Company	NOBLE ENERGY INC.
Well	STATE A36-09
Field	WATTENBERG
County	WELD
State	COLORADO

NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL CEMENT BOND VDL

Company NOBLE ENERGY INC.
Well STATE A36-09
Field WATTENBERG
County WELD State COLORADO

Location: API #: 0512314790
NE/SE
SEC 36 TWP 6N RGE 64W

Other Services

Permanent Datum	GL	Elevation 4628	
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4638
D.F.
G.L. 4628

Date	MARCH 20, 2015
Run Number	ONE
Depth Driller	6960
Depth Logger	1000
Bottom Logged Interval	1000
Top Log Interval	SURFACE
Open Hole Size	6-1/4
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	N/A
Estimated Cement Top	SURFACE
Time Well Ready	LEED RIG
Time Logger on Bottom	1-11/16 RED TOOL
Equipment Number	4838
Location	45
Recorded By	GREG NOLAN
Witnessed By	ALLEN MILLER

	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#	SURFACE	317
Prot. String				
Production String	2-7/8	6.5#	SURFACE	6948
Liner				

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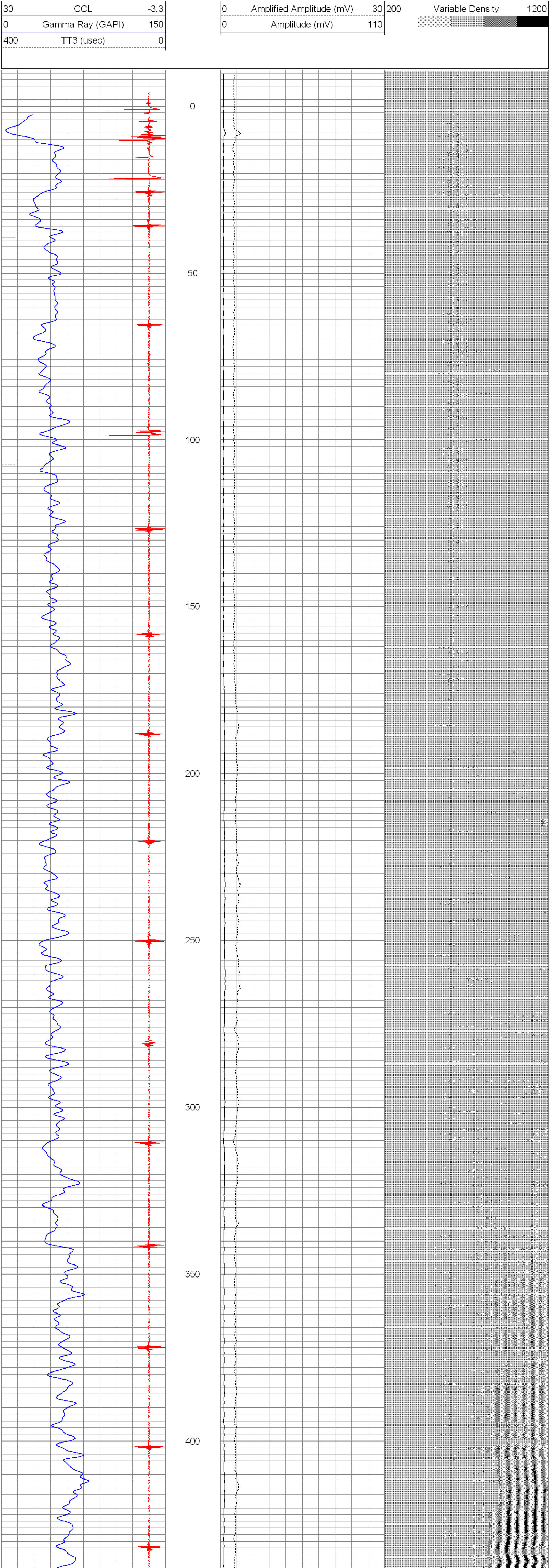
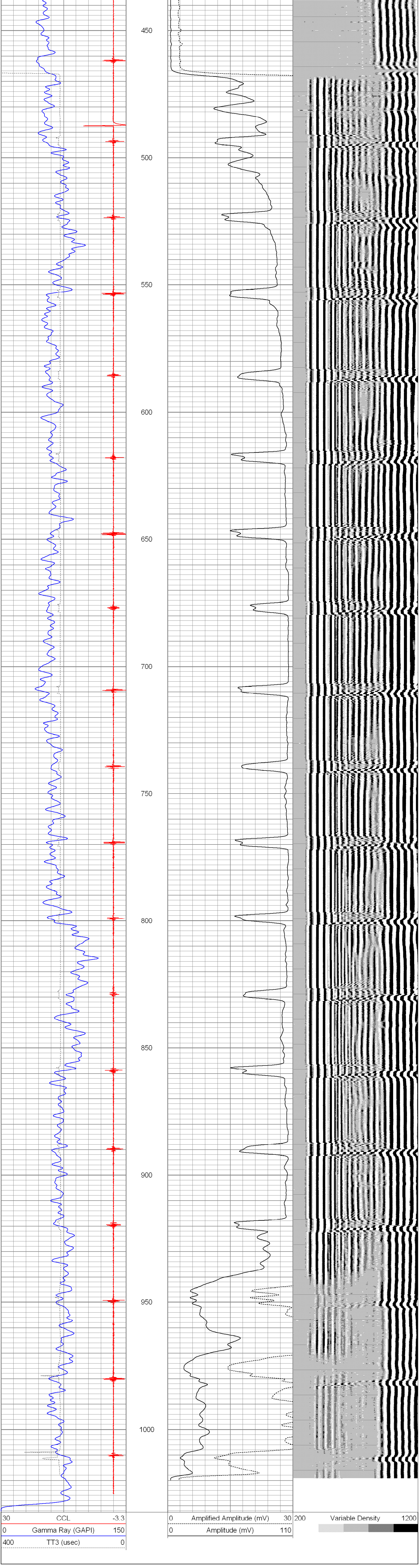
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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 NCPS!!!!
LOG NOT CORRELATED
WCR 61 & WCR 62, N.4, W.2, S INTO

Database File:	cbl noble state a36-9.db
Dataset Pathname:	pass3
Presentation Format:	nuexcbl
Dataset Creation:	Fri Mar 20 07:39:39 2015 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240





Calibration Report

Database File: cbl noble state a36-9.db
Dataset Pathname: pass3
Dataset Creation: Fri Mar 20 07:39:39 2015 by Log SCH 120430

Gamma Ray Calibration Report

Serial Number: tit/temp
Tool Model: temp/tit
Performed: Wed Oct 09 07:50:28 2013

Calibrator Value: 1.0 GAPI

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 0.7000 GAPI/cps

Cement Bond Log Calibration Report

Serial Number: TEKCO-01
Tool Model: TEKCO-1x2
Performed: Fri Mar 20 07:37:31 2015

Depth: 756.408 ft
Casing Diameter: 2.875 in

	3' Spacing	5' Spacing	
Signal Zero:	2.5	0	mV
Calibrated Amplitude:	106.451	106.451	mV
Reading at Signal Zero:	-0.0057373	-0.00595703	V
Reading in Free Pipe:	2.49878	2.23655	V
Gain:	41.5054	47.4697	
Offset:	2.73813	0.282778	