Company	CARRIZO OIL & GAS INC
Well	BRINGELSON 9-20-9-58
Field	WILDCAT
County	WELD State CO

HALLIBURTON

CEMENT BOND LOG

SCALE: 5"=100'

Company	CARRIZO OIL & GAS INC		
Well	BRINGELSON 9-20-9-58		
Field	WILDCAT		
County	WELD	State	CO

API No.: 05-123-38612-00 Serv #: 901270133
Location: LAT:40.734690 LONG:-103.895580
SHL: 1982 FSL & 570' FWL
BHL: 1800' FSL 600' FEL

Other Services
NONE

Sec: 20 Twp: 9N Rge: 58W

Permanent Datum	GL	Elevation	4928
Log Measured From	KB , 17 Ft. above perm. datum		
Drilling Measured From	KB		

Elevation
K.B. 4945
D.F. 4944
G.L. 4928

Date @ Time Logged	17-APR-2014 @ 11:20	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.33
Depth - Driller	10268	Fluid Level	SURFACE
Depth - Logger	5308	Cement Top Est. Logged	480
Bottom - Logged Interval	5295	Equipment / Location	11703208 / BRIGHTON
Top - Log Interval	46	Recorded by	M. WOODALL
Max. Recorded Temp.	200	Witnessed by	MR. JEFF SCHNEIDER

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	N/A			
Cement Type / Weight	/	/	/	/
Formulation				
Mud Type / Mud Wgt.	/	/	/	/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
ONE	8.75	0	6062	7	23.0	0	6068
LINER	6.125	5308	10268	4.5	11.60	5308	10268

<<< Fold Here >>>

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 WHICH 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

PRIMARY DEPTH REFERENCE
BLANKET VALUE : 241 GAPI
ESTIMATED TOP OF CEMENT @ 480'

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES
YOUR CREW TODAY: J. SAAD, M. THEIS, B. DUNKEL

HALLIBURTON

MAIN PASS UNDER 1000 PSI

SCALE 5"=100'

Database File:	carrizo_bringelson_ranch_9_20_9_58.db
Dataset Pathname:	pass12
Presentation Format:	2katcbl
Dataset Creation:	Thu Apr 17 11:22:43 2014 by Log Halliburton Casedho
Charted by:	Depth in Feet scaled 1:240

Left	Curve	Right
9	Collar Locator	-1
0	Gamma Ray (GAPI)	150
380	Travel Time (usec)	280
0	TEMP (degF)	250
0	Amplified Amplitude (mV)	10
0	Amplitude (mV)	100
200	MSG	1200

9	Collar Locator	-1	0	Amplified Amplitude (mV)	10	200 MSG 1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100	■ ■ ■ ■
380	Travel Time (usec)	280				
0	TEMP (degF)	250				

HALLIBURTON

MAIN PASS UNDER 1000 PSI

SCALE 5"=100'

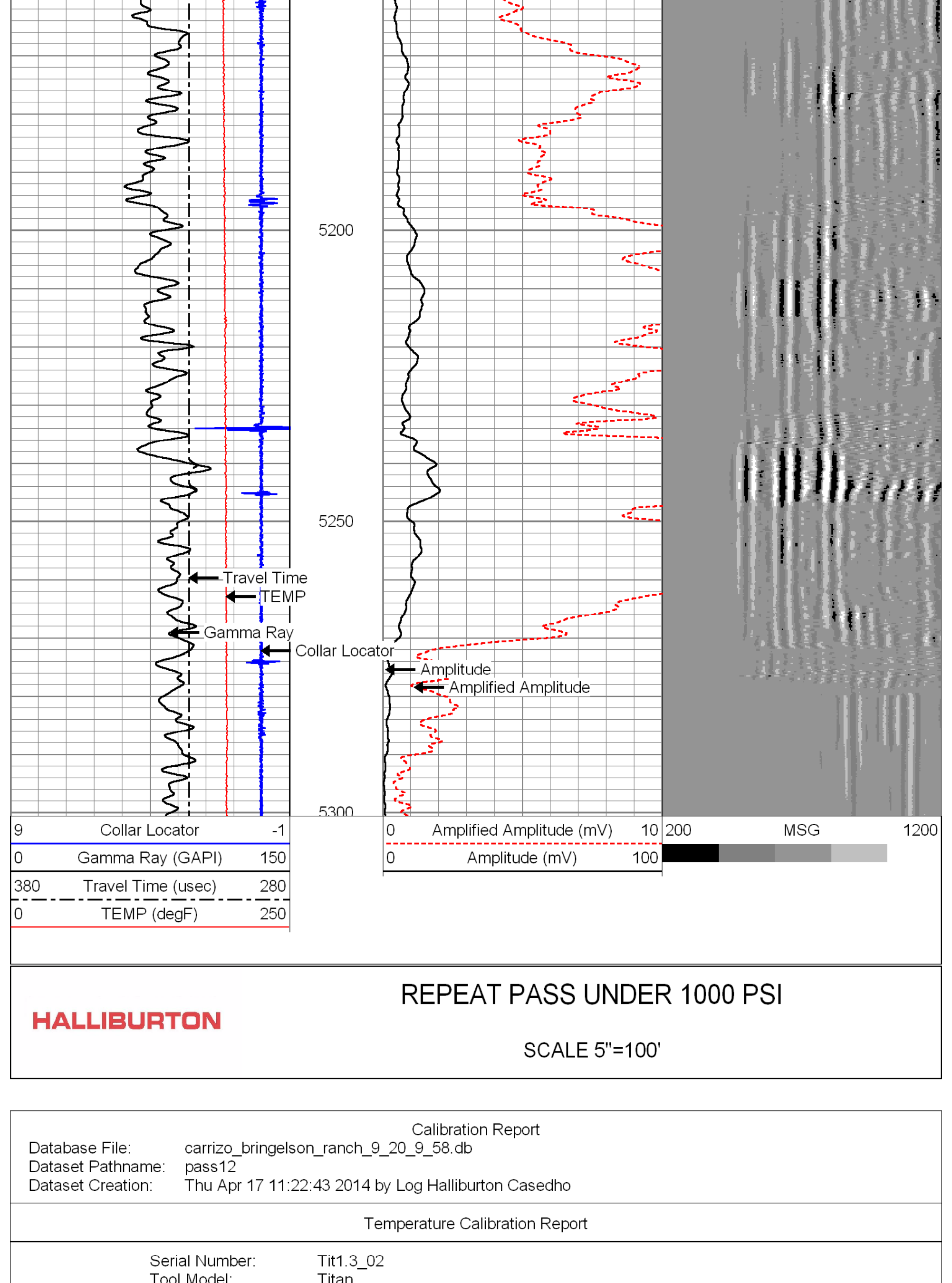
HALLIBURTON

REPEAT PASS UNDER 1000 PSI

SCALE 5"=100'

Database File: carrizo_bringelson_ranch_9_20_9_58.db
Dataset Pathname: pass8
Presentation Format: 2katcbl
Dataset Creation: Thu Apr 17 11:07:07 2014 by Log Halliburton Casedho
Charted by: Depth in Feet scaled 1:240

9	Collar Locator	-1	0	Amplified Amplitude (mV)	10	200 MSG 1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100	■ ■ ■ ■
380	Travel Time (usec)	280				
0	TEMP (degF)	250				



9	Collar Locator	-1	0	Amplified Amplitude (mV)	10	200 MSG 1200
0	Gamma Ray (GAPI)	150	0	Amplitude (mV)	100	■ ■ ■ ■
380	Travel Time (usec)	280				
0	TEMP (degF)	250				

HALLIBURTON

REPEAT PASS UNDER 1000 PSI

SCALE 5"=100'

Calibration Report

Database File: carrizo_bringelson_ranch_9_20_9_58.db
Dataset Pathname: pass12
Dataset Creation: Thu Apr 17 11:22:43 2014 by Log Halliburton Casedho

Temperature Calibration Report

Serial Number: Tit1.3_02
Tool Model: Titan
Performed: Fri Jan 04 07:55:24 2002

	Reference		Reading	
Low Reference:	0.00	degF	0.00	cps
High Reference:	1.00	degF	1.00	cps

Gain: 0.10
Offset: 0.00
Delta Spacing 2

Gamma Ray Calibration Report

Type / Serial: Probe / 275

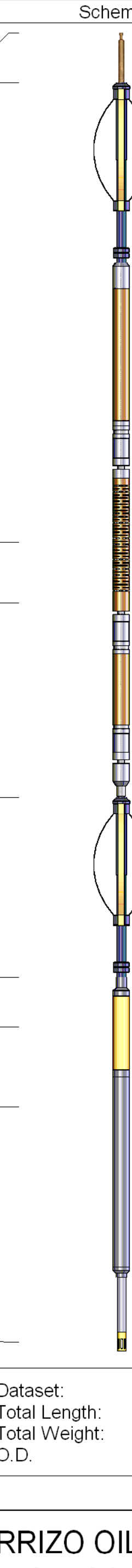
SHOP CALIBRATION	Sun Apr 14 16:21:42 2013				
	Counts/Sec.	Gain	Offset	Jig	Units
Background	119.3				cps
Calibrator	459.2				cps
		0.7090			GAPI/cps
PRIMARY VERIFICATION	Sun Apr 14 16:26:20 2013				
Background	81.6				cps
Calibrator	324.0				cps
Difference				242.5	GAPI
BEFORE SURVEY VERIFICATION	Thu Apr 17 07:31:29 2014				
Background	87.7				cps
Calibrator	333.4				cps
Difference				245.7	GAPI
AFTER SURVEY VERIFICATION	Thu Apr 17 10:21:32 2014				
Background	89.9				cps
Calibrator	338.7				cps
Difference				248.8	GAPI

Cement Bond Log Calibration Report

Serial Number: 275
Tool Model: Probe
Performed: Thu Apr 17 07:53:43 2014

Depth: 342.982 ft
Casing Diameter: 7 in

	3' Spacing	5' Spacing	
Signal Zero:	0.1	0.1	mV
Calibrated Amplitude:	62.1651	62.1651	mV
Reading at Signal Zero:	-0.0147461	-0.0143555	V
Reading in Free Pipe:	0.193188	0.182837	V
Gain:	298.484	314.744	
Offset:	4.50147	4.6183	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
STNDCH CENT	22.00 21.17		1_CABLEHEAD 1"OD CABLE HEAD	0.83	1.00	3.00
			CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	3.00	2.75	35.00
WVF3 WVF5	13.50 12.50		CBL-Probe (275) Probe 2.75" Dual Receiver Bond	8.92	2.75	60.00
CENT	9.25		CENT-Probe (PT_MONO2) Probe 2 3/4 Centralizer	3.00	2.75	35.00
GR CCL GR	6.25 5.42 4.08		GR-Probe (275) Probe 2.75" 4 Channel Pulse	5.00	2.75	30.00
TEMP	0.17		TEMP-Titan (Tit1.3_02) Titan Temp 1.3875	1.25	1.39	10.00

Dataset: carrizo_bringelson_ranch_9_20_9_58.db: field/well/run1/pass12
Total Length: 22.00 ft
Total Weight: 173.00 lb
O.D. 2.75 in

Company	CARRIZO OIL & GAS INC		
Well	BRINGELSON 9-20-9-58		
Field	WILDCAT		
County	WELD	State	CO

HALLIBURTON

CEMENT BOND
LOG
SCALE: 5"=100'