



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Woolsey Operation Company LLC
 125 N Market
 Suite 100
 Wichita, Kansas 67202+1729
 ATTN: Bill Klaver

22/28S/19W/Kiowa

McFadden B-1

Job Ticket: 62100

DST#: 1

Test Start: 2018.01.24 @ 10:10:00

GENERAL INFORMATION:

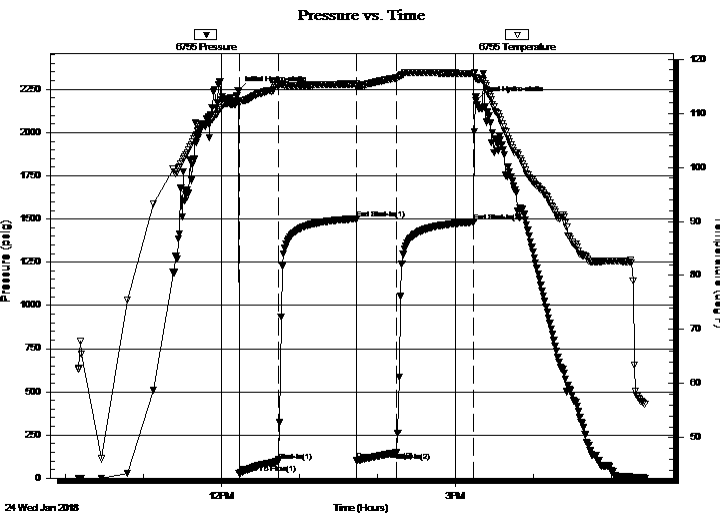
Formation: **lola**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 12:13:32
 Tester: Ken Swinney
 Time Test Ended: 17:26:02
 Unit No: 72 Pratt/80
 Interval: **4440.00 ft (KB) To 4474.00 ft (KB) (TVD)**
 Reference Elevations: 2284.00 ft (KB)
 Total Depth: 4474.00 ft (KB) (TVD)
 2272.00 ft (CF)
 Hole Diameter: 7.80 inches
 Hole Condition: Fair
 KB to GR/CF: 12.00 ft

Serial #: 6755

Inside

Press@RunDepth: 146.90 psig @ 4470.00 ft (KB) Capacity: psig
 Start Date: 2018.01.24 End Date: 2018.01.24 Last Calib.: 2018.01.24
 Start Time: 10:10:01 End Time: 17:26:02 Time On Btm: 2018.01.24 @ 12:13:02
 Time Off Btm: 2018.01.24 @ 15:16:02

TEST COMMENT: I.F. 30 Minutes/ Tool slide 10 feet before open/ Blow built to 2 inch then died to 1 inch
 I.S.I. 60 Minutes/ No blow back
 F.F. 30 Minutes/ Blow built to 3/4 inch then died to surface blow
 F.S.I. 60 Minutes/ No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2240.88	112.40	Initial Hydro-static
1	28.29	111.85	Open To Flow (1)
31	96.62	115.28	Shut-In(1)
91	1501.29	115.40	End Shut-In(1)
92	102.23	114.99	Open To Flow (2)
122	146.90	116.56	Shut-In(2)
182	1483.13	117.37	End Shut-In(2)
183	2184.04	116.43	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	Muddy Water w/skim of oil	0.63
0.00	Mud 20% Water 80%	0.00
124.00	Muddy Water/ Mud 5% Water 95%	1.08

Gas Rates

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



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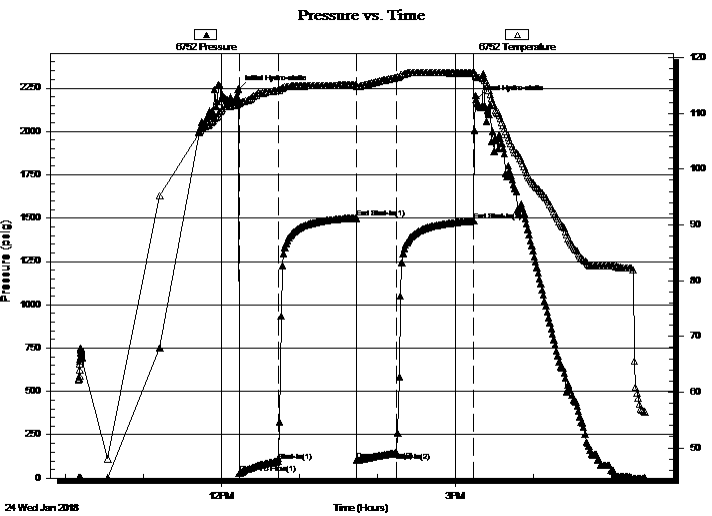
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 Deviated: No Whipstock: ft (KB)
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 Total Depth: 4474.00 ft (KB) (TVD)
 Hole Diameter: 7.80 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Ken Swinney
 Unit No: 72 Pratt/80
 Reference Elevations: 2284.00 ft (KB)
 2272.00 ft (CF)
 KB to GR/CF: 12.00 ft

Serial #: 6752

Outside

Press@RunDepth: 1483.60 psig @ 4471.00 ft (KB) Capacity: psig
 Start Date: 2018.01.24 End Date: 2018.01.24 Last Calib.: 2018.01.24
 Start Time: 10:10:01 End Time: 17:26:02 Time On Btm: 2018.01.24 @ 12:13:02
 Time Off Btm: 2018.01.24 @ 15:16:02

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 I.S.I. 60 Minutes/ No blow back
 F.F. 30 Minutes/ Blow built to 3/4 inch then died to surface blow
 F.S.I. 60 Minutes/ No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2241.09	112.03	Initial Hydro-static
1	27.13	111.71	Open To Flow (1)
31	97.12	114.10	Shut-In(1)
91	1501.61	115.05	End Shut-In(1)
92	102.29	114.77	Open To Flow (2)
122	146.99	116.44	Shut-In(2)
182	1483.60	117.20	End Shut-In(2)
183	2184.41	116.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
124.00	Muddy Water w/skim of oil	0.63
0.00	Mud 20% Water 80%	0.00
124.00	Muddy Water/ Mud 5% Water 95%	1.08

Gas Rates

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



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FLUID SUMMARY

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22/28S/19W/Kiowa

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ATTN: Bill Klaver

McFadden B-1

Job Ticket: 62100

DST#: 1

Test Start: 2018.01.24 @ 10:10:00

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:

42000 ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
124.00	Muddy Water w/skim of oil	0.625
0.00	Mud 20% Water 80%	0.000
124.00	Muddy Water/ Mud 5% Water 95%	1.084

Total Length: 248.00 ft Total Volume: 1.709 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Recovery Resistivity .204 ohms @ 57 deg.

