RELIANCE OILFIELD SERVICES

Pulsed Neutron Gamma Ray Collar Locator Log

Company	TEP Rocky Mountain LLC
Well	Federal GM 411-10
Field	Grand Valley
County	Garfield
State	Colorado

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Field Grand Valley
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Location: API # : 05-045-22685
2117' FNL & 1894' FWL SENW
SEC 10 TWP 7S RGE 96W

Other Services
RBL

Permanent Datum	Ground Level	Elevation	6148'
Log Measured From	Kelly Bushing	24 FT	
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 6172'
D.F. 6171'
G.L. 6148'

Date	03-AUG-2017
Run Number	One
Depth Driller	7292 FT
Depth Logger	7237 FT
Bottom Logged Interval	7237 FT
Top Log Interval	3890 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
Recorded By	J.Donnelly
Witnessed By	---

Borehole Record			Tubing Record		
Run Number	Bit	From	To	Size (in)	Weight (lb/ft)	From	To

Casing Record	Size (in)	Wgt (lb/ft)	Grade	Top	Bottom
Surface Casing	9 5/8	32.3	H-40	Surface	1056 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	7278 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-AUG-2017
Log ran from 7237 FT to 3890 FT

Thank you for choosing Reliance Oilfield Services, LLC!!

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Main Pass

Database File	tep_federal gm 411-10_pdn_08-03-2017\tep_federal gm 411-10_pdn_08-03-17_shifted.db
Dataset Pathname	gm_411-10_pdn_shift
Presentation Format	ros_pdn
Dataset Creation	Sun Aug 06 12:13:00 2017
Charted by	Depth in Feet scaled 1:240

0	Gamma Ray (GAPI)	150
	Casing Collar Locator	
0	Line Speed (ft/min)	100
0	SSIN (cps)	500000

10	RATIO	0
60	SIGMA (cu)	0
0.35	RATIC	0
11	RATIN	0
0	LS (cps)	0000
	SS	
0	(cps	4e+006

0	Gamma Ray (GAPI)	150
	Casing Collar Locator	
0	Line Speed (ft/min)	100
0	SSIN (cps)	500000

10	RATIO	0
60	SIGMA (cu)	0
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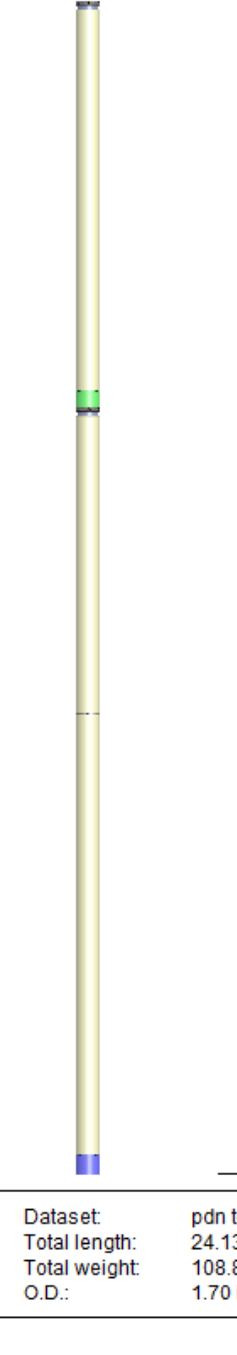
0	LS (cps)	0000
	SS	
0	(cps	4e+006

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan_Electric_Cable_Heads-Titan_1-11 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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