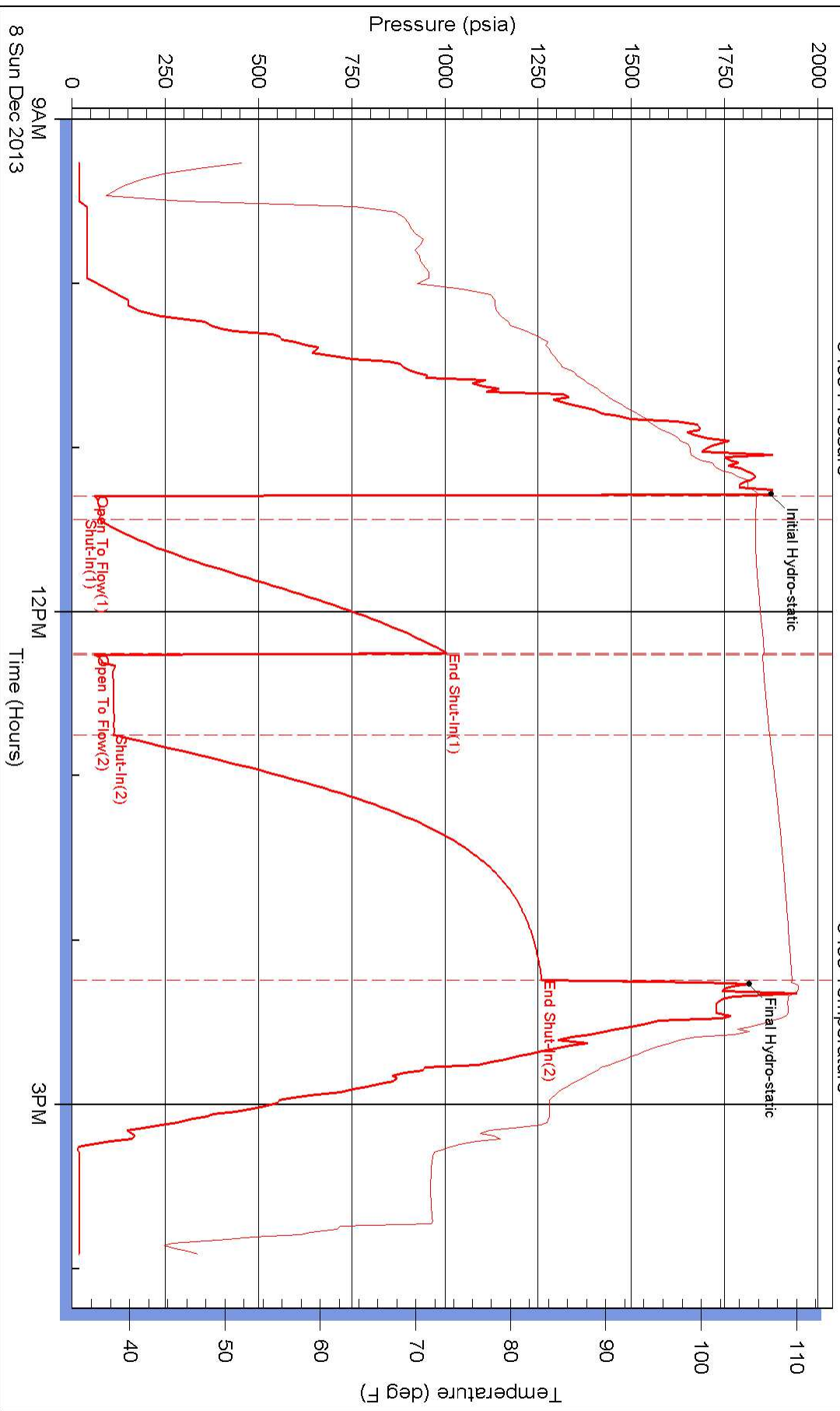
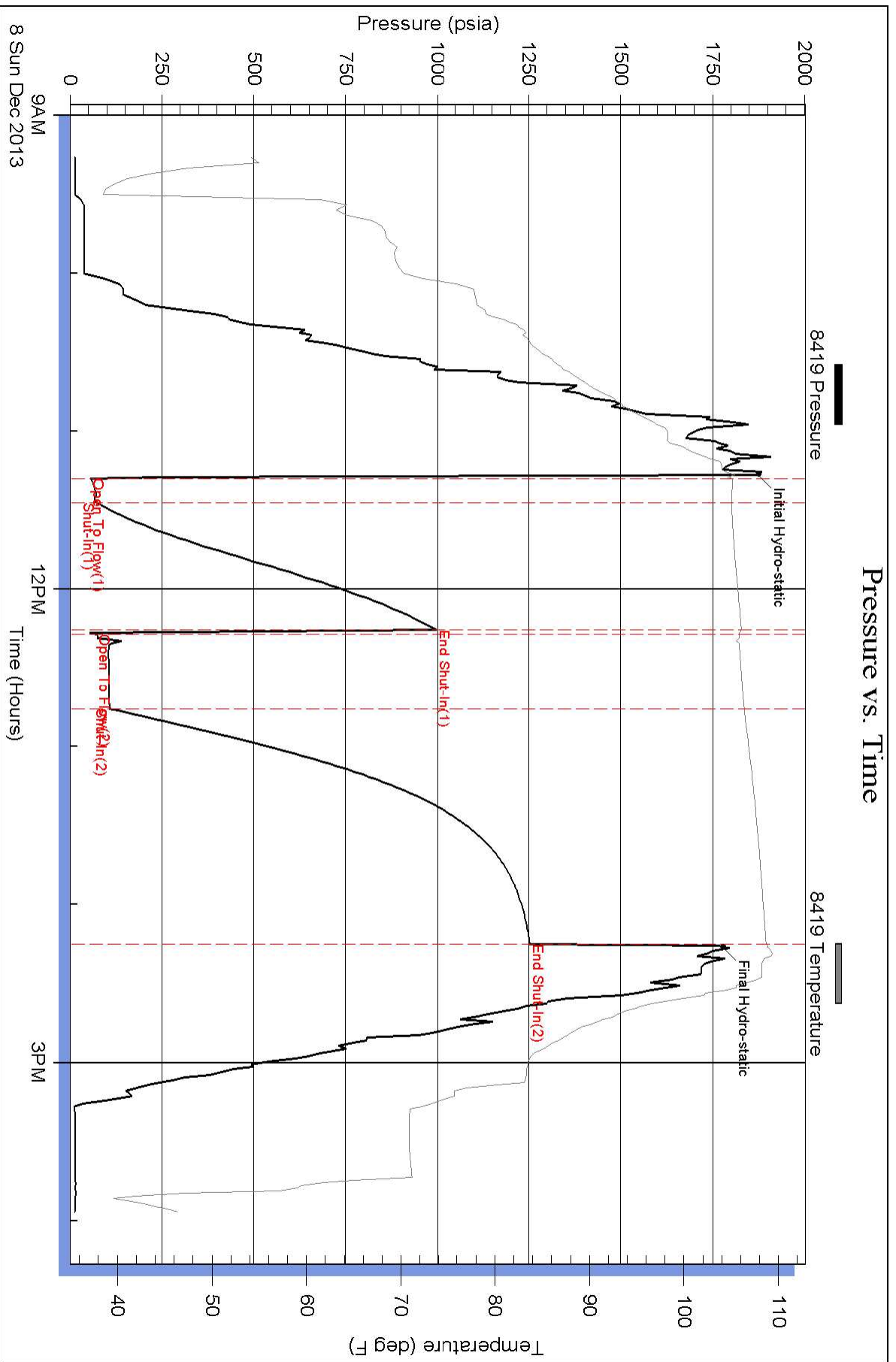


# Pressure vs. Time



# Pressure vs. Time





# DRILL STEM TEST REPORT

## FLUID SUMMARY

Edison Operating Company LLC

**16-24s-13w Stafford**

8100 East 22nd Steet North  
 Building 1900  
 Wichita, Kansas 67226  
 ATTN: Adam Nighswonger

**Rixon #1-16**

Job Ticket: 18178

**DST#: 1**

Test Start: 2013.12.08 @ 00:00:00

### Mud and Cushion Information

Mud Type: Gel Chem  
 Mud Weight: 9.00 lb/gal  
 Viscosity: 58.00 sec/qt  
 Water Loss: 9.60 in<sup>3</sup>  
 Resistivity: ohm.m  
 Salinity: 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
0.00	1750 feet of gas in the pipe	0.000
130.00	feet of drillin mud	0.639

Total Length: 130.00 ft      Total Volume: 0.639 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Edison Operating Company LLC

**16-24s-13w Stafford**

8100 East 22nd Steet North  
 Building 1900  
 Wichita, Kansas 67226  
 ATTN: Adam Nighswonger

**Rixon #1-16**

Job Ticket: 18178

**DST#: 1**

Test Start: 2013.12.08 @ 00:00:00

**Tool Information**

Drill Pipe:	Length: 3453.00 ft	Diameter: 3.80 inches	Volume: 48.44 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.86 inches	Volume: 0.00 bbl	Weight set on Packer: 2000.00 lb
Drill Collar:	Length: 241.00 ft	Diameter: 2.25 inches	Volume: 1.19 bbl	Weight to Pull Loose: 69000.00 lb
			<u>Total Volume: 49.63 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3707.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	58.00 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			3684.00	
Hydraulic Tool	5.00			3689.00	
Jars	6.00			3695.00	
Safety Joint	2.00			3697.00	
Packer	5.00			3702.00	28.00 Bottom Of Top Packer
Packer	5.00			3707.00	
Perforations	25.00			3732.00	
Recorder	1.00	8419	Inside	3733.00	
Recorder	1.00	8405	Outside	3734.00	
Bullnose	3.00			3737.00	30.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>58.00</b>				



# DRILL STEM TEST REPORT

Edison Operating Company LLC

**16-24s-13w Stafford**

8100 East 22nd Steet North  
 Building 1900  
 Wichita, Kansas 67226  
 ATTN: Adam Nighswonger

**Rixon #1-16**

Job Ticket: 18178

**DST#: 1**

Test Start: 2013.12.08 @ 00:00:00

## GENERAL INFORMATION:

Formation: **Lansing Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 3335

**Interval: 3707.00 ft (KB) To 3737.00 ft (KB) (TVD)**

Reference Elevations: 1925.00 ft (KB)

Total Depth: 3737.00 ft (KB) (TVD)

1920.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8405 Outside**

Press @ RunDepth: 1260.08 psia @ 3734.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.12.08

End Date: 2013.12.08

Last Calib.: 2013.12.08

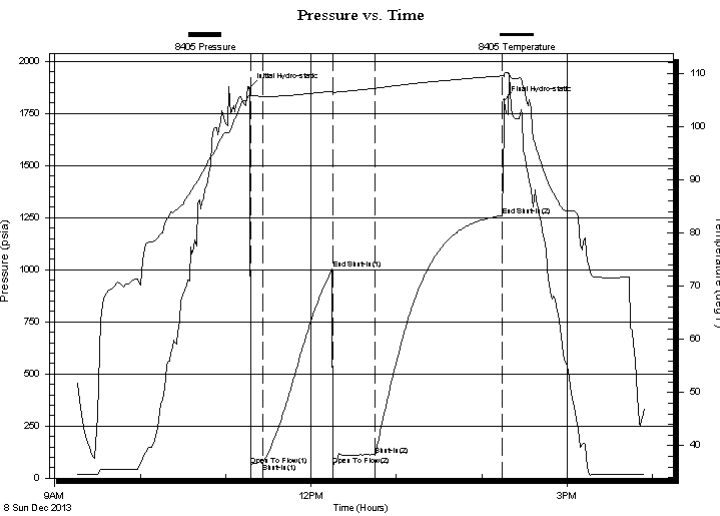
Start Time: 09:15:00

End Time: 15:54:30

Time On Btm: 2013.12.08 @ 11:17:00

Time Off Btm: 2013.12.08 @ 14:16:00

**TEST COMMENT:** 1st Opening 10 Minutes-Weak building blow built to 8 inches into the water  
 1st Shut-In 45 Minutes-No blow back  
 2nd Opening 30 Minutes-Strong blow bleed it off after 5 min. fair blow built to the bottom of the bucket in 3 minutes  
 2nd Shut-In 90 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1872.58	105.99	Initial Hydro-static
1	60.33	105.73	Open To Flow (1)
9	73.31	105.67	Shut-In(1)
58	1003.88	106.61	End Shut-In(1)
59	61.33	106.41	Open To Flow (2)
88	110.79	107.15	Shut-In(2)
178	1260.08	109.50	End Shut-In(2)
179	1813.89	109.97	Final Hydro-static

## Recovery

## Gas Rates

Length (ft)	Description	Volume (bbl)
0.00	1750 feet of gas in the pipe	0.00
130.00	feet of drillin mud	0.64

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



# DRILL STEM TEST REPORT

Edison Operating Company LLC

**16-24s-13w Stafford**

8100 East 22nd Steet North  
 Building 1900  
 Wichita, Kansas 67226  
 ATTN: Adam Nighswonger

**Rixon #1-16**

Job Ticket: 18178

**DST#: 1**

Test Start: 2013.12.08 @ 00:00:00

## GENERAL INFORMATION:

Formation: **Lansing Kansas City**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:00:00

Time Test Ended: 00:00:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 3335

**Interval: 3707.00 ft (KB) To 3737.00 ft (KB) (TVD)**

Reference Elevations: 1925.00 ft (KB)

Total Depth: 3737.00 ft (KB) (TVD)

1920.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8419 Inside**

Press @ RunDepth: 1252.46 psia @ 3733.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.12.08

End Date: 2013.12.08

Last Calib.: 2013.12.08

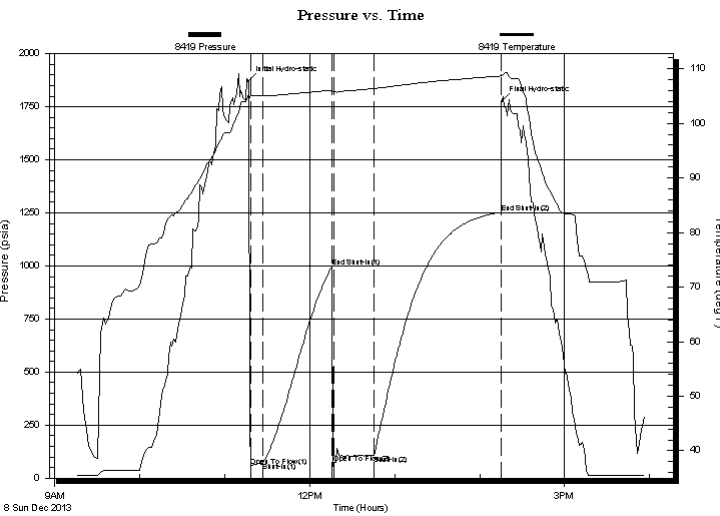
Start Time: 09:15:00

End Time: 15:56:30

Time On Btm: 2013.12.08 @ 11:16:30

Time Off Btm: 2013.12.08 @ 14:16:00

**TEST COMMENT:** 1st Opening 10 Minutes-Weak building blow built to 8 inches into the water  
 1st Shut-In 45 Minutes-No blow back  
 2nd Opening 30 Minutes-Strong blow bleed it off after 5 min. fair blow built to the bottom of the bucket in 3 minutes  
 2nd Shut-In 90 Minutes-No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1873.24	105.41	Initial Hydro-static
2	54.81	105.15	Open To Flow (1)
11	72.50	105.07	Shut-In(1)
59	996.75	106.09	End Shut-In(1)
61	71.31	105.82	Open To Flow (2)
89	107.09	106.36	Shut-In(2)
179	1252.46	108.68	End Shut-In(2)
180	1777.49	108.79	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	1750 feet of gas in the pipe	0.00
130.00	feet of drillin mud	0.64

## Gas Rates

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



## DRILL STEM TEST REPORT

Prepared For: **Edison Operating Company LLC**

8100 East 22nd Steet North  
Building 1900  
Wichita, Kansas 67226

ATTN: Adam Nighswonger

**Rixon #1-16**

**16-24s-13w Stafford**

Start Date: 2013.12.08 @ 00:00:00

End Date: 2013.12.08 @ 00:00:00

Job Ticket #: 18178                      DST #: 1

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

Printed: 2013.12.08 @ 15:54:28