



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Herman L Loeb LLC  
 PO Box 838  
 Lawrenceville, IL 62439  
 ATTN: Jon Christensen

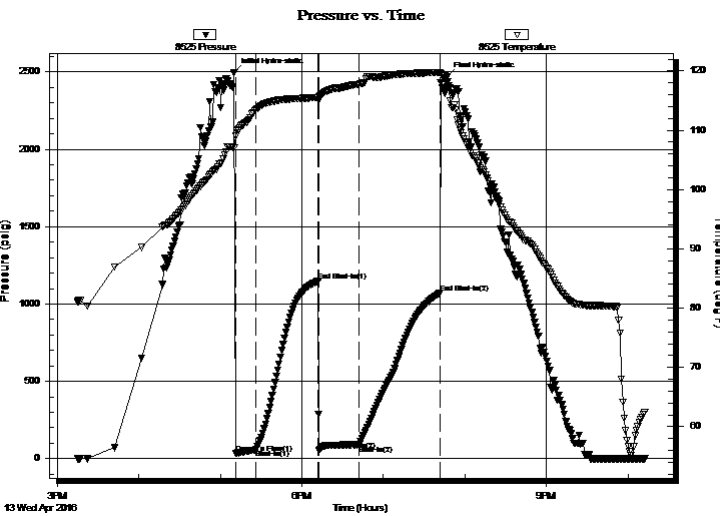
**1-30S-19W Kiowa**  
**Koger 3**  
 Job Ticket: 57987 **DST#: 3**  
 Test Start: 2016.04.13 @ 15:15:00

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 17:11:15  
 Time Test Ended: 22:12:15  
 Interval: **5053.00 ft (KB) To 5075.00 ft (KB) (TVD)**  
 Total Depth: 5075.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 2281.00 ft (KB)  
 2269.00 ft (CF)  
 KB to GR/CF: 12.00 ft

**Serial #: 8525 Inside**  
 Press@RunDepth: 88.65 psig @ 5054.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2016.04.13 End Date: 2016.04.13 Last Calib.: 2016.04.13  
 Start Time: 15:15:01 End Time: 22:12:15 Time On Btm: 2016.04.13 @ 17:10:15  
 Time Off Btm: 2016.04.13 @ 19:47:00

**TEST COMMENT:** IF: Strong Blow , BOB in 3 minutes  
 IS: Weak Surface Blow Back  
 FF: Strong Blow , BOB in 30 seconds  
 FS: Weak Surface Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2497.81	107.08	Initial Hydro-static
1	35.34	109.00	Open To Flow (1)
16	57.37	113.46	Shut-In(1)
62	1148.29	115.52	End Shut-In(1)
63	52.96	115.59	Open To Flow (2)
92	88.65	117.77	Shut-In(2)
152	1070.50	119.78	End Shut-In(2)
157	2467.54	117.39	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	1978 GIP	0.00
62.00	GMCW 5%G 20%M 75%W	0.30
127.00	OMCW 5%O 40%M 55%W	0.62
3.00	GCM 2%G 98%M	0.01

\* Recovery from multiple tests

## Gas Rates

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



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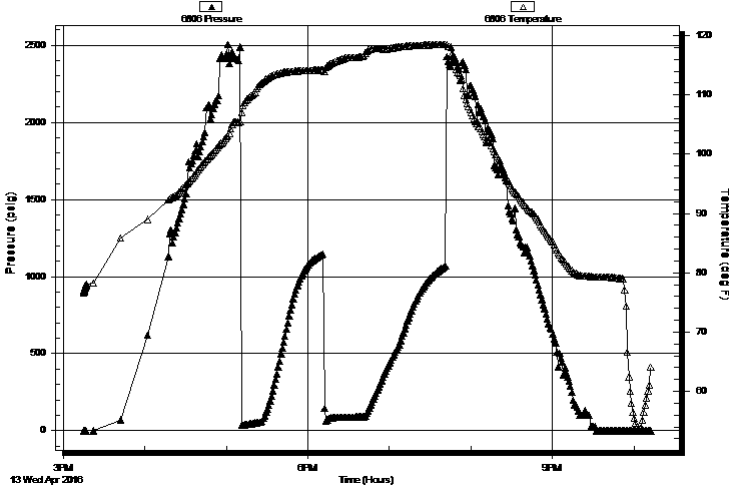
### Serial #: 6806

**Outside**

Press@RunDepth:      psig @ 5054.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2016.04.13      End Date: 2016.04.13      Last Calib.: 2016.04.13  
 Start Time: 15:15:01      End Time: 22:12:15      Time On Btm:  
    Time Off Btm:

**TEST COMMENT:** IF: Strong Blow , BOB in 3 minutes  
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 FF: Strong Blow , BOB in 30 seconds  
 FS: Weak Surface Blow Back

Pressure vs. Time



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

### Recovery

Length (ft)	Description	Volume (bbl)
0.00	1978 GIP	0.00
62.00	GMCW 5%G 20%M 75%W	0.30
127.00	OMCW 5%O 40%M 55%W	0.62
3.00	GCM 2%G 98%M	0.01

### Gas Rates

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

\* Recovery from multiple tests



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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Herman L Loeb LLC  
PO Box 838  
Lawrenceville, IL 62439  
ATTN: Jon Christensen

**1-30S-19W Kiowa**  
**Koger 3**  
Job Ticket: 57987      **DST#: 3**  
Test Start: 2016.04.13 @ 15:15:00

## 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:	85000 ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.99 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 4500.00 ppm			
Filter Cake: 0.02 inches			

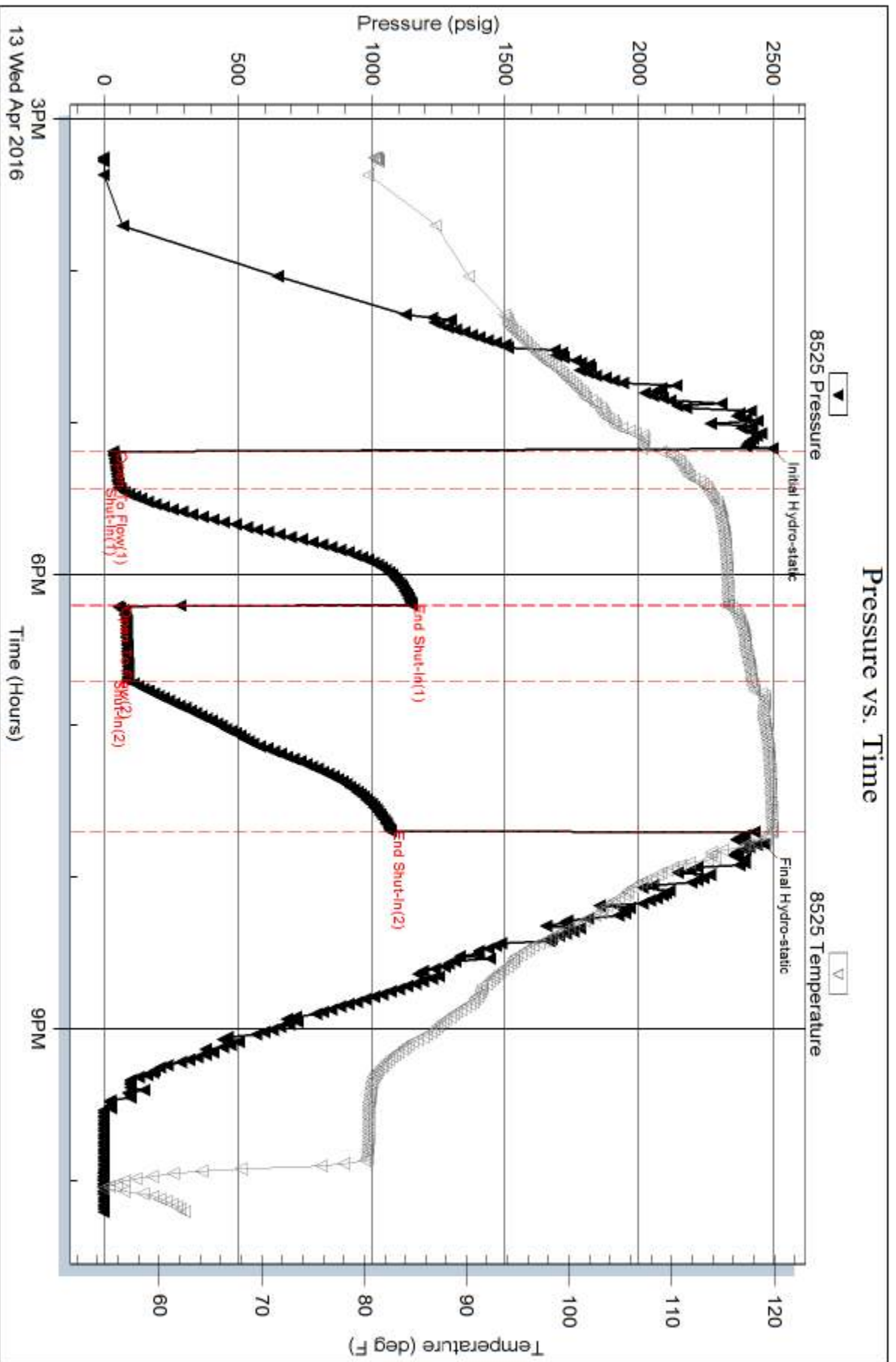
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	1978 GIP	0.000
62.00	GMCW 5%G 20%M 75%W	0.305
127.00	OMCW 5%O 40%M 55%W	0.625
3.00	GCM 2%G 98%M	0.015

Total Length: 192.00 ft      Total Volume: 0.945 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: RW w as .13@ 50 degrees

### Pressure vs. Time



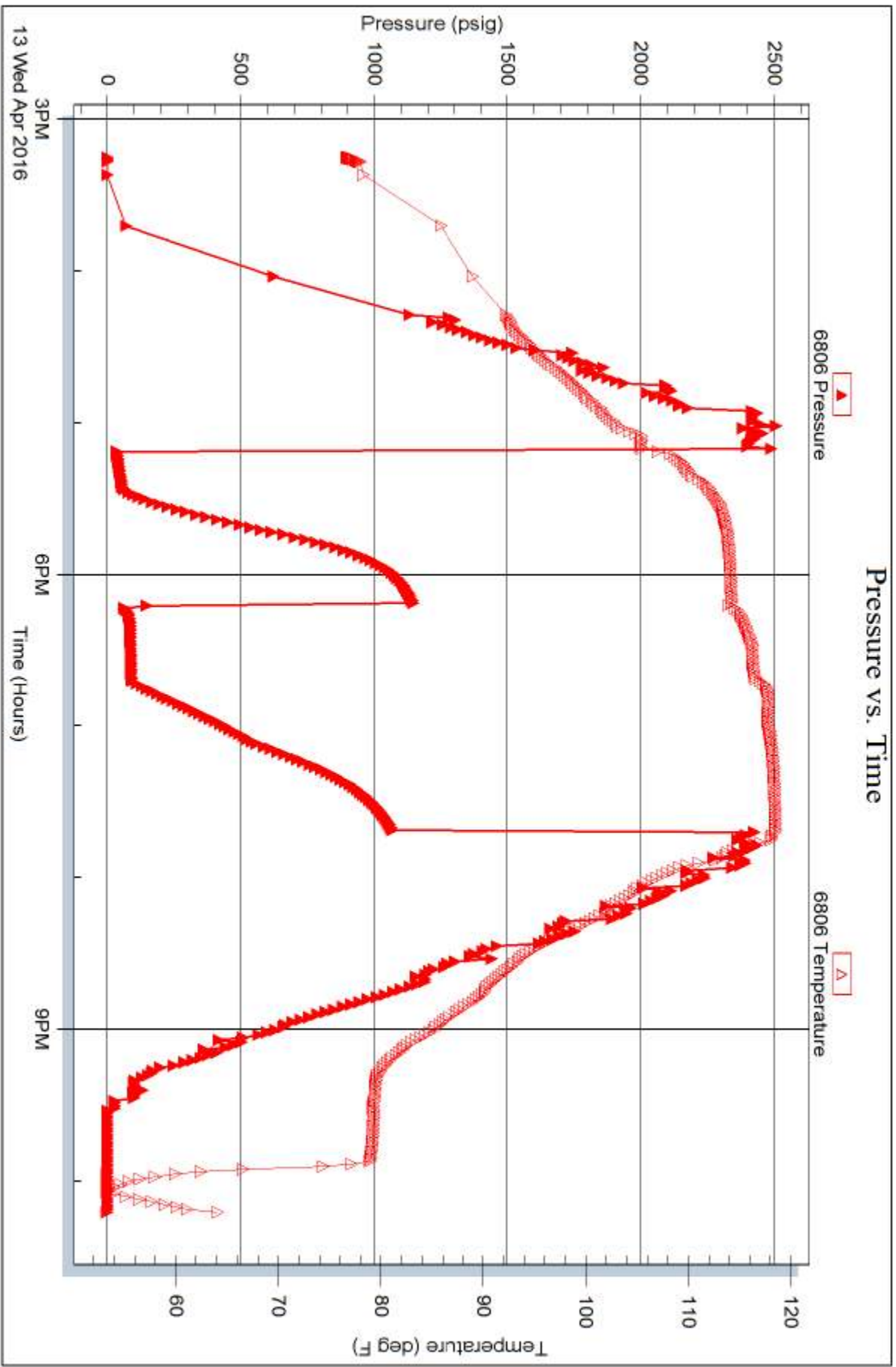
13 Wed Apr 2016

Serial #: 6806

Outside Herman L Loeb LLC

Koger 3

DST Test Number: 3



13 Wed Apr 2016

Triobite Testing, Inc

Ref. No: 57987

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