SUPERIOR WELL SERVICES

CEMENT BOND LOG GAMMA RAY C C L V D L

Company Noble Energy INC.
Well FABRIZIUS 1161-27-14
Field Grover
County Weld
State Colorado

Company	Noble Energy INC.
Well	FABRIZIUS 1161-27-14
Field	Grover
County	Weld
State	Colorado
API #	05123309700
Location:	1937' FNL & 623' FEL SE NE LAT/LONG: 40.894350 / +104.185080
	SEC 27 TWP 11N RGE 61W
Other Services	
Permanent Datum	GL
Elevation	5193
Log Measured From	KB 12'
Drilling Measured From	KB
Elevation	K.B. 5205 D.F. 5193 G.L. 5204

Date	June 1, 2010	
Run Number	One	
Depth Driller	7764	
Depth Logger	7717	
Bottom Logged Interval	7716	
Top Log Interval	Surface	
Casing Size	5 1/2"	
Type Fluid	Water	
Density / Viscosity	Not Recorded	
Max. Recorded Temp.	245 deg F	
Estimated Cement Top	131	
Time Well Ready	Mast Truck	
Time Logger on Bottom	10:17am	
Equipment Number	T5 (3344)	2.75 Tool 1 GRN
Location	Platteville, CO	
Recorded By	K. Monaghan	
Witnessed By	S. Armstrong	

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 lb/ft J-55	Surface	1054.6
Prot. String				
Production String	5 1/2"	17 lb/ft N-80	Surface	7742.9
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!!!
API# 05-123-30970-00
Correlated to Schlumberger's
Platform Express / Compensated Neutron / Density Lithology / Gamma Ray
Dated: May 4, 2010
Directions: 122 & 89, E 2MI, N1.6MI To Tank Battery, NW Through TB Into

Database File:	cblfabrizius 1161-27-14.db
Dataset Pathname:	pass5
Presentation Format:	nuexbond
Dataset Creation:	Tue Jun 01 11:12:30 2010 by Log Std Casedhole 09061
Charted by:	Depth in Feet scaled 1:240

30 Gamma Ray (GAPI) 130
20 CCL -1
340 TT3 (usec) 240
0 Amplified Amplitude (mV) 20
0 Amplitude (mV) 100
200 VDL 1200

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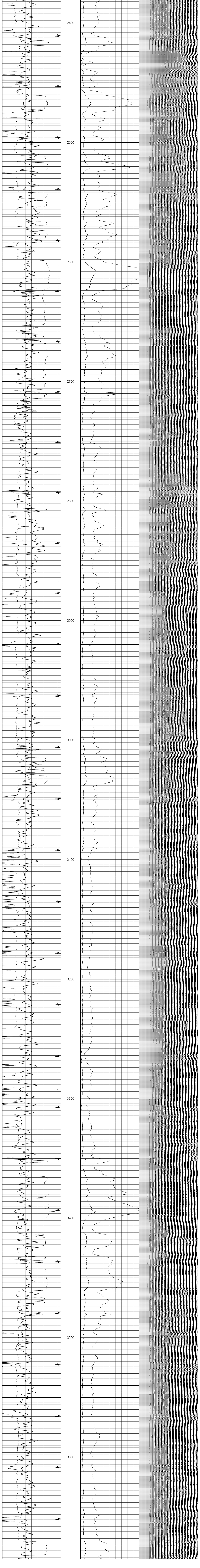
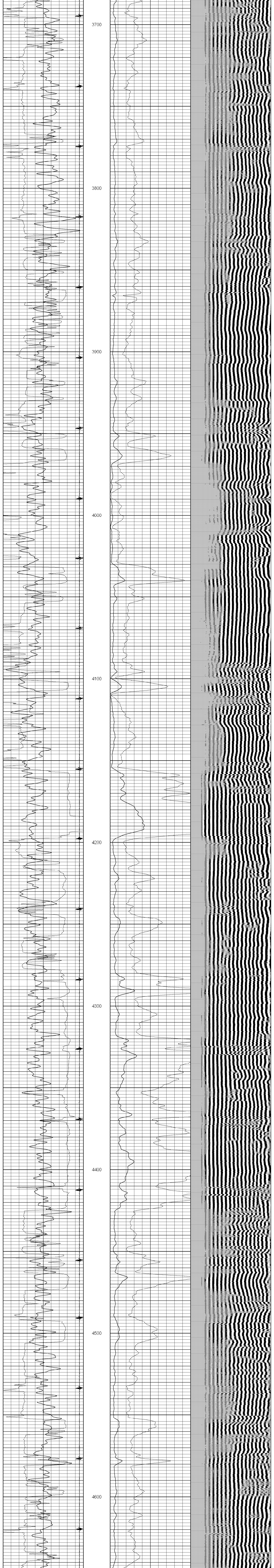
20 CCL -1
340 TT3 (usec) 240
0 Amplified Amplitude (mV) 20
0 Amplitude (mV) 100
200 VDL 1200

Database File:	cblfabrizius 1161-27-14.db
Dataset Pathname:	pass4
Presentation Format:	nuexbond
Dataset Creation:	Tue Jun 01 10:49:38 2010 by Log Std Casedhole 09061
Charted by:	Depth in Feet scaled 1:240

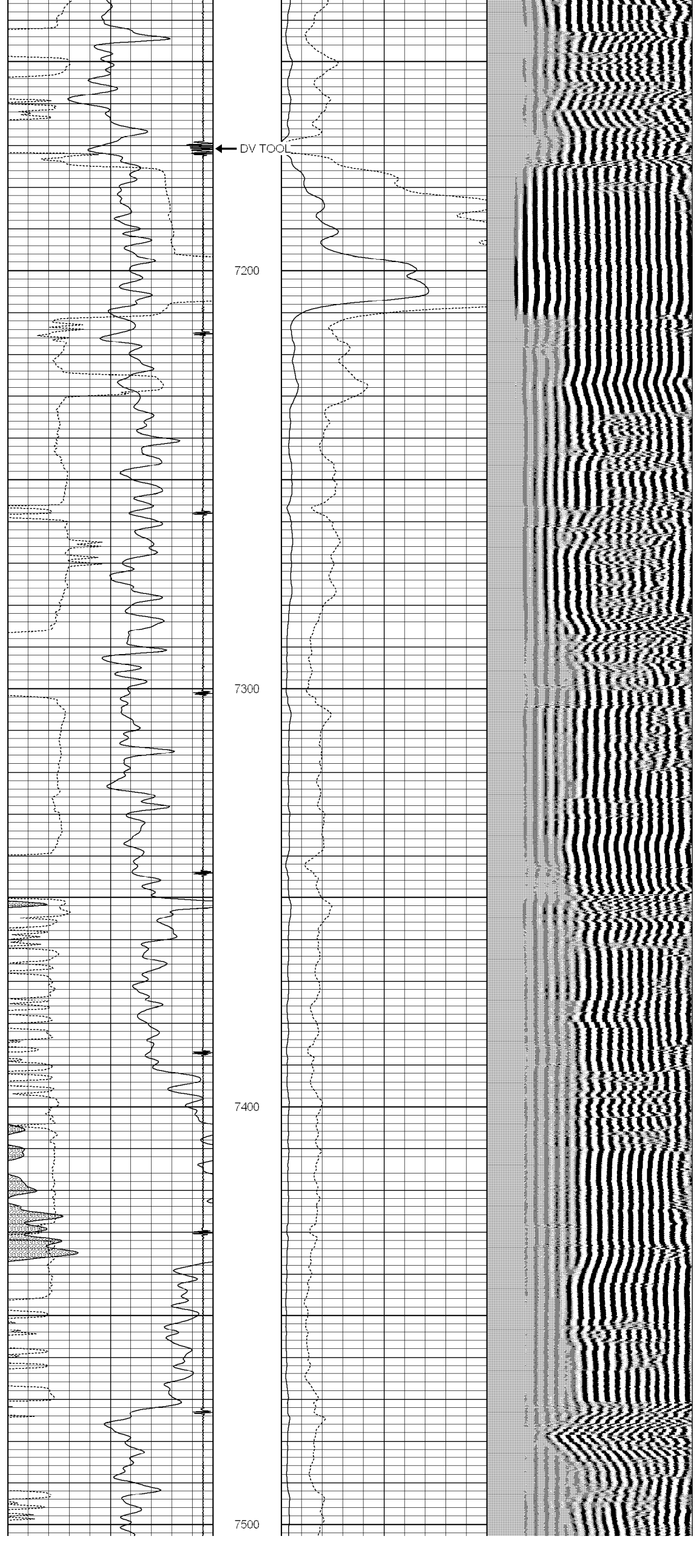
30 Gamma Ray (GAPI) 130
20 CCL -1
340 TT3 (usec) 240
0 Amplified Amplitude (mV) 20
0 Amplitude (mV) 100
200 VDL 1200

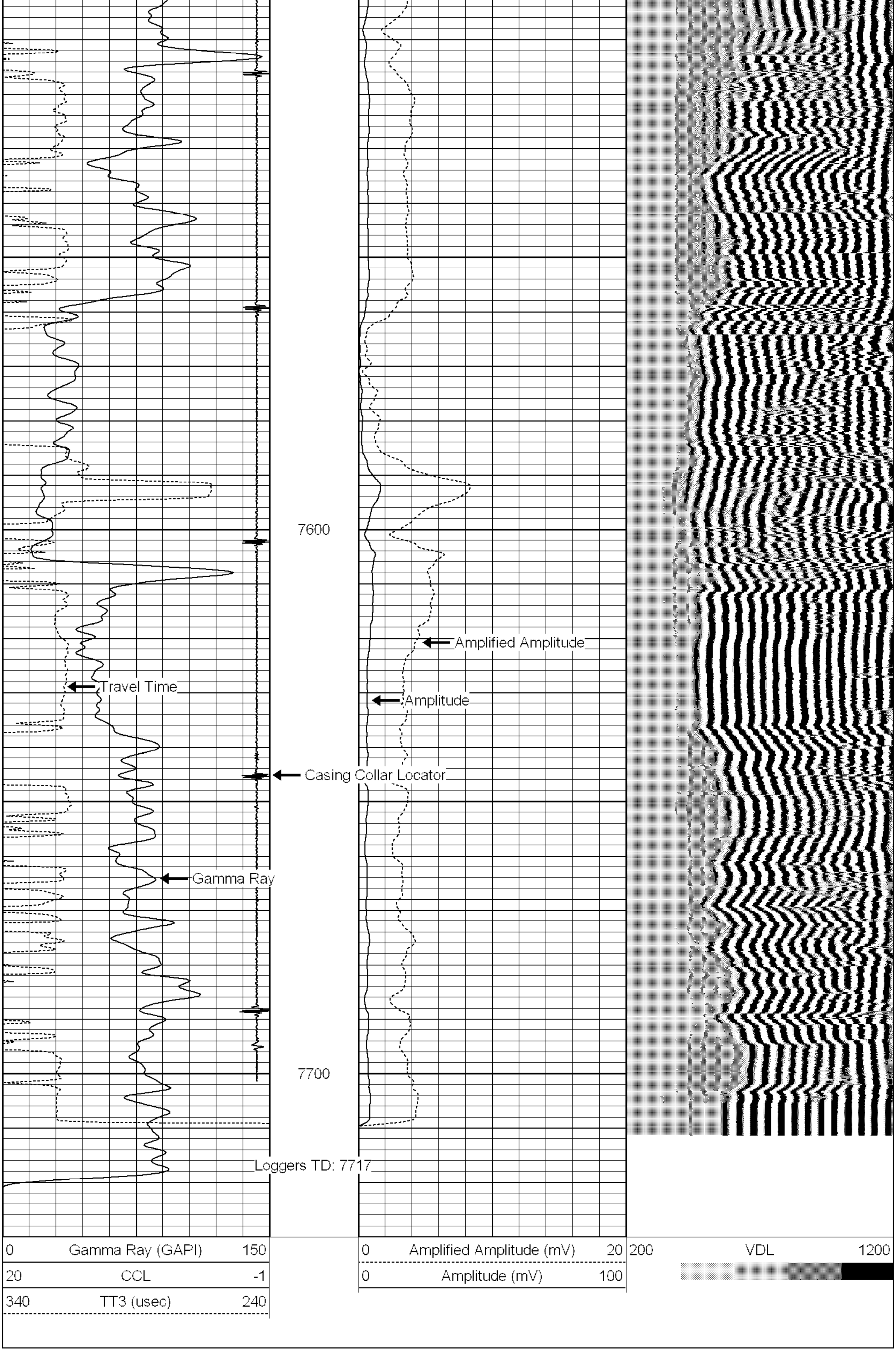




Database File: cblfabrizius 1161-27-14.db
Dataset Pathname: pass3
Presentation Format: nuexbond
Dataset Creation: Tue Jun 01 10:27:29 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

Database File: cblfabrizius 1161-27-14.db
Dataset Pathname: pass2
Presentation Format: nuexbond
Dataset Creation: Tue Jun 01 10:19:02 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240





Calibration Report

Database File: cblfabrizius 1161-27-14.db
Dataset Pathname: pass2
Dataset Creation: Tue Jun 01 10:19:02 2010 by Log Std Casedhole 09061

Gamma Ray Calibration Report

Serial Number:	234GR-328	
Tool Model:	TekcoGR	
Performed:	Thu Aug 02 12:04:45 2007	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	0.8000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	234B35C-8013	
Tool Model:	TEKCO	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	108.250	ft

Master Calibration, performed Tue Jun 01 10:59:40 2010:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.058	2.500	0.500	71.921	29.251	-1.194
CAL	-0.004	2.500				
5'	-0.007	1.172	0.500	71.921	60.555	0.924
SUM						
S1						
S2						
S3						
S4						
S5						
S6						
S7						
S8						

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	-0.004	2.500	1.000	0.000

Air Zero Calibration, performed Tue Jun 01 10:54:23 2010:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1			
S2			
S3			
S4			
S5			
S6			
S7			
S8			