



MIDWEST WIRELINE

**DUAL COMP POROSITY
MICRO & DUAL IND LOG**

Company Ritchie Exploration, Inc.
Well #3 Wyrill 19A
Field Todd Northeast
County Rooks
State Kansas

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Location: API #: 15-163-24446-00-00
63 S & 112 W of S2 NW/NE
1053 FNL & 2092 FEL
SEC 19 TWP 6S RGE 20W
Permanent Datum Ground Level Elevation 2281
Log Measured From Kelly Bushing
Drilling Measured From Kelly Bushing
Other Services
None
K.B. 2288
D.F.
G.L. 2281

Date	11/28/2021						
Run Number	One						
Type Log	CNL/CDL/ML/DIL						
Depth Driller	3840						
Depth Logger	3838						
Bottom Logged Interval	3837						
Top Logged Interval	3100						
Type Fluid In Hole	Chemical						
Salinity, PPM CL	2000						
Density	9.3						
Level	Full						
Max. Rec. Temp. F	114						
Operating Rig Time	4 Hours						
Equipment -- Location	P-24 Hays						
Recorded By	T. Martin						
Witnessed By	Kent Matson						
Borehole Record							
Run No.	Bit	From	To	Size	Wgt.	From	To
One	12.25	00	215	8.625	23	00	215
Two	7.875	215	TD				
Casing Record							

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

Stockton, KS, 5 N to Rd E,
15 W to Rd 3, 1 N, 1 W, S & W into

Log Measured From: Kelly Bushing 7 Ft. Above Permanent Datum

THANK YOU FOR USING MIDWEST WIRELINE LLC
785-625-3858

Your Midwest Wireline Crew

Engineer: T. Martin
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Kent Matson
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	32.75		GR-M&W (233-M&W)	3.00	3.50	50.00
CNLSC CNSSC	29.65 28.90		CNT-M&W (207-MW)	5.00	3.50	100.00
LSD DCAL SSD	20.60 20.58 20.10		CDL-M&W (934-226)	8.50	4.00	250.00
RLL3F RLL3	15.50 15.50		DIL-PSI HIGH TEMP (952-828)	18.25	3.50	220.00
CILD	8.33					
CILM	4.50					
SP	0.20					

Dataset: ritchie_#3 wyrill 19a.db: field/well/Stack/pass3.1
 Total length: 34.75 ft
 Total weight: 620.00 lb
 O.D.: 4.00 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\ritchie_#3 wyrill 19a.db
 Dataset field/well/Stack/pass3.1/_vars_

Top - Bottom

A	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	M	MATRXDEN g/cc
1	7.875	114	5.5	0	1	2	2.71
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Limestone	0	0	0	145	50	Off	3838

Variable Description

A : Cement Factor (a)
 BOREID : Borehole I.D.
 BOTTEMP : Bottom Hole Temperature
 CASEOD : Casing O.D.
 CASETHCK : Casing Thickness
 FLUIDDEN : Fluid Density
 M : Cement Exp (m)
 MATRXDEN : Matrix Density

NPORSEL : Neutron Porosity Curve Select
 PERFS : Perforation Flag
 SNDERR : Deep Sonde Error Correction
 SNDERRM : Medium Sonde Error Correction
 SPSHIFT : S.P. Baseline Offset
 SRFTEMP : Surface Temperature
 SZCOR : CN Size Cor. ?
 TDEPTH : Total Depth

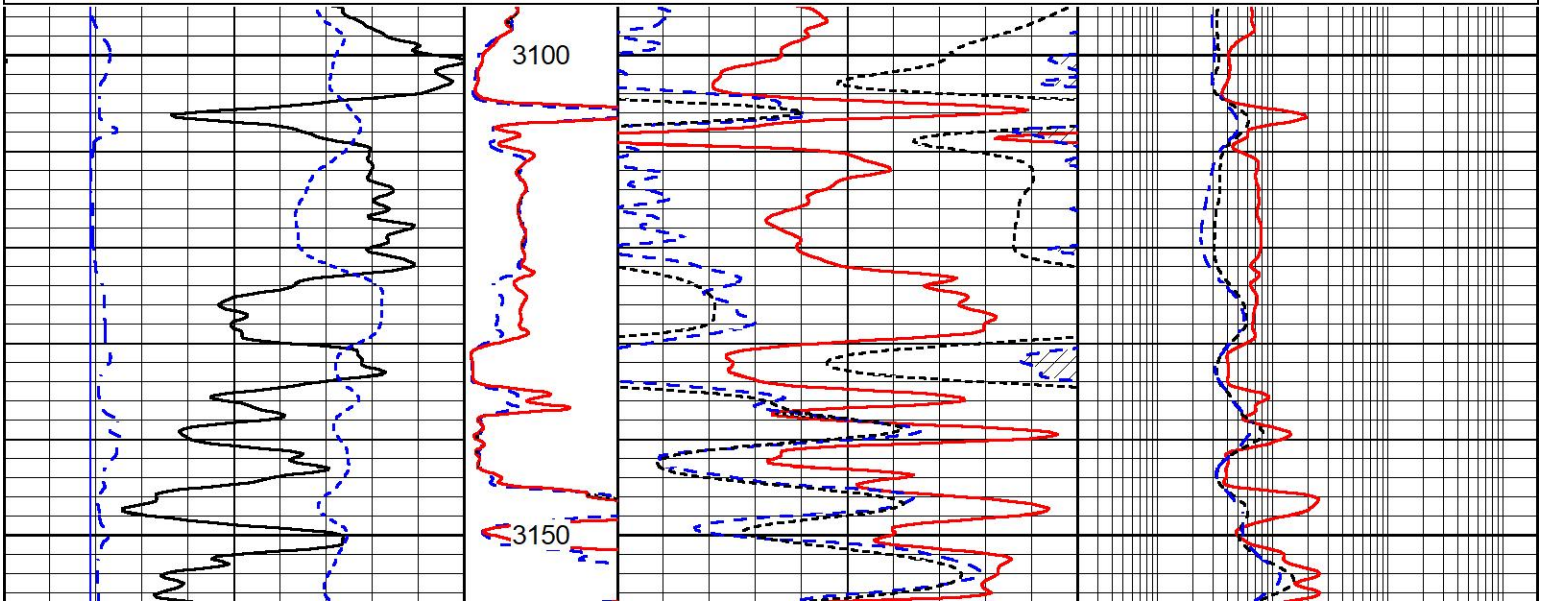


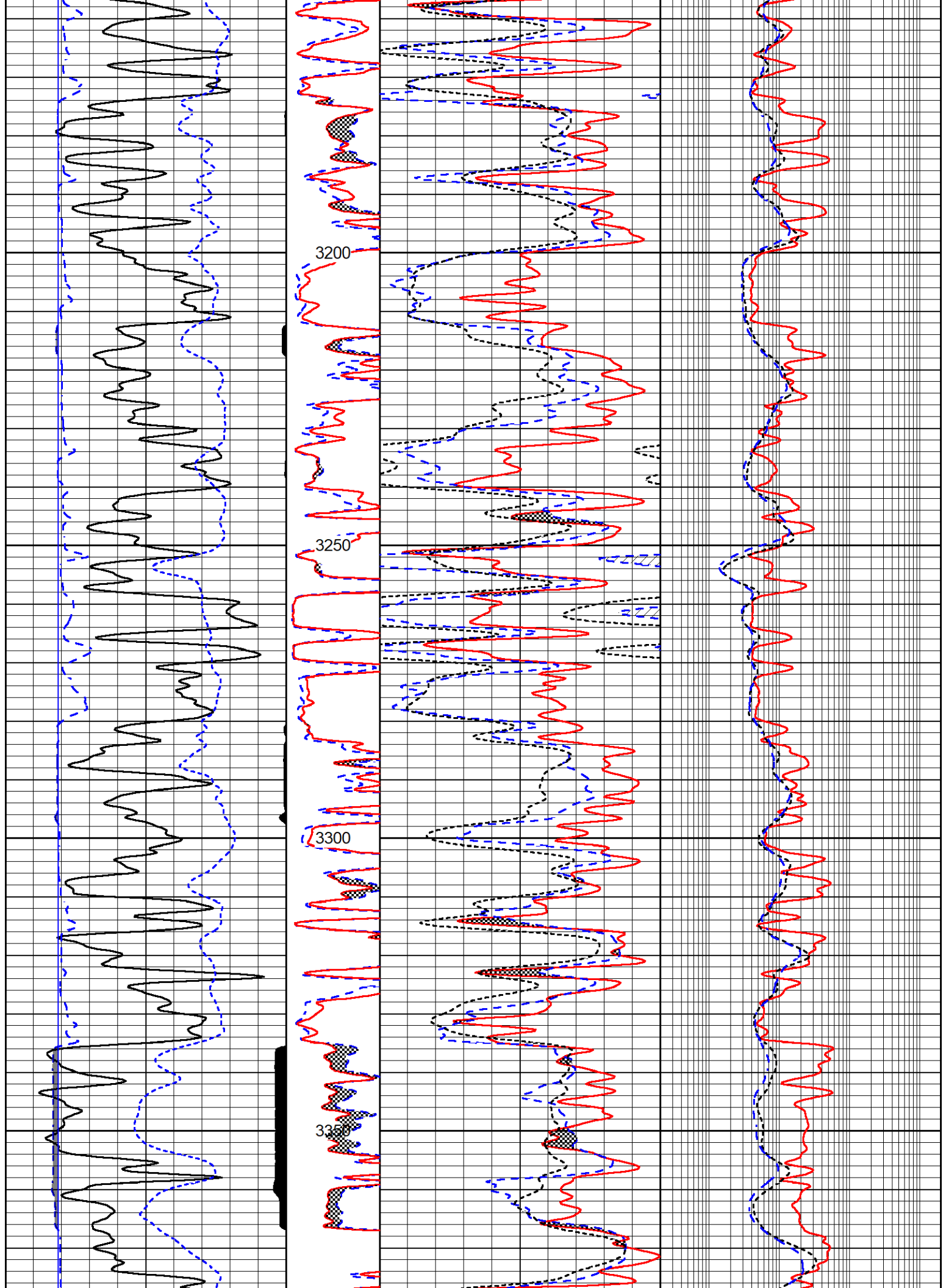
DETAIL SECTION

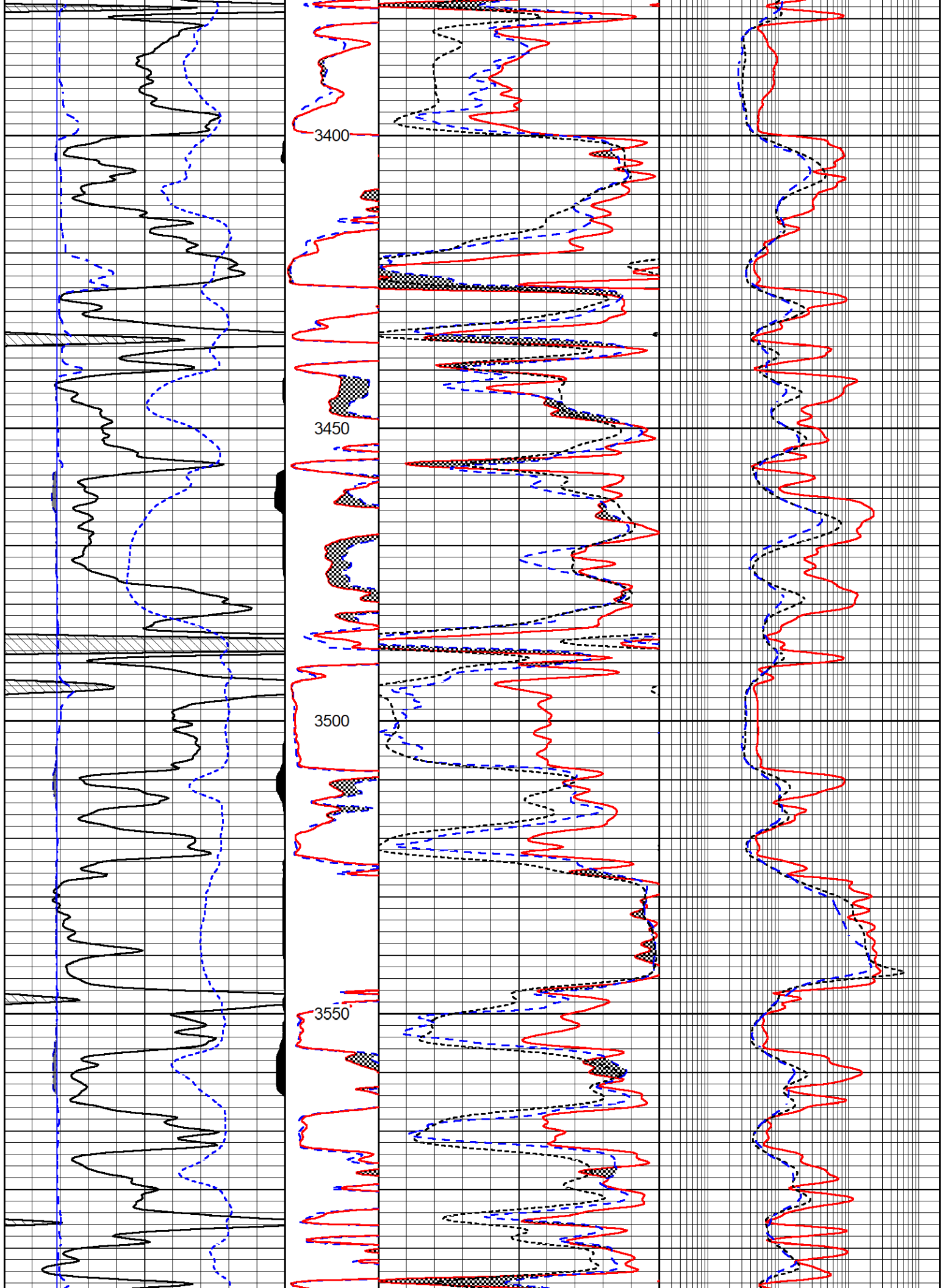
MAIN PASS

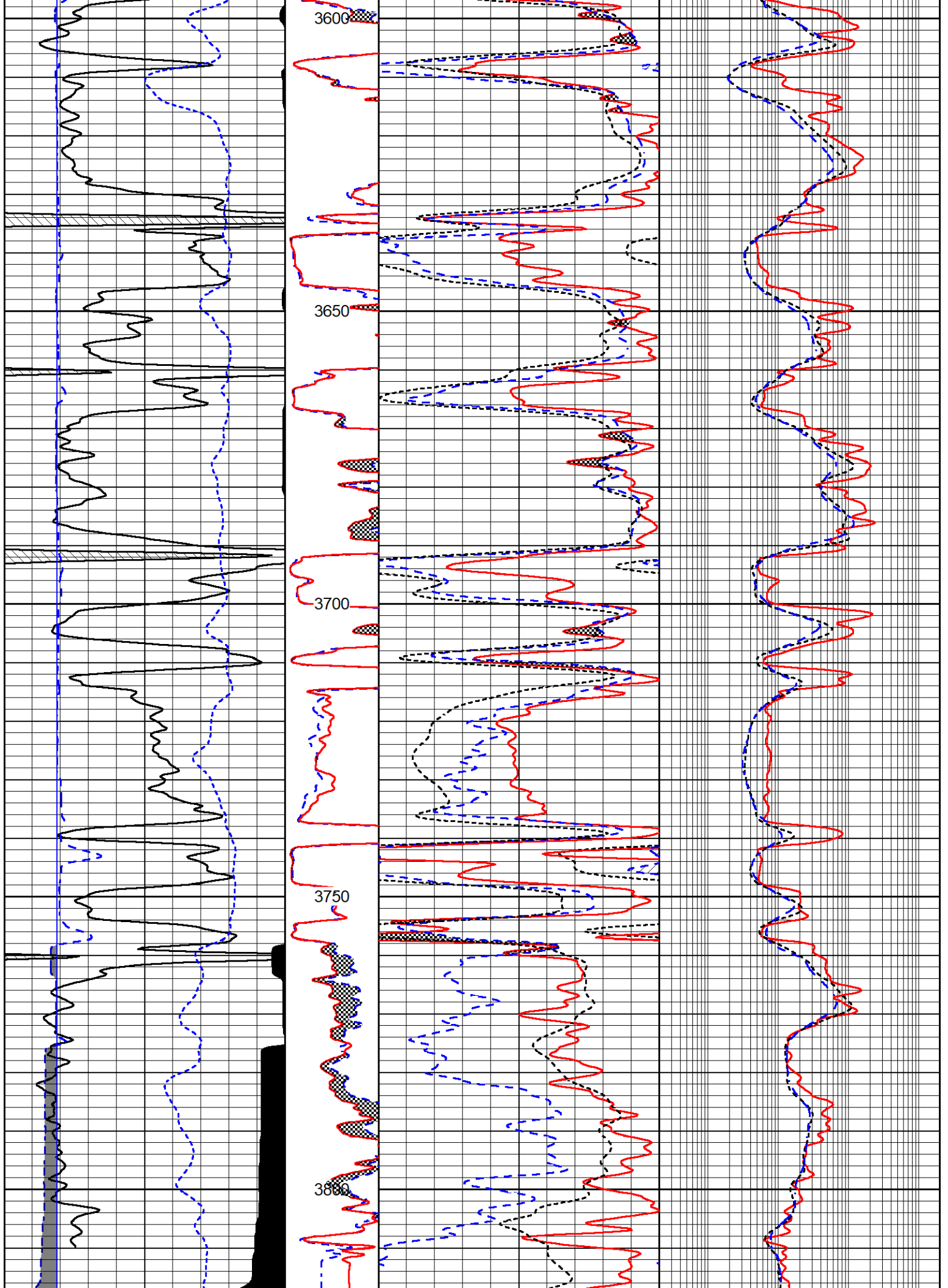
Database File ritchie_#3 wyrill 19a.db
 Dataset Pathname Stack/pass3.1
 Presentation Format RITCHC~1
 Dataset Creation Sun Nov 28 12:34:00 2021
 Charted by Depth in Feet scaled 1:240

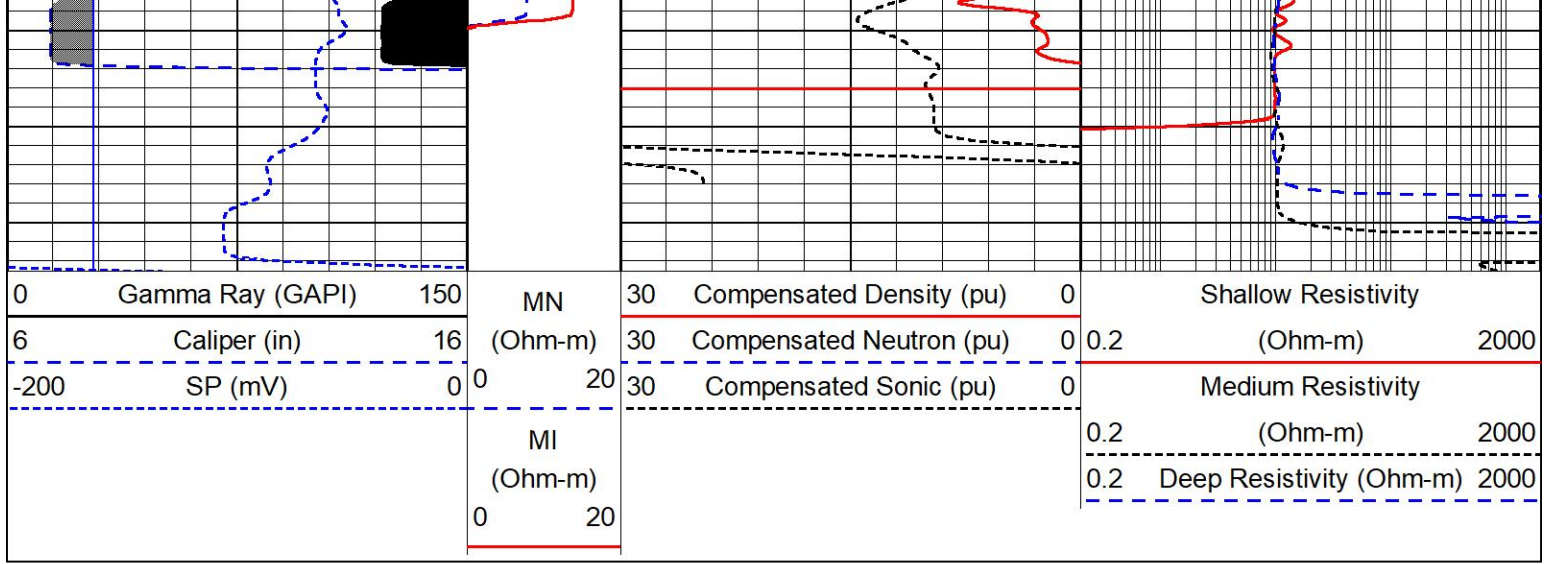
0	Gamma Ray (GAPI)	150	MN	30	Compensated Density (pu)	0	Shallow Resistivity
6	Caliper (in)	16	(Ohm-m)	30	Compensated Neutron (pu)	0	(Ohm-m) 2000
-200	SP (mV)	0	0 20	30	Compensated Sonic (pu)	0	Medium Resistivity
			MI				0.2 (Ohm-m) 2000
			(Ohm-m)				0.2 Deep Resistivity (Ohm-m) 2000
			0 20				









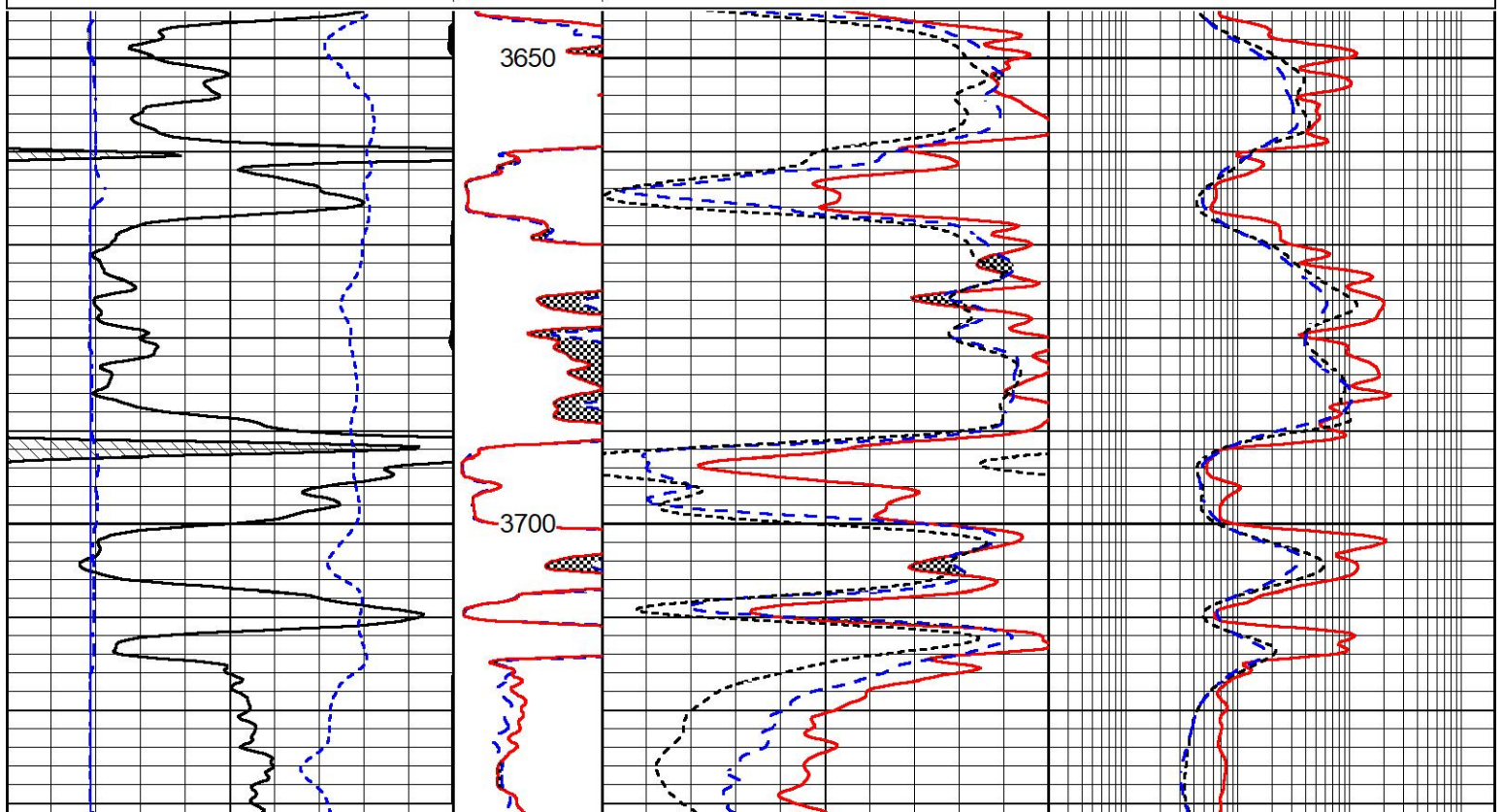
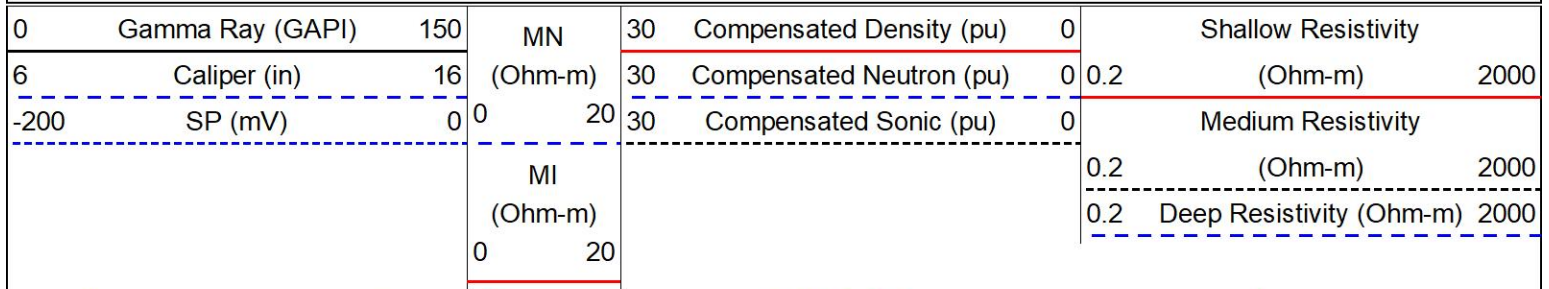


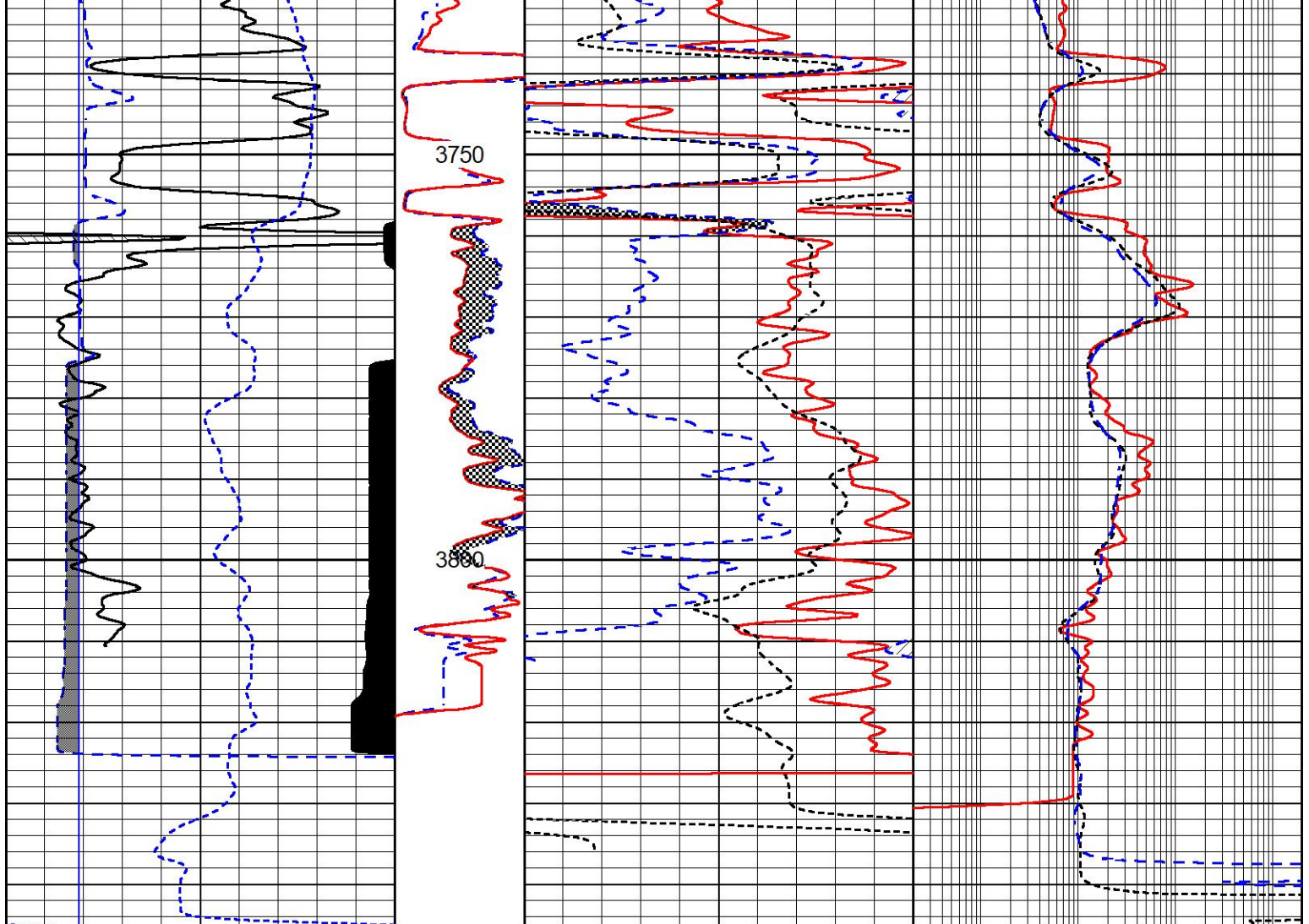
MIDWEST WIRELINE

REPEAT SECTION

REPEAT PASS

Database File ritchie_#3 wyrill 19a.db
 Dataset Pathname Stack/pass2.1
 Presentation Format RITCHC~1
 Dataset Creation Sun Nov 28 11:53:28 2021
 Charted by Depth in Feet scaled 1:240





0	Gamma Ray (GAPI)	150	MN	30	Compensated Density (pu)	0	Shallow Resistivity		
6	Caliper (in)	16	(Ohm-m)	30	Compensated Neutron (pu)	0	(Ohm-m)	2000	
-200	SP (mV)	0	0	20	30	Compensated Sonic (pu)	0	Medium Resistivity	
			MI				0.2	(Ohm-m)	2000
			(Ohm-m)				0.2	Deep Resistivity (Ohm-m)	2000
			0	20					



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