



**DIAMOND TESTING, LLC**  
P.O. Box 157  
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MADDENUNIT1DST3

Company Range Oil Company, Inc. Lease & Well No. Madden Unit No. 1  
Elevation 1469 KB Formation Simpson Sand Effective Pay      Ft. Ticket No. F279  
Date 6-2-14 Sec. 31 Twp. 19S Range 6E County Chase State Kansas  
Test Approved By Ken Wallace Diamond Representative Jake Fahrenbruch

Formation Test No. 3 Interval Tested from 2,233 ft. to 2,262 ft. Total Depth 2,262 ft.  
Packer Depth 2,228 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Packer Depth 2,233 ft. Size 6 3/4 in. Packer Depth      ft. Size      in.  
Depth of Selective Zone Set      ft.

Top Recorder Depth (Inside) 2,216 ft. Recorder Number 5951 Cap. 5,000 psi.  
Bottom Recorder Depth (Outside) 2,234 ft. Recorder Number 5584 Cap. 5,000 psi.  
Below Straddle Recorder Depth      ft. Recorder Number      Cap.      psi.

Drilling Contractor C & G Drilling Company - Rig 2 Drill Collar Length 300 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 49 Weight Pipe Length      ft I.D.      in.  
Weight 9.0 Water Loss 7.6 cc. Drill Pipe Length 1,905 ft I.D. 3 1/2 in.  
Chlorides 900 P.P.M. Test Tool Length 28 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 29 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: Blow increasing. Off bottom of bucket in 10 mins. No blow back during shut-in.  
2nd Open: Blow increasing. Off bottom of bucket in 11 mins. No blow back during shut-in.

Recovered 740 ft. of slightly mud cut water w/trace oil specks = 7.737200 bbls. (Grind out: 1%-oil; 93%-water; 6%-mud)  
Recovered      ft. of      Chlorides: 10,000 Ppm PH: 7.5 RW: .55 @ 82°  
Recovered      ft. of       
Recovered      ft. of       
Recovered      ft. of       
Recovered      ft. of     

Remarks Tool Sample Grind Out: 1%-oil; 60%-water; 39%-mud

Time Set Packer(s) 5:30 A.M. Time Started off Bottom 8:30 A.M. Maximum Temperature 92°  
Initial Hydrostatic Pressure.....(A) 1071 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 10 P.S.I. to (C) 179 P.S.I.  
Initial Closed In Period.....Minutes 30 (D) 778 P.S.I.  
Final Flow Period.....Minutes 60 (E) 181 P.S.I. to (F) 335 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 774 P.S.I.  
Final Hydrostatic Pressure.....(H) 1070 P.S.I.