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Pioneer Energy Services

CEMENT BOND LOG WITH GAMMA RAY

Company BONANZA CREEK ENERGY
Well STATE CROW VALLEY 41-21-20XRLNB
Field WATTENBERG
County WELD
State CO.

Company	BONANZA CREEK ENERGY		
Well	STATE CROW VALLEY 41-21-20XRLNB		
Field	WATTENBERG		
County	WELD	State	CO.
Location:	API # : 05-123-41116		Other Services NONE
	SEC 21 TWP 7N RGE 62W		
Permanent Datum	GL	Elevation 4896	Elevation K.B. 4913 D.F. G.L. 4896
Log Measured From	KB		
Drilling Measured From	KB		

Date of Service	27 JULY 2015		
Run Number	1		
Depth Driller or PBTD	N/A		
Depth Logger	5830'		
Bottom Log Interval	5830'		
Top Log Interval	SURFACE		
Open Hole Size	8.75		
Type Fluid	WATER		
Fluid Level	50'		
Fluid Density	N/A		
Max. Recorded Temperature	N/A		
Max. Wellhead Pressure	ZERO		
Wellhead Connection	N/A		
Estimated Cement Top	SEE LOG		
Unit Number	P-96		
Wireline Size	1/4"		
Location	FORT MORGAN		
Recorded By	D TRAVIS	C CHRISTENSEN	
Witnessed By	KURT DODGE		

	Size	Wt/Ft	Top	Bottom
Tubing Record				
Surface Casing	9 5/8	35#	0	535
Production Casing	7	26#	0	7225
Liner Record	4.5	11.5	0	5819

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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.
LOGGED UNDER ZERO PRESSURE
LOG ZEROED WITH 17' KB

THANK YOU FOR USING PIONEER ENERGY SERVICES

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: TRAVIS	RBT	070132
Operator: CHRISTENSEN	GR	1102495
Operator: PRENTICE		
Operator: GARCIA		

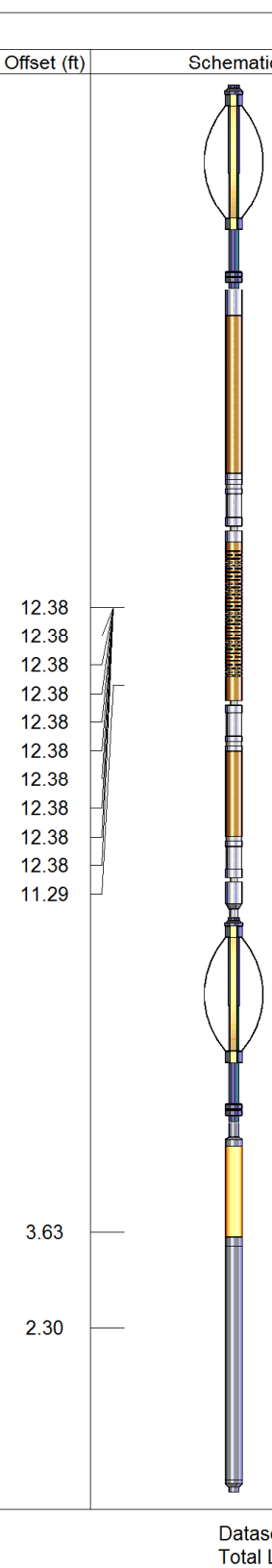
Log Variables

Database:C:\Warrior\Data\2-014060.db
Dataset: field/well/run1/pass4.3

Top - Bottom

PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft
0	26	0	1.5	0.08	7	0	15580

BOTTEMP degF	BOREID in
200	8.75

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CENT-PTS275 (1)	2.88	2.75	
WVF3FT WVFCAL WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 WVF5FT	12.38 12.38 12.38 12.38 12.38 12.38 12.38 12.38 12.38 12.38 11.29		RBT-Probe (070132) Probe Radii Bond Tool with Digital Telemetry	8.77	2.75	90.00
			CENT-PTS275 (2)	2.88	2.75	
CCL GR	3.63 2.30		GR_CCL-Probe (110249) Probe Gamma CCL	5.17	2.75	100.00

Dataset: 2-014060.db: field/well/run1/pass4.3
Total Length: 19.69 ft
Total Weight: 190.00 lb
O.D. 2.75 in

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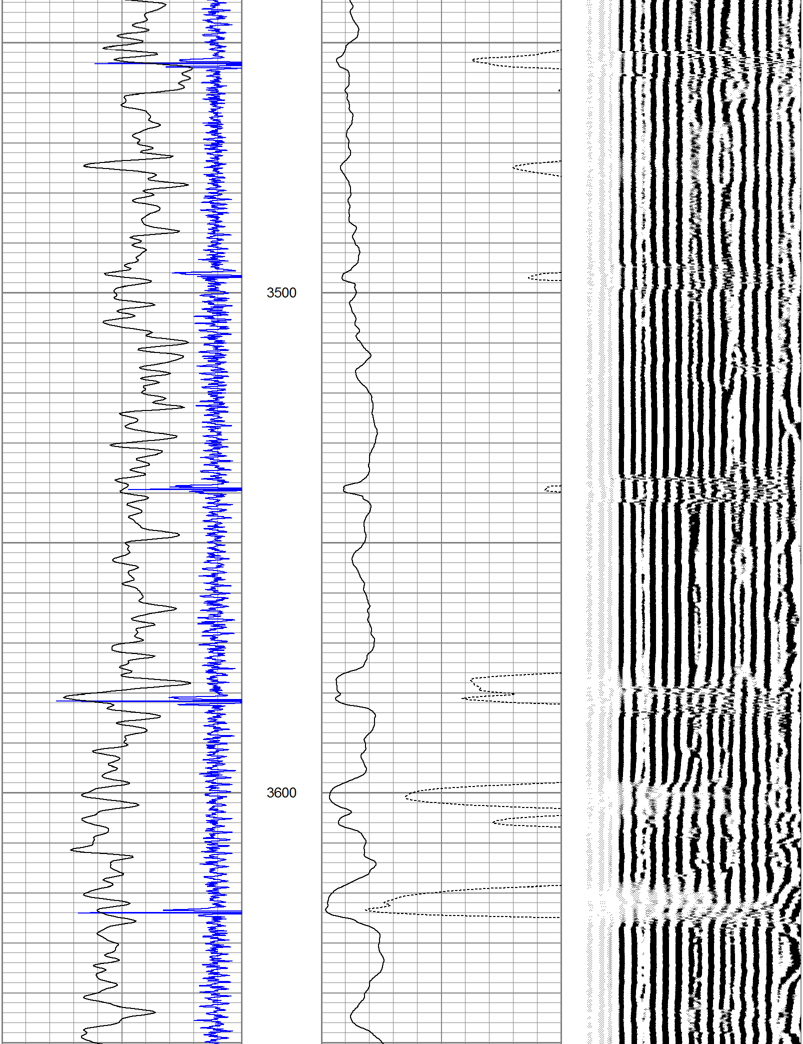
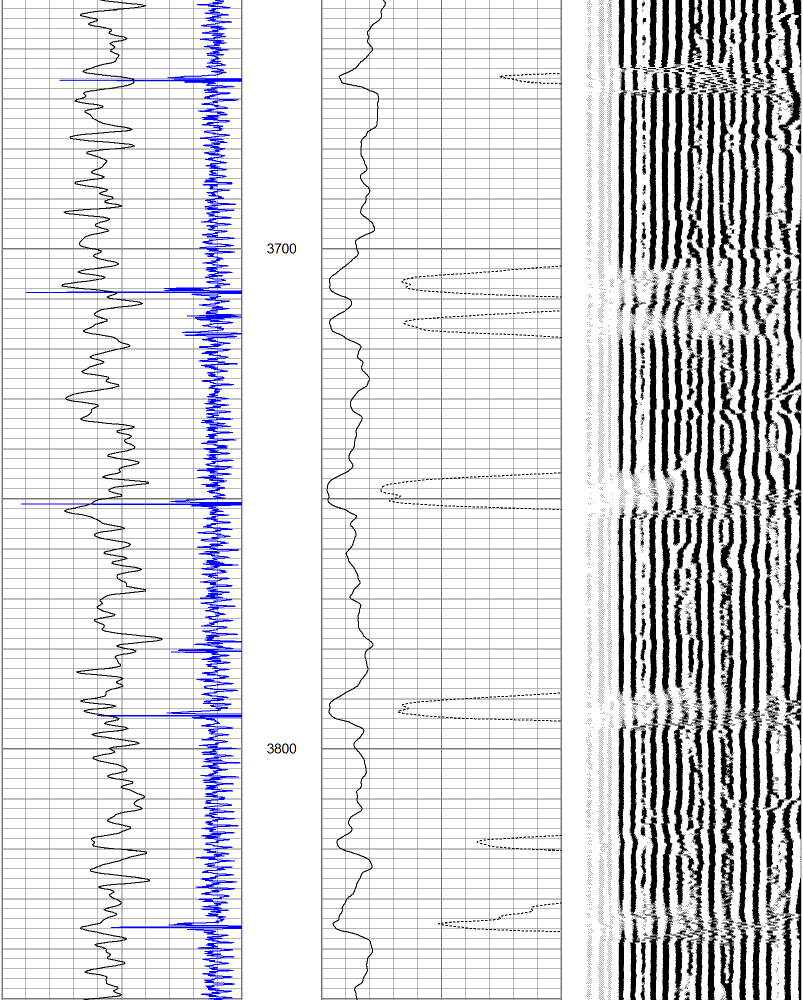
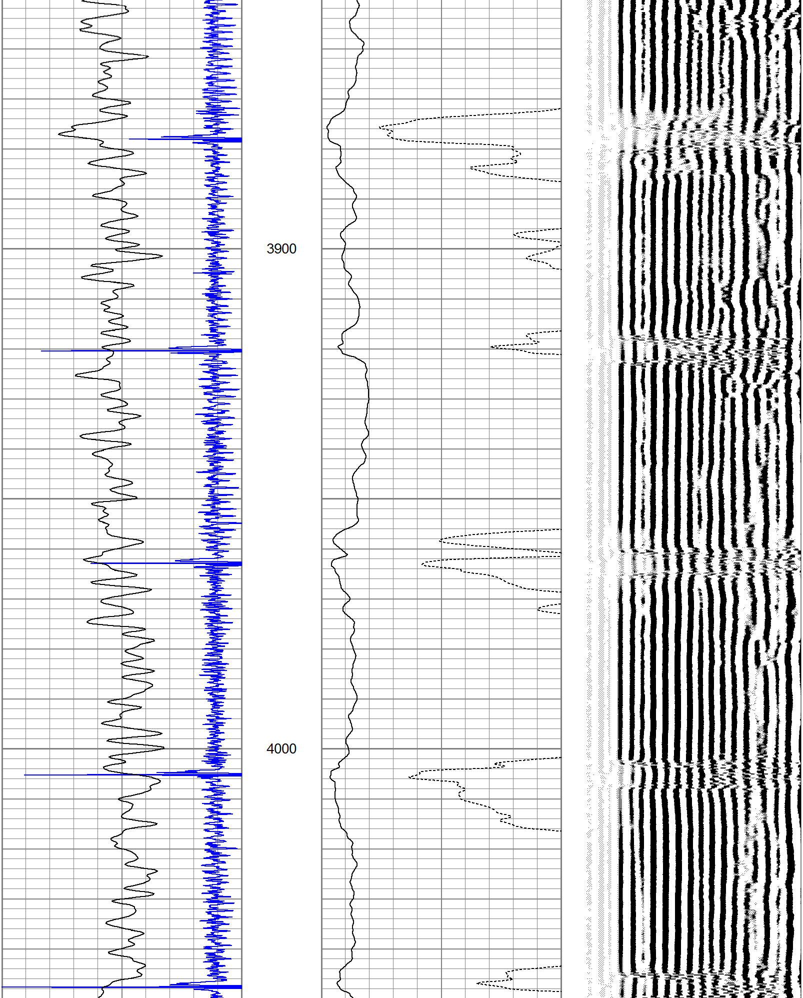
MAIN PASS

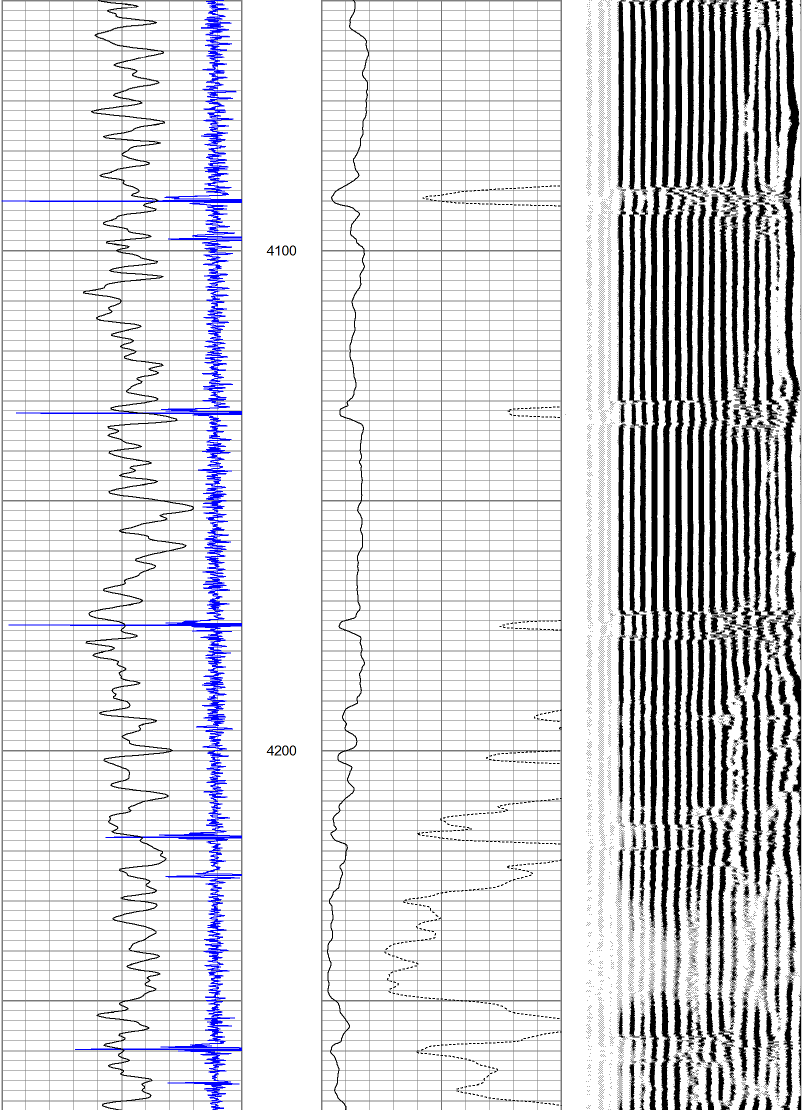
LOGGED UNDER ZERO PSI

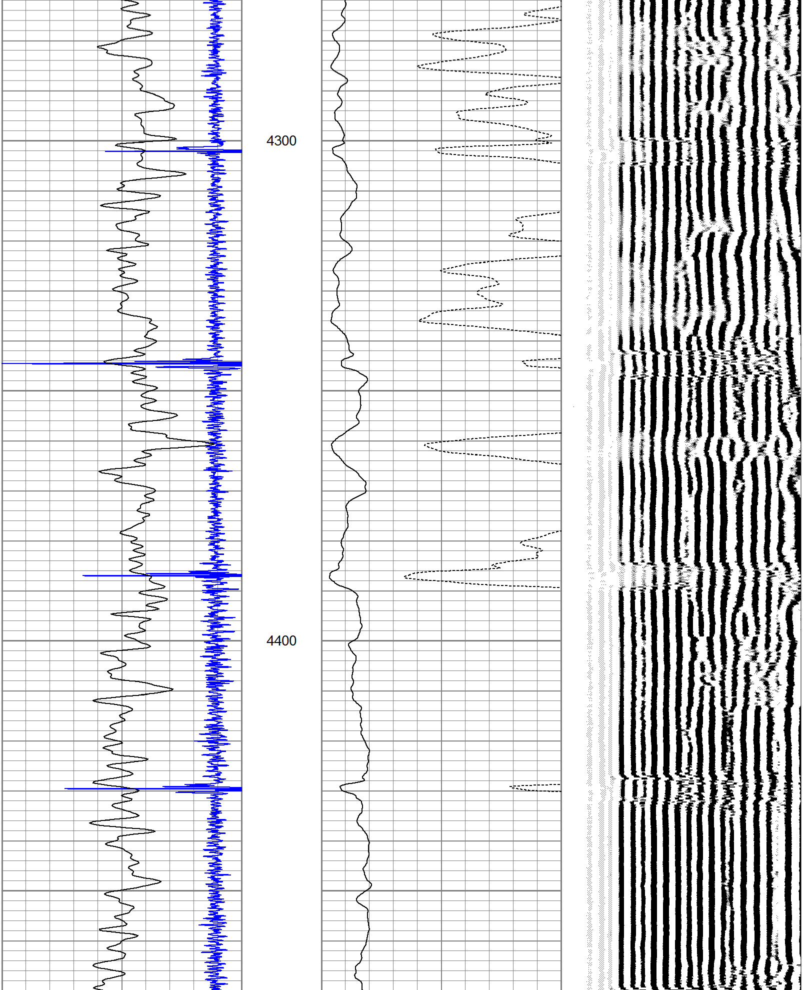
Database File: 2-014060.db
Dataset Pathname: pass4.3
Presentation Format: cbl
Dataset Creation: Mon Jul 27 13:08:24 2015 by Calc SCH 120430
Charted by: Depth in Feet scaled 1:240

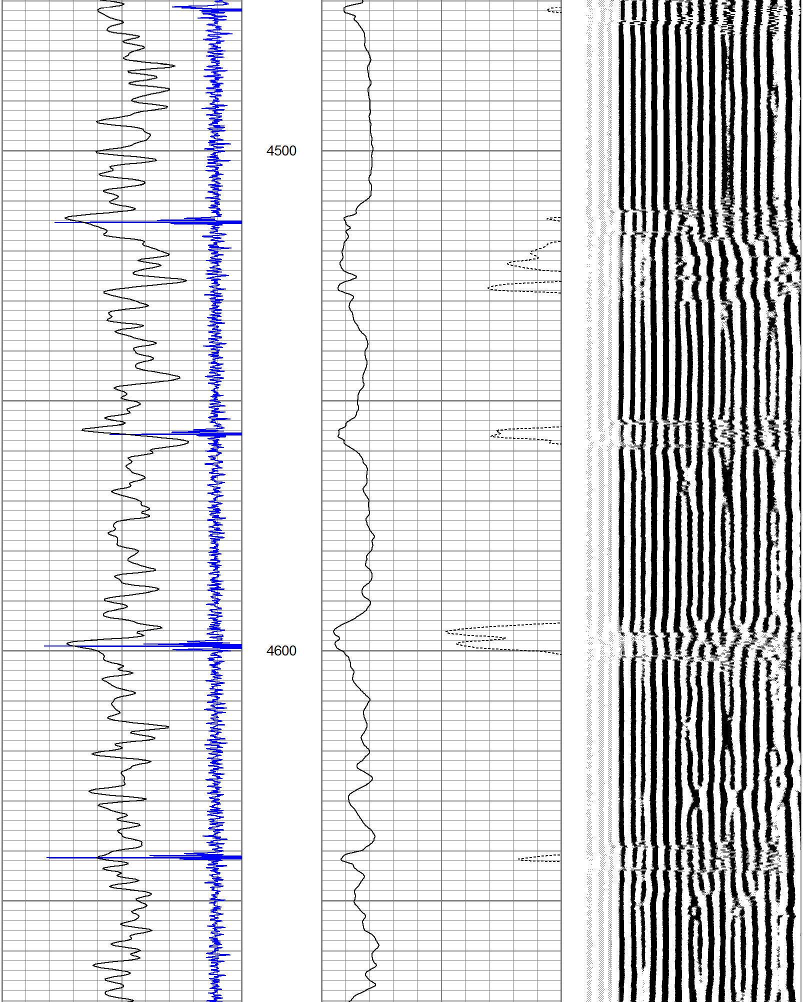


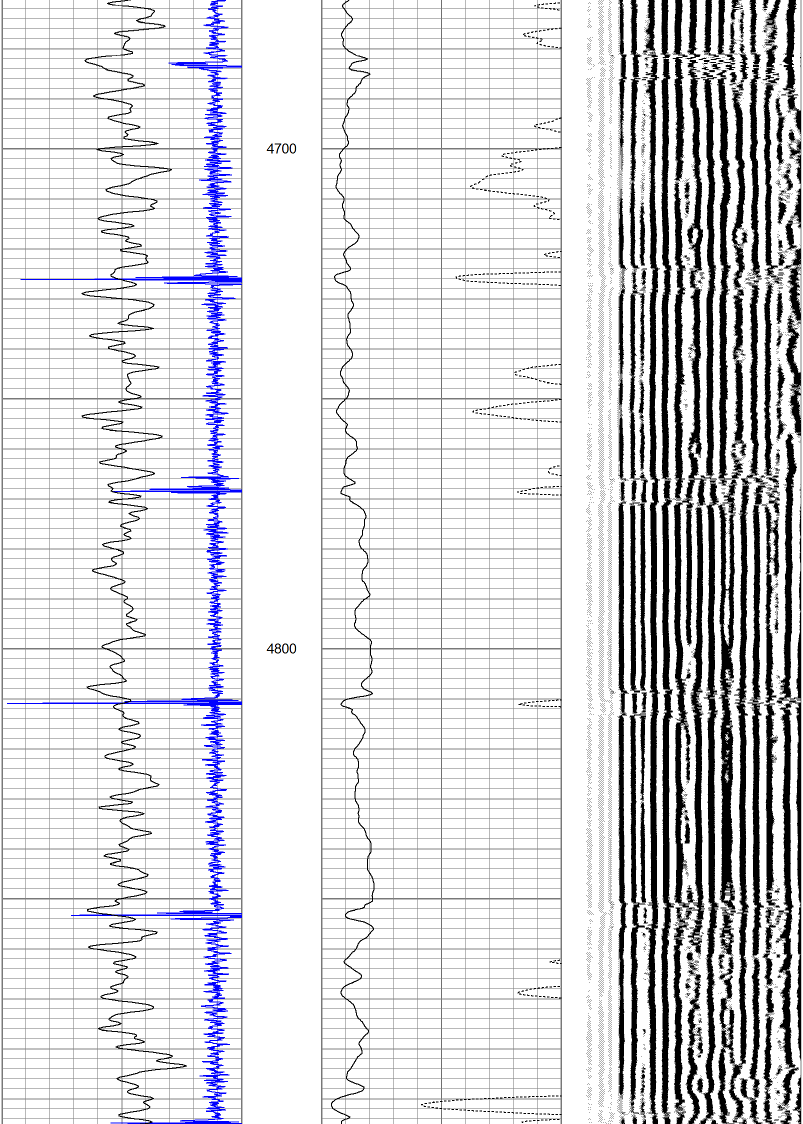


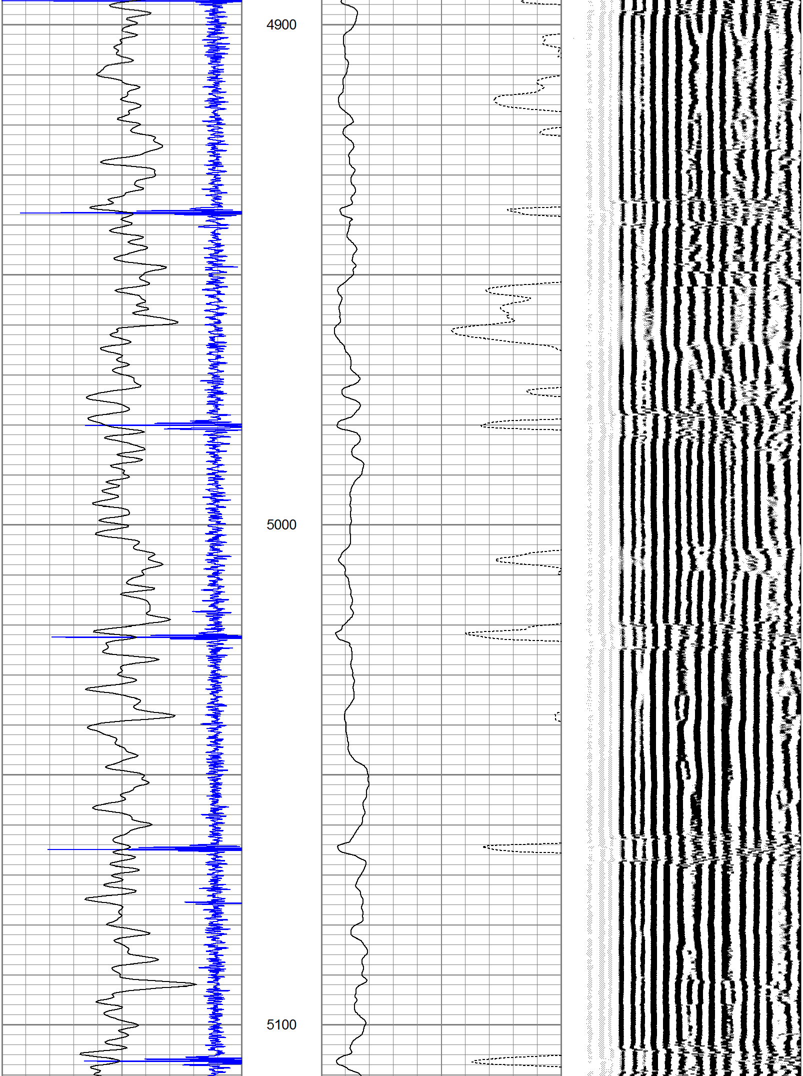


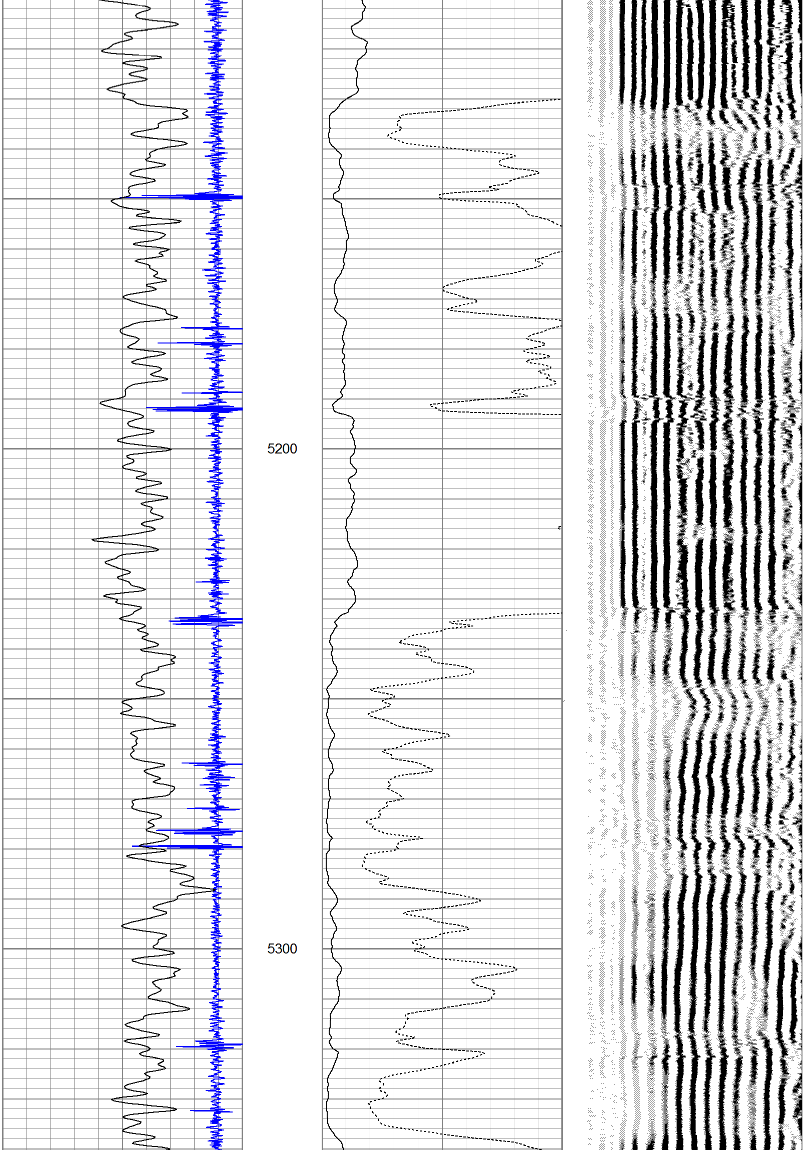


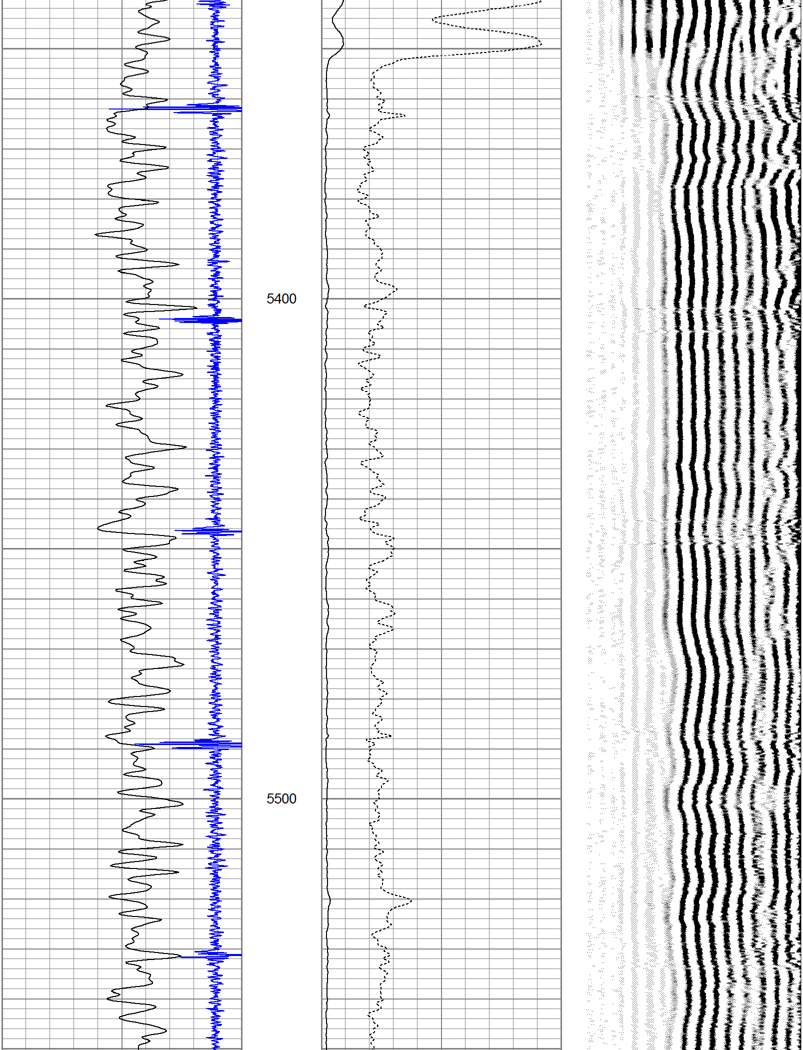


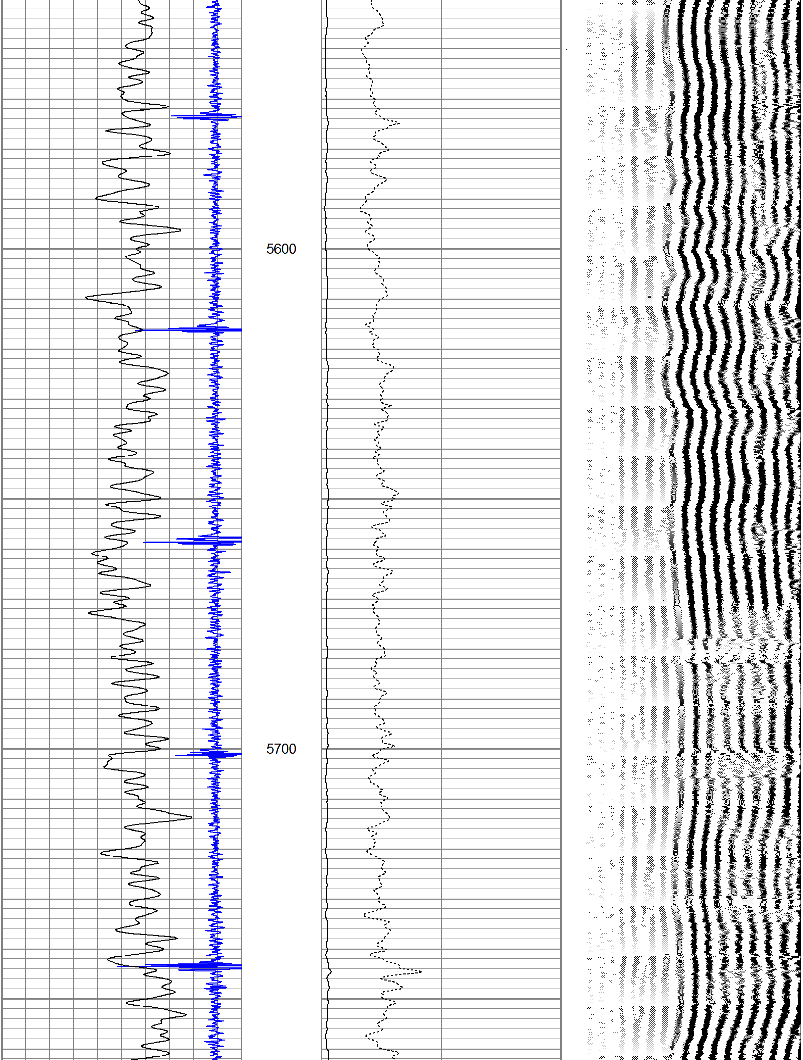


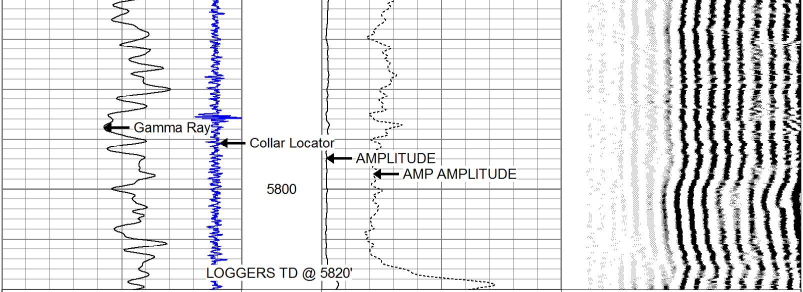












9	Collar Locator	-1	0	AMP AMPLITUDE (mV)	10	200	VDL	1200
0	Gamma Ray (GAPI)	200	0	AMPLITUDE (mV)	100			

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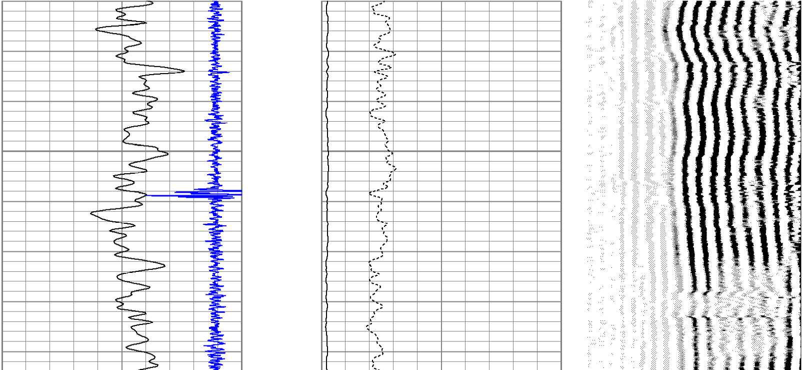
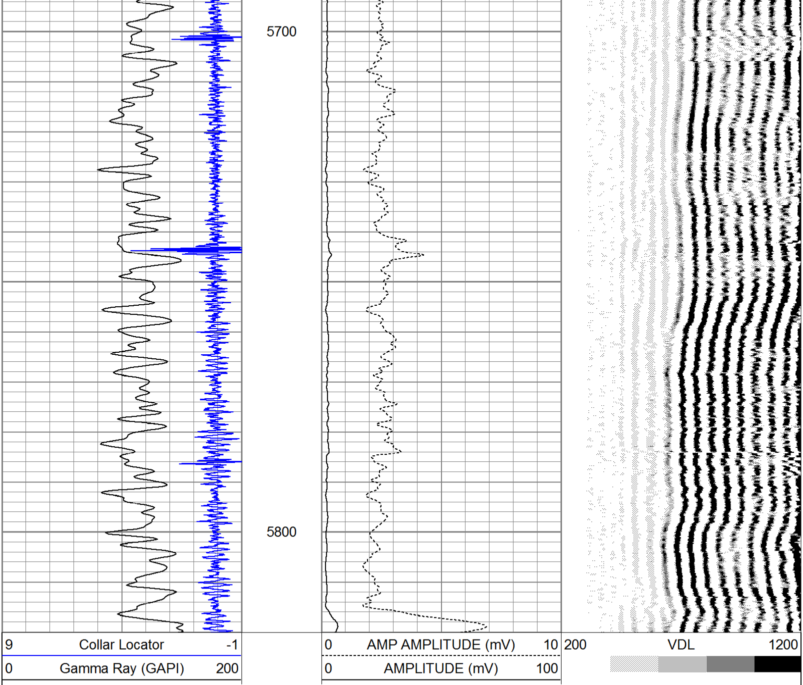
REPEAT PASS

Database File: 2-014060.db
Dataset Pathname: pass3.1
Presentation Format: cbl
Dataset Creation: Mon Jul 27 13:14:18 2015 by Calc SCH 120430
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			





Calibration Report

Database File: 2-014060.db
Dataset Pathname: pass4.3
Dataset Creation: Mon Jul 27 13:08:24 2015 by Calc SCH 120430

Gamma Ray Calibration Report

Serial Number: 110249
Tool Model: Probe
Performed: Mon Jul 13 11:39:22 2015

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.9900 GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	070132	
Tool Model:	Probe	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	178.700	ft

Master Calibration, performed Mon Jul 27 13:07:43 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.047	1.759	1.500	62.165	35.417	-0.149
CAL	0.018	2.017				
5'	0.009	1.240	1.500	62.165	49.267	1.054
SUM						
S1	0.046	1.669	0.000	100.000	61.591	-2.822
S2	0.037	1.761	0.000	100.000	58.036	-2.175
S3	0.041	1.820	0.000	100.000	56.215	-2.305
S4	0.039	1.686	0.000	100.000	60.701	-2.349
S5	0.035	1.776	0.000	100.000	57.426	-1.989
S6	0.040	1.922	0.000	100.000	53.131	-2.136
S7	0.031	1.970	0.000	100.000	51.551	-1.573
S8	0.024	1.789	0.000	100.000	56.666	-1.388

Internal Reference Calibration, performed Mon Jul 27 11:25:31 2015:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.023	1.979	0.018	2.017	1.022	-0.006

Air Zero Calibration, performed Mon Jul 27 10:30:11 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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Company	BONANZA CREEK ENERGY
Well	STATE CROW VALLEY 41-21-20XRLNE
Field	WATTENBERG
County	WELD
State	CO.