The Perforators LLC

Cement Bond Gamma Ray CCL Log

Company Duco Well Service
Well Croff 12-5
Field Spindle
County Adams
State CO

Company	Duco Well Service
Well	Croff 12-5
Field	Spindle
County	Adams State CO
Location:	API #: 05-001-08162-00
	SW/NE
	SEC 12 TWP 1S RGE 68W

Other Services
CICR
Cement
Perforate
Spartan Booster

Permanent Datum Ground Level Elevation 5075'
Log Measured From Kelly Bushing 5' Above Ground Level
Drilling Measured From Kelly Bushing

Elevation
K.B. 5080'
D.F. ----
G.L. 5075'

Date	8-2-19
Run Number	One
Depth Driller	N/A
Depth Logger	4761'
Bottom Logged Interval	4760'
Top Log Interval	Surface
Open Hole Size	N/A
Type Fluid	Water
Density / Viscosity	N/A
Max. Recorded Temp.	N/A
Estimated Cement Top	3550'
Time Well Ready	15:00
Time Logger on Bottom	15:15
Equipment Number	T943
Location	Roosevelt
Recorded By	Funk
Witnessed By	Mr. Rector

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
One	12 1/4"	0	N/A				
Two	7 7/8"	0	N/A				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8 5/8"	24#	0	N/A
Prot. String				
Production String	4 1/2"	10.5#	0	5139'
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

CBL not depth correlated.

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Main Pass

Database File croff12-5.db
Dataset Pathname pass1.4
Presentation Format cbl
Dataset Creation Fri Aug 02 16:02:25 2019
Charted by Depth in Feet scaled 1:240

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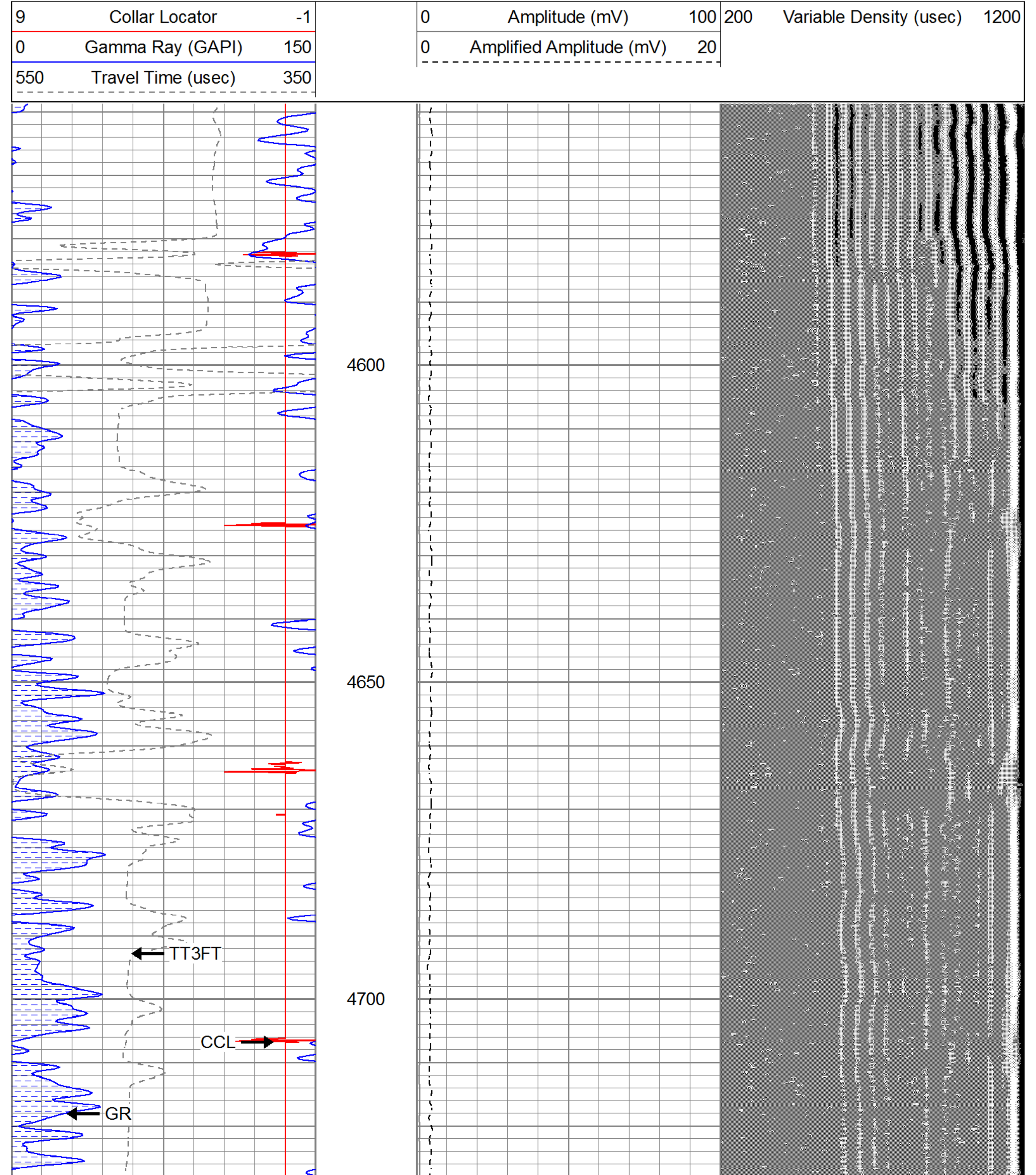
Repeat Section

Database File croff12-5.db
Dataset Pathname pass1.2
Presentation Format cbl
Dataset Creation Fri Aug 02 15:09:26 2019
Charted by Depth in Feet scaled 1:240



Calibration Report

Database File croff12-5.db
Dataset Pathname pass1.4
Dataset Creation Fri Aug 02 16:02:25 2019

Gamma Ray Calibration Report

Serial Number:	970903	
Tool Model:	P	
Performed:	Tue Apr 18 10:15:17 2017	
Calibrator Value:	200.0	GAPI
Background Reading:	54.0	cps
Calibrator Reading:	250.0	cps
Sensitivity:	1.0204	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	020406	
Tool Model:	P	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	343.417	ft

Master Calibration, performed Fri Aug 02 14:57:52 2019:

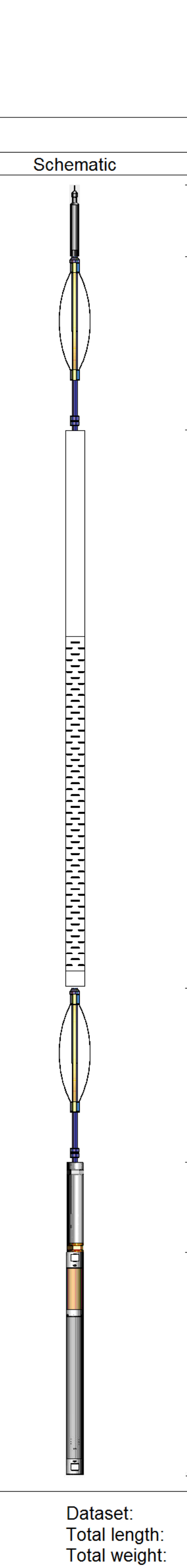
	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.024	1.369	0.500	81.921	60.542	-0.939
CAL						
5'	0.024	2.341	1.000	71.921	30.602	0.272
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL						

Air Zero Calibration, performed Thu Jun 20 11:30:56 2019:

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



Sensor	Offset (ft)	Description	Length (ft)	O.D. (in)	Weight (lb)
		CHD-1.6875" 1 11-16" Cablehead	1.13	1.69	5.00
		CENT-TitanBig Big Titan 3 Bowspring Centralizer	2.73	2.75	25.00
WVF3FT WVF5FT	11.90 10.90	CBL-P (020406) Probe 2 3/4" (Single Pin)	8.75	2.75	45.00
		CENT-TitanSmall Small Titan 3 Bowspring Centralizer	2.73	1.69	5.00
CCL	4.08	CCL-Probe (970903) Probe 2 3/4"	1.42	2.75	7.50
GR	2.50	GR-P (970903) Probe 2 3/4" (Gamma Ray)	3.50	2.75	34.00

Dataset: croff12-5.db: field/well/run1/pass1.4
Total length: 20.25 ft
Total weight: 121.50 lb
O.D.: 2.75 in