



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Ritchie Exploration Inc.

3-18s-33w Scott Co KS

8100 E. 22nd. St.
N #700 Box 783188
Wichita Ks 67278
ATTN: John Goldsmith

L-Bo Land 3 C #1

Job Ticket: 61338

DST#: 3

Test Start: 2017.02.24 @ 13:12:15

GENERAL INFORMATION:

Formation: **Altamont C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 15:13:45

Time Test Ended: 20:14:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Mike Roberts

Unit No: 81

Interval: 4472.00 ft (KB) To 4530.00 ft (KB) (TVD)

Reference Elevations: 3006.00 ft (KB)

Total Depth: 4530.00 ft (KB) (TVD)

3001.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6749 Outside

Press@RunDepth: 143.33 psig @ 4510.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.02.24

End Date:

2017.02.24

Last Calib.: 2017.02.24

Start Time: 13:12:15

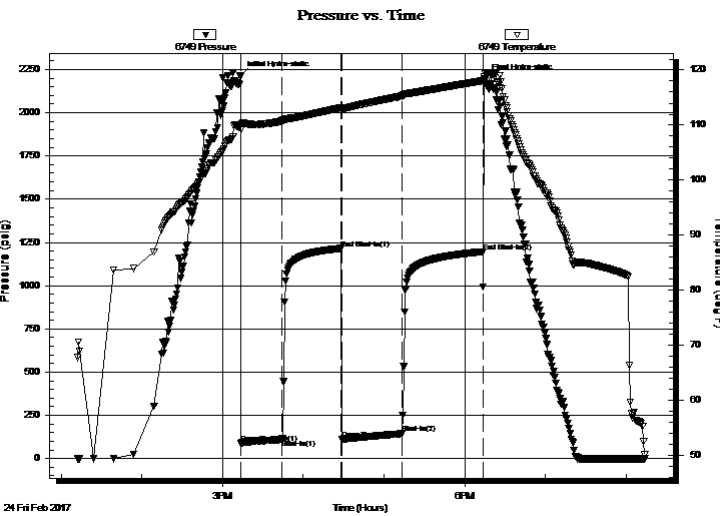
End Time:

20:14:00

Time On Btm: 2017.02.24 @ 15:13:30

Time Off Btm: 2017.02.24 @ 18:14:45

TEST COMMENT: IF: Built to 4 1/2" blow
IS: No return blow
FF: Built to 2" blow
FS: No return blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2212.15	110.14	Initial Hydro-static
1	86.44	109.26	Open To Flow (1)
31	111.03	110.71	Shut-In(1)
75	1215.07	113.17	End Shut-In(1)
75	113.27	112.88	Open To Flow (2)
120	143.33	115.25	Shut-In(2)
180	1196.09	118.06	End Shut-In(2)
182	2195.67	118.78	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
62.00	mcw 20%m 80%w (collar)	0.30
62.00	mcw 50%m 50%w (collar)	0.30
62.00	mud 100%m	0.87

* Recovery from multiple tests

Gas Rates

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



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FLUID SUMMARY

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ATTN: John Goldsmith

L-Bo Land 3 C #1

Job Ticket: 61338

DST#: 3

Test Start: 2017.02.24 @ 13:12:15

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 50.00 sec/qt

Water Loss: 7.97 in³

Resistivity: 0.00 ohm.m

Salinity: 3000.00 ppm

Filter Cake: 1.00 inches

Cushion Type:

Cushion Length: ft

Cushion Volume: bbl

Gas Cushion Type:

Gas Cushion Pressure: psig

Oil API:

0 deg API

Water Salinity: 19000 ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	mcw 20%m 80%w (collar)	0.305
62.00	mcw 50%m 50%w (collar)	0.305
62.00	mud 100%m	0.870

Total Length: 186.00 ft Total Volume: 1.480 bbl

Num Fluid Samples: 0

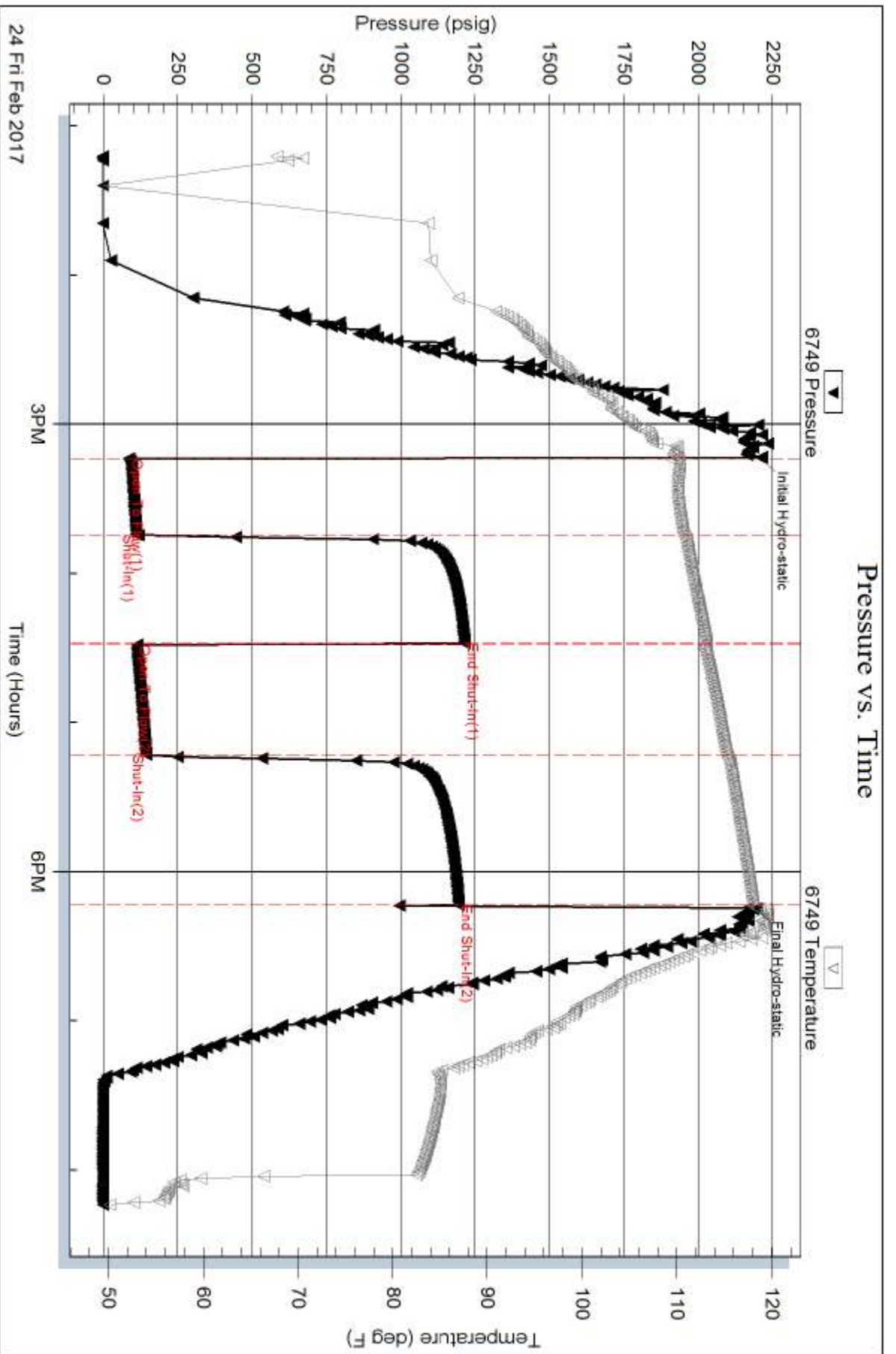
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW= .876@31.4=19,000 ppm



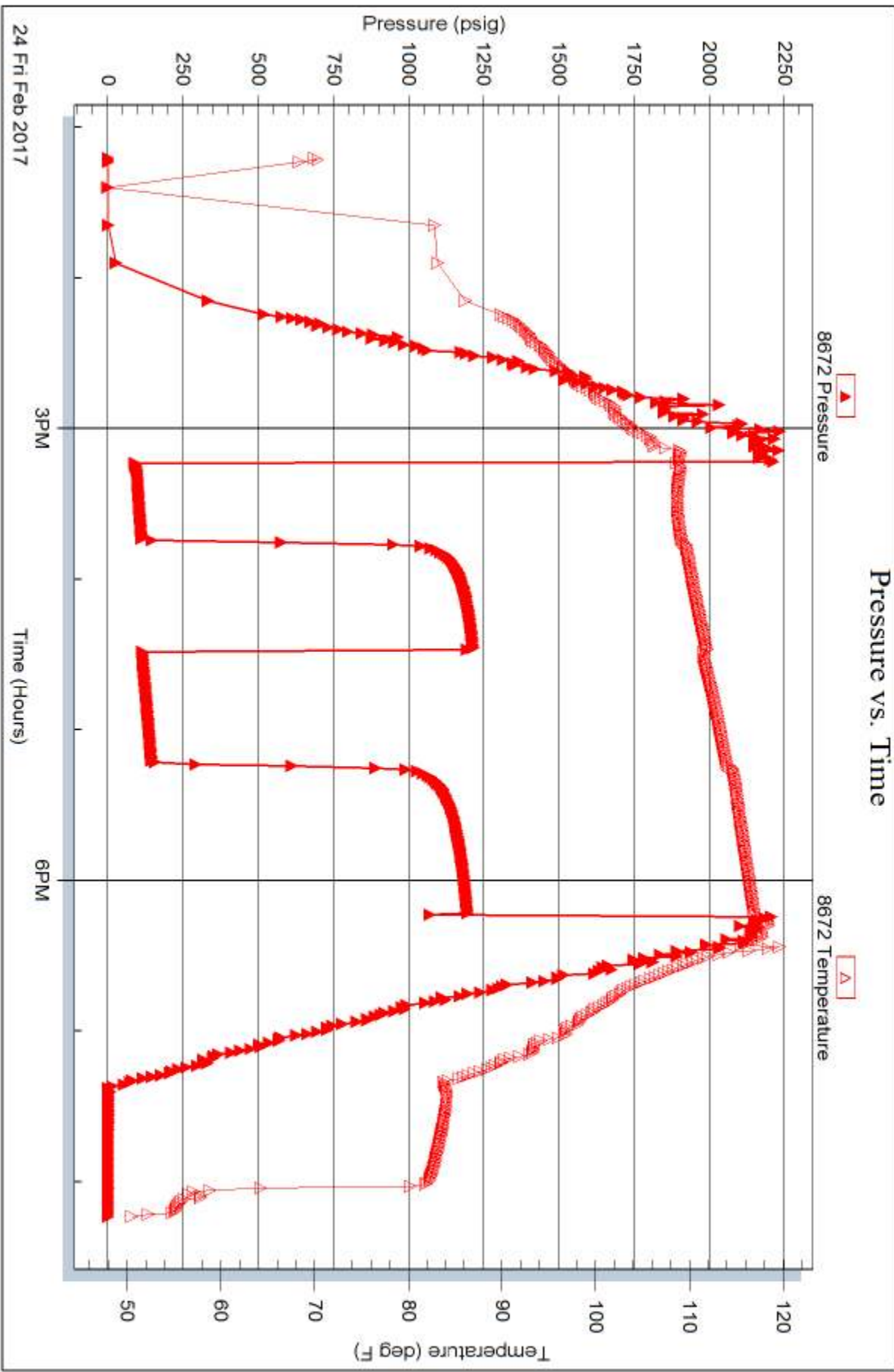
Serial #: 8672

Inside

Ritchie Exploration Inc.

L-Bo Land 3 C#1

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 61338

Printed: 2017.02.24 @ 21:34:57