petroleum Inc.
Well	T. Schertz No.1-32
Field	Wildcat
County	Thomas
State	Kansas
Location	NW SW NE SW 1797' FSL 1489' FWL
Sec:	32
Twp:	10S
Rge:	34W
Other Services	DIL MEL

Permanent Datum	Ground Level		Elevation 3278
Log Measured From	Kelly Bushing	5	Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 3283
D.F.
G.L. 3278

Date	10/21/2011		
Run Number	One		
Type Log	CNL / CDL		
Depth Driller	4900		
Depth Logger	4901		
Bottom Logged Interval	4880		
Top Logged Interval	3700		
Type Fluid In Hole	Chemical		
Salinity, PPM CL	8,400		
Density	9.2		
Level	Full		
Max. Rec. Temp. F	125		
Operating Rig Time	4 Hours		
Equipment -- Location	17 Hays		
Recorded By	C. Desaire		
Witnessed By	Bob Elder		

Borehole Record				Casing Record			
Run No.	Bit	From	To	Size	Wgt.	From	To
1	12.25	00	291	8.625	24#	00	291
2	7.875	291	4900				

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

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Monument KS, W to 25 Hwy,
N to Co Ln, 5 W, N Into

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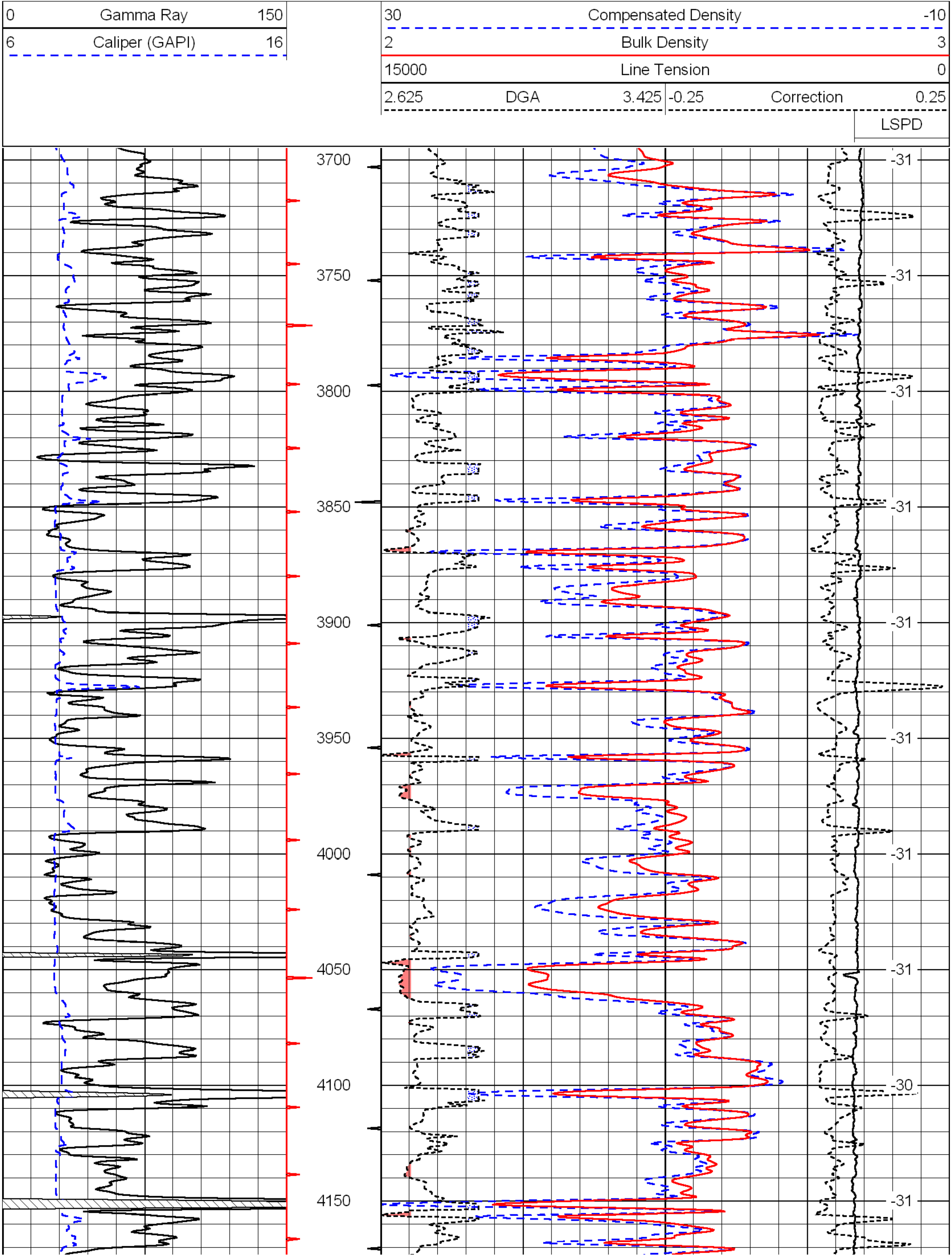
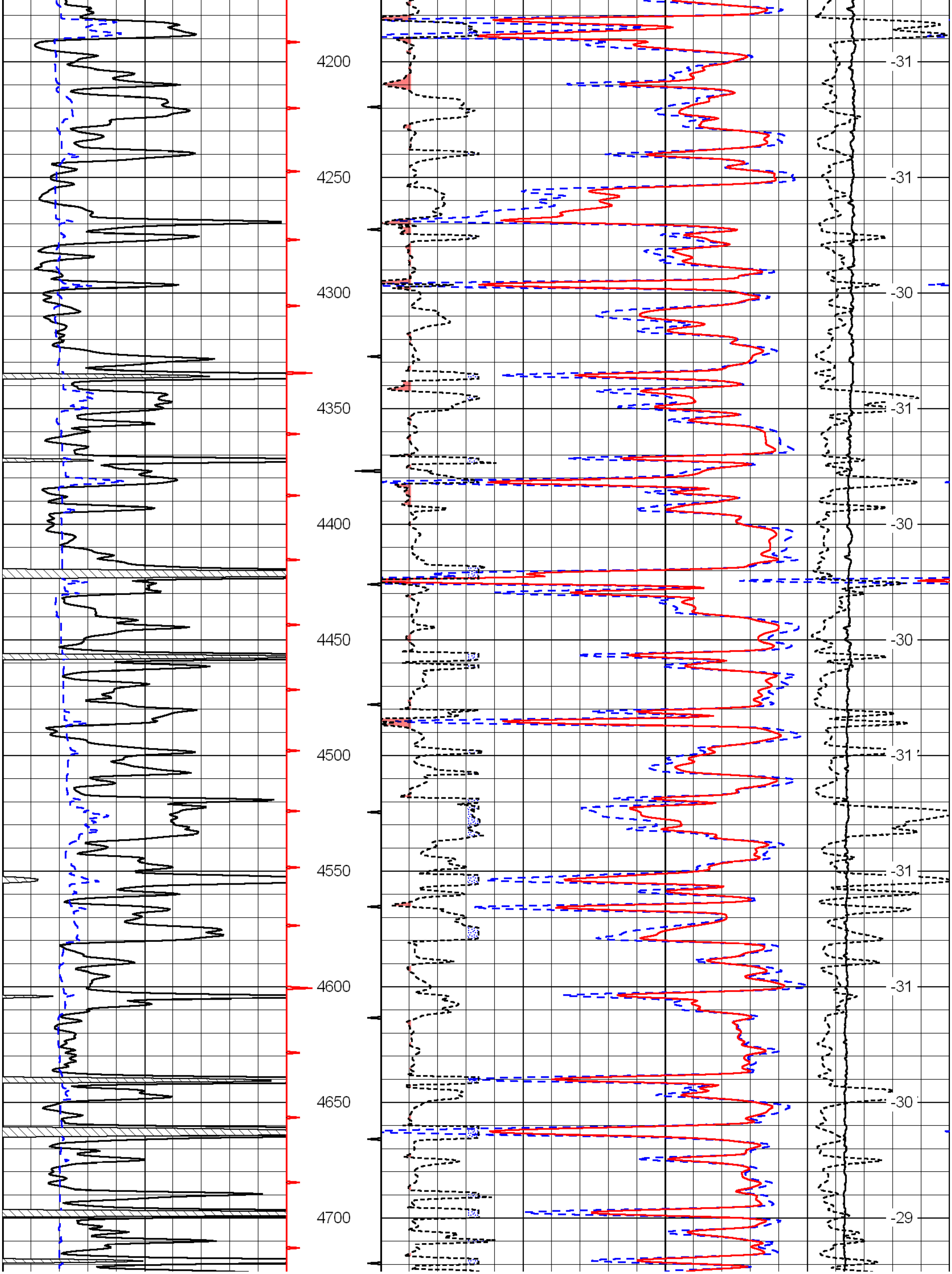
Charted by: Depth in Feet scaled 1:600

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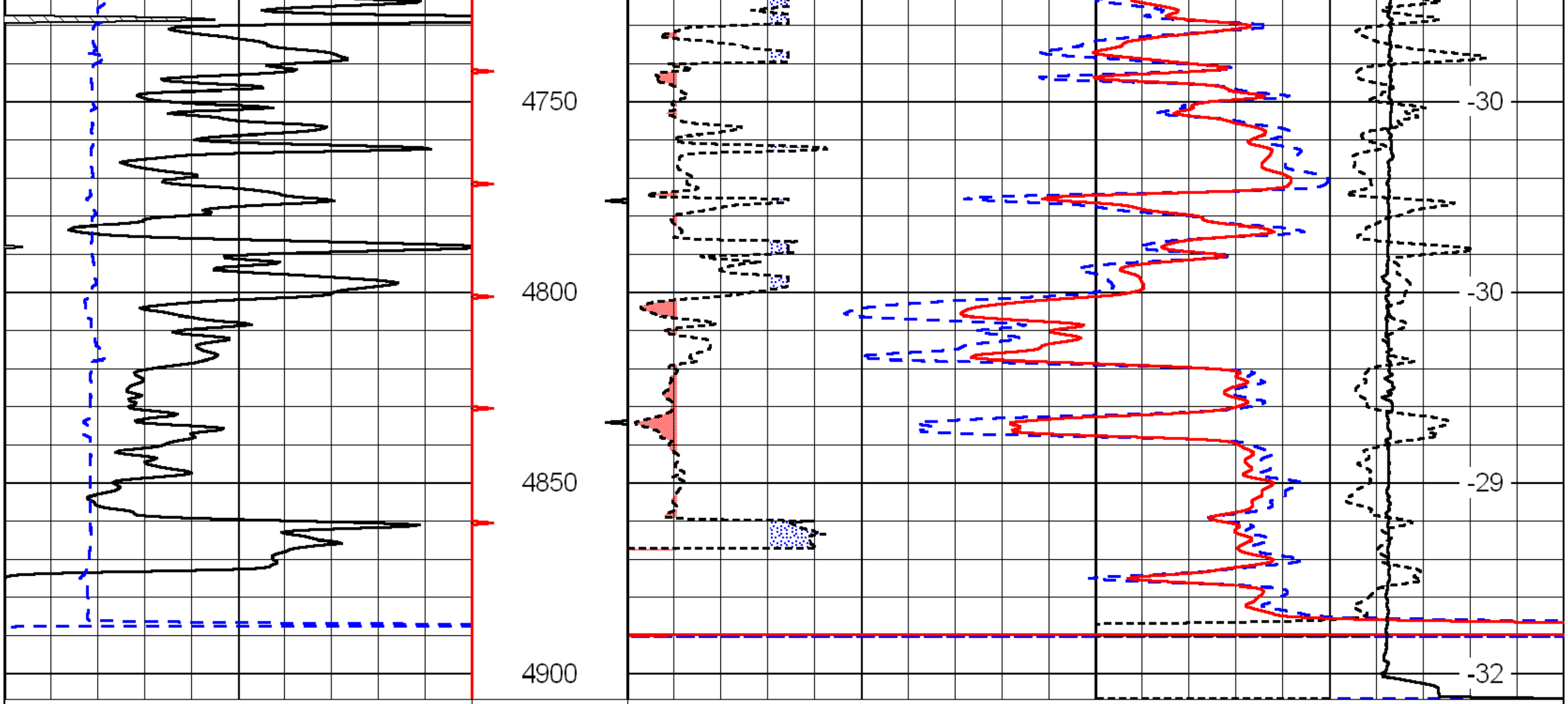

0 Gamma Ray 150

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

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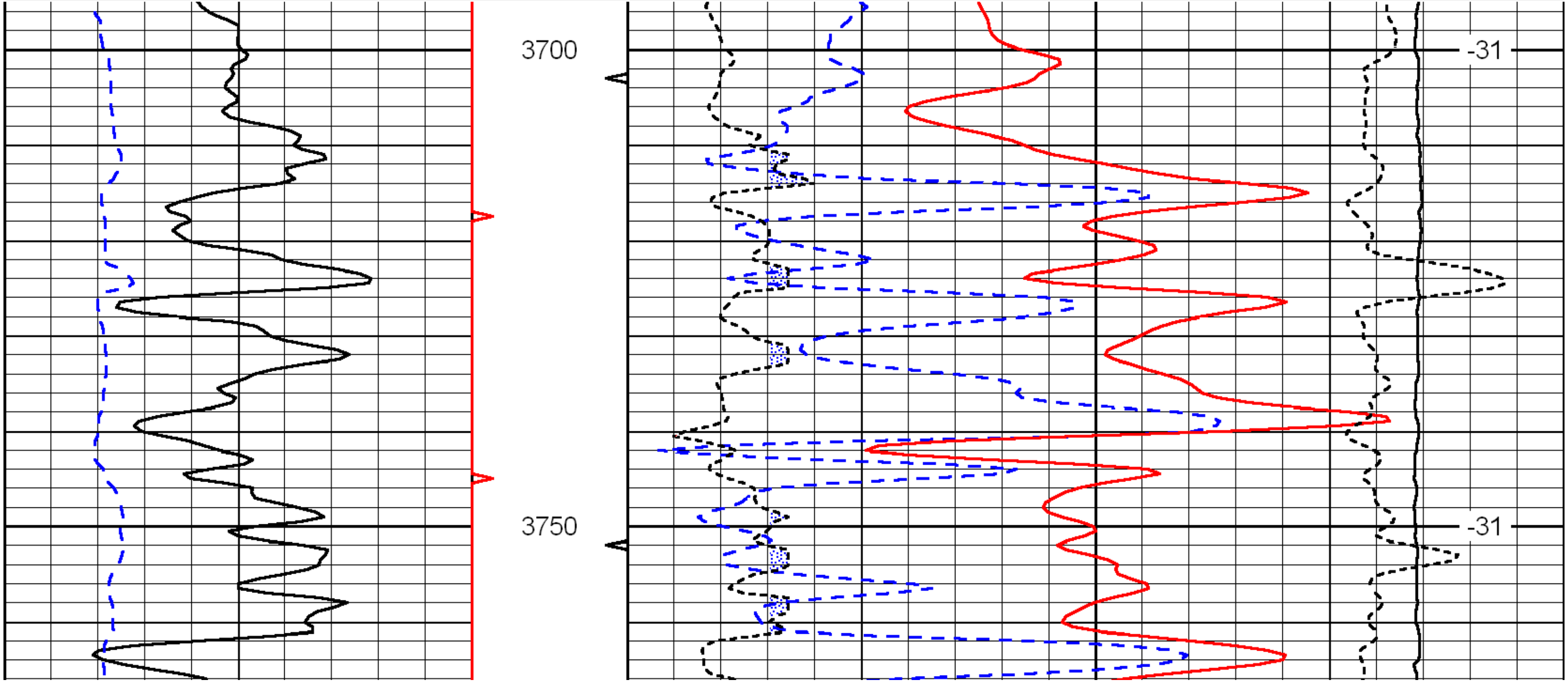
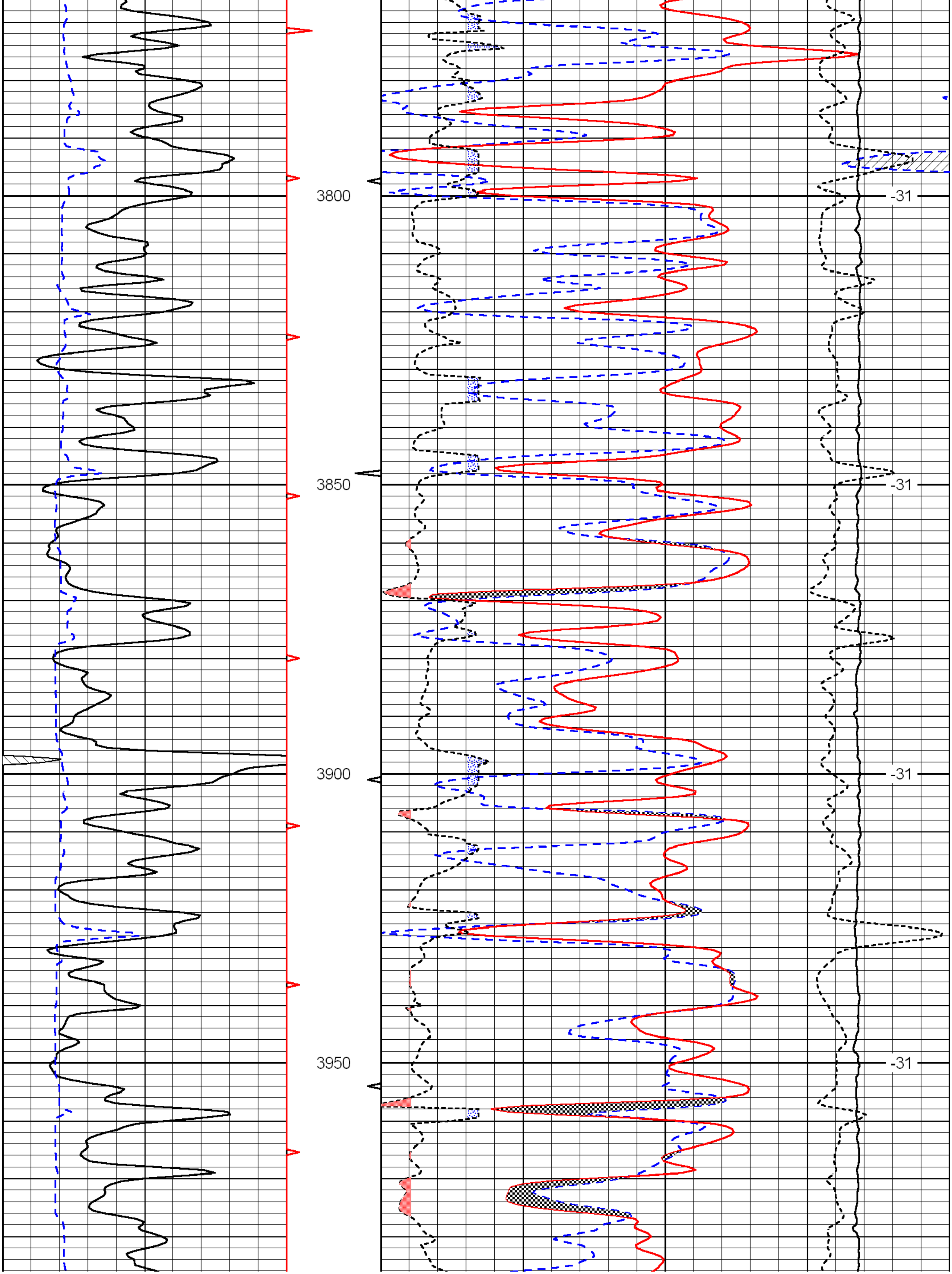
30 Compensated Density (Limestone) -10

2.625 DGA 3.425 -0.25 Correction 0.25

15000 Line Tension 0

LSPD

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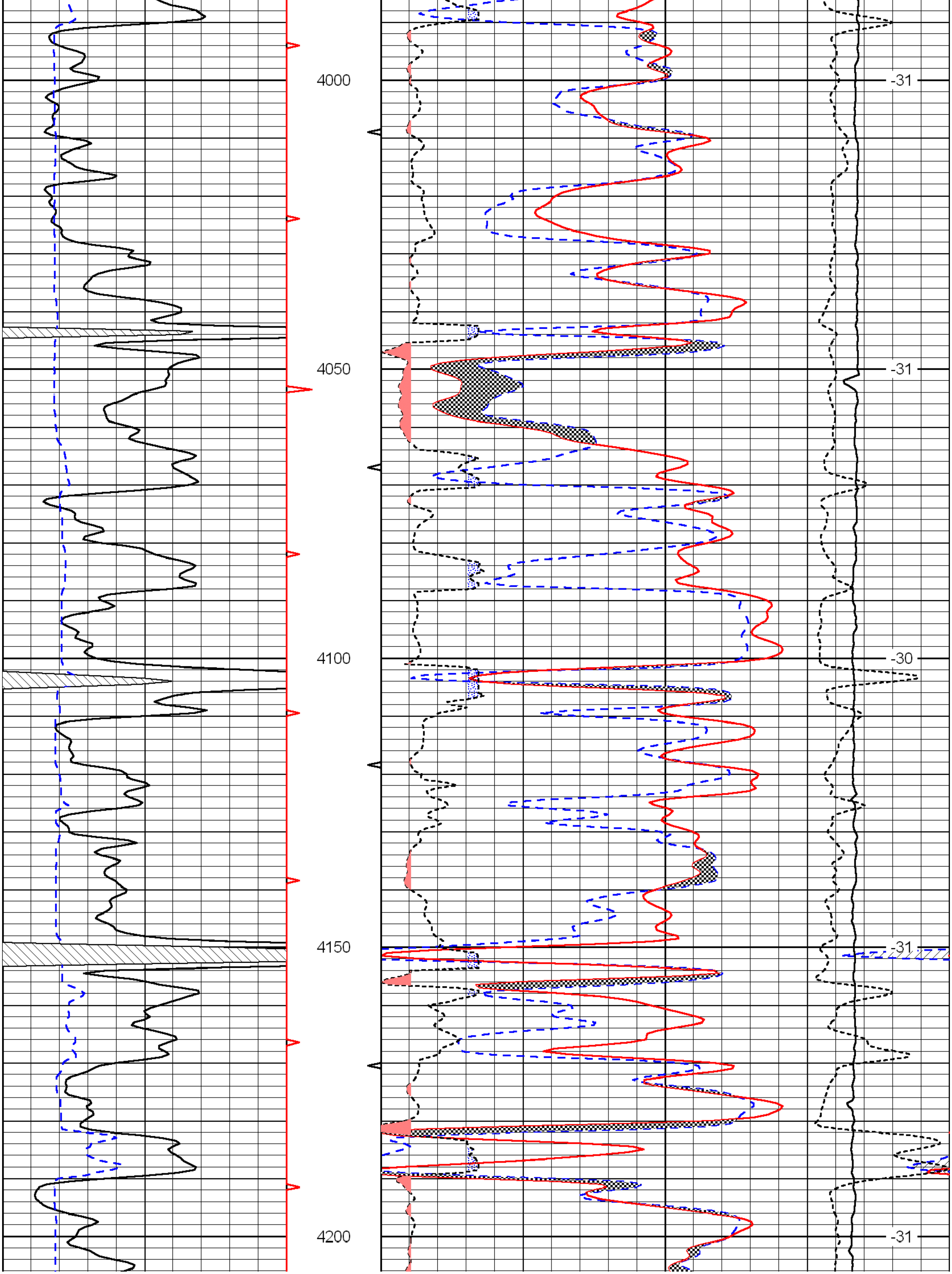
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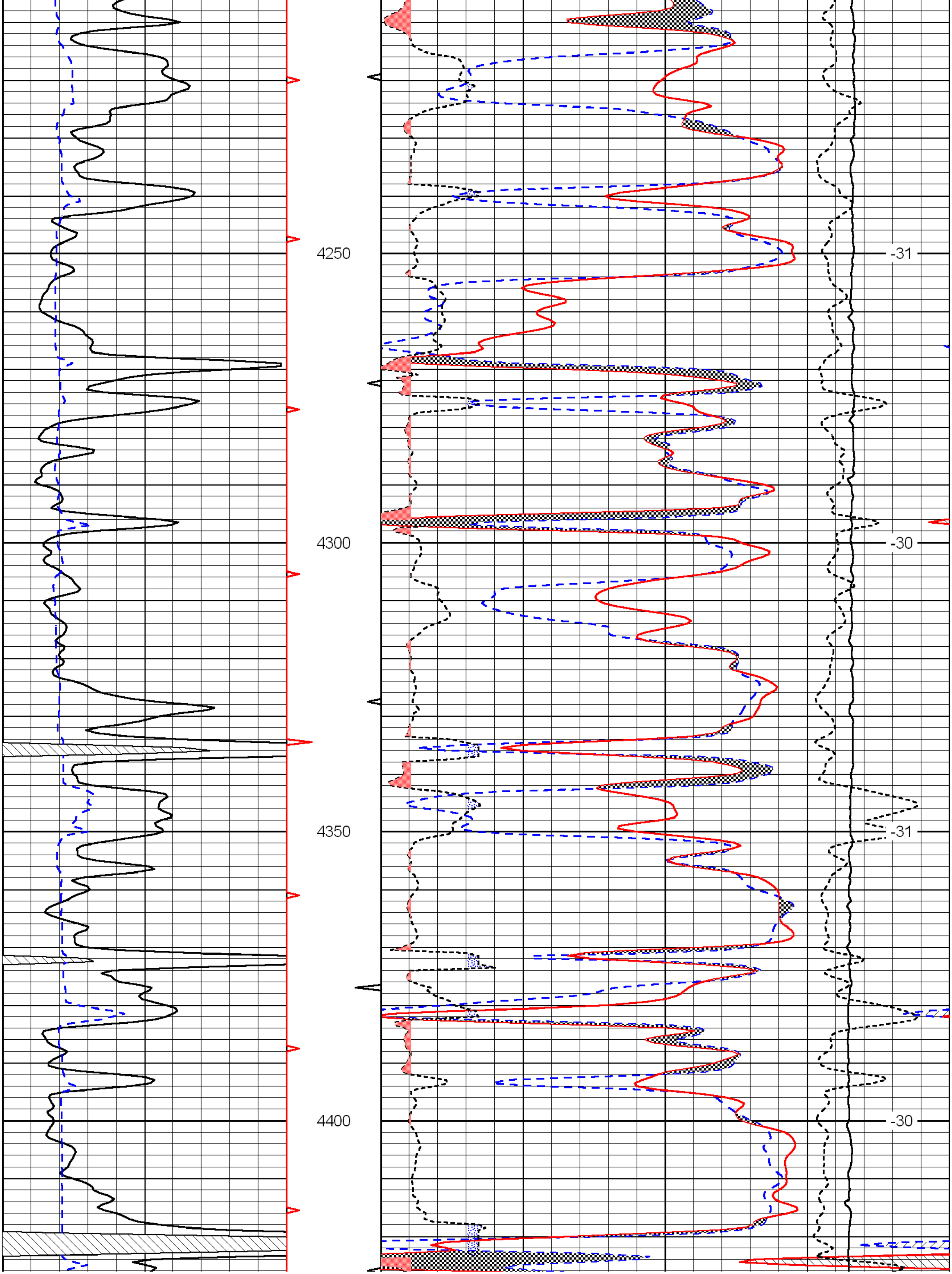
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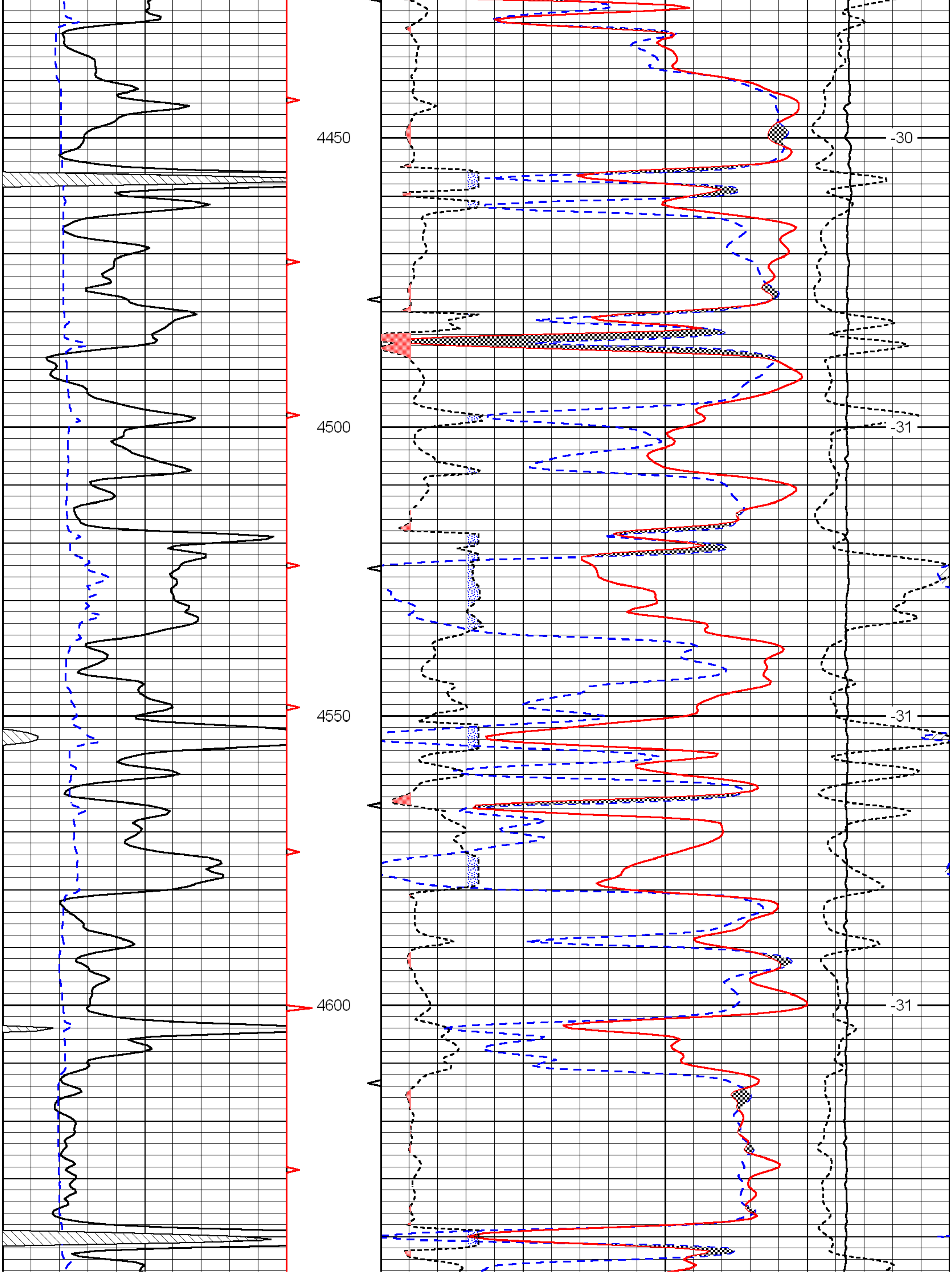
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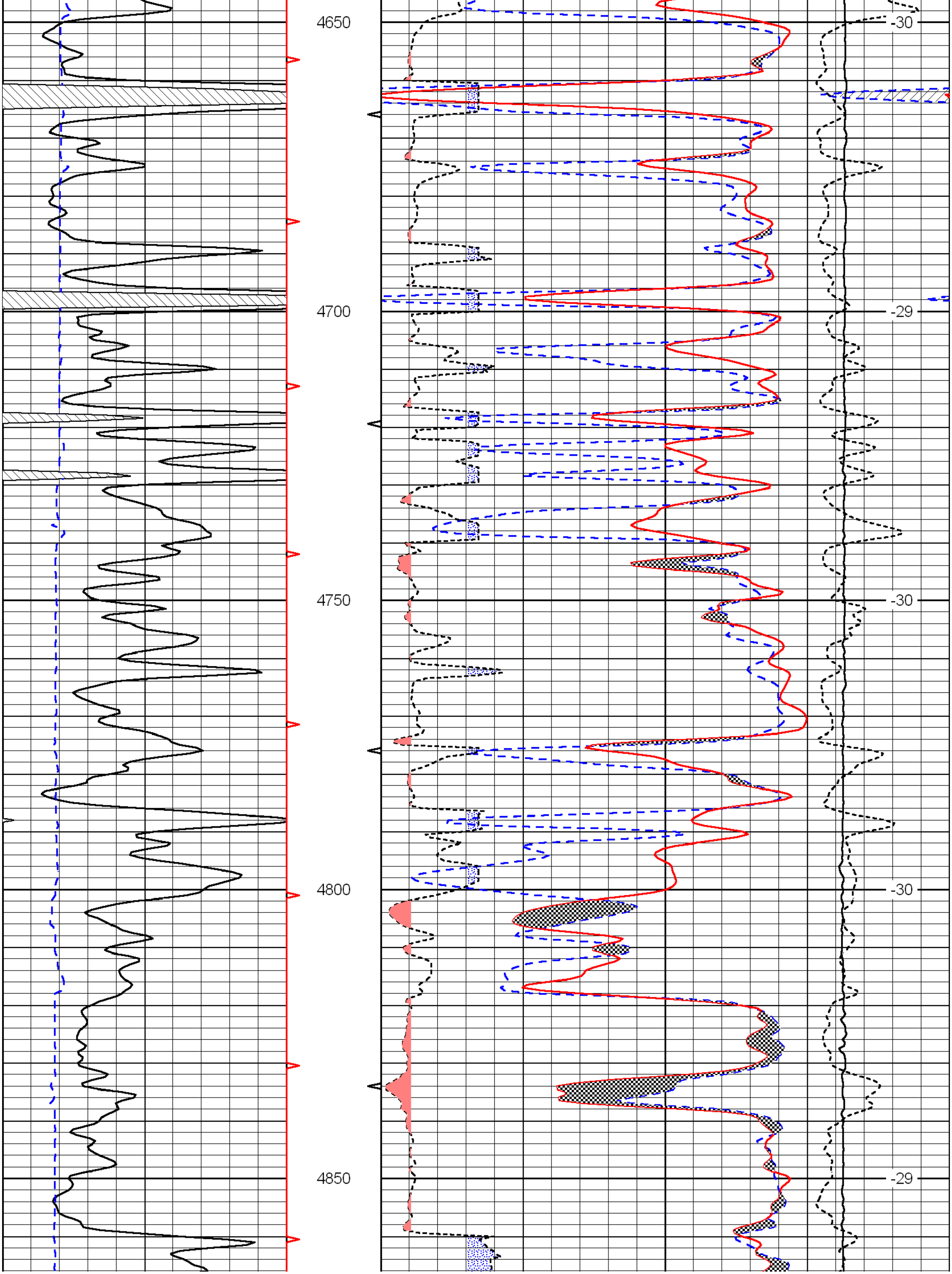
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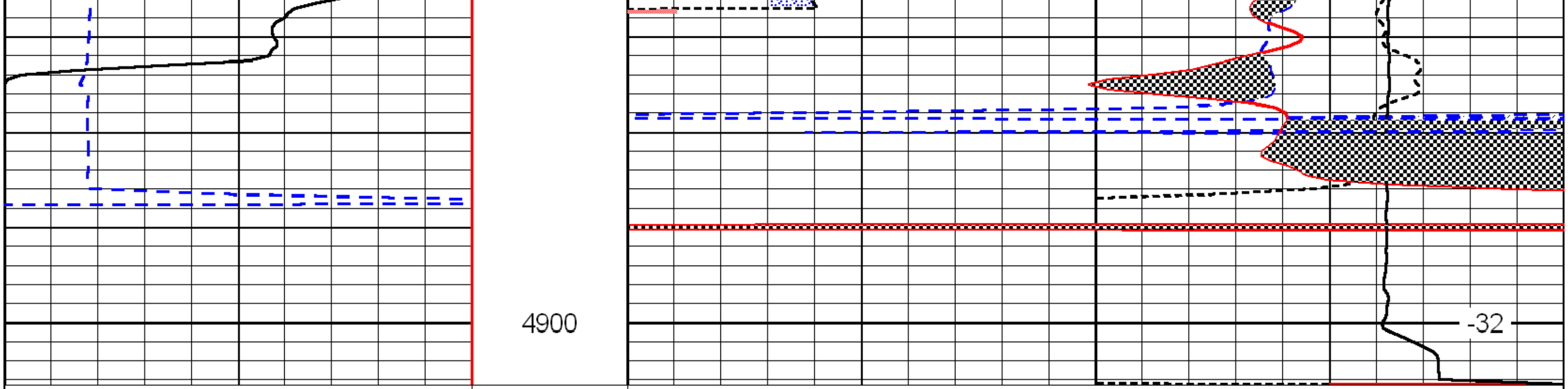

0 Gamma Ray 150

6 Caliper (GAPI) 16

30 Compensated Neutron (Limestone) -10

30 Compensated Density (Limestone) -10

2.625 DGA 3.425 | -0.25 Correction 0.25

15000 Line Tension 0

LSPD

LOG-TECH

DIGITAL LOG (785) 625-3858

Dual Induction Log

API No. 15-193-20,823-00-00

Company Norstar Petroleum Inc.
Well T. Schertz No.1-32
Field Wildcat
County Thomas State Kansas

Location NW SW NE SW
1797' FSL 1489' FWL
Sec: 32 Twp: 10S Rge: 34W

Other Services
CNL/CDL
MEL

Permanent Datum Ground Level Elevation 3278
Log Measured From Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From Kelly Bushing

Elevation
K.B. 3283
D.F.
G.L. 3278

Date	10/21/2011			
Run Number	One			
Depth Driller	4900			
Depth Logger	4901			
Bottom Logged Interval	4900			
Top Log Interval	250			
Casing Driller	8.625 @ 291			
Casing Logger	293			
Bit Size	7.875			
Type Fluid in Hole	Chemical			
Salinity,ppm CL	8,400			
Density / Viscosity	9.2	61		
pH / Fluid Loss	9.5	11.2		
Source of Sample	Flowline			
Rm @ Meas. Temp	.2 @ 72			
Rmf @ Meas. Temp	.15 @ 72			
Rmc @ Meas. Temp	.27 @ 72			
Source of Rmf / Rmc	Charts			
Rm @ BHT	.12 @ 125			
Operating Rig Time	4 Hours			
Max Rec. Temp. F	125			
Equipment Number	17			
Location	Hays			
Recorded By	C. Desaire			
Witnessed By	Bob Elder			

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Comments

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Monument KS, W to 25 Hwy,
N to Co Ln, 5 W, N Into

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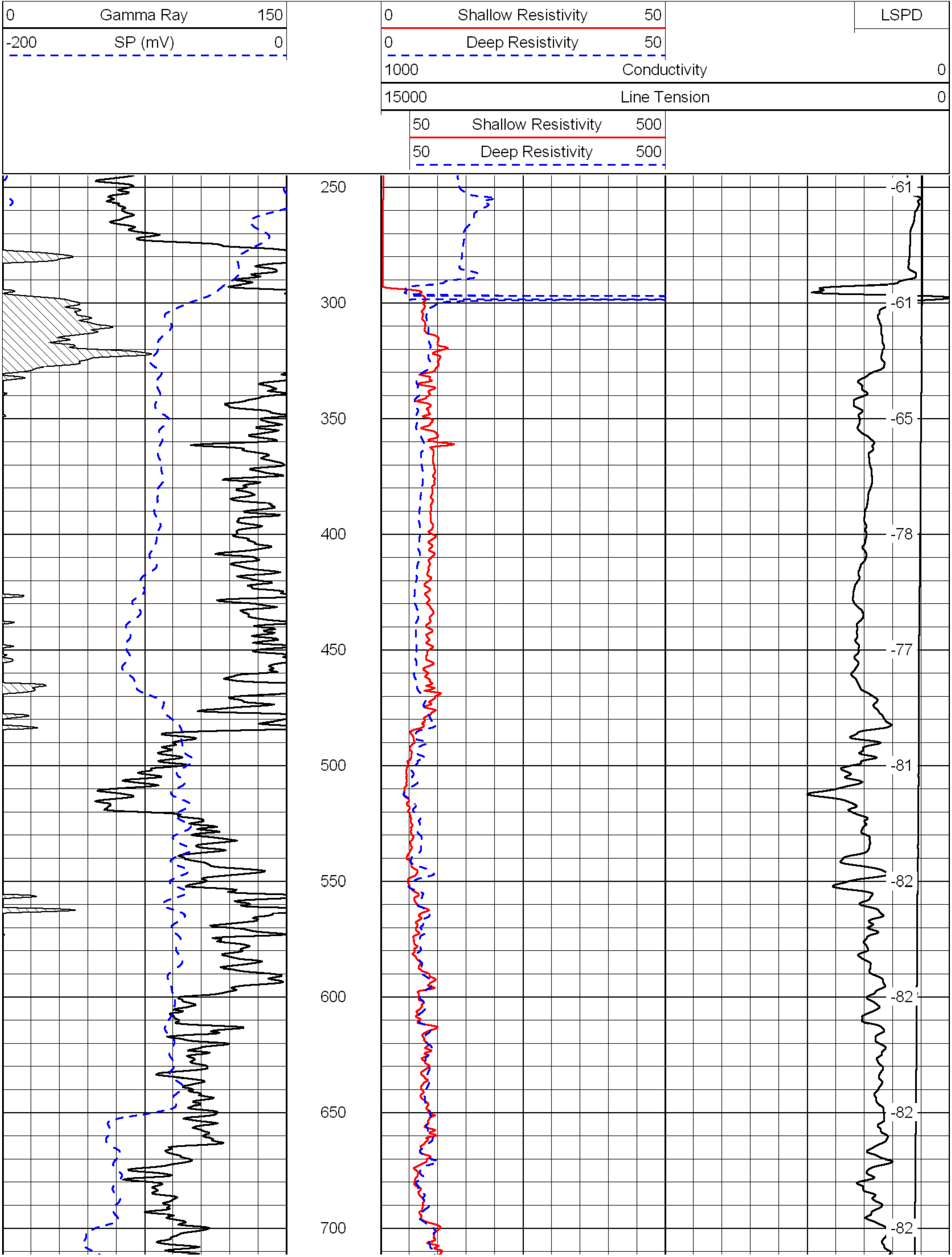
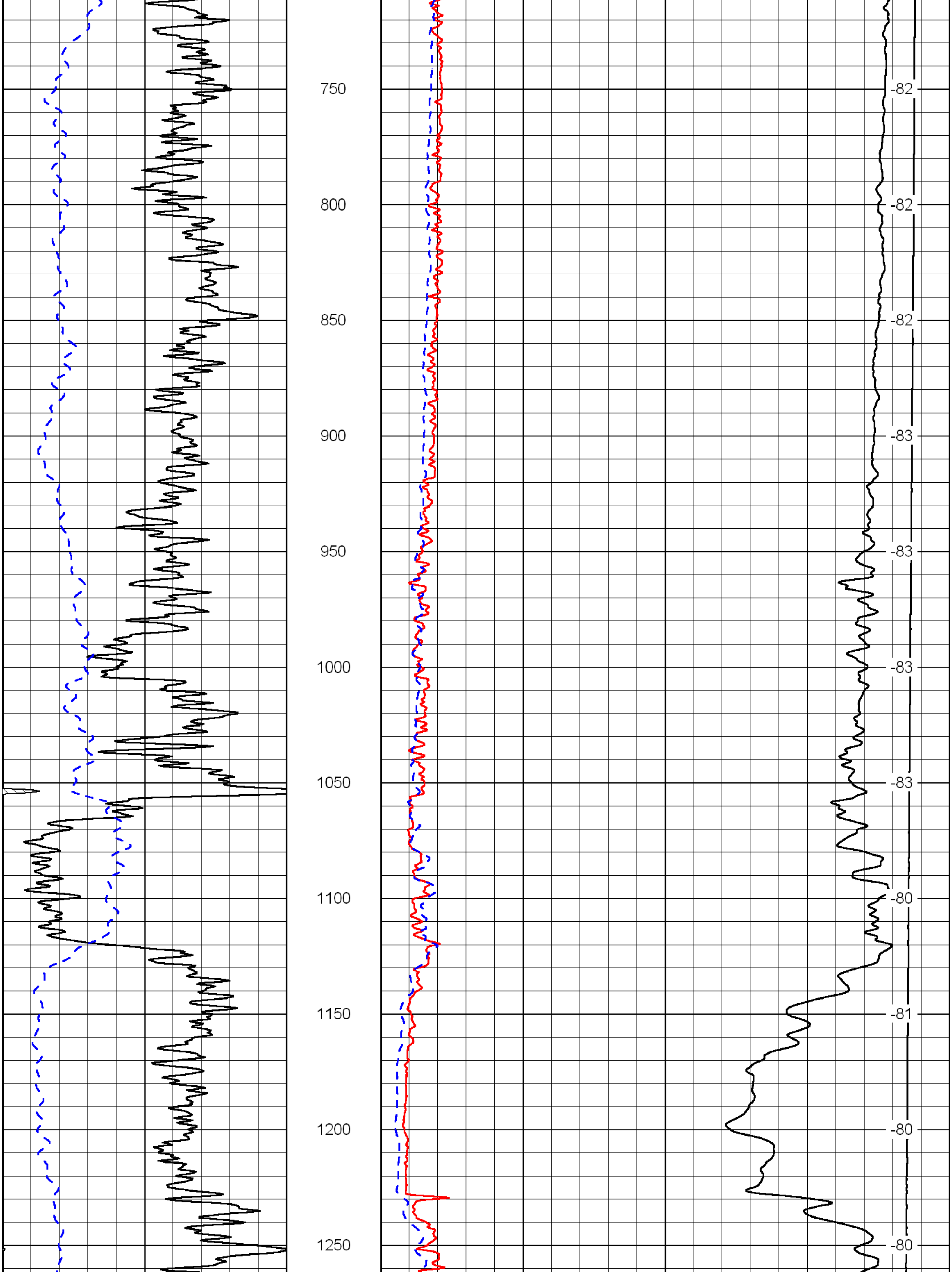
Charted by: Depth in Feet Scaled 1:600

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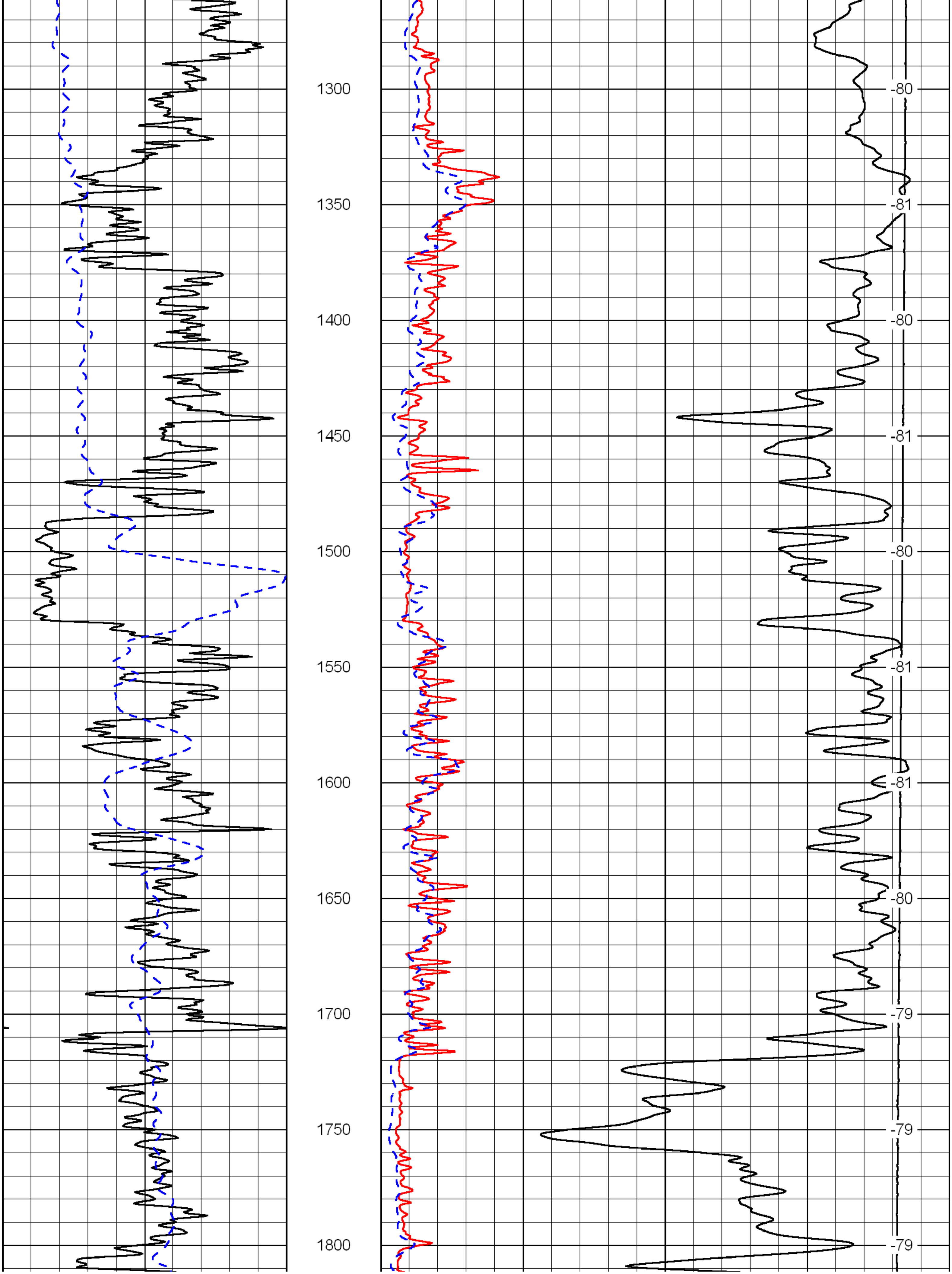
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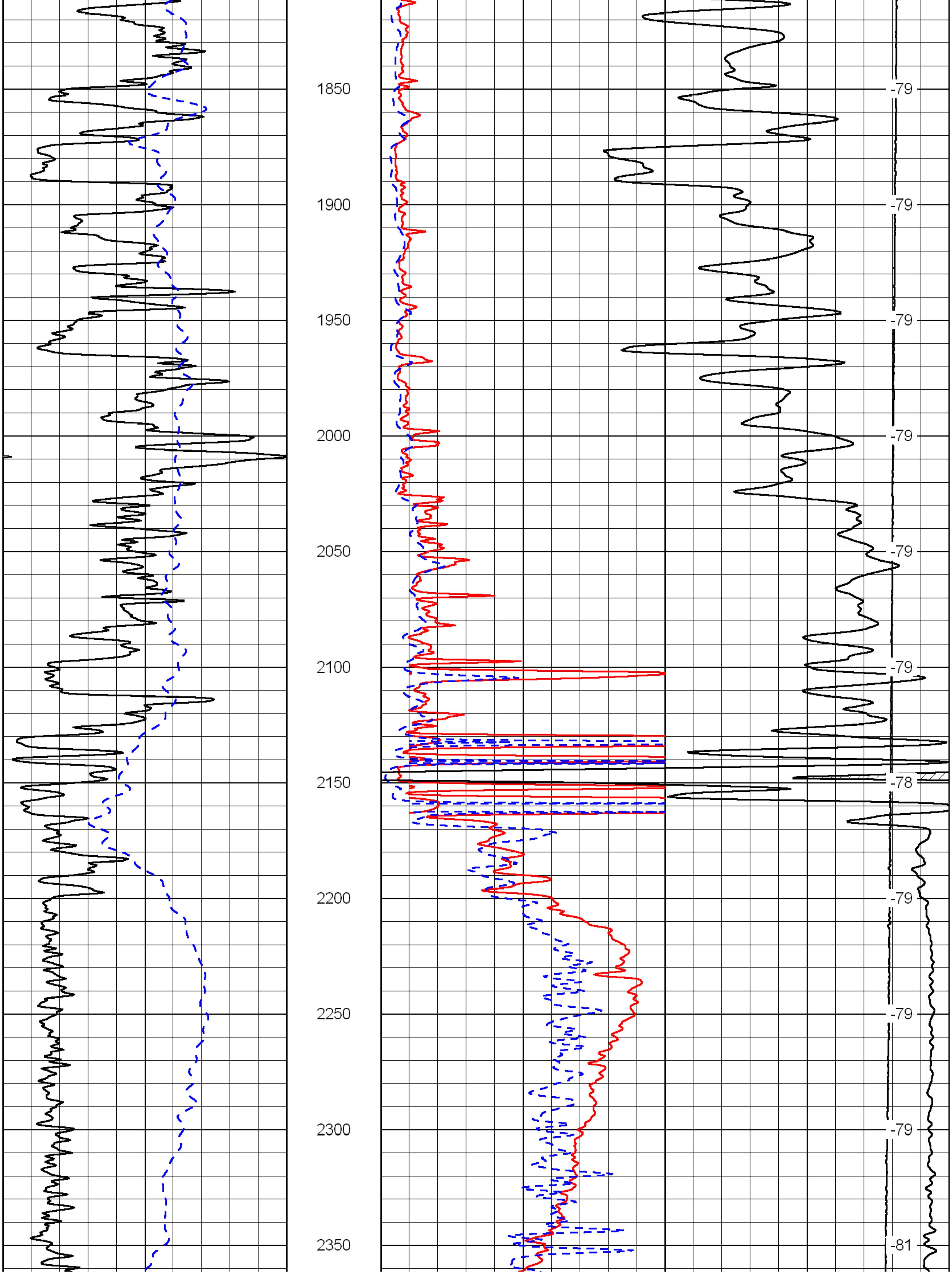
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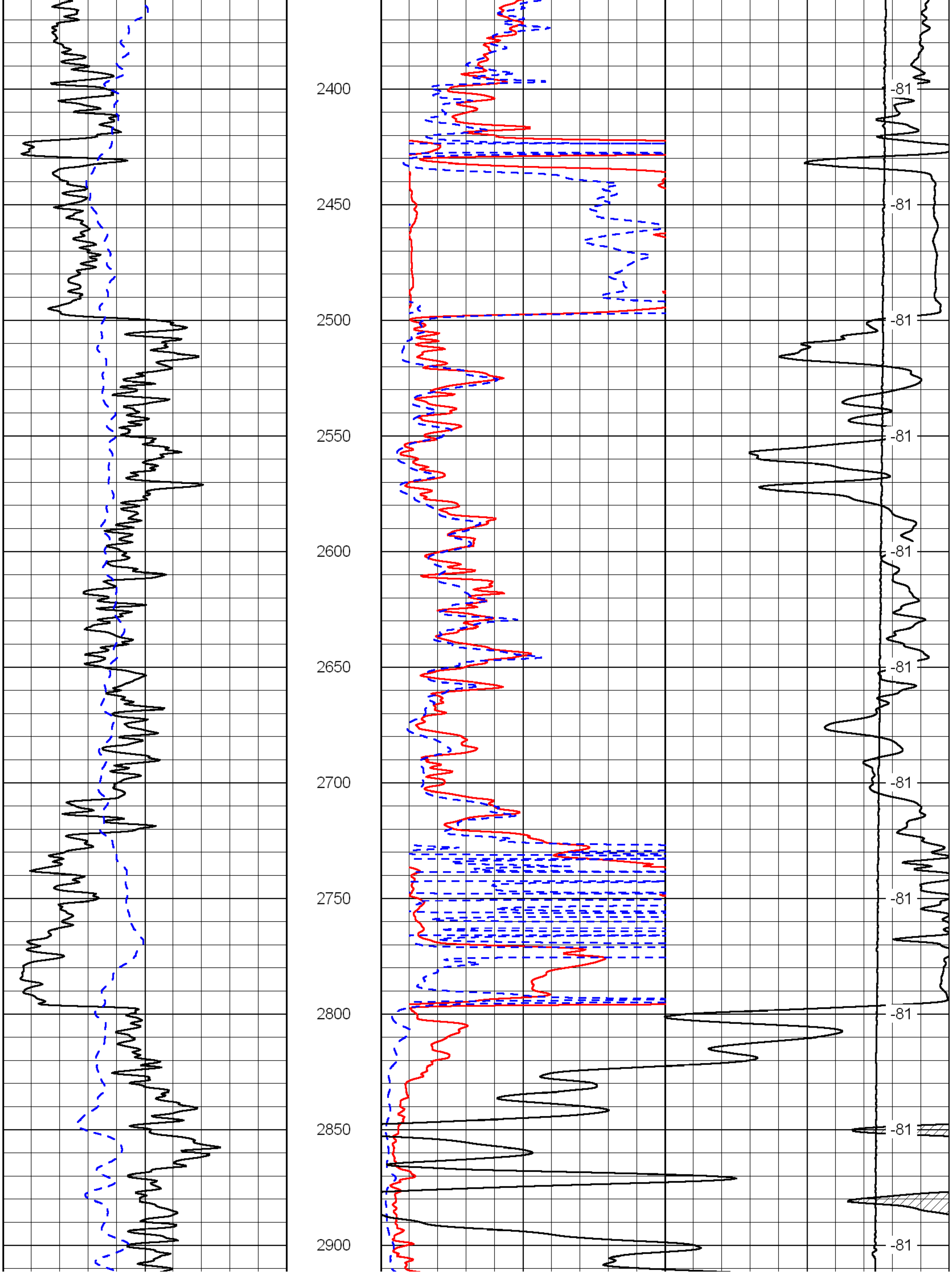
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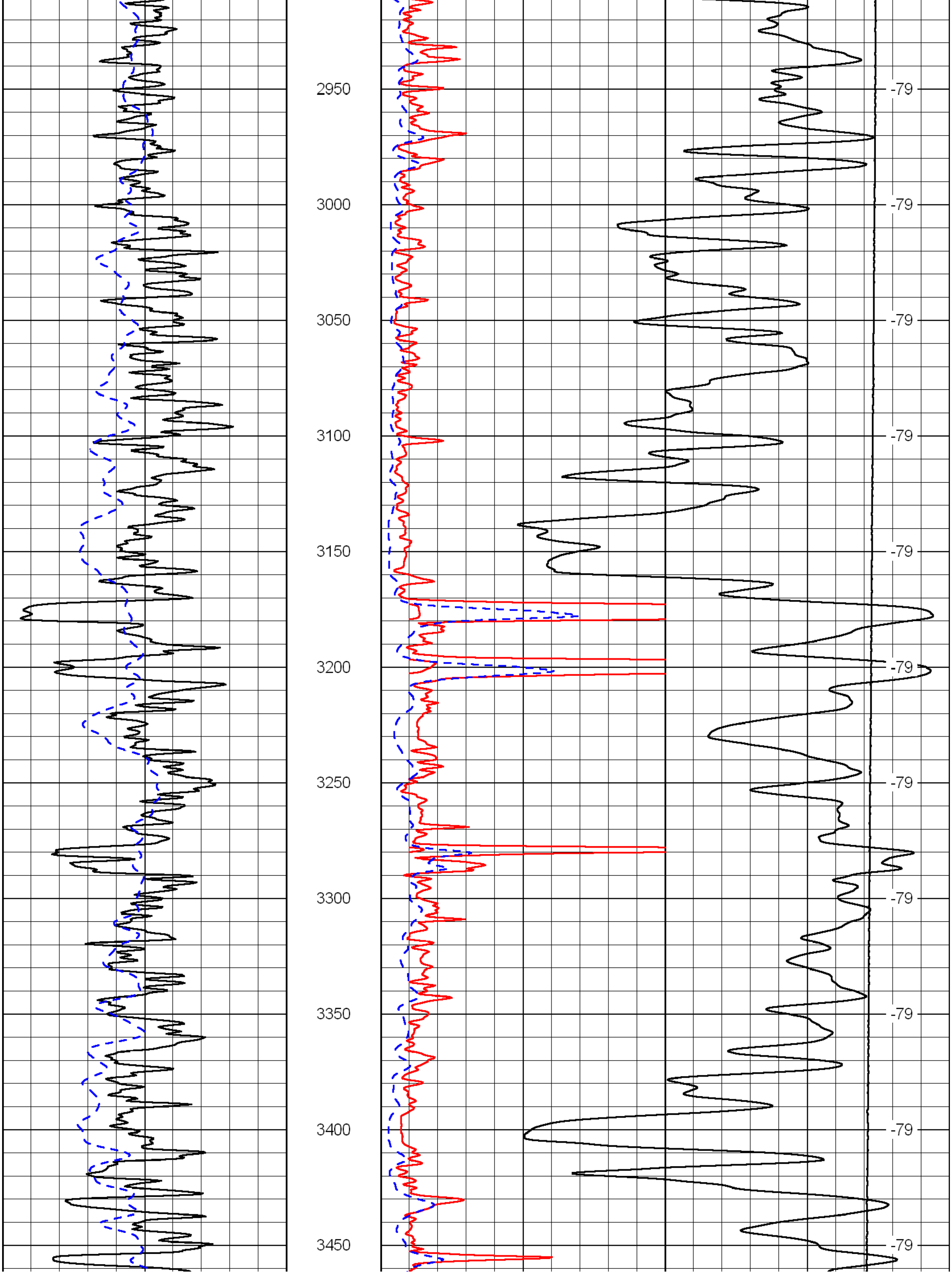
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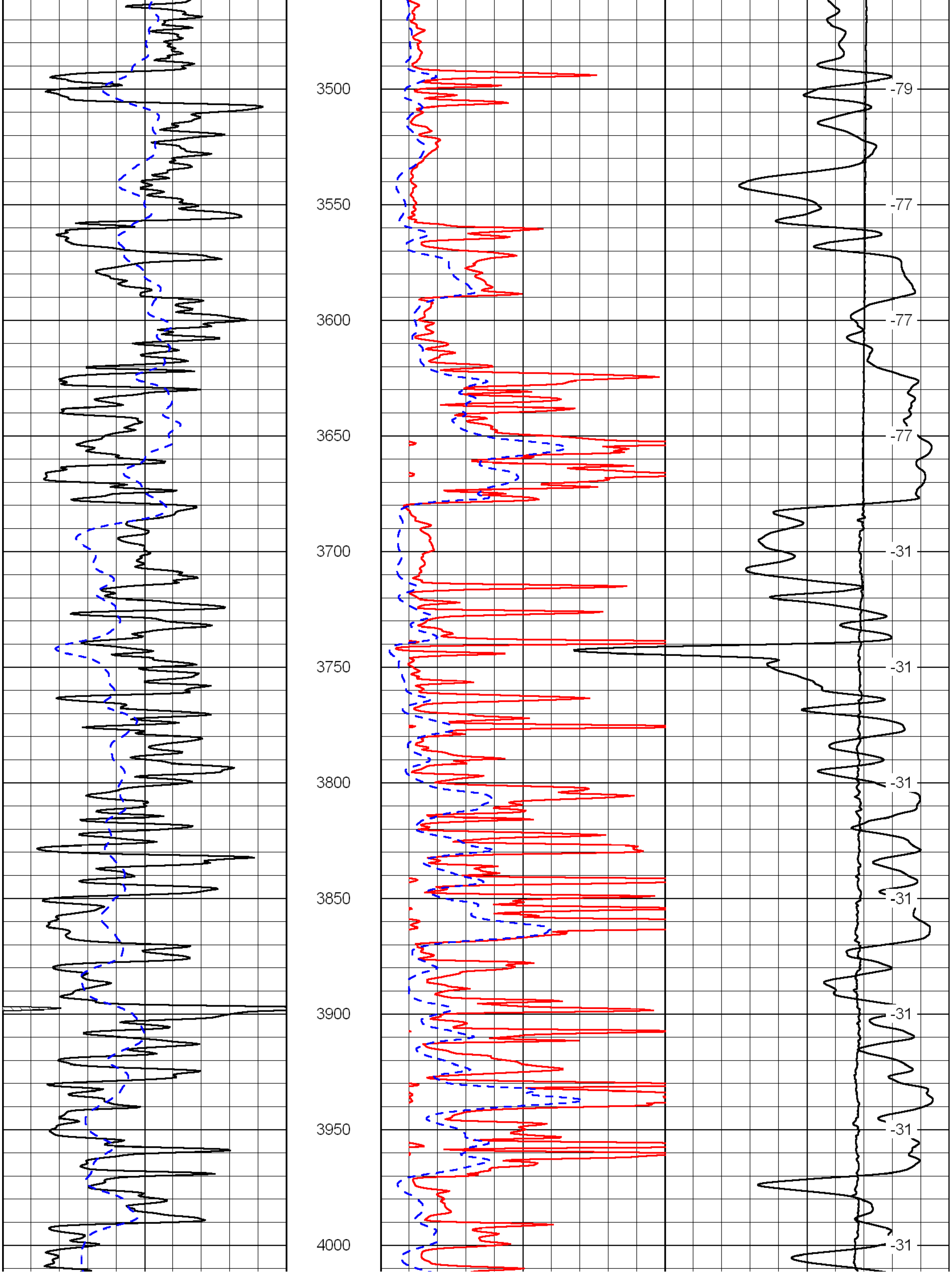
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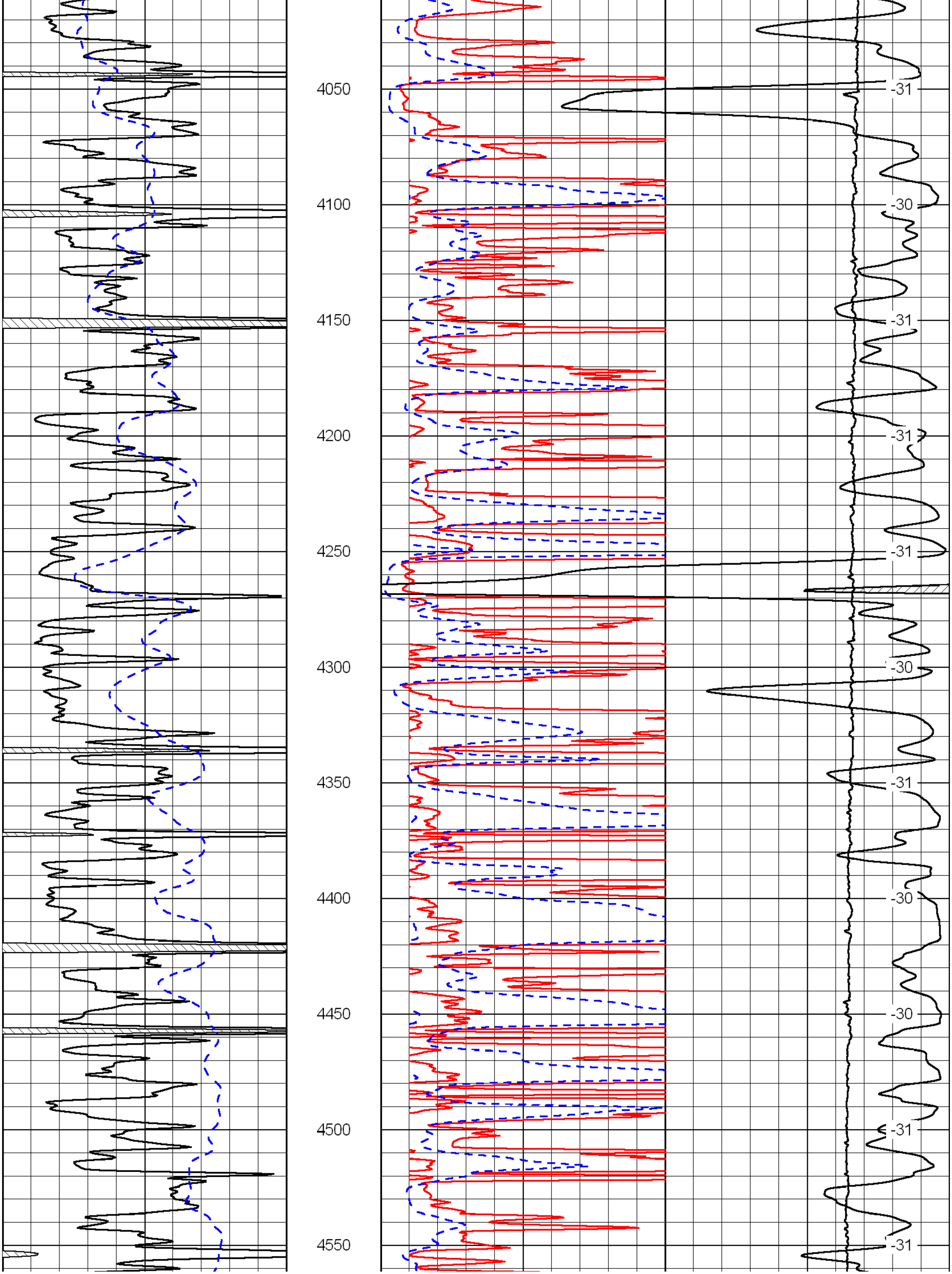
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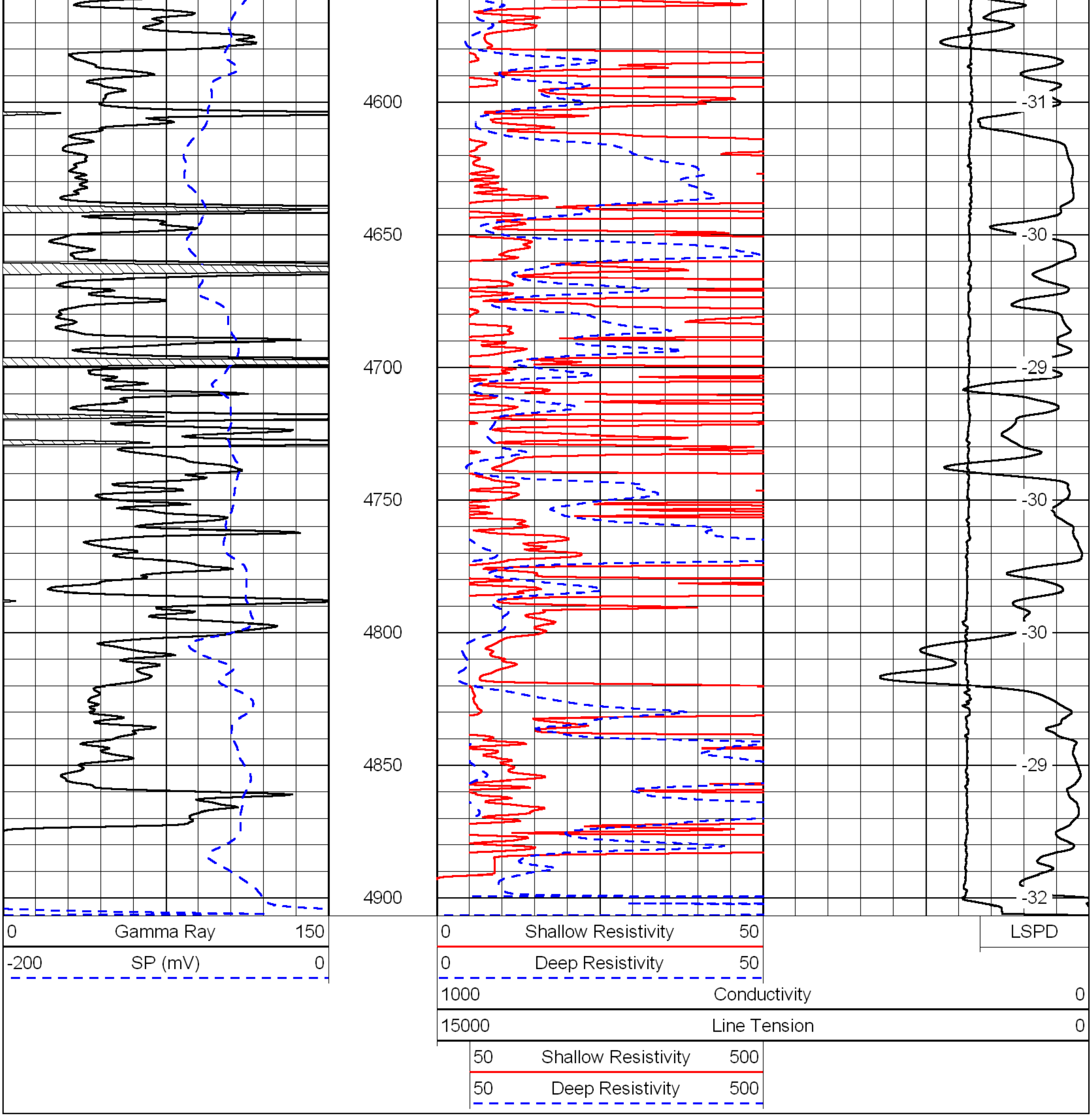

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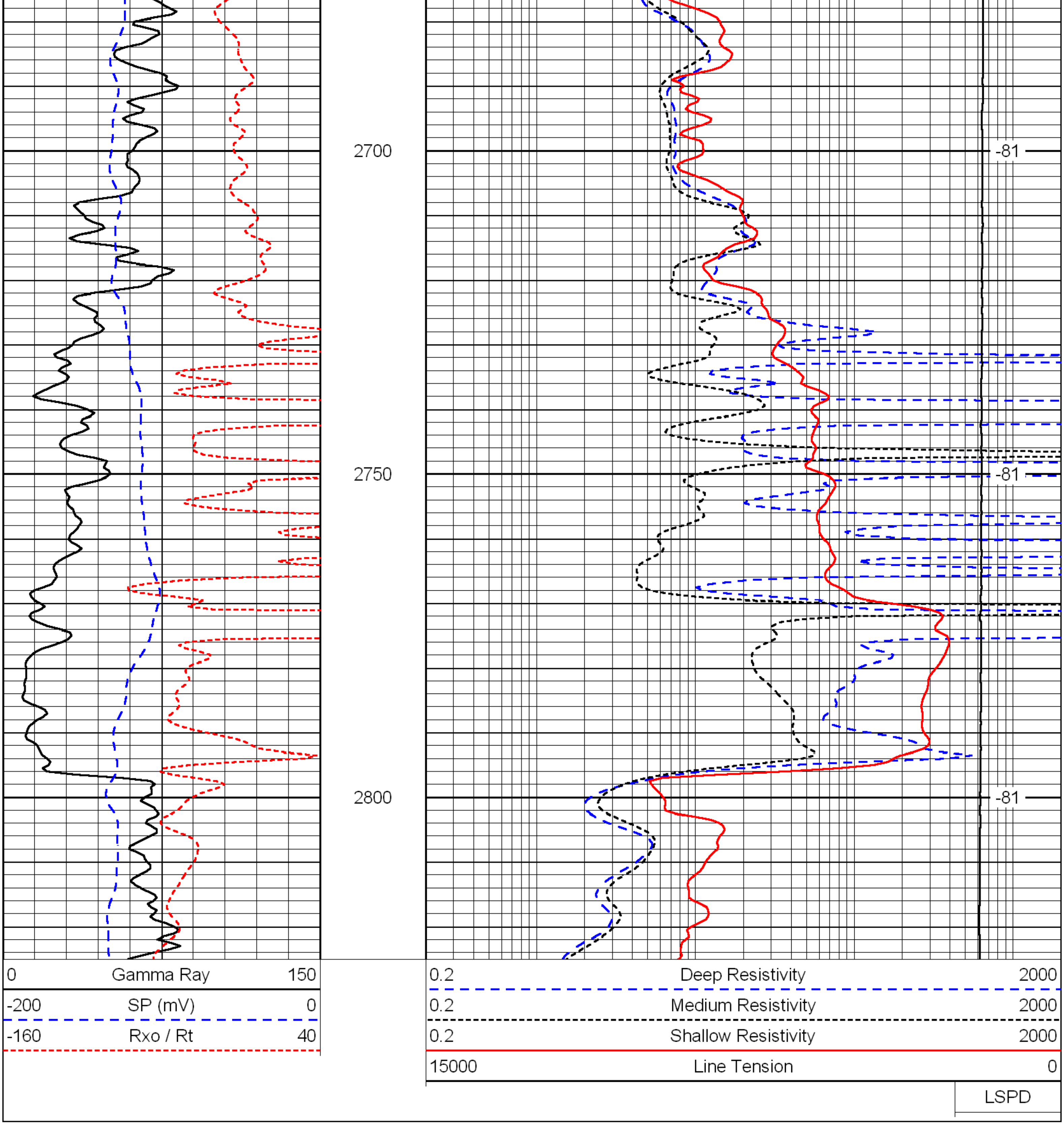
-200 SP (mV) 0
-160 Rxo / Rt 40

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



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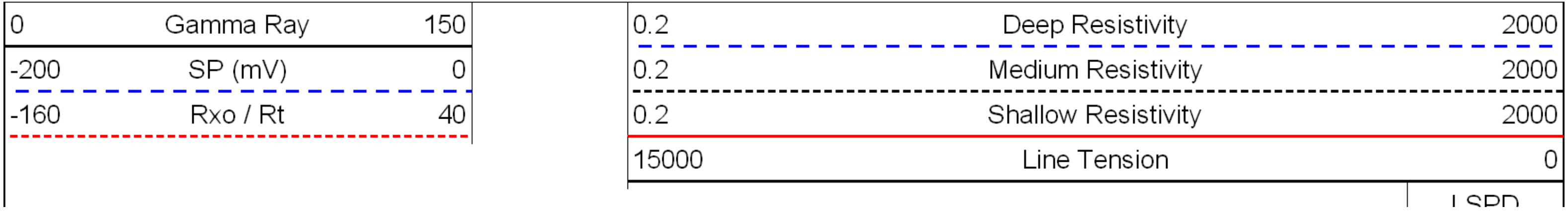
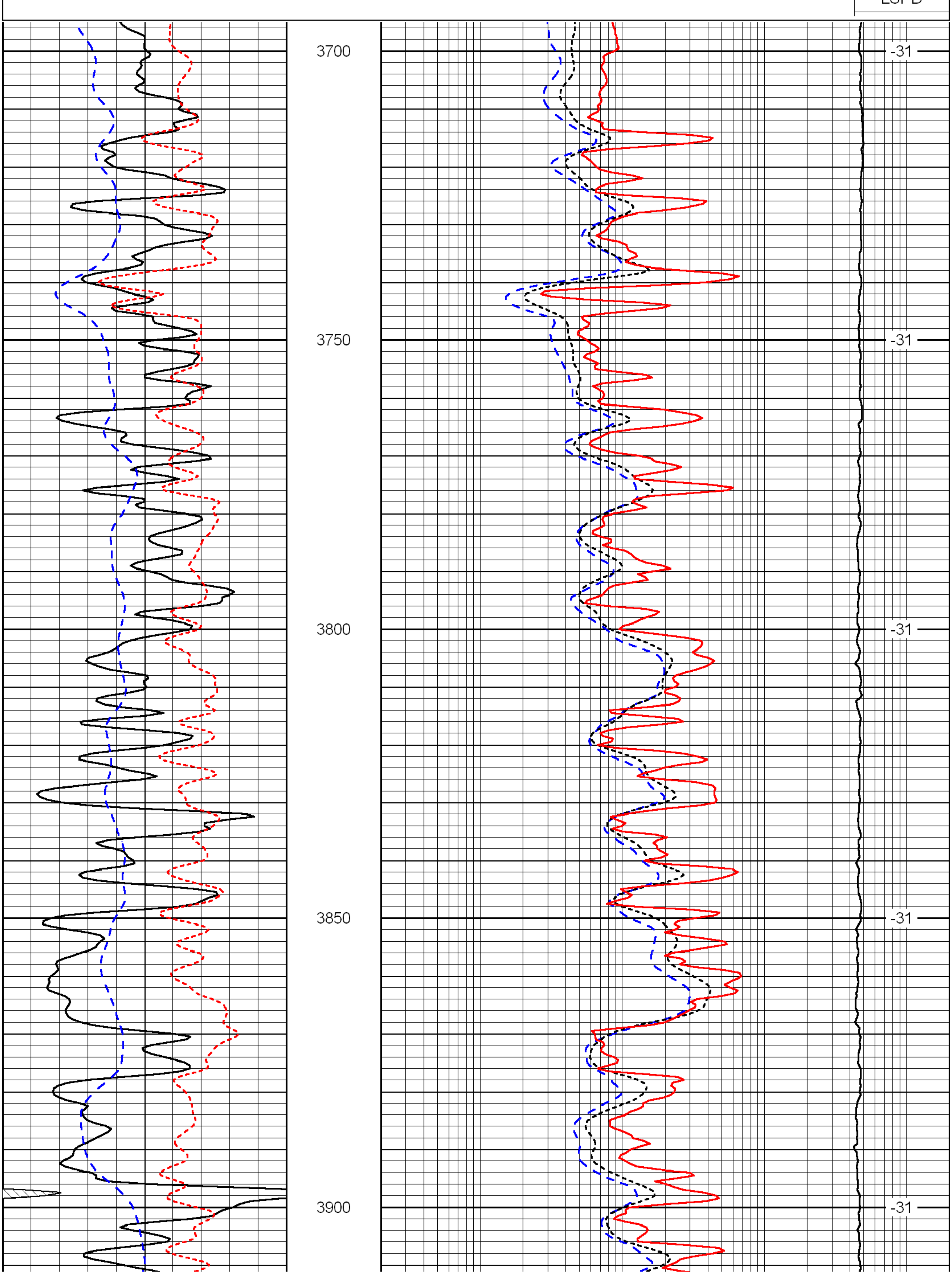
Presentation Format: dil
Dataset Creation: Fri Oct 21 19:30:18 2011
Charted by: Depth in Feet scaled 1:240

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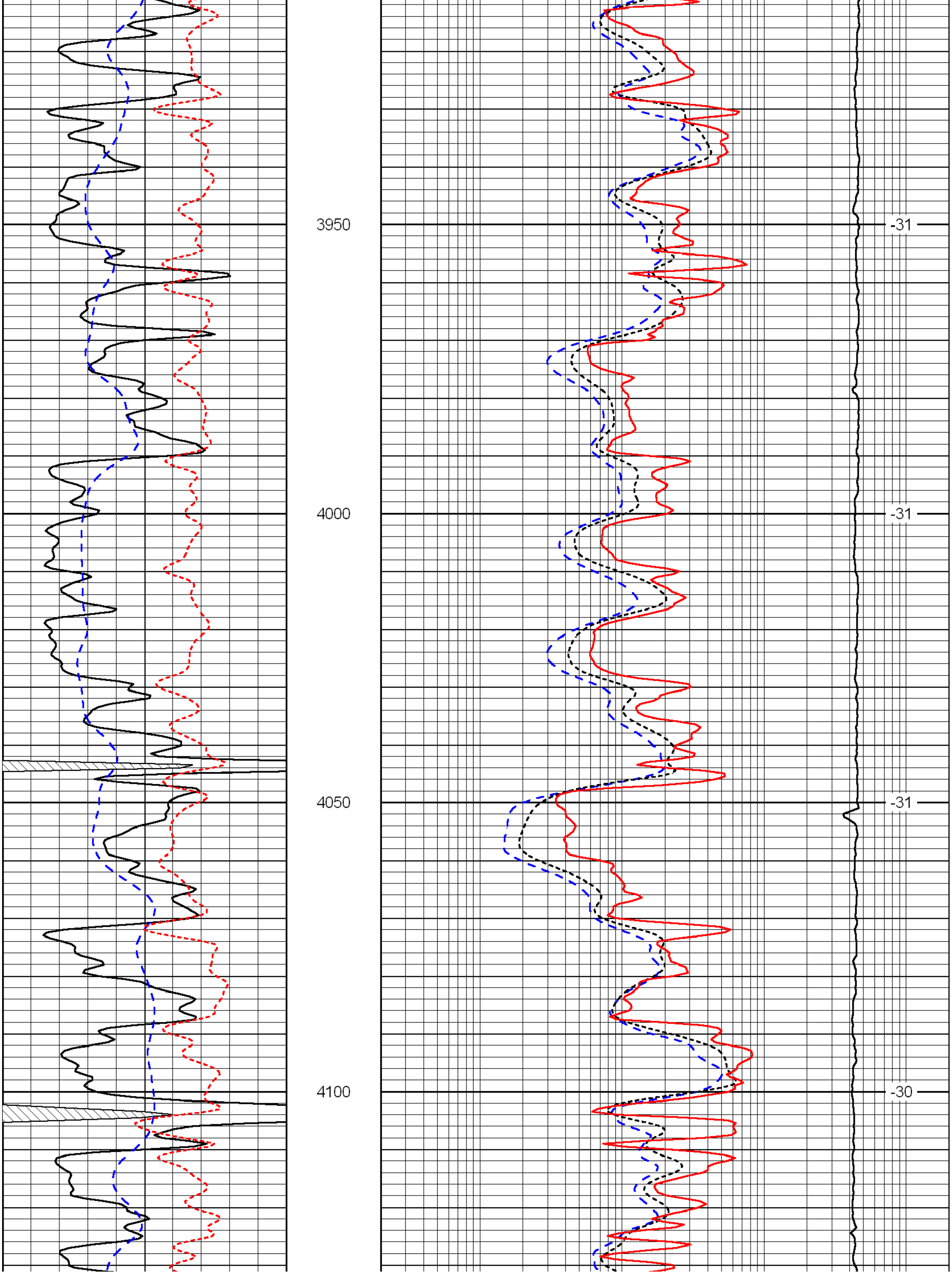
3750
3800
3850
3900
-31
-31
-31
-31
-31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4000
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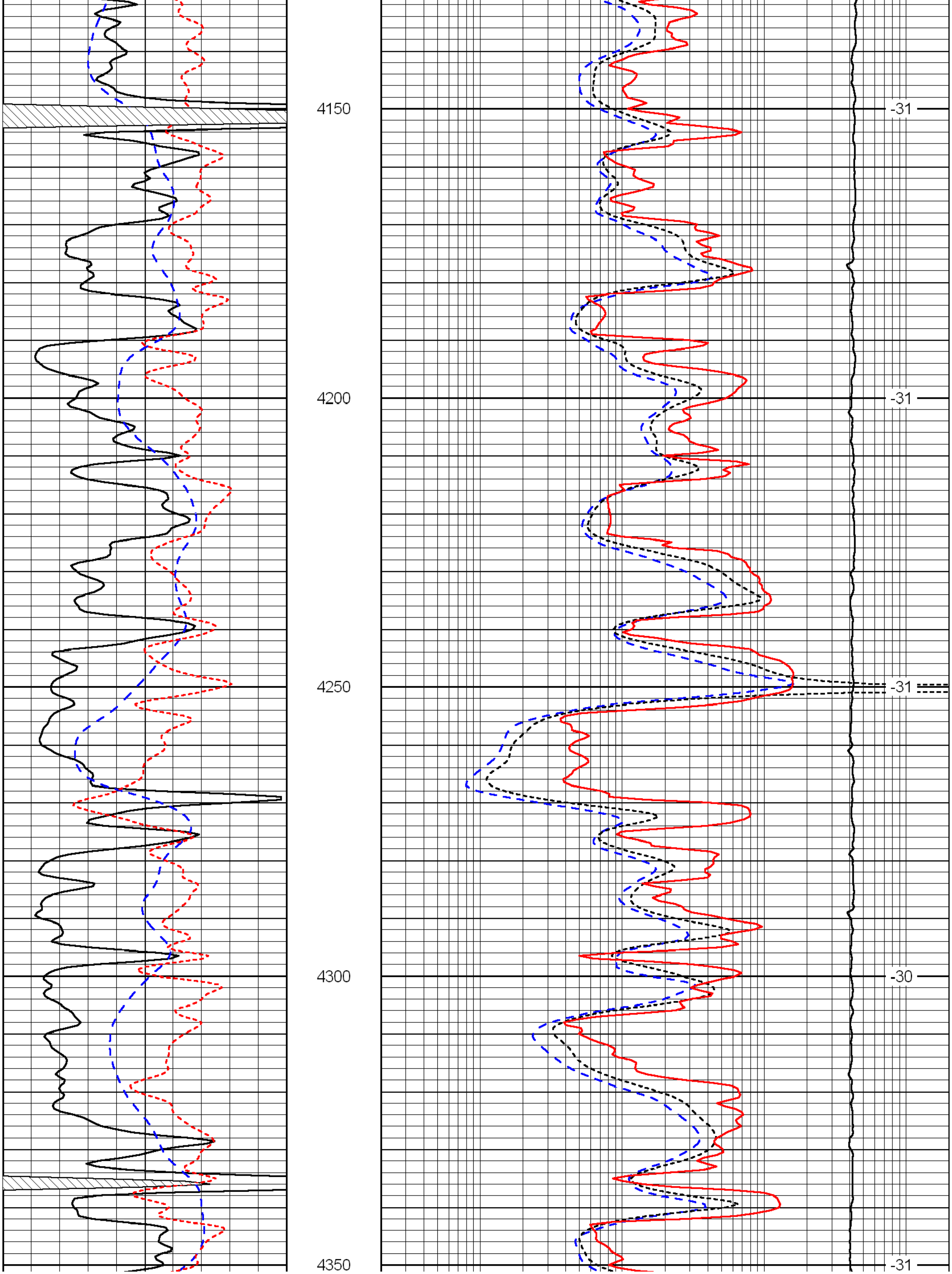
4100
-30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4200
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4250
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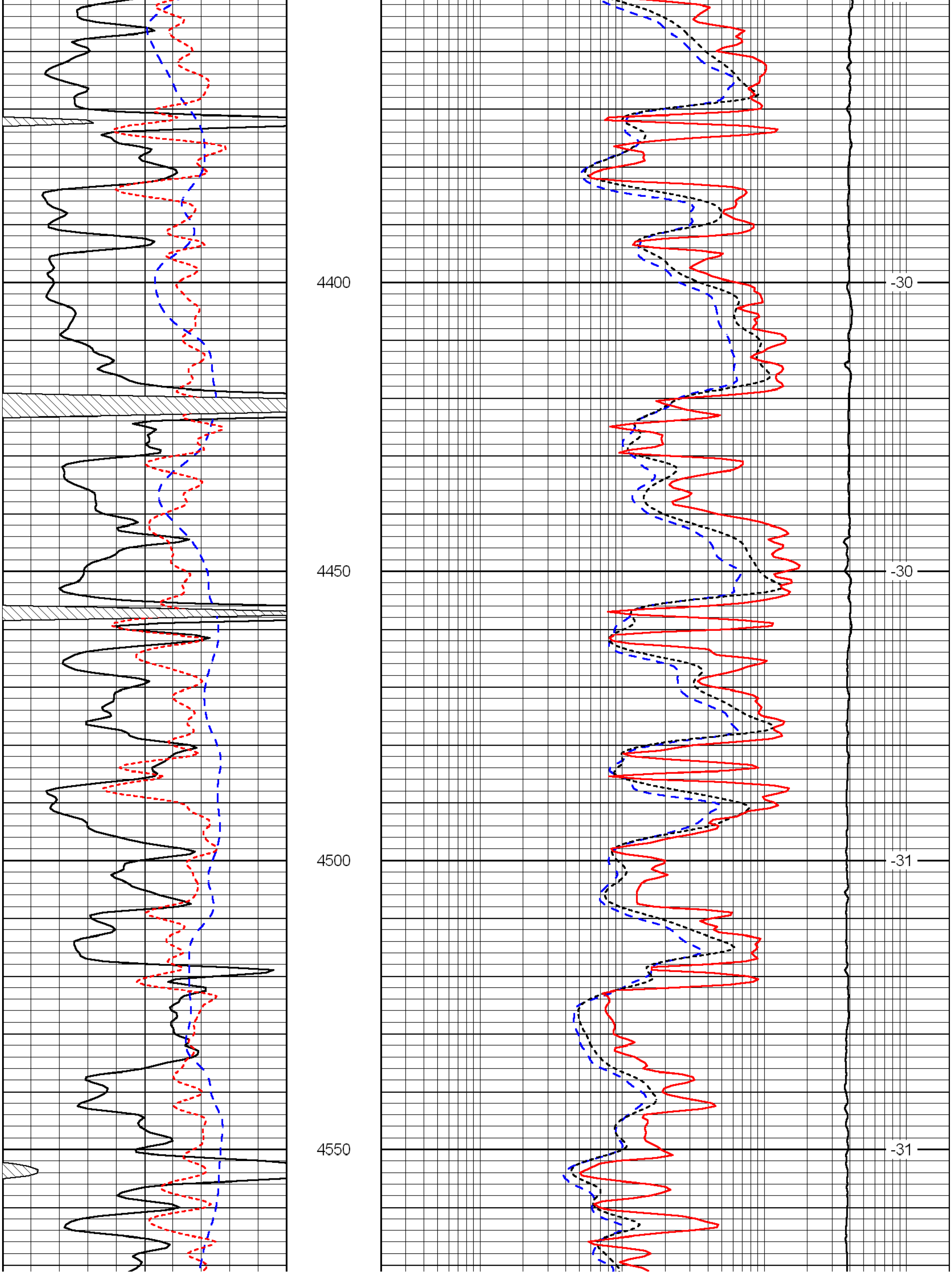
4350
-31


4400
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4450
-30
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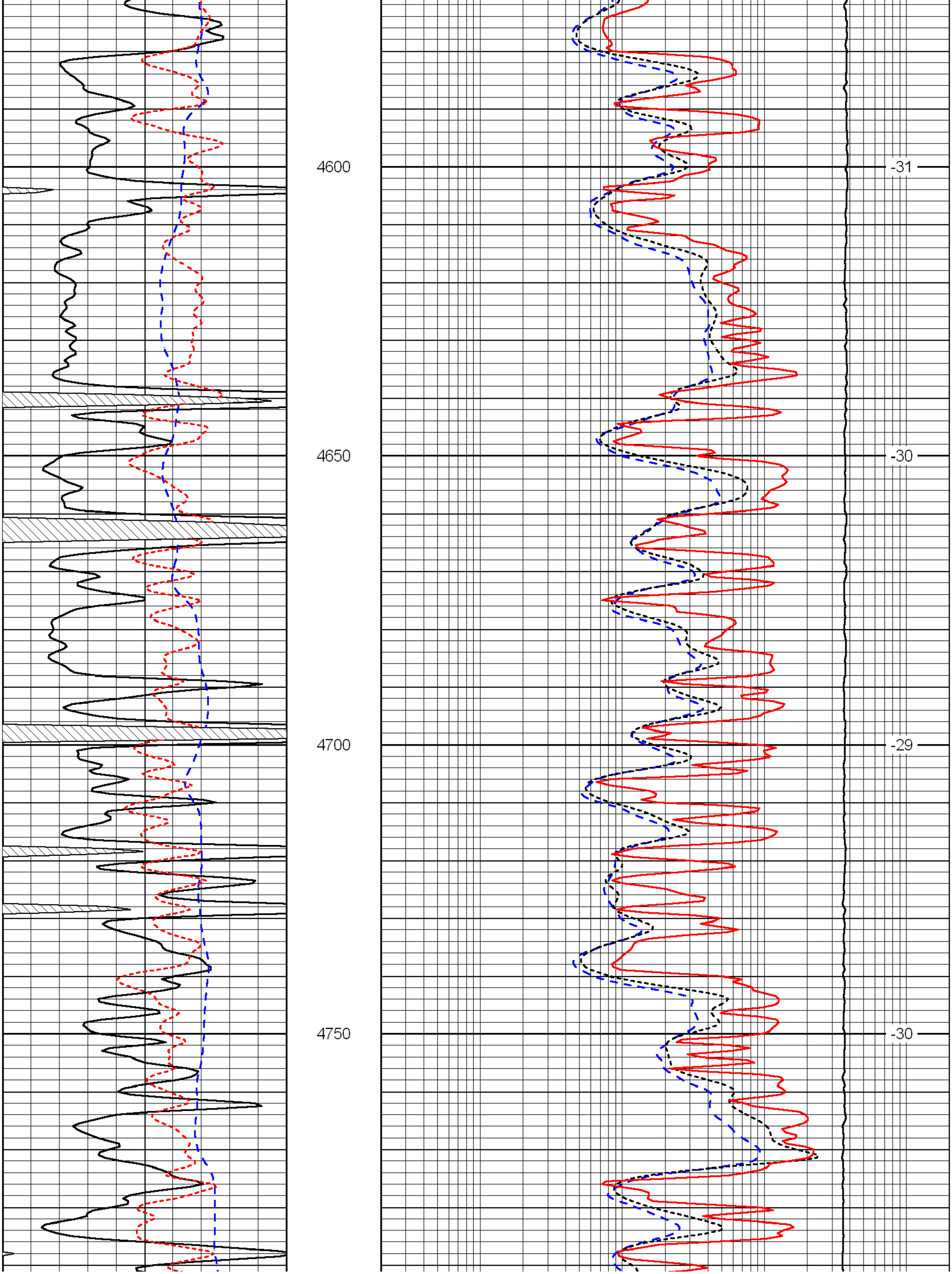
-31
4550
-31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4650
-30
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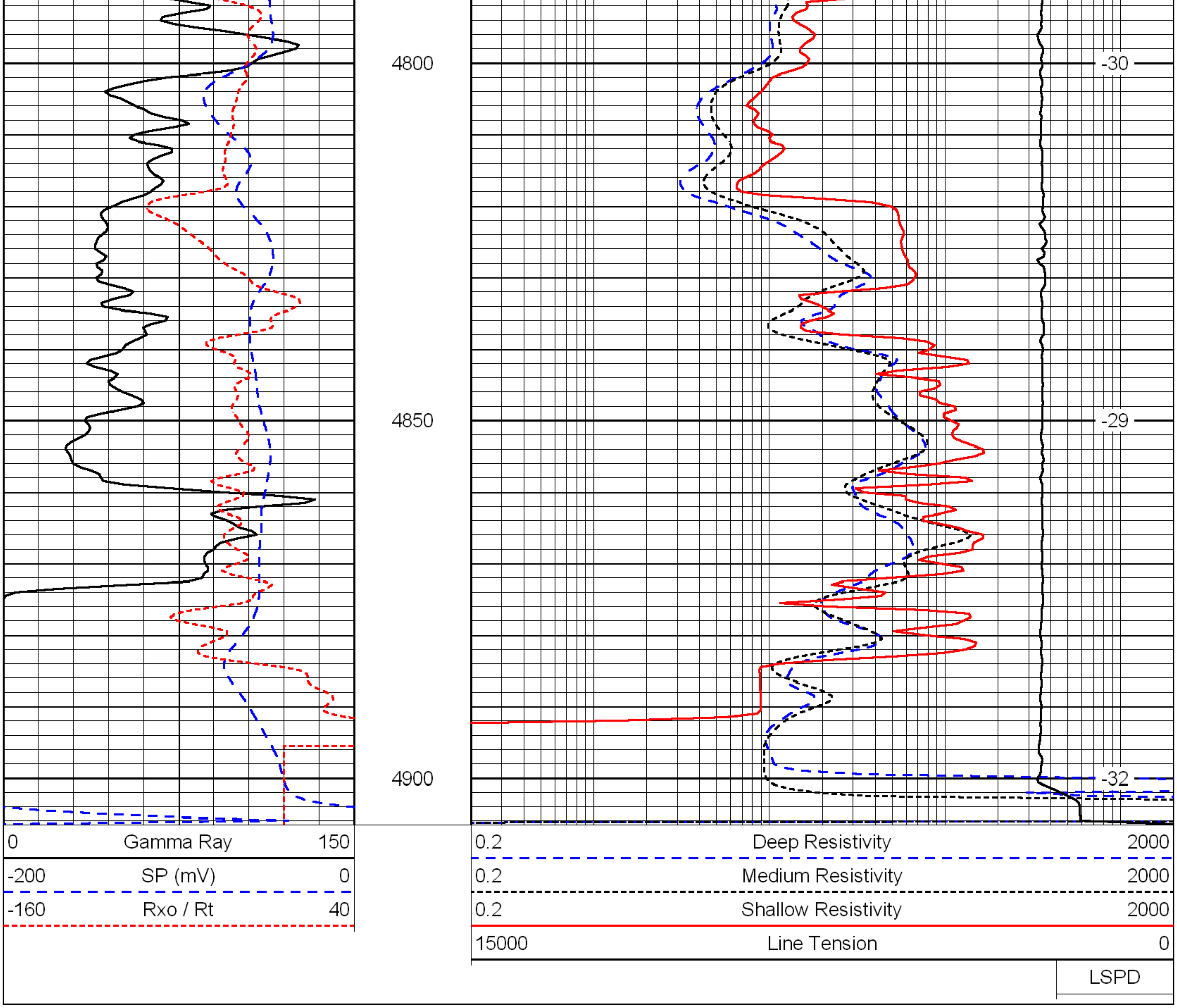
-29
4750
-30


4800
4850
4900
-30
-29
-32
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

LOG-TECH

DIGITAL LOG (785) 625-3858

Microresistivity Log

API No.
15-193-20,823-00-00

Company: Norstar Petroleum Inc.
Well: T. Schertz No.1-32
Field: Wildcat
County: Thomas State: Kansas

Location: NW SW NE SW
1797' FSL 1489' FWL
Sec: 32 Twp: 10S Rge: 34W

Other Services
CNL/CDL
DIL

Permanent Datum: Ground Level Elevation 3278
Log Measured From: Kelly Bushing 5 Ft. Above Perm. Datum
Drilling Measured From: Kelly Bushing

Elevation
K.B. 3283
D.F.
G.L. 3278

Date	10/21/2011		
Run Number	Two		
Depth Driller	4900		
Depth Logger	4901		
Bottom Logged Interval	4900		
Top Log Interval	3700		
Casing Driller	8.625 @ 291		
Casing Logger	293		
Bit Size	7.875		
Type Fluid in Hole	Chemical		
Salinity,ppm CL	8,400		
Density / Viscosity	9.2 61		
pH / Fluid Loss	9.5 11.2		
Source of Sample	Flowline		
Rm @ Meas. Temp	.2 @ 72		
Rmf @ Meas. Temp	.15 @ 72		
Rmc @ Meas. Temp	.27 @ 72		
Source of Rmf / Rmc	Charts		
Rm @ BHT	.12 @ 125		
Operating Rig Time	4 Hours		
Max Rec. Temp. F	125		
Equipment Number	17		
Location	Hays		
Recorded By	C. Desaire		
Witnessed By	Bob Elder		

<<< 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.

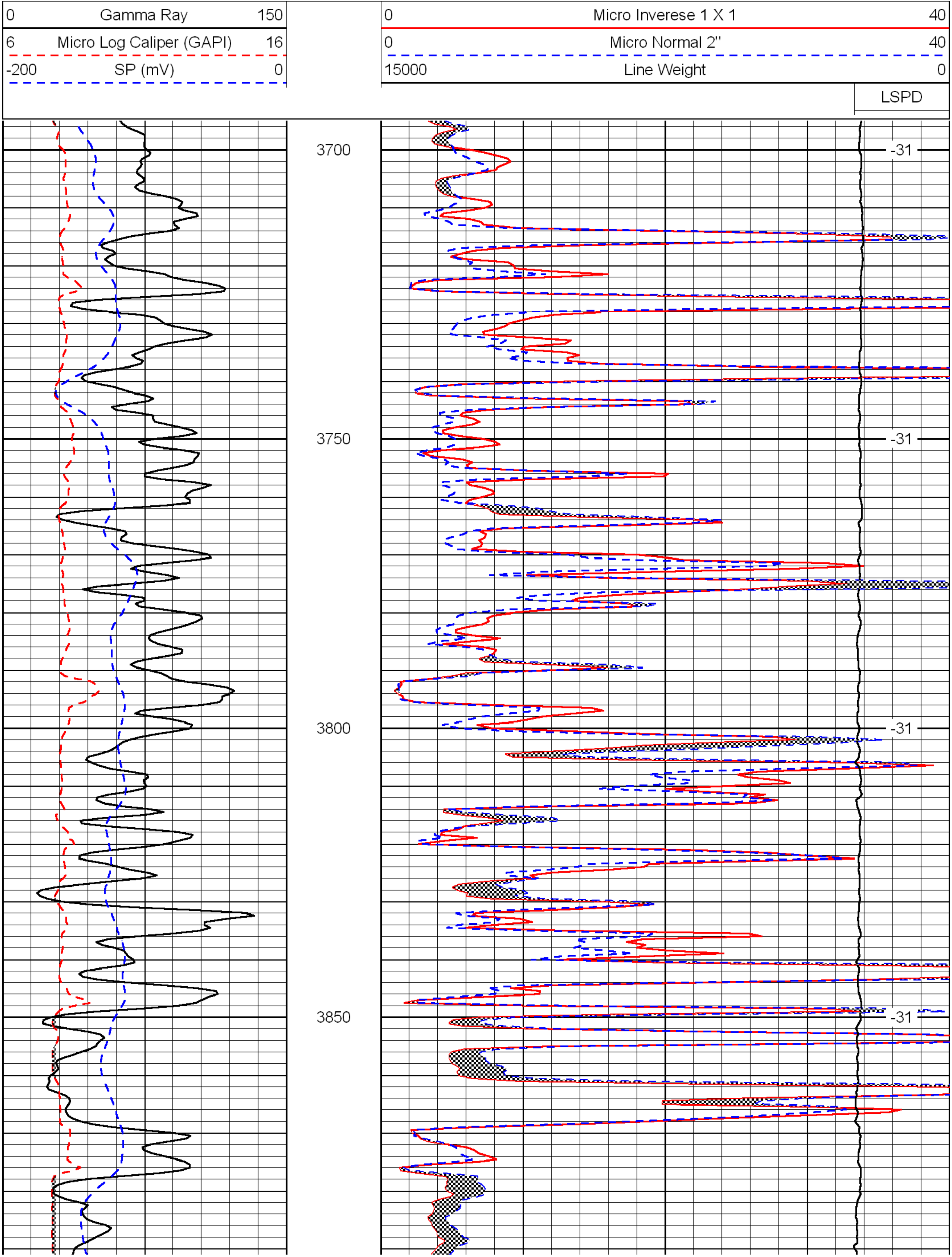
Comments

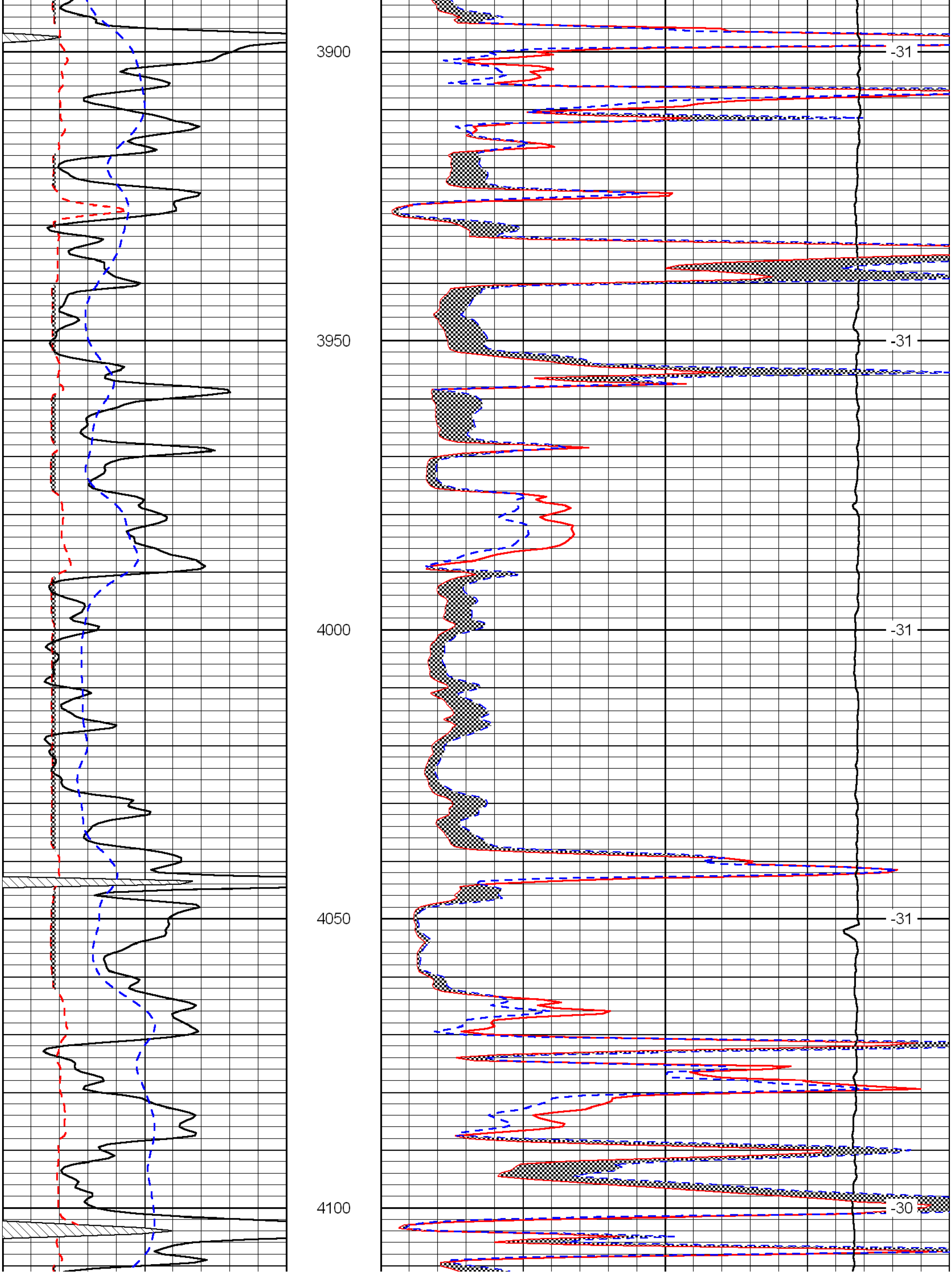
Thank you for using Log-Tech, Inc.
(785) 625-3858

Monument KS, W to 25 Hwy,
N to Co Ln, 5 W, N Into

Database File:	c:\warrior\data\norstar_t. schertz no.1-32\norstarhd.db
Dataset Pathname:	dil/norstk
Presentation Format:	micro
Dataset Creation:	Fri Oct 21 19:30:18 2011
Charted by:	Depth in Feet scaled 1:240

Charted by: Depth in Feet scaled 1:240

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4000
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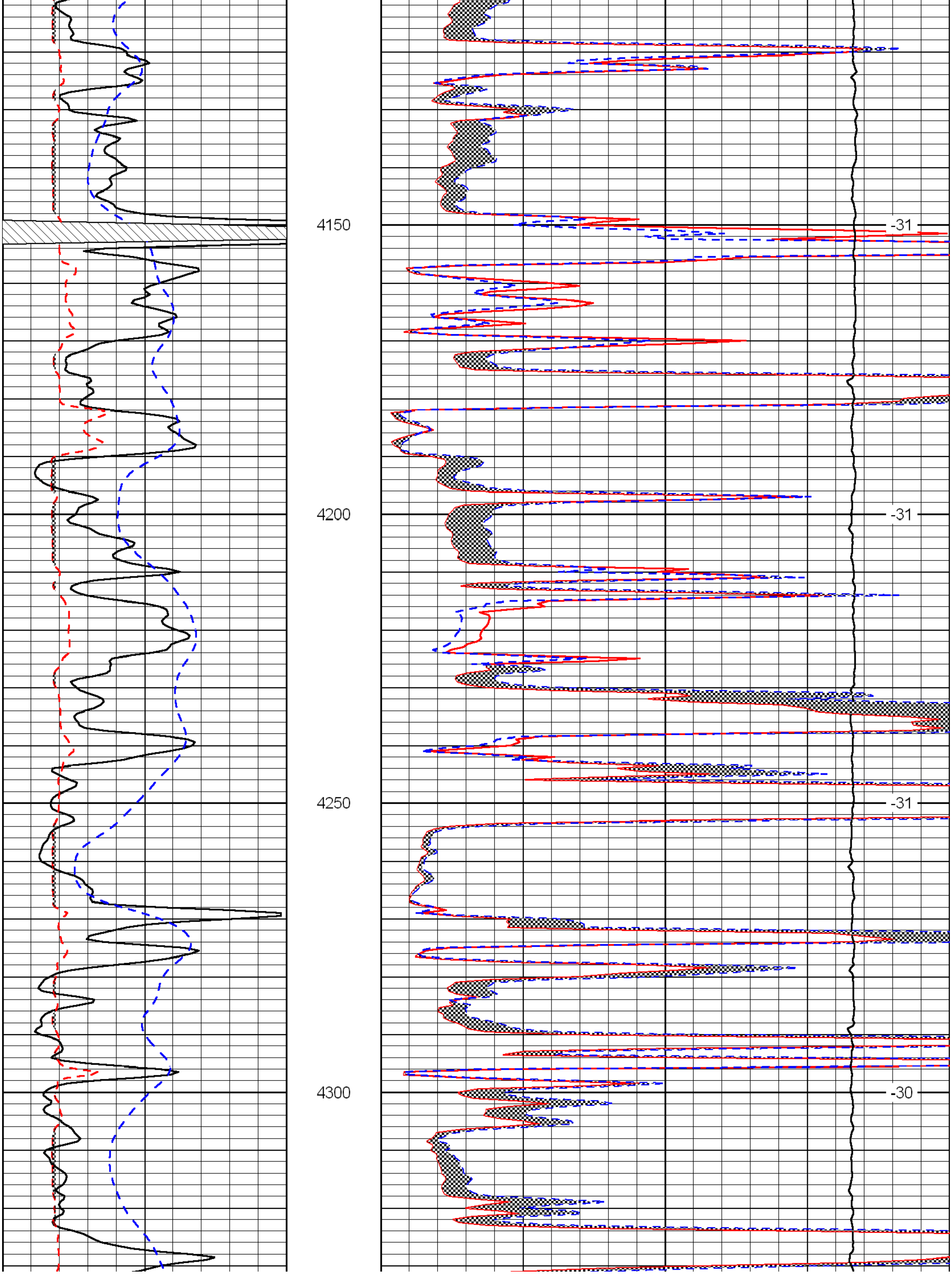
4050
-31
4100
-30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4200
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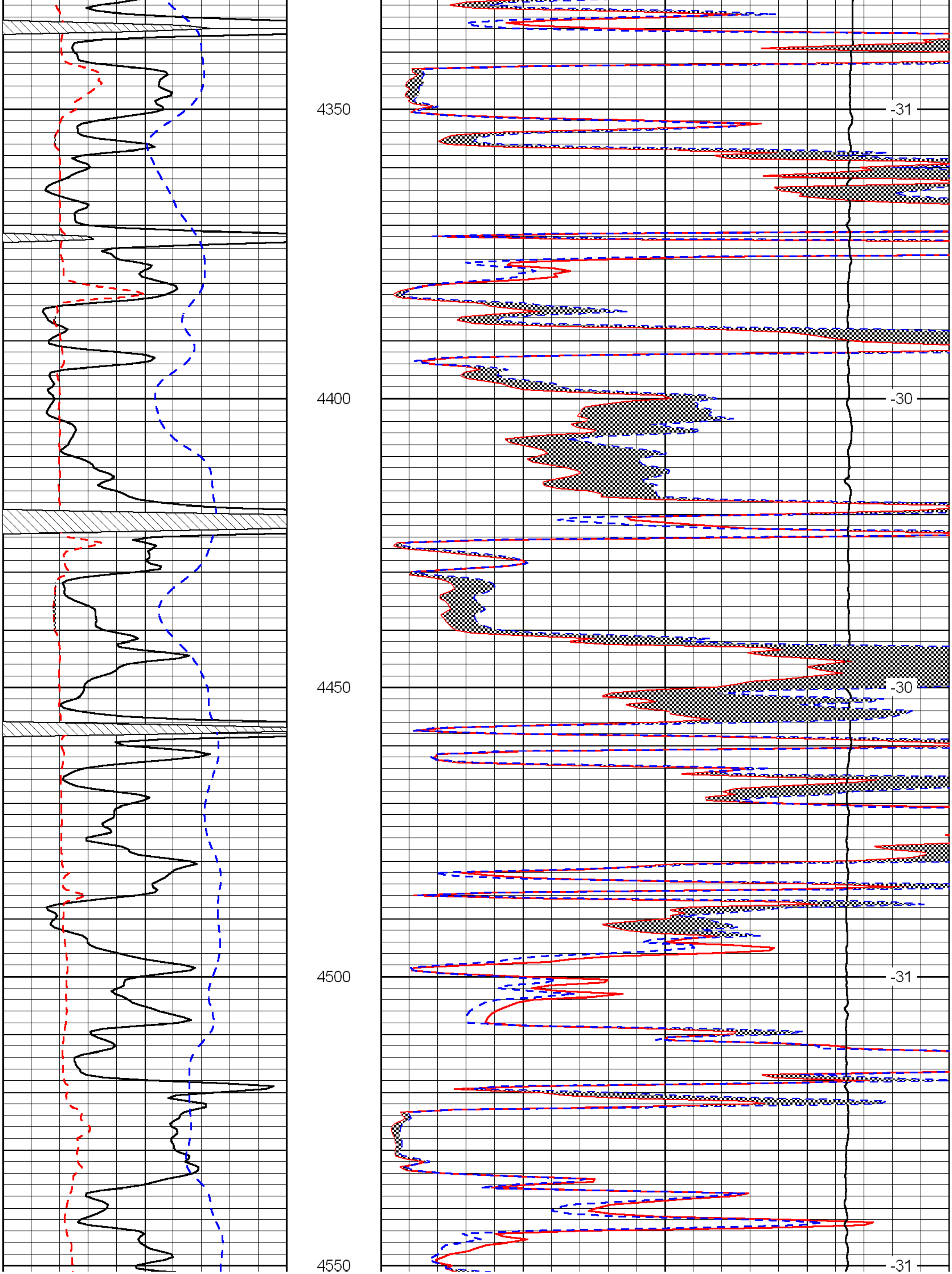
4250
-31
4300
-30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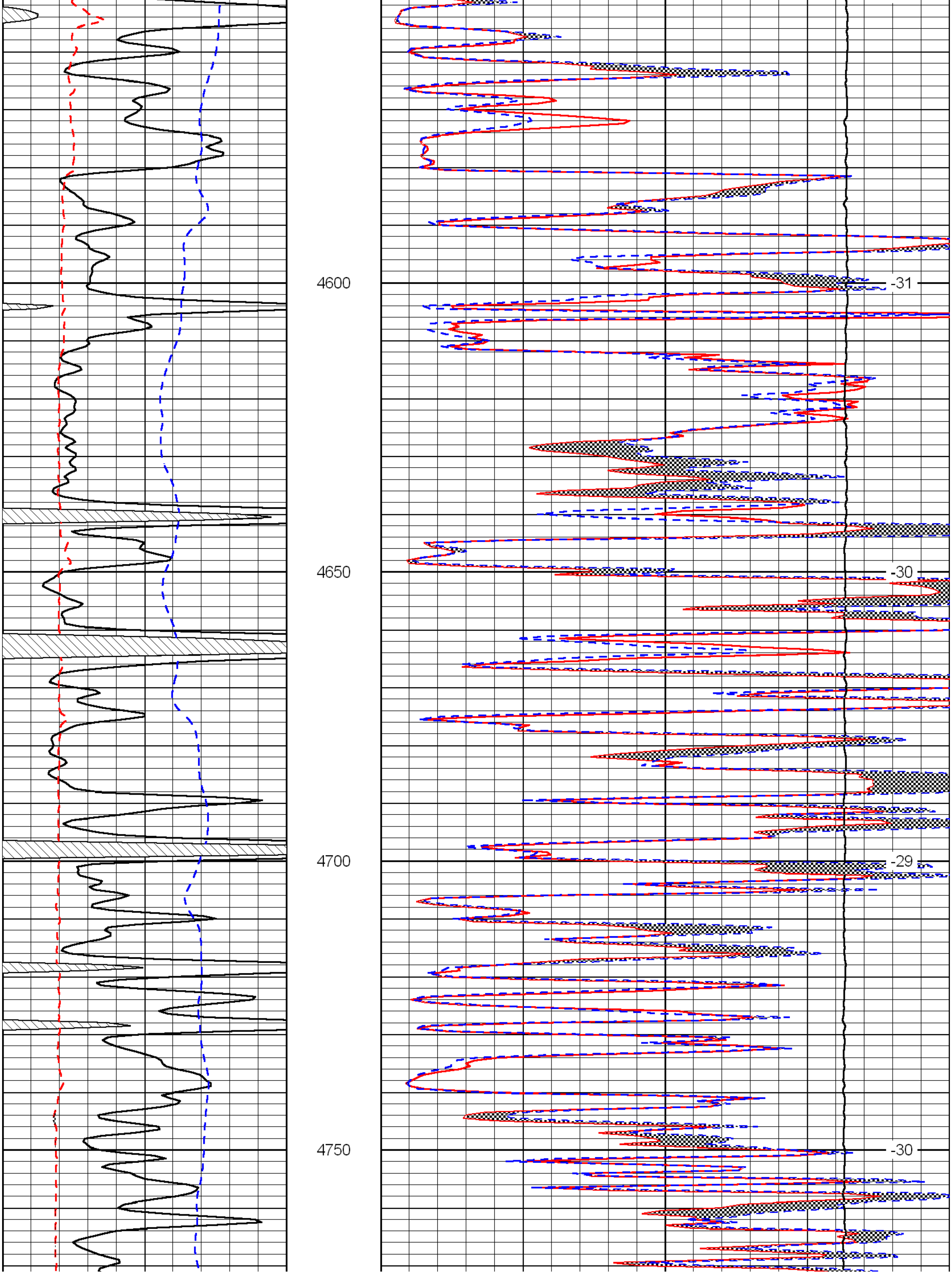
4550
-31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4700
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4750
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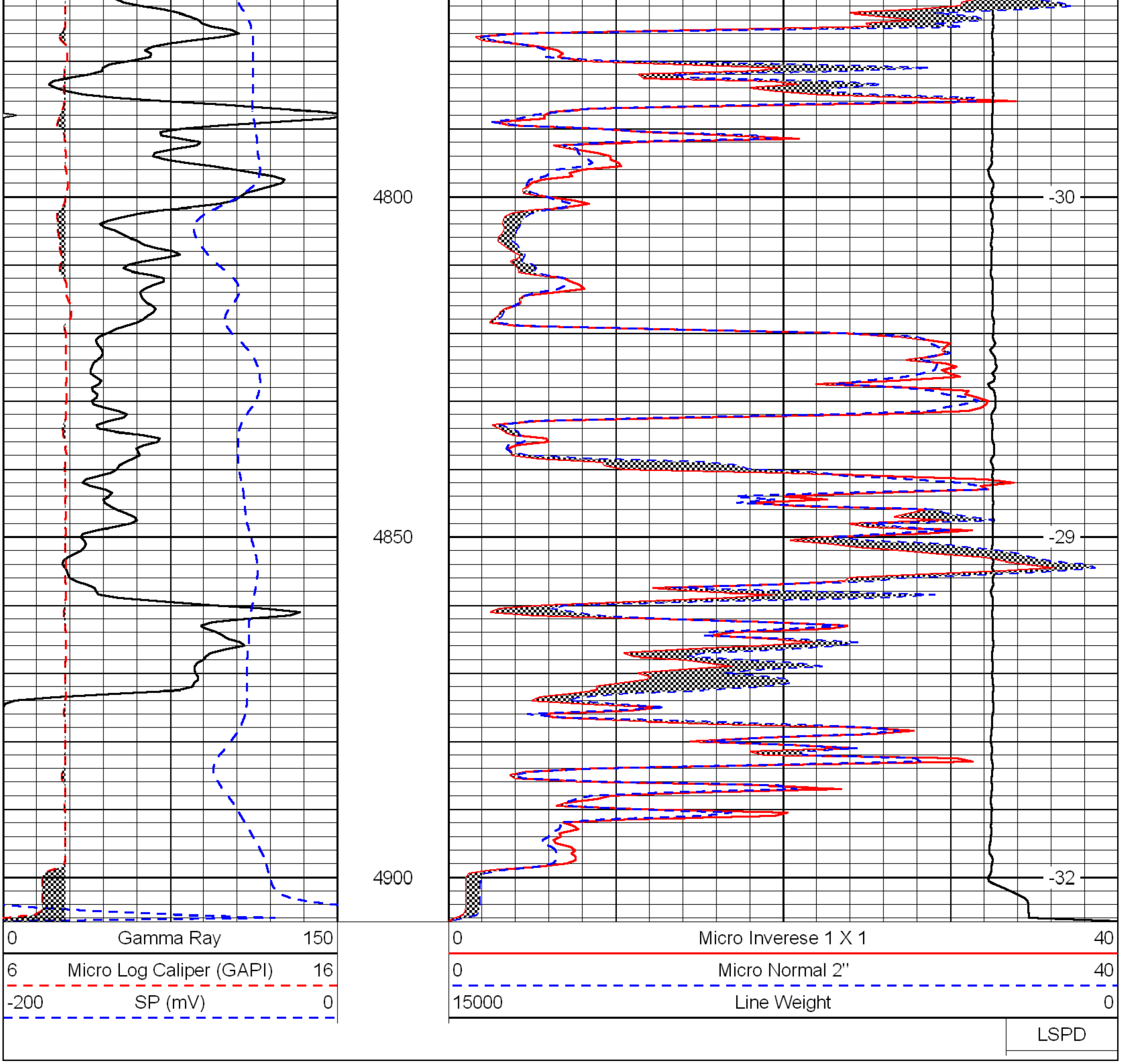
4800
4850
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-29
-32
0
Gamma Ray
150
6
Micro Log Caliper (GAPI)
16
-200
SP (mV)
0
0
Micro Inverese 1 X 1
40
0
Micro Normal 2"
40
15000
Line Weight
0
LSPD

SUPERIOR WELL SERVICES

SUPERIOR
Hays,
Kansas

DUAL RECEIVER CEMENT BOND LOG

Company	NORSTAR PETROLEUM, INC.
Well	T. SCHERTZ #1-32
Field	WILDCAT
County	THOMAS
State	KANSAS

Company NORSTAR PETROLEUM, INC.
Well T. SCHERTZ #1-32
Field WILDCAT
County THOMAS State KANSAS

Location: API #: 15-193-20823-0000
1797' FSL & 1489' FWL
NW - SW -NE -SW
SEC 32 TWP 10S RGE 34W

Other Services
PERF

Permanent Datum GROUND LEVEL Elevation 3278
Log Measured From KELLY BUSHING 5' A.G.L.
Drilling Measured From KELLY BUSHING

Elevation
K.B. 3283
D.F. 3281
G.L. 3278

Date	10-28-11
Run Number	ONE
Depth Driller	4900
Depth Logger	4848
Bottom Logged Interval	4846
Top Log Interval	0
Open Hole Size	7 7/8
Type Fluid	WATER
Density / Viscosity	
Max. Recorded Temp.	
Estimated Cement Top	3792
Time Well Ready	
Time Logger on Bottom	
Equipment Number	788
Location	HAYS, KS
Recorded By	JEREMY SEIB
Witnessed By	DAVE PAULY

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12 1/4	0	291				
TWO	7 7/8	291	4900				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8 5/8		0	291
Prot. String	5 1/2		0	
Production String				
Liner				

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

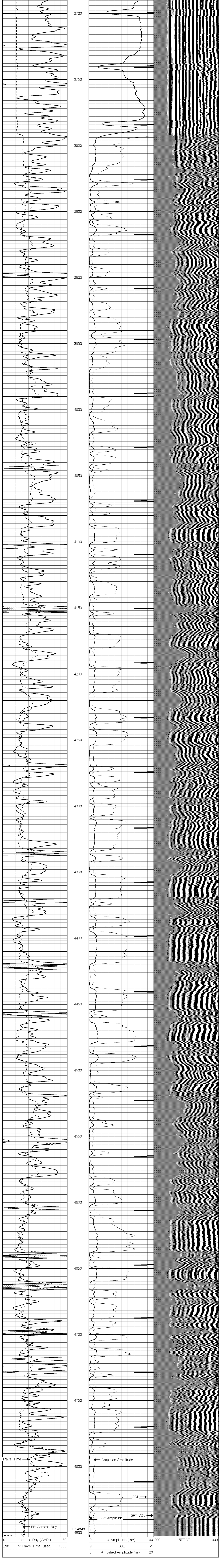
THANK YOU FOR USING SUPERIOR WELL SERVICES HAYS, KS (785) 628-6395
DIRECTIONS: OAKLEY, KS - 15 MILES WEST ON HWY 40 TO RD. 280TH (EAST EDGE OF PAGE CITY) - 3 MILES NORTH TO DEAD END- 1/16 MILE WEST - NORTH INTO ON LEASE RD(NEXT TO FARM HOUSE

SUPERIOR WELL SERVICES
SUPERIOR
Hays,
Kansas

DV TOOL

Database File: 7915.db
Dataset Pathname: pass4.1
Presentation Format: dcbl02
Dataset Creation: Fri Oct 28 20:24:41 2011 by Calc Open-Cased 110302
Charted by: Depth in Feet scaled 1:240

Database File: 7915.db
Dataset Pathname: pass3.2
Presentation Format: dcbl02
Dataset Creation: Fri Oct 28 20:02:05 2011
Charted by: Depth in Feet scaled 1:240



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Norstar Petroleum, Inc.

88 Inverness Cir. E, Unit F104
Englewood, Co 80112

ATTN: Bob Elder

32 10s 34w Thomas,Ks

T Schertz 1-32

Job Ticket: 44493 **DST#: 1**

Test Start: 2011.10.18 @ 13:16:00

GENERAL INFORMATION:

Formation: **LKC H,I,J**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 15:18:30
Time Test Ended: 21:56:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Bradley Walter
Unit No: 40

Interval: 4328.00 ft (KB) To 4417.00 ft (KB) (TVD)
Total Depth: 4417.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

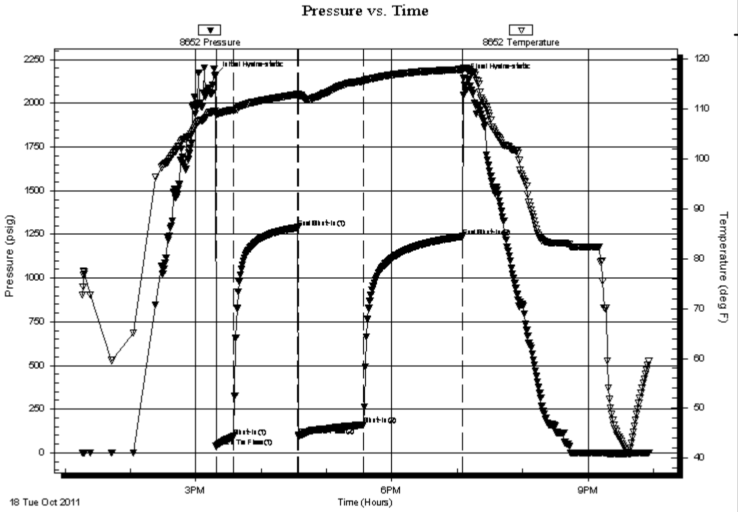
Reference Elevations: 3283.00 ft (KB)
3278.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8652 **Inside**

Press@RunDepth: 161.49 psig @ 4329.00 ft (KB)
Start Date: 2011.10.18 End Date: 2011.10.18
Start Time: 13:16:05 End Time: 21:56:00

Capacity: 8000.00 psig
Last Calib.: 2011.10.18
Time On Btm: 2011.10.18 @ 15:18:15
Time Off Btm: 2011.10.18 @ 19:06:00

TEST COMMENT: IF: 5" blow .
ISI: No return blow .
FF: BOB@ 59 minutes.
FSI: Surface blow , Died @ 35 minutes.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2159.50	109.60	Initial Hydro-static
1	36.20	108.85	Open To Flow (1)
17	93.67	109.73	Shut-In(1)
76	1289.24	112.92	End Shut-In(1)
76	98.31	112.48	Open To Flow (2)
136	161.49	115.59	Shut-In(2)
227	1237.81	117.90	End Shut-In(2)
228	2145.19	118.20	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
125.00	ocm 10o 90m	0.61
65.00	ocm 40o 60m	0.32
130.00	mco 50m 50o	1.35
20.00	oil 100o	0.28

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum, Inc.

88 Inverness Cir. E, Unit F104
Englewood, Co 80112

ATTN: Bob Elder

32 10s 34w Thomas,Ks

T Schertz 1-32

Job Ticket: 44493 **DST#: 1**

Test Start: 2011.10.18 @ 13:16:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	25 deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	50.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.18 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	9800.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

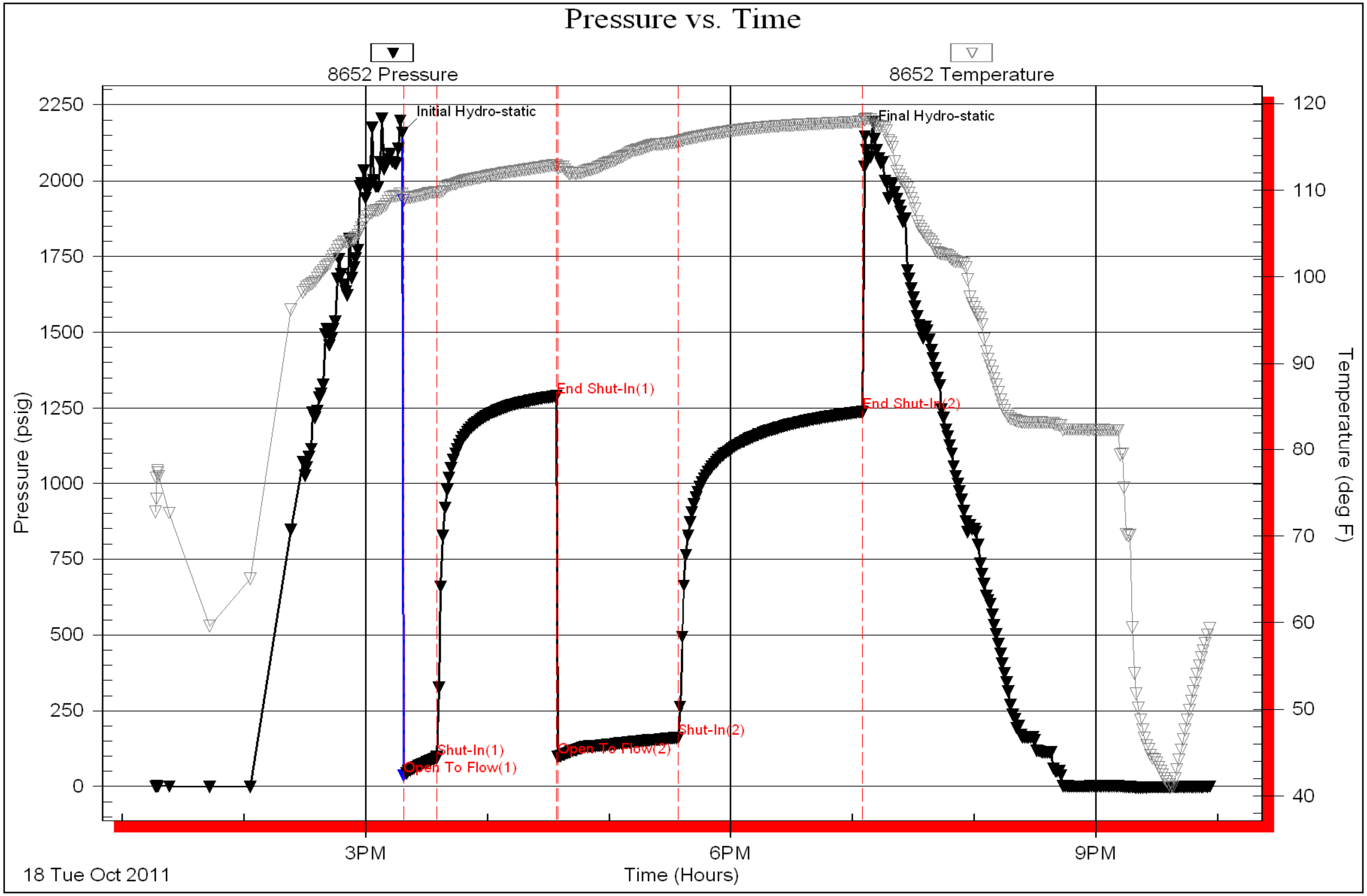
Recovery Table

Length ft	Description	Volume bbl
125.00	ocm 10o 90m	0.615
65.00	ocm 40o 60m	0.320
130.00	mco 50m 50o	1.350
20.00	oil 100o	0.281

Total Length: 340.00 ft Total Volume: 2.566 bbl

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

Serial #: 8652 **Inside** Norstar Petroleum, Inc. T Schertz 1-32 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 44493 Printed: 2011.10.19 @ 08:34:59

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Norstar Petroleum, Inc.

88 Inverness Cir. E, Unit F104
Englewood, Co 80112

ATTN: Bob Elder

32 10s 34w Thomas,Ks

T Schertz 1-32

Job Ticket: 44494 **DST#: 2**

Test Start: 2011.10.19 @ 05:20:00

GENERAL INFORMATION:

Formation: **LKC K**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:39:45
Time Test Ended: 13:20:15

Interval: 4415.00 ft (KB) To 4450.00 ft (KB) (TVD)
Total Depth: 4417.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 40

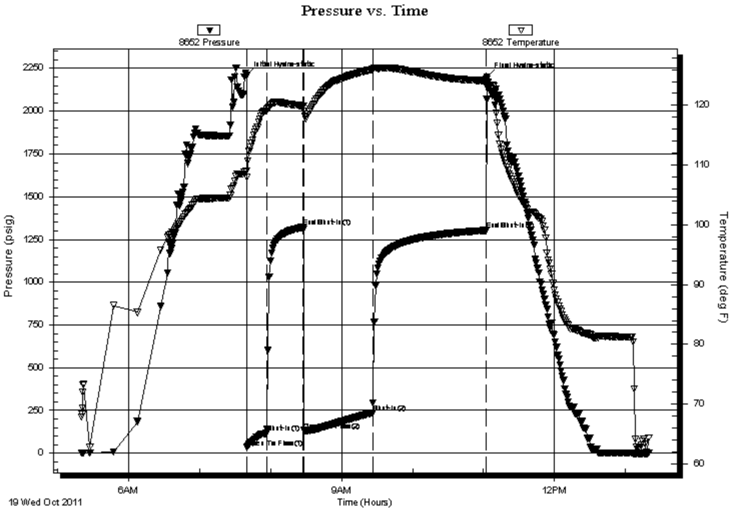
Reference Elevations: 3283.00 ft (KB)
3278.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8652 **Inside**

Press@RunDepth: 237.18 psig @ 4416.00 ft (KB)
Start Date: 2011.10.19 End Date: 2011.10.19
Start Time: 05:20:05 End Time: 13:20:14

Capacity: 8000.00 psig
Last Calib.: 2011.10.19
Time On Btm: 2011.10.19 @ 07:39:30
Time Off Btm: 2011.10.19 @ 11:03:15

TEST COMMENT: IF: BOB @ 10 min.
ISI: 1" blow .
FF: BOB @ 7 minutes.
FSI: 2 1/2 " blow , died @ 60 minutes.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2209.20	109.03	Initial Hydro-static
1	33.79	107.93	Open To Flow (1)
17	117.64	119.35	Shut-In(1)
48	1322.08	119.90	End Shut-In(1)
49	133.34	118.99	Open To Flow (2)
107	237.18	126.03	Shut-In(2)
203	1303.36	124.08	End Shut-In(2)
204	2201.00	123.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
250.00	ocm 10o 90m	1.30
340.00	gmco 30g 5m 65o	4.77
0.00	650' GIP	0.00

* Recovery from multiple tests

Gas Rates

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

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum, Inc.

88 Inverness Cir. E, Unit F104
Englewood, Co 80112

ATTN: Bob Elder

32 10s 34w Thomas,Ks

T Schertz 1-32

Job Ticket: 44494 **DST#: 2**

Test Start: 2011.10.19 @ 05:20:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	31 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:	10.38 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	8500.00 ppm				
Filter Cake:	1.00 inches				

Recovery Information

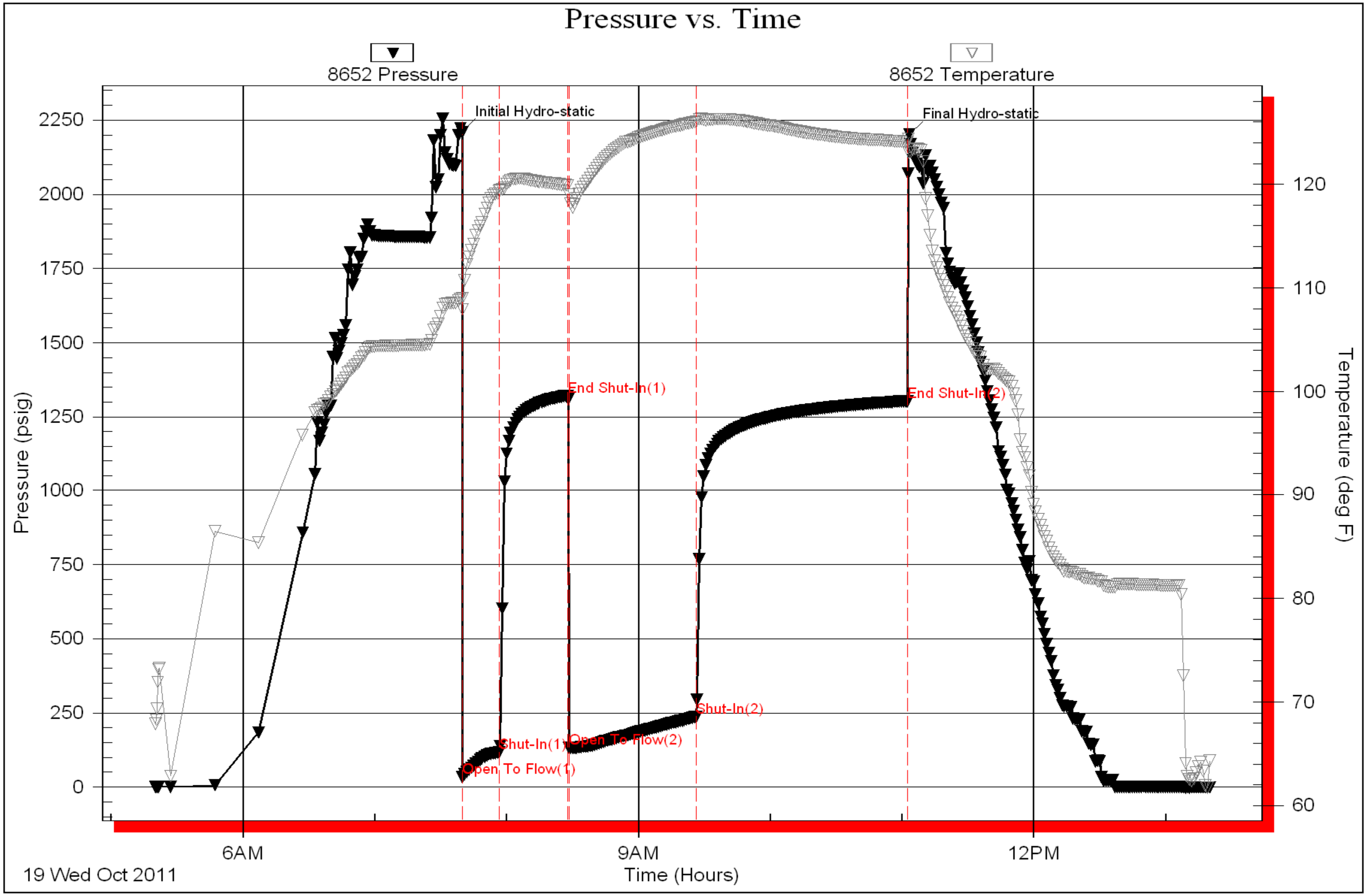
Recovery Table

Length ft	Description	Volume bbl
250.00	ocm 10o 90m	1.302
340.00	gmco 30g 5m 65o	4.769
0.00	650' GIP	0.000

Total Length: 590.00 ft Total Volume: 6.071 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments: Bottom hole temp 124

Serial #: 8652 **Inside** Norstar Petroleum, Inc. T Schertz 1-32 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 44494 Printed: 2011.10.19 @ 14:00:03

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Norstar Petroleum, Inc.

88 Inverness Cir. E, Unit F104
Englewood, Co 80112

ATTN: Bob Elder

32 10s 34w Thomas,Ks

T Schertz 1-32

Job Ticket: 44495 **DST#: 3**

Test Start: 2011.10.20 @ 19:32:00

GENERAL INFORMATION:

Formation: **Johnson**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 21:41:00
Time Test Ended: 02:49:15

Interval: 4714.00 ft (KB) To 4770.00 ft (KB) (TVD)
Total Depth: 4470.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)
Tester: Bradley Walter
Unit No: 40

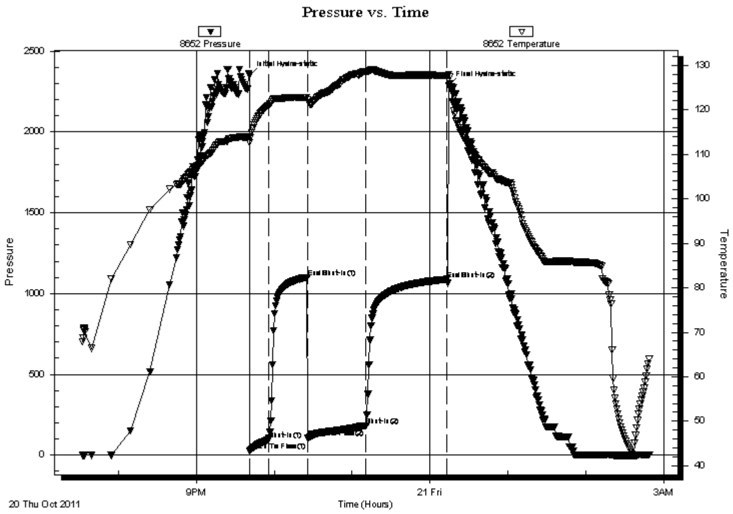
Reference Elevations: 3283.00 ft (KB)
3278.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8652 **Inside**

Press@RunDepth: 181.95 psig @ 4715.00 ft (KB)
Start Date: 2011.10.20 End Date: 2011.10.21
Start Time: 19:32:05 End Time: 02:49:14

Capacity: 8000.00 psig
Last Calib.: 2011.10.21
Time On Btm: 2011.10.20 @ 21:40:45
Time Off Btm: 2011.10.21 @ 00:14:30

TEST COMMENT: IF: 1" blow .
ISI: No return
FF: 3 " Blow .
FSI: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2347.34	114.03	Initial Hydro-static
1	27.36	112.63	Open To Flow (1)
15	95.72	120.98	Shut-In(1)
45	1100.85	122.67	End Shut-In(1)
45	106.65	122.15	Open To Flow (2)
90	181.95	128.55	Shut-In(2)
153	1088.56	127.72	End Shut-In(2)
154	2285.32	127.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
240.00	gmco 30g 45o 25m	1.18
120.00	gmco 20g 40o 40m	1.11

* Recovery from multiple tests

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Norstar Petroleum, Inc.

88 Inverness Cir. E, Unit F104
Englew ood, Co 80112

ATTN: Bob Elder

32 10s 34w Thomas,Ks

T Schertz 1-32

Job Ticket: 44495 **DST#: 3**

Test Start: 2011.10.20 @ 19:32:00

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:	12 ppm
Viscosity:	56.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	11.98 in^3	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	7500.00 ppm				
Filter Cake:	2.00 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
240.00	gmco 30g 45o 25m	1.180
120.00	gmco 20g 40o 40m	1.109

Total Length: 360.00 ft Total Volume: 2.289 bbl

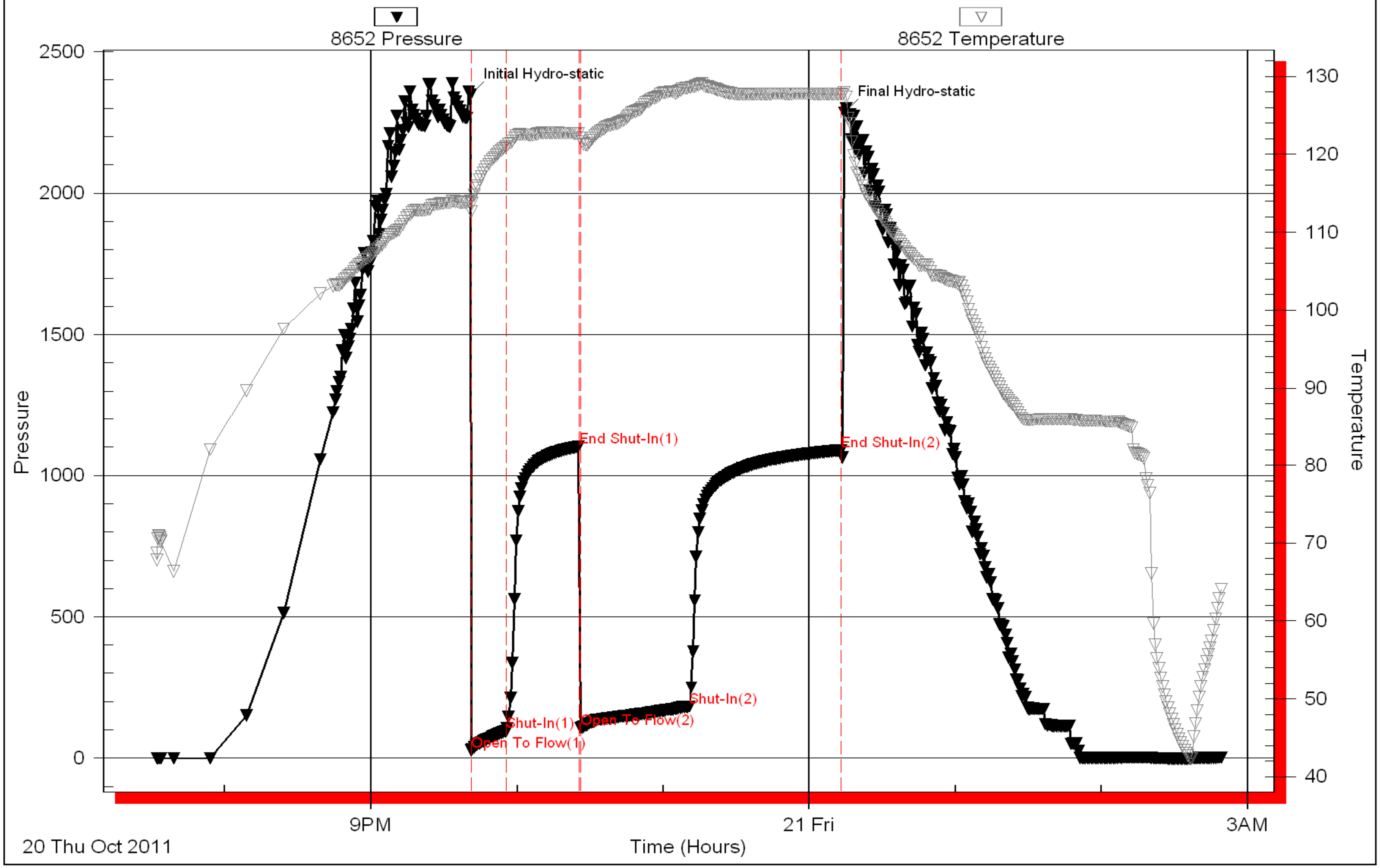
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Serial #: 8652 **Inside** Norstar Petroleum, Inc. T Schertz 1-32 DST Test Number: 3

Pressure vs. Time



Trilobite Testing, Inc Ref. No: 44495 Printed: 2011.10.21 @ 15:46:52

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

AD ASTRA PER ASPERA
Kansas
Corporation Commission

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

January 11, 2012

Clark D. Parrott
Norstar Petroleum, Inc.
88 INVERNESS CIR E. Unit F104
ENGLEWOOD, CO 80112

Re: ACO1
API 15-193-20823-00-00
T. Schertz 1-32
SW/4 Sec.32-10S-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