PEAK WIRELINE SERVICES, INC.

DUAL SPACED CEMENT BOND LOG

Company PRONGHORN OPERATING, LLC.
Well HARLEY #5
Field CHEYENNE WELLS
County CHEYENNE
State COLORADO

Company	PRONGHORN OPERATING, LLC.		
Well	HARLEY #5		
Field	CHEYENNE WELLS		
County	CHEYENNE	State	COLORADO
Location	1867' FSL & 737' FEL SEC 4 TWP 14S RGE 44W	Other Services	
Permanent Datum	GROUND LEVEL	Elevation	4307
Log Measured From	KELLY BUSHING 16' AGL	Elevation	K.B. 4323 D.F. 4322 G.L. 4307
Drilling Measured From	KELLY BUSHING		

Date	7-1-2013
Run Number	ONE
Depth Driller	5641
Depth Logger	
Bottom Logged Interval	
Top Log Interval	
Casing Size	5 1/2"
Type Fluid	WATER
Density / Viscosity	
Max. Recorded Temp.	
Estimated Cement Top	
Time Well Ready	
Time Logger on Bottom	
Equipment Number	TR-4
Location	CHEYENNE WELLS, CO
Recorded By	HENDERSON
Witnessed By	ZANE KUENZLER

Borehole Record			Tubing Record		
Run Number	Bit	From	To	Size	Weight	From	To
ONE	17 1/2"	00	426				
TWO	12 1/4"	426	1650				
THREE	7 7/8"	1650	5641				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	13 3/8"	54#	0	426
Prot. String				
Production String	5 1/2"	15.5#	0	5641
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

Database File: harleyfive.db
Dataset Pathname: pass3
Presentation Format: cbldig
Dataset Creation: Mon Jul 01 08:33:23 2013 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

9 Collar Locator -1	0 Amplitude (mV) 100	200 Variable Density 1200
0 GR (GAPI) 150	800 Travel Time (usec) 200	

9 Collar Locator -1	0 Amplitude (mV) 100	200 Variable Density 1200
0 GR (GAPI) 150	800 Travel Time (usec) 200	

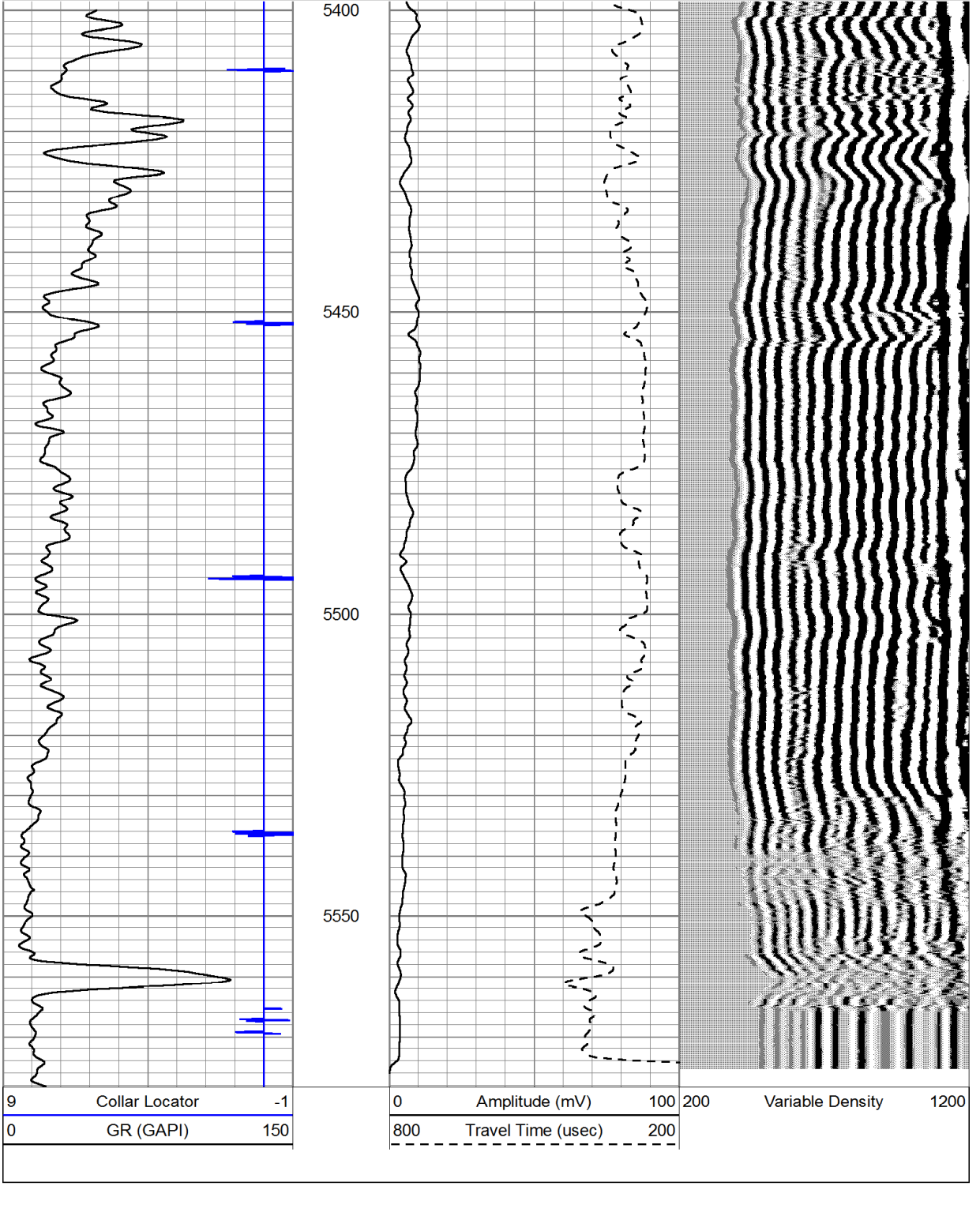
Database File: harleyfive.db
Dataset Pathname: pass2.2
Presentation Format: cbldig
Dataset Creation: Mon Jul 01 09:31:38 2013
Charted by: Depth in Feet scaled 1:240

9 Collar Locator -1	0 Amplitude (mV) 100	200 Variable Density 1200
0 GR (GAPI) 150	800 Travel Time (usec) 200	

9 Collar Locator -1	0 Amplitude (mV) 100	200 Variable Density 1200
0 GR (GAPI) 150	800 Travel Time (usec) 200	

Database File: harleyfive.db
Dataset Pathname: pass1
Presentation Format: cbldig
Dataset Creation: Mon Jul 01 07:56:07 2013 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240

9 Collar Locator -1	0 Amplitude (mV) 100	200 Variable Density 1200
0 GR (GAPI) 150	800 Travel Time (usec) 200	



9 Collar Locator -1	0 Amplitude (mV) 100	200 Variable Density 1200
0 GR (GAPI) 150	800 Travel Time (usec) 200	

Calibration Report

Database File: harleyfive.db
Dataset Pathname: pass2.2
Dataset Creation: Mon Jul 01 09:31:38 2013

Gamma Ray Calibration Report

Serial Number:	061120GR	
Tool Model:	PROBE	
Performed:	Mon Jul 01 07:56:52 2013	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	85.8	cps
Sensitivity:	0.9000	GAPI/cps

Cement Bond Log Calibration Report

Serial Number:	5.5dig040201		
Tool Model:	Probe275Digital		
Performed:	Mon Jul 01 07:52:03 2013		
Depth:	16	ft	
Casing Diameter:	5.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.25	0	mV
Calibrated Amplitude:	71.921	71.921	mV
Reading at Signal Zero:	0.00129395	0.00385742	V
Reading in Free Pipe:	1.78933	1.53535	V
Gain:	40.0836	46.9613	
Offset:	0.198134	-0.18115	