Company TEP Rocky Mountain LLC
Well Federal PA 612-26
Field Parachute
County Garfield
State Colorado

Pulsed Neutron Gamma Ray Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Federal PA 612-26
Field	Parachute
County	Garfield
State	Colorado
Location:	API # : 05-045-23712
	SEC 26 TWP 6S RGE 95W
Other Services	RBL

		Elevation
Permanent Datum	Ground Level	5636.9'
Log Measured From	Kelly Bushing	24 FT
Drilling Measured From	Kelly Bushing	

Elevation
K.B. 5660.9'
D.F. 5659.9'
G.L. 5636.9'

Date	03-SEP-2018
Run Number	One
Depth Driller	8927 FT
Depth Logger	8864 FT
Bottom Logged Interval	8858 FT
Top Log Interval	4998 FT
Open Hole Size	8.750"
Type Fluid	Fresh Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	---
Estimated Cement Top	---
Time Well Ready	---
Time Logger on Bottom	---
Equipment Number	---
Location	Grand Junction, CO
Recorded By	J.Donnelly
Witnessed By	---

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size (in)	Wgt (lbs/Ft)	Grade	Top	Bottom
Surface Casing	9 5/8	36	H-40	Surface	1118 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	8886 FT
Intermediate #2					
Liner					

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, 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. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

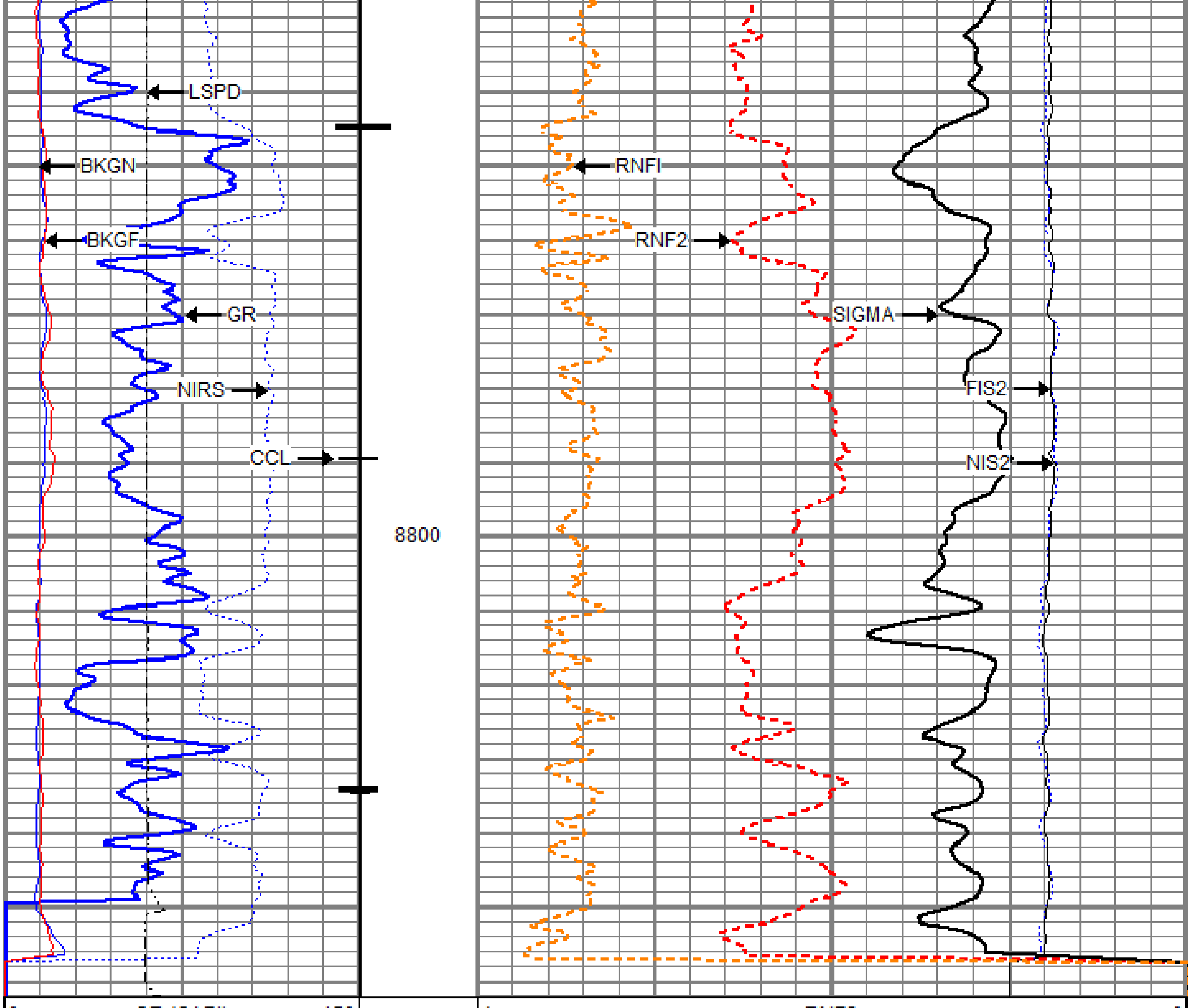
Comments

Log ran as per customer request
Depth referenced to Reliance Bond Log dated 02-SEP-2018
Log ran from 8858 FT to 4998 FT
Pulsed Neutron Data logged with Hunter RAS Tool

Thank you for choosing Reliance Oilfield Services, LLC!!

Main Pass

Database File	tep\federal pa 612-26\pn\tep_federal pa 612-26_pn_09-03-18.db
Dataset Pathname	merge1
Presentation Format	ros_pdn_hunter
Dataset Creation	Wed Sep 05 10:33:26 2018
Charted by	Depth in Feet scaled 1:240



0	GR (GAPI)	150
	Casing Collar Locator	
-100	Line Speed (ft/min)	100
0	NIRS	400000
0	BKGN (cps)	4000
0	BKGF (cps)	2000

4	RNF2	0
60	SIGMA (cu)	0
4.5	RNFI	0
0	FIS2	45000
0	NIS2	100000

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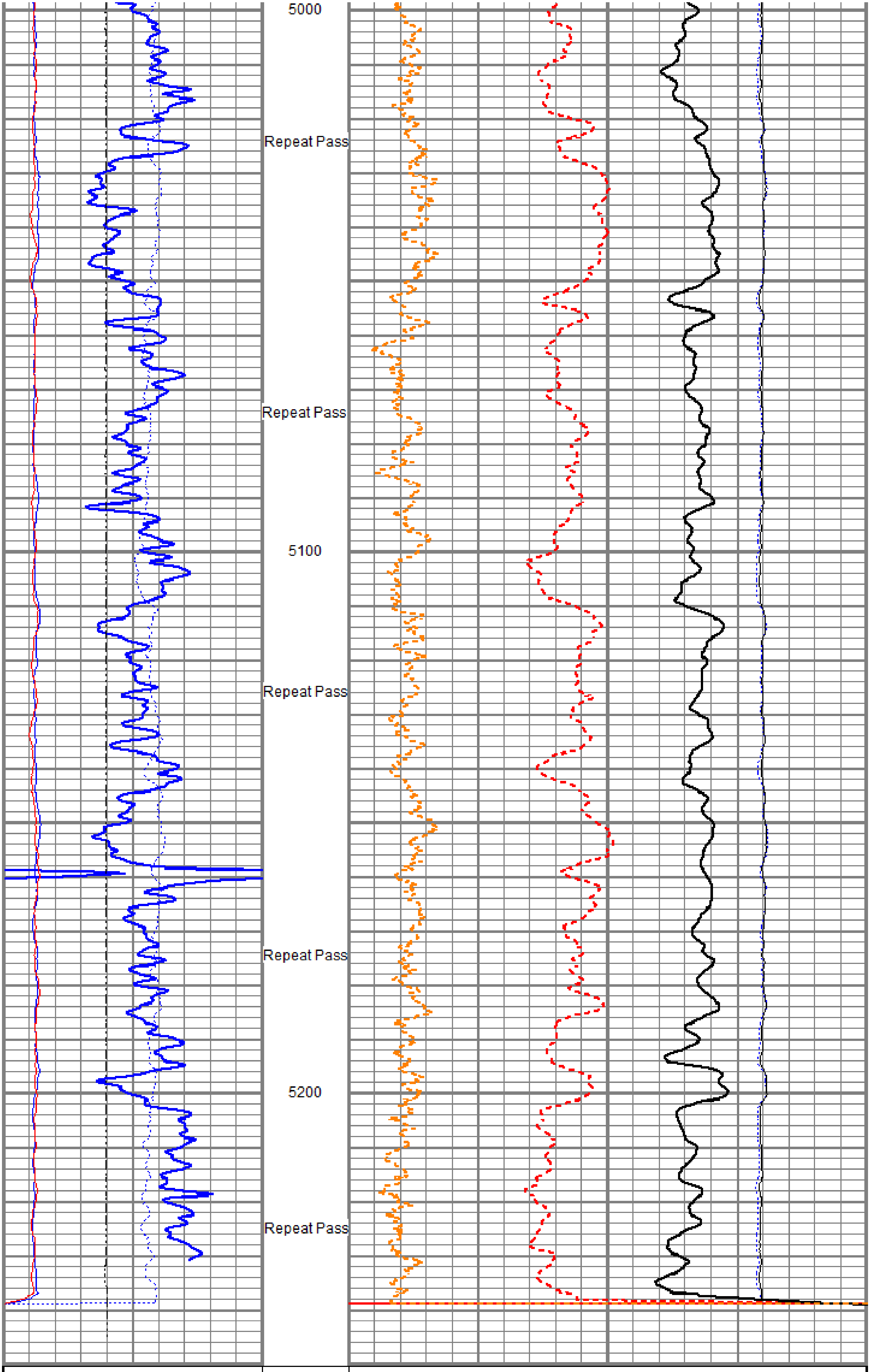
Repeat Pass

Database File	tep\federal pa 612-26\pn\tep_federal pa 612-26_pn_09-03-18.db
Dataset Pathname	1/Repeat.2
Presentation Format	hws ras_sigma_log
Dataset Creation	Mon Sep 03 09:28:18 2018
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
-100	Line Speed (ft/min)	100
0	NIRS (cps)	400000
0	BKGN (cps)	4000
0	BKGF (cps)	2000

4	RNF2	0
60	SIGMA (cu)	0
4.5	RNFI	0
0	FIS2 (cps)	45000
0	NIS2 (cps	100000

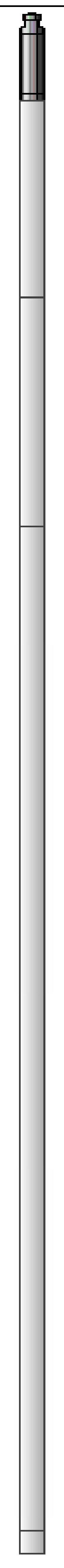


0	Gamma Ray (GAPI)	150
-100	Line Speed (ft/min)	100
0	NIRS (cps)	400000
0	BKGN (cps)	4000
0	BKGF (cps)	2000

4	RNF2	0
60	SIGMA (cu)	0
4.5	RNFI	0
0	FIS2 (cps)	45000
0	NIS2 (cps	100000

Sensor	Offset (ft)
TCUTEMP	14.69
TCUVOLT	14.69
GCL_CCL	13.97
GCL_GR	12.50
GCL_GR	12.50
Long	6.25
Far	6.25
Near	6.25
Anci	6.25

Schematic



Description	Length (ft)	O.D. (in)	Weight (lb
Titan CHD-16875 GO Titan 1-11/16" Assembled Electric Cable Head w/ 1" Fishing Neck	1.03	1.69	5.40
HWS_TCU-002 (001705) HWS Telemetry Control Unit (TCU002)	2.30	1.69	10.87
HWS_GCL-001 (001681) HWS Gamma Ray Collar Locator (1.6875")	2.69	1.69	13.40
HWS_RAS-RAS002 (003041) Hunter Well Science Pulsed Neutron Tool	11.75	1.69	55.82
HWS_TBN-001 (001724) HWS Terminator Bull Nose (1.6875")	0.25	1.69	0.99

Dataset:	tep_federal pa 612-26_pn_09-03-18.db: field/well/Main/Main.2
Total length:	18.02 ft
Total weight:	86.48 lb
O.D.:	1.69 in

Calibration Report

Database File	c:\programdata\warrior\data\tep\federal pa 612-26\pn\tep_federal pa 612-26_pn_09-03-18.db
Dataset Pathname	Main/Main.2
Dataset Creation	Mon Sep 03 09:39:31 2018

Gamma Ray Calibration Report

Serial Number:	001681	
Tool Model:	001	
Performed:	(Not Performed)	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	
Calibrator Reading:	1.0	
Sensitivity:	1.0000	GAPI/

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