PEAK WIRELINE SERVICES, INC.

DUAL SPACED CEMENT BOND LOG

Company	PRONGHORN OPERATING, LLC.
Well	HARLEY #2
Field	CHEYENNE WELLS
County	CHEYENNE
State	COLORADO
Country	USA

Company PRONGHORN OPERATING, LLC.
Well HARLEY #2
Field CHEYENNE WELLS
County CHEYENNE Country USA
State COLORADO

Location: API #: 05-017-07744
7806' FNL & 1992' FEL
SEC 5 TWP 14S RGE 44W

Other Services

Permanent Datum GROUND LEVEL Elevation 4239
Log Measured From KELLY BUSHING 16' AGL
Drilling Measured From KELLY BUSHING

Elevation
K.B. 4255
D.F. 4254
G.L. 4239

Date	9-6-2013	
Run Number	ONE	
Depth Driller	5545	
Depth Logger	5523	2360
Bottom Logged Interval	5519	2360
Top Log Interval	2920	800
Open Hole Size	7 7/8"	
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"	0	457				
TWO	12 1/4"	457	1552				
THREE	7 7/8"	1552	5545				

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	13 3/8"	54#	0	457
Prot. String				
Production String	5 1/2"	15.5#	0	5541
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:	harley.db
Dataset Pathname:	2/run1/pass3
Presentation Format:	cbldig
Dataset Creation:	Fri Sep 06 06:32:37 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		600 Travel Time (usec) 200		

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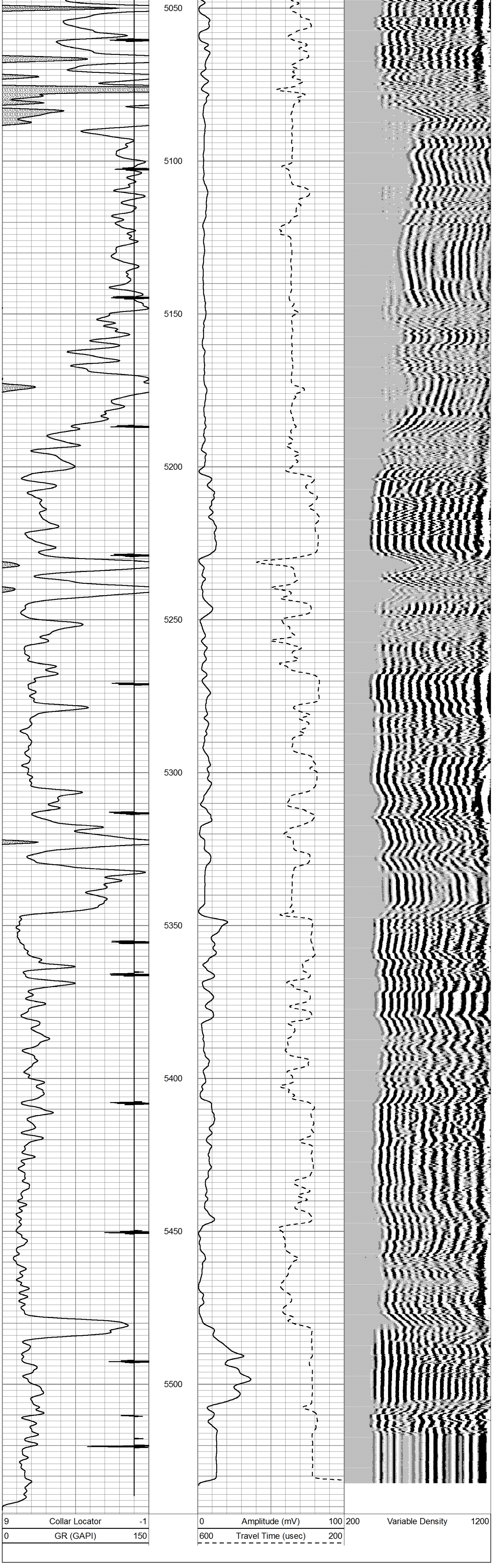
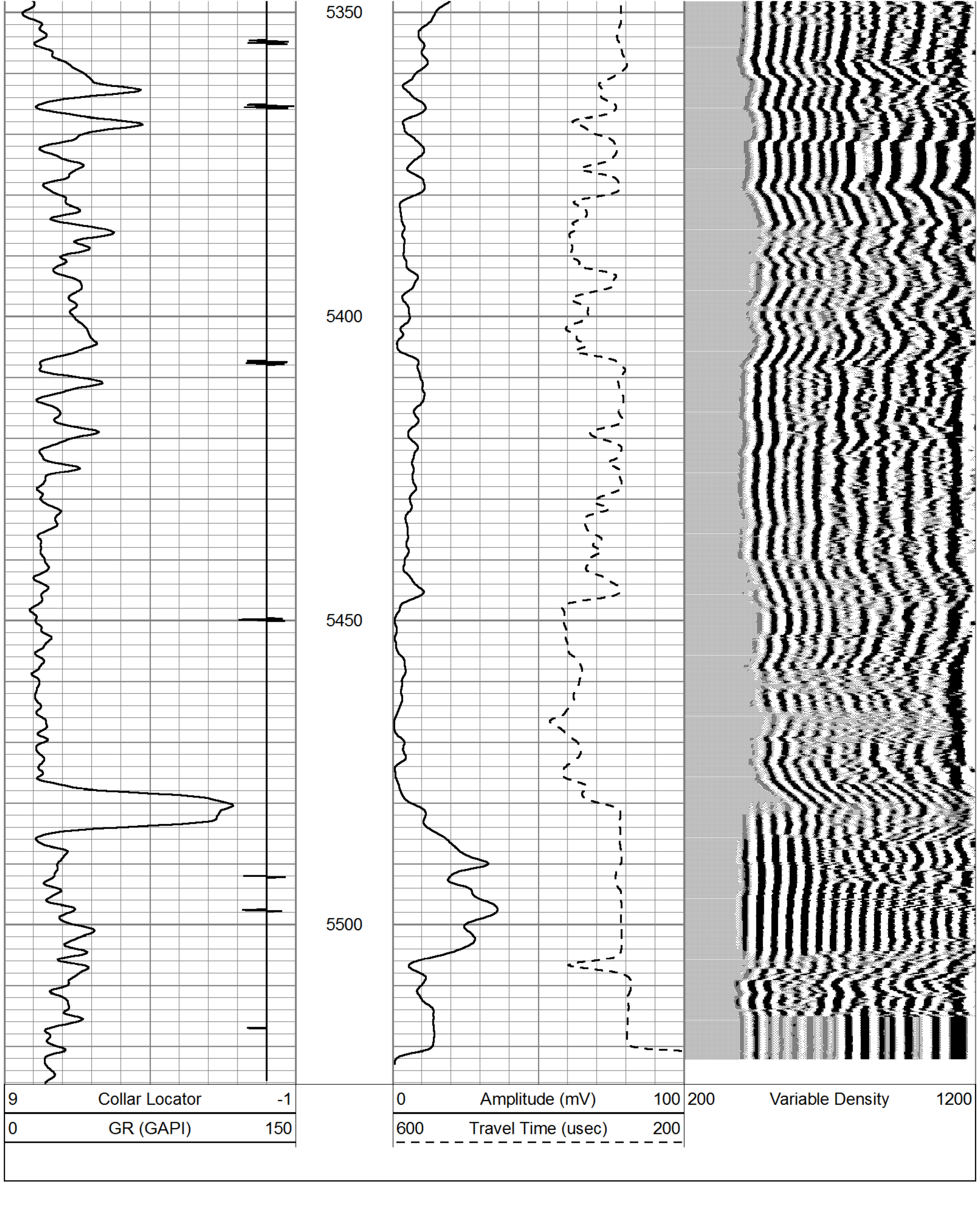
0 GR (GAPI) 150		600 Travel Time (usec) 200		

Database File:	harley.db
Dataset Pathname:	2/run1/pass2
Presentation Format:	cbldig
Dataset Creation:	Fri Sep 06 05:53:42 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		600 Travel Time (usec) 200		



Database File: harley.db
Dataset Pathname: 2/run1/pass1
Presentation Format: cbldig
Dataset Creation: Fri Sep 06 05:47:14 2013 by Log 7.0 B1
Charted by: Depth in Feet scaled 1:240



Calibration Report

Database File: harley.db
Dataset Pathname: 2/run1/pass1
Dataset Creation: Fri Sep 06 05:47:14 2013 by Log 7.0 B1

Gamma Ray Calibration Report

Serial Number:	061120GR	
Tool Model:	PROBE	
Performed:	Tue Jul 09 12:56:40 2013	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	85.8	cps
Sensitivity:	1.0000	GAPI/cps

Cement Bond Log Calibration Report

Serial Number:	5.5dig040201		
Tool Model:	Probe275Digital		
Performed:	Fri Sep 06 05:37:59 2013		
Depth:	84.9833	ft	
Casing Diameter:	5.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.5	0	mV
Calibrated Amplitude:	71.921	71.921	mV
Reading at Signal Zero:	-0.00805664	0.00939941	V
Reading in Free Pipe:	2.12754	2.12346	V
Gain:	33.4431	34.0203	
Offset:	0.769439	-0.319771	