HALLIBURTON

ACOUSTIC CEMENT BOND LOG

CORRECTED COPY

Company CHESAPEAKE ENERGY
Well WRD FEDERAL 8-26
Field WHITE RIVER DOME
County RIO BLANCO State CO

Company	CHESAPEAKE ENERGY
Well	WRD FEDERAL 8-26
Field	WHITE RIVER DOME
County	RIO BLANCO State CO

API No.: 05103101480000 Serv #: 5319533

Location: SURFACE HOLE:
1355' FNL & 909' FEL

Sec: 26 Twp:2N Rge: 97W

Other Services

NONE

Permanent Datum	GROUND LEVEL	Elevation	5914'
Log Measured From	K.B. , 17 Ft. above perm. datum		
Drilling Measured From	K.B.		

Elevation
K.B. 5931'
D.F. 5930'
G.L. 5914'

Date @ Time Logged	24 AUG 2007 @ 0845	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.34 PPG
Depth - Driller	7295'	Fluid Level	FULL
Depth - Logger	7213'	Cement Top Est. Logged	2900'
Bottom - Logged Interval	7205'	Equipment / Location	88022 / G.J.
Top - Log Interval	2700'	Recorded by	RETZLAFF
Max. Recorded Temp.	174 DEG F	Witnessed by	DOWHANIUK

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
ONE	N/A	SURFACE	1136'	8.625"	N/A	SURFACE	1136'
TWO	7.875"	1136'	7291'	5.5"	17 #	SURFACE	7291'

<<< Fold Here >>>

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

HES BOND LOG DATED 24 AUG 2007 WAS CORRELATED TO SCHLUMBERGER LITHODENSITY/COMPENSATED NEUTRON ARRAY INDUCTION TOOL LOG.

RECORDED MAIN LOG PASS UNDER 1000 PSI.

LOGGING DEPTHS PER CUSTOMER REQUEST.

SHORT JOINT AT 5508' - 5529'.

YOUR HES CREW: P. KILPATRICK & D. NALL.

THANK YOU FOR USING HALLIBURTON ENERGY SERVICES

Service Ticket No.	5319533	API No.	05103101480000	PGM Ver	WARRIOR 7.2

The Well Name, Location, Borehole Description, and / or Cementing Data Furnished by Client

EQUIPMENT DATA

CBL		GR		CCL			
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	
Serial No.	142E1	Serial No.	142E1	Serial No.	142-E1	Serial No.	
Model No.	CBT HA-CBT	Model No.	GR-UGR-HA	Model No.	CCL-CBT	Model No.	
Diameter	3.25"	Diameter	3.38"	Diameter	3.38"	Diameter	

LOGGING DATA

General Data

Pass	Depths		Well Head	Speed	Logging Run Comments
No.	From	To	Pressure	Ft/Min	
ONE	7220'	2700'	1000 PSI	60	MAIN LOG SECTION
TWO	7220'	7000'	0 PSI	60	REPEAT LOG SECTION

	CBL		GR		CCL			
Pass	Scale		Scale		Scale		Scale	
No.	L	R	L	R	L	R	L	L
ONE	200	1200	0	200	90	-10		

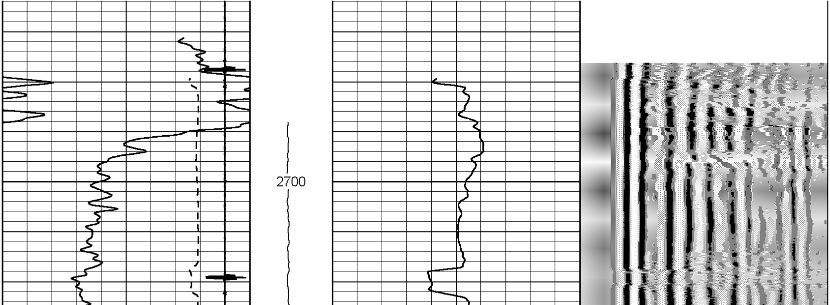
DIRECTIONAL INFORMATION

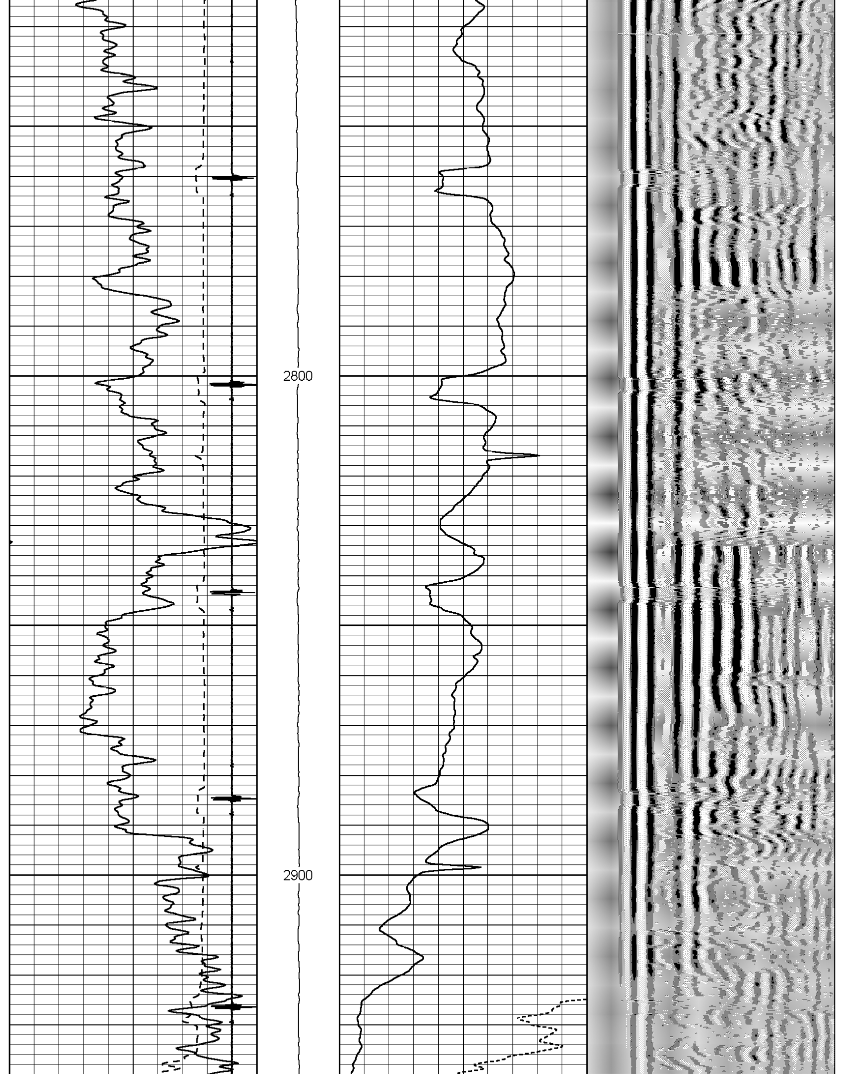
Maximum Deviation		deg. @		KOP		

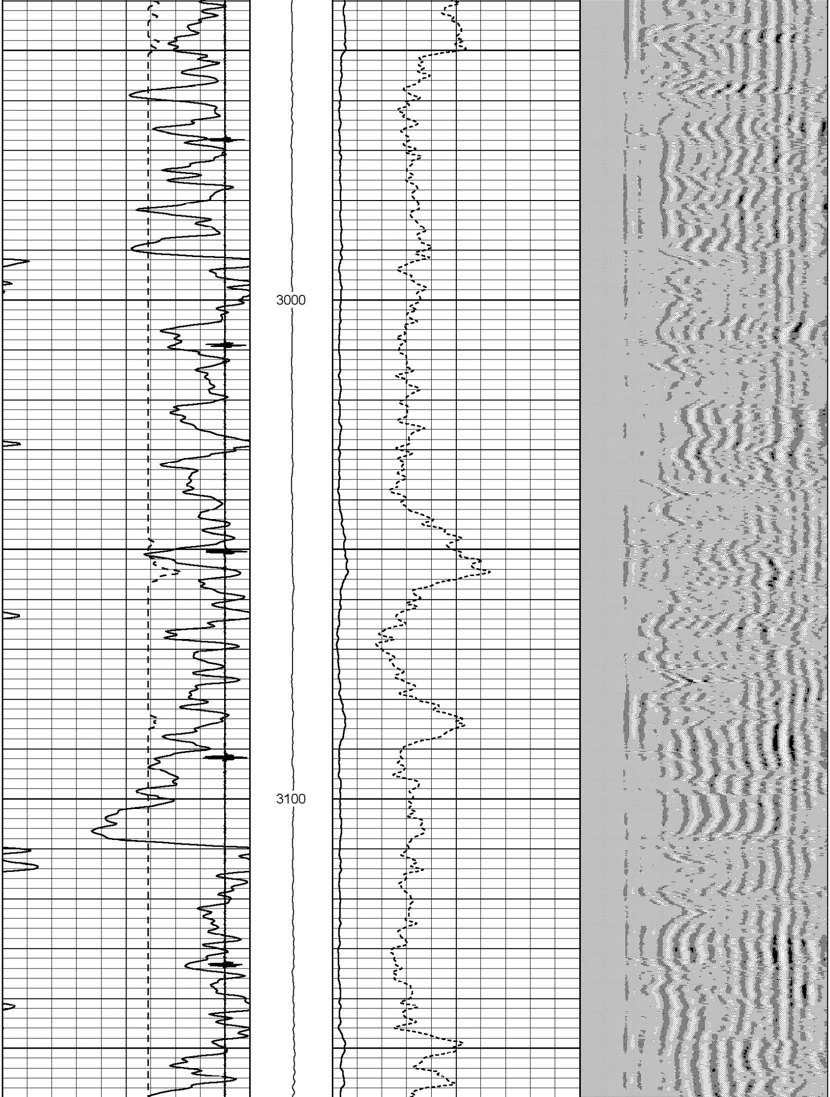
Database File: wrd_fed_8_26_cbl.db
Dataset Pathname: whtrvrdom/wrd_fed_8/cbl/corrected4
Presentation Format: cblprint
Dataset Creation: Mon Aug 27 15:51:05 2007
Charted by: Depth in Feet scaled 1:240

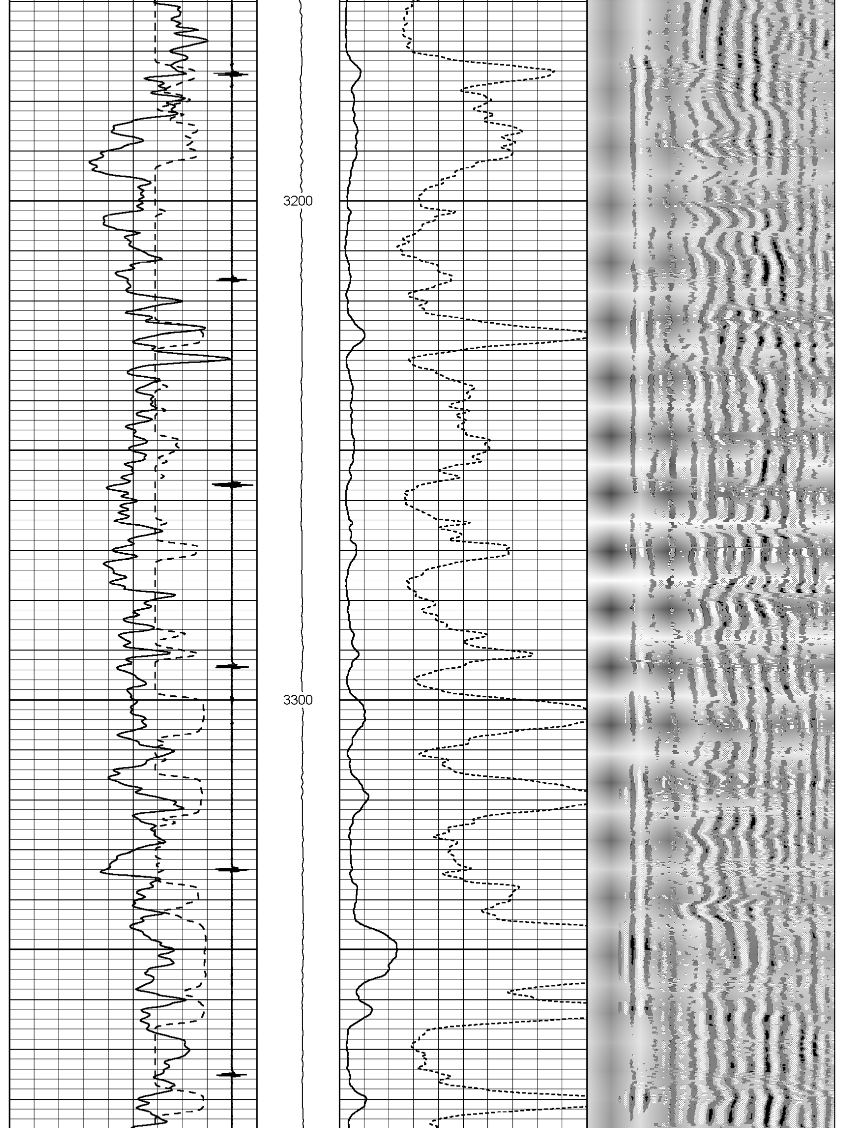
360 TRAVEL TIME (usec) 160 90 Collar Locator -10 0 Gamma Ray (GAPI) 250	TENSION 0 (lb)2000	0 AMP AMPLITUDE (mV) 10 0 AMPLITUDE (mV) 100

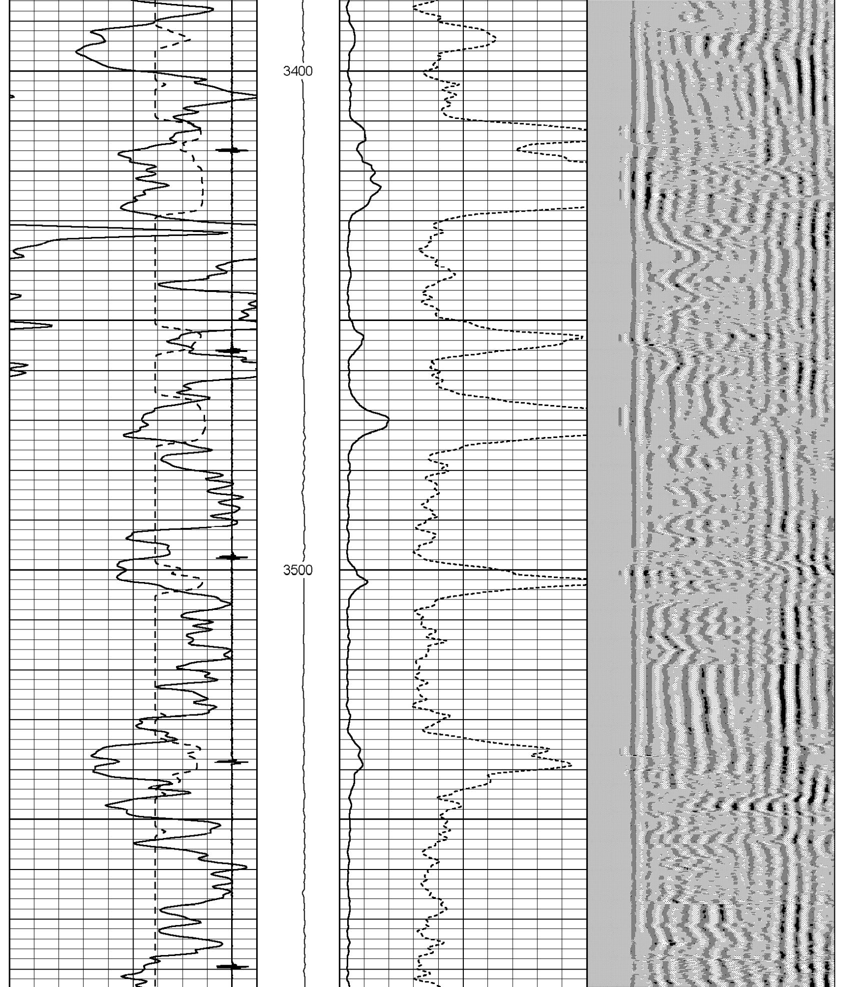
200	MSG	1200

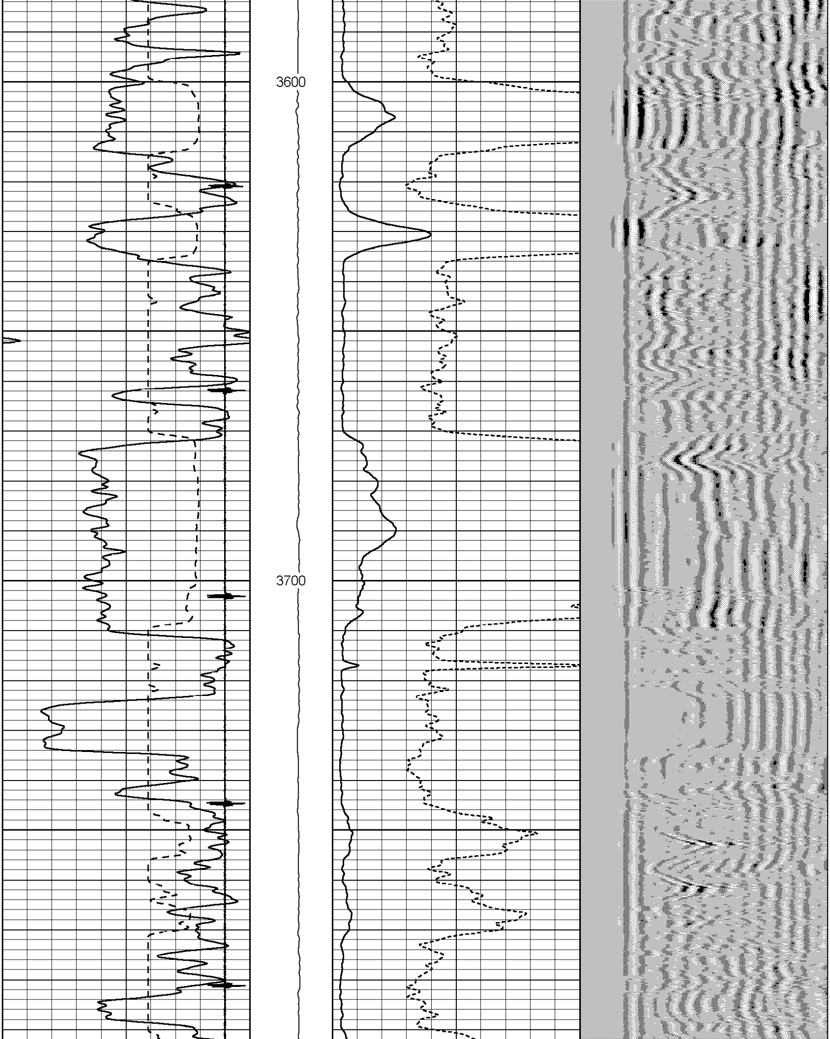


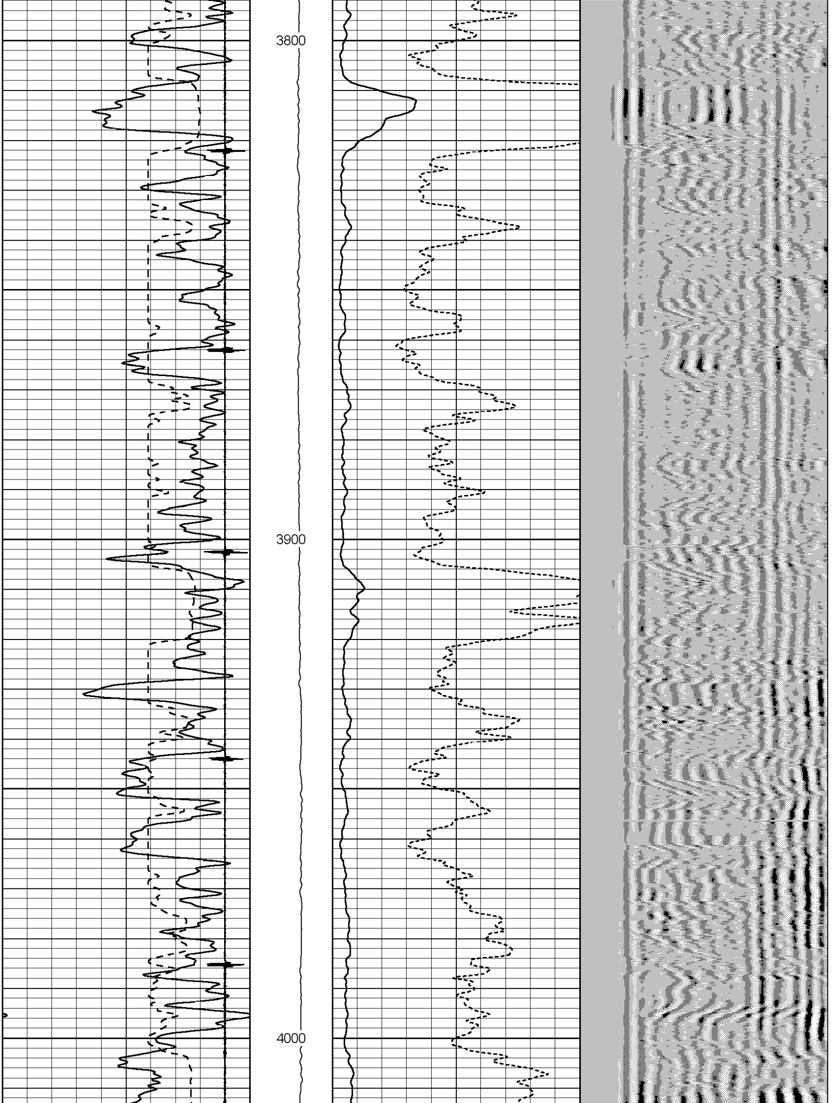


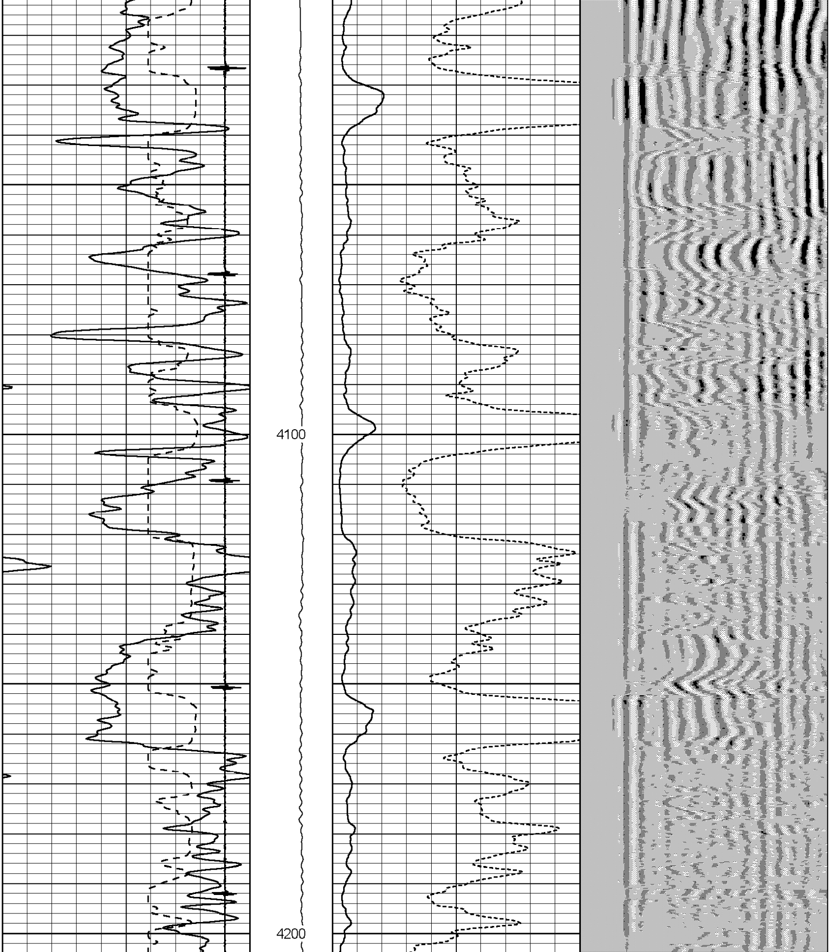


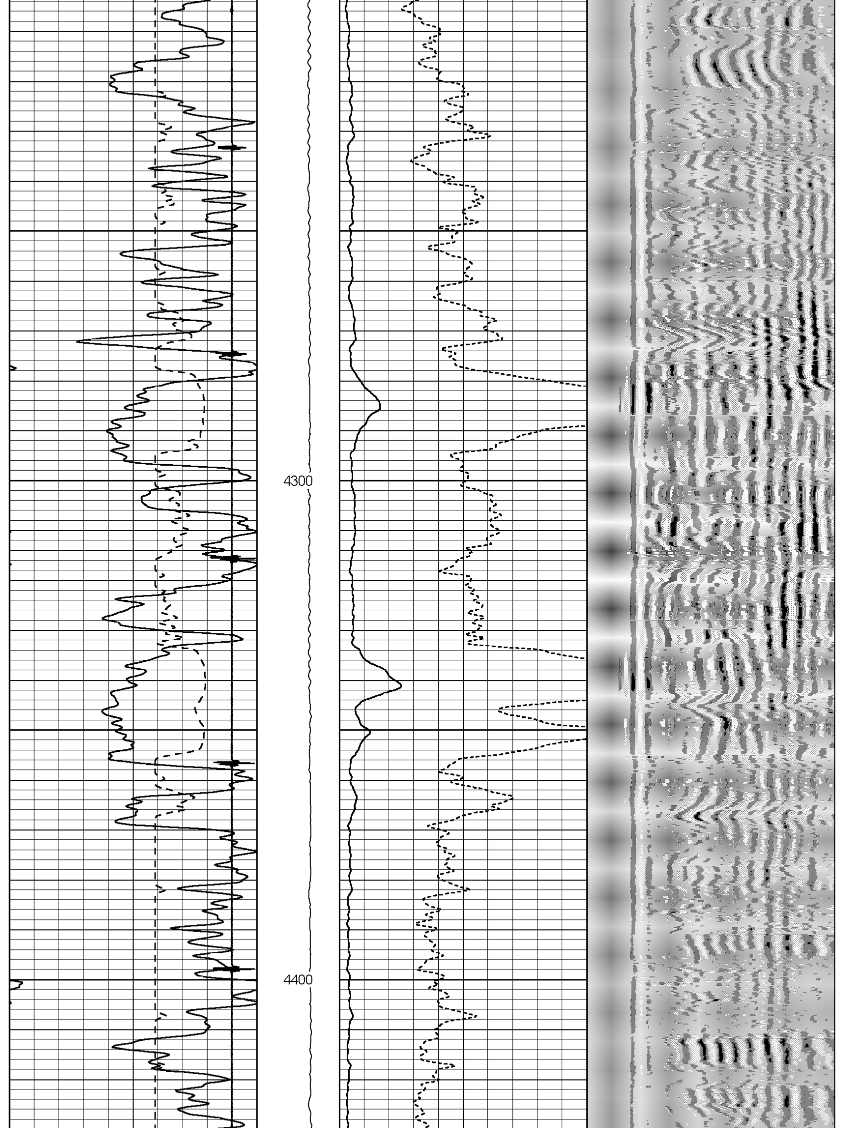


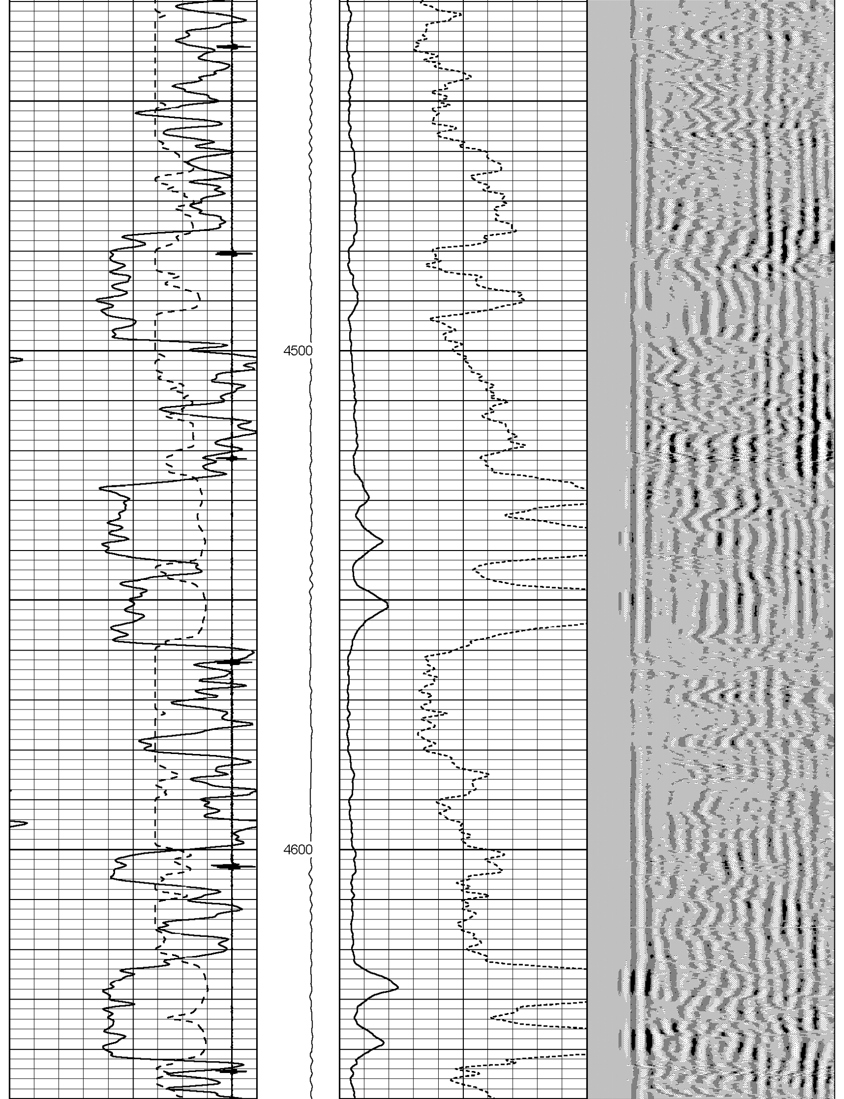


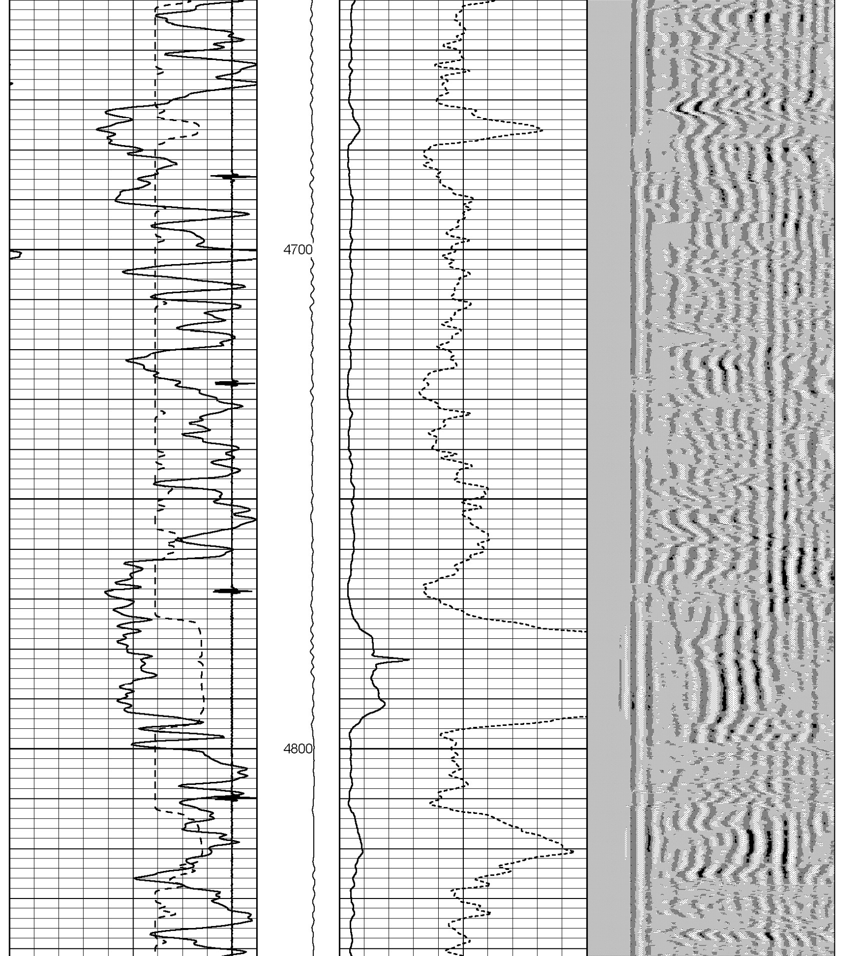


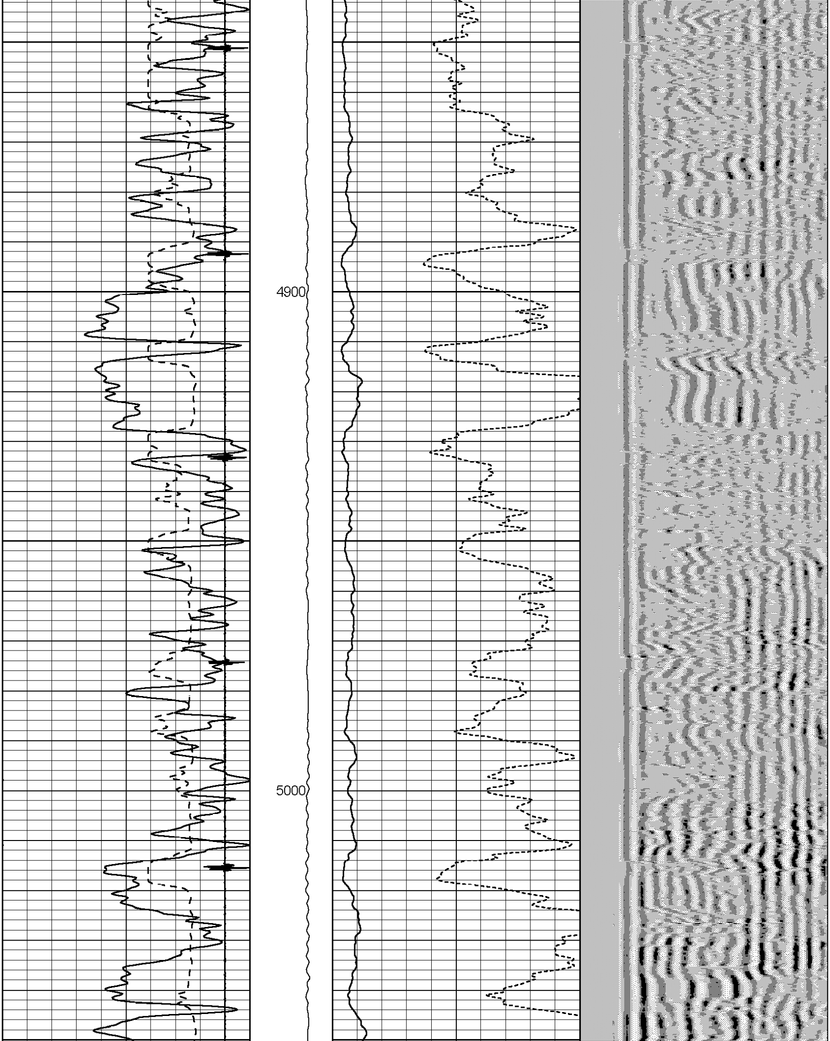


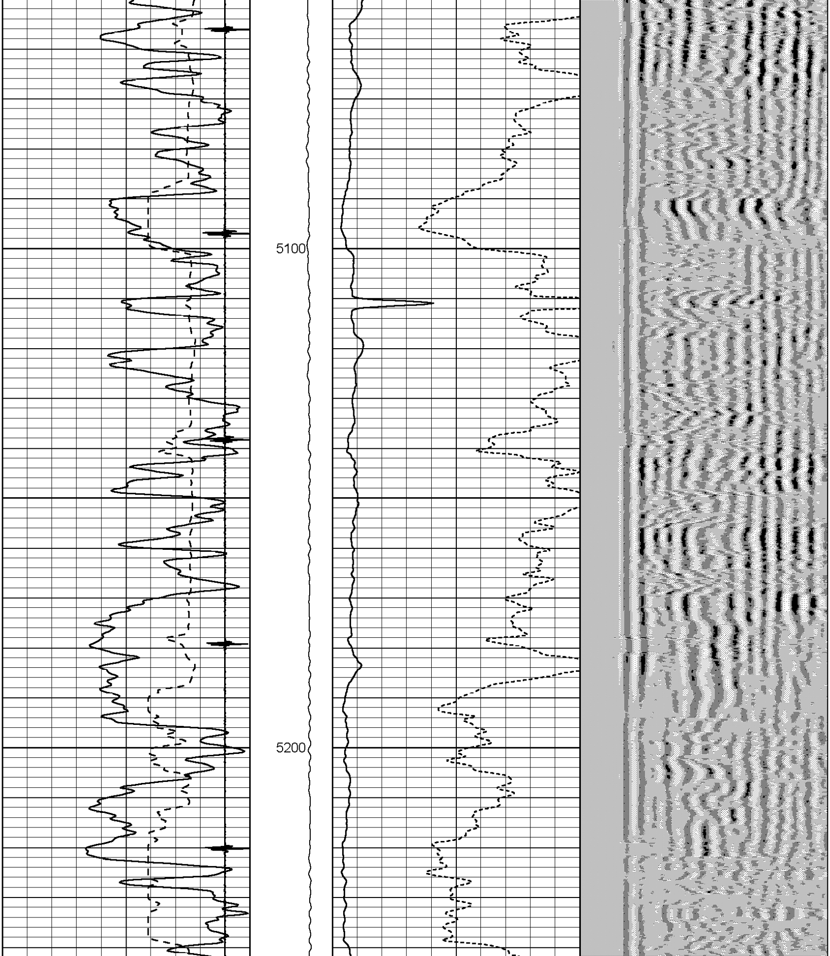


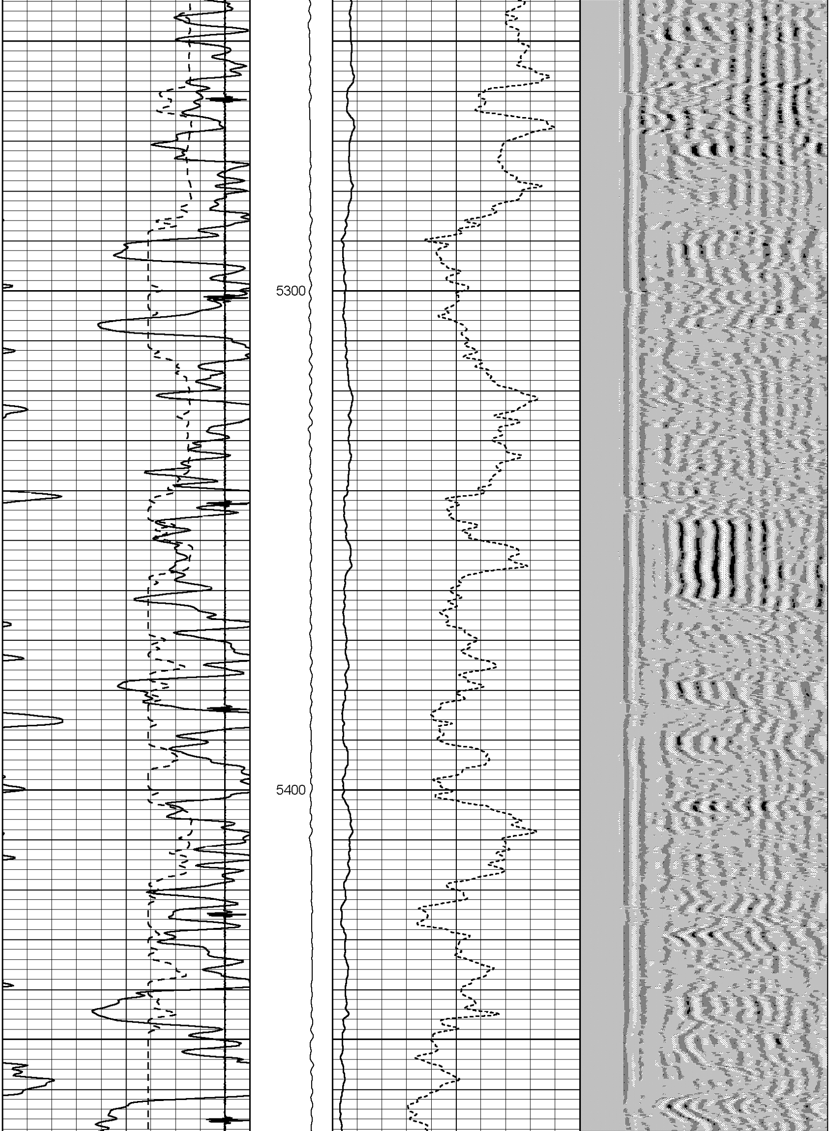


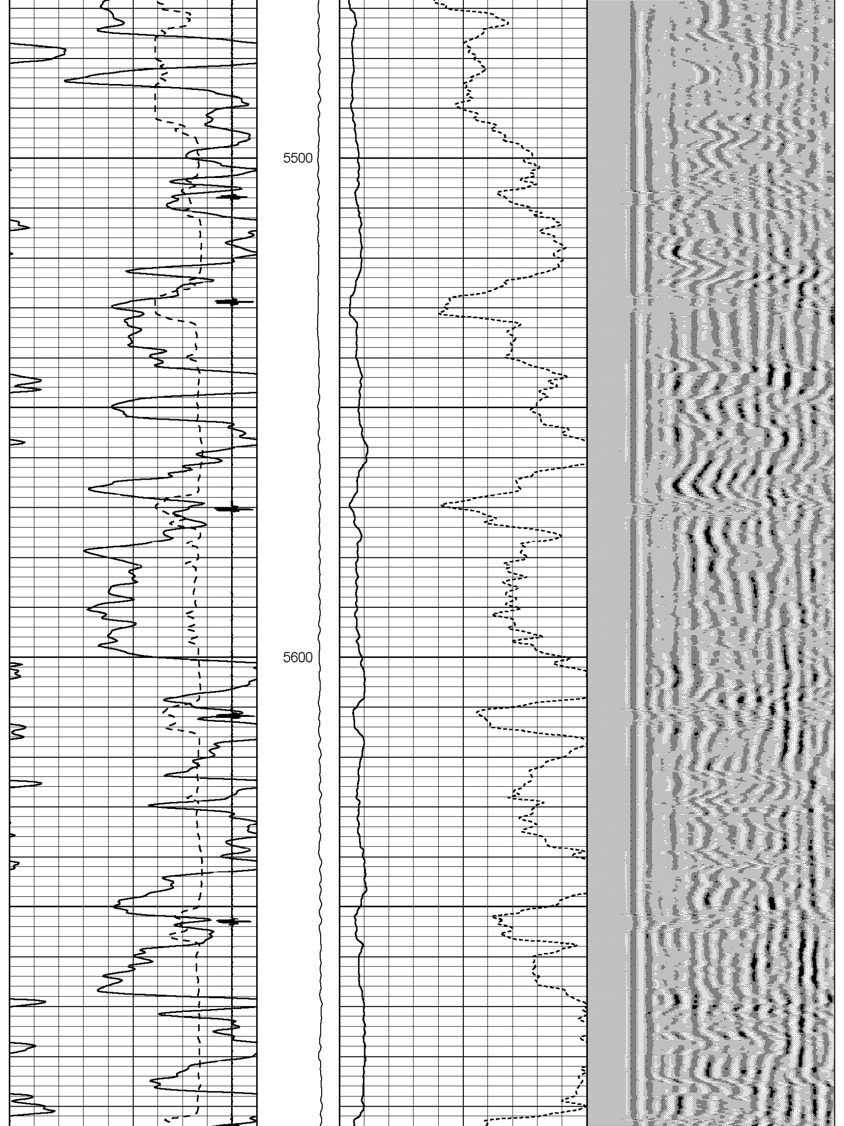


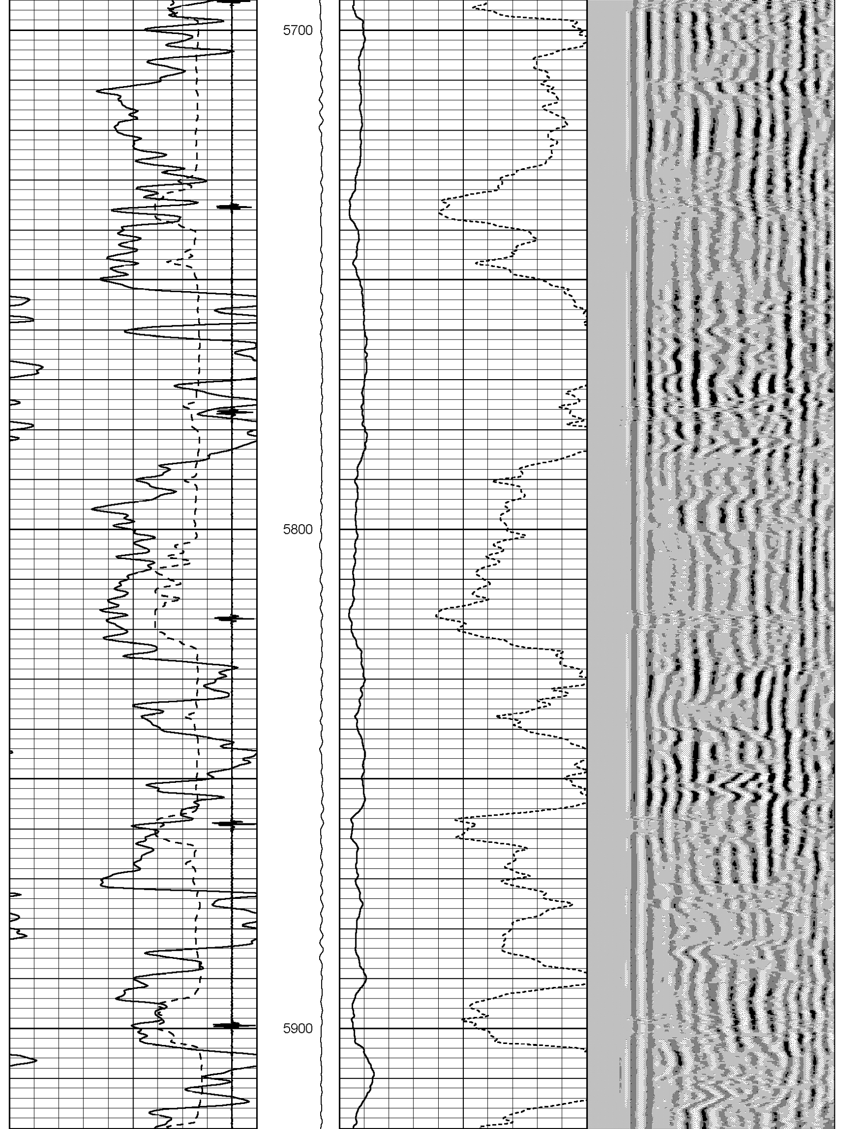


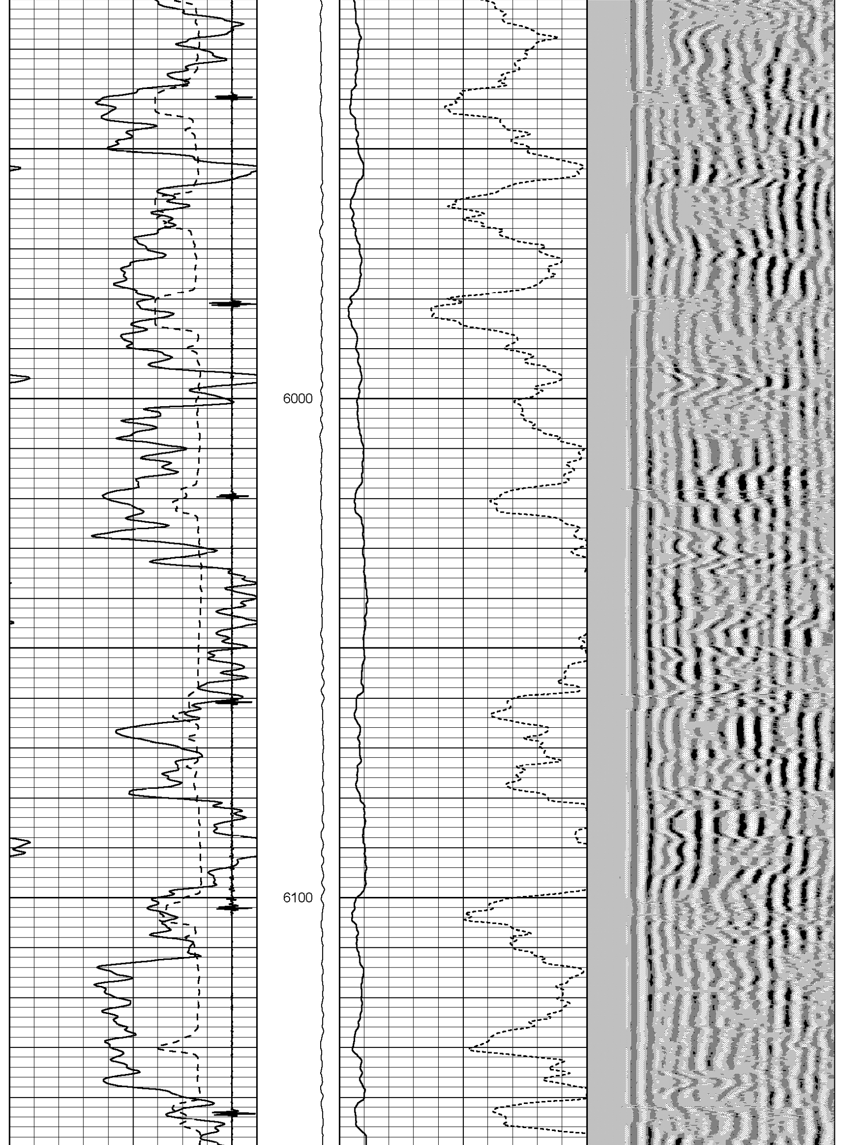


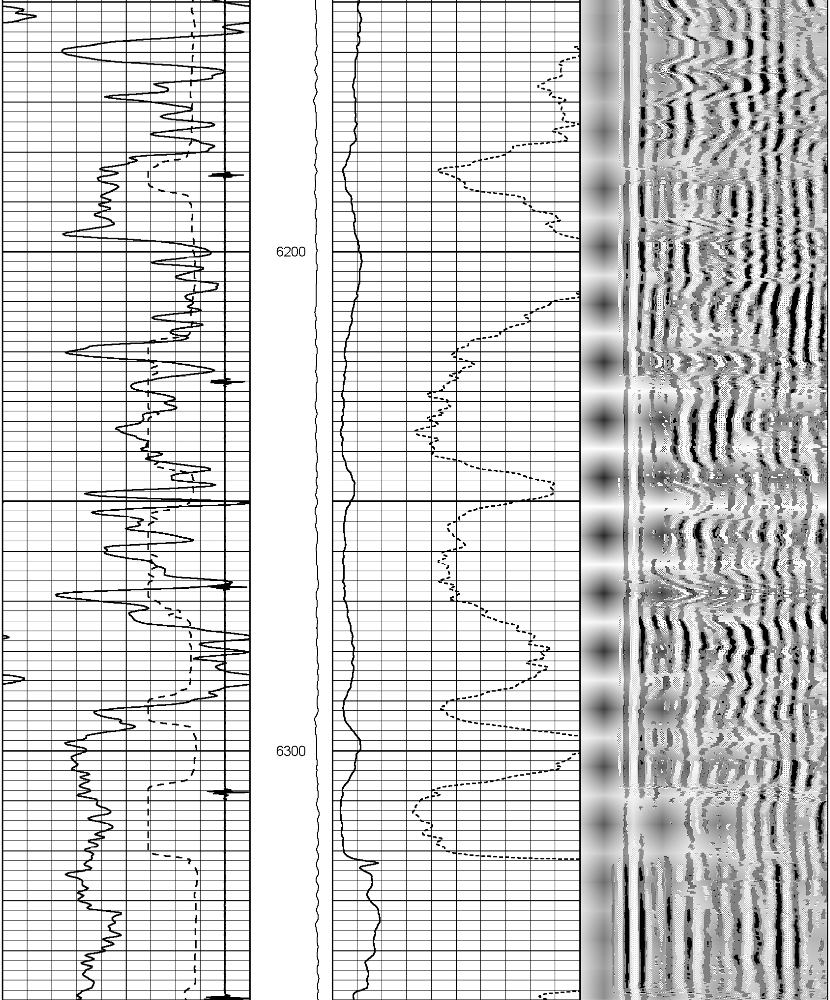


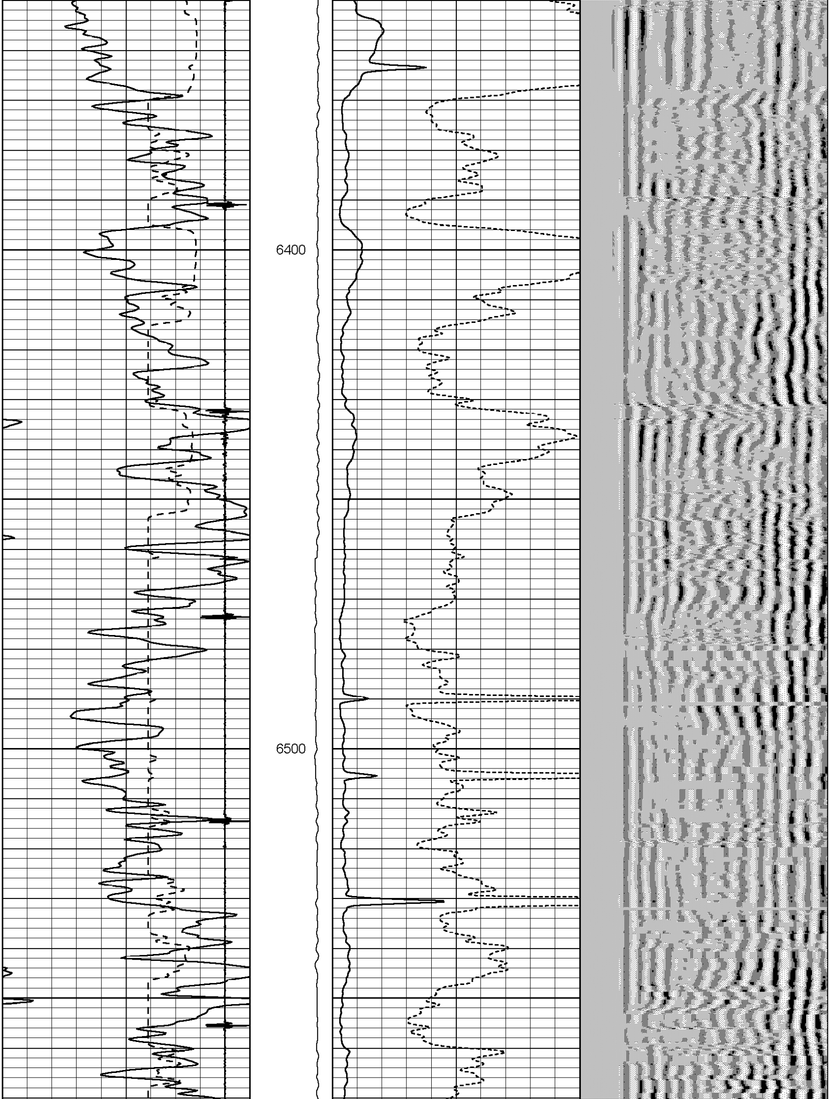


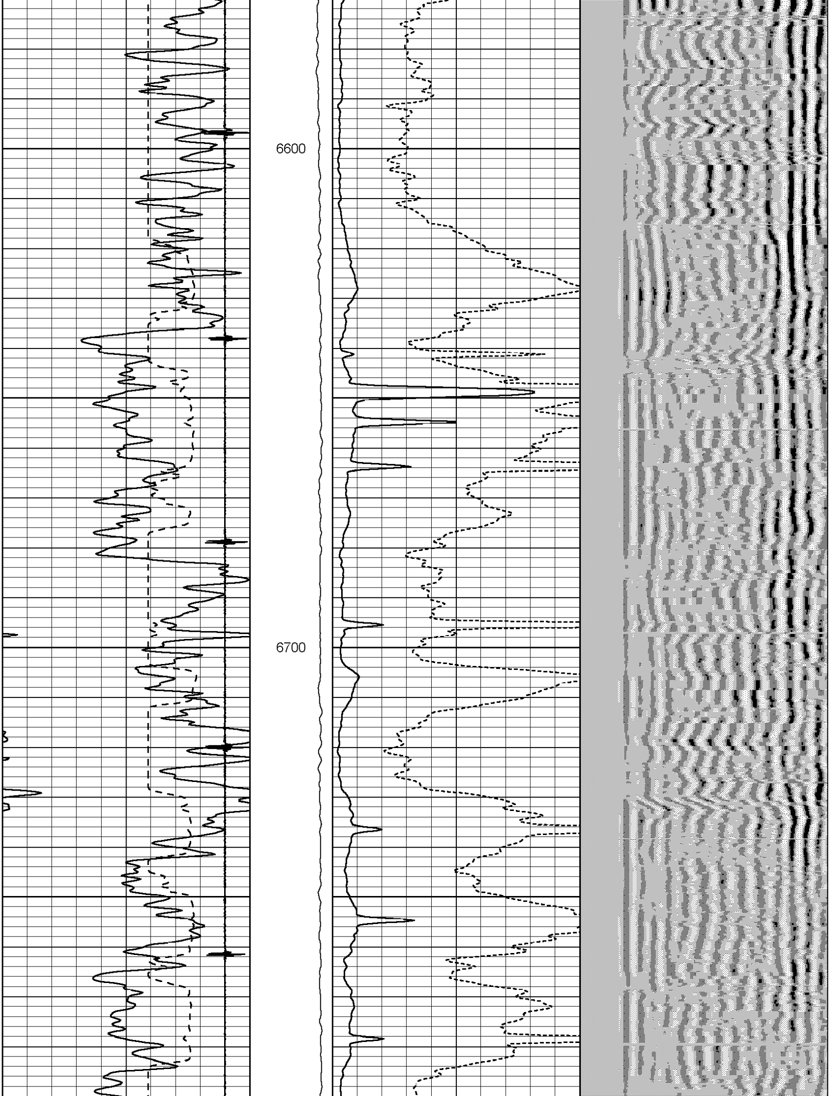


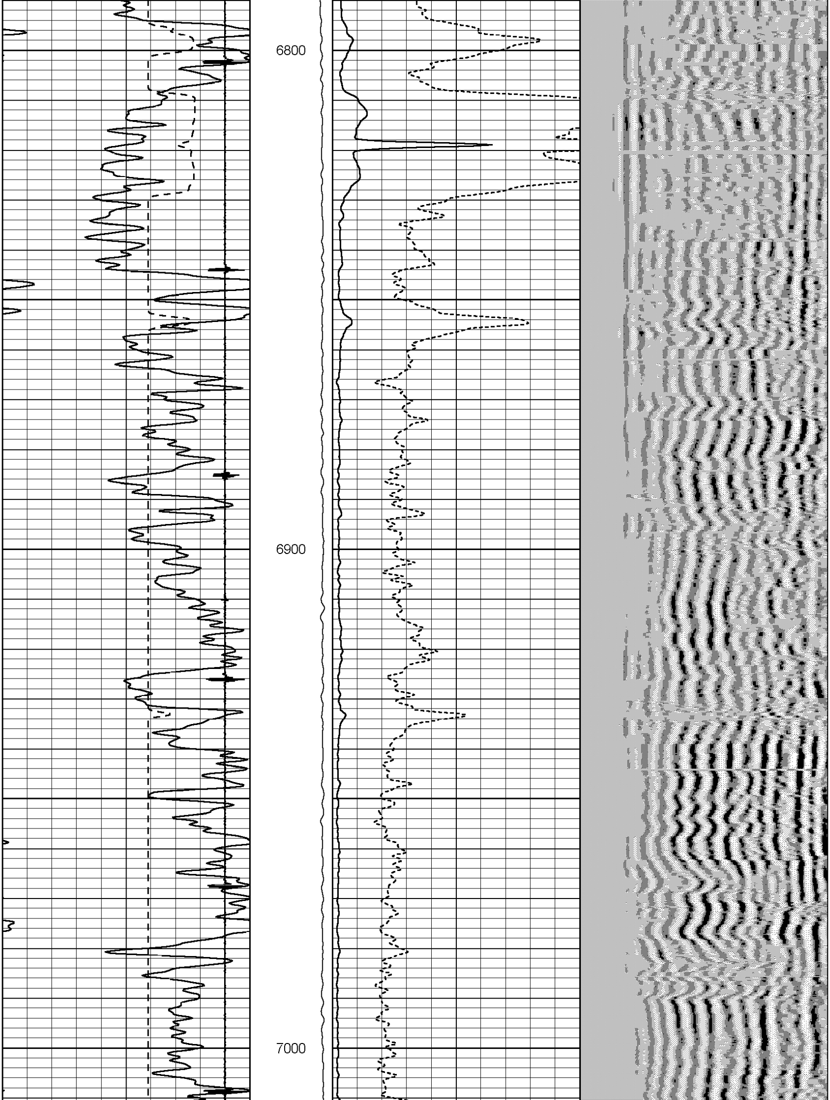


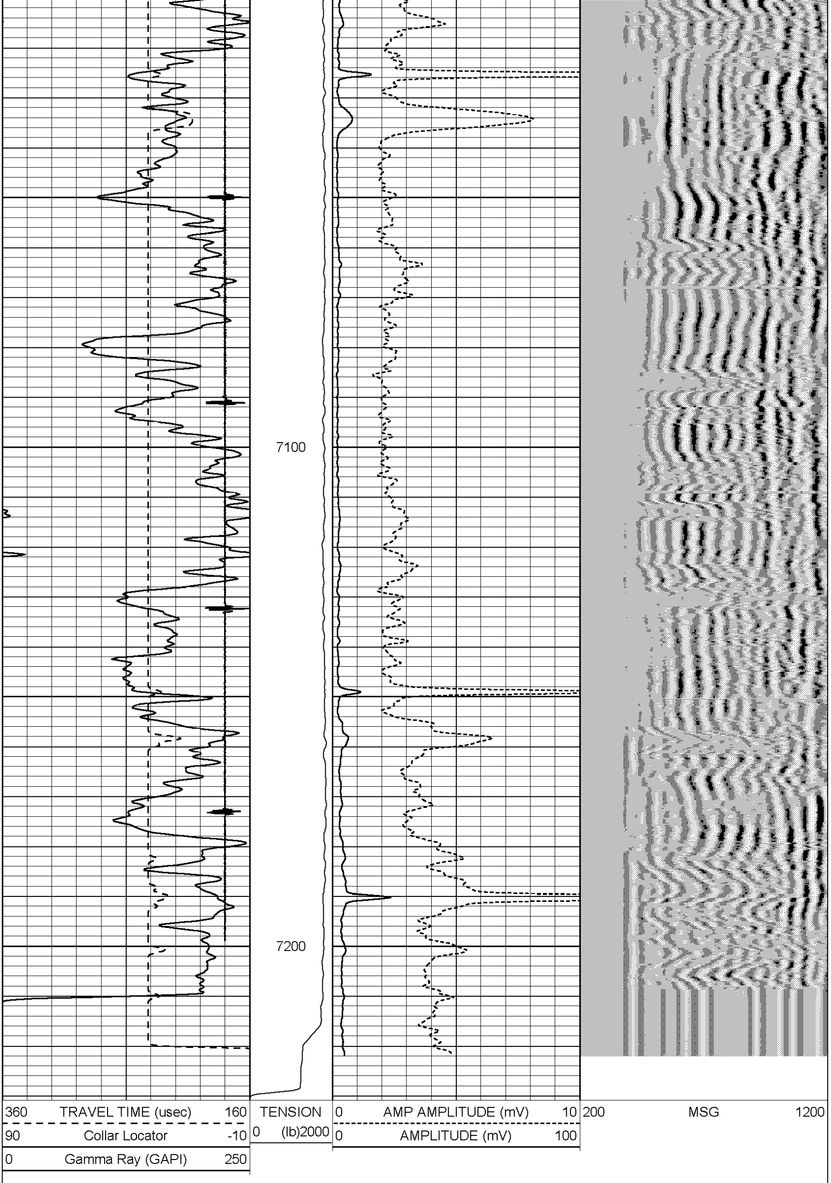












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ACOUSTIC CEMENT BOND LOG

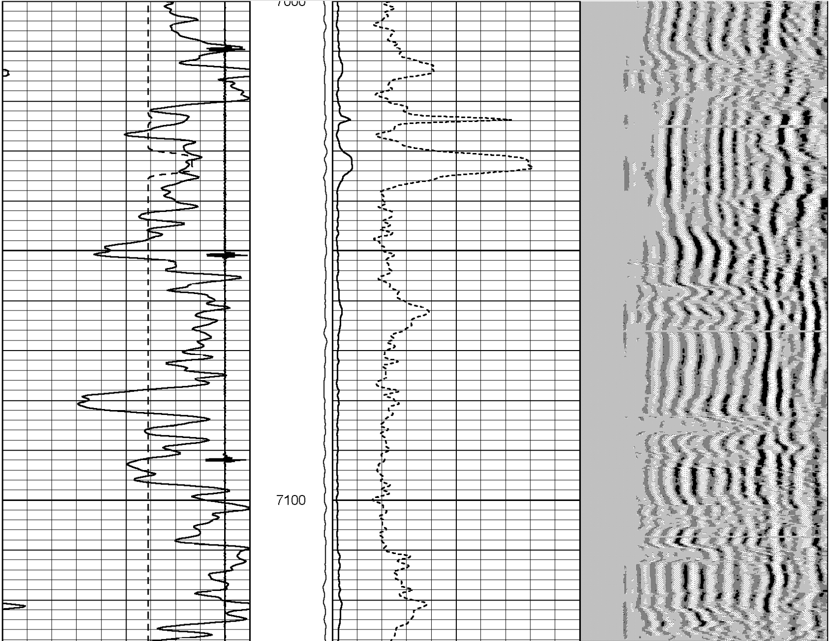
REPEAT LOG SECTION (0 PSI)

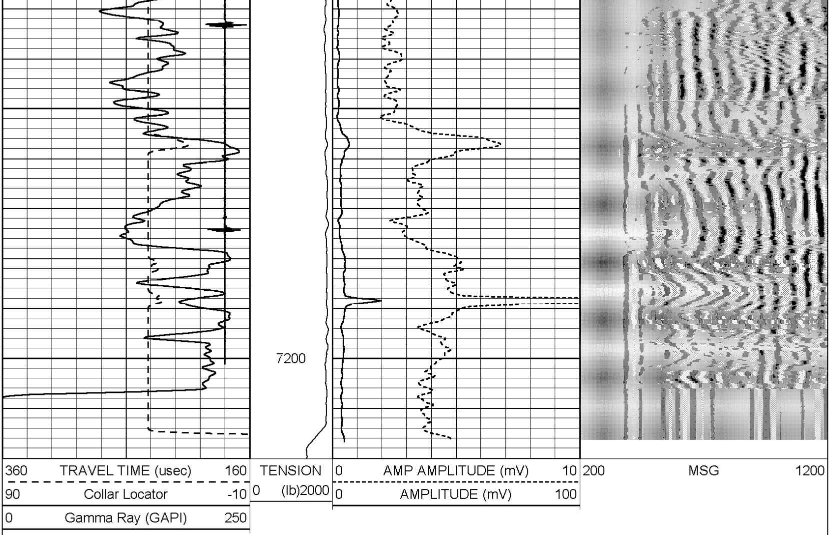
5" = 100'

Database File:	wrd_fed_8_26_cbl.db
Dataset Pathname:	whtrvrdom/wrd_fed_8/cbl/pass7
Presentation Format:	cblprint
Dataset Creation:	Mon Aug 27 15:53:00 2007
Charted by:	Depth in Feet scaled 1:240

360 TRAVEL TIME (usec) 160 90 Collar Locator -10 0 Gamma Ray (GAPI) 250	TENSION 0 (lb)2000	0 AMP AMPLITUDE (mV) 10 0 AMPLITUDE (mV) 100

200 MSG 1200





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ACOUSTIC CEMENT BOND LOG

REPEAT LOG SECTION (0 PSI)
5" = 100'

Calibration Report

Database File:	wrd_fed_8_26_cbl.db
Dataset Pathname:	whtrvrdom/wrd_fed_8/cbl/merge2
Dataset Creation:	Mon Aug 27 15:52:23 2007

Segmented Cement Bond Log Calibration Report

Serial Number:	142E1	
Tool Model:	CBT_HA	
Calibration Casing Diameter:	5.500	in
Calibration Depth:	911.400	ft

Master Calibration, performed Fri Aug 24 08:56:11 2007:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3'	-0.007	0.174	2.000	71.921	385.278	4.812
CAL						
5'	-0.008	0.223	2.000	71.921	302.393	4.488

Internal Reference Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)		Calibrated (v)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
CAL						

Air Zero Calibration, performed Wed Dec 31 17:00:00 1969:

	Raw (v)	Calibrated (v)	Results
	Zero	Zero	Offset
3'	0.000	0.000	0.000
5'	0.000	0.000	0.000

Gamma Ray Calibration Report

Type / Serial: UGR-HA / 142E1

SHOP CALIBRATION Fri Aug 24 08:26:55 2007

	Counts/Sec.	Gain	Offset	Jig	Units
Background	143.8				cps
Calibrator	468.8				cps
		0.7907			GAPI/cps

PRIMARY VERIFICATION Fri Aug 24 08:29:36 2007

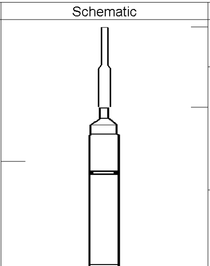
Background	116.2				cps
Calibrator	376.3				cps
Difference				260.1	GAPI

BEFORE SURVEY VERIFICATION

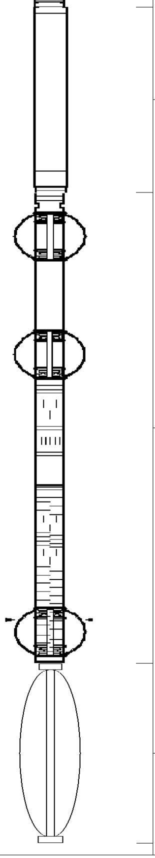
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			HAL HAL Cable Head	1.92	1.44	10.00
CCL	22.63		CCLCBT-UCCL-UN (142E1) Universal CCL - UCCL-UN	3.96	3.38	10.00

GR	16.79
WVF3FT	8.54
WVF5FT	7.54
WVFSYNC	4.29
LLMTEN	0.00



GR-UGR-HA (142E1) Universal Gamma Ray UGR-HA	4.42	3.38	80.00
CBT_CBT_HA-CBT_HA (142E1) G-Type Modular 3 1/4" Cement Bond Tool (No Delay)	11.25	3.25	215.00
CBLINLINE	4.29	3.25	

Dataset: wrd_fed_8_26_cbl.db: whtrvrdom/wrd_fed_8/cbl/pass7
Total Length: 25.84 ft
Total Weight: 315.00 lb
O.D. 3.38 in

Company	CHESAPEAKE ENERGY
Well	WRD FEDERAL 8-26
Field	WHITE RIVER DOME
County	RIO BLANCO
State	CO

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ACOUSTIC CEMENT
BOND LOG