ROCKY MOUNTAIN WIRELINE SERVICE

CEMENT BOND LOG
GAMMA RAY / CCL

Company	WILLIAMS PRODCUTION RMT CO.		
Well	GM 34-32		
Field	GRAND VALLEY		
County	GARFIELD	State	COLORADO
Location:	API # : 05-045-17829 SHL: 2621' FNL & 1132' FEL BHL: 0987' FSL & 1913' FEL	Other Services	
	SEC 32 TWP 6S RGE 96W		
Permanent Datum	G.L.	Elevation 5948'	Elevation K.B. 5972' D.F. 5971' G.L. 5948'
Log Measured From	K.B.	Ft Above PD 24'	
Drilling Measured From	K.B.		

Date	12 - 17 - 2010		
Run Number	ONE		
Depth Driller	7196'		
Present Depth Driller	NA		
Depth Logger	5100'		
Bottom Logged Interval	5099'		
Top Log Interval	4500'		
Fluid Level	750'		
Type Fluid	WATER		
Max. Recorded Temp.	NA		
Estimated Cement Top	SEE LOG		
Equipment Number	208		
Location	GRAND JCT.		
Recorded By	INGRAM		
Witnessed By	MR. SNOW		

Borehole Record				Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	13.5"	SURFACE	1039'	9.625"	36#	SURFACE	1039'
TWO	7.875"	SURFACE	7196'	4.5"	11.6#	SURFACE	7196'

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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 BAKER RADIAL BOND LOG DATED 9-9-10
MAIN PASS 5" = 100'
CSG PSI = STATIC

Calibration Report

Database File: 121710_williams_gm_34_32.db
Dataset Pathname: main/pass1.1
Dataset Creation: Fri Dec 17 17:46:08 2010 by Calc Std Casedhole 08121

Gamma Ray Calibration Report

Serial Number:	AJD00166	
Tool Model:	020	
Performed:	Sun Jun 13 13:33:21 1993	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	1123	
Tool Model:	004	
Calibration Casing Diameter:	4.500	in
Calibration Depth:	944.971	ft

Master Calibration, performed Fri Dec 17 17:45:13 2010:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.000	0.855	1.000	81.196	93.785	1.000
5FT	0.000	0.873	1.000	81.196	91.826	1.000
S1	0.000	0.933	0.000	100.000	107.229	-0.000
S2	0.000	0.879	0.000	100.000	113.726	-0.000
S3	0.000	0.825	0.000	100.000	121.143	-0.000
S4	0.000	0.811	0.000	100.000	123.286	-0.000
S5	0.000	0.830	0.000	100.000	120.459	-0.000
S6	0.000	0.884	0.000	100.000	113.077	-0.000
S7	0.000	0.936	0.000	100.000	106.809	-0.000
S8	0.000	0.953	0.000	100.000	104.908	-0.000

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

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MAIN PASS

Database File: 121710_williams_gm_34_32.db
Dataset Pathname: main/pass1.1
Presentation Format: rmws_dsc
Dataset Creation: Fri Dec 17 17:46:08 2010 by Calc Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

15500	CCL	19200	LTEN		0	AMPx5 (mV)	20	200	VDL	1200
0	GR (GAPI)	150	0	(lb)3000	0	AMP (mV)	100			
					380	TT (usec)	180			

15500	CCL	19200	LTEN		0	AMPx5 (mV)	20	200	VDL	1200
0	GR (GAPI)	150	0	(lb)3000	0	AMP (mV)	100			
					380	TT (usec)	180			

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MAIN PASS

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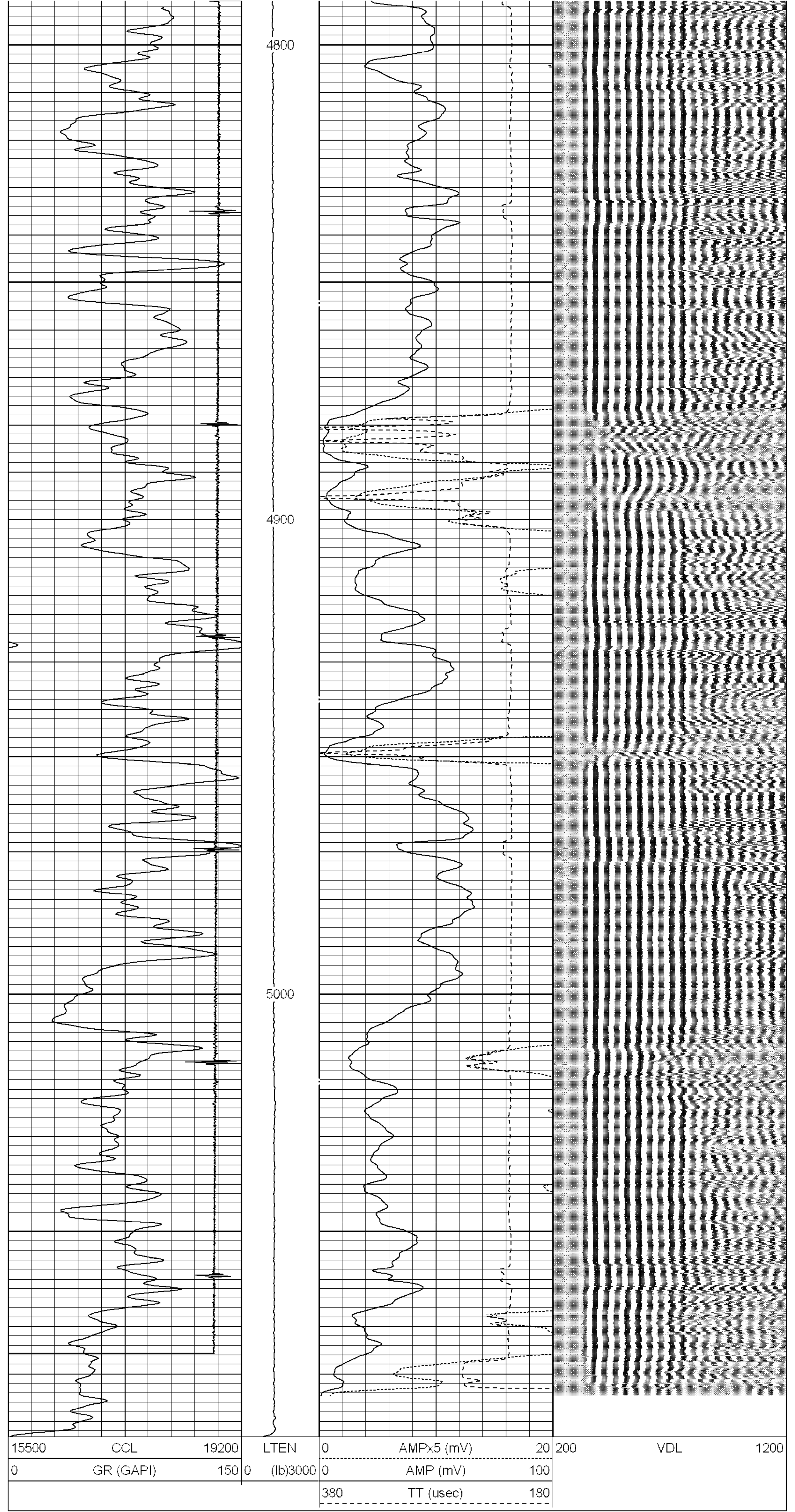
REPEAT PASS

Database File: 121710_williams_gm_34_32.db
Dataset Pathname: repeat/pass1.1
Presentation Format: rmws_dsc
Dataset Creation: Fri Dec 17 17:47:46 2010 by Calc Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

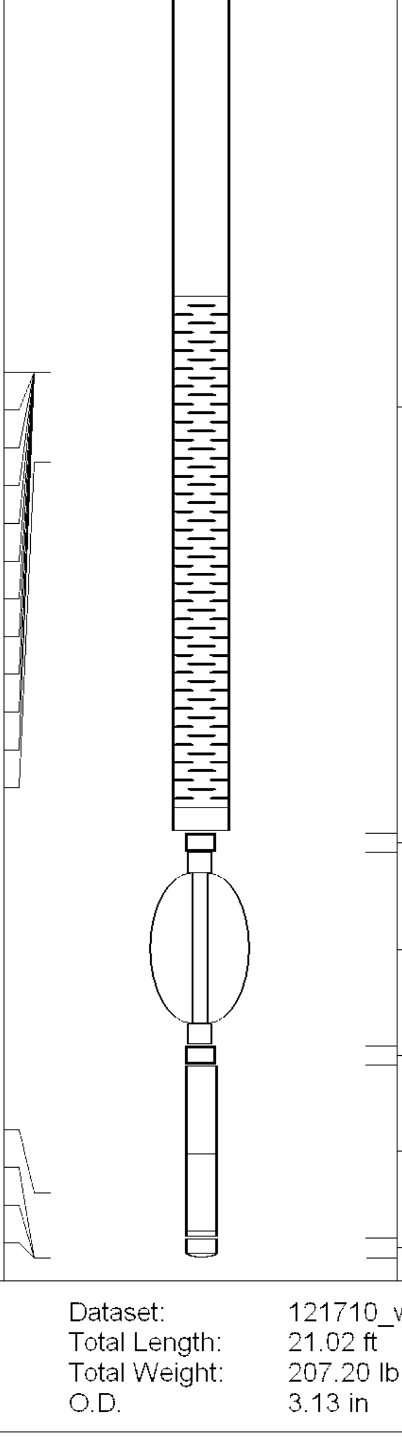
15500	CCL	19200	LTEN		0	AMPx5 (mV)	20	200	VDL	1200
0	GR (GAPI)	150	0	(lb)3000	0	AMP (mV)	100			
					380	TT (usec)	180			



15500	CCL	19200	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

REPEAT PASS



Sensor	Offset (ft)	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	17.30	CCL-028 (1036) CCL UW 3 1/8" SONDEX	1.61	3.13	36.00
		SONDEX/GO SONDEX/GO	0.21	1.69	0.50
		TITAN169 Titan 1 11/16" Centralizer	2.17	1.69	5.00
		SONDEX/GO SONDEX/GO	0.21	1.69	0.50
WVF3FT WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 CBLTEMP CBLROT WVF5FT	9.86 9.86 9.86 9.86 9.86 9.86 9.86 9.86 9.86 9.86 9.86 8.86	RBT-004 (1123) Radial Bond Tool (UW 3 1/8)	9.47	3.13	140.00
		SONDEX/GO SONDEX/GO	0.21	1.69	0.50
		TITAN169 Titan 1 11/16" Centralizer	2.17	1.69	5.00
		SONDEX/GO SONDEX/GO	0.21	1.69	0.50
GR TSTAMP	0.72 0.00	PGR-020 (AJD00166) 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: 121710_williams_gm_34_32.db: field/well/main/pass1.1
Total Length: 21.02 ft
Total Weight: 207.20 lb
O.D. 3.13 in

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Company	WILLIAMS PRODCUTION RMT CO.
Well	GM 34-32
Field	GRAND VALLEY
County	GARFIELD
State	COLORADO