Comp.	Anadarko
Well	State 35-16
Field	Wattenberg
Co.	Weld
State	Colorado

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Pioneer Energy Services

RADIAL BOND LOG WITH GAMMA RAY

Company	**Anadarko**		
Well	**State 35-16**		
Field	**Wattenberg**		
County	**Weld**	State	**Colorado**

Location: API # : 05-123-29027
1887' FSL, 1895' FWL
SEC 16 TWP 1N RGE 68W

Other Services

Permanent Datum	GL	Elevation 5191'	Elevation K.B. 5206' D.F. 5205' G.L. 5191'
Log Measured From	KB	15' Above Perm. Datum	
Drilling Measured From	KB		

Date of Service	29 July 2016
Run Number	One
Depth Driller or PBTD	8475'
Depth Logger	3900'
Bottom Log Interval	3900'
Top Log Interval	Surface
Open Hole Size	N/A
Type Fluid	Water
Fluid Level	Surface
Fluid Density	N/A
Max. Recorded Temperature	139 deg F
Max. Wellhead Pressure	Zero
Wellhead Connection	N/A
Estimated Cement Top	See Log
Unit Number	P53
Wireline Size	9/32
Location	Ft. Morgan
Recorded By	Cory Burns
Witnessed By	Nick Lang

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	8.625"		Surface	907
Production Casing	4.5"	11.6	Surface	8473'
Liner Record				

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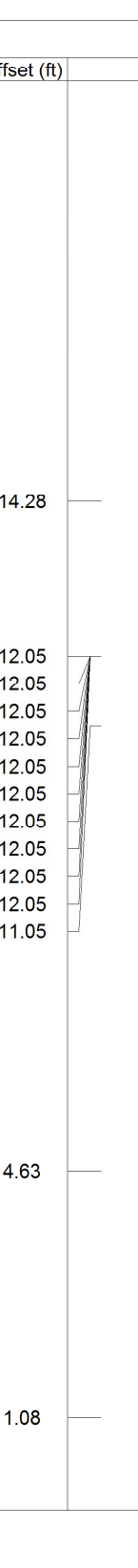
All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, 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.

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: Cory Burns		
Operator: Brent Roddy		
Operator:		
Operator:		

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			Cable Head-Titan 143 1 7/16" Titan Cable Head (1" Fish Top)	1.03	1.43	2.00
			Centralizer-169 Titan Non-ADJ Titan 1 11/16" Non Adjustable Centralizer	2.17	2.88	22.00
TEMP	14.28					
WVFS8	12.05		SCBL-275 Probe w Temp New Mod (1411 Probe Radii Bond Tool with Temperature	9.17	2.75	95.00
WVFS7	12.05					
WVFS6	12.05					
WVFS5	12.05					
WVFS4	12.05					
WVFS3	12.05					
WVFS2	12.05					
WVFS1	12.05					
WVFCAL	12.05					
WVF3FT	12.05					
WVF5FT	11.05					
			Centralizer-169 Titan Non-ADJ Titan 1 11/16" Non Adjustable Centralizer	2.17	2.88	22.00
CCL	4.63		CCL_Logging-275 Probe (080633) Probe 2 3/4" Logging CCL	2.00	2.75	25.00
			GR-275 Probe (070155) Probe 2.75" Gamma Ray Analog	3.36	2.75	40.00
GR	1.08					
			Bullnose-Titan GO Pin Pressure Cap	0.27	1.38	1.00

Dataset: state35-16.db: field/well/run1/pass4.2
Total length: 20.16 ft
Total weight: 207.00 lb
O.D.: 2.88 in

Log Variables

DatabaseC:\ProgramData\Warrior\Data\state35-16.db
Dataset field/well/run1/pass4.2/_vars_

Top - Bottom

BHTEMP_Src	BOREID in	BOTTEMP degF	CASEOD in	CASETHCK in	CASEWGHT lb/ft	MAXAMPL mV
TEMP	7.875	100	4.5	0	10.5	81.2
MINAMPL **mV**	**MINATTN** **db/ft**	**PERFS**	**PPT** **usec**	**SRFTEMP** **degF**	**TDEPTH** **ft**	
1	0.08	0	0	0	0	

Variable Description

BHTEMP_Src : BHTEMP Input Source Selector
BOREID : Borehole I.D.
BOTTEMP : Bottom Hole Temperature
CASEOD : Casing O.D.
CASETHCK : Casing Thickness
CASEWGHT : Casing Weight
MAXAMPL : Maximum Amplitude
MINAMPL : Minimum Amplitude
MINATTN : Minimum Attenuation
PERFS : Perforation Flag
PPT : Predicted Pipe Time
SRFTEMP : Surface Temperature
TDEPTH : Total Depth

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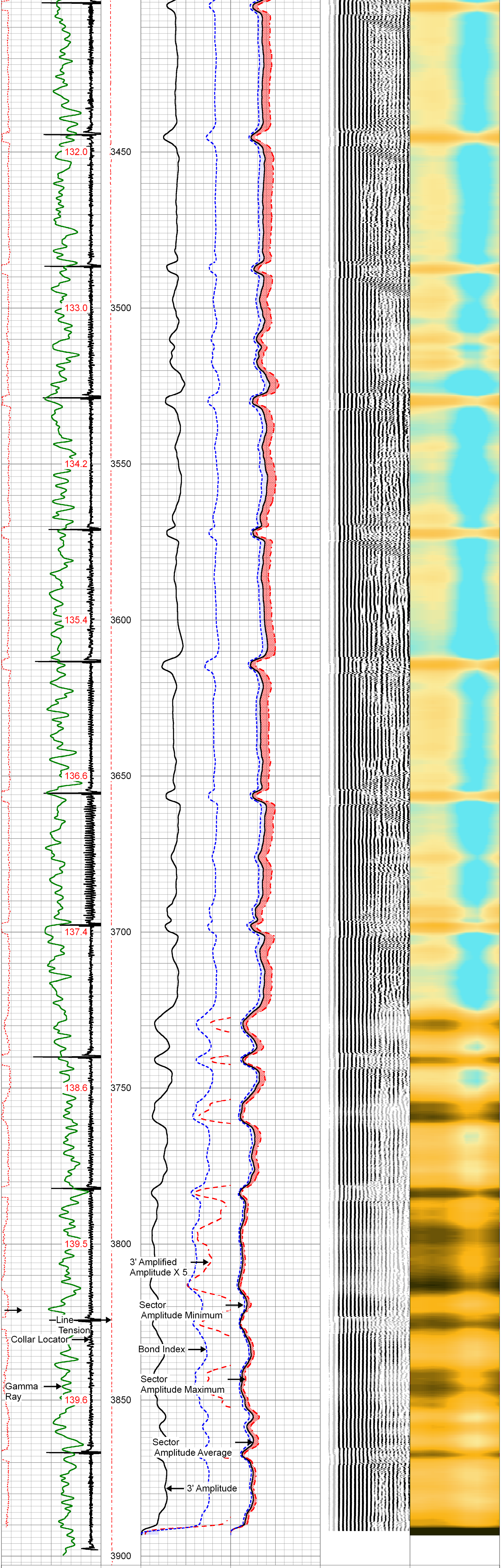
Main Pass

Database File	state35-16.db
Dataset Pathname	pass4.2
Presentation Format	pinr_scbl
Dataset Creation	Fri Jul 29 09:02:08 2016
Charted by	Depth in Feet scaled 1:240



3' Travel Time
250 (usec) 150
-9 Collar Locator 1
Gamma Ray
0 (GAPI) 200
TEMP
(degF)

Line Tension
0 (lb) 3000

3' Amplitude
0 (mV) 100
3' Amplified Amplitude X 5
0 (mV) 20
1 Bond Index 0

Sector Amplitude Average
0 150
Sector Amplitude Maximum
0 150
Sector Amplitude Minimum
0 150

200 VDL 1200

1 Sector Map 8
10 60

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Repeat Pass

Database File	state35-16.db
Dataset Pathname	pass3
Presentation Format	pinr_scbl
Dataset Creation	Fri Jul 29 07:56:39 2016
Charted by	Depth in Feet scaled 1:240

3' Travel Time
250 (usec) 150
-9 Collar Locator 1
Gamma Ray
0 (GAPI) 200
TEMP
(degF)

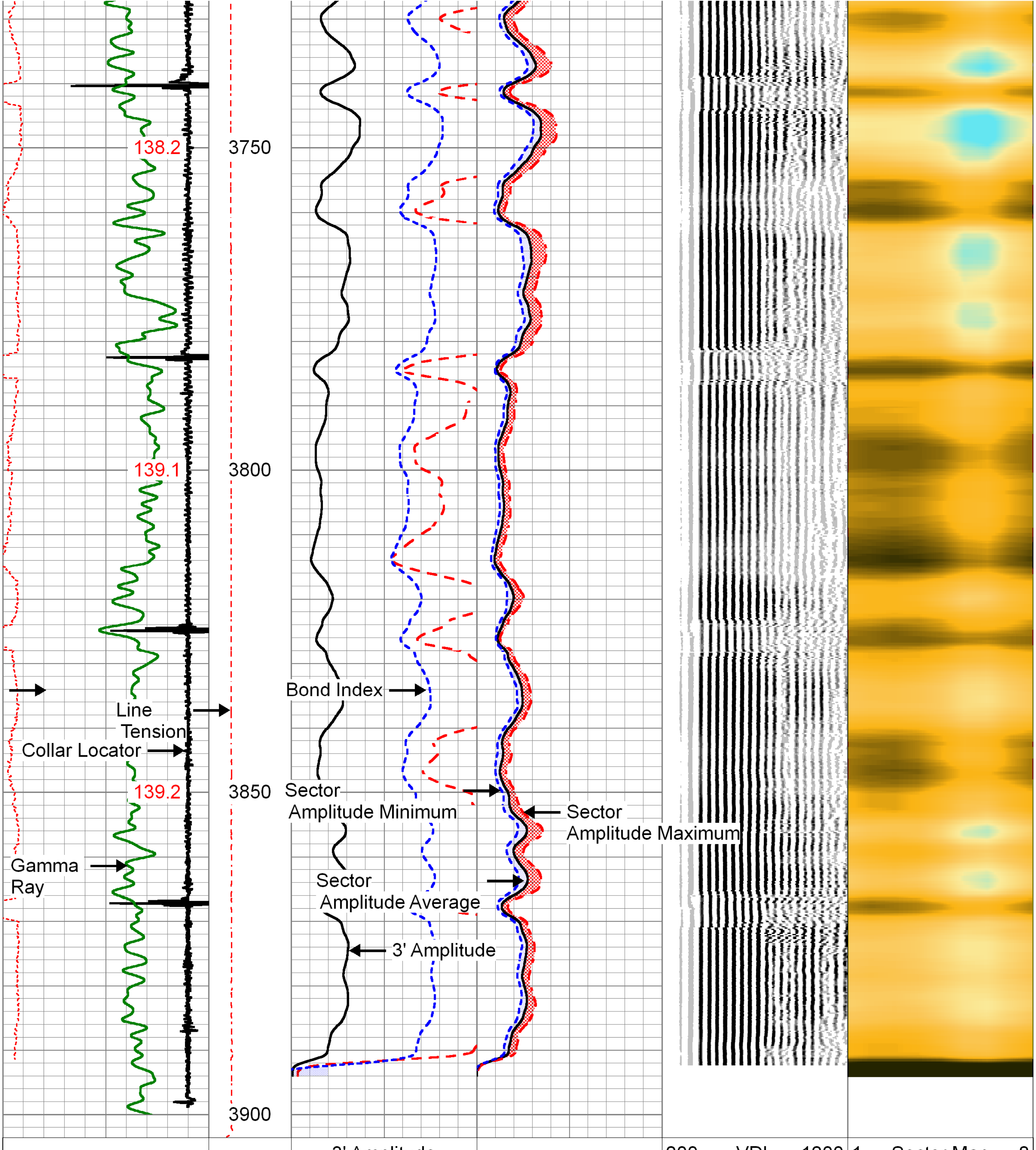
Line Tension
0 (lb) 3000

3' Amplitude
0 (mV) 100
3' Amplified Amplitude X 5
0 (mV) 20
1 Bond Index 0

Sector Amplitude Average
0 150
Sector Amplitude Maximum
0 150
Sector Amplitude Minimum
0 150

200 VDL 1200

1 Sector Map 8
10 60



3' Travel Time
250 (usec) 150
-9 Collar Locator 1
Gamma Ray
0 (GAPI) 200
TEMP
(degF)

Line Tension
0 (lb) 3000

3' Amplitude
0 (mV) 100
3' Amplified Amplitude X 5
0 (mV) 20
1 Bond Index 0

Sector Amplitude Average
0 150
Sector Amplitude Maximum
0 150
Sector Amplitude Minimum
0 150

200 VDL 1200

1 Sector Map 8
10 60

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