KOLAR Document ID: 1509640

Confidentiality Requested:
☑ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 30425
Name: DNR Oil and Gas, Inc.
Address 1: PO BOX 4507
Address 2:
City: ENGLEWOOD State: CO Zip: 80155 + 4507
Contact Person: Charles B. Davis
Phone: (303) 825-8956
CONTRACTOR: License # 5929
Name: Duke Drilling Co., Inc.
Wellsite Geologist: Steve Davis
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☑ Oil ☐ WSW ☐ SWD
☐ Gas ☐ DH ☐ EOR
☐ OG ☐ GSW
☐ 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 EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

10/09/2019 Spud Date or Recompletion Date
10/18/2019 Date Reached TD
12/19/2019 Completion Date or Recompletion Date

API No.: 15-191-22815-00-00
Spot Description:
S2 - S2 - N2 - N2 Sec. 33 Twp. 34 S. R. 2 ☑ East ☐ West
1275 Feet from ☑ North / ☐ South Line of Section
2640 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: Sumner
Lease Name: WOLF/NEAL Well #: 1
Field Name: Padgett
Producing Formation: Simpson
Elevation: Ground: 1171 Kelly Bushing: 1179
Total Vertical Depth: 3742 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 300 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from:
feet depth to: w/ sx cmt.

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

Chloride content: 800 ppm Fluid volume: 700 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: 03/25/2020
☐ **Confidential Release Date:**
☐ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☐ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☑ **I** ☐ **II** ☐ **III** **Approved by:** Rene Stucky **Date:** 04/12/2020

Page Two

Operator Name: DNR Oil and Gas, Inc. Lease Name: WOLF/NEAL Well #: 1

Sec. 33 Twp. 34 S. R. 2 ☑ East ☐ West County: Sumner

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 *(Attach Additional Sheets)*	☑ Yes	☐ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:
Attached

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

Name	Top	Datum
Latan	2289	-1110
Stainaker	2332	-1153
Layton	2765	-1586
Kansas City	2958	-1779
Mississippi	3411	2232
Simpson	3657	2478
RTD	3742	-2563

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	24	300	Class A	185	3%Ca2%gel
Production	7.875	5.50	15.5	3740	Thickset	175	5#kalseal1#Phenoseal

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	-			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
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)*

Date of first Production/Injection or Resumed Production/ Injection:	Producing Method:
01/05/2020	☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	20	0	10	0	41

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL: Top	Bottom
☐ Vented ☐ Sold ☑ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	3659	3662

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
4	3659	3662			NONE

TUBING RECORD:	Size:	Set At:	Packer At:
	2.8750	3676	None

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	DNR Oil and Gas, Inc.
Well Name	WOLF/NEAL 1
Doc ID	1509640

All Electric Logs Run

CDL
CNL
PE
DIL

Form	ACO1 - Well Completion
Operator	DNR Oil and Gas, Inc.
Well Name	WOLF/NEAL 1
Doc ID	1509640

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	24	300	Class A	185	3%Ca2%gel
Production	7.875	5.50	15.5	3740	Thickset	175	5#kalseal1#Phenoseal

810 E 7TH
PO Box 92
EUREKA, KS 67045
(620) 583-5561

ELITE
CEMENTING & ACID SERVICE, LLC

Cement or Acid Field Report
Ticket No. **4732**
Foreman David Gardner
Camp Eureka

API# 15-191-22815

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State
10-10-19	1357	Wolf/Neal #1	33	34 S.	2 E.	Sumner	KS

Customer	Safety Meeting	Unit #	Driver	Unit #	Driver
DNR Oil and Gas, Inc.	DG ZA SM	105	Zevi		
Mailing Address: P.O. Box 4507		110	Steve		
City: Englewood / State: CO / Zip Code: 80155					

Job Type Surface — Hole Depth 300' — Slurry Vol. 45 Bbl — Tubing
Casing Depth 290.43' — Hole Size 12¼" — Slurry Wt. 15# — Drill Pipe
Casing Size & Wt. 8⅝" 24# — Cement Left in Casing 15' +/- — Water Gal/SK 6.5 — Other
Displacement 18 Bbl — Displacement PSI — Bump Plug to — BPM

Remarks: Safety Meeting. Rig up to 8⅝" casing. Break circulation w/ 10 Bbl fresh water. Mixed 185 sks Class 'A' Cement w/ 3% Cacl2, 2% Gel, + ¼#/sk Floseal @ 15#/gal, yield 1.35 = 45 Bbl Slurry. Displace w/ 18 Bbl fresh water. Shut down. Close casing in. Good circulation @ all times while cementing. Good cement returns to surface = 5 Bbl to Pit. Job complete. Rig down.

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C101	1	Pump Charge	890.00	890.00
C107	90	Mileage	4.20	378.00
C200	185 sks	Class 'A' Cement	15.75	2913.75
C205	520#	Cacl2 @ 3%	.63	327.60
C206	350#	Gel @ 2%	.21	73.50
C209	45#	Floseal @ ¼#/sk	2.35	105.75
C108B	8.69 Tons	Ton Mileage - Bulk Truck	1.40	1094.94
		Thank You	Sub Total	5,783.54
		7.5%	Sales Tax	256.55
			Total	6,040.09

Authorization Dion Vargas Title TP

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

810 E 7TH
PO Box 92
EUREKA, KS 67045
(620) 583-5561

ELITE CEMENTING & ACID SERVICE, LLC

Cement or Acid Field Report
Ticket No. **4772**
Foreman David Gardner
Camp Eureka

API# 15-191-22815

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State
10-18-19	1357	Wolf / Neal #1	33	34 S.	2 E.	Sumner	KS

Customer: DNR Oil & Gas, Inc.
Mailing Address: P.O. Box 4507
City: Englewood | State: Co | Zip Code: 80155

Safety Meeting: DG AM SM KM

Unit #	Driver	Unit #	Driver
104	Alan M.		
112	Steve		

Job Type: Longstring | Hole Depth: 3742' K.B. | Slurry Vol.: 57 Bbl | Tubing:
Casing Depth: 3746' | Hole Size: 7 7/8" | Slurry Wt.: 13.6# | Drill Pipe:
Casing Size & Wt.: 5 1/2" 15.50# | Cement Left in Casing: 42' S.S. | Water Gal/SK: 9.0 | Other:
Displacement: 90 1/2 Bbl | Displacement PSI: 1000 PSI | Bump Plug to: 1500 PSI | BPM:

Remarks: Safety Meeting. 5 1/2" casing set @ 3746'. Rig up to 5 1/2" casing. Break circulation w/ 15 Bbl fresh water. Mixed 175 sks Thickset Cement w/ 5# Kolseal/sk, 1# Phenoseal/sk @ 13.6# /gal, yield 1.85 = 57 Bbl slurry. Wash out pump & lines. Shut down. Release 5 1/2" Latch Down Plug. Displace plug to seat w/ 90 1/2 Bbl fresh water. Final pumping pressure of 1000 PSI. Bump plug to 1500 PSI. Release pressure. Float & Plug held good. (KCL in 1st 40 Bbl Displacement water). Good circulation @ all times while cementing. Job complete. Rig down.

Note: 5 1/2" casing set @ 3746' = 8' Above K.B.
Plug Rat hole w/ 20 sks Cement.
Centralizers on #1, 2, 3, 5, 9, 15 Float Collar w/ Latch Down Assy. on top of 1st Joint.

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C102	1	Pump Charge	1100.00	1100.00
C107	90	Mileage	4.20	378.00
C201	195 sks	Thick Set Cement	20.50	3997.50
C207	975#	Kolseal @ 5#/sk	.47	458.25
C208	195#	Phenoseal @ 1#/sk	1.30	253.50
C108B	10.725 Tons	Ton Mileage - Bulk Truck	1.40	1351.35
C691	1	5 1/2" Guide Shoe	175.00	175.00
C674	1	5 1/2" AFU Float Collar	359.00	359.00
C421	1	5 1/2" Latch Down Plug	242.00	242.00
C504	6	5 1/2" x 7 7/8" Centralizers	50.00	300.00
C781	1	5 1/2" Stop Collar	32.00	32.00
C222	5 gals	KCL (1st 40 Bbl Displacement water)	30.00	150.00
		Thank You	Sub Total	8,796.60
		7.5 %	Sales Tax	447.54
			Total	9,244.14

Authorization _____ Title _____

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

DNR OIL AND GAS, INC.
Wolf/Neal #1
1275' FNL & 2640' FEL of Section 33-T34S-R2E
SUMNER COUNTY, KANSAS
API#15-191-22815-00-00

Geologist's Report
WellSight Systems
Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name:	**DNR Oil & Gas Wolf/Neal #1**
API:	**15-191-22815-00-00**
Location:	**1275' FNL & 2640' FEL of Section 33-T34S-R2E**
License Number:	**KOL #30425** **Region: Sumner County, KS**
Spud Date:	**10/09/2019** **Drilling Completed: 10/18/2019**
Surface Coordinates:	**1275' FNL & 2640' FEL of Section 33-T34S-R2E**
	Appx. S/2 S/2 N/2 N/2 **Padgett Field**
Bottom Hole Coordinates:	**Vertical Test**
Ground Elevation (ft):	**1171** **K.B. Elevation (ft): 1179**
Logged Interval (ft):	**RTD To: 2000 Total Depth (ft): RTD 3742 LTD 3742**
Formation:	**Arbuckle**
Type of Drilling Fluid:	**Chemical (Displacement complete @ 2200')**

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

Operator

Company: DNR Oil and Gas, Inc.
Address: P.O. Box 4507
Englewood, CO. 80155
Company Representative: Charlie Davis

Geologist

Name: Richard S.(Steve) Davis Jr.
Company: Consulting Petroleum Geologist
Address: 7329 E. Norfolk
Wichita, Kansas 67206
Cell 316-772-6479 Home 316-686-1193

BIT RECORD:

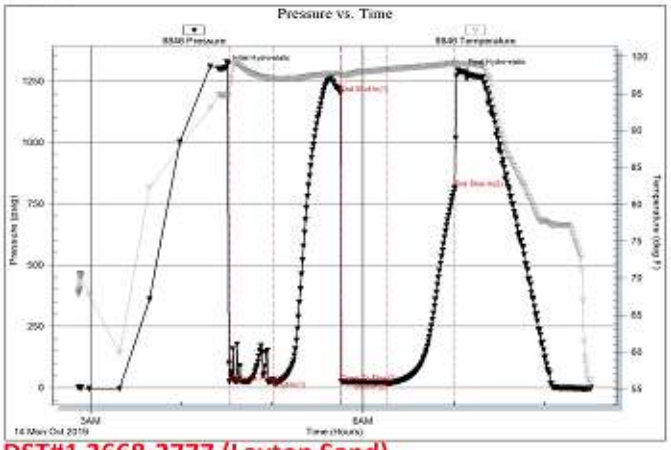
Number	Size	Make/Type	Depth Out	Footage	Hours
1	12 1/4"	RR	197	197	6 3/4
2	12 1/4"	RR	300	103	2 1/4
3	7 7/8"	JZ RX23	3567	3267	79
4	7 7/8"	RR	3742	175	8 3/4

CONTRACTOR:
Duke Drilling Rig #2
Toolpusher: Dion Vasquez
MUD:
Mud Co (displacement complete @ 2200')
Engineer: Brad Bortz
DRILL STEM TESTING: Trilobite Testing Inc.
Tester: Jimmy Ricketts
ELECTRIC LOG: Eli Wireline (CDL/CNL, DIL & PE)
Engineer: Jason Cappellucci

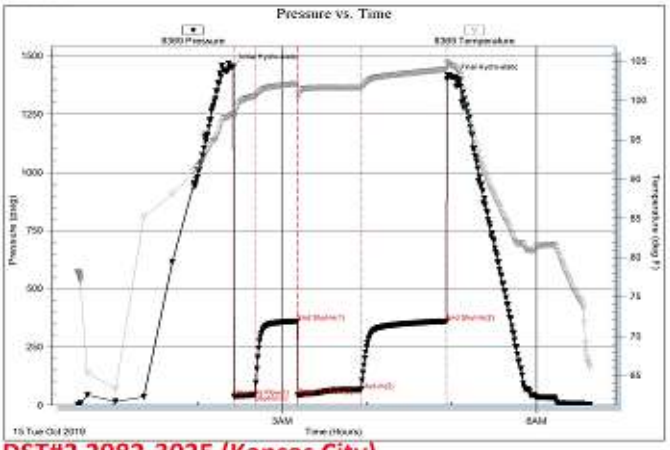
CASING RECORD:
Surface: 8 5/8"@ 289' w/ 185 sks
Production: 5 1/2" @ 3740' w/ 175 sks

KB 1179

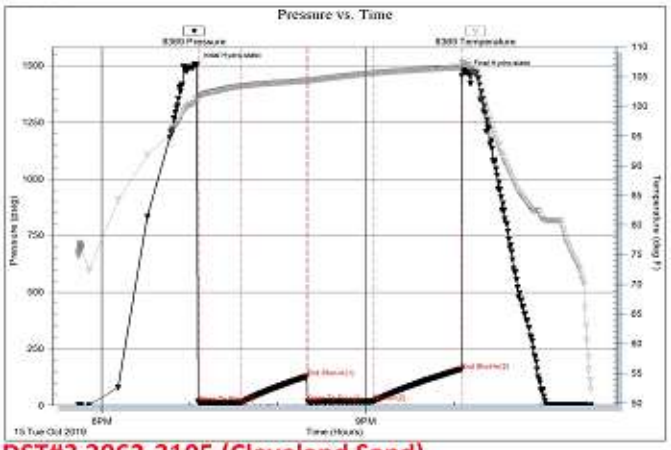
Formation	Sample	E-Log	Datum
Iatan	2290	2289	-1110
Stalnaker	2330	2332	-1153
Layton	2766	2765	-1586
Kansas City	2958	2958	-1779
BKC	3054	3052	-1873
Cleveland	3090	3090	-1911
Marmaton	3132	3133	-1954
Pawnee	3178	3178	-1999
Fort Scott	3214	3214	-2035
Cherokee Shale	3249	3249	-2070
Mississippi	3411	3411	-2232
Chattanooga	3625	3625	-2446
Kinderhook	3596	3595	-2416
Simpson	3657	3657	-2478
Arbuckle	3731	NA	-2552
RTD	3742	3742	-2563



DST#1 2668-2777 (Layton Sand)



DST#2 2982-3025 (Kansas City)



DST#3 3062-3105 (Cleveland Sand)

Rock Types

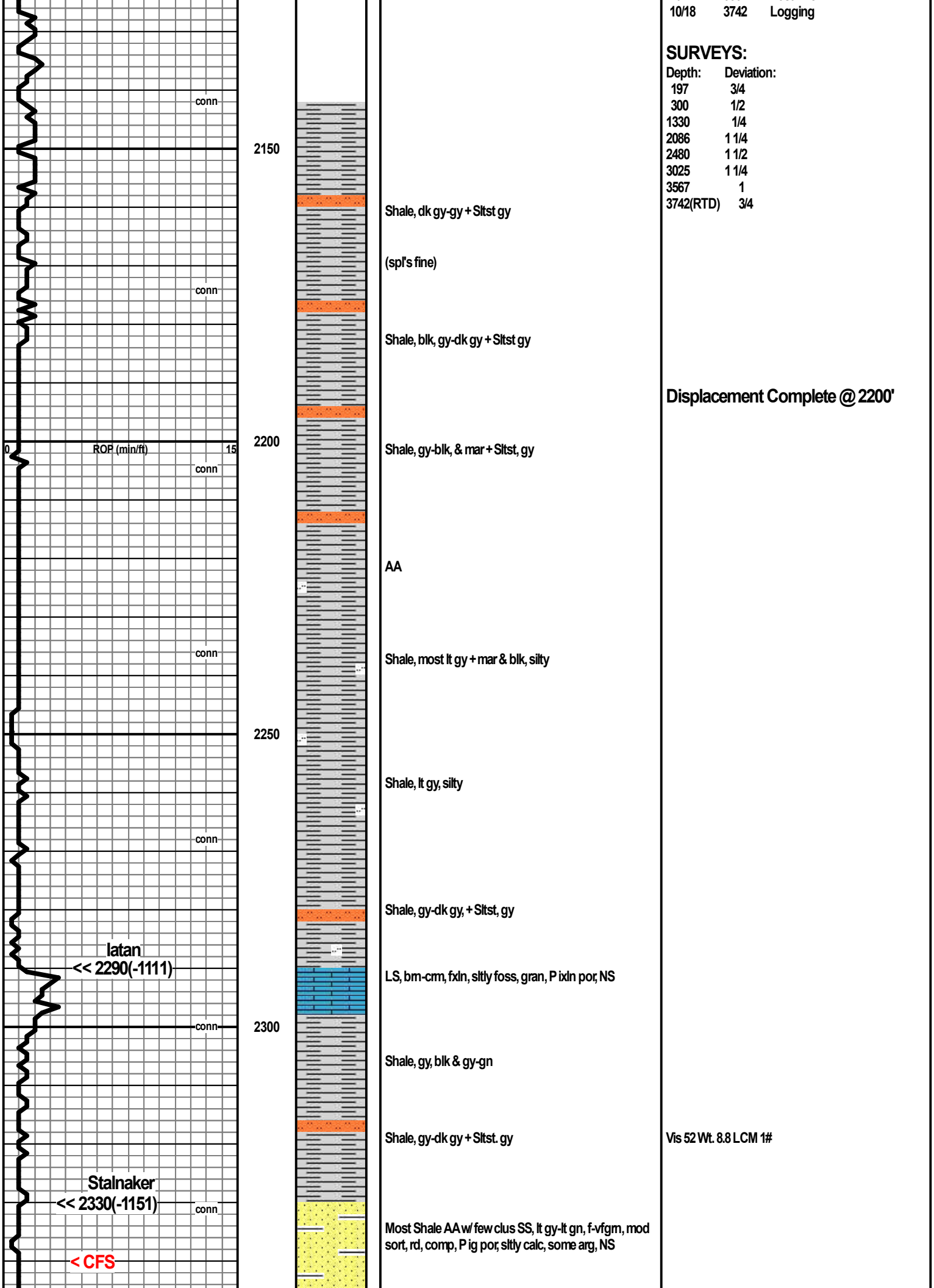
Anhy	Clyst	Gyp	Mrlst	Shgy
Bent	Coal	Igne	Salt	Sltst
Brec	Congl	Lmst	Shale	Ss
Cht	Dol	Meta	Shcol	Till

ROP (min/ft)	Depth	Lithology	Shows	Geological Descriptions	Remarks
0 ROP (min/ft) 15	2100				**Daily Penetration:**

conn

7:00 AM

Date:	Depth:	Activity:
10/09/2019	0	MIRU & Spud
10/10	197	Drilling
10/11	615	Drilling
10/12	1490	Drilling
10/13	2340	Drilling
10/14	2777	DST#1
10/15	3025	DST #2
10/16	3190	Drilling
10/17	3567	Lost Circ.



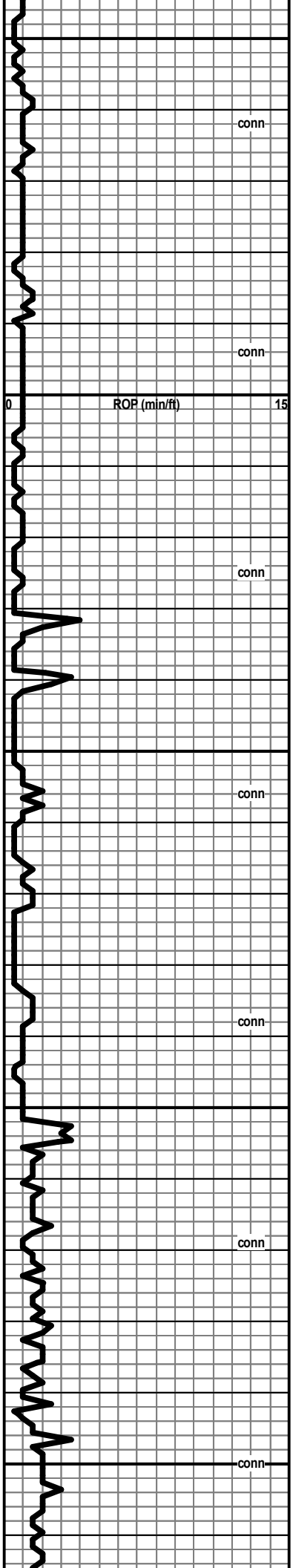
10/18	3742	Logging

SURVEYS:

Depth:	Deviation:
197	3/4
300	1/2
1330	1/4
2086	1 1/4
2480	1 1/2
3025	1 1/4
3567	1
3742(RTD)	3/4

Displacement Complete @ 2200'

Vis 52 Wt. 8.8 LCM 1#



2350

(2380 spl) SS, gy-tan, fgrn, mod-well sort, rd-sub ang, comp-fri, F-G ig por, SSFO, FS gas bubb, dull fluor, fnt odor

SS, tan-lt gy, f-vfgrn, mod-well sort, sub rd-rd, comp, F-P ig por, sltly glauc, NS + Shale, gy-gn

SS, wh, fgrn, sub rd, well sort, blk shale incl, P ig por, NS + Shale, gy-gn

2400

SS, tan-clr qtz, f-mgrn, mod-well sort, rd-sub rd, fri, F-G ig por, NS

Vis 60 Wt 8.6 Fil 8.0 PH 11.5
Chl 800 LCM 2.5#
10/13/2019 @ 2418'

SS AA + Shale, gy & lt gn

Most SS, gy-tan, f-mgrn, mod-well sort, sub rd, comp-fri, F ig por, NS

2450

SS, gy-tan, f-mgrn, mod sort, rd-sub rd, comp, F ig por, NS + Shale gy

Inc. Shale, gy-gn

SS, crm-gy-clr qtz, f-mgrn, mod-well sort, rd-sub rd, comp-fri, F-G ig por, ? spt'd stn, NSFO, N fluor, fnt odor

SS, crm-clr qtz, f-mgrn, mod sort, rd, fri, F-G ig por, NS

2500

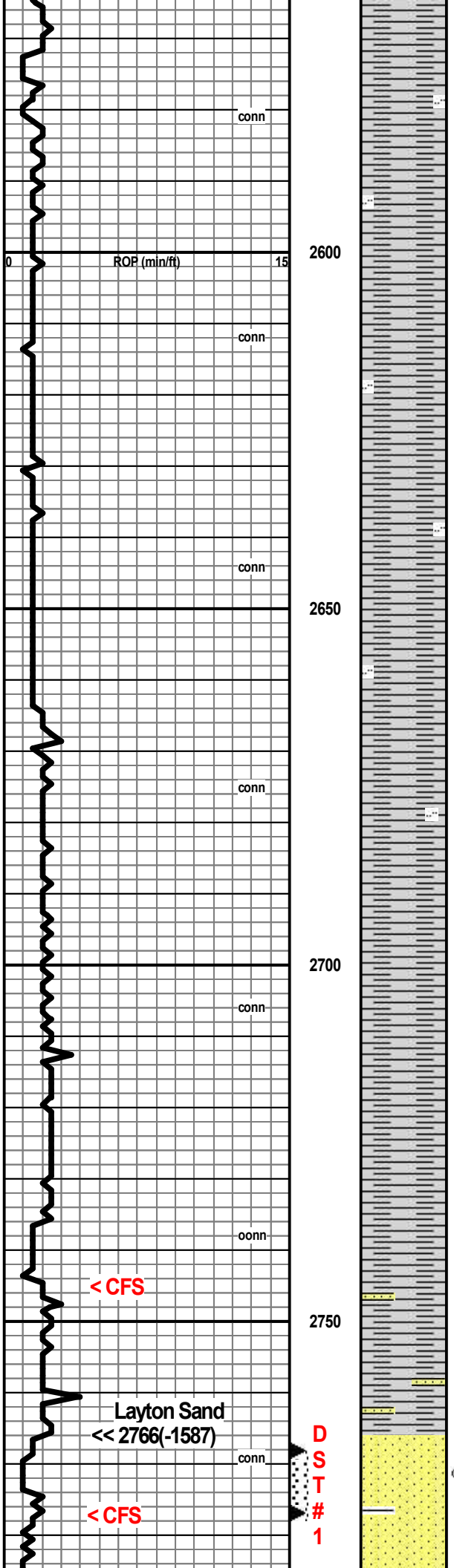
Shale, gy-blk, some silty + SS AA

Shale, gy-blk + SS, gy-tan, f-vfgrn, sub rd, mod-well sort, comp-fri, some arg, F-P ig por, NS

Shale & SS AA

2550

Most Shale, gy-blk



Shale, gy-blk, some silty

Shale, gy-blk

Vis 51 Wt 8.8 LCM 2#

Shale, gy-blk, some silty

Most Shale, gy-blk, silty + Sltst, gy

Shale, gy-dk gy & blk

Shale, blk, dk gy & gy-gn

Shale, blk-dk gy

AA

Vis 50 Wt 8.8 LCM 2#

Most Shale, blk-dk gy

Ran 15 stand short trip prior to DST #1

Pipe Strap @ 2777, .84 short

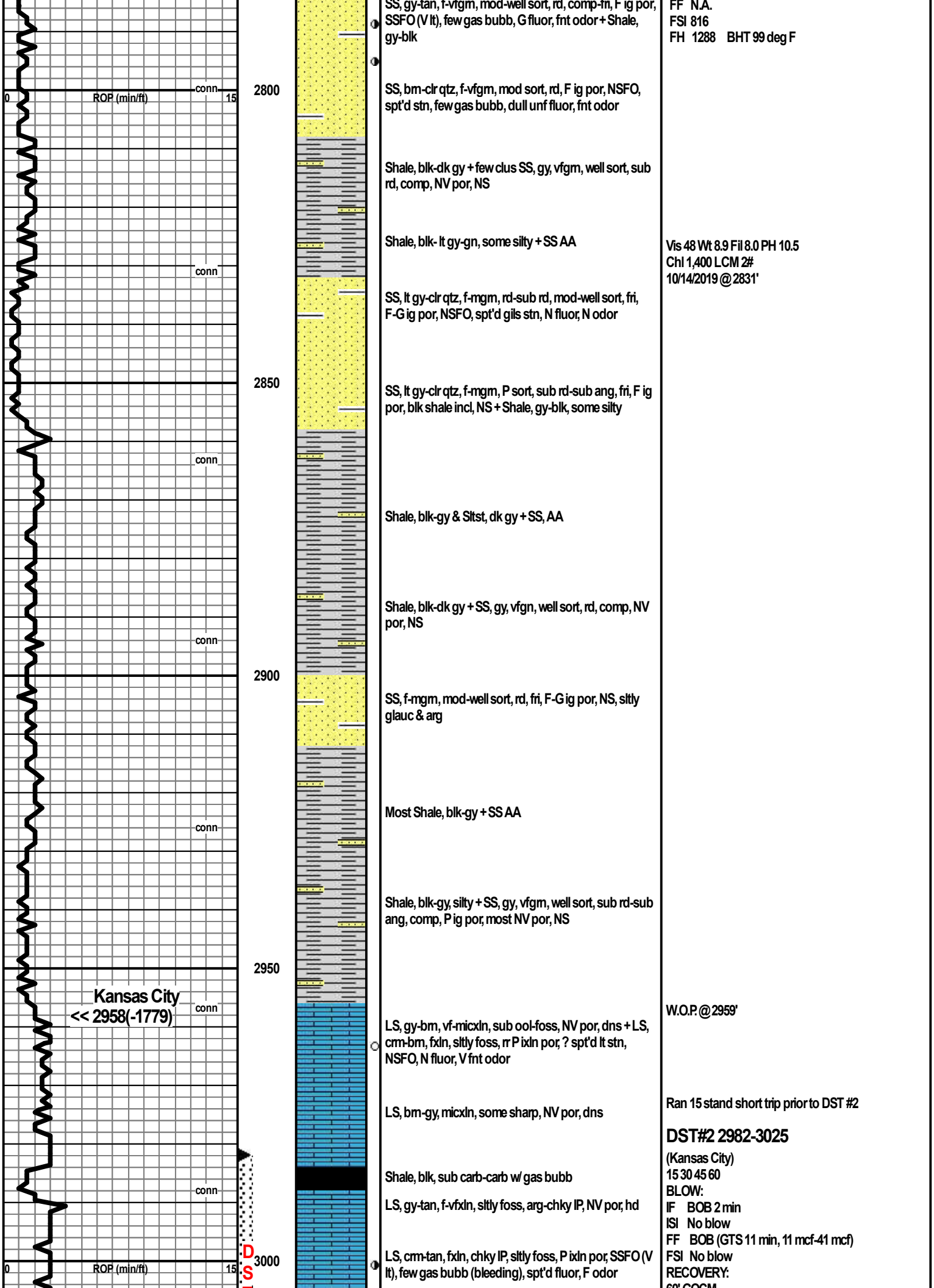
Shale, blk, dk gy + few clus SS. crm-clr qtz-gy, f-mgm, well sort, sub rd, fri, F ig por, NS (slough ?)

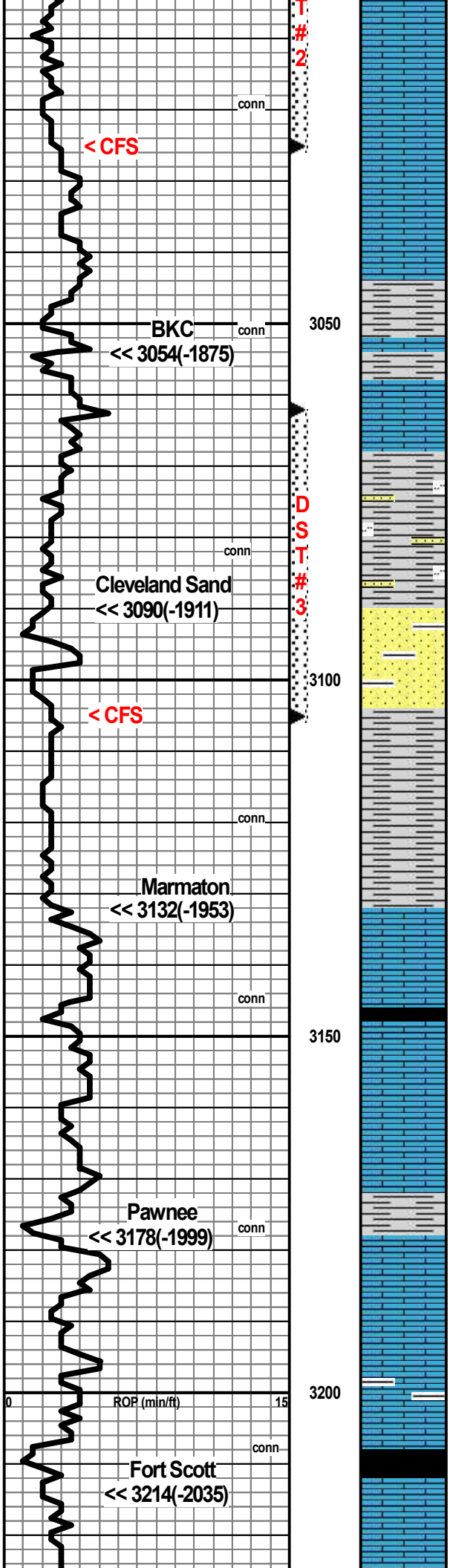
DST#1 2768-2777

(Layton Sand)
30 45 30 45
BLOW:
IF 2 1/2" decreasing to 1"
ISI No blow
FF No blow
FSI No blow
(TOOL SLID & PLUGGED)
RECOVERY: 15' M (100%m)
IH 1305
IF N.A.
ISI 1203(?)

SS, brn-clr qtz, f-mgm, mod-well sort, rd-sub rd, fri, F-G ig por, FSFO (V lt), few gas bubb, G fluor, G odor + Shale, gy-blk

(trip spl's, most shale)


0
ROP (min/ft)
15
conn
conn
conn
conn
conn
conn
2800
2850
2900
2950
3000
Kansas City
<< 2958(-1779)
DST#2
SS, gy-tan, f-vfgm, mod-well sort, rd, comp-fri, F ig por, SSFO (V lt), few gas bubb, G fluor, fnt odor + Shale, gy-blk
SS, brn-clr qtz, f-vfgm, mod sort, rd, F ig por, NSFO, spt'd stn, few gas bubb, dull unf fluor, fnt odor
Shale, blk-dk gy + few clus SS, gy, vfgm, well sort, sub rd, comp, NV por, NS
Shale, blk- lt gy-gn, some silty + SS AA
SS, lt gy-clr qtz, f-mgm, rd-sub rd, mod-well sort, fri, F-G ig por, NSFO, spt'd gils stn, N fluor, N odor
SS, lt gy-clr qtz, f-mgm, P sort, sub rd-sub ang, fri, F ig por, blk shale incl, NS + Shale, gy-blk, some silty
Shale, blk-gy & Sltst, dk gy + SS, AA
Shale, blk-dk gy + SS, gy, vfgn, well sort, rd, comp, NV por, NS
SS, f-mgm, mod-well sort, rd, fri, F-G ig por, NS, sltly glauc & arg
Most Shale, blk-gy + SS AA
Shale, blk-gy, silty + SS, gy, vfgm, well sort, sub rd-sub ang, comp, P ig por, most NV por, NS
LS, gy-brn, vf-micxln, sub ool-foss, NV por, dns + LS, crm-brn, fxln, sltly foss, rr P ixln por, ? spt'd lt stn, NSFO, N fluor, V fnt odor
LS, brn-gy, micxln, some sharp, NV por, dns
Shale, blk, sub carb-carb w/ gas bubb
LS, gy-tan, f-vfxln, sltly foss, arg-chky lP, NV por, hd
LS, crm-tan, fxln, chky lP, sltly foss, P ixln por, SSFO (V lt), few gas bubb (bleeding), spt'd fluor, F odor
FF N.A.
FSI 816
FH 1288 BHT 99 deg F
Vis 48 Wt 8.9 Fil 8.0 PH 10.5
Chl 1,400 LCM 2#
10/14/2019 @ 2831'
W.O.P. @ 2959'
Ran 15 stand short trip prior to DST #2
DST#2 2982-3025
(Kansas City)
15 30 45 60
BLOW:
IF BOB 2 min
ISI No blow
FF BOB (GTS 11 min, 11 mcf-41 mcf)
FSI No blow
RECOVERY:



LS, crm-tan, f-mxln, some crs-re xln, sub ool, P ixln por & few pc's P oom por, SSFO (V lt), FS gas bubb (bleeding), spt'd lt stn, spt'd fluor, G odor

LS, tan-gy, vf-micxln, sltly foss, NV por, dns + LS, off wh-gy, fxln, chky lP, NV por, hd

LS, brn-gy, vfxln, some sharp, sub ool, NV por, dns

Shale, blk (sub carb) - dk gy + LS, brn, vf-micxln, sharp, NV por, dns

LS, crm-gy, fxln, chky lP, sub ool, NV por, hd + LS, lt gy-tan, vf-fxln, ool-foss, rr P ipart-pp por, NS, some chky

Shale, gy, blk & gn (sdy) + Sltst, gn

AA

SS, gy-gn, f-mgrn, sub rd-sub ang, mod sort, glauc & arg, most comp, sltly calc, P ig por, SSFO (V lt), FS gas bubb, dull spt'd fluor, F odor

Shale, dk gy, gy-gn & mar

Shale, gy-gn, sft

LS, tan-off wh, f-vfxln, sub chky, sltlly foss, NV por, hd

Shale, blk carb

LS, tan-gy, f-vfxln, sub ool, NV por, chky-dns

LS, gy-tan, vf-fxln, NV por, hd

Shale, blk, sub carb

LS, dk gy-brn, micxln, sltly foss, NV por, dns

LS, tan-off wh, f-vfxln, sub ool, chky, NV por, sft

LS, brn-tan, vfxln, NV por, chky-dns

Shale, blk carb

LS, crm-off wh, fxln, chky, ool-foss, P ixln por, NS

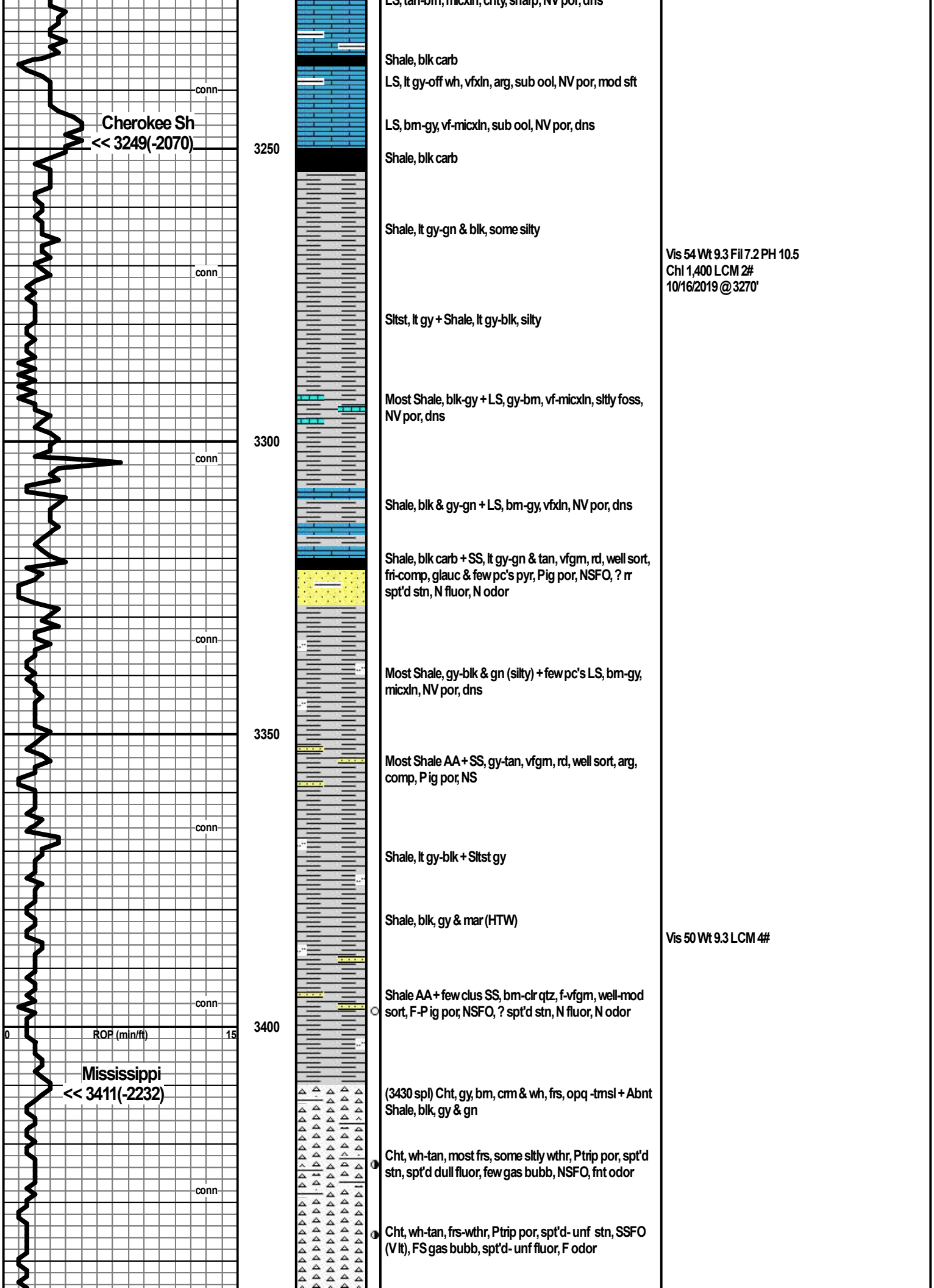
LS, tan-brn, micxln, chty, sharp, NV por, dns

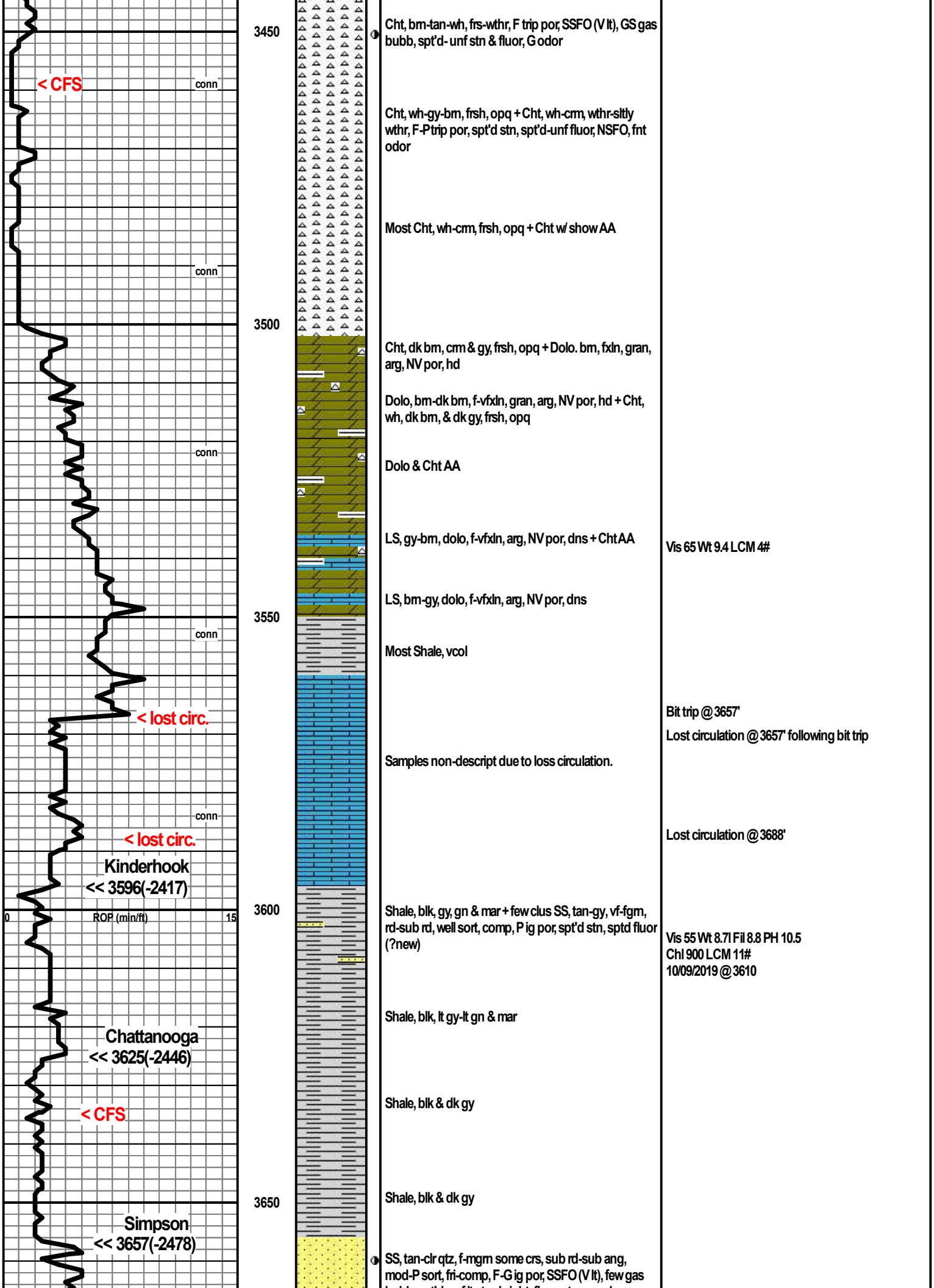
60' GOCM
(6%g 11%o 83%m)
65' G&OCWM
(10%g 13%o 13%w 64%m)
125' TOTAL FLUID
IH 1454
IF 38 - 48
ISI 361
FF 42 - 66
ISI 360
FH 1410 BHT 104 deg F

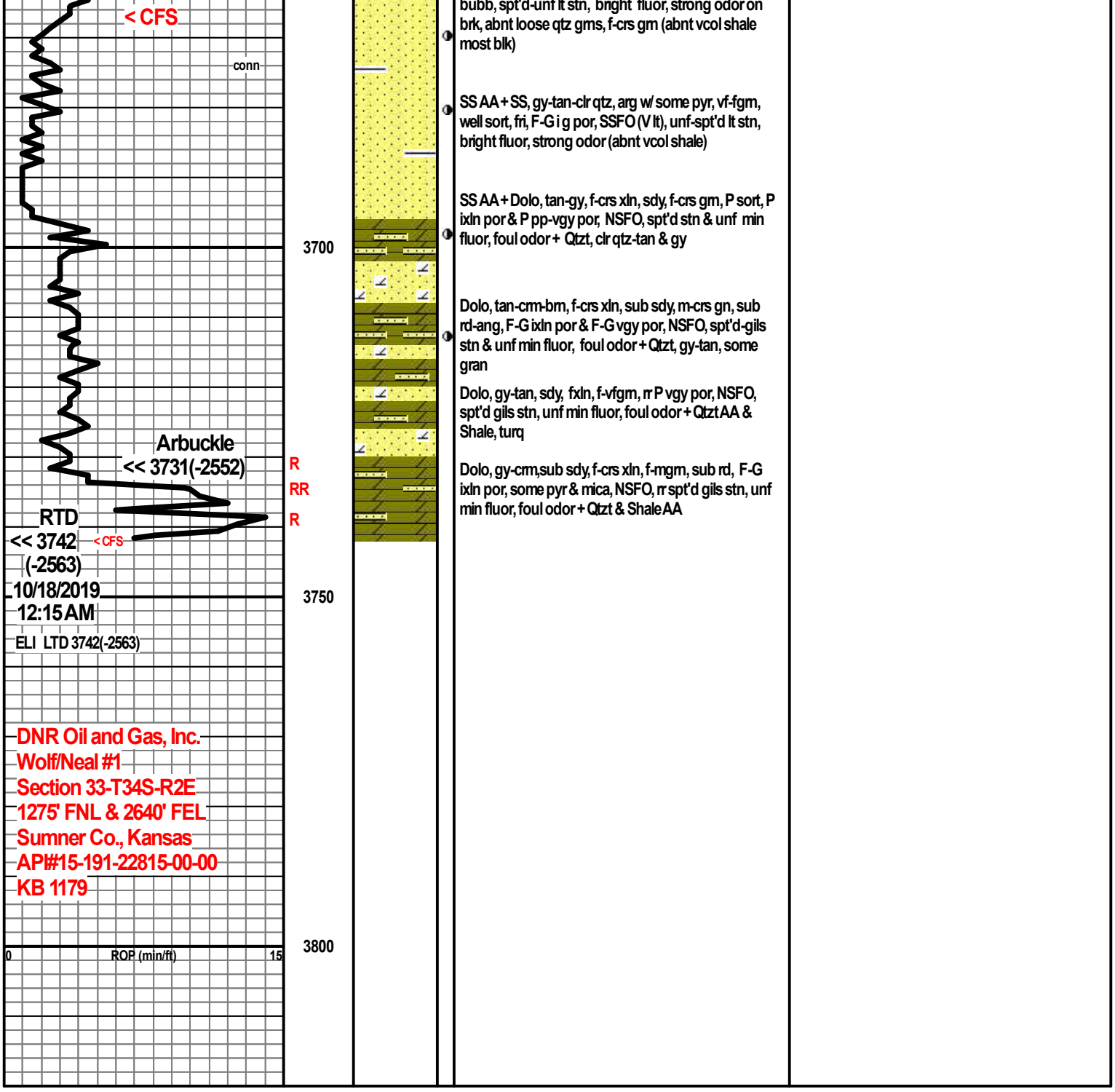
Vis 44 Wt 9.2 Fil 8.0 PH 10.5
Chl 2,000 LCM 1.5#
10/15/2019 @ 3026'

DST#3 3062-3105
(Cleveland Sand)
30 45 45 60
BLOW:
IF Weak bldg to 13"
ISI No blow
FF Weak bldg to 9"
FSI No blow
RECOVERY:
240' GIP
15' oil specked mud
IH 1500
IF 13 - 13
ISI 127
FF 16 - 17
FSI 157
FH 1467 BHT 107 deg F

Vis 56 Wt 9.1 LCM 3#


LS, tan-brn, micxln, chty, sharp, NV por, dns
Shale, blk carb
LS, lt gy-off wh, vfxln, arg, sub ool, NV por, mod sft
LS, brn-gy, vf-micxln, sub ool, NV por, dns
Shale, blk carb
Shale, lt gy-gn & blk, some silty
Sltst, lt gy + Shale, lt gy-blk, silty
Most Shale, blk-gy + LS, gy-brn, vf-micxln, sltly foss, NV por, dns
Shale, blk & gy-gn + LS, brn-gy, vfxln, NV por, dns
Shale, blk carb + SS, lt gy-gn & tan, vfgrn, rd, well sort, fri-comp, glauc & few pc's pyr, Pig por, NSFO, ? rr spt'd stn, N fluor, N odor
Most Shale, gy-blk & gn (silty) + few pc's LS, brn-gy, micxln, NV por, dns
Most Shale AA + SS, gy-tan, vfgrn, rd, well sort, arg, comp, P ig por, NS
Shale, lt gy-blk + Sltst gy
Shale, blk, gy & mar (HTW)
Shale AA + few clus SS, brn-clr qtz, f-vfgrn, well-mod sort, F-P ig por, NSFO, ? spt'd stn, N fluor, N odor
(3430 spl) Cht, gy, brn, crm & wh, frs, opq -tmsl + Abnt Shale, blk, gy & gn
Cht, wh-tan, most frs, some sltly wthr, Ptrip por, spt'd stn, spt'd dull fluor, few gas bubb, NSFO, fnt odor
Cht, wh-tan, frs-wthr, Ptrip por, spt'd- unf stn, SSFO (V lt), FS gas bubb, spt'd- unf fluor, F odor
Vis 54 Wt 9.3 Fil 7.2 PH 10.5
Chl 1,400 LCM 2#
10/16/2019 @ 3270'
Vis 50 Wt 9.3 LCM 4#
conn
Cherokee Sh
<< 3249(-2070)
3250
3300
3350
3400
0
ROP (min/ft)
15
Mississippi
<< 3411(-2232)


3450
3500
3550
3600
3650
< CFS
conn
conn
conn
conn
< lost circ.
< lost circ.
Kinderhook
<< 3596(-2417)
0
ROP (min/ft)
15
Chattanooga
<< 3625(-2446)
< CFS
Simpson
<< 3657(-2478)
Cht, brn-tan-wh, frs-wthr, F trip por, SSFO (V lt), GS gas bubb, spt'd- unf stn & fluor, G odor
Cht, wh-gy-brn, frsh, opq + Cht, wh-crm, wthr-sltly wthr, F-P trip por, spt'd stn, spt'd-unf fluor, NSFO, fnt odor
Most Cht, wh-crm, frsh, opq + Cht w/ show AA
Cht, dk brn, crm & gy, frsh, opq + Dolo. brn, fxln, gran, arg, NV por, hd
Dolo, brn-dk brn, f-vfxln, gran, arg, NV por, hd + Cht, wh, dk brn, & dk gy, frsh, opq
Dolo & Cht AA
LS, gy-brn, dolo, f-vfxln, arg, NV por, dns + Cht AA
Vis 65 Wt 9.4 LCM 4#
LS, brn-gy, dolo, f-vfxln, arg, NV por, dns
Most Shale, vcol
Bit trip @ 3657'
Lost circulation @ 3657' following bit trip
Samples non-descript due to loss circulation.
Lost circulation @ 3688'
Shale, blk, gy, gn & mar + few clus SS, tan-gy, vf-fgrn, rd-sub rd, well sort, comp, P ig por, spt'd stn, sptd fluor (?new)
Vis 55 Wt 8.7 l Fil 8.8 PH 10.5
Chl 900 LCM 11#
10/09/2019 @ 3610
Shale, blk, lt gy-lt gn & mar
Shale, blk & dk gy
Shale, blk & dk gy
SS, tan-clr qtz, f-mgrn some crs, sub rd-sub ang, mod-P sort, fri-comp, F-G ig por, SSFO (V lt), few gas


< CFS
conn
3700
Arbuckle
<< 3731(-2552)
R
RR
R
RTD
<< 3742
(-2563)
< CFS
10/18/2019
12:15 AM
ELI LTD 3742(-2563)
3750
DNR Oil and Gas, Inc.
Wolf/Neal #1
Section 33-T34S-R2E
1275' FNL & 2640' FEL
Sumner Co., Kansas
API#15-191-22815-00-00
KB 1179
3800
0
ROP (min/ft)
15
bubb, spt'd-unf lt stn, bright fluor, strong odor on brk, abnt loose qtz gms, f-crs gm (abnt vcol shale most blk)
SS AA + SS, gy-tan-clr qtz, arg w/ some pyr, vf-fgm, well sort, fri, F-G i g por, SSFO (V lt), unf-spt'd lt stn, bright fluor, strong odor (abnt vcol shale)
SS AA + Dolo, tan-gy, f-crs xln, sdy, f-crs gm, P sort, P ixln por & P pp-vgy por, NSFO, spt'd stn & unf min fluor, foul odor + Qtzt, clr qtz-tan & gy
Dolo, tan-crm-brn, f-crs xln, sub sdy, m-crs gn, sub rd-ang, F-G ixln por & F-G vgy por, NSFO, spt'd-gils stn & unf min fluor, foul odor + Qtzt, gy-tan, some gran
Dolo, gy-tan, sdy, fxln, f-vfgm, rr P vgy por, NSFO, spt'd gils stn, unf min fluor, foul odor + Qtzt AA & Shale, turq
Dolo, gy-crm,sub sdy, f-crs xln, f-mgrn, sub rd, F-G ixln por, some pyr & mica, NSFO, rr spt'd gils stn, unf min fluor, foul odor + Qtzt & Shale AA

DRILL STEM TEST REPORT

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65406 **DST#: 2**

Test Start: 2019.10.15 @ 00:35:00

GENERAL INFORMATION:

Formation: **Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:25:40
Time Test Ended: 06:38:09

Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

Interval: 2982.00 ft (KB) To 3025.00 ft (KB) (TVD)
Total Depth: 3025.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

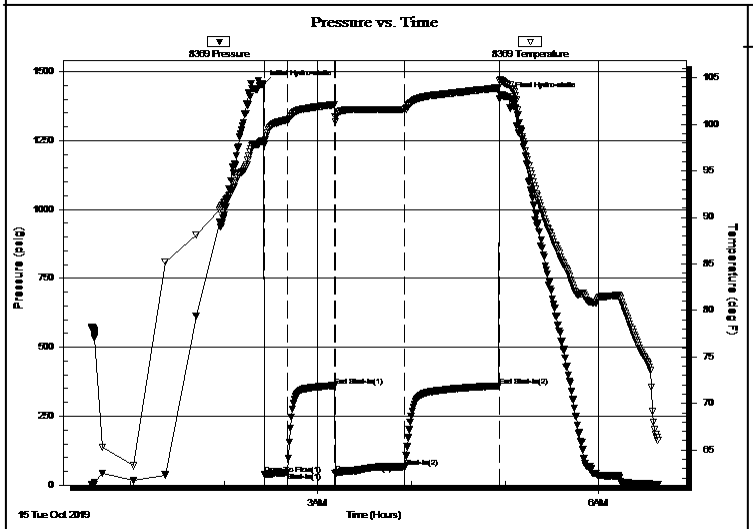
Reference Elevations: 1179.00 ft (KB)
1171.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8369 **Outside**

Press@RunDepth: 66.07 psig @ 2983.00 ft (KB)
Start Date: 2019.10.15 End Date: 2019.10.15
Start Time: 00:35:01 End Time: 06:38:10

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2019.10.15 @ 02:24:50
Time Off Btm: 2019.10.15 @ 05:02:09

TEST COMMENT: IF - Weak blow building to strong blow 2 minutes into initial flow period. Continuing to build to 285 inches.
FF - Strong blow throughout final flow period. Gas to surface 11 minutes into final flow period.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1453.50	98.21	Initial Hydro-static
1	38.38	97.79	Open To Flow (1)
16	47.92	100.50	Shut-In(1)
46	360.56	102.10	End Shut-In(1)
47	41.64	100.83	Open To Flow (2)
91	66.07	101.60	Shut-In(2)
152	359.89	103.94	End Shut-In(2)
158	1409.55	104.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GO&WCM 10%G 13%O 13%W & 64%M	0.84
65.00	GOCM 6%G 11%O & 83%M	0.91

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	14.10	10.67
Last Gas Rate	0.25	5.90	32.20
Max. Gas Rate	0.13	14.10	10.67

DRILL STEM TEST REPORT

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65406 **DST#: 2**

Test Start: 2019.10.15 @ 00:35:00

GENERAL INFORMATION:

Formation: **Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:25:40
Time Test Ended: 06:38:09

Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

Interval: 2982.00 ft (KB) To 3025.00 ft (KB) (TVD)
Total Depth: 3025.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

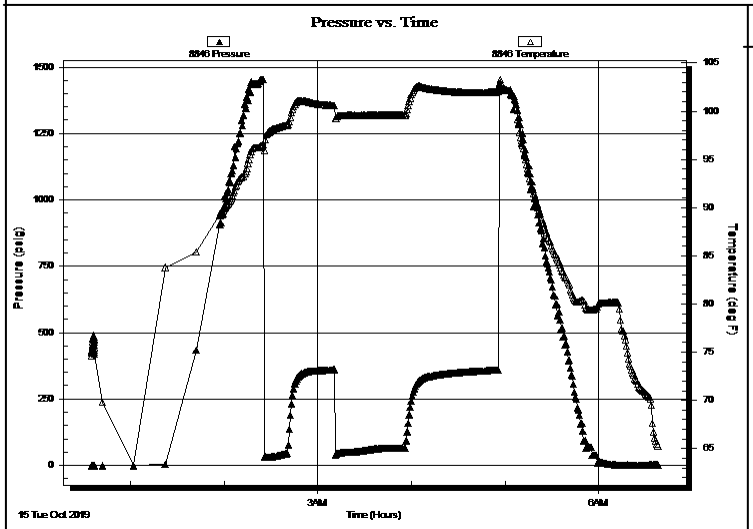
Reference Elevations: 1179.00 ft (KB)
1171.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8846 **Inside**

Press@RunDepth: psig @ 2983.00 ft (KB)
Start Date: 2019.10.15 End Date: 2019.10.15
Start Time: 00:35:01 End Time: 06:38:20

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF - Weak blow building to strong blow 2 minutes into initial flow period. Continuing to build to 285 inches.
FF - Strong blow throughout final flow period. Gas to surface 11 minutes into final flow period.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GO&WCM 10%G 13%O 13%W & 64%M	0.84
65.00	GOCM 6%G 11%O & 83%M	0.91

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	14.10	10.67
Last Gas Rate	0.25	5.90	32.20
Max. Gas Rate	0.13	14.10	10.67

DRILL STEM TEST REPORT

FLUID SUMMARY

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65406 **DST#: 2**

Test Start: 2019.10.15 @ 00:35:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1400.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GO&WCM 10%G 13%O 13%W & 64%M	0.842
65.00	GOCM 6%G 11%O & 83%M	0.912

Total Length: 125.00 ft Total Volume: 1.754 bbl

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

DRILL STEM TEST REPORT

GAS RATES

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65406 **DST#: 2**

Test Start: 2019.10.15 @ 00:35:00

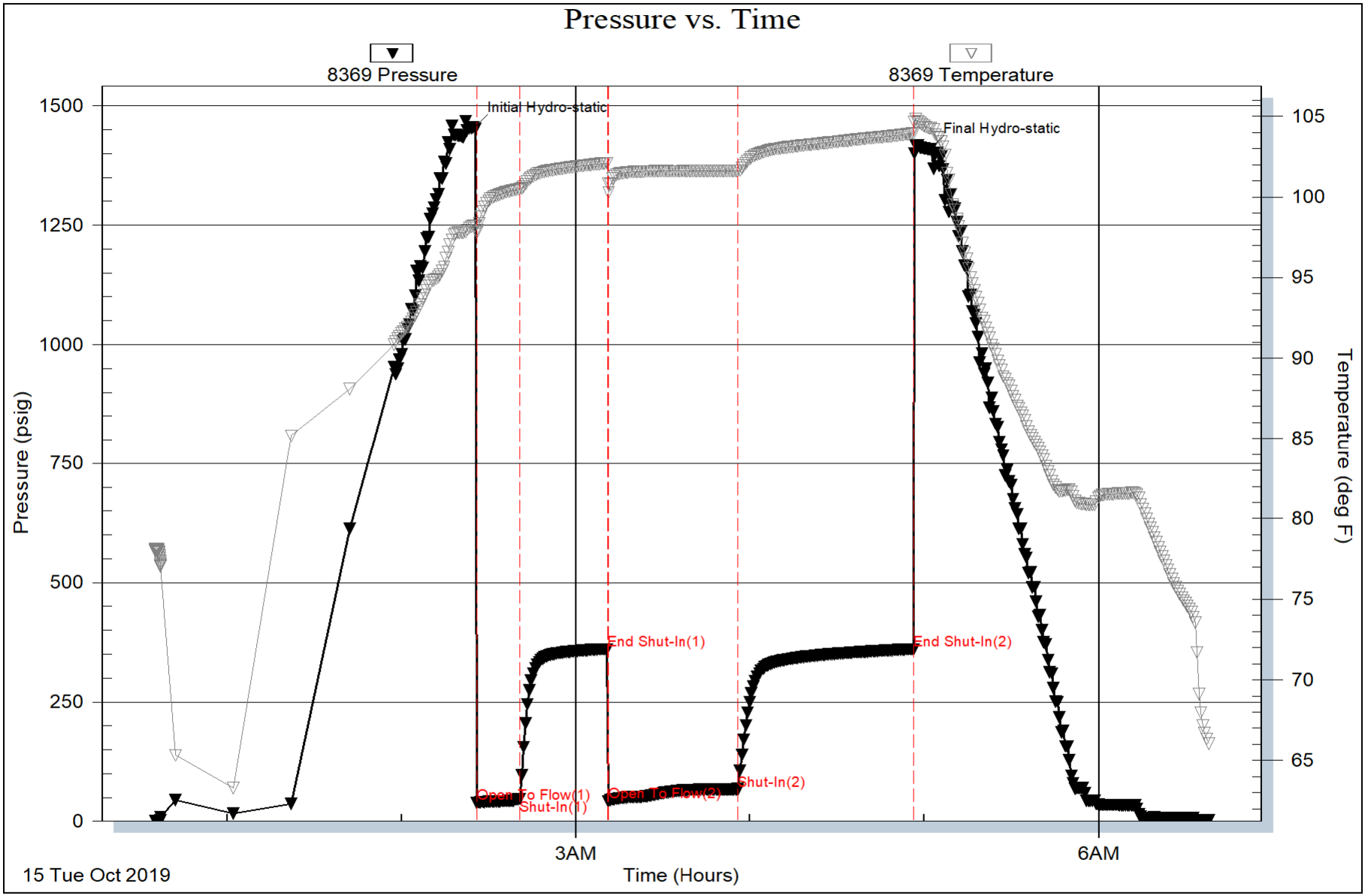
Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

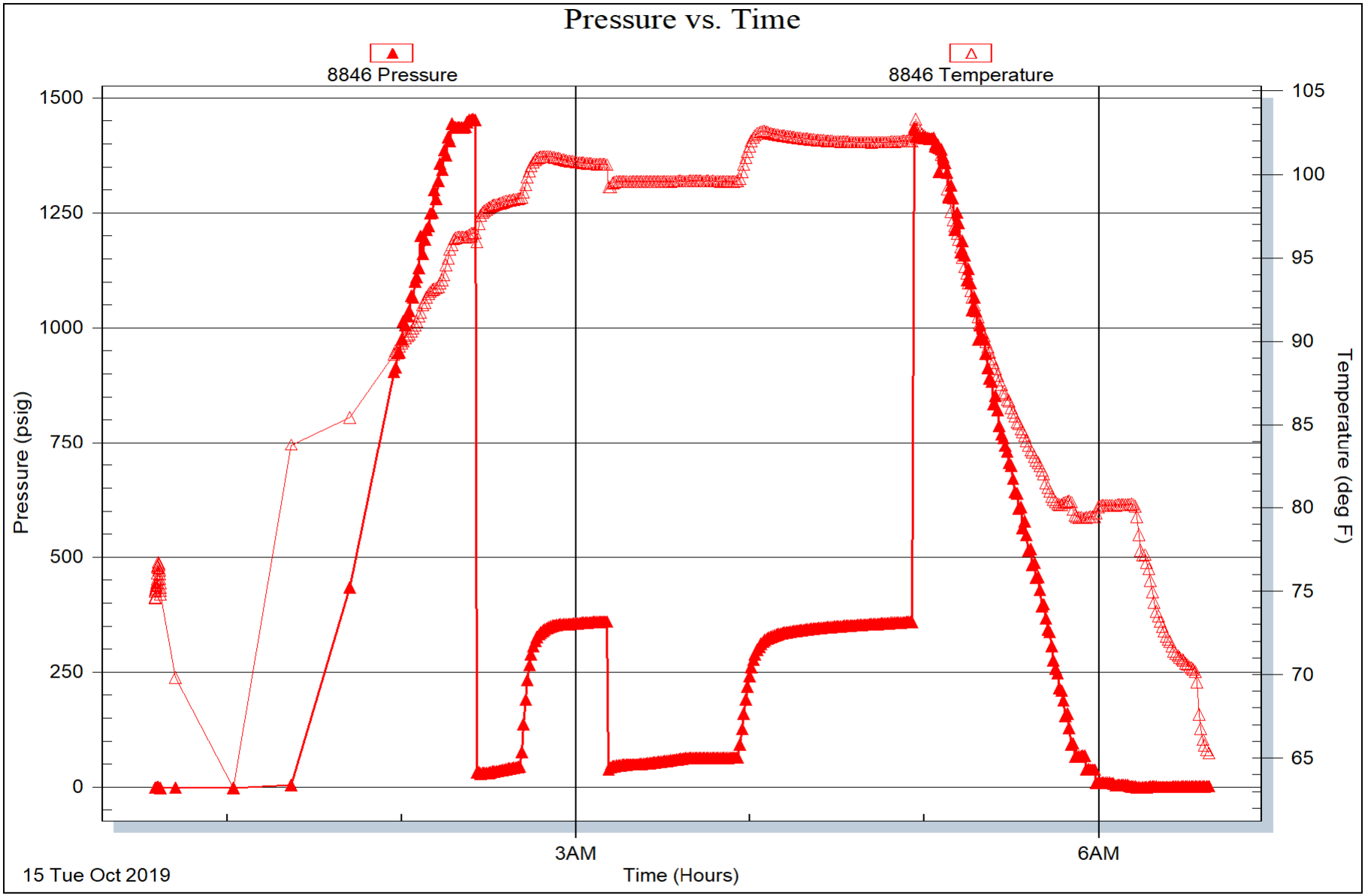
Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.13	14.10	10.67
2	20	0.25	11.60	41.25
2	30	0.25	7.30	34.42
2	34	0.25	5.90	32.20

Serial #: 8369 **Outside** DNR Oil and Gas, Inc. Wolf/Neal #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 65406 Printed: 2019.10.15 @ 07:37:39

Serial #: 8846 **Inside** DNR Oil and Gas, Inc. Wolf/Neal #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 65406 Printed: 2019.10.15 @ 07:37:39

DRILL STEM TEST REPORT

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65406 **DST#: 2**

Test Start: 2019.10.15 @ 00:35:00

GENERAL INFORMATION:

Formation: **Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:25:40
Time Test Ended: 06:38:09

Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

Interval: 2982.00 ft (KB) To 3025.00 ft (KB) (TVD)
Total Depth: 3025.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

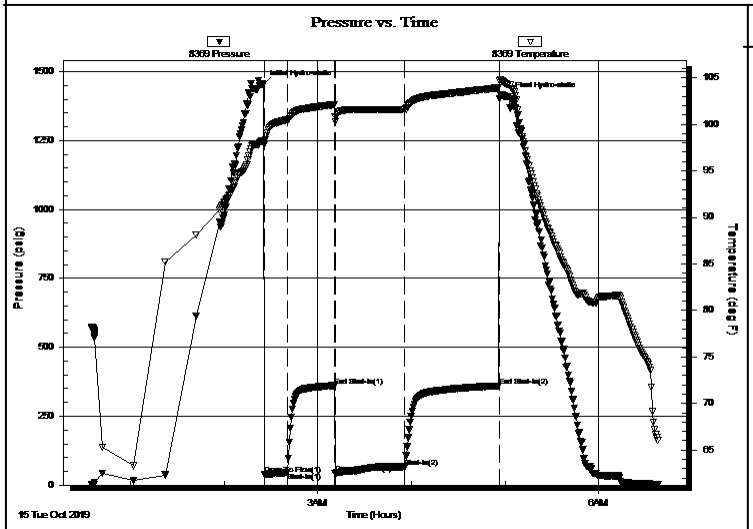
Reference Elevations: 1179.00 ft (KB)
1171.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8369 **Outside**

Press@RunDepth: 66.07 psig @ 2983.00 ft (KB)
Start Date: 2019.10.15 End Date: 2019.10.15
Start Time: 00:35:01 End Time: 06:38:10

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm: 2019.10.15 @ 02:24:50
Time Off Btm: 2019.10.15 @ 05:02:09

TEST COMMENT: IF - Weak blow building to strong blow 2 minutes into initial flow period. Continuing to build to 285 inches.
FF - Strong blow throughout final flow period. Gas to surface 11 minutes into final flow period.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1453.50	98.21	Initial Hydro-static
1	38.38	97.79	Open To Flow (1)
16	47.92	100.50	Shut-In(1)
46	360.56	102.10	End Shut-In(1)
47	41.64	100.83	Open To Flow (2)
91	66.07	101.60	Shut-In(2)
152	359.89	103.94	End Shut-In(2)
158	1409.55	104.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GO&WCM 10%G 13%O 13%W & 64%M	0.84
65.00	GOCM 6%G 11%O & 83%M	0.91

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	14.10	10.67
Last Gas Rate	0.25	5.90	32.20
Max. Gas Rate	0.13	14.10	10.67

DRILL STEM TEST REPORT

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65406 **DST#: 2**

Test Start: 2019.10.15 @ 00:35:00

GENERAL INFORMATION:

Formation: **Kansas City**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 02:25:40
Time Test Ended: 06:38:09

Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

Interval: 2982.00 ft (KB) To 3025.00 ft (KB) (TVD)
Total Depth: 3025.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

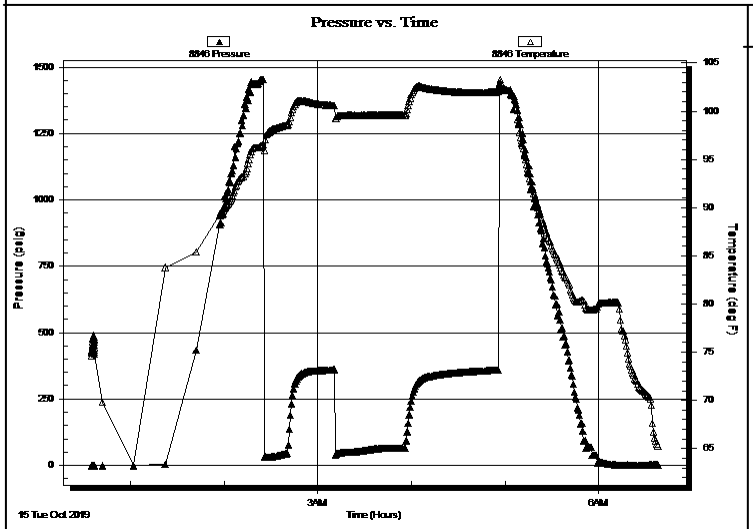
Reference Elevations: 1179.00 ft (KB)
1171.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8846 **Inside**

Press@RunDepth: psig @ 2983.00 ft (KB)
Start Date: 2019.10.15 End Date: 2019.10.15
Start Time: 00:35:01 End Time: 06:38:20

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF - Weak blow building to strong blow 2 minutes into initial flow period. Continuing to build to 285 inches.
FF - Strong blow throughout final flow period. Gas to surface 11 minutes into final flow period.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GO&WCM 10%G 13%O 13%W & 64%M	0.84
65.00	GOCM 6%G 11%O & 83%M	0.91

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	14.10	10.67
Last Gas Rate	0.25	5.90	32.20
Max. Gas Rate	0.13	14.10	10.67

DRILL STEM TEST REPORT

FLUID SUMMARY

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65406 **DST#: 2**

Test Start: 2019.10.15 @ 00:35:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	48.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	1400.00 ppm				
Filter Cake:	inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	GO&WCM 10%G 13%O 13%W & 64%M	0.842
65.00	GOCM 6%G 11%O & 83%M	0.912

Total Length: 125.00 ft Total Volume: 1.754 bbl

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

DRILL STEM TEST REPORT

GAS RATES

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65406 **DST#: 2**

Test Start: 2019.10.15 @ 00:35:00

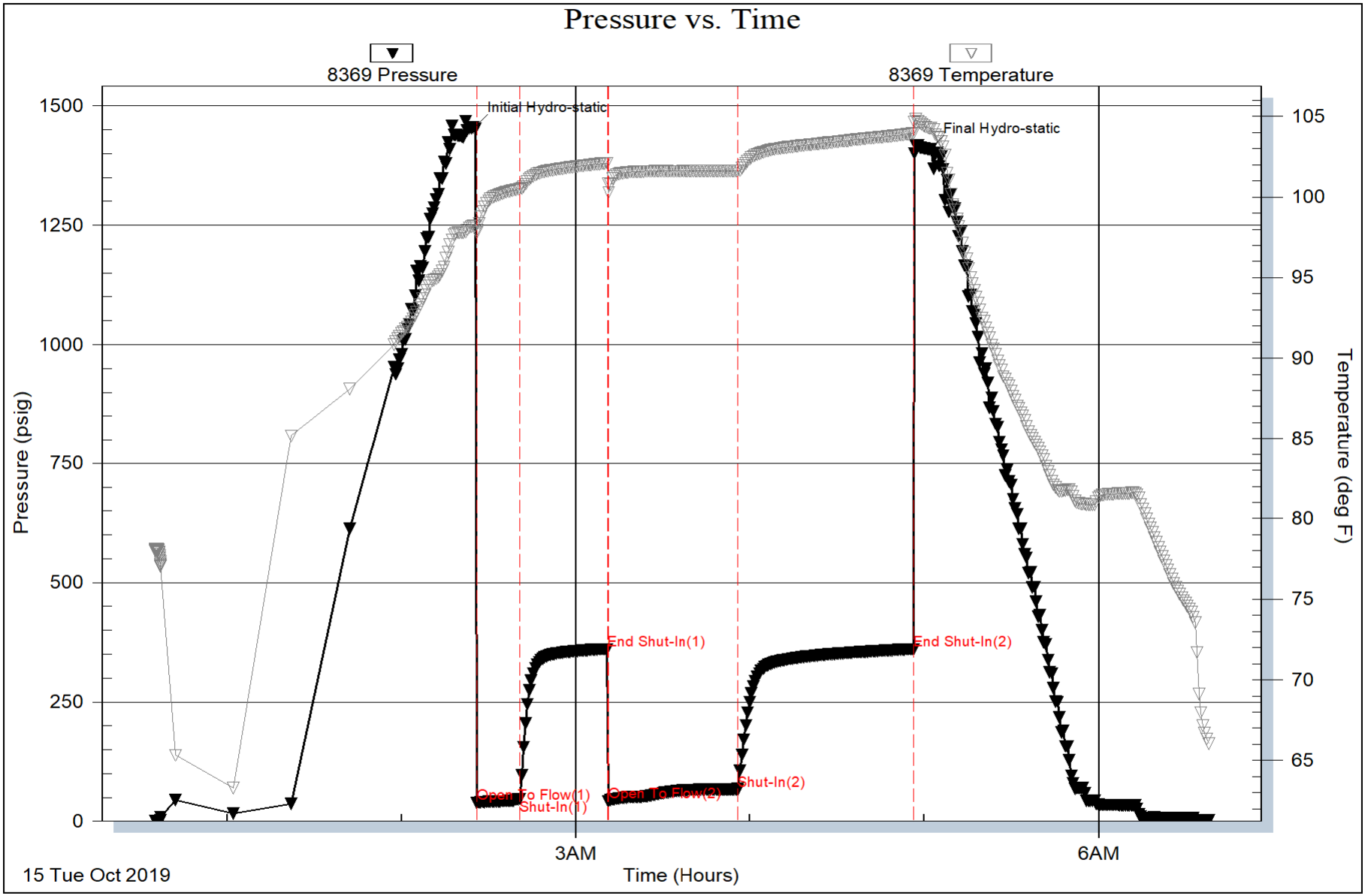
Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

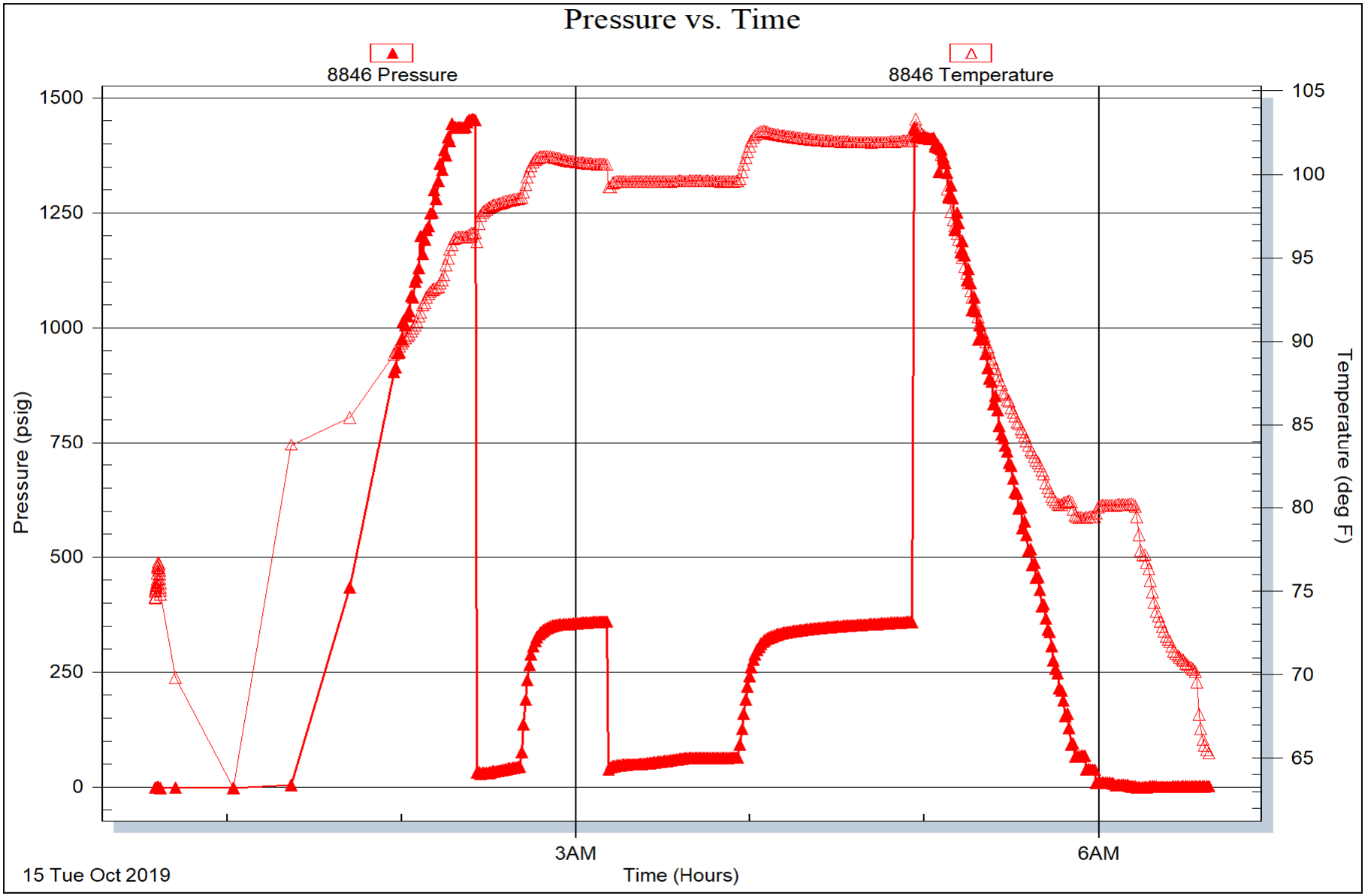
Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.13	14.10	10.67
2	20	0.25	11.60	41.25
2	30	0.25	7.30	34.42
2	34	0.25	5.90	32.20

Serial #: 8369 **Outside** DNR Oil and Gas, Inc. Wolf/Neal #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 65406 Printed: 2019.10.15 @ 07:37:39

Serial #: 8846 **Inside** DNR Oil and Gas, Inc. Wolf/Neal #1 DST Test Number: 2



Trilobite Testing, Inc Ref. No: 65406 Printed: 2019.10.15 @ 07:37:39

DRILL STEM TEST REPORT

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65407 **DST#: 3**

Test Start: 2019.10.15 @ 17:44:00

GENERAL INFORMATION:

Formation: **Cleveland Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:05:40
Time Test Ended: 23:34:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

Interval: 3062.00 ft (KB) To 3105.00 ft (KB) (TVD)
Total Depth: 3105.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

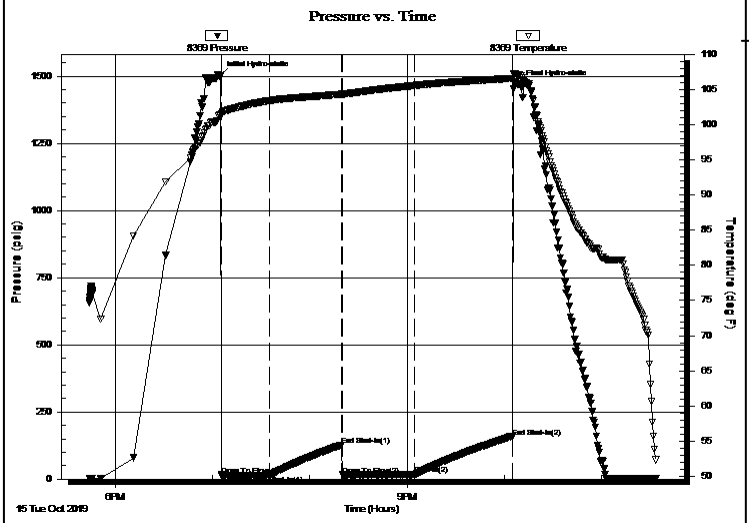
Reference Elevations: 1179.00 ft (KB)
1171.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8369 **Outside**

Press@RunDepth: 16.66 psig @ 3063.00 ft (KB)
Start Date: 2019.10.15 End Date: 2019.10.15
Start Time: 17:44:01 End Time: 23:34:00

Capacity: 8000.00 psig
Last Calib.: 2019.10.15
Time On Btm: 2019.10.15 @ 19:04:30
Time Off Btm: 2019.10.15 @ 22:09:20

TEST COMMENT: IF - Weak blow building to strong blow 24 minutes into initial flow period. Continuing to build to 13 inches.
FF - Weak blow building to 9 inches during final flow period.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1500.28	101.28	Initial Hydro-static
2	13.27	101.48	Open To Flow (1)
31	13.03	103.37	Shut-In(1)
76	127.48	104.30	End Shut-In(1)
76	15.92	104.27	Open To Flow (2)
121	16.66	105.54	Shut-In(2)
181	156.78	106.55	End Shut-In(2)
185	1467.43	107.01	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
15.00	OSM Tr O & 100%M	0.21
240.00	Gas in pipe 100%G	3.37

Gas Rates

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

DRILL STEM TEST REPORT

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65407 **DST#: 3**

Test Start: 2019.10.15 @ 17:44:00

GENERAL INFORMATION:

Formation: **Cleveland Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 19:05:40
Time Test Ended: 23:34:00

Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

Interval: 3062.00 ft (KB) To 3105.00 ft (KB) (TVD)
Total Depth: 3105.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair

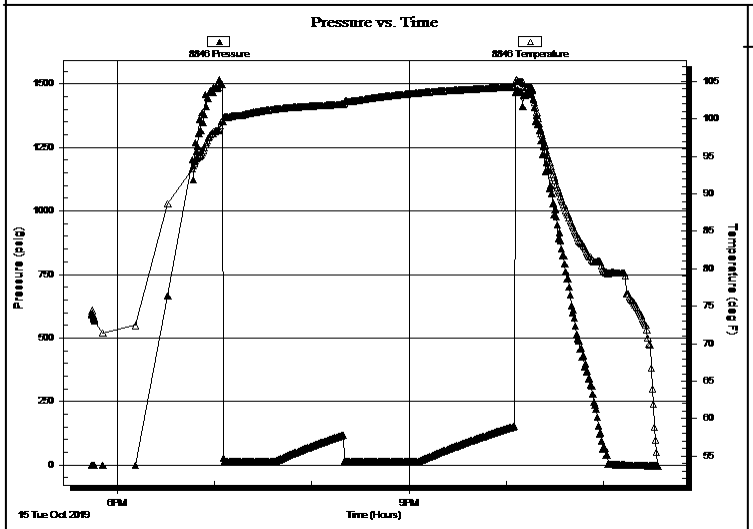
Reference Elevations: 1179.00 ft (KB)
1171.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8846 **Inside**

Press@RunDepth: psig @ 3063.00 ft (KB)
Start Date: 2019.10.15 End Date: 2019.10.15
Start Time: 17:44:01 End Time: 23:33:50

Capacity: 8000.00 psig
Last Calib.: 1899.12.30
Time On Btm:
Time Off Btm:

TEST COMMENT: IF - Weak blow building to strong blow 24 minutes into initial flow period. Continuing to build to 13 inches.
FF - Weak blow building to 9 inches during final flow period.



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
15.00	OSM Tr O & 100%M	0.21
240.00	Gas in pipe 100%G	3.37

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

DNR Oil and Gas, Inc.

P.O. Box 4507
Englewood, CO
80155-4507
ATTN: Charles Davis/Steve

33/34S/2E Sumner, KS

Wolf/Neal #1

Job Ticket: 65407 **DST#: 3**

Test Start: 2019.10.15 @ 17:44:00

Mud and Cushion Information

Mud Type:	Gel Chem	Cushion Type:		Oil API:	deg API
Mud Weight:	9.00 lb/gal	Cushion Length:	ft	Water Salinity:	ppm
Viscosity:	44.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	7.99 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2000.00 ppm				
Filter Cake:	inches				

Recovery Information

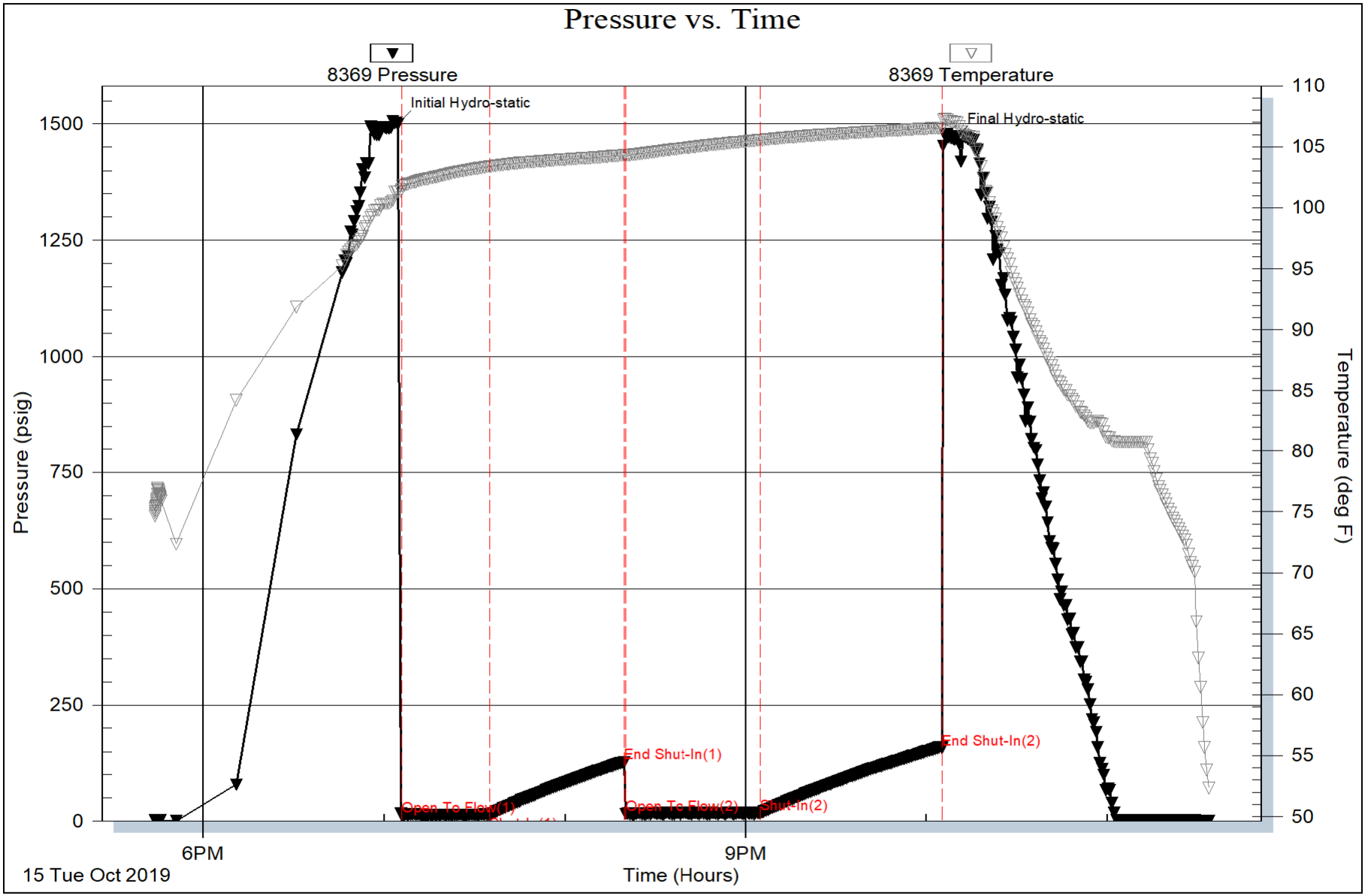
Recovery Table

Length ft	Description	Volume bbl
15.00	OSM Tr O & 100%M	0.210
240.00	Gas in pipe 100%G	3.367

Total Length: 255.00 ft Total Volume: 3.577 bbl

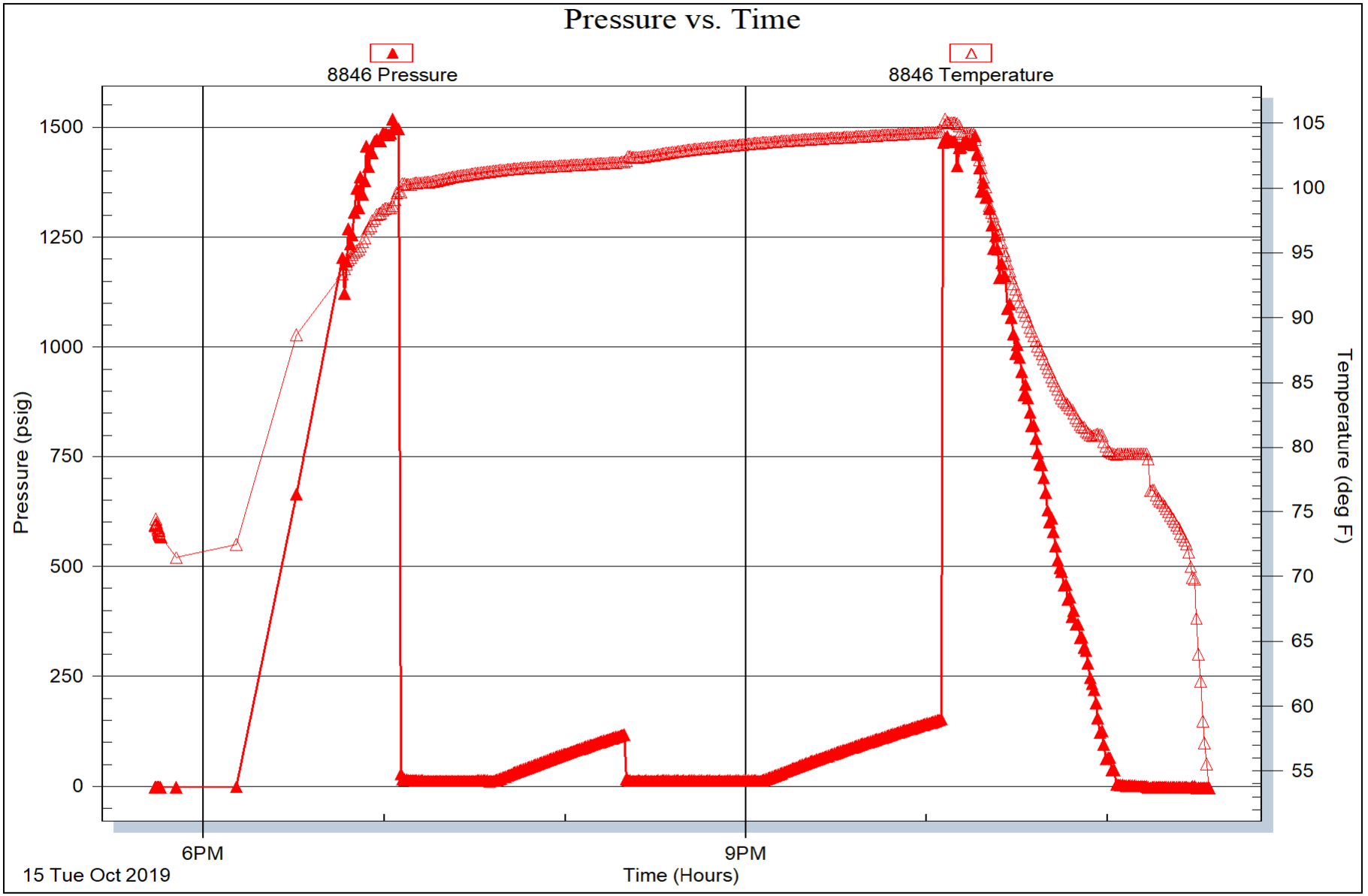
Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
Laboratory Name: Laboratory Location:
Recovery Comments:

Serial #: 8369 **Outside** DNR Oil and Gas, Inc. Wolf/Neal #1 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 65407 Printed: 2019.10.16 @ 07:59:41

Serial #: 8846 **Inside** DNR Oil and Gas, Inc. Wolf/Neal #1 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 65407 Printed: 2019.10.16 @ 07:59:41

Conservation Division
266 N. Main St., Ste. 220
Wichita, KS 67202-1513

Kansas
Corporation Commission

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

March 26, 2020

Charles B. Davis
DNR Oil and Gas, Inc.
PO BOX 4507
ENGLEWOOD, CO 80155-4507

Re: ACO-1
API 15-191-22815-00-00
WOLF/NEAL 1
N/2 Sec.33-34S-02E
Sumner County, Kansas

Dear Charles B. Davis:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 10/09/2019 and the ACO-1 was received on March 25, 2020 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department

DUAL INDUCTION LOG

Company DNR OIL & GAS, INC.
Well WOLF/NEAL #1
Field PADGETT
County SUMNER State KANSAS

Company DNR OIL & GAS, INC.
Well WOLF/NEAL #1
Field PADGETT
County SUMNER
State KANSAS

Location: API # : 15-191-22815-0000

1275' FNL & 2640' FEL

SEC 33 TWP 34S RGE 2E

Other Services
CDL/CNL/PE

Permanent Datum GROUND LEVEL Elevation 1171
Log Measured From KELLY BUSHING 8' A.G.L
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1179
D.F. 1177
G.L. 1171

Date	10/18/19		
Run Number	ONE		
Depth Driller	3742		
Depth Logger	3742		
Bottom Logged Interval	3740	700 - 900	
Top Log Interval	00		
Casing Driller	8 5/8" @ 300'		
Casing Logger	300'		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 900 PPM	
Density / Viscosity	8.7/55		
pH / Fluid Loss	10.5/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.45 @ 75F		
Rmf @ Meas. Temp	1.08 @ 75F		
Rmc @ Meas. Temp	1.74 @ 75F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.95 @ 114F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	114F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	STEVE DAVIS		

<<< Fold Here >>>

Comments

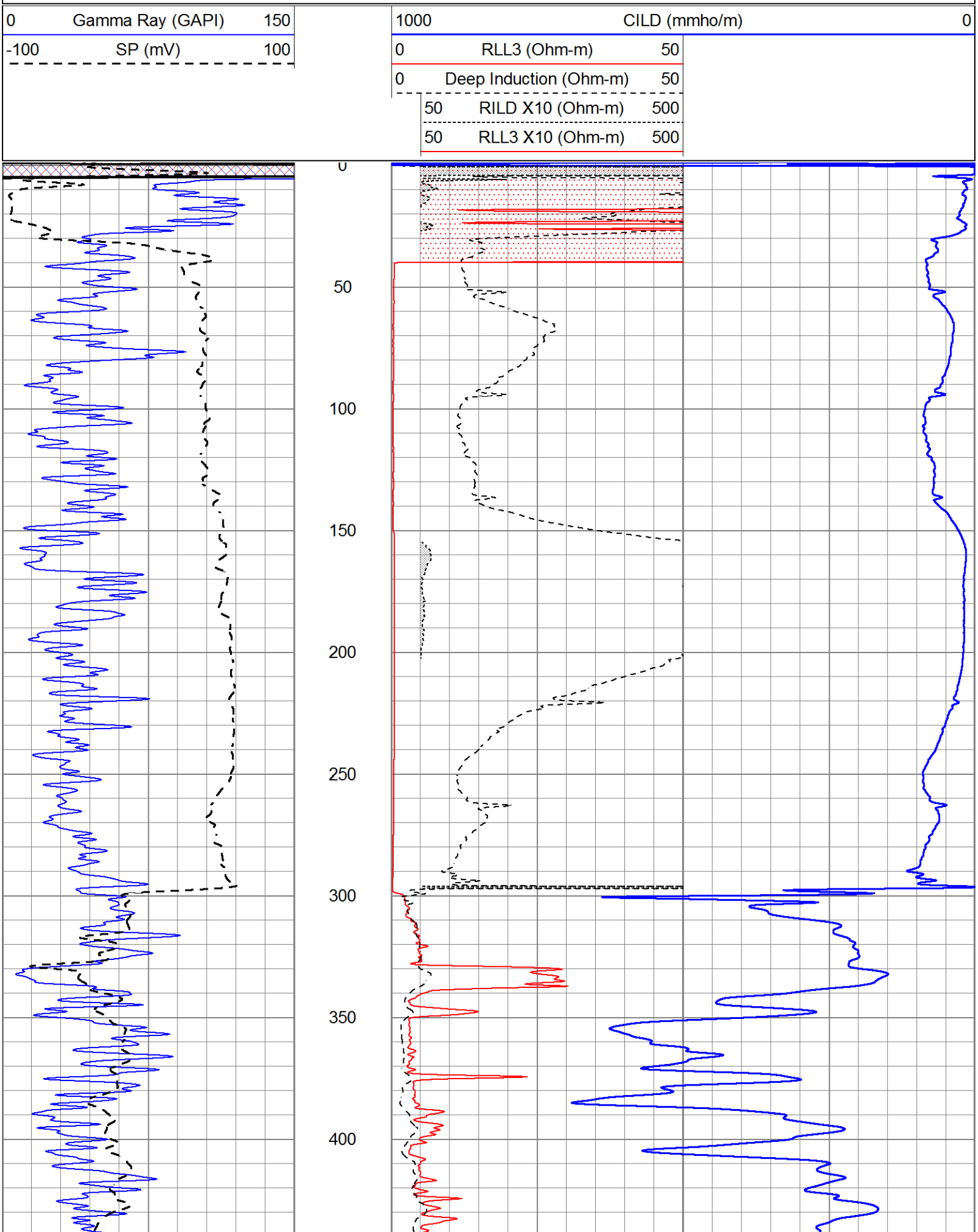
THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395

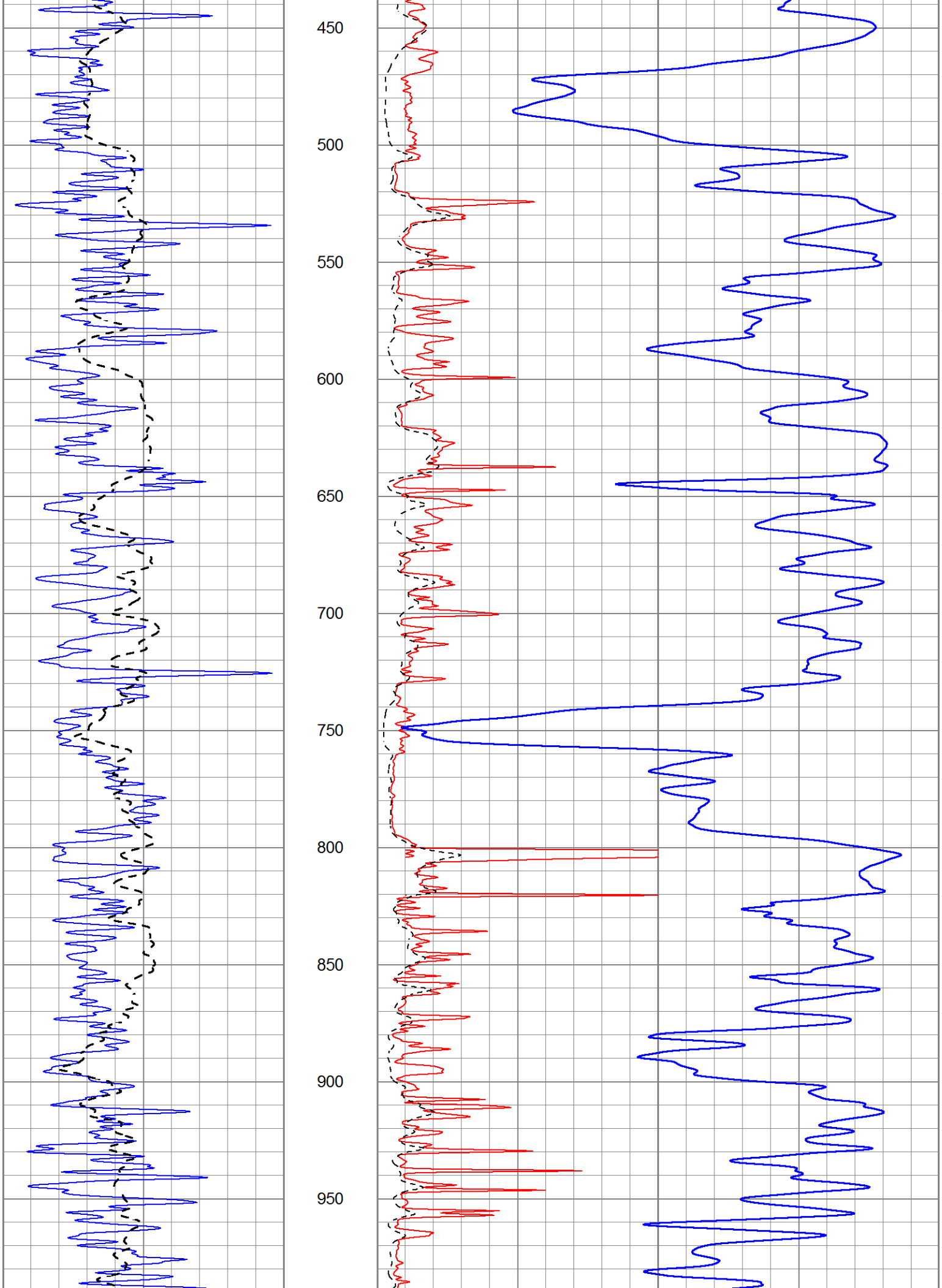
DIRECTIONS

I 35 & SOUTH HAVEN EXIT - 6 1/2 EAST - SOUTH INTO

MAIN SECTION

Database File	3999pe8.db
Dataset Pathname	pass3.3
Presentation Format	_dil2
Dataset Creation	Fri Oct 18 08:15:27 2019
Charted by	Depth in Feet scaled 1:600

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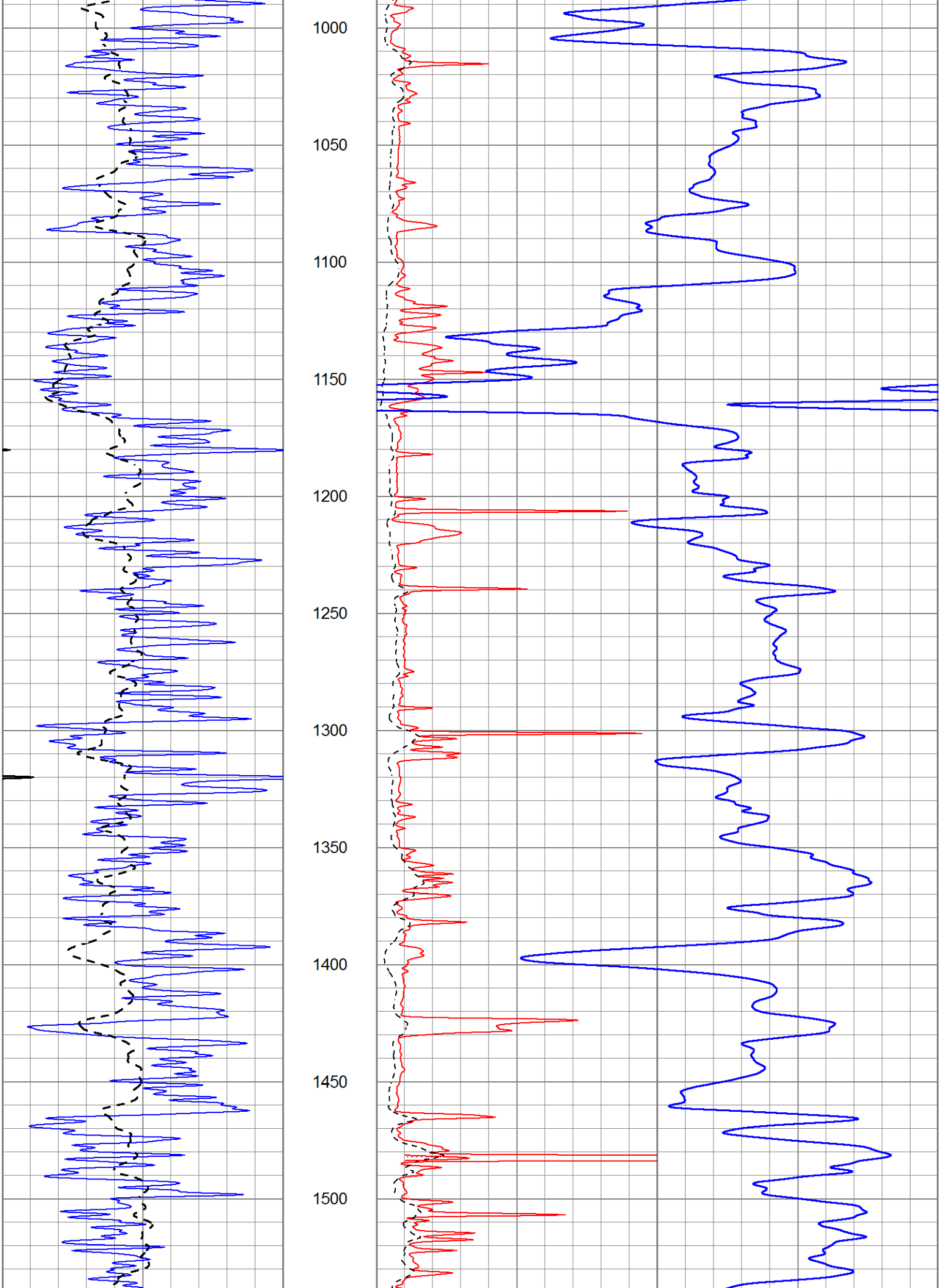
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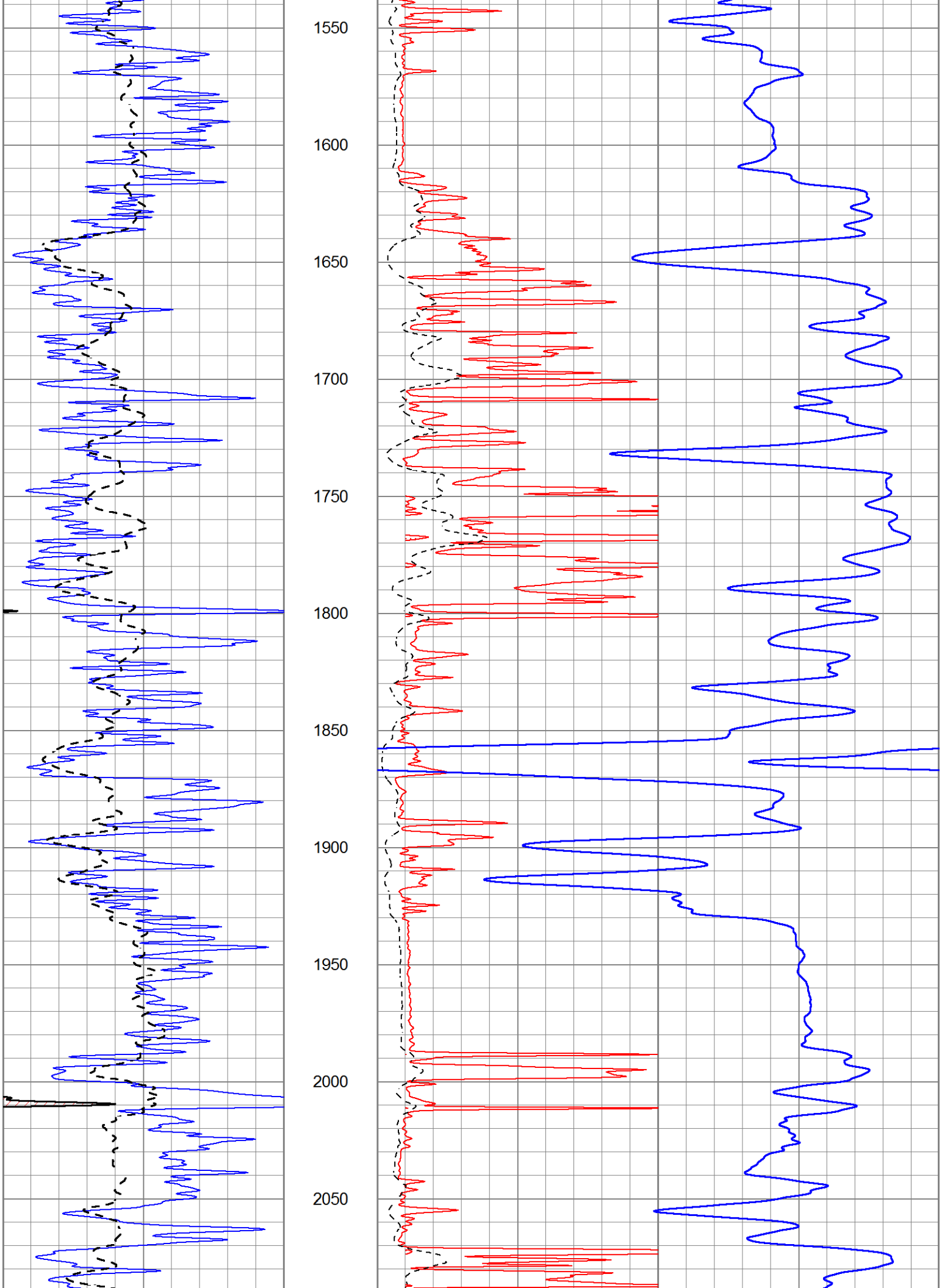
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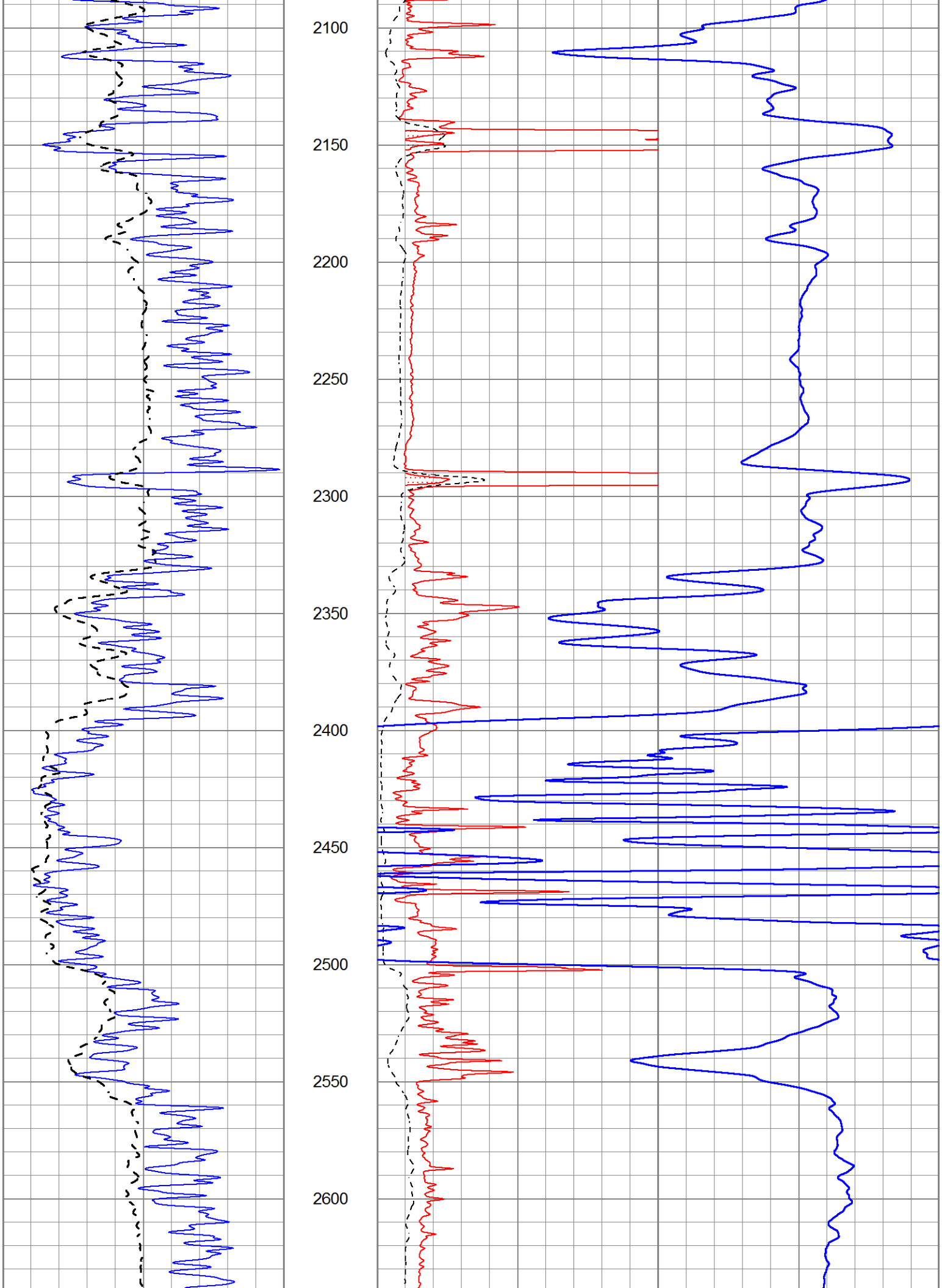
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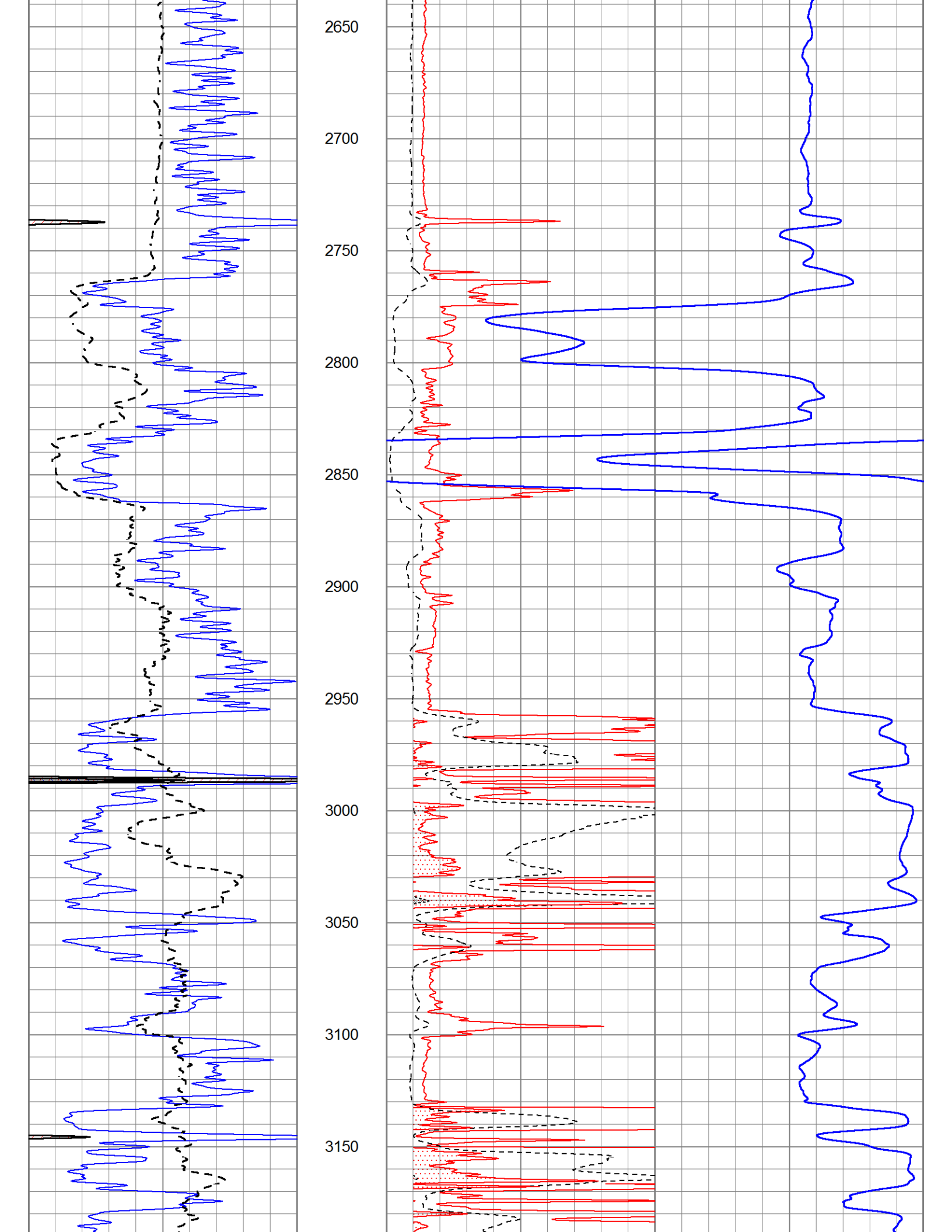
2550
2600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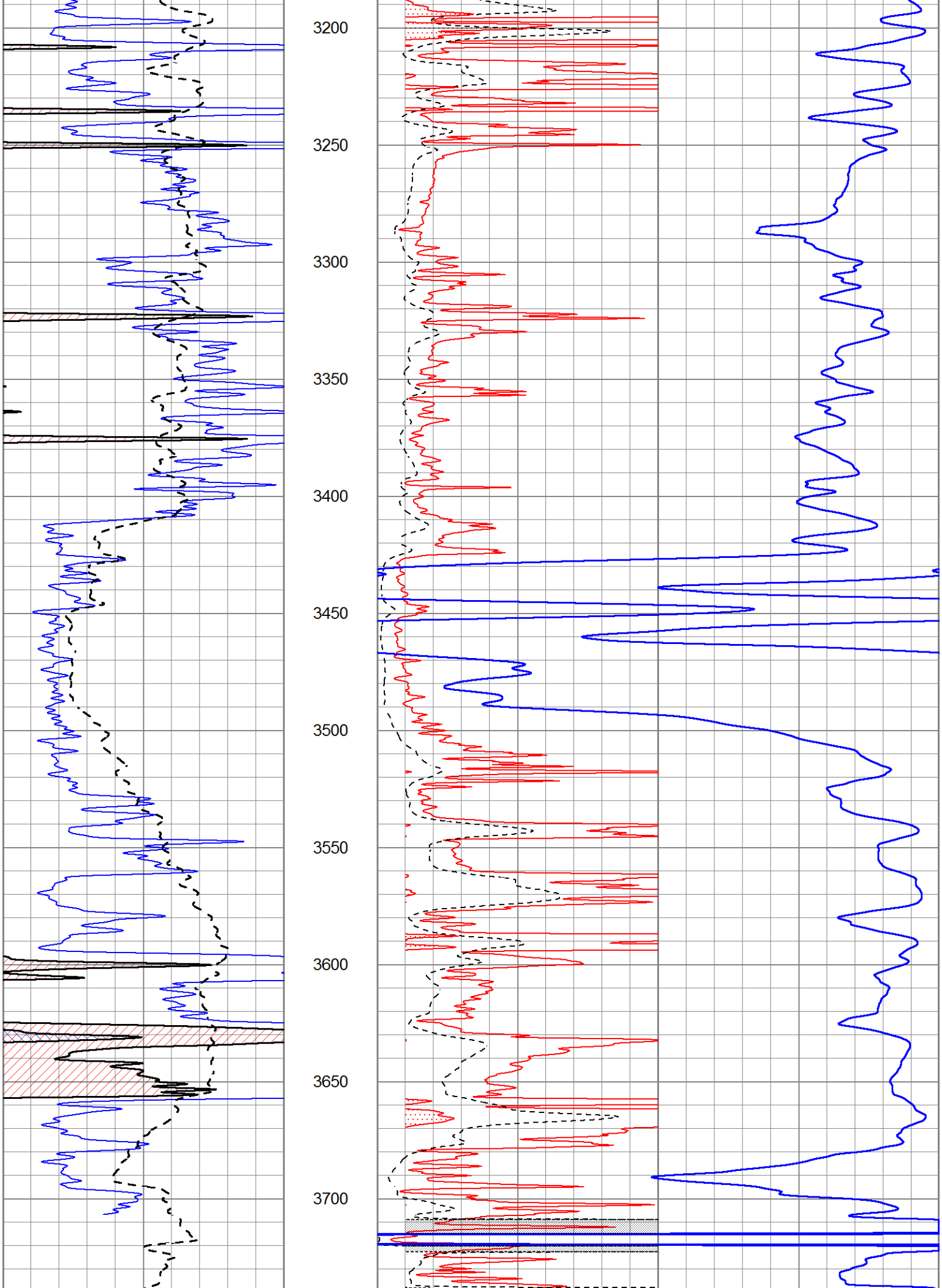
3200
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3300
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3400
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3500
3550
3600
3650
3700

0	Gamma Ray (GAPI)	150
-100	SP (mV)	100

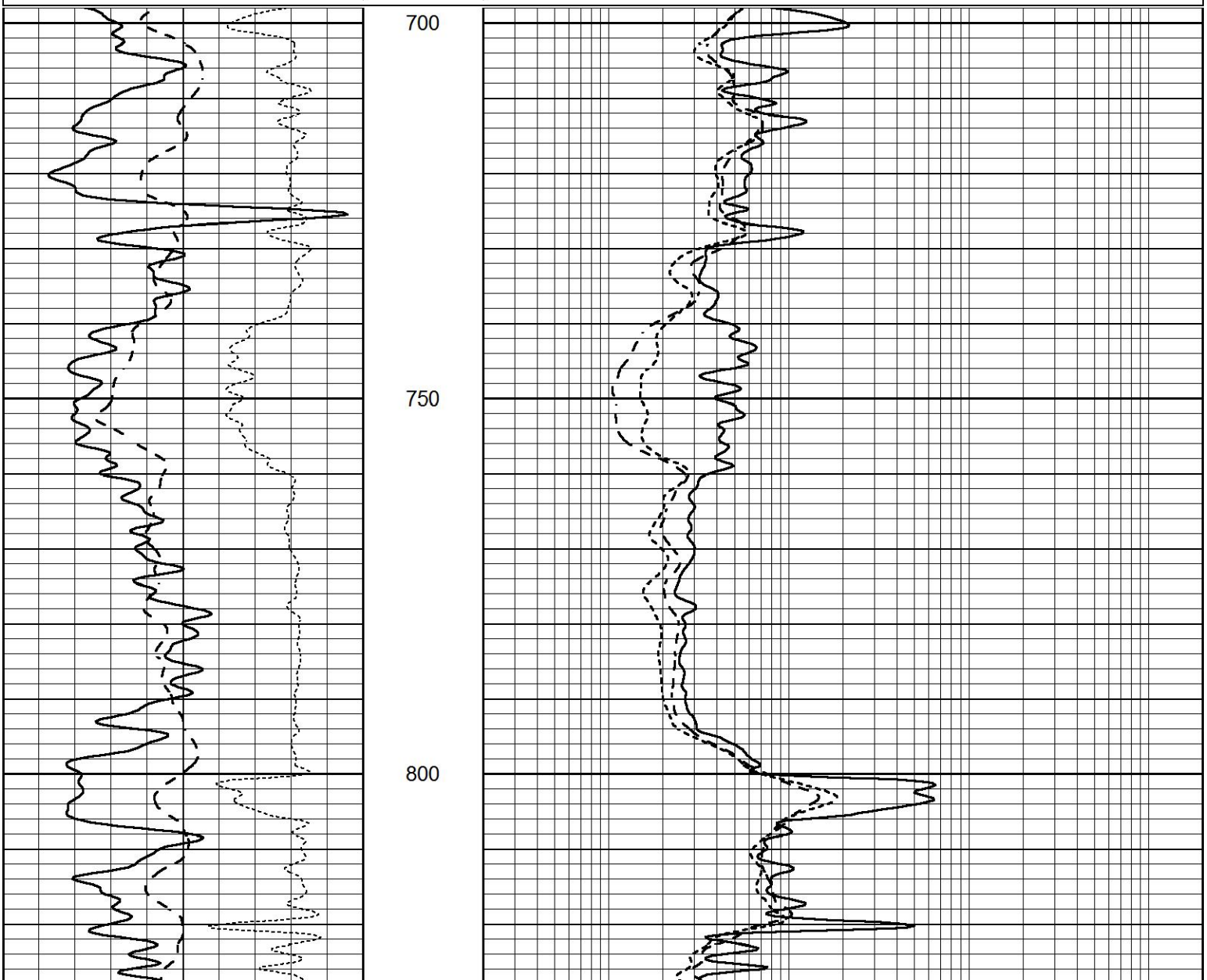
1000	CILD (mmho/m)	0
0	RLL3 (Ohm-m)	50
0	Deep Induction (Ohm-m)	50
50	RILD X10 (Ohm-m)	500
50	RLL3 X10 (Ohm-m)	500

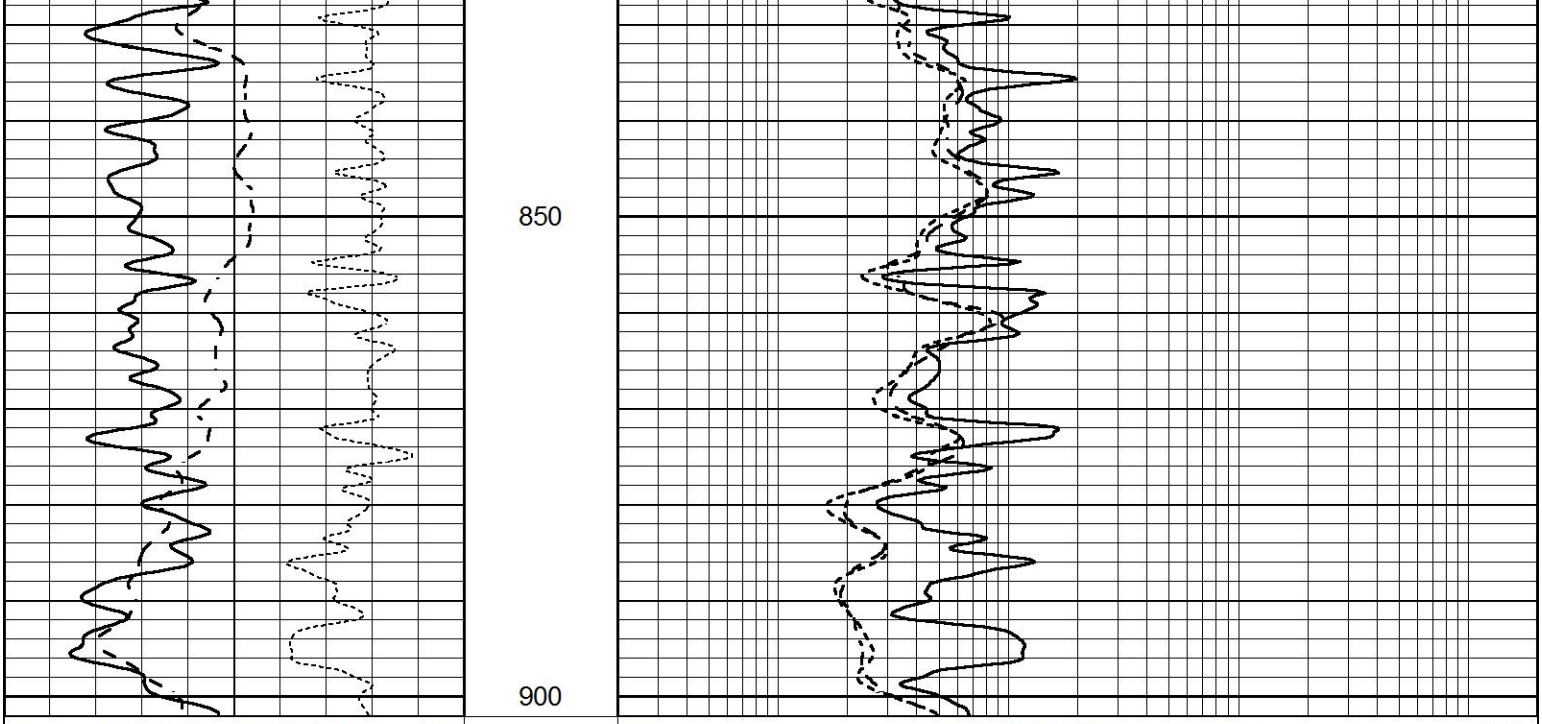
MAIN SECTION

Database File	3999pe8.db
Dataset Pathname	pass3.2
Presentation Format	_dil
Dataset Creation	Fri Oct 18 07:47:04 2019
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000





0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

MAIN SECTION

Database File	3999pe8.db
Dataset Pathname	pass3.1
Presentation Format	_dil
Dataset Creation	Fri Oct 18 07:28:25 2019
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

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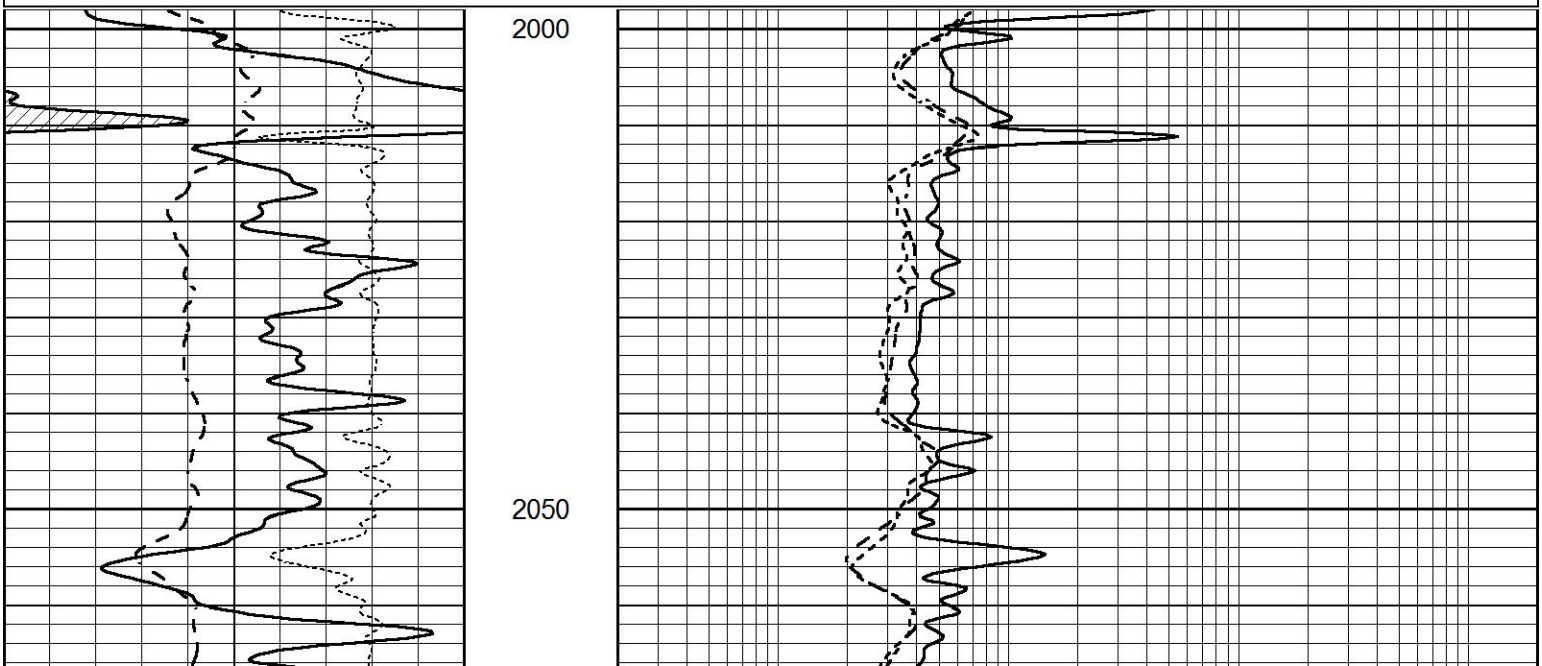
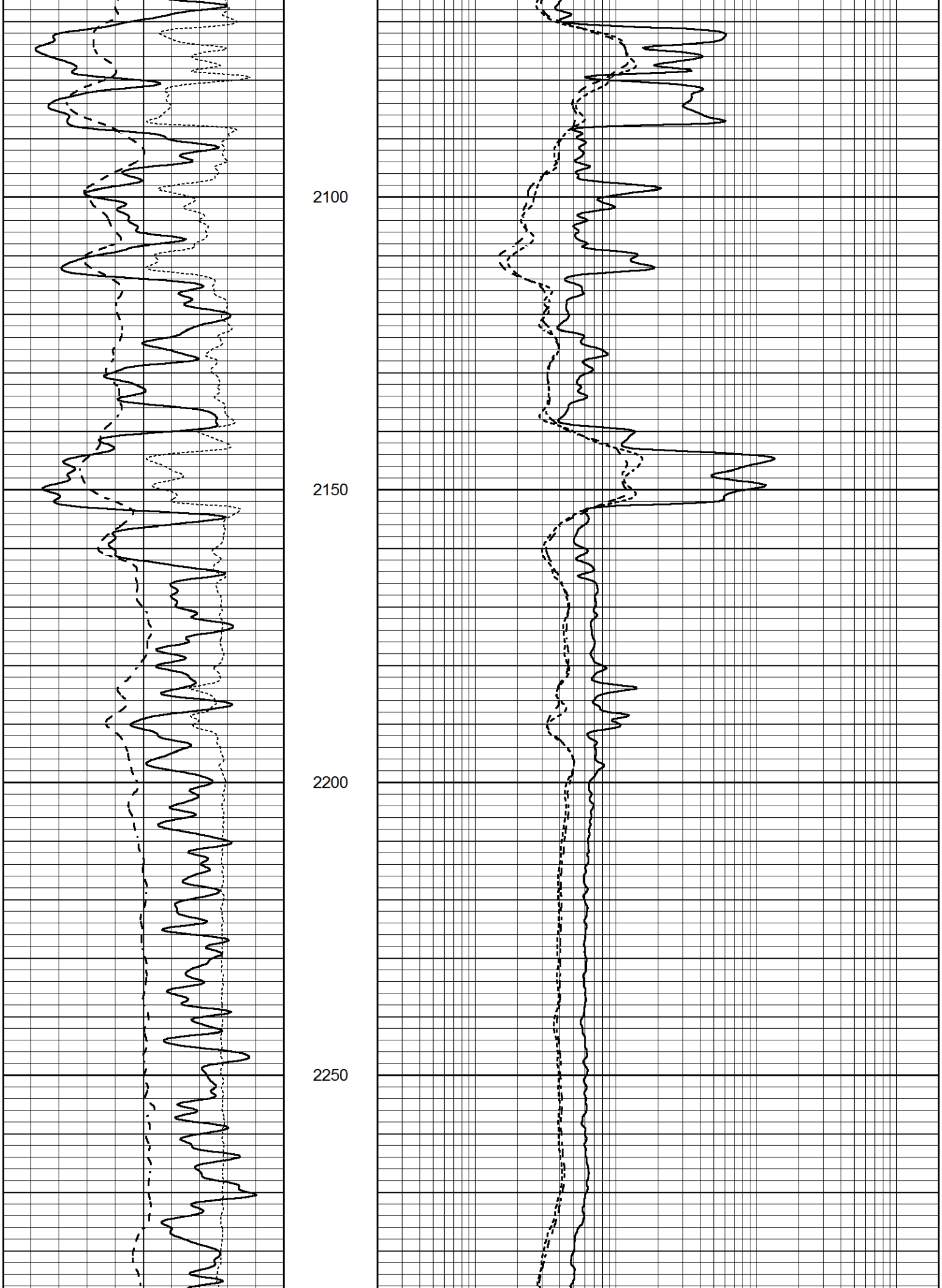
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

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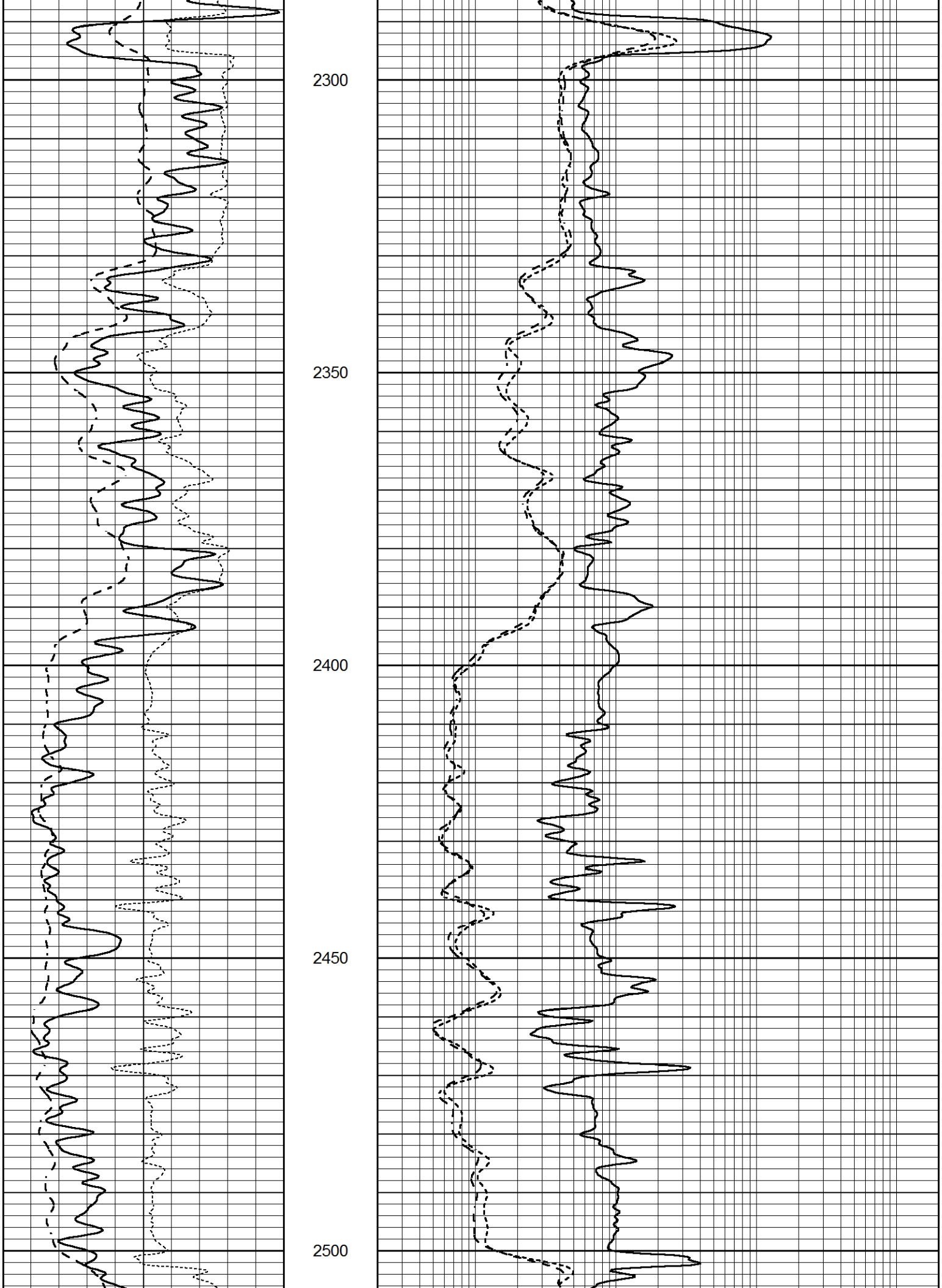
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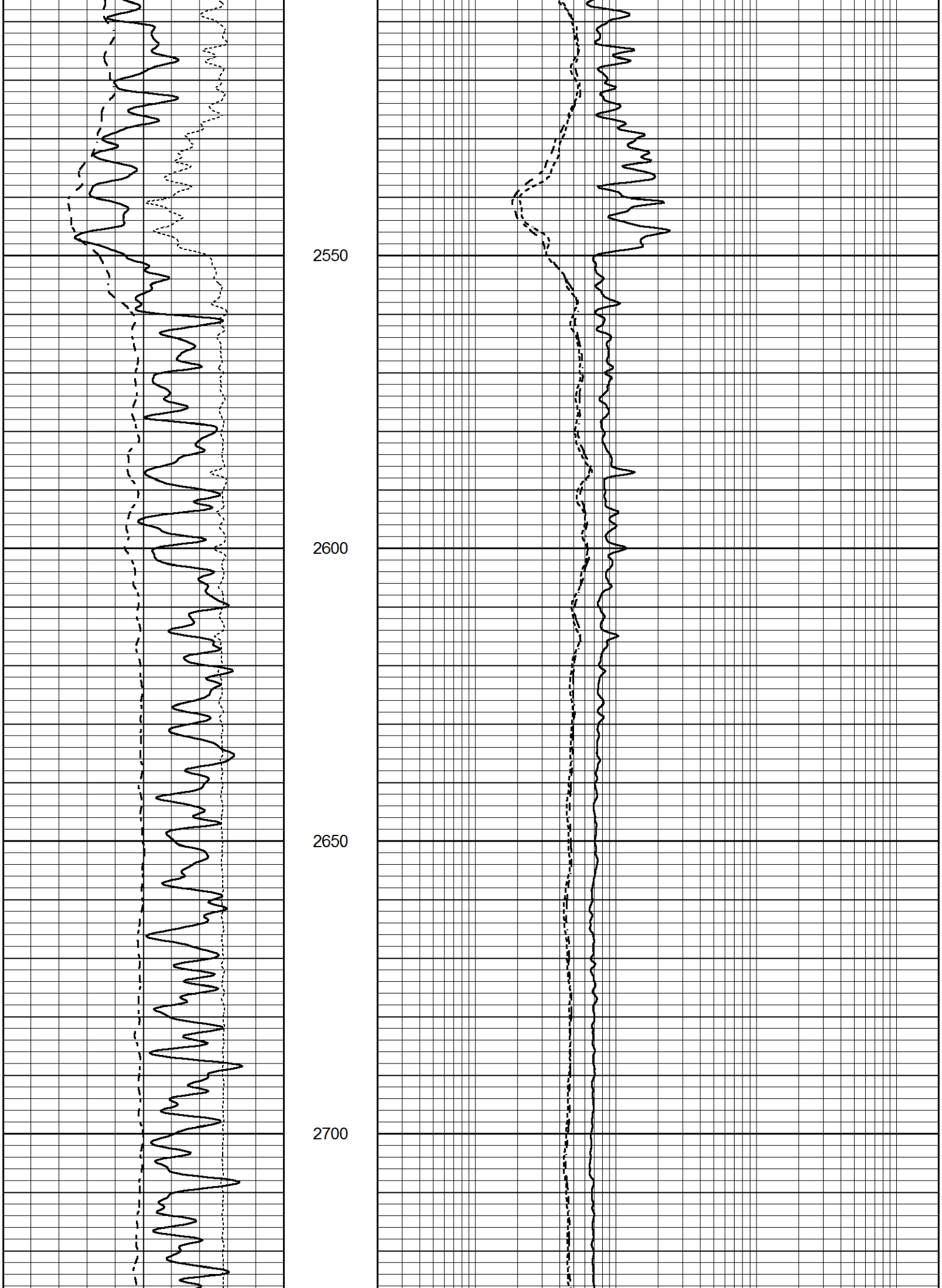
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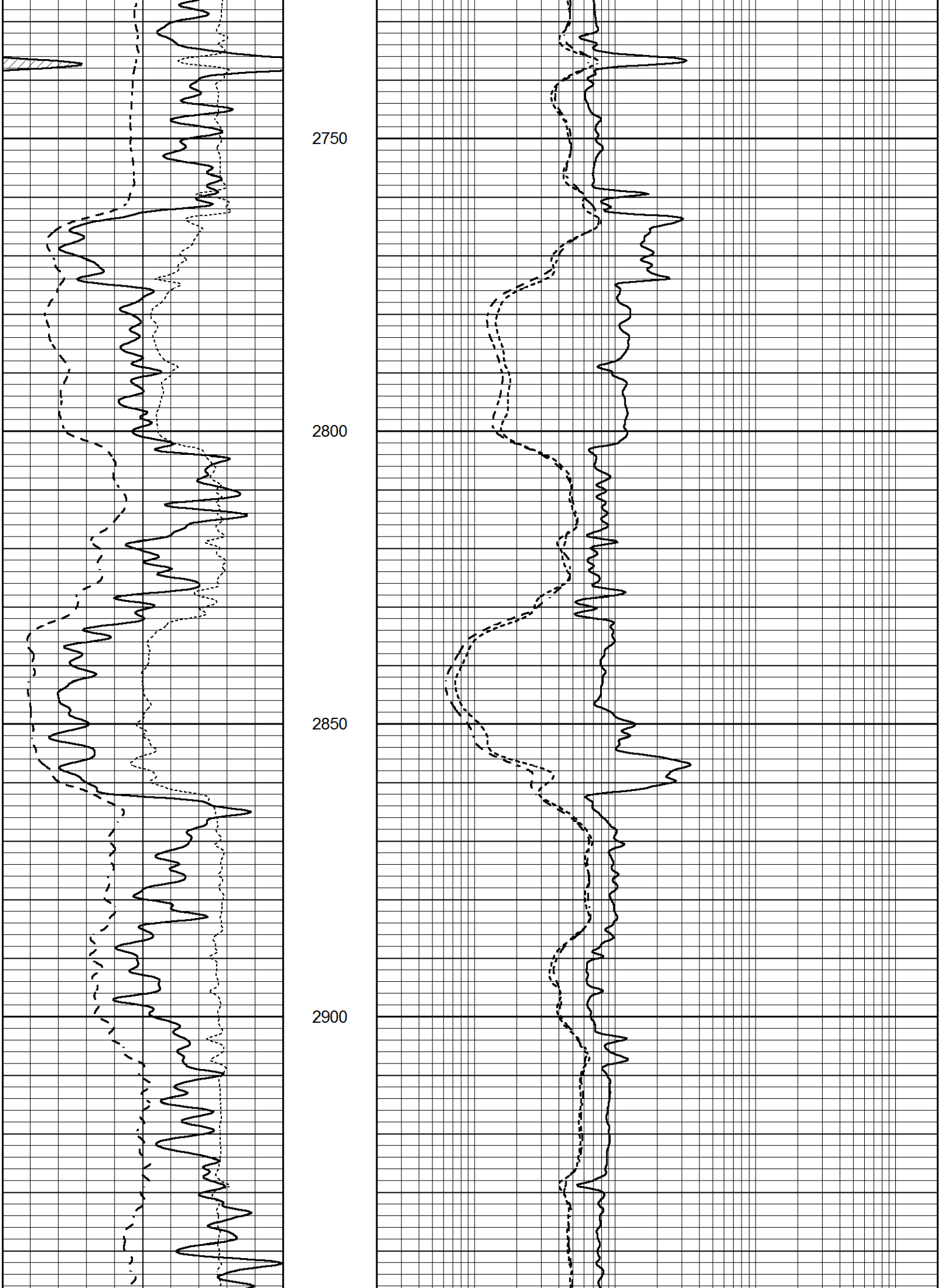
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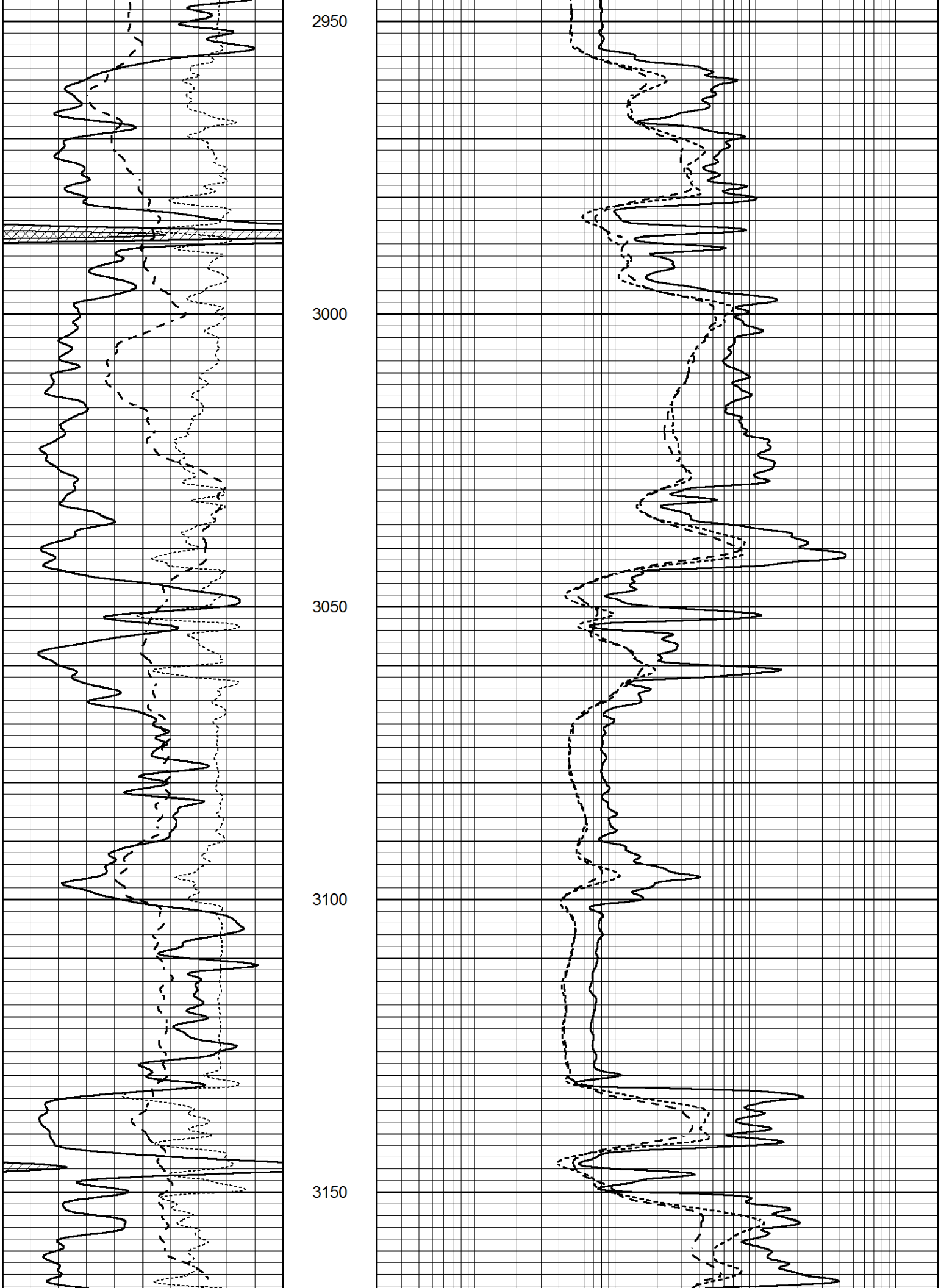
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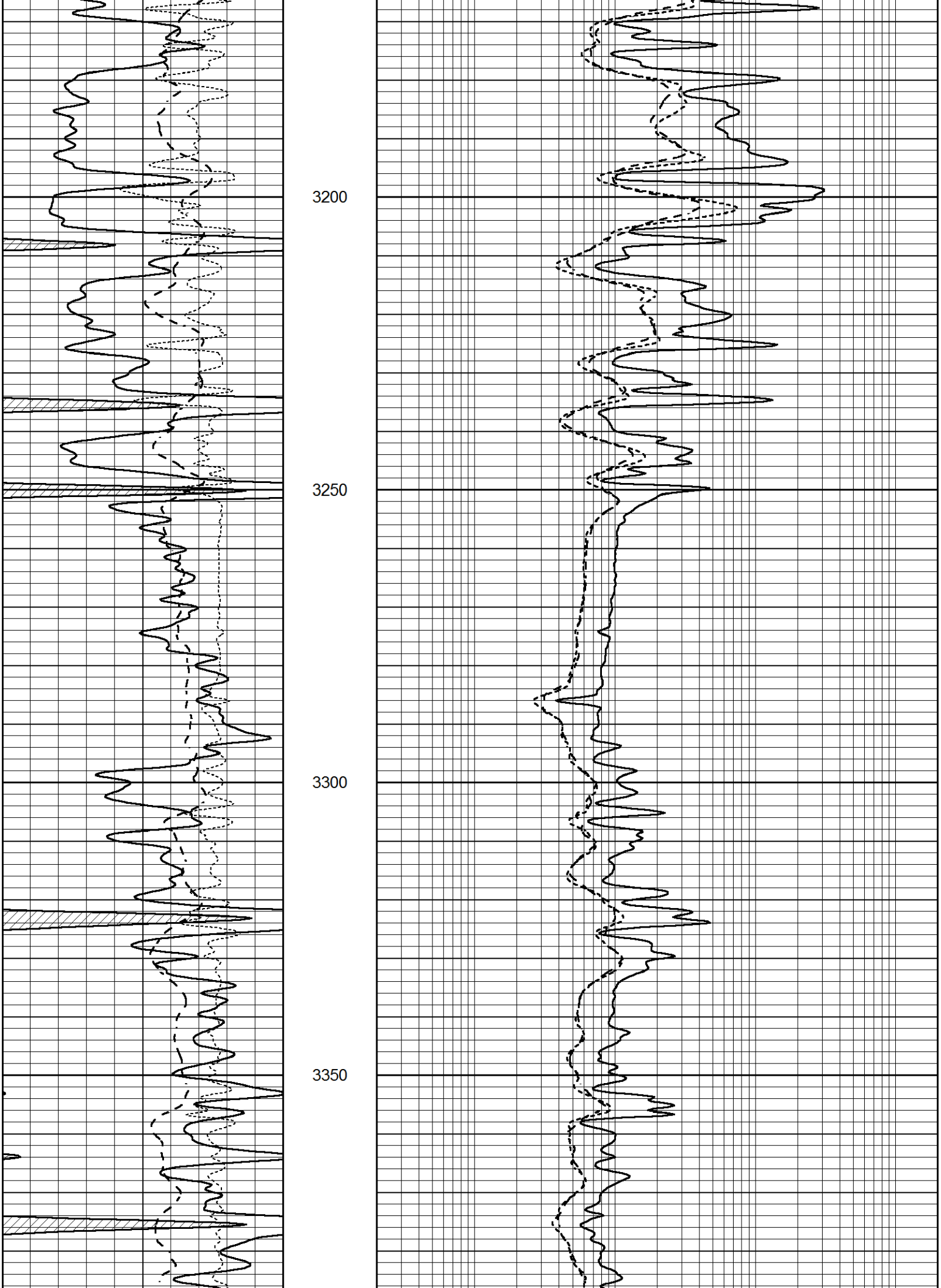
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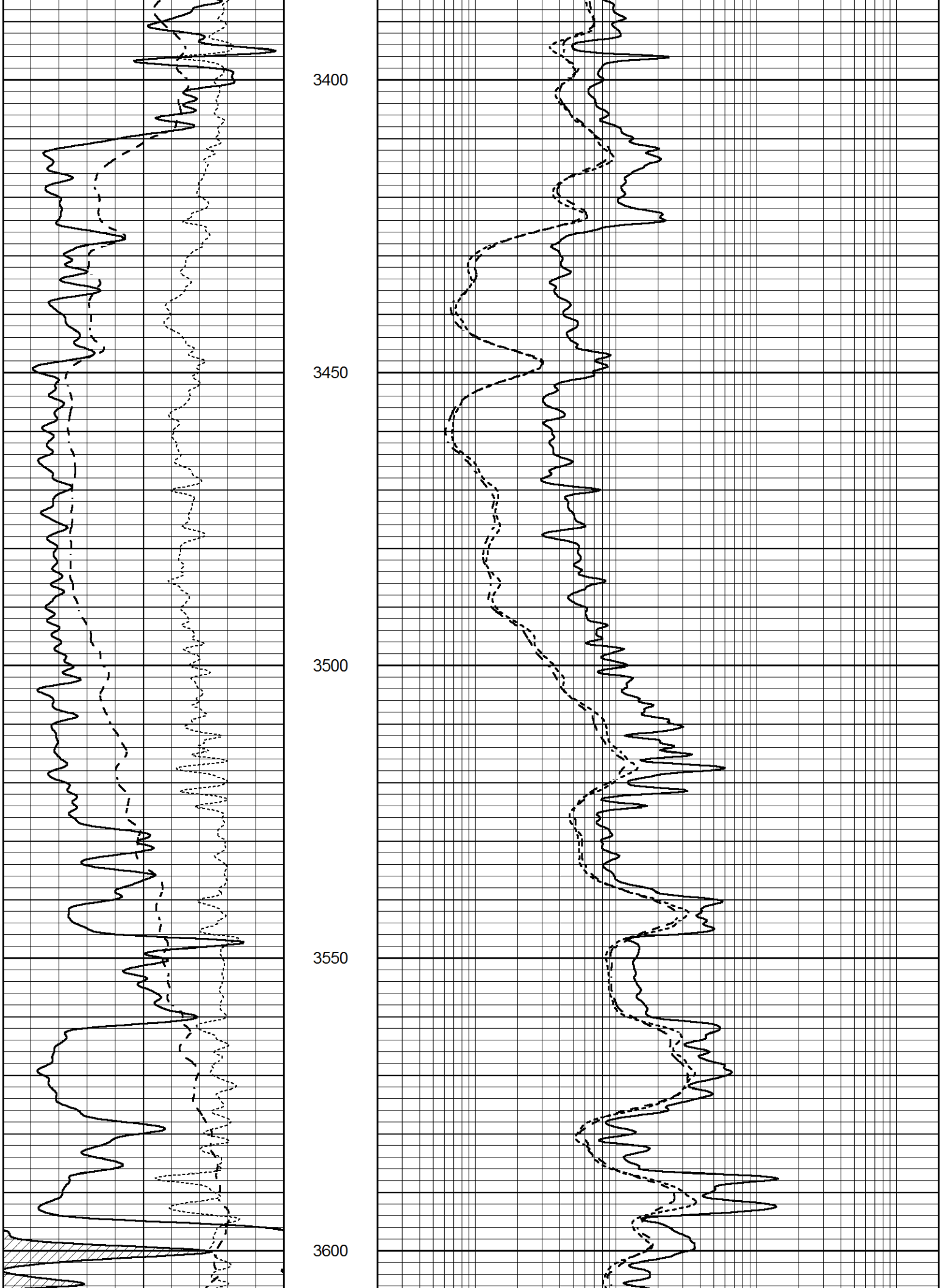
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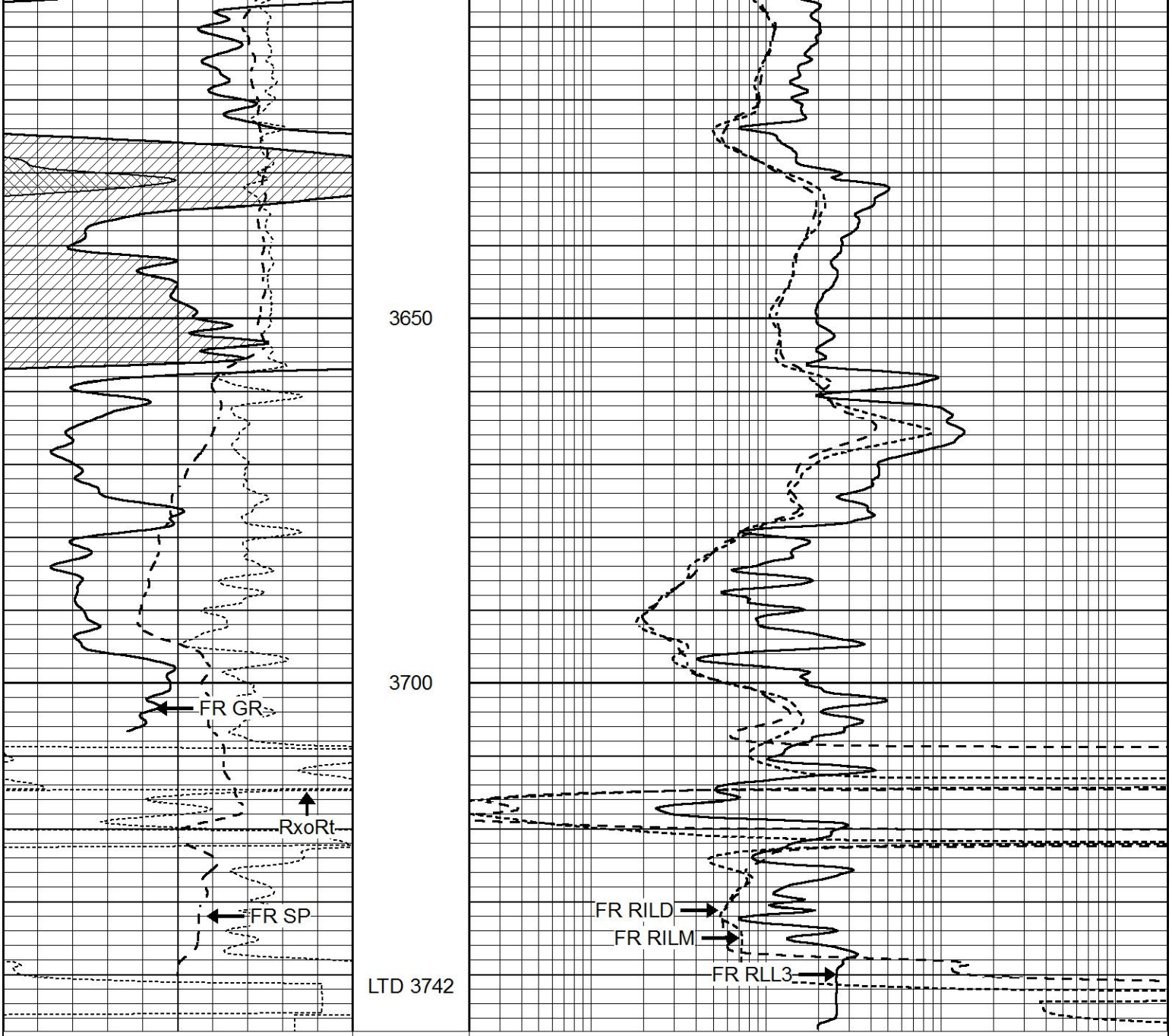


0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

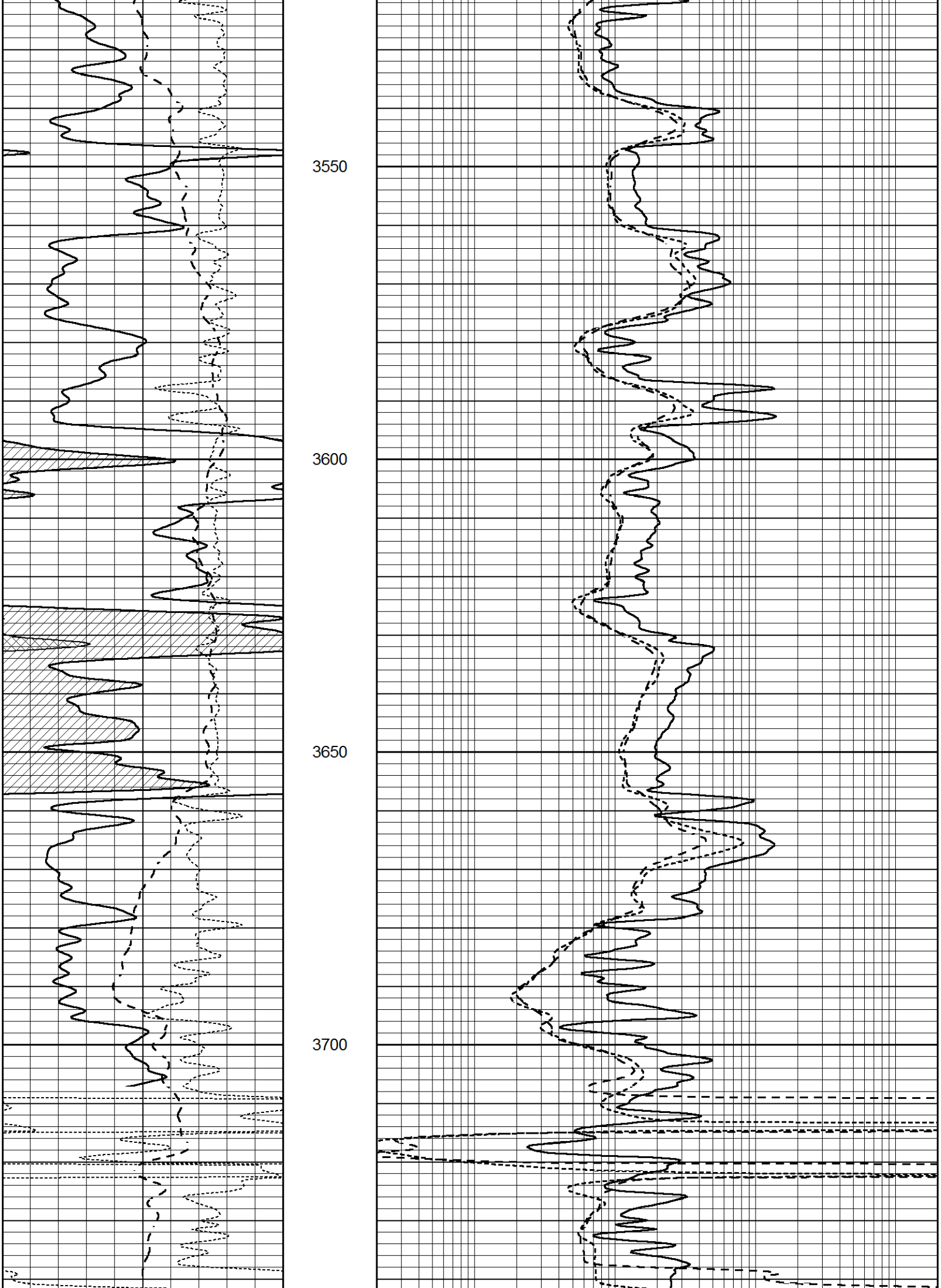
0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000

REPEAT SECTION

Database File	3999pe8.db
Dataset Pathname	pass2.1
Presentation Format	_dil
Dataset Creation	Fri Oct 18 07:22:43 2019
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
-100	SP (mV)	100
-250	Rxo/Rt	50

0.2	SHALLOW GUARD (Ohm-m)	2000
0.2	MEDIUM INDUCTION (Ohm-m)	2000
0.2	DEEP INDUCTION (Ohm-m)	2000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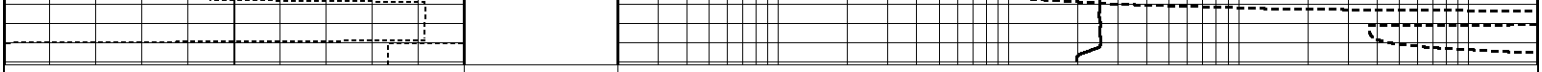


0	GAMMA RAY (GAPI)	150	0.2	SHALLOW GUARD (Ohm-m)	2000
-100	SP (mV)	100	0.2	MEDIUM INDUCTION (Ohm-m)	2000
-250	Rxo/Rt	50	0.2	DEEP INDUCTION (Ohm-m)	2000

Calibration Report

Database File 3999pe8.db
Dataset Pathname pass2.1
Dataset Creation Fri Oct 18 07:22:43 2019

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe
Surface Cal Performed: Tue Feb 19 11:44:18 2019
Downhole Cal Performed: Tue Feb 19 11:44:24 2019
After Survey Verification Performed: Tue Feb 19 11:44:27 2019

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	618.595	-5.524
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	1.197
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Compensated Neutron Calibration Report

Serial Number: 080621PMC
Tool Model: NABORS

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Serial Number:	7	
Tool Model:	Probe1	
Performed:	Tue Feb 19 11:45:10 2019	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.4300	GAPI/cps

COMPENSATED DENSITY/NEUTRON PE LOG

Company DNR OIL & GAS, INC.
Well WOLF/NEAL #1
Field PADGETT
County SUMNER State KANSAS

Company DNR OIL & GAS, INC.
Well WOLF/NEAL #1
Field PADGETT
County SUMNER
State KANSAS

Location: API # : 15-191-22815-0000

1275' FNL & 2640' FEL

SEC 33 TWP 34S RGE 2E

Other Services
DIL

Permanent Datum GROUND LEVEL Elevation 1171
Log Measured From KELLY BUSHING 8' A.G.L
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1179
D.F. 1177
G.L. 1171

Date	10/18/19		
Run Number	ONE		
Depth Driller	3742		
Depth Logger	3742		
Bottom Logged Interval	3718	700 - 900	
Top Log Interval	2000		
Casing Driller	8 5/8" @ 300'		
Casing Logger	300'		
Bit Size	7 7/8		
Type Fluid in Hole	CHEMICAL MUD	CHLORIDES 900 PPM	
Density / Viscosity	8.7/55		
pH / Fluid Loss	10.5/8.8		
Source of Sample	FLOWLINE		
Rm @ Meas. Temp	1.45 @ 75F		
Rmf @ Meas. Temp	1.08 @ 75F		
Rmc @ Meas. Temp	1.74 @ 75F		
Source of Rmf / Rmc	MEASUREMENT		
Rm @ BHT	0.95 @ 114F		
Time Circulation Stopped	2 HOURS		
Time Logger on Bottom	////		
Maximum Recorded Temperature	114F		
Equipment Number	3802		
Location	HAYS, KANSAS		
Recorded By	JASON CAPPELLUCCI		
Witnessed By	STEVE DAVIS		

Comments

THANK YOU FOR USING ELI WIRELINE SERVICES, HAYS, KS. (785) 628-6395

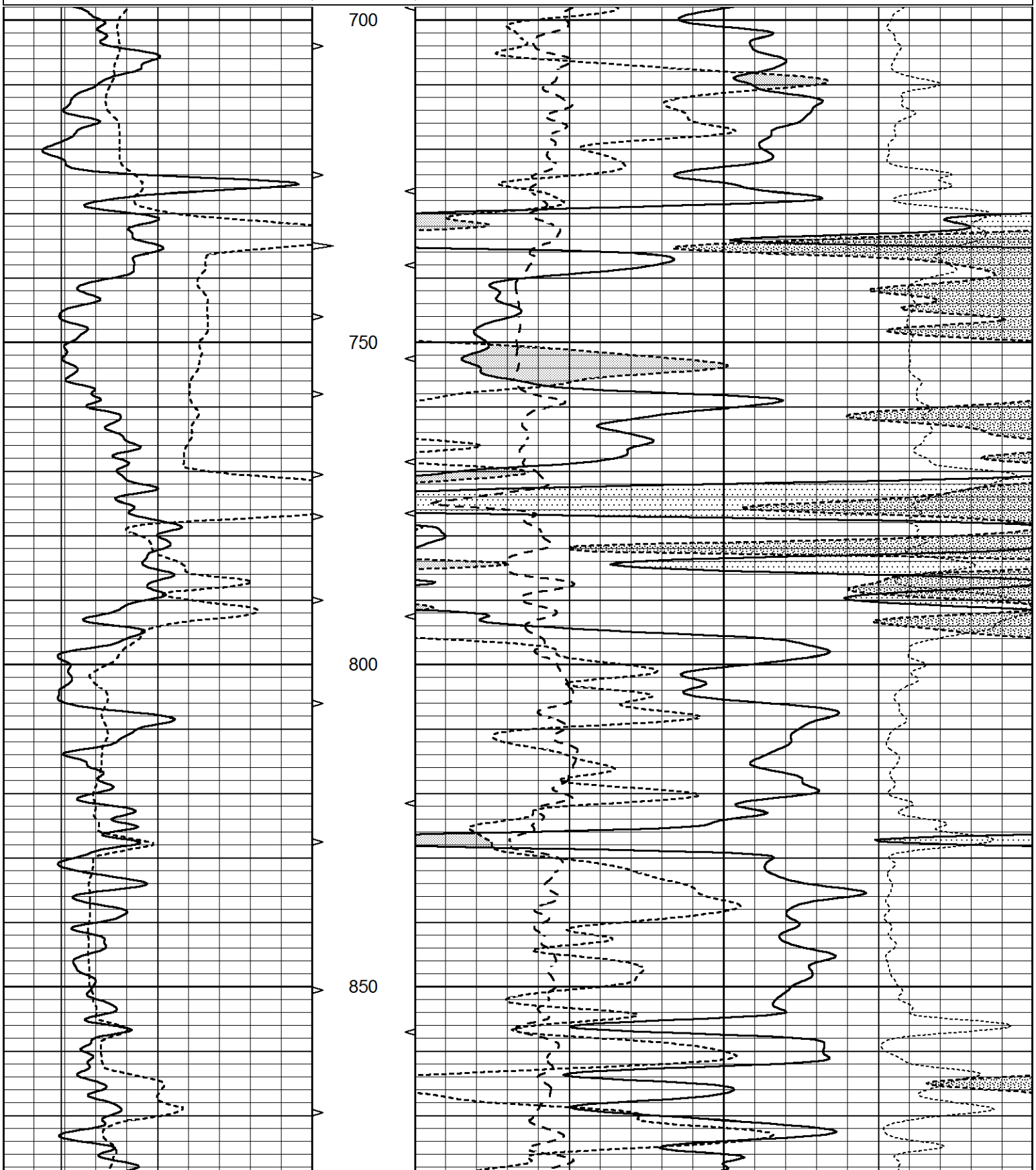
DIRECTIONS

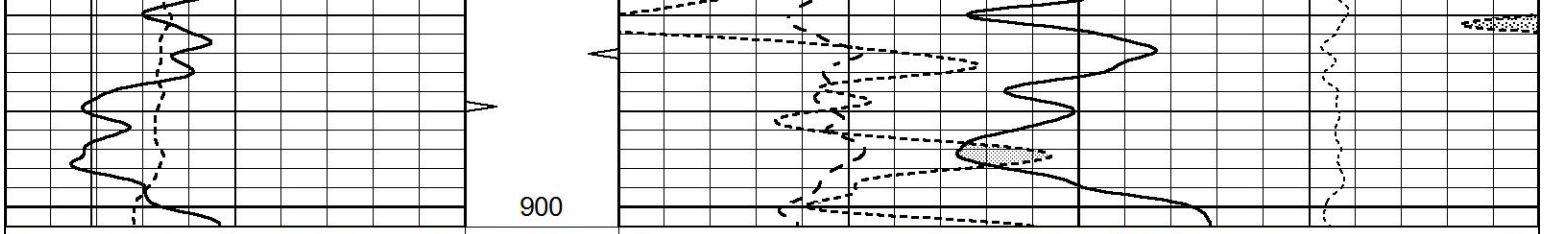
I 35 & SOUTH HAVEN EXIT - 6 1/2 EAST - SOUTH INTO

MAIN SECTION

Database File	3999pe8.db
Dataset Pathname	pass3.2
Presentation Format	_ldt_neu
Dataset Creation	Fri Oct 18 07:47:04 2019
Charted by	Depth in Feet scaled 1:240

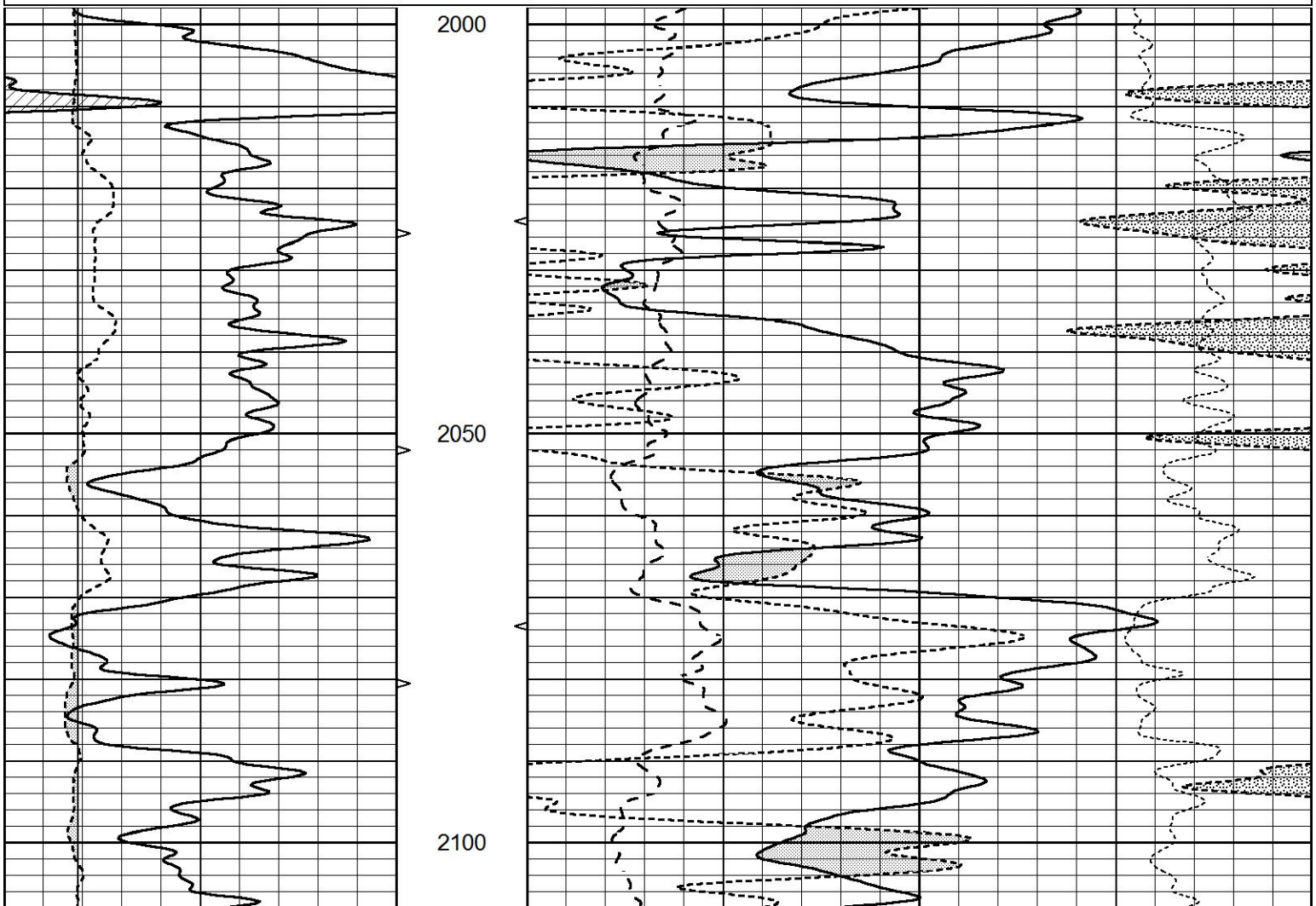
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)		-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)		-10
			TBHV	0	PE	10 -0.25 CORRECTION (g/cc)	0.25
			0 (ft3) 10				

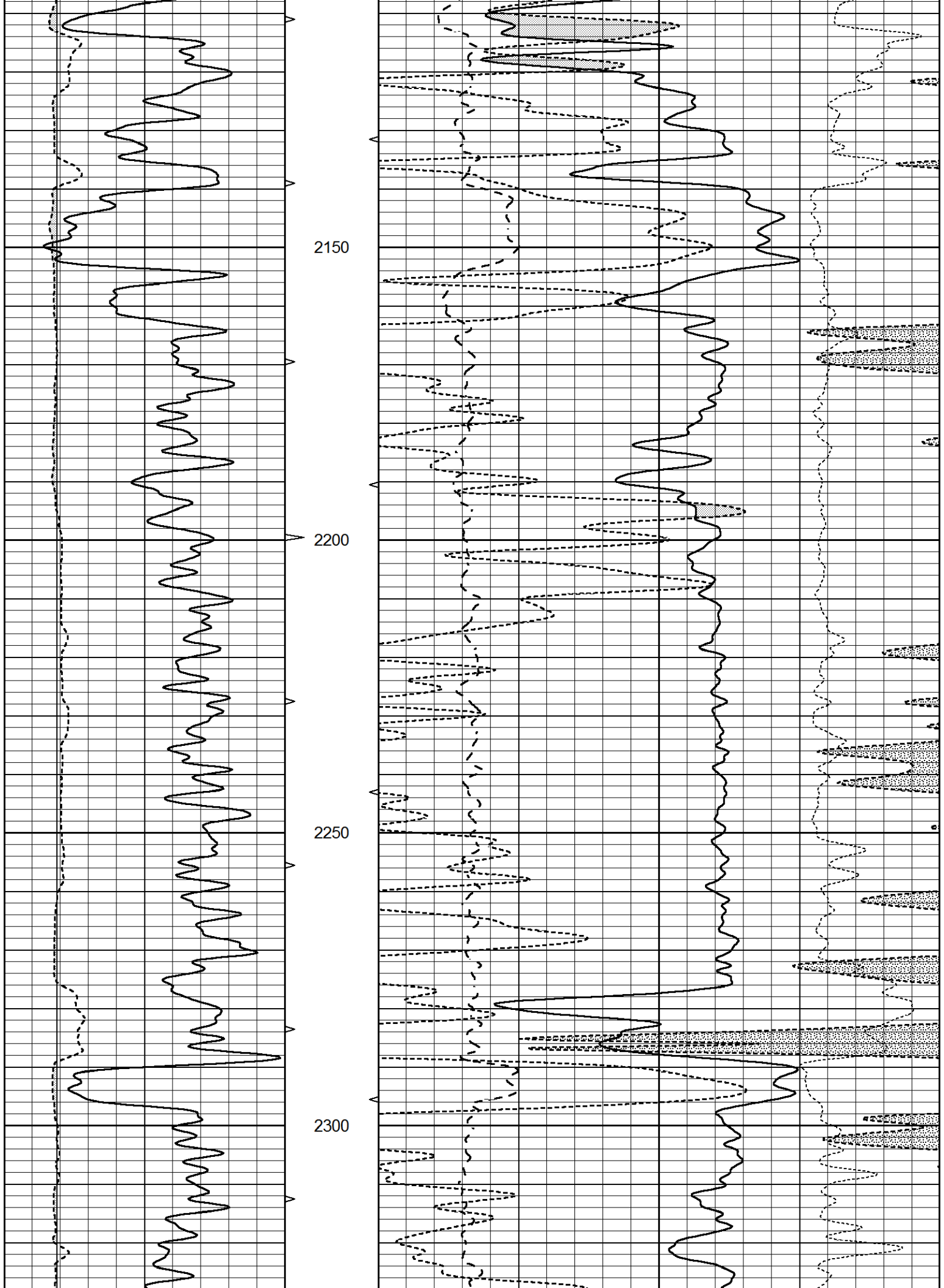


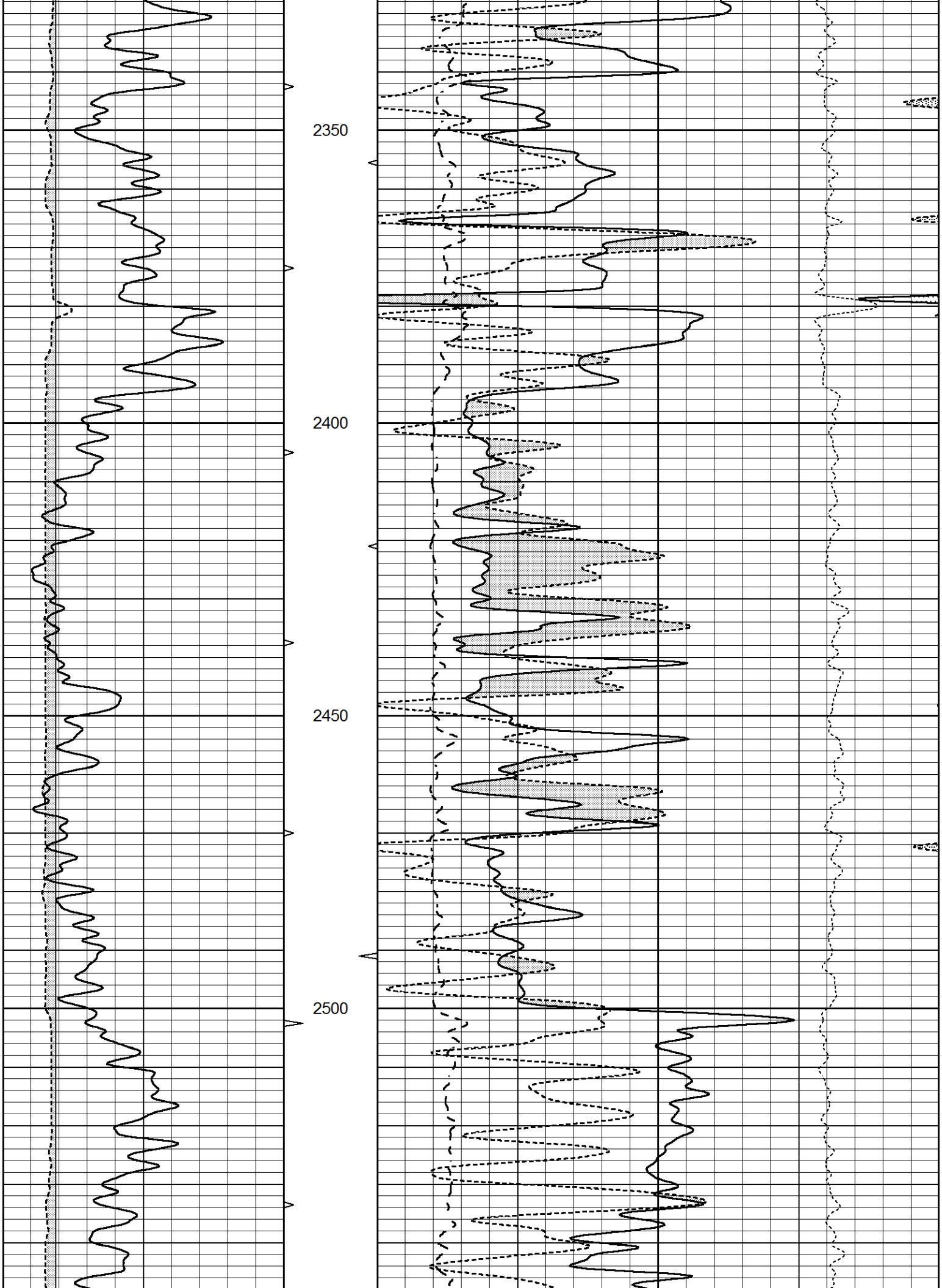


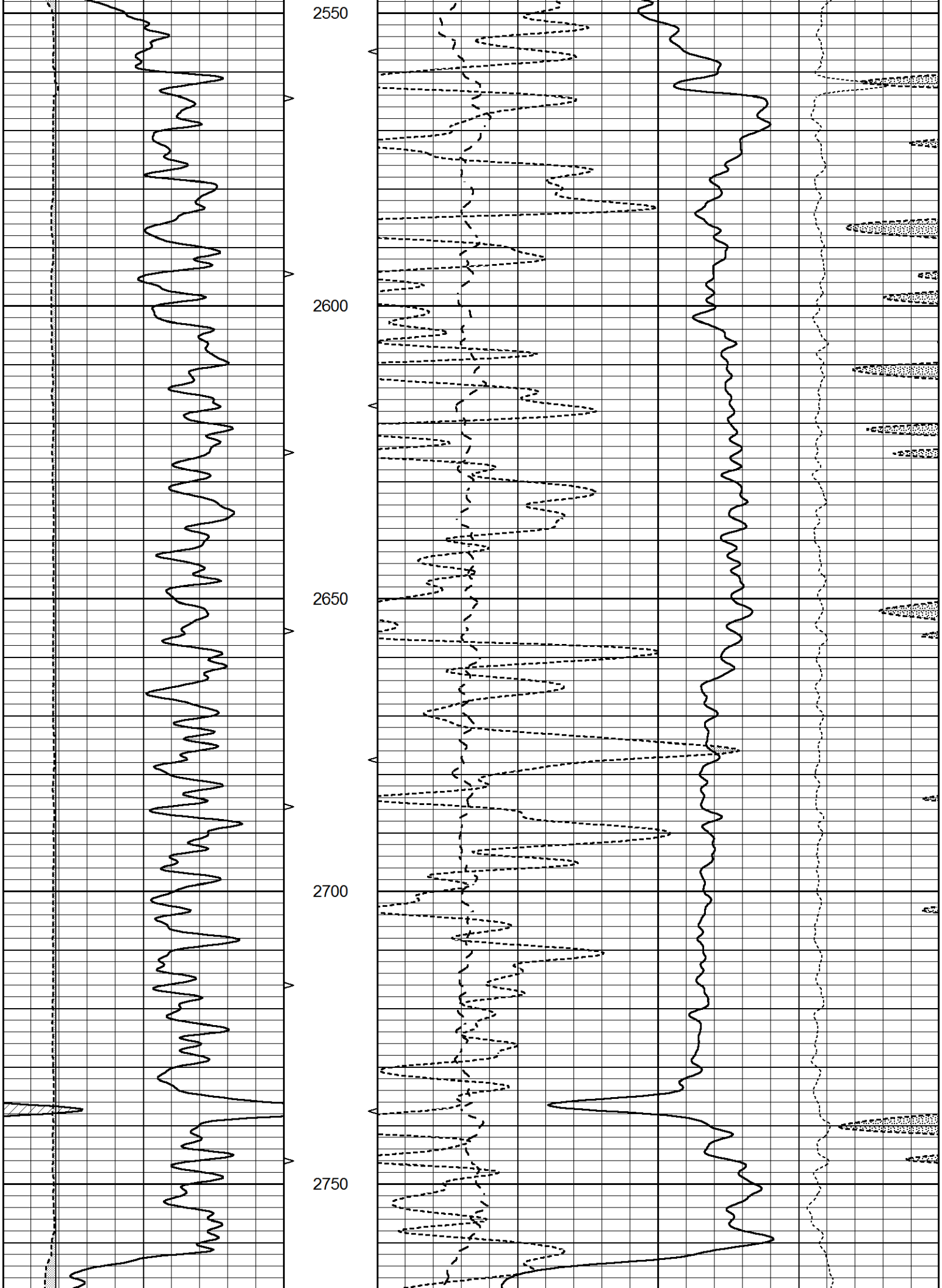
MAIN SECTION

Database File	3999pe8.db
Dataset Pathname	pass3.1
Presentation Format	_ldt_neu
Dataset Creation	Fri Oct 18 07:28:25 2019
Charted by	Depth in Feet scaled 1:240




2150
2200
2250
2300


2350
2400
2450
2500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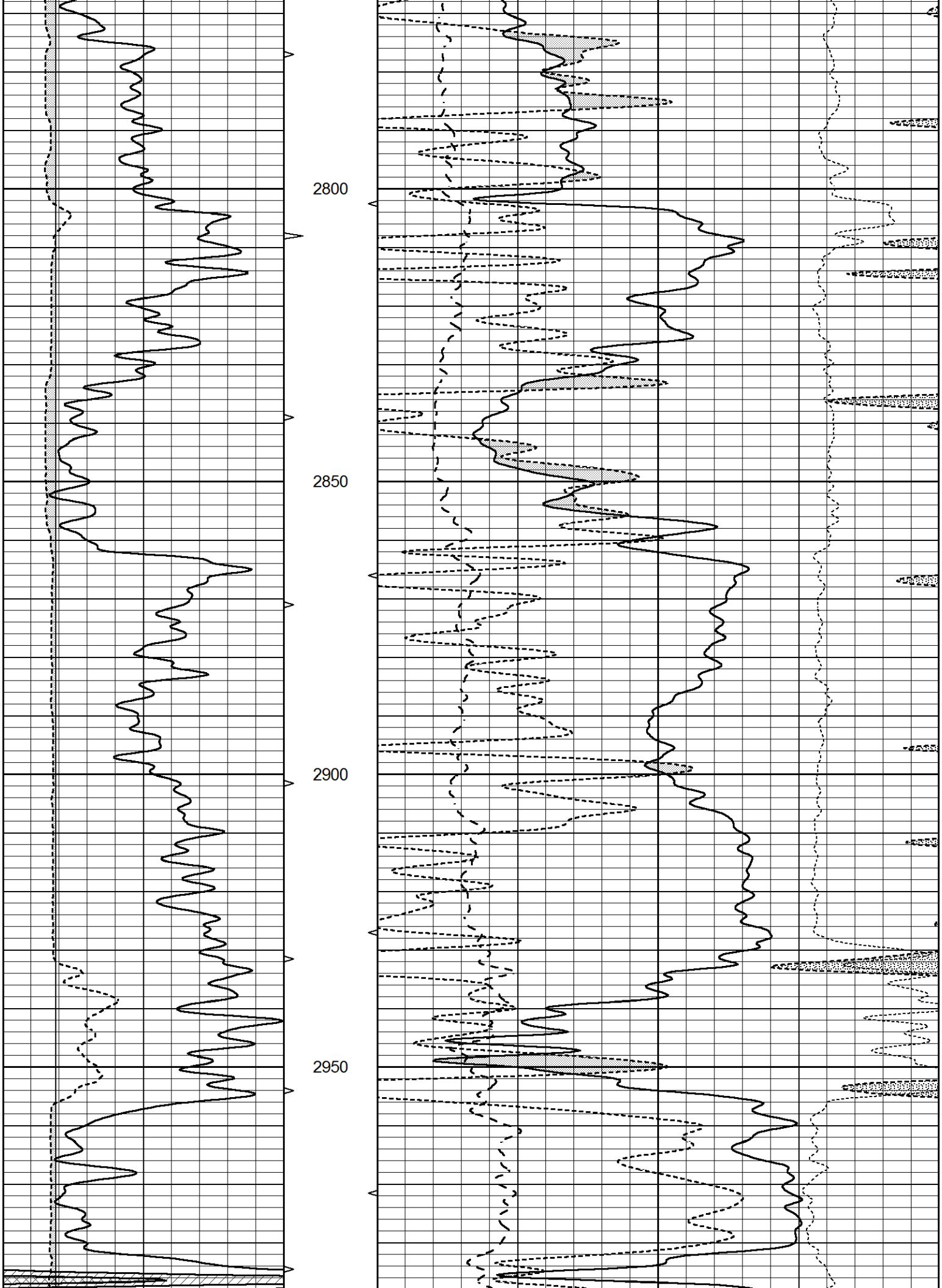
2600
2650
2700
2750


2800
2850
2900
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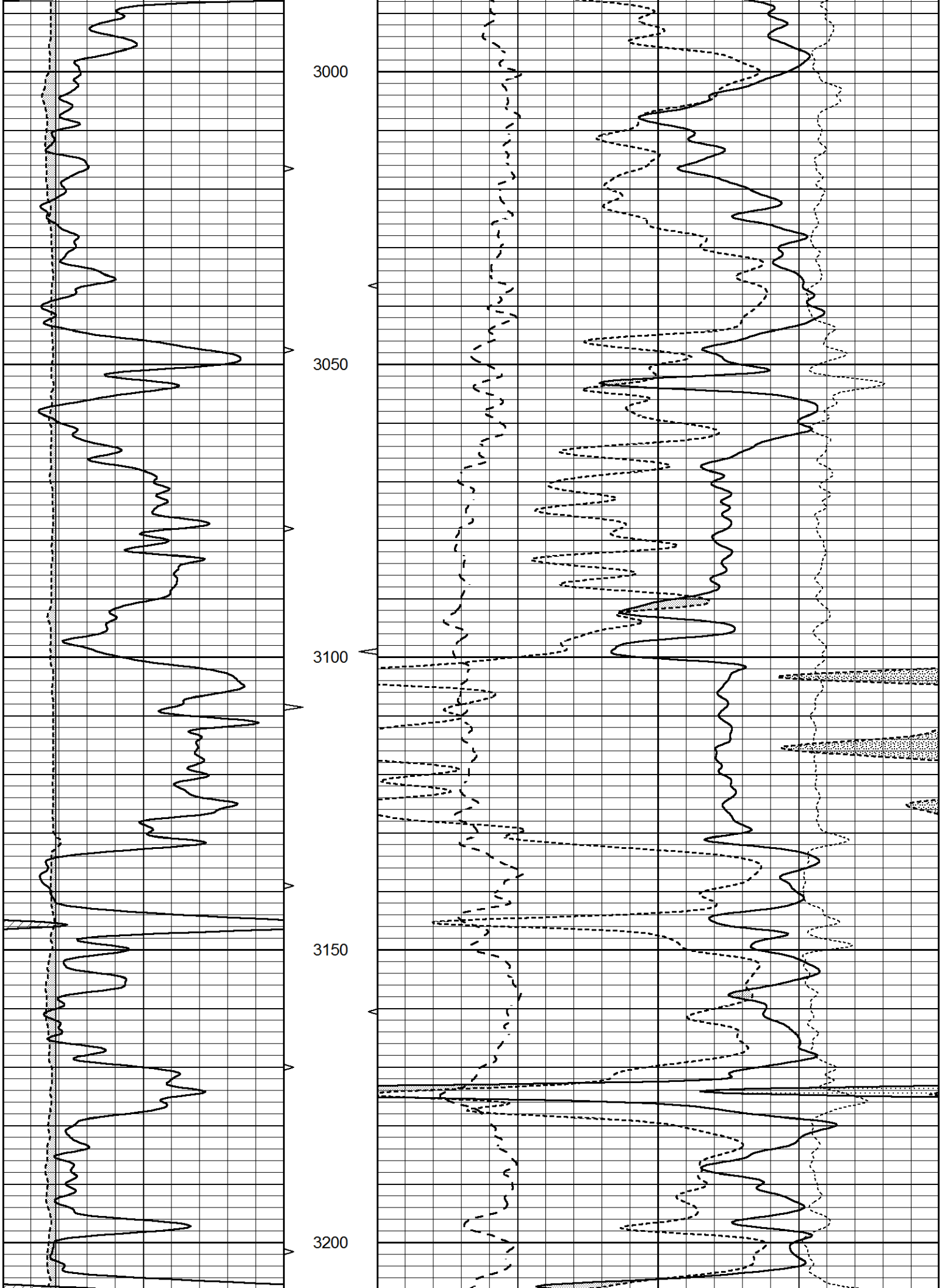
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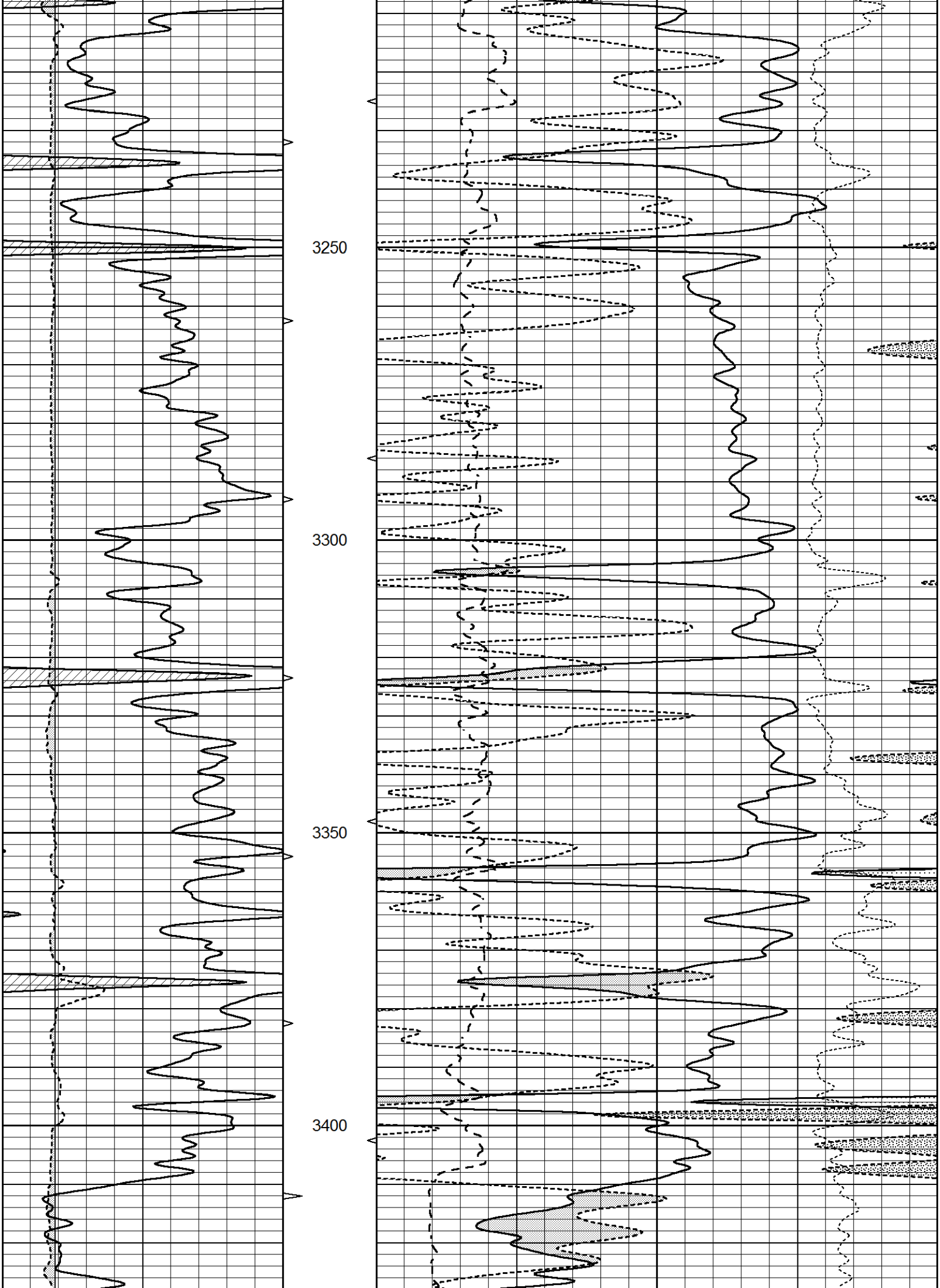
3200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3300
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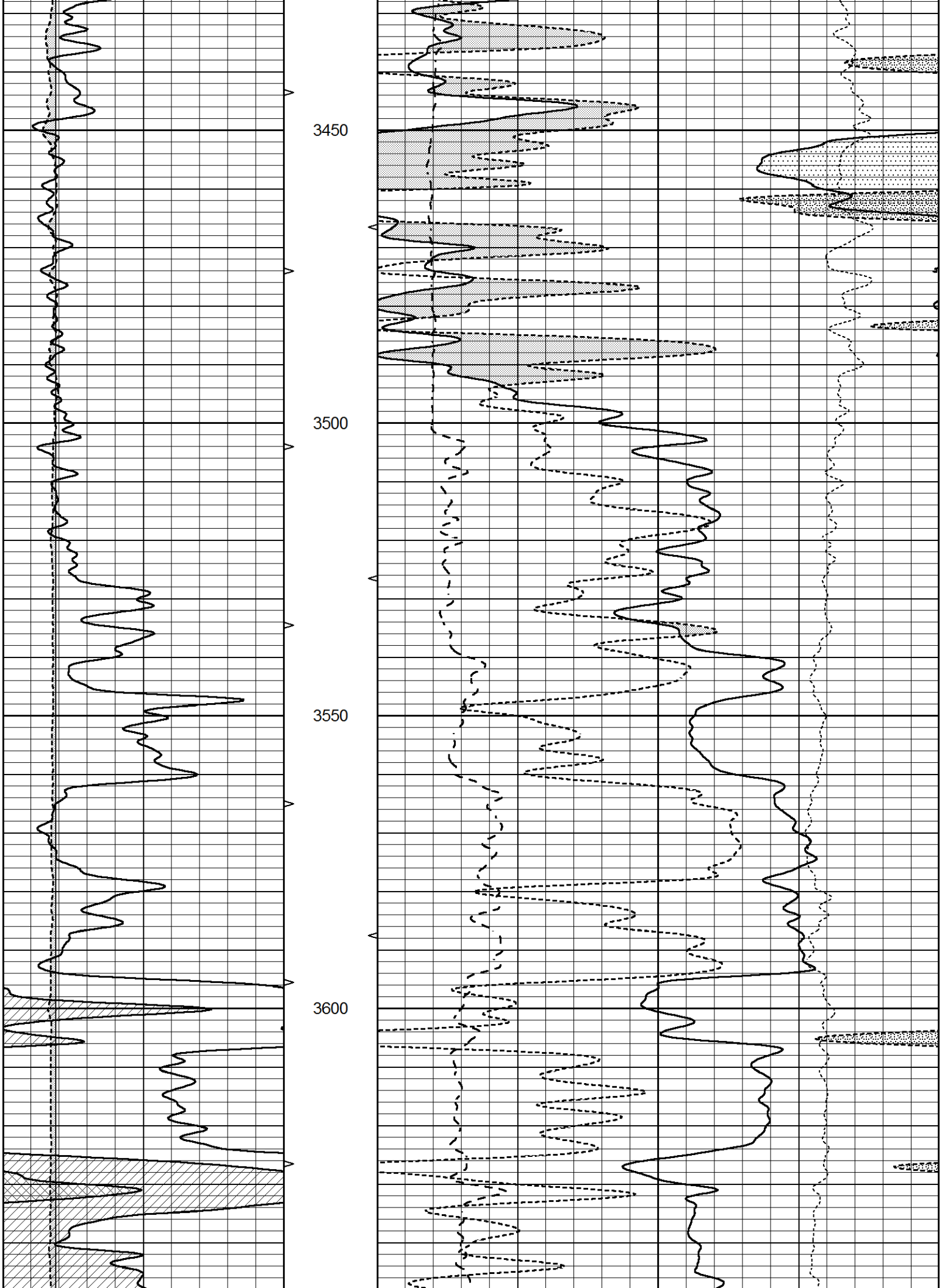
3450
3500
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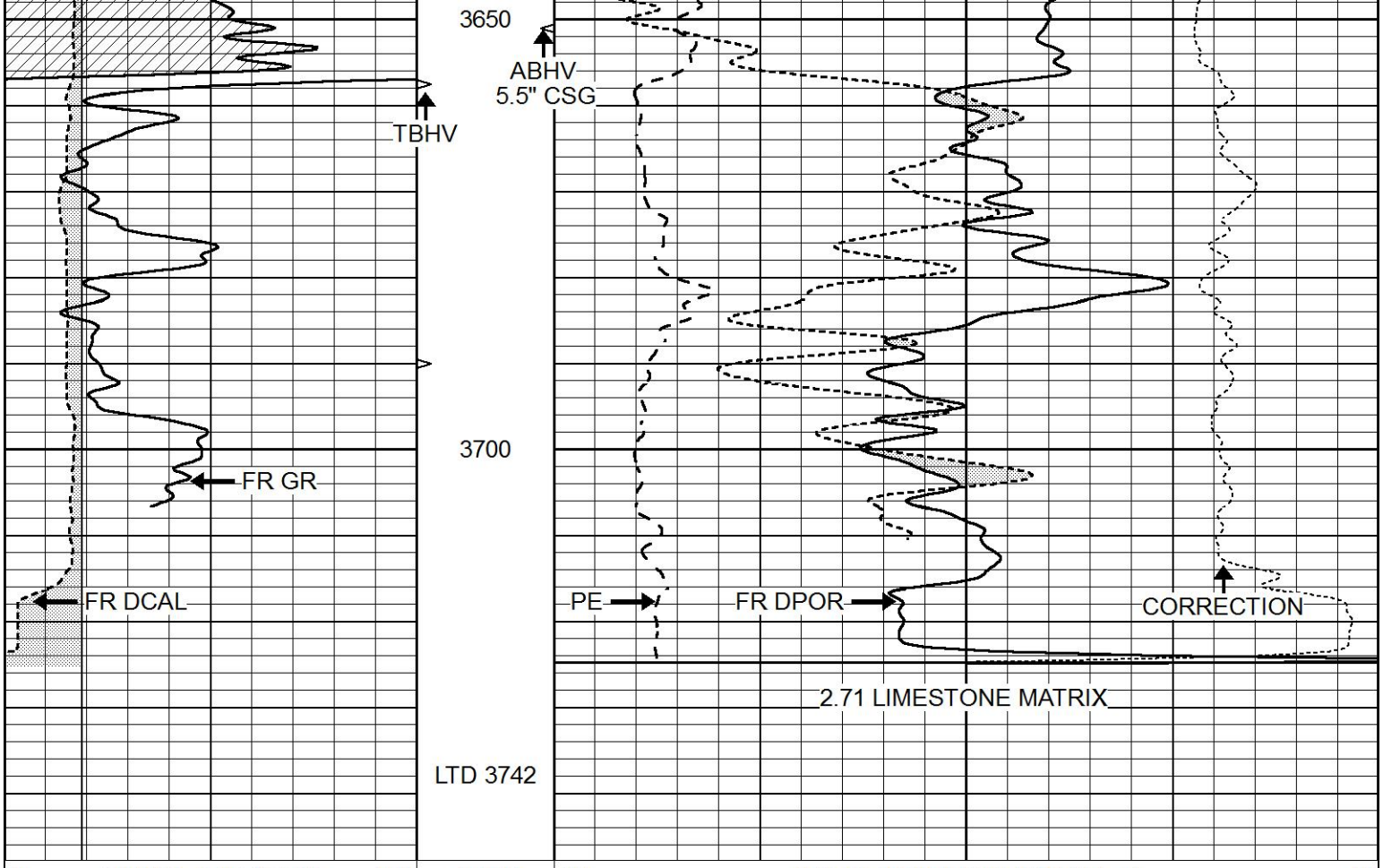
3600

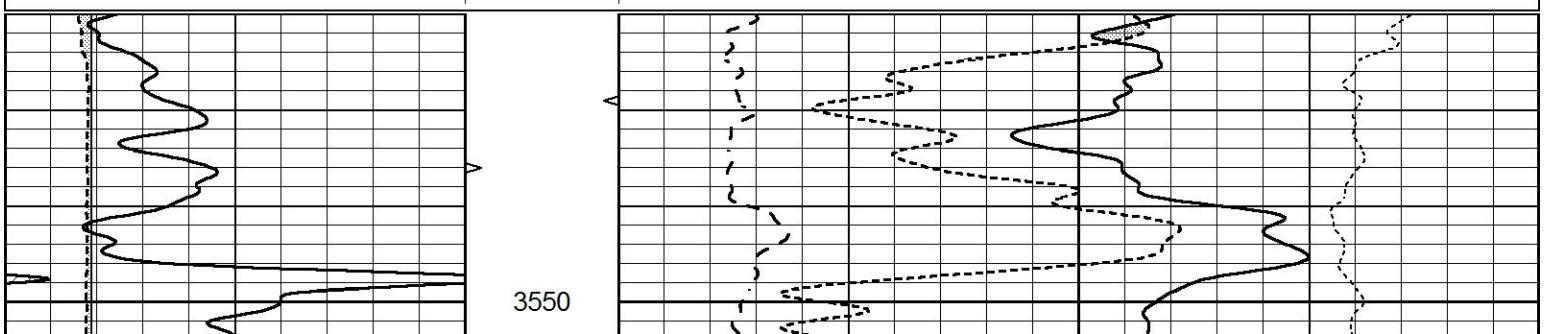


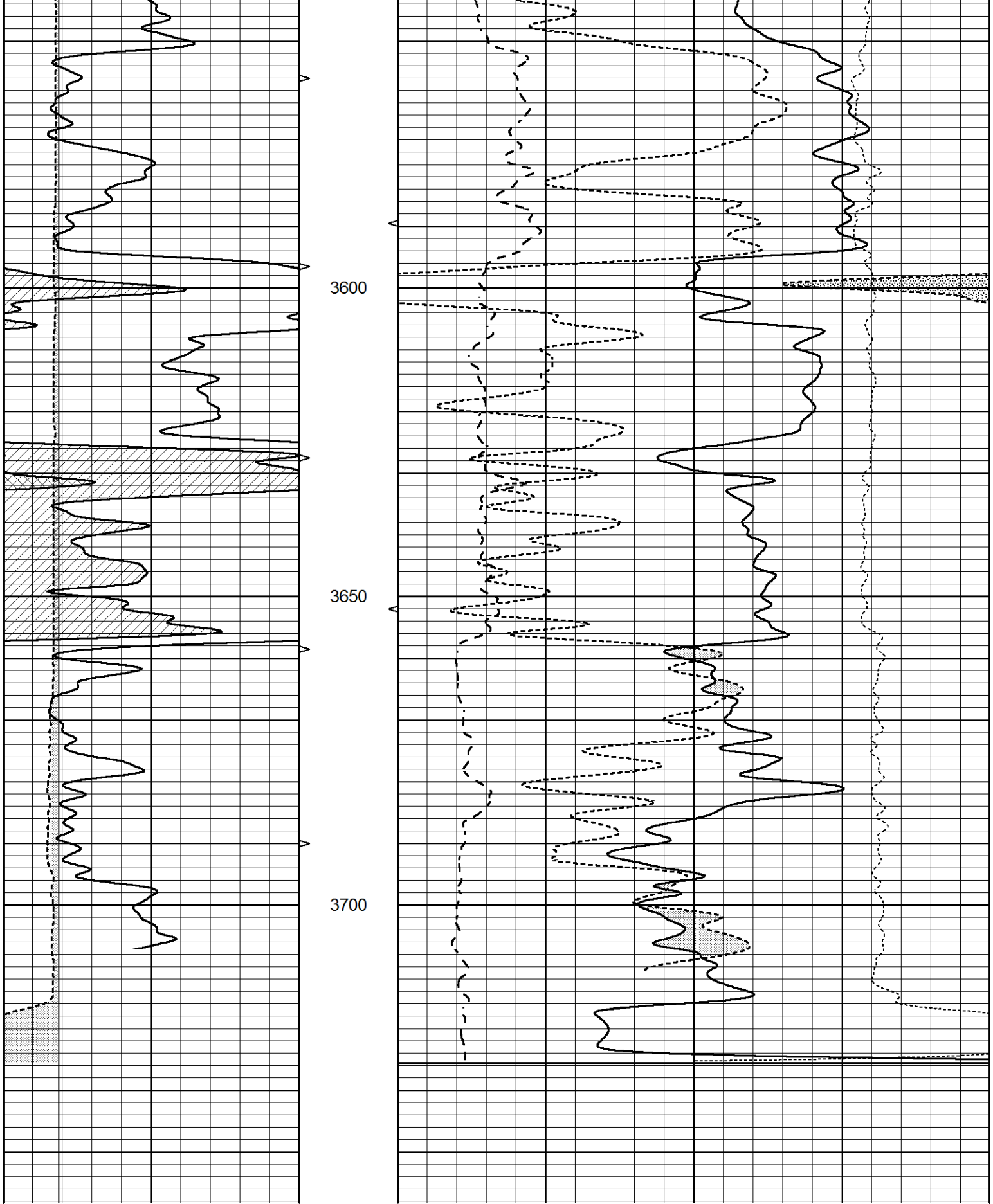
0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)		-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)		-10
			TBHV	0	PE 10	-0.25 CORRECTION (g/cc)	0.25
			0 (ft3) 10				

REPEAT SECTION

Database File	3999pe8.db
Dataset Pathname	pass2.1
Presentation Format	_ldt_neu
Dataset Creation	Fri Oct 18 07:22:43 2019
Charted by	Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150	ABHV	30	COMPENSATED DENSITY (pu)		-10
6	CALIPER (in)	16	10 (ft3) 0	30	COMPENSATED NEUTRON (pu)		-10
			TBHV	0	PE 10	-0.25 CORRECTION (g/cc)	0.25
			0 (ft3) 10				





0 GAMMA RAY (GAPI) 150	ABHV	30 COMPENSATED DENSITY (pu) -10		
6 CALIPER (in) 16	10 (ft3) 0	30 COMPENSATED NEUTRON (pu) -10		
	TBHV	0 PE 10	-0.25 CORRECTION (g/cc) 0.25	
	0 (ft3) 10			

Calibration Report

Database File 3999pe8.db
Dataset Pathname pass2.1
Dataset Creation Fri Oct 18 07:22:43 2019

Dual Induction Calibration Report

Serial-Model: FW1410-55-Probe
Surface Cal Performed: Tue Feb 19 11:44:18 2019
Downhole Cal Performed: Tue Feb 19 11:44:24 2019
After Survey Verification Performed: Tue Feb 19 11:44:27 2019

Surface Calibration

	Readings			References			Results	
Loop:	Air	Loop		Air	Loop		m	b
Deep	0.011	0.656	V	1.000	400.000	mmho/m	618.595	-5.524
Medium	-0.000	0.731	V	1.000	464.000	mmho/m	632.856	1.197
Internal:	Zero	Cal		Zero	Cal		m	b
Deep	0.007	0.649	V	0.000	400.000	mmho/m	623.784	-4.595
Medium	0.004	0.743	V	0.000	464.000	mmho/m	627.284	-2.251

Downhole Calibration

	Readings			References			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	-0.824	395.917	mmho/m	-0.976	397.550	mmho/m	1.004	-0.149
Medium	3.565	471.327	mmho/m	3.468	471.590	mmho/m	1.001	-0.099
LL3		7.503	V		1500.000	Ohm-m		
		0.001	V		20.000	Ohm-m		
		-7.481	V		3745.000	mmho-m		

After Survey Verification

	Readings			Targets			Results	
	Zero	Cal		Zero	Cal		m'	b'
Deep	0.000	0.000	mmho/m	-0.824	395.917	mmho/m	1.000	0.000
Medium	0.000	0.000	mmho/m	3.565	471.327	mmho/m	1.000	0.000
LL3		0.000	Ohm-m		1500.000	Ohm-m		
		0.000	Ohm-m		20.000	Ohm-m		
		0.000	mmho-m		3745.000	mmho-m		

Compensated Neutron Calibration Report

Serial Number: 080621PMC
Tool Model: NABORS

PRE-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

POST-SURVEY VERIFICATION

Detector	Readings	Measured	Target
Short Space	cps		
Long Space	cps	pu	pu

Gamma Ray Calibration Report

Gamma Ray Calibration Report

Serial Number:	7	
Tool Model:	Probe1	
Performed:	Tue Feb 19 11:45:10 2019	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.4300	GAPI/cps

Conservation Division
266 N. Main St., Ste. 220
Wichita, KS 67202-1513

Kansas
Corporation Commission

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

April 07, 2020

Charles B. Davis
DNR Oil and Gas, Inc.
PO BOX 4507
ENGLEWOOD, CO 80155-4507

Re: ACO-1
API 15-191-22815-00-00
WOLF/NEAL 1
N/2 Sec.33-34S-02E
Sumner County, Kansas

Dear Charles B. Davis:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 10/09/2019 and the ACO-1 was received on April 07, 2020 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

Production Department