PSI
PHOENIX SURVEYS, INC.

V.D.L. C.C.L GAMMA-RAY CEMENT BOND LOG

Company	HRM RESOURCES, LLC
Well	DUTTON 21-22
Field	WATTENBERG
County	WELD
State	COLORADO

Company HRM RESOURCES, LLC
Well DUTTON 21-22
Field WATTENBERG
County WELD State COLORADO

Location: API # : 051232923700
SHL 1153' FNL & 1197' FWL NWNW
BHL 681' FNL & 1946' FWL NENW
SEC 22 TWP 4N RGE 67W

Other Services

Permanent Datum	GL	Elevation 4870'	Elevation
Log Measured From	KB		K.B. 4885'
Drilling Measured From	KB		D.F. 4884'
			G.L. 4870

Date	DEC. 21 2010
Run Number	ONE
Depth Driller	7503'
Depth Logger	7446'
Bottom Logged Interval	7434'
Top Log Interval	2700'
Open Hole Size	7-7/8"
Type Fluid	WATER
Density / Viscosity	NA
Max. Recorded Temp.	211 DEG. F
Estimated Cement Top	3070'
Time Well Ready	NA
Time Logger on Bottom	NA
Equipment Number	9605
Location	FORT MORGAN
Recorded By	TODD YOUNG
Witnessed By	TOM COBB

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String	4.5"	11.6 LB.	SURFACE	7446'
Production String				
Liner				

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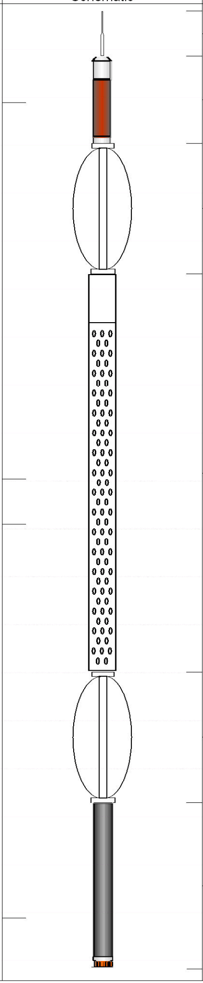
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

WCR 19 & WCR 44 1/2 MILE S E 7/10 N INTO

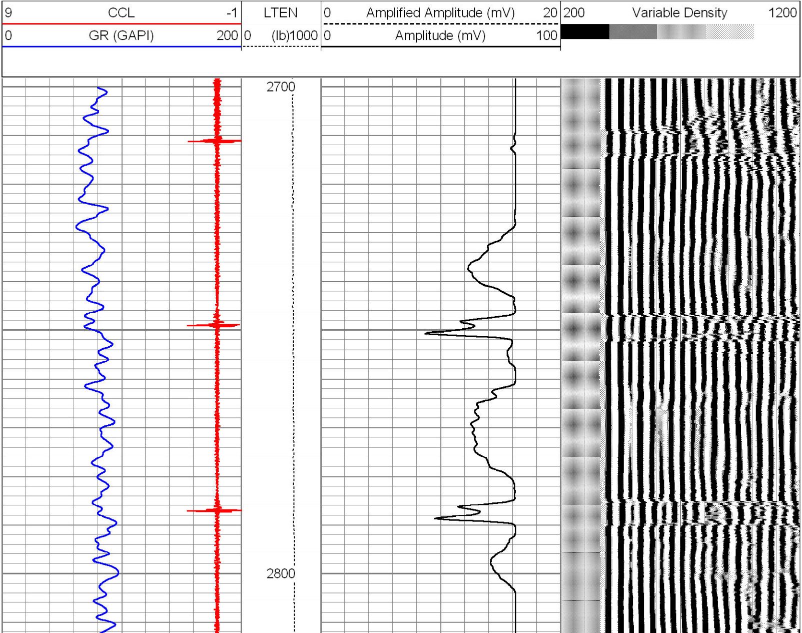
THANK YOU FOR USING P.S.I.

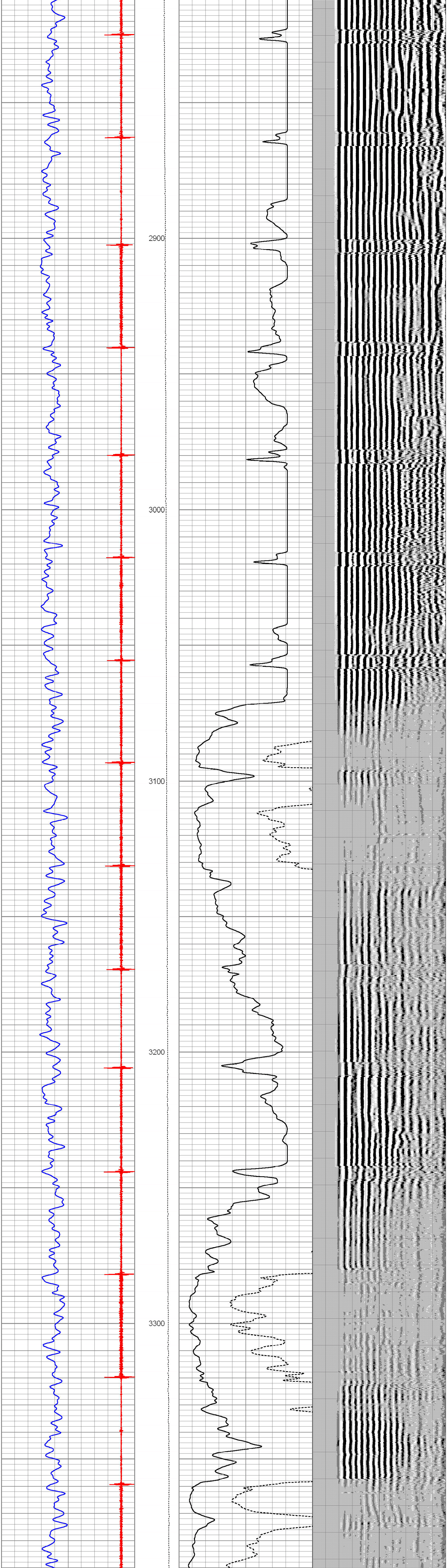


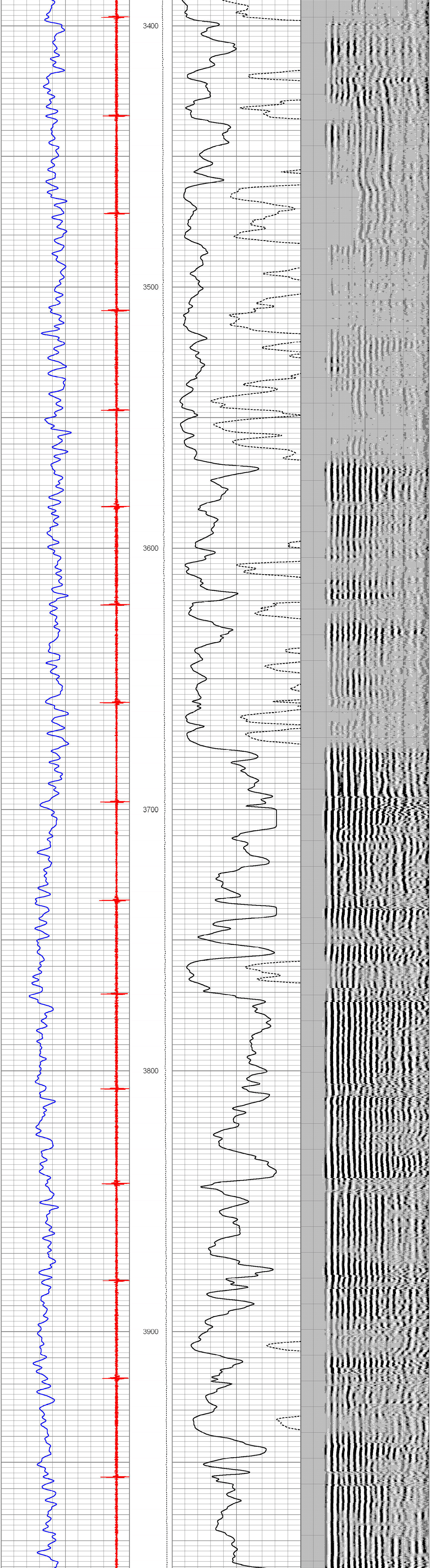
Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		STNDRD Standard Cable Head	1.00	1.69	1.00
CCL	19.06	CCL-titan01 (01t)	1.92	2.75	
		SDSCENT Centralizer	2.88	2.75	20.00
WVF3	10.79	CBL-Probe (050215)	8.75	2.75	93.00
WVF5	9.79				
		SDSCENT Centralizer	2.88	2.75	20.00
GR	1.13	GR-probe 2.75 (51013)	3.67	2.75	100.00

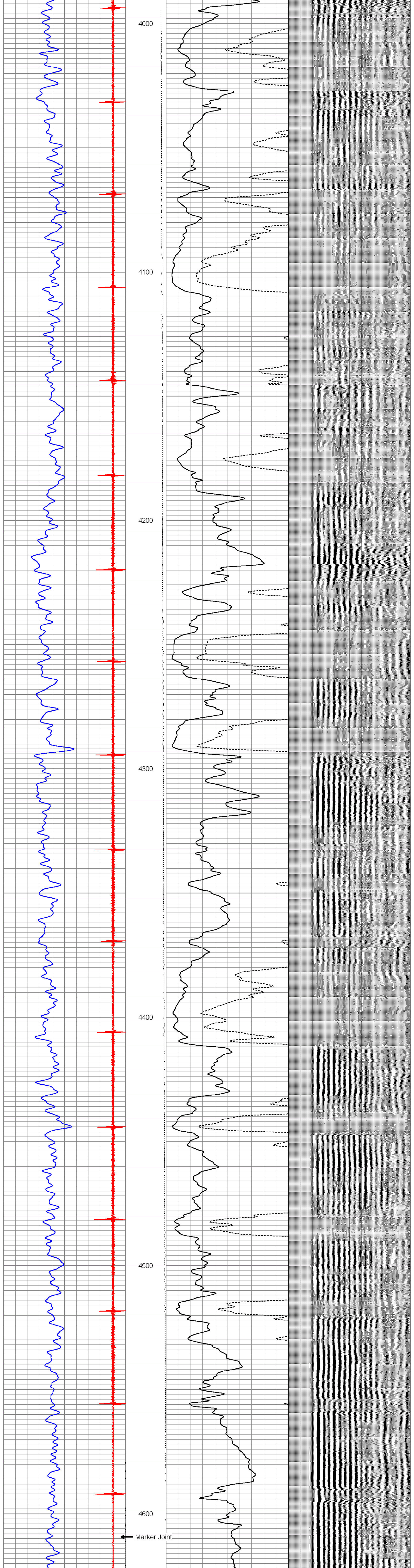
Dataset: hrmdutton21-22.db: field/well/run1/pass3
Total Length: 21.08 ft
Total Weight: 234.00 lb
O.D. 2.75 in

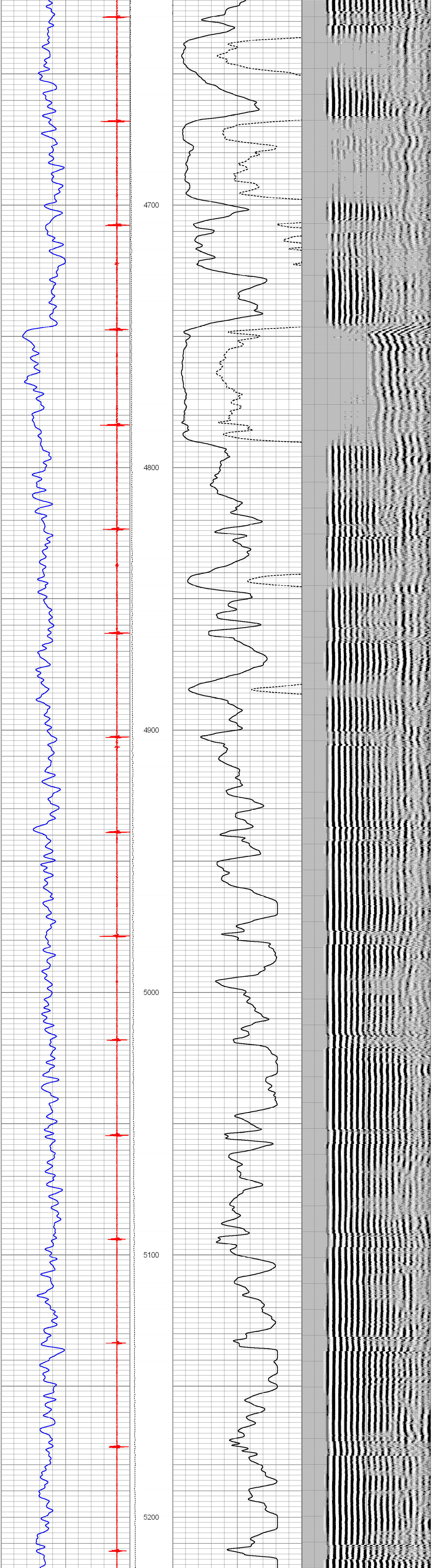
Database File:	hrmdutton21-22.db
Dataset Pathname:	pass3
Presentation Format:	cbl_dr
Dataset Creation:	Tue Dec 21 09:36:16 2010 by Log Std Casedhole 08121
Charted by:	Depth in Feet scaled 1:240

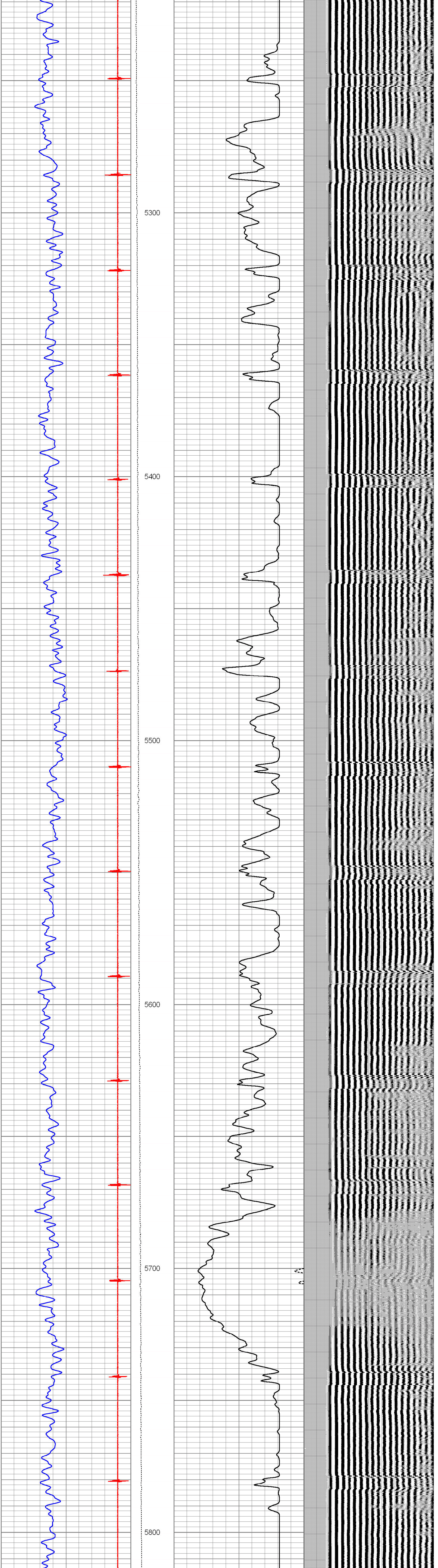


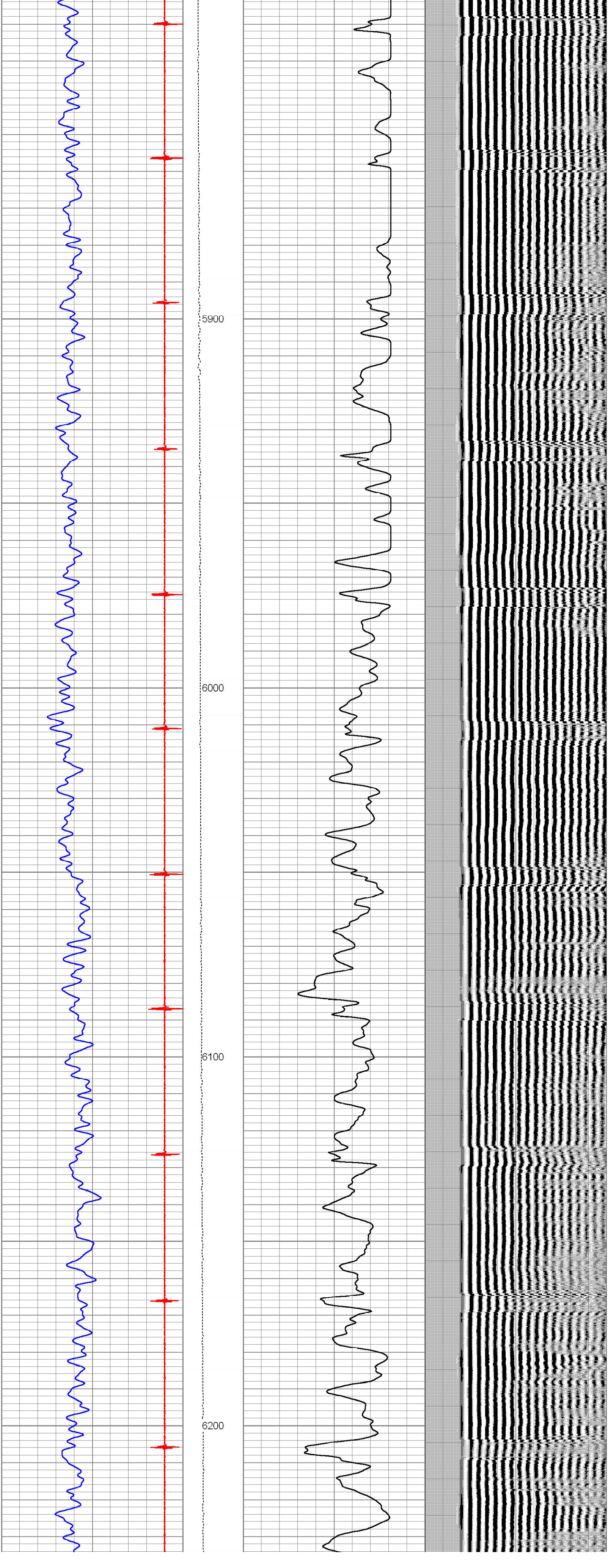


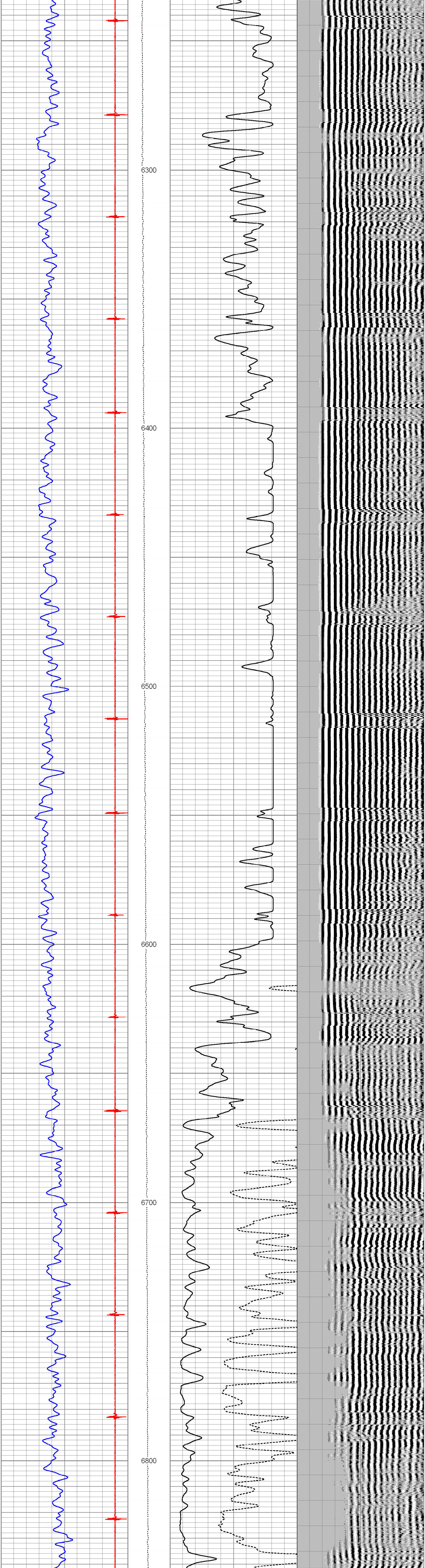


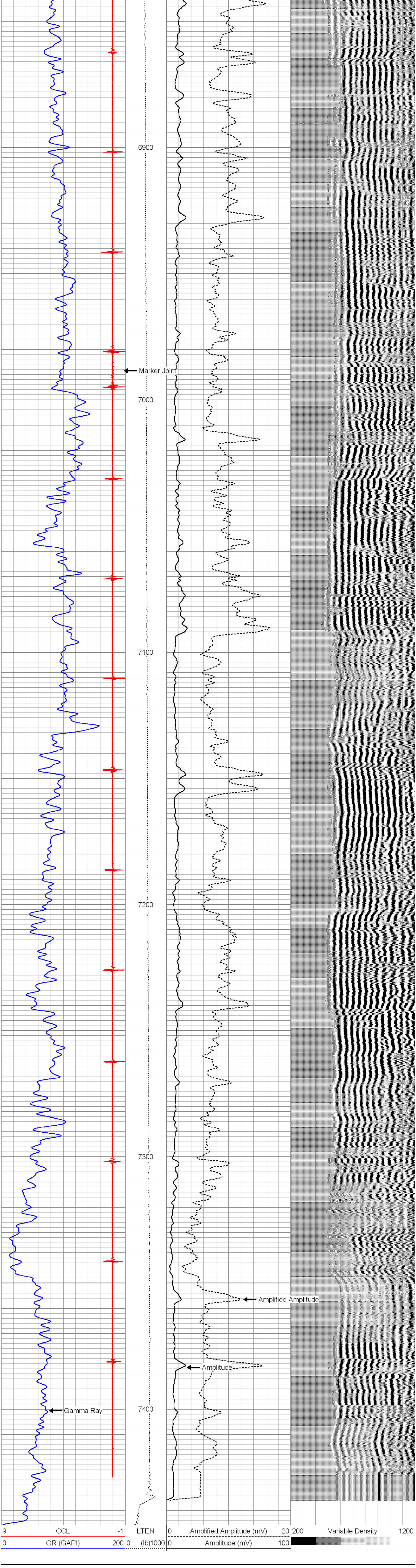


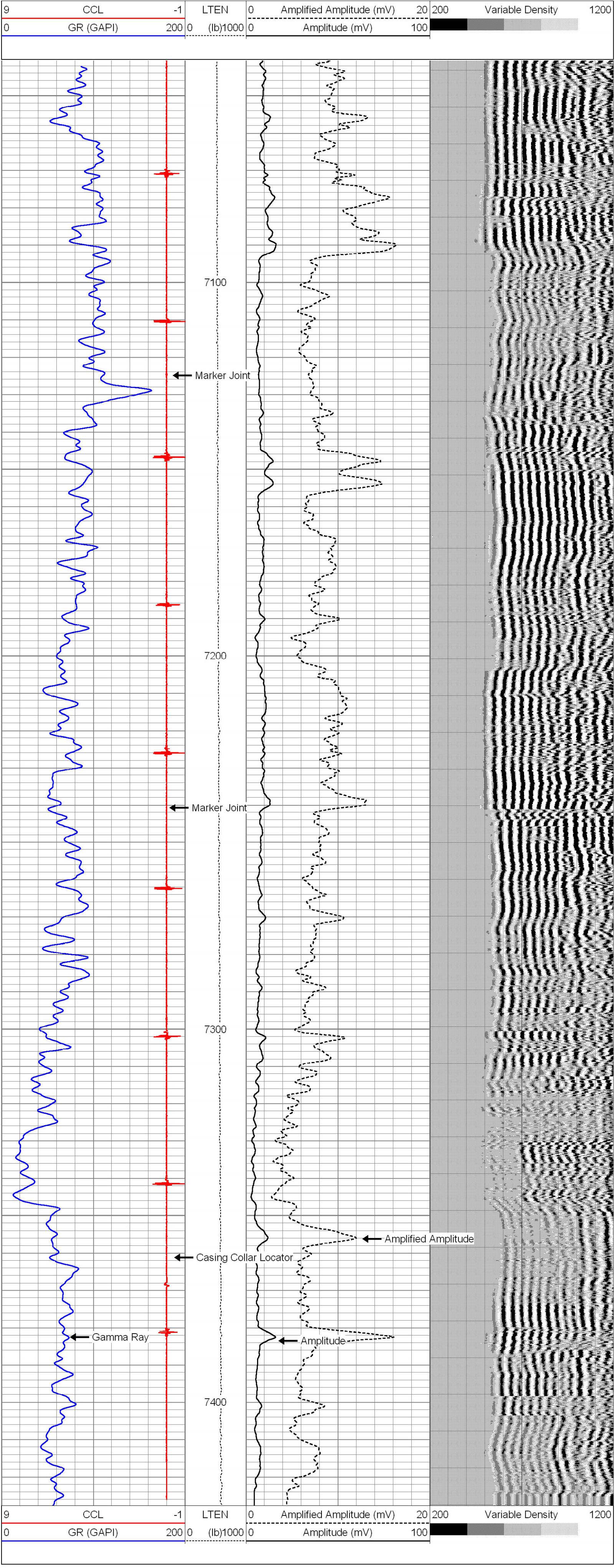










Database File: hrmdutton21-22.db
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Dataset Creation: Tue Dec 21 09:26:00 2010 by Log Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240