



DRILL STEM TEST REPORT

Prepared For: **Younger Energy Company**

3415 E. Harry suite 403 bld400
Wichita, Kansas 67207

ATTN: Keith Reavis

Baur Y #3-27

27-21s-15w Pawnee

Start Date: 2017.07.16 @ 08:15:00

End Date: 2017.07.16 @ 04:02:00

Job Ticket #: DST #: 1

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

Printed: 2017.07.16 @ 18:37:45



DRILL STEM TEST REPORT

Younger Energy Company

27-21s-15w Pawnee

3415 E.Harry suite 403 bld400
Wichita, Kansas 67207

Baur Y #3-27

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Job Ticket:

DST#: 1

Test Start: 2017.07.16 @ 08:15:00

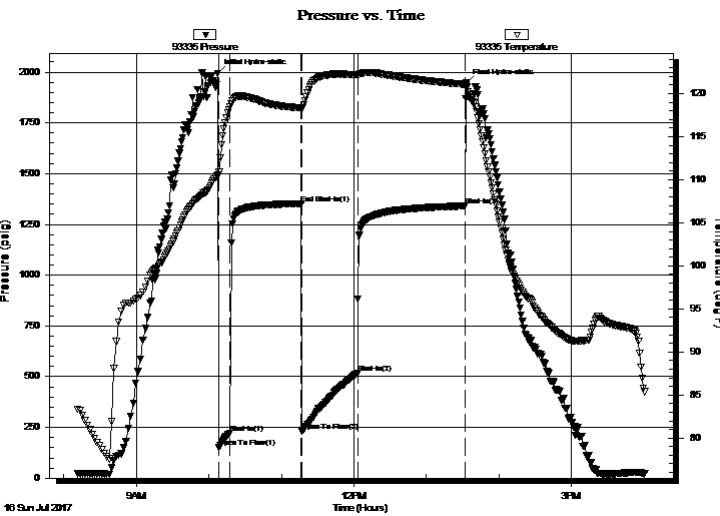
GENERAL INFORMATION:

Formation: **Simpson Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:11:00
 Time Test Ended: 04:02:00
 Interval: **3710.00 ft (KB) To 3890.00 ft (KB) (TVD)**
 Total Depth: 3890.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Gene Budig
 Unit No: 1
 Reference Elevations: 1976.00 ft (KB)
 1968.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 93335 Inside

Press@RunDepth: 1352.79 psig @ 3885.04 ft (KB) Capacity: 5000.00 psig
 Start Date: 2017.07.16 End Date: 2017.07.16 Last Calib.: 2017.07.16
 Start Time: 08:11:30 End Time: 16:00:30 Time On Btm: 2017.07.16 @ 10:07:30
 Time Off Btm: 2017.07.16 @ 13:33:00

TEST COMMENT: 1st Opening 10 Minutes good blow built to the bottom of a 5 gallon bucket in 5 minutes
 1st Shut-in 60 Minutes 1/2 inch blow back
 2nd Opening 45 Minutes Good blow built to the bottom of a 5 gallon bucket in 5 minutes
 2nd Shut-In 90 Minutes weak 1/4 inch blow back and died



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1991.29	110.53	Initial Hydro-static
1	153.11	110.58	Open To Flow (1)
10	221.02	118.48	Shut-In(1)
69	1352.79	118.35	End Shut-In(1)
70	229.58	118.34	Open To Flow (2)
116	518.23	122.18	Shut-In(2)
205	1340.87	121.06	Shut-In(3)
206	1945.38	120.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	feet of gas in the pipe	0.00
420.00	Clean Gassy Oil 15% Gas 85%Oil	5.89
120.00	muddy gassy oil	1.68
0.00	10%Gas 57%Oil 34%mud	0.00
180.00	Clean Gassy Oil	2.52
120.00	muddy gassy oil	1.68

Gas Rates

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



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Wichita, Kansas 67207

Baur Y #3-27

ATTN: Keith Reavis

Job Ticket: **DST#: 1**

Test Start: 2017.07.16 @ 08:15:00

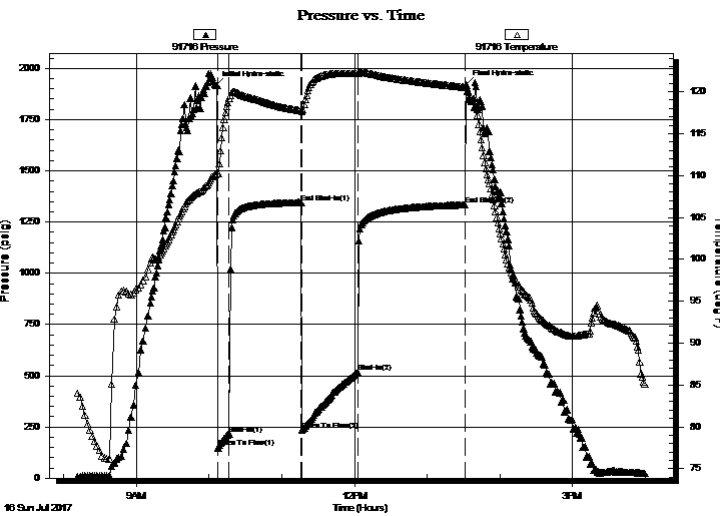
GENERAL INFORMATION:

Formation: **Simpson Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:11:00
 Time Test Ended: 04:02:00
 Interval: **3710.00 ft (KB) To 3890.00 ft (KB) (TVD)**
 Total Depth: 3890.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Gene Budig
 Unit No: 1
 Reference Elevations: 1976.00 ft (KB)
 1968.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 91716 Outside

Press@RunDepth: 1334.35 psig @ 3885.04 ft (KB) Capacity: 5000.00 psig
 Start Date: 2017.07.16 End Date: 2017.07.16 Last Calib.: 2017.07.16
 Start Time: 08:11:30 End Time: 15:59:30 Time On Btm: 2017.07.16 @ 10:05:30
 Time Off Btm: 2017.07.16 @ 13:32:30

TEST COMMENT: 1st Opening 10 Minutes good blow built to the bottom of a 5 gallon bucket in 5 minutes
 1st Shut-in 60 Minutes 1/2 inch blow back
 2nd Opening 45 Minutes Good blow built to the bottom of a 5 gallon bucket in 5 minutes
 2nd Shut-In 90 Minutes weak 1/4 inch blow back and died



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1915.51	110.13	Initial Hydro-static
2	149.04	110.25	Open To Flow (1)
11	216.40	119.15	Shut-In(1)
71	1343.45	117.73	End Shut-In(1)
71	235.49	117.69	Open To Flow (2)
117	516.49	122.15	Shut-In(2)
206	1334.35	120.51	End Shut-In(2)
207	1918.35	120.46	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	feet of gas in the pipe	0.00
420.00	Clean Gassy Oil 15% Gas 85%Oil	5.89
120.00	muddy gassy oil	1.68
0.00	10%Gas 57%Oil 34%mud	0.00
180.00	Clean Gassy Oil	2.52
120.00	muddy gassy oil	1.68

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Younger Energy Company

27-21s-15w Pawnee

3415 E.Harry suite 403 bld400
Wichita, Kansas 67207

Baur Y #3-27

Job Ticket:

DST#: 1

ATTN: Keith Reavis

Test Start: 2017.07.16 @ 08:15:00

Tool Information

Drill Pipe:	Length: 3713.00 ft	Diameter: 3.80 inches	Volume: 52.08 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: 76000.00 lb
			<u>Total Volume: 52.08 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3710.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	180.04 ft			
Tool Length:	207.04 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			3688.00	
Hydraulic tool	5.00			3693.00	
Jars	5.00			3698.00	
Safety Joint	2.00			3700.00	
Top Packer	5.00			3705.00	
Packer	5.00			3710.00	27.00 Bottom Of Top Packer
Anchor	0.00			3710.00	
Change Over Sub	0.75			3710.75	
Drill Pipe	155.54			3866.29	
Change Over Sub	0.75			3867.04	
Anchor	18.00			3885.04	
Recorder	0.00	93335	Inside	3885.04	
Recorder	0.00	91716	Outside	3885.04	
Bullnose	5.00			3890.04	180.04 Anchor Tool

Total Tool Length: 207.04



DRILL STEM TEST REPORT

FLUID SUMMARY

Younger Energy Company

27-21s-15w Pawnee

3415 E.Harry suite 403 bld400
Wichita, Kansas 67207

Baur Y #3-27

Job Ticket:

DST#: 1

ATTN: Keith Reavis

Test Start: 2017.07.16 @ 08:15:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 49.00 sec/qt
Water Loss: 9.19 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: psig

Oil API: deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	feet of gas in the pipe	0.000
420.00	Clean Gassy Oil 15% Gas 85%Oil	5.891
120.00	muddy gassy oil	1.683
0.00	10%Gas 57%Oil 34%mud	0.000
180.00	Clean Gassy Oil	2.525
120.00	muddy gassy oil	1.683
0.00	10%Gas 48%oilk 42%Mud	0.000
120.00	Muddy Gassy Oil	1.683
0.00	10%Gas 50%Oil 40%Mud	0.000
60.00	Muddy Gassy Oil	0.842
0.00	10%Gas 74%Oil 16%Mud	0.000
0.00	Gravity 42 corrected	0.000

Total Length: 1020.00 ft Total Volume: 14.307 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

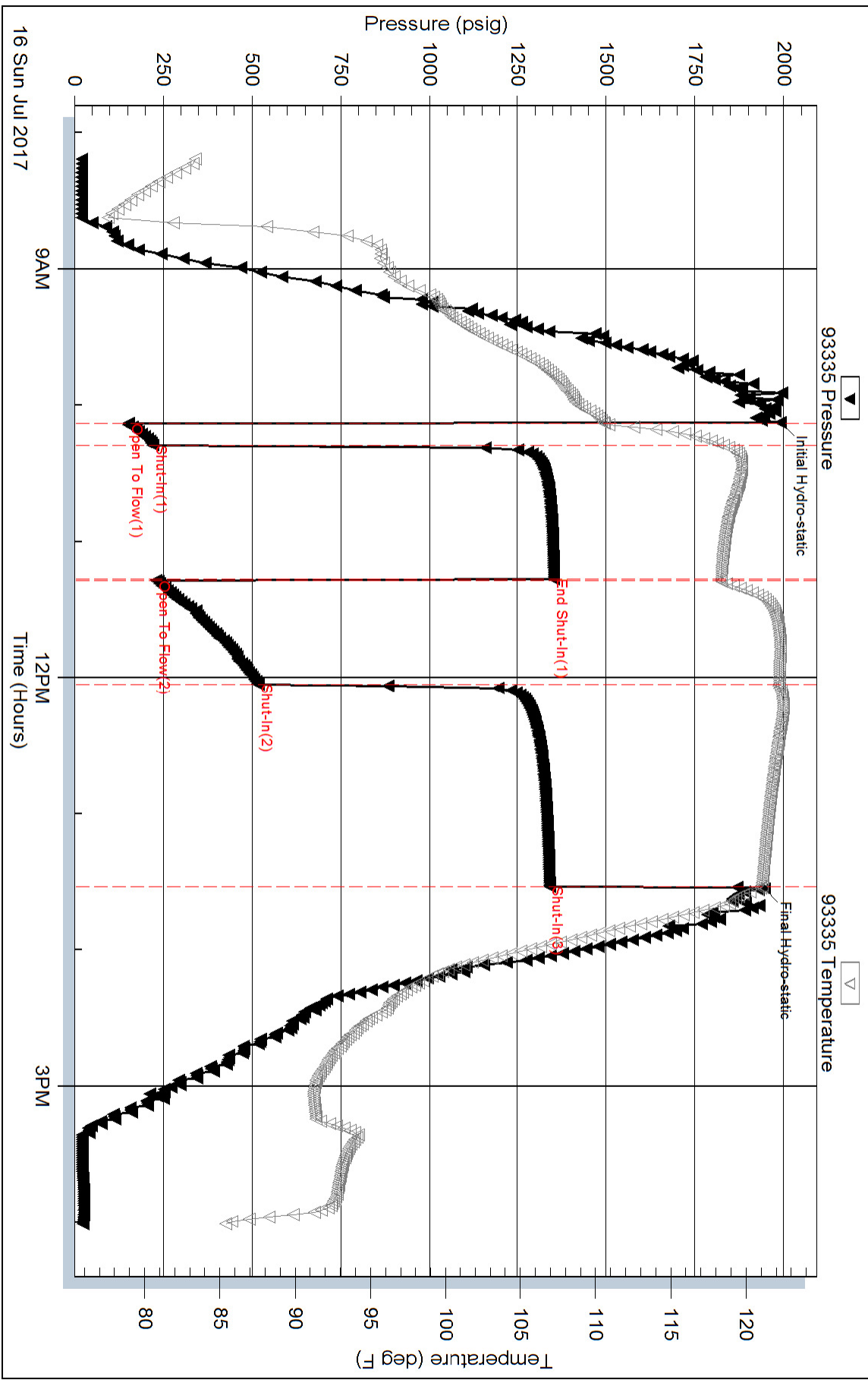
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time

