Company TEP Rocky Mountain LLC
Well Ware SR 414-12
Field Rulison
County Garfield
State Colorado

RELIANCE OILFIELD SERVICES

Pulsed Neutron Gamma Ray Casing Collar Log

Company	TEP Rocky Mountain LLC		
Well	Ware SR 414-12		
Field	Rulison		
County	Garfield	State	Colorado
Location:	API # : 05-045-23455	Other Services	RBL
SEC 12 TWP 7S RGE 94W			
Permanent Datum	Ground Level	Elevation 7479'	Elevation
Log Measured From	Kelly Bushing	24 FT	K.B. 7503'
Drilling Measured From	Kelly Bushing		D.F. 7502' G.L. 7479'

Date	29-JAN-2018	
Run Number	One	
Depth Driller	10035 FT	
Depth Logger	9975 FT	
Bottom Logged Interval	9968 FT	
Top Log Interval	5920 FT	
Open Hole Size	8.750"	
Type Fluid	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	Z.Fisher	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	1132 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	9995 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 9968 FT to 5920 FT
Pulsed Neutron Data logged with Hunter RAS Tool

Thank you for choosing Reliance Oilfield Services, LLC!!

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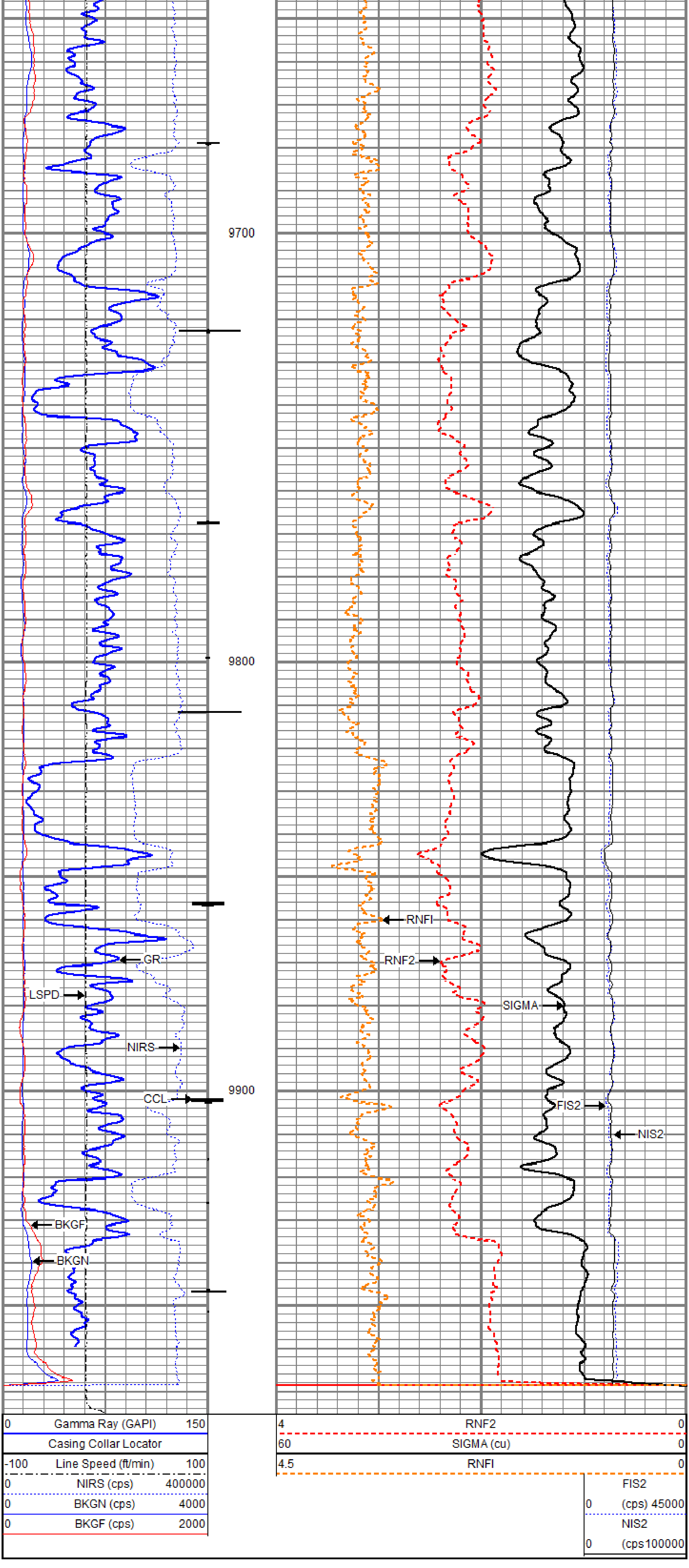
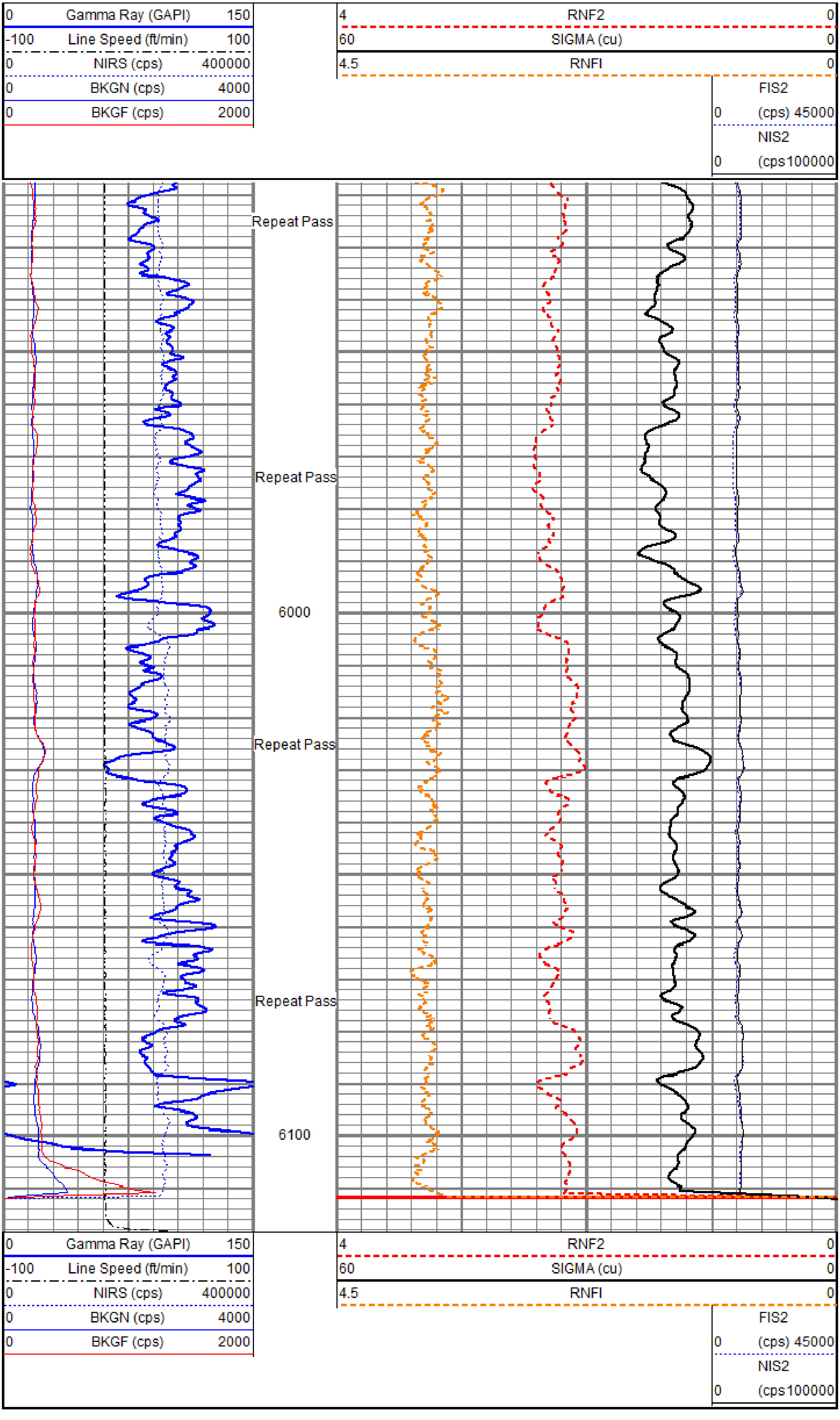
Main Pass

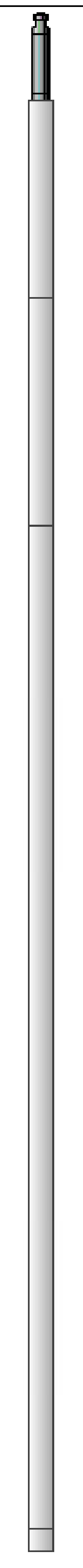
Database File tep\sr 414-12\pn\tep_ware sr 414-12_pn_01-29-18.db
Dataset Pathname main.2
Presentation Format ros_pdn_hunter
Dataset Creation Mon Jan 29 16:47:59 2018
Charted by Depth in Feet scaled 1:240



Repeat Pass

Database File tep\sr 414-12\pn\tep_ware sr 414-12_pn_01-29-18.db
Dataset Pathname repeat.2
Presentation Format ros_pdn_hunter
Dataset Creation Mon Jan 29 16:50:19 2018
Charted by Depth in Feet scaled 1:240



Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			Titan CHD-1375 MOD Titan Modified 1-3/8" Assembled Electric Cable Head w/ 1" Fishing Neck	1.04	1.38	1.00
			HWS_TCU-001 (001705) HWS Telemetry Control Unit	2.30	1.69	10.87
			HWS_GCL-001 (001681) HWS Gamma Ray Collar Locator (1.6875")	2.69	1.69	13.40
TCUTEMP TCUVOLT GCL_CCL	14.69 14.69 13.97					
GCL_GR GCL_GR	12.50 12.50					
Long Far Near Anci	6.25 6.25 6.25 6.25		HWS_RAS-RAS001 (003041) Hunter Well Science Pulsed Neutron Tool	11.75	1.69	55.82
			HWS_TBN-001 (000001) HWS Terminator Bull Nose (1.6875")	0.25	1.69	0.99

Dataset: tep_ware sr 414-12_pn_01-29-18.db: field/well/run1/main.2
Total length: 18.03 ft
Total weight: 82.08 lb
O.D.: 1.69 in

Calibration Report

Database File c:\programdata\warrior\data\tep\sr 414-12\pn\tep_ware sr 414-12_pn_01-29-18.db
Dataset Pathname main.2
Dataset Creation Mon Jan 29 16:47:59 2018

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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