



## DRILL STEM TEST REPORT

Prepared For: **Ernst Oil**

1234 Walker Ave.  
Walker, Ks. 67674

ATTN: Fred Ernst

**19-10s-17w**

**Becker # 2**

Start Date: 2005.01.16 @ 18:36:49

End Date: 2005.01.17 @ 02:35:19

Job Ticket #: 21201                      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**

Ernst Oil  
 1234 Walker Ave.  
 Walker, Ks. 67674  
 ATTN: Fred Ernst

**Becker # 2**  
**19-10s-17w**  
 Job Ticket: 21201      **DST#: 1**  
 Test Start: 2005.01.16 @ 18:36:49

**GENERAL INFORMATION:**

Formation: **L.Kc.-BC&E**  
 Deviated: **No Whipstock:**      ft (KB)  
 Time Tool Opened: 20:19:49  
 Time Test Ended: 02:35:19  
 Interval: **3369.00 ft (KB) To 3415.00 ft (KB) (TVD)**  
 Total Depth: **3415.00 ft (KB) (TVD)**  
 Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
 Test Type: **Conventional Bottom Hole**  
 Tester: **John Schmidt**  
 Unit No: **31**  
 Reference Elevations: **2102.00 ft (KB)**  
**2097.00 ft (CF)**  
 KB to GR/CF: **5.00 ft**

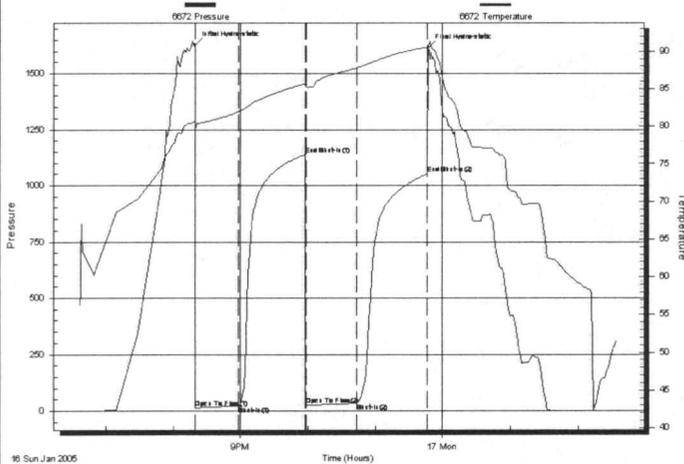
**Serial #: 6672**

**Inside**

Press@RunDepth: **34.13 psig @ 3371.00 ft (KB)**      Capacity: **7000.00 psig**  
 Start Date: **2005.01.16**      End Date: **2005.01.17**      Last Calib.: **2005.01.17**  
 Start Time: **18:36:50**      End Time: **02:35:19**      Time On Btm: **2005.01.16 @ 20:19:19**  
 Time Off Btm: **2005.01.16 @ 23:47:19**

TEST COMMENT: IF-Weak to Fair built to 4" in.      ISI-Dead  
 FF-Weak built to 2.5" in.      FSI-Dead

Pressure vs. Time



**PRESSURE SUMMARY**

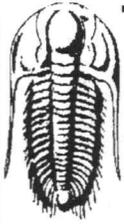
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1628.68	80.64	Initial Hydro-static
1	12.09	79.62	Open To Flow (1)
39	22.86	82.02	Shut-In(1)
98	1137.66	85.73	End Shut-In(1)
99	24.17	85.29	Open To Flow (2)
145	34.13	87.84	Shut-In(2)
208	1052.07	90.58	End Shut-In(2)
208	1617.20	90.72	Final Hydro-static

**Recovery**

Length (ft)	Description	Volume (bbl)
47.00	Oil stain mud	0.66
3.00	oil	0.04

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Ernst Oil  
1234 Walker Ave.  
Walker, Ks. 67674  
ATTN: Fred Ernst

**Becker # 2**  
**19-10s-17w**  
Job Ticket: 21201      **DST#: 1**  
Test Start: 2005.01.16 @ 18:36:49

### Tool Information

Drill Pipe:	Length: 3353.00 ft	Diameter: 3.80 inches	Volume: 47.03 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 60000.00 lb
			<u>Total Volume: 47.03 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	4.00 ft			String Weight: Initial 44000.00 lb
Depth to Top Packer:	3369.00 ft			Final 44000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	66.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

### Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3350.00	
Shut In Tool	5.00			3355.00	
Hydraulic tool	5.00			3360.00	
Packer	4.00			3364.00	20.00      Bottom Of Top Packer
Packer	5.00			3369.00	
Stubb	1.00			3370.00	
Perforations	1.00			3371.00	
Recorder	0.00	6672	Inside	3371.00	
Blank Spacing	31.00			3402.00	
Recorder	0.00	11084	Outside	3402.00	
Perforations	10.00			3412.00	
Bullnose	3.00			3415.00	46.00      Bottom Packers & Anchor

**Total Tool Length: 66.00**



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

FLUID SUMMARY

Ernst Oil  
1234 Walker Ave.  
Walker, Ks. 67674  
ATTN: Fred Ernst

**Becker # 2**  
**19-10s-17w**  
Job Ticket: 21201      **DST#: 1**  
Test Start: 2005.01.16 @ 18:36:49

### Mud and Cushion Information

Mud Type: Gel Chem	Cushion Type:	Oil API:	deg API
Mud Weight: 9.00 lb/gal	Cushion Length: ft	Water Salinity:	ppm
Viscosity: 48.00 sec/qt	Cushion Volume: bbl		
Water Loss: 8.39 in <sup>3</sup>	Gas Cushion Type:		
Resistivity: ohm.m	Gas Cushion Pressure: psig		
Salinity: ppm			
Filter Cake: inches			

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
47.00	Oil stain mud	0.659
3.00	oil	0.042

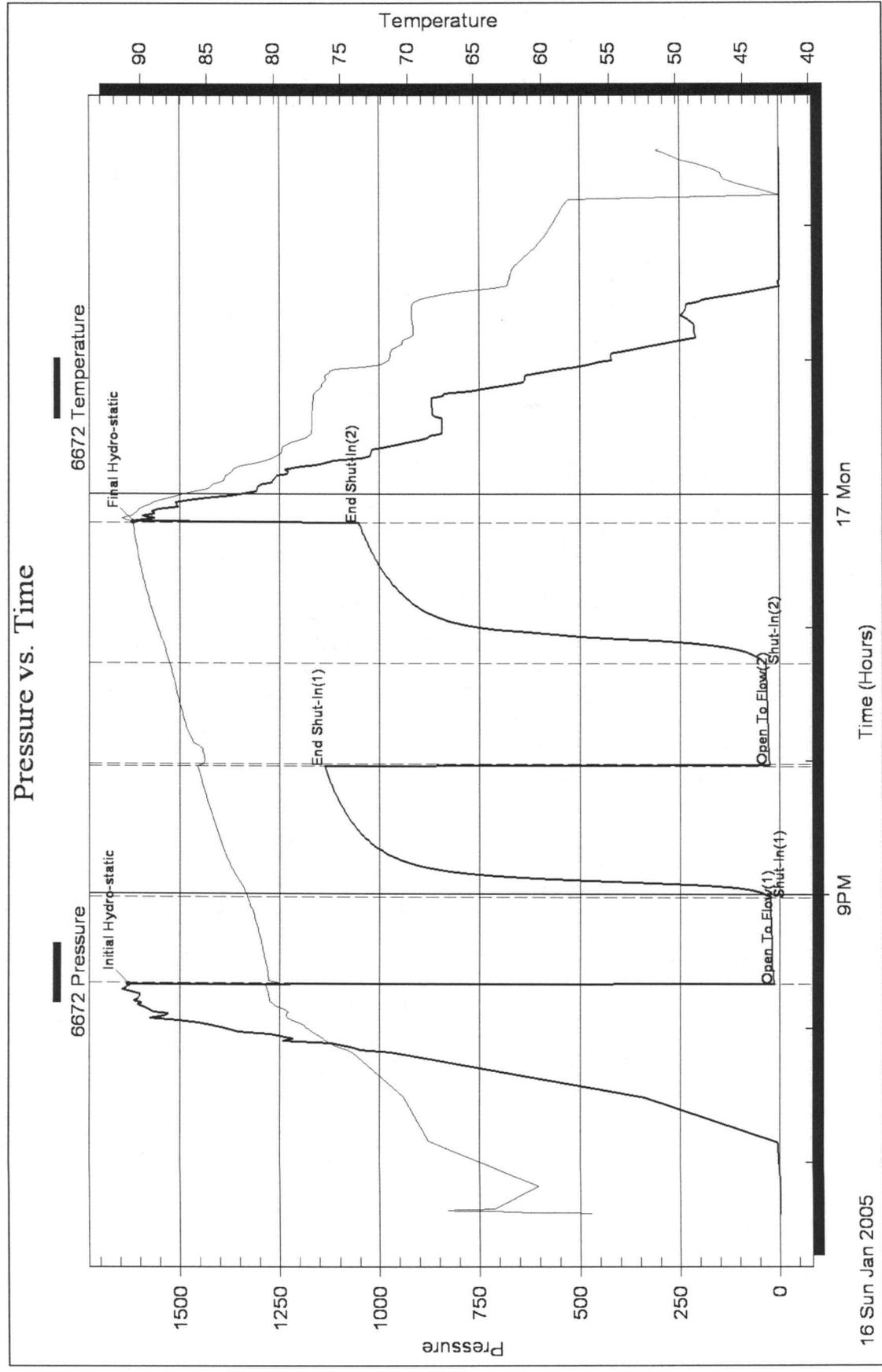
Total Length: 50.00 ft      Total Volume: 0.701 bbl  
 Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:  
 Laboratory Name:      Laboratory Location:  
 Recovery Comments:

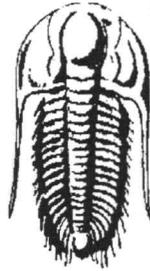
Serial #: 6672

Inside Ernst Oil

19--10s--17w

DST Test Number: 1





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Ernst Oil**

1234 Walker Ave.  
Walker, Ks. 67674

ATTN: Fred Ernst

**19--10s--17w**

**Becker # 2**

Start Date: 2005.01.17 @ 17:18:13

End Date: 2005.01.18 @ 01:12:13

Job Ticket #: 21202                      DST #: 2

Trilobite Testing, Inc

PO Box 362 Hays, KS 67601

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

Ernst Oil

Becker # 2

19--10s--17w

DST # 2

L/Kc-H to L

2005.01.17



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Ernst Oil  
1234 Walker Ave.  
Walker, Ks. 67674  
ATTN: Fred Ernst

**Becker # 2**  
**19-10s-17w**  
Job Ticket: 21202      **DST#: 2**  
Test Start: 2005.01.17 @ 17:18:13

## GENERAL INFORMATION:

Formation: **L.Kc.-H to L**  
Deviated: **No Whipstock:**      ft (KB)  
Time Tool Opened: 19:07:43  
Time Test Ended: 01:12:13  
Interval: **3461.00 ft (KB) To 3558.00 ft (KB) (TVD)**  
Total Depth: **3558.00 ft (KB) (TVD)**  
Hole Diameter: **7.88 inches** Hole Condition: **Fair**  
Test Type: **Conventional Bottom Hole**  
Tester: **John Schmidt**  
Unit No: **31**  
Reference Elevations: **2102.00 ft (KB)**  
**2097.00 ft (CF)**  
KB to GR/CF: **5.00 ft**

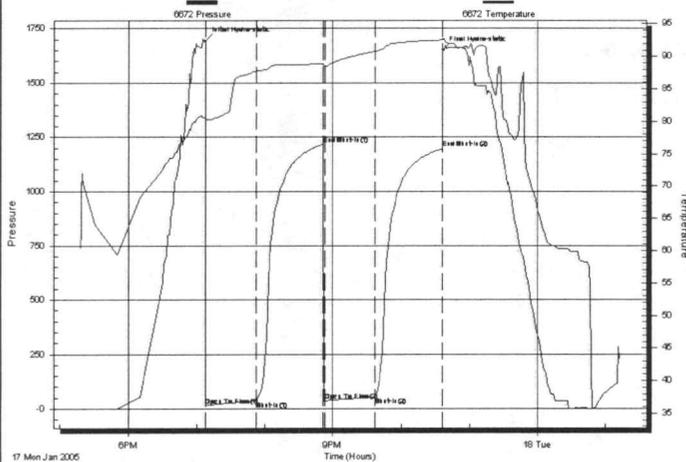
## Serial #: 6672

Inside

Press@RunDepth: **52.29 psig @ 3463.00 ft (KB)**      Capacity: **7000.00 psig**  
Start Date: **2005.01.17**      End Date: **2005.01.18**      Last Calib.: **2005.01.18**  
Start Time: **17:18:14**      End Time: **01:12:13**      Time On Btm: **2005.01.17 @ 19:07:13**  
Time Off Btm: **2005.01.17 @ 22:36:13**

TEST COMMENT: IF-Good blow built to 9" in.      IS-Weak Surface blow back.  
FF-Good blow built to 11" in.      FS-Weak Surface blow back.

Pressure vs. Time



## PRESSURE SUMMARY

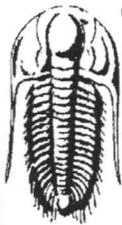
Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1693.14	80.59	Initial Hydro-static
1	14.96	80.28	Open To Flow (1)
45	35.81	87.76	Shut-In(1)
104	1216.95	88.88	End Shut-In(1)
106	36.24	88.55	Open To Flow (2)
150	52.29	90.76	Shut-In(2)
209	1197.24	92.50	End Shut-In(2)
209	1650.81	92.73	Final Hydro-static

## Recovery

Length (ft)	Description	Volume (bbl)
100.00	MCO-30% mud-70% oil	1.40
100.00	Gas in pipe	1.40

## Gas Rates

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



**TRILOBITE**  
TESTING, INC

## DRILL STEM TEST REPORT

TOOL DIAGRAM

Ernst Oil  
1234 Walker Ave.  
Walker, Ks. 67674  
ATTN: Fred Ernst

**Becker # 2**  
**19-10s-17w**  
Job Ticket: 21202      **DST#: 2**  
Test Start: 2005.01.17 @ 17:18:13

### Tool Information

Drill Pipe:	Length: 3446.00 ft	Diameter: 3.80 inches	Volume: 48.34 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: 0.00 ft	Diameter: 2.25 inches	Volume: 0.00 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 48.34 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	5.00 ft			String Weight: Initial 45000.00 lb
Depth to Top Packer:	3461.00 ft			Final 46000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	97.00 ft			
Tool Length:	117.00 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			3442.00	
Shut In Tool	5.00			3447.00	
Hydraulic tool	5.00			3452.00	
Packer	4.00			3456.00	20.00      Bottom Of Top Packer
Packer	5.00			3461.00	
Stubb	1.00			3462.00	
Perforations	1.00			3463.00	
Recorder	0.00	6672	Inside	3463.00	
Blank Spacing	62.00			3525.00	
Recorder	0.00	11084	Outside	3525.00	
Perforations	30.00			3555.00	
Bullnose	3.00			3558.00	97.00      Bottom Packers & Anchor
<b>Total Tool Length:</b>		<b>117.00</b>			



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Ernst Oil

**Becker # 2**

1234 Walker Ave.  
Walker, Ks. 67674

**19-10s-17w**

Job Ticket: 21202

**DST#: 2**

ATTN: Fred Ernst

Test Start: 2005.01.17 @ 17:18:13

### Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 48.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.39 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: ppm

Filter Cake: inches

### Recovery Information

Recovery Table

Length ft	Description	Volume bbl
100.00	MCO-30%mud-70%oil	1.403
100.00	Gas in pipe	1.403

Total Length: 200.00 ft      Total Volume:      bbl

Num Fluid Samples:

Num Gas Bombs:

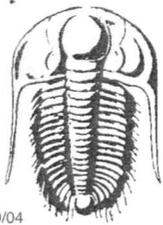
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

*INV 7/15*

No 21201

9/04

## Test Ticket

Well Name & No. BECKER #2 Test No. #1 Date 1-16-05  
 Company ERNST OIL Zone Tested L. KC, BC & E  
 Address 1234 WALKER AVE, WALKER, KS, 67624 Elevation 2102 KB 2097 GL  
 Co. Rep / Geo. TYLER SANDERS Cont. AAA Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 19 Twp. 10s Rge. 17W Co. ROOKS State KS  
 No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 3369 To 3415 Initial Str Wt./Lbs. 44,000 Unseated Str Wt./Lbs. 44,000  
 Anchor Length 46' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 60,000  
 Top Packer Depth 3364 Tool Weight 2,200  
 Bottom Packer Depth 3369 Hole Size 7 7/8"  Rubber Size 6 3/4"   
 Total Depth 3415 Wt. Pipe Run 0 Drill Collar Run 0  
 Mud Wt. 9.3 LCM TR Vis. 48 WL 8.4 Drill Pipe Size 4 1/2 X 4 1/2 Ft. Run \_\_\_\_\_  
 Blow Description FP - WEAK TO FAIR BUILT TO 4" IN ISI - DEAD  
FP - WEAK BUILT 2 1/2" IN. FSI - DEAD

Recovery - Total Feet 50 GIP 0 Ft. in DC 0 Ft. in DP 50'  
 Rec. 47 Feet of 800 MUD @ OIL STAIN %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud \_\_\_\_\_  
 Rec. 3 Feet of OIL %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 90 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 8,000 ppm System

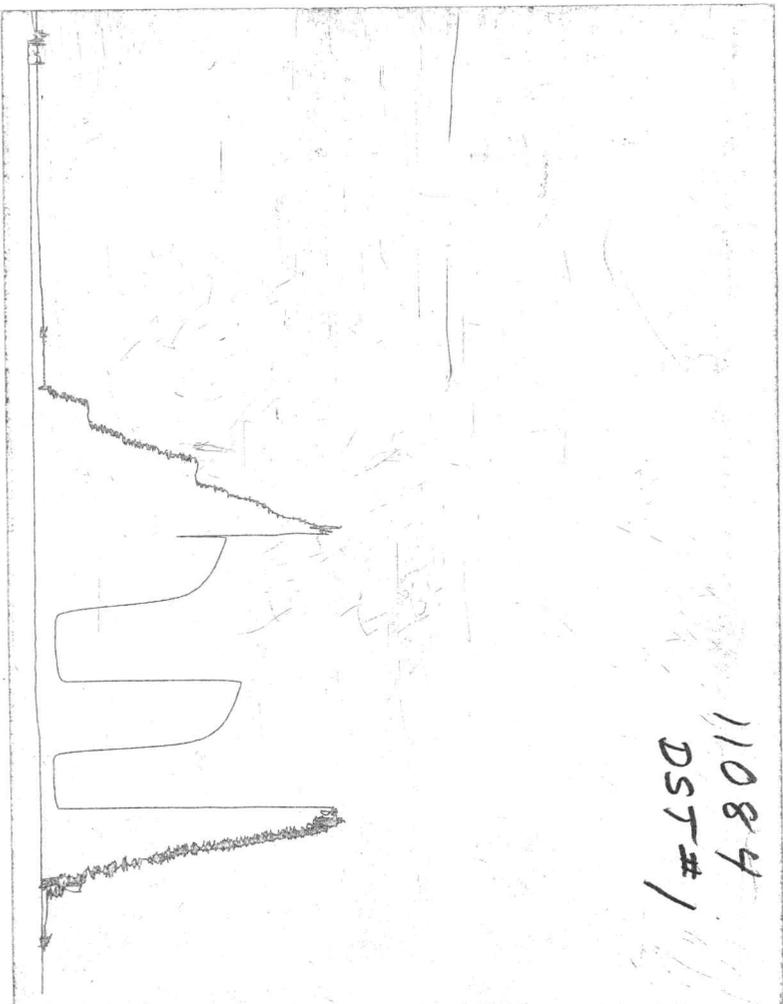
	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1630</u> PSI	<u>4672</u>	<u>B. HOLE</u>
(B) First Initial Flow Pressure		<u>12</u> PSI	(depth) <u>3371</u>	Jars _____
(C) First Final Flow Pressure		<u>22</u> PSI	Recorder No. <u>11084</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		<u>1137</u> PSI	(depth) _____	Circ Sub _____
(E) Second Initial Flow Pressure		<u>24</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>34</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>1052</u> PSI	Initial Opening <u>45</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1607</u> PSI	Initial Shut-In <u>60</u>	Shale Packer _____
			Final Flow <u>45</u>	Ruined Packer _____
			Final Shut-In <u>60</u>	Mileage <u>R. TRIP - 48</u>
			T-On Location <u>17:00</u>	Sub Total: <u>948</u>
			T-Started <u>18:36</u>	Std. By <u>1.5</u> <u>45</u>
			T-Open <u>20:19</u>	Other _____
			T-Pulled <u>23:47</u>	Total: <u>993.0</u>
			T-Out <u>02:35</u>	

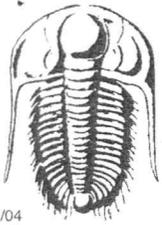
TRILOBITE TESTING INC. SHALL NOT BE LIABLE FOR DAMAGED OF ANY KIND OF THE PROPERTY OR PERSONNEL OF THE ONE FOR WHOM A TEST IS MADE, OR FOR ANY LOSS SUFFERED OR SUSTAINED, DIRECTLY OR INDIRECTLY, THROUGH THE USE OF ITS EQUIPMENT, OR ITS STATEMENTS OR OPINION CONCERNING THE RESULTS OF ANY TEST. TOOLS LOST OR DAMAGED IN THE HOLE SHALL BE PAID FOR AT COST BY THE PARTY FOR WHOM THE TEST IS MADE.

Approved By [Signature]  
 Our Representative John J. Schmidt

**CHART PAGE**

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





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 21202

## Test Ticket

Well Name & No. BECKER # 2 Test No. # 2 Date 1-17-05  
 Company ERNST OIL Zone Tested L.K. - H To L  
 Address \_\_\_\_\_ Elevation 2102 KB 2097 GL  
 Co. Rep / Geo. TYLER SANDERS Cont. A + A Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
 Location: Sec. 19 Twp. 105 Rge. 17 W Co. ROOKS State KS  
 No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 3461 To 3558 Initial Str Wt./Lbs. 45,000 Unseated Str Wt/Lbs. 46,000  
 Anchor Length 97' Wt. Set Lbs. 25,000 Wt. Pulled Loose/Lbs. 65,000  
 Top Packer Depth 3456 Tool Weight 2,200  
 Bottom Packer Depth 3461 Hole Size 7 7/8" ✓ Rubber Size 6 3/4" ✓  
 Total Depth 3558 Wt. Pipe Run 0 Drill Collar Run 0  
 Mud Wt. 9.3 LCM TR. Vis. 41 WL 8.8 Drill Pipe Size 4 1/2 X 11 1/4 Ft. Run 3446'  
 Blow Description IF. GOOD BLOW BUILT TO 9" IN. I.S.I. WEAK SURF. BLOW BACK  
FF. GOOD BLOW BUILT TO 11" IN. F.S.I. WEAK SURF. BLOW BACK

Recovery - Total Feet 100' GIP 100' Ft. in DC 0 Ft. in DP 100'  
 Rec. 100' Feet of MCO %gas 70 %oil \_\_\_\_\_ %water 30 %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 \_\_\_\_\_ °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
 RW \_\_\_\_\_ @ \_\_\_\_\_ °F Chlorides \_\_\_\_\_ ppm Recovery \_\_\_\_\_ Chlorides 2,000 ppm System

	AK-1	Alpine	Recorder No.	Test
(A) Initial Hydrostatic Mud		<u>1693</u> PSI	<u>6672</u>	<u>B. HOLE</u>
(B) First Initial Flow Pressure		<u>14</u> PSI	(depth) <u>3463</u>	Jars _____
(C) First Final Flow Pressure		<u>35</u> PSI	Recorder No. <u>11084</u>	Safety Jt. _____
(D) Initial Shut-In Pressure		<u>1216</u> PSI	(depth) <u>3525</u>	Circ Sub _____
(E) Second Initial Flow Pressure		<u>36</u> PSI	Recorder No. _____	Sampler _____
(F) Second Final Flow Pressure		<u>52</u> PSI	(depth) _____	Straddle _____
(G) Final Shut-In Pressure		<u>1197</u> PSI	Initial Opening <u>45</u>	Ext. Packer _____
(Q) Final Hydrostatic Mud		<u>1650</u> PSI	Initial Shut-In <u>60</u>	Shale Packer _____

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Approved By John H. Salter  
 Our Representative John Schmidt

Final Flow 45  
 Final Shut-In 60  
 T-On Location 16:30  
 T-Started 17:18  
 T-Open 19:07  
 T-Pulled 22:36  
 T-Out 01:12

Sub Total: 948  
 Std. By 34 22.50  
 Other \_\_\_\_\_  
 Total: \$970.50

**CHART PAGE**

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

