



PIONEER
Pioneer Energy Services

MICRORESISTIVITY LOG

Company JAMES PRODUCTION, INC.

Well BEST #1-1

Field WILDCAT

County SHERIDAN

State KANSAS

Company JAMES PRODUCTION, INC.

Well BEST #1-1

Field WILDCAT

County SHERIDAN

State KANSAS

Location:

API #: 15-179-21462-00-00

Other Services

335' FNL & 1294' FEL
SEC 1 TWP 7S RGE 29W

Permanent Datum GROUND LEVEL Elevation 2825'
Log Measured From KELLY BUSHING
Drilling Measured From KELLY BUSHING

Elevation
K.B. 2830'
D.F. N/A
G.L. 2825'

Date 7/31/2019

Run Number ONE

Depth Driller 4270'

Depth Logger 4267'

Bottom Logged Interval 4266'

Top Log Interval 3500'

Casing Driller 8.625" @ 305'

Casing Logger 302'

Bit Size 7.875"

Type Fluid in Hole CHEMICAL

Salinity, ppm CL 1500

Density / Viscosity 8.7 49

pH / Fluid Loss 9.0 9.2

Source of Sample FLOWLINE

Rm @ Meas. Temp 1.20 @ 73

Rmt @ Meas. Temp 0.90 @ 73

Rmc @ Meas. Temp 1.62 @ 73

Source of Rmt / Rmc CHARTS

Rm @ BHT 0.74 @ 119

Operating Rig Time 4 HOURS

Max Rec. Temp. F 119

Equipment Number P-24

Location HAYS

Recorded By IAN MABB

Witnessed By JARRED LEIS

<<< 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.

HOXIE, KS.

6 MILES NORTH TO RD 70N, 3 MILES WEST TO RD 30,
2 MILES NORTH & WEST INTO

Log Measured From: KELLY BUSHING 5 Ft. Above Permanent Datum

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

Your Pioneer Energy Services Crew

Engineer: IAN MABB

Operator:

Operator:

Operator:

This Log Record Was Witnessed By

Primary Witness: JARRED LEIS

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 2	mmho/m -3	mV 255	degF 0	Off	ft 0

Sensor	Offset (ft)	Schematic		Description	Length (ft)	O.D. (in)	Weight (lb)
GR	40.58			GR-M&W (233-M&W)	3.00	3.50	50.00
CNLSC	37.48			CNT-M&W (207-MW)	5.50	3.50	100.00
CNSSC	36.73						
LSD	28.43			CDL-M&W (96-916)	8.50	4.00	250.00
	DCAL	28.42					
	SSD	27.93					
MCAL	19.83			ML-PSIML (PSI-01)	7.58	4.00	65.00
	MI	19.83		GO Micro log tools converted to Simplec electronics			
	MN	19.83					
RLL3F	15.80						
RLL3	15.80						
CILD	8.00			DIL-PSI HIGH TEMP (1039)	18.50	3.50	220.00

CILM

4.70

SP

0.20

Dataset: james_production_best_1_1.db: field/well/stackmel/pass3.1
 Total length: 43.08 ft
 Total weight: 685.00 lb
 O.D.: 4.00 in

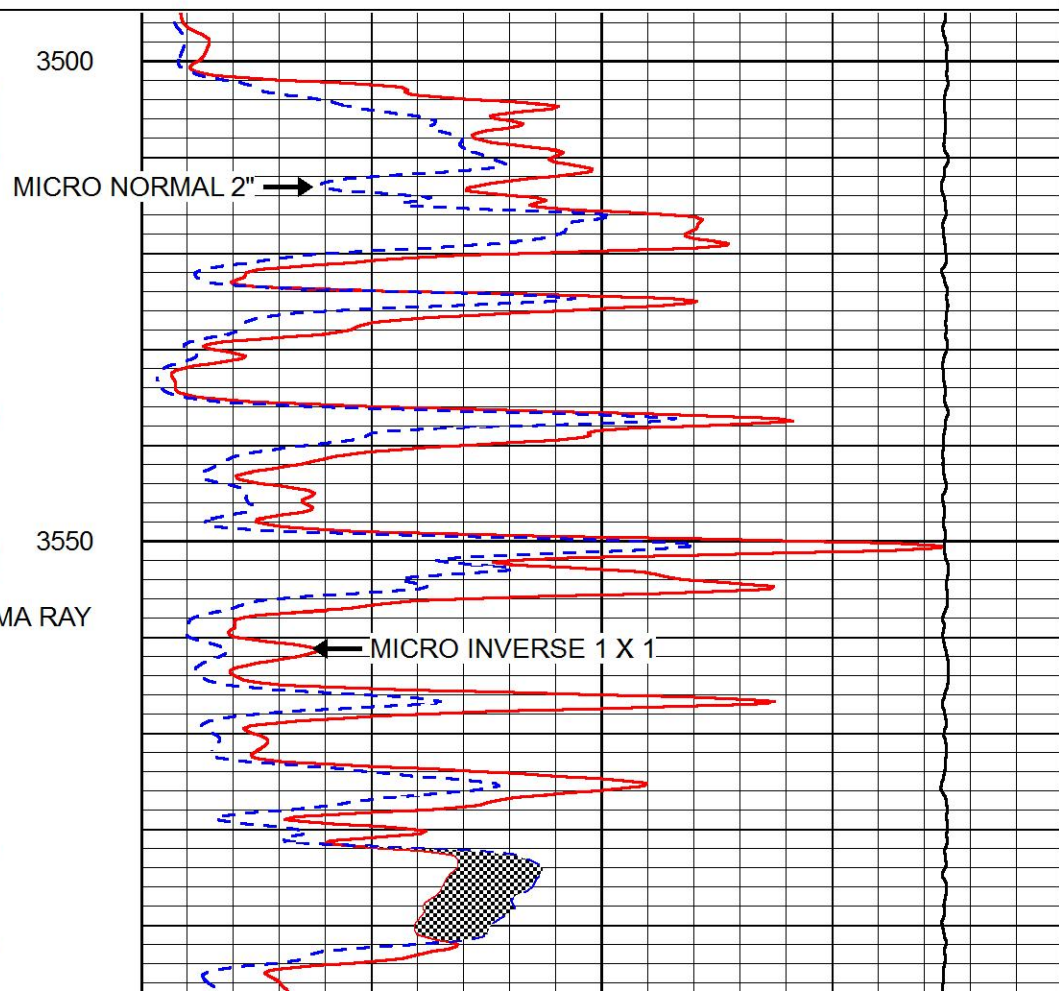
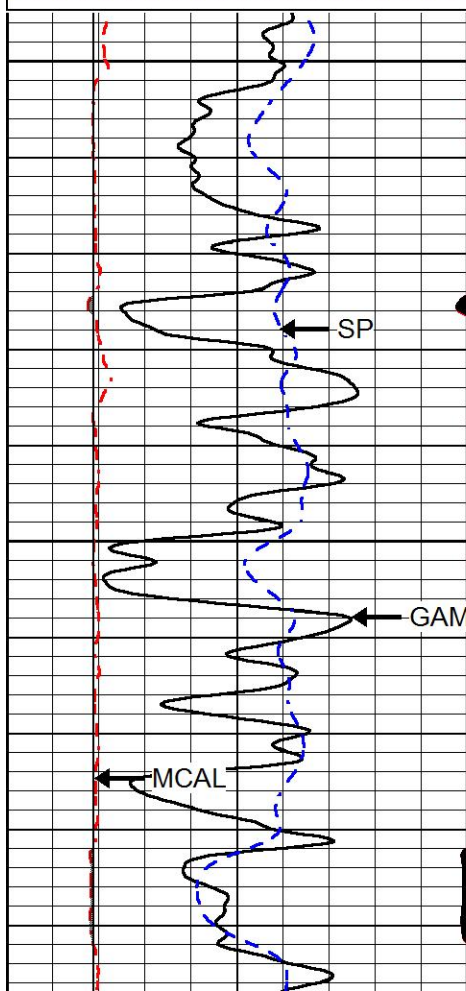


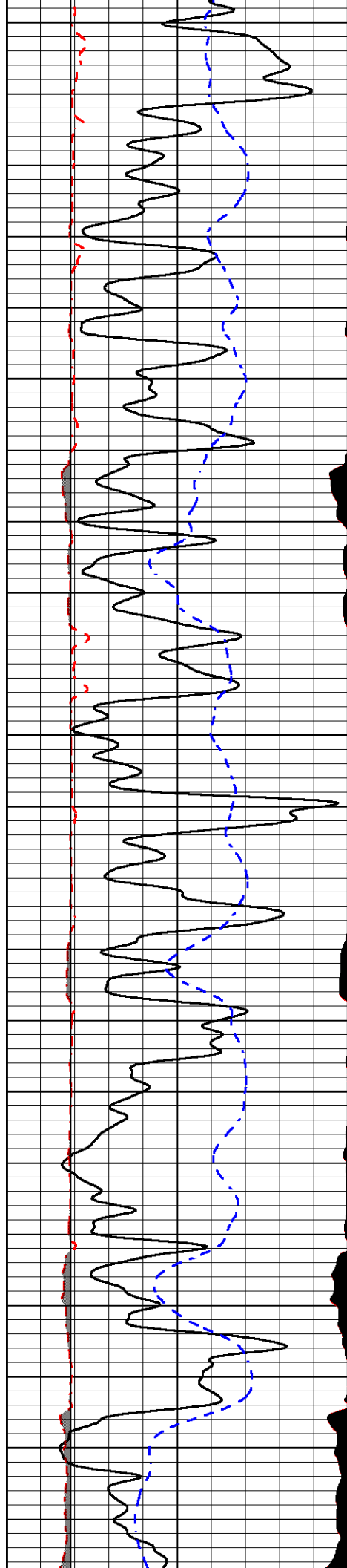
MAIN PASS

Database File james_production_best_1_1.db
 Dataset Pathname stackmel/pass3.1
 Presentation Format _micro
 Dataset Creation Wed Jul 31 01:52:37 2019
 Charted by Depth in Feet scaled 1:240

0	GAMMA RAY (GAPI)	150
6	MCAL (in)	16
2.875	mcAl (in)	7.875
6	Bit Size (in)	16
-200	SP (mV)	0

0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
10000	Line Weight (lb)	0





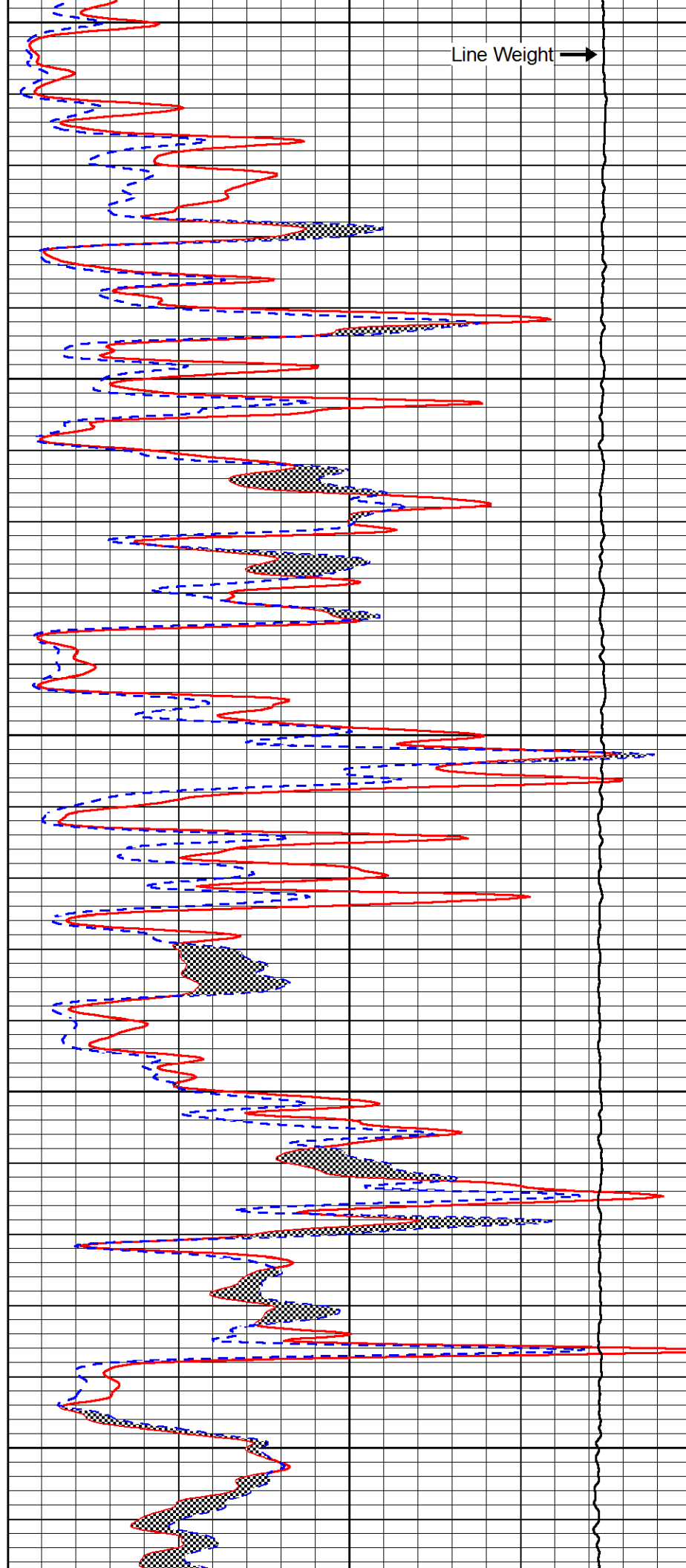
3600

3650

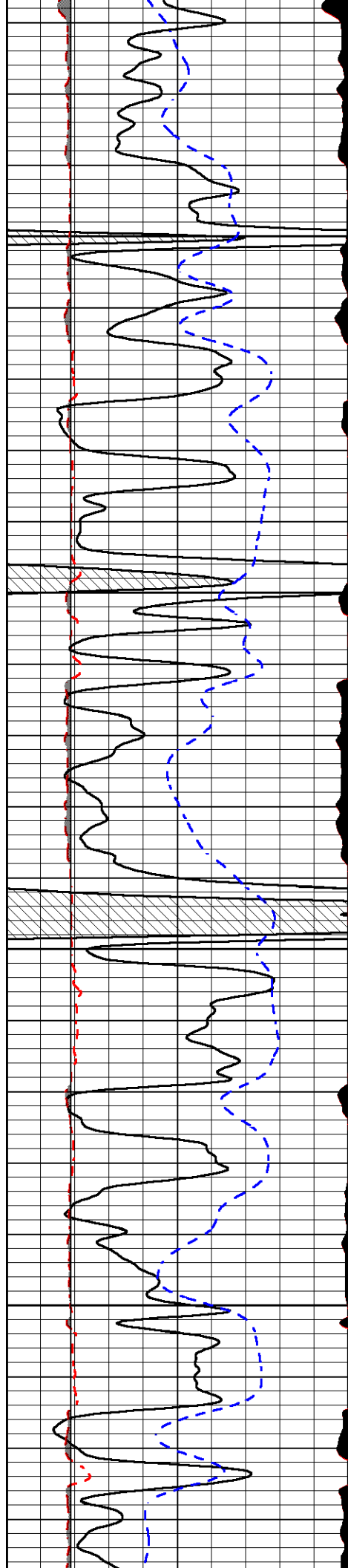
3700

3750

3800



Line Weight →

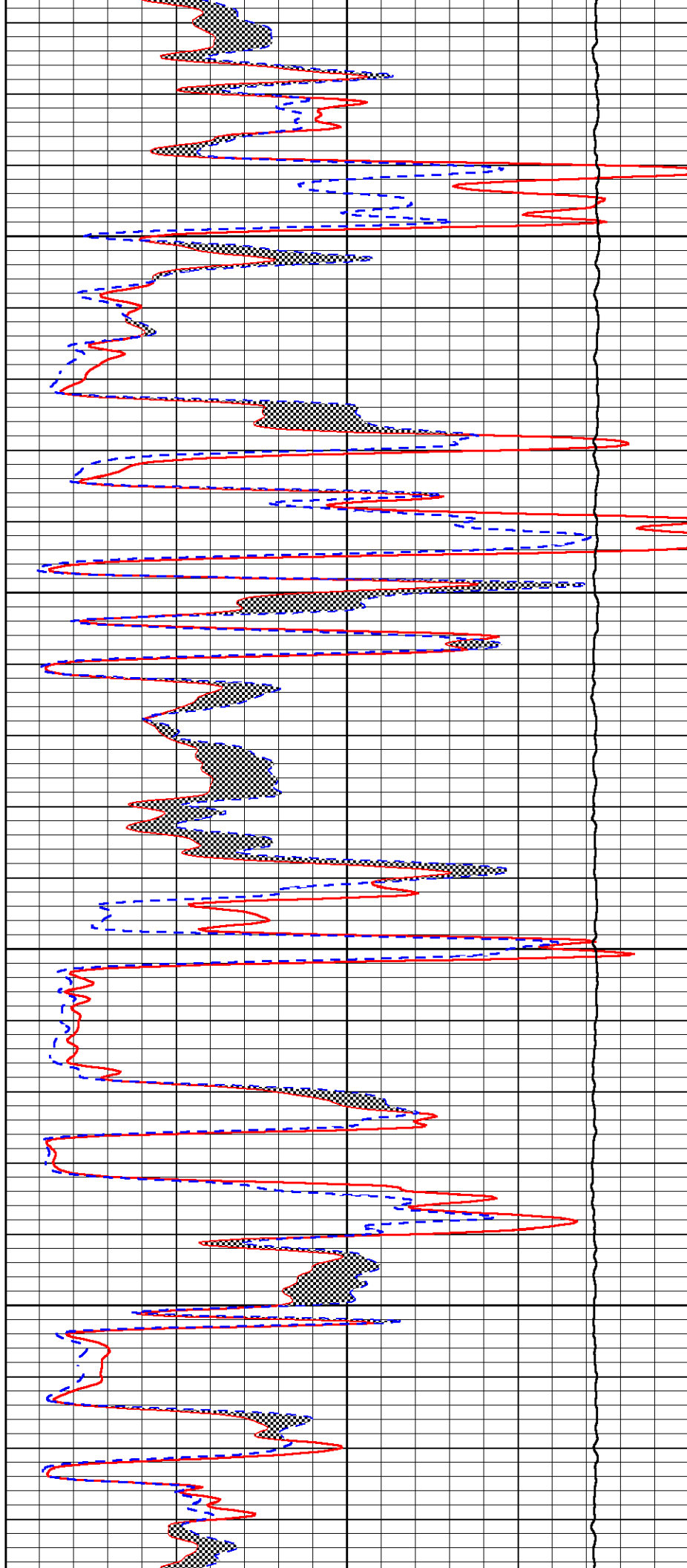


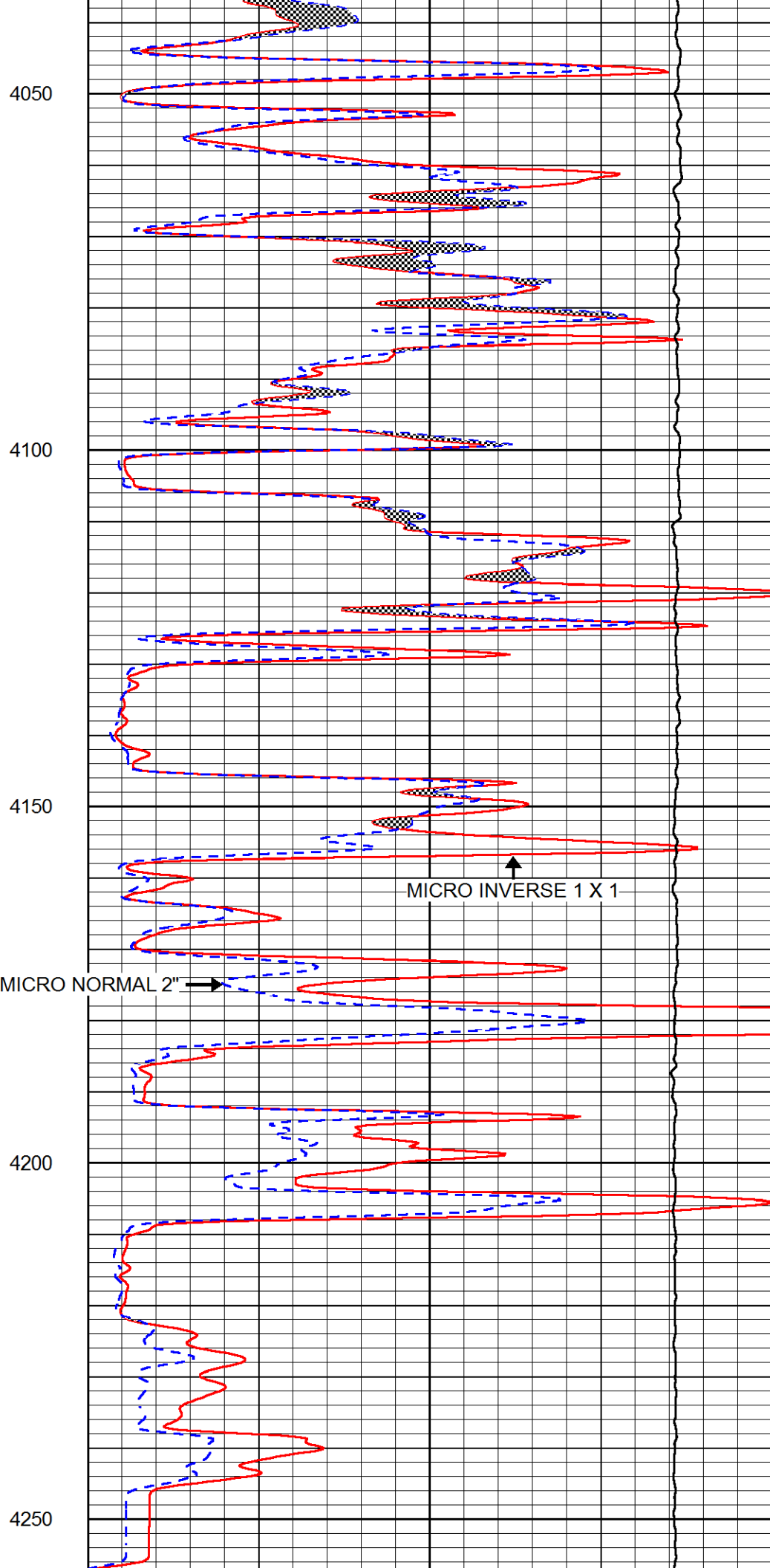
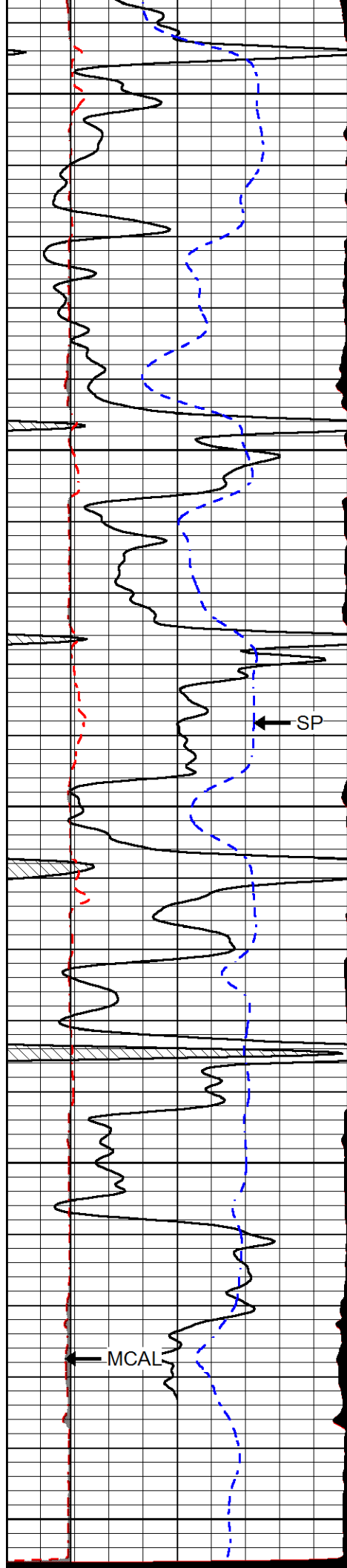
3850

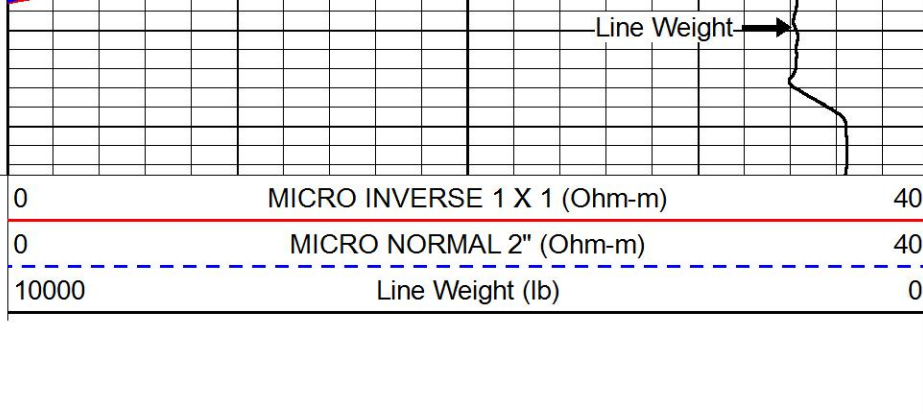
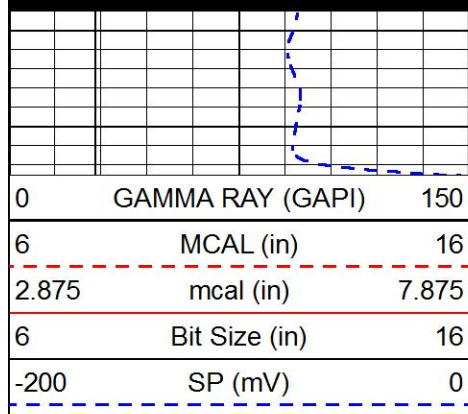
3900

3950

4000

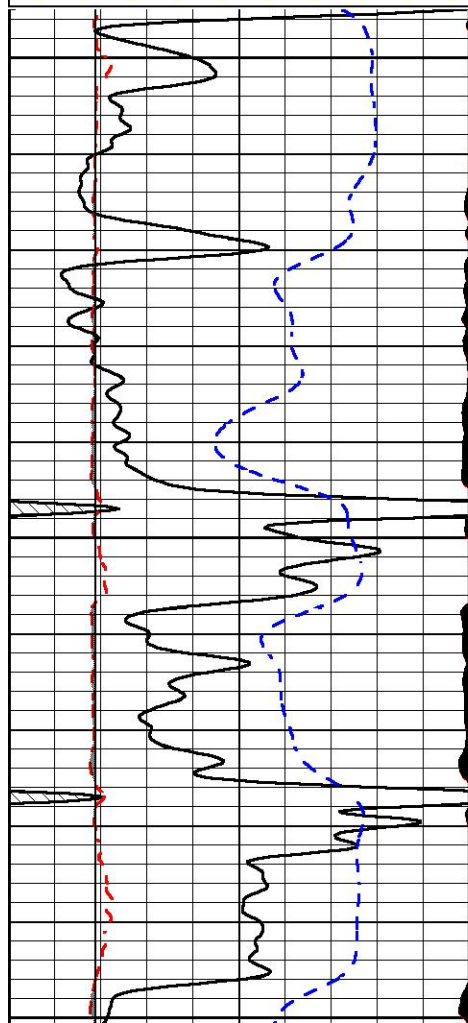
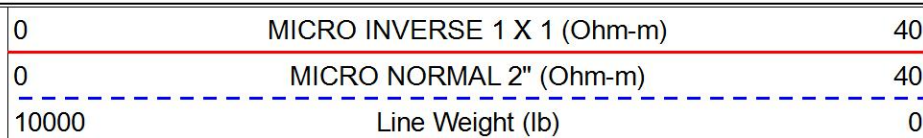
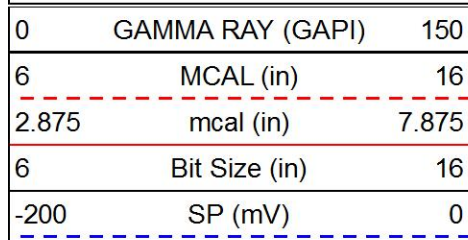






REPEAT SECTION

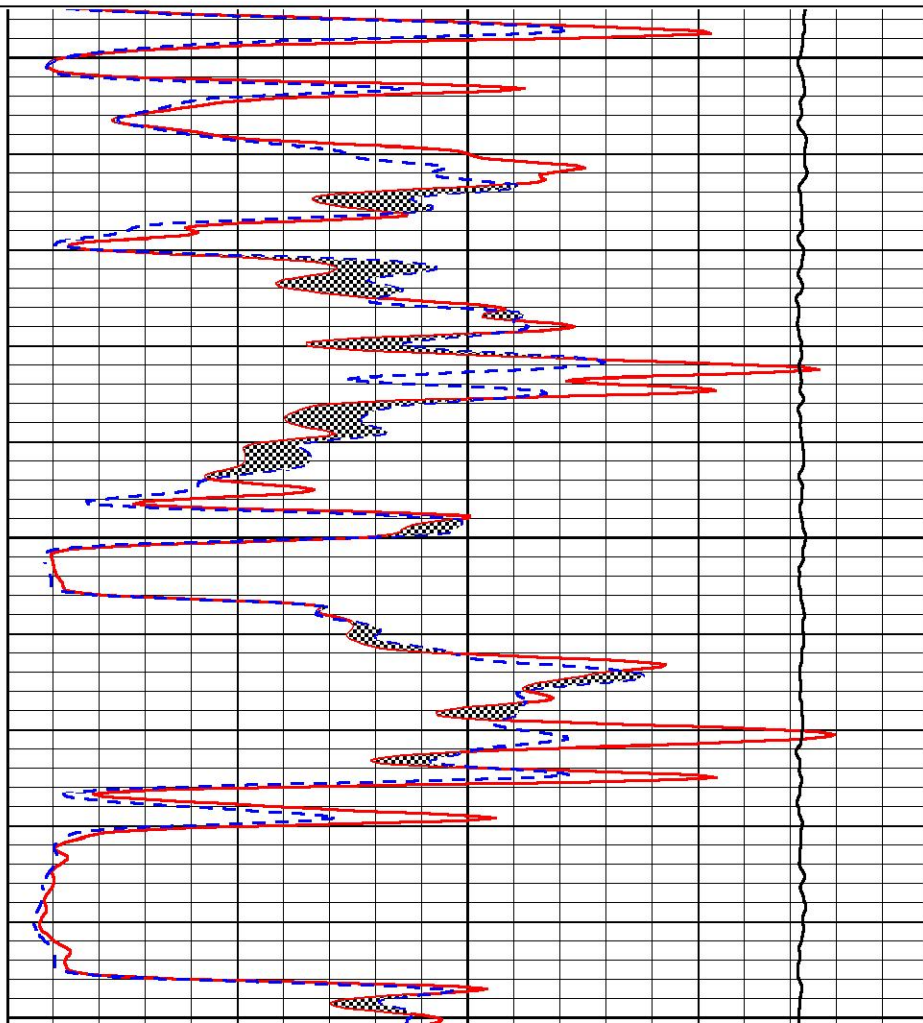
Database File james_production_best_1_1.db
 Dataset Pathname stackmel/pass2.1
 Presentation Format _micro
 Dataset Creation Wed Jul 31 01:38:11 2019
 Charted by Depth in Feet scaled 1:240

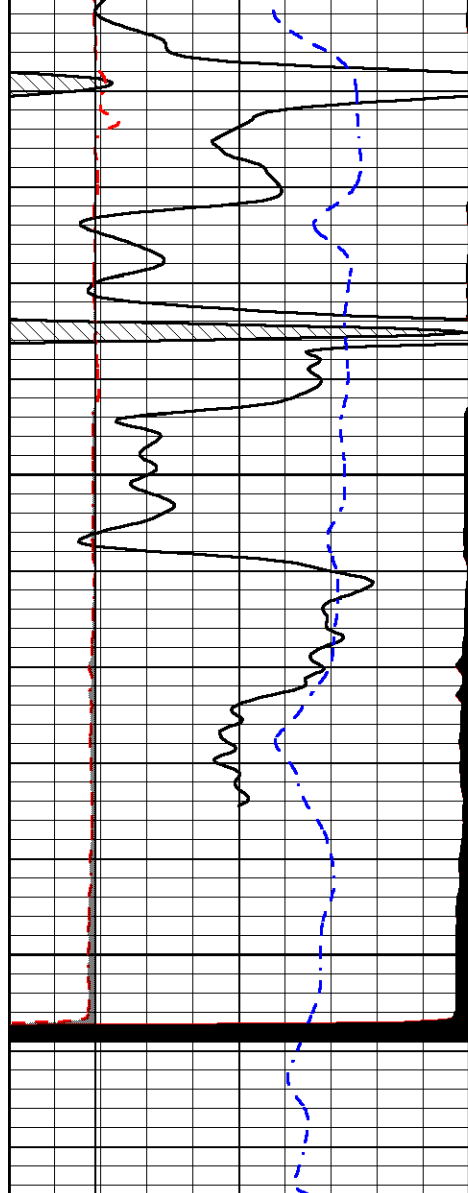


4050

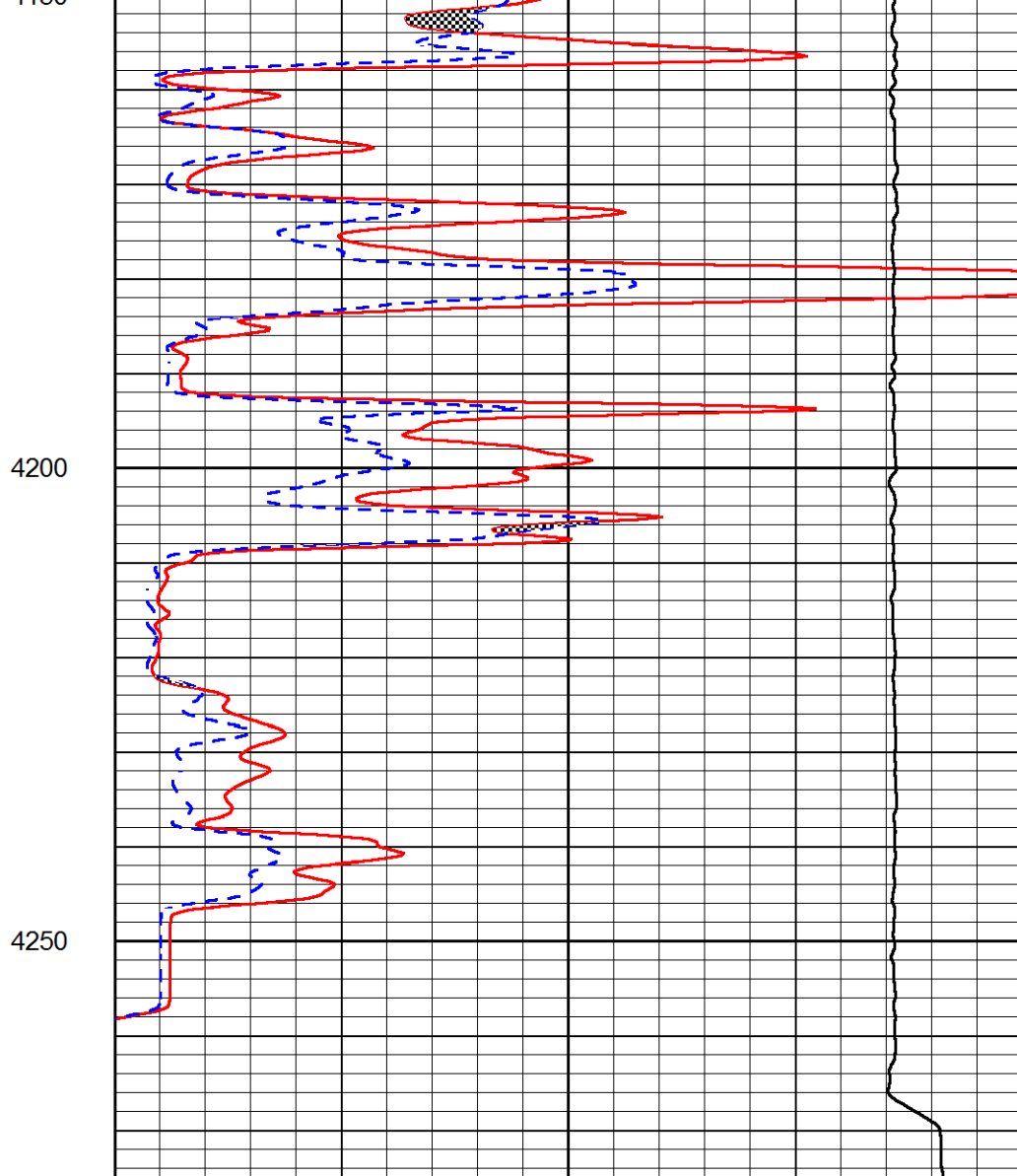
4100

4150





0	GAMMA RAY (GAPI)	150
6	MCAL (in)	16
2.875	mcal (in)	7.875
6	Bit Size (in)	16
-200	SP (mV)	0



0	MICRO INVERSE 1 X 1 (Ohm-m)	40
0	MICRO NORMAL 2" (Ohm-m)	40
10000	Line Weight (lb)	0

Calibration Report

Database File james_production_best_1_1.db
 Dataset Pathname stackmel/pass3.1
 Dataset Creation Wed Jul 31 01:52:37 2019

Dual Induction Calibration Report

Serial-Model: 1039-PSI HIGH TEMP
 Calibration Performed: Tue Jul 09 07:46:05 2019

Loop:	Readings		References			Results	
	Air	Loop	Air	Loop		Gain	Offset
Deep	167.000	835.000	0.000	255.800	mmho/m	0.430	-51.000
Medium	0.000	1348.000	142.000	255.800	mmho/m	0.365	-49.000

Serial-Model:
Performed:PSI-01-PSIML
Tue Jul 23 20:18:27 2019

	Readings		References			Results	
	Zero	Cal	Zero	Cal		m	b
Normal	0.0000	1.0000	0.0000	1.0000	Ohm-m	12000.0000	-0.7000
Inverse	0.0000	1.0000	0.0000	1.0000	Ohm-m	13000.0000	-0.6000
Caliper	1.0001	1.1397	6.5000	18.5000	in	70.0000	-64.1500

Compensated Density Calibration Report

Serial-Model:
Source / Verifier:
Master Calibration Performed:96-916-M&W
16955B / 2ci
Wed Mar 27 11:00:53 2019

Master Calibration

	Density			Far Detector		Near Detector	
Magnesium	1.755	g/cc		8943.64		10054.60	cps
Aluminum	2.655	g/cc		1595.61		6242.82	cps
Spine Angle = 74.54				Density/Spine Ratio = 0.503			
	Size			Reading			
Small Ring	6.00	in		1.75			
Large Ring	16.00	in		1.46			

Compensated Neutron Calibration Report

Serial Number: 207-MW
Tool Model: M&W
Calibration Performed: WED FEB 13 10:30:30 2019

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: 233-M&W
Tool Model: M&W
Calibration Performed: Fri Feb 07 01:42:40 2014Calibrator Value: 1.0 GAPI
Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps
Sensitivity: 0.5500 GAPI/cpsCompany JAMES PRODUCTION, INC.
Well BEST #1-1
Field WILDCAT

PIONEER

Pioneer Energy Services

County

SHERIDAN

State

KANSAS