



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Pioneer Resources, Inc.
 80 Windmill Dr.
 Phillipsburg, Ks 67661
 ATTN: Jason Alm

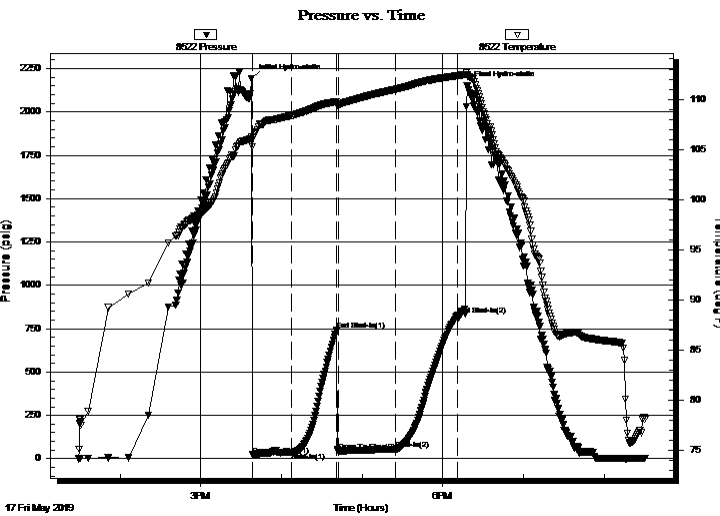
13 14s 32w
Knopp #8
 Job Ticket: 65225 **DST#: 2**
 Test Start: 2019.05.17 @ 13:29:00

GENERAL INFORMATION:

Formation: **Johnson**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:38:30
 Time Test Ended: 20:30:30
 Interval: **4342.00 ft (KB) To 4420.00 ft (KB) (TVD)**
 Total Depth: 4420.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Bradley Walter
 Unit No: 78
 Reference Elevations: 2792.00 ft (KB)
 2785.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8522 **Inside**
 Press@RunDepth: 56.52 psig @ 4343.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.05.17 End Date: 2019.05.17 Last Calib.: 2019.05.17
 Start Time: 13:29:05 End Time: 20:30:29 Time On Btm: 2019.05.17 @ 15:38:00
 Time Off Btm: 2019.05.17 @ 18:18:00

TEST COMMENT: 30- IF: 4" blow .
 30- IS: No return.
 45- FF: 6" blow .
 45- FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2190.12	106.26	Initial Hydro-static
1	22.66	105.27	Open To Flow (1)
30	38.68	108.36	Shut-In(1)
63	741.09	109.77	End Shut-In(1)
64	41.68	109.38	Open To Flow (2)
107	56.52	110.98	Shut-In(2)
153	827.42	112.35	End Shut-In(2)
160	2152.99	112.38	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
75.00	gocm 10g 25o 65m	0.37
0.00	45' gip	0.00

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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13 14s 32w

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Phillipsburg, Ks 67661

Knopp #8

Job Ticket: 65225

DST#: 2

ATTN: Jason Alm

Test Start: 2019.05.17 @ 13:29:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
75.00	gocm 10g 25o 65m	0.369
0.00	45' gip	0.000

Total Length: 75.00 ft Total Volume: 0.369 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

