



CEMENT BOND LOG

Company CMX INC,
Well HAGERMAN NO. 13-10 OWWO
Field ORA
County PAWNEE
State KANSAS

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Field ORA
County PAWNEE State KANSAS

Location: API #: 15-145-21694-00-01
2310' FNL & 990' FWL

SEC 10 TWP 20 S RGE 19 W

Permanent Datum GROUND LEVEL Elevation 2231
Log Measured From KELLY BUSHING---USE 13' KB
Drilling Measured From KELLY BUSHING

Other Services
MAST
TRAILER
Elevation
K.B. 2239
D.F. 2238
G.L. 2231

Date 10/08/2015

Run Number ONE
Depth Driller 4509
Depth Logger 4456
Bottom Logged Interval 4456
Top Log Interval 3000
Open Hole Size N/A
Type Fluid WATER
Density / Viscosity FULL
Max. Recorded Temp. 123
Estimated Cement Top 3288
Time Well Ready 3:00 PM
Time Logger on Bottom 3:45
Equipment Number T-173
Location HAYS
Recorded By A DREILING
Witnessed By MR KEITH BRIGHT

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
	12.25	0	507'				
	7.785	507	T.D.				

Casing Record		Size	Vgt/Ft	Top	Bottom
Surface String	8 5/8		23#	0	507
Prot. String					
Production String	5.5"		15.5 #	0	T.D.
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

RUSH CENTER KS.,
10 S TO X RD.(PAWNEE CO.)
6W, 1/2 N.,E INTO

LOG CORRELATED TO PIONEER DUAL INDUCTION
(NOTE)
USE 13' KB TO CORRELATE !!



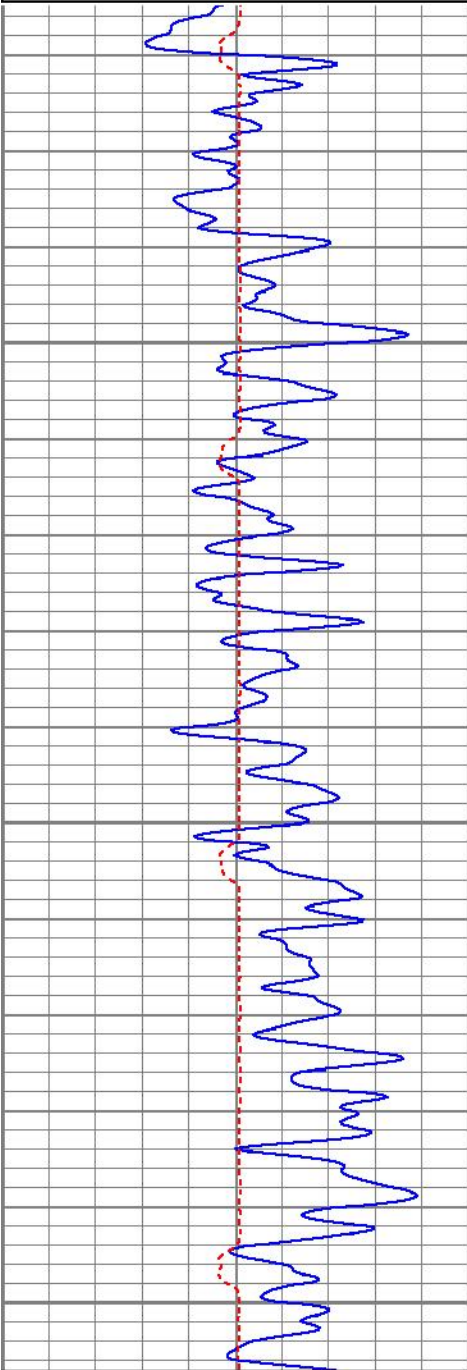
FREE PIPE PASS
CALIBRATED TOOL @ 1581'

Database File	cmx_hagerman_13-10.db
Dataset Pathname	grcbl/pass2
Presentation Format	cbl
Dataset Creation	Thu Oct 08 15:28:34 2015
Charted by	Depth in Feet scaled 1:240

0	GR (GAPI)	150
150	GR (GAPI)	300
420	TT3FT (usec)	220

18	CCL	-2
0	AMP3 (mV)	100

200	VDL	1200
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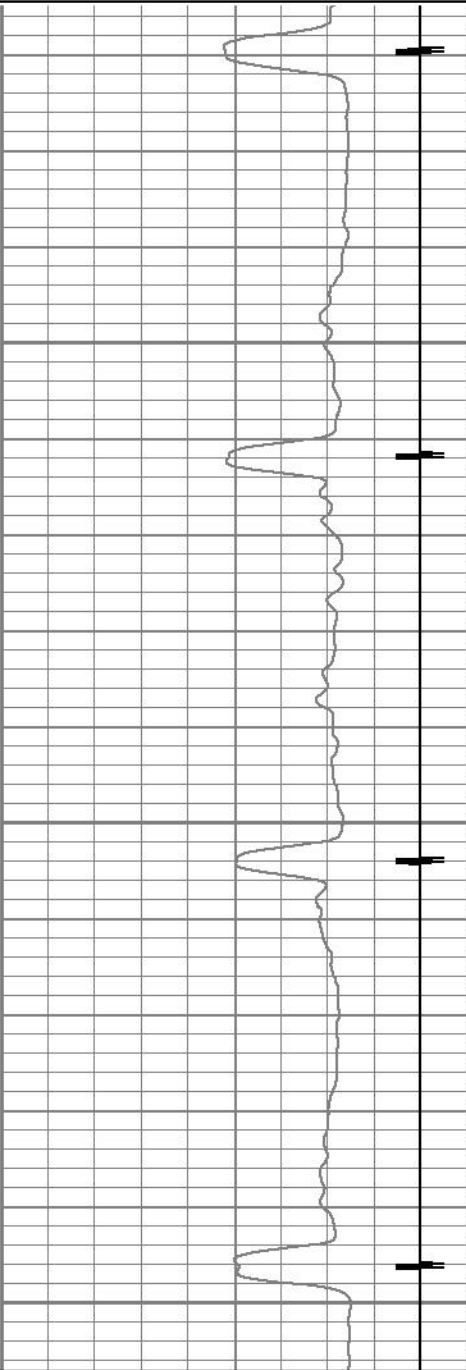


1500

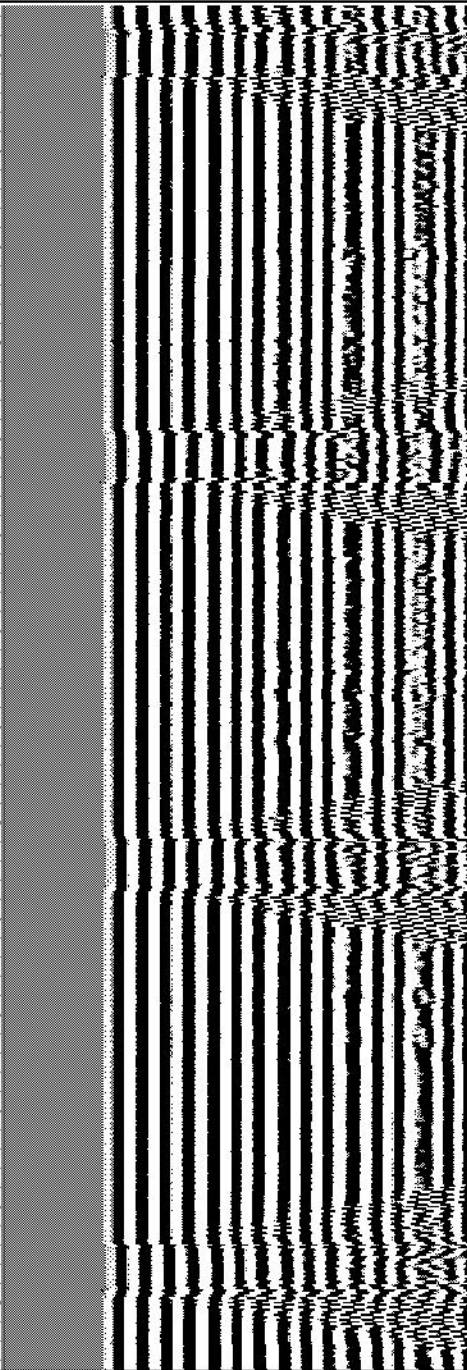
1550

1600

0	GR (GAPI)	150
150	GR (GAPI)	300
420	TT3FT (usec)	220



18	CCL	-2
0	AMP3 (mV)	100



200	VDL	1200
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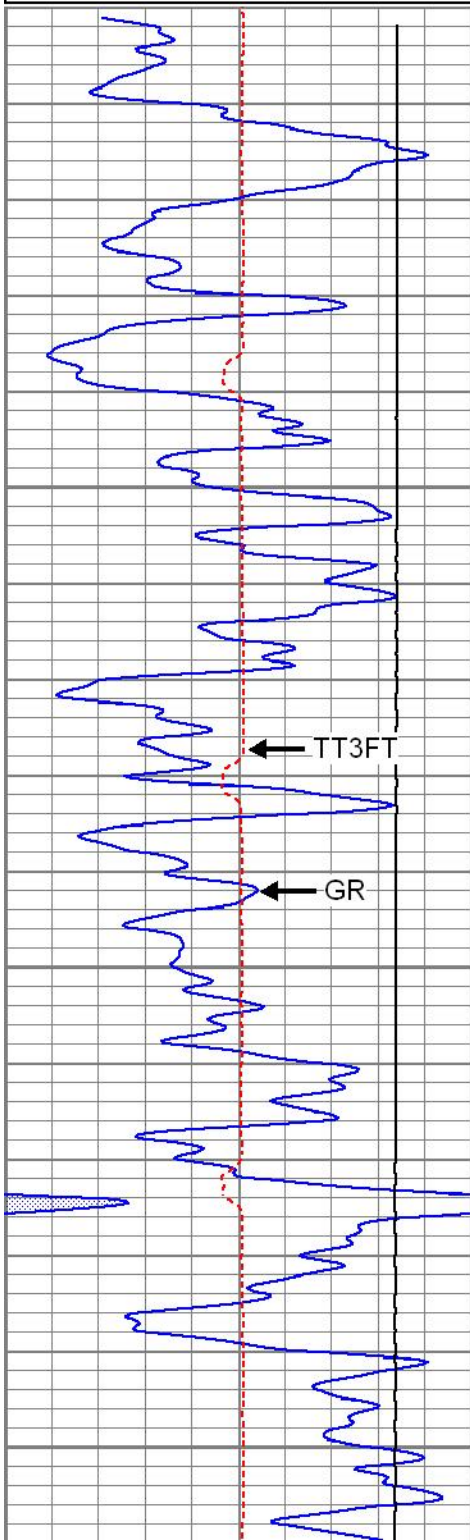


MAIN PASS

Database File cmx_hagerman_13-10.db
Dataset Pathname grcbl/pass5.1
Presentation Format cbl
Dataset Creation Thu Oct 08 16:35:58 2015
Charted by Depth in Feet scaled 1:240

0	GR (GAPI)	150
150	GR (GAPI)	300
420	TT3FT (usec)	220
5000	LTEN (lb)	0

18	CCL	-2	200	VDL	1200
0	AMP3 (mV)	100			

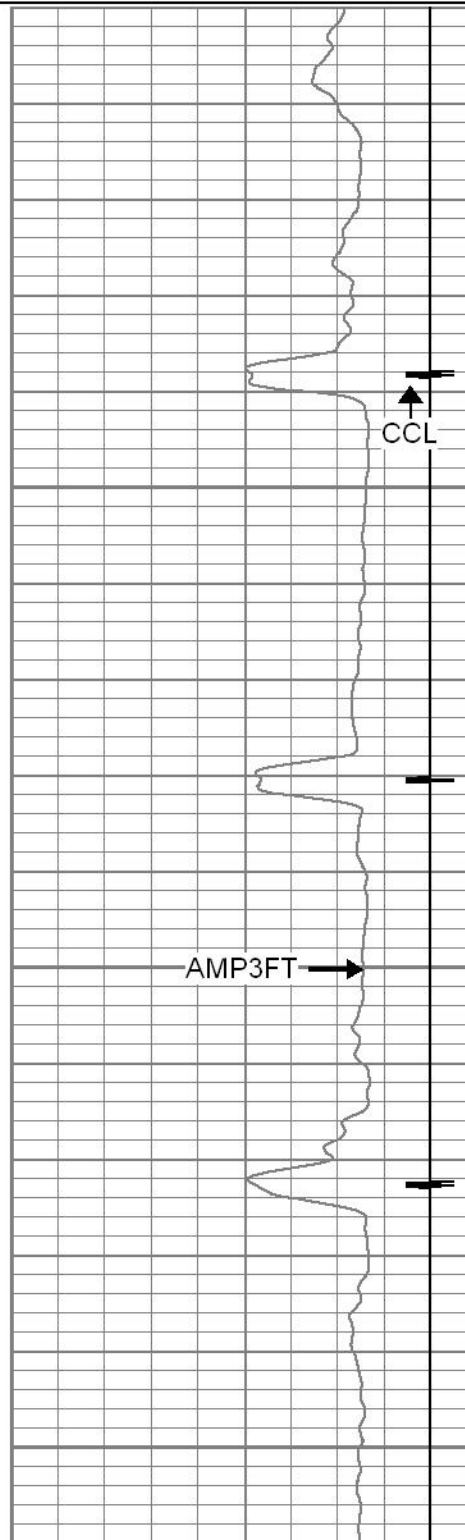


2950

3000

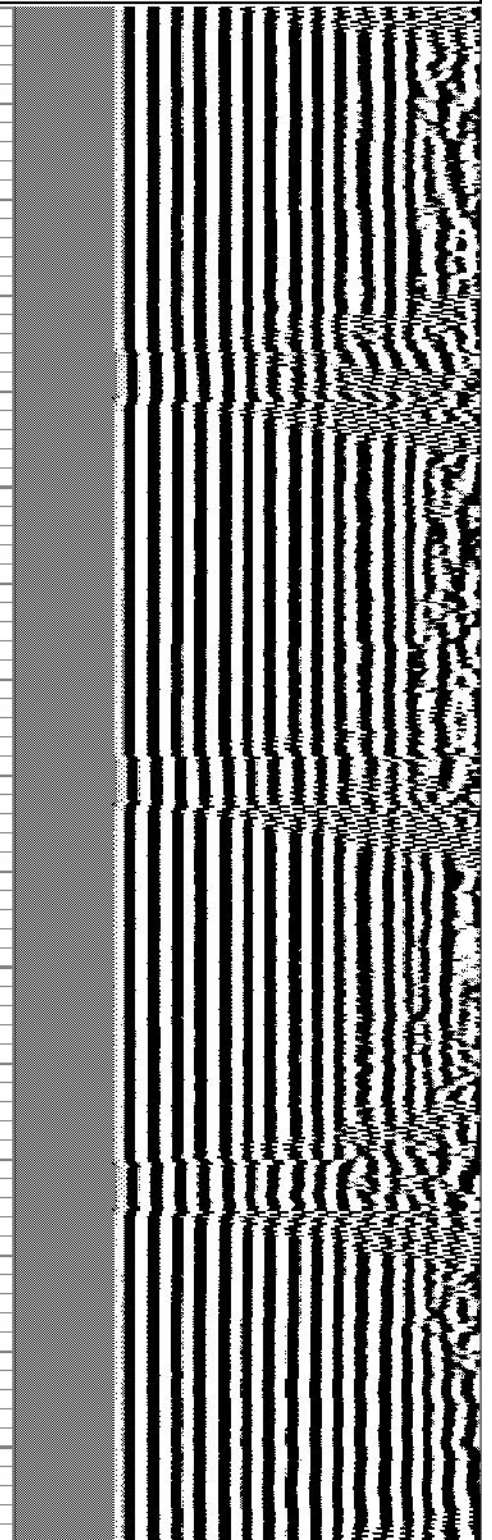
3050

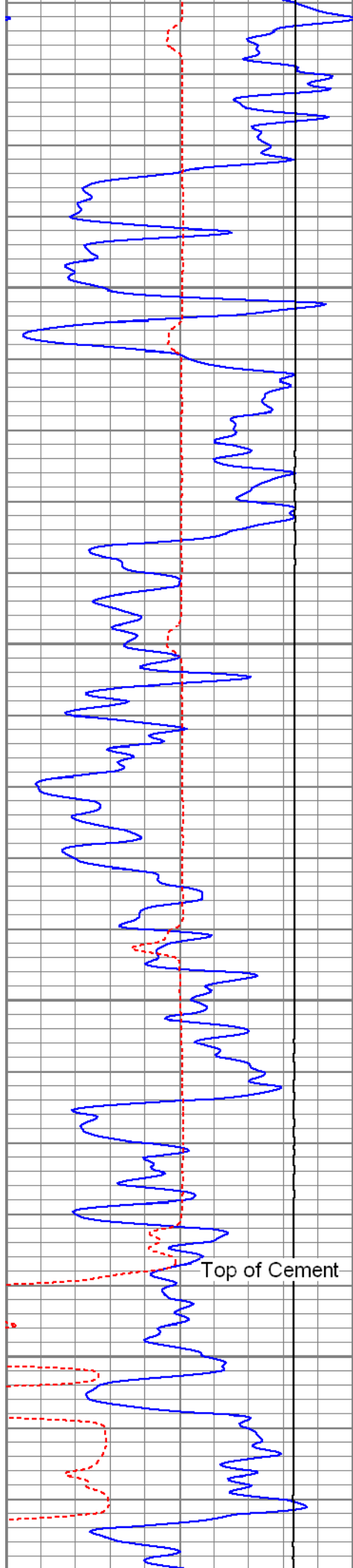
3100



CCL

AMP3FT





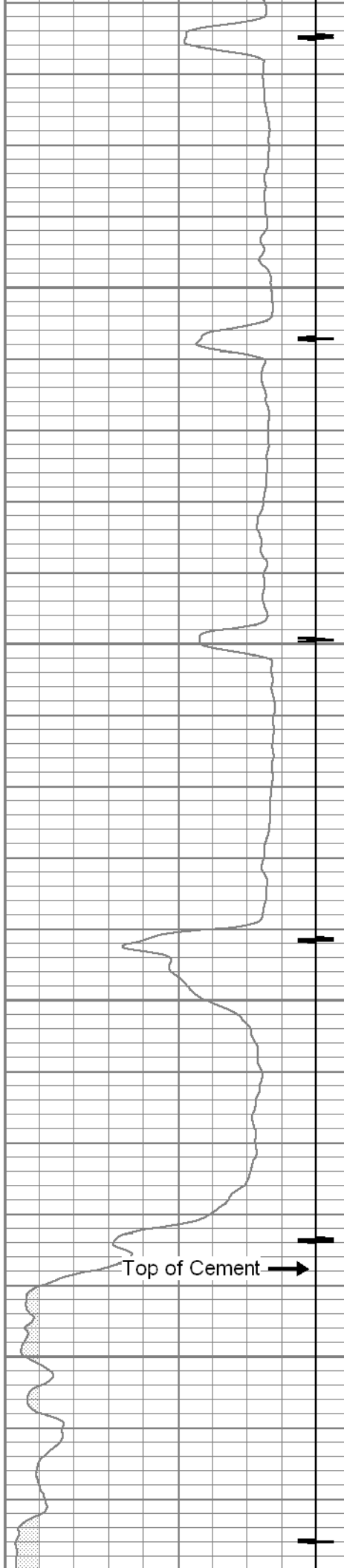
3150

3200

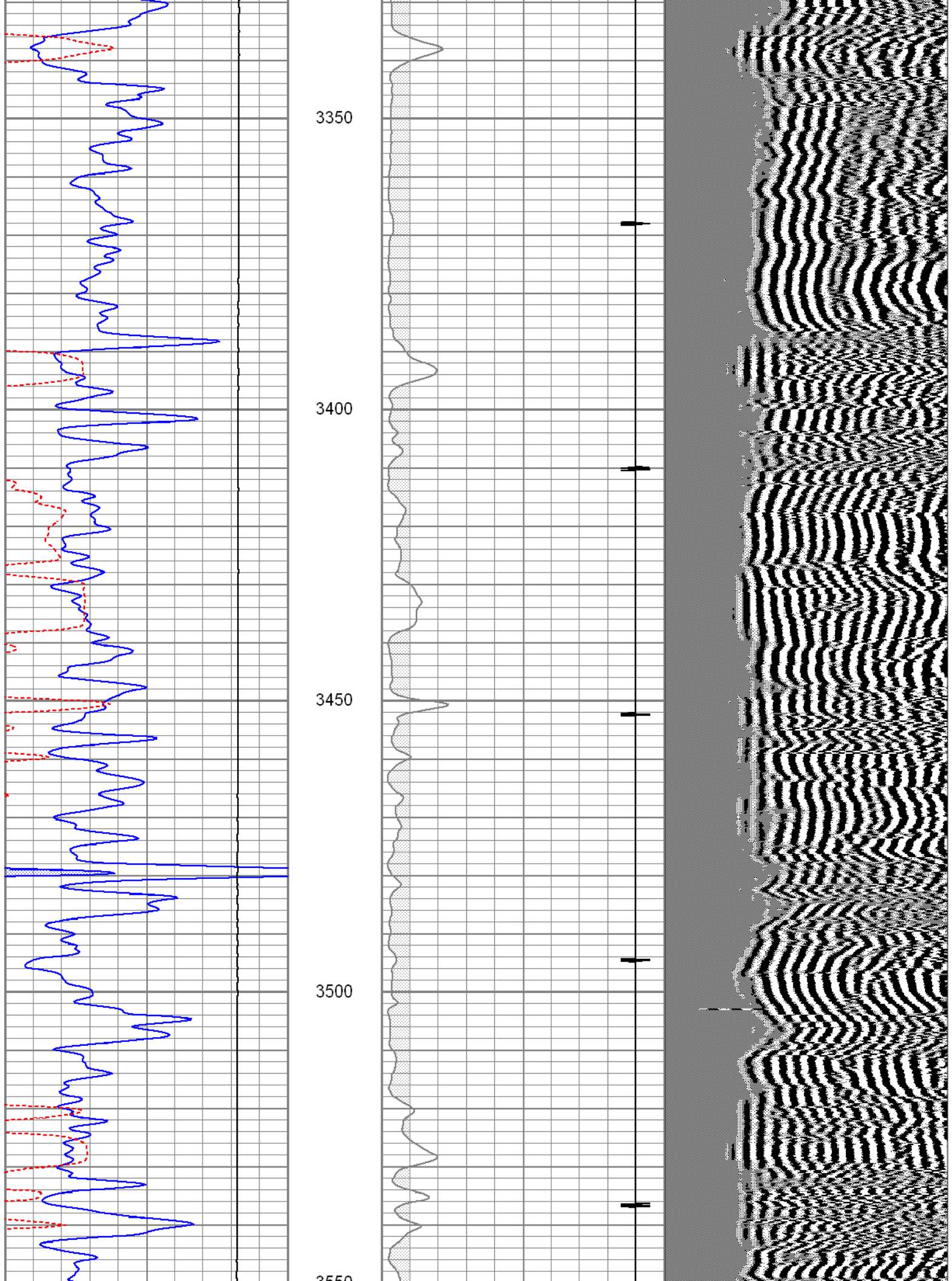
3250

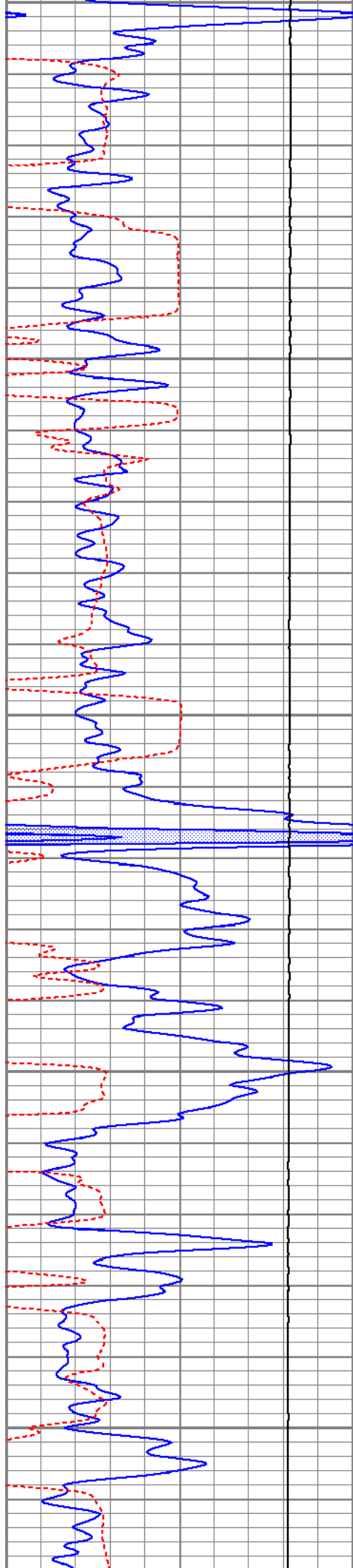
Top of Cement

3300



Top of Cement





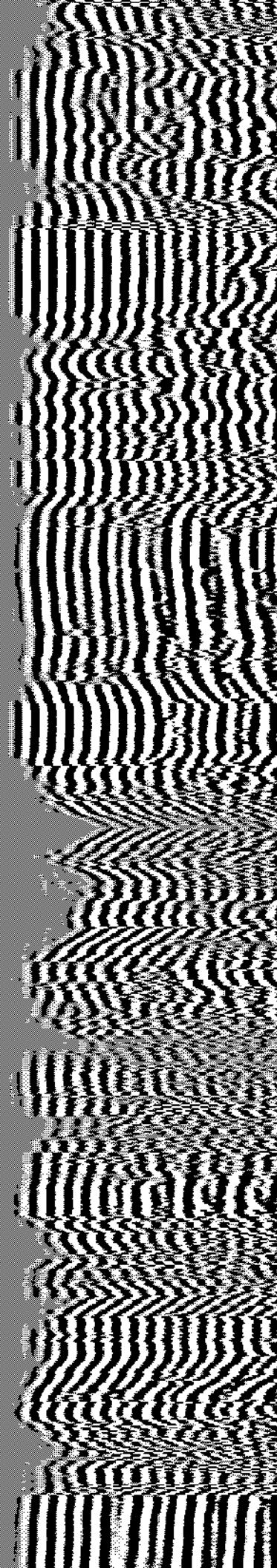
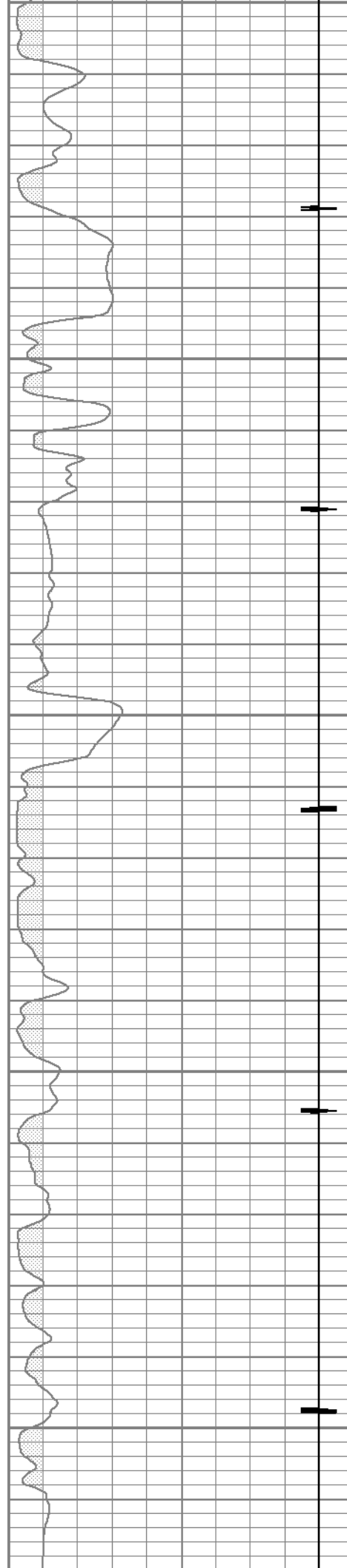
3550

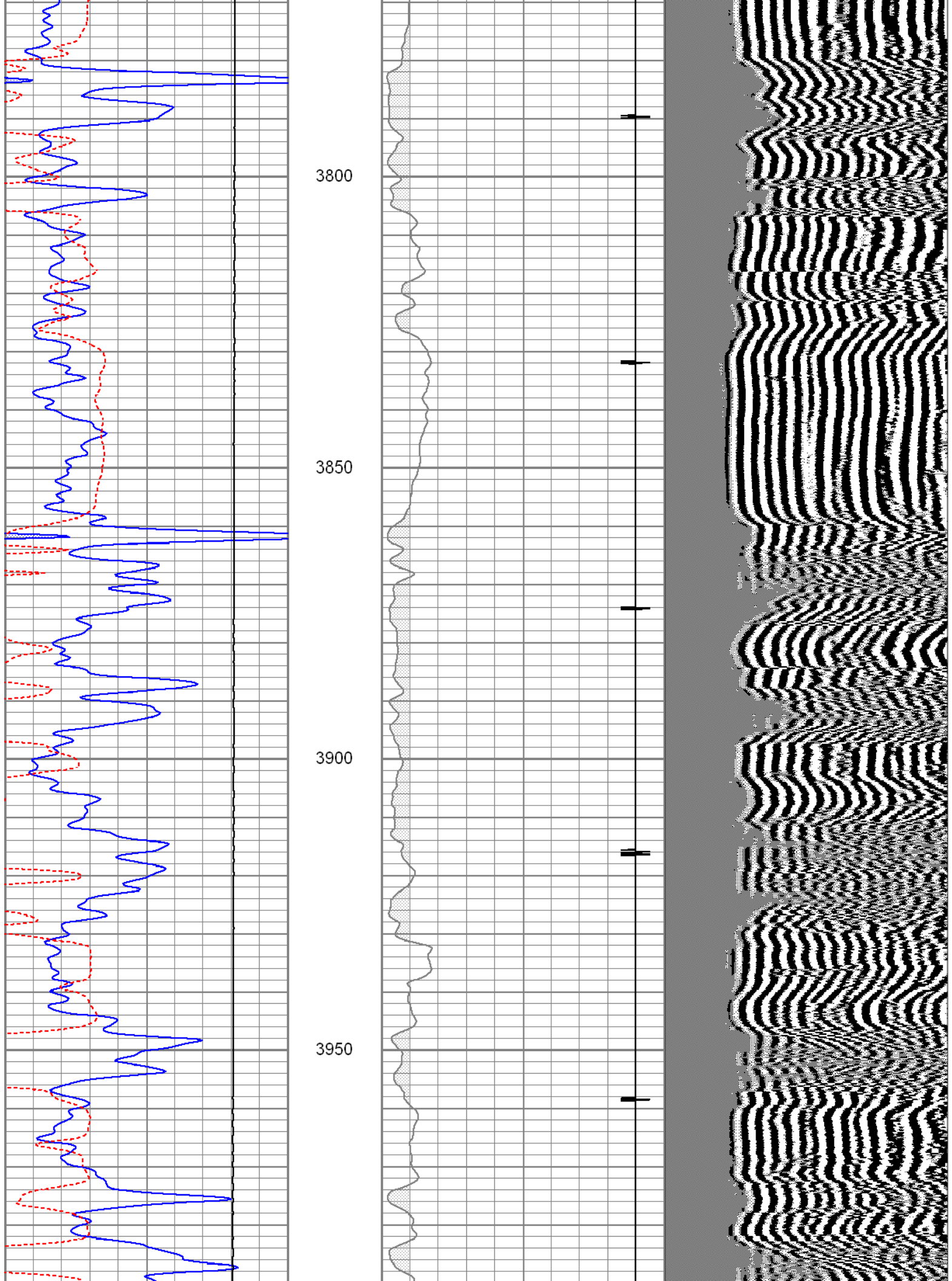
3600

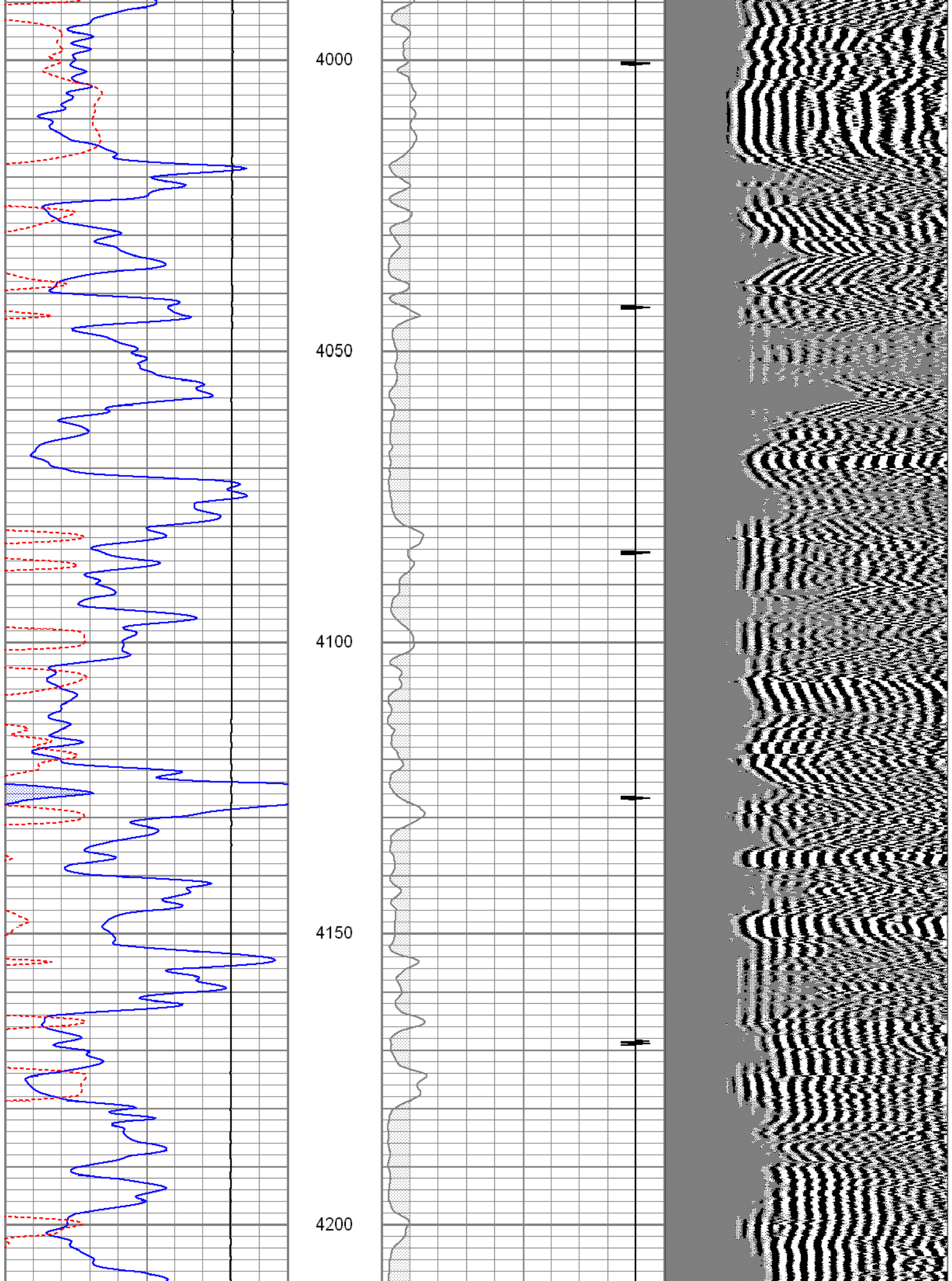
3650

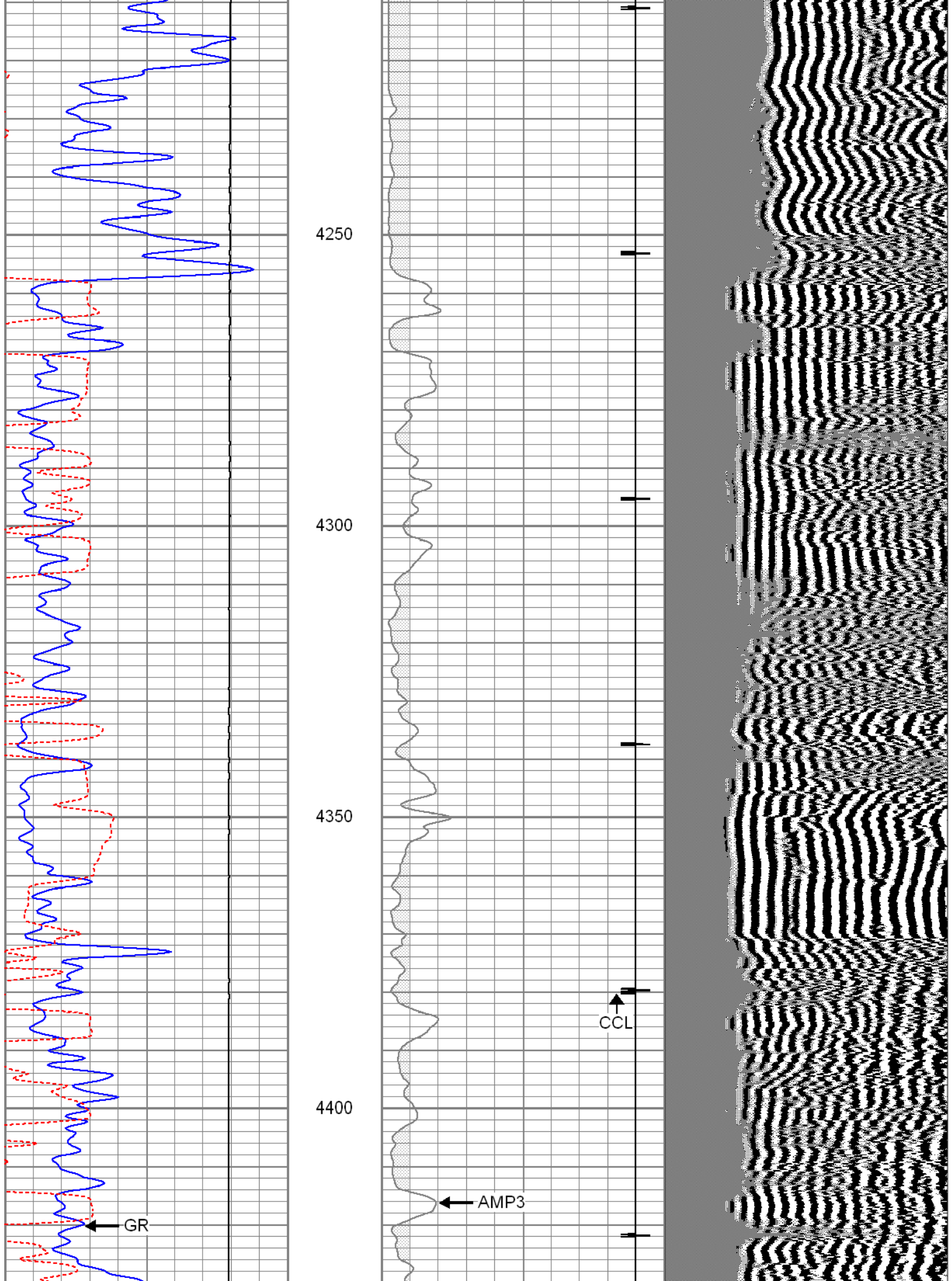
3700

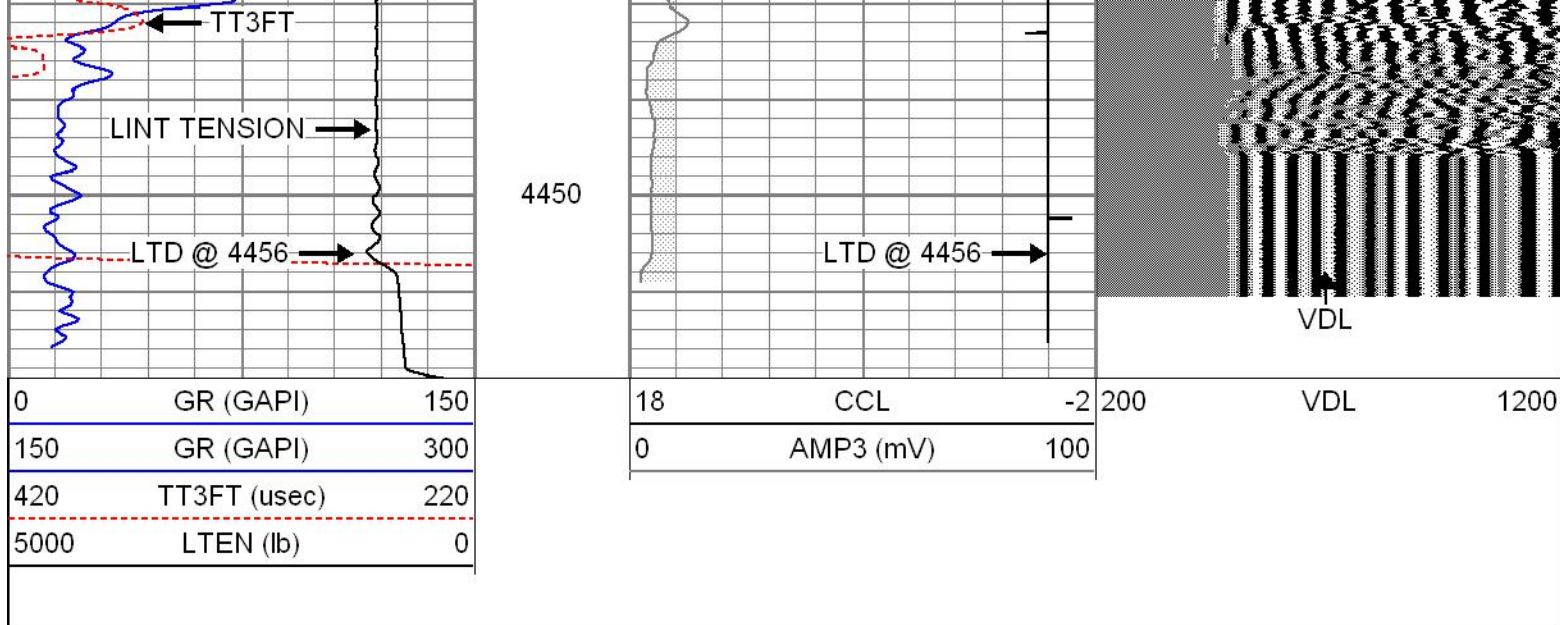
3750





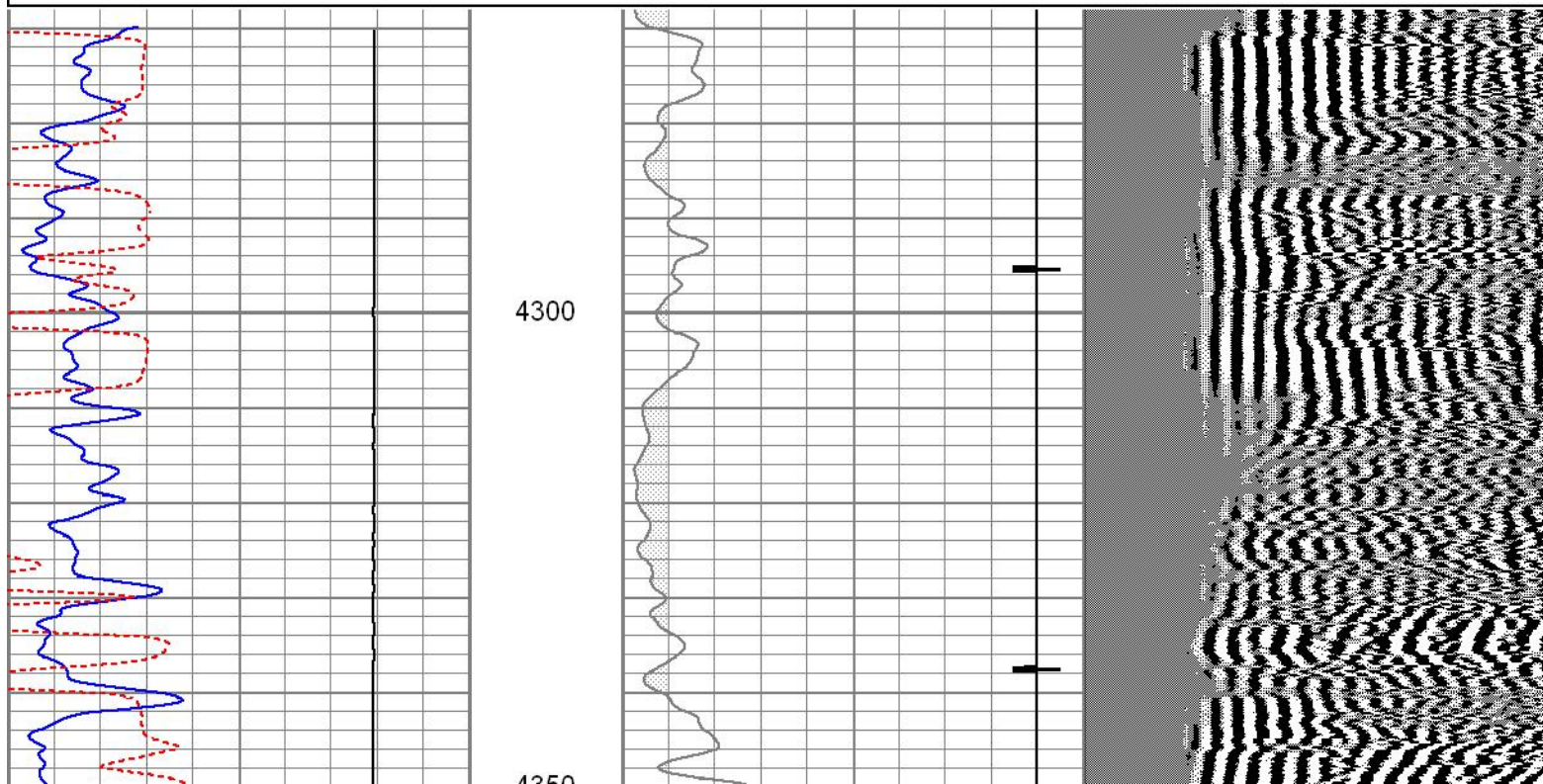
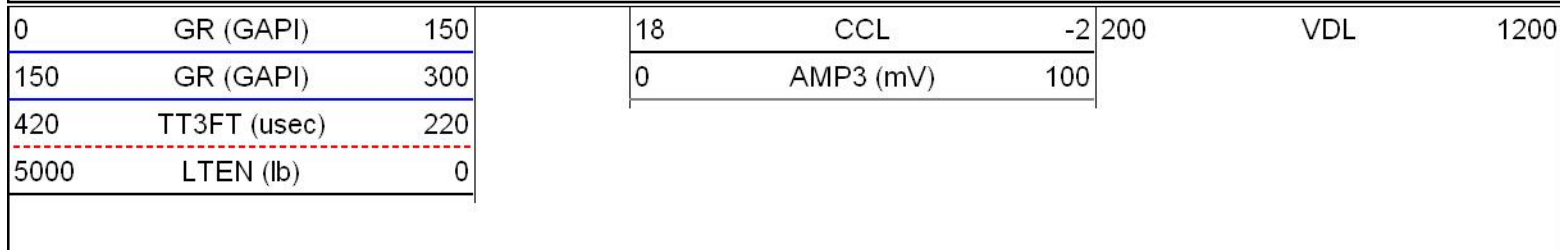


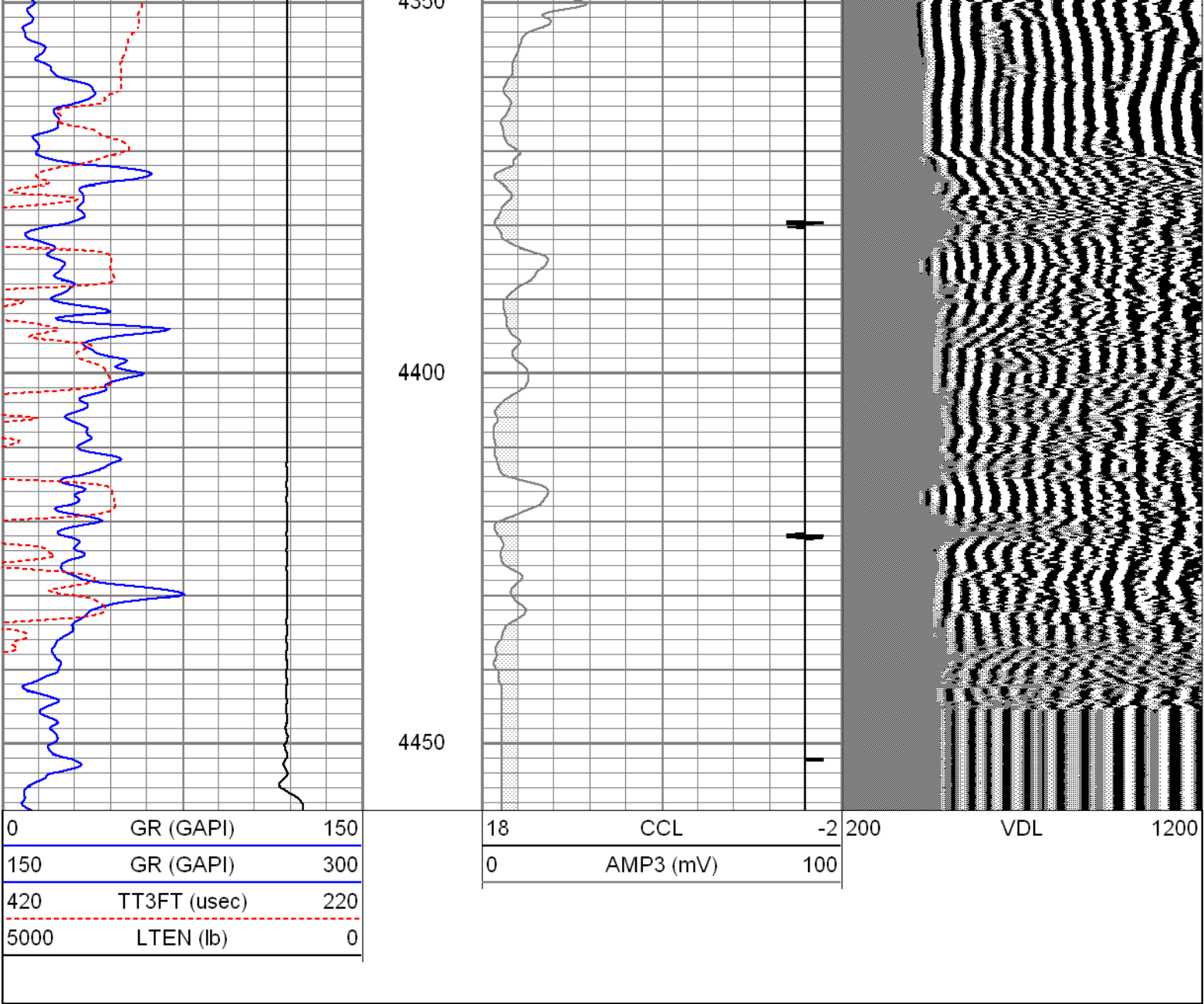




REPEAT SECTION

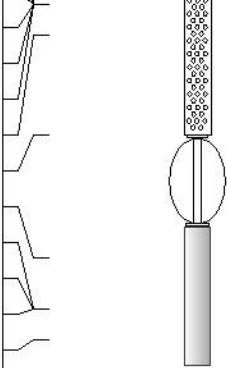
Database File cmx_hagerman_13-10.db
 Dataset Pathname grcbl/pass4
 Presentation Format cbl
 Dataset Creation Thu Oct 08 15:45:37 2015
 Charted by Depth in Feet scaled 1:240





DatabaseC:\Documents and Settings\All Users\Warrior\Data\cmx_hagerman_13-10.db						
Dataset field/well/grcbl/pass5						
Top - Bottom						
PPT usec 0	CASEWGHT lb/ft 15.5	MAXAMPL mV 0	MINAMPL mV 1	MINATTN db/ft 0.8	CASEOD in 5.5	PERFS 0
TDEPTH ft 4500	BOTTEMP degF 123	BOREID in 6.25				

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
WVFS8	11.75		X	3.00	1.69	25.00
WVFS7	11.75					
WVFS6	11.75					
WVFS5	11.75					
WVFS4	11.75					
WVFS3	11.75					
SCBL Probe Radial (080321)						
				8.75	2.75	106.50

WVFS2	11.75		8.75	2.75	100.50	
WVFS1	11.75					
WVF3FT	11.75					
WVF5FT	10.75					
WVFCAL	7.50					
CCL	3.50		X	3.00	1.69	25.00
ACCZ	1.83					
ACCY	1.83					
ACCX	1.83		275D_INC (080616) 2-3/4" GR-CCL with Inclination	4.50	2.75	50.00
GR	0.83					
Dataset: cmx_hagerman_13-10.db: field/well/grcbl/pass5 Total length: 19.25 ft Total weight: 206.50 lb O.D.: 2.75 in						

Calibration Report						
Database File	cmx_hagerman_13-10.db					
Dataset Pathname	grcbl/pass4					
Dataset Creation	Thu Oct 08 15:45:37 2015					
Gamma Ray Calibration Report						
Serial Number:	080616					
Tool Model:	275D_INC					
Performed:	Thu Oct 08 15:17:09 2015					
Calibrator Value:	200.0	GAPI				
Background Reading:	50.0	cps				
Calibrator Reading:	250.0	cps				
Sensitivity:	1.2900	GAPI/cps				
Inclinometer Calibration Report						
Performed:	Tue Apr 07 10:16:42 2009					
	Low Read.	High Read.	Low Ref.	High Ref.	Gain	Offset
X Accelerometer	-3585.20	3595.40	-1.00	1.00	gee	0.00
						-0.00
Y Accelerometer	-3619.40	3520.00	-1.00	1.00	gee	0.00
						0.01
Z Accelerometer	-104.20	3565.60	0.00	1.00	gee	0.00
						0.03
RB					1.00	0.00

Segmented Cement Bond Log Calibration Report							
Serial Number:	080321						
Tool Model:	ProbeRadial						
Calibration Casing Diameter:	5.500	in					
Calibration Depth:	1580.878	ft					

Master Calibration performed Thu Oct 08 15:28:10 2015:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.011	1.015	1.700	71.921	68.450	2.473
CAL	-0.011	1.294				
5'	-0.011	1.058	1.700	71.921	65.672	2.440
SUM						
S1	-0.011	1.077	0.000	72.000	66.188	0.741
S2	-0.011	1.082	0.000	72.000	65.862	0.756
S3	-0.011	1.037	0.000	72.000	68.706	0.774
S4	-0.011	1.001	0.000	72.000	71.149	0.785
S5	-0.011	0.981	0.000	72.000	72.537	0.823
S6	-0.011	0.979	0.000	72.000	72.678	0.819
S7	-0.011	1.008	0.000	72.000	70.611	0.790
S8	-0.011	1.020	0.000	72.000	69.836	0.786

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	-0.011	1.294	1.000	0.000

Air Zero Calibration, performed Thu Oct 08 15:17:50 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	



Company CMX INC,
 Well HAGERMAN NO. 13-10
 Field ORA
 County PAWNEE
 State KANSAS

Country