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
SEC 32 TWP 6S RGE 96W

Other Services

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	11 - 19 - 2010
Run Number	ONE
Depth Driller	7196'
Present Depth Driller	NA
Depth Logger	6920'
Bottom Logged Interval	6921'
Top Log Interval	4700'
Fluid Level	400'
Type Fluid	WATER
Max. Recorded Temp.	NA
Estimated Cement Top	5080'
Equipment Number	208
Location	GRAND JCT.
Recorded By	INGRAM
Witnessed By	MR. MIKE SNOW

Run Number	Borehole Record Bit	From	To	Casing Record 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 any one 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: 111910_williams_gm_34_32.db
Dataset Pathname: main/pass1.2
Dataset Creation: Fri Nov 19 12:29:39 2010 by Calc Std Casedhole 08121

Gamma Ray Calibration Report

Serial Number:	TEKCO234_352	
Tool Model:	TEKCO234	
Performed:	Sat Oct 16 12:26:26 2010	
Calibrator Value:	1.0	
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.0000	/cps

CBL Calibration Report

Serial Number:	TEKCO_8043		
Tool Model:	TEKCO		
Performed:	Fri Nov 19 12:28:52 2010		
Depth:	4582.929	ft	
Casing Diameter:	4.500	in	
	3' Spacing	5' Spacing	
Signal Zero:	1.000	1.000	mV
Calibrated Amplitude:	81.196	81.196	mV
Reading at Signal Zero:	0.000	0.000	V
Reading in Free Pipe:	1.626	1.626	V
Gain:	49.317	49.311	
Offset:	0.999	1.000	

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MAIN PASS

Database File: 111910_williams_gm_34_32.db
Dataset Pathname: main/pass1.2
Presentation Format: rmws_dsc
Dataset Creation: Fri Nov 19 12:29:39 2010 by Calc Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240

ROCKY MOUNTAIN WIRELINE SERVICE

MAIN PASS

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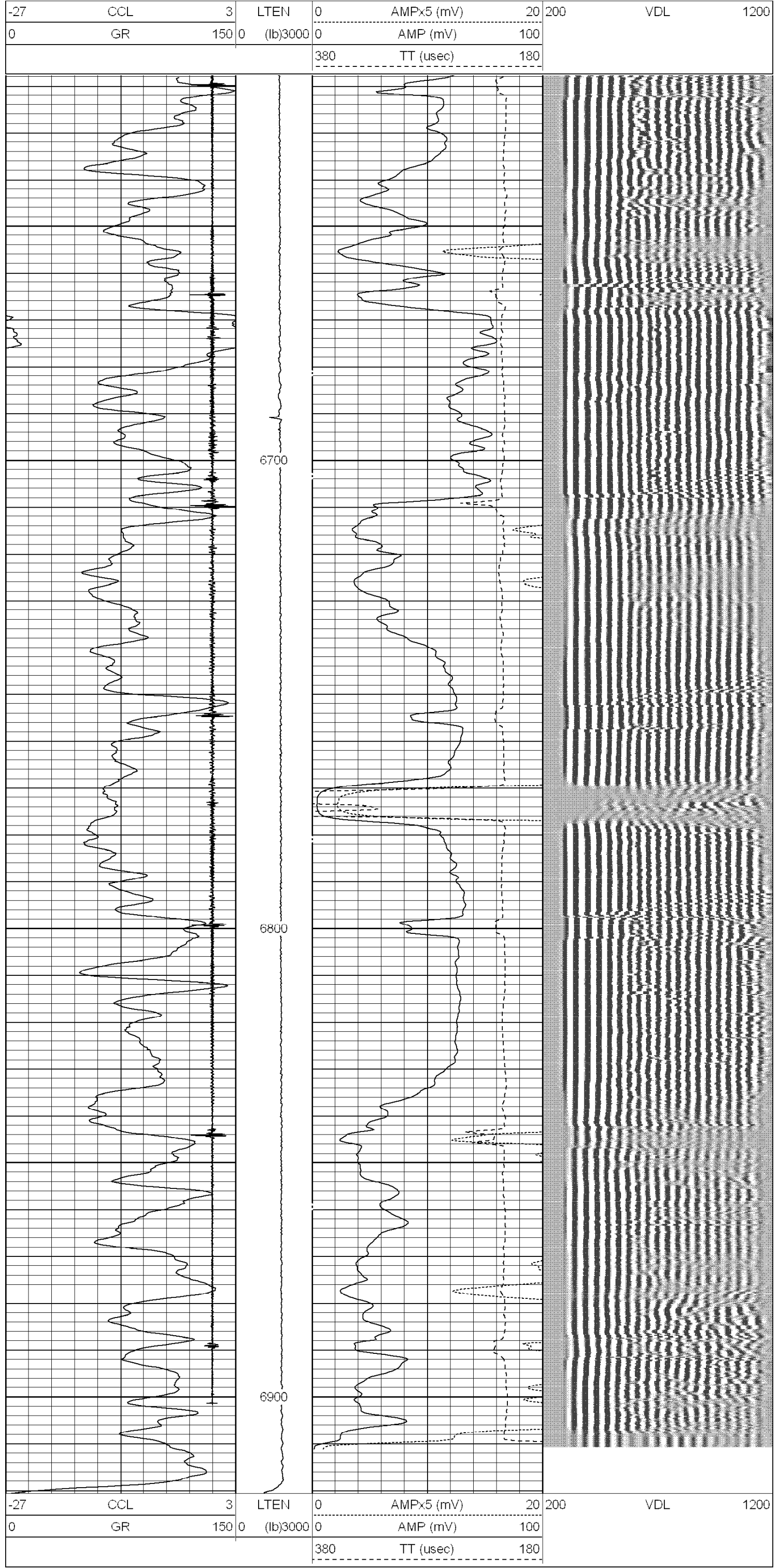
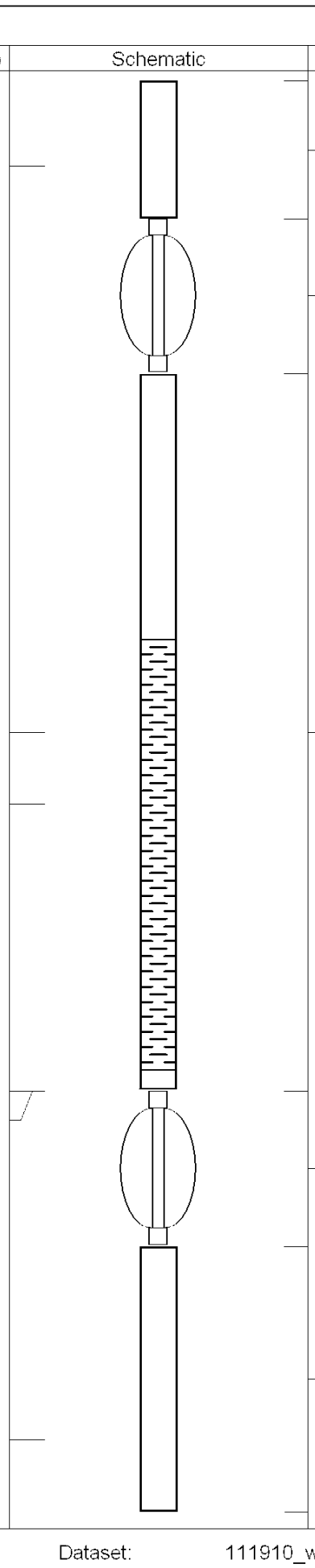
REPEAT PASS

Database File: 111910_williams_gm_34_32.db
Dataset Pathname: repeat/pass1.1
Presentation Format: rmws_dsc
Dataset Creation: Fri Nov 19 12:33:21 2010 by Calc Std Casedhole 08121
Charted by: Depth in Feet scaled 1:240



ROCKY MOUNTAIN WIRELINE SERVICE

REPEAT PASS



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
CCL	18.75	CCL-TITAN275 (TITAN275_102) Titan 2 3/4" CCL	1.92	2.75	10.00
		TITAN169 Titan 1 11/16" Centralizer	2.17	1.69	5.00
WVF3FT	10.85	CBLTEKCO-TEKCO (TEKCO_8043) DEMO TOOL - DEMINSIONS INVALID	10.00	3.25	50.00
WVF5FT	9.85				
WVFCAL	5.85				
WVFSYNC	5.85	TITAN169 Titan 1 11/16" Centralizer	2.17	1.69	5.00
GR	1.00	GR-TEKCO234 (TEKCO234_352) Tekco 2 3/4" Gamma Ray	3.69	2.75	20.00

Dataset: 111910_williams_gm_34_32.db: field/well/main/pass1.2
Total Length: 19.94 ft
Total Weight: 90.00 lb
O.D. 3.25 in

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