



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

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

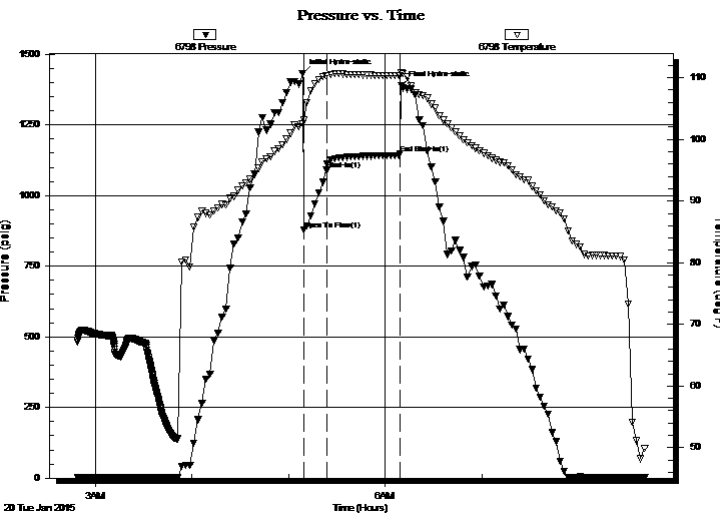
**2-31S-3W Sumner**  
**Southborough 1**  
 Job Ticket: 59896 **DST#: 1**  
 Test Start: 2015.01.20 @ 02:48:50

## GENERAL INFORMATION:

Formation: **Stalnaker Sand**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:09:20  
 Time Test Ended: 08:42:50  
 Interval: **2928.00 ft (KB) To 2982.00 ft (KB) (TVD)**  
 Total Depth: 2982.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Leal Cason  
 Unit No: 74  
 Reference Elevations: 1317.00 ft (KB)  
 1308.00 ft (CF)  
 KB to GR/CF: 9.00 ft

**Serial #: 6798 Inside**  
 Press@RunDepth: 1090.05 psig @ 2929.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2015.01.20 End Date: 2015.01.20 Last Calib.: 2015.01.20  
 Start Time: 02:48:51 End Time: 08:42:50 Time On Btm: 2015.01.20 @ 05:08:35  
 Time Off Btm: 2015.01.20 @ 06:10:05

TEST COMMENT: IF: Strong Blow , BOB in 15 seconds  
 IS: 6 inch Blow Back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1432.64	102.60	Initial Hydro-static
1	878.82	103.10	Open To Flow (1)
15	1090.05	110.35	Shut-In(1)
61	1147.96	110.32	End Shut-In(1)
62	1388.88	110.85	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
1512.00	Water	19.24
189.00	GWCM 5%G 35%W 60%M	2.65
285.00	GWCM 2%G 28%W 70%M	4.00

## Gas Rates

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



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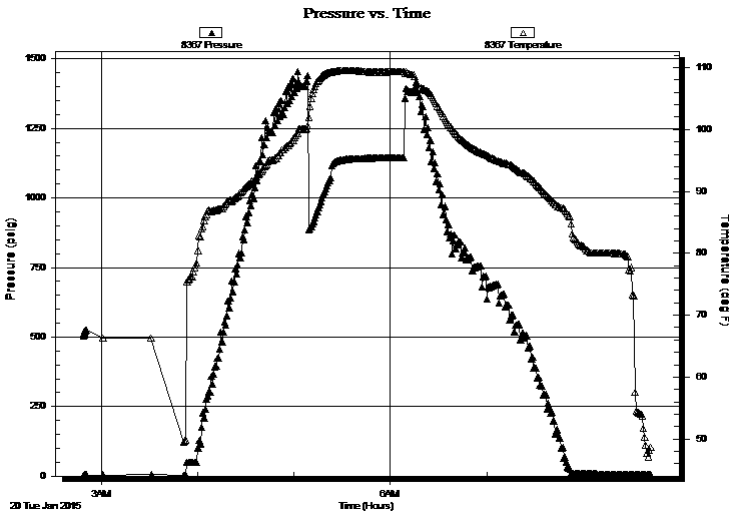
**2-31S-3W Sumner**  
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Interval: **2928.00 ft (KB) To 2982.00 ft (KB) (TVD)**  
Reference Elevations: 1317.00 ft (KB)  
Total Depth: 2982.00 ft (KB) (TVD)      1308.00 ft (CF)  
Hole Diameter: 7.88 inches      Hole Condition: Good      KB to GR/CF: 9.00 ft

**Serial #: 8367      Outside**  
Press@RunDepth:      psig @ 2929.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2015.01.20      End Date: 2015.01.20      Last Calib.: 2015.01.20  
Start Time: 02:48:51      End Time: 08:42:35      Time On Btm:  
Time Off Btm:

TEST COMMENT: IF: Strong Blow , BOB in 15 seconds  
IS: 6 inch Blow Back



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
1512.00	Water	19.24
189.00	GWCM 5%G 35%W 60%M	2.65
285.00	GWCM 2%G 28%W 70%M	4.00

## Gas Rates

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



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TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

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

**2-31S-3W Sumner**  
**Southborough 1**  
Job Ticket: 59896      **DST#: 1**  
Test Start: 2015.01.20 @ 02:48:50

### Mud and Cushion Information

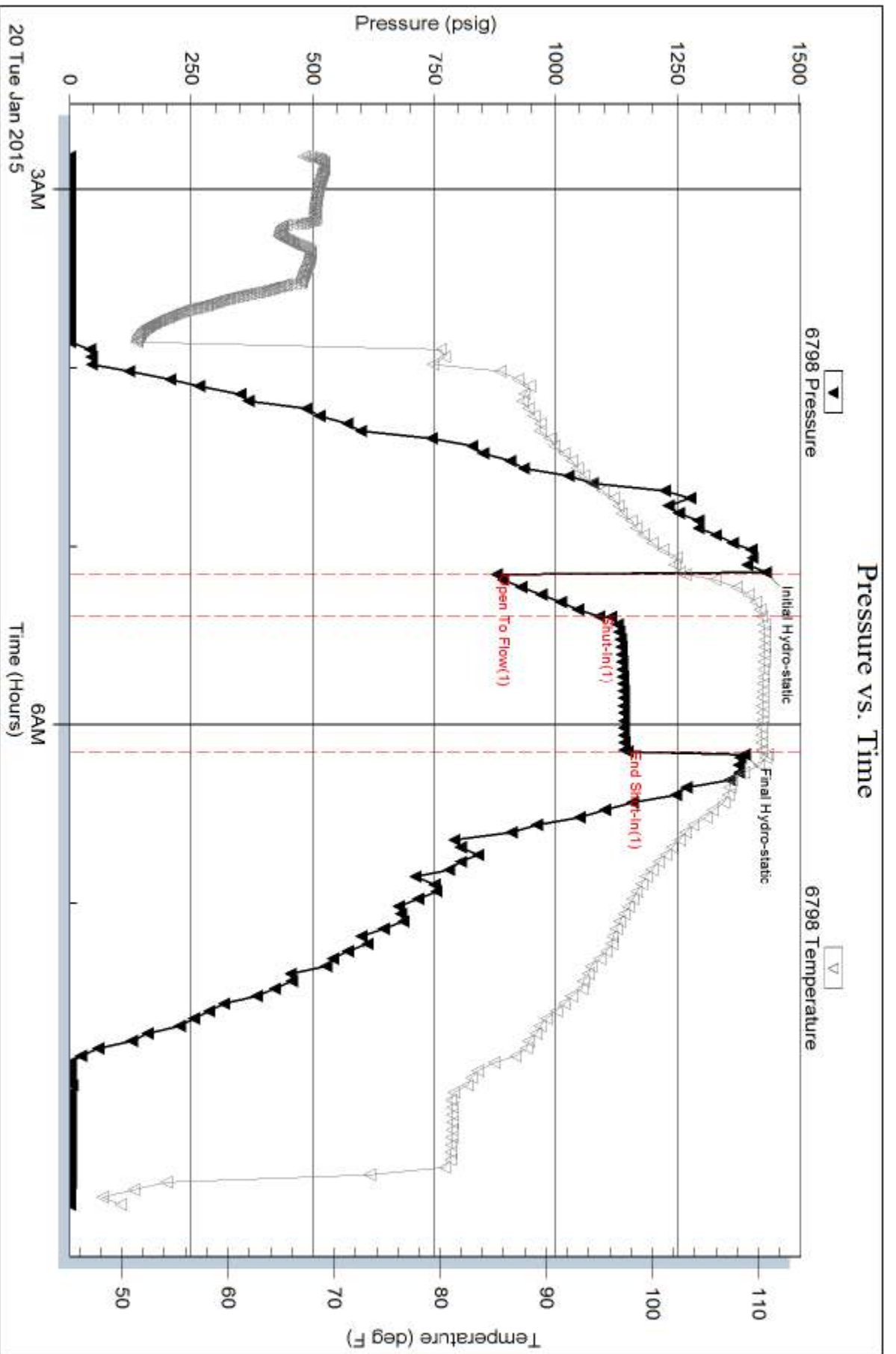
Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 240000 ppm	
Viscosity: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 68000.00 ppm			
Filter Cake: 0.02 inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1512.00	Water	19.242
189.00	GWCM 5%G 35%W 60%M	2.651
285.00	GWCM 2%G 28%W 70%M	3.998

Total Length: 1986.00 ft      Total Volume: 25.891 bbl  
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
Laboratory Name:      Laboratory Location:  
Recovery Comments: RW was .07 @ 44 degrees



Serial #: 8367

Outside Herman L Loeb LLC

Southborough 1

DST Test Number: 1

