



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: 65459

DST#: 3

ATTN: Keaton Jones

Test Start: 2019.11.30 @ 03:49:56

GENERAL INFORMATION:

Formation: **Simpson Sand**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:12:56

Time Test Ended: 11:00:56

Test Type: Conventional Bottom Hole (Reset)

Tester: Matt Smith

Unit No: 68

Interval: 4199.00 ft (KB) To 4260.00 ft (KB) (TVD)

Reference Elevations: 1926.00 ft (KB)

Total Depth: 4260.00 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: 50.44 psig @ 4200.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.11.30

End Date:

2019.11.30

Last Calib.:

2019.11.30

Start Time: 03:50:01

End Time:

11:00:55

Time On Btm:

2019.11.30 @ 06:09:26

Time Off Btm:

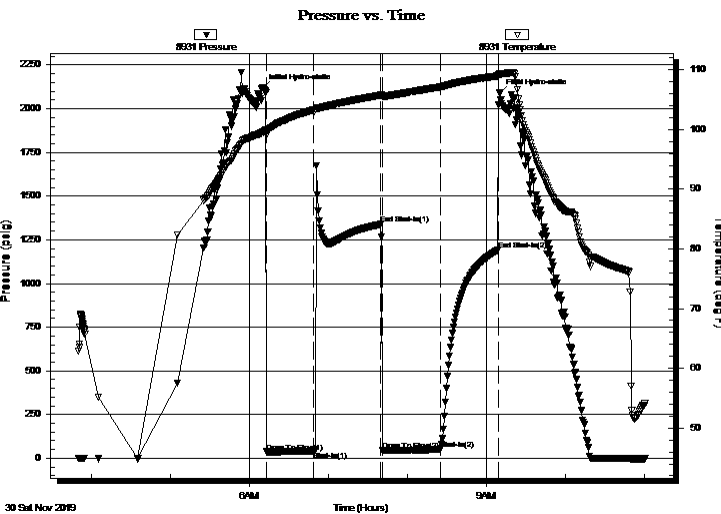
2019.11.30 @ 09:10:11

TEST COMMENT: IF: Weak Blow . Built to 2 1/2".

IS: No Blow .

FF: Weak Blow . Built to 1/2".

FS: No Blow .



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2116.96	99.44	Initial Hydro-static
4	35.83	99.01	Open To Flow (1)
39	38.08	103.27	Shut-In(1)
91	1338.17	105.75	End Shut-In(1)
92	45.20	105.57	Open To Flow (2)
136	50.44	107.11	Shut-In(2)
180	1190.06	108.95	End Shut-In(2)
181	2088.80	109.25	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
65.00	GOSM 2%g 98%m	0.91
6.00	GVSOM 2%g 2%o 96%m	0.08
0.00	64 FT G.I.P. 100%g	0.00

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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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:

10000 ppm

Viscosity: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 11.99 in³

Gas Cushion Type:

Resistivity: 10000.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: 0.20 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
65.00	GOSM 2%g 98%m	0.912
6.00	GVSOM 2%g 2%o 96%m	0.084
0.00	64 FT G.I.P. 100%g	0.000

Total Length: 71.00 ft Total Volume: 0.996 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #: None

Laboratory Name:

Laboratory Location:

Recovery Comments: Driller Kept Pulling to string weight on shut ins an opens. Brake Handle issues.

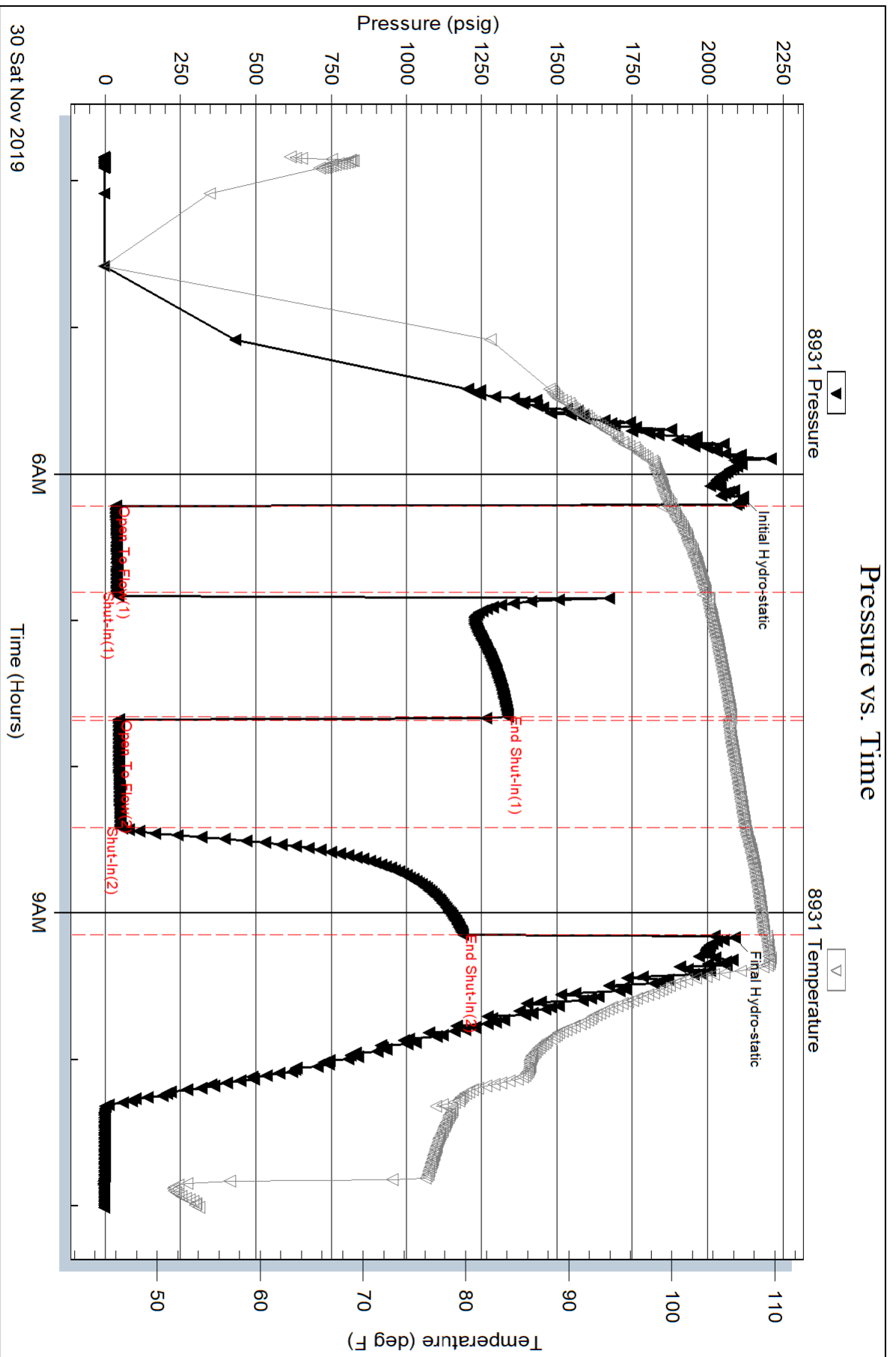
Serial #: 8931

Inside

Grunder Oil, LLC.

Grunder #3

DST Test Number: 3



Serial #: 8788

Outside Grunder Oil, LLC.

Grunder #3

DST Test Number: 3

