

**SIDEWALL NEUTRON
DENSITY POROSITY**

MIDWEST WIRELINE

Company BNL Enterprise		Well State #9		Field		County Las Animas		State Colorado					
Location:		API # : 05-071-09923		Other Services									
SEC 9		TWP 30S		RGE 54W		DIL							
Permanent Datum		Ground Level		Elevation 5402		Elevation							
Log Measured From		Kelly Bushing				K.B. 5406							
Drilling Measured From		Kelly Bushing				D.F. 5402							
Date		6/1/2025											
Run Number		One											
Type Log		CNL/CDL											
Depth Driller		1225											
Depth Logger		1225											
Bottom Logged Interval		1223											
Top Logged Interval		0											
Type Fluid In Hole		Air											
Salinity, PPM CL													
Density													
Level													
Max. Rec. Temp. F													
Operating Rig Time		2 Hours											
Equipment -- Location		110 HAYS											
Recorded By		D. Schmidt											
Witnessed By		Peter Kondrat											
Borehole Record		From		To		Size		Wgt.		From		To	
One		12.25		0		40		9.875		36		40	
Two		6.125		40		1143		7		20		0	
Three		6.125		1143		TD						1143	

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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.

Kim, Co
West to Rd 179,
11.3 North, 3.5 East, North to Farmhouse,
4 North

Log Measured From: Kelly Bushing 4 Ft. Above Permanent Datum

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

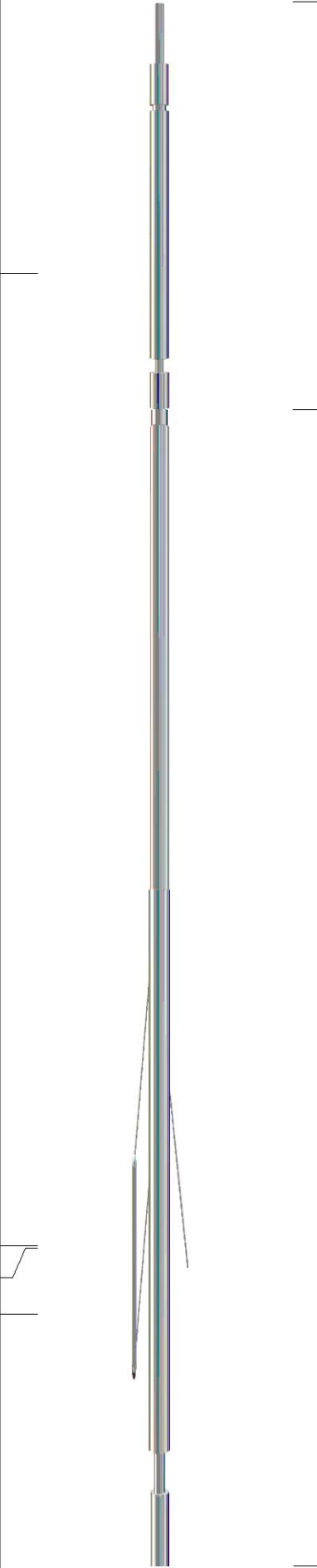
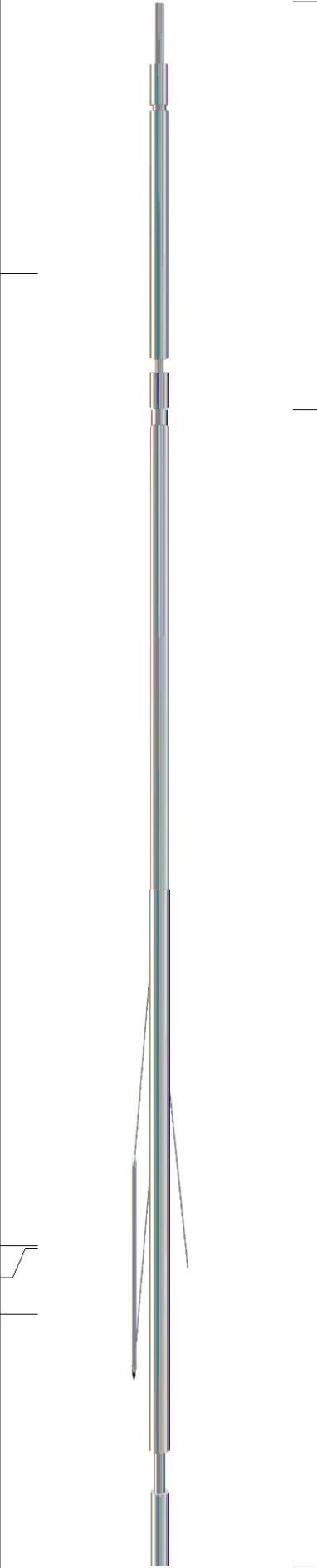
Your Midwest Wireline Crew

Engineer: D. Schmidt
Operator:
Operator:
Operator:

This Log Record Was Witnessed By

Primary Witness: Peter Kondrat
Secondary Witness:
Secondary Witness:
Secondary Witness:

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
GR	15.00		GR-M&W (103)	3.00	3.50	50.00
LGRD	11.00		LGRD-M&W (49) Simlec Long Guard	3.50	3.50	40.00
SCAL	5.10		SWN-M&W-SP (SP-701)	10.50	4.00	190.00
SWN	4.45					
SP	0.20					
Dataset: Total length: Total weight: O.D.:			bnl_state #9.db: field/well/rag/pass2.1 17.00 ft 280.00 lb 4.00 in			

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 (308-05)	8.50	4.00	250.00
LSD	2.35					
DCAL	2.33					
SSD	1.85					

Dataset: bnl_state #9.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_state #9.db
Dataset field/well/rag/pass2.1/_vars_

Top - Bottom

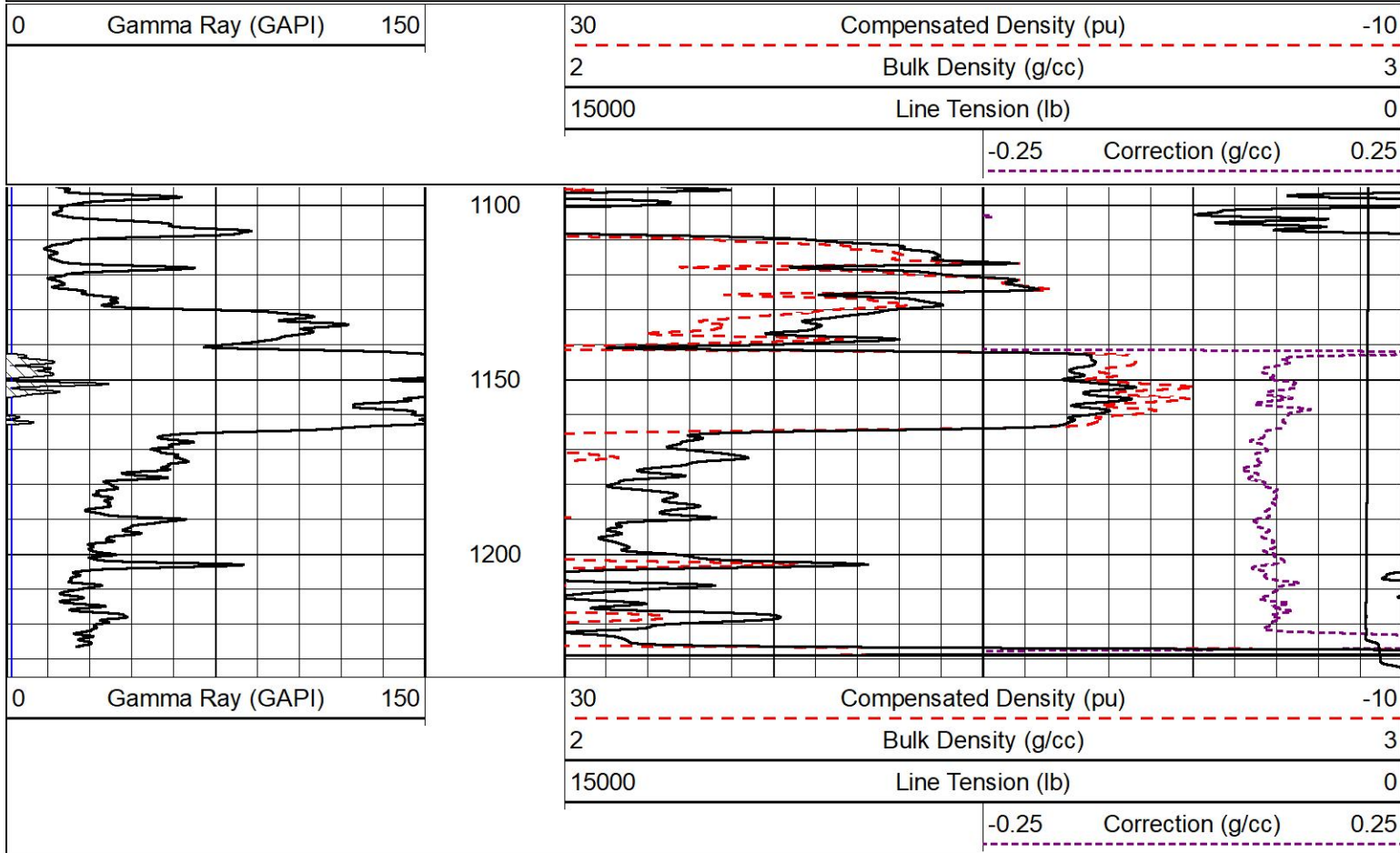
AIR_HOLE?	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	FLUIDDEN g/cc	MATRXDEN g/cc	MudWgt lb/gal
Yes	6.125	100	0	0	0	2.68	0
NPORSEL	PERFS	SNDERR mmho/m	SNDERRM mmho/m	SPSHIFT mV	SRFTEMP degF	SZCOR	TDEPTH ft
Sandstone	No	0	0	0	85	Off	1225



2" SCALE BULK DENSITY

MAIN PASS

Database File bnl_state #9.db
Dataset Pathname Dil/pass2.3
Presentation Format _cdl
Dataset Creation Sun Jun 01 13:24:36 2025
Charted by Depth in Feet scaled 1:600



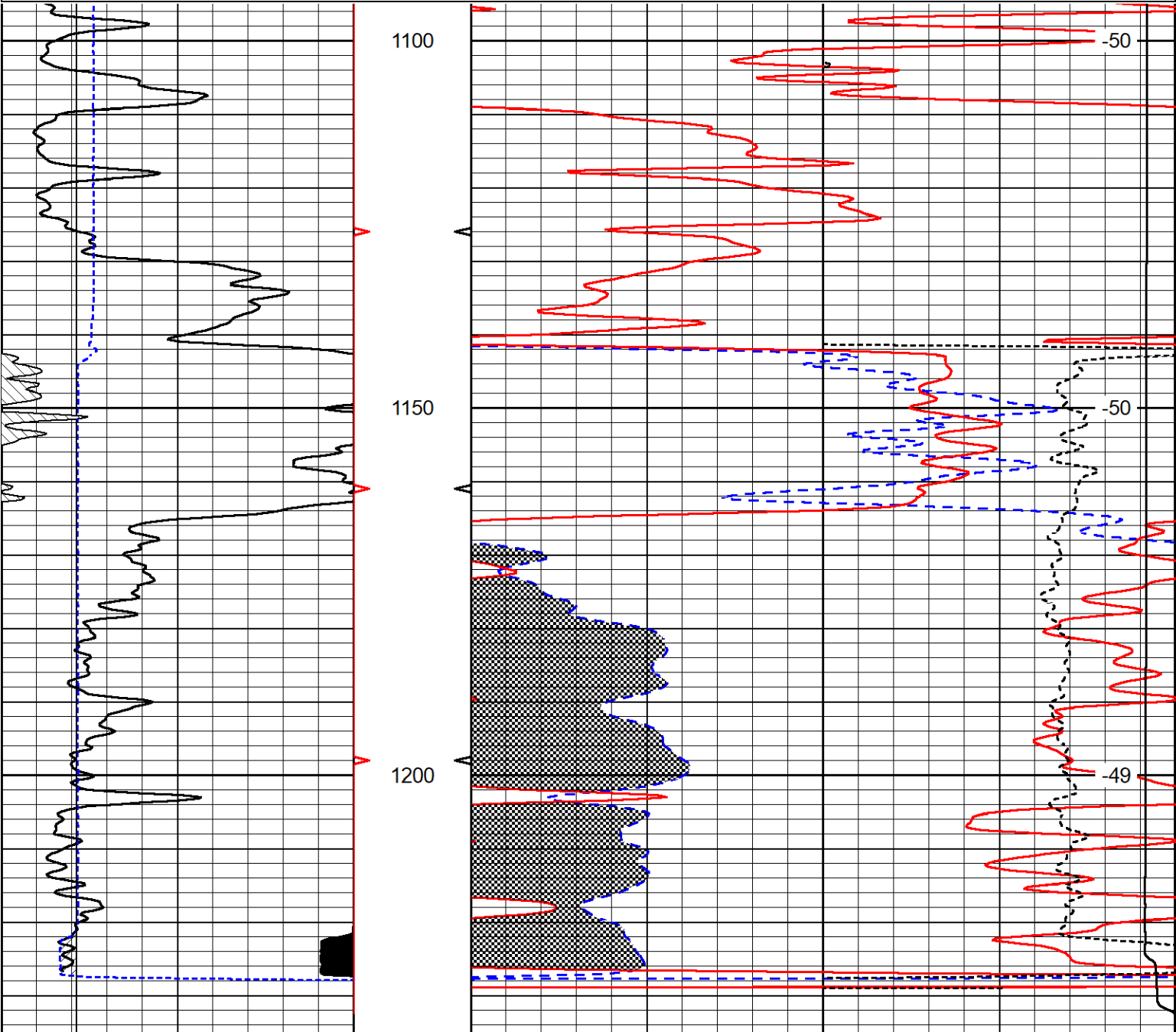
DETAIL SECTION

MAIN PASS

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
		Line Speed (ft/min)



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
		Line Speed (ft/min)

Calibration Report

Database File bnl_state #9.db
 Dataset Pathname rag/pass2.1
 Dataset Creation Sun Jun 01 12:48:26 2025

Sidewall Neutron Calibration Report

Serial Number: SP-701
 Tool Model: M&W-SP

SWN Calibration Tue Aug 30 15:14:50 2016

Readings	Target	Normalization
2566.42 cps	1085.00 cps	0.3400

Caliper Calibration Tue Aug 30 15:14:50 2016

Readings	Reference	Gain	Offset
0.85	4.00	-18.50	19.71
0.31	14.00		

Gamma Ray Calibration Report

Serial Number: 103
 Tool Model: M&W
 Performed: Wed Aug 30 12:29:43 2023

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps

Calibrator Reading: 1.0 cps

Sensitivity: 0.6000 GAPI/cps



Company	BNL Enterprise
Well	State #9
Field	
County	Las Animas
State	Colorado