



DRILL STEM TEST REPORT

Prepared For: **YOUNGER ENERGY COMPANY**

9415 E. HARRY SUITE 403
BUILDING 400
WICHITA, KANSAS 67207

ATTN: KEITH REAVIS

SCHARTZ 2-34

34-21S-15W PAWNEE

Start Date: 2015.12.07 @ 10:11:00

End Date: 2015.12.07 @ 17:25:00

Job Ticket #: 01203 DST #: 1

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

Printed: 2015.12.07 @ 17:51:32



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DST#: 1

Test Start: 2015.12.07 @ 10:11:00

GENERAL INFORMATION:

Formation: **SIMPSON SAND**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:54:00

Time Test Ended: 17:25:00

Test Type: Conventional Bottom Hole (Initial)

Tester: GENE BUDIG

Unit No: 1-56

Interval: **3728.00 ft (KB) To 3923.00 ft (KB) (TVD)**

Reference Elevations: 1978.00 ft (KB)

Total Depth: 3923.00 ft (KB) (TVD)

1970.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: **9139** Outside

Press@RunDepth: 1321.29 psia @ 3918.18 ft (KB)

Capacity: 5000.00 psia

Start Date: 2015.12.07

End Date: 2015.12.07

Last Calib.: 2015.12.07

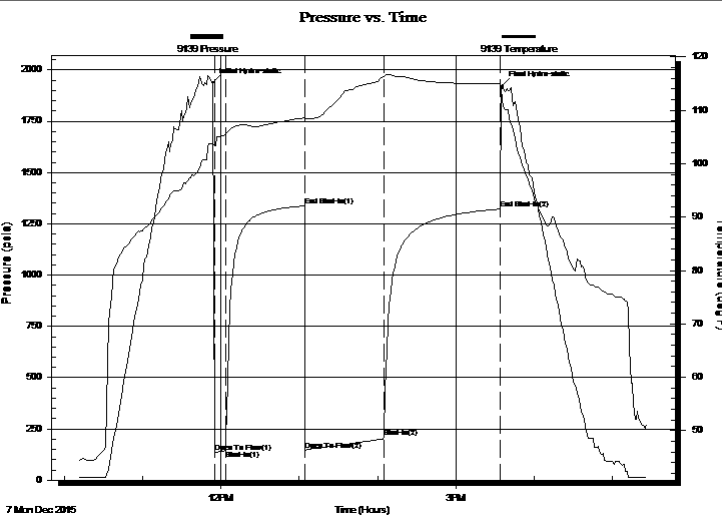
Start Time: 10:11:00

End Time: 17:26:30

Time On Btm: 2015.12.07 @ 11:54:00

Time Off Btm: 2015.12.07 @ 15:35:30

TEST COMMENT: 1ST OPENING 10 MINUTES WEAK BLOW BUILT TO 4 INCHES INTO THE WATER
 1ST SHUT-IN 60 MINUTES-NO BLOW BACK
 2ND OPENING 60 MINUTES WEAK BUILDING BLOW BUILT TO BOTTOM OF THE BUCKET IN 40 MINUTES
 2ND SHUT-IN 90 MINUTES



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1936.76	103.76	Initial Hydro-static
1	134.17	103.36	Open To Flow (1)
10	143.86	105.52	Shut-In(1)
70	1336.36	108.59	End Shut-In(1)
71	147.49	108.31	Open To Flow (2)
131	210.03	116.40	Shut-In(2)
220	1321.29	114.99	End Shut-In(2)
222	1921.47	111.90	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GAS IN THE PIPE	0.84
20.00	MUDDY OIL 60 OIL 40 MUD	0.28
60.00	OIL CUT MUD 35 OIL 65 MUD	0.84
60.00	OIL CUT MUD 25 OIL 75 MUD	0.84
60.00	OIL CUT MUD 20 OIL 80 MUD	0.84

Gas Rates

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



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Unit No: 1-56

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Reference Elevations: 1978.00 ft (KB)

Total Depth: 3923.00 ft (KB) (TVD)

1970.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 9119

Inside

Press@RunDepth: 1321.80 psia @ 3918.18 ft (KB)

Capacity: 5000.00 psia

Start Date: 2015.12.07 End Date: 2015.12.07

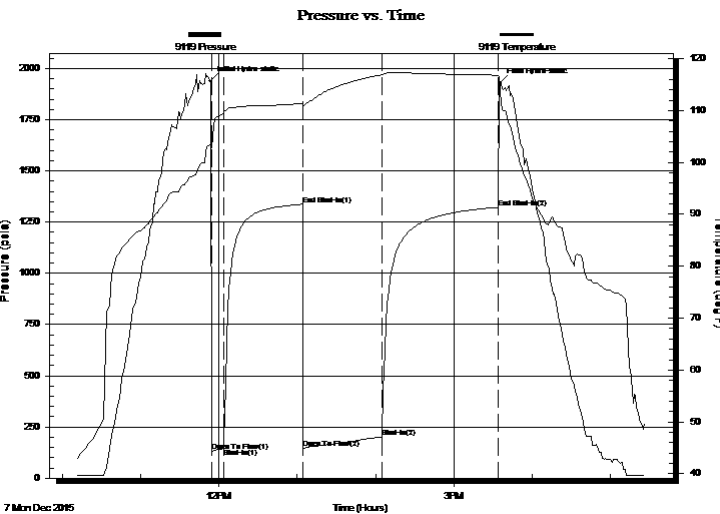
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 2ND OPENING 60 MINUTES WEAK BUILDING BLOW BUILT TO BOTTOM OF THE BUCKET IN 40 MINUTES
 2ND SHUT-IN 90 MINUTES



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1939.77	103.41	Initial Hydro-static
1	132.86	102.76	Open To Flow (1)
10	143.75	109.59	Shut-In(1)
71	1336.81	111.36	End Shut-In(1)
71	146.48	110.99	Open To Flow (2)
132	201.72	116.88	Shut-In(2)
221	1321.80	116.82	End Shut-In(2)
222	1928.87	113.40	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
60.00	GAS IN THE PIPE	0.84
20.00	MUDDY OIL 60 OIL 40 MUD	0.28
60.00	OIL CUT MUD 35 OIL 65 MUD	0.84
60.00	OIL CUT MUD 25 OIL 75 MUD	0.84
60.00	OIL CUT MUD 20 OIL 80 MUD	0.84

Gas Rates

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

YOUNGER ENERGY COMPANY

34-21S-15W PAWNEE

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 BUILDING 400
 WICHITA, KANSAS 67207
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SCHARTZ 2-34

Job Ticket: 01203

DST#: 1

Test Start: 2015.12.07 @ 10:11:00

Tool Information

Drill Pipe:	Length: 3716.00 ft	Diameter: 3.80 inches	Volume: 52.13 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.76 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: 74000.00 lb
			Total Volume: 52.13 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3728.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	195.18 ft			
Tool Length:	224.18 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			3704.00	
Hydraulic tool	5.00			3709.00	
Jars	7.00			3716.00	
Safety Joint	2.00		Fluid	3718.00	
Top Packer	5.00			3723.00	
Packer	5.00			3728.00	29.00 Bottom Of Top Packer
Anchor	5.00			3733.00	
Change Over Sub	0.75			3733.75	
Drill Pipe	156.68			3890.43	
Change Over Sub	0.75			3891.18	
Anchor	27.00			3918.18	
Recorder	0.00	9119	Inside	3918.18	
Recorder	0.00	9139	Outside	3918.18	
Bullnose	5.00			3923.18	195.18 Anchor Tool

Total Tool Length: 224.18



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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: 46.00 sec/qt
 Water Loss: 10.40 in³
 Resistivity: ohm.m
 Salinity: 10000.00 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
60.00	GAS IN THE PIPE	0.842
20.00	MUDDY OIL 60 OIL 40 MUD	0.281
60.00	OIL CUT MUD 35 OIL 65 MUD	0.842
60.00	OIL CUT MUD 25 OIL 75 MUD	0.842
60.00	OIL CUT MUD 20 OIL 80 MUD	0.842

Total Length: 260.00 ft Total Volume: 3.649 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time

