

Scott 'A' 2-5
F.C. Hall & Co.

Superior Testers Enterprises, Inc.

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

(316) 792-6902

5-215-10w

15-159-22389

Date 6-19-01 Location SE 1/4 Sec 4, T21S, R10W Elevation 1771 K.B. County Rice

Company F.C. Hall Company, LLC Number of Copies 5

Charts Mailed to 6427 East Teller P.O. Box 780167 Wichita, Kansas 67228-0167

Drilling Contractor Stevens Drilling Rig #4

Length Drill Pipe 1140 I.D. Drill Pipe 3.86 Tool Joint Size 4 1/2" X.H.

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

Length Drill Collars 249 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 1410 Bottom Packer Depth 1415 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 1415 TO 1441 ANCHOR LENGTH 26 TOTAL DEPTH 1441 Hole Size 7 7/8"

LEASE & WELL NO. Herrington Scott #2-5 FORMATION TESTED Herrington TEST NO. 1

Mud Weight 9.4 Viscosity 36 Water Loss _____ Chlorides - Pits _____ D.S.T. _____

Maximum Temp. 79 °F Initial Hydrostatic Pressure (A) 748 P.S.I. Final Hydrostatic Pressure (H) 724 P.S.I.

Tool Open I.F.P. from 5:30 A.M. to 5:45 A.M. 15 min

Tool Closed I.C.I.P. from 5:45 A.M. to 6:15 A.M. 30 min

Tool Open F.F.P. from 6:15 A.M. to 6:45 A.M. 30 min

Tool Closed F.C.I.P. from 6:45 A.M. to 7:45 A.M. 60 min

from [B] 60 P.S.I. to [C] 76 P.S.I.

[D] 542 P.S.I.

from [E] 101 P.S.I. to [F] 123 P.S.I.

[G] 206 P.S.I.

Initial Blow WEAK building blow built to 5 inches into the water

Final Blow WEAK building blow built to 9 inches into the water

Total Feet Recovered 150 Gravity of Oil _____ Corrected _____

150 Feet of SLIGHTLY muddy salt water % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of _____ % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of Tool SLID ON 1st SHOT-TO % Gas _____ % Oil _____ % Mud _____ % Water _____

_____ Feet of INVALID SHOT-TO % 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. Electron Depth 1434 Cir. Sub none Sampler none

Bottom Recorder No. 5413 Clock No. 47441 Depth 1438 Insurance none

Price of Job _____

Tool Operator Don Rudy

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.

11839

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

(316) 792-6902

State KANSAS

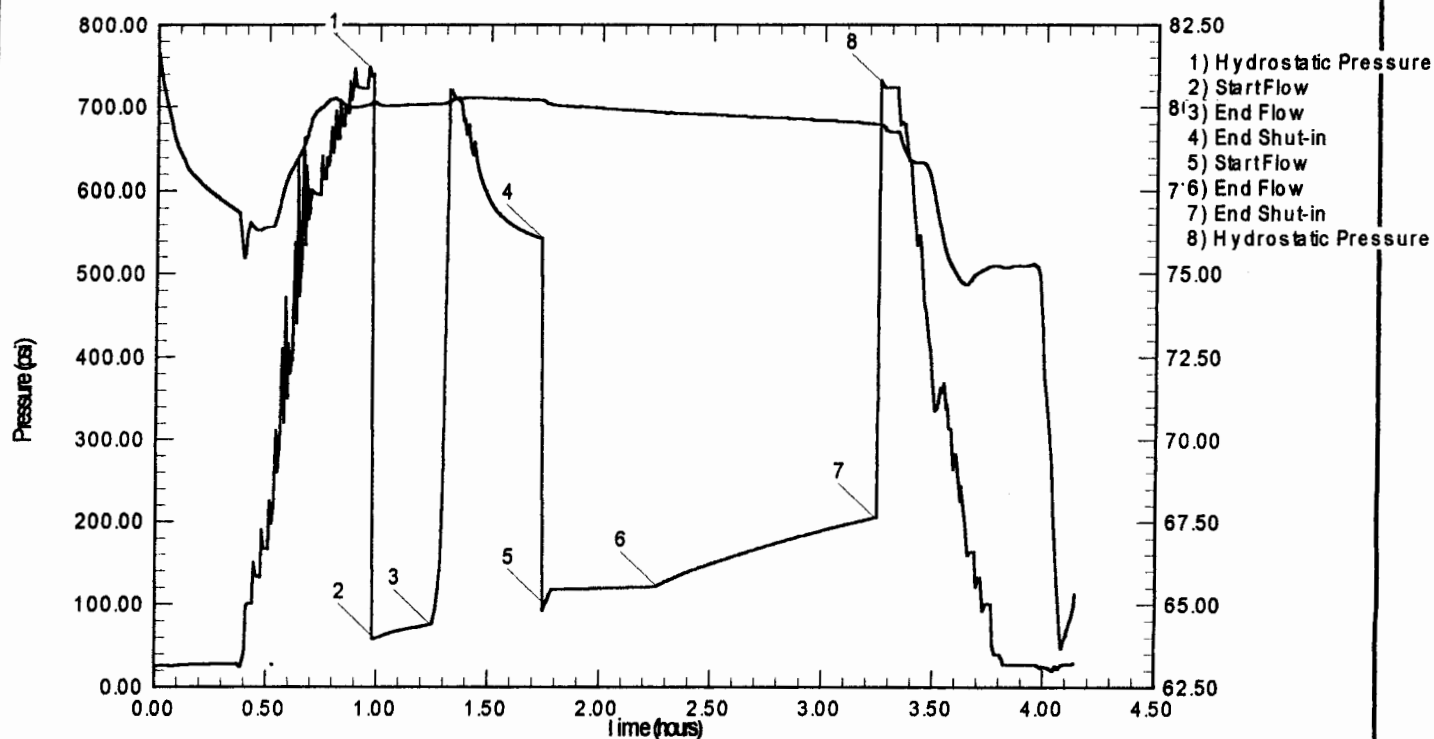
Test Date June 19, 2001

County RICE

Sec Town Range 5-21S-10W

Field

Report Number 11839



Field Reading

(1)	Initial Hydrostatic Pressure	748
(2)	Initial Flow Pressure	60
(3)	Final Initial Flow Pressure	76
(4)	Initial Shut-In Pressure	542
(5)	Initial Final Flow Pressure	101
(6)	Final Flow Pressure	123
(7)	Final Shut-In Pressure	206
(8)	Final Hydrostatic Pressure	724

ELECTRONIC RECORDER DEPTH 1434 FT, RECORDER NUMBER 78225

SUPERIOR TESTERS ENTERPRISES INC.**DRILL STEM TEST REPORT**

GREAT BEND, KANSAS 67530 (316)792-6902

GENERAL INFORMATION

COMPANY NAME	F.G.HOLL COMPANY LL.C.	LEASE AND WELL NUMBER	SCOTT"A" #2-5
TEST DATE	6/19/01	FORMATION TESTED	HERRINGTON
SECTION-TOWN-RANGE	5-21S-10W	DRILL STEM TEST NUMBER	1
STATE	KANSAS	REPORT NUMBER	11839
COUNTY	RICE	ELEVATION KELLY BUSHINGS	1771
ELEVATION GROUND LEVEL	1762	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	KENT ROBERTS		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	1415	TOP PACKER DEPTH	1410
TEST INTERVAL (to)	1441	BOTTOM PACKER DEPTH	1415
ANCHOR LENGTH	26	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	1441	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

TOOL OPEN (from)

TOOL OPEN (to)

DURATION (min.)

INITIAL SHUT-IN

TOOL CLOSED (from)

TOOL CLOSED (to)

DURATION (min.)

FINAL OPEN

TOOL OPEN (from)

TOOL OPEN (to)

DURATION (min.)

FINAL SHUT-IN

TOOL CLOSED (from)

TOOL CLOSED (to)

DURATION (min.)

PRESSURE READINGS

INITIAL HYDROSTATIC

INITIAL FLOW

FINAL INITIAL FLOW

INITIAL SHUT-IN

INITIAL FINAL FLOW

FINAL FLOW

FINAL SHUT-IN

FINAL HYDROSTATIC

MAXIMUM TEMPERATURE

TOP RECORDER DEPTH

RECORDER NUMBER

BOTTOM RECORDER DEPTH

RECORDER NUMBER

INITIAL BLOW**WEAK BUILDING BLOW BUILT TO 5 INCHES INTO THE WATER****WEAK BUILDING BLOW BUILT TO 9 INCHES INTO THE WATER****FINAL BLOW****EXTRA EQUIPMENT**

JARS	YES	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 **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH **1140**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH **249**

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 **36**

WATER LOSS

CHLORIDES-PITS

CHLORIDES-DST

FEET OF RECOVERY	RECOVERY DECRPTION	% GAS	% OIL	% MUD	% WATER
1) 150	SLIGHTLY MUDDY SALT WATER				
2)					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					

TOTAL RECOVERY

COMMENTS

TOOL SLID ON 1ST SHUT-IN 1ST SHUT- IN IS INVALID

Superior Testers Enterprises, Inc.

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

(316) 792-6902

Date 6-19-2001 Location St. Louis 5-25-10th Elevation 1771 K.B. County Rice

Company F.G. Hall Company L.L.C. Number of Copies 2

Charts Mailed to 6427 East 9th Ave. P.O. Box 780167 Wichita Kansas 67278-0167

Drilling Contractor Starline Drilling Rig #4

Length Drill Pipe 1166 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X 11

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

Length Drill Collars 249 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X 11

Top Packer Depth 1436 Bottom Packer Depth 1441 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 1441 TO 1466 ANCHOR LENGTH 25 TOTAL DEPTH 1466 Hole Size 7 7/8"

LEASE & WELL NO. Scott "A" #2-5 FORMATION TESTED Winfield TEST NO. 2

Mud Weight 9.31 Viscosity 34 Water Loss 12.4 Chlorides - Pits 85000 D.S.T.

Maximum Temp 80 °F Initial Hydrostatic Pressure (A) 735 P.S.I. Final Hydrostatic Pressure (H) 784 P.S.I.

Tool Open I.F.P. from 1:45 p.m. to 2:15 p.m. 30 min

Tool Closed I.C.I.P. from 2:15 p.m. to 3:15 p.m. 60 min

Tool Open F.F.P. from 3:15 p.m. to 4:15 p.m. 60 min

Tool Closed F.C.I.P. from 4:15 p.m. to 5:45 p.m. 90 min

Initial Blow Log blow built to the bottom of a 5 gallon bucket in 4 minutes

Final Blow Shave blow - Gas to Surface in 8 minutes

Total Feet Recovered 130 Gravity of Oil _____ Corrected

130 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 _____

Remarks _____

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

Top Recorder No. 78225 Clock No. Electron Depth 1459 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 8463 Clock No. 47441 Depth 1463 Insurance NONE

Price of Job _____

Tool Operator Gene Bundy

Approved By _____

112 11840

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SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

(316) 792-6902

State KANSAS

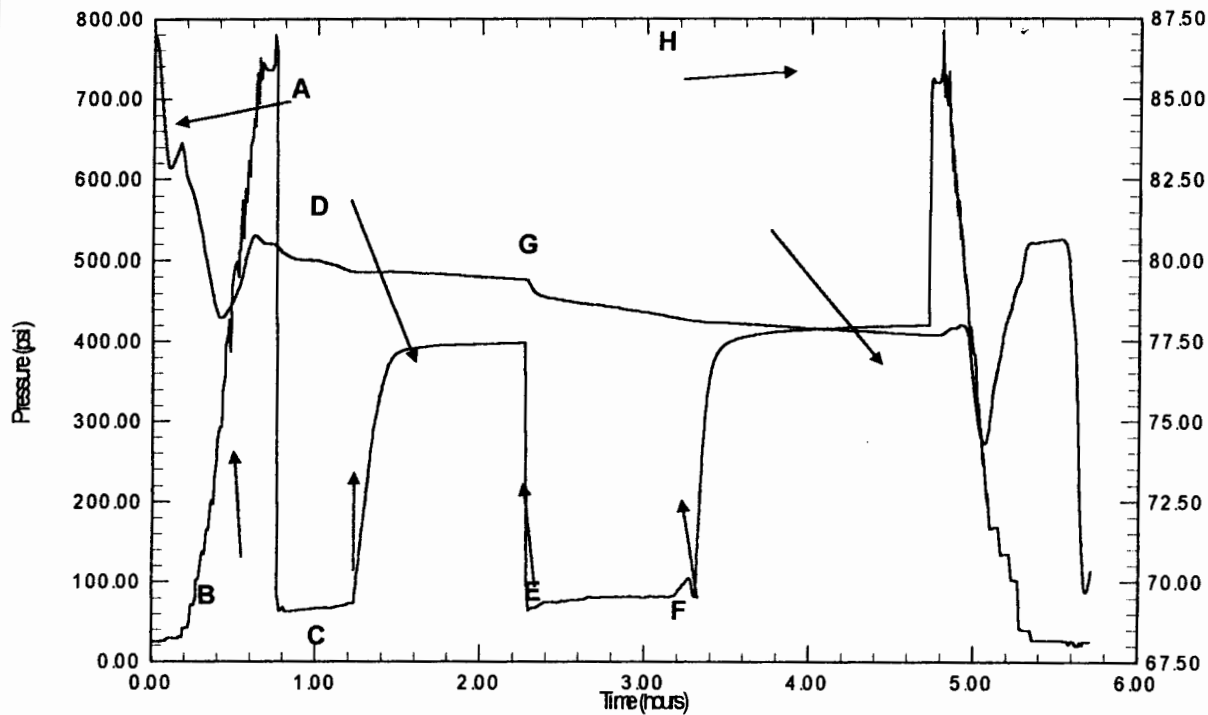
County RICE

Field

Test Date September 19, 2001

Sec Town Range 5-21S-10W

Report Number 11840



Field Reading

(A)	Initial Hydrostatic Pressure	735
(B)	Initial Flow Pressure	63
(C)	Final Initial Flow Pressure	74
(D)	Initial Shut-In Pressure	398
(E)	Initial Final Flow Pressure	67
(F)	Final Flow Pressure	81
(G)	Final Shut-In Pressure	420
(H)	Final Hydrostatic Pressure	784

ELECTRONIC RECORDER DEPTH FT, RECORDER NUMBER 1459

Company: F.G.HOLL COMPANY L.L.C. Lease & Well No. SCOTT "A" #2-5 Test # 2 Date:6-19-2001 SEC. 5 TWP. 21S
RGE. 10W

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

CREAT PLUM, KANSAS 67520 (316)792-6902

GENERAL INFORMATION

COMPANY NAME	F.G.HOLL COMPANY L.L.C.	LEASE AND WELL NUMBER	SCOTT "A" 2-5
TEST DATE	09/19/2001	FORMATION TESTED	WINFIELD
SECTION-TOWN-RANGE	5-21S-10W	DRILL STEM TEST NUMBER	2
STATE	KANSAS	REPORT NUMBER	11840
COUNTY	RICE	ELEVATION KELLY BUSHINGS	1771
ELEVATION GROUND LEVEL	1762	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	KENT ROBERTS		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	1441	TOP PACKER DEPTH	1436
TEST INTERVAL (to)	1466	BOTTOM PACKER DEPTH	1441
ANCHOR LENGTH	25	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	1466	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

TOOL OPEN (from)	1:45
TOOL OPEN (to)	2:15
DURATION (min.)	30

INITIAL SHUT-IN

TOOL CLOSED (from)	2:15
TOOL CLOSED (to)	3:15
DURATION (min.)	60

FINAL OPEN

TOOL OPEN (from)	3:15
TOOL OPEN (to)	4:15
DURATION (min.)	60

FINAL SHUT-IN

TOOL CLOSED (from)	4:15
TOOL CLOSED (to)	5:45
DURATION (min.)	90

PRESSURE READINGS

INITIAL HYDROSTATIC	735
INITIAL FLOW	63
FINAL INITIAL FLOW	74
INITIAL SHUT-IN	398
INITIAL FINAL FLOW	67
FINAL FLOW	81
FINAL SHUT-IN	420
FINAL HYDROSTATIC	784
MAXIMUM TEMPERATURE	80
TOP RECORDER DEPTH	
RECORDER NUMBER	1459
BOTTOM RECORDER DEPTH	1463
RECORDER NUMBER	5463

INITIAL BLOW FAIR BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 4 MINUTES

FINAL BLOW STRONG BLOW-GAS TO SURFACE IN 8 MINUTES

EXTRA EQUIPMENT

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

SUPERIOR TESTERS ENTERPRISES INC.

DRILL STEM TEST REPORT

SPECIALTY WELL LOGGING & TESTING (316)792-6902

WELL INFORMATION

DRILLING CONTRACTOR **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH **1166**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH **249**

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 **9.3**

VISCOSITY **34**

WATER LOSS **12.4**

CHLORIDES-PITS **85000**

CHLORIDES-DST

FEET OF RECOVERY	RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1) 130	DRILLING MUD				
2)					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					

TOTAL RECOVERY

COMMENTS

#

Well Test Interpretation
for
F.G.HOLL COMPANY L.L.C
SCOTT "A" #2-5 - WINFIELD
RICE County, KANSAS

Report Number

11840

Test Date

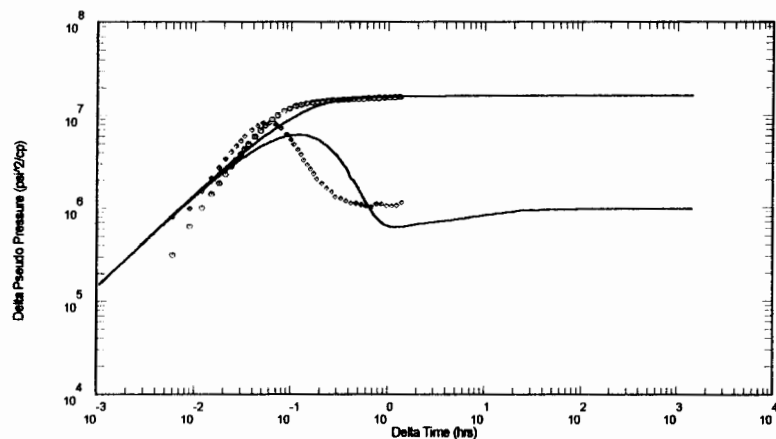
Jun-19-01

Interpretation Results

Model of Behavior Homogeneous
Permeability (to GAS)..... 0.814 md
Transmissibility 708 md-ft/cp
Skin = 7.0
Delta P Skin (psi) 189
PI (at 1459 ft) 0 psia
Total Delta P (Pwf - Pi) (74 - 0) = 74
Last SI Pressure (psia) 419.91
Radius of Investigation 13 ft

Input Data: $Q_{last} = 23$ mscfd, $B = 6.02E+00$ rbl/scf
 $r_w = 6.42$, $h = 10$, $u = 0.012$, $ct = 3.61E-3$, $\phi = 0.18$

Figure A - Log-log Plot of Build-up Period



Executive Summary

Test Overview

This report contains the interpretation of a build-up test on the Scott "A" #2-5 well completed in the Winfield Formation. The gauge was placed at a depth of 1459 feet. Flowing pressures were monitored for a short duration and the well was shut-in at surface for a 1 1/2 hour build-up test. The final rate prior to shut-in is 225 mscfd. Section 2 provides a detailed listing of the rate history used in the analysis.

Interpretation Results

Figure A, above, is a log-log plot of the build-up period with the pressure derivative function. The solid line in Figure A is the multi-rate type-curve response generated using a wellbore storage and skin model with parallel no-flow boundaries xx feet on each side of the well. There is good agreement between the measured data and model response. Superposition and Pressure History Simulation analysis also provide results consistent with the log-log analysis presented above. Based on the model response radial flow occurs from xx to xx hours into the build-up.

Skin Damage

The estimated skin damage 6.8 represents 2.57% of the total pressure drop required to produce 22.5 mscfd from the formation. The pressure drop due to skin is 189.45 psi.

Boundaries

Report Contents

Section 2 - Sequence of Events; Section 3 - Analysis Plots; Section 4 - Pressure Data; Section 5 - Distribution List

SUPERIOR TESTERS ENTERPRISES INC.

General Information

Company Name	F.G.HOLL COMPANY L.L.C
Well	SCOTT "A" #2-5
Test Description	WINFIELD
State	KANSAS
County	RICE
Field	Field
Test Date	19-Jun-01
Interpretation Date	19-Jun-01
Report Number	11840

Input Data

Test Type	Build-up
Fluid Type	GAS
Last Rate Prior to Shut-in	23
Rate Units	mscfd
Zone Height [h] (ft)	10
Porosity (frac)	0.18
Viscosity (cp)	0.012
Total Compressibility (1/psi)	3.6070E-03
Formation Volume Factor	6.0210
Open Hole Radius (ft)	6.417
Distance Between Wells (ft)	

Results

Wellbore Storage Type	Constant Storage	
Storage Coeff 1 (bbls/psi)	0.0031	Cartesian
Storage Coeff 2 (bbls/psi)	0	
Transition Level	0	
Skin Model	Skin	
Skin or Fracture Length	6.995317	6.805 Semi or SqrRt
FCD if applicable	0	
Reservoir Model	Homogeneous	
Permeability (md)	0.814	0.77737 Semi-log
Transmissibility (kh/u)	708	675.9739 Semi-log
Omega if Applicable	0	
Lambda if Applicable	0	
Initial Pressure or P* (psi)	0	0.77737 Semi-log

Shut-in Duration	1.4
Last Flowing Pressure	74
Last Shut-in Pressure	419.9101
Bottomhole Temp (F)	80

Packer Depth	1441
Gauge Depth	1459
Top of Perforations	1441
Bottom of Perforations	1462
TD	1466

Tubing O.D.	4 1/2 X.H
Tubing I.D.	2.25
Tubing Length	1411

Water Saturation (%)	0.400
Gas Saturation (%)	0.600
Condensate Saturation (%)	0.000
Gas Specific Gravity (dim)	0.650
Condensate Gravity - API	0.000
Yield (Rbl/mml)	2.000

Boundary Model

Boundary Model	Parallel No Flow
Distance to Single Fault or L1 or Re	0
L2	0
L3	0
L4	0
Average Pressure	

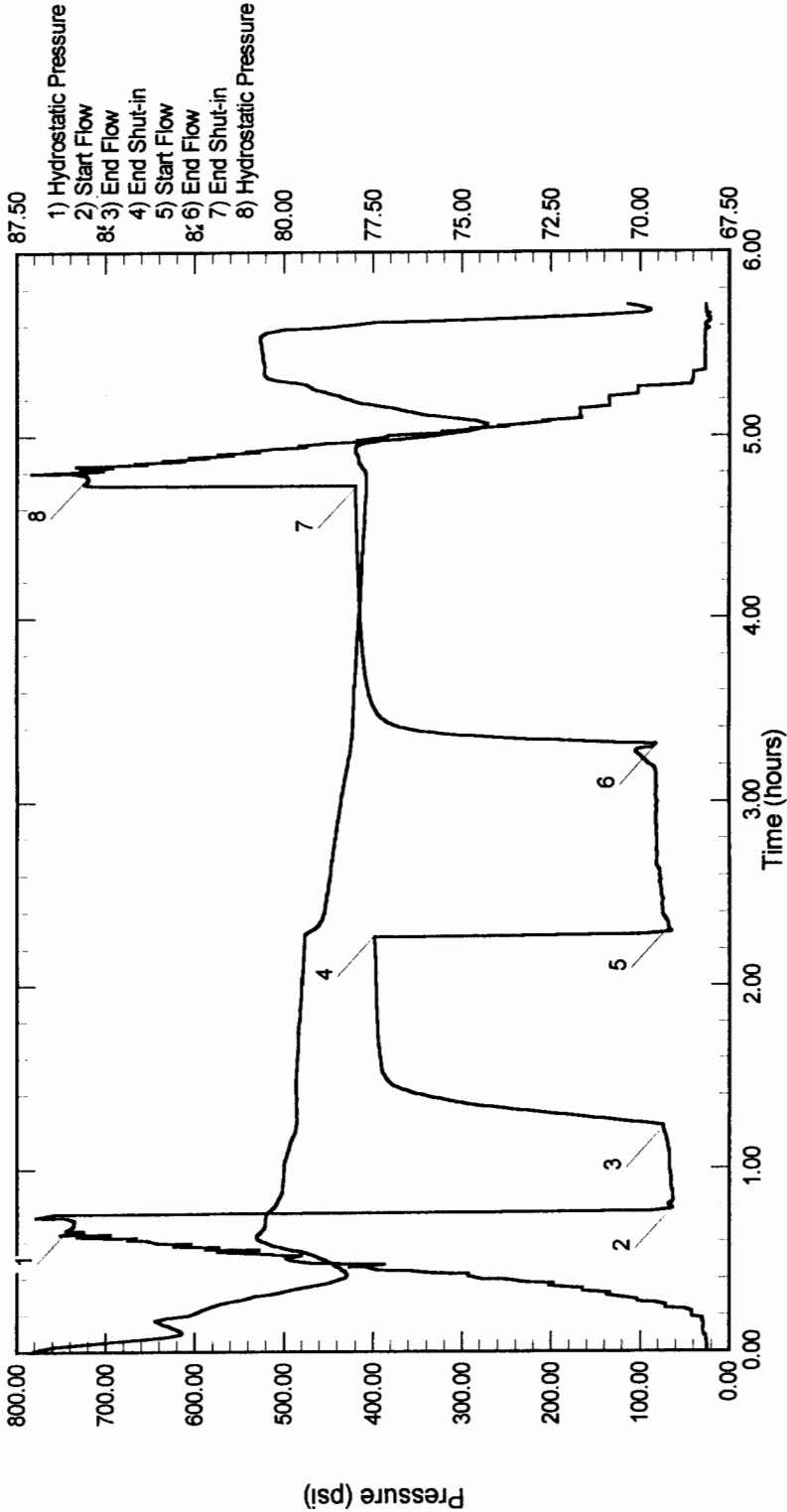
Calculations

Radius of Investigation (ft)	13	12.3221
Delta P Skin (psi)	189.45	193.020
Percent of Total DP	2.57	2.6176
Semi-log Slope (m)	31.130	32.603

Reference Date	06/20/2001
Reference Real Time	11:21:04
Reference Elapsed Time	0

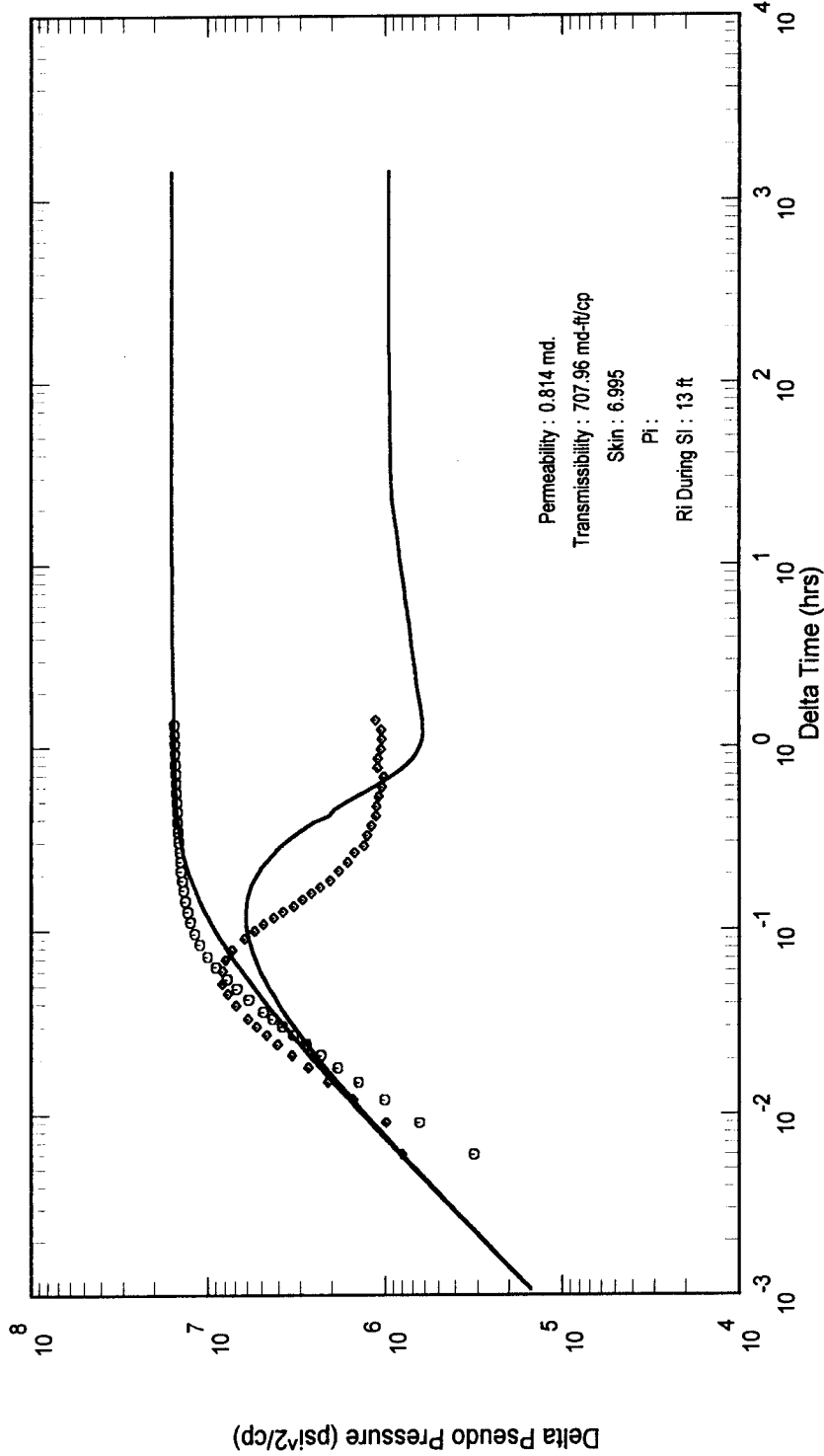
State KANSAS County RICE Field Field	F.G.HOLL COMPANY L.L.C SCOTT "A" #2-5 WINFIELD	Test Date 19-Jun-01 Analysis Date 19-Jun-01 Report Number 11840
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Bottomhole Pressure and Temperature Log

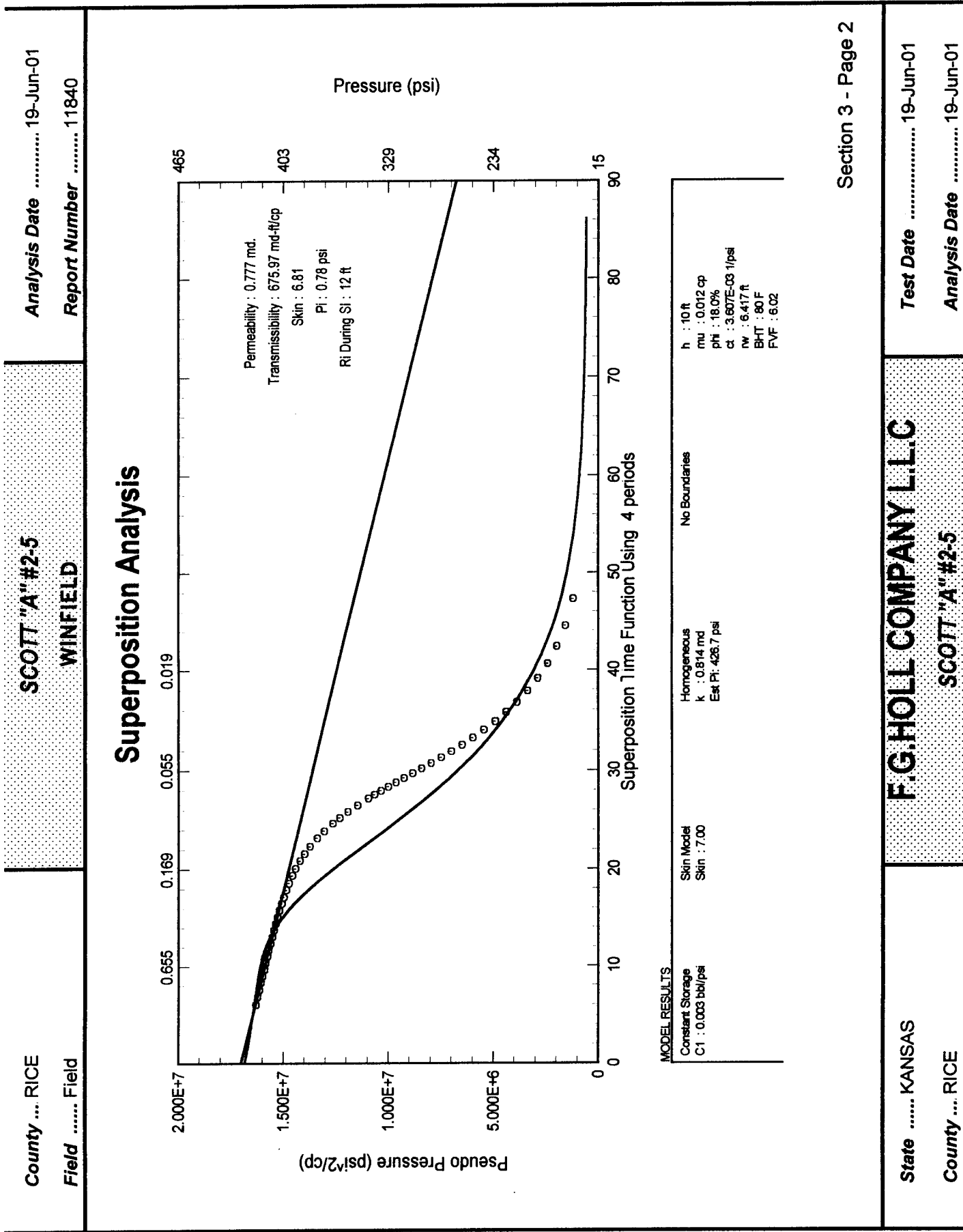


State KANSAS	F.G.HOLL COMPANY L.L.C SCOTT "A" #2-5 WINFIELD	Test Date 19-Jun-01
County ... RICE		Analysis Date 19-Jun-01
Field Field		Report Number 11840

Log-Log Match



State KANSAS	F.G.HOLL COMPANY L.L.C	Test Date 19-Jun-01
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Superposition Analysis

Pressure (psi)

465

403

329

234

15

2.000E+7

1.500E+7

1.000E+7

5.000E+6

0

0.655

0.169

0.055

0.019

0

10

20

30

40

50

60

70

80

90

Superposition Time Function Using 4 periods

Permeability : 0.777 md.

Transmissibility : 675.97 md-ft/cp

Skin : 6.81

PI : 0.78 psi

Ri During SI : 12 ft

MODEL RESULTS

Constant Storage

C1 : 0.003 bbl/psi

Skin Model

Skin : 7.00

Homogeneous

k : 0.814 md

Est PI: 426.7 psi

No Boundaries

h : 10 ft

mu : 0.012 cp

phi : 18.0%

alpha : 3.607E-03 1/psi

rw : 6.417 ft

BHT : 80 F

FVF : 6.02

State KANSAS

County ... RICE

F.G.HOLL COMPANY L.L.C

SCOTT "A" #2-5

Test Date 19-Jun-01

Analysis Date 19-Jun-01

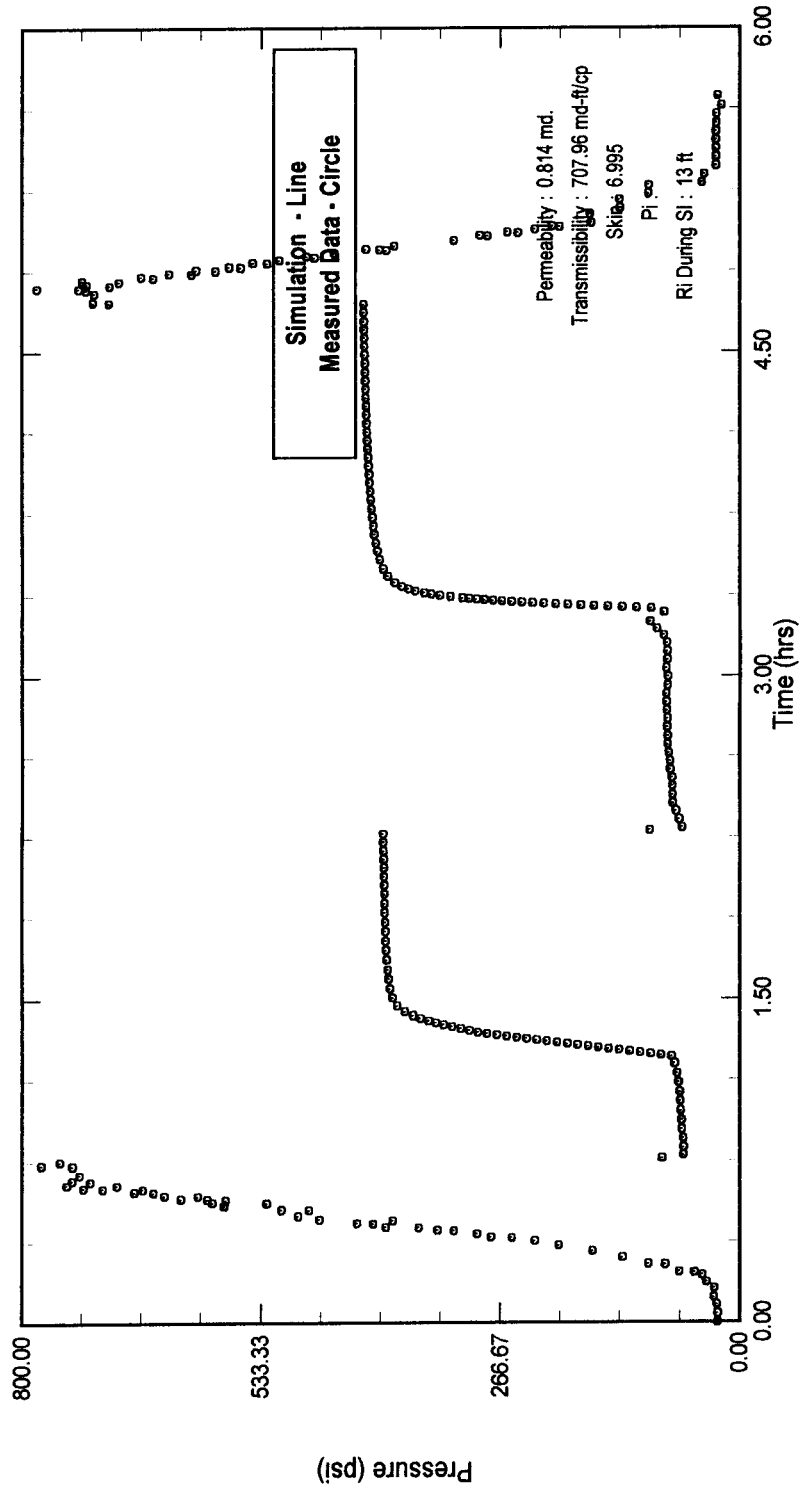
Section 3 - Page 2

Field Field

WINFIELD

Report Number 11840

Pressure History Simulation



Section 3 - Page 3

State KANSAS

County RICE

Field Field

F.G.HOLL COMPANY L.L.C

SCOTT "A" #2-5

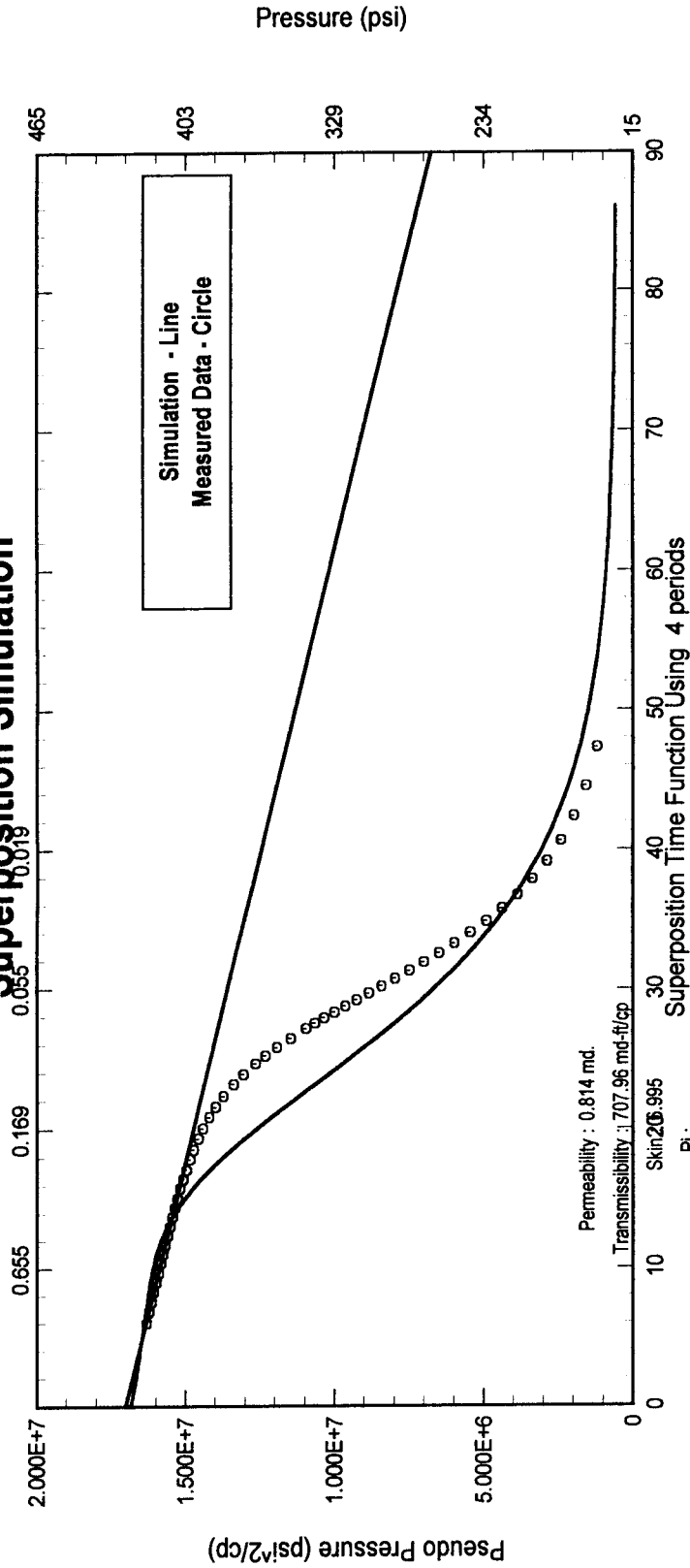
WINFIELD

Test Date 19-Jun-01

Analysis Date 19-Jun-01

Report Number 11840

Superposition Simulation



MODEL RESULTS	
Constant Storage C1 : 0.003 bbl/psi	h : 10 ft
	mu : 0.012 cp
	phi : 18.0%
	ci : 3.607E-03 1/psi
	rw : 6.417 ft
	BHT : 80 F
	FVF : 6.02
	No Boundaries
	Homogeneous
	k : 0.814 md
	Est Pi : 426.7 psi
	RI During SI : 13 ft
	Skin Model
	Skin : 7.00

Section 3 - Page 4

State KANSAS County RICE Field Field	Test Date 19-Jun-01 Analysis Date 19-Jun-01 Report Number 11840
	F.G.HOLL COMPANY L.L.C SCOTT "A" #2-5 WINFIELD
	Input Data

Porosity (%) [phi]: 18.0%	Open Hole Radius (ft) [rw]: 6.417	Gauge Depth (ft): 0
Viscosity (cp) [u]: 0.012	Net Zone Thickness (ft) [h]: 10	Top of Perforations: 1441
FVF (Rb/Scf) [B]: 6.021	Rate During Period (mscfd) [qn]: 0	Bottom of Perforations: 1462
Total Compressibility (1/psi) [ct]: 3.607E-03	ABS(Rate Prior to Period (mscfd)) [qn-1]: 23	BHT (F): 80
Log - Log Analysis		
Permeability		
$kh = 1422 (\Delta q) (T) (Pd/p)$ $kh = 1422 * (22.5) * (460 + 80) * (4.71E-7)$ $kh = 8.140 \text{ md-ft}$ $k = 0.814 \text{ md}$		
Wellbore Storage Coefficient		
$C(1) = 0.000295 (kh) / (u * [TD/CD]/dt)$ $C(1) = 0.000295 * (8.14) / (0.012 * 67.393)$ $C(1) = 0.00309896$ $CD = 0.8936 C(1) / (\phi * ct * h * rw^2)$ $CD = 0.8936 * 3.1E-3 / (0.180 * 3.61E-3 * 10 * 6.417^2)$ $CD = 0$		
Skin		
$S = 1/2 \ln (CDe2s \text{ match} / CD)$ $S = 1/2 \ln (1.23E+04 / (0.01))$ $S = 7.0$		
Radius of Investigation		
$ri = ((k * S / time) / (960 \phi u ct))^{.5}$ $ri = ((0.81 * 1.4) / (960 * 0.180 * 0.012 * 3.61E-3))^{.5}$ $ri = 13 \text{ ft}$		
Section 3 - Page 5		

State KANSAS		F.G.HOLL COMPANY L.L.C		Test Date 19-Jun-01
County ... RICE		SCOTT "A" #2-5		Analysis Date 19-Jun-01
Field Field		WINFIELD		Report Number 11840

Input Data				
Porosity (%) [phi]: 18.0%	Open Hole Radius (ft) [rw]: 6.417	Gauge Depth (ft): 1459		
Viscosity (cp) [u]: 0.012	Net Zone Thickness (ft) [h]: 10	Top of Perforations: 1441		
FVF (Rb/Scf) [B]: 6.021	Rate During Period (mscfd) [qn]: 0	Bottom of Perforations: 1462		
Total Compressibility (1/psi) [ct]: 3.607E-03	ABS(Rate Prior to Period (mscfd)) [qn-1]: 23	BHT (F): 80		

Superposition Analysis	
Permeability	
$kh = 1637 \text{ (T) / m'}$	
$kh = 1637 * (460 + 80) / (2558584)$	
$kh = 7.774 \text{ md-ft}$	
$k = 0.777 \text{ md}$	
Skin	
$S = 1.1513((m(P_{1hr}) - m(P_{wf}) / (m' \Delta q) - \log(k / (\phi u c t r w^2)) + 3.227)$	
$S = 1.1513((1.558E+07 / (1.137E+05 * 22.5) - \log(0.777 / (0.180 * 0.012 * 3.61E-03 * 6.417^2)) + 3.227)$	
$S = 6.81$	
Radial Flow Line Parameters (Superposition Plot)	
Start Radial Flow Line (hrs): 0.267	RSqr: 0.999
End Radial Flow Line (hrs): 1.404	Number of Points: 212
Start Radial Flow Line (SF): 16.296	$P^* \text{ (mp psi}^2\text{/cp): } 1.701E+07$
End Radial Flow Line (SF): 6.012	$P^* \text{ (psia): } 428.69$

Section 3 - Page 6

Test Data
F.G.HOLL COMPANY L.L.C
SCOTT "A" #2-5 - WINFIELD

State KANSAS
County RICE
Field Field

Test Date June 19, 2001
Interpretation Date June 19, 2001
Report Number 11840



Net Zone Height (ft) 10
 Formation Volume Factor (rbt/mscf) 6.0210
 Viscosity (cp) 0.0115
 Total Compressibility (1/psi) 3.6070E-03
 Condensate Gravity (API) 0.00
 Yield (RBL/MMSCF) 2.00
 Saturations (Gas, Cond, Water) % 0.600 / 0.400 / 0.000
 Gas Specific Gravity (dim) 0.65
 Bottomhole Temperature (F) 80
 Porosity (%) 0.18
 Open Hole Diameter (ft) 6.42

	1	2	3	
Tubing Outside Diameter	4 1/2 X.H	4 1/2 X.H		
Tubing Inside Diameter	3.800	2.250		
Tubing Length	2266	249		
Volume	31.79	1.22		33.01

Packer Depth	1441			
Top of Perforations	1441			
Gauge Depth	1459	18 ft		
Mid of Perforations	1452		10.5 ft	
Bottom of Perforations	1462			21 ft
TD	1466			

Perforation Detail

	Top (ft-md)	Btm (ft-md)	Net (ft)	SPF	Diam (inches)
1					
2					
3					
4					
5					
6					

0

Superior Testers Enterprises, Inc.

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

(316) 792-6902

1771 K.B.

Date 6-7-01 Location NE 1/4 Sec 5 T2S R10W Elevation 1762 GL County rice

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

Charts Mailed to 6427 East Kellogg P.O. Box 780167 Wichita Kansas 67278-0167

Drilling Contractor Sterling Drilling Rig #4

Length Drill Pipe 1927 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 249 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 2197 Bottom Packer Depth 2202 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 2202 TO 2240 ANCHOR LENGTH 38 TOTAL DEPTH 2240 Hole Size 7 7/8'

LEASE & WELL NO. Scott "A" #2-5 FORMATION TESTED Lawson Sand TEST NO. 3

Mud Weight 9.6 Viscosity 63 Water Loss 12.9 Chlorides - Pits 4000 D.S.T. _____

Maximum Temp. 88 °F Initial Hydrostatic Pressure (A) 1096 P.S.I. Final Hydrostatic Pressure (H) 1056 P.S.I.

Tool Open I.F.P. from 5:45 A m to 6:00 A m 15 min

Tool Closed I.C.I.P. from 6:00 A m to 6:30 A m 30 min

Tool Open F.F.P. from 6:30 A m to 6:45 A m 15 min

Tool Closed F.C.I.P. from 6:45 A m to 7:15 A m 30 min

Initial Blow WEAK STEADY 1/2 inch blow

Final Blow WEAK STEADY 1/2 inch blow

Total Feet Recovered 70 Gravity of Oil _____ Corrected _____

70 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 _____

Remarks _____

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

Top Recorder No. 78225 Clock No. ELECTRONIC Depth 2233 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 5463 Clock No. 47441 Depth 2237 Insurance NONE

Price of Job _____

Tool Operator Gene Ludwig

Approved By _____

11841

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.

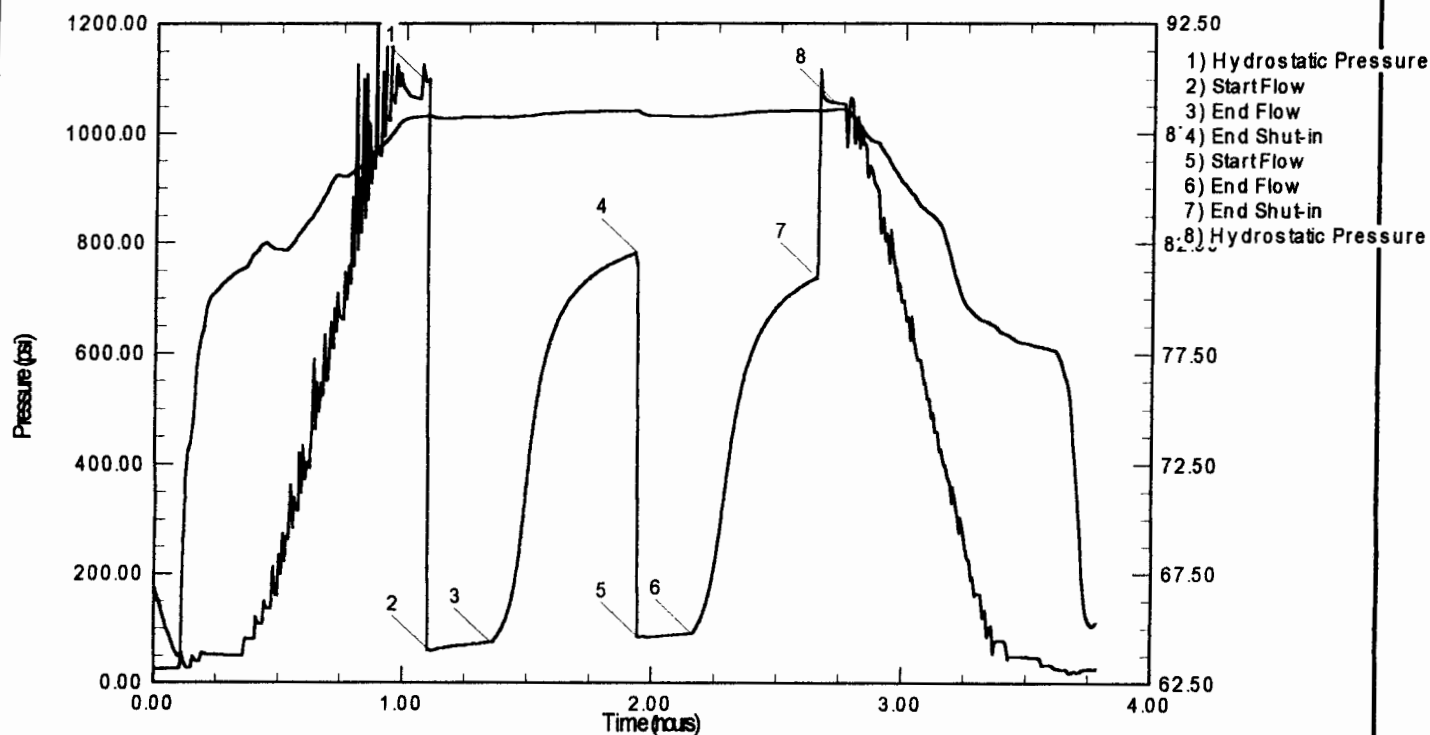
Great Bend, Kansas

CHART DATA

(316) 792-6902

State KANSAS
County RICE
Field

Test Date June 21, 2001
Sec Town Range 5-21S-10W
Report Number 11841



Field Reading

(1)	Initial Hydrostatic Pressure	1096
(2)	Initial Flow Pressure	61
(3)	Final Initial Flow Pressure	75
(4)	Initial Shut-In Pressure	783
(5)	Initial Final Flow Pressure	86
(6)	Final Flow Pressure	91
(7)	Final Shut-In Pressure	738
(8)	Final Hydrostatic Pressure	1056

ELECTRONIC RECORDER DEPTH 2233 FT, RECORDER NUMBER 78225

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	SCOTT "A" #2-5
TEST DATE	6/21/01	FORMATION TESTED	LANGDON SAND
SECTION-TOWN-RANGE	5-21S-10W	DRILL STEM TEST NUMBER	3
STATE	KANSAS	REPORT NUMBER	11841
COUNTY	RICE	ELEVATION KELLY BUSHINGS	1771
ELEVATION GROUND LEVEL	1762	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	KENT ROBERTS		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	2202	TOP PACKER DEPTH	2197
TEST INTERVAL (to)	2240	BOTTOM PACKER DEPTH	2202
ANCHOR LENGTH	38	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	2240	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

TOOL OPEN (from)

TOOL OPEN (to)

DURATION (min.)

INITIAL SHUT-IN

TOOL CLOSED (from)

TOOL CLOSED (to)

DURATION (min.)

FINAL OPEN

TOOL OPEN (from)

TOOL OPEN (to)

DURATION (min.)

FINAL SHUT-IN

TOOL CLOSED (from)

TOOL CLOSED (to)

DURATION (min.)

PRESSURE READINGS

INITIAL HYDROSTATIC

INITIAL FLOW

FINAL INITIAL FLOW

INITIAL SHUT-IN

INITIAL FINAL FLOW

FINAL FLOW

FINAL SHUT-IN

FINAL HYDROSTATIC

MAXIMUM TEMPERATURE

TOP RECORDER DEPTH

RECORDER NUMBER

BOTTOM RECORDER DEPTH

RECORDER NUMBER

INITIAL BLOW **WEAK STEADY 1/2 INCH BLOW**

FINAL BLOW **WEAK STEADY 1/2 INCH BLOW**

EXTRA EQUIPMENT

JARS	YES	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 **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH **1927**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH **249**

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 **63**

WATER LOSS **12**

CHLORIDES-PITS **4000**

CHLORIDES-DST

FEET OF RECOVERY		RECOVERY DECIPTION	% GAS	% OIL	% MUD	% WATER
1)	70	DRILLING MUD				
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) 792-6902

Date 6-21-2001 Location SE 1/4-34 S-21-T10N Elevation 1771 K.B. County Rice

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

Charts Mailed to 6427 East Kellogg P.O. Box 780167 Wichita Kansas 67225-0167

Drilling Contractor Skelinc Drilling Rig #4

Length Drill Pipe 2013 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 249 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 2285 Bottom Packer Depth 2290 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 2290 TO 2348 ANCHOR LENGTH 58 TOTAL DEPTH 2348 Hole Size 7 7/8

LEASE & WELL NO. Scott #2-5 FORMATION TESTED Tarkio TEST NO. 4

Mud Weight 8.9 Viscosity 43 Water Loss 22 Chlorides - Pits 5200 D.S.T. 128,000

Maximum Temp. 90 °F Initial Hydrostatic Pressure (A) 1105 P.S.I. Final Hydrostatic Pressure (H) 1101 P.S.I.

Tool Open I.F.P. from 4:30 P.m. to 5:00 P.m. 30 min

Tool Closed I.C.I.P. from 5:00 P.m. to 6:00 P.m. 60 min

Tool Open F.F.P. from 6:00 P.m. to 6:30 P.m. 30 min

Tool Closed F.C.I.P. from 6:30 P.m. to 7:30 P.m. 60 min

Initial Blow Weak building blow built to 4 inches into the water

Final Blow Weak building blow built to the bottom of a 5 gallon bucket in 28 minutes

Total Feet Recovered 330 Gravity of Oil 12.4 Corrected

30 Feet of Thick heavy mud %Gas 1 %Oil 1 %Mud 1 %Water 1

2300 Feet of SLIGHTLY muddy water chlorides %Gas 1 %Oil 1 %Mud 1 %Water 1

128,000 Feet of 128,000 %Gas 1 %Oil 1 %Mud 1 %Water 1

128,000 Feet of 128,000 %Gas 1 %Oil 1 %Mud 1 %Water 1

128,000 Feet of 128,000 %Gas 1 %Oil 1 %Mud 1 %Water 1

128,000 Feet of 128,000 %Gas 1 %Oil 1 %Mud 1 %Water 1

128,000 Feet of 128,000 %Gas 1 %Oil 1 %Mud 1 %Water 1

128,000 Feet of 128,000 %Gas 1 %Oil 1 %Mud 1 %Water 1

128,000 Feet of 128,000 %Gas 1 %Oil 1 %Mud 1 %Water 1

128,000 Feet of 128,000 %Gas 1 %Oil 1 %Mud 1 %Water 1

Remarks

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

Top Recorder No. 78225 Clock No. ELECTRONIC Depth 2341 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 5463 Clock No. 47441 Depth 2345 Insurance NONE

Price of Job

Tool Operator Don Badley

Approved By 11842

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

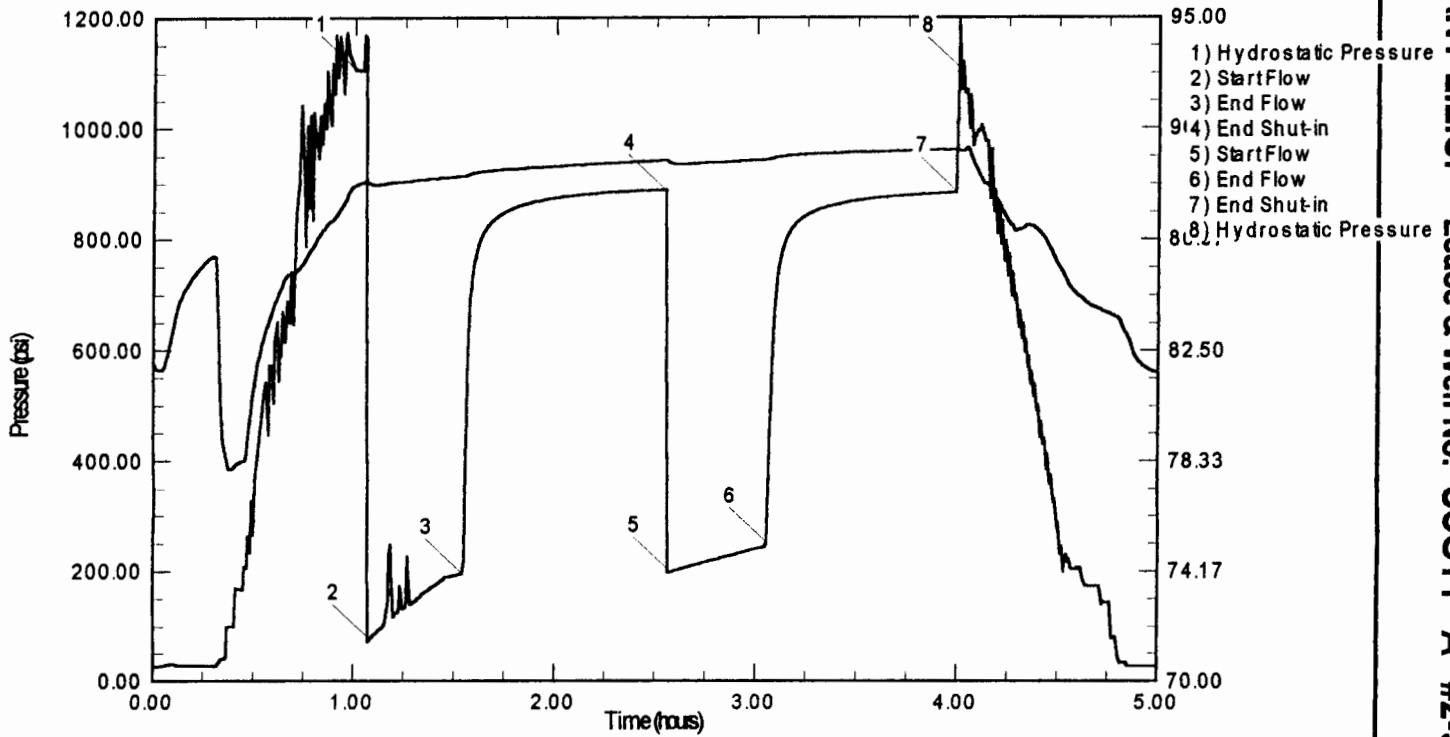
Test Date June 21, 2001

County RICE

Sec Town Range 5-21S-10W

Field

Report Number 11842



Field Reading

(1)	Initial Hydrostatic Pressure	1105
(2)	Initial Flow Pressure	78
(3)	Final Initial Flow Pressure	106
(4)	Initial Shut-In Pressure	890
(5)	Initial Final Flow Pressure	199
(6)	Final Flow Pressure	252
(7)	Final Shut-In Pressure	884
(8)	Final Hydrostatic Pressure	1101

ELECTRONIC RECORDER DEPTH 2341 FT, RECORDER NUMBER 78225

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	SCOTT"A" #2-5
TEST DATE	6/21/01	FORMATION TESTED	TARKIO
SECTION-TOWN-RANGE	5-21S-10W	DRILL STEM TEST NUMBER	4
STATE	KANSAS	REPORT NUMBER	11842
COUNTY	RICE	ELEVATION KELLY BUSHINGS	1771
ELEVATION GROUND LEVEL	1762	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	KENT ROBERTS		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	2290	TOP PACKER DEPTH	2285
TEST INTERVAL (to)	2348	BOTTOM PACKER DEPTH	2290
ANCHOR LENGTH	58	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	2348	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

TOOL OPEN (from)	4:30
TOOL OPEN (to)	5:00
DURATION (min.)	30

INITIAL SHUT-IN

TOOL CLOSED (from)	5:00
TOOL CLOSED (to)	6:00
DURATION (min.)	60

FINAL OPEN

TOOL OPEN (from)	6:00
TOOL OPEN (to)	6:30
DURATION (min.)	30

FINAL SHUT-IN

TOOL CLOSED (from)	6:30
TOOL CLOSED (to)	7:30
DURATION (min.)	60

PRESSURE READINGS

INITIAL HYDROSTATIC	1105
INITIAL FLOW	78
FINAL INITIAL FLOW	106
INITIAL SHUT-IN	890
INITIAL FINAL FLOW	199
FINAL FLOW	252
FINAL SHUT-IN	884
FINAL HYDROSTATIC	1101
MAXIMUM TEMPERATURE	90
TOP RECORDER DEPTH	2341
RECORDER NUMBER	78225
BOTTOM RECORDER DEPTH	2345
RECORDER NUMBER	13189

INITIAL BLOW

WEAK BUILDING BLOW BUILT TO 4 INCHES INTO THE WATER

FINAL BLOW

**WEAK BUILDING BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET
IN 28 MINUTES (12 1/2 INCHES)**

EXTRA EQUIPMENT

JARS	YES	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 **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH **2013**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH **249**

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 **8.9**

VISCOSITY **43**

WATER LOSS **7.2**

CHLORIDES-PITS **5200**

CHLORIDES-DST **128000**

FEET OF RECOVERY		RECOVERY DECRPTION	% GAS	% OIL	% MUD	% WATER
1)	30	THICK HEAVY MUD				
2)	300	SLIGHTLY MUDDY WATER-CHLORIDES 128000				
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) 792-6902

Date 6-23-01 Location 1/2-1/2-W 521-10W Elevation 1771 K.B. County Rice
17626L

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

Charts Mailed to 6427 East Kellogg P.O. Box 780167 Wichita Kansas 67278-0167

Drilling Contractor Sterling Drilling R.O. #4

Length Drill Pipe 2849 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 249 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 3119 Bottom Packer Depth 3124 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 3124 TO 3136 ANCHOR LENGTH 12 TOTAL DEPTH 3136 Hole Size 7 7/8

LEASE & WELL NO. Scott "A" #2-5 FORMATION TESTED Kansas City "G" TEST NO. 5

Mud Weight 80.94 Viscosity 40 Water Loss 10.5 Chlorides - Pits 8000 D.S.T.

Maximum Temp. 90 Initial Hydrostatic Pressure (A) 1556 P.S.I. Final Hydrostatic Pressure (H) 1495 P.S.I.

Tool Open I.F.P. from 7:45 p.m. to 8:15 p.m. 30 min

Tool Closed I.C.I.P. from 8:15 p.m. to 9:15 p.m. 60 min

Tool Open F.F.P. from 9:15 p.m. to 10:15 p.m. 60 min

Tool Closed F.C.I.P. from 10:15 p.m. to 11:45 p.m. 90 min

Initial Blow fair blow built to the bottom of a 5 Gallon bucket in 12 minutes

Final Blow Strong blow - bottom of a 5 Gallon bucket in 30 seconds

Total Feet Recovered 70 slightly Gravity of Oil _____ Corrected _____

30 Feet of CLEAN Gassy Oil % Gas _____ % Oil _____ % Mud _____ % Water _____

40 Feet of SLIGHTLY MUD & GAS Cat Oil % Gas 7 % Oil 70 % Mud 23 % Water 0

1100 Feet of GAS IN THE PIPE % 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 3129 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 5463 Clock No. 47441 Depth 3133 Insurance NONE

Price of Job _____

Tool Operator Steve Budig

Approved By _____

11843

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.

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

(316) 792-6902

State KANSAS

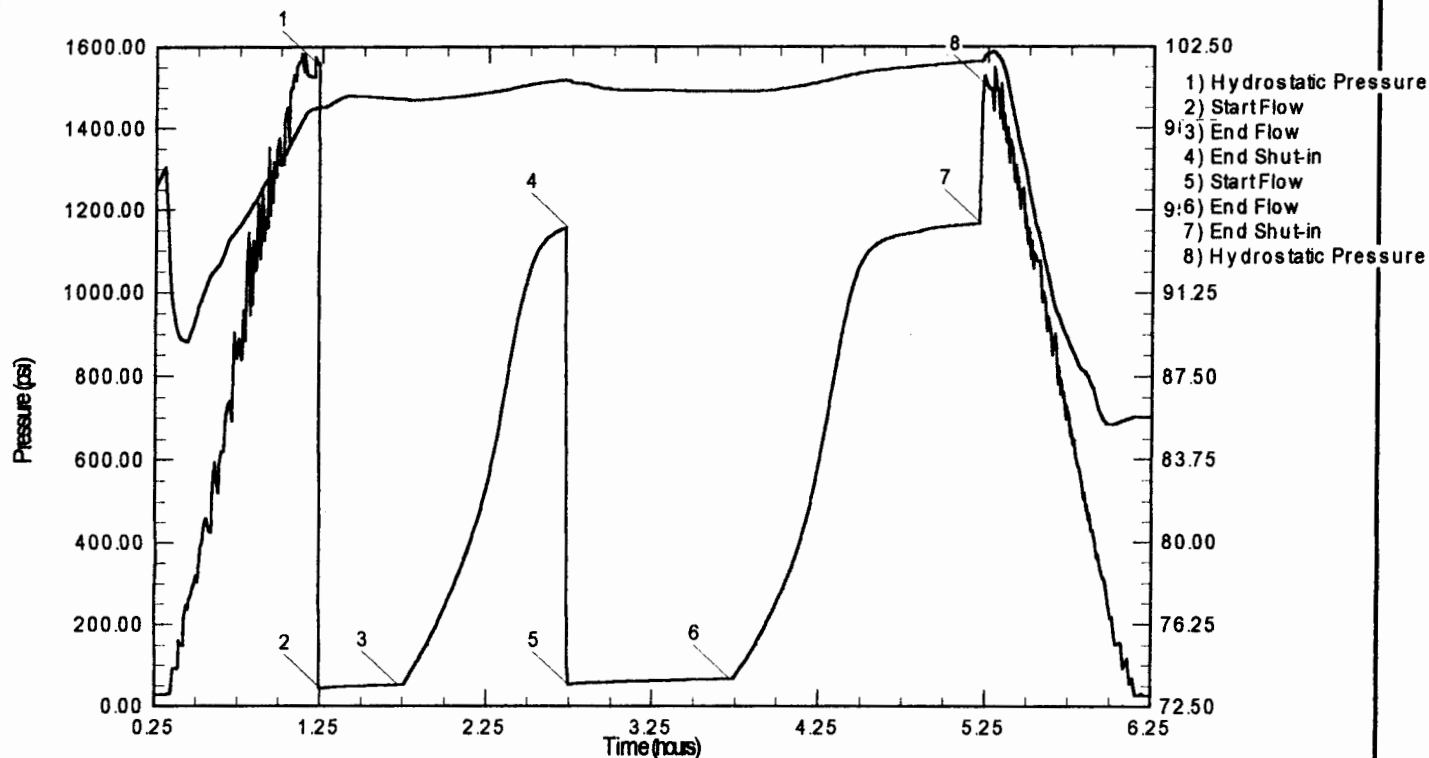
Test Date June 23, 2001

County RICE

Sec Town Range 5-21S-10W

Field

Report Number 11843



Field Reading

(1)	Initial Hydrostatic Pressure	1556
(2)	Initial Flow Pressure	44
(3)	Final Initial Flow Pressure	52
(4)	Initial Shut-In Pressure	1158
(5)	Initial Final Flow Pressure	51
(6)	Final Flow Pressure	67
(7)	Final Shut-In Pressure	1167
(8)	Final Hydrostatic Pressure	1495

ELECTRONIC RECORDER DEPTH 3129 FT, RECORDER NUMBER 78225

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	SCOTT "A" #2-5
TEST DATE	6/23/01	FORMATION TESTED	KANSAS CITY "G"
SECTION-TOWN-RANGE	5-21S-10W	DRILL STEM TEST NUMBER	5
STATE	KANSAS	REPORT NUMBER	11843
COUNTY	RICE	ELEVATION KELLY BUSHINGS	1771
ELEVATION GROUND LEVEL	1762	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	KENT ROBERTS		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	3124	TOP PACKER DEPTH	3119
TEST INTERVAL (to)	3136	BOTTOM PACKER DEPTH	3124
ANCHOR LENGTH	12	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	3136	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

TOOL OPEN (from)

TOOL OPEN (to)

DURATION (min.)

INITIAL SHUT-IN

TOOL CLOSED (from)

TOOL CLOSED (to)

DURATION (min.)

FINAL OPEN

TOOL OPEN (from)

TOOL OPEN (to)

DURATION (min.)

FINAL SHUT-IN

TOOL CLOSED (from)

TOOL CLOSED (to)

DURATION (min.)

PRESSURE READINGS

INITIAL HYDROSTATIC

INITIAL FLOW

FINAL INITIAL FLOW

INITIAL SHUT-IN

INITIAL FINAL FLOW

FINAL FLOW

FINAL SHUT-IN

FINAL HYDROSTATIC

MAXIMUM TEMPERATURE

TOP RECORDER DEPTH

RECORDER NUMBER

BOTTOM RECORDER DEPTH

RECORDER NUMBER

INITIAL BLOW

FAIR BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 12 MINUTES

FINAL BLOW

STRONG BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 30 SECONDS AND DECREASED TO A WEAK STEADY 3 INCH BLOW AT THE END OF 1 HOUR

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 **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH **2849**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH **249**

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 **9.2**

VISCOSITY **40**

WATER LOSS **10.5**

CHLORIDES-PITS **8000**

CHLORIDES-DST

FEET OF RECOVERY		RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1)	1100	CLEAN SLIGHTLY GAS CUT OIL SLIGHTLY MUD AND GAS CUT OIL	7	70	23	
2)	30					
3)	40					
4)						
5)						
6)						
7)						
8)						
9)						
10)						
11)						
12)						
13)						
14)						
15)						

TOTAL RECOVERY

COMMENTS

Well Test Interpretation
for
F.G.HOLL COMPANY L.L.C.
SCOTT "A" #2-5 - KANSAS CITY "G"
RICE County, KANSAS

Report Number

11843

Test Date

Jun-23-01

Interpretation Results

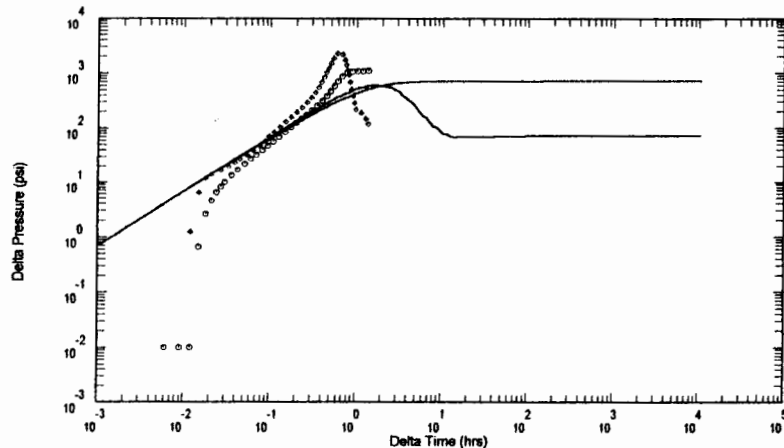
Model of Behavior

Homogeneous

Permeability (to Oil)..... 1.333 md
Transmissibility 2 md-ft/cp
Skin 5.89
Delta P Skin (psi) 1130
Pi (at 3129 ft) 0 psia
Total Delta P (Pinj - Pi) (67 - 0) = 67
Last SI Pressure (psia) 1167.03
Radius of Investigation 2 ft

Input Data: Qlast = 3 bpd, B = 1.073 rbl/stb
rw = 3.21, h = 5, u = 3.368, ct = 5.83E-4, phi = 0.18

Figure A - Log-log Plot of Analysis Period



Executive Summary

Test Overview

This report contains the interpretation of a Drill stem test on the Scott well completed in the Kansa city"G" Formation. The gauge was placed at a depth of 3129 feet. Flowing pressures were monitored for a 1 1/2 hour duration and the well was shut-in at surface for a 2 hour test. The final rate prior to shut-in is 3.4 bpd. Section 2 provides a detailed listing of the rate history used in the analysis.

Interpretation Results

Figure A, above, is a log-log plot of the 2ND Shut-In period with the pressure derivative function. The solid line in Figure A is the multi-rate type-curve response generated using a wellbore storage and skin model with NO boundaries. There is good agreement between the measured data and model response. Superposition and Pressure History Simulation analysis also provide results consistent with the log-log analysis presented above. Based on the model response radial flow occurs from xx to xx hours into the build-up.

Skin Damage

The estimated skin damage 3.68 represents 16.93% of the total pressure drop required to produce 3.4 bpd from the formation. The pressure drop due to skin is xx psi.

Boundaries

Report Contents

Section 2 - Sequence of Events; Section 3 - Analysis Plots; Section 4 - Pressure Data; Section 5 - Distribution List

SUPERIOR TESTERS ENTERPRISES INC.

County ▼	F.G.HOLL COMPANY L.L.C.
	SCOTT "A" #2-5
	KANSAS CITY "G"
	KANSAS
	RICE
	Field
	23-Jun-01
	24-Jun-01
11843	

Constant Storage ▼	
0.0001	
0	
0	
Skin ▼	
5.890243	3.683
0	

Homogeneous ▼	
1.333	0.60
2	0.89
0	
0	
0	1.28E+03

Parallel No Flow ▼	
0	
0	
0	
0	

2	1.6256
1130.45	1566.056
16.93	23.4510
220.596	488.749

Build-up ▼
Oil
3
bopd
5
0.18
3.368
5.8270E-04
1.0730
3.208

1.49
67
1167.03
102

3124
3129

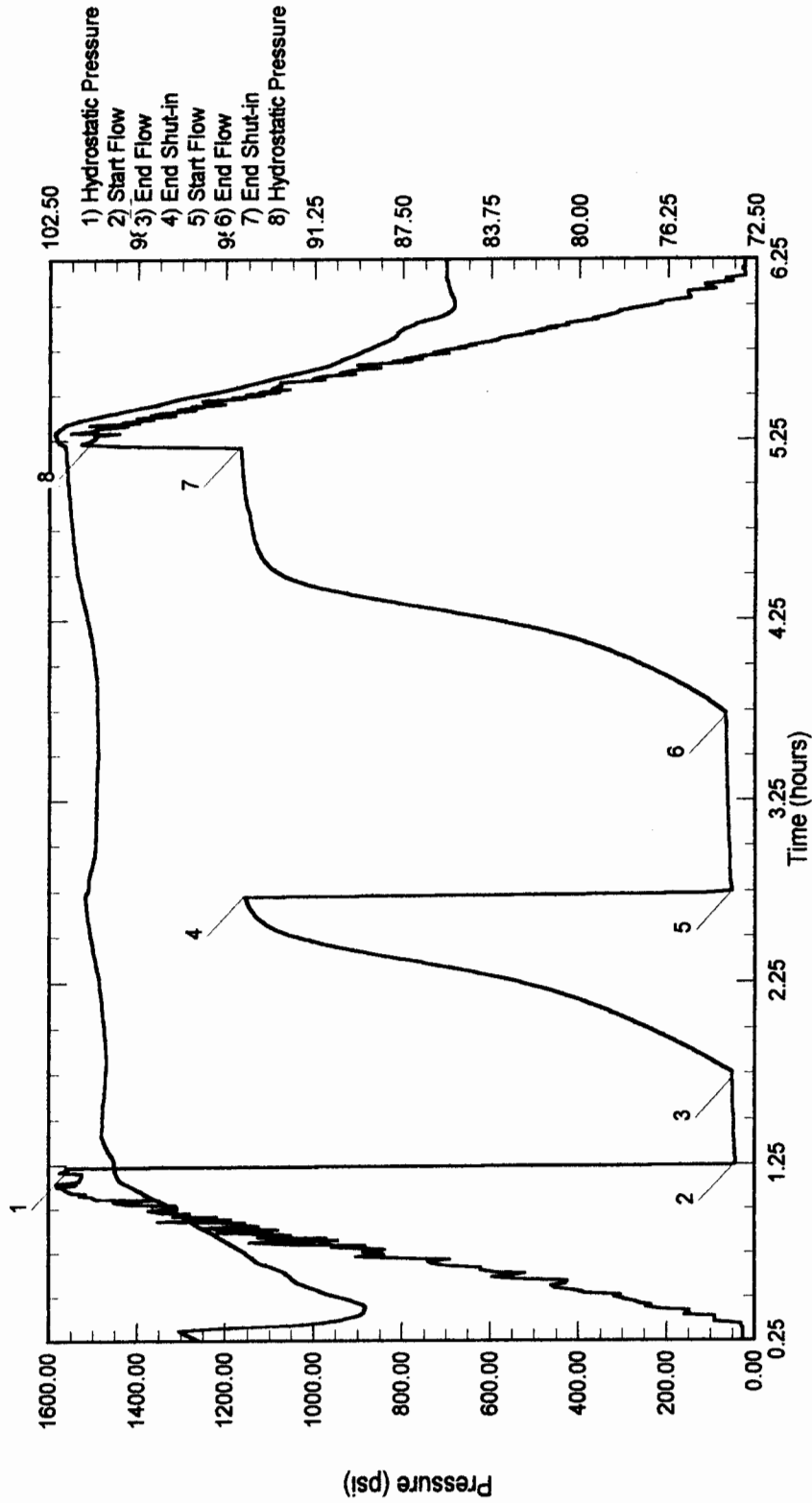
Top of Perforations ▼	3124
Bottom of Perforations ▼	3132
P8TD ▼	3136

4 1/2 X.H.
3.8
2849

0.4
0
0.6
0.65
35
160
0
6/24/01
1:48:34
0

State KANSAS	F.G.HOLL COMPANY L.L.C. SCOTT "A" #2-5 KANSAS CITY "G"	Test Date 23-Jun-01
County RICE		Analysis Date 24-Jun-01
Field Field		Report Number 11843

Bottomhole Pressure and Temperature Log



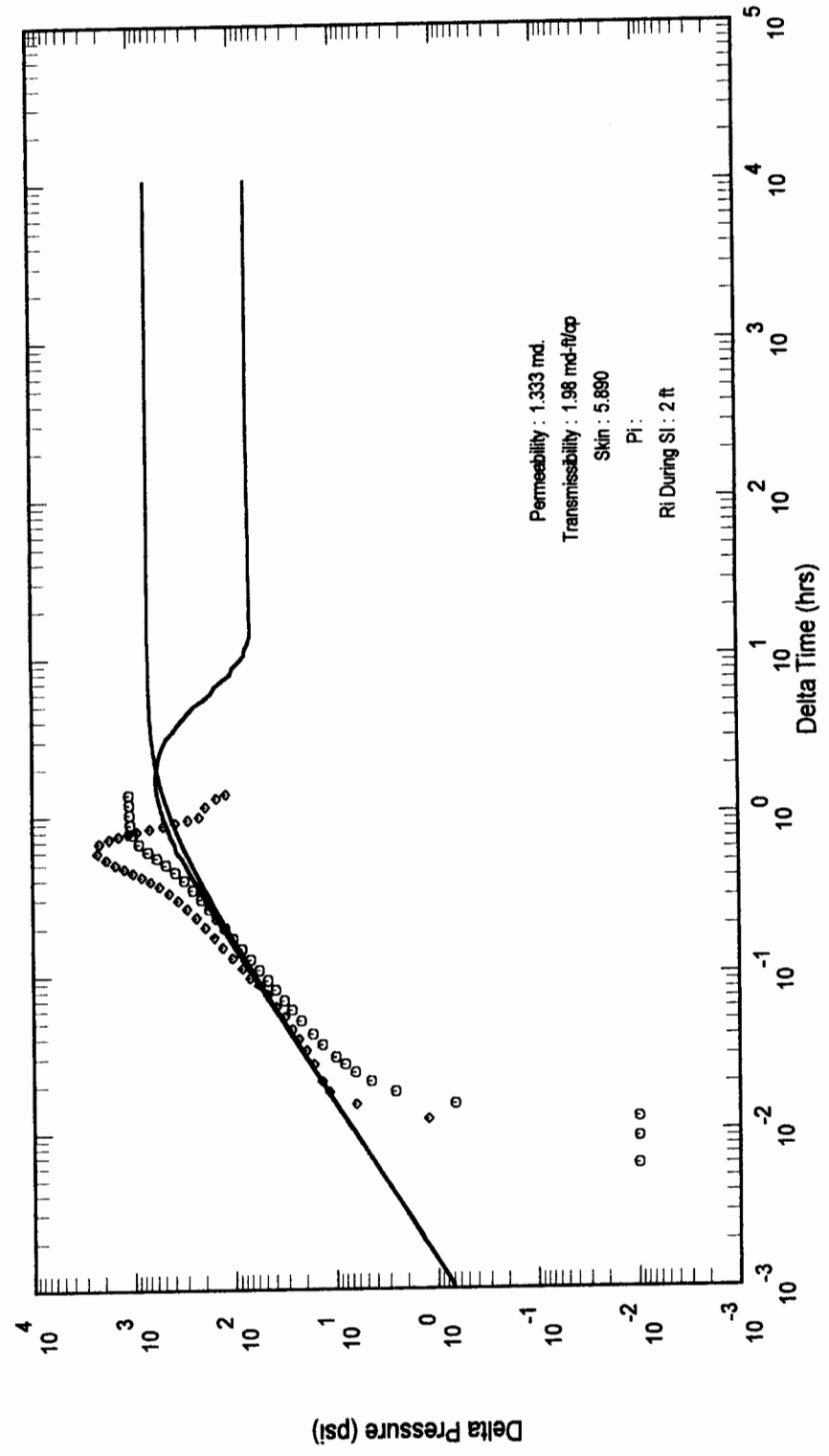
F.G.HOLL COMPANY L.L.C.

State KANSAS
 County RICE
 Field Field

Test Date 23-Jun-01
 Analysis Date 24-Jun-01
 Report Number 11843

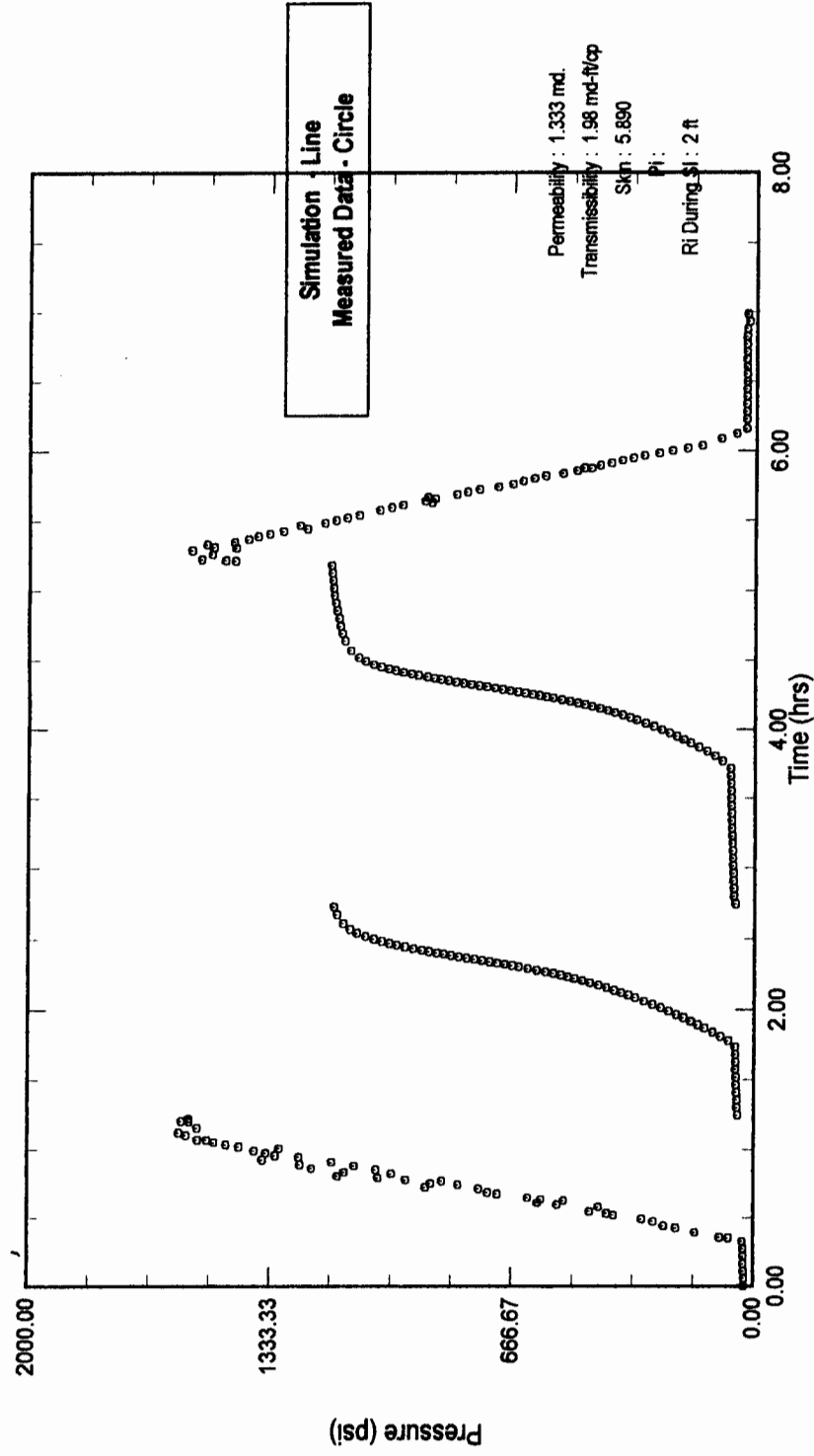
SCOTT "A" #2-5
 KANSAS CITY "G"

Log-Log Match

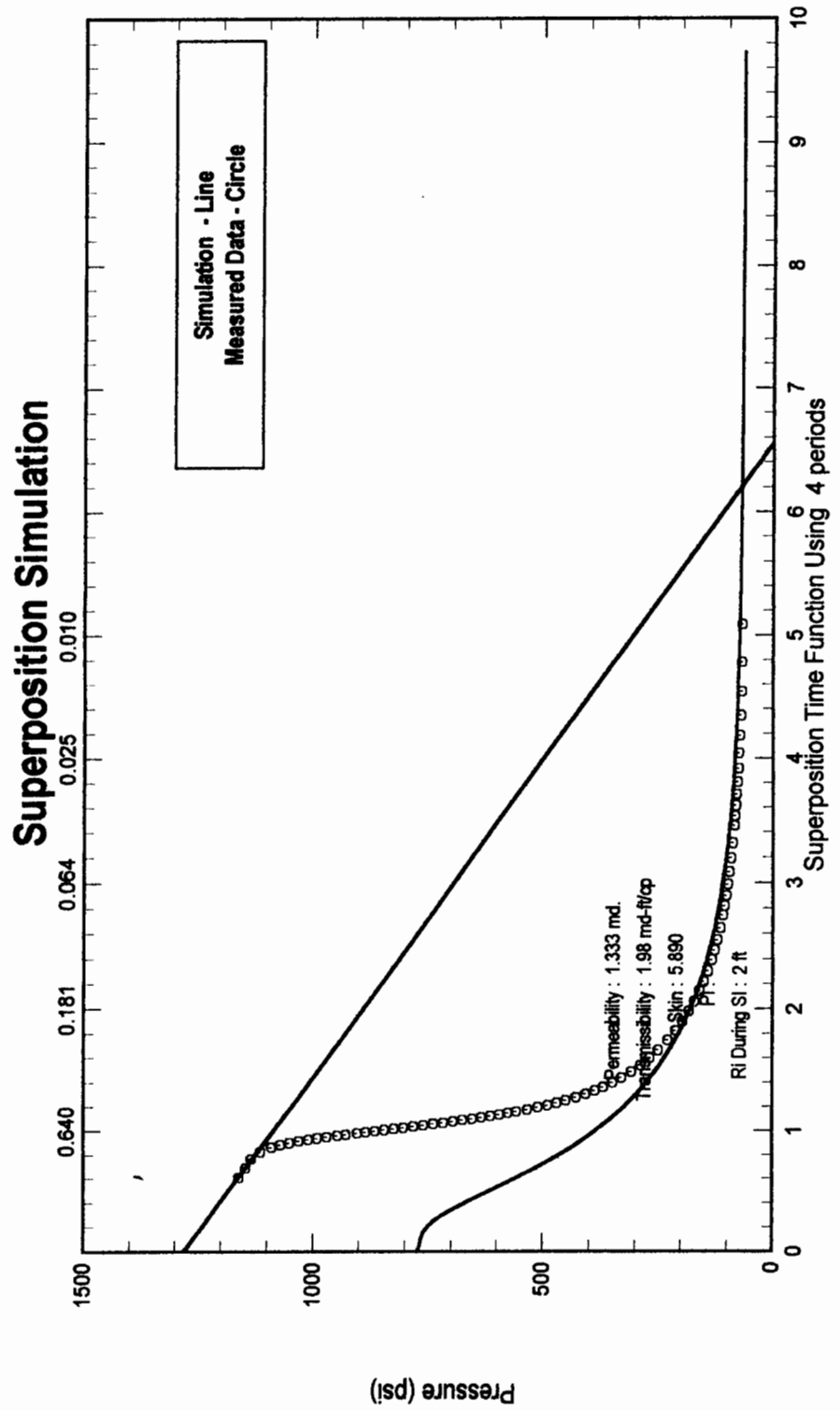


State KANSAS County RICE Field Field	F.G.HOLL COMPANY L.L.C. SCOTT "A" #2-5 KANSAS CITY "G"	Test Date 23-Jun-01 Analysis Date 24-Jun-01 Report Number 11843
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Pressure History Simulation

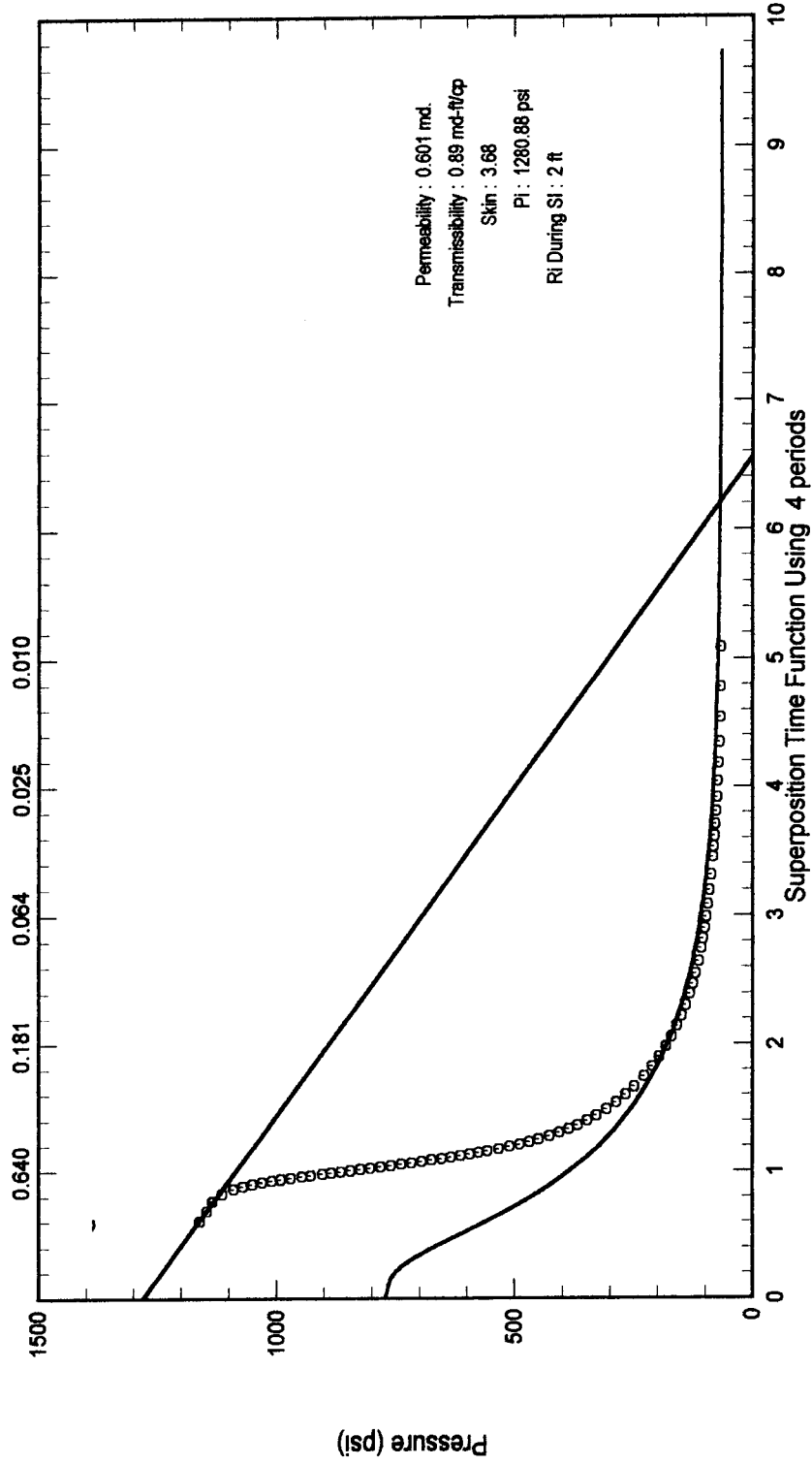


State KANSAS County RICE Field Field	F.G.HOLL COMPANY L.L.C. SCOTT "A" #2-5 KANSAS CITY "G"	Test Date 23-Jun-01 Analysis Date 24-Jun-01 Report Number 11843
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State KANSAS	F.G.HOLL COMPANY L.L.C. SCOTT "A" #2-5 KANSAS CITY "G"	Test Date 23-Jun-01
County RICE		Analysis Date 24-Jun-01
Field Field		Report Number 11843

Superposition Analysis



State KANSAS County RICE Field Field	F.G.HOLL COMPANY L.L.C. SCOTT "A" #2-5 KANSAS CITY "G"	Test Date 23-Jun-01 Analysis Date 24-Jun-01 Report Number 11843
Input Data		
Porosity (%) [phi]: 18.0% Viscosity (cp) [u]: 3.368 FVF (Rb/Scf) [B]: 1.073 Total Compressibility (1/psi) [ct]: 5.827E-04	Open Hole Radius (ft) [rw]: 3.208 Net Zone Thickness (ft) [h]: 5 Rate During Period (mscfd) [qn]: 0 ABS/Rate Prior to Period (mscfd) [qn-1]: 3	Gauge Depth (ft): 3129 Top of Perforations: 3124 Bottom of Perforations: 3132 BHT (F): 102
Log - Log Analysis		
Permeability		
$kh = 141.2 (\Delta q) (u) (B) (Pd/dp)$ $kh = 141.2 * (2.5) * (3.368) * (1.073) * (5.22E-3)$ $kh = 6.663 \text{ md-ft}$ $k = 1.333 \text{ md-ft}$		
Wellbore Storage Coefficient		
$C(1) = 0.000295 (kh) / (u * [TD/CD]/dt)$ $C(1) = 0.000295 * (6.66) / (3.368 * 5.838)$ $C(1) = 0.000$ $CD = 0.8936 C(1) / (\phi h * ct * h * rw^2)$ $CD = 0.8936 * 1.0E-4 / (0.18000 * 5.83E-4 * 5 * 3.208^2)$ $CD = 0$		
Skin		
$S = 1/2 \ln (CDe2s \text{ match} / CD)$ $S = 1/2 \ln (2.16E+03 / (0.02))$ $S = 5.9$		
Radius of Investigation		
$r_i = ((k * S) \text{ time}) / (960 \phi h u ct)^{.5}$ $r_i = ((1.33 * 1.49) / (960 * 0.180 * 3.37 * 5.83E-4))^{.5}$ $r_i = 2 \text{ ft}$		

State KANSAS		F.G.HOLL COMPANY L.L.C.		Test Date 23-Jun-01
County RICE		SCOTT "A" #2-5		Analysis Date 24-Jun-01
Field Field		KANSAS CITY "G"		Report Number 11843

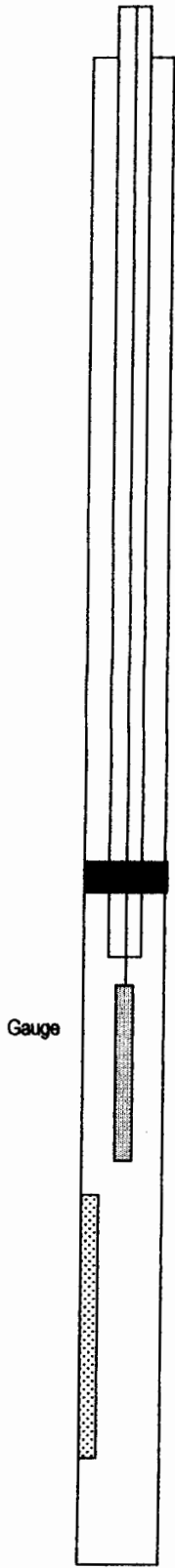
Input Data				
Porosity (%) [phi]: 18.0%	Open Hole Radius (ft) [rw]: 3.208	Gauge Depth (ft): 3129		
Viscosity (cp) [u]: 3.368	Net Zone Thickness (ft) [h]: 5	Top of Perforations: 3124		
FVF (Rb/Scf) [B]: 1.073	Rate During Period (mscf) [qn]: 0	Bottom of Perforations: 3132		
Total Compressibility (1/psi) [ct]: 5.827E-04	ABS(Rate Prior to Period (mscf)) [qn-1]: 3	BHT (F): 102		

Superposition Analysis	
Permeability	
$kh = 162.6 (u) (B) / m'$ $kh = 162.6 * (3.368 * (1.073)) / (1.95E+02)$ $kh = 3.01 \text{ md-ft}$ $k = 0.60 \text{ md}$	
Skin	
$S = 1.1513 ((P1hr - Pwf) / (m' \Delta q) - \log(k / (\phi u c t r w^2)) + 3.227)$ $S = 1.1513 ((1070.4 / (1.95E+02 * 2.5) - \log(0.601 / (0.180 * 3.368 * 5.83E-04 * 3.208^2)) + 3.227)$ $S = 3.68$	
Radial Flow Line Parameters (Superposition Plot)	
Start Radial Flow Line (hrs): 0.834	RSqr: 0.978
End Radial Flow Line (hrs): 1.344	Number of Points: 23
Start Radial Flow Line (SF): 0.837	P* (psi): 1280.88
End Radial Flow Line (SF): 0.589	

Test Data
F.G.HOLL COMPANY L.L.C.
SCOTT "A" #2-5 - KANSAS CITY "G"

State KANSAS
 County RICE
 Field Field

Test Date June 23, 2001
 Interpretation Date June 24, 2001
 Report Number 11843



Net Zone Height (ft) 5
 Formation Volume Factor (rbt/mscf) 1.0730
 Viscosity (cp) 3.3683
 Total Compressibility (1/psi) 5.8270E-04
 Oil Gravity (API) 35.00
 GOR (Scf/Stbl) 160.00
 Saturations (Gas, Oil, Water) frac 0.000 / 0.400 / 0.600
 Gas Specific Gravity (dim) 0.65
 Bottomhole Temperature (F) 102
 Porosity (Frac) 0.18
 Open Hole Diameter (ft) 3.21

	1	2	3	
Tubing Outside Diameter	4 1/2 X.H.	4 1/2 X.H.		
Tubing Inside Diameter	3.800	2.250		
Tubing Length	2849	249		
Tubing Volume (bbls)	39.96	1.22		41.19

Packer Depth	3124			
Top of Perforations	3124			
Gauge Depth	3129	5 ft		
Mid of Perforations	3128		4 ft	
Bottom of Perforations	3132			8 ft
PBTD	3136			

Perforation Detail

	Top (ft-md)	Btm (ft-md)	Net (ft)	SPF	Diam (inches)
1					
2					
3					
4					
5					
6					

Superior Testers Enterprises, Inc.

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

(316) 792-6902

Date 6-24-2001 Location N¹/₂ E 1/4 Sec 5-21-10^N Elevation 1771 K.B. County Rice
Elevation 17626L

Company F.G. Hull Company L.L.C. Number of Copies 5

Charts Mailed to 6427 East Kellogg P.O. Box 780167 Wichita Kansas 67278-0167

Drilling Contractor Sterling Drilling Rig #4

Length Drill Pipe 3053 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 249 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X H.

Top Packer Depth 3225 Bottom Packer Depth 3230 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 3225 TO 3230 ANCHOR LENGTH 70 TOTAL DEPTH 3300 Hole Size 7 7/8"

LEASE & WELL NO. Scott #1 2-5 FORMATION TESTED Kansas City TEST NO. 6

Mud Weight 9.4 Viscosity 45 Water Loss 8.0 Chlorides - Pits 8000 D.S.T. _____

Maximum Temp. 102 °F Initial Hydrostatic Pressure (A) 1619 P.S.I. Final Hydrostatic Pressure (H) 1599 P.S.I.

Tool Open I.F.P. from 5:05 P.m. to 5:20 P.m. 15 min

Tool Closed I.C.I.P. from 5:20 P.m. to 5:50 P.m. 30 min

Tool Open F.F.P. from 5:50 P.m. to 6:05 P.m. 15 min

Tool Closed F.C.I.P. from 6:05 P.m. to 6:25 P.m. 20 min

Initial Blow Very weak surface blow for 7 minutes & died

Final Blow no blow

Total Feet Recovered 5 Gravity of Oil _____ Corrected _____

5 Feet of Oil Spaced 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 _____

Remarks _____

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

Top Recorder No. 78225 Clock No. 5567 Depth 3293 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 5863 Clock No. 47441 Depth 3297 Insurance NONE

Price of Job _____

Tool Operator Gene Budig

Approved By _____

11844

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.

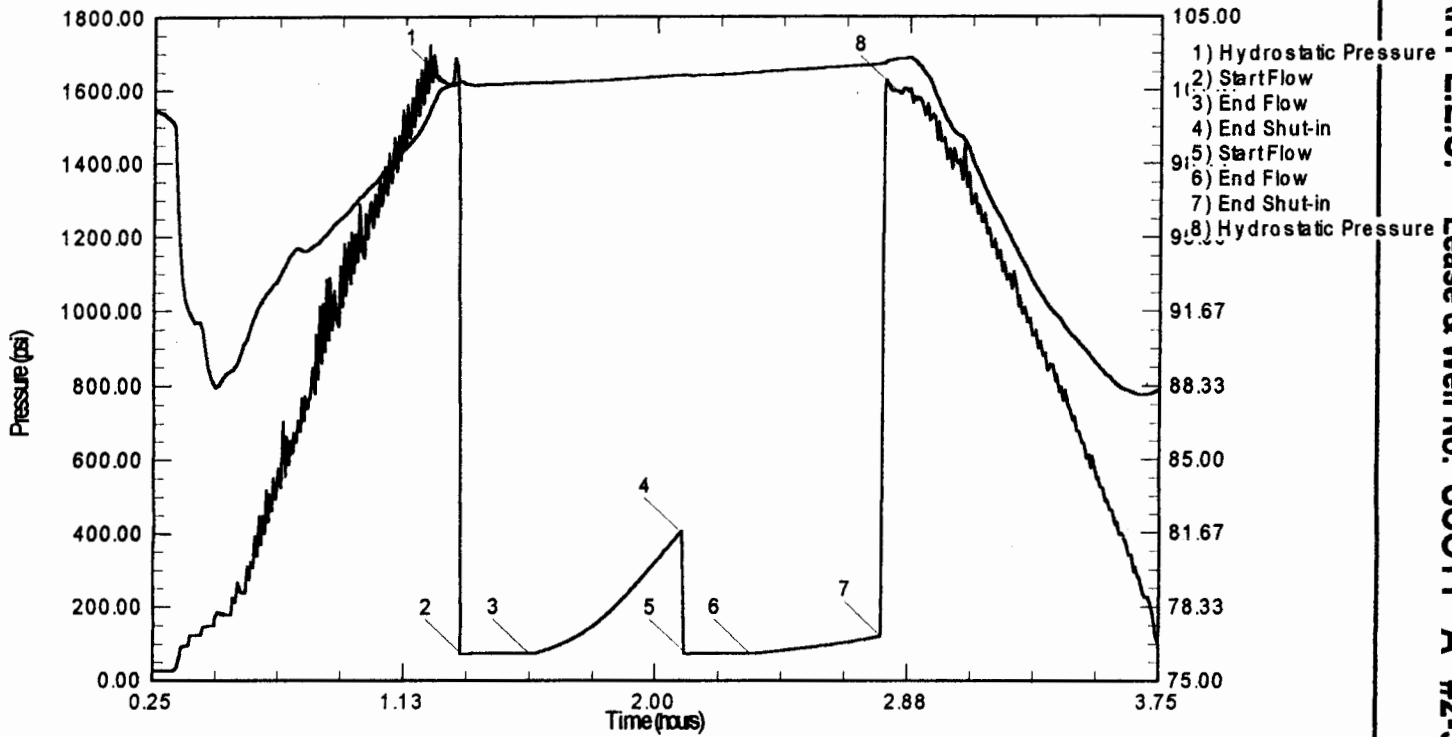
Great Bend, Kansas

CHART DATA

(316) 792-6902

State KANSAS
County RICE
Field

Test Date June 24, 2001
Sec Town Range 5-21S-10W
Report Number 11844



Field Reading

(1)	Initial Hydrostatic Pressure	1619
(2)	Initial Flow Pressure	72
(3)	Final Initial Flow Pressure	73
(4)	Initial Shut-In Pressure	403
(5)	Initial Final Flow Pressure	73
(6)	Final Flow Pressure	73
(7)	Final Shut-In Pressure	122
(8)	Final Hydrostatic Pressure	1599

ELECTRONIC RECORDER DEPTH 3293 FT, RECORDER NUMBER 78225

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	SCOTT "A" #2-5
TEST DATE	6/24/01	FORMATION TESTED	KANSAS CITY
SECTION-TOWN-RANGE	5-21S-10W	DRILL STEM TEST NUMBER	6
STATE	KANSAS	REPORT NUMBER	11844
COUNTY	RICE	ELEVATION KELLY BUSHINGS	1771
ELEVATION GROUND LEVEL	1762	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	KENT ROBERTS		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	3230	TOP PACKER DEPTH	3225
TEST INTERVAL (to)	3300	BOTTOM PACKER DEPTH	3230
ANCHOR LENGTH	70	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	3300	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

TOOL OPEN (from)	5:05
TOOL OPEN (to)	5:20
DURATION (min.)	15

INITIAL SHUT-IN

TOOL CLOSED (from)	5:20
TOOL CLOSED (to)	5:50
DURATION (min.)	30

FINAL OPEN

TOOL OPEN (from)	5:50
TOOL OPEN (to)	6:05
DURATION (min.)	15

FINAL SHUT-IN

TOOL CLOSED (from)	6:05
TOOL CLOSED (to)	6:35
DURATION (min.)	30

PRESSURE READINGS

INITIAL HYDROSTATIC	1619
INITIAL FLOW	72
FINAL INITIAL FLOW	73
INITIAL SHUT-IN	403
INITIAL FINAL FLOW	73
FINAL FLOW	73
FINAL SHUT-IN	122
FINAL HYDROSTATIC	1599
MAXIMUM TEMPERATURE	
TOP RECORDER DEPTH	3293
RECORDER NUMBER	78225
BOTTOM RECORDER DEPTH	3297
RECORDER NUMBER	13189

INITIAL BLOW

VERY WEAK SURFACE BLOW FOR 7 MINUTES AND DIED

FINAL BLOW

NO BLOW

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 **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH **3053**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH **249**

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 **9.2**

VISCOSITY **45**

WATER LOSS **8**

CHLORIDES-PITS **8000**

CHLORIDES-DST

FEET OF RECOVERY		RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1)	5	OIL SPECKED MUD				
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) 792-6902

Date 6-25-2001 Location 3/2-9/2-5/4 5-21-10" Elevation 1771Kb, 1762GL County Rice

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

Charts Mailed to 6427 East Kellogg P.O. Box 780167 Wichita Kansas 67278

Drilling Contractor Steeling Drilling Rig #4

Length Drill Pipe 3025 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 249 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X.H.

Top Packer Depth 3279 Bottom Packer Depth 3304 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 3304 TO 3338 ANCHOR LENGTH 34 TOTAL DEPTH 3338 Hole Size 7 7/8"

LEASE & WELL NO. SCOTT #2-5 FORMATION TESTED Viola TEST NO. 7

Mud Weight 9.4 Viscosity 45 Water Loss 8.9 Chlorides - Pits 8000 D.S.T. _____

Maximum Temp. 102 °F Initial Hydrostatic Pressure (A) 1662 P.S.I. Final Hydrostatic Pressure (H) 1541 P.S.I.

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

Tool Closed I.C.I.P. from 4:45 AM to 5:15 AM 30 min

Tool Open F.F.P. from 5:15 AM to 5:30 AM 15 min

Tool Closed F.C.I.P. from 5:30 AM to 6:00 AM 30 min

Initial Blow VERY WEAK SURFACE BLOW FOR 8 MINUTES & DIED

Final Blow NO BLOW

Total Feet Recovered 5 Gravity of Oil _____ Corrected _____

5 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 _____

Remarks _____

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

Top Recorder No. 28825 Clock No. ELECTRONIC Depth 3331 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 5463 Clock No. 47441 Depth 3335 Insurance NONE

Price of Job _____

Tool Operator Steve Budig

Approved By _____

117 11845

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.

SUPERIOR TESTERS ENTERPRISES INC.

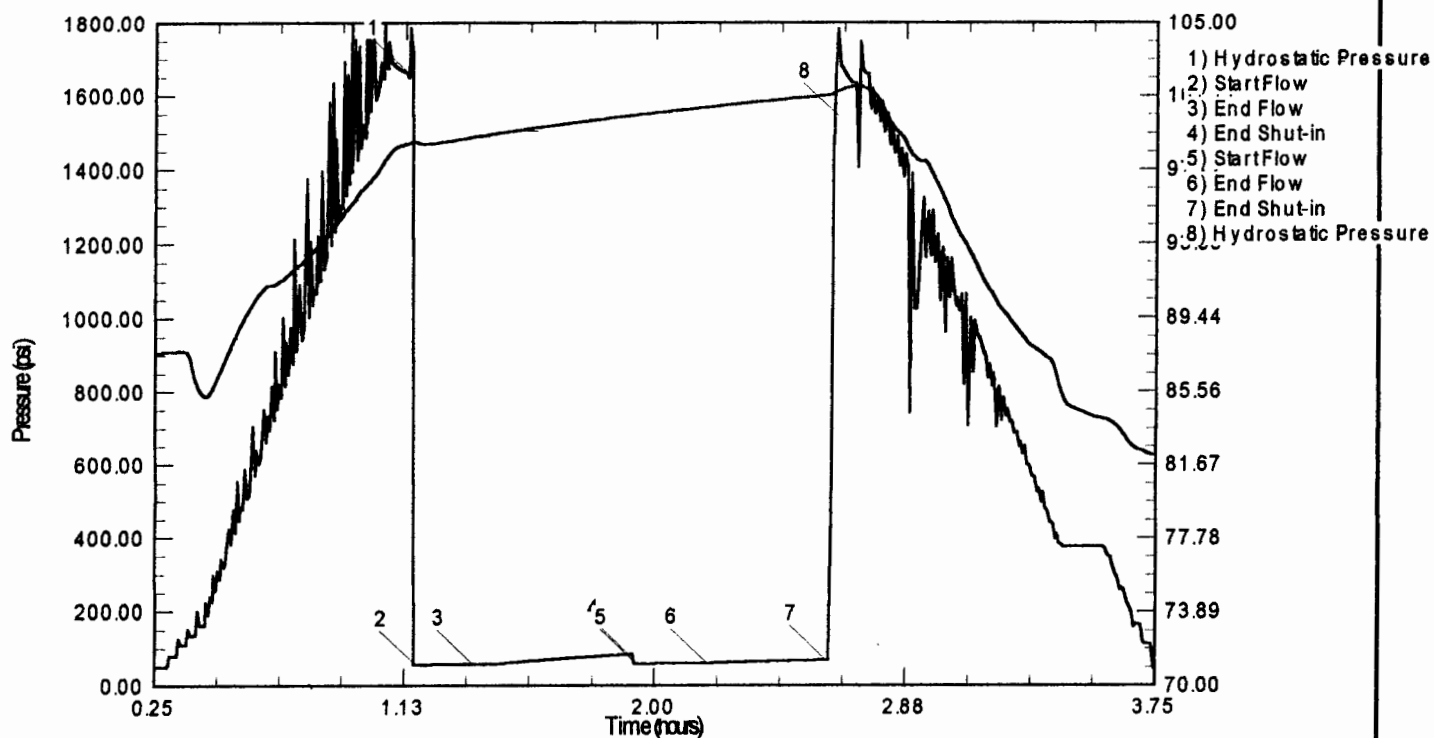
Great Bend, Kansas

CHART DATA

(316) 792-6902

State KANSAS
County RICE
Field

Test Date June 25, 2001
Sec Town Range 5-21S-10W
Report Number 11845



Field Reading

(1)	Initial Hydrostatic Pressure	1662
(2)	Initial Flow Pressure	55
(3)	Final Initial Flow Pressure	57
(4)	Initial Shut-In Pressure	84
(5)	Initial Final Flow Pressure	59
(6)	Final Flow Pressure	60
(7)	Final Shut-In Pressure	69
(8)	Final Hydrostatic Pressure	1541

ELECTRONIC RECORDER DEPTH 3331 FT, RECORDER NUMBER 78225

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	SCOTT "A" #2-5
TEST DATE	6/25/01	FORMATION TESTED	VIOLA
SECTION-TOWN-RANGE	5-21S-10W	DRILL STEM TEST NUMBER	7
STATE	KANSAS	REPORT NUMBER	11845
COUNTY	RICE	ELEVATION KELLY BUSHINGS	1771
ELEVATION GROUND LEVEL	1762	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	KENT ROBERTS		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	3304	TOP PACKER DEPTH	3299
TEST INTERVAL (to)	3338	BOTTOM PACKER DEPTH	3304
ANCHOR LENGTH	34	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	3338	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

TOOL OPEN (from)	4:30
TOOL OPEN (to)	4:45
DURATION (min.)	15

INITIAL SHUT-IN

TOOL CLOSED (from)	4:45
TOOL CLOSED (to)	5:15
DURATION (min.)	30

FINAL OPEN

TOOL OPEN (from)	5:15
TOOL OPEN (to)	5:30
DURATION (min.)	15

FINAL SHUT-IN

TOOL CLOSED (from)	5:30
TOOL CLOSED (to)	6:00
DURATION (min.)	30

PRESSURE READINGS

INITIAL HYDROSTATIC	1662
INITIAL FLOW	55
FINAL INITIAL FLOW	57
INITIAL SHUT-IN	84
INITIAL FINAL FLOW	59
FINAL FLOW	60
FINAL SHUT-IN	69
FINAL HYDROSTATIC	1541
MAXIMUM TEMPERATURE	102
TOP RECORDER DEPTH	3331
RECORDER NUMBER	78225
BOTTOM RECORDER DEPTH	3335
RECORDER NUMBER	13189

INITIAL BLOW

VERY WEAK SURFACE BLOW FOR 8 MINUTES AND DIED

FINAL BLOW

NO BLOW

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 **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH **3025**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH **249**

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 **9.2**

VISCOSITY **45**

WATER LOSS **8**

CHLORIDES-PITS **8000**

CHLORIDES-DST

FEET OF RECOVERY		RECOVERY DECIPTION	% GAS	% OIL	% MUD	% WATER
1)	5	DRILLING MUD				
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) 792-6902

Date 6-25-2001 Location S 8-3/4 W 5-21-10 Elevation 1771 K.B. County Rice

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

Charts Mailed to 6427 East Kellogg Road Box 78067 Wichita Kansas 67278-0167

Drilling Contractor STEELING Drilling Rig #4

Length Drill Pipe 3064 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 249 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X H

Top Packer Depth 3336 Bottom Packer Depth 3341 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 3341 TO 3351 ANCHOR LENGTH 10 TOTAL DEPTH 3351 Hole Size 7 7/8"

LEASE & WELL NO. Scott "A" #2-5 FORMATION TESTED Lower Viola TEST NO. 8

Mud Weight 9.2 Viscosity 42 Water Loss 10% Chlorides - Pits 11500 D.S.T.

Maximum Temp. 104 °F Initial Hydrostatic Pressure (A) 1623 P.S.I. Final Hydrostatic Pressure (H) 1626 P.S.I.

Tool Open I.F.P. from 6:30 p.m. to 6:45 p.m. 15 min

Tool Closed I.C.I.P. from 6:45 p.m. to 7:25 p.m. 40 min

Tool Open F.F.P. from 7:25 p.m. to 7:40 p.m. 15 min

Tool Closed F.C.I.P. from 7:40 p.m. to 8:00 p.m. 30 min

Initial Blow VERY WEAK surface blow for 8 minutes & DIED

Final Blow no blow

Total Feet Recovered 60 Gravity of Oil _____ Corrected

60 Feet of Drilling mud no shows % 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 AFTER the flush packers leaked then held

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

Top Recorder No. 78225 Clock No. ELECTRONIC Depth 3344 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 5463 Clock No. 47441 Depth 3348 Insurance NONE

Price of Job _____

Tool Operator Steve Budig

Approved By _____

ME 11846

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.

Company: F.G.HOLL COMPANY L.L.C. Lease & Well No. SCOTT "A" #2-5 Test #: 8 Date: 6-25-2001 SEC. 5 TWP. 21S
RGE. 10W

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

(316) 792-6902

State KANSAS

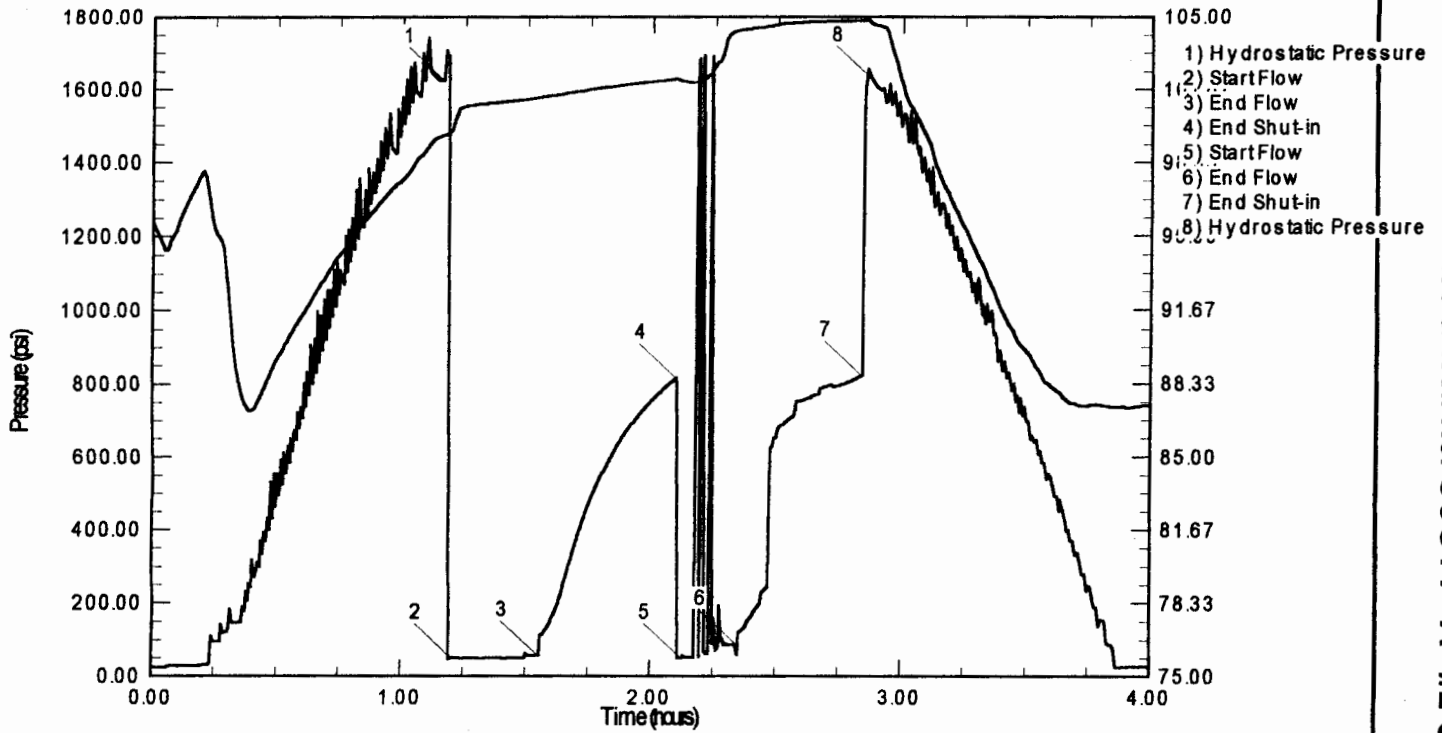
Test Date June 25, 2001

County RICE

Sec Town Range 5-21S-10W

Field

Report Number 11846



Field Reading

(1)	Initial Hydrostatic Pressure	1623
(2)	Initial Flow Pressure	51
(3)	Final Initial Flow Pressure	49
(4)	Initial Shut-In Pressure	815
(5)	Initial Final Flow Pressure	51
(6)	Final Flow Pressure	88
(7)	Final Shut-In Pressure	822
(8)	Final Hydrostatic Pressure	1626

ELECTRONIC RECORDER DEPTH 3344 FT, RECORDER NUMBER 78225

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	SCOTT "A" #2-5
TEST DATE	6/25/01	FORMATION TESTED	LOWER VIOLA
SECTION-TOWN-RANGE	5-21S-10W	DRILL STEM TEST NUMBER	8
STATE	KANSAS	REPORT NUMBER	11846
COUNTY	RICE	ELEVATION KELLY BUSHINGS	1771
ELEVATION GROUND LEVEL	1762	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	KENT ROBERTS		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	3341	TOP PACKER DEPTH	3336
TEST INTERVAL (to)	3351	BOTTOM PACKER DEPTH	3341
ANCHOR LENGTH	10	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	3351	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

TOOL OPEN (from) **6:30**
TOOL OPEN (to) **6:45**
DURATION (min.) **15**

INITIAL SHUT-IN

TOOL CLOSED (from) **6:45**
TOOL CLOSED (to) **7:25**
DURATION (min.) **40**

FINAL OPEN

TOOL OPEN (from) **7:25**
TOOL OPEN (to) **7:40**
DURATION (min.) **15**

FINAL SHUT-IN

TOOL CLOSED (from) **7:40**
TOOL CLOSED (to) **8:10**
DURATION (min.) **30**

PRESSURE READINGS

INITIAL HYDROSTATIC **1623**
INITIAL FLOW **51**
FINAL INITIAL FLOW **49**
INITIAL SHUT-IN **815**
INITIAL FINAL FLOW **51**
FINAL FLOW **88**
FINAL SHUT-IN **822**
FINAL HYDROSTATIC **1626**

MAXIMUM TEMPERATURE **104**

TOP RECORDER DEPTH **3344**
RECORDER NUMBER **78225**
BOTTOM RECORDER DEPTH **3348**
RECORDER NUMBER **13189**

INITIAL BLOW

WEAK SURFACE BLOW FOR 8 MINUTES AND DIED

FINAL BLOW

NO BLOW FLUSHED TOOL GOOD SURGE NOHELP

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 **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH **3064**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH **249**

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 **9.2**

VISCOSITY **42**

WATER LOSS **10.2**

CHLORIDES-PITS **11500**

CHLORIDES-DST

FEET OF RECOVERY		RECOVERY DECEIPTION	% GAS	% OIL	% MUD	% WATER
1)	60	DRILLING MUD				
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) 792-6902

Date 6-26-2001 Location 9 1/2 E - 9 N 5 25' 10" Elevation 1771 Kt. County Rice

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

Charts Mailed to 6427 East Kellogg P.O. Box 780167 Wichita, Kansas 67278-0167

Drilling Contractor Steelers Drilling Rig #4

Length Drill Pipe 3064 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 249 I.D. Drill Collars 2.25 Tool Joint Size 4 1/2" X H.

Top Packer Depth 3297 Bottom Packer Depth 3302 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 3302 TO 3382 ANCHOR LENGTH 80 TOTAL DEPTH 3382 Hole Size 7 7/8"

LEASE & WELL NO. South H #2-S FORMATION TESTED Simpson TEST NO. 9

Mud Weight 9.3 Viscosity 55 Water Loss 8.8 Chlorides - Pits 10000 D.S.T. 28000

Maximum Temp. 105 °F Initial Hydrostatic Pressure (A) 1706 P.S.I. Final Hydrostatic Pressure (H) 1615 P.S.I.

Tool Open I.F.P. from 7:40 A.M. to 7:55 A.M. 15 min

Tool Closed I.C.I.P. from 7:55 A.M. to 8:55 A.M. 60 min

Tool Open F.F.P. from 8:55 A.M. to 9:00 A.M. 5 min

Tool Closed F.C.I.P. from 9:00 A.M. to 10:00 A.M. 60 min

Initial Blow Good blow built to the bottom of a 5 Gallon Bucket in 45 SECONDS

Final Blow Good blow built to the bottom of a 5 Gallon Bucket in 45 SECONDS

Total Feet Recovered 1800 Gravity of Oil _____ Corrected

1800 Feet of SLIGHTLY muddy water chlorides 28000 % 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 3375 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 5463 Clock No. 47441 Depth 3379 Insurance NONE

Price of Job _____

Tool Operator Gene Budig

Approved By _____

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11847

SUPERIOR TESTERS ENTERPRISES INC.

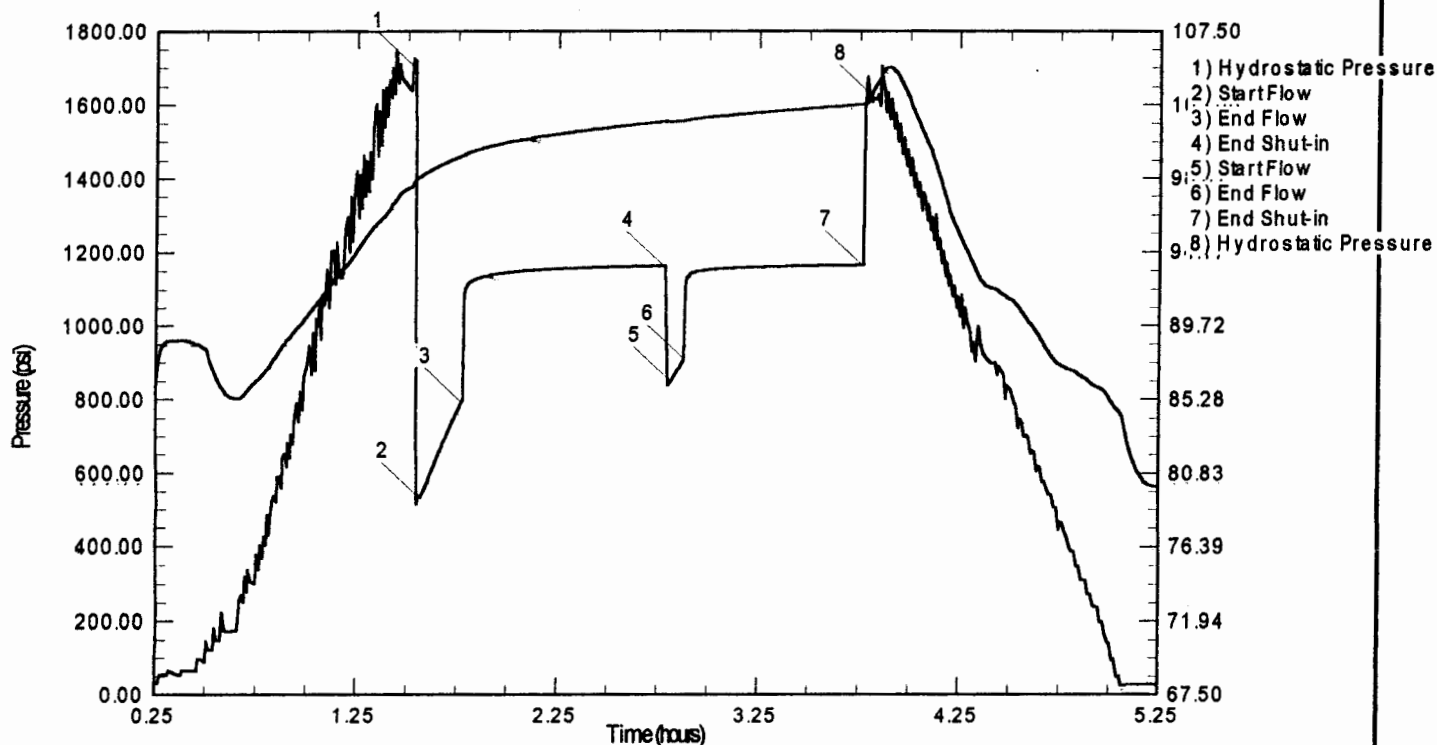
Great Bend, Kansas

CHART DATA

(316) 792-6902

State KANSAS
County RICE
Field

Test Date June 26, 2001
Sec Town Range 5-21S-10W
Report Number 11847



Field Reading

(1)	Initial Hydrostatic Pressure	1706
(2)	Initial Flow Pressure	535
(3)	Final Initial Flow Pressure	791
(4)	Initial Shut-In Pressure	1163
(5)	Initial Final Flow Pressure	849
(6)	Final Flow Pressure	909
(7)	Final Shut-In Pressure	1164
(8)	Final Hydrostatic Pressure	1615

ELECTRONIC RECORDER DEPTH 3375 FT, RECORDER NUMBER 78225

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	SCOTT "A" #2-5
TEST DATE	6/26/01	FORMATION TESTED	SIMPSON
SECTION-TOWN-RANGE	5-21S-10W	DRILL STEM TEST NUMBER	9
STATE	KANSAS	REPORT NUMBER	11847
COUNTY	RICE	ELEVATION KELLY BUSHINGS	1771
ELEVATION GROUND LEVEL	1762	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	KENT ROBERTS		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	3302	TOP PACKER DEPTH	3297
TEST INTERVAL (to)	3382	BOTTOM PACKER DEPTH	3302
ANCHOR LENGTH	80	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	3382	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

<i>INITIAL OPEN</i>	
TOOL OPEN (from)	7:40
TOOL OPEN (to)	7:55
DURATION (min.)	15
<i>INITIAL SHUT-IN</i>	
TOOL CLOSED (from)	7:55
TOOL CLOSED (to)	8:55
DURATION (min.)	60
<i>FINAL OPEN</i>	
TOOL OPEN (from)	8:55
TOOL OPEN (to)	9:00
DURATION (min.)	5
<i>FINAL SHUT-IN</i>	
TOOL CLOSED (from)	9:00
TOOL CLOSED (to)	10:00
DURATION (min.)	60

PRESSURE READINGS

INITIAL HYDROSTATIC	1706
INITIAL FLOW	535
FINAL INITIAL FLOW	791
INITIAL SHUT-IN	1163
INITIAL FINAL FLOW	849
FINAL FLOW	909
FINAL SHUT-IN	1164
FINAL HYDROSTATIC	1615
MAXIMUM TEMPERATURE	105
TOP RECORDER DEPTH	3375
RECORDER NUMBER	78225
BOTTOM RECORDER DEPTH	3379
RECORDER NUMBER	13189

INITIAL BLOW**GOOD BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 45 SECONDS****FINAL BLOW****GOOD BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 45 SECONDS****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 **STERLING DRILLING RIG #4**

DRILL PIPE LENGTH **3064**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH **249**

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 **9.3**

VISCOSITY **55**

WATER LOSS **8.8**

CHLORIDES-PITS **10000**

CHLORIDES-DST **28000**

FEET OF RECOVERY		RECOVERY DECRPTION	% GAS	% OIL	% MUD	% WATER
1)	1800	SLIGHTLY MUDDY WATER CHLORIDES 28000				
2)						
3)						
4)						
5)						
6)						
7)						
8)						
9)						
10)						
11)						
12)						
13)						
14)						
15)						

TOTAL RECOVERY

COMMENTS