



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Grunder Oil, LLC.

**14-25s-13w Stafford Co., Ks**

122 S. Main St.  
St. John, Ks. 67576

**Grunder #3**

Job Ticket: 65458

**DST#: 2**

ATTN: Keaton Jones

Test Start: 2019.11.29 @ 04:51:37

## GENERAL INFORMATION:

Formation: **Viola**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:13:22

Time Test Ended: 12:53:37

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

**Interval: 4088.00 ft (KB) To 4125.00 ft (KB) (TVD)**

Reference Elevations: 1926.00 ft (KB)

Total Depth: 4125.00 ft (KB) (TVD)

1921.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8931**

**Inside**

Press@RunDepth: 139.07 psig @ 4089.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.11.29

End Date:

2019.11.29

Last Calib.:

2019.11.29

Start Time: 04:51:42

End Time:

12:53:36

Time On Btm:

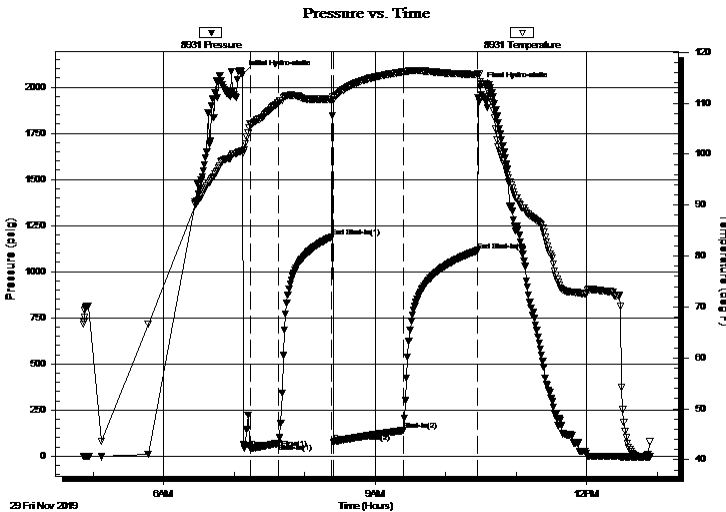
2019.11.29 @ 07:06:37

Time Off Btm:

2019.11.29 @ 10:29:37

**TEST COMMENT:** IF: Strong Blow . B.O.B. in 10 mins. Built to 28.84".  
IS: Weak Blow . Built to 3/4".  
FF: Strong Blow . B.O.B. in 16 mins. Built to 39".  
FS: Weak Blow . Built to 1 1/4".

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2068.81	100.73	Initial Hydro-static
7	43.88	105.86	Open To Flow (1)
32	70.64	110.22	Shut-In(1)
77	1188.10	110.76	End Shut-In(1)
78	76.52	110.56	Open To Flow (2)
137	139.07	116.12	Shut-In(2)
201	1114.24	115.60	End Shut-In(2)
203	2002.37	114.22	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
130.00	GO spec WCM 3%g 77%w 20%m	1.82
64.00	GOWCM 10%g 10%o 10%w 70%m	0.90
69.00	GOCM 5%g 15%o 80%m	0.97
0.00	475' G.I.P. 100%g	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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## Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 54.00 sec/qt  
Water Loss: 10.79 in<sup>3</sup>  
Resistivity: 8000.00 ohm.m  
Salinity: ppm  
Filter Cake: 0.20 inches

Cushion Type:  
Cushion Length: ft  
Cushion Volume: bbl  
Gas Cushion Type:  
Gas Cushion Pressure: psig

Oil API: deg API  
Water Salinity: 70000 ppm

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
130.00	GO spec WCM 3%g 77%w 20%m	1.824
64.00	GOWCM 10%g 10%o 10%w 70%m	0.898
69.00	GOCM 5%g 15%o 80%m	0.968
0.00	475' G.I.P. 100%g	0.000

Total Length: 263.00 ft      Total Volume: 3.690 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #: None

Laboratory Name:      Laboratory Location:

Recovery Comments: RW .197 @ 43 Degrees = 70,000 Chlorides.

Tool Started Bridging and setting in fil 18 Ft High. Slide 4 Ft.

Serial #: 8931

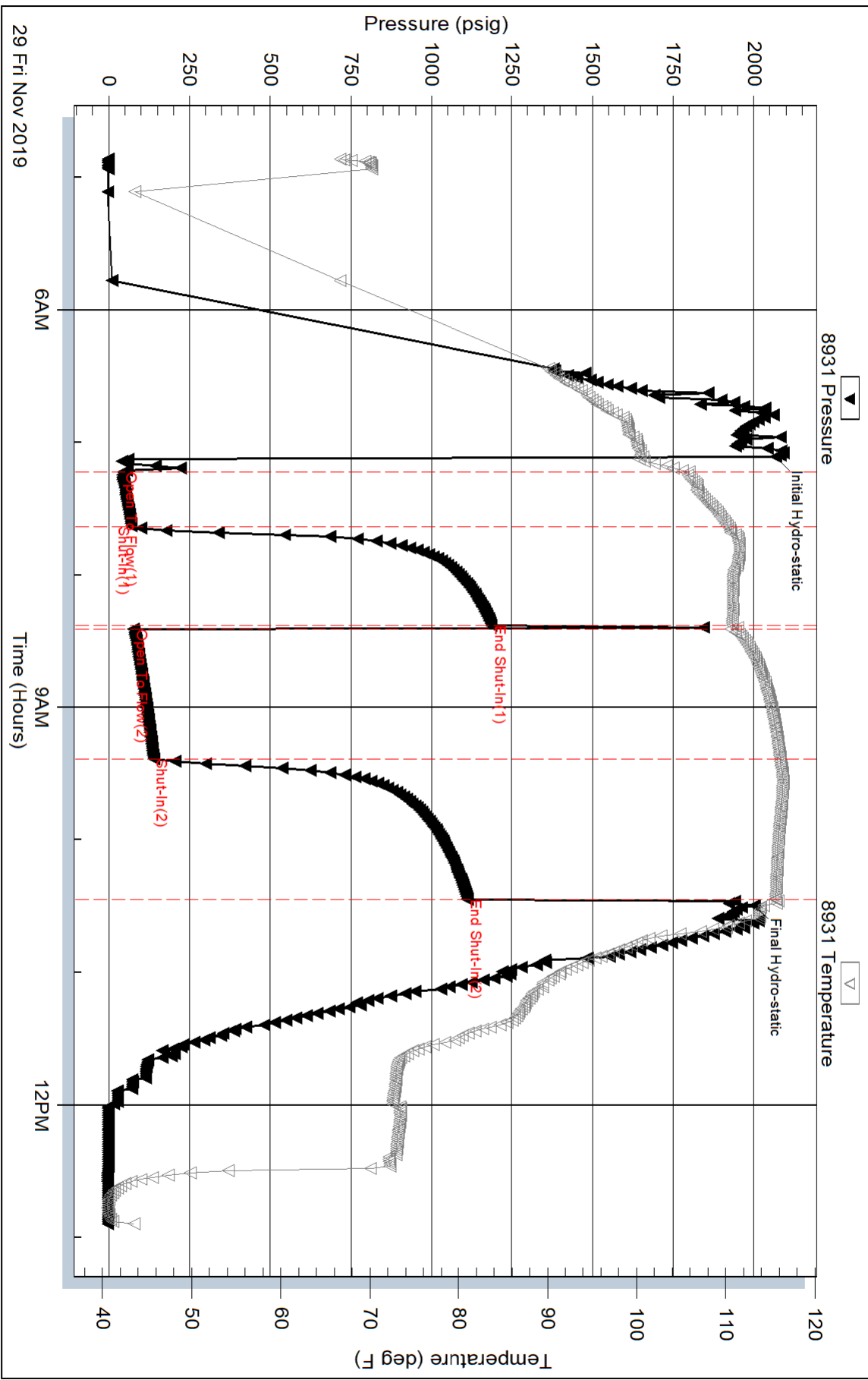
Inside

Grunder Oil, LLC.

Grunder #3

DST Test Number: 2

# Pressure vs. Time



Triobite Testing, Inc

Ref. No: 65458

Printed: 2019.11.29 @ 14:04:34

Serial #: 8788

Outside Grunder Oil, LLC

Grunder #3

DST Test Number: 2

