PIONEER
Pioneer Energy Services

CEMENT BOND LOG WITH GAMMA RAY

Company	BONANZA CREEK
Well	STATE ANTELOPE A-U-2HNB
Field	STATE ANTELOPE B-2 PAD
County	WELD
State	COLORADO

Company BONANZA CREEK
Well STATE ANTELOPE A-U-2HNB
Field STATE ANTELOPE B-2 PAD
County WELD State COLORADO

Location: API # : 05-123-41071-00
NW/NW
1319' FNL & 345' FWL
SEC 2 TWP 5N RGE 62W

Other Services

			Elevation
Permanent Datum	G.L.	Elevation 4646'	K.B. 4663'
Log Measured From	K.B.		D.F.
Drilling Measured From	K.B.		G.L. 4646'

Date of Service	26-MARCH-2015
Run Number	ONE
Depth Driller or PBTD	10967'
Depth Logger	6572'
Bottom Log Interval	6572'
Top Log Interval	SURFACE
Open Hole Size	N/A
Type Fluid	FW
Fluid Level	44'
Fluid Density	N/A
Max. Recorded Temperature	N/A
Max. Wellhead Pressure	0 PSI
Wellhead Connection	N/A
Estimated Cement Top	
Unit Number	29, BILLINGS MT
Wireline Size	1/4"
Location	COLORADO
Recorded By	J.BUSH
Witnessed By	MR.TIM JAYNE

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	9.625"	36.00#	SURFACE	428'
Production Casing	7.00"	26.00#	SURFACE	6843'
Liner Record	4.50"	11.60#	6700'	TD

<<< 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.

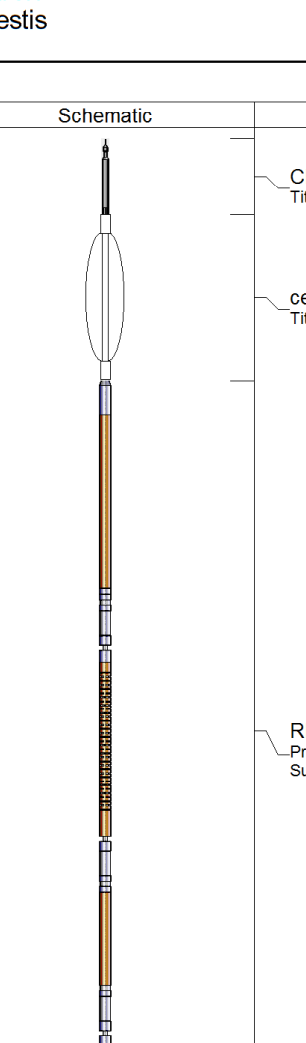
Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

ALL DEPTHS ARE WIRELINE MEASUREMENT TAKEN FROM 17' K.B.

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: Jason Bush		
Operator: J.T. Schubert		
Operator: Dusty Huestis		
Operator:		



Sensor	Offset (ft)
Temp	13.27
WVFS8	11.04
WVFS7	11.04
WVFS6	11.04
WVFS5	11.04
WVFS4	11.04
WVFS3	11.04
WVFS2	11.04
WVFS1	11.04
WVFCAL	11.04
WVF3FT	11.04
WVF5FT	10.04
HEADVOLT	6.79
CCL	3.64
GR	0.89

Description	Length (ft)	O.D. (in)	Weight (lb
CHD-STNDRD Titan 1 7/16" Cablehead	1.00	1.43	2.00
cent-tit_small_2750_top Titan 2 3/4" Cent (Small)	2.17	2.75	15.00
RBT-Probe RBL-T-Dig (FW1410-01) Probe 2.75" Radii T with Integral Temperature Sub	9.17	2.75	120.00
cent-tit_small_2750_top Titan 2 3/4" Cent (Small)	2.17	2.75	15.00
GR-Probe GR/CCL Digital (275 Digital) Probe 2.75" GR/CCL 4 Channel Telemetry/Digital	4.63	2.75	30.00

Dataset: bonanza_creek_a_u_2hnb.db: field/well/cbl/pass1
Total length: 19.13 ft
Total weight: 182.00 lb
O.D.: 2.75 in

PIONEER
Pioneer Energy Services

MAIN LOG

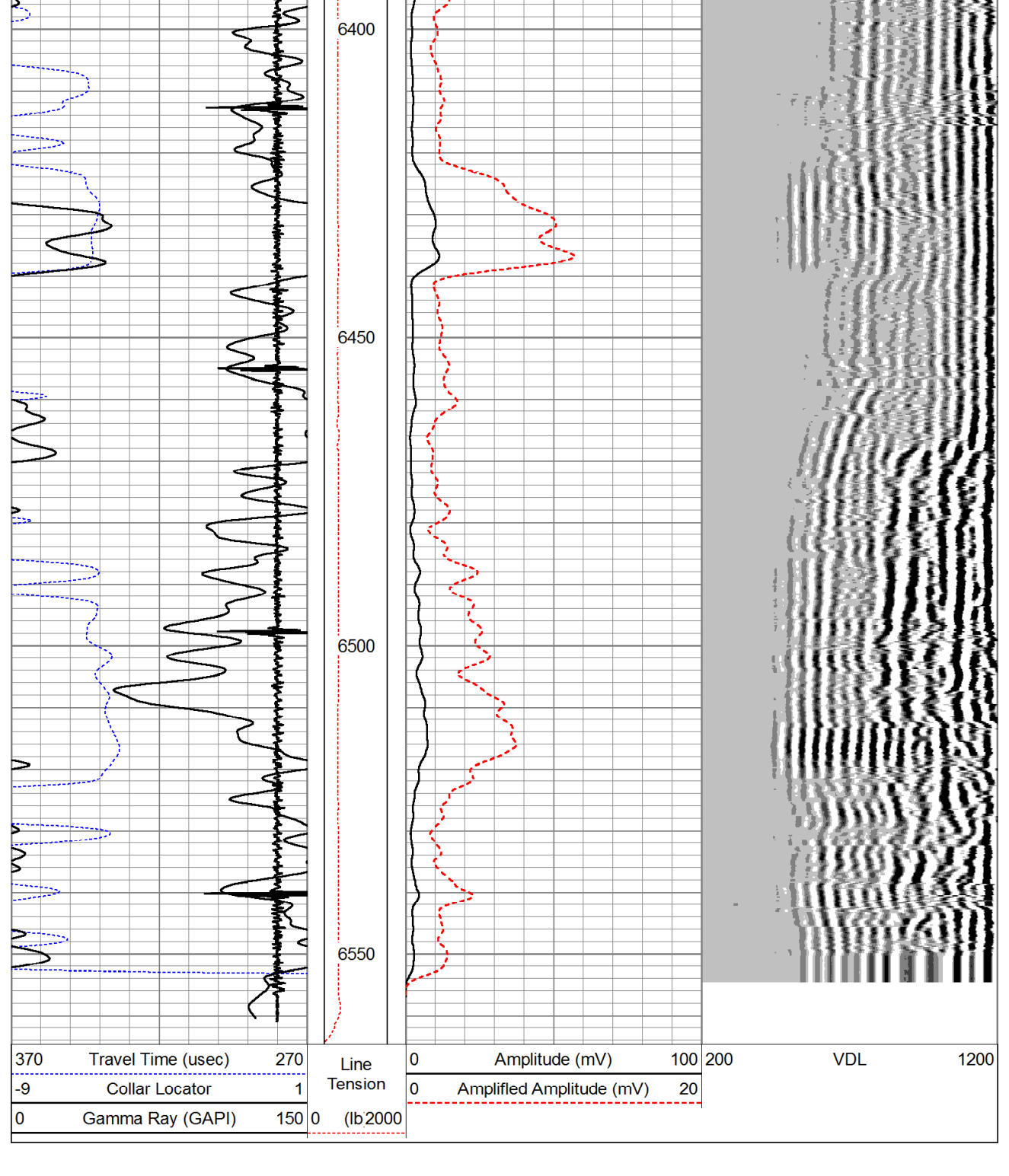
0 PSI APPLIED AT SURFACE

Database File	bonanza_creek_a_u_2hnb.db
Dataset Pathname	cbl/merge1
Presentation Format	pnr_cbl
Dataset Creation	Thu Mar 26 18:32:02 2015
Charted by	Depth in Feet scaled 1:240

REPEAT SECTION

0 PSI APPLIED AT SURFACE

Database File	bonanza_creek_a_u_2hnb.db
Dataset Pathname	cbl/pass6
Presentation Format	pnr_cbl
Dataset Creation	Thu Mar 26 11:37:36 2015
Charted by	Depth in Feet scaled 1:240



Calibration Report

Database File	bonanza_creek_a_u_2hnb.db
Dataset Pathname	cbl/merge1
Dataset Creation	Thu Mar 26 18:32:02 2015

Gamma Ray Calibration Report

Serial Number:	275 Digital	
Tool Model:	Probe GR/CCL Digital	
Performed:	Thu Mar 26 11:17:31 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.8500	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	FW1410-01	
Tool Model:	Probe RBL-T-Dig	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	642.567	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.329	1.000	62.165	46.006	1.000
CAL	0.009	2.005				
5'	0.000	1.517	1.000	62.165	40.320	1.000
SUM						
S1	-0.028	1.240	0.000	100.000	78.886	2.193
S2	-0.007	1.329	0.000	100.000	74.899	0.490
S3	0.000	1.414	0.000	100.000	70.745	-0.000
S4	0.000	1.496	0.000	100.000	66.857	-0.000
S5	0.000	1.491	0.000	100.000	67.056	-0.001
S6	0.000	1.394	0.000	100.000	71.711	-0.000
S7	0.000	1.283	0.000	100.000	77.916	-0.000
S8	-0.011	1.238	0.000	100.000	80.092	0.842

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.009	2.005	1.000	0.000

Air Zero Calibration, performed Thu Mar 26 10:59:19 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

PIONEER

Pioneer Energy Services

Company	BONANZA CREEK		
Well	STATE ANTELOPE A-U-2HNB		
Field			
County	WELD		
State	COLORADO	Country	USA