



## DRILL STEM TEST REPORT

Prepared For: **American Warrior Inc.**

P.O. Box 399  
Garden City KS 67846

ATTN: Luke Thompson

### **O'Brate FLB #1-29**

### **29-25s-31w Finney,KS**

Start Date: 2016.09.28 @ 14:23:15

End Date: 2016.09.28 @ 23:18:15

Job Ticket #: 65614                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

ph: 785-625-4778 fax: 785-625-5620

Printed: 2016.09.30 @ 09:40:25



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

American Warrior Inc.

**29-25s-31w Finney, KS**

P.O. Box 399  
Garden City KS 67846

**O'Brate FLB #1-29**

Job Ticket: 65614

**DST#: 1**

ATTN: Luke Thompson

Test Start: 2016.09.28 @ 14:23:15

## GENERAL INFORMATION:

Formation: **Pawnee**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:27:15

Time Test Ended: 23:18:15

Test Type: Conventional Bottom Hole (Initial)

Tester: Mike Roberts

Unit No: 81

**Interval: 4574.00 ft (KB) To 4605.00 ft (KB) (TVD)**

Reference Elevations: 2848.00 ft (KB)

Total Depth: 4605.00 ft (KB) (TVD)

2838.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

**Serial #: 6751 Outside**

Press@RunDepth: 105.92 psig @ 4575.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.09.28

End Date:

2016.09.28

Last Calib.:

2016.09.28

Start Time: 14:23:15

End Time:

23:18:15

Time On Btm:

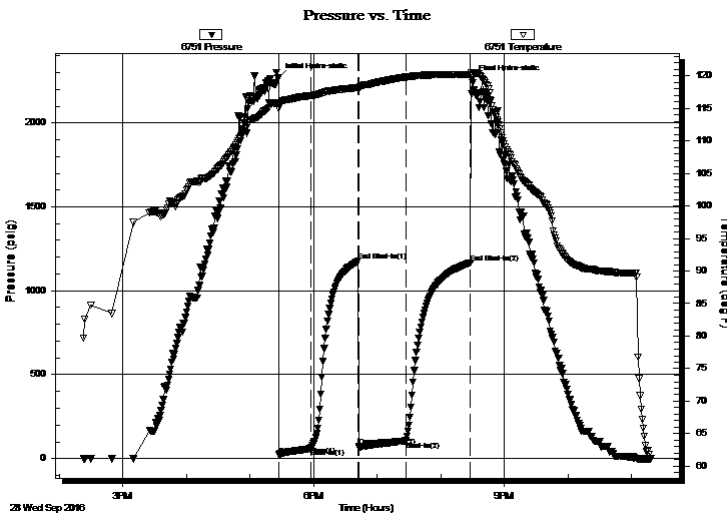
2016.09.28 @ 17:27:00

Time Off Btm:

2016.09.28 @ 20:29:45

TEST COMMENT: IF:BOB in 28 min.  
IS:No return blow  
FF:Built to 8" blow  
FS:No return blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2270.82	115.81	Initial Hydro-static
1	22.26	114.94	Open To Flow (1)
31	58.18	116.92	Shut-In(1)
76	1176.10	118.17	End Shut-In(1)
76	71.69	117.88	Open To Flow (2)
120	105.92	119.79	Shut-In(2)
182	1167.02	120.21	End Shut-In(2)
183	2260.13	120.46	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	GIP= 248	0.00
62.00	gcom 2%g 3%o 95%m	0.30
124.00	gcom 5% g 5%o 95%m	0.61

## Gas Rates

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



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**DST#: 1**

ATTN: Luke Thompson

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Total Depth: 4605.00 ft (KB) (TVD)

2838.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 10.00 ft

**Serial #: 8672** **Inside**

Press@RunDepth: psig @ 4575.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2016.09.28

End Date: 2016.09.28

Last Calib.: 2016.09.28

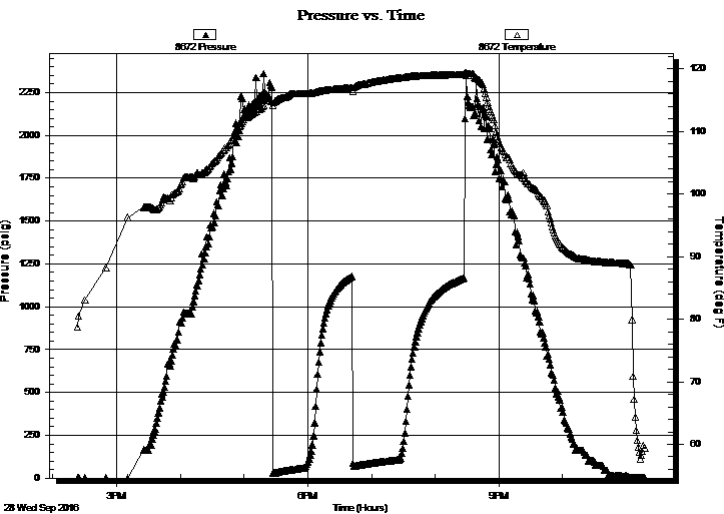
Start Time: 14:23:15

End Time: 23:18:00

Time On Btm:

Time Off Btm:

**TEST COMMENT:** IF:BOB in 28 min.  
IS:No return blow  
FF:Built to 8" blow  
FS:No return blow



## PRESSURE SUMMARY

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

## Recovery

Length (ft)	Description	Volume (bbl)
0.00	GIP= 248	0.00
62.00	gcom 2%g 3%o 95%m	0.30
124.00	gcom 5% g 5%o 95%m	0.61

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

American Warrior Inc.

**29-25s-31w Finney,KS**

P.O. Box 399  
Garden City KS 67846

**O'Brate FLB #1-29**

Job Ticket: 65614

**DST#: 1**

ATTN: Luke Thompson

Test Start: 2016.09.28 @ 14:23:15

## Tool Information

Drill Pipe:	Length: 4264.00 ft	Diameter: 3.80 inches	Volume: 59.81 bbl	Tool Weight:	1500.00 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: 309.00 ft	Diameter: 2.25 inches	Volume: 1.52 bbl	Weight to Pull Loose:	100000.0 lb
			<u>Total Volume: 61.33 bbl</u>	Tool Chased	0.00 ft
Drill Pipe Above KB:	27.00 ft			String Weight: Initial	90000.00 lb
Depth to Top Packer:	4574.00 ft			Final	91000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	31.00 ft				
Tool Length:	59.00 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			4547.00	
Shut In Tool	5.00			4552.00	
Hydraulic tool	5.00			4557.00	
Jars	5.00			4562.00	
Safety Joint	3.00			4565.00	
Packer	5.00			4570.00	28.00 Bottom Of Top Packer
Packer	4.00			4574.00	
Stubb	1.00			4575.00	
Recorder	0.00	8672	Inside	4575.00	
Recorder	0.00	6751	Outside	4575.00	
Perforations	25.00			4600.00	
Bullnose	5.00			4605.00	31.00 Bottom Packers & Anchor

**Total Tool Length: 59.00**



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## FLUID SUMMARY

American Warrior Inc.

**29-25s-31w Finney,KS**

P.O. Box 399  
Garden City KS 67846

**O'Brate FLB #1-29**

Job Ticket: 65614

**DST#: 1**

ATTN: Luke Thompson

Test Start: 2016.09.28 @ 14:23:15

### 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:

0 ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbf

Water Loss: 8.78 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 3300.00 ppm

Filter Cake: 1.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbf
0.00	GIP= 248	0.000
62.00	gcom 2%g 3%o 95%m	0.305
124.00	gcom 5% g 5%o 95%m	0.610

Total Length: 186.00 ft

Total Volume: 0.915 bbl

Num Fluid Samples: 0

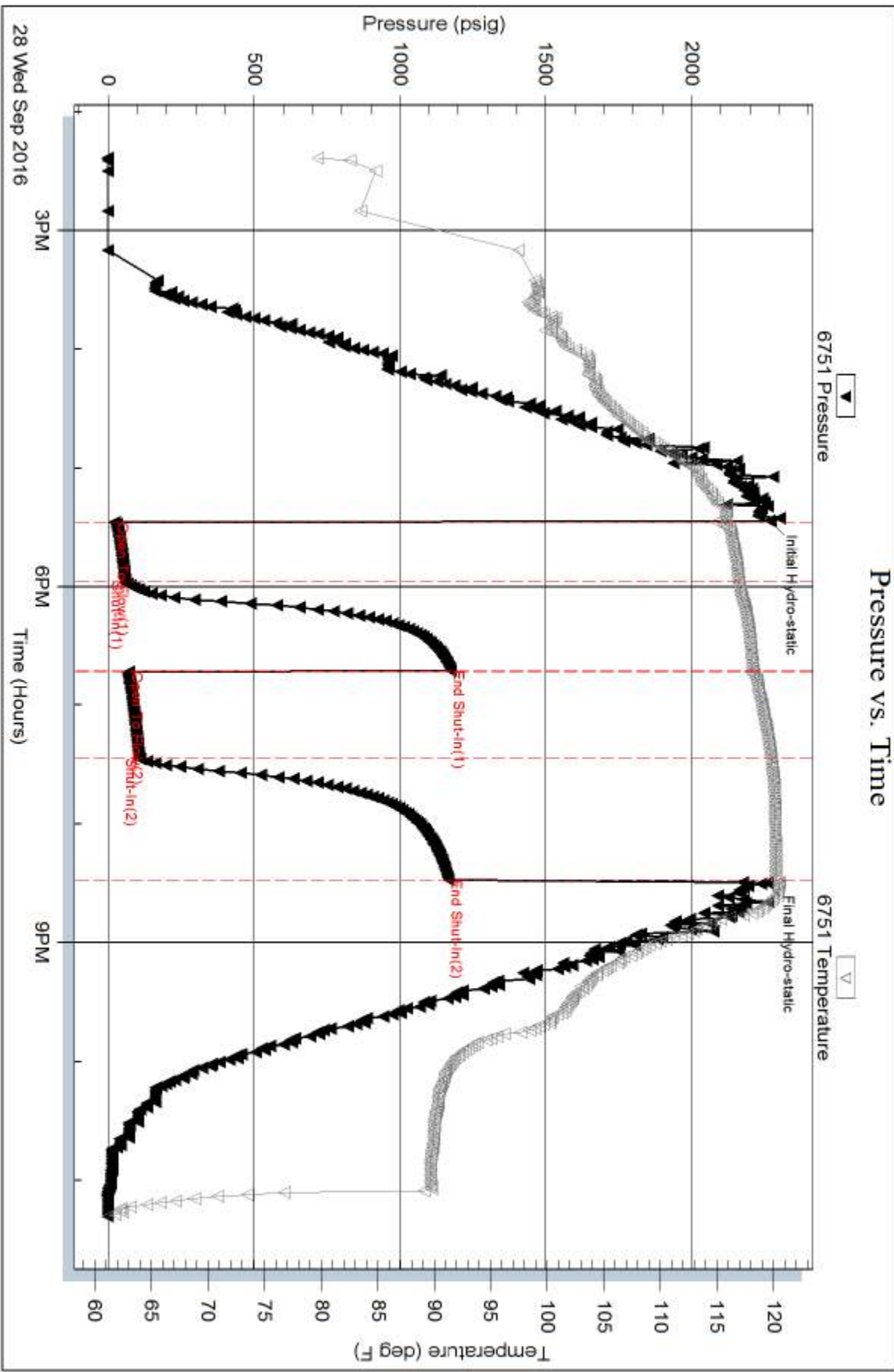
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



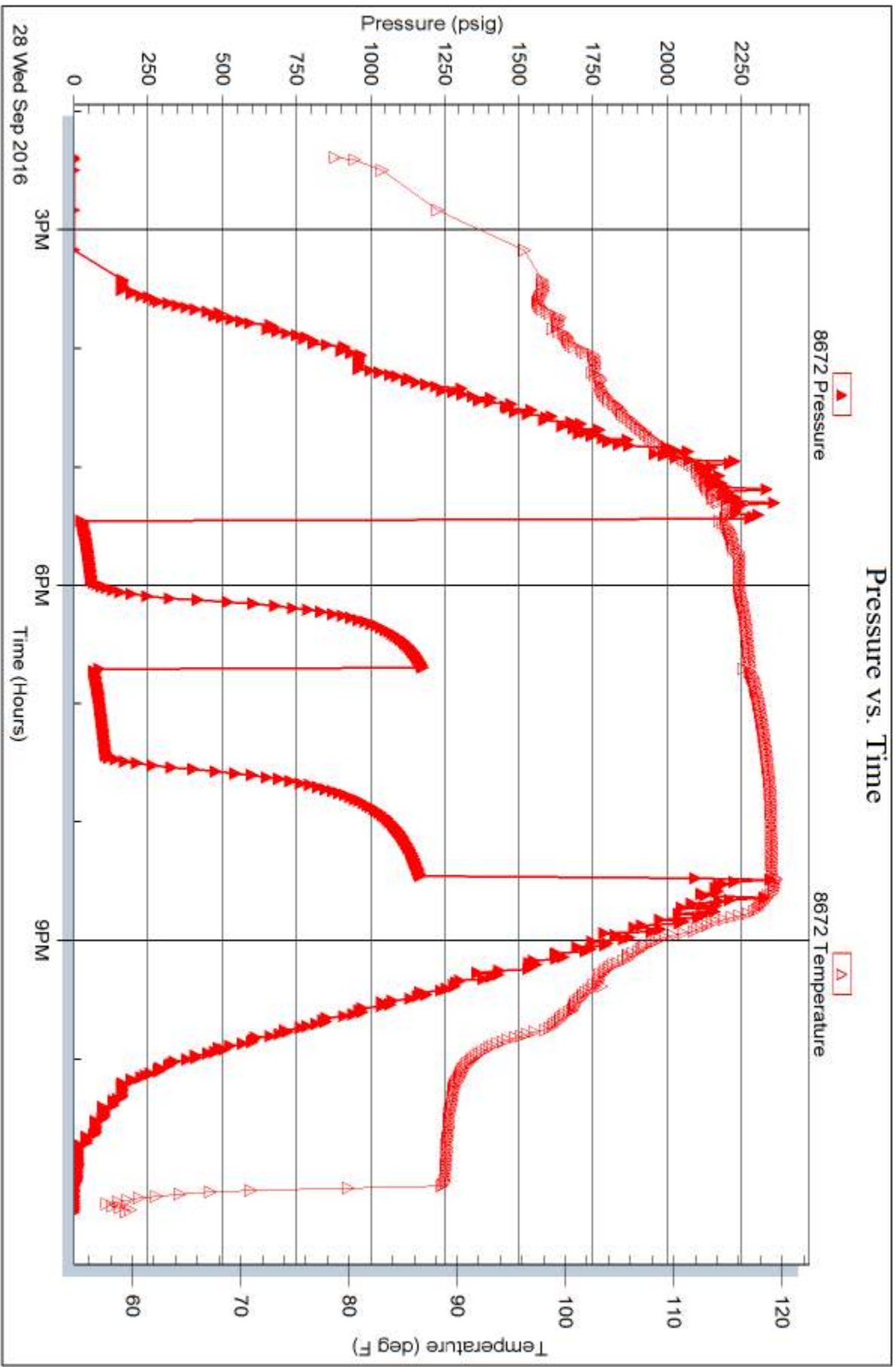
Serial #: 8672

Inside

American Warrior Inc.

O/Brate FLB #1-29

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 65614

Printed: 2016.09.30 @ 09:40:27



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **65614**

Well Name & No. O'Brate FLR # 1-29 Test No. 1 Date 9-28-16  
 Company American Warrior Inc Elevation 2898 KB 2838 GL  
 Address P.O. Box 399 Garden City KS 67846  
 Co. Rep / Geo. Luke Thompson Rig Duke 1  
 Location: Sec. 29 Twp. 25S Rge. 31W Co. Finney State KS

Interval Tested 4574-4605 Zone Tested Pawnee  
 Anchor Length 31 Drill Pipe Run 4264 Mud Wt. 9.3  
 Top Packer Depth 4569 Drill Collars Run 309 Vis. 48  
 Bottom Packer Depth 4574 Wt. Pipe Run Ø WL 8.8  
 Total Depth 4605 Chlorides 3300 ppm System LCM 3  
 Blow Description IF: BOB in 28 Min.  
IS: No Return Blow  
FF: Built to 8" Blow  
FS: No Return Blow

Rec	Feet of	%gas	%oil	%water	%mud
<del>62</del>	Feet of <u>GIP = 248'</u>				
<u>62</u>	Feet of <u>gcom</u>	<u>2</u>	<u>3</u>	<u>95</u>	
<u>124</u>	Feet of <u>gcom</u>	<u>5</u>	<u>5</u>	<u>90</u>	
	Feet of				
	Feet of				

Rec Total 186 BHT 121 Gravity — API RW — @ — °F Chlorides — ppm

(A) Initial Hydrostatic <u>2270</u>	<input checked="" type="checkbox"/> Test <u>1150</u> <del>\$1250.00</del>	T-On Location <u>12:30</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars <u>\$250.00</u>	T-Started <u>14:23</u>
(C) First Final Flow <u>58</u>	<input checked="" type="checkbox"/> Safety Joint <u>\$75.00</u>	T-Open <u>17:27</u>
(D) Initial Shut-In <u>1176</u>	<input checked="" type="checkbox"/> Circ Sub <u>NC</u>	T-Pulled <u>20:20</u>
(E) Second Initial Flow <u>71</u>	<input type="checkbox"/> Hourly Standby	T-Out
(F) Second Final Flow <u>105</u>	<input checked="" type="checkbox"/> Mileage <u>110RT = \$82.50/-</u>	Comments <u>Loaded 9-29-16</u>
(G) Final Shut-In <u>1167</u>	<input checked="" type="checkbox"/> Sampler <u>X2</u> +82.50	<u>19:15</u>
(H) Final Hydrostatic <u>2260</u>	<input type="checkbox"/> Straddle	
	<input type="checkbox"/> Shale Packer	<input type="checkbox"/> Ruined Shale Packer
	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Ruined Packer
	<input type="checkbox"/> Extra Recorder	<input type="checkbox"/> Extra Copies
Initial Open <u>30</u>	<input type="checkbox"/> Day Standby	Sub Total <u>0</u>
Initial Shut-In <u>45</u>	<input type="checkbox"/> Accessibility <u>1640</u>	Total <u>1640.00</u>
Final Flow <u>45</u>	Sub Total <u>\$1657.50/-</u>	MP/DST Disc't
Final Shut-In <u>60</u>		

Approved By \_\_\_\_\_ Our Representative Mike Roberts  
 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.