



## DRILL STEM TEST REPORT

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

9431 East \\\\central Suite 100  
Wichita, Kansas 67206

ATTN: Rene Husted

**Kruckenbergs #1-18**

**18-19s-14w Barton**

Start Date: 2018.08.08 @ 07:51:00

End Date: 2018.08.08 @ 17:26:00

Job Ticket #: 01091                      DST #: 1

Eagle Testers

1309 Patton Road    Great Bend, Kansas 67530

620-791-7394

Printed: 2018.08.08 @ 17:47:27

F.G,Holl Company LLC

18-19s-14w Barton

Kruckenbergs #1-18

DST # 1

Kansas City "A & B"

2018.08.08



# DRILL STEM TEST REPORT

F.G.Holl Company LLC

18-19s-14w Barton

9431 East 1111 Central Suite 100  
Wichita, Kansas 67206

Kruckenberg #1-18

Job Ticket: 01091

DST#: 1

ATTN: Rene Husted

Test Start: 2018.08.08 @ 07:51:00

## GENERAL INFORMATION:

Formation: Kansas City "A & B"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:44:00

Time Test Ended: 17:26:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 1

Interval: 3230.00 ft (KB) To 3279.00 ft (KB) (TVD)

Total Depth: 3279.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1916.00 ft (KB)

1908.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 9139 Outside

Press@RunDepth: 1121.26 psig @ 3273.84 ft (KB)

Start Date: 2018.08.08

End Date: 2018.08.08

Start Time: 07:51:00

End Time: 17:25:00

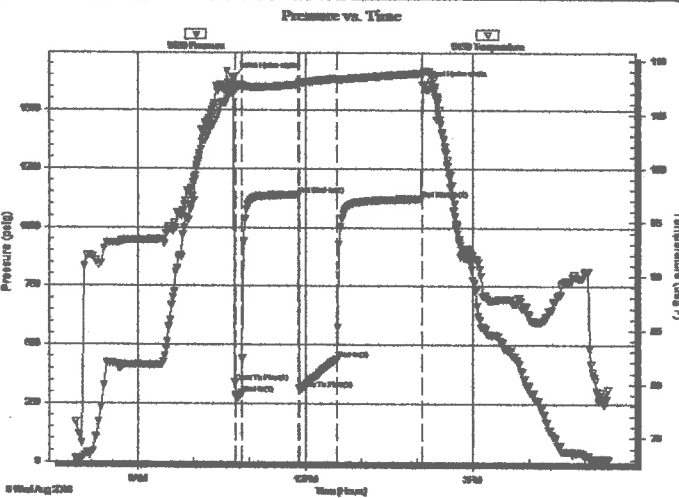
Capacity: 5000.00 psig

Last Calib.: 2018.08.08

Time On Btm: 2018.08.08 @ 10:43:30

Time Off Btm: 2018.08.08 @ 14:06:00

**TEST COMMENT:** 1st Opening 5 Minutes Strong blow gas to surface in 3 minutes  
1st Shut-in 60 Minutes good blow back  
2nd Opening 45 Minutes strong blow see gas flow report  
2nd Shut-in 90 Minutes good blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1640.29	107.03	Initial Hydro-static
1	339.82	107.50	Open To Flow (1)
9	291.94	107.74	Shut-in(1)
69	1138.36	107.80	End Shut-in(1)
70	313.63	108.00	Open To Flow (2)
111	439.73	108.33	Shut-in(2)
202	1121.26	108.82	End Shut-in(2)
203	1608.13	108.78	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	drilling mud	1.68
1000.00	gassy frothy oil cut mud	14.03
0.00	30% Gas 60% Oil 10 %Mud	0.00

## Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	7.86	81.54
Last Gas Rate	0.38	12.17	97.35
Max. Gas Rate	0.38	15.65	110.08



# DRILL STEM TEST REPORT

F.G.Holl Company LLC

18-19s-14w Barton

9431 East 11th Central Suite 100  
Wichita, Kansas 67206

Kruckenberg #1-18

Job Ticket: 01091

DST#: 1

ATTN: Rene Husted

Test Start: 2018.08.08 @ 07:51:00

## GENERAL INFORMATION:

Formation: Kansas City "A & B"

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:44:00

Time Test Ended: 17:26:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Gene Budig

Unit No: 1

Interval: 3230.00 ft (KB) To 3279.00 ft (KB) (TVD)

Total Depth: 3279.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 1916.00 ft (KB)

1908.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 9119

Inside

Press@RunDepth: 1110.90 psig @ 3273.84 ft (KB)

Capacity: 5000.00 psig

Start Date: 2018.08.08

End Date: 2018.08.08

Last Calib.: 2018.08.08

Start Time: 07:51:00

End Time: 17:25:00

Time On Btm: 2018.08.08 @ 10:43:30

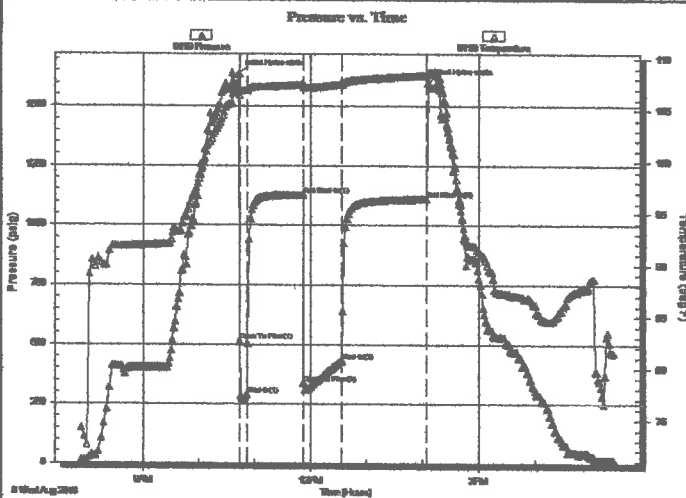
Time Off Btm: 2018.08.08 @ 14:06:30

TEST COMMENT: 1st Opening 5 Minutes Strong blow gas to surface in 3 minutes

1st Shut-in 60 Minutes good blow back

2nd Opening 45 Minutes strong blow see gas flow report

2nd Shut-in 90 Minutes good blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1634.94	107.09	Initial Hydro-static
1	513.45	106.46	Open To Flow (1)
9	287.55	106.92	Shut-in(1)
69	1128.32	107.50	End Shut-in(1)
70	335.37	107.25	Open To Flow (2)
111	430.44	107.51	Shut-in(2)
201	1110.90	108.39	End Shut-in(2)
203	1599.55	108.60	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
120.00	drilling mud	1.68
1000.00	gassy frothy oil cut mud	14.03
0.00	30% Gas 60% Oil 10 %Mud	0.00

## Gas Rates

	Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.38	7.86	81.54
Last Gas Rate	0.38	12.17	97.35
Max. Gas Rate	0.38	15.65	110.08



# DRILL STEM TEST REPORT

TOOL DIAGRAM

F.G.Holl Company LLC

18-19s-14w Barton

9431 East 1111 Central Suite 100  
Wichita, Kansas 67206

Kruckenberg #1-18

Job Ticket: 01091

DST#: 1

ATTN: Rene Husted

Test Start: 2018.08.08 @ 07:51:00

## Tool Information

Drill Pipe:	Length: 3230.00 ft	Diameter: 3.80 inches	Volume: 45.31 bbl	Tool Weight: 20000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.86 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 78000.00 lb
		Total Volume:	45.31 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	3230.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	48.84 ft			
Tool Length:	78.84 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

## Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			3205.00	
Hydraulic tool	5.00			3210.00	
Jars	5.00			3215.00	
Safety Joint	5.00			3220.00	
Packer	5.00			3225.00	30.00 Bottom Of Top Packer
Packer	5.00		Fluid	3230.00	
Anchor	5.00			3235.00	
Change Over Sub	0.75			3235.75	
Drill Pipe	31.34			3267.09	
Change Over Sub	0.75		Inside	3267.84	
Anchor	6.00			3273.84	
Recorder	0.00	9119	Inside	3273.84	
Recorder	0.00	9139	Outside	3273.84	
Bullnose	5.00			3278.84	48.84 Bottom Packers & Anchor

**Total Tool Length: 78.84**



# DRILL STEM TEST REPORT

**FLUID SUMMARY**

F.G.Holl Company LLC

**18-19s-14w Barton**

9431 East 1111 Central Suite 100  
Wichita, Kansas 67206

**Kruckenberg #1-18**

Job Ticket: 01091

**DST#: 1**

ATTN: Rene Hustedad

Test Start: 2018.08.08 @ 07:51:00

## 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:

bbf

Water Loss: 8.79 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 8900.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbf
120.00	drilling mud	1.683
1000.00	gassy frothy oil cut mud	14.027
0.00	30% Gas 60% Oil 10 %Mud	0.000

Total Length: 1120.00 ft      Total Volume: 15.710 bbf

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Serial #: 9139

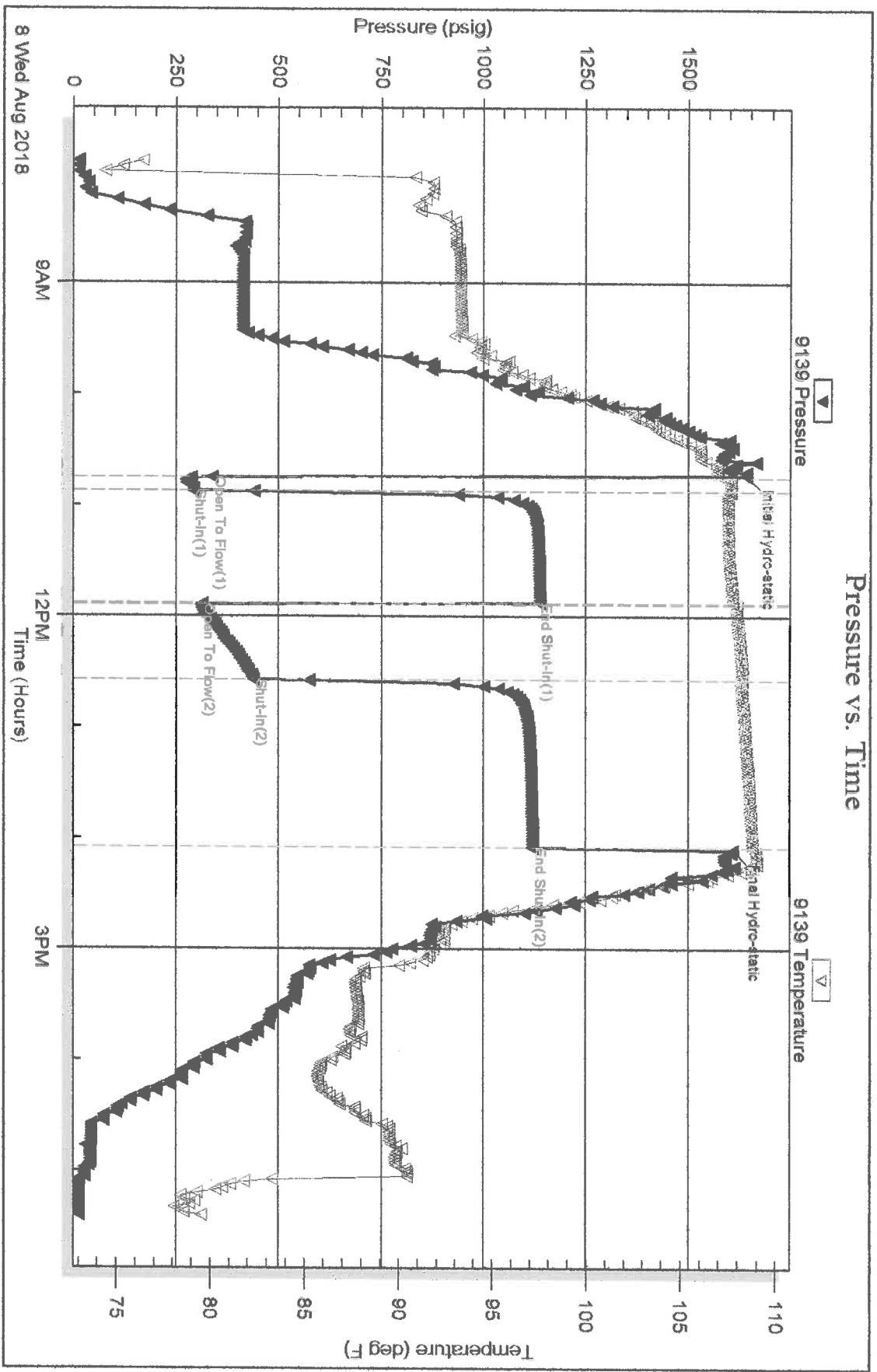
Outside

F.G.Hill Company LLC

Kruckenbergl #1-18

DST Test Number: 1

### Pressure vs. Time



Eagle Testers

Ref. No: 01091

Printed: 2018.08.08 @ 17:47:29

Serial #: 9119

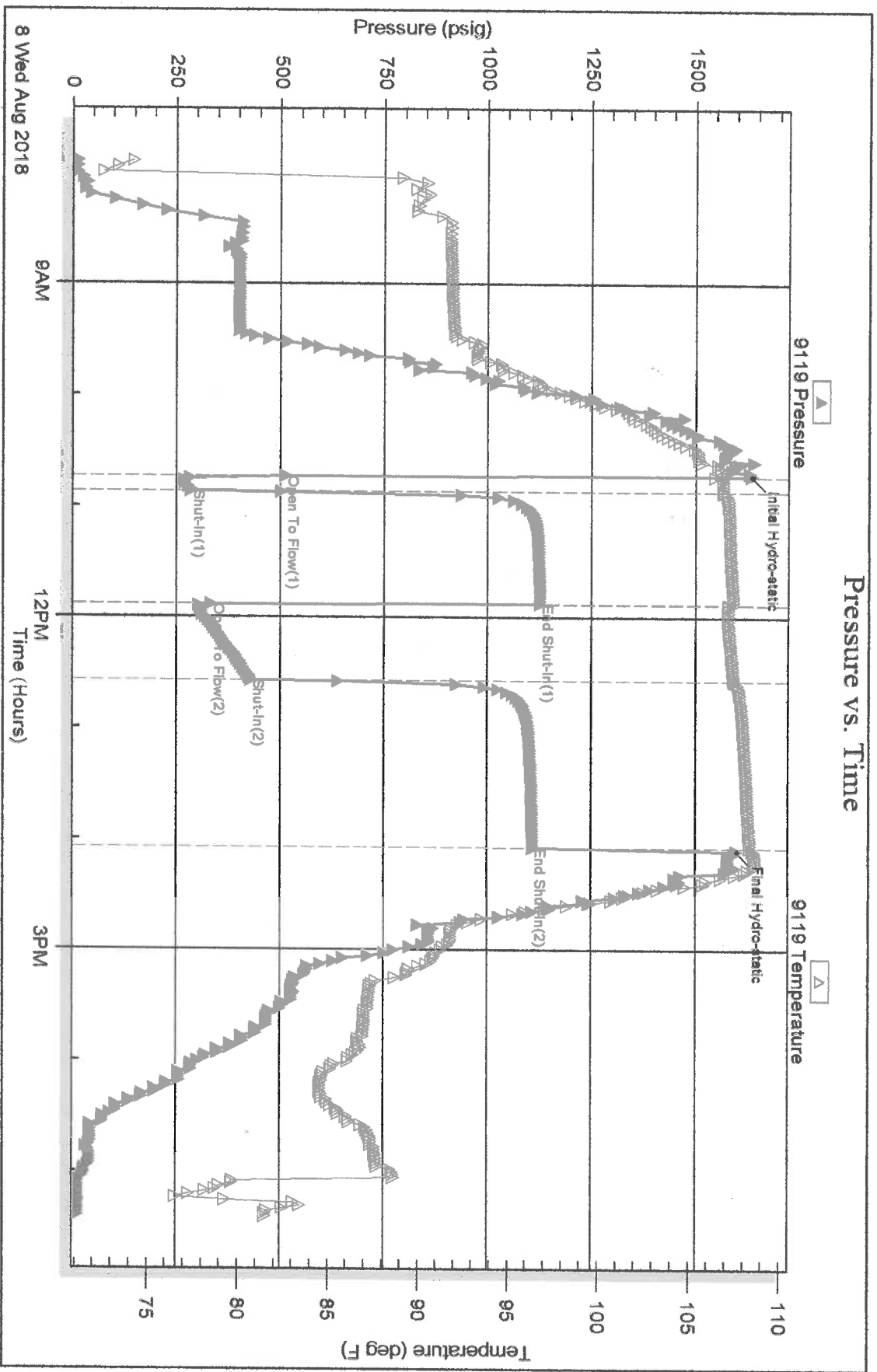
Inside

F.G.Hall Company LLC

Kuuckenberg #1-18

DST Test Number: 1

### Pressure vs. Time



Eagle Testers

Ref. No: 01091

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