V.D.L. C.C.L. GAMMA RAY CEMENT BOND LOG

PIONEER
Pioneer Energy Services

Company	Bonanza Creek Operating
Well	State Antelope 12-42-2HNB
Field	Wattenberg
County	Weld
State	Colorado

Company	**Bonanza Creek Operating Company LLC**		
Well	**State Antelope 12-42-2HNB**		
Field	**Wattenberg**		
County	**Weld**	State	**Colorado**
Location:	API # : 05-123-41045 SHL: 1400' FNL X 374' FWL BHL: 1980' FNL X 470' FFELL SEC 2 TWP 5N RGE 62W	Other Services	None
Permanent Datum	GL	Elevation 4648'	Elevation K.B. NA D.F. NA G.L. 4648'
Log Measured From	GL		
Drilling Measured From	KB		

Date of Service	3-Aug-2015
Run Number	One
Depth Driller or PBTD	NA
Depth Logger	5787'
Bottom Log Interval	5775'
Top Log Interval	Surface
Open Hole Size	NA
Type Fluid	Water
Fluid Level	200'
Fluid Density	8.34 LB/G
Max. Recorded Temperature	NA
Max. Wellhead Pressure	0 PSI
Wellhead Connection	NA
Estimated Cement Top	NA
Unit Number	P 129
Wireline Size	9/32
Location	Fort Morgan
Recorded By	Randy Azevedo
Witnessed By	Kurt Dodge

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	9.625"	36#	Surface	486'
Production Casing	7"	26#	Surface	6668'
Liner Record	4.5"	11.6#	Liner top	10,870

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not 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.

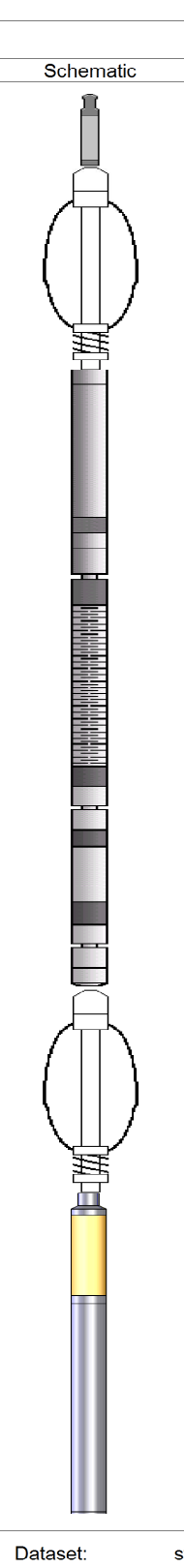
Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
Log ran as per customer request.
Log ran from liner top to surface.
Log ran with 0 PSI surface Induced pressure.
Liner top @ 5700'
KOP @ 5720'
Limited Header info on location.

Thank you for choosing Pioneer Energy Services.
So# 2-310082

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer ENERGY Services Crew	Tool Data - Services	Serial Number
Engineer: Azevedo Operator: D. Baessler Operator: C.Anderson Operator: J. King		



Sensor	Offset (ft)	Description	Length (ft)	O.D. (in)	Weight (lb
		Titan-1.4375 1 7/16 Titan Type II Cable Head	1.03	1.44	5.00
		CENT-Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
WVF3FT	11.67	CBLPROBE-Probe35 (PR060214) Probe 2 3/4" Dual Reciever	8.77	2.75	93.00
WVF5FT	10.67				
WVFSYNC	7.42				
		CENT-Probe 2 3/4" Probe Adjustable Spring Centralizer	2.88	2.75	15.00
CCL	3.63				
GR	0.89	GR_CCL-PRB275 (PR020605) Probe 2 3/4" Gamma Ray / CCL	4.54	2.75	60.00

Dataset: state antelope12-42-2 cbl.db: field/well/run1/pass3
Total length: 20.09 ft
Total weight: 188.00 lb
O.D.: 2.75 in

7" Main Section

Log ran under 0 PSI surface induced pressure

PIONEER
Pioneer Energy Services

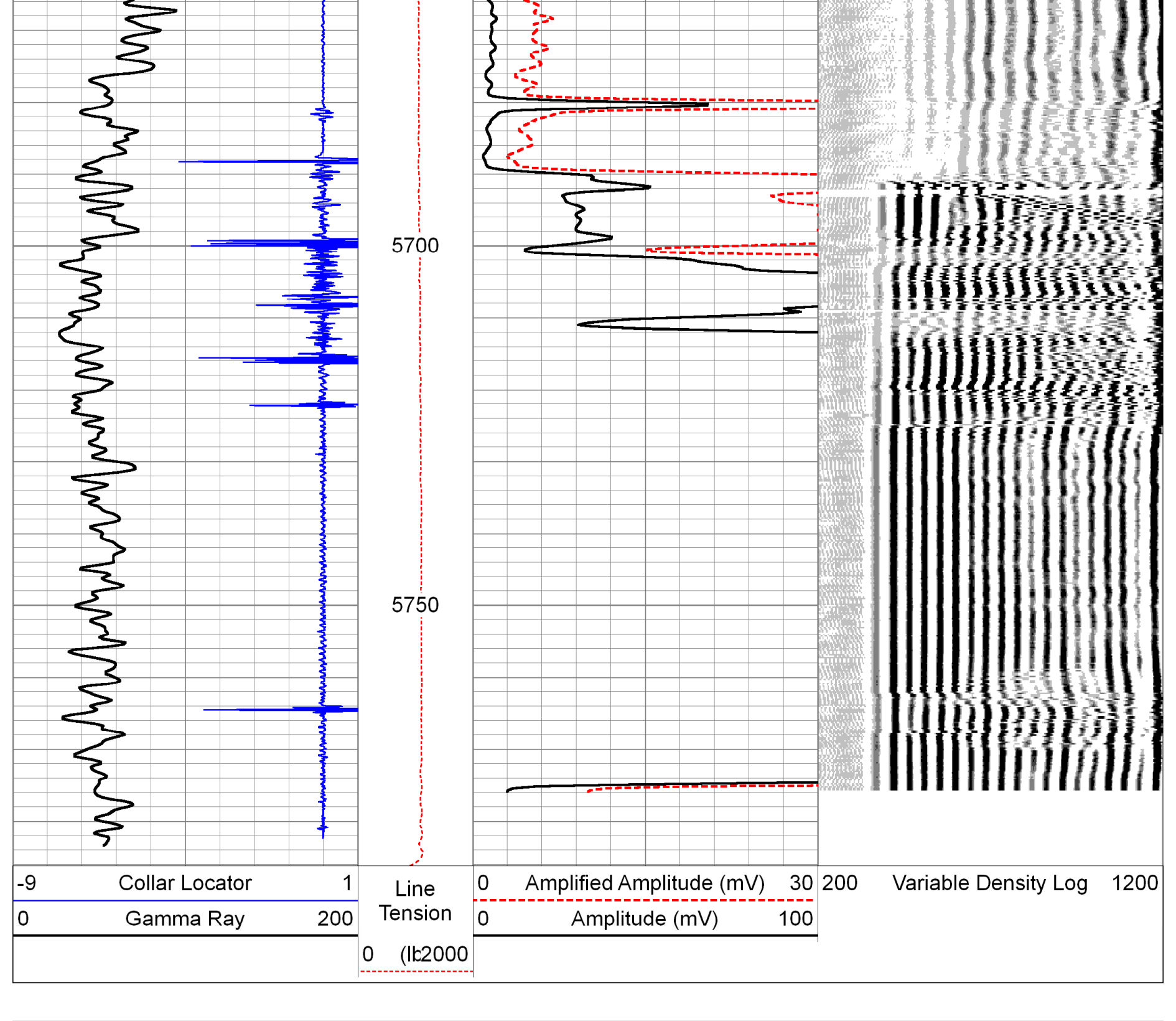
Database File	state antelope12-42-2 cbl.db
Dataset Pathname	pass3
Presentation Format	pnr_cbl
Dataset Creation	Fri Aug 21 09:37:16 2015
Charted by	Depth in Feet scaled 1:240

PIONEER
Pioneer Energy Services

Repeat Section

Log ran under 0 PSI surface induced pressure

Database File	state antelope12-42-2 cbl.db
Dataset Pathname	pass2
Presentation Format	pnr_cbl
Dataset Creation	Fri Aug 21 09:32:49 2015
Charted by	Depth in Feet scaled 1:240



Calibration Report

Database File	state antelope12-42-2 cbl.db
Dataset Pathname	pass3
Dataset Creation	Fri Aug 21 09:37:16 2015

Gamma Ray Calibration Report

Serial Number:	PR020605	
Tool Model:	PRB275	
Performed:	(Not Performed)	
Calibrator Value:	1.0	
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	/cps

CBL Calibration Report

Serial Number:	PR060214		
Tool Model:	Probe35		
Performed:	Fri Aug 21 07:56:19 2015		
Depth:	203.408	ft	
Casing Diameter:	7.000	in	
	3' Spacing	5' Spacing	
Signal Zero:	1.000	1.000	mV
Calibrated Amplitude:	62.165	62.165	mV
Reading at Signal Zero:	-0.094	-0.069	V
Reading in Free Pipe:	0.543	0.722	V
Gain:	96.023	77.313	
Offset:	9.992	6.326	

PIONEER
Pioneer Energy Services

Company	Bonanza Creek Operating Company LLC	
Well	State Antelope 12-42-2HNB	
Field	Wattenberg	
County	Weld	
State	Colorado	Country