

KANSAS CORPORATION COMMISSION  
OIL & GAS CONSERVATION DIVISION

**ORIGINAL**

Form ACO-1  
June 2009

Form Must Be Typed  
Form must be Signed  
All blanks must be Filled

**WELL COMPLETION FORM**  
**WELL HISTORY - DESCRIPTION OF WELL & LEASE**

OPERATOR: License # 30259  
Name: Werth Exploration Trust  
Address 1: 1308 Schwaller Ave.  
Address 2: \_\_\_\_\_  
City: Hays State: KS Zip: 67601 + \_\_\_\_\_  
Contact Person: Andy Werth  
Phone: ( 785 ) 625-4968  
CONTRACTOR: License # 31548  
Name: Discovery Drilling Co., Inc.  
Wellsite Geologist: E. L. Glassman  
Purchaser: NA

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SLOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- CM (Coal Bed Methane)
- Cathodic     Other (Core, Expl., etc.): \_\_\_\_\_

If Workover/Re-entry: Old Well Info as follows:

Operator: \_\_\_\_\_  
Well Name: \_\_\_\_\_  
Original Comp. Date: \_\_\_\_\_ Original Total Depth: \_\_\_\_\_

Deepening     Re-perf.     Conv. to ENHR     Conv. to SWD

Conv. to GSW

Plug Back: \_\_\_\_\_ Plug Back Total Depth \_\_\_\_\_

Commingled      Permit #: \_\_\_\_\_

Dual Completion      Permit #: \_\_\_\_\_

SWD      Permit #: \_\_\_\_\_

ENHR      Permit #: \_\_\_\_\_

GSW      Permit #: \_\_\_\_\_

|                                   |                   |   |
|-----------------------------------|-------------------|---|
| <u>01/13/2011</u>                 | <u>01/19/2011</u> | <u>01/26/2011</u>                       |
| Spud Date or<br>Recompletion Date | Date Reached TD   | Completion Date or<br>Recompletion Date |

API No. 15 - 065-23,711-00-00

Spot Description: \_\_\_\_\_  
SW NE SW NW Sec. 22 Twp. 7 S. R. 22  East  West

1,884 Feet from  North /  South Line of Section

689 Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:  
 NE  NW  SE  SW

County: Graham  
Lease Name: Worcester L. C. Well #: 1  
Field Name: Un-named  
Producing Formation: LKC  
Elevation: Ground: 2284 Kelly Bushing: 2292  
Total Depth: 3850 Plug Back Total Depth: 3814  
Amount of Surface Pipe Set and Cemented at: 264.08 Feet  
Multiple Stage Cementing Collar Used?  Yes  No  
If yes, show depth set: 1782 Feet  
If Alternate II completion, cement circulated from: 1782  
feet depth to: Surface elevation w/ 450 sx cmt.

**Drilling Fluid Management Plan**

(Data must be collected from the Reserve Pit)

Chloride content: 12,000 ppm Fluid volume: 240 bbls  
Dewatering method used: Evaporation  
Location of fluid disposal if hauled offsite: \_\_\_\_\_  
Operator Name: \_\_\_\_\_  
Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_  
Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West  
County: \_\_\_\_\_ Permit #: \_\_\_\_\_

**INSTRUCTIONS:** An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

**AFFIDAVIT**

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: E. L. Glassman  
Title: Agent Date: 02/15/2011

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Letter of Confidentiality Received  
Date: \_\_\_\_\_

Confidential Release Date: \_\_\_\_\_

Wireline Log Received

Geologist Report Received

UIC Distribution

ALT  I  II  III Approved by: DJ Date: 3/1/11

Operator Name: Werth Exploration Trust Lease Name: Worcester L: C. Well #: 1  
 Sec. 22 Twp. 7 S. R. 22  East  West County: Graham

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach complete copy of all Electric Wire-line Logs surveyed. Attach final geological well site report.

| Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><i>(Attach Additional Sheets)</i><br><br>Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br><br>Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No<br>Electric Log Submitted Electronically <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br><i>(If no, Submit Copy)</i><br><br>List All E. Logs Run:<br><b>Dual Induction, Density-Neutron, Micro, Cement Bond</b> | <input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample<br><br><table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Name</th> <th style="text-align: left;">Top</th> <th style="text-align: left;">Datum</th> </tr> </thead> <tbody> <tr> <td>Stone Corral</td> <td>1910</td> <td>382</td> </tr> <tr> <td>B/Stone Corral</td> <td>1942</td> <td>350</td> </tr> <tr> <td>Topeka</td> <td>3274</td> <td>-982</td> </tr> <tr> <td>Heebner</td> <td>3483</td> <td>-1191</td> </tr> <tr> <td>Lansing</td> <td>3523</td> <td>-1231</td> </tr> <tr> <td>B/Kansas City</td> <td>3714</td> <td>-1422</td> </tr> <tr> <td>Arbuckle</td> <td colspan="2">Not reached</td> </tr> </tbody> </table> | Name  | Top | Datum | Stone Corral | 1910 | 382 | B/Stone Corral | 1942 | 350 | Topeka | 3274 | -982 | Heebner | 3483 | -1191 | Lansing | 3523 | -1231 | B/Kansas City | 3714 | -1422 | Arbuckle | Not reached |  |
|--|--|-------|-----|-------|--------------|------|-----|----------------|------|-----|--------|------|------|---------|------|-------|---------|------|-------|---------------|------|-------|----------|-------------|--|
| Name   | Top  | Datum |     |       |              |      |     |                |      |     |        |      |      |         |      |       |         |      |       |               |      |       |          |             |  |
| Stone Corral   | 1910   | 382   |     |       |              |      |     |                |      |     |        |      |      |         |      |       |         |      |       |               |      |       |          |             |  |
| B/Stone Corral   | 1942   | 350   |     |       |              |      |     |                |      |     |        |      |      |         |      |       |         |      |       |               |      |       |          |             |  |
| Topeka   | 3274   | -982  |     |       |              |      |     |                |      |     |        |      |      |         |      |       |         |      |       |               |      |       |          |             |  |
| Heebner  | 3483   | -1191 |     |       |              |      |     |                |      |     |        |      |      |         |      |       |         |      |       |               |      |       |          |             |  |
| Lansing  | 3523   | -1231 |     |       |              |      |     |                |      |     |        |      |      |         |      |       |         |      |       |               |      |       |          |             |  |
| B/Kansas City  | 3714   | -1422 |     |       |              |      |     |                |      |     |        |      |      |         |      |       |         |      |       |               |      |       |          |             |  |
| Arbuckle   | Not reached  |       |     |       |              |      |     |                |      |     |        |      |      |         |      |       |         |      |       |               |      |       |          |             |  |

| CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used  |                   |                           |                   |               |                |              |                            |
|---|-------------------|---------------------------|-------------------|---------------|----------------|--------------|----------------------------|
| Report all strings set-conductor, surface, intermediate, production, etc. |                   |                           |                   |               |                |              |                            |
| Purpose of String   | Size Hole Drilled | Size Casing Set (In O.D.) | Weight Lbs. / Ft. | Setting Depth | Type of Cement | # Sacks Used | Type and Percent Additives |
| Surface Pipe  | 12.25"            | 8.625"                    | 23#               | 264.08        | Common         | 160          | 2% Gel, 3% CC              |
| Production  | 7.875"            | 5.5"                      | 15.5#             | 3836          | EA/2           | 155          | 10% salt, 1/2# floeal/sx   |

| ADDITIONAL CEMENTING / SQUEEZE RECORD   |                  |                |              |                            |
|---|------------------|----------------|--------------|----------------------------|
| Purpose:  | Depth Top Bottom | Type of Cement | # Sacks Used | Type and Percent Additives |
| <input type="checkbox"/> Perforate<br><input checked="" type="checkbox"/> Protect Casing<br><input type="checkbox"/> Plug Back TD<br><input type="checkbox"/> Plug Off Zone | Surface-1782     | 60/40 POZ      | 450          | 4% Gel, 1/2# celloflake/sx |

| Shots Per Foot | PERFORATION RECORD - Bridge Plugs Set/Type<br>Specify Footage of Each Interval Perforated | Acid, Fracture, Shot, Cement Squeeze Record<br><i>(Amount and Kind of Material Used)</i> | Depth |
|----------------|---|--|-------|
| 2              | 3593-3596   | 500 gal 15% MCA  | 3593  |
| 2              | 3677-3680   | 500 gal 15% MCA, 3000 gal 15% NE   | 3677  |

|  |                         |  |                          |  |
|--|-------------------------|--|--------------------------|--|
| TUBING RECORD:   | Size: <u>2.875"</u>     | Set At: <u>3810</u>  | Packer At: <u>None</u>   | Liner Run: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Date of First, Resumed Production, SWD or ENHR.<br><u>02/15/2011</u> |                         | Producing Method:<br><input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain) _____ |                          |  |
| Estimated Production Per 24 Hours                                    | Oil Bbls.<br><u>100</u> | Gas Mcf  | Water Bbls.<br><u>75</u> | Gas-Oil Ratio<br>Gravity   |

|   |   |   |
|---|---|---|
| DISPOSITION OF GAS:<br><input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease<br><i>(If vented, Submit ACO-18.)</i> | METHOD OF COMPLETION:<br><input type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled<br><i>(Submit ACO-5) (Submit ACO-4)</i><br><input type="checkbox"/> Other (Specify) _____ | PRODUCTION INTERVAL:<br><u>3593-3596, 3677-3680</u> |
|---|---|---|

# QUALITY OILWELL CEMENTING, INC.

Phone 785-483-2025  
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4408

|                     |              |      |    |  |            |       |   |  |        |       |    |             |  |        |        |  |
|---------------------|--------------|------|----|--|------------|-------|---|--|--------|-------|----|-------------|--|--------|--------|--|
| Date                | 1-13-11      | Sec. | 22 | Twp.   | 7          | Range | 22  | County   | Graham | State | KS | On Location |  | Finish | 6:30pm |  |
| Lease               | LC Worcester |      |    | Well No.   | 2          |       | Location Bogue 924 Jct W to 310 <sup>th</sup> N to 3 1/2 E Intz |  |        |       |    |             |  |        |        |  |
| Contractor          | Discovery #2 |      |    | Owner  |            |       |   | To Quality Oilwell Cementing, Inc.<br>You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed. |        |       |    |             |  |        |        |  |
| Type Job            | Surface      |      |    | Hole Size  | 12 1/4     |       | T.D.  | 264'   |        |       |    |             |  |        |        |  |
| Csg.                | 8 5/8 23lb   |      |    | Depth  | 264.08'    |       |   |  |        |       |    |             |  |        |        |  |
| Tbg. Size           |              |      |    | Depth  |            |       |   |  |        |       |    |             |  |        |        |  |
| Tool                |              |      |    | Depth  |            |       |   |  |        |       |    |             |  |        |        |  |
| Cement Left in Csg. | 10-15 ft     |      |    | Shoe Joint   |            |       |   |  |        |       |    |             |  |        |        |  |
| Meas Line           |              |      |    | Displace   | 15.84 bbls |       |   |  |        |       |    |             |  |        |        |  |
|                     |              |      |    | Charge To  |            |       |   |  |        |       |    |             |  |        |        |  |
|                     |              |      |    | Wenth Exploration  |            |       |   |  |        |       |    |             |  |        |        |  |
|                     |              |      |    | Street   |            |       |   |  |        |       |    |             |  |        |        |  |
|                     |              |      |    | City   |            |       |   |  |        |       |    |             |  |        |        |  |
|                     |              |      |    | State  |            |       |   |  |        |       |    |             |  |        |        |  |
|                     |              |      |    | The above was done to satisfaction and supervision of owner agent or contractor. |            |       |   |  |        |       |    |             |  |        |        |  |
|                     |              |      |    | Cement Amount Ordered  |            |       |   |  |        |       |    |             |  |        |        |  |
|                     |              |      |    | 16 Slom 350cc 290cc  |            |       |   |  |        |       |    |             |  |        |        |  |

**EQUIPMENT**

|         |    |     |        |              |  |          |     |  |  |  |  |  |  |  |  |  |
|---------|----|-----|--------|--------------|--|----------|-----|--|--|--|--|--|--|--|--|--|
| Pumptrk | 9  | No. | Cement | Brandon      |  | Common   | 165 |  |  |  |  |  |  |  |  |  |
| Bulktrk | 8  | No. | Helper | Paul         |  | Poz. Mix |     |  |  |  |  |  |  |  |  |  |
| Bulktrk | PH | No. | Driver | Doug / Rocky |  | Gel.     | 3   |  |  |  |  |  |  |  |  |  |
| Bulktrk |    | No. | Driver |              |  | Calcium  | 6   |  |  |  |  |  |  |  |  |  |

**JOB SERVICES & REMARKS**

|                    |                         |
|--------------------|-------------------------|
| Remarks:           | Hulls                   |
| Rat Hole           | Salt                    |
| Mouse Hole         | Flowseal                |
| Centralizers       | Kol-Seal                |
| Baskets            | Mud CLR 48              |
| D/V or Port Collar | CFL-117 or CD110 CAF 38 |

Cement did grab  
Thank you's

|             |     |
|-------------|-----|
| Sand        |     |
| Handling    | 174 |
| Mileage     |     |
| Guide Shoe  |     |
| Centralizer |     |
| Baskets     |     |
| AFU Inserts |     |
| Float Shoe  |     |
| Latch Down  |     |

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Quality Oilwell  
Cementing

|                |         |
|----------------|---------|
| Pumptrk Charge | Surface |
| Mileage        | 44      |
| Tax            |         |
| Discount       |         |
| Total Charge   |         |

X Signature *[Handwritten Signature]*

JOB LOG

SWIFT Services, Inc.

DATE 1-20-11 PAGE NO. 1

CUSTOMER *Worth Explorations Trust* WELL NO. # *1* LEASE *Worcester LC* JOB TYPE *Longstring* TICKET NO. *19517*

| CHART NO. | TIME | RATE (BPM) | VOLUME (BBL) (GAL) | PUMPS |   | PRESSURE (PSI) |        | DESCRIPTION OF OPERATION AND MATERIALS |
|-----------|------|------------|--------------------|-------|---|----------------|--------|--|
|           |      |            |                    | T     | C | TUBING         | CASING |  |
|           | 0615 |            |                    |       |   |                |        | on loc w/ FE                           |
|           |      |            |                    |       |   |                |        | RTD 3850' LTD 3844'                    |
|           |      |            |                    |       |   |                |        | 5 1/2" x 15.5' x 3836' x 21'           |
|           |      |            |                    |       |   |                |        | Cent. 1, 3, 5, 7, 10, 12, 46           |
|           |      |            |                    |       |   |                |        | Base 14, 47                            |
|           |      |            |                    |       |   |                |        | P.C. 47 @ 1282'                        |
|           | 0915 |            |                    |       |   |                |        | Start F.E.                             |
|           | 1045 |            |                    |       |   |                |        | Break Circ.                            |
|           | 1135 | 2.5        | 7/5                |       |   |                |        | Plug RH & MH 30/20 sks EA-2            |
|           | 1145 | 4.5        | 0                  |       |   | 200            |        | Start KCL Flush                        |
|           |      | 4.5        | 10/0               |       |   | 200            |        | Start Flocheck 21                      |
|           |      | 4.5        | 8/0                |       |   | 200            |        | Start KCL Flush                        |
|           | 1150 | 5.5        | 10/0               |       |   | 250            |        | Start Cement 150 sks EA-2              |
|           | 1155 |            | 36                 |       |   |                |        | End Cement                             |
|           |      |            |                    |       |   |                |        | wash PHL                               |
|           |      |            |                    |       |   |                |        | Drop L.D. Plug                         |
|           | 1159 | 6.5        | 0                  |       |   | 200            |        | Start Displacement                     |
|           | 1209 | 5          | 62                 |       |   | 250            |        | catch Cement                           |
|           | 1215 |            | 91                 |       |   | 750<br>1500    |        | Land Plug                              |
|           |      |            |                    |       |   |                |        | Release pressure                       |
|           |      |            |                    |       |   |                |        | Fleet Held                             |

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Thank you  
Nick, Josh F, & Joe

**TREATMENT REPORT**

Acid Stage No. ....

Date 1/26/11 District G-B P. O. No. C37519  
Company Wirth Exploration  
Well Name & No. Worcester LC-#7  
Location Field  
County Graham State KS

Casing: Size 5 1/2" Type & Wt. .... Set at .... ft.  
Formation: .... Perf. .... to ....  
Formation: .... Perf. .... to ....  
Formation: .... Perf. .... to ....  
Liner: Size 2 7/8" Type & Wt. .... Top at .... ft. Bottom at .... ft.  
Cemented: Yes/No. Perforated from .... ft. to .... ft.  
Tubing: Size & Wt. 2 7/8" Swung at .... ft.  
Perforated from .... ft. to .... ft.  
Open Hole Size .... T.D. .... ft. P.D. to .... ft.

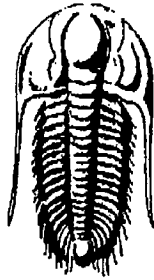
Type Treatment: Amt. .... Type Fluid .... Sand Size ... Pounds of Sand ...  
Breakdown: ... Bbl./Gal. ....  
..... Bbl./Gal. ....  
..... Bbl./Gal. ....  
..... Bbl./Gal. ....  
Flush ..... Bbl./Gal. ....  
Treated from ..... ft. to ..... ft. No. ft. ....  
from ..... ft. to ..... ft. No. ft. ....  
from ..... ft. to ..... ft. No. ft. ....  
Actual Volume of Oil/Water to Load Hole: ..... Bbl./Gal. ....  
Pump Trucks No. Used: Std. 320 Sp. .... Twin .....  
Auxiliary Equipment 317310 .....  
Packer: ..... Set at ..... ft.  
Auxiliary Tools .....  
Logging or Sealing Materials: Type .....

Company Representative John Becker Treater Nathan W.

| TIME<br>a.m. / p.m. | PRESSURES |        | Total Fluid<br>Pumped | REMARKS   |
|---------------------|-----------|--------|-----------------------|---|
|                     | Tubing    | Casing |                       |   |
| 8:30                | 2 7/8"    | 5 1/2" |                       | On location.  |
| :                   |           |        |                       |   |
| :                   |           |        |                       | Port collar @ 1782'                                     |
| :                   |           |        |                       | Pressure up tubing to 500#                              |
| :                   |           |        |                       | Open port-collar. Break circulation.                    |
| :                   |           |        |                       | Mix 450 sks. 6 1/2" / gal. per. 4% cel<br>wl Cellflake. |
| :                   |           |        |                       | Circulated cement to surface.                           |
| :                   |           |        |                       | Displace w/ 9 bbls.                                     |
| :                   |           |        |                       | shut port collar.                                       |
| :                   |           |        |                       | Pressure test to 1,000#                                 |
| :                   |           |        |                       | Run 2 jts.  |
| 10:15               |           |        |                       | Reverse out cement.                                     |
| :                   |           |        |                       |   |
| :                   |           |        |                       |   |
| :                   |           |        |                       |   |
| :                   |           |        |                       |   |
| :                   |           |        |                       |   |
| :                   |           |        |                       |   |
| :                   |           |        |                       |   |
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| :                   |           |        |                       |   |

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Thank You!  
Nathan W.



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

## DRILL STEM TEST REPORT

Prepared For: **Werth Exploration Trust**

1308 Schwaller  
Hays, KS. 67601

ATTN: Ed Gassman

**22-7s-22w Graham KS**

**L C Worcester #1**

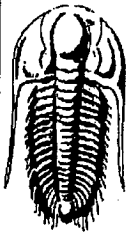
Start Date: 2011.01.17 @ 03:37:07

End Date: 2011.01.17 @ 10:04:07

Job Ticket #: 41288                      DST #: 1

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620

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**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

Werth Exploration Trust

**L C Worcester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

Job Ticket: 41288

DST#: 1

ATTN: Ed Gassman

Test Start: 2011.01.17 @ 03:37:07

**GENERAL INFORMATION:**

Formation: C  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 05:12:37  
 Time Test Ended: 10:04:07

Test Type: Conventional Bottom Hole  
 Tester: Jason McLemore  
 Unit No: 54

Interval: 3540.00 ft (KB) To 3563.00 ft (KB) (TVD)  
 Total Depth: 3563.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2292.00 ft (KB)  
 2284.00 ft (CF)  
 KB to GR/CF: 8.00 ft

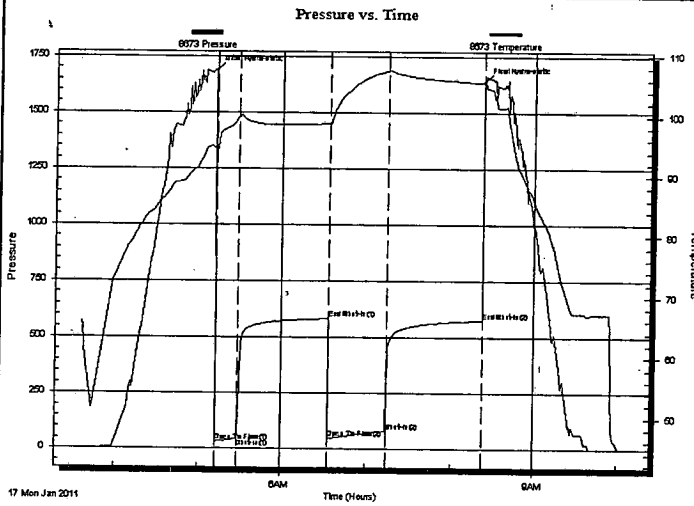
**Serial #: 8673**

Inside

Press@RunDepth: 78.90 psig @ 3542.00 ft (KB)  
 Start Date: 2011.01.17 End Date: 2011.01.17  
 Start Time: 03:37:09 End Time: 10:04:07

Capacity: 8000.00 psig  
 Last Calib.: 2011.01.17  
 Time On Btm: 2011.01.17 @ 05:12:22  
 Time Off Btm: 2011.01.17 @ 08:23:07

**TEST COMMENT:** IFP-Fair Blow ,Built to 6"  
 ISI-Dead  
 FFP-Fair Blow ,BOB in 31 Min.  
 FSI-Surface Blow back



**PRESSURE SUMMARY**

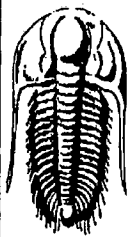
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1687.10         | 94.73        | Initial Hydro-static |
| 1           | 33.08           | 93.85        | Open To Flow (1)     |
| 17          | 45.62           | 99.91        | Shut-In(1)           |
| 81          | 582.60          | 98.89        | End Shut-In(1)       |
| 82          | 48.89           | 98.58        | Open To Flow (2)     |
| 122         | 78.90           | 107.53       | Shut-In(2)           |
| 191         | 575.14          | 105.58       | End Shut-In(2)       |
| 191         | 1639.51         | 106.12       | Final Hydro-static   |

**Recovery**

| Length (ft) | Description          | Volume (bbl) |
|-------------|----------------------|--------------|
| 90.00       | VSOCMMW-1%O-79%W-20M | 0.98         |
| 30.00       | OCWM-10%O-20%W-70%M  | 0.42         |
| 20.00       | Clean Oil            | 0.28         |
|             |                      |              |
|             |                      |              |

**Gas Rates**

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



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Werth Exploration Trust

**L C Worcester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

Job Ticket: 41288

**DST#: 1**

ATTN: Ed Gassman

Test Start: 2011.01.17 @ 03:37:07

## Tool Information

|                           |                    |                       |                                |                        |             |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------|-------------|
| Drill Pipe:               | Length: 3517.00 ft | Diameter: 3.80 inches | Volume: 49.33 bbl              | Tool Weight:           | 2000.00 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: 31.00 ft   | Diameter: 2.25 inches | Volume: 0.15 bbl               | Weight to Pull Loose:  | 70000.00 lb |
|                           |                    |                       | <u>Total Volume: 49.48 bbl</u> | Tool Chased            | 5.00 ft     |
| Drill Pipe Above KB:      | 29.00 ft           |                       |                                | String Weight: Initial | 45000.00 lb |
| Depth to Top Packer:      | 3540.00 ft         |                       |                                | Final                  | 46000.00 lb |
| Depth to Bottom Packer:   | ft                 |                       |                                |                        |             |
| Interval between Packers: | 23.00 ft           |                       |                                |                        |             |
| Tool Length:              | 44.00 ft           |                       |                                |                        |             |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                        |             |

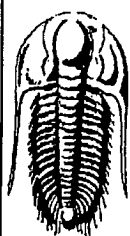
Tool Comments:

## Tool Description

| Tool Description | Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths                |
|------------------|-------------|------------|----------|------------|-------------------------------|
| Change Over Sub  | 1.00        |            |          | 3520.00    |                               |
| Shut In Tool     | 5.00        |            |          | 3525.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3530.00    |                               |
| Packer           | 5.00        |            |          | 3535.00    | 21.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3540.00    |                               |
| Stubb            | 1.00        |            |          | 3541.00    |                               |
| Perforations     | 1.00        |            |          | 3542.00    |                               |
| Recorder         | 0.00        | 8673       | Inside   | 3542.00    |                               |
| Recorder         | 0.00        | 6755       | Outside  | 3542.00    |                               |
| Perforations     | 18.00       |            |          | 3560.00    |                               |
| Bullnose         | 3.00        |            |          | 3563.00    | 23.00 Bottom Packers & Anchor |

**Total Tool Length: 44.00**





**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Werth Exploration Trust

**L C Worcester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

Job Ticket: 41288

DST#: 1

ATTN: Ed Gassman

Test Start: 2011.01.17 @ 03:37:07

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

31 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

72000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

| Length<br>ft | Description         | Volume<br>bbbl |
|--------------|---------------------|----------------|
| 90.00        | VSOCMM-1%O-79%W-20M | 0.980          |
| 30.00        | OCMM-10%O-20%W-70%M | 0.421          |
| 20.00        | Clean Oil           | 0.281          |

Total Length: 140.00 ft

Total Volume: 1.682 bbl

Num Fluid Samples: 0

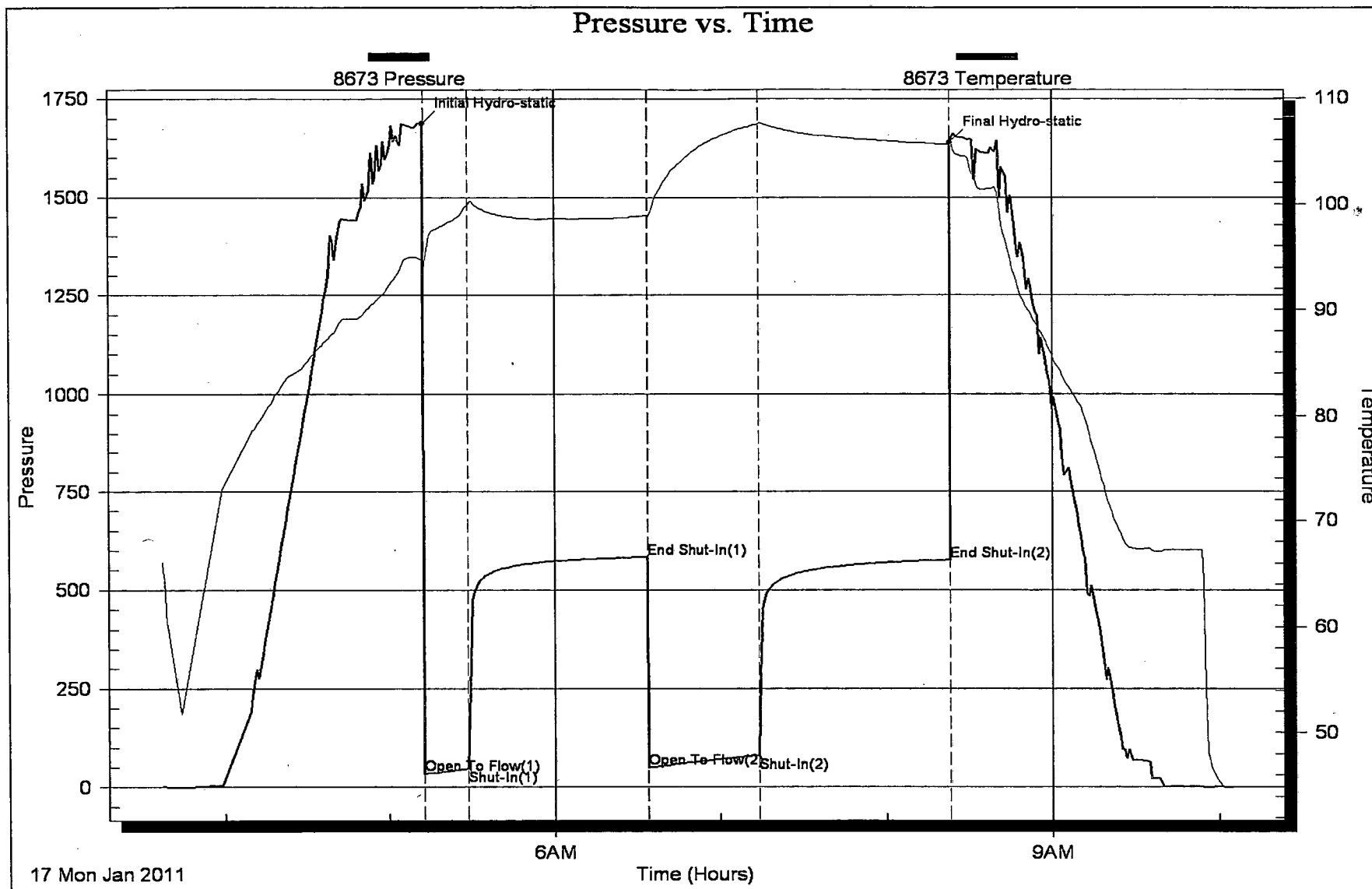
Num Gas Bombs: 0

Serial #:

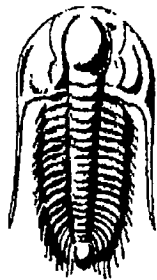
Laboratory Name:

Laboratory Location:

Recovery Comments: RW .155 @ 50F = 72000 chlorides



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

## DRILL STEM TEST REPORT

Prepared For: **Werth Exploration Trust**

1308 Schwaller  
Hays, KS. 67601

ATTN: Ed Gassman

**22-7s-22w Graham KS**

**L C Worcester #1**

Start Date: 2011.01.17 @ 15:56:10

End Date: 2011.01.17 @ 22:53:40

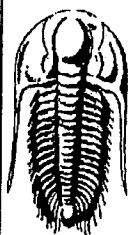
Job Ticket #: 41289                      DST #: 2

Trilobite Testing, Inc

PO Box 1733 Hays, KS 67601

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

Werth Exploration Trust  
L C Worcester #1  
22-7s-22w Graham KS  
DST # 2  
D-E-F  
2011.01.17



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Werth Exploration Trust

L C Worcester #1

1308 Schwaller  
Hays, KS. 67601

22-7s-22w Graham KS

ATTN: Ed Gassman

Job Ticket: 41289

DST#: 2

Test Start: 2011.01.17 @ 15:56:10

## GENERAL INFORMATION:

Formation: D-E-F

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 17:55:25

Time Test Ended: 22:53:40

Test Type: Conventional Bottom Hole

Tester: Jason McLemore

Unit No: 54

Interval: 3567.00 ft (KB) To 3592.00 ft (KB) (TVD)

Total Depth: 3592.00 ft (KB) (TVD)

Hole Diameter: 7.80 inches Hole Condition: Good

Reference Elevations: 2292.00 ft (KB)

2284.00 ft (CF)

KB to GR/CF: 8.00 ft

Serial #: 8673

Inside

Press@RunDepth: 211.02 psig @ 3571.00 ft (KB)

Start Date: 2011.01.17

End Date:

2011.01.17

Capacity: 8000.00 psig

Last Calib.: 2011.01.17

Start Time: 15:56:12

End Time:

22:53:40

Time On Btm: 2011.01.17 @ 17:54:40

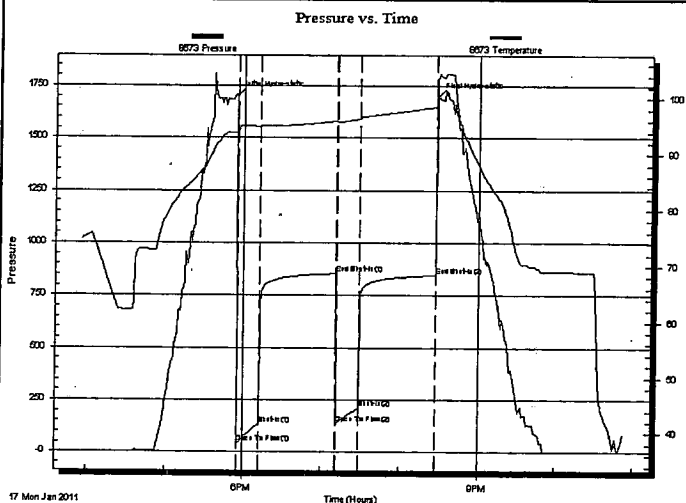
Time Off Btm: 2011.01.17 @ 20:27:40

TEST COMMENT: IFP-Strong, BOB in 6-1/2 Min.

ISI-Dead

FFP-Dead

FSI-Dead



## PRESSURE SUMMARY

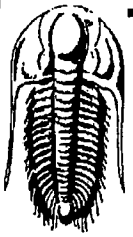
| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1704.90         | 94.00        | Initial Hydro-static |
| 1           | 44.97           | 93.84        | Open To Flow (1)     |
| 18          | 133.30          | 95.01        | Shut-In(1)           |
| 77          | 853.14          | 96.05        | End Shut-In(1)       |
| 78          | 137.74          | 95.80        | Open To Flow (2)     |
| 94          | 211.02          | 96.38        | Shut-In(2)           |
| 153         | 845.40          | 98.53        | End Shut-In(2)       |
| 153         | 1699.97         | 101.73       | Final Hydro-static   |

## Recovery

| Length (ft) | Description           | Volume (bbt) |
|-------------|-----------------------|--------------|
| 390.00      | Muddy Water-90%W-10%M | 5.19         |
| 20.00       | Clean Oil             | 0.28         |
|             |                       |              |
|             |                       |              |
|             |                       |              |

## Gas Rates

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



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Werth Exploration Trust

**L C Worcester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

Job Ticket: 41289

**DST#: 2**

ATTN: Ed Gassman

Test Start: 2011.01.17 @ 15:56:10

### Tool Information

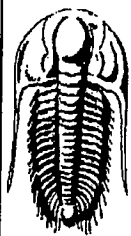
|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3597.00 ft | Diameter: 3.80 inches | Volume: 50.46 bbl              | Tool Weight: 2000.00 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: 31.00 ft   | Diameter: 2.25 inches | Volume: 0.15 bbl               | Weight to Pull Loose: 55000.00 lb  |
|                           |                    |                       | <u>Total Volume: 50.61 bbl</u> | Tool Chased 5.00 ft                |
| Drill Pipe Above KB:      | 82.00 ft           |                       |                                | String Weight: Initial 45000.00 lb |
| Depth to Top Packer:      | 3567.00 ft         |                       |                                | Final 50000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 25.00 ft           |                       |                                |                                    |
| Tool Length:              | 46.00 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        |            |          | 3547.00    |                               |
| Shut In Tool     | 5.00        |            |          | 3552.00    |                               |
| Hydraulic tool   | 5.00        |            |          | 3557.00    |                               |
| Packer           | 5.00        |            |          | 3562.00    | 21.00 Bottom Of Top Packer    |
| Packer           | 5.00        |            |          | 3567.00    |                               |
| Stubb            | 1.00        |            |          | 3568.00    |                               |
| Perforations     | 3.00        |            |          | 3571.00    |                               |
| Recorder         | 0.00        | 8673       | Inside   | 3571.00    |                               |
| Recorder         | 0.00        | 6755       | Outside  | 3571.00    |                               |
| Perforations     | 18.00       |            |          | 3589.00    |                               |
| Bullnose         | 3.00        |            |          | 3592.00    | 25.00 Bottom Packers & Anchor |

**Total Tool Length: 46.00**



**TRILOBITE  
TESTING, INC**

## DRILL STEM TEST REPORT

**FLUID SUMMARY**

Werth Exploration Trust

**L C Worcester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

Job Ticket: 41289

**DST#: 2**

ATTN: Ed Gassman

Test Start: 2011.01.17 @ 15:56:10

### Mud and Cushion Information

|                                  |                            |                           |
|----------------------------------|----------------------------|---------------------------|
| Mud Type: Gel Chem               | Cushion Type:              | Oil API: 24 deg API       |
| Mud Weight: 9.00 lb/gal          | Cushion Length: ft         | Water Salinity: 75000 ppm |
| Viscosity: 62.00 sec/qt          | Cushion Volume: bbl        |                           |
| Water Loss: 7.58 in <sup>3</sup> | Gas Cushion Type:          |                           |
| Resistivity: ohm.m               | Gas Cushion Pressure: psig |                           |
| Salinity: 1.00 ppm               |                            |                           |
| Filter Cake: inches              |                            |                           |

### Recovery Information

Recovery Table

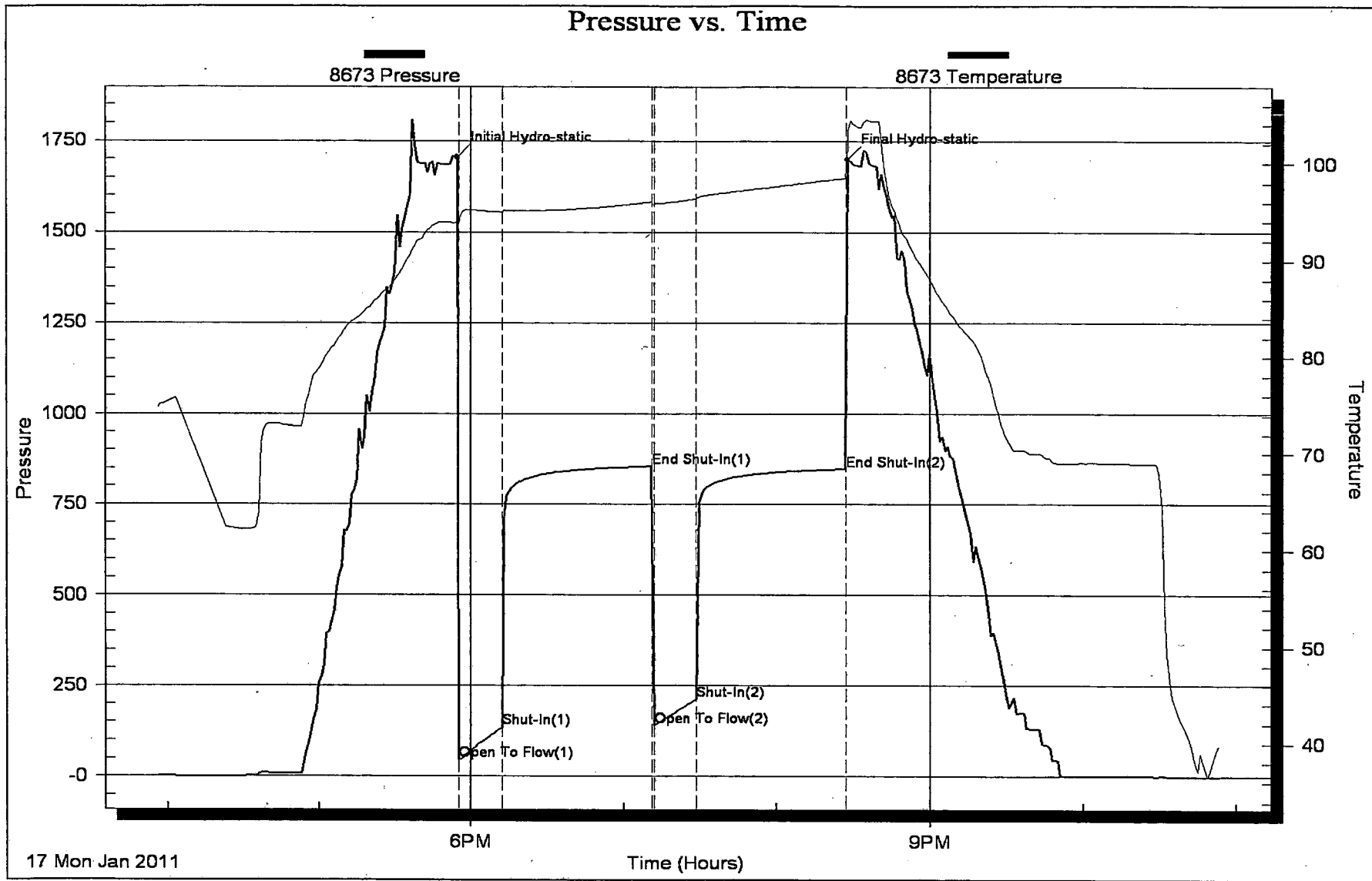
| Length<br>ft | Description           | Volume<br>bbl |
|--------------|-----------------------|---------------|
| 390.00       | Muddy Water-90%W-10%M | 5.188         |
| 20.00        | Clean Oil             | 0.281         |

Total Length: 410.00 ft      Total Volume: 5.469 bbl

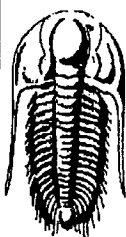
Num Fluid Samples: 0      Num Gas Bombs: 0      Serial #:

Laboratory Name:      Laboratory Location:

Recovery Comments: RW .251 @ 32F = 75000 ppm chlorides



17 Mon Jan 2011



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

Werth Exploration Trust

**L C Worchester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

ATTN: Ed Gassman

Job Ticket: 41290

DST#: 3

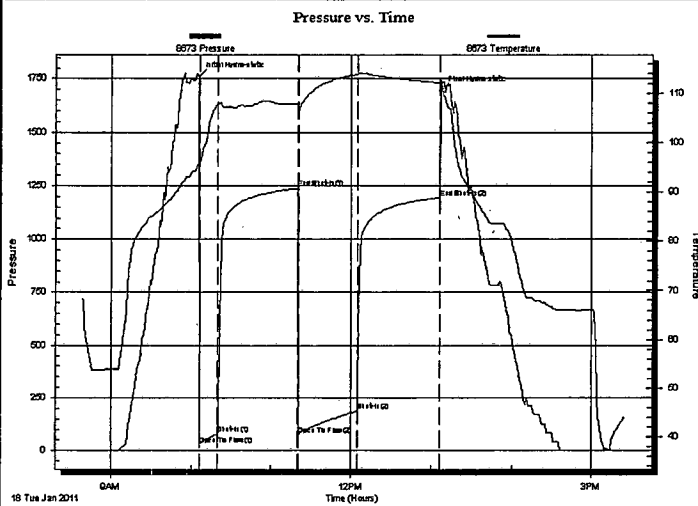
Test Start: 2011.01.18 @ 08:38:19

## GENERAL INFORMATION:

Formation: H-I  
 Deviated: No Whipstock: ft (KB)  
 Time Tool Opened: 10:05:49  
 Time Test Ended: 15:25:04  
 Interval: 3658.00 ft (KB) To 3684.00 ft (KB) (TVD)  
 Total Depth: 3684.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Jason McLemore  
 Unit No: 54  
 Reference Elevations: 2292.00 ft (KB)  
 2284.00 ft (CF)  
 KB to GR/CF: 8.00 ft

**Serial #: 8673** Inside  
 Press@RunDepth: 189.02 psig @ 3663.00 ft (KB) Capacity: 8000.00 psig  
 Start Date: 2011.01.18 End Date: 2011.01.18 Last Calib.: 2011.01.18  
 Start Time: 08:38:21 End Time: 15:25:04 Time On Btm: 2011.01.18 @ 10:05:19  
 Time Off Btm: 2011.01.18 @ 13:06:49

**TEST COMMENT:** IFP-Strong, BOB in 4-1/2 Min.  
 IS-Blow back Built to 3/4"  
 FFP-Strong, BOB in 4-1/2 Min.  
 FS-Blow back Built to 9"



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1760.74         | 96.09        | Initial Hydro-static |
| 1           | 30.24           | 95.44        | Open To Flow (1)     |
| 15          | 77.88           | 107.72       | Shut-In(1)           |
| 75          | 1238.86         | 107.64       | End Shut-In(1)       |
| 76          | 77.13           | 106.76       | Open To Flow (2)     |
| 120         | 189.02          | 113.73       | Shut-In(2)           |
| 182         | 1194.88         | 112.14       | End Shut-In(2)       |
| 182         | 1695.41         | 112.48       | Final Hydro-static   |

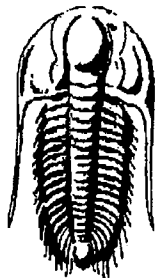
## Recovery

| Length (ft) | Description           | Volume (bbl) |
|-------------|-----------------------|--------------|
| 90.00       | Muddy Water-90%W010%M | 0.98         |
| 100.00      | HOCWM-35%O-20%W-45%M  | 1.40         |
| 235.00      | Clean Oil             | 3.30         |
| 0.00        | 660' Gas In Pipe      | 0.00         |
|             |                       |              |
|             |                       |              |

## Gas Rates

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





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

## DRILL STEM TEST REPORT

Prepared For: **Werth Exploration Trust**

1308 Schwaller  
Hays, KS. 67601

ATTN: Ed Gassman

**22-7s-22w Graham KS**

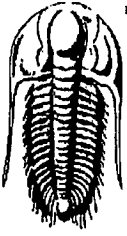
**L C Worcester #1**

Start Date: 2011.01.18 @ 08:38:19

End Date: 2011.01.18 @ 15:25:04

Job Ticket #: 41290                      DST #: 3

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE  
TESTING, INC**

**DRILL STEM TEST REPORT**

**TOOL DIAGRAM**

Werth Exploration Trust

**L C Worchester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

Job Ticket: 41290

**DST#: 3**

ATTN: Ed Gassman

Test Start: 2011.01.18 @ 08:38:19

**Tool Information**

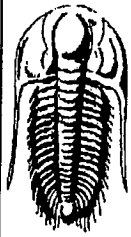
|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3611.00 ft | Diameter: 3.80 inches | Volume: 50.65 bbl              | Tool Weight: 2000.00 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: 31.00 ft   | Diameter: 2.25 inches | Volume: 0.15 bbl               | Weight to Pull Loose: 54000.00 lb  |
|                           |                    |                       | <b>Total Volume: 50.80 bbl</b> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 5.00 ft            |                       |                                | String Weight: Initial 47000.00 lb |
| Depth to Top Packer:      | 3658.00 ft         |                       |                                | Final 49000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 26.00 ft           |                       |                                |                                    |
| Tool Length:              | 47.00 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  |      |         | 3638.00 |                               |
| Shut In Tool    | 5.00  |      |         | 3643.00 |                               |
| Hydraulic tool  | 5.00  |      |         | 3648.00 |                               |
| Packer          | 5.00  |      |         | 3653.00 | 21.00 Bottom Of Top Packer    |
| Packer          | 5.00  |      |         | 3658.00 |                               |
| Stubb           | 1.00  |      |         | 3659.00 |                               |
| Perforations    | 4.00  |      |         | 3663.00 |                               |
| Recorder        | 0.00  | 8673 | Inside  | 3663.00 |                               |
| Recorder        | 0.00  | 6755 | Outside | 3663.00 |                               |
| Perforations    | 18.00 |      |         | 3681.00 |                               |
| Bullnose        | 3.00  |      |         | 3684.00 | 26.00 Bottom Packers & Anchor |

**Total Tool Length: 47.00**



**TRILOBITE  
TESTING, INC**

# DRILL STEM TEST REPORT

**FLUID SUMMARY**

Werth Exploration Trust

**L C Worchester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

Job Ticket: 41290

**DST#: 3**

ATTN: Ed Gassman

Test Start: 2011.01.18 @ 08:38:19

## Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

39 deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

76000 ppm

Viscosity: 62.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 7.58 in<sup>3</sup>

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1.00 ppm

Filter Cake: inches

## Recovery Information

Recovery Table

| Length<br>ft | Description           | Volume<br>bbl |
|--------------|-----------------------|---------------|
| 90.00        | Muddy Water-90%W010%M | 0.980         |
| 100.00       | HOCVM-35%O-20%W-45%M  | 1.403         |
| 235.00       | Clean Oil             | 3.296         |
| 0.00         | 660' Gas In Pipe      | 0.000         |

Total Length: 425.00 ft

Total Volume: 5.679 bbl

Num Fluid Samples: 0

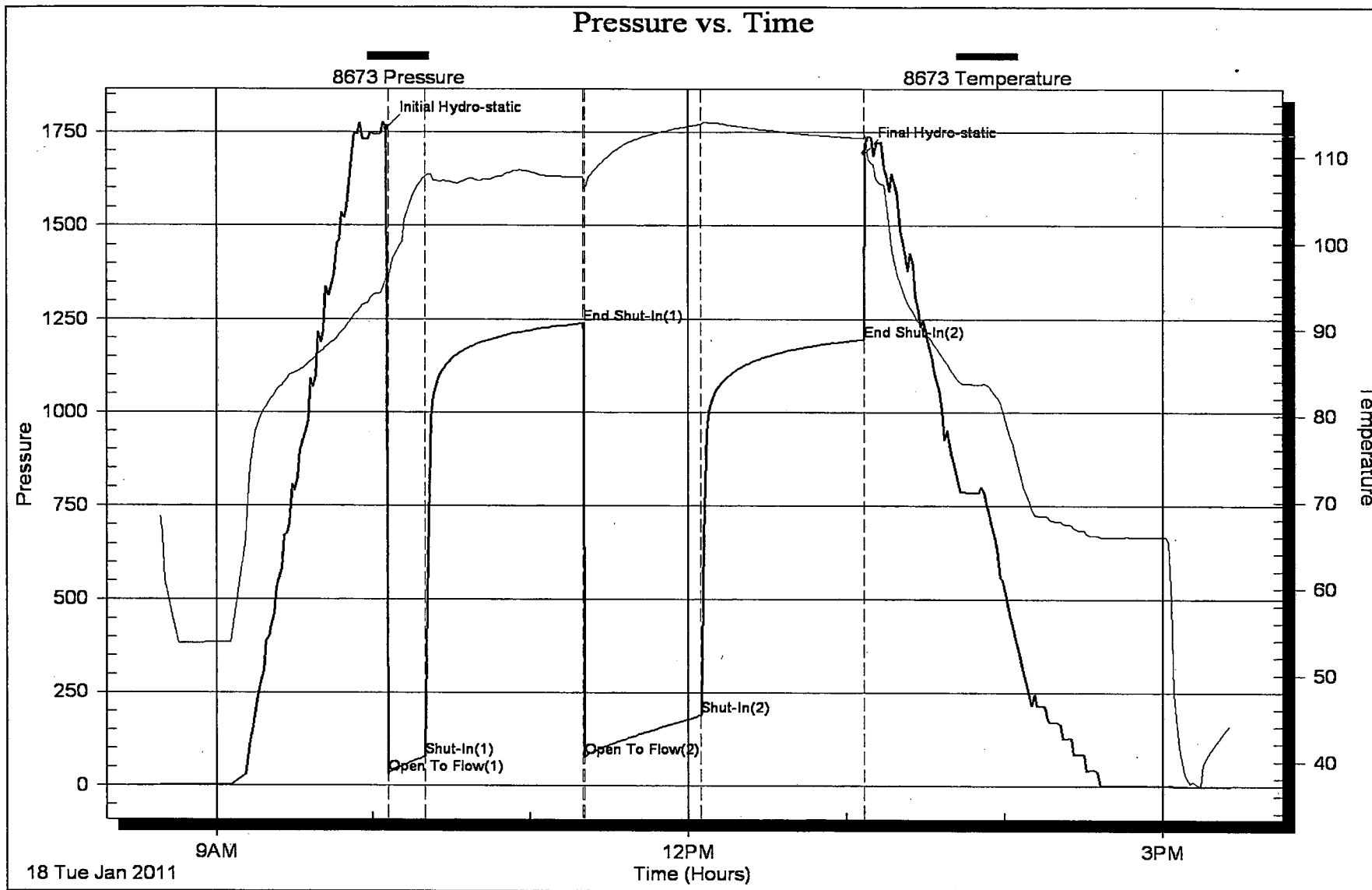
Num Gas Bombs: 0

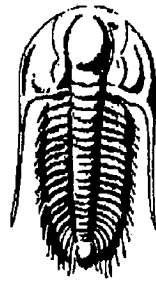
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW .186 @ 40F = 76000 ppm chlorides





**TRILOBITE  
TESTING, INC.**

## DRILL STEM TEST REPORT

Prepared For: **Werth Exploration Trust**

1308 Schwaller  
Hays, KS. 67601

ATTN: Ed Gassman

**22-7s-22w Graham KS**

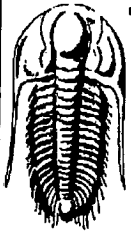
**L C Worcester #1**

Start Date: 2011.01.18 @ 22:12:32

End Date: 2011.01.19 @ 05:01:17

Job Ticket #: 41291                      DST #: 4

Trilobite Testing, Inc  
PO Box 1733 Hays, KS 67601  
ph: 785-625-4778 fax: 785-625-5620



**TRILOBITE TESTING, INC**

# DRILL STEM TEST REPORT

Werth Exploration Trust

**L C Worcester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

Job Ticket: 41291      DST#: 4

ATTN: Ed Gassman

Test Start: 2011.01.18 @ 22:12:32

## GENERAL INFORMATION:

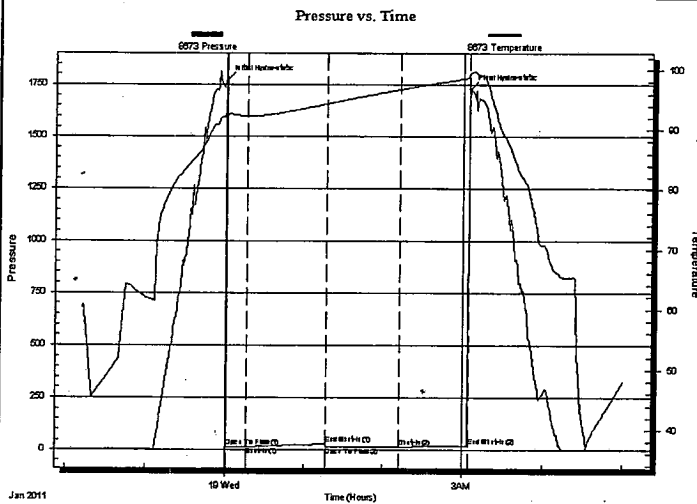
Formation: J  
 Deviated: No      Whipstock:      ft (KB)  
 Time Tool Opened: 00:01:02  
 Time Test Ended: 05:01:17  
 Interval: 3681.00 ft (KB) To 3708.00 ft (KB) (TVD)  
 Total Depth: 3708.00 ft (KB) (TVD)  
 Hole Diameter: 7.80 inches      Hole Condition: Good  
 Test Type: Conventional Bottom Hole  
 Tester: Jason McLemore  
 Unit No: 54  
 Reference Elevations: 2292.00 ft (KB)  
 2284.00 ft (CF)  
 KB to GR/CF: 8.00 ft

## Serial #: 8673

Inside

Press@RunDepth: 16.61 psig @ 3687.00 ft (KB)      Capacity: 8000.00 psig  
 Start Date: 2011.01.18      End Date: 2011.01.19      Last Calib.: 2011.01.19  
 Start Time: 22:12:34      End Time: 05:01:17      Time On Btm: 2011.01.19 @ 00:00:47  
 Time Off Btm: 2011.01.19 @ 03:04:32

TEST COMMENT: IFP-Weak Blow, Built to 1-1/4"  
 IS-Dead  
 FFP-Weak Surface Blow  
 FS-Dead



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 1772.15         | 92.99        | Initial Hydro-static |
| 1           | 14.31           | 92.34        | Open To Flow (1)     |
| 15          | 15.13           | 92.32        | Shut-In(1)           |
| 76          | 28.95           | 94.30        | End Shut-In(1)       |
| 76          | 15.42           | 94.32        | Open To Flow (2)     |
| 132         | 16.61           | 96.76        | Shut-In(2)           |
| 183         | 20.29           | 98.69        | End Shut-In(2)       |
| 184         | 1730.12         | 99.40        | Final Hydro-static   |

## Recovery

| Length (ft) | Description  | Volume (bbl) |
|-------------|--------------|--------------|
| 3.00        | Drilling Mud | 0.01         |
|             |              |              |
|             |              |              |
|             |              |              |
|             |              |              |

## Gas Rates

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



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TESTING, INC**

## DRILL STEM TEST REPORT

**TOOL DIAGRAM**

Werth Exploration Trust

**L C Worcester #1**

1308 Schwaller  
Hays, KS. 67601

**22-7s-22w Graham KS**

Job Ticket: 41291

**DST#: 4**

ATTN: Ed Gassman

Test Start: 2011.01.18 @ 22:12:32

### Tool Information

|                           |                    |                       |                                |                                    |
|---------------------------|--------------------|-----------------------|--------------------------------|------------------------------------|
| Drill Pipe:               | Length: 3643.00 ft | Diameter: 3.80 inches | Volume: 51.10 bbl              | Tool Weight: 2000.00 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: 31.00 ft   | Diameter: 2.25 inches | Volume: 0.15 bbl               | Weight to Pull Loose: 52000.00 lb  |
|                           |                    |                       | <u>Total Volume: 51.25 bbl</u> | Tool Chased 0.00 ft                |
| Drill Pipe Above KB:      | 14.00 ft           |                       |                                | String Weight: Initial 48000.00 lb |
| Depth to Top Packer:      | 3681.00 ft         |                       |                                | Final 48000.00 lb                  |
| Depth to Bottom Packer:   | ft                 |                       |                                |                                    |
| Interval between Packers: | 27.00 ft           |                       |                                |                                    |
| Tool Length:              | 48.00 ft           |                       |                                |                                    |
| Number of Packers:        | 2                  | Diameter: 6.75 inches |                                |                                    |

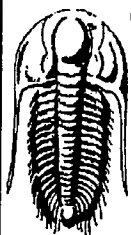
Tool Comments:

### Tool Description

| Length (ft) | Serial No. | Position | Depth (ft) | Accum. Lengths |
|-------------|------------|----------|------------|----------------|
|-------------|------------|----------|------------|----------------|

|                 |       |              |         |                               |
|-----------------|-------|--------------|---------|-------------------------------|
| Change Over Sub | 1.00  |              | 3661.00 |                               |
| Shut In Tool    | 5.00  |              | 3666.00 |                               |
| Hydraulic tool  | 5.00  |              | 3671.00 |                               |
| Packer          | 5.00  |              | 3676.00 | 21.00 Bottom Of Top Packer    |
| Packer          | 5.00  |              | 3681.00 |                               |
| Stubb           | 1.00  |              | 3682.00 |                               |
| Perforations    | 5.00  |              | 3687.00 |                               |
| Recorder        | 0.00  | 8673 Inside  | 3687.00 |                               |
| Recorder        | 0.00  | 6755 Outside | 3687.00 |                               |
| Perforations    | 18.00 |              | 3705.00 |                               |
| Bullnose        | 3.00  |              | 3708.00 | 27.00 Bottom Packers & Anchor |

**Total Tool Length: 48.00**



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TESTING, INC**

## DRILL STEM TEST REPORT

FLUID SUMMARY

Werth Exploration Trust

L C Worcester #1

1308 Schwaller  
Hays, KS. 67601

22-7s-22w Graham KS

Job Ticket: 41291

DST#: 4

ATTN: Ed Gassman

Test Start: 2011.01.18 @ 22:12:32

### 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: 7.99 in<sup>3</sup>

Gas Cushion Type:

Gas Cushion Pressure:

psig

Resistivity: ohm.m

Salinity: 1500.00 ppm

Filter Cake: inches

### Recovery Information

Recovery Table

| Length<br>ft | Description  | Volume<br>bbl |
|--------------|--------------|---------------|
| 3.00         | Drilling Mud | 0.015         |

Total Length: 3.00 ft Total Volume: 0.015 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:



