CEMENT BOND LOG
GAMMA RAY C C L
V D L

SUPERIOR WELL SERVICES

Company	Noble Energy INC.
Well	NYGREN USX O19-02D
Field	Wattenberg
County	Weld
State	Colorado

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Well NYGREN USX O19-02D
Field Wattenberg
County Weld State Colorado

Location: API #: 05123343390000
705' FNL & 656' FEL
NE NE
SEC 19 TWP 4N RGE 67W

Other Services

Permanent Datum	GL	Elevation 4865	Elevation K.B. 4881 D.F. 4880 G.L. 4865
Log Measured From	KB 16'		
Drilling Measured From	KB		

Date	October 6, 2011	
Run Number	One	
Depth Driller	7571 est.	
Depth Logger	7394	
Bottom Logged Interval	7393	
Top Log Interval	415	
Casing Size	4 1/2"	
Type Fluid	Water	
Max. Recorded Temp.	226 deg F	
Estimated Cement Top	1380	
Time Well Ready	Crane	
Time Logger On Bottom	AM	
Unit Number	3344	
Tool Size / ID Number	2.75 Probe 110802	2.75 Probe 110809
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	529
Prot. String				
Production String	4 1/2"	11.6 lb/ft M-80	Surface	7571
Liner				

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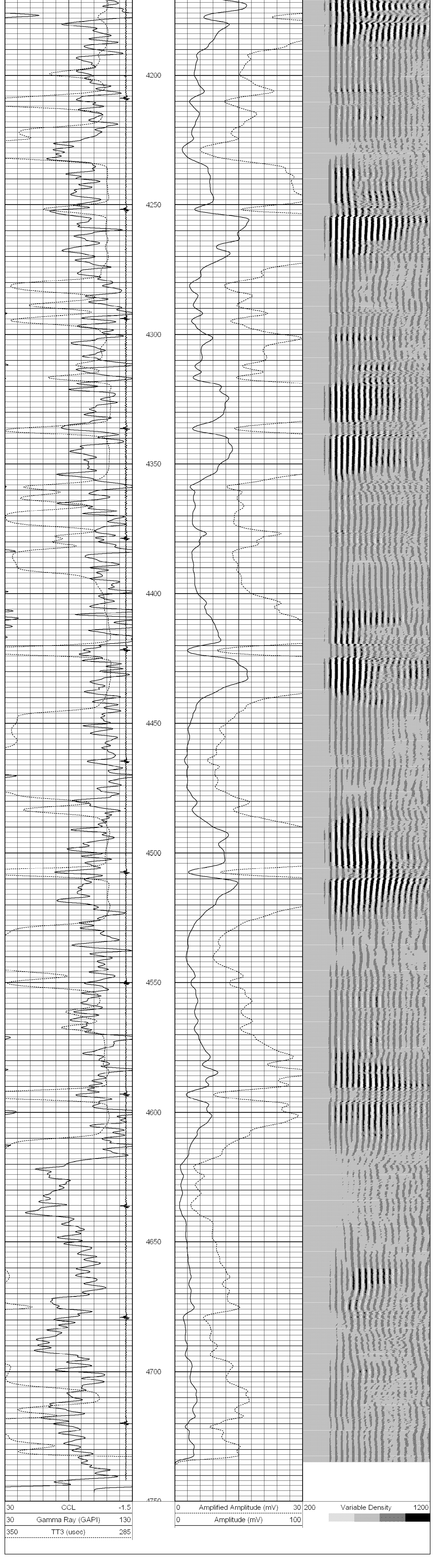
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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# 05-123-34339-0000
NO OPEN HOLE TO CORRELATE WITH
Wireline Zero @ 16' KB
(Southern Most Well of 2 Well Pad)

Database File:	cblnygren usx o19-02d.db
Dataset Pathname:	pass3
Presentation Format:	noble en
Dataset Creation:	Thu Oct 06 08:03:55 2011 by Log SCH 110722
Charted by:	Depth in Feet scaled 1:240



Database File: cblnygren usx o19-02d.db
Dataset Pathname: pass2
Presentation Format: noble en
Dataset Creation: Thu Oct 06 07:39:18 2011 by Log SCH 110722
Charted by: Depth in Feet scaled 1:240

Calibration Report

Database File: cblnygren usx o19-02d.db
Dataset Pathname: pass3
Dataset Creation: Thu Oct 06 08:03:55 2011 by Log SCH 110722

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110809

SHOP CALIBRATION Thu Oct 06 08:20:03 2011

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.7000			GAPI/cps

PRIMARY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

BEFORE SURVEY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Cement Bond Log Calibration Report

Serial Number: 110802
Tool Model: Probe275Digital
Performed: Thu Oct 06 07:18:23 2011

Depth: 209.5 ft
Casing Diameter: 4.5 in

	3' Spacing	5' Spacing	
Signal Zero:	0.9	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0.0124268	0.0125244	V
Reading in Free Pipe:	2.49658	2.41873	V
Gain:	32.3233	33.7445	
Offset:	0.498326	-0.42263	