



## DRILL STEM TEST REPORT

Prepared For: **CLX Energy, Inc**

518 17th Street, Suite 745  
Denver, Co 80202

ATTN: Arden Ratzlaff

**34-29s-12w Pratt**

**Hoffman Trust #1**

Start Date: 2004.02.19 @ 21:33:40

End Date: 2004.02.20 @ 04:38:10

Job Ticket #: 18019      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

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518 17th Street, Suite 745  
Denver, Co 80202  
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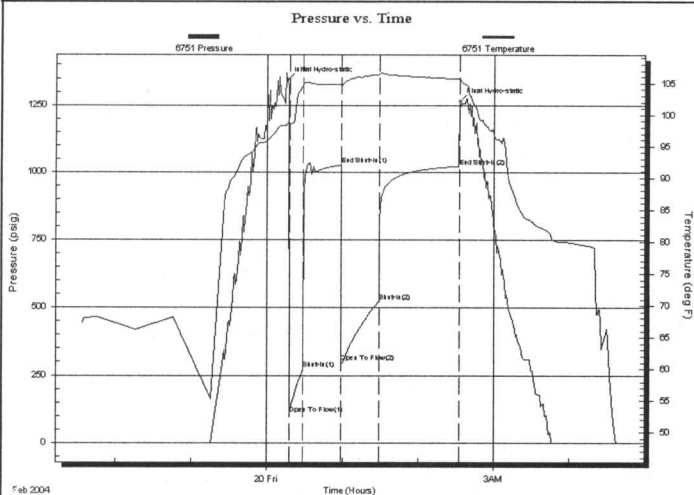
**Hoffman Trust #1**  
**34-29s-12w Pratt**  
Job Ticket: 18019 **DST#: 1**  
Test Start: 2004.02.19 @ 21:33:40

### GENERAL INFORMATION:

Formation: **Indian Cave**  
Deviated: No Whipstock: ft (KB)  
Time Tool Opened: 00:17:55  
Time Test Ended: 04:38:10  
Interval: **2749.00 ft (KB) To 2810.00 ft (KB) (TVD)**  
Total Depth: 2810.00 ft (KB) (TVD)  
Hole Diameter: 7.88 inches Hole Condition: Fair  
Test Type: Conventional Bottom Hole  
Tester: Nathan  
Unit No: 16  
Reference Elevations: 1868.00 ft (KB)  
1859.00 ft (CF)  
KB to GR/CF: 9.00 ft

**Serial #: 6751** **Inside**  
Press@RunDepth: 522.97 psig @ 2789.00 ft (KB) Capacity: 7000.00 psig  
Start Date: 2004.02.19 End Date: 2004.02.20 Last Calib.: 1899.12.30  
Start Time: 21:33:50 End Time: 04:38:10 Time On Btm: 2004.02.20 @ 00:15:40  
Time Off Btm: 2004.02.20 @ 02:32:10

**TEST COMMENT:** IF- Fair blow building O.B.B. in 1 minute 20 seconds  
IS- No blow  
FF- Fair blow building O.B.B. in 1 minute 30 seconds  
FSI- No blow



### PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1340.56         | 98.64        | Initial Hydro-static |
| 3           | 105.00          | 98.55        | Open To Flow (1)     |
| 13          | 272.87          | 104.69       | Shut-In (1)          |
| 43          | 1029.27         | 104.79       | End Shut-In (1)      |
| 43          | 296.91          | 104.59       | Open To Flow (2)     |
| 73          | 522.97          | 106.34       | Shut-In (2)          |
| 136         | 1022.23         | 105.75       | End Shut-In (2)      |
| 137         | 1264.50         | 105.80       | Final Hydro-static   |

### Recovery

| Length (ft) | Description                   | Volume (bbl) |
|-------------|-------------------------------|--------------|
| 372.00      | Drig Mud 100% mud             | 4.09         |
| 248.00      | Muddy water 52% mud 48% water | 3.48         |
| 372.00      | Saltwater 94% water 6% mud    | 5.22         |
|             |                               |              |
|             |                               |              |
|             |                               |              |

### Gas Rates

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



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TOOL DIAGRAM

CLX Energy, Inc

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Hoffman Trust #1

34-29s-12w Pratt

Job Ticket: 18019

DST#: 1

Test Start: 2004.02.19 @ 21:33:40

### Tool Information

|                           |                    |                       |                   |                                    |
|---------------------------|--------------------|-----------------------|-------------------|------------------------------------|
| Drill Pipe:               | Length: 2616.00 ft | Diameter: 3.80 inches | Volume: 36.70 bbl | Tool Weight: 2200.00 lb            |
| Heavy Wt. Pipe:           | Length: 0.00 ft    | Diameter: 0.00 inches | Volume: 0.00 bbl  | Weight set on Packer: 22000.00 lb  |
| Drill Collar:             | Length: 124.00 ft  | Diameter: 2.25 inches | Volume: 0.61 bbl  | Weight to Pull Loose: 60000.00 lb  |
|                           |                    | Total Volume:         | 37.31 bbl         | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 13.00 ft           |                       |                   | String Weight: Initial 53000.00 lb |
| Depth to Top Packer:      | 2749.00 ft         |                       |                   | Final 55000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                   |                                    |
| Interval between Packers: | 61.00 ft           |                       |                   |                                    |
| Tool Length:              | 83.00 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        |            |          | 2728.00    |                               |
| Shut In Tool     | 5.00        |            |          | 2733.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 2738.00    |                               |
| Safety Joint     | 2.00        |            |          | 2740.00    |                               |
| Packer           | 4.00        |            |          | 2744.00    | 22.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 2749.00    |                               |
| Stubb            | 1.00        |            |          | 2750.00    |                               |
| Perforations     | 5.00        |            |          | 2755.00    |                               |
| Change Over Sub  | 1.00        |            |          | 2756.00    |                               |
| Blank Spacing    | 32.00       |            |          | 2788.00    |                               |
| Change Over Sub  | 1.00        |            |          | 2789.00    |                               |
| Recorder         | 0.00        | 6751       | Inside   | 2789.00    |                               |
| Perforations     | 18.00       |            |          | 2807.00    |                               |
| Recorder         | 0.00        | 13630      | Outside  | 2807.00    |                               |
| Bullnose         | 3.00        |            |          | 2810.00    | 61.00 Bottom Packers & Anchor |

**Total Tool Length: 83.00**



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### FLUID SUMMARY

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518 17th Street, Suite 745  
Denver, Co 80202

**34-29s-12w Pratt**

Job Ticket: 18019

**DST#: 1**

ATTN: Arden Ratzlaff

Test Start: 2004.02.19 @ 21:33:40

### 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: 108000 ppm

Viscosity: 55.00 sec/qt

Cushion Volume:

bbl

Water Loss: 8.77 in<sup>3</sup>

Gas Cushion Type:

Resistivity: 0.00 ohm.m

Gas Cushion Pressure:

psig

Salinity: 5000.00 ppm

Filter Cake: 0.02 inches

### Recovery Information

Recovery Table

| Length<br>ft | Description                   | Volume<br>bbl |
|--------------|-------------------------------|---------------|
| 372.00       | Drig Mud 100%mud              | 4.089         |
| 248.00       | Muddy w ater 52%mud 48%w ater | 3.479         |
| 372.00       | Saltw ater 94%w ater 6%mud    | 5.218         |

Total Length: 992.00 ft

Total Volume: 12.786 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

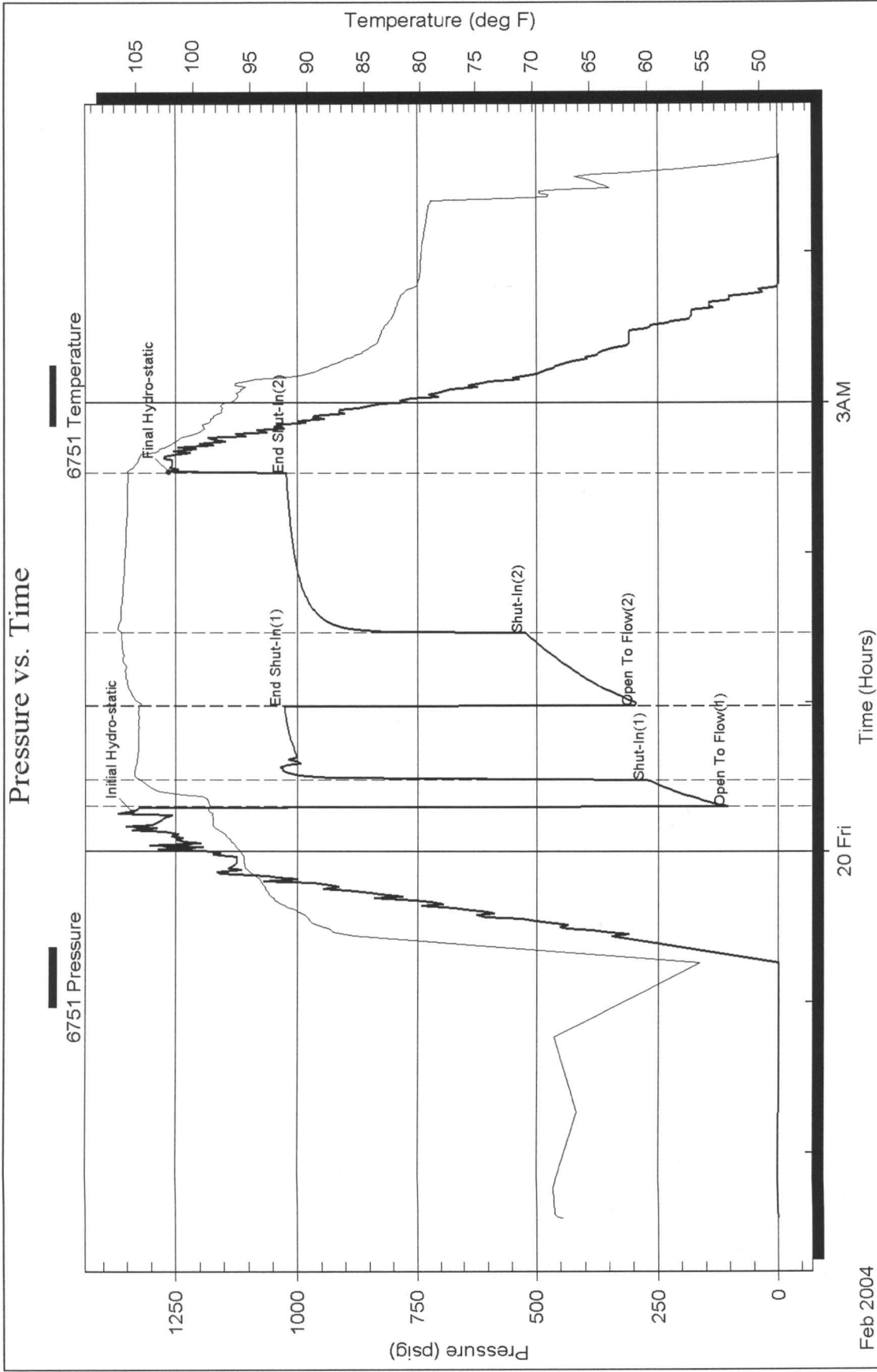
Serial #: 6751

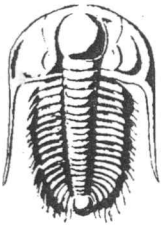
Inside

CLX Energy, Inc

34-29s-12w Pratt

DST Test Number: 1





# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

Nº 18019

05/03

## Test Ticket

Well Name & No. Hoffman Trust #1 Test No. 1 Date 2/19/04  
Company CLX Energy, Inc Zone Tested Indian Cave  
Address 51817th Street, Suite 745 Denver, Co 80202 Elevation 1868 KB 1859 GL  
Co. Rep / Geo. Arden Ratzliff Cont. Duke Drtg #4 Est. Ft. of Pay \_\_\_\_\_ Por. \_\_\_\_\_ %  
Location: Sec. 34 Twp. 29S Rge. 12W Co. Pratt State Ks  
No. of Copies \_\_\_\_\_ Distribution Sheet (Y, N) \_\_\_\_\_ Turnkey (Y, N) \_\_\_\_\_ Evaluation (Y, N) \_\_\_\_\_

Interval Tested 2749 - 2810 Initial Str Wt./Lbs 53,000 Unseated Str Wt./Lbs 55,000  
Anchor Length 60 Wt. Set Lbs 22,000 Wt. Pulled Loose/Lbs 60,000  
Top Packer Depth 2744 Tool Weight 2200  
Bottom Packer Depth 2749 Hole Size 7 7/8" Rubber Size 6 3/4"  
Total Depth 2810 Wt. Pipe Run -0- Drill Collar Run 124  
Mud Wt. 8.9 LCM -0- Vis. 55 WL 8.8 Drill Pipe Size 4 1/2 Ft. Run 2616  
Blow Description TF - Fairblow O.B.B in 1min 20sec  
TSI - No blow  
FF - Fairblow O.B.B in 1min 30sec  
FSI - No blow

Recovery - Total Feet 992 GIP -0- Ft. in DC 124 Ft. in DP 868  
Rec. 372 Feet of Drly mud %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water 100 %mud  
Rec. 248 Feet of muddy water %gas \_\_\_\_\_ %oil 48 %water 52 %mud  
Rec. 372 Feet of Saltwater %gas \_\_\_\_\_ %oil 94 %water 6 %mud  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
Rec. \_\_\_\_\_ Feet of \_\_\_\_\_ %gas \_\_\_\_\_ %oil \_\_\_\_\_ %water \_\_\_\_\_ %mud  
BHT 1060 °F Gravity \_\_\_\_\_ °API D @ \_\_\_\_\_ °F Corrected Gravity \_\_\_\_\_ °API  
RW 140 @ 37.5 °F Chlorides 108,000 ppm Recovery \_\_\_\_\_ Chlorides 5,000 ppm System

AK-1 Alpine  
(A) Initial Hydrostatic Mud 1341 PSI Recorder No. 6751 Test bottom hole 700  
(B) First Initial Flow Pressure 105 PSI (depth) 2789 Elec. Rec. ✓ 750  
(C) First Final Flow Pressure 273 PSI Recorder No. 13630 Jars \_\_\_\_\_  
(D) Initial Shut-In Pressure 1029 PSI (depth) 2807 Safety Jt. ✓ 50  
(E) Second Initial Flow Pressure 297 PSI Recorder No. \_\_\_\_\_ Circ Sub \_\_\_\_\_  
(F) Second Final Flow Pressure 523 PSI (depth) \_\_\_\_\_ Sampler \_\_\_\_\_  
(G) Final Shut-In Pressure 1022 PSI Initial Opening 10 Straddle \_\_\_\_\_  
(Q) Final Hydrostatic Mud 1264 PSI Initial Shut-In 30 Ext. Packer \_\_\_\_\_  
Final Flow 30 Shale Packer \_\_\_\_\_  
Final Shut-In 60 Mileage 21 35.70  
T-On Location 21:15 Sub Total: 935.70  
T-Started 21:33 Std. By \_\_\_\_\_  
T-Open 0:17 Other \_\_\_\_\_  
T-Pulled 2:27 Total: \_\_\_\_\_  
T-Out 4:38

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Approved By Arden Ratzliff  
Our Representative John Budwig

# CHART PAGE

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

