



DIAMOND TESTING, LLC
P.O. Box 157
HOISINGTON, KANSAS 67544
(620) 653-7550 • (800) 542-7313
UMMELBROTHERSTRUST4DST2

Company Richlan Drilling Lease & Well No. Ummel Brothers Trust No. 4
Elevation 2274 KB Formation Mississippi Effective Pay _____ Ft. Ticket No. T284
Date 11-18-13 Sec. 24 Twp. 18S Range 24W County Ness State Kansas
Test Approved By Robert A. (Bob) Schreiber Diamond Representative _____ Tim Venters

Formation Test No. 2 Interval Tested from 4,249 ft. to 4,307 ft. Total Depth 4,307 ft.
Packer Depth 4,244 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Packer Depth 4,249 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Depth of Selective Zone Set _____ ft.

Top Recorder Depth (Inside) 4,230 ft. Recorder Number 8457 Cap. 10,000 psi.
Bottom Recorder Depth (Outside) 4,304 ft. Recorder Number 11030 Cap. 5,025 psi.
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ psi.

Drilling Contractor Southwind Drilling, Inc. - Rig 8 Drill Collar Length _____ ft I.D. _____ in.
Mud Type Chemical Viscosity 56 Weight Pipe Length _____ ft I.D. _____ in.
Weight 9.2 Water Loss 9.6 cc. Drill Pipe Length 4,216 ft I.D. 3 1/2 in.
Chlorides 3,000 P.P.M. Test Tool Length 33 ft Tool Size 3 1/2-IF in.
Jars: Make Sterling Serial Number 2 Anchor Length 26' perf. w/32' drill pipe 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, 1/2 in. blow increasing. Off bottom of bucket in 24 mins. No blow back during shut-in.
2nd Open: Weak, 1/4 in. blow increasing to 11 ins. No blow back during shut-in.

Recovered 30 ft. of mud = .426900 bbls.
Recovered 125 ft. of slightly water cut mud = 1.778750 bbls. (Grind out: 17%-water; 83%-mud)
Recovered 65 ft. of heavy water cut mud = .924950 bbls. (Grind out: 46%-water; 54%-mud)
Recovered 65 ft. of mud cut water = .924950 bbls. (Grind out: 71%-water; 29%-mud) Chlorides: 19,000 Ppm PH: 7.0
Recovered 285 ft. of TOTAL FLUID = 4.055550 bbls.

Recovered _____ ft. of _____
Remarks Tool Sample Grind Out: 1%-oil; 74%-water; 25%-mud

Time Set Packer(s) 5:43 P.M. Time Started off Bottom 7:58 P.M. Maximum Temperature 116°
Initial Hydrostatic Pressure.....(A) 2026 P.S.I.
Initial Flow Period.....Minutes 30 (B) 19 P.S.I. to (C) 79 P.S.I.
Initial Closed In Period.....Minutes 30 (D) 874 P.S.I.
Final Flow Period.....Minutes 45 (E) 87 P.S.I. to (F) 138 P.S.I.
Final Closed In Period.....Minutes 30 (G) 671 P.S.I.
Final Hydrostatic Pressure.....(H) 2025 P.S.I.

DIAMOND TESTING

General Information Report

General Information

Company Name RICHLAN DRILLING & GENERAL PARTNERS
Contact RICK SCHREIBER
Well Name UMMEL BROTHERS TRUST #4
Unique Well ID DST #2, MISSISSIPPIAN, 4249-4307
Surface Location SEC 24-18S-24W, NESS CO. KS.
Field MINER
Well Type Vertical
Test Type CONVENTIONAL
Formation DST #2, MISSISSIPPIAN, 4249-4307
Well Fluid Type 01 Oil

Representative TIM VENTERS
Well Operator RICHLAN DRLG. & GENERAL PARTS.
Report Date 2013/11/18
Prepared By TIM VENTERS

Qualified By BOB SCHREIBER

Start Test Date 2013/11/18
Final Test Date 2013/11/18

Start Test Time 15:09:00
Final Test Time 23:04:00

Test Recovery:

RECOVERED: 30' MUD
 125' SWCM, 17% WATER, 83% MUD
 65' HWCM, 46% WATER, 54% MUD
 65' MCW, 71% WATER, 29% MUD
 285' TOTAL FLUID

TOOL SAMPLE: 1% OIL, 74% WATER, 25% MUD

CHLORIDES: 19,000 ppm
PH: 7.0

RICHLAN DRILLING & GENERAL PARTNERS
DST #2, MISSISSIPPIAN, 4249-4307
Start Test Date: 2013/11/18
Final Test Date: 2013/11/18

UMMEL BROTHERS TRUST #4
Formation: DST #2, MISSISSIPPIAN, 4249-4307
Pool: MINER
Job Number: T284

UMMEL BROTHERS TRUST #4

