



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Ritchie Exploration Inc
 8100 E 22nd St N 700
 Wichita, Ks 67278
 ATTN: John Goldsmith

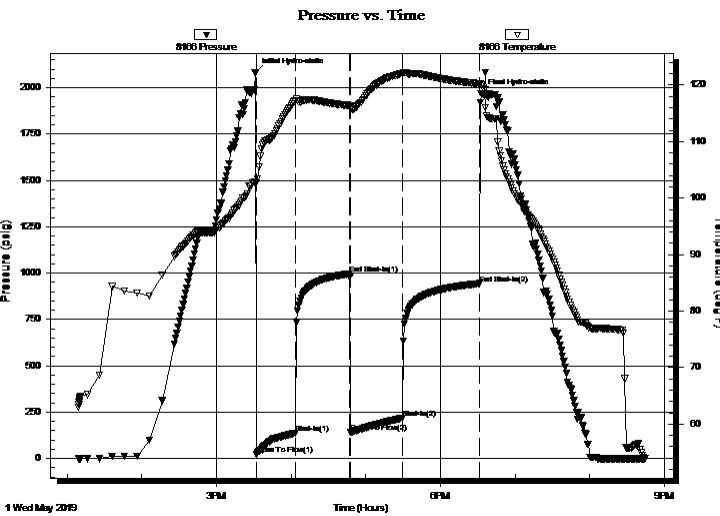
17-16s-31w Scott, Ks
Scheuerman 17D #1
 Job Ticket: 65226 **DST#: 3**
 Test Start: 2019.05.01 @ 13:09:12

GENERAL INFORMATION:

Formation: **LKC H-I**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 15:32:12
 Time Test Ended: 20:44:42
Interval: 4140.00 ft (KB) To 4208.00 ft (KB) (TVD)
 Total Depth: 4208.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Bottom Hole (Reset)
 Tester: Brandon Turley
 Unit No: 79
 Reference Elevations: 2951.00 ft (KB)
 2944.00 ft (CF)
 KB to GR/CF: 7.00 ft

Serial #: 8166 Outside
 Press@RunDepth: 219.10 psig @ 4141.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.05.01 End Date: 2019.05.01 Last Calib.: 2019.05.01
 Start Time: 13:09:17 End Time: 20:44:41 Time On Btm: 2019.05.01 @ 15:31:12
 Time Off Btm: 2019.05.01 @ 18:32:42

TEST COMMENT: IF: BOB in 19 min. 15"
 IS: No return.
 FF: BOB in 25 min. 17"
 FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2079.94	102.83	Initial Hydro-static
1	22.21	102.67	Open To Flow (1)
32	137.38	117.20	Shut-In(1)
76	995.59	116.33	End Shut-In(1)
77	140.06	115.93	Open To Flow (2)
119	219.10	122.08	Shut-In(2)
180	943.59	120.22	End Shut-In(2)
182	1967.26	119.97	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
248.00	mcw 90%w 10%m	1.78
206.00	w cm 15%w 85%m	2.89

* Recovery from multiple tests

Gas Rates

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



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Scheuerman 17D #1

ATTN: John Goldsmith

Job Ticket: 65226

DST#: 3

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Time Tool Opened: 15:32:12

Time Test Ended: 20:44:42

Test Type: Bottom Hole (Reset)

Tester: Brandon Turley

Unit No: 79

Interval: **4140.00 ft (KB) To 4208.00 ft (KB) (TVD)**

Reference Elevations: 2951.00 ft (KB)

Total Depth: 4208.00 ft (KB) (TVD)

2944.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 7.00 ft

Serial #: 6651 Inside

Press@RunDepth: psig @ 4141.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.05.01 End Date: 2019.05.01

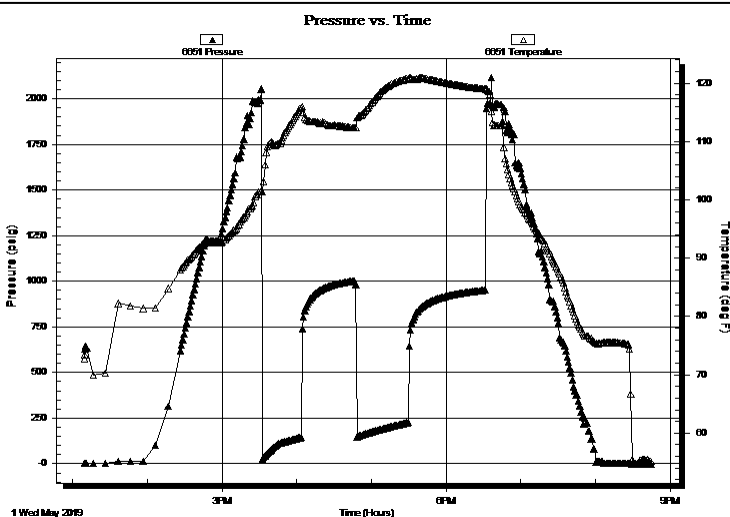
Last Calib.: 2019.05.01

Start Time: 13:09:25 End Time: 20:44:49

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: BOB in 19 min. 15"
IS: No return.
FF: BOB in 25 min. 17"
FS: No return.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
248.00	mcw 90%w 10%m	1.78
206.00	w cm 15%w 85%m	2.89

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Gas Rates

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



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FLUID SUMMARY

Ritchie Exploration Inc

17-16s-31w Scott, Ks

8100 E 22nd St N 700
Wichita, Ks 67278

Scheuerman 17D #1

Job Ticket: 65226

DST#: 3

ATTN: John Goldsmith

Test Start: 2019.05.01 @ 13:09:12

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:

54000 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.40 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 2500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
248.00	mcw 90%w 10%m	1.784
206.00	w cm 15%w 85%m	2.890

Total Length: 454.00 ft Total Volume: 4.674 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: .20@50=54000

