



DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc.**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Tom Funk

Kruto #1-29

29-10s-34w Thomas,KS

Start Date: 2012.02.18 @ 04:55:00

End Date: 2012.02.18 @ 13:09:45

Job Ticket #: 45067 DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.02.23 @ 15:35:00



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45067

DST#: 1

ATTN: Tom Funk

Test Start: 2012.02.18 @ 04:55:00

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:47:45

Time Test Ended: 13:09:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Jace McKinney

Unit No: 46

Interval: 4141.00 ft (KB) To 4180.00 ft (KB) (TVD)

Reference Elevations: 3258.00 ft (KB)

Total Depth: 4180.00 ft (KB) (TVD)

3245.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8675

Inside

Press @ Run Depth: 327.45 psig @ 4142.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.18

End Date:

2012.02.18

Last Calib.: 2012.02.18

Start Time: 04:55:01

End Time:

13:09:45

Time On Btm: 2012.02.18 @ 07:45:45

Time Off Btm: 2012.02.18 @ 10:49:30

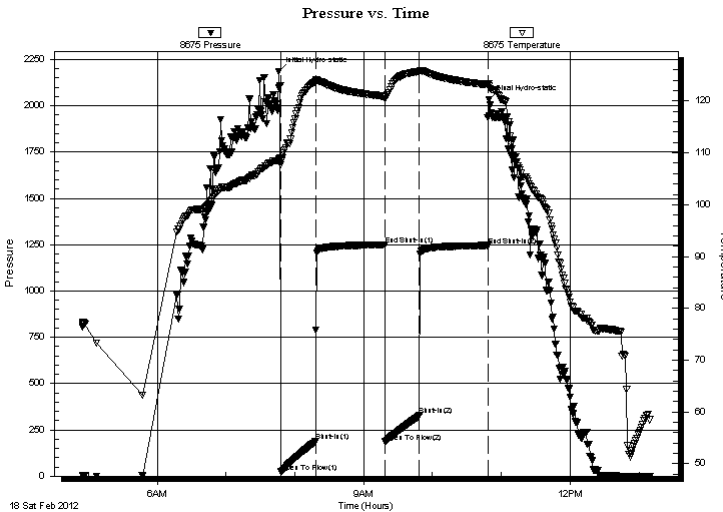
TEST COMMENT: B.O.B. in 10 min.

Bled off for 5 min. No return blow

B.O.B. in 11 min.

Bled off for 5 min. No return blow

PRESSURE SUMMARY



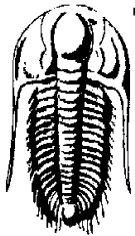
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2186.00	108.58	Initial Hydro-static
2	22.40	107.78	Open To Flow (1)
33	186.82	123.77	Shut-In(1)
93	1248.54	120.91	End Shut-In(1)
93	185.02	120.51	Open To Flow (2)
123	327.45	125.70	Shut-In(2)
183	1245.31	123.11	End Shut-In(2)
184	2032.65	122.88	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
196.00	mcw 30%M 70%W	2.75
372.00	100%W	5.22

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45067

DST#: 1

ATTN: Tom Funk

Test Start: 2012.02.18 @ 04:55:00

GENERAL INFORMATION:

Formation: **Toronto**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:47:45

Time Test Ended: 13:09:45

Test Type: Conventional Bottom Hole (Initial)

Tester: Jace McKinney

Unit No: 46

Interval: **4141.00 ft (KB) To 4180.00 ft (KB) (TVD)**

Total Depth: 4180.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3258.00 ft (KB)

3245.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: **8650 Outside**

Press @ RunDepth: psig @ 4142.00 ft (KB)

Start Date: 2012.02.18 End Date: 2012.02.18

Start Time: 04:55:01 End Time: 13:09:45

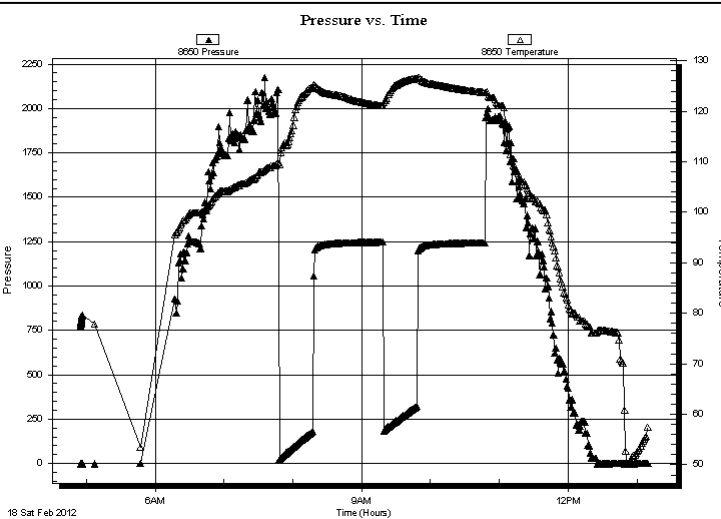
Capacity: 8000.00 psig

Last Calib.: 2012.02.18

Time On Btm:

Time Off Btm:

TEST COMMENT: B.O.B. in 10 min.
Bled off for 5 min. No return blow
B.O.B. in 11 min.
Bled off for 5 min. No return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
196.00	mcw 30%M 70%W	2.75
372.00	100%W	5.22

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45067

DST#: 1

ATTN: Tom Funk

Test Start: 2012.02.18 @ 04:55:00

Tool Information

Drill Pipe:	Length: 4137.04 ft	Diameter: 3.80 inches	Volume: 58.03 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 58.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.04 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4141.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	39.00 ft			
Tool Length:	59.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			4122.00	
Shut In Tool	5.00			4127.00	
Hydraulic tool	5.00			4132.00	
Packer	5.00			4137.00	20.00 Bottom Of Top Packer
Packer	4.00			4141.00	
Stubb	1.00			4142.00	
Recorder	0.00	8675	Inside	4142.00	
Recorder	0.00	8650	Outside	4142.00	
Perforations	35.00			4177.00	
Change Over Sub	0.00			4177.00	
Drill Pipe	0.00			4177.00	
Change Over Sub	0.00			4177.00	
Bullnose	3.00			4180.00	39.00 Bottom Packers & Anchor

Total Tool Length: 59.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45067

DST#: 1

ATTN: Tom Funk

Test Start: 2012.02.18 @ 04:55:00

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: 46.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
196.00	mcw 30%M 70%W	2.749
372.00	100%W	5.218

Total Length: 568.00 ft Total Volume: 7.967 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: 0.15 @ 50 F = 70,000

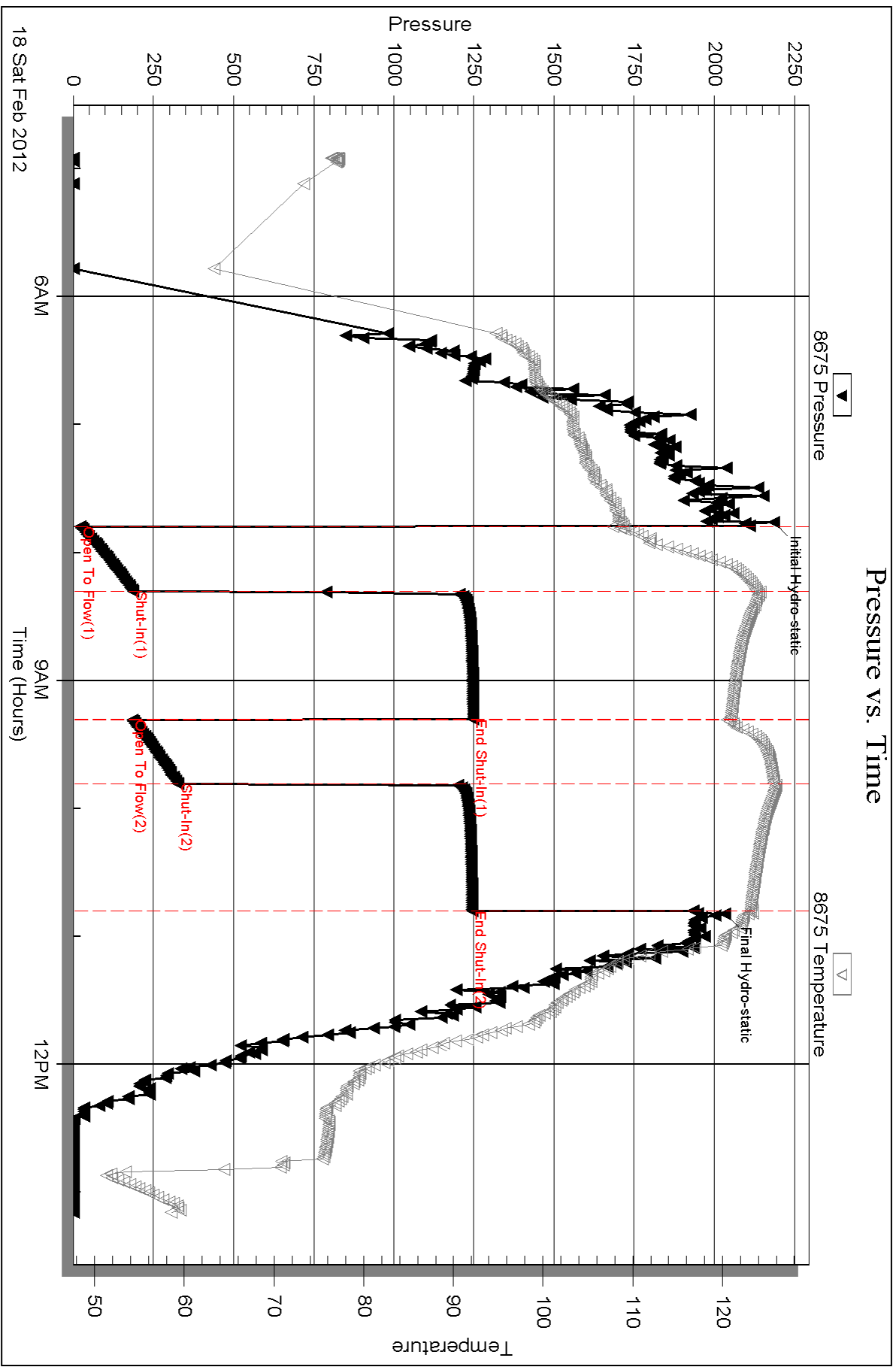
Serial #: 8675

Inside

Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 1



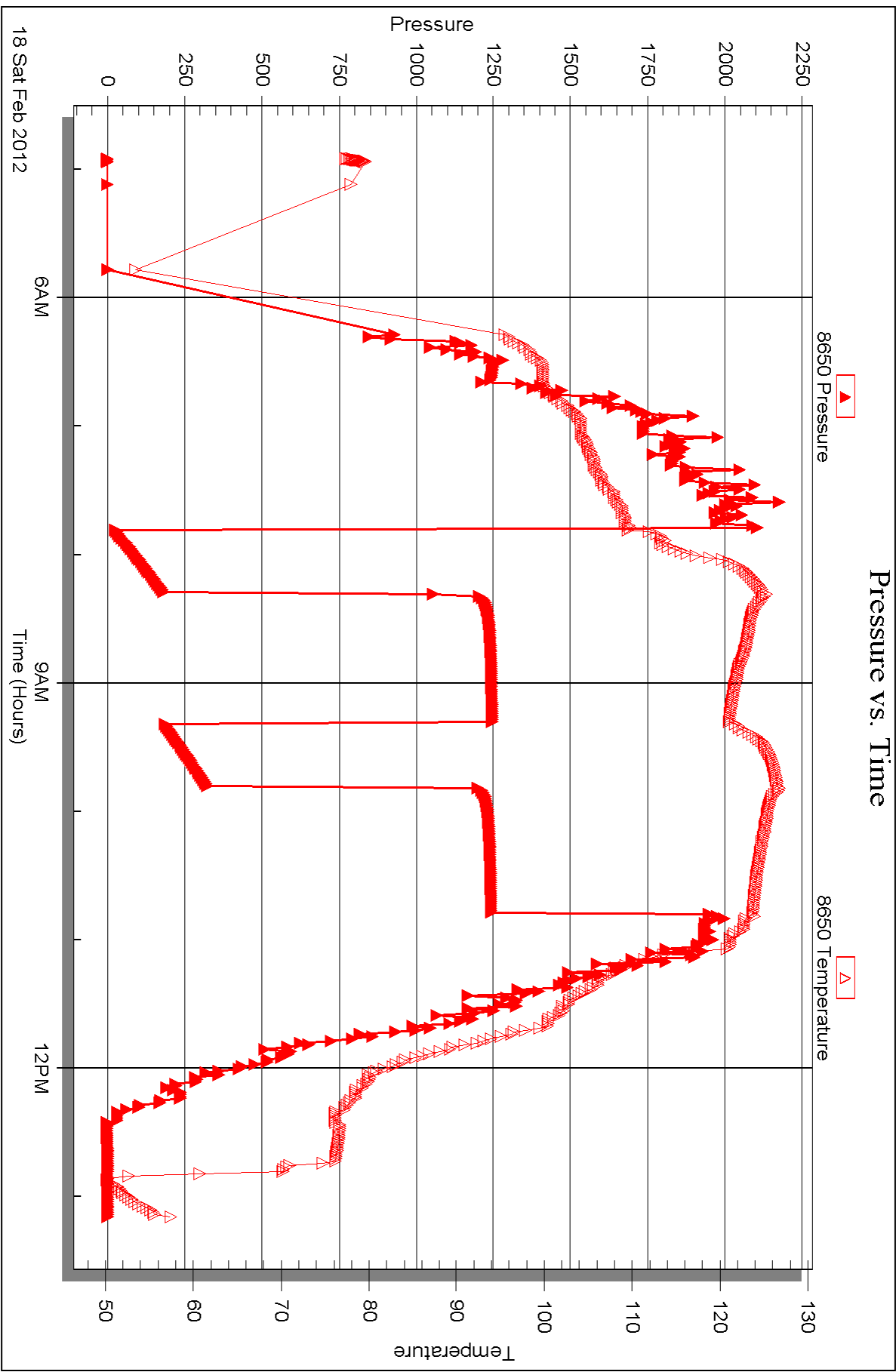
Serial #: 8650

Outside

Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc.**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Tom Funk

Kruto #1-29

29-10s-34w Thomas,KS

Start Date: 2012.02.19 @ 10:00:00

End Date: 2012.02.19 @ 18:07:45

Job Ticket #: 45068 DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.02.23 @ 15:34:08



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45068

DST#: 2

ATTN: Tom Funk

Test Start: 2012.02.19 @ 10:00:00

GENERAL INFORMATION:

Formation: **Kansas City " H, I,**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 12:06:00
 Time Test Ended: 18:07:45
 Interval: **4315.00 ft (KB) To 4400.00 ft (KB) (TVD)**
 Total Depth: 4400.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jace McKinney
 Unit No: 46
 Reference Elevations: 3258.00 ft (KB)
 3245.00 ft (CF)
 KB to GR/CF: 13.00 ft

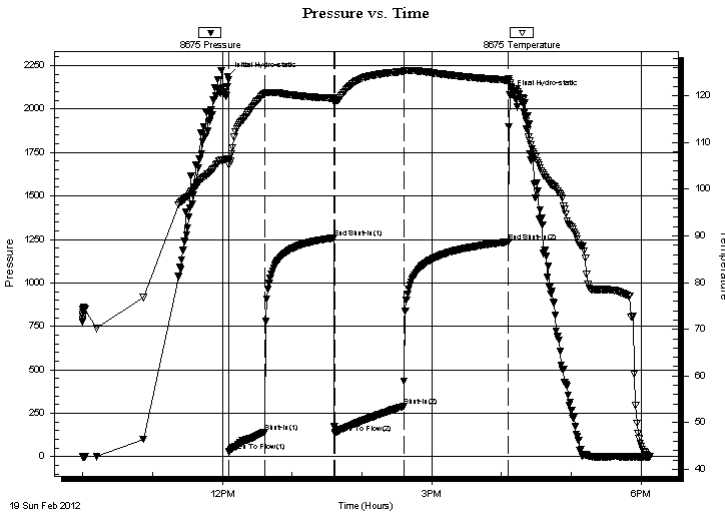
Serial #: 8675

Inside

Press @ Run Depth: 290.73 psig @ 4316.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.02.19 End Date: 2012.02.19 Last Calib.: 2012.02.19
 Start Time: 10:00:01 End Time: 18:07:45 Time On Btm: 2012.02.19 @ 12:04:30
 Time Off Btm: 2012.02.19 @ 16:07:00

TEST COMMENT: B.O.B. in 16 min.
 Bled off for 5 min. No return blow
 B.O.B. in 20 min.
 Bled off for 5 min. No return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2188.55	106.52	Initial Hydro-static
2	28.91	105.25	Open To Flow (1)
32	141.54	120.39	Shut-In(1)
92	1258.87	119.45	End Shut-In(1)
92	136.83	119.04	Open To Flow (2)
152	290.73	125.21	Shut-In(2)
242	1236.23	123.34	End Shut-In(2)
243	2082.61	122.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
10.00	100% Free Oil	0.14
186.00	mcw 30%M 70%W	2.61
392.00	100%W	5.50

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45068

DST#: 2

ATTN: Tom Funk

Test Start: 2012.02.19 @ 10:00:00

Tool Information

Drill Pipe:	Length: 4325.39 ft	Diameter: 3.80 inches	Volume: 60.67 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 74000.00 lb
			<u>Total Volume: 60.67 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	30.39 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4315.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	105.00 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			4296.00	
Shut In Tool	5.00			4301.00	
Hydraulic tool	5.00			4306.00	
Packer	5.00			4311.00	20.00 Bottom Of Top Packer
Packer	4.00			4315.00	
Stubb	1.00			4316.00	
Recorder	0.00	8675	Inside	4316.00	
Recorder	0.00	8650	Outside	4316.00	
Perforations	17.00			4333.00	
Change Over Sub	1.00			4334.00	
Drill Pipe	62.00			4396.00	
Change Over Sub	1.00			4397.00	
Bullnose	3.00			4400.00	85.00 Bottom Packers & Anchor

Total Tool Length: 105.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45068

DST#: 2

ATTN: Tom Funk

Test Start: 2012.02.19 @ 10:00:00

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: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	100% Free Oil	0.140
186.00	mcw 30%M 70%W	2.609
392.00	100%W	5.499

Total Length: 588.00 ft Total Volume: 8.248 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .15 @ 50 F = 70,000

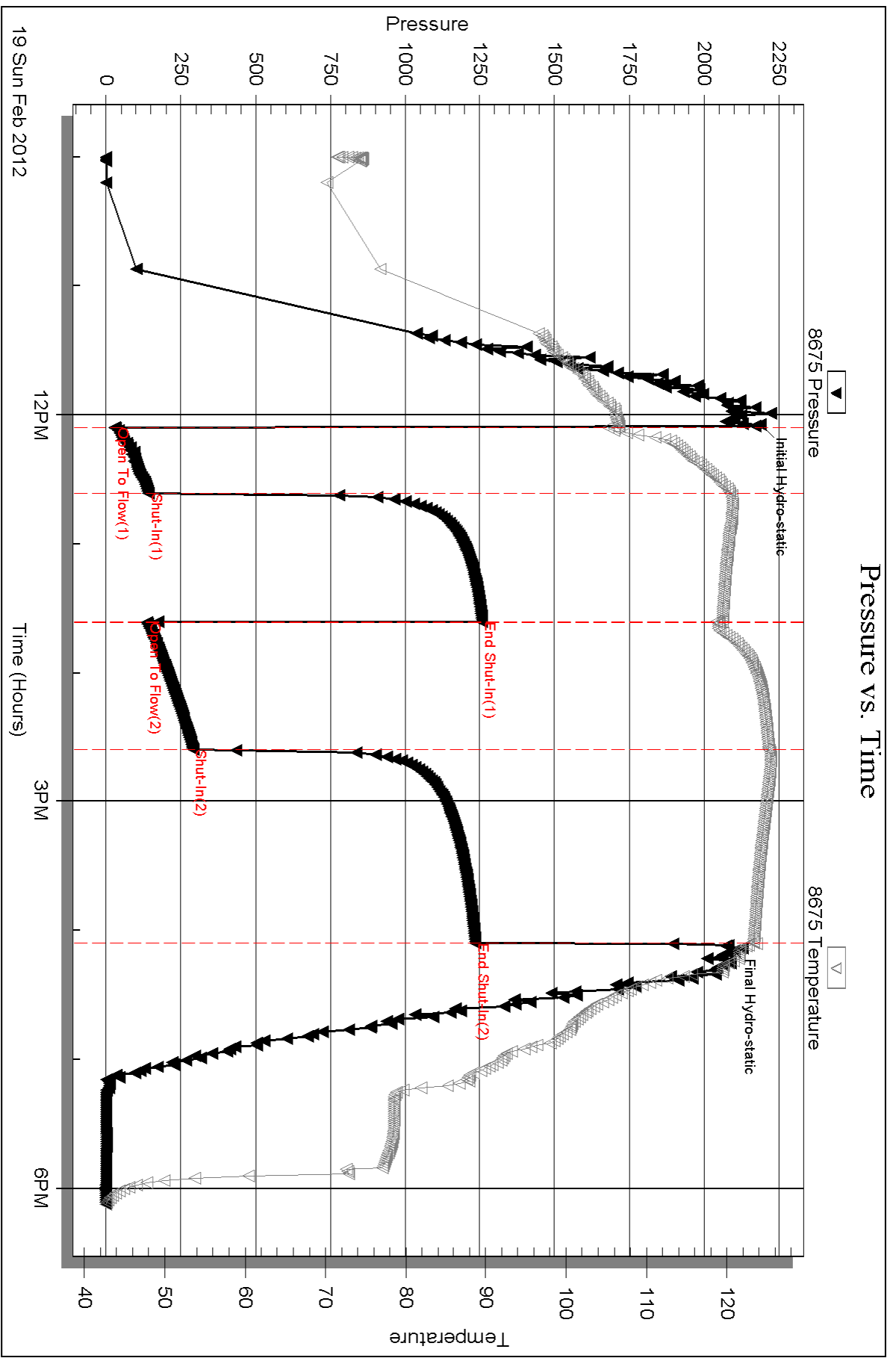
Serial #: 8675

Inside

Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 45068

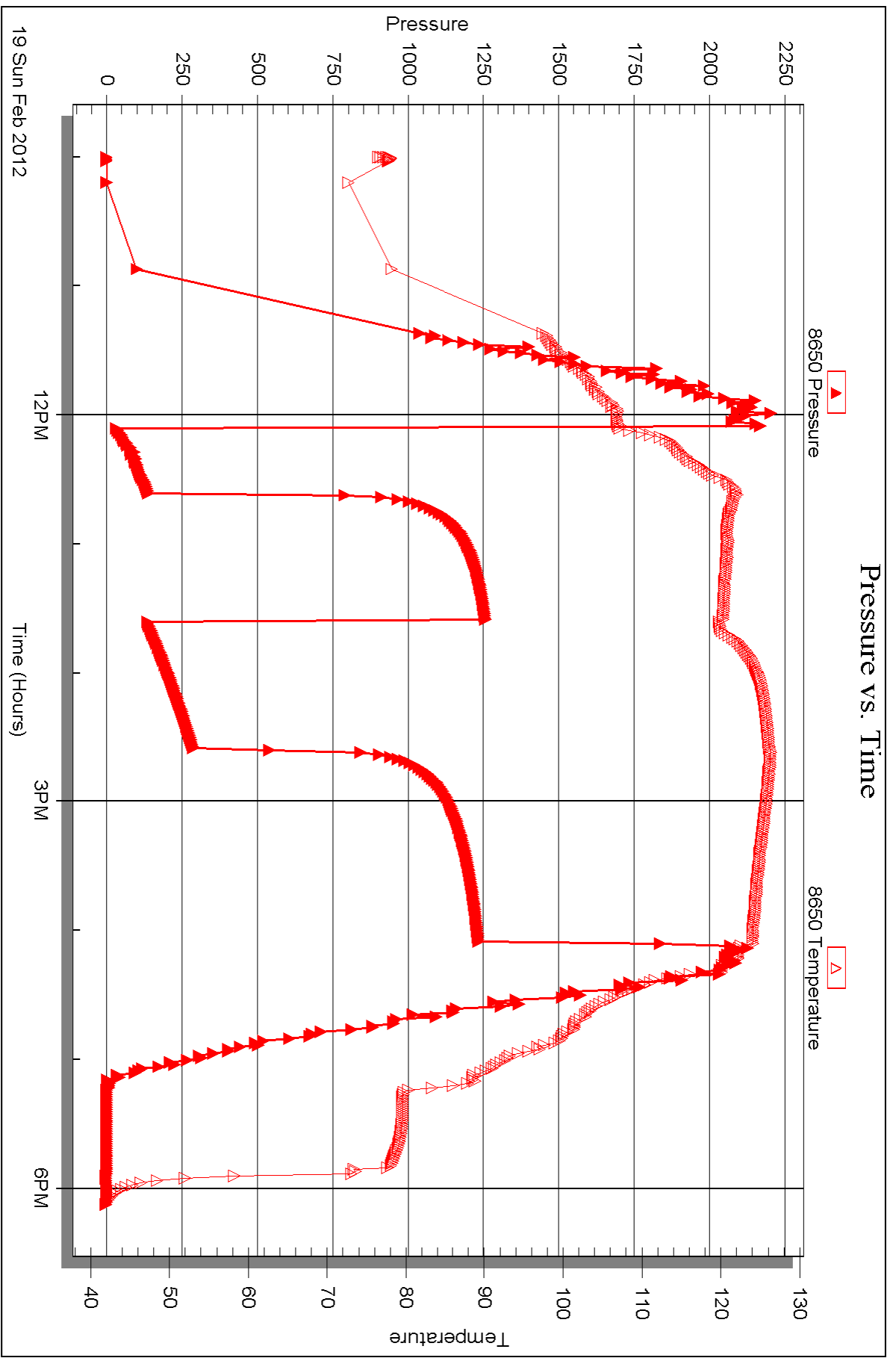
Printed: 2012.02.23 @ 15:34:10

Serial #: 8650

Outside Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc.**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Tom Funk

Kruto #1-29

29-10s-34w Thomas,KS

Start Date: 2012.02.20 @ 02:00:00

End Date: 2012.02.20 @ 10:54:00

Job Ticket #: 45069 DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.02.23 @ 15:33:25



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45069

DST#: 3

ATTN: Tom Funk

Test Start: 2012.02.20 @ 02:00:00

GENERAL INFORMATION:

Formation: **Kansas City " K "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 04:11:30

Time Test Ended: 10:54:00

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4403.00 ft (KB) To 4427.00 ft (KB) (TVD)

Total Depth: 4427.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3258.00 ft (KB)

3245.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: 8675

Inside

Press @ Run Depth: 617.94 psig @ 4404.00 ft (KB)

Start Date: 2012.02.20

End Date:

2012.02.20

Start Time: 02:00:01

End Time:

10:54:00

Capacity: 8000.00 psig

Last Calib.: 2012.02.20

Time On Btm: 2012.02.20 @ 04:10:15

Time Off Btm: 2012.02.20 @ 07:20:45

TEST COMMENT:

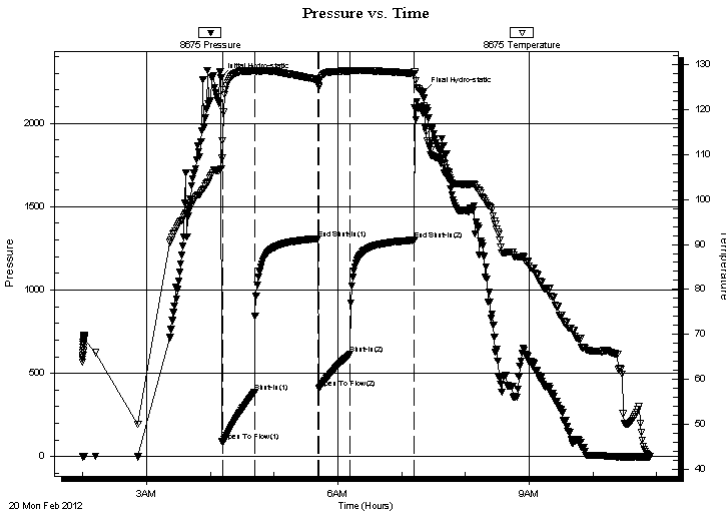
B.O.B. in 2 min.

Bled off for 5 min. Built to 1 1/2" return blow

B.O.B. in 2 1/2 min.

Bled off for 5 min. Built to 3" return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2272.75	106.79	Initial Hydro-static
2	90.91	113.05	Open To Flow (1)
32	386.30	128.70	Shut-In(1)
92	1306.84	126.68	End Shut-In(1)
92	408.81	125.45	Open To Flow (2)
122	617.94	128.64	Shut-In(2)
182	1299.16	128.04	End Shut-In(2)
191	2191.43	122.69	Final Hydro-static

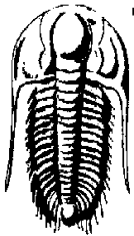
Recovery

Length (ft)	Description	Volume (bbl)
0.00	729 Feet Gas In Pipe	0.00
294.00	Free Oil 10%G 90%O	4.12
186.00	ocg 40%O 60%G	2.61
279.00	w cmgo 10%W 20%M 30%G 40%O	3.91
279.00	gcomw 10%G 10%O 20%M 60%W	3.91
372.00	100% Water	5.22

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

29-10s-34w Thomas, KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45069

DST#: 3

ATTN: Tom Funk

Test Start: 2012.02.20 @ 02:00:00

GENERAL INFORMATION:

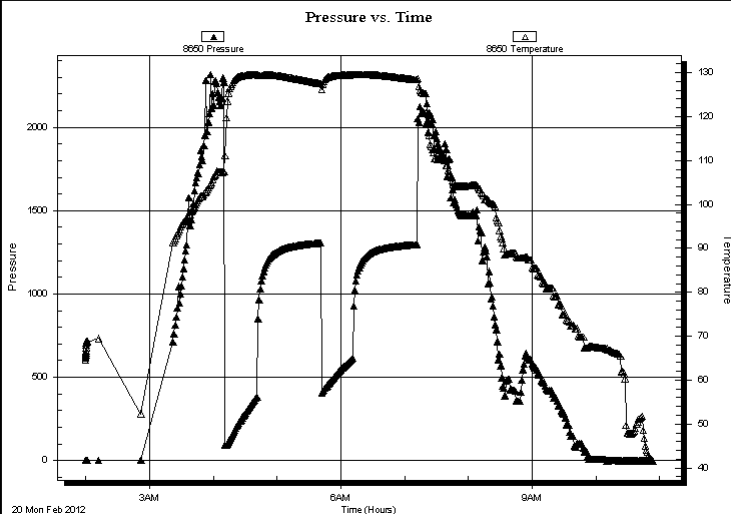
Formation: **Kansas City " K "**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 04:11:30
 Time Test Ended: 10:54:00
 Interval: **4403.00 ft (KB) To 4427.00 ft (KB) (TVD)**
 Total Depth: 4427.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Jace McKinney
 Unit No: 46
 Reference Elevations: 3258.00 ft (KB)
 3245.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 8650

Outside

Press @ Run Depth: psig @ 4404.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2012.02.20 End Date: 2012.02.20 Last Calib.: 2012.02.20
 Start Time: 02:00:01 End Time: 10:54:00 Time On Btm:
 Time Off Btm:

TEST COMMENT: B.O.B. in 2 min.
 Bled off for 5 min. Built to 1 1/2" return blow
 B.O.B. in 2 1/2 min.
 Bled off for 5 min. Built to 3" return blow



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	729 Feet Gas In Pipe	0.00
294.00	Free Oil 10%G 90%O	4.12
186.00	ocg 40%O 60%G	2.61
279.00	w cmgo 10%W 20%M 30%G 40%O	3.91
279.00	gcomw 10%G 10%O 20%M 60%W	3.91
372.00	100% Water	5.22

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45069

DST#: 3

ATTN: Tom Funk

Test Start: 2012.02.20 @ 02:00:00

Tool Information

Drill Pipe:	Length: 4388.73 ft	Diameter: 3.80 inches	Volume: 61.56 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 78000.00 lb
			<u>Total Volume: 61.56 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.73 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4403.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	44.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			4384.00	
Shut In Tool	5.00			4389.00	
Hydraulic tool	5.00			4394.00	
Packer	5.00			4399.00	20.00 Bottom Of Top Packer
Packer	4.00			4403.00	
Stubb	1.00			4404.00	
Recorder	0.00	8675	Inside	4404.00	
Recorder	0.00	8650	Outside	4404.00	
Perforations	20.00			4424.00	
Change Over Sub	0.00			4424.00	
Drill Pipe	0.00			4424.00	
Change Over Sub	0.00			4424.00	
Bullnose	3.00			4427.00	24.00 Bottom Packers & Anchor

Total Tool Length: 44.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45069

DST#: 3

ATTN: Tom Funk

Test Start: 2012.02.20 @ 02:00:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

33 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

50000 ppm

Viscosity: 45.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	729 Feet Gas In Pipe	0.000
294.00	Free Oil 10%G 90%O	4.124
186.00	ocg 40%O 60%G	2.609
279.00	w cmgo 10%W 20%M 30%G 40%O	3.914
279.00	gcomw 10%G 10%O 20%M 60%W	3.914
372.00	100% Water	5.218

Total Length: 1410.00 ft Total Volume: 19.779 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW: .20 @ 50 F = 50,000

API: 31 @ 40 F = 33

Serial #: 8675

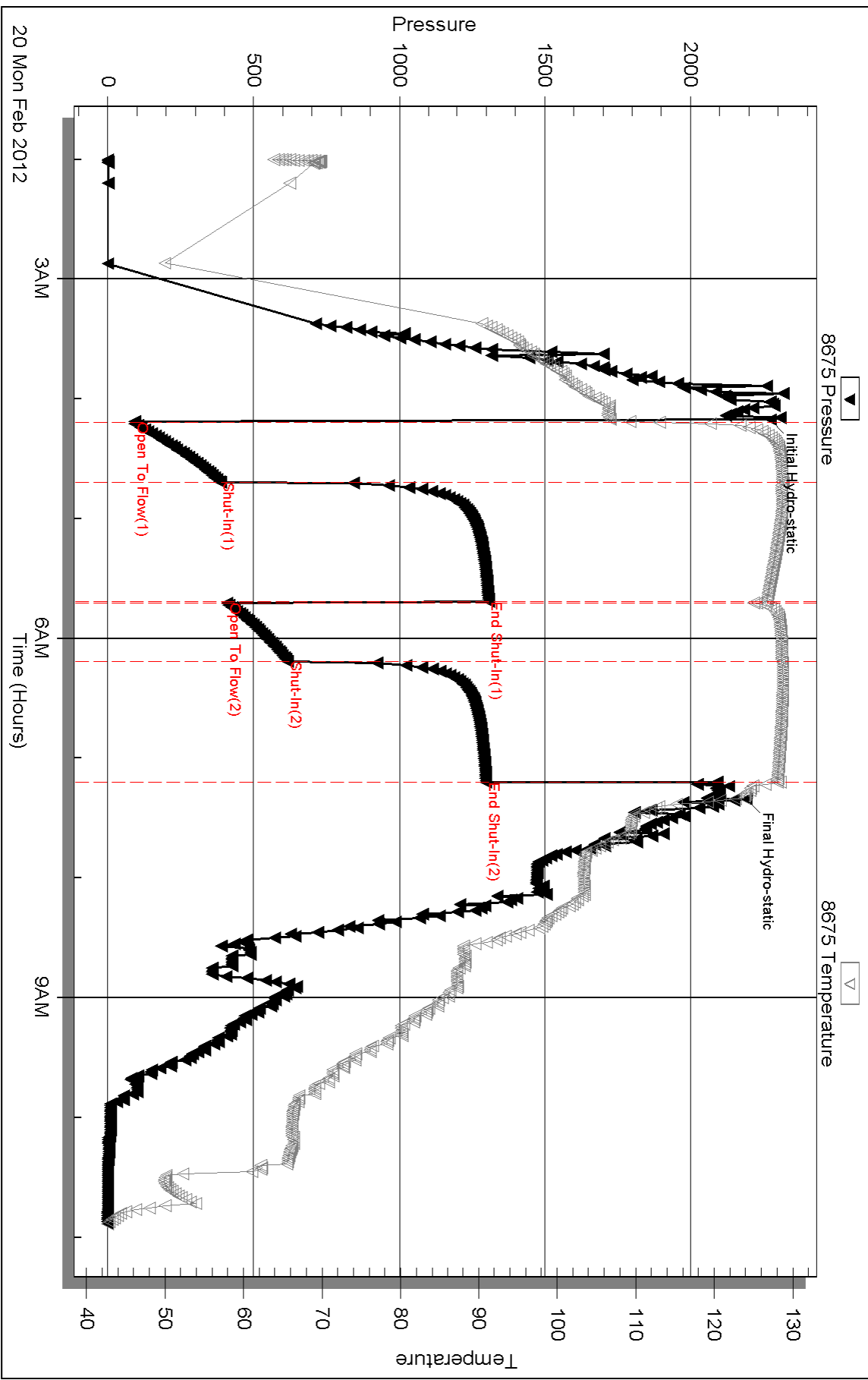
Inside

Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 3

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 45069

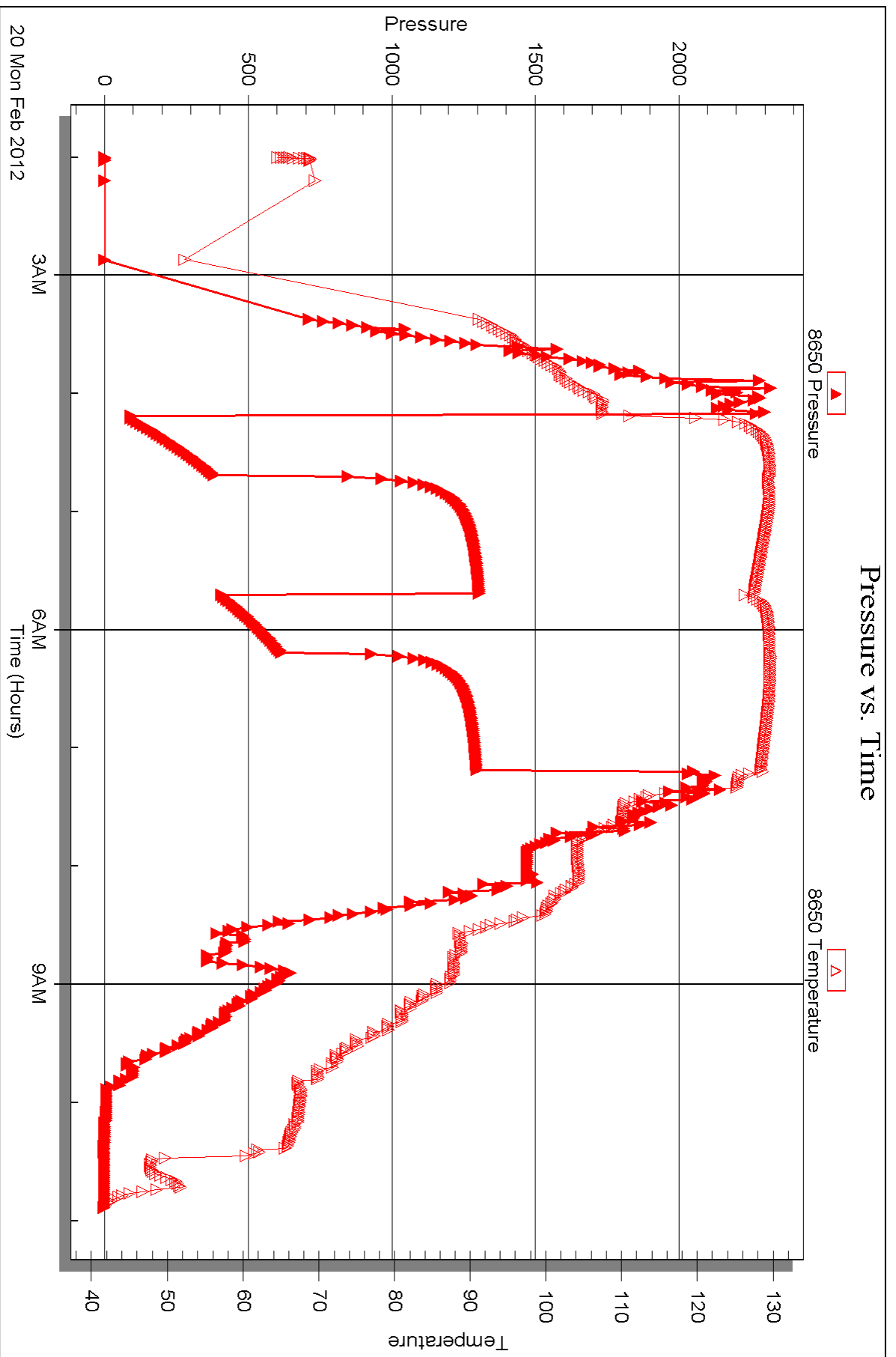
Printed: 2012.02.23 @ 15:33:27

Serial #: 8650

Outside Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 3





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc.**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Tom Funk

Kruto #1-29

29-10s-34w Thomas,KS

Start Date: 2012.02.21 @ 06:45:00

End Date: 2012.02.21 @ 16:34:30

Job Ticket #: 45070 DST #: 4

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2012.02.23 @ 15:32:25



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45070

DST#: 4

ATTN: Tom Funk

Test Start: 2012.02.21 @ 06:45:00

GENERAL INFORMATION:

Formation: **Myric Station**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:56:15

Time Test Ended: 16:34:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4623.00 ft (KB) To 4661.00 ft (KB) (TVD)

Reference Elevations: 3258.00 ft (KB)

Total Depth: 4661.00 ft (KB) (TVD)

3245.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8675

Inside

Press @ Run Depth: 602.75 psig @ 4624.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.21

End Date:

2012.02.21

Last Calib.:

2012.02.21

Start Time: 06:45:01

End Time:

16:34:30

Time On Btm:

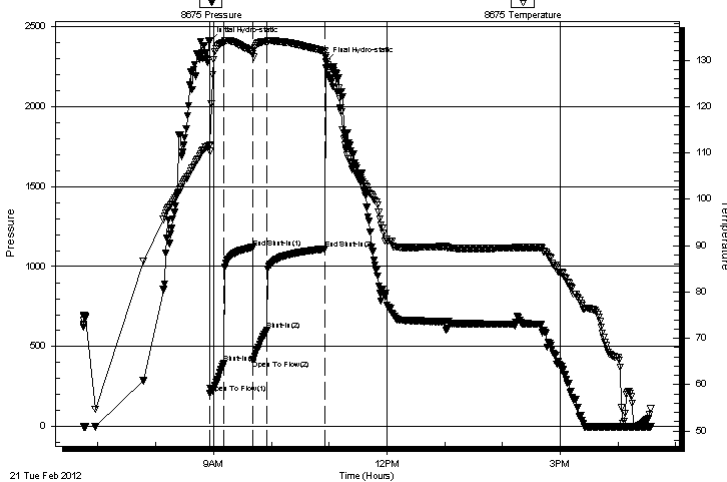
2012.02.21 @ 08:56:00

Time Off Btm:

2012.02.21 @ 10:56:45

TEST COMMENT: B.O.B. in 1 min.
Bled off for 5 min. B.O.B. in 2 min.
B.O.B. in 1 1/2 min.
Bled off for 5 min. B.O.B. in 3 min.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2407.28	111.54	Initial Hydro-static
1	210.10	110.35	Open To Flow (1)
15	393.99	133.81	Shut-In(1)
45	1119.08	131.88	End Shut-In(1)
45	413.16	131.49	Open To Flow (2)
60	602.75	133.98	Shut-In(2)
120	1110.32	132.02	End Shut-In(2)
121	2278.05	130.63	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	1503 Feet Gas In Pipe	0.00
1287.00	1287 100% Oil Drop the bar	18.05
186.00	w cmgo 10%W 30%M 30%G 30%O	2.61

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Tom Funk

29-10s-34w Thomas, KS

Kruto #1-29

Job Ticket: 45070

DST#: 4

Test Start: 2012.02.21 @ 06:45:00

GENERAL INFORMATION:

Formation: **Myric Station**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 08:56:15

Time Test Ended: 16:34:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: **4623.00 ft (KB) To 4661.00 ft (KB) (TVD)**

Total Depth: 4661.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Fair

Reference Elevations: 3258.00 ft (KB)

3245.00 ft (CF)

KB to GR/CF: 13.00 ft

Serial #: **8650** Outside

Press @ Run Depth: psig @ 4624.00 ft (KB)

Start Date: 2012.02.21

End Date:

2012.02.21

Capacity: 8000.00 psig

Last Calib.:

2012.02.21

Start Time: 06:45:01

End Time:

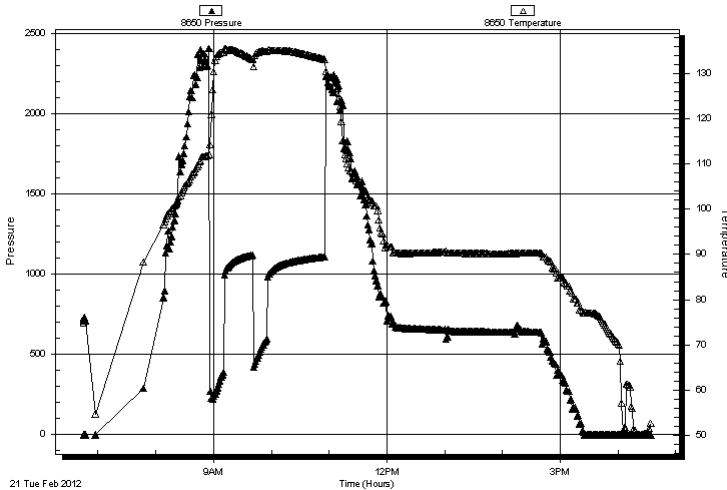
16:34:15

Time On Btm:

Time Off Btm:

TEST COMMENT: B.O.B. in 1 min.
Bled off for 5 min. B.O.B. in 2 min.
B.O.B. in 1 1/2 min.
Bled off for 5 min. B.O.B. in 3 min.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	1503 Feet Gas In Pipe	0.00
1287.00	1287 100% Oil Drop the bar	18.05
186.00	w cmgo 10%W 30%M 30%G 30%O	2.61

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45070

DST#: 4

ATTN: Tom Funk

Test Start: 2012.02.21 @ 06:45:00

Tool Information

Drill Pipe:	Length: 4608.61 ft	Diameter: 3.80 inches	Volume: 64.65 bbl	Tool Weight: 1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 64.65 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.61 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4623.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	38.00 ft			
Tool Length:	58.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			4604.00	
Shut In Tool	5.00			4609.00	
Hydraulic tool	5.00			4614.00	
Packer	5.00			4619.00	20.00 Bottom Of Top Packer
Packer	4.00			4623.00	
Stubb	1.00			4624.00	
Recorder	0.00	8675	Inside	4624.00	
Recorder	0.00	8650	Outside	4624.00	
Perforations	34.00			4658.00	
Change Over Sub	0.00			4658.00	
Drill Pipe	0.00			4658.00	
Change Over Sub	0.00			4658.00	
Bullnose	3.00			4661.00	38.00 Bottom Packers & Anchor

Total Tool Length: 58.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45070

DST#: 4

ATTN: Tom Funk

Test Start: 2012.02.21 @ 06:45:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 69.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 9900.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	1503 Feet Gas In Pipe	0.000
1287.00	1287 100% Oil Drop the bar	18.053
186.00	w cmgo 10%W 30%M 30%G 30%O	2.609

Total Length: 1473.00 ft Total Volume: 20.662 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API: 39 @ 60 F = 39

Serial #: 8675

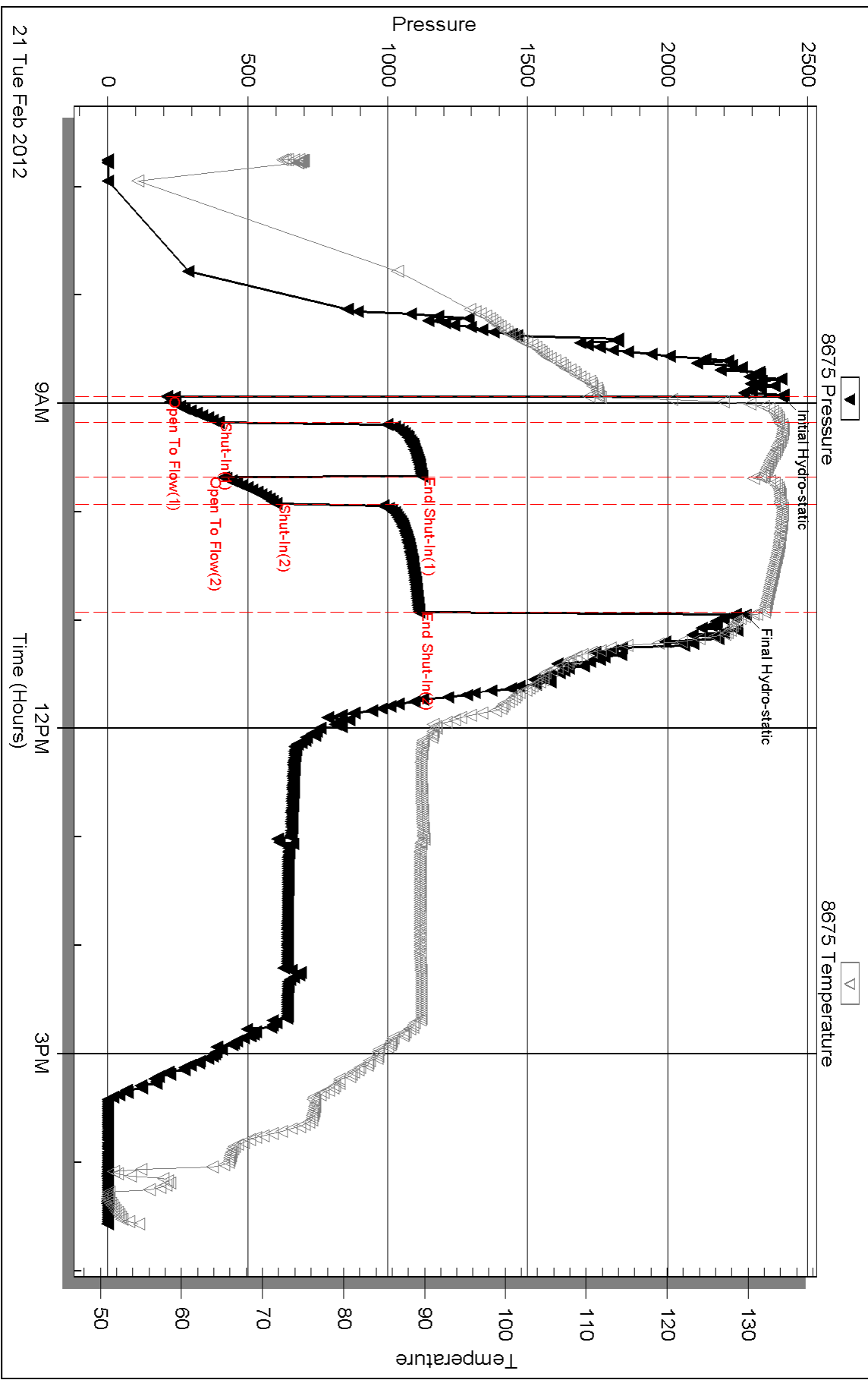
Inside

Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 4

Pressure vs. Time



Triobite Testing, Inc

Ref. No: 45070

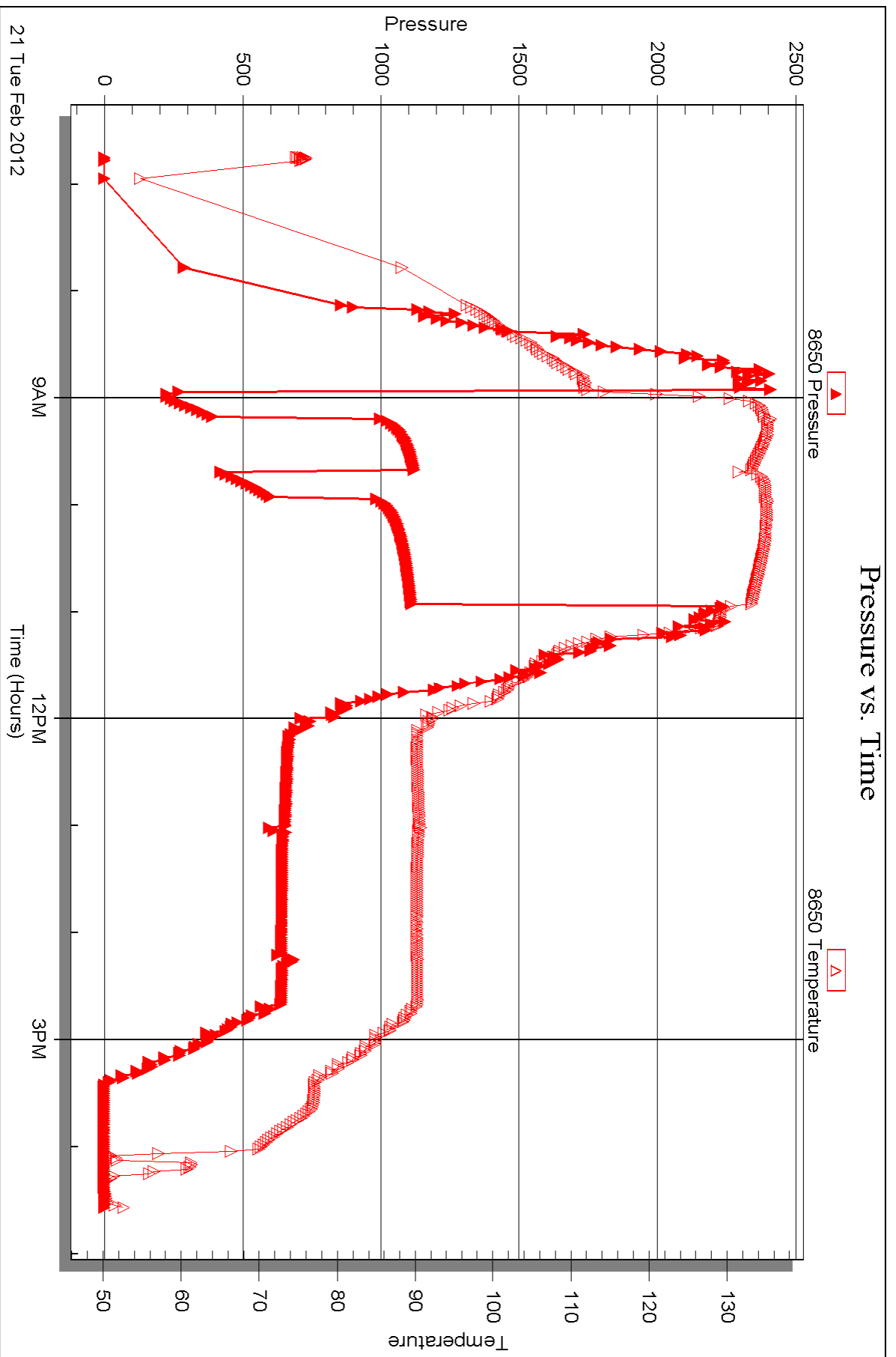
Printed: 2012.02.23 @ 15:32:27

Serial #: 8650

Outside Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 4





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Company Inc.**

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Tom Funk

Kruto #1-29

29-10s-34w Thomas,KS

Start Date: 2012.02.22 @ 04:05:00

End Date: 2012.02.22 @ 13:06:15

Job Ticket #: 45071 DST #: 5

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

Printed: 2012.02.23 @ 15:31:24



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45071

DST#: 5

ATTN: Tom Funk

Test Start: 2012.02.22 @ 04:05:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:41:15

Time Test Ended: 13:06:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4706.00 ft (KB) To 4762.00 ft (KB) (TVD)

Reference Elevations: 3258.00 ft (KB)

Total Depth: 4762.00 ft (KB) (TVD)

3245.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8675 Inside

Press @ Run Depth: 127.12 psig @ 4707.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.22

End Date:

2012.02.22

Last Calib.:

2012.02.22

Start Time: 04:05:01

End Time:

13:06:15

Time On Btm:

2012.02.22 @ 06:41:00

Time Off Btm:

2012.02.22 @ 10:46:45

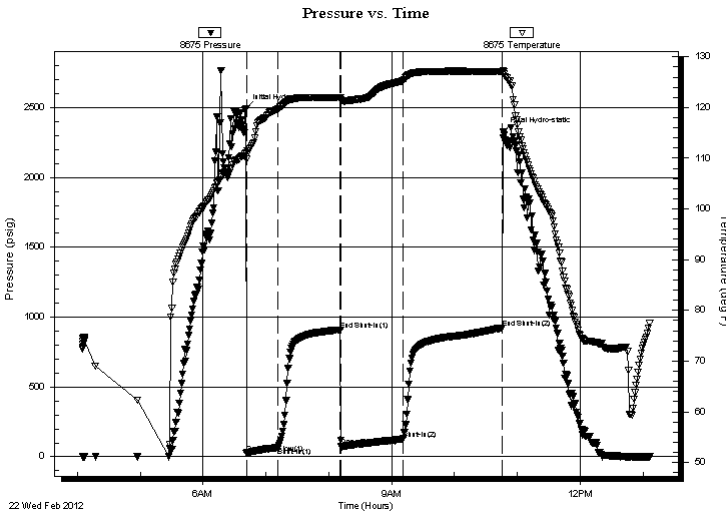
TEST COMMENT: B.O.B. in 15 min.

Bled off for 5 min. Built to 1" return blow

B.O.B. in 4 min.

Bled off for 5 min. Built to 2" return blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2493.23	111.05	Initial Hydro-static
1	24.06	109.83	Open To Flow (1)
31	66.40	119.73	Shut-In(1)
90	909.30	122.02	End Shut-In(1)
91	73.26	121.62	Open To Flow (2)
150	127.12	125.30	Shut-In(2)
245	923.42	127.10	End Shut-In(2)
246	2326.00	126.99	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	635 Feet Weak Gas In Pipe	0.00
289.00	mco 30%M 30%G 40%O	4.05

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

Murfin Drilling Company Inc.

250 N Water Ste 300
Wichita KS 67202-1216

ATTN: Tom Funk

29-10s-34w Thomas,KS

Kruto #1-29

Job Ticket: 45071

DST#: 5

Test Start: 2012.02.22 @ 04:05:00

GENERAL INFORMATION:

Formation: **Johnson**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:41:15

Time Test Ended: 13:06:15

Test Type: Conventional Bottom Hole (Reset)

Tester: Jace McKinney

Unit No: 46

Interval: 4706.00 ft (KB) To 4762.00 ft (KB) (TVD)

Reference Elevations: 3258.00 ft (KB)

Total Depth: 4762.00 ft (KB) (TVD)

3245.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 13.00 ft

Serial #: 8650 Outside

Press @ Run Depth: psig @ 4707.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2012.02.22

End Date:

2012.02.22

Last Calib.:

2012.02.22

Start Time: 04:05:01

End Time:

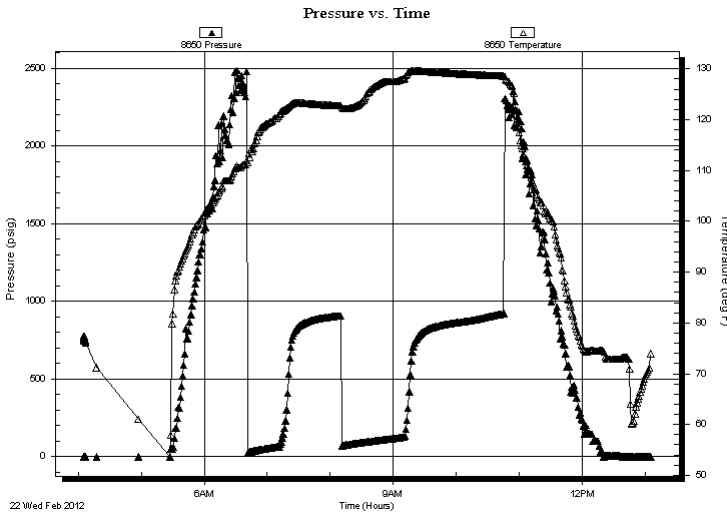
13:06:00

Time On Btm:

Time Off Btm:

TEST COMMENT: B.O.B. in 15 min.
Bled off for 5 min. Built to 1" return blow
B.O.B. in 4 min.
Bled off for 5 min. Built to 2" return blow

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	635 Feet Weak Gas In Pipe	0.00
289.00	mco 30%M 30%G 40%O	4.05

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45071

DST#: 5

ATTN: Tom Funk

Test Start: 2012.02.22 @ 04:05:00

Tool Information

Drill Pipe:	Length: 4702.60 ft	Diameter: 3.80 inches	Volume: 65.97 bbl	Tool Weight:	1500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	30000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose:	70000.00 lb
			<u>Total Volume: 65.97 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	16.60 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4706.00 ft			Final	62000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	56.00 ft				
Tool Length:	76.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			4687.00	
Shut In Tool	5.00			4692.00	
Hydraulic tool	5.00			4697.00	
Packer	5.00			4702.00	20.00 Bottom Of Top Packer
Packer	4.00			4706.00	
Stubb	1.00			4707.00	
Recorder	0.00	8675	Inside	4707.00	
Recorder	0.00	8650	Outside	4707.00	
Perforations	19.00			4726.00	
Change Over Sub	1.00			4727.00	
Drill Pipe	31.00			4758.00	
Change Over Sub	1.00			4759.00	
Bullnose	3.00			4762.00	56.00 Bottom Packers & Anchor

Total Tool Length: 76.00



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Company Inc.

29-10s-34w Thomas,KS

250 N Water Ste 300
Wichita KS 67202-1216

Kruto #1-29

Job Ticket: 45071

DST#: 5

ATTN: Tom Funk

Test Start: 2012.02.22 @ 04:05:00

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: 43.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.59 in³

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 8600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	635 Feet Weak Gas In Pipe	0.000
289.00	mcgo 30%M 30%G 40%O	4.054

Total Length: 289.00 ft Total Volume: 4.054 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

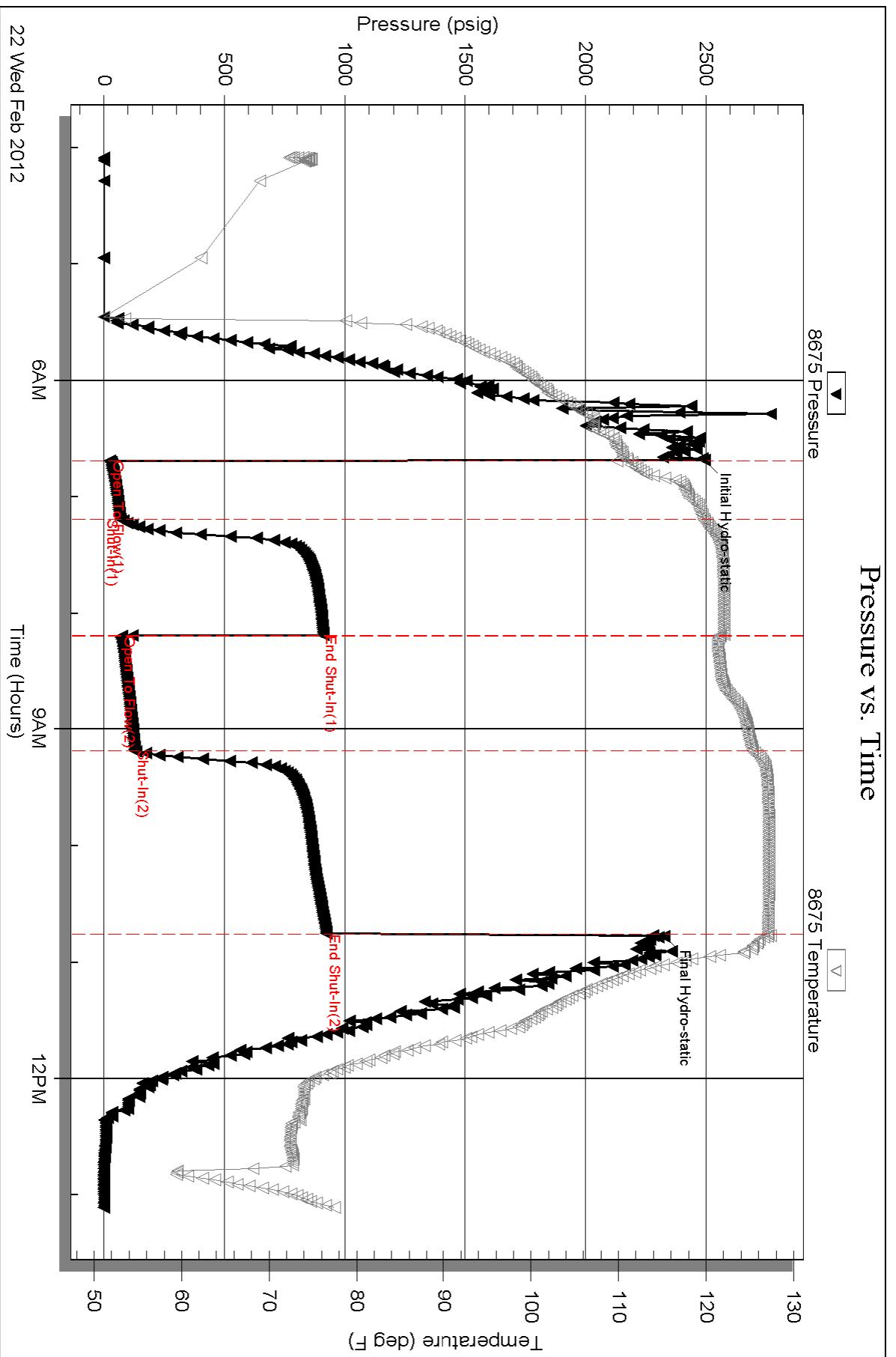
Serial #: 8675

Inside

Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 5

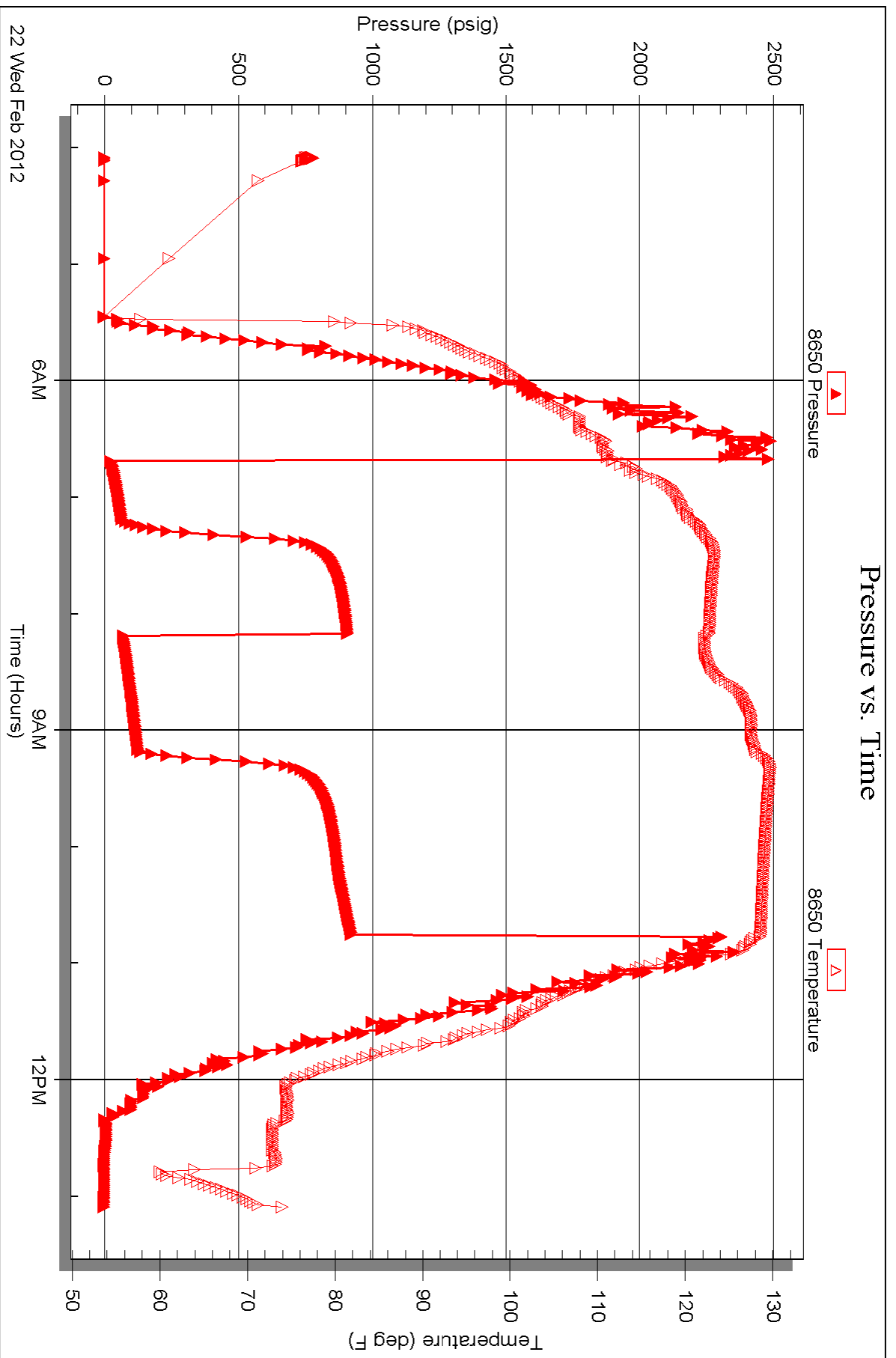


Serial #: 8650

Outside Murfin Drilling Company Inc.

Krulo #1-29

DST Test Number: 5



Triobite Testing, Inc

Ref. No: 45071

Printed: 2012.02.23 @ 15:31:27



TRILOBITE TESTING INC.

P.O. Box 1733 • Hays, Kansas 67601

RECEIVED
FEB 23 2012

Test Ticket

NO. 45067

4/10

BY: _____

Well Name & No. Kruto 1-29 Test No. 1 Date 2/18/12
 Company Martin Drilling Company INC Elevation 3258 KB 3245 GL
 Address 250 W Water STE 300 Wichita KS 67202-1216
 Co. Rep / Geo. Tom Funk Rig Martin 25
 Location: Sec. 29 Twp. 10S Rge. 34W Co. Thomas State KS

Interval Tested 4141 - 4180 Zone Tested Toronto
 Anchor Length 39 Drill Pipe Run 4137.04 Mud Wt. 9.1
 Top Packer Depth 4137 Drill Collars Run 0 Vis 46
 Bottom Packer Depth 4141 Wt. Pipe Run 0 WL 7.2
 Total Depth 4180 Chlorides 9,800 ppm System LCM 96

Blow Description B.O.B. in 10 min.
Bled off for 5 min. No return blow
B.O.B. in 11 min.
Bled off for 5 min. No return blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>196</u>	<u>Feet of MCW</u>			<u>70</u>	<u>30</u>
<u>372</u>	<u>Feet of water</u>			<u>100</u>	

Rec Total 568 BHT 124 Gravity — API RW 15 @ 50 ° F Chlorides 70,000 ppm

(A) Initial Hydrostatic 2,186 Test 1225 T-On Location 4:20
 (B) First Initial Flow 22 Jars _____ T-Started 4:55
 (C) First Final Flow 187 Safety Joint _____ T-Open 7:48
 (D) Initial Shut-In 1,249 Circ Sub N/C T-Pulled 10:48
 (E) Second Initial Flow 185 Hourly Standby _____ T-Out 13:09
 (F) Second Final Flow 327 Mileage 136 RT 190.40 Comments _____
 (G) Final Shut-In 1,245 Sampler _____
 (H) Final Hydrostatic 2,033 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____

Initial Open 30 Extra Packer _____ Extra Copies _____
 Initial Shut-In 60 Extra Recorder _____ Sub Total 0
 Final Flow 30 Day Standby _____ Total 1415.40
 Final Shut-In 60 Accessibility _____ MP/DST Disc't _____
 Sub Total 1415.40

Approved By _____ Our Representative _____

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

RECEIVED
FEB 23 2012

Test Ticket

NO. 45068

4/10

BY: _____

Well Name & No. Kruto 1-29 Test No. 2 Date 2/19/12
 Company Murfin Drilling Company Inc. Elevation 3258 KB 3245 GL
 Address 250 W Water STE 300 Wichita KS 67202 - 1216
 Co. Rep / Geo. Tom Funk Rig Murfin 25
 Location: Sec. 29 Twp. 10s Rge. 34w Co. Thomas State KS

Interval Tested 4315 - 4400 Zone Tested Kansas City "H, E, S"
 Anchor Length 85 Drill Pipe Run 4325 Mud Wt. 9.3
 Top Packer Depth 4311 Drill Collars Run 0 Vis 45
 Bottom Packer Depth 4315 Wt. Pipe Run 0 WL 7.2
 Total Depth 4400 Chlorides 9,700 ppm System LCM 7#

Blow Description B.O.B. in 16 min.
Bled off for 5 min. No return below
B.O.B. in 20 min.
Bled off for 5 min. No return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>Feet bit</u>	<u>100</u>			
<u>186</u>	<u>mcw</u>		<u>70</u>	<u>30</u>	
<u>392</u>	<u>w</u>		<u>100</u>		

Rec Total 588 BHT 125 Gravity — API RW 0.15 @ 50 °F Chlorides 70,000 ppm

(A) Initial Hydrostatic 2,189 Test 1225' T-On Location 9:20
 (B) First Initial Flow 29 Jars _____ T-Started 10:00
 (C) First Final Flow 142 Safety Joint _____ T-Open 12:05
 (D) Initial Shut-In 1,259 Circ Sub N/C T-Pulled 16:05
 (E) Second Initial Flow 137 Hourly Standby _____ T-Out _____
 (F) Second Final Flow 291 Mileage 136 RT 190.40 Comments _____
 (G) Final Shut-In 1,236 Sampler _____
 (H) Final Hydrostatic 2,083 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 0
 Initial Shut-In 60 Day Standby _____ Total 1415.40
 Final Flow 60 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 90 Sub Total 1415.40

Approved By [Signature] 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

RECEIVED
FEB 23 2012

Test Ticket

NO. 45069

Well Name & No. Krato 1-29 BY: _____ Test No. 3 Date 2/20/12
 Company Murfin Drilling Company Inc Elevation 3258 KB 3245 GL
 Address 250 W Water STE 300 Wichita KS 67202-1216
 Co. Rep / Geo. Tom Funk Rig Murfin 25
 Location: Sec. 29 Twp. 10S Rge. 34W Co. Thomas State KS

Interval Tested 4403-4427 Zone Tested Kansas City "K"
 Anchor Length 24 Drill Pipe Run 4388 Mud Wt. 9.3
 Top Packer Depth 4399 Drill Collars Run 0 Vis 45
 Bottom Packer Depth 4403 Wt. Pipe Run 0 WL 7.2
 Total Depth 4427 Chlorides 9,700 ppm System LCM 7#

Blow Description B.O.B. in 2 min.
Bled off for 5 min. Built to 1 1/2" return below
B.O.B. in 2 1/2 min.
Bled off for 5 min. Built to 3" return below

Rec	Feet of	%gas	%oil	%water	%mud
<u>294</u>	<u>Oil</u>	<u>10</u>	<u>90</u>		
<u>186</u>	<u>OCG</u>	<u>60</u>	<u>40</u>		
<u>279</u>	<u>WCMCO</u>	<u>30</u>	<u>40</u>	<u>10</u>	<u>20</u>
<u>279</u>	<u>CCOMW</u>	<u>10</u>	<u>10</u>	<u>60</u>	<u>20</u>
<u>372</u>	<u>Water</u>			<u>100</u>	

Rec Total 1410 BHT 129 Gravity 33 API RW .20 @ 50 °F Chlorides 50,000 ppm

- (A) Initial Hydrostatic 2,273
- (B) First Initial Flow 91
- (C) First Final Flow 386
- (D) Initial Shut-In 1,307
- (E) Second Initial Flow 409
- (F) Second Final Flow 618
- (G) Final Shut-In 1,299
- (H) Final Hydrostatic 2,191

- Test 1225'
- Jars
- Safety Joint
- Circ Sub N/C
- Hourly Standby
- Mileage 13LeRT 190.40
- Sampler B Marked wrong thing
- Straddle
- Shale Packer
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total 1415.40

- T-On Location 1:00
- T-Started 2:00
- T-Open 4:11
- T-Pulled 7:11
- T-Out 10:54
- Comments 729 Feet Gas In Pipe
- Ruined Shale Packer
- Ruined Packer
- Extra Copies
- Sub Total 0
- Total 1415.40
- MP/DST Disc't

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

Approved By _____ Our Representative _____
 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

RECEIVED
FEB 23 2012

Test Ticket

NO. 45070

Well Name & No. Kruto 1-29 Test No. 4 Date 2/21/12
 Company Murfin Drilling Company Inc Elevation 3258 KB 3245 GL
 Address 250 N Water STE 300 Wichita KS 67202-1216
 Co. Rep / Geo. ~~250 N Water~~ Tom Funk Rig Murfin 25
 Location: Sec. 29 Twp. 106 Rge. 34W Co. Thomas State KS

Interval Tested 4623-4641 Zone Tested Myric Station
 Anchor Length 38 Drill Pipe Run 4608 Mud Wt. 9.2
 Top Packer Depth 4619 Drill Collars Run 0 Vis 6.9
 Bottom Packer Depth 4623 Wt. Pipe Run 0 WL 7.2
 Total Depth 4641 Chlorides 9,900 ppm System LCM 7#

Blow Description B.O.B. in 1 min.
Bled off for 5 min. B.O.B. in 2 min.
B.O.B. in 1 1/2 min.
Bled off for 5 min. B.O.B. in 3 min.

Rec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>1503 GIP</u>	<u>100</u>			
<u>1287</u>	<u>Oil</u>				
<u>186</u>	<u>wcm60</u>	<u>30</u>	<u>30</u>	<u>10</u>	<u>30</u>

Rec Total 1473 BHT 133 Gravity 39 API RW — @ — °F Chlorides — ppm

- (A) Initial Hydrostatic 2,407
- (B) First Initial Flow 210
- (C) First Final Flow 394
- (D) Initial Shut-In 1,119
- (E) Second Initial Flow 413
- (F) Second Final Flow 603
- (G) Final Shut-In 1,110
- (H) Final Hydrostatic 2,278

- Test 1225'
- Jars
- Safety Joint
- Circ Sub Used 50'
- Hourly Standby
- Mileage 136 RT 190.46
- Sampler
- Straddle
- Shale Packer
- Extra Packer
- Extra Recorder
- Day Standby
- Accessibility
- Sub Total 1465.40

- T-On Location 6:00
- T-Started 6:45
- T-Open 8:57
- T-Pulled 10:55
- T-Out 10:55

- Comments
- Ruined Shale Packer
- Ruined Packer
- Extra Copies
- Sub Total 0
- Total 1465.40
- MP/DST Disc't

Initial Open 0.15
 Initial Shut-In 30
 Final Flow 15
 Final Shut-In 60

Approved By [Signature] 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

RECEIVED
FEB 23 2012

Test Ticket

NO. 45071

4/10

BY: _____

Well Name & No. Kruto 1-29 Test No. 5 Date 2/22/12
 Company Martin Drilling Company Inc Elevation 3258 KB 3245 GL
 Address 250 W Water STE 300 Wichita KS 67202 - 1216
 Co. Rep / Geo. Tom Funk Rig Martin 25
 Location: Sec. 29 Twp. 10S Rge. 34W Co. Thomas State KS

Interval Tested 4706 - 4762 Zone Tested Johnson
 Anchor Length 56 Drill Pipe Run 4702.60 Mud Wt. 9.1
 Top Packer Depth 4702 Drill Collars Run 0 Vis 43
 Bottom Packer Depth 4706 Wt. Pipe Run 0 WL 7.6
 Total Depth 4762 Chlorides 8,600 ppm System LCM 5#

Blow Description B.O.B. in 15 min.
Bled off for 5 min. Built to 1" return blow
B.O.B. in 4 min.

Bled off for 5 min. Built to 2" return blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>0</u>	<u>Feet of 635 feet weak gas in pipe</u>				
<u>289</u>	<u>Feet of m660</u>	<u>30%</u>	<u>40%</u>	<u>30%</u>	<u>30%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 289 BHT 127 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2,493 Test 1225' T-On Location 3:00
 (B) First Initial Flow 24 Jars _____ T-Started 4:05
 (C) First Final Flow 6.6 Safety Joint _____ T-Open 6:41
 (D) Initial Shut-In 909 Circ Sub n/c T-Pulled 10:45
 (E) Second Initial Flow 73 Hourly Standby _____ T-Out 13:06
 (F) Second Final Flow 127 Mileage 186 RT 190.40 Comments _____
 (G) Final Shut-In 923 Sampler _____
 (H) Final Hydrostatic 2,326 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1415.40
 Accessibility _____ MP/DST Disc't _____

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90
 Sub Total 1415.40

Approved By [Signature] 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.