



**DIAMOND TESTING, LLC**  
 P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
 (620) 653-7550 • (800) 542-7313  
 madden3dst2

Company Range Oil Company, Inc. Lease & Well No. Madden Unit No. 3  
 Elevation 1481 EGL Formation Viola Effective Pay \_\_\_\_\_ Ft. Ticket No. S0521  
 Date 11-22-14 Sec. 31 Twp. 19S Range 6E County Chase State Kansas  
 Test Approved By Kenneth C. Wallace Diamond Representative Jacob McCallie

Formation Test No. 2 Interval Tested from 2,187 ft. to 2,197 ft. Total Depth 2,197 ft.  
 Packer Depth 2,182 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Packer Depth 2,187 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
 Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 2,168 ft. Recorder Number 5515 Cap. 5,000 psi.  
 Bottom Recorder Depth (Outside) 2,188 ft. Recorder Number 5586 Cap. 5,000 psi.  
 Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor C & G Drilling Company - Rig 1 Drill Collar Length 178 ft I.D. 2 1/4 in.  
 Mud Type Chemical Viscosity 53 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
 Weight 9.3 Water Loss 7.6 cc. Drill Pipe Length 1,976 ft I.D. 3 in.  
 Chlorides 880 P.P.M. Test Tool Length 33 ft Tool Size 3 1/2-IF in.  
 Jars: Make Sterling Serial Number 4 Anchor Length 10 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-FH in.

Blow: 1st Open: Weak, surface blow increasing to 1 3/4 ins. in 30 mins. No blow back during shut-in.  
 2nd Open: No blow increasing to 1 in. in 60 mins. No blow back during shut-in.

Recovered 35 ft. of clean oil = .172200 bbls. (Grind out: 100%-oil) Gravity: 29 @ 60°  
 Recovered 10 ft. of oil cut mud = .049200 bbls. (Grind out: 19%-oil; 81%-mud)  
 Recovered 45 ft. of TOTAL FLUID = .221400 bbls.  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
 Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks Tool Sample Grind Out: 13%-oil; 87%-mud  
Diesel in bucket.

Time Set Packer(s) 6:52 A.M. Time Started off Bottom 9:52 A.M. Maximum Temperature 89°  
 Initial Hydrostatic Pressure.....(A) 1058 P.S.I.  
 Initial Flow Period.....Minutes 30 (B) 9 P.S.I. to (C) 16 P.S.I.  
 Initial Closed In Period.....Minutes 30 (D) 743 P.S.I.  
 Final Flow Period.....Minutes 60 (E) 16 P.S.I. to (F) 26 P.S.I.  
 Final Closed In Period.....Minutes 60 (G) 749 P.S.I.  
 Final Hydrostatic Pressure.....(H) 1049 P.S.I.