ROCKY MOUNTAIN WIRELINE SERVICE

CEMENT BOND LOG
GAMMA RAY \ CCL
TEMPERATURE

Company	BILL BARRETT CORPORATION
Well	CB - TG - LAND 11D - 20 - 692
Field	MAMM CREEK
County	GARFIELD
State	COLORADO
API # :	05-045-19757
Location:	SHL: 0628' FNL & 2581' FEL BHL: 0105' FNL & 0660' FWL
Other Services	3.75" GAUGE RING
SEC	20
TWP	6S
RGE	92W

				Elevation
Permanent Datum	G.L.	Elevation	5530'	K.B. 5553'
Log Measured From	K.B.	Ft Above PD	23'	D.F. 5552'
Drilling Measured From	K.B.			G.L. 5530'

Date	07 - 10 - 2011
Run Number	ONE
Depth Driller	8193'
Present Depth Driller	8130'
Depth Logger	8130'
Bottom Logged Interval	8129'
Top Log Interval	4520'
Fluid Level	SURFACE
Type Fluid	WATER
Max. Recorded Temp.	217.2° F
Estimated Cement Top	5100'
Equipment Number	208
Location	GRAND JCT.
Recorded By	HARRIS
Witnessed By	MR. LAFFERTY

	Borehole Record			Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	8.750"	857'	5455'	9.625"	36 #	SURFACE	857'
TWO	7.875"	5455'	8193'	4.5"	11.6#	SURFACE	8193'

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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.

WARRIOR 7.0 SOFTWARE - Comments

NOTE: LOG WAS DEPTH CORRELATED USING WEATHERFORD OPENHOLE DATED 6-27-2011
SHORT JOINTS: 6185' - 6214' AND 7182' - 7216'
MAIN PASS 5" = 100'
TEMP. PASS 2' = 100'
CSG PSI = STATIC

Calibration Report

Database File: c:\warrior\data\bbc\11-d\071011_bbc_land_11d.db
Dataset Pathname: TEMP/pass3
Dataset Creation: Mon Jul 11 08:16:59 2011

Temperature Calibration Report

Serial Number: 217894
Tool Model: 016
Performed: Fri Oct 24 13:23:59 2008

Point #	Reading		Reference	
1	13298.00	cps	75.97	degF
2	17844.00	cps	104.32	degF
3	29434.00	cps	175.71	degF
4	41028.00	cps	246.70	degF
5	52674.00	cps	317.75	degF
6	58555.00	cps	353.61	degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

Gamma Ray Calibration Report

Type / Serial: 020 / 217692

SHOP CALIBRATION Wed Apr 06 13:50:00 2011

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		1.1000			GAPI/cps
PRIMARY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	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

Segmented Cement Bond Log Calibration Report

Serial Number: 1123
Tool Model: 004

Calibration Casing Diameter: 4.500 in
Calibration Depth: 196.046 ft

Master Calibration, performed Sat Jul 09 13:40:12 2011:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.004	1.171	1.000	81.196	68.703	0.748
5FT	-0.001	0.993	1.000	81.196	80.674	1.060
S1	0.004	1.219	0.000	100.000	82.329	-0.349
S2	0.004	1.189	0.000	100.000	84.370	-0.304
S3	0.007	1.119	0.000	100.000	89.979	-0.649
S4	0.005	1.126	0.000	100.000	89.218	-0.436
S5	0.006	1.149	0.000	100.000	87.495	-0.562
S6	0.006	1.178	0.000	100.000	85.362	-0.519
S7	0.007	1.180	0.000	100.000	85.254	-0.623
S8	0.007	1.199	0.000	100.000	83.881	-0.609

Calibration Report

Serial Number: 1123
Tool Model: 004
Performed:

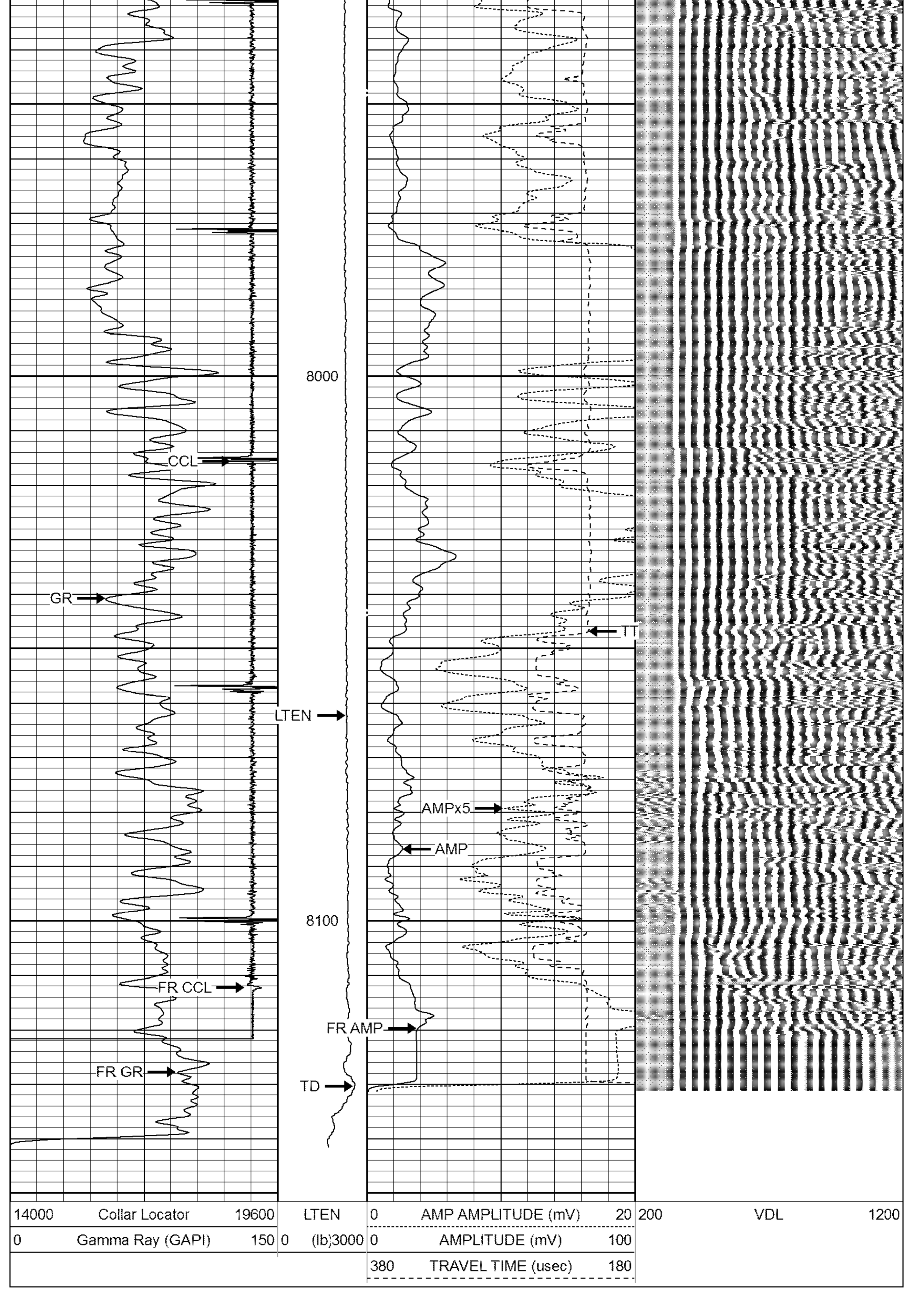
	Reference (degF)	Reading ()
Low:	0.000	0.000
High:	1.000	1.000
	Gain = 1.000	Offset= 0.000

ROCKY MOUNTAIN WIRELINE SERVICE

MAIN PASS

Database File: c:\warrior\data\bbc\11-d\071011_bbc_land_11d.db
Dataset Pathname: MAIN/pass3
Presentation Format: rmws_dsc
Dataset Creation: Mon Jul 11 08:13:32 2011
Charted by: Depth in Feet scaled 1:240

14000	Collar Locator	19600	LTEN		0	AMP AMPLITUDE (mV)	20	200	VDL	1200
0	Gamma Ray (GAPI)	150	0	(lb) 3000	0	AMPLITUDE (mV)	100			
					380	TRAVEL TIME (usec)	180			



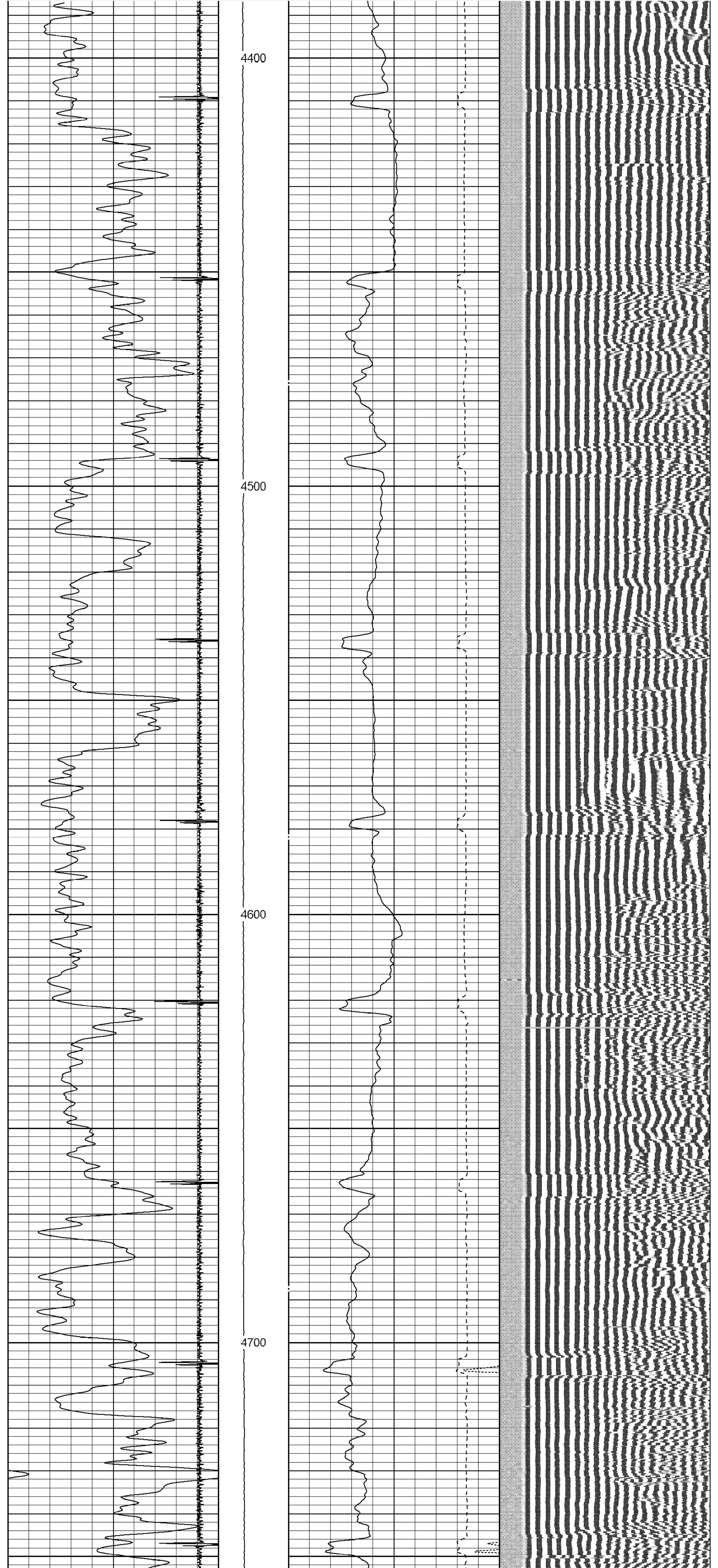
14000 Collar Locator 19600	LTEN	0 AMP AMPLITUDE (mV) 20	200 VDL 1200
0 Gamma Ray (GAPI) 150	0 (lb) 3000	0 AMPLITUDE (mV) 100	
		380 TRAVEL TIME (usec) 180	

ROCKY MOUNTAIN WIRELINE SERVICE

REPEAT PASS

Database File: c:\warrior\data\bbc\11-d\071011_bbc_land_11d.db
Dataset Pathname: REPEAT/pass3
Presentation Format: rmws_dsc
Dataset Creation: Sun Jul 10 11:28:02 2011 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240

12500 CCL 19700	LTEN	0 AMPx5 (mV) 20	200 VDL 1200
0 GR (GAPI) 150	0 (lb) 3000	0 AMP (mV) 100	
		380 TT (usec) 180	



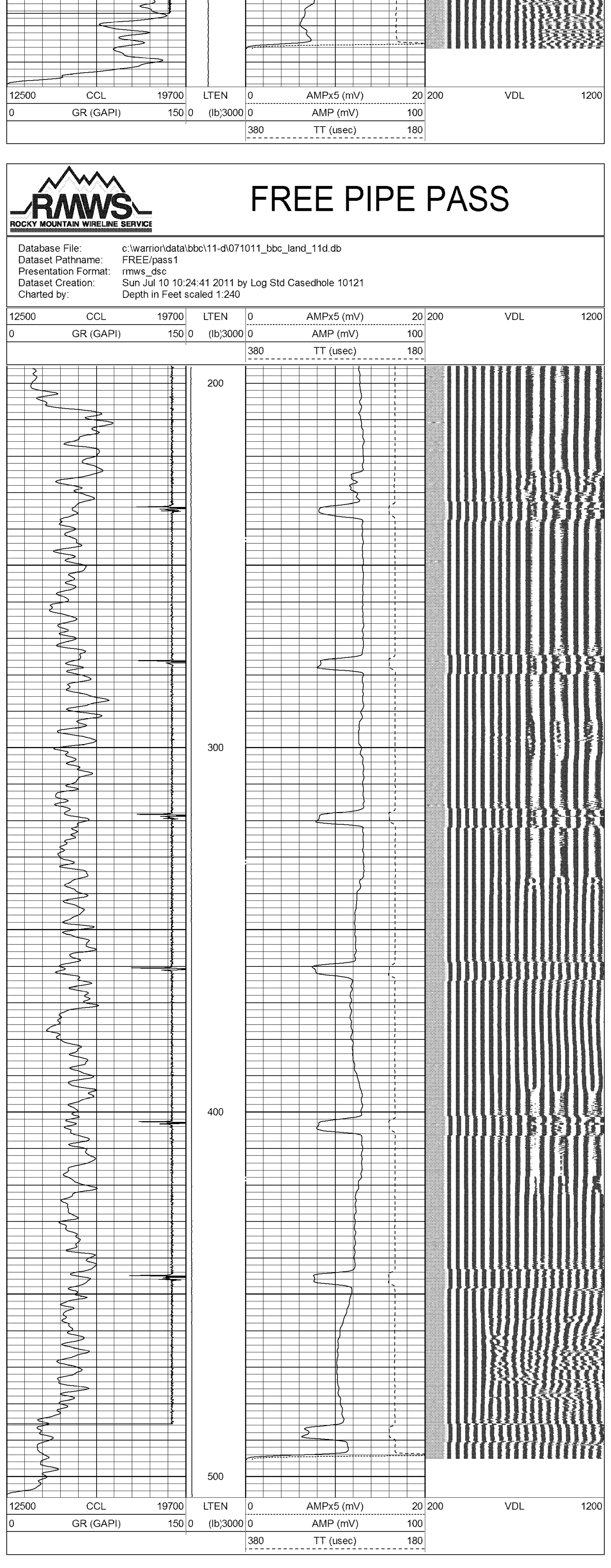
12500 CCL 19700	LTEN	0 AMPx5 (mV) 20	200 VDL 1200
0 GR (GAPI) 150	0 (lb) 3000	0 AMP (mV) 100	
		380 TT (usec) 180	

ROCKY MOUNTAIN WIRELINE SERVICE

FREE PIPE PASS

Database File: c:\warrior\data\bbc\11-d\071011_bbc_land_11d.db
Dataset Pathname: FREE/pass1
Presentation Format: rmws_dsc
Dataset Creation: Sun Jul 10 10:24:41 2011 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240

12500 CCL 19700	LTEN	0 AMPx5 (mV) 20	200 VDL 1200
0 GR (GAPI) 150	0 (lb) 3000	0 AMP (mV) 100	
		380 TT (usec) 180	



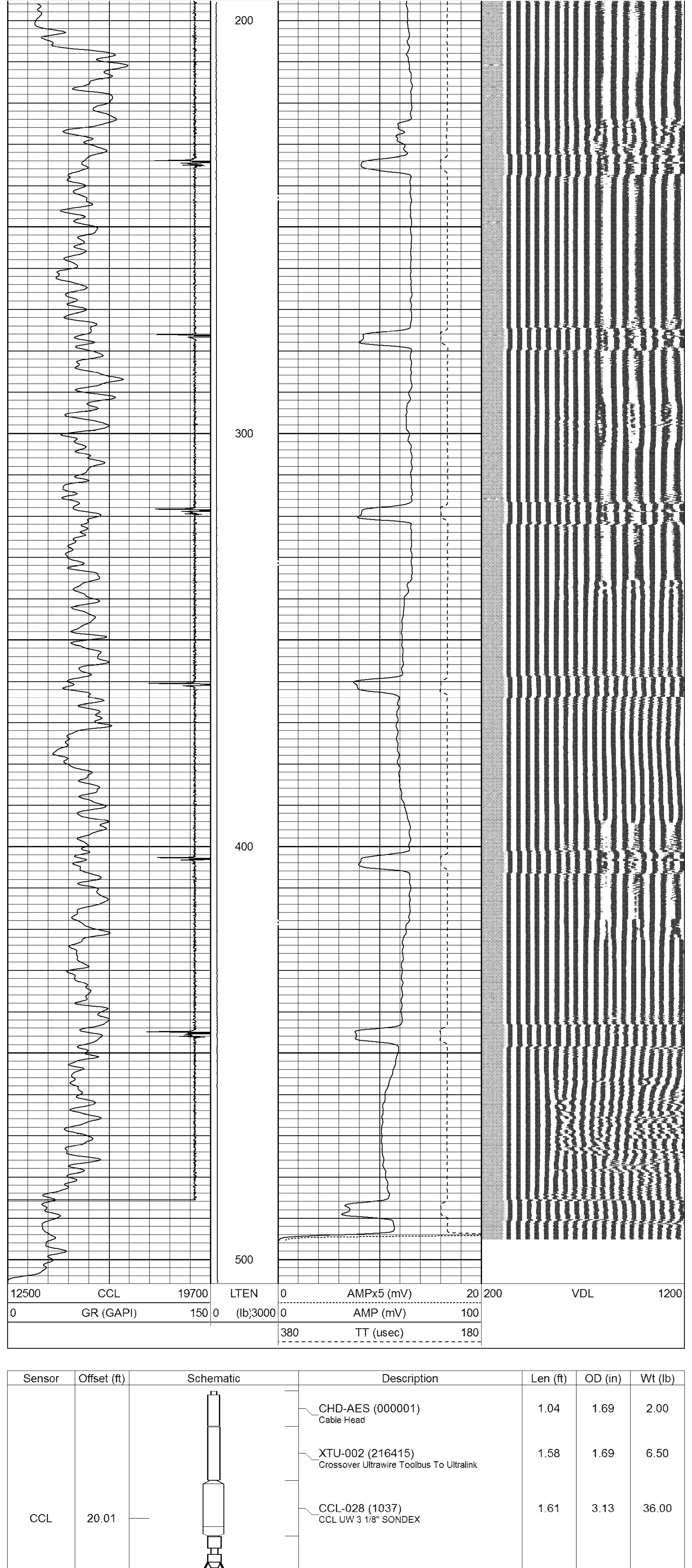
12500 CCL 19700	LTEN	0 AMPx5 (mV) 20	200 VDL 1200
0 GR (GAPI) 150	0 (lb) 3000	0 AMP (mV) 100	
		380 TT (usec) 180	

ROCKY MOUNTAIN WIRELINE SERVICE

FREE PIPE PASS

Database File: c:\warrior\data\bbc\11-d\071011_bbc_land_11d.db
Dataset Pathname: FREE/pass1
Presentation Format: rmws_dsc
Dataset Creation: Sun Jul 10 10:24:41 2011 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240

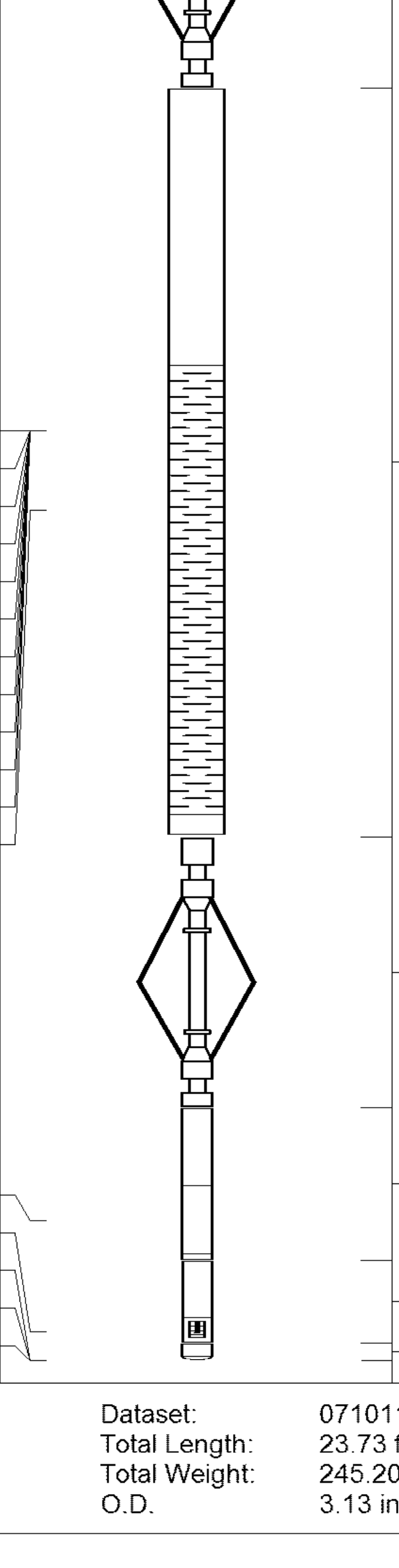
12500 CCL 19700	LTEN	0 AMPx5 (mV) 20	200 VDL 1200
0 GR (GAPI) 150	0 (lb) 3000	0 AMP (mV) 100	
		380 TT (usec) 180	



12500 CCL 19700	LTEN	0 AMPx5 (mV) 20	200 VDL 1200
0 GR (GAPI) 150	0 (lb) 3000	0 AMP (mV) 100	
		380 TT (usec) 180	

Sensor	Offset (ft)
CCL	20.01
WVF3FT	11.74
WVFS1	11.74
WVFS2	11.74
WVFS3	11.74
WVFS4	11.74
WVFS5	11.74
WVFS6	11.74
WVFS7	11.74
WVFS8	11.74
CBLTEMP	11.74
CBLROT	11.74
WVF5FT	10.74
GR	1.76
TEMP	0.37
TSTAMP	0.00
ITEMPX	0.00
HVOLTX	0.00

Schematic



Description	Len (ft)	OD (in)	Wt (lb)
CHD-AES (000001) Cable Head	1.04	1.69	2.00
XTU-002 (216415) Crossover Ultrawire Toolbus To Ultralink	1.58	1.69	6.50
CCL-028 (1037) CCL UW 3 1/8" SONDEX	1.61	3.13	36.00
SNDX 6 Arm PRC 022 W/ GO ADAPTORS	3.42	2.38	22.00
RBT-004 (1123) Radial Bond Tool (UW 3 1/8)	9.47	3.13	140.00
SNDX 6 Arm PRC 022 W/ GO ADAPTORS	3.42	2.38	22.00
PGR-020 (217692) Production Gamma Ray	1.93	1.69	9.50
PRT-016 (217894) Platinum Resistance Thermometer	1.04	1.69	6.00
BUL-006 (212965) Bullnose Terminator	0.22	1.69	1.20

Dataset: 071011_bbc_land_11d.db: field/well/TEMP/pass3
Total Length: 23.73 ft
Total Weight: 245.20 lb
O.D. 3.13 in

ROCKY MOUNTAIN WIRELINE SERVICE

Company	BILL BARRETT CORPORATION
Well	CB - TG - LAND 11D - 20 - 692
Field	MAMM CREEK
County	GARFIELD
State	COLORADO