

# Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

Date 6-9-02 Location Yw-Me 16-50-13 Elevation 1845 K.F. County Boeber

Company F.B. Hall Company L.L.C. Number of Copies 5

Charts Mailed to 9431 East Central P.O. Box 780167 Wichita, Kansas 67276-0167

Drilling Contractor Steeling Drilling Co #4

Length Drill Pipe 3829 I.D. Drill Pipe 2.50 Tool Joint Size 4 1/2" X.H.

Length Weight Pipe None I.D. Weight Pipe None Tool Joint Size None

Length Drill Collars 248 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 4100-4105 Bottom Packer Depth 4140 Number of Packers 3 Packer Size 6 3/4"

TESTED FROM 4105 TO 4140 ANCHOR LENGTH 35 TOTAL DEPTH 4150 Hole Size 7 7/8"

LEASE & WELL NO. Leased Tract #1-16 FORMATION TESTED Kansas City "H" TEST NO. 1

Mud Weight 9.4 Viscosity 45 Water Loss 12.9 Chlorides - Pits 6000 D.S.T. 10/1000

Maximum Temp. 128 °F Initial Hydrostatic Pressure (A) 2018 P.S.I. Final Hydrostatic Pressure (H) 1979 P.S.I.

Tool Open I.F.P. from 4:45 am to 5:15 am 30 min

from [B] 216 P.S.I. to [C] 271 P.S.I.

Tool Closed I.C.I.P. from 5:15 am to 6:15 am 60 min

[D] 1457 P.S.I.

Tool Open F.F.P. from 6:15 am to 7:15 am 60 min

from [E] 283 P.S.I. to [F] 491 P.S.I.

Tool Closed F.C.I.P. from 7:15 am to 8:45 am 90 min

[G] 1322 P.S.I.

Initial Blow Strong blow - Gas to surface in 3 minutes

Final Blow Strong blow - See Gas flow Report

Total Feet Recovered 1100 Gravity of Oil \_\_\_\_\_ Corrected

1100 Feet of SALT WATER CHLORIDES 101000 % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Remarks \_\_\_\_\_

Extra Equipment - Jars yes Safety Joint yes Extra Packer yes (300) Straddle yes Hook Wall None

Top Recorder No. 7825 Clock No. Electronic Depth 4108 Cir. Sub None Sampler None

Bottom Recorder No. 5463 Clock No. 47441 Depth 4147 Insurance None

Price of Job \_\_\_\_\_

Tool Operator Gene Buder

Approved By \_\_\_\_\_

Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

NO 14061

**SUPERIOR TESTERS ENTERPRISES INC.**

**Great Bend, Kansas**

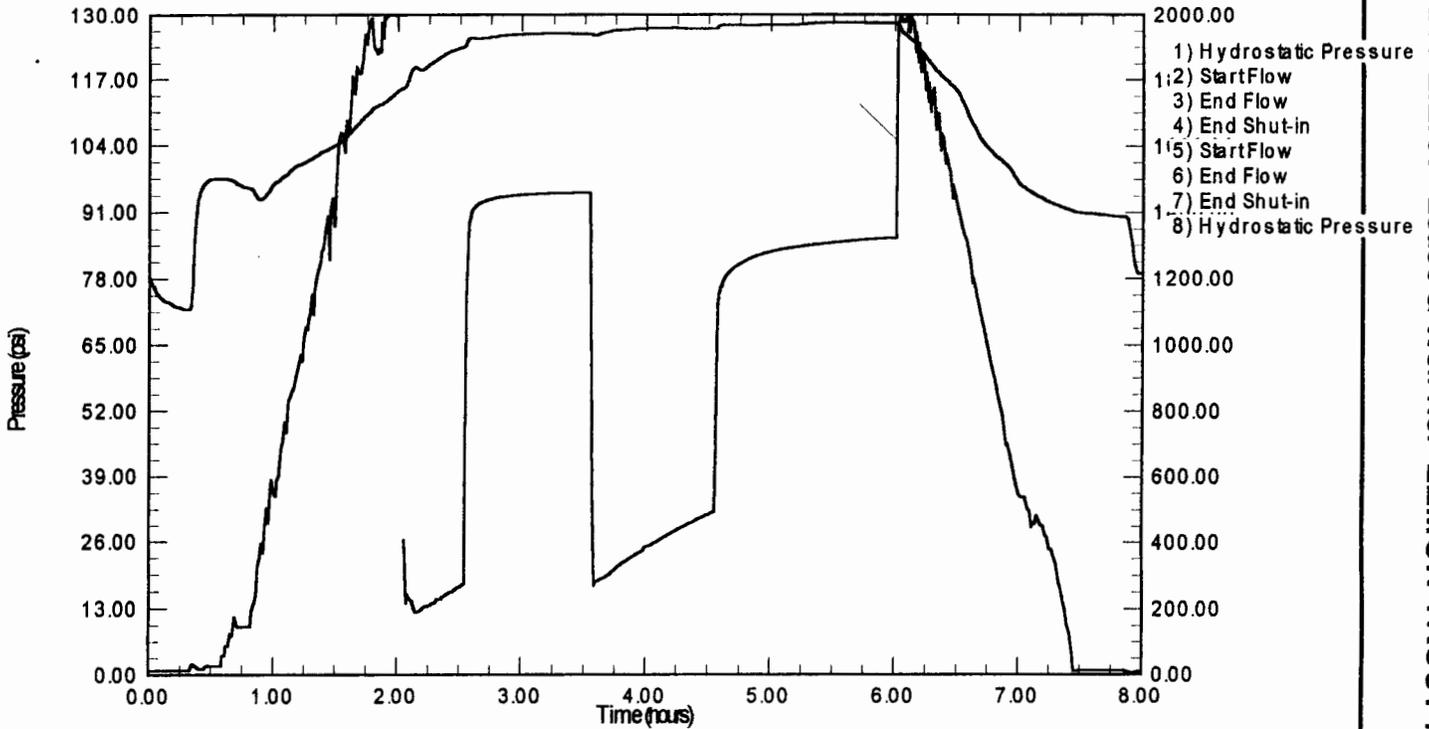
**CHART DATA**

**(316) 792-6902**

**State** ..... KANSAS  
**County** ..... BARBER  
**Field** .....

**Test Date** ..... June 9, 2002  
**Sec Town Range** ..... 16-30S-13W  
**Report Number** ..... 14061

Company: F.G.HOLL COMPANY L.L.C. Lease & Well No. LEMON TRUST #1-16 Test #: 1 Date: 06-09-002 SEC. 16 TWP.  
 30S RGE. 13W



**Field Reading**

(1)	Initial Hydrostatic Pressure	2018
(2)	Initial Flow Pressure	216
(3)	Final Initial Flow Pressure	271
(4)	Initial Shut-In Pressure	1457
(5)	Initial Final Flow Pressure	283
(6)	Final Flow Pressure	491
(7)	Final Shut-In Pressure	1322
(8)	Final Hydrostatic Pressure	1979

**ELECTRONIC RECORDER DEPTH 4108 FT, RECORDER NUMBER 78225**

# SUPERIOR TESTERS ENTERPRISES INC.

## DRILL STEM TEST REPORT

GREAT BEND, KANSAS 67530 (316)792-6902

### GENERAL INFORMATION

COMPANY NAME .....	<b>F.G.HOLL COMPANY L.L.C.</b>	LEASE AND WELL NUMBER .....	<b>LEMON TRUST #1-16</b>
TEST DATE .....	<b>6/9/02</b>	FORMATION TESTED .....	<b>KANSAS CITY 'H'</b>
SECTION-TOWN-RANGE .....	<b>16-30S-13W</b>	DRILL STEM TEST NUMBER .....	<b>1</b>
STATE .....	<b>KANSAS</b>	REPORT NUMBER .....	<b>14061</b>
COUNTY .....	<b>BARBER</b>	ELEVATION KELLY BUSHINGS .....	<b>1845</b>
ELEVATION GROUND LEVEL .....	<b>1836</b>	TESTING ENGINEER .....	<b>GENE BUDIG</b>
COMPANY REPRESENTATIVE .....	<b>BILL REE</b>		

### TOOL SETTING INFORMATION

TEST INTERVAL (From) .....	<b>4105</b>	TOP PACKER DEPTH .....	<b>4100-4105</b>
TEST INTERVAL (to) .....	<b>4140</b>	BOTTOM PACKER DEPTH .....	<b>4140</b>
ANCHOR LENGTH .....	<b>35</b>	NUMBER OF PACKERS .....	<b>2</b>
TOTAL DEPTH (ft) .....	<b>4150</b>	PACKER SIZE .....	<b>6 3/4</b>
		HOLE SIZE .....	<b>7 7/8</b>

### FLOW TIMES

*INITIAL OPEN*

TOOL OPEN (from) .....	<b>4:45</b>
TOOL OPEN (to) .....	<b>5:15</b>
DURATION (min.) .....	<b>30</b>

*INITIAL SHUT-IN*

TOOL CLOSED (from) .....	<b>5:15</b>
TOOL CLOSED (to) .....	<b>6:15</b>
DURATION (min.) .....	<b>60</b>

*FINAL OPEN*

TOOL OPEN (from) .....	<b>6:15</b>
TOOL OPEN (to) .....	<b>7:15</b>
DURATION (min.) .....	<b>60</b>

*FINAL SHUT-IN*

TOOL CLOSED (from) .....	<b>7:15</b>
TOOL CLOSED (to) .....	<b>8:45</b>
DURATION (min.) .....	<b>90</b>

### PRESSURE READINGS

INITIAL HYDROSTATIC .....	<b>2018</b>
INITIAL FLOW .....	<b>216</b>
FINAL INITIAL FLOW .....	<b>271</b>
INITIAL SHUT-IN .....	<b>1457</b>
INITIAL FINAL FLOW .....	<b>283</b>
FINAL FLOW .....	<b>491</b>
FINAL SHUT-IN .....	<b>1322</b>
FINAL HYDROSTATIC .....	<b>1979</b>
MAXIMUM TEMPERATURE .....	<b>128</b>
TOP RECORDER DEPTH .....	<b>4108</b>
RECORDER NUMBER .....	<b>78225</b>
BOTTOM RECORDER DEPTH .....	<b>4147</b>
RECORDER NUMBER .....	<b>5463</b>

### INITIAL BLOW

**STRONG BLOW WITH GAS TO SURFACE IN 3 MINUTES**

### FINAL BLOW

**STRONG BLOW-SEE GAS FLOW REPORT**

### EXTRA EQUIPMENT

JARS .....	<b>YES</b>	EXTRA PACKER (3RD) .....	<b>YES</b>
SAFETY JOINT .....	<b>YES</b>	EXTRA PACKER (4TH) .....	<b>NO</b>
ELECTRONIC RECORDER .....	<b>YES</b>	STRADDLE .....	<b>YES</b>
CIRCULATING SUB .....	<b>NO</b>	HOOKE WALL .....	<b>NO</b>
		SAMPLER .....	<b>NO</b>

**SUPERIOR TESTERS ENTERPRISES INC.**

**DRILL STEM TEST REPORT**

GREAT BEND, KANSAS 67530 (316)792-6902

**WELL INFORMATION**

DRILLING CONTRACTOR ..... **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH ..... **3829**

DRILL PIPE I.D. .... **3.8**

TOOL JOINT SIZE ..... **4 1/2 X.H.**

DRILL COLLAR LENGTH ..... **248**

DRILL COLLAR I.D. .... **2.25**

TOOL JOINT SIZE ..... **4 1/2 X.H.**

WEIGHT PIPE LENGTH .....

WEIGHT PIPE I.D. .... **2.25**

TOOL JOINT SIZE ..... **4 1/2 X.H.**

MUD WEIGHT #/GAL ..... **9.6**

VISCOSITY ..... **45**

WATER LOSS ..... **12**

CHLORIDES-PITS ..... **6000**

CHLORIDES-DST ..... **101000**

	FEET OF RECOVERY	RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1)	<b>1100</b>	<b>SALT WATER CHLORIDES 101,000</b>				
2)						
3)						
4)						
5)						
6)						
7)						
8)						
9)						
10)						
11)						
12)						
13)						
14)						
15)						
	<b>TOTAL RECOVERY</b>					

**COMMENTS**

# SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

GAS FLOW RATE

(316) 792-6902

#

STATE..... KANSAS	Test Date .....	6/9/02
COUNTY..... BARBER	Sec Town Range .....	16-30S-13W
FIELD.....	Report Number .....	14061

## Initial Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Orifice Tester	PSI on Orifice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
TOOL OPENED	4:50	5	50			1 1/4	311.000
AT 4:45 WITH	5:00	15	54			1 1/4	323.000
GAS TO	5:10	25	44			1 1/4	291.000
SURFACE IN	5:15	30	40			1 1/4	278.000
3 MINUTES							
AT 4:48							

## Final Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Orifice Tester	PSI on Orifice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
TOOL OPENED	6:25	10	20			3/4	63.500
AT 6:15	6:35	20	42			3/4	92.000
	6:45	30	60			3/4	110.000
	6:55	40	66			3/4	115.000
	7:05	50	68			3/4	117.000
	7:15	60	76			3/4	123.000
<b>GAS SAMPLE WAS TAKEN</b>							

# SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

## SUPERPOSITION ANALYSIS

(316) 792-6902

### 1ST SHUT-IN

State ..... KANSAS

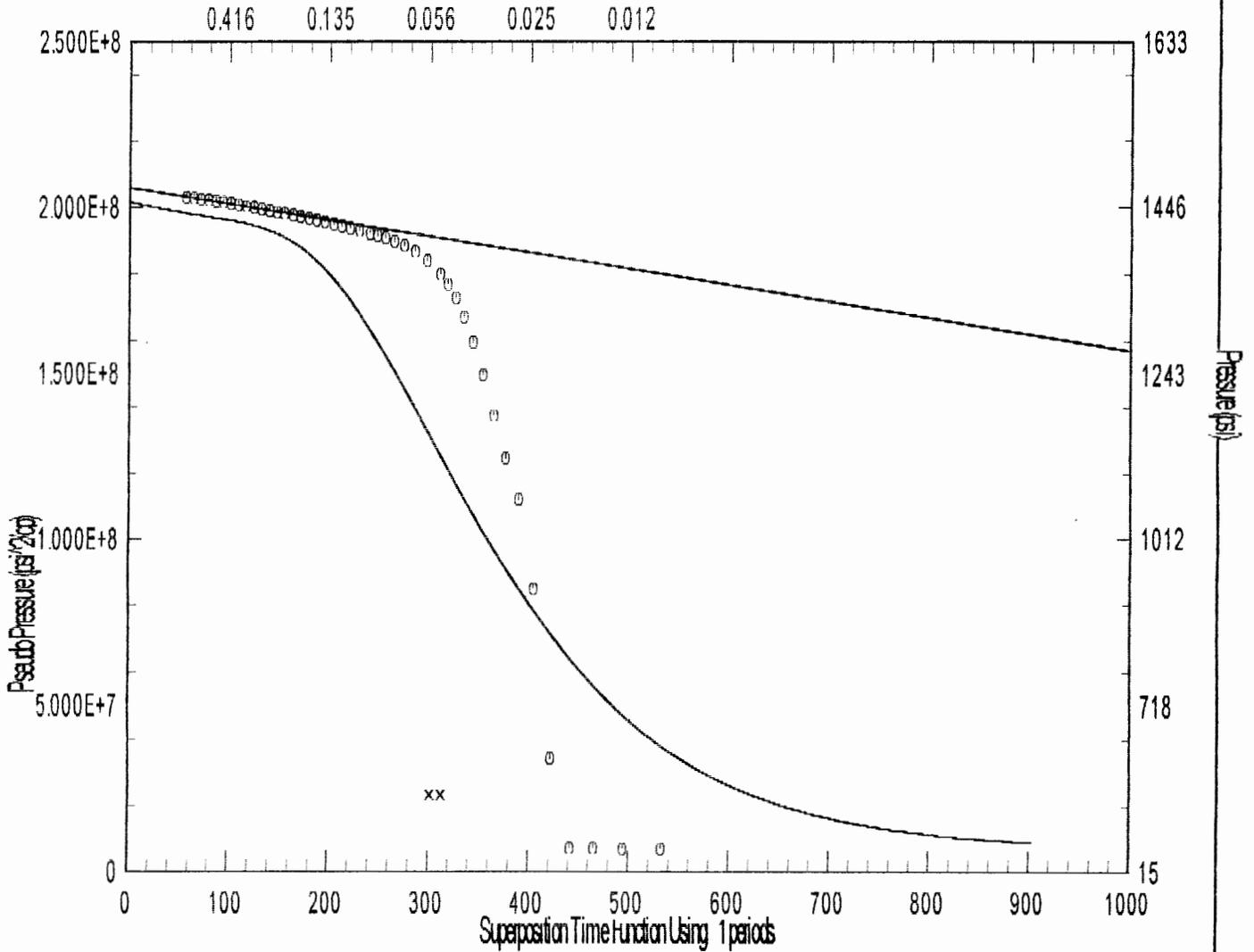
Test Date ..... 6/9/02

County ..... BARBER

Sec Town Range ..... 16-30S-13W

Field .....

Report Number ..... 14061



**MODEL RESULTS**

Constant Storage	Skin Model	Homogeneous	No Boundaries	h : 10 ft
C1 : 0.001 bbl/psi	Skin : 8.61	k : 1.245 md		mu : 0.017 cp
		Est Pi: 1451.5 psi		phi : 18.0%
				ct : 1.285E-03 1/psi
				rw : 6.417 ft
				BHT : 128 F
				FVF : 1.33

Field :  
County or Parish :  
State :

Date Printed: 06/11/02 03:15:51  
Analysis Period : End Flow - End 1ST Shut-in  
Comment : Line #

---

Superposition Slope -> m' ..... -48728.260000  
Horner Slope -> m ..... -1.515449E+7  
Intercept ..... 2.058E+8  
P(dt=1 hr) ..... 2.033E+8  
Pwf ..... 6.911E+6  
R Sqr ..... 0.9918

Intercept (psi) ..... 1468.028  
k (md) ..... 1.97535  
kh (md-ft) ..... 19.75355  
k/u (md/cp) ..... 114.84620  
kh/uB (md-ft/cp) ..... 1148.46199  
Skin ..... 13.9366  
DP Skin ..... 1138.6650  
Total DP ..... 1197.4784  
Percent DP ..... 95.09%

Radius Invest (ft) ..... 23  
Radius Time (hrs) ..... 1.02

Delta Q = ..... 311  
h (ft)= ..... 10  
mu (cp) = ..... 0.0172  
B (stb/scf) = ..... 1.3290

First Point # ..... 60  
Second Point # ..... 299  
Start Real Time ..... 0.183  
End Real Time ..... 0.981  
Start SF Time ..... 168.883

# SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

## SUPERPOSITION ANALYSIS

(316) 792-6902

### 2ND SHUT-IN

State ..... KANSAS

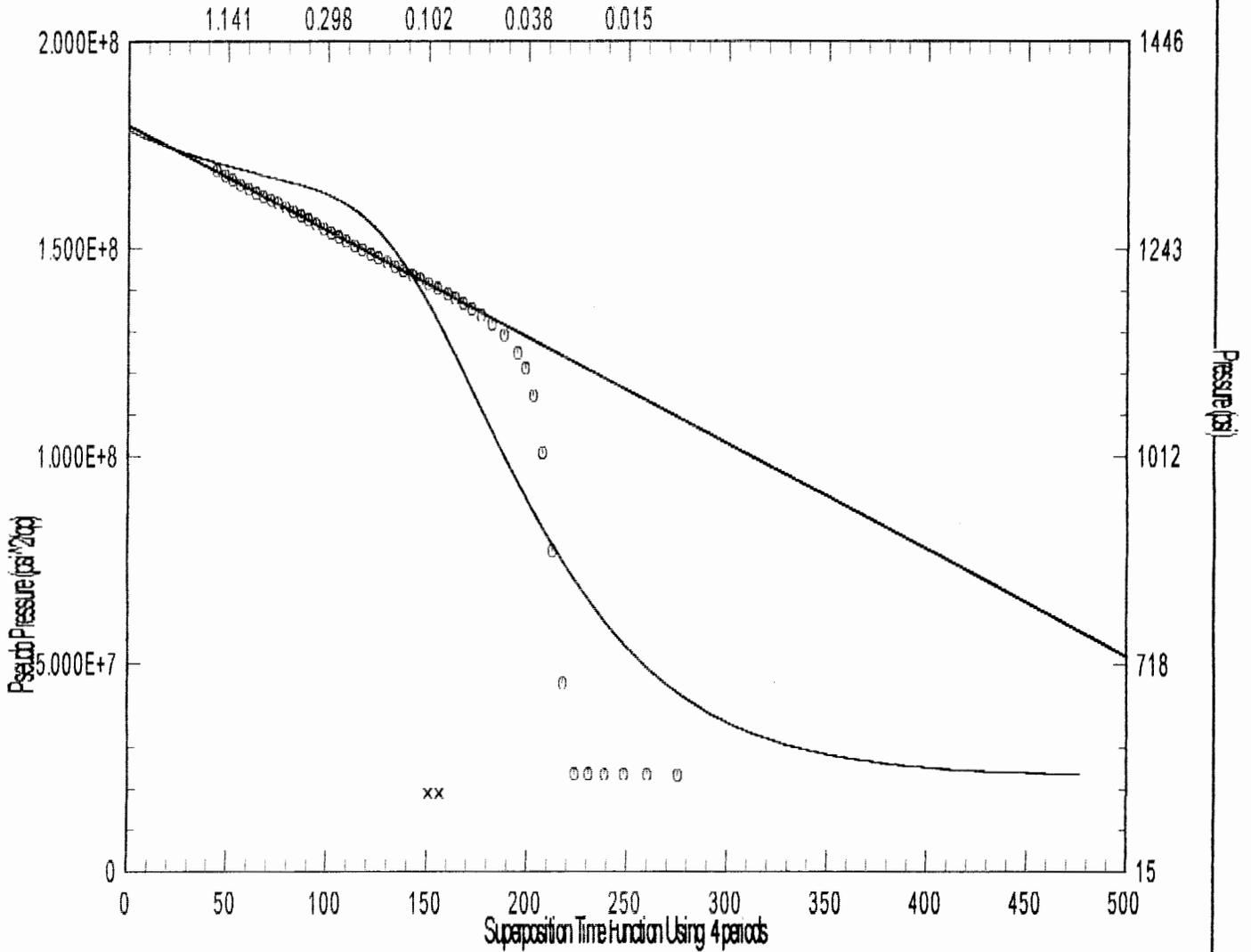
Test Date ..... 6/9/02

County ..... BARBER

Sec Town Range ..... 16-30S-13W

Field .....

Report Number ..... 14061



**MODEL RESULTS**

Constant Storage	Skin Model	Homogeneous	No Boundaries
C1 : 7.380E-4 bbl/psi	Skin : 4.52	k : 0.349 md	h : 10 ft
		Est Pi: 1361.3 psi	mu : 0.017 cp
			phi : 18.0%
			ct : 1.285E-03 1/psi
			rw : 6.417 ft
			BHT : 128 F
			FVF : 1.33

Field :  
County or Parish :  
State :

Date Printed: 06/11/02 03:22:35  
Analysis Period : End Flow - End 2ND Shut-in  
Comment : Line #

---

Superposition Slope -> m' ..... -2.557366E+5  
Horner Slope -> m ..... -3.145560E+7  
Intercept ..... 1.797E+8  
P(dt=1 hr) ..... 1.659E+8  
Pwf ..... 2.314E+7  
R Sqr ..... 0.9986

Intercept (psi) ..... 1366.013  
k (md) ..... 0.37639  
kh (md-ft) ..... 3.76386  
k/u (md/cp) ..... 21.88289  
kh/uB (md-ft/cp) ..... 218.82891  
Skin ..... 5.0702  
DP Skin ..... 802.2790  
Total DP ..... 874.9331  
Percent DP ..... 91.70%

Radius Invest (ft) ..... 12  
Radius Time (hrs) ..... 1.46

Delta Q = ..... 123  
h (ft)= ..... 10  
mu (cp) = ..... 0.0172  
B (stb/scf) = ..... 1.3290

First Point # ..... 73  
Second Point # ..... 298  
Start Real Time ..... 0.222  
End Real Time ..... 1.371  
Start SF Time ..... 112.925

# Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

Date 06-10-2002 Location SW-NE 16-30-13 Elevation 1845 KB County Barber

Company F.G. Holl Company LLC Number of Copies 5

Charts Mailed to 9431 East Central P.O. Box 750167 Wichita, Kansas 67276-0167

Drilling Contractor Sterling Drilling Rig #4

Length Drill Pipe 3829 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X.H.

Length Weight Pipe NONE I.D. Weight Pipe NONE Tool Joint Size NONE

Length Drill Collars 248 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 4275 Bottom Packer Depth 4280 Number of Packers 0 Packer Size 6 3/4"

TESTED FROM 4280 TO 4300 ANCHOR LENGTH 20 TOTAL DEPTH 4300 Hole Size 7 7/8"

LEASE & WELL NO. LEMON TRUST #1-16 FORMATION TESTED KANSAS CITY "M" TEST NO. 2

Mud Weight 9.4 Viscosity 45 Water Loss 9.4 Chlorides - Pits 5000 D.S.T. 42000

Maximum Temp. 121 °F Initial Hydrostatic Pressure (A) 2071 P.S.I. Final Hydrostatic Pressure (H) 2052 P.S.I.

Tool Open I.F.P. from 4:30 A.M. to 4:50 A.M. 20 min

Tool Closed I.C.I.P. from 4:50 A.M. to 5:35 A.M. 45 min

Tool Open F.F.P. from 5:35 A.M. to 5:55 A.M. 20 min

Tool Closed F.C.I.P. from 5:55 A.M. to 6:40 A.M. 45 min

Initial Blow VERY WEAK SURFACE BLOW FOR 15 MINUTES

Final Blow NO BLOW

Total Feet Recovered 65 Gravity of Oil \_\_\_\_\_ Corrected

<u>65</u> Feet of <u>Muddy water with a few spots of</u> % Gas _____ % Oil _____ % Mud _____ % Water _____
_____ Feet of <u>oil</u> % Gas _____ % Oil _____ % Mud _____ % Water _____
_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____
_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____
_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____
_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____
_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____
_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____
_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

Remarks \_\_\_\_\_

Extra Equipment - Jars YES Safety Joint YES Extra Packer NONE Straddle NONE Hook Wall NONE

Top Recorder No. 78225 Clock No. Electronic Depth 4293 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 5463 Clock No. 42442 Depth 4297 Insurance NONE

Price of Job \_\_\_\_\_

Tool Operator Steve Bentley

Approved By \_\_\_\_\_

from [B] <u>41</u> P.S.I. to [C] <u>63</u> P.S.I.
[D] <u>1314</u> P.S.I.
from [E] <u>72</u> P.S.I. to [F] <u>87</u> P.S.I.
[G] <u>1287</u> P.S.I.

Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

No 14062

**SUPERIOR TESTERS ENTERPRISES INC.**

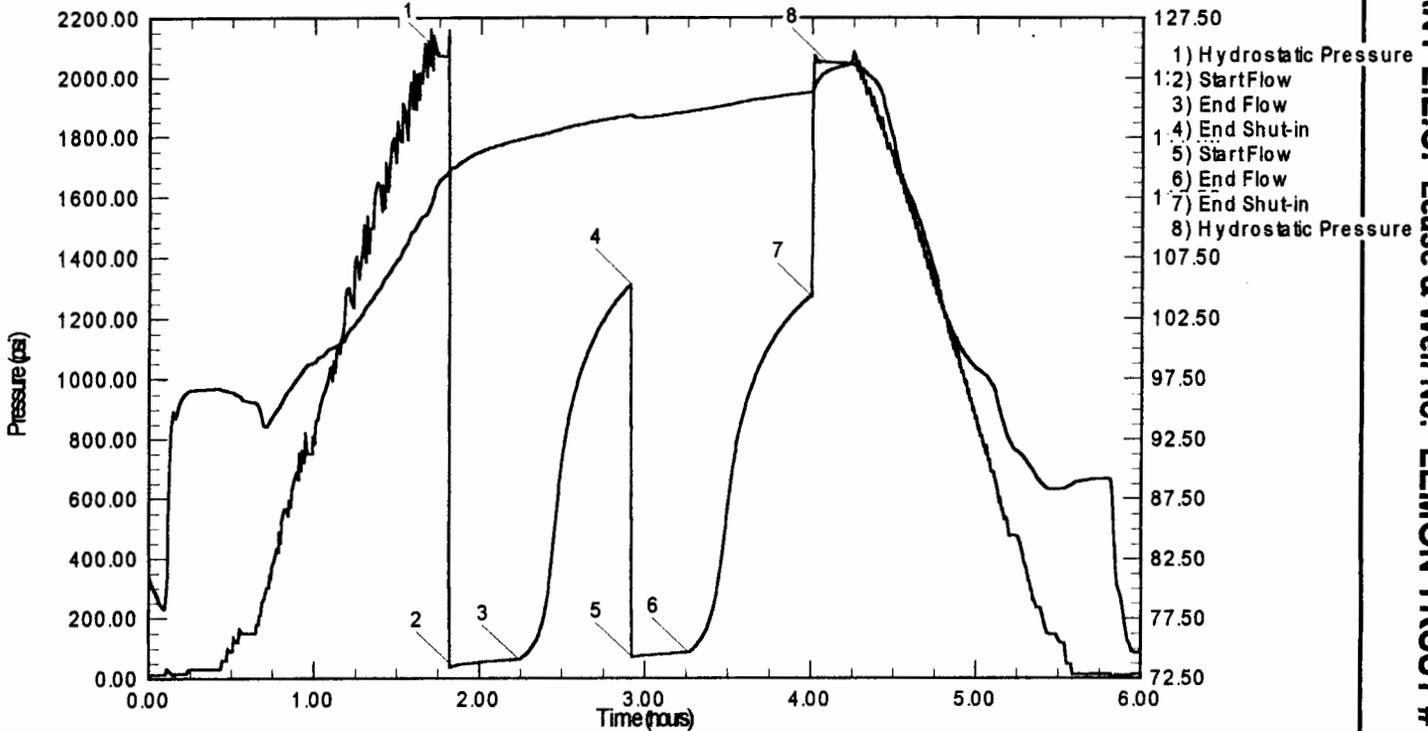
Great Bend, Kansas

**CHART DATA**

(316) 792-6902

State ..... KANSAS  
 County ..... BARBER  
 Field .....

Test Date ..... June 10, 2002  
 Sec Town Range ..... 16-30S-13W  
 Report Number ..... 14062



**Field Reading**

(1)	Initial Hydrostatic Pressure	2071
(2)	Initial Flow Pressure	41
(3)	Final Initial Flow Pressure	63
(4)	Initial Shut-In Pressure	1314
(5)	Initial Final Flow Pressure	72
(6)	Final Flow Pressure	87
(7)	Final Shut-In Pressure	1287
(8)	Final Hydrostatic Pressure	2052

ELECTRONIC RECORDER DEPTH 4293 FT, RECORDER NUMBER 78225

Company: F.G.HOLL COMPANY L.L.C. Lease & Well No. LEMON TRUST #1-16 Test #: 2 Date: 6-10-2002 SEC. 16 TWP. 30N RGE.13S

# SUPERIOR TESTERS ENTERPRISES INC.

## DRILL STEM TEST REPORT

GREAT BEND, KANSAS 67530 (316)792-6902

### GENERAL INFORMATION

COMPANY NAME .....	<b>F.G.HOLL COMPANY L.L.C.</b>	LEASE AND WELL NUMBER .....	<b>14062</b>
TEST DATE .....	<b>6/10/02</b>	FORMATION TESTED .....	<b>KANSAS CITY™M™</b>
SECTION-TOWN-RANGE .....	<b>16-30S-13W</b>	DRILL STEM TEST NUMBER .....	<b>2</b>
STATE .....	<b>KANSAS</b>	REPORT NUMBER .....	<b>14062</b>
COUNTY .....	<b>BARBER</b>	ELEVATION KELLY BUSHINGS .....	<b>1845</b>
ELEVATION GROUND LEVEL .....	<b>1836</b>	TESTING ENGINEER .....	<b>GENE BUDIG</b>
COMPANY REPRESENTATIVE .....	<b>BILL REE</b>		

### TOOL SETTING INFORMATION

TEST INTERVAL (From) .....	<b>4280</b>	TOP PACKER DEPTH .....	<b>4275</b>
TEST INTERVAL (to) .....	<b>4300</b>	BOTTOM PACKER DEPTH .....	<b>4280</b>
ANCHOR LENGTH .....	<b>20</b>	NUMBER OF PACKERS .....	<b>2</b>
TOTAL DEPTH (ft) .....	<b>4300</b>	PACKER SIZE .....	<b>6 3/4</b>
		HOLE SIZE .....	<b>7 7/8</b>

### FLOW TIMES

*INITIAL OPEN*

TOOL OPEN (from) .....	<b>4:30</b>
TOOL OPEN (to) .....	<b>4:40</b>
DURATION (min.) .....	<b>20</b>

*INITIAL SHUT-IN*

TOOL CLOSED (from) .....	<b>4:40</b>
TOOL CLOSED (to) .....	<b>5:35</b>
DURATION (min.) .....	<b>45</b>

*FINAL OPEN*

TOOL OPEN (from) .....	<b>5:35</b>
TOOL OPEN (to) .....	<b>5:55</b>
DURATION (min.) .....	<b>20</b>

*FINAL SHUT-IN*

TOOL CLOSED (from) .....	<b>5:55</b>
TOOL CLOSED (to) .....	<b>6:40</b>
DURATION (min.) .....	<b>45</b>

### PRESSURE READINGS

INITIAL HYDROSTATIC .....	<b>2071</b>
INITIAL FLOW .....	<b>41</b>
FINAL INITIAL FLOW .....	<b>63</b>
INITIAL SHUT-IN .....	<b>1314</b>
INITIAL FINAL FLOW .....	<b>72</b>
FINAL FLOW .....	<b>87</b>
FINAL SHUT-IN .....	<b>11287</b>
FINAL HYDROSTATIC .....	<b>2052</b>
MAXIMUM TEMPERATURE .....	<b>121</b>
TOP RECORDER DEPTH .....	<b>4293</b>
RECORDER NUMBER .....	<b>78225</b>
BOTTOM RECORDER DEPTH .....	<b>4297</b>
RECORDER NUMBER .....	<b>5463</b>

### INITIAL BLOW

**VERY WEAK SURFACE BLOW FOR 15 MINUTES AND DIED**

### FINAL BLOW

**NO BLOW**

### EXTRA EQUIPMENT

JARS .....	<b>YES</b>	EXTRA PACKER (3RD) .....	<b>NO</b>
SAFETY JOINT .....	<b>YES</b>	EXTRA PACKER (4TH) .....	<b>NO</b>
ELECTRONIC RECORDER .....	<b>YES</b>	STRADDLE .....	<b>NO</b>
CIRCULATING SUB .....	<b>NO</b>	HOOK WALL .....	<b>NO</b>
		SAMPLER .....	<b>NO</b>

**SUPERIOR TESTERS ENTERPRISES INC.**

**DRILL STEM TEST REPORT**

GREAT BEND, KANSAS 67530 (316)792-6902

**WELL INFORMATION**

DRILLING CONTRACTOR .....	<b>STERLING DRILLING DRILLING RIG #4</b>		
DRILL PIPE LENGTH .....	<b>3829</b>	DRILL COLLAR LENGTH .....	<b>248</b>
DRILL PIPE I.D. ....	<b>3.8</b>	DRILL COLLAR I.D. ....	<b>2.25</b>
TOOL JOINT SIZE .....	<b>4 1/2 X.H.</b>	TOOL JOINT SIZE .....	<b>4 1/2 X.H.</b>
WEIGHT PIPE LENGTH .....		MUD WEIGHT #GAL .....	<b>9.4</b>
WEIGHT PIPE I.D. ....	<b>2.25</b>	VISCOSITY .....	<b>45</b>
TOOL JOINT SIZE .....	<b>4 1/2 X.H.</b>	WATER LOSS .....	<b>9.6</b>
		CHLORIDES-PITS .....	<b>5000</b>
		CHLORIDES-DST .....	<b>42000</b>

FEET OF RECOVERY	RECOVERY DECIPTION	% GAS	% OIL	% MUD	% WATER
1) 65	MUDDY WATER WITH A FEW SPOTS OF OIL CHLORIDES 42000				
2)					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					

TOTAL RECOVERY

**COMMENTS**

# Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6903

1845 KB

Date 6-10-2002 Location SW-NE 16-30-13 Elevation 1836 GL County BARBER

Company F. G. Holl Company LLC Number of Copies 2

Charts Mailed to 9431 East Central Wichita, Kansas P. Box 780167 67278-0167

Drilling Contractor Sterling Drilling Rig # 4

Length Drill Pipe 4097 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" V.H.

Length Weight Pipe NONE I.D. Weight Pipe NONE Tool Joint Size NONE

Length Drill Collars 248 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 4388 Bottom Packer Depth 4373 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 4343 TO 4373 ANCHOR LENGTH 30 TOTAL DEPTH 4403 Hole Size 7 7/8"

LEASE & WELL NO. Lemo Trust #1-16 FORMATION TESTED Kinderhook TEST NO. 3

Mud Weight 9.4 Viscosity 45 Water Loss 84 Chlorides - Pits 5000 D.S.T. \_\_\_\_\_

Maximum Temp. 12.5 °F Initial Hydrostatic Pressure (A) 2127 P.S.I. Final Hydrostatic Pressure (H) 2092 P.S.I.

Tool Open I.F.P. from <u>10:45 p m</u> to <u>11:15 p m</u> <u>30</u> min	from [B] <u>249</u> P.S.I. to [C] <u>54</u> P.S.I.
Tool Closed I.C.I.P. from <u>11:15 p m</u> to <u>12:15 a m</u> <u>60</u> min	[D] <u>401</u> P.S.I.
Tool Open F.F.P. from <u>12:15 a m</u> to <u>1:15 a m</u> <u>60</u> min	from [E] <u>47</u> P.S.I. to [F] <u>49</u> P.S.I.
Tool Closed F.C.I.P. from <u>1:15 a m</u> to <u>2:45 a m</u> <u>90</u> min	[G] <u>701</u> P.S.I.

Initial Blow Weak building blow built to 6 1/2 inches into the water

Final Blow Strong blow built to the bottom of a 5 gallon bucket in 10 seconds

Total Feet Recovered 10 Gravity of Oil \_\_\_\_\_ Corrected \_\_\_\_\_

<u>10</u> Feet of <u>mud with no shows of oil or gas</u>	% Gas _____	% Oil _____	% Mud _____	% Water _____
Feet of _____	% Gas _____	% Oil _____	% Mud _____	% Water _____
Feet of _____	% Gas _____	% Oil _____	% Mud _____	% Water _____
Feet of _____	% Gas _____	% Oil _____	% Mud _____	% Water _____
Feet of _____	% Gas _____	% Oil _____	% Mud _____	% Water _____
Feet of _____	% Gas _____	% Oil _____	% Mud _____	% Water _____
Feet of _____	% Gas _____	% Oil _____	% Mud _____	% Water _____
Feet of _____	% Gas _____	% Oil _____	% Mud _____	% Water _____
Feet of _____	% Gas _____	% Oil _____	% Mud _____	% Water _____
Feet of _____	% Gas _____	% Oil _____	% Mud _____	% Water _____

Remarks \_\_\_\_\_

Extra Equipment - Jars NONE Safety Joint 400 Extra Packer NONE Straddle NONE Hook Wall NONE  
Top Recorder No. Electronic Clock No. 28225 Depth 4976 Cir. Sub NONE Sampler NONE  
Bottom Recorder No. 5463 Clock No. 4741 Depth 4500 Insurance NONE

Price of Job \_\_\_\_\_

Tool Operator Sam Budy

Approved By \_\_\_\_\_

No 14063

Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

**SUPERIOR TESTERS ENTERPRISES INC.**

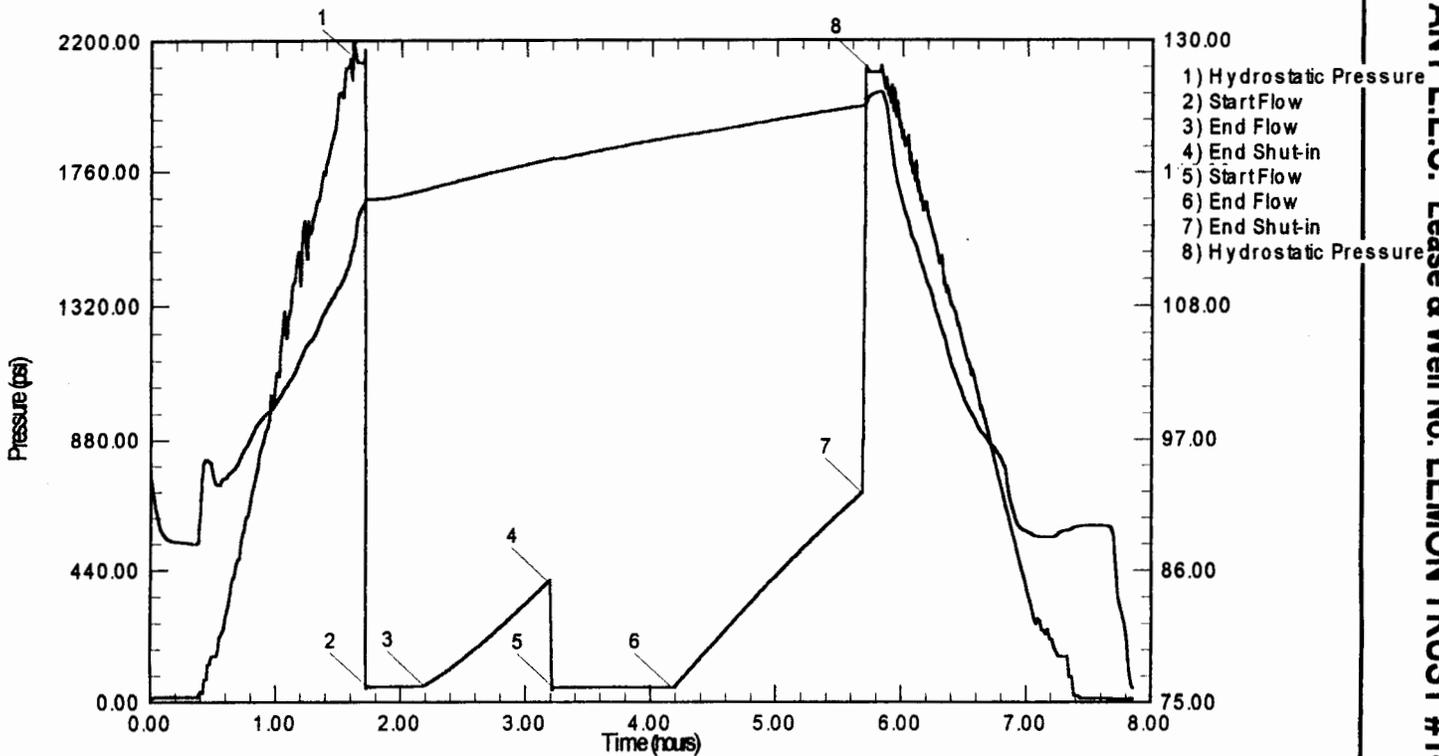
Great Bend, Kansas

**CHART DATA**

(316) 792-6902

State ..... KANSAS  
 County ..... BARBER  
 Field .....

Test Date ..... June 10, 2002  
 Sec Town Range ..... 16-30S-13W  
 Report Number ..... 14063



**Field Reading**

(1)	Initial Hydrostatic Pressure	2127
(2)	Initial Flow Pressure	49
(3)	Final Initial Flow Pressure	54
(4)	Initial Shut-In Pressure	401
(5)	Initial Final Flow Pressure	47
(6)	Final Flow Pressure	49
(7)	Final Shut-In Pressure	701
(8)	Final Hydrostatic Pressure	2092

**ELECTRONIC RECORDER DEPTH 4300 FT, RECORDER NUMBER 78225**

Company: F.G.HOLL COMPANY L.L.C. Lease & Well No. LEMON TRUST #1-16 Test #: 3 Date: 6-10-2002 SEC. 16 TWP. 30S  
 RGE. 13 W

# SUPERIOR TESTERS ENTERPRISES INC.

## DRILL STEM TEST REPORT

GREAT BEND, KANSAS 67530 (316)792-6902

### GENERAL INFORMATION

COMPANY NAME	F.G.HOLL COMPANY L.L.C.	LEASE AND WELL NUMBER	LEMON TRUST #1-16
TEST DATE	6/10/02	FORMATION TESTED	KINDERHOOK
SECTION-TOWN-RANGE	16-30S-13W	DRILL STEM TEST NUMBER	3
STATE	KANSAS	REPORT NUMBER	14063
COUNTY	BARBER	ELEVATION KELLY BUSHINGS	1845
ELEVATION GROUND LEVEL	1836	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	BILL REE		

### TOOL SETTING INFORMATION

TEST INTERVAL (From)	4373	TOP PACKER DEPTH	4368
TEST INTERVAL (to)	4403	BOTTOM PACKER DEPTH	4373
ANCHOR LENGTH	30	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	4403	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

### FLOW TIMES

*INITIAL OPEN*

TOOL OPEN (from)	10:45
TOOL OPEN (to)	11:15
DURATION (min.)	30

*INITIAL SHUT-IN*

TOOL CLOSED (from)	11:15
TOOL CLOSED (to)	12:15
DURATION (min.)	60

*FINAL OPEN*

TOOL OPEN (from)	12:15
TOOL OPEN (to)	1:15
DURATION (min.)	60

*FINAL SHUT-IN*

TOOL CLOSED (from)	1:15
TOOL CLOSED (to)	2:45
DURATION (min.)	90

### PRESSURE READINGS

INITIAL HYDROSTATIC	2127
INITIAL FLOW	49
FINAL INITIAL FLOW	54
INITIAL SHUT-IN	401
INITIAL FINAL FLOW	47
FINAL FLOW	49
FINAL SHUT-IN	701
FINAL HYDROSTATIC	2092
MAXIMUM TEMPERATURE	125
TOP RECORDER DEPTH	4396
RECORDER NUMBER	78225
BOTTOM RECORDER DEPTH	4400
RECORDER NUMBER	5463

### INITIAL BLOW

WEAK BUILDING BLOW BUILT TO 6 1/2 INCHES INTO THE WATER

### FINAL BLOW

STRONG BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 10 SECONDS DECREASED TO A FAIR BLOW AFTER 7 MINUTES

### EXTRA EQUIPMENT

JARS	NO	EXTRA PACKER (3RD)	NO
SAFETY JOINT	YES	EXTRA PACKER (4TH)	NO
ELECTRONIC RECORDER	YES	STRADDLE	NO
CIRCULATING SUB	NO	HOOK WALL	NO
		SAMPLER	NO

# SUPERIOR TESTERS ENTERPRISES INC.

## DRILL STEM TEST REPORT

GREAT BEND, KANSAS 67530 (316)792-6902

### WELL INFORMATION

DRILLING CONTRACTOR ..... <b>STERLING DRILLING RIG #4</b>	
DRILL PIPE LENGTH ..... <b>4097</b>	DRILL COLLAR LENGTH ..... <b>248</b>
DRILL PIPE I.D. .... <b>3.8</b>	DRILL COLLAR I.D. .... <b>2.25</b>
TOOL JOINT SIZE ..... <b>4 1/2 X.H.</b>	TOOL JOINT SIZE ..... <b>4 1/2 X.H.</b>
WEIGHT PIPE LENGTH .....	MUD WEIGHT #/GAL ..... <b>9.3</b>
WEIGHT PIPE I.D. .... <b>2.25</b>	VISCOSITY ..... <b>45</b>
TOOL JOINT SIZE ..... <b>4 1/2 X.H.</b>	WATER LOSS ..... <b>8.8</b>
	CHLORIDES-PITS ..... <b>5000</b>
	CHLORIDES-DST .....

FEET OF RECOVERY	RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1) 2) 3) 4) 5) 6) 7) 8) 9) 10) 11) 12) 13) 14) 15)	<b>10 DRILING MUD WITH NO SHOWS OF OIL AND OR GAS</b>				

**TOTAL RECOVERY**

### COMMENTS

# Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

1845RB

Date 06-11-2002 Location 1/4 Sec 16 30<sup>S</sup> 13<sup>W</sup> Elevation 18566L County BACHER

Company F.C. Hall Company LLC Number of Copies 3

Charts Mailed to 9431 East Central P.O. Box 73067 Wichita Kansas 67278-0167

Drilling Contractor Steeling Drilling Rigs

Length Drill Pipe 4194 I.D. Drill Pipe 3.50 Tool Joint Size 4 1/2" X.H.

Length Weight Pipe None I.D. Weight Pipe None Tool Joint Size None

Length Drill Collars 248 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 4465 Bottom Packer Depth 4470 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 4470 TO 4490 ANCHOR LENGTH 20 TOTAL DEPTH 4490 Hole Size 7 7/8"

LEASE & WELL NO. Lemo Trust #1-16 FORMATION TESTED Viola TEST NO. 4

Mud Weight 9.2 Viscosity 50 Water Loss 9.4 Chlorides - Pits 8000 D.S.T. 9000

Maximum Temp. 121 °F Initial Hydrostatic Pressure (A) 2171 P.S.I. Final Hydrostatic Pressure (H) 2135 P.S.I.

Tool Open I.F.P. from 8:15 P.m to 8:45 P.m 30 min

Tool Closed I.C.I.P. from 8:45 P.m to 9:45 P.m 60 min

Tool Open F.F.P. from 9:45 P.m to 10:30 P.m 45 min

Tool Closed F.C.I.P. from 10:30 P.m to 12:00 P.m 90 min

Initial Blow Stroke blow Gas to Surface in 7 minutes

Final Blow Stroke Blow - see Gas Flow Report

Total Feet Recovered 230 Gravity of Oil \_\_\_\_\_ Corrected

230 Feet of Drilling mud % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

\_\_\_\_\_ Feet of \_\_\_\_\_ % Gas \_\_\_\_\_ % Oil \_\_\_\_\_ % Mud \_\_\_\_\_ % Water \_\_\_\_\_

Remarks \_\_\_\_\_

Extra Equipment - Jars None Safety Joint YES Extra Packer None Straddle None Hook Wall None

Top Recorder No. 78225 Clock No. Electronic Depth 4483 Cir. Sub None Sampler None

Bottom Recorder No. 5463 Clock No. 47441 Depth 4487 Insurance None

Price of Job \_\_\_\_\_

Tool Operator Don Sudy

Approved By \_\_\_\_\_

Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made, of for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

No 14064

**SUPERIOR TESTERS ENTERPRISES INC.**

Great Bend, Kansas

**CHART DATA**

(316) 792-6902

State ..... KANSAS

Test Date ..... June 11, 2002

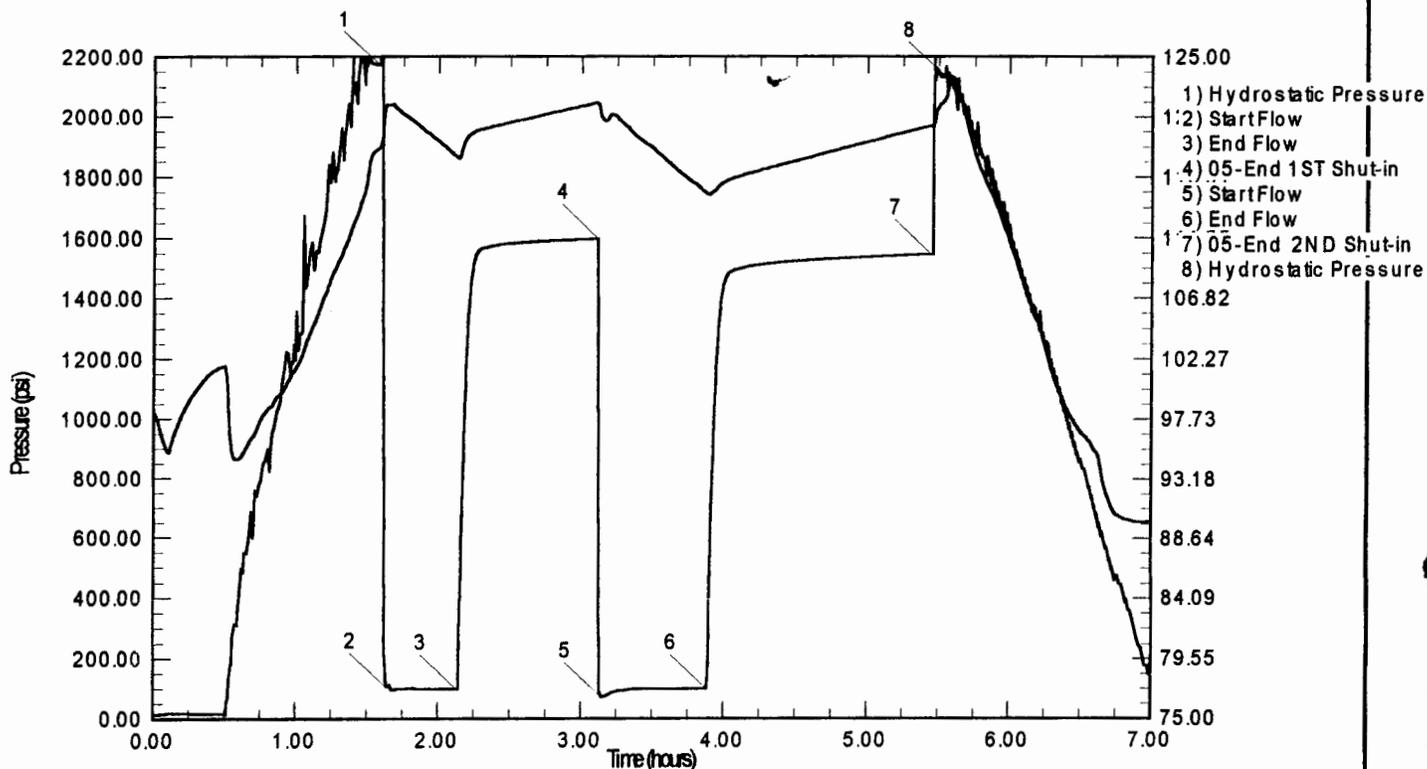
County ..... BARBER

Sec Town Range ..... 16-30S-13W

Field .....

Report Number ..... 14064

Company: F.G.HOLL COMPANY L.L.C. Lease & Well No. LEM... TRUST #1-16 Test #: 4 Date: 06-11-2002 SEC. 16 TWP.  
 30S RGE. 13W



**Field Reading**

(1)	Initial Hydrostatic Pressure	2171
(2)	Initial Flow Pressure	104
(3)	Final Initial Flow Pressure	99
(4)	Initial Shut-In Pressure	1597
(5)	Initial Final Flow Pressure	72
(6)	Final Flow Pressure	98
(7)	Final Shut-In Pressure	1546
(8)	Final Hydrostatic Pressure	2135

**ELECTRONIC RECORDER DEPTH 4483 FT, RECORDER NUMBER 78225**

# SUPERIOR TESTERS ENTERPRISES INC.

## DRILL STEM TEST REPORT

GREAT BEND, KANSAS 67530 (316)792-6902

### GENERAL INFORMATION

COMPANY NAME .....	<b>F.G.HOLL COMPANY L.L.C.</b>	LEASE AND WELL NUMBER .....	<b>LEMON TRUST #1-16</b>
TEST DATE .....	<b>6/11/02</b>	FORMATION TESTED .....	<b>VIOLA</b>
SECTION-TOWN-RANGE .....	<b>16-30S-13W</b>	DRILL STEM TEST NUMBER .....	<b>4</b>
STATE .....	<b>KANSAS</b>	REPORT NUMBER .....	<b>14064</b>
COUNTY .....	<b>BARBER</b>	ELEVATION KELLY BUSHINGS .....	<b>1845</b>
ELEVATION GROUND LEVEL .....	<b>1836</b>	TESTING ENGINEER .....	<b>GENE BUDIG</b>
COMPANY REPRESENTATIVE .....	<b>BILL REE</b>		

### TOOL SETTING INFORMATION

TEST INTERVAL (From) .....	<b>4470</b>	TOP PACKER DEPTH .....	<b>4465</b>
TEST INTERVAL (to) .....	<b>4490</b>	BOTTOM PACKER DEPTH .....	<b>4470</b>
ANCHOR LENGTH .....	<b>20</b>	NUMBER OF PACKERS .....	<b>2</b>
TOTAL DEPTH (ft) .....	<b>4490</b>	PACKER SIZE .....	<b>6 3/4</b>
		HOLE SIZE .....	<b>7 7/8</b>

### FLOW TIMES

<i>INITIAL OPEN</i>	
TOOL OPEN (from) .....	<b>8:15</b>
TOOL OPEN (to) .....	<b>8:45</b>
DURATION (min.) .....	<b>30</b>
<i>INITIAL SHUT-IN</i>	
TOOL CLOSED (from) .....	<b>8:45</b>
TOOL CLOSED (to) .....	<b>9:45</b>
DURATION (min.) .....	<b>60</b>
<i>FINAL OPEN</i>	
TOOL OPEN (from) .....	<b>9:45</b>
TOOL OPEN (to) .....	<b>10:30</b>
DURATION (min.) .....	<b>60</b>
<i>FINAL SHUT-IN</i>	
TOOL CLOSED (from) .....	<b>10:30</b>
TOOL CLOSED (to) .....	<b>12:00</b>
DURATION (min.) .....	<b>90</b>

### PRESSURE READINGS

INITIAL HYDROSTATIC .....	<b>2171</b>
INITIAL FLOW .....	<b>104</b>
FINAL INITIAL FLOW .....	<b>99</b>
INITIAL SHUT-IN .....	<b>1597</b>
INITIAL FINAL FLOW .....	<b>72</b>
FINAL FLOW .....	<b>98</b>
FINAL SHUT-IN .....	<b>1546</b>
FINAL HYDROSTATIC .....	<b>2135</b>
MAXIMUM TEMPERATURE .....	<b>121</b>
TOP RECORDER DEPTH .....	<b>4483</b>
RECORDER NUMBER .....	<b>78225</b>
BOTTOM RECORDER DEPTH .....	<b>4487</b>
RECORDER NUMBER .....	<b>5463</b>

### INITIAL BLOW

**STRONG BLOW WITH GAS TO SURFACE IN 7 MINUTES**

### FINAL BLOW

**STRONG BLOW-SEE GAS FLOW REPORT**

### EXTRA EQUIPMENT

JARS .....	<b>NO</b>	EXTRA PACKER (3RD) .....	<b>NO</b>
SAFETY JOINT .....	<b>YES</b>	EXTRA PACKER (4TH) .....	<b>NO</b>
ELECTRONIC RECORDER .....	<b>YES</b>	STRADDLE .....	<b>NO</b>
CIRCULATING SUB .....	<b>NO</b>	HOOK WALL .....	<b>NO</b>
		SAMPLER .....	<b>NO</b>

**SUPERIOR TESTERS ENTERPRISES INC.**  
**DRILL STEM TEST REPORT**  
 GREAT BEND ,KANSAS 67530 (316)792-6902

**WELL INFORMATION**

DRILLING CONTRACTOR .....	<b>STERLING DRILLING RIG #4</b>	DRILL COLLAR LENGTH .....	<b>248</b>
DRILL PIPE LENGTH .....	<b>4194</b>	DRILL COLLAR I.D. ....	<b>2.25</b>
DRILL PIPE I.D. ....	<b>3.8</b>	TOOL JOINT SIZE .....	<b>4 1/2 X.H.</b>
TOOL JOINT SIZE .....	<b>4 1/2 X.H.</b>	WEIGHT PIPE LENGTH .....	
WEIGHT PIPE I.D. ....	<b>2.25</b>	MUD WEIGHT #/GAL .....	<b>9.2</b>
TOOL JOINT SIZE .....	<b>4 1/2 X.H.</b>	VISCOSITY .....	<b>50</b>
		WATER LOSS .....	<b>9.6</b>
		CHLORIDES-PITS .....	<b>8000</b>
		CHLORIDES-DST .....	<b>9000</b>

FEET OF RECOVERY	RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1) <b>250</b>	<b>GASSY MUD</b>				
2)					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					

TOTAL RECOVERY

**COMMENTS**

# SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

GAS FLOW RATE

(316) 792-6902

#

STATE..... KANSAS	Test Date ..... 6/11/02
COUNTY..... BARBER	Sec Town Range ..... 16-30S-13W
FIELD.....	Report Number ..... 14064

### Initial Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Orifice Tester	PSI on Orifice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
TOOL OPENED AT	8:25	10	58			3/4	108.000
8:15 WITH GAS TO	8:35	20	64			3/4	114.000
SURFACE IN	8:45	30	65			3/4	<del>114500.000</del>
7 MINUTES AT							114,500
8:22							

### Final Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H2O Orifice Tester	PSI on Orifice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
TOOL OPENED AT	9:55	10	72			3/4	120.000
9:45	10:05	20	70			3/4	119.000
	10:15	30	70			3/4	119.000
	10:25	40	68			3/4	117.000
	10:30	45	68			3/4	117.000

# SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

## SUPERPOSITION ANALYSIS

(316) 792-6902

### 1ST SHUT-IN

State ..... KANSAS

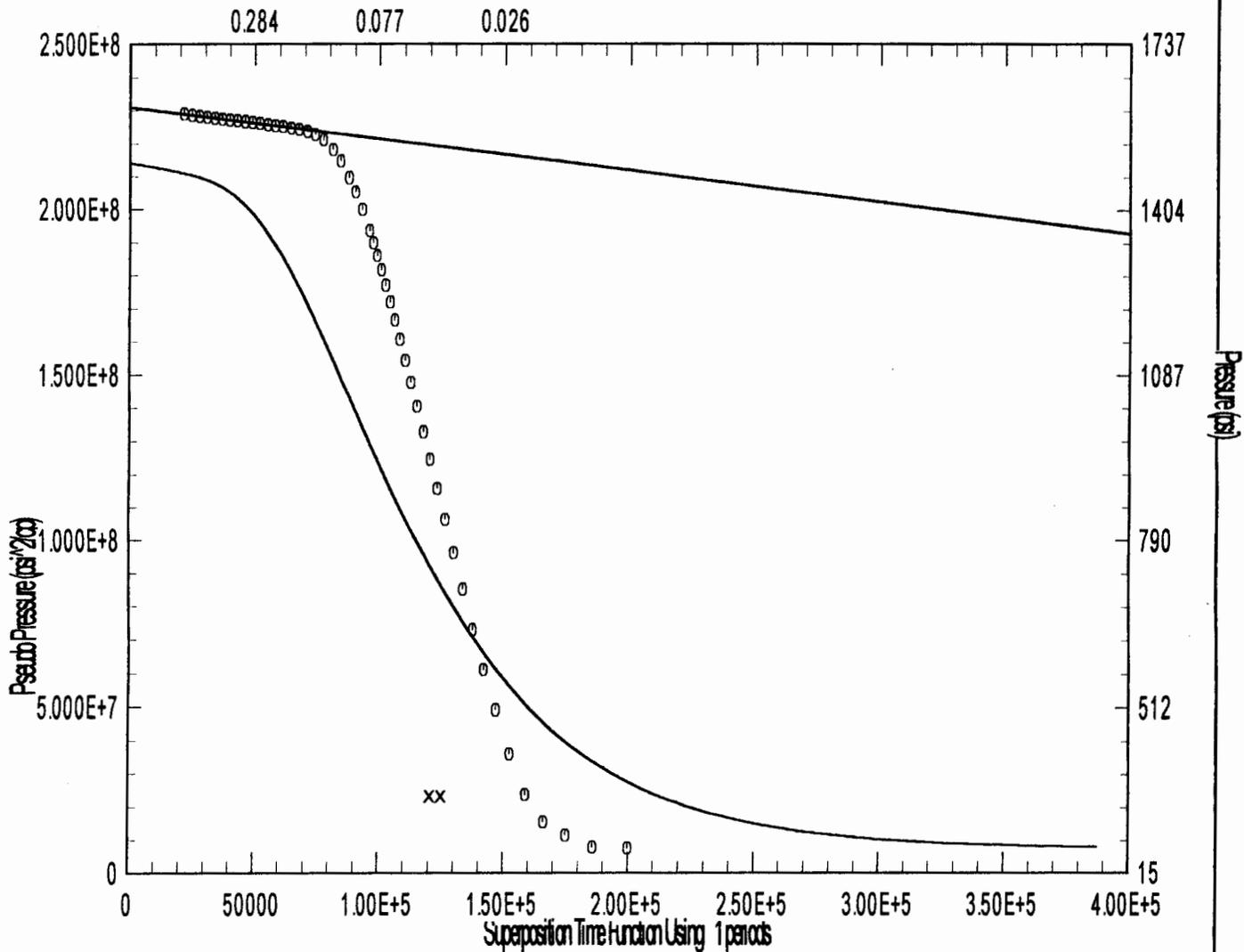
Test Date ..... 6/11/02

County ..... BARBER

Sec Town Range ..... 16-30S-13W

Field .....

Report Number ..... 14064



#### MODEL RESULTS

Constant Storage	Skin Model	Homogeneous	No Boundaries
C1 : 0.210 bbl/psi	Skin : 14.30	k : 790.028 md	h : 10 ft
		Est Pi: 1495.7 psi	mu : 0.056 cp
			phi : 18.0%
			ct : 8.920E-04 1/psi
			nw : 6.417 ft
			BHT : 121 F
			FVF : 0.70

Field :  
County or Parish :  
State :

Date Printed: 06/12/02 02:41:06  
Analysis Period : End Flow - 05-End 1ST Shut-in  
Comment : Line #

---

Superposition Slope -> m' ..... -94.991780  
Horner Slope -> m ..... -1.087656E+7  
Intercept ..... 2.310E+8  
P(dt=1 hr) ..... 2.291E+8  
Pwf ..... 7.617E+6  
R Sqr ..... 0.9990

Intercept (psi) ..... 1608.784  
k (md) ..... 1001.24134  
kh (md-ft) ..... 10012.41337  
k/u (md/cp) ..... 17879.30905  
kh/uB (md-ft/cp) ..... 178793.09045  
Skin ..... 19.7518  
DP Skin ..... 1275.5410  
Total DP ..... 1515.5435  
Percent DP ..... 84.16%

Radius Invest (ft) ..... 338  
Radius Time (hrs) ..... 0.98

Delta Q = ..... 114500  
h (ft)= ..... 10  
mu (cp) = ..... 0.0560  
B (stb/scf) = ..... 0.6973

First Point # ..... 57  
Second Point # ..... 300  
Start Real Time ..... 0.174  
End Real Time ..... 0.984  
Start SF Time ..... 66742.800

# SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

## SUPERPOSITION ANALYSIS

(316) 792-6902

### 2ND SHUT-IN

State ..... KANSAS

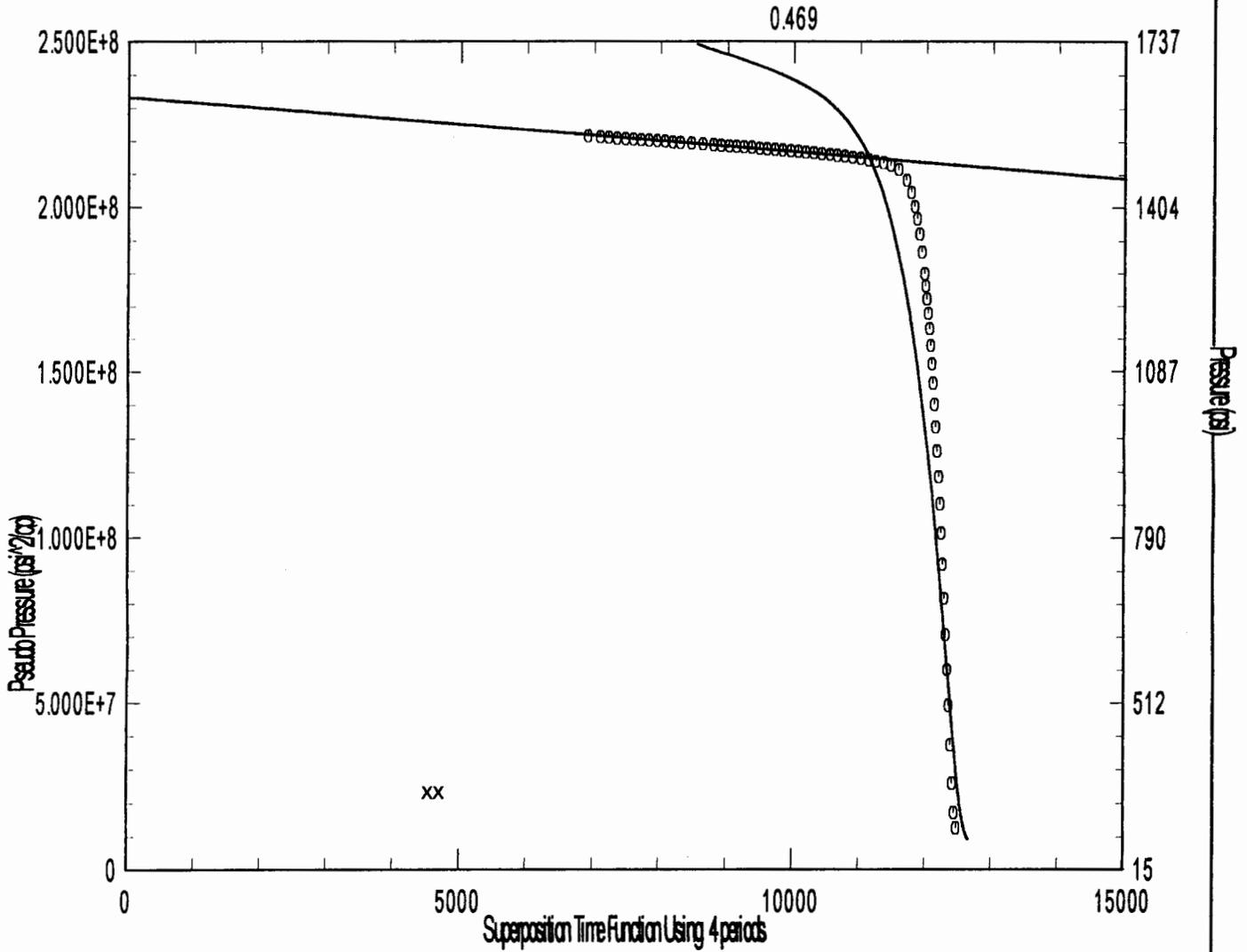
Test Date ..... 6/11/02

County ..... BARBER

Sec Town Range ..... 16-30S-13W

Field .....

Report Number ..... 14064



**MODEL RESULTS**

Constant Storage	Skin Model	Homogeneous	No Boundaries	h : 10 ft
C1 : 2.040E-4 bbl/psi	Skin : 540.00	k : 24.049 md		mu : 0.056 cp
		Est P: 2000.9 psi		phi : 18.0%
				ct : 8.920E-04 1/psi
				rw : 6.417 ft
				BHT : 121 F
				FVF : 0.70

Field :  
County or Parish :  
State :

Date Printed: 06/12/02 02:45:32  
Analysis Period : End Flow - 05-End 2ND Shut-in  
Comment : Line #

---

Superposition Slope -> m' ..... -1624.057000  
Horner Slope -> m ..... -1.900147E+5  
Intercept ..... 2.332E+8  
P(dt=1 hr) ..... 2.199E+8  
Pwf ..... 7.588E+6  
R Sqr ..... 0.9860

Intercept (psi) ..... 1623.532  
k (md) ..... 58.56303  
kh (md-ft) ..... 585.63030  
k/u (md/cp) ..... 1045.76837  
kh/uB (md-ft/cp) ..... 10457.68369  
Skin ..... 1283.7128  
DP Skin ..... 1441.7192  
Total DP ..... 1530.9942  
Percent DP ..... 94.17%

Radius Invest (ft) ..... 103  
Radius Time (hrs) ..... 1.56

Delta Q = ..... 117  
h (ft)= ..... 10  
mu (cp) = ..... 0.0560  
B (stb/scf) = ..... 0.6973

First Point # ..... 74  
Second Point # ..... 300  
Start Real Time ..... 0.225  
End Real Time ..... 1.563  
Start SF Time ..... 11124.730

# Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530

(316) 792-6902

Date 6-13-2002 Location Sw 1/4 16-30-13 N Elevation 1845KB County Barber

Company F.G. Hail Company LLC Number of Copies 5

Charts Mailed to 9431 East Central P.O. Box 780167 Wichita, Kansas 67275-0167

Drilling Contractor Sterling Drilling Rig #1

Length Drill Pipe 4397 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X.H.

Length Weight Pipe NONE I.D. Weight Pipe NONE Tool Joint Size NONE

Length Drill Collars 248 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 4668 Bottom Packer Depth 4673 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 4673 TO 4685 ANCHOR LENGTH 12 TOTAL DEPTH 4685 Hole Size 7 7/8"

LEASE & WELL NO. Limon Trust #1-16 FORMATION TESTED Acbuckle TEST NO. 5

Mud Weight 9.4 Viscosity 58 Water Loss 88 Chlorides - Pits 6000 D.S.T. 64000

Maximum Temp. 139 °F Initial Hydrostatic Pressure (A) 2248 P.S.I. Final Hydrostatic Pressure (H) 2243 P.S.I.

Tool Open I.F.P. from 7:00 A.m to 7:30 A.m 30 min

Tool Closed I.C.I.P. from 7:30 A.m to 8:30 A.m 60 min

Tool Open F.F.P. from 8:30 A.m to 9:30 A.m 60 min

Tool Closed F.C.I.P. from 9:30 A.m to 11:00 A.m 90 min

Initial Blow WEAK building blow built to 3 inches into the water

Final Blow WEAK building blow built to 4 inches into the water

Total Feet Recovered 300 Gravity of Oil \_\_\_\_\_ Corrected

Feet of	% Gas	% Oil	% Mud	% Water
<u>1</u> Feet of <u>CLEAN oil on top</u>				
<u>300</u> Feet of <u>Salt water with a few spots of oil</u>				
_____ Feet of _____				
_____ Feet of _____				
_____ Feet of _____				
_____ Feet of _____				
_____ Feet of _____				
_____ Feet of _____				
_____ Feet of _____				
_____ Feet of _____				

Remarks \_\_\_\_\_

Extra Equipment - Jars NONE Safety Joint yes Extra Packer NONE Straddle NONE Hook Wall NONE

Top Recorder No. 78225 Clock No. Electric Depth 4678 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 47441 Clock No. 47441 Depth 4682 Insurance NONE

Price of Job \_\_\_\_\_

Tool Operator Don Budy

Approved By \_\_\_\_\_

Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to the property or personnel of the one for whom a test is made, of for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

No 14065

**SUPERIOR TESTERS ENTERPRISES INC.**

**Great Bend, Kansas**

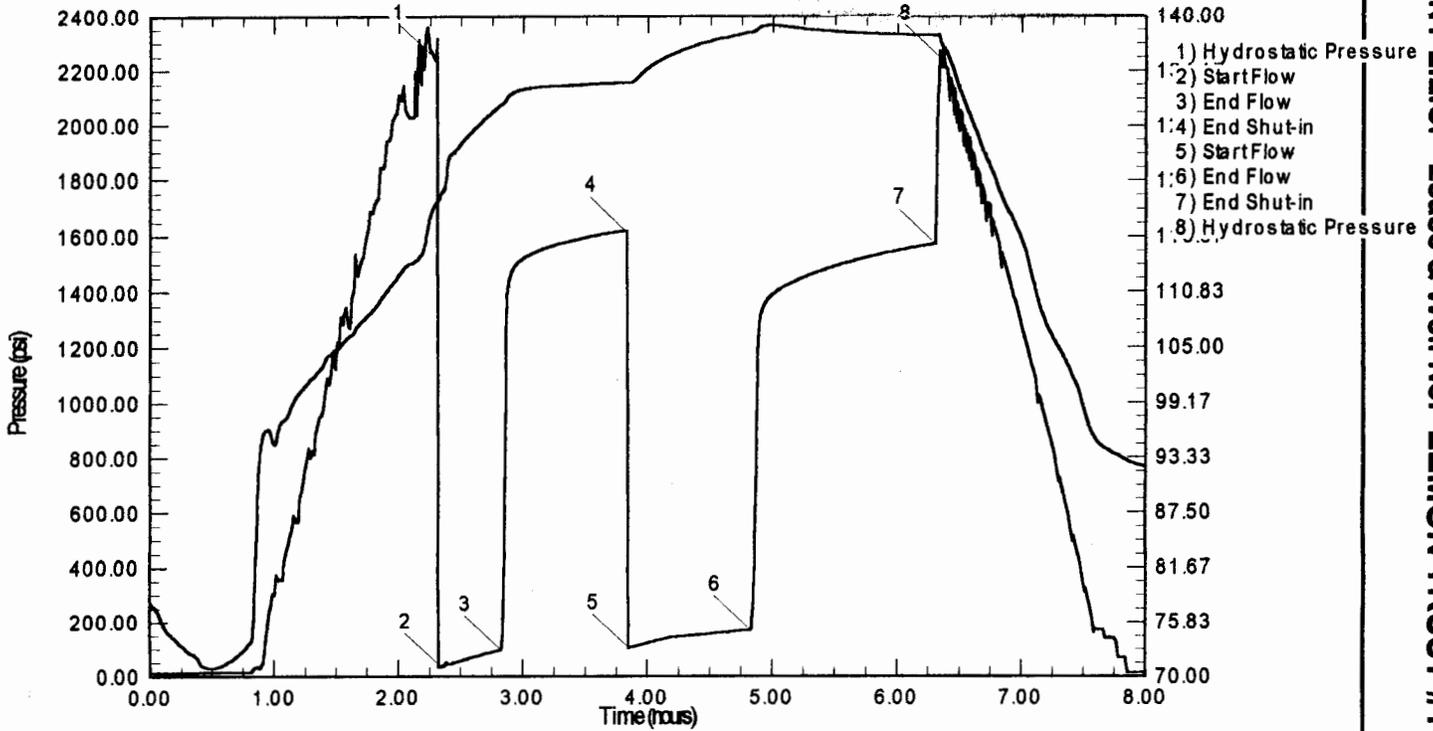
**CHART DATA**

**(316) 792-6902**

**State** ..... KANSAS  
**County** ..... BARBER  
**Field** .....

**Test Date** ..... June 13, 2002  
**Sec Town Range** ..... 16-30S-13W  
**Report Number** ..... 14065

Company: F.G.HOLL COMPANY L.L.C. Lease & Well No. LEMON TRUST #1-16 Test #: 5 Date: 6-13-2002 SEC. 16 TWP. 30S  
 RGE. 13W



**Field Reading**

(1)	Initial Hydrostatic Pressure	2248
(2)	Initial Flow Pressure	36
(3)	Final Initial Flow Pressure	99
(4)	Initial Shut-In Pressure	1618
(5)	Initial Final Flow Pressure	105
(6)	Final Flow Pressure	171
(7)	Final Shut-In Pressure	1573
(8)	Final Hydrostatic Pressure	2243

**ELECTRONIC RECORDER DEPTH 4678 FT, RECORDER NUMBER 78225**

# SUPERIOR TESTERS ENTERPRISES INC.

## DRILL STEM TEST REPORT

GREAT BEND, KANSAS 67530 (316)792-6902

### GENERAL INFORMATION

COMPANY NAME .....	<b>F.G.HOLL COMPANY L.L.C.</b>	LEASE AND WELL NUMBER .....	<b>LEMON TRUST #1-16</b>
TEST DATE .....	<b>6/13/02</b>	FORMATION TESTED .....	<b>ARBUCKLE</b>
SECTION-TOWN-RANGE .....	<b>16-30S-13W</b>	DRILL STEM TEST NUMBER .....	<b>5</b>
STATE .....	<b>KANSAS</b>	REPORT NUMBER .....	<b>14065</b>
COUNTY .....	<b>BARBER</b>	ELEVATION KELLY BUSHINGS .....	<b>1845</b>
ELEVATION GROUND LEVEL .....	<b>1836</b>	TESTING ENGINEER .....	<b>GENE BUDIG</b>
COMPANY REPRESENTATIVE .....	<b>BILL REE</b>		

### TOOL SETTING INFORMATION

TEST INTERVAL (From) .....	<b>4673</b>	TOP PACKER DEPTH .....	<b>4668</b>
TEST INTERVAL (to) .....	<b>4685</b>	BOTTOM PACKER DEPTH .....	<b>4673</b>
ANCHOR LENGTH .....	<b>12</b>	NUMBER OF PACKERS .....	<b>2</b>
TOTAL DEPTH (ft) .....	<b>4685</b>	PACKER SIZE .....	<b>6 3/4</b>
		HOLE SIZE .....	<b>7 7/8</b>

### FLOW TIMES

*INITIAL OPEN*

TOOL OPEN (from) .....	<b>7:00</b>
TOOL OPEN (to) .....	<b>7:30</b>
DURATION (min.) .....	<b>30</b>

*INITIAL SHUT-IN*

TOOL CLOSED (from) .....	<b>7:30</b>
TOOL CLOSED (to) .....	<b>8:30</b>
DURATION (min.) .....	<b>60</b>

*FINAL OPEN*

TOOL OPEN (from) .....	<b>8:30</b>
TOOL OPEN (to) .....	<b>9:30</b>
DURATION (min.) .....	<b>60</b>

*FINAL SHUT-IN*

TOOL CLOSED (from) .....	<b>9:30</b>
TOOL CLOSED (to) .....	<b>11:00</b>
DURATION (min.) .....	<b>90</b>

### PRESSURE READINGS

INITIAL HYDROSTATIC .....	<b>2248</b>
INITIAL FLOW .....	<b>36</b>
FINAL INITIAL FLOW .....	<b>99</b>
INITIAL SHUT-IN .....	<b>1618</b>
INITIAL FINAL FLOW .....	<b>105</b>
FINAL FLOW .....	<b>171</b>
FINAL SHUT-IN .....	<b>1573</b>
FINAL HYDROSTATIC .....	<b>2243</b>
MAXIMUM TEMPERATURE .....	<b>139</b>
TOP RECORDER DEPTH .....	<b>4678</b>
RECORDER NUMBER .....	<b>78225</b>
BOTTOM RECORDER DEPTH .....	<b>4682</b>
RECORDER NUMBER .....	<b>5463</b>

### INITIAL BLOW

**WEAK BUILDING BLOW BUILT TO 3 INCHES INTO THE WATER**

### FINAL BLOW

**WEAK BUILDING BLOW BUILT TO 4 INCHES INTO THE WATER**

### EXTRA EQUIPMENT

JARS .....	<b>NO</b>	EXTRA PACKER (3RD) .....	<b>NO</b>
SAFETY JOINT .....	<b>YES</b>	EXTRA PACKER (4TH) .....	<b>NO</b>
ELECTRONIC RECORDER .....	<b>YES</b>	STRADDLE .....	<b>NO</b>
CIRCULATING SUB .....	<b>NO</b>	HOOK WALL .....	<b>NO</b>
		SAMPLER .....	<b>NO</b>

# SUPERIOR TESTERS ENTERPRISES INC.

## DRILL STEM TEST REPORT

GREAT BEND, KANSAS 67530 (316)792-6902

### WELL INFORMATION

DRILLING CONTRACTOR ..... <b>STERLING DRILLING RIG #4</b>	
DRILL PIPE LENGTH ..... <b>4397</b>	DRILL COLLAR LENGTH ..... <b>248</b>
DRILL PIPE I.D. .... <b>3.8</b>	DRILL COLLAR I.D. .... <b>2.25</b>
TOOL JOINT SIZE ..... <b>4 1/2 X.H.</b>	TOOL JOINT SIZE ..... <b>4 1/2 X.H.</b>
WEIGHT PIPE LENGTH .....	MUD WEIGHT #/GAL ..... <b>9.2</b>
WEIGHT PIPE I.D. .... <b>2.25</b>	VISCOSITY ..... <b>58</b>
TOOL JOINT SIZE ..... <b>4 1/2 X.H.</b>	WATER LOSS ..... <b>8.8</b>
	CHLORIDES-PITS ..... <b>6000</b>
	CHLORIDES-DST ..... <b>64000</b>

FEET OF RECOVERY	RECOVERY DECIPTION	% GAS	% OIL	% MUD	% WATER
1)	1				
2)	300				
3)	<b>CLEAN OIL ON TOP</b> <b>SALT WATER WITH A FEW SPOTS OF OIL SCATTERED THROUGH OUT</b> <b>CHLORIDES 64000</b>				
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					

TOTAL RECOVERY

### COMMENTS