



## DRILL STEM TEST REPORT

Prepared For: **Edison Operating Company LLC**

8100 E.22nd Str.N.Bldg 1800  
Wichita, Kansas 67226-2316

ATTN: Adam Kennedy

### **Red Raider #1-26**

#### **26-32s-19w Commanche**

Start Date: 2019.07.27 @ 05:31:00

End Date: 2019.07.27 @ 12:56:00

Job Ticket #: 1                      DST #: 1

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

Printed: 2019.07.28 @ 01:17:20



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Job Ticket: 1

**DST#: 1**

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Test Start: 2019.07.27 @ 05:31:00

## GENERAL INFORMATION:

Formation: **Altamonmt**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:48:00

Time Test Ended: 12:56:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 1

**Interval: 4935.00 ft (KB) To 4965.00 ft (KB) (TVD)**

Reference Elevations: 1962.00 ft (KB)

Total Depth: 4965.00 ft (KB) (TVD)

1952.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

**Serial #: 9139 Outside**

Press@RunDepth: 1332.21 psig @ 4960.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2019.07.27

End Date: 2019.07.27

Last Calib.: 2019.07.28

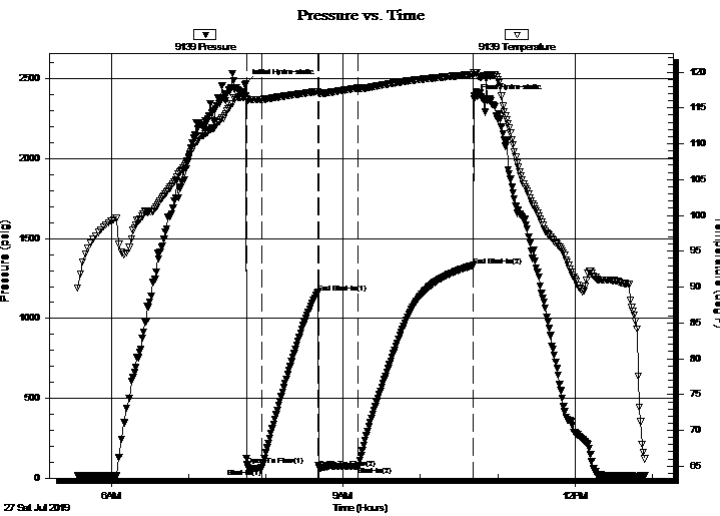
Start Time: 05:31:00

End Time: 12:54:00

Time On Btm: 2019.07.27 @ 07:44:30

Time Off Btm: 2019.07.27 @ 10:41:30

**TEST COMMENT:** 1st Opening 10 Minutes strong blow built to the bottom of the bucket in 1 minute  
 1st Shut-In 45 Minutes no blow back  
 2nd Opening 30 Minutes strong blow built to the bottom of the bucket in 1 minute  
 2nd Shut-In 9i0 Minutes good blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2472.90	116.66	Initial Hydro-static
1	83.48	116.12	Open To Flow (1)
13	63.73	116.19	Shut-In(1)
56	1162.34	117.30	End Shut-In(1)
57	63.75	117.04	Open To Flow (2)
87	75.32	117.76	Shut-In(2)
177	1332.21	119.66	End Shut-In(2)
177	2374.27	119.87	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	3750 Gas in the pipe	0.00
30.00	Drilling Mud	0.42
60.00	slightly oil and gas cut mud	0.84
0.00	22% Gas 20% Oil 48% Mud 20% Water	0.00

## Gas Rates

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



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Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 1

**Interval: 4935.00 ft (KB) To 4965.00 ft (KB) (TVD)**

Reference Elevations: 1962.00 ft (KB)

Total Depth: 4965.00 ft (KB) (TVD)

1952.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

**Serial #: 9119**

**Inside**

Press@RunDepth: 1334.85 psig @ 4960.00 ft (KB)

Capacity: 5000.00 psig

Start Date: 2019.07.27

End Date: 2019.07.27

Last Calib.: 2019.07.28

Start Time: 05:31:00

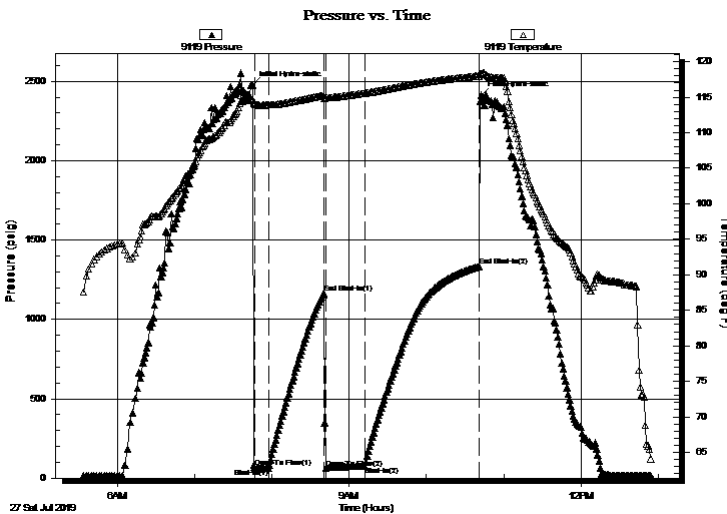
End Time: 12:54:30

Time On Btm: 2019.07.27 @ 07:45:00

Time Off Btm: 2019.07.27 @ 10:42:30

**TEST COMMENT:** 1st Opening 10 Minutes strong blow built to the bottom of the bucket in 1 minute  
1st Shut-In 45 Minutes no blow back  
2nd Opening 30 Minutes strong blow built to the bottom of the bucket in 1 minute  
2nd Shut-In 90 Minutes good blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2476.43	114.69	Initial Hydro-static
2	66.06	114.17	Open To Flow (1)
13	62.76	113.93	Shut-In(1)
56	1165.45	115.27	End Shut-In(1)
57	64.94	114.94	Open To Flow (2)
87	76.15	115.56	Shut-In(2)
176	1334.85	118.00	End Shut-In(2)
178	2412.76	118.36	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	3750 Gas in the pipe	0.00
30.00	Drilling Mud	0.42
60.00	slightly oil and gas cut mud	0.84
0.00	22% Gas 20% Oil 48% Mud 20% Water	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Edison Operating Company LLC

**26-32s-19w Commanche**

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Job Ticket: 1

**DST#: 1**

ATTN: Adam Kennedy

Test Start: 2019.07.27 @ 05:31:00

## Tool Information

Drill Pipe:	Length: 4920.00 ft	Diameter: 3.80 inches	Volume: 69.01 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: 84000.00 lb
			<u>Total Volume: 69.01 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	15.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	4935.00 ft			Final lb
Depth to Bottom Packer:	ft			
Interval between Packers:	30.00 ft			
Tool Length:	60.00 ft			
Number of Packers:	1	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4910.00	
Hydraulic tool	5.00			4915.00	
Jars	5.00			4920.00	
Safety Joint	5.00			4925.00	
Packer	5.00			4930.00	30.00 Bottom Of Top Packer
Packer	5.00		Fluid	4935.00	
Anchor	25.00			4960.00	
Recorder	0.00	9119	Inside	4960.00	
Recorder	0.00	9139	Outside	4960.00	
Bullnose	5.00			4965.00	30.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>60.00</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: 48.00 sec/qt  
Water Loss: 10.40 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 5500.00 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	3750 Gas in the pipe	0.000
30.00	Drilling Mud	0.421
60.00	slightly oil and gas cut mud	0.842
0.00	22% Gas 20% Oil 48% Mud 20% Water	0.000

Total Length: 90.00 ft      Total Volume: 1.263 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

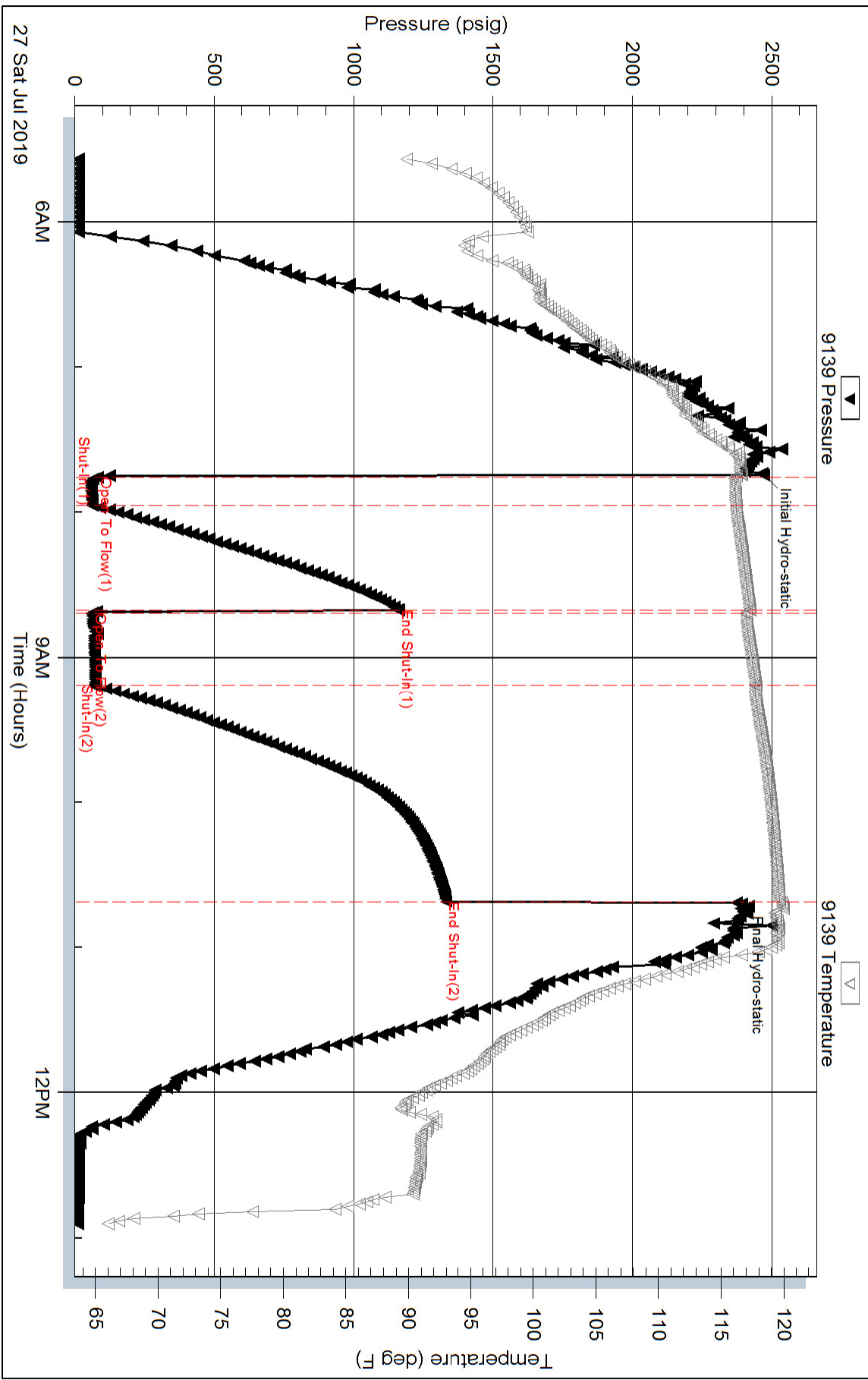
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



### Pressure vs. Time

