



DRILL STEM TEST REPORT

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

9431 East Central Suite 100
Wichita Kansas 67206

ATTN: Frank Greenbaum

Dunavan 1-14

14-20s-15w-Barton

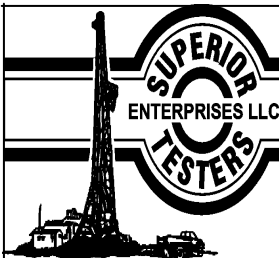
Start Date: 2012.07.12 @ 08:17:00

End Date: 2012.07.12 @ 15:11:00

Job Ticket #: 17303 DST #: 2

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

Printed: 2012.07.13 @ 01:26:42



DRILL STEM TEST REPORT

F.G Holl Company
 9431 East Central Suite 100
 Wichita Kansas 67206
 ATTN: Frank Greenbaum

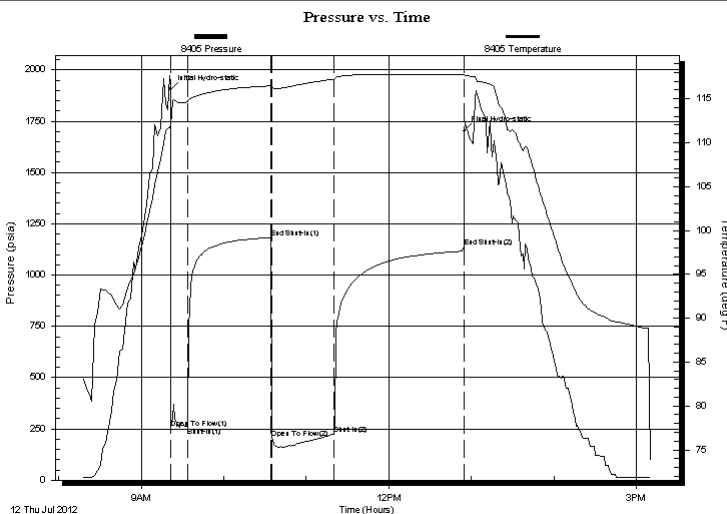
14-20s-15w-Barton
Dunavan 1-14
 Job Ticket: 17303 **DST#: 2**
 Test Start: 2012.07.12 @ 08:17:00

GENERAL INFORMATION:

Formation: Arbuckle			
Deviated: No Whipstock:		ft (KB)	Test Type: Conventional Bottom Hole (Initial)
Time Tool Opened: 09:21:30			Tester: Dustin Ellis
Time Test Ended: 15:11:00			Unit No: 3315-Great Bend-30
Interval: 3671.00 ft (KB) To 3681.00 ft (KB) (TVD)			Reference Elevations: 1990.00 ft (KB)
Total Depth: 3681.00 ft (KB) (TVD)			1982.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair		KB to GR/CF: 8.00 ft

Serial #: 8405	Inside				
Press @ Run Depth: 223.00 psia @ 3677.00 ft (KB)			Capacity:	5000.00 psia	
Start Date: 2012.07.12	End Date: 2012.07.12	Last Calib.:	2012.07.13		
Start Time: 08:17:00	End Time: 15:11:00	Time On Btm: 2012.07.12 @ 09:21:00			
		Time Off Btm: 2012.07.12 @ 12:55:00			

TEST COMMENT: 1st Open 15 minutes Strong blow bottom bucket instantly
 1st Shut in 60 minutes Yes blow back
 2nd Open 45 minutes Strong blow bottom bucket instantly
 2nd Shut in 90 minutes Yes blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1906.38	112.07	Initial Hydro-static
1	253.07	111.89	Open To Flow (1)
13	257.81	114.67	Shut-In(1)
74	1182.16	116.48	End Shut-In(1)
75	202.40	116.25	Open To Flow (2)
119	223.00	117.23	Shut-In(2)
214	1137.13	117.71	End Shut-In(2)
214	1701.54	117.77	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
412.00	Water 100%	5.78
0.00	Chlorides 63,000 @ .5 ohms 68 degrees	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	0.60	17.25
Last Gas Rate	1.00	0.60	17.25
Max. Gas Rate	1.00	0.70	20.12



DRILL STEM TEST REPORT

F.G Holl Company
 9431 East Central Suite 100
 Wichita Kansas 67206
 ATTN: Frank Greenbaum

14-20s-15w-Barton
Dunavan 1-14
 Job Ticket: 17303 **DST#: 2**
 Test Start: 2012.07.12 @ 08:17:00

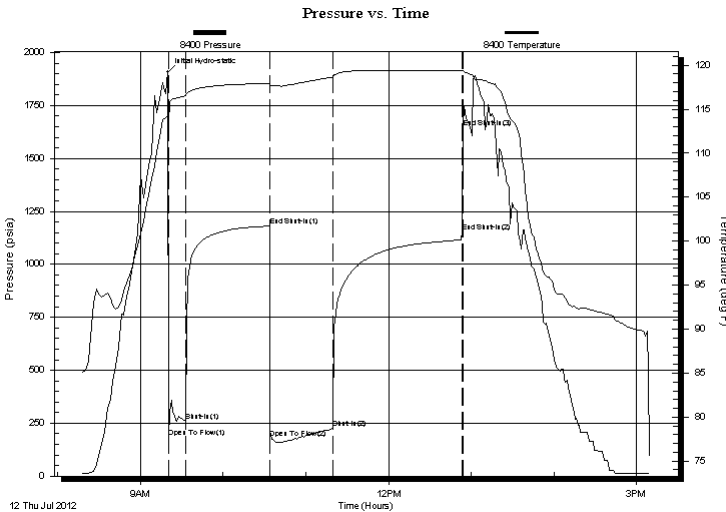
GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 09:21:30
 Tester: Dustin Ellis
 Time Test Ended: 15:11:00
 Unit No: 3315-Great Bend-30
Interval: 3671.00 ft (KB) To 3681.00 ft (KB) (TVD)
 Reference Elevations: 1990.00 ft (KB)
 Total Depth: 3681.00 ft (KB) (TVD)
 1982.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 8.00 ft

Serial #: 8400 Outside
 Press @ RunDepth: 1645.37 psia @ 3678.00 ft (KB) Capacity: 5000.00 psia
 Start Date: 2012.07.12 End Date: 2012.07.12 Last Calib.: 2012.07.13
 Start Time: 08:17:00 End Time: 15:10:00 Time On Btm: 2012.07.12 @ 09:20:00
 Time Off Btm:

TEST COMMENT: 1st Open 15 minutes Strong blow bottom bucket instantly
 1st Shut in 60 minutes Yes blow back
 2nd Open 45 minutes Strong blow bottom bucket instantly
 2nd Shut in 90 minutes Yes blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psia)	Temp (deg F)	Annotation
0	1906.21	114.34	Initial Hydro-static
1	184.48	113.41	Open To Flow (1)
13	259.44	116.55	Shut-In(1)
74	1181.05	117.94	End Shut-In(1)
74	179.91	117.54	Open To Flow (2)
120	224.41	118.64	Shut-In(2)
214	1155.43	119.36	End Shut-In(2)
214	1645.37	119.41	End Shut-In(3)

Recovery

Length (ft)	Description	Volume (bbl)
412.00	Water 100%	5.78
0.00	Chlorides 63,000 @.5 ohms 68 degrees	0.00

Gas Rates

	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
First Gas Rate	1.00	0.60	17.25
Last Gas Rate	1.00	0.60	17.25
Max. Gas Rate	1.00	0.70	20.12



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G Holl Company

14-20s-15w-Barton

9431 East Central Suite 100
Wichita Kansas 67206

Dunavan 1-14

Job Ticket: 17303

DST#: 2

ATTN: Frank Greenbaum

Test Start: 2012.07.12 @ 08:17:00

Tool Information

Drill Pipe:	Length: 3669.00 ft	Diameter: 3.80 inches	Volume: 51.47 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: 53000.00 lb
			<u>Total Volume: 51.47 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3671.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	10.00 ft			
Tool Length:	38.00 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			3648.00	
Hydraulic Tool	5.00			3653.00	
Jars	6.00			3659.00	
Safety Joint	2.00			3661.00	
Packer	5.00			3666.00	28.00 Bottom Of Top Packer
Packer	5.00			3671.00	
Anchor	5.00			3676.00	
Recorder	1.00	8405	Inside	3677.00	
Recorder	1.00	8400	Outside	3678.00	
Bull Plug	3.00			3681.00	10.00 Bottom Packers & Anchor
Total Tool Length:	38.00				



DRILL STEM TEST REPORT

FLUID SUMMARY

F.G Holl Company
9431 East Central Suite 100
Wichita Kansas 67206
ATTN: Frank Greenbaum

14-20s-15w-Barton
Dunavan 1-14
Job Ticket: 17303 **DST#: 2**
Test Start: 2012.07.12 @ 08:17:00

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: 56.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.00 in ³	Gas Cushion Type:		
Resistivity: 0.50 ohm.m	Gas Cushion Pressure: psia		
Salinity: 4300.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
412.00	Water 100%	5.779
0.00	Chlorides 63,000 @.5 ohms 68 degrees	0.000

Total Length: 412.00 ft Total Volume: 5.779 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:



DRILL STEM TEST REPORT

GAS RATES

F.G Holl Company

14-20s-15w-Barton

9431 East Central Suite 100
Wichita Kansas 67206

Dunavan 1-14

Job Ticket: 17303

DST#: 2

ATTN: Frank Greenbaum

Test Start: 2012.07.12 @ 08:17:00

Gas Rates Information

Temperature: 59 (deg F)
Relative Density: 0.65
Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psia)	Gas Rate (Mcf/d)
1	10	1.00	0.60	17.25
1	10	1.00	0.60	17.25
2	20	1.00	0.70	20.12
3	30	1.00	0.60	17.25

Pressure vs. Time

