



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Quest Energy LLC  
2732 N Reese Rd  
Brookville KS 67425-9812  
ATTN: Tom

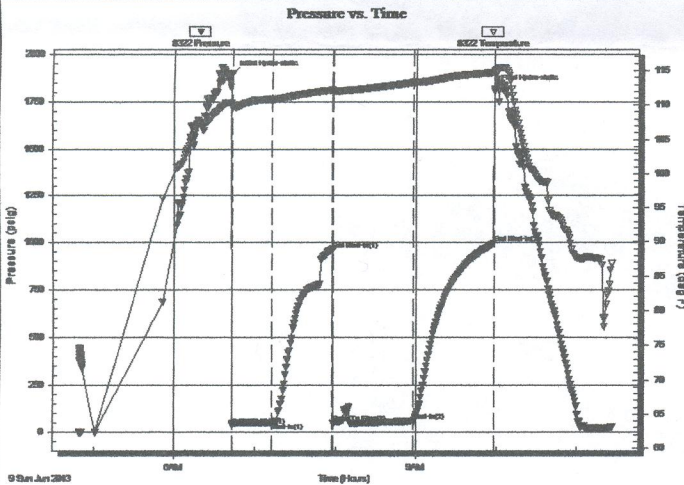
**8 17s 19w Rush**  
**Legleiter 1-8**  
Job Ticket: 53812      **DST#: 1**  
Test Start: 2013.06.09 @ 04:49:00

## GENERAL INFORMATION:

Formation: **Cherokee Sand**  
Deviated: No Whipstock: 2083.00 ft (KB)  
Time Tool Opened: 06:43:00  
Time Test Ended: 11:26:00  
Test Type: Conventional Bottom Hole (Initial)  
Tester: Jim Svaty  
Unit No: 41  
Interval: **3805.00 ft (KB) To 3850.00 ft (KB) (TVD)**  
Total Depth: 3850.00 ft (KB) (TVD)  
Reference Elevations: 2083.00 ft (KB)  
2078.00 ft (CF)  
Hole Diameter: 7.88 inches Hole Condition: Poor  
KB to GR/CF: 5.00 ft

**Serial #: 8322      Outside**  
Press@RunDepth: 60.45 psig @ 3813.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2013.06.09      End Date: 2013.06.09      Last Calib.: 2013.06.09  
Start Time: 04:49:00      End Time: 11:26:00      Time On Btm: 2013.06.09 @ 06:42:50  
Time Off Btm: 2013.06.09 @ 09:58:09

**TEST COMMENT:** 30-IFP- Surface Blow Building to 4 in.  
45-ISIP- No Blow  
60-FFP- Surface Blow Building to 3 in.  
60-FSIP- No Blow



## PRESSURE SUMMARY

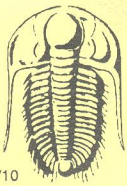
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1892.75	110.29	Initial Hydro-static
1	38.15	109.56	Open To Flow (1)
30	52.39	110.81	Shut-In(1)
75	963.52	112.17	End Shut-In(1)
76	49.82	111.95	Open To Flow (2)
135	60.45	113.27	Shut-In(2)
195	997.70	114.71	End Shut-In(2)
196	1819.37	115.04	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
83.00	Oil Speck Mud 100%	1.16

## Gas Rates

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



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53812

4/10

Well Name & No. Legleiter #1-8 Test No. 1 Date 6-9-13  
 Company Quest Energy LLC Elevation 2083 KB 2078 GL  
 Address 2732 N Reese Rd. Brookville Ks. 67425-9812  
 Co. Rep / Geo. Tom Rig Royal #1  
 Location: Sec. 8 Twp. 17<sup>s</sup> Rge. 19<sup>w</sup> Co. Rush State KS

Interval Tested Cherokee 3805-3850 Zone Tested Cherokee Sand.  
 Anchor Length ~~3805-3850~~ 45 Drill Pipe Run 3810 Mud Wt. 9.1  
 Top Packer Depth 3800 Drill Collars Run 0 Vis 54  
 Bottom Packer Depth 3805 Wt. Pipe Run 0 WL 8.0  
 Total Depth 3850 Chlorides 5000 ppm System LCM 2  
 Blow Description IFP - Surface Blow Building to 4in,  
ISIP - No Blow  
FFP - Surface Blow Building to 3in.  
FSIP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>83</u>	<u>Oil Speck Mud.</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 83 BHT 115 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1892</u>	<input checked="" type="checkbox"/> Test _____	T-On Location <u>00:05</u>
(B) First Initial Flow <u>38</u>	<input checked="" type="checkbox"/> Jars _____	T-Started <u>04:49</u>
(C) First Final Flow <u>52</u>	<input checked="" type="checkbox"/> Safety Joint _____	T-Open <u>06:43</u>
(D) Initial Shut-In <u>963</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>09:58</u>
(E) Second Initial Flow <u>49</u>	<input type="checkbox"/> Hourly Standby <u>10:00</u>	T-Out <u>11:26</u>
(F) Second Final Flow <u>60</u>	<input checked="" type="checkbox"/> Mileage <u>57 RT</u>	Comments _____
(G) Final Shut-In <u>997</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>1819</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	Sub Total _____
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder _____	Total _____
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total _____	

Approved By \_\_\_\_\_ 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.

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**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Quest Energy LLC  
2732 N Reese Rd  
Brookville KS 67425-9812  
ATTN: Tom

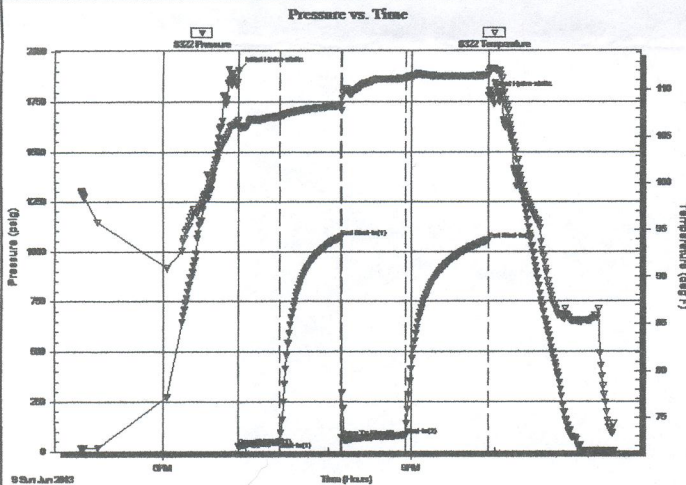
**8 17s 19w Rush**  
**Legleiter 1-8**  
Job Ticket: 53813      **DST#: 2**  
Test Start: 2013.06.09 @ 17:01:00

## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock: 2083.00 ft (KB)  
Time Tool Opened: 18:54:40  
Time Test Ended: 23:27:00  
Test Type: Conventional Bottom Hole (Reset)  
Tester: Jim Svaty  
Unit No: 41  
Interval: **3804.00 ft (KB) To 3865.00 ft (KB) (TVD)**  
Total Depth: 3865.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Poor  
Reference Elevations: 2083.00 ft (KB)  
2078.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 8322      Outside**  
Press@RunDepth: 81.95 psig @ 3828.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2013.06.09      End Date: 2013.06.09      Last Calib.: 2013.06.09  
Start Time: 17:01:00      End Time: 23:27:00      Time On Btm: 2013.06.09 @ 18:54:30  
Time Off Btm: 2013.06.09 @ 21:55:40

**TEST COMMENT:** 30-IFP- Surface Blow Building to 5 1/2 in.  
45-ISIP- No Blow  
45-FFP- Surface Blow Building to 4 1/2 in.  
60-FSIP- No Blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1904.73	106.77	Initial Hydro-static
1	26.23	106.15	Open To Flow (1)
30	48.90	107.21	Shut-In(1)
75	1071.37	108.33	End Shut-In(1)
75	69.78	107.78	Open To Flow (2)
121	81.95	111.25	Shut-In(2)
181	1055.39	111.51	End Shut-In(2)
182	1781.71	111.79	Final Hydro-static

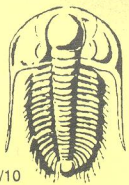
## Recovery

Length (ft)	Description	Volume (bbl)
146.00	Oil Speck Mud 100%	2.05

\* Recovery from multiple tests

## Gas Rates

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



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53813

4/10

Well Name & No. Legleiter 1-8 Test No. 2 Date 6-9-13  
 Company Quest Energy LLC Elevation 2083 KB 2078 GL  
 Address 2732 N. Reese Rd Brookville KS. 67425-9812  
 Co. Rep / Geo. Tom Rig Royal #1  
 Location: Sec. 8 Twp. 17 S Rge. 19 W Co. Rush State KS

Interval Tested 3804-3865 Zone Tested C.S. + Arbuckle  
 Anchor Length 61 Drill Pipe Run 3809 Mud Wt. 9.4  
 Top Packer Depth 3798 Drill Collars Run 0 Vis 68  
 Bottom Packer Depth 3804 Wt. Pipe Run 0 WL 9.6  
 Total Depth 3865 Chlorides 10000 ppm System LCM 1 1/2

Blow Description IFP - Surface Blow Building to 5 1/2 in.  
ISIP - No Blow.  
FFP - Surface Blow Building to 4 1/2 in  
FSIP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>146</u>	<u>0.1 Speck mud.</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 146 BHT 112 Gravity \_\_\_\_\_ API RW \_\_\_\_\_ @ \_\_\_\_\_ ° F Chlorides \_\_\_\_\_ ppm

(A) Initial Hydrostatic <u>1904</u>	<input checked="" type="checkbox"/> Test _____	T-On Location <u>16:30</u>
(B) First Initial Flow <u>26</u>	<input checked="" type="checkbox"/> Jars _____	T-Started <u>17:01</u>
(C) First Final Flow <u>48</u>	<input checked="" type="checkbox"/> Safety Joint _____	T-Open <u>18:55</u>
(D) Initial Shut-In <u>1071</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>21:55</u>
(E) Second Initial Flow <u>69</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>23:27</u>
(F) Second Final Flow <u>81</u>	<input checked="" type="checkbox"/> Mileage _____	Comments _____
(G) Final Shut-In <u>1055</u>	<input type="checkbox"/> Sampler _____	<input type="checkbox"/> Ruined Shale Packer _____
(H) Final Hydrostatic <u>1781</u>	<input type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Packer _____
Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Extra Copies _____
Initial Shut-In <u>45</u>	<input type="checkbox"/> Extra Packer _____	Sub Total _____
Final Flow <u>45</u>	<input type="checkbox"/> Extra Recorder _____	Total _____
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby _____	MP/DST Disc't _____
	<input type="checkbox"/> Accessibility _____	
	Sub Total _____	

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

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# DRILL STEM TEST REPORT

Quest Energy LLC  
2732 N Reese Rd  
Brookville KS 67425-9812  
ATTN: Tom

**8 17s 19w Rush**  
**Legleiter 1-8**  
Job Ticket: 53814      **DST#: 3**  
Test Start: 2013.06.10 @ 13:50:00

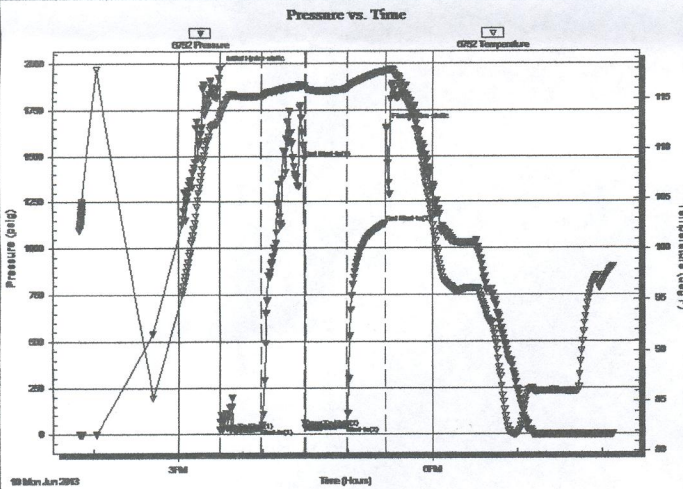
## GENERAL INFORMATION:

Formation: **Arbuckle**  
Deviated: No Whipstock: 2083.00 ft (KB)  
Time Tool Opened: 15:29:30  
Time Test Ended: 20:08:00  
Interval: **3852.00 ft (KB) To 3872.00 ft (KB) (TVD)**  
Total Depth: 3910.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Poor

Test Type: Conventional Straddle (Reset)  
Tester: Jim Svaty  
Unit No: 41  
Reference Elevations: 2083.00 ft (KB)  
2078.00 ft (CF)  
KB to GR/CF: 5.00 ft

**Serial #: 6752**      **Inside**  
Press@RunDepth: 47.17 psig @ 3853.00 ft (KB)      Capacity: 8000.00 psig  
Start Date: 2013.06.10      End Date: 2013.06.10      Last Calib.: 2013.06.10  
Start Time: 13:50:00      End Time: 20:08:00      Time On Btm: 2013.06.10 @ 15:29:20  
Time Off Btm: 2013.06.10 @ 17:27:00

**TEST COMMENT:** 30-IFP- Surface Blow Building to 3 in.  
30-ISIP- No Blow  
30-FFP- Surface Blow Building to 2 3/4 in.  
30-FSIP- No Blow



## PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1968.77	113.31	Initial Hydro-static
1	22.68	112.96	Open To Flow (1)
30	31.78	115.22	Shut-In(1)
60	1486.67	116.24	End Shut-In(1)
61	34.39	115.94	Open To Flow (2)
91	47.17	115.99	Shut-In(2)
118	1133.85	117.66	End Shut-In(2)
118	1657.60	117.75	Final Hydro-static

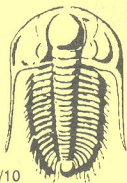
## Recovery

Length (ft)	Description	Volume (bbl)
10.00	OWCM 3%O 47%w 50%m	0.14
63.00	WCM 50%w 50%m Show of Oil	0.88

## Gas Rates

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

\* Recovery from multiple tests



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 53814

4/10

Well Name & No. Legleiter #1-8 Test No. 3 Date 6-10-13  
 Company Quest Energy LLC Elevation 2083 KB 2078 GL  
 Address 2732 N. Reese Rd Brookville KS 67425-9812  
 Co. Rep / Geo. Tom Rig Royal #1  
 Location: Sec. 8 Twp. 17<sup>s</sup> Rge. 19<sup>w</sup> Co. Rush State KS.

Interval Tested 3852-3872 Zone Tested Arbuckle  
 Anchor Length 20 (38 T.P.) Drill Pipe Run 3843 Mud Wt. 9.4  
 Top Packer Depth 3852 Drill Collars Run 0 Vis 68  
 Bottom Packer Depth 3872 Wt. Pipe Run 0 WL 9.6  
 Total Depth 3910 Chlorides 10000 ppm System LCM 1.1/2

Blow Description IFP - Surface Blow Building to 3 in.  
ISIP - No Blow  
FFP - Surface Blow Building to 2 3/4 in.  
FSIP - No Blow

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>0 WCM</u>	<u>3</u>	<u>47</u>	<u>50</u>	
<u>63</u>	<u>WCM Show of Oil</u>		<u>50</u>	<u>50</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 73 BHT 117 Gravity \_\_\_\_\_ API RW .190 @ 95 ° F Chlorides 26000 ppm

(A) Initial Hydrostatic <u>1968</u>	<input checked="" type="checkbox"/> Test _____	T-On Location <u>13:10</u>
(B) First Initial Flow <u>22</u>	<input checked="" type="checkbox"/> Jars _____	T-Started <u>13:50</u>
(C) First Final Flow <u>31</u>	<input checked="" type="checkbox"/> Safety Joint _____	T-Open <u>15:30</u>
(D) Initial Shut-In <u>1486</u>	<input type="checkbox"/> Circ Sub _____	T-Pulled <u>17:30</u>
(E) Second Initial Flow <u>34</u>	<input type="checkbox"/> Hourly Standby _____	T-Out <u>20:08</u>
(F) Second Final Flow <u>47</u>	<input checked="" type="checkbox"/> Mileage _____	Comments _____
(G) Final Shut-In <u>1133</u>	<input type="checkbox"/> Sampler _____	
(H) Final Hydrostatic <u>1657</u>	<input checked="" type="checkbox"/> Straddle _____	<input type="checkbox"/> Ruined Shale Packer _____

Initial Open <u>30</u>	<input type="checkbox"/> Shale Packer _____	<input type="checkbox"/> Ruined Packer _____
Initial Shut-In <u>30</u>	<input type="checkbox"/> Extra Packer _____	<input type="checkbox"/> Extra Copies _____
Final Flow <u>30</u>	<input type="checkbox"/> Extra Recorder _____	Sub Total _____
Final Shut-In <u>30</u>	<input type="checkbox"/> Day Standby _____	Total _____
	<input type="checkbox"/> Accessibility _____	MP/DST Disc't _____
	Sub Total _____	

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

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