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Pioneer Energy Services

CEMENT BOND LOG WITH GAMMA RAY / CCL

Company	BONANZA CREEK ENERGY
Well	PRONGHORN O-K-15HNC
Field	WATTENBERG
County	WELD
State	CO
Country	

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Location: API # : 05-123-41160
SHL: 250' FSL 1418' FWL SESW
SEC 15 TWP 5N RGE 61W

Other Services
NONE

Permanent Datum	GL	Elevation 4669'	Elevation
Log Measured From	KB		K.B. 4686'
Drilling Measured From	BK		D.F. 4686'
			G.L. 4669'

Date	APRIL 13, 2015
Run Number	1
Depth Driller	NA
Depth Logger	6062'
Bottom Logged Interval	6062'
Top Log Interval	SURFACE
Open Hole Size	8.75
Type Fluid	WATER
Density / Viscosity	NA
Max. Recorded Temp.	NA
Estimated Cement Top	SEE LOG
Time Well Ready	1330
Time Logger on Bottom	1415'
Equipment Number	P-109
Location	FT. MORGAN
Recorded By	SHAUN STUMP
Witnessed By	DARYK BARBEROUSSE

Borehole Record			Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9+5/8"	36#	SURFACE	446'
Prot. String	7"	26#	SURFACE	6629'
Production String				
Liner				

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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.

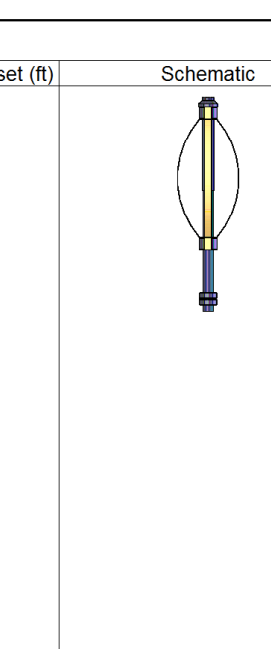
Comments

THANK YOU FOR USING PIONEER

0 PSI ON WELL WHILE LOGGING

S.O. 2-014047

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			CENT-PTS275	2.83	2.75	
WVFS8 WVFS7 WVFS6 WVFS5 WVFS4 WVFS3 WVFS2 WVFS1 WVFCAL WVF3FT WVF5FT	11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 11.71 10.63		RBT-Probe (Base) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
			CENT-PTS275	2.83	2.75	
CCL GR	3.63 2.30		GR_CCL-Probe (111211) Probe Gamma CCL	4.54	2.75	100.00



Dataset: 14047fixed.db: field/well/run1/pass2
Total length: 19.13 ft
Total weight: 190.00 lb
O.D.: 2.75 in

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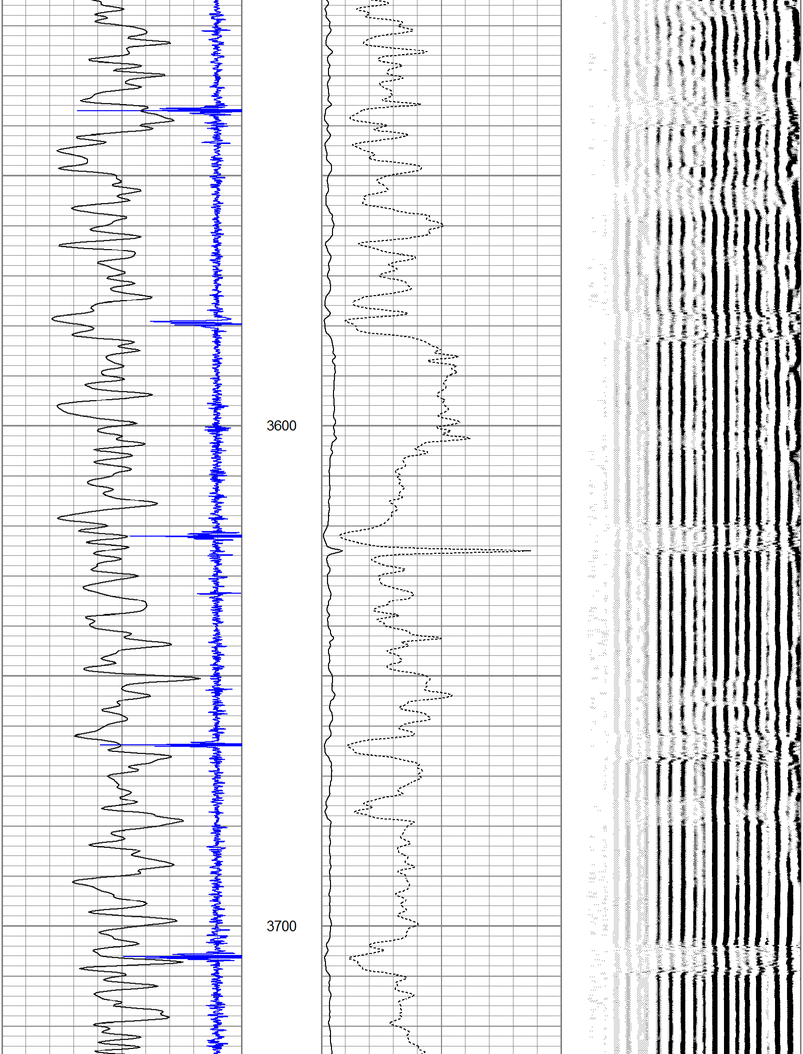
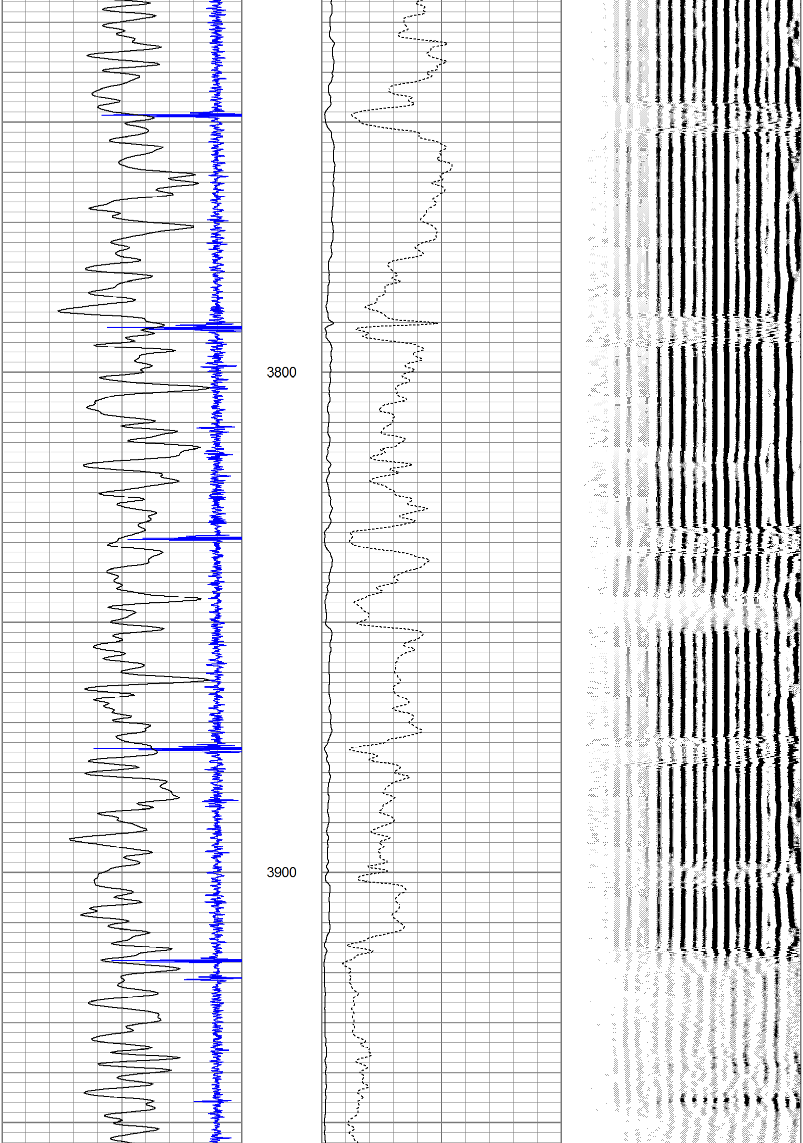
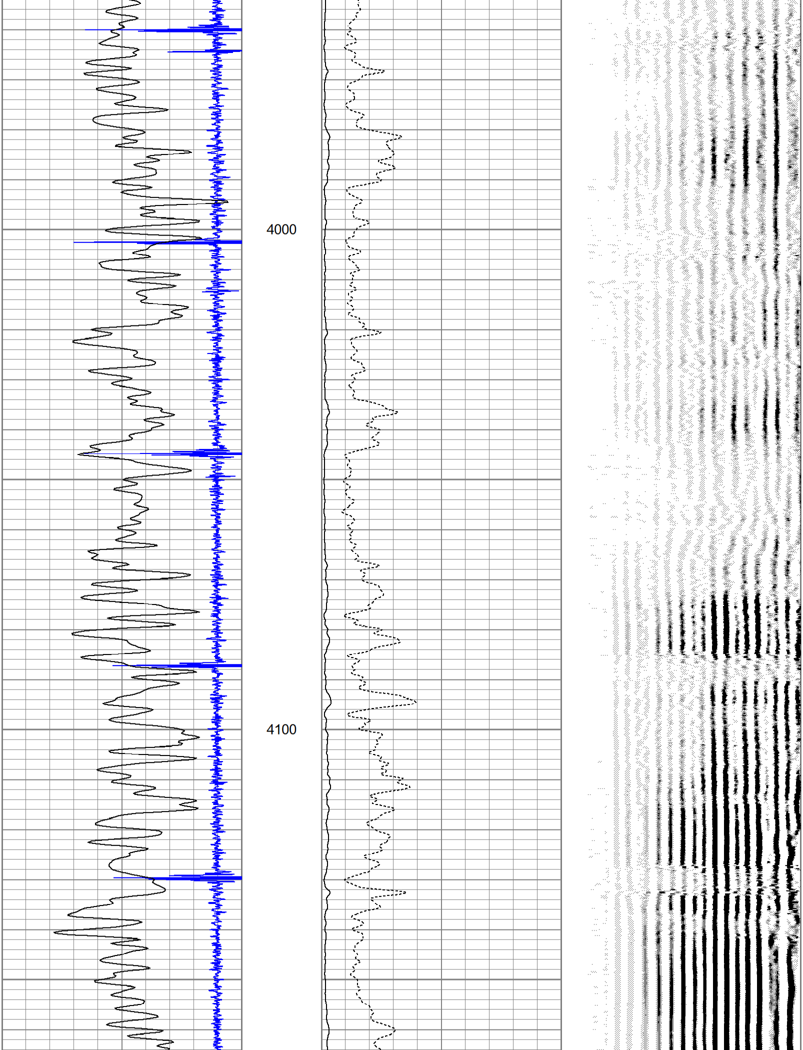
MAIN PASS

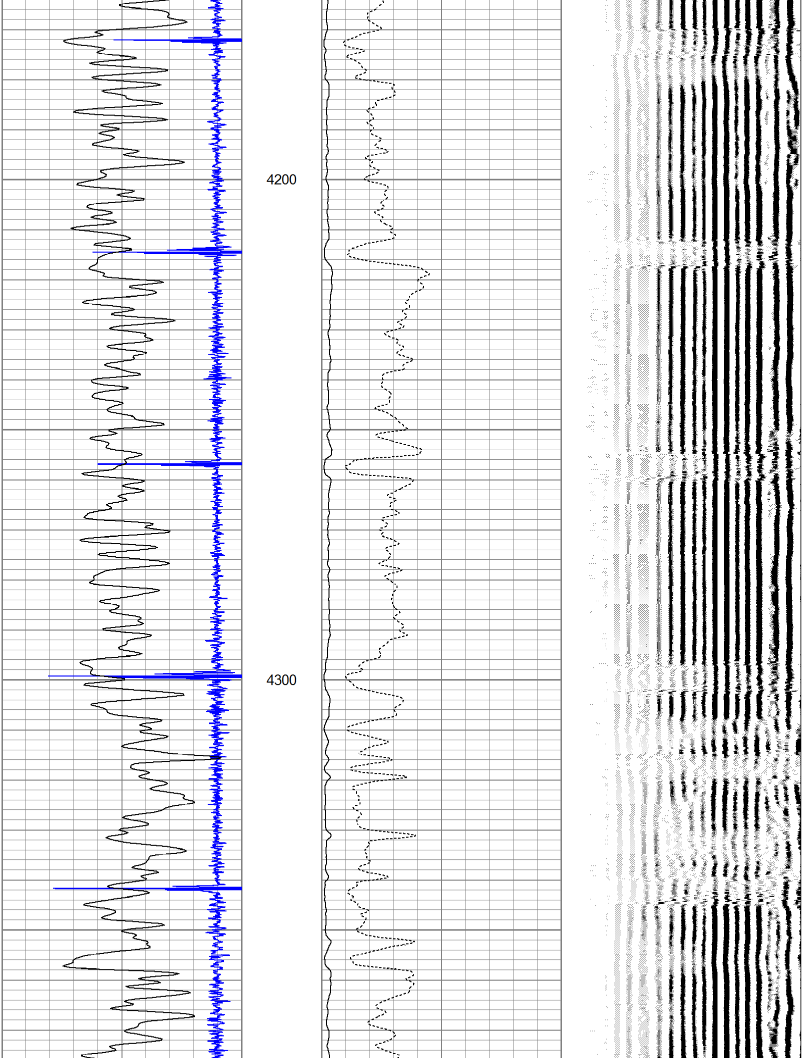
Database File	14047fixed.db
Dataset Pathname	final2
Presentation Format	cbl
Dataset Creation	Wed Apr 15 15:14:51 2015
Charted by	Depth in Feet scaled 1:240

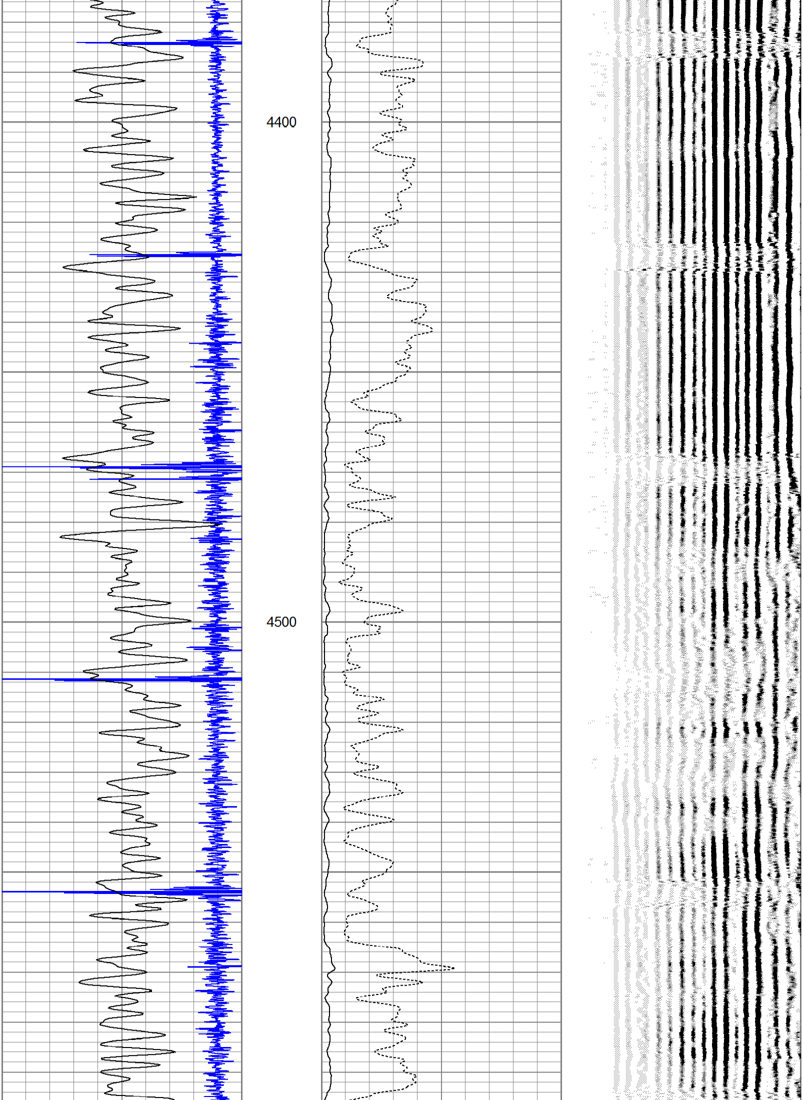
9	Collar Locator	-1	0	AMP AMPLITUDE (mV)	10	200	VDL	1200
0	Gamma Ray (GAPI)	200	0	AMPLITUDE (mV)	100			

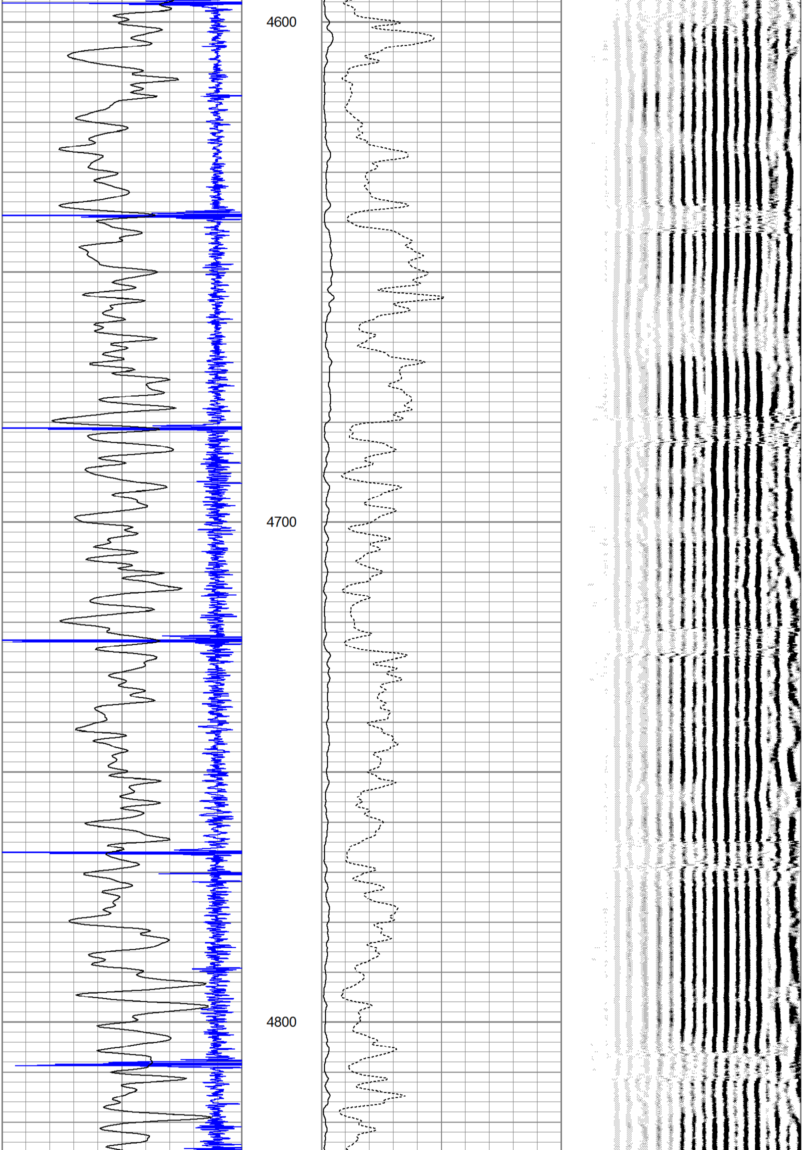


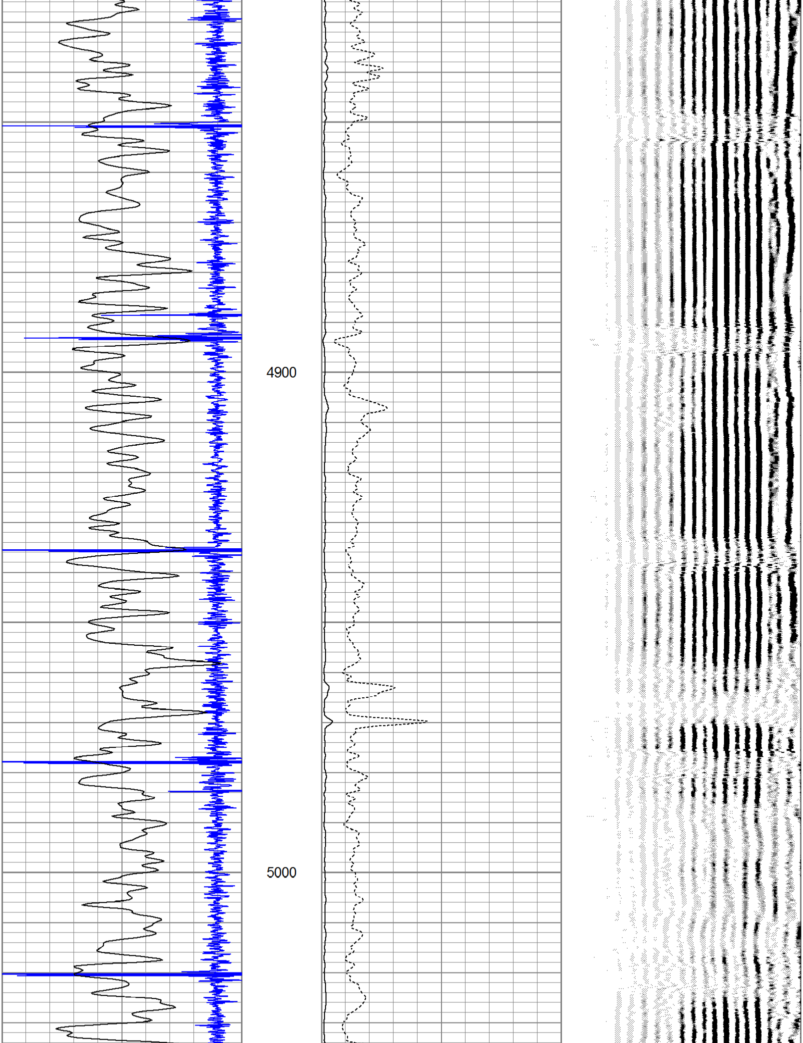


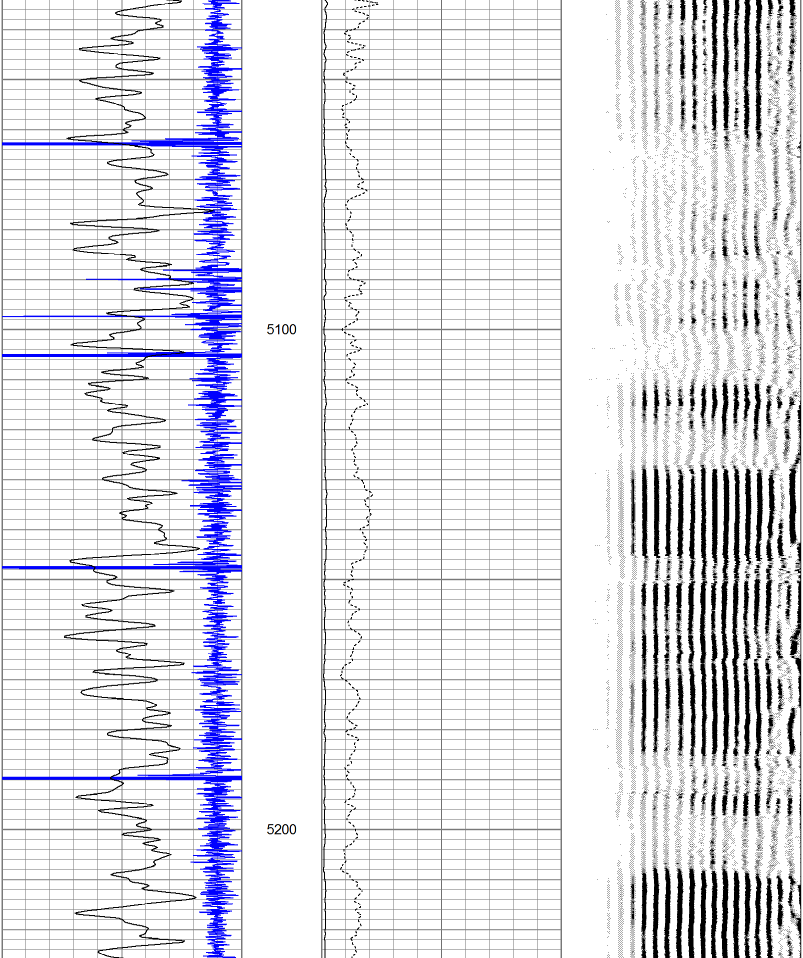


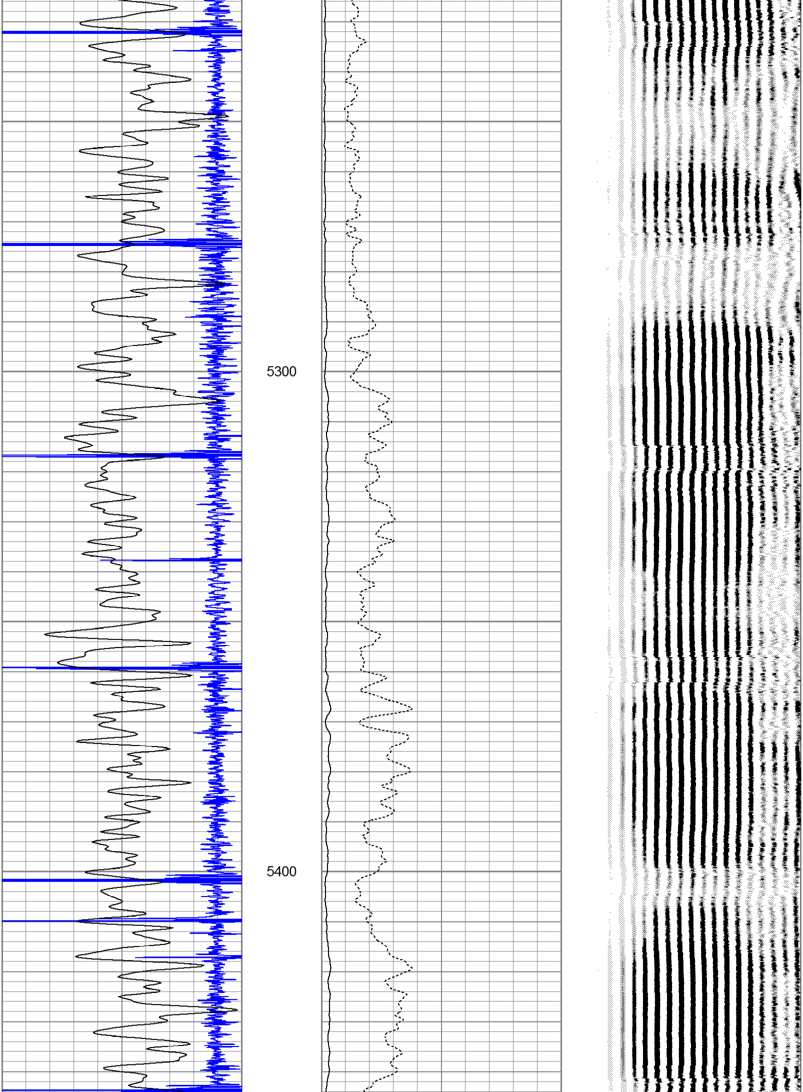


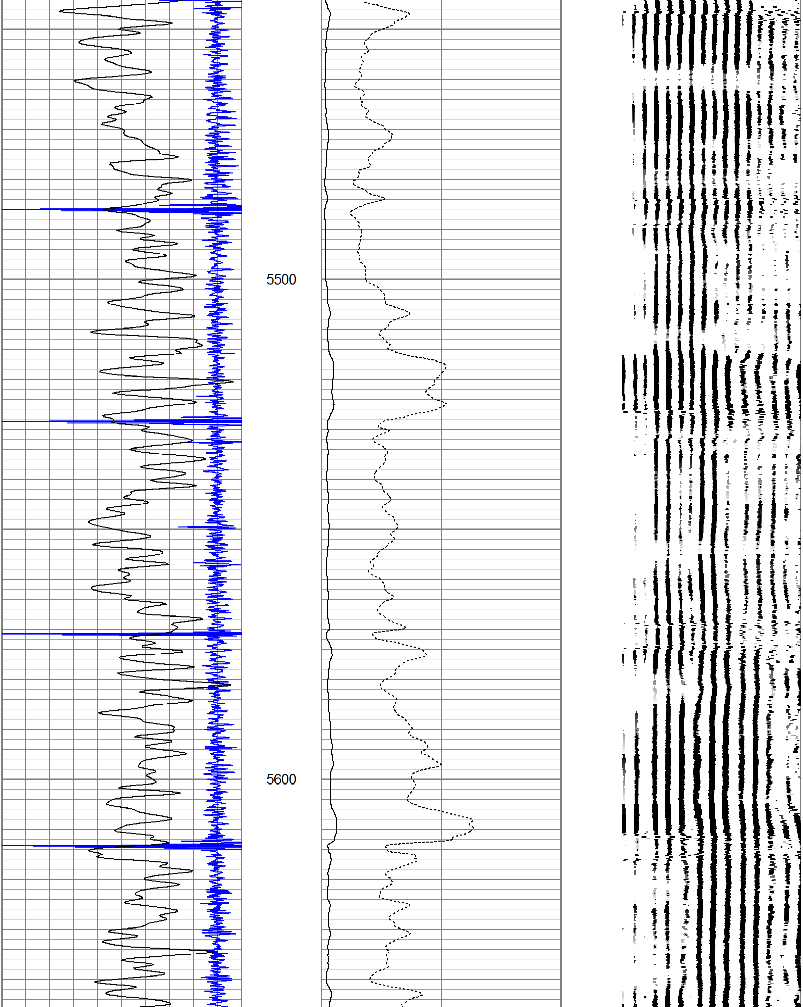


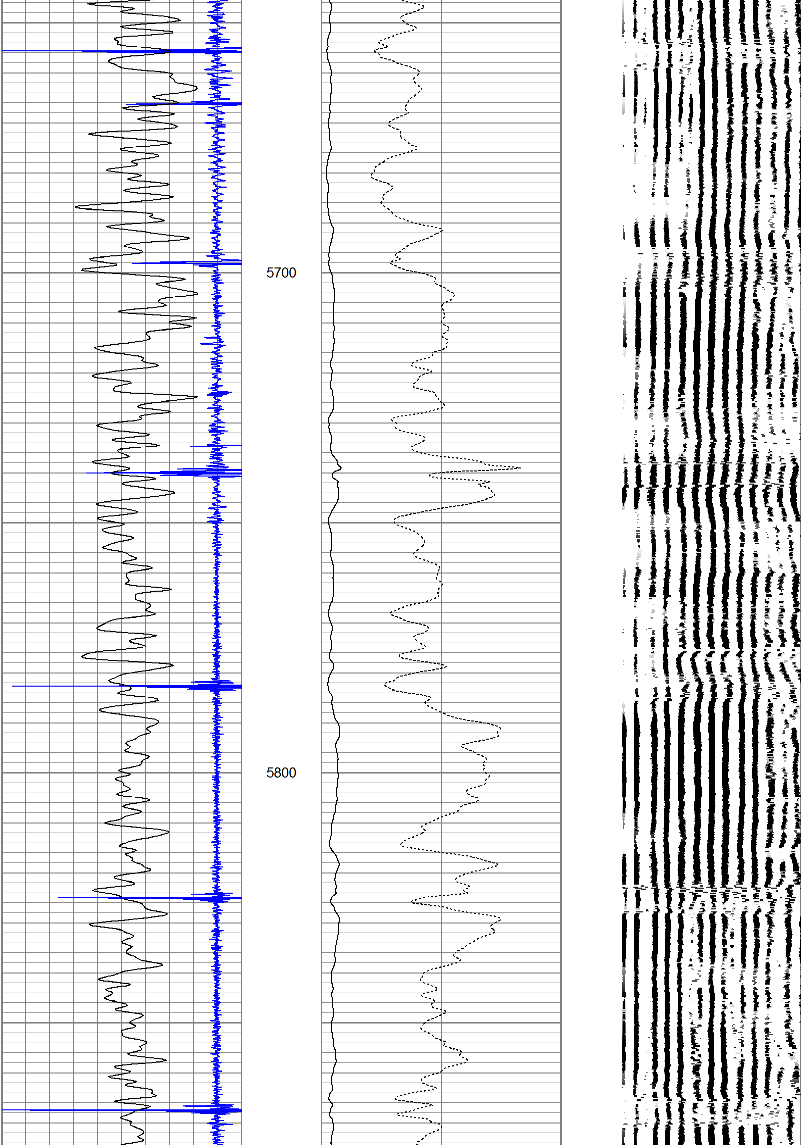


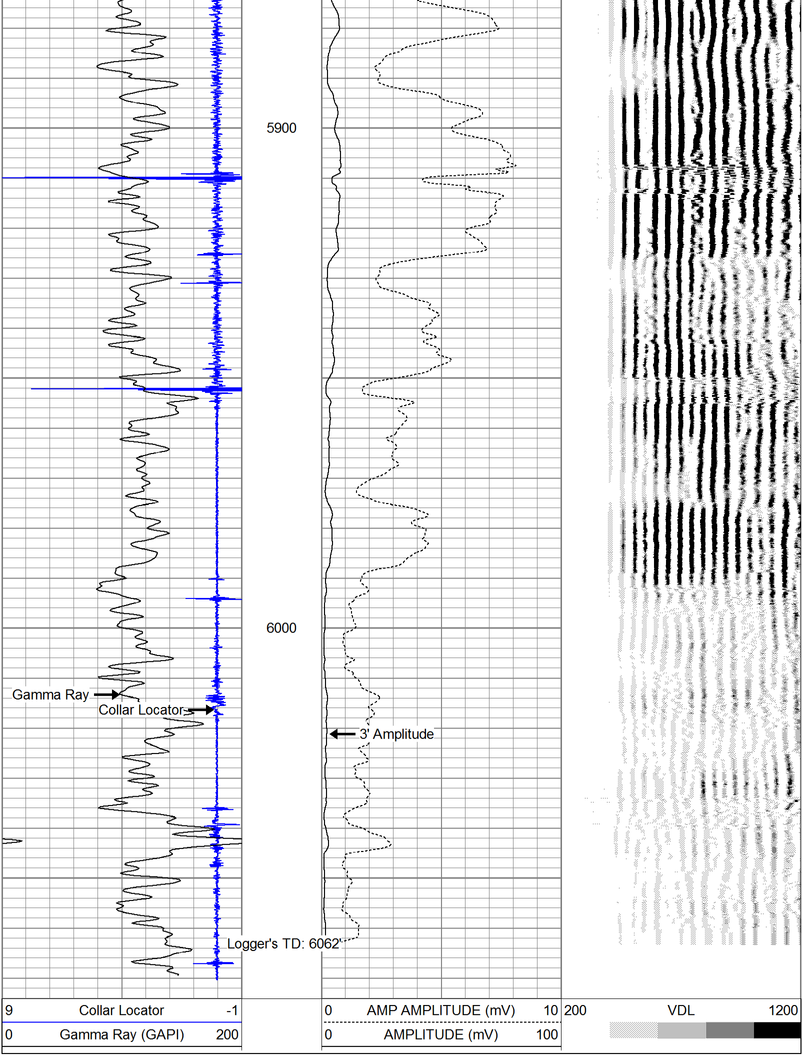












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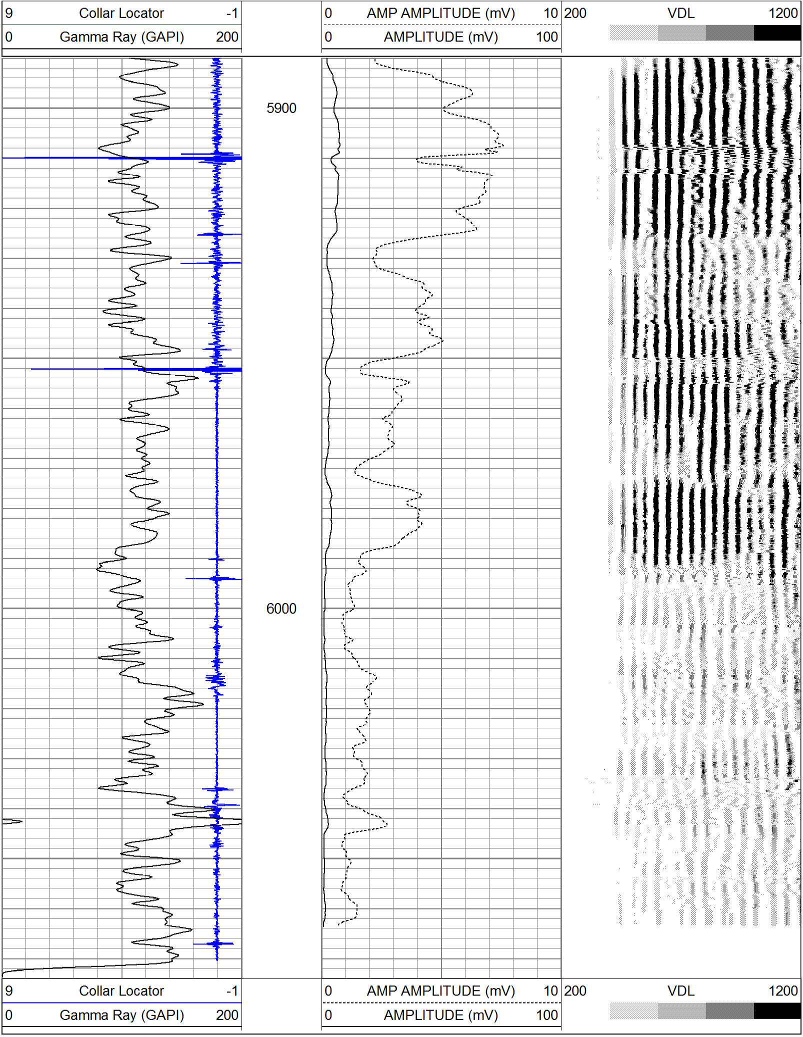
END OF MAIN PASS

Database File	14047fixed.db
Dataset Pathname	pass2.1
Presentation Format	cbl
Dataset Creation	Wed Apr 15 13:38:27 2015
Charted by	Depth in Feet scaled 1:240



Calibration Report

Database File	14047fixed.db
Dataset Pathname	pass2
Dataset Creation	Wed Apr 15 13:38:21 2015

Gamma Ray Calibration Report

Serial Number:	111211	
Tool Model:	Probe	
Performed:	Mon Apr 13 12:15:55 2015	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.8000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	Base	
Tool Model:	Probe	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	320.183	ft

Master Calibration, performed Mon Apr 13 13:28:43 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.014	0.719	2.000	62.165	82.022	3.155
CAL	1.000	1.009				
5'	0.164	0.693	2.000	62.165	113.728	-16.695
SUM						
S1	-0.068	0.632	0.000	100.000	143.042	9.663
S2	-0.077	0.613	0.000	100.000	144.958	11.097
S3	-0.042	0.638	0.000	100.000	147.083	6.173
S4	-0.030	0.709	0.000	100.000	135.402	4.037
S5	-0.043	0.790	0.000	100.000	120.057	5.189
S6	-0.047	0.845	0.000	100.000	112.217	5.231
S7	-0.030	0.792	0.000	100.000	121.622	3.624
S8	-0.077	0.703	0.000	100.000	128.188	9.907

Internal Reference Calibration, performed Wed Aug 21 11:08:58 2013:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	1.000	1.009	1.000	0.000

Air Zero Calibration, performed Mon Apr 13 09:38:39 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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Field	WATTENBERG
County	WELD
State	CO