RELIANCE OILFIELD SERVICES

Radial Cement Bond
Gamma Ray
Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Tri State Trucking PA 543-26
Field	Parachute
County	Garfield
State	Colorado

Company TEP Rocky Mountain LLC
Well Tri State Trucking PA 543-26
Field Parachute
County Garfield State Colorado
Location: API # : 05-045-23652
SEC 25 TWP 6S RGE 95W
Other Services
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Permanent Datum	Ground Level	Elevation	5224'
Log Measured From	Kelly Bushing	24 FT	
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 5248'
D.F. 5247'
G.L. 5224'

Date	12-DEC-2017
Run Number	One
Depth Driller	8615 FT
Depth Logger	8536 FT
Bottom Logged Interval	8531 FT
Top Log Interval	Surface
Open Hole Size	8.750"
Type Fluid	Fresh Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	240°F
Estimated Cement Top	See Log
Time Well Ready	ROA
Time Logger on Bottom	5:45
Equipment Number	HD-359
Location	Grand Junction, CO
Recorded By	Z.Fisher
Witnessed By	C.Applegate

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	1135 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	8572 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 at 3986-4008 FT
Log ran from 8536 FT to Surface
Recorded with 0 PSI Surface Induced Pressure

Thank you for choosing Reliance Oilfield Services, LLC!!

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Main Pass

Recorded With 0 PSI Surface Induced Pressure

Database File	tep_tri state trucking pa 543-26_rbl_12-12-17\tep_tri state trucking pa 543-26_rbl_12-12-17.db
Dataset Pathname	main.3
Presentation Format	ros_rbt004_tep
Dataset Creation	Wed Dec 13 16:11:19 2017
Charted by	Depth in Feet scaled 1:240

Gamma Ray		3' Amplitude	5' Variable Density Log	Sector Map	Average Amplitude
0 (GAPI) 200		0 (mV) 100	200 1200	10 110	0 150
Casing Collar Locator		3' Amplitude x 5			Mimimum Amplitude
Line Speed		0 (mV) 20			0 150
-150 (ft/min) 150		3' Travel Time			Maximum Amplitude
Line Tension		300 (usec) 200			0 150
0 (lb) 2000					
Temperature					
0 (degF) 20					

3800
3900
Marker Joint
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
5600
5700
5800
5900
6000
6100
6200
6300
6400
6500
6600
6700
6800
6900
7000
7100
7200
7300
7400
7500
7600
7700

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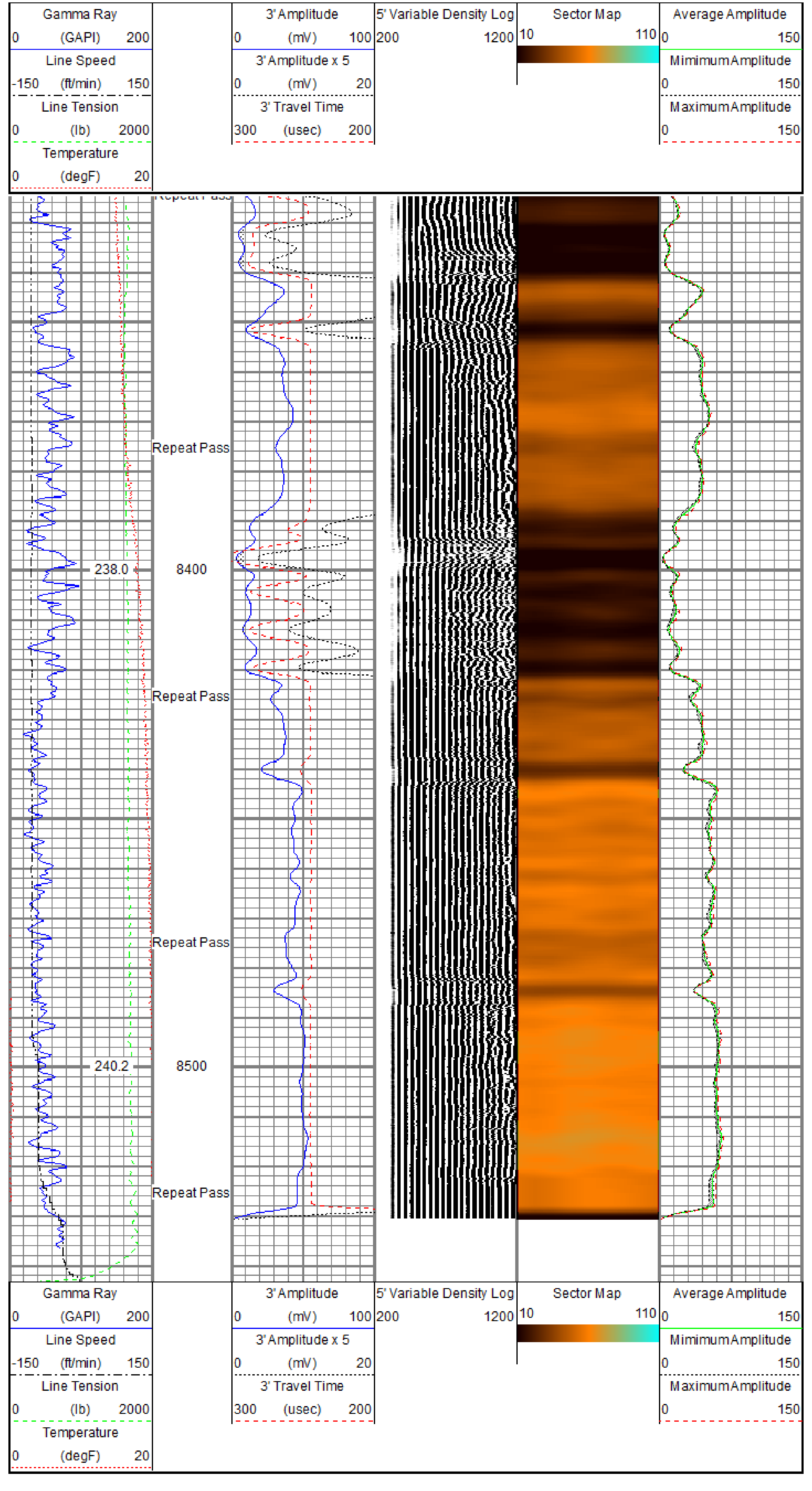
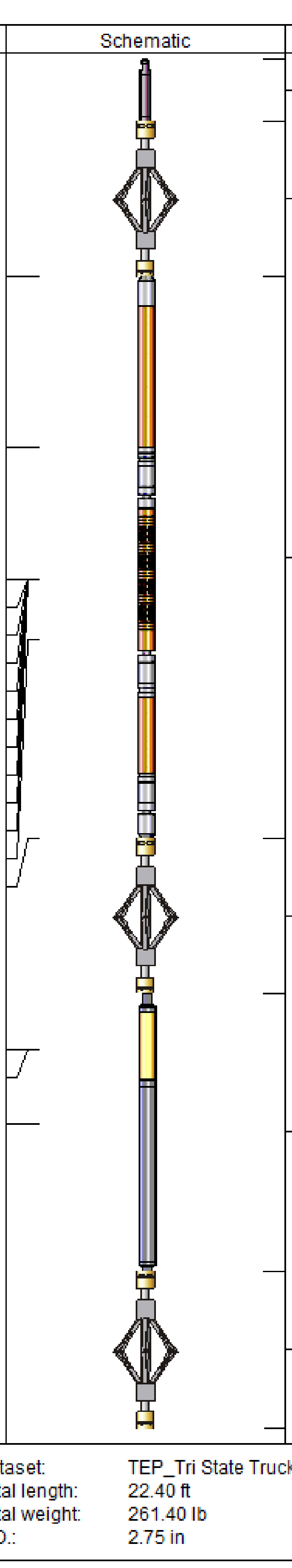
Repeat Pass

Recorded With 0 PSI Surface Induced Pressure

Database File	tep_tri state trucking pa 543-26_rbl_12-12-17\tep_tri state trucking pa 543-26_rbl_12-12-17.db
Dataset Pathname	repeat.1
Presentation Format	ros_rbt004_tep
Dataset Creation	Thu Dec 14 08:56:36 2017
Charted by	Depth in Feet scaled 1:240





Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			Titan_Electric_Cable_Heads-Titan_1-11/11.03 Electric Cable Head with 1" Fishing Neck		1.69	5.40
			DSS_RAC-RAC_5-Arm 5 Arm 2-3/4" Roller Centralizer	2.55	2.75	32.00
HeadVolt	18.84					
Temp	16.05					
WVFS8	13.88		Probe_RADII-C-P_RBT_2750 (101013) Probe 2-3/4" Sector Cement Bond Tool with Temperature Probe	9.19	2.75	105.00
WVFS7	13.88					
WVFS6	13.88					
WVFS5	13.88					
WVFS4	13.88					
WVFS3	13.88					
WVFS2	13.88					
WVFS1	13.88					
WVFCAL	13.88					
WVF3FT	13.88					
WVF5FT	12.88					
HEADVOLT	9.63					
			DSS_RAC-RAC_5-Arm 5 Arm 2-3/4" Roller Centralizer	2.55	2.75	32.00
DCCL	6.18					
CCL	6.18					
GR	4.96		Probe_GR_CCL-P_CGR_2750_S (FW1304.548) Probe 2-3/4" Digital CCL / Gamma Ray Combined		2.75	55.00
			DSS_RAC-RAC_5-Arm 5 Arm 2-3/4" Roller Centralizer	2.55	2.75	32.00

Dataset:	TEP_Tri State Trucking PA 543-26_RBL_12-12-17.db: field/well/run1/main
Total length:	22.40 ft
Total weight:	261.40 lb
O.D.:	2.75 in

Calibration Report

Database File	c:\programdata\warrior\data\tep_tri state trucking pa 543-26_rbl_12-12-17\tep_tri state trucking pa 543-26_rb
Dataset Pathname	main.3
Dataset Creation	Wed Dec 13 16:11:19 2017

Gamma Ray Calibration Report

Serial Number:	FW1307-038	
Tool Model:	P_CGR_2750_S	
Performed:	Sat Feb 06 11:43:09 2016	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.6	cps
Sensitivity:	0.6061	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	101013	
Tool Model:	P_RBT_2750	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	32.658	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.004	0.642	0.000	81.196	125.598	0.507
CAL	-0.006	0.767				
5'	-0.002	0.570	0.000	81.196	141.831	0.292
SUM						
S1	-0.003	0.670	0.000	100.000	148.697	0.385
S2	-0.003	0.667	0.000	100.000	149.344	0.410
S3	-0.006	0.627	0.000	100.000	157.910	0.951
S4	-0.005	0.608	0.000	100.000	163.201	0.750
S5	-0.003	0.602	0.000	100.000	165.324	0.483
S6	-0.004	0.621	0.000	100.000	159.783	0.707
S7	-0.007	0.635	0.000	100.000	155.706	1.082
S8	-0.004	0.663	0.000	100.000	149.930	0.559

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	-0.006	0.767	1.000	0.000

Air Zero Calibration, performed Mon Dec 11 22:37:01 2017:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	-0.005	0.000	0.001
5'	-0.001	0.000	0.000
SUM			
S1	-0.003	0.000	-0.000
S2	-0.004	0.000	0.000
S3	-0.005	0.000	0.000
S4	-0.003	0.000	-0.000
S5	-0.003	0.000	0.000
S6	-0.004	0.000	0.000
S7	-0.005	0.000	-0.000
S8	-0.003	0.000	0.000

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Field	Parachute
County	Garfield
State	Colorado