gyrodata

Cement Bond Log

Company	Extraction Oil and Gas
Well	MLD 11
Field	Wattenberg
County	Weld
State	Colorado

Company Extraction Oil and Gas
Well MLD 11
Field Wattenberg
County Weld **State** Colorado

API #: 05-123-44816
Location: NW/NW
801 FNL
520 FWL

Other Services

SEC: 22 TWP: 4N RGE: 68W

Elevation
K.B. 4900
D.F. 4899
G.L. 4875

Permanent Datum: Ground Level Elevation: 4875
Log Measured From: Kelly Bushing , 25 ft. above Permanent Datum.
Drilling Measured From: Kelly Bushing

Date	26 Sept 2017
Run Number	One
Plug Back T.D. Driller	----
Plug Back T.D. Logger	----
Bottom Logged Interval	6894
Top Log Interval	Surface
Type Fluid	Water
Density / Viscosity	----
Max Recorded Temp.	221
Time Logger on Bottom	1300
Equipment Number	GD114
Location	Casper
Recorded By	GS Yarbro
Witnessed By	Mr. Stephens

Casing Record

Size	Weight	From	To
9 5/8	36	0	1500
5 1/2	20	0	11697

Tubing Record

Size	Weight	From	To

<<< Fold Here >>>

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 # : RM0917WLOW656
Your Crew Today: Carpenter, Kennicker
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	1590
40 % Bond	1590
60 % Bond	1622
80 % Bond	4958
100 % Bond	6312

Comments

Estimated Top of Cement (40% Bond Index) @ 1590

Thank you for using Gyrodata

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

Log Variables

Databased:\warrior\data\2017-09-25_extrac_mld11_cbl\2017-09-25_extrac_mld11_cbl.db
Dataset field/well/run1/pass3.1/_vars_

Top - Bottom

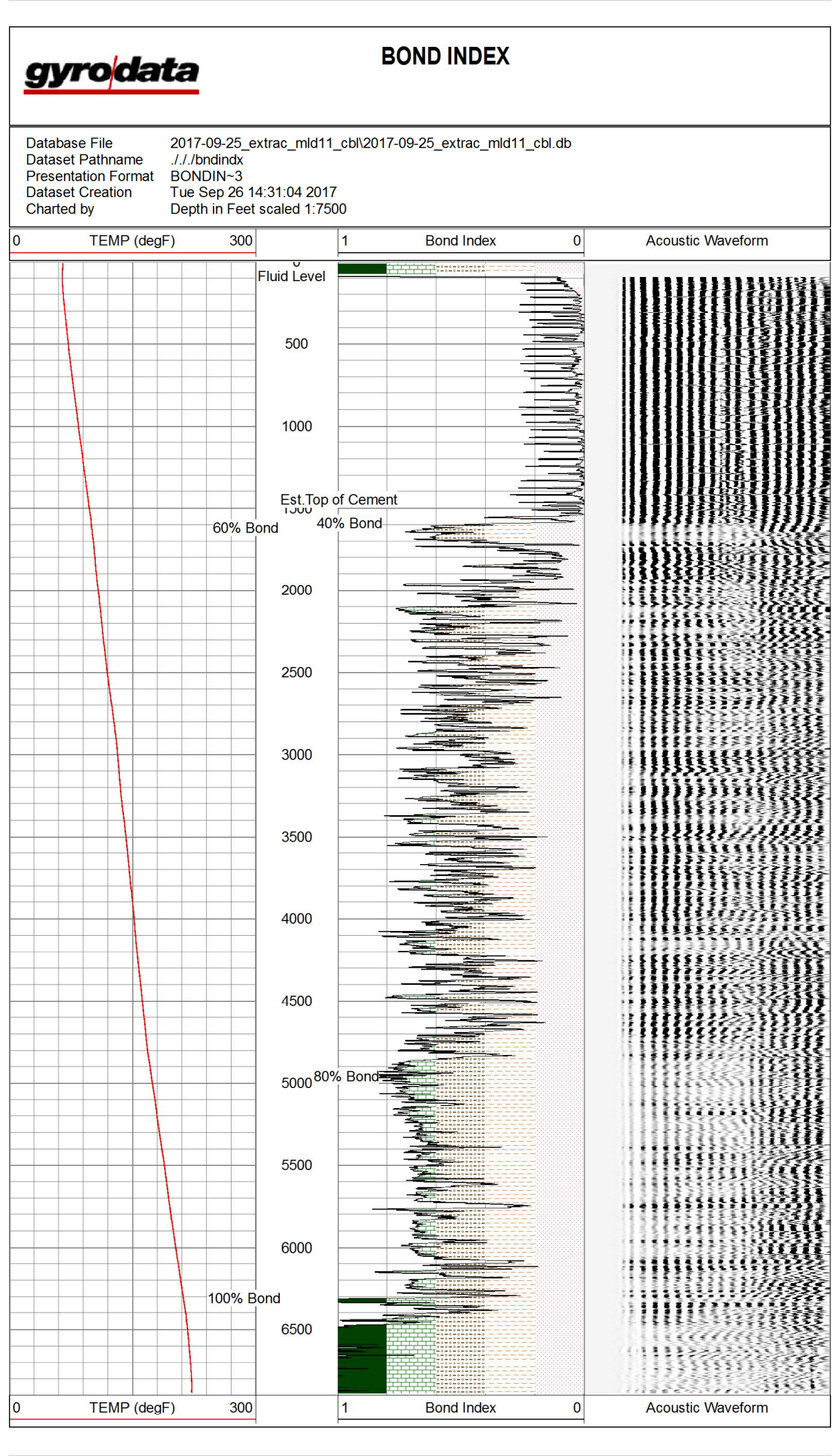
BHTEMP_Src	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	CASEWGHT lb/ft	MAXAMPL mV	MaxAPIID in
TEMP	8.5	100	5.5	0.361	20	71.9	4.923

MaxAPIWall in	MINAMPL mV	MinAPIID in	MINATTN db/ft	PPT usec
0.361	1.9	4.751	0	239

gyrodata

BOND INDEX

Database File 2017-09-25_extrac_mld11_cbl\2017-09-25_extrac_mld11_cbl.db
Dataset Pathname ./././bndindx
Presentation Format BONDIN~3
Dataset Creation Tue Sep 26 14:31:04 2017
Charted by Depth in Feet scaled 1:7500



gyrodata

MAIN PASS - Ran with 0 PSI

5 in / 100 ft

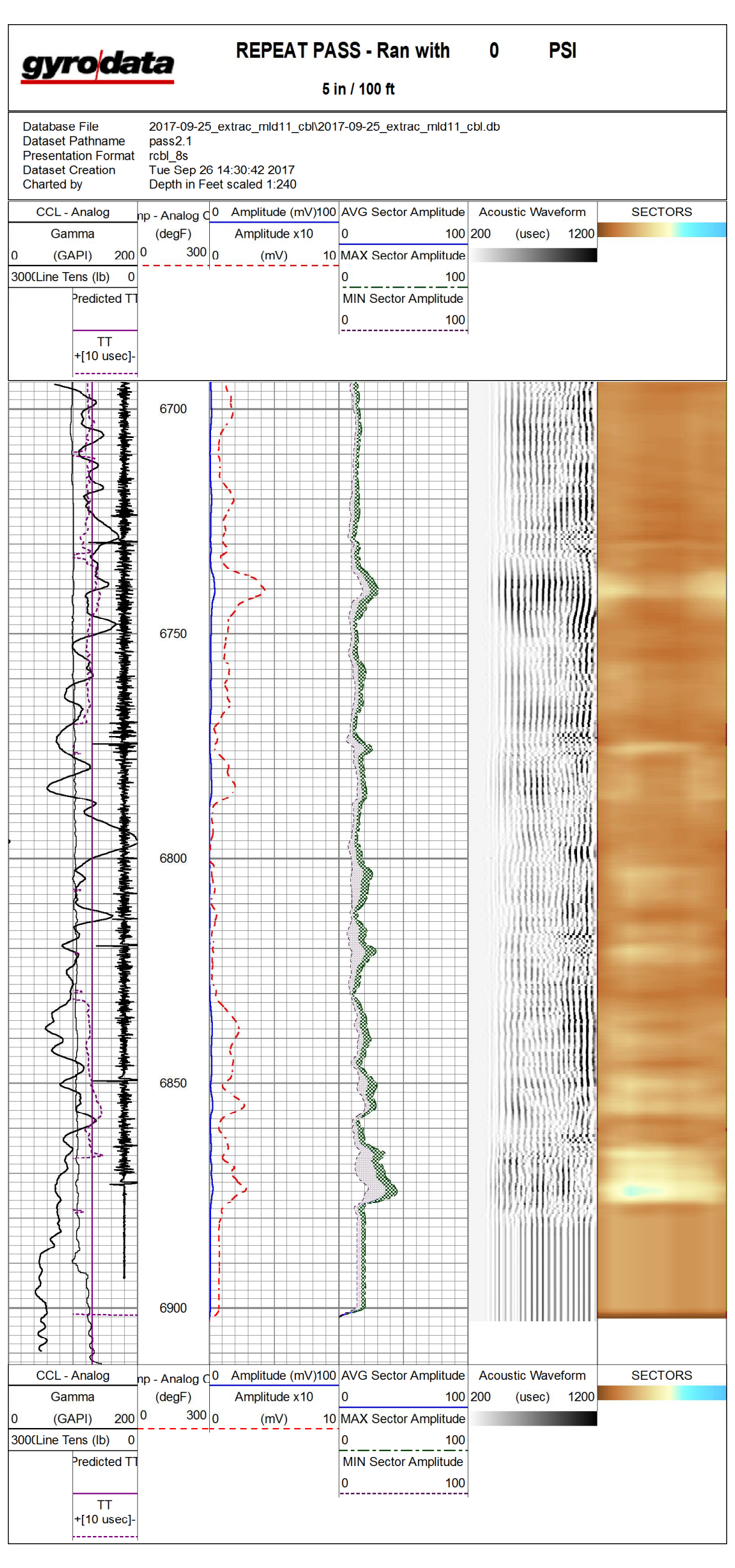
Database File 2017-09-25_extrac_mld11_cbl\2017-09-25_extrac_mld11_cbl.db
Dataset Pathname pass3.1
Presentation Format rcbl_8s
Dataset Creation Tue Sep 26 14:29:17 2017
Charted by Depth in Feet scaled 1:240

gyrodata

REPEAT PASS - Ran with 0 PSI

5 in / 100 ft

Database File	2017-09-25_extrac_mld11_cbl\2017-09-25_extrac_mld11_cbl.db
Dataset Pathname	pass2.1
Presentation Format	rcbl_8s
Dataset Creation	Tue Sep 26 14:30:42 2017
Charted by	Depth in Feet scaled 1:240



Calibration Report

Database File	d:\warrior\data\2017-09-25_extrac_mld11_cbl\2017-09-25_extrac_mld11_cbl.db
Dataset Pathname	pass3.1
Dataset Creation	Tue Sep 26 14:29:17 2017

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:	IPPO2-01	
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	1.564	0.000	72.000	46.061	-0.056
CAL	0.000	0.750				
5'	-0.004	1.918	0.000	72.000	37.452	0.159
SUM						
S1	0.023	1.659	0.000	72.000	44.001	-1.001
S2	0.027	1.526	0.000	72.000	48.029	-1.300
S3	0.038	1.584	0.000	72.000	46.586	-1.779
S4	0.036	1.552	0.000	72.000	47.492	-1.702
S5	0.033	1.668	0.000	72.000	44.047	-1.449
S6	0.023	1.771	0.000	72.000	41.200	-0.958
S7	0.022	1.867	0.000	72.000	39.027	-0.877
S8	0.026	1.757	0.000	72.000	41.600	-1.092

Internal Reference Calibration, performed (Not Performed):

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.750	0.000	0.750	1.000	0.000

Air Zero Calibration, performed (Not Performed):

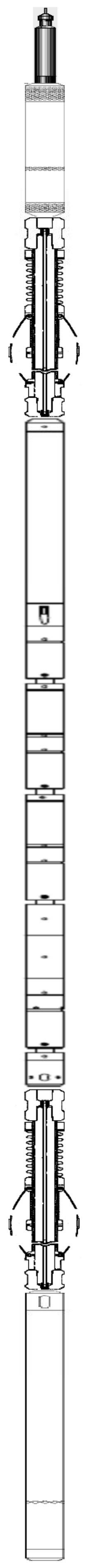
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

Temperature Calibration Report

Serial Number: IPPO2-01
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)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			CableHead-TitanConeType2	1.03	1.44	3.60
CCL	18.96		CCL_Log-2 3/4" TekCo (IPSN7-03) 450 Deg. CCL	1.83	2.75	33.00
			TekCo-275_Tekco 2 3/4" Tekco Adjustable SPRING Centralizer	2.73	2.75	25.00
TEMP	12.78					
WVFS8	11.49					
WVFS7	11.49		RBTA-2 3/4" RIB Analog (IPPO2-01) Radial Incremented Bond Tool with Temp	9.13	2.75	102.00
WVFS6	11.49					
WVFS5	11.49					
WVFS4	11.49					
WVFS3	11.49					
WVFS2	11.49					
WVFS1	11.49					
WVF3FT	10.74					
WVF5FT	9.74					
WVFSYNC	6.41					
WVFTEMP	6.41					
WVFCAL	6.41					
			TekCo-275_Tekco 2 3/4" Tekco Adjustable SPRING Centralizer	2.73	2.75	25.00
			GR_Log-2 3/4" TekCo (ISHV2-03) 400 Deg. Gamma Ray	3.68	2.75	47.00
GR	1.04					
LOCTIM	0.00					
UTCTIM	0.00					

Dataset: 2017-09-25_extrac_mld11_cbl.db: field/well/run1/pass3.1
Total length: 21.13 ft
Total weight: 235.60 lb
O.D.: 2.75 in

gyrodata

Company	Extraction Oil and Gas
Well	MLD 11
Field	Wattenberg
County	Weld
State	Colorado
Country	U.S.A.