



SIDEWALL NEUTRON /  
DENSITY POROSITY

MIDWEST WIRELINE

Company BNL Enterprise  
Well Jackson 02 L4 3154  
Field  
County Las Animas  
State Colorado

Company BNL Enterprise  
Well Jackson 02 L4 3154  
Field  
County Las Animas State Colorado

Location: API #:

1200 FNL & 646 FWL

SEC 2 TWP 31S RGE 54W

Other Services  
DIL

Permanent Datum Ground Level Elevation 5612  
Log Measured From Kelly Bushing  
Drilling Measured From Kelly Bushing

K.B. 5616  
D.F.  
G.L. 5612

Date 5/4/2025

Run Number One

Type Log SWN / CDL

Depth Driller 1232

Depth Logger 1230

Bottom Logged Interval 1228

Top Logged Interval 00

Type Fluid In Hole Water

Salinity, PPM CL

Density

Level

Max. Rec. Temp. F 86

Operating Rig Time 2 Hours

Equipment -- Location P-24 HAYS

Recorded By D. Schmidt

Witnessed By Trent Skaggs

Witnessed By

Borehole Record

Casing Record

Run No. Bit From To Size Wgt. From To

One 12.25 0 38 9.625 36 0 38

Two 8.75 38 1146 7 20 0 1146

Three 6.125 1146 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.

Kim, CO

East on Hwy 160 to Rd 179, 11 North to Rd 54,  
about 3 East then Southeast, then back Northeast to rig

Log Measured From: Kelly Bushing

Ft. Above Permanent Datum

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

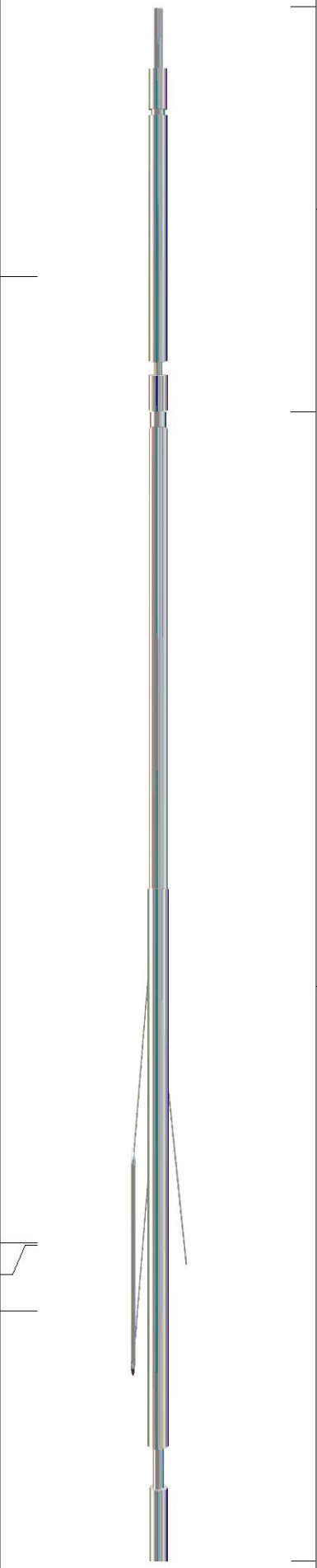
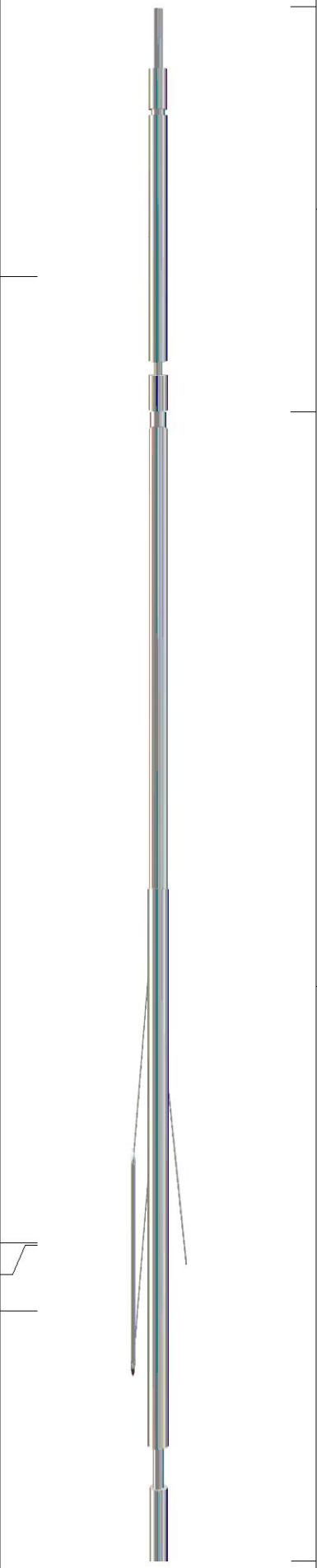
Your Pioneer Energy Services Crew

Engineer: D. Schmidt  
Operator:  
Operator:  
Operator:

This Log Record Was Witnessed By

Primary Witness: Trent Skaggs  
Secondary Witness:  
Secondary Witness:  
Secondary Witness:



Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	9.50		GR-M&W (105)	3.00	3.50	50.00
			CDL-M&W (305-24)	8.50	4.00	250.00
LSD	2.35					
DCAL	2.33					
SSD	1.85					

Dataset: bnl\_jackson 02 I4 3154.db: field/well/cdl/pass1

Total length: 11.50 ft

Total weight: 300.00 lb

O.D.: 4.00 in

# Log Variables

DatabaseC:\ProgramData\Warrior\Data\bnl\_jackson 02 I4 3154.db  
Dataset field/well/dil/pass4.1/\_vars\_

## Top - Bottom

BOREID in 6.125	BOTTEMP degF 86	CASEOD in 7	CASETHCK in 0.272	CASEWGHT lb/ft 20	MATRXDEN g/cc 2.68	MAXAMPL mV 0	MINAMPL mV 1
MINATTN db/ft 0.8	PERFS No	PPT usec 0	SNDERR mmho/m 8	SNDERRM mmho/m 8.6	SPSHIFT mV 0	SRFTEMP degF 50	TDEPTH ft 1106

## Variable Description

BOREID : Borehole I.D.  
BOTTEMP : Bottom Hole Temperature  
CASEOD : Casing O.D.  
CASETHCK : Casing Thickness  
CASEWGHT : Casing Weight  
MATRXDEN : Matrix Density  
MAXAMPL : Maximum Amplitude  
MINAMPL : Minimum Amplitude

MINATTN : Minimum Attenuation  
PERFS : Perforation Flag  
PPT : Predicted Pipe Time  
SNDERR : Deep Sonde Error Correction  
SNDERRM : Medium Sonde Error Correction  
SPSHIFT : S.P. Baseline Offset  
SRFTEMP : Surface Temperature  
TDEPTH : Total Depth

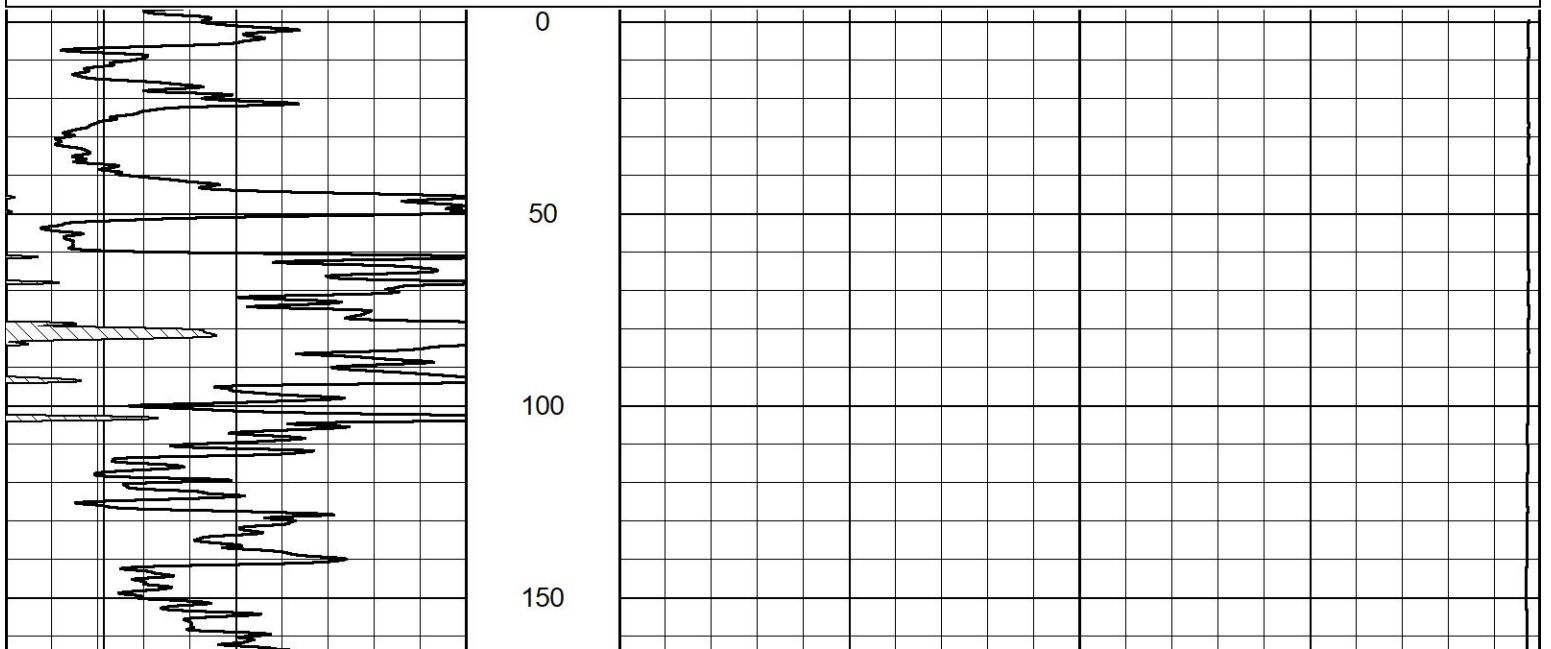


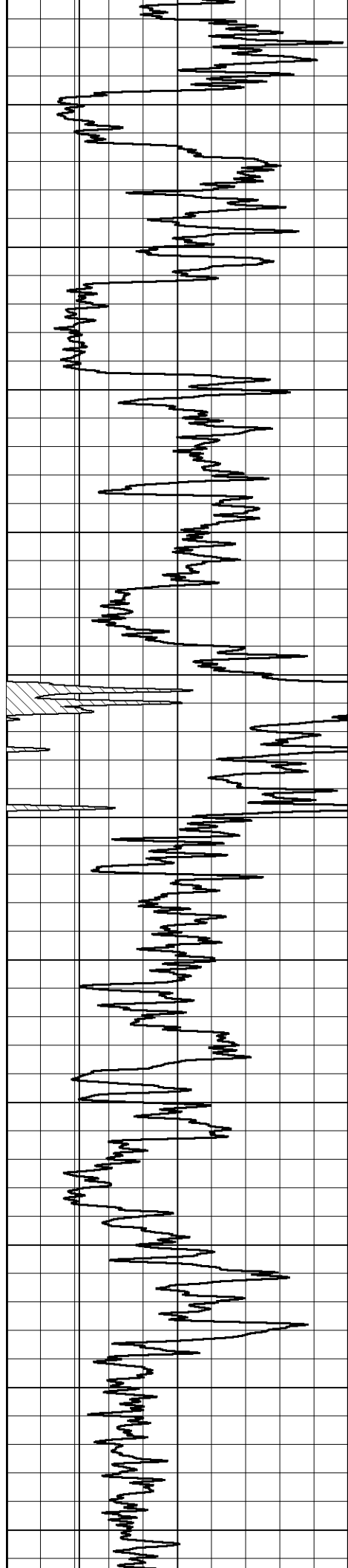
## DETAIL SECTION

### MAIN PASS

Database File bnl\_jackson 02 I4 3154.db  
Dataset Pathname dil/pass4.1  
Presentation Format swncdl  
Dataset Creation Sun May 04 11:21:09 2025  
Charted by Depth in Feet scaled 1:600

0	Gamma Ray (GAPI)	150	30	SWSS (pu)	-10
4	Density Caliper (in)	14	30	Compensated Density (2.65 ma) (pu)	-10
4	Bit Size	14	15000	Line Weight (lb)	0
				-0.25	Correction (g/cc) 0.25





200

250

300

350

400

450

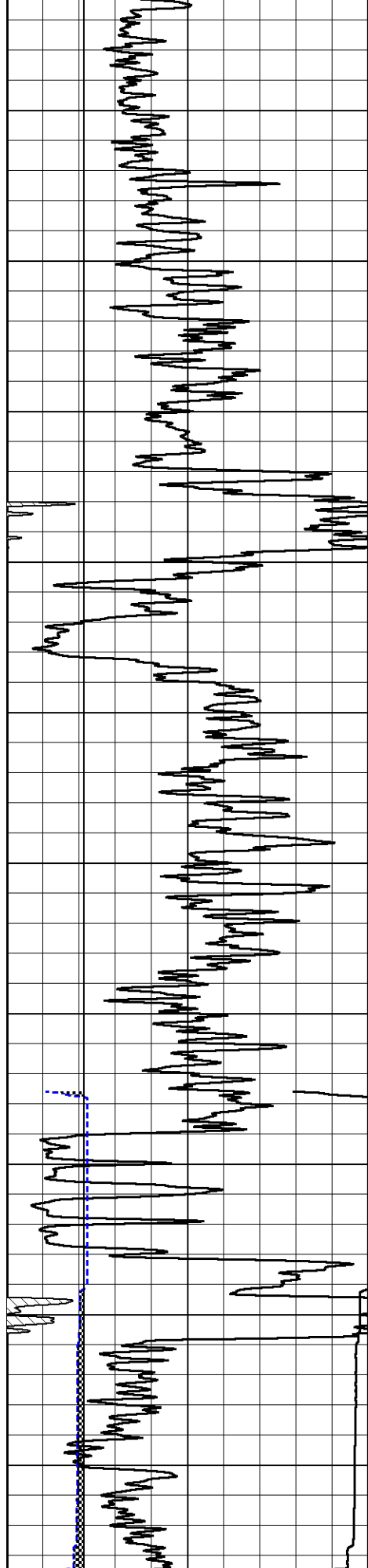
500

550

600

650

700



0 Gamma Ray (GAPI) 150  
4 Density Caliper (in) 14

750

800

850

900

950

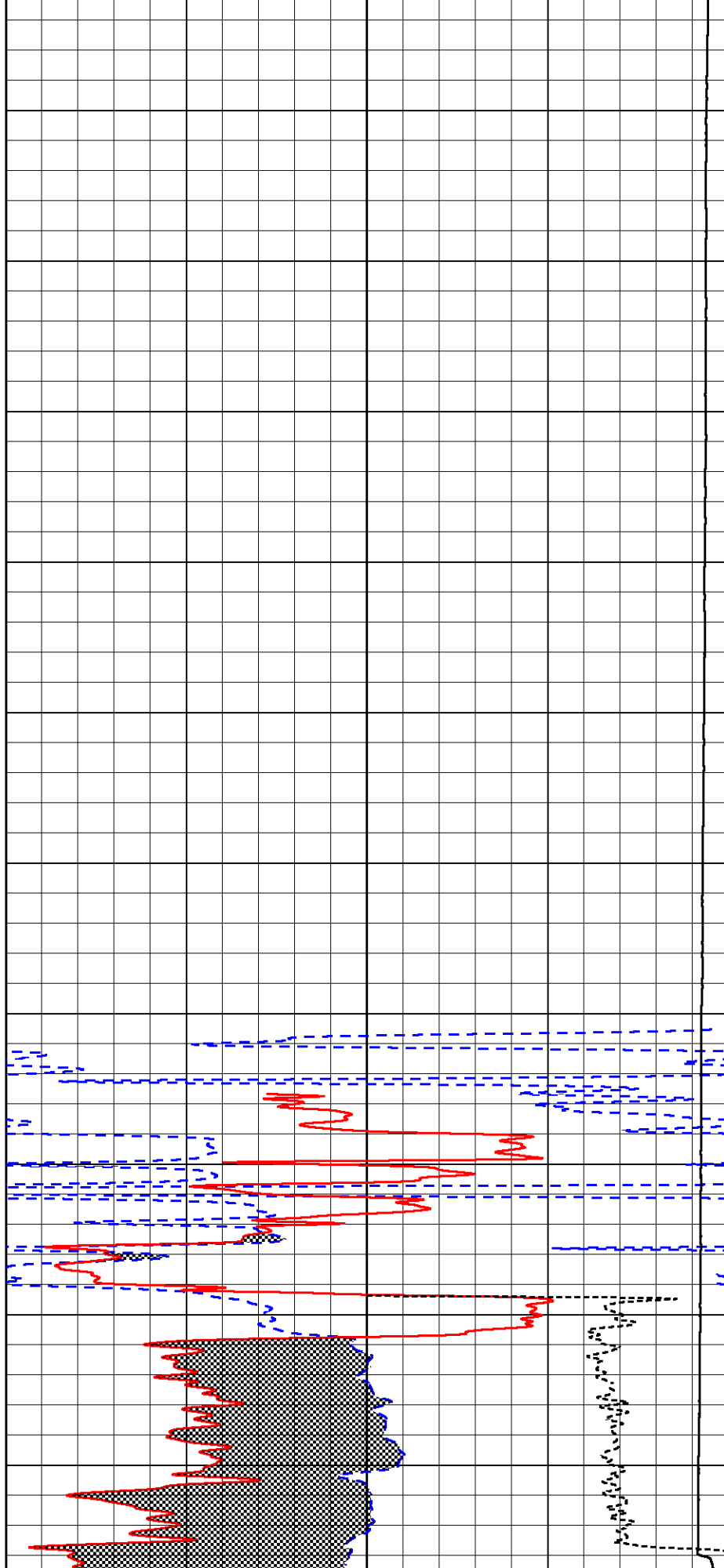
1000

1050

1100

1150

1200



30 SWSS (pu) -10  
30 Compensated Density (2.65 ma) (pu) -10



4	Bit Size	14	15000	Line Weight (lb)	0	
				-0.25	Correction (g/cc)	0.25
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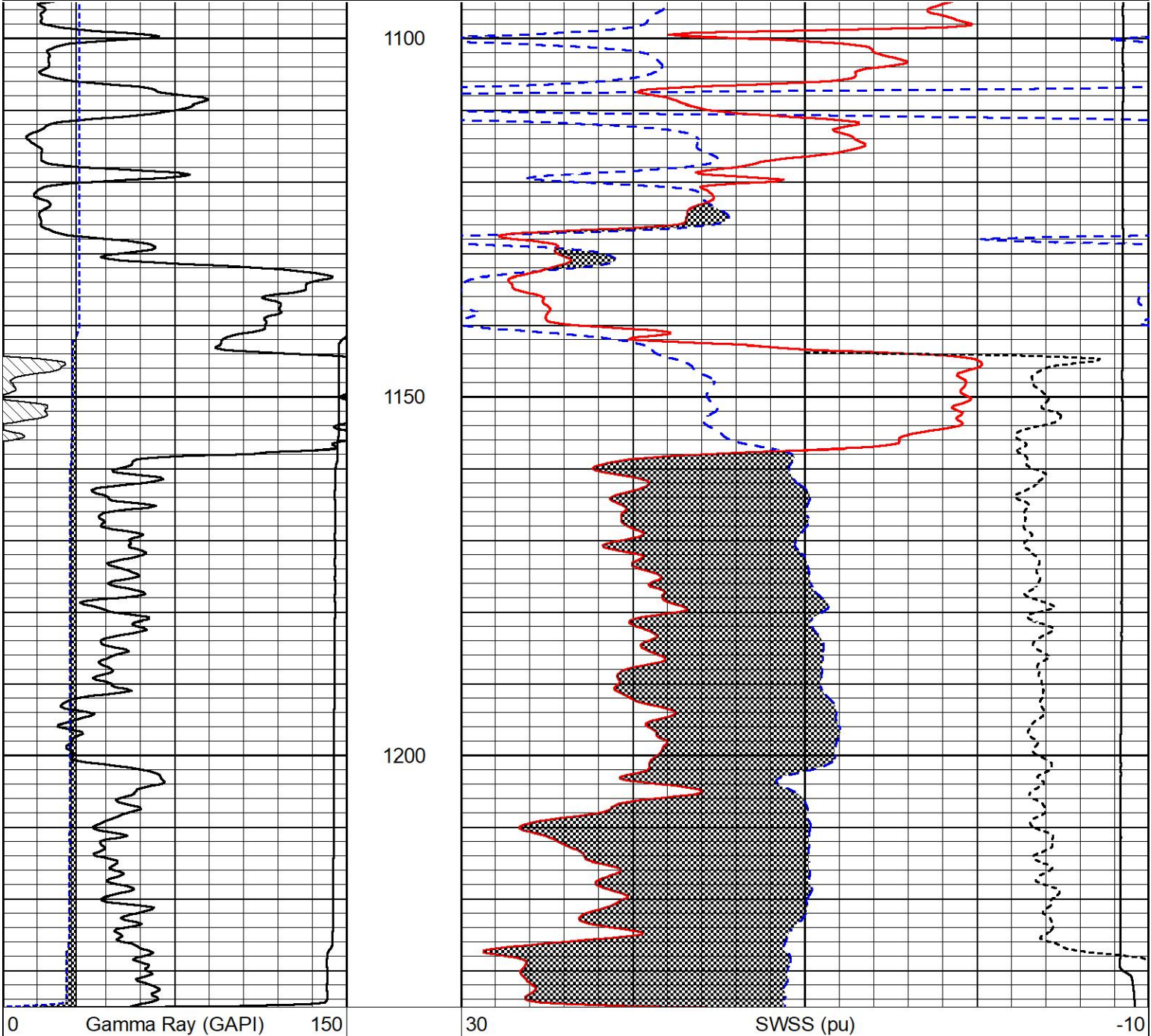
MIDWEST WIRELINE

# DETAIL SECTION MAIN PASS

Database File            bnl\_jackson 02 I4 3154.db  
Dataset Pathname        dil/pass4.1  
Presentation Format      swncdl  
Dataset Creation        Sun May 04 11:21:09 2025  
Charted by                Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
4	Density Caliper (in)	14
4	Bit Size	14

30	SWSS (pu)		-10
30	Compensated Density (2.65 ma) (pu)		-10
15000	Line Weight (lb)		0
	-0.25	Correction (g/cc)	0.25



4	Density Caliper (in)	14	30	Compensated Density (2.65 ma) (pu)	-10
4	Bit Size	14	15000	Line Weight (lb)	0
				-0.25	Correction (g/cc) 0.25

Calibration Report					
Database File	bnl_jackson 02 l4 3154.db				
Dataset Pathname	cdl/pass1.3				
Dataset Creation	Sun May 04 12:28:27 2025				
Compensated Density Calibration Report					
Serial-Model:		305-24-M&W			
Source / Verifier:		77782B / 2ci			
Master Calibration Performed:		Wed Apr 2 04:00:06 2025			
Before Survey Verification Performed:					
After Survey Verification Performed:					
Master Calibration					
	Density		Far Detector	Near Detector	
Magnesium	1.680	g/cc	6246.26	7435.86	cps
Aluminum	2.570	g/cc	1405.93	5176.17	cps
Spine Angle = 76.35			Density/Spine Ratio = 0.580		
	Size		Reading		
Small Ring	4.00	in	1.09		
Large Ring	14.00	in	1.45		
Gamma Ray Calibration Report					
Serial Number:		105			
Tool Model:		M&W			
Performed:		Mon Aug 7 20:46:01 2023			
Calibrator Value:		500.0	GAPI		
Background Reading:		24.0	cps		
Calibrator Reading:		637.0	cps		
Sensitivity:		0.6500	GAPI/cps		

Calibration Report					
Database File	bnl_jackson 02 l4 3154.db				
Dataset Pathname	rag/pass1.3				
Dataset Creation	Sun May 04 12:11:38 2025				
Sidewall Neutron Calibration Report					
Serial Number:		701			
Tool Model:		M&W-SP			
SWN Calibration		Thu Sep 27 19:55:51 2012			
Readings		Target		Normalization	
2566.42 cps		1085.00 cps		0.4750	
Caliper Calibration		Thu Sep 27 19:55:51 2012			
Readings		Reference		Gain	Offset
0.90		4.00		-13.50	16.10



0.00  
0.211.00  
14.00

10.00

10.10

## Gamma Ray Calibration Report

Serial Number:	105	
Tool Model:	M&W	
Performed:	Mon Aug 7 20:46:01 2023	
Calibrator Value:	500.0	GAPI
Background Reading:	24.0	cps
Calibrator Reading:	637.0	cps
Sensitivity:	0.6500	GAPI/cps



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Well	Jackson 02 L4 3154
Field	
County	Las Animas
State	Colorado