



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cholla Production LLC  
 10490 Bradford Rd  
 Suite 201  
 Littleton CO 80127  
 ATTN: Charlie Strudevant

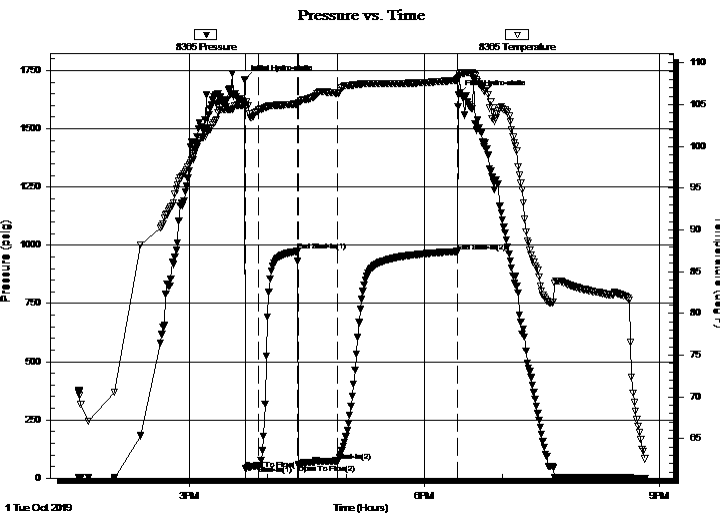
**3/16S/20W/Rush**  
**Zimmerman 1-3**  
 Job Ticket: 66299 **DST#: 1**  
 Test Start: 2019.10.01 @ 13:35:00

## GENERAL INFORMATION:

Formation: **Upper Lansing**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Initial)  
 Time Tool Opened: 15:42:47 Tester: Ken Swinney  
 Time Test Ended: 20:49:02 Unit No: 72 Hays/ 60  
 Interval: **3474.00 ft (KB) To 3522.00 ft (KB) (TVD)** Reference Elevations: 2173.00 ft (KB)  
 Total Depth: 3522.00 ft (KB) (TVD) 2166.00 ft (CF)  
 Hole Diameter: 7.80 inches Hole Condition: Poor KB to GR/CF: 7.00 ft

**Serial #: 8365 Inside**  
 Press@RunDepth: 73.90 psig @ 3475.00 ft (KB) Capacity: psig  
 Start Date: 2019.10.01 End Date: 2019.10.01 Last Calib.: 2019.10.01  
 Start Time: 13:35:01 End Time: 20:49:02 Time On Btm: 2019.10.01 @ 15:42:17  
 Time Off Btm: 2019.10.01 @ 18:26:02

**TEST COMMENT:** IF 10 Minutes/ Blow built to 3 inch  
 ISI 30 Mintues/ No blow back  
 FF 30 Minutes/ Blow to BOB in 23 minutes/ total build 17 inches  
 FSI 90 Minutes/ Surface blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1710.49	104.96	Initial Hydro-static
1	39.58	104.72	Open To Flow (1)
11	54.46	104.36	Shut-In(1)
41	974.07	105.08	End Shut-In(1)
42	58.52	105.13	Open To Flow (2)
71	73.90	106.40	Shut-In(2)
163	973.11	107.94	End Shut-In(2)
164	1644.66	108.30	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
139.00	GOM/ G 20% O 20% M 60%	0.86
0.00	169 feet GIP	0.00

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Cholla Production LLC  
 10490 Bradford Rd  
 Suite 201  
 Littleton CO 80127  
 ATTN: Charlie Strudevant

**3/16S/20W/Rush**

**Zimmerman 1-3**

Job Ticket: 66299

**DST#: 1**

Test Start: 2019.10.01 @ 13:35:00

## GENERAL INFORMATION:

Formation: **Upper Lansing**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 15:42:47  
 Time Test Ended: 20:49:02  
 Interval: **3474.00 ft (KB) To 3522.00 ft (KB) (TVD)**  
 Total Depth: 3522.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Ken Swinney  
 Unit No: 72 Hays/ 60  
 Reference Elevations: 2173.00 ft (KB)  
 2166.00 ft (CF)  
 KB to GR/CF: 7.00 ft

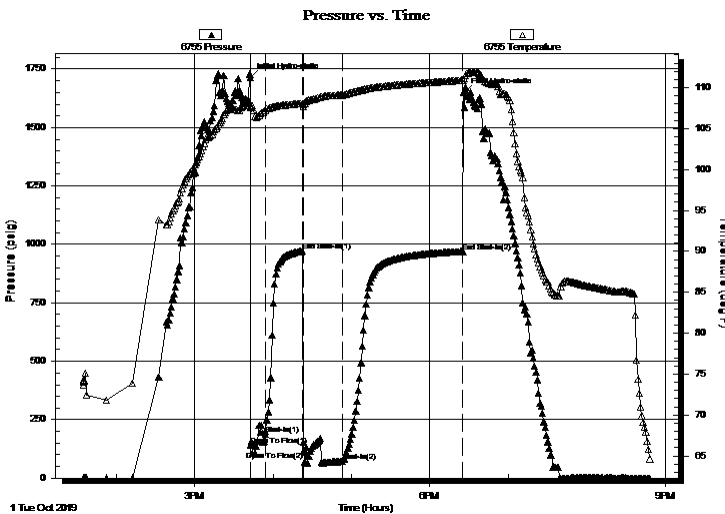
## Serial #: 6755

**Outside**

Press@RunDepth: 969.91 psig @ 3476.00 ft (KB) Capacity: psig  
 Start Date: 2019.10.01 End Date: 2019.10.01 Last Calib.: 2019.10.01  
 Start Time: 13:35:01 End Time: 20:49:02 Time On Btm: 2019.10.01 @ 15:42:32  
 Time Off Btm: 2019.10.01 @ 18:26:02

TEST COMMENT: IF 10 Minutes/ Blow built to 3 inch  
 ISI 30 Mintues/ No blow back  
 FF 30 Minutes/ Blow to BOB in 23 minutes/ total build 17 inches  
 FSI 90 Minutes/ Surface blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1715.01	107.77	Initial Hydro-static
1	139.30	107.64	Open To Flow (1)
12	186.47	107.26	Shut-In(1)
40	971.21	108.09	End Shut-In(1)
41	116.89	107.72	Open To Flow (2)
71	70.72	109.11	Shut-In(2)
163	969.91	110.93	End Shut-In(2)
164	1648.79	111.10	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
139.00	GOM/ G 20% O 20% M 60%	0.86
0.00	169 feet GIP	0.00

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Cholla Production LLC

**3/16S/20W/Rush**

10490 Bradford Rd  
Suite 201  
Littleton CO 80127  
ATTN: Charlie Strudevant

**Zimmerman 1-3**

Job Ticket: 66299

**DST#: 1**

Test Start: 2019.10.01 @ 13:35:00

## 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:

ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.80 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3200.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
139.00	GOM/ G 20% O 20% M 60%	0.857
0.00	169 feet GIP	0.000

Total Length: 139.00 ft      Total Volume: 0.857 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time

