Company TEP Rocky Mountain LLC
Well Federal GM 343-8
Field Grand Valley
County Garfield
State Colorado

RELIANCE OILFIELD SERVICES

Pulsed Neutron
Gamma Ray
Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Federal GM 343-8
Field	Grand Valley
County	Garfield State Colorado
Location:	API #: 05-045-24020 SEC 8 TWP 7S RGE 96W
Other Services	RBL

Permanent Datum	Ground Level	Elevation	6172.4'	Elevation K.B. 6196.4' D.F. 6195.4' G.L. 6172.4'
Log Measured From	Kelly Bushing	24 FT		
Drilling Measured From	Kelly Bushing			

Date	05-FEB-2019
Run Number	One
Depth Driller	7230 FT
Depth Logger	7196 FT
Bottom Logged Interval	7190 FT
Top Log Interval	3754 FT
Open Hole Size	---
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	13 3/8	54.5	J-55	Surface	1038 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	7189 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 03-FEB-2019
Log ran from 7190 FT to 3754 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\federal gm 343-8\pn\tep_federal gm 343-8_pn_02-05-19.db
Dataset Pathname SHIFTED/merge1
Presentation Format ros_pdn_hunter
Dataset Creation Fri Feb 08 10:49:20 2019
Charted by Depth in Feet scaled 1:240

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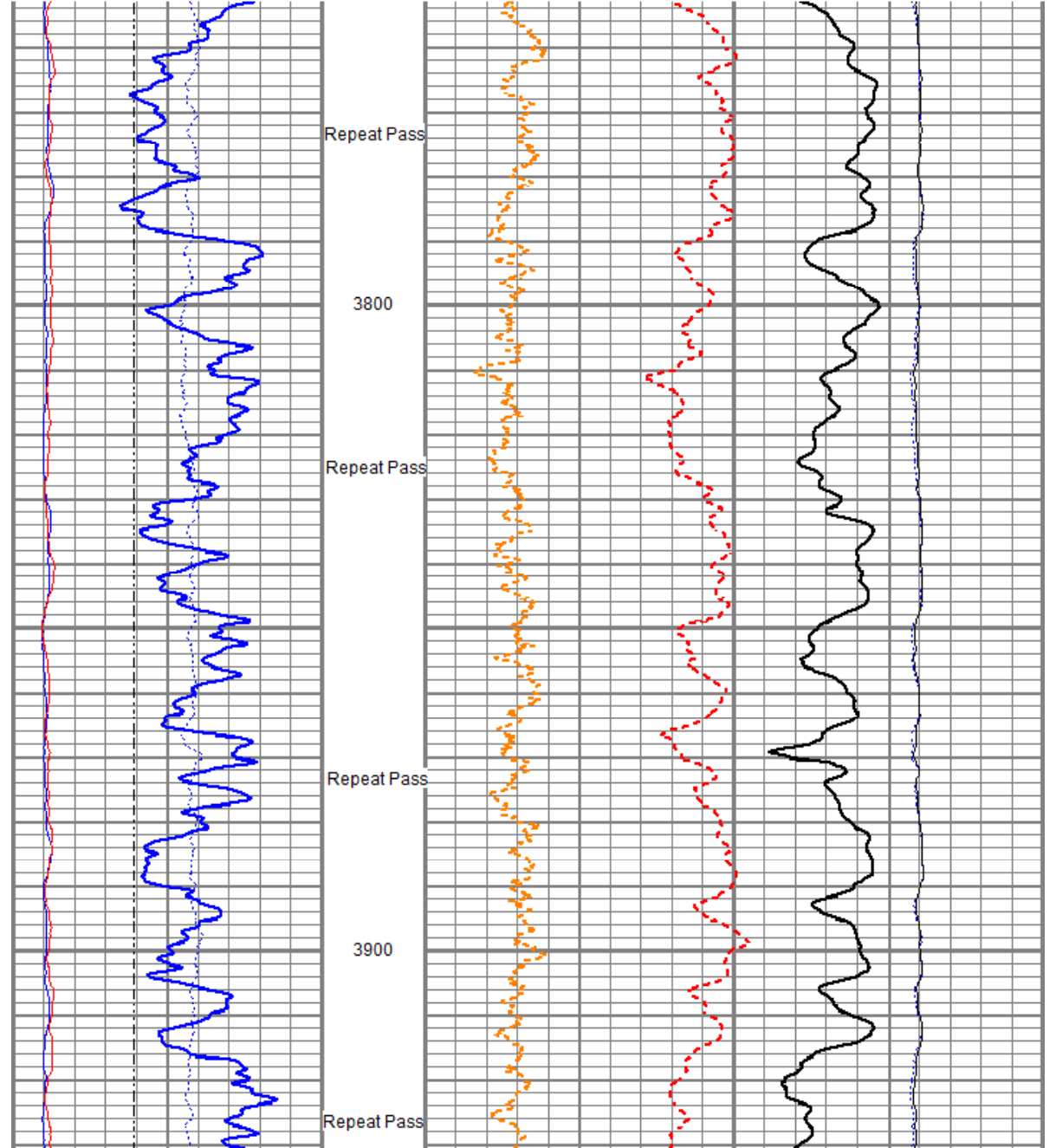
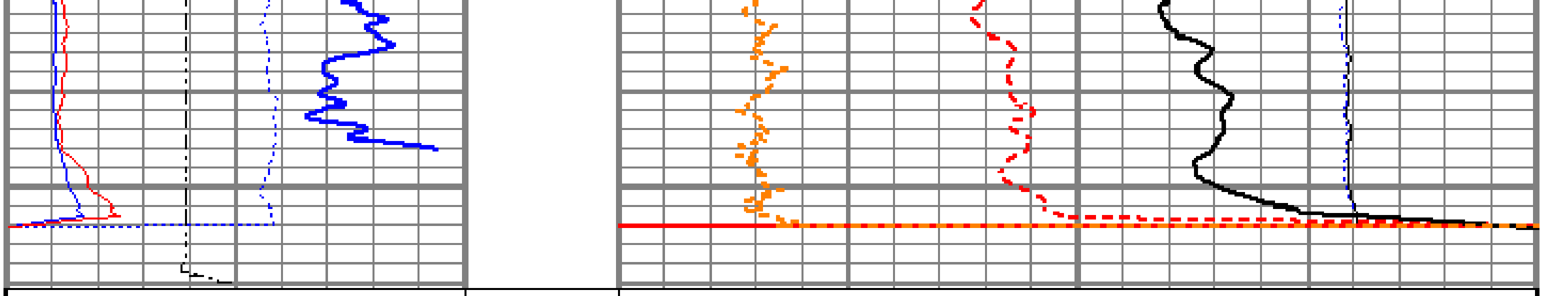
Repeat Pass

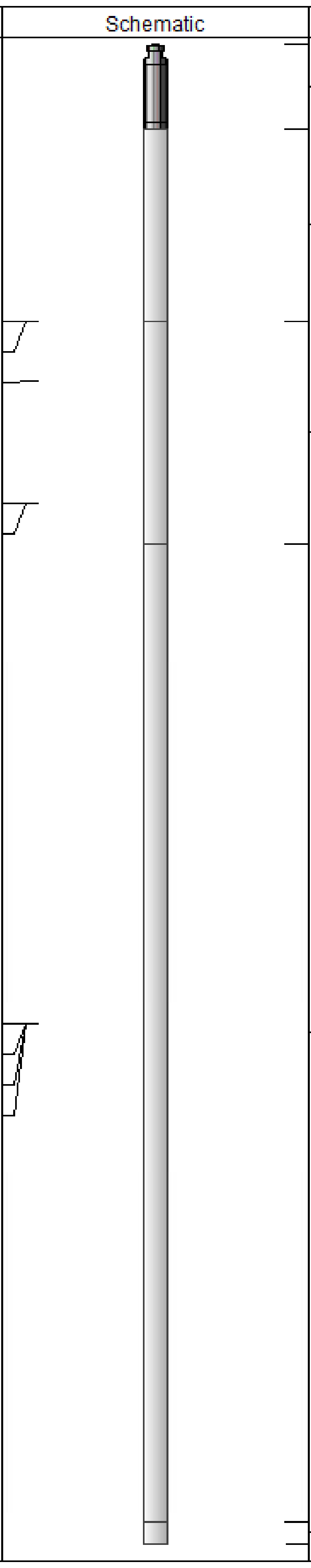
Database File f:\data\tep\federal gm 343-8\pn\tep_federal gm 343-8_pn_02-05-19.db
Dataset Pathname Repeat.2
Presentation Format ros_pdn_hunter
Dataset Creation Tue Feb 05 16:53:58 2019
Charted by Depth in Feet scaled 1:240





0	GR (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)	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 (001681) 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_federal gm 343-8_pn_02-05-19.db: field/well/run1/Main.2
Total length:	18.02 ft
Total weight:	86.48 lb
O.D.:	1.69 in

Calibration Report

Database File	f:\data\tep\federal gm 343-8\pn\tep_federal gm 343-8_pn_02-05-19.db
Dataset Pathname	Main.2
Dataset Creation	00:00:00

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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