

**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **MTM Petroleum INC**

2370 South State RD 14  
Kingman KS 67068

ATTN: Nick Miller/ Jerry S

**Hufford # 3**

**23-30s-7w Kingman,KS**

Start Date: 2012.02.11 @ 10:12:03

End Date: 2012.02.11 @ 19:49:33

Job Ticket #: 47455                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

**ORIGINAL**

Printed: 2012.02.17 @ 16:31:06

MTM Petroleum INC

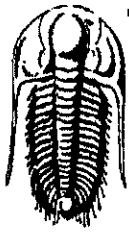
23-30s-7w Kingman,KS

Hufford # 3

DST # 1

KC Swope

2012.02.11



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# DRILL STEM TEST REPORT

MTM Petroleum INC

23-30s-7w Kingman,KS

2370 South State RD 14  
Kingman KS 67068

Hufford # 3

Job Ticket: 47455

DST#: 1

ATTN: Nick Miller/ Jerry S

Test Start: 2012.02.11 @ 10:12:03

## GENERAL INFORMATION:

Formation: **KC Swope**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:50:48

Time Test Ended: 19:49:33

Test Type: Conventional Straddle (Initial)

Tester: Chris Staats

Unit No: 47

Interval: **3760.00 ft (KB) To 3790.00 ft (KB) (TVD)**

Total Depth: **3888.00 ft (KB) (TVD)**

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 1474.00 ft (KB)

1464.00 ft (CF)

KB to GR/CF: 10.00 ft

**Serial #: 8166** Inside

Press@RunDepth: 152.40 psig @ 3761.00 ft (KB)

Start Date: 2012.02.11

End Date: 2012.02.11

Start Time: 10:12:08

End Time: 19:49:33

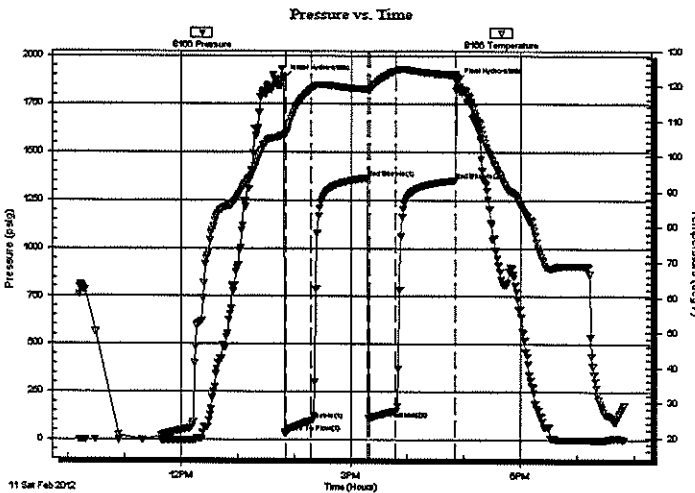
Capacity: 8000.00 psig

Last Calib.: 2012.02.11

Time On Btm: 2012.02.11 @ 13:49:18

Time Off Btm: 2012.02.11 @ 16:52:18

**TEST COMMENT:** IF: Strong blow BOB 9 min  
IS: Weak blow back 1"  
FF: Strong blow BOB 4 min  
FS: Weak blow back 1"



## PRESSURE SUMMARY

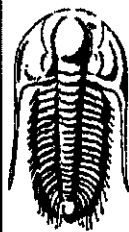
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1877.98	105.98	Initial Hydro-static
2	37.63	106.34	Open To Flow (1)
28	98.71	119.05	Shut-In(1)
89	1364.59	119.14	End Shut-In(1)
90	108.54	118.63	Open To Flow (2)
119	152.40	124.30	Shut-In(2)
182	1353.16	123.20	End Shut-In(2)
183	1864.18	122.61	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
62.00	G,O,W,M 20%gas 30%oil25%w ater25%r0.30	
62.00	O,W,M 5%oil 10%mud 85%w ater	0.36
186.00	W,M 5%mud 95% w ater	2.61

## Gas Rates

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



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MTM Petroleum INC  
2370 South State RD 14  
Kingman KS 67068  
ATTN: Nick Miller/ Jerry S

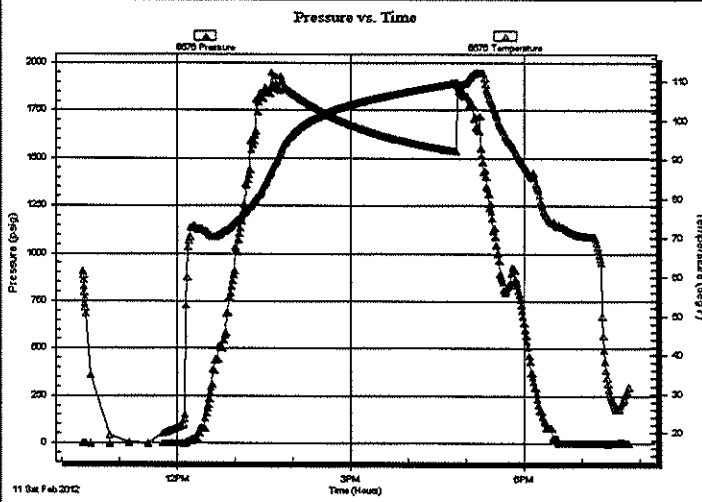
23-30s-7w Kingman,KS  
**Hufford # 3**  
Job Ticket: 47455      DST#: 1  
Test Start: 2012.02.11 @ 10:12:03

## GENERAL INFORMATION:

Formation: **KC Swope**  
 Deviated: No Whipstock:                      ft (KB)  
 Time Tool Opened: 13:50:48  
 Time Test Ended: 19:49:33  
 Interval: **3760.00 ft (KB) To 3790.00 ft (KB) (TVD)**  
 Total Depth: **3888.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: Fair  
 Test Type: Conventional Straddle (Initial)  
 Tester: Chris Staats  
 Unit No: 47  
 Reference Elevations: 1474.00 ft (KB)  
 1464.00 ft (CF)  
 KB to GR/CF: 10.00 ft

**Serial #: 8676 Below (Straddle)**  
 Press@RunDepth:                      psig @ 3797.50 ft (KB)  
 Start Date: 2012.02.11      End Date: 2012.02.11  
 Start Time: 10:22:14      End Time: 19:48:39  
 Capacity: 8000.00 psig  
 Last Calib.: 2012.02.11  
 Time On Btm:  
 Time Off Btm:

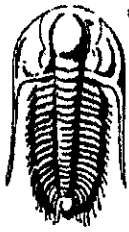
**TEST COMMENT:** IF: Strong blow BOB 9 min  
 IS: Weak blow back 1"  
 FF: Strong blow BOB 4 min  
 FS: Weak blow back 1"



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

Recovery		
Length (ft)	Description	Volume (bbl)
62.00	G,O,W,M 20%gas 30%oil25%w ater25%r0.30	0.30
62.00	O,W,M 5%oil 10%mud 85%w ater	0.36
186.00	W,M 5%mud 95% w ater	2.61

Gas Rates		
Choke (Inches)	Pressure (psig)	Gas Rate (Mcf/d)



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TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

MTM Petroleum INC

23-30s-7w Kingman,KS

2370 South State RD 14  
Kingman KS 67068

Hufford # 3

Job Ticket: 47455

DST#: 1

ATTN: Nick Miller/ Jerry S

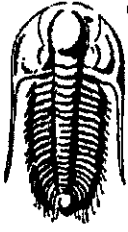
Test Start: 2012.02.11 @ 10:12:03

**Tool Information**

Drill Pipe:	Length: 3703.00 ft	Diameter: 3.80 inches	Volume: 51.94 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 118.00 ft	Diameter: 2.25 inches	Volume: 0.58 bbl	Weight to Pull Loose:	70000.00 lb
		Total Volume: 52.52 bbl		Tool Chased	2.00 ft
Drill Pipe Above KB:	85.00 ft			String Weight: Initial	62000.00 lb
Depth to Top Packer:	3760.00 ft			Final	63000.00 lb
Depth to Bottom Packer:	3894.00 ft				
Interval between Packers:	134.00 ft				
Tool Length:	158.00 ft				
Number of Packers:	3	Diameter:	6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3737.00	
Shut In Tool	5.00			3742.00	
Hydraulic tool	5.00			3747.00	
Safety Joint	3.00			3750.00	
Packer	5.00			3755.00	24.00 Bottom Of Top Packer
Packer	5.00			3760.00	
Stubb	1.00			3761.00	
Recorder	0.00	6773	Outside	3761.00	
Recorder	0.00	8166	Inside	3761.00	
Perforations	30.00			3791.00	
Blank Off Sub	1.00			3792.00	
Packer - Shale	5.00			3797.00	
Change Over Sub	0.50			3797.50	
Recorder	0.00	8676	Below	3797.50	
Drill Pipe	93.00			3890.50	
Change Over Sub	0.50			3891.00	
Bullnose	3.00			3894.00	134.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>158.00</b>				



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

MTM Petroleum INC

23-30s-7w Kingman,KS

2370 South State RD 14  
Kingman KS 67068

**Hufford # 3**

Job Ticket: 47455

**DST#: 1**

ATTN: Nick Miller/ Jerry S

Test Start: 2012.02.11 @ 10:12:03

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 10.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 9.99 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: 0.00 ohm.m	Gas Cushion Pressure: psig		
Salinity: 4000.00 ppm			
Filter Cake: 0.02 inches			

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
62.00	G,O,W,M 20%gas 30%oil 25%w ater 25%mud	0.305
62.00	O,W,M 5%oil 10%mud 85%w ater	0.360
186.00	W,M 5%mud 95% w ater	2.609

Total Length: 310.00 ft      Total Volume: 3.274 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

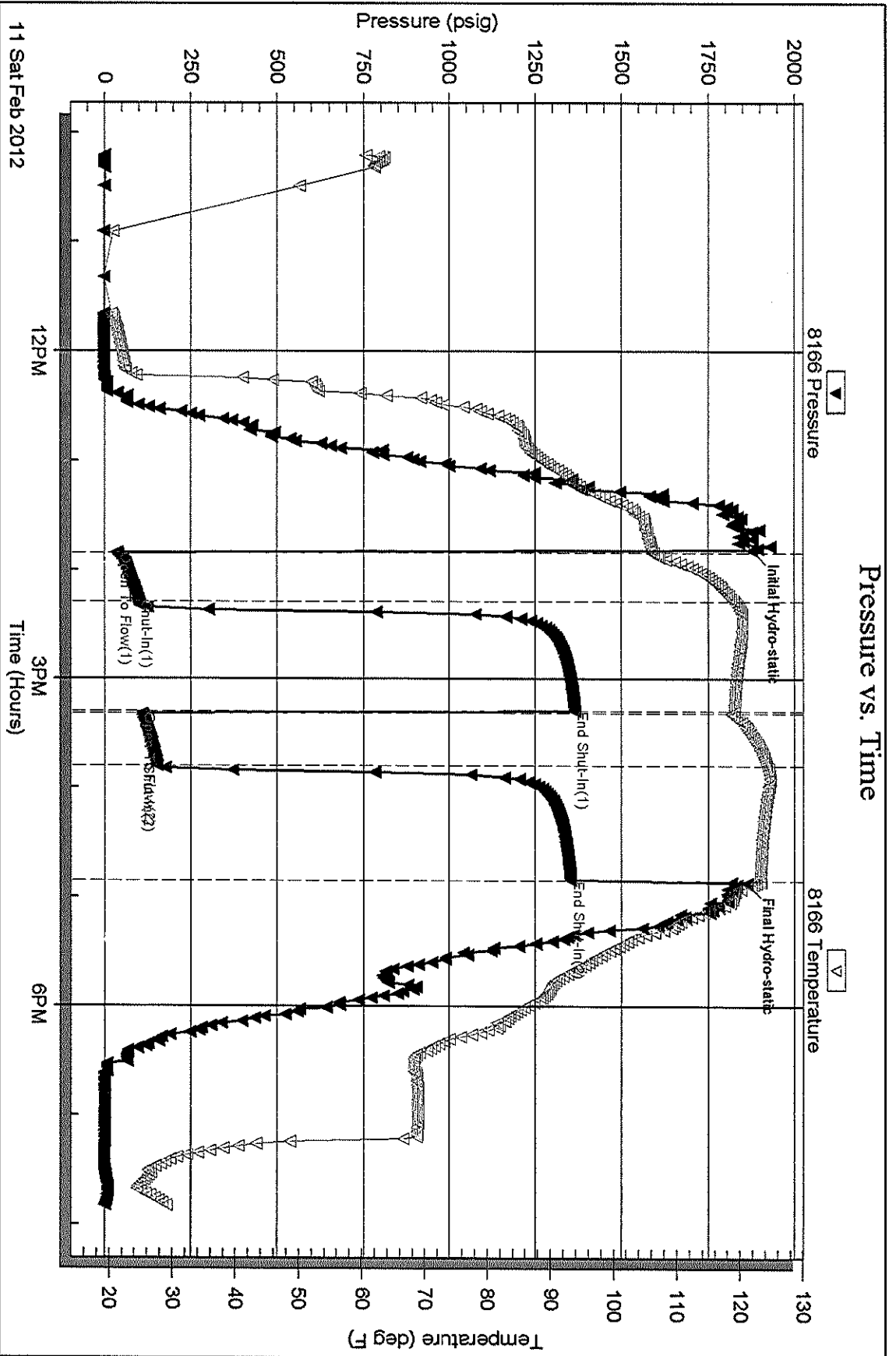
Serial #: 8166

Inside

MTM Petroleum INC

Hufford # 3

DST Test Number: 1



Trilocke Testing, Inc

Ref. No: 47455

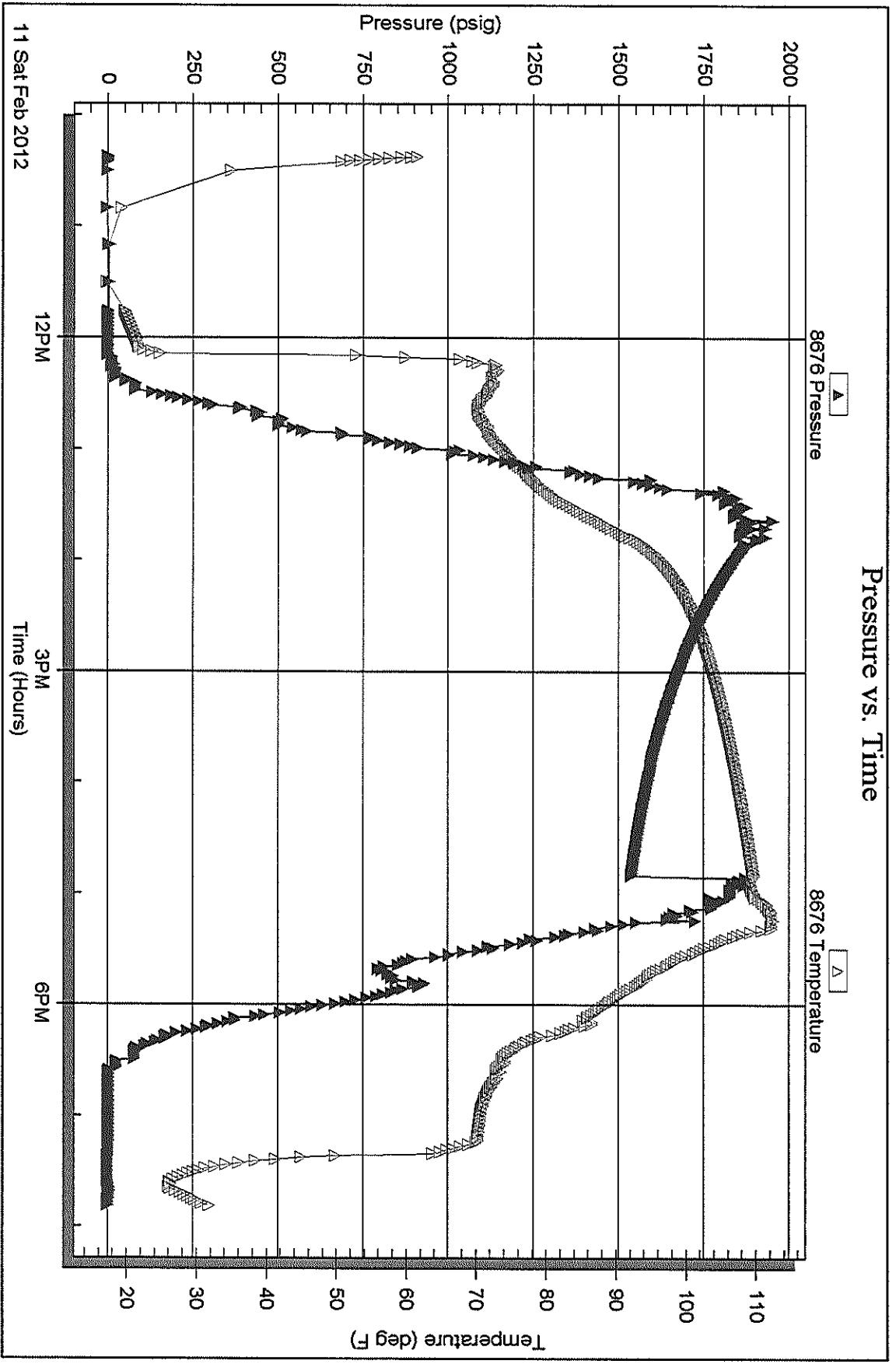
Printed: 2012.02.17 @ 16:31:08

Serial #: 8676

Below (Strat) Petroleum INC

Hufford # 3

DST Test Number: 1



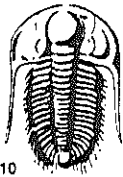
Tribble Testing, Inc

Ref. No: 47455

Printed: 2012.02.17 @ 16:31:08







# TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED  
FEB 17 2012

## Test Ticket

NO. 47455

Well Name & No. M+M Petroleum INC HOFFORD #3 Test No. 1 Date 2-11-12  
 Company M+M Petroleum INC Elevation 1474 KB KB 1464 GL  
 Address 2370 SOUTH STATE Road 14 Kingman KS 67068  
 Co. Rep / Geo. NICK MILLER / Jerry Smith Rig Hardt #1  
 Location: Sec. 23 Twp. 30S Rge. 7W Co. Kingman State KS

Interval Tested 3760-3790 Zone Tested KC SWOPE  
 Anchor Length 20' Drill Pipe Run 3703 Mud Wt. 9.5  
 Top Packer Depth 3755 Drill Collars Run 118 Vis 48  
 Bottom Packer Depth 3760 Wt. Pipe Run 0 WL 10.0  
 Total Depth 3888 Chlorides 4000 ppm System LCM 0

Blow Description IF: STRONG blow BOB 9min  
ISI: WEAK blow back 1"  
FF: STRONG blow BOB 4min  
FSL WEAK blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>62'</u>	<u>G, W, M</u>	<u>20</u>	<u>30</u>	<u>25</u>	<u>25</u>
<u>62'</u>	<u>O, W, M</u>	<u>0</u>	<u>5</u>	<u>85</u>	<u>10</u>
<u>186'</u>	<u>W, M</u>	<u>0</u>	<u>0</u>	<u>95</u>	<u>5</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 310' BHT 125 Gravity - API RW 98 @ 23 °F Chlorides 23,000 ppm  
 (A) Initial Hydrostatic 1877  Test 1125- T-On Location 10:00 AM  
 (B) First Initial Flow 37  Jars \_\_\_\_\_ T-Started 10:12  
 (C) First Final Flow 98  Safety Joint 75- T-Open 13:50  
 (D) Initial Shut-In 1364  Circ Sub \_\_\_\_\_ T-Pulled 5:00  
 (E) Second Initial Flow 108  Hourly Standby \_\_\_\_\_ T-Out 7:40  
 (F) Second Final Flow 152  Mileage 130 miles 82- Comments \_\_\_\_\_  
 (G) Final Shut-In 1353  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 1864  Straddle 1000-  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_ Sub Total 0  
 Day Standby \_\_\_\_\_ Total 1982-  
 Accessibility \_\_\_\_\_ MP/DST Disc't \_\_\_\_\_  
 Sub Total 1982-

Initial Open 30  
 Initial Shut-In 60  
 Final Flow 30  
 Final Shut-In 60

Approved By [Signature] Our Representative Christa

TriLOBite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

