

**WELL NAME:** Jones 'B' #4  
**COMPANY:** A. L. Abercrombie, Inc.  
**LOCATION:** Sec. 15 Twp. 18s Rge. 18w  
Rush County Kansas  
**DATE:** 12-2-96

TRILOBITE TESTING L.L.C.

OPERATOR : A. L. Abercrombie Inc.  
 WELL NAME: Jones 'B' #4  
 LOCATION : 15-18s-18w Rush KS  
 INTERVAL : 3762.00 To 3810.00 ft

DATE 11-29-96  
 KB 2058.00 ft TICKET NO: 9745 DST #1  
 GR 2053.00 ft FORMATION: Arbuckle  
 TD 3810.00 ft TEST TYPE: CONV

RECORDER DATA

Mins		Field	1	2	3	4	TIME DATA-----
PF 30	Rec.	13754	13754	13249			PF Fr. 0330 to 0400 hr
SI 30	Range(Psi )	4000.0	4000.0	4500.0	0.0	0.0	IS Fr. 0400 to 0430 hr
SF 30	Clock(hrs)	12	12	12			SF Fr. 0430 to 0500 hr
FS 30	Depth(ft )	3769.0	3769.0	3807.0	0.0	0.0	FS Fr. 0500 to 0530 hr

	Field	1	2	3	4	
A. Init Hydro	1936.0	1948.0	0.0	0.0	0.0	T STARTED 0145 hr
B. First Flow	19.0	32.0	0.0	0.0	0.0	T ON BOTM 0328 hr
B1. Final Flow	19.0	32.0	0.0	0.0	0.0	T OPEN 0330 hr
C. In Shut-in	29.0	35.0	0.0	0.0	0.0	T PULLED 0530 hr
D. Init Flow	19.0	24.0	0.0	0.0	0.0	T OUT 0720 hr
E. Final Flow	19.0	24.0	0.0	0.0	0.0	
F. Fl Shut-in	39.0	48.0	0.0	0.0	0.0	
G. Final Hydro	1856.0	1906.0	0.0	0.0	0.0	
Inside/Outside	I	I	O			

TOOL DATA-----

Tool Wt.	1500.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	100000.00 lbs
Initial Str Wt	39000.00 lbs
Unseated Str Wt	39000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	3742.00 ft
H.W. I.D	2.70 in
H.W. Length	567.00 ft

RECOVERY

Tot Fluid 10.00 ft of 0.00 ft in DC and 10.00 ft in DP  
 10.00 ft of Drilling Mud  
 0.00 ft of  
 SALINITY 0.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA-----

Mud Type	Chem
Weight	9.20 lb/cf
Vis.	50.00 S/L
W.L.	9.60 in3
F.C.	0.00 in
Mud Drop	

BLOW DESCRIPTION

Initial Flow -  
 Weak - died in 13 min.

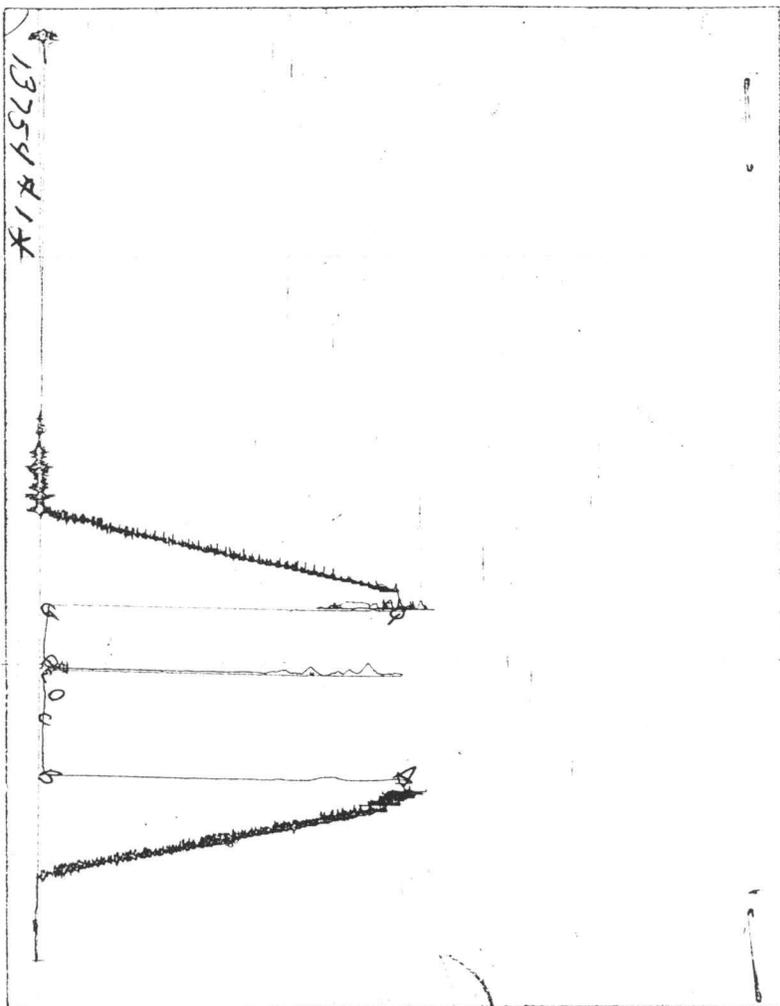
Final Flow -  
 No blow - flushed tool - no help

Amt. of fill	0.00 ft
Btm. H. Temp.	1110.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Dan Bangle
Co. Rep.	Kitt Noah
Contr.	Abercrombie
Rig #	8
Unit #	
Pump T.	

SAMPLES:  
 SENT TO:

Test Successful: Y

CHART PAGE



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

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

No 9746

Well Name & No. <u>Jones 'B' #4</u>	Test No. <u>2</u>	Date <u>11-29-96</u>
Company <u>A.L. Abercrombie, Inc.</u>	Zone Tested <u>Arbuckle</u>	
Address _____	Elevation <u>2058</u>	KB <u>2053</u> GL
Co. Rep / Geo. <u>KITT Noah</u>	Cont. <u>Abercrombie #8</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>15</u>	Twp. <u>18</u>	Rge. <u>18</u> Co. <u>Rush</u> State <u>Ks.</u>
No. of Copies _____	Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested <u>3762-3814</u>	Initial Str Wt./Lbs. <u>39000</u>	Unseated Str Wt./Lbs. <u>42000</u>
Anchor Length <u>52</u>	Wt. Set Lbs. <u>20,000</u>	Wt. Pulled Loose/Lbs. <u>50,000</u>
Top Packer Depth <u>3757</u>	Tool Weight <u>1500</u>	
Bottom Packer Depth <u>3762</u>	Hole Size — 7 7/8" _____	Rubber Size — 6 3/4" _____
Total Depth <u>3814</u>	Wt. Pipe Run <u>567</u>	Drill Collar Run _____
Mud Wt. <u>9.3</u> LCM _____	Vis. <u>61</u> WL <u>10.4</u>	Drill Pipe Size <u>4.5xH</u>
Blow Description <u>I.F. STRONG - B.O.B. in 3 1/2" min.</u>	Ft. Run <u>3766</u>	

E.F. STRONG - B.O.B. in 5 min.

Recovery — Total Feet <u>1364</u>	GIP <u>190</u>	Ft. in DC _____	Ft. in DP <u>1364</u>
Rec. <u>310</u>	Feet Of <u>5 1/4 WTR + MC GSY</u>	0% gas 50% oil	5% water 25% mud
Rec. <u>248</u>	Feet Of <u>M + WTR C GSY</u>	25% gas 35% oil	30% water 10% mud
Rec. <u>496</u>	Feet Of <u>OC GSY WTR</u>	25% gas 20% oil	55% water % mud
Rec. <u>310</u>	Feet Of <u>OC GSY M</u>	20% gas 20% oil	% water 60% mud
Rec. _____	Feet Of _____	% gas % oil	% water % mud

BHT 118 °F Gravity \_\_\_\_\_ °API D@ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW 1.30 @ 80° °F Chlorides 20,000 ppm Recovery Chlorides 5,000 ppm System

(A) Initial Hydrostatic Mud <u>1936</u>	PSI Recorder No. <u>13754</u>	T-Started <u>12:55</u>
(B) First Initial Flow Pressure <u>68</u>	PSI (depth) <u>3773</u>	T-Open <u>14:12</u>
(C) First Final Flow Pressure <u>334</u>	PSI Recorder No. <u>13249</u>	T-Pulled <u>16:56</u>
(D) Initial Shut-in Pressure <u>1076</u>	PSI (depth) <u>3811</u>	T-Out <u>19:30</u>
(E) Second Initial Flow Pressure <u>383</u>	PSI Recorder No. _____	
(F) Second Final Flow Pressure <u>590</u>	PSI (depth) _____	
(G) Final Shut-in Pressure <u>1076</u>	PSI Initial Opening <u>30</u>	Test _____
(H) Final Hydrostatic Mud <u>1836</u>	PSI Initial Shut-in <u>45</u>	Jars _____
	Final Flow <u>45</u>	Safety Joint _____
	Final Shut-in <u>45</u>	Straddle _____

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE 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.

61 STDs + 1 Sampler \_\_\_\_\_  
 Extra Packer \_\_\_\_\_  
 Elect. Rec. \_\_\_\_\_  
 Other \_\_\_\_\_  
 TOTAL PRICE \$ 400

Approved By Kitt Noah  
 Our Representative Dan Bangle

(5)

TRILOBITE TESTING L.L.C.

OPERATOR : A. L. Abercrombie Inc.

DATE 11-29-96

WELL NAME: Jones 'B' #4

KB 2058.00 ft

TICKET NO: 9746

DST #2

LOCATION : 15-18s-18w Rush KS

GR 2059.00 ft

FORMATION: Arbuckle

INTERVAL : 3762.00 To 3814.00 ft

TD 3814.00 ft

TEST TYPE: CONV

RECORDER DATA

Mins	Field	1	2	3	4	TIME DATA-----
PF 30 Rec.	13754	13754	13249			PF Fr. 1412 to 1442 hr
SI 45 Range(Psi )	4000.0	4000.0	4500.0	0.0	0.0	IS Fr. 1442 to 1527 hr
SF 45 Clock(hrs)	12	12	12			SF Fr. 1527 to 1612 hr
FS 45 Depth(ft )	3773.0	3773.0	3811.0	0.0	0.0	FS Fr. 1612 to 1656 hr

	Field	1	2	3	4	
A. Init Hydro	1936.0	1946.0	0.0	0.0	0.0	T STARTED 1255 hr
B. First Flow	68.0	75.0	0.0	0.0	0.0	T ON BOTM 1410 hr
B1. Final Flow	334.0	341.0	0.0	0.0	0.0	T OPEN 1412 hr
C. In Shut-in	1076.0	1078.0	0.0	0.0	0.0	T PULLED 1656 hr
D. Init Flow	383.0	380.0	0.0	0.0	0.0	T OUT 1930 hr
E. Final Flow	590.0	604.0	0.0	0.0	0.0	
F. Fl Shut-in	1076.0	1072.0	0.0	0.0	0.0	
G. Final Hydro	1836.0	1878.0	0.0	0.0	0.0	
Inside/Outside	I	I	O			

TOOL DATA-----

Tool Wt.	1500.00 lbs
Wt Set On Packer	20000.00 lbs
Wt Pulled Loose	50000.00 lbs
Initial Str Wt	39000.00 lbs
Unseated Str Wt	42000.00 lbs
Bot Choke	0.75 in
Hole Size	7.88 in
D Col. ID	2.25 in
D. Pipe ID	3.80 in
D.C. Length	0.00 ft
D.P. Length	3766.00 ft
H.W. I.D	2.70 in
H.W. Length	567.00 ft

RECOVERY

Tot Fluid 1364.00 ft of 0.00 ft in DC and 1364.00 ft in DP  
 190.00 ft of Gas in pipe  
 310.00 ft of Slightly water & mud cut gassy oil  
 0.00 ft of 20%g 50%o 5%w 25%m  
 248.00 ft of Mud and water cut gassy oil  
 0.00 ft of 25%g 35%o 30%w 10%m  
 496.00 ft of Oil cut gassy water 25%g 20%o 55%w  
 310.00 ft of Oil cut gass mud 20%g 20%o 60%m  
 0.00 ft of RW .30 @ 80F  
 SALINITY 20000.00 P.P.M. A.P.I. Gravity 0.00

MUD DATA-----

Mud Type	Chem
Weight	9.30 lb/cf
Vis.	61.00 S/L
W.L.	10.40 in3
F.C.	0.00 in
Mud Drop	
Amt. of fill	0.00 ft
Btm. H. Temp.	118.00 F
Hole Condition	
% Porosity	0.00
Packer Size	6.75 in
No. of Packers	2
Cushion Amt.	0.00
Cushion Type	
Reversed Out	
Tool Chased	
Tester	Dan Bangle
Co. Rep.	Kitt Noah
Contr.	Abercrombie
Rig #	8
Unit #	
Pump T.	

BLOW DESCRIPTION

Initial Flow -  
 Strong blow - bottom of bucket  
 in 3-1/2 min.

Final Flow -  
 Strong blow - bottom of bucket  
 in 5 min.

SAMPLES:  
 SENT TO:

Test Successful: Y

CALCULATED RECOVERY ANALYSIS

DST 2

TICKET 9746

SAMPLE #	TOTAL FEET	GAS		OIL		WATER		MUD	
		%	FEET	%	FEET	%	FEET	%	FEET
DRILL 1	310	20	62	50	155	5	15.5	25	77.5
PIPE 2	248	25	62	35	86.8	30	74.4	10	24.8
3	496	25	124	20	99.2	55	272.8		0
4	310	20	62	20	62		0	60	186
5			0		0		0		0
6			0		0		0		0
WEIGHT 1			0		0		0		0
PIPE 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
DRILL 1			0		0		0		0
COLLARS 2			0		0		0		0
3			0		0		0		0
4			0		0		0		0
5			0		0		0		0
TOTAL	1364		310		403		362.7		288.3

BBL OIL = 5.73066 \* HRS OPEN 1.25 = BBL/DAY 110.02867  
 BBL WATER = 5.157594 \* = 99.025805  
 BBL MUD = 4.099626  
 BBL GAS = 4.4082

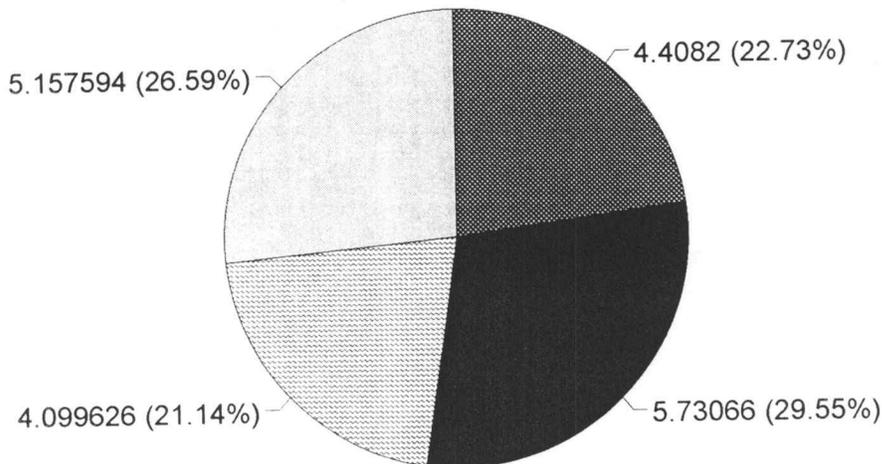
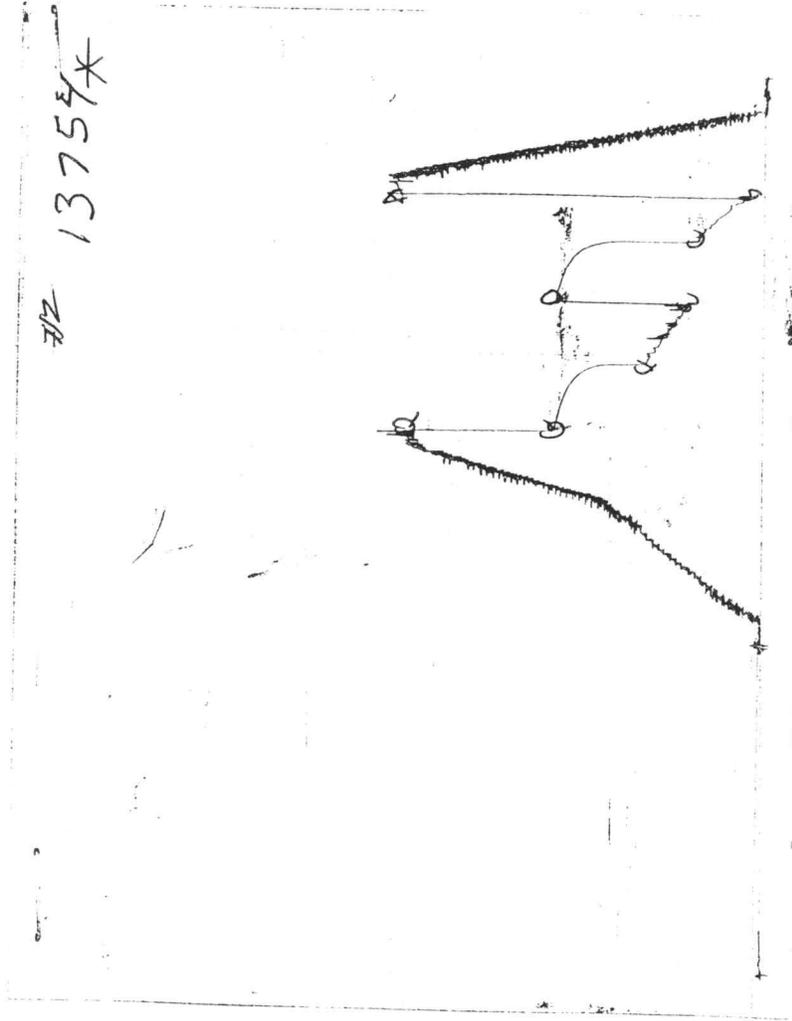


CHART PAGE



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

# TRILOBITE TESTING L.L.C.

P.O. Box 362 • Hays, Kansas 67601

## Test Ticket

No 9745

Well Name & No. <u>Jones 'B' #4</u>	Test No. <u>1</u>	Date <u>11-29-96</u>
Company <u>A. L. Abercrombie, Inc</u>	Zone Tested <u>Arbuckle</u>	
Address <u>801 Union Ctr, Wichita, Ks. 67202</u>	Elevation <u>2058</u> KB <u>2053</u> GL	
Co. Rep / Geo. <u>KITT Noah</u>	Cont. <u>Abercrombie #8</u>	Est. Ft. of Pay _____ Por. _____ %
Location: Sec. <u>15</u> Twp. <u>18</u> Rge. <u>18</u>	Co. <u>Rush</u> State <u>Ks.</u>	
No. of Copies _____	Distribution Sheet (Y, N) _____	Turnkey (Y, N) _____ Evaluation (Y, N) _____

Interval Tested 3762 - 3810 Initial Str Wt./Lbs. 39,000 Unseated Str Wt./Lbs. 39,000  
Anchor Length 48 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 100,000  
Top Packer Depth 3757 Tool Weight 1500  
Bottom Packer Depth 3762 Hole Size — 7 7/8" Rubber Size — 6 3/4"  
Total Depth 3810 Wt. Pipe Run 567 Drill Collar Run \_\_\_\_\_  
Mud Wt. 9.2 LCM In Vis. 50 WL 9.6 Drill Pipe Size 4.5XH Ft. Run 3742  
Blow Description I.F. Weak - Died in 13 min.

F.F. No blow - flushed tool - no help

Recovery — Total Feet	GIP	Ft. in DC	Ft. in DP	%gas	%oil	%water	%mud
<u>10</u>			<u>10</u>				
Rec. <u>10</u> Feet Of <u>D.M.</u>							
Rec. _____ Feet Of _____							
Rec. _____ Feet Of _____							
Rec. _____ Feet Of _____							
Rec. _____ Feet Of _____							

BHT 111 °F Gravity \_\_\_\_\_ °API D@ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery Chlorides 4,000 ppm System

(A) Initial Hydrostatic Mud <u>1936</u> PSI Recorder No. <u>13254</u> T-Started <u>01:45</u>
(B) First Initial Flow Pressure <u>19</u> PSI (depth) <u>3769</u> T-Open <u>03:30</u>
(C) First Final Flow Pressure <u>19</u> PSI Recorder No. <u>13249</u> T-Pulled <u>05:30</u>
(D) Initial Shut-in Pressure <u>29</u> PSI (depth) <u>3807</u> T-Out <u>07:20</u>
(E) Second Initial Flow Pressure <u>19</u> PSI Recorder No. _____
(F) Second Final Flow Pressure <u>19</u> PSI (depth) _____
(G) Final Shut-in Pressure <u>39</u> PSI Initial Opening <u>30</u> Test _____
(H) Final Hydrostatic Mud <u>1856</u> PSI Initial Shut-in <u>30</u> Jars _____
Final Flow <u>30</u> Safety Joint _____
Final Shut-in <u>30</u> Straddle _____
_____ Circ. Sub _____
_____ Sampler _____
_____ Extra Packer _____
_____ Elect. Rec. _____
_____ Other _____

TRILOBITE TESTING L.L.C. SHALL NOT BE LIABLE FOR DAMAGE 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 Kitt Noah  
Our Representative Dan Bangle

TOTAL PRICE \$ 400