ROCKY MOUNTAIN WIRELINE SERVICE

CEMENT BOND LOG
GAMMA RAY / CCL

Company	**WILLIAMS PRODUCTION RMT CO**
Well	**PA 442 - 12**
Field	**PARACHUTE**
County	**GARFIELD** State **CO**

Location: API # : 05 - 045 - 19022

SHL: 421' FNL & 1930' FEL
BHL: 2071' FNL & 335' FEL

SEC 12 TWP 7S RGE 95W

Other Services

Permanent Datum	G.L.	Elevation	6289'
Log Measured From	K.B.	Ft Above PD	26'
Drilling Measured From	K.B.		

Elevation
K.B. 6315'
D.F. 6314'
G.L. 6289'

Date	03 - 11 - 2011		
Run Number	ONE		
Depth Driller	8662'		
Present Depth Driller	6975'		
Depth Logger	6975'		
Bottom Logged Interval	6974'		
Top Log Interval	5900'		
Fluid Level	300'		
Type Fluid	WATER		
Max. Recorded Temp.	NA		
Estimated Cement Top	SEE LOG		
Equipment Number	216		
Location	GRAND JCT.		
Recorded By	INGRAM		
Witnessed By	MR. MIKE SNOW		

Borehole Record				Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	13.5"	SURFACE	1300'	9.625"		SURFACE	1300'
TWO	7.875"	SURFACE	8662'	4.5"	11.6#	SURFACE	8662'

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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 CEMENT BOND LOG DATED 1-17-2011
MAIN PASS 5" = 100'
CSG PSI = 1000#

Calibration Report

Database File: 031111_williams_pa442_12.db
Dataset Pathname: run1.1/MAIN.1
Dataset Creation: Fri Mar 11 09:15:49 2011 by Calc Std Casedhole 07122

Gamma Ray Calibration Report

Serial Number:	TEKO234_359	
Tool Model:	TEKCO234	
Performed:	Thu Dec 17 10:09:12 2009	
Calibrator Value:	1.0	
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.1000	/cps

CBL Calibration Report

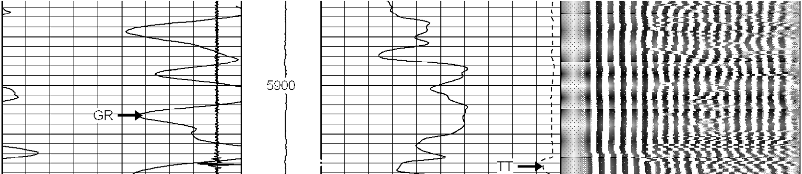
Serial Number:	TEKCO_8043		
Tool Model:	TEKCO		
Performed:	Fri Mar 11 09:15:01 2011		
Depth:	580.388	ft	
Casing Diameter:	4.500	in	
	3' Spacing	5' Spacing	
Signal Zero:	1.000	1.000	mV
Calibrated Amplitude:	81.196	81.196	mV
Reading at Signal Zero:	0.000	0.000	V
Reading in Free Pipe:	0.674	0.867	V
Gain:	119.002	92.469	
Offset:	1.000	1.000	

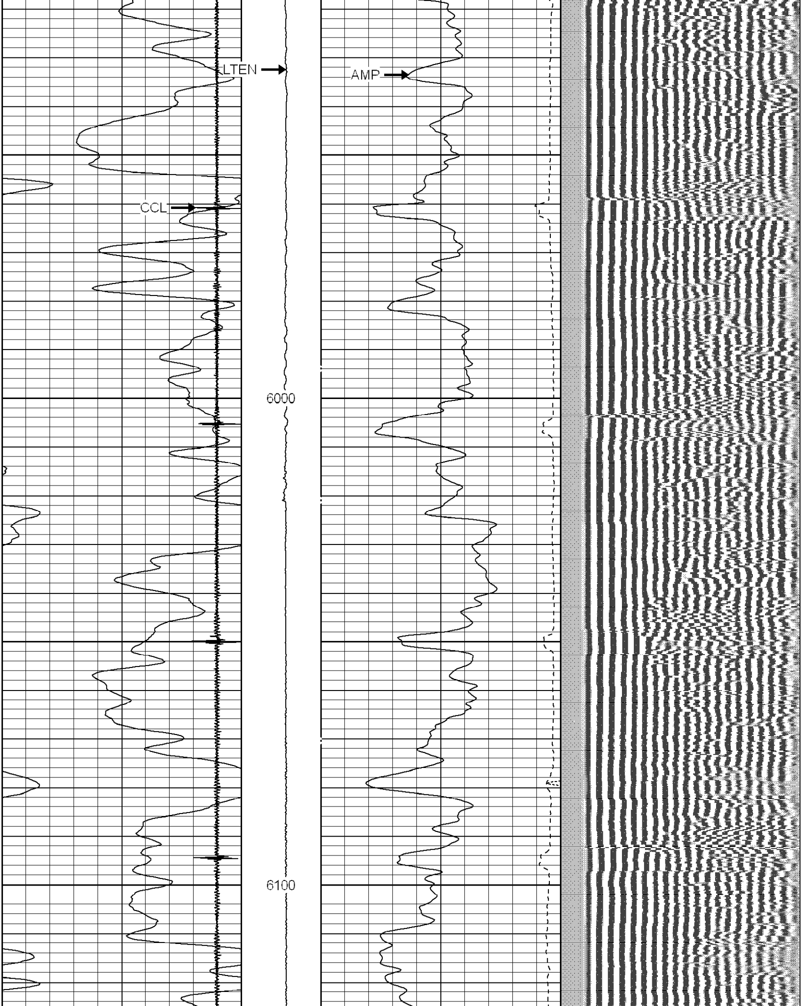
RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

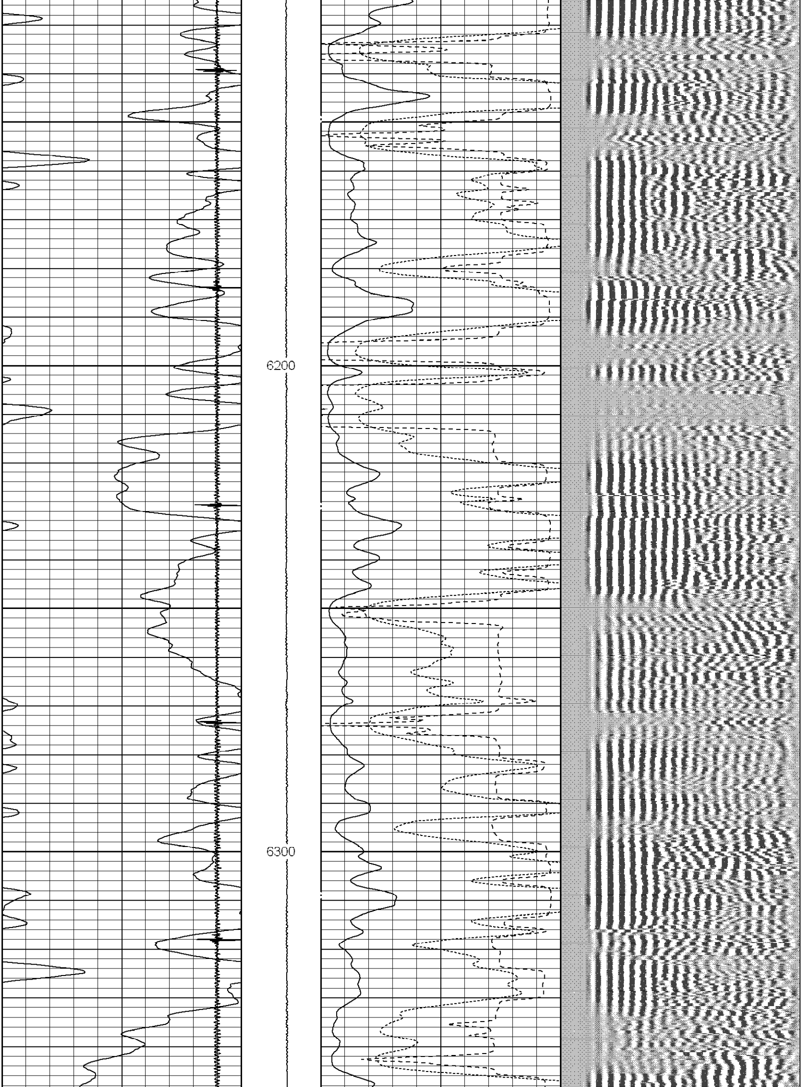
MAIN PASS

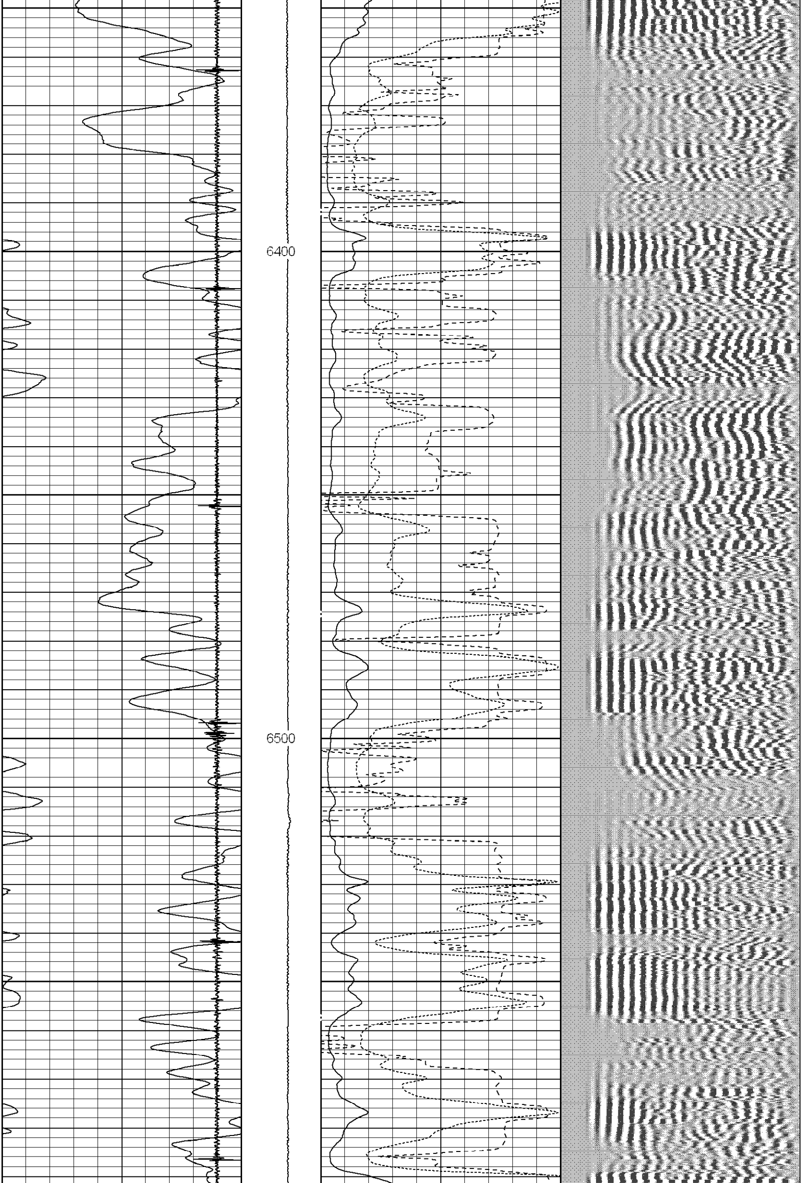
Database File: 031111_williams_pa442_12.db
Dataset Pathname: run1.1/MAIN.1
Presentation Format: rmws_dsc
Dataset Creation: Fri Mar 11 09:15:49 2011 by Calc Std Casedhole 07122
Charted by: Depth in Feet scaled 1:240

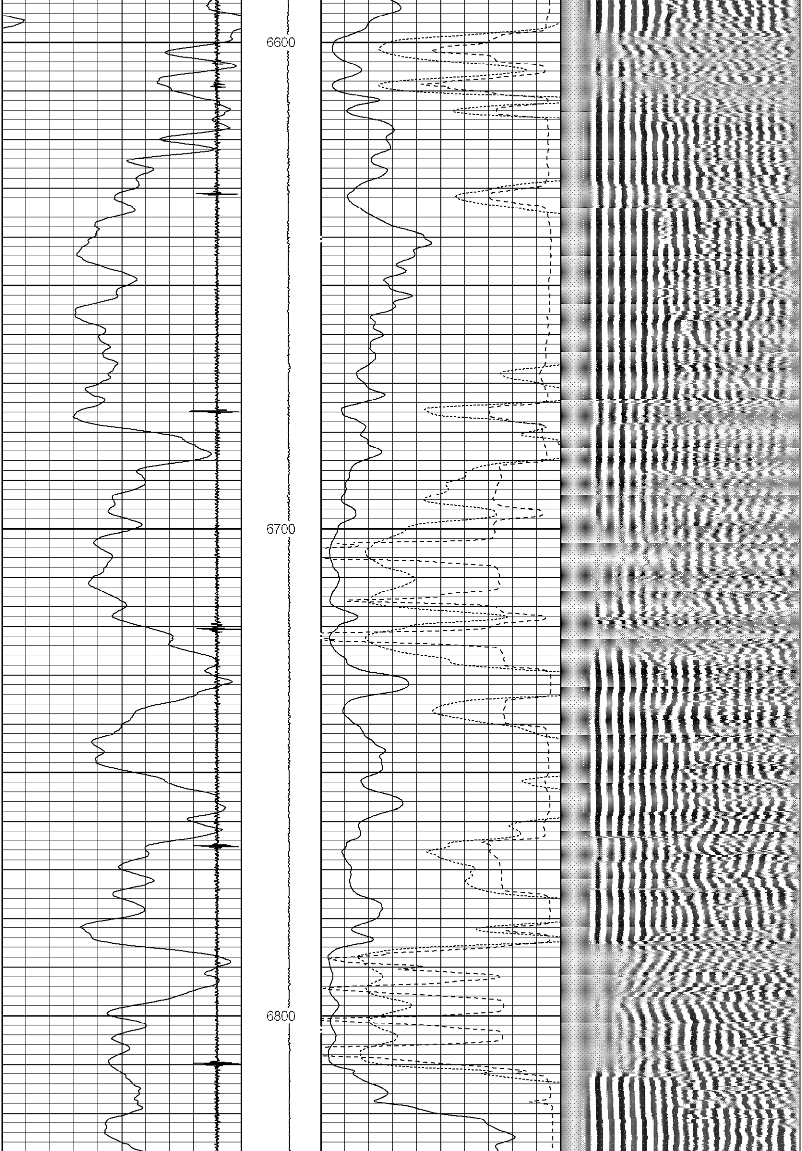
-27 Collar Locator 3	LTEN	0 AMP AMPLITUDE (mV) 20	200 VDL 1200
0 Gamma Ray 150	0 (lb)2000	0 AMPLITUDE (mV) 100	
		380 TRAVEL TIME (usec) 180	

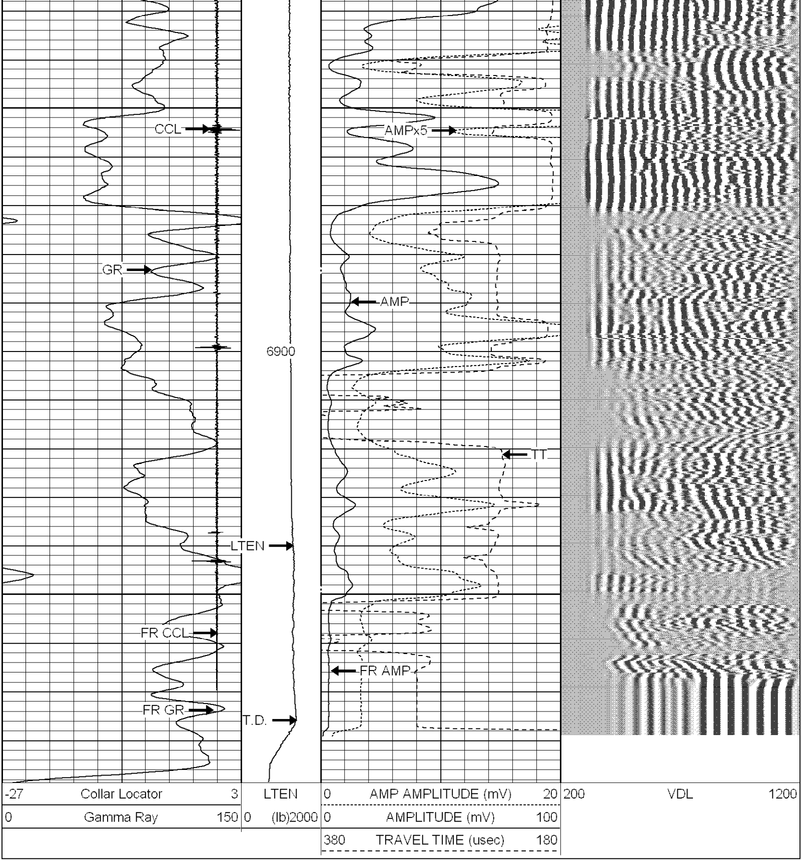












RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

MAIN PASS

RMWS
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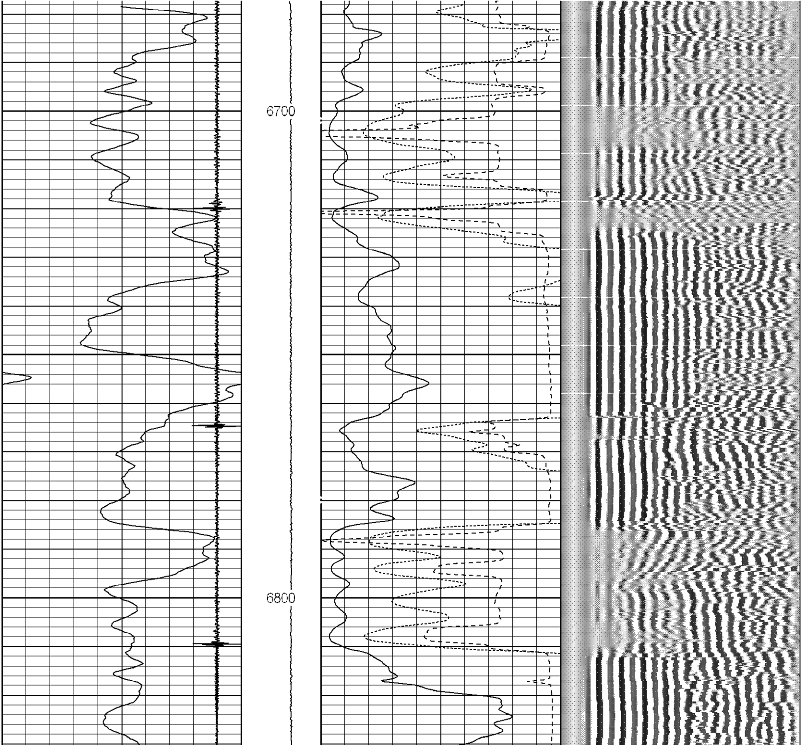
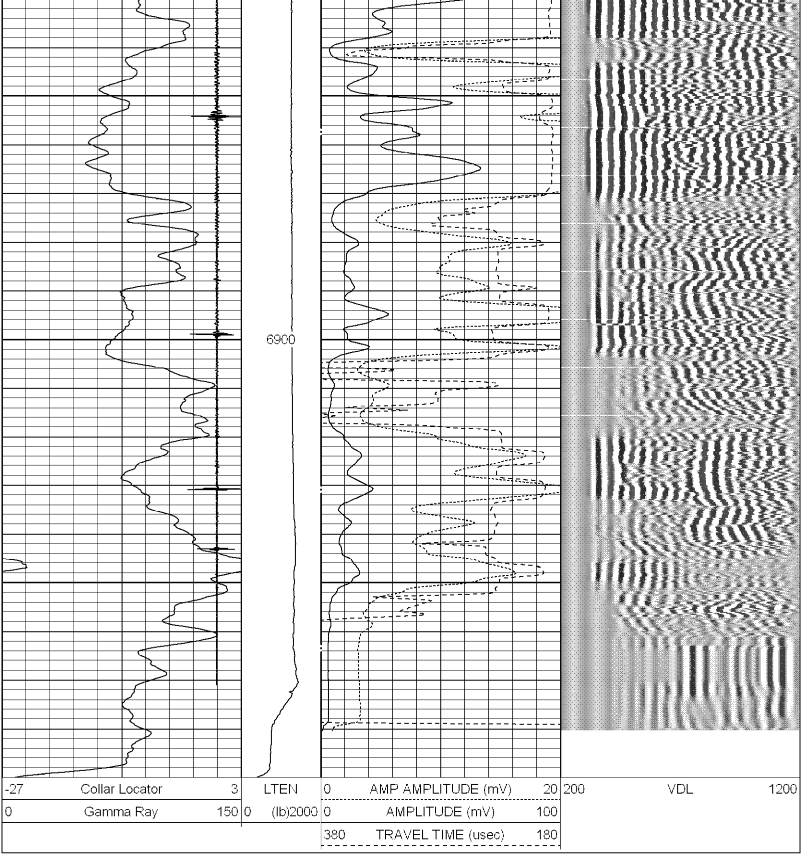
REPEAT PASS

Database File:	031111_williams_pa442_12.db
Dataset Pathname:	REPEAT.1
Presentation Format:	rmws_dsc
Dataset Creation:	Fri Mar 11 09:40:08 2011 by Calc Std Casedhole 07122
Charted by:	Depth in Feet scaled 1:240

-27	Collar Locator	3	LTEN	0	AMP AMPLITUDE (mV)	20	200	VDL	1200
0	Gamma Ray	150	0 (lb)2000	0	AMPLITUDE (mV)	100			
				380	TRAVEL TIME (usec)	180			





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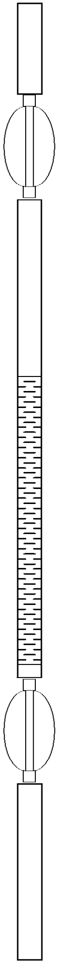
REPEAT PASS

Sensor	Offset (ft)	Schematic	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-TEKCO234 (TEKO234_359) Tekco 2 3/4" Gamma Ray	3.69	2.75	20.00
GR	1.00					

Dataset:	031111_williams_pa442_12.db: field/well/run1.1/MAIN.1
Total Length:	19.94 ft
Total Weight:	90.00 lb
O.D.	3.25 in

RMWS

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Company	WILLIAMS PRODUCTION RMT CO
Well	PA 442 - 12
Field	PARACHUTE
County	GARFIELD
State	CO