



DRILL STEM TEST REPORT

Prepared For: **Younger Energy Company**

9415 E Harry Street Suite 403 Wichita KS
67207+5083

ATTN: Kent Matson

MorrisonLutherUnit#1

06-21s-13w Stafford

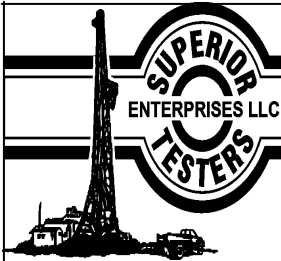
Start Date: 2014.06.24 @ 13:03:00

End Date: 2014.06.24 @ 19:33:30

Job Ticket #: 18587 DST #: 5

Superior Testers Enterprises LLC
PO Box 138 Great Bend KS 67530
1-800-792-6902

Printed: 2014.06.24 @ 20:46:56



DRILL STEM TEST REPORT

Younger Energy Company

06-21s-13w Stafford

9415 E Harry Street Suite 403 Wichita KS
67207+5083

MorrisonLutherUnit#1

ATTN: Kent Matson

Job Ticket: 18587

DST#: 5

Test Start: 2014.06.24 @ 13:03:00

GENERAL INFORMATION:

Formation: **Lansing I zone**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:19:30

Time Test Ended: 19:33:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 33-Great Bend-20

Interval: **3457.00 ft (KB) To 3465.00 ft (KB) (TVD)**

Total Depth: 3465.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1908.00 ft (KB)

1900.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8159

Press@RunDepth: 39.93 psig @ ft (KB)

Start Date: 2014.06.24

End Date: 2014.06.24

Start Time: 13:03:00

End Time: 19:33:30

Capacity: 5000.00 psig

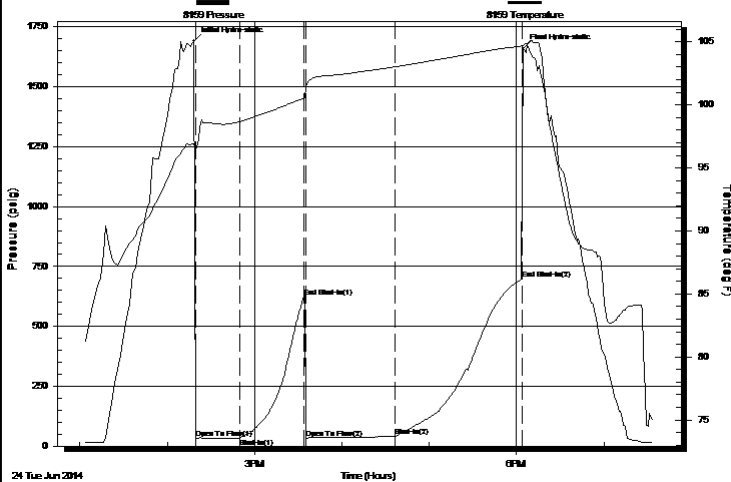
Last Calib.: 2014.06.24

Time On Btm: 2014.06.24 @ 14:18:30

Time Off Btm: 2014.06.24 @ 18:04:30

TEST COMMENT: 1st Opening 30 Minutes-Weak blow built 3 inches into bucket w water in 30 minutes 9 inches into w ater
1st Shut-in 45 Minutes-Very weak surface blow
2nd Opening 60 Minutes-Fair blow built bottom of bucket in 13 minutes
2nd Shut-in 90 Minutes-1 inch blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1690.67	96.89	Initial Hydro-static
1	31.88	96.49	Open To Flow (1)
31	33.73	98.66	Shut-In(1)
76	622.77	100.54	End Shut-In(1)
77	32.96	101.44	Open To Flow (2)
138	39.93	103.03	Shut-In(2)
225	697.06	104.67	End Shut-In(2)
226	1660.96	104.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	mud oil 40% mud 60% oil	0.56
0.00	380 feet gas in pipe	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Younger Energy Company

06-21s-13w Stafford

9415 E Harry Street Suite 403 Wichita KS
67207+5083

MorrisonLutherUnit#1

Job Ticket: 18587

DST#: 5

ATTN: Kent Matson

Test Start: 2014.06.24 @ 13:03:00

GENERAL INFORMATION:

Formation: **Lansing I zone**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:19:30

Time Test Ended: 19:33:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Jared Scheck

Unit No: 33-Great Bend-20

Interval: **3457.00 ft (KB) To 3465.00 ft (KB) (TVD)**

Reference Elevations: 1908.00 ft (KB)

Total Depth: 3465.00 ft (KB) (TVD)

1900.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 8.00 ft

Serial #: 8524

Press@RunDepth: 697.66 psig @ ft (KB)

Capacity: 5000.00 psig

Start Date: 2014.06.24

End Date:

2014.06.24

Last Calib.:

2014.06.24

Start Time: 13:03:00

End Time:

19:33:30

Time On Btm:

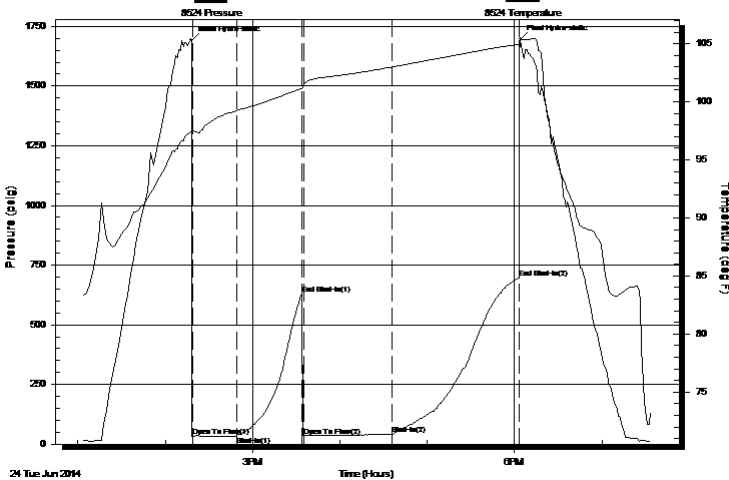
2014.06.24 @ 14:18:00

Time Off Btm:

2014.06.24 @ 18:04:00

TEST COMMENT: 1st Opening 30 Minutes-Weak blow built 3 inches into bucket w water in 30 minutes 9 inches into w ater
1st Shut-in 45 Minutes-Very weak surface blow
2nd Opening 60 Minutes-Fair blow built bottom of bucket in 13 minutes
2nd Shut-in 90 Minutes-1 inch blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1691.66	97.44	Initial Hydro-static
1	31.88	97.48	Open To Flow (1)
31	34.45	99.24	Shut-In(1)
76	630.60	101.17	End Shut-In(1)
77	33.04	101.50	Open To Flow (2)
138	40.73	103.00	Shut-In(2)
225	697.66	104.95	End Shut-In(2)
226	1696.63	105.34	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
40.00	mud oil 40% mud 60% oil	0.56
0.00	380 feet gas in pipe	0.00

Gas Rates

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

Younger Energy Company

06-21s-13w Stafford

9415 E Harry Street Suite 403 Wichita KS
67207+5083

MorrisonLutherUnit#1

Job Ticket: 18587

DST#: 5

ATTN: Kent Matson

Test Start: 2014.06.24 @ 13:03:00

Tool Information

Drill Pipe:	Length: 3434.00 ft	Diameter: 3.80 inches	Volume: 48.17 bbl	Tool Weight: 1000.00 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: 65000.00 lb
			<u>Total Volume: 48.17 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	3457.00 ft			Final 53000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	8.00 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			3434.00	
Hydraulic tool	5.00			3439.00	
Jars	6.00			3445.00	
Safety Joint	2.00			3447.00	
Top Packer	5.00			3452.00	
Packer	5.00			3457.00	28.00 Bottom Of Top Packer
Anchor	3.00			3460.00	
Recorder	1.00	8159	Inside	3461.00	
Recorder	1.00	8524	Outside	3462.00	
Bull Plug	3.00			3465.00	8.00 Anchor Tool
Total Tool Length:	36.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

Younger Energy Company

06-21s-13w Stafford

9415 E Harry Street Suite 403 Wichita KS
67207+5083

MorrisonLutherUnit#1

Job Ticket: 18587

DST#: 5

ATTN: Kent Matson

Test Start: 2014.06.24 @ 13:03:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 46.00 sec/qt
Water Loss: 8.20 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
40.00	mud oil 40% mud 60% oil	0.561
0.00	380 feet gas in pipe	0.000

Total Length: 40.00 ft Total Volume: 0.561 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

