CEMENT BOND LOG WITH GAMMA RAY

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Company BONANZA CREEK ENERGY
Well STATE ANTELOPE 44-1-36XRLNB
Field WATTENBERG
County WELD
State COLORADO

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Well **STATE ANTELOPE 44-1-36XRLNB**
Field **WATTENBERG**
County **WELD** State **COLORADO**

Location: API # : 05-123-41159-00
SESE
SEC 1 TWP 5N RGE 62W

Other Services
NONE

Permanent Datum GL Elevation 4658'
Log Measured From KB
Drilling Measured From KB

Elevation
K.B. 4675'
D.F. N/A
G.L. 4658'

Date of Service	JULY 28, 2015	
Run Number	ONE	
Depth Driller or PBTD	N/A	
Depth Logger	6356'	
Bottom Log Interval	6355'	
Top Log Interval	SURFACE	
Open Hole Size	N/A	
Type Fluid	WATER	
Fluid Level	N/A	
Fluid Density	N/A	
Max. Recorded Temperature	N/A	
Max. Wellhead Pressure	ZERO	
Wellhead Connection	N/A	
Estimated Cement Top	SEE LOG	
Unit Number	P-96	
Wireline Size	1/4"	
Location	FT. MORGAN	
Recorded By	CLINT CHRISTENSEN	DWAIN TRAVIS
Witnessed By	KURT DODGE	

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	9 5/8"	36#	0'	447'
Production Casing	7"	26#	0'	6655'
Liner Record	4.5"	11.6#	6398'	TD

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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 ZERO PSI
LOGGED ZEROED AT GROUND LEVEL TO 17' KB

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: CLINT CHRISTENSEN	RBT-PROBE	070132
Operator: DWAIN TRAVIS	GR_CCL-PROBE	110249
Operator: MIKE GARCIA		
Operator: JAMES PRENTICE		

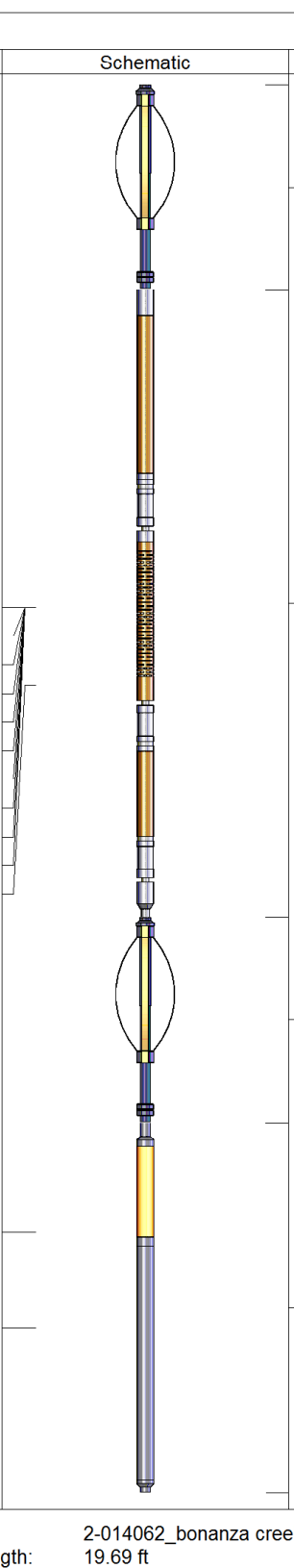
Log Variables

Database:C:\Warrior\Data\2-014062_bonanza creek_state antelope 44-1-36xrlnb_cbl.db
Dataset: field/well/run1/pass5.1

Top - Bottom

BOREID in	BOTTEMP degF	TDEPTH ft	PERFS	CASEOD in	MINATTN db/ft	MINAMPL mV	MAXAMPL mV
8.75	200	0	0	7	0.08	1.5	0

CASEWGHT lb/ft	PPT usec
26	0



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CENT-PTS275 (1)	2.88	2.75	
WVF3FT	12.38	RBT-Probe (130433) Probe Radii Bond Tool with Digital Telemetry	8.77	2.75	90.00
WVFCAL	12.38				
WVFS1	12.38				
WVFS2	12.38				
WVFS3	12.38				
WVFS4	12.38				
WVFS5	12.38				
WVFS6	12.38				
WVFS7	12.38				
WVFS8	12.38				
WVF5FT	11.29				
		CENT-PTS275 (2)	2.88	2.75	
CCL	3.63				
GR	2.30	GR_CCL-Probe (110246) Probe Gamma CCL	5.17	2.75	100.00

Dataset: 2-014062_bonanza creek_state antelope 44-1-36xrlnb_cbl.db: field/well/run1/pass5.1
Total Length: 19.69 ft
Total Weight: 190.00 lb
O.D. 2.75 in

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MAIN PASS

LOGGED UNDER ZERO PSI

Database File: 2-014062_bonanza creek_state antelope 44-1-36xrlnb_cbl.db
Dataset Pathname: pass5.1
Presentation Format: cbl
Dataset Creation: Tue Jul 28 22:14:57 2015
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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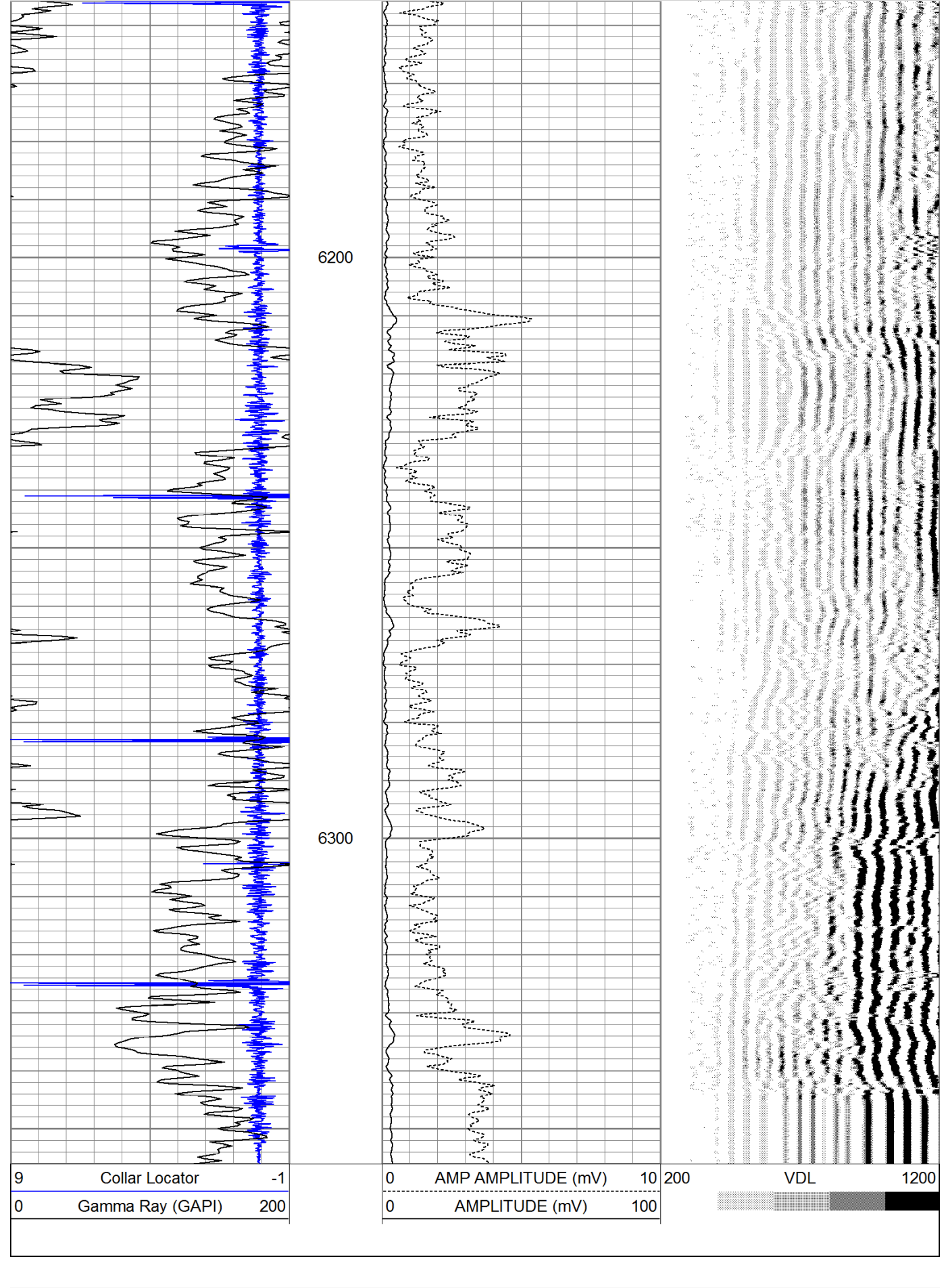
REPEAT PASS

Database File: 2-014062_bonanza creek_state antelope 44-1-36xrlnb_cbl.db
Dataset Pathname: repeat
Presentation Format: cbl
Dataset Creation: Tue Jul 28 22:45:40 2015 by Calc SCH 120430
Charted by: Depth in Feet scaled 1:240



Calibration Report

Database File: 2-014062_bonanza creek_state antelope 44-1-36xrlnb_cbl.db
Dataset Pathname: pass5.1
Dataset Creation: Tue Jul 28 22:14:57 2015

Gamma Ray Calibration Report

Serial Number:	110246	
Tool Model:	Probe	
Performed:	Tue Jul 28 11:07:44 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	130433	
Tool Model:	Probe	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	0.0	ft

Master Calibration, performed Tue Jul 28 11:30:23 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.003	1.523	1.000	62.165	40.428	0.591
CAL	0.002	1.998				
5'	0.020	1.586	1.000	62.165	39.246	-0.091
SUM						
S1	0.009	1.412	0.000	100.000	71.288	-0.638
S2	0.004	1.456	0.000	100.000	68.874	-0.277
S3	0.012	1.575	0.000	100.000	63.958	-0.758
S4	0.008	1.694	0.000	100.000	59.303	-0.475
S5	0.015	1.756	0.000	100.000	57.433	-0.875
S6	0.012	1.703	0.000	100.000	59.135	-0.706
S7	0.016	1.566	0.000	100.000	64.508	-1.004
S8	-0.003	1.441	0.000	100.000	69.267	0.210

Internal Reference Calibration, performed Tue Jul 28 11:19:38 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.002	1.998	1.000	0.000

Air Zero Calibration, performed Tue Jul 28 11:10:45 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

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