



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc

**23/6s/27w Sheridan KS**

250 N. Water STE 300  
Wichita, KS 67202

**Mowry #1-23**

Job Ticket: 45545

**DST#: 1**

ATTN: Steve Miller

Test Start: 2011.12.13 @ 00:35:00

## GENERAL INFORMATION:

Formation: **LKC "A - B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:55:00

Time Test Ended: 08:25:30

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 57

**Interval: 3893.00 ft (KB) To 3940.00 ft (KB) (TVD)**

Reference Elevations: 2703.00 ft (KB)

Total Depth: 3940.00 ft (KB) (TVD)

2698.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8366**

**Inside**

Press @ Run Depth: 23.53 psig @ 3894.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.12.13

End Date:

2011.12.13

Last Calib.:

2011.12.13

Start Time: 00:35:05

End Time:

08:25:29

Time On Btm:

2011.12.13 @ 02:52:00

Time Off Btm:

2011.12.13 @ 06:01:30

## TEST COMMENT:

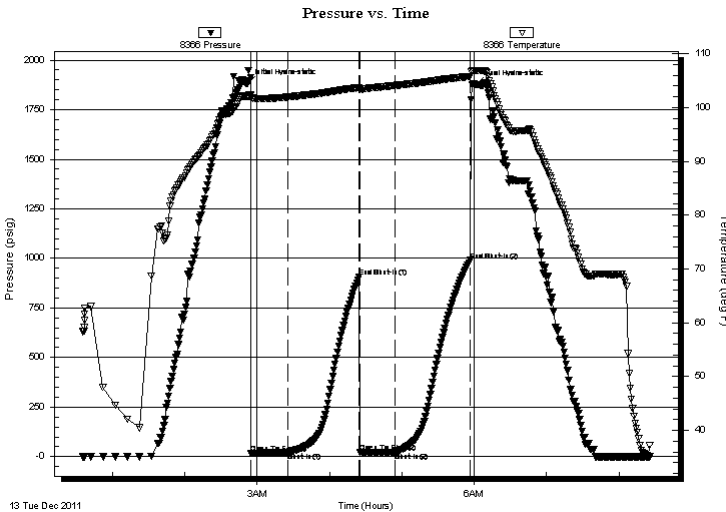
30 - IF: 1/4" Blow at open, Built to 1 1/2"

60 - IS: Bled off, Blow back built to 1/8" (temp. blow ?)

30 - FF: Blow built to 1/4"

60 - FS: Bled off, No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1881.92	102.10	Initial Hydro-static
3	17.23	101.82	Open To Flow (1)
33	20.24	101.94	Shut-In(1)
93	907.52	103.69	End Shut-In(1)
93	21.27	103.41	Open To Flow (2)
123	23.53	104.09	Shut-In(2)
185	989.53	105.75	End Shut-In(2)
190	1876.02	106.86	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100% w /trace oil	0.02

## Gas Rates

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



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Wichita, KS 67202

**Mowry #1-23**

Job Ticket: 45545

**DST#: 1**

ATTN: Steve Miller

Test Start: 2011.12.13 @ 00:35:00

## 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:

ppm

Viscosity: 82.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.20 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100% w/trace oil	0.025

Total Length: 5.00 ft      Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

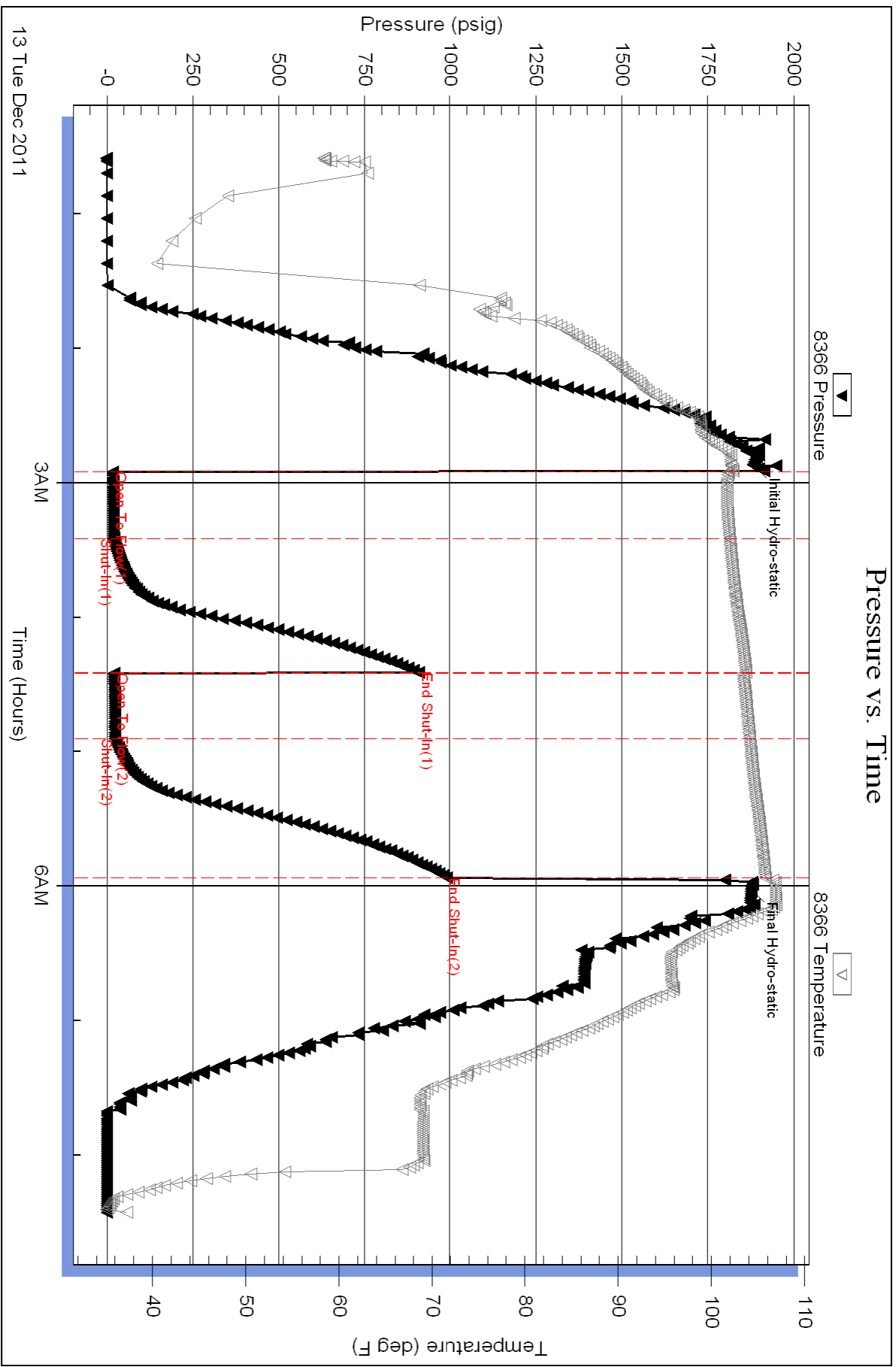
Serial #: 8366

Inside

Murfin Drilling Co., Inc

Mowry #1-23

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 45545

Printed: 2011.12.13 @ 08:48:09



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc

**23/6s/27w Sheridan KS**

250 N. Water STE 300  
Wichita, KS 67202

**Mowry #1-23**

Job Ticket: 45546

**DST#: 2**

ATTN: Steve Miller

Test Start: 2011.12.14 @ 05:25:00

## GENERAL INFORMATION:

Formation: **LKC "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:31:30

Time Test Ended: 12:16:00

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 57

**Interval: 4040.00 ft (KB) To 4066.00 ft (KB) (TVD)**

Reference Elevations: 2703.00 ft (KB)

Total Depth: 4066.00 ft (KB) (TVD)

2698.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 8366**

**Inside**

Press @ Run Depth: 19.70 psig @ 4041.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2011.12.14

End Date:

2011.12.14

Last Calib.:

2011.12.14

Start Time: 05:25:05

End Time:

12:15:59

Time On Btm:

2011.12.14 @ 07:29:00

Time Off Btm:

2011.12.14 @ 10:38:00

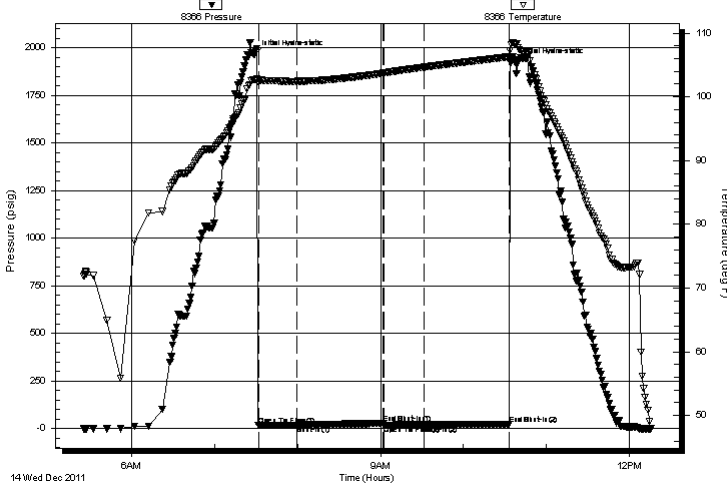
**TEST COMMENT:** 30 - IF: Blow built to 1 1/8" (Diesel in Bucket)

60 - IS: Bled off, No blow back

30 - FF: No blow

60- FSI: No blow back

Pressure vs. Time



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1963.59	102.75	Initial Hydro-static
3	17.10	102.48	Open To Flow (1)
31	19.23	102.45	Shut-In(1)
93	27.06	103.72	End Shut-In(1)
94	19.33	103.73	Open To Flow (2)
123	19.70	104.67	Shut-In(2)
184	23.03	106.30	End Shut-In(2)
189	1919.56	108.38	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
2.00	Mud 100%	0.01

## Gas Rates

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

\* Recovery from multiple tests



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Job Ticket: 45546

**DST#: 2**

ATTN: Steve Miller

Test Start: 2011.12.14 @ 05:25:00

## 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:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
2.00	Mud 100%	0.010

Total Length: 2.00 ft      Total Volume: 0.010 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

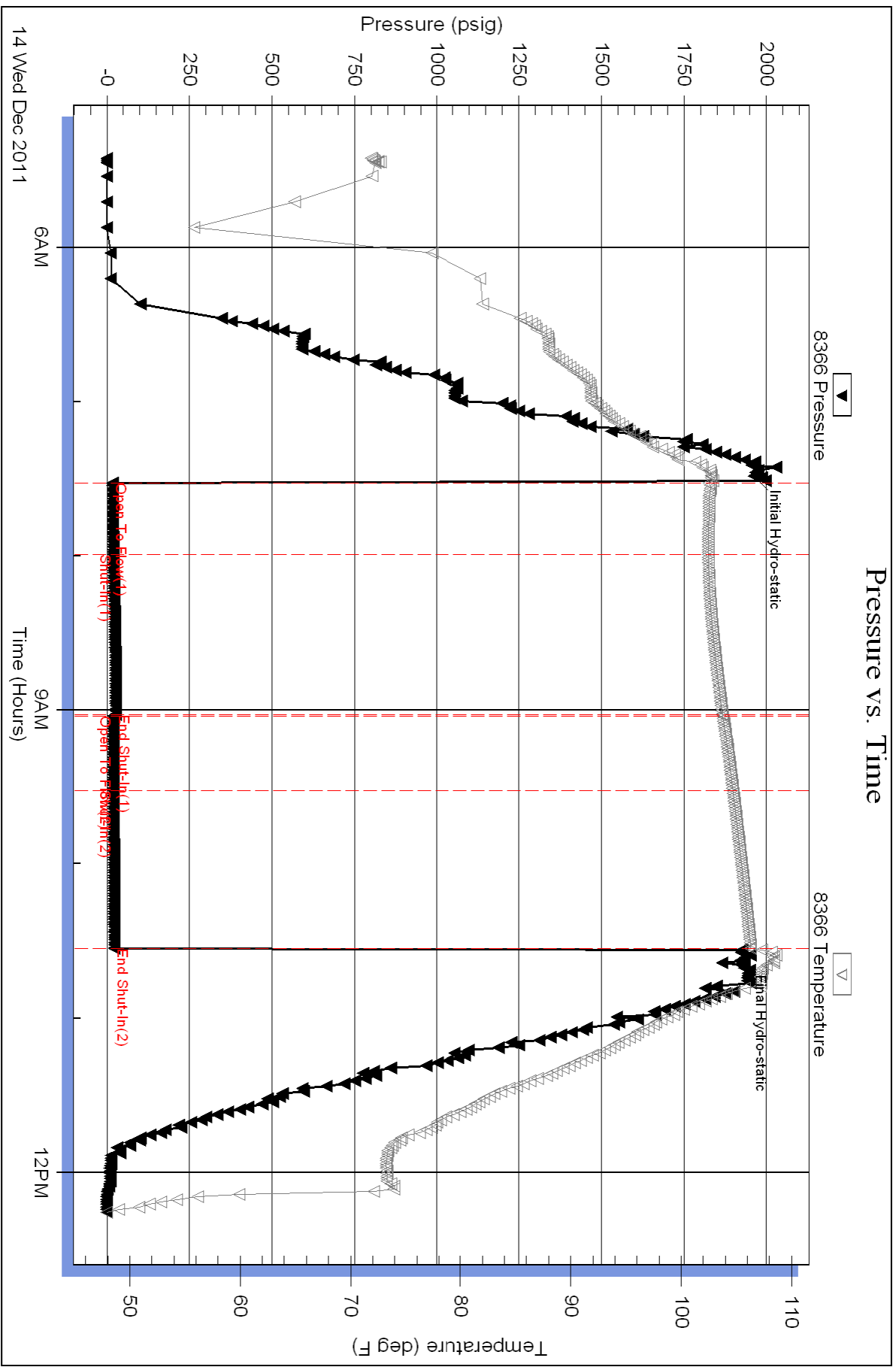
Serial #: 8366

Inside

Murfin Drilling Co., Inc

Mowry #1-23

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 45546

Printed: 2011.12.14 @ 13:56:52