



DRILL STEM TEST REPORT

Prepared For: **CARRIE EXPLOATION LLC**

1611 COPPER CREEK C-2
HAYS, KANSAS 67601-2667

ATTN: HERB DEINES

BOB THOMAS C-2

35-19S-11W BARTON

Start Date: 2016.10.26 @ 05:52:00

End Date: 2016.10.26 @ 09:48:30

Job Ticket #: 01139 DST #: 5

Eagle Testers
1309 Patton Road Great Bend, Kansas 67530
620-791-7394

Printed: 2016.10.26 @ 10:01:56



DRILL STEM TEST REPORT

CARRIE EXPLOATION LLC

35-19S-11W BARTON

1611 COPPER CREEK C-2
HAYS, KANSAS 67601-2667

BOB THOMAS C-2

Job Ticket: 01139

DST#: 5

ATTN: HERB DEINES

Test Start: 2016.10.26 @ 05:52:00

GENERAL INFORMATION:

Formation: **ARBUCKLE**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:56:30

Time Test Ended: 09:48:30

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1

Interval: **3270.00 ft (KB) To 3298.00 ft (KB) (TVD)**

Reference Elevations: 1778.00 ft (KB)

Total Depth: 3270.00 ft (KB) (TVD)

1770.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 9139

Press@RunDepth: 67.90 psia @ ft (KB)

Capacity: psia

Start Date: 2016.10.26

End Date: 2016.10.26

Last Calib.: 1899.12.30

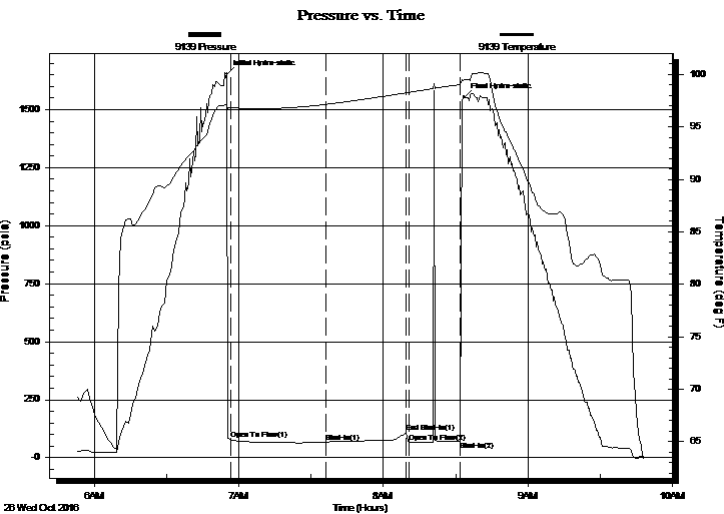
Start Time: 05:52:00

End Time: 09:48:30

Time On Btm: 2016.10.26 @ 06:55:00

Time Off Btm: 2016.10.26 @ 08:33:30

TEST COMMENT: 1st OPENING 30 MINUTES VERY WEAK SURFACE BLOW FOR 12 MINUTES AND DIED
1ST SHUT-IN 45 MINUTES-NO BLOW BACK
2ND OPENING 20 MINUTES NO BLOW FLUSHED TOOL GOOD SURGE NO HELP
2ND SHUT-IN NONE TAKEN



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1652.66	97.13	Initial Hydro-static
2	77.73	96.82	Open To Flow (1)
41	67.90	97.14	Shut-In(1)
75	108.17	98.26	End Shut-In(1)
76	65.67	98.28	Open To Flow (2)
97	70.30	99.05	Shut-In(2)
99	1552.99	99.49	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OIL SPOTTED MUD	0.14

Gas Rates

Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

CARRIE EXPLOATION LLC

35-19S-11W BARTON

1611 COPPER CREEK C-2
HAYS, KANSAS 67601-2667

BOB THOMAS C-2

Job Ticket: 01139

DST#: 5

ATTN: HERB DEINES

Test Start: 2016.10.26 @ 05:52:00

GENERAL INFORMATION:

Formation: **ARBUCKLE**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:56:30

Time Test Ended: 09:48:30

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1

Interval: **3270.00 ft (KB) To 3298.00 ft (KB) (TVD)**

Reference Elevations: 1778.00 ft (KB)

Total Depth: 3270.00 ft (KB) (TVD)

1770.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 9119

Press@RunDepth: 107.09 psia @ ft (KB)

Capacity: psia

Start Date: 2016.10.26

End Date:

2016.10.26

Last Calib.:

1899.12.30

Start Time: 05:52:00

End Time:

09:48:30

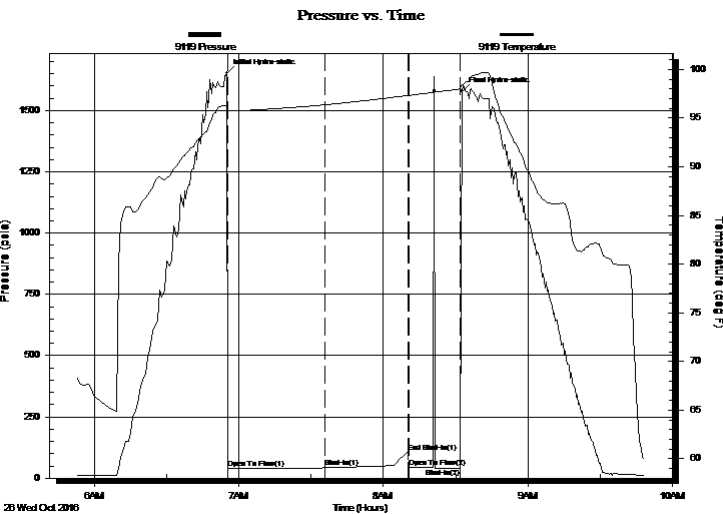
Time On Btm:

2016.10.26 @ 06:55:00

Time Off Btm:

2016.10.26 @ 08:32:30

TEST COMMENT: 1st OPENING 30 MINUTES VERY WEAK SURFACE BLOW FOR 12 MINUTES AND DIED
1ST SHUT-IN 45 MINUTES-NO BLOW BACK
2ND OPENING 20 MINUTES NO BLOW FLUSHED TOOL GOOD SURGE NO HELP
2ND SHUT-IN NONE TAKEN



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1652.34	96.21	Initial Hydro-static
1	38.26	95.78	Open To Flow (1)
41	42.27	96.38	Shut-In(1)
75	107.09	97.35	End Shut-In(1)
76	44.83	97.34	Open To Flow (2)
97	40.42	98.01	Shut-In(2)
98	1577.68	98.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	OIL SPOTTED MUD	0.14

Gas Rates

Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)



DRILL STEM TEST REPORT

TOOL DIAGRAM

CARRIE EXPLOATION LLC

35-19S-11W BARTON

1611 COPPER CREEK C-2
HAYS, KANSAS 67601-2667

BOB THOMAS C-2

Job Ticket: 01139

DST#: 5

ATTN: HERB DEINES

Test Start: 2016.10.26 @ 05:52:00

Tool Information

Drill Pipe:	Length: 3262.00 ft	Diameter: 3.80 inches	Volume: 45.76 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 45.76 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	12.00 ft			String Weight: Initial 36000.00 lb
Depth to Top Packer:	3270.00 ft			Final 36000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	48.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Shut In Tool	5.00			3255.00	
Hydraulic tool	5.00			3260.00	
Top Packer	5.00			3265.00	
Packer	5.00			3270.00	20.00 Bottom Of Top Packer
Anchor	23.00			3293.00	
Recorder	0.00		Inside	3293.00	
Recorder	0.00		Outside	3293.00	
Bullnose	5.00			3298.00	28.00 Anchor Tool

Total Tool Length: 48.00



DRILL STEM TEST REPORT

FLUID SUMMARY

CARRIE EXPLOATION LLC

35-19S-11W BARTON

1611 COPPER CREEK C-2
HAYS, KANSAS 67601-2667

BOB THOMAS C-2

Job Ticket: 01139

DST#: 5

ATTN: HERB DEINES

Test Start: 2016.10.26 @ 05:52:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 48.00 sec/qt
Water Loss: 10.20 in³
Resistivity: ohm.m
Salinity: 6000.00 ppm
Filter Cake: 1.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psia

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	OIL SPOTTED MUD	0.140

Total Length: 10.00 ft Total Volume: 0.140 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

