



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: 2016.10.25 @ 10:30:00

End Date: 2016.10.25 @ 00:00:00

Job Ticket #: 01138 DST #: 4

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

Printed: 2016.10.26 @ 07:35:22



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GENERAL INFORMATION:

Formation: **KANSAS CITY G**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:33:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1-30

Interval: **3102.00 ft (KB) To 3118.00 ft (KB) (TVD)**

Reference Elevations: 1778.00 ft (KB)

Total Depth: 3118.00 ft (KB) (TVD)

1770.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 9119

Inside

Press@RunDepth: 739.08 psia @ 3113.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2016.10.25

End Date:

2016.10.25

Last Calib.:

2016.10.25

Start Time: 10:31:00

End Time:

15:58:00

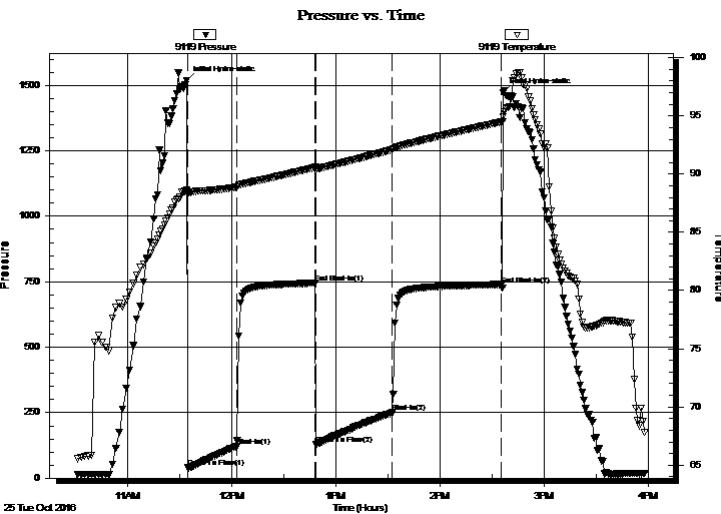
Time On Btm:

2016.10.25 @ 11:34:00

Time Off Btm:

2016.10.25 @ 14:36:30

TEST COMMENT: 1ST OPENING 30 MINUTES GOOD BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 6 MINUTES
1ST SHUT-IN 45 MINUTES NO BLOW BACK
2ND OPENING 45 MINUTES GOOD BLOW BUILT TO THE BOTTOM OF 5 GALLON BUCKET IN 12 MINUTES
2ND SHUT-IN 60 MINUTES NO BLOW BACK



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1518.94	88.61	Initial Hydro-static
1	40.54	88.31	Open To Flow (1)
29	120.11	88.88	Shut-In(1)
74	744.50	90.58	End Shut-In(1)
75	128.99	90.29	Open To Flow (2)
119	249.82	92.10	Shut-In(2)
182	739.08	94.48	End Shut-In(2)
183	1470.53	94.94	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
425.00	water chlorides 82000	5.96

Gas Rates

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



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Total Depth: 3118.00 ft (KB) (TVD)

1770.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 9139

Outside

Press@RunDepth: 752.02 psia @ 3113.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2016.10.25

End Date:

2016.10.25

Last Calib.:

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15:58:00

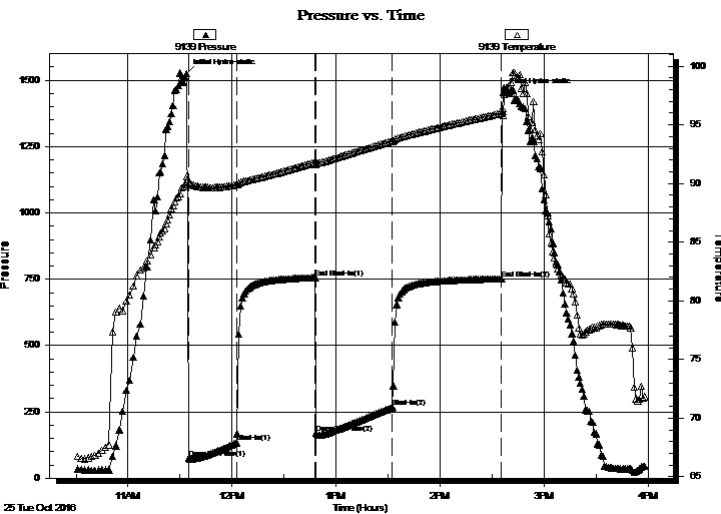
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PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1525.53	90.61	Initial Hydro-static
1	73.93	90.09	Open To Flow (1)
29	133.61	89.88	Shut-In(1)
74	756.34	91.82	End Shut-In(1)
75	168.87	91.64	Open To Flow (2)
119	266.33	93.61	Shut-In(2)
182	752.02	95.97	End Shut-In(2)
183	1452.98	95.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
425.00	water chlorides 82000	5.96

Gas Rates

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



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TOOL DIAGRAM

CARRIE EXPLOATION LLC

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ATTN: HERB DEINES

Test Start: 2016.10.25 @ 10:30:00

Tool Information

Drill Pipe:	Length: 3110.00 ft	Diameter: 3.80 inches	Volume: 43.63 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.78 inches	Volume: 0.00 bbl	Weight set on Packer:	20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	68000.00 lb
			<u>Total Volume: 43.63 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial	36000.00 lb
Depth to Top Packer:	3102.00 ft			Final	38000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	16.00 ft				
Tool Length:	36.00 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			3087.00	
Hydraulic tool	5.00			3092.00	
Top Packer	5.00			3097.00	
Packer	5.00			3102.00	20.00 Bottom Of Top Packer
Anchor	11.00			3113.00	
Recorder	0.00	9119	Inside	3113.00	
Recorder	0.00	9139	Outside	3113.00	
Bullnose	5.00			3118.00	16.00 Anchor Tool

Total Tool Length: 36.00



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FLUID SUMMARY

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Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 43.00 sec/qt

Water Loss: in³

Resistivity: ohm.m

Salinity: ppm

Filter Cake: inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psia

Oil API:

Water Salinity: deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
425.00	w ater chlorides 82000	5.962

Total Length: 425.00 ft Total Volume: 5.962 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

