



## DRILL STEM TEST REPORT

Prepared For: **Eagle Creek Corporation**

8100 E 22nd St N  
Bldg 500 Suite A  
Wichita, KS 67226

ATTN: Rocky Milford

### **Johnson-Rapier #1-24**

### **24 20s 35w Wichita,KS**

Start Date: 2017.07.16 @ 14:40:00

End Date: 2017.07.16 @ 23:05:30

Job Ticket #: 64207                      DST #: 1

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

Printed: 2017.07.17 @ 15:37:12



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Eagle Creek Corporation  
 8100 E 22nd St N  
 Bldg 500 Suite A  
 Wichita, KS 67226  
 ATTN: Rocky Milford

**24 20s 35w Wichita, KS**

**Johnson-Rapier #1-24**

Job Ticket: 64207

**DST#: 1**

Test Start: 2017.07.16 @ 14:40:00

## GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 16:38:30

Time Test Ended: 23:05:30

Test Type: Conventional Bottom Hole (Initial)

Tester: Bradley Walter

Unit No: 78

**Interval: 4575.00 ft (KB) To 4603.00 ft (KB) (TVD)**

Reference Elevations: 3146.00 ft (KB)

Total Depth: 4603.00 ft (KB) (TVD)

3141.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Good

KB to GR/CF: 5.00 ft

**Serial #: 8845 Outside**

Press@RunDepth: 125.77 psig @ 4576.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2017.07.16 End Date: 2017.07.16

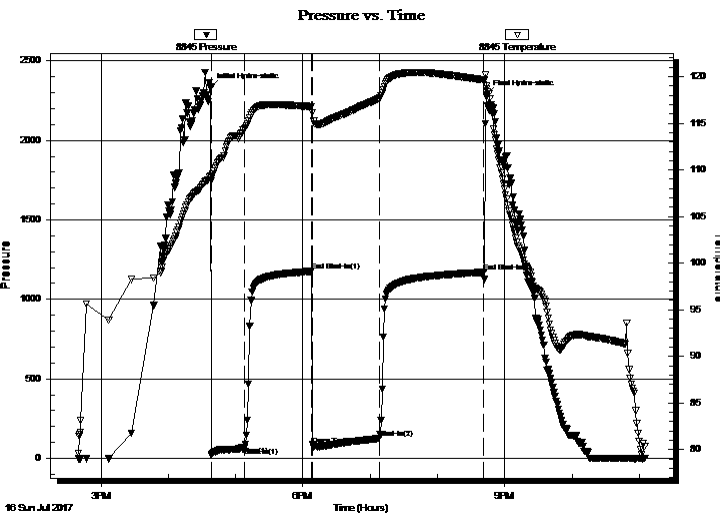
Last Calib.: 2017.07.16

Start Time: 14:40:05 End Time: 23:05:29

Time On Btm: 2017.07.16 @ 16:38:00

Time Off Btm: 2017.07.16 @ 20:43:30

**TEST COMMENT:** IF: BOB @ 9 1/2 min.  
 IS: 1/2" return, receded to surface.  
 FF: BOB @ 5 min.  
 FS: BOB @ 24 min, receded to 8".



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2333.47	109.32	Initial Hydro-static
1	21.15	108.79	Open To Flow (1)
30	67.42	114.45	Shut-In(1)
90	1176.58	116.79	End Shut-In(1)
91	84.88	116.17	Open To Flow (2)
151	125.77	117.66	Shut-In(2)
244	1169.99	119.64	End Shut-In(2)
246	2284.50	118.98	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
210.00	gmco 40g 25m 35o	1.86
120.00	go 20g 80o	1.68
0.00	1180 GIP	0.00

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Eagle Creek Corporation

**24 20s 35w Wichita, KS**

8100 E 22nd St N  
Bldg 500 Suite A  
Wichita, KS 67226  
ATTN: Rocky Milford

**Johnson-Rapier #1-24**

Job Ticket: 64207

**DST#: 1**

Test Start: 2017.07.16 @ 14:40:00

## Tool Information

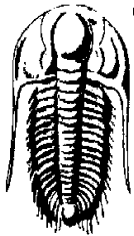
Drill Pipe:	Length: 4450.00 ft	Diameter: 3.80 inches	Volume: 62.42 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 119.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 85000.00 lb
			<u>Total Volume: 63.01 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	21.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	4575.00 ft			Final 68000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	28.00 ft			
Tool Length:	55.00 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			4549.00	
Shut In Tool	5.00			4554.00	
Hydraulic tool	5.00			4559.00	
Jars	5.00			4564.00	
Safety Joint	2.00			4566.00	
Packer	5.00			4571.00	27.00 Bottom Of Top Packer
Packer	4.00			4575.00	
Stubb	1.00			4576.00	
Recorder	0.00	8365	Inside	4576.00	
Recorder	0.00	8845	Outside	4576.00	
Perforations	24.00			4600.00	
Bullnose	3.00			4603.00	28.00 Bottom Packers & Anchor

**Total Tool Length: 55.00**



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Eagle Creek Corporation

**24 20s 35w Wichita, KS**

8100 E 22nd St N  
Bldg 500 Suite A  
Wichita, KS 67226  
ATTN: Rocky Milford

**Johnson-Rapier #1-24**

Job Ticket: 64207

**DST#: 1**

Test Start: 2017.07.16 @ 14:40:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

30 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

0 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
210.00	gmco 40g 25m 35o	1.862
120.00	go 20g 80o	1.683
0.00	1180 GIP	0.000

Total Length: 330.00 ft

Total Volume: 3.545 bbl

Num Fluid Samples: 0

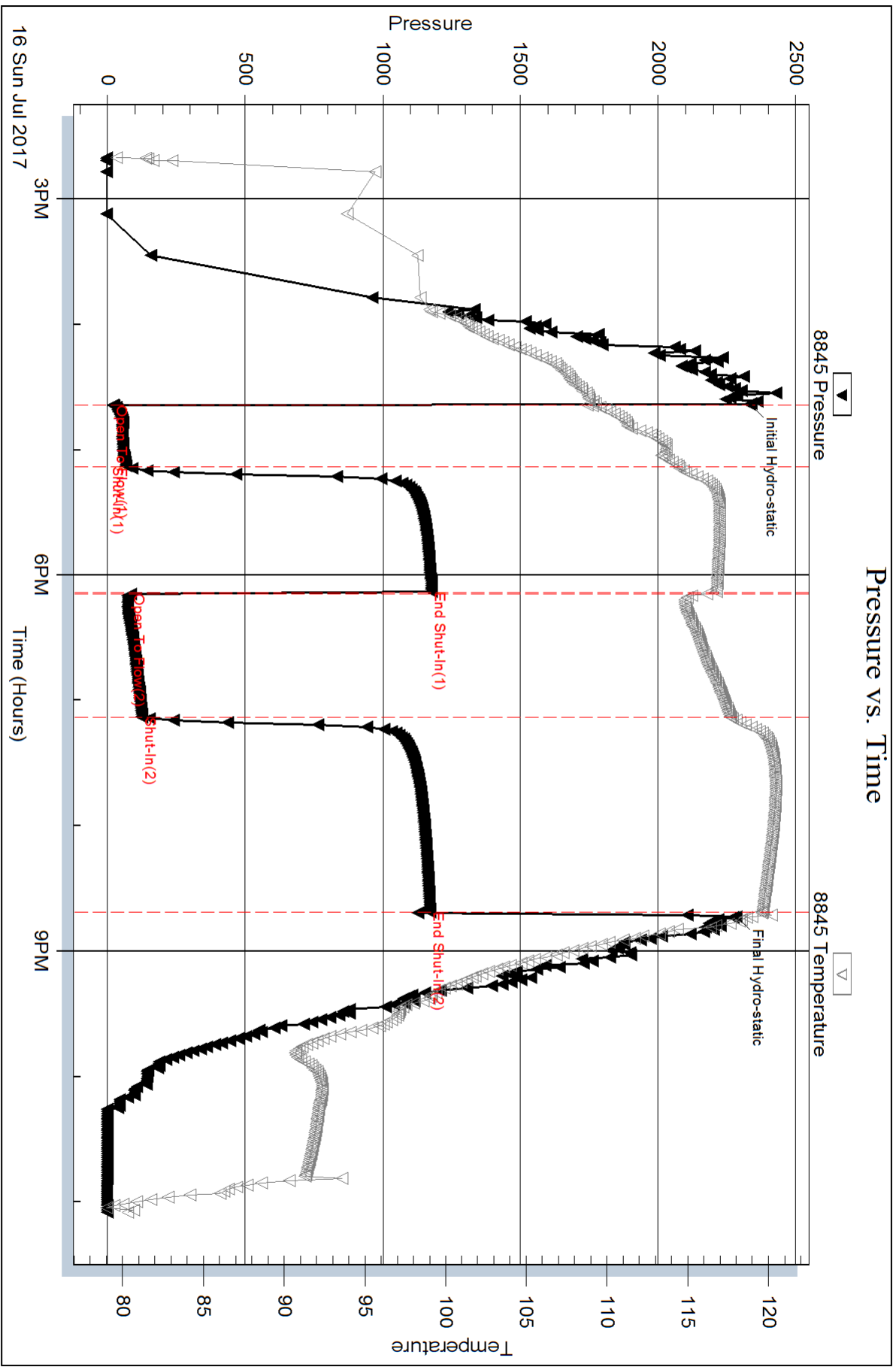
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



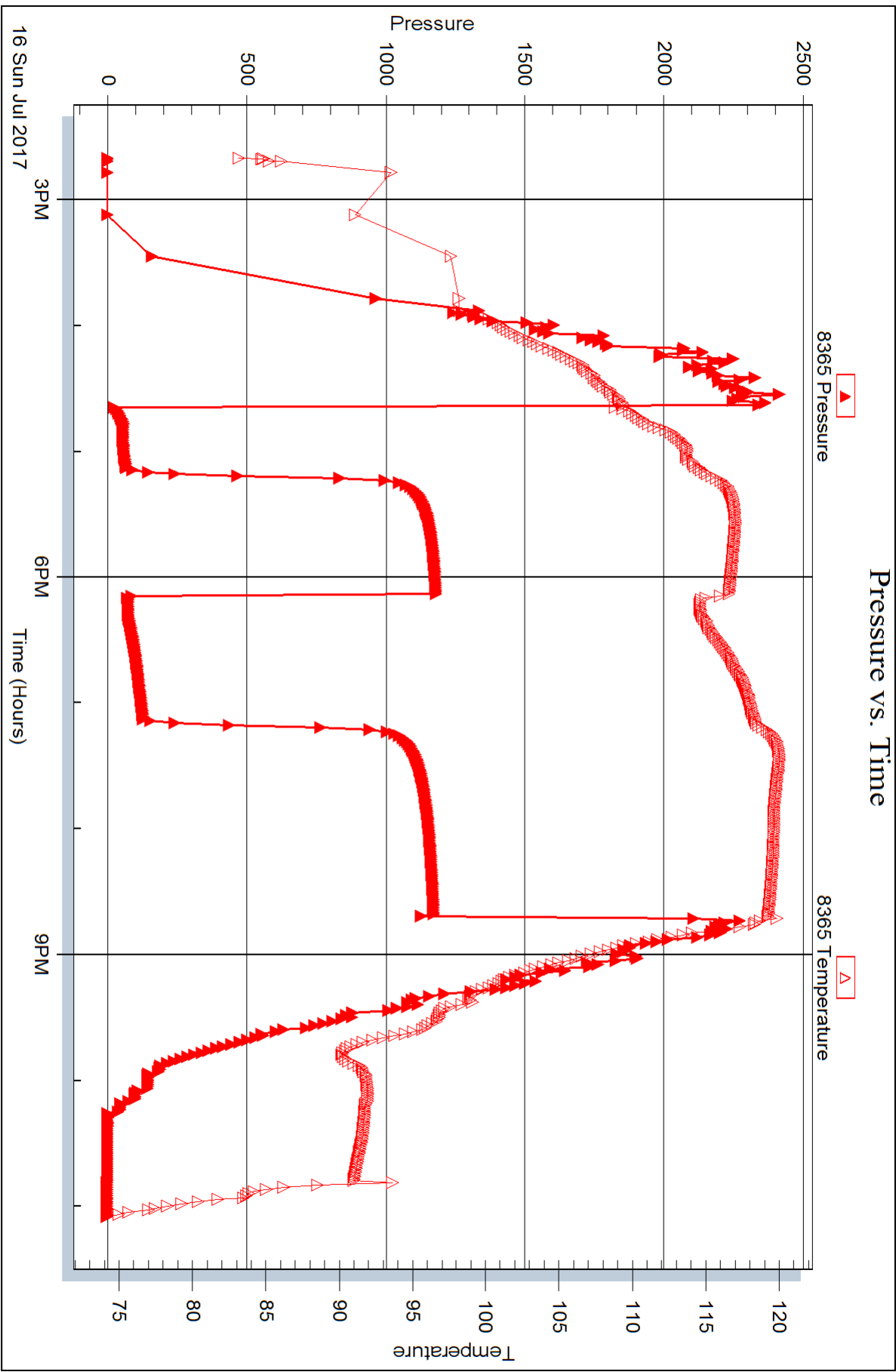
Serial #: 8365

Inside

Eagle Creek Corporation

Johnson-Rapier #1-24

DST Test Number: 1





## DRILL STEM TEST REPORT

Prepared For: **Eagle Creek Corporation**

8100 E 22nd St N  
Bldg 500 Suite A  
Wichita, KS 67226

ATTN: Rocky Milford

### **Johnson-Rapier #1-24**

### **24 20s 35w Wichita,KS**

Start Date: 2017.07.17 @ 05:37:00

End Date: 2017.07.17 @ 14:10:15

Job Ticket #: 64208                      DST #: 2

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

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**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Eagle Creek Corporation  
 8100 E 22nd St N  
 Bldg 500 Suite A  
 Wichita, KS 67226  
 ATTN: Rocky Milford

**24 20s 35w Wichita, KS**

**Johnson-Rapier #1-24**

Job Ticket: 64208 **DST#: 2**  
 Test Start: 2017.07.17 @ 05:37:00

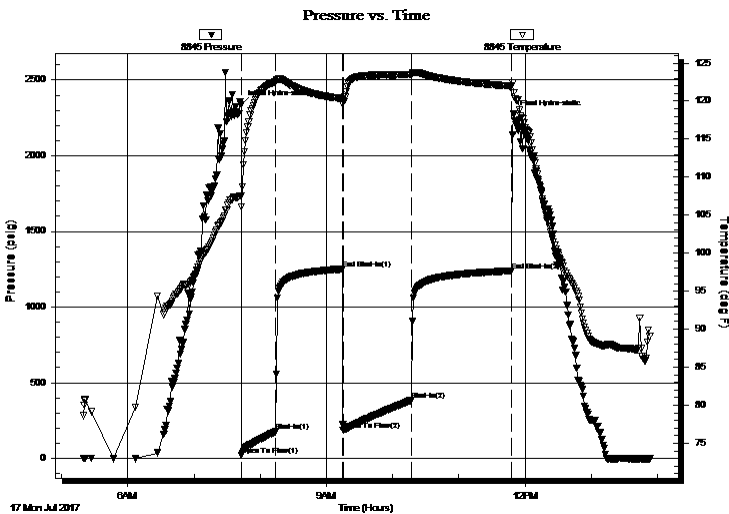
## GENERAL INFORMATION:

Formation: **Ft Scott**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 08:00:00  
 Time Test Ended: 14:10:15  
 Interval: **4604.00 ft (KB) To 4619.00 ft (KB) (TVD)**  
 Total Depth: 4619.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Reset)  
 Tester: Bradley Walter  
 Unit No: 78  
 Reference Elevations: 3146.00 ft (KB)  
 3141.00 ft (CF)  
 KB to GR/CF: 5.00 ft

**Serial #: 8845 Outside**  
 Press@RunDepth: 384.01 psig @ 4605.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2017.07.17 End Date: 2017.07.17 Last Calib.: 2017.07.17  
 Start Time: 05:20:05 End Time: 13:53:15 Time On Btm: 2017.07.17 @ 07:42:45  
 Time Off Btm: 2017.07.17 @ 11:49:45

TEST COMMENT: IF: BOB @ 12 min.  
 IS: No return.  
 FF: BOB @ 13 min.  
 FS: No return.

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2338.17	107.53	Initial Hydro-static
1	22.53	106.07	Open To Flow (1)
32	178.37	122.56	Shut-In(1)
92	1249.91	120.31	End Shut-In(1)
93	184.32	119.90	Open To Flow (2)
155	384.01	123.49	Shut-In(2)
245	1238.90	121.97	End Shut-In(2)
247	2274.78	121.08	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
800.00	smcw 3m 97w (oil spots on top)	10.14

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Eagle Creek Corporation

**24 20s 35w Wichita, KS**

8100 E 22nd St N  
Bldg 500 Suite A  
Wichita, KS 67226  
ATTN: Rocky Milford

**Johnson-Rapier #1-24**

Job Ticket: 64208

**DST#: 2**

Test Start: 2017.07.17 @ 05:37:00

## Tool Information

Drill Pipe:	Length: 4482.00 ft	Diameter: 3.80 inches	Volume: 62.87 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 119.00 ft	Diameter: 2.25 inches	Volume: 0.59 bbl	Weight to Pull Loose: 80000.00 lb
			<u>Total Volume: 63.46 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	24.00 ft			String Weight: Initial 68000.00 lb
Depth to Top Packer:	4604.00 ft			Final 70000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	15.00 ft			
Tool Length:	42.00 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			4578.00	
Shut In Tool	5.00			4583.00	
Hydraulic tool	5.00			4588.00	
Jars	5.00			4593.00	
Safety Joint	2.00			4595.00	
Packer	5.00			4600.00	27.00 Bottom Of Top Packer
Packer	4.00			4604.00	
Stubb	1.00			4605.00	
Recorder	0.00	8365	Inside	4605.00	
Recorder	0.00	8845	Outside	4605.00	
Perforations	11.00			4616.00	
Bullnose	3.00			4619.00	15.00 Bottom Packers & Anchor

**Total Tool Length: 42.00**



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Wichita, KS 67226  
ATTN: Rocky Milford

**Johnson-Rapier #1-24**

Job Ticket: 64208

**DST#: 2**

Test Start: 2017.07.17 @ 05:37:00

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

0 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

41000 ppm

Viscosity: 69.00 sec/qt

Cushion Volume:

bbbl

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

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: 1.00 inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
800.00	smcw 3m 97w (oil spots on top)	10.138

Total Length: 800.00 ft      Total Volume: 10.138 bbl

Num Fluid Samples: 0

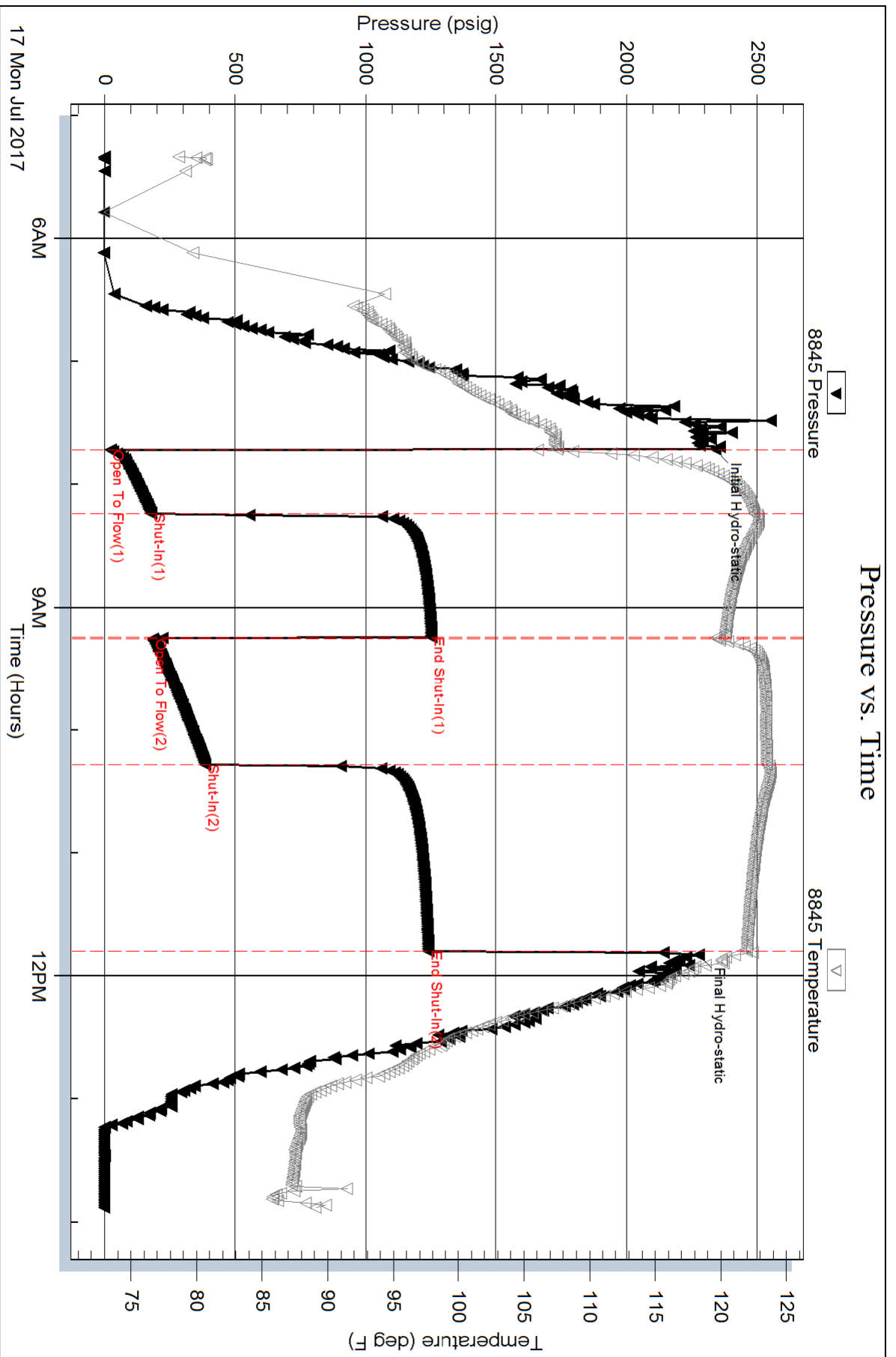
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: rw is .137 @ 87f = 41000ppm



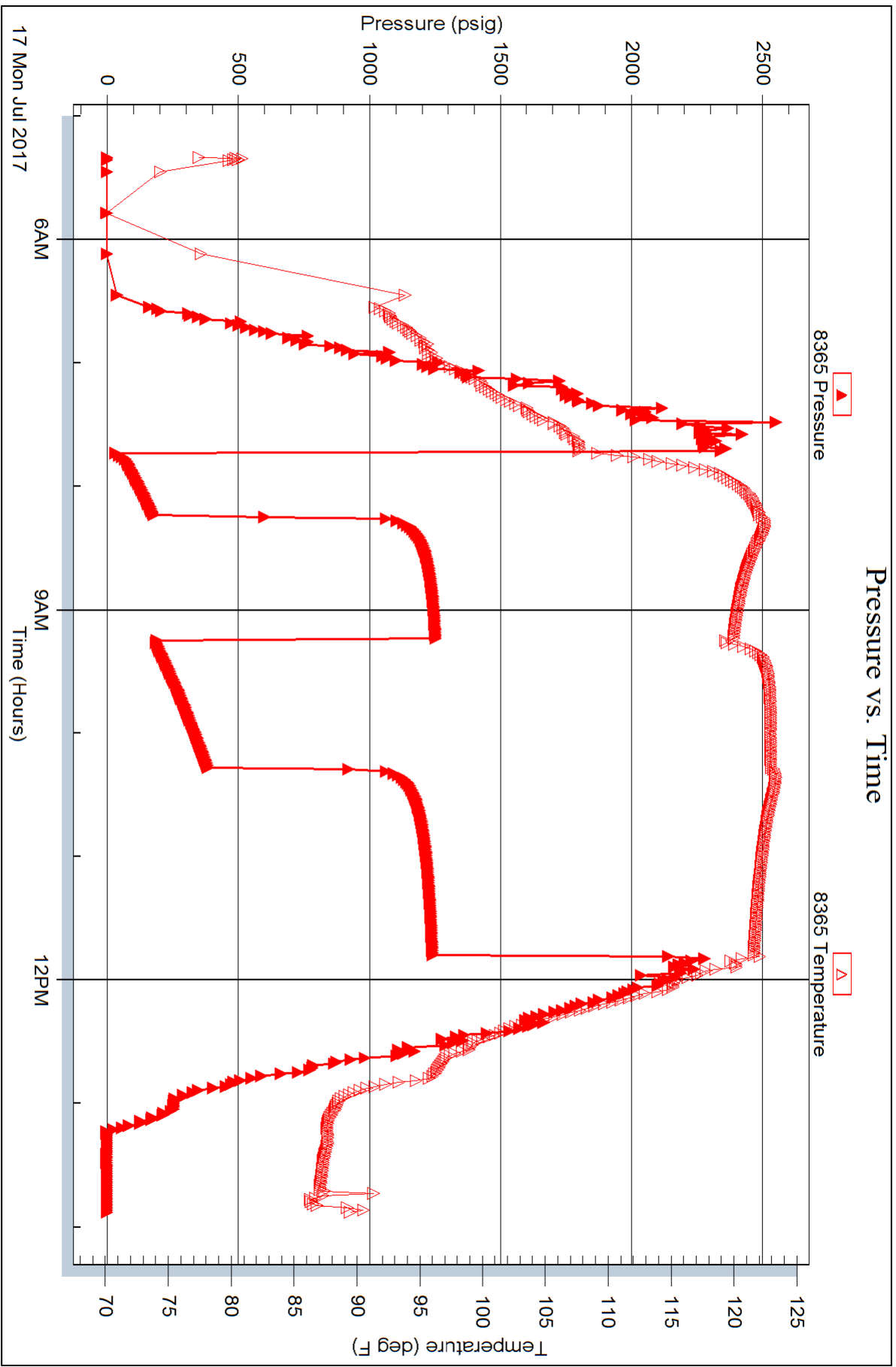
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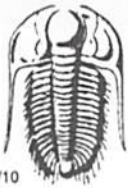
Inside

Eagle Creek Corporation

Johnson-Rapier #1-24

DST Test Number: 2





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **64207**

Well Name & No. Johnson-Rapier #1-24 Test No. 1 Date 7/16/2017  
 Company Eagle Creek Corporation Elevation 3146 KB 3141 GL  
 Address 5100 E 22<sup>nd</sup> St. N, Bldg 500 Suite A Wichita, ks 67226  
 Co. Rep / Geo. Rocky Milford Rig WW #2  
 Location: Sec. 24 Twp. 20s Rge. 35W Co. Wichita State Ks

Interval Tested 4575 - 4603 Zone Tested Pawnee  
 Anchor Length 28' Drill Pipe Run 4450 Mud Wt. 9.2  
 Top Packer Depth 4570 Drill Collars Run 119 Vis 61  
 Bottom Packer Depth 4575 Wt. Pipe Run 0 WL 6.4  
 Total Depth 4603 Chlorides 3800 ppm System LCM 2 #

Blow Description IF: BOB @ 9 1/2 min.  
ISF: 1/2" return, receded to surface  
FF: BOB @ 5 min.  
FST: BOB @ 24 min, receded to 8"

Rec	Feet of	%gas	%oil	%water	%mud
<u>210</u>	<u>6 mcd</u>	<u>40%</u>	<u>35%</u>	<u>25%</u>	
<u>120</u>	<u>60</u>	<u>20%</u>	<u>50%</u>		
	<u>1180' GIP</u>				

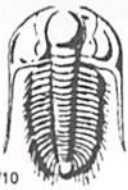
Rec Total 330 BHT 120 Gravity 30 API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2333</u>	<input checked="" type="checkbox"/> Test <u>1150</u>	T-On Location <u>1400</u>
(B) First Initial Flow <u>21</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>1440</u>
(C) First Final Flow <u>67</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>1639</u>
(D) Initial Shut-In <u>1177</u>	<input checked="" type="checkbox"/> Circ Sub <u>1/2</u>	T-Pulled <u>2039</u>
(E) Second Initial Flow <u>85</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2306</u>
(F) Second Final Flow <u>126</u>	<input checked="" type="checkbox"/> Mileage <u>78 LT</u> <u>58.50</u>	Comments
(G) Final Shut-In <u>1170</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2285</u>	<input type="checkbox"/> Straddle	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Packer
Initial Open <u>30</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total <u>0</u>
Final Flow <u>60</u>	<input type="checkbox"/> Day Standby	Total <u>1533.50</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility	MP/DST Disc't
	Sub Total <u>1533.50</u>	

Approved By \_\_\_\_\_ Our Representative

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# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **64208**

4/10

Well Name & No. Johnson Rapier #1-24 Test No. 2 Date 7/17/2017  
 Company Eagle Creek Corporation Elevation 3146 KB 3141 GL  
 Address 8100 E 22<sup>nd</sup> St N Bldg 500 Suite A Wichita, KS 67226  
 Co. Rep / Geo. Rocky Milford Rig WW #10  
 Location: Sec. 24 Twp. 20s Rge. 35w Co. Wichita State KS

Interval Tested 4604 4619 Zone Tested Ft Scott  
 Anchor Length 15 Drill Pipe Run 4482 Mud Wt. 9.2  
 Top Packer Depth 4599 Drill Collars Run 119 Vis 69  
 Bottom Packer Depth 4604 Wt. Pipe Run Ø WL 6.4  
 Total Depth 4619 Chlorides 3500 ppm System LCM 2<sup>nd</sup>

Blow Description IF: BOB @ 12 min.  
ISI: No return.  
FF: BOB @ 13 min.  
FSI: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>800</u>	<u>SNOW</u>			<u>97</u>	<u>3</u>

Rec Total 800 BHT 122 Gravity — API RW 137 @ 87 °F Chlorides 41000 ppm  
 (A) Initial Hydrostatic 2338  Test 1150 T-On Location 0430  
 (B) First Initial Flow 23  Jars 250 T-Started 0530  
 (C) First Final Flow 178  Safety Joint 75 T-Open 0747  
 (D) Initial Shut-In 1250  Circ Sub N/C T-Pulled 11:50  
 (E) Second Initial Flow 184  Hourly Standby \_\_\_\_\_ T-Out 1353  
 (F) Second Final Flow 384  Mileage 78 RT 58.50 Comments \_\_\_\_\_  
 (G) Final Shut-In 1239  Sampler \_\_\_\_\_  
 (H) Final Hydrostatic 2275  Straddle \_\_\_\_\_  
 Initial Open 30  Shale Packer \_\_\_\_\_  
 Initial Shut-In 60  Extra Packer \_\_\_\_\_  
 Final Flow 60  Extra Recorder \_\_\_\_\_  
 Final Shut-In 90  Day Standby \_\_\_\_\_  
 Sub Total 1533.50  Accessibility \_\_\_\_\_  
 Sub Total 1533.50  Ruined Shale Packer \_\_\_\_\_  
 Ruined Packer \_\_\_\_\_  
 Extra Copies \_\_\_\_\_  
 Sub Total 0  
 Total 1533.50  
 MP/DST Disc't \_\_\_\_\_

Approved By \_\_\_\_\_ Our Representative [Signature]

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