NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL CEMENT BOND VDL

Company	NOBLE ENERGY INC.
Well	WELLS RANCH USX BB15-13
Field	WATTENBERG
County	WELD
State	COLORADO

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Well WELLS RANCH USX BB15-13
Field WATTENBERG
County WELD **State** COLORADO
Location: API # : 0512326176

SWSW

SEC 15 TWP 5N RGE 63W

Other Services

Permanent Datum	GL	Elevation	4,667.00	Elevation
Log Measured From	KB			K.B. 4,679.00
Drilling Measured From	KB			D.F. 4,678.00 G.L. 4,667.00

Date	19-DEC-2014
Run Number	ONE
Depth Driller	6,832.00
Depth Logger	914.00
Bottom Logged Interval	941.00
Top Log Interval	SURFACE
Casing Size	8-5/8"
Type Fluid	WATER
Max. Recorded Temp.	8.33PPG
Estimated Cement Top	N/A
Time Well Ready	SURFACE
Time Logger On Bottom	AM
Unit Number	1-11/16CBLPRB#2
Tool Size / ID Number	92-3827
Location	STERLING
Recorded By	LEROY HOBBS
Witnessed By	TONY MATHIAS

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String				
Prot. String				
Production String	4-1/2"	11.6LBS	SURFACE	T.D
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 USING NABORS WIRELINE.

LOG WAS RAN OFF A 12' KB.

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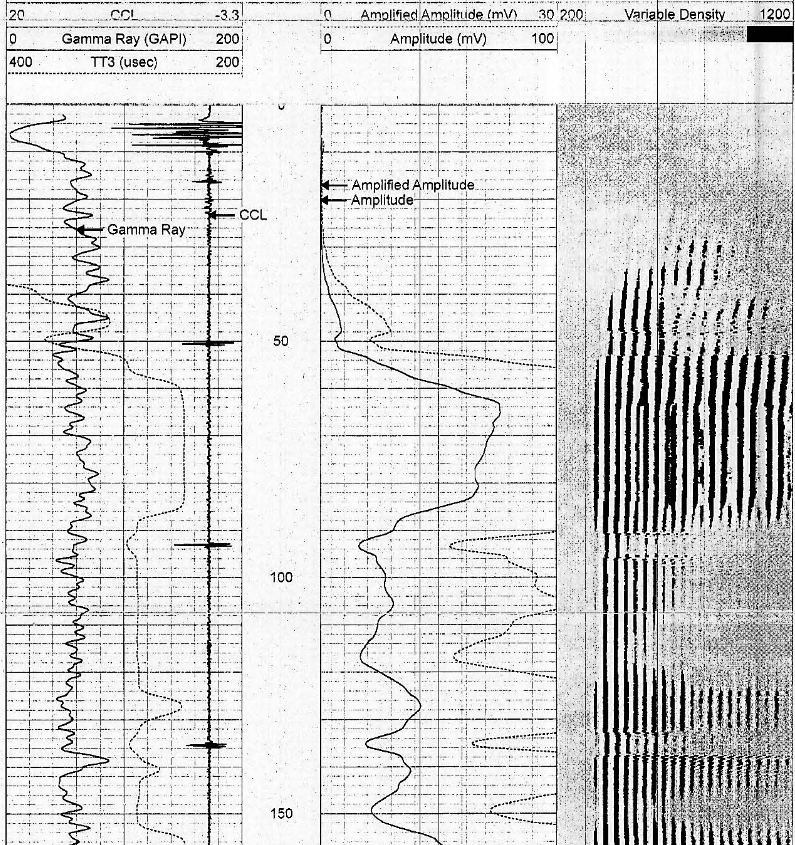
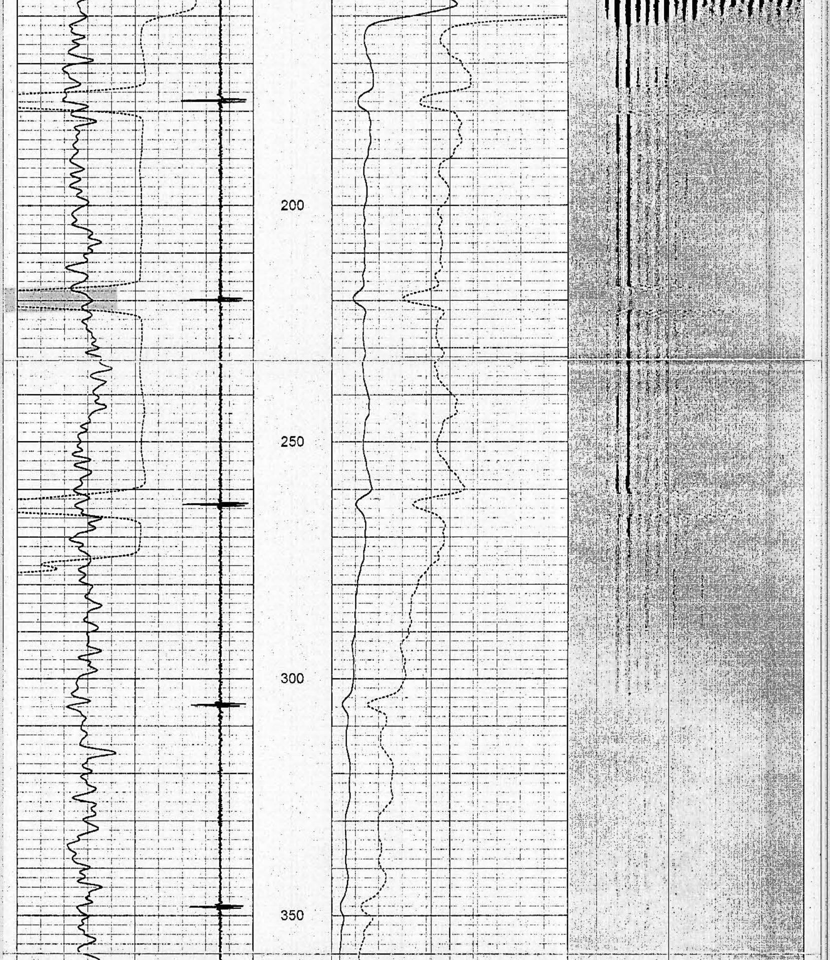
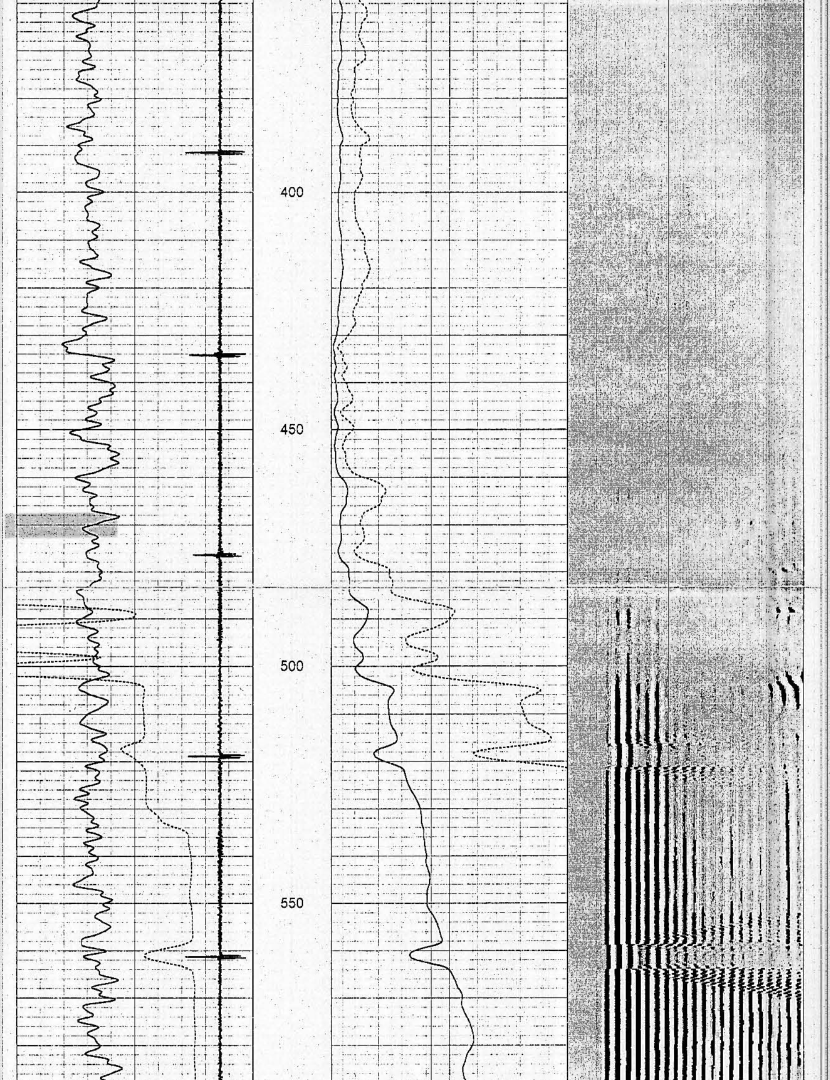
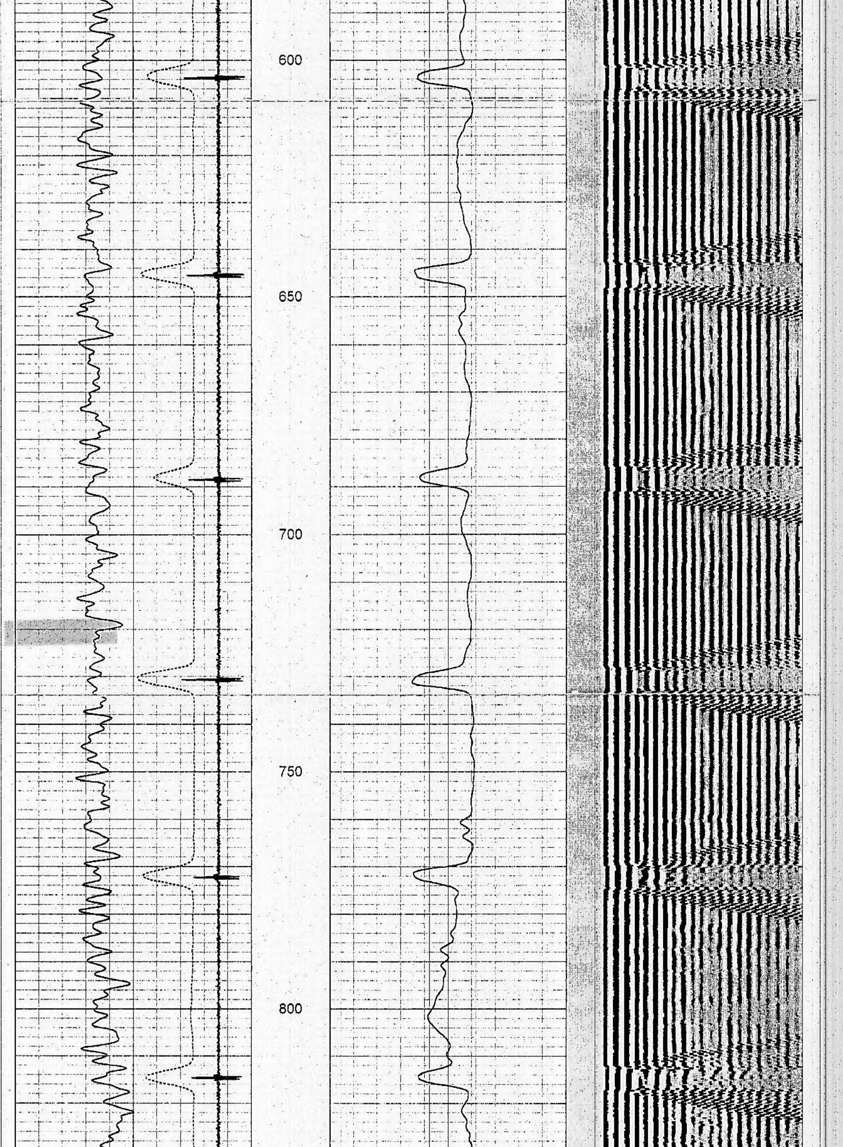
WELLS RANCH USX BB15-13

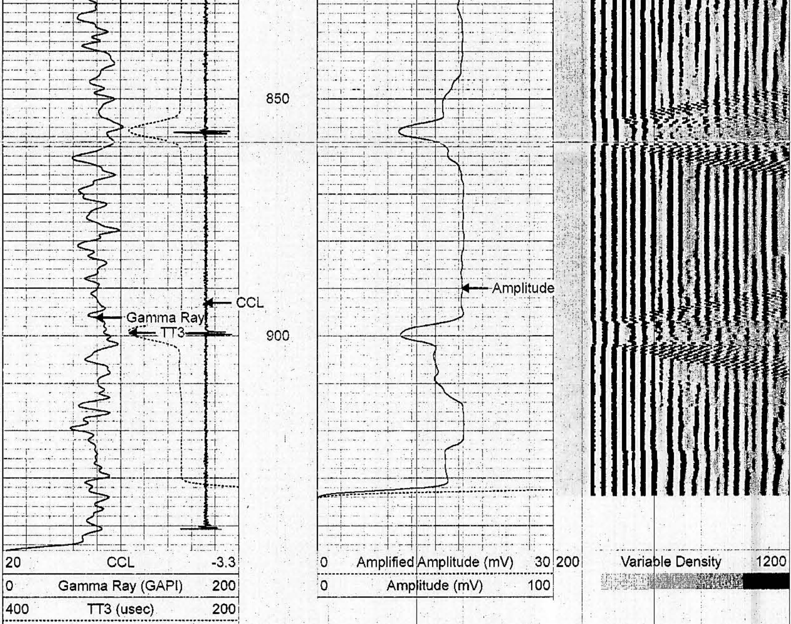
Database File:	wellranchusxbb15-13_0512326176.db
Dataset Pathname:	pass1
Presentation Format:	nuexcbl
Dataset Creation:	Fri Dec 19 10:14:54 2014 by Log 7.0 B1
Charted by:	Depth in Feet scaled 1:240











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MAIN PASS

LOGGED UNDER "0" PSI

Calibration Report

Database File: wellranchusxbb15-13_0512326176.db
Dataset Pathname: pass1
Dataset Creation: Fri Dec 19 10:14:54 2014 by Log 7.0 B1

Gamma Ray Calibration Report

Type / Serial: CCL/GR / FW1406-009

SHOP CALIBRATION Sun Jun 13 13:33:21 1993

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		1.0000			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

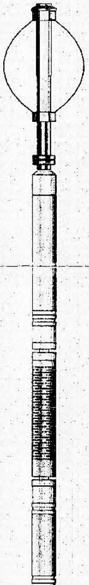
Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

AFTER SURVEY VERIFICATION

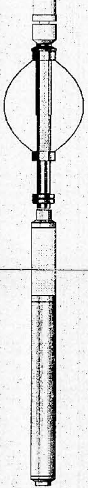
Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

Cement Bond Log Calibration Report

Serial Number:	FW1406-029		
Tool Model:	Probe		
Performed:	Mon Nov 24 08:49:47 2014		
Depth:	2788.84	ft	
Casing Diameter:	4.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	0.8	0	mV
Calibrated Amplitude:	81.1961	81.1961	mV
Reading at Signal Zero:	0.0170654	0.0149414	V
Reading in Free Pipe:	1.4323	1.37769	V
Gain:	56.8076	59.5828	
Offset:	-0.169446	-0.890251	



Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			probe 1-11/16	3.13	0.00	
WVF3	12.58		CBL-Probe (FW1406-029) 1-11/16	8.60	1.69	41.00
WVF5	11.58					



		probe 1-11/16	3.13	0.00
CCL	4.08			
		GR-CCL/GR (FW1406-009) 1-11/16	5.21	1.69
GR	0.57			

Dataset: wellranchusxbb15-13_0512326176.db: field/well/run1/pass1
Total Length: 20.06 ft
Total Weight: 41.00 lb
O.D. 1.69 in

[redacted]