NABORS
COMPLETION & PRODUCTION SERVICES CO.

GAMMA RAY CCL CEMENT BOND SECTOR VDL

Company	NOBLE ENERY INC.
Well	GUTTERSEN STATE DD17-79-1HN
Field	WATTENBERG
County	WELD
State	COLORADO

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Well GUTTERSEN STATE DD17-79-1HN
Field WATTENBERG
County WELD State COLORADO

Location: API #: 0512338013
BHL: 75' FNL & 330' FWL
SW/SW
SEC 17 TWP 3N RGE 63W

Other Services

Permanent Datum	GL	Elevation	4820
Log Measured From	KB		
Drilling Measured From	KB		

Elevation
K.B. 4844
D.F.
G.L. 4820

Date	JANUARY 7, 2013
Run Number	ONE
Depth Driller	11502
Depth Logger	6848
Bottom Logged Interval	6848
Top Log Interval	SURFACE
Open Hole Size	8-3/4
Type Fluid	WATER
Density / Viscosity	N/A
Max. Recorded Temp.	228°F
Estimated Cement Top	762
Time Well Ready	PORTABLE MAST
Time Logger on Bottom	PROBE 2-3/4 101020/785
Equipment Number	4838
Location	45
Recorded By	GREG NOLAN
Witnessed By	BILL MANSFIELD

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	24	841.2
Prot. String				
Production String	7	26# P-110 IC	24	6963.2
Liner	4-1/2	11.6# P-110	6859.9	11487

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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

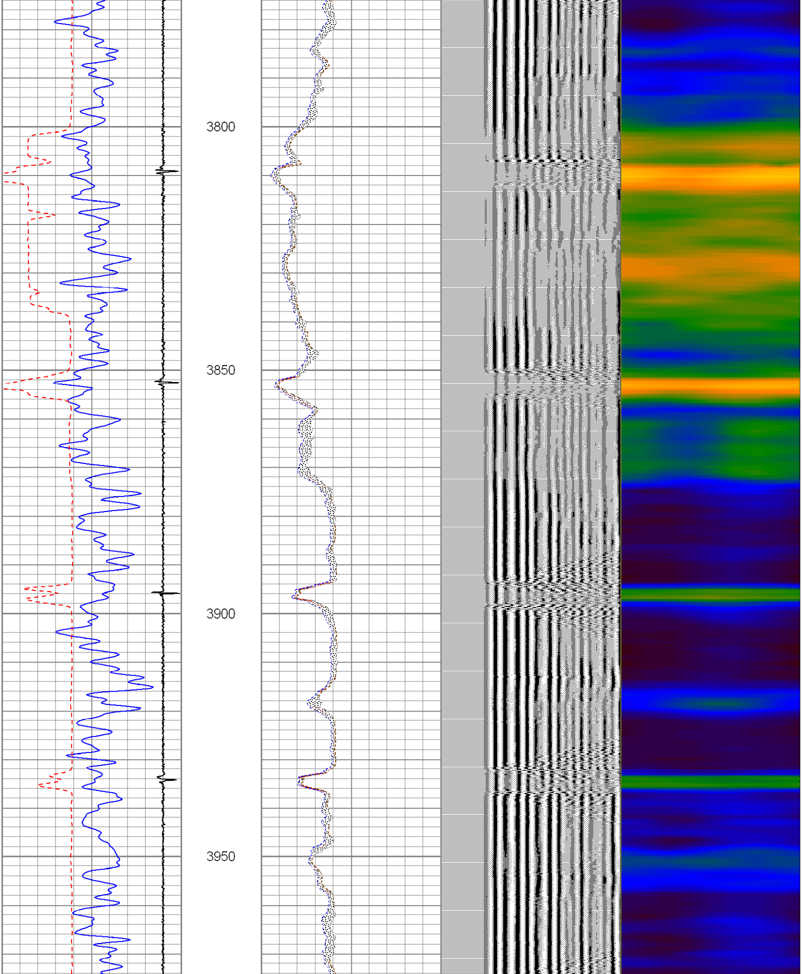
THANK YOU FOR CHOOSING NCPS!!!!
LOG NOT CORRELATED
WCR 40 & WCR 57, S1.5, SE2.4, E.3, S.15, E1.3, S.75 INTO
CENTER WELL OF A 3 WELL PAD

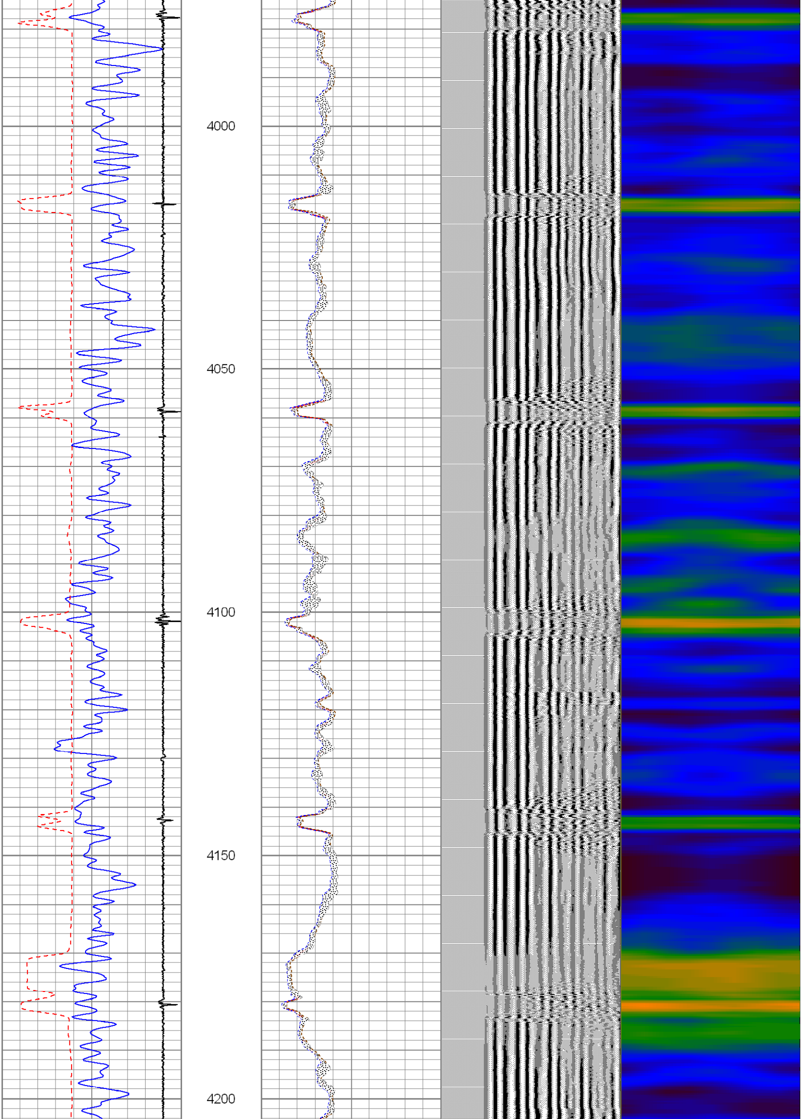
Database File:	cbl noble guttersen state d17-79-1hn.db
Dataset Pathname:	pass3
Presentation Format:	sector2
Dataset Creation:	Tue Jan 07 14:50:08 2014 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

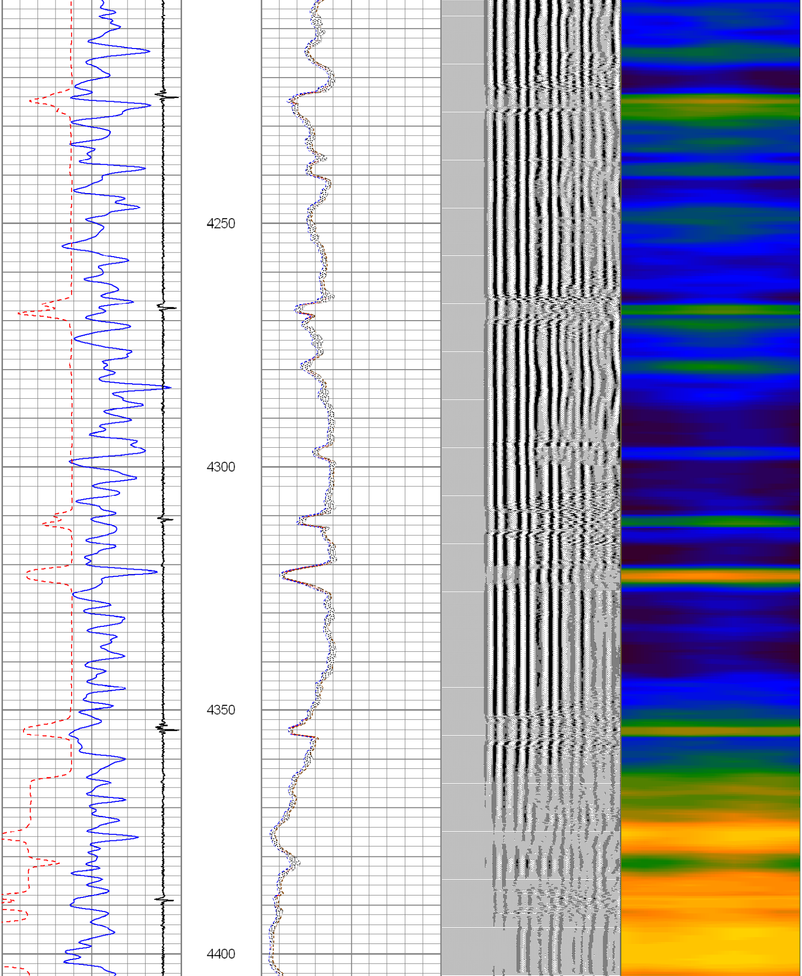
0	GR (GAPI)	150
400	TT3FT (usec)	200
50	CCL	-5.5

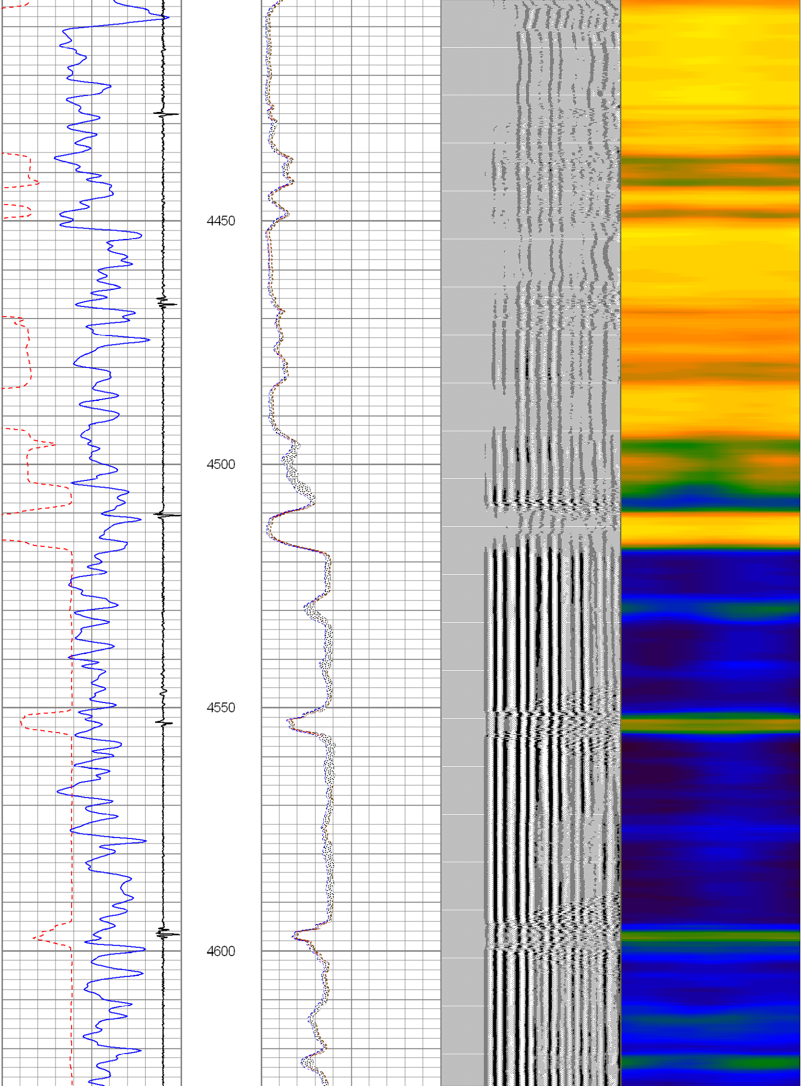
0	AMPMAX	100
0	AMPAVG	100
0	AMPMIN	100
0	AMP3FT (mV)	100

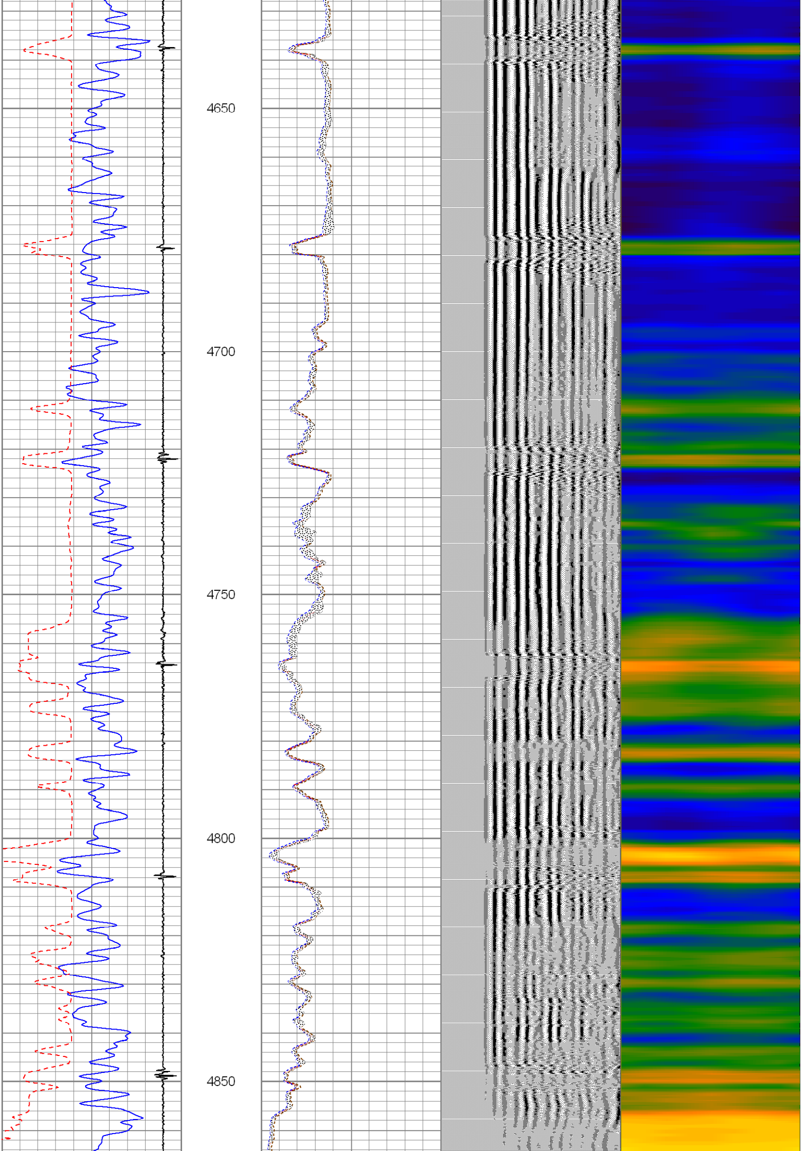
200	WVF5FT	1200
1	Sector Map	8

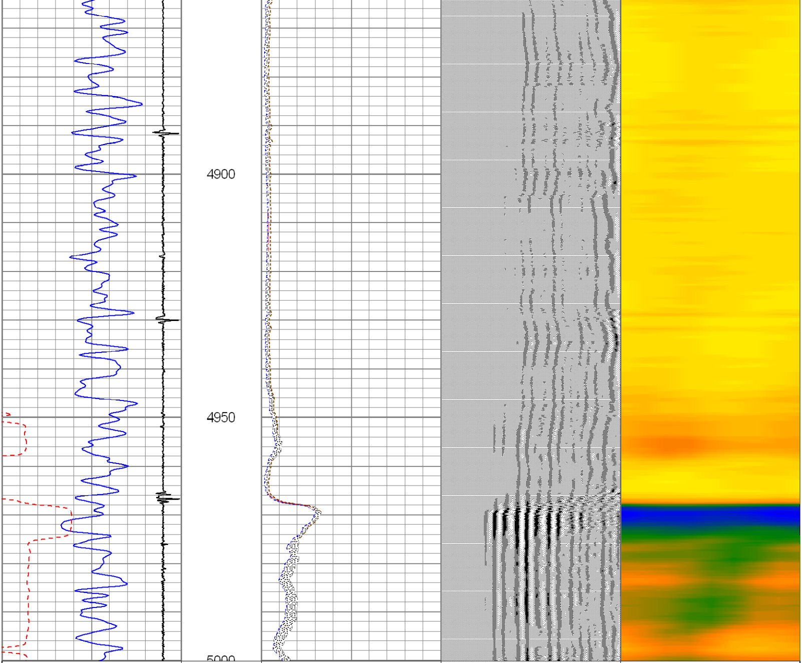








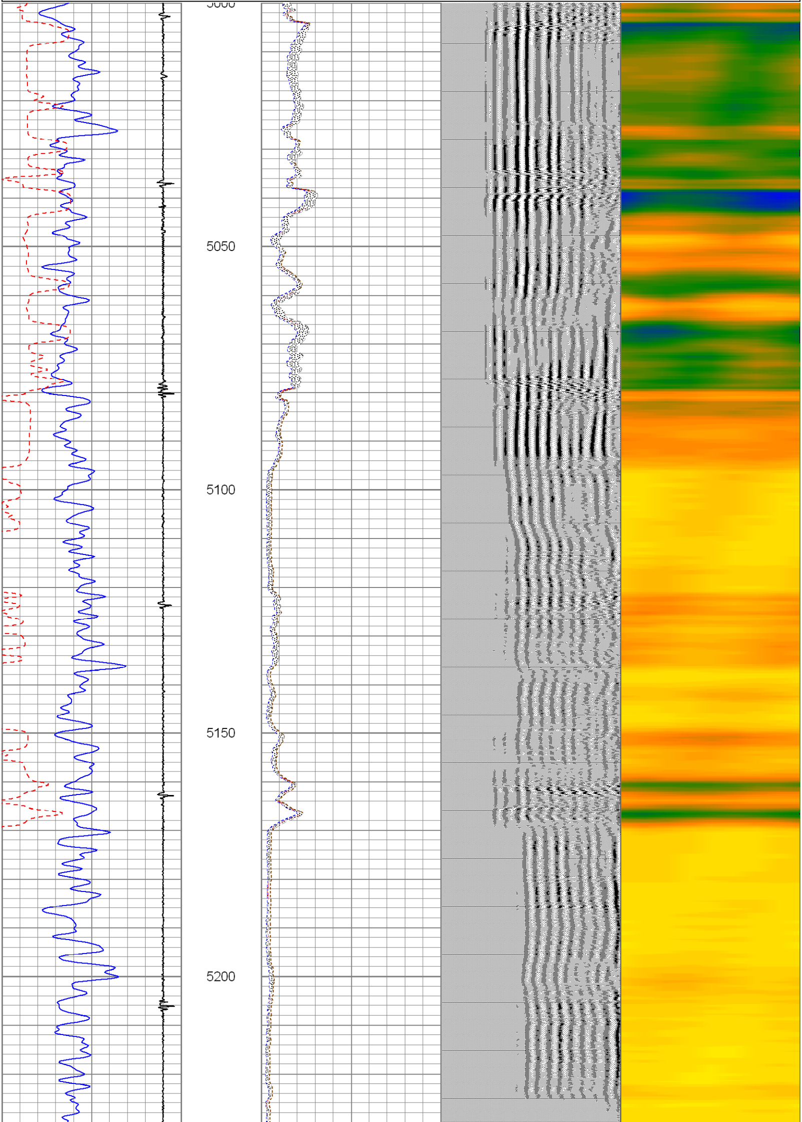


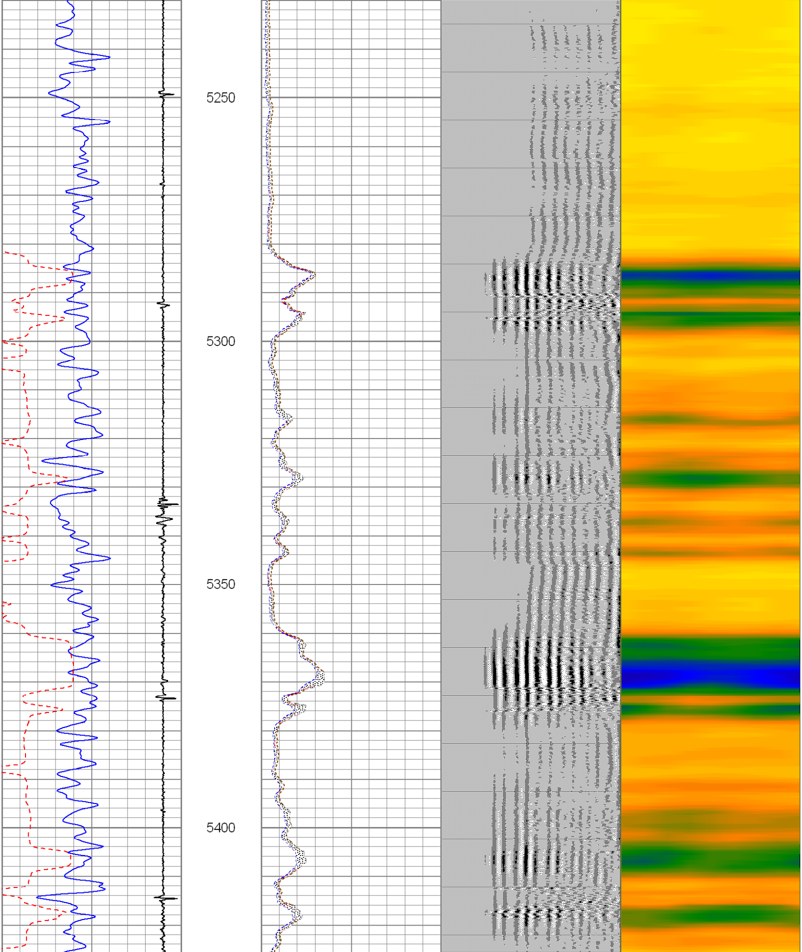


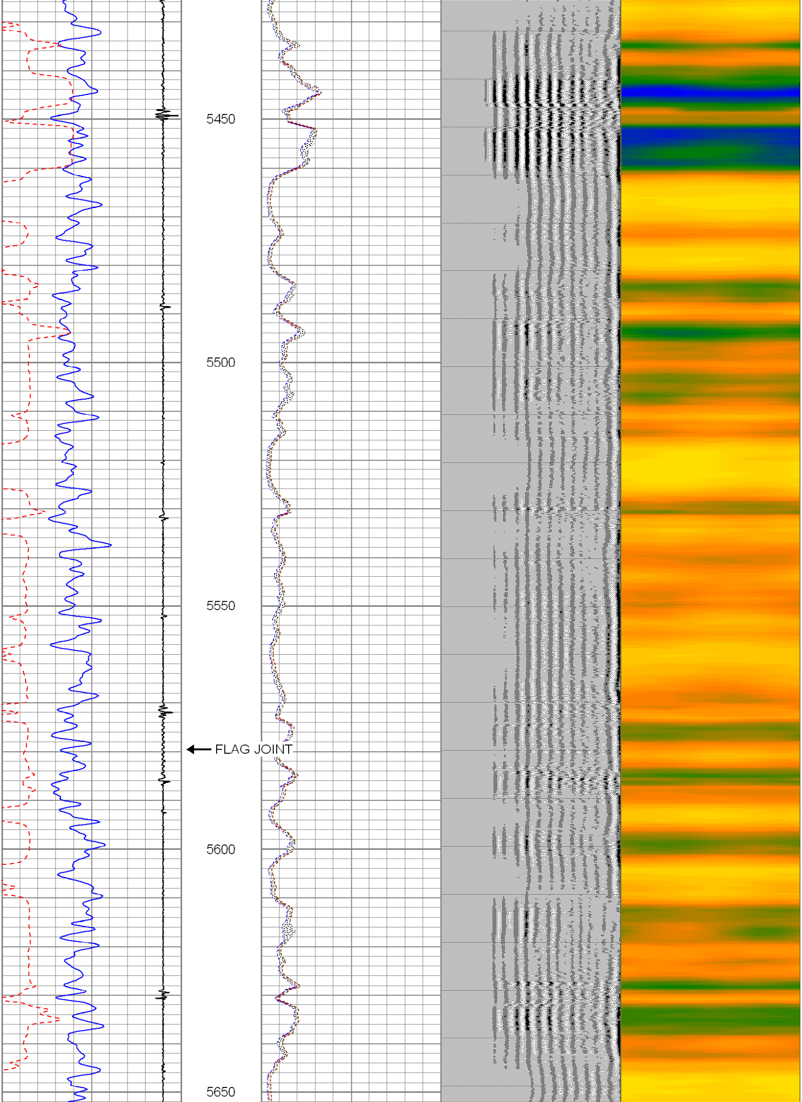
0 GR (GAPI) 150	0 AMPMAX 100	200 WVF5FT 1200	1 Sector Map 8
400 TT3FT (usec) 200	0 AMPAVG 100		
50 CCL -5.5	0 AMPMIN 100		
	0 AMP3FT (mV) 100		

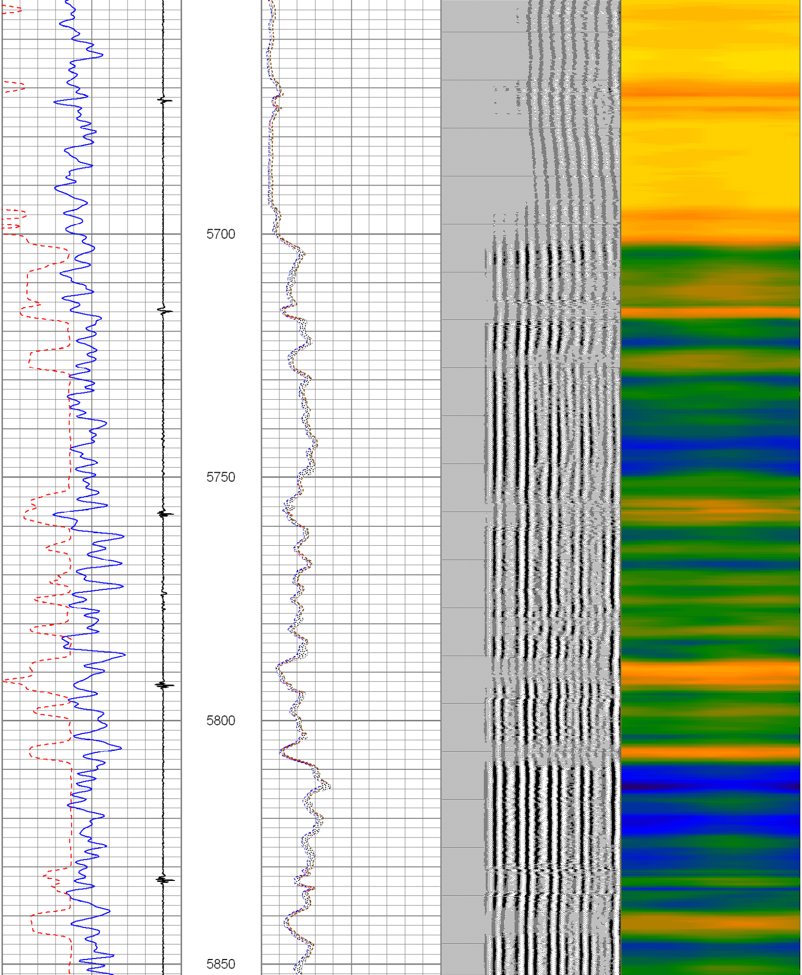
Database File:	cbl noble guttersen state d17-79-1hn.db
Dataset Pathname:	pass2
Presentation Format:	sector2
Dataset Creation:	Tue Jan 07 14:32:21 2014 by Log SCH 120430
Charted by:	Depth in Feet scaled 1:240

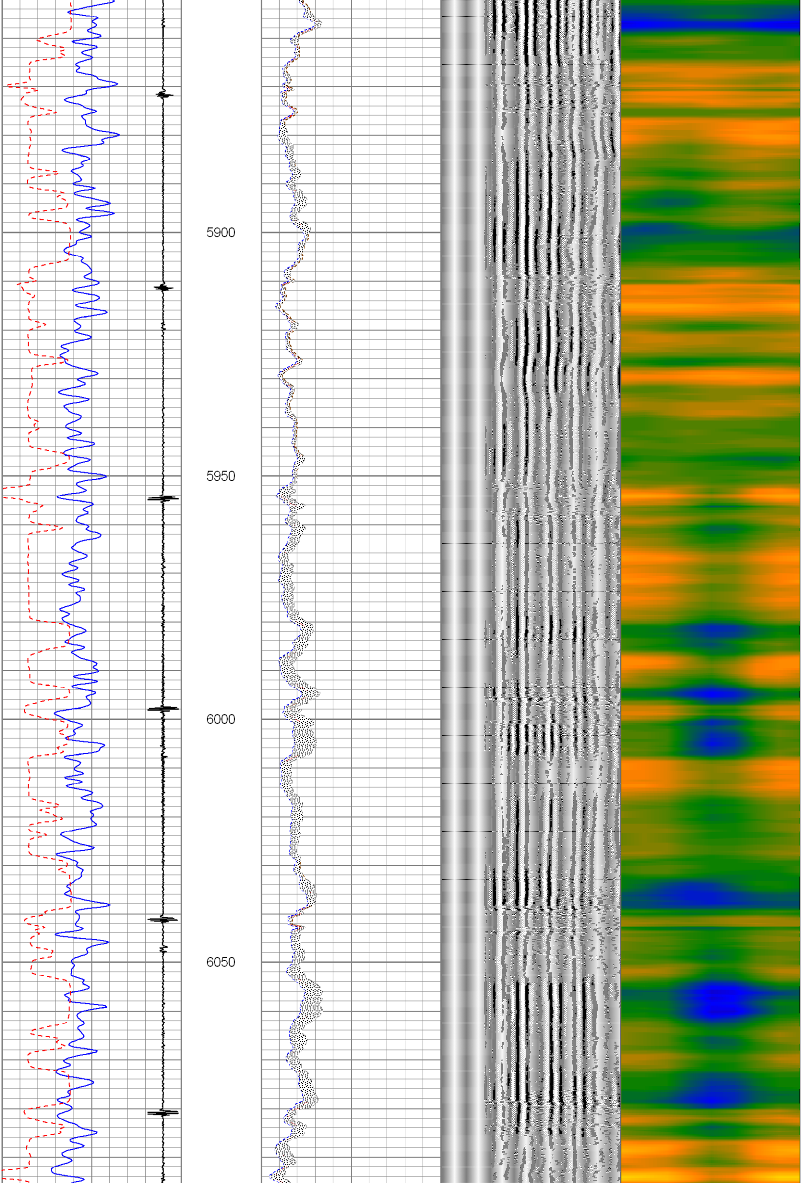
0 GR (GAPI) 200	0 AMPMAX 100	200 WVF5FT 1200	1 Sector Map 8
400 TT3FT (usec) 200	0 AMPAVG 100		
70 CCL -7.7	0 AMPMIN 100		
	0 AMP3FT (mV) 100		

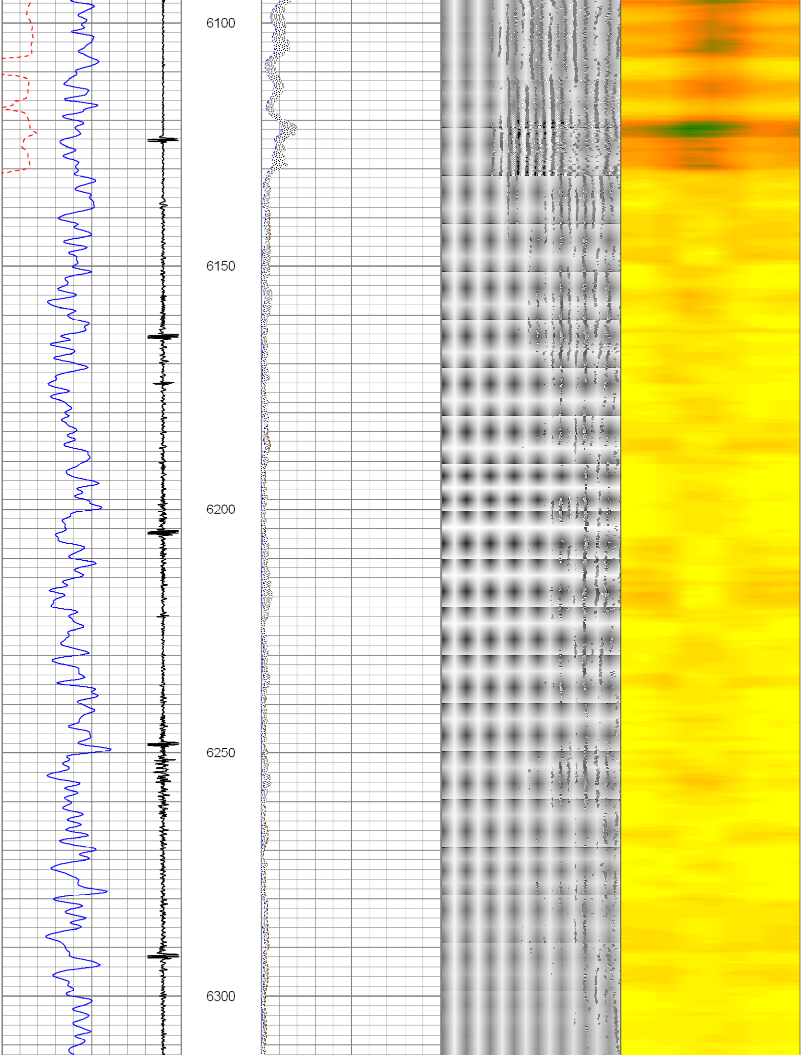


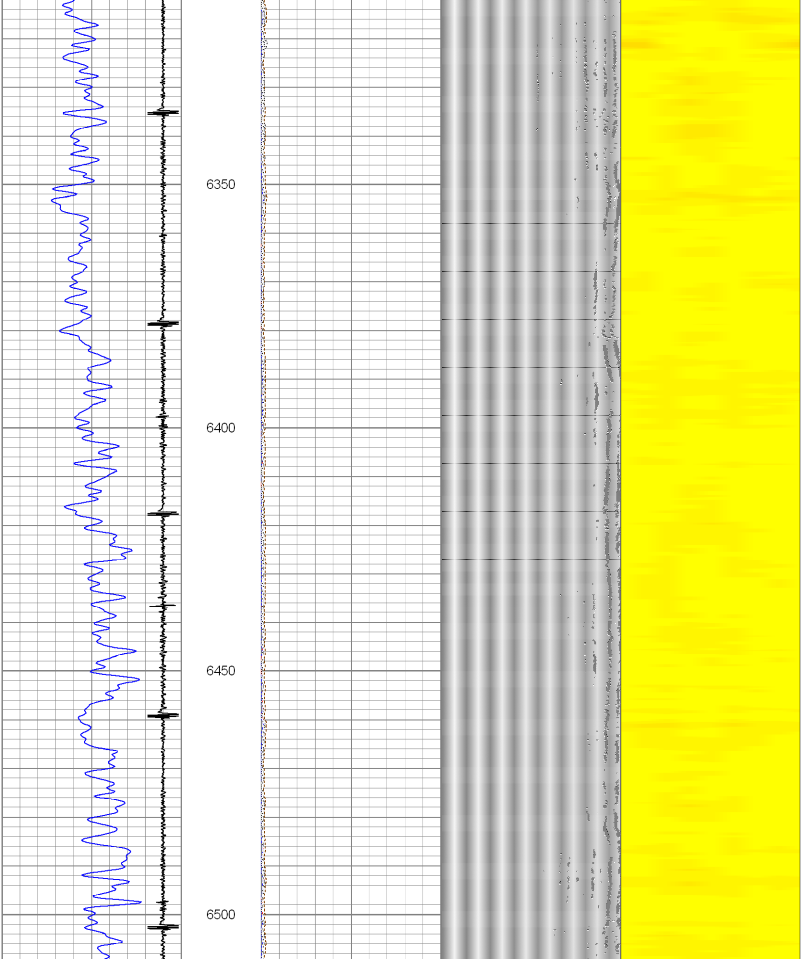


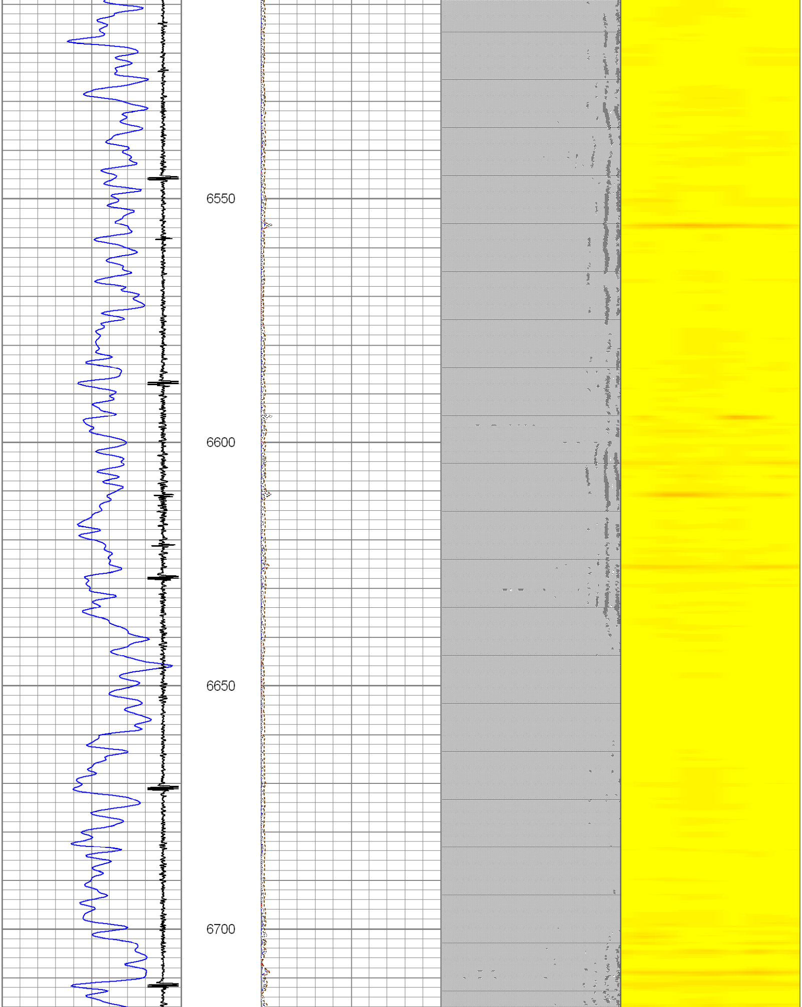


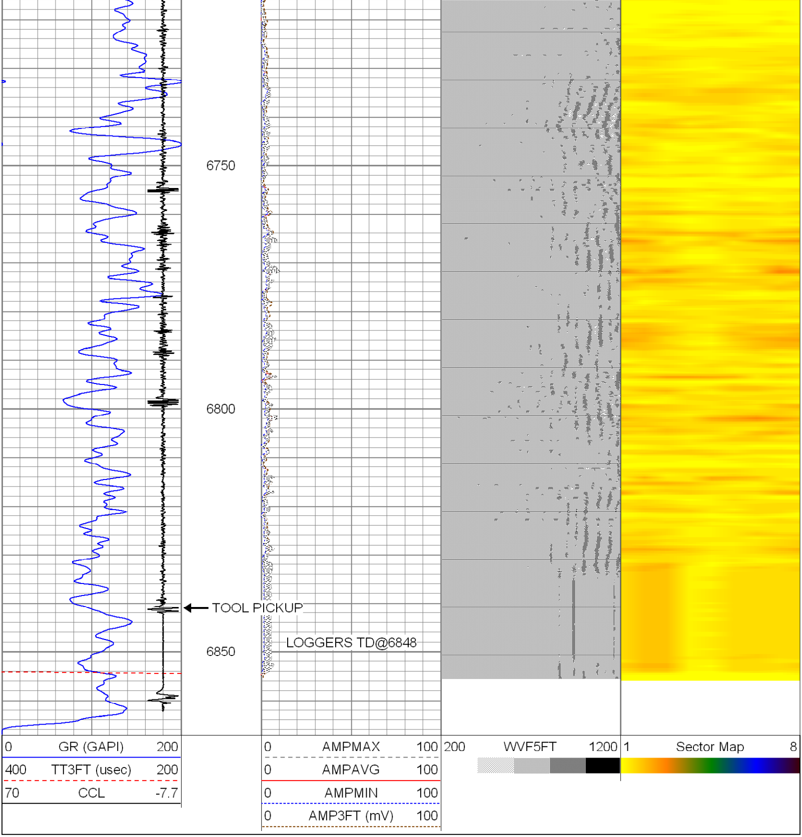












Calibration Report

Database File:	cbl noble guttersen state d17-79-1hn.db
Dataset Pathname:	pass2
Dataset Creation:	Tue Jan 07 14:32:21 2014 by Log SCH 120430

Gamma Ray Calibration Report

Type / Serial: Probe275dig / 110785

SHOP CALIBRATION Fri Nov 08 09:38:30 2013

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		0.4400			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:	308.375	ft

Master Calibration, performed Tue Jan 07 14:13:55 2014:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	0.007	1.020	1.500	62.165	59.923	1.060
CAL	0.007	1.426				
5'	0.007	1.127	1.500	62.165	54.209	1.096
SUM						
S1	0.007	1.104	0.000	62.165	56.672	-0.420
S2	0.007	1.073	0.000	62.165	58.321	-0.432
S3	0.007	1.031	0.000	62.165	60.754	-0.449
S4	0.007	0.968	0.000	62.165	64.707	-0.474
S5	0.007	0.911	0.000	62.165	68.826	-0.511
S6	0.007	0.914	0.000	62.165	68.533	-0.499
S7	0.007	1.009	0.000	62.165	62.048	-0.462
S8	0.007	1.101	0.000	62.165	56.846	-0.422

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	0.007	1.426	1.000	0.000

Air Zero Calibration, performed Tue Jan 07 08:30:13 2014:

	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