HALLIBURTON

ACOUSTIC CEMENT BOND LOG

5" = 100'

Company CARRIZO OIL & GAS INC.
Well SIEVERS 1-3-7-62
Field NIOBRARA
County WELD State CO

Company	CARRIZO OIL & GAS INC.
Well	SIEVERS 1-3-7-62
Field	NIOBRARA
County	WELD
State	CO

API No.: 05-123-36557 Serv #: 900460010
Location: SHL: 251' FSL & 1308' FEL
BHL: 650' FNL & 650' FEL

Other Services
NONE

Sec:3 Twp:7N Rge:62W

Elevation
K.B. 4905'
D.F. 4905'
G.L. 4890'

Permanent Datum GROUND LEVEL Elevation 4890'
Log Measured From KB , 15 Ft. above perm. datum
Drilling Measured From KB

Date @ Time Logged	24 MAY 2013	Type Fluid in Hole	FRESH WATER
Run No.	ONE	Density of Fluid	8.4
Depth - Driller	11022'	Fluid Level	SURFACE
Depth - Logger	5976'	Cement Top Est. Logged	SURFACE
Bottom - Logged Interval	5976'	Equipment / Location	11697681 / RS WYO
Top - Log Interval	SURFACE	Recorded by	T. ERNEST
Max. Recorded Temp.	N/A	Witnessed by	KIRK WILLIAMS

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

Borehole Record			Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
				9.625	36#	SURFACE	1400'
				7	23#	SURFACE	6823'
				4.5	11.6#	6107'	11022'

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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

MAIN AND REPEAT PASS LOGGED @ 1000 PSI

THANK YOU FOR CHOOSING HALLIBURTON ENERGY SERVICES, ROCK SPRINGS, WYOMING.

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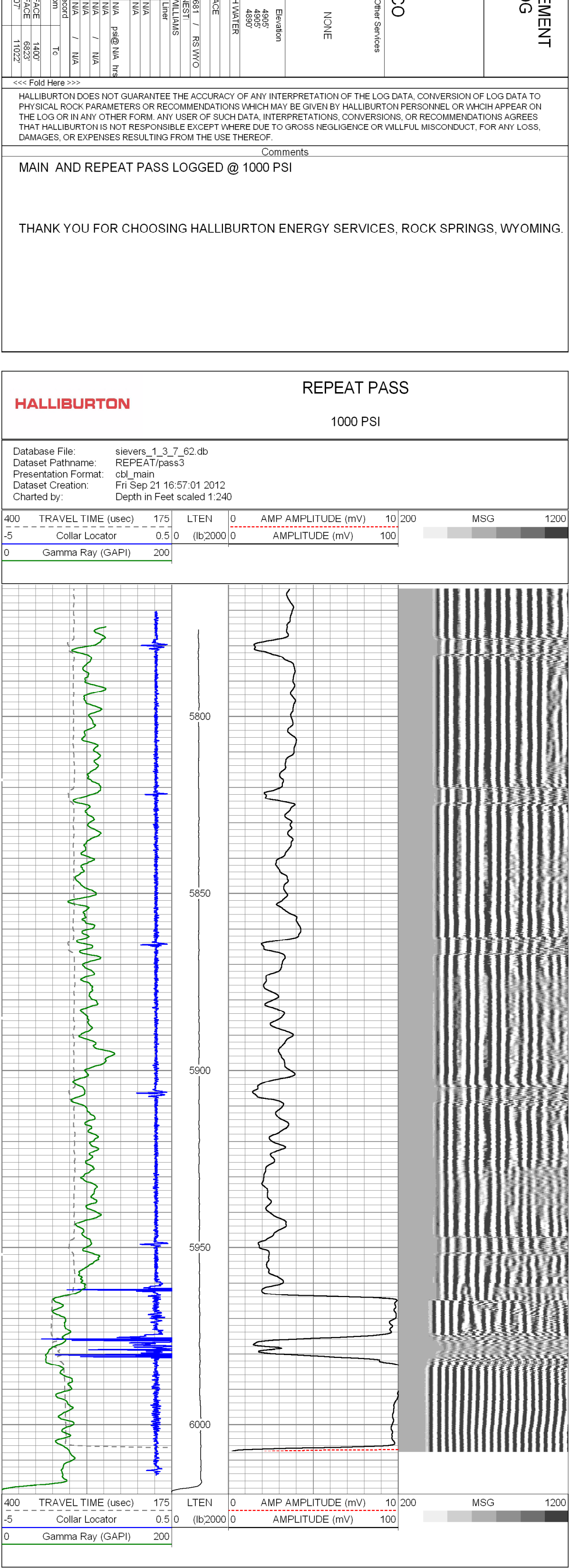
REPEAT PASS

1000 PSI

Database File:	sievers_1_3_7_62.db
Dataset Pathname:	REPEAT/pass3
Presentation Format:	cbl_main
Dataset Creation:	Fri Sep 21 16:57:01 2012
Charted by:	Depth in Feet scaled 1:240



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REPEAT PASS

1000 PSI

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MAIN PASS

1000 PSI

Database File:	sievers_1_3_7_62.db
Dataset Pathname:	MAIN/pass7
Presentation Format:	cbl_main
Dataset Creation:	Fri Sep 21 16:48:18 2012
Charted by:	Depth in Feet scaled 1:240

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MAIN PASS

1000 PSI

Calibration Report

Database File: sievers_1_3_7_62.db
Dataset Pathname: MAIN/pass4
Dataset Creation: Fri Sep 21 15:50:45 2012 by Log Halliburton Casedho

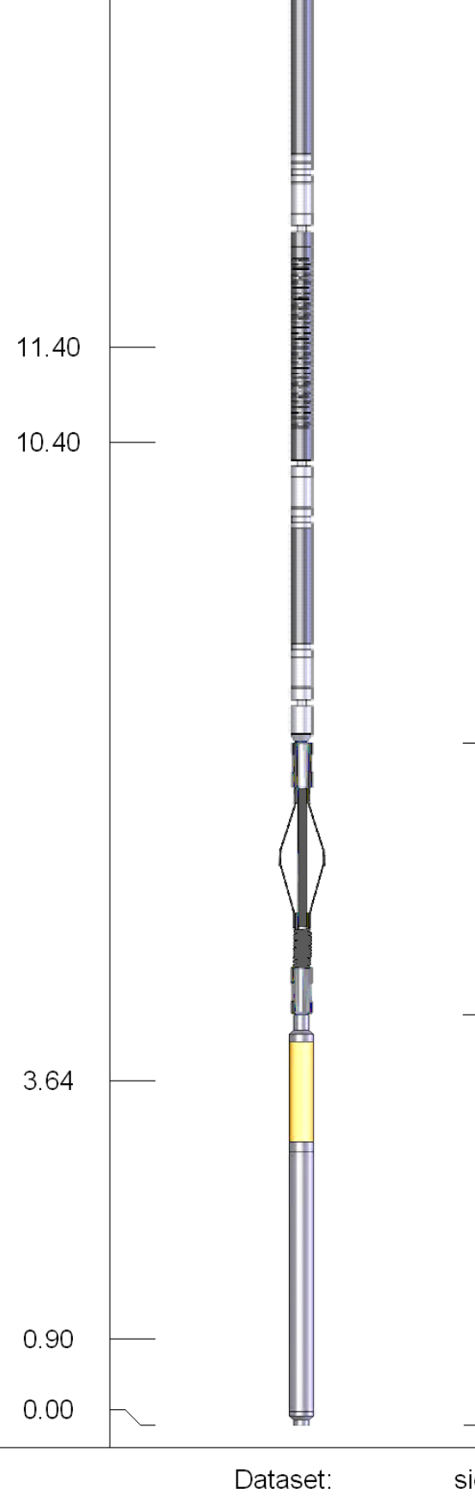
Gamma Ray Calibration Report

Type / Serial: Probe / 070664

	Counts/Sec.	Gain	Offset	Jig	Units
SHOP CALIBRATION	Wed Aug 22 12:07:26 2012				
Background	112.8				cps
Calibrator	297.4				cps
		0.9800			GAPI/cps
PRIMARY VERIFICATION	Wed Oct 24 12:07:24 2012				
Background	41.2				cps
Calibrator	261.6				cps
Difference				220.4	GAPI
BEFORE SURVEY VERIFICATION	Wed Oct 24 18:02:04 2012				
Background	45.8				cps
Calibrator	260.7				cps
Difference				214.9	GAPI
AFTER SURVEY VERIFICATION					
Background	0.0				cps
Calibrator	0.0				cps
Difference				0.0	GAPI

Cement Bond Log Calibration Report

Serial Number:	061114		
Tool Model:	Probe		
Performed:	Fri Sep 21 15:50:01 2012		
Depth:	759.4		ft
Casing Diameter:	7		in
	3' Spacing	5' Spacing	
Signal Zero:	2	2	mV
Calibrated Amplitude:	63	63	mV
Reading at Signal Zero:	0.0020752	0.00119629	V
Reading in Free Pipe:	0.973291	1.02668	V
Gain:	62.8079	59.4839	
Offset:	1.86966	1.92884	

Sensor	Offset (ft)	Schematic	Description	Len (ft)	OD (in)	Wt (lb)
			STND_CH 1.4375 IN CABLE HEAD	1.00	1.44	1.00
			AS4-0017 2.75" PROBE	2.83	2.75	20.00
WVF3	11.40		CBL-Probe (061114) Probe 2.75" Dual Receiver Bond	8.92	2.75	60.00
WVF5	10.40					
			Probe_275 Probe 2 3/4 Centralizer	2.88	2.75	20.00
CCL	3.64					
GR	0.90		GR-Probe (070664) Probe 2.75" 4 Channel Pulse	4.33	2.75	30.00
LLMTEN	0.00					

Dataset: sievers_1_3_7_62.db: field/well/MAIN/pass4
Total Length: 19.96 ft
Total Weight: 131.00 lb
O.D.: 2.75 in

Company	CARRIZO OIL & GAS INC.		
Well	SIEVERS 1-3-7-62		
Field	NIOBRARA		
County	WELD	State	CO
HALLIBURTON		ACOUSTIC CEMENT BOND LOG 5" = 100'	