

DRILL STEM TEST REPORT

Prepared For: **John O. Farmer, Inc.**

370 W. Wichita Ave.
Russell KS 67665

ATTN: Austin Klaus

Dorcas Unit #1

36-16S-10E Lyon,KS

Start Date: 2019.06.28 @ 15:04:00

End Date: 2019.06.28 @ 22:46:30

Job Ticket #: 65938 DST #: 1

Trilobite Testing, Inc
1515 Commerce Parkway Hays, KS 67601
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Printed: 2019.07.01 @ 10:26:38

John O. Farmer, Inc.
36-16S-10E Lyon,KS
Dorcas Unit #1
DST # 1
Simpson Sand
2019.06.28



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

John O. Farmer, Inc.
 370 W. Wichita Ave.
 Russell KS 67665
 ATTN: Austin Klaus

36-16S-10E Lyon, KS
Dorcas Unit #1
 Job Ticket: 65938 **DST#: 1**
 Test Start: 2019.06.28 @ 15:04:00

GENERAL INFORMATION:

Formation: **Simpson Sand**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 17:25:15
 Time Test Ended: 22:46:30
 Interval: **3137.00 ft (KB) To 3148.00 ft (KB) (TVD)**
 Total Depth: 3148.00 ft (KB) (TVD)
 Hole Diameter: 7.88 inches Hole Condition: Fair
 Test Type: Conventional Bottom Hole (Initial)
 Tester: Royal Fisher
 Unit No: 77
 Reference Elevations: 1352.00 ft (KB)
 1344.00 ft (CF)
 KB to GR/CF: 8.00 ft

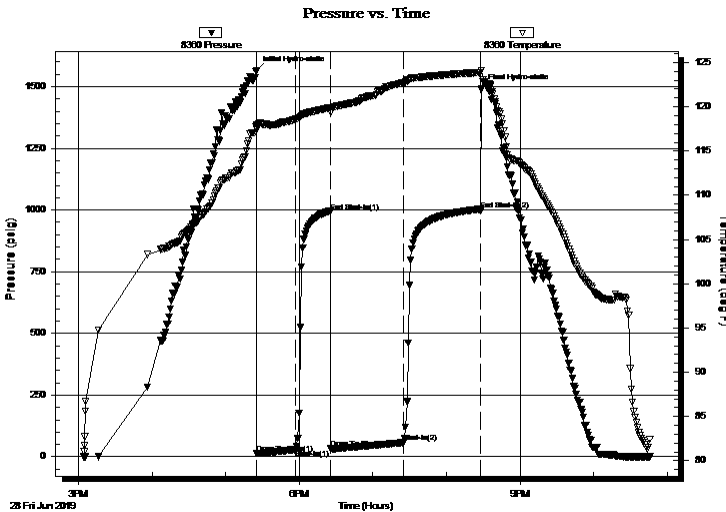
Serial #: 8360

Inside

Press@RunDepth: 57.33 psig @ 3138.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2019.06.28 End Date: 2019.06.28 Last Calib.: 2019.06.28
 Start Time: 15:04:05 End Time: 22:46:29 Time On Btm: 2019.06.28 @ 17:25:00
 Time Off Btm: 2019.06.28 @ 20:28:30

TEST COMMENT: 30 - IFP - Surface blow slow ly built to 2 3/4"
 30 - ISI - No Return
 60 - FFP - Surface blow slow ly built to 3 3/4"
 60 - FSI - No Return

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1565.74	117.91	Initial Hydro-static
1	13.71	117.46	Open To Flow (1)
32	28.39	118.59	Shut-In(1)
61	994.00	119.90	End Shut-In(1)
61	33.56	119.41	Open To Flow (2)
120	57.33	122.71	Shut-In(2)
183	998.80	123.88	End Shut-In(2)
184	1491.89	124.06	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
100.00	Free Oil - 100%o	0.73
17.00	WCO - 20%w - 80%o	0.12

Gas Rates

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



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

TOOL DIAGRAM

John O. Farmer, Inc.

36-16S-10E Lyon, KS

370 W. Wichita Ave.
Russell KS 67665

Dorcas Unit #1

Job Ticket: 65938

DST#: 1

ATTN: Austin Klaus

Test Start: 2019.06.28 @ 15:04:00

Tool Information

Drill Pipe:	Length: 2878.90 ft	Diameter: 3.25 inches	Volume: 29.54 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 242.37 ft	Diameter: 2.75 inches	Volume: 1.78 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight to Pull Loose: 58000.00 lb
			<u>Total Volume: 31.32 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.27 ft			String Weight: Initial 54000.00 lb
Depth to Top Packer:	3137.00 ft			Final 54000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	11.00 ft			
Tool Length:	32.00 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			3121.00	
Hydraulic tool	5.00			3126.00	
Change Over Sub	1.00			3127.00	
Packer - Shale	5.00			3132.00	
Packer	5.00			3137.00	21.00 Bottom Of Top Packer
Stubb	1.00			3138.00	
Recorder	0.00	8360	Inside	3138.00	
Recorder	0.00	8671	Outside	3138.00	
perforations	7.00			3145.00	
Bullnose	3.00			3148.00	11.00 Anchor Tool
Total Tool Length:	32.00				



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DRILL STEM TEST REPORT

FLUID SUMMARY

John O. Farmer, Inc.

36-16S-10E Lyon, KS

370 W. Wichita Ave.
Russell KS 67665

Dorcas Unit #1

Job Ticket: 65938

DST#: 1

ATTN: Austin Klaus

Test Start: 2019.06.28 @ 15:04:00

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: 50.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 8.79 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1500.00 ppm

Filter Cake: 1.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
100.00	Free Oil - 100%o	0.735
17.00	WCO - 20%w - 80%o	0.125

Total Length: 117.00 ft Total Volume: 0.860 bbl

Num Fluid Samples: 0

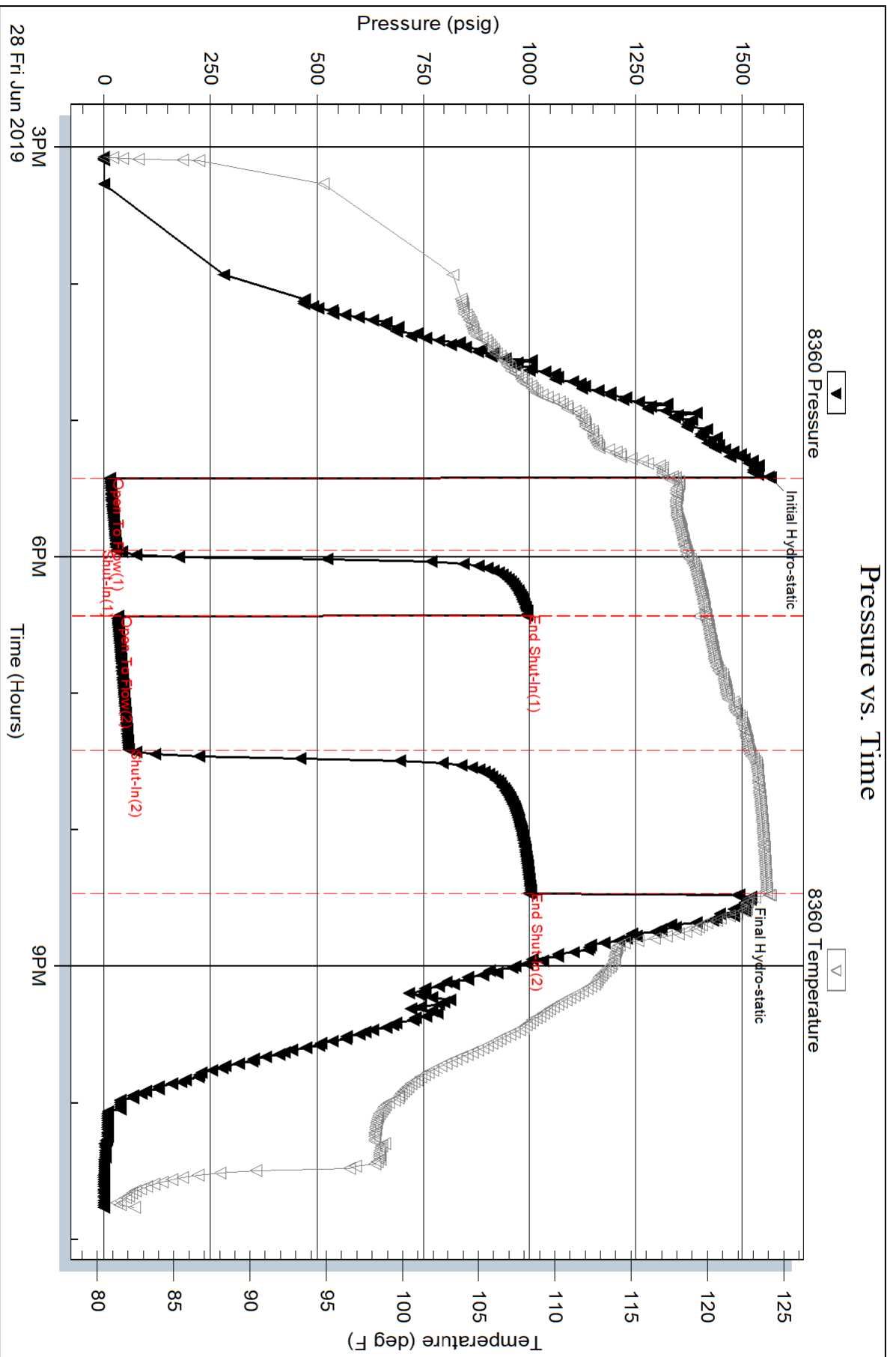
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

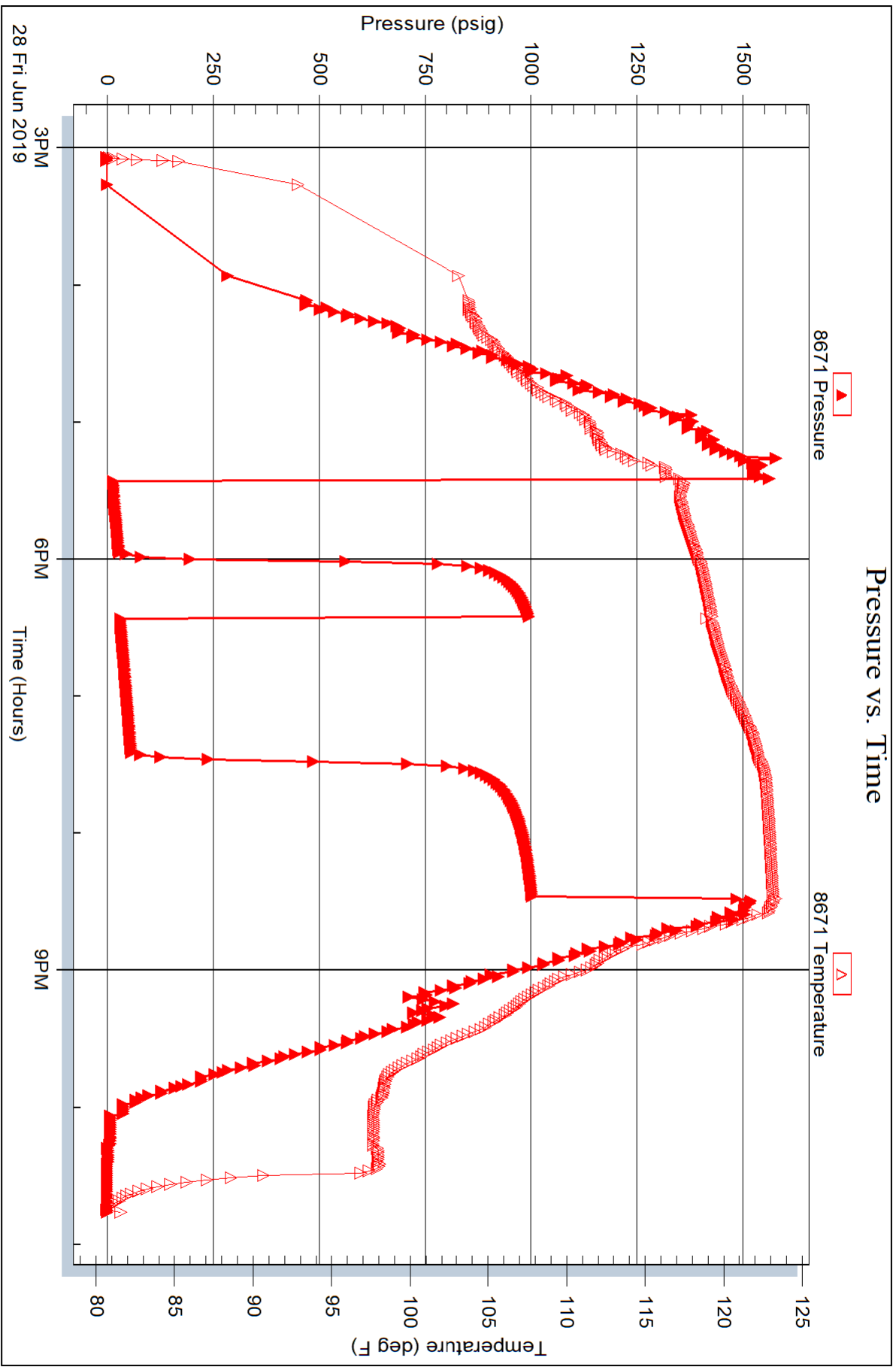


Serial #: 8671

Outside John O. Farmer, Inc.

Dorcas Unit #1

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 65938

Printed: 2019.07.01 @ 10:26:39



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket 65938

NO.

Well Name & No. Dorcas Unit #1 Test No. 1 Date 6-28-19
 Company John O. Farmer, Inc. Elevation 1352 KB 1344 GL
 Address 370 W. Wichita Ave Russell Ks 67765
 Co. Rep / Geo. Austin Klaus Rig Discovery #2
 Location: Sec. 36 Twp 16S Rge. 10E Co. Lyons State Ks

Interval Tested 3137' - 3148' Zone Tested Simpson Sand
 Anchor Length 11' Drill Pipe Run 2878.90' Mud Wt. 9.3
 Top Packer Depth 3132' Drill Collars Run 0 Vis 50
 Bottom Packer Depth 3137' Wt. Pipe Run 242.37' WL 8.8
 Total Depth 3148' Chlorides 1500 ppm System LCM 1.5#

Blow Description JFP-Surface blow slowly built to 2 3/4"
ISI-No Return
JFP-Surface blow slowly built to 3 3/4"
FSI-No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>100'</u>	<u>Free Oil</u>	<u>100</u>			
<u>17'</u>	<u>WCO</u>	<u>80</u>	<u>20</u>		
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 117' BHT 124°F Gravity 31@90 API RW @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1566 Test 1200 T-On Location 12:30 pm
 (B) First Initial Flow 14 Jars _____ T-Started 3:04 pm
 (C) First Final Flow 28 Safety Joint _____ T-Open 5:25 pm
 (D) Initial Shut-In 994 Circ Sub _____ T-Pulled 8:25 pm
 (E) Second Initial Flow 34 Hourly Standby _____ T-Out 10:46 pm
 (F) Second Final Flow 57 Mileage 296rt Comments loaded tool
 (G) Final Shut-In 999 Sampler _____ after test
 (H) Final Hydrostatic 1492 Straddle _____ EM Tool _____

Initial Open 30 Extra Packer _____ Ruined Shale Packer _____
 Initial Shut-In 30 Extra Recorder _____ Ruined Packer _____
 Final Flow 60 Day Standby _____ Extra Copies _____
 Final Shut-In 60 Accessibility _____ Sub Total 0
 Sub Total 1746 Total 1746 MP/DST Disc't _____

Approved By _____ Our Representative Royal Fisher

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