

**TRILOBITE  
TESTING, INC.**

# DRILL STEM TEST REPORT

Bickle Energies, LLC

20 12s 33w Logan, Ks

PO Box 816  
Hays, Ks 67601

Ahern #1

Job Ticket: 64636

DST#: 1

ATTN: Garet Dinkel

Test Start: 2016.01.20 @ 14:30:00

## GENERAL INFORMATION:

Formation: **Johnson**

Deviated: **No** Whipstock: **ft (KB)**

Time Tool Opened: 16:59:15

Time Test Ended: 23:05:45

Test Type: **Conventional Bottom Hole (Initial)**

Tester: **Bradley Walter**

Unit No: **69**

Interval: **4652.00 ft (KB) To 4725.00 ft (KB) (TVD)**

Total Depth: **4725.00 ft (KB) (TVD)**

Hole Diameter: **7.88 inches** Hole Condition: **Good**

Reference Elevations: **3161.00 ft (KB)**

**3156.00 ft (CF)**

KB to GR/CF: **5.00 ft**

Serial #: **8522** Outside

Press@RunDepth: **408.06 psig @ 4653.00 ft (KB)**

Start Date: **2016.01.20**

End Date: **2016.01.20**

Capacity: **8000.00 psig**

Last Calib.: **2016.01.20**

Start Time: **14:30:00**

End Time: **23:05:45**

Time On Btm: **2016.01.20 @ 16:58:45**

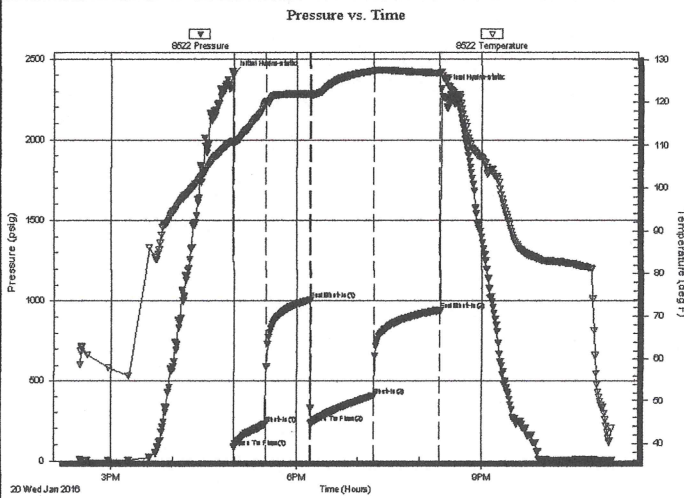
Time Off Btm: **2016.01.20 @ 20:20:45**

TEST COMMENT: **IF: BOB @ 10 minutes.**

**IS: No return.**

**FF: BOB @ 16 min.**

**FSI: No return.**



## PRESSURE SUMMARY

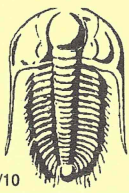
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2404.61	111.08	Initial Hydro-static
1	82.71	110.44	Open To Flow (1)
32	227.86	120.00	Shut-In(1)
75	1005.99	122.04	End Shut-In(1)
76	235.10	121.78	Open To Flow (2)
137	408.06	127.35	Shut-In(2)
201	942.95	126.87	End Shut-In(2)
202	2318.45	127.09	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
490.00	smcw 3m 97w (oil trace)	5.78
330.00	somcw 2o 30m 68w	4.63
10.00	oil 100o	0.14
0.00	45' GIP	0.00

## Gas Rates

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



# TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

## Test Ticket

NO. 64636

Well Name & No. Ahern # 1 Test No. 1 Date 1/20/2016  
 Company Buckle Energies, LLC Elevation 3161 KB 3156 GL  
 Address 20 Box 816 Hays, Ks 67601  
 Co. Rep / Geo. Garet Dinkel Rig WW # 10  
 Location: Sec. 20 Twp. 12s Rge. 33w Co. Logan State KS

Interval Tested 4652 - 4725 Zone Tested Johnson  
 Anchor Length 73 Drill Pipe Run 4520 Mud Wt. 9.4  
 Top Packer Depth 4647 Drill Collars Run 120 Vis 58  
 Bottom Packer Depth 4652 Wt. Pipe Run 0 WL 8.0  
 Total Depth 4725 Chlorides 3500 ppm System LCM 1 #

Blow Description JF: BOD @ 10 min.  
JSJ: No return.  
FF: BOD @ 16 min.  
FST: No return.

Rec	Feet of	%gas	%oil	%water	%mud
<u>10</u>	<u>OIL</u>	<u>100</u>			
<u>330</u>	<u>50mcw</u>	<u>2</u>	<u>68</u>	<u>30</u>	
<u>490</u>	<u>5mcw Trace OIL</u>		<u>97</u>	<u>3</u>	
	<u>45' GJP</u>				

Rec Total 830 BHT 127 Gravity - API RW 1488 @ 50 °F Chlorides 19,000 ppm

(A) Initial Hydrostatic <u>2405</u>	<input checked="" type="checkbox"/> Test	T-On Location <u>11.40</u>
(B) First Initial Flow <u>83</u>	<input checked="" type="checkbox"/> Jars	T-Started <u>1430</u>
(C) First Final Flow <u>228</u>	<input checked="" type="checkbox"/> Safety Joint	T-Open <u>1658</u>
(D) Initial Shut-In <u>1006</u>	<input checked="" type="checkbox"/> Circ Sub <u>N/C</u>	T-Pulled <u>2013</u>
(E) Second Initial Flow <u>235</u>	<input type="checkbox"/> Hourly Standby	T-Out <u>2306</u>
(F) Second Final Flow <u>408</u>	<input checked="" type="checkbox"/> Mileage <u>98 RT</u>	Comments
(G) Final Shut-In <u>943</u>	<input type="checkbox"/> Sampler	
(H) Final Hydrostatic <u>2318</u>	<input 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>45</u>	<input type="checkbox"/> Extra Packer	<input type="checkbox"/> Extra Copies
Final Flow <u>60</u>	<input type="checkbox"/> Extra Recorder	Sub Total
Final Shut-In <u>60</u>	<input type="checkbox"/> Day Standby	Total
	<input type="checkbox"/> Accessibility	MP/DST Disc't
	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.

Serial #: 8522

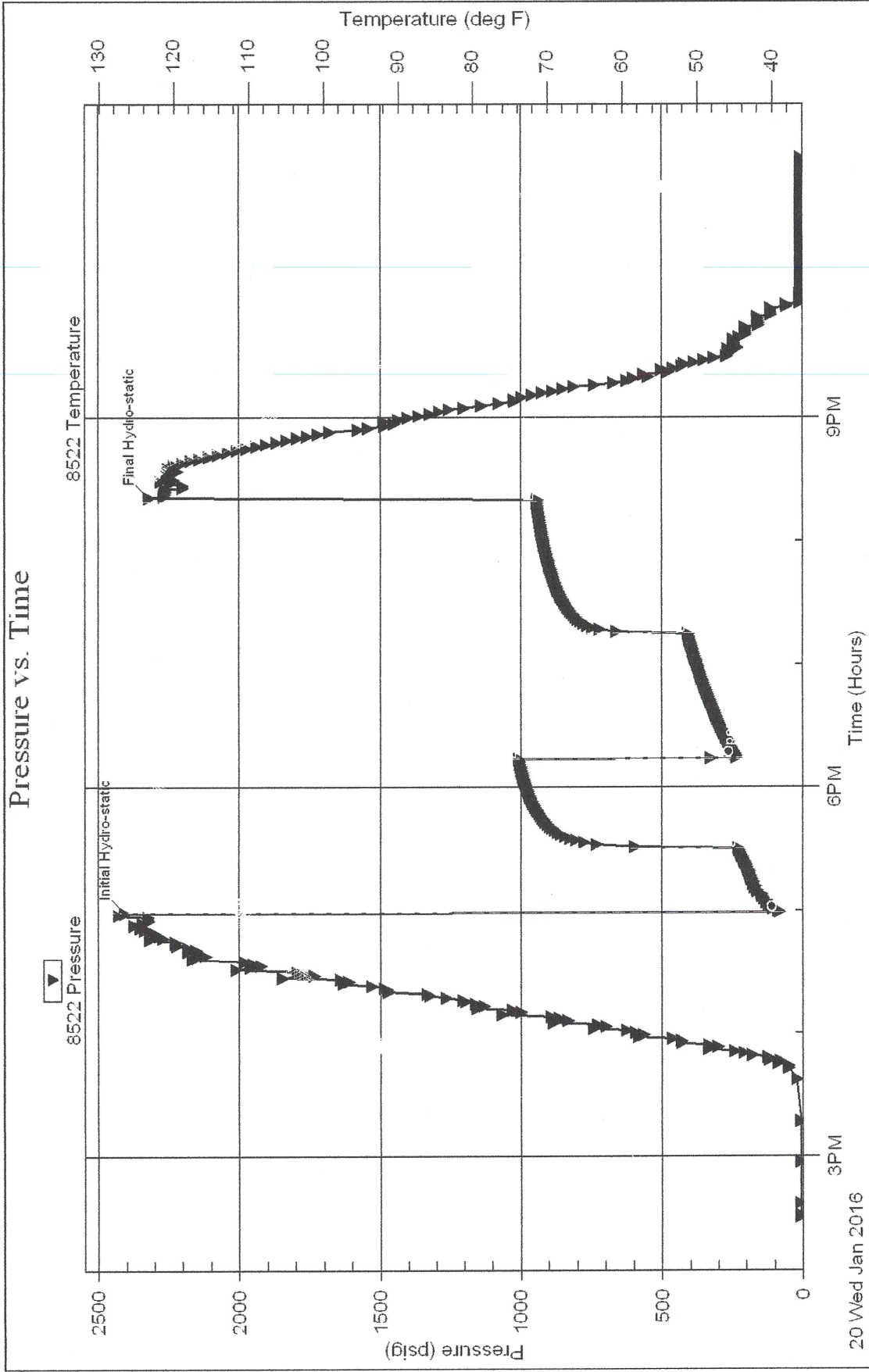
Outside

Bickle Energies, LLC

Ahern #1

DST Test Number: 1

### Pressure vs. Time



Trilobite Testing, Inc

Ref. No: 64636

Printed: 2016.01.20 @ 23:24:15