



## DRILL STEM TEST REPORT

Prepared For: **F.G. Holl Company LLC.**

9431 E. Central STE. 100  
Wichita Ks, 67206

ATTN: Frank Greenbaum

**Jost #1-29**

**29/21s/15w/Pawnee**

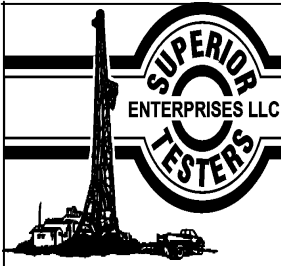
Start Date: 2013.08.22 @ 04:15:00

End Date: 2013.08.22 @ 11:05:30

Job Ticket #: 18479                      DST #: 6

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

Printed: 2013.08.22 @ 11:23:37



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Test Start: 2013.08.22 @ 04:15:00

## GENERAL INFORMATION:

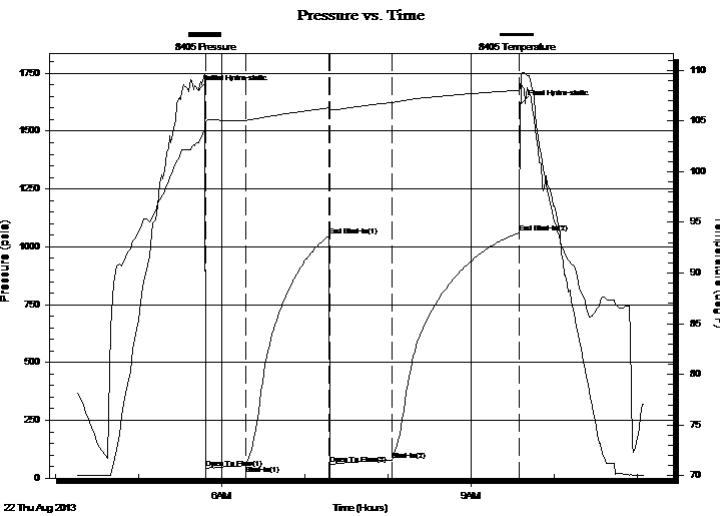
Formation: **LKC "B"**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 05:48:30  
 Tester: Shane Konzem  
 Time Test Ended: 11:05:30  
 Unit No: 3330/66/Great Bend  
 Interval: **3486.00 ft (KB) To 3510.00 ft (KB) (TVD)**  
 Reference Elevations: 1978.00 ft (KB)  
 Total Depth: 3510.00 ft (KB) (TVD)  
 1970.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Poor  
 KB to GR/CF: 8.00 ft

## Serial #: 8405

Inside

Press @ Run Depth: 78.15 psia @ 3506.00 ft (KB) Capacity: 5000.00 psia  
 Start Date: 2013.08.22 End Date: 2013.08.22 Last Calib.: 2013.08.22  
 Start Time: 04:15:00 End Time: 11:05:30 Time On Btm: 2013.08.22 @ 05:43:30  
 Time Off Btm: 2013.08.22 @ 09:36:00

**TEST COMMENT:** 1st Open/ 30 Minutes. Good blow built to bottom of a 5 gallon bucket in 2 minutes and 20 seconds.  
 1st Shut In/ 60 Minutes. No blow back.  
 2nd Open/ 45 Minutes. Fair blow built to bottom of 5 gallon bucket in 12 minutes and 10 seconds.  
 2nd Shut In/ 90 Minutes. No blow back.



## PRESSURE SUMMARY

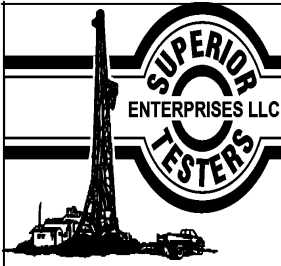
Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1677.99	102.87	Initial Hydro-static
5	42.84	104.86	Open To Flow (1)
34	55.06	105.06	Shut-In(1)
94	1046.90	106.28	End Shut-In(1)
95	58.41	106.12	Open To Flow (2)
140	78.15	106.82	Shut-In(2)
232	1060.80	108.03	End Shut-In(2)
233	1616.81	109.09	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	120 feet 100% gas	0.00
31.00	60% Oil, 25% water, cut 15% mud.	0.43
62.00	5% Oil, 25% mud, cut 70% water.	0.87
0.00	Chloride recov. 27000 ppm	0.00

## Gas Rates

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



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Job Ticket: 18479

**DST#: 6**

ATTN: Frank Greenbaum

Test Start: 2013.08.22 @ 04:15:00

## GENERAL INFORMATION:

Formation: **LKC "B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:48:30

Time Test Ended: 11:05:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Shane Konzem

Unit No: 3330/66/Great Bend

**Interval: 3486.00 ft (KB) To 3510.00 ft (KB) (TVD)**

Reference Elevations: 1978.00 ft (KB)

Total Depth: 3510.00 ft (KB) (TVD)

1970.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Poor

KB to GR/CF: 8.00 ft

**Serial #: 8400 Outside**

Press @ Run Depth: 1024.33 psia @ 3507.00 ft (KB)

Capacity: 5000.00 psia

Start Date: 2013.08.22

End Date: 2013.08.22

Last Calib.: 2013.08.22

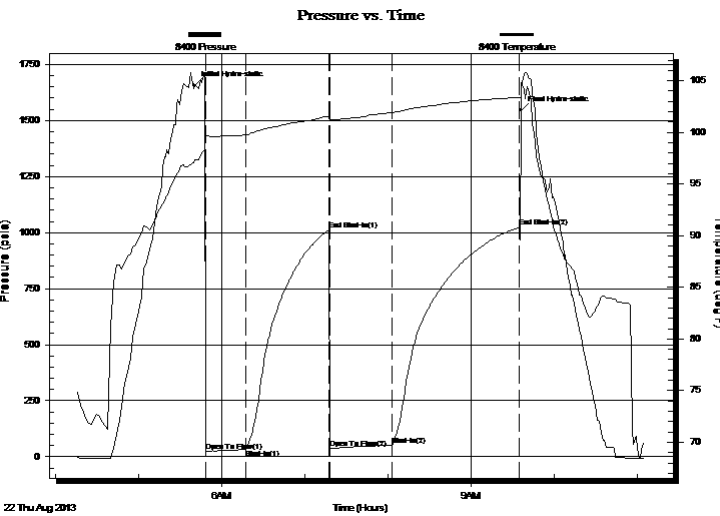
Start Time: 04:15:00

End Time: 11:06:00

Time On Btm: 2013.08.22 @ 05:40:30

Time Off Btm: 2013.08.22 @ 09:36:00

**TEST COMMENT:** 1st Open/ 30 Minutes. Good blow built to bottom of a 5 gallon bucket in 2 minutes and 20 seconds.  
1st Shut In/ 60 Minutes. No blow back.  
2nd Open/ 45 Minutes. Fair blow built to bottom of 5 gallon bucket in 12 minutes and 10 seconds.  
2nd Shut In/ 90 Minutes. No blow back.



## PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1657.62	97.36	Initial Hydro-static
8	26.59	99.65	Open To Flow (1)
37	32.83	99.77	Shut-In(1)
97	1012.73	101.55	End Shut-In(1)
98	36.52	101.26	Open To Flow (2)
143	52.17	101.92	Shut-In(2)
235	1024.33	103.39	End Shut-In(2)
236	1544.92	103.47	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	120 feet 100% gas	0.00
31.00	60% Oil, 25% water, cut 15% mud.	0.43
62.00	5% Oil, 25% mud, cut 70% water.	0.87
0.00	Chloride recov. 27000 ppm	0.00

## Gas Rates

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



# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

F.G. Holl Company LLC.

**29/21s/15w/Pawnee**

9431 E. Central STE. 100  
Wichita Ks, 67206

**Jost #1-29**

Job Ticket: 18479

**DST#: 6**

ATTN: Frank Greenbaum

Test Start: 2013.08.22 @ 04:15:00

## Tool Information

Drill Pipe:	Length: 3465.00 ft	Diameter: 3.80 inches	Volume: 48.60 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: 60000.00 lb
			<u>Total Volume: 48.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 48000.00 lb
Depth to Top Packer:	3486.00 ft			Final 48000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	53.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3458.00	
Shut-In Tool	5.00			3463.00	
Hydroic Tool	5.00			3468.00	
Jars	6.00			3474.00	
Safety Joint	2.00			3476.00	
Packer	5.00			3481.00	29.00 Bottom Of Top Packer
Packer	5.00			3486.00	
Perforations	19.00			3505.00	
Recorder	1.00	8405	Inside	3506.00	
Recorder	1.00	8400	Outside	3507.00	
Bullnose	3.00			3510.00	24.00 Bottom Packers & Anchor

**Total Tool Length: 53.00**



# 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: 50.00 sec/qt  
Water Loss: 7.60 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 4900.00 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	120 feet 100% gas	0.000
31.00	60% Oil, 25% water, cut 15% mud.	0.435
62.00	5% Oil, 25% mud, cut 70% water.	0.870
0.00	Chloride recov. 27000 ppm	0.000

Total Length: 93.00 ft      Total Volume: 1.305 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

