



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(620) 653-7550 • (800) 542-7313
UBTT3dst1

Company Richlan Drilling Lease & Well No. Ummel Brothers Trust Twin No. 3
Elevation 2270 KB Formation Cherokee Sand Effective Pay Ft. Ticket No. F051
Date 11-14-12 Sec. 24 Twp. 18S Range 24W County Ness State Kansas
Test Approved By Robert A. (Bob) Schreiber Diamond Representative Jake Fahrenbruch

Formation Test No. 1 Interval Tested from 4,246 ft. to 4,304 ft. Total Depth 4,304 ft.
Packer Depth 4,241 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Packer Depth 4,246 ft. Size 6 3/4 in. Packer Depth ft. Size in.
Depth of Selective Zone Set ft.

Top Recorder Depth (Inside) 4,225 ft. Recorder Number 0062 Cap. 5,000 psi.
Bottom Recorder Depth (Outside) 4,301 ft. Recorder Number 11033 Cap. 5,150 psi.
Below Straddle Recorder Depth ft. Recorder Number Cap. psi.

Drilling Contractor Southwind Drilling, Inc. - Rig 70 Drill Collar Length ft I.D. in.
Mud Type Chemical Viscosity 52 Weight Pipe Length ft I.D. in.
Weight 8.8 Water Loss 9.2 cc. Drill Pipe Length 4,213 ft I.D. 3 1/2 in.
Chlorides 5,000 P.P.M. Test Tool Length 33 ft Tool Size 3 1/2-IF in.
Jars: Make Sterling Serial Number 5 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: Strong blow increasing. Off bottom of bucket in 7 mins. No blow back during shut-in.
2nd Open: Strong blow increasing. Off bottom of bucket in 8 mins. No blow back during shut-in.

Recovered 300 ft. of mud cut water = 4.269000 bbls. (Grind out: 70%-water; 30%-mud)
Recovered 715 ft. of water = 10.174450 bbls. (Grind out: 100%-water) Chlorides: 19,000 Ppm PH: 7.5 RW: .26 @ 43°
Recovered 1,015 ft. of TOTAL FLUID = 14.443450 bbls.
Recovered ft. of
Recovered ft. of
Recovered ft. of

Remarks Tool Sample Grind Out: 1%-oil; 99%-water

Time Set Packer(s) 9:55 P.M. Time Started off Bottom 11:55 P.M. Maximum Temperature 127°
Initial Hydrostatic Pressure.....(A) 2025 P.S.I.
Initial Flow Period.....Minutes 30 (B) 14 P.S.I. to (C) 263 P.S.I.
Initial Closed In Period.....Minutes 30 (D) 1320 P.S.I.
Final Flow Period.....Minutes 30 (E) 262 P.S.I. to (F) 472 P.S.I.
Final Closed In Period.....Minutes 30 (G) 1320 P.S.I.
Final Hydrostatic Pressure.....(H) 2015 P.S.I.



Diamond Testing General Report

**JAKE
FAHRENBRUCH - TESTER**
Cell: (620) 282-8977

P.O. Box 157
Hoisington KS 67544
Office: (800) 542-7313

General Information

Company Name	Richlan Drilling	Well Name	Ummel Brothers Trust Twin #3
Well Operator	Richlan Drilling	Unique Well ID	DST #1, Cherokee Sand, 4246'-4304'
Contact	Bob Schreiber	Surface Location	Sec 24-18s-24w-Ness Co.-KS
Site Contact	Bob Schreiber	Test Unit	#5
Field	Miner	Pool	Miner
Well Type	Vertical	Job Number	F051
Prepared By	Jake Fahrenbruch	Qualified By	Bob Shreiber

Test Information

Test Type	Conventional Bottom Hole	Test Purpose	Initial Test
Formation	Cherokee Sand, 4246'-4304'	Gauge Name	0062
Start Test Date	2012/11/14	Start Test Time	19:24:00
Final Test Date	2012/11/15	Final Test Time	03:42:00

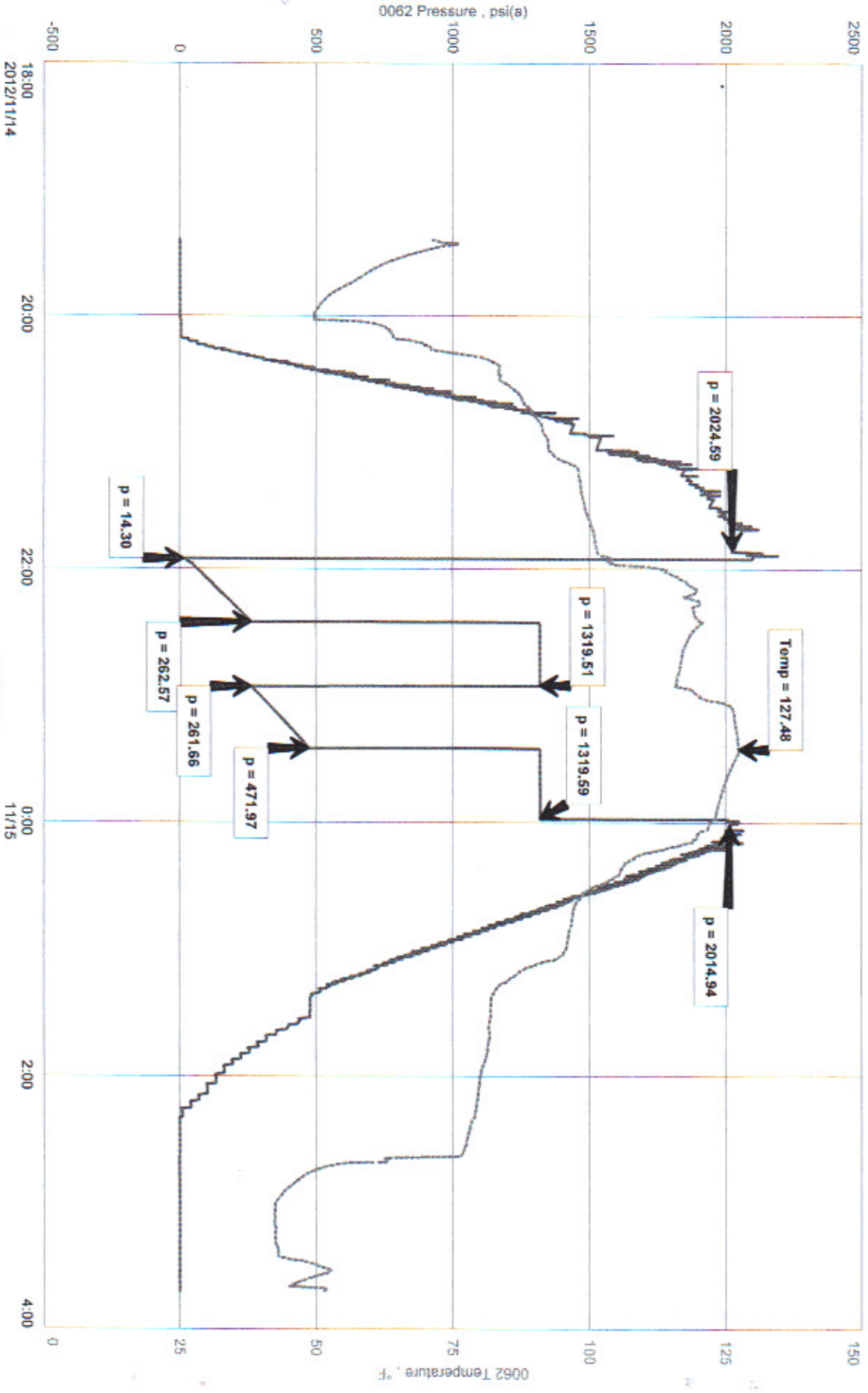
Test Results

Recovered:	300'	MCW	70% wtr, 30% mud	4.26 bbl
	715'	Water	100% wtr	10.15 bbl
	-----	No GIP		
	-----	Total Fluid Recovered: 1015'		14.41 bbl
	-----	Chlorides: 19,000 ppm		
	-----	PH: 7.5		
	-----	RW: .26 @ 43 deg F		
	-----	Tool Sample: SOSW, <1% oil, >99% wtr		

Richlan Drilling
DST #1, Cherokee Sand, 4246'-4304'
Start Test Date: 2012/11/14
Final Test Date: 2012/11/15

Ummel Brothers Trust Twin #3

Ummel Brothers Trust Twin #3
Formation: Cherokee Sand, 4246'-4304'
Pool: Miner
Job Number: F051



Richlan Drly a General Partnership
Umond Brothers Trust "Twin" #3
DST #1 Cherokee land 4246-4304
6-15-2012

1015' water

