HALLIBURTON

ACOUSTIC CEMENT BOND LOG

Company CHEVRON USA INC.
Well SKR 598-35-AV-15
Field SKINNER RIDGE
County GARFIELD State CO

Company CHEVRON USA INC.
Well SKR 598-35-AV-15
Field SKINNER RIDGE
County GARFIELD State CO

API No.: 050451439600 Serv #: 5774342
Location: SURFACE HOLE:
0998' FNL & 1461' FEL
BOTTOM HOLE:
2095' FNL & 1987' FEL

Other Services
RMTE

Sec: 35 Twp: 05S Rge: 98W

Permanent Datum	GROUND LEVEL	Elevation 6110'	Elevation K.B. 6134' D.F. ---- G.L. 6110'
Log Measured From	K.B. , 24 Ft. above perm. datum		
Drilling Measured From	K.B.		

Date @ Time Logged	03-27-2008 1200 HRS	Type Fluid in Hole	WATER
Run No.	ONE	Density of Fluid	8.34 PPG
Depth - Driller	6845'	Fluid Level	FULL
Depth - Logger	6739'	Cement Top Est. Logged	1208'
Bottom - Logged Interval	6731'	Equipment / Location	10029613 / GJ
Top - Log Interval	SURFACE	Recorded by	SKJERPEN
Max. Recorded Temp.	226 F	Witnessed by	N/A

CEMENTING DATA	Surface String	Protection String	Production String	Liner
Date / Time Cemented		09-27-2007	09-27-2007	
Primary / Squeeze		LEAD	TAIL	
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume		82.5 bbl	289 bbl	
Cement Type / Weight	/	5050POZ/ 12.8#	5050POZ/ 13.2#	/
Formulation				
Mud Type / Mud Wgt.	/	KCL-SIL / 10.4#	KCL-SIL / 10.4#	/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	12.25"	SURFACE	1680'	8.625"	24 #	SURFACE	1680'
ONE	7.875"	1680'	6845'	4.5"	11.6 #	SURFACE	6824'

<<< 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

RBT-TTTC RAN IN COMBINATION

LOG TIED INTO THE UPPER STRAP MARKER JOINT

DEPTH CORRECTION TO MATCH UPPER MARKER JOINT: 8'

SHORT JOINTS: 3640'-3664' & 4704'-4728'

YOUR CREW: COSSEY & WRIGHT
E.I.T.: LEE

THANK YOU FOR USING HALLIBURTON ENERGY SERVICES GRAND JUNCTION, CO

Service Ticket No. 5774342 API No. 050451439600 PGM Ver WARRIOR 7.0

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

EQUIPMENT DATA

TELEMETRY		RBT					
Run No.	ONE	Run No.	ONE	Run No.		Run No.	
Serial No.	214896	Serial No.	11002211	Serial No.		Serial No.	
Model No.	TTTC-U	Model No.	RBT-004	Model No.		Model No.	
Diameter	1.69"	Diameter	3.13"	Diameter		Diameter	

LOGGING DATA

General Data

Pass No.	Depths From	Depths To	Well Head Pressure	Speed Ft/Min	Logging Run Comments
ONE	6739'	SURFACE	0 PSI	REC	MAIN LOG SECTION

	GR		CCL					
Pass	Scale		Scale		Scale		Scale	
No.	L	R	L	R	L	R	L	L
ONE	0	200	20000	18000				

DIRECTIONAL INFORMATION

Maximum Deviation		deg. @		KOP	

Log Variables

Database:C:\Warrior\Data\c_skr_598_35_av_15_rbt.db
Dataset: field/well/run1/pass10

Top - Bottom

RINOR	RTF	RTN	RNOR	PPT usec	CASEWGHT lb/ft	MAXAMPL mV	MINAMPL mV
1.04234	0.816863	1.07109	5.15045	0	11.6	82	1

MINATTN db/ft	CASEOD in	PERFS	TDEPTH ft	BOTTEMP degF	BOREID in
0.8	4.5	0	6739	226	7.875

HALLIBURTON

MAIN PASS 5" = 100'

Database File:	c_skr_598_35_av_15_rbt.db
Dataset Pathname:	MAIN_RBT
Presentation Format:	rbt_chev
Dataset Creation:	Thu Mar 27 14:39:04 2008
Charted by:	Depth in Feet scaled 1:240

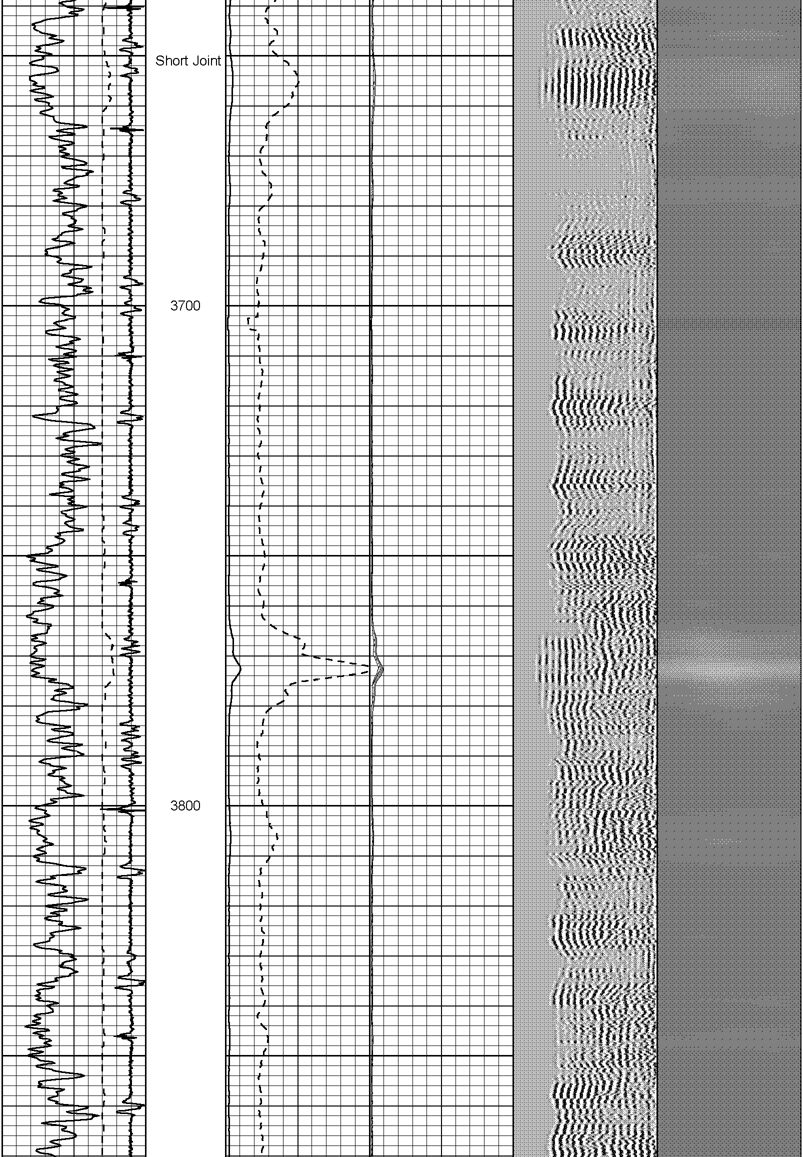
440 TT (usec) 140
0 GR (GAPI) 200
20000 CCL 18000

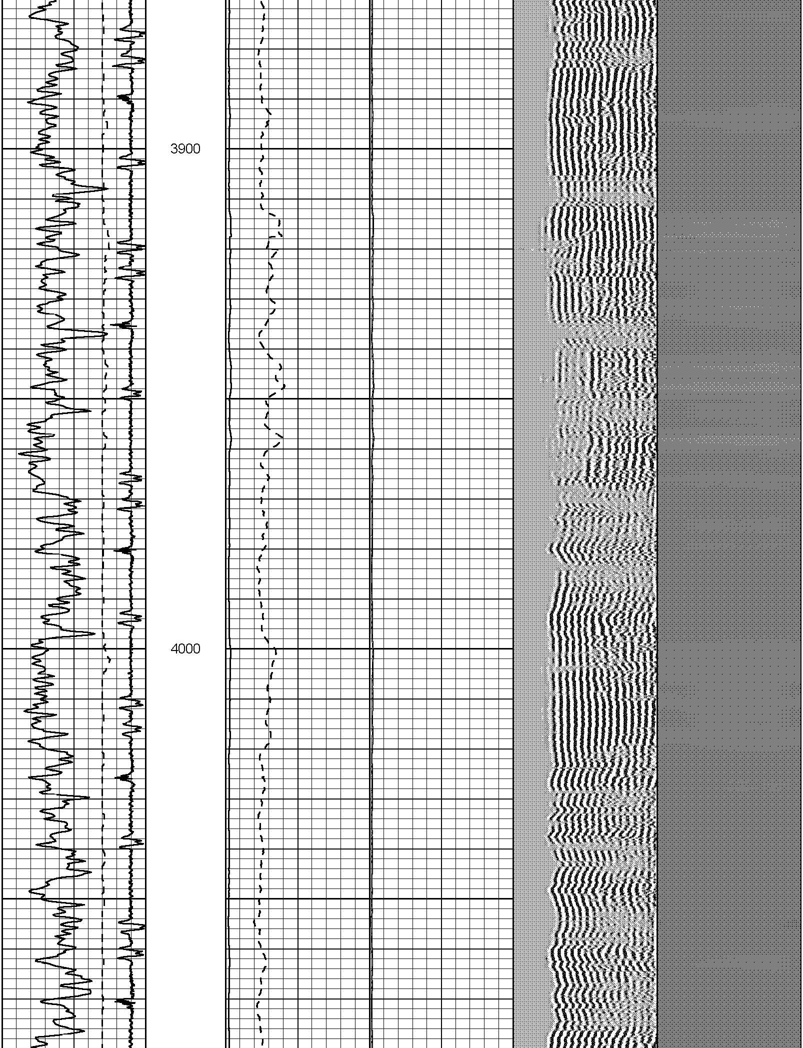
0 AMP (mV) 100
AMPx5(mV)
0 (mV) 10

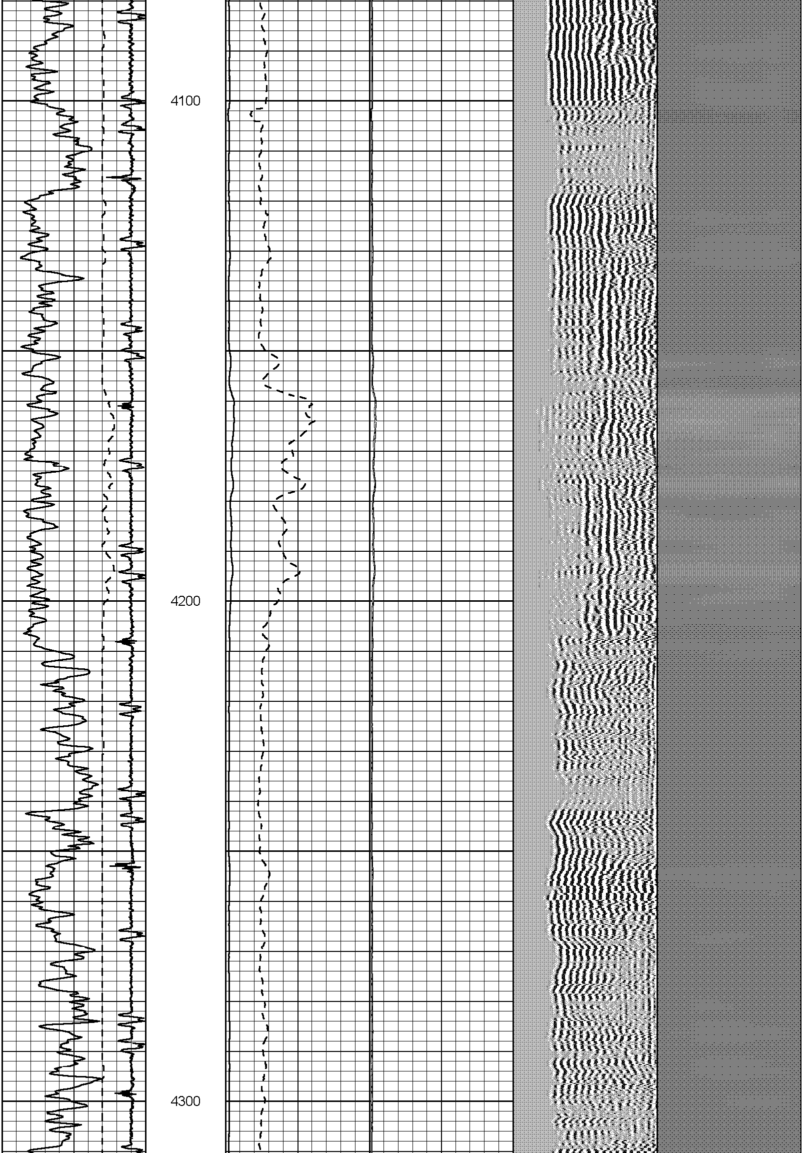
0 AMPAVG 150
0 AMPMAX 150
0 AMPMIN 150

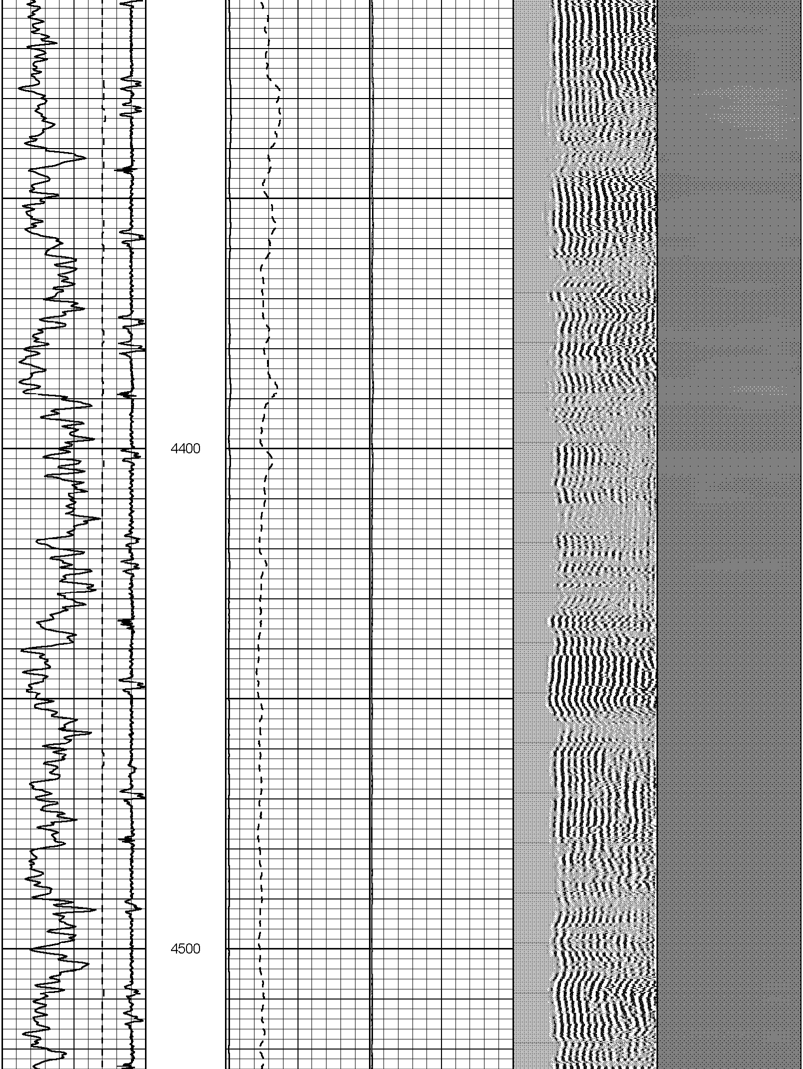
200 MSG 1200

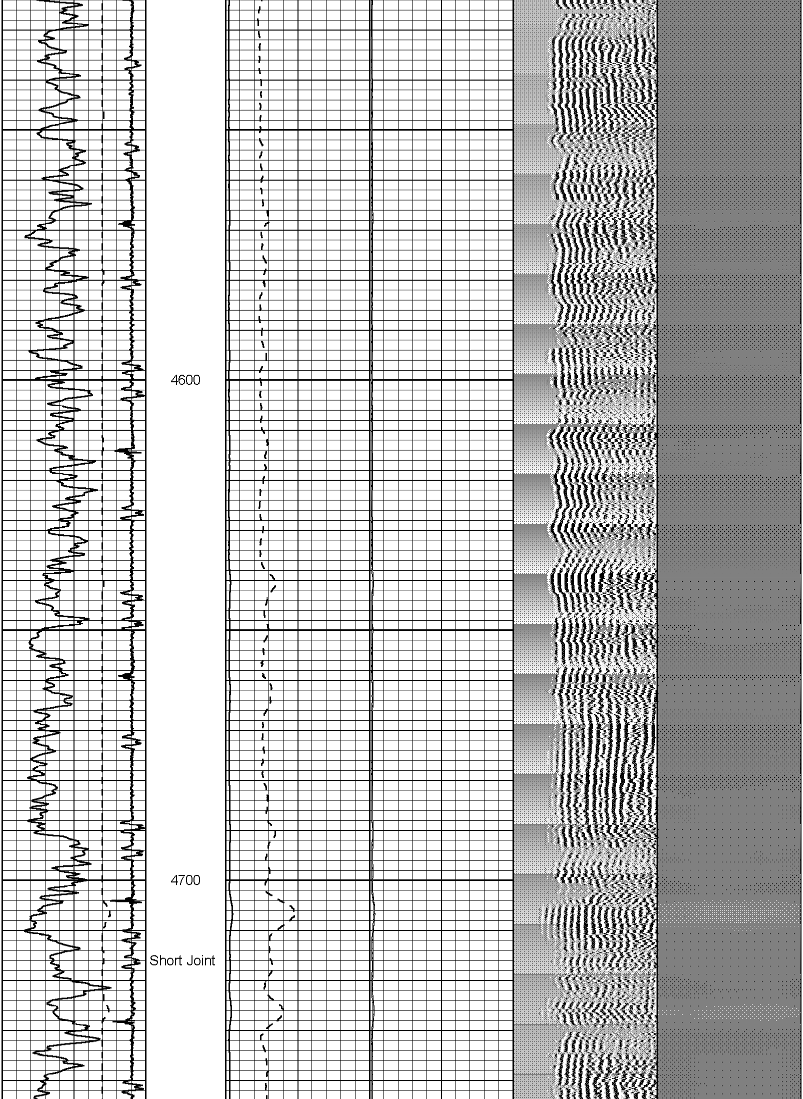
1 SECTORS 8

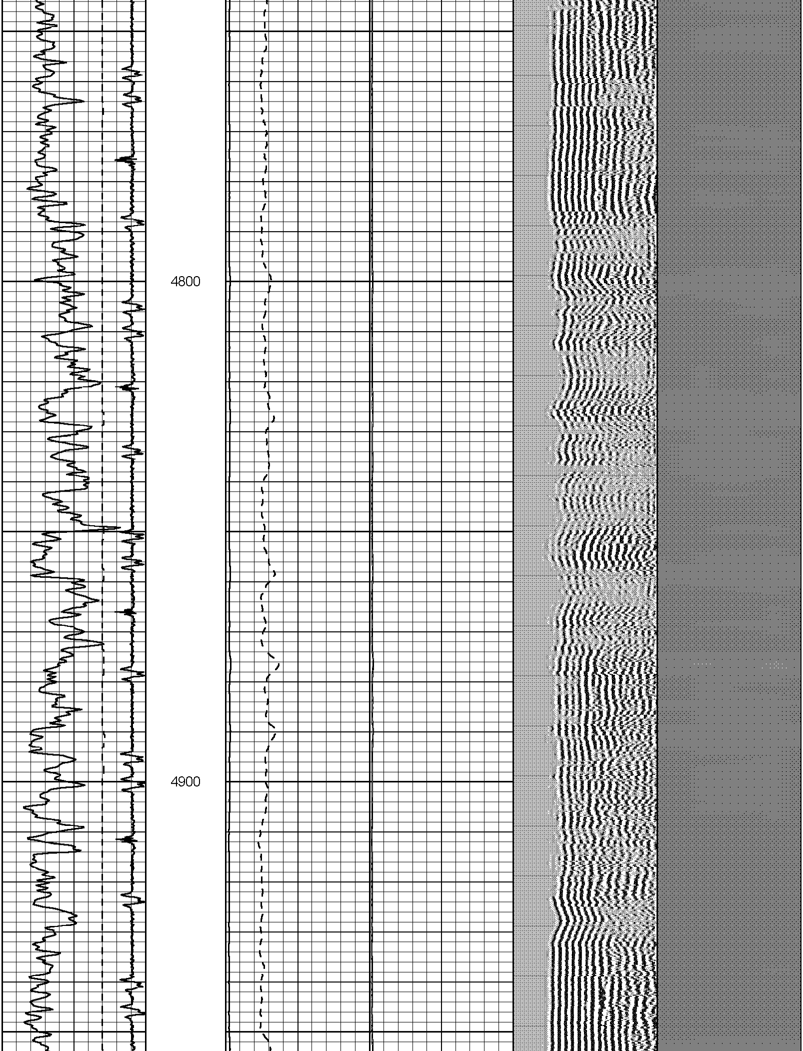


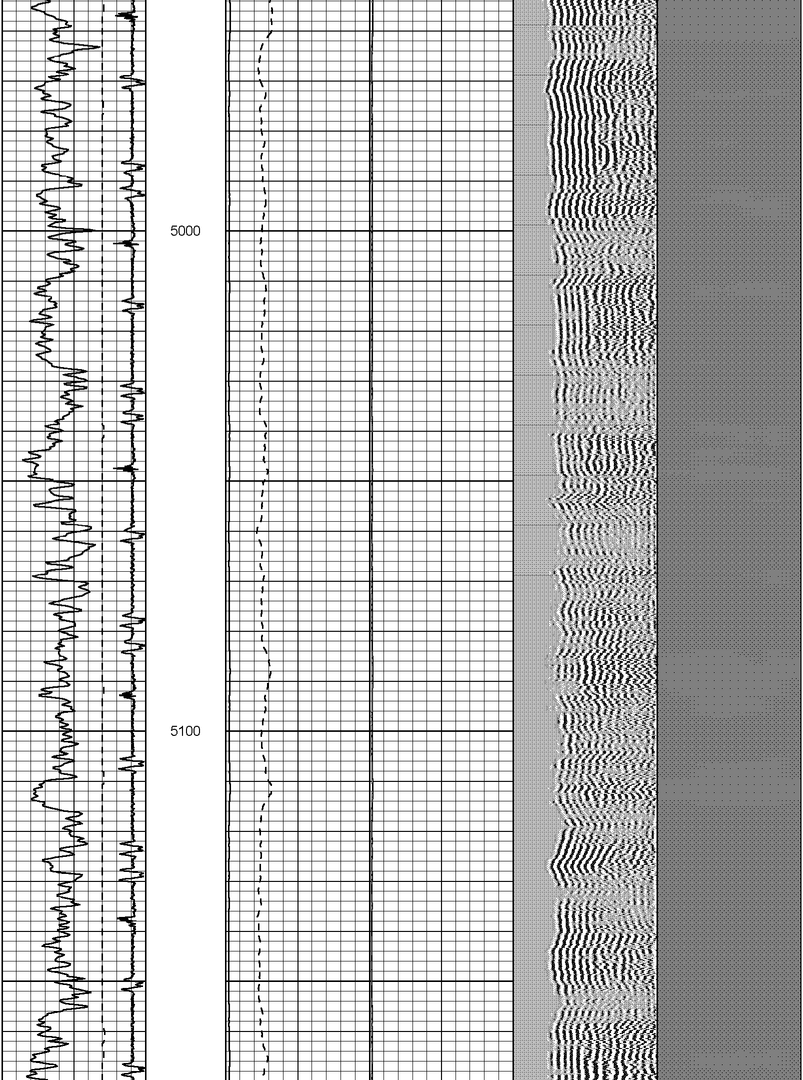


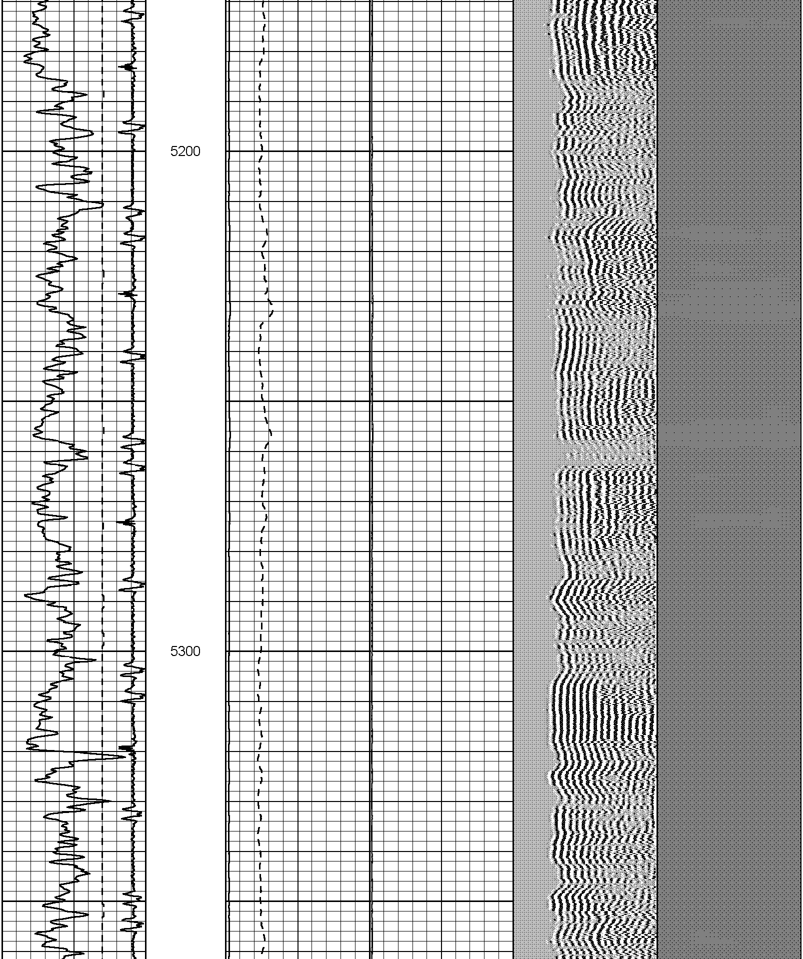


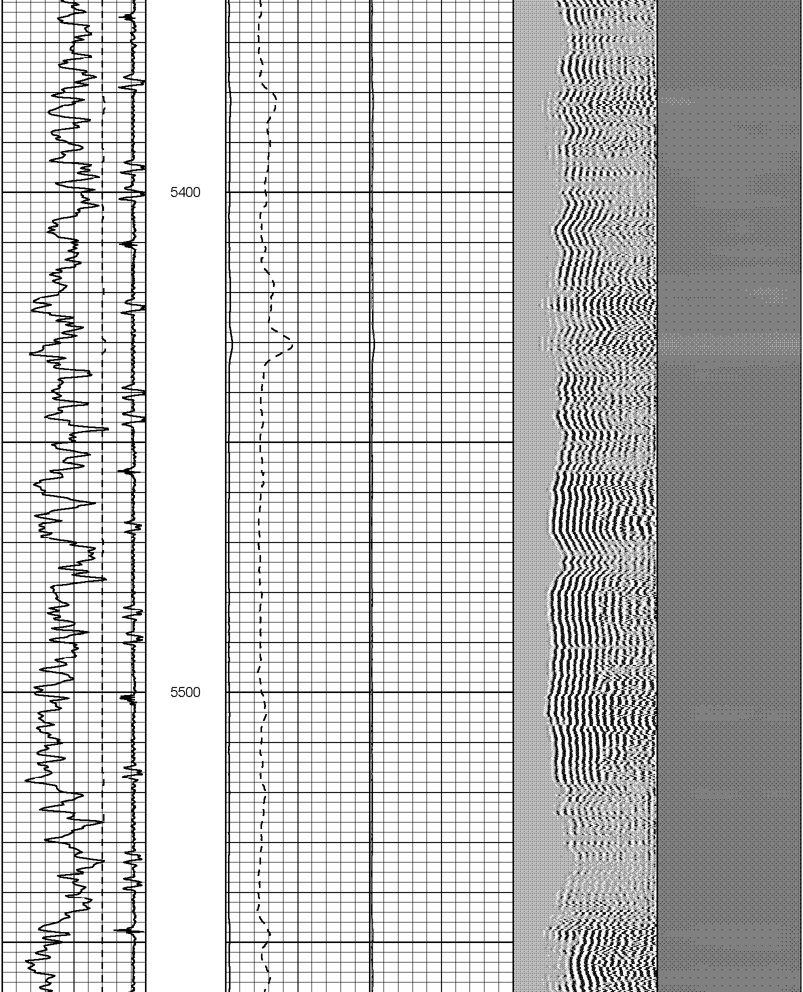


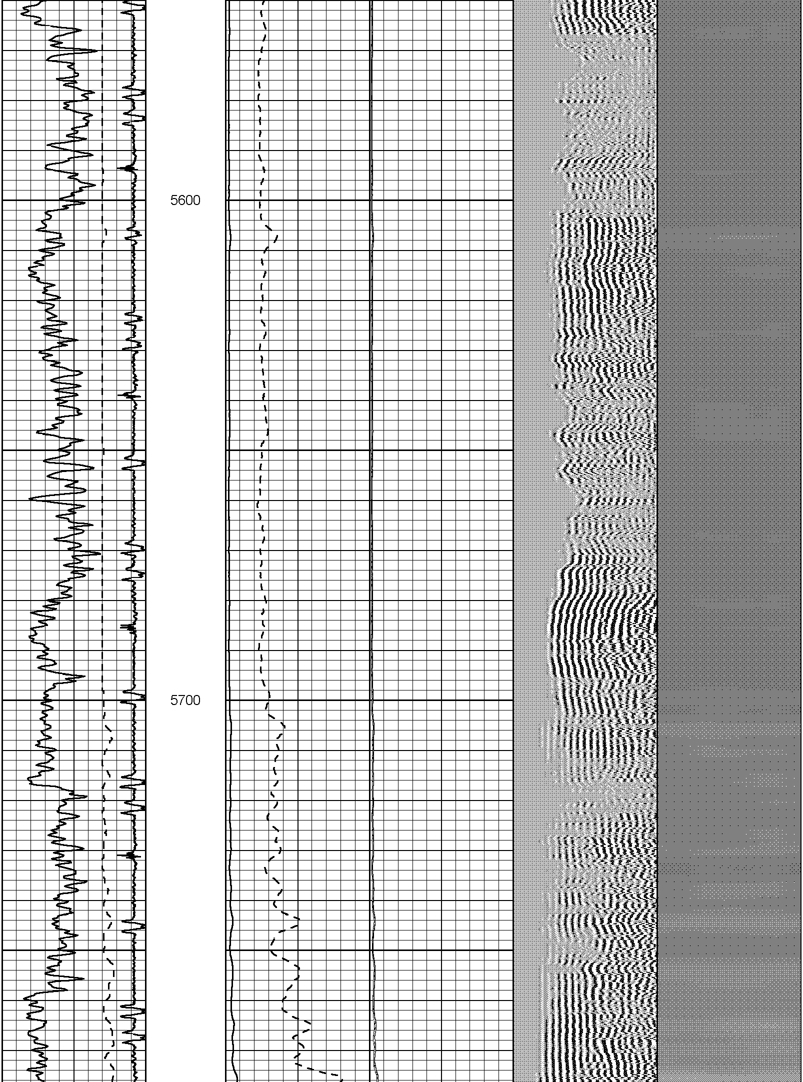


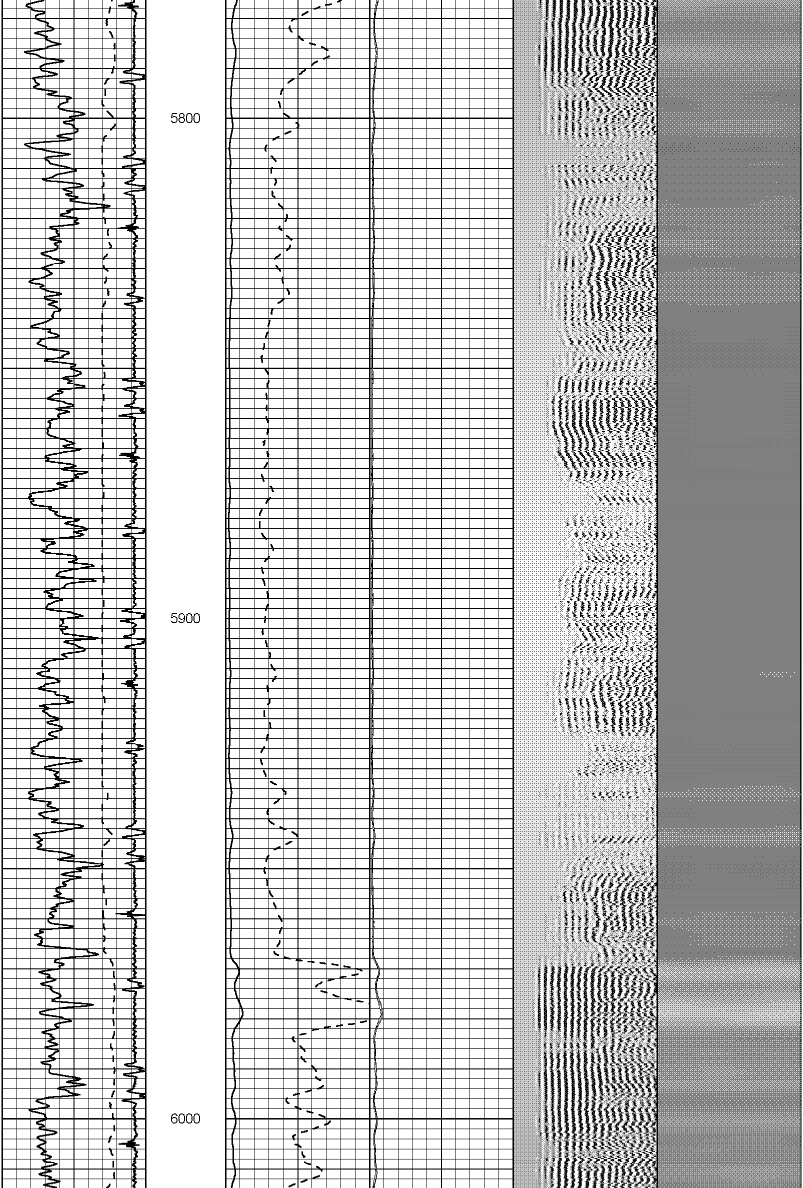


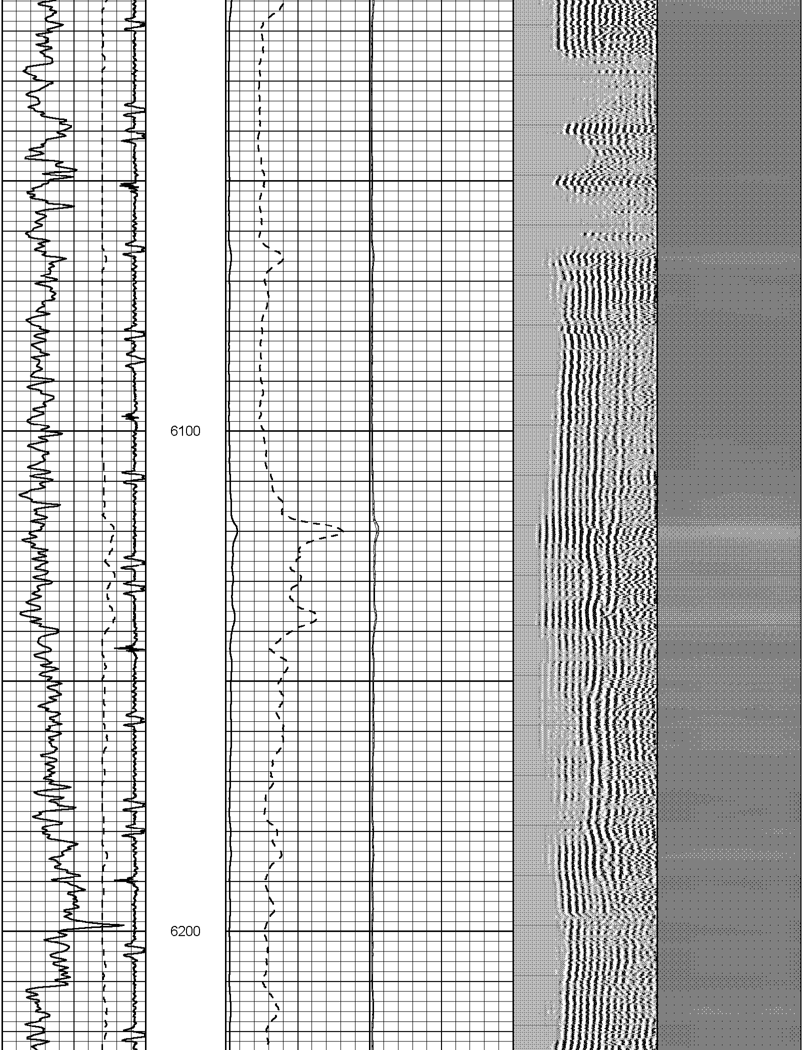


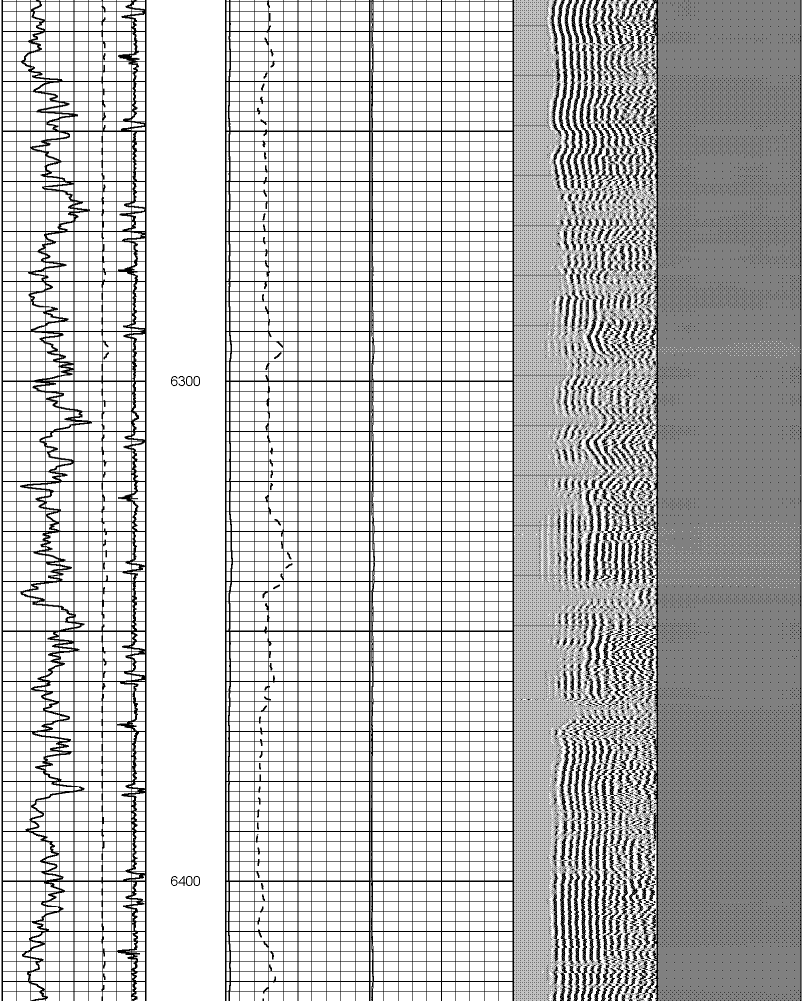


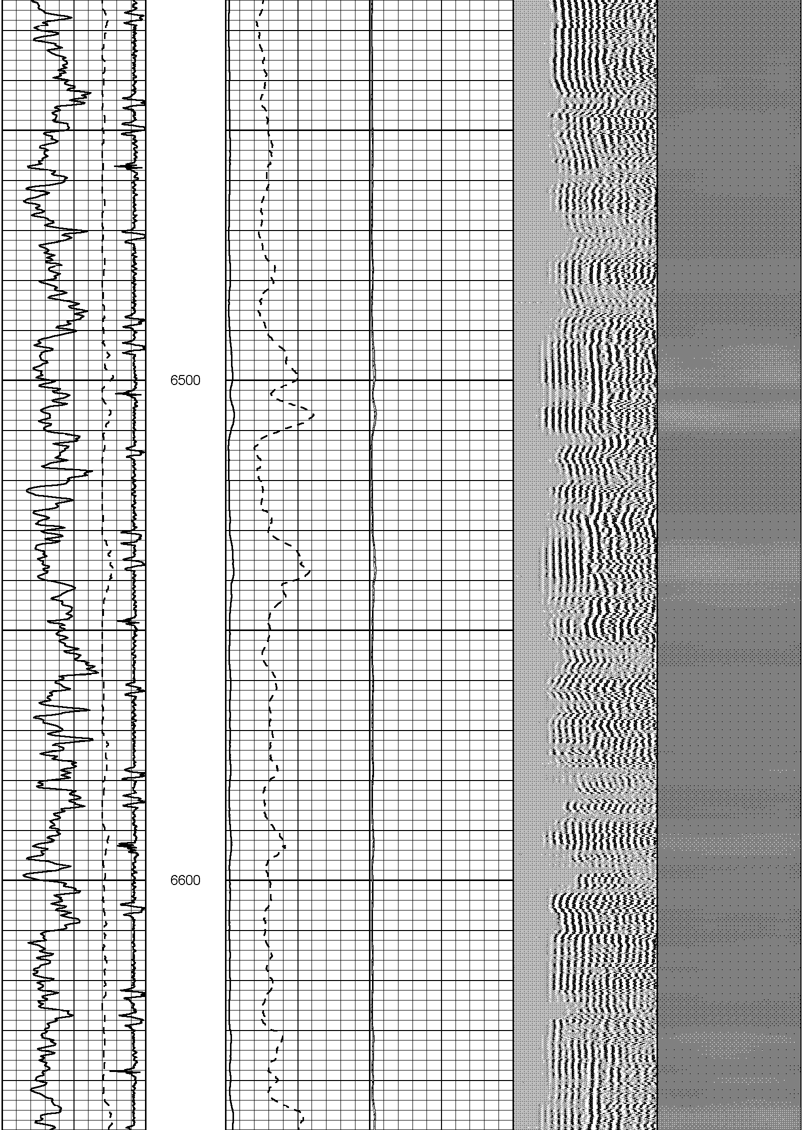


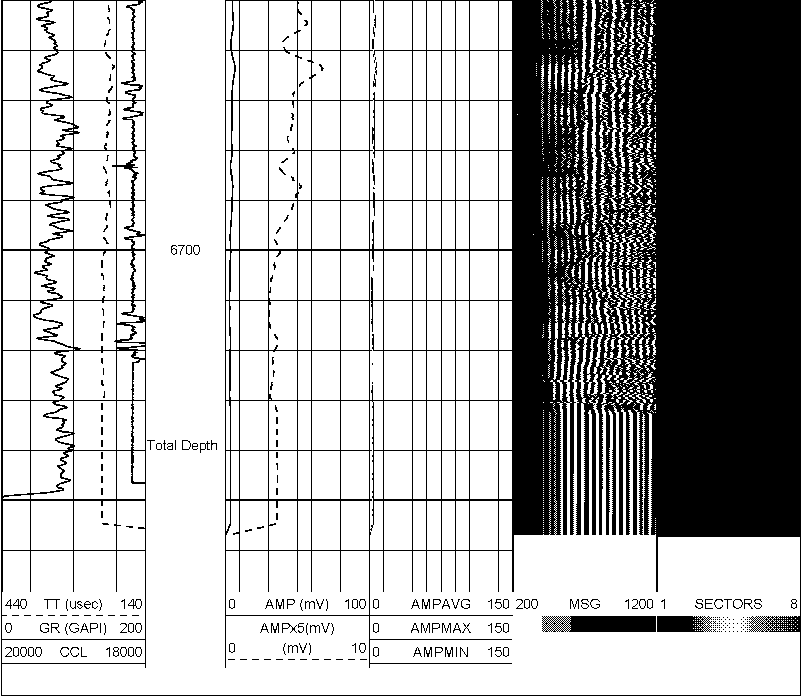












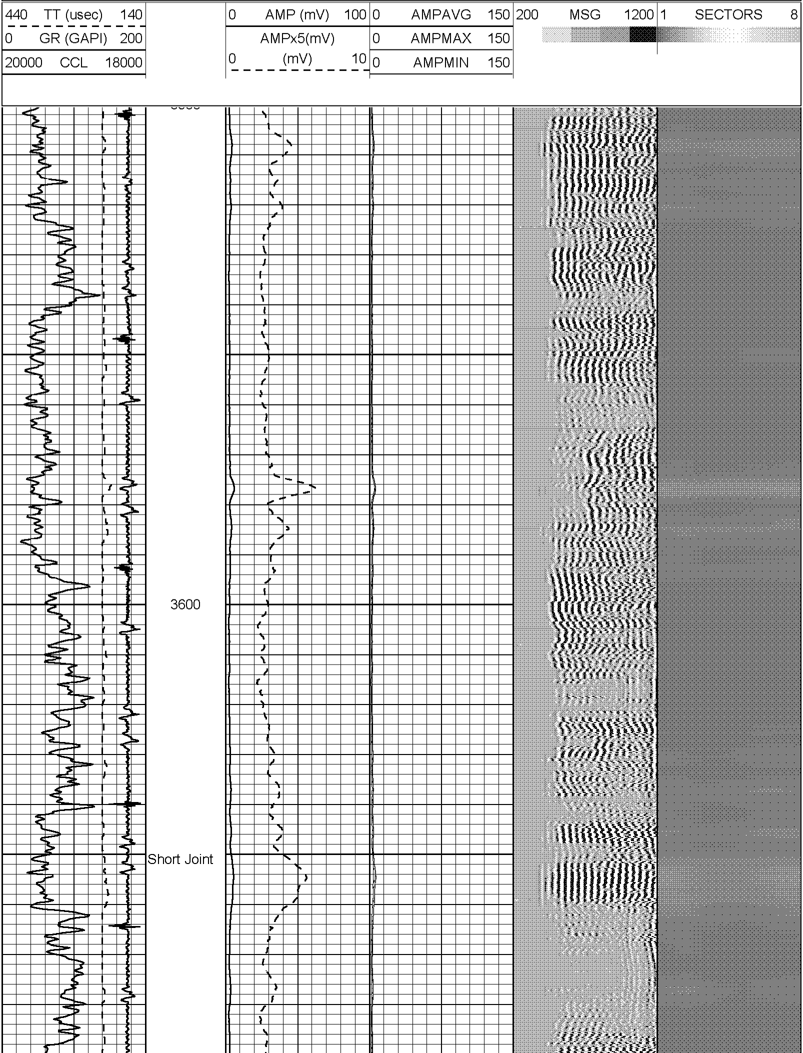
HALLIBURTON

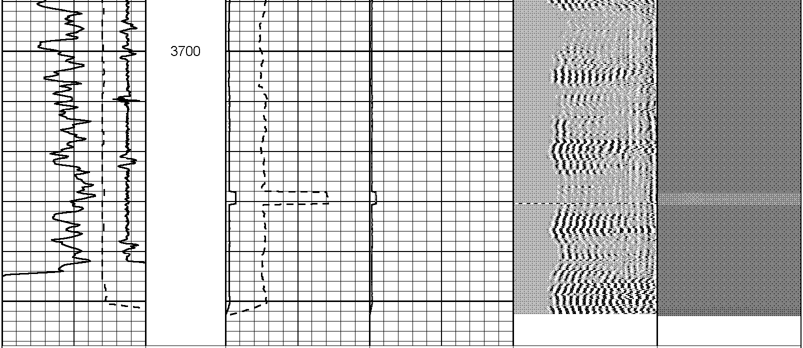
MAIN PASS 5" = 100'

HALLIBURTON

REPEAT PASS

Database File: c_skr_598_35_av_15_rbt.db
Dataset Pathname: pass7
Presentation Format: rbt_chev
Dataset Creation: Thu Mar 27 12:35:00 2008 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240





440 TT (usec) 140 0 GR (GAPI) 200 20000 CCL 18000		0 AMP (mV) 100 AMPx5(mV) 0 (mV) 10	0 AMPAVG 150 0 AMPMAX 150 0 AMPMIN 150	200 MSG 1200	1 SECTORS 8

HALLIBURTON

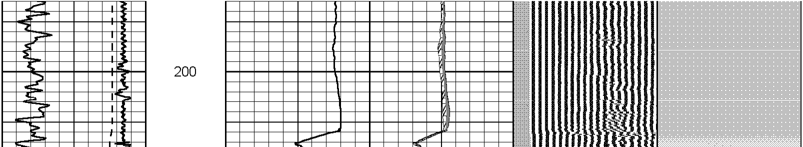
REPEAT PASS

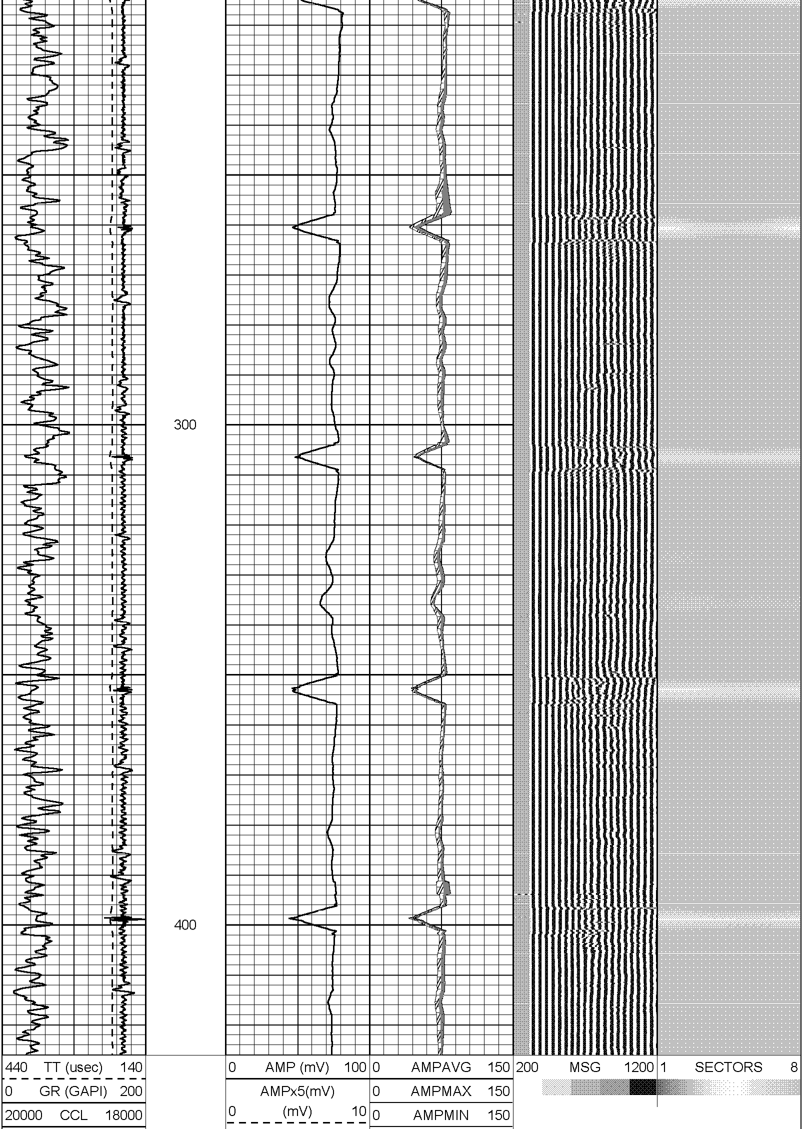
HALLIBURTON

FREE PIPE

Database File:	c_skr_598_35_av_15_rbt.db
Dataset Pathname:	pass2
Presentation Format:	rbt_chev
Dataset Creation:	Thu Mar 27 12:15:53 2008 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

440 TT (usec) 140 0 GR (GAPI) 200 20000 CCL 18000		0 AMP (mV) 100 AMPx5(mV) 0 (mV) 10	0 AMPAVG 150 0 AMPMAX 150 0 AMPMIN 150	200 MSG 1200	1 SECTORS 8





HALLIBURTON

FREE PIPE

Calibration Report

Database File:	c_skr_598_35_av_15_rbt.db
Dataset Pathname:	pass10
Dataset Creation:	Thu Mar 27 12:54:08 2008 by Log Halliburton Casedho

Segmented Cement Bond Log Calibration Report

Serial Number:	11002211	
Tool Model:	004	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	1270.695	ft

Master Calibration, performed Thu Mar 27 12:23:55 2008:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.000	0.960	0.000	82.000	85.404	0.000
5FT	0.000	0.934	0.000	82.000	87.795	0.000
S1	0.000	0.991	0.000	82.000	82.711	0.000
S2	0.000	1.040	0.000	82.000	78.857	0.000
S3	0.000	0.998	0.000	82.000	82.172	0.000
S4	0.000	0.970	0.000	82.000	84.546	0.000
S5	0.000	0.935	0.000	82.000	87.694	0.000
S6	0.000	0.928	0.000	82.000	88.363	0.000
S7	0.000	0.942	0.000	82.000	87.022	0.000
S8	0.000	0.956	0.000	82.000	85.757	0.000

Calibration Report

Serial Number:	11002211
Tool Model:	004

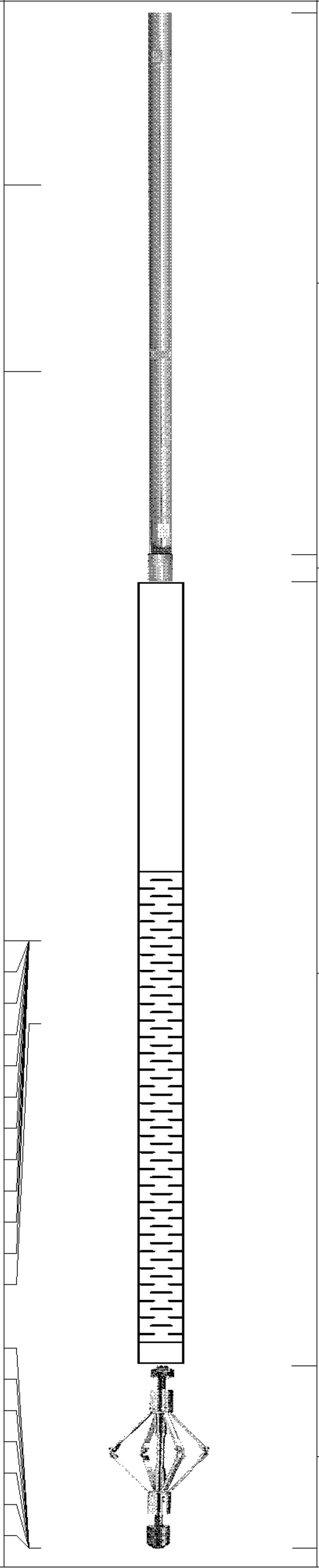
Performed:

	Reference ()	Reading ()
Low:		
High:		
	Gain =	Offset=

Gamma Ray Calibration Report

Type / Serial: ULTRA_LINK / 214878

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION		Mon Mar 24 08:37:18 2008			
Background	35.7				cps
Calibrator	204.6				cps
		1.4336			GAPI/cps
PRIMARY VERIFICATION		Sun Mar 23 12:51:51 2008			
Background	55.7				cps
Calibrator	306.3				cps
Difference				250.6	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)
CCL	16.48					
			TTTCU-ULTRA_LINK (214878) Through Tubing Telemetry Cartridge - Ultrawire	6.55	1.69	33.00
GR	14.22					
			AUH	0.33	1.69	2.00
WVF3FT	7.34					
WVFS1	7.34		RBT-004 (11002211) Radial Bond Tool (UW 3 1/8)	9.47	3.13	140.00
WVFS2	7.34					
WVFS3	7.34					
WVFS4	7.34					
WVFS5	7.34					
WVFS6	7.34					
WVFS7	7.34					
WVFS8	7.34					
CBLTEMP	7.34					
CBLROT	7.34					
WVF5FT	6.34					
XHUTEMP	0.00					
XHUCURR	0.00					
XHUVOLT	0.00					
XHUSTAT	0.00		CSS169Roller CSS 1 11/16" ROLLER CENTRALIZER	2.20	1.69	4.41
TSTAMP	0.00					
ITEMPX	0.00					
HVOLTX	0.00					

Dataset: c_skr_598_35_av_15_rbt.db: field/well/run1/pass10
Total Length: 18.56 ft
Total Weight: 179.41 lb
O.D. 3.13 in

Company CHEVRON USA INC.
Well SKR 598-35-AV-15
Field SKINNER RIDGE
County GARFIELD State CO

HALLIBURTON

ACOUSTIC CEMENT BOND LOG