



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Deutsch Oil Co  
 8100 E 22nd Street North  
 Building 800  
 Wichita, Kansas 67226  
 ATTN: Aaron Young

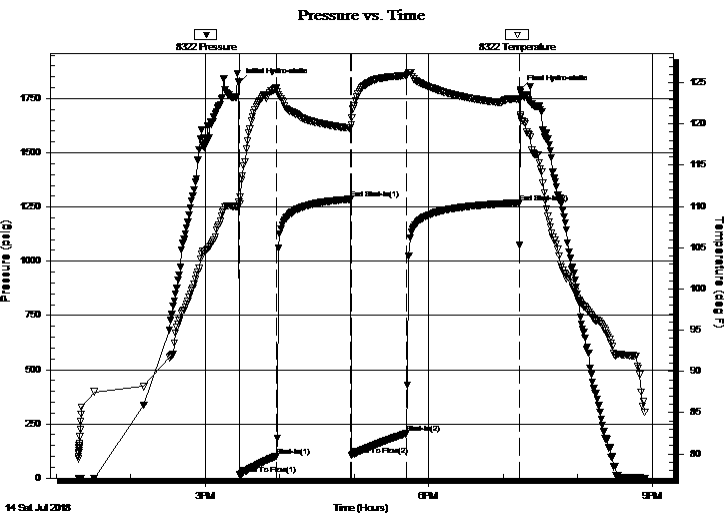
**18/26S/11W/Pratt**  
**Triple M #1-18**  
 Job Ticket: 63886 **DST#: 1**  
 Test Start: 2018.07.14 @ 13:18:00

## GENERAL INFORMATION:

Formation: **Lansing/Kansas City**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 15:27:47  
 Time Test Ended: 20:54:02  
 Interval: **3792.00 ft (KB) To 3812.00 ft (KB) (TVD)**  
 Total Depth: 3812.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72 Pratt 30  
 Reference Elevations: 1865.00 ft (KB)  
 1858.00 ft (CF)  
 KB to GR/CF: 7.00 ft

**Serial #: 8322 Inside**  
 Press@RunDepth: 206.83 psig @ 3793.00 ft (KB) Capacity: psig  
 Start Date: 2018.07.14 End Date: 2018.07.14 Last Calib.: 2018.07.14  
 Start Time: 13:18:01 End Time: 20:54:02 Time On Btm: 2018.07.14 @ 15:27:17  
 Time Off Btm: 2018.07.14 @ 19:13:47

**TEST COMMENT:** I.F. 30 Minutes/ Blow built to BOB in 24 minutes/ Total build 13 1/2 inches  
 I.S.I. 60 Minutes/ No blow back  
 F.F. 45 Minutes/ Blow built to BOB in 29 minutes/ Total build 15 inches  
 F.S.I. 90 Minutes/ No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1824.86	110.58	Initial Hydro-static
1	15.71	110.30	Open To Flow (1)
30	101.90	124.33	Shut-In(1)
90	1285.77	119.50	End Shut-In(1)
91	106.02	119.92	Open To Flow (2)
135	206.83	125.88	Shut-In(2)
226	1269.91	122.94	End Shut-In(2)
227	1789.80	121.06	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	Muddy Water/ Mud 20% Water 80%	1.74
279.00	Muddy Water/ Mud 5% Water 95%	3.91

## Gas Rates

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



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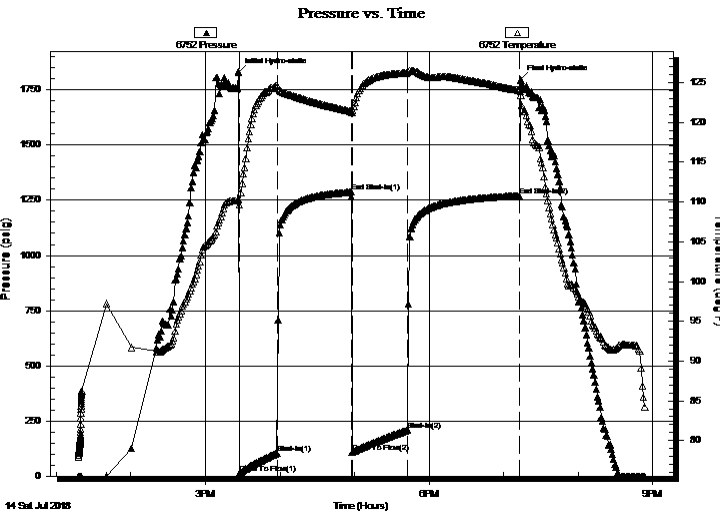
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## GENERAL INFORMATION:

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 Total Depth: 3812.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72 Pratt 30  
 Reference Elevations: 1865.00 ft (KB)  
 1858.00 ft (CF)  
 KB to GR/CF: 7.00 ft

**Serial #: 6752 Outside**  
 Press@RunDepth: 1271.37 psig @ 3794.00 ft (KB) Capacity: psig  
 Start Date: 2018.07.14 End Date: 2018.07.14 Last Calib.: 2018.07.14  
 Start Time: 13:18:01 End Time: 20:54:02 Time On Btm: 2018.07.14 @ 15:26:47  
 Time Off Btm: 2018.07.14 @ 19:13:47

**TEST COMMENT:** I.F. 30 Minutes/ Blow built to BOB in 24 minutes/ Total build 13 1/2 inches  
 I.S.I. 60 Minutes/ No blow back  
 F.F. 45 Minutes/ Blow built to BOB in 29 minutes/ Total build 15 inches  
 F.S.I. 90 Minutes/ No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1829.63	110.36	Initial Hydro-static
1	14.91	109.66	Open To Flow (1)
31	104.70	124.56	Shut-In(1)
91	1287.30	121.39	End Shut-In(1)
92	107.90	121.22	Open To Flow (2)
136	208.01	126.23	Shut-In(2)
226	1271.37	124.02	End Shut-In(2)
227	1794.43	123.32	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
124.00	Muddy Water/ Mud 20% Water 80%	1.74
279.00	Muddy Water/ Mud 5% Water 95%	3.91

## Gas Rates

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



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# DRILL STEM TEST REPORT

## FLUID SUMMARY

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8100 E 22nd Street North  
Building 800  
Wichita, Kansas 67226  
ATTN: Aaron Young

**18/26S/11W/Pratt**  
**Triple M #1-18**  
Job Ticket: 63886      **DST#: 1**  
Test Start: 2018.07.14 @ 13:18:00

### 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:	50000 ppm
Viscosity: 42.00 sec/qt	Cushion Volume: bbl		
Water Loss: 10.39 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 6000.00 ppm			
Filter Cake: 1.00 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
124.00	Muddy Water/ Mud 20% Water 80%	1.739
279.00	Muddy Water/ Mud 5% Water 95%	3.914

Total Length: 403.00 ft      Total Volume: 5.653 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: Recovery Resistivity .120 @ 83 deg.



