



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Herman L. Loeb, LLC
 PO Box 838
 Lawrenceville, IL. 62439
 ATTN: Jon Christensen

28-27s-18w Kiowa,KS

Yost #4-28

Job Ticket: 63470

DST#: 3

Test Start: 2018.10.12 @ 03:29:00

GENERAL INFORMATION:

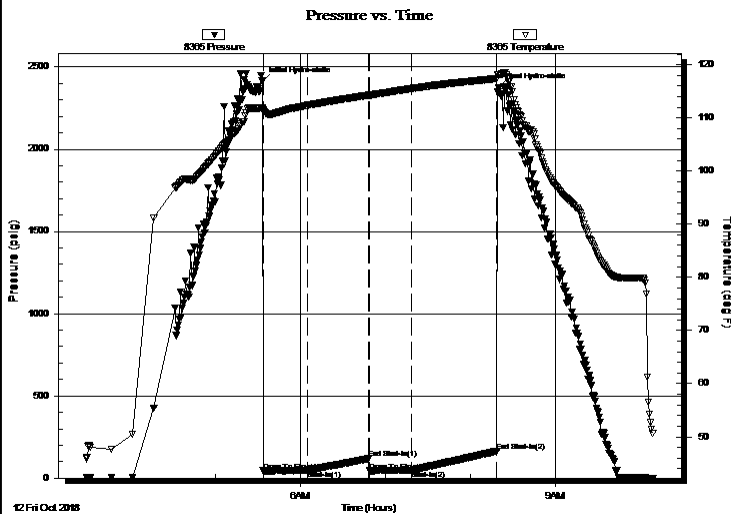
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 05:34:02
 Time Test Ended: 10:09:02
 Interval: **4738.00 ft (KB) To 4798.00 ft (KB) (TVD)**
 Total Depth: 4798.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney Benny Mu
 Unit No: 72 Pratt
 Reference Elevations: 2210.00 ft (KB)
 2199.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 8365

Inside

Press@RunDepth: 46.55 psig @ 4777.80 ft (KB) Capacity: psig
 Start Date: 2018.10.12 End Date: 2018.10.12 Last Calib.: 2018.10.12
 Start Time: 03:29:01 End Time: 10:09:02 Time On Btm: 2018.10.12 @ 05:33:17
 Time Off Btm: 2018.10.12 @ 08:20:02

TEST COMMENT: I.F. 30 Minutes/ Blow built to 7 "
 I.S.I. 45 Minutes/ no blow back
 F.F. 30 Minutes/ Blow built to 6"
 F.S.I. 60 Minutes/ no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2412.42	111.83	Initial Hydro-static
1	43.06	111.44	Open To Flow (1)
32	46.81	112.34	Shut-In(1)
75	118.20	114.25	End Shut-In(1)
76	43.82	114.27	Open To Flow (2)
105	46.55	115.50	Shut-In(2)
166	164.42	117.42	End Shut-In(2)
167	2375.05	118.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud w/show oil in tool/ Mud 100%	0.15
0.00	210 GIP	0.00

Gas Rates

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



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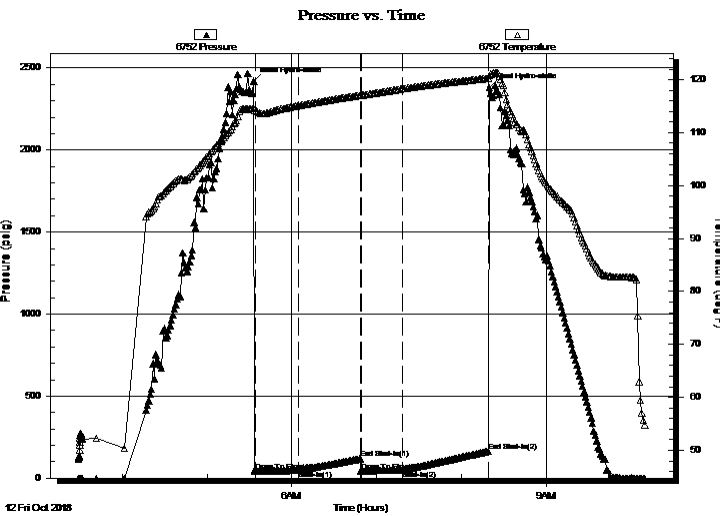
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 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney Benny Mu
 Unit No: 72 Pratt
 Reference Elevations: 2210.00 ft (KB)
 2199.00 ft (CF)
 KB to GR/CF: 11.00 ft

Serial #: 6752 Outside

Press@RunDepth: 164.79 psig @ 4778.80 ft (KB) Capacity: psig
 Start Date: 2018.10.12 End Date: 2018.10.12 Last Calib.: 2018.10.12
 Start Time: 03:29:01 End Time: 10:10:02 Time On Btm: 2018.10.12 @ 05:33:02
 Time Off Btm: 2018.10.12 @ 08:19:47

TEST COMMENT: I.F. 30 Minutes/ Blow built to 7 "
 I.S.I. 45 Minutes/ no blow back
 F.F. 30 Minutes/ Blow built to 6"
 F.S.I. 60 Minutes/ no blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2415.50	114.63	Initial Hydro-static
1	41.80	114.18	Open To Flow (1)
32	46.99	115.10	Shut-In(1)
76	118.75	117.03	End Shut-In(1)
76	43.95	117.03	Open To Flow (2)
106	46.74	118.27	Shut-In(2)
166	164.79	120.29	End Shut-In(2)
167	2382.47	120.82	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	Mud w/show oil in tool/ Mud 100%	0.15
0.00	210 GIP	0.00

Gas Rates

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



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FLUID SUMMARY

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Job Ticket: 63470 **DST#: 3**
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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: 66.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.79 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 7500.00 ppm			
Filter Cake: 1.00 inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	Mud w /show oil in tool/ Mud 100%	0.148
0.00	210 GIP	0.000

Total Length: 30.00 ft Total Volume: 0.148 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

