



DRILL STEM TEST REPORT

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

9431 East Central Suite 100
Wichita, Kansas 67206

ATTN: Reene Husted

Smith D #1-30

30-20s-15w Barton

Start Date: 2014.01.18 @ 02:30:00

End Date: 2014.01.18 @ 00:00:00

Job Ticket #: 17118 DST #: 4

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

Printed: 2014.01.18 @ 09:16:55



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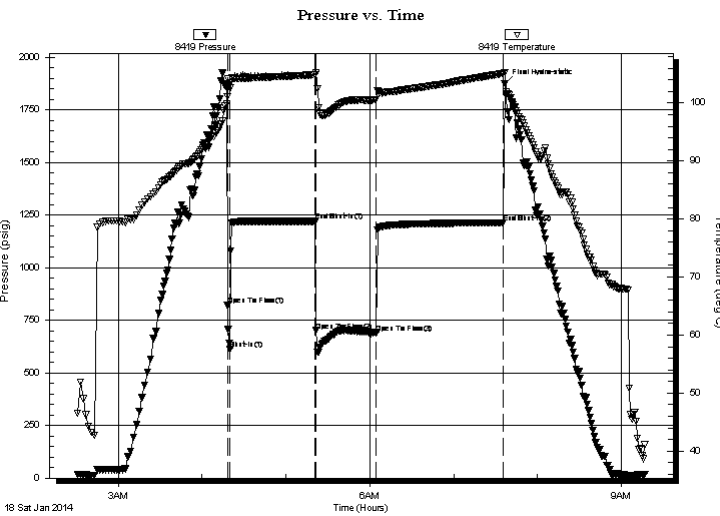
30-20s-15w Barton
Smith D #1-30
 Job Ticket: 17118 **DST#: 4**
 Test Start: 2014.01.18 @ 02:30:00

GENERAL INFORMATION:

Formation: **Arbuckle**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 00:00:00
 Time Test Ended: 00:00:00
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Gene Budig
 Unit No: 3320
 Interval: **3744.00 ft (KB) To 3787.00 ft (KB) (TVD)**
 Reference Elevations: 2033.00 ft (KB)
 Total Depth: 3587.00 ft (KB) (TVD) 2025.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8419 Inside
 Press@RunDepth: 1213.46 psig @ 3783.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.01.18 End Date: 2014.01.18 Last Calib.: 2014.01.18
 Start Time: 02:30:00 End Time: 09:17:00 Time On Btm: 2014.01.18 @ 04:17:30
 Time Off Btm: 2014.01.18 @ 07:36:30

TEST COMMENT: 1st Opening 3 Minutes Strong blow with gas to surface in 2 minutes
 1st Shut-In 60 Minutes-Weak blow back
 2nd Opening 45 Minutes-Strong blow see gas flow report
 2nd Shut-In 90 Minutes-Fair blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg C)	Annotation
0	1860.58	99.81	Initial Hydro-static
1	821.23	101.11	Open To Flow (1)
3	614.75	102.66	Shut-In(1)
64	1220.75	104.87	End Shut-In(1)
64	701.01	105.14	Open To Flow (2)
107	688.97	100.59	Open To Flow (3)
199	1213.46	105.11	End Shut-In(2)
199	1875.10	105.27	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	Gassy Mud	1.40
100.00	Watery Mud 60%Mud 40%Water	1.40
0.00	Chlorides 19000	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	141.00	4467.57
Last Gas Rate	1.00	167.00	5215.03
Max. Gas Rate	1.00	167.00	5215.03



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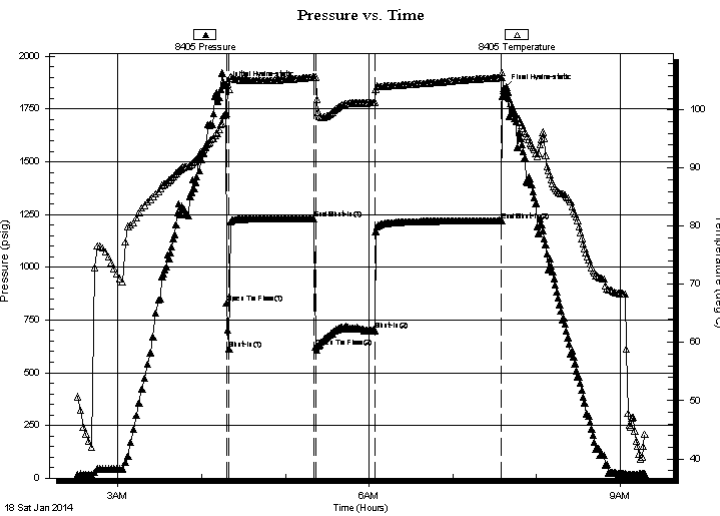
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 Total Depth: 3587.00 ft (KB) (TVD) 2025.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 8.00 ft

Serial #: 8405 Outside
 Press@RunDepth: 1221.62 psig @ 3784.00 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.01.18 End Date: 2014.01.18 Last Calib.: 2014.01.18
 Start Time: 02:30:00 End Time: 09:17:30 Time On Btm: 2014.01.18 @ 04:17:00
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TEST COMMENT: 1st Opening 3 Minutes Strong blow with gas to surface in 2 minutes
 1st Shut-In 60 Minutes-Weak blow back
 2nd Opening 45 Minutes-Strong blow see gas flow report
 2nd Shut-In 90 Minutes-Fair blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg C)	Annotation
0	1863.48	99.31	Initial Hydro-static
1	830.92	99.40	Open To Flow (1)
3	610.48	103.50	Shut-In(1)
64	1228.88	105.66	End Shut-In(1)
65	622.80	105.66	Open To Flow (2)
107	700.20	101.32	Shut-In(2)
198	1221.62	105.59	End Shut-In(2)
200	1848.26	103.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	Gassy Mud	1.40
100.00	Watery Mud 60%Mud 40%Water	1.40
0.00	Chlorides 19000	0.00

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	1.00	141.00	4467.57
Last Gas Rate	1.00	167.00	5215.03
Max. Gas Rate	1.00	167.00	5215.03



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TOOL DIAGRAM

F.G.Holl Company LLC

30-20s-15w Barton

9431 East Central Suite 100
Wichita, Kansas 67206

Smith D #1-30

Job Ticket: 17118

DST#: 4

ATTN: Reene Hustead

Test Start: 2014.01.18 @ 02:30:00

Tool Information

Drill Pipe:	Length: 3720.00 ft	Diameter: 3.80 inches	Volume: 52.18 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: 73000.00 lb
			<u>Total Volume: 52.18 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 50000.00 lb
Depth to Top Packer:	3744.00 ft			Final 50000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	71.00 ft			
Number of Packers:	2	Diameter: 7.88 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut-In Tool	5.00			3721.00	
Hydraulic Tool	5.00			3726.00	
Safety Joint	2.00			3728.00	
Jars	6.00			3734.00	
Packer	5.00			3739.00	28.00 Bottom Of Top Packer
Packer	5.00			3744.00	
Anchor	38.00			3782.00	
Recorder	1.00	8419	Inside	3783.00	
Recorder	1.00	8405	Outside	3784.00	
Bullnose	3.00			3787.00	43.00 Bottom Packers & Anchor
Total Tool Length:	71.00				



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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: 9.60 in³
Resistivity: ohm.m
Salinity: 6500.00 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
100.00	Gassy Mud	1.403
100.00	Watery Mud 60%Mud 40%Water	1.403
0.00	Chlorides 19000	0.000

Total Length: 200.00 ft Total Volume: 2.806 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

