RMWS
ROCKY MOUNTAIN WIRELINE SERVICE

CEMENT BOND LOG
GAMMA RAY / CCL
TEMPERATURE
(SURFACE CASING)

Company	FRAM OPERATING, LLC
Well	MANSUR 33 - 1 - G
Field	WILDCAT
County	MESA
State	COLORADO

Location: API #: 05 - 077 - 09473 - 00
SHL: 2066' FNL & 1811' FWL
BHL: 1732' FNL & 588' FWL
LAT: 38.984630 LONG -108.242410
SEC 33 TWP 12S RGE 97W

Other Services

Permanent Datum	G.L.	Elevation 6083'	Elevation K.B. 6097' D.F. 6096' G.L. 6083'
Log Measured From	K.B.	14' Ft Above PD	
Drilling Measured From	K.B.		

Date	05 - 29 - 2011
Run Number	ONE
Depth Driller	510'
Present Depth Driller	NA
Depth Logger	425'
Bottom Logged Interval	424'
Top Log Interval	SURFACE
Fluid Level	SURFACE
Type Fluid	WATER
Max. Recorded Temp.	85.5°F
Estimated Cement Top	SEE LOG
Equipment Number	208
Location	GRAND JCT.
Recorded By	INGRAM
Witnessed By	MR JOHN GRIGGS

Borehole Record				Casing Record			
Run Number	Bit	From	To	Size	Weight	From	To
				9.625"	36#	SURFACE	510'

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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 MEASURED USING K.B. OF 14'
MAIN PASS 5" = 100'
TEMP PASS 2" = 100'
CSG PSI = STATIC

Calibration Report

Database File: 052911_fram_mansur_33_1_g.db
Dataset Pathname: main/pass1.1
Dataset Creation: Sun May 29 09:14:07 2011 by Calc 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

Serial Number:	217692	
Tool Model:	020	
Performed:	Wed Apr 06 13:50:00 2011	
Calibrator Value:	1.0	GAPI
Background Reading:	0.0	cps
Calibrator Reading:	1.0	cps
Sensitivity:	1.1000	GAPI/cps

Segmented Cement Bond Log Calibration Report

Serial Number:	1123	
Tool Model:	004	
Calibration Casing Diameter:	9.625	in
Calibration Depth:	39.254	ft

Master Calibration, performed Sun May 29 09:13:37 2011:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.002	0.296	1.000	51.280	170.757	0.723
5FT	-0.000	0.534	1.000	51.280	94.073	1.001
S1	0.003	0.286	0.000	100.000	353.303	-0.948
S2	0.003	0.240	0.000	100.000	421.092	-1.093
S3	0.007	0.226	0.000	100.000	456.327	-2.992
S4	0.004	0.255	0.000	100.000	397.831	-1.567
S5	0.004	0.315	0.000	100.000	322.167	-1.402
S6	0.003	0.373	0.000	100.000	270.494	-0.939
S7	0.006	0.375	0.000	100.000	271.061	-1.621
S8	0.006	0.331	0.000	100.000	307.206	-1.834

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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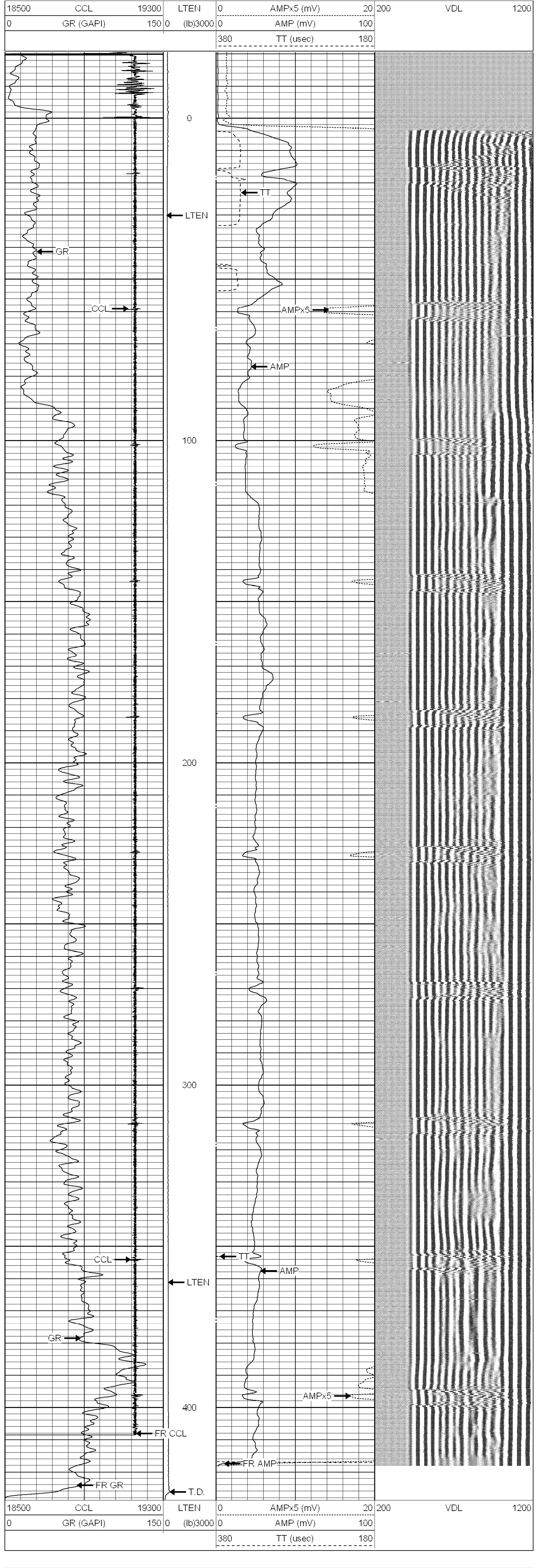
MAIN PASS

Database File: 052911_fram_mansur_33_1_g.db
Dataset Pathname: main/pass1.1
Presentation Format: rmws_dsc
Dataset Creation: Sun May 29 09:14:07 2011 by Calc Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240



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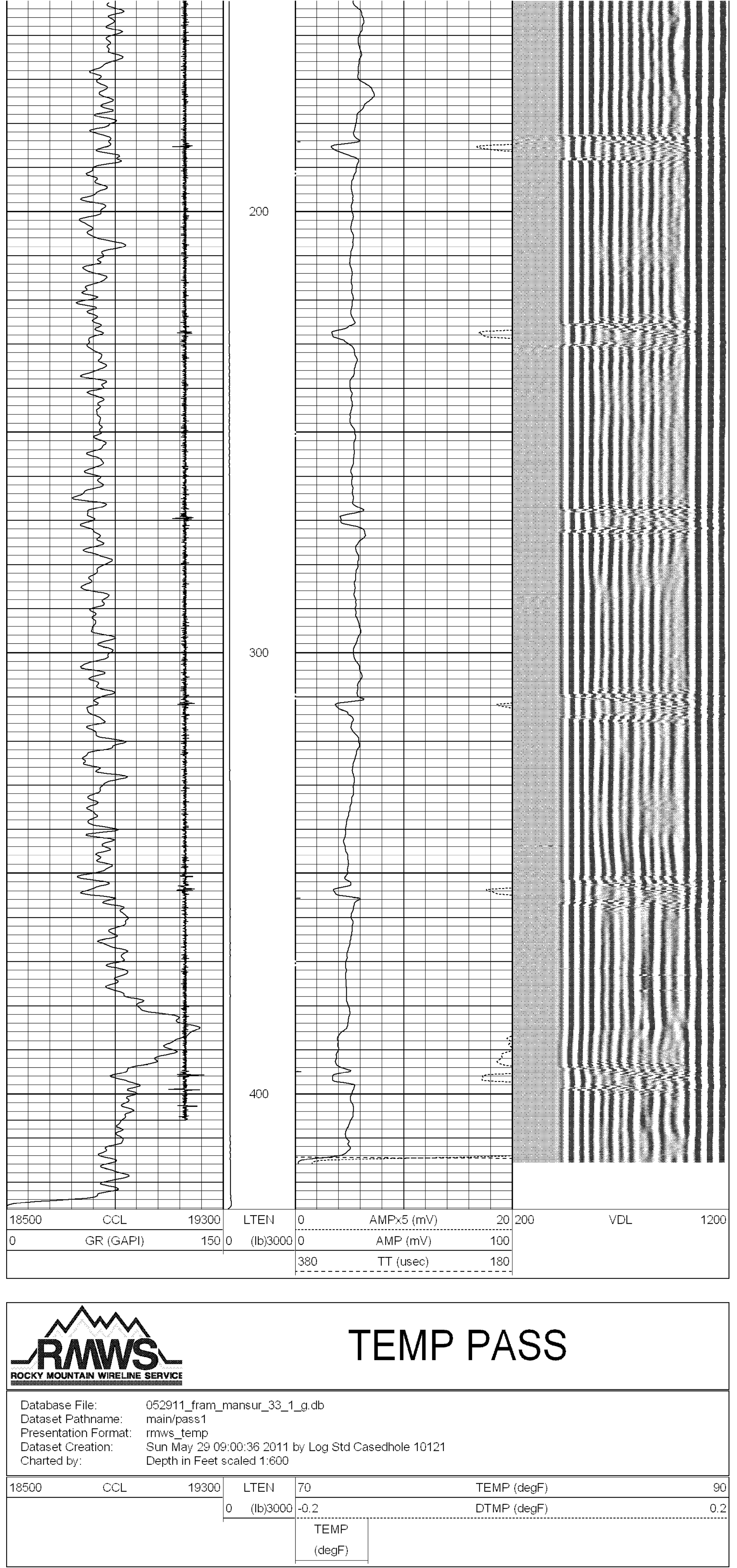
REPEAT PASS

Database File: 052911_fram_mansur_33_1_g.db
Dataset Pathname: repeat/pass1.1
Presentation Format: rmws_dsc
Dataset Creation: Sun May 29 09:17:16 2011 by Calc Std Casedhole 10121
Charted by: Depth in Feet scaled 1:240



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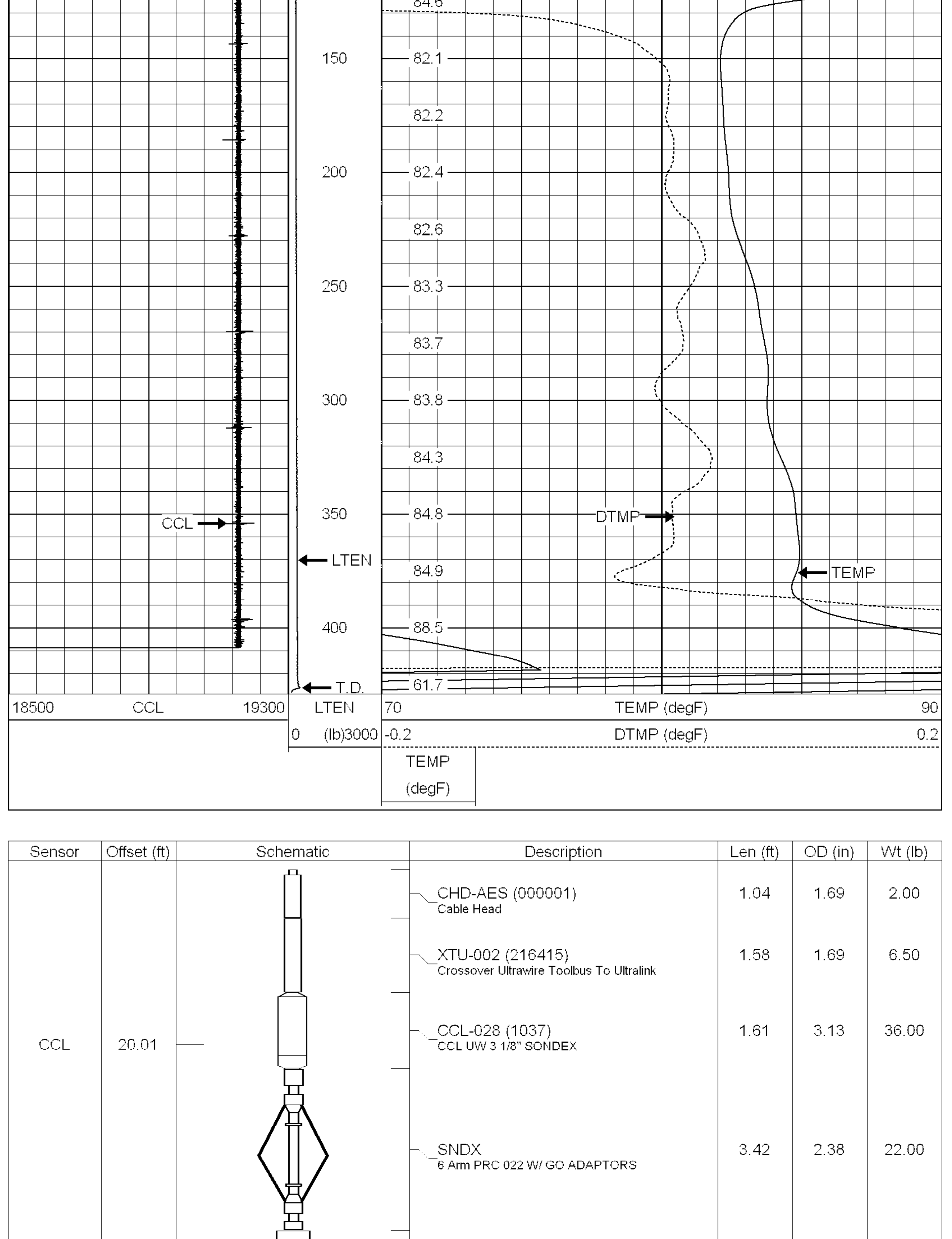
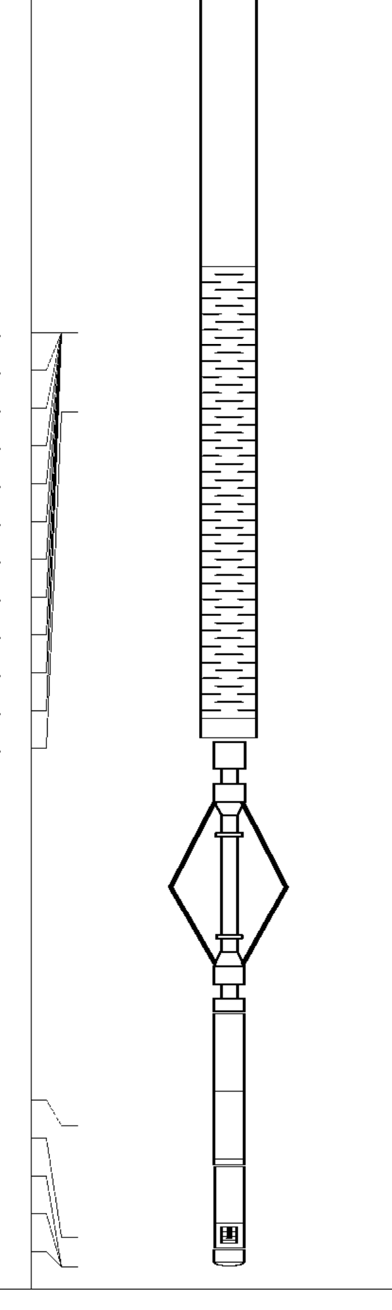
TEMP PASS

Database File: 052911_fram_mansur_33_1_g.db
Dataset Pathname: main/pass1
Presentation Format: rmws_temp
Dataset Creation: Sun May 29 09:00:36 2011 by Log Std Casedhole 10121
Charted by: Depth in Feet scaled 1:600





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	1.76	PGR-020 (217692) Production Gamma Ray	1.93	1.69	9.50
TEMP TSTAMP ITEMPX HVOLTX	0.37 0.00 0.00 0.00	PRT-016 (216611) Platinum Resistance Thermometer	1.04	1.69	6.00
		BUL-006 (212965) Bullnose Terminator	0.22	1.69	1.20

Dataset: 052911_fram_mansur_33_1_g.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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