Company	TEP ROCKY MOUNTAIN LLC
Well	FEDERAL RWF 331-9
Field	RULISON
County	GARFIELD
State	CO
Country	USA

THE WIRELINE GROUP

RADIAL CEMENT BOND LOG GAMMA RAY/CCL

Company	TEP ROCKY MOUNTAIN LLC
Well	FEDERAL RWF 331-9
Field	RULISON
County	GARFIELD
State	CO
Country	USA

Location: API #: 05-045-24402

2540' FSL & 530' FEL NESE

Lat/Long: 39.539410 / -107.885330

SEC 9 TWP 6S RGE 94W

Other Services: NONE

Permanent Datum	GL	Elevation	6369'
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 6399'
D.F. N/A
G.L. 6369'

Date	6 MARCH 2022
Run Number	ONE
Depth Driller	10038'
Depth Logger	9922'
Bottom Logged Interval	9920'
Top Log Interval	SURFACE
Open Hole Size	8.75"
Type Fluid	WATER
Density / Viscosity	8.3#
Max. Recorded Temp.	245* F
Estimated Cement Top	SEE LOG
Time Well Ready	ROA
Time Logger on Bottom	12:45
Equipment Number	8048
Location	WINDSOR, CO
Recorded By	SCHUMAN
Witnessed By	MR DUSTIN WELSH

Borehole Record				Tubing Record		
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9.625"	36#	SURFACE	1119'
Prot. String				
Production String	4.5"	11.6#	SURFACE	9989'
Liner				

<<< Fold Here >>>

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

CORRELATED TO CASING TALLY MARKER JOINT 5930-5950'
MAIN PASS RAN WITH ZERO PSI @ SURFACE
LOG WAS RAN WITH 30' K.B.
THANK YOU FOR USING THE WIRELINE GROUP!

THE WIRELINE GROUP

MAIN PASS

LOGGED WITH ZERO PSI AT SURFACE
5"=100'

Database File	federal rwf 331-9.db
Dataset Pathname	pass3
Presentation Format	rbl7
Dataset Creation	Sun Mar 06 12:48:08 2022
Charted by	Depth in Feet scaled 1:240

3750
3800
3850
3900
3950
4000
4050
4100
4150
4200
4250
4300
4350
4400
4450
4500
4550
4600
4650
4700
4750
4800
4850
4900
4950
5000
5050
5100
5150
5200
5250
5300
5350
5400
5450
5500
5550
5600
5650
5700
5750
5800
5850
5900
Marker Joint
5950
6000
6050
6100
6150
6200
6250
6300
6350
6400
6450
6500
6550
6600
6650
6700
6750
6800
6850
6900
6950
7000
7050
7100
7150
7200
7250
7300
7350
7400
7450
7500
7550
7600
7650
7700

335 TT (usec) 235	LTEN (lb)	Amplitude	-5 AMPS2 150	VDL	Cement Map
0 GR (GAPI) 150		0 (mV) 100	-5 AMPS3 150	200 (usec) 1200	
50 TEMP (degF) 250	3000	Amplified Amplitude	-5 AMPS4 150		
TEMP (degF)	CCL	0 (mV) 10	-5 AMPS5 150		
			-5 AMPS6 150		
			-5 AMPS7 150		
			-5 AMPS8 150		
			-5 AMPS1 150		

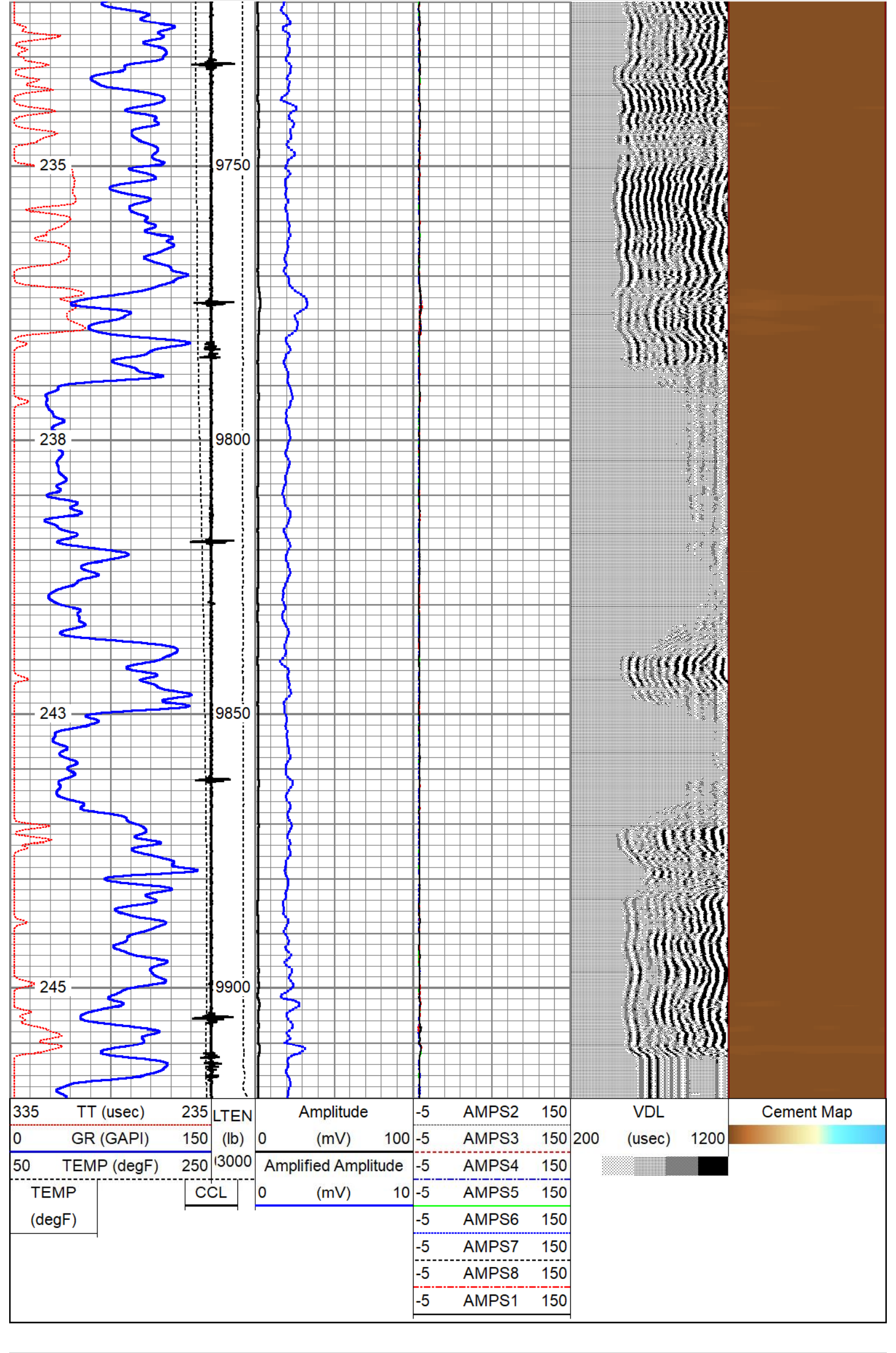
REPEAT SECTION

LOGGED WITH ZERO PSI AT SURFACE

5"=100'

Database File federal rwf 331-9.db
Dataset Pathname pass2
Presentation Format rbl7
Dataset Creation Sun Mar 06 12:42:33 2022
Charted by Depth in Feet scaled 1:240

335 TT (usec) 235	LTEN (lb)	Amplitude	-5 AMPS2 150	VDL	Cement Map
0 GR (GAPI) 150		0 (mV) 100	-5 AMPS3 150	200 (usec) 1200	
50 TEMP (degF) 250	3000	Amplified Amplitude	-5 AMPS4 150		
TEMP (degF)	CCL	0 (mV) 10	-5 AMPS5 150		
			-5 AMPS6 150		
			-5 AMPS7 150		
			-5 AMPS8 150		
			-5 AMPS1 150		



335 TT (usec) 235	LTEN (lb)	Amplitude	-5 AMPS2 150	VDL	Cement Map
0 GR (GAPI) 150		0 (mV) 100	-5 AMPS3 150	200 (usec) 1200	
50 TEMP (degF) 250	3000	Amplified Amplitude	-5 AMPS4 150		
TEMP (degF)	CCL	0 (mV) 10	-5 AMPS5 150		
			-5 AMPS6 150		
			-5 AMPS7 150		
			-5 AMPS8 150		
			-5 AMPS1 150		

Calibration Report

Database File federal rwf 32-9.db
Dataset Pathname pass1.3
Dataset Creation Sun Mar 06 03:01:59 2022

Gamma Ray Calibration Report

Serial Number:	1401-17	
Tool Model:	GCT275-0000	
Performed:	Fri Jan 28 14:50:15 2022	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	120663-4.5	
Tool Model:	RADII-275C	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	2640.701	ft

Master Calibration, performed Sat Mar 5 19:17:10 2022:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.005	0.856	0.700	81.196	94.670	0.194
CAL	0.003	1.016				
5'	0.006	0.514	0.700	81.196	158.439	-0.190
SUM						
S1	0.006	0.815	0.000	100.000	123.694	-0.790
S2	0.002	0.767	0.000	100.000	130.698	-0.292
S3	0.004	0.751	0.000	100.000	133.850	-0.472
S4	0.005	0.831	0.000	100.000	121.054	-0.650
S5	0.005	0.964	0.000	100.000	104.236	-0.494
S6	0.004	1.045	0.000	100.000	96.069	-0.365
S7	0.001	0.982	0.000	100.000	101.949	-0.113
S8	0.002	0.904	0.000	100.000	110.815	-0.212

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.003	1.016	1.000	0.000

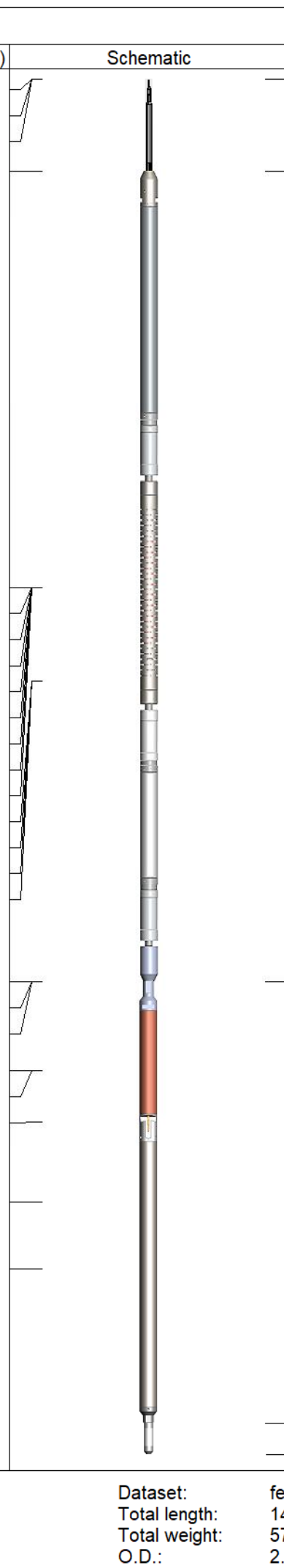
Air Zero Calibration, performed (Not Performed):

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

Inclinometer Calibration Report

Performed: (Not Performed)

	Low Read.	High Read.	Low Ref.	High Ref.	
X Accelerometer	0.00	1.00	0.00	1.00	gee
Y Accelerometer	0.00	1.00	0.00	1.00	gee
Z Accelerometer	0.00	1.00	0.00	1.00	gee



Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
mSec_Count RBT_Status Error_Ct RBT_HV	14.85 14.85 14.85 13.85		Cable-Head-Titan 1 7/16" Cable Head	1.00	1.44	1.00
WVFS8 WVFS7 WVFS6 WVFS5 WVFS4 WVFS3 WVFS2 WVFS1 WVF3FT RBT_ACCZ RBT_ACCY RBT_ACCX WVF5FT	9.35 9.35 9.35 9.35 9.35 9.35 9.35 9.35 9.35 8.35 8.35 8.35 8.35		RBT8-RADII-275C (120663-4.5) Probe 2.75" RADII 8 Sector Bond Tool	8.75	2.75	
GCT_HV WVFSYNC WVFCAL CCL$2 CCL$1 GCT_Temp GR GCT_IntTemp	5.10 5.10 5.10 4.14 4.14 3.59 2.72 2.00		GC-GCT275-0000 (1401-17) Probe 2.75" Gamma Ray - CCL w/ Temp	4.77	2.75	55.00
			Plug-FA108-0000 1.38" Bull Plug	0.33	1.38	1.00

Dataset: federal rwf 331-9.db: field/well/run1/pass2
Total length: 14.85 ft
Total weight: 57.00 lb
O.D.: 2.75 in

Company	TEP ROCKY MOUNTAIN LLC	
Well	FEDERAL RWF 331-9	
Field	RULISON	
County	GARFIELD	
State	CO	Country USA