RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

CEMENT BOND LOG
GAMMARAY / CCL
TEMPERATURE

Company BILL BARRETT CORPORATION
Well GGU FEDERAL 23D - 28 - 691
Field GIBSON GULCH
County GARFIELD State COLORADO
Location: API #: 05-045-19208
SHL: 2000' FNL & 1876' FWL
BHL: 2466' FSL & 1990' FWL
SEC 28 TWP 6S RGE 91W
Other Services
GAUGE RING
3.75"

Permanent Datum	G.L.	Elevation	6332'
Log Measured From	K.B.	Ft Above PD	22'
Drilling Measured From	K.B.		

Elevation
K.B. 6354'
D.F. 6353'
G.L. 6332'

Date	09-17-2010
Run Number	ONE
Depth Driller	7700'
Present Depth Driller	7594'
Depth Logger	7594'
Bottom Logged Interval	7594'
Top Log Interval	2350'
Fluid Level	SURFACE
Type Fluid	WATER
Max. Recorded Temp.	212.8°F
Estimated Cement Top	2650'
Equipment Number	216
Location	GRAND JCT.
Recorded By	HARRIS
Witnessed By	MR. BEAUXIS

	Borehole Record			Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	8.750"	830'	4721'	9.625"	36#	SURFACE	830'
TWO	7.880"	4721'	7700'	4.5"	11.6#	SURFACE	7700'

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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: THIS LOG WAS DEPTH CORRELATED TO THE WEATHERFORDOPEN HOLE LOG DATED 7-24-10
MAIN PASS 5" = 100'
TEMP PASS 2" =100'
CSG PSI = 0
SHORT JOINTS AT 5306' - 5328' AND 6422' - 6442'

Calibration Report
Database File: C:\Warrior\Data\BBC_KDH\091710_bbc_federal_23-B.db
Dataset Pathname: MAIN/pass2
Dataset Creation: Fri Sep 17 16:52:20 2010

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

Serial Number:	AJD00094	
Tool Model:	020	
Performed:	Fri Sep 17 09:18:41 2010	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.2000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	1122	
Tool Model:	004	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	142.387	ft

Master Calibration, performed Fri Sep 17 08:53:10 2010:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.034	0.869	0.000	81.196	97.273	1.000
5FT	0.020	0.922	0.000	81.196	90.086	-1.840
S1	0.030	0.891	0.000	100.000	116.102	-3.482
S2	0.029	0.915	0.000	100.000	112.852	-3.263
S3	0.028	0.863	0.000	100.000	119.768	-3.370
S4	0.027	0.850	0.000	100.000	121.563	-3.294
S5	0.029	0.846	0.000	100.000	122.443	-3.559
S6	0.028	0.855	0.000	100.000	120.996	-3.410
S7	0.030	0.876	0.000	100.000	118.122	-3.505
S8	0.029	0.883	0.000	100.000	117.086	-3.389

Calibration Report

Serial Number: 1122
Tool Model: 004
Performed:

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

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MAIN PASS

Database File: c:\warrior\data\bbc_kdh\091710_bbc_federal_23-b.db
Dataset Pathname: MAIN/pass2
Presentation Format: rmws_dsc
Dataset Creation: Fri Sep 17 16:52:20 2010
Charted by: Depth in Feet scaled 1:240

18800 Collar Locator 16700 0 Gamma Ray (GAPI) 150	LTEN 0 (lb)2000	0 AMP AMPLITUDE (mV) 20 0 AMPLITUDE (mV) 100 380 TRAVEL TIME (usec) 180	200 VDL 1200

18800	Collar Locator	16700	LTEN	0	AMP AMPLITUDE (mV)	20	200	VDL	1200
0	Gamma Ray (GAPI)	150	0 (lb)2000	0	AMPLITUDE (mV)	100			
				380	TRAVEL TIME (usec)	180			

MAIN PASS

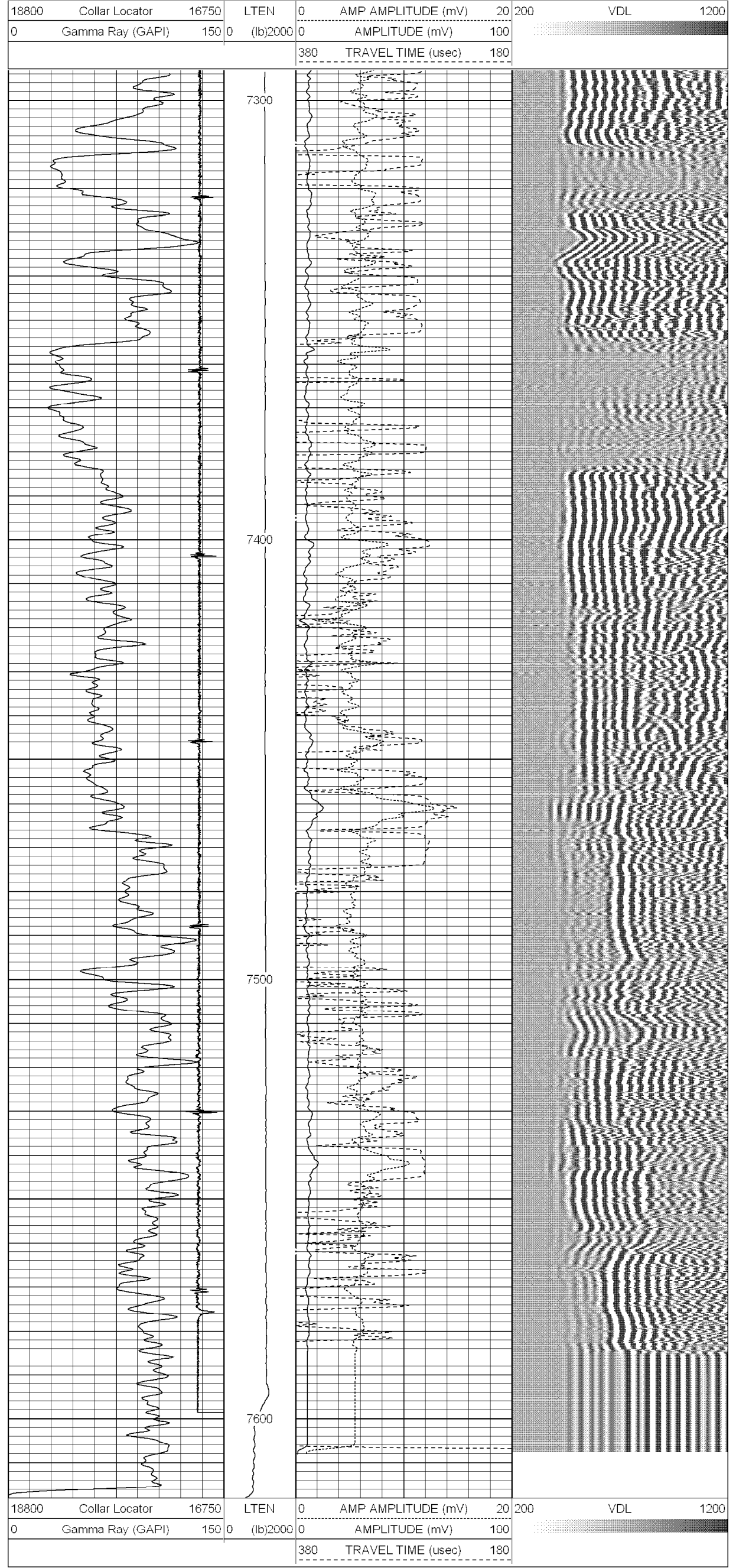
ROCKY MOUNTAIN WIRELINE SERVICE

REPEAT PASS

ROCKY MOUNTAIN WIRELINE SERVICE

Database File: c:\warrior\data\bbc_kdh\091710_bbc_federal_23-b.db
Dataset Pathname: REPEAT/pass1
Presentation Format: rmws_dsc
Dataset Creation: Fri Sep 17 10:18:24 2010 by Log Std Casedhole 07122
Charted by: Depth in Feet scaled 1:240

18800	Collar Locator	16750	LTEN	0	AMP AMPLITUDE (mV)	20	200	VDL	1200
0	Gamma Ray (GAPI)	150	0 (lb)2000	0	AMPLITUDE (mV)	100			
				380	TRAVEL TIME (usec)	180			



18800	Collar Locator	16750	LTEN	0	AMP AMPLITUDE (mV)	20	200	VDL	1200
0	Gamma Ray (GAPI)	150	0 (lb)2000	0	AMPLITUDE (mV)	100			
				380	TRAVEL TIME (usec)	180			

REPEAT PASS

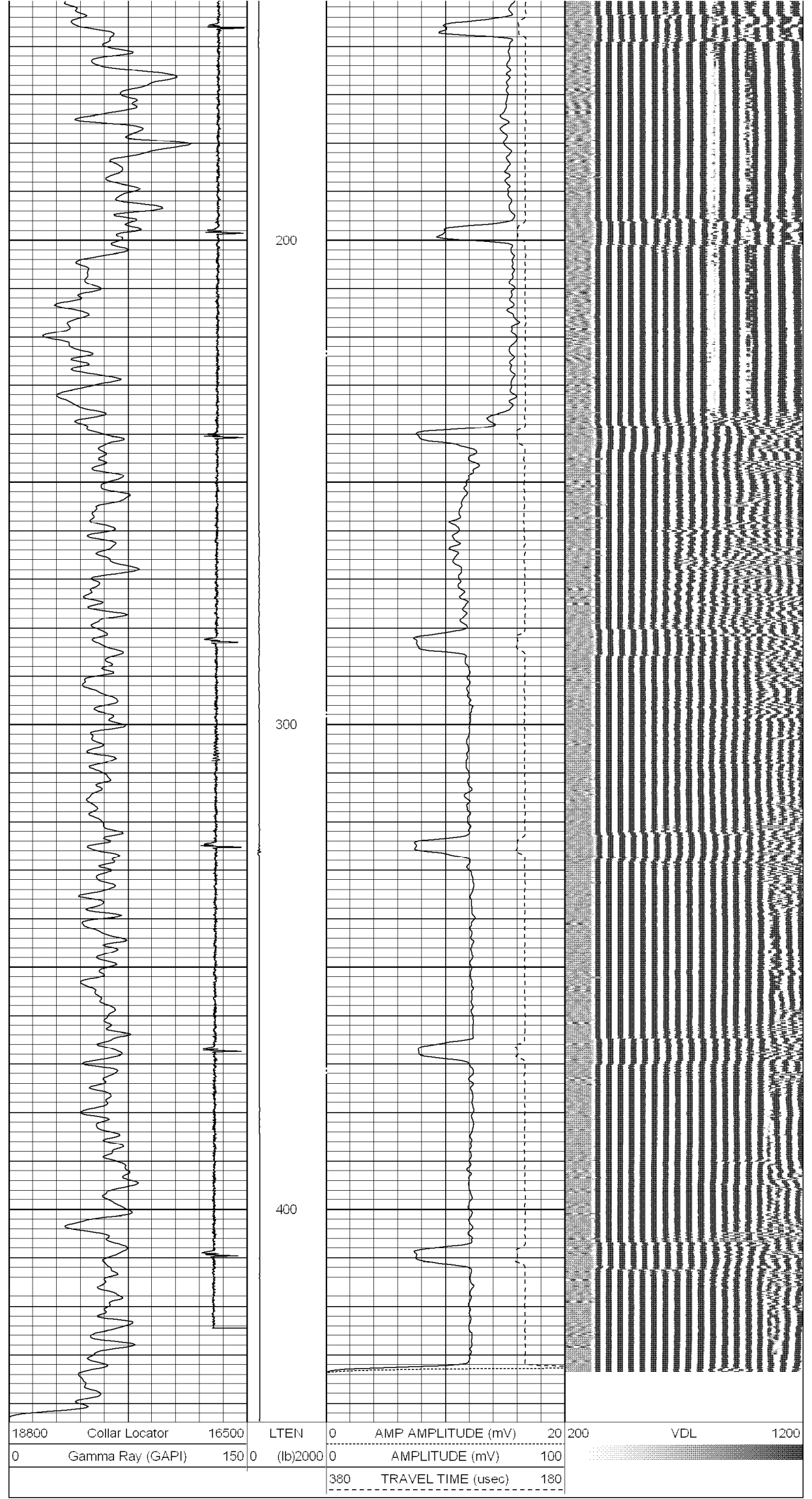
ROCKY MOUNTAIN WIRELINE SERVICE

FREE PIPE PASS

ROCKY MOUNTAIN WIRELINE SERVICE

Database File: c:\warrior\data\bbc_kdh\091710_bbc_federal_23-b.db
Dataset Pathname: FREE1/pass2
Presentation Format: rmws_dsc
Dataset Creation: Sat Sep 18 09:10:15 2010 by Calc Std Casedhole 07122
Charted by: Depth in Feet scaled 1:240

18800	Collar Locator	16500	LTEN	0	AMP AMPLITUDE (mV)	20	200	VDL	1200
0	Gamma Ray (GAPI)	150	0 (lb)2000	0	AMPLITUDE (mV)	100			
				380	TRAVEL TIME (usec)	180			



18800	Collar Locator	16500	LTEN	0	AMP AMPLITUDE (mV)	20	200	VDL	1200
0	Gamma Ray (GAPI)	150	0 (lb)2000	0	AMPLITUDE (mV)	100			
				380	TRAVEL TIME (usec)	180			

FREE PIPE PASS

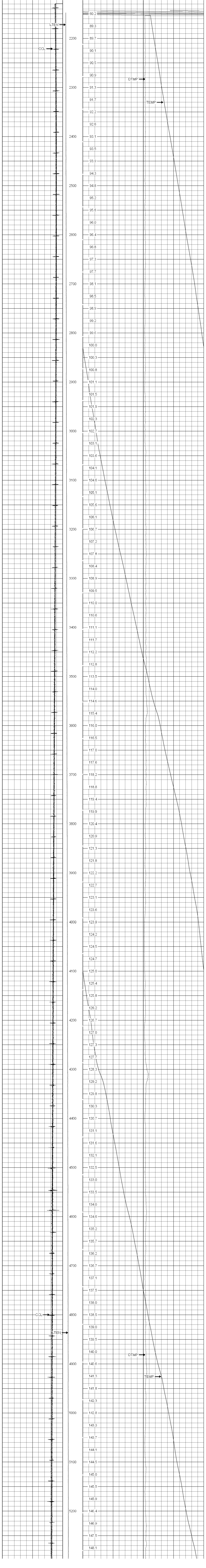
ROCKY MOUNTAIN WIRELINE SERVICE

TEMP PASS

ROCKY MOUNTAIN WIRELINE SERVICE

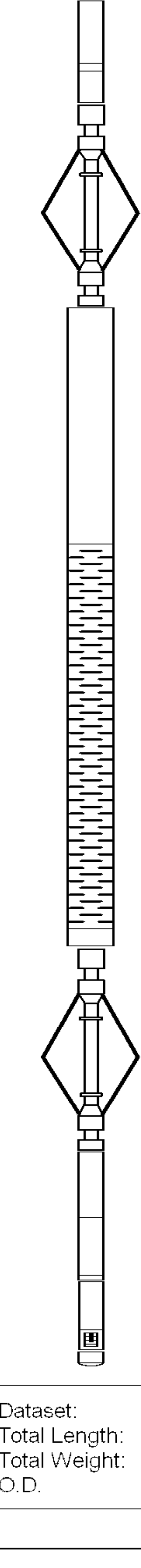
Database File: c:\warrior\data\bbc_kdh\091710_bbc_federal_23-b.db
Dataset Pathname: TEMP/pass1
Presentation Format: rmws_tem
Dataset Creation: Fri Sep 17 09:02:12 2010 by Log Std Casedhole 07122
Charted by: Depth in Feet scaled 1:600

18600	CCL	16700	LTEN	50	TEMP (degF)	75
			0 (lb)2000	-0.5	DTMP (degF)	0.5
				TEMP (degF)		



ROCKY MOUNTAIN WIRELINE SERVICE

TEMP PASS



Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			CHD-AES (000001) Cable Head	1.04	1.69	2.00
			XTU-002 (217219) Crossover Ultrawire Toolbus To Ultralink	1.58	1.69	6.50
CCL	19.20		CCL-015 (217601) Casing Collar Locator	1.54	1.69	9.00
			PRC-022 (215770) (6 ARM 2 3/8" ROLLER CENTRALIZER SONDEX)	3.00	2.38	21.40
WVF3FT WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 CBLTEMP CBLROT WVF5FT	11.32 11.32 11.32 11.32 11.32 11.32 11.32 11.32 11.32 11.32 11.32 10.32		RBT-004 (1122) Radial Bond Tool (UW 3 1/8)	9.47	3.13	140.00
			PRC-022 (215771) (6 ARM 2 3/8" ROLLER CENTRALIZER SONDEX)	3.00	2.38	21.40
GR	1.76		PGR-020 (AJD00094) Production Gamma Ray	1.93	1.69	9.50
TEMP TSTAMP ITEMPX	0.37 0.00 0.00		PRT-016 (217894) Platinum Resistance Thermometer	1.04	1.69	6.00
HVOLTX	0.00		BUL-006 (212965) Bullnose Terminator	0.22	1.69	1.20

Dataset: 091710_bbc_federal_23-B.db: field/well/MAIN/pass2
Total Length: 22.82 ft
Total Weight: 217.00 lb
O.D.: 3.13 in

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Company	BILL BERRETT CORPORATION
Well	GGU FEDERAL 23D - 28 - 691
Field	GIPSON GULCH
County	GARFIELD
State	COLORADO