



Pioneer Energy Services

Gamma Ray CCL
Cement Bond VDL

Company	Great Western Oil & Gas		
Well	Kortum #1		
Field	Wattenberg		
County	Adams		
State	CO		
Location:	Company	Great Western Oil & Gas	
	Well	Kortum #1	
	Field	Wattenberg	
	County	Adams	State CO
Other Services	API #:		
	<div> <div>SEC</div> <div>TWP</div> <div>RGE</div> </div>		
Permanent Datum		GL	Elevation
Log Measured From		KB	
Drilling Measured From		KB	
		K.B.	
		D.F.	
		G.L.	

Date	May-29-2013						
Run Number	one						
Depth Driller							
Depth Logger							
Bottom Logged Interval	446						
Top Log Interval	Surface						
Open Hole Size							
Type Fluid	Water						
Density / Viscosity							
Max. Recorded Temp.							
Estimated Cement Top							
Time Well Ready							
Time Logger on Bottom							
Equipment Number	75						
Location							
Recorded By	Mike Meisner						
Witnessed By	Jack Brunner						
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							
Liner							

AA Gold Hero AA

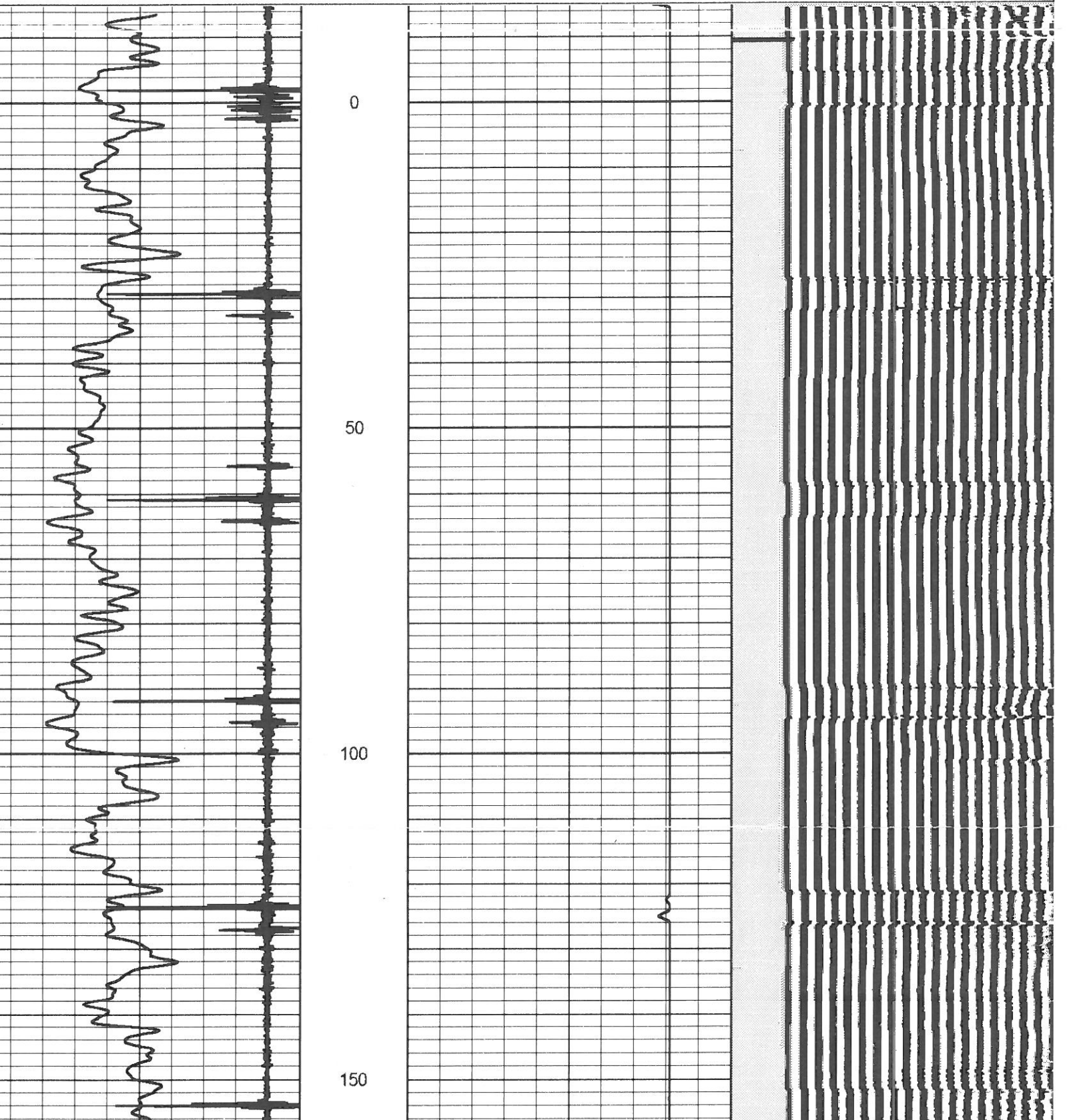
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

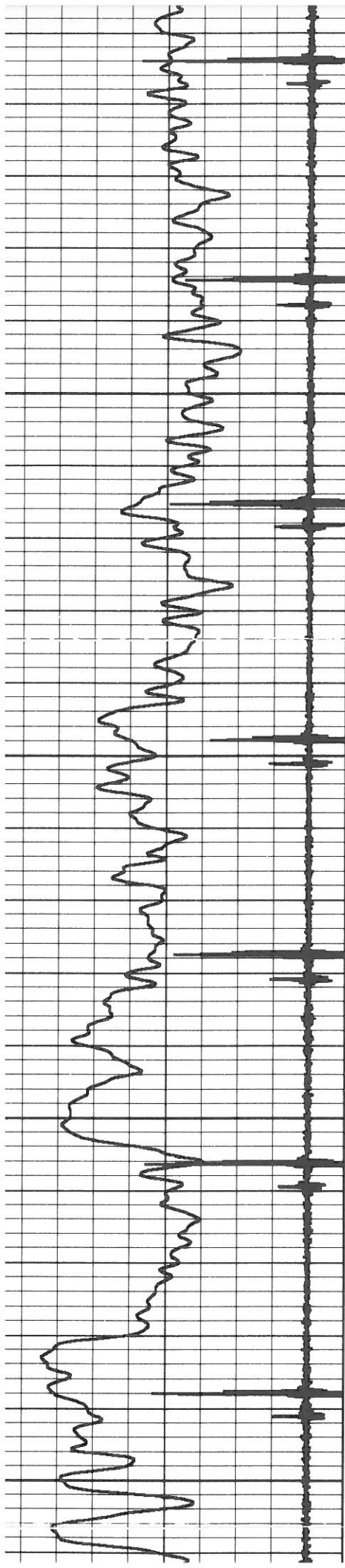
Comments

Thank You for calling Pioneer

Database File: gw-2.db
Dataset Pathname: pass3
Presentation Format: cbl_dr
Dataset Creation: Wed May 29 09:54:41 2013 by Log SCH 120430
Charted by: Depth in Feet scaled 1:240

Collar Locator	-1	LTEN	0	Amplified Amplitude (mV)	30	200	Variable Density	1200
Gamma Ray (GAPI)	200	0	(lb)2000	0	Amplitude (mV)	100		





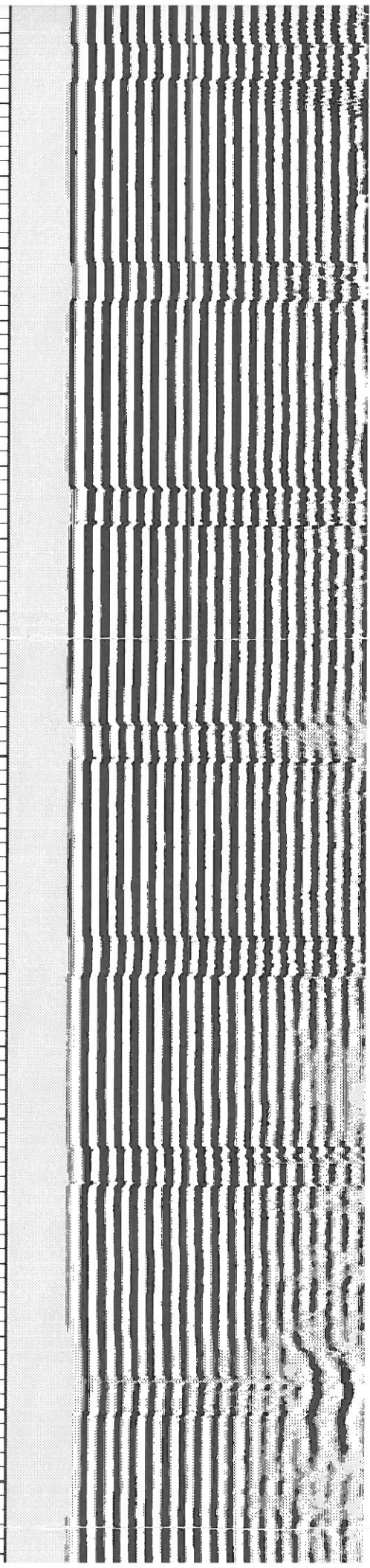
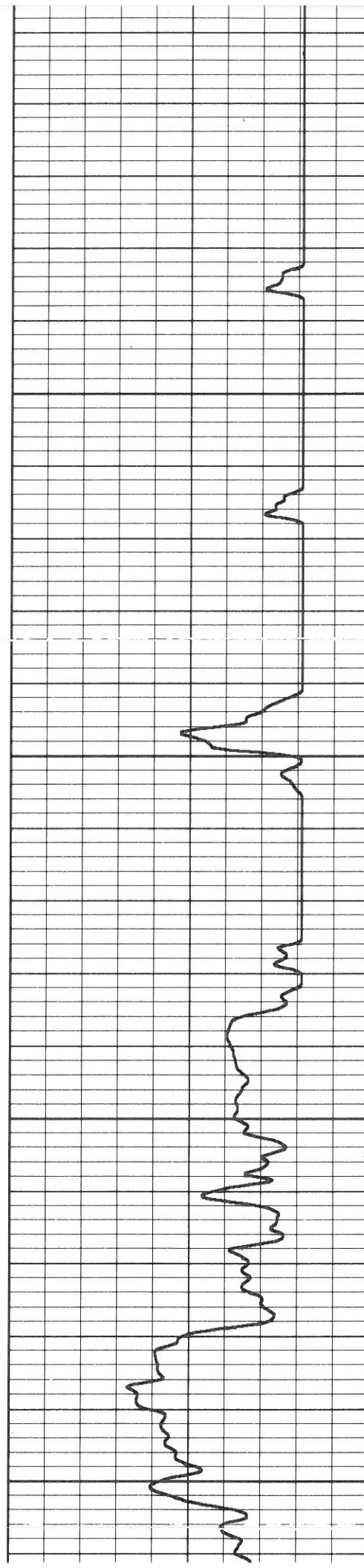
150

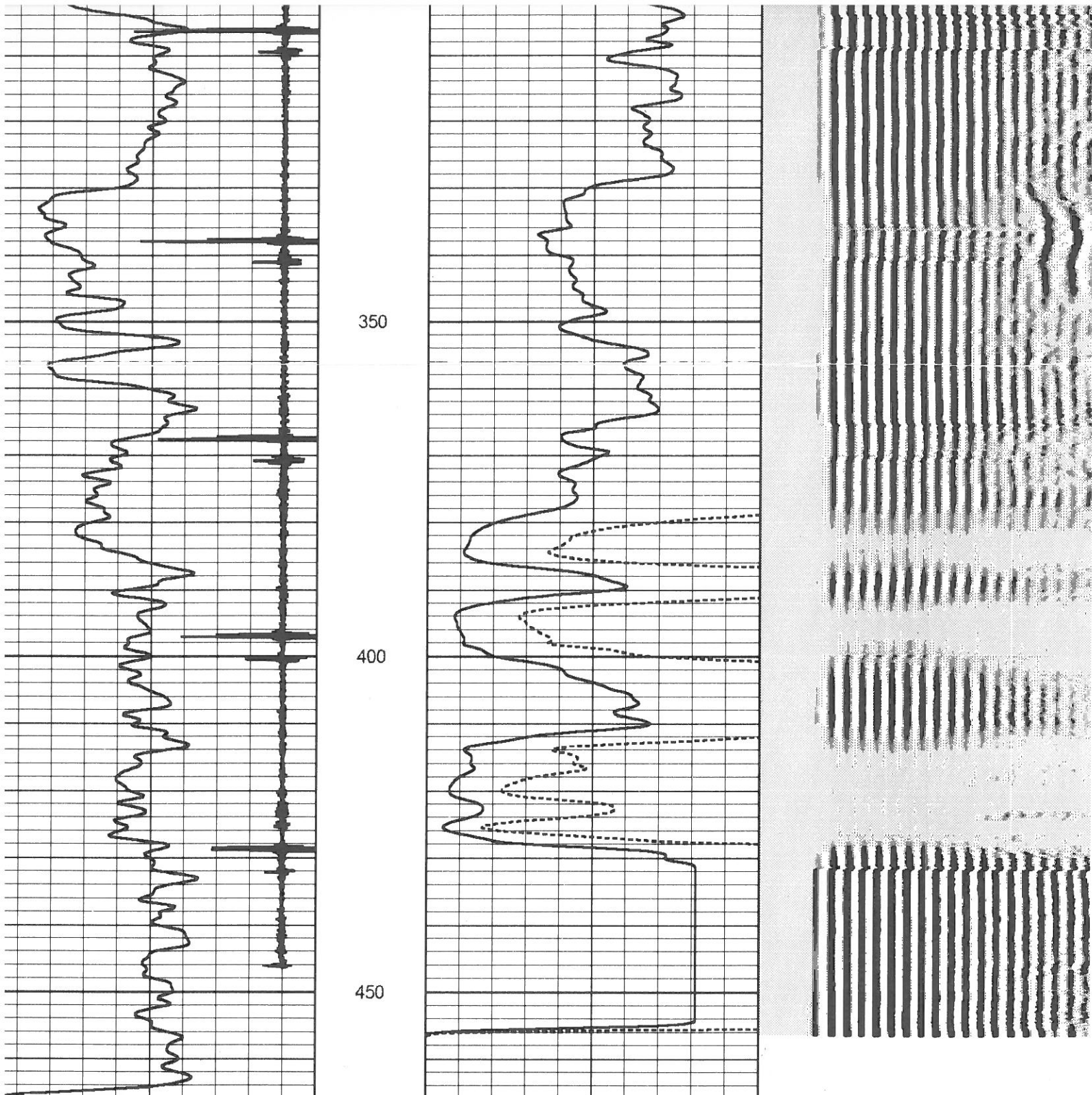
200

250

300

350





350

400

450

Collar Locator	-1	LTEN	0	Amplified Amplitude (mV)	30	200	Variable Density	1200
Gamma Ray (GAPI)	200	0	(lb)2000	0	Amplitude (mV)	100		