



## DRILL STEM TEST REPORT

Prepared For: **Stewart Producers Inc**

PO Box 546  
MT Vernon IL 62864+0546

ATTN: Andrew Stenzel

### **Peddie-Hoovler #1**

### **8-18s-24w Ness,KS**

Start Date: 2019.07.18 @ 19:20:00

End Date: 2019.07.19 @ 03:02:45

Job Ticket #: 65966                      DST #: 1

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

Printed: 2019.07.22 @ 09:20:12

Stewart Producers Inc  
8-18s-24w Ness,KS  
Peddie-Hoovler #1  
DST # 1  
Mississippi  
2019.07.18



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Stewart Producers Inc  
 PO Box 546  
 MT Vernon IL 62864+0546  
 ATTN: Andrew Stenzel

**8-18s-24w Ness,KS**  
**Peddie-Hoovler #1**  
 Job Ticket: 65966 **DST#: 1**  
 Test Start: 2019.07.18 @ 19:20:00

## GENERAL INFORMATION:

Formation: **Mississippi**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 21:44:15  
 Time Test Ended: 03:02:45  
 Interval: **4278.00 ft (KB) To 4356.00 ft (KB) (TVD)**  
 Total Depth: 4356.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Spencer J Staab  
 Unit No: 84  
 Reference Elevations: 2335.00 ft (KB)  
 2327.00 ft (CF)  
 KB to GR/CF: 8.00 ft

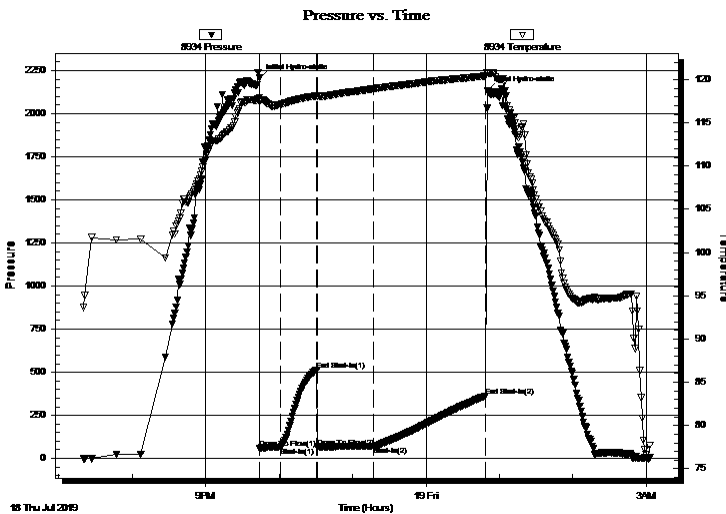
## Serial #: 8934

Inside

Press@RunDepth: 70.92 psig @ 4281.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.07.18 End Date: 2019.07.19 Last Calib.: 2019.07.19  
 Start Time: 19:20:15 End Time: 03:02:45 Time On Btm: 2019.07.18 @ 21:43:45  
 Time Off Btm: 2019.07.19 @ 00:50:15

TEST COMMENT: 15-IF-Weak; Built to 3 1/2"  
 30-ISI-No Return  
 45-FF-Weak; Built to 1 1/4"  
 90-FSI-No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2205.62	117.92	Initial Hydro-static
1	60.20	117.47	Open To Flow (1)
17	66.39	117.13	Shut-In(1)
47	513.60	118.13	End Shut-In(1)
48	63.55	118.02	Open To Flow (2)
93	70.92	118.93	Shut-In(2)
186	362.93	120.43	End Shut-In(2)
187	2130.55	120.77	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
20.00	MO 50%M 50%O	0.28
30.00	GO 30%G 70%O	0.43

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Stewart Producers Inc  
 PO Box 546  
 MT Vernon IL 62864+0546  
 ATTN: Andrew Stenzel

**8-18s-24w Ness,KS**  
**Peddie-Hoovler #1**  
 Job Ticket: 65966 **DST#: 1**  
 Test Start: 2019.07.18 @ 19:20:00

**Tool Information**

Drill Pipe:	Length: 4254.00 ft	Diameter: 3.82 inches	Volume: 60.30 bbl	Tool Weight:	2300.00 lb
Heavy Wt. Pipe:	Length: ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	68000.00 lb
			<u>Total Volume:</u> - bbl	Tool Chased	ft
Drill Pipe Above KB:	8.00 ft			String Weight: Initial	60000.00 lb
Depth to Top Packer:	4278.00 ft			Final	61000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	78.00 ft				
Tool Length:	110.00 ft				
Number of Packers:	1	Diameter: 6.75 inches			

Tool Comments:

<b>Tool Description</b>	<b>Length (ft)</b>	<b>Serial No.</b>	<b>Position</b>	<b>Depth (ft)</b>	<b>Accum. Lengths</b>
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Change Over Sub	1.00			4247.00	
Shut In Tool	5.00			4252.00	
Hydraulic tool	5.00			4257.00	
gap sub	3.00			4260.00	
Jars	5.00			4265.00	
Safety Joint	3.00			4268.00	
Packer	5.00			4273.00	32.00 Bottom Of Top Packer
Packer	5.00			4278.00	
Stubb	1.00			4279.00	
Perforations	1.00			4280.00	
Change Over Sub	1.00			4281.00	
Recorder	0.00	8352	Inside	4281.00	
Recorder	0.00	8934	Inside	4281.00	
Drill Pipe	64.00			4345.00	
Change Over Sub	1.00			4346.00	
Perforations	7.00			4353.00	
Bullnose	3.00			4356.00	78.00 Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>110.00</b>				



**TRILOBITE  
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# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Stewart Producers Inc  
 PO Box 546  
 MT Vernon IL 62864+0546  
 ATTN: Andrew Stenzel

**8-18s-24w Ness,KS**  
**Peddie-Hoovler #1**  
 Job Ticket: 65966      **DST#: 1**  
 Test Start: 2019.07.18 @ 19:20:00

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 39 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: ppm
Viscosity: 54.00 sec/qt	Cushion Volume: bbl	
Water Loss: 7.19 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 3200.00 ppm		
Filter Cake: inches		

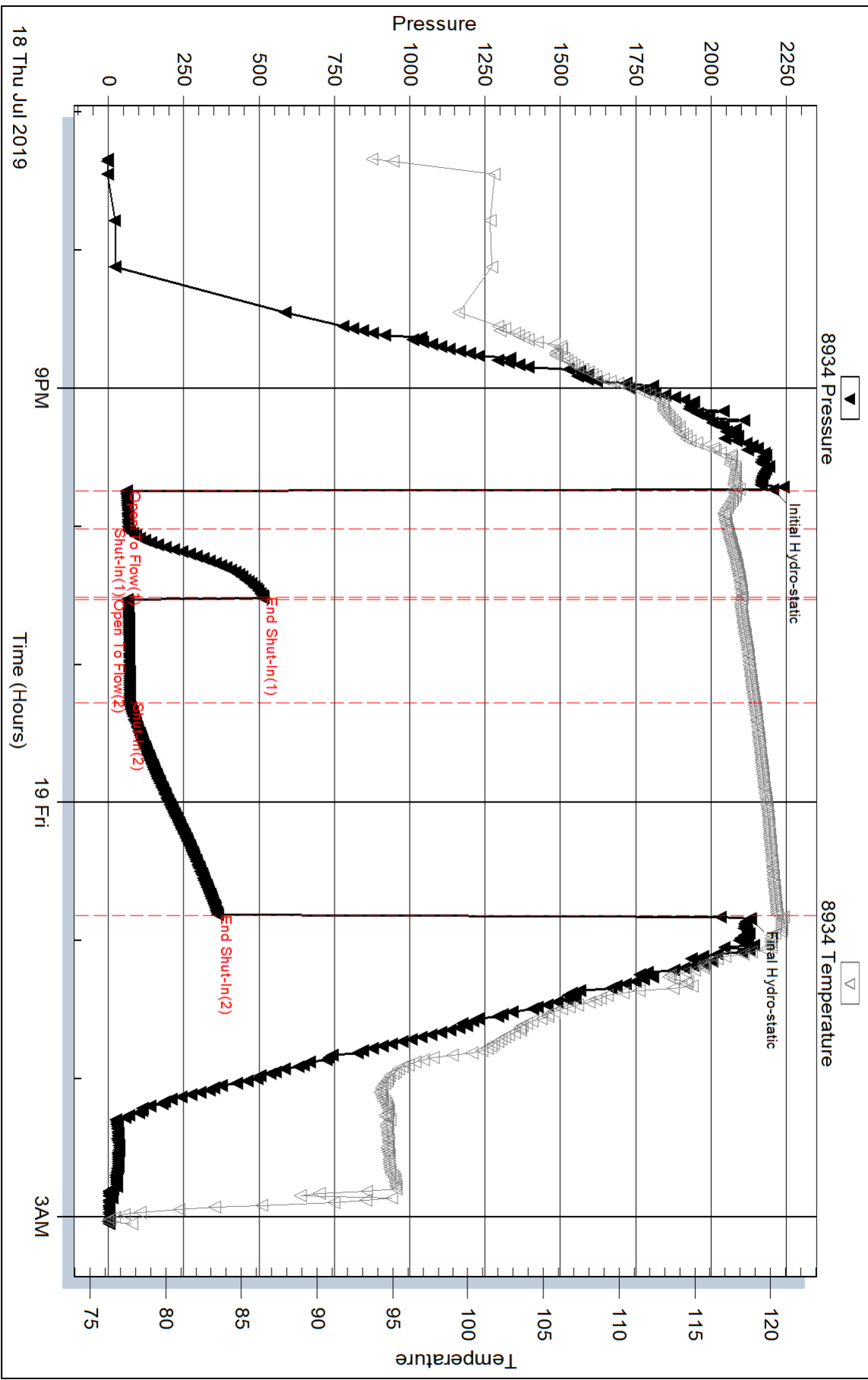
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
20.00	MO 50%M 50%O	0.284
30.00	GO 30%G 70%O	0.425

Total Length: 50.00 ft      Total Volume: 0.709 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments: 1#LCM

### Pressure vs. Time



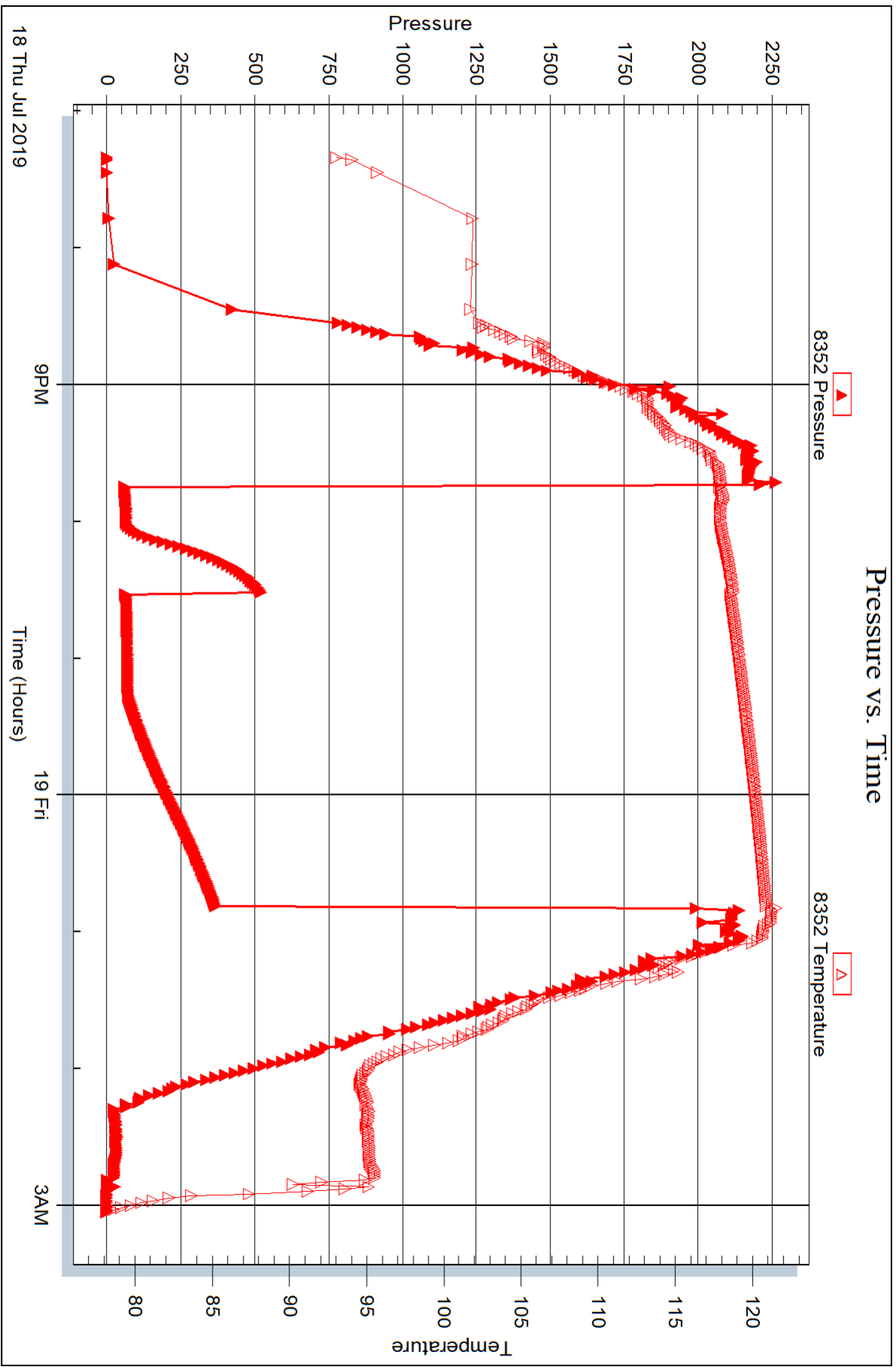
Serial #: 8352

Inside

Stewart Producers Inc

Peddie-Hoover #1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 65966

Printed: 2019.07.22 @ 09:20:13



## DRILL STEM TEST REPORT

Prepared For: **Stewart Producers Inc**

PO Box 546  
MT Vernon IL 62864+0546

ATTN: Andrew Stenzel

### **Peddie-Hoovler #1**

### **8-18s-24w Ness,KS**

Start Date: 2019.07.19 @ 17:47:00

End Date: 2019.07.20 @ 00:51:30

Job Ticket #: 65967                      DST #: 2

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

Printed: 2019.07.22 @ 09:19:43





**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Stewart Producers Inc  
 PO Box 546  
 MT Vernon IL 62864+0546  
 ATTN: Andrew Stenzel

**8-18s-24w Ness, KS**  
**Peddie-Hoovler #1**  
 Job Ticket: 65967 **DST#: 2**  
 Test Start: 2019.07.19 @ 17:47:00

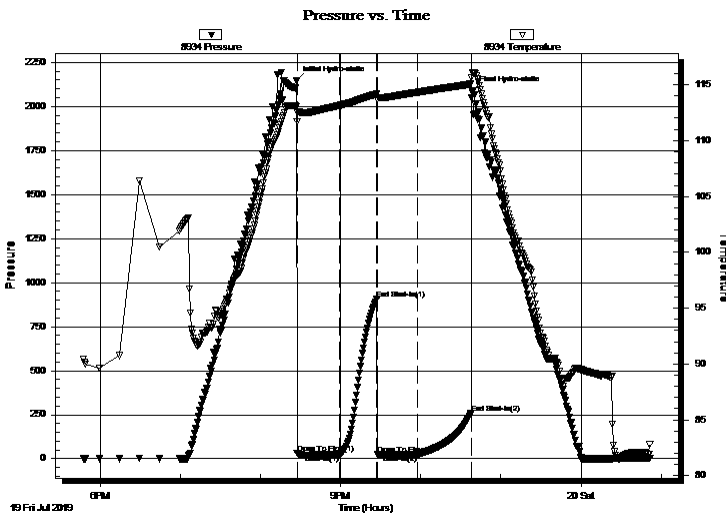
## GENERAL INFORMATION:

Formation: **Ft. Scott**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 20:27:15  
 Time Test Ended: 00:51:30  
 Interval: **4220.00 ft (KB) To 4277.00 ft (KB) (TVD)**  
 Total Depth: 4422.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Fair  
 Test Type: Conventional Straddle (Reset)  
 Tester: Spencer J Staab  
 Unit No: 84  
 Reference Elevations: 2335.00 ft (KB)  
 2327.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8934 Inside**  
 Press@RunDepth: 26.02 psig @ 4223.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2019.07.19 End Date: 2019.07.20 Last Calib.: 2019.07.20  
 Start Time: 17:47:15 End Time: 00:51:30 Time On Btm: 2019.07.19 @ 20:27:00  
 Time Off Btm: 2019.07.19 @ 22:39:00

TEST COMMENT: 30-IF-Weak; Built to 1/2"  
 30-ISI-No Return  
 30-FF-No Blow  
 30-FSI-No Return

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2145.94	113.07	Initial Hydro-static
1	29.32	111.71	Open To Flow (1)
32	23.53	113.14	Shut-In(1)
60	908.49	114.16	End Shut-In(1)
61	26.42	113.65	Open To Flow (2)
91	26.02	114.32	Shut-In(2)
131	257.24	115.06	End Shut-In(2)
132	2088.10	116.10	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	OSM 100%M	0.43

\* Recovery from multiple tests

## Gas Rates

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







**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Stewart Producers Inc  
 PO Box 546  
 MT Vernon IL 62864+0546  
 ATTN: Andrew Stenzel

**8-18s-24w Ness,KS**  
**Peddie-Hoovler #1**  
 Job Ticket: 65967      **DST#: 2**  
 Test Start: 2019.07.19 @ 17:47:00

**Tool Information**

Drill Pipe:	Length: 4222.00 ft	Diameter: 3.82 inches	Volume: 59.85 bbl	Tool Weight:	2300.00 lb
Heavy Wt. Pipe:	Length:            ft	Diameter: 2.75 inches	Volume: - bbl	Weight set on Packer:	25000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	95000.00 lb
			<u>Total Volume:</u>	Tool Chased	ft
			- bbl	String Weight: Initial	61000.00 lb
Drill Pipe Above KB:	34.00 ft			Final	61000.00 lb
Depth to Top Packer:	4220.00 ft				
Depth to Bottom Packer:	4422.00 ft				
Interval between Packers:	202.00 ft				
Tool Length:	234.00 ft				
Number of Packers:	1	Diameter: 6.75 inches			

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4189.00	
Shut In Tool	5.00			4194.00	
Hydraulic tool	5.00			4199.00	
gap sub	3.00			4202.00	
Jars	5.00			4207.00	
Safety Joint	3.00			4210.00	
Packer	5.00			4215.00	32.00      Bottom Of Top Packer
Packer	5.00			4220.00	
Stubb	1.00			4221.00	
Perforations	1.00			4222.00	
Change Over Sub	1.00			4223.00	
Recorder	0.00	8934	Inside	4223.00	
Recorder	0.00	8352	Inside	4223.00	
Drill Pipe	32.00			4255.00	
Change Over Sub	1.00			4256.00	
Perforations	16.00			4272.00	
Blank Off Sub	1.00			4273.00	
Top S. Packer	4.00			4277.00	
Straddle Packer	0.00			4277.00	
Stubb	1.00			4278.00	
Perforations	10.00			4288.00	
Change Over Sub	1.00			4289.00	
Recorder	0.00	9120	Below	4289.00	
Drill Pipe	127.00			4416.00	
Change Over Sub	1.00			4417.00	
Perforations	2.00			4419.00	



**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Stewart Producers Inc

**8-18s-24w Ness,KS**

PO Box 546  
MT Vernon IL 62864+0546

**Peddie-Hoovler #1**

Job Ticket: 65967

**DST#: 2**

ATTN: Andrew Stenzel

Test Start: 2019.07.19 @ 17:47:00

## 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: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.60 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 3800.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	OSM 100%M	0.425

Total Length: 30.00 ft      Total Volume: 0.425 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: 1#LCM

Serial #: 8934

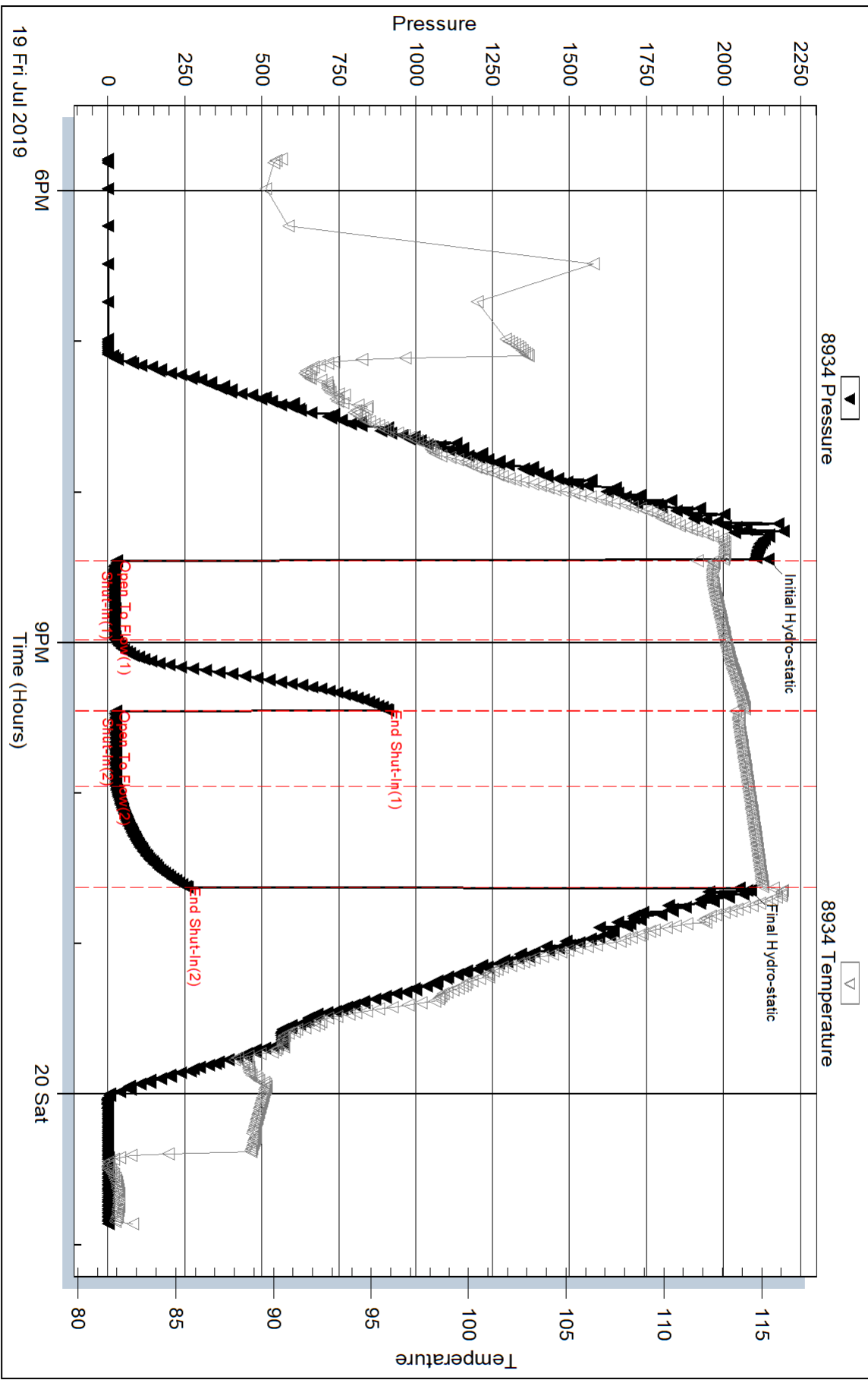
Inside

Stewart Producers Inc

Peddle-Hoover #1

DST Test Number: 2

### Pressure vs. Time



Triobite Testing, Inc

Ref. No: 65967

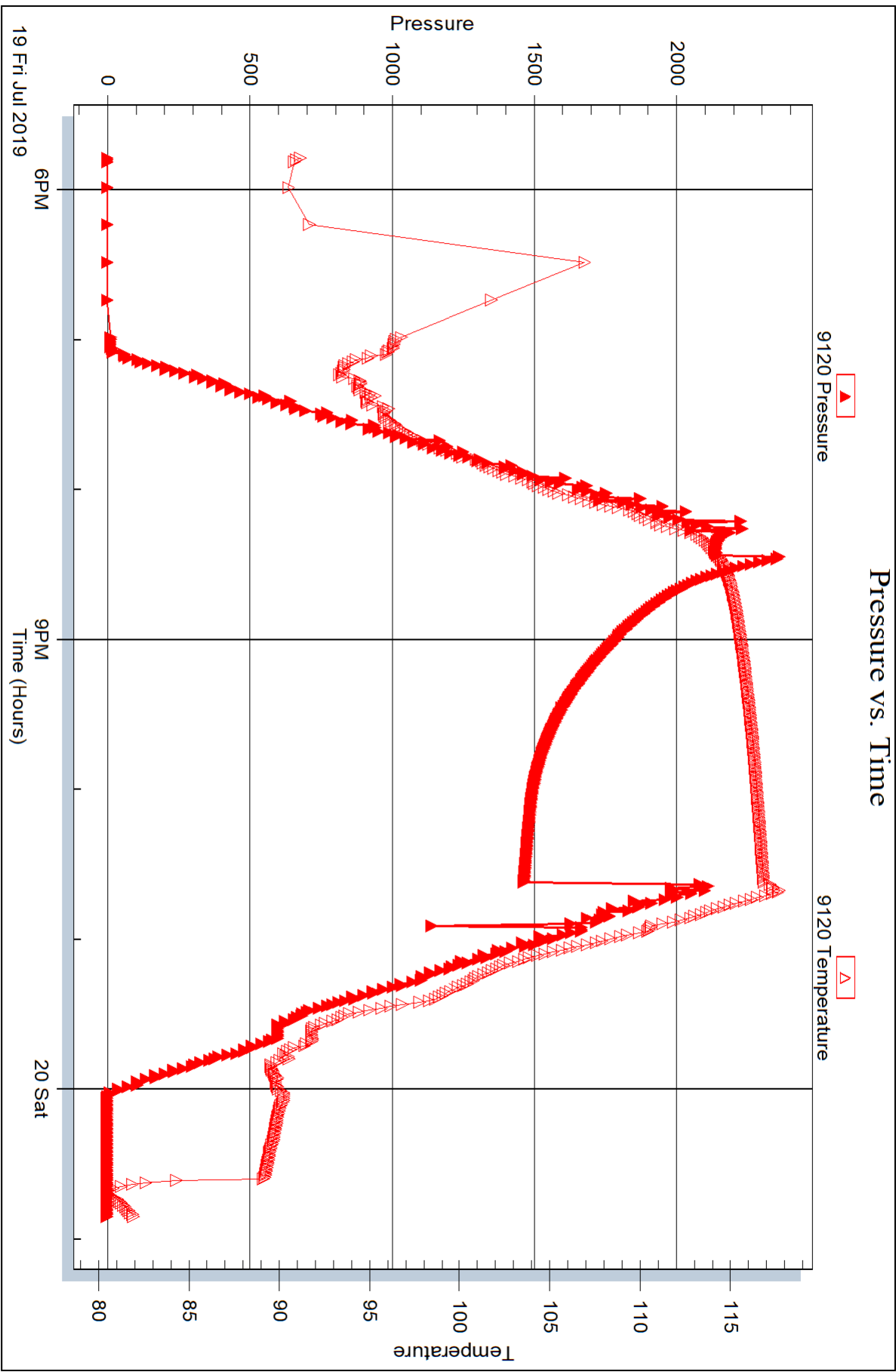
Printed: 2019.07.22 @ 09:19:44

Serial #: 9120

Below (Stratajet) Producers Inc

Peddie-Hoverler #1

DST Test Number: 2



Triobite Testing, Inc

Ref. No: 65967

Printed: 2019.07.22 @ 09:19:44

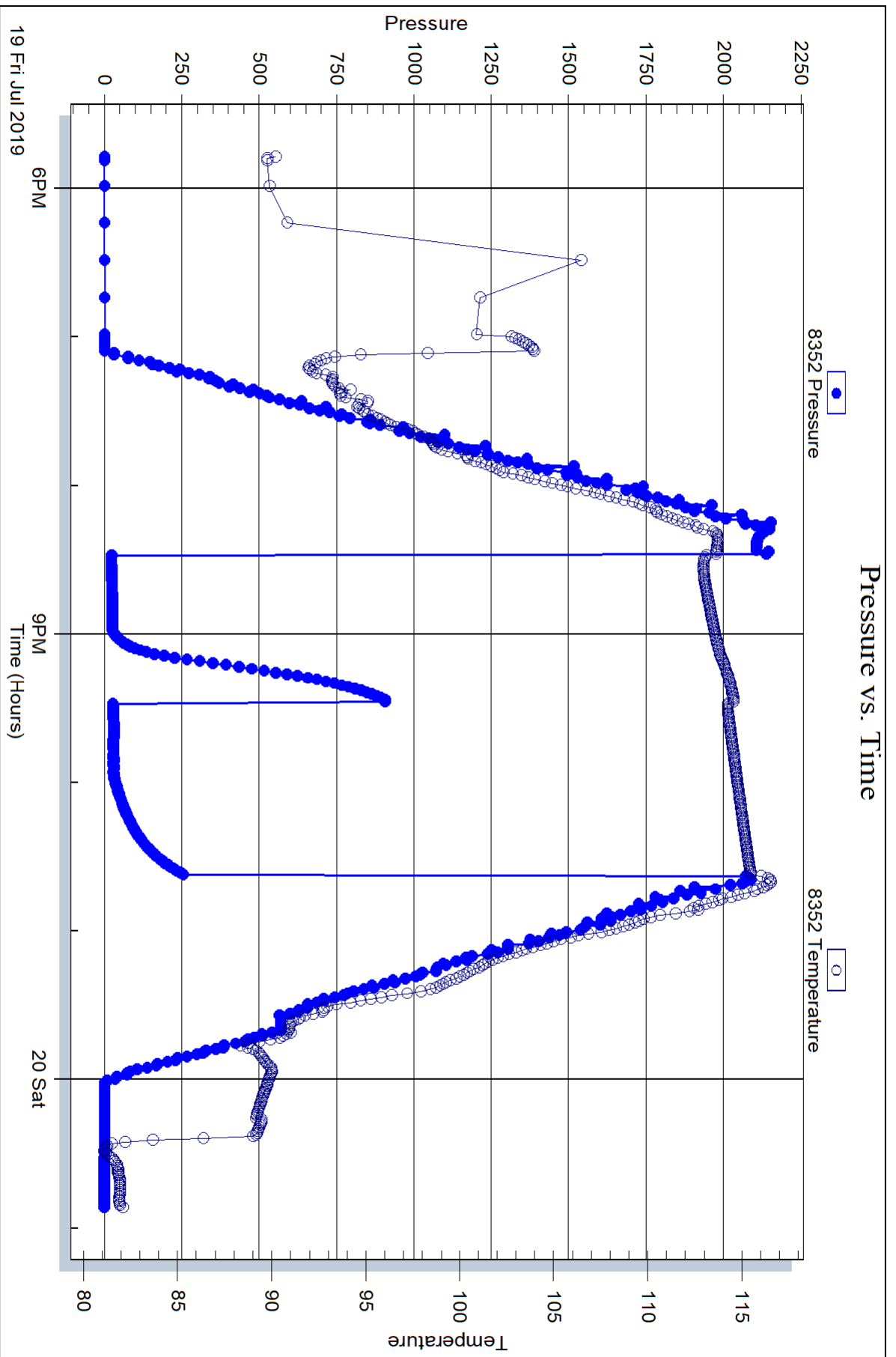
Serial #: 8352

Inside

Stewart Producers Inc

Peddie-Hoover #1

DST Test Number: 2







# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket 65966

NO.

Well Name & No. Peddie - Hoover #1 Test No. 1 Date 07/18/2019  
 Company Stewart Producers Inc Elevation 2335 KB 2327' GL  
 Address 301 N 27th St PO BOX 546 Mt Vernon IL 62864-0546  
 Co. Rep / Geo. Andrew Stengel Rig Pickrell #10  
 Location: Sec. 8 Twp 18S Rge. 24W Co. Wess State IL

Interval Tested 4278' - 4356' Zone Tested Mississippi  
 Anchor Length 78' Drill Pipe Run \_\_\_\_\_ Mud Wt. 9.2  
 Top Packer Depth 4273' Drill Collars Run - Vis 54  
 Bottom Packer Depth 4278' Wt. Pipe Run - WL 7.2  
 Total Depth 4356' Chlorides 3200 ppm System LCM 1#

Blow Description 77- Weak; Built to 3 1/2"  
73- No Return  
77- Weak; Built 1 1/4"  
73- No Return

Rec	Feet of	%gas	%oil	%water	%mud
<u>20'</u>	<u>MLO</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>
<u>30'</u>	<u>GO</u>	<u>30</u>	<u>70</u>		
____	____	____	____	____	____
____	____	____	____	____	____
____	____	____	____	____	____

Rec Total 50' BHT 120° Gravity 39° API RW - @ - F Chlorides - ppm

(A) Initial Hydrostatic <u>2205</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>18:05</u>
(B) First Initial Flow <u>60</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>19:20</u>
(C) First Final Flow <u>66</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>21:45</u>
(D) Initial Shut-In <u>513</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>00:45</u> <u>07/19/2019</u>
(E) Second Initial Flow <u>63</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>03:03</u>
(F) Second Final Flow <u>70</u>	<input checked="" type="checkbox"/> Mileage <u>14427</u> 114rt	Comments _____
(G) Final Shut-In <u>362</u>	<input type="checkbox"/> Sampler _____	_____
(H) Final Hydrostatic <u>2130</u>	<input type="checkbox"/> Straddle _____	<input checked="" type="checkbox"/> EM Tool <u>350</u>

Initial Open <u>15</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Ruined Packer _____
Final Flow <u>45</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>1739</u>
	Sub Total <u>1739</u>	MP/DST Disc't _____

Approved By \_\_\_\_\_ Our Representative Jensen J. Paul Thanks!  
 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.

785-259-0056



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket 65967

NO.

Well Name & No. Peddie-Howler #1 Test No. 2 Date 07/19/2019  
 Company Stewart Producers Inc Elevation 2335 KB 2327 GL  
 Address 301 N 27th St PO Box 546 Mt Vernon 62864-0546  
 Co. Rep / Geo. Andrew Stempel Rig Pickrell #10  
 Location: Sec. 8 Twp 18A Rge. 24w Co. Neos State Mo

Interval Tested 4220' - 4277' Zone Tested 7d Scott  
 Anchor Length 57' 145' tail Drill Pipe Run 4222' Mud Wt. 9.3  
 Top Packer Depth 4220' Drill Collars Run - Vis 61  
 Bottom Packer Depth 4277' Wt. Pipe Run - WL 7.6  
 Total Depth 4428' Chlorides 3800 ppm System LCM 1#

Blow Description 17-20' Wk; Built to 1/2"  
SD: No Return  
17- No Blow  
SD: No Return

Rec	Feet of	%gas	%oil	%water	%mud
30'	OSM			100	

Rec Total 30' BHT 115° Gravity - API RW - @ - F Chlorides - ppm

(A) Initial Hydrostatic <u>8145</u>	<input checked="" type="checkbox"/> Test <u>1300</u>	T-On Location <u>16:35</u>
(B) First Initial Flow <u>29</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>17:47</u>
(C) First Final Flow <u>23</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>20:25</u>
(D) Initial Shut-In <u>908</u>	<input type="checkbox"/> Circ Sub	T-Pulled <u>22:25</u>
(E) Second Initial Flow <u>26</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>00:50 07/20/2019</u>
(F) Second Final Flow <u>26</u>	<input checked="" type="checkbox"/> Mileage <u>14427</u> 114	Comments
(G) Final Shut-In <u>257</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2088</u>	<input checked="" type="checkbox"/> Straddle	<input type="checkbox"/> EM Tool <u>350</u>

Initial Open 30  
 Initial Shut-In 30  
 Final Flow 30  
 Final Shut-In 30

Extra Packer  
 Extra Recorder  
 Day Standby  
 Accessibility

Sub Total 1739 MP/DST Disc't

Approved By \_\_\_\_\_ Our Representative Spencer 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.

785-259-0058