



## DRILL STEM TEST REPORT

Prepared For: **Forestar Petroleum Corp.**

1801 Broadway Suite 600  
Denver CO 80202

ATTN: Larry Nicholson

### **Jacob #1-9**

#### **9-10s-35w Thomas,KS**

Start Date: 2014.02.18 @ 20:04:00

End Date: 2014.02.19 @ 05:30:02

Job Ticket #: 56309                      DST #: 1

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

Printed: 2014.02.27 @ 11:33:51



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Forestar Petroleum Corp.  
 1801 Broadway Suite 600  
 Denver CO 80202  
 ATTN: Larry Nicholson

**9-10s-35w Thomas,KS**

**Jacob #1-9**

Job Ticket: 56309

**DST#: 1**

Test Start: 2014.02.18 @ 20:04:00

## GENERAL INFORMATION:

Formation: **LKC "I-K"**  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 23:02:25  
 Time Test Ended: 05:30:02  
 Interval: **4422.00 ft (KB) To 4486.00 ft (KB) (TVD)**  
 Total Depth: 4486.00 ft (KB) (TVD)  
 Hole Diameter: 7.88 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole (Initial)  
 Tester: Will MacLean  
 Unit No: 72  
 Reference Elevations: 3309.00 ft (KB)  
 3299.00 ft (CF)  
 KB to GR/CF: 10.00 ft

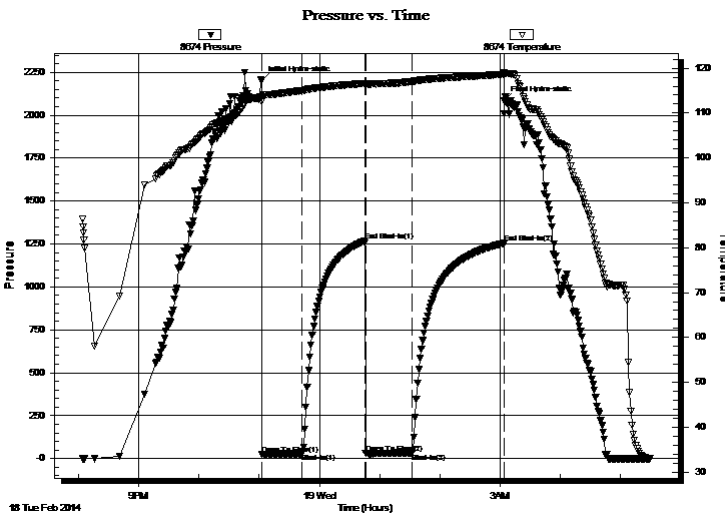
## Serial #: 8674

Inside

Press@RunDepth: 32.78 psig @ 4403.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2014.02.18 End Date: 2014.02.19 Last Calib.: 2014.02.19  
 Start Time: 20:04:00 End Time: 05:30:02 Time On Btm: 2014.02.18 @ 23:02:10  
 Time Off Btm: 2014.02.19 @ 03:04:24

TEST COMMENT: IF- Weak Surface Blow 3/4" Built to 2 1/2" Chased Tool about 4'  
 IS- No Blow  
 FF- No Blow  
 FS- No Blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2203.07	113.62	Initial Hydro-static
1	25.27	112.48	Open To Flow (1)
41	29.01	114.96	Shut-In(1)
103	1266.68	116.60	End Shut-In(1)
104	29.96	116.20	Open To Flow (2)
150	32.78	117.00	Shut-In(2)
242	1253.95	118.60	End Shut-In(2)
243	2083.08	118.81	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
34.00	WCM 2%w 98%o with a Skim of Oil on	0.48

## Gas Rates

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





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Forestar Petroleum Corp.  
1801 Broadway Suite 600  
Denver CO 80202  
ATTN: Larry Nicholson

**9-10s-35w Thomas,KS**  
**Jacob #1-9**  
Job Ticket: 56309      **DST#: 1**  
Test Start: 2014.02.18 @ 20:04:00

**Tool Information**

Drill Pipe:	Length: 4405.00 ft	Diameter: 3.80 inches	Volume: 61.79 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	28000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	14000.00 lb
			<u>Total Volume: 61.79 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	30.00 ft			String Weight: Initial	52000.00 lb
Depth to Top Packer:	4402.00 ft			Final	52000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	64.00 ft				
Tool Length:	91.00 ft				
Number of Packers:	2	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			4376.00	
Shut In Tool	5.00			4381.00	
Hydraulic tool	5.00			4386.00	
Jars	5.00			4391.00	
Safety Joint	2.00			4393.00	
Packer	5.00			4398.00	27.00      Bottom Of Top Packer
Packer	4.00			4402.00	
Stubb	1.00			4403.00	
Recorder	0.00	8355	Outside	4403.00	
Recorder	0.00	8674	Inside	4403.00	
Perforations	21.00			4424.00	
Change Over Sub	1.00			4425.00	
Drill Pipe	30.00			4455.00	
Change Over Sub	1.00			4456.00	
Perforations	5.00			4461.00	
Bullnose	5.00			4466.00	64.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>91.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

## FLUID SUMMARY

Forestar Petroleum Corp.

**9-10s-35w Thomas,KS**

1801 Broadway Suite 600  
Denver CO 80202

**Jacob #1-9**

Job Ticket: 56309

**DST#: 1**

ATTN: Larry Nicholson

Test Start: 2014.02.18 @ 20:04:00

### 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: 58.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.95 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 10000.00 ppm

Filter Cake: 2.00 inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
34.00	WCM 2%w 98%m with a Skim of Oil on To	0.477

Total Length: 34.00 ft      Total Volume: 0.477 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

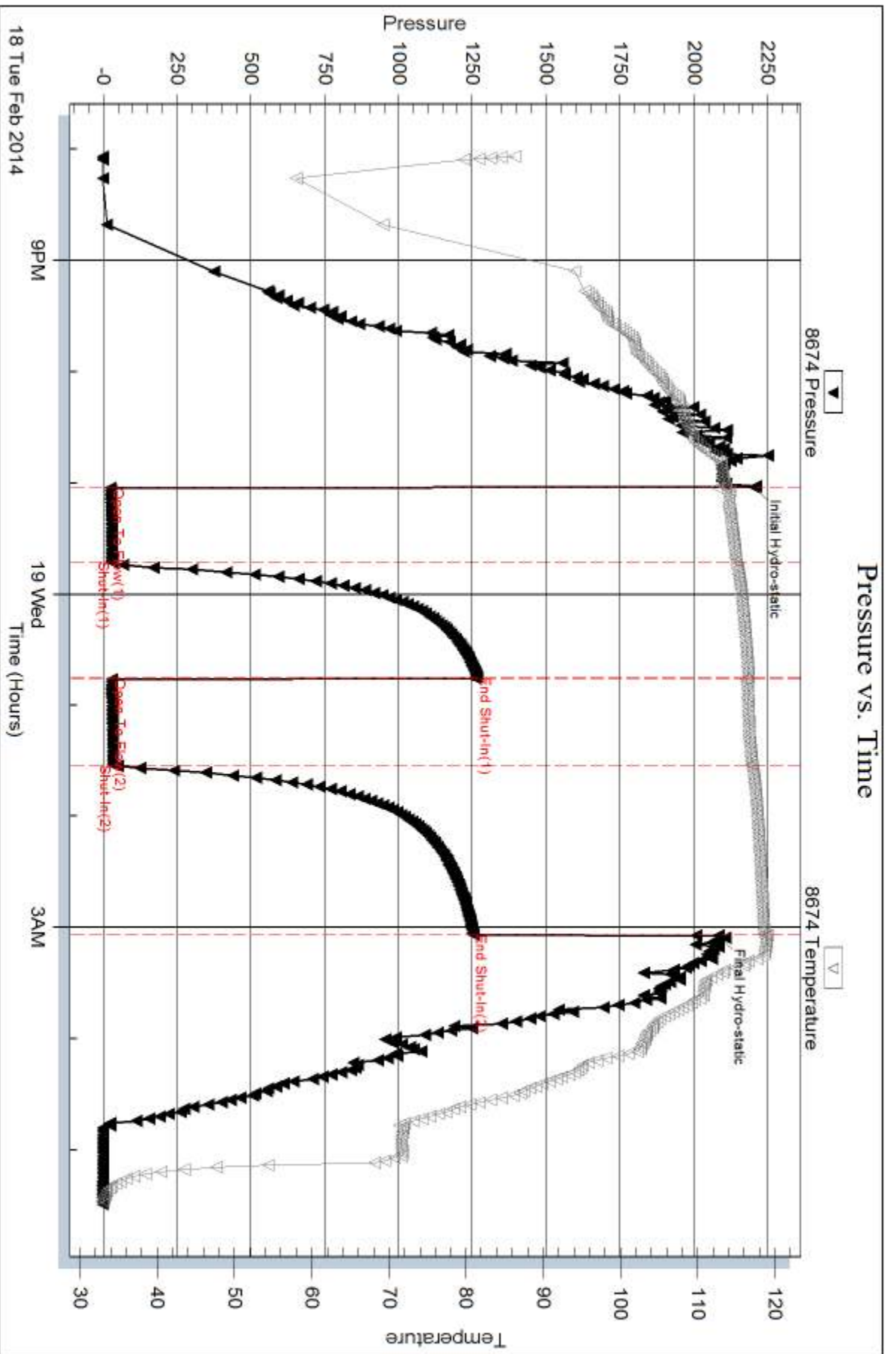
Serial #: 8674

Inside

Forestar Petroleum Corp.

Jacob #1-9

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 56309

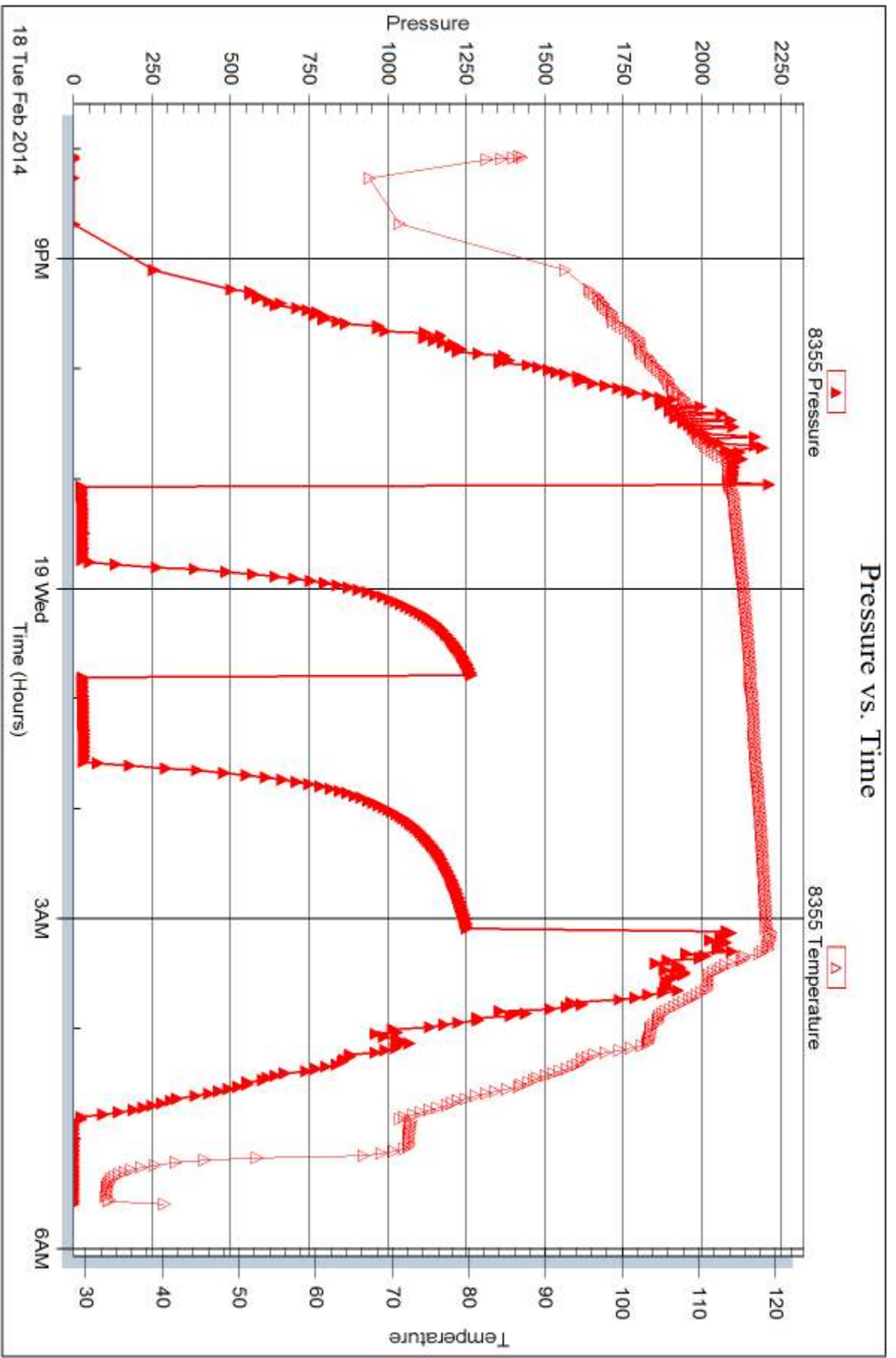
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Serial #: 8355

Outside Forestar Petroleum Corp.

Jacob #1-9

DST Test Number: 1



Trilobite Testing, Inc

Ref. No: 56309

Printed: 2014.02.27 @ 11:33:54



## DRILL STEM TEST REPORT

Prepared For: **Forestar Petroleum Corp.**

1801 Broadway Suite 600  
Denver CO 80202

ATTN: Larry Nicholson

### **Jacob #1-9**

#### **9-10s-35w Thomas,KS**

Start Date: 2014.02.20 @ 16:14:00

End Date: 2014.02.21 @ 00:51:39

Job Ticket #: 56310                      DST #: 2

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

Printed: 2014.02.27 @ 11:33:03

Forestar Petroleum Corp.

9-10s-35w Thomas,KS

Jacob #1-9

DST # 2

Ft. Scott - Johnson

2014.02.20





**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Forestar Petroleum Corp.  
 1801 Broadway Suite 600  
 Denver CO 80202  
 ATTN: Larry Nicholson

**9-10s-35w Thomas,KS**  
**Jacob #1-9**  
 Job Ticket: 56310      **DST#: 2**  
 Test Start: 2014.02.20 @ 16:14:00

## GENERAL INFORMATION:

Formation: **Ft. Scott - Johnson**  
 Deviated: No Whipstock: ft (KB)  
 Test Type: Conventional Bottom Hole (Reset)  
 Time Tool Opened: 19:06:25  
 Tester: Will MacLean  
 Time Test Ended: 00:51:39  
 Unit No: 72  
**Interval: 4647.00 ft (KB) To 4782.00 ft (KB) (TVD)**  
 Reference Elevations: 3309.00 ft (KB)  
 Total Depth: 4782.00 ft (KB) (TVD)  
 3299.00 ft (CF)  
 Hole Diameter: 7.88 inches  
 Hole Condition: Good  
 KB to GR/CF: 10.00 ft

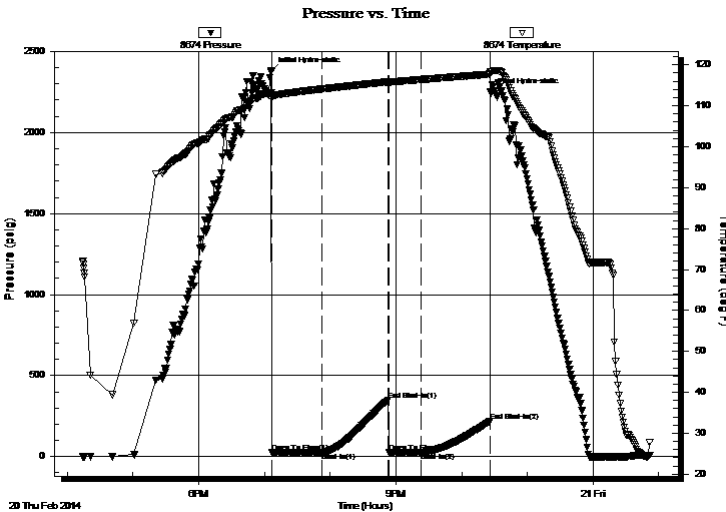
## Serial #: 8674

Inside

Press@RunDepth: 26.83 psig @ 4649.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2014.02.20      End Date: 2014.02.21      Last Calib.: 2014.02.21  
 Start Time: 16:14:00      End Time: 00:51:40      Time On Btm: 2014.02.20 @ 19:06:10  
 Time Off Btm: 2014.02.20 @ 22:26:24

TEST COMMENT: IF- Weak Surface Blow Built to 1/2" Died Back to 1/4"  
 IS- No Blow  
 FF- No Blow  
 FS- No Blow

## PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2375.41	113.08	Initial Hydro-static
1	24.53	111.76	Open To Flow (1)
47	26.84	114.09	Shut-In(1)
107	348.12	115.84	End Shut-In(1)
108	26.27	115.71	Open To Flow (2)
137	26.83	116.41	Shut-In(2)
200	217.88	117.72	End Shut-In(2)
201	2248.65	118.42	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
15.00	WCM 3%w 97%w with a Few Oil Spots	0.21

\* Recovery from multiple tests

## Gas Rates

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





**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Forestar Petroleum Corp.  
1801 Broadway Suite 600  
Denver CO 80202  
ATTN: Larry Nicholson

**9-10s-35w Thomas,KS**  
**Jacob #1-9**  
Job Ticket: 56310      **DST#: 2**  
Test Start: 2014.02.20 @ 16:14:00

## Tool Information

Drill Pipe:	Length: 4642.00 ft	Diameter: 3.80 inches	Volume: 65.12 bbl	Tool Weight:	2000.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 0.00 inches	Volume: 0.00 bbl	Weight set on Packer:	28000.00 lb
Drill Collar:	Length: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose:	16000.00 lb
			<u>Total Volume: 65.12 bbl</u>	Tool Chased	ft
Drill Pipe Above KB:	22.00 ft			String Weight: Initial	54000.00 lb
Depth to Top Packer:	4647.00 ft			Final	54000.00 lb
Depth to Bottom Packer:	ft				
Interval between Packers:	135.00 ft				
Tool Length:	162.00 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			4621.00	
Shut In Tool	5.00			4626.00	
Hydraulic tool	5.00			4631.00	
Jars	5.00			4636.00	
Safety Joint	2.00			4638.00	
Packer	5.00			4643.00	27.00      Bottom Of Top Packer
Packer	4.00			4647.00	
Stubb	1.00			4648.00	
Perforations	1.00			4649.00	
Recorder	0.00	8355	Outside	4649.00	
Recorder	0.00	8674	Inside	4649.00	
Perforations	20.00			4669.00	
Change Over Sub	1.00			4670.00	
Drill Pipe	96.00			4766.00	
Change Over Sub	1.00			4767.00	
Perforations	10.00			4777.00	
Bullnose	5.00			4782.00	135.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>	<b>162.00</b>				



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Forestar Petroleum Corp.  
1801 Broadway Suite 600  
Denver CO 80202  
ATTN: Larry Nicholson

**9-10s-35w Thomas,KS**  
**Jacob #1-9**  
Job Ticket: 56310      **DST#: 2**  
Test Start: 2014.02.20 @ 16:14:00

## 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: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.75 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: 9500.00 ppm			
Filter Cake: 1.00 inches			

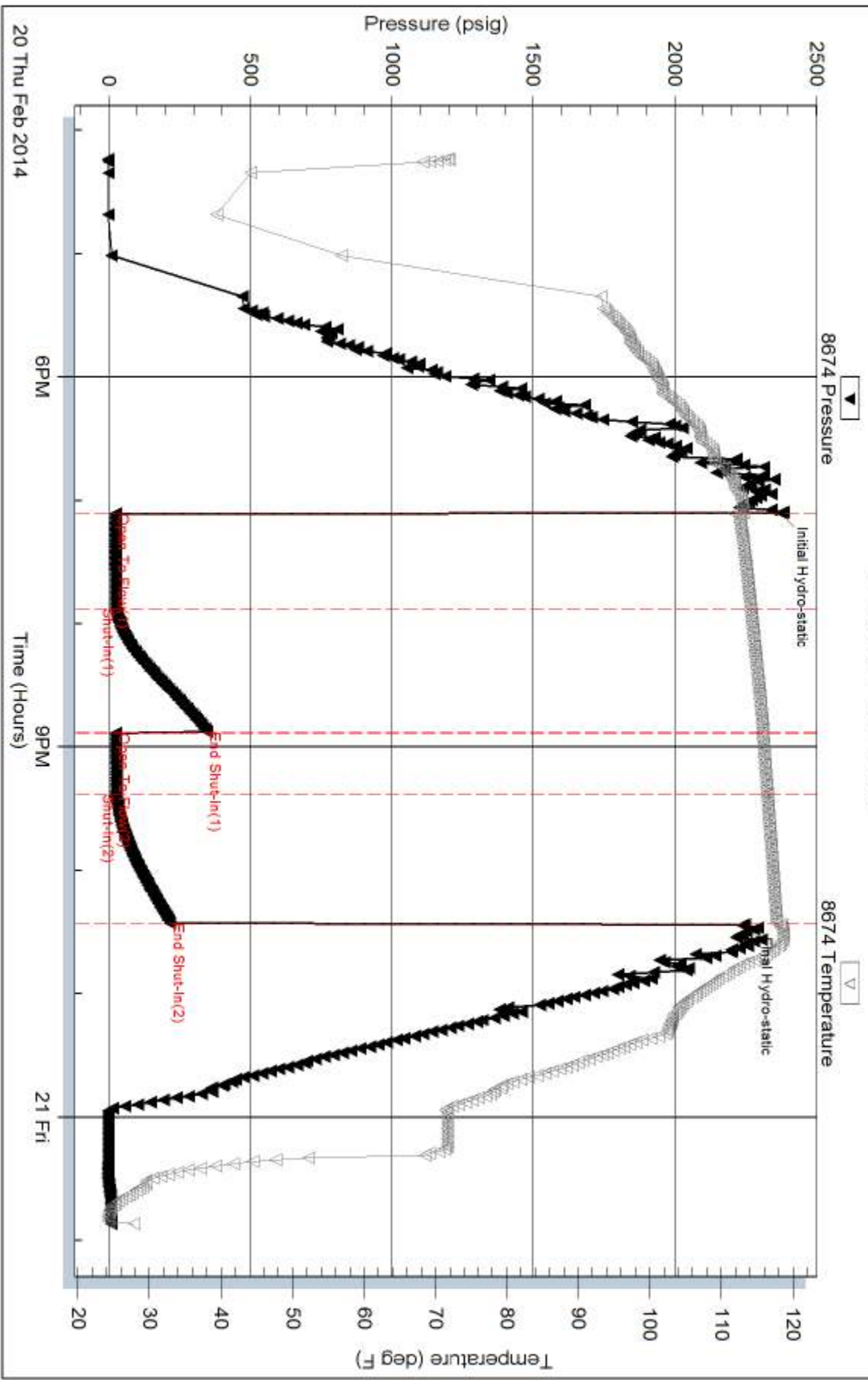
## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
15.00	WCM 3%w 97%m with a Few Oil Spots in	0.210

Total Length: 15.00 ft      Total Volume: 0.210 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

### Pressure vs. Time

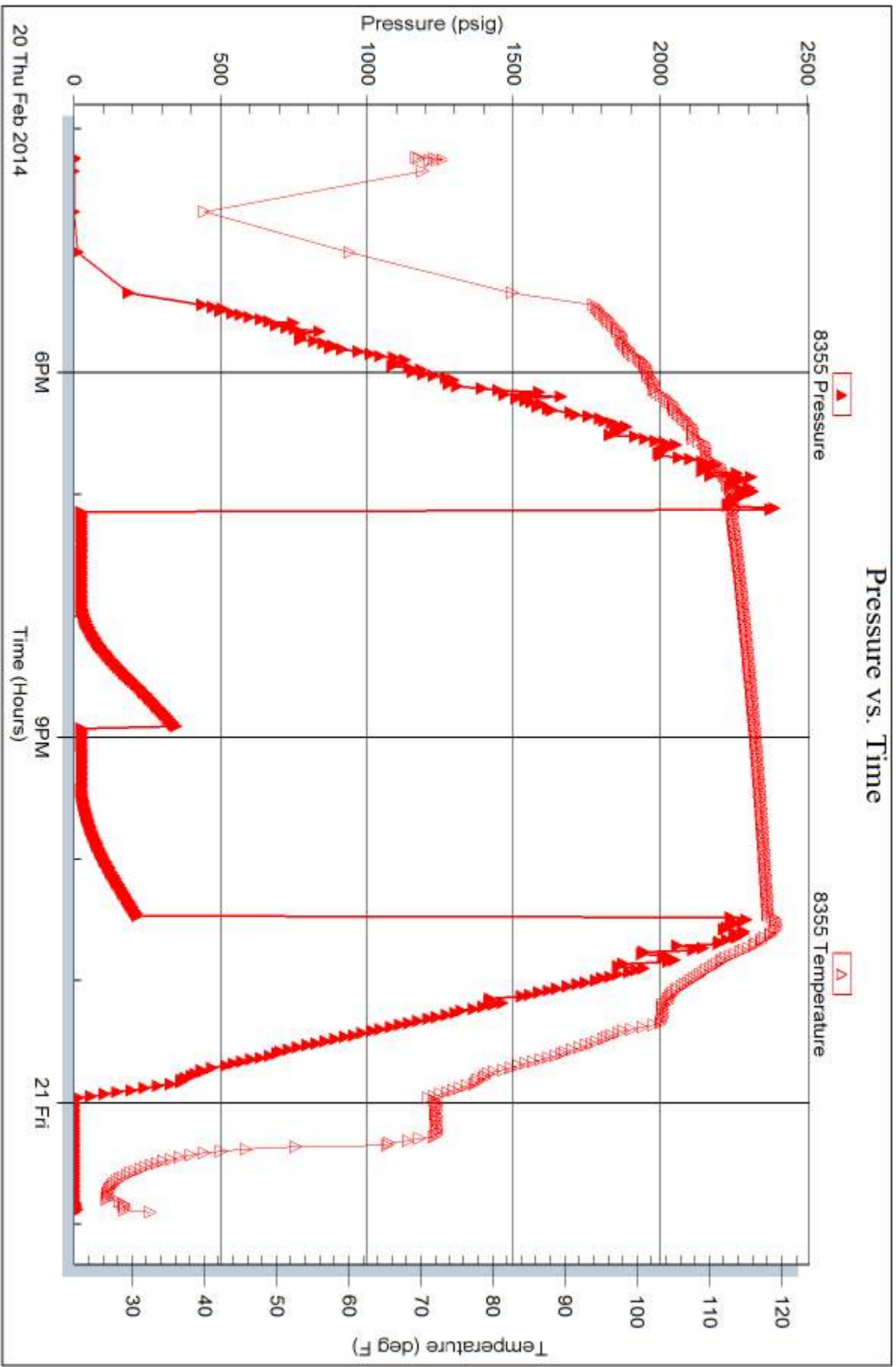


Serial #: 8355

Outside Forestar Petroleum Corp.

Jacob #1-9

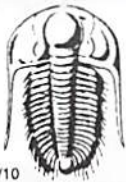
DST Test Number: 2



Trilobite Testing, Inc

Ref. No: 56310

Printed: 2014.02.27 @ 11:33:06



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 56309

Well Name & No. Jacob #19 Test No. DST #1 Date 2-18-14  
 Company Forestar Petroleum Corp Elevation 3309 KB 3299 GL  
 Address 1801 Broadway Suite 600 Denver CO. 80202  
 Co. Rep / Geo. Larry Nicholson Rig Val Rg #7  
 Location: Sec. 9 Twp. 10S Rge. 35W Co. Thomas State KS

Interval Tested 4402 - 4466 Zone Tested LRC "J, R, L"  
 Anchor Length 64 Drill Pipe Run 4405 Mud Wt. 9.1  
 Top Packer Depth 4398 Drill Collars Run 0 Vis 58  
 Bottom Packer Depth 4402 Wt. Pipe Run 0 WL 8.0  
 Total Depth 4466 Chlorides 10,000 ppm System LCM 116  
 Blow Description IF - Weak Surface Blow 34' Built to 2 1/2" Chased Tool about 4'  
ISI - No Blow  
FF - No Blow  
FSI - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>34</u>	<u>WCM with a SR. of 0.1</u>			<u>2%</u>	<u>98%</u>
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 34 BHT 118 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2203</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>18:08</u>
(B) First Initial Flow <u>25</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>20:04</u>
(C) First Final Flow <u>29</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>23:02</u>
(D) Initial Shut-In <u>1266</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>3:04</u>
(E) Second Initial Flow <u>29</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>5:30</u>
(F) Second Final Flow <u>32</u>	<input checked="" type="checkbox"/> Mileage <u>150 RIT 232.50</u>	Comments _____
(G) Final Shut-In <u>1253</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2083</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<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>45</u>	<input type="checkbox"/> Day Standby _____	Total <u>2057.50</u>
Final Shut-In <u>90</u>	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>2057.50</u>	

Approved By Jerry Huder Our Representative Rick M...

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.





# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. **56310**

Well Name & No. Jacob # 1-9 Test No. DST #2 Date 2-20-14  
 Company Forestar Petroleum Corp. Elevation 3309 KB 3299 GL  
 Address 1801 Broadway Suite 600 Denver CO. 80202  
 Co. Rep / Geo. Larry Nicholson Rig Val Rs #17  
 Location: Sec. 9 Twp. 10S Rge. 35W Co. Thomas State KS

Interval Tested 4647-4782 Zone Tested Ft. Scott / Cherokee / Johnson  
 Anchor Length 135 Drill Pipe Run 4642 Mud Wt. 9.2  
 Top Packer Depth 4643 Drill Collars Run 0 Vis 48  
 Bottom Packer Depth 4647 Wt. Pipe Run 0 WL 8-8  
 Total Depth 4782 Chlorides 9500 ppm System LCM 1/5  
 Blow Description IF- Weak Surface Blow Burt to 1/2" Dried Back to 1/4"  
ISI- No Blow  
FF- No Blow  
FSI- No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>15</u>	<u>WCM with a few Oil Spots in Tool</u>		<u>3</u>	<u>97</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 15 BHT 118 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>2375</u>	<input checked="" type="checkbox"/> Test <u>1250</u>	T-On Location <u>14:00</u>
(B) First Initial Flow <u>24</u>	<input checked="" type="checkbox"/> Jars <u>250</u>	T-Started <u>16:14</u>
(C) First Final Flow <u>26</u>	<input checked="" type="checkbox"/> Safety Joint <u>75</u>	T-Open <u>19:06</u>
(D) Initial Shut-In <u>348</u>	<input checked="" type="checkbox"/> Circ Sub <u>NIC</u>	T-Pulled <u>22:26</u>
(E) Second Initial Flow <u>26</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>00:51</u>
(F) Second Final Flow <u>26</u>	<input checked="" type="checkbox"/> Mileage <u>150 RIT</u> 232.50	Comments _____
(G) Final Shut-In <u>217</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>2248</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____
Initial Open <u>45</u>	<input checked="" type="checkbox"/> Shale Packer <u>250</u>	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>60</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total <u>283.33</u>
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby <u>1d 8.5h</u>	Total <u>2340.83</u>
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total <u>2057.50</u>	

Approved By [Signature] Our Representative [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.