PHOENIX SURVEYS, INC.

Cement Bond Log
Gamma Ray - CCL

Company	Noble Energy, Inc.
Well	Suman-GeorgeTrusts 44-27
Field	Wildcat
County	Yuma
State	Colorado

Company Noble Energy, Inc.

Well Suman-GeorgeTrusts 44-27

Field Wildcat

County Yuma State Colorado

Location: API # : 05-125-11730-0000

SE SE
300' FSL & 1550' FEL
SEC 27 TWP 1S RGE 45W

Other Services
MAST
SWAB
PERF

Permanent Datum	Ground Level	Elevation	3902
Log Measured From	Kelly Bushing		
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 3908
D.F. 3907
G.L. 3902

Date	1-Mar-2010		
Run Number	1		
Depth Driller	2408		
Depth Logger	2347		
Bottom Logged Interval	2346		
Top Log Interval	100		
Open Hole Size	6.125"		
Type Fluid	Water		
Density / Viscosity	8.34		
Max. Recorded Temp.	112		
Estimated Cement Top	Surface		
Time Well Ready	11:00		
Time Logger on Bottom	11:40		
Equipment Number	#54		
Location	Ft Morgan, CO		
Recorded By	Sam Hopper		
Witnessed By	David Ledet		

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	4.5	10.5	Surface	TD
Liner				

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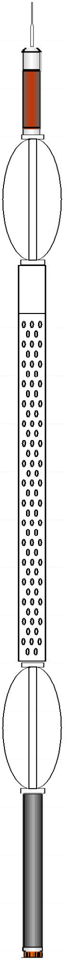
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, 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

Depth Ref to SLB Tripple Combo OH Logs Dated 21-Feb-2010
Run CBL from TD to 100'
Swab to 500' above top of perforations
Perforate 2225-2262 @ 3 SPF, 120deg, using Titan 3-1/8", 19gm, 0.40"EHD, 40.89"PENE
Thank you for using Phoenix Surveys!!
API# 05-125-11730-0000

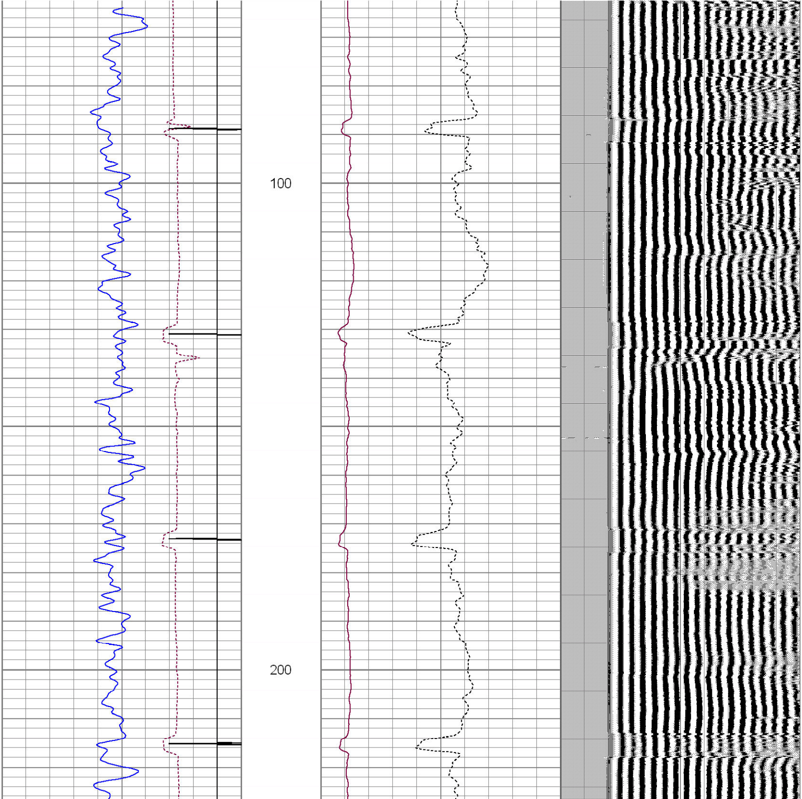
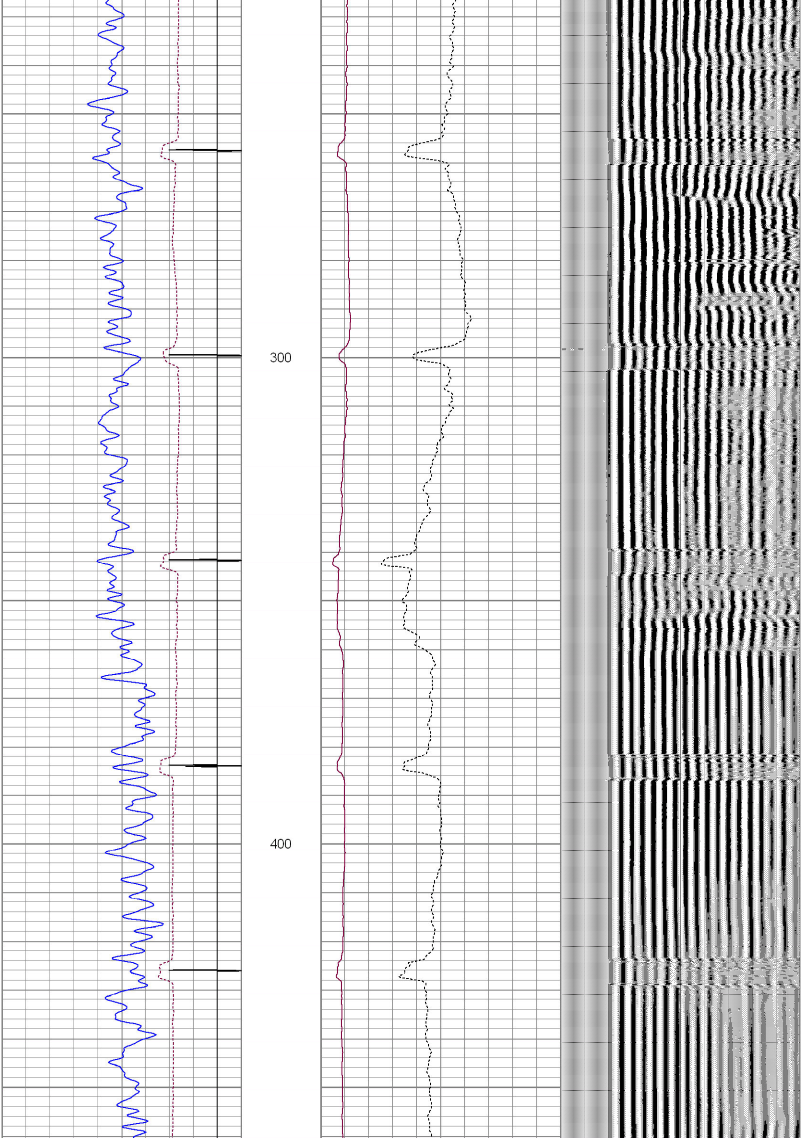
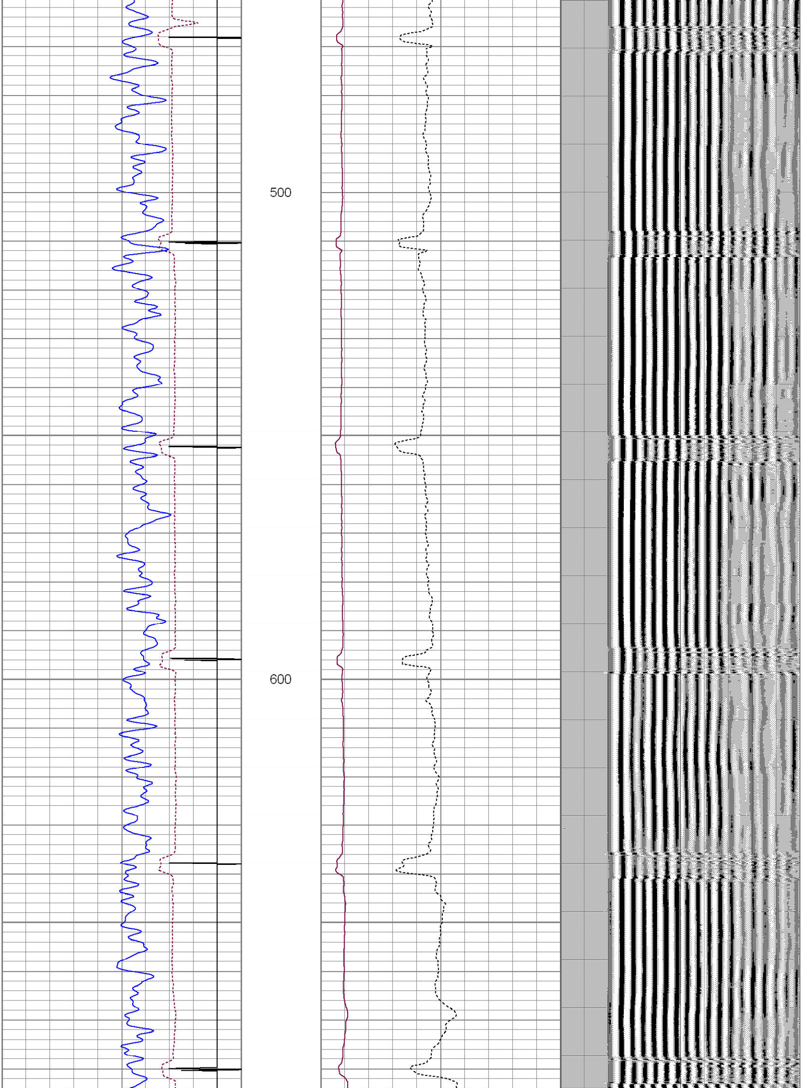
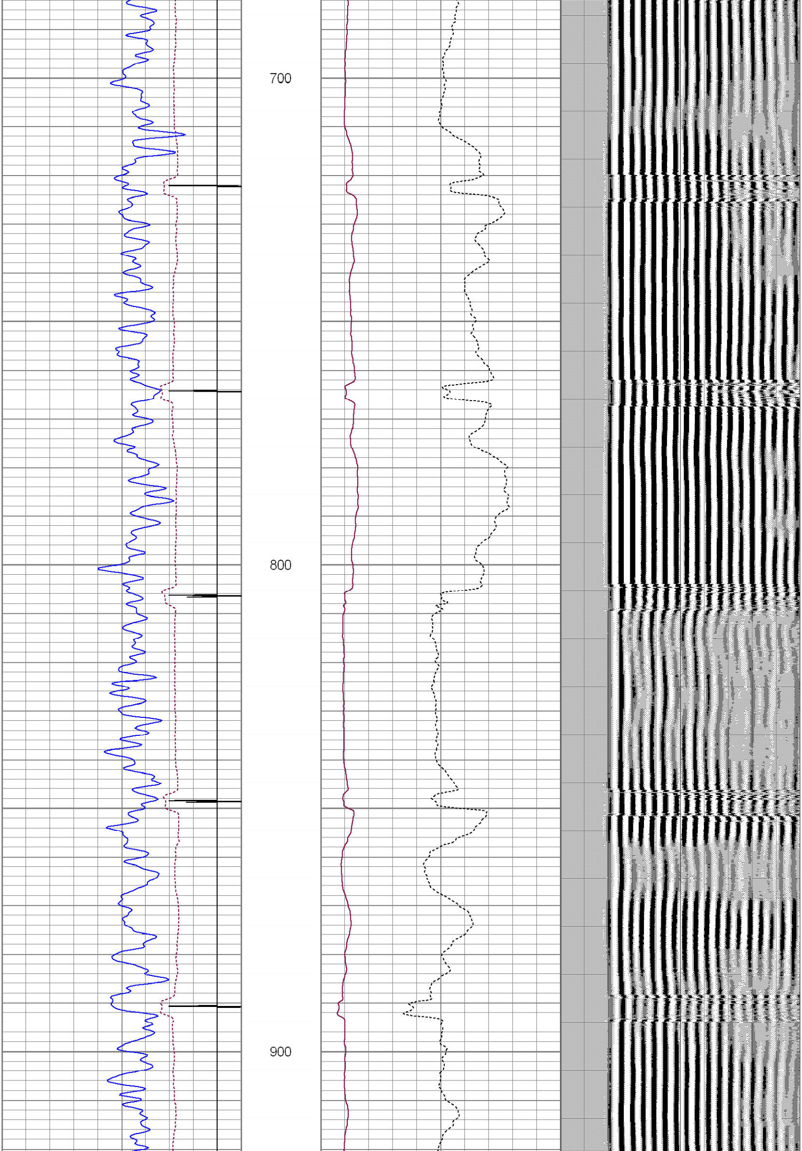
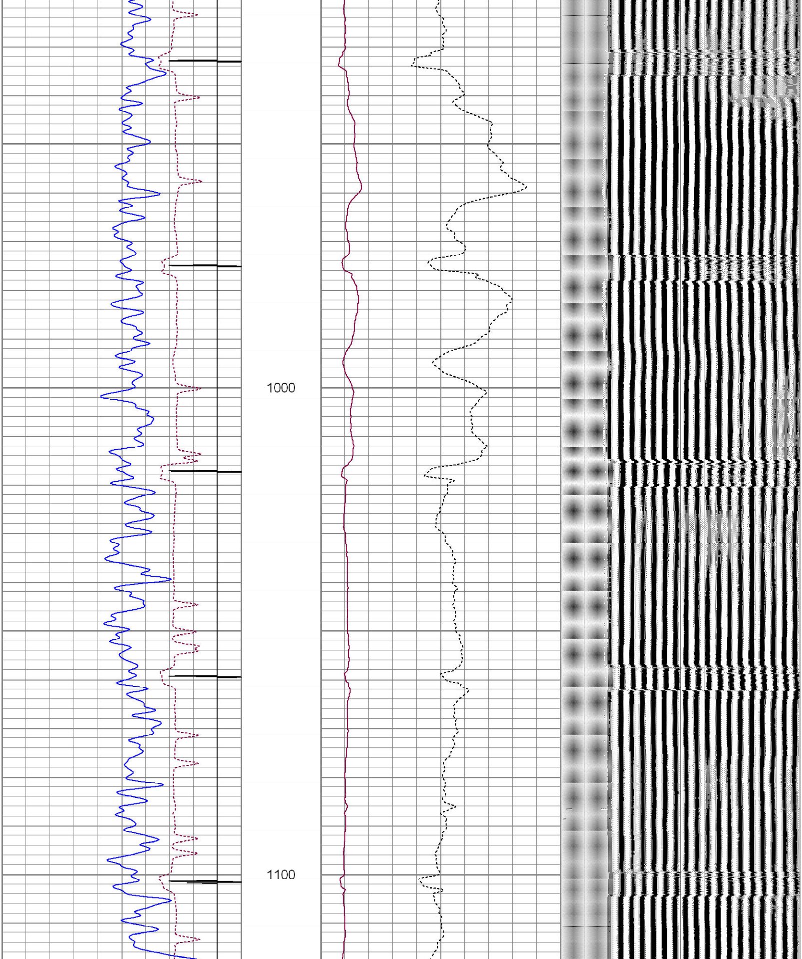
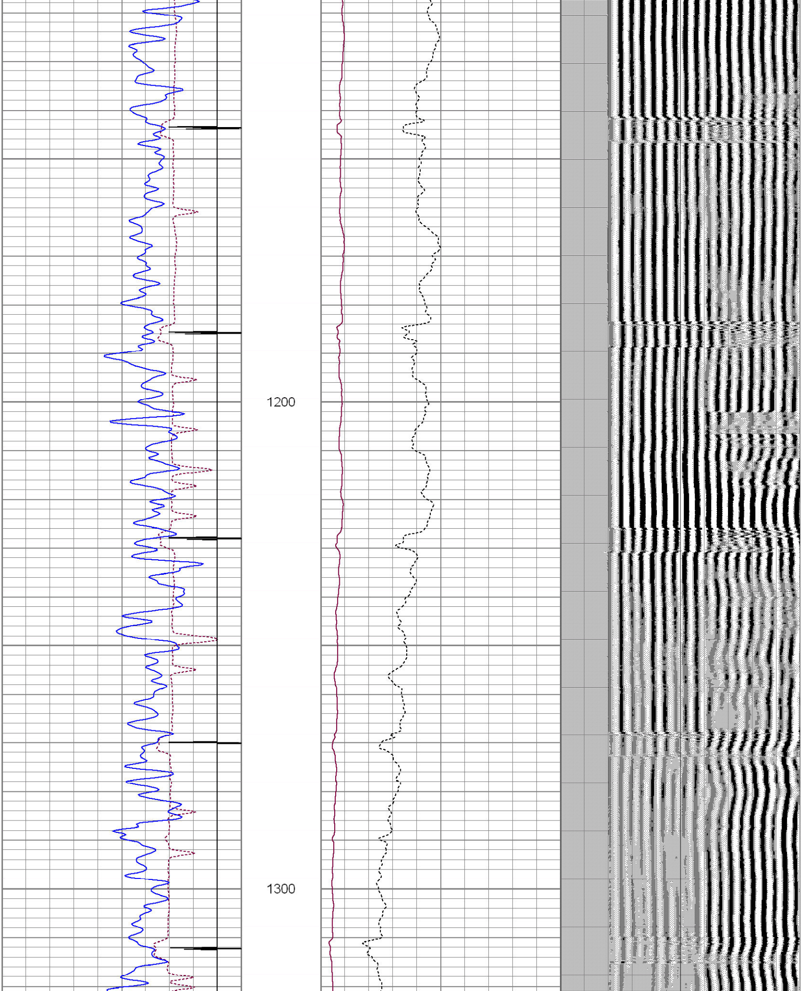
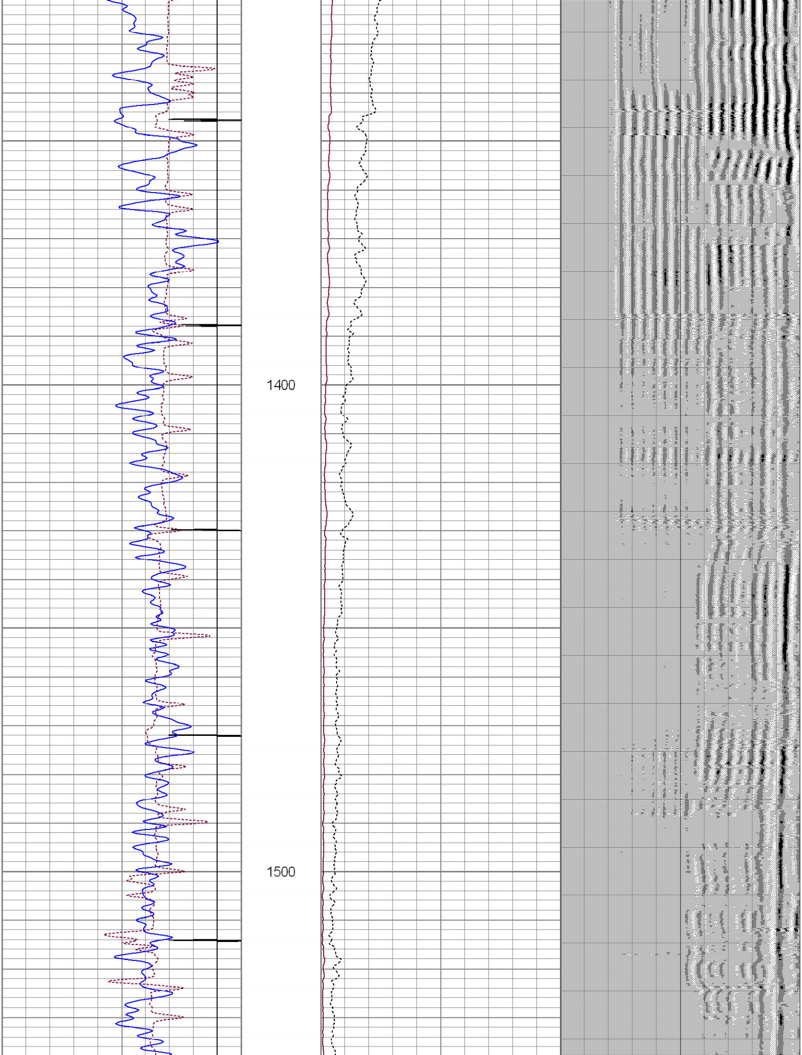
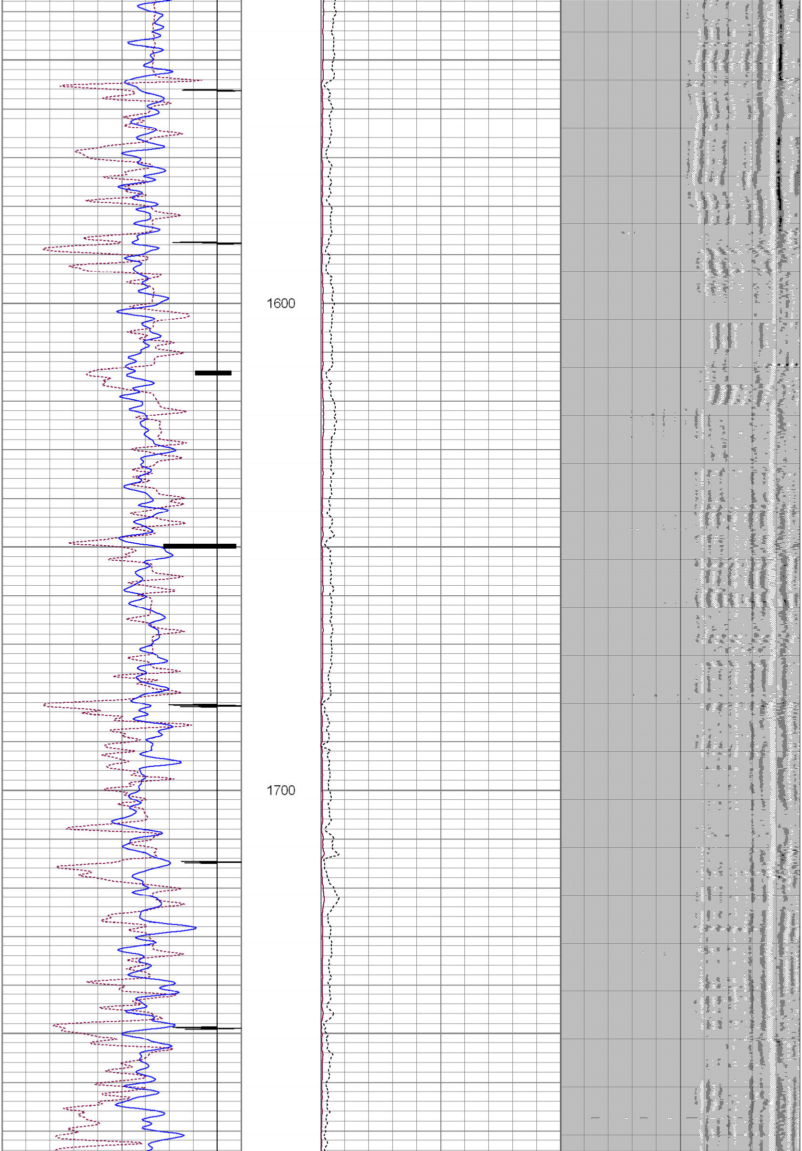
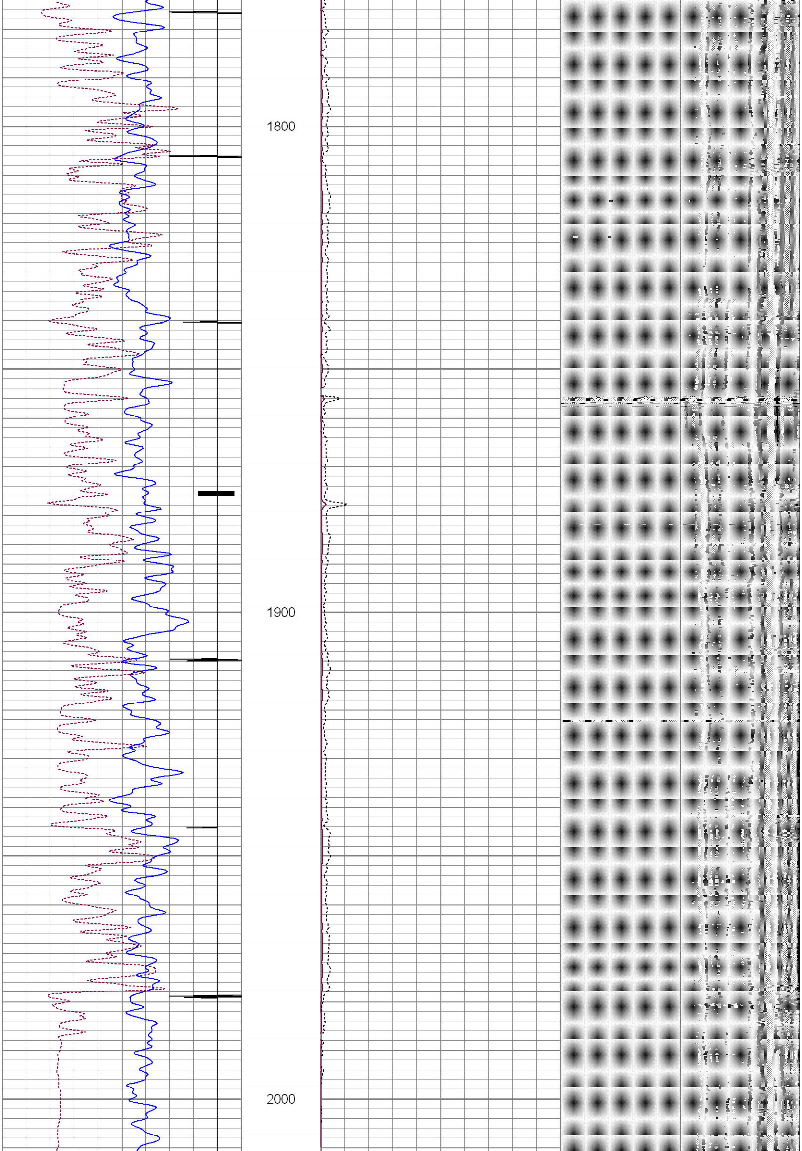
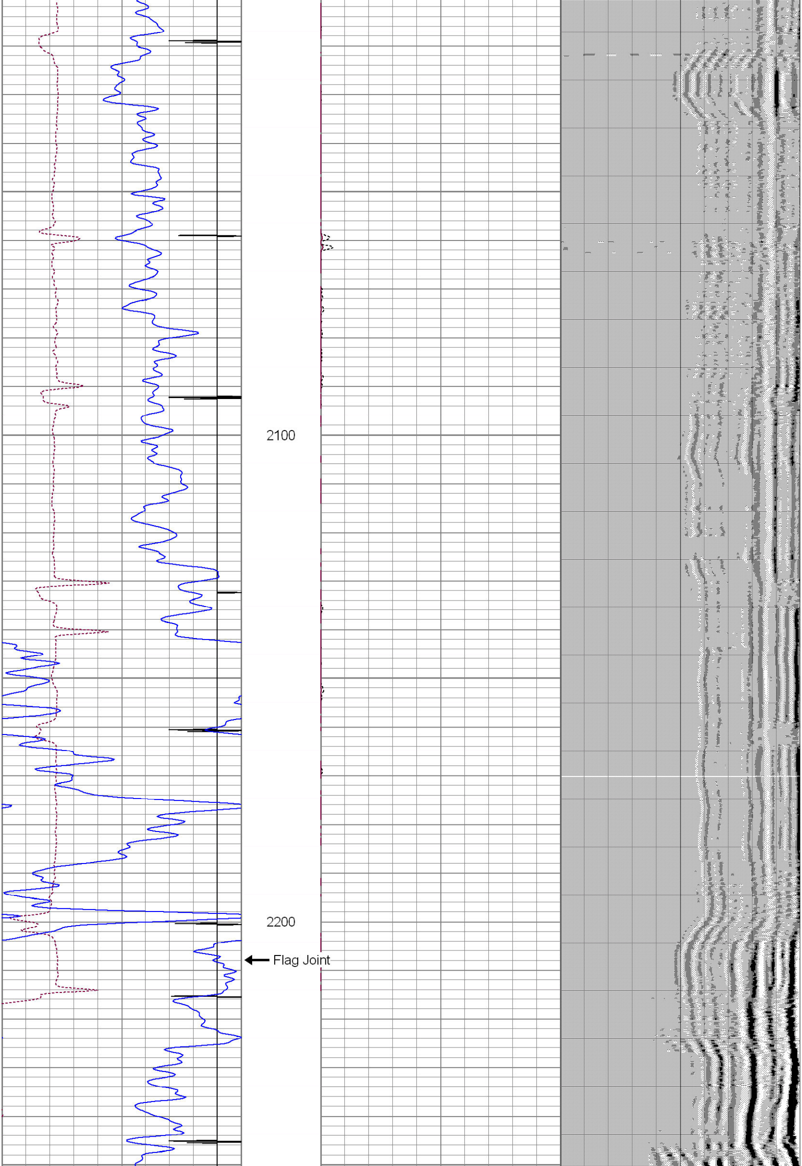
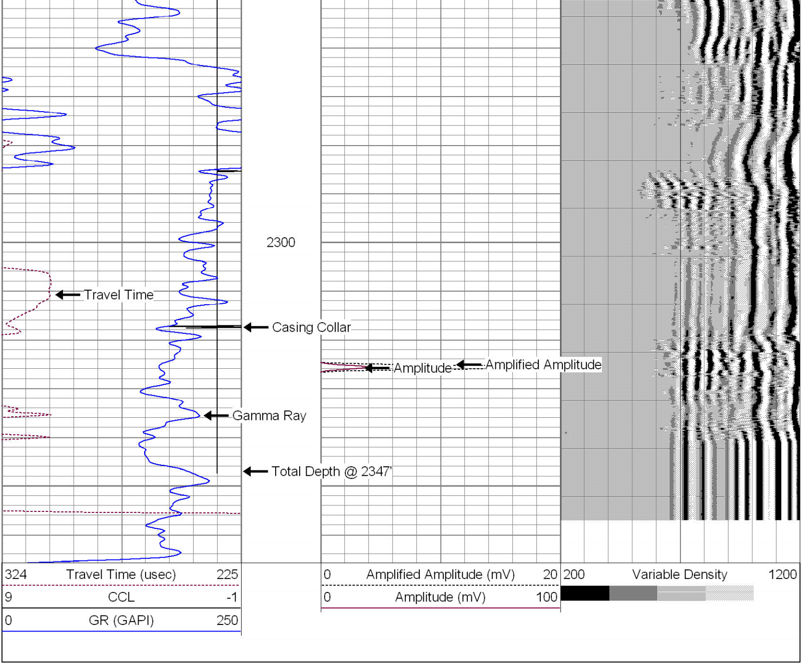
Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			STNDRD Standard Cable Head	1.00	1.69	1.00
CCL	19.06		CCL-titan01 (01t)	1.92	2.75	
			SDSCENT Centralizer	2.88	2.75	20.00
WVF3	10.79		CBL-Probe (050215)	8.75	2.75	93.00
WVF5	9.79					
			SDSCENT Centralizer	2.88	2.75	20.00
			GR-probe 2.75 (51013)	3.67	2.75	100.00
GR	1.13					

Dataset:	noble_suman-gt_44-27.db: field/well/run1/pass6
Total Length:	21.08 ft
Total Weight:	234.00 lb
O.D.	2.75 in

Database File: noble_suman-gt_44-27.db
Dataset Pathname: pass6
Presentation Format: cbl_dr
Dataset Creation: Mon Mar 01 11:39:41 2010 by Log Std Casedhole 09061
Charted by: Depth in Feet scaled 1:240

324 Travel Time (usec) 225
9 CCL -1
0 GR (GAPI) 250

0 Amplified Amplitude (mV) 20
0 Amplitude (mV) 100

200 Variable Density 1200
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