

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](mailto: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
--	---

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
---	---	------------------------------------

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:	
----------------	-------	---------	------------	--

Form	ACO1 - Well Completion
Operator	Murfin Drilling Co., Inc.
Well Name	FRISBIE 'C' 1-16
Doc ID	1456475

All Electric Logs Run

DIL
DUCP
MEL
BHCS





**CEMENT TREATMENT REPORT**

Customer: <b>Murfin Drilling INC</b>	Well: <b>FRISBIE C 1-16</b>	Ticket: <b>ICT1808</b>
City, State: <b>McDonald, KS</b>	County: <b>Rawlins KS</b>	Date: <b>2/27/2019</b>
Field Rep: <b>Jay</b>	S-T-Ref: <b>16-2S-35W</b>	Service: <b>Cement</b>

Downhole Information	
Hole Size:	12.25
Hole Depth:	302
Casing Size:	8.625
Casing Depth:	302
Tubing / Liner:	In
Depth:	ft
Tool / Packer:	
Depth:	302
Displacement:	108BBL

Slurry	
Weight:	14.8 #/bx
Water / Sx:	
Yield:	1.41
Bbls / Ft.:	0.064
Depth:	ft
Volume:	bbls
Excess:	128
Total Slurry:	69
Total Sacks:	275 bx

Cement Blend		
Product	%	#
Class A	100.0	26790
Gol	2.0	536
GaCl	3.0	804
Motac		
KalSeal		
PhenoSeal	0.3	72
Salt		
<b>Total</b>		<b>28,202</b>

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
9:00PM				Arrive on location					
9:06PM				Hold Safety meeting					
9:10PM				Rig up equipment					
11:PM				Start running casing					
11:45PM				Casing on bottom					
11:50PM				Rig circulates					
12:30AM	5.0	150.0	69.0	Cement 275sx					
1:00AM	5.0	150.0	10.0	Displace					
1:15AM		150.0		Plug down shul in					
1:45AM				Rig down					
2:00AM				Leave Location					

CREW		UNIT	SUMMARY		
Comptroller:	Miles Shaw	73.0	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Paul Williams	269.0	5 bpm	150.00 psi	67.00 bbls
Bulk #1:	John Polley	0.7			
Bulk #2:					



**CEMENT TREATMENT REPORT**

<b>Customer:</b> Murfin Drilling INC	<b>Well:</b> Frisbie C 1-16	<b>Ticket:</b> ICT1832
<b>City, State:</b> McDonald,KS	<b>County:</b> Rawlins Co	<b>Date:</b> 3/9/2019
<b>Field Rep:</b> Nathan Witt	<b>S-T-R:</b> 16/2S/35W	<b>Service:</b> Cementing

Downhole Information	
Hole Size:	7 7/8
Hole Depth:	4900'
Casing Size:	5.5
Casing Depth:	4896'
Tubing / Liner:	
Depth:	
Tool / Packer:	
Depth:	
Displacement:	

Slurry		
Weight:	12/14.5	# / sx
Water / Sx:	15.46/7.41	gal / sx
Yield:	2.56/1.63	ft <sup>3</sup> / sx
Bbls / Ft.:	0.0238	
Depth:	ft	
Volume:		
Excess:		
Total Slurry:	217.5bbls	
Total Sacks:	550sx	

Cement Blend		
Product	%	#
Class A	550sx	51700
Gel		
CaCl		987
Metso		1034
KoISeal		1000
PhenoSeal		87
Salt		1236
<b>Total</b>		<b>56,044</b>

TIME	RATE	PSI	BBLs	REMARKS	TIME	RATE	PSI	BBLs	REMARKS
1:40PM				ARRIVAL					
1:45PM				SAFETY MEETING					
2:00 PM				RIG UP EQUIP					
4:45PM				START RUNNING CASING 117 JNTS					
6:00 PM				CIRCULATE CASING JNT 58 30 MINUTES					
7:30PM				CIRCULATE CASING ON BOTTOM					
8:40PM	4.0	300.0	12.0	PUMP MUD FLUSH & PLUG RH W/30 SX MH W/20SX					
8:50PM	5.0	300.0	217.5	CEMENT DOWN CASING 300SX H-CON TAILED W/200SX H-BOND					
9:50PM	3.0			WASH UP CLEAR PUMP&LINES RELEASE PLUG					
9:55PM	6.0	2,100.0		DISPLACE PLUG 1500 LIFT 2100 LAND					
10:20PM		2,100.0		PLUG DOWN					
10:45PM				FINISH WASH UP AND RIG DOWN EQUIP					
11:15PM				DEPART					
				TURBOLIZERS ON JNTS 1-13, 34, 44					
				BASKETS ON JNTS 11, 35, 45					

UNIT			SUMMARY		
Cementer:	Miles Shaw	73/282	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Josh Mosier	267	4.5 bpm	##### psi	229.50 bbls
Bulk #1:	Kale Ochs	242			
Bulk #2:	John Polley	181/254			

MDCI  
 Frisbie C 1-16  
 990' FSL 1980'FWL  
 Sec. 16-2S-35W  
 3249' KB

Formation	Sample top	Datum	Ref	Log tops	Datum	Ref
Anhydrite	3092	+157	-4	3095	+154	-7
B/Anhydrite	3133	+116	-10	3130	+119	-7
Topeka	3964	-715	-6	3955	-706	+3
Oread	4076	-827	-7	4073	-824	-4
Lansing	4168	-919	-6	4166	-917	-4
Stark	4386	-1137	-8	4380	-1131	-1
Mound City	4432	-1183	-8	4428	-1179	-4
Ft Scott	4554	-1305	-8	4546	-1297	Flat
Oakley	4626	-1377	-5	4624	-1375	-3
Mississippi	4802	-1553	-5	4799	-1550	-2
RTD	4900	-1651				
LTD				4896	-1647	

# Saman Sharifaie

## Petroleum Geologist

### GEOLOGIST'S REPORT

#### DRILLING TIME AND SAMPLE LOG

COMPANY: **Martin Drilling Co., Inc.**  
LEASE: **Frishie "B" #1-16**

FIELD: **Wildcat**  
LOCATION: **9007 ESL & 1980' EWL**  
SEC: **16 TWP 2S RGE 35W**  
COUNTY: **Rainbow STATE Kansas**  
CONTRACTOR: **Martin Drilling #3**  
RUD: **02/27/19 COMP 491/0.19**  
SPUD: **4/9007' TYPE MUD Chemical**  
MUD UP: **3300'**

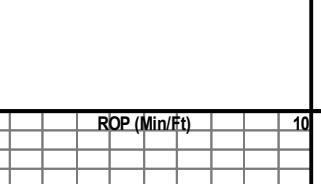
SAMPLES SAVED FROM: **3860' TO RTD**  
DRILLING TIME KEPT FROM: **3860' TO RTD**  
SAMPLES EXAMINED FROM: **3660' TO RTD**

CONDUCTOR: **8-5/8" at 3022'**  
SURFACE: **5-1/2" at 4896'**  
PRODUCTION: **5-1/2" at 4896'**

ELEVATIONS: **KB 3249'**  
ELECTRICAL: **DF**  
CASING: **GL 3244'**  
MEASUREMENTS ARE ALL FROM KELLY BUSHING

GEOLOGICAL SUPERVISION FROM: **3560'**  
CND: **D.L. MEL. Somic**  
REFERENCE WELL: **MDCI - Frishie "B" #1-15**  
*Pioneer Well*

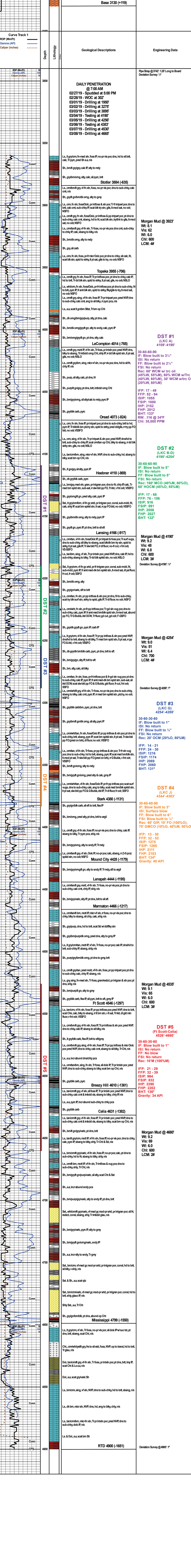
Formation	Sample Tops	E-log Tops	Pos.
Anhydrite	3092' (+157)	3095' (+154)	-7
Base Anhydrite	3133' (+116)	3130' (+119)	-7
Oil Seal	4076' (+827)	4073' (+824)	-4
Leakoff	4166' (+917)	4166' (+917)	-4
Starts	4388' (+137)	4380' (+131)	-1
Normal Cvt	4452' (+185)	4428' (+129)	-4
FT Seals	4454' (+185)	4536' (+297)	Frnt
OKREV	4626' (+377)	4624' (+375)	-3
MISSISSIPPI	4802' (+553)	4799' (+550)	-2



REMARKS Due to poor to fair shows of oil in multiple pay zones and positive DST results, it is recommended and agreed upon by all parties that production casing be set to further evaluate this well.

Respectfully Submitted,  
Saman Sharifaie  
Petroleum Geologist

API #15-153-21222  
\*Tops have been adjusted to electric logs







## DRILL STEM TEST REPORT

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

250 N Water STE 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Frisbie "B" #1-16**

#### **16-2S-35W Rawlins KS**

Start Date: 2019.03.04 @ 03:30:00

End Date: 2019.03.04 @ 12:49:49

Job Ticket #: 65291                      DST #: 1

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

Printed: 2019.03.08 @ 14:14:57

Murfin Drilling Co Inc.  
16-2S-35W Rawlins KS  
Frisbie "B" #1-16  
DST # 1  
LKC "A"  
2019.03.04



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65291

**DST#: 1**

ATTN: Saman Sharifaie

Test Start: 2019.03.04 @ 03:30:00

## GENERAL INFORMATION:

Formation: **LKC " A "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 06:39:30

Time Test Ended: 12:49:49

Test Type: Conventional Bottom Hole (Initial)

Tester: Ryan Nichols

Unit No: 71

**Interval: 4109.00 ft (KB) To 4190.00 ft (KB) (TVD)**

Reference Elevations: 3249.00 ft (KB)

Total Depth: 4190.00 ft (KB) (TVD)

3244.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8366**

**Outside**

Press@RunDepth: 94.01 psig @ 4110.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.03.04

End Date:

2019.03.04

Last Calib.: 2019.03.04

Start Time: 03:30:01

End Time:

12:49:49

Time On Btm: 2019.03.04 @ 06:38:50

Time Off Btm: 2019.03.04 @ 10:43:00

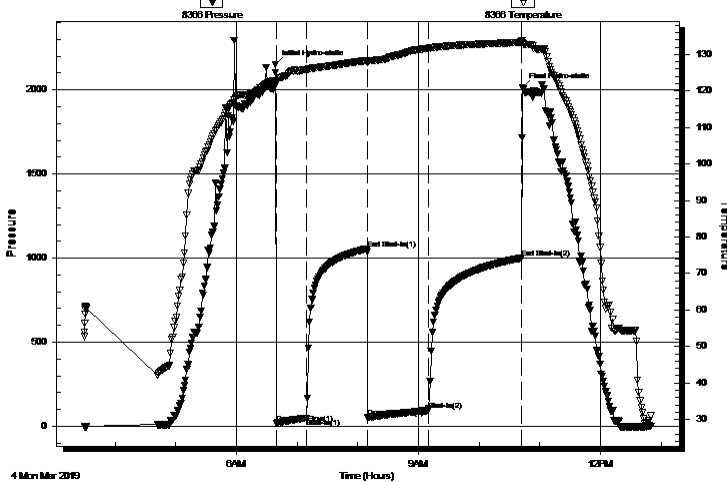
**TEST COMMENT:** 30 IF - Blow built to 3 1/4" (in diesel)

60 ISI - No return

60 FF - Blow built to 2 1/4"

90 FSI - No return

Pressure vs. Time



## PRESSURE SUMMARY

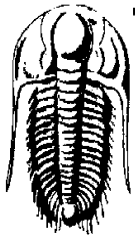
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2152.43	122.73	Initial Hydro-static
1	16.96	121.99	Open To Flow (1)
31	49.06	125.80	Shut-In(1)
91	1055.10	128.32	End Shut-In(1)
91	52.16	127.82	Open To Flow (2)
152	94.01	131.69	Shut-In(2)
244	1000.27	133.39	End Shut-In(2)
245	2011.99	133.30	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
60.00	WCM W/trace oil - 45%W - 55%M	0.30
60.00	WCM W/trace oil - 40%W - 60%M	0.30
30.00	WCM W/trace oil - 20%w - 80%M	0.15

## Gas Rates

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



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65291      **DST#: 1**

ATTN: Saman Sharifaie

Test Start: 2019.03.04 @ 03:30:00

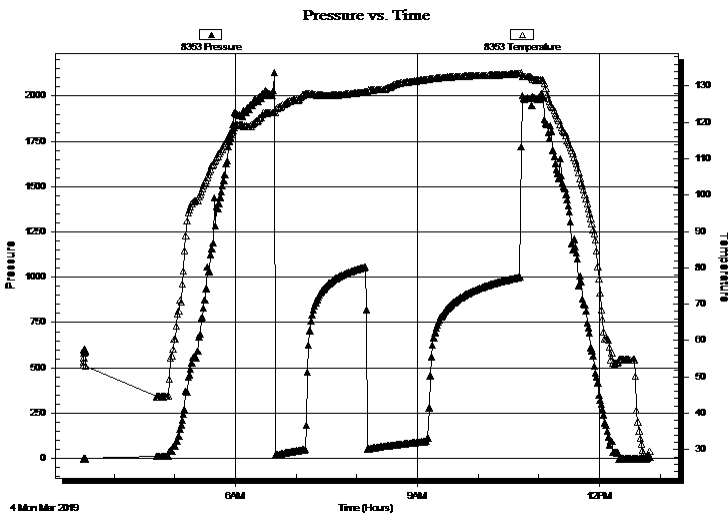
**GENERAL INFORMATION:**

Formation: <b>LKC " A "</b>			
Deviated: No Whipstock:	ft (KB)	Test Type: Conventional Bottom Hole (Initial)	
Time Tool Opened: 06:39:30		Tester: Ryan Nichols	
Time Test Ended: 12:49:49		Unit No: 71	
<b>Interval: 4109.00 ft (KB) To 4190.00 ft (KB) (TVD)</b>		Reference Elevations: 3249.00 ft (KB)	
Total Depth: 4190.00 ft (KB) (TVD)		3244.00 ft (CF)	
Hole Diameter: 7.88 inches	Hole Condition: Good	KB to GR/CF: 5.00 ft	

**Serial #: 8353**      **Inside**

Press@RunDepth:      psig @	4110.00 ft (KB)	Capacity:	8000.00 psig
Start Date: 2019.03.04	End Date: 2019.03.04	Last Calib.:	2019.03.04
Start Time: 03:30:01	End Time: 12:49:49	Time On Btm:	
		Time Off Btm:	

**TEST COMMENT:** 30 IF - Blow built to 3 1/4" (in diesel)  
 60 ISI - No return  
 60 FF - Blow built to 2 1/4"  
 90 FSI - No return



**PRESSURE SUMMARY**

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

**Recovery**

Length (ft)	Description	Volume (bbl)
60.00	WCM W/trace oil - 45%W - 55%M	0.30
60.00	WCM W/trace oil - 40%W - 60%M	0.30
30.00	WCM W/trace oil - 20%w - 80%M	0.15

**Gas Rates**

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65291

**DST#: 1**

ATTN: Saman Sharifaie

Test Start: 2019.03.04 @ 03:30:00

## Tool Information

Drill Pipe:	Length: 3883.00 ft	Diameter: 3.80 inches	Volume: 54.47 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: 206.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 55.48 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4109.00 ft			Final 60000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	81.00 ft			
Tool Length:	109.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4086.00	
Hydraulic tool	5.00			4091.00	
Jars	5.00			4096.00	
Safety Joint	3.00			4099.00	
Packer	5.00			4104.00	28.00 Bottom Of Top Packer
Packer	5.00			4109.00	
Stubb	1.00			4110.00	
Recorder	0.00	8353	Inside	4110.00	
Recorder	0.00	8366	Outside	4110.00	
Perforations	12.00			4122.00	
Blank Spacing	65.00			4187.00	
Bullnose	3.00			4190.00	81.00 Bottom Packers & Anchor

**Total Tool Length: 109.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65291

**DST#: 1**

ATTN: Saman Sharifaie

Test Start: 2019.03.04 @ 03:30:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

35000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.98 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
60.00	WCM W/trace oil - 45%W - 55%M	0.295
60.00	WCM W/trace oil - 40%W - 60%M	0.295
30.00	WCM W/trace oil - 20%w - 80%M	0.148

Total Length: 150.00 ft      Total Volume: 0.738 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

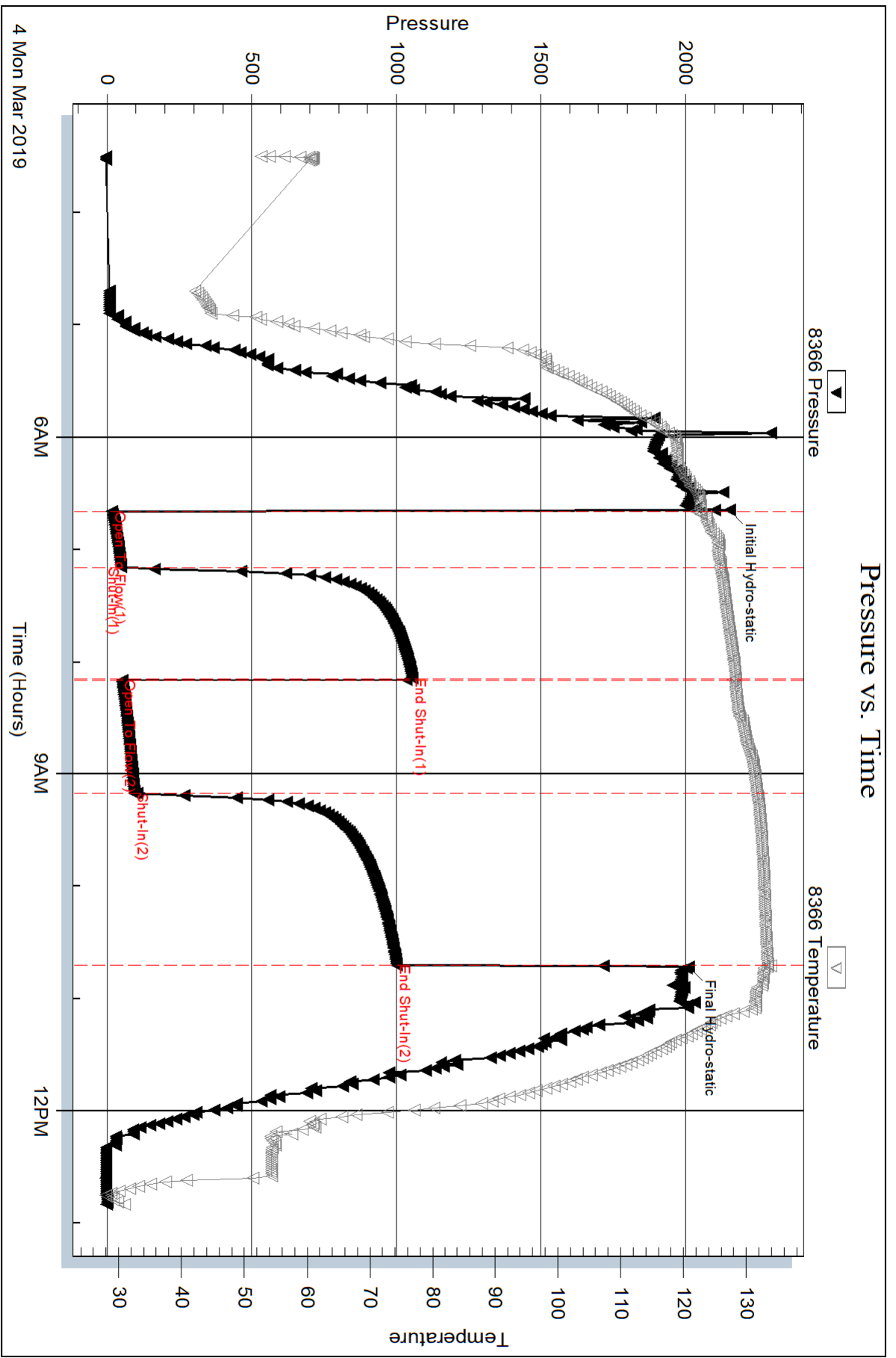
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW - .361 @ 34 DEG F

CHLORIDES = 35,000 PPM



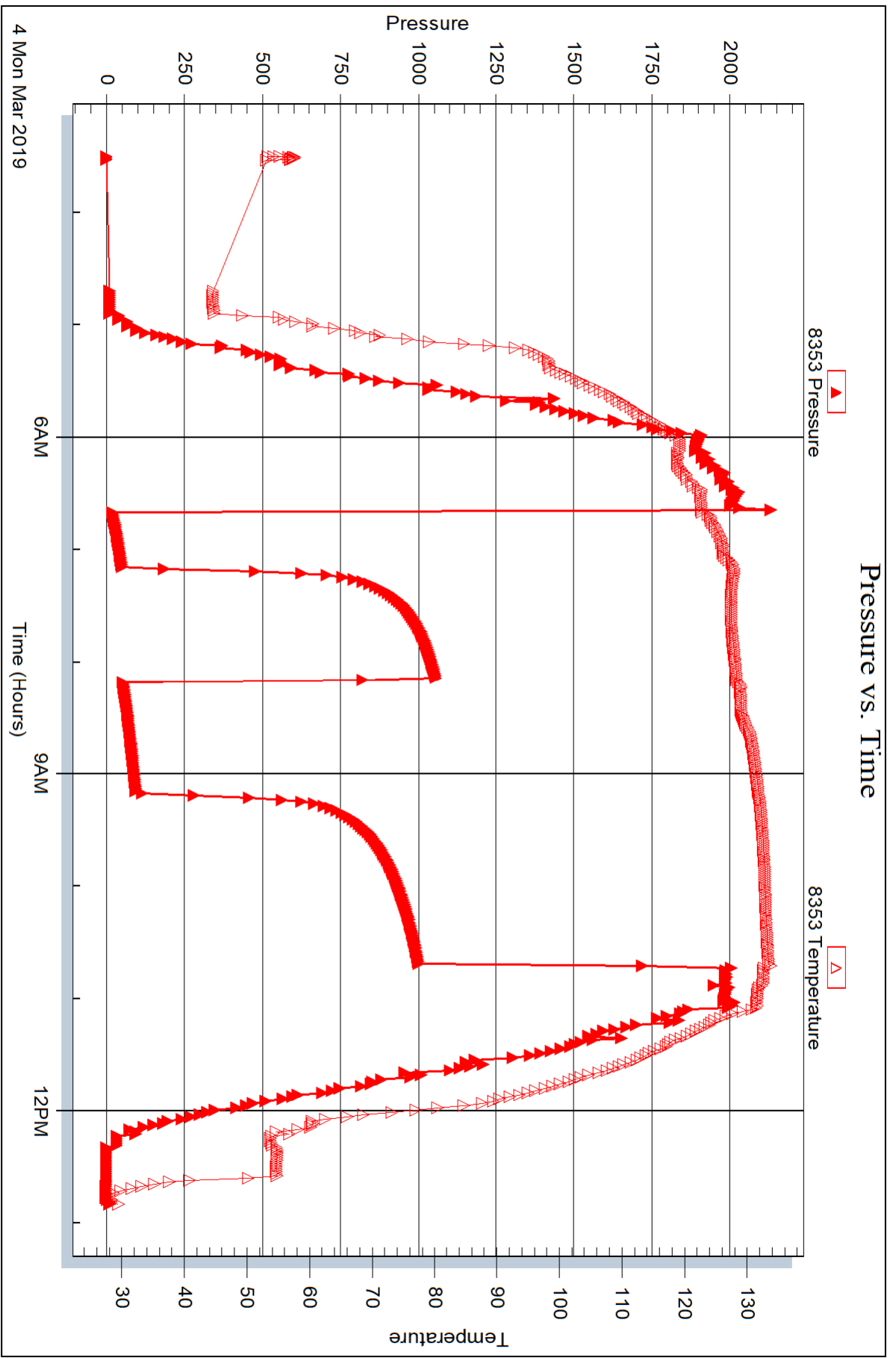
Serial #: 8353

Inside

Murfin Drilling Co Inc.

Frisbie "B" #1-16

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 65291

Printed: 2019.03.08 @ 14:14:58



## DRILL STEM TEST REPORT

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

250 N Water STE 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Frisbie "B" #1-16**

#### **16-2S-35W Rawlins KS**

Start Date: 2019.03.04 @ 22:30:00

End Date: 2019.03.05 @ 07:04:30

Job Ticket #: 65292                      DST #: 2

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

Printed: 2019.03.08 @ 14:13:06

Murfin Drilling Co Inc.

16-2S-35W Rawlins KS

Frisbie "B" #1-16

DST # 2

LKC "B - D"

2019.03.04





# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65292

**DST#: 2**

ATTN: Saman Sharifaie

Test Start: 2019.03.04 @ 22:30:00

### GENERAL INFORMATION:

Formation: **LKC "B - D" "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:45:50

Time Test Ended: 07:04:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 71

**Interval: 4190.00 ft (KB) To 4254.00 ft (KB) (TVD)**

Reference Elevations: 3249.00 ft (KB)

Total Depth: 4254.00 ft (KB) (TVD)

3244.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

### Serial #: 8366

Outside

Press@RunDepth: 106.41 psig @ 4191.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.03.04

End Date:

2019.03.05

Last Calib.:

2019.03.05

Start Time: 22:30:01

End Time:

07:04:30

Time On Btm:

2019.03.05 @ 00:45:10

Time Off Btm:

2019.03.05 @ 04:47:00

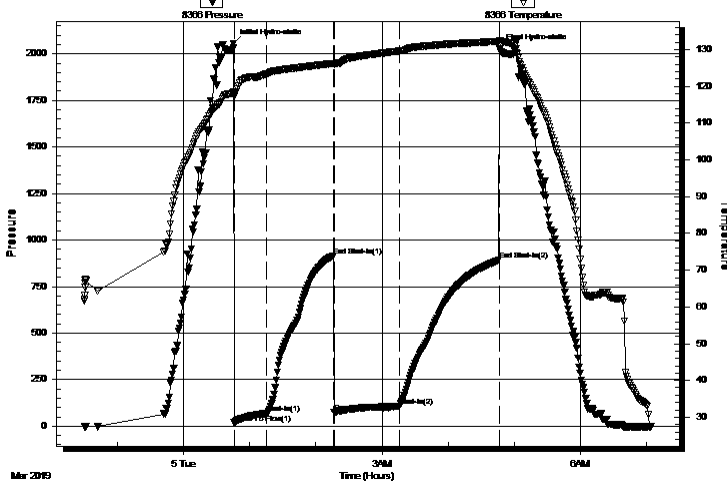
TEST COMMENT: 30 IF - Blow built to 5" (in diesel)

60 ISI - No return

60 FF - Blow built to 5"

90 FSI - No return

Pressure vs. Time



### PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2055.95	118.49	Initial Hydro-static
1	17.33	117.38	Open To Flow (1)
30	67.79	123.32	Shut-In(1)
91	915.62	126.27	End Shut-In(1)
92	75.74	126.01	Open To Flow (2)
151	106.41	129.63	Shut-In(2)
241	891.22	132.26	End Shut-In(2)
242	2027.10	132.52	Final Hydro-static

### Recovery

Length (ft)	Description	Volume (bbl)
60.00	HOCM - 45%o - 55%M	0.30
160.00	MCO - 40%M - 60%o	0.91

### Gas Rates

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

\* Recovery from multiple tests



# TRILOBITE TESTING, INC.

## DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65292

**DST#: 2**

ATTN: Saman Sharifaie

Test Start: 2019.03.04 @ 22:30:00

### GENERAL INFORMATION:

Formation: **LKC " B - D' "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 00:45:50

Time Test Ended: 07:04:30

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 71

**Interval: 4190.00 ft (KB) To 4254.00 ft (KB) (TVD)**

Total Depth: 4254.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3249.00 ft (KB)

3244.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8353** Inside

Press@RunDepth: psig @ 4191.00 ft (KB)

Start Date: 2019.03.04

End Date:

2019.03.05

Start Time: 22:30:01

End Time:

07:04:19

Capacity: 8000.00 psig

Last Calib.:

2019.03.05

Time On Btm:

Time Off Btm:

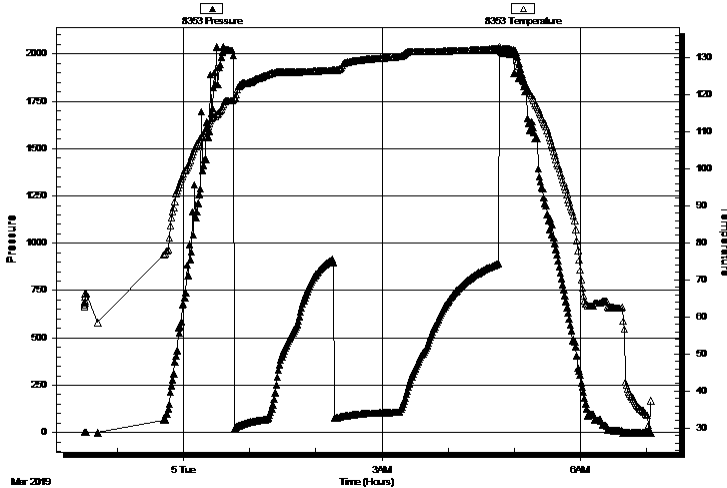
TEST COMMENT: 30 IF - Blow built to 5" (in diesel)

60 ISI - No return

60 FF - Blow built to 5"

90 FSI - No return

Pressure vs. Time



### PRESSURE SUMMARY

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

### Recovery

Length (ft)	Description	Volume (bbl)
60.00	HOCM - 45%o - 55%M	0.30
160.00	MCO - 40%M - 60%o	0.91

### 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.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65292

**DST#: 2**

ATTN: Saman Sharifaie

Test Start: 2019.03.04 @ 22:30:00

### Tool Information

Drill Pipe:	Length: 3979.00 ft	Diameter: 3.80 inches	Volume: 55.81 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: 206.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 56.82 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 60000.00 lb
Depth to Top Packer:	4190.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	64.00 ft			
Tool Length:	92.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4167.00	
Hydraulic tool	5.00			4172.00	
Jars	5.00			4177.00	
Safety Joint	3.00			4180.00	
Packer	5.00			4185.00	28.00 Bottom Of Top Packer
Packer	5.00			4190.00	
Stubb	1.00			4191.00	
Recorder	0.00	8353	Inside	4191.00	
Recorder	0.00	8366	Outside	4191.00	
Perforations	27.00			4218.00	
Blank Spacing	33.00			4251.00	
Bullnose	3.00			4254.00	64.00 Bottom Packers & Anchor

**Total Tool Length: 92.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65292

**DST#: 2**

ATTN: Saman Sharifaie

Test Start: 2019.03.04 @ 22:30:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
60.00	HOCM - 45% <sub>o</sub> - 55%M	0.295
160.00	MCO - 40%M - 60% <sub>o</sub>	0.914

Total Length: 220.00 ft      Total Volume: 1.209 bbl

Num Fluid Samples: 0

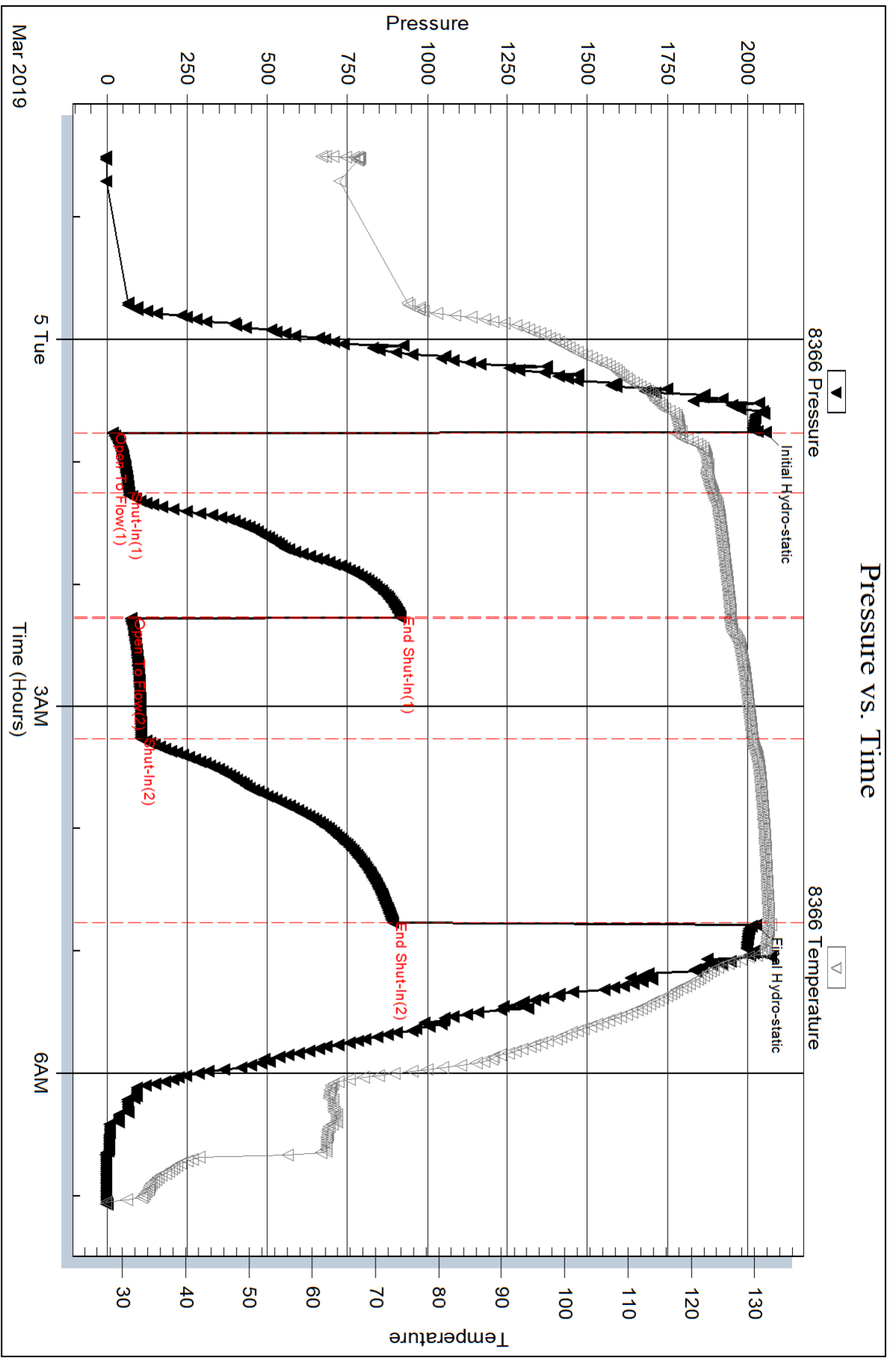
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



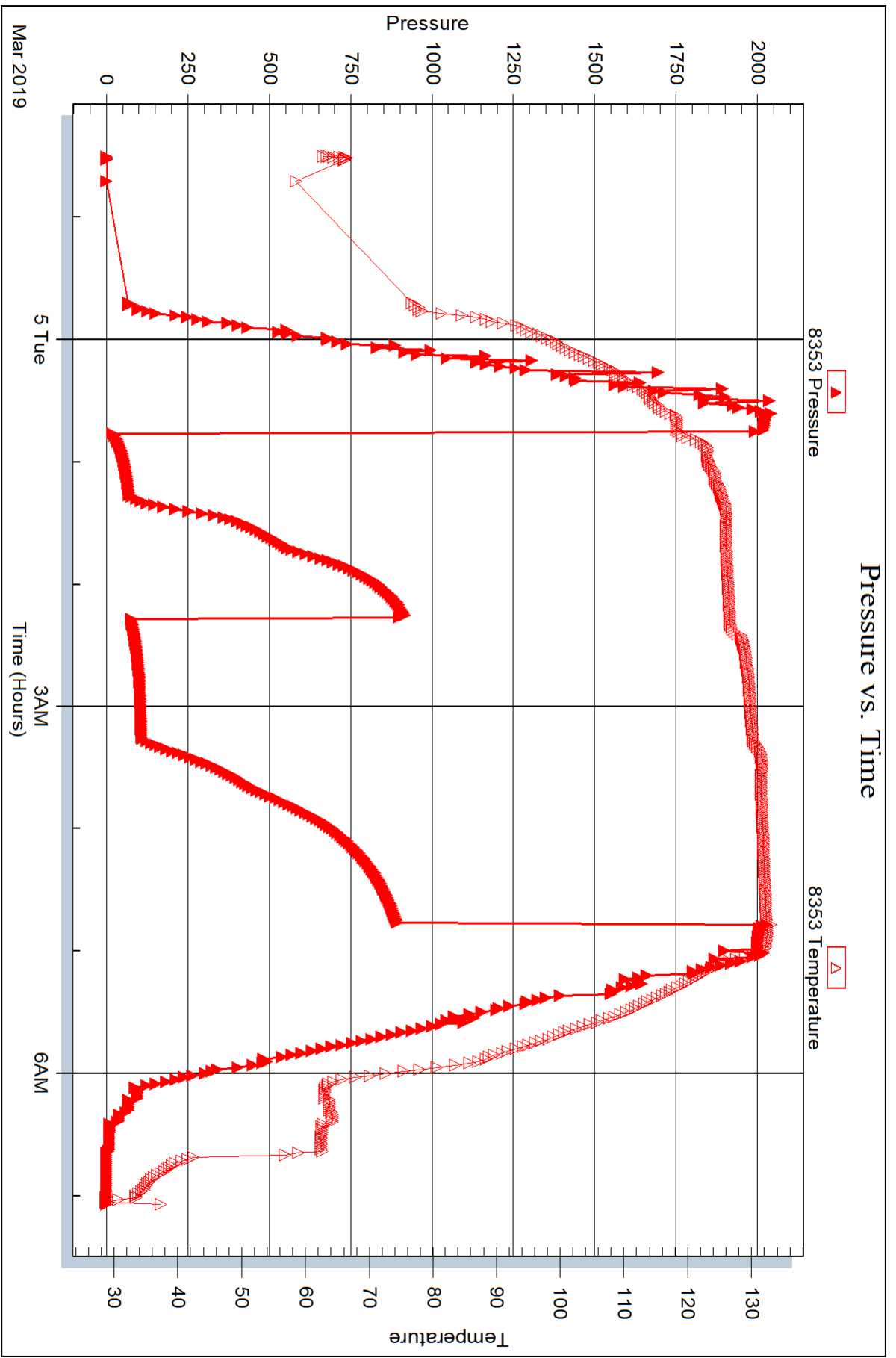
Serial #: 8353

Inside

Murfin Drilling Co Inc.

Frisbie "B" #1-16

DST Test Number: 2





## DRILL STEM TEST REPORT

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

250 N Water STE 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Frisbie "B" #1-16**

#### **16-2S-35W Rawlins KS**

Start Date: 2019.03.05 @ 14:49:00

End Date: 2019.03.05 @ 21:48:20

Job Ticket #: 65293                      DST #: 3

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

Printed: 2019.03.08 @ 14:12:42



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65293

**DST#: 3**

ATTN: Saman Sharifaie

Test Start: 2019.03.05 @ 14:49:00

## GENERAL INFORMATION:

Formation: **LKC " G "**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 16:58:50  
 Time Test Ended: 21:48:20  
 Interval: **4254.00 ft (KB) To 4288.00 ft (KB) (TVD)**  
 Total Depth: 4288.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Ryan Nichols  
 Unit No: 71  
 Reference Elevations: 3249.00 ft (KB)  
 3244.00 ft (CF)  
 KB to GR/CF: 5.00 ft

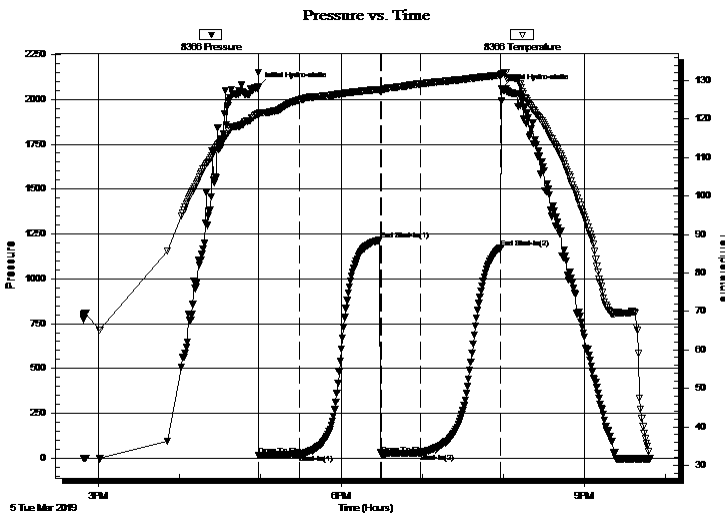
## Serial #: 8366

Outside

Press@RunDepth: 29.85 psig @ 4255.00 ft (KB)  
 Start Date: 2019.03.05 End Date: 2019.03.05  
 Start Time: 14:49:01 End Time: 21:48:20  
 Capacity: 8000.00 psig  
 Last Calib.: 2019.03.05  
 Time On Btm: 2019.03.05 @ 16:58:10  
 Time Off Btm: 2019.03.05 @ 19:58:39

TEST COMMENT: 30 IF - Blow built to 1"  
 60 ISI - No return  
 30 FF - Blow built to 1/2"  
 60 FSI - No return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2068.58	121.37	Initial Hydro-static
1	14.18	121.17	Open To Flow (1)
31	21.06	124.95	Shut-In(1)
91	1216.39	127.73	End Shut-In(1)
92	24.12	127.59	Open To Flow (2)
121	29.85	129.16	Shut-In(2)
180	1173.58	131.38	End Shut-In(2)
181	2060.15	131.54	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	OCM - 20%o 80%M	0.10

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65293

**DST#: 3**

ATTN: Saman Sharifaie

Test Start: 2019.03.05 @ 14:49:00

## GENERAL INFORMATION:

Formation: **LKC " G "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:58:50

Time Test Ended: 21:48:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 71

**Interval: 4254.00 ft (KB) To 4288.00 ft (KB) (TVD)**

Reference Elevations: 3249.00 ft (KB)

Total Depth: 4288.00 ft (KB) (TVD)

3244.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8353**

**Inside**

Press@RunDepth: psig @ 4255.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2019.03.05

End Date:

2019.03.05

Last Calib.:

2019.03.05

Start Time: 14:49:01

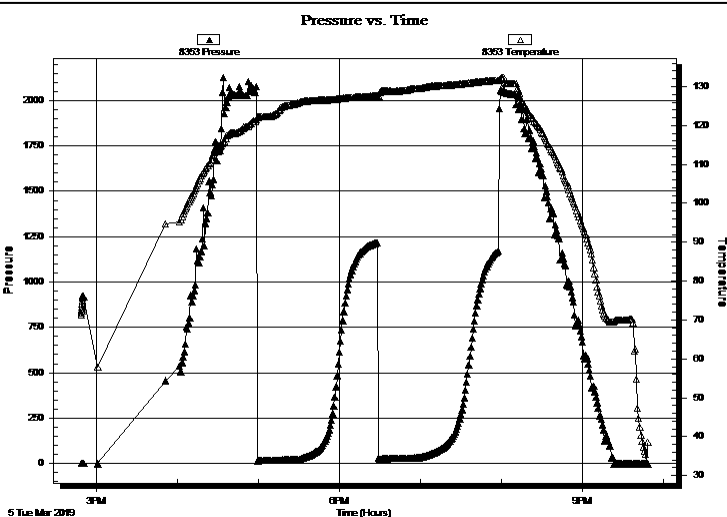
End Time:

21:48:20

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 30 IF - Blow built to 1"  
60 ISI - No return  
30 FF - Blow built to 1/2"  
60 FSI - No return



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	OCM - 20%o 80%M	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.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65293

**DST#: 3**

ATTN: Saman Sharifaie

Test Start: 2019.03.05 @ 14:49:00

## Tool Information

Drill Pipe:	Length: 4034.00 ft	Diameter: 3.80 inches	Volume: 56.59 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: 206.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 57.60 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	14.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4254.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	34.00 ft			
Tool Length:	62.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4231.00	
Hydraulic tool	5.00			4236.00	
Jars	5.00			4241.00	
Safety Joint	3.00			4244.00	
Packer	5.00			4249.00	28.00 Bottom Of Top Packer
Packer	5.00			4254.00	
Stubb	1.00			4255.00	
Recorder	0.00	8353	Inside	4255.00	
Recorder	0.00	8366	Outside	4255.00	
Perforations	30.00			4285.00	
Bullnose	3.00			4288.00	34.00 Bottom Packers & Anchor

**Total Tool Length: 62.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65293

**DST#: 3**

ATTN: Saman Sharifaie

Test Start: 2019.03.05 @ 14:49:00

## 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: 51.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.39 in<sup>3</sup>

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
20.00	OCM - 20%o 80%M	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:

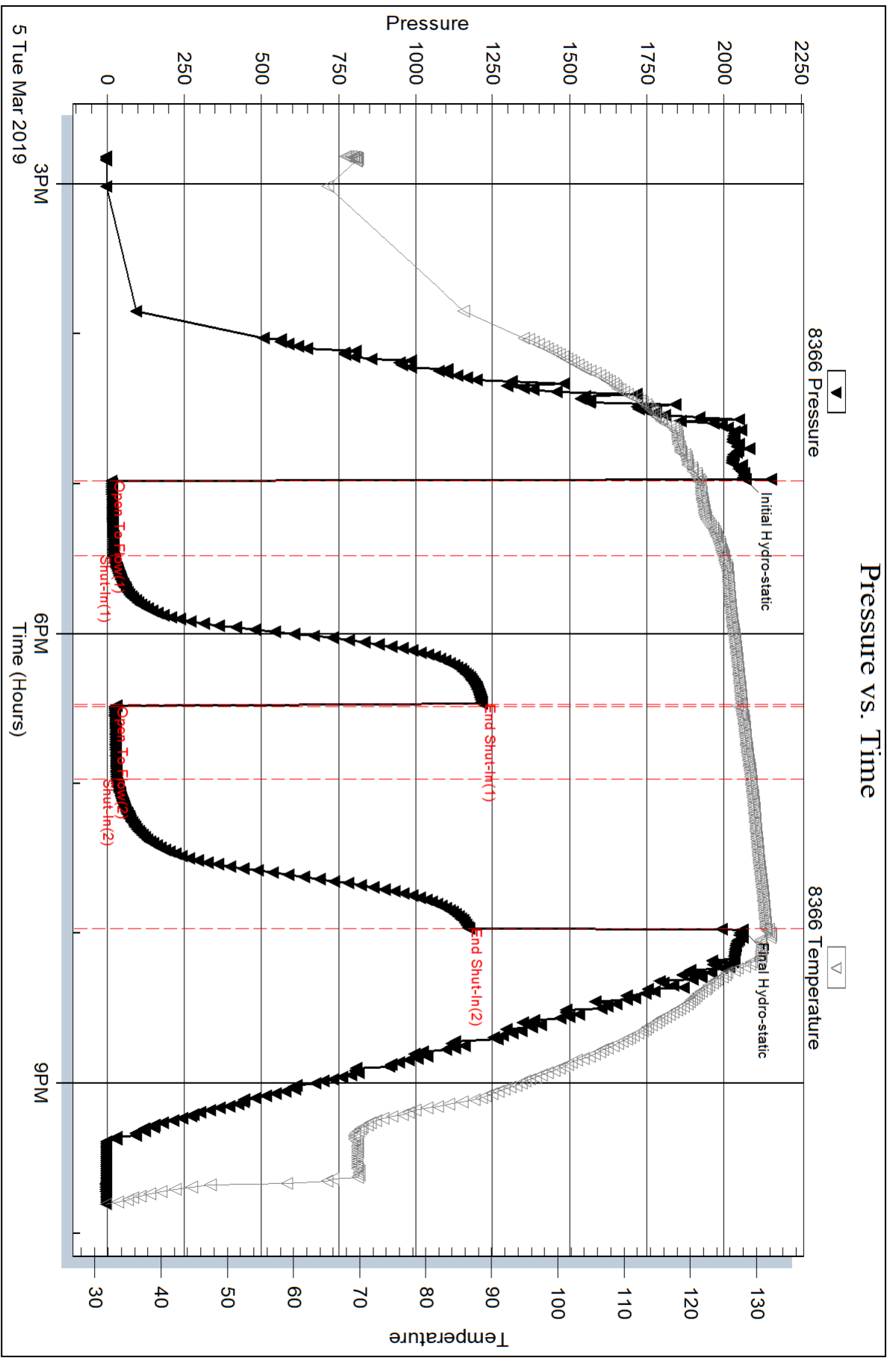
Recovery Comments:

Serial #: 8366

Outside Murfin Drilling Co Inc.

Frisbie "B" #1-16

DST Test Number: 3



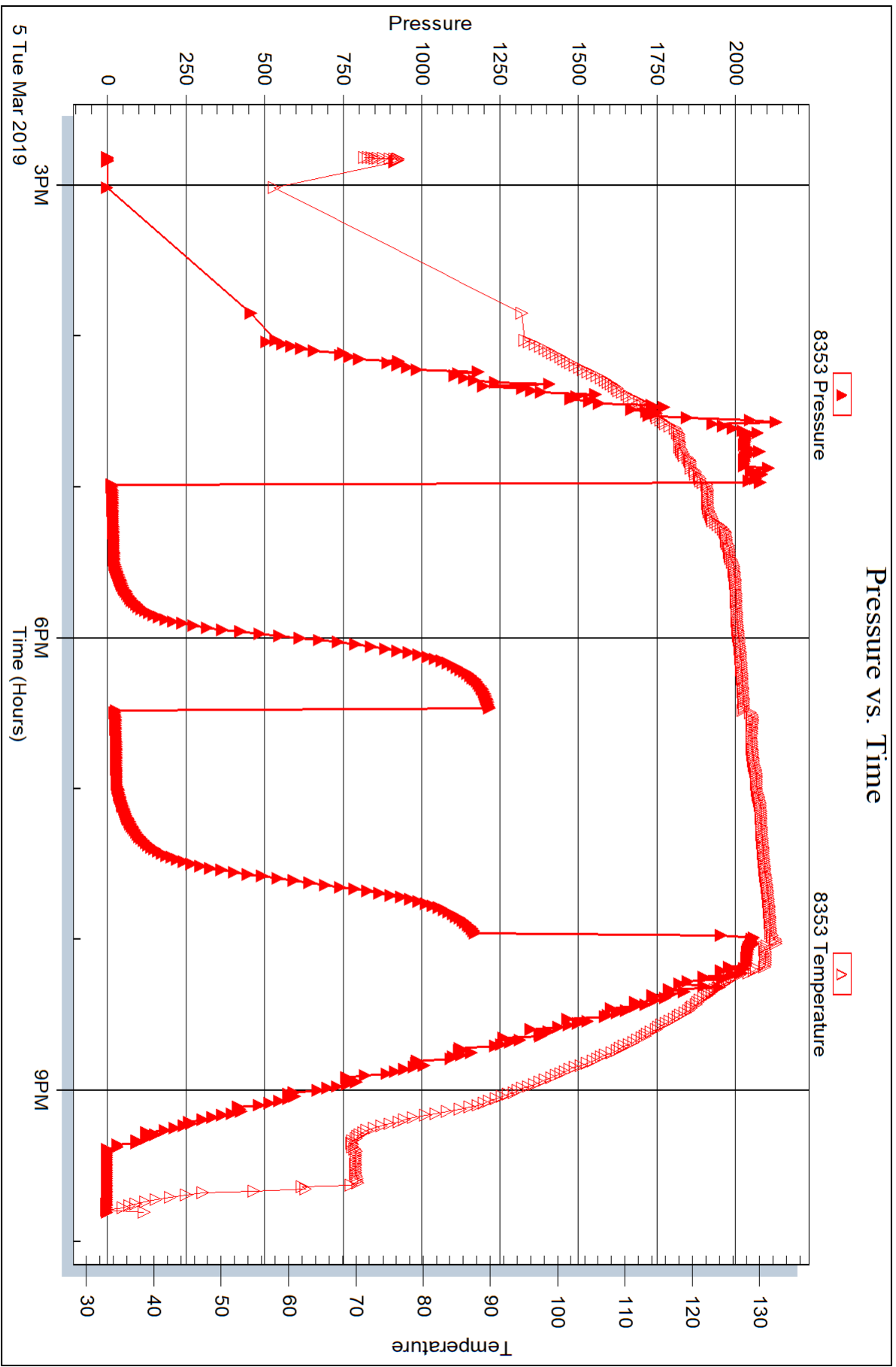
Serial #: 8353

Inside

Murfin Drilling Co Inc.

Frisbie "B" #1-16

DST Test Number: 3



Trilobite Testing, Inc

Ref. No: 65293

Printed: 2019.03.08 @ 14:12:43



## DRILL STEM TEST REPORT

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

250 N Water STE 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Frisbie "B" #1-16**

#### **16-2S-35W Rawlins KS**

Start Date: 2019.03.06 @ 09:42:00

End Date: 2019.03.06 @ 17:37:20

Job Ticket #: 65294                      DST #: 4

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

Printed: 2019.03.08 @ 14:12:02



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65294

**DST#: 4**

ATTN: Saman Sharifaie

Test Start: 2019.03.06 @ 09:42:00

## GENERAL INFORMATION:

Formation: **LKC " J "**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:36:10

Time Test Ended: 17:37:20

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 71

**Interval: 4344.00 ft (KB) To 4383.00 ft (KB) (TVD)**

Total Depth: 4383.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Reference Elevations: 3249.00 ft (KB)

3244.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8366 Outside**

Press@RunDepth: 51.73 psig @ 4345.00 ft (KB)

Start Date: 2019.03.06

End Date:

2019.03.06

Start Time: 09:42:01

End Time:

17:37:20

Capacity: 8000.00 psig

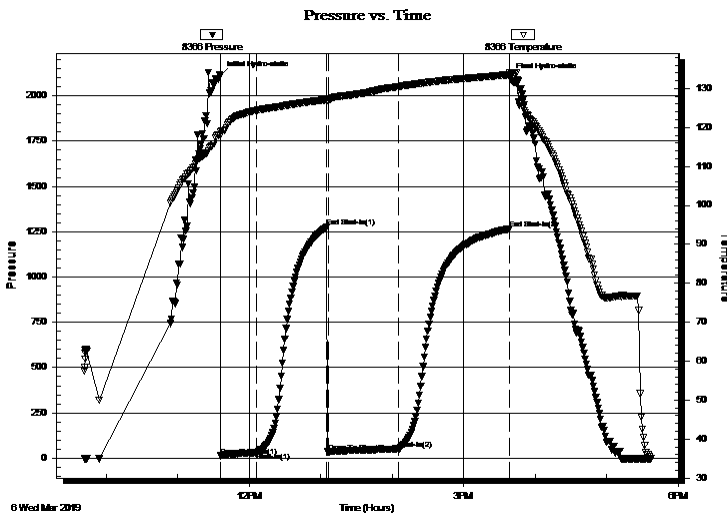
Last Calib.: 2019.03.06

Time On Btm: 2019.03.06 @ 11:36:00

Time Off Btm: 2019.03.06 @ 15:38:50

**TEST COMMENT:** 30 IF - Blow built to 3"  
60 ISI - Surface blow  
60 FF - Blow built to 6"  
90 FSI - Blow built to 1/4"

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2110.92	118.95	Initial Hydro-static
1	12.79	117.91	Open To Flow (1)
30	30.11	124.36	Shut-In(1)
90	1275.27	127.13	End Shut-In(1)
91	31.73	126.86	Open To Flow (2)
149	51.73	130.43	Shut-In(2)
243	1264.98	133.52	End Shut-In(2)
243	2102.76	134.05	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	GHMCO - 10%G - 40%M - 50%o	0.34
10.00	FO - 100%o	0.05
0.00	60' GIP	0.00

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65294

**DST#: 4**

ATTN: Saman Sharifaie

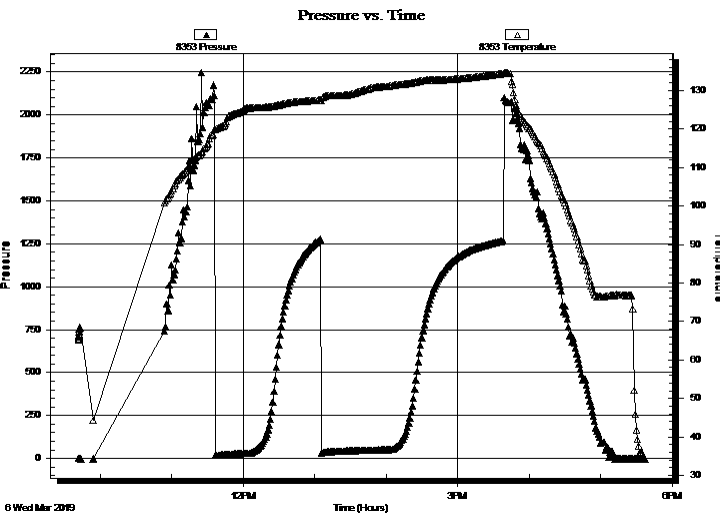
Test Start: 2019.03.06 @ 09:42:00

## GENERAL INFORMATION:

Formation: **LKC " J "**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 11:36:10  
 Time Test Ended: 17:37:20  
 Interval: **4344.00 ft (KB) To 4383.00 ft (KB) (TVD)**  
 Total Depth: 4383.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Ryan Nichols  
 Unit No: 71  
 Reference Elevations: 3249.00 ft (KB)  
 3244.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8353 Inside**  
 Press@RunDepth: psig @ 4345.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.03.06 End Date: 2019.03.06 Last Calib.: 2019.03.06  
 Start Time: 09:42:01 End Time: 17:37:10 Time On Btm:  
 Time Off Btm:

**TEST COMMENT:** 30 IF - Blow built to 3"  
 60 ISI - Surface blow  
 60 FF - Blow built to 6"  
 90 FSI - Blow built to 1/4"



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
70.00	GHMCO - 10%G - 40%M - 50%o	0.34
10.00	FO - 100%o	0.05
0.00	60' GIP	0.00

\* 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.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65294

**DST#: 4**

ATTN: Saman Sharifaie

Test Start: 2019.03.06 @ 09:42:00

## Tool Information

Drill Pipe:	Length: 4134.00 ft	Diameter: 3.80 inches	Volume: 57.99 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: 206.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 59.00 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4344.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	39.00 ft			
Tool Length:	67.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Shut In Tool	5.00			4321.00	
Hydraulic tool	5.00			4326.00	
Jars	5.00			4331.00	
Safety Joint	3.00			4334.00	
Packer	5.00			4339.00	28.00 Bottom Of Top Packer
Packer	5.00			4344.00	
Stubb	1.00			4345.00	
Recorder	0.00	8353	Inside	4345.00	
Recorder	0.00	8366	Outside	4345.00	
Perforations	35.00			4380.00	
Bullnose	3.00			4383.00	39.00 Bottom Packers & Anchor

**Total Tool Length: 67.00**



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65294

**DST#: 4**

ATTN: Saman Sharifaie

Test Start: 2019.03.06 @ 09:42:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

40 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 60.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.59 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
70.00	GHMCO - 10%G - 40%M - 50%o	0.344
10.00	FO - 100%o	0.049
0.00	60' GIP	0.000

Total Length: 80.00 ft      Total Volume: 0.393 bbl

Num Fluid Samples: 0

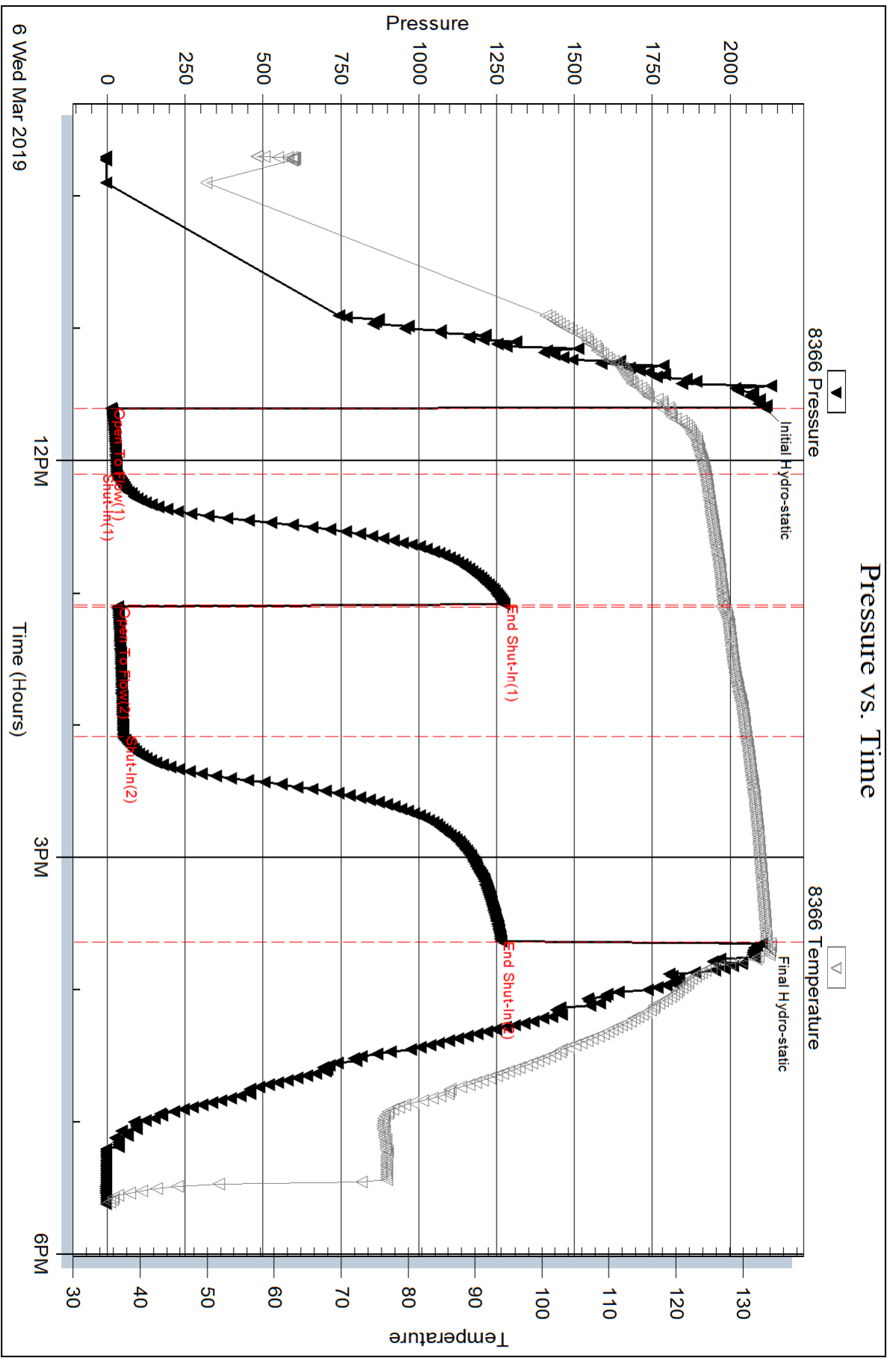
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: Gravity = 39 @ 50 DEG F = 40 COR 60 DEG F



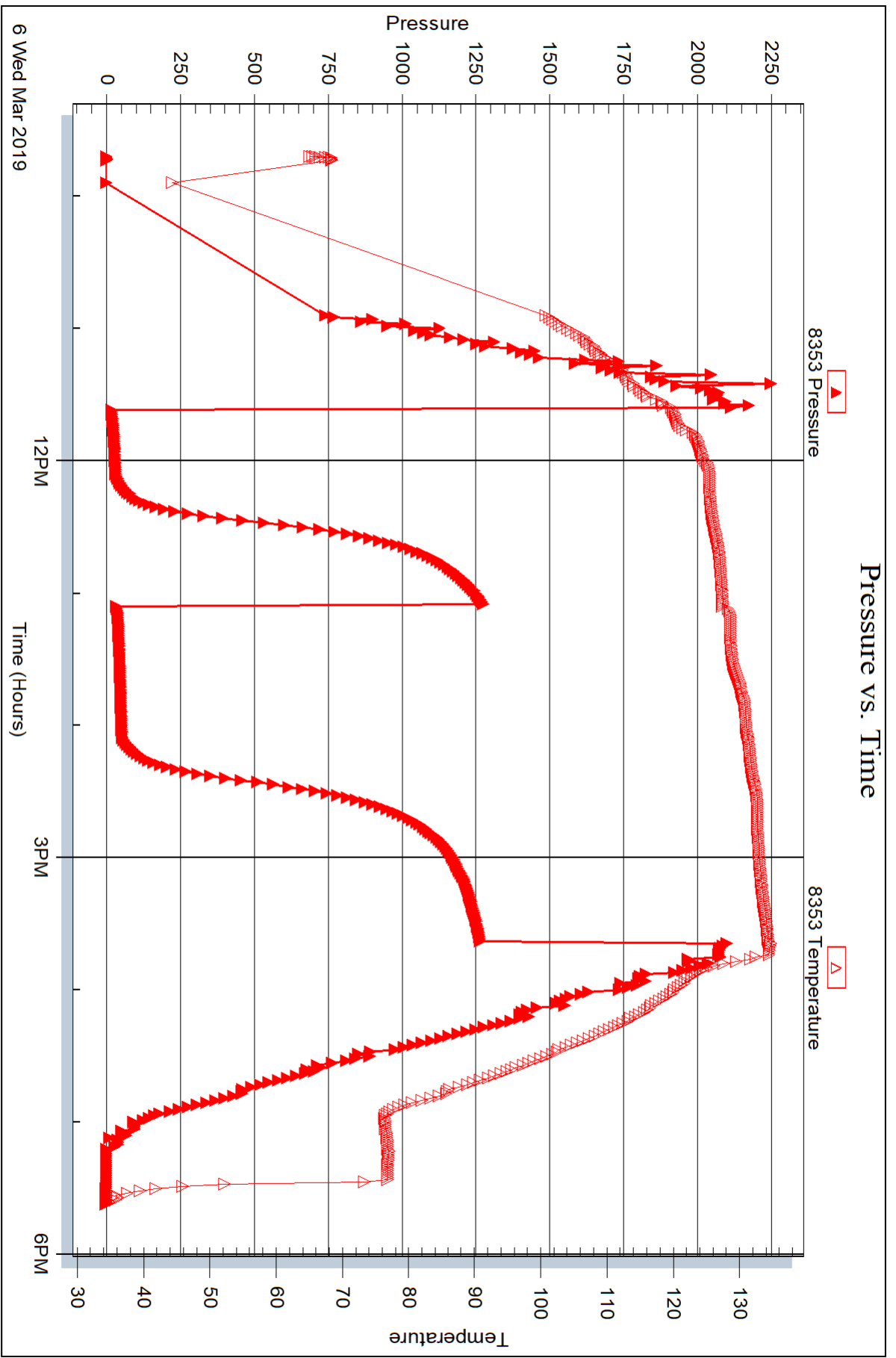
Serial #: 8353

Inside

Murfin Drilling Co Inc.

Frisbie "B" #1-16

DST Test Number: 4





## DRILL STEM TEST REPORT

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

250 N Water STE 300  
Wichita KS 67202

ATTN: Saman Sharifaie

### **Frisbie "B" #1-16**

#### **16-2S-35W Rawlins KS**

Start Date: 2019.03.07 @ 20:11:00

End Date: 2019.03.08 @ 04:02:09

Job Ticket #: 65259                      DST #: 5

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

Printed: 2019.03.08 @ 14:02:55

Murfin Drilling Co Inc. 16-2S-35W Rawlins KS Frisbie "B" #1-16 DST # 5 Ft. Scott - Cella 2019.03.07



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65259

**DST#: 5**

ATTN: Saman Sharifaie

Test Start: 2019.03.07 @ 20:11:00

## GENERAL INFORMATION:

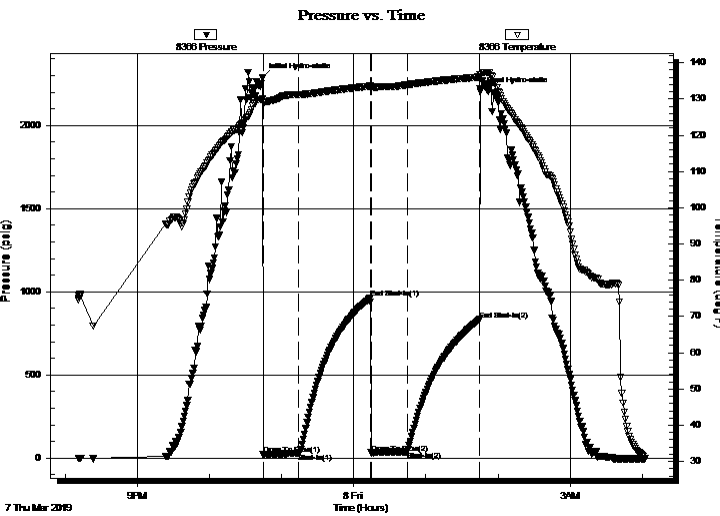
Formation: **Ft. Scott - Celia**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 22:44:30  
 Time Test Ended: 04:02:09  
 Interval: **4526.00 ft (KB) To 4660.00 ft (KB) (TVD)**  
 Total Depth: 4660.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Ryan Nichols  
 Unit No: 71  
 Reference Elevations: 3249.00 ft (KB)  
 3244.00 ft (CF)  
 KB to GR/CF: 5.00 ft

## Serial #: 8366

**Outside**

Press@RunDepth: 38.89 psig @ 4527.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.03.07 End Date: 2019.03.08 Last Calib.: 2019.03.08  
 Start Time: 20:11:01 End Time: 04:02:10 Time On Btm: 2019.03.07 @ 22:44:10  
 Time Off Btm: 2019.03.08 @ 01:45:10

**TEST COMMENT:** 30 IF - Blow built to 2" (in diesel)  
 60 ISI - No return  
 30 FF - No blow  
 60 FSI - No return



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2289.70	129.95	Initial Hydro-static
1	20.84	129.07	Open To Flow (1)
30	28.61	131.17	Shut-In(1)
90	964.04	133.56	End Shut-In(1)
91	32.43	133.11	Open To Flow (2)
120	38.89	133.93	Shut-In(2)
181	832.35	136.06	End Shut-In(2)
181	2201.93	136.62	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%M	0.05

\* Recovery from multiple tests

## Gas Rates

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



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65259

**DST#: 5**

ATTN: Saman Sharifaie

Test Start: 2019.03.07 @ 20:11:00

## GENERAL INFORMATION:

Formation: **Ft. Scott - Celia**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 22:44:30

Time Test Ended: 04:02:09

**Interval: 4526.00 ft (KB) To 4660.00 ft (KB) (TVD)**

Total Depth: 4660.00 ft (KB) (TVD)

Hole Diameter: 7.88 inches Hole Condition: Good

Test Type: Conventional Bottom Hole (Reset)

Tester: Ryan Nichols

Unit No: 71

Reference Elevations: 3249.00 ft (KB)

3244.00 ft (CF)

KB to GR/CF: 5.00 ft

**Serial #: 8353**

**Inside**

Press@RunDepth: psig @ 4527.00 ft (KB)

Start Date: 2019.03.07 End Date: 2019.03.08

Start Time: 20:11:01 End Time: 04:02:10

Capacity: 8000.00 psig

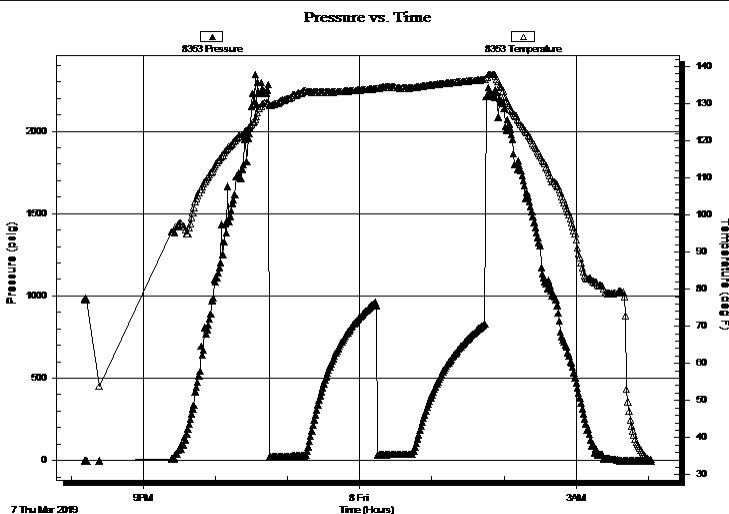
Last Calib.: 2019.03.08

Time On Btm:

Time Off Btm:

**TEST COMMENT:** 30 IF - Blow built to 2" (in diesel)  
60 ISI - No return  
30 FF - No blow  
60 FSI - No return

## PRESSURE SUMMARY



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

## Recovery

Length (ft)	Description	Volume (bbl)
10.00	Mud 100%M	0.05

## Gas Rates

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

\* Recovery from multiple tests



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65259

**DST#: 5**

ATTN: Saman Sharifaie

Test Start: 2019.03.07 @ 20:11:00

## Tool Information

Drill Pipe:	Length: 4318.00 ft	Diameter: 3.80 inches	Volume: 60.57 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: 206.00 ft	Diameter: 2.25 inches	Volume: 1.01 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 61.58 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4526.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	134.00 ft			
Tool Length:	162.00 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			4503.00	
Hydraulic tool	5.00			4508.00	
Jars	5.00			4513.00	
Safety Joint	3.00			4516.00	
Packer	5.00			4521.00	28.00 Bottom Of Top Packer
Packer	5.00			4526.00	
Stubb	1.00			4527.00	
Recorder	0.00	8353	Inside	4527.00	
Recorder	0.00	8366	Outside	4527.00	
Perforations	33.00			4560.00	
Blank Spacing	97.00			4657.00	
Bullnose	3.00			4660.00	134.00 Bottom Packers & Anchor

**Total Tool Length: 162.00**





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Murfin Drilling Co Inc.

**16-2S-35W Rawlins KS**

250 N Water STE 300  
Wichita KS 67202

**Frisbie "B" #1-16**

Job Ticket: 65259

**DST#: 5**

ATTN: Saman Sharifaie

Test Start: 2019.03.07 @ 20:11:00

## 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: 65.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 5.99 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
10.00	Mud 100%M	0.049

Total Length: 10.00 ft      Total Volume: 0.049 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

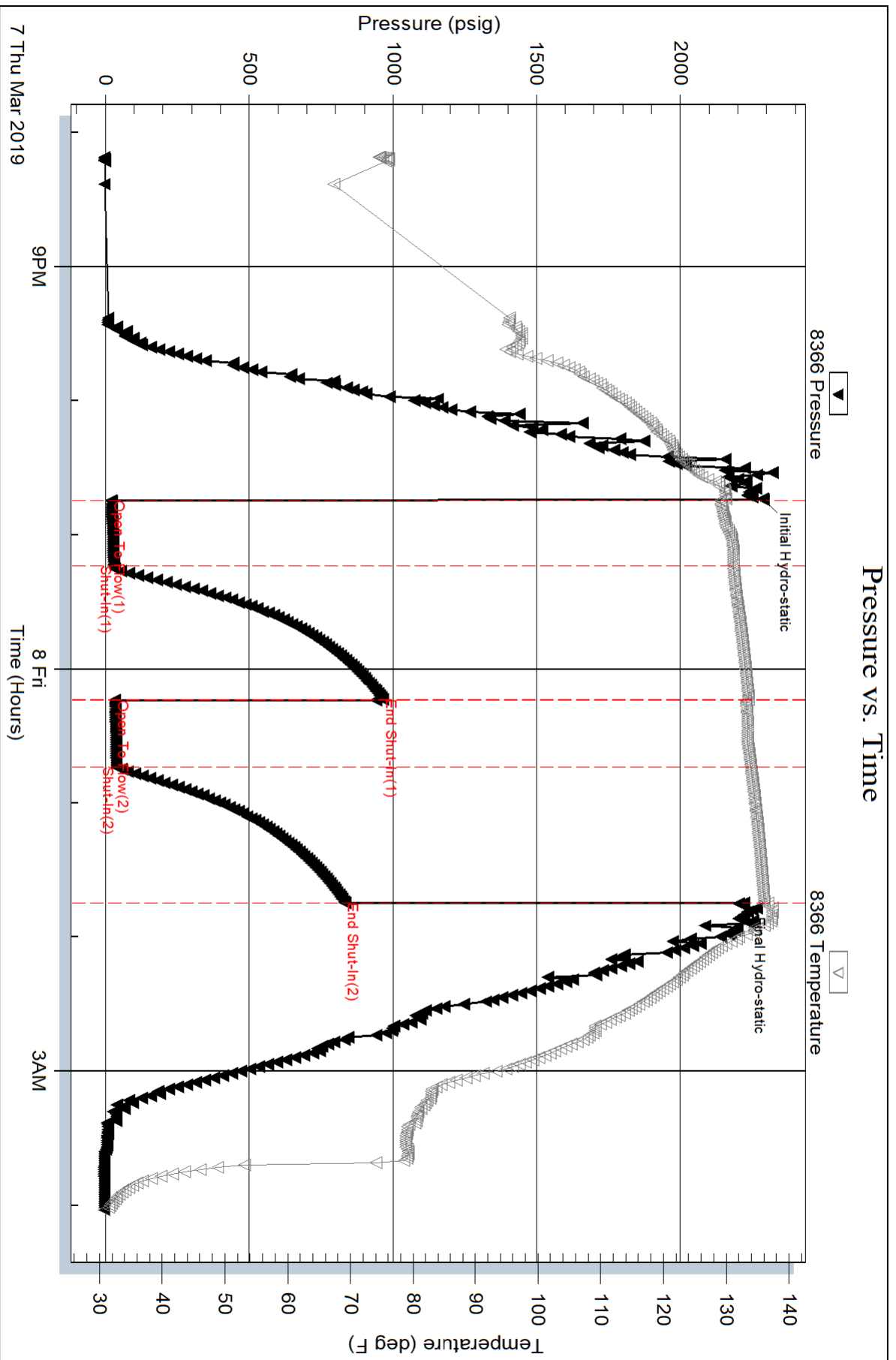
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

### Pressure vs. Time



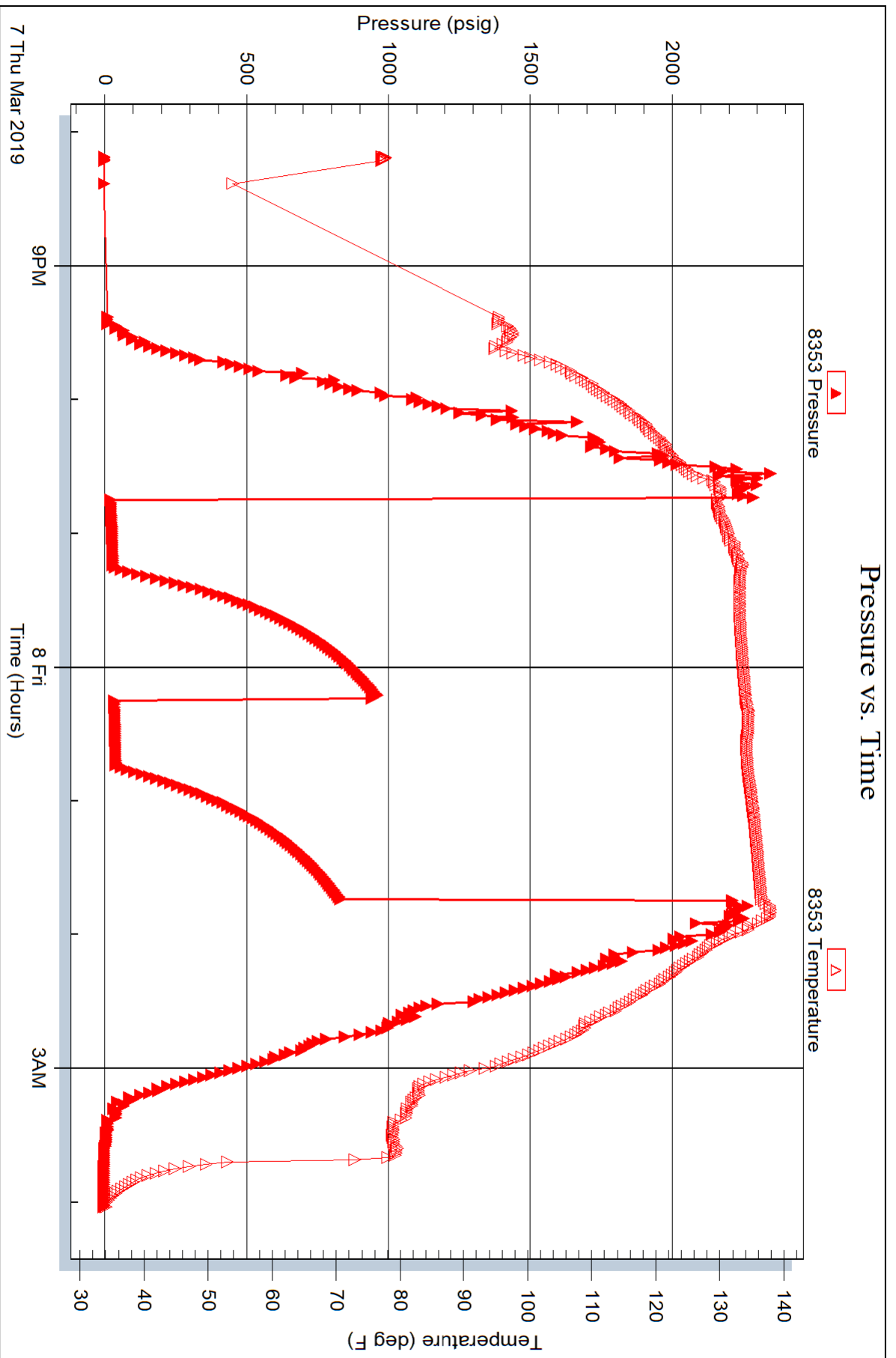
Serial #: 8353

Inside

Murfin Drilling Co Inc.

Frisbie "B" #1-16

DST Test Number: 5





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 65291

Well Name & No. Frisbie "B" #1-16 Test No. 1 Date 3/4/19  
 Company Murfin Drilling Co Inc Elevation 3249 KB 3244 GL  
 Address 250 N. Water STE 300 Wichita KS 67202  
 Co. Rep / Geo. Saman Shaitaie Rig Murfin #3  
 Location: Sec. 16 Twp 2S Rge. 35W Co. Rawlins State KS

Interval Tested 4109 - 4190 Zone Tested LKC "A"  
 Anchor Length 81' Drill Pipe Run 3883' Mud Wt. 8.7  
 Top Packer Depth 4104 Drill Collars Run 206' Vis 62  
 Bottom Packer Depth 4109 Wt. Pipe Run 0' WL 6.0  
 Total Depth 4190 Chlorides 600 ppm System LCM 4  
 Blow Description 30 IF - Blow built to 3 1/4" (in diesel)  
60 ISI - No return  
60 FF - Blow built to 2 1/4"  
90FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>30'</u>	<u>WCM W/trace oil</u>	<u>trace</u>	<u>20</u>	<u>80</u>	
<u>60'</u>	<u>WCM W/trace oil</u>	<u>trace</u>	<u>40</u>	<u>60</u>	
<u>60'</u>	<u>WCM W/trace oil</u>	<u>trace</u>	<u>45</u>	<u>55</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 150' BHT 133° Gravity — API RW .418 @ 34 °F Chlorides 35000 ppm

(A) Initial Hydrostatic <u>2152</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>02:30</u>
(B) First Initial Flow <u>17</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>03:30</u>
(C) First Final Flow <u>49</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>06:40</u>
(D) Initial Shut-In <u>1055</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>10:42</u>
(E) Second Initial Flow <u>52</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>12:45</u>
(F) Second Final Flow <u>94</u>	<input checked="" type="checkbox"/> Mileage <u>93 RT</u> 93	Comments
(G) Final Shut-In <u>1000</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2011</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>1718</u>
	Sub Total <u>1718</u>	MP/DST Disc't

Approved By \_\_\_\_\_ 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. 65292

Well Name & No. Frisbie "B" # 1-16 Test No. 2 Date 3/4/19  
 Company Murfin Drilling Co. Inc. Elevation 3249 KB 3244 GL  
 Address 250 N. Water STE 300 Wichita KS 67202  
 Co. Rep / Geo. Saman Sharif Rig Murfin # 3  
 Location: Sec. 16 Twp 25 Rge. 35W Co. Rawlins State KS

Interval Tested 4190 - 4254 Zone Tested LKC "D"  
 Anchor Length 64' Drill Pipe Run 3979' Mud Wt. 9.2  
 Top Packer Depth 4185 Drill Collars Run 206' Vis 48  
 Bottom Packer Depth 4190 Wt. Pipe Run 0' WL 6.8  
 Total Depth 4254 Chlorides 600 ppm System LCM 3  
 Blow Description 30 IF - Blow built to 5" (in diesel)  
60 ISI - No return  
60 FF - Blow built to 5"  
90 FSI - No return

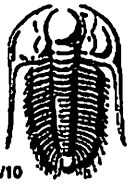
Rec	Feet of	%gas	%oil	%water	%mud
<u>160'</u>	<u>MCO</u>	<u>60</u>		<u>40</u>	
<u>60'</u>	<u>OCM</u>	<u>45</u>		<u>55</u>	

Rec Total 220' BHT 132' Gravity — API RW — @ —° F Chlorides — ppm

(A) Initial Hydrostatic <u>2056</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>22:00</u>
(B) First Initial Flow <u>17</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>22:30</u>
(C) First Final Flow <u>68</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>00:45</u>
(D) Initial Shut-In <u>916</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>04:45</u>
(E) Second Initial Flow <u>76</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>07:00</u>
(F) Second Final Flow <u>106</u>	<input checked="" type="checkbox"/> Mileage <u>93 RT</u> 93	Comments
(G) Final Shut-In <u>891</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2027</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>1718</u>
	Sub Total <u>1718</u>	MP/DST Disc't

Approved By \_\_\_\_\_ Our Representative Tom 2 Michael

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. 65293

Well Name & No. Frisbie "B" # 1-18 Test No. 3 Date 3/5/19  
 Company Murfin Drilling Co. Inc Elevation 3249 KB 3244 GL  
 Address 250 N. Water STE 300 Wichita KS 67202  
 Co. Rep / Geo. Samen Sharifaie Rig Murfin # 3  
 Location: Sec. 16 Twp 25 Rge. 35W Co. Kawlin State KS

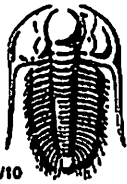
Interval Tested 4254 - 4288 Zone Tested LKL "G"  
 Anchor Length 34' Drill Pipe Run 4034 Mud Wt. 9.0  
 Top Packer Depth 4249 Drill Collars Run 206' Vis 51  
 Bottom Packer Depth 4254 Wt. Pipe Run 0' WL 6.4  
 Total Depth 4288 Chlorides 700 ppm System LCM 4  
 Blow Description 30 IF - Blow built to 1"  
60 IS - No return  
70 FF - Blow built to 1/2"  
60 FS - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>20'</u>	<u>OCM</u>	<u>20</u>	<u>80</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 131° Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2069</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>14:00</u>
(B) First Initial Flow <u>14</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>14:49</u>
(C) First Final Flow <u>21</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>16:58</u>
(D) Initial Shut-In <u>1216</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>19:58</u>
(E) Second Initial Flow <u>24</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>21:45</u>
(F) Second Final Flow <u>30</u>	<input checked="" type="checkbox"/> Mileage <u>93 RT</u> 93	Comments
(G) Final Shut-In <u>1174</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2060</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>30</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1718</u>
	Sub Total <u>1718</u>	MP/DST Disc't

Approved By \_\_\_\_\_ Our Representative R. J. [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. 65294

Well Name & No. Frisbie "B" #1-16 Test No. 4 Date 3/6/19  
 Company Murfin Drilling Co. Inc. Elevation 3249 KB 3244 GL  
 Address 250 N. Water STE 300 Wichita KS 67202  
 Co. Rep / Geo. Saman Sharifai Rig Murfin #3  
 Location: Sec. 16 Twp 2S Rge. 35 W Co. Rawlins State KS

Interval Tested 4344 - 4383 Zone Tested LKC "J"  
 Anchor Length 39' Drill Pipe Run 4134' Mud Wt. 8.9  
 Top Packer Depth 4339 Drill Collars Run 206' Vis 60  
 Bottom Packer Depth 4344 Wt. Pipe Run 0' WL 5.6  
 Total Depth 4383 Chlorides 600 ppm System LCM 4

Blow Description 30 IF - Blow built to 3"  
60 ISI - Surface blow  
60 ~~ISI~~ FF - Blow built to 6"  
90 FSI - Blow built to 1/4"

Rec	Feet of	%gas	%oil	%water	%mud
<u>10'</u>	<u>FO</u>	<u>100</u>			
<u>70'</u>	<u>GMCO</u>	<u>10</u>	<u>50</u>	<u>40</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

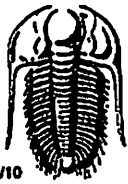
Rec Total 80' BHT 1340 Gravity 400 @ 60° API RW — @ — ° F Chlorides — ppm

(A) Initial Hydrostatic 2111  Test 1300 T-On Location 09:00  
 (B) First Initial Flow 13  Jars 250 T-Started 09:42  
 (C) First Final Flow 30  Safety Joint 75 T-Open 11:36  
 (D) Initial Shut-In 1275  Circ Sub — T-Pulled 15:38  
 (E) Second Initial Flow 32  Hourly Standby — T-Out 17:30  
 (F) Second Final Flow 52  Mileage 93 RT 93 Comments 60' GIP  
 (G) Final Shut-In 1265  Sampler —  
 (H) Final Hydrostatic 2103  Straddle —

Initial Open 30  Shale Packer —  EM Tool —  
 Initial Shut-In 60  Extra Packer —  Ruined Shale Packer —  
 Final Flow 60  Extra Recorder —  Ruined Packer —  
 Final Shut-In 90  Day Standby —  Extra Copies —  
 Sub Total 0  Accessibility — Total 1718  
 Sub Total 1718 MP/DST Disc't —

Approved By \_\_\_\_\_ Our Representative Ry 2 mld

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. 65295

Well Name & No. Frisbie "B" #1-16 Test No. 5 Date 3/7/1982  
 Company Martin Drilling Co. Inc. Elevation 3249 KB 3244 GL  
 Address 250 N. Water STE 300 Wichita KS 67202  
 Co. Rep / Geo. Saman Sherifaie Rig Martin # 3  
 Location: Sec. 16 Twp 25 Rge. 35W Co. Kawlings State KS

Interval Tested 4526 - 4660 Zone Tested Ft. Scott - Celia  
 Anchor Length 134' Drill Pipe Run 4318' Mud Wt. 9.1  
 Top Packer Depth 4521 Drill Collars Run 206' Vis 65  
 Bottom Packer Depth 4526 Wt. Pipe Run 0' WL 6.0  
 Total Depth 4660 Chlorides 600 ppm System LCM 3  
 Blow Description 30 IF - Blow built to 2" (in diesel)  
60 ISL - No return  
30 FF - No blow  
60 FSI - No return

Rec	Feet of	%gas	%oil	%water	%mud
<u>10'</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 10' BHT 136° Gravity — API RW — @ — F Chlorides — ppm

(A) Initial Hydrostatic <u>2290</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>19:30</u>
(B) First Initial Flow <u>21</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>20:11</u>
(C) First Final Flow <u>29</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>22:44</u>
(D) Initial Shut-In <u>964</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>01:44</u>
(E) Second Initial Flow <u>32</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>04:00</u>
(F) Second Final Flow <u>39</u>	<input checked="" type="checkbox"/> Mileage <u>93 RT</u> 93	Comments
(G) Final Shut-In <u>832</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2202</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>30</u>	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
	<input type="checkbox"/> Accessibility	Total <u>1718</u>
Sub Total <u>1718</u>		MP/DST Disc't

Approved By \_\_\_\_\_ Our Representative Ryan J. Nichols

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.