

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) (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	DORSCH B 1-9
Doc ID	1586451

All Electric Logs Run

DIL
DUCP
MEL
BHCS





# Robert D. Hendrix

## Petroleum Geologist

### GEOLOGIST'S REPORT

### DRILLING TIME AND SAMPLE LOG

COMPANY **Murfin Drilling Company Inc.**

LEASE **Dorsch 'B' #1-9**

FIELD **Widilcat**

LOCATION **990' fs1 & 330' fwl**

SEC **9** TWPSP **3S** RGE **37W**

COUNTY **Cheyenne** STATE **Kansas**

CONTRACTOR **Murfin Drilling Company Inc. Rig #3**

RTD **6/14/2021** COMP **6/25/2021**

SPD **5100'** LTD **5100'**

MUD UP **3700'** TYPE MUD **Chemical**

SAMPLE LESS SAVED FROM **4050'** TO **5100'**

DRILLING TIME KEPT FROM **4050'** TO **5100'**

SAMPLES EXAMINED FROM **4050'** TO **5100'**

GEOLOGICAL SUPERVISION FROM **3987'**

GEOLOGIST ON WELL **Robert D. Hendrix**

FORMER TOPS **ELECTRIC LOG** SAMPLE

Topoka **4153 (-717)** **3293 (+143)**

Oread **4282 (-846)** **4286 (-850)**

Lansing **4359 (-923)** **4363 (-927)**

Mound City **4634 (-1198)** **4641 (-1205)**

Ft Scott **4764 (-1327)** **4767 (-1328)**

Oakley Shale **4838 (-1403)** **4839 (-1403)**

Mississippian **5059 (-1623)** **5076 (-1640)**

ELEVATIONS

KB **3436'**

DF

GL **3431'**

Measurements Are All From **Kelly Bishing**

CASING

CONDUCTOR SURFACE **8.58' at 389'**

PRODUCTION

ELECTRICAL SURVEYS

API# **15-023-21553**

Geological Supervision From **3987'**

Geologist On Well **Robert D. Hendrix**

Former Tops **ELECTRIC LOG** SAMPLE

Topoka **4153 (-717)** **3293 (+143)**

Oread **4282 (-846)** **4286 (-850)**

Lansing **4359 (-923)** **4363 (-927)**

Mound City **4634 (-1198)** **4641 (-1205)**

Ft Scott **4764 (-1327)** **4767 (-1328)**

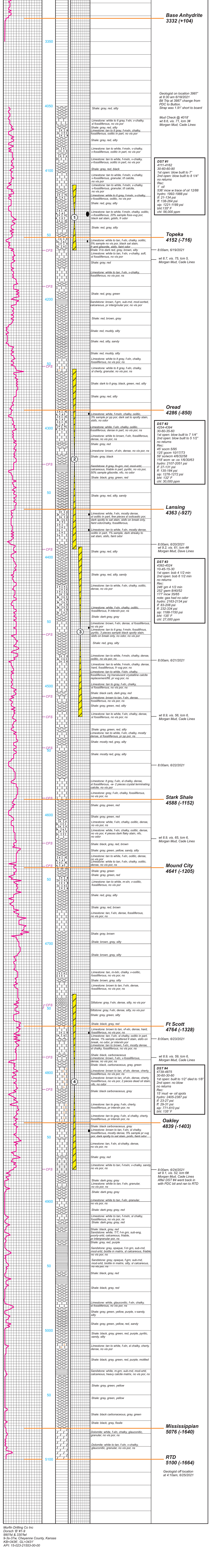
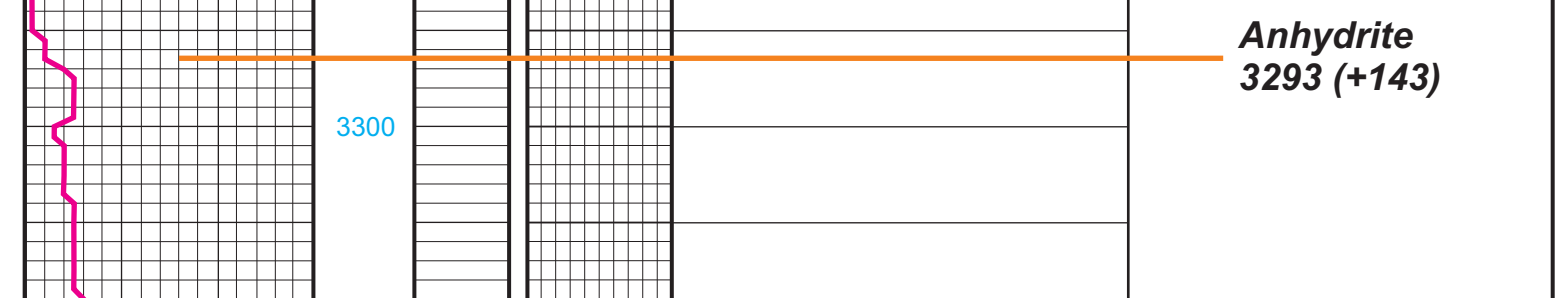
Oakley Shale **4838 (-1403)** **4839 (-1403)**

Mississippian **5059 (-1623)** **5076 (-1640)**

REMARKS: All shows were tested and all tests yielded poor results. The decision was made to plug and abandon.

HSI plugged hole, 8:15AM - 11:30AM 6/25, as follows using 255sxs 60/40poz, 4%gel, 50sxs @ 3310', 100sxs @ 2480', 50sxs @ 439', 10sxs @ 40', 30sxs RH, 15sxs MH, RR @ 3:30PM 6/25/2021

### LEGEND







## DRILL STEM TEST REPORT

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

250 N. Water STE 300  
Wichita, KS 67202

ATTN: Robert Hendrix

### **Dorsch 'B' #1-9**

#### **9-3s-37w Cheyenne KS**

Start Date: 2021.06.19 @ 00:24:00

End Date: 2021.06.19 @ 09:08:05

Job Ticket #: 67021                      DST #: 1

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

Printed: 2021.06.24 @ 15:44:30



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67021

**DST#: 1**

ATTN: Robert Hendrix

Test Start: 2021.06.19 @ 00:24:00

## GENERAL INFORMATION:

Formation: **Topeka**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:30:36

Time Test Ended: 09:08:05

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 73

**Interval: 4111.00 ft (KB) To 4162.00 ft (KB) (TVD)**

Reference Elevations: 3436.00 ft (KB)

Total Depth: 4162.00 ft (KB) (TVD)

3431.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6771**

**Inside**

Press@RunDepth: 263.61 psig @ 4112.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2021.06.19

End Date:

2021.06.19

Last Calib.:

2021.06.19

Start Time: 00:24:01

End Time:

09:08:05

Time On Btm:

2021.06.19 @ 02:30:21

Time Off Btm:

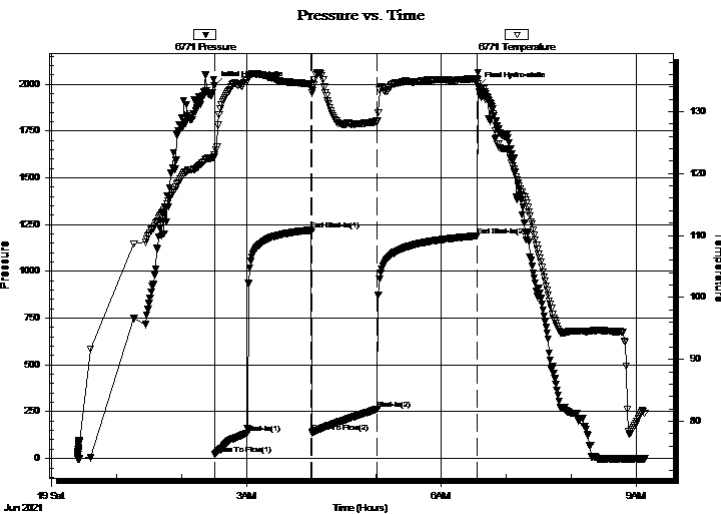
2021.06.19 @ 06:34:06

TEST COMMENT: 30 - IF: 1/2" Blow at open, built to 7"

60 - IS: No blow back

60 - FF: Blow built to 8 1/4"

90 - FS: No blow back



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1992.47	123.06	Initial Hydro-static
1	21.32	122.75	Open To Flow (1)
31	134.37	134.91	Shut-In(1)
90	1220.53	134.51	End Shut-In(1)
90	138.32	132.99	Open To Flow (2)
151	263.61	128.49	Shut-In(2)
243	1189.40	135.26	End Shut-In(2)
244	1987.83	134.55	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
536.00	MCW w/trace oil 88%w, 12%m	5.91
1.00	Oil 100%	0.01

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67021

**DST#: 1**

ATTN: Robert Hendrix

Test Start: 2021.06.19 @ 00:24:00

## Tool Information

Drill Pipe:	Length: 3918.00 ft	Diameter: 3.80 inches	Volume: 54.96 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: 177.00 ft	Diameter: 2.25 inches	Volume: 0.87 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 55.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	17.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4111.00 ft			Final 55000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	51.00 ft			
Tool Length:	84.00 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			4079.00	
Shut In Tool	5.00			4084.00	
Hydraulic tool	5.00			4089.00	
Jars	5.00			4094.00	
EM Tool	4.00			4098.00	
Safety Joint	3.00			4101.00	
Packer	5.00			4106.00	33.00 Bottom Of Top Packer
Packer	5.00			4111.00	
Stubb	1.00			4112.00	
Recorder	0.00	6771	Inside	4112.00	
Recorder	0.00	8367	Outside	4112.00	
Perforations	10.00			4122.00	
Change Over Sub	1.00			4123.00	
Drill Pipe	32.00			4155.00	
Change Over Sub	1.00			4156.00	
Perforations	3.00			4159.00	
Bullnose	3.00			4162.00	51.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>84.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67021

**DST#: 1**

ATTN: Robert Hendrix

Test Start: 2021.06.19 @ 00:24:00

### 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:

56000 ppm

Viscosity: 71.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.19 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1000.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
536.00	MCW w /trace oil 88%w , 12%m	5.906
1.00	Oil 100%	0.014

Total Length: 537.00 ft      Total Volume: 5.920 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

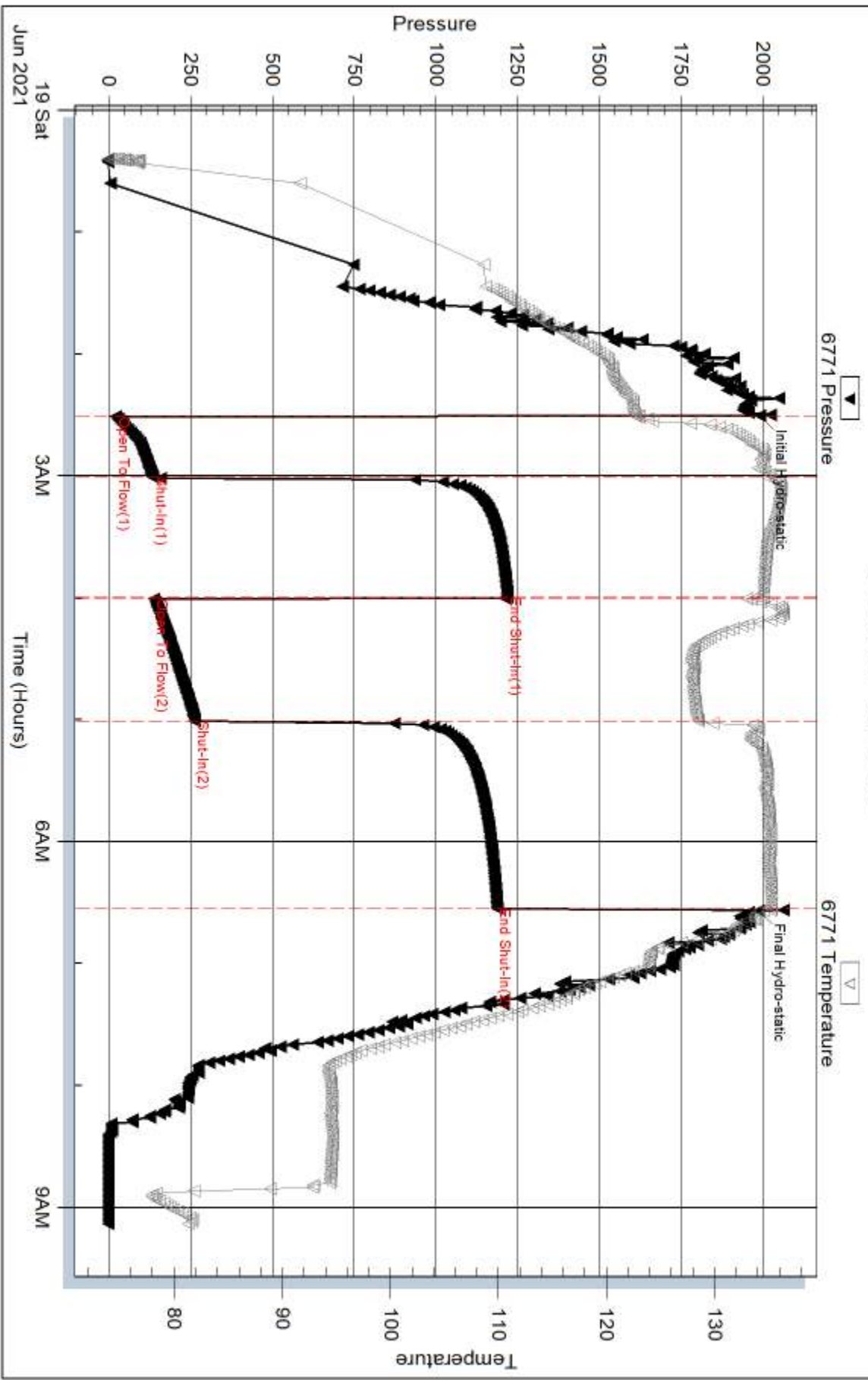
Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .139 ohms @ 70 deg F Chlorides = 56,000 ppm

Oil looked to be low gravity

### Pressure vs. Time

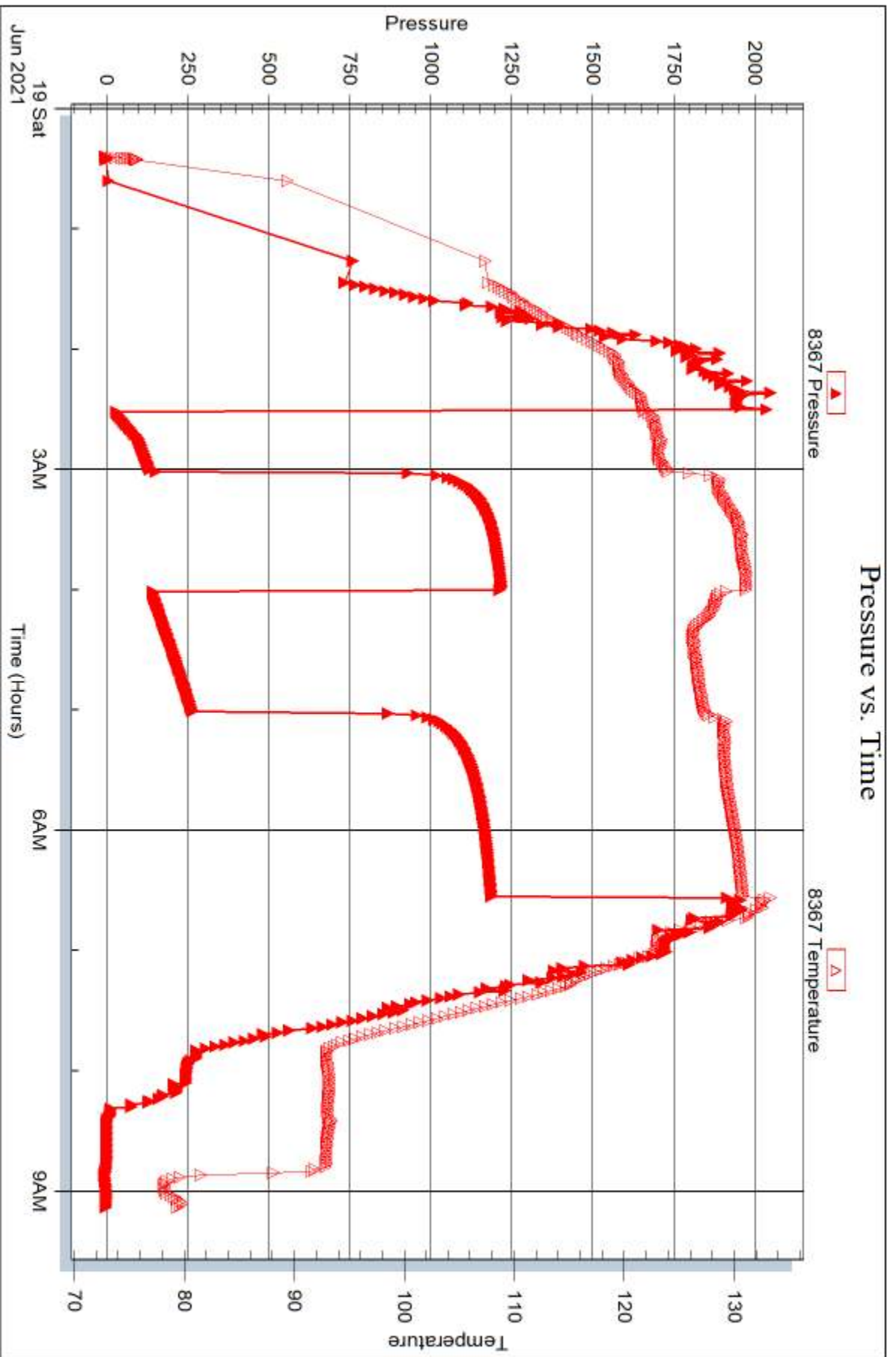


Serial #: 8367

Outside Marfin Drilling Co., Inc.

Dorsch 'B' #1-9

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 67021

Printed: 2021.06.24 @ 15:44:35



## DRILL STEM TEST REPORT

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

250 N. Water STE 300  
Wichita, KS 67202

ATTN: Robert Hendrix

### **Dorsch 'B' #1-9**

#### **9-3s-37w Cheyenne KS**

Start Date: 2021.06.20 @ 12:15:00

End Date: 2021.06.20 @ 20:08:06

Job Ticket #: 67022                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2021.06.24 @ 15:43:58





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67022

**DST#: 2**

ATTN: Robert Hendrix

Test Start: 2021.06.20 @ 12:15:00

## GENERAL INFORMATION:

Formation: **Oread - Lans. "A"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 14:10:36  
 Time Test Ended: 20:08:06  
 Interval: **4254.00 ft (KB) To 4394.00 ft (KB) (TVD)**  
 Total Depth: 4394.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: James Winder  
 Unit No: 73  
 Reference Elevations: 3436.00 ft (KB)  
 3431.00 ft (CF)  
 KB to GR/CF: 5.00 ft

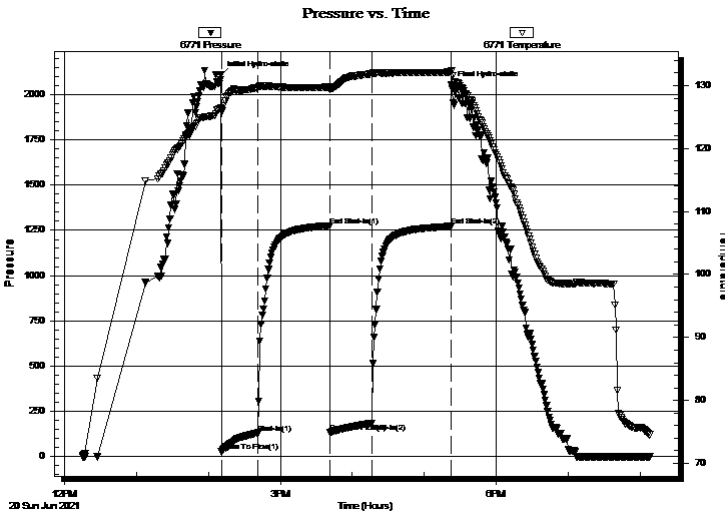
## Serial #: 6771

Inside

Press@RunDepth: 184.35 psig @ 4255.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2021.06.20 End Date: 2021.06.20 Last Calib.: 2021.06.20  
 Start Time: 12:15:01 End Time: 20:08:06 Time On Btm: 2021.06.20 @ 14:10:21  
 Time Off Btm: 2021.06.20 @ 17:22:36

TEST COMMENT: 30 - IF: 1/2" Blow at open, built to 7 1/4"  
 60 - IS: No blow back  
 30 - FF: Blow built to 5 1/2"  
 60 - FS: No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2106.95	126.54	Initial Hydro-static
1	27.44	126.14	Open To Flow (1)
31	130.81	129.71	Shut-In(1)
91	1275.89	129.75	End Shut-In(1)
91	135.01	129.41	Open To Flow (2)
126	184.35	131.87	Shut-In(2)
192	1271.77	132.13	End Shut-In(2)
193	2051.49	132.37	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
118.00	WCM w/Oil spots 63% <sub>m</sub> , 30% <sub>w</sub> , 6% <sub>g</sub> , 1% <sub>o</sub>	0.58
59.00	SO/WCM 58% <sub>m</sub> , 32% <sub>w</sub> , 6% <sub>g</sub> , 4% <sub>o</sub>	0.29
125.00	GOCM 73% <sub>m</sub> , 17% <sub>o</sub> , 10% <sub>g</sub>	1.75
45.00	SOCM 95% <sub>m</sub> , 5% <sub>o</sub>	0.63

\* 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.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67022

**DST#: 2**

ATTN: Robert Hendrix

Test Start: 2021.06.20 @ 12:15:00

## Tool Information

Drill Pipe:	Length: 4075.00 ft	Diameter: 3.80 inches	Volume: 57.16 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: 177.00 ft	Diameter: 2.25 inches	Volume: 0.87 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 58.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	31.00 ft			String Weight: Initial 55000.00 lb
Depth to Top Packer:	4254.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	140.00 ft			
Tool Length:	173.00 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			4222.00	
Shut In Tool	5.00			4227.00	
Hydraulic tool	5.00			4232.00	
Jars	5.00			4237.00	
EM Tool	4.00			4241.00	
Safety Joint	3.00			4244.00	
Packer	5.00			4249.00	33.00 Bottom Of Top Packer
Packer	5.00			4254.00	
Stubb	1.00			4255.00	
Recorder	0.00	6771	Inside	4255.00	
Recorder	0.00	8367	Outside	4255.00	
Perforations	5.00			4260.00	
Change Over Sub	1.00			4261.00	
Drill Pipe	126.00			4387.00	
Change Over Sub	1.00			4388.00	
Perforations	3.00			4391.00	
Bullnose	3.00			4394.00	140.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>173.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67022

**DST#: 2**

ATTN: Robert Hendrix

Test Start: 2021.06.20 @ 12:15:00

## 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:

30000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.18 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
118.00	WCM w/Oil spots 63% <i>m</i> , 30% <i>w</i> , 6% <i>g</i> , 1% <i>o</i>	0.580
59.00	SO/WCM 58% <i>m</i> , 32% <i>w</i> , 6% <i>g</i> , 4% <i>o</i>	0.290
125.00	GOCM 73% <i>m</i> , 17% <i>o</i> , 10% <i>g</i>	1.753
45.00	SOCM 95% <i>m</i> , 5% <i>o</i>	0.631

Total Length: 347.00 ft

Total Volume: 3.254 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

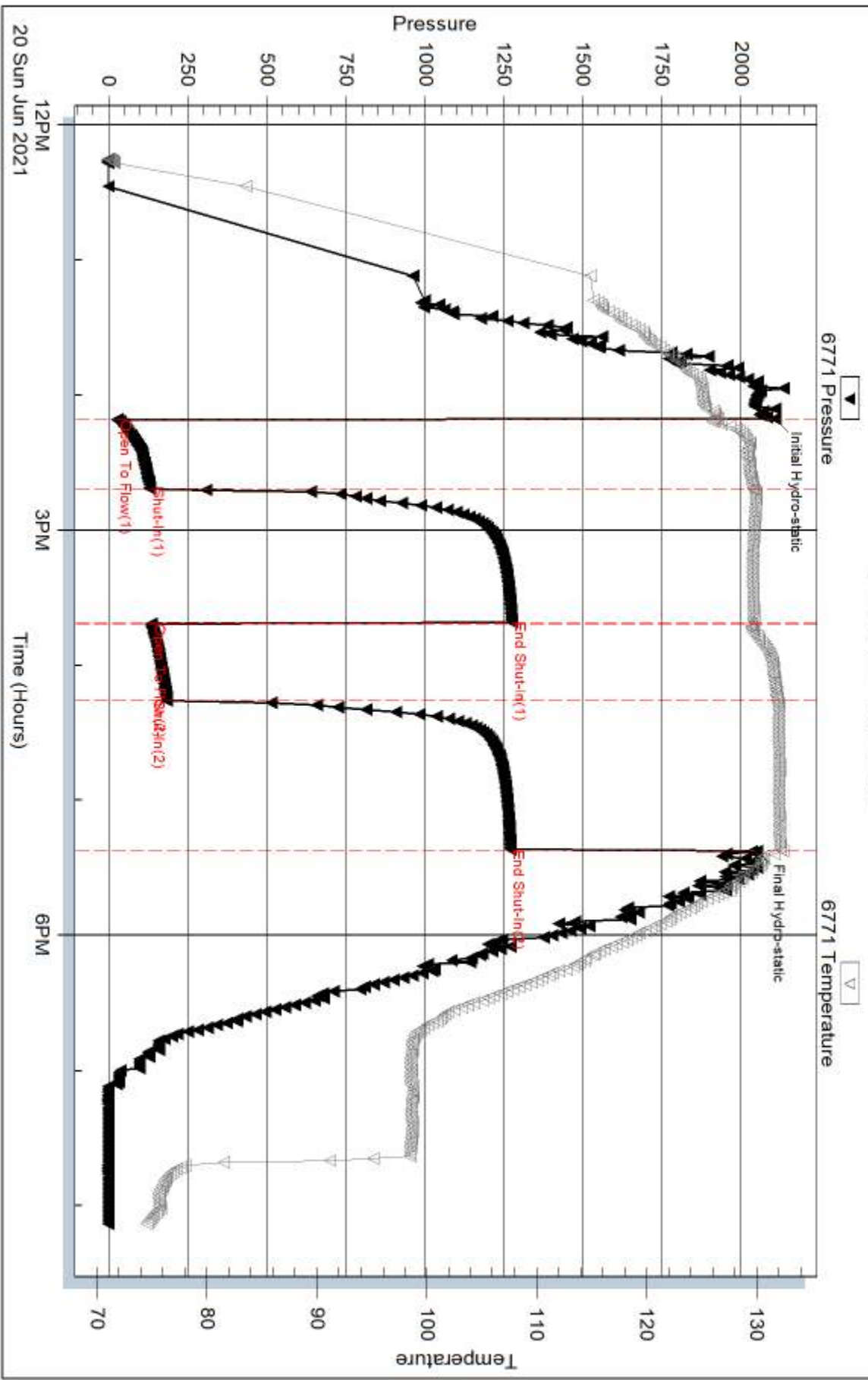
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .229 ohms @ 72 deg F Chlorides = 30,000 ppm

### Pressure vs. Time



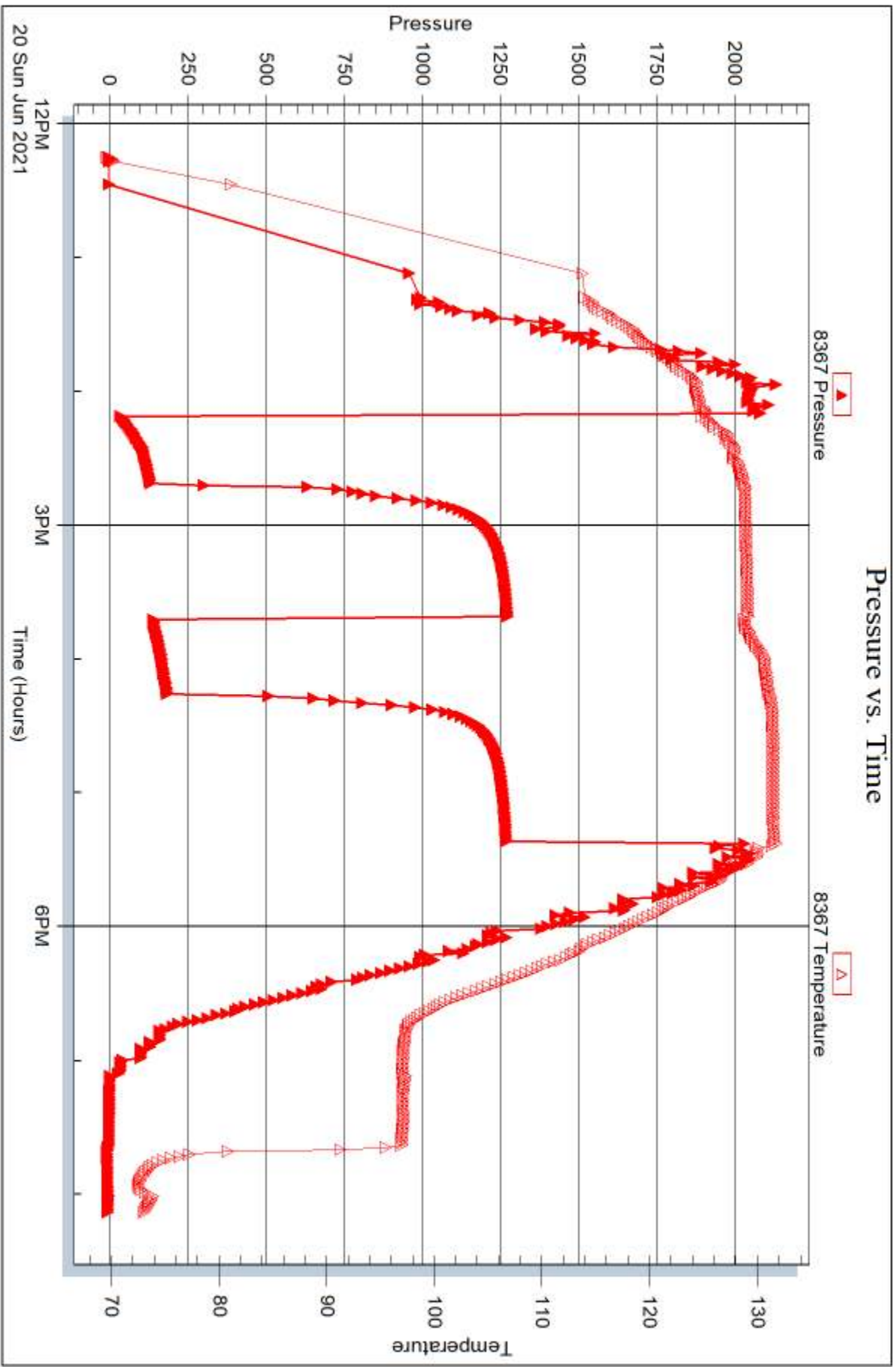


Serial #: 8367

Outside Marfin Drilling Co., Inc.

Dorsch 'B' #1-9

DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 67022

Printed: 2021.06.24 @ 15:43:58



## DRILL STEM TEST REPORT

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

250 N. Water STE 300  
Wichita, KS 67202

ATTN: Robert Hendrix

### **Dorsch 'B' #1-9**

#### **9-3s-37w Cheyenne KS**

Start Date: 2021.06.21 @ 15:53:00

End Date: 2021.06.21 @ 23:46:21

Job Ticket #: 67023                      DST #: 3

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Printed: 2021.06.24 @ 15:43:17



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67023

**DST#: 3**

ATTN: Robert Hendrix

Test Start: 2021.06.21 @ 15:53:00

## GENERAL INFORMATION:

Formation: **LKC "D - G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 18:56:51

Time Test Ended: 23:46:21

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 73

**Interval: 4392.00 ft (KB) To 4524.00 ft (KB) (TVD)**

Reference Elevations: 3436.00 ft (KB)

Total Depth: 4524.00 ft (KB) (TVD)

3431.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6771**

**Inside**

Press@RunDepth: 334.09 psig @ 4393.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2021.06.21

End Date: 2021.06.21

Last Calib.: 2021.06.22

Start Time: 15:53:01

End Time: 23:46:21

Time On Btm: 2021.06.21 @ 18:56:36

Time Off Btm: 2021.06.21 @ 20:42:21

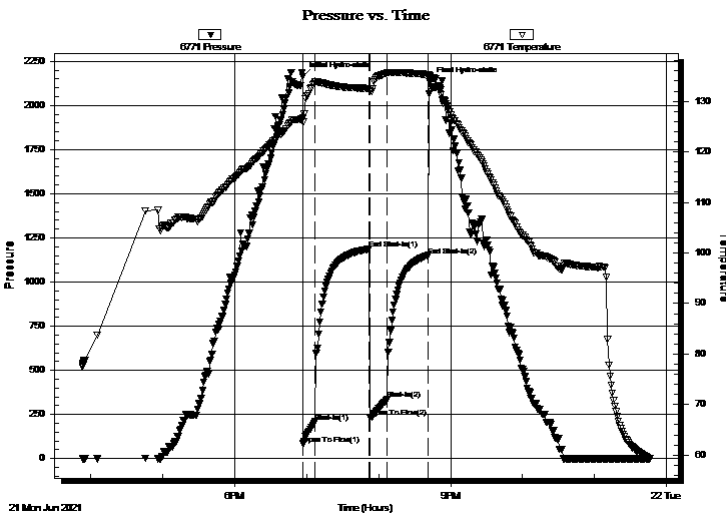
**TEST COMMENT:** 10 - IF: Blow built to BOB (11") at 4 1/2 min., built to 18 1/4"

45 - IS: No blow back

15 - FF: Blow built to BOB at 6 1/2 min., built to 16 1/2"

30 - FS: No blow back

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2163.36	126.63	Initial Hydro-static
1	83.44	125.87	Open To Flow (1)
11	208.35	133.80	Shut-In(1)
56	1187.76	132.53	End Shut-In(1)
57	231.58	132.04	Open To Flow (2)
71	334.09	135.71	Shut-In(2)
105	1150.22	135.30	End Shut-In(2)
106	2133.72	134.99	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
177.00	MCW 65%w, 35%m	0.87
252.00	GWM 52%m, 40%w, 8%g	3.53
246.00	GM 93%m, 7%g	3.45

\* 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.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67023

**DST#: 3**

ATTN: Robert Hendrix

Test Start: 2021.06.21 @ 15:53:00

## Tool Information

Drill Pipe:	Length: 4203.00 ft	Diameter: 3.80 inches	Volume: 58.96 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: 177.00 ft	Diameter: 2.25 inches	Volume: 0.87 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 59.83 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 56000.00 lb
Depth to Top Packer:	4392.00 ft			Final 59000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	132.00 ft			
Tool Length:	165.00 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			4360.00	
Shut In Tool	5.00			4365.00	
Hydraulic tool	5.00			4370.00	
Jars	5.00			4375.00	
EM Tool	4.00			4379.00	
Safety Joint	3.00			4382.00	
Packer	5.00			4387.00	33.00 Bottom Of Top Packer
Packer	5.00			4392.00	
Stubb	1.00			4393.00	
Recorder	0.00	6771	Inside	4393.00	
Recorder	0.00	8367	Outside	4393.00	
Perforations	30.00			4423.00	
Change Over Sub	1.00			4424.00	
Drill Pipe	95.00			4519.00	
Change Over Sub	1.00			4520.00	
Perforations	1.00			4521.00	
Bullnose	3.00			4524.00	132.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>165.00</b>				





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67023

**DST#: 3**

ATTN: Robert Hendrix

Test Start: 2021.06.21 @ 15:53:00

### Mud and Cushion Information

Mud Type: Gel Chem  
Mud Weight: 9.00 lb/gal  
Viscosity: 56.00 sec/qt  
Water Loss: 6.79 in<sup>3</sup>  
Resistivity: ohm.m  
Salinity: 1200.00 ppm  
Filter Cake: 2.00 inches

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

Oil API: deg API  
Water Salinity: 27000 ppm

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
177.00	MCW 65%w , 35%m	0.870
252.00	GWM 52%m, 40%w , 8%g	3.535
246.00	GM 93%m, 7%g	3.451

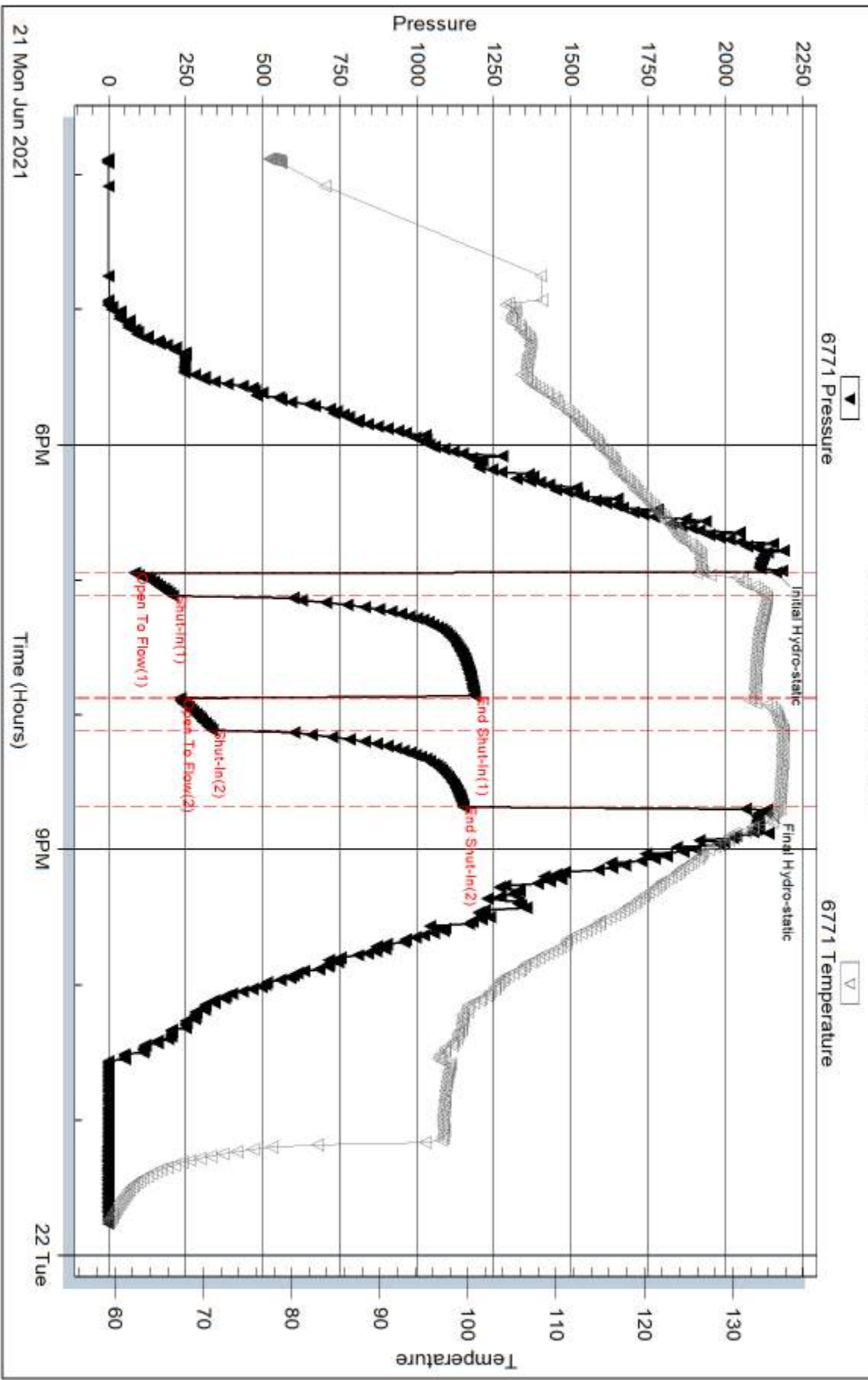
Total Length: 675.00 ft      Total Volume: 7.856 bbl

Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments: RW = .312 ohms @ 58.3 deg F Chlorides = 27,000 ppm

### Pressure vs. Time

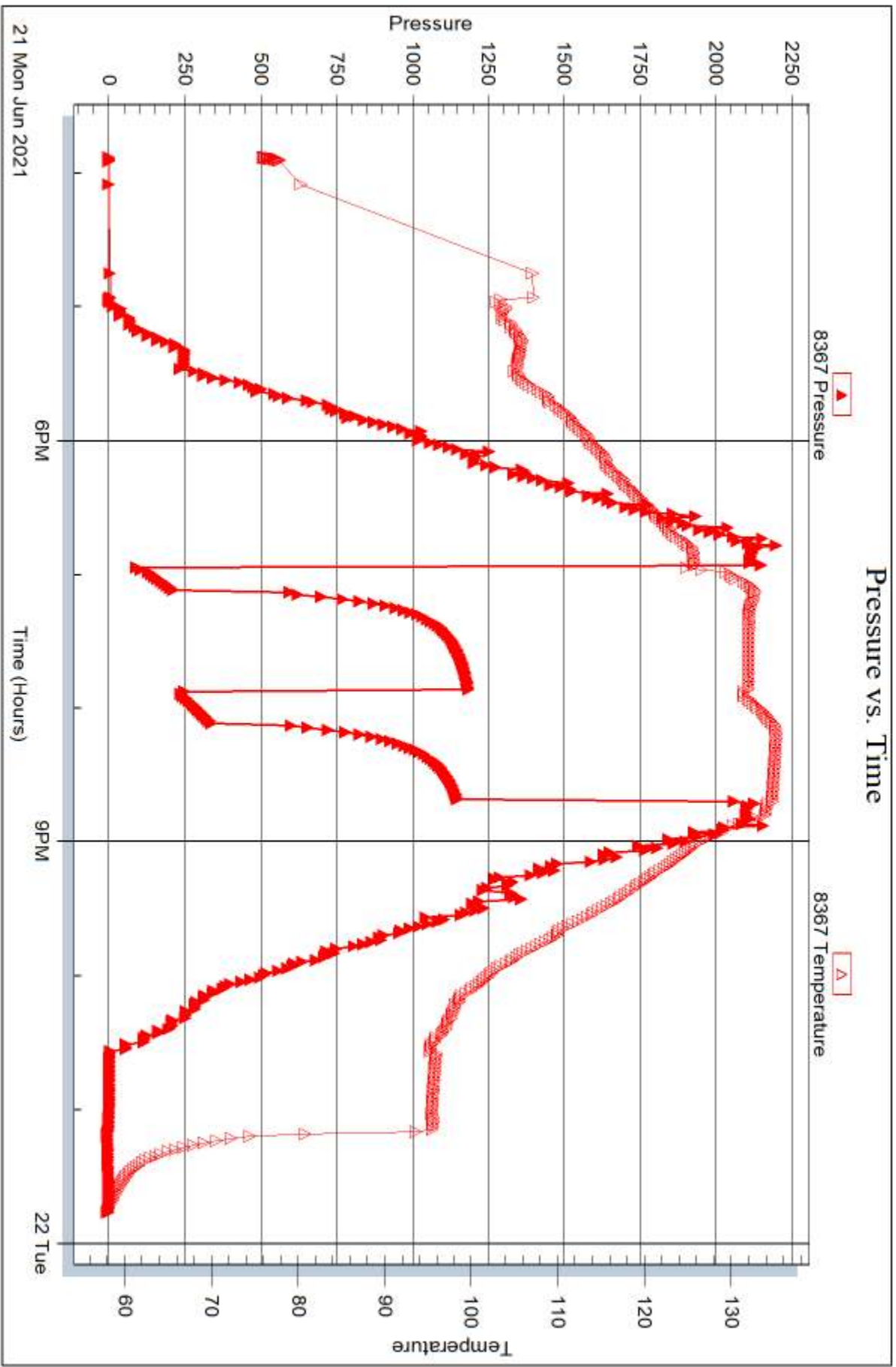


Serial #: 8367

Outside Murfin Drilling Co., Inc.

Dorsch 'B' #1-9

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 67023

Printed: 2021.06.24 @ 15:43:19



## DRILL STEM TEST REPORT

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

250 N. Water STE 300  
Wichita, KS 67202

ATTN: Robert Hendrix

### **Dorsch 'B' #1-9**

#### **9-3s-37w Cheyenne KS**

Start Date: 2021.06.24 @ 00:25:00

End Date: 2021.06.24 @ 08:19:21

Job Ticket #: 67024                      DST #: 4

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

Printed: 2021.06.24 @ 15:42:44



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67024

**DST#: 4**

ATTN: Robert Hendrix

Test Start: 2021.06.24 @ 00:25:00

## GENERAL INFORMATION:

Formation: **Ft. Scott - Celia**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 02:59:36

Time Test Ended: 08:19:21

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 73

**Interval: 4739.00 ft (KB) To 4875.00 ft (KB) (TVD)**

Reference Elevations: 3436.00 ft (KB)

Total Depth: 4875.00 ft (KB) (TVD)

3431.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

**Serial #: 6771**

**Inside**

Press@RunDepth: 30.55 psig @ 4740.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2021.06.24

End Date:

2021.06.24

Last Calib.:

2021.06.24

Start Time: 00:25:01

End Time:

08:19:21

Time On Btm:

2021.06.24 @ 02:59:06

Time Off Btm:

2021.06.24 @ 06:02:36

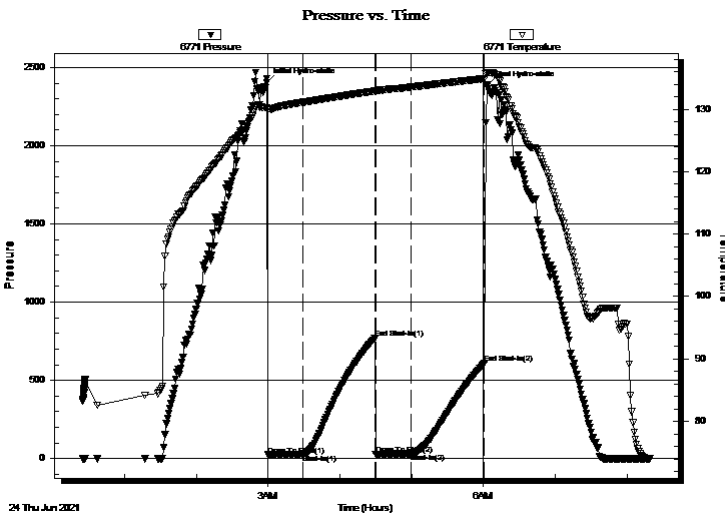
**TEST COMMENT:** 30 - IF: 1/4" Blow at open, built to 1/2", died back to 1/8"

60 - IS: No blow back

30 - FF: No blow

60 - FS: No blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2405.40	130.24	Initial Hydro-static
1	23.48	130.07	Open To Flow (1)
31	26.56	131.11	Shut-In(1)
91	771.38	132.90	End Shut-In(1)
91	28.55	132.86	Open To Flow (2)
121	30.55	133.54	Shut-In(2)
182	609.91	134.89	End Shut-In(2)
184	2386.76	135.88	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	Mud 100%	0.07
0.00	Oil spots in tool	0.00

## Gas Rates

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

\* Recovery from multiple tests





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67024

**DST#: 4**

ATTN: Robert Hendrix

Test Start: 2021.06.24 @ 00:25:00

## Tool Information

Drill Pipe:	Length: 4548.00 ft	Diameter: 3.80 inches	Volume: 63.80 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: 177.00 ft	Diameter: 2.25 inches	Volume: 0.87 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 64.67 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	19.00 ft			String Weight: Initial 58000.00 lb
Depth to Top Packer:	4739.00 ft			Final 58000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	136.00 ft			
Tool Length:	169.00 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			4707.00	
Shut In Tool	5.00			4712.00	
Hydraulic tool	5.00			4717.00	
Jars	5.00			4722.00	
EM Tool	4.00			4726.00	
Safety Joint	3.00			4729.00	
Packer	5.00			4734.00	33.00 Bottom Of Top Packer
Packer	5.00			4739.00	
Stubb	1.00			4740.00	
Recorder	0.00	6771	Inside	4740.00	
Recorder	0.00	8367	Outside	4740.00	
Perforations	30.00			4770.00	
Change Over Sub	1.00			4771.00	
Drill Pipe	94.00			4865.00	
Change Over Sub	1.00			4866.00	
Perforations	6.00			4872.00	
Bullnose	3.00			4875.00	136.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>169.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co., Inc.

**9-3s-37w Cheyenne KS**

250 N. Water STE 300  
Wichita, KS 67202

**Dorsch 'B' #1-9**

Job Ticket: 67024

**DST#: 4**

ATTN: Robert Hendrix

Test Start: 2021.06.24 @ 00:25:00

## 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: 59.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.40 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1100.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	Mud 100%	0.074
0.00	Oil spots in tool	0.000

Total Length: 15.00 ft      Total Volume: 0.074 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

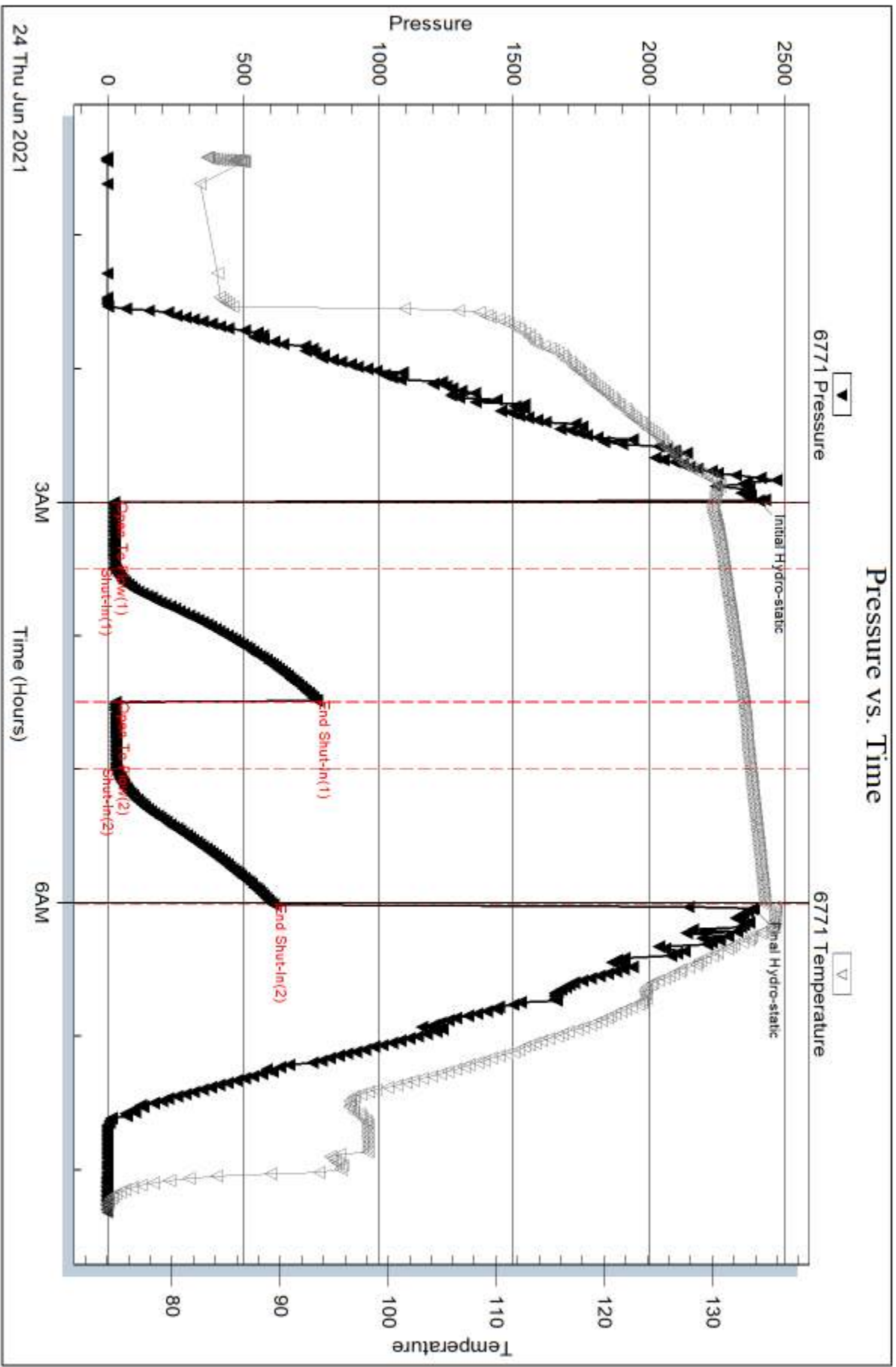
Serial #:

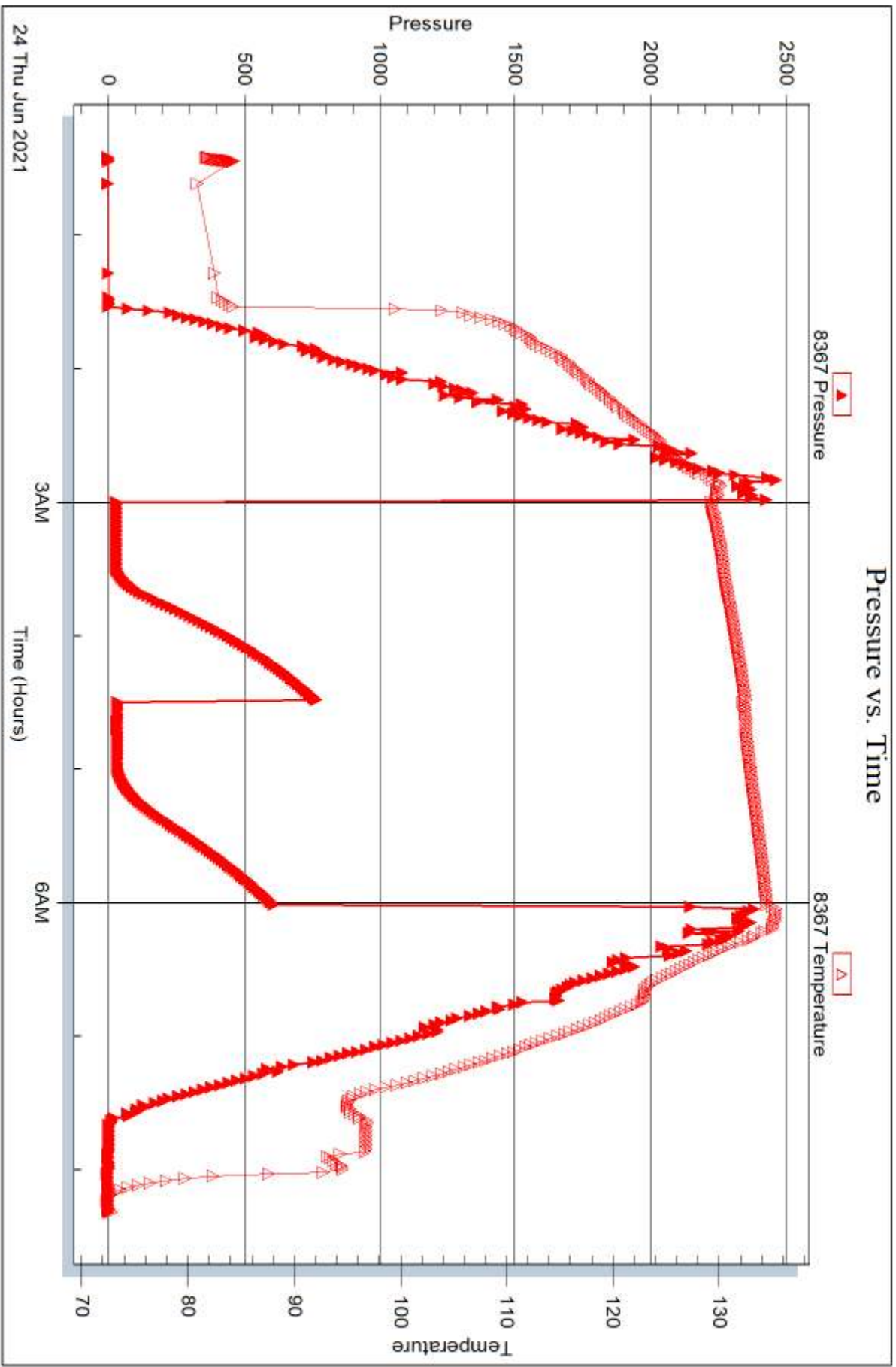
Laboratory Name:

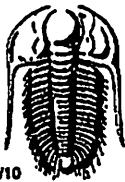
Laboratory Location:

Recovery Comments:









# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 67021

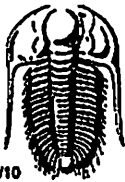
Well Name & No. Dorsch 'B' #1-9 Test No. 1 Date 6-19-21  
 Company Murfin Drilling Co. Inc Elevation 3436 KB 3431 GL  
 Address 250 N. Water STE 300 Wichita, KS 67202  
 Co. Rep / Geo. Robert Hendrix Rig Murfin #3  
 Location: Sec. 9 Twp 3s Rge. 37w Co. Cheyenne State KS

Interval Tested 4111-4162 Zone Tested Topeka  
 Anchor Length 51 Drill Pipe Run 3918 Mud Wt. 8.6  
 Top Packer Depth 4106 Drill Collars Run 177 Vis 71  
 Bottom Packer Depth 4111 Wt. Pipe Run - WL 7.2  
 Total Depth 4162 Chlorides 1000 ppm System LCM 3  
 Blow Description IF: 1/2" Blow at open, built to 7"  
ISI: No blowback  
FF: Blow built to 8 1/4"  
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>1</u>	<u>0,1</u>	<u>100</u>			
<u>536</u>	<u>mcw w/trace oil</u>	<u>trace</u>	<u>88</u>	<u>12</u>	

Rec Total 537 BHT 135 Gravity API RW 139 @ 70 ° F Chlorides 56,000 ppm  
 (A) Initial Hydrostatic 1992  Test 1300 T-On Location 23:30 6/18  
 (B) First Initial Flow 21  Jars 250 T-Started 00:24  
 (C) First Final Flow 134  Safety Joint 75 T-Open 2:30  
 (D) Initial Shut-In 1221  Circ Sub \_\_\_\_\_ T-Pulled 6:32  
 (E) Second Initial Flow 138  Hourly Standby \_\_\_\_\_ T-Out 9:00 6/19  
 (F) Second Final Flow 264  Mileage 110 RT 137.50 Comments oil was low  
 (G) Final Shut-In 1189  Sampler \_\_\_\_\_ gravity  
 (H) Final Hydrostatic 1988  Straddle \_\_\_\_\_  EM Tool 350  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_  
 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 2112.50  
 Sub Total 1762.50 MP/DST Disc't \_\_\_\_\_

Approved By [Signature] 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

NO. 67022

Well Name & No. Dorsch 'B' #1-9 Test No. 2 Date 6-20-21  
 Company Murfin Drilling Co Inc Elevation 3436 KB 3431 GL  
 Address 250 N. Water STE 300 Wichita, KS 67202  
 Co. Rep / Geo. Robert Hendrix Rig Murfin #3  
 Location: Sec. 9 Twp 3s Rge. 37w Co. Cheyenne State KS

Interval Tested 4254-4394 Zone Tested Oread - Lans. 'A'  
 Anchor Length 140 Drill Pipe Run 4075 Mud Wt. 9.2  
 Top Packer Depth 4249 Drill Collars Run 177 Vls 61  
 Bottom Packer Depth 4254 Wt. Pipe Run - WL 7.2  
 Total Depth 4394 Chlorides 1200 ppm System LCM 4  
 Blow Description IF: 1/2" Blow at open, built to 7 1/4"  
ISI: No blowback  
FF: Blow built to 5 1/2"  
FSI: No blowback

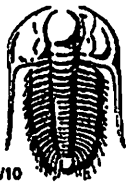
Rec	Feet of	%gas	%oil	%water	%mud
<u>45</u>	<u>50cm</u>	<u>5</u>		<u>95</u>	
<u>125</u>	<u>60cm</u>	<u>10</u>		<u>73</u>	
<u>59</u>	<u>50/wcm</u>	<u>6</u>	<u>4</u>	<u>32</u>	<u>58</u>
<u>118</u>	<u>wcm w/oil spots</u>	<u>6</u>	<u>1</u>	<u>30</u>	<u>63</u>
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 347 BHT 132 Gravity API RW. 229 @ 72 ° F Chlorides 30,000 ppm

(A) Initial Hydrostatic 2107  Test 1300 T-On Location 10:50  
 (B) First Initial Flow 27  Jars 250 T-Started 12:15  
 (C) First Final Flow 131  Safety Joint 75 T-Open 14:10  
 (D) Initial Shut-In 1276  Circ Sub \_\_\_\_\_ T-Pulled 17:22  
 (E) Second Initial Flow 135  Hourly Standby \_\_\_\_\_ T-Out 20:00  
 (F) Second Final Flow 184  Mileage 110 RT 137.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1272  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2051  Straddle \_\_\_\_\_  EM Tool 350  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_  
 Initial Open 30  Shale Packer \_\_\_\_\_  
 Initial Shut-In 60  Extra Packer \_\_\_\_\_  
 Final Flow 35  Extra Recorder \_\_\_\_\_  
 Final Shut-In 60  Day Standby \_\_\_\_\_  
 Accessibility \_\_\_\_\_  
 Sub Total 1762.50 Sub Total 350  
 Total 2112.50 MP/DST Disc't \_\_\_\_\_

Approved By [Signature] Our Representative [Signature]

Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 67023

Well Name & No. Dorsch "B" #1-9 Test No. 3 Date 6-21-21  
 Company Murfin Drilling Co. Inc. Elevation 3436 KB 3431 GL  
 Address 250 N. Water STE 300 Wichita, KS 67202  
 Co. Rep / Geo. Robert Hendrix Rig Murfin #3  
 Location: Sec. 9 Twp 3s Rge. 37w Co. Cheyenne State KS

Interval Tested 4392-4524 Zone Tested Lans. "D-6"  
 Anchor Length 132 Drill Pipe Run 4203 Mud Wt. 8.9  
 Top Packer Depth 4387 Drill Collars Run 177 Vls 56  
 Bottom Packer Depth 4392 Wt. Pipe Run - WL 6.8  
 Total Depth 4524 Chlorides 1200 ppm System LCM 6  
 Blow Description IF: Blow built to BOB (11") at 4 1/2 min, built to 18 1/4"  
ISI: No blowback

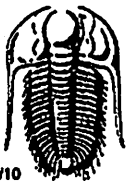
FF: Blow built to BOB at 6 1/2 min, built to 16 1/2"  
FSI: No blowback

Rec	Feet of	%gas	%oil	%water	%mud
<u>246</u>	<u>GM</u>	<u>7</u>	<u>-</u>	<u>-</u>	<u>93</u>
<u>252</u>	<u>GWM</u>	<u>8</u>	<u>-</u>	<u>40</u>	<u>52</u>
<u>177</u>	<u>MCW</u>	<u>-</u>	<u>-</u>	<u>65</u>	<u>35</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 675 BHT 135 Gravity API RW 312 @ 58.3° F Chlorides 27,000 ppm  
 (A) Initial Hydrostatic 2163  Test 1300 T-On Location 14:30  
 (B) First Initial Flow 83  Jars 250 T-Started 15:53  
 (C) First Final Flow 208  Safety Joint 75 T-Open 18:56  
 (D) Initial Shut-In 1188  Circ Sub \_\_\_\_\_ T-Pulled 20:40  
 (E) Second Initial Flow 232  Hourly Standby \_\_\_\_\_ T-Out 23:40  
 (F) Second Final Flow 334  Mileage 110 RT 137.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1150  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2134  Straddle \_\_\_\_\_  EM Tool 350  
 Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_

Initial Open 10  
 Initial Shut-In 45  
 Final Flow 15  
 Final Shut-In 30  
 Sub Total 1762.50  
 Sub Total 2112.50  
 MP/DST Disc't \_\_\_\_\_

Approved By [Signature] Our Representative James Winkler  
 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. 67024

Well Name & No. Dorsch 'B' #1-9 Test No. 4 Date 6-23-21  
 Company Murfin Drilling Co. Inc Elevation 3436 KB 3431 GL  
 Address 250 N. Water STE 300 Wichita, KS 67202  
 Co. Rep / Geo. Robert Hendrix Rig Murfin #3  
 Location: Sec. 9 Twp 3s Rge. 37w Co. Cheyenne State KS

Interval Tested 4739-4875 Zone Tested Ft. Scott - Celia  
 Anchor Length 136 Drill Pipe Run 4548 Mud Wt. 8.9  
 Top Packer Depth 4734 Drill Collars Run 177 Vis 59  
 Bottom Packer Depth 4739 Wt. Pipe Run - WL 6.4  
 Total Depth 4875 Chlorides 1100 ppm System LCM 6  
 Blow Description IF: 1/4 Blow at open, built to 1/2", died back to 1/8"  
ISI: No blowback  
FF: No blow  
FSI: No blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>mud</u>			<u>100</u>	
	<u>Oil spots in tool</u>				

Rec Total 15 BHT 135 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm  
 (A) Initial Hydrostatic 2405  Test 1300 T-On Location 22:35 6/23  
 (B) First Initial Flow 23  Jars 250 T-Started 00:25  
 (C) First Final Flow 27  Safety Joint 75 T-Open 2:59  
 (D) Initial Shut-In 771  Circ Sub \_\_\_\_\_ T-Pulled 6:00  
 (E) Second Initial Flow 29  Hourly Standby \_\_\_\_\_ T-Out 8:20  
 (F) Second Final Flow 31  Mileage 110 RT 137.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 610  Sampler \_\_\_\_\_  EM Tool 350  
 (H) Final Hydrostatic 2387  Straddle \_\_\_\_\_  Ruined Shale Packer \_\_\_\_\_  
 Shale Packer \_\_\_\_\_  Ruined Packer \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  Extra Copies \_\_\_\_\_  
 Extra Recorder \_\_\_\_\_  
 Day Standby 1.5d 11h 366.67 Sub Total 350+366.67  
 Accessibility \_\_\_\_\_ Total 2479.17  
 Sub Total 1762.50 MP/DST Disc't \_\_\_\_\_

Approved By [Signature] Our Representative James Winder  
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## DRILLING REPORT - LOG TOPS - DORSCH B 1-9

Formation	Sample top	Datum	Ref	Log tops	Datum	Ref
MDCI Dorsch 'B' #1-9 990' FSL 330'FWL Sec. 9-3S-37W 3436' KB						
Anhydrite	3293	+143	+10	3290	+146	+13
B/Anhydrite	3321	+115	+15	3327	+109	9
Topeka	4152	-716	-4	4153	-717	-5
Oread	4286	-850	-7	4282	-846	-3
Lansing	4363	-927	-7	4360	-924	-4
Stark	4588	-1152	-5	4584	-1148	-1
Mound City	4641	-1205	-6	4634	-1198	+1
Ft Scott	4764	-1328	-4	4764	-1328	-4
Oakley	4839	-1403	-4	4838	-1402	-3
Mississippian	5076	-1640	-1	5059	-1623	+10
RTD	5100					
LTD				5100		







**CEMENT TREATMENT REPORT**

Customer: <b>Murfin Drilling</b>	Well: <b>Dorsch 1-9</b>	Ticket: <b>WP 1523</b>
City, State:	County: <b>Cheyenne KS</b>	Date: <b>6/25/2021</b>
Field Rep: <b>Jay</b>	S-T-R: <b>9-3S-37W</b>	Service: <b>PTA</b>

Downhole Information	
Hole Size:	<b>7 7/8 In</b>
Hole Depth:	<b>5100 ft</b>
Casing Size:	<b>in</b>
Casing Depth:	<b>ft</b>
Tubing / Liner:	<b>in</b>
Depth:	<b>ft</b>
Tool / Packer:	
Tool Depth:	<b>ft</b>
Displacement:	<b>bbls</b>

Calculated Slurry - Lead	
Blend:	<b>H-Plug</b>
Weight:	<b>13.8 ppg</b>
Water / Sx:	<b>6.9 gal / sx</b>
Yield:	<b>1.42 ft<sup>3</sup> / sx</b>
Annular Bbls / Ft.:	<b>0.0406 bbs / ft.</b>
Depth:	<b>ft</b>
Annular Volume:	<b>0.0 bbls</b>
Excess:	
Total Slurry:	<b>64.5 bbls</b>
Total Sacks:	<b>255 sx</b>

Calculated Slurry - Tail	
Blend:	
Weight:	<b>ppg</b>
Water / Sx:	<b>gal / sx</b>
Yield:	<b>ft<sup>3</sup> / sx</b>
Annular Bbls / Ft.:	<b>bbs / ft.</b>
Depth:	<b>ft</b>
Annular Volume:	<b>0 bbls</b>
Excess:	
Total Slurry:	<b>0.0 bbls</b>
Total Sacks:	<b>0 sx</b>

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
715A			-	-	ON LOCATION
720A				-	SAFETY MEETING
730A				-	RIG UP
810A	3.0	300.0	5.0	5.0	H2O AHEAD
812A	3.0	250.0	12.6	17.6	CEMENT 50 SKS H-PLUG @ 3310 FT
816A	3.0	150.0	5.0	22.6	DISPLACE H2O
820A				22.6	DISPLACE MUD WITH RIG PUMP
850A	4.0	250.0	5.0	27.6	H2O AHEAD
857A	4.3	250.0	25.3	52.9	CEMENT 100 SKS H-PLUG @ 2480 FT
905A	4.0	110.0	28.6	81.5	DISPLACE H2O
1005A	3.0	150.0	5.0		H2O AHEAD
1008A	3.0	120.0	12.6		CEMENT 50 SKS H-PLUG @ 439 FT
1012A	3.0	100.0	2.9		DISPLACE H2O
1115A	2.5	100.0	2.5		CEMENT 10 SKS @ 40 FT-SURFACE
1120A	2.5	100.0	3.8		CEMENT 15 SKS IN MOUSEHOLE
1125A	2.5	100.0	7.6		CEMENT 30 SKS IN RATHOLE
1130A					WASH UP
1145A					RIG DOWN
1210A					LEFT LOCATION

CREW			UNIT			SUMMARY		
Cementer:	<b>Jimmie</b>	<b>914</b>			Average Rate	Average Pressure	Total Fluid	
Pump Operator:	<b>Mike</b>	<b>230</b>			<b>3.2 bpm</b>	<b>165 psi</b>	<b>116 bbls</b>	
Bulk #1:	<b>Hugo</b>	<b>194/254</b>						
Bulk #2:								