RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

CEMENT BOND LOG
GAMMA RAY / CCL

Company OXY USA
Well CC 697 - 09 - 15B
Field
County GARFIELD
State COLORADO
Location:
API # :
Other Services

SEC TWP RGE

Permanent Datum G.L.
Log Measured From K.B.
Drilling Measured From K.B.
Elevation Ft Above PD 30'
Elevation K.B. D.F. G.L.

Date	05 - 07 - 2011
Run Number	ONE
Depth Driller	2665'
Present Depth Driller	2570'
Depth Logger	2570'
Bottom Logged Interval	2569'
Top Log Interval	SURFACE
Fluid Level	SURFACE
Type Fluid	WATER
Max. Recorded Temp.	109.9° F
Estimated Cement Top	1320'
Equipment Number	208
Location	GRAND JCT.
Recorded By	INGRAM
Witnessed By	MR. VICTOR

Borehole Record				Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To
				9.625"	36#	SURFACE	2665'

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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

MAIN PASS 5" = 100'
CSG PSI = STATIC

Calibration Report

Database File: 050711_oxy_cc_697_09_15b.db
Dataset Pathname: main/pass1
Dataset Creation: Sat May 07 16:09:01 2011 by Log Std Casedhole 10121

Temperature Calibration Report

Serial Number: 216611
Tool Model: 016
Performed: Fri Oct 24 13:21:19 2008

Point #	Reading		Reference	
1	11136.00	cps	63.28	degF
2	17489.00	cps	104.70	degF
3	28778.00	cps	175.60	degF
4	40401.00	cps	250.00	degF
5	51742.00	cps	321.75	degF
6	57178.00	cps	355.95	degF
7		cps		degF
8		cps		degF
9		cps		degF
10		cps		degF

Gamma Ray Calibration Report

Type / Serial: 020 / AJD00094

SHOP CALIBRATION Sun Jun 13 13:33:21 1993

	Counts/Sec.	Gain	Offset	Jig	Units
Background	0.0				cps
Calibrator	1.0				cps
		1.0000			GAPI/cps

PRIMARY VERIFICATION

Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

BEFORE SURVEY VERIFICATION

Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

Segmented Cement Bond Log Calibration Report

Serial Number: 1123
Tool Model: 004

Calibration Casing Diameter: 9.625 in
Calibration Depth: 183.117 ft

Master Calibration, performed Sat May 07 15:45:42 2011:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.004	0.478	1.000	51.280	106.038	0.610
5FT	-0.001	0.859	1.000	51.280	58.469	1.044
S1	0.004	0.276	0.000	100.000	367.306	-1.556
S2	0.004	0.247	0.000	100.000	410.978	-1.480
S3	0.007	0.237	0.000	100.000	435.676	-3.143
S4	0.005	0.239	0.000	100.000	426.890	-2.084
S5	0.006	0.245	0.000	100.000	418.323	-2.686
S6	0.006	0.259	0.000	100.000	395.272	-2.403
S7	0.007	0.255	0.000	100.000	403.826	-2.953
S8	0.007	0.254	0.000	100.000	405.746	-2.947

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: 050711_oxy_cc_697_09_15b.db
Dataset Pathname: main/pass1.1
Presentation Format: rmws_dsc
Dataset Creation: Sat May 07 16:44:07 2011 by Calc Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240

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MAIN PASS

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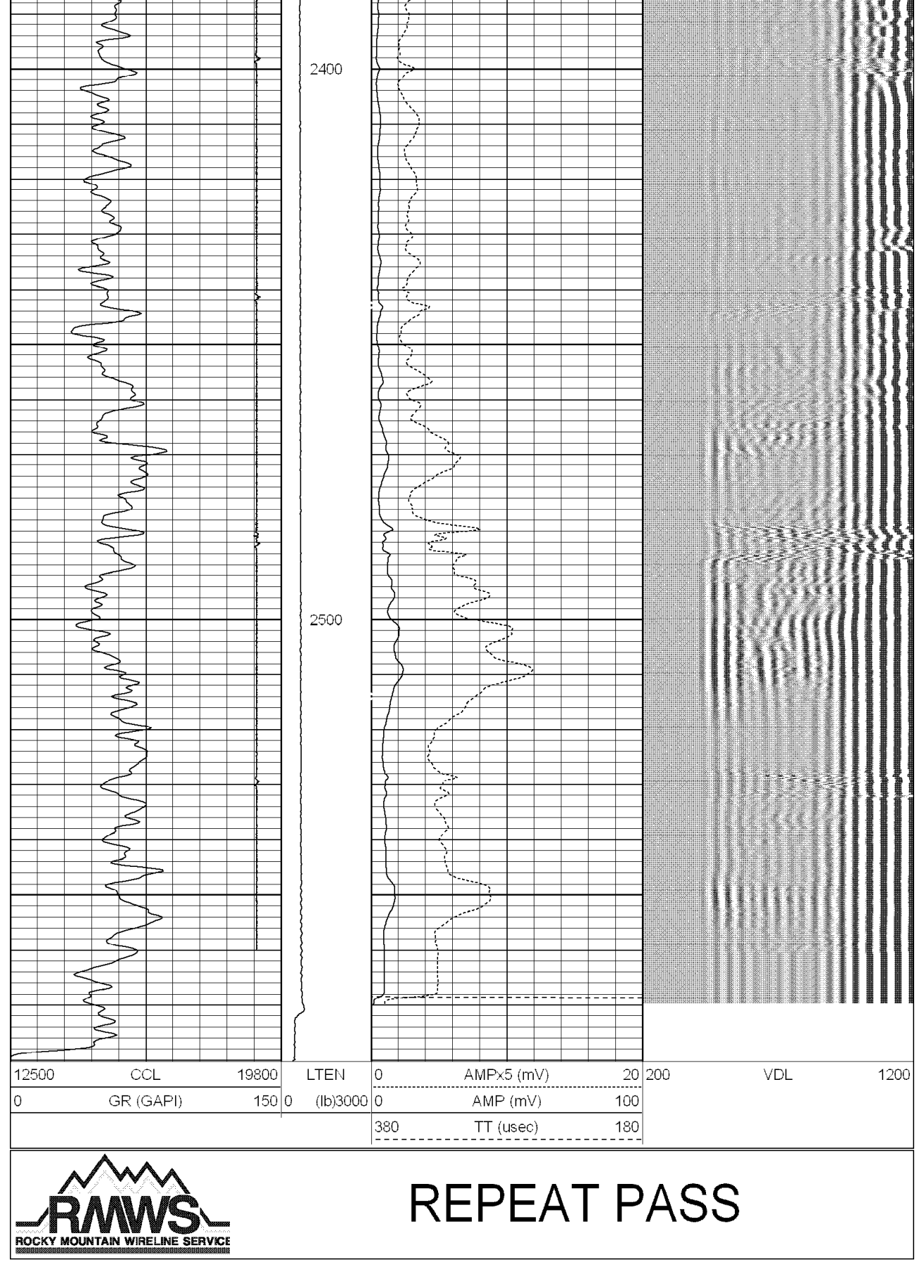
REPEAT PASS

Database File: 050711_oxy_cc_697_09_15b.db
Dataset Pathname: repeat/pass1.1
Presentation Format: rmws_dsc
Dataset Creation: Sat May 07 16:52:42 2011 by Calc Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240



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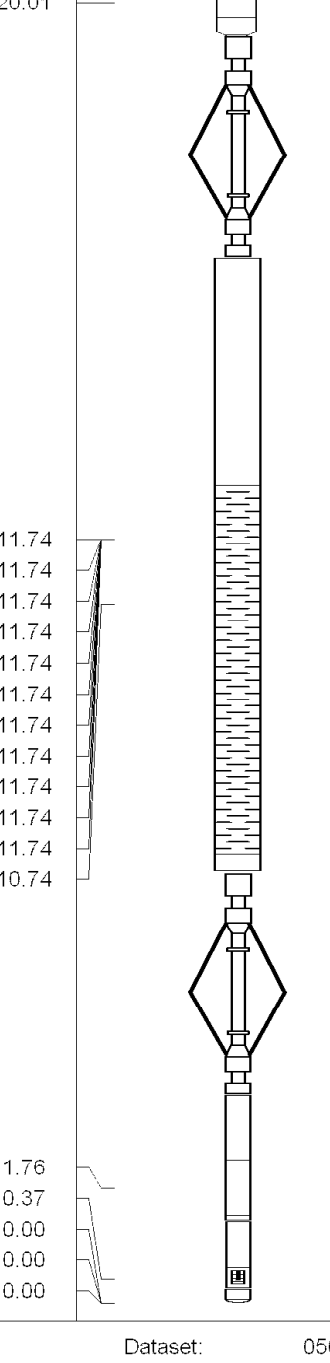
REPEAT PASS



Sensor	Offset (ft)	Description	Len (ft)	OD (in)	Wt (lb)
		CHD-AES (000001) Cable Head	1.04	1.69	2.00
		XTU-002 (216415) Crossover Ultrawire Toolbus To Ultralink	1.58	1.69	6.50
CCL	20.01	CCL-028 (1037) CCL UW 3 1/8" SONDEX	1.61	3.13	36.00
		SNDX 6 Arm PRC 022 W/ GO ADAPTORS	3.42	2.38	22.00
WVF3FT WVFS1 WVFS2 WVFS3 WVFS4 WVFS5 WVFS6 WVFS7 WVFS8 CBLTEMP CBLROT WVF5FT	11.74 11.74 11.74 11.74 11.74 11.74 11.74 11.74 11.74 11.74 11.74 10.74	RBT-004 (1123) Radial Bond Tool (UW 3 1/8)	9.47	3.13	140.00
		SNDX 6 Arm PRC 022 W/ GO ADAPTORS	3.42	2.38	22.00
GR TEMP TSTAMP ITEMPX HVOLTX	1.76 0.37 0.00 0.00 0.00	PGR-020 (AJD00094) Production Gamma Ray PRT-016 (216611) Platinum Resistance Thermometer BUL-006 (212965) Bullnose Terminator	1.93 1.04 0.22	1.69 1.69 1.69	9.50 6.00 1.20

Dataset: 050711_oxy_cc_697_09_15b.db: field/well/main/pass1.1
Total Length: 23.73 ft
Total Weight: 245.20 lb
O.D. 3.13 in

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Company OXY USA
Well CC 697 - 09 - 15B
Field
County GARFIELD
State COLORADO