GAMMA RAY CCL
CEMENT BOND VDL

JW WIRELINE COMPANY

Company	AURORA POWER RESOURCES INC
Well	DAVID BENDER 1A
Field	BIJOU WEST
County	MORGAN
State	COLORADO

Company AURORA POWER RESOURCES INC
Well DAVID BENDER 1A
Field BIJOU WEST
County MORGAN State COLORADO

Location: API # : 05-087-08178-00
SHL: NWSW 2441' FSL & 260' FWL
LAT: 40.326670, LONG. -104.054240
SEC 12 TWP 4N RGE 60W

Other Services

Permanent Datum	GL	Elevation	4462	Elevation
Log Measured From	KB			K.B. 4476
Drilling Measured From	KB			D.F. 4475 G.L. 4462

Date	2-APRIL-2014
Run Number	ONE
Depth Driller	6585
Depth Logger	6508
Bottom Logged Interval	6504
Top Log Interval	200
Open Hole Size	7.875
Type Fluid	WATER
Density / Viscosity	9.1 lbm/gal
Max. Recorded Temp.	175
Estimated Cement Top	4350
Time Well Ready	16:30
Time Logger on Bottom	17:15
Equipment Number	2829
Location	STERLING, CO
Recorded By	BRIAN HECHT
Witnessed By	ED JONES

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	5.5"			
Liner				

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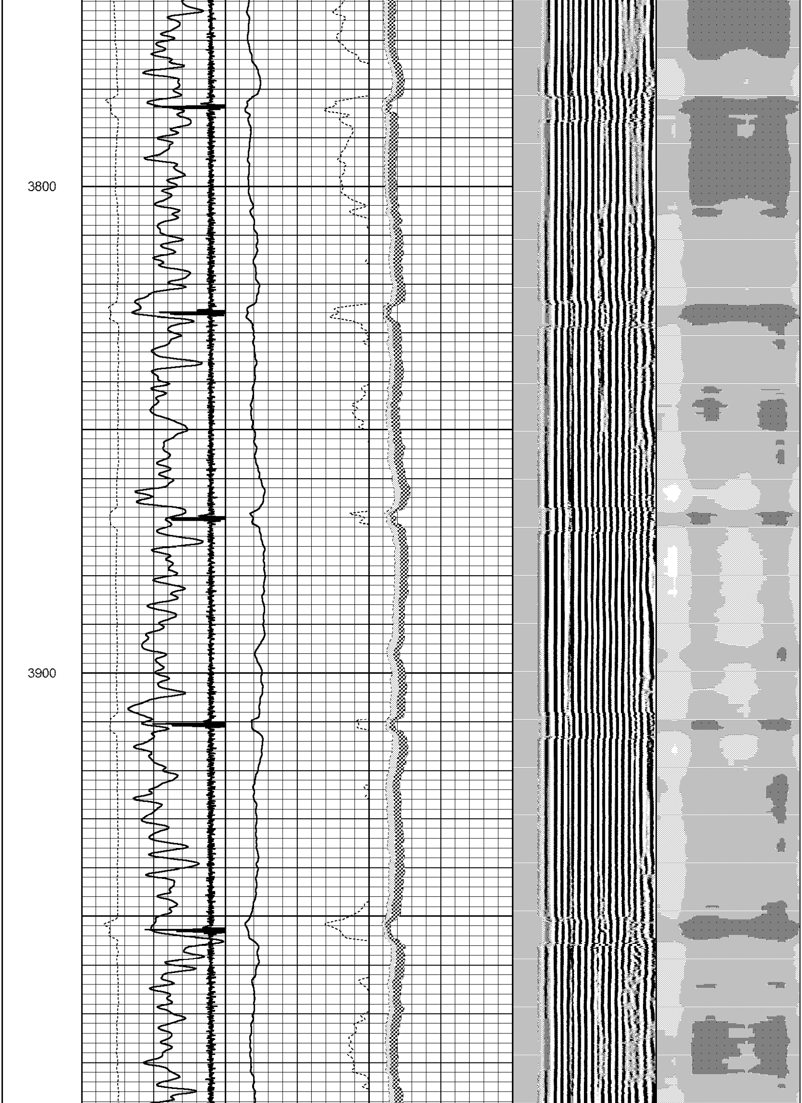
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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.

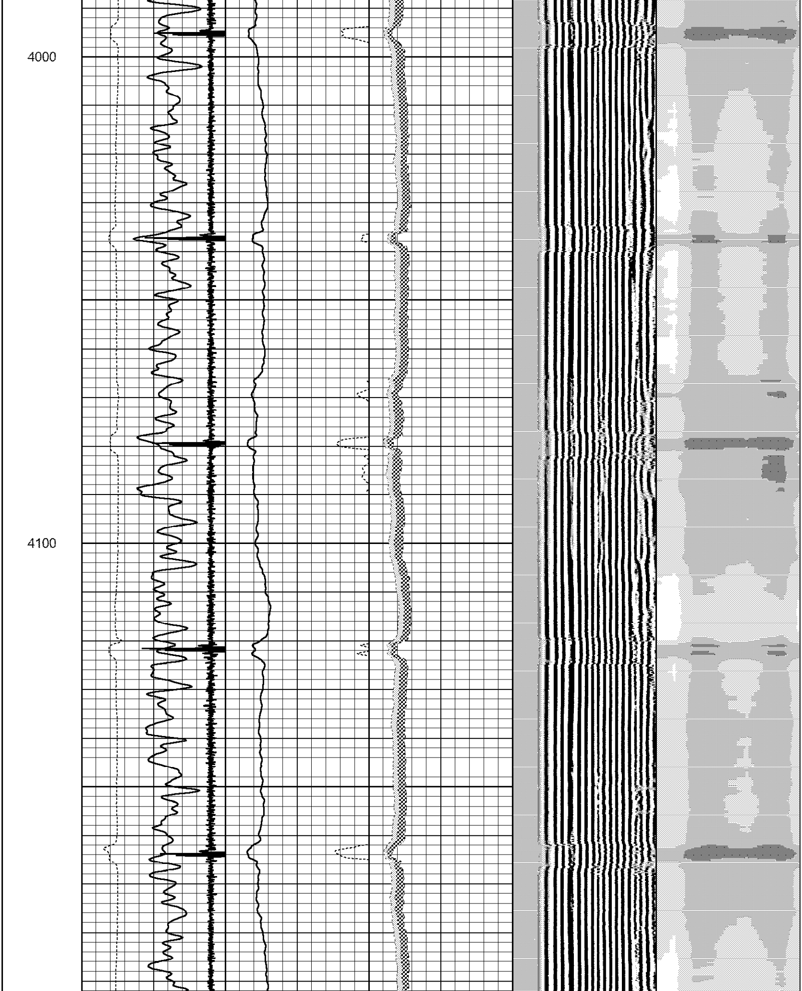
Comments

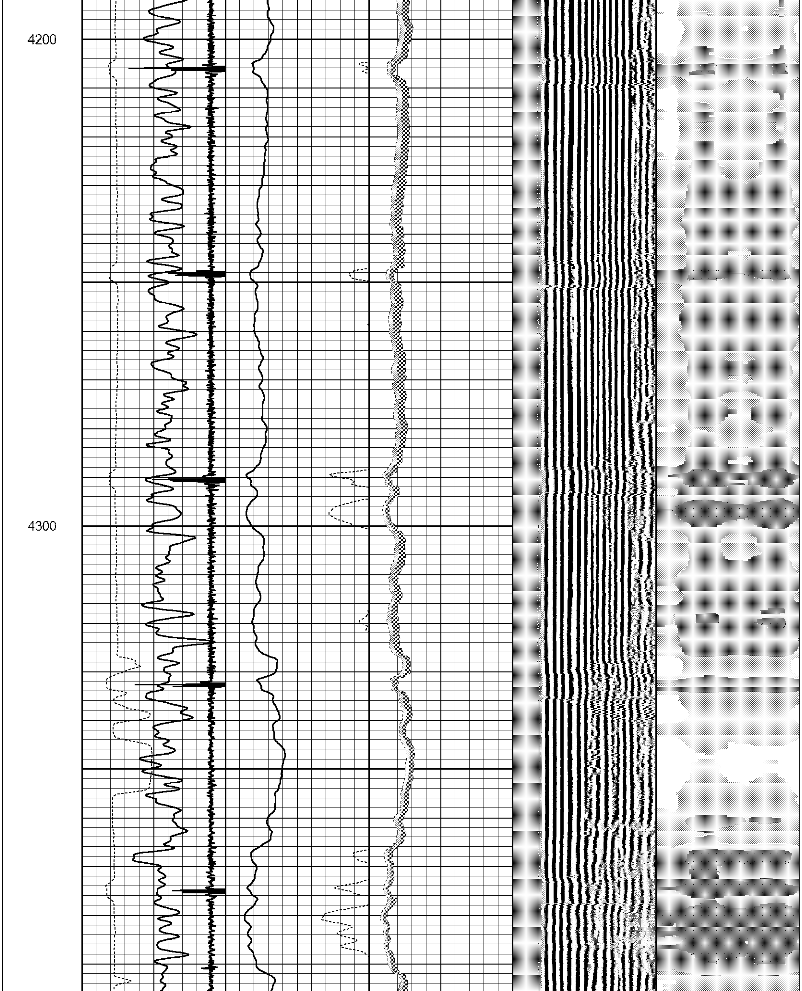
CORRELATED TO SCHLUMBERGER OPEN HOLE LOG
DATED 16-FEB-2014

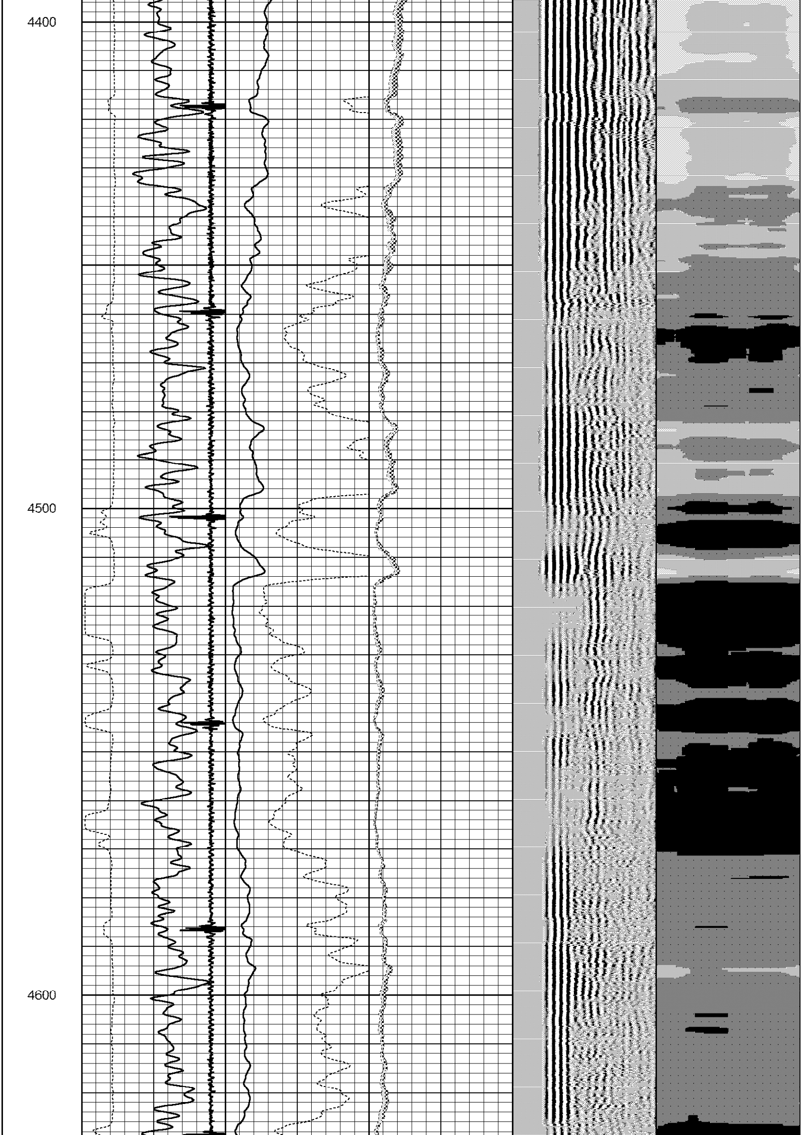
Database File:	david bender 1a.db
Dataset Pathname:	pass3.3
Presentation Format:	scbl02
Dataset Creation:	Thu Apr 03 10:52:31 2014 by Calc Std Casedhole 10121
Charted by:	Depth in Feet scaled 1:240

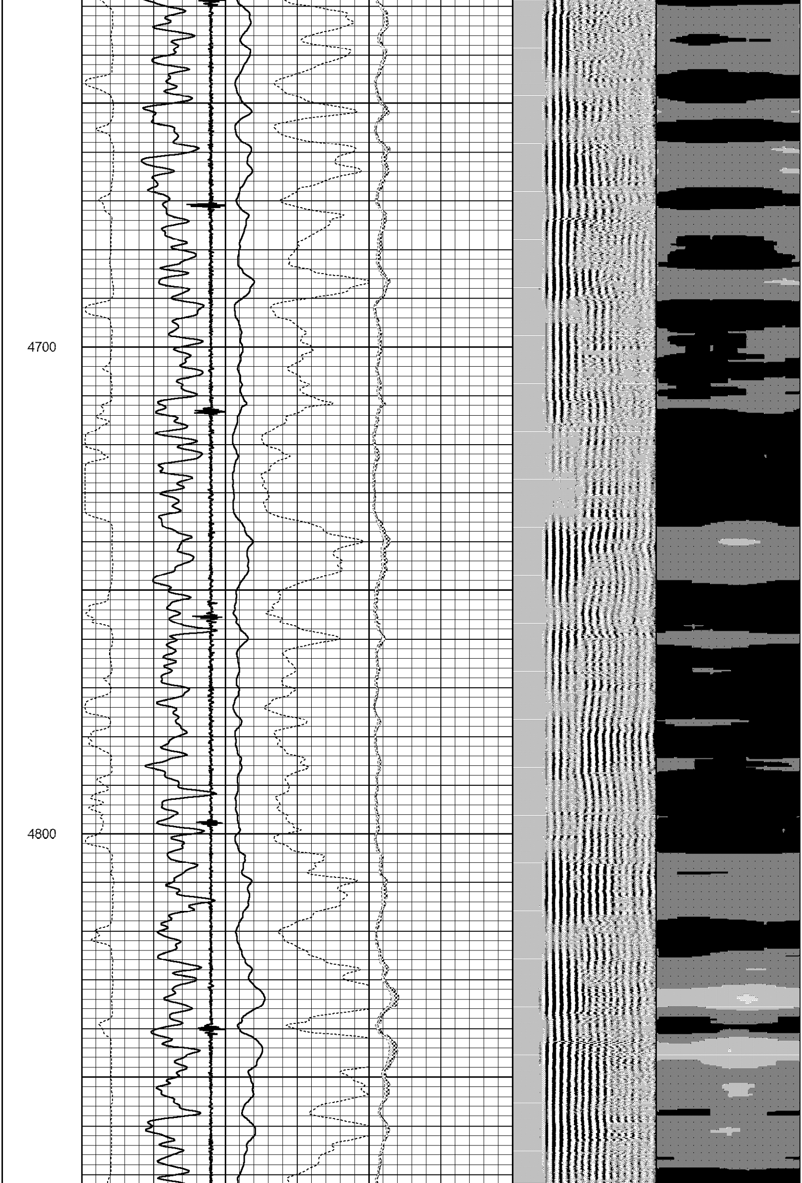
350 TT (usec) 200	0 AMP (mV) 100	-2 AMPAVG 200	200 VDL 1200	1 Cement Map 8
-9 CCL 1	0 AMPx5 (mV) 20	-2 AMPMAX 200		■▩▨░
0 GR (GAPI) 200		-2 AMPMIN 200		

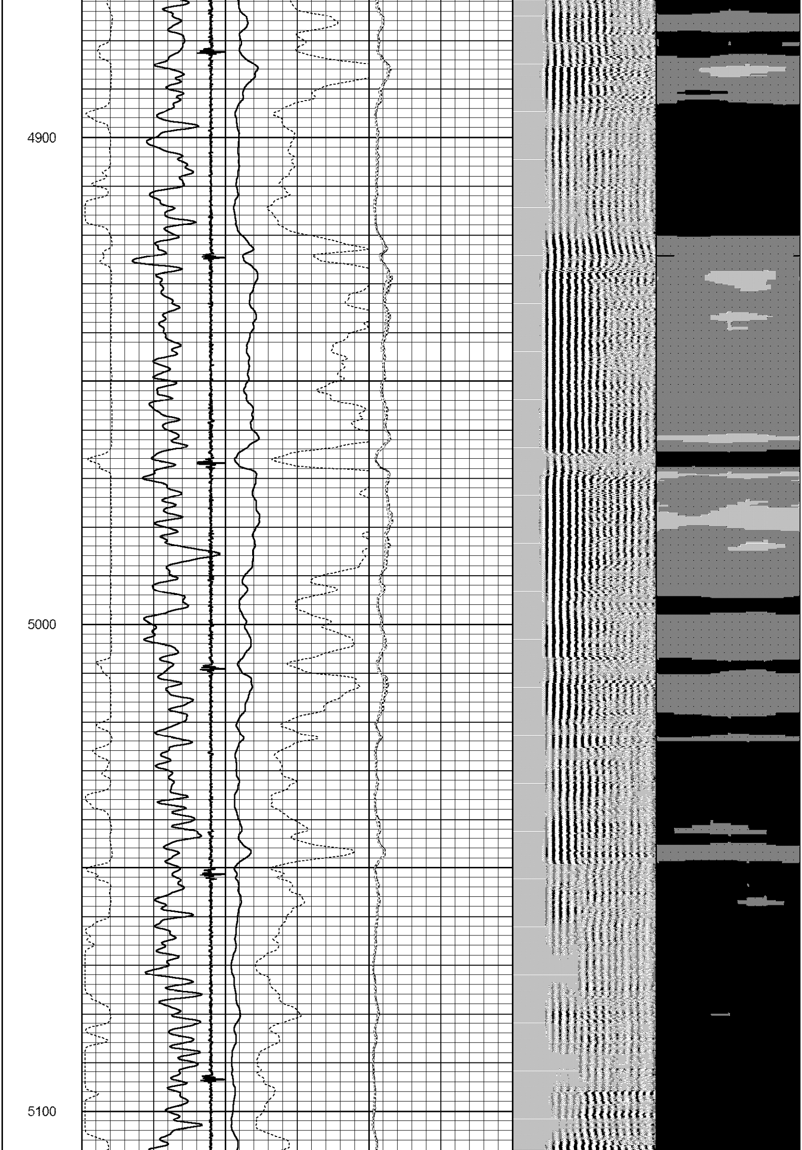


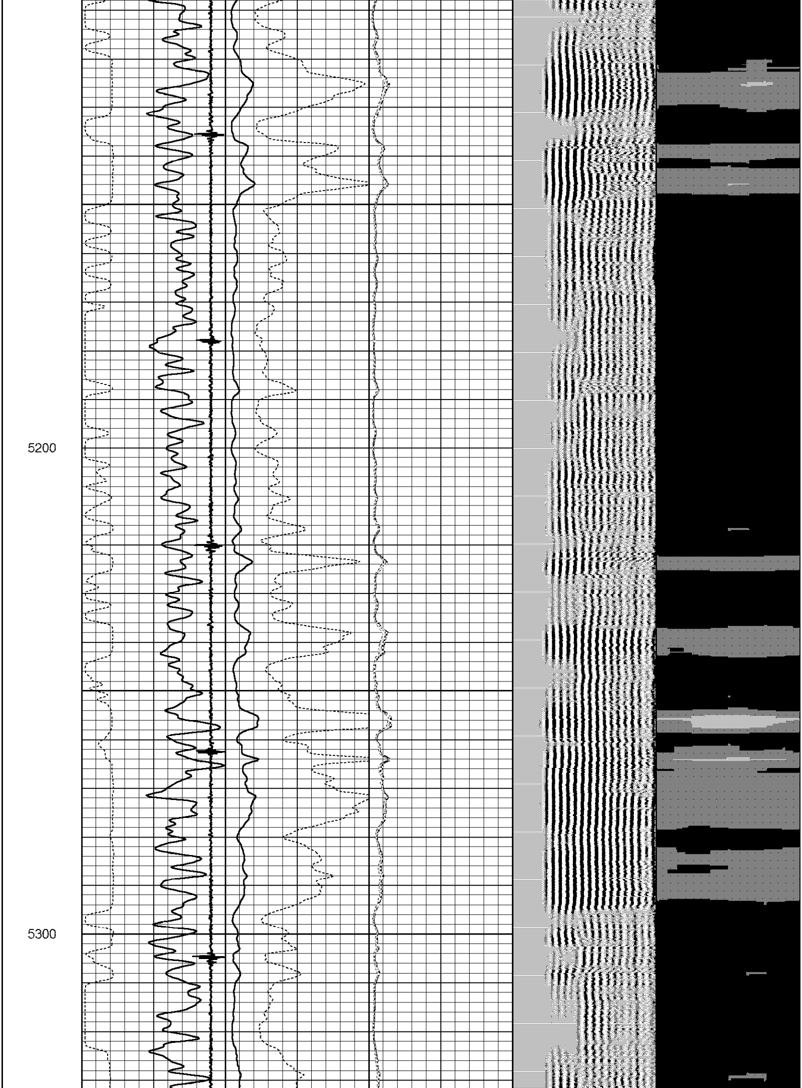


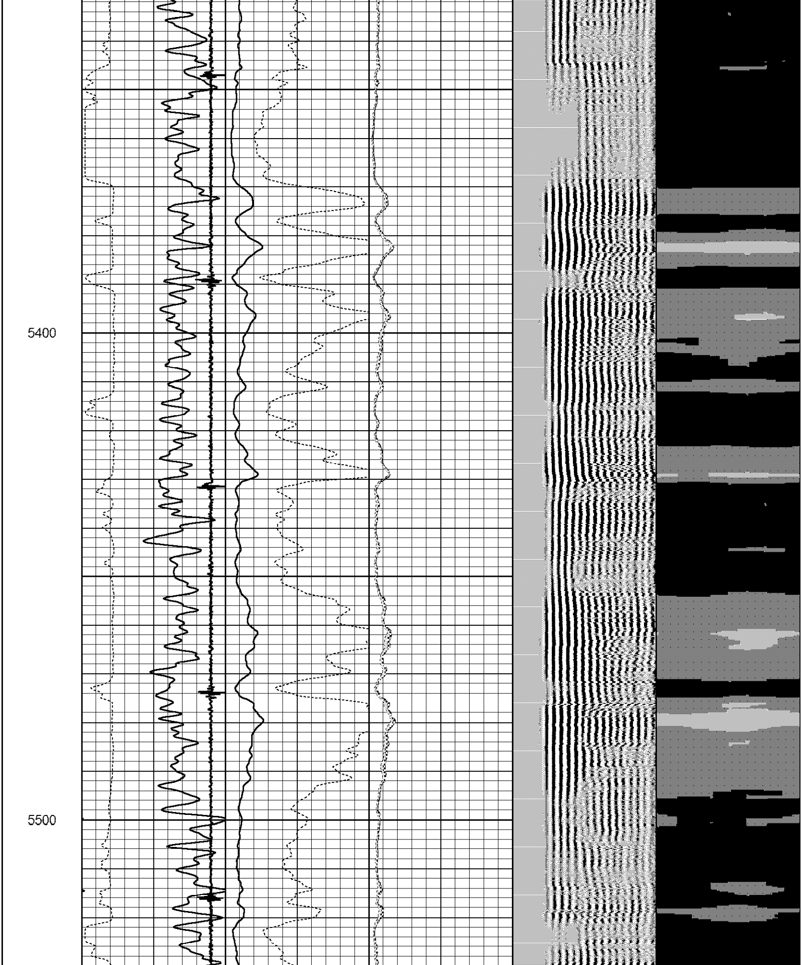


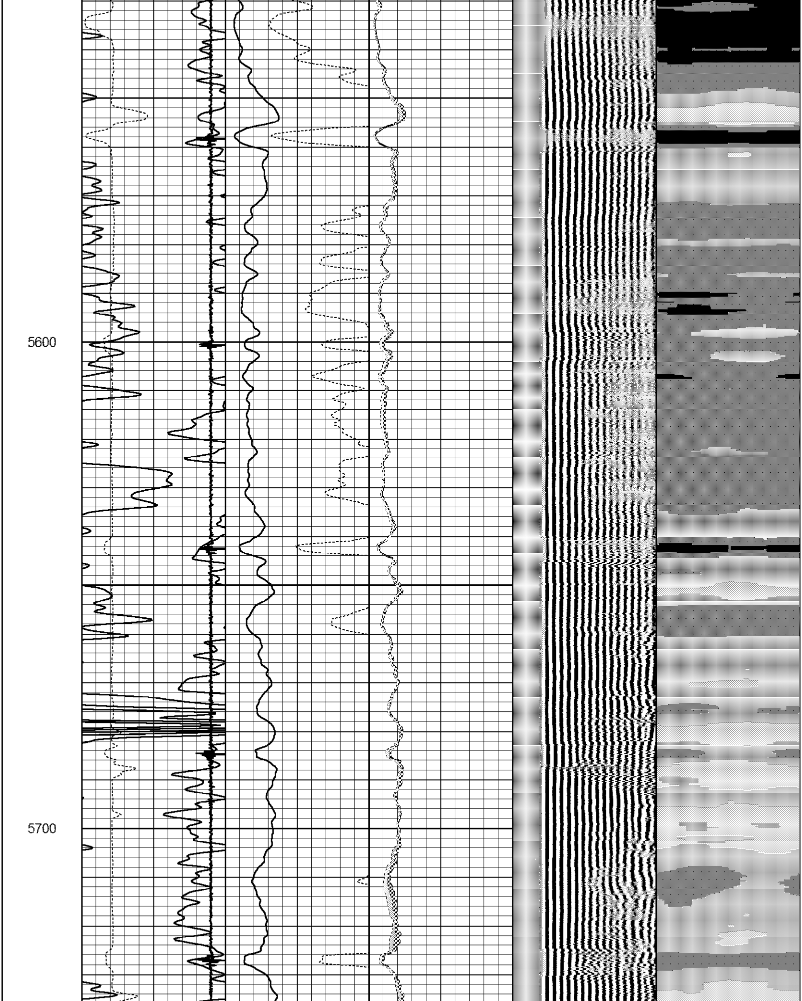


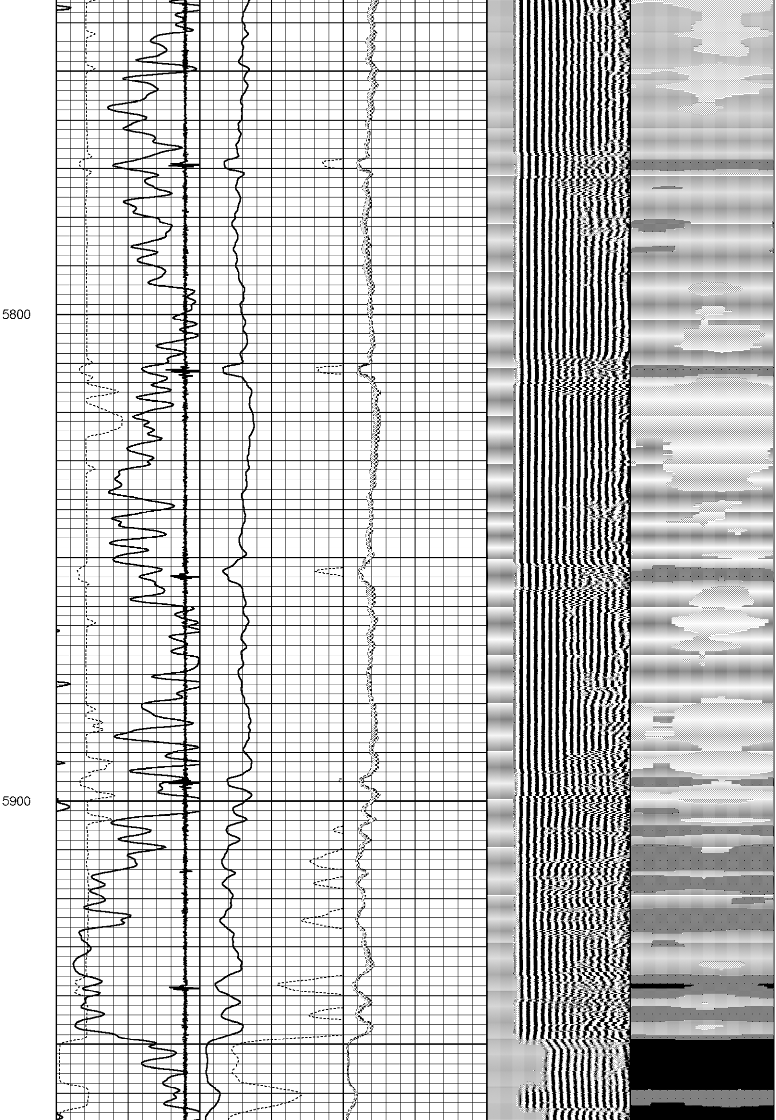


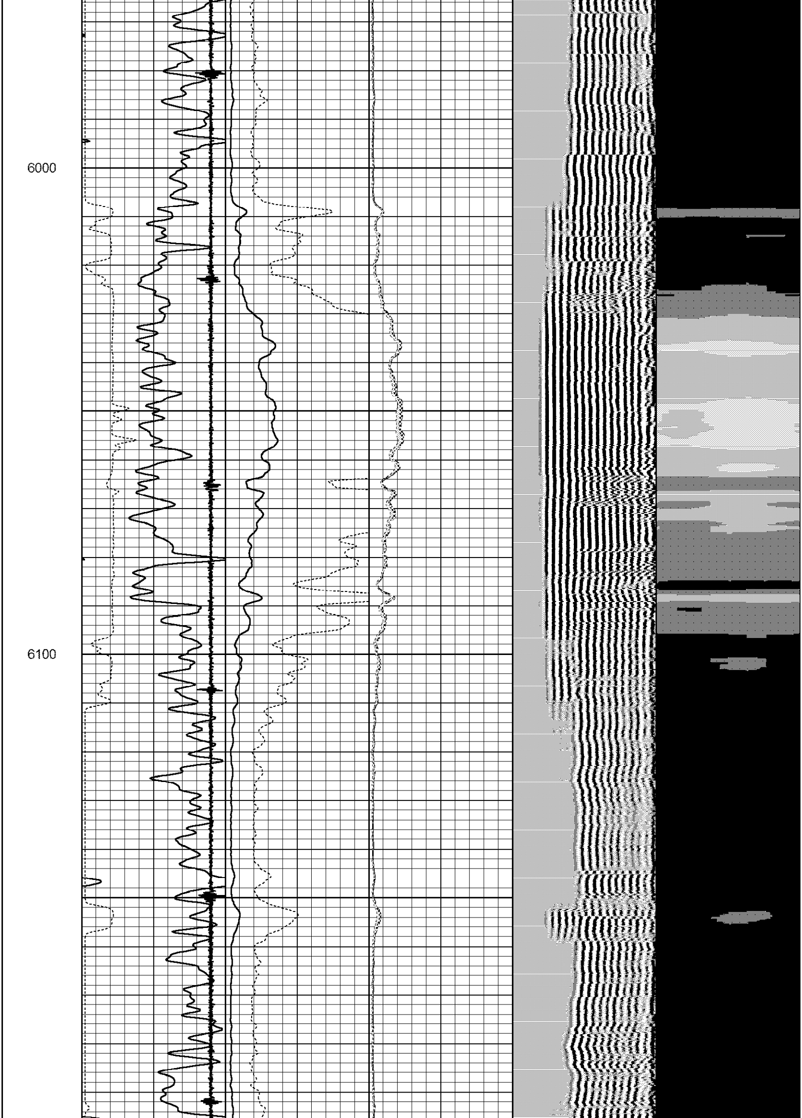


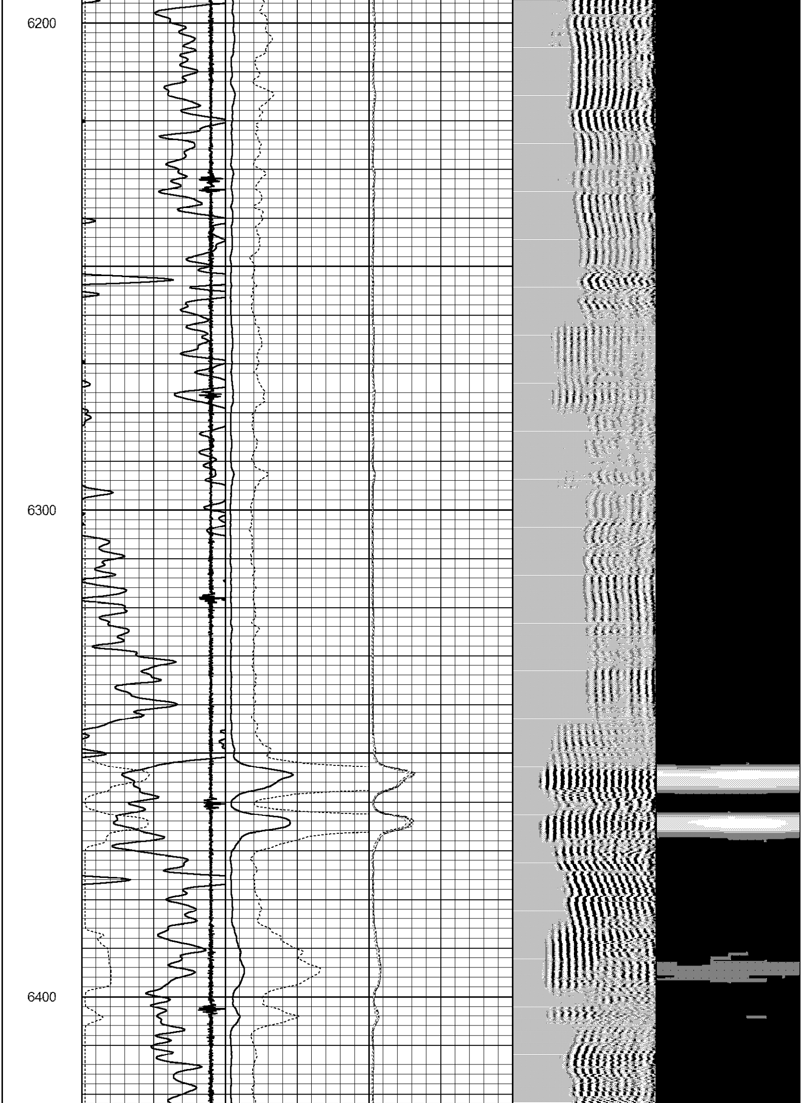


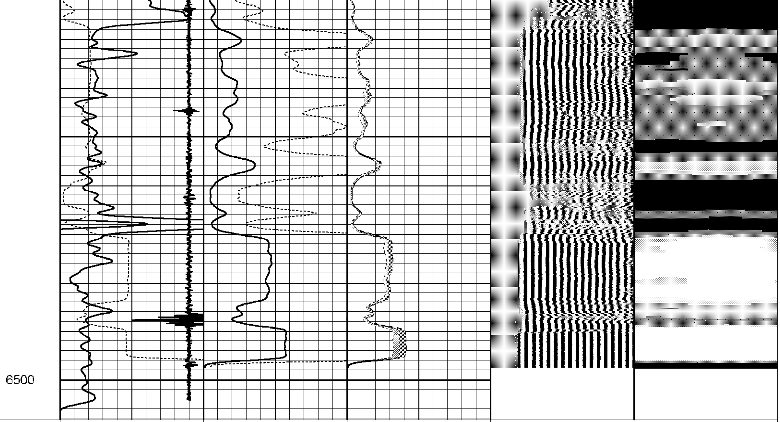




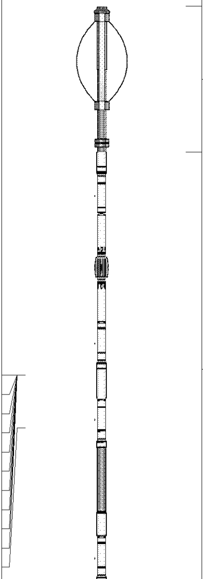


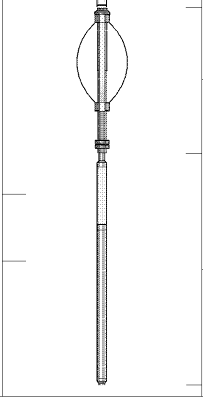






350 TT (usec) 200	0 AMP (mV) 100	-2 AMPAVG 200	200 VDL 1200	1 Cement Map 8
-9 CCL 1	0 AMPx5 (mV) 20	-2 AMPMAX 200		■▓▒░
0 GR (GAPI) 200		-2 AMPMIN 200		

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CENT-Probe (Probe1) PROBE 2.75 CENT	3.00	2.75	25.00
WVF3FT	12.08		RBT-Probe (4.5040904) Probe Radii Bond Tool with Digital Telemetry	8.92	2.75	90.00
WVFCAL	12.08					
WVFS1	12.08					
WVFS2	12.08					
WVFS3	12.08					
WVFS4	12.08					
WVFS5	12.08					
WVFS6	12.08					
WVFS7	12.08					
WVFS8	12.08					
WVF5FT	11.00					



		CENT-Probe (Probe2) PROBE 2.75 CENT	3.00	2.75	25.00
CCL	3.92				
GR	2.54	GR-Probe275dig (pr051112) Probe Digital Gamma CCL	4.75	2.75	57.00

Dataset:	david bender 1a.db: field/well/run1/pass3
Total Length:	19.67 ft
Total Weight:	197.00 lb
O.D.	2.75 in

Calibration Report

Database File: david bender 1a.db
Dataset Pathname: pass3
Dataset Creation: Wed Apr 02 17:09:14 2014 by Log Std Casedhole 10121

Gamma Ray Calibration Report

Type / Serial: Probe275dig / pr051112

SHOP CALIBRATION

Sun Jun 13 14:33:21 1993

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		1.0000			GAPI/cps

PRIMARY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

BEFORE SURVEY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number:	4.5040904	
Tool Model:	Probe	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	995.500	ft

Master Calibration, performed Wed Apr 02 16:39:11 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.000	1.256	1.000	71.921	56.456	1.000
CAL	0.000	2.168				
5'	0.000	1.032	1.000	71.921	68.715	1.000
SUM						
S1	0.000	1.328	0.000	71.000	53.465	0.000
S2	0.000	1.402	0.000	71.000	50.656	0.000
S3	0.000	1.375	0.000	71.000	51.635	0.000
S4	0.000	1.268	0.000	71.000	56.013	0.000
S5	0.000	1.164	0.000	71.000	61.010	0.000
S6	0.000	1.109	0.000	71.000	64.024	0.000
S7	0.000	1.142	0.000	71.000	62.156	0.000
S8	0.000	1.232	0.000	71.000	57.653	0.000

Internal Reference Calibration, performed Wed Dec 31 18:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	2.168	1.000	0.000

Air Zero Calibration, performed Wed Apr 02 16:37:00 2014:

	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