RELIANCE
OILFIELD SERVICES

Radial Cement Bond
Gamma Ray
Casing Collar Log

Company	TEP Rocky Mountain LLC
Well	Federal RG 43-7-297
Field	Sulphur Creek
County	Rio Blanco
State	Colorado

Company TEP Rocky Mountain LLC
Well Federal RG 43-7-297
Field Sulphur Creek
County Rio Blanco State Colorado
Location: API # : 05-103-12475
SEC 18 TWP 2S RGE 97W
Other Services
PN

Permanent Datum Ground Level Elevation 6621'
Log Measured From Kelly Bushing 30 FT
Drilling Measured From Kelly Bushing

Elevation
K.B. 6651'
D.F. 6650'
G.L. 6621'

Date	09-AUG-2021
Run Number	One
Depth Driller	12903 FT
Depth Logger	12828 FT
Bottom Logged Interval	12813 FT
Top Log Interval	Surface
Open Hole Size	8.75"
Type Fluid	Water
Density / Viscosity	8.34 lb/gal
Max. Recorded Temp.	277°F
Estimated Cement Top	See Log
Time Well Ready	ROA
Time Logger on Bottom	13:36
Equipment Number	HD-0331
Location	Grand Junction, CO
Recorded By	P. Edwards
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	36	J-55	Surface	3486 FT
Intermediate #1	4 1/2	11.6	P-110	Surface	12864 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 30 FT
Marker Joint recorded from 6824 to 6834 FT
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_federal rg 43-7-297_rbl_08-09-21\tep_federal rg 43-7-297_rbl_08-09-21.db
Dataset Pathname	mainpass.2.2
Presentation Format	ros_radii_tep
Dataset Creation	Thu Aug 12 09:23:51 2021
Charted by	Depth in Feet scaled 1:240

Gamma Ray
0 (GAPI) 200
Casing Collar Locator
Line Speed
-150 (ft/min) 150
0 Line Tension (lb) 500
Temperature
0 (degF) 20

0 3' Amplitude (mV) 100
3' Amplitude x 5
0 (mV) 20
3' Travel Time
300 (usec) 200

5' Variable Density Log
200 (usec) 1200

Sector Map

Average Amplitude
0 150
Mimimum Amplitude
0 150
Maximum Amplitude
0 150

143.4
3800
145.2
3900
147.4
4000
148.7
4100
150.6
4200
152.2
4300
154.2
4400
155.7
4500
157.2
4600
158.7
4700
160.5
4800
162.1
4900
163.6
5000
165.2
5100
166.9
5200
168.3
5300
169.8
5400
171.5
5500
173.4
5600
174.6
5700
176.2
5800
177.6
5900
179.2
6000
180.6
6100
182.1
6200
183.8
6300
185.5
6400
186.9
6500
188.4
6600
189.8
6700
190.9
6800
Marker Joint
192.3
6900
193.3
7000
194.6
7100
195.7
7200
197.0
7300
198.2
7400
199.6
7500
200.6
7600
202.0
7700

203.1
7800
203.8
7900
205.1
8000
206.3
8100
207.4
8200
208.3
8300
209.1
8400
210.7
8500
211.6
8600
213.0
8700
214.0
8800
215.6
8900
217.0
9000
218.3
9100
219.7
9200
221.0
9300
222.4
9400
223.7
9500
225.0
9600
226.0
9700
227.4
9800
228.8
9900
230.2
10000
231.6
10100
232.9
10200
234.4
10300
235.9
10400
237.4
10500
238.8
10600
240.2
10700
241.9
10800
243.0
10900
244.7
11000
246.4
11100
247.6
11200
250.1
11300
252.6
11400
254.5
11500
259.4
11600
262.5
11700

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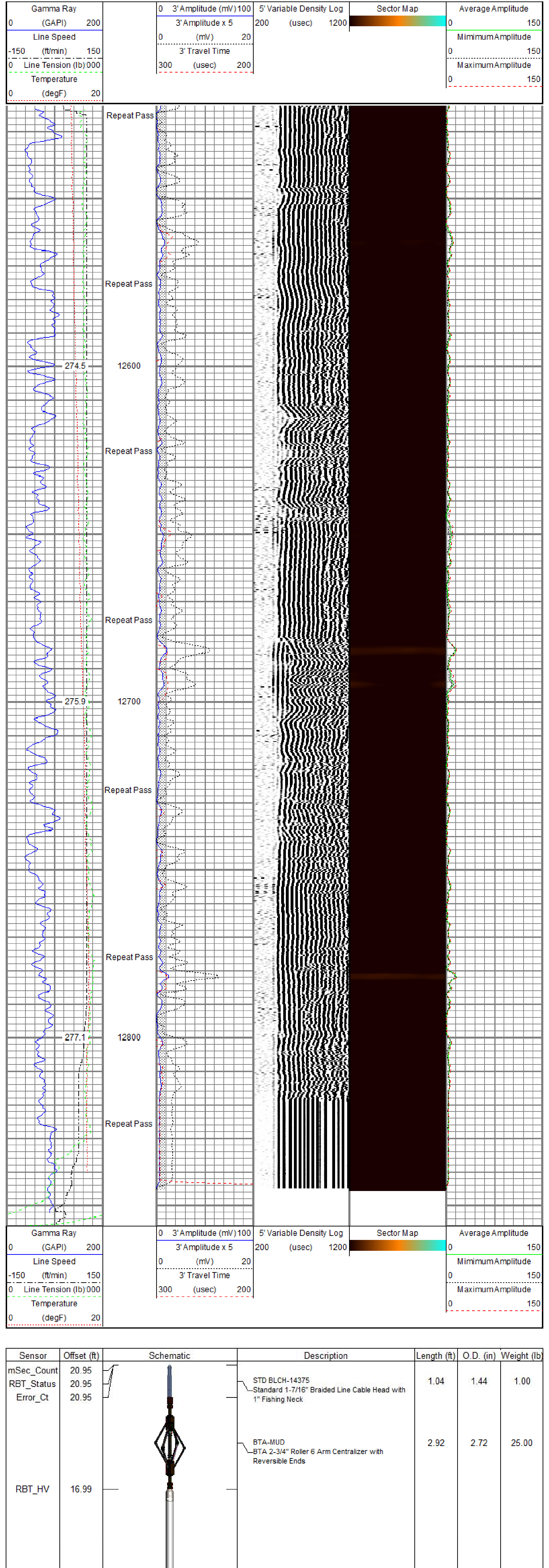
Repeat Pass

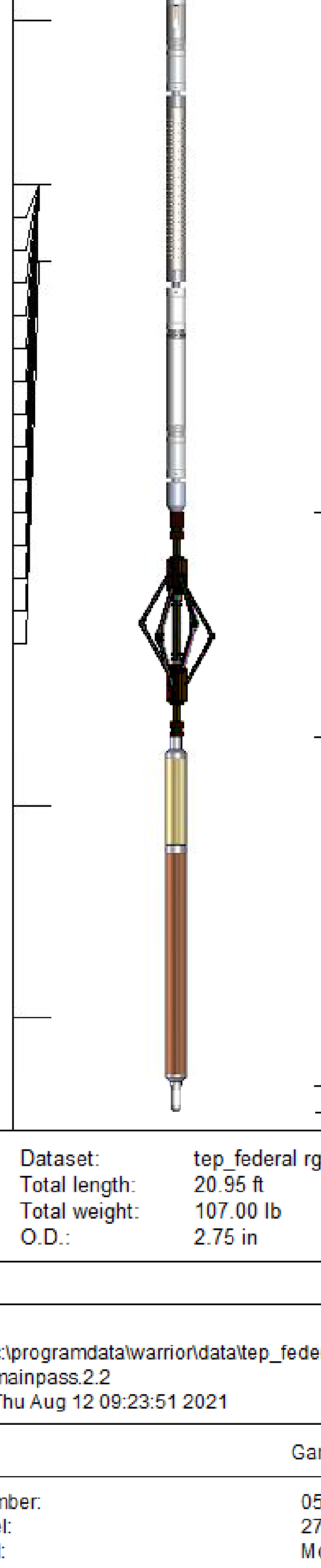
Recorded with 0 PSI Surface Induced Pressure

Database File tep_federal rg 43-7-297_rbl_08-09-21\tep_federal rg 43-7-297_rbl_08-09-21.db
Dataset Pathname repeat.2
Presentation Format ros_radii_tep
Dataset Creation Thu Aug 12 10:56:09 2021
Charted by Depth in Feet scaled 1:240



Sensor	Offset (ft)
mSec_Count	20.95
RBT_Status	20.95
Error_Ct	20.95
RBT_HV	16.99
RBT_TEMP	14.19
RBT_ACCZ	12.04
RBT_ACCY	12.04
RBT_ACCX	12.04
WVFSYNC	12.04
WVFS8	12.04
WVFS7	12.04
WVFS6	12.04
WVFS5	12.04
WVFS4	12.04
WVFS3	12.04
WVFS2	12.04
WVFS1	12.04
WVFCAL	12.04
WVF3FT	12.04
WVF5FT	11.04
CCL	3.97
GR	1.23

Schematic



Description	Length (ft)	O.D. (in)	Weight (lb)
STD BLCH-14375 Standard 1-7/16" Braided Line Cable Head with 1" Fishing Neck	1.04	1.44	1.00
BTA-MUD BTA 2-3/4" Roller 6 Arm Centralizer with Reversible Ends	2.92	2.72	25.00
RBT8-RADII-275T (RBT275T_Base) Probe 2.75" RADII 8 Sector Bond Tool w/ Temperature	9.20	2.75	
BTA-MUD BTA 2-3/4" Roller 6 Arm Centralizer with Reversible Ends	2.92	2.72	25.00
Probe GR-CCL ANL-2750 A (051217) Probe 2.75" Analog 4 Channel Pulse Gamma Ray/CCL Combined	4.54	2.75	55.00
Plug-FA108-0000 1.38" Bull Plug	0.33	1.38	1.00

Dataset: tep_federal rg 43-7-297_rbl_08-09-21.db: field/well/run1/mainpass.2.2
Total length: 20.95 ft
Total weight: 107.00 lb
O.D.: 2.75 in

Calibration Report

Database File c:\programdata\warrior\data\tep_federal rg 43-7-297_rbl_08-09-21\tep_federal rg 43-7-297_rbl_08-09-21.db
Dataset Pathname mainpass.2.2
Dataset Creation Thu Aug 12 09:23:51 2021

Gamma Ray Calibration Report

Serial Number:	051217	
Tool Model:	2750 A	
Performed:	Mon Oct 1 11:32:35 2018	
Calibrator Value:	637.0	GAPI
Background Reading:	115.3	cps
Calibrator Reading:	1027.7	cps
Sensitivity:	0.6982	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	RBT275T_Base	
Tool Model:	RADII-275T	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	-0.003	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.004	0.532	0.250	81.196	153.445	-0.424
CAL	0.004	0.751				
5'	0.006	0.445	0.250	81.196	184.324	-0.788
SUM						
S1	0.005	0.517	0.000	100.000	195.304	-1.002
S2	0.006	0.507	0.000	100.000	199.647	-1.204
S3	0.005	0.495	0.000	100.000	204.447	-1.123
S4	0.004	0.502	0.000	100.000	200.993	-0.880
S5	0.005	0.518	0.000	100.000	195.158	-0.998
S6	0.006	0.531	0.000	100.000	190.537	-1.137
S7	0.006	0.537	0.000	100.000	188.257	-1.126
S8	0.005	0.539	0.000	100.000	187.188	-0.895

Air Zero Calibration, performed Mon Aug 9 08:04:49 2021:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.005	0.000	-0.000
5'	0.006	0.000	0.000
SUM			
S1	0.005	0.000	-0.000
S2	0.004	0.000	0.001
S3	0.005	0.000	0.000
S4	0.006	0.000	-0.001
S5	0.005	0.000	0.000
S6	0.007	0.000	0.000
S7	0.006	0.000	0.000
S8	0.006	0.000	-0.001

Inclinometer Calibration Report

Performed: Wed May 22 09:49:34 2019

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	-923.00	912.00	-1.00	1.00	gee
Y Accelerometer	-895.00	877.00	-1.00	1.00	gee
Z Accelerometer	-0.10	860.00	0.00	1.00	gee

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