BWWC
Black Warrior Wireline Corporation

SECTOR BOND LOG

Company	ANTERO RESOURCES PICEANCE CORP.
Well	NORTH BANK B4
Field	MAMM CREEK
County	GARFIELD
State	CO

Company ANTERO RESOURCES PICEANCE CORP.
Well NORTH BANK B4
Field MAMM CREEK
County GARFIELD State CO
Location: API # : 0451241800
1304' FNL 568' FEL
SEC 12 TWP 6S RGE 93W
Other Services NONE

Permanent Datum	K.B	Elevation 5413'	Elevation
Log Measured From	K.B		K.B. 5433'
Drilling Measured From	K.B		D.F.
			G.L. 5413'

Date	16 JAN 2008
Run Number	ONE
Depth Driller	9107'
Depth Logger	9051'
Bottom Logged Interval	9047'
Top Log Interval	SURFACE
Open Hole Size	7.875"
Type Fluid	H20
Density / Viscosity	8.34 PPM
Max. Recorded Temp.	230 F
Estimated Cement Top	4090'
Time Well Ready	ROA
Time Logger on Bottom	00:47
Equipment Number	6419
Location	GND JCT
Recorded By	K.KEENER
Witnessed By	

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

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	8.625"	24 LBS.	SURFACE	9110'
Prot. String	5.5"	17 LBS.	SURFACE	911'
Production String				
Liner				

<<< 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

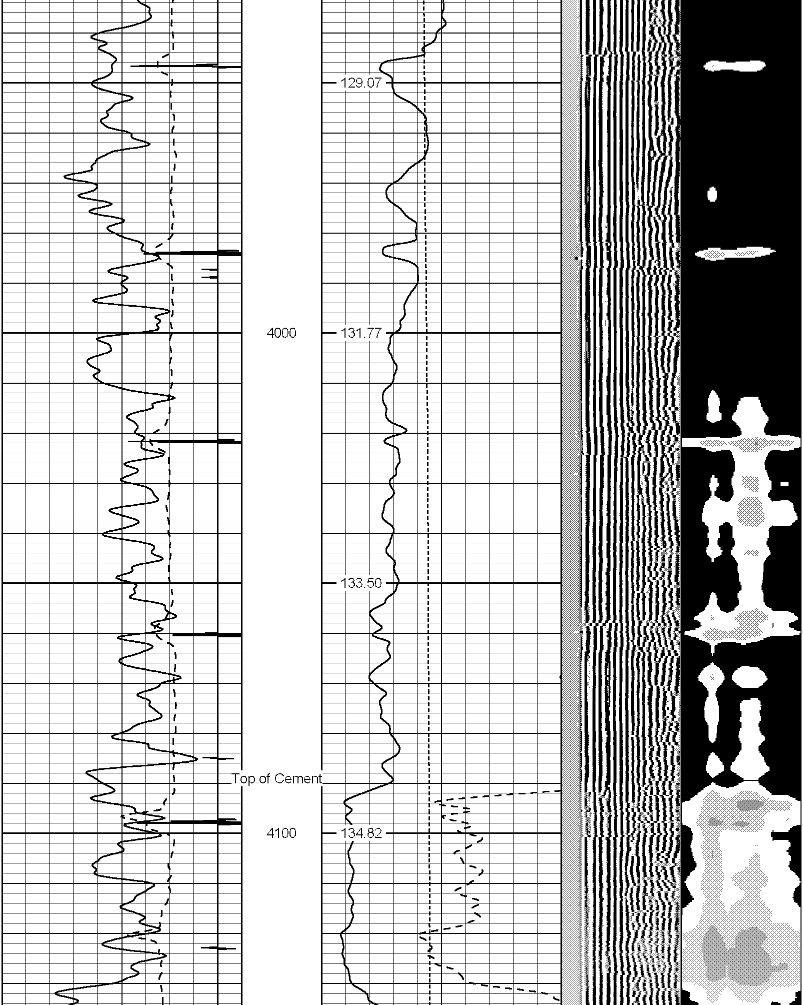
THANK YOU FOR USING WARRIOR ENERGY SERVICES

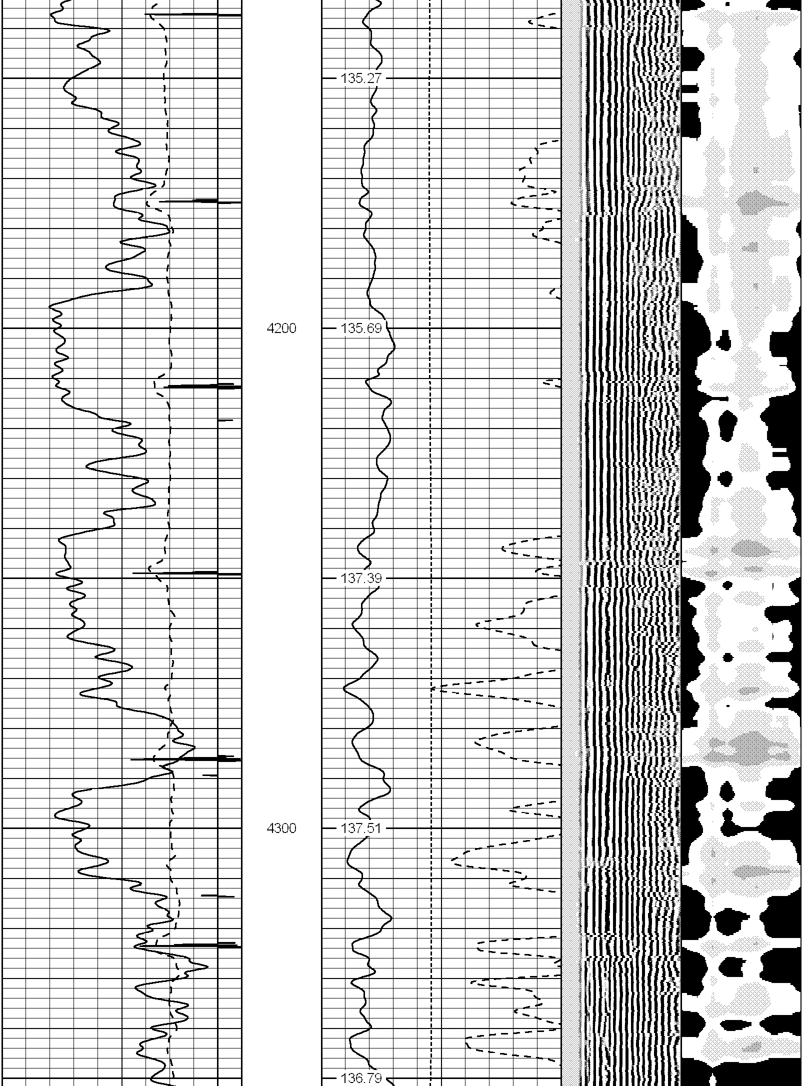
SHORT JOINTS
5419 - 5438
8595.5-8615

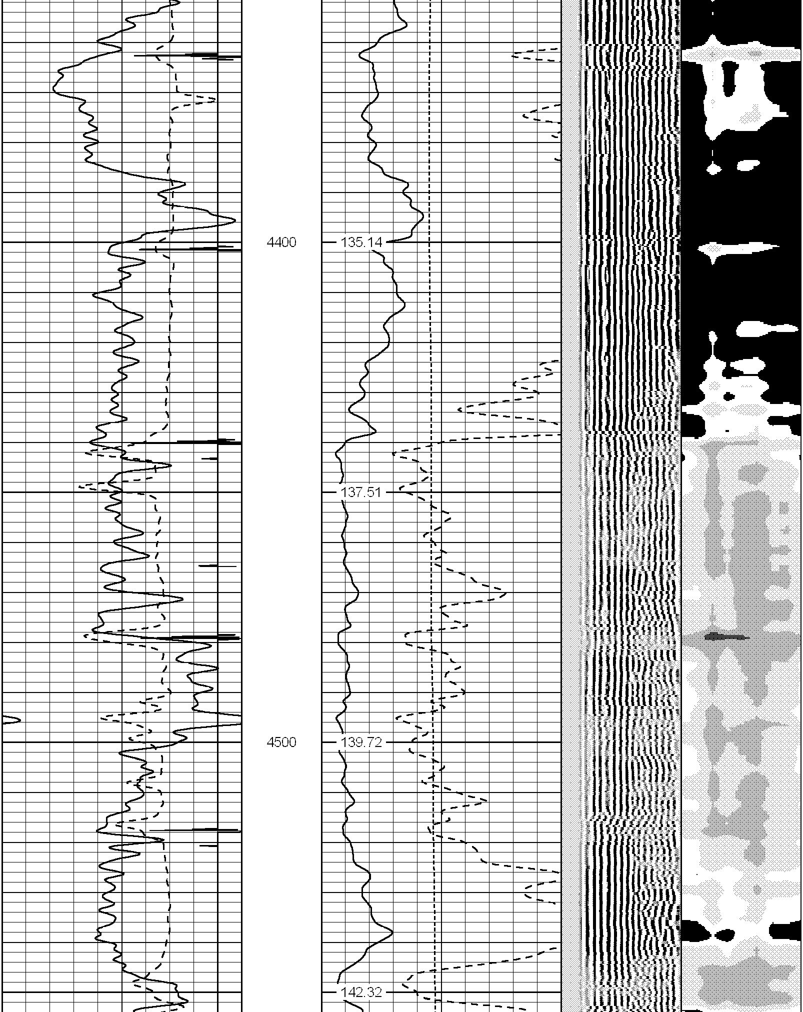
BWWC
Black Warrior Wireline Corporation

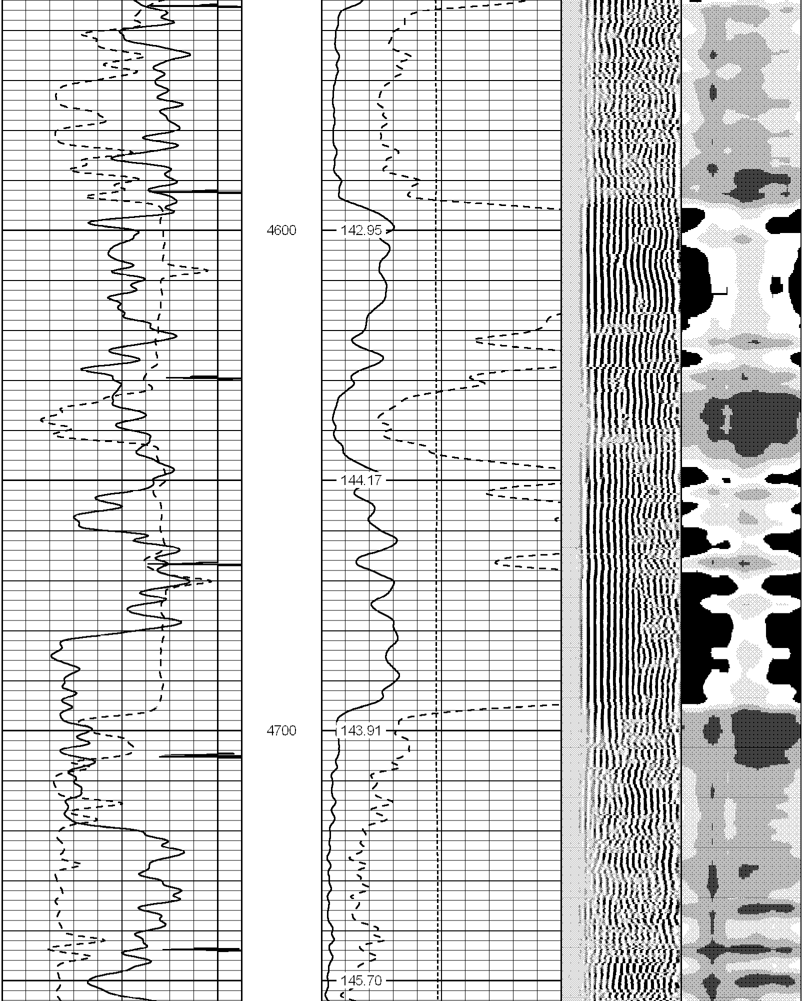
MAIN LOG PASS

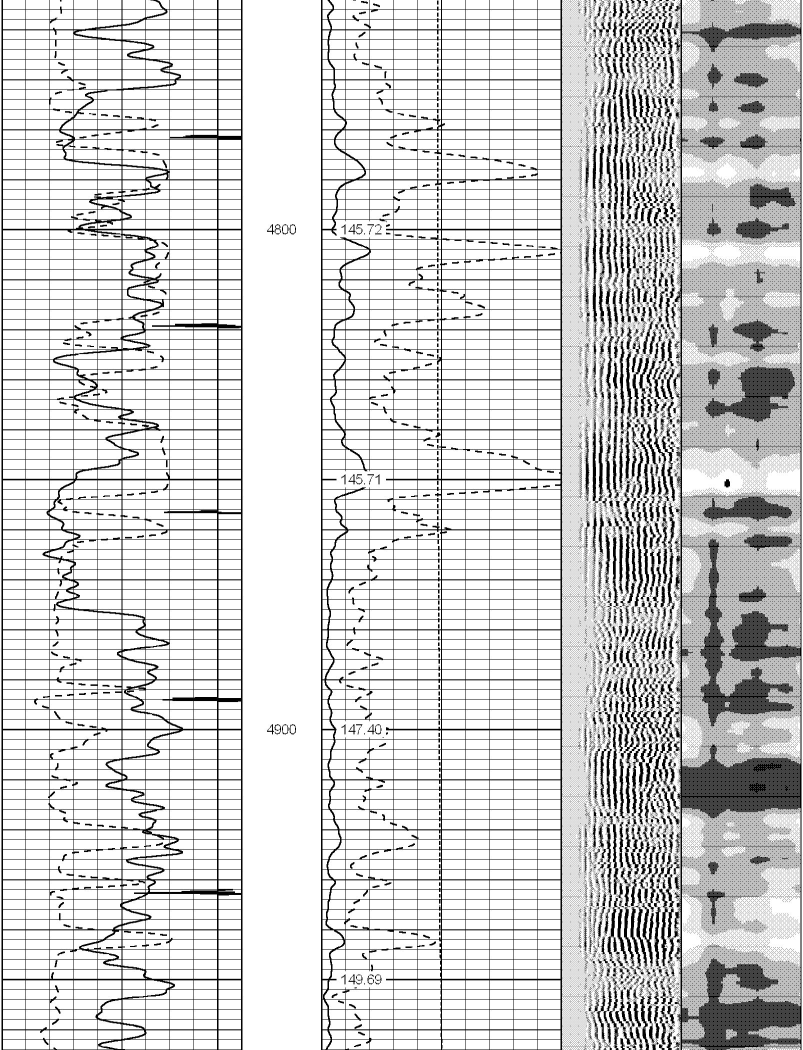
Database File: 6419-0115.db
Dataset Pathname: pass14.3
Presentation Format: 1scbtvad
Dataset Creation: Wed Jan 16 04:06:21 2008 by Calc Std Casedhole 06040
Charted by: Depth in Feet scaled 1:240

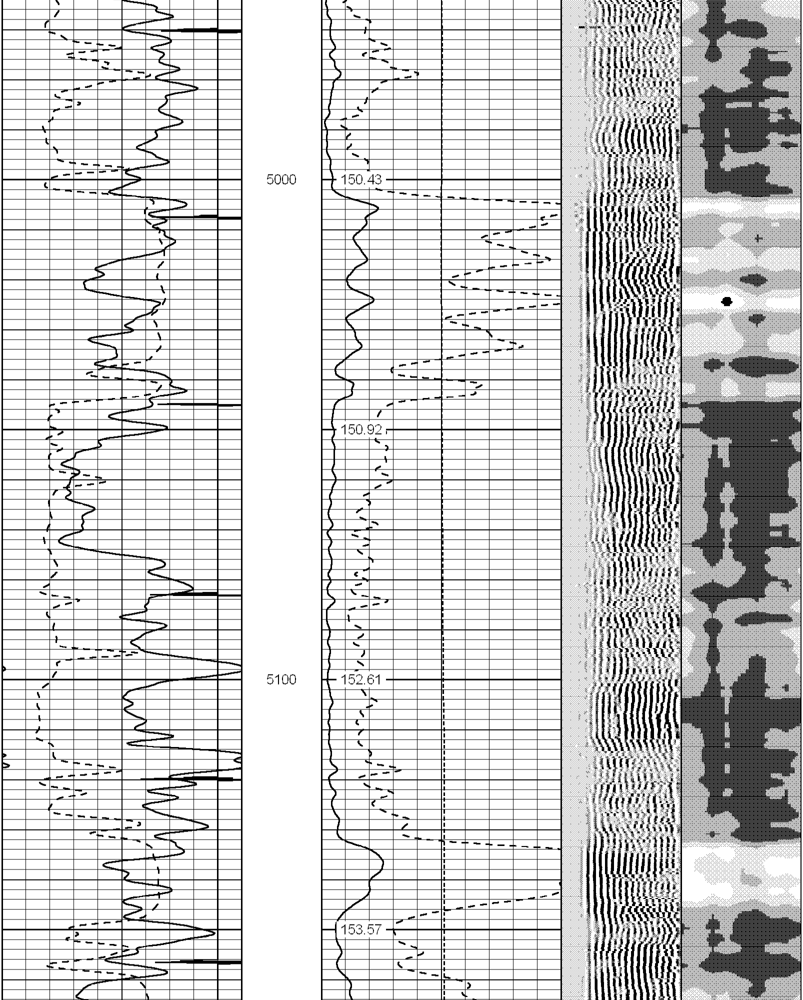

129.07
4000
131.77
133.50
Top of Cement
4100
134.82

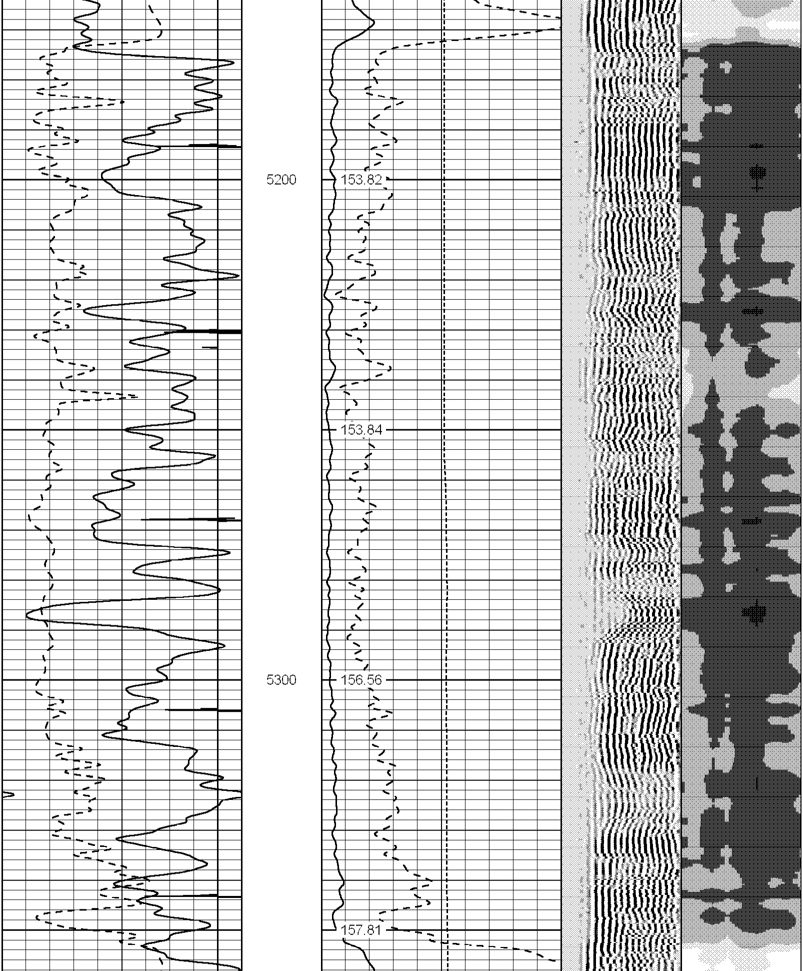

135.27
4200
135.69
137.39
4300
137.51
136.79

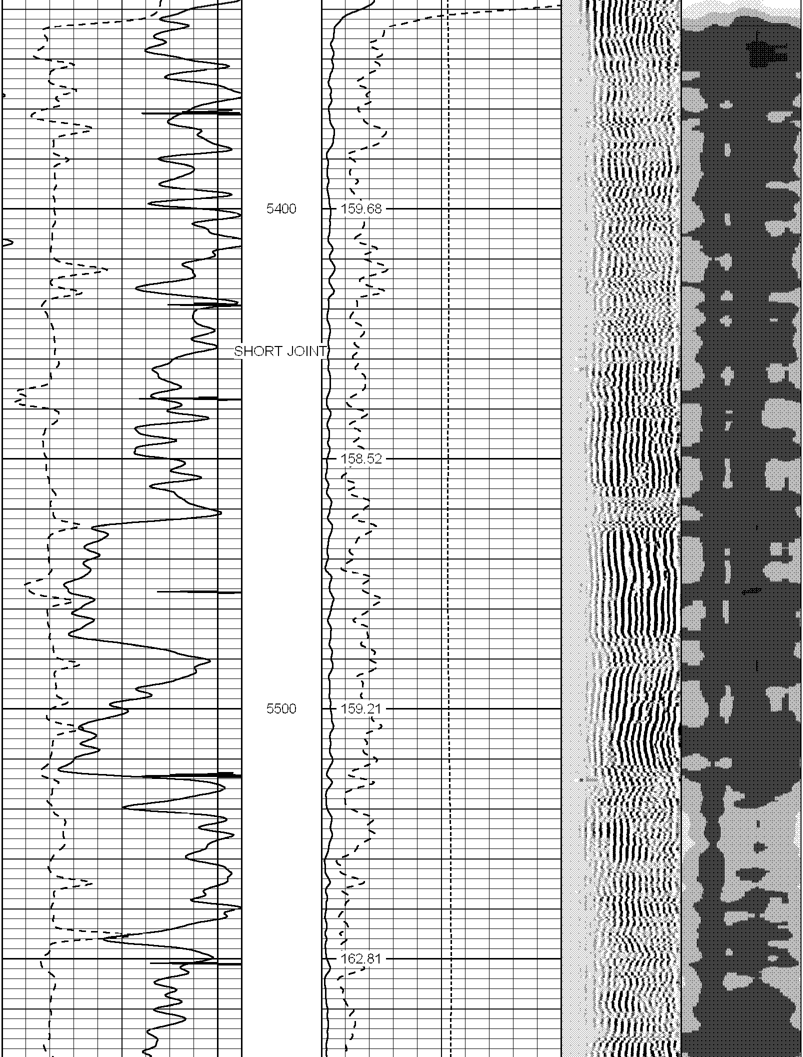

4400
135.14
137.51
4500
139.72
142.32

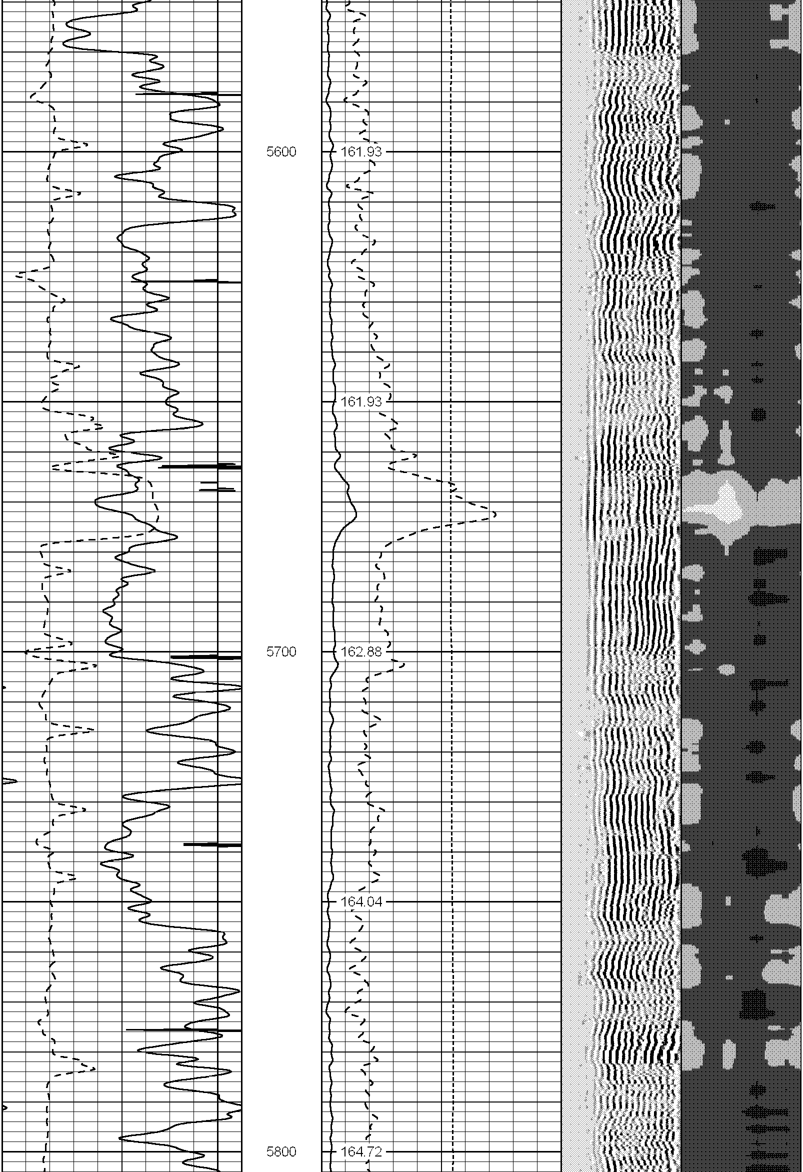

4600
142.95
144.17
4700
143.91
145.70

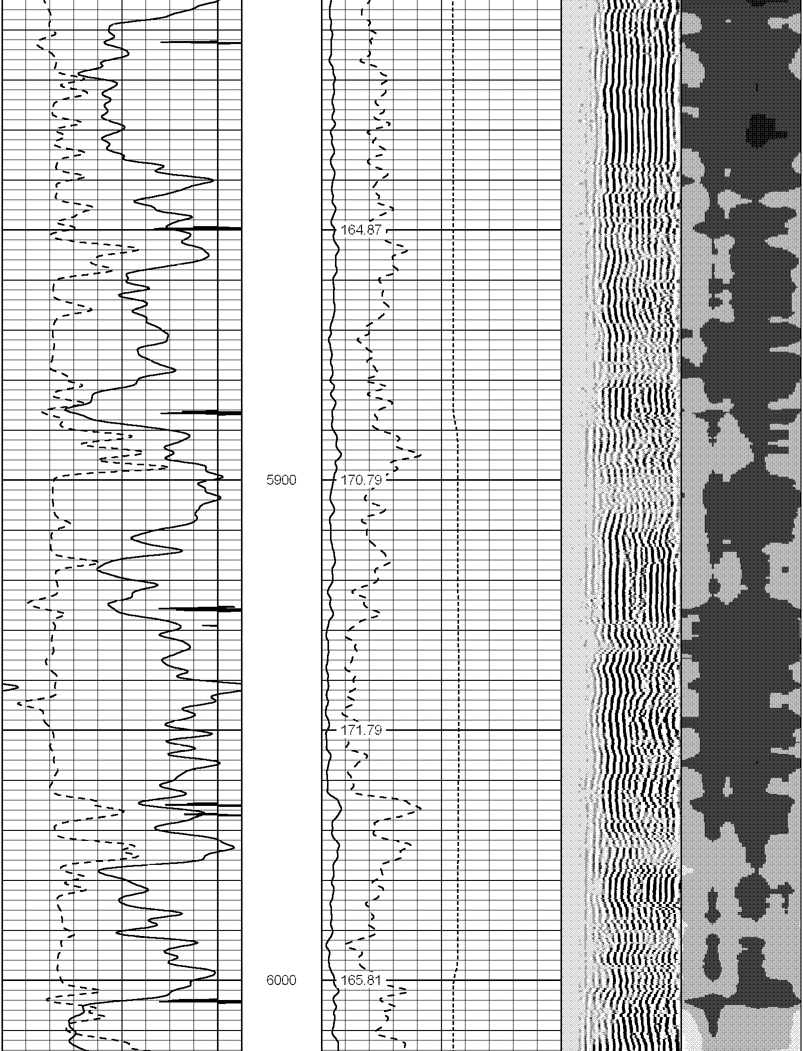

4800
145.72
145.71
4900
147.40
149.69

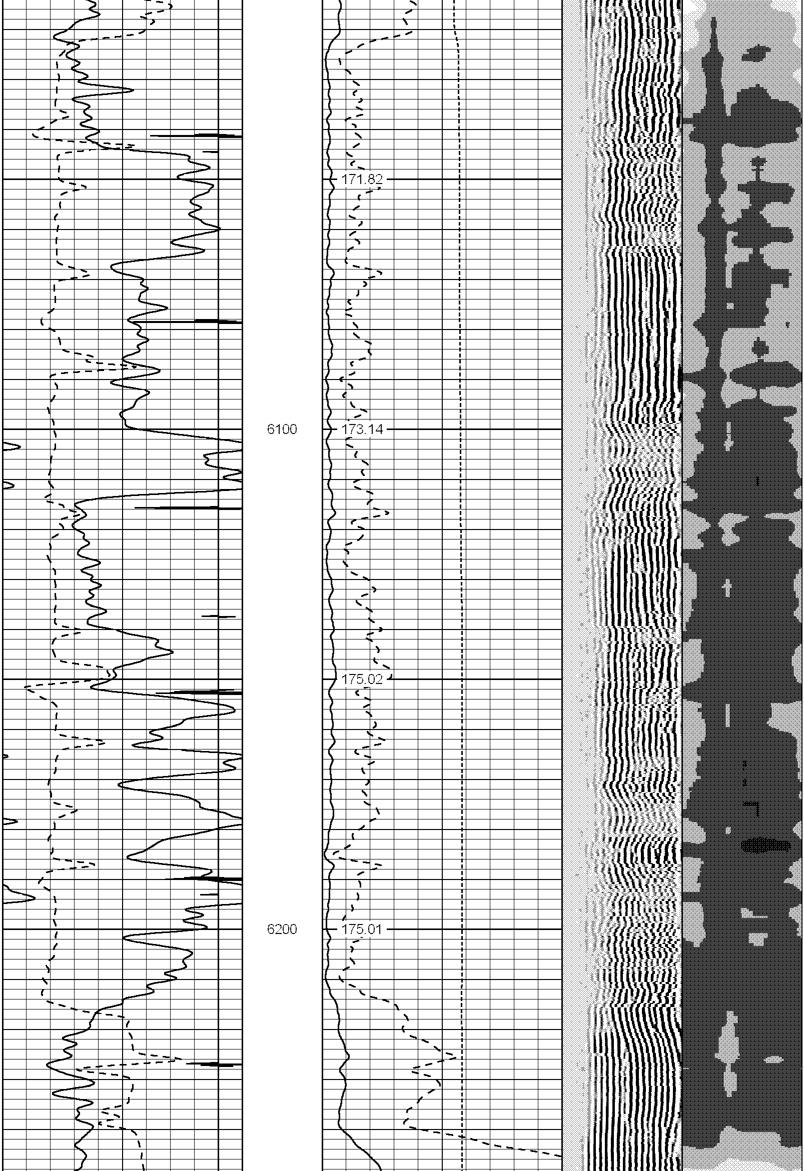

5000
150.43
150.92
5100
152.61
153.57

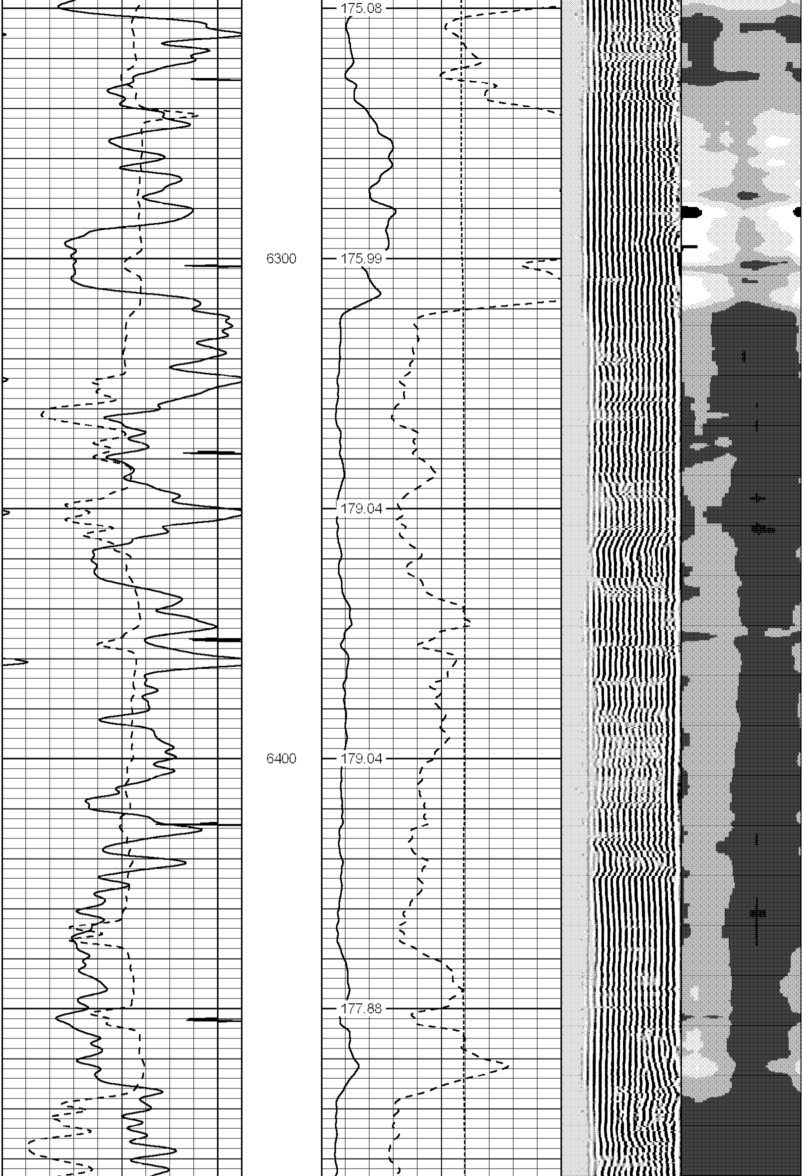

5200
153.82
153.84
5300
156.56
157.81

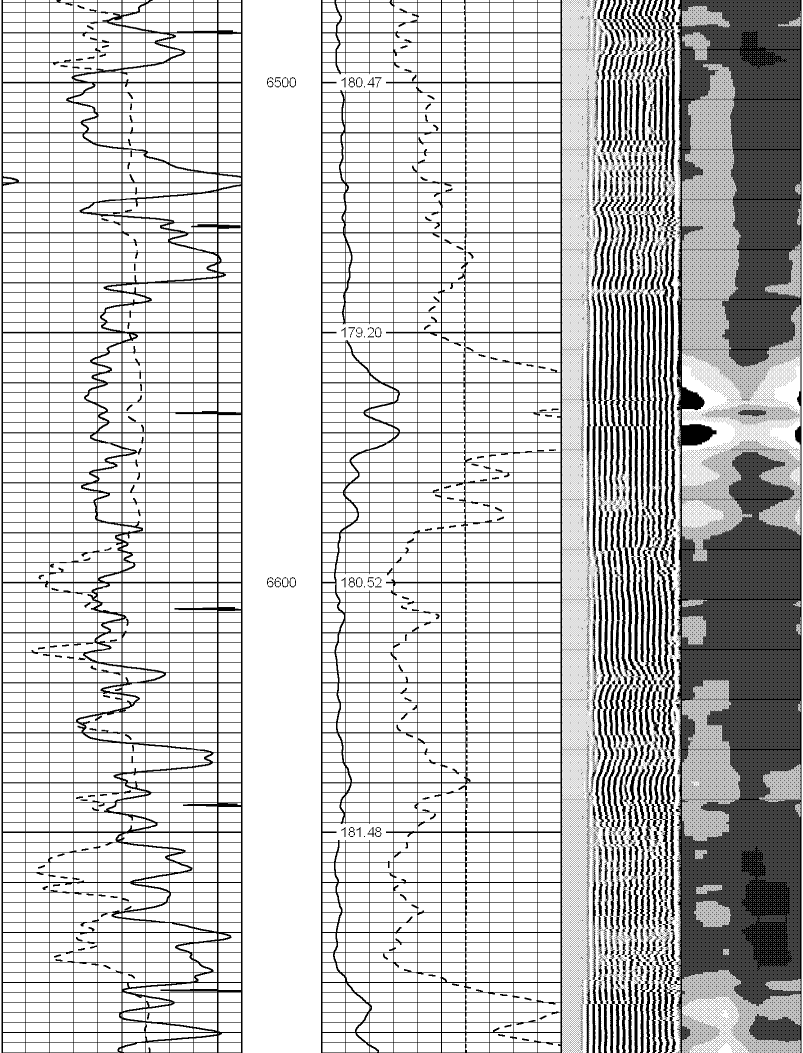

5400
159.68
SHORT JOINT
158.52
5500
159.21
162.81

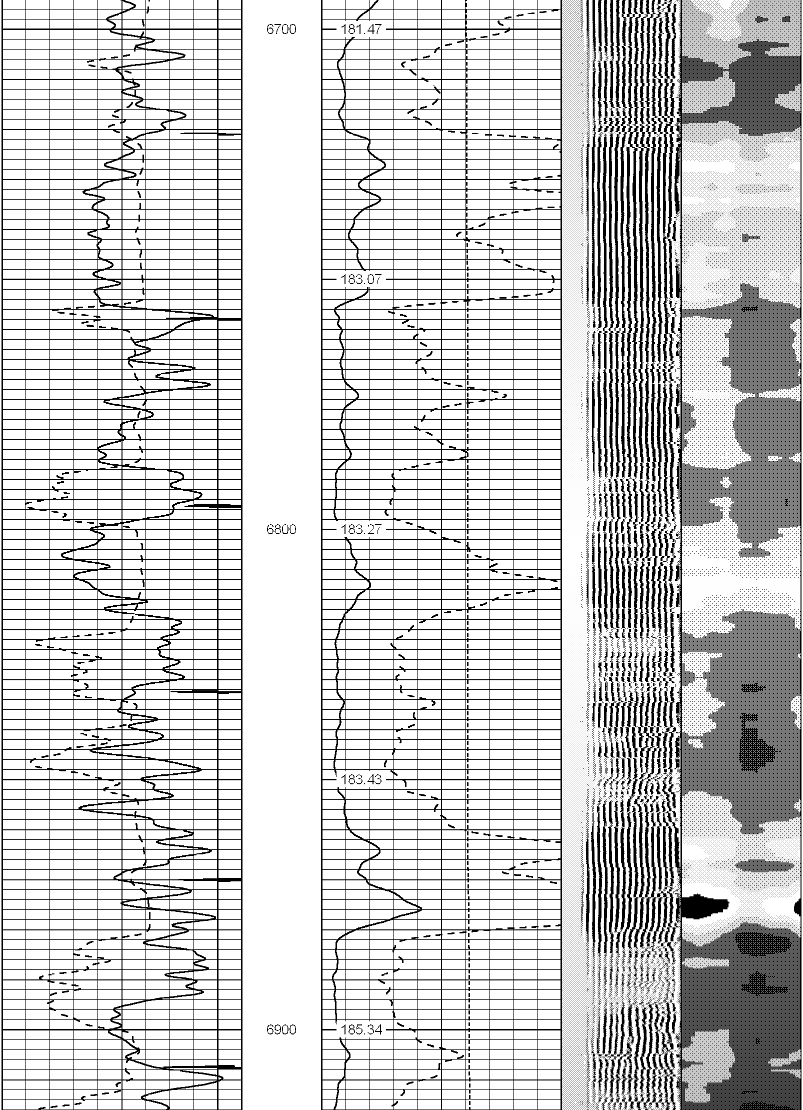

5600
161.93
161.93
5700
162.88
164.04
5800
164.72

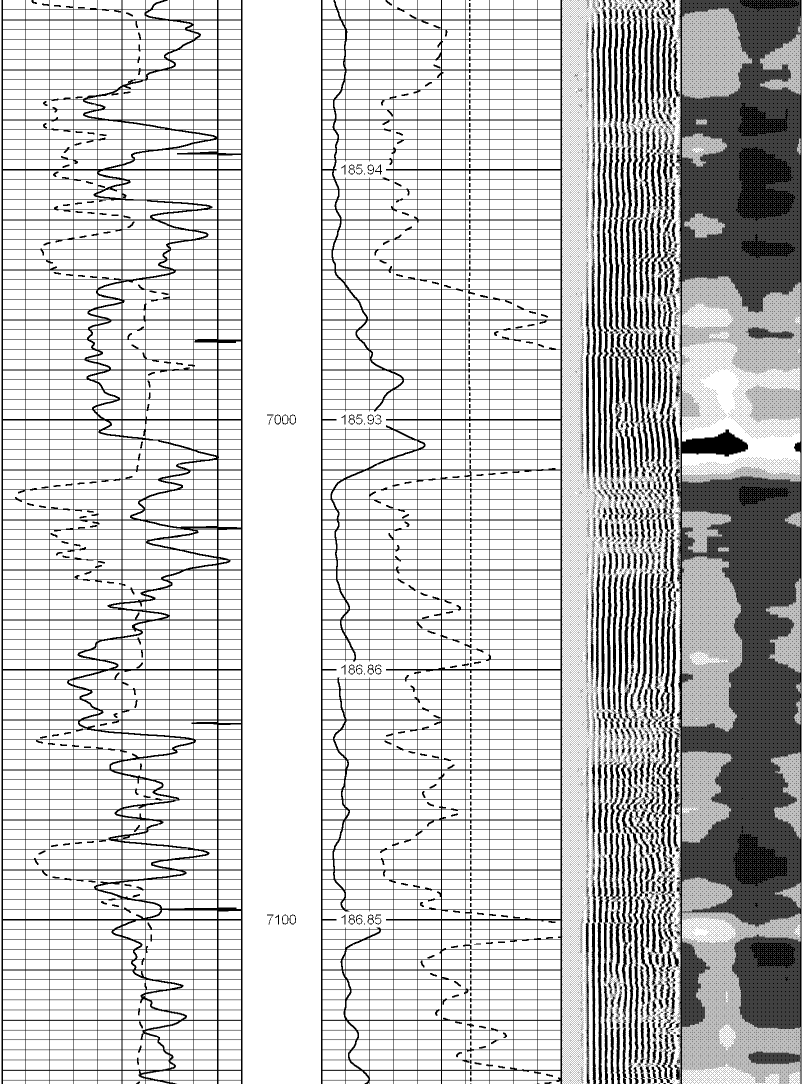

164.87
5900
170.79
171.79
6000
165.81

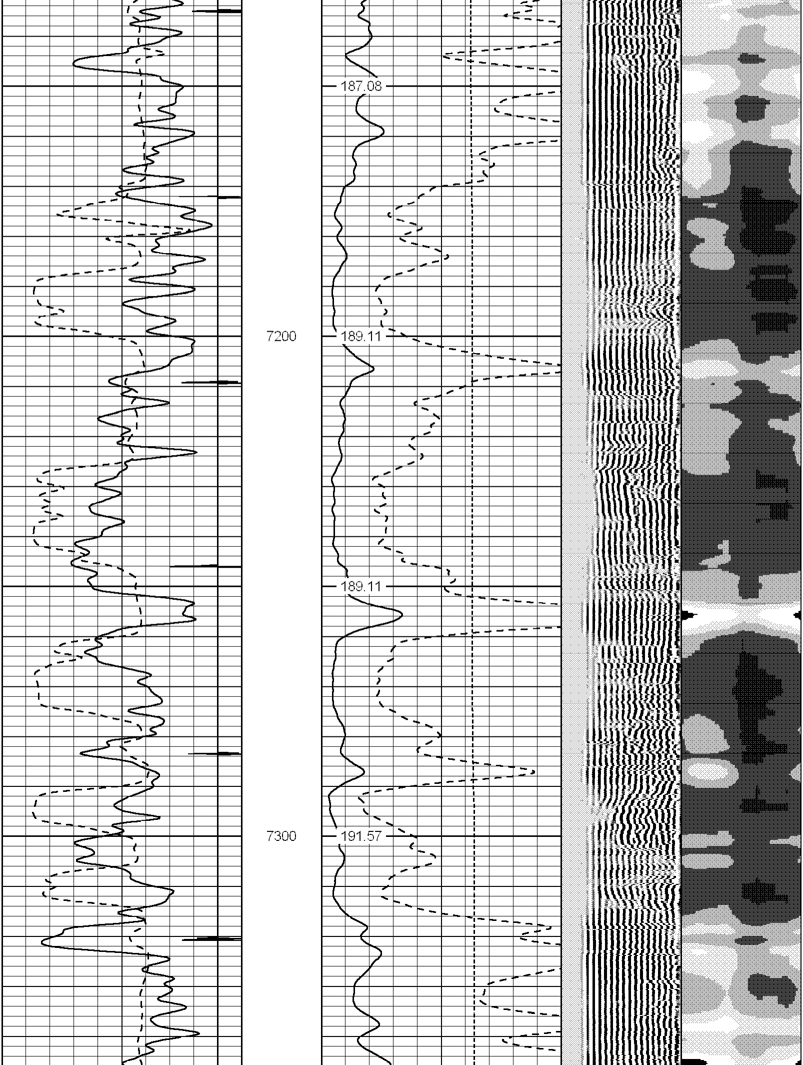

171.82
6100
173.14
175.02
6200
175.01

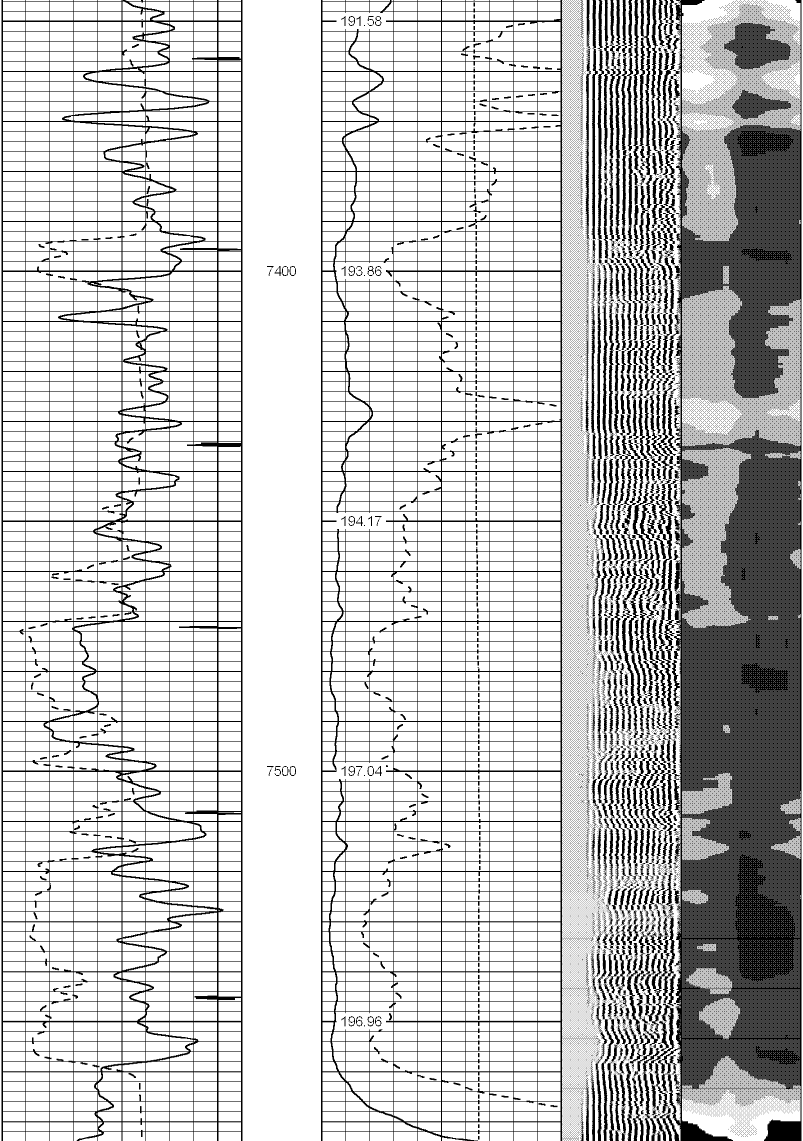

175.08
6300
175.99
179.04
6400
179.04
177.88

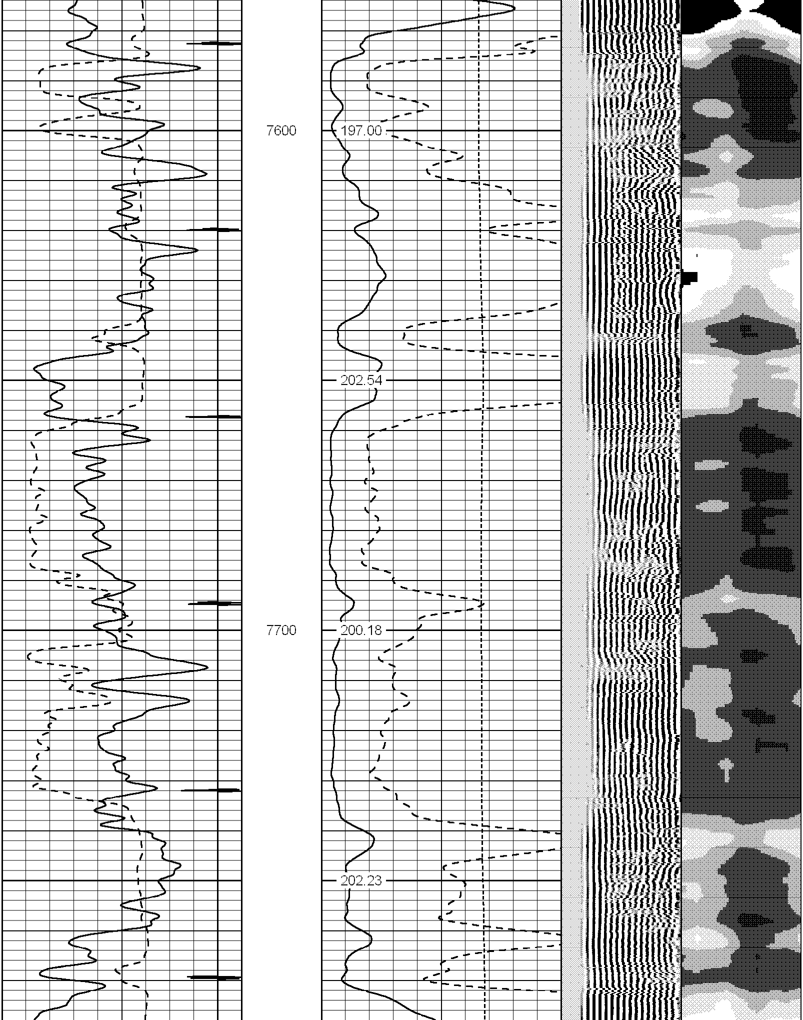

6500
180.47
179.20
6600
180.52
181.48

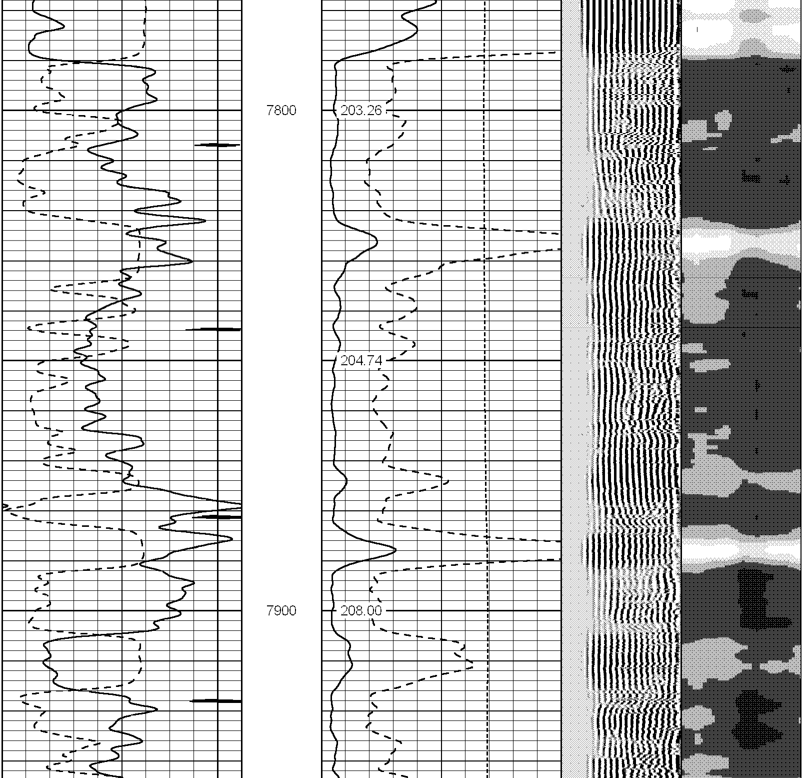

6700
181.47
183.07
6800
183.27
183.43
6900
185.34


185.94
7000
185.93
186.86
7100
186.85


187.08
7200
189.11
189.11
7300
191.57


191.58
7400
193.86
194.17
7500
197.04
196.96

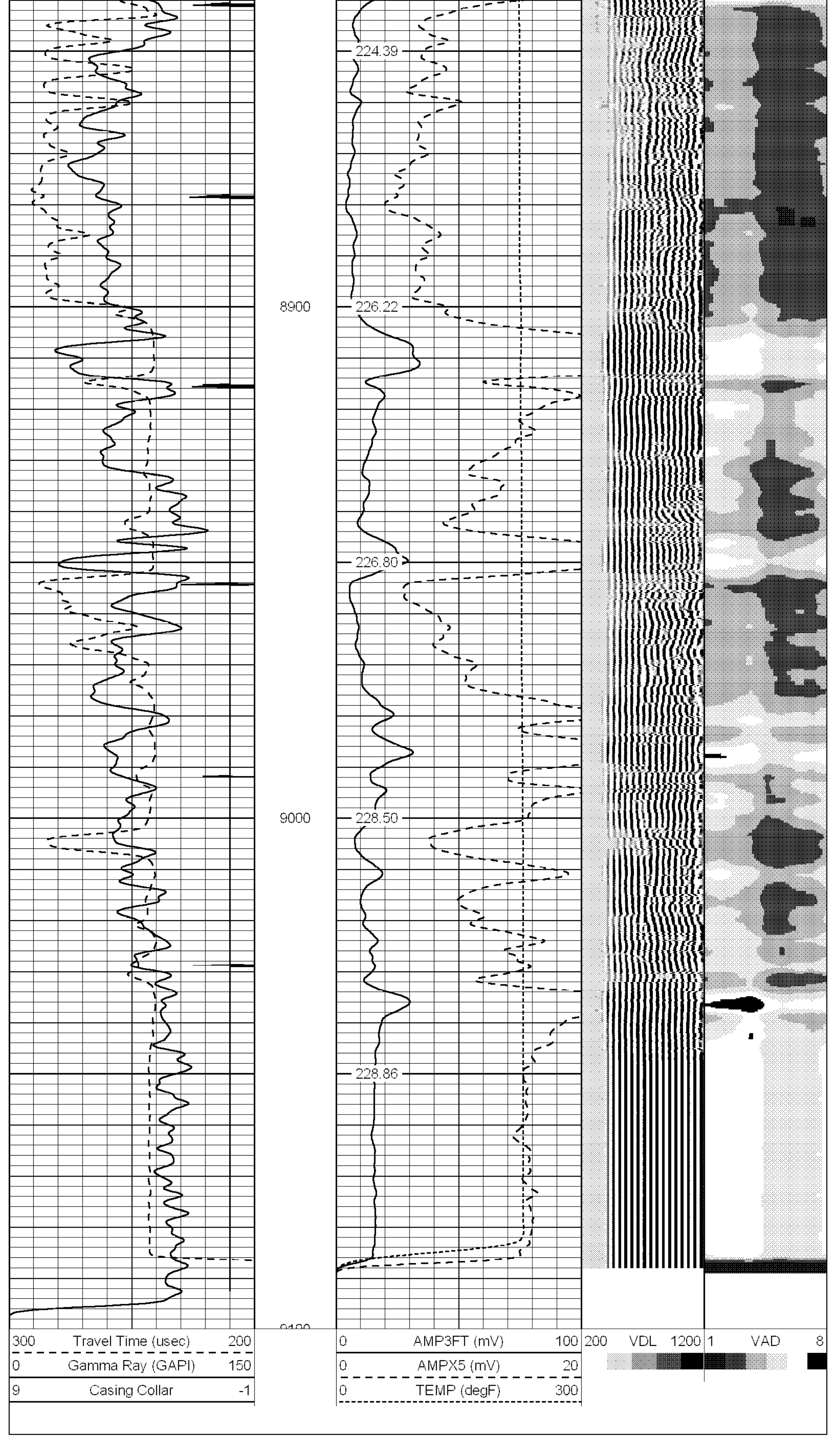

7600
197.00
202.54
7700
200.18
202.23


7800
203.26
204.74
7900
208.00

BWWC
Black Warrior Wireline Corporation

REPEAT PASS

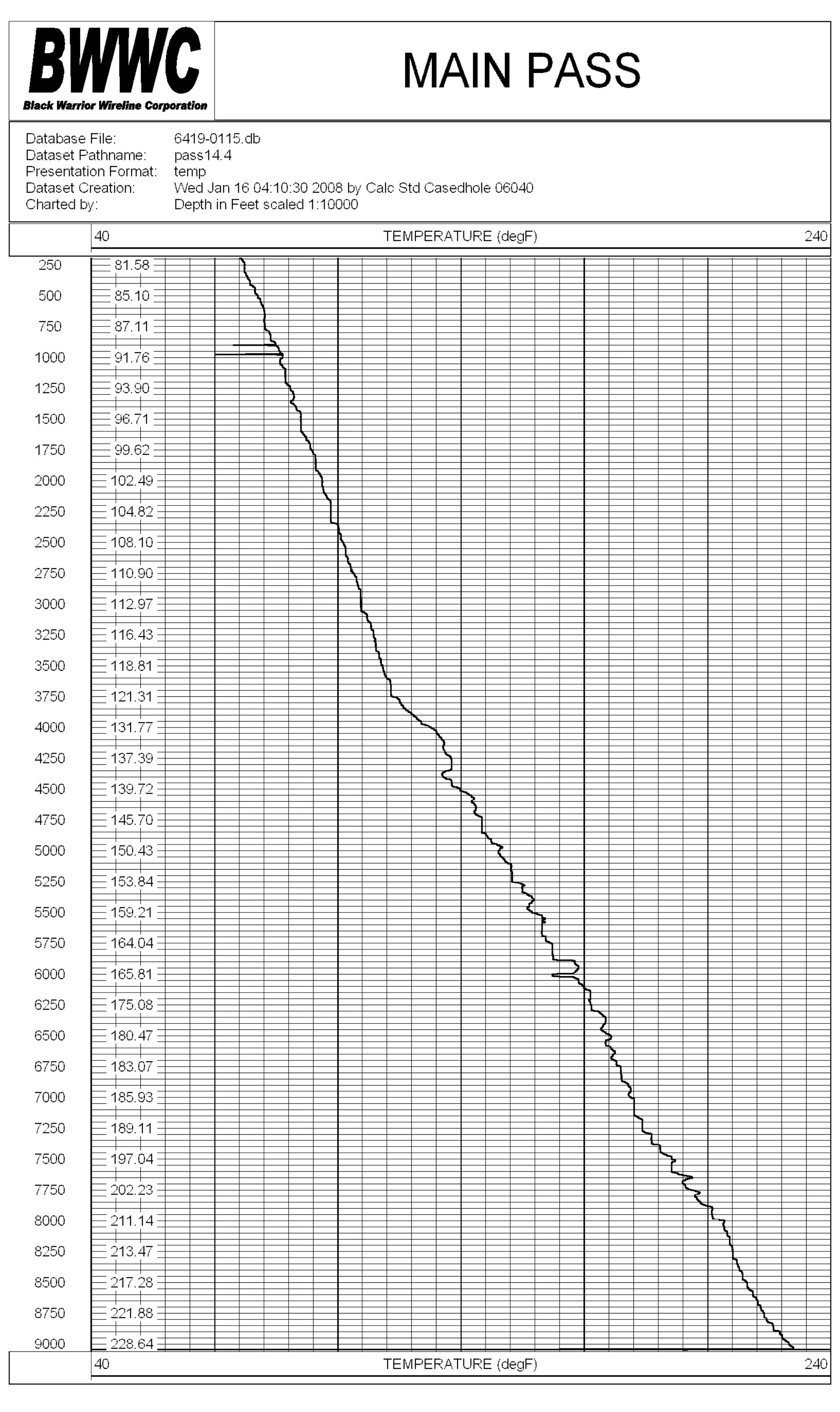
Database File: 6419-0115.db
Dataset Pathname: pass13
Presentation Format: 1scbtvad
Dataset Creation: Wed Jan 16 01:48:03 2008 by Log Std Casedhole 06040
Charted by: Depth in Feet scaled 1:240

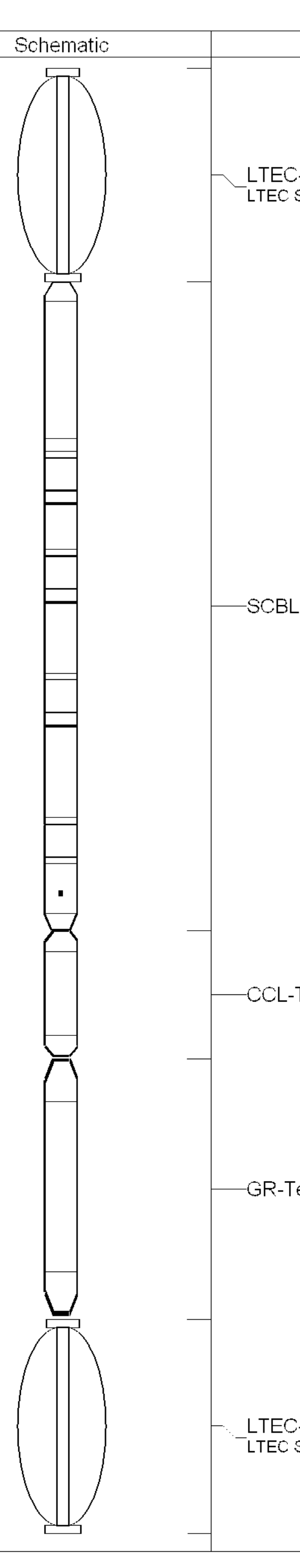


BWWC
Black Warrior Wireline Corporation

MAIN PASS

Database File: 6419-0115.db
Dataset Pathname: pass14.4
Presentation Format: temp
Dataset Creation: Wed Jan 16 04:10:30 2008 by Calc Std Casedhole 06040
Charted by: Depth in Feet scaled 1:10000





Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			LTEC-1.68 LTEC Six Arm	3.00	1.69	15.00
TEMP	14.85					
WVFS1	13.56					
WVFS2	13.56		SCBL100T-Tekco100T (100T-001)	9.13	0.00	
WVFS3	13.56					
WVFS4	13.56					
WVFS5	13.56					
WVFS6	13.56					
WVFS7	13.56					
WVFS8	13.56					
WVF3FT	12.81					
WVFCAL	12.81					
WVF5FT	11.81					
WVFTEMP	8.47					
WVFSYNC	8.47					
CCL	7.29		CCL-Tekco105 (105-004)	1.81	2.75	15.00
			GR-Tekco110 (110-004)	3.66	2.75	25.00
GR	4.00					
			LTEC-1.68 LTEC Six Arm	3.00	1.69	15.00

Dataset: 6419-0115.db: field/well/run1/pass14.4
Total Length: 20.60 ft
Total Weight: 70.00 lb
O.D. 2.75 in