



DRILL STEM TEST REPORT

Prepared For: **Raymond Oil**

PO Box 48788
Wichita, KS 67201

ATTN: Robert Turner

Jackson Family #19-1

19-24S-8E Butler,KS

Start Date: 2016.08.10 @ 08:59:00

End Date: 2016.08.10 @ 18:46:45

Job Ticket #: 63079 DST #: 1

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

Printed: 2016.08.12 @ 08:56:31

Raymond Oil
19-24S-8E Butler,KS
Jackson Family #19-1
DST # 1
Squirrel Sand
2016.08.10



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Raymond Oil
PO Box 48788
Wichita, KS 67201
ATTN: Robert Turner

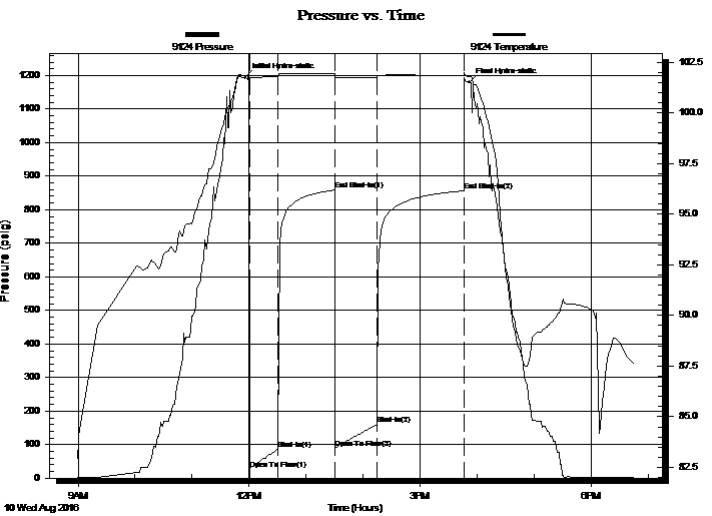
19-24S-8E Butler, KS
Jackson Family #19-1
Job Ticket: 63079 **DST#: 1**
Test Start: 2016.08.10 @ 08:59:00

GENERAL INFORMATION:

Formation: **Squirrel Sand**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 12:00:30
Time Test Ended: 18:46:45
Interval: **2417.00 ft (KB) To 2452.00 ft (KB) (TVD)**
Total Depth: 2452.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Fair
Reference Elevations: 1524.00 ft (KB)
1514.00 ft (CF)
KB to GR/CF: 10.00 ft
Test Type: Conventional Bottom Hole (Initial)
Tester: Jimmy Ricketts
Unit No: 80

Serial #: 9124 Outside
Press@RunDepth: 159.86 psig @ 2418.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2016.08.10 End Date: 2016.08.10 Last Calib.: 2016.08.10
Start Time: 08:59:05 End Time: 18:46:45 Time On Btm: 2016.08.10 @ 11:56:00
Time Off Btm: 2016.08.10 @ 15:51:45

TEST COMMENT: IF - Weak blow building to 11 inches during initial flow period.
FF - No blow building to 11 inches during final flow period.



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1192.83	101.86	Initial Hydro-static
5	27.63	101.43	Open To Flow (1)
35	85.74	101.80	Shut-In(1)
94	858.44	101.92	End Shut-In(1)
95	89.57	101.75	Open To Flow (2)
139	159.86	101.75	Shut-In(2)
230	856.26	101.83	End Shut-In(2)
236	1179.29	101.80	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	A few oil specks in testing tool	0.00
120.00	Mud cut water 90% W & 10% M	0.59
120.00	Heavy water cut mud 35% W & 65% M	0.59
60.00	Drilling mud 100% M	0.30

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Raymond Oil
PO Box 48788
Wichita, KS 67201
ATTN: Robert Turner

19-24S-8E Butler, KS
Jackson Family #19-1
Job Ticket: 63079 **DST#: 1**
Test Start: 2016.08.10 @ 08:59:00

Tool Information

Drill Pipe:	Length: 2102.00 ft	Diameter: 2.60 inches	Volume: 13.80 bbl	Tool Weight: 2600.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 314.00 ft	Diameter: 2.25 inches	Volume: 1.54 bbl	Weight to Pull Loose: 27000.00 lb
			<u>Total Volume: 15.34 bbl</u>	Tool Chased 2.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial 24000.00 lb
Depth to Top Packer:	2417.00 ft			Final 25000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	35.00 ft			
Tool Length:	63.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

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

Change Over Sub	1.00			2390.00	
Shut In Tool	5.00			2395.00	
Hydraulic tool	5.00			2400.00	
Jars	5.00			2405.00	
Safety Joint	3.00			2408.00	
Packer	4.00			2412.00	28.00 Bottom Of Top Packer
Packer	5.00			2417.00	
Stubb	1.00			2418.00	
Recorder	0.00	9124	Outside	2418.00	
Recorder	0.00	6798	Inside	2418.00	
Perforations	29.00			2447.00	
Bullnose	5.00			2452.00	35.00 Bottom Packers & Anchor

Total Tool Length: 63.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Raymond Oil
PO Box 48788
Wichita, KS 67201
ATTN: Robert Turner

19-24S-8E Butler, KS
Jackson Family #19-1
Job Ticket: 63079 **DST#: 1**
Test Start: 2016.08.10 @ 08:59:00

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:	90000 ppm
Viscosity: 43.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.78 in ³	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 1800.00 ppm			
Filter Cake: inches			

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	A few oil specks in testing tool	0.000
120.00	Mud cut water 90% W & 10% M	0.590
120.00	Heavy water cut mud 35% W & 65% M	0.590
60.00	Drilling mud 100% M	0.295

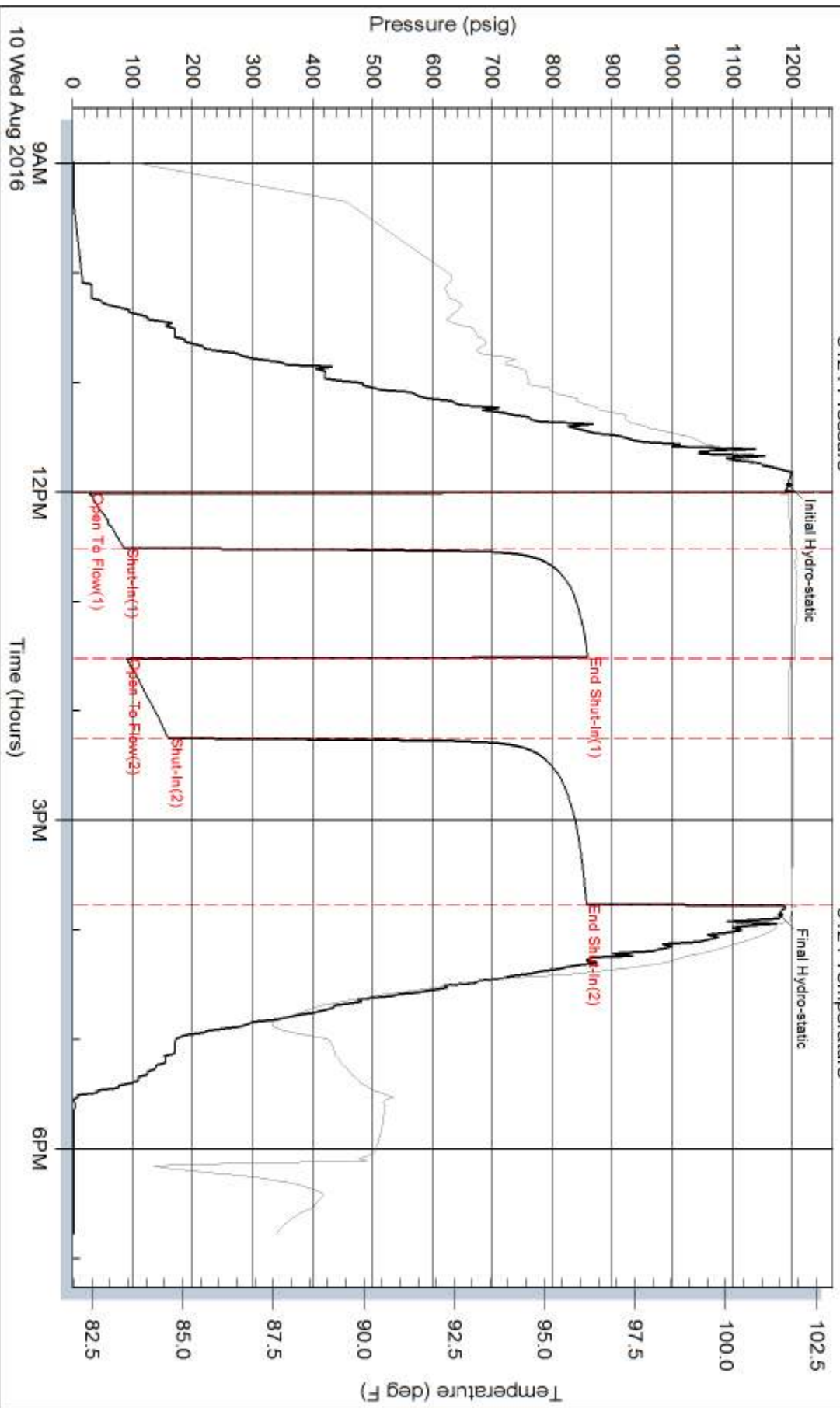
Total Length: 300.00 ft Total Volume: 1.475 bbl

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

Laboratory Name: Laboratory Location:

Recovery Comments:

Pressure vs. Time



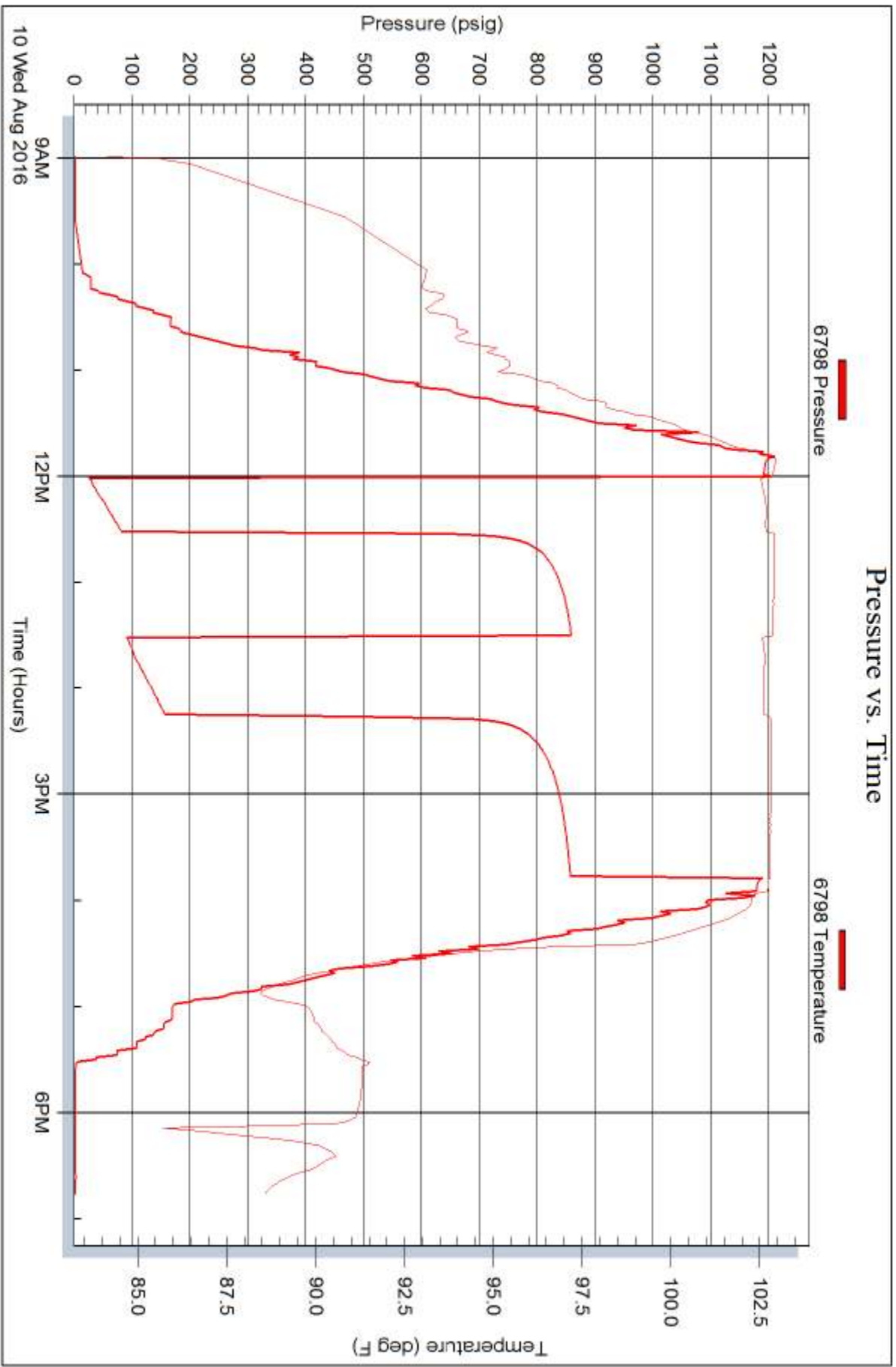
Serial #: 6798

Inside

Raymond Oil

Jackson Family #19-1

DST Test Number: 1



Tribble Testing, Inc

Ref. No: 63079

Printed: 2016.08.12 @ 08:56:32



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 63079

Well Name & No. Jackson Family 19-1 Test No. 1 Date 8-10-16
 Company Raymond Oil Company, Inc. Elevation 1524 KB 1514 GL
 Address P.O. Box 48788 Wichita, KS. 67201
 Co. Rep / Geo. Robert Turner Rig Summit #1
 Location: Sec. 19 Twp. 24S Rge. 8 E Co. Butler State KS.

Interval Tested 2417-2452 Zone Tested Squirrel Sand
 Anchor Length 35' Drill Pipe Run 2102 Mud Wt. 9.1
 Top Packer Depth 2422 Drill Collars Run 314 Vis 43
 Bottom Packer Depth 2417 Wt. Pipe Run 0 WL 8.8
 Total Depth 2452 Chlorides 1800 ppm System LCM
 Blow Description IF - weak blow building to 11 inches
FF - No blow building to 11 inches

Rec	Feet of	%gas	%oil	%water	%mud
<u>60'</u>	<u>Drilling Mud</u>			<u>100</u>	
<u>120</u>	<u>HWCN</u>		<u>35</u>	<u>65</u>	
<u>120</u>	<u>mclw</u>		<u>90</u>	<u>10</u>	

Rec Total 300 BHT _____ Gravity _____ API RW _____ @ _____ °F Chlorides 90,000 ppm

(A) Initial Hydrostatic 1193 Test 1050 T-On Location 0600
 (B) First Initial Flow 28 Jars 250 T-Started 0915
 (C) First Final Flow 86 Safety Joint 75 T-Open 1201
 (D) Initial Shut-In 858 Circ Sub _____ T-Pulled 1546
 (E) Second Initial Flow 90 Hourly Standby _____ T-Out _____
 (F) Second Final Flow 160 Mileage RT 138 103.50 Comments _____
 (G) Final Shut-In 856 Sampler _____
 (H) Final Hydrostatic 1179 Straddle _____ Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 1478.50
 Accessibility _____ MP/DST Disc't _____

Sub Total 1478.50

Initial Open 30
 Initial Shut-In 60
 Final Flow 45
 Final Shut-In 90

Approved By [Signature] Our Representative Jimmy Dinko

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.