



## DRILL STEM TEST REPORT

Prepared For: **Southwind Petroleum Cop**

1400 W 14th st Wichita Ks 67203-2901

ATTN: Bob Williams

**Eileen Hagerman 4-1**

**04-20-16s Pawnee**

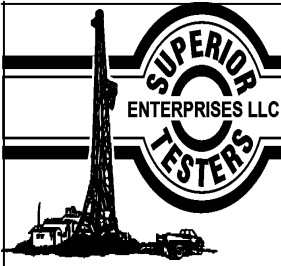
Start Date: 2013.01.11 @ 22:28:00

End Date: 2013.01.12 @ 04:20:30

Job Ticket #: 16999                      DST #: 2

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

Printed: 2013.01.12 @ 04:36:17



# DRILL STEM TEST REPORT

Southwind Petroleum Corp  
 1400 W 14th st Wichita Ks 67203-2901  
 ATTN: Bob Williams

**04-20-16s Pawnee**  
**Eileen Hagerman 4-1**  
 Job Ticket: 16999 **DST#: 2**  
 Test Start: 2013.01.11 @ 22:28:00

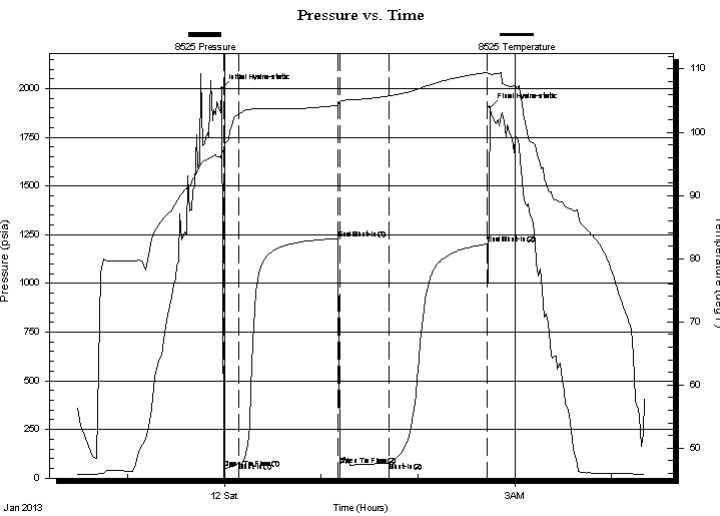
## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 23:59:30 Tester: Jared Scheck  
 Time Test Ended: 04:20:30 Unit No: 3320- Great Bend-30  
 Interval: **3746.00 ft (KB) To 3762.00 ft (KB) (TVD)** Reference Elevations: 2025.00 ft (KB)  
 Total Depth: 3762.00 ft (KB) (TVD) 2023.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 2.00 ft

## Serial #: 8525

Press@RunDepth: 78.98 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.01.11 End Date: 2013.01.12 Last Calib.: 2013.01.12  
 Start Time: 22:28:00 End Time: 04:20:30 Time On Btm: 2013.01.11 @ 23:58:30  
 Time Off Btm: 2013.01.12 @ 02:44:30

**TEST COMMENT:** 1st Opening 10 Minutes-Weak blow built 2 inches into bucket w ater in 10 minutes  
 1st Shut-in 60 Minutes-Very weak surface surge  
 2nd Opening 30 Minutes-Weak blow built 2 1/2 inches into bucket w ater in 30 minutes  
 2nd Shut-in 60 Minutes-No blow back



## PRESSURE SUMMARY

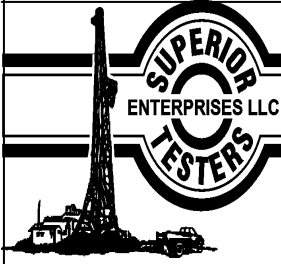
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2000.34	96.74	Initial Hydro-static
1	52.52	97.17	Open To Flow (1)
11	79.38	102.86	Shut-In(1)
72	1230.39	104.23	End Shut-In(1)
73	65.39	104.81	Open To Flow (2)
104	78.98	105.75	Shut-In(2)
165	1201.68	109.46	End Shut-In(2)
166	1903.59	109.23	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud	0.28

## Gas Rates

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



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 1400 W 14th st Wichita Ks 67203-2901  
 ATTN: Bob Williams

**04-20-16s Pawnee**  
**Eileen Hagerman 4-1**  
 Job Ticket: 16999 **DST#: 2**  
 Test Start: 2013.01.11 @ 22:28:00

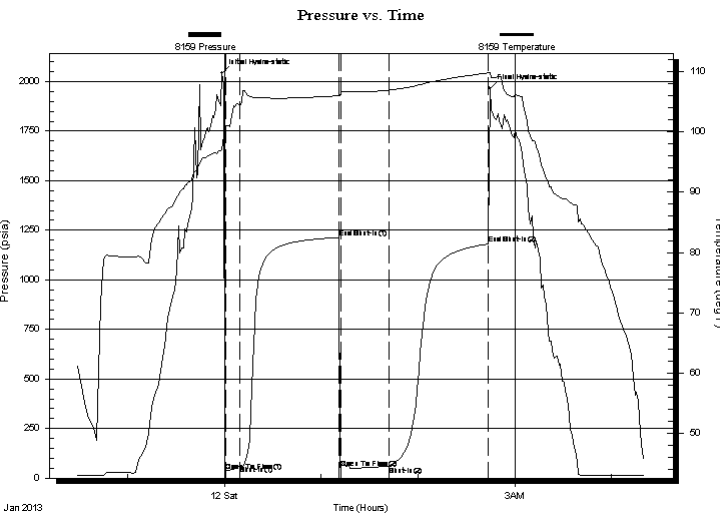
## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 23:59:30 Tester: Jared Scheck  
 Time Test Ended: 04:20:30 Unit No: 3320- Great Bend-30  
 Interval: **3746.00 ft (KB) To 3762.00 ft (KB) (TVD)** Reference Elevations: 2025.00 ft (KB)  
 Total Depth: 3762.00 ft (KB) (TVD) 2023.00 ft (CF)  
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 2.00 ft

## Serial #: 8159

Press@RunDepth: 1180.79 psia @ ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.01.11 End Date: 2013.01.12 Last Calib.: 2013.01.12  
 Start Time: 22:28:00 End Time: 04:21:00 Time On Btm: 2013.01.11 @ 23:58:30  
 Time Off Btm: 2013.01.12 @ 02:44:30

**TEST COMMENT:** 1st Opening 10 Minutes-Weak blow built 2 inches into bucket w ater in 10 minutes  
 1st Shut-in 60 Minutes-Very weak surface surge  
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 2nd Shut-in 60 Minutes-No blow back



## PRESSURE SUMMARY

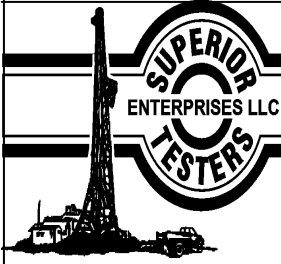
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	2041.84	97.02	Initial Hydro-static
2	36.56	100.93	Open To Flow (1)
11	64.18	104.43	Shut-In(1)
73	1213.73	106.02	End Shut-In(1)
74	48.26	106.39	Open To Flow (2)
104	59.19	106.93	Shut-In(2)
165	1180.79	109.77	End Shut-In(2)
166	1965.66	109.87	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	mud	0.28

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Southwind Petroleum Corp  
 1400 W 14th st Wichita Ks 67203-2901  
 ATTN: Bob Williams

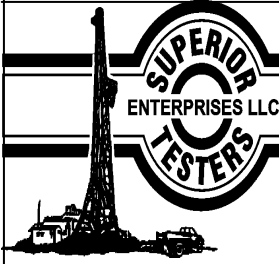
**04-20-16s Pawnee**  
**Eileen Hagerman 4-1**  
 Job Ticket: 16999 **DST#:2**  
 Test Start: 2013.01.11 @ 22:28:00

**Tool Information**

Drill Pipe:	Length: 3740.00 ft	Diameter: 3.80 inches	Volume: 52.46 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:	64000.00 lb
			<u>Total Volume: 52.46 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial	55000.00 lb
Depth to Top Packer:	3746.00 ft			Final	55000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	16.00 ft				
Tool Length:	44.00 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			3723.00	
Hydraulic Tool	5.00			3728.00	
Jars	6.00			3734.00	
Safety Joint	2.00			3736.00	
Packer	5.00			3741.00	28.00 Bottom Of Top Packer
Packer	5.00			3746.00	
Anchor	14.00			3760.00	
Recorder	1.00	8525	Inside	3761.00	
Recorder	1.00	8159	Outside	3762.00	16.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>44.00</b>				



# DRILL STEM TEST REPORT

## FLUID SUMMARY

Southwind Petroleum Cop  
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ATTN: Bob Williams

**04-20-16s Pawnee**  
**Eileen Hagerman 4-1**  
Job Ticket: 16999      **DST#:2**  
Test Start: 2013.01.11 @ 22:28:00

### Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 50.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.60 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psia		
Salinity: 7000.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	mud	0.281

Total Length: 20.00 ft      Total Volume: 0.281 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

