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CEMENT BOND LOG

Company	EXTRACTION O & G
Well	KODAK #10
Field	WATTENBERG
County	WELD
State	CO

Company	**EXTRACTION O & G**		
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County	**WELD**	State	**CO**

API No.: 05-123-37257 Serv #: 1043

Location: LAT. 40.461490
LONG. -104.885380
1341' FNL & 1042' FWL

Sec: 27 Twp: 6N Rge: 67W

Other Services
CCL
TEMPERATURE

Permanent Datum	GROUND LEVEL	Elevation	4769'	Elevation	
Log Measured From	KB , 24 Ft. above perm. datum			K.B.	4793'
Drilling Measured From	KB			D.F.	4792'
				G.L.	4769'

Date @ Time Logged	6-FEB-15 @1000 HRS	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.4 LB/GL
Depth - Driller	16905'	Fluid Level	412'
Depth - Logger	6575'	Cement Top Est. Logged	612'
Bottom - Logged Interval	6562'	Equipment / Location	GD-114 / CASPER WY
Top - Log Interval	SURFACE	Recorded by	M. FENN
Max. Recorded Temp.	194° F	Witnessed by	H. MCGRAW

CEMENTING DATA	Surface String	Protection String	Production String	Liner
Date / Time Cemented				
Primary / Squeeze				
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume				
Cement Type / Weight	/	/	/	/
Formulation				
Mud Type / Mud Wgt.	/	/	/	/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
				9 5/8"	36#	SURFACE	798'
				7"	26#	SURFACE	7491'
				4 1/2"	13.5#	6587'	16903'

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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

Cement Bond Log was the initial log ran on the well dated 2/6/15
Cement top was estimated at 612'
Max temp on bottom was 194° F
KOP @6650'
Wireline Depth was to 6575' per company man request.
Gamma Survey to surface per procedure.

Your crew today was J.Adams, M.Stewart.

Thank you for using Gyrodata Logging Services, Casper, WY

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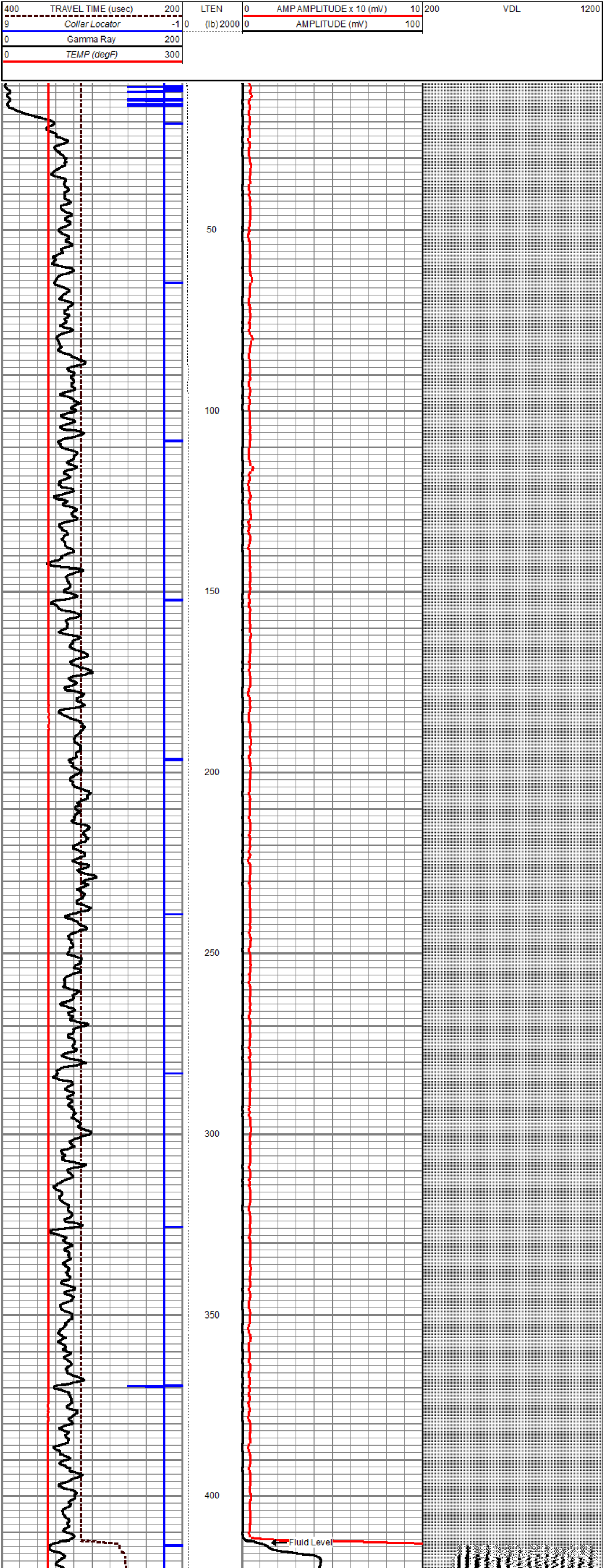
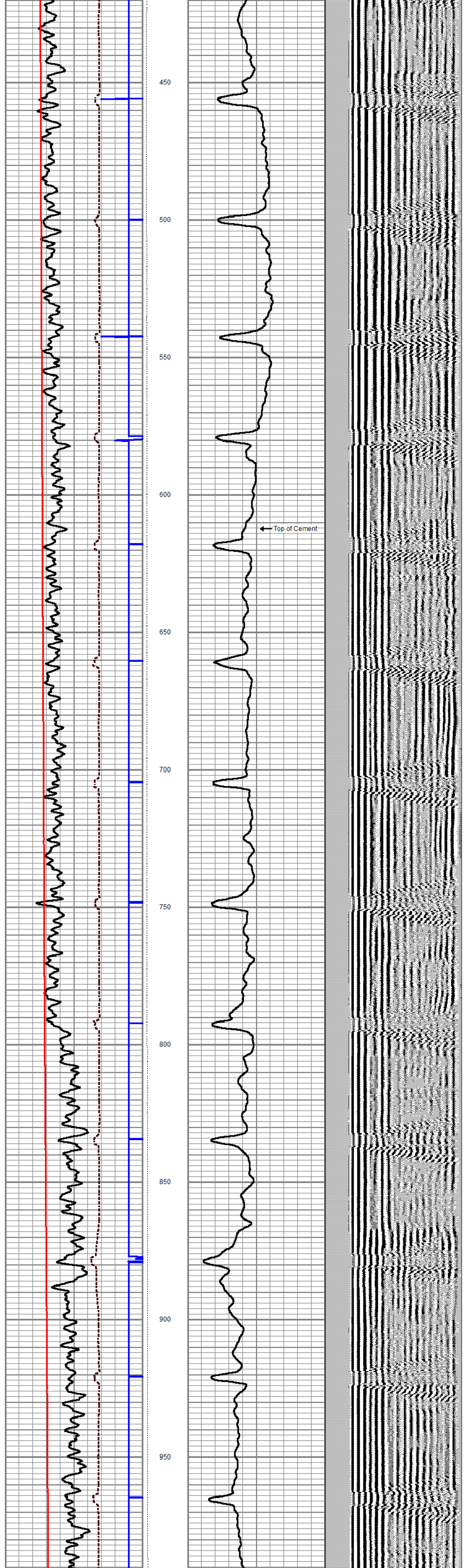
CEMENT BOND LOG PRESENTATION

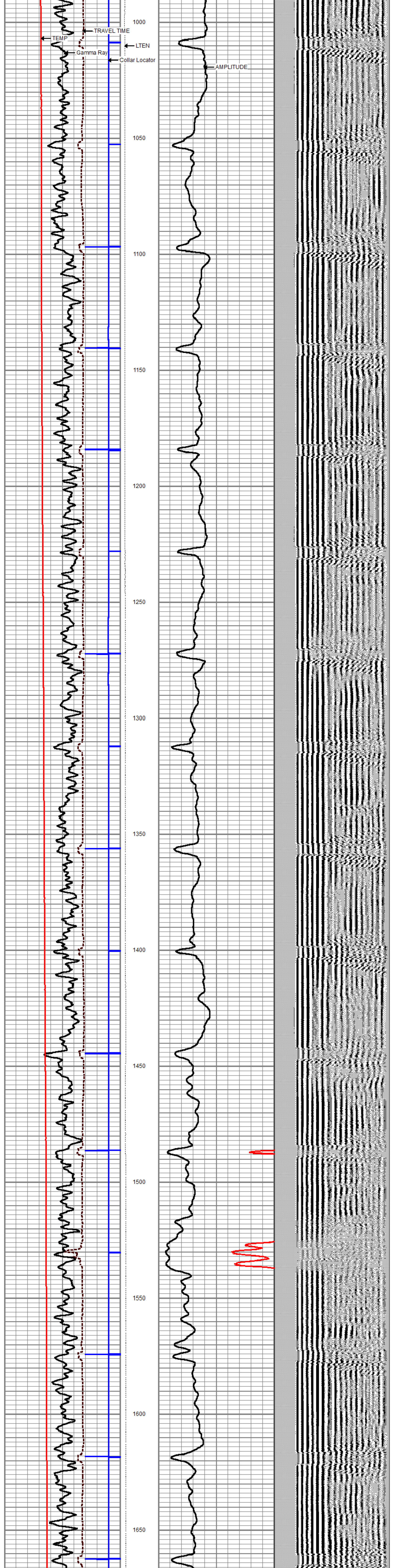
MAIN LOG SECTION 0 PSI

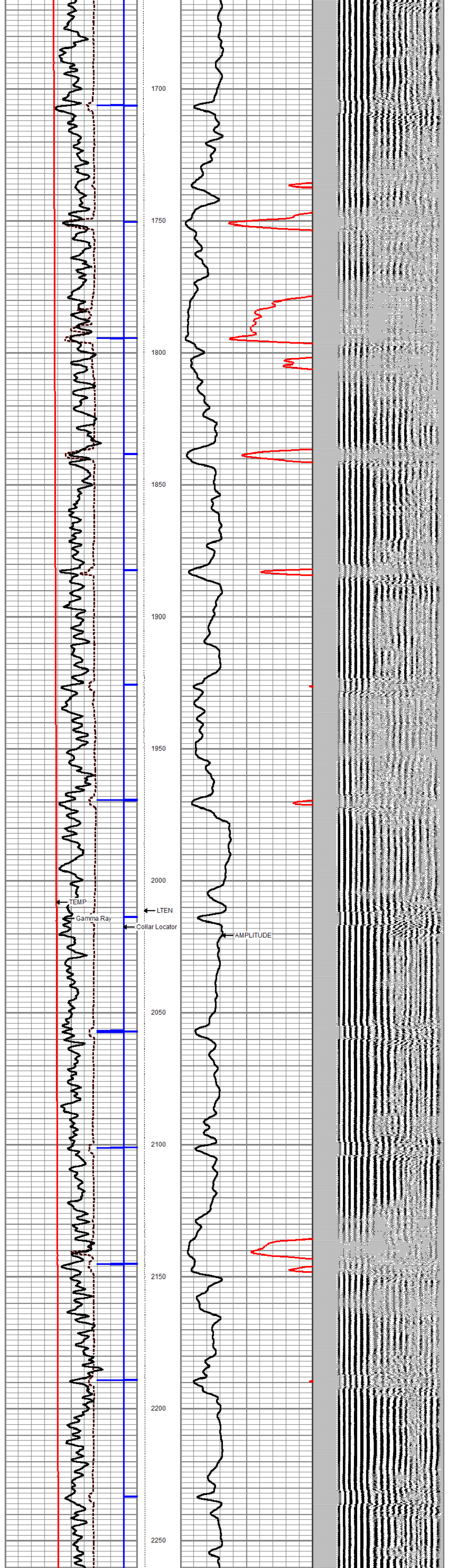
5"=100'

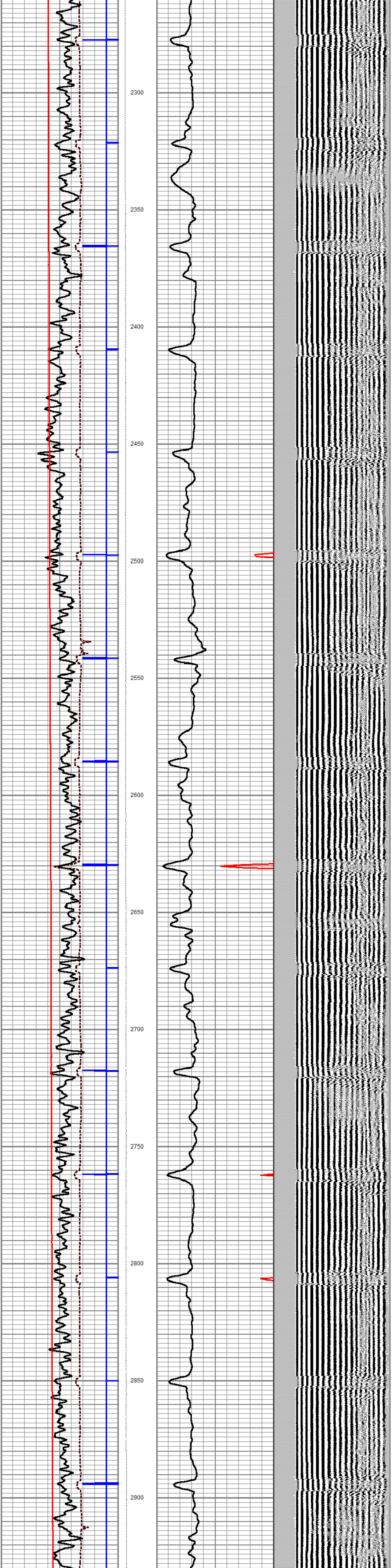
Database File	2015_extraction_kodak_10.db
Dataset Pathname	pass3.1
Presentation Format	cbl_drs
Dataset Creation	Fri Feb 06 12:28:25 2015
Charted by	Depth in Feet scaled 1:240

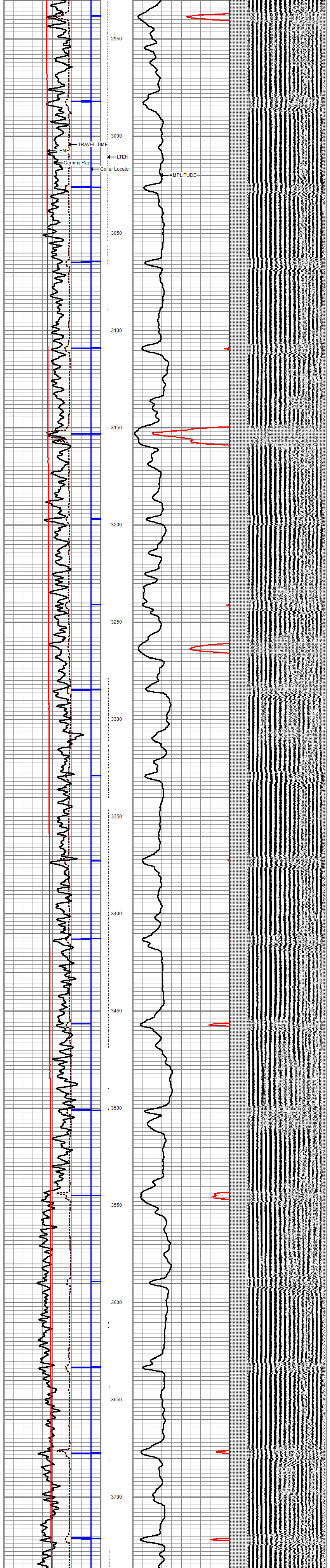


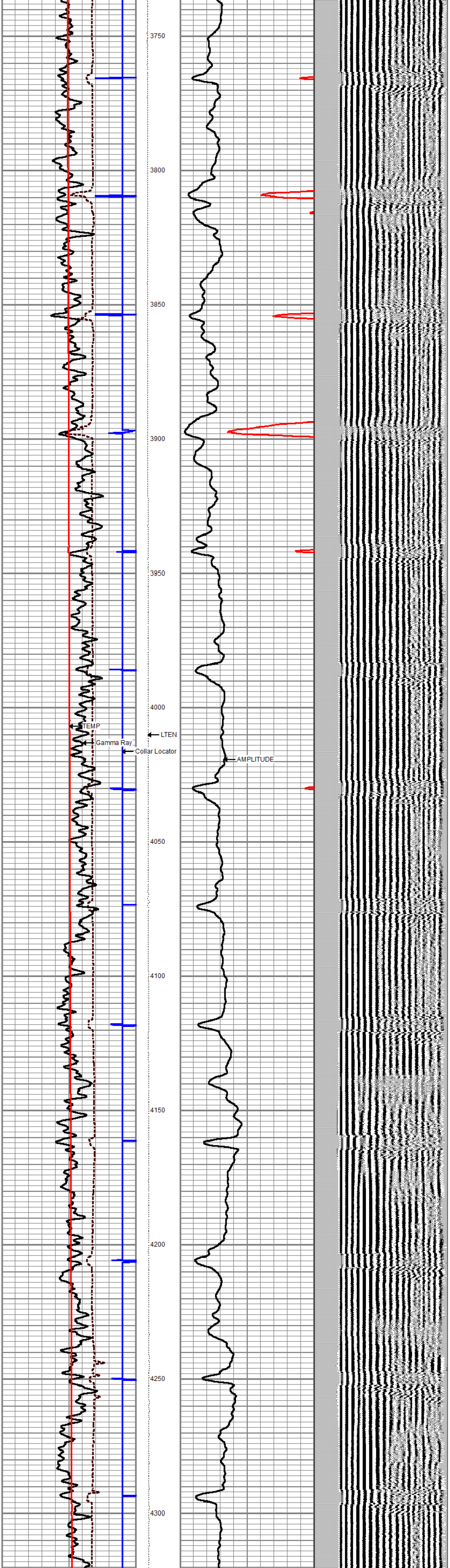


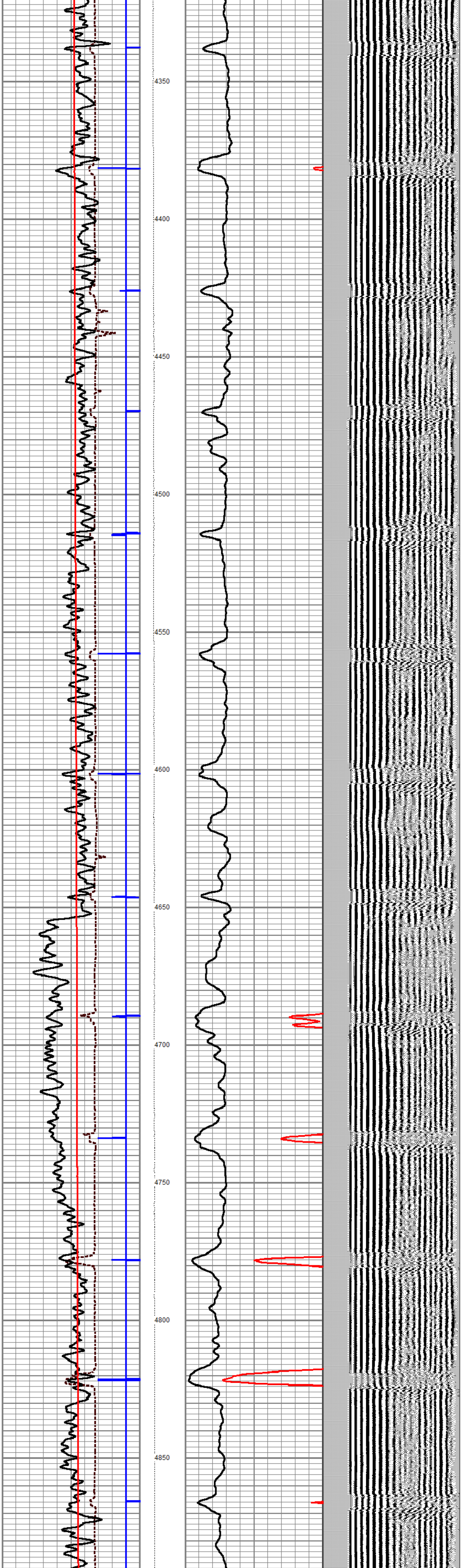


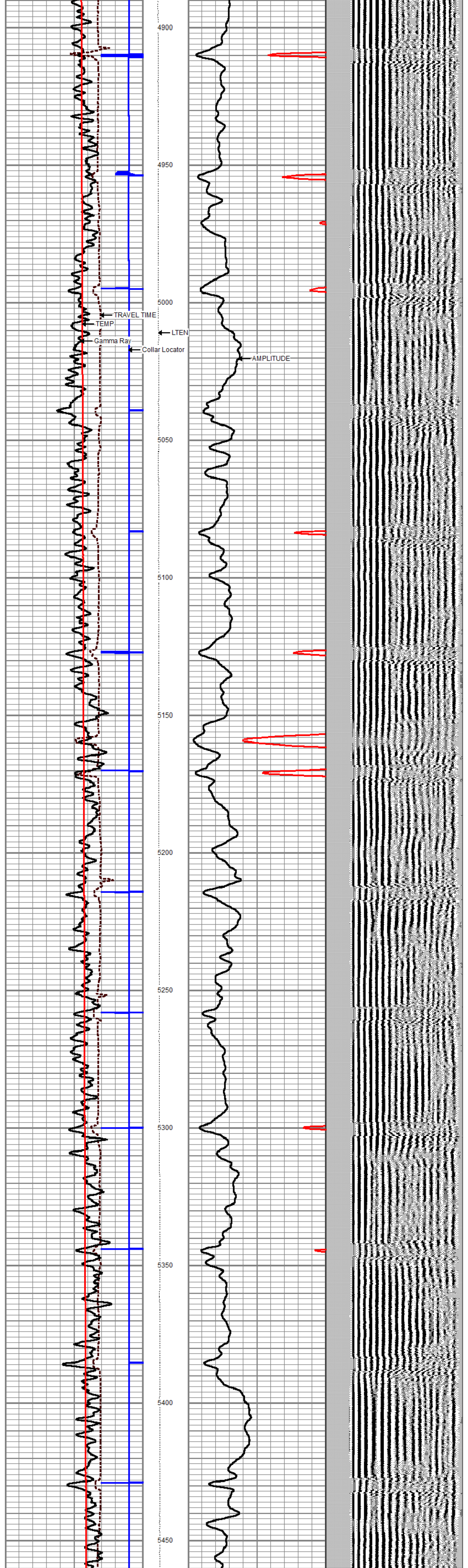


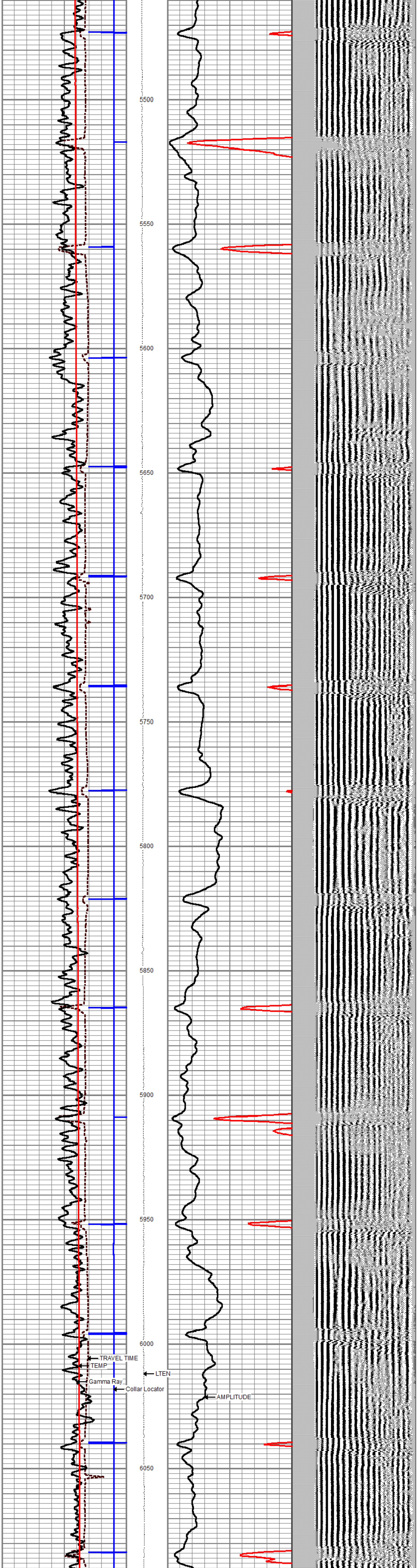


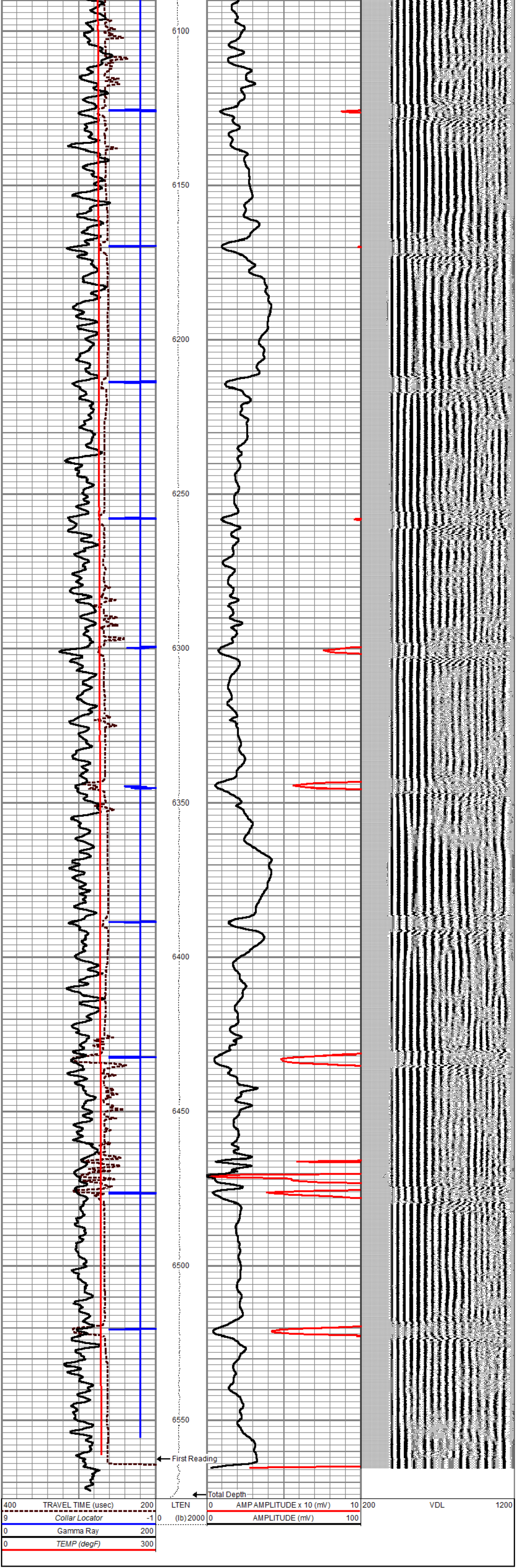












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CEMENT BOND LOG PRESENTATION

MAIN LOG SECTION 0 PSI
5"=100'

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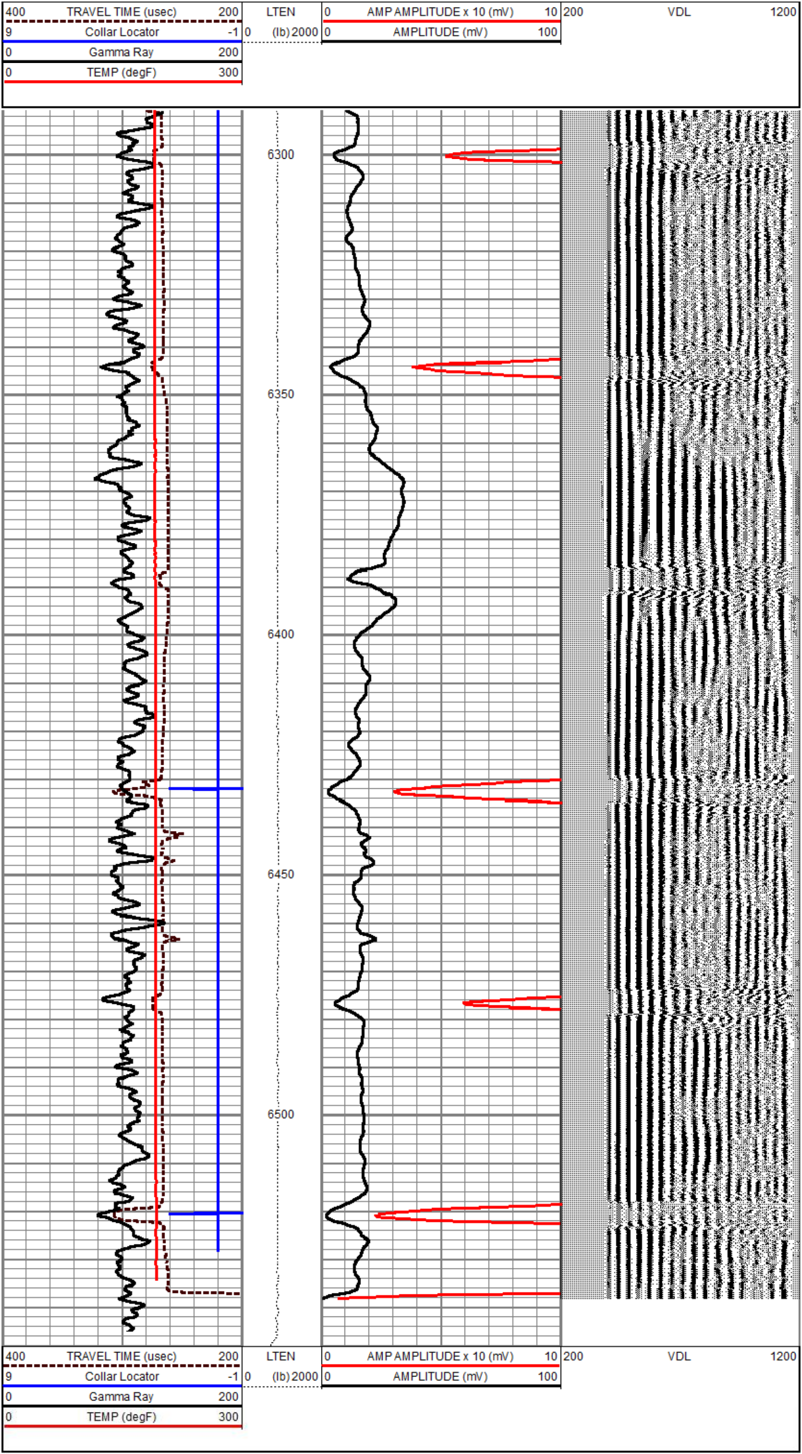
CEMENT BOND LOG PRESENTATION

REPEAT LOG SECTION 0 PSI
5"=100'

Database File	2015_extraction_kodak_10.db
Dataset Pathname	pass2
Presentation Format	cbl_drs
Dataset Creation	Fri Feb 06 10:32:16 2015
Charted by	Depth in Feet scaled 1:240



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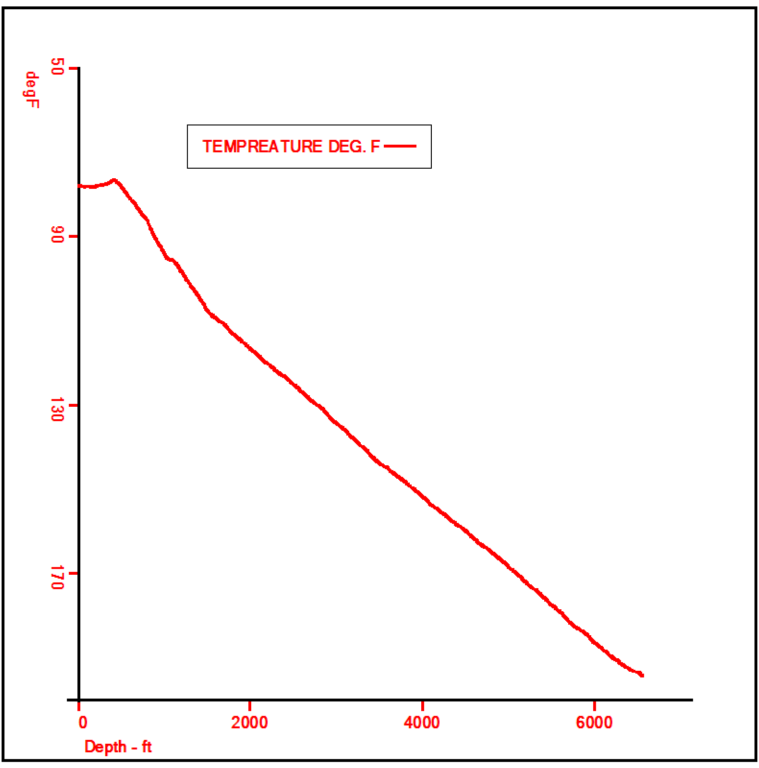
CEMENT BOND LOG PRESENTATION

REPEAT LOG SECTION 0 PSI
5"=100'



Log Variables

Database C:\ProgramData\Warrior\Data\2015_extraction_kodak_10.db
Dataset field/well/run1/pass3.1

Top - Bottom

BHTEMP_Src	PPT	CASEWGHT	MAXAMPL	MINAMPL	MINATTN	SRFTEMP	CASEOD	PERFS	TDEPTH
	usec	lb/ft	mV	mV	db/ft	degF	in		ft
1	0	26	62	1.7	0.8	0	7	0	0
BOTTEMP	BOREID								
degF	in								
220	7.875								

Calibration Report

Database File	2015_extraction_kodak_10.db
Dataset Pathname	pass3.1
Dataset Creation	Fri Feb 06 12:28:25 2015

Gamma Ray Calibration Report

Serial Number:	234GR4-IPCD9-01	
Tool Model:	GR-Tek-Co	
Performed:	Thu Mar 13 23:43:39 2014	
Calibrator Value:	120.0	
Background Reading:	104.4	cps
Calibrator Reading:	258.9	cps
Sensitivity:	0.8769	/cps

Segmented Cement Bond Log Calibration Report

Serial Number: 234RIBT-IT4B1-0-FIELD 5.5(01-19-2015)
Tool Model: 275 H/T RIB with I/E Temp

Calibration Casing Diameter: 7.000 in
Calibration Depth: 1551.333 ft

Master Calibration, performed Fri Feb 06 12:28:21 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.011	0.452	0.000	62.165	134.340	1.443
CAL	0.000	0.342				
5'	-0.009	0.718	0.000	62.165	85.551	0.757
SUM						
S1	-0.011	0.479	0.000	100.000	203.890	2.324
S2	-0.012	0.554	0.000	100.000	176.779	2.094
S3	-0.014	0.516	0.000	100.000	188.540	2.703
S4	-0.014	0.412	0.000	100.000	235.050	3.269
S5	-0.013	0.511	0.000	100.000	190.710	2.556
S6	-0.013	0.509	0.000	100.000	191.589	2.420
S7	-0.011	0.521	0.000	100.000	188.074	2.070
S8	-0.010	0.486	0.000	100.000	201.578	2.079

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.000	0.342	1.000	0.000

Air Zero Calibration, performed Wed Dec 31 17:00:00 1969:

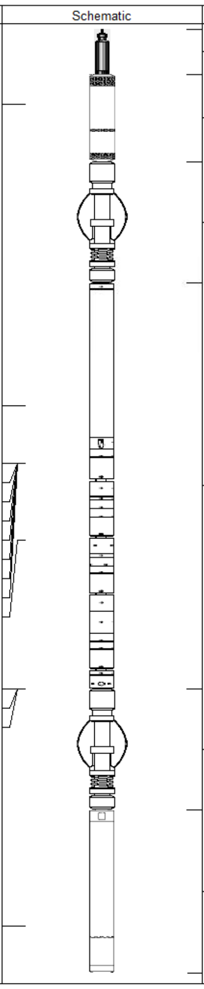
	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000

Temperature Calibration Report

Serial Number: 234RIBT-IT4B1-0-FIELD 5.5(01-19-2015)
Tool Model: 275 H/T RIB with I/E Temp
Performed: Mon Jan 19 10:07:23 2015

	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)
			TitanConeType2 Cable Head 1 7/16 Cone Type II	1.03	1.44	3.60
CCL	19.56		CCL-275tekco (234CCL-1PSN7-002) 2 3/4" 450 Deg. "F" TekCo CCL Earth Mag	1.96	2.75	20.00
			2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
TEMP	12.77					
WVFS8	11.48					
WVFS7	11.48		275 H/T RIB with I/E Temp (234RIBT-IT4B1-0-F 5.5(01 2015)) Tekco 2.75" 450 Deg. F RIB with I/E Temp	9.13	2.75	102.00
WVFS6	11.48					
WVFS5	11.48					
WVFS4	11.48					
WVFS3	11.48					
WVFS2	11.48					
WVFS1	11.48					
WVF5FT	9.73					
WVFSYNC	6.40					
WVFTEMP	6.40					
WVFCAL	6.40					
			2.75 2 3/4" Tekco Adjustable Centralizer	2.73	2.75	25.00
			GR-GR-Tek-Co (234GR4-IPCD9-01) Tekco 2 3/4" 400 Deg. F Logging Gamma Ray	3.67	2.75	40.00
GR	1.04					

Dataset: 2015_extraction_kodak_10.db: field/well/run1/pass3.1
Total length: 21.25 ft
Total weight: 215.60 lb
O.D.: 2.75 in

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Company	**EXTRACTION O & G**		
Well	**KODAK #10**		
Field	**WATTENBERG**		
County	**WELD**		
State	**CO**	**Country**	**USA**