



**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
MADDENUNIT1DST1

Company Range Oil Company, Inc. Lease & Well No. Madden Unit No. 1  
Elevation 1469 KB Formation Viola Effective Pay \_\_\_\_\_ Ft. Ticket No. F277  
Date 5-31-14 Sec. 31 Twp. 19S Range 6E County Chase State Kansas  
Test Approved By Ken Wallace Diamond Representative Jake Fahrenbruch

Formation Test No. 1 Interval Tested from 2,179 ft. to 2,188 ft. Total Depth 2,188 ft.  
Packer Depth 2,174 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 2,179 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 2,162 ft. Recorder Number 5951 Cap. 5,000 psi.  
Bottom Recorder Depth (Outside) 2,180 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 52 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Weight 8.9 Water Loss 7.8 cc. Drill Pipe Length 1,851 ft I.D. 3 1/2 in.  
Chlorides 800 P.P.M. Test Tool Length 28 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number Not Run Anchor Length 9 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: Building blow increasing to 7 1/2 ins. No blow back during shut-in.  
2nd Open: Building blow increasing to 9 1/2 ins. No blow back during shut-in.

Recovered 240 ft. of clean heavy oil = 1.180800 bbls. (Grind out: 100%-oil) Gravity: 29 @ 60°  
Recovered 20 ft. of oil cut mud = .098400 bbls. (Grind out: 20%-oil; 80%-mud)  
Recovered 260 ft. of TOTAL FLUID = 1.279200 bbls.  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Remarks Tool Sample Grind Out: 85%-oil; 15%-mud

Time Set Packer(s) 8:30 P.M. Time Started off Bottom 11:30 P.M. Maximum Temperature 97°  
Initial Hydrostatic Pressure.....(A) 1019 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 8 P.S.I. to (C) 47 P.S.I.  
Initial Closed In Period.....Minutes 30 (D) 742 P.S.I.  
Final Flow Period.....Minutes 60 (E) 48 P.S.I. to (F) 110 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 749 P.S.I.  
Final Hydrostatic Pressure.....(H) 1018 P.S.I.