



## DRILL STEM TEST REPORT

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

9431 East Central Suite 100  
Wichita, Kansas 67206-2563

ATTN: Rene Husted

### **Kufeld #1-19**

### **19-19s18w Barton**

Start Date: 2014.09.15 @ 00:00:00

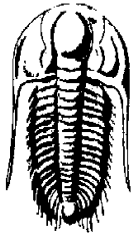
End Date:

Job Ticket #: 60376

DST #: 11

Trilobite Testing, Inc  
1515 Commerce Parkway Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

Printed: 2014.09.15 @ 18:20:38



**TRILOBITE**  
**TESTING, INC.**

## DRILL STEM TEST REPORT

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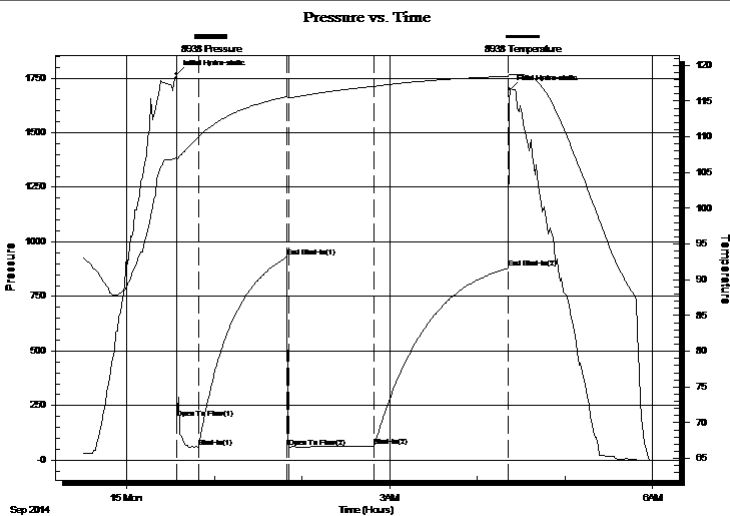
**19-19s18w Barton**  
**Kufeld #1-19**  
Job Ticket: 60376      **DST#: 11**  
Test Start: 2014.09.15 @ 00:00:00

### GENERAL INFORMATION:

Formation: **Conglomerate & Arbuv**  
Deviated: No      Whipstock:      ft (KB)      Test Type: Conventional Bottom Hole (Initial)  
Time Tool Opened:      Tester: Gene Budig  
Time Test Ended:      Unit No: S4  
**Interval: 3471.00 ft (KB) To 3555.00 ft (KB) (TVD)**      Reference Elevations: 1915.00 ft (KB)  
Total Depth: 3555.00 ft (KB) (TVD)      1907.00 ft (CF)  
Hole Diameter: 7.88 inches      Hole Condition: Fair      KB to GR/CF: 8.00 ft

**Serial #: 8938      Outside**  
Press@RunDepth: 878.60 psig @ 3551.77 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2014.09.14      End Date: 2014.09.15      Last Calib.: 2014.09.15  
Start Time: 17:33:00      End Time: 05:59:00      Time On Btm: 2014.09.15 @ 00:34:00  
Time Off Btm: 2014.09.15 @ 04:22:00

TEST COMMENT: 1st Opening 15 Minutes Good blow built to the bottom of the bucket in 1 minute  
1st Shut-In 60 Minutes  
2nd Opening 60 Minutes Good blow gas to surface in 15 minutes See gas flow report  
2nd Shut-In 90 Minutes-Fair blow back



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1766.93	107.16	Initial Hydro-static
1	191.85	106.85	Open To Flow (1)
15	61.31	109.96	Shut-In(1)
76	930.25	115.61	End Shut-In(1)
77	59.14	115.44	Open To Flow (2)
136	65.60	117.07	Shut-In(2)
227	878.60	118.47	End Shut-In(2)
228	1698.88	118.66	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
50.00	MUD	0.70

### Gas Rates

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



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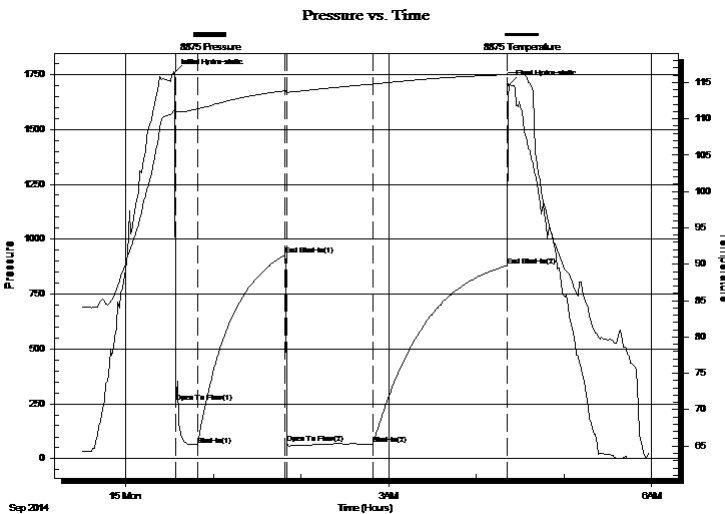
**19-19s18w Barton**  
**Kufeld #1-19**  
 Job Ticket: 60376 **DST#: 11**  
 Test Start: 2014.09.15 @ 00:00:00

## GENERAL INFORMATION:

Formation: **Conglomerate & Arbuv**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened:  
 Time Test Ended:  
 Interval: **3471.00 ft (KB) To 3555.00 ft (KB) (TVD)**  
 Total Depth: 3555.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Gene Budig  
 Unit No: S4  
 Reference Elevations: 1915.00 ft (KB)  
 1907.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8875 Inside**  
 Press@RunDepth: 878.90 psig @ 3550.77 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.09.14 End Date: 2014.09.15 Last Calib.: 2014.09.15  
 Start Time: 17:33:00 End Time: 05:58:30 Time On Btm: 2014.09.15 @ 00:33:30  
 Time Off Btm: 2014.09.15 @ 04:22:00

**TEST COMMENT:** 1st Opening 15 Minutes Good blow built to the bottom of the bucket in 1 minute  
 1st Shut-In 60 Minutes  
 2nd Opening 60 Minutes Good blow gas to surface in 15 minutes See gas flow report  
 2nd Shut-In 90 Minutes-Fair blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1757.02	111.26	Initial Hydro-static
1	257.15	110.40	Open To Flow (1)
16	63.50	111.36	Shut-In(1)
76	927.62	113.87	End Shut-In(1)
77	72.14	113.68	Open To Flow (2)
136	67.54	114.77	Shut-In(2)
228	878.90	116.10	End Shut-In(2)
229	1703.26	116.31	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
50.00	MUD	0.70

## Gas Rates

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



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# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

F.G. Holl Company LLC

**19-19s18w Barton**

9431 East Central Suite 100  
Wichita, Kansas 67206-2563

**Kufeld #1-19**

Job Ticket: 60376

**DST#: 11**

ATTN: Rene Husted

Test Start: 2014.09.15 @ 00:00:00

## 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: 2.76 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: 65000.00 lb
			<u>Total Volume: 48.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3471.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	83.77 ft			
Tool Length:	111.77 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			3448.00	
Hydraulic Tool	5.00			3453.00	
Jars	6.00			3459.00	
Safety Joint	2.00			3461.00	
Top Packer	5.00			3466.00	
Packer	5.00			3471.00	28.00 Bottom Of Top Packer
Anchor	14.00			3485.00	
Change Over Sub	0.75			3485.75	
Drill Pipe	31.27			3517.02	
Change Over Sub	0.75			3517.77	
Anchor	32.00			3549.77	
Recorder	1.00	8875	Inside	3550.77	
Recorder	1.00	8938	Outside	3551.77	
Bull Plug	3.00			3554.77	83.77 Anchor Tool

**Total Tool Length: 111.77**



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**FLUID SUMMARY**

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Job Ticket: 60376      **DST#: 11**  
Test Start: 2014.09.15 @ 00:00:00

## 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: 44.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.80 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 8400.00 ppm			
Filter Cake: 1.00 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
50.00	MUD	0.701

Total Length: 50.00 ft      Total Volume: 0.701 bbl

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

Laboratory Name:      Laboratory Location:

Recovery Comments:

### Pressure vs. Time

