



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Co.

25.5S/33W/thomas.KS

250 N. Water STE #300
Wichita, KS 67202

Schroeder #1-25

Job Ticket: 43091

DST#: 1

ATTN: Steve Miller

Test Start: 2012.01.25 @ 04:09:00

GENERAL INFORMATION:

Formation: **LKC "A,C,D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:24:45

Time Test Ended: 15:46:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 4007.00 ft (KB) To 4068.00 ft (KB) (TVD)

Reference Elevations: 3108.00 ft (KB)

Total Depth: 4068.00 ft (KB) (TVD)

3103.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6799

Inside

Press @ Run Depth: 913.62 psig @ 4008.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.25

End Date:

2012.01.25

Last Calib.:

2012.01.25

Start Time: 04:09:05

End Time:

15:46:45

Time On Btm:

2012.01.25 @ 09:23:15

Time Off Btm:

2012.01.25 @ 12:25:45

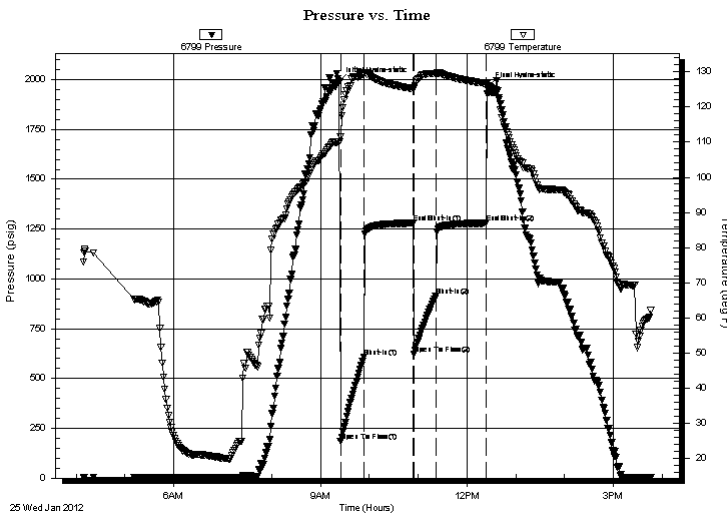
TEST COMMENT: IF- BoB in 3 1/2 min.

IS- Weak surface return started at 5 min. Built to 3/4"

FF- BoB in 4 min.

FS- Weak surface return started at 7 min. Built to 1/4"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1989.16	110.12	Initial Hydro-static
2	185.55	111.50	Open To Flow (1)
30	607.14	129.28	Shut-In(1)
90	1279.63	125.22	End Shut-In(1)
92	622.48	125.20	Open To Flow (2)
119	913.62	129.51	Shut-In(2)
180	1279.94	126.72	End Shut-In(2)
183	1966.83	126.11	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud (heavy) 100m	0.02
849.00	MW 95W 5M	10.59
310.00	MW 80W 20M	4.35
759.00	WM 30W 70M	10.65

Gas Rates

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



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FLUID SUMMARY

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25.5S/33W/thomas.KS

250 N. Water STE #300
Wichita, KS 67202

Schroeder #1-25

Job Ticket: 43091

DST#: 1

ATTN: Steve Miller

Test Start: 2012.01.25 @ 04:09:00

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:

14500 ppm

Viscosity: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.20 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud (heavy) 100m	0.025
849.00	MW 95W 5M	10.588
310.00	MW 80W 20M	4.348
759.00	WM 30W 70M	10.647

Total Length: 1923.00 ft Total Volume: 25.608 bbl

Num Fluid Samples: 0

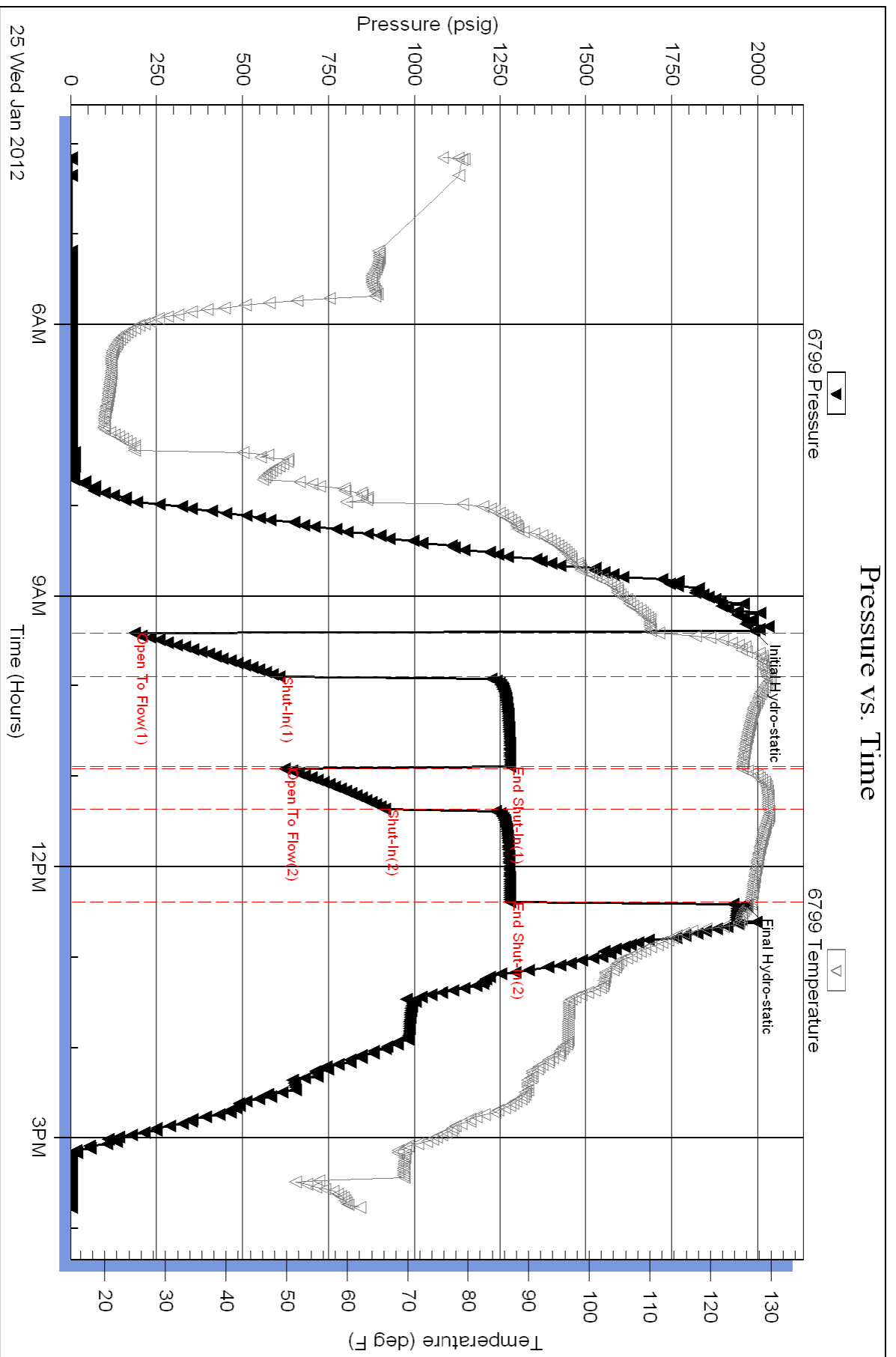
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .56 @ 61 deg. = 14,500ppm





TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co.
 250 N. Water STE #300
 Wichita, KS 67202
 ATTN: Steve Miller

25.5S/33W/Rawlins/KS

Schroeder #1-25

Job Ticket: 43092 **DST#: 2**

Test Start: 2012.01.26 @ 03:35:00

GENERAL INFORMATION:

Formation: **LKC "F"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 06:29:45
 Time Test Ended: 11:37:00
 Interval: **4073.00 ft (KB) To 4096.00 ft (KB) (TVD)**
 Total Depth: 4096.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Kevin Mack
 Unit No: 43
 Reference Elevations: 3108.00 ft (KB)
 3103.00 ft (CF)
 KB to GR/CF: 5.00 ft

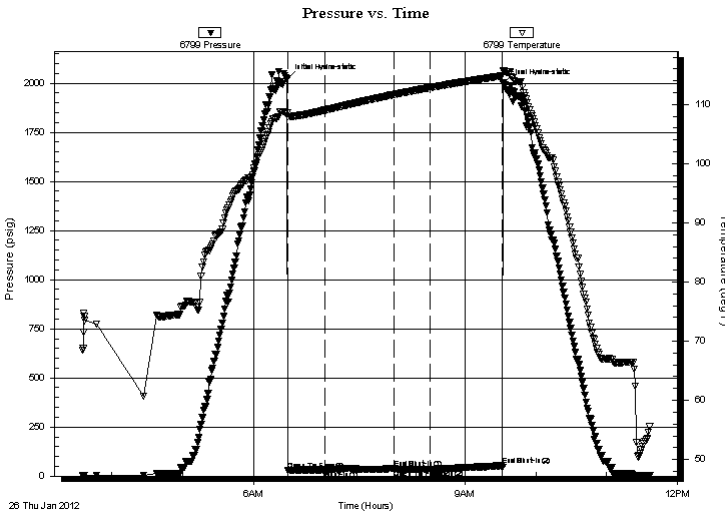
Serial #: 6799

Inside

Press @ RunDepth: 35.60 psig @ 4074.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.01.26 End Date: 2012.01.26 Last Calib.: 2012.01.26
 Start Time: 03:35:05 End Time: 11:36:59 Time On Btm: 2012.01.26 @ 06:29:00
 Time Off Btm: 2012.01.26 @ 09:32:15

TEST COMMENT: IF- Surface blow built to 1 1/4"
 IS- No Return
 FF- No Blow
 FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2024.37	108.60	Initial Hydro-static
1	30.00	107.95	Open To Flow (1)
32	31.35	108.99	Shut-In(1)
91	39.72	111.65	End Shut-In(1)
91	34.82	111.66	Open To Flow (2)
122	35.60	112.83	Shut-In(2)
183	53.83	114.81	End Shut-In(2)
184	1999.06	115.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	OSM 100M (oil spots)	0.02

Gas Rates

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



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FLUID SUMMARY

Murfin Drilling Co.

25.5S/33W/Rawlins/KS

250 N. Water STE #300
Wichita, KS 67202

Schroeder #1-25

Job Ticket: 43092

DST#: 2

ATTN: Steve Miller

Test Start: 2012.01.26 @ 03:35:00

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: 76.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.80 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	OSM 100M (oil spots)	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:

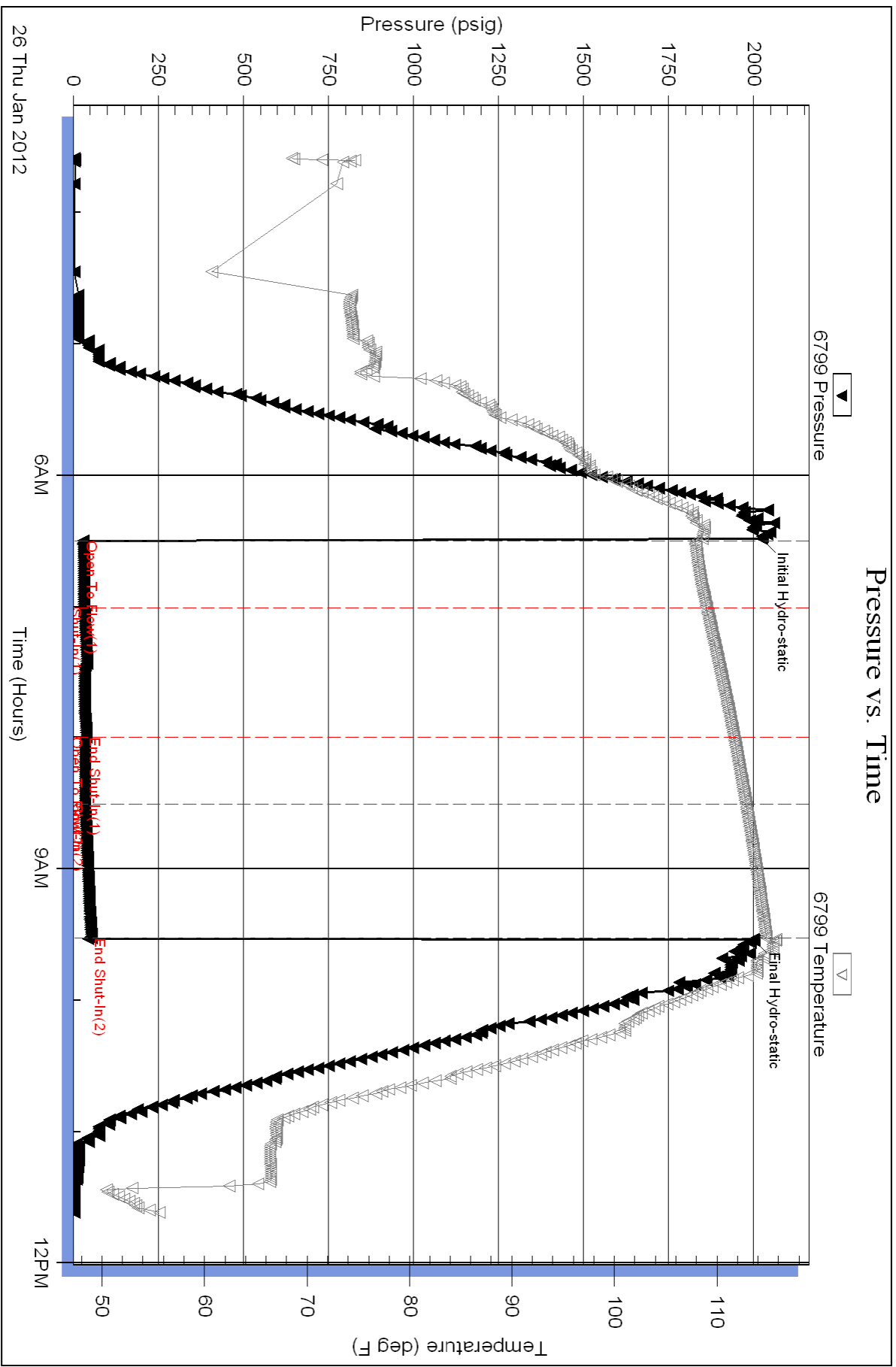
Serial #: 6799

Inside

Murfin Drilling Co.

Schroeder #1-25

DST Test Number: 2





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DRILL STEM TEST REPORT

Murfin Drilling Co.

25.5S/33W/Rawlins/KS

250 N. Water STE #300
Wichita, KS 67202

Schroeder #1-25

Job Ticket: 43093

DST#: 3

ATTN: Steve Miller

Test Start: 2012.01.27 @ 04:29:00

GENERAL INFORMATION:

Formation: **LKC "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:47:00

Time Test Ended: 10:57:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 4154.00 ft (KB) To 4190.00 ft (KB) (TVD)

Reference Elevations: 3108.00 ft (KB)

Total Depth: 4190.00 ft (KB) (TVD)

3103.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6799

Press @ Run Depth: 36.26 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.27 End Date: 2012.01.27

Last Calib.: 2012.01.27

Start Time: 04:29:05 End Time: 10:57:44

Time On Btm: 2012.01.27 @ 06:46:45

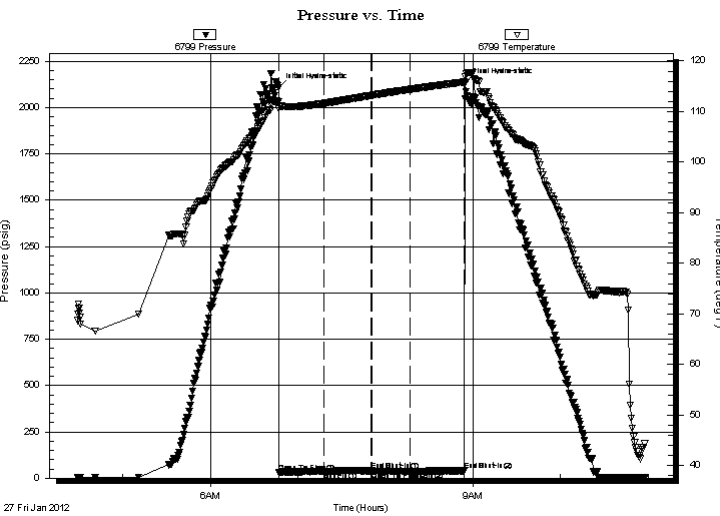
Time Off Btm: 2012.01.27 @ 08:54:45

TEST COMMENT: IF- Surface Blow died at 2 min.

IS- No Return

FF- No Blow

FS- No Return



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2108.71	111.97	Initial Hydro-static
1	29.24	110.57	Open To Flow (1)
31	35.67	111.62	Shut-In(1)
63	39.75	113.16	End Shut-In(1)
64	35.73	113.21	Open To Flow (2)
91	36.26	114.40	Shut-In(2)
128	40.12	115.85	End Shut-In(2)
128	2133.62	116.89	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud 100M	0.02

Gas Rates

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



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FLUID SUMMARY

Murfin Drilling Co.

25.5S/33W/Rawlins/KS

250 N. Water STE #300
Wichita, KS 67202

Schroeder #1-25

Job Ticket: 43093

DST#: 3

ATTN: Steve Miller

Test Start: 2012.01.27 @ 04:29:00

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: 80.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud 100M	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

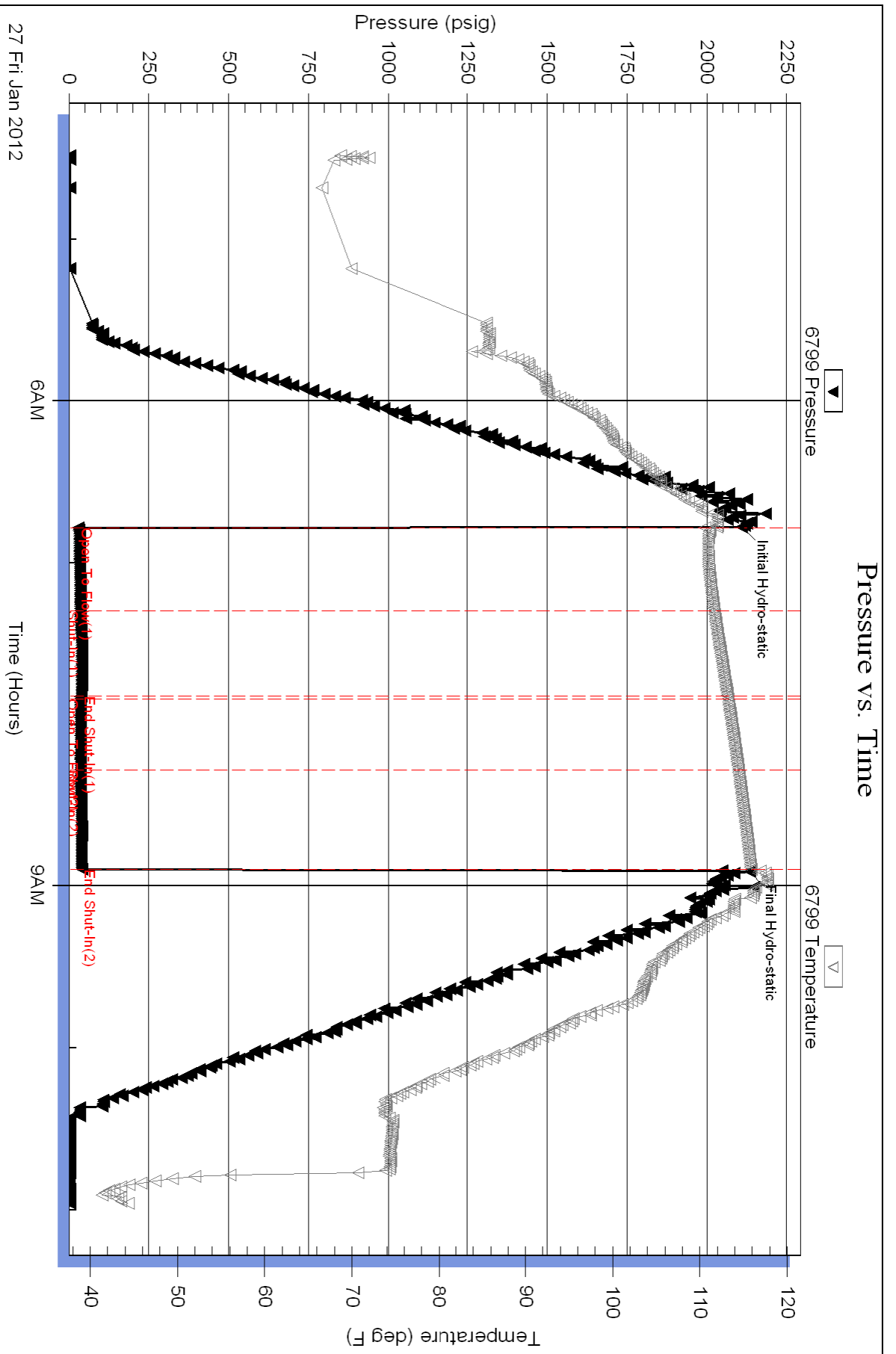
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





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Murfin Drilling Co.

25.5S/33W/Rawlins/KS

250 N. Water STE #300
Wichita, KS 67202

Schroeder #1-25

Job Ticket: 43094

DST#: 4

ATTN: Steve Miller

Test Start: 2012.01.28 @ 18:14:00

GENERAL INFORMATION:

Formation: **Cherokee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:37:45

Time Test Ended: 03:11:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 4446.00 ft (KB) To 4476.00 ft (KB) (TVD)

Reference Elevations: 3108.00 ft (KB)

Total Depth: 4479.00 ft (KB) (TVD)

3103.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 6799

Press @ Run Depth: 427.56 psig @ ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.01.28

End Date:

2012.01.29

Last Calib.:

2012.01.29

Start Time: 18:14:05

End Time:

03:11:30

Time On Btm:

2012.01.28 @ 20:33:45

Time Off Btm:

2012.01.28 @ 23:33:45

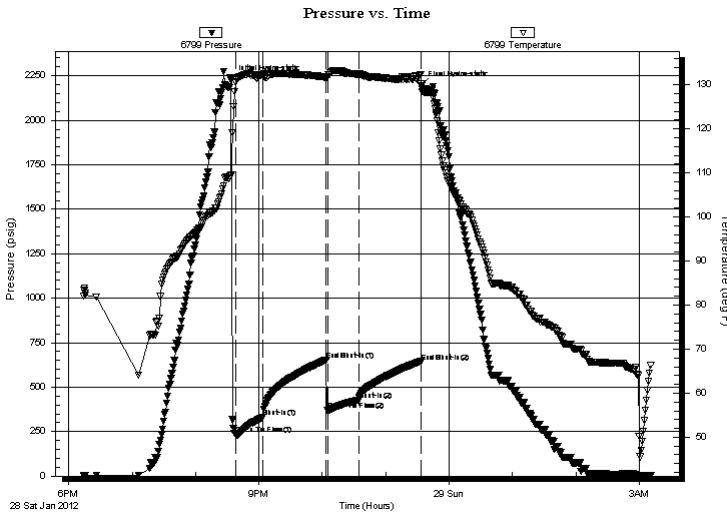
TEST COMMENT: IF- BoB in 1 1/2 min. Blow began to die at 10 min. Died back to 1/2"

IS- No Return

FF- Surface blow built to 1/4" Then died at 8 min.

FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2227.26	109.46	Initial Hydro-static
4	232.78	130.54	Open To Flow (1)
30	330.11	132.35	Shut-In(1)
90	653.48	131.72	End Shut-In(1)
91	368.01	131.57	Open To Flow (2)
121	427.56	132.43	Shut-In(2)
180	643.44	132.35	End Shut-In(2)
180	2196.44	130.24	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
180.00	OCMW 20o 30M 50W	0.89
992.00	Clean Gassy Oil 100o	13.92

Gas Rates

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



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250 N. Water STE #300
Wichita, KS 67202

Schroeder #1-25

Job Ticket: 43094

DST#: 4

ATTN: Steve Miller

Test Start: 2012.01.28 @ 18:14:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

27 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

16000 ppm

Viscosity: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.99 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3000.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
180.00	OCMW 20o 30M 50W	0.885
992.00	Clean Gassy Oil 100o	13.915

Total Length: 1172.00 ft Total Volume: 14.800 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Oil API 26@ 50 deg = 27

RW .78 @ 37 deg = 16000 ppm

