

TRILOBITE TESTING, L.L.C.

P.O. Box 362 • Hays, Kansas 67601

Drill-Stem Test Data

Well Name MICHEALIS #2 Test No. 1 Date 5/30/93
Company A.L. ABERCROMBIE, INC Zone LKC "J"
Address 801 UNION CNTR WICHITA KS 67202 Elevation 3114
Co. Rep./Geo. MIKE DIXON Cont. ABERCROMBIE RIG #8 Est. Ft. of Pay _____
Location: Sec. 15 Twp. 12S Rge. 33W Co. LOGAN State KS

Interval Tested 4284-4305 Drill Pipe Size 4.5" XH
Anchor Length 21 Wt. Pipe I.D. - 2.7 Ft. Run 495
Top Packer Depth 4279 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 4284 Mud Wt. _____ lb/Gal.
Total Depth 4305 Viscosity 44 Filtrate 11.2

Tool Open @ 5:12 AM Initial Blow WEAK SURFACE BLOW BUILD TO 1/4"

Final Blow NO BLOW

Recovery - Total Feet 5 Flush Tool? NO

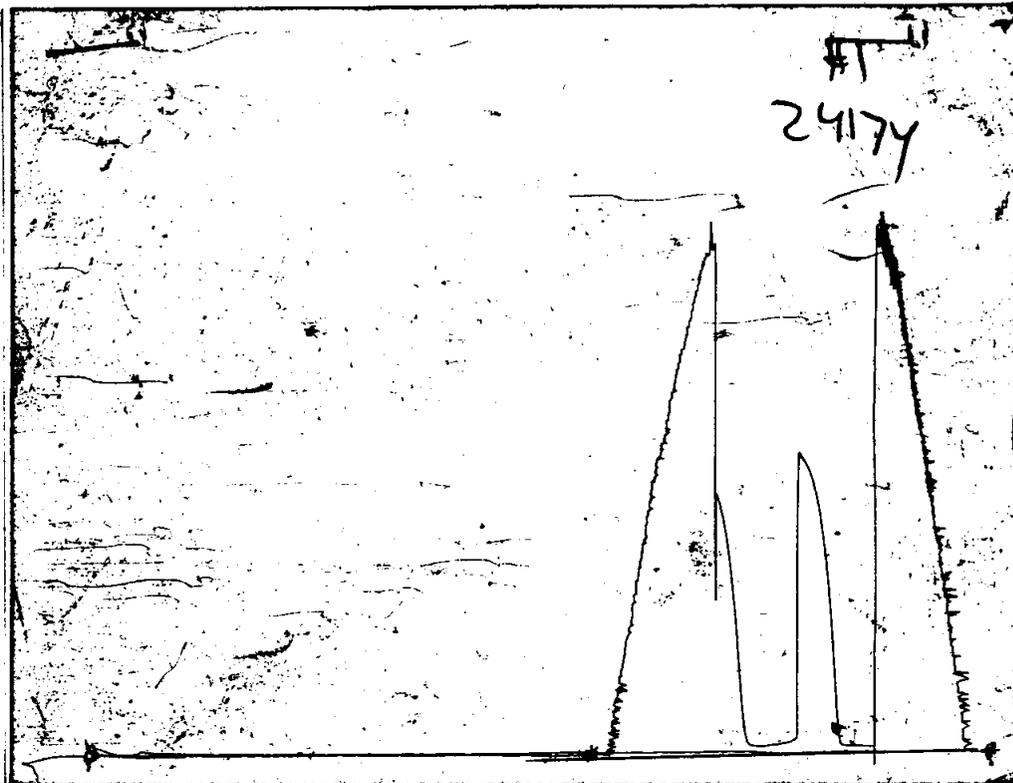
Rec. 5 Feet of MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2080.5 PSI AK1 Recorder No. 22150 Range 3925
(B) First Initial Flow Pressure 15.7 PSI @ (depth) 4287 w / Clock No. 31154
(C) First Final Flow Pressure 45.2 PSI AK1 Recorder No. 24174 Range 3050
(D) Initial Shut-in Pressure 1175.2 PSI @ (depth) 4301 w / Clock No. 25814
(E) Second Initial Flow Pressure 45.6 PSI AK1 Recorder No. _____ Range _____
(F) Second Final Flow Pressure 23.4 PSI @ (depth) _____ w / Clock No. _____
(G) Final Shut-in Pressure 1024.6 PSI Initial Opening 30 Final Flow 30
(H) Final Hydrostatic Mud 2026.8 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2089	2080.5
(B) FIRST INITIAL FLOW PRESSURE	22	15.69
(C) FIRST FINAL FLOW PRESSURE	30	45.2
(D) INITIAL CLOSED-IN PRESSURE	1183	1175.2
(E) SECOND INITIAL FLOW PRESSURE	30	45.6
(F) SECOND FINAL FLOW PRESSURE	30	23.4
(G) FINAL CLOSED-IN PRESSURE	1032	1024.6
(H) FINAL HYDROSTATIC MUD	2019	2026.8

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Test Ticket

No 5746

Well Name & No. <u>Michaelis #2</u>	Test No. <u>1</u>	Date <u>5-30-93</u>
Company <u>A.L. Abercrombie, Inc</u>	Zone Tested <u>LKL '5'</u>	
Address <u>801 Union Center Wichita, KS 67202</u>	Elevation <u>3114</u>	
Co. Rep./Geo. <u>Mike Dixon</u>	cont. <u>Abercrombie #8</u>	Est. Ft. of Pay _____
Location: Sec. <u>15</u>	Twp. <u>12s</u>	Rge. <u>33w</u> Co. <u>Logan</u> State <u>Ks</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4284-4305</u>	Drill Pipe Size <u>4 1/2 XH</u>
Anchor Length <u>21</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>4279</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4284</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>495</u>
Total Depth <u>4305</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.0</u> lb/gal.	Viscosity <u>44</u> Filtrate <u>11.2</u>
Tool Open @ <u>5:12 AM</u> Initial Blow <u>weak surface blow built to 4"</u>	

Final Blow no blow

Recovery — Total Feet <u>5</u>	Feet of Gas in Pipe _____	Flush Tool? _____
Rec. <u>5</u> Feet Of <u>MUD</u>	%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. _____ Feet Of _____	%gas _____ %oil _____ %water _____ %mud _____	

BHT 110 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API

RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

- (A) Initial Hydrostatic Mud 2089 PSI Ak1 Recorder No. 22150 Range 3925
- (B) First Initial Flow Pressure 22 PSI @ (depth) 4287 w/Clock No. 31154
- (C) First Final Flow Pressure 30 PSI AK1 Recorder No. 24174 Range 3050
- (D) Initial Shut-In Pressure 1183 PSI @ (depth) 4301 w/Clock No. 25814
- (E) Second Initial Flow Pressure 30 PSI AK1 Recorder No. _____ Range _____
- (F) Second Final Flow Pressure 30 PSI @ (depth) _____ w/Clock No. _____
- (G) Final Shut-In Pressure 1032 PSI Initial Opening 30 Test 1000
- (H) Final Hydrostatic Mud 2019 PSI Initial Shut-In 30 Jars _____

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.

Final Flow 30 Safety Joint _____
 Final Shut-In 30 Straddle _____
 Circ. Sub _____
 Sampler _____
 Extra Packer _____
 Other _____

Approved By [Signature]
 Our Representative Paul Simpson

TOTAL PRICE \$ 1100

TRILOBITE TESTING, L.L.C.

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Drill-Stem Test Data

Well Name MICHEALIS #2 Test No. 2 Date 5/31/93
Company A.L. ABERCROMBIE, INC Zone JOHNSON
Address 801 UNION CNTR WICHITA KS 67202 Elevation 3114
Co. Rep./Geo. MIKE DIXON Cont. ABERCROMBIE RIG #8 Est. Ft. of Pay _____
Location: Sec. 15 Twp. 12S Rge. 33W Co. LOGAN State KS

Interval Tested 4605-4638 Drill Pipe Size 4.5" XH
Anchor Length 33 Wt. Pipe I.D. - 2.7 Ft. Run 495
Top Packer Depth 4600 Drill Collar - 2.25 Ft. Run _____
Bottom Packer Depth 4605 Mud Wt. 9.5 lb/Gal.
Total Depth 4638 Viscosity 44 Filtrate 11.8

Tool Open @ 12:10 PM Initial Blow SURFACE BLOW BUILDING TO 1/2"

Final Blow NO BLOW

Recovery - Total Feet 2 Flush Tool? NO

Rec. 2 Feet of OIL SPECKED MUD
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____
Rec. _____ Feet of _____

BHT 114 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud 2315.6 PSI AK1 Recorder No. 22150 Range 3925

(B) First Initial Flow Pressure 25.6 PSI @ (depth) 4609 w / Clock No. 31154

(C) First Final Flow Pressure 28.4 PSI AK1 Recorder No. 24174 Range 3050

(D) Initial Shut-in Pressure 35.2 PSI @ (depth) 4635 w / Clock No. 25814

(E) Second Initial Flow Pressure 24.1 PSI AK1 Recorder No. _____ Range _____

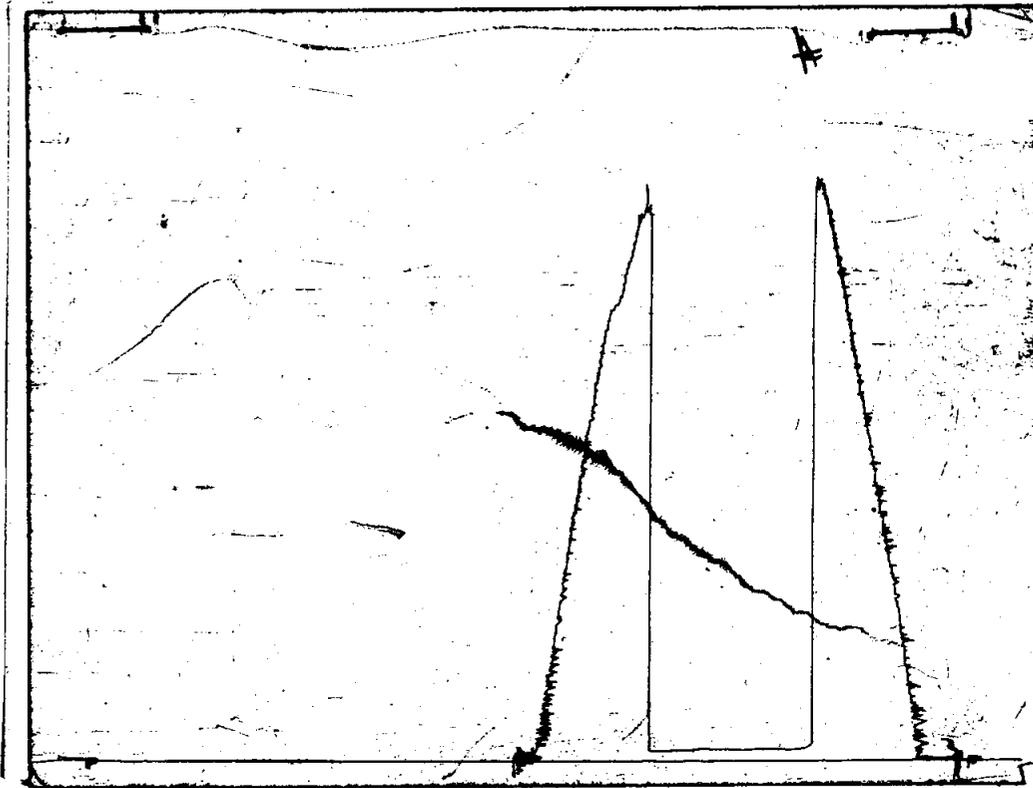
(F) Second Final Flow Pressure 29.4 PSI @ (depth) _____ w / Clock No. _____

(G) Final Shut-in Pressure 12.5 PSI Initial Opening 30 Final Flow 30

(H) Final Hydrostatic Mud 2263.8 PSI Initial Shut-in 30 Final Shut-in 30

Our Representative PAUL SIMPSON

CHART PAGE



This is an actual photograph of recorder chart

	FIELD READING	OFFICE READING
(A) INITIAL HYDROSTATIC MUD	2323	2315.6
(B) FIRST INITIAL FLOW PRESSURE	16	25.6
(C) FIRST FINAL FLOW PRESSURE	16	28.4
(D) INITIAL CLOSED-IN PRESSURE	22	35.2
(E) SECOND INITIAL FLOW PRESSURE	16	24.1
(F) SECOND FINAL FLOW PRESSURE	16	29.4
(G) FINAL CLOSED-IN PRESSURE	16	12.5
(H) FINAL HYDROSTATIC MUD	2276	2263.8

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Test Ticket

No 5747

Well Name & No. <u>Michaelis #2</u>	Test No. <u>2</u>	Date <u>5-31-93</u>
Company <u>AZ Abercrombie, Inc</u>	Zone Tested <u>John Zone</u>	
Address _____	Elevation <u>3114</u>	
Co. Rep./Geo. <u>Mike Dixon</u>	cont. <u>Abercrombie #8</u>	Est. Ft. of Pay _____
Location: Sec. <u>15</u>	Twp. <u>12s</u>	Rge. <u>33w</u> Co. <u>Logan</u> State <u>Ks</u>
No. of Copies _____	Distribution Sheet _____	Yes _____ No _____ Turnkey _____ Yes _____ No _____ Evaluation _____

Interval Tested <u>4605 - 4638</u>	Drill Pipe Size <u>4 1/2 XH</u>
Anchor Length <u>33</u>	Top Choke — 1" _____ Bottom Choke — 1/4" _____
Top Packer Depth <u>4600</u>	Hole Size — 7 7/8" _____ Rubber Size — 6 3/4" _____
Bottom Packer Depth <u>4605</u>	Wt. Pipe I.D. — 2.7 Ft. Run <u>495</u>
Total Depth <u>4638</u>	Drill Collar — 2.25 Ft. Run _____
Mud Wt. <u>9.5</u> lb/gal.	Viscosity <u>44</u> Filtrate <u>11.8</u>
Tool Open @ <u>12:10 PM</u>	Initial Blow <u>surface blow building to 1/2"</u>
Final Blow <u>no blow</u>	

Recovery — Total Feet	Feet of Gas in Pipe	Flush Tool?
Rec. <u>2</u> Feet Of <u>oil specked mud</u>	% 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. _____ Feet Of _____	% gas _____ % oil _____ % water _____ % mud _____	

BHT 114 °F Gravity _____ °API @ _____ °F Corrected Gravity _____ °API
RW _____ @ _____ °F Chlorides _____ ppm Recovery Chlorides _____ ppm System

(A) Initial Hydrostatic Mud <u>2323</u>	PSI Ak1 Recorder No. <u>22150</u>	Range <u>3925</u>
(B) First Initial Flow Pressure <u>16</u>	PSI @ (depth) <u>4609</u>	w/Clock No. <u>31154</u>
(C) First Final Flow Pressure <u>16</u>	PSI AK1 Recorder No. <u>24174</u>	Range <u>3050</u>
(D) Initial Shut-in Pressure <u>22</u>	PSI @ (depth) <u>4635</u>	w/Clock No. <u>25814</u>
(E) Second Initial Flow Pressure <u>16</u>	PSI AK1 Recorder No. _____	Range _____
(F) Second Final Flow Pressure <u>16</u>	PSI @ (depth) _____	w/Clock No. _____
(G) Final Shut-in Pressure <u>16</u>	PSI Initial Opening <u>30</u>	Test _____
(H) Final Hydrostatic Mud <u>2276</u>	PSI Initial Shut-in <u>30</u>	Jars _____

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Final Flow <u>30</u>	Safety Joint _____
Final Shut-in <u>30</u>	Straddle _____
	Circ. Sub _____
	Sampler _____
	Extra Packer _____
	Other _____

Approved By [Signature]
Our Representative Paul Simpson