

**TRILOBITE**  
**TESTING, INC.**

DRILL STEM TEST REPORT

Prepared for

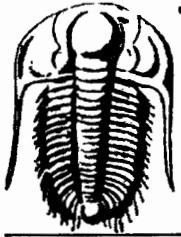
Molz Oil Co Inc  
19159 SW Clairmont  
Kiowa, KS 67070

Ruby #2  
2-33s-10w  
Barber co KS

ORIGINAL

Trilobite Testing, Inc  
PO Box 362 - Hays, Kansas - 67601  
ph: 785-625-4778 fax: 785-625-5620  
e-mail: [trilobite@eaglecom.net](mailto:trilobite@eaglecom.net)

# ORIGINAL



## TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT  
Molz Oil Co Inc  
19159 SW Clairmont  
Kiowa, KS 67070

|             |                        |           |           |
|-------------|------------------------|-----------|-----------|
| Well name#: | Ruby #2                | Date:     | 2/19/2003 |
| Location#:  | 2-33s-10w Barber co KS | Ticket #: | 16553     |
|             |                        | DST#      | 1         |

General Informaion:

|                   |             |                        |              |               |          |
|-------------------|-------------|------------------------|--------------|---------------|----------|
| Formation:        | Mississippi | Test Type:             | Conventional | BHT:          | 119      |
| Interval:         | 4378-4450   | Tester:                | Jim Wenrich  | OIL API:      |          |
| Total Depth:      | 4450        | Elevation:             | 1411 ft(KB)  | H2O Salinity: |          |
| Hole Diameter:    | 7 7/8"      |                        | 1400 ft(CF)  |               |          |
| Start Data:       | 2/19/2003   | Tool Weight:           | 2100         | Mud Type:     | Chemical |
| Start Time:       | 10:00:00    | Weight Set on Packers: | 20000        | Mud Weight:   | 9.3      |
| Time tool opened: | 12:50:00    | Weight to Pull Loose:  | 90000        | Viscosity:    | 51       |
| Time Off Btm:     | 15:50:00    | Initial String Weight: | 82000        | Water Loss:   | 9.6      |
| End Date:         | 2/19/03     | Final String Weight:   | 84000        | Resistivity:  | -        |
| End Time:         | 18:45:00    | Drill Pipe Length:     | 3870         | Salinity:     | 4000     |
|                   |             | Drill Collar Length:   | 545          |               |          |
|                   |             | Wt. Pipe Length:       |              |               |          |

Test Comment:  
IF: Strong blow - Bottom of bucket in 15 sec. GTS in 2 min  
ISI: Weak blow 1/4" in bucket  
FF: Strong blow - Bottom of bucket immediately  
FSI: Weak blow 1" in bucket

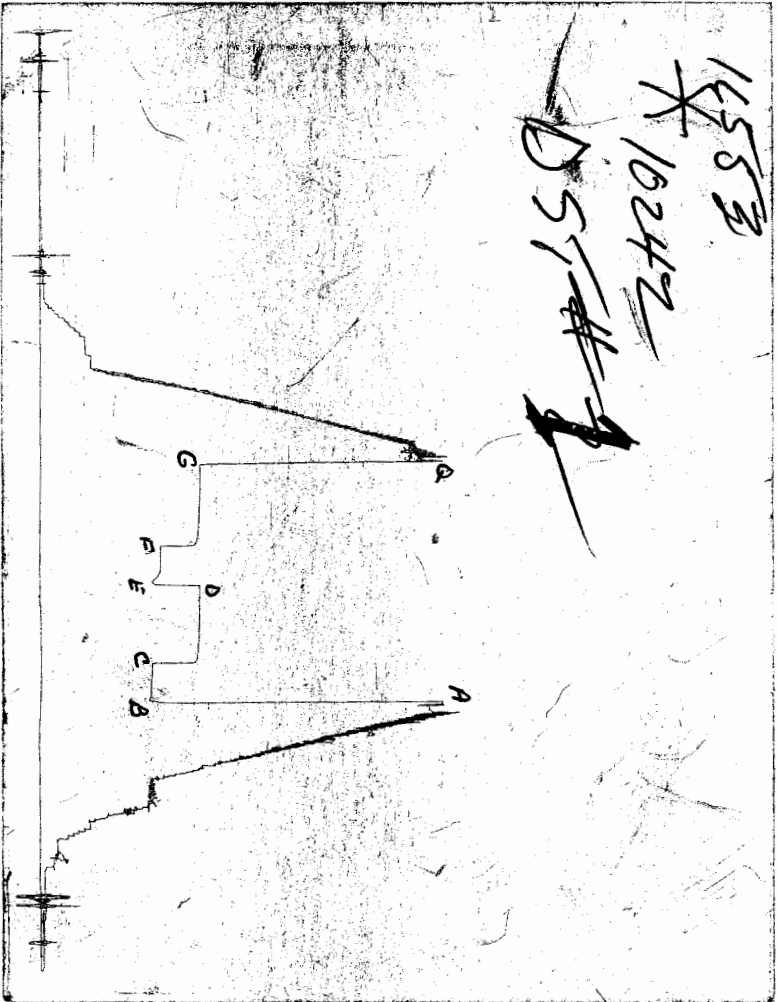
|                      |   |
|----------------------|---|
| Recovery Length(ft): |   |
| 485                  | Gas & mud cut oil 35%gas 55% oil 10%mud |
| 90                   | Gas & oil cut mud 25%gas 35%oil 40%mud  |

### Gas Volume Report

| Recorder #:           | 10242 |            | Min: | Ins. Of water<br>PSIG | Orifice<br>size | MCF/D  |
|-----------------------|-------|------------|------|-----------------------|-----------------|--------|
| Pressure Summary:     |       | Time:(min) |      |                       |                 |        |
| Initial Hydro-static: | 2215  |            | 1    | 10                    | .75             | 1748.2 |
| Open to Flow (1):     | 641   | 30         | 1    | 20                    | .75             | 1994.5 |
| Shut-in (1):          | 651   | 60         | 1    | 30                    | .75             | 2081.5 |
| End Shut-in (1):      | 910   |            | 2    | 10                    | .75             | 2313.3 |
| Open to Flow (2):     | 649   | 30         | 2    | 20                    | .75             | 2371.3 |
| Shut-in (2):          | 697   | 60         | 2    | 30                    | .75             | 2371.3 |
| End Shut-in (2);      | 912   |            |      |                       |                 |        |
| Final Hydro-static:   | 2182  |            |      |                       |                 |        |

**CHART PAGE**

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



# NATURAL GAS ANALYSIS REPORT

Sampled by:

Trilobite Testing, Inc.  
Hays, Kansas  
Scott City, Kansas  
Phone: 800-728-5369  
Fax: 785-625-5620

Analyzed by:

Caraway Analytical, Inc  
P. O. Box 2137  
Liberal, Kansas 67905  
Phone: 620-624-5389  
Fax: 620-626-7108

Lab Number: 20030903

Analyzed: 02/23/03

Sample From: Ruby 2  
Producer: Molz Oil Co.

Pressure:  
Temperature:

Date Location: 2-33-10

Time:  
Sampler:  
Source: DST 1

County: Barber  
State: Kansas  
Formation: Miss

|                | Mole %     | GPM   |
|----------------|------------|-------|
| Helium         | He: 0.094  | 0.000 |
| Hydrogen       | H2: 0.004  | 0.000 |
| Oxygen         | O2: 0.000  | 0.000 |
| Nitrogen       | N2: 1.522  | 0.000 |
| Carbon Dioxide | CO2: 0.084 | 0.000 |
| Methane        | C1: 88.249 | 0.000 |
| Ethane         | C2: 5.476  | 1.465 |
| Propane        | C3: 2.518  | 0.694 |
| Iso Butane     | iC4: 0.326 | 0.107 |
| Normal Butane  | nC4: 0.802 | 0.253 |
| Iso Pentane    | iC5: 0.197 | 0.072 |
| Normal Pentane | nC5: 0.255 | 0.092 |
| Hexanes Plus   | C6+: 0.473 | 0.206 |

TOTAL: 100.000 2.889

Z Fact: 0.9973

SP.GR.: 0.6513

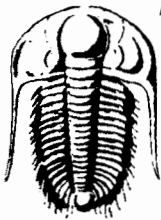
BTU (SAT): 1116.6 @ 14.73 psia  
BTU (DRY): 1136.3 @ 14.73 psia

**OCTANE RATING: 124.2**

COMMENTS:

0.000





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 16553

## Test Ticket

Well Name & No. BUBY #2 Test No. 1 Date 2/19/03  
 Company Molz Oil Co Inc Zone Tested Miss  
 Address 19139 SW Clairmont Kiowa, Ks 67070 Elevation 1411 KB 1400 GL  
 Co. Rep / Geo. Gordon Keen Cont. Duke Rig #5 Est. Ft. of Pay      Por.      %  
 Location: Sec. 2 Twp. 33s Rge. 10w Co. BARBER State Ks  
 No. of Copies 5 Distribution Sheet (Y, N)      Turnkey (Y, N)      Evaluation (Y, N)     

Interval Tested 4378 4450 Initial Str Wt./Lbs. 82,000 Unseated Str Wt./Lbs. 81,000  
 Anchor Length 72 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 90,000  
 Top Packer Depth 4373 Tool Weight 2100  
 Bottom Packer Depth 4378 Hole Size — 7 7/8"  Rubber Size — 6 3/4"   
 Total Depth 4450 Wt. Pipe Run 0 Drill Collar Run 545  
 Mud Wt. 9.3 LCM 0 Vis. 51 WL 9.6 Drill Pipe Size 4 1/2 XH Ft. Run 3870  
 Blow Description IF: Strong blow. B.O.B. in 15 secs. GTS in 2 mins. (see gas report)  
1st: Weak blow. 1/4" in bucket. FF: Strong blow. B.O.B. immediately. (see gas report)  
Report). FSI: Weak blow 1" in bucket.

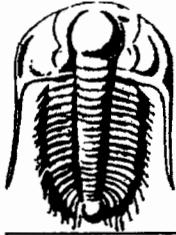
Recovery — Total Feet 575 GIP GTS Ft. in DC 545 Ft. in DP 30  
 Rec. 485 Feet Of G+MCO 35% gas 55% oil %water 10% mud  
 Rec. 90 Feet Of G+OCM 25% gas 35% oil %water 40% mud  
 Rec.      Feet Of      %gas %oil %water %mud  
 Rec.      Feet Of      %gas %oil %water %mud  
 Rec.      Feet Of      %gas %oil %water %mud  
 BHT 119 °F Gravity      °API D@      °F Corrected Gravity      °API  
 RW      @      °F Chlorides      ppm Recovery Chlorides 4,000 ppm System

|                                  | AK-1        | Alpine |                     |   |
|----------------------------------|-------------|--------|---------------------|---|
| (A) Initial Hydrostatic Mud      | <u>3229</u> |        | PSI Recorder No.    | <u>10242</u> T-On Location <u>0918</u>                                |
| (B) First Initial Flow Pressure  | <u>639</u>  |        | PSI (depth)         | <u>4379</u> T-Started <u>1000</u>                                     |
| (C) First Final Flow Pressure    | <u>667</u>  |        | PSI Recorder No.    | <u>1363</u> T-Open <u>1250</u>  |
| (D) Initial Shut-In Pressure     | <u>916</u>  |        | PSI (depth)         | <u>4448</u> T-Pulled <u>1550</u>                                      |
| (E) Second Initial Flow Pressure | <u>667</u>  |        | PSI Recorder No.    | <u>    </u> T-Out <u>1845</u>   |
| (F) Second Final Flow Pressure   | <u>719</u>  |        | PSI (depth)         | <u>    </u> T-Off Location <u>    </u>                                |
| (G) Final Shut-in Pressure       | <u>927</u>  |        | PSI Initial Opening | <u>30</u> Test <input checked="" type="checkbox"/> <u>800</u>         |
| (Q) Final Hydrostatic Mud        | <u>2219</u> |        | PSI Initial Shut-in | <u>60</u> Jars <input checked="" type="checkbox"/> <u>200</u>         |
|                                  |             |        | Final Flow          | <u>30</u> Safety Joint <input checked="" type="checkbox"/> <u>150</u> |
|                                  |             |        | Final Shut-in       | <u>60</u> Straddle <u>    </u>  |

TRILOBITE TESTING INC. 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 [Signature]  
 Our Representative John Stewart

Circ. Sub       
 Sampler       
 Extra Packer       
 Elec. Rec.       
 Mileage  50  
 Other       
 TOTAL PRICE \$



# TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT  
 Molz Oil Co Inc  
 19159 SW Clairmont  
 Kiowa, KS 67070

|             |                        |           |           |
|-------------|------------------------|-----------|-----------|
| Well name#: | Ruby #2                | Date:     | 2/20/2003 |
| Location#:  | 2-33s-10w Barber co KS | Ticket #: | 16554     |
|             |                        | DST#      | 2         |

General Informaion:

|                |           |            |              |               |     |
|----------------|-----------|------------|--------------|---------------|-----|
| Formation:     | Viola     | Test Type: | Conventional | BHT:          | 124 |
| Interval:      | 4676-4700 | Tester:    | Jim Wenrich  | OIL API:      |     |
| Total Depth:   | 4700      | Elevation: | 1411 ft(KB)  | H2O Salinity: |     |
| Hole Diameter: | 7 7/8"    |            | 1400 ft(CF)  |               |     |

|                   |           |                        |       |              |          |
|-------------------|-----------|------------------------|-------|--------------|----------|
| Start Data:       | 2/20/2003 | Tool Weight:           | 2100  | Mud Type:    | Chemical |
| Start Time:       | 18:15:00  | Weight Set on Packers: | 20000 | Mud Weight:  | 9.3      |
| Time tool opened: | 20:03:00  | Weight to Pull Loose:  | 90000 | Viscosity:   | 51       |
| Time Off Btm:     | 23:03:00  | Initial String Weight: | 82000 | Water Loss:  | 9.6      |
| End Date:         | 2/21/03   | Final String Weight:   | 84000 | Resistivity: | -        |
| End Time:         | 2:00:00   | Drill Pipe Length:     | 4215  | Salinity:    | 5000     |
|                   |           | Drill Collar Length:   | 454   |              |          |
|                   |           | Wt. Pipe Length:       |       |              |          |

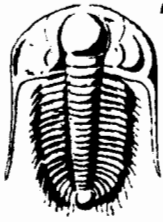
Test Comment:  
 IF: Strong blow Bottom of Bucket in 8 minutes  
 ISI: no blow  
 FF: Strong blow Bottom of bucket in 1 minute  
 FSI: no blow

|                      |   |
|----------------------|---|
| Recovery Length(ft): |   |
| 30                   | Gassy oil cut mud 15%gas 6%oil 79%mud                 |
| 120                  | Gassy oil water cut mud 20%gas 20%oil 10%water 50%mud |

### Gas Volume Report

| Recorder #:           | 10242      | Min: | Ins. Of water | Orifice size | MCF/D |
|-----------------------|------------|------|---------------|--------------|-------|
| Pressure Summary:     | Time:(min) |      | PSIG          |              |       |
| Initial Hydro-static: | 2366       |      |               |              |       |
| Open to Flow (1):     | 52         | 45   |               |              |       |
| Shut-in (1):          | 52         | 45   |               |              |       |
| End Shut-in (1):      | 1529       |      |               |              |       |
| Open to Flow (2):     | 86         | 45   |               |              |       |
| Shut-in (2):          | 86         | 45   |               |              |       |
| End Shut-in (2):      | 1629       |      |               |              |       |
| Final Hydro-static:   | 2308       |      |               |              |       |





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

No 16554

## Test Ticket

Well Name & No. RUBY #2 Test No. 2 Date 2/20/03  
 Company Molz Oil Co Inc. Zone Tested VIOLA  
 Address 19159 SW CLARKMONT KNOX, KS 67070 Elevation 1411 KB 1400GL  
 Co. Rep / Geo. Gordon Keen Cont. Duke Dalg Rig #5 Est. Ft. of Pay      Por.      %  
 Location: Sec. 2 Twp. 33 Rge. 10W Co. BARBER State KS  
 No. of Copies 5 Distribution Sheet (Y, N)      Turnkey (Y, N)      Evaluation (Y, N)     

Interval Tested 4676 4700 Initial Str Wt./Lbs. 82,000 Unseated Str Wt./Lbs. 84,000  
 Anchor Length      24 Wt. Set Lbs. 20,000 Wt. Pulled Loose/Lbs. 90,000  
 Top Packer Depth      4671 Tool Weight 2100  
 Bottom Packer Depth      4676 Hole Size — 7 7/8"  Rubber Size — 6 3/4"   
 Total Depth      4700 Wt. Pipe Run 0 Drill Collar Run 454  
 Mud Wt. 9.3 LCM 0 Vis. 50 WL 12.0 Drill Pipe Size 4 1/2 X H Ft. Run 4215  
 Blow Description IF! Strong blow. B.O.B. in 8 mins. ISF. No blow.  
FF! Strong blow. B.O.B. in 1 min. FSI: No blow.

Recovery — Total Feet 150 GIP 1700 Ft. in DC 150 Ft. in DP 0  
 Rec. 30 Feet Of 900 CM 15% gas 6% oil %water 79% mud  
 Rec. 120 Feet Of 900 CM 20% gas 20% oil 10% water 50% mud  
 Rec.      Feet Of      %gas %oil %water %mud  
 Rec.      Feet Of      %gas %oil %water %mud  
 Rec.      Feet Of      %gas %oil %water %mud  
 BHT 124 °F Gravity      °API D@      °F Corrected Gravity      °API  
 RW      @      °F Chlorides      ppm Recovery Chlorides 5,000 ppm System

|                                  | AK-1        | Alpine |                     |  |
|----------------------------------|-------------|--------|---------------------|--|
| (A) Initial Hydrostatic Mud      | <u>2321</u> |        | PSI Recorder No.    | <u>10242</u> T-On Location <u>1715</u>                               |
| (B) First Initial Flow Pressure  | <u>58</u>   |        | PSI (depth)         | <u>4677</u> T-Started <u>1815</u>                                    |
| (C) First Final Flow Pressure    | <u>82</u>   |        | PSI Recorder No.    | <u>13630</u> T-Open <u>2003</u>                                      |
| (D) Initial Shut-In Pressure     | <u>1543</u> |        | PSI (depth)         | <u>4698</u> T-Pulled <u>2303</u>                                     |
| (E) Second Initial Flow Pressure | <u>93</u>   |        | PSI Recorder No.    | <u>    </u> T-Out <u>0200</u>  |
| (F) Second Final Flow Pressure   | <u>105</u>  |        | PSI (depth)         | <u>    </u> T-Off Location <u>    </u>                               |
| (G) Final Shut-in Pressure       | <u>1626</u> |        | PSI Initial Opening | <u>45</u> Test <input checked="" type="checkbox"/> <u>800</u>        |
| (Q) Final Hydrostatic Mud        | <u>2331</u> |        | PSI Initial Shut-in | <u>45</u> Jars <input checked="" type="checkbox"/> <u>200</u>        |
|                                  |             |        | Final Flow          | <u>45</u> Safety Joint <input checked="" type="checkbox"/> <u>50</u> |
|                                  |             |        | Final Shut-in       | <u>45</u> Straddle <u>    </u>                                       |

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Approved By Gordon W. Keen  
 Our Representative Jim Henrich

Circ. Sub       
 Sampler       
 Extra Packer       
 Elec. Rec.       
 Mileage  50  
 Other       
 TOTAL PRICE \$