



DIAMOND TESTING

P.O. Box 157
HOISINGTON, KANSAS 67544
(620) 653-7550 • (800) 542-7313

API #15-009-24764-00-00 ORIGINAL
5-168-11W

Company Mai Oil Operations, Inc. Lease & Well No. Thill 'S' No. 2
Elevation 1793 KB Formation Plattsmouth Effective Pay -- Ft. Ticket No. J1395
Date 9-6-03 Sec. 5 Twp. 16S Range 11W County Barton State Kansas
Test Approved By David Shumaker Diamond Representative John C. Riedl

Formation Test No. 1 Interval Tested from 2,768 ft. to 2,806 ft. Total Depth 2,806 ft.
Packer Depth 2,763 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.
Packer Depth 2,768 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.
Depth of Selective Zone Set -- ft.

Top Recorder Depth (Inside) 2,771 ft. Recorder Number Elec. Cap. 5,000 psi
Bottom Recorder Depth (Outside) 2,805 ft. Recorder Number 11017 Cap. 4,000 psi
Below Straddle Recorder Depth -- ft. Recorder Number -- Cap. -- psi

Drilling Contractor Murfin Drilling Company, Inc. - Rig 16 Drill Collar Length 90 ft. I.D. 2 1/4 in.
Mud Type Chemical Viscosity 56 Weight Pipe Length -- ft. I.D. -- in.
Weight 8.8 Water Loss 7.0 cc. Drill Pipe Length 2,658 ft. I.D. 3 1/2 in.
Chlorides 5,000 P.P.M. Test Tool Length 20 ft. Tool Size 3 1/2 - IF in.
Bars: Make Bowen Serial Number Not Run Anchor Length 38 ft. Size 4 1/2 - FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.

Blow: 1st Open: Weak blow. Dead in 8 mins.
2nd Open: No blow. Flushed tool & received a weak blow. Dead in 1 min.

Recovered 20 ft. of drilling mud with oil specks in tool = .098400 bbls.
Recovered -- ft. of
Recovered -- ft. of
Recovered -- ft. of
Recovered -- ft. of

Remarks

Time Set Packer(s) 4:42 P.M. Time Started Off Bottom 5:47 P.M. Maximum Temperature 98°
Initial Hydrostatic Pressure (A) 1281 P.S.I.
Initial Flow Period Minutes 30 (B) 11 P.S.I. to (C) 27 P.S.I.
Initial Closed In Period Minutes 30 (D) 690 P.S.I.
Final Flow Period Minutes 5 (E) 26 P.S.I. to (F) 29 P.S.I.
Final Closed In Period Minutes -- (G) -- P.S.I.
Final Hydrostatic Pressure (H) 1271 P.S.I.



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Company Mai Oil Operations, Inc. Lease & Well No. Thill '5' No. 2  
Location 1793 KB Formation Lansing/Kansas City Effective Pay      -- Ft. Ticket No. J1396  
Date 9-7-03 Sec. 5 Twp. 16S Range 11W County Barton State Kansas  
Test Approved By David Shumaker Diamond Representative John C. Riedl

Formation Test No. 2 Interval Tested from 2,930 ft. to 2,983 ft. Total Depth 2,983 ft.  
Packer Depth 2,925 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Packer Depth 2,930 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 2,933 ft. Recorder Number Elec. Cap. 5,000 psi  
Bottom Recorder Depth (Outside) 2,980 ft. Recorder Number 11017 Cap. 4,000 psi  
Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi

Drilling Contractor Murfin Drilling Company, Inc. - Rig 16 Drill Collar Length 90 ft. I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 55 Weight Pipe Length      ft. I.D.      in.  
Weight 9.0 Water Loss 8.8 cc. Drill Pipe Length 2,820 ft. I.D. 3 1/2 in.  
Chlorides 6,000 P.P.M. Test Tool Length 20 ft. Tool Size 3 1/2 - IF in.  
Bars: Make Bowen Serial Number Not Run Anchor Length 53 ft. Size 4 1/2 - FH in.  
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.

Blow: 1st Open: Strong blow. Off bottom of bucket in 1 1/2 mins. Gas to surface in 8 mins. (SEE GAS VOLUME REPORT)  
2nd Open: Strong blow. Gas to surface throughout.

Recovered 115 ft. of gas cut mud = .797800 bbls. (Grind out: 10%-gas; 90%-mud)  
Recovered      ft. of       
Recovered      ft. of       
Recovered      ft. of       
Recovered      ft. of     

Remarks     

Time Set Packer(s) 8:18 <sup>A.M.</sup>/<sub>P.M.</sub> Time Started Off Bottom 11:18 <sup>A.M.</sup>/<sub>P.M.</sub> Maximum Temperature 102°  
Initial Hydrostatic Pressure ..... (A) 1389 P.S.I.  
Initial Flow Period ..... Minutes 30 (B) 30 P.S.I. to (C) 36 P.S.I.  
Initial Closed In Period ..... Minutes 45 (D) 990 P.S.I.  
Final Flow Period ..... Minutes 45 (E) 26 P.S.I. to (F) 32 P.S.I.  
Final Closed In Period ..... Minutes 60 (G) 986 P.S.I.  
Final Hydrostatic Pressure ..... (H) 1345 P.S.I.





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Company Mai Oil Operations, Inc. Lease & Well No. Thill 'B' No. 2
Location 1793 KB Formation Lansing/Kansas City 'G' Effective Pay -- Ft. Ticket No. J1397
Date 9-7-03 Sec. 5 Twp. 16S Range 11W County Barton State Kansas
Test Approved By Allen Bangert Diamond Representative John C. Riedl

Formation Test No. 3 Interval Tested from 3,028 ft. to 3,042 ft. Total Depth 3,042 ft.
Packer Depth 3,023 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.
Packer Depth 3,028 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.
Depth of Selective Zone Set -- ft.

Top Recorder Depth (Inside) 3,031 ft. Recorder Number Elec. Cap. 5,000 psi
Bottom Recorder Depth (Outside) 3,039 ft. Recorder Number 11017 Cap. 4,000 psi
Slow Straddle Recorder Depth -- ft. Recorder Number -- Cap. -- psi

Drilling Contractor Murfin Drilling Company, Inc. - Rig 16 Drill Collar Length 90 ft. I.D. 2 1/4 in.
Mud Type Chemical Viscosity 48 Weight Pipe Length -- ft. I.D. -- in.
Weight 8.8 Water Loss 9.0 cc. Drill Pipe Length 2,918 ft. I.D. 3 1/2 in.
Chlorides 6,000 P.P.M. Test Tool Length 20 ft. Tool Size 3 1/2 - JF in.
Bars: Make Bowen Serial Number Not Run Anchor Length 14 ft. Size 4 1/2 - FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.

Blow: 1st Open: Strong blow. Off bottom of bucket in 13 mins. No blow back during shut-in.
2nd Open: Strong blow. Off bottom of bucket in 5 mins. Weak blow back during shut-in.

Recovered 1,080 ft. of gas in pipe
Recovered 60 ft. of oil & water cut gassy mud = .295200 bbls. (Grind out: 20%-oil; 25%-water; 10%-gas; 45%-mud)
Recovered 60 ft. of oil & gas cut muddy water = .573600 bbls. (Grind out: 10%-oil; 5%-gas; 25%-mud; 60%-water)
Recovered 120 ft. of TOTAL FLUID = .868800 bbls. Chlorides: 50,000 Ppm
Recovered -- ft. of --

Remarks

Time Set Packer(s) 10:30 P.M. Time Started Off Bottom 1:30 A.M. Maximum Temperature 104°
Initial Hydrostatic Pressure (A) 1467 P.S.I.
Initial Flow Period Minutes 30 (B) 15 P.S.I. to (C) 38 P.S.I.
Initial Closed In Period Minutes 45 (D) 632 P.S.I.
Final Flow Period Minutes 45 (E) 22 P.S.I. to (F) 51 P.S.I.
Final Closed In Period Minutes 60 (G) 627 P.S.I.
Final Hydrostatic Pressure (H) 1413 P.S.I.



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Company Mai Oil Operations, Inc. Lease & Well No. Thill "B" No. 2  
 Location 1793 KB Formation Arbuckle Effective Pay -- Ft. Ticket No. J1398  
 Date 9-8-03 Sec. 5 Twp. 16S Range 11W County Barton State Kansas  
 Test Approved By David Shumaker Diamond Representative John C. Riedl

Formation Test No. 4 Interval Tested from 3,221 ft. to 3,272 ft. Total Depth 3,272 ft.  
 Casing Depth 3,216 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.  
 Casing Depth 3,221 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.  
 Depth of Selective Zone Set          ft.

Top Recorder Depth (Inside) 3,224 ft. Recorder Number Elec. Cap. 5,000 psi  
 Bottom Recorder Depth (Outside) 3,269 ft. Recorder Number 11017 Cap. 4,000 psi  
 Flow Straddle Recorder Depth          ft. Recorder Number          Cap.          psi

Drilling Contractor Murfin Drilling Company, Inc. - Rig 16 Drill Collar Length 90 ft. I.D. 2 1/4 in.  
 Mud Type Chemical Viscosity 44 Weight Pipe Length -- ft. I.D. -- in.  
 Weight 9.2 Water Loss 10.0 cc. Drill Pipe Length 3,111 ft. I.D. 3 1/2 in.  
 Chlorides 7,000 P.P.M. Test Tool Length 20 ft. Tool Size 3 1/2 - IF in.  
 Tools: Make Bowen Serial Number Not Run Anchor Length 51 ft. Size 4 1/2 - FH in.  
 Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.  
 Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.

Flow: 1st Open: Strong blow. Off bottom of bucket in 8 mins. No blow back during shut-in.  
 2nd Open: Strong blow. Off bottom of bucket in 5 mins. No blow back during shut-in.

Recovered 500 ft. of gassy oil = 6.264800 bbls. (Grind out: 15%-gas; 85%-oil)  
 Recovered 250 ft. of slightly muddy & gas cut oil = 3.550000 bbls. (Grind out: 20%-mud; 10%-gas; 70%-oil)  
 Recovered 750 ft. of TOTAL FLUID = 9.814800 bbls. Gravity: 39 @ 60°  
 Recovered          ft. of           
 Recovered          ft. of         

Remarks         

Time Set Packer(s) 9:40 ~~P.M.~~ <sup>A.M.</sup> Time Started Off Bottom 12:40 ~~P.M.~~ <sup>A.M.</sup> Maximum Temperature 109°  
 Initial Hydrostatic Pressure ..... (A) 1567 P.S.I.  
 Initial Flow Period ..... Minutes 30 (B) 33 P.S.I. to (C) 149 P.S.I.  
 Initial Closed In Period ..... Minutes 45 (D) 1046 P.S.I.  
 Final Flow Period ..... Minutes 45 (E) 155 P.S.I. to (F) 277 P.S.I.  
 Final Closed In Period ..... Minutes 60 (G) 1050 P.S.I.  
 Final Hydrostatic Pressure ..... (H) 1547 P.S.I.