



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc
 250 N. Water Suite 300
 Wichita, KS 67202
 ATTN: Paul Gunzelman

Moore A #1-21
21/1s/29w Decatur KS
 Job Ticket: 040834 **DST#: 1**
 Test Start: 2011.02.27 @ 00:20:00

GENERAL INFORMATION:

Formation: **LKC "A - G"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:43:30
 Time Test Ended: 08:43:30
Interval: 3667.00 ft (KB) To 3769.00 ft (KB) (TVD)
 Total Depth: 3769.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole
 Tester: James Winder
 Unit No: 46
 Reference Elevations: 2732.00 ft (KB)
 2727.00 ft (CF)
 KB to GR/CF: 5.00 ft

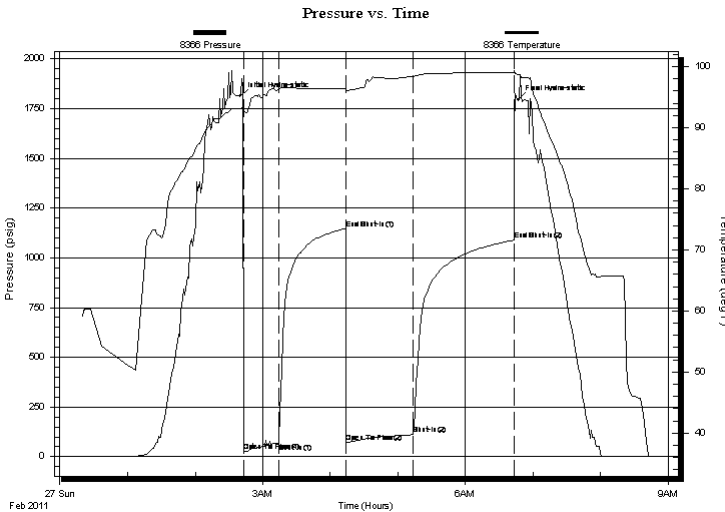
Serial #: 8366

Inside

Press @ Run Depth: 111.16 psig @ 3668.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2011.02.27 End Date: 2011.02.27 Last Calib.: 2011.02.27
 Start Time: 00:20:05 End Time: 08:43:29 Time On Btm: 2011.02.27 @ 02:40:00
 Time Off Btm: 2011.02.27 @ 06:47:00

TEST COMMENT: IF: Blow built to 5"
 IS: Bled off, No blow back
 FF: Blow built to 5 1/4"
 FS: Bled off, No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1812.08	93.08	Initial Hydro-static
4	25.65	92.66	Open To Flow (1)
34	66.59	96.25	Shut-In(1)
94	1147.16	96.42	End Shut-In(1)
94	71.87	96.08	Open To Flow (2)
154	111.16	98.40	Shut-In(2)
243	1088.52	99.06	End Shut-In(2)
247	1794.65	98.69	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
176.00	MCW w/trace oil 68%w, 32%m	0.87
24.00	SOCWM 52%w, 46%w, 2%o	0.34

Gas Rates

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



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FLUID SUMMARY

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ATTN: Paul Gunzelman

Moore A #1-21
21/1s/29w Decatur KS
Job Ticket: 040834 **DST#: 1**
Test Start: 2011.02.27 @ 00:20:00

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: 58.00 sec/qt	Cushion Volume: bbl		
Water Loss: 6.40 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1400.00 ppm			
Filter Cake: 2.00 inches			

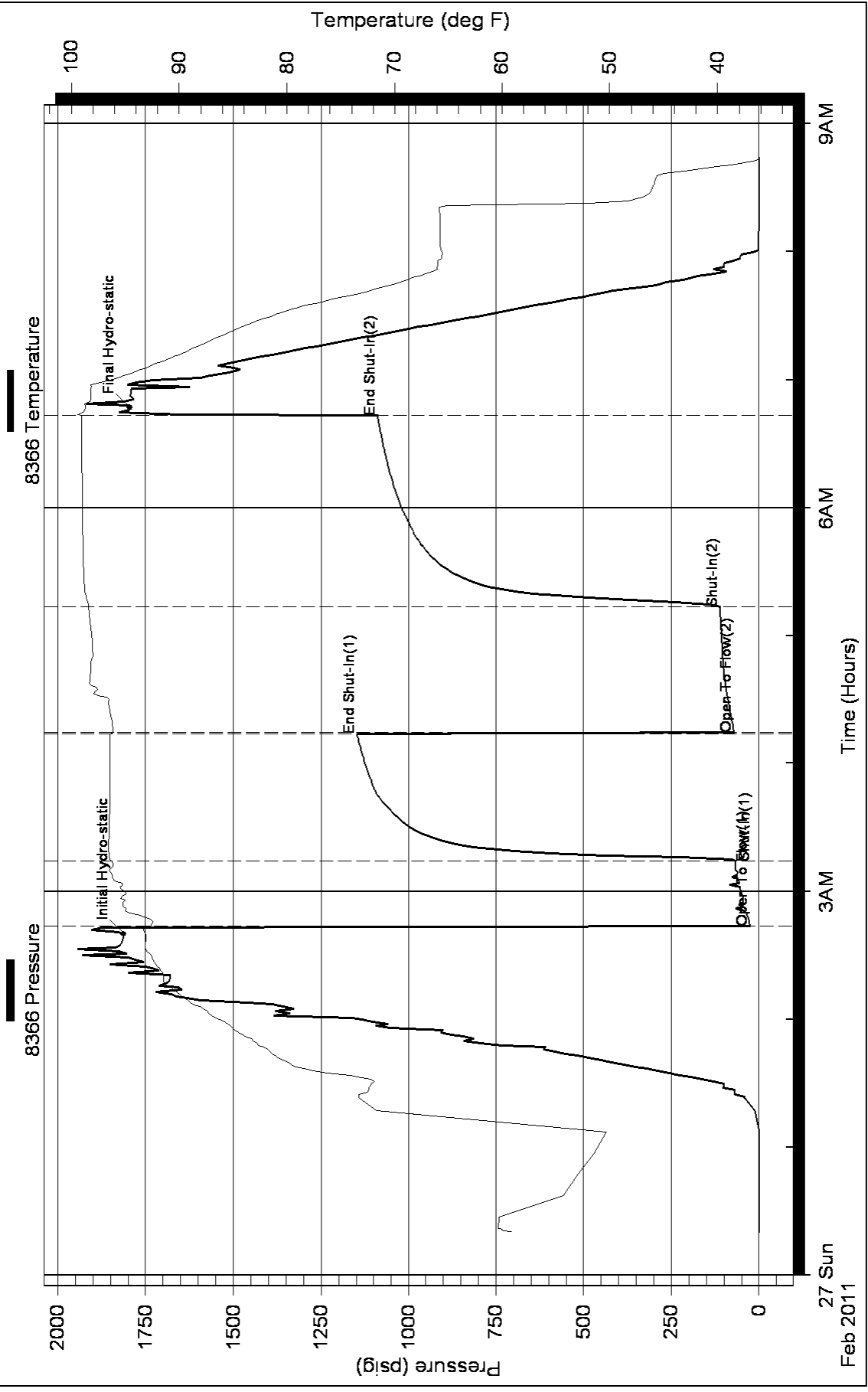
Recovery Information

Recovery Table

Length ft	Description	Volume bbl
176.00	MCW w/trace oil 68%w , 32%m	0.866
24.00	SOCWM 52%m, 46%w , 2%o	0.337

Total Length: 200.00 ft Total Volume: 1.203 bbl
 Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:
 Laboratory Name: Laboratory Location:
 Recovery Comments: RW= .172 ohms @ 61.9 deg F
 Chlorides = 50,000 ppm

Pressure vs. Time





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Moore A #1-21
21/1s/29w Decatur KS
Job Ticket: 040835 **DST#: 2**
Test Start: 2011.02.27 @ 23:37:00

GENERAL INFORMATION:

Formation: **LKC "J - K"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:47:00
Time Test Ended: 06:15:00
Interval: **3798.00 ft (KB) To 3870.00 ft (KB) (TVD)**
Total Depth: 3870.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole
Tester: James Winder
Unit No: 46
Reference Elevations: 2732.00 ft (KB)
2727.00 ft (CF)
KB to GR/CF: 5.00 ft

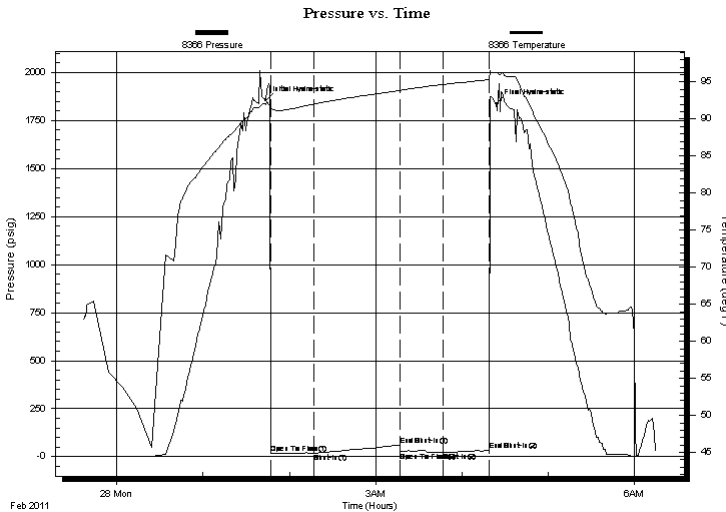
Serial #: 8366

Inside

Press@RunDepth: 21.91 psig @ 3799.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2011.02.27 End Date: 2011.02.28 Last Calib.: 2011.02.28
Start Time: 23:37:05 End Time: 06:14:59 Time On Btm: 2011.02.28 @ 01:43:30
Time Off Btm: 2011.02.28 @ 04:24:00

TEST COMMENT: IF: Blow built to about 1/2", slow ly died back to 1/4" at close
IS: Bled off, No blow back
FF: No blow
FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1854.61	92.00	Initial Hydro-static
4	18.06	91.47	Open To Flow (1)
34	19.31	92.02	Shut-In(1)
93	61.34	93.84	End Shut-In(1)
94	24.79	93.85	Open To Flow (2)
123	21.91	94.67	Shut-In(2)
155	32.19	95.31	End Shut-In(2)
161	1836.07	96.33	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
4.00	Mud 100%	0.02

Gas Rates

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



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Job Ticket: 040835

DST#: 2

ATTN: Paul Gunzelman

Test Start: 2011.02.27 @ 23:37:00

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: 6.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 2000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
4.00	Mud 100%	0.020

Total Length: 4.00 ft Total Volume: 0.020 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

