RELIANCE
OILFIELD SERVICES

Pulsed Neutron Gamma Ray Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Ware SR 334-12
Field	Rulison
County	Garfield
State	Colorado

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Well Ware SR 334-12
Field Rulison
County Garfield State Colorado
Location: API # : 05-045-23451
SEC 12 TWP 7S RGE 94W
Other Services: RBL

Permanent Datum	Ground Level	Elevation	7479'	Elevation
Log Measured From	Kelly Bushing			K.B. 7503'
Drilling Measured From	Kelly Bushing			D.F. 7502' G.L. 7479'

Date	29-JAN-2018
Run Number	One
Depth Driller	9735 FT
Depth Logger	9688 FT
Bottom Logged Interval	9688 FT
Top Log Interval	5565 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	A. Ellsworth
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	32.3	H-40	Surface	1138 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	9692 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 28-JAN-2018
Log ran from 9688 FT to 5565 FT
Pulsed Neutron Data logged with the Hunter RAS Tool

Thank you for choosing Reliance Oilfield Services, LLC!!

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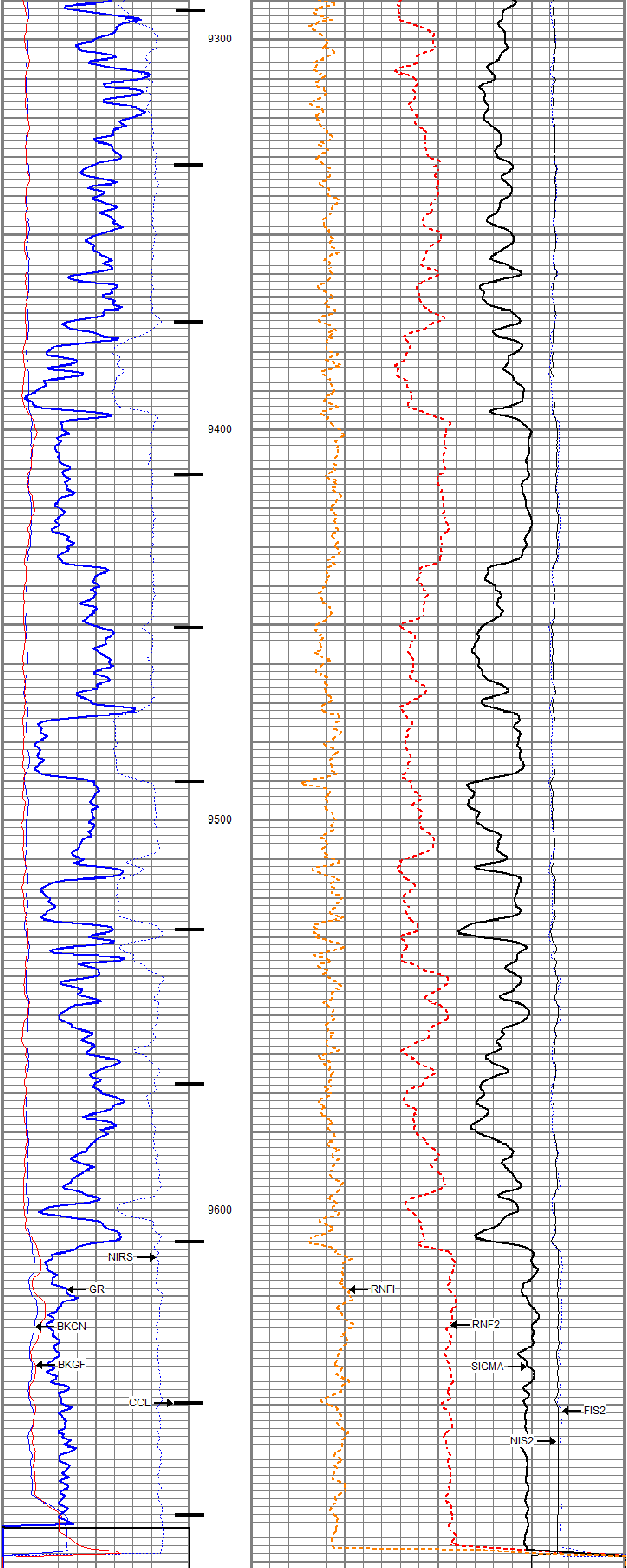
Main Pass

Database File	tep\sr 334-12\pn\tep_ware sr 334-12_pn_01-29-18.db
Dataset Pathname	ware_sr_334-12_pn_main_merge_shift
Presentation Format	ros_pdn_hunter
Dataset Creation	Mon Feb 05 14:02:14 2018
Charted by	Depth in Feet scaled 1:240



0	Gamma Ray (GAPI)	150
	Casing Collar Locator	
0	NIRS (cps)	400000
0	BKGN (cps)	4000
0	BKGF (cps)	2000

4	RNF2	0
60	SIGMA (cu)	0
4.5	RNFI	0

	FIS2
0	(cps) 45000
	NIS2
0	(cps100000

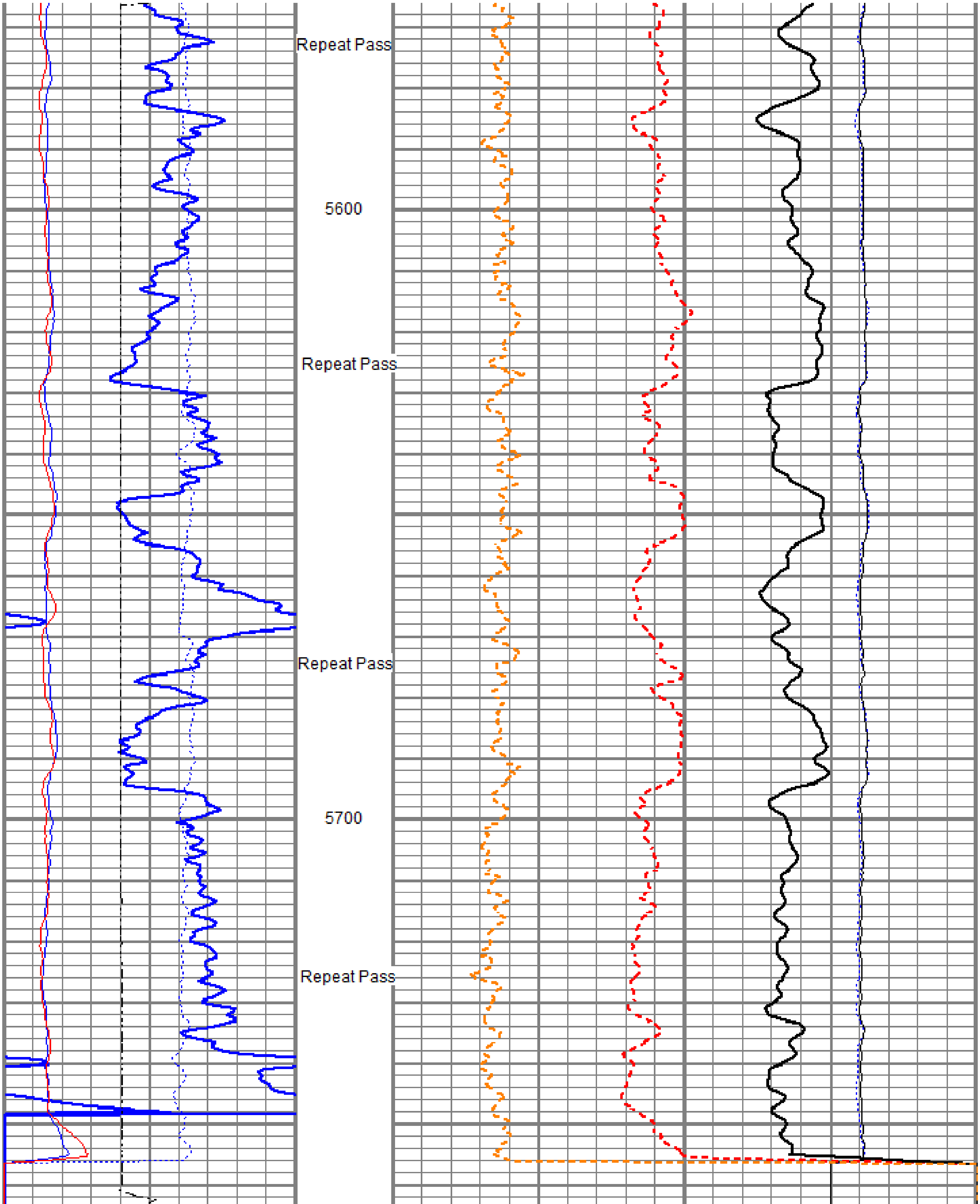
Repeat Pass

Database File	tep\sr 334-12\pn\tep_ware sr 334-12_pn_01-29-18.db
Dataset Pathname	repeat/ware_sr_334-12_pn_repeat_2_shift
Presentation Format	ros_pdn_hunter
Dataset Creation	Mon Feb 05 16:53:49 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

	FIS2
0	(cps) 45000
	NIS2
0	(cps100000



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

	FIS2
0	(cps) 45000
	NIS2
0	(cps100000

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan_Electric_Cable_Heads-Titan_1-1/1 Electric Cable Head with 1" Fishing Neck	1.03	1.69	5.40
			Telemetry-Antares Antares Telemetry / Gamma / CCL	4.07	1.70	17.60
			Generator-Antares Antares Neutron Generator	19.03	1.70	85.80

Dataset:	pdn tool.db: field/well/run1/PDN_Tool_Diagram
Total length:	24.13 ft
Total weight:	108.80 lb
O.D.:	1.70 in

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