PIONEER
Pioneer Energy Services

GAMMA RAY
COMPENSATED NEUTRON

Company PDC ENERGY INC
Well R & R FARMS 29L-301
Field WATTENBERG
County WELD State CO

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Well **R & R FARMS 29L-301**
Field **WATTENBERG**
County **WELD** State **CO**

Location: API # : 05-123-41931
SHL: 641' FSL & 444' FWL
SWSW
SEC 29 TWP 5N RGE 63W

Other Services
NONE

		Elevation		Elevation
Permanent Datum	GL		K.B.	
Log Measured From	GL		D.F.	
Drilling Measured From	KB		G.L.	

Date of Service	NOVEMBER 15, 2015
Run Number	1
Depth Driller or PBTD	N/A
Depth Logger	6609'
Bottom Log Interval	6609'
Top Log Interval	SURFACE
Open Hole Size	8.75"
Type Fluid	WATER
Fluid Level	20'
Fluid Density	N/A
Max. Recorded Temperature	N/A
Max. Wellhead Pressure	0
Wellhead Connection	N/A
Estimated Cement Top	N/A
Unit Number	P52
Wireline Size	7/16"
Location	FT. MORGAN CO
Recorded By	SHAUN STUMP
Witnessed By	N/A

	Size	Wt/Ft	Top	Bottom
Tubing Record	N/A	N/A	N/A	N/A
Surface Casing	9.625"	36	N/A	N/A
Production Casing	7.000"	26	N/A	N/A
Liner Record	4.500"	13.5	N/A	N/A

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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.
LOG CORRELATED TO GL
SO# 2-013800

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: SHAUN STUMP	CNT	PSI 856
Operator:	GR	PSI 939
Operator: MIKE GARCIA		
Operator: GENO VALLEJOS		

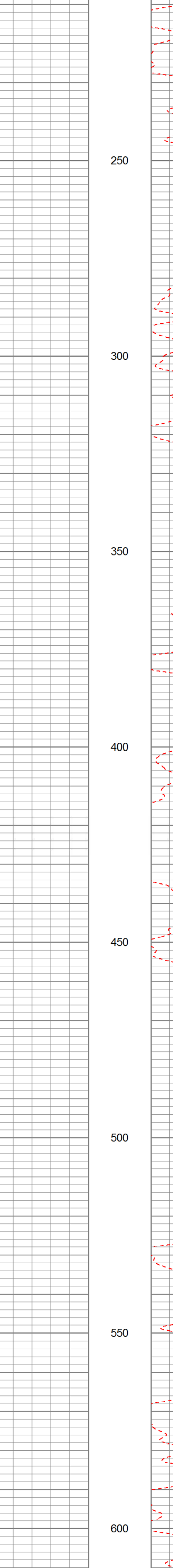
Log Variables

Database C:\ProgramData\Warrior\Data\2-013800.db
Dataset field/well/run1/pass3/_vars_

Top - Bottom

SZCOR	NPORSEL	SRFTEMP degF	CASETHCK in	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF
Off	Sandstone	0	0	7	0	0	198

BOREID in
8.75



Sensor	Offset (ft)	Description	Length (ft)	O.D. (in)	Weight (lb
		CHD (~0)	2.00	3.50	30.00
GR	5.67	GR-PSI (939)	2.92	3.50	40.00
CNLSC	2.00	CNT-PSI (856)	5.00	3.50	70.00
CNSSC	1.50				

Dataset: 2-013800.db: field/well/run1/pass3
Total length: 9.92 ft
Total weight: 140.00 lb
O.D.: 3.50 in

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MAIN PASS

Database File 2-013800.db
Dataset Pathname pass3
Presentation Format den_neu
Dataset Creation Sun Nov 15 10:25:38 2015
Charted by Depth in Feet scaled 1:240

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END OF MAIN PASS

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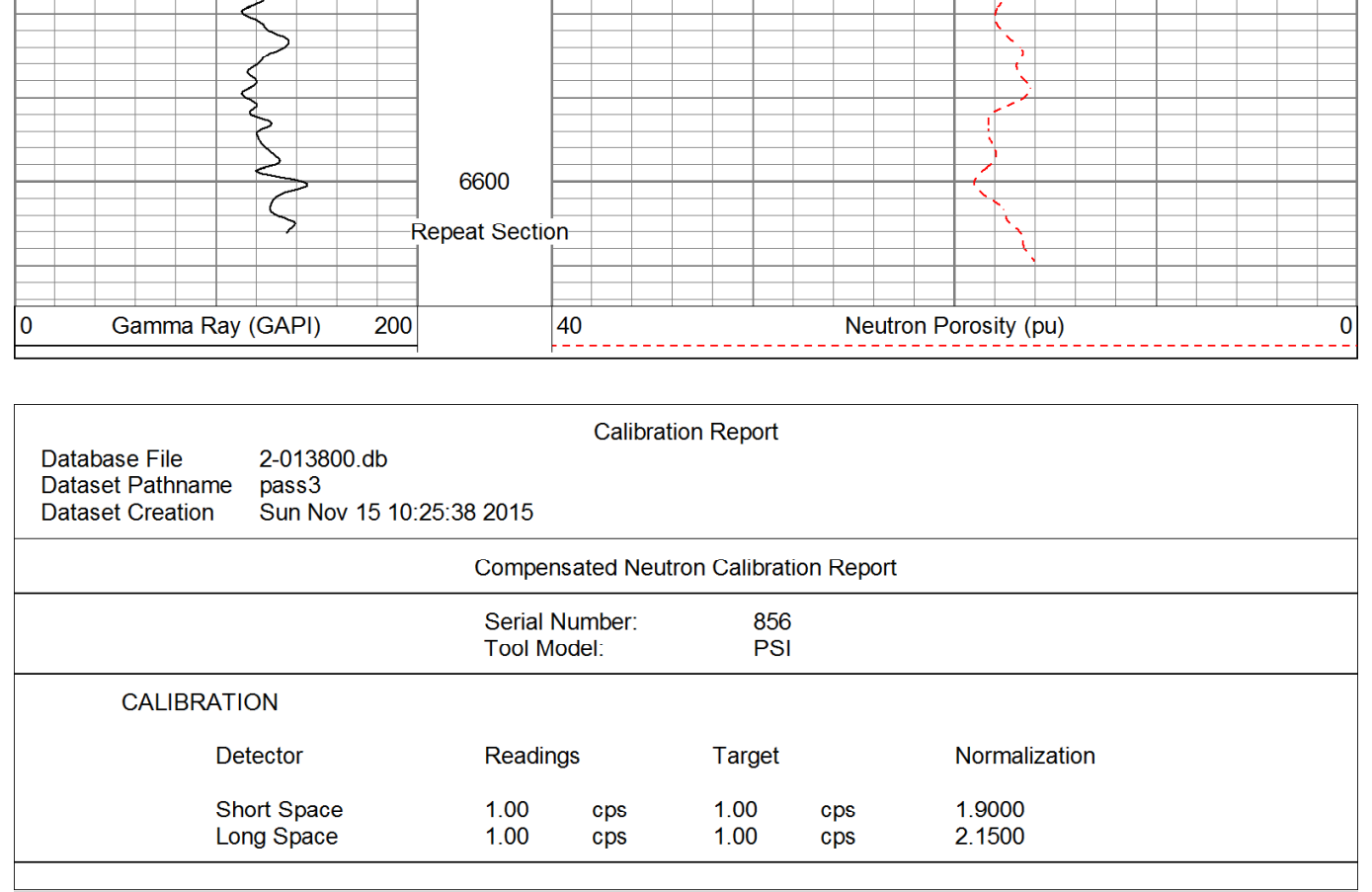
REPEAT SECTION

Database File	2-013800.db
Dataset Pathname	pass3.2
Presentation Format	den_neu
Dataset Creation	Sun Nov 15 10:47:35 2015
Charted by	Depth in Feet scaled 1:240



Calibration Report

Database File	2-013800.db
Dataset Pathname	pass3
Dataset Creation	Sun Nov 15 10:25:38 2015

Compensated Neutron Calibration Report

Serial Number: 856
Tool Model: PSI

CALIBRATION

Detector	Readings		Target		Normalization
Short Space	1.00	cps	1.00	cps	1.9000
Long Space	1.00	cps	1.00	cps	2.1500

Gamma Ray Calibration Report

Serial Number:	939	
Tool Model:	PSI	
Performed:	Thu Nov 12 21:59:47 2015	
Calibrator Value:	150.0	GAPI
Background Reading:	45.0	cps
Calibrator Reading:	295.0	cps
Sensitivity:	0.7100	GAPI/cps

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