



DRILL STEM TEST REPORT

Prepared For: **Younger Energy Company**

9415 E. Harry Ste 403 bldg400
Wichita ,Kansas 67207

ATTN: keith Reavis

Jarbo "A" # @

25-26s-14w Pratt

Start Date: 2019.04.27 @ 11:30:00

End Date: 2019.04.27 @ 17:31:00

Job Ticket #: 01360 DST #: 3

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

Printed: 2019.04.27 @ 18:07:07



DRILL STEM TEST REPORT

Younger Energy Company

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Jarbo "A" # @

Job Ticket: 01360

DST#: 3

ATTN: keith Reavis

Test Start: 2019.04.27 @ 11:30:00

GENERAL INFORMATION:

Formation: **Kansas City "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:57:00

Time Test Ended: 17:31:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 1

Interval: 4046.00 ft (KB) To 4680.00 ft (KB) (TVD)

Reference Elevations: 1979.00 ft (KB)

Total Depth: 4080.00 ft (KB) (TVD)

1967.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

Serial #: 9139 Outside

Press@RunDepth: 977.05 psig @ 4075.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2019.04.27

End Date: 2019.04.27

Last Calib.: 2019.04.27

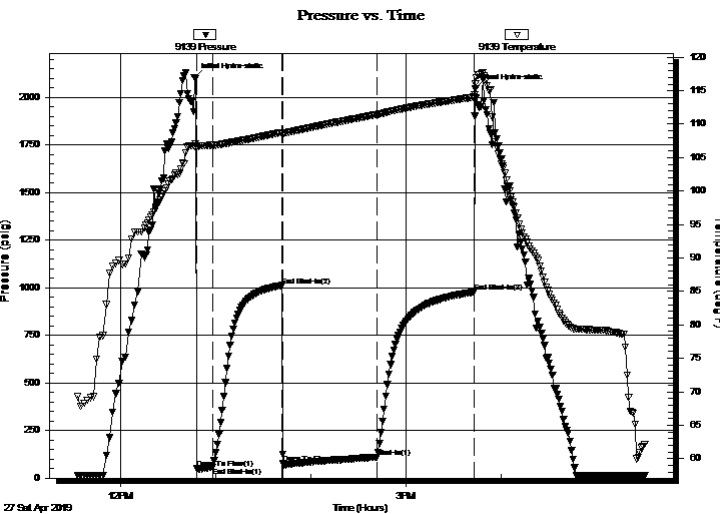
Start Time: 11:30:00

End Time: 17:30:30

Time On Btm: 2019.04.27 @ 12:46:30

Time Off Btm: 2019.04.27 @ 15:43:30

TEST COMMENT: 1st Opening 10 Minutes good blow built to the bottom of the bucket in 90 seconds
1st shut-in 45 Minutes no blow back
2nd Opening 60 Minutes good blow built to the bottom of the bucket in 1 minute
2nd Shut-In 60 Minutes 3 inch blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2105.89	106.72	Initial Hydro-static
2	51.17	106.67	Open To Flow (1)
12	57.73	106.85	End Shut-In(1)
55	1012.14	108.77	End Shut-In(2)
56	76.39	108.63	Open To Flow (2)
115	110.56	111.44	Shut-In(1)
176	977.05	114.04	End Shut-In(3)
177	2045.27	116.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2900.00	Gas in the pipe	40.68
45.00	w ater cut muddy frothy oil	0.63
0.00	10% Gas 30%Oil 25%Mud30%Water	0.00
90.00	w ater cut muddy frothy oil	1.26
0.00	20%Gas 30%Oil 18%Mud 35%Waster	0.00
30.00	oil and gas cut muddy w ater	0.42

Gas Rates

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



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Job Ticket: 01360

DST#: 3

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Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 1

Interval: 4046.00 ft (KB) To 4680.00 ft (KB) (TVD)

Reference Elevations: 1979.00 ft (KB)

Total Depth: 4080.00 ft (KB) (TVD)

1967.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 12.00 ft

Serial #: 9119

Inside

Press@RunDepth: 980.03 psig @ 4075.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2019.04.27

End Date:

2019.04.27

Last Calib.:

2019.04.27

Start Time: 11:30:00

End Time:

17:30:30

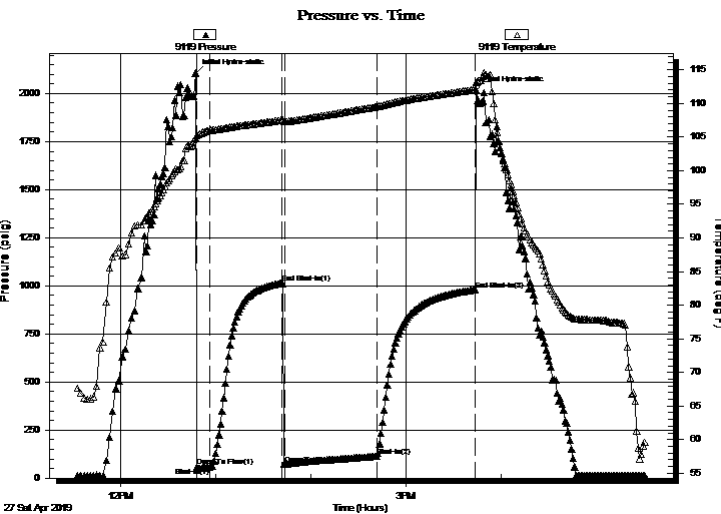
Time On Btm:

2019.04.27 @ 12:46:59

Time Off Btm:

2019.04.27 @ 15:44:00

TEST COMMENT: 1st Opening 10 Minutes good blow built to the bottom of the bucket in 90 seconds
1st shut-in 45 Minutes no blow back
2nd Opening 60 Minutes good blow built to the bottom of the bucket in 1 minute
2nd Shut-In 60 Minutes 3 inch blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2105.74	104.87	Initial Hydro-static
2	59.05	105.17	Open To Flow (1)
10	57.73	105.96	Shut-In(1)
55	1014.78	107.53	End Shut-In(1)
57	72.57	107.29	Open To Flow (2)
115	113.25	109.52	Shut-In(2)
177	980.03	112.03	End Shut-In(2)
178	2017.51	113.08	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
2900.00	Gas in the pipe	40.68
45.00	w ater cut muddy frothy oil	0.63
0.00	10% Gas 30%Oil 25%Mud30%Water	0.00
90.00	w ater cut muddy frothy oil	1.26
0.00	20%Gas 30%Oil 18%Mud 35%Waster	0.00
30.00	oil and gas cut muddy w ater	0.42

Gas Rates

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



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TOOL DIAGRAM

Younger Energy Company
 9415 E. Harry Ste 403 bldg400
 Wichita ,Kansas 67207
 ATTN: keith Reavis

25-26s-14w Pratt
Jarbo "A" # @
 Job Ticket: 01360 **DST#: 3**
 Test Start: 2019.04.27 @ 11:30:00

Tool Information

Drill Pipe:	Length: 4031.00 ft	Diameter: 3.80 inches	Volume: 56.54 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:	68000.00 lb
			<u>Total Volume: 56.54 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4046.00 ft			Final	60000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	34.00 ft				
Tool Length:	64.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4021.00	
Hydraulic tool	5.00			4026.00	
Jars	5.00			4031.00	
Safety Joint	5.00			4036.00	
Packer	5.00			4041.00	30.00 Bottom Of Top Packer
Packer	5.00		Fluid	4046.00	
Anchor	29.00			4075.00	
Recorder	0.00	9119	Inside	4075.00	
Recorder	0.00	9139	Outside	4075.00	
Bullnose	5.00			4080.00	34.00 Bottom Packers & Anchor
Total Tool Length:	64.00				



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FLUID SUMMARY

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Job Ticket: 01360

DST#: 3

ATTN: keith Reavis

Test Start: 2019.04.27 @ 11:30:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 58.00 sec/qt
Water Loss: 7.99 in³
Resistivity: ohm.m
Salinity: 5000.00 ppm
Filter Cake: 1.00 inches

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

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2900.00	Gas in the pipe	40.679
45.00	w ater cut muddy frothy oil	0.631
0.00	10% Gas 30%Oil 25%Mud30%Water	0.000
90.00	w ater cut muddy frothy oil	1.262
0.00	20%Gas 30%Oil 18%Mud 35%Waster	0.000
30.00	oil and gas cut muddy w ater	0.421
0.00	25%Gas 15% Oil15% mud 45% Water	0.000
0.00	Chlorides 78000	0.000

Total Length: 3065.00 ft Total Volume: 42.993 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

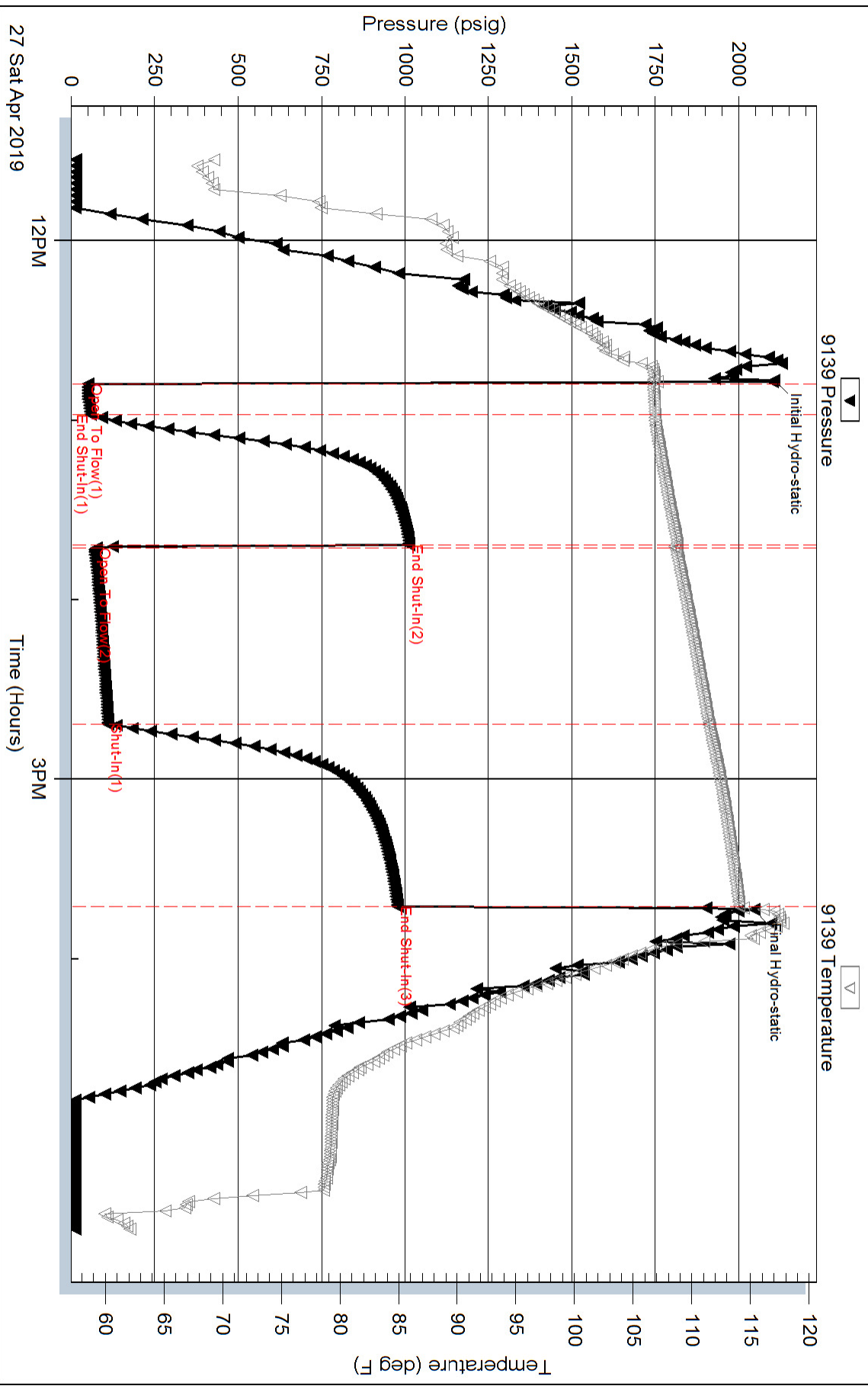
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time

