



PIONEER
Pioneer Energy Services

DUAL COMP POROSITY LOG

Company **THOMAS GARNER, INC.**
Well **DIAMOND 'H' #1**
Field **UNKNOWN**
County **STAFFORD** State **KANSAS**

Location: API #: 15-185-24071-00-00

Other Services

SEC 23 TWP 25S RGE 13W
2310' FSL & 810' FWL

DIL
MEL/BHCS

Permanent Datum GROUND LEVEL Elevation 1923'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 1934'
D.F. N/A
G.L. 1923'

Company **THOMAS GARNER, INC.**
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State **KANSAS**

Date 8/4/2020

Run Number ONE

Type Log CNL/CDL

Depth Driller 4300'

Depth Logger 4300'

Bottom Logged Interval 4271'

Top Logged Interval 3300'

Type Fluid In Hole CHEMICAL

Salinity, PPM CL 8,300

Density 8.9

Level FULL

Max. Rec. Temp. F 119 DEG/F

Operating Rig Time 4 HOURS

Equipment -- Location P-108 HAYS

Recorded By J. HENRICKSON

Witnessed By KEITH REAVIS

Borehole Record

Casing Record

Run No.	Bit	From	To	Size	Wgt.	From	To
ONE	12.25"	0	349'	8.625"	24#	0	349'
TWO	7.875"	349'	TD				

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

ST. JOHN, KANSAS
SOUTH TO 60 RD, 1 EAST, 1/2 SOUTH,
EAST INTO

Log Measured From: KELLY BUSHING 11 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneerenergy.com 785-625-3858

Your Pioneer Energy Services Crew

Engineer: J. HENRICKSON
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: KEITH REAVIS
Secondary Witness:
Secondary Witness:
Secondary Witness:

Top - Bottom

A	BOREID	BOTTEMP	CASEOD	CASETHCK	FLUIDDEN	M	MATRXDEN
1	in 7.875	degF 119	in 5.5	in 0	g/cc 1	2	g/cc 2.71
NPORSEL	PERFS	SNDERR	SNDERRM	SPSHIFT	SRFTEMP	SZCOR	TDEPTH
Limestone	0	mmho/m 5	mmho/m 5	mV 270	degF 0	Off	ft 4300

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	44.50			GR-M&W (89-M&W)	3.00	3.50	50.00
CNLSC	41.40			CNT-M&W (tk10-MW)	5.50	3.50	100.00
CNSSC	40.65						
LSD	32.35			CDL-M&W (915-956)	8.50	4.00	250.00
DCAL	32.33						
SSD	31.85						
ML-PSI UDM ML (UDM-01)				Stackable Microlog Tools	11.50	4.00	215.00
MCAL	20.87						
MI	20.87						
MN	20.87						
RLL3	15.80						
RLL3F	15.79						
CILD	8.00			DIL-M&W (55-222)	18.50	3.50	220.00

CILM 4.70

SP 0.20

Dataset: garner_diamond_h_1.db: field/well/stackml/pass3.1
Total length: 47.00 ft
Total weight: 835.00 lb
O.D.: 4.00 in

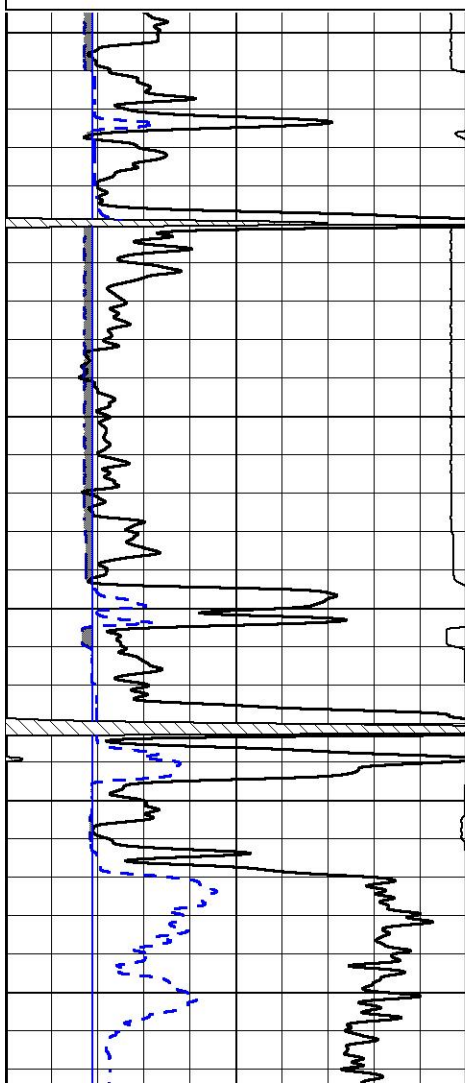


MAIN PASS

Database File garner_diamond_h_1.db
Dataset Pathname stackml/pass3.1
Presentation Format cdl
Dataset Creation Tue Aug 04 14:51:04 2020
Charted by Depth in Feet scaled 1:600

0 GAMMA RAY (GAPI) 150
6 CALIPER (in) 16

30 COMPENSATED DENSITY (pu) -10
2 BULK DENSITY (g/cc) 3
15000 LINE TENSION (lb) 0



3300

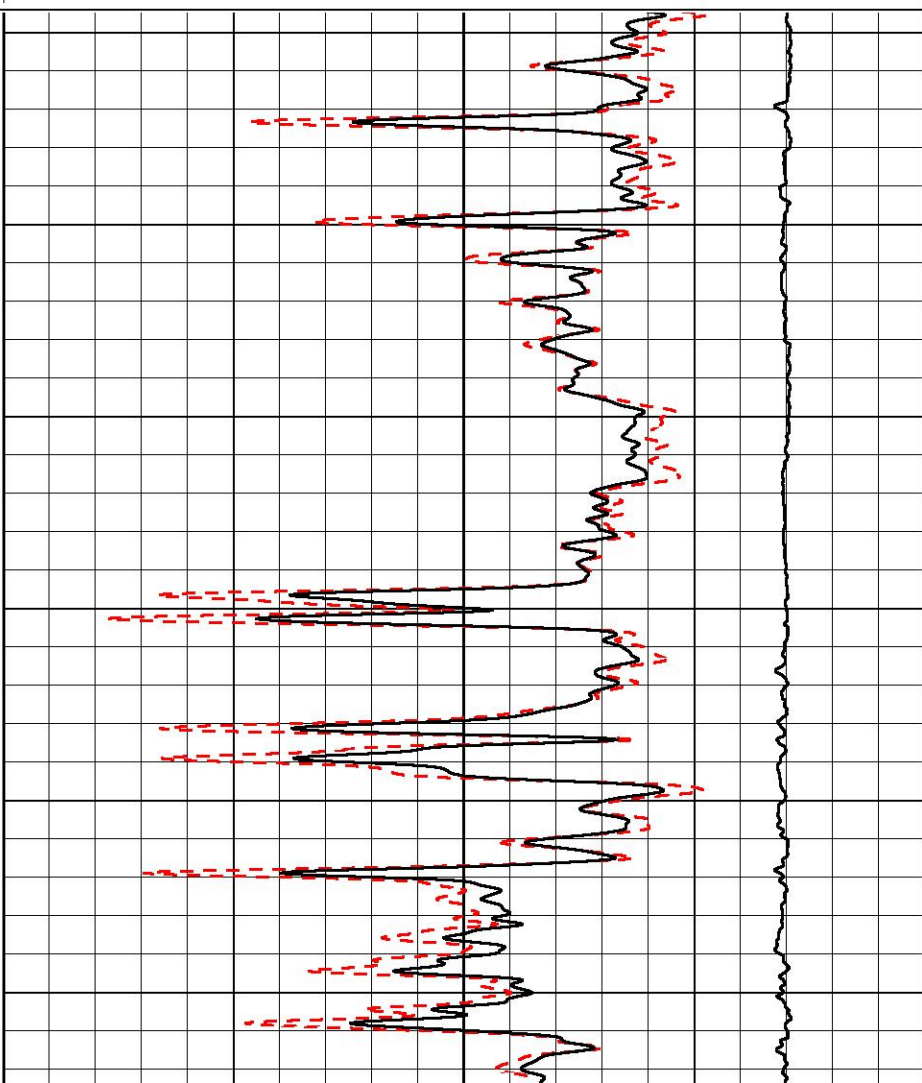
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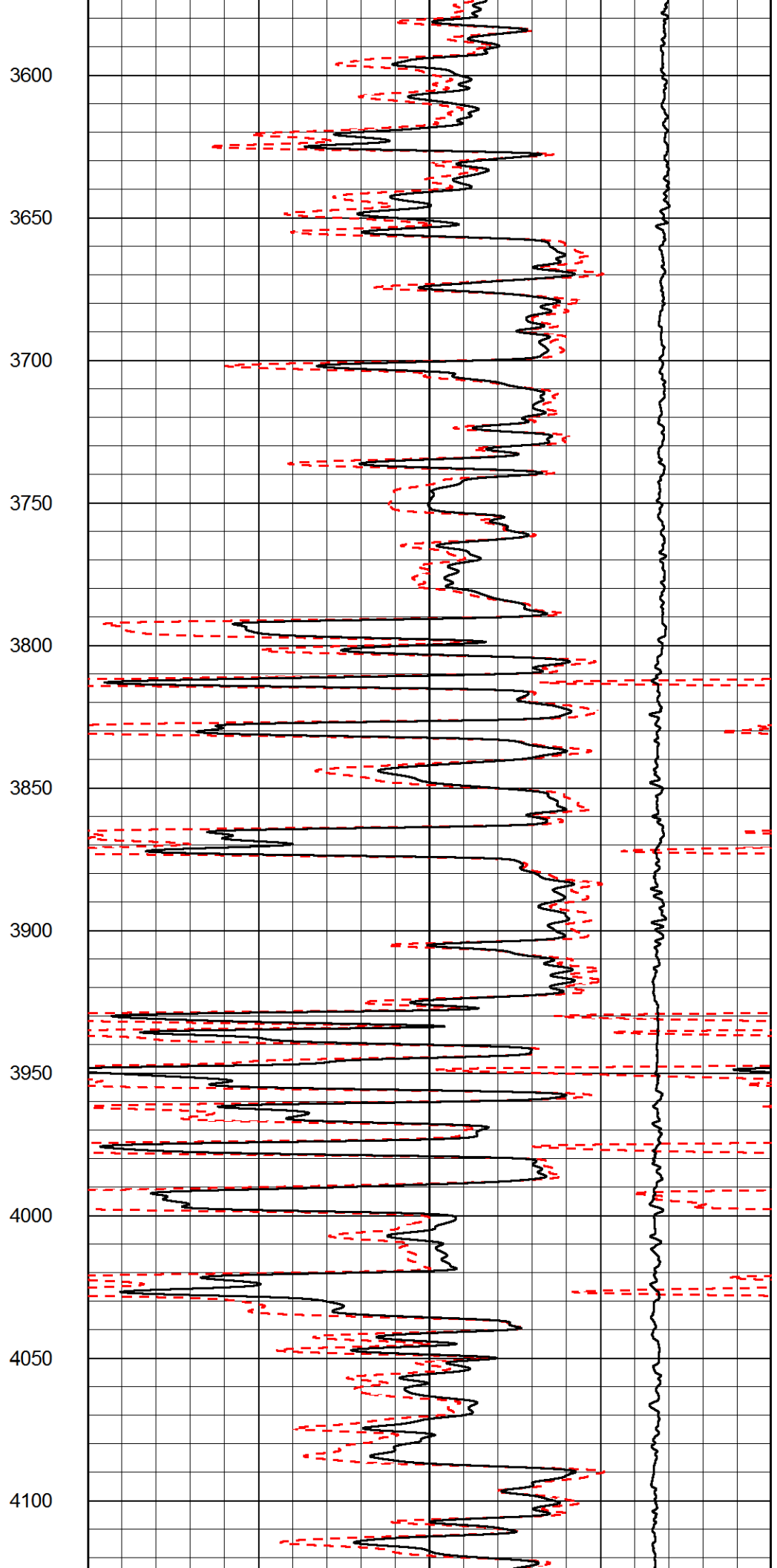
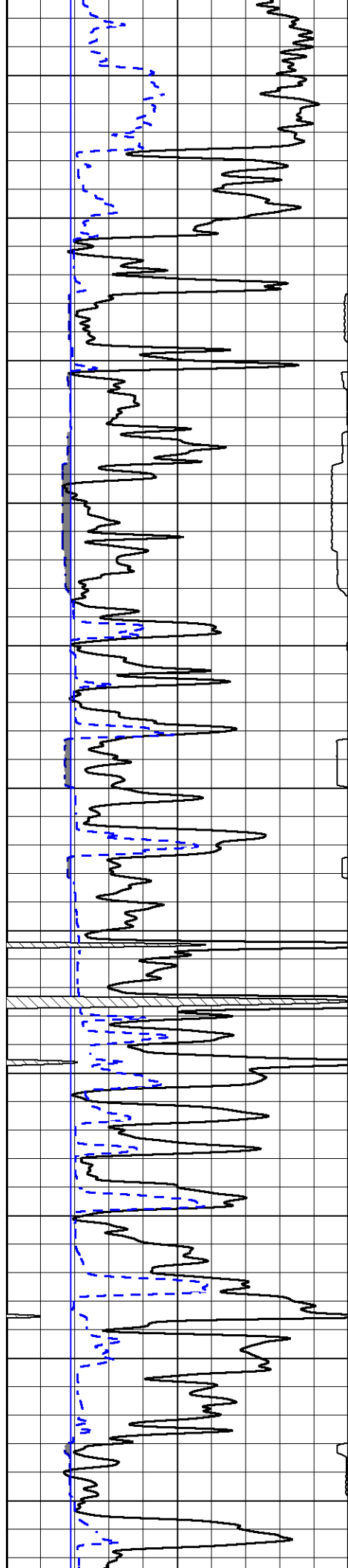
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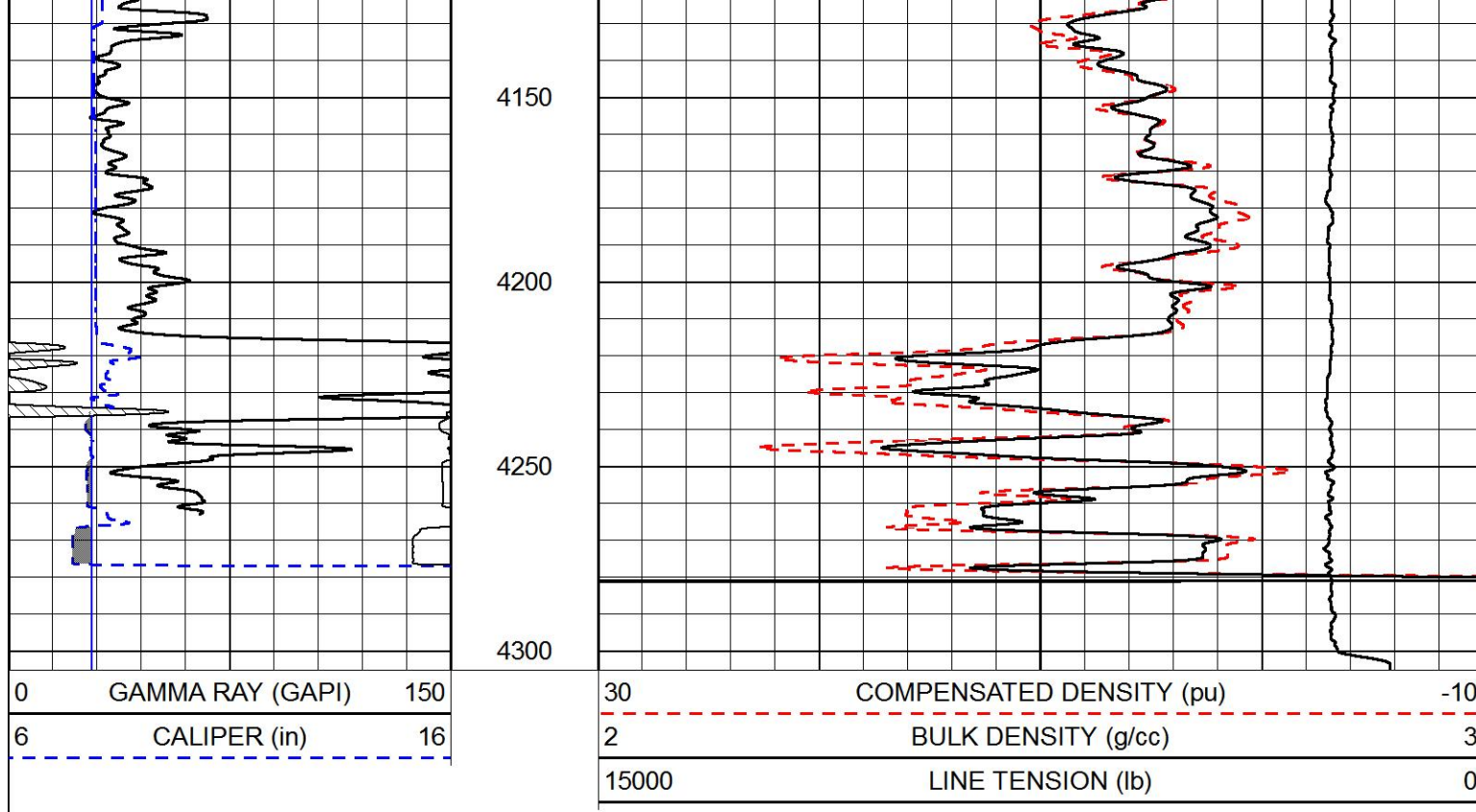
3450

3500

3550





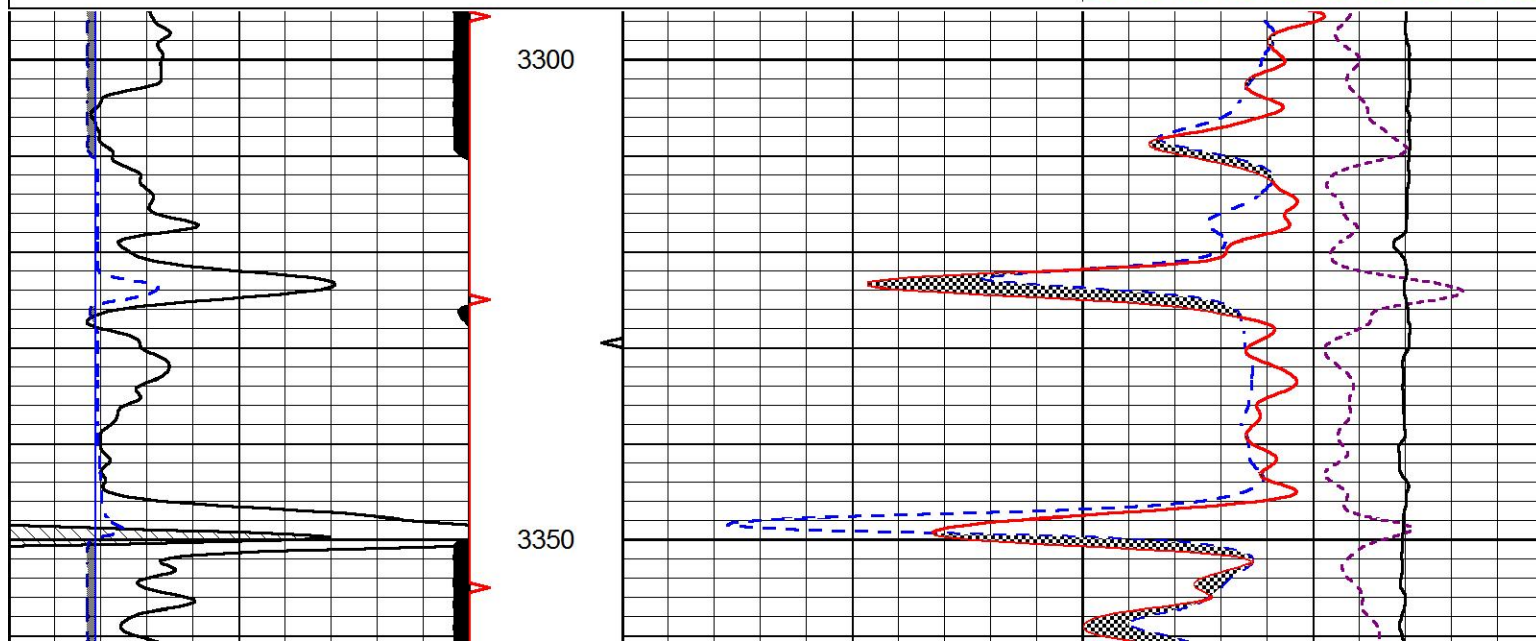
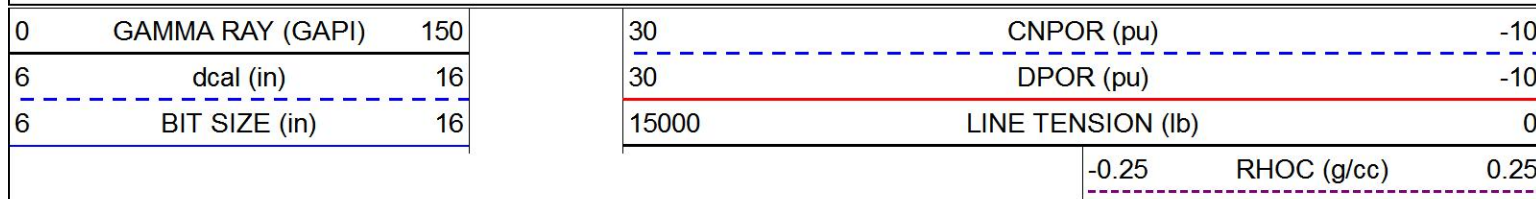


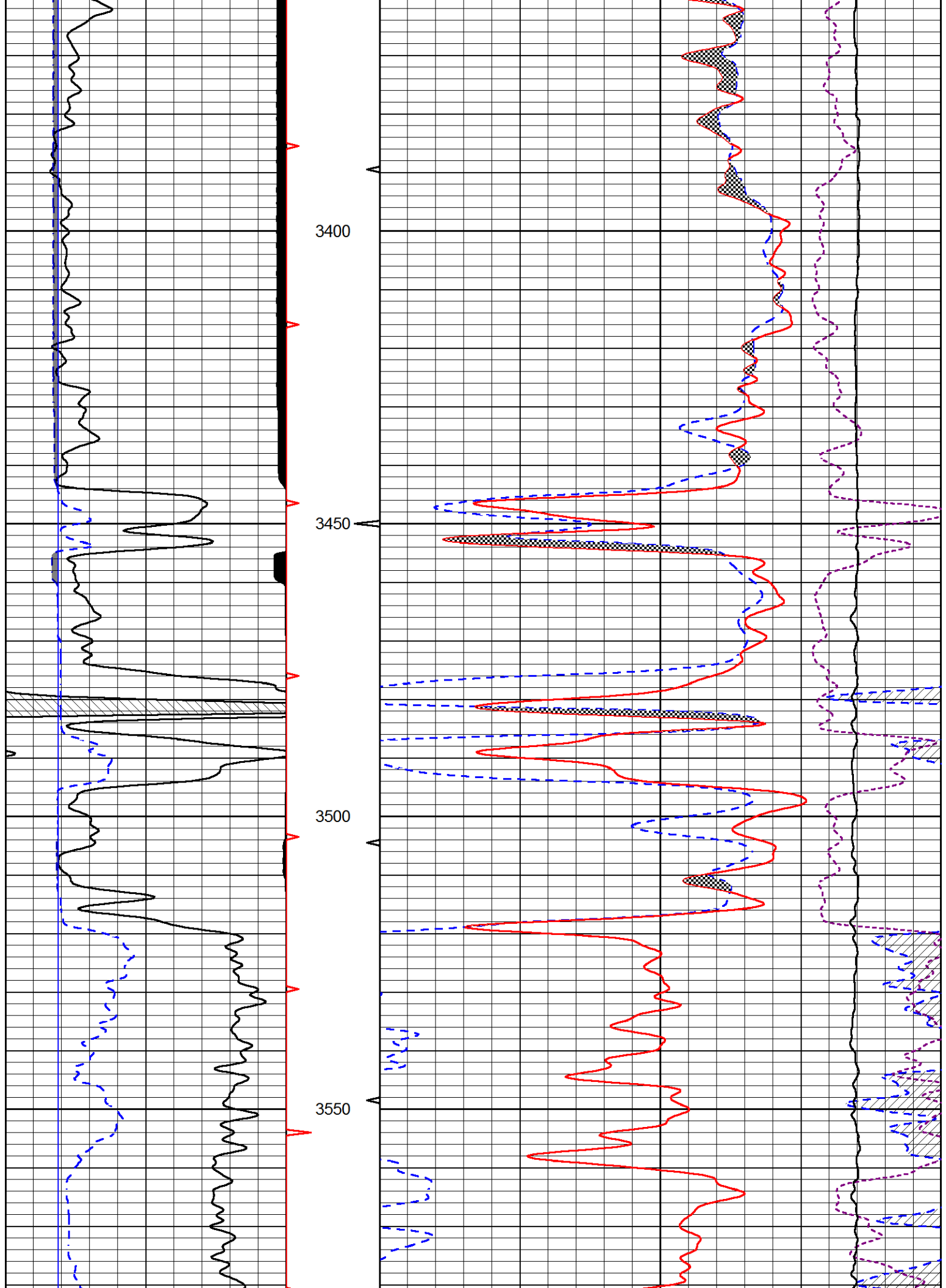


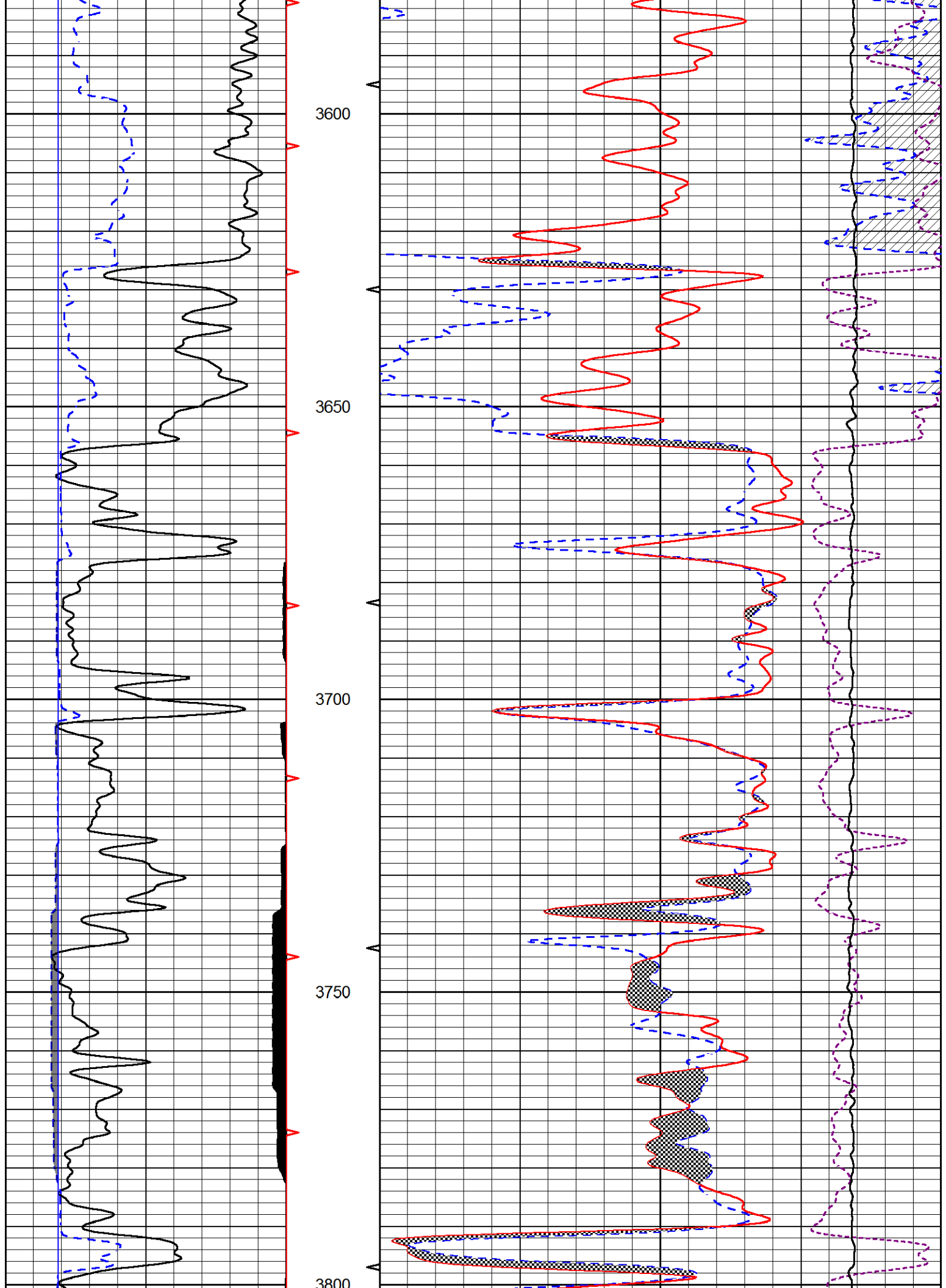
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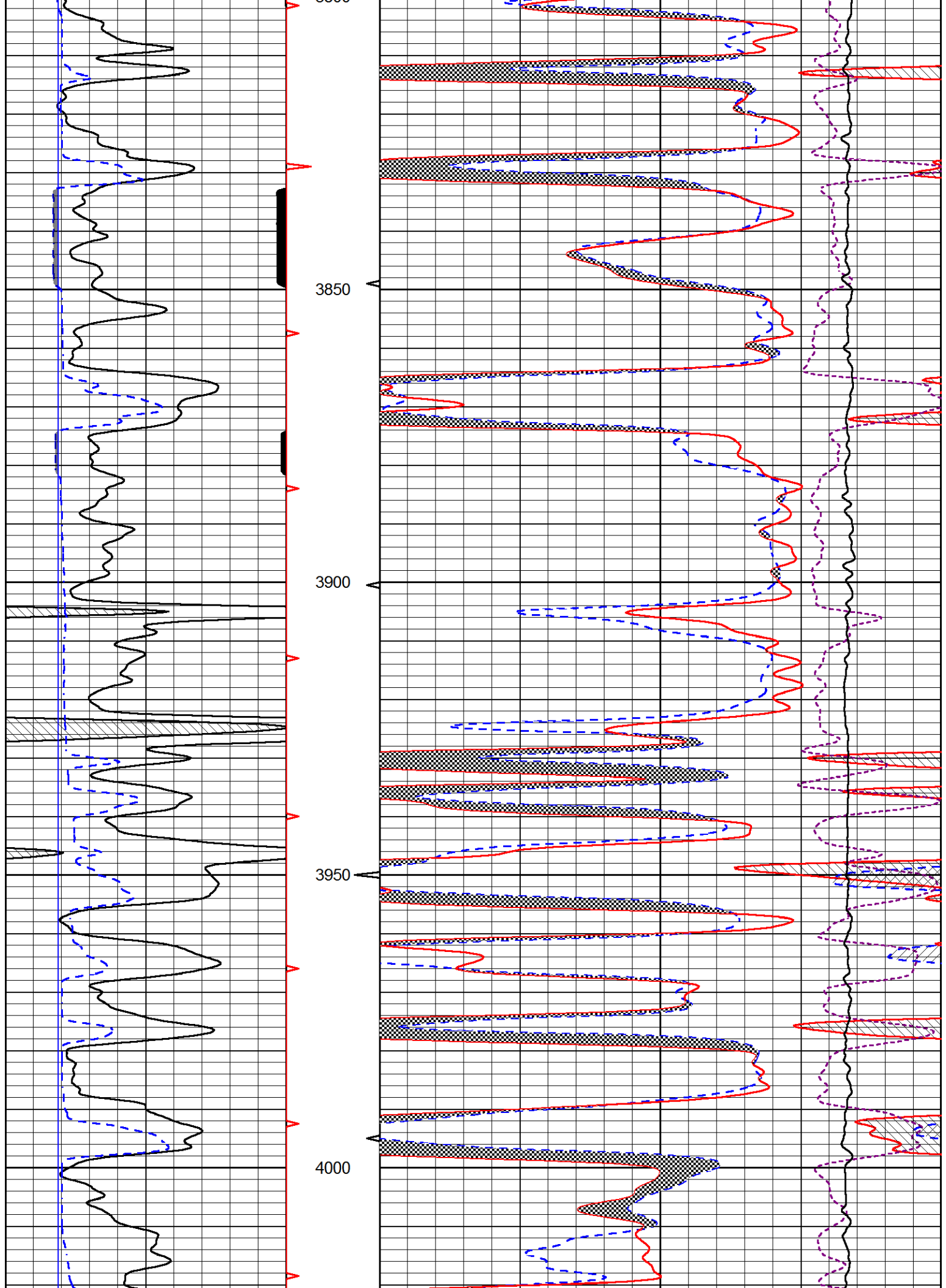
MAIN PASS

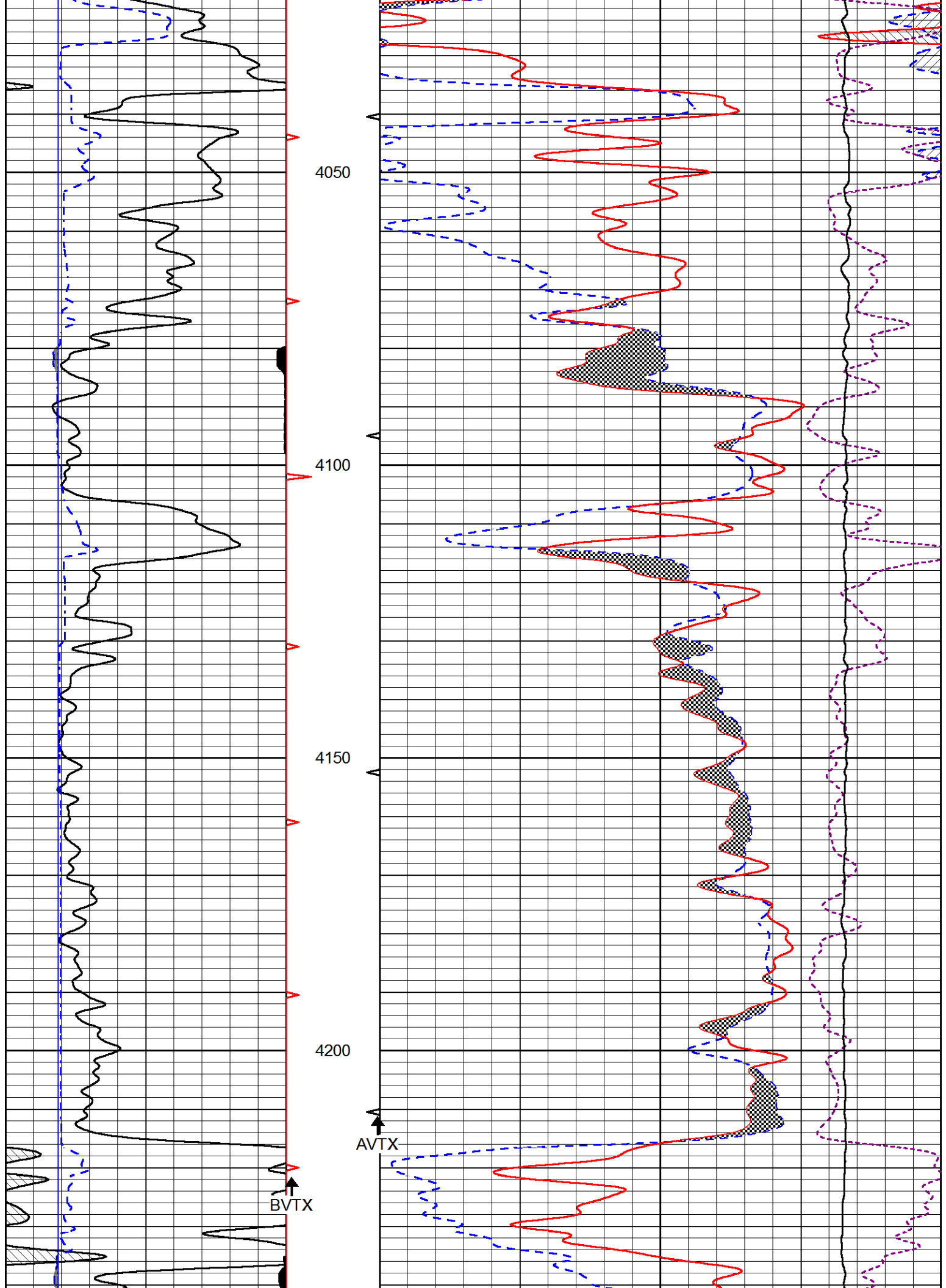
Database File: garner_diamond_h_1.db
 Dataset Pathname: stackml/pass3.1
 Presentation Format: cndlspec
 Dataset Creation: Tue Aug 04 14:51:04 2020
 Charted by: Depth in Feet scaled 1:240

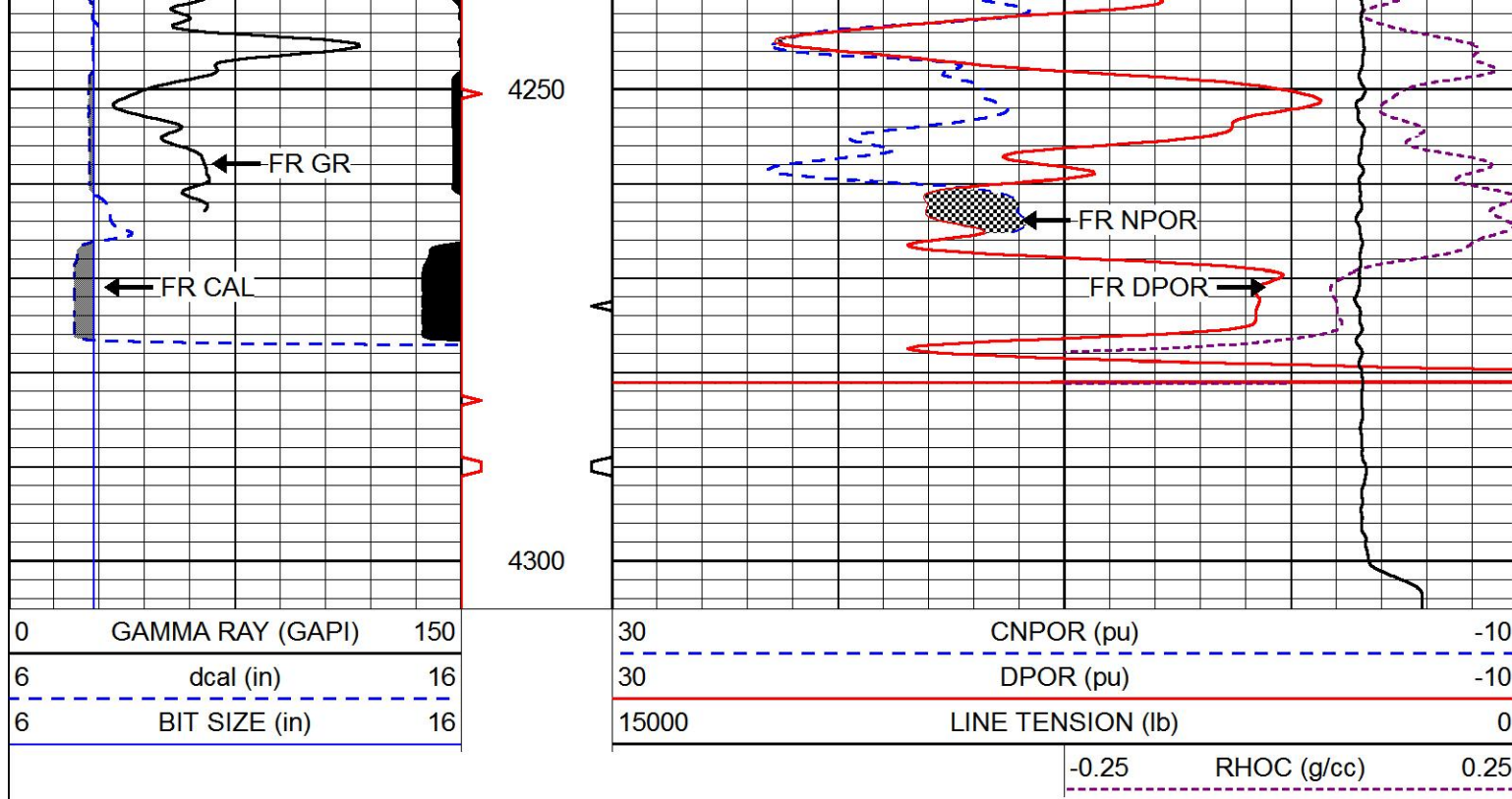








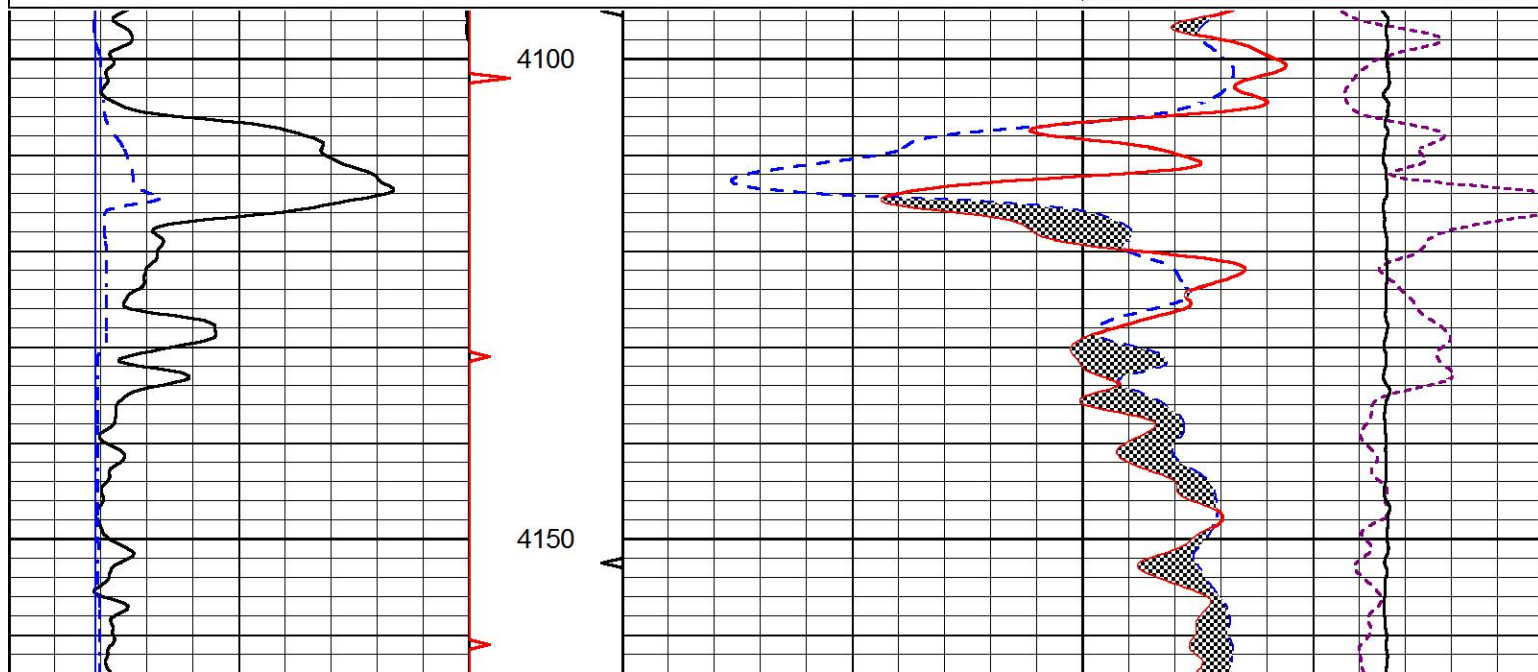
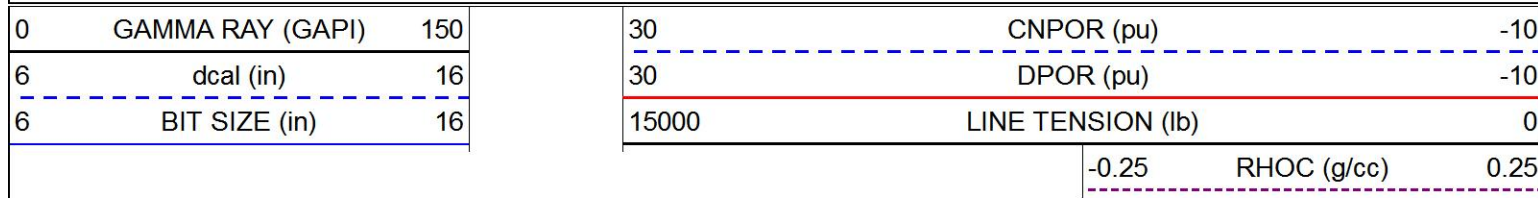


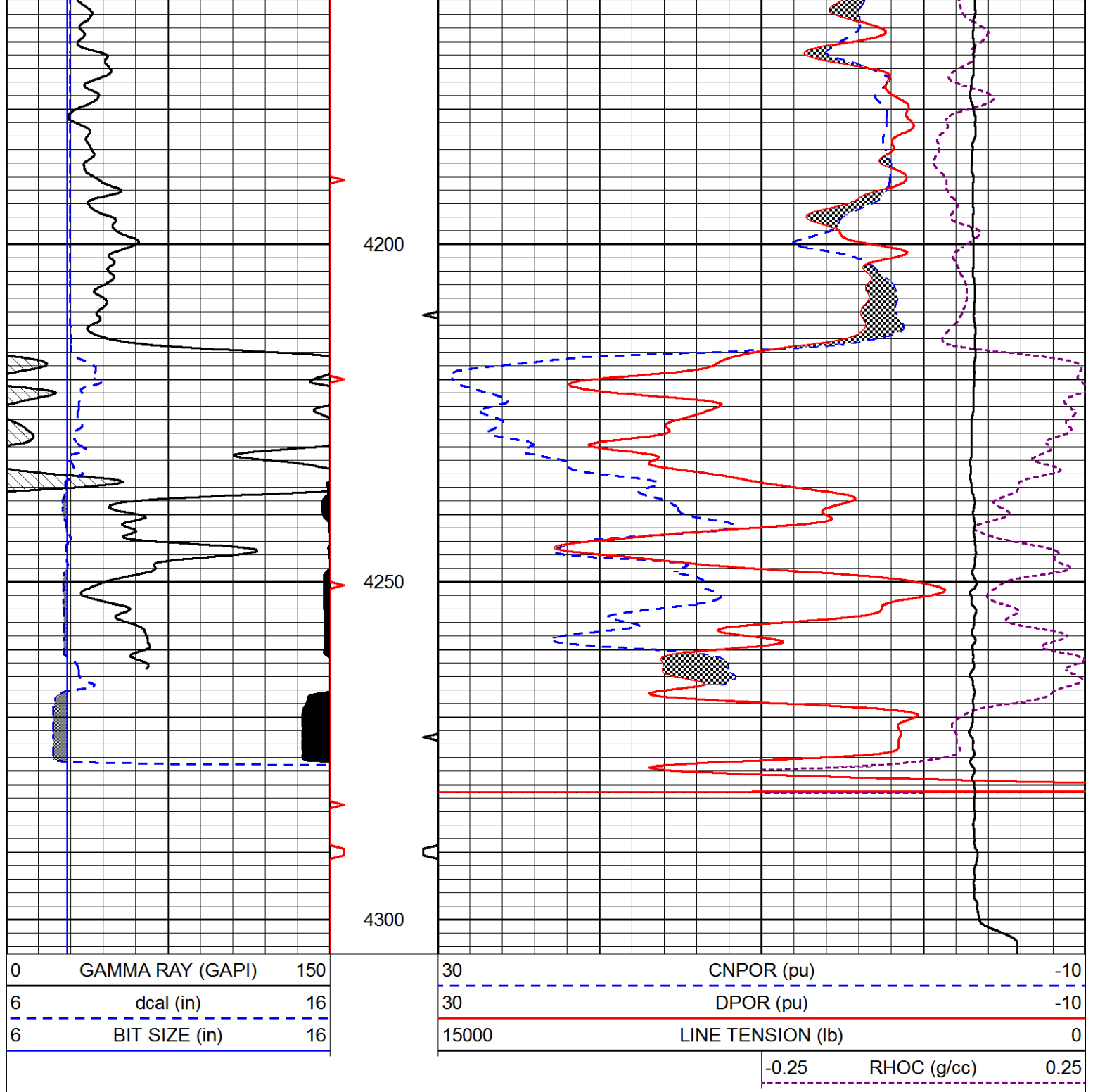


REPEAT SECTION

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Database File: garner_diamond_h_1.db
 Dataset Pathname: stackml/pass2.1
 Presentation Format: cndlspec
 Dataset Creation: Tue Aug 04 13:57:18 2020
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File garner_diamond_h_1.db
 Dataset Pathname stackml/pass3.1
 Dataset Creation Tue Aug 04 14:51:04 2020

Dual Induction Calibration Report

Serial-Model: 55-222-M&W
 Calibration Performed: Tue Dec 10 05:11:10 2019

Readings			References			Results	
Loop:	Air	Loop	Air	Loop	mmho/m	Gain	Offset
Deep	167.000	835.000	0.000	255.800	mmho/m	0.500	-41.000

Medium	0.000	1348.000	142.000	255.800	mmho/m	0.370	-15.000
Microlog Calibration Report							
Serial-Model: Performed:			UDM-01-PSI UDM ML Fri May 31 06:10:42 2019				
Readings			References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	25000.0000	0.0000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	25000.0000	0.0000
Caliper	1.3766	1.0818	8.0000	22.0000	in	-47.4839	69.2000
Compensated Density Calibration Report							
Serial-Model: Source / Verifier: Master Calibration Performed:			915-956-M&W / Thu Mar 19 09:21:34 2020				
Master Calibration							
	Density		Far Detector		Near Detector		
Magnesium	1.755	g/cc	3668.53	4669.61	cps		
Aluminum	2.675	g/cc	710.88	3056.05	cps		
Spine Angle = 75.51			Density/Spine Ratio = 0.543				
	Size		Reading				
Small Ring	4.00	in	1.17				
Large Ring	14.00	in	1.05				
Compensated Neutron Calibration Report							
Serial Number: Tool Model: Calibration Performed:			tk10-MW M&W Wed Nov 16 11:21:36 2016				
Detector	Readings		Target		Normalization		
Short Space	6240.00	cps	1000.00	cps	1.6025		
Long Space	460.00	cps	1000.00	cps	1.9500		
Gamma Ray Calibration Report							
Serial Number: Tool Model: Calibration Performed:		89-M&W M&W Tue Dec 10 05:11:34 2019					
Calibrator Value:		1000.0	GAPI				
Background Reading:		0.0	cps				
Calibrator Reading:		6.2	cps				
Sensitivity:		0.5200	GAPI/cps				



Well	DIAMOND 'H' #1
Field	UNKNOWN
County	STAFFORD
State	KANSAS