RELIANCE OILFIELD SERVICES

Pulsed Neutron Gamma Ray Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Chevron TR 624-22-597
Field	Trail Ridge
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC
Well Chevron TR 624-22-597
Field Trail Ridge
County Garfield State Colorado
Location: API # : 05-045-23701
SEC 22 TWP 5S RGE 97W

Other Services
RBL

		Elevation		Elevation
Permanent Datum	Ground Level	8134.8'		K.B. 8158.8'
Log Measured From	Kelly Bushing	24 FT		D.F. 8157.8'
Drilling Measured From	Kelly Bushing			G.L. 8134.8'

Date	17-MAR-2019
Run Number	Two
Depth Driller	9514 FT
Depth Logger	9479 FT
Bottom Logged Interval	9474 FT
Top Log Interval	5337 FT
Open Hole Size	8.750"
Type Fluid	Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	---
Estimated Cement Top	---
Time Well Ready	ROA
Time Logger on Bottom	1:00
Equipment Number	HD-0359
Location	Grand Junction, CO
Recorded By	Z. Fisher
Witnessed By	D.Welsh

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	J-55	Surface	2743 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	9472 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 17-MAR-2019
Log ran from 9474 FT to 5337 FT
Pulsed Neutron Data logged with the Hunter RAS Tool

Thank you for choosing Reliance Oilfield Services, LLC!

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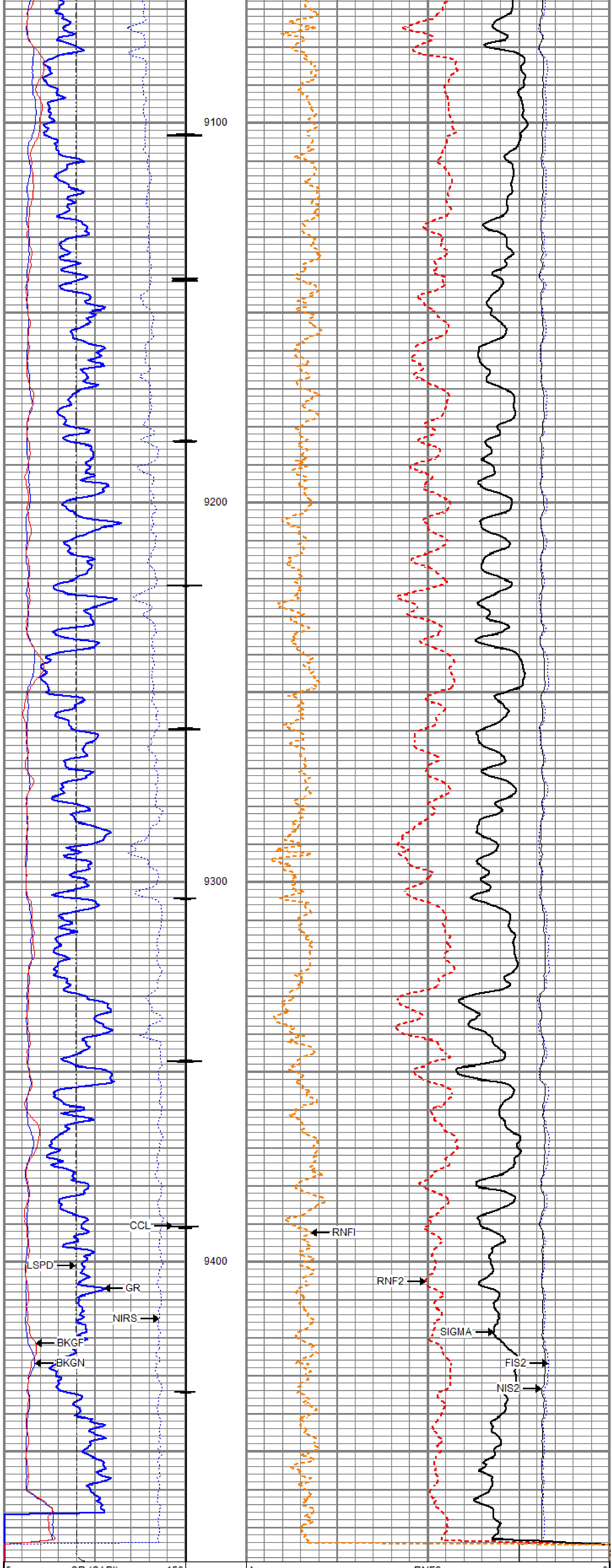
Main Pass

Database File	f:\data\tep\chevron tr 624-22-597\pn\tep_chevron tr 624-22-597_pn_03-17-19.db
Dataset Pathname	runSHIFTED/merge1
Presentation Format	ros_pdn_hunter
Dataset Creation	Thu Mar 28 14:09:10 2019
Charted by	Depth in Feet scaled 1:240



0	GR (GAPI)	150	4	RNF2	0	
	Casing Collar Locator		60	SIGMA (cu)	0	
-100	Line Speed (ft/min)	100	4.5	RNFI	0	
0	NIRS	400000			0	FIS2 45000
0	BKGN (cps)	4000			0	NIS2 100000
0	BKGF (cps)	2000				

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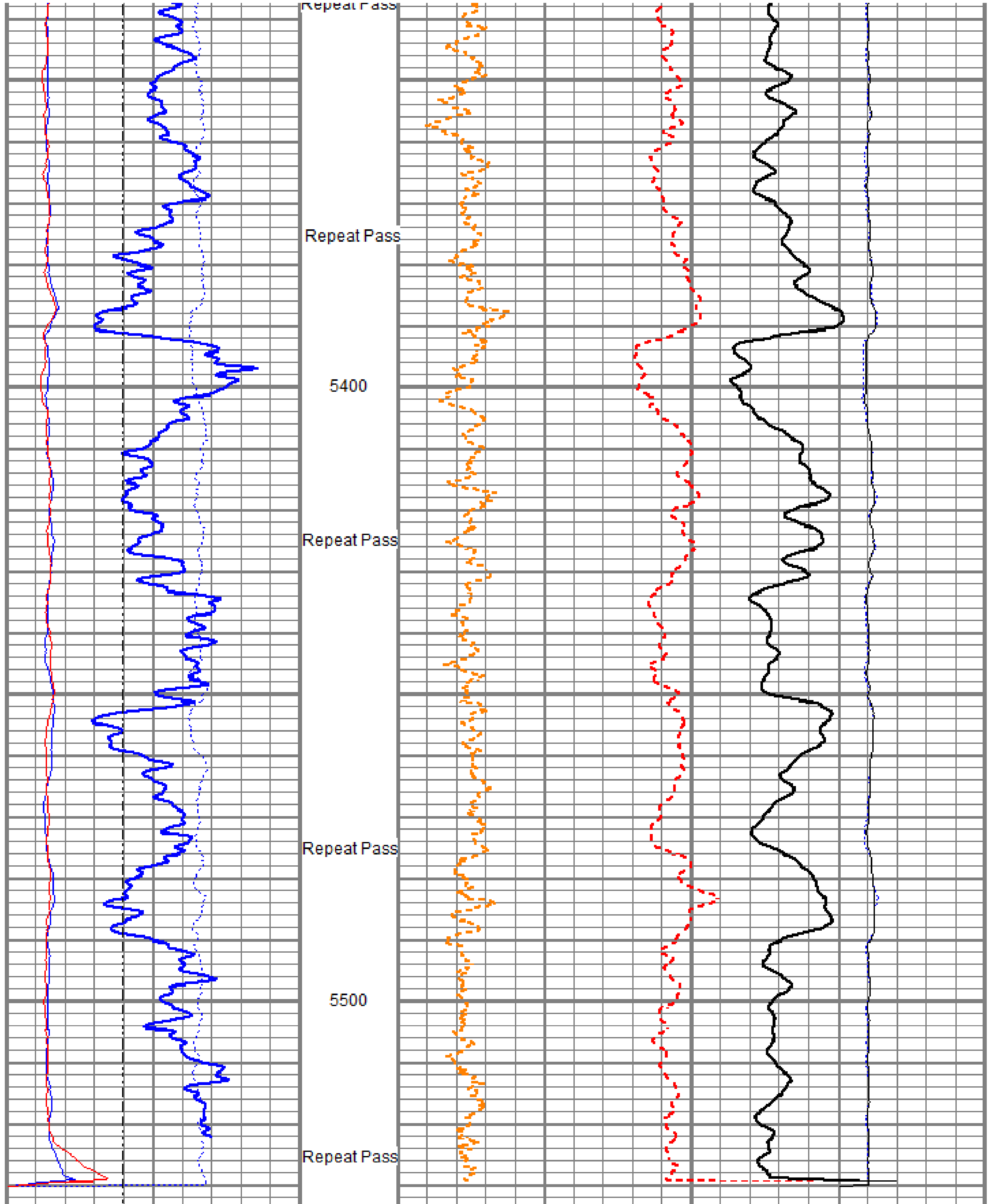
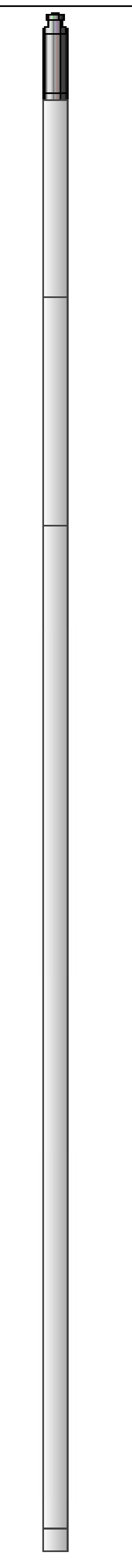
Repeat Pass

Database File f:\data\tep\chevron tr 624-22-597\pn\tep_chevron tr 624-22-597_pn_03-17-19.db
Dataset Pathname Main2.2
Presentation Format ros_pdn_hunter
Dataset Creation Mon Mar 18 05:09:53 2019
Charted by Depth in Feet scaled 1:240

0	GR (GAPI)	150	4	RNF2	0	
-100	Line Speed (ft/min)	100	60	SIGMA (cu)	0	
0	NIRS (cps)	400000	4.5	RNFI	0	
0	BKGN (cps)	4000			0	FIS2 (cps) 45000
0	BKGF (cps)	2000			0	NIS2 (cps100000



0	GR (GAPI)	150	4	RNF2	0	
-100	Line Speed (ft/min)	100	60	SIGMA (cu)	0	
0	NIRS (cps)	400000	4.5	RNFI	0	
0	BKGN (cps)	4000			0	FIS2 (cps) 45000
0	BKGF (cps)	2000			0	NIS2 (cps100000



Sensor	Offset (ft)	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 (001704) HWS Telemetry Control Unit (TCU002)	2.30	1.69	10.87
TCUTEMP TCUVOLT GCL_CCL	14.69 14.69 13.97					
			HWS_GCL-001 (001475) HWS Gamma Ray Collar Locator (1.6875")	2.69	1.69	13.40
GCL_GR GCL_GR	12.50 12.50					
Long Far Near Anci	6.25 6.25 6.25 6.25		HWS_RAS-RAS002 (003041) Hunter Well Science Pulsed Neutron Tool	11.75	1.69	55.82
			HWS_TBN-001 (001725) HWS Terminator Bull Nose (1.6875")	0.25	1.69	0.99

Dataset: tep_chevron tr 624-22-597_pn_03-17-19.db: field/well/run1/Main1.2
Total length: 18.02 ft
Total weight: 86.48 lb
O.D.: 1.69 in

Calibration Report

Database File f:\data\tep\chevron tr 624-22-597\pn\tep_chevron tr 624-22-597_pn_03-17-19.db
Dataset Pathname Main1.2
Dataset Creation Mon Mar 18 05:08:43 2019

Gamma Ray Calibration Report

Serial Number:	001475	
Tool Model:	001	
Performed:	Fri Oct 19 14:55:00 2018	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	
Calibrator Reading:	1.0	
Sensitivity:	1.0000	GAPI/

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