

16-165-23W

**KCC**  
AUG 03 2006  
**CONFIDENTIAL**

**BEREN CORPORATION  
MILTON # 1-16  
NWNENWSW SECTION 16 T16S-R23W  
NESS COUNTY, KANSAS**

AUG 03 2006  
KCC WICHITA

**GEOLOGIST  
WILLIAM B. BYNOG**

## RESUME

OPERATOR: BEREN CORPORATION

WELL NAME & NUMBER: MILTON # 1-16

LOCATION: NWNENWSW SECTION  
16 T16S-R23W

COUNTY: NESS

STATE: KANSAS

SPUD DATE: 6-27-2006 COMPLETION DATE: 7-5-2006

ELEVATIONS: GL: 2466' KB: 2477'

CONTRACTOR: BEREDCO # 10

LOGS: LOG TECH TYPES: DIL, SONIC, CDL& CNL SP &  
MICROLOG  
ENGINEER: MIKE GARRISON

WELLSITE ENGINEER: NONE

MUD COMPANY: MUD CO., MUD

MUD TYPE & ENGINEER: FRESH CHEMICAL:

GEOLOGIST: WILLIAM BYNOG

HOLE SIZE: 7 7/8

MUD LOGGING BY: NONE

DRILL STEM TEST COMPANY: TRILOBITE TESTING

DRILL STEM TEST: DST#1 4390-4470

WELL STATUS: DRY HOLE

## SUMMARY AND CONCLUSION

Milton # 1-16 was drilled a total depth of 4550 feet testing the Cherokee Sands in Ness County, Kansas. Our primary objective was the Cherokee Sands and secondary the Lansing Kansas City and Fort Scott Formations. Milton # 1-16 was drilled on a 3-D Seismic high located just north of Osgood Field. Structurally, Milton # 1-16 came in low to the prognosis and surrounding productive wells on the Anhydrite top and remained low through the Cherokee and Mississippi sections. There were some fair sample shows in the Cherokee Sands. These sample shows and Drill stem test will be discussed in the following paragraphs.

The Cherokee Sands starting at 4548 feet had some poorly developed upper sands from 4448 to 4470 feet with poor porosity development, spotty light brown stain and fair cuts, not worthy of a Drill stem test.

The lower Cherokee Sand at 4470 to 4484 feet was better developed with fair to good porosity development fair spotty light brown stain and a weak cut. This zone was tested on Drill stem test # 1 recovering 150 feet of muddy water (80% water) and 660 feet of salt water with virgin reservoir pressures. There appeared to be a conglomerate section in the lower Cherokee from 4486 to 4514 with very abundant Chert and unconsolidated coarse grained sands with no shows.

The Mississippi Formation at 4514 feet had some fair porosity development but also appeared to be wet with no sample shows.

Logs agreed with sample evaluation and Drill stem test data recording either tight or wet Zones. A decision was made to plug and abandon.

## BIT RECORD

| Bit # | SIZE  | MAKE | TYPE   | DEPTH OUT | FOOTAGE | HOURS |
|-------|-------|------|--------|-----------|---------|-------|
| 1     | 121/4 | VAR  | CH20   | 231       | 231     | 3     |
| 2     | 7 7/8 | VAR  | CH20ms | 4550      | 4319    | 83    |

## DEVIATION RECORD

| DEPTH | ANGLE |
|-------|-------|
| 231   | 0     |

## DAILY CHRONOLOGY

| DATE    | DEPTH AT 7:00 | FOOTAGE | REMARKS           |
|---------|---------------|---------|-------------------|
| 6-28-06 | 231           | 231     | Spud, set surface |
| 6-29-06 | 400           | 169     | WOC, Drilling     |
| 6-30-06 | 2200          | 1800    | Drilling          |
| 7-1-06  | 3190          | 990     | Drilling          |
| 7-2-06  | 3880          | 690     | Drilling          |
| 7-3-06  | 4315          | 335     | Drilling          |
| 7-4-06  | 4470          | 155     | DST# 1            |
| 7-5-06  | 4550          | 80      | Logging           |

## FORMATION TOPS

| FORMATION      | DEPTH (LOGS) |
|----------------|--------------|
| ANHYDRITE      | 1820(+657)   |
| BASE           | 1856(+621)   |
| TOPEAKA        | 3546         |
| HEEBNER        | 3858(-1381)  |
| TORONTO        | 3875(-1398)  |
| LANSING A      | 3896(-1419)  |
| LANSING B      |              |
| LANSING C      |              |
| LANSING D      |              |
| KANSAS CITY E  |              |
| KANSAS CITY F  |              |
| KANSAS CITY G  |              |
| KANSAS CITY H  |              |
| KANSAS CITY I  |              |
| KANSAS CITY J  |              |
| KANSAS CITY K  |              |
| KANSAS CITY L  |              |
| BKC            | 4202(-1725)  |
| MARMATON       | 4232(-1755)  |
| PAWNEE         | 4290(-1813)  |
| FORT SCOTT     | 4378(-1901)  |
| CHEROKEE SHALE | 4400(-1932)  |
| CHEROKEE SANDS | 4454(-1977)  |
| MISSISSIPPI    | 4514(-2037)  |

## LITHOLOGY

### HEEBNER

3860-70 Shale black, carbonaceous, firm, finely micaceous

3870-76 Shale red, green, firm, argillaceous

### TORONTO

3876-90 Limestone white, firm-hard, microcrystalline, poor porosity, some Chert white

3890-96 Shale red, green, firm, argillaceous

### LANSING

3896-3910 Limestone cream, hard, microcrystalline, slightly oolitic, poor porosity, abundant Chert white

3910-30 Shale red, green, firm, argillaceous

3910-80 Limestone cream, firm, slightly oolitic, chalky, poor to fair porosity, no show, abundant Chert white

3980-4000 Shale green, red, as above

4000-10 Limestone white, firm, microsucrosic, fair porosity, chalky, oolitic, no show

4010-40 Limestone cream, very hard, dense, abundant Chert white

4040-50 Shale gray, green, firm, waxy

4050-80 Limestone buff, hard, cryptocrystalline, abundant Chert white some pyrite

4080-82 Shale as above

4082-90 Limestone cream, firm, chalky, oolitic, fair intergranular porosity, no show, abundant Chert white, some pyrite

4090-4100 Limestone cream, hard, dense, abundant Chert white

4100-10 Shale gray, green, red, firm, argillaceous

4090-4100 Limestone cream, hard, microcrystalline, slightly oolitic, poor porosity

4100-10 Shale green, gray, waxy

4110-55 Limestone cream, very hard, dense, abundant Chert white, cream

4155-65 Shale gray, green, firm, argillaceous

4165-80 Limestone gray, hard, dense, chalky

4180-90 Shale as above

4190-4202 Limestone gray, very hard, dense, dirty

BKC

4202-30 Shale red, soft, very argillaceous with very thin interbedded Limestone as above

4230-50 Limestone cream, very hard, dense

4250-60 Shale red, brown, yellow, green, firm, argillaceous

4260-90 Limestone as above

PAWNEE

4290-4330 Limestone gray, very hard, cryptocrystalline, dense, abundant Chert gray, tan, orange

4330-60 Limestone buff, gray, very hard, microcrystalline, dense, abundant Chert as above

4360-74 Shale red, black, gray, fissile, carbonaceous

FORT SCOTT

4374-4400 Limestone light gray, firm, chalky, microcrystalline, poor porosity, some oolites, no show

CHEROKEE SHALE

4400-20 Shale black, firm, fissile, carbonaceous

4420-30 Limestone cream, hard, chalky, microcrystalline, poor porosity

4430-40 Shale as above

4440-52 Limestone as above

#### CHEROKEE SANDS

4452-58 Sandstone translucent, unconsolidated, medium to coarse grain, sub angular to rounded, medium sorted, very rare cluster with spotty, light brown stain, dull yellow fluorescence, good cut

4458-66 Shale green, blue, firm, waxy

4466-90 Sandstone translucent, hard, medium to coarse grain, sub angular to rounded, poorly sorted, calcareous cement, slightly glauconitic, poor to fair porosity, spotty brown stain, fair cut, fair odor, abundant unconsolidated sand possible good porosity

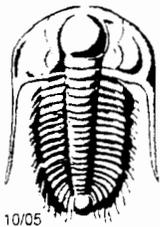
4490-94 Sandstone unconsolidated to very friable, medium to coarse grain, medium sorted, sub angular to rounded, slightly calcareous, clean, good porosity, trace very spotty stain, weak cut

4494-96 Shale as above

4496-4514 Conglomerate abundant Dolomite buff, very hard & Chert white, yellow, buff very hard & abundant unconsolidated Sand grains coarse, translucent

#### MISSISSIPPI

4514-50 Dolomite white, buff, hard, microcrystalline, poor-some fair porosity, no show, abundant Chert yellow, white, smoky



# TRILOBITE TESTING INC.

P.O. Box 362 • Hays, Kansas 67601

25350

## Test Ticket

Well Name & No. MILTON #1-16 Test No. 1 Date 7-4-06  
 Company Beren Corp Zone Tested Cher sd  
 Address P.O. Box 20380 WICHITA, Ks 67208 Elevation 2477 KB 2466 GL  
 Co. Rep / Geo. Bryan Byrnes Rig Beredcor 10  
 Location: Sec. 16 Twp. 16<sup>s</sup> Rge. 23<sup>w</sup> Co. Ness State Ko  
 Comment: \_\_\_\_\_ Release date / time: \_\_\_\_\_

Interval Tested 4390 - 4470 Initial Str Wt./Lbs. 56000 Unseated Str Wt./Lbs. 60000  
 Anchor Length 80 Wt. Set Lbs. 25000 Wt. Pulled Loose/Lbs. 90000  
 Top Packer Depth 4385 Tool Weight 2200  
 Bottom Packer Depth 4390 Hole Size 7 7/8" - Rubber Size 6 3/4" -  
 Total Depth 4470 Wt. Pipe Run - Drill Collar Run 240  
 Mud Wt. 9.6 LCM 1# Vis. 53 WL 8 Drill Pipe Size 4" FH Ft. Run 4129  
 Blow Description IFP - WEAK TO STRONG IN 3 MIN  
FFP - WEAK TO STRONG IN 6 MIN  
NO BLOW ON SHUT-IN

Recovery - Total Feet 810 GIP - Ft. in DC 240 Ft. in DP 570  
 Rec. 150 Feet of MU %gas \_\_\_\_\_ %oil 80 %water 20 %mud \_\_\_\_\_  
 Rec. 660 Feet of WATER %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 124 °F Gravity - °API D @ - °F Corrected Gravity - °API \_\_\_\_\_  
 RW .28 @ 85 °F Chlorides 19000 ppm Recovery \_\_\_\_\_ Chlorides 4000 ppm System \_\_\_\_\_

|                                  |      |        |      |     |                 |       |              |                                     |
|----------------------------------|------|--------|------|-----|-----------------|-------|--------------|-------------------------------------|
| (A) Initial Hydrostatic Mud      | AK-1 | Alpine | 2149 | PSI | Recorder No.    | 8167  | Test         | <input checked="" type="checkbox"/> |
| (B) First Initial Flow Pressure  |      |        | 54   | PSI | (depth)         | 4391  | Jars         | <input checked="" type="checkbox"/> |
| (C) First Final Flow Pressure    |      |        | 251  | PSI | Recorder No.    | 13534 | Safety Jt.   | <input checked="" type="checkbox"/> |
| (D) Initial Shut-In Pressure     |      |        | 1258 | PSI | (depth)         | 4396  | Circ Sub     | _____                               |
| (E) Second Initial Flow Pressure |      |        | 268  | PSI | Recorder No.    | -     | Sampler      | _____                               |
| (F) Second Final Flow Pressure   |      |        | 385  | PSI | (depth)         | -     | Straddle     | _____                               |
| (G) Final Shut-In Pressure       |      |        | 1250 | PSI | Initial Opening | 15    | Ext. Packer  | _____                               |
| (Q) Final Hydrostatic Mud        |      |        | 2107 | PSI | Initial Shut-In | 30    | Shale Packer | _____                               |

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Approved By Ray Schwager  
 Our Representative RAY SCHWAGER THANK

|               |      |               |  |
|---------------|------|---------------|--|
| Final Flow    | 15   | Ruined Packer | _____                                      |
| Final Shut-In | 30   | Mileage       | <input checked="" type="checkbox"/> 100 RT |
| T-On Location | 0130 | Sub Total:    | _____                                      |
| T-Started     | 0856 | Std. By       | _____                                      |
| T-Open        | 0845 | Acc. Chg:     | _____                                      |
| T-Pulled      | 1015 | Other:        | _____                                      |
| T-Out         | 1247 | Total:        | _____                                      |



**TRILOBITE TESTING, INC.**

# DRILL STEM TEST REPORT

Beren Corp  
 P O Box 20380  
 Wichita-Ks 67208  
 ATTN: Gary Misak

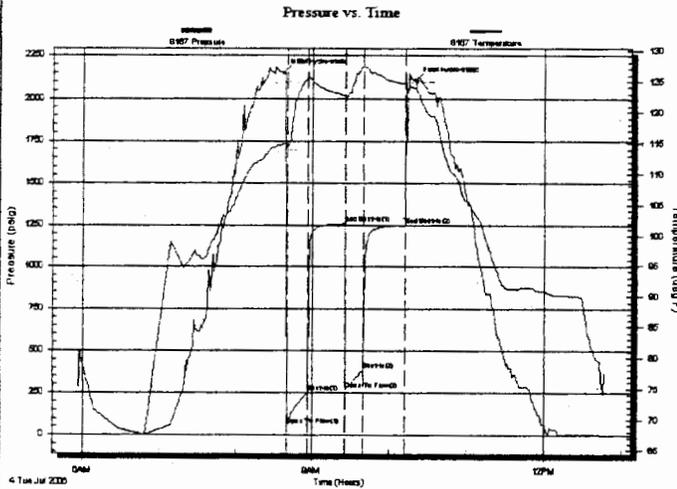
**Milton #1-16**  
**16-16s-23w Ness**  
 Job Ticket: 25350      **DST#: 1**  
 Test Start: 2006.07.04 @ 05:56:20

## GENERAL INFORMATION:

Formation: **Cher Sd**  
 Deviated: No Whipstock ..... ft (KB)  
 Time Tool Opened: 08:39:49  
 Time Test Ended: 12:47:19  
 Interval: **4390.00 ft (KB) To 4470.00 ft (KB) (TVD)**  
 Total Depth: 4470.00 ft (KB) (TVD)  
 Hole Diameter: 7.85 inches Hole Condition: Poor  
 Test Type: Conventional Bottom Hole  
 Tester: Ray Schwager  
 Unit No: 28  
 Reference Elevations: 2477.00 ft (KB)  
 2466.00 ft (CF)  
 KB to GR/CF: 11.00 ft

**Serial #: 8167      Inside**  
 Press@RunDepth: 385.43 psig @ 4391.01 ft (KB)      Capacity: 7000.00 psig  
 Start Date: 2006.07.04      End Date: 2006.07.04      Last Callb.: 2006.07.04  
 Start Time: 05:56:20      End Time: 12:47:19      Time On Btm: 2006.07.04 @ 08:36:49  
 Time Off Btm: 2006.07.04 @ 10:19:49

TEST COMMENT: IFF-wk to strg in 3 min.  
 FFP-wk to strg in 6 min  
 Times 15-30-15-30  
 no bl on shut-in



## PRESSURE SUMMARY

| Time (Min.) | Pressure (psig) | Temp (deg F) | Annotation           |
|-------------|-----------------|--------------|----------------------|
| 0           | 2149.12         | 114.82       | Initial Hydro-static |
| 3           | 54.83           | 114.15       | Open To Flow (1)     |
| 20          | 251.04          | 125.48       | Shut-In (1)          |
| 49          | 1258.33         | 122.81       | End Shut-In (1)      |
| 49          | 268.80          | 122.42       | Open To Flow (2)     |
| 63          | 385.43          | 127.30       | Shut-In (2)          |
| 96          | 1250.12         | 124.54       | End Shut-In (2)      |
| 103         | 2107.43         | 123.92       | Final Hydro-static   |

## Recovery

| Length (ft) | Description        | Volume (bbl) |
|-------------|--------------------|--------------|
| 660.00      | Water RW .28 @ 85F | 5.73         |
| 150.00      | MW 20%M 80%W       | 1.63         |
|             |                    |              |
|             |                    |              |
|             |                    |              |

## Gas Rates

|  | Choke (inches) | Pressure (psig) | Gas Rate (Mcfd) |
|--|----------------|-----------------|-----------------|
|  |                |                 |                 |

Serial #: 8167

Inside

Beren Corp

16-16s-23w Ness

DST Test Number: 1

# Pressure vs. Time

