



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling, Co.**

250 N Water Ste #300
Wichita, KS 67202

ATTN: Rocky Milford

Cotton Candy #1-14

14-4s-30w Decatur,KS

Start Date: 2012.07.15 @ 06:39:00

End Date: 2012.07.15 @ 16:42:45

Job Ticket #: 48021 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.07.26 @ 08:37:30



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling, Co.
250 N Water Ste #300
Wichita, KS 67202
ATTN: Rocky Milford

14-4s-30w Decatur, KS

Cotton Candy #1-14

Job Ticket: 48021 **DST#: 1**

Test Start: 2012.07.15 @ 06:39:00

GENERAL INFORMATION:

Formation: **LKC "B"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 10:48:45
 Time Test Ended: 16:42:45
 Interval: **3911.00 ft (KB) To 3932.00 ft (KB) (TVD)**
 Total Depth: 3932.00 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: 2813.00 ft (KB)
 2808.00 ft (CF)
 KB to GR/CF: 5.00 ft

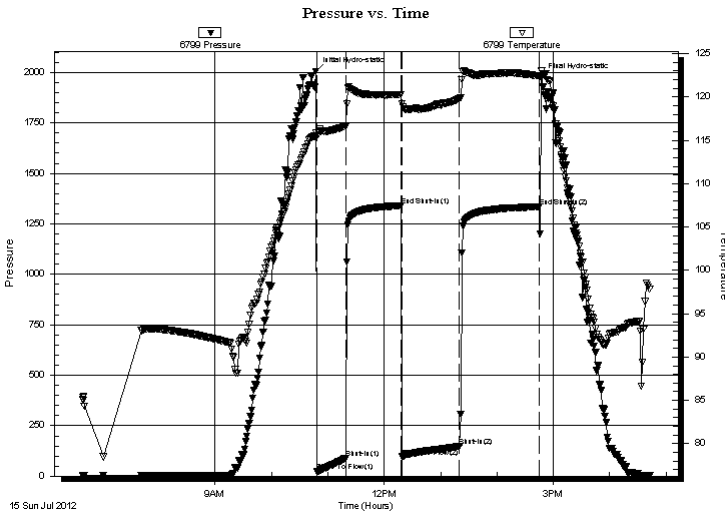
Serial #: 6799

Inside

Press @ RunDepth: 148.28 psig @ 3912.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.07.15 End Date: 2012.07.15 Last Calib.: 2012.07.15
 Start Time: 06:39:05 End Time: 16:42:45 Time On Btm: 2012.07.15 @ 10:47:30
 Time Off Btm: 2012.07.15 @ 14:47:30

TEST COMMENT: 30 - IF- 1/8" Blow built to 5"
 60 - IS- No Return
 60 - FF- Surface Blow started at 4 min. Built to 8"
 90 - FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2006.21	115.82	Initial Hydro-static
2	22.24	115.51	Open To Flow (1)
32	87.33	116.63	Shut-In(1)
90	1340.26	120.28	End Shut-In(1)
92	95.61	119.20	Open To Flow (2)
153	148.28	119.84	Shut-In(2)
238	1335.31	122.44	End Shut-In(2)
240	1974.62	123.07	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Show of oil spots in tool	0.00
186.00	MW 10M 90W	0.91
124.00	MW 30M 70W	1.74

Gas Rates

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



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DRILL STEM TEST REPORT

Murfin Drilling, Co.
250 N Water Ste #300
Wichita, KS 67202
ATTN: Rocky Milford

14-4s-30w Decatur, KS

Cotton Candy #1-14

Job Ticket: 48021

DST#: 1

Test Start: 2012.07.15 @ 06:39:00

GENERAL INFORMATION:

Formation: **LKC "B"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 10:48:45

Time Test Ended: 16:42:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 3911.00 ft (KB) To 3932.00 ft (KB) (TVD)

Reference Elevations: 2813.00 ft (KB)

Total Depth: 3932.00 ft (KB) (TVD)

2808.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

Serial #: 8648

Inside

Press @ Run Depth: psig @ 3912.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.07.15

End Date:

2012.07.15

Last Calib.:

2012.07.15

Start Time: 06:40:05

End Time:

16:41:45

Time On Btm:

Time Off Btm:

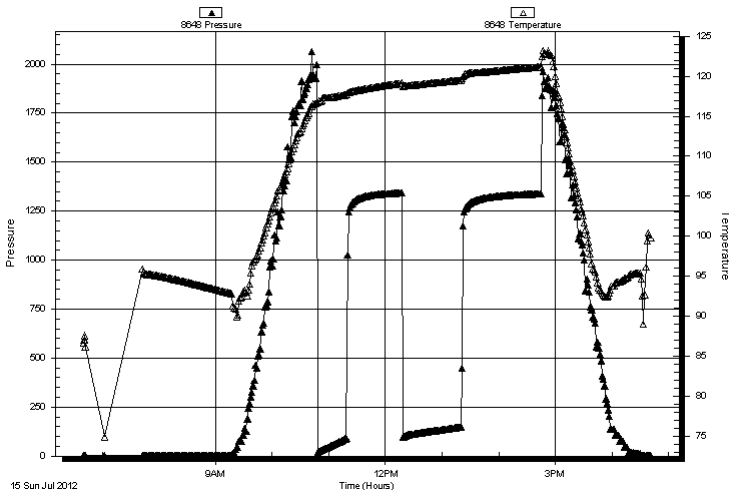
TEST COMMENT: 30 - IF- 1/8" Blow built to 5"

60 - IS- No Return

60 - FF- Surface Blow started at 4 min. Built to 8"

90 - FS- No Return

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Show of oil spots in tool	0.00
186.00	MW 10M 90W	0.91
124.00	MW 30M 70W	1.74

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling, Co.

14-4s-30w Decatur,KS

250 N Water Ste #300
Wichita, KS 67202

Cotton Candy #1-14

Job Ticket: 48021

DST#: 1

ATTN: Rocky Milford

Test Start: 2012.07.15 @ 06:39:00

Tool Information

Drill Pipe:	Length: 3725.00 ft	Diameter: 3.80 inches	Volume: 52.25 bbl	Tool Weight: 2500.00 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 53.16 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	29.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3911.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	21.00 ft			
Tool Length:	50.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3883.00	
Shut In Tool	5.00			3888.00	
Hydraulic tool	5.00			3893.00	
Jars	5.00			3898.00	
Safety Joint	3.00			3901.00	
Packer	5.00			3906.00	29.00 Bottom Of Top Packer
Packer	5.00			3911.00	
Stubb	1.00			3912.00	
Recorder	0.00	8648	Inside	3912.00	
Recorder	0.00	6799	Inside	3912.00	
Perforations	15.00			3927.00	
Bullnose	5.00			3932.00	21.00 Bottom Packers & Anchor

Total Tool Length: 50.00



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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling, Co.

14-4s-30w Decatur,KS

250 N Water Ste #300
Wichita, KS 67202

Cotton Candy #1-14

Job Ticket: 48021

DST#: 1

ATTN: Rocky Milford

Test Start: 2012.07.15 @ 06:39:00

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:

19000 ppm

Viscosity: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Show of oil spots in tool	0.000
186.00	MW 10M 90W	0.915
124.00	MW 30M 70W	1.739

Total Length: 310.00 ft Total Volume: 2.654 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW.28 @ 93 deg = 19000 ppm

Serial #: 6799

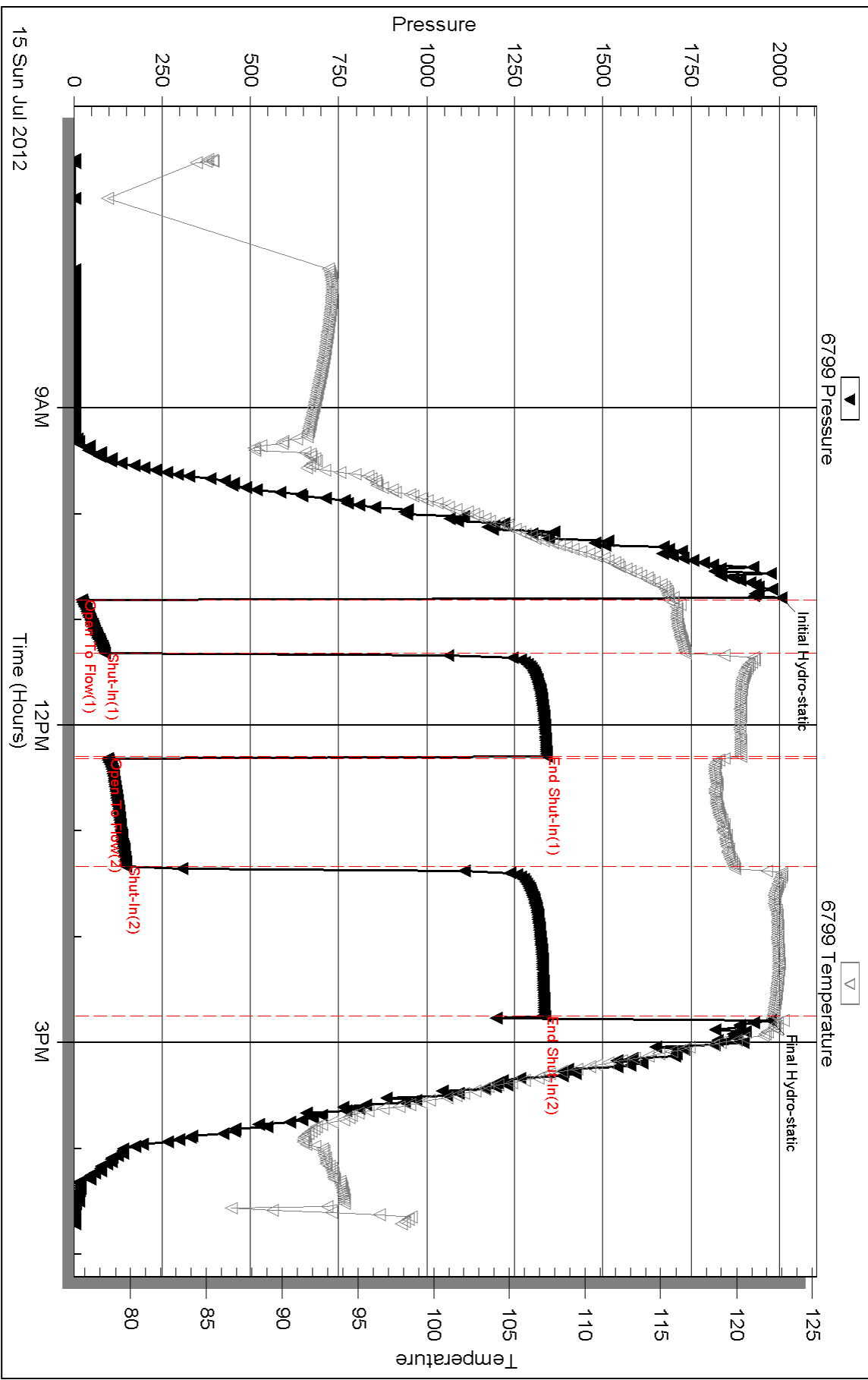
Inside

Murfin Drilling, Co.

Cotton Candy #1-14

DST Test Number: 1

Pressure vs. Time



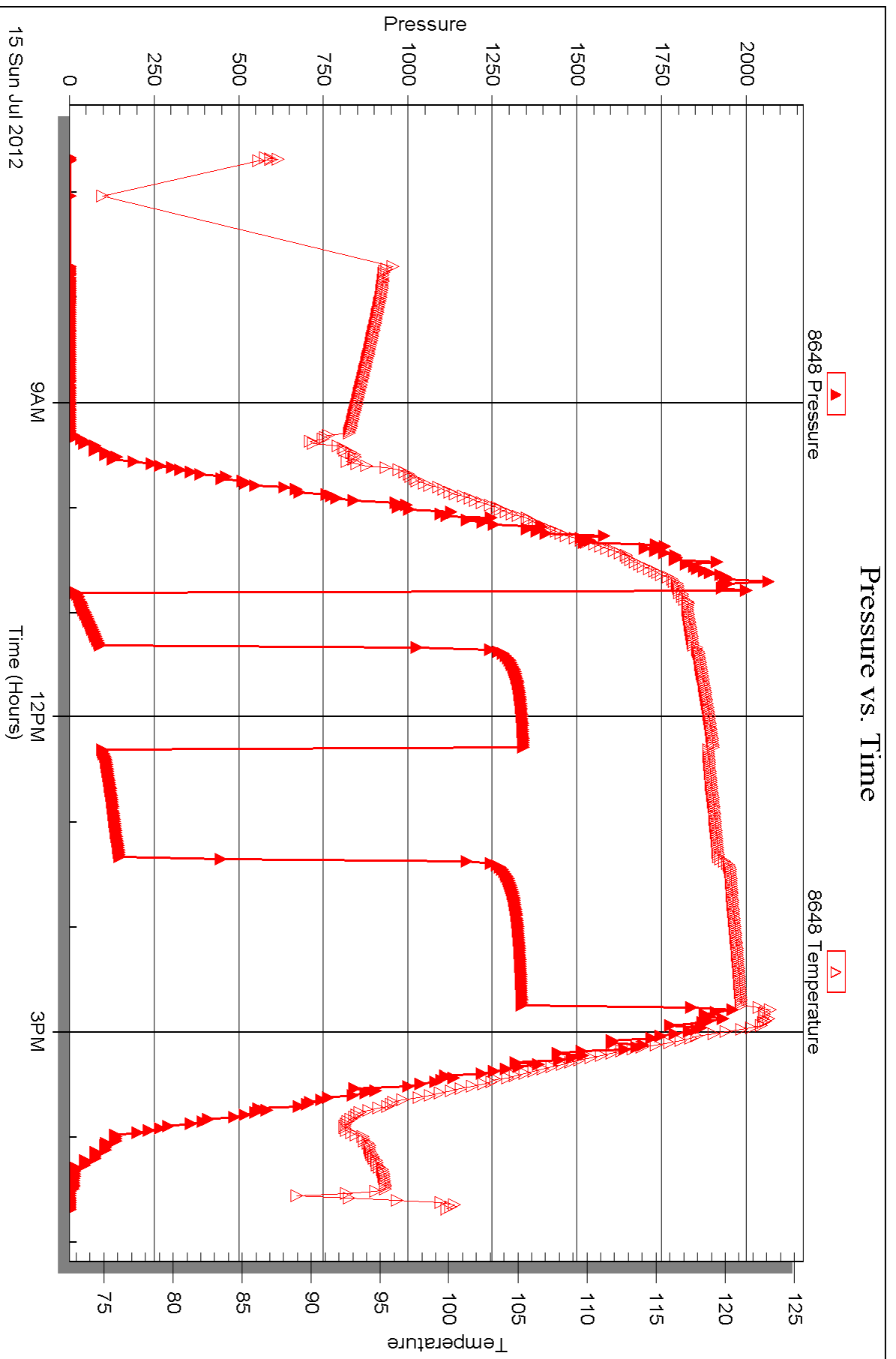
Serial #: 8648

Inside

Murfin Drilling, Co.

Cotton Candy #1-14

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling, Co.**

250 N Water Ste #300
Wichita, KS 67202

ATTN: Rocky Milford

Cotton Candy #1-14

14-4s-30w Decatur,KS

Start Date: 2012.07.16 @ 03:46:00

End Date: 2012.07.16 @ 10:33:15

Job Ticket #: 48022 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2012.07.26 @ 08:36:47



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling, Co.
250 N Water Ste #300
Wichita, KS 67202
ATTN: Rocky Milford

14-4s-30w Decatur, KS
Cotton Candy #1-14
Job Ticket: 48022 **DST#: 2**
Test Start: 2012.07.16 @ 03:46:00

GENERAL INFORMATION:

Formation: **LKC "E-G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:46:00
Time Test Ended: 10:33:15
Interval: **3947.00 ft (KB) To 3983.00 ft (KB) (TVD)**
Total Depth: 3983.00 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: 2813.00 ft (KB)
2808.00 ft (CF)
KB to GR/CF: 5.00 ft

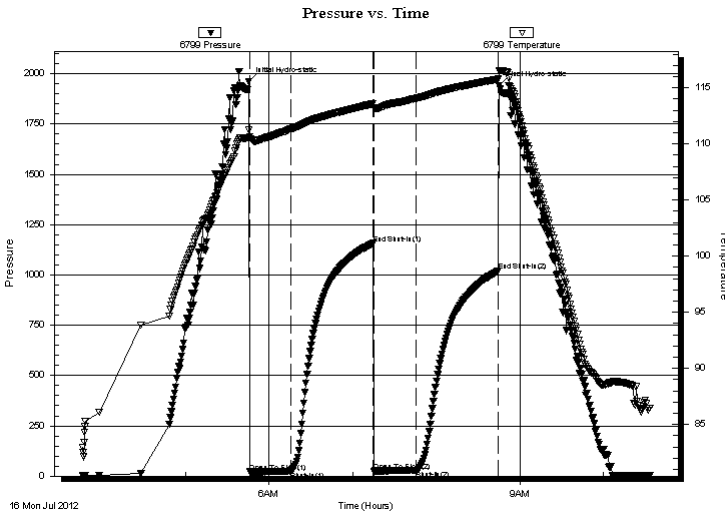
Serial #: 6799

Inside

Press @ RunDepth: 28.48 psig @ 3948.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2012.07.16 End Date: 2012.07.16 Last Calib.: 2012.07.16
Start Time: 03:46:05 End Time: 10:33:14 Time On Btm: 2012.07.16 @ 05:45:15
Time Off Btm: 2012.07.16 @ 08:45:15

TEST COMMENT: 30 - IF- Surface blow did not build or die.
60 - IS- No Return
30 - FF- No Blow
60 - FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1959.95	111.21	Initial Hydro-static
1	20.86	110.62	Open To Flow (1)
30	24.14	111.30	Shut-In(1)
90	1156.54	113.57	End Shut-In(1)
90	25.39	113.18	Open To Flow (2)
120	28.48	114.04	Shut-In(2)
180	1020.20	115.76	End Shut-In(2)
180	1939.81	116.53	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100M	0.05

Gas Rates

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



TRILOBITE
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DRILL STEM TEST REPORT

Murfin Drilling, Co.

250 N Water Ste #300
Wichita, KS 67202

ATTN: Rocky Milford

14-4s-30w Decatur, KS

Cotton Candy #1-14

Job Ticket: 48022

DST#: 2

Test Start: 2012.07.16 @ 03:46:00

GENERAL INFORMATION:

Formation: **LKC "E-G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:46:00

Time Test Ended: 10:33:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Kevin Mack

Unit No: 43

Interval: 3947.00 ft (KB) To 3983.00 ft (KB) (TVD)

Total Depth: 3983.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 2813.00 ft (KB)

2808.00 ft (CF)

KB to GR/CF: 5.00 ft

Serial #: 8648 Inside

Press@RunDepth: psig @ 3948.00 ft (KB)

Start Date: 2012.07.16

End Date: 2012.07.16

Capacity: 8000.00 psig

Last Calib.: 2012.07.16

Start Time: 03:46:50

End Time: 10:32:29

Time On Btm:

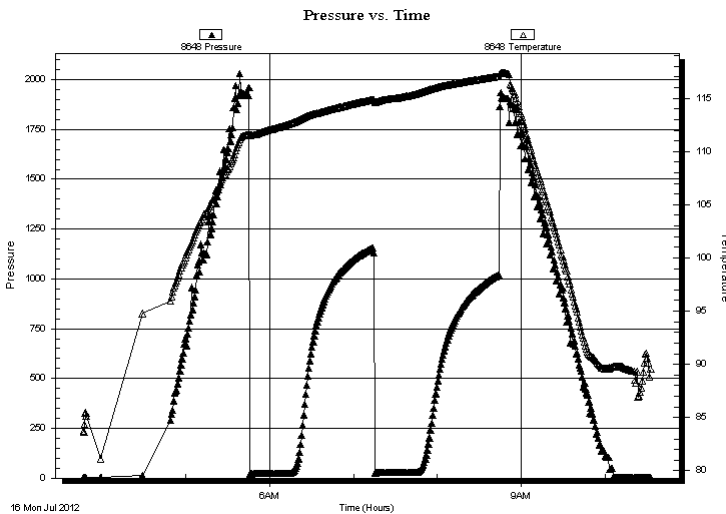
Time Off Btm:

TEST COMMENT: 30 - IF- Surface blow did not build or die.

60 - IS- No Return

30 - FF- No Blow

60 - FS- No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100M	0.05

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling, Co.

14-4s-30w Decatur, KS

250 N Water Ste #300
Wichita, KS 67202

Cotton Candy #1-14

Job Ticket: 48022

DST#: 2

ATTN: Rocky Milford

Test Start: 2012.07.16 @ 03:46:00

Tool Information

Drill Pipe:	Length: 3757.00 ft	Diameter: 3.80 inches	Volume: 52.70 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 53.61 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	25.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	3947.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	65.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3919.00	
Shut In Tool	5.00			3924.00	
Hydraulic tool	5.00			3929.00	
Jars	5.00			3934.00	
Safety Joint	3.00			3937.00	
Packer	5.00			3942.00	29.00 Bottom Of Top Packer
Packer	5.00			3947.00	
Stubb	1.00			3948.00	
Recorder	0.00	8648	Inside	3948.00	
Recorder	0.00	6799	Inside	3948.00	
Perforations	30.00			3978.00	
Bullnose	5.00			3983.00	36.00 Bottom Packers & Anchor

Total Tool Length: 65.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling, Co.

14-4s-30w Decatur,KS

250 N Water Ste #300
Wichita, KS 67202

Cotton Candy #1-14

Job Ticket: 48022

DST#: 2

ATTN: Rocky Milford

Test Start: 2012.07.16 @ 03:46:00

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud 100M	0.049

Total Length: 10.00 ft Total Volume: 0.049 bbl

Num Fluid Samples: 0

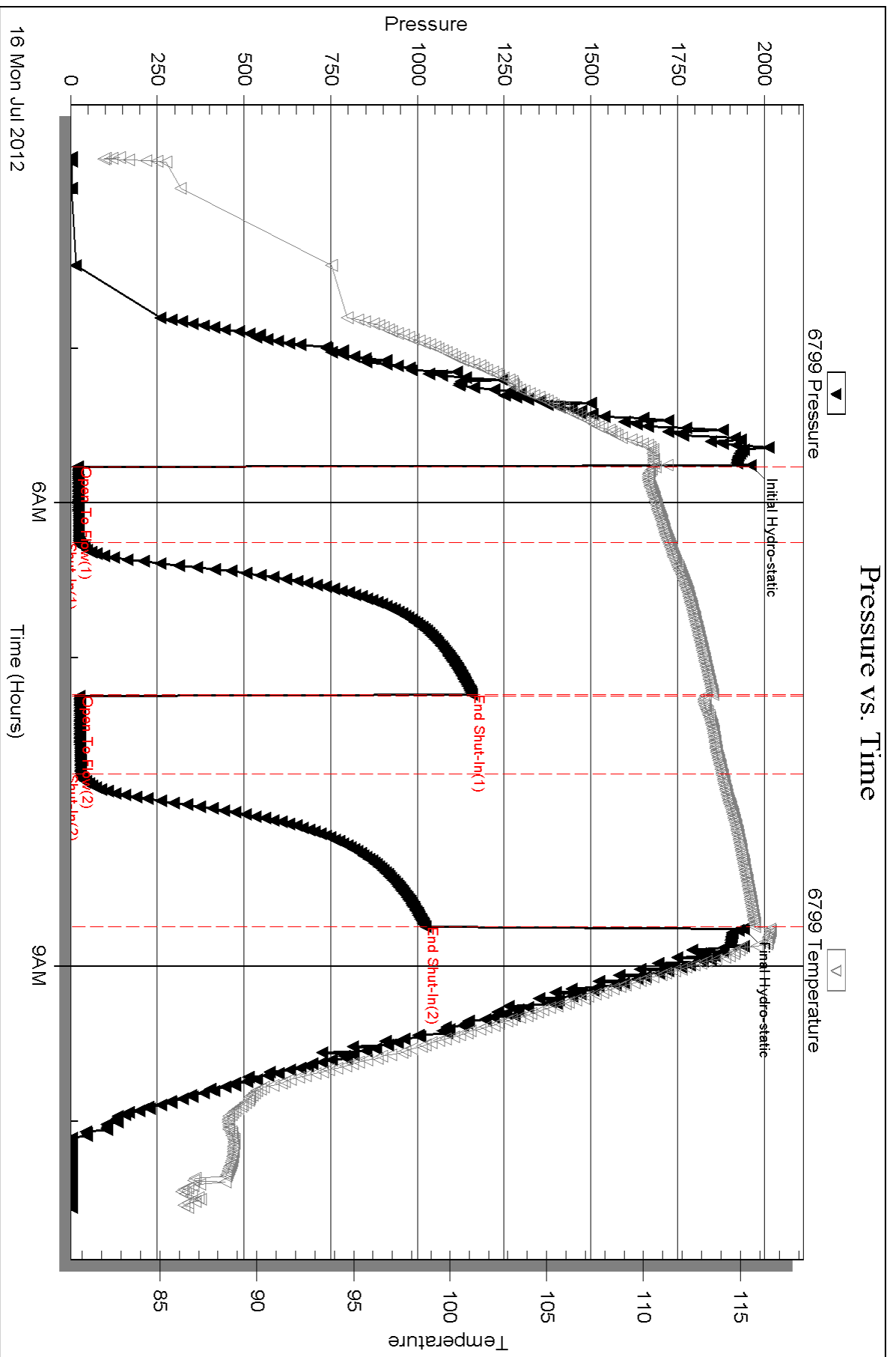
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



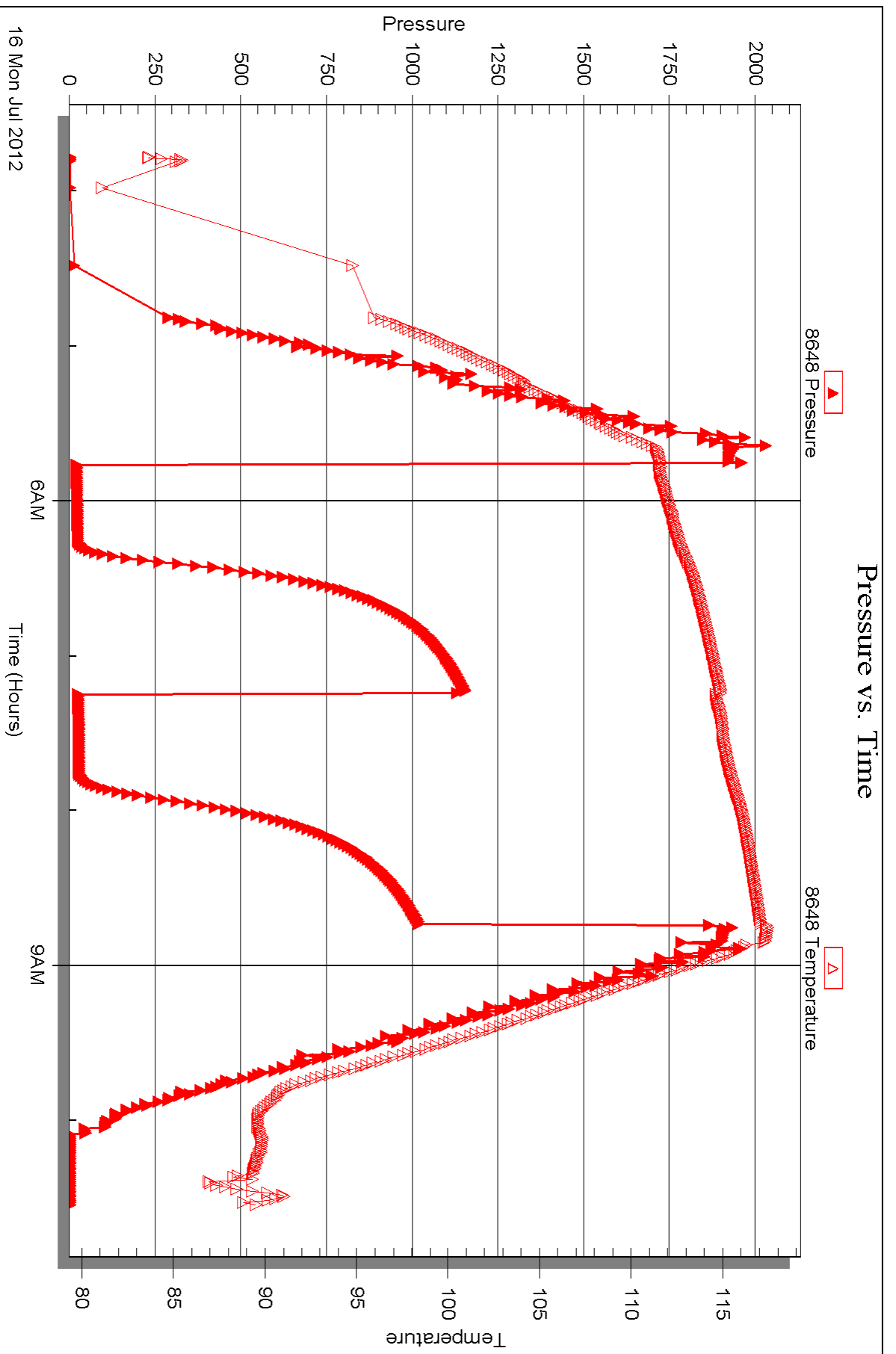
Serial #: 8648

Inside

Murfin Drilling, Co.

Cotton Candy #1-14

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 48022

Printed: 2012.07.26 @ 08:36:49



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling, Co.**

250 N Water Ste #300
Wichita, KS 67202

ATTN: Rocky Milford

Cotton Candy #1-14

14-4s-30w Decatur,KS

Start Date: 2012.07.17 @ 00:18:00

End Date: 2012.07.17 @ 08:53:45

Job Ticket #: 48023 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.07.26 @ 08:32:59

Murfin Drilling, Co. 14-4s-30w Decatur,KS Cotton Candy #1-14 DST # 3 LKC "H-K" 2012.07.17



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling, Co.
 250 N Water Ste #300
 Wichita, KS 67202
 ATTN: Rocky Milford

14-4s-30w Decatur, KS
Cotton Candy #1-14
 Job Ticket: 48023 **DST#: 3**
 Test Start: 2012.07.17 @ 00:18:00

GENERAL INFORMATION:

Formation: **LKC "H-K"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 02:34:45
 Time Test Ended: 08:53:45
 Interval: **3996.00 ft (KB) To 4087.00 ft (KB) (TVD)**
 Total Depth: 4087.00 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: 2813.00 ft (KB)
 2808.00 ft (CF)
 KB to GR/CF: 5.00 ft

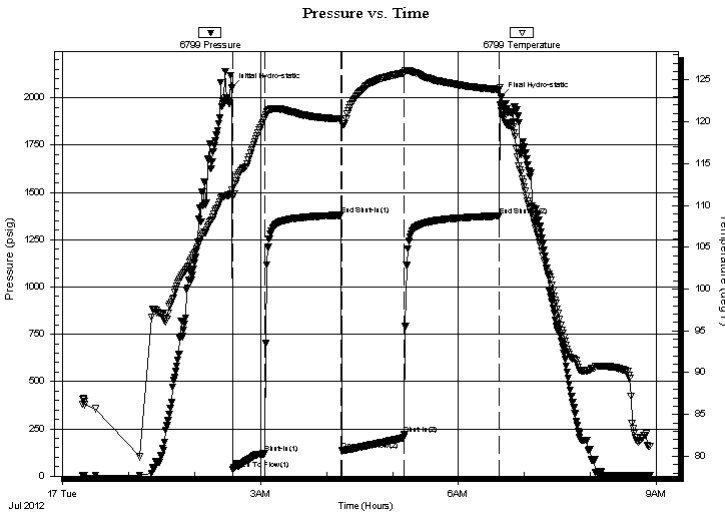
Serial #: 6799

Inside

Press @ Run Depth: 222.90 psig @ 3997.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.07.17 End Date: 2012.07.17 Last Calib.: 2012.07.17
 Start Time: 00:18:05 End Time: 08:53:45 Time On Btm: 2012.07.17 @ 02:33:45
 Time Off Btm: 2012.07.17 @ 06:38:30

TEST COMMENT: 30 - IF- 1/8" Blow built to 9 1/2"
 60 - IS- No Return
 60 - FF- Surface blow started at 3 min. Built to BoB in 55 min.
 90 - FS- No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2051.63	111.84	Initial Hydro-static
1	34.78	111.13	Open To Flow (1)
30	119.55	120.43	Shut-In(1)
99	1379.17	120.32	End Shut-In(1)
100	134.79	119.71	Open To Flow (2)
157	222.90	125.86	Shut-In(2)
243	1375.01	123.83	End Shut-In(2)
245	2007.79	121.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud (Heavy) 100M	0.02
181.00	MW 15M 85W	0.89
194.00	WM 70M 30W	2.72

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling, Co.
 250 N Water Ste #300
 Wichita, KS 67202
 ATTN: Rocky Milford

14-4s-30w Decatur, KS
Cotton Candy #1-14
 Job Ticket: 48023 **DST#: 3**
 Test Start: 2012.07.17 @ 00:18:00

GENERAL INFORMATION:

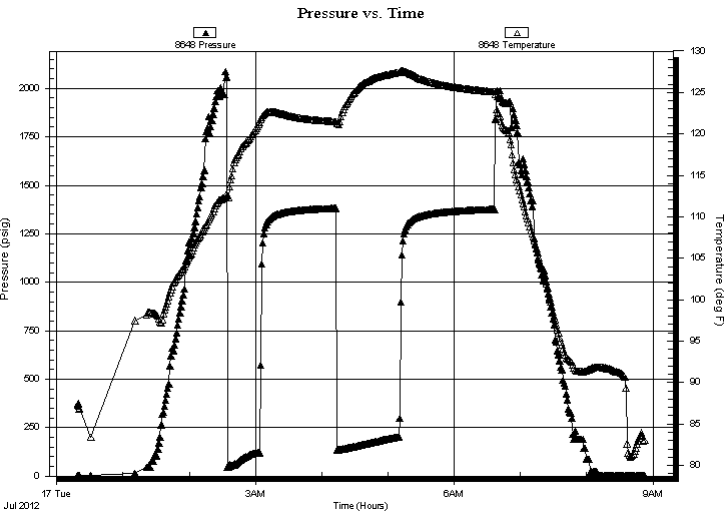
Formation: **LKC "H-K"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 02:34:45 Tester: Kevin Mack
 Time Test Ended: 08:53:45 Unit No: 43
Interval: 3996.00 ft (KB) To 4087.00 ft (KB) (TVD)
 Reference Elevations: 2813.00 ft (KB)
 Total Depth: 4087.00 ft (KB) (TVD) 2808.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Good KB to GR/CF: 5.00 ft

Serial #: 8648

Inside

Press @ Run Depth: psig @ 3997.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.07.17 End Date: 2012.07.17 Last Calib.: 2012.07.17
 Start Time: 00:18:50 End Time: 08:52:30 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30 - IF- 1/8" Blow built to 9 1/2"
 60 - IS- No Return
 60 - FF- Surface blow started at 3 min. Built to BoB in 55 min.
 90 - FS- No Return



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud (Heavy) 100M	0.02
181.00	MW 15M 85W	0.89
194.00	WM 70M 30W	2.72

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling, Co.

14-4s-30w Decatur, KS

250 N Water Ste #300
Wichita, KS 67202

Cotton Candy #1-14

Job Ticket: 48023

DST#: 3

ATTN: Rocky Milford

Test Start: 2012.07.17 @ 00:18:00

Tool Information

Drill Pipe:	Length: 3787.00 ft	Diameter: 3.80 inches	Volume: 53.12 bbl	Tool Weight: 2500.00 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: 186.00 ft	Diameter: 2.25 inches	Volume: 0.91 bbl	Weight to Pull Loose: 62000.00 lb
			<u>Total Volume: 54.03 bbl</u>	Tool Chased ft
Drill Pipe Above KB:	6.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	3996.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	91.00 ft			
Tool Length:	120.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Length (ft) Serial No. Position Depth (ft) Accum. Lengths

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3968.00	
Shut In Tool	5.00			3973.00	
Hydraulic tool	5.00			3978.00	
Jars	5.00			3983.00	
Safety Joint	3.00			3986.00	
Packer	5.00			3991.00	29.00 Bottom Of Top Packer
Packer	5.00			3996.00	
Stubb	1.00			3997.00	
Recorder	0.00	8648	Inside	3997.00	
Recorder	0.00	6799	Inside	3997.00	
Perforations	20.00			4017.00	
Change Over Sub	1.00			4018.00	
Drill Pipe	63.00			4081.00	
Change Over Sub	1.00			4082.00	
Bullnose	5.00			4087.00	91.00 Bottom Packers & Anchor

Total Tool Length: 120.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling, Co.

14-4s-30w Decatur,KS

250 N Water Ste #300
Wichita, KS 67202

Cotton Candy #1-14

Job Ticket: 48023

DST#: 3

ATTN: Rocky Milford

Test Start: 2012.07.17 @ 00:18:00

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: 54.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 1700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
5.00	Mud (Heavy) 100M	0.025
181.00	MW 15M 85W	0.890
194.00	WM 70M 30W	2.721

Total Length: 380.00 ft Total Volume: 3.636 bbl

Num Fluid Samples: 0

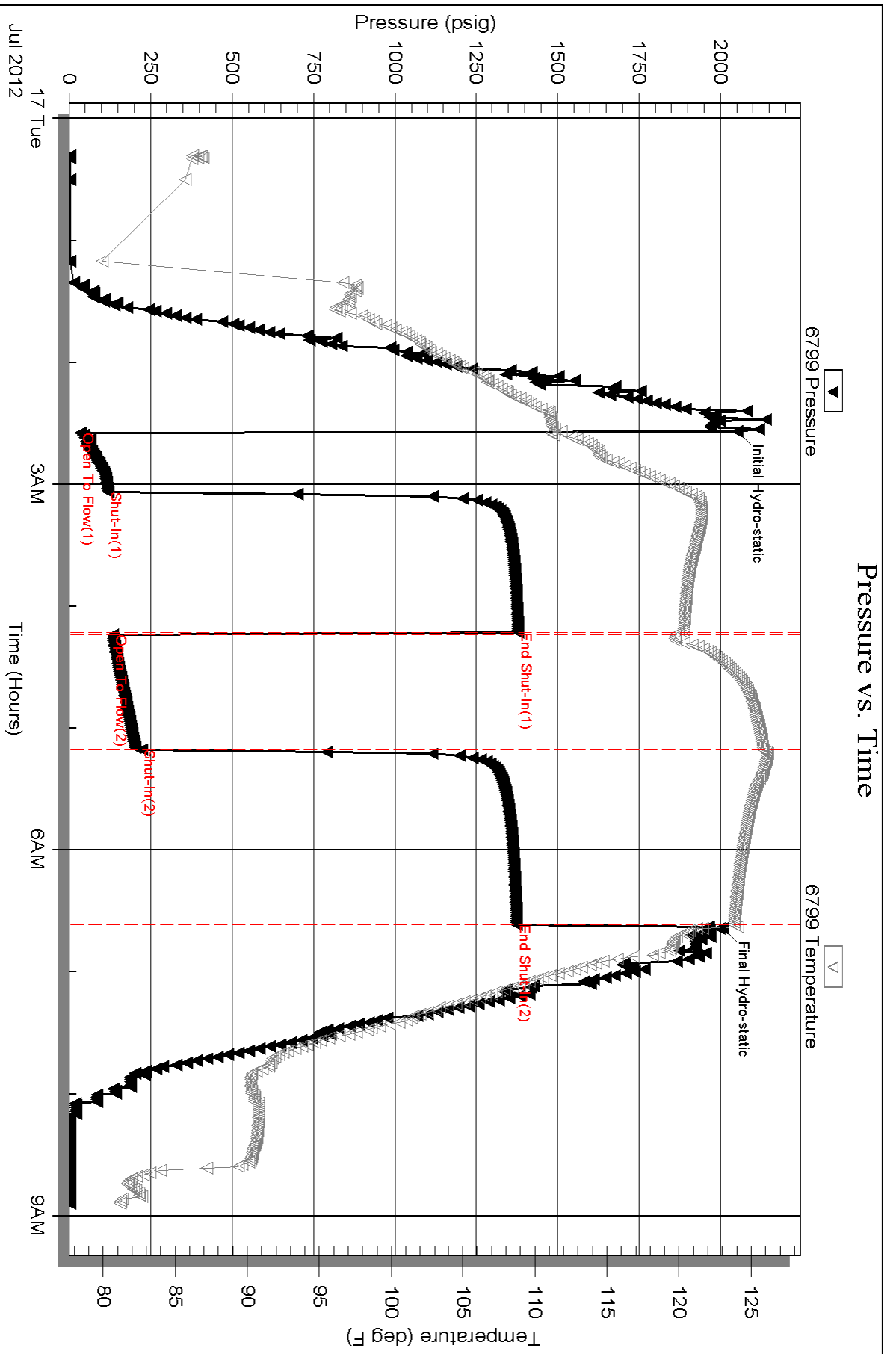
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



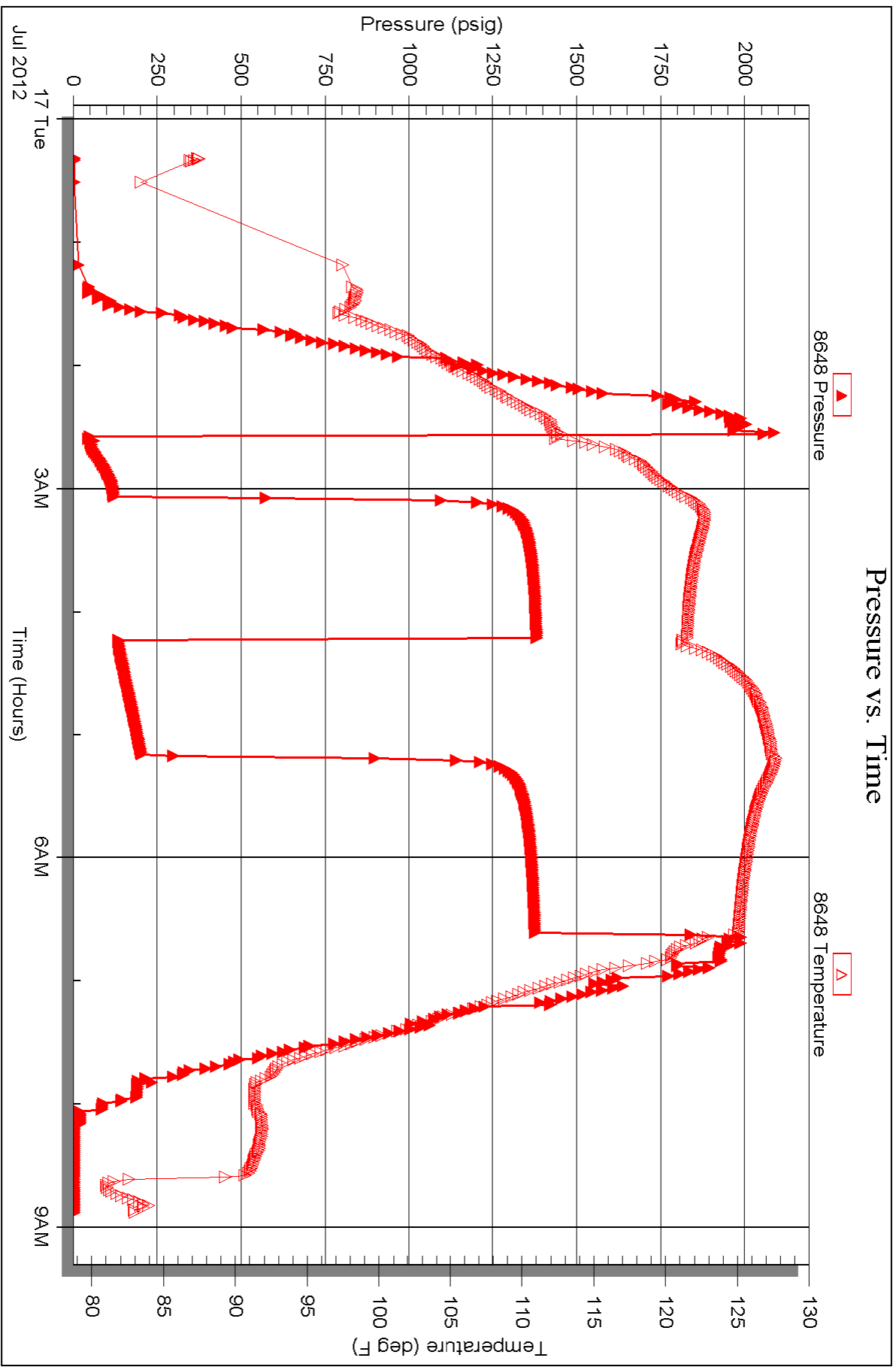
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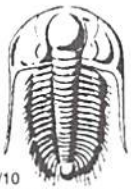
Inside

Murfin Drilling, Co.

Cotton Candy #1-14

DST Test Number: 3





TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48021

Well Name & No. Cotton Candy #1-14 Test No. 1 Date 7-15-12
 Company Murphy Drilling Co. Elevation 2813 KB 2808 GL
 Address 250 N Water STE #300 Wichita, KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murphy #8
 Location: Sec. 14 Twp. 4s Rge. 30w Co. Decatur State KS

Interval Tested 3911-3932 Zone Tested LKC "B"
 Anchor Length 3907 21' Drill Pipe Run 3725 Mud Wt. 9.0
 Top Packer Depth 3907 Drill Collars Run 186 Vis 65
 Bottom Packer Depth 3911 Wt. Pipe Run Ø WL 6.0
 Total Depth 3932 Chlorides 900 ppm System LCM 5#
 Blow Description IF - 1/8" Blow built to 5"
IS - NO Return
FF - Surface Blow started at 4 min. Built to 8"
FS - NO Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>124</u>	<u>MW</u>		<u>70</u>	<u>30</u>	
<u>186</u>	<u>MW</u>		<u>90</u>	<u>10</u>	
<u>0</u>	<u>Show of oil spots in tool</u>	<u>(spots)</u>			

Rec Total 310 BHT 122 Gravity _____ API RW .28 @ 93 ° F Chlorides 19,000 ppm

(A) Initial Hydrostatic <u>2006</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>6:00 AM</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>6:39 AM</u>
(C) First Final Flow <u>87</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>10:48 AM</u>
(D) Initial Shut-In <u>1340</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>2:48 PM</u>
(E) Second Initial Flow <u>95</u>	<input checked="" type="checkbox"/> Hourly Standby <u>X2</u> 1.75h 175	T-Out <u>4:44 PM</u>
(F) Second Final Flow <u>148</u>	<input checked="" type="checkbox"/> Mileage <u>42 RT</u> 65.10	Comments <u>Rig had to</u>
(G) Final Shut-In <u>1335</u>	<input type="checkbox"/> Sampler _____	<u>fix high gear chain</u>
(H) Final Hydrostatic <u>1974</u>	<input type="checkbox"/> Straddle _____	<u>before TIHTT.</u>
	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>0</u>
Initial Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	Total <u>1715.10</u>
Final Flow <u>60</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
Final Shut-In <u>90</u>	Sub Total <u>1715.10</u>	

Approved By _____ Our Representative [Signature]

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.



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48022

Well Name & No. Cotton Candy # 1-14 Test No. 2 Date 7-16-12
 Company Murfin Drilling Co. Elevation 2813 KB 2808 GL
 Address 250 N Water STE #300 Wichita, KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin #8
 Location: Sec. 14 Twp. 4s Rge. 30 W Co. Decatur State KS

Interval Tested 3947-3983 Zone Tested LKC "E-G"
 Anchor Length 36 Drill Pipe Run 3257 Mud Wt. 9.3
 Top Packer Depth 3943 Drill Collars Run 186' Vis 54
 Bottom Packer Depth 3947 Wt. Pipe Run Ø WL 6.8
 Total Depth 3983 Chlorides 1,900 ppm System LCM 5#

Blow Description IF- Surface blow did not build or die
IS- No Return
FF- No Blow
FS- No Return

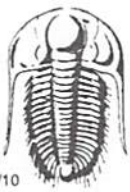
Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 10 BHT 116 Gravity — API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic <u>1959</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>3:40 AM</u>
(B) First Initial Flow <u>20</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>3:46 AM</u>
(C) First Final Flow <u>24</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>5:45 AM</u>
(D) Initial Shut-In <u>1156</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>8:45 AM</u>
(E) Second Initial Flow <u>25</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>10:34 AM</u>
(F) Second Final Flow <u>28</u>	<input checked="" type="checkbox"/> Mileage <u>42 RT</u> 65.10	Comments
(G) Final Shut-In <u>1020</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>1939</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1540.10</u>
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1540.10</u>	

Approved By _____ Our Representative

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TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

Test Ticket

NO. 48023

Well Name & No. Cotton Candy #1-14 Test No. 3 Date 7-16-12
 Company Murfin Drilling Co. Elevation 2413 KB 2808 GL
 Address 250 N Water STE #300 Wichita, KS 67202
 Co. Rep / Geo. Rocky Milford Rig Murfin #8
 Location: Sec. 14 Twp. 4S Rge. 30W Co. Decatur State KS

Interval Tested 3996-4087 Zone Tested LKC "H-K"
 Anchor Length 91 Drill Pipe Run 3787 Mud Wt. 9.0
 Top Packer Depth 3992 Drill Collars Run 186' Vis 54
 Bottom Packer Depth 3996 Wt. Pipe Run 0 WL 6.4
 Total Depth 4087 Chlorides 1,700 ppm System LCM 5#
 Blow Description IF- 1/8" Blow built to 9 1/2"
IS- No Return
FF- Surface blow started at 3 min. Built to BOB in 55 min
FS- No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>194</u>	<u>UM</u>		<u>30</u>	<u>70</u>	
<u>180</u>	<u>MW</u>		<u>85</u>	<u>15</u>	
<u>5</u>	<u>Mud (heavy)</u>			<u>100</u>	

Rec Total 380' BHT 124 Gravity - API RW - @ - ° F Chlorides - ppm

(A) Initial Hydrostatic <u>2051</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>11:50 AM</u>
(B) First Initial Flow <u>34</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>12:18 AM</u>
(C) First Final Flow <u>119</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>2:34 AM</u>
(D) Initial Shut-In <u>1379</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>6:34 AM</u>
(E) Second Initial Flow <u>134</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>8:54 AM</u>
(F) Second Final Flow <u>222</u>	<input checked="" type="checkbox"/> Mileage <u>42 RT</u> 65.10	Comments <u>RV Meter</u>
(G) Final Shut-In <u>1375</u>	<input type="checkbox"/> Sampler	<u>is not reading correctly</u>
(H) Final Hydrostatic <u>2007</u>	<input type="checkbox"/> Straddle	
Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>90</u>	<input checked="" type="checkbox"/> Day Standby <u>X1</u> 1d 12h	Sub Total <u>800</u>
	<input type="checkbox"/> Accessibility	Total <u>2690.10</u>
	Sub Total <u>1890.10</u>	MP/DST Disc't

Approved By _____ Our Representative

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