CEMENT BOND LOG

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Company	Extraction Oil and Gas
Well	WS-Sunrise 5-5-5
Field	Wattenberg
County	Weld
State	Colorado

Company Extraction Oil and Gas
Well WS-Sunrise 5-5-5
Field Wattenberg
County Weld State Colorado

API # : 05-123-46052
Location: SW/SE
253 FSL
1650 FEL

SEC: 32 TWP: 6N RGE: 65W

Other Services

Elevation
K.B. 4666
D.F. 4665
G.L. 4641

Permanent Datum: Ground Level Elevation: 4641
Log Measured From: Kelly Bushing , 25 ft. above Permanent Datum.
Drilling Measured From: Kelly Bushing

Date	26 March 2018
Run Number	One
Plug Back T.D. Driller	----
Plug Back T.D. Logger	----
Bottom Logged Interval	7190
Top Log Interval	Surface
Type Fluid	Water
Density / Viscosity	----
Max. Recorded Temp.	248
Time Logger on Bottom	12:15
Equipment Number	GD112
Location	Casper
Recorded By	GS Yarbro
Witnessed By	Hackford/Stephens

Casing Record				Tubing Record			
Size	Weight	From	To	Size	Weight	From	To
9 5/8	36	25	----				
5 1/2	20	25	----				

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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.

Ticket # : RM0318PCBW364
Your Crew Today: Kennicker, Staker, Tad-y
Log Correlated to: Surface

Cement Data	
Date Cemented	----
Primary / Squeeze	Primary
Type / Weight	----
Main Pass Press.	Zero
Repeat Pass Press.	Zero

Bond Index	
Index %	Est Top Depth
20 % Bond	100
40 % Bond	100
60 % Bond	198
80 % Bond	1305
100 % Bond	----

Comments

Estimated Top of Cement
(40% Bond Index) @100'

Thank you for using Gyrodata

Eric Regnier: Rocky Mountain Wireline Manager EricR@Gyrodata.com

Log Variables

Databased:\warrior\data\20180326_extraction_wssunrise 5-5-5_cbl\20180326_extraction_wssunrise
Dataset field/well/run1/Main/_vars_

Top - Bottom

BHTEMP_Src	BOREID in	BOTTEMP degF	CASEID in	CASEOD in	CASETHCK in	CASEWGHT lb/ft	MAXAMPL mV
TEMP	8.5	100	4.778	5.5	0.361	20	71.9

MaxAPIID in	MaxAPIWall in	MINAMPL mV	MinAPIID in	MINATTN db/ft	PPT usec
4.923	0.361	1.9	4.751	0	237

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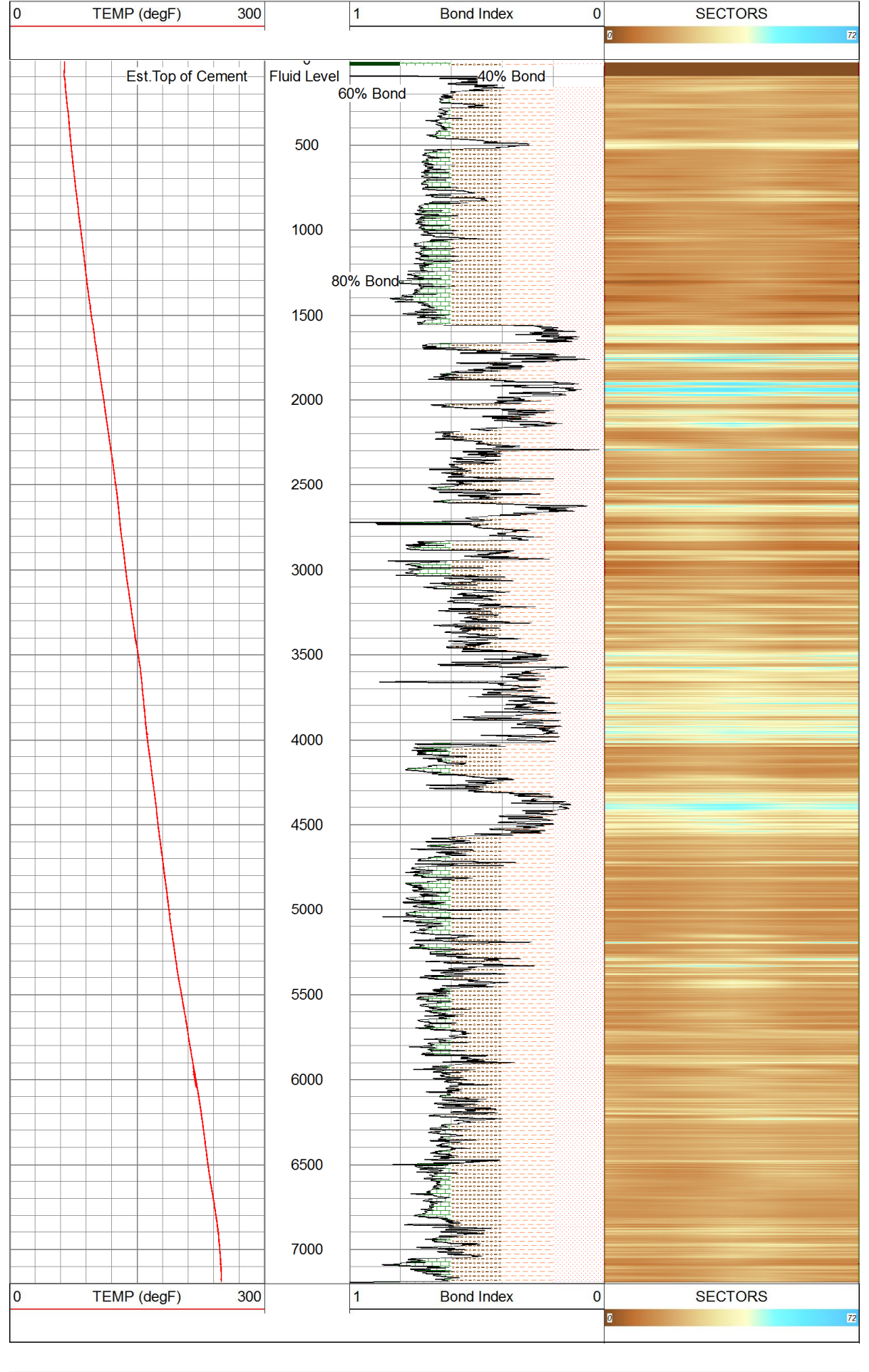
BOND INDEX

Database File 20180326_extraction_wssunrise 5-5-5_cbl\20180326_extraction_wssunrise 5-5-5_cbl.db
Dataset Pathname ./././bndindx
Presentation Format BNDIND~1
Dataset Creation Mon Mar 26 13:57:32 2018
Charted by Depth in Feet scaled 1:7500



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MAIN PASS - Ran with 0 PSI

5 in / 100 ft

Database File 20180326_extraction_wssunrise 5-5-5_cbl\20180326_extraction_wssunrise 5-5-5_cbl.db
Dataset Pathname Main
Presentation Format rcbl_8s
Dataset Creation Mon Mar 26 13:54:16 2018
Charted by Depth in Feet scaled 1:240

CCL - Analog	np - Analog C	Amplitude (mV)	AVG Sector Amplitude	Acoustic Waveform	SECTORS
Gamma 0 (GAPI) 200	(degF) 0 300	0 100 Amplitude x10 0 (mV) 10	0 100	200 (usec) 1200	0 72
300(Line Tens (lb) 0			MAX Sector Amplitude 0 100		
Predicted TT			MIN Sector Amplitude 0 100		
TT +[10 usec]-					

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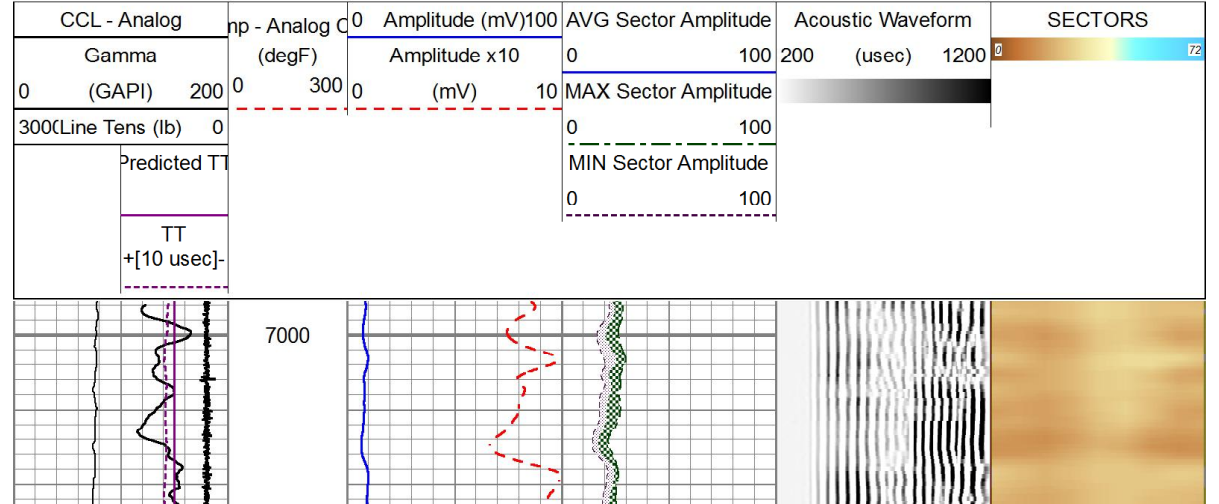
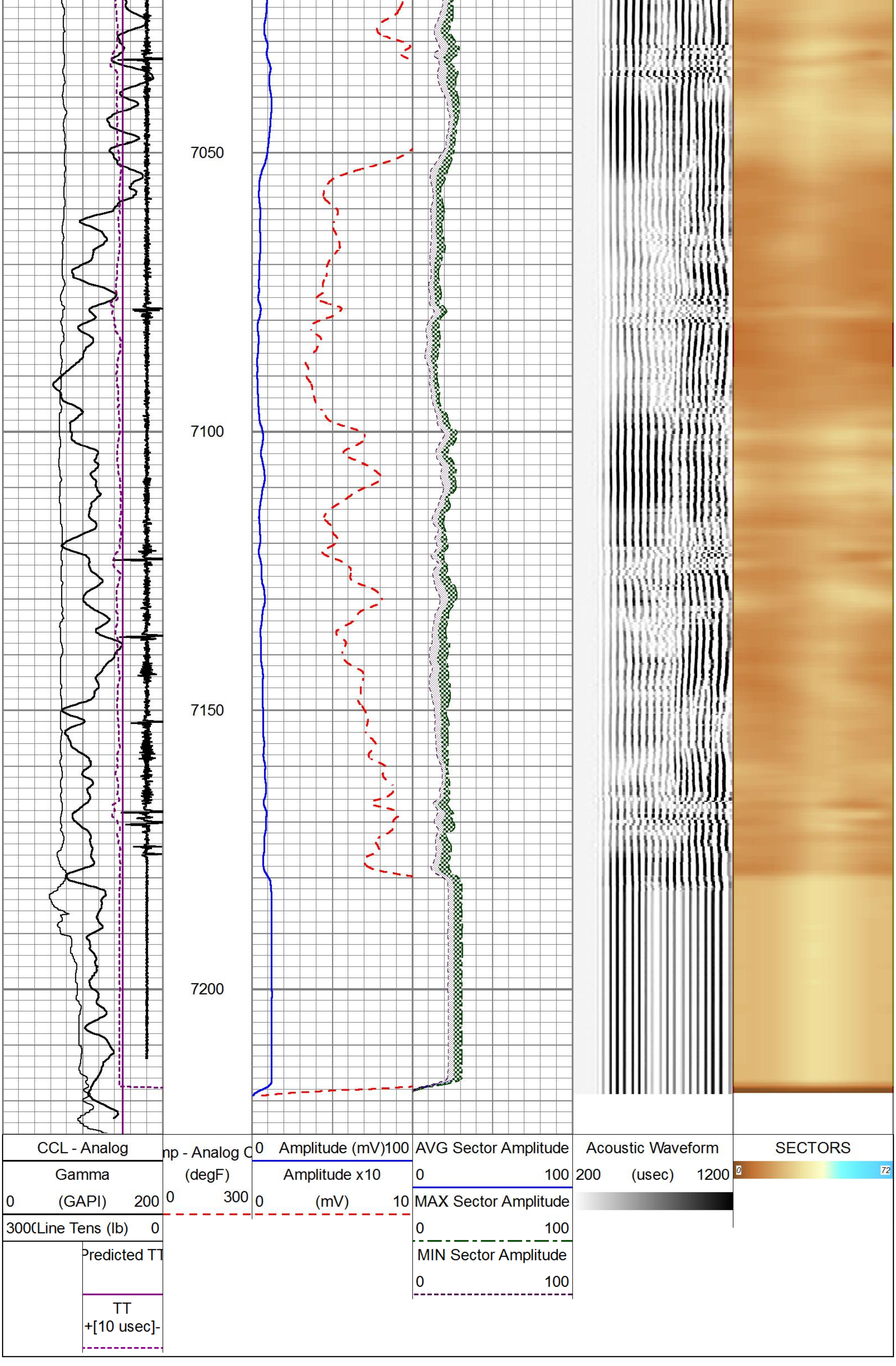
REPEAT PASS - Ran with 0 PSI

5 in / 100 ft

Database File 20180326_extraction_wssunrise 5-5-5_cbl\20180326_extraction_wssunrise 5-5-5_cbl.db
Dataset Pathname pass2.1
Presentation Format rcbl_8s
Dataset Creation Mon Mar 26 13:55:27 2018
Charted by Depth in Feet scaled 1:240

CCL - Analog	np - Analog C	Amplitude (mV)	AVG Sector Amplitude	Acoustic Waveform	SECTORS
Gamma 0 (GAPI) 200	(degF) 0 300	0 100 Amplitude x10 0 (mV) 10	0 100	200 (usec) 1200	0 72
300(Line Tens (lb) 0			MAX Sector Amplitude 0 100		
Predicted TT			MIN Sector Amplitude 0 100		
TT +[10 usec]-					





Calibration Report

Database File	d:\warrior\data\20180326_extraction_wssunrise 5-5-5_cbl\20180326_extraction_wssunrise 5-5-5_cbl.db
Dataset Pathname	Main
Dataset Creation	Mon Mar 26 13:54:16 2018

Gamma Ray Calibration Report

Serial Number:	ISHV2-03	
Tool Model:	2 3/4" TekCo	
Performed:	Tue Dec 13 00:23:06 2016	
Calibrator Value:	194.0	GAPI
Background Reading:	58.9	cps
Calibrator Reading:	300.8	cps
Sensitivity:	0.8020	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	IT4B1-01	
Tool Model:	2 3/4" RIB Analog	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	0.000	ft

Master Calibration, performed (Derived):

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.001	1.277	0.000	71.921	56.275	0.042
CAL	0.000	0.290				
5'	0.001	1.486	0.000	71.921	48.429	-0.062
SUM						
S1	0.035	1.079	0.000	72.000	68.981	-2.436
S2	0.038	1.215	0.000	72.000	61.203	-2.356
S3	0.040	1.502	0.000	72.000	49.223	-1.955
S4	0.037	1.790	0.000	72.000	41.067	-1.504
S5	0.043	1.817	0.000	72.000	40.576	-1.731
S6	0.041	1.409	0.000	72.000	52.634	-2.161
S7	0.041	1.263	0.000	72.000	58.923	-2.396
S8	0.036	1.100	0.000	72.000	67.642	-2.417

Internal Reference Calibration, performed Fri Aug 25 16:20:58 2017:

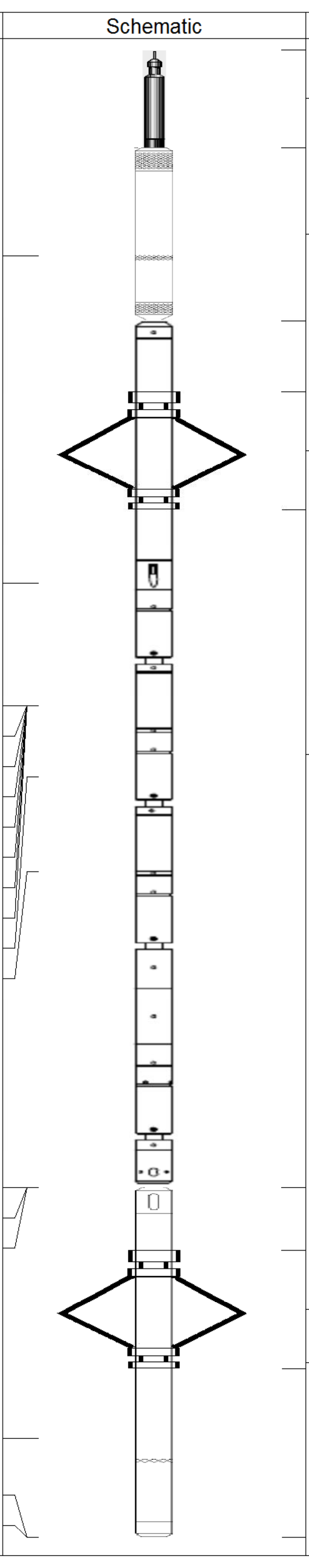
	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.290	0.000	0.290	1.000	0.000

Air Zero Calibration, performed Fri Aug 25 16:20:58 2017:

	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

Temperature Calibration Report

Serial Number:	IT4B1-01			
Tool Model:	2 3/4" RIB Analog			
Performed:	Fri Aug 26 11:07:15 2016			
	Reference		Reading	
Low Reference:	0.00	degF	0.00	usec
High Reference:	1.00	degF	1.00	usec
Gain:	0.33			
Offset:	0.00			
Delta Spacing	1			



Sensor	Offset (ft)	Description	Length (ft)	O.D. (in)	Weight (lb
		CableHead-TitanConeType2	1.03	1.44	3.60
		CCL_Log-2 3/4" TekCo (IPSN7-03)	1.83	2.75	33.00
CCL	13.50				
		Antelope-Overbody	1.25	2.75	
TEMP	10.05				
WVFS8	8.76				
WVFS7	8.76				
		RBTA-2 3/4" RIB Analog (IT4B1-01)	9.13	2.75	102.00
WVFS6	8.76				
WVFS5	8.76				
WVFS4	8.76				
WVFS3	8.76				
WVFS2	8.76				
WVFS1	8.76				
WVF3FT	8.01				
WVF5FT	7.01				
WVFSYNC	3.68				
WVFTEMP	3.68				
WVFCAL	3.68				
		Antelope-Overbody	1.25	2.75	
		GR_Log-2 3/4" TekCo (ISHV2-03)	3.68	2.75	47.00
GR	1.04				
LOCTIM	0.00				
UTCTIM	0.00				

Dataset:	20180326_extraction_wssunrise 5-5-5_cbl.db: field/well/run1/Main
Total length:	15.67 ft
Total weight:	185.60 lb
O.D.:	2.75 in

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Company	**Extraction Oil and Gas**
Well	**WS-Sunrise 5-5-5**
Field	**Wattenberg**
County	**Weld**
State	**Colorado**
Country	**U.S.A.**