



DRILL STEM TEST REPORT

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

9431 East Central STE 100
Wichita Kansas 67206

ATTN: Rene Husted

Calcara unit 1-19

19-19s-14-Barton

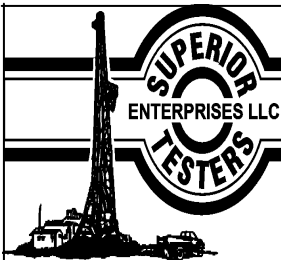
Start Date: 2014.06.01 @ 01:53:00

End Date: 2014.06.01 @ 06:35:00

Job Ticket #: 18327 DST #: 1

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

Printed: 2014.06.01 @ 19:51:38



DRILL STEM TEST REPORT

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 9431 East Central STE 100
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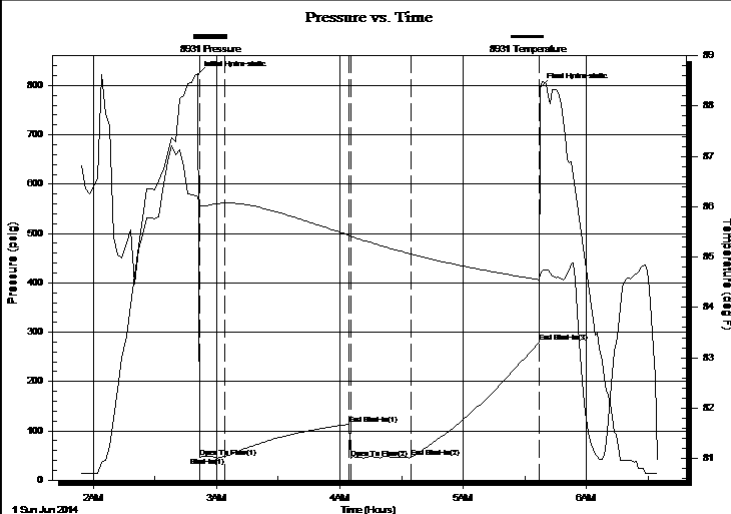
19-19s-14-Barton
Calcara unit 1-19
 Job Ticket: 18327 **DST#: 1**
 Test Start: 2014.06.01 @ 01:53:00

GENERAL INFORMATION:

Formation: **Herrington**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:52:00
 Time Test Ended: 06:35:00
 Interval: **1687.00 ft (KB) To 1737.00 ft (KB) (TVD)**
 Total Depth: 1737.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Dustin Ellis
 Unit No: 3315-Great Bend-15
 Reference Elevations: 1904.00 ft (KB)
 1896.00 ft (CF)
 KB to GR/CF: 8.00 ft

Serial #: 8931 Inside
 Press@RunDepth: 46.61 psig @ 1732.51 ft (KB) Capacity: 5000.00 psig
 Start Date: 2014.06.01 End Date: 2014.06.01 Last Calib.: 2014.06.01
 Start Time: 01:53:00 End Time: 06:35:00 Time On Btm: 2014.06.01 @ 02:51:00
 Time Off Btm: 2014.06.01 @ 05:37:30

TEST COMMENT: 1st Open 15 minutes Weak building blow built to 1.5 inches into a 5 gallon bucket of water.
 1st Shut in 60 minutes No blow back.
 2nd Open 30 minutes Weak building blow built to 5 inches into a 5 gallon bucket of water.
 2nd Shut in 60 minutes No blow back.



PRESSURE SUMMARY

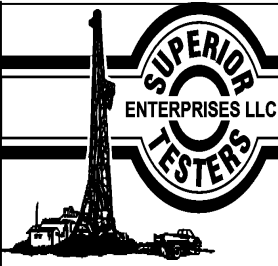
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	821.43	86.19	Initial Hydro-static
1	46.58	86.02	Open To Flow (1)
13	46.61	86.08	Shut-In(1)
74	113.34	85.44	End Shut-In(1)
75	43.35	85.41	Open To Flow (2)
104	45.58	85.06	End Shut-In(2)
166	279.97	84.55	End Shut-In(3)
167	794.98	84.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
7.00	Mud 100%	0.10
0.00	10ft. gas in pipe	0.00

Gas Rates

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



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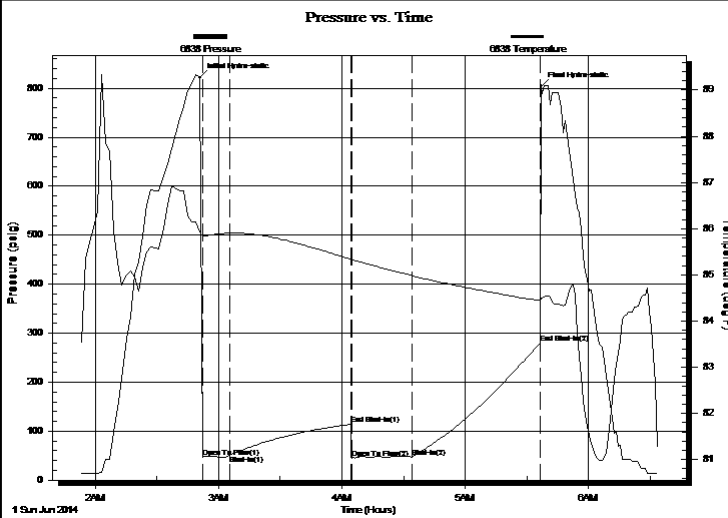
19-19s-14-Barton
Calcara unit 1-19
 Job Ticket: 18327 **DST#: 1**
 Test Start: 2014.06.01 @ 01:53:00

GENERAL INFORMATION:

Formation: Herrington		Test Type: Conventional Bottom Hole (Initial)
Deviated: No Whipstock: ft (KB)		Tester: Dustin Ellis
Time Tool Opened: 02:52:00		Unit No: 3315-Great Bend-15
Time Test Ended: 06:35:00		
Interval: 1687.00 ft (KB) To 1737.00 ft (KB) (TVD)		Reference Elevations: 1904.00 ft (KB)
Total Depth: 1737.00 ft (KB) (TVD)		1896.00 ft (CF)
Hole Diameter: 7.88 inches	Hole Condition: Fair	KB to GR/CF: 8.00 ft

Serial #: 6838	Outside		
Press@RunDepth: 280.30 psig @ 1732.51 ft (KB)		Capacity: 5000.00 psig	
Start Date: 2014.06.01	End Date: 2014.06.01	Last Calib.: 2014.06.01	
Start Time: 01:52:00	End Time: 06:34:00	Time On Btm: 2014.06.01 @ 02:51:00	
		Time Off Btm: 2014.06.01 @ 05:37:00	

TEST COMMENT: 1st Open 15 minutes Weak building blow built to 1.5 inches into a 5 gallon bucket of water.
 1st Shut in 60 minutes No blow back.
 2nd Open 30 minutes Weak building blow built to 5 inches into a 5 gallon bucket of water.
 2nd Shut in 60 minutes No blow back.



PRESSURE SUMMARY			
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	821.65	85.92	Initial Hydro-static
1	46.84	85.85	Open To Flow (1)
15	50.70	85.91	Shut-In(1)
74	114.23	85.34	End Shut-In(1)
74	45.20	85.33	Open To Flow (2)
103	46.43	84.98	Shut-In(2)
166	280.30	84.44	End Shut-In(2)
166	803.58	84.49	Final Hydro-static

Recovery		
Length (ft)	Description	Volume (bbl)
7.00	Mud 100%	0.10
0.00	10ft. gas in pipe	0.00

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



DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G. Holl Company
 9431 East Central STE 100
 Wichita Kansas 67206
 ATTN: Rene Husted

19-19s-14-Barton
Calcara unit 1-19
 Job Ticket: 18327 **DST#: 1**
 Test Start: 2014.06.01 @ 01:53:00

Tool Information

Drill Pipe:	Length: 1677.00 ft	Diameter: 3.80 inches	Volume: 23.52 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: 34000.00 lb
			<u>Total Volume: 23.52 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	18.00 ft			String Weight: Initial 30000.00 lb
Depth to Top Packer:	1687.00 ft			Final 30000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.51 ft			
Tool Length:	78.51 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			1664.00	
Hydraulic tool	5.00			1669.00	
Jars	6.00			1675.00	
Safety Joint	2.00			1677.00	
Top Packer	5.00			1682.00	
Packer	5.00			1687.00	28.00 Bottom Of Top Packer
Anchor	7.00			1694.00	
Change Over Sub	0.00			1694.00	
Drill Pipe	31.51			1725.51	
Change Over Sub	0.00			1725.51	
Anchor	7.00			1732.51	
Recorder	0.00	8931	Inside	1732.51	
Recorder	0.00	6838	Outside	1732.51	
Bull Plug	5.00			1737.51	50.51 Anchor Tool

Total Tool Length: 78.51



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FLUID SUMMARY

F.G. Holl Company

19-19s-14-Barton

9431 East Central STE 100
Wichita Kansas 67206

Calcara unit 1-19

Job Ticket: 18327

DST#: 1

ATTN: Rene Husted

Test Start: 2014.06.01 @ 01:53:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 42.00 sec/qt
Water Loss: 13.60 in³
Resistivity: ohm.m
Salinity: 15000.00 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
7.00	Mud 100%	0.098
0.00	10ft. gas in pipe	0.000

Total Length: 7.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

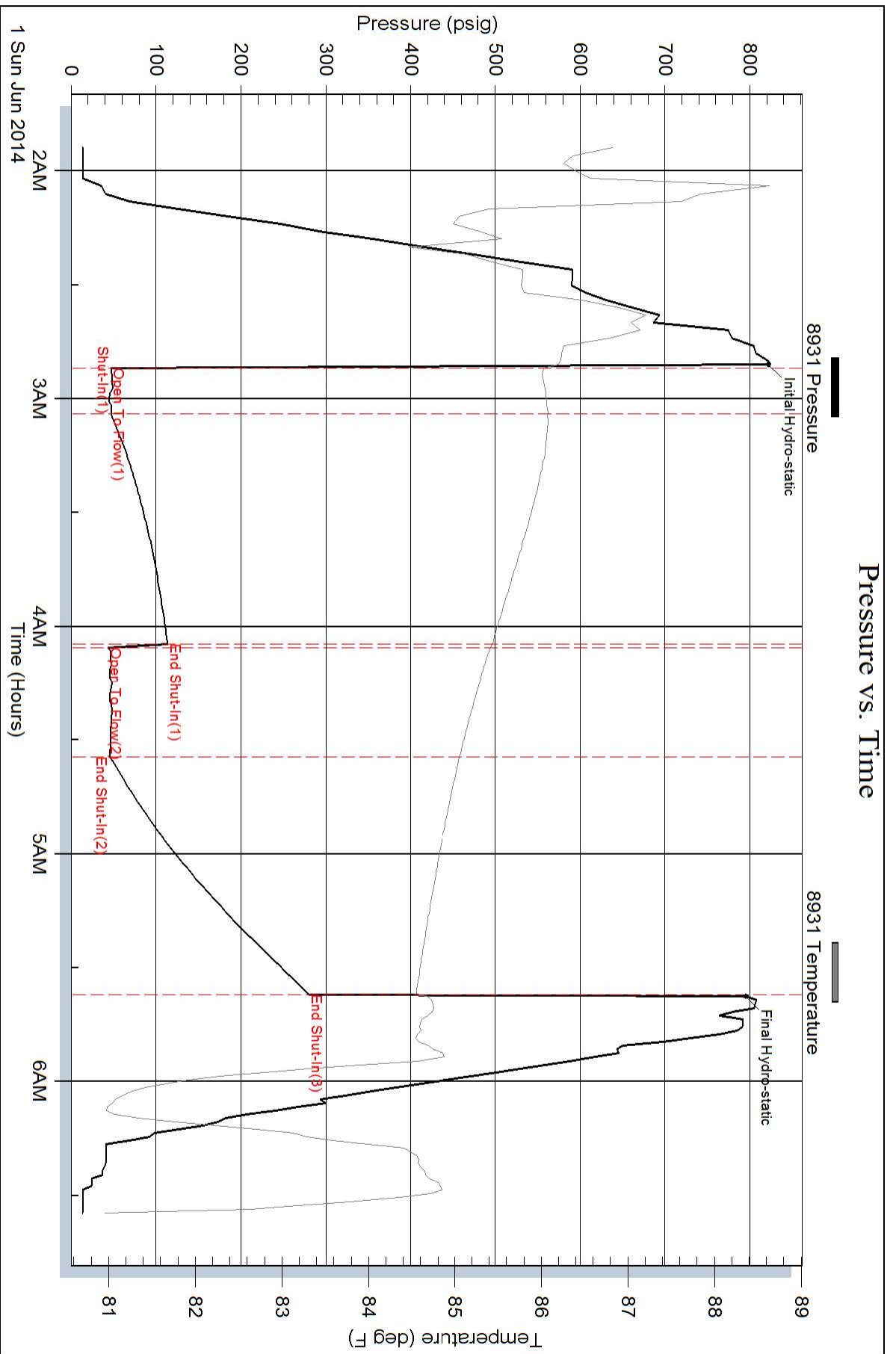
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time



Pressure vs. Time

