

**TRILOBITE  
TESTING, INC.**

**DRILL STEM TEST REPORT**

Prepared For: **Aleo Oil Company**

1864 NW 20th  
Hoisington KS 67554

ATTN: Brad Hutchison

**22 15 13W Russell KS**

**Esfeld #2**

Start Date: 2006.09.24 @ 08:12:50

End Date: 2006.09.24 @ 14:52:35

Job Ticket #: 25102                      DST #: 1

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Aleo Oil Company  
 1864 NW 20th  
 Hoisington KS 67554  
 ATTN: Brad Hutchison

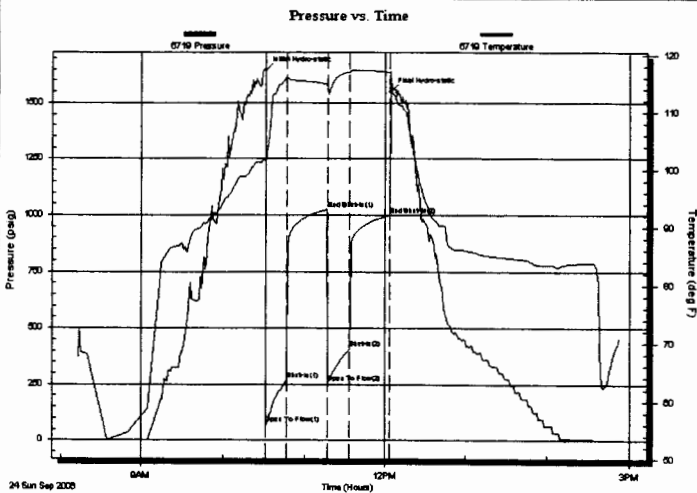
**Esfeld #2**  
**22 15 13W Russell KS**  
 Job Ticket: 25102 **DST#: 1**  
 Test Start: 2006.09.24 @ 08:12:50

## GENERAL INFORMATION:

Formation: **Arbuckle**  
 Deviated: No Whipstock ft (KB)  
 Time Tool Opened: 10:31:20  
 Time Test Ended: 14:52:35  
 Interval: **3284.00 ft (KB) To 3315.00 ft (KB) (TVD)**  
 Total Depth: 3315.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Jason McLemore  
 Unit No: 32  
 Reference Elevations: 1879.00 ft (KB)  
 1869.00 ft (CF)  
 KB to GR/CF: 10.00 ft

**Serial #: 6719 Inside**  
 Press@RunDepth: 412.18 psig @ 3287.00 ft (KB)  
 Start Date: 2006.09.24 End Date: 2006.09.24  
 Start Time: 08:12:52 End Time: 14:52:35  
 Capacity: 7000.00 psig  
 Last Calib.: 2006.09.24  
 Time On Btrn: 2006.09.24 @ 10:31:05  
 Time Off Btrn: 2006.09.24 @ 12:04:05

**TEST COMMENT:** IFP Strong Blow BOB in 2 Mn.  
 ISI Blow back Built to 1"  
 FFP Strong BOB in 1 Mn. 45 Sec.  
 FSI Dead



## PRESSURE SUMMARY

Time (Mn.)	Pressure (psig)	Temp (deg F)	Annotation
0	1645.24	101.75	Initial Hydro-static
1	71.78	101.55	Open To Flow (1)
16	270.49	116.10	Shut-In(1)
46	1025.34	114.89	End Shut-in(1)
47	259.01	114.25	Open To Flow (2)
63	412.18	117.02	Shut-In(2)
93	999.72	116.98	End Shut-in(2)
93	1548.77	117.06	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
30.00	SMV 95%W 5%M	0.15
240.00	MVCO 20%G 55%O 15%W 10%M	3.37
450.00	VSMO 45%G 50%O 5%M	6.31
280.00	Frothy Oil 20%G 80%O	3.93

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Aleo Oil Company

**Esfeld #2**

1864 NW 20th  
Hoisington KS 67554

**22 15 13W Russell KS**

Job Ticket: 25102

**DST#: 1**

ATTN: Brad Hutchison

Test Start: 2006.09.24 @ 08:12:50

**Tool Information**

Drill Pipe:	Length: 3256.00 ft	Diameter: 3.80 inches	Volume: 45.67 bbl	Tool Weight: 2200.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.70 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 30.00 ft	Diameter: 2.25 inches	Volume: 0.15 bbl	Weight to Pull Loose: 48000.00 lb
			<b>Total Volume: 45.82 bbl</b>	Tool Chased 0.00 ft
Drill Pipe Above KB:	23.00 ft			String Weight: Initial 42000.00 lb
Depth to Top Packer:	3284.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	31.00 ft			
Tool Length:	52.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3264.00	
Shut In Tool	5.00			3269.00	
Hydraulic tool	5.00			3274.00	
Packer	5.00			3279.00	21.00 Bottom Of Top Packer
Packer	5.00			3284.00	
Stubb	1.00			3285.00	
Perforations	2.00			3287.00	
Recorder	0.00	6719	Inside	3287.00	
Perforations	25.00			3312.00	
Recorder	0.00	13221	Outside	3312.00	
Bullnose	3.00			3315.00	31.00 Bottom Packers & Anchor

**Total Tool Length: 52.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Aleo Oil Company

**Esfeld #2**

1864 NW 20th  
Hoisington KS 67554

**22 15 13W Russell KS**

Job Ticket: 25102

**DST#: 1**

ATTN: Brad Hutchison

Test Start: 2006.09.24 @ 08:12:50

## Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API: 35 deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity: 22000 ppm
Viscosity: 55.00 sec/qt	Cushion Volume: bbl	
Water Loss: 9.59 in <sup>3</sup>	Gas Cushion Type:	
Resistivity: ohm.m	Gas Cushion Pressure: psig	
Salinity: 6300.00 ppm		
Filter Cake: 2.00 inches		

## Recovery Information

Recovery Table

Length ft	Description	Volume bbl
30.00	SMW 95%W 5%M	0.148
240.00	MWCO 20%G 55%O 15%W 10%M	3.367
450.00	VSMO 45%G 50%O 5%M	6.312
280.00	Frothy Oil 20%G 80%O	3.928

Total Length: 1000.00 ft      Total Volume: 13.755 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

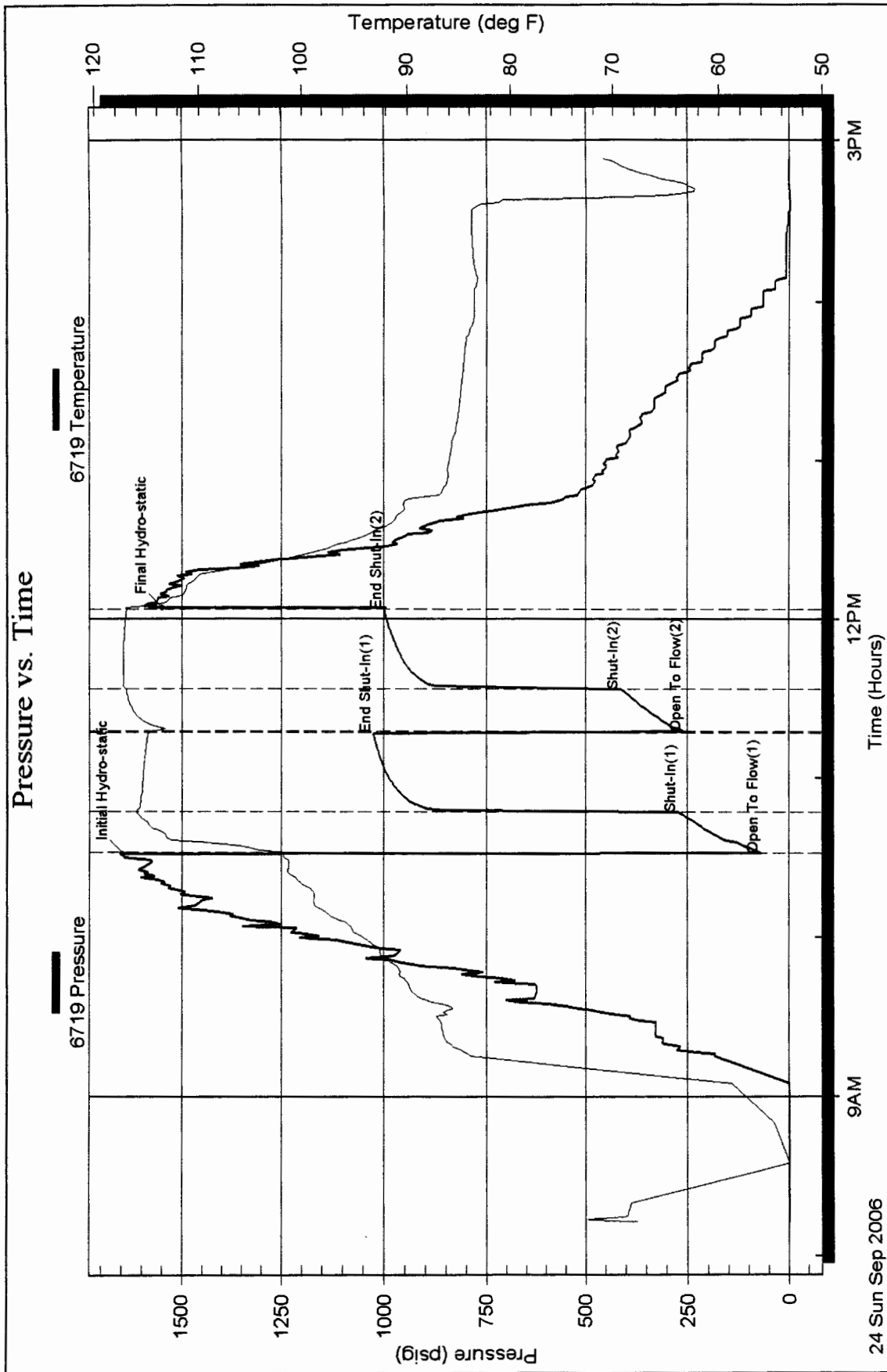
Serial #:

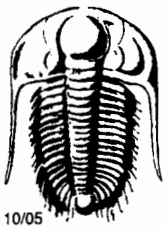
Laboratory Name:

Laboratory Location:

Recovery Comments:

# Pressure vs. Time





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

9288

25102

## Test Ticket

Well Name & No. Esfeld #2 Test No. 1 Date 9-24-06  
 Company Aleo Oil Company Zone Tested Arbuckle  
 Address --- NW 20th Haysington, KS Elevation 1879 KB 1869 GL  
 Co. Rep / Geo. Brad Hutchison Rig Southwind #3  
 Location: Sec. 22 Twp. 15s Rge. 13w Co. Russell State Ks  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 3284 - 3315 Initial Str Wt./Lbs. 42,000 Unseated Str Wt./Lbs. 46,000  
 Anchor Length 31' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 48,000  
 Top Packer Depth 3279 Tool Weight 2200  
 Bottom Packer Depth 3284 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3315 Wt. Pipe Run 0 Drill Collar Run 30  
 Mud Wt. 9.0 LCM 1# Vis. 55 WL 9.6 Drill Pipe Size 4 1/2 XH Ft. Run 3256

Blow Description IFP - Strong Blow, BOB in 2 min.  
ISI - Blowback Built to 1"  
FFP - Strong Blow, BOB in 1 min 45 sec.  
FSI - Dead.

Recovery - Total Feet	GIP	Ft. in DC	Ft. in DP
Rec. <u>280</u>	Feet of <u>Frothy Oil</u>	<u>20</u> %gas <u>80</u> %oil	%water %mud
Rec. <u>450</u>	Feet of <u>Very S Muddy Oil</u>	<u>45</u> %gas <u>50</u> %oil	%water <u>5</u> %mud
Rec. <u>240</u>	Feet of <u>Muddy Water Cut Frothy Oil</u>	<u>40</u> %gas <u>55</u> %oil	<u>15</u> %water <u>10</u> %mud
Rec. <u>30</u>	Feet of <u>Slightly Muddy Water</u>	%gas %oil	<u>95</u> %water <u>5</u> %mud
BHT <u>117'</u>	*F Gravity <u>37</u>	*API D @ <u>78</u>	*F Corrected Gravity <u>35</u> *API
RW <u>.278</u> @ <u>75</u>	*F Chlorides <u>22,000</u> ppm	Recovery _____	Chlorides <u>6,300</u> ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud	<u>1642</u> PSI	<u>6719</u>	<u>6719</u>	<u>1100</u>
(B) First Initial Flow Pressure	<u>72</u> PSI	<u>3287</u>	(depth)	Jars _____
(C) First Final Flow Pressure	<u>270</u> PSI	<u>13221</u>	Recorder No.	Safety Jt. _____
(D) Initial Shut-In Pressure	<u>1025</u> PSI	<u>3312</u>	(depth)	Circ Sub _____
(E) Second Initial Flow Pressure	<u>259</u> PSI		Recorder No.	Sampler _____
(F) Second Final Flow Pressure	<u>412</u> PSI		(depth)	Straddle _____
(G) Final Shut-In Pressure	<u>1000</u> PSI	<u>15</u>	Initial Opening	Ext. Packer _____
(Q) Final Hydrostatic Mud	<u>1549</u> PSI	<u>30</u>	Initial Shut-In	Shale Packer _____
		<u>15</u>	Final Flow	Ruined Packer _____
		<u>30</u>	Final Shut-In	Mileage <u>105 + 131.25</u>

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.

Approved By [Signature] T-Started 8:12 T-Open 10:31 T-Pulled 12:01 T-Out 14:53  
 Our Representative J. Mc Lemore Thank you  
 Sub Total: \_\_\_\_\_ Std. By: \_\_\_\_\_ Acc. Chg: \_\_\_\_\_ Other: 812 31.25 Total: \_\_\_\_\_

**CHART PAGE**

This is a photocopy of the actual AK-1 recorder chart.

Alex  
ESCell #2  
DST #1

