



PIONEER

Pioneer Energy Services

CEMENT BOND LOG WITH GAMMA RAY

Company		SHAKESPEARE OIL COMPANY, INC.			
Well		HUCK #2-6 OWWO			
Field		BECKELY NORTH			
County		SCOTT		State KANSAS	
Location:		API # : 15--171-21223-00-00		Other Services	
Permanent Datum		474' FSL & 515' FWL		PERFORATE	
SEC 06		TWP 18S		RGE 31W	
Log Measured From		GROUND LEVEL		Elevation 2958'	
KELLY BUSHING		10' Above GL		K.B. 2968'	
Drilling Measured From		KELLY BUSHING		D.F. N/A	
				G.L. 2958'	
Date of Service		01/29/2019			
Run Number		ONE			
Depth Driller or PBTD		4649'			
Depth Logger		4584'			
Bottom Log Interval		4582'			
Top Log Interval		3450'			
Open Hole Size		7.875"			
Type Fluid		WATER			
Fluid Level		270'			
Fluid Density		N/A			
Max. Recorded Temperature		122 DEG F			
Max. Wellhead Pressure		0 PSI			
Wellhead Connection		N/A			
Estimated Cement Top		3670'			
Unit Number		P-18			
Wireline Size		5/16"			
Location		COLBY, KS.			
Recorded By		D.WALKER			
Witnessed By		KYLE ROBY			
Size		Wt/Ft		Top	
Bottom					
Tubing Record					
Surface Casing		8.625"		23#	
Production Casing		4.5"		11.5#	
Liner Record				00'	
				256'	
				TD.	

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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

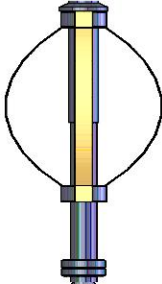
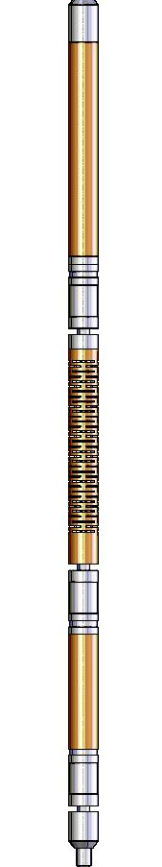
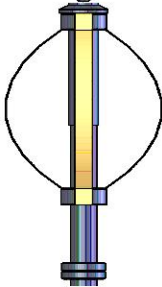
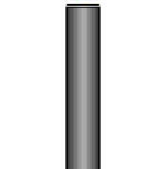
N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.
SCOTT CITY, KANSAS
FROM HWY 83 & 96 EAST TO RODEO ROAD,
1 1/8 NORTH, EAST INTO

THANK YOU FOR USING PIONEER ENERGY SERVICES!

Your Pioneer Energy Services Crew	Tool Data - Services	Serial Number
Engineer: D.WALKER Operator: M.LINDBERG Operator: Operator:		

Top - Bottom

PPT usec 0	CASEWGHT lb/ft 11.5	MAXAMPL mV 0	MINAMPL mV 1	MINATTN db/ft 0.8	SRFTEMP degF 30	CASETHCK in 0	CASEOD in 4.5
PERFS 0	TDEPTH ft 4640	BOTTEMP degF 122	BOREID in 7.875				

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb)
			CENT-Probe Probe Centralizer	2.83	2.75	20.00
WVFS8	11.63		RBT-Probe (4.5040904) Probe Radii Bond Tool with Digital Telemetry	8.75	2.75	107.00
WVFS7	11.63					
WVFS6	11.63					
WVFS5	11.63					
WVFS4	11.63					
WVFS3	11.63					
WVFS2	11.63					
WVFS1	11.63					
WVFCAL	11.63					
WVF3FT	11.63					
WVF5FT	10.63					
			CENT-Probe Probe Centralizer	2.83	2.75	20.00
CCL	3.63					

GR	2.30		GR_CCL-Tiger (TigerProbe)	4.54	2.75	50.00
Dataset: shakespeare_huck#2-6_owwo_grcbl.db: field/well/run1/pass6 Total length: 18.96 ft Total weight: 197.00 lb O.D.: 2.75 in						

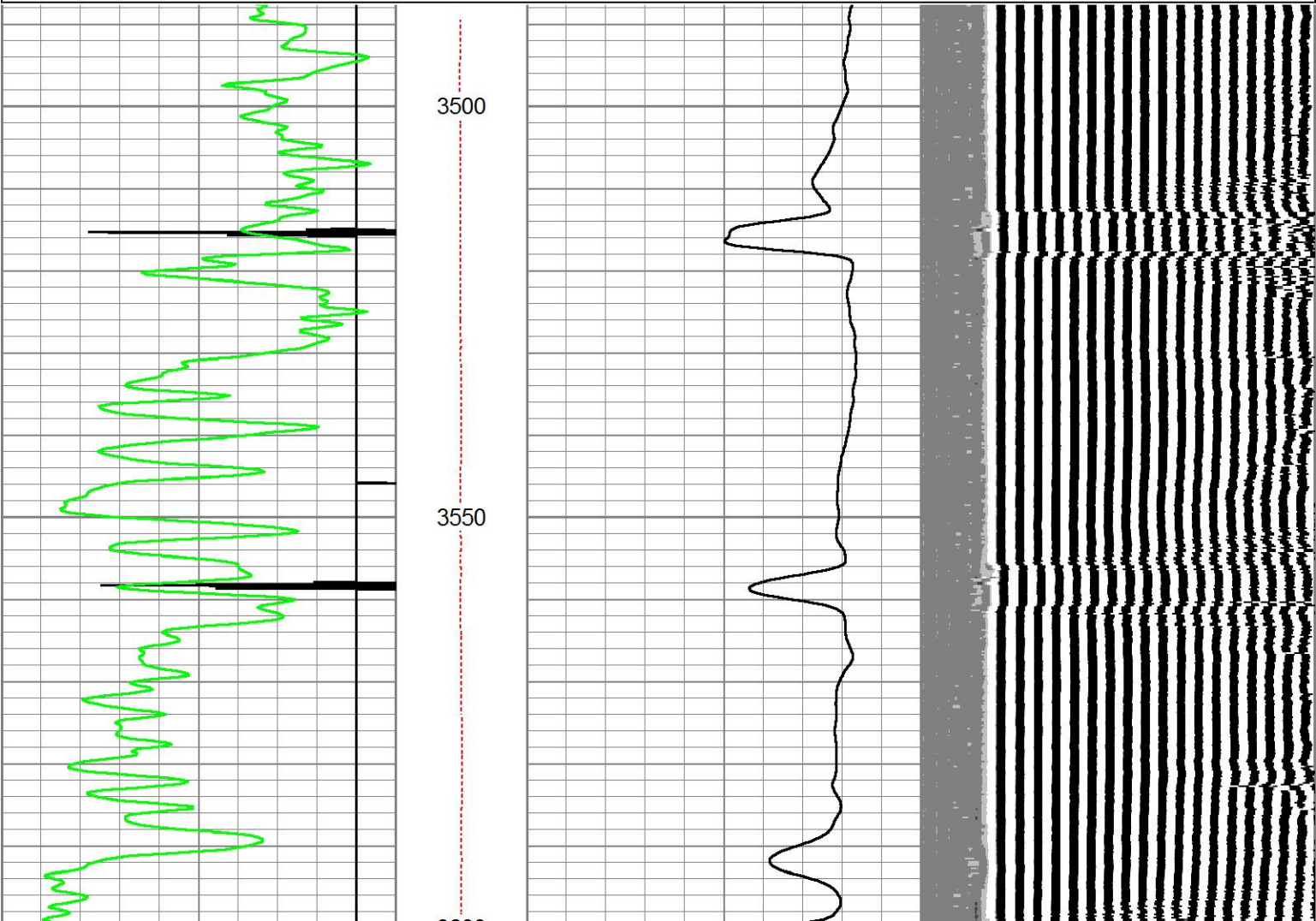


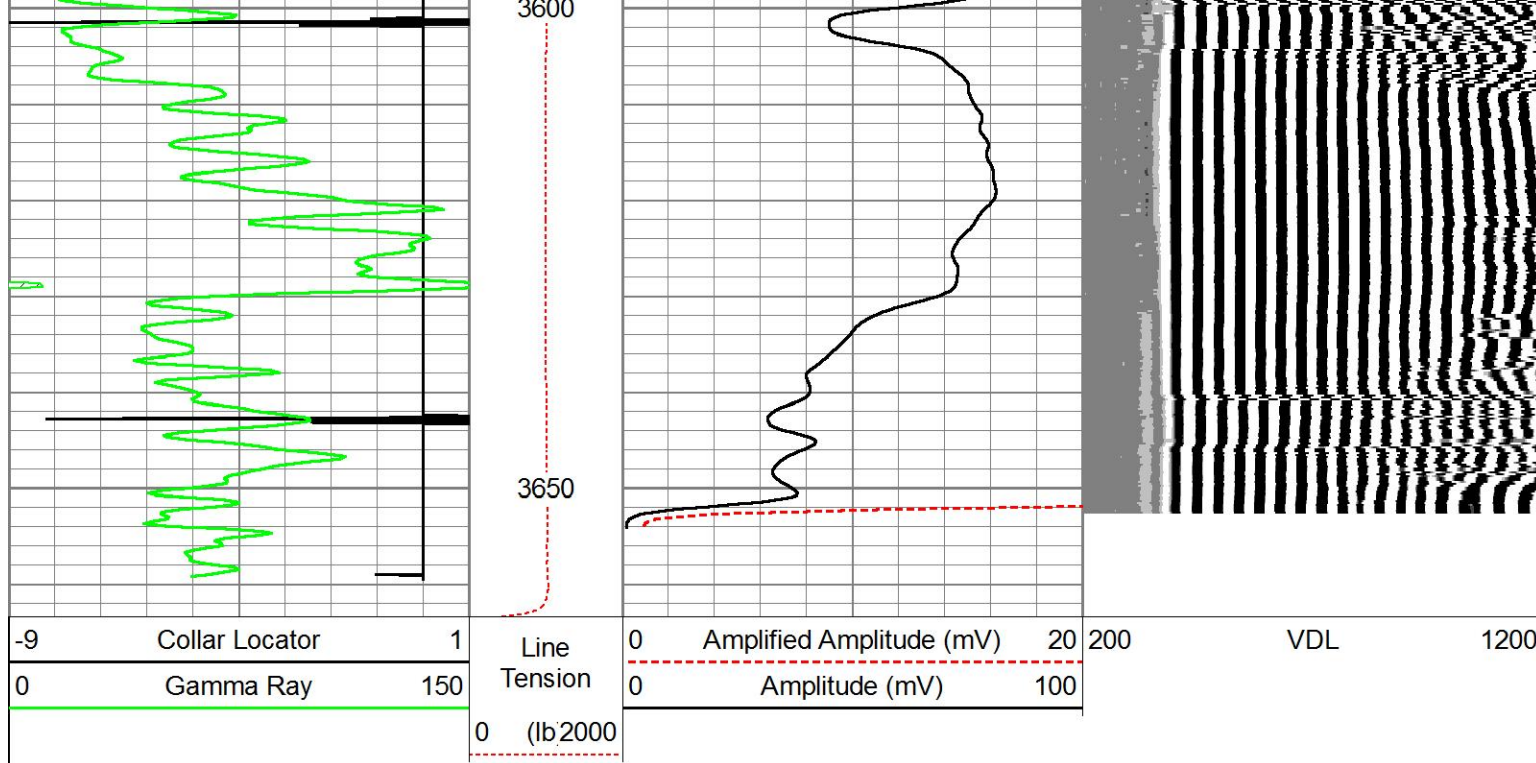
FREE PIPE SECTION

ZERO PSI APPLIED AT SURFACE

Database File	shakespeare_huck#2-6_owwo_grcbl.db
Dataset Pathname	pass2
Presentation Format	pinr_cbl-gr-ccl_1
Dataset Creation	Tue Jan 29 12:59:42 2019
Charted by	Depth in Feet scaled 1:240

-9	Collar Locator	1	Line	0	Amplified Amplitude (mV)	20	200	VDL	1200
0	Gamma Ray	150	Tension	0	Amplitude (mV)	100			
			0 (lb 2000)						





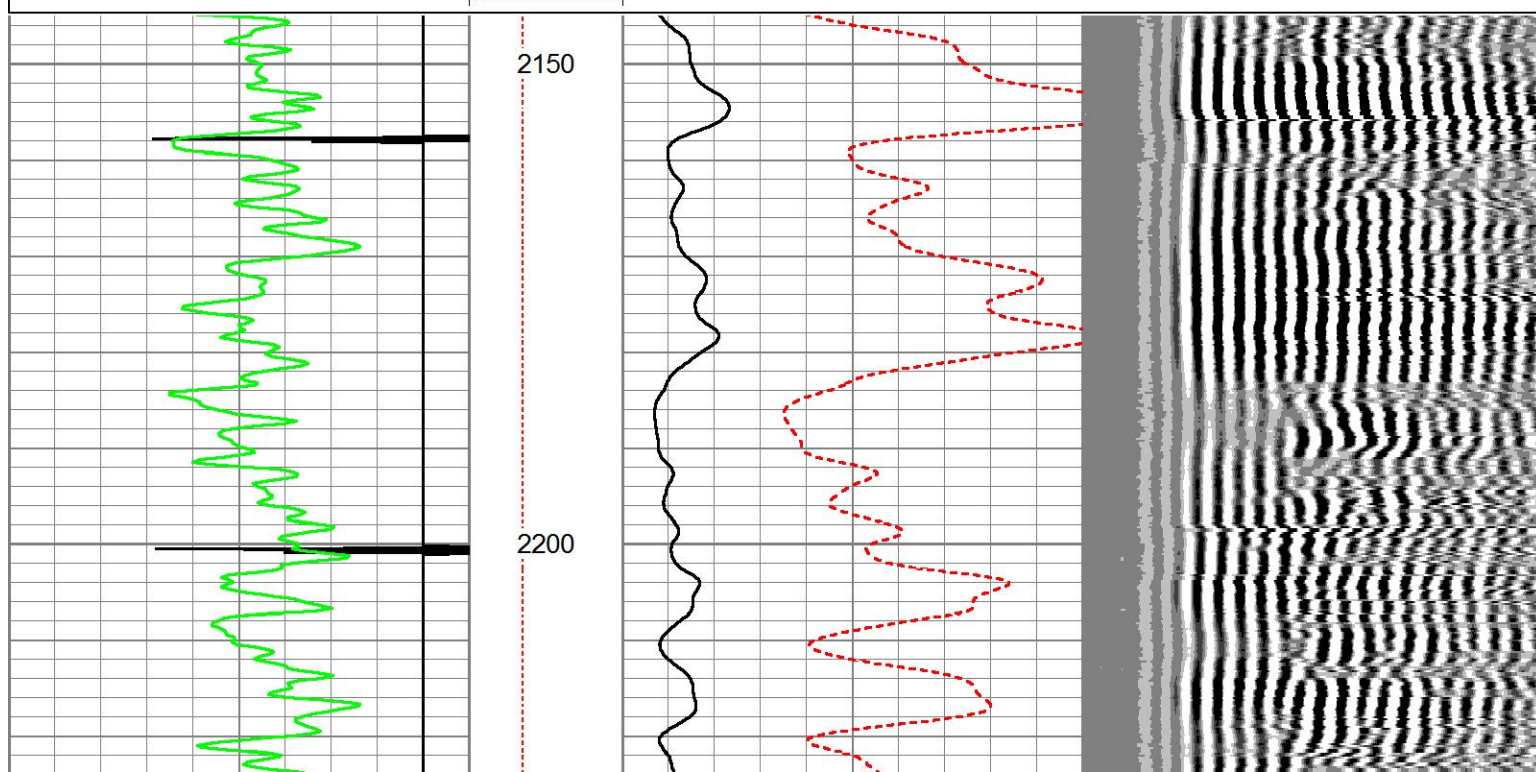
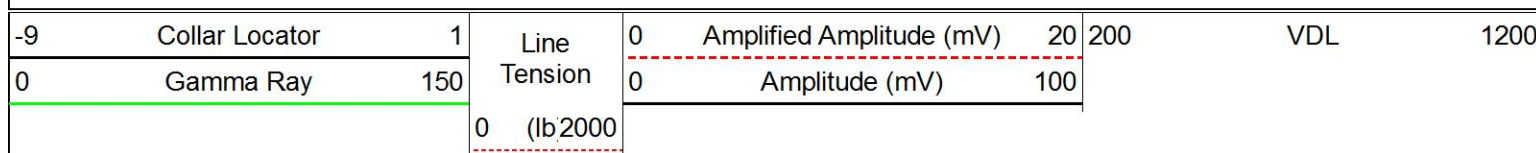


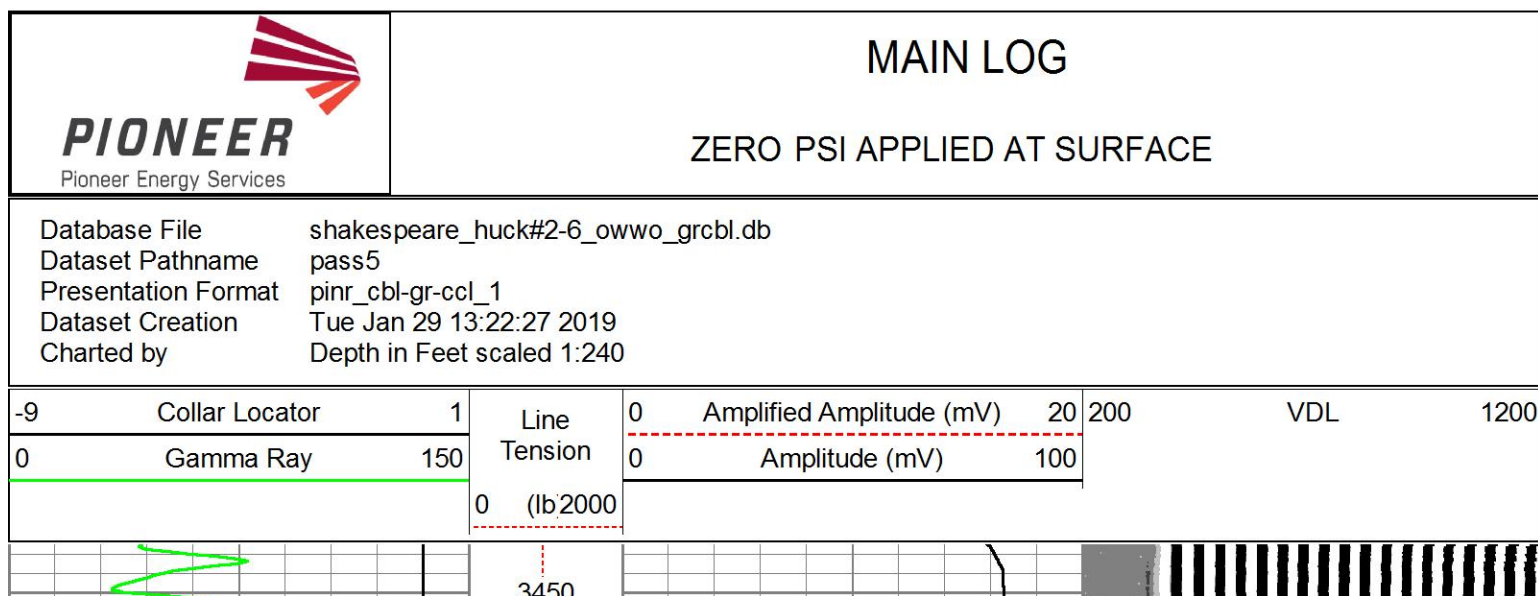
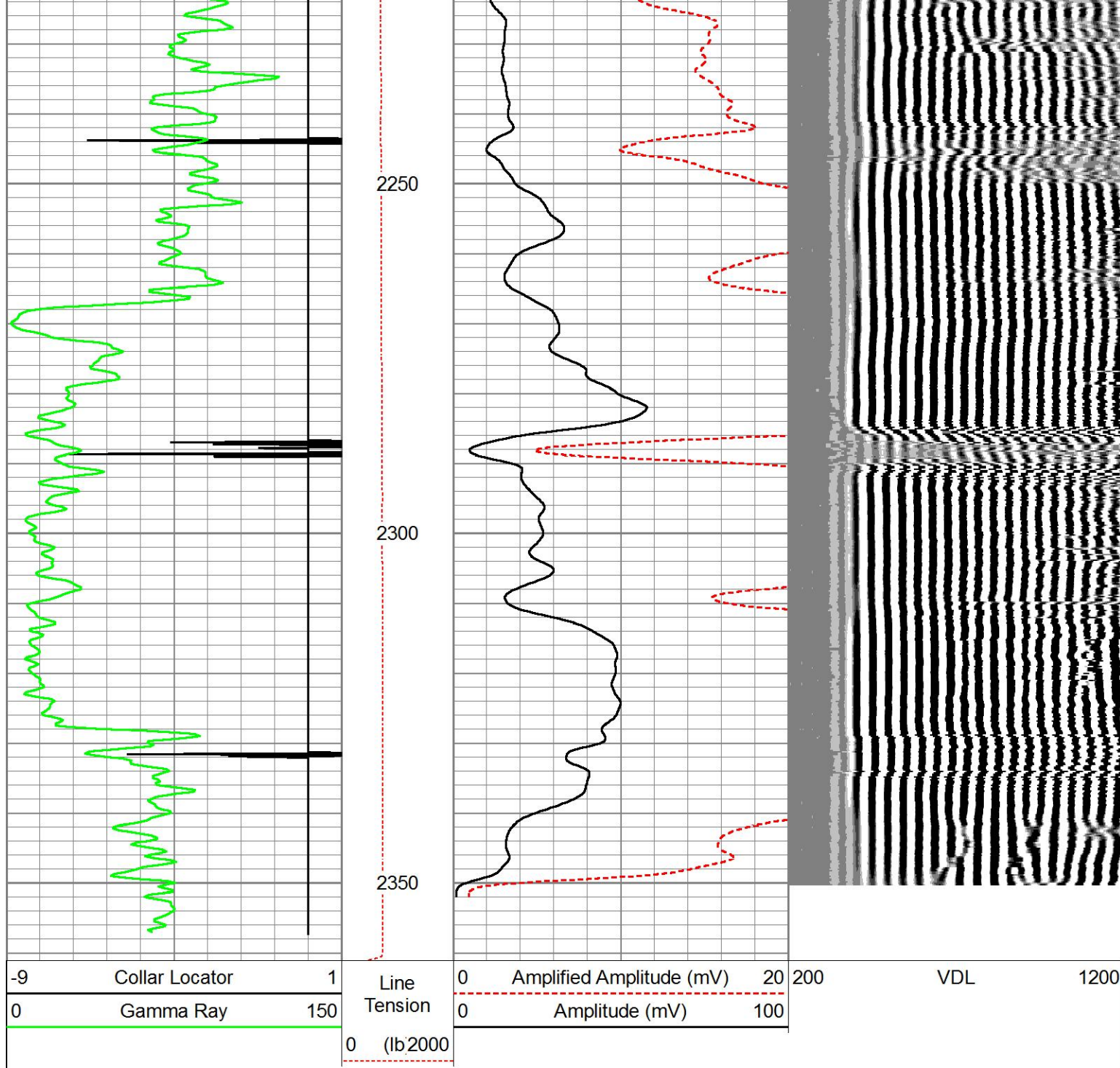
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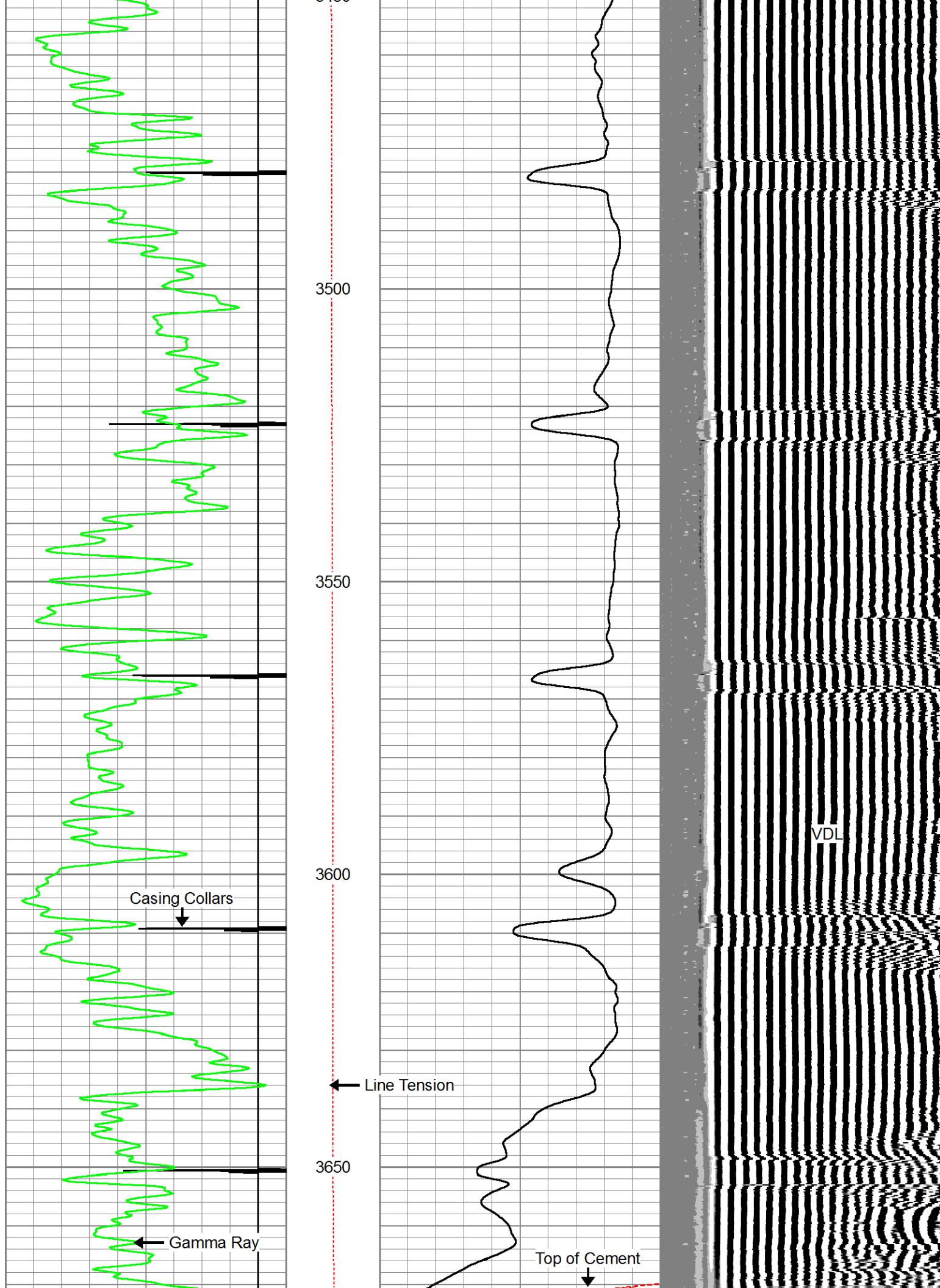
MAIN LOG

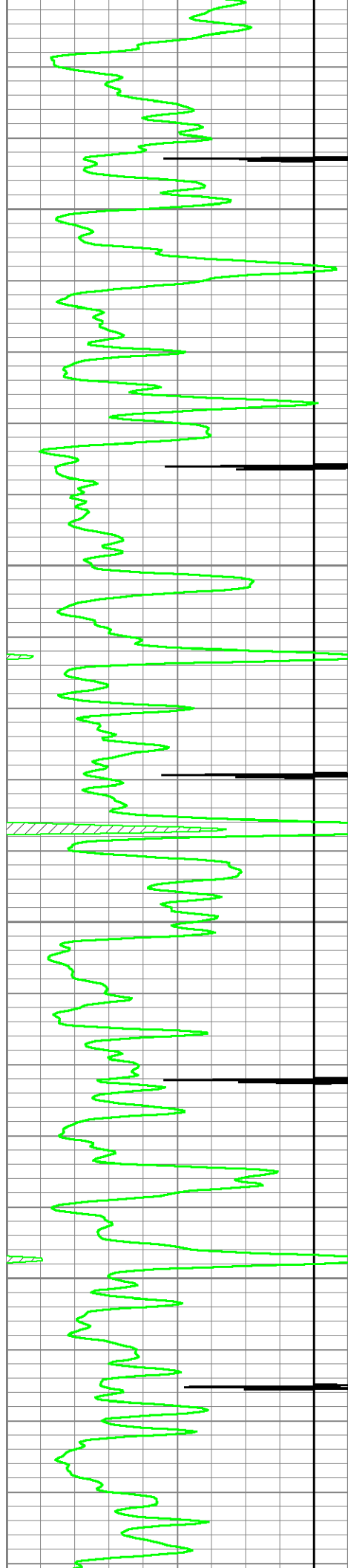
DV TOOL @ 2287'

Database File: shakespere_huck#2-6_owwo_grcbl.db
 Dataset Pathname: pass6
 Presentation Format: pinr_cbl-gr-ccl_1
 Dataset Creation: Tue Jan 29 13:57:19 2019
 Charted by: Depth in Feet scaled 1:240









3700

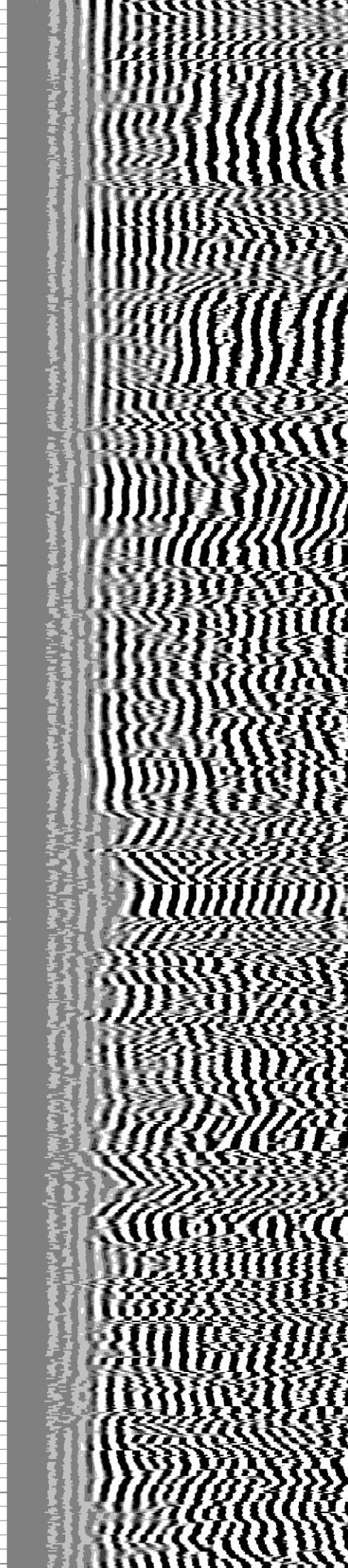
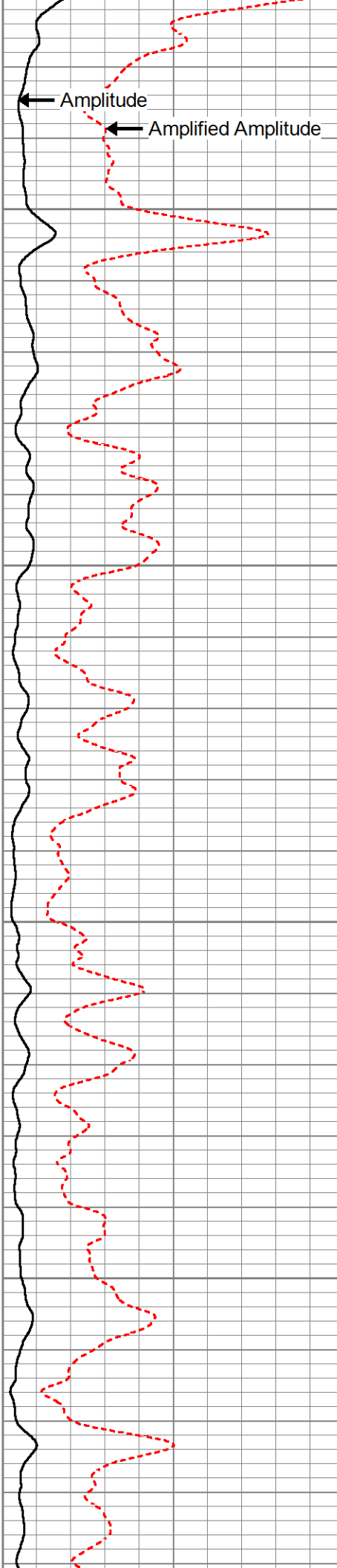
3750

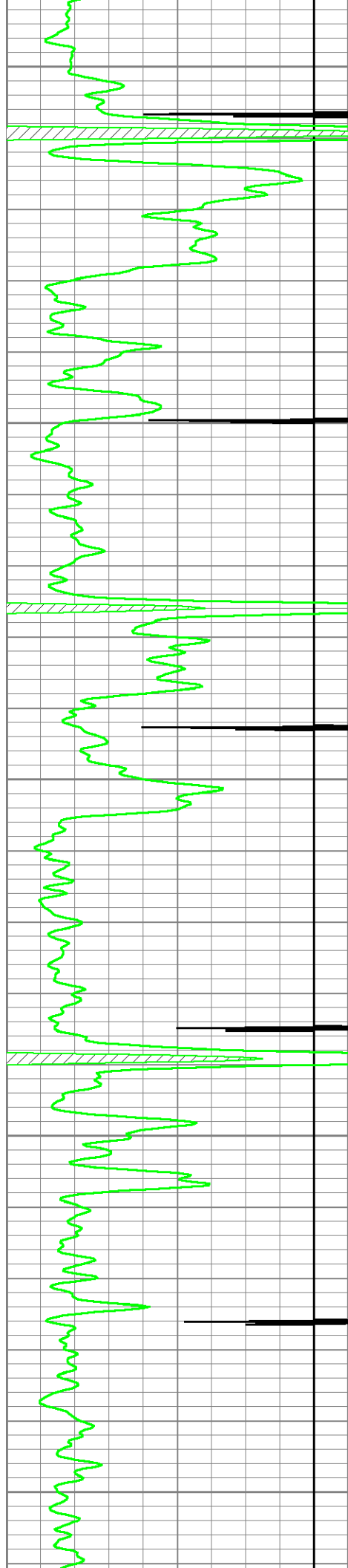
3800

3850

Amplitude

Amplified Amplitude





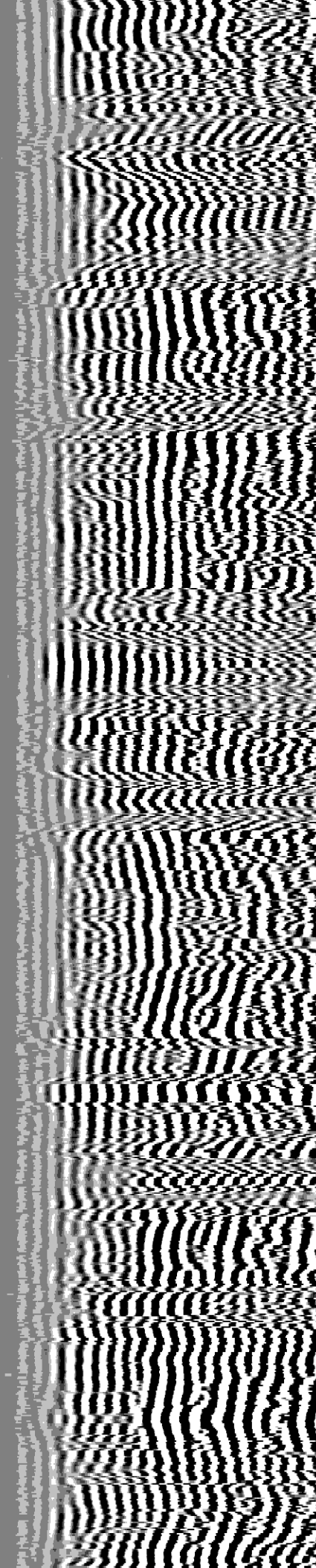
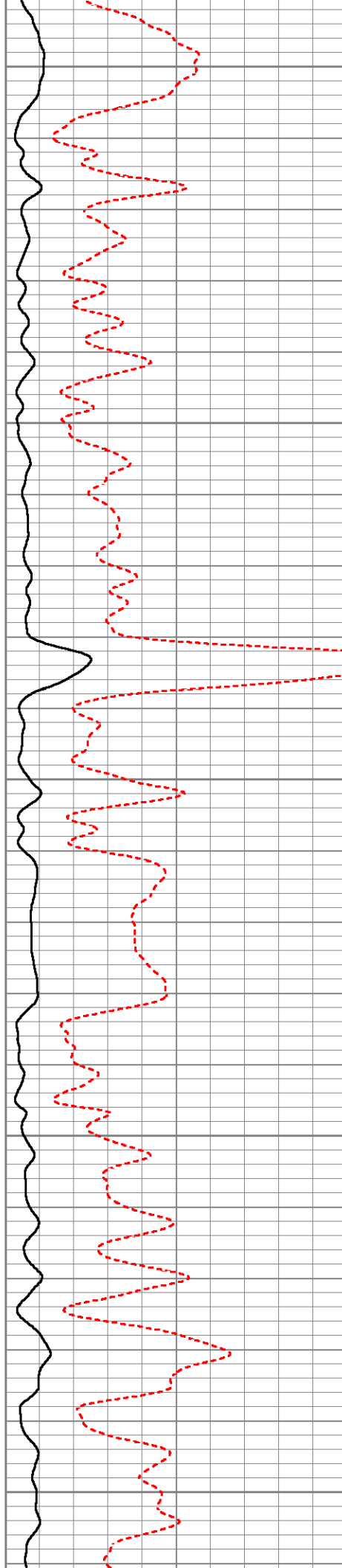
3900

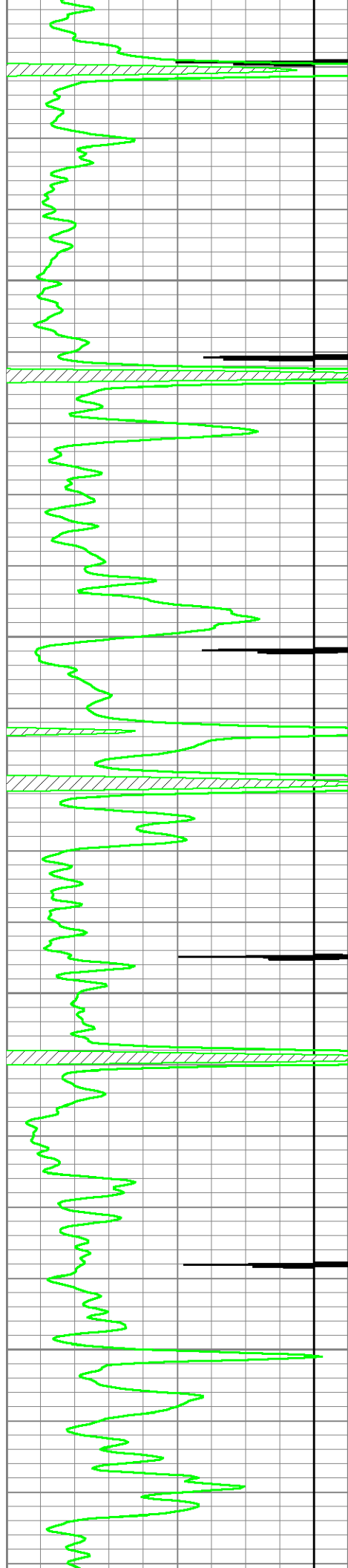
3950

4000

4050

4100



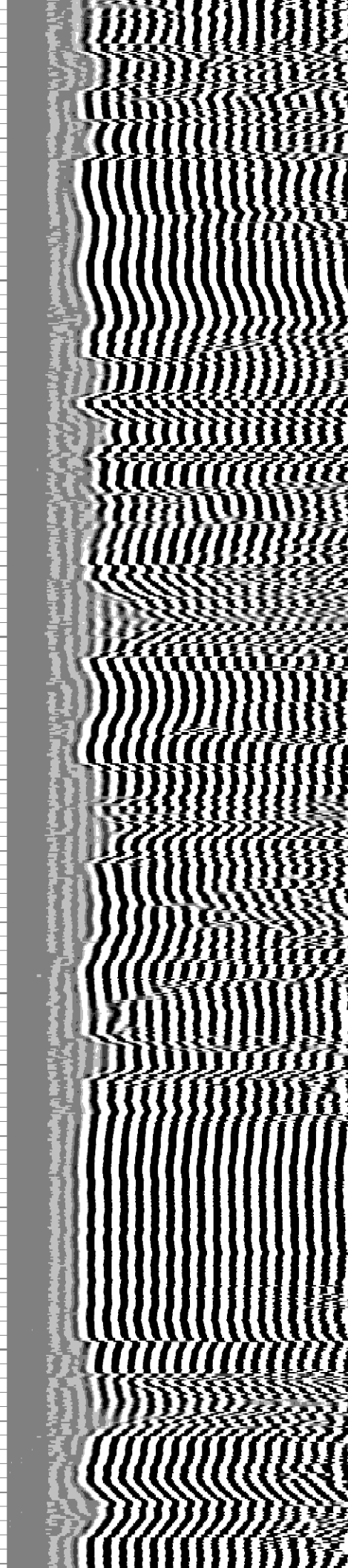
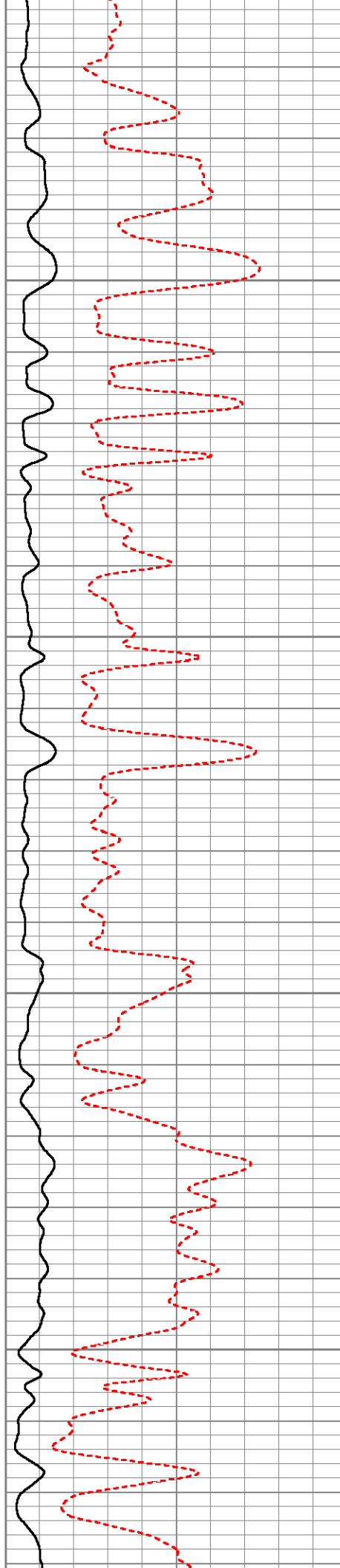


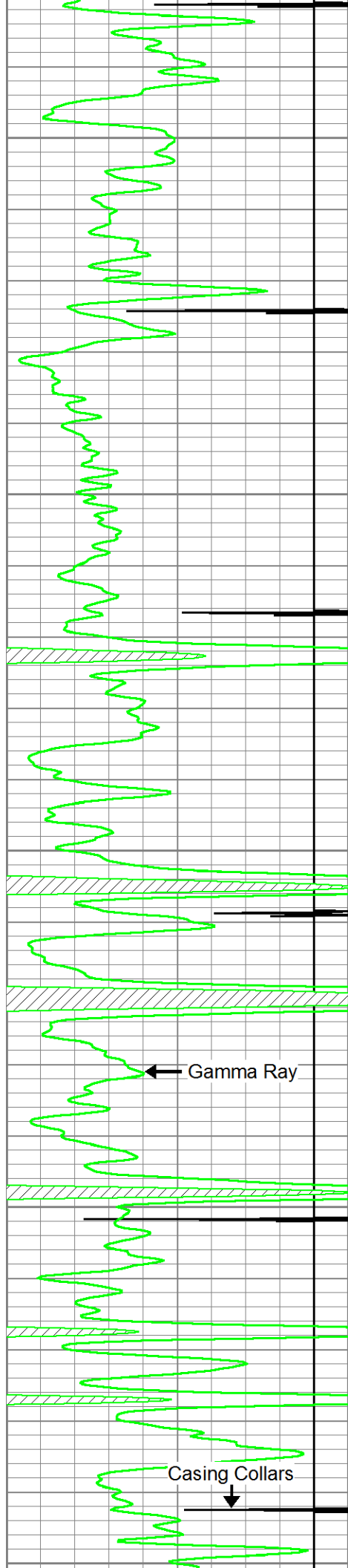
4150

4200

4250

4300





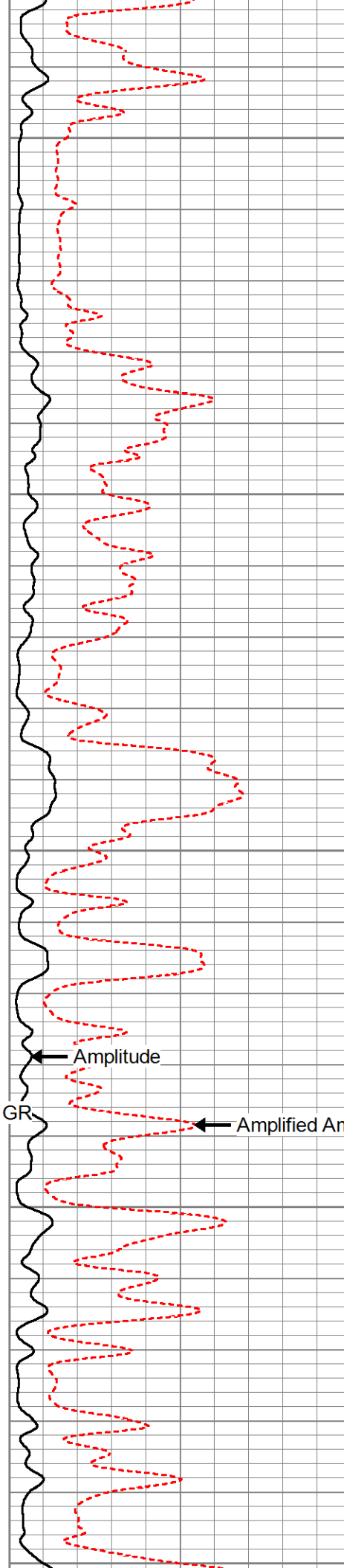
4350

4400

4450

4500

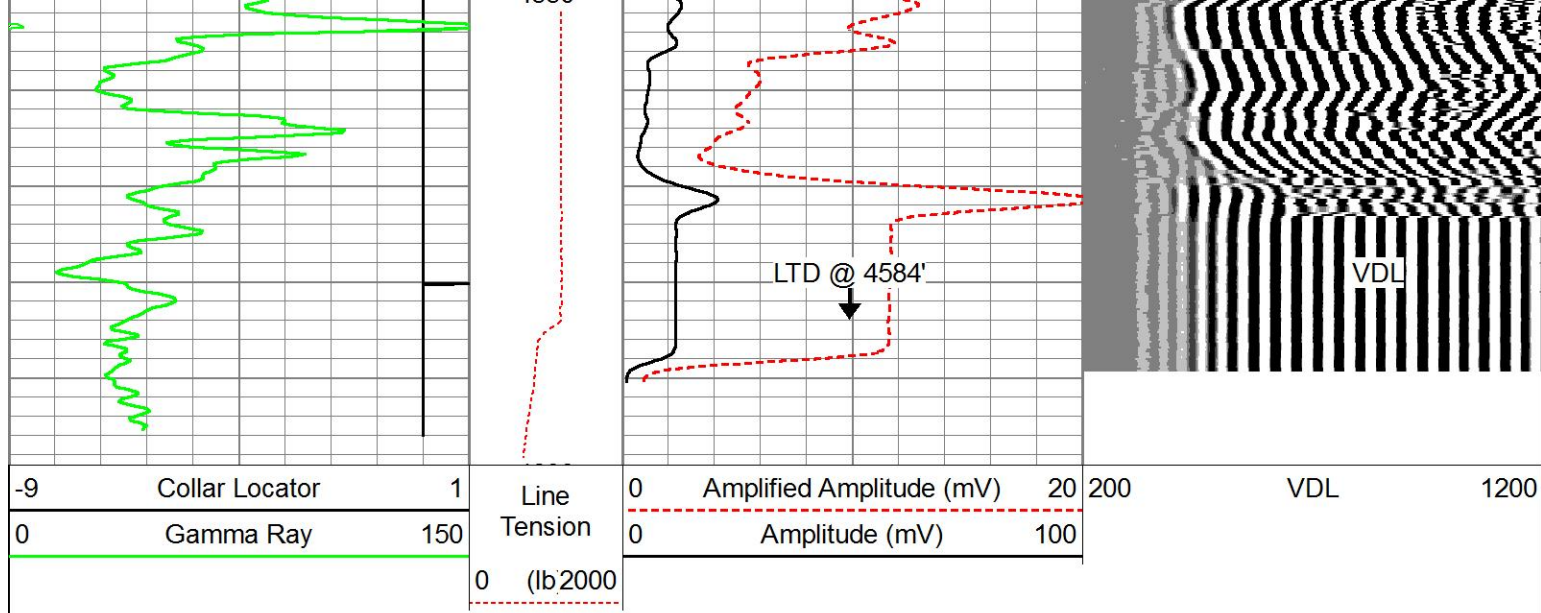
4550



Amplitude

GR

Amplified Amplitude



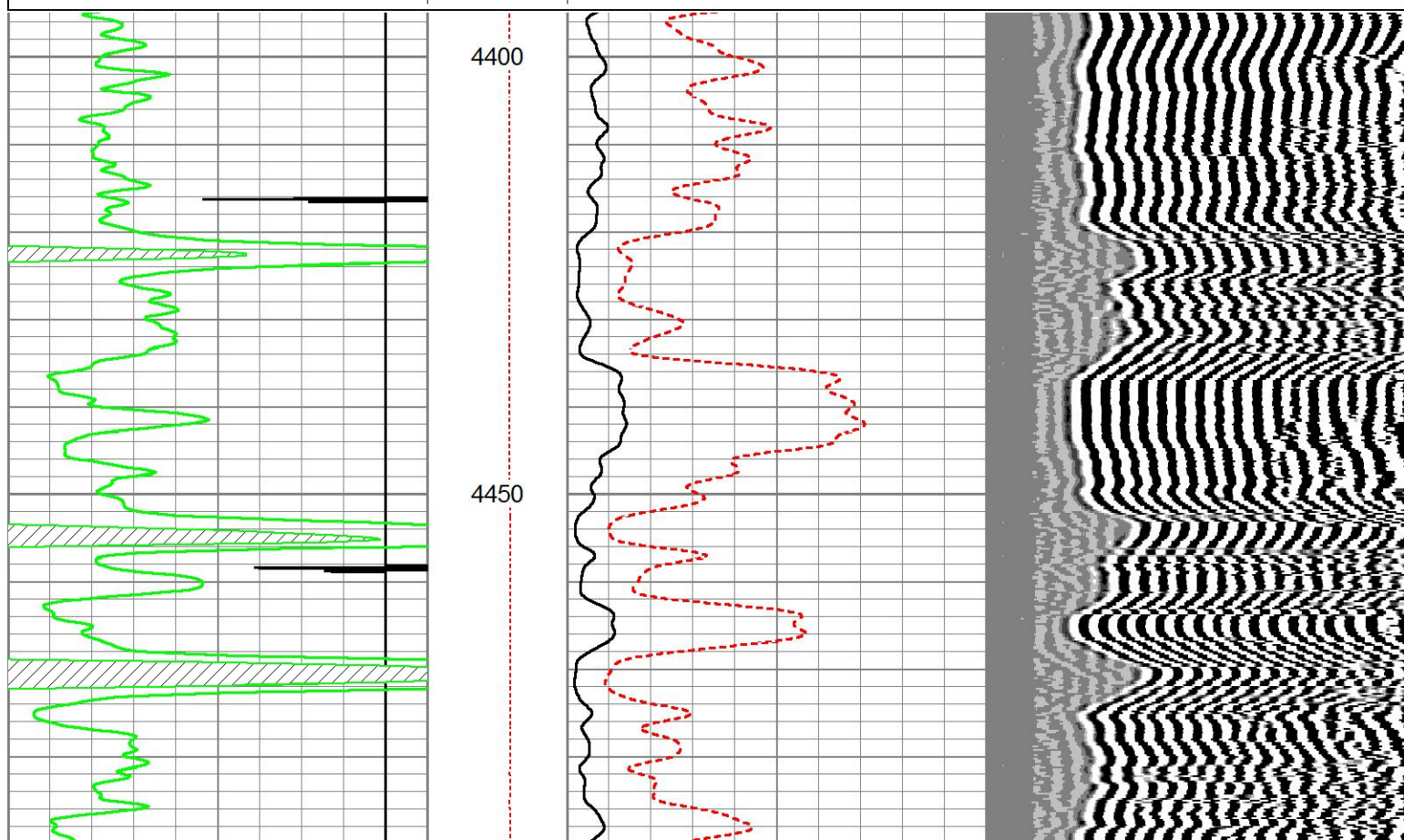
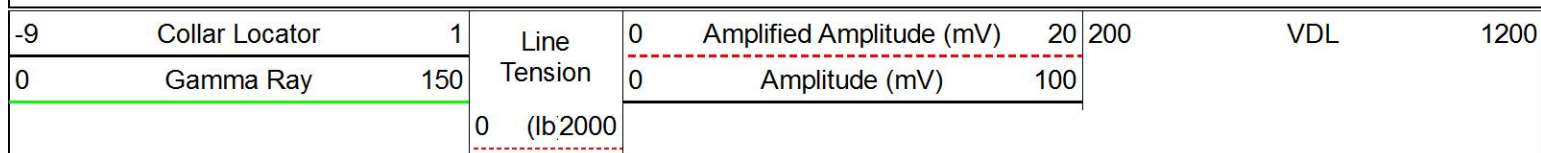


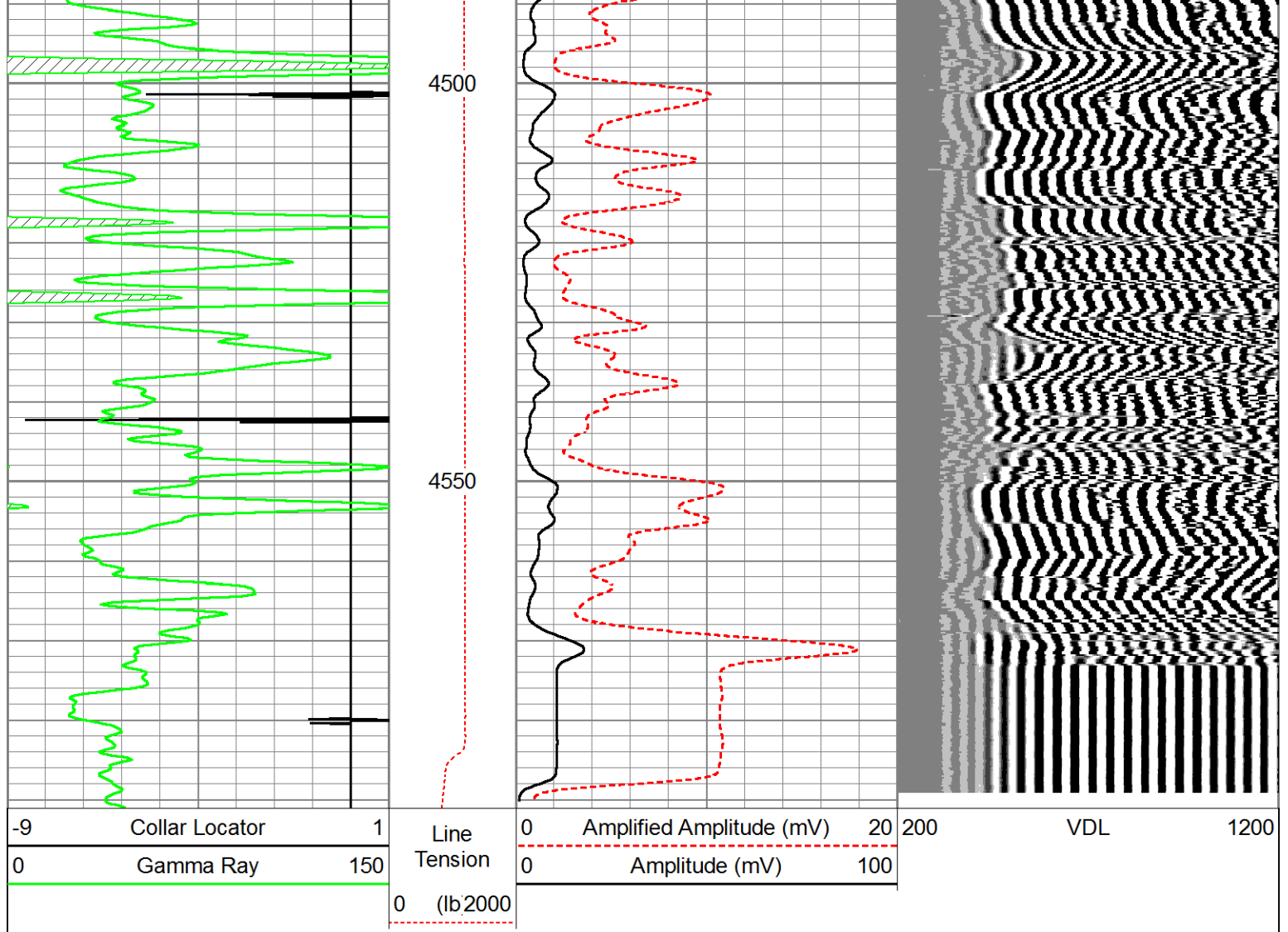
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REPEAT SECTION

ZERO PSI APPLIED AT SURFACE

Database File: shakespeare_huck#2-6_owwo_grcbl.db
 Dataset Pathname: pass4
 Presentation Format: pinr_cbl-gr-ccl_1
 Dataset Creation: Tue Jan 29 13:14:48 2019
 Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File shakespeare_huck#2-6_owwo_grcbl.db
 Dataset Pathname pass6
 Dataset Creation Tue Jan 29 13:57:19 2019

Gamma Ray Calibration Report

Serial Number: TigerProbe
 Tool Model: Tiger
 Performed: Tue Jan 29 13:11:23 2019

Calibrator Value: 1.0

Background Reading: 0.0 cps
 Calibrator Reading: 1.0 cps

Sensitivity: 0.8000 /cps

Segmented Cement Bond Log Calibration Report

Serial Number: 4.5040904
 Tool Model: Probe

Calibration Casing Diameter: 4.500 in
 Calibration Depth: 3550.015 ft

Master Calibration, performed Tue Jan 29 12:58:57 2019:

Raw (v)

Calibrated (mv)

Results

	Raw (v)		Calibrated (mV)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.006	1.852	0.700	81.196	43.335	0.945
CAL	-0.006	2.174				
5'	-0.005	1.562	0.700	81.196	51.365	0.958
SUM						
S1	-0.006	1.655	0.000	100.000	60.206	0.342
S2	-0.006	1.799	0.000	100.000	55.396	0.327
S3	-0.006	1.904	0.000	100.000	52.362	0.309
S4	-0.006	1.960	0.000	100.000	50.884	0.286
S5	-0.005	1.956	0.000	100.000	50.974	0.272
S6	-0.006	1.907	0.000	100.000	52.292	0.289
S7	-0.005	1.813	0.000	100.000	54.994	0.281
S8	-0.006	1.667	0.000	100.000	59.769	0.341

Air Zero Calibration, performed Fri Jan 25 08:26:48 2019:

	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 SHAKESPEARE OIL COMPANY, INC.
 Well HUCK #2-6 OWWO
 Field BECKELY NORTH
 County SCOTT
 State KANSAS