RMWS ROCKY MOUNTAIN WIRELINE SERVICE

SECTOR BOND LOG
GAMMA RAY / CCL

Company WILLIAMS PRODUCTION RMT CO
Well CTR 323 - 25 - 597
Field GRAND VALLEY
County GARFIELD State COLORADO
Location: API # : 05 -045 - 16311
SHL: X: 1231038.10 Y:648736.70
BHL: X: 1229676.50 Y: 649152.70
SEC 25 TWP 5S RGE 97W
Other Services

Permanent Datum	G.L.	Elevation 8430'	Elevation K.B. 8457' D.F. 8456' G.L. 8430'
Log Measured From	K.B.	Ft Above PD 27'	
Drilling Measured From	K.B.		

Date	06 - 20 - 2010	
Run Number	ONE	
Depth Driller	9794'	
Present Depth Driller	8000'	
Depth Logger	8000'	
Bottom Logged Interval	7999'	
Top Log Interval	6500'	
Fluid Level	1000'	
Type Fluid	WATER	
Max. Recorded Temp.	NA	
Estimated Cement Top	NA	
Equipment Number	218	
Location	GRAND JCT.	
Recorded By	INGRAM	MCBROOM
Witnessed By	MR. TILLER	

Borehole Record				Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	14.75"	SURFACE	2893'	9.625"	32.3#	SURFACE	2893'
TWO	7.875"	2893'	9794'	4.5"	11.6"	SURFACE	9794'

<<< 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.

WARRIOR 7.0 SOFTWARE - Comments

NOTE: LOG WAS DEPTH CORRELATED USING HES ACOUSTIC CBL DATED 1-16-09
MAIN PASS 5" = 100'
MAIN PASS #1 CSG PSI = STATIC
MAIN PASS #2 CSG PSI = 1000

Calibration Report

Database File: 62010_williams_ctr323-25.db
Dataset Pathname: main0/pass1.2
Dataset Creation: Sun Jun 20 18:20:51 2010 by Calc Std Casedhole 08121

Gamma Ray Calibration Report

Serial Number: 217693
Tool Model: 020
Performed: Sun Jun 13 13:33:21 1993

Calibrator Value: 1.0

Background Reading: 0.0 cps
Calibrator Reading: 1.0 cps

Sensitivity: 1.0000 /cps

Segmented Cement Bond Log Calibration Report

Serial Number: 1122
Tool Model: 004

Calibration Casing Diameter: 4.500 in
Calibration Depth: 6674.571 ft

Master Calibration, performed Sun Jun 13 22:48:06 2010:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.032	1.059	1.000	81.196	64.108	1.000
5FT	0.018	0.832	1.000	81.196	69.513	1.000
S1	0.032	1.082	0.000	100.000	81.139	1.000
S2	0.031	1.145	0.000	100.000	73.912	1.000
S3	0.031	1.097	0.000	100.000	74.442	1.000
S4	0.029	1.059	0.000	100.000	73.796	1.000
S5	0.032	1.001	0.000	100.000	74.788	1.000
S6	0.032	0.975	0.000	100.000	78.085	1.000
S7	0.033	0.985	0.000	100.000	81.650	1.000
S8	0.031	1.026	0.000	100.000	83.118	1.000

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

RMWS ROCKY MOUNTAIN WIRELINE SERVICE

MAIN PASS #1

CSG PSI = STATIC

Database File: 62010_williams_ctr323-25.db
Dataset Pathname: main0/pass1.2
Presentation Format: rmws_scbl
Dataset Creation: Sun Jun 20 18:20:51 2010 by Calc Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

12000 CCL 19800	LTEN	0 AMP (mV) 100	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
0 GR 200	0 (lb)2000	0 AMPx5 (mV) 20	0 AMPMAX 150		0 80
		380 TT (usec) 180	0 AMPMIN 150		

12000 CCL 19800	LTEN	0 AMP (mV) 100	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
0 GR 200	0 (lb)2000	0 AMPx5 (mV) 20	0 AMPMAX 150		0 80
		380 TT (usec) 180	0 AMPMIN 150		

RMWS ROCKY MOUNTAIN WIRELINE SERVICE

MAIN PASS#1

CSG PSI = STATIC

RMWS ROCKY MOUNTAIN WIRELINE SERVICE

MAIN PASS #2

CSG PSI = 1000

Database File: 62010_williams_ctr323-25.db
Dataset Pathname: mainpass/pass3.2
Presentation Format: rmws_scbl
Dataset Creation: Sun Jun 20 18:17:25 2010 by Calc Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

12000 CCL 19800	LTEN	0 AMP (mV) 100	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
0 GR 200	0 (lb)2000	0 AMPx5 (mV) 20	0 AMPMAX 150		0 80
		380 TT (usec) 180	0 AMPMIN 150		

12000 CCL 19800	LTEN	0 AMP (mV) 100	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
0 GR 200	0 (lb)2000	0 AMPx5 (mV) 20	0 AMPMAX 150		0 80
		380 TT (usec) 180	0 AMPMIN 150		

RMWS ROCKY MOUNTAIN WIRELINE SERVICE

MAIN PASS #2

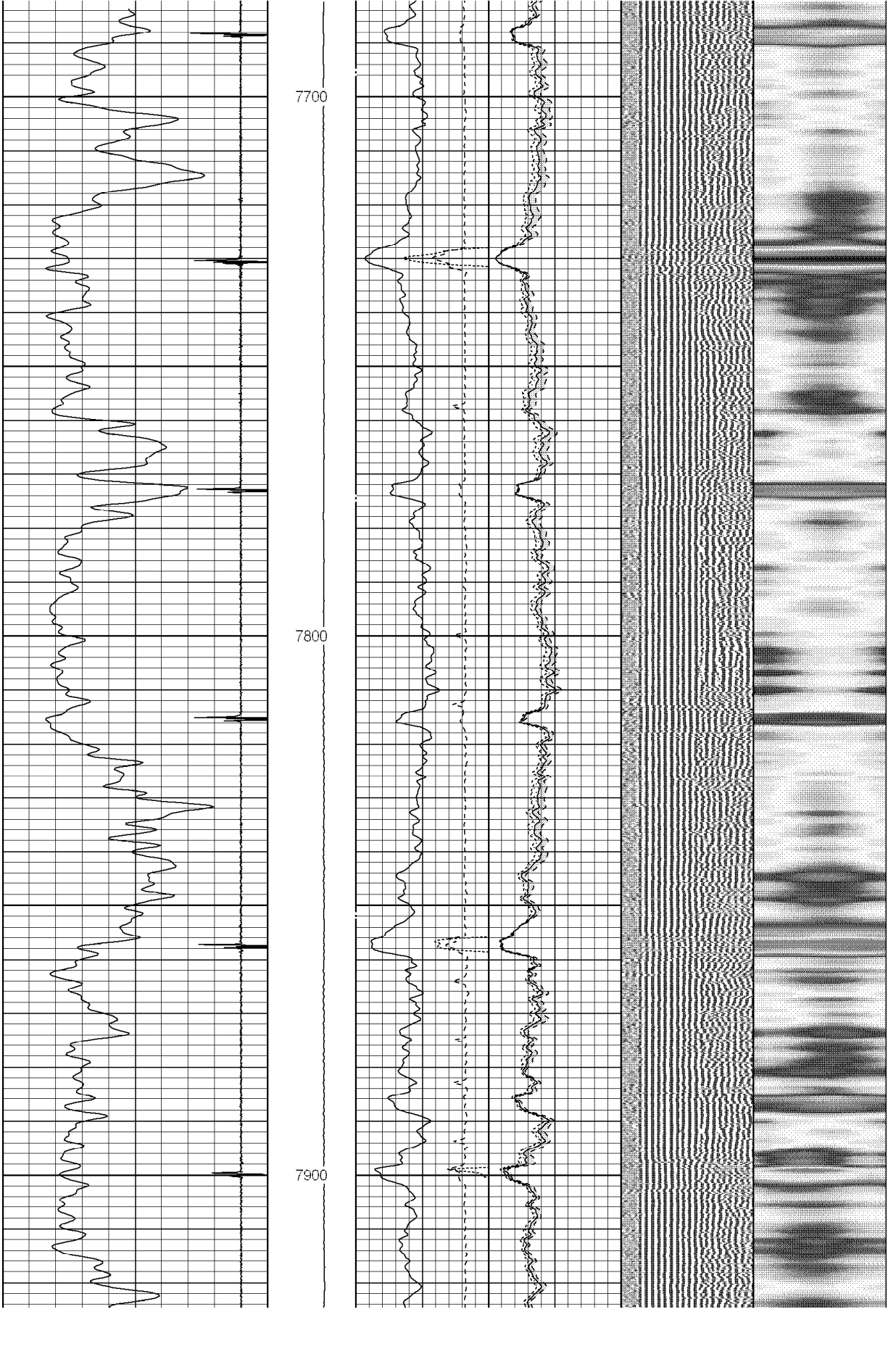
CSG PSI = 1000

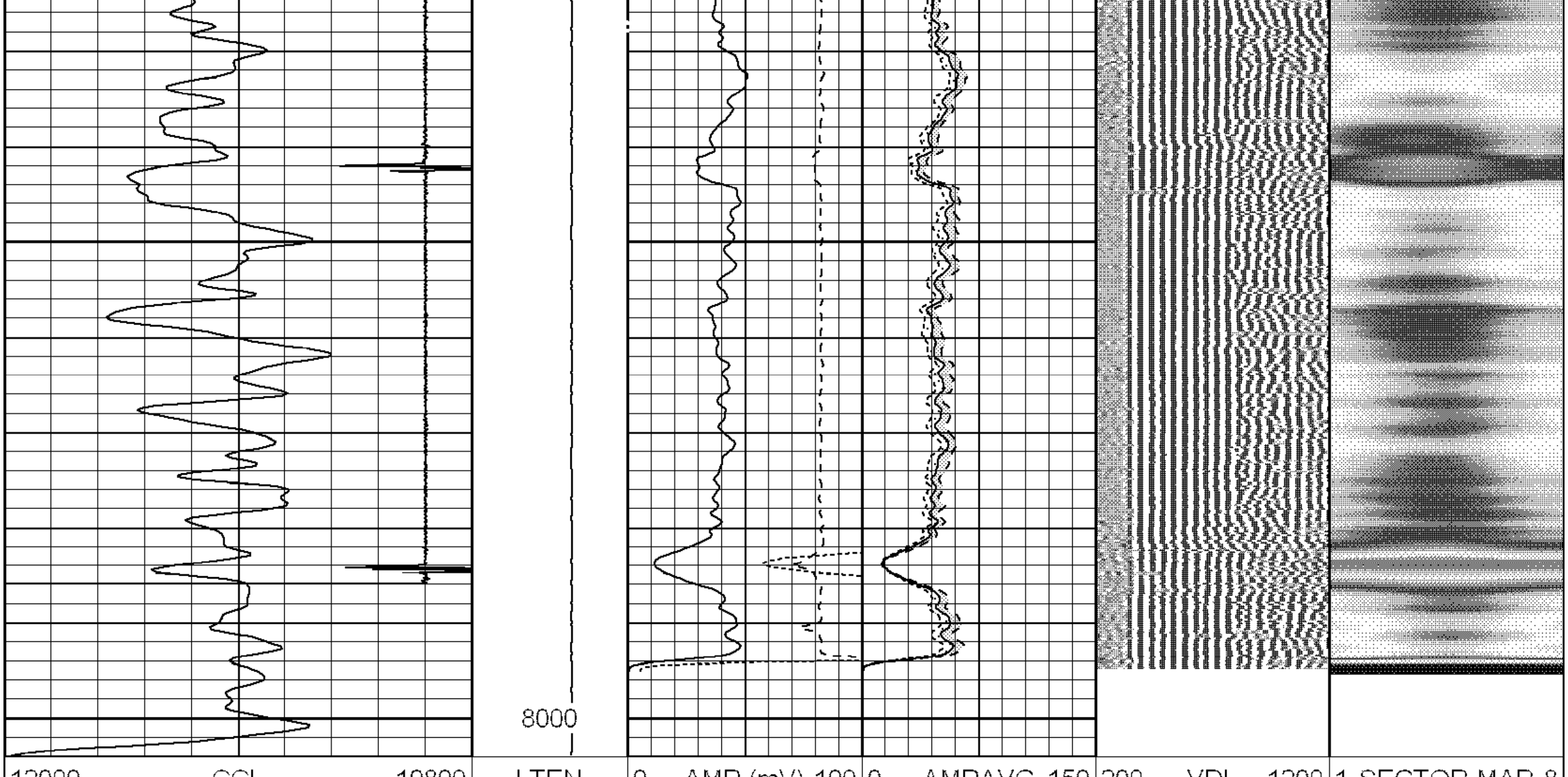
RMWS ROCKY MOUNTAIN WIRELINE SERVICE

REPEAT PASS

Database File: 62010_williams_ctr323-25.db
Dataset Pathname: down/pass2.1
Presentation Format: rmws_scbl
Dataset Creation: Sun Jun 20 18:40:48 2010 by Calc Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

12000 CCL 19800	LTEN	0 AMP (mV) 100	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
0 GR 200	0 (lb)2000	0 AMPx5 (mV) 20	0 AMPMAX 150		0 80
		380 TT (usec) 180	0 AMPMIN 150		





12000 CCL 19800	LTEN	0 AMP (mV) 100	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
0 GR 200	0 (lb)2000	0 AMPx5 (mV) 20	0 AMPMAX 150		0 80
		380 TT (usec) 180	0 AMPMIN 150		

RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

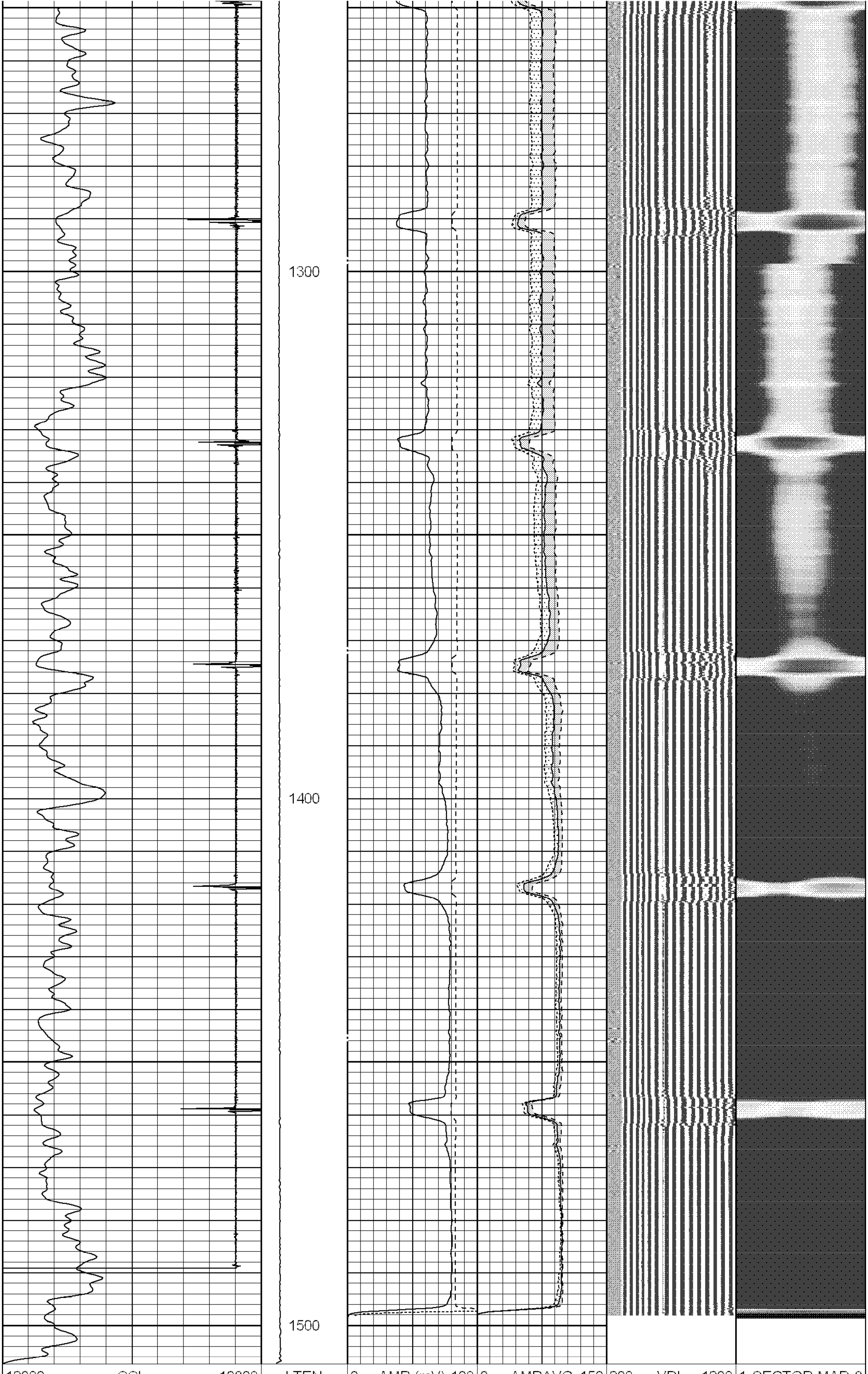
REPEAT PASS

RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

FREE PIPE PASS

Database File:	62010_williams_ctr323-25.db
Dataset Pathname:	freepipe/pass1.1
Presentation Format:	rmws_scbl
Dataset Creation:	Sun Jun 20 17:46:25 2010 by Calc Std Casedhole 08121
Charted by:	Depth in Feet scaled 1:240

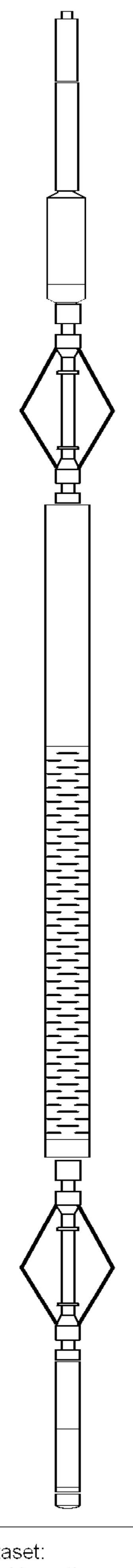
12000 CCL 19800	LTEN	0 AMP (mV) 100	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
0 GR 200	0 (lb)2000	0 AMPx5 (mV) 20	0 AMPMAX 150		0 80
		380 TT (usec) 180	0 AMPMIN 150		



12000 CCL 19800	LTEN	0 AMP (mV) 100	0 AMPAVG 150	200 VDL 1200	1 SECTOR MAP 8
0 GR 200	0 (lb)2000	0 AMPx5 (mV) 20	0 AMPMAX 150		0 80
		380 TT (usec) 180	0 AMPMIN 150		

RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

FREE PIPE 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	17.93		CCL-028 (1037) CCL UW 3 1/8" SONDEX	1.61	3.13	36.00
			PRC-062 (C-1103) 4ARM 2 3/4" ROLLER	2.90	2.75	34.00
WVF3FT WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 CBLTEMP CBLROT WVF5FT	10.18 10.18 10.18 10.18 10.18 10.18 10.18 10.18 10.18 10.18 10.18 9.18		RBT-004 (1122) Radial Bond Tool (UW 3 1/8)	9.47	3.13	140.00
			PRC-062 (C-1099) 4ARM 2 3/4" ROLLER	2.90	2.75	34.00
GR TSTAMP	0.72 0.00		PGR-020 (217693) Production Gamma Ray	1.93	1.69	9.50
ITEMPX HVOLTX	0.00 0.00		BUL-006 (212965) Bullnose Terminator	0.22	1.69	1.20

Dataset:	62010_williams_ctr323-25.db: field/well/main0/pass1.2
Total Length:	21.65 ft
Total Weight:	263.20 lb
O.D.	3.13 in