

**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Castle Resources Inc  
 PO Box 583  
 Russell, Kansas  
 67665+0583  
 ATTN: Jerry Green

**9/17S/19W/Rush**

**George Legleiter #1**

Job Ticket: 66290

**DST#: 1**

Test Start: 2019.08.21 @ 12:54:00

## GENERAL INFORMATION:

Formation: **Conglom sand/Arbuckl**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:43:32

Time Test Ended: 20:54:02

Test Type: Conventional Straddle (Initial)

Tester: Ken Swinney

Unit No: 72 Hays/ 54

**Interval: 3854.00 ft (KB) To 3876.00 ft (KB) (TVD)**

Reference Elevations: 2127.00 ft (KB)

Total Depth: 3940.00 ft (KB) (TVD)

2122.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8365 Inside**

Press@RunDepth: 76.82 psig @ 3854.00 ft (KB)

Capacity: psig

Start Date: 2019.08.21

End Date: 2019.08.21

Last Calib.: 2019.08.21

Start Time: 12:54:01

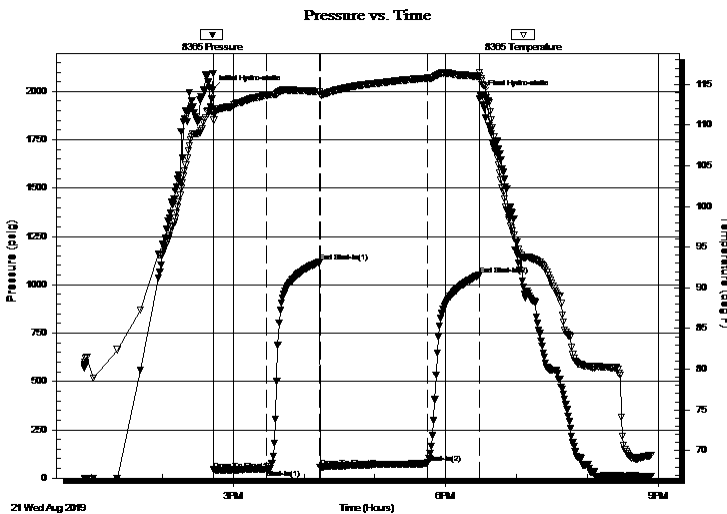
End Time: 20:54:02

Time On Btm: 2019.08.21 @ 14:42:17

Time Off Btm: 2019.08.21 @ 18:30:02

**TEST COMMENT:** IF 45 Minutes/ Blow built to 8 1/2 inch  
 ISI 45 Minutes/ No blow back  
 FF 90 Minutes/ Blow to BOB in 70 minutes/ Total build 16 inches  
 FSI 45 Minutes/ Surface blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2007.16	111.69	Initial Hydro-static
2	42.40	110.60	Open To Flow (1)
46	46.06	113.66	Shut-In(1)
91	1116.80	114.05	End Shut-In(1)
92	56.91	113.73	Open To Flow (2)
182	76.82	115.75	Shut-In(2)
227	1052.22	116.03	End Shut-In(2)
228	1982.56	115.40	Final Hydro-static

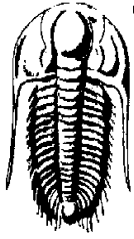
## Recovery

Length (ft)	Description	Volume (bbl)
79.00	MO / M 40% O 60%	1.11
94.00	GO / G 5% O 95%	1.32
0.00	142 feet GIP	0.00

## Gas Rates

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





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Reference Elevations: 2127.00 ft (KB)

Total Depth: 3940.00 ft (KB) (TVD)

2122.00 ft (CF)

Hole Diameter: 7.80 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6755**

**Outside**

Press@RunDepth: 1057.36 psig @ 3854.00 ft (KB)

Capacity: psig

Start Date: 2019.08.21

End Date:

2019.08.21

Last Calib.:

2019.08.21

Start Time: 12:54:01

End Time:

20:54:02

Time On Btm:

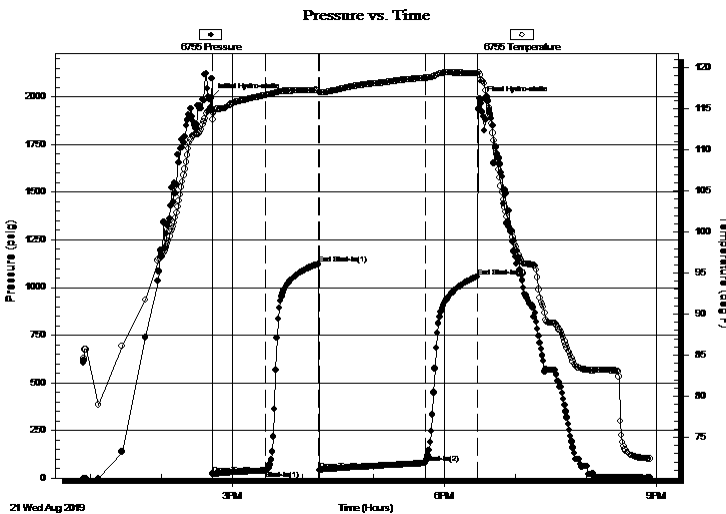
2019.08.21 @ 14:42:17

Time Off Btm:

2019.08.21 @ 18:30:47

**TEST COMMENT:** IF 45 Minutes/ Blow built to 8 1/2 inch  
 ISI 45 Minutes/ No blow back  
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 FSI 45 Minutes/ Surface blow back

## PRESSURE SUMMARY



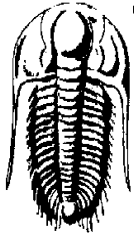
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1994.34	114.78	Initial Hydro-static
2	22.32	113.66	Open To Flow (1)
46	38.80	116.65	Shut-In(1)
91	1121.74	117.22	End Shut-In(1)
92	41.95	117.03	Open To Flow (2)
182	77.72	118.73	Shut-In(2)
226	1057.36	119.27	End Shut-In(2)
229	1982.43	118.58	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
79.00	MO / M 40% O 60%	1.11
94.00	GO / G 5% O 95%	1.32
0.00	142 feet GIP	0.00

## Gas Rates

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



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## FLUID SUMMARY

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**9/17S/19W/Rush**

PO Box 583  
Russell, Kansas  
67665+0583

**George Legleiter #1**

Job Ticket: 66290

**DST#: 1**

ATTN: Jerry Green

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### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
79.00	MO / M 40% O 60%	1.108
94.00	GO / G 5% O 95%	1.319
0.00	142 feet GIP	0.000

Total Length: 173.00 ft

Total Volume: 2.427 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

