



DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg. Co., Inc.**

250 N. Water, Ste 300
Wichita, KS 67202

ATTN: Steve Miller

Franklin 'A' #1-27

27-4s-33w Rawlins,KS

Start Date: 2015.05.02 @ 18:30:00

End Date: 2015.05.03 @ 03:54:30

Job Ticket #: 62278 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.05.07 @ 16:41:42



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins, KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62278

DST#: 1

ATTN: Steve Miller

Test Start: 2015.05.02 @ 18:30:00

GENERAL INFORMATION:

Formation: **Toronto - LKC "B"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 20:48:30
 Time Test Ended: 03:54:30
 Interval: **3979.00 ft (KB) To 4060.00 ft (KB) (TVD)**
 Total Depth: 4060.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Brandon Quintana
 Unit No: 57
 Reference Elevations: 3128.00 ft (KB)
 3123.00 ft (CF)
 KB to GR/CF: 5.00 ft

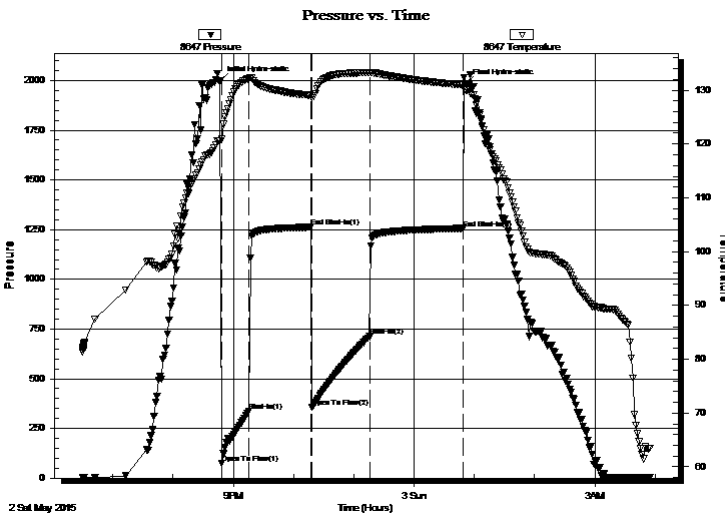
Serial #: 8647

Inside

Press@RunDepth: 712.77 psig @ 3980.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.05.02 End Date: 2015.05.03 Last Calib.: 2015.05.03
 Start Time: 18:30:01 End Time: 03:54:30 Time On Btm: 2015.05.02 @ 20:47:00
 Time Off Btm: 2015.05.03 @ 00:51:30

TEST COMMENT: 30 - IF - Opened w/ surface blow , built to B.o.B in 7 min.
 60 - ISI - Return built to 1", died back to 1/2"
 60 - FF - Blow built to B.o.B in 6 min.
 90 - FSI - No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1999.27	120.66	Initial Hydro-static
2	74.74	120.89	Open To Flow (1)
29	337.54	132.17	Shut-In(1)
90	1262.34	129.03	End Shut-In(1)
92	356.91	128.57	Open To Flow (2)
149	712.77	133.23	Shut-In(2)
242	1256.10	130.98	End Shut-In(2)
245	1982.88	130.03	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1445.00	WM 79%w, 21%m	18.00
43.00	OCM 98%m, 2%o w / 1' of oil on top	0.60
0.00	83' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62278

DST#: 1

ATTN: Steve Miller

Test Start: 2015.05.02 @ 18:30:00

Tool Information

Drill Pipe:	Length: 3735.00 ft	Diameter: 3.80 inches	Volume: 52.39 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.80 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	32.80 ft			String Weight: Initial 53000.00 lb
Depth to Top Packer:	3979.00 ft			Final 57000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	81.00 ft			
Tool Length:	109.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			3956.00	
Hydraulic tool	5.00			3961.00	
Jars	5.00			3966.00	
Safety Joint	3.00			3969.00	
Packer	5.00			3974.00	28.00 Bottom Of Top Packer
Packer	5.00			3979.00	
Stubb	1.00			3980.00	
Recorder	0.00	8647	Inside	3980.00	
Recorder	0.00	8372	Outside	3980.00	
Perforations	12.00			3992.00	
Change Over Sub	1.00			3993.00	
Drill Pipe	63.00			4056.00	
Change Over Sub	1.00			4057.00	
Bullnose	3.00			4060.00	81.00 Bottom Packers & Anchor

Total Tool Length: 109.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62278

DST#: 1

ATTN: Steve Miller

Test Start: 2015.05.02 @ 18:30:00

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: 105000 ppm

Viscosity: 53.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.76 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5400.00 ppm

Filter Cake: 3.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
1445.00	WM 79%w , 21%m	18.003
43.00	OCM 98%m, 2%o w / 1' of oil on top	0.603
0.00	83' GIP	0.000

Total Length: 1488.00 ft Total Volume: 18.606 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

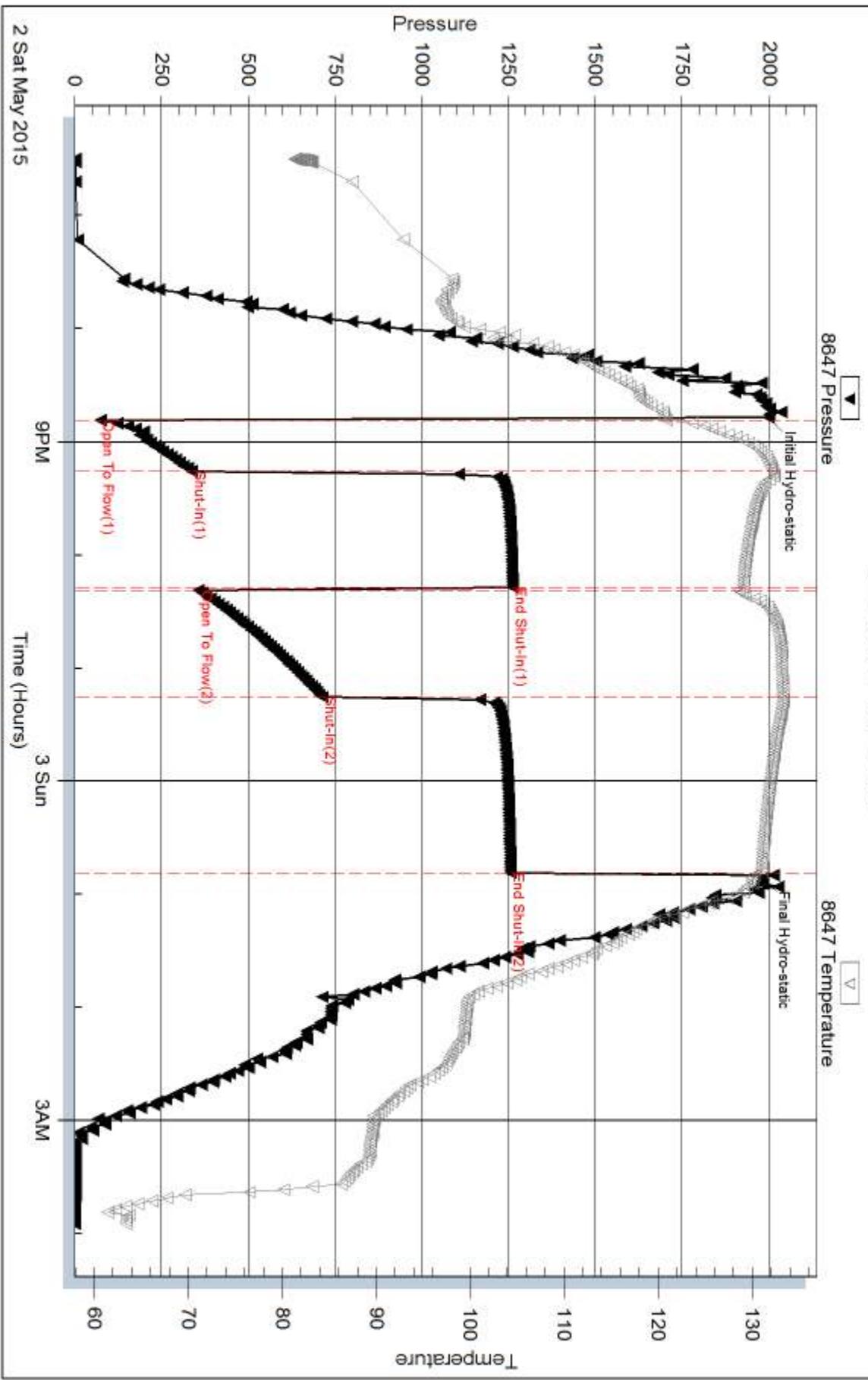
Laboratory Name:

Laboratory Location:

Recovery Comments: 83' GIP

RW.107 @59F

Pressure vs. Time





DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg. Co., Inc.**

250 N. Water, Ste 300
Wichita, KS 67202

ATTN: Steve Miller

Franklin 'A' #1-27

27-4s-33w Rawlins,KS

Start Date: 2015.05.03 @ 15:36:00

End Date: 2015.05.04 @ 00:28:30

Job Ticket #: 62279 DST #: 2

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.05.07 @ 16:41:09

Murfin Drlg. Co., Inc.
27-4s-33w Rawlins,KS
Franklin 'A' #1-27
DST # 2
LKC "F&G"
2015.05.03



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62279

DST#: 2

ATTN: Steve Miller

Test Start: 2015.05.03 @ 15:36:00

GENERAL INFORMATION:

Formation: **LKC "F&G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:48:30

Time Test Ended: 00:28:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Quintana

Unit No: 57

Interval: 4084.00 ft (KB) To 4120.00 ft (KB) (TVD)

Reference Elevations: 3128.00 ft (KB)

Total Depth: 4120.00 ft (KB) (TVD)

3123.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8647

Inside

Press@RunDepth: 161.06 psig @ 4085.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.03

End Date:

2015.05.04

Last Calib.:

2015.05.04

Start Time:

15:36:01

End Time:

00:28:30

Time On Btm:

2015.05.03 @ 17:41:00

Time Off Btm:

2015.05.03 @ 21:48:30

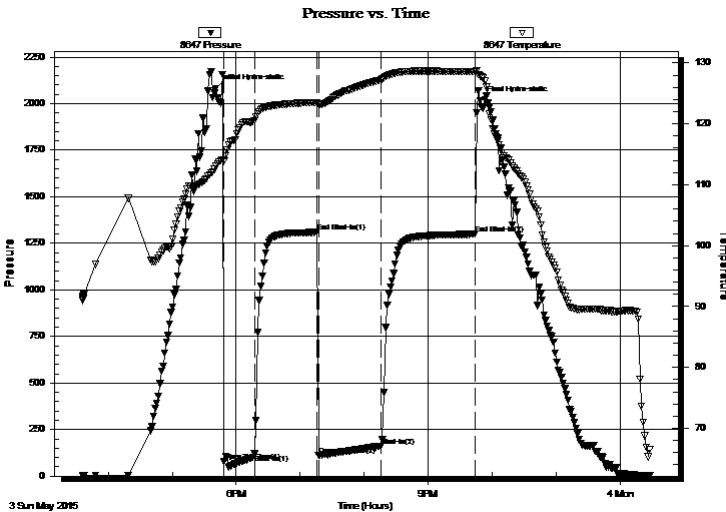
TEST COMMENT: 30 - IF - Opened w/ surface blow , built to B.o.B in 27 min.

60 - ISI - Return built to 1 1/2"

30 - FF - Blow built to B.o.B in 26 min.

60 - FSI - Return built to 3", died back to 2"

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2080.17	113.01	Initial Hydro-static
8	78.60	113.94	Open To Flow (1)
36	119.52	120.54	Shut-In(1)
95	1309.84	123.55	End Shut-In(1)
96	112.99	123.25	Open To Flow (2)
155	161.06	127.22	Shut-In(2)
243	1299.41	128.56	End Shut-In(2)
248	2015.85	127.84	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
122.00	GOCM 70% m, 20% o, 10% g	0.60
216.00	GO 80% o, 20% g	1.87
0.00	409' GIP	0.00

Gas Rates

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



DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.
 250 N. Water, Ste 300
 Wichita, KS 67202
 ATTN: Steve Miller

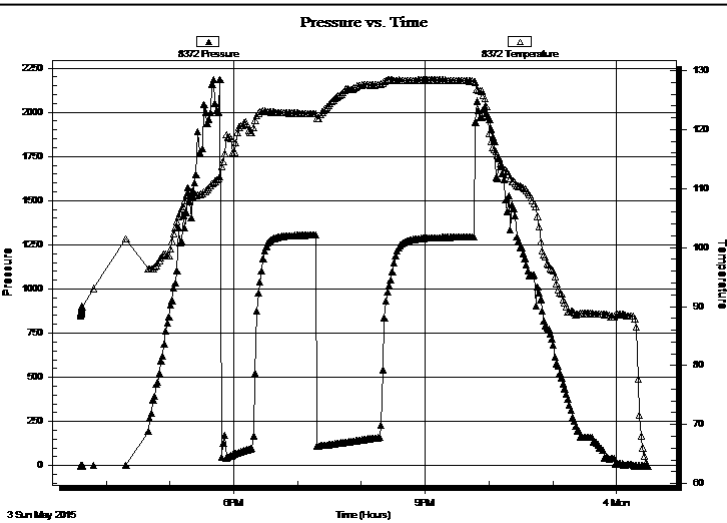
27-4s-33w Rawlins,KS
Franklin 'A' #1-27
 Job Ticket: 62279 **DST#: 2**
 Test Start: 2015.05.03 @ 15:36:00

GENERAL INFORMATION:

Formation: **LKC "F&G"**
 Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 17:48:30 Tester: Brandon Quintana
 Time Test Ended: 00:28:30 Unit No: 57
 Interval: **4084.00 ft (KB) To 4120.00 ft (KB) (TVD)** Reference Elevations: 3128.00 ft (KB)
 Total Depth: 4120.00 ft (KB) (TVD) 3123.00 ft (CF)
 Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

Serial #: 8372 Outside
 Press@RunDepth: psig @ 4085.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.05.03 End Date: 2015.05.04 Last Calib.: 2015.05.04
 Start Time: 15:36:01 End Time: 00:30:00 Time On Btm:
 Time Off Btm:

TEST COMMENT: 30 - IF - Opened w/ surface blow , built to B.o.B in 27 min.
 60 - ISI - Return built to 1 1/2"
 30 - FF - Blow built to B.o.B in 26 min.
 60 - FSI - Return built to 3", died back to 2"



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
122.00	GOCM 70% m, 20% o, 10% g	0.60
216.00	GO 80% o, 20% g	1.87
0.00	409' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62279

DST#: 2

ATTN: Steve Miller

Test Start: 2015.05.03 @ 15:36:00

Tool Information

Drill Pipe:	Length: 3831.00 ft	Diameter: 3.80 inches	Volume: 53.74 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.80 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.80 ft			String Weight: Initial 52000.00 lb
Depth to Top Packer:	4084.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	64.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4061.00	
Hydraulic tool	5.00			4066.00	
Jars	5.00			4071.00	
Safety Joint	3.00			4074.00	
Packer	5.00			4079.00	28.00 Bottom Of Top Packer
Packer	5.00			4084.00	
Stubb	1.00			4085.00	
Recorder	0.00	8647	Inside	4085.00	
Recorder	0.00	8372	Outside	4085.00	
Perforations	32.00			4117.00	
Bullnose	3.00			4120.00	36.00 Bottom Packers & Anchor

Total Tool Length: 64.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62279

DST#: 2

ATTN: Steve Miller

Test Start: 2015.05.03 @ 15:36:00

Mud and Cushion Information

Mud Type: Gel Chem
Mud Weight: 9.00 lb/gal
Viscosity: 47.00 sec/qt
Water Loss: 8.77 in³
Resistivity: ohm.m
Salinity: 6700.00 ppm
Filter Cake: 3.00 inches

Cushion Type:
Cushion Length: ft
Cushion Volume: bbl
Gas Cushion Type:
Gas Cushion Pressure: psig

Oil API: 31 deg API
Water Salinity: ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
122.00	GOCM 70% _m , 20% _o , 10% _g	0.600
216.00	GO 80% _o , 20% _g	1.875
0.00	409' GIP	0.000

Total Length: 338.00 ft Total Volume: 2.475 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

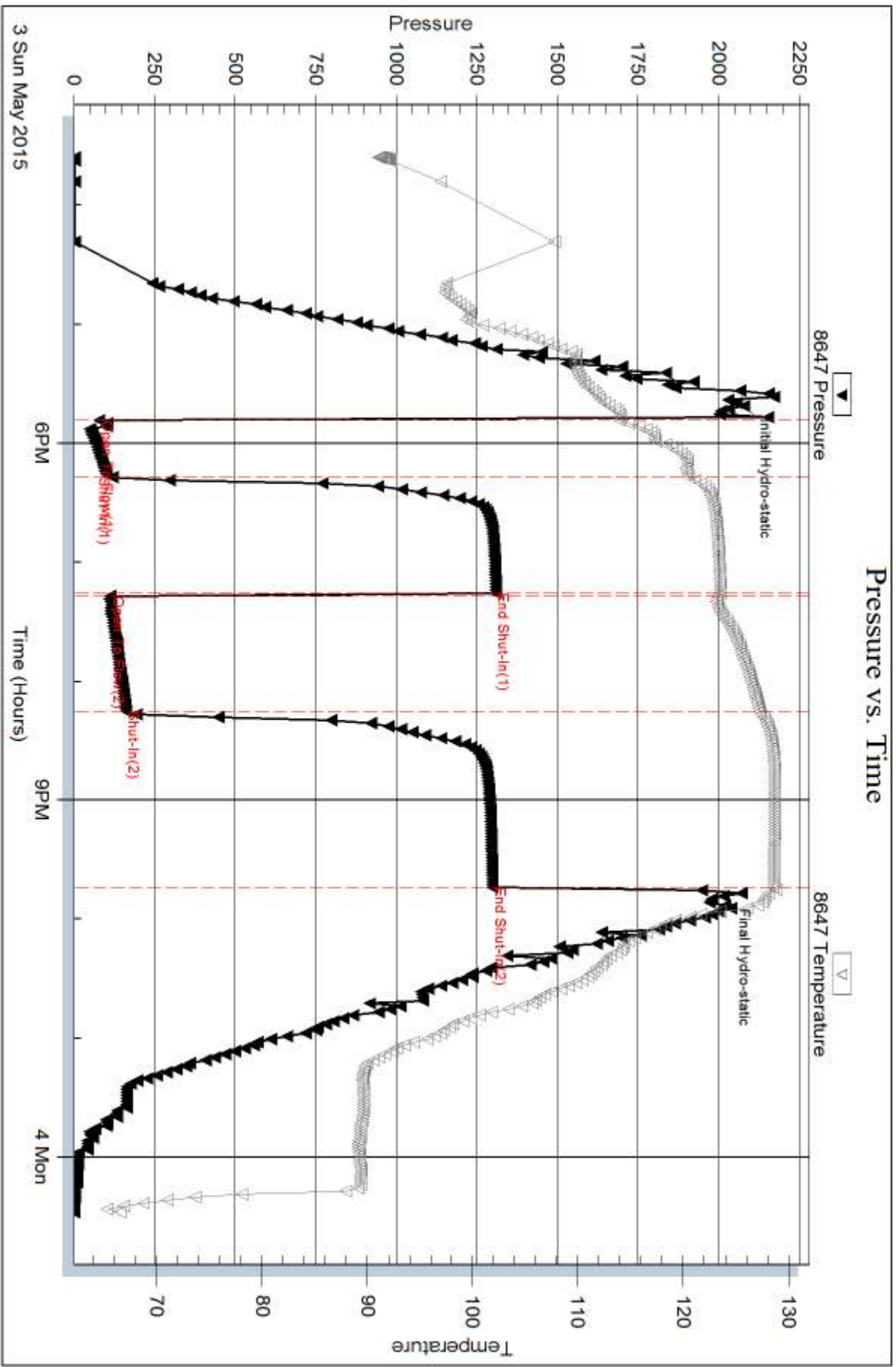
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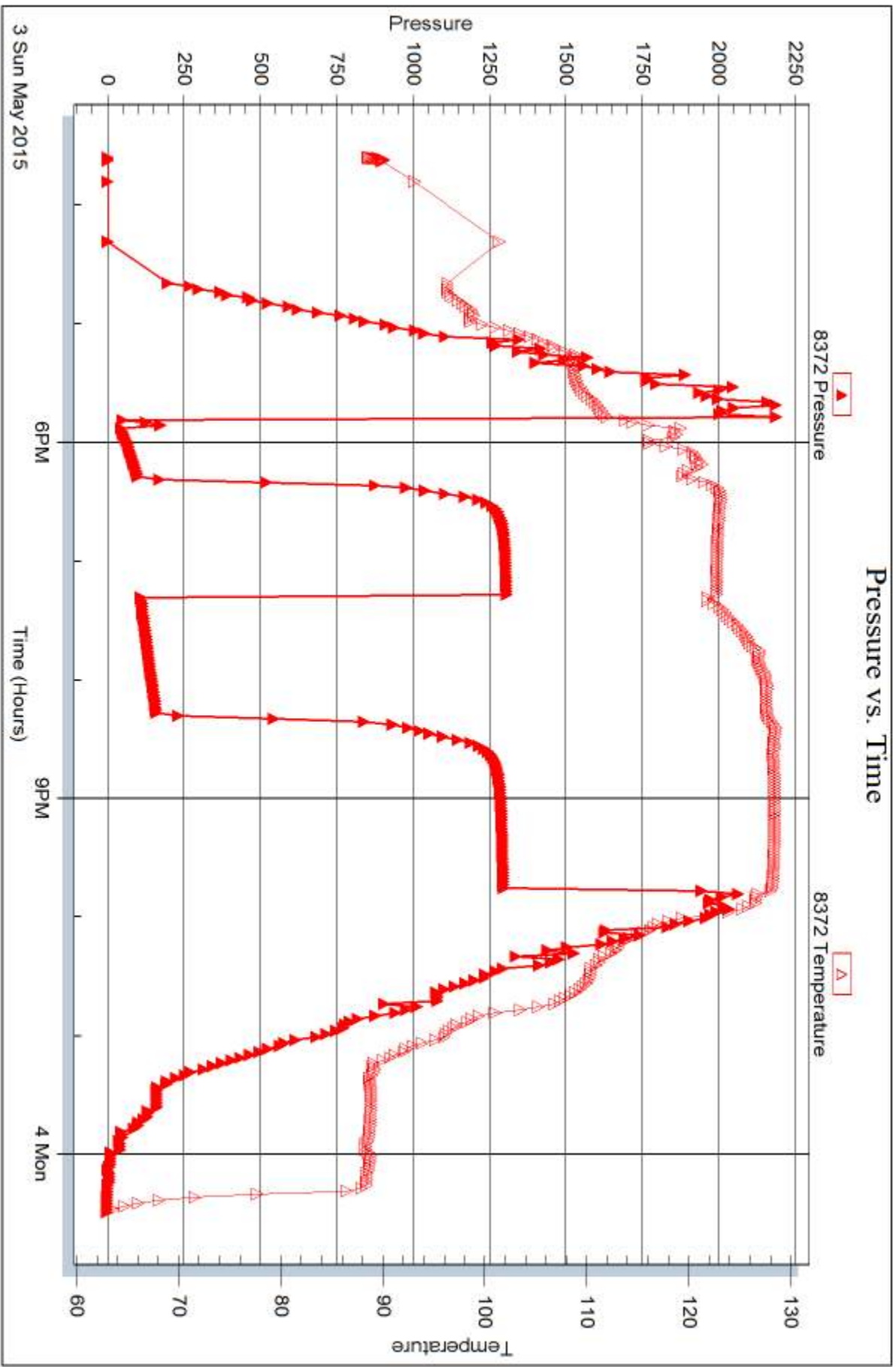
Laboratory Name:

Laboratory Location:

Recovery Comments: 409' GIP

Gravity 30 @ 75F Corrected = 31







DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg. Co., Inc.**

250 N. Water, Ste 300
Wichita, KS 67202

ATTN: Steve Miller

Franklin 'A' #1-27

27-4s-33w Rawlins,KS

Start Date: 2015.05.04 @ 11:46:00

End Date: 2015.05.04 @ 19:04:30

Job Ticket #: 62280 DST #: 3

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.05.07 @ 16:40:45



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins, KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

ATTN: Steve Miller

Job Ticket: 62280

DST#: 3

Test Start: 2015.05.04 @ 11:46:00

GENERAL INFORMATION:

Formation: **LKC "J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 14:07:30
 Time Test Ended: 19:04:30
 Interval: **4164.00 ft (KB) To 4200.00 ft (KB) (TVD)**
 Total Depth: 4200.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Brandon Quintana
 Unit No: 57
 Reference Elevations: 3128.00 ft (KB)
 3123.00 ft (CF)
 KB to GR/CF: 5.00 ft

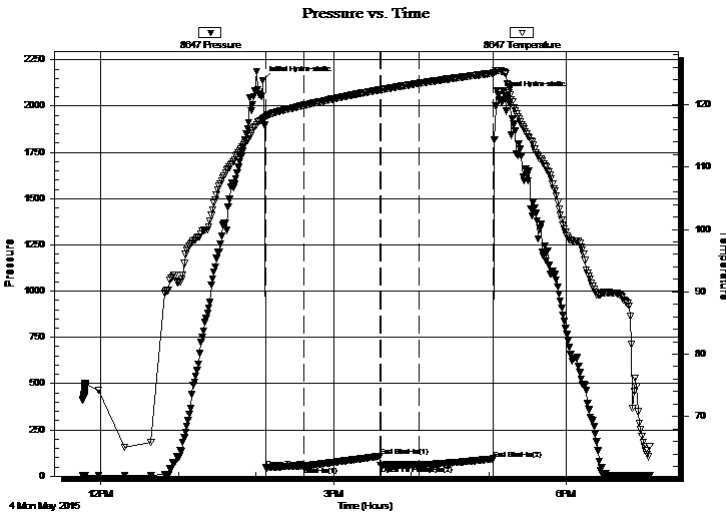
Serial #: 8647

Inside

Press@RunDepth: 58.32 psig @ 4165.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2015.05.04 End Date: 2015.05.04 Last Calib.: 2015.05.04
 Start Time: 11:46:01 End Time: 19:04:30 Time On Btm: 2015.05.04 @ 14:05:30
 Time Off Btm: 2015.05.04 @ 17:07:30

TEST COMMENT: 30 - IF - Opened w/ surface blow , built to 3/4"
 60 - ISI - No Return
 30 - FF - No Blow
 60 - FSI - No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2139.91	117.69	Initial Hydro-static
2	44.71	118.08	Open To Flow (1)
32	54.20	119.92	Shut-In(1)
90	106.83	122.39	End Shut-In(1)
91	59.62	122.38	Open To Flow (2)
121	58.32	123.45	Shut-In(2)
178	93.34	125.08	End Shut-In(2)
182	2059.08	125.52	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
64.00	100% mud	0.31

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.

250 N. Water, Ste 300
Wichita, KS 67202

ATTN: Steve Miller

27-4s-33w Rawlins, KS

Franklin 'A' #1-27

Job Ticket: 62280

DST#: 3

Test Start: 2015.05.04 @ 11:46:00

GENERAL INFORMATION:

Formation: **LKC "J"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 14:07:30

Time Test Ended: 19:04:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Quintana

Unit No: 57

Interval: **4164.00 ft (KB) To 4200.00 ft (KB) (TVD)**

Reference Elevations: 3128.00 ft (KB)

Total Depth: 4200.00 ft (KB) (TVD)

3123.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8372 Outside

Press@RunDepth: psig @ 4165.00 ft (KB)

Start Date: 2015.05.04

End Date:

2015.05.04

Capacity: 8000.00 psig

Last Calib.:

2015.05.04

Start Time: 11:46:01

End Time:

19:05:30

Time On Btm:

Time Off Btm:

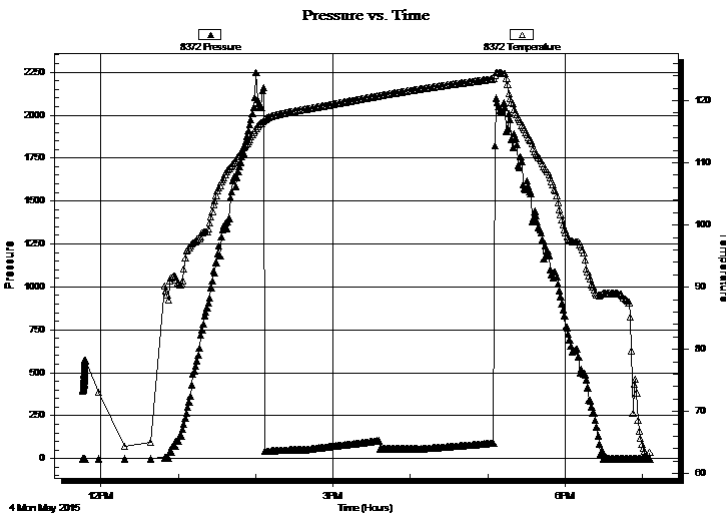
TEST COMMENT: 30 - IF - Opened w/ surface blow , built to 3/4"

60 - ISI - No Return

30 - FF - No Blow

60 - FSI - No Return

PRESSURE SUMMARY



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

Recovery

Length (ft)	Description	Volume (bbl)
64.00	100% mud	0.31

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62280

DST#: 3

ATTN: Steve Miller

Test Start: 2015.05.04 @ 11:46:00

Tool Information

Drill Pipe:	Length: 3896.00 ft	Diameter: 3.80 inches	Volume: 54.65 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.80 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.80 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	4164.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	36.00 ft			
Tool Length:	64.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
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Shut In Tool	5.00			4141.00	
Hydraulic tool	5.00			4146.00	
Jars	5.00			4151.00	
Safety Joint	3.00			4154.00	
Packer	5.00			4159.00	28.00 Bottom Of Top Packer
Packer	5.00			4164.00	
Stubb	1.00			4165.00	
Recorder	0.00	8647	Inside	4165.00	
Recorder	0.00	8372	Outside	4165.00	
Perforations	32.00			4197.00	
Bullnose	3.00			4200.00	36.00 Bottom Packers & Anchor

Total Tool Length: 64.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62280

DST#: 3

ATTN: Steve Miller

Test Start: 2015.05.04 @ 11:46:00

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: 47.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6700.00 ppm

Filter Cake: 3.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
64.00	100% mud	0.315

Total Length: 64.00 ft Total Volume: 0.315 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

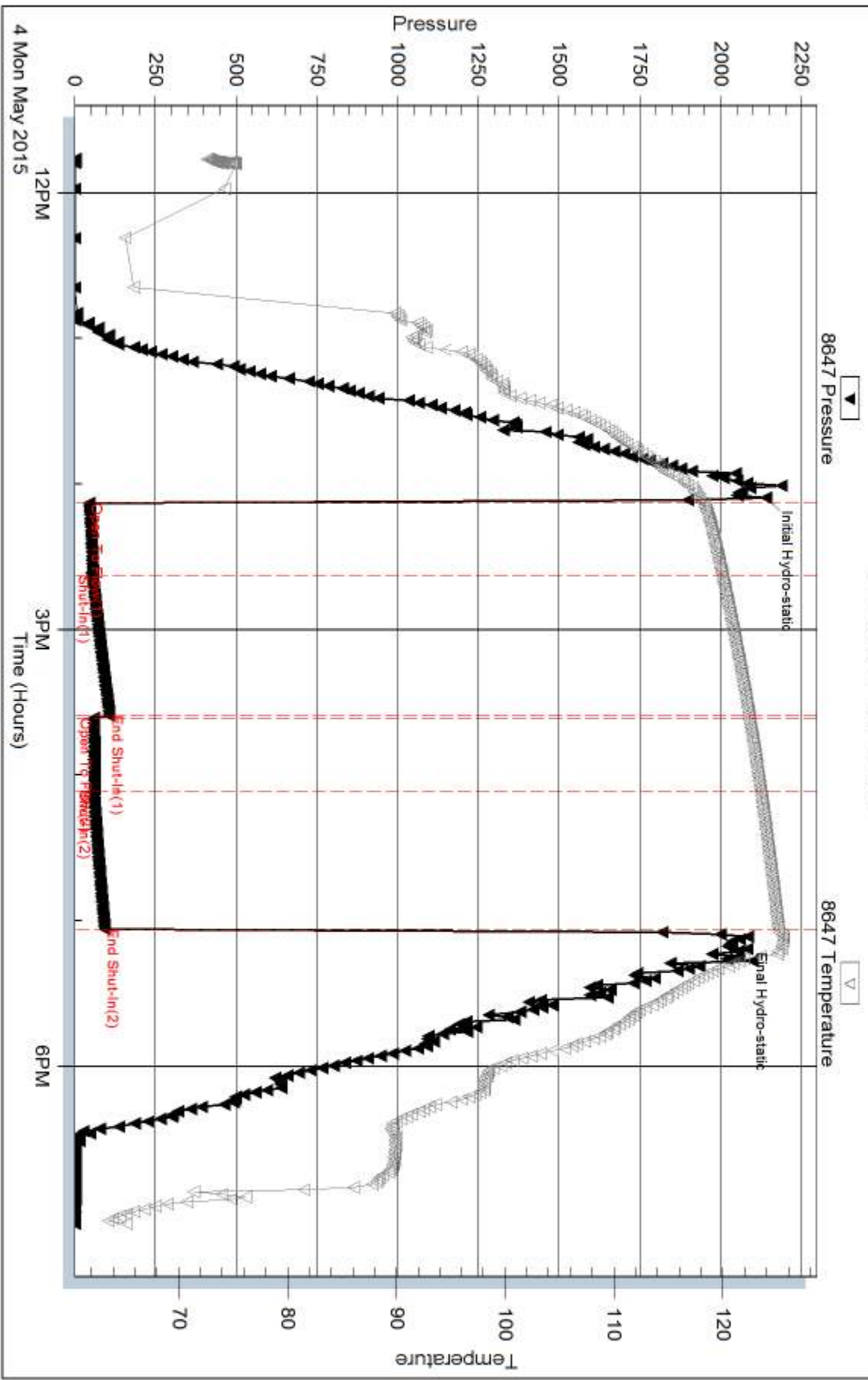
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time

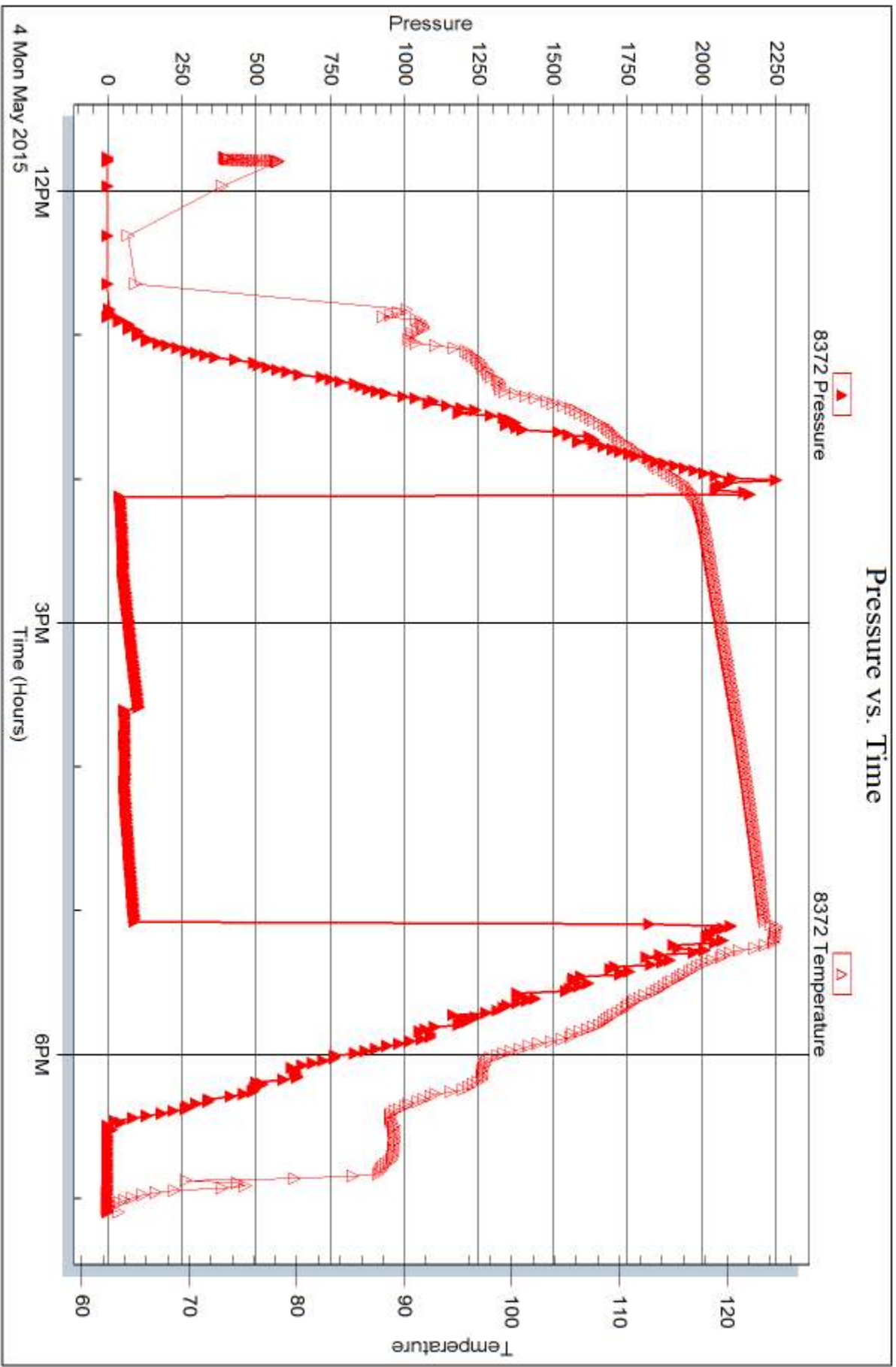


Serial #: 8372

Outside Murfin Dtg. Co., Inc.

Franklin 'A' #1-27

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 62280

Printed: 2015.05.07 @ 16:40:47



DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg. Co., Inc.**

250 N. Water, Ste 300
Wichita, KS 67202

ATTN: Steve Miller

Franklin 'A' #1-27

27-4s-33w Rawlins,KS

Start Date: 2015.05.05 @ 16:25:00

End Date: 2015.05.06 @ 01:40:30

Job Ticket #: 62281 DST #: 4

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.05.07 @ 16:40:16



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

ATTN: Steve Miller

Job Ticket: 62281

DST#: 4

Test Start: 2015.05.05 @ 16:25:00

GENERAL INFORMATION:

Formation: **Lower Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:51:00

Time Test Ended: 01:40:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Quintana

Unit No: 57

Interval: 4408.00 ft (KB) To 4436.00 ft (KB) (TVD)

Reference Elevations: 3128.00 ft (KB)

Total Depth: 4436.00 ft (KB) (TVD)

3123.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8647

Inside

Press@RunDepth: 218.89 psig @ 4409.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.05

End Date:

2015.05.06

Last Calib.:

2015.05.06

Start Time:

16:25:01

End Time:

01:40:30

Time On Btm:

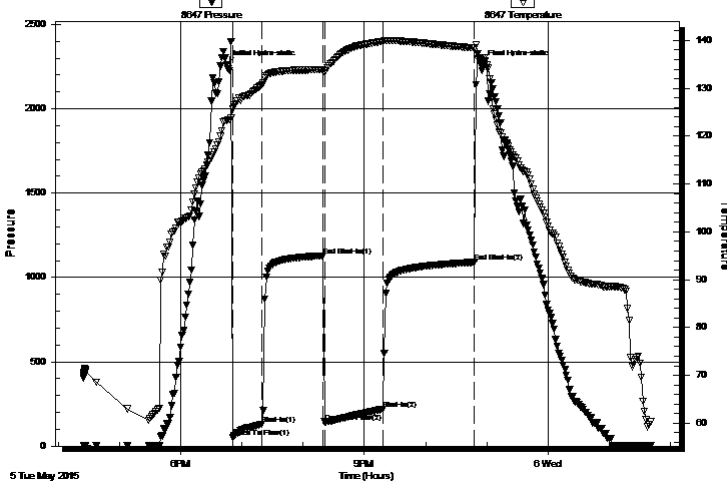
2015.05.05 @ 18:45:00

Time Off Btm:

2015.05.05 @ 22:54:00

TEST COMMENT: 30 - IF - Opened w/surface blow / built to B.o.B in 13 minutes
60 ISI - Return built to 7" over the hour
30 - FF - Blow built to B.o.B in 12 min.
60 - FSI - Return built to 7" over the 90 min.

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2263.03	123.29	Initial Hydro-static
6	53.44	125.62	Open To Flow (1)
35	128.91	130.72	Shut-In(1)
95	1129.11	133.85	End Shut-In(1)
96	143.86	133.23	Open To Flow (2)
153	218.89	139.80	Shut-In(2)
243	1090.86	138.43	End Shut-In(2)
249	2258.72	136.35	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
244.00	GMCO 40%o, 30%g, 30%m	1.20
297.00	GO 70%o, 30%g	4.12
0.00	585' GIP	0.00

Gas Rates

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



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins, KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62281

DST#: 4

ATTN: Steve Miller

Test Start: 2015.05.05 @ 16:25:00

GENERAL INFORMATION:

Formation: **Lower Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:51:00

Time Test Ended: 01:40:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Quintana

Unit No: 57

Interval: 4408.00 ft (KB) To 4436.00 ft (KB) (TVD)

Reference Elevations: 3128.00 ft (KB)

Total Depth: 4436.00 ft (KB) (TVD)

3123.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8372 Outside

Press@RunDepth: psig @ 4409.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.05 End Date: 2015.05.06

Last Calib.: 2015.05.06

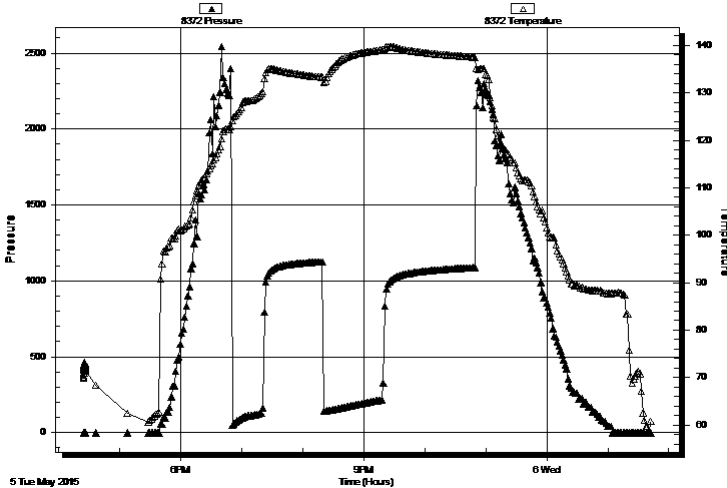
Start Time: 16:25:01 End Time: 01:42:00

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF - Opened w/surface blow / built to B.o.B in 13 minutes
60 ISI - Return built to 7" over the hour
30 - FF - Blow built to B.o.B in 12 min.
60 - FSI - Return built to 7" over the 90 min.

Pressure vs. Time



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
244.00	GMCO 40%o, 30%g, 30%m	1.20
297.00	GO 70%o, 30%g	4.12
0.00	585' GIP	0.00

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62281

DST#: 4

ATTN: Steve Miller

Test Start: 2015.05.05 @ 16:25:00

Tool Information

Drill Pipe:	Length: 4157.00 ft	Diameter: 3.80 inches	Volume: 58.31 bbl	Tool Weight:	2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 248.80 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose:	75000.00 lb
			<u>Total Volume:</u>	Tool Chased	0.00 ft
			- bbl	String Weight: Initial	58000.00 lb
Drill Pipe Above KB:	17.80 ft			Final	59000.00 lb
Depth to Top Packer:	4408.00 ft				
Depth to Bottom Packer:	ft				
Interval between Packers:	28.00 ft				
Tool Length:	48.00 ft				
Number of Packers:	2	Diameter: 6.75 inches			
Tool Comments:					

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Shut In Tool	5.00			4393.00	
Hydraulic tool	5.00			4398.00	
Packer	5.00			4403.00	20.00 Bottom Of Top Packer
Packer	5.00			4408.00	
Stubb	1.00			4409.00	
Recorder	0.00	8647	Inside	4409.00	
Recorder	0.00	8372	Outside	4409.00	
Perforations	24.00			4433.00	
Bullnose	3.00			4436.00	28.00 Bottom Packers & Anchor
Total Tool Length:	48.00				



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62281

DST#: 4

ATTN: Steve Miller

Test Start: 2015.05.05 @ 16:25:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

38 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 96.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.78 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 5800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
244.00	GMCO 40%o, 30%g, 30%m	1.200
297.00	GO 70%o, 30%g	4.122
0.00	585' GIP	0.000

Total Length: 541.00 ft Total Volume: 5.322 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

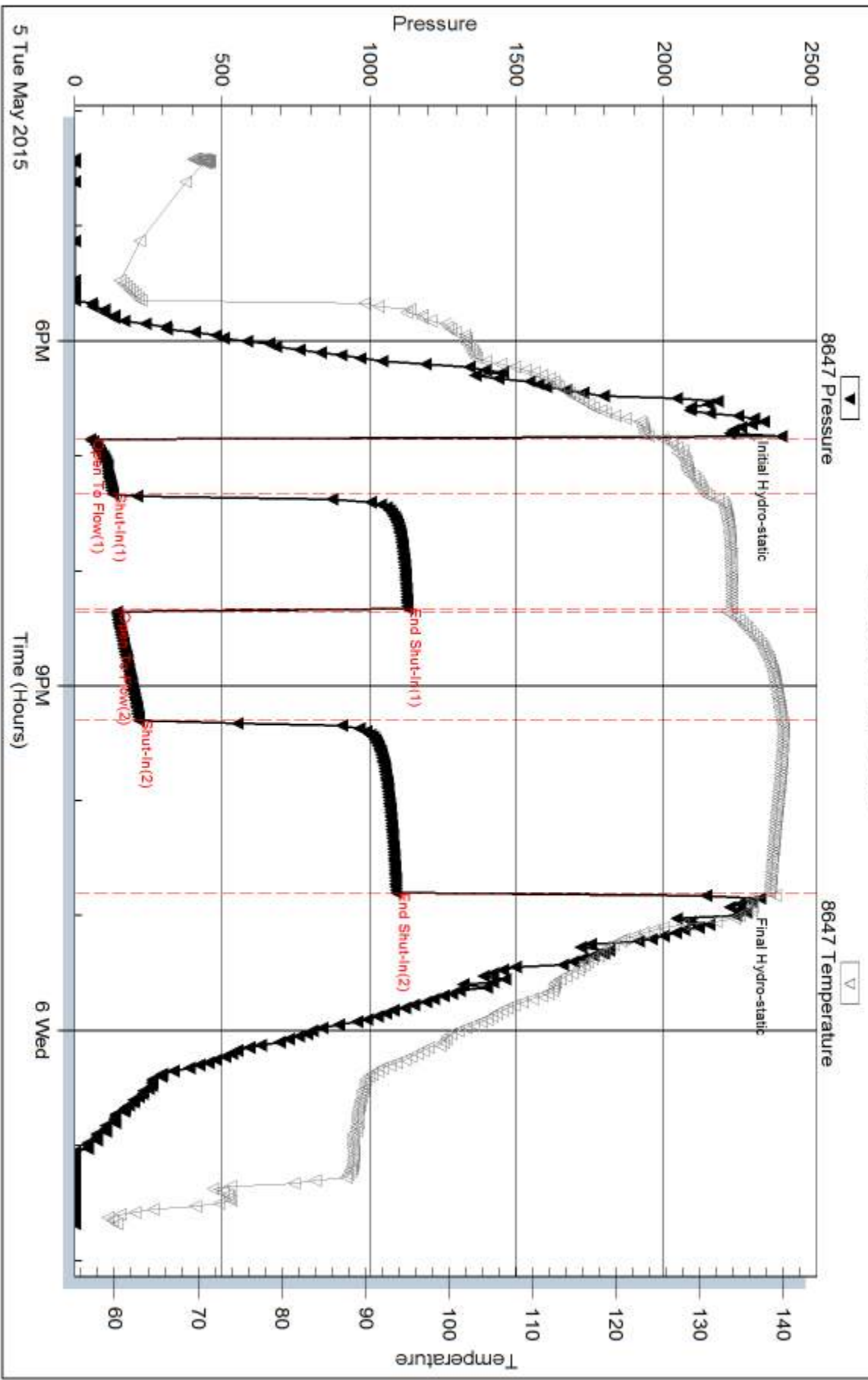
Serial #:

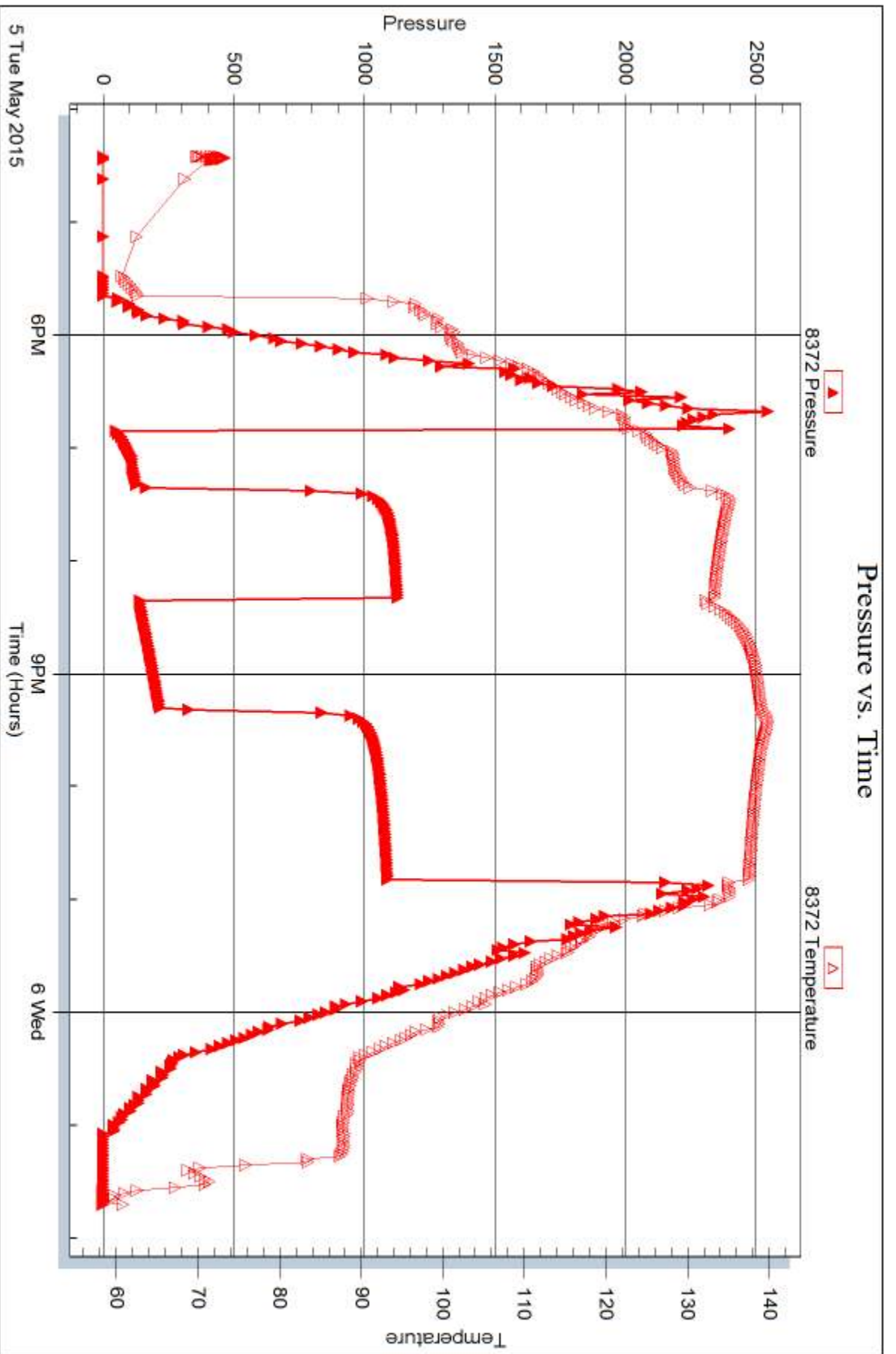
Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity 37 @ 70F Corrected = 38

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Murfin Drlg. Co., Inc.**

250 N. Water, Ste 300
Wichita, KS 67202

ATTN: Steve Miller

Franklin 'A' #1-27

27-4s-33w Rawlins,KS

Start Date: 2015.05.06 @ 11:20:00

End Date: 2015.05.06 @ 18:54:00

Job Ticket #: 62282 DST #: 5

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2015.05.07 @ 16:33:25



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62282

DST#: 5

ATTN: Steve Miller

Test Start: 2015.05.06 @ 11:20:00

GENERAL INFORMATION:

Formation: **Verdigris**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 13:37:30

Time Test Ended: 18:54:00

Test Type: Conventional Bottom Hole (Initial)

Tester: Brandon Quintana

Unit No: 57

Interval: 4443.00 ft (KB) To 4490.00 ft (KB) (TVD)

Reference Elevations: 3128.00 ft (KB)

Total Depth: 4490.00 ft (KB) (TVD)

3123.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8647

Inside

Press@RunDepth: 82.10 psig @ 4444.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2015.05.06

End Date:

2015.05.06

Last Calib.:

2015.05.06

Start Time: 11:20:01

End Time:

18:54:00

Time On Btm:

2015.05.06 @ 13:36:30

Time Off Btm:

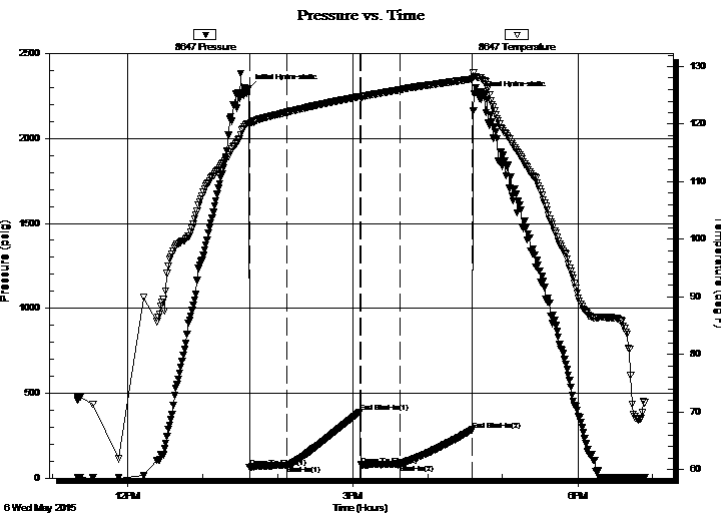
2015.05.06 @ 16:40:30

TEST COMMENT: 30 - IF - Opened w/ surface blow , built to 1"

60 - ISI - No Blow

30 - FF - No Return

60 - FSI - No Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2294.81	120.06	Initial Hydro-static
1	63.54	120.04	Open To Flow (1)
31	73.05	122.06	Shut-In(1)
89	388.91	124.77	End Shut-In(1)
90	78.08	124.69	Open To Flow (2)
121	82.10	125.96	Shut-In(2)
179	284.35	127.82	End Shut-In(2)
184	2254.24	128.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
106.00	100% mud	0.52

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62282

DST#: 5

ATTN: Steve Miller

Test Start: 2015.05.06 @ 11:20:00

Tool Information

Drill Pipe:	Length: 4181.00 ft	Diameter: 3.80 inches	Volume: 58.65 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: inches	Volume: - bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 248.80 ft	Diameter: 2.25 inches	Volume: 1.22 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: - bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.80 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4443.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	47.00 ft			
Tool Length:	75.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4420.00	
Hydraulic tool	5.00			4425.00	
Jars	5.00			4430.00	
Safety Joint	3.00			4433.00	
Packer	5.00			4438.00	28.00 Bottom Of Top Packer
Packer	5.00			4443.00	
Stubb	1.00			4444.00	
Recorder	0.00	8647	Inside	4444.00	
Recorder	0.00	8372	Outside	4444.00	
Perforations	10.00			4454.00	
Change Over Sub	1.00			4455.00	
Drill Pipe	31.00			4486.00	
Change Over Sub	1.00			4487.00	
Bullnose	3.00			4490.00	47.00 Bottom Packers & Anchor

Total Tool Length: 75.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drlg. Co., Inc.

27-4s-33w Rawlins,KS

250 N. Water, Ste 300
Wichita, KS 67202

Franklin 'A' #1-27

Job Ticket: 62282

DST#: 5

ATTN: Steve Miller

Test Start: 2015.05.06 @ 11:20:00

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: 91.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 6400.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
106.00	100% mud	0.521

Total Length: 106.00 ft Total Volume: 0.521 bbl

Num Fluid Samples: 0

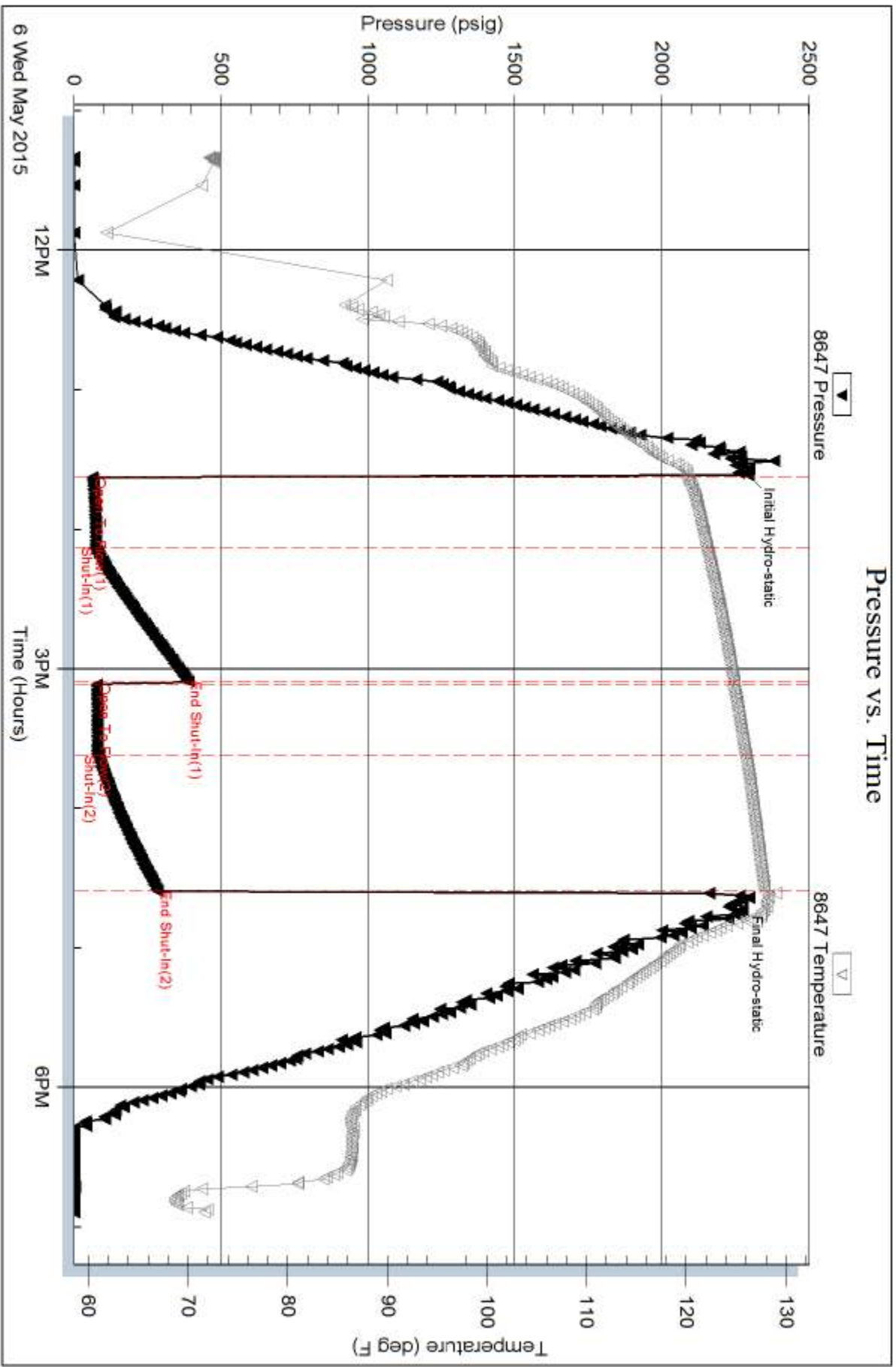
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

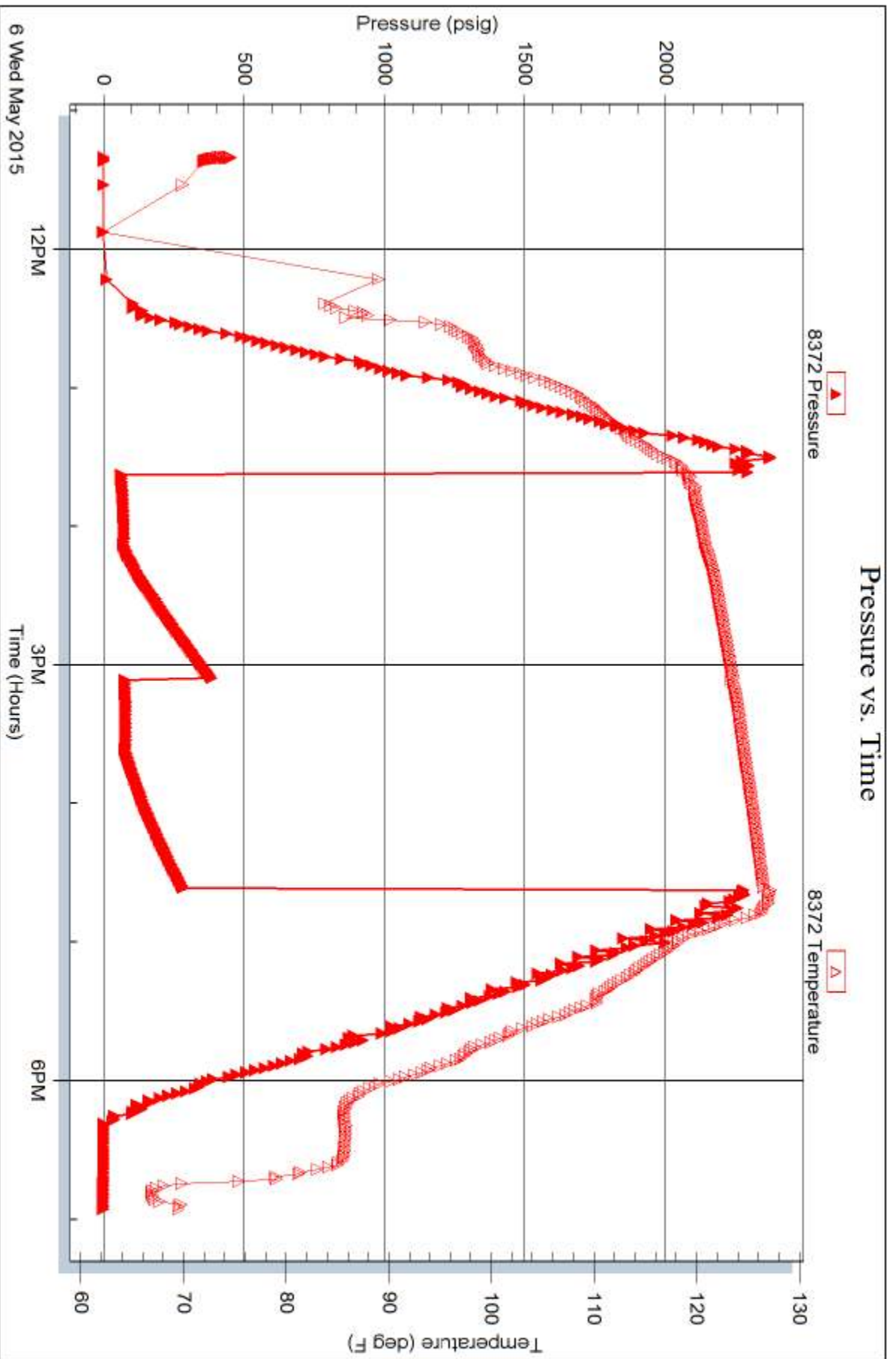


Serial #: 8372

Outside Marlin Drfg. Co., Inc.

Franklin 'A' #1-27

DST Test Number: 5



Trilobite Testing, Inc

Ref. No: 62282

Printed: 2015.05.07 @ 16:33:27



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62278

Well Name & No. Franklin 'A' #1-27 Test No. 1 Date 5-2-15
 Company Murfin Drlg. Co., Inc. Elevation 3128 KB 3123 GL
 Address 250 N. Water, STE 300 Wichita, KS 67202
 Co. Rep / Geo. Steve Miller Rig Murfin #7
 Location: Sec. 27 Twp. 4S Rge. 33W Co. Rawlins State KS

Interval Tested 3979-4060 Zone Tested Toronto - LKC "B"
 Anchor Length 81' Drill Pipe Run 3735 Mud Wt. 9.3
 Top Packer Depth 3974 Drill Collars Run 248.8 Vis 53
 Bottom Packer Depth 3979 Wt. Pipe Run — WL 8.8
 Total Depth 4060 Chlorides 5400 ppm System LCM 10
 Blow Description IF - Opened w/ surface blow, built to B.o.B in 7 min
ISI - Return built to 1", died back to 1/2"
FF - Blow built to B.o.B in 6 min.
FSI - No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>43</u>	<u>OCM w/ a foot of oil on top</u>		<u>2</u>	<u>98</u>	<u>0</u>
<u>1445</u>	<u>MW</u>			<u>79</u>	<u>21</u>
<u>83</u>	<u>GIP</u>	<u>100</u>			

Rec Total 1488 BHT 131 Gravity — API RW .107 @ 59 °F Chlorides 105,000 ppm
 (A) Initial Hydrostatic 1499 Test 1150 T-On Location 3:19 PM
 (B) First Initial Flow 74 Jars 250 T-Started 6:30 PM
 (C) First Final Flow 337 Safety Joint 75 T-Open 8:49 PM
 (D) Initial Shut-In 1262 Circ Sub _____ T-Pulled 12:49 AM
 (E) Second Initial Flow 356 Hourly Standby _____ T-Out 4:00 AM
 (F) Second Final Flow 712 Mileage 82 R.T. 82 Comments _____
 (G) Final Shut-In 1256 Sampler _____
 (H) Final Hydrostatic 1482 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1557

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 9

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1557
 MP/DST Disc't _____

Approved By _____ Our Representative Bond Out

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.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **62279**

Well Name & No. Franklin A' #1-27 Test No. 2 Date 5-3-15
 Company Murfin Drlg. Co., Inc. Elevation 3128 KB 3123 GL
 Address 250 N. Water, STE 300 67202
 Co. Rep / Geo. Steve Miller Rig Murfin #7
 Location: Sec. 27 Twp. 4S Rge. 33W Co. Rawlins State KS

Interval Tested 4084-4120 Zone Tested LKC "F+G"
 Anchor Length 36' Drill Pipe Run 3831 Mud Wt. 9
 Top Packer Depth 4079 Drill Collars Run 248.8 Vis 47
 Bottom Packer Depth 4084 Wt. Pipe Run — WL 8.8
 Total Depth 4120 Chlorides 6700 ppm System LCM 9
 Blow Description IF- Opened w/ surface blow, built to B.o.B in 27 min.
ISI- Return built to 1 1/2"
FF- Blow built to B.o.B in 26 min.
FSI- Return built to 3", died back to 2"

Rec	Feet of	%gas	%oil	%water	%mud
216	60	20	80		
122	60cm	10	20		70
409	61P	160			
Rec Total	338	BHT	128	Gravity	31
				API RW	@
					° F Chlorides

(A) Initial Hydrostatic 2080 Test 1150 T-On Location 2:59 PM
 (B) First Initial Flow 78 Jars 250 T-Started 3:36 PM
 (C) First Final Flow 119 Safety Joint 75 T-Open 5:49 PM
 (D) Initial Shut-In 1309 Circ Sub _____ T-Pulled 9:49 PM
 (E) Second Initial Flow 112 Hourly Standby _____ T-Out 12:31 AM
 (F) Second Final Flow 161 Mileage 82 R.T. 82 Comments _____
 (G) Final Shut-In 1299 Sampler _____
 (H) Final Hydrostatic 2015 Straddle _____
 Shale Packer _____
 Extra Packer _____
 Extra Recorder _____
 Day Standby _____
 Accessibility _____
 Sub Total 1557

Initial Open 30
 Initial Shut-In 60
 Final Flow 60
 Final Shut-In 90

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 1557
 MP/DST Disc't _____

Approved By _____ Our Representative Burdett

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **62280**

4/10

Well Name & No. Franklin A' #1-27 Test No. 3 Date 5-4-15
 Company Murfin Drlg. Co., Inc. Elevation 3128 KB 3123 GL
 Address 250 N. Water, STE 300 Wichita, KS 67202
 Co. Rep / Geo. Steve Miller Rig Murfin #7
 Location: Sec. 27 Twp. 4S Rge. 33W Co. Rawlins State KS

Interval Tested 4164-4200 Zone Tested LKC "J"
 Anchor Length 36' Drill Pipe Run 3896 Mud Wt. 9
 Top Packer Depth 4159 Drill Collars Run 248.8 Vis 47
 Bottom Packer Depth 4164 Wt. Pipe Run — WL 8.8
 Total Depth 4200 Chlorides 6700 ppm System LCM 9
 Blow Description IF- Opened w/ surface blow, built to 3/4"
ISI- No Return
FF- No Blow
FSI- No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>64</u>	<u>mud</u>				<u>100</u>

Rec Total 64 BHT 125 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2139 Test 1150 T-On Location 11:22 AM
 (B) First Initial Flow 44 Jars 250 T-Started 11:46 AM
 (C) First Final Flow 54 Safety Joint 75 T-Open 2:04 PM
 (D) Initial Shut-In 106 Circ Sub _____ T-Pulled 5:04 PM
 (E) Second Initial Flow 59 Hourly Standby _____ T-Out 7:02 PM
 (F) Second Final Flow 58 Mileage 82 R.T. 82 Comments _____
 (G) Final Shut-In 93 Sampler _____
 (H) Final Hydrostatic 2059 Straddle _____
 Shale Packer _____ Ruined Shale Packer _____
 Ruined Packer X 320
 Extra Packer _____ Extra Copies _____
 Initial Open 30 Extra Recorder _____ Sub Total 320
 Initial Shut-In 60 Day Standby _____ Total 1877
 Final Flow 30 Accessibility _____ MP/DST Disc't _____
 Final Shut-In 60 Sub Total 1557

Approved By _____ Our Representative Bud Oit

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.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 62281

Well Name & No. Franklin 'A' #1-27 Test No. 4 Date 5-5-15
 Company Murfin Drilg. Co., Inc. Elevation 3128 KB 3123 GL
 Address 250 N. Water. STE 300 Wichita, KS
 Co. Rep / Geo. Steve Miller Rig Murfin #7
 Location: Sec. 27 Twp. 4S Rge. 33W Co. Rawlins State KS

Interval Tested 4408-4436 Zone Tested Lower Pawnee
 Anchor Length 28' Drill Pipe Run 4157 Mud Wt. 9.3
 Top Packer Depth 4403 Drill Collars Run 248.8 Vis 96
 Bottom Packer Depth 4408 Wt. Pipe Run - WL 8.8
 Total Depth 4436 Chlorides 5800 ppm System LCM 9
 Blow Description IF- Opened w/ surface blow. built to B.o.B in 13 min.
ISI- Return built to 7" over the hour
PF- Blow built to B.o.B in 12 min.
FSI- Return built to 7" over the 90 mins.

Rec	Feet of	%gas	%oil	%water	%mud
297	60	30%	70%		
244	Gmco	30%	40%		30%
		%gas	%oil	%water	%mud
		%gas	%oil	%water	%mud
585	GIP	100%			

Rec Total 541 BHT 138 Gravity 38 API RW @ °F Chlorides ppm
 (A) Initial Hydrostatic 2263 Test 1150 T-On Location 4:20 PM
 (B) First Initial Flow 53 Jars 250 T-Started 4:25 PM
 (C) First Final Flow 128 Safety Joint 75 T-Open 6:51 PM
 (D) Initial Shut-In 1129 Circ Sub _____ T-Pulled 10:51 PM
 (E) Second Initial Flow 143 Hourly Standby _____ T-Out 1:42 AM
 (F) Second Final Flow 218 Mileage 82 R.T. 82 Comments _____
 (G) Final Shut-In 1090 Sampler _____
 (H) Final Hydrostatic 2258 Straddle _____
 Initial Open 30 Shale Packer _____
 Initial Shut-In 60 Extra Packer _____
 Final Flow 60 Extra Recorder _____
 Final Shut-In 90 Day Standby _____
 Accessibility _____
 Sub Total 1557 MP/DST Disc't _____

Approved By _____ Our Representative Burd O'K
 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.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **62282**

4/10

Well Name & No. Franklin 'A' #1-27 Test No. 5 Date 5-6-15
 Company Murfin Drilg. Co., Inc Elevation 3128 KB 3123 GL
 Address 250 N. Water, STE 300 Wichita, KS 67202
 Co. Rep / Geo. Steve Miller Rig Murfin #7
 Location: Sec. 27 Twp. 4S Rge. 33W Co. Rawlins State KS

Interval Tested 4443-4490 Zone Tested Verdigris
 Anchor Length 47' Drill Pipe Run 4181 Mud Wt. 9.1
 Top Packer Depth 4438 Drill Collars Run 248.8 Vis 91
 Bottom Packer Depth 4443 Wt. Pipe Run — WL 8.4
 Total Depth 4490 Chlorides 6400 ppm System LCM 9
 Blow Description IF- Opened w/ surface blow, built to 1"
ISI- No Return
FF- No Blow
FSI No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>106</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	Feet of	%gas	%oil	%water	%mud

Rec Total 106 BHT 127 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic 2294 Test 1150 T-On Location 11:16 AM
 (B) First Initial Flow 63 Jars 250 T-Started 11:20 AM
 (C) First Final Flow 73 Safety Joint 75 T-Open 1:39 PM
 (D) Initial Shut-In 388 Circ Sub — T-Pulled 4:39 PM
 (E) Second Initial Flow 78 Hourly Standby — T-Out 6:56 PM
 (F) Second Final Flow 82 Mileage 82 R.T x2 Comments Picked up tool
 (G) Final Shut-In 284 Sampler 82+82 on 5-7-15 @ 3:15 PM
 (H) Final Hydrostatic 2254 Straddle — Ruined Shale Packer —
 Shale Packer — Ruined Packer X2 320+320
 Extra Packer — Extra Copies —
 Initial Open 30 Extra Recorder — Sub Total 640
 Initial Shut-In 60 Day Standby — Total 2279
 Final Flow 30 Accessibility — MP/DST Disc't —
 Final Shut-In 60 Sub Total 1639

Approved By _____ Our Representative Brd Bt

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