HALLIBURTON

Cement Bond Log
Gamma Ray
CCL

Scale 1:240

Company Encana Oil & Gas (USA) Inc
Well Shaffer Newman 24-13
Field Wattenberg
County Weld State Colorado

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Well **Shaffer Newman 24-13**
Field **Wattenberg**
County **Weld** State **Colorado**

API No.: 05013065830000 Serv #:
Location:

Sec: Twp: Rge:

Other Services

None

Permanent Datum	GL	Elevation		Elevation
Log Measured From	KB	, 15	Ft. above perm. datum	K.B.
				D.F.
Drilling Measured From	KB			G.L.

Date @ Time Logged	24-Apr-09	Type Fluid in Hole	Water
Run No.	One	Density of Fluid	8.4
Depth - Driller	NA	Fluid Level	Surface
Depth - Logger	8504	Cement Top Est. Logged	6260
Bottom - Logged Interval	8502	Equipment / Location	10842980 / Brighton
Top - Log Interval	6030	Recorded by	Michael Snyder
Max. Recorded Temp.	NA	Witnessed by	Tom Cobb

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			340 Sacks	
Cement Type / Weight	/	/	1.69 Y / 13.5 PPG	/
Formulation				
Mud Type / Mud Wgt.	/	/	/	/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
One				N-80 4.5	11.6	Surface	TD

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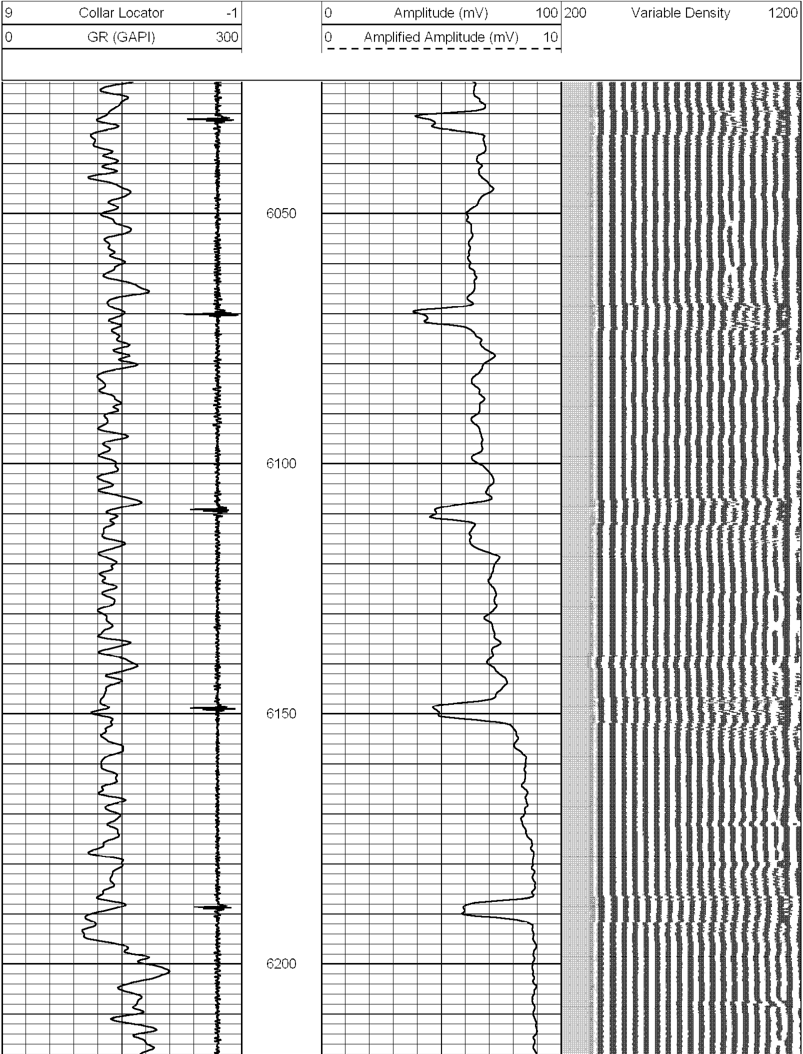
HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHCIH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR 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.

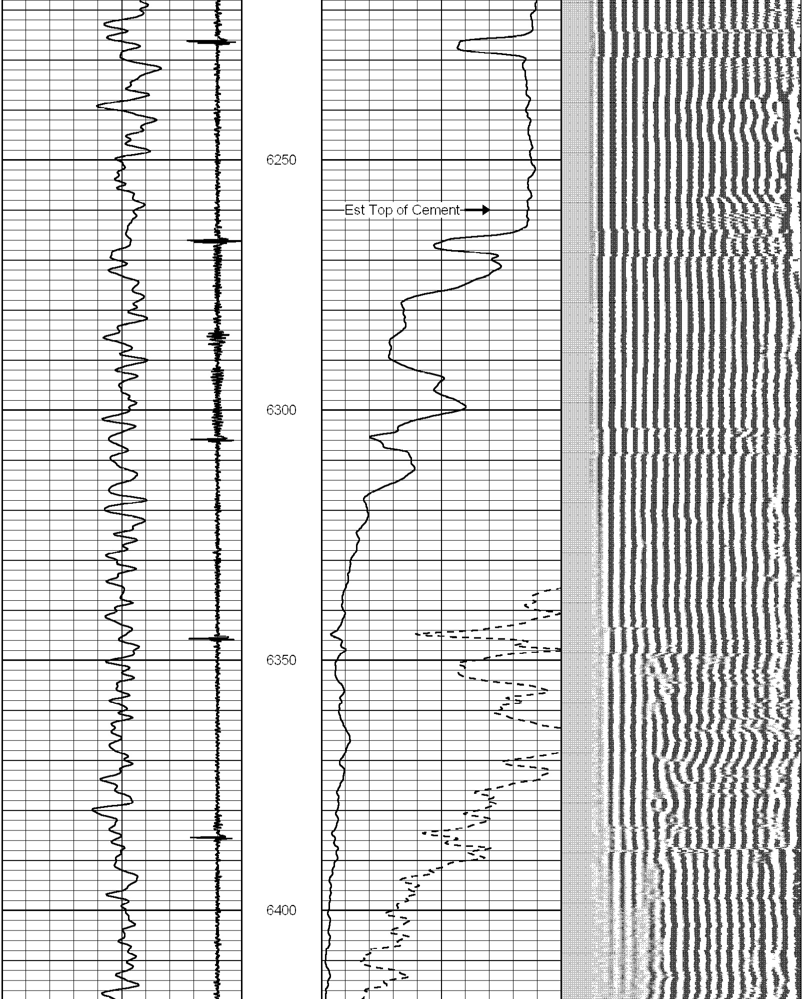
Comments

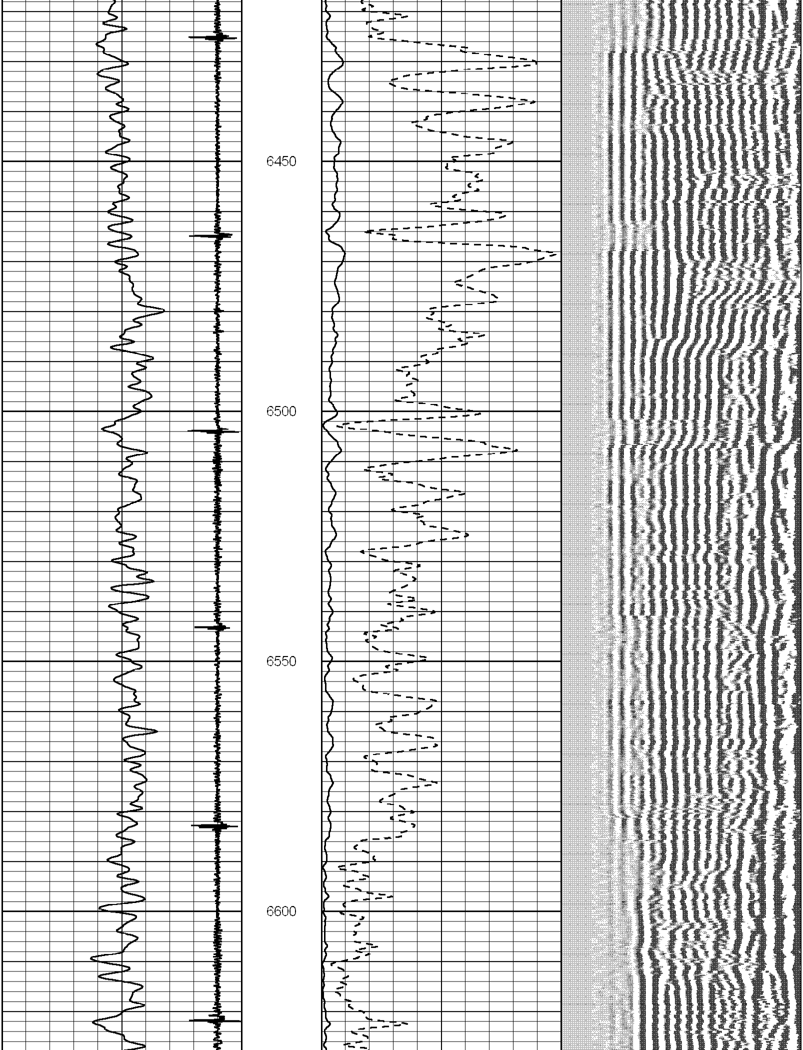
Thank you for choosing Halliburton!

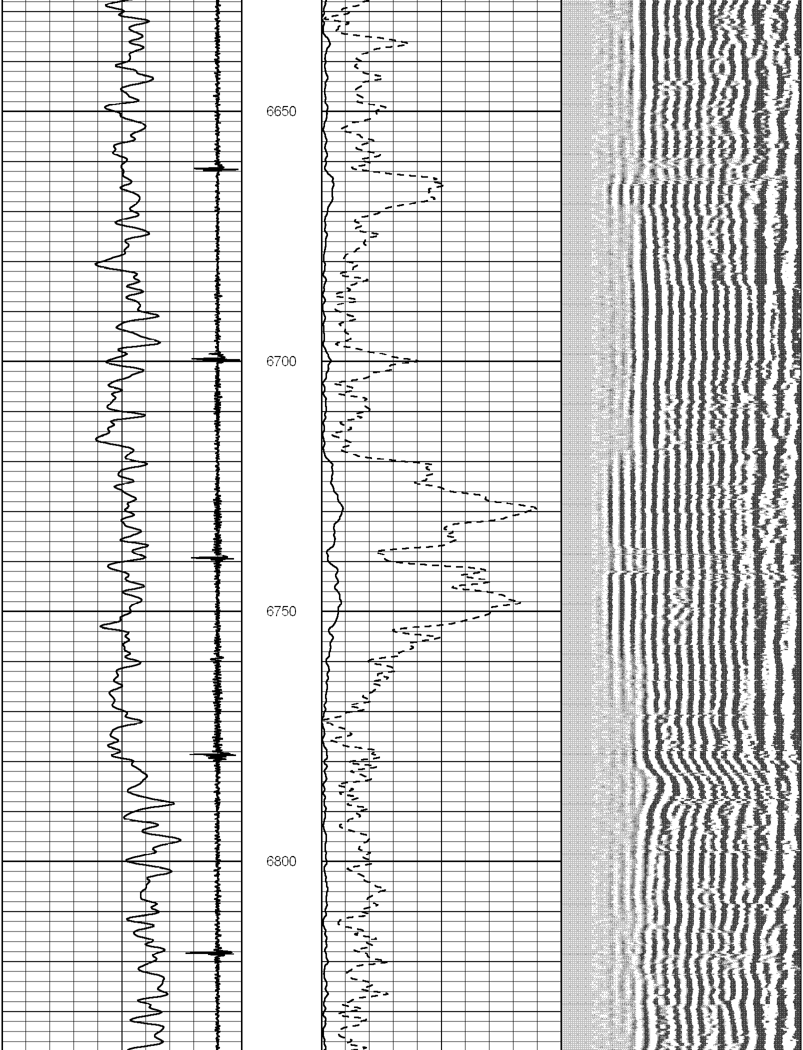
Your Crew Today: Michael Snyder, Jake Walker, Greg Lueck

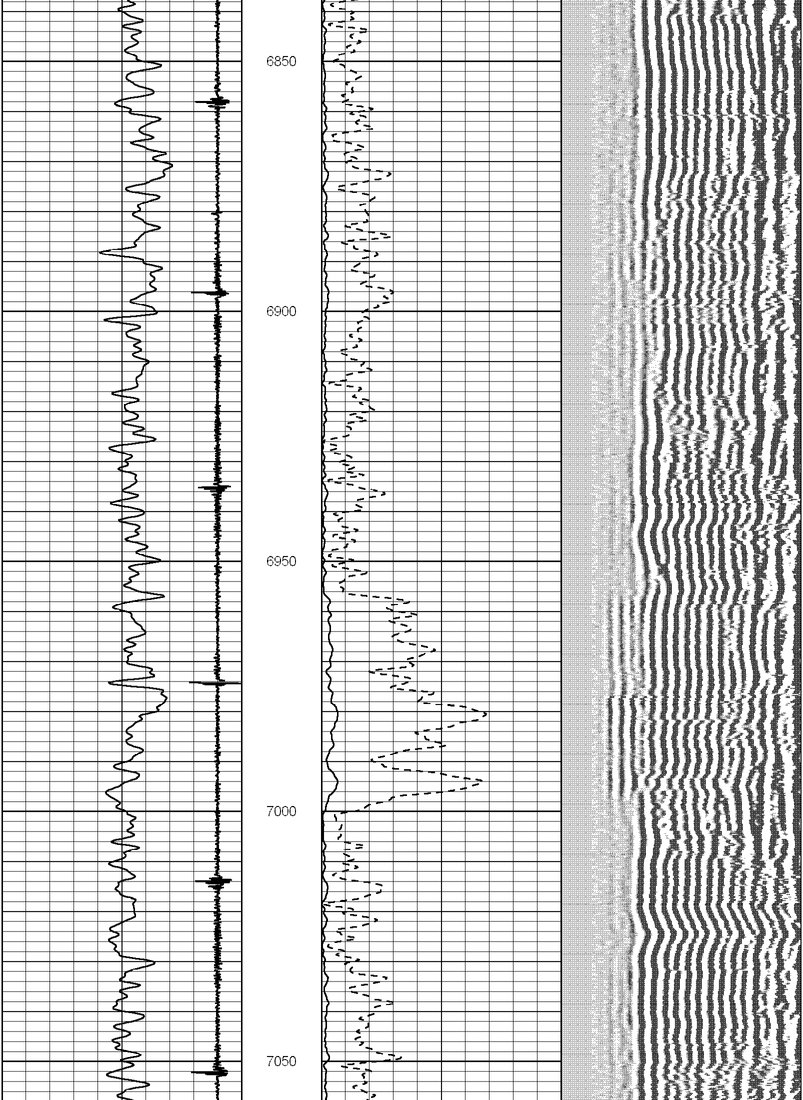
Database File: encana_shaffer_newman24-13.db
Dataset Pathname: pass8
Presentation Format: mikecbl
Dataset Creation: Fri Apr 24 13:47:11 2009 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

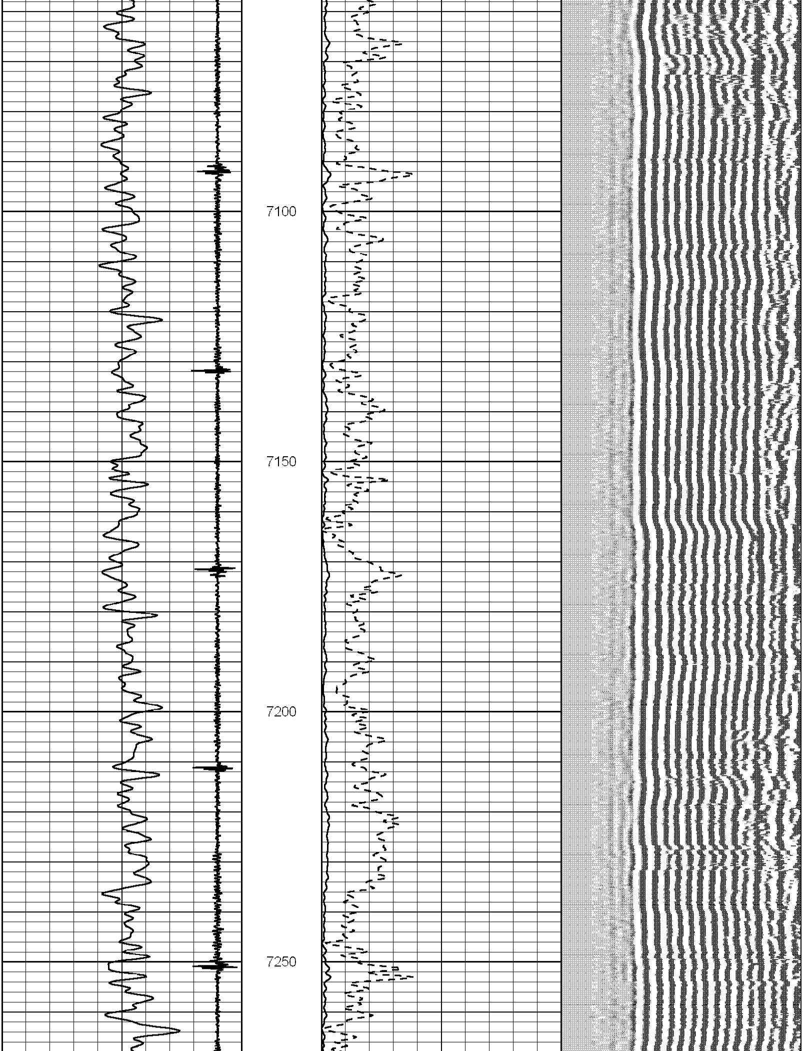


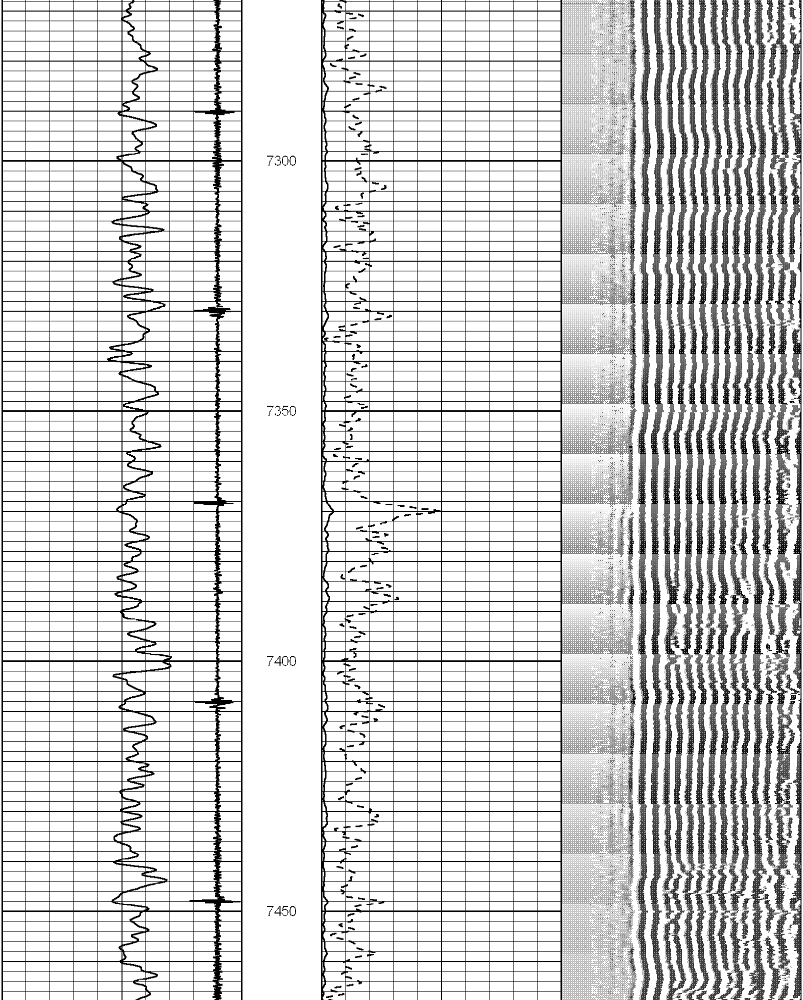


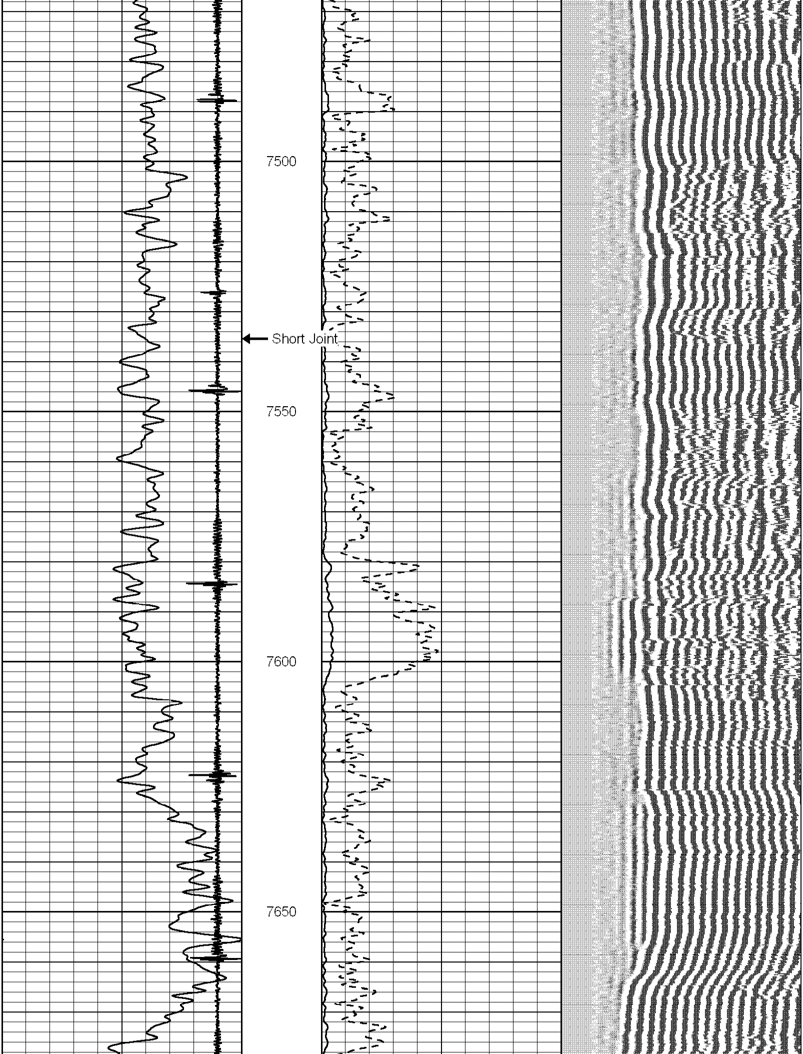


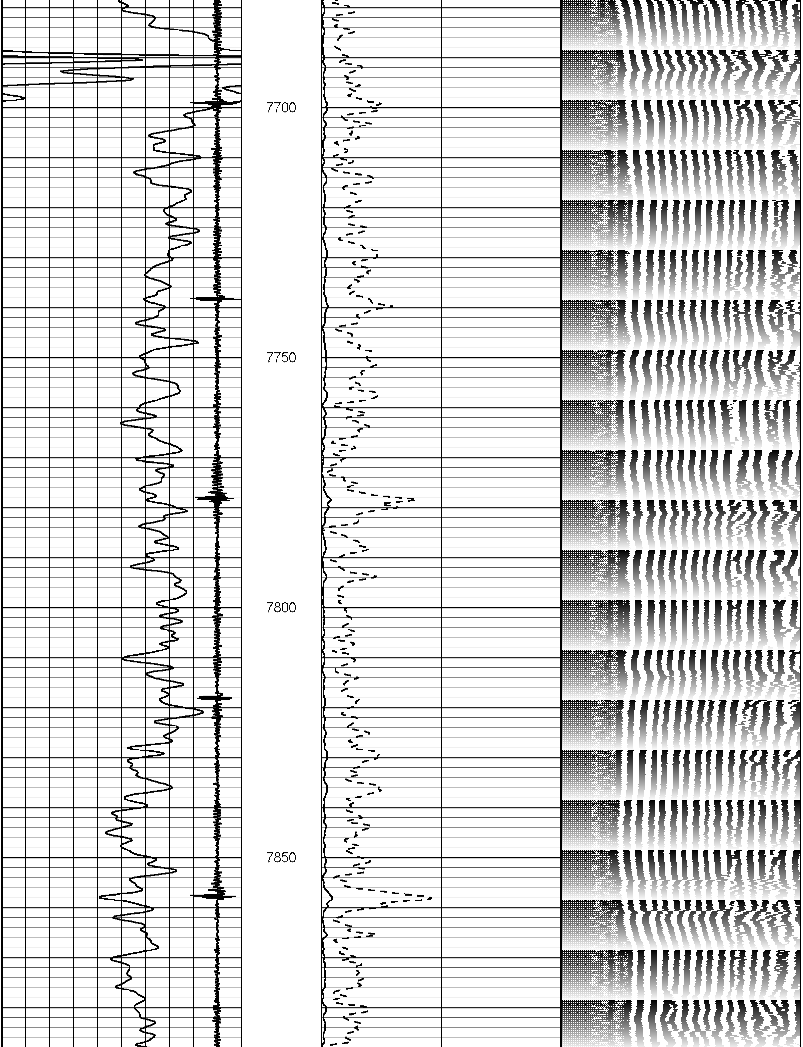


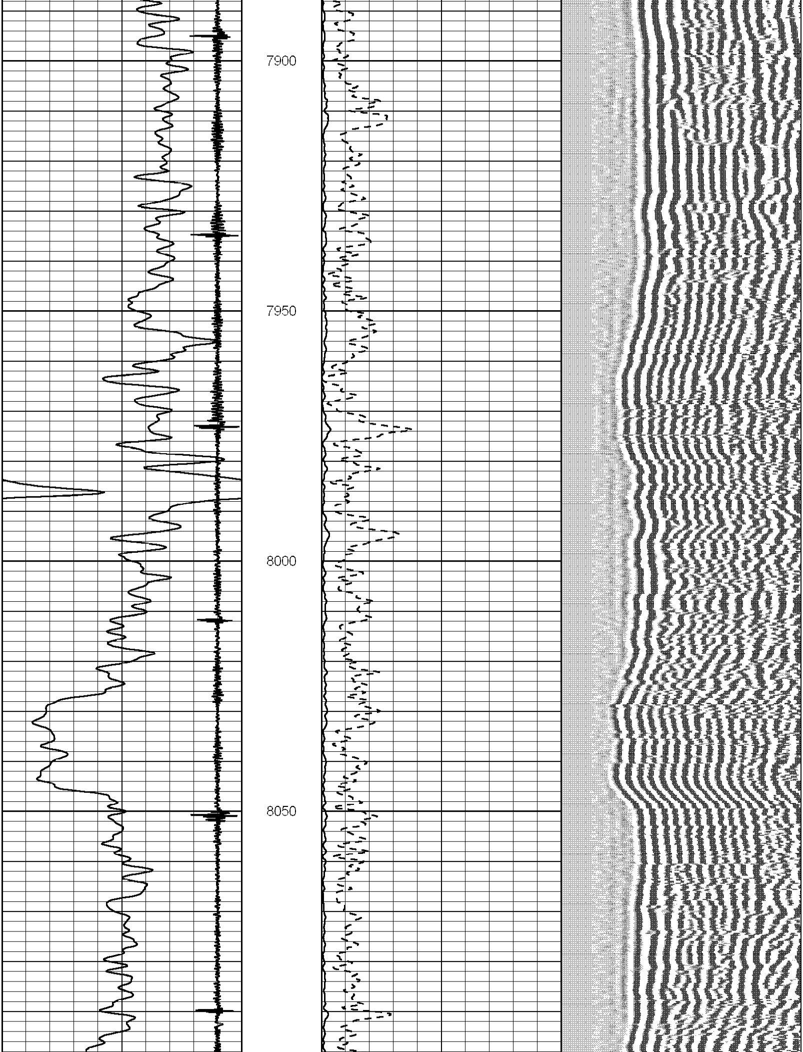


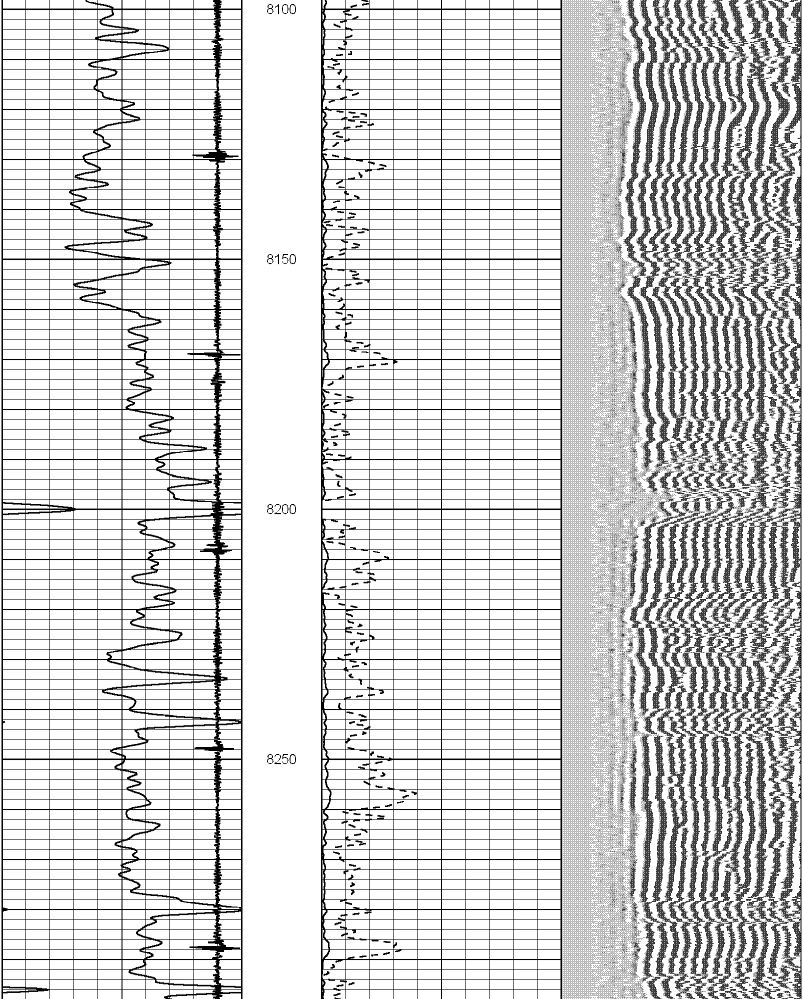


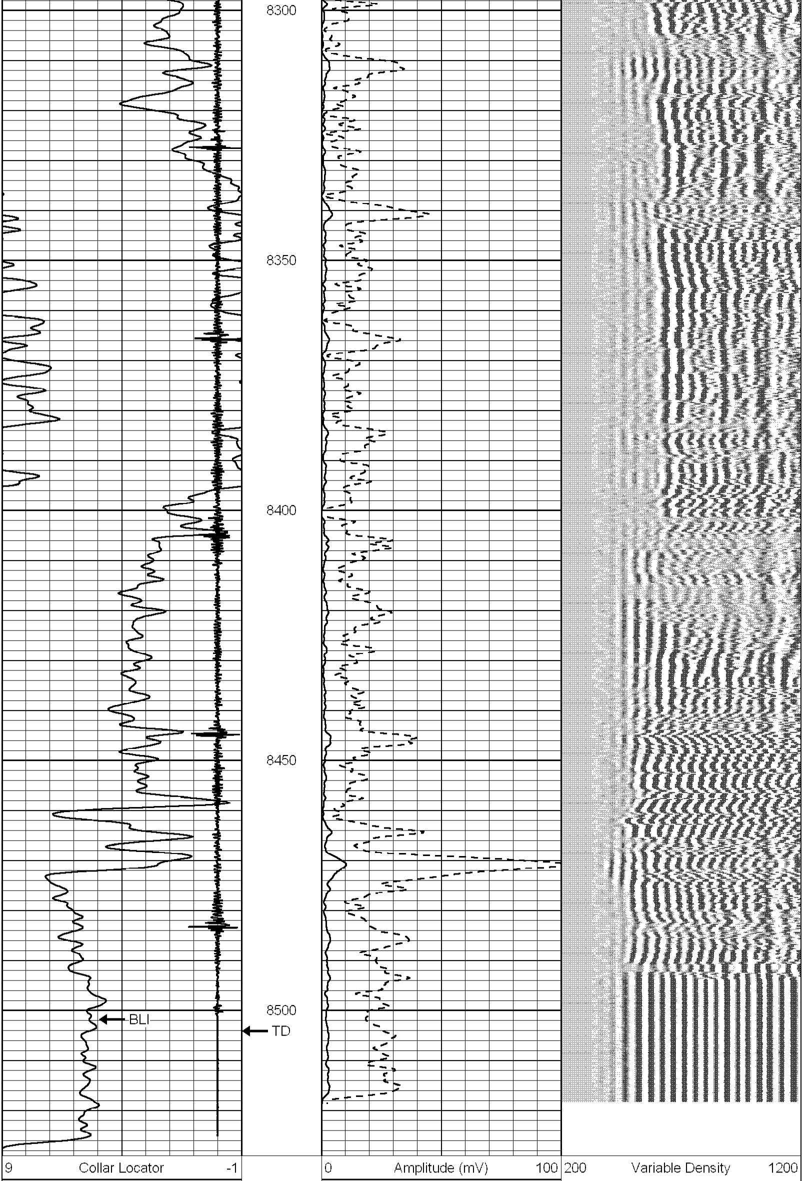












0 GR (GAPI) 300	0 Amplified Amplitude (mV) 10

Log Variables

Database:C:\Warrior\Data\encana_shaffer_newman24-13.db
Dataset: field/well/run1/pass8

Top - Bottom

PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV	MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft
0	11.5	81.196	0	0.8	4.5	0	0

BOTTEMP degF	BOREID in
100	7.875

Calibration Report

Database File: encana_shaffer_newman24-13.db
Dataset Pathname: pass8
Dataset Creation: Fri Apr 24 13:47:11 2009 by Log Halliburton Casedho

Gamma Ray Calibration Report

Type / Serial: probe275dig / pr050806

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION	Tue Jun 17 11:06:25 2008				
Background	116.4				cps
Calibrator	481.8				cps
		1.3000			GAPI/cps
PRIMARY VERIFICATION	Fri May 18 10:14:11 2007				
Background	77.7				cps
Calibrator	320.3				cps
Difference				242.6	GAPI
BEFORE SURVEY VERIFICATION	Fri May 18 10:17:30 2007				
Background	76.6				cps
Calibrator	320.4				cps
Difference				243.9	GAPI
AFTER SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

CBL Calibration Report

Serial Number:	040201	
Tool Model:	PRB275_Dig	
Performed:	Fri Apr 24 13:27:46 2009	
Depth:	3272.052	ft
Casing Diameter:	4.500	in
	3' Spacing	
Signal Zero:	1.500	mV
Calibrated Amplitude:	81.196	mV
Reading at Signal Zero:	0.010	V
Reading in Free Pipe:	1.017	V
Gain:	79.117	
Offset:	0.741	

Temperature Calibration Report

Serial Number:	040201	
Tool Model:	PRB275_Dig	
Performed:	Sat Oct 27 12:52:34 2007	

	Reference		Reading	
Low Reference:	0.00	degF	0.00	cps
High Reference:	1.00	degF	1.00	cps

Gain:	0.10
Offset:	0.00
Delta Spacing	1

Company	Encana Oil & Gas (USA) Inc		
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CCL
Scale 1:240