

DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N Water ST STE 300 Wichita, KS 67202

ATTN: Gregg Smith

Moonraker #6-27

27-10S-56W Lincoln, CO

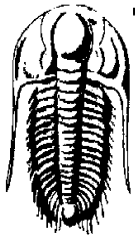
Start Date: 2019.01.14 @ 17:23:00

End Date: 2019.01.15 @ 17:28:54

Job Ticket #: 64065 DST #: 1

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

Printed: 2019.01.21 @ 14:49:53



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co.

27-10S-56W Lincoln, CO

250 N Water ST STE 300 Wichita, KS 67202

Moonraker #6-27

ATTN: Gregg Smith

Job Ticket: 64065

DST#: 1

Test Start: 2019.01.14 @ 17:23:00

GENERAL INFORMATION:

Formation: **Marmaton A - C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:08:54

Time Test Ended: 17:28:54

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

Interval: **7334.00 ft (KB) To 7402.00 ft (KB) (TVD)**

Total Depth: 7402.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 5473.00 ft (KB)

5462.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8289 Inside

Press@RunDepth: 340.35 psig @ 7336.00 ft (KB)

Start Date: 2019.01.14

End Date:

2019.01.15

Start Time: 17:23:02

End Time:

17:28:54

Capacity: 8000.00 psig

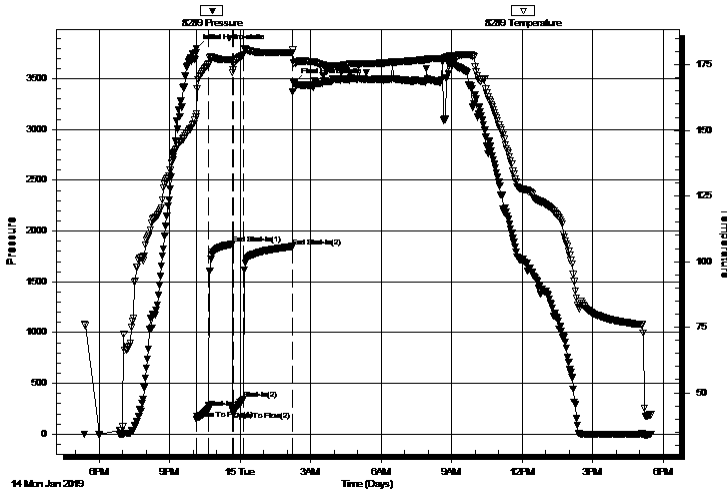
Last Calib.: 2019.01.14

Time On Btm: 2019.01.14 @ 22:08:20

Time Off Btm: 2019.01.15 @ 02:17:04

TEST COMMENT: IF: BOB 2 min., strong building blow, 616"
ISI: Blow back GTS immediately, 110"
FF: BOB GTS ASAO, strong building blow, 480" @ 1/8"
FSI: Blow back immediately, 320"

Pressure vs. Time



PRESSURE SUMMARY

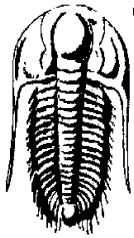
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3798.74	156.23	Initial Hydro-static
1	145.32	156.42	Open To Flow (1)
32	250.76	175.18	Shut-In(1)
91	1870.23	176.87	End Shut-In(1)
94	220.73	173.26	Open To Flow (2)
120	340.35	178.82	Shut-In(2)
246	1848.15	179.71	End Shut-In(2)
249	3461.24	175.67	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
155.00	GWM 10%G,30%W,60%M	0.76
2800.00	mud (circulated in)	36.32
93.00	VGM 40%G, 60%M	1.30
465.00	VGO 50%G, 50%O	6.52
93.00	GO 15%G, 85%O	1.30

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	8.30	8.50
Last Gas Rate	0.13	14.00	10.63
Max. Gas Rate	0.13	14.00	10.63



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DRILL STEM TEST REPORT

Murfin Drilling Co.

250 N Water ST STE 300 Wichita, KS 67202

ATTN: Gregg Smith

27-10S-56W Lincoln, CO

Moonraker #6-27

Job Ticket: 64065

DST#: 1

Test Start: 2019.01.14 @ 17:23:00

GENERAL INFORMATION:

Formation: **Marmaton A - C**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:08:54

Time Test Ended: 17:28:54

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

Interval: **7334.00 ft (KB) To 7402.00 ft (KB) (TVD)**

Total Depth: 7402.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 5473.00 ft (KB)

5462.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6672 Outside

Press@RunDepth: psig @ 7336.00 ft (KB)

Start Date: 2019.01.14

End Date:

2019.01.15

Start Time: 17:23:02

End Time:

17:29:00

Capacity: 8000.00 psig

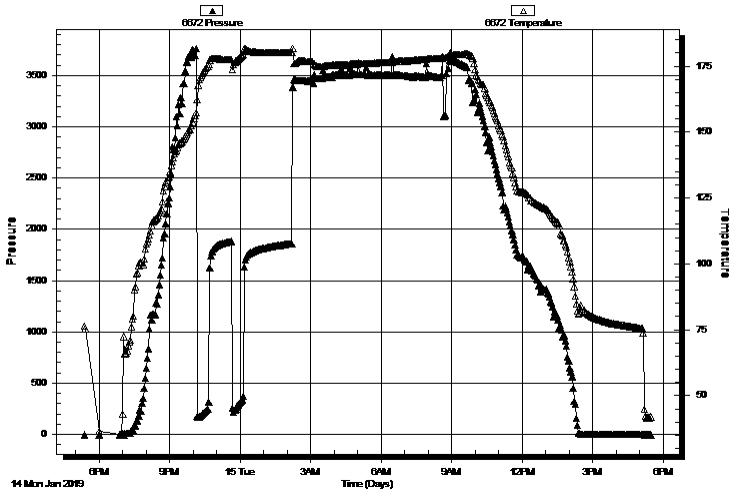
Last Calib.: 1899.12.30

Time On Btm:

Time Off Btm:

TEST COMMENT: IF: BOB 2 min., strong building blow, 616"
IS: Blow back GTS immediately, 110"
FF: BOB GTS ASAO, strong building blow, 480" @ 1/8"
FSI: Blow back immediately, 320"

Pressure vs. Time



PRESSURE SUMMARY

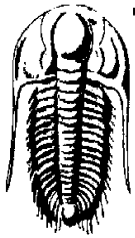
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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Recovery

Length (ft)	Description	Volume (bbl)
155.00	GWM 10%G,30%W,60%M	0.76
2800.00	mud (circulated in)	36.32
93.00	VGM 40%G, 60%M	1.30
465.00	VGO 50%G, 50%O	6.52
93.00	GO 15%G, 85%O	1.30

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.13	8.30	8.50
Last Gas Rate	0.13	14.00	10.63
Max. Gas Rate	0.13	14.00	10.63



TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

27-10S-56W Lincoln, CO

250 N Water ST STE 300 Wichita, KS 67202

Moonraker #6-27

Job Ticket: 64065

DST#: 1

ATTN: Gregg Smith

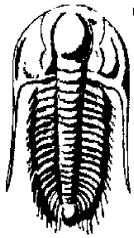
Test Start: 2019.01.14 @ 17:23:00

Tool Information

Drill Pipe:	Length: 6844.00 ft	Diameter: 3.80 inches	Volume: 96.00 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 480.00 ft	Diameter: 2.25 inches	Volume: 2.36 bbl	Weight to Pull Loose: 105000.0 lb
		Total Volume:	98.36 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 98000.00 lb
Depth to Top Packer:	7334.00 ft			Final 104000.0 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	68.00 ft			
Tool Length:	98.00 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			7309.00	
Sampler	3.00			7312.00	
Hydraulic tool	5.00			7317.00	
Jars	5.00			7322.00	
Safety Joint	3.00			7325.00	
Packer	5.00			7330.00	30.00 Bottom Of Top Packer
Packer	4.00			7334.00	
Stubb	1.00			7335.00	
Perforations	1.00			7336.00	
Recorder	0.00	8289	Inside	7336.00	
Recorder	0.00	6672	Outside	7336.00	
Perforations	29.00			7365.00	
Change Over Sub	1.00			7366.00	
Drill Pipe	32.00			7398.00	
Change Over Sub	1.00			7399.00	
Bullnose	3.00			7402.00	68.00 Bottom Packers & Anchor
Total Tool Length:	98.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

27-10S-56W Lincoln, CO

250 N Water ST STE 300 Wichita, KS 67202

Moonraker #6-27

Job Ticket: 64065

DST#: 1

ATTN: Gregg Smith

Test Start: 2019.01.14 @ 17:23:00

Mud and Cushion Information

Mud Type: Gel Chem

Mud Weight: 9.00 lb/gal

Viscosity: 71.00 sec/qt

Water Loss: 7.19 in³

Resistivity: ohm.m

Salinity: 400.00 ppm

Filter Cake: inches

Cushion Type:

Cushion Length:

Cushion Volume:

Gas Cushion Type:

Gas Cushion Pressure:

ft

bbl

psig

Oil API:

Water Salinity:

38 deg API

ppm

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
155.00	GWM 10%G,30%W,60%M	0.762
2800.00	mud (circulated in)	36.316
93.00	VGM 40%G, 60%M	1.305
465.00	VGO 50%G, 50%O	6.523
93.00	GO 15%G, 85%O	1.305

Total Length: 3606.00 ft Total Volume: 46.211 bbl

Num Fluid Samples: 0

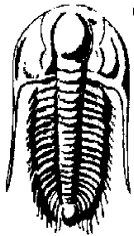
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: API = 36@40F = 38 API



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DRILL STEM TEST REPORT

GAS RATES

Murfin Drilling Co.

27-10S-56W Lincoln, CO

250 N Water ST STE 300 Wichita, KS 67202

Moonraker #6-27

Job Ticket: 64065

DST#: 1

ATTN: Gregg Smith

Test Start: 2019.01.14 @ 17:23:00

Gas Rates Information

Temperature: 59 (deg F)

Relative Density: 0.65

Z Factor: 0.8

Gas Rates Table

Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.13	8.30	8.50
2	20	0.13	9.90	9.09
2	30	0.13	14.00	10.63

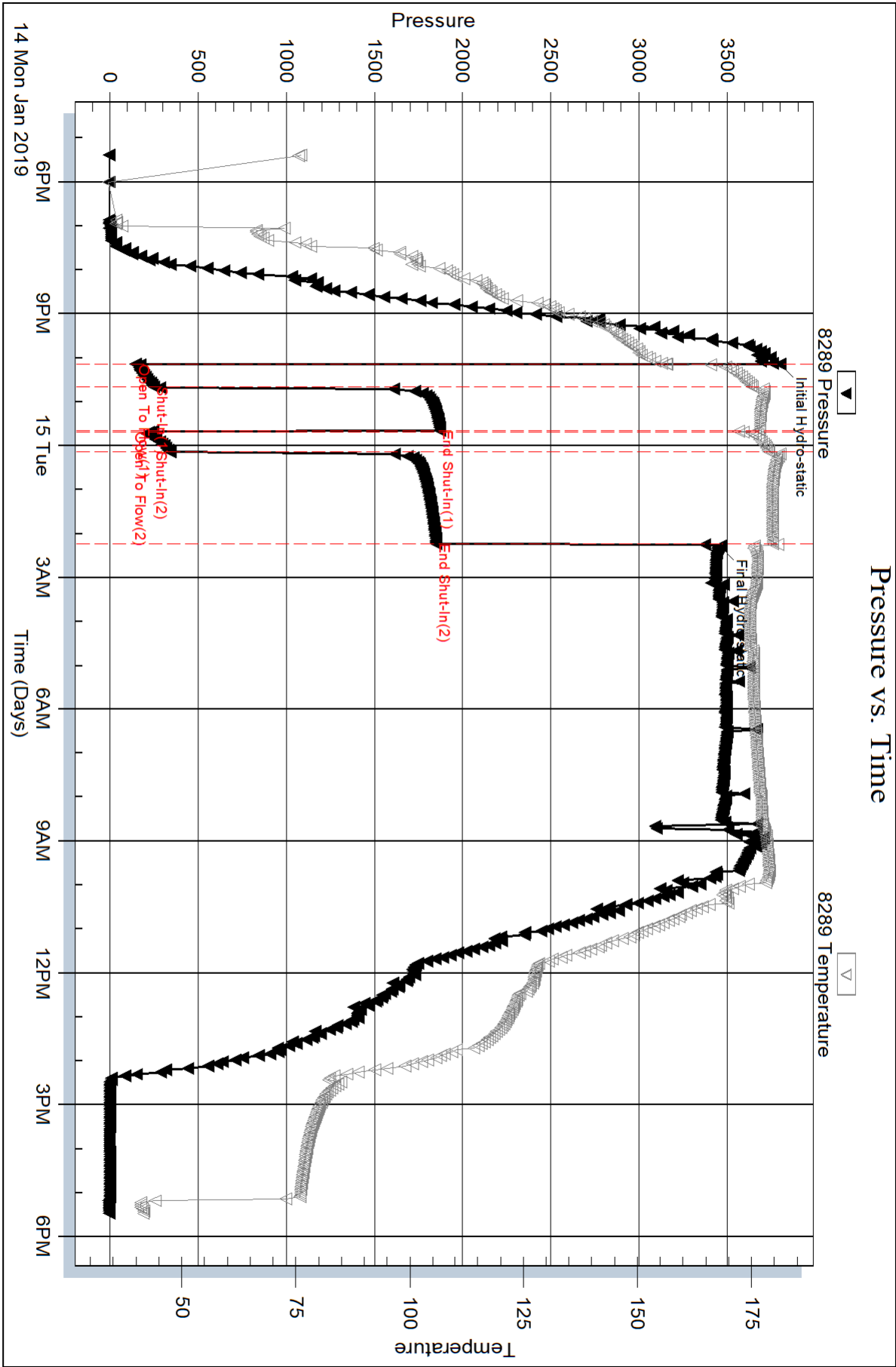
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Inside

Murfin Drilling Co.

Moonraker #6-27

DST Test Number: 1

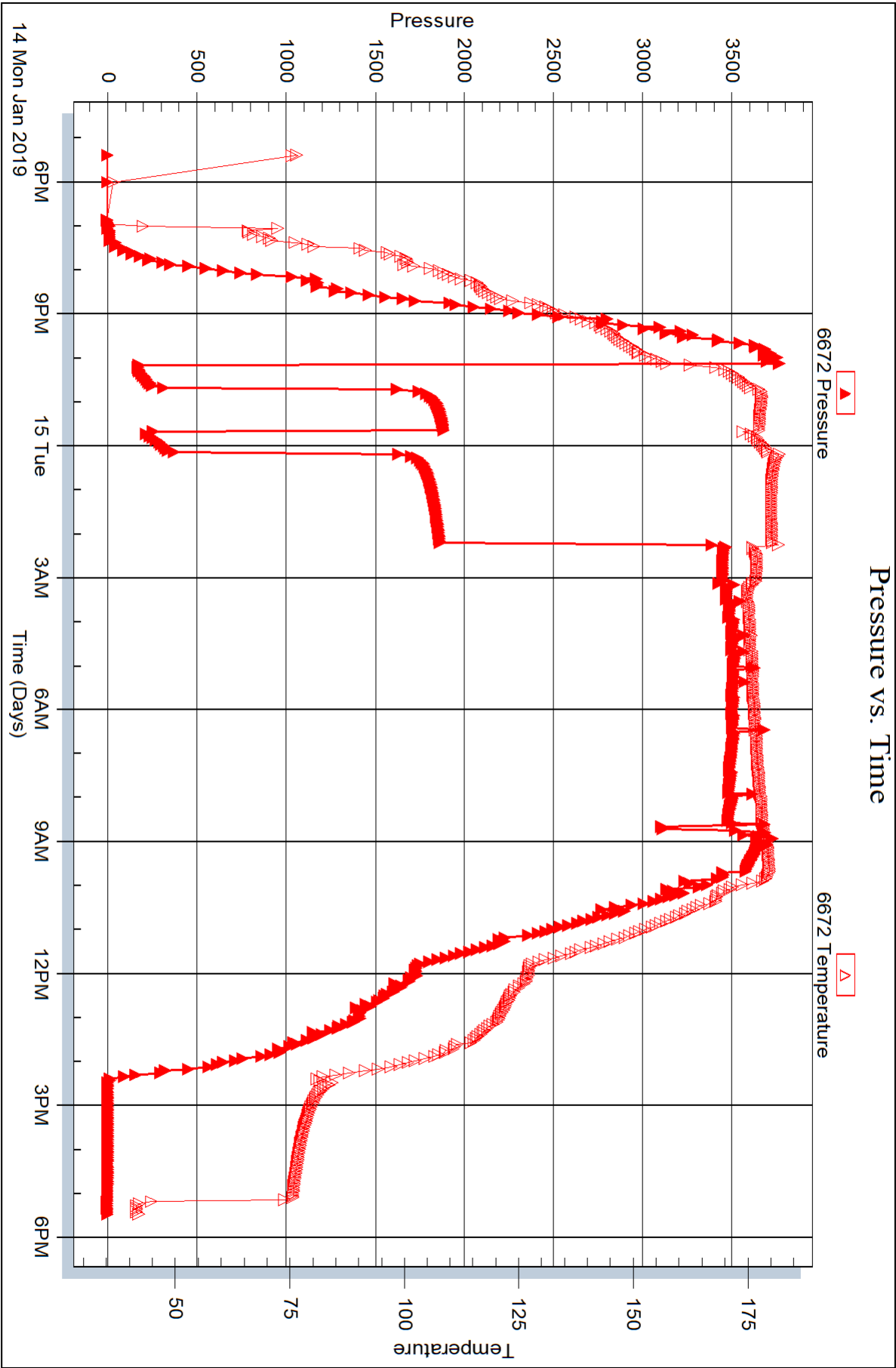


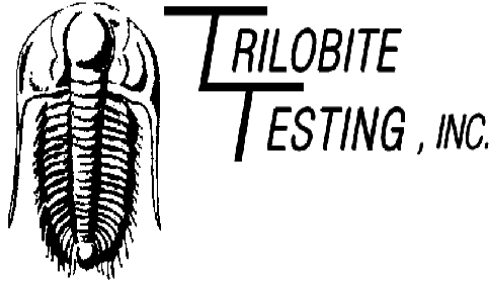
Serial #: 6672

Outside Murfin Drilling Co.

Moonraker #6-27

DST Test Number: 1





DRILL STEM TEST REPORT

Prepared For: **Murfin Drilling Co.**

250 N Water ST STE 300 Wichita, KS 67202

ATTN: Gregg Smith

Moonraker #6-27

27-10S-56W Lincoln, CO

Start Date: 2019.01.16 @ 22:36:00

End Date: 2019.01.17 @ 12:27:40

Job Ticket #: 64066 DST #: 2

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

Printed: 2019.01.21 @ 14:49:04



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TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co.

250 N Water ST STE 300 Wichita, KS 67202

ATTN: Gregg Smith

27-10S-56W Lincoln, CO

Moonraker #6-27

Job Ticket: 64066

DST#: 2

Test Start: 2019.01.16 @ 22:36:00

GENERAL INFORMATION:

Formation: **Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:50:24

Time Test Ended: 12:27:40

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

Interval: 7440.00 ft (KB) To 7490.00 ft (KB) (TVD)

Total Depth: 7490.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 5473.00 ft (KB)

5462.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 8289 Inside

Press@RunDepth: 33.55 psig @ 7443.00 ft (KB)

Start Date: 2019.01.16

End Date:

2019.01.17

Start Time: 22:36:02

End Time:

12:27:40

Capacity: 8000.00 psig

Last Calib.: 2019.01.16

Time On Btm: 2019.01.17 @ 03:50:09

Time Off Btm: 2019.01.17 @ 08:27:10

TEST COMMENT: IF: Fair building blow , 8.4"

IS: No blow back

FF: BOB 40 min., strong building blow , 19.7"

FS: No blow back

PRESSURE SUMMARY

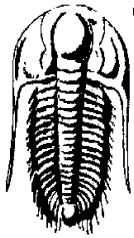
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	3728.29	165.00	Initial Hydro-static
1	53.13	163.61	Open To Flow Slight plugging
4	23.16	165.48	Open To Flow (1)
33	33.55	168.21	Shut-In(1)
92	1709.33	171.84	End Shut-In(1)
92	52.70	170.96	Open To Flow (2)
152	64.13	176.32	Shut-In(2)
275	1753.92	177.68	End Shut-In(2)
278	3467.03	175.60	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
93.00	GSOCM 10%G,10%O,80%M	0.46

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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Murfin Drilling Co.

250 N Water ST STE 300 Wichita, KS 67202

ATTN: Gregg Smith

27-10S-56W Lincoln, CO

Moonraker #6-27

Job Ticket: 64066

DST#: 2

Test Start: 2019.01.16 @ 22:36:00

GENERAL INFORMATION:

Formation: **Ft. Scott**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 03:50:24

Time Test Ended: 12:27:40

Test Type: Conventional Bottom Hole (Initial)

Tester: Chris Hagman

Unit No: 75

Interval: 7440.00 ft (KB) To 7490.00 ft (KB) (TVD)

Total Depth: 7490.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 5473.00 ft (KB)

5462.00 ft (CF)

KB to GR/CF: 11.00 ft

Serial #: 6672 Outside

Press@RunDepth: psig @ 7443.00 ft (KB)

Start Date: 2019.01.16

End Date:

2019.01.17

Start Time: 22:36:02

End Time:

12:27:25

Capacity: 8000.00 psig

Last Calib.: 1899.12.30

Time On Btm:

Time Off Btm:

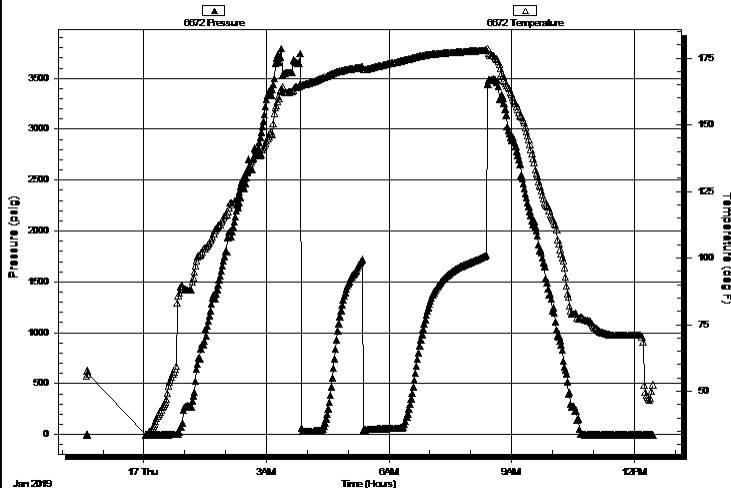
TEST COMMENT: IF: Fair building blow , 8.4"

IS: No blow back

FF: BOB 40 min., strong building blow , 19.7"

FS: No blow back

Pressure vs. Time



PRESSURE SUMMARY

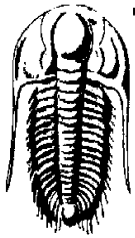
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
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Recovery

Length (ft)	Description	Volume (bbl)
93.00	GSOCM 10%G,10%O,80%M	0.46

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
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TRILOBITE
TESTING, INC.

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co.

27-10S-56W Lincoln, CO

250 N Water ST STE 300 Wichita, KS 67202

Moonraker #6-27

Job Ticket: 64066

DST#: 2

ATTN: Gregg Smith

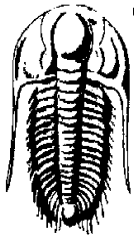
Test Start: 2019.01.16 @ 22:36:00

Tool Information

Drill Pipe:	Length: 6937.00 ft	Diameter: 3.80 inches	Volume: 97.31 bbl	Tool Weight: 2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 480.00 ft	Diameter: 2.25 inches	Volume: 2.36 bbl	Weight to Pull Loose: 110000.0 lb
		Total Volume:	99.67 bbl	Tool Chased 0.00 ft
Drill Pipe Above KB:	7.00 ft			String Weight: Initial 98000.00 lb
Depth to Top Packer:	7440.00 ft			Final 98000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	50.00 ft			
Tool Length:	80.00 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			7415.00	
Sampler	3.00			7418.00	
Hydraulic tool	5.00			7423.00	
Jars	5.00			7428.00	
Safety Joint	3.00			7431.00	
Packer	5.00			7436.00	30.00 Bottom Of Top Packer
Packer	4.00			7440.00	
Stubb	1.00			7441.00	
Perforations	2.00			7443.00	
Recorder	0.00	8289	Inside	7443.00	
Recorder	0.00	6672	Outside	7443.00	
Perforations	10.00			7453.00	
Change Over Sub	1.00			7454.00	
Drill Pipe	32.00			7486.00	
Change Over Sub	1.00			7487.00	
Bullnose	3.00			7490.00	50.00 Bottom Packers & Anchor
Total Tool Length:	80.00				



TRILOBITE
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DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co.

27-10S-56W Lincoln, CO

250 N Water ST STE 300 Wichita, KS 67202

Moonraker #6-27

Job Ticket: 64066

DST#: 2

ATTN: Gregg Smith

Test Start: 2019.01.16 @ 22:36:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbl

Water Loss: 6.39 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
93.00	GSOCM 10%G, 10%O, 80%M	0.457

Total Length: 93.00 ft Total Volume: 0.457 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Sampler= 1000ml oil, 3 CF Gas, 200ml mud, @ 550psi
449' GIP

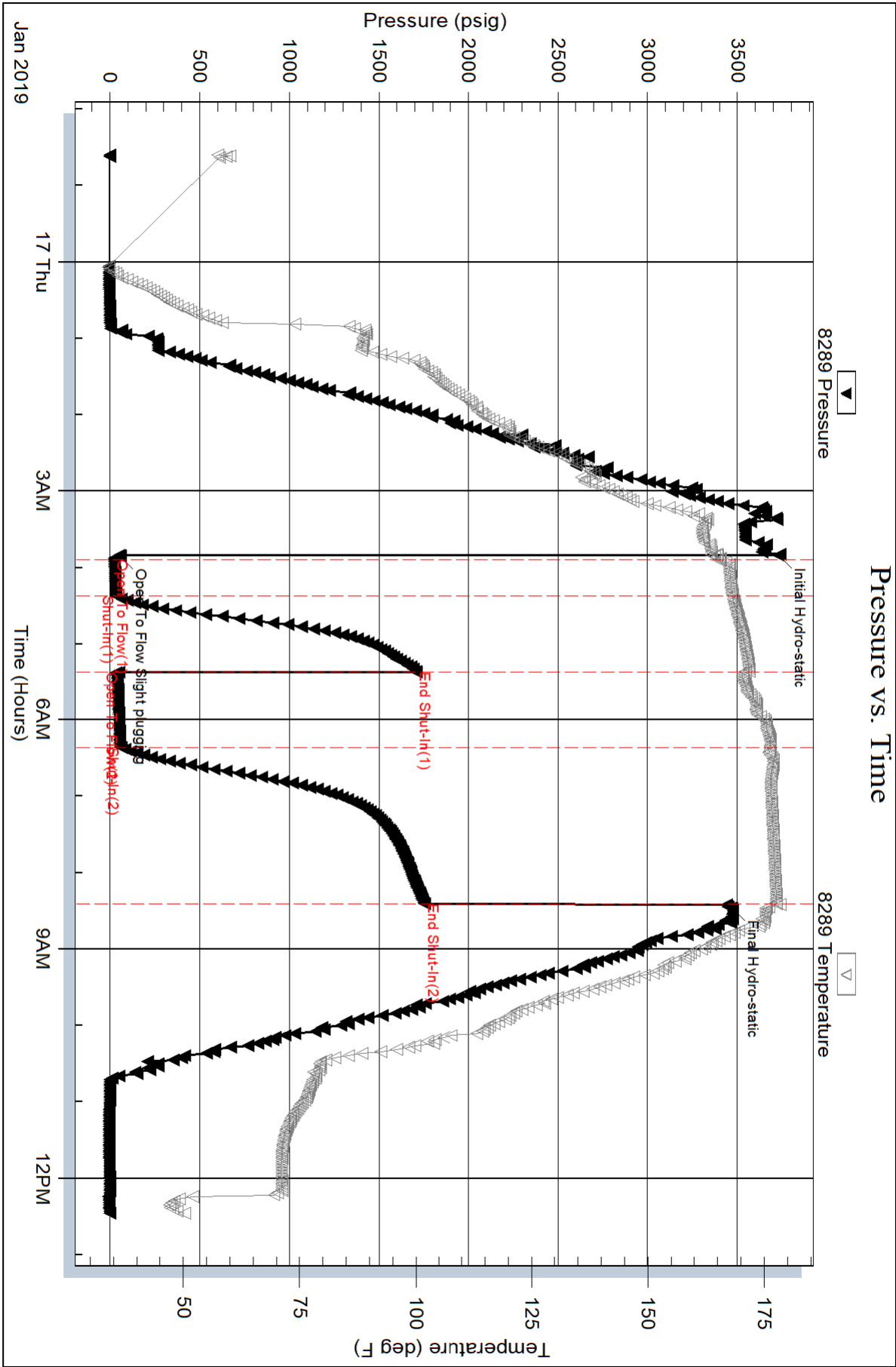
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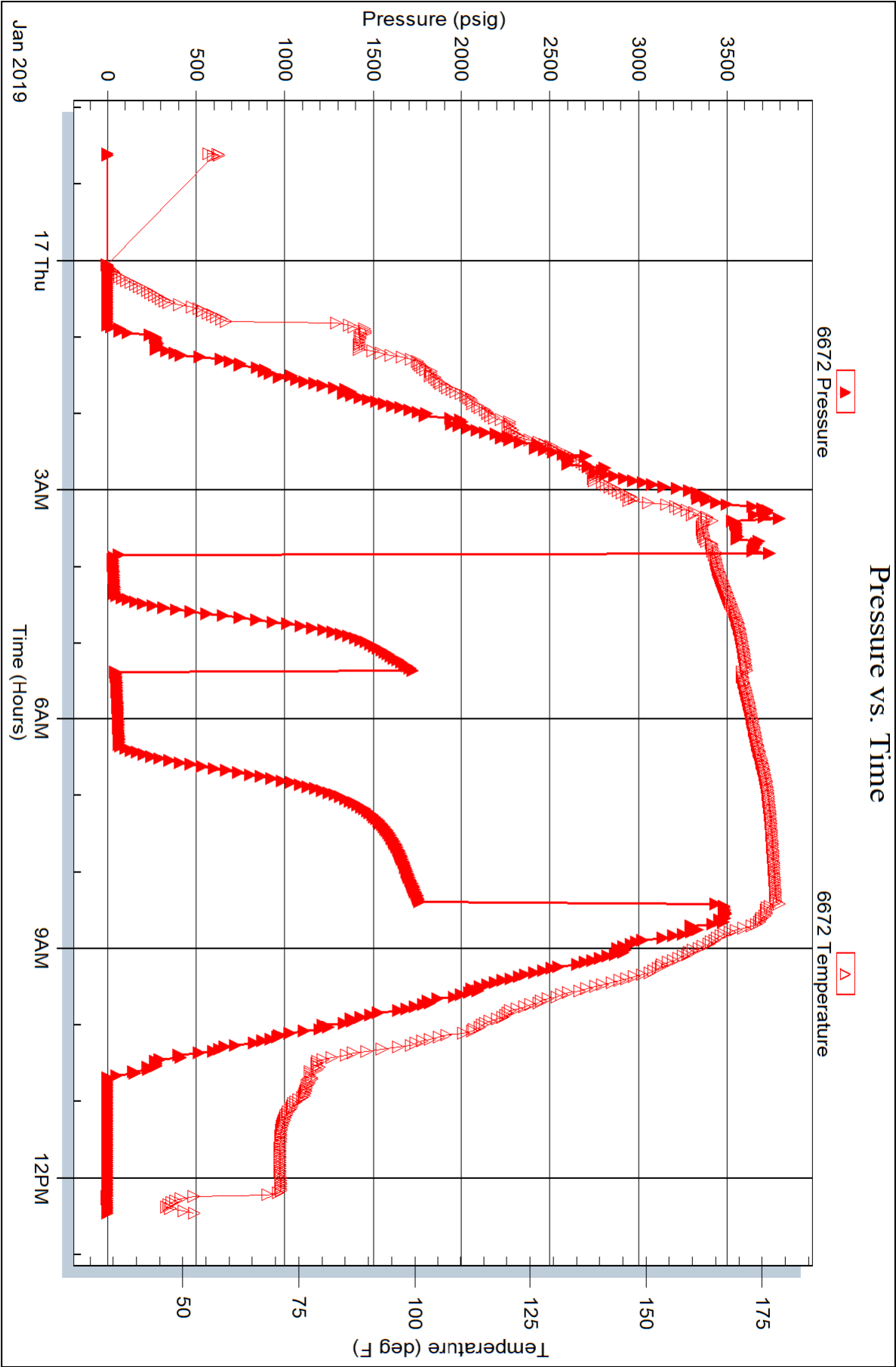
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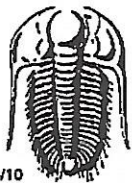
Murfin Drilling Co.

Moonraker #6-27

DST Test Number: 2







TRIBOLITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. **64065** 24998

Well Name & No. Moonraker 6-27 Test No. 1 Date 1-14-19
Company Murfin Drilling Co. Elevation 5473 KB 5462 GL
Address 250 N Water ST STE 300 Wichita, KS 67202
Co. Rep / Geo. Gregg Smith Rig Murfin 25
Location: Sec. 27 Twp 10S Rge. 56W Co. Lincoln State CO

Interval Tested 7334-7402 Zone Tested Marmaton A.B., & C
Anchor Length 68' Drill Pipe Run 6844 Mud Wt. 9.1
Top Packer Depth 7329 Drill Collars Run 480 Vis 71
Bottom Packer Depth 7334 Wt. Pipe Run N.A. WL 7.2
Total Depth 7402 Chlorides 400 ppm System LCM 20th

Blow Description IF: BOB 2 min., strong building blow, 616 inches
ISI: Blow back, GTS immediately, 110 inches
FF: BOB, GTS ASAO, strong building blow, 480 inches @ 1/8"
FSI: Blow back immediately, 320 inches
waited for daylight
dropped bar

Rec	Feet of	%gas	%oil	%water	%mud
<u>55</u>	<u>gassy watery mud</u>	<u>10</u>	<u>30</u>	<u>60</u>	<u>%mud</u>
<u>2800</u>	<u>mud (circulated from dropping bar)</u>	<u>%gas</u>	<u>%oil</u>	<u>%water</u>	<u>100 %mud</u>
<u>93</u>	<u>gassy mud</u>	<u>40 %gas</u>	<u>Spot %oil</u>	<u>%water</u>	<u>60 %mud</u>
<u>465</u>	<u>gassy oil</u>	<u>50 %gas</u>	<u>50 %oil</u>	<u>%water</u>	<u>%mud</u>
<u>93</u>	<u>gassy oil</u>	<u>15 %gas</u>	<u>85 %oil</u>	<u>%water</u>	<u>%mud</u>

Rec Total 3606 BHT 177 Gravity 38 API RW @ °F Chlorides ppm

(A) Initial Hydrostatic 3799 ☒ Test conv. 1850 T-On Location 1330

(B) First Initial Flow 145 ☒ Jars 250 T-Started 1730

(C) First Final Flow 251 ☒ Safety Joint 75 T-Open 2205

(D) Initial Shut-In 1870 ☐ Circ Sub T-Pulled 0205

(E) Second Initial Flow 221 ☐ Hourly Standby 15h ?? T-Out 1730 (1-15-19)

(F) Second Final Flow 340 ☒ Mileage x 480 364rt Comments lots on Q 1723

(G) Final Shut-In 1848 ☒ Sampler 250 told on bank at 13:00

(H) Final Hydrostatic 3461 ☐ Straddle ☐ Ruined Shale Packer

Initial Open 30 ☐ Extra Packer ☐ Ruined Packer

Initial Shut-In 60 ☐ Extra Recorder ☐ Extra Copies

Final Flow 30 ☐ Day Standby Sub Total 0

Final Shut-In 120 ☐ Accessibility Total 3039

Sub Total 3039 MP/DST Disc't

Approved By Gregg Smith Our Representative Chris Hagman

Tribolite 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.



Gas Volume Report

DST No.

[illegible]

Remarks:



TRILOBITE TESTING, INC.

P.O. Box 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 64065 Date 1-14-19
Company Name Marlin Drilling Co.
Lease Moongraker 6-27 Test No. 1
County Lincoln, CO Sec. 27 Twp. 10 S Rng. 56 W

SAMPLER RECOVERY

Gas 7 CF ~~ML~~ Chlorides _____ ppm.
Oil 1200 ML Resistivity _____ ohms @ _____ F
Mud Ø ML Viscosity _____
Water Ø ML Mud Weight _____
Other Ø ML Filtrate _____
Pressure 1050 psi ~~ML~~ Other _____
Total 1200 ML _____

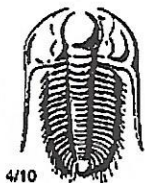
PIT MUD ANALYSIS

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity 38 corrected @60F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 64066

Well Name & No. Moontaker 6-27 Test No. 2 Date 1-16-19
 Company Murfin Drilling Co. Elevation 5473 KB 5462 GL
 Address 250 N Water St. STE 300 Wichita, KS 67202
 Co. Rep / Geo. Gregg Smith Rig Murfin 25
 Location: Sec. 27 Twp 10S Rge. 56W Co. Lincoln State CO.

Interval Tested 7440-7490 Zone Tested Fr. Scott
 Anchor Length 50 Drill Pipe Run 6937 Mud Wt. 9.0
 Top Packer Depth 7435 Drill Collars Run 480 Vis 60
 Bottom Packer Depth 7440 Wt. Pipe Run N.A. WL 6.4
 Total Depth 7490 Chlorides 600 ppm System LCM 24#

Blow Description IF: Fair building blow, 8.4 inches
ISL: No blow back
FPI BOR 40 min., 19.7 inches
FSI: No blow back

Rec	Feet of	%gas	%oil	%water	%mud
<u>93</u>	<u>gassy oily mud</u>	<u>10</u>	<u>10</u>	<u>80</u>	<u>80</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of <u>449' G.P.</u>	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 93 BHT 177 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic <u>3728</u>	<input checked="" type="checkbox"/> Test <u>conn.</u> 1850	T-On Location <u>2200</u>
(B) First Initial Flow <u>53</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>2330</u>
(C) First Final Flow <u>34</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>0350</u>
(D) Initial Shut-In <u>1709</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>0820</u>
(E) Second Initial Flow <u>53</u>	<input type="checkbox"/> Hourly Standby <u>1h 80</u>	T-Out <u>1200</u>
(F) Second Final Flow <u>64</u>	<input checked="" type="checkbox"/> Mileage <u>30 (Lincon) + 364</u>	Comments <u>bats on @ 2235</u>
(G) Final Shut-In <u>1754</u>	<input type="checkbox"/> Sampler <u>250</u>	
(H) Final Hydrostatic <u>3467</u>	<input type="checkbox"/> Straddle _____	

Initial Open <u>30</u>	<input checked="" type="checkbox"/> Shale Packer <u>X1.0</u> 250	<input checked="" type="checkbox"/> Ruined Shale Packer <u>X1.0</u> 350
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 <u>1.5d 15.5h</u>	<input type="checkbox"/> Extra Copies _____
Final Shut-In <u>120</u>	<input type="checkbox"/> Day Standby <u>released 1600 1-19-19</u>	Sub Total <u>1150</u>
	<input type="checkbox"/> Accessibility _____	Total <u>4299</u>
	Sub Total <u>3149</u>	MP/DST Disc't _____

Approved By Gregg Smith Our Representative Chris Hagman

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 362 • Hays, Kansas 67601

FLUID SAMPLER DATA

Ticket No. 64066 Date 1-16-19
Company Name Murkin Drilling Co.
Lease Moonraker 6-27 Test No. 2
County Lincoln, Co Sec. 27 Twp. 10S Rng. 56W

SAMPLER RECOVERY

Gas 3 CF ~~ML~~
Oil 1000 ML
Mud 200 ML
Water Ø ML
Other Ø ML
Pressure 550 PSI ~~ML~~
Total 1700 ML

PIT MUD ANALYSIS

Chlorides _____ ppm.
Resistivity _____ ohms @ _____ F
Viscosity _____
Mud Weight _____
Filtrate _____
Other _____

SAMPLER ANALYSIS

Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
Gravity _____ corrected @60F

PIPE RECOVERY

TOP
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
MIDDLE
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.
BOTTOM
Resistivity _____ ohms @ _____ F
Chlorides _____ ppm.