

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____			
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	PFEIFER 'A' 1-21
Doc ID	1509588

All Electric Logs Run

DIL
DUCP
MEL
BHCS

LeBlanc

PARTIAL BIT RECORD

COMPANY: Murfin Drilling Company, Inc. (30606)

LEASE: Peiffer, A. 1-21

FIELD: Wildcat

SECTION: 21 TOWNSHIP 2S RANGE 38W

COUNTY: Cheyenne STATE: Kansas

CONTRACTOR: Murfin Drilling Co., INC. (30606)

COMMENCED DRILLING: Thursday, March 21, 2020

RTD: 5200 FEET L.T.O. 4520 FEET

MUD P/L AT 3800 FEET: MUD TYPE: CHEMICAL

SUMMARY: 5200 FEET TO 5000 FEET

SHAPE: 5200 FEET TO 5000 FEET

SHAPE: 5000 FEET TO 4800 FEET

SHAPE: 4800 FEET TO 4600 FEET

SHAPE: 4600 FEET TO 4400 FEET

SHAPE: 4400 FEET TO 4200 FEET

SHAPE: 4200 FEET TO 4000 FEET

SHAPE: 4000 FEET TO 3800 FEET

SHAPE: 3800 FEET TO 3600 FEET

SHAPE: 3600 FEET TO 3400 FEET

SHAPE: 3400 FEET TO 3200 FEET

SHAPE: 3200 FEET TO 3000 FEET

SHAPE: 3000 FEET TO 2800 FEET

SHAPE: 2800 FEET TO 2600 FEET

SHAPE: 2600 FEET TO 2400 FEET

SHAPE: 2400 FEET TO 2200 FEET

SHAPE: 2200 FEET TO 2000 FEET

SHAPE: 2000 FEET TO 1800 FEET

SHAPE: 1800 FEET TO 1600 FEET

SHAPE: 1600 FEET TO 1400 FEET

SHAPE: 1400 FEET TO 1200 FEET

SHAPE: 1200 FEET TO 1000 FEET

SHAPE: 1000 FEET TO 800 FEET

SHAPE: 800 FEET TO 600 FEET

SHAPE: 600 FEET TO 400 FEET

SHAPE: 400 FEET TO 200 FEET

SHAPE: 200 FEET TO 0 FEET

LOG TOP: 5200 FEET

LOG TOP: 5000 FEET

LOG TOP: 4800 FEET

LOG TOP: 4600 FEET

LOG TOP: 4400 FEET

LOG TOP: 4200 FEET

LOG TOP: 4000 FEET

LOG TOP: 3800 FEET

LOG TOP: 3600 FEET

LOG TOP: 3400 FEET

LOG TOP: 3200 FEET

LOG TOP: 3000 FEET

LOG TOP: 2800 FEET

LOG TOP: 2600 FEET

LOG TOP: 2400 FEET

LOG TOP: 2200 FEET

LOG TOP: 2000 FEET

LOG TOP: 1800 FEET

LOG TOP: 1600 FEET

LOG TOP: 1400 FEET

LOG TOP: 1200 FEET

LOG TOP: 1000 FEET

LOG TOP: 800 FEET

LOG TOP: 600 FEET

LOG TOP: 400 FEET

LOG TOP: 200 FEET

LOG TOP: 0 FEET

Remarks	Formation	Sample	Corrected	Electric	Subsea
			Depth	Log Top	Depth
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DRILL STEM TEST REPORT

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

250 N. Water STE 300
Wichita, KS 672020

ATTN: Ken LeBlanc

Pfeifer 'A' #1-21

21-2s-38w Cheyenne,KS

Start Date: 2020.02.25 @ 18:06:00

End Date: 2020.02.26 @ 01:13:15

Job Ticket #: 66481 DST #: 1

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

Printed: 2020.03.02 @ 13:43:47



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

21-2s-38w Cheyenne,KS

250 N. Water STE 300
Wichita, KS 672020

Pfeifer 'A' #1-21

Job Ticket: 66481

DST#: 1

ATTN: Ken LeBlanc

Test Start: 2020.02.25 @ 18:06:00

GENERAL INFORMATION:

Formation: **LKC "A"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 20:17:45

Time Test Ended: 01:13:15

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 83

Interval: 4185.00 ft (KB) To 4270.00 ft (KB) (TVD)

Reference Elevations: 3304.00 ft (KB)

Total Depth: 4270.00 ft (KB) (TVD)

3299.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8652 Outside

Press@RunDepth: 26.72 psig @ 4186.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2020.02.25

End Date:

2020.02.26

Last Calib.:

2020.02.26

Start Time: 18:06:05

End Time:

01:13:14

Time On Btm:

2020.02.25 @ 20:17:30

Time Off Btm:

2020.02.25 @ 23:20:30

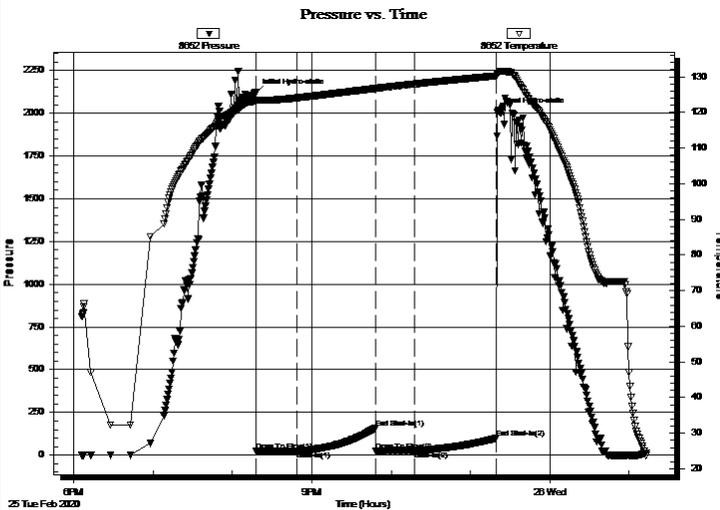
TEST COMMENT: 30 - IF: Blow built to 1 1/2" (diesel in bucket)

60 - IS: No blow back

30 - FF: No blow

60 - FS: No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2119.61	123.47	Initial Hydro-static
1	22.41	122.86	Open To Flow (1)
32	24.82	124.10	Shut-In(1)
91	156.88	126.72	End Shut-In(1)
91	24.25	126.68	Open To Flow (2)
121	26.72	127.98	Shut-In(2)
183	99.64	130.27	End Shut-In(2)
183	2007.05	130.70	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	Mud w /trace oil 100% m	0.22

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

21-2s-38w Cheyenne,KS

250 N. Water STE 300
Wichita, KS 672020

Pfeifer 'A' #1-21

Job Ticket: 66481

DST#: 1

ATTN: Ken LeBlanc

Test Start: 2020.02.25 @ 18:06:00

Tool Information

Drill Pipe:	Length: 3992.00 ft	Diameter: 3.80 inches	Volume: 56.00 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 68000.00 lb
			<u>Total Volume: 56.89 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	16.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4185.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	114.00 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			4157.00	
Shut In Tool	5.00			4162.00	
Hydraulic tool	5.00			4167.00	
Jars	5.00			4172.00	
Safety Joint	3.00			4175.00	
Packer	5.00			4180.00	29.00 Bottom Of Top Packer
Packer	5.00			4185.00	
Stubb	1.00			4186.00	
Recorder	0.00	6625	Inside	4186.00	
Recorder	0.00	8652	Outside	4186.00	
Perforations	15.00			4201.00	
Blank Spacing	65.00			4266.00	
Perforations	1.00			4267.00	
Bullnose	3.00			4270.00	85.00 Bottom Packers & Anchor

Total Tool Length: 114.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

21-2s-38w Cheyenne,KS

250 N. Water STE 300
Wichita, KS 672020

Pfeifer 'A' #1-21

Job Ticket: 66481

DST#: 1

ATTN: Ken LeBlanc

Test Start: 2020.02.25 @ 18:06:00

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	Mud w /trace oil 100%m	0.221

Total Length: 45.00 ft Total Volume: 0.221 bbl

Num Fluid Samples: 0

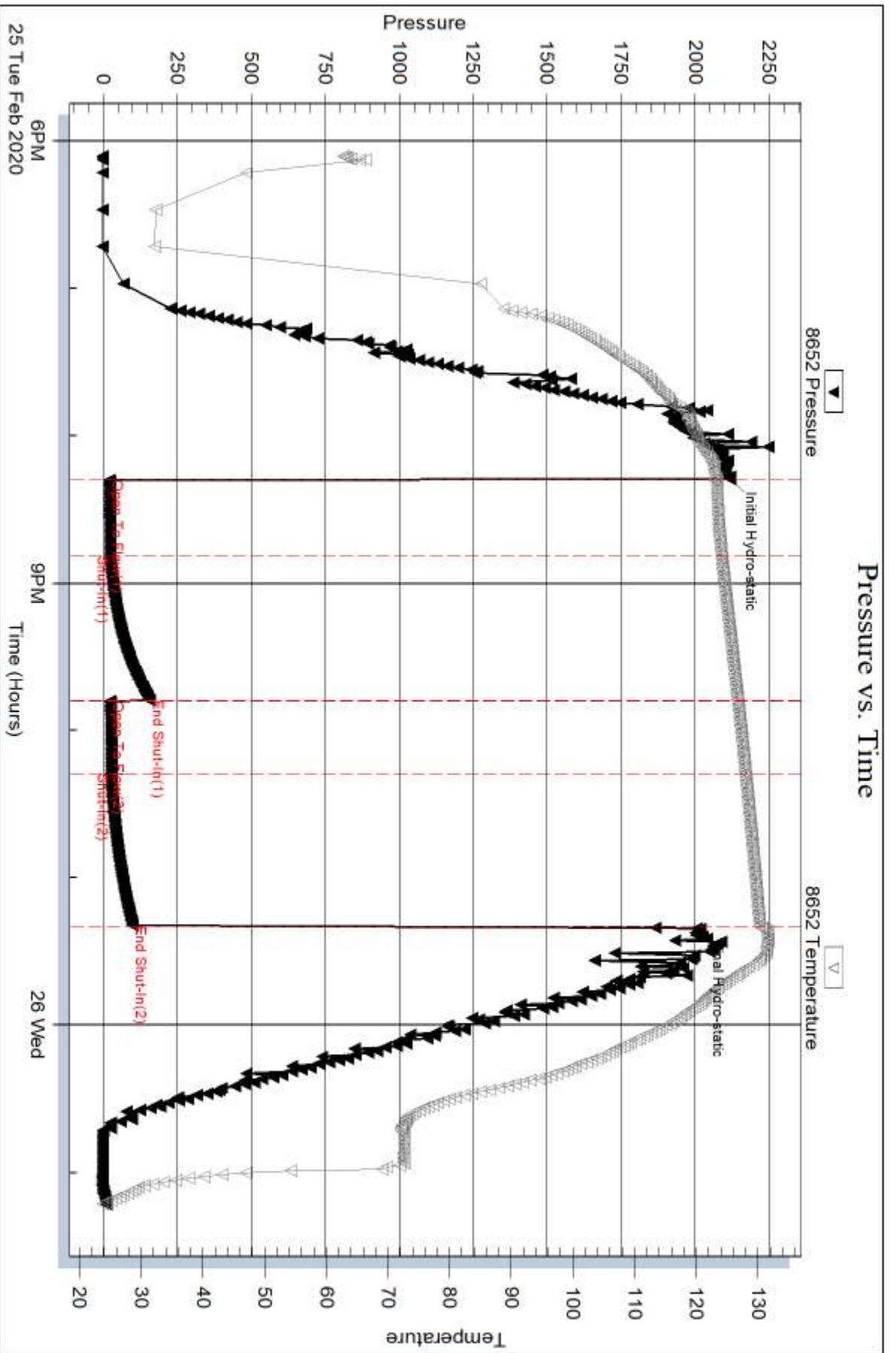
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



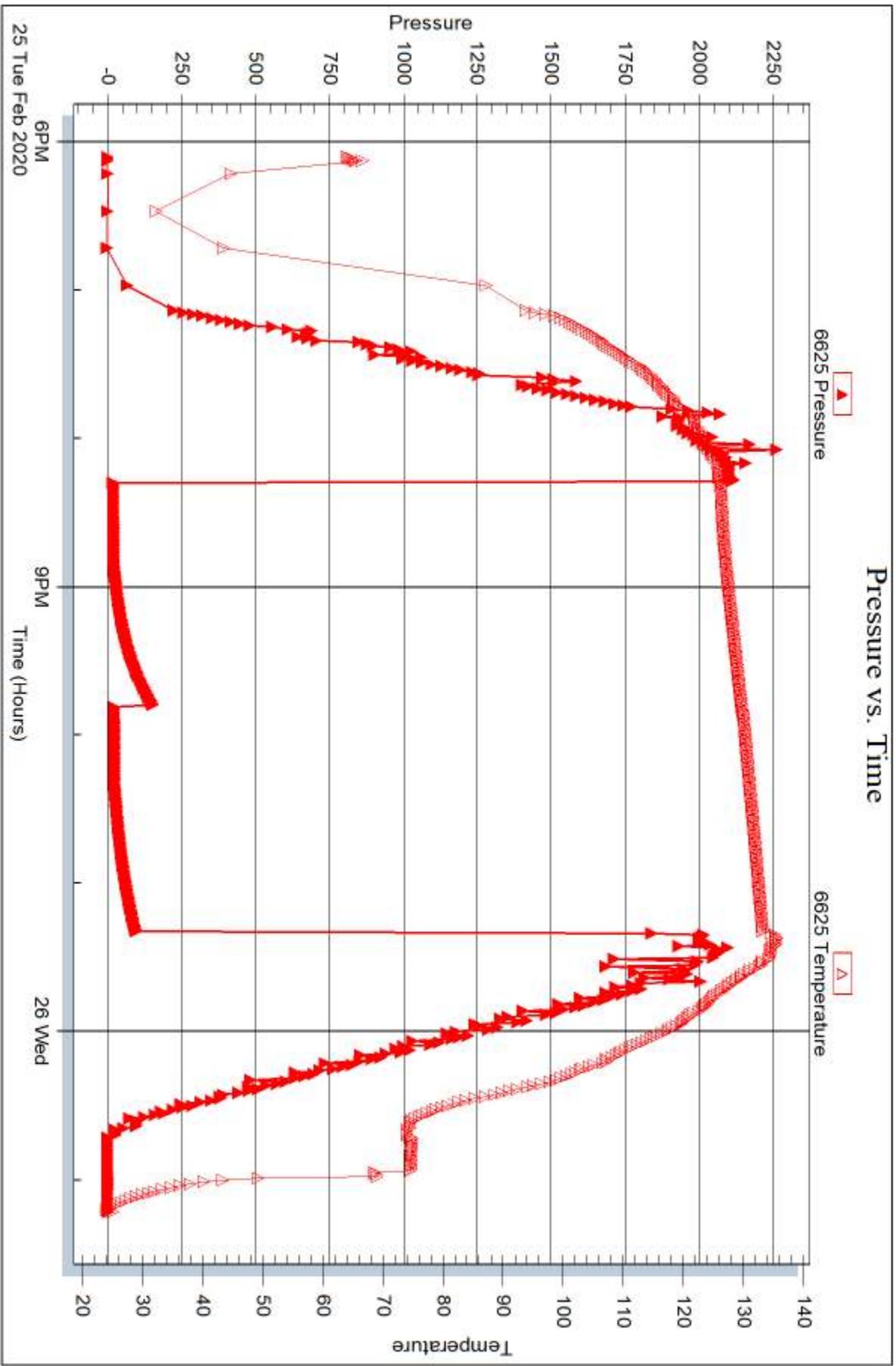
Serial #: 6625

Inside

Murfin Drilling Co., Inc.

Preifer 'A' #1-21

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 66481

Printed: 2020.03.02 @ 13:43:48



DRILL STEM TEST REPORT

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

250 N. Water STE 300
Wichita, KS 672020

ATTN: Ken LeBlanc

Pfeifer 'A' #1-21

21-2s-38w Cheyenne,KS

Start Date: 2020.02.26 @ 16:06:00

End Date: 2020.02.27 @ 00:24:00

Job Ticket #: 66482 DST #: 2

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

Printed: 2020.03.02 @ 13:43:25



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.
250 N. Water STE 300
Wichita, KS 672020
ATTN: Ken LeBlanc

21-2s-38w Cheyenne,KS

Pfeifer 'A' #1-21

Job Ticket: 66482 **DST#: 2**
Test Start: 2020.02.26 @ 16:06:00

GENERAL INFORMATION:

Formation: **LKC "D - G"**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:02:45
Time Test Ended: 00:24:00
Interval: **4305.00 ft (KB) To 4380.00 ft (KB) (TVD)**
Total Depth: 4380.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Test Type: Conventional Bottom Hole (Reset)
Tester: James Winder
Unit No: 83
Reference Elevations: 3304.00 ft (KB)
3299.00 ft (CF)
KB to GR/CF: 5.00 ft

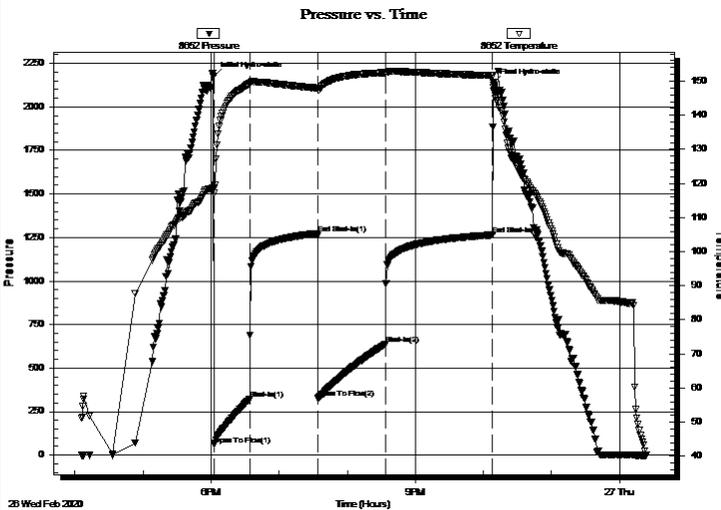
Serial #: 8652

Outside

Press@RunDepth: 637.51 psig @ 4306.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2020.02.26 End Date: 2020.02.27 Last Calib.: 2020.02.27
Start Time: 16:06:05 End Time: 00:23:59 Time On Btm: 2020.02.26 @ 18:02:30
Time Off Btm: 2020.02.26 @ 22:09:00

TEST COMMENT: 30 - IF: Blow built to BOB (11") at 4 min. (Diesel in bucket), built to 55"
60 - IS: No blow back
60 - FF: Blow built to BOB at 6 min., built to 81"
90 - FS: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2174.29	118.51	Initial Hydro-static
1	60.11	117.14	Open To Flow (1)
32	321.12	149.24	Shut-In(1)
92	1273.35	147.92	End Shut-In(1)
92	325.21	147.89	Open To Flow (2)
152	637.51	152.50	Shut-In(2)
246	1264.94	151.65	End Shut-In(2)
247	2138.70	148.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
1010.00	SMCW 97%w, 3% m	12.53
250.00	MCW 87%w, 13% m	3.51
125.00	MW 58%w, 42% m	1.75
15.00	Mud 100%	0.21

* 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 Co., Inc.

21-2s-38w Cheyenne,KS

250 N. Water STE 300
Wichita, KS 672020

Pfeifer 'A' #1-21

Job Ticket: 66482

DST#: 2

ATTN: Ken LeBlanc

Test Start: 2020.02.26 @ 16:06:00

Tool Information

Drill Pipe:	Length: 4120.00 ft	Diameter: 3.80 inches	Volume: 57.79 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 58.68 bbl</u>	Tool Chased 3.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	4305.00 ft			Final 66000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	75.00 ft			
Tool Length:	104.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments: tool chased 3' to bottom at open, lost around 10' of mud

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4277.00	
Shut In Tool	5.00			4282.00	
Hydraulic tool	5.00			4287.00	
Jars	5.00			4292.00	
Safety Joint	3.00			4295.00	
Packer	5.00			4300.00	29.00 Bottom Of Top Packer
Packer	5.00			4305.00	
Stubb	1.00			4306.00	
Recorder	0.00	6625	Inside	4306.00	
Recorder	0.00	8652	Outside	4306.00	
Perforations	5.00			4311.00	
Blank Spacing	65.00			4376.00	
Perforations	1.00			4377.00	
Bullnose	3.00			4380.00	75.00 Bottom Packers & Anchor

Total Tool Length: 104.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

21-2s-38w Cheyenne,KS

250 N. Water STE 300
Wichita, KS 672020

Pfeifer 'A' #1-21

Job Ticket: 66482

DST#: 2

ATTN: Ken LeBlanc

Test Start: 2020.02.26 @ 16:06:00

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:

130000 ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.38 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
1010.00	SMCW 97%w , 3%m	12.528
250.00	MCW 87%w , 13%m	3.507
125.00	MW 58%w , 42%m	1.753
15.00	Mud 100%	0.210

Total Length: 1400.00 ft Total Volume: 17.998 bbl

Num Fluid Samples: 0

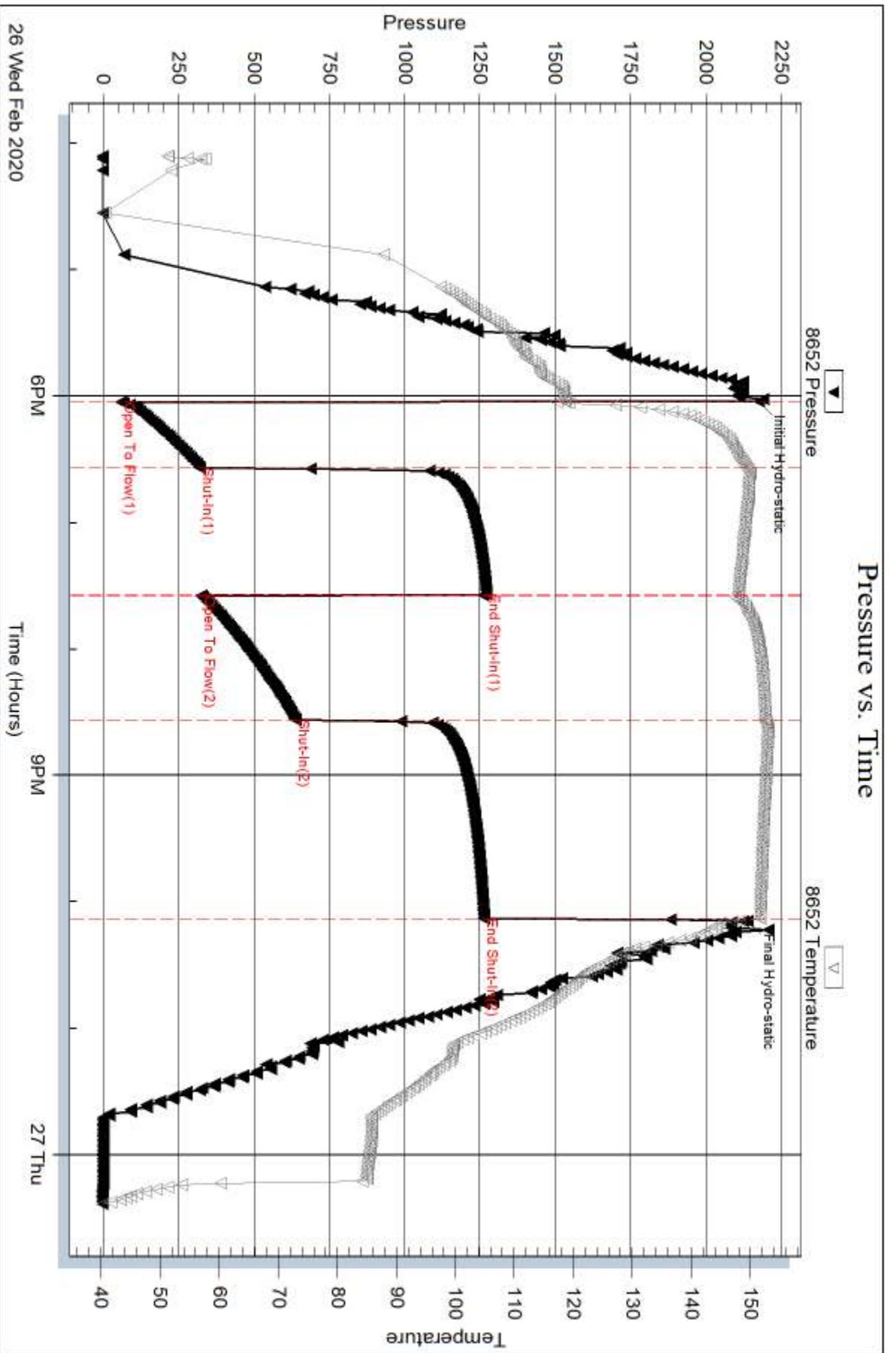
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .120 ohms @ 38.3 deg F Chlorides = 130,000 ppm



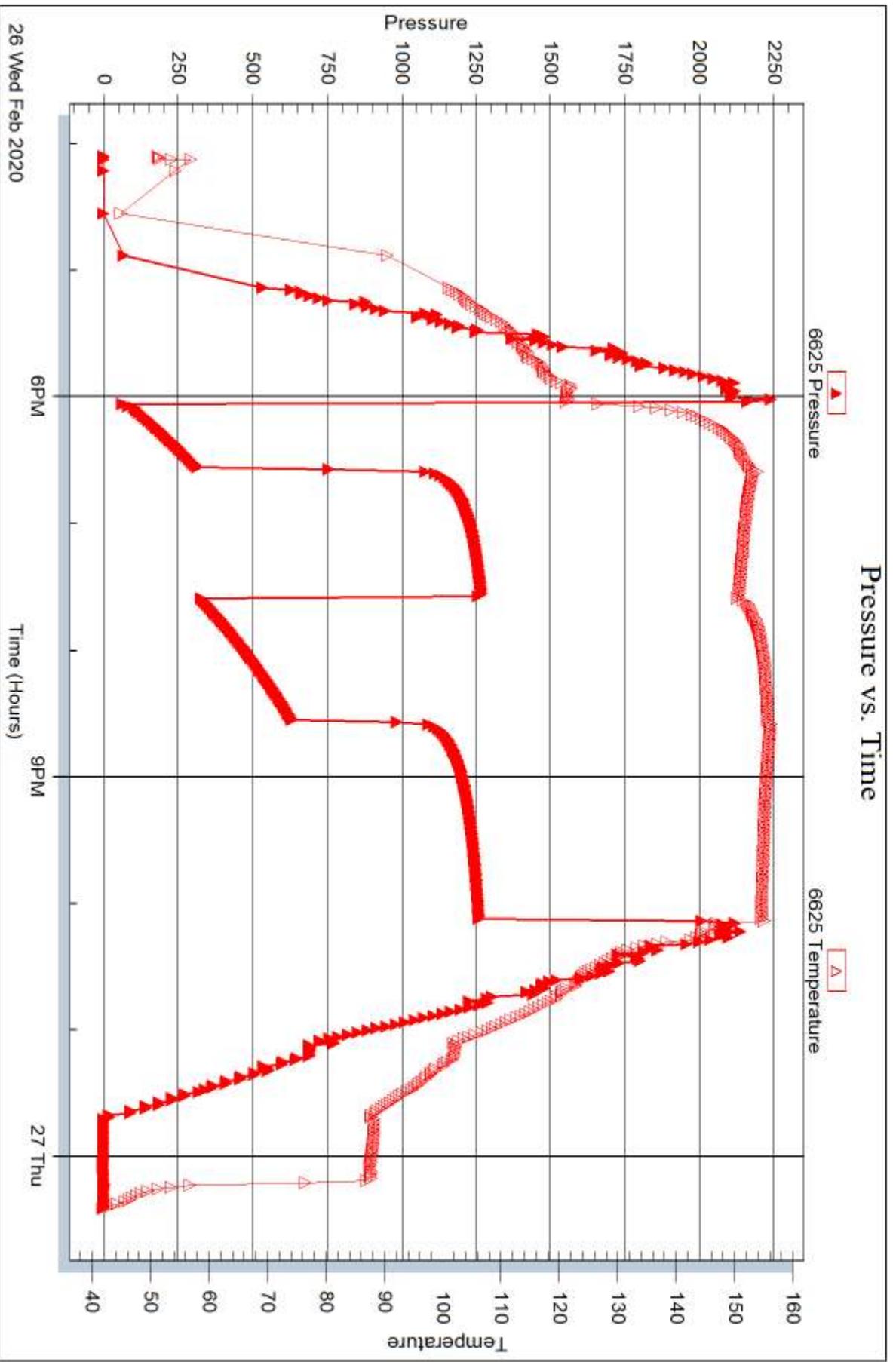
Serial #: 6625

Inside

Murfin Drilling Co., Inc.

Preifer 'A' #1-21

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 66482

Printed: 2020.03.02 @ 13:43:26



DRILL STEM TEST REPORT

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

250 N. Water STE 300
Wichita, KS 672020

ATTN: Ken LeBlanc

Pfeifer 'A' #1-21

21-2s-38w Cheyenne,KS

Start Date: 2020.02.27 @ 11:50:00

End Date: 2020.02.27 @ 18:47:15

Job Ticket #: 66483 DST #: 3

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

Printed: 2020.03.02 @ 13:43:01

Murfin Drilling Co., Inc.

21-2s-38w Cheyenne,KS

Pfeifer 'A' #1-21

DST # 3

LKC "H - J"

2020.02.27



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.
 250 N. Water STE 300
 Wichita, KS 672020
 ATTN: Ken LeBlanc

21-2s-38w Cheyenne, KS

Pfeifer 'A' #1-21

Job Ticket: 66483 **DST#: 3**
 Test Start: 2020.02.27 @ 11:50:00

GENERAL INFORMATION:

Formation: **LKC "H - J"**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 13:38:30
 Time Test Ended: 18:47:15
 Interval: **4375.00 ft (KB) To 4460.00 ft (KB) (TVD)**
 Total Depth: 4460.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Reset)
 Tester: James Winder
 Unit No: 83
 Reference Elevations: 3304.00 ft (KB)
 3299.00 ft (CF)
 KB to GR/CF: 5.00 ft

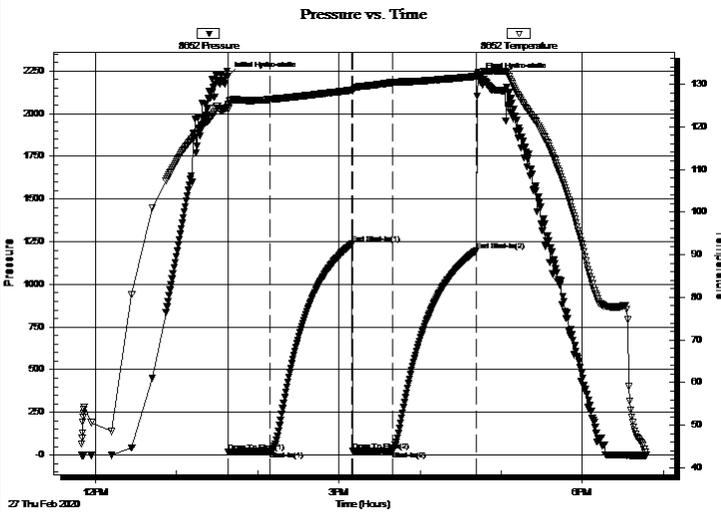
Serial #: 8652

Outside

Press@RunDepth: 26.35 psig @ 4376.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2020.02.27 End Date: 2020.02.27 Last Calib.: 2020.02.27
 Start Time: 11:50:05 End Time: 18:47:14 Time On Btm: 2020.02.27 @ 13:38:15
 Time Off Btm: 2020.02.27 @ 16:43:30

TEST COMMENT: 30 - IF: Blow built to 1 1/4" (Diesel in bucket)
 60 - IS: No blow
 30 - FF: No blow
 60 - FS: No blow

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2219.48	125.35	Initial Hydro-static
1	17.91	124.22	Open To Flow (1)
31	22.04	126.41	Shut-In(1)
92	1237.88	128.58	End Shut-In(1)
92	23.70	128.31	Open To Flow (2)
122	26.35	130.37	Shut-In(2)
184	1195.92	131.83	End Shut-In(2)
186	2210.86	132.74	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
20.00	Mud 100%	0.10

* 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 Co., Inc.

21-2s-38w Cheyenne,KS

250 N. Water STE 300
Wichita, KS 672020

Pfeifer 'A' #1-21

Job Ticket: 66483

DST#: 3

ATTN: Ken LeBlanc

Test Start: 2020.02.27 @ 11:50:00

Tool Information

Drill Pipe:	Length: 4183.00 ft	Diameter: 3.80 inches	Volume: 58.68 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 64000.00 lb
			<u>Total Volume: 59.57 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 64000.00 lb
Depth to Top Packer:	4375.00 ft			Final 64000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	85.00 ft			
Tool Length:	114.00 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			4347.00	
Shut In Tool	5.00			4352.00	
Hydraulic tool	5.00			4357.00	
Jars	5.00			4362.00	
Safety Joint	3.00			4365.00	
Packer	5.00			4370.00	29.00 Bottom Of Top Packer
Packer	5.00			4375.00	
Stubb	1.00			4376.00	
Recorder	0.00	6625	Inside	4376.00	
Recorder	0.00	8652	Outside	4376.00	
Perforations	15.00			4391.00	
Blank Spacing	65.00			4456.00	
Perforations	1.00			4457.00	
Bullnose	3.00			4460.00	85.00 Bottom Packers & Anchor

Total Tool Length: 114.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

21-2s-38w Cheyenne,KS

250 N. Water STE 300
Wichita, KS 672020

Pfeifer 'A' #1-21

Job Ticket: 66483

DST#: 3

ATTN: Ken LeBlanc

Test Start: 2020.02.27 @ 11:50:00

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: 56.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.59 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	Mud 100%	0.098

Total Length: 20.00 ft Total Volume: 0.098 bbl

Num Fluid Samples: 0

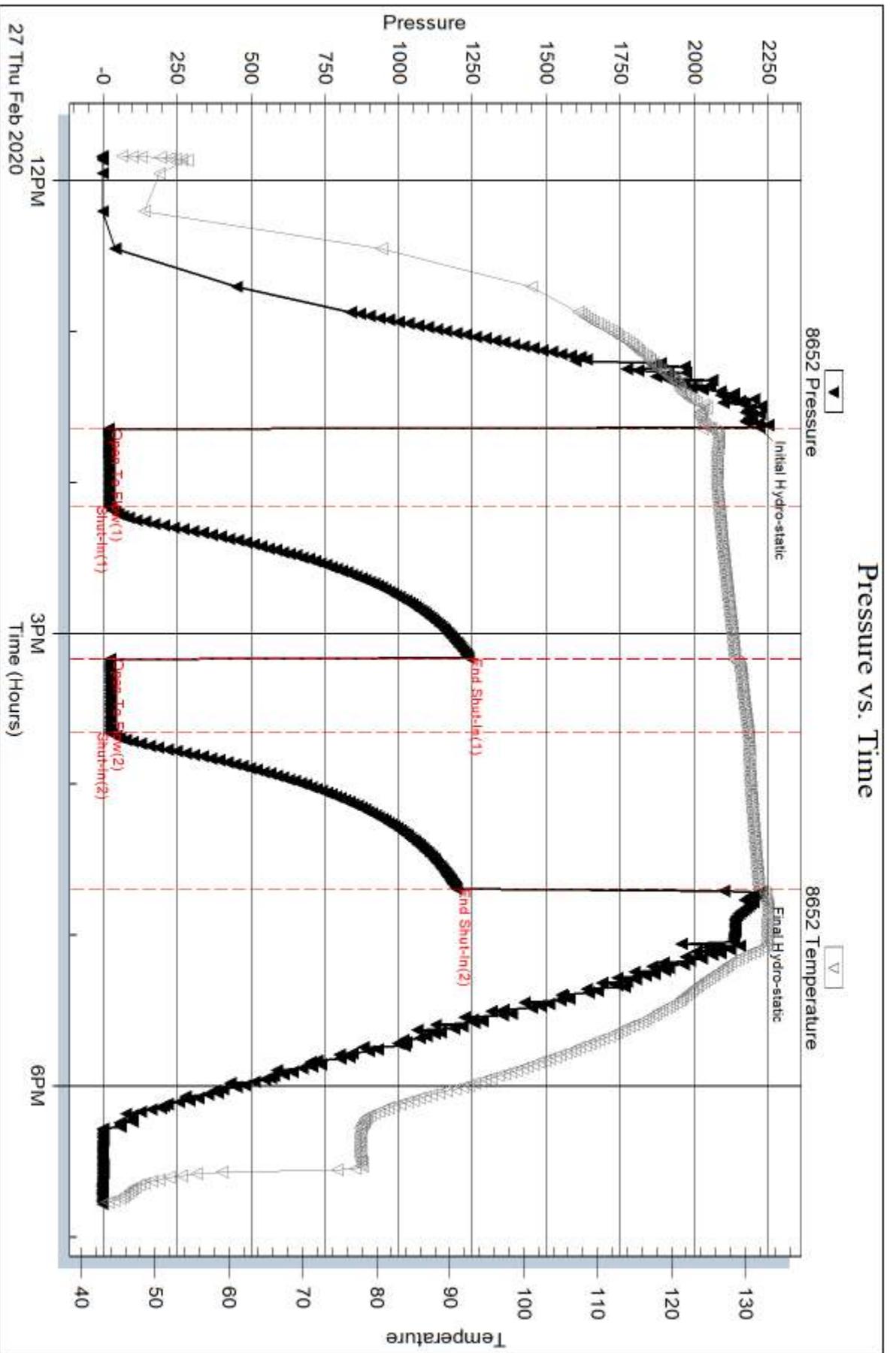
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



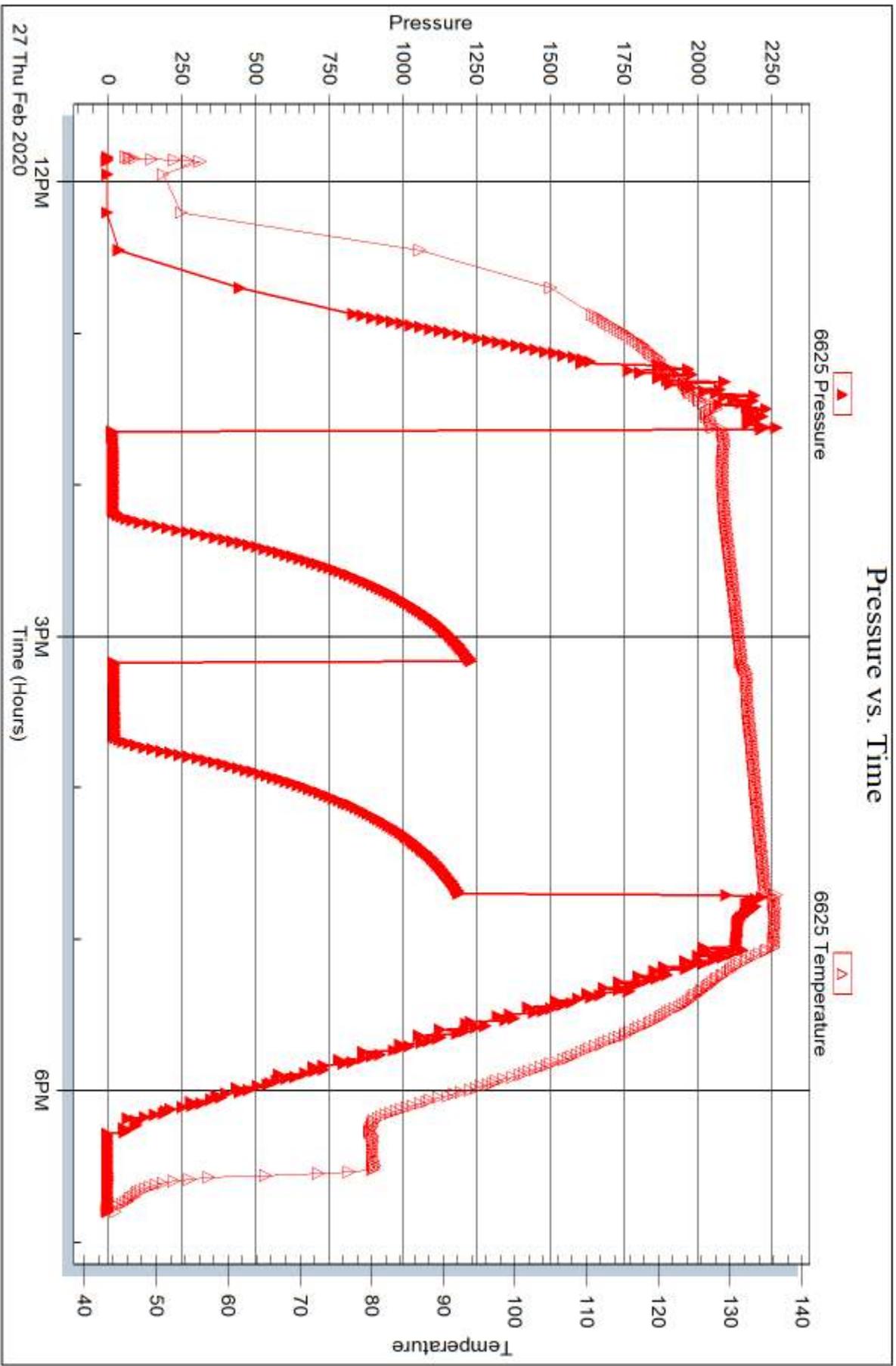
Serial #: 6625

Inside

Murfin Drilling Co., Inc.

Preifer A' #1-21

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 66483

Printed: 2020.03.02 @ 13:43:02



DRILL STEM TEST REPORT

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

250 N. Water STE 300
Wichita, KS 672020

ATTN: Ken LeBlanc

Pfeifer 'A' #1-21

21-2s-38w Cheyenne,KS

Start Date: 2020.02.29 @ 05:15:00

End Date: 2020.02.29 @ 13:43:45

Job Ticket #: 66484 DST #: 4

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

Printed: 2020.03.02 @ 13:42:36



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Murfin Drilling Co., Inc.

21-2s-38w Cheyenne,KS

250 N. Water STE 300
Wichita, KS 672020

Pfeifer 'A' #1-21

Job Ticket: 66484

DST#: 4

ATTN: Ken LeBlanc

Test Start: 2020.02.29 @ 05:15:00

Tool Information

Drill Pipe:	Length: 4435.00 ft	Diameter: 3.80 inches	Volume: 62.21 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 180.00 ft	Diameter: 2.25 inches	Volume: 0.89 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 63.10 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4636.00 ft			Final 56000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	114.00 ft			
Tool Length:	143.00 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			4608.00	
Shut In Tool	5.00			4613.00	
Hydraulic tool	5.00			4618.00	
Jars	5.00			4623.00	
Safety Joint	3.00			4626.00	
Packer	5.00			4631.00	29.00 Bottom Of Top Packer
Packer	5.00			4636.00	
Stubb	1.00			4637.00	
Recorder	0.00	6625	Inside	4637.00	
Recorder	0.00	8652	Outside	4637.00	
Perforations	12.00			4649.00	
Blank Spacing	97.00			4746.00	
Perforations	1.00			4747.00	
Bullnose	3.00			4750.00	114.00 Bottom Packers & Anchor

Total Tool Length: 143.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Murfin Drilling Co., Inc.

21-2s-38w Cheyenne,KS

250 N. Water STE 300
Wichita, KS 672020

Pfeifer 'A' #1-21

Job Ticket: 66484

DST#: 4

ATTN: Ken LeBlanc

Test Start: 2020.02.29 @ 05:15:00

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:

bbbl

Water Loss: 5.97 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 700.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
185.00	Mud w /trace oil 100%m	0.955

Total Length: 185.00 ft Total Volume: 0.955 bbl

Num Fluid Samples: 0

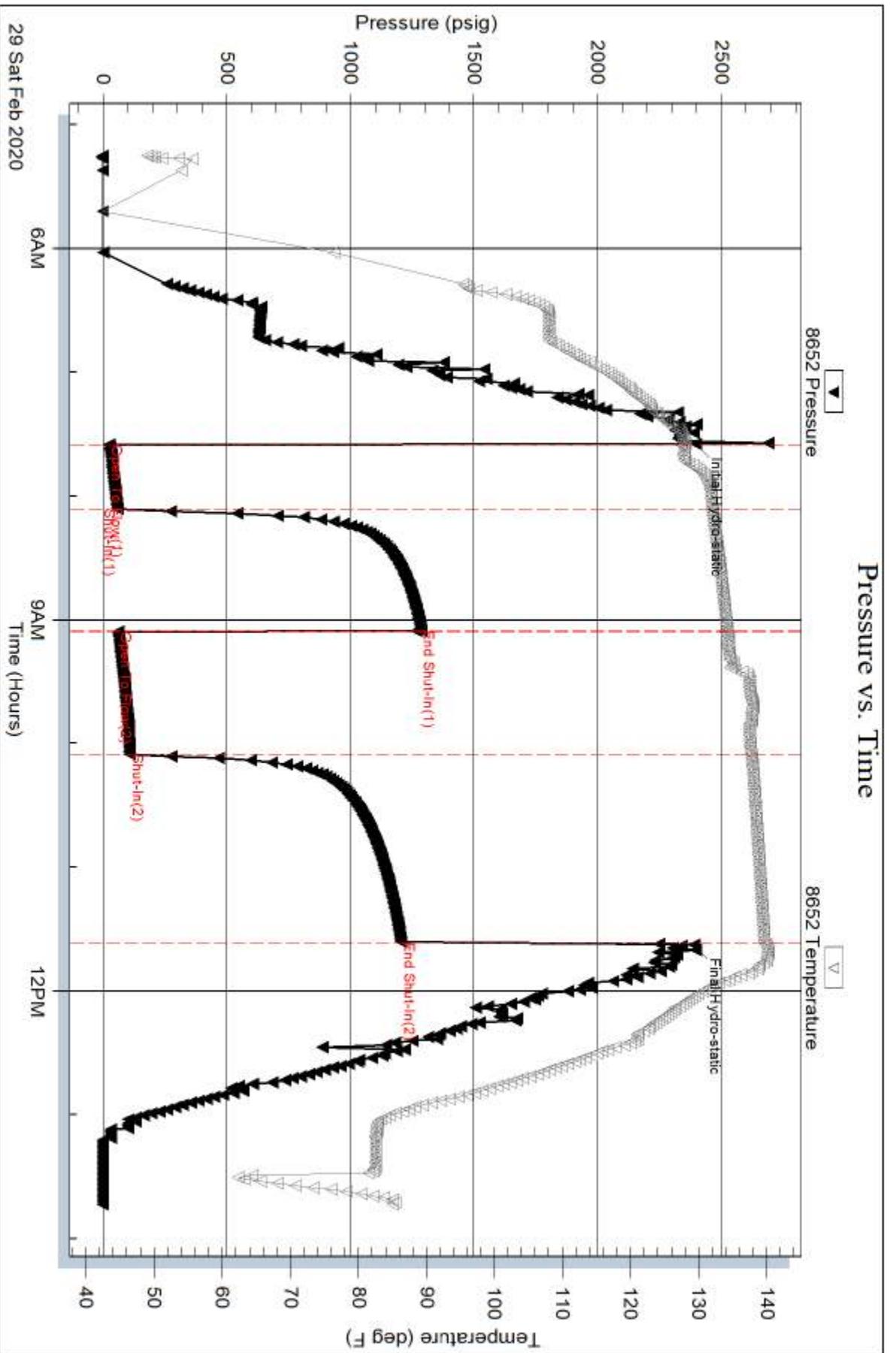
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



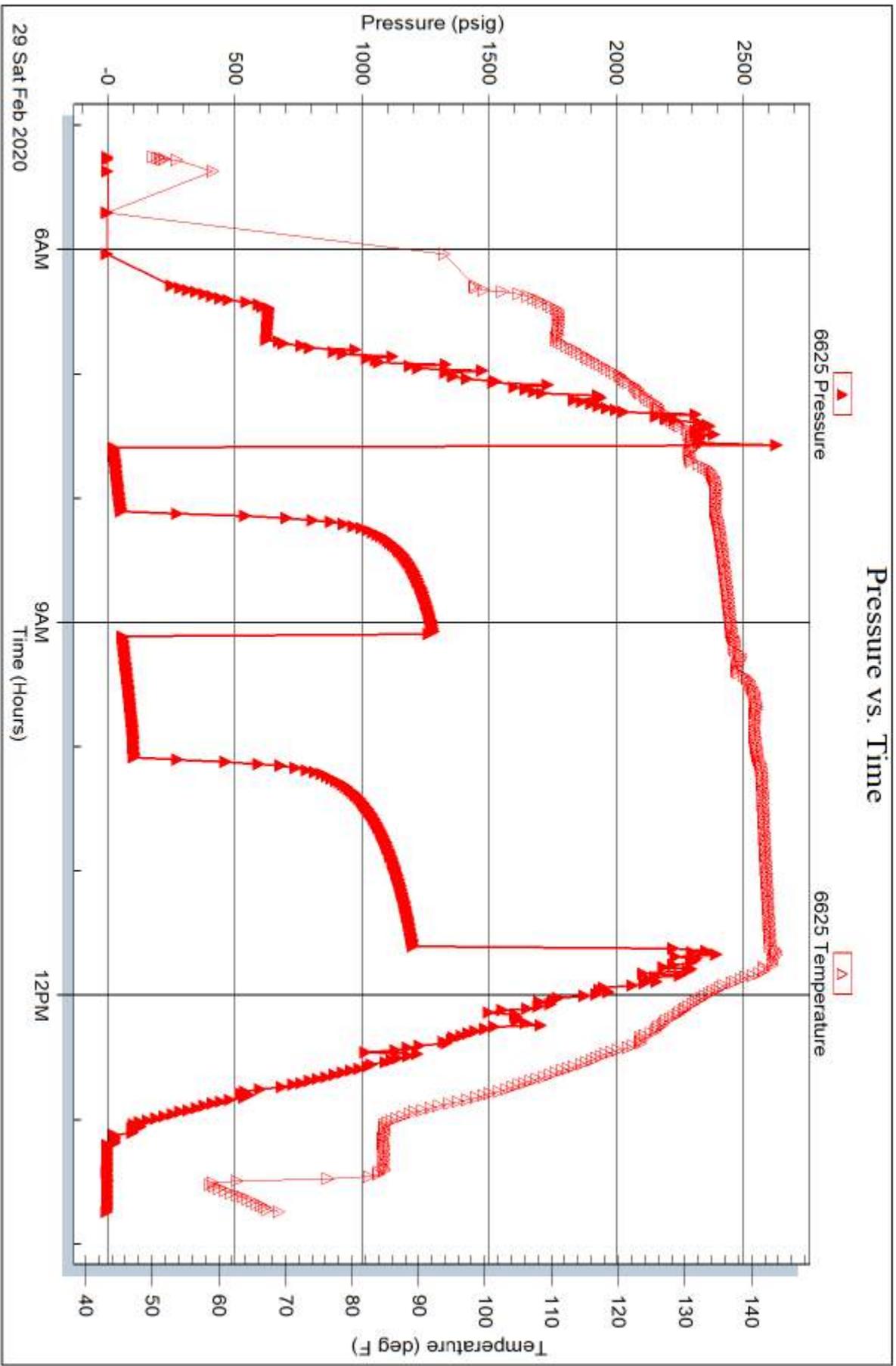
Serial #: 6625

Inside

Murfin Drilling Co., Inc.

Preifer A' #1-21

DST Test Number: 4





TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket 66481

NO.

Well Name & No. Pfeifer 'A' #1-21 Test No. 1 Date 2-25-20
 Company Murfin Drilling Co. Inc Elevation 3304 KB 3299 GL
 Address 250 N. Water STE 300 Wichita, KS 67202
 Co. Rep / Geo. Ken LeBlanc Rig Murfin #7
 Location: Sec. 21 Twp 2s Rge. 38w Co. Cheyenne State KS

Interval Tested 4185-4270 Zone Tested LKC "A"
 Anchor Length 85 Drill Pipe Run 3992 Mud Wt. 9.1
 Top Packer Depth 4180 Drill Collars Run 180 Vis 56
 Bottom Packer Depth 4185 Wt. Pipe Run - WL 6.0
 Total Depth 4270 Chlorides 700 ppm System LCM 4

Blow Description IF: Blow built to 1 1/2" (diesel in bucket)
ISI: No blowback
FF: No blow
FSI: No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>45</u>	<u>mud w/trace oil</u>	<u>trace</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 45 BHT 130 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2120 Test 1300 T-On Location 16:35 3/25
 (B) First Initial Flow 22 Jars 250 T-Started 18:06
 (C) First Final Flow 25 Safety Joint 75 T-Open 20:17
 (D) Initial Shut-In 157 Circ Sub _____ T-Pulled 23:19
 (E) Second Initial Flow 24 Hourly Standby _____ T-Out 1:10 3/26
 (F) Second Final Flow 27 Mileage 140RT 140
 (G) Final Shut-In 100 Sampler _____
 (H) Final Hydrostatic 2007 Straddle _____

Initial Open 30 Shale Packer _____
 Initial Shut-In 60 Extra Packer _____
 Final Flow 30 Extra Recorder _____
 Final Shut-In 60 Day Standby _____
 Sub Total 1765 Accessibility _____
 Sub Total 1765 EM Tool _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Sub Total 0
 Total 1765
 MP/DST Disc't _____

Approved By Ken LeBlanc Our Representative James Winder

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TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket 66482

NO.

Well Name & No. Pfeifer 'A' #1-21 Test No. 2 Date 2-26-20
 Company Murfin Drilling Co. Inc Elevation 3304 KB 3299 GL
 Address 250 N Water STE 300 Wichita, KS 67202
 Co. Rep / Geo. Ken LeBlanc Rig Murfin #7
 Location: Sec. 21 Twp 2s Rge. 38W Co. Cheyenne State KS

Interval Tested 4305 - 4380 Zone Tested LKC "D-6"
 Anchor Length 75 Drill Pipe Run 4120 Mud Wt. 9.2
 Top Packer Depth 4300 Drill Collars Run 180 Vls 60
 Bottom Packer Depth 4305 Wt. Pipe Run - WL 6.4
 Total Depth 4380 Chlorides 700 ppm System LCM 4

Blow Description IF: Blow built to BOB (11") at 4 min, (diesel in bucket) built to 55"
ISI: No blowback
FF: Blow built to BOB at 6 min, built to 81"
FSI: No blowback

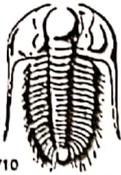
Rec	Feet of	%gas	%oil	%water	%mud
15	Mud			100	
125	MW		58	42	
250	MCW		87	13	
1010	SMCW		97	3	
3					

Rec Total 1400 BHT 152 Gravity _____ API RW .120 @ 38.3°F Chlorides 130,000 ppm

(A) Initial Hydrostatic <u>2174</u>	<input checked="" type="checkbox"/> Test 1300	T-On Location <u>15:20</u> <u>7/26</u>
(B) First Initial Flow <u>60</u>	<input checked="" type="checkbox"/> Jars 250	T-Started <u>16:06</u>
(C) First Final Flow <u>321</u>	<input checked="" type="checkbox"/> Safety Joint 75	T-Open <u>18:02</u>
(D) Initial Shut-In <u>1273</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>22:08</u>
(E) Second Initial Flow <u>325</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>00:25</u> <u>7/27</u>
(F) Second Final Flow <u>638</u>	<input checked="" type="checkbox"/> Mileage <u>140 RT</u> 140	Comments <u>Tool chased 3' to</u>
(G) Final Shut-In <u>1265</u>	<input type="checkbox"/> Sampler	<u>bottom at open - lost 10' mud</u>
(H) Final Hydrostatic <u>2139</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> EM Tool
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>90</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1765</u>
	Sub Total <u>1765</u>	MP/DST Disc't _____

Approved By _____ Our Representative James Winder

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 66483

NO.

Well Name & No. Pfeifer 'A' #1-21 Test No. 3 Date 2-27-20
 Company Murfin Drilling Co. Inc. Elevation 3304 KB 3299 GL
 Address 250 N. Water STE 300 Wichita, KS 67202
 Co. Rep / Geo. Ken LeBlanc Rig Murfin #7
 Location: Sec. 21 Twp 25 Rge. 38w Co. Cheyenne State KS

Interval Tested 4375-4460 Zone Tested LKC "H-J"
 Anchor Length 85 Drill Pipe Run 4183 Mud Wt. ~~9.2~~ 9.2
 Top Packer Depth 4370 Drill Collars Run 180 Vis 56
 Bottom Packer Depth 4375 Wt. Pipe Run - WL 5.6
 Total Depth 4460 Chlorides 700 ppm System LCM 4

Blow Description IF: Blow built to 1/4" (diesel in bucket)
ISI: No blowback
FF: No blow
FSI: No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>20</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 20 BHT 132 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

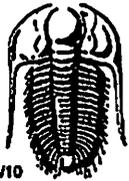
(A) Initial Hydrostatic <u>2219</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>11:35</u>
(B) First Initial Flow <u>18</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>11:50</u>
(C) First Final Flow <u>22</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>13:38</u>
(D) Initial Shut-In <u>1238</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>16:41</u>
(E) Second Initial Flow <u>24</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>18:40</u>
(F) Second Final Flow <u>26</u>	<input checked="" type="checkbox"/> Mileage <u>140RT</u> 140	Comments _____
(G) Final Shut-In <u>1196</u>	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>2211</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> EM Tool _____

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

Sub Total 1765 MP/DST Disc't _____

Approved By Ken LeBlanc Our Representative James Winder

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 66484

NO.

Well Name & No. Pfeifer 'A' #1-21 Test No. 4 Date 2-29-20
 Company Murfin Drilling Co, Inc Elevation 3304 KB 3299 GL
 Address 250 N. Water STE 300 Wichita, KS 67202
 Co. Rep / Geo. Ken LeBlanc Rig Murfin #7
 Location: Sec. 21 Twp 2s Rge. 38w Co. Cheyenne State KS

Interval Tested 4636 - 4750 Zone Tested Ft. Scott - Celia
 Anchor Length 114 Drill Pipe Run 4435 Mud Wt. 9.1
 Top Packer Depth 4631 Drill Collars Run 180 Vis 60
 Bottom Packer Depth 4636 Wt. Pipe Run - WL 6.0
 Total Depth 4750 Chlorides 700 ppm System LCM 4

Blow Description IF: 1" Blow at open, built to 4 1/2" (diesel in bucket)
ISD: No blowback
FF: Blow started at 8 min., built to 3"
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>185</u>	<u>Mud w/trace oil</u>	<u>trace</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 185 BHT 140 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

- (A) Initial Hydrostatic 2397
- (B) First Initial Flow 25
- (C) First Final Flow 58
- (D) Initial Shut-In 1284
- (E) Second Initial Flow 60
- (F) Second Final Flow 107
- (G) Final Shut-In 1204
- (H) Final Hydrostatic 2390

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

- Test 1300
- Jars 250
- Safety Joint 75
- Circ Sub _____
- Hourly Standby _____
- Mileage 140RT 140
- Sampler _____
- Straddle _____
- Shale Packer _____
- Extra Packer _____
- Extra Recorder _____
- Day Standby _____
- Accessibility _____
- Sub Total 1765

T-On Location 4:15
 T-Started 5:15
 T-Open 7:35
 T-Pulled 11:36
 T-Out 13:40

Comments tool chased 2' to bottom at open - No mud loss

EM Tool _____
 Ruined Shale Packer _____
 Ruined Packer 320
 Extra Copies _____
 Sub Total 320
 Total 2085
 MP/DST Disc't _____

Approved By Ken LeBlanc Our Representative James Winder

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.

MDCI
Pfeifer 'A' #1-21
2310FSL 660FEL
Sec. 21-T2S-R38W
3304' KB

Formation	Sample top	Datum	Ref	Log Top	Datum	Ref
Anhydrite	3191	+113	-20	3200	+104	-29
B/Anhydrite	3232	+72	-24	3239	+65	-31
Topeka	4007	-703	-22	4014	-710	-29
Oread	4157	-853	-28	4164	-860	-35
Lansing	4229	-925	-23	4231	-927	-25
Stark	4462	-1158	-29	4466	-1162	-33
Mound City	4506	-1202	-22	4524	-1220	-40
Ft Scott	4631	-1327	-17	4650	-1346	-36
Oakley	4704	-1400	-16	4729	-1425	-41
Mississippian				4974	-1670	-58
RTD	5200					
LTD				5201		



CEMENT TREATMENT REPORT

Customer:	Murfin Drilling Company	Well:	Pfeifer 'A' #1-21	Ticket:	ICT3340
City, State:	Oakley KS	County:	Cheyenne KS	Date:	3/1/2020
Field Rep:	Arturo Cabezas	S-T-R:	ne/se 21-2s-38w	Service:	Plug

Downhole Information	
Hole Size:	7 7/8 in
Hole Depth:	ft
Drill pipe	4 1/2 in
Casing Depth:	307.38 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Depth:	ft
Displacement:	bbbls

Calculated Slurry	
Weight:	13.6 # / sx
Water / Sk:	6.89 gal / sx
Yield:	1.42 ft ³ / sx
Bbls / Ft:	0.142
Depth:	5205.2 ft
Annular Volume:	bbbls
Excess:	%
Total Slurry:	bbbls
Total Sacks:	255 sx

Product	% / #	#
Class A	60.00	23460
Poz		
Gel	40.00	9384
CaCl		
Gypsum		
Metso		
Kol Seal		
Flo Seal		
Salt (bww)		
Total		32,844

TIME	RATE	PSI	BBLs	REMARKS
545P				GOT TO LOCATION
650P				SAFTEY MEETING
800P				RIG UP
715P	4.0	300.0	5.0	H2O AHEAD
716P	5.0	350.0	12.5	50 SKS H-PLUG @ 3210 ft
720P	4.0	300.0	5.0	DISPLACED H2O
722P				DISPLACED MUD WITH RIG
759P	4.0	200.0	5.0	H2O AHEAD
801P	5.0	300.0	25.1	100sks H-Plug @2400ft
809P	4.0	150.0	5.0	DISPLACED H2O
811P				DISPLACED MUD WITH RIG
910P	4.0	200.0	5.0	H2O Ahead
911P	5.0	250.0	12.5	50 sks H plug @ 360 ft
913P	5.0	200.0	1.0	Displaced H2O
1005P	4.0	150.0	5.0	Cemented RH
1007P	4.0	100.0	3.5	Cemented MH
1009P	4.0	100.0	2.5	Top 40
1015P				Rigged down
1045P				Left location

CREW		UNIT	SUMMARY		
Cementer:	Josh Mosier	29	Average Rate	Average Pressure	Total Fluid
Pump Operator:	John Polley	208	4.33333 bpm	217 psi	87 bbls
Bulk #1:	Kale Ochs	205			
Bulk #2:	Dane Retzlaff	78			