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Pioneer Energy Services

CEMENT BOND LOG WITH GAMMA RAY/CCL

Company BONANZA CREEK ENERGY
Well PRONGHORN K-0-22HNB
Field WATTENBERG
County WELD State CO

Company	**BONANZA CREEK ENERGY**
Well	**PRONGHORN K-0-22HNB**
Field	**WATTENBERG**
County	**WELD** State **CO**

Location: API # : 05-123-39546
SHL: 392' FNL & 1278' FWL NWNW
SEC 22 TWP 5N RGE 61W

Other Services
NONE

Permanent Datum GL Elevation 4661
Log Measured From GL
Drilling Measured From GL

Elevation
K.B. 4678'
D.F. 4678'
G.L. 4661'

Date of Service	FEBRUARY 7, 2015
Run Number	1
Depth Driller or PBTD	NA
Depth Logger	6464'
Bottom Log Interval	6464'
Top Log Interval	Surface
Open Hole Size	8.75"
Type Fluid	WBM
Fluid Level	28'
Fluid Density	NA
Max. Recorded Temperature	NA
Max. Wellhead Pressure	0 PSI
Wellhead Connection	7"
Estimated Cement Top	370'
Unit Number	P-36
Wireline Size	7/16"
Location	FT. MORGAN
Recorded By	SHAUN STUMP
Witnessed By	NA

	Size	Wt/Ft	Top	Bottom
Tubing Record	N/A	N/A	N/A	N/A
Surface Casing	N/A	N/A	N/A	N/A
Production Casing	7"	26#	SURFACE	6766'
Liner Record	N/A	N/A	N/A	N/A

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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.
LOGGED UNDER 0 PSI
DEPTH CORRELATED TO MAGNETIC MARK

THANK YOU FOR USING PIONEER ENERGY SERVICES
SO# 2-013954

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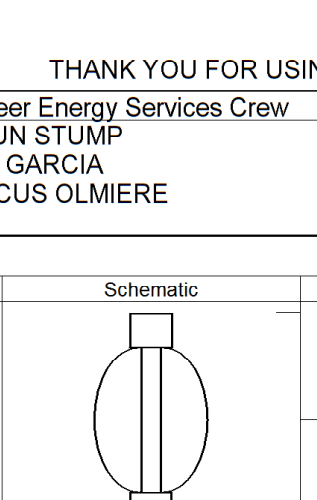
Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: SHAUN STUMP	PROBE RADII BOND	11206
Operator: MIKE GARCIA	PROBE CCL/GAMMA	51013
Operator: MARCUS OLMIERE		
Operator: NA		



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CENT #2 -A (1)	2.83	2.75	20.00
IntTemp	14.66				
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	11.41 11.41 11.41 11.41 11.41 11.41 11.41 11.41 11.41 11.41 10.41	RBT-RBT-C3 (11206) Probe Radii Bond Tool with Digital Telemetry	9.33	2.75	90.00
		CENT-A (1)	2.83	2.75	20.00
CCL	3.92				
GR	1.13	GR-probe 2.75 (51013) proble Digital CCL Gamma	4.33	2.75	100.00

Dataset: 13954.db: field/well/run1/pass2
Total Length: 19.32 ft
Total Weight: 230.00 lb
O.D. 2.75 in

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Main Pass

0 PSI ON WELL WHILE LOGGING

Database File:	13954.db
Dataset Pathname:	Mainpass
Presentation Format:	cbl
Dataset Creation:	Sat Feb 07 09:57:32 2015 by Calc Open-Cased 110302
Charted by:	Depth in Feet scaled 1:240

-9 Collar Locator 1
0 Gamma Ray (GAPI) 200
0 AMP AMPLITUDE (mV) 10
0 AMPLITUDE (mV) 100
200 VDL 1200

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END OF MAIN PASS

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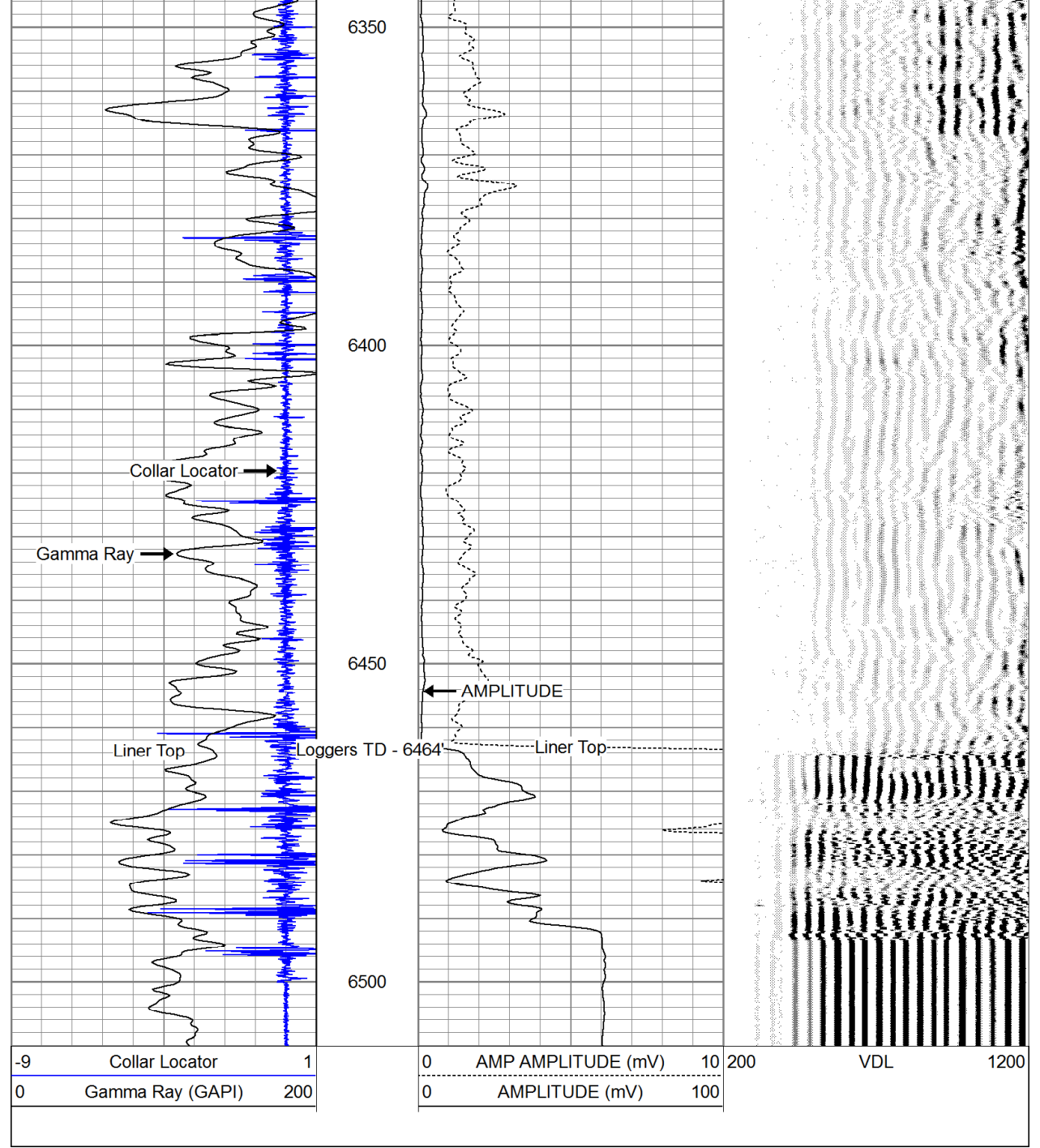
REPEAT SECTION

0 PSI ON WELL WHILE LOGGING

Database File:	13954.db
Dataset Pathname:	pass2.2
Presentation Format:	cbl
Dataset Creation:	Sat Feb 07 09:49:09 2015 by Calc Open-Cased 110302
Charted by:	Depth in Feet scaled 1:240



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END REPEAT SECTION

Calibration Report

Database File:	13954.db
Dataset Pathname:	pass2
Dataset Creation:	Sat Feb 07 08:34:08 2015 by Log Open-Cased 110302

Gamma Ray Calibration Report

Serial Number:	51013	
Tool Model:	probe 2.75	
Performed:	Fri Jan 30 06:09:47 2015	
Calibrator Value:	1400.0	GAPI
Background Reading:	26.8	cps
Calibrator Reading:	1120.0	cps
Sensitivity:	1.0000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	11206	
Tool Model:	RBT-C3	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	1042.512	ft

Master Calibration, performed Tue Feb 03 05:12:21 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.014	0.754	0.250	62.200	80.706	1.349
CAL	0.001	0.882				
5'	0.000	0.719	0.250	62.200	86.216	0.249
SUM						
S1	-0.011	1.240	0.000	100.000	79.915	0.867
S2	-0.001	1.245	0.000	100.000	80.252	0.067
S3	-0.001	1.090	0.000	100.000	91.644	0.081
S4	-0.001	1.172	0.000	100.000	85.297	0.051
S5	-0.019	1.298	0.000	100.000	75.925	1.426
S6	-0.017	1.383	0.000	100.000	71.404	1.247
S7	-0.018	1.248	0.000	100.000	79.026	1.398
S8	-0.022	1.336	0.000	100.000	73.670	1.599

Internal Reference Calibration, performed Fri Jan 30 08:10:19 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.909	0.001	1.020	1.122	0.000

Air Zero Calibration, performed Fri Jan 30 07:19:30 2015:

	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

Company	BONANZA CREEK ENERGY		
Well	PRONGHORN K-0-22HNB		
Field	WATTENBERG		
County	WELD	State	CO

CEMENT BOND LOG
WITH GAMMA RAY/CCL