GAMMA RAY CCL
CEMENT BOND VDL

Company	NOBLE ENERGY INC.		
Well	SATER C23-28D		
Field	WATTENBERG		
County	WELD	State	COLORADO

Company NOBLE ENERGY INC.
Well SATER C23-28D
Field WATTENBERG
County WELD
State COLORADO

Location: API # : 0512330804

SHL: 762' FNL & 1740' FEL NW/NE
BHL: 71' FNL & 2600' FEL NW/NE
SEC 23 TWP 4N RGE 64W

Other Services

Permanent Datum	GL	Elevation	4650
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4664
D.F. 4664
G.L. 4650

Date	DECEMBER 2, 2011		
Run Number	ONE		
Depth Driller	7070		
Depth Logger	6991		
Bottom Logged Interval	6990		
Top Log Interval	1686		
Open Hole Size	7-7/8		
Type Fluid	WATER		
Density / Viscosity	N/A		
Max. Recorded Temp.	242 DEG. F		
Estimated Cement Top	2039		
Time Well Ready	PORTABLE MAST		
Time Logger on Bottom	1-11/16 GO TOOL		
Equipment Number	3342		
Location	45		
Recorded By	GREG NOLAN		
Witnessed By	MITCH TRIMBLE		

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8-5/8	24# J-55	14	599
Prot. String				
Production String	4-1/2	11.6# M-80	14	7060
Liner				

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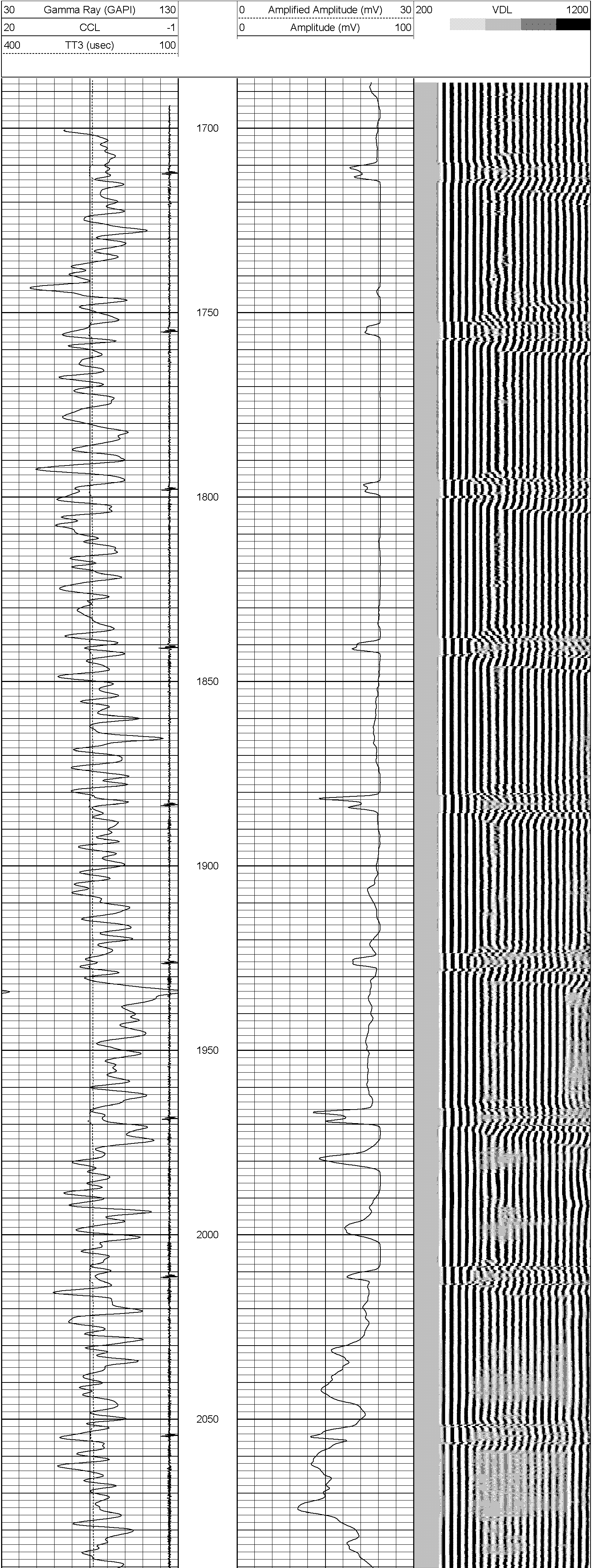
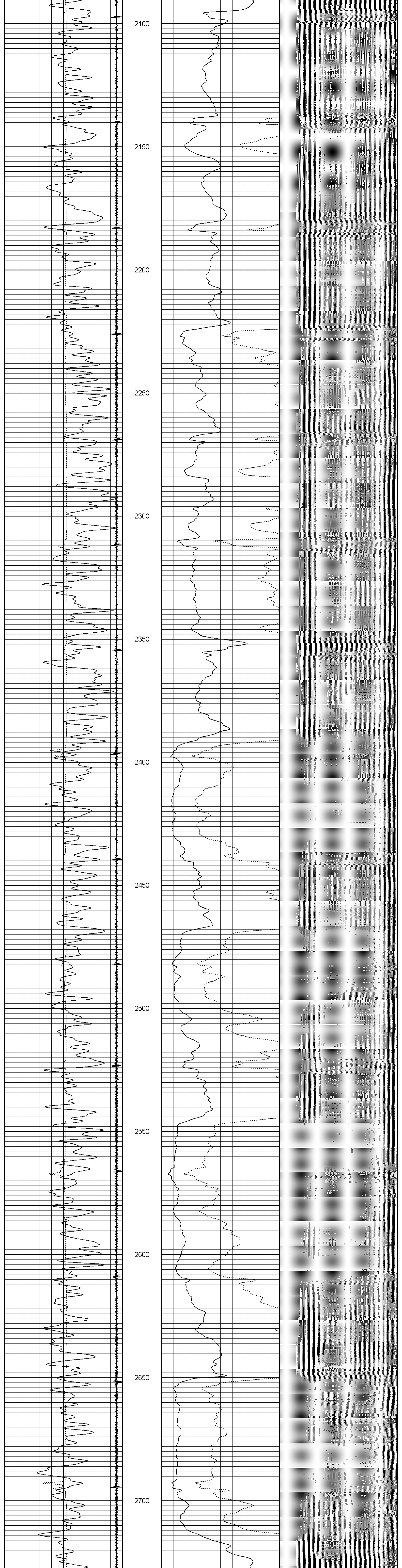
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

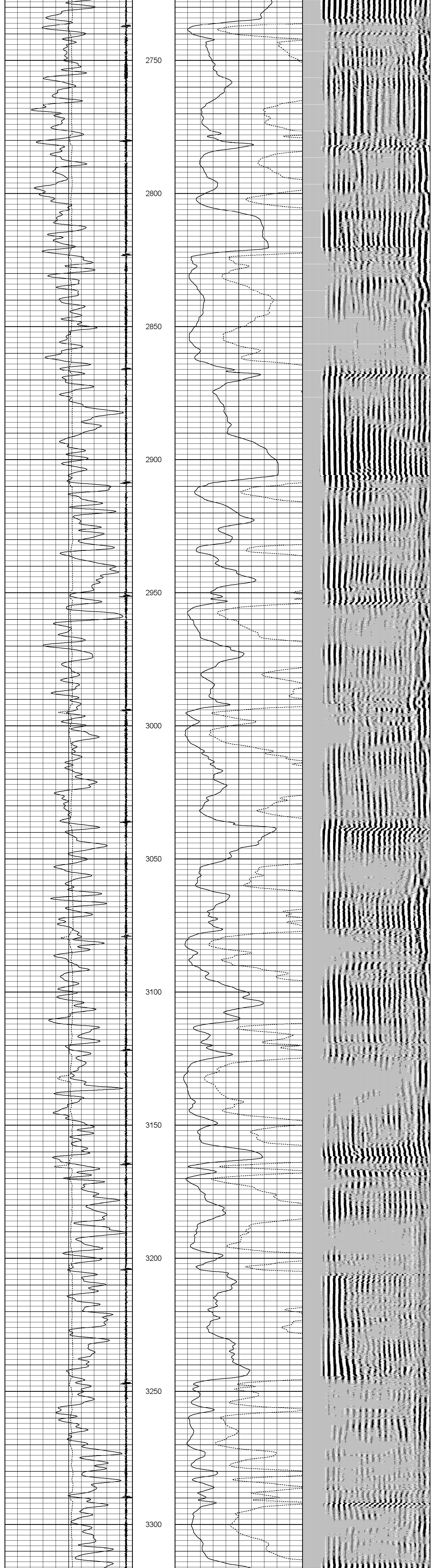
Comments

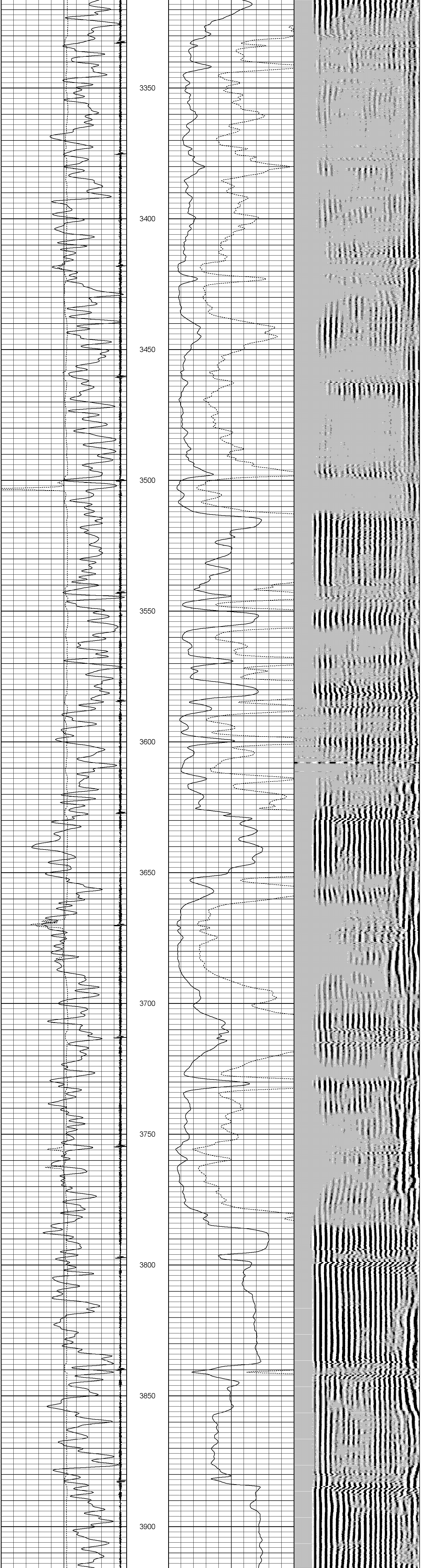
THANK YOU FOR CHOOSING SUPERIOR WELL SERVICES!!!!
UPPER SECTION OF LOG CORRELATED TO PSI COMP. DENSITY/NEUTRON MICROLOG DATED NOVEMBER 14, 2011
LOWER SECTION NOT CORRELATED TO OPEN HOLE LOG
WCR 44 & WCR 57, E.75, S 700', W 400' INTO
EAST WELL OF A 2 WELL PAD

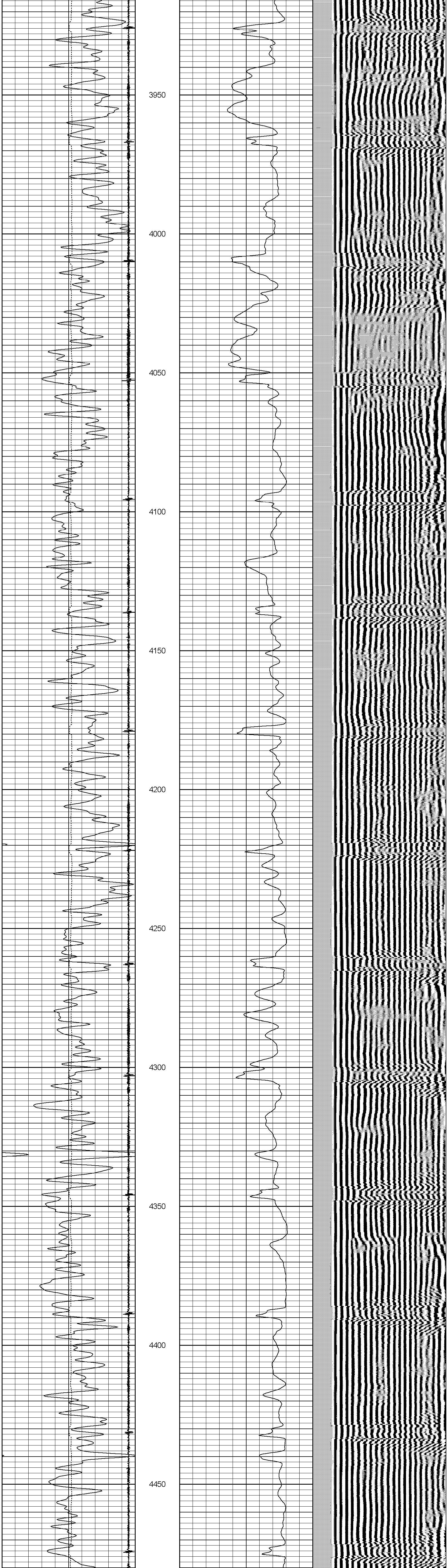
Database File:	cbl noble sater c23-28d.db
Dataset Pathname:	pass2
Presentation Format:	nuexbond
Dataset Creation:	Fri Dec 02 12:52:29 2011 by Log Std Casedhole 10081
Charted by:	Depth in Feet scaled 1:240

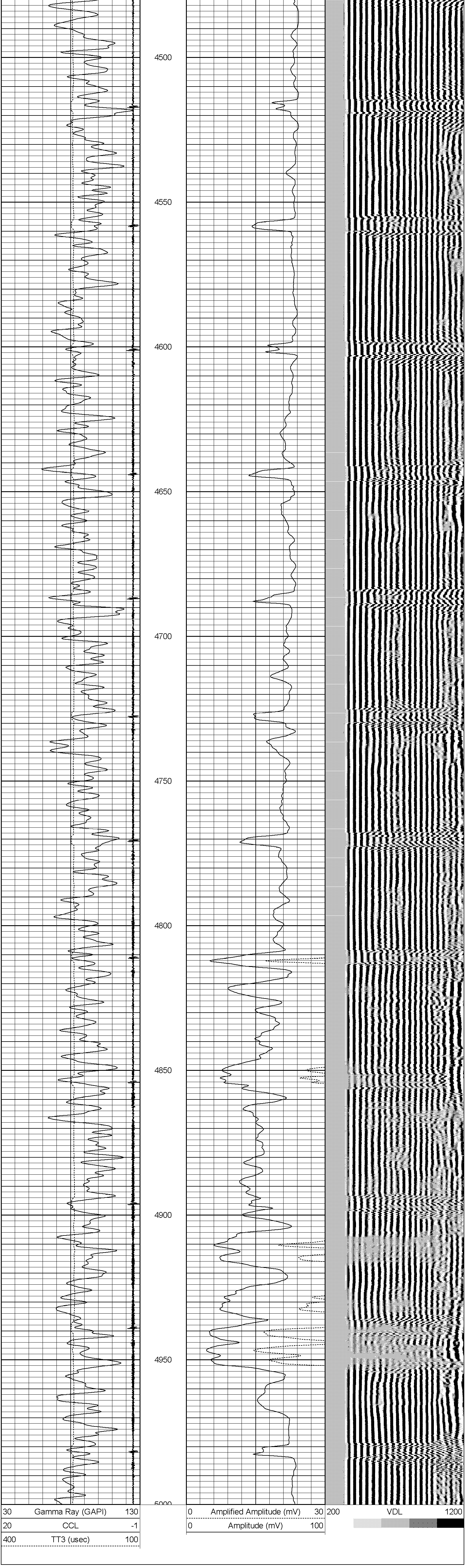




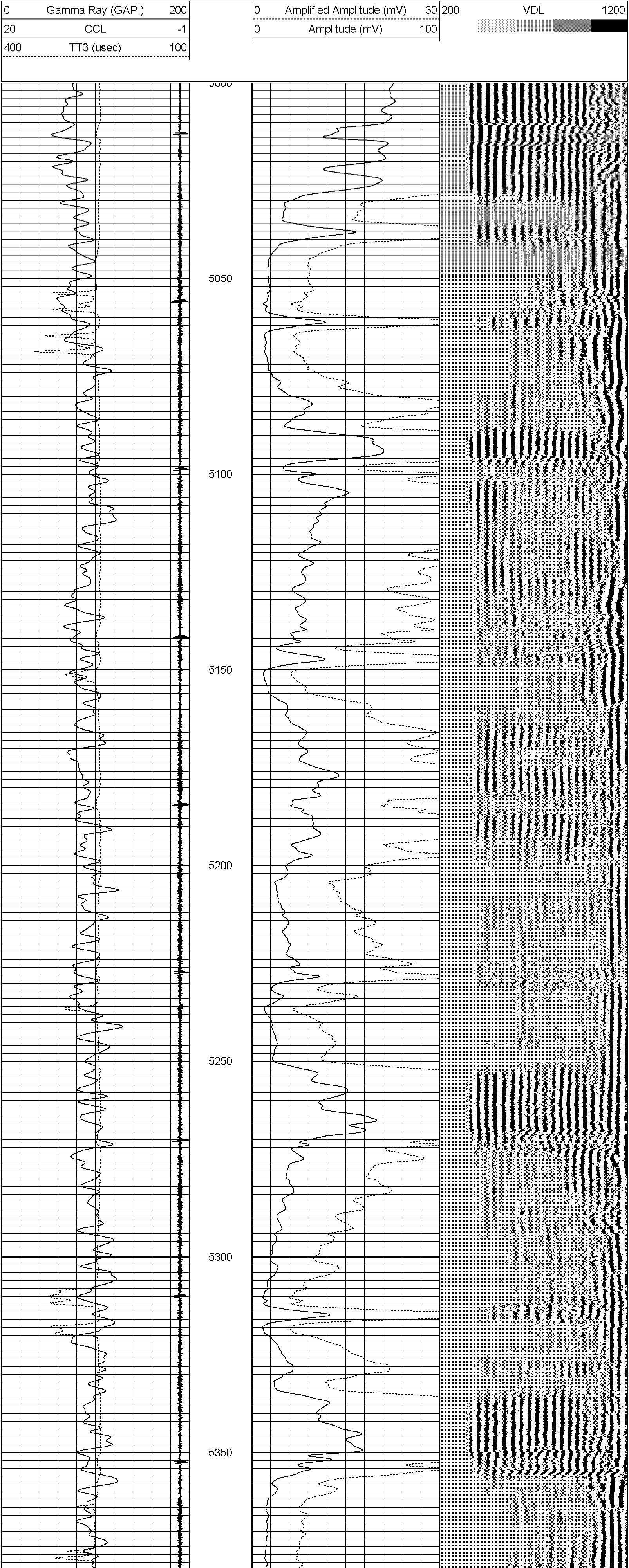


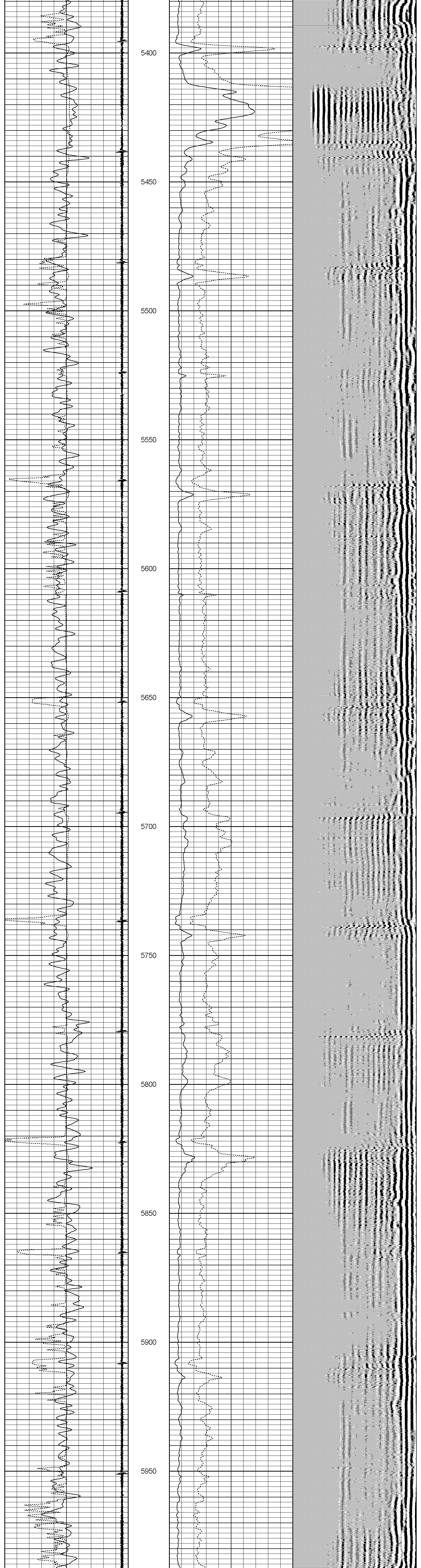


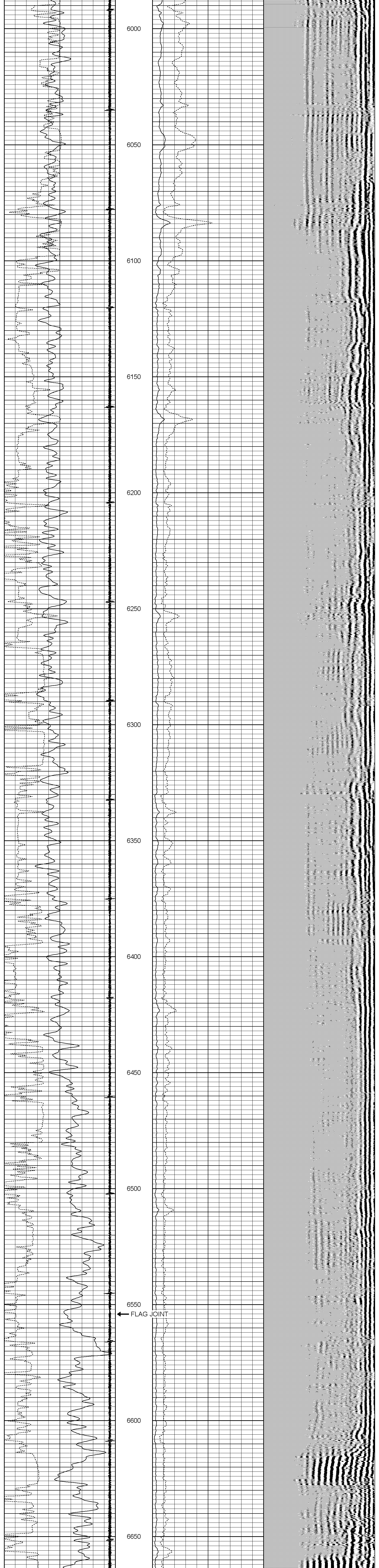


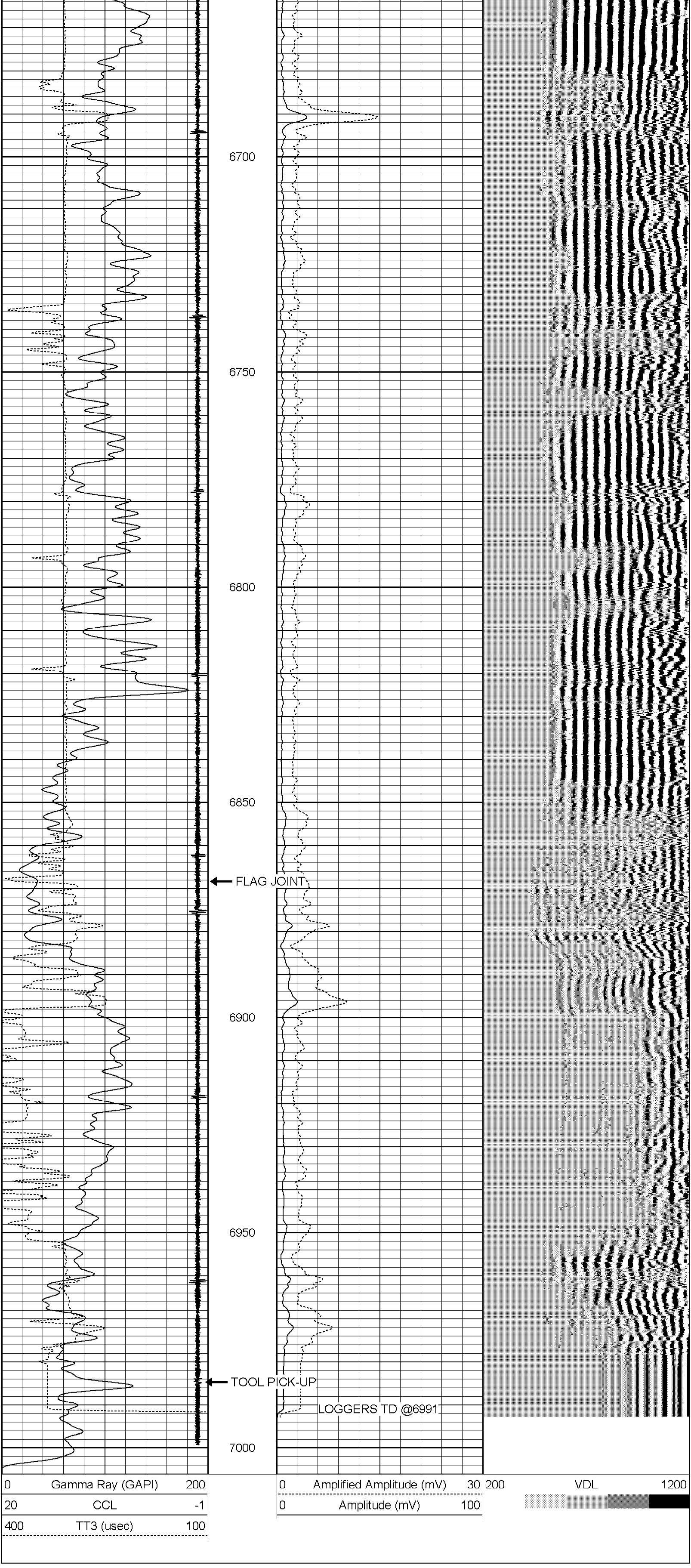


Database File: cbl noble sater c23-28d.db
Dataset Pathname: pass1
Presentation Format: nuexbond
Dataset Creation: Fri Dec 02 12:37:23 2011 by Log Std Casedhole 10081
Charted by: Depth in Feet scaled 1:240









Calibration Report

Database File:	cbl noble sater c23-28d.db
Dataset Pathname:	pass2
Dataset Creation:	Fri Dec 02 12:52:29 2011 by Log Std Casedhole 10081

Gamma Ray Calibration Report

Serial Number:	1-11/16T	
Tool Model:	T1-11/16	
Performed:	Tue Aug 16 14:56:34 2011	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

CBL Calibration Report

Serial Number:	111		
Tool Model:	TekCo_GOI		
Performed:	Fri Dec 02 12:22:36 2011		
Depth:	970.275	ft	
Casing Diameter:	4.500	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.800	0.800	mV
Calibrated Amplitude:	81.196	81.196	mV
Reading at Signal Zero:	0.008	0.008	V
Reading in Free Pipe:	2.498	2.499	V
Gain:	32.279	32.275	
Offset:	0.555	0.548	