NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL CEMENT BOND VDL

Company	NOBLE ENERGY INC.
Well	THISTLE DOWN STATE PC F36-69HN
Field	WATTENBERG
County	WELD
State	COLORADO

Company NOBLE ENERGY INC.
Well THISTLE DOWN STATE PC F36-69HN
Field WATTENBERG
County WELD State COLORADO
Location: API #: 0512335673
BHL: 1665' FSL & 535' FWL
SE/NE
SEC 36 TWP 5N RGE 65W
Other Services

			Elevation
Permanent Datum	GL	Elevation 4770	K.B. 4788
Log Measured From	KB		D.F.
Drilling Measured From	KB		G.L. 4770

Date	MARCH 15, 2013
Run Number	ONE
Depth Driller	11371
Depth Logger	7331
Bottom Logged Interval	7331
Top Log Interval	SURFACE
Open Hole Size	8-3/4
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	223 DEG. F
Estimated Cement Top	1250
Time Well Ready	PORTABLE MAST
Time Logger on Bottom	2-3/4 PROBE 110803
Equipment Number	4838
Location	45
Recorded By	GREG NOLAN
Witnessed By	BRIAN PEARSON

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	9-5/8	36# J-55	16	593.9
Prot. String				
Production String	7	26# P-110	16	7426
Liner	4-1/2	11.6# P-110	7323.1	11356

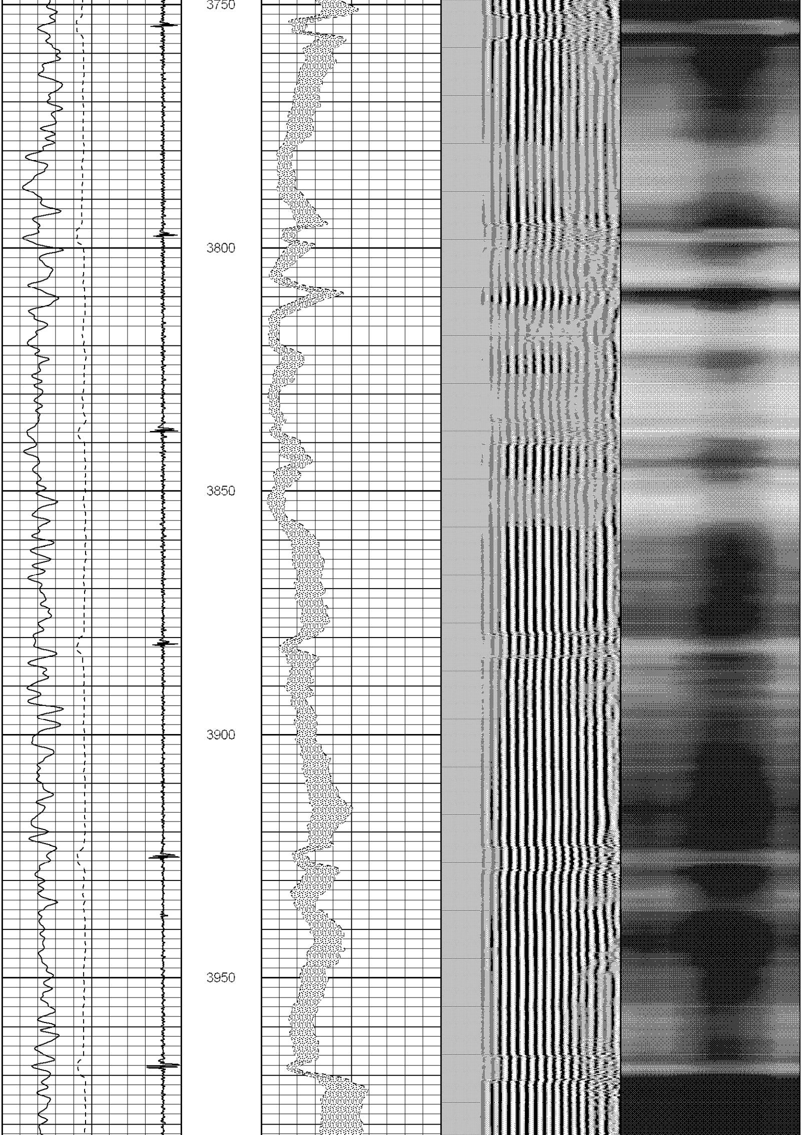
<<< Fold Here >>>

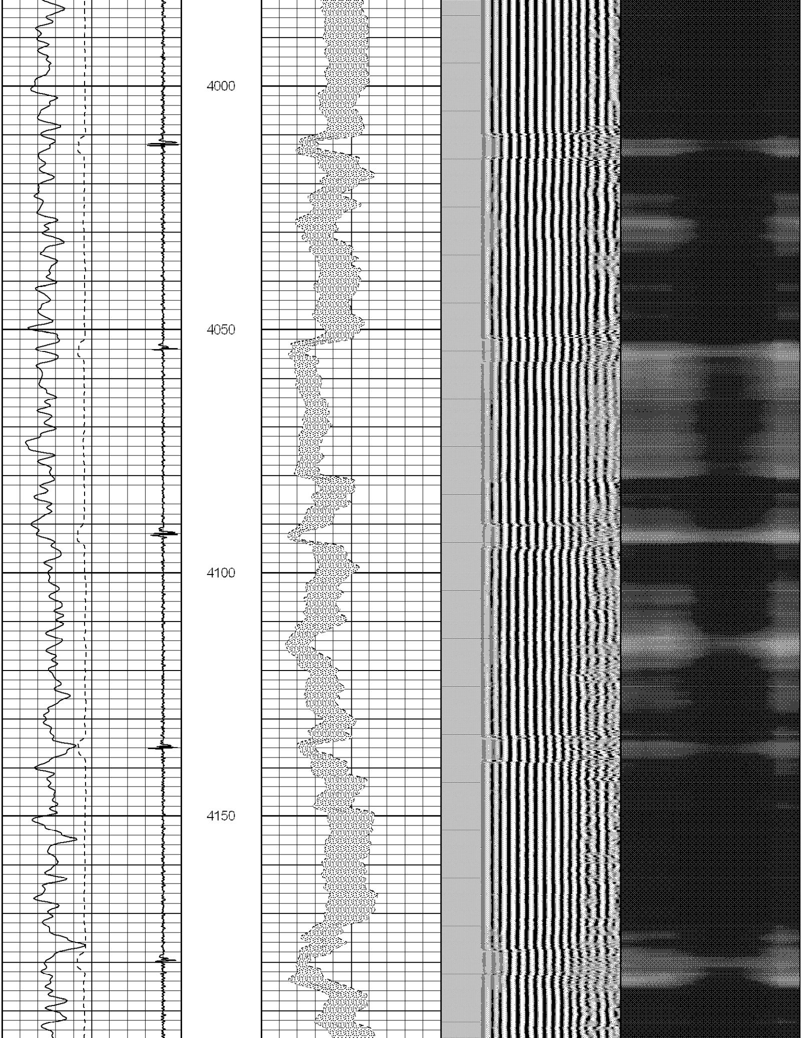
All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs,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

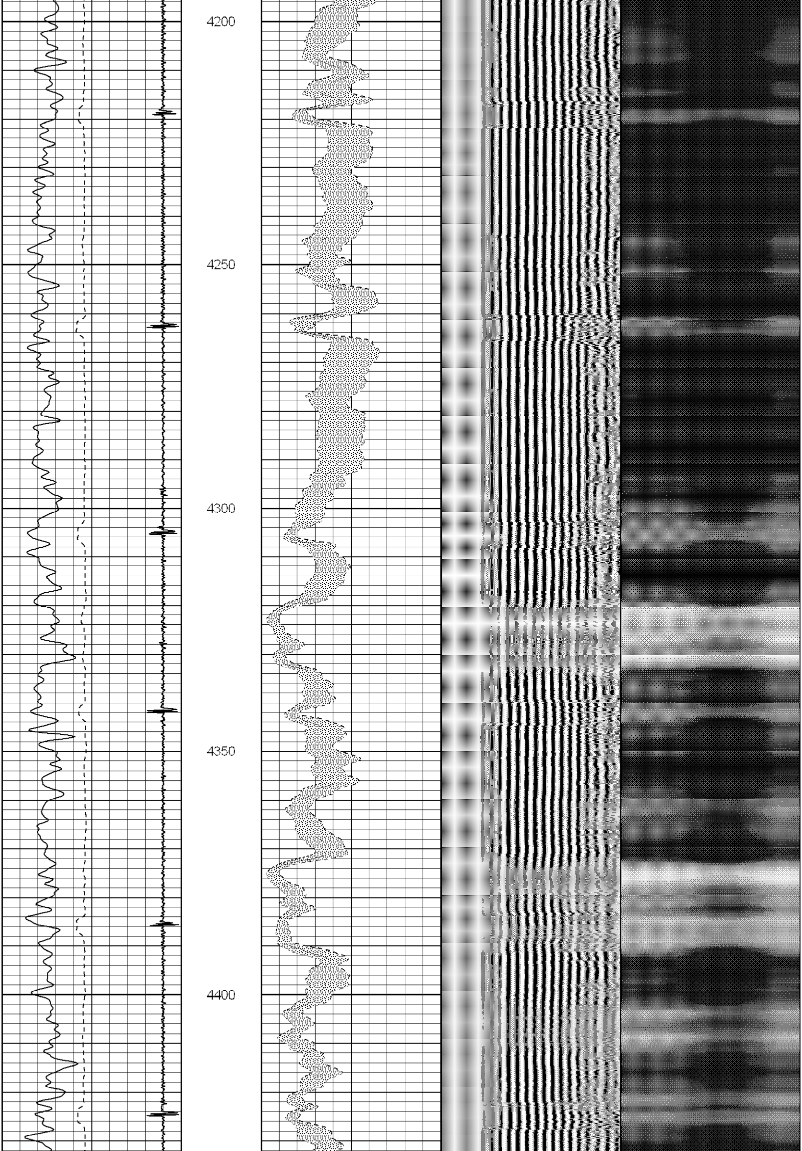
Comments

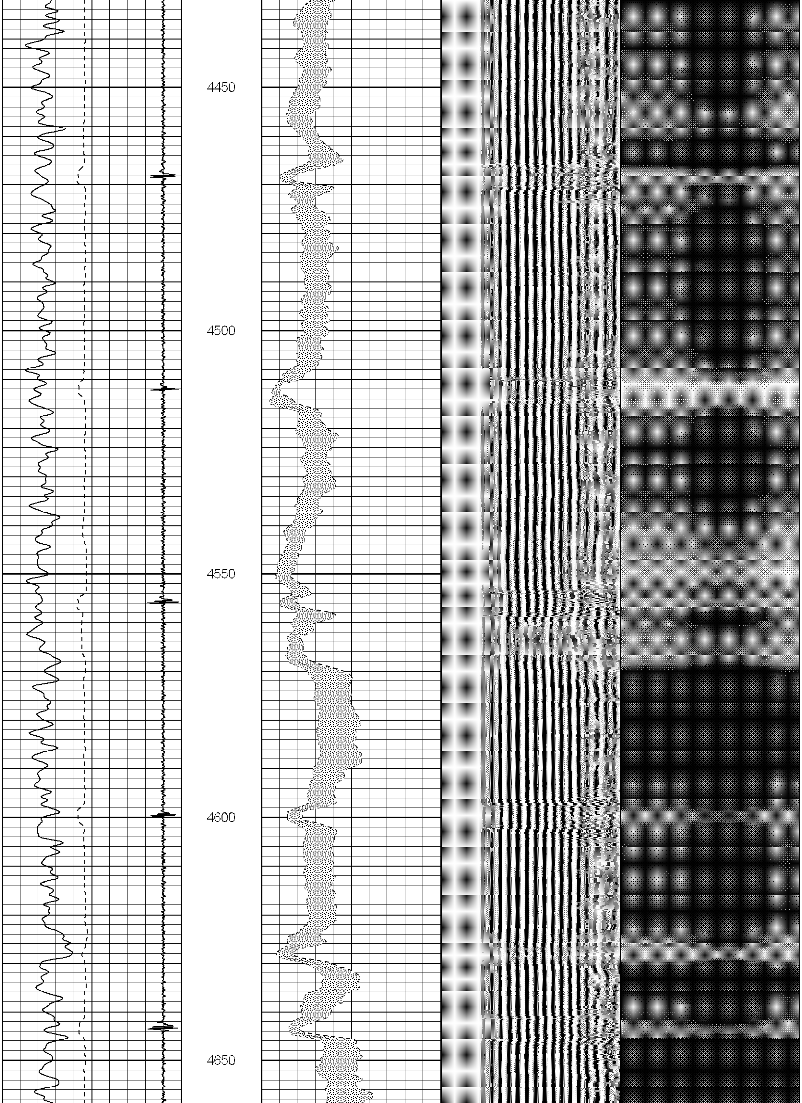
THANK YOU FOR CHOOSING NCPS!!!!
LOG NOT CORRELATED
WCR 52 & WCR 49, S.4, W 200', S INTO
SOUTHERN WELL OF A 3 WELL PAD

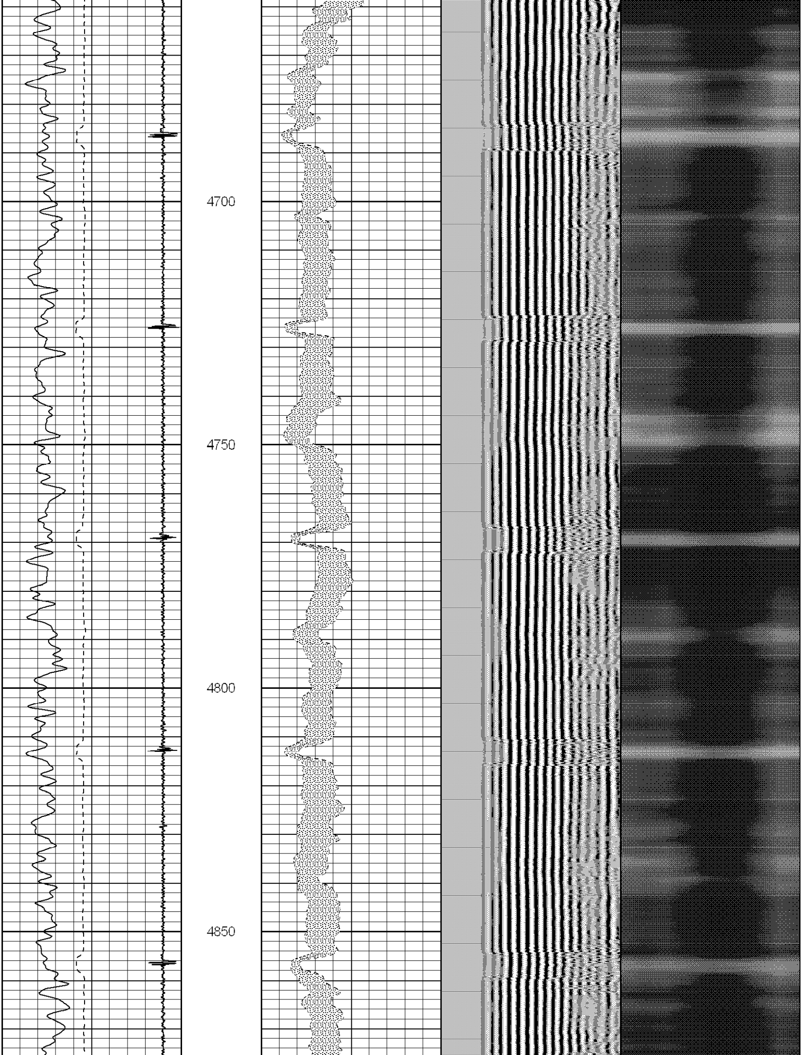
Database File:	cbl noble thistle down state pc f36-63hn.db
Dataset Pathname:	pass4
Presentation Format:	sector2
Dataset Creation:	Fri Mar 15 07:43:15 2013 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

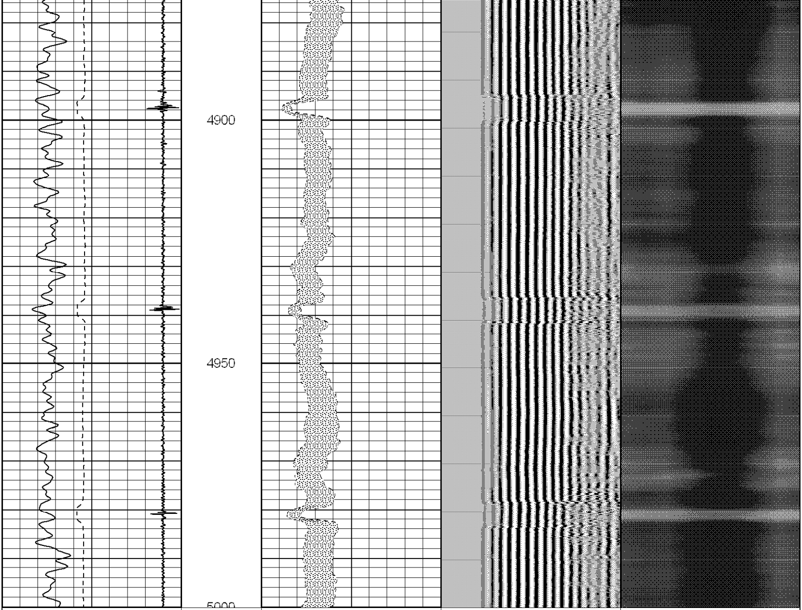








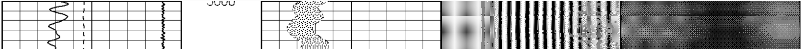


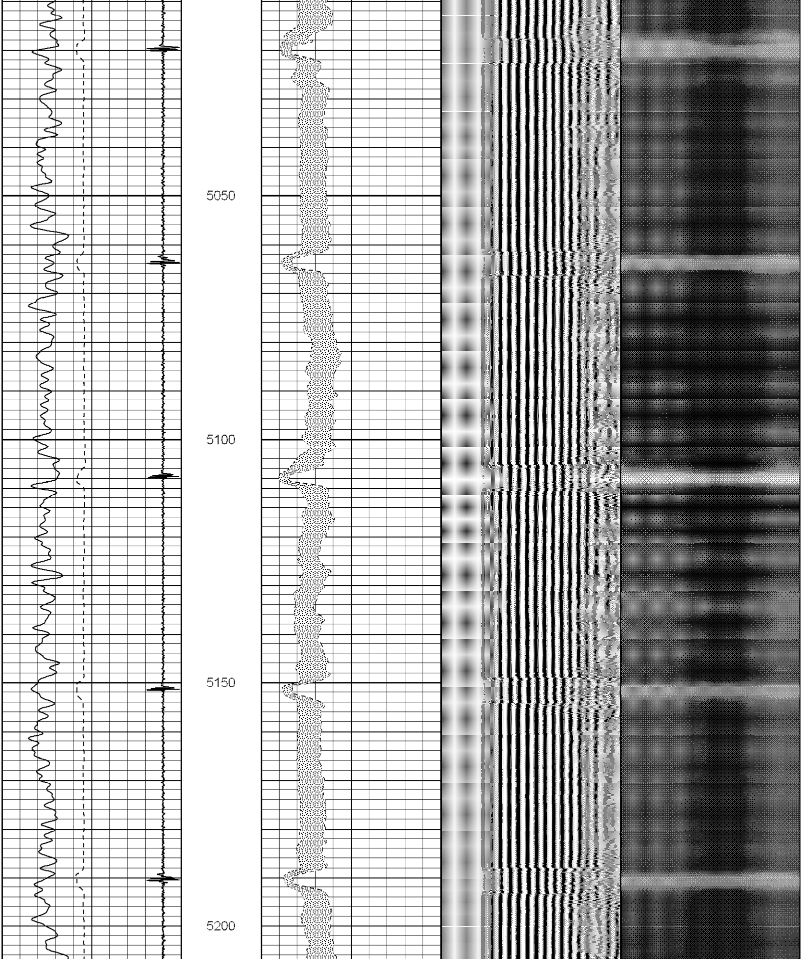


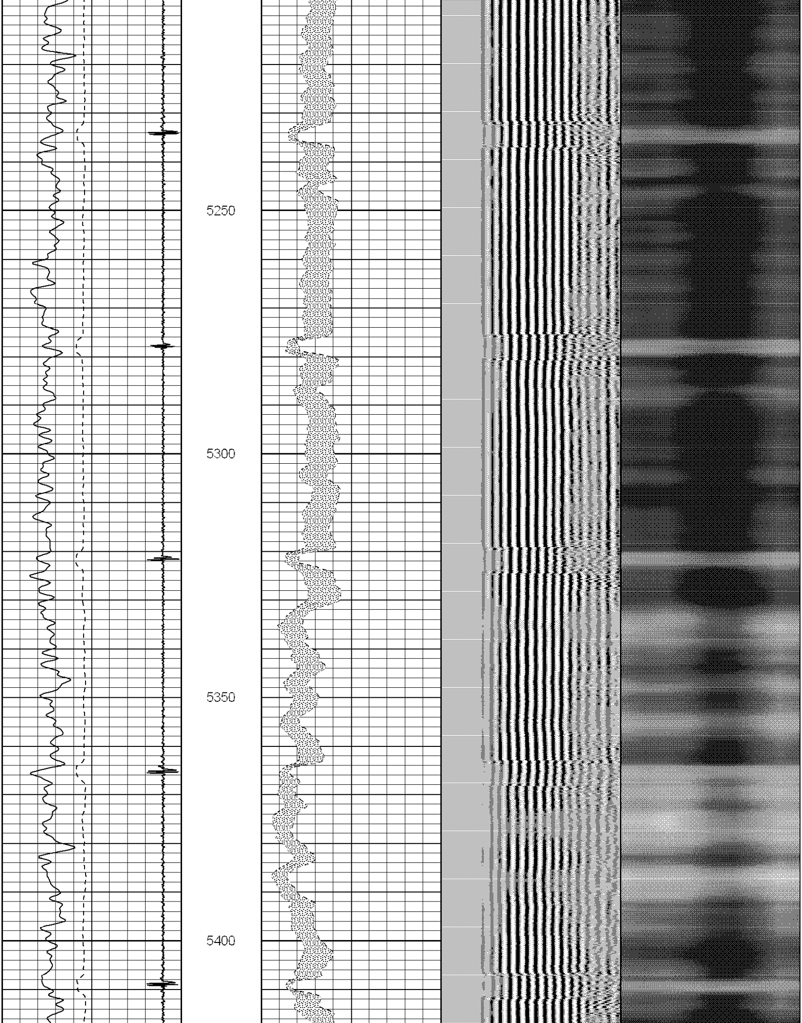
0 GR (GAPI) 200	0 AMPMAX 100	200 WVF5FT 1200	1 Sector Map 8
400 TT3FT (usec) 200	0 AMPAVG 100		
50 CCL -5.5	0 AMPMIN 100		
	0 AMP3FT (mV) 100		

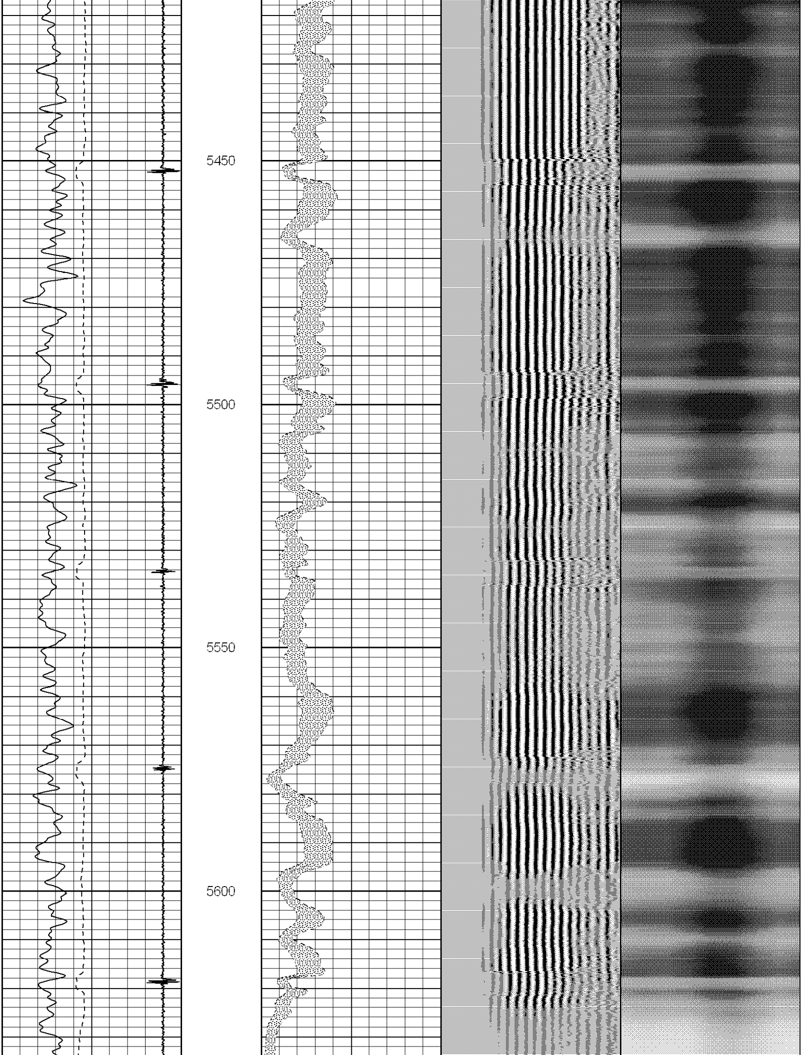
Database File:	cbl noble thistle down state pc f36-63hn.db
Dataset Pathname:	pass3
Presentation Format:	sector2
Dataset Creation:	Fri Mar 15 07:20:39 2013 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

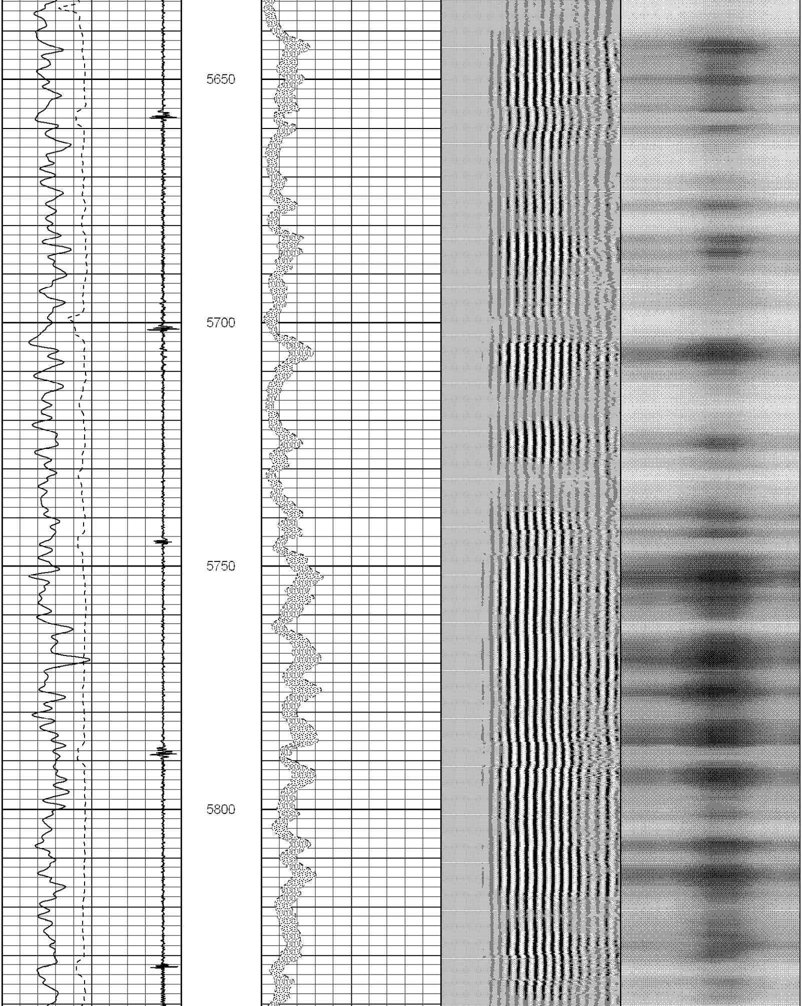
0 GR (GAPI) 200	0 AMPMAX 100	200 WVF5FT 1200	1 Sector Map 8
400 TT3FT (usec) 200	0 AMPAVG 100		
50 CCL -5.5	0 AMPMIN 100		
	0 AMP3FT (mV) 100		

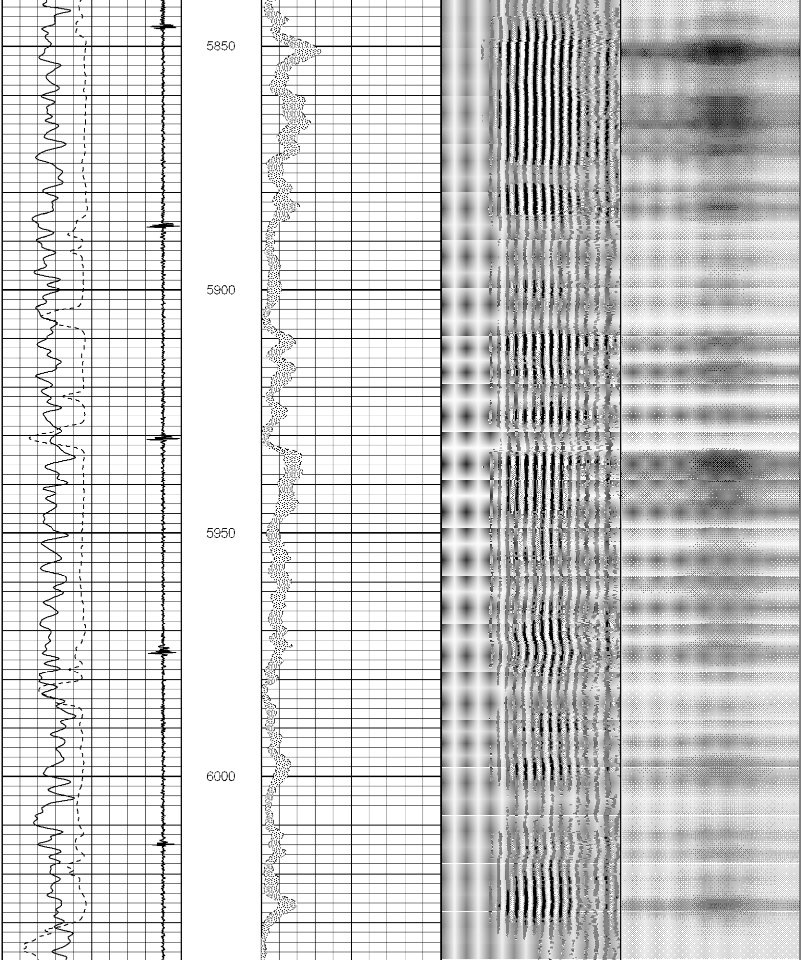


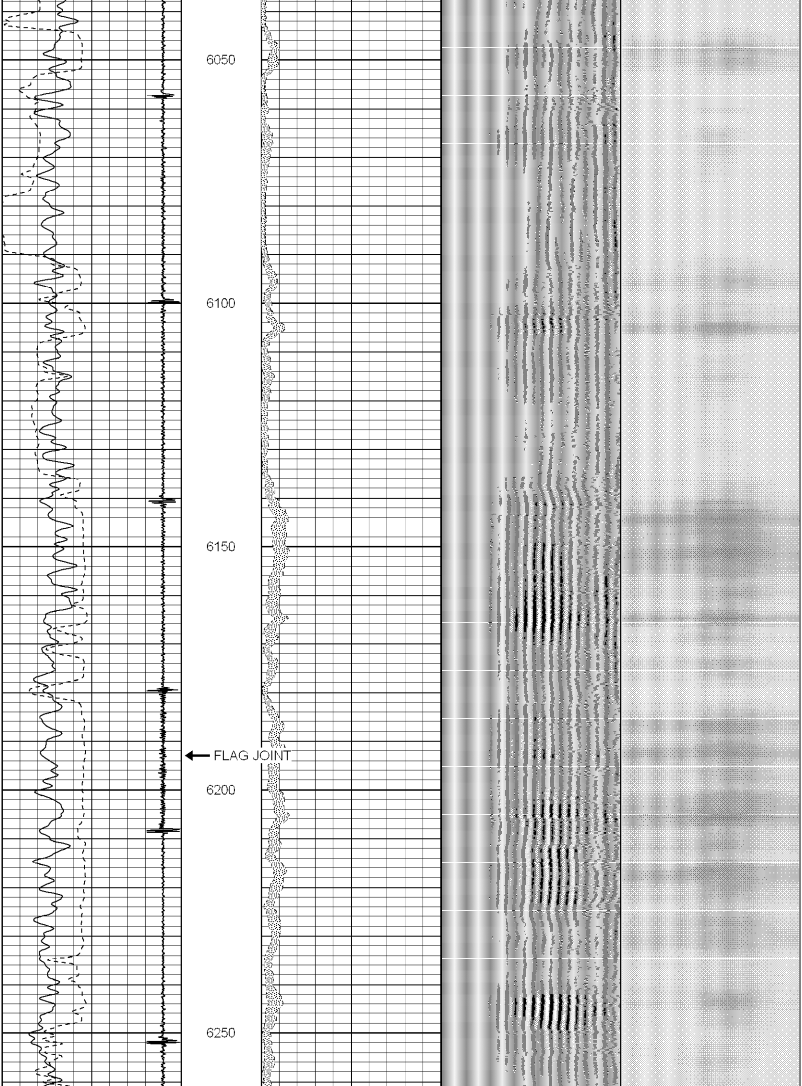


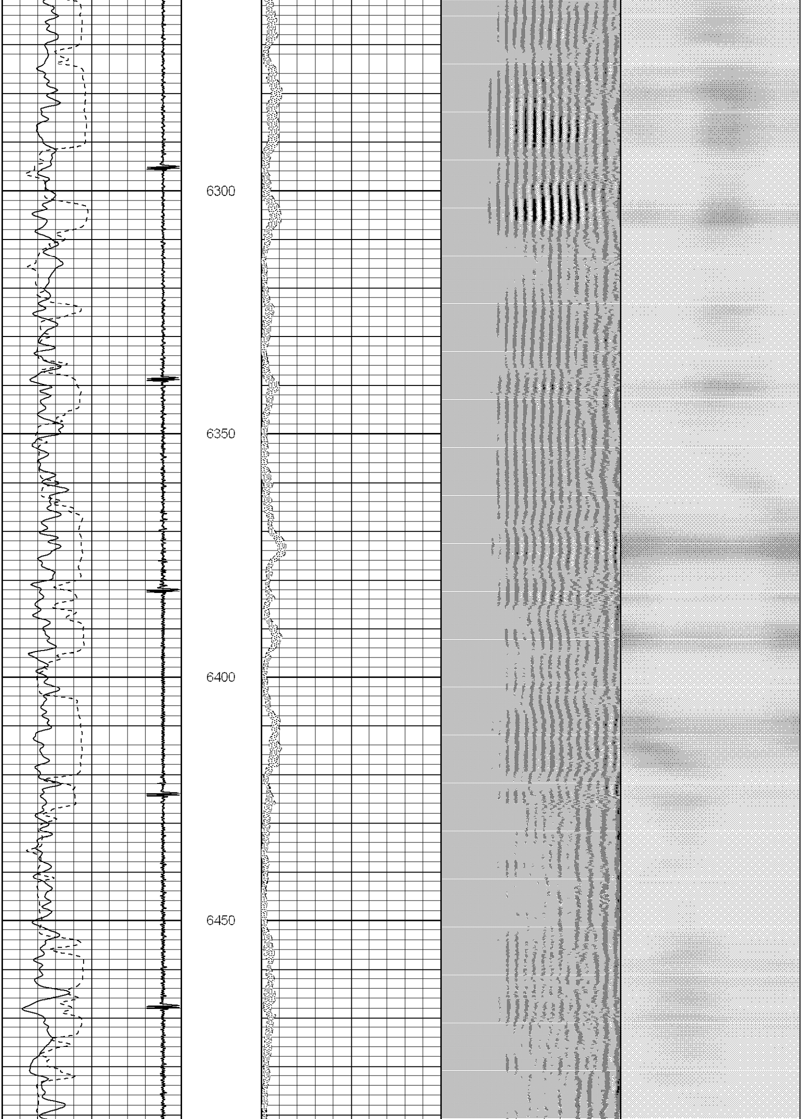


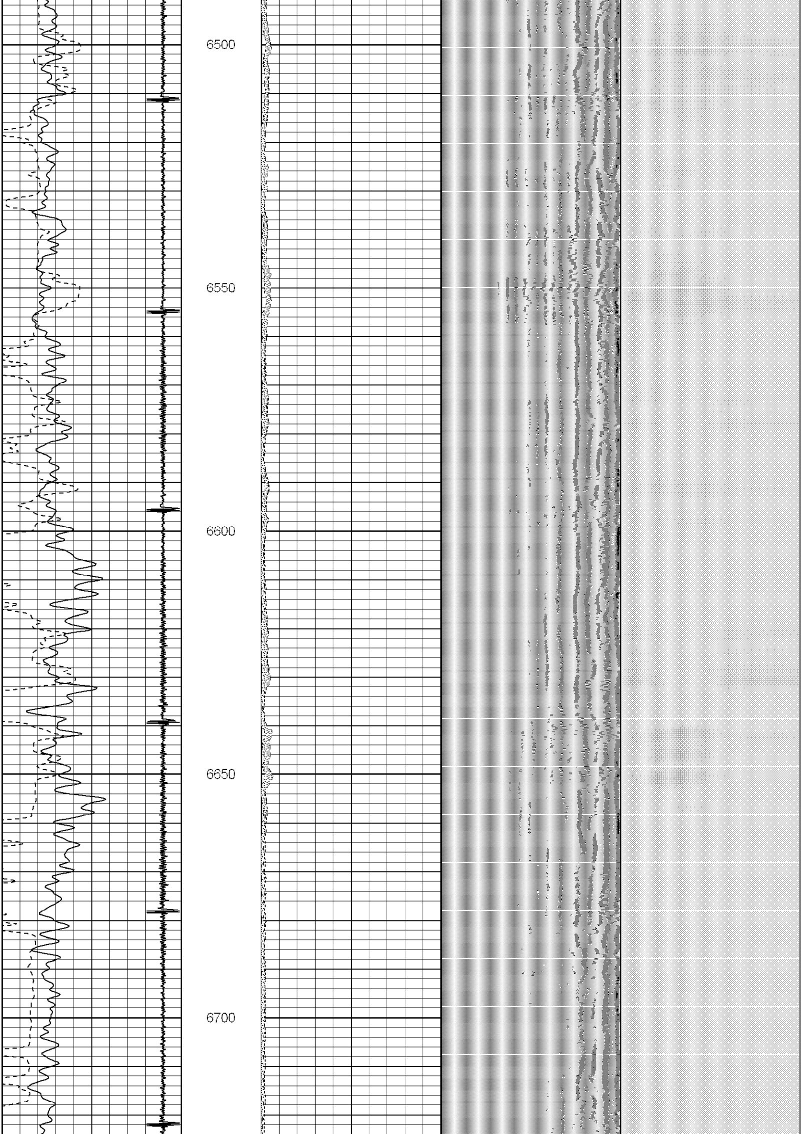


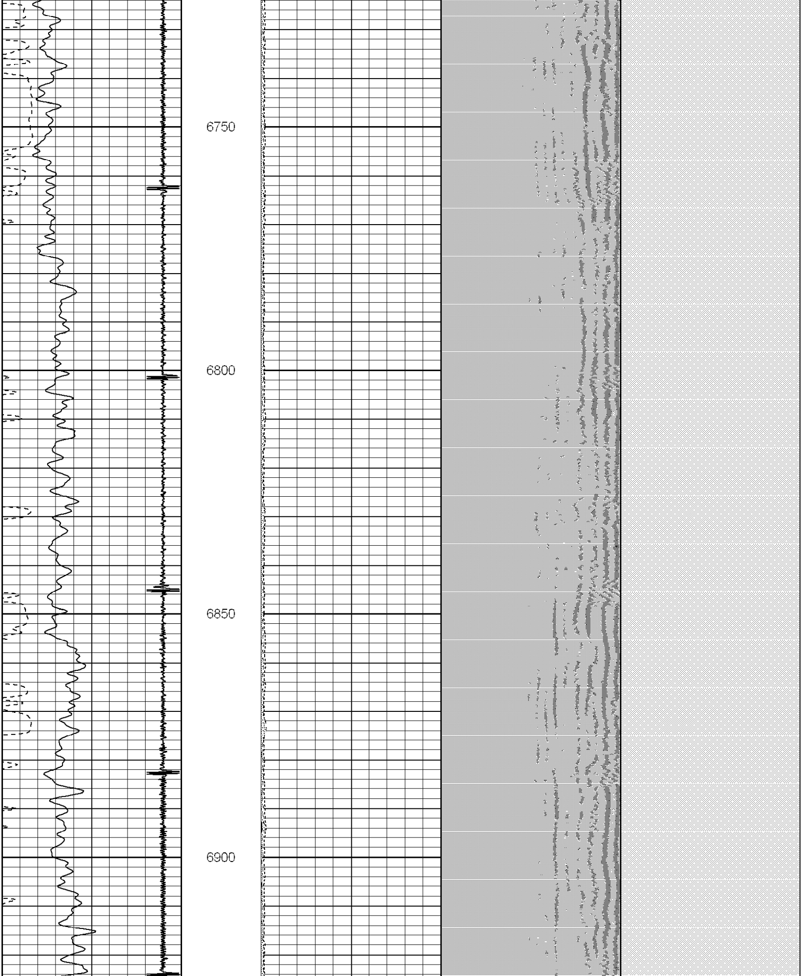


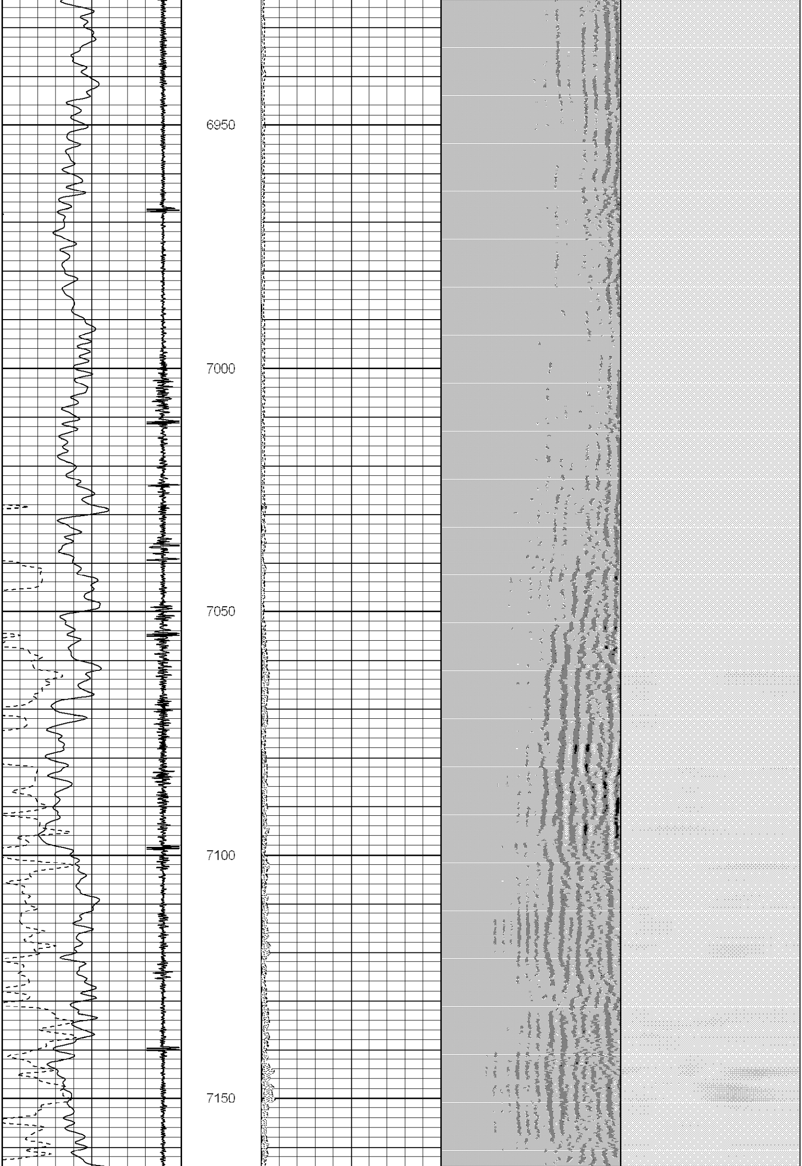


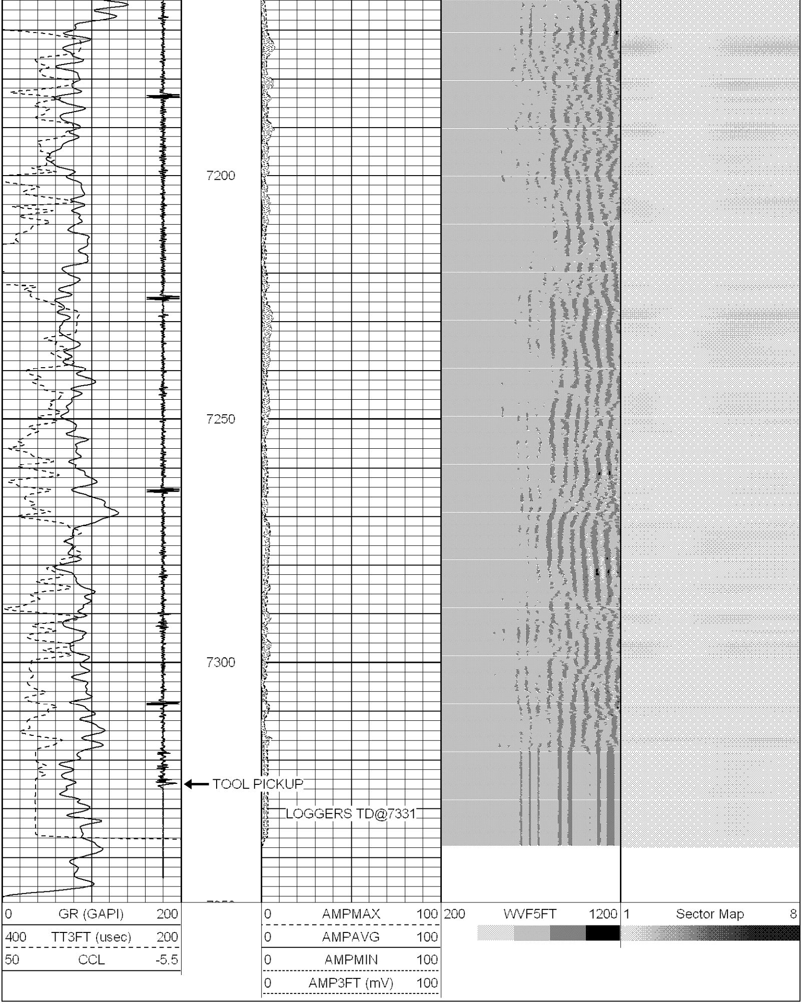












Calibration Report

Database File: cbl noble thistle down state pc f36-63hn.db
Dataset Pathname: pass4
Dataset Creation: Fri Mar 15 07:43:15 2013 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110785

SHOP CALIBRATION

Thu Mar 07 06:39:34 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.5000			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

Segmented Cement Bond Log Calibration Report

Serial Number:	101020	
Tool Model:	Probe	
Calibration Casing Diameter:	7.000	in
Calibration Depth:	802.767	ft

Master Calibration, performed Fri Mar 15 07:01:37 2013:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.008	1.072	1.500	62.165	56.997	1.057
CAL	0.008	1.449				
5'	0.008	1.235	1.500	62.165	49.427	1.120
SUM						
S1	0.007	1.218	0.000	62.165	51.345	-0.384
S2	0.008	1.166	0.000	62.165	53.695	-0.418
S3	0.008	1.075	0.000	62.165	58.217	-0.438
S4	0.008	0.977	0.000	62.165	64.140	-0.492
S5	0.008	0.903	0.000	62.165	69.407	-0.525
S6	0.008	0.928	0.000	62.165	67.559	-0.519
S7	0.008	1.079	0.000	62.165	58.040	-0.448
S8	0.008	1.218	0.000	62.165	51.367	-0.391

Internal Reference Calibration, performed Fri Jan 13 14:30:16 2012:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL	0.000	0.000	0.008	1.449	1.000	0.000

Air Zero Calibration, performed Fri Mar 15 06:53:44 2013:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000
SUM			
S1	0.000	0.000	0.000
S2	0.000	0.000	0.000
S3	0.000	0.000	0.000
S4	0.000	0.000	0.000
S5	0.000	0.000	0.000
S6	0.000	0.000	0.000
S7	0.000	0.000	0.000
S8	0.000	0.000	0.000