



## DRILL STEM TEST REPORT

Prepared For: **Edison Operating Company LLC**

8100 E.22nd st N.Bldg. 1900  
Wichita, Kansas 67226-2319

ATTN: Derek Patterson

**O'connor #1-8**

**8-24s-12w Stafford**

Start Date: 2019.05.24 @ 10:11:00

End Date: 2019.05.24 @ 17:42:00

Job Ticket #: 01363                      DST #: 2

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

Printed: 2019.05.24 @ 18:06:52



# DRILL STEM TEST REPORT

Edison Operating Company LLC

8-24s-12w Stafford

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Job Ticket: 01363

DST#: 2

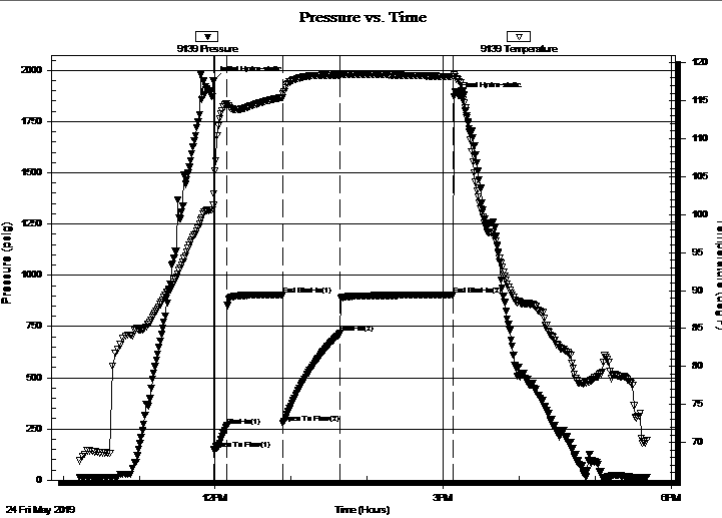
Test Start: 2019.05.24 @ 10:11:00

## GENERAL INFORMATION:

Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 11:59:00 Tester: Gene Budig  
 Time Test Ended: 17:42:00 Unit No: 1  
 Interval: **3896.00 ft (KB) To 3917.00 ft (KB) (TVD)** Reference Elevations: 1895.00 ft (KB)  
 Total Depth: 3917.00 ft (KB) (TVD) 1885.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

**Serial #: 9139 Outside**  
 Press@RunDepth: 903.32 psig @ 3912.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2019.05.24 End Date: 2019.05.24 Last Calib.: 2019.05.24  
 Start Time: 10:11:00 End Time: 17:40:30 Time On Btm: 2019.05.24 @ 11:58:30  
 Time Off Btm: 2019.05.24 @ 15:08:30

**TEST COMMENT:** 1st Opening 10 Minutes fair blow built to the bottom of a 5 gallon bucket in 4 minutes  
 1st Shut-In 45 Minutes 2 inch blow back  
 2nd Opening 45 Minutes fair blow built to the bottom of a 5 gallon bucket in 2 minutes  
 2nd Shut-In 90 Minutes 4 inch blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1948.64	101.21	Initial Hydro-static
1	148.35	102.77	Open To Flow (1)
11	265.63	114.38	Shut-In(1)
55	904.55	115.40	End Shut-In(1)
55	276.68	115.85	Open To Flow (2)
100	716.00	118.38	Shut-In(2)
189	903.32	118.16	End Shut-In(2)
190	1871.30	118.37	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	600 feet of gas in the pipe	0.00
180.00	gassy slightly oil cut muddy w ater	2.52
0.00	29%Gas 5% Oil 6% Mud 90%Water	0.00
180.00	slightlu oiland gas cut muddy w ater	2.52
0.00	1%Gas 5%Oil 4%Mud 90%Water	0.00
180.00	slightly oil and mud cut w ater	2.52

## Gas Rates

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



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O'connor #1-8

Job Ticket: 01363

DST#: 2

ATTN: Derek Patterson

Test Start: 2019.05.24 @ 10:11:00

## GENERAL INFORMATION:

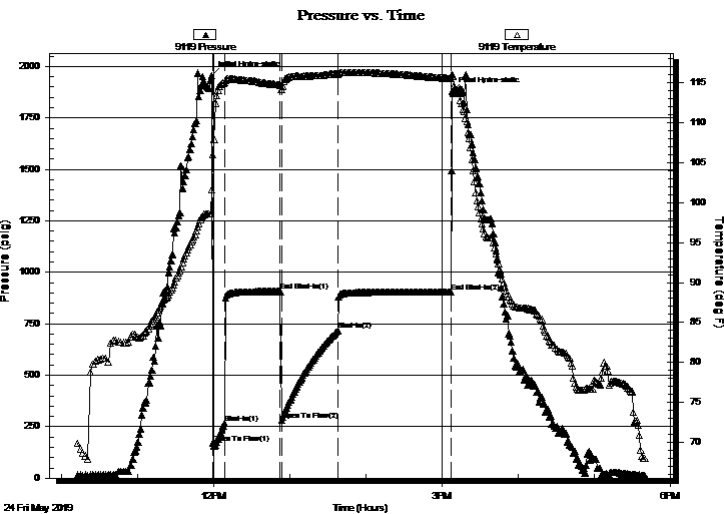
Formation: **Viola**  
 Deviated: No Whipstock: ft (KB)  
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 Interval: **3896.00 ft (KB) To 3917.00 ft (KB) (TVD)** Reference Elevations: 1895.00 ft (KB)  
 Total Depth: 3917.00 ft (KB) (TVD) 1885.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 10.00 ft

## Serial #: 9119

Inside

Press@RunDepth: 905.90 psig @ 3912.00 ft (KB) Capacity: 5000.00 psig  
 Start Date: 2019.05.24 End Date: 2019.05.24 Last Calib.: 2019.05.24  
 Start Time: 10:11:00 End Time: 17:40:00 Time On Btm: 2019.05.24 @ 11:58:30  
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 1st Shut-In 45 Minutes 2 inch blow back  
 2nd Opening 45 Minutes fair blow built to the bottom of a 5 gallon bucket in 2 minutes  
 2nd Shut-In 90 Minutes 4 inch blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1955.79	101.59	Initial Hydro-static
1	171.07	106.05	Open To Flow (1)
10	265.42	115.06	Shut-In(1)
54	907.17	114.72	End Shut-In(1)
55	281.56	114.14	Open To Flow (2)
100	717.46	116.09	Shut-In(2)
189	905.90	115.55	End Shut-In(2)
190	1878.55	116.05	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	600 feet of gas in the pipe	0.00
180.00	gassy slightly oil cut muddy w ater	2.52
0.00	29%Gas 5% Oil 6% Mud 90%Water	0.00
180.00	slightlu oiland gas cut muddy w ater	2.52
0.00	1%Gas 5%Oil 4%Mud 90%Water	0.00
180.00	slightly oil and mud cut w ater	2.52

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Edison Operating Company LLC

**8-24s-12w Stafford**

8100 E.22nd st N.Bldg. 1900  
Wichita, Kansas 67226-2319

**O'connor #1-8**

Job Ticket: 01363

**DST#: 2**

ATTN: Derek Patterson

Test Start: 2019.05.24 @ 10:11:00

## Tool Information

Drill Pipe:	Length: 3873.00 ft	Diameter: 3.80 inches	Volume: 54.33 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:	78000.00 lb
			<u>Total Volume: 54.33 bbl</u>	Tool Chased	9.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial	46000.00 lb
Depth to Top Packer:	3896.00 ft			Final	51000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	21.00 ft				
Tool Length:	51.00 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			3871.00	
Hydraulic tool	5.00			3876.00	
Jars	5.00			3881.00	
Safety Joint	5.00			3886.00	
Packer	5.00			3891.00	30.00 Bottom Of Top Packer
Packer	5.00		Fluid	3896.00	
Anchor	16.00			3912.00	
Recorder	0.00	9119	Inside	3912.00	
Recorder	0.00	9139	Outside	3912.00	
Bullnose	5.00			3917.00	21.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>51.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

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### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 49.00 sec/qt  
Water Loss: 10.60 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 9800.00 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	600 feet of gas in the pipe	0.000
180.00	gassy slightly oil cut muddy w ater	2.525
0.00	29%Gas 5% Oil 6% Mud 90%Water	0.000
180.00	slightlu oiland gas cut muddy w ater	2.525
0.00	1%Gas 5%Oil 4%Mud 90%Water	0.000
180.00	slightly oil and mud cut w ater	2.525
0.00	3%Oil 1%Mud 94%Water	0.000
180.00	w ater with a trace of oil	2.525
0.00	1%Oil 99%Water	0.000
800.00	Water chlorides 52000	11.222

Total Length: 1520.00 ft      Total Volume: 21.322 bbl

Num Fluid Samples: 0

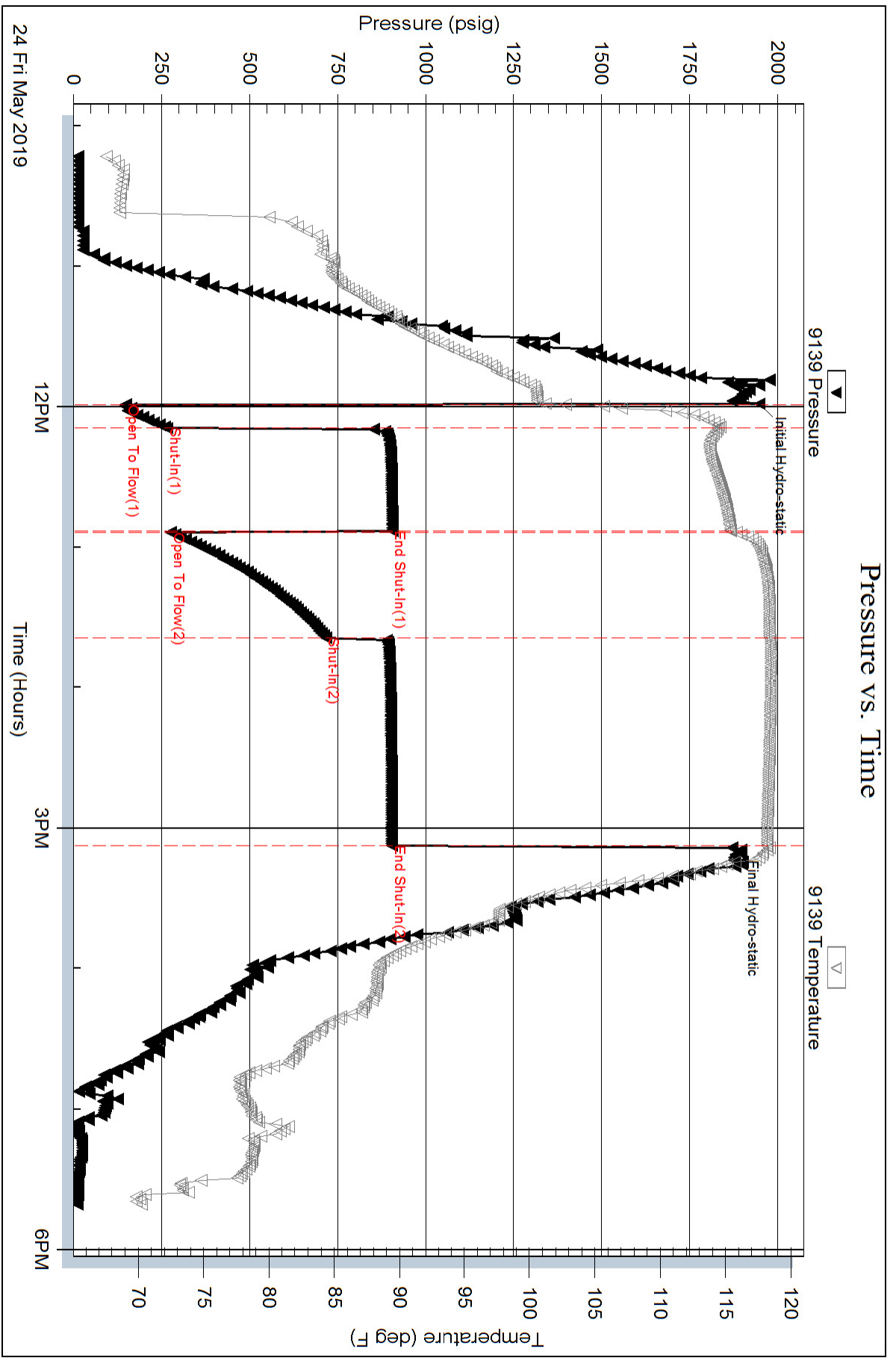
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



### Pressure vs. Time

