RELIANCE OILFIELD SERVICES

Temperature
Gamma Ray
Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Federal RU 513-17
Field	Rulison
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC
Well Federal RU 513-17
Field Rulison
County Garfield State Colorado
Location: API # : 05-045-23734
SEC 17 TWP 7S RGE 93W
Other Services
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Permanent Datum	Ground Level	Elevation	8365.6'	Elevation
Log Measured From	Kelly Bushing	24 FT		K.B. 8389.6' D.F. 8388.6' G.L. 8365.6'
Drilling Measured From	Kelly Bushing			

Date	26-APR-2018
Run Number	One
Depth Driller	10710 FT
Depth Logger	10675 FT
Bottom Logged Interval	10675 FT
Top Log Interval	Surface
Open Hole Size	8.750"
Type Fluid	Fresh Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	235°F
Estimated Cement Top	5100 FT
Time Well Ready	ROA
Time Logger on Bottom	06:00
Equipment Number	HD-0359
Location	Grand Junction, CO
Recorded By	J. Donnelly
Witnessed By	B. Brown

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	1128 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	10671 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 Kelly Bushing at 24 FT
Marker Joint logged from 6811 FT to 6833 FT
Log ran from 10675 FT to Surface

Thank you for choosing Reliance Oilfield Services, LLC!!

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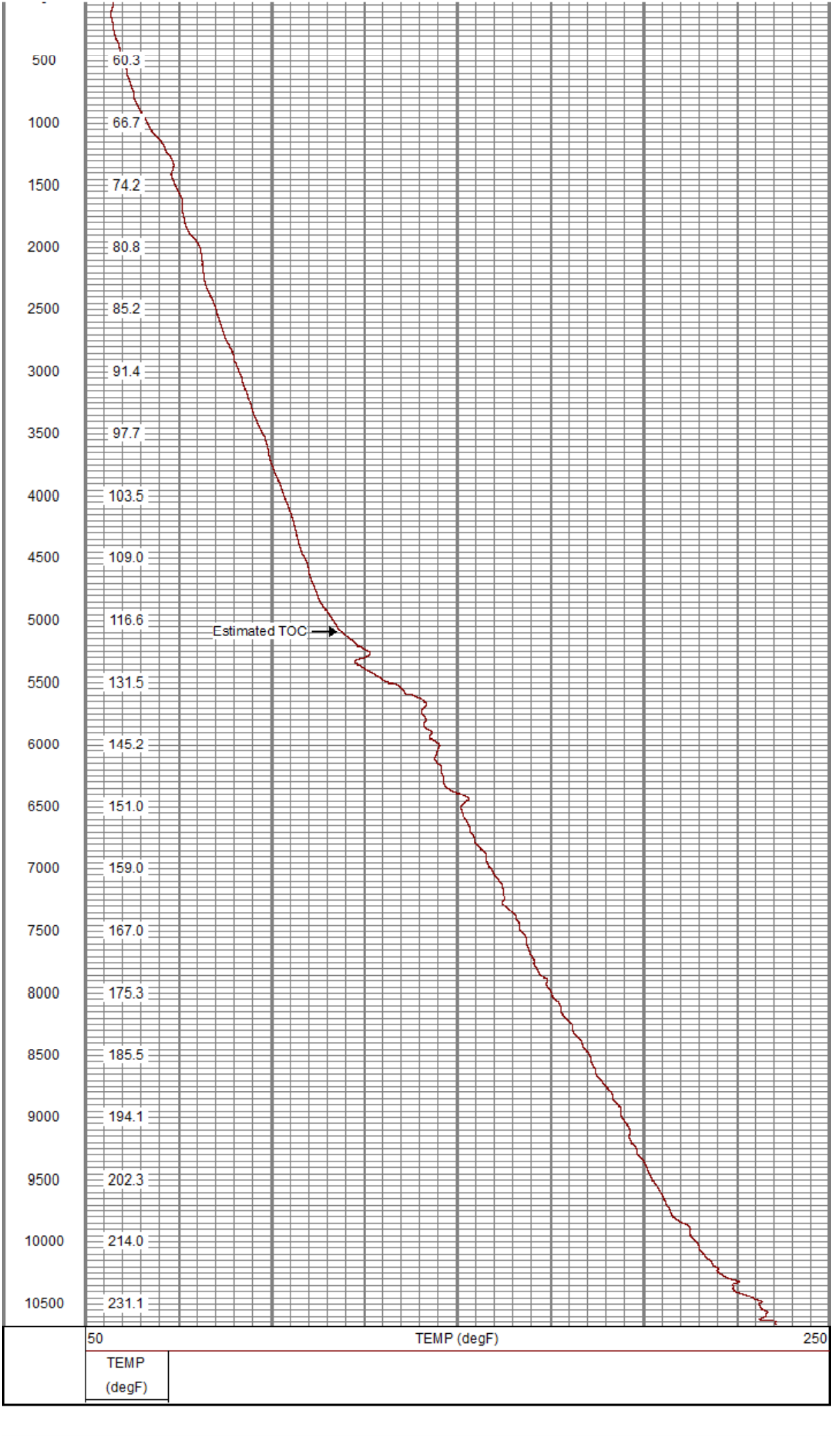
Main Pass (Quick Look)

Logged with 0 PSI Surface Induced Pressure

Database File	tep_ru 513-17\tep_federal ru 513-17_temp_04-26-18.db
Dataset Pathname	mainQL
Presentation Format	ros_temp_ql_tep
Dataset Creation	Thu Apr 26 19:50:45 2018
Charted by	Depth in Feet scaled 1:10000



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Main Pass

Logged with 0 PSI Surface Induced Pressure

Database File	tep_ru 513-17\tep_federal ru 513-17_temp_04-26-18.db
Dataset Pathname	main1
Presentation Format	ros_temp_tep
Dataset Creation	Thu Apr 26 13:37:09 2018
Charted by	Depth in Feet scaled 1:240

3500
3600
3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
Estimated TOC
5600
5700
5800
5900
6000
6100
6200
6300
6400
6500
6600
6700
6800
Marker Joint
6900
7000
7100
7200
7300
7400

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			Titan CHD-14375 GO Titan 1-7/16" Assembled Electric Cable Head w/ 1" Fishing Neck	1.03	1.44	3.60
CCL	6.62		CCL Logging-T 16875 (GGGG) Titan 1-11/16" Logging CCL	1.82	1.69	5.00
GR	2.60		Gamma Ray-T 16875 S (GGGG) Titan 1-11/16" Scintillating Gamma Ray	4.74	1.69	12.00
TEMP	0.13		TEMP-T 1375 SBFT (CCCC) Titan 1-3/8" Temperature Probe in Short Body w/ Feedthrough	1.17	1.38	3.00

Dataset:	TEP_Federal RU 513-17_TEMP_04-26-18.db: field/well/run1/main1
Total length:	8.76 ft
Total weight:	23.60 lb
O.D.:	1.69 in

Calibration Report

Database File	C:\ProgramData\Warrior\Data\TEP_RU 513-17\TEP_Federal RU 513-17_TEMP_04-26-18.db
Dataset Pathname	main1
Dataset Creation	Thu Apr 26 13:37:09 2018

Temperature Calibration Report

Serial Number:	CCCC	
Tool Model:	T 1375 SBFT	
Performed:	Wed Mar 15 14:39:51 2006	
	Reference	Reading
Low Reference:	0.00 degF	0.00 cps
High Reference:	100.00 degF	1000.00cps
Gain:	0.10	
Offset:	0.00	
Delta Spacing	2	

Gamma Ray Calibration Report

Serial Number:	GGGG	
Tool Model:	T 16875 S	
Performed:	(Not Performed)	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

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