Company	BILL BARRETT CORPORATION
Well	JOLLEY 42C-20-691
Field	GIBSON GULCH
County	GARFIELD State CO

HALLIBURTON

RADIO CEMENT BOND LOG

FIELD PRINT

Company	BILL BARRETT CORPORATION
Well	JOLLEY 42C-20-691
Field	GIBSON GULCH
County	GARFIELD State CO

API No.: 05045196810000 Serv #: 8448510

Location: SHL: 2618' FNL & 1743' FEL

BHL: 1791' FNL & 0664' FEL

Other Services

RMTE
JB-GR

Sec: 20 Twp: 6S Rge: 91W

Permanent Datum	GROUND LEVEL	Elevation 6457'	Elevation
Log Measured From	K.B. , 23 Ft. above perm. datum		K.B. 6480 D.F. 6479 G.L. 6457
Drilling Measured From	K.B.		

Date @ Time Logged	03/ SEPT/11 @ 22:45	Type Fluid in Hole	WATER
Run No.	ONE	Density of Fluid	8.3 PPG
Depth - Driller	7935'	Fluid Level	SURFACE
Depth - Logger	7863	Cement Top Est. Logged	LOGGED
Bottom - Logged Interval	7855'	Equipment / Location	10971659 / GJ
Top - Log Interval	SURFACE	Recorded by	JARRASCUE
Max. Recorded Temp.	219 DGF	Witnessed by	N/A

CEMENTING DATA	Surface String	Protection String	Production String	Liner
Date / Time Cemented				
Primary / Squeeze				
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume				
Cement Type / Weight	/	/	/	/
Formulation				
Mud Type / Mud Wgt.	/	/	/	/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	14.75"	SURFACE	860'	9 5/8"	36 #	SURFACE	860'
ONE	7.875"	860'	7935'	4.5"	11.6 #	SURFACE	7934'

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HALLIBURTON DOES NOT GUARANTEE THE ACCURACY OF ANY INTERPRETATION OF THE LOG DATA, CONVERSION OF LOG DATA TO PHYSICAL ROCK PARAMETERS OR RECOMMENDATIONS WHICH MAY BE GIVEN BY HALLIBURTON PERSONNEL OR WHCIH APPEAR ON THE LOG OR IN ANY OTHER FORM. ANY USER OF SUCH DATA, INTERPRETATIONS, CONVERSIONS, OR RECOMMENDATIONS AGREES THAT HALLIBURTON IS NOT RESPONSIBLE EXCEPT WHERE DUE TO GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, FOR ANY LOSS, DAMAGES, OR EXPENSES RESULTING FROM THE USE THEREOF.

Comments

HES RADIO CEMENT BOND LOG CORRELATED ON BOTTOM
TO HES TEMPERATURE DATED , JULY 29,2011
LOGGED INTERVALS PER CUSTOMER REQUEST
RBT & RMTE RAN IN COMBO
RUN JUNK BASKET & GAUGE RING 3.75"

SHORT JOINTS : 6868' - 6890'

CREW: A. GAULT & D.WILLIAMS

THANK YOU FOR USING HALLIBURTON ENERGY SERVICES GRAND JUNCTION, CO

Service Ticket No. 8448510 API No. 05045196810000 PGM Ver 101102_R1

The Well Name, Location, Borehole Description, and / or Cementing Data Furnished by Client

EQUIPMENT DATA

GAMMA RAY		RBT					
Run No.	ONE	Run No.	ONE	Run No.		Run No.	
Serial No.	10002718	Serial No.	2211	Serial No.		Serial No.	
Model No.	GR-PROBE	Model No.	RBT-004	Model No.		Model No.	
Diameter	1 11/16"	Diameter	3 1/8"	Diameter		Diameter	

LOGGING DATA

General Data

Pass No.	Depths From	Depths To	Well Head Pressure	Speed Ft/Min	Logging Run Comments
ONE	7863'	SURFACE	0	REC	MAIN PASS

	GAMMA RAY		CCL					
Pass	Scale		Scale		Scale		Scale	
No.	L	R	L	R	L	R	L	L
ONE	0	150	-5400	600				

DIRECTIONAL INFORMATION

Maximum Deviation		deg. @		KOP	

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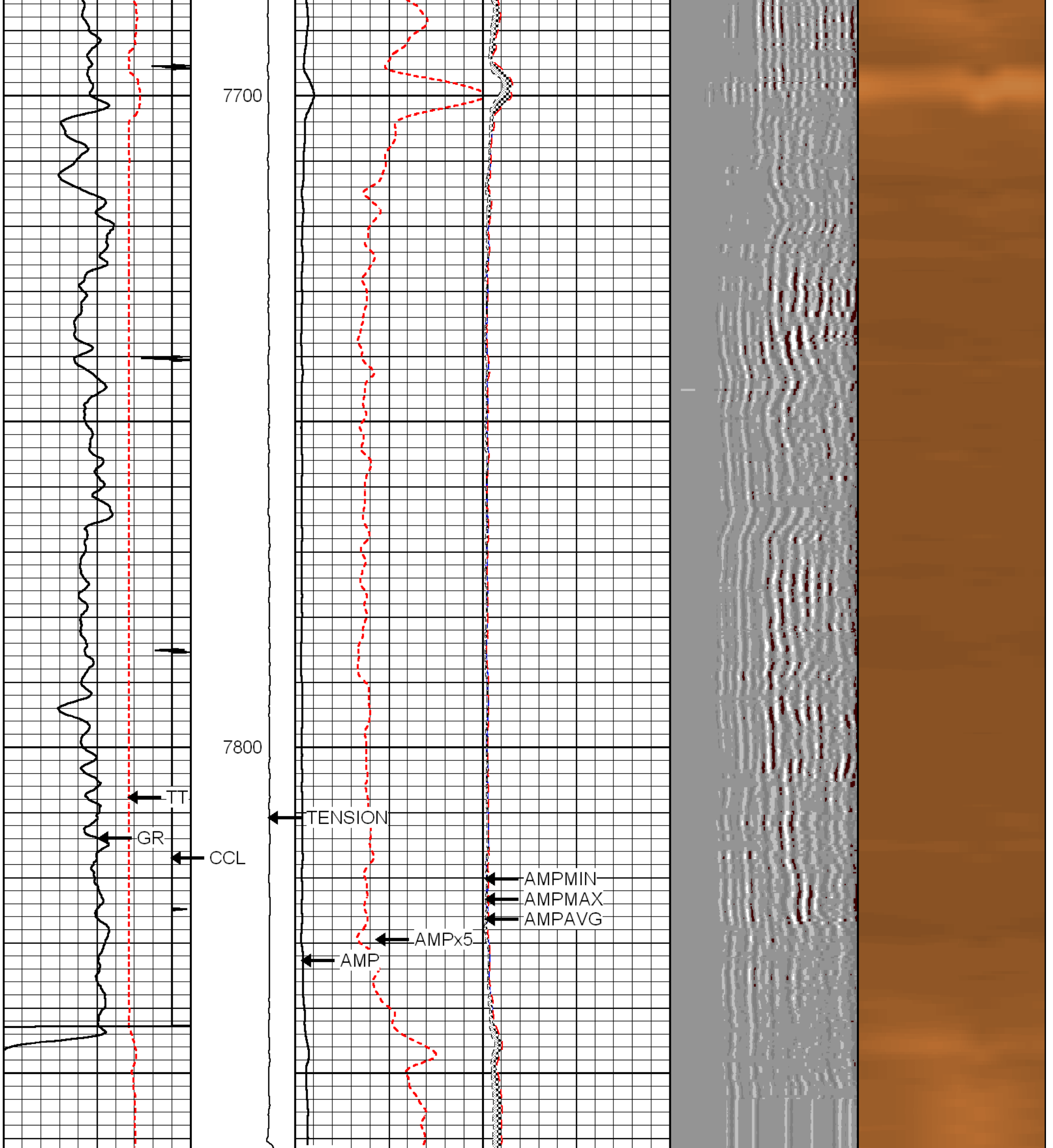
MAIN LOG SECTION

5"=100'

Database File: c:\warrior\data\bill_barrett\jolley_42c_20_691\jolley_42c_20_691_rbt_rmt.db
Dataset Pathname: GG/J_42C2069/run1/MAIN_RBT
Presentation Format: radial
Dataset Creation: Sun Sep 04 11:54:32 2011
Charted by: Depth in Feet scaled 1:240

360 TT (usec) 160	TENSION	0 AMP (mV) 100	0 AMPAVG 100	200 MSG 1200	1 SECTORS 8
-5400 CCL 600	0 (lb) 2500	0 AMPx5 (mV) 10	0 AMPMAX 100		1 100
0 GR (GAPI) 150			0 AMPMIN 100		

3700
3800
3900
4000
4100
4200
4300
4400
4500
4600
4700
4800
4900
5000
5100
5200
5300
5400
5500
5600
5700
5800
5900
6000
6100
6200
6300
6400
6500
6600
6700
6800
SHORT JOINT
6900
7000
7100
7200
7300
7400
7500
7600



360 TT (usec) 160	TENSION	0 AMP (mV) 100	0 AMPAVG 100	200 MSG 1200	1 SECTORS 8
-5400 CCL 600	0 (lb) 2500	0 AMPx5 (mV) 10	0 AMPMAX 100		1 100
0 GR (GAPI) 150			0 AMPMIN 100		

HALLIBURTON

MAIN LOG SECTION

5"=100'

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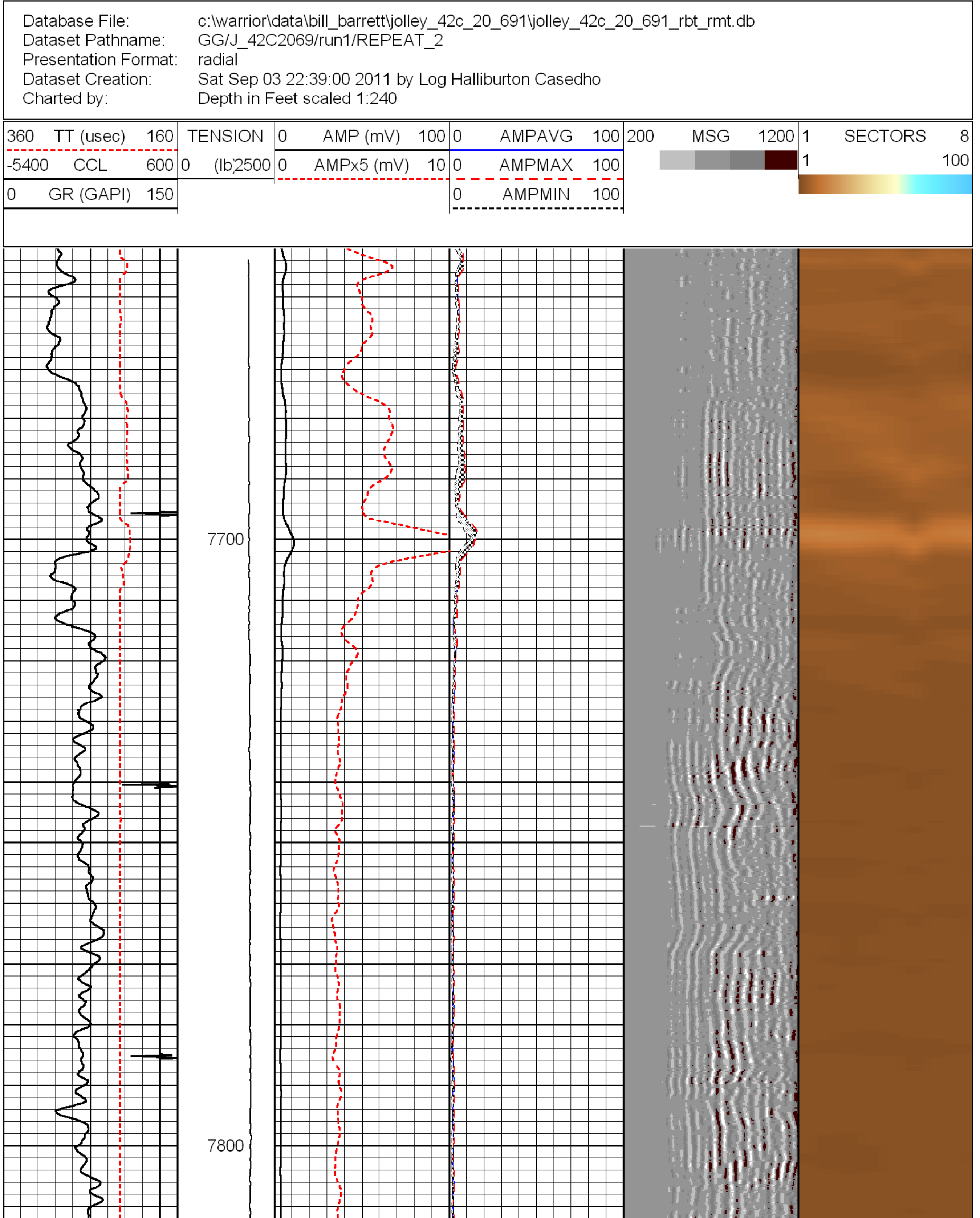
REPEAT LOG SECTION

5"=100'

Database File: c:\warrior\data\bill_barrett\jolley_42c_20_691\jolley_42c_20_691_rbt_rmt.db
Dataset Pathname: GG/J_42C2069/run1/REPEAT_2
Presentation Format: radial
Dataset Creation: Sat Sep 03 22:39:00 2011 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

360 TT (usec) 160	TENSION	0 AMP (mV) 100	0 AMPAVG 100	200 MSG 1200	1 SECTORS 8
-5400 CCL 600	0 (lb) 2500	0 AMPx5 (mV) 10	0 AMPMAX 100		1 100
0 GR (GAPI) 150			0 AMPMIN 100		



360 TT (usec) 160	TENSION	0 AMP (mV) 100	0 AMPAVG 100	200 MSG 1200	1 SECTORS 8
-5400 CCL 600	0 (lb) 2500	0 AMPx5 (mV) 10	0 AMPMAX 100		1 100
0 GR (GAPI) 150			0 AMPMIN 100		

REPEAT LOG SECTION

5"=100'

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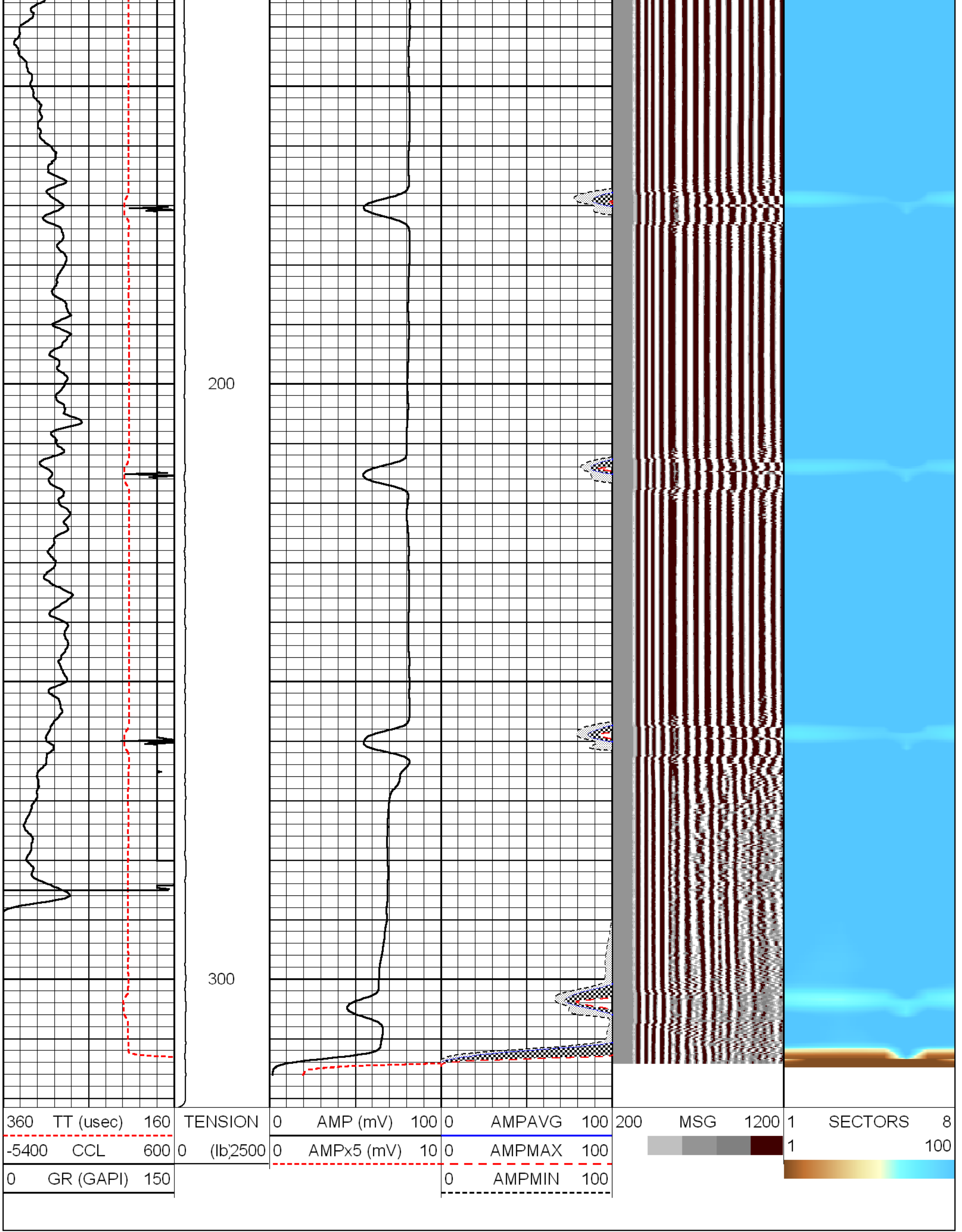
FREE PIPE LOG SECTION

5"=100'

Database File: c:\warrior\data\bill_barrett\jolley_42c_20_691\jolley_42c_20_691_rbt_rmt.db
Dataset Pathname: GG/J_42C2069/run1/F_PIPE1
Presentation Format: radial
Dataset Creation: Sat Sep 03 21:26:46 2011 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

360 TT (usec) 160	TENSION	0 AMP (mV) 100	0 AMPAVG 100	200 MSG 1200	1 SECTORS 8
-5400 CCL 600	0 (lb) 2500	0 AMPx5 (mV) 10	0 AMPMAX 100		1 100
0 GR (GAPI) 150			0 AMPMIN 100		



360 TT (usec) 160	TENSION	0 AMP (mV) 100	0 AMPAVG 100	200 MSG 1200	1 SECTORS 8
-5400 CCL 600	0 (lb) 2500	0 AMPx5 (mV) 10	0 AMPMAX 100		1 100
0 GR (GAPI) 150			0 AMPMIN 100		

HALLIBURTON

REPEAT LOG SECTION

5"=100'

Calibration Report

Database File: C:\Warrior\Data\BILL_BARRETT\JOLLEY_42C_20_691\jolley_42c_20_691_rbt_rmt.db
Dataset Pathname: GG/J_42C2069/run1/MAIN_RBT
Dataset Creation: Sun Sep 04 11:54:32 2011

Segmented Cement Bond Log Calibration Report

Serial Number: 2211
Tool Model: 004

Calibration Casing Diameter: 4.500 in
Calibration Depth: 111.350 ft

Master Calibration, performed Sat Sep 03 21:24:27 2011:

	Raw (v)		Calibrated (mv)		Results	
	Zero	Cal	Zero	Cal	Gain	Offset
3FT	0.000	0.744	2.000	82.000	107.510	1.975
5FT	0.004	0.820	2.000	82.000	98.093	1.588
S1	0.003	0.877	0.000	100.000	114.450	-0.355
S2	0.003	0.924	0.000	100.000	108.565	-0.353
S3	0.003	0.886	0.000	100.000	113.214	-0.285
S4	0.003	0.882	0.000	100.000	113.699	-0.319
S5	0.003	0.862	0.000	100.000	116.351	-0.295
S6	0.003	0.849	0.000	100.000	118.168	-0.342
S7	0.002	0.839	0.000	100.000	119.483	-0.220
S8	0.002	0.835	0.000	100.000	120.052	-0.205

Calibration Report

Serial Number: 2211
Tool Model: 004
Performed:

	Reference (degF)	Reading ()
Low:	0.000	0.000
High:	1.000	1.000
	Gain = 1.000	Offset = 0.000

Reservoir Monitor Tool I Calibration Report

Serial-Model: 11680606-A

Shop Calibration Performed: Thu Aug 25 15:24:40 2011

Carbon/Oxygen Mode

Stabilization

Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	80.00	80.00	0.00	+/-15.00	V
ITCR2	3148	3250	-102	+/-250	cps

Near Detector

	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60.13	60.00	0.0257	5.50	<6.00
Fe	206.55	206.00	0.0929	-----	-----
NGAIN = 0.997	NZOFF = 0.0				

Far Detector

	Channel	Expected Value	Amplitude	FWHM	Tol.
H	60.15	60.00	0.0369	5.55	<6.50
Fe	208.89	208.00	0.0909	-----	-----
FGAIN = 0.995	FZOFF = 0.2				

Result	Logged	Expected Value	Diff.	Tol.	Units
COIR2	0.45	0.44	0.01	+/-0.03	
LIRI2	1.64	1.64	0.00	+/-0.20	
TCCR2	4952	4700	252	+/-1000	cps
ITCR2	3144	3250	-106	+/-250	cps

Capture Mode

Stabilization

Result	Logged	Expected Value	Diff.	Tol.	Units
GENV	81.00	80.00	1.00	+/-15.00	V
FCAP	10197	10000	197	+/-500	cps

Horizontal Water Tank

Result	Logged	Expected Value	Diff.	Tol.	Units
N/F Normalizer	0.93	0.95	-0.02	+/-0.10	
N/F Inel Norm	0.60	0.61	-0.01	+/-0.06	
RNF	1.08	1.05	0.03	+/-0.10	
RINCF					
SGFN	24.07	24.00	0.07	+/-1.00	cu
SGFF	22.93	22.85	0.08	+/-0.50	cu
FSIN	24811	24000	811	+/-2000	
FCAP	10475	10000	475	+/-1000	cps
NFTR	0.82			<5.00	
FFTR	0.89			<5.00	
NBKG	151			<500	cps
FBKG	111			<500	cps
RTN	0.42	0.40	0.02	+/-0.25	usec
RTF	0.45	0.40	0.05	+/-0.25	usec

Calibration Software Modules

HRMTI Module	2011.3.25.0
RMTI Module	2011.3.25.1

Log Data Acquisition Software Modules

HRMTI Module	2011.3.25.0
RMTI Module	2011.3.25.1

Gamma Ray Calibration Report

Type / Serial: 001 / 10002718

SHOP CALIBRATION Sat Sep 03 12:32:28 2011

	Counts/Sec.	Gain	Offset	Jig	Units
Background	39.6				cps
Calibrator	330.3				cps
		1.4035			GAPI/cps

PRIMARY VERIFICATION Sat Sep 03 12:36:18 2011

Background	56.3		cps
Calibrator	466.4		cps
Difference		410.1	GAPI

BEFORE SURVEY VERIFICATION

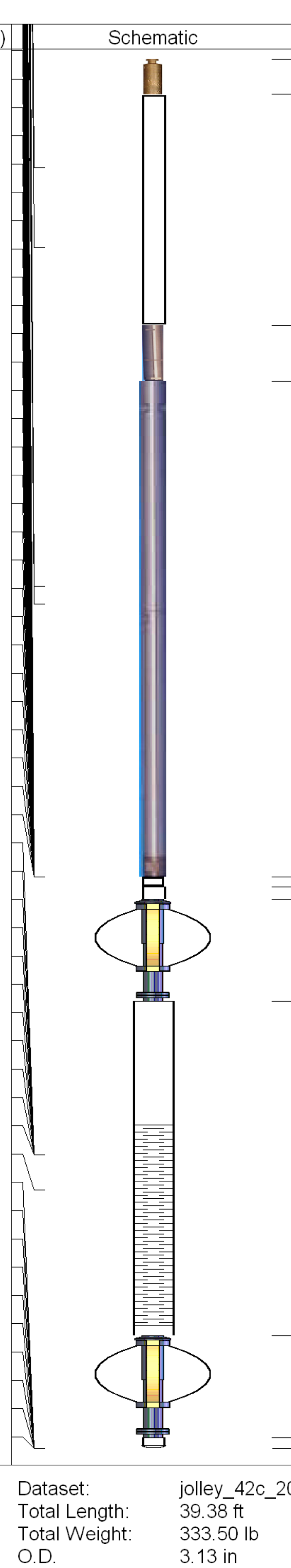
Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

AFTER SURVEY VERIFICATION

Background	0.0		cps
Calibrator	0.0		cps
Difference		0.0	GAPI

Sensor	Offset (ft)
RmtGenRepPv	16.19
RmtGenIspCmd	16.19
RmtGenIspPv	16.19
RmtGenIspI	16.19
RmtGenCmd	16.19
RmtGenPv	16.19
RmtGenI	16.19
RmtGenP5VI	16.19
RmtGenTemp	16.19
RmtGenP15VI	16.19
RmtGen200V	16.19
RmtGenP33V	16.19
RmtGenP5V	16.19
RmtGenClampV	16.19
RmtGenSyncV	16.19
RmtGenLvdsV	16.19
RmtGen15BusV	16.19
RmtGenIonI	16.19
RmtNDetStat	16.19
RmtNPrgSt1	16.19
RmtNPMI	16.19
RmtNPMHV	16.19
RmtNTemp	16.19
RmtFDetStat	16.19
RmtFPrgSt1	16.19
RmtFPMI	16.19
RmtFPMHV	16.19
RmtFTemp	16.19
WVF3FT	8.32
WVFS1	8.32
WVFS2	8.32
WVFS3	8.32
WVFS4	8.32
WVFS5	8.32
WVFS6	8.32
WVFS7	8.32
WVFS8	8.32
CBLTEMP	8.32
CBLROT	8.32
WVF5FT	7.32
LLMTEN	0.00
XHUERR1	0.00
XHUERR2	0.00
XHUTEMP	0.00
XHUCURR	0.00
XHUVOLT	0.00
XHUSTAT	0.00
TSTAMP	0.00
ITEMPX	0.00
HVOLTX	0.00

Schematic



Description	Len (ft)	OD (in)	Wt (lb)
STND_CH 1.4375 IN CABLE HEAD	1.00	1.44	1.00
TTTCU-001 (10002718) Through Tubing Telemetry Cartridge - Ultrawire	6.55	1.69	33.00
XHU-003 (11721046) Crossover Halliburton 1553 to Ultrawire	1.58	1.69	7.00
RMTI-A (11680606) Halliburton RMTI Tool	14.06	2.13	77.00
GoxSondex Go Box x Sondex Pin CrossOver	0.27	1.69	1.00
AUH-001 (000001) Adaptor Ultrawire/Halliburton	0.38	1.69	3.00
CENT-Probe (PTS_MONO) Probe 2 3/4 Centralizer	2.88	2.75	35.00
RBT-004 (2211) Radial Bond Tool (UW 3 1/8)	9.47	3.13	140.00
CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	2.88	2.75	35.00
BUL-001 (000001) Bullnose	0.30	1.69	1.50

Dataset: jolley_42c_20_691_rbt_rmt.db: GG/J_42C2069/run1/MAIN_RBT
Total Length: 39.38 ft
Total Weight: 333.50 lb
O.D. 3.13 in

Company	BILL BARRETT CORPORATION		
Well	JOLLEY 42C-20-691		
Field	GIBSON GULCH		
County	GARFIELD	State	CO

HALLIBURTON

RADIO CEMENT
BOND LOG