



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Darrah Oil Company LLC

14-9s-22w Graham KS

125 N Market Suite 1425
Wichita KS 67202+1720

Van Loenen

ATTN: Wyatt Urban

Job Ticket: 65992

DST#: 3

Test Start: 2019.09.10 @ 19:15:00

GENERAL INFORMATION:

Formation: **LKC 'C'**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 21:22:47

Time Test Ended: 01:18:02

Test Type: Conventional Straddle (Reset)

Tester: Spencer J Staab

Unit No: 84

Interval: 3568.00 ft (KB) To 3590.00 ft (KB) (TVD)

Reference Elevations: 2035.00 ft (KB)

Total Depth: 3925.00 ft (KB) (TVD)

2030.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8374

Inside

Press@RunDepth: 168.36 psig @ 3569.00 ft (KB)

Capacity: psig

Start Date: 2019.09.10

End Date:

2019.09.11

Last Calib.:

2019.09.11

Start Time: 19:15:01

End Time:

01:18:02

Time On Btm:

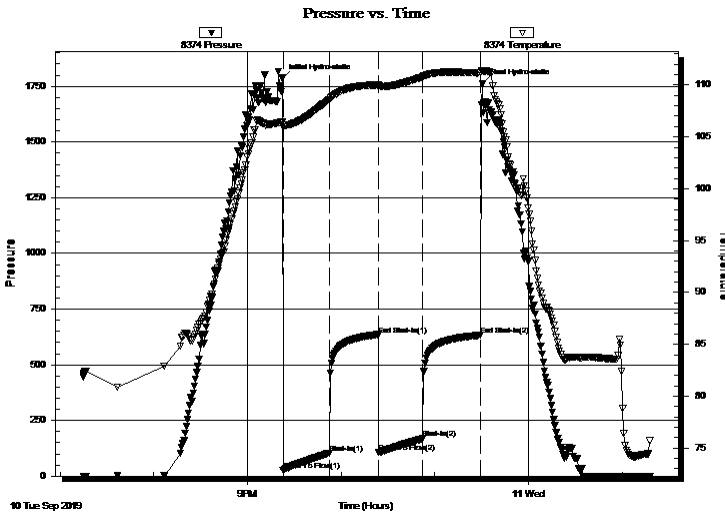
2019.09.10 @ 21:22:32

Time Off Btm:

2019.09.10 @ 23:30:32

TEST COMMENT: 30-IF-BOB 15 mins; Built to 14"
30-ISI-No Return
30-FF-BOB 22 mins; Built to 12"
30-FSI-No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1784.53	106.43	Initial Hydro-static
1	24.70	105.94	Open To Flow (1)
30	103.93	108.58	Shut-In(1)
62	635.36	109.99	End Shut-In(1)
62	106.83	109.91	Open To Flow (2)
90	168.36	110.79	Shut-In(2)
127	632.66	111.20	End Shut-In(2)
128	1760.13	111.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
260.00	MCW 10%M 90%W	3.41
120.00	MW w /oil spots 50%M 50%W	1.70

Gas Rates

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

* Recovery from multiple tests



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FLUID SUMMARY

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Van Loenen

Job Ticket: 65992

DST#: 3

ATTN: Wyatt Urban

Test Start: 2019.09.10 @ 19:15:00

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:

27000 ppm

Viscosity: 57.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
260.00	MCW 10%M 90%W	3.408
120.00	MW w/oil spots 50%M 50%W	1.701

Total Length: 380.00 ft

Total Volume: 5.109 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

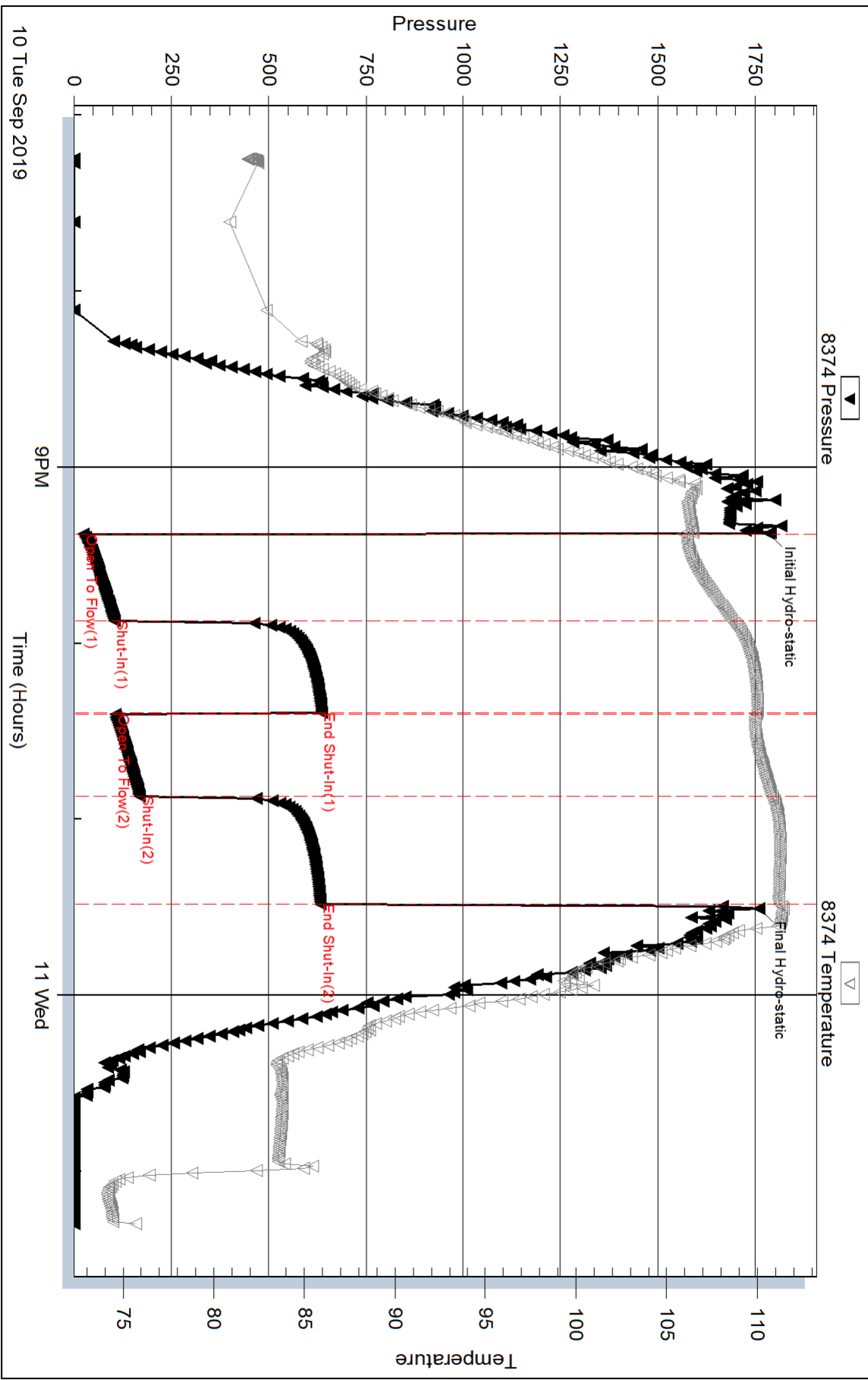
Laboratory Name:

Laboratory Location:

Recovery Comments: 3#LCM

RW=.229@74F

Pressure vs. Time

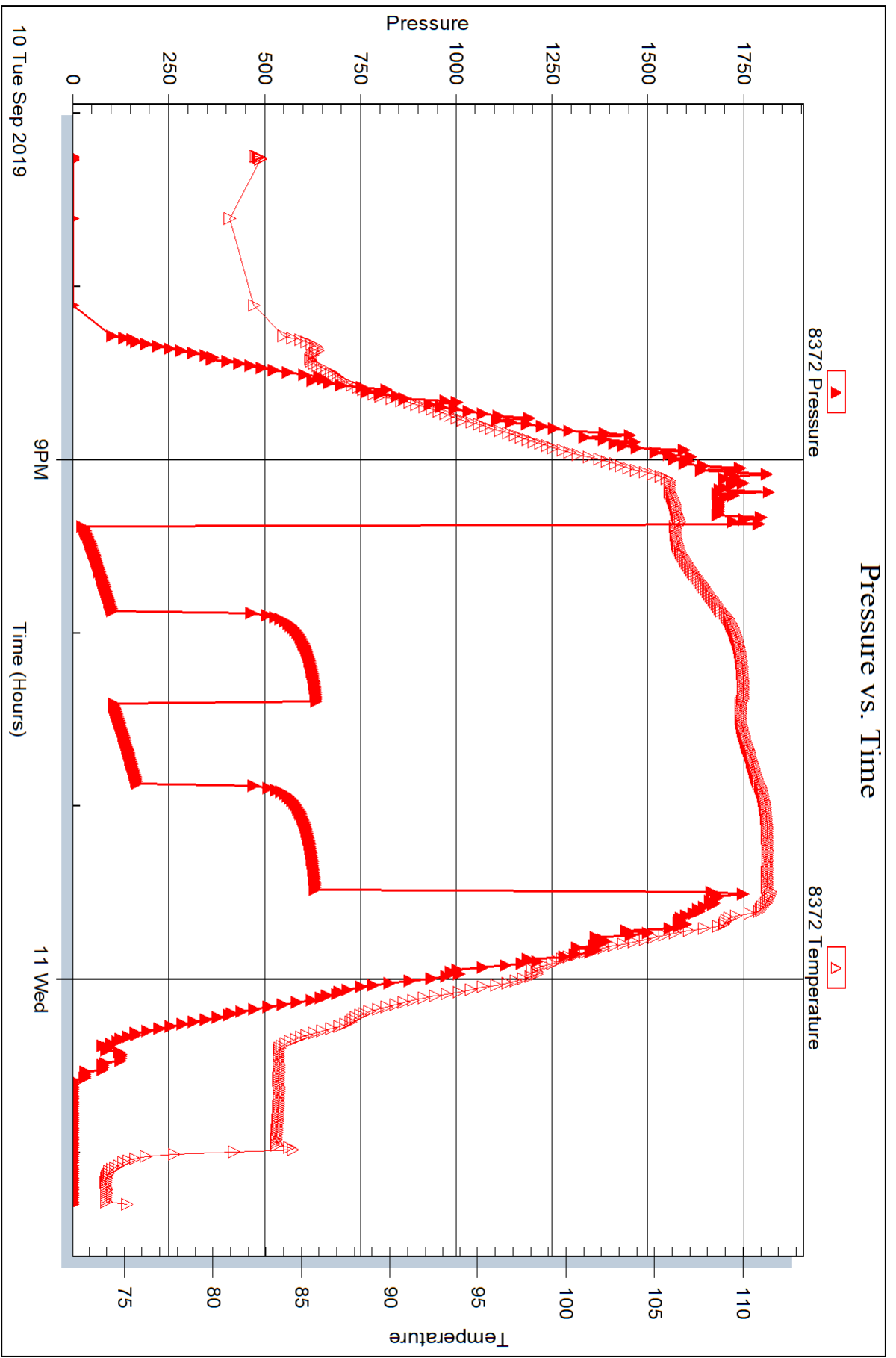


Serial #: 8372

Outside Darrah Oil Company LLC

Van Loenen

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 65992

Printed: 2019.09.11 @ 08:24:25

