HALLIBURTON

CEMENT BOND LOG

SCALE 5"=100'

Company	ENCANA OIL & GAS LP ONSHORE
Well	BURY CRANDELL 12-23
Field	WATTENBURG
County	WELD
State	CO

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Well BURY CRANDELL 12-23
Field WATTENBURG
County WELD State CO

API No.: 0501420672000 Serv #:
Location: SHL: SW NW SEC 23-1N-68W
(EST) BHL: NW SW SEC 23-1N-68W

Other Services
NONE

Sec: 23 Twp: 1N Rge: 68W

Permanent Datum	GL	Elevation	5149	Elevation
Log Measured From	KB , 12 Ft. above perm. datum			K.B. 5161
Drilling Measured From	KB			D.F. 5160 G.L. 5149

Date @ Time Logged	22-NOV-2010	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.33
Depth - Driller	8840	Fluid Level	SURFACE
Depth - Logger	8748	Cement Top Est. Logged	4470
Bottom - Logged Interval	8736	Equipment / Location	11014931 / BRIGHTON
Top - Log Interval	4200	Recorded by	KYLE TOWNSEND
Max. Recorded Temp.	237	Witnessed by	MR. TOM MAJORS

CEMENTING DATA	Surface String	Protection String	Production String	Liner
Date / Time Cemented				
Primary / Squeeze				
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume				
Cement Type / Weight	/	/	/	/
Formulation				
Mud Type / Mud Wgt.	/	/	/	/

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

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HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHCIH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

Comments

DEPTH BASED ON KELLY BUSHING 12' ABOVE GROUND LEVEL.

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES

YOUR CREW TODAY: K. TOWNSEND, T. PIETRAS, C. NAKAGAWA, M. THEIS

HALLIBURTON

MAIN PASS

5"=100'

Database File: encana bury crandell 12-23.db
Dataset Pathname: pass9
Presentation Format: cbl01sus
Dataset Creation: Wed Sep 22 13:15:32 2010 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

9 Collar Locator -1	0 Amplified Amplitude (mV) 10	200 Variable Density 1200
0 Gamma Ray (GAPI) 200	0 Amplitude (mV) 100	

HALLIBURTON

MAIN PASS

5"=100'

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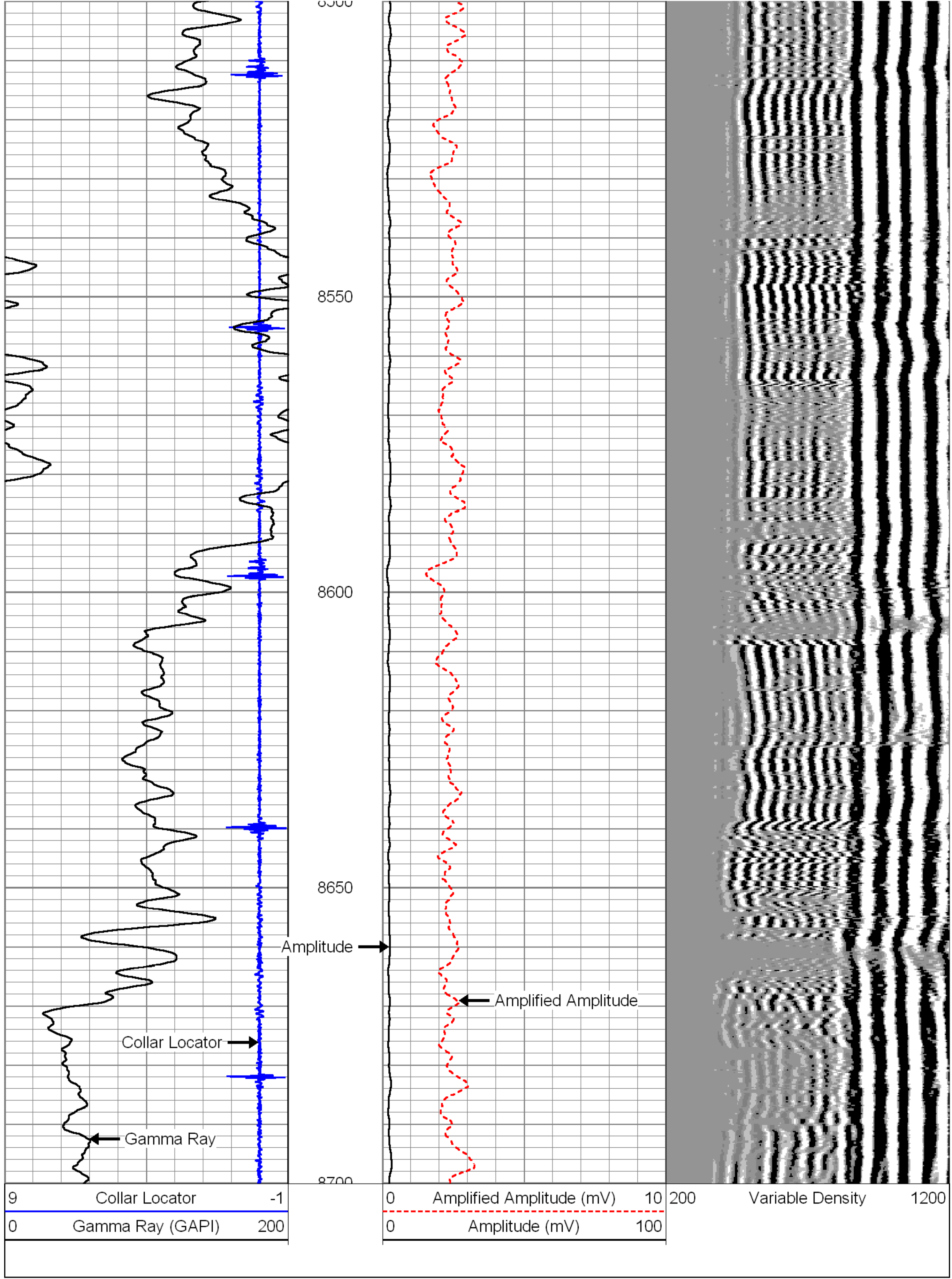
REPEAT PASS

5"=100'

Database File: encana bury crandell 12-23.db
Dataset Pathname: pass8
Presentation Format: cbl01sus
Dataset Creation: Wed Sep 22 13:08:48 2010 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

9 Collar Locator -1	0 Amplified Amplitude (mV) 10	200 Variable Density 1200
0 Gamma Ray (GAPI) 200	0 Amplitude (mV) 100	



9 Collar Locator -1	0 Amplified Amplitude (mV) 10	200 Variable Density 1200
0 Gamma Ray (GAPI) 200	0 Amplitude (mV) 100	

HALLIBURTON

REPEAT PASS

5"=100'

Calibration Report

Database File: encana bury crandell 12-23.db
Dataset Pathname: pass8
Dataset Creation: Wed Sep 22 13:08:48 2010 by Log Halliburton Casedho

Gamma Ray Calibration Report

Type / Serial: Probe / 070361

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION	Wed Sep 22 11:47:01 2010				
Background	46.2				cps
Calibrator	191.1				cps
		1.6355			GAPI/cps
PRIMARY VERIFICATION	Wed Sep 22 11:52:28 2010				
Background	81.3				cps
Calibrator	320.7				cps
Difference				239.4	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:	070347		
Tool Model:	Probe		
Performed:	Wed Sep 22 12:36:04 2010		
Depth:	4384.99	ft	
Casing Diameter:	5.5	in	
	3' Spacing	5' Spacing	
Signal Zero:	1	1	mV
Calibrated Amplitude:	82	82	mV
Reading at Signal Zero:	0.00227051	0.00153809	V
Reading in Free Pipe:	0.194092	0.156128	V
Gain:	422.268	523.967	
Offset:	0.0412371	0.194093	

Company	ENCANA OIL & GAS LP ONSHORE		
Well	BURY CRANDELL 12-23		
Field	WATTENBURG		
County	WELD	State	CO

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CEMENT BOND LOG

SCALE 5"=100'