

Superior Testers Enterprises, Inc.

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

(316) 792-6902

ORIGINAL

Date 10-29-2002 Location 10 1/2 E 27 N 40 W 13-24-17 Elevation 2111 K.B. County EDWARDSCompany F.C. Itall Company LLC Number of Copies 5Charts Mailed to 9431 East Central P.O. Box 80167 Wichita, Kansas 67228-0167Drilling Contractor Duke Drilling Rig #4Length Drill Pipe 2178 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X 11/16"Length Weight Pipe NONE I.D. Weight Pipe NONE Tool Joint Size NONELength Drill Collars NONE I.D. Drill Collars NONE Tool Joint Size NONETop Packer Depth 2200 Bottom Packer Depth 2205 Number of Packers 2 Packer Size 6 3/4"TESTED FROM 2205 TO 2250 ANCHOR LENGTH 45 TOTAL DEPTH 2250 Hole Size 7 7/8LEASE & WELL NO. MILLER # 6-13 FORMATION TESTED Winfield TEST NO. 1Mud Weight 9.0 Viscosity 43 Water Loss 14 Chlorides - Pits 41000 D.S.T. Maximum Temp. 88 °F Initial Hydrostatic Pressure (A) 1085 P.S.I. Final Hydrostatic Pressure (H) 1082 P.S.I.Tool Open I.F.P. from 3:30 A.M. to 4:00 A.M. 30 minTool Closed I.C.I.P. from 4:00 A.M. to 5:00 A.M. 60 minTool Open F.F.P. from 5:00 A.M. to 6:00 A.M. 60 minTool Closed F.C.I.P. from 6:00 A.M. to 7:30 A.M. 90 minInitial Blow Fair blow built to the bottom of a 5 Gallon Bucket in 2 minutesFinal Blow Strong blow - Bottom in 5 sec - Gas in 1 minute - See for flow RepelTotal Feet Recovered 125 Gravity of Oil Corrected125 Feet of Drilling Mud Gassy % 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 NONETop Recorder No. 78225 Clock No. Electronic Depth 2243 Cir. Sub NONE Sampler NONEBottom Recorder No. 13208 Clock No. 42441 Depth 2247 Insurance NONEPrice of Job Tool Operator Don BudigApproved By

N2 12082

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

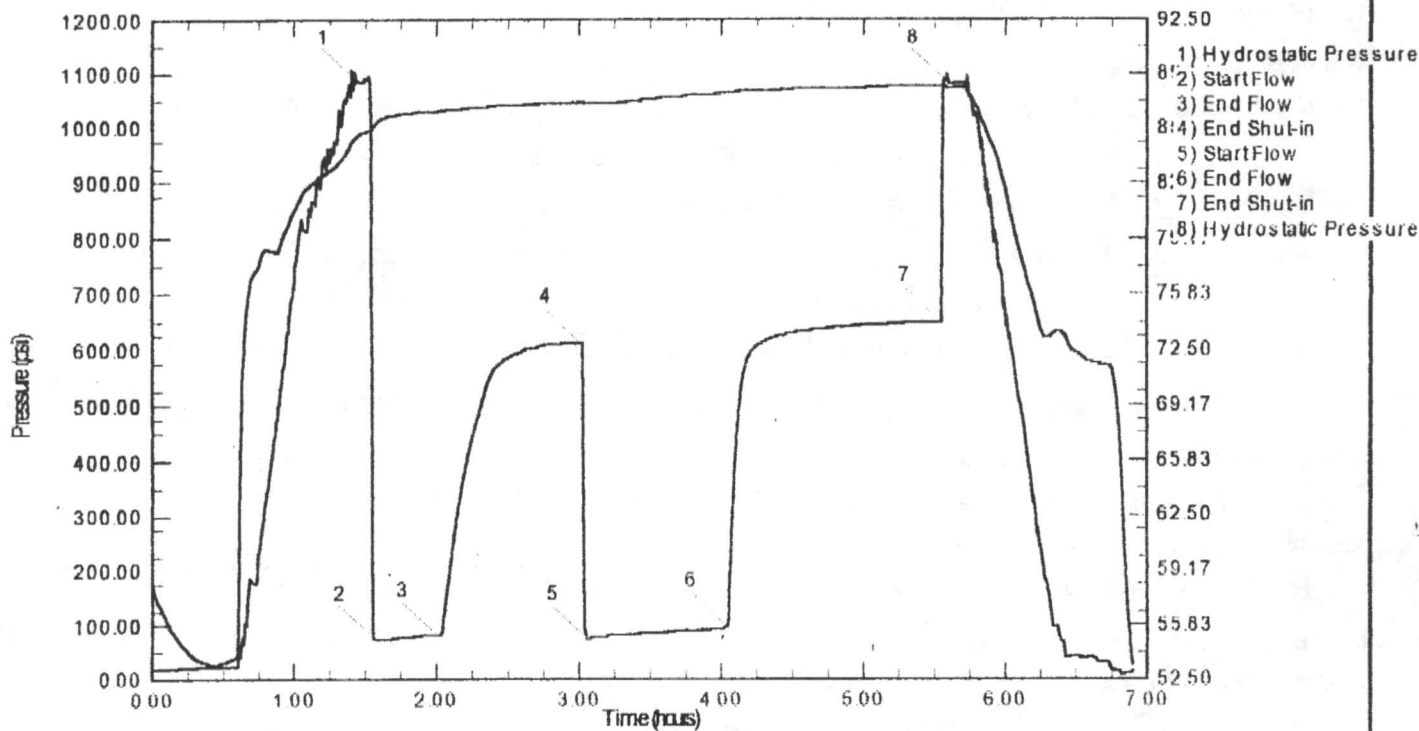
(316) 792-6902

ORIGINAL

State KANSAS
County EDWARDS
Field

Test Date October 29, 2002
Sec Town Range 13-24S-17W
Report Number 12082

Company: F.G.HOLL COMPANY L.L.C. Lease & Well No. MILLER #6-13 Test #: 1 Date: 10-29-2002 SEC. 13 TWP. 24S RGE. 17W



Field Reading

(1)	Initial Hydrostatic Pressure	1085
(2)	Initial Flow Pressure	75
(3)	Final Initial Flow Pressure	81
(4)	Initial Shut-In Pressure	612
(5)	Initial Final Flow Pressure	73
(6)	Final Flow Pressure	98
(7)	Final Shut-In Pressure	649
(8)	Final Hydrostatic Pressure	1082

ELECTRONIC RECORDER DEPTH 2243 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	MILLER#6-13
TEST DATE	10/29/02	FORMATION TESTED	WINFIELD
SECTION-TOWN-RANGE	13-24S-17W	DRILL STEM TEST NUMBER	1
STATE	KANSAS	REPORT NUMBER	12082
COUNTY	EDWARDS	ELEVATION KELLY BUSHINGS	2111
ELEVATION GROUND LEVEL	2102	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	BILL REE		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	2205	TOP PACKER DEPTH	2200
TEST INTERVAL (to)	2250	BOTTOM PACKER DEPTH	2205
ANCHOR LENGTH	46	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	2250	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

TOOL OPEN (from)	3:30
TOOL OPEN (to)	4:00
DURATION (min.)	30

INITIAL SHUT-IN

TOOL CLOSED (from)	4:00
TOOL CLOSED (to)	5:00
DURATION (min.)	60

FINAL OPEN

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

FINAL SHUT-IN

TOOL CLOSED (from)	6:00
TOOL CLOSED (to)	7:30
DURATION (min.)	90

PRESSURE READINGS

INITIAL HYDROSTATIC	1085
INITIAL FLOW	75
FINAL INITIAL FLOW	81
INITIAL SHUT-IN	612
INITIAL FINAL FLOW	73
FINAL FLOW	98
FINAL SHUT-IN	649
FINAL HYDROSTATIC	1082
MAXIMUM TEMPERATURE	88
TOP RECORDER DEPTH	2243
RECORDER NUMBER	78225
BOTTOM RECORDER DEPTH	2247
RECORDER NUMBER	13208

INITIAL BLOW

FAIR BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 2 MINUTES

FINAL BLOW

STRONG BLOW-BOTTOM OF THE BUCKET IN 5 SECONDS WITH GAS TO SURFACE IN 1 MINUTE-SEE GAS FLOW REPORT

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 **DUKE DRILLING RIG #4**

DRILL PIPE LENGTH **2178**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH

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**

VISCOSITY **43**

WATER LOSS **14**

CHLORIDES-PITS **41000**

CHLORIDES-DST

FEET OF RECOVERY		RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1)	125	GASSY DRILLING MUD				
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 #####

COUNTY..... EDWARDS

Sec Town Range 13-24S-17W

FIELD.....

Report Number 12082

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)

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	5:10	10	18			1/2	26.800
5:00 WITH	5:20	20	20			1/2	28.000
GAS TO SURFACE	5:30	30	24			1/2	30.700
IN 1 MINUTE	5:40	40	28			1/2	33.200
AT 5:01	5:50	50	34			1/2	36.500
	6:00	60	38			1/2	38.600
GAS SAMPLE WAS TAKEN							

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

SUPERPOSITION ANALYSIS

(316) 792-6902

2ND SHUT-IN

State KANSAS

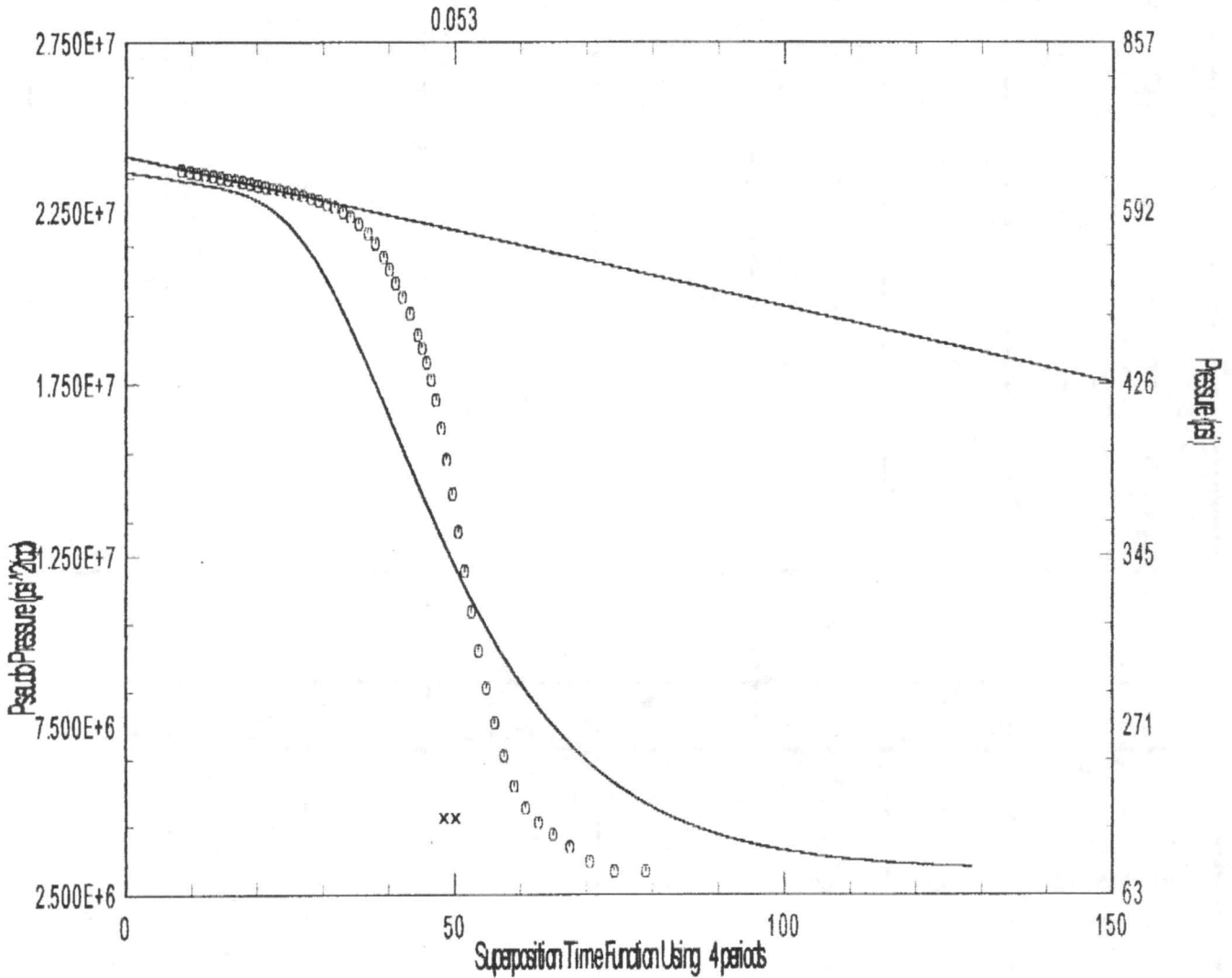
Test Date 10/29/02

County EDWARDS

Sec Town Range 13-24S-17W

Field

Report Number 12082



MODEL RESULTS

Constant Storage
C1 : 0.006 bbl/psi

Skin Model
Skin : 15.00

Homogeneous
k : 3.344 md
Est PI : 647.2 psi

No Boundaries

h : 10 ft
mu : 0.006 cp
phi : 20.0%
ct : 2.612E-06 1/psi
rw : 0.333 ft
BHT : 88 F
FVF : 32.55

Field :
County or Parish :
State :

Date Printed: 10/31/02 18:51:28
Analysis Period : 2nd
Comment : Line #

Superposition Slope -> m' -44025.310000
Horner Slope -> m -1.708182E+6
Intercept 2.415E+7
P(dt=1 hr) 2.365E+7
Pwf 3.211E+6
R Sqr 0.9914

Intercept (psi) 670.375
k (md) 2.03764
kh (md-ft) 20.37637
k/u (md/cp) 323.43445
kh/uB (md-ft/cp) 3234.34452
Skin 6.2657
DP Skin 248.2727
Total DP 573.5125
Percent DP 43.29%

Radius Invest (ft) 985
Radius Time (hrs) 1.50

Delta Q = 39
h (ft)= 10
mu (cp) = 0.0063
B (stb/scf) = 32.5500

First Point # 58
Second Point # 295
Start Real Time 0.177
End Real Time 1.329
Start SF Time 31.518

Superior Testers Enterprises, Inc. ORIGINAL

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

(316) 792-6902

Date 10-29-2002 Location N 1/2 - 27/4 - 13-24-17W Elevation 2111 K.B. County Edwards

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

Charts Mailed to 9431 East Central P.O. Box 750167 Wichita, Kansas 67275-0167

Drilling Contractor Date Drilling Rig # 4

Length Drill Pipe 2366 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 NONE I.D. Drill Collars NONE Tool Joint Size NONE

Top Packer Depth 2288 Bottom Packer Depth 2273 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 2273 TO 2311 ANCHOR LENGTH 18 TOTAL DEPTH 2311 Hole Size 7 7/8"

LEASE & WELL NO. Miller #6-13 FORMATION TESTED Townsend TEST NO. 2

Mud Weight 8.9 Viscosity 41 Water Loss 8.9 Chlorides - Pits 30000 D.S.T.

Maximum Temp. 88 °F Initial Hydrostatic Pressure (A) 1124 P.S.I. Final Hydrostatic Pressure (H) 1111 P.S.I.

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

Tool Closed I.C.I.P. from 6:50 p.m. to 7:30 p.m. 40 min

Tool Open F.F.P. from 7:30 p.m. to 8:30 p.m. 60 min

Tool Closed F.C.I.P. from 8:30 p.m. to 9:00 p.m. 30 min

Initial Blow Weak building blow built to the bottom of a 5 Galbu bucket in 20 min

Final Blow Strong blow - Decreased to weak blow - Gas in 32 min.

Total Feet Recovered 230 Gravity of Oil _____ Corrector

30 Feet of Gassy 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 yes Safety Joint yes Extra Packer none Straddle none Hook Wall none

Top Recorder No. 78225 Clock No. Electronic Depth 2304 Cir. Sub none Sampler none

Bottom Recorder No. 13208 Clock No. 47441 Depth 2308 Insurance none

Price of Job _____

Tool Operator Gene Rudy

Approved By _____

NO 12083

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SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

CHART DATA

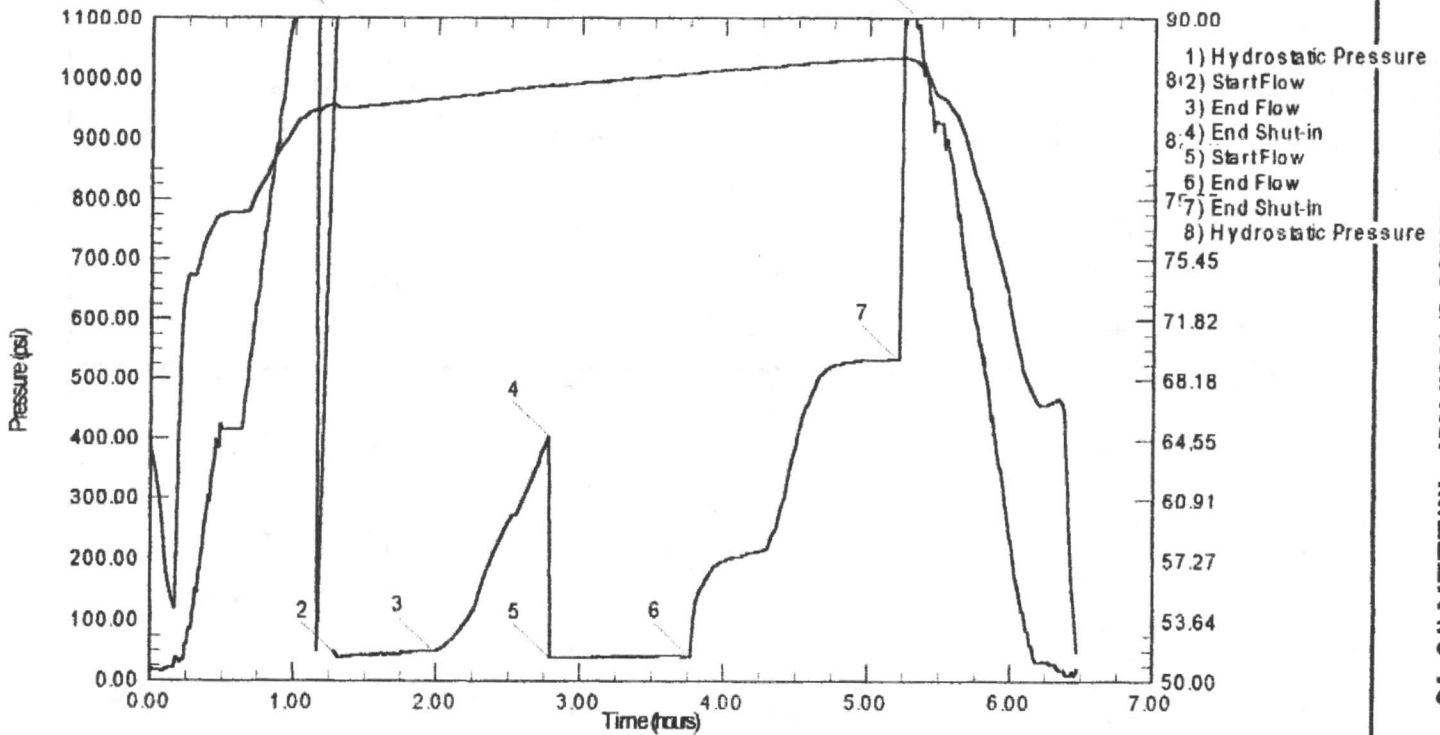
(316) 792-6902

ORIGINAL

State KANSAS
County EDWARDS
Field

Test Date October 29, 2002
Sec Town Range 13-24S-17W
Report Number 12083

Company: F.G.HOLL COMPANY L.L.C. Lease & Well No. MILLER #6-13 Test #: 2 Date: 10-29-2002 SEC. 13 TWP. 24S
RGE. 17W



Field Reading

(1)	Initial Hydrostatic Pressure	1124
(2)	Initial Flow Pressure	39
(3)	Final Initial Flow Pressure	49
(4)	Initial Shut-In Pressure	406
(5)	Initial Final Flow Pressure	38
(6)	Final Flow Pressure	39
(7)	Final Shut-In Pressure	534
(8)	Final Hydrostatic Pressure	1111

ELECTRONIC RECORDER DEPTH 2304 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	MILLER #6-13
TEST DATE	10/29/02	FORMATION TESTED	TOWANDA
SECTION-TOWN-RANGE	13-24S-17W	DRILL STEM TEST NUMBER	2
STATE	KANSAS	REPORT NUMBER	12083
COUNTY	EDWARDS	ELEVATION KELLY BUSHINGS	2111
ELEVATION GROUND LEVEL	2102	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	BILL REE		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	2293	TOP PACKER DEPTH	2288
TEST INTERVAL (to)	2311	BOTTOM PACKER DEPTH	2293
ANCHOR LENGTH	18	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	2311	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN

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

INITIAL SHUT-IN

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

FINAL OPEN

TOOL OPEN (from)	7:30
TOOL OPEN (to)	8:30
DURATION (min.)	60

FINAL SHUT-IN

TOOL CLOSED (from)	8:30
TOOL CLOSED (to)	10:00
DURATION (min.)	90

PRESSURE READINGS

INITIAL HYDROSTATIC	1124
INITIAL FLOW	39
FINAL INITIAL FLOW	49
INITIAL SHUT-IN	406
INITIAL FINAL FLOW	38
FINAL FLOW	39
FINAL SHUT-IN	534
FINAL HYDROSTATIC	1111
MAXIMUM TEMPERATURE	88
TOP RECORDER DEPTH	2304
RECORDER NUMBER	78225
BOTTOM RECORDER DEPTH	2308
RECORDER NUMBER	13208

INITIAL BLOW

WEAK BUILDING BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 20 MINUTES

FINAL BLOW

STRONG BLOW BOTTOM OF A 5 GALLON BUCKET IN 5 SECONDS AND DECREASED TO A WEAK BUILDING BLOW WITH GAS TO SURFACE IN 37 MINUTES

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 **DUKE DRILLING RIG #4**

DRILL PIPE LENGTH **2366**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH

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 **41**

WATER LOSS **8**

CHLORIDES-PITS **30000**

CHLORIDES-DST

FEET OF RECOVERY		RECOVERY DECRPTION	% GAS	% OIL	% MUD	% WATER
1)	30	GASSY DRILLING MUD				
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 #####

COUNTY..... EDWARDS

Sec Town Range 13-24S-17W

FIELD.....

Report Number 12083

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)

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	8:10	40	6			1/8	1.290
AT 7:30 WITH	8:15	45	8			1/8	1.500
GAS TO	8:20	50	11			1/8	1.750
SURFACE IN	8:30	60	14			1/8	1.980
37 MINUTES							
AT 8:07							
THERE WAS NO GAS SAMPLE TAKEN NOT ENOUGH PRESSURE							

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

SUPERPOSITION ANALYSIS

(316) 792-6902

2ND SHUT-IN

State KANSAS

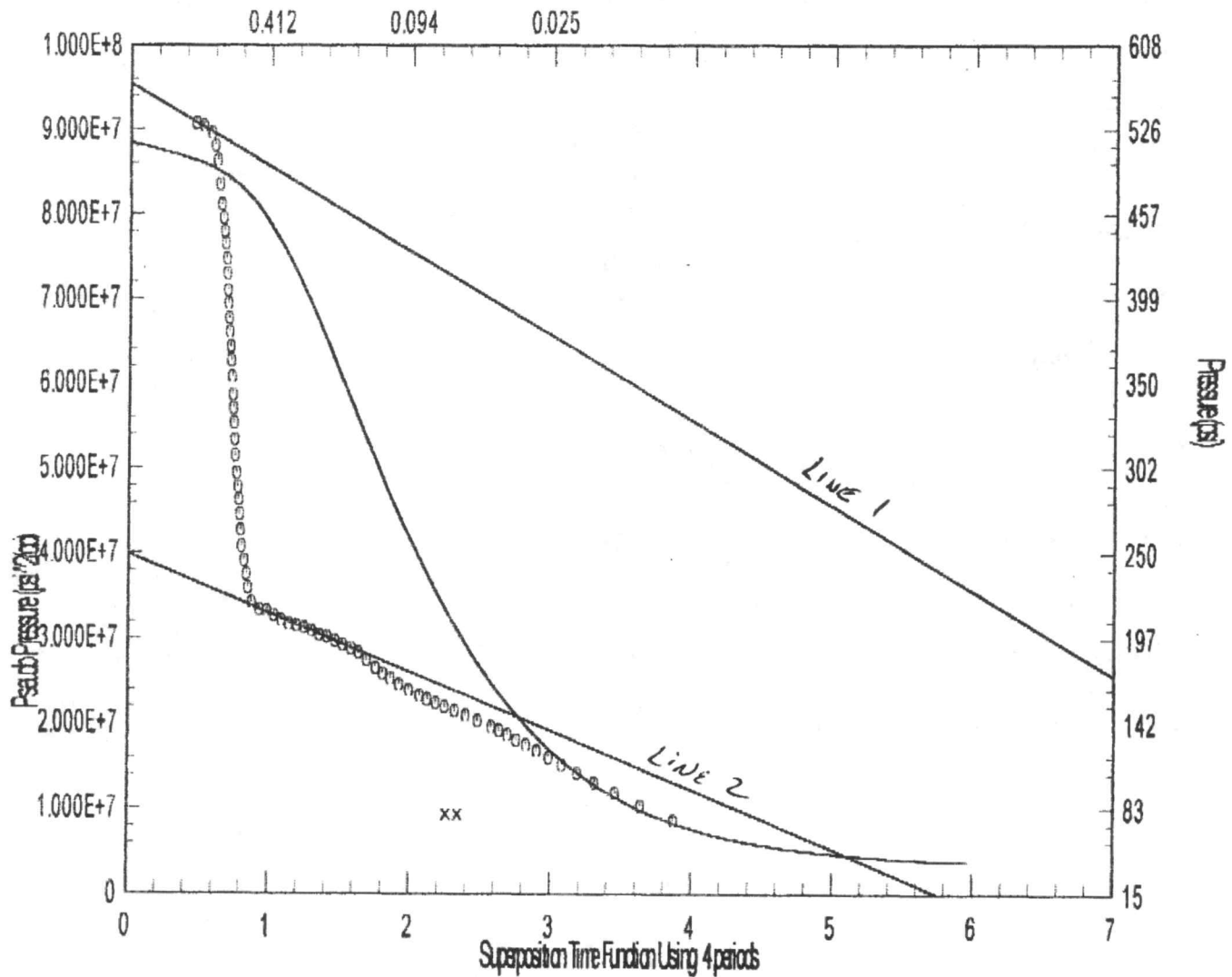
Test Date 10/29/02

County EDWARDS

Sec Town Range 13-24S-17W

Field

Report Number 12083



MODEL RESULTS

Constant Storage
C1 : 5.660E-5 bbl/psi

Skin Model
Skin : 11.00

Homogeneous
k : 0.044 md
Est Pi : 514.1 psi

No Boundaries

h : 5 ft
mu : 0.014 cp
phi : 20.0%
ct : 2.545E-03 1/psi
rw : 0.321 ft
BHT : 88 F
FVF : 2.13

Field :
County or Parish :
State :

Date Printed: 10/30/02 11:47:41
Analysis Period : AP2ND SHUT-IN
Comment : Line # *LINE 1*

Superposition Slope -> m' -9.980680E+6
Horner Slope -> m -1.896329E+7
Intercept 9.540E+7
P(dt=1 hr) 8.979E+7
Pwf 3.446E+6
R Sqr 0.9081

Intercept (psi) 570.796
k (md) 0.01798
kh (md-ft) 0.08988
k/u (md/cp) 1.30263
kh/uB (md-ft/cp) 6.51313
Skin 3.8971
DP Skin 348.2849
Total DP 531.5884
Percent DP 65.52%

Radius Invest (ft) 2
Radius Time (hrs) 1.43

Delta Q = 2
h (ft)= 5
mu (cp) = 0.0138
B (stb/scf) = 2.1340

First Point # 280
Second Point # 300
Start Real Time 0.933
End Real Time 1.434
Start SF Time 0.590

Field :
County or Parish :
State :

Date Printed: 10/30/02 11:48:32
Analysis Period : AP2ND SHUT-IN
Comment : Line # 2

Superposition Slope -> m' -6.924541E+6
Horner Slope -> m -1.315663E+7
Intercept 3.986E+7
P(dt=1 hr) 3.597E+7
Pwf 3.446E+6
R Sqr 0.9870

Intercept (psi) 248.979
k (md) 0.02591
kh (md-ft) 0.12955
k/u (md/cp) 1.87754
kh/uB (md-ft/cp) 9.38770
Skin 1.3187
DP Skin 94.7721
Total DP 209.7716
Percent DP 45.18%

Radius Invest (ft) 2
Radius Time (hrs) 1.43

Delta Q = 2
h (ft)= 5
mu (cp) = 0.0138
B (stb/scf) = 2.1340

First Point # 54
Second Point # 153
Start Real Time 0.165
End Real Time 0.462
Start SF Time 1.595

Superior Testers Enterprises, Inc.

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

(316) 792-6902

ORIGINAL

Date 11-1-2002 Location 19E 21 N 12 W 7 S - 13-24-17W Elevation 2111 KH County EdwardsCompany F.C. Hall Company L.L.C. Number of Copies 5Charts Mailed to 943 East Central P.O. Box 780167 Wichita Kansas 67278-0167Drilling Contractor Duke Drilling Rig #4Length Drill Pipe 2759 I.D. Drill Pipe 3.80 Tool Joint Size 4 1/2" X HLength Weight Pipe NONE I.D. Weight Pipe NONE Tool Joint Size NONELength Drill Collars NONE I.D. Drill Collars NONE Tool Joint Size NONETop Packer Depth 2781 Bottom Packer Depth 2786 Number of Packers 2 Packer Size 6 3/4"TESTED FROM 2786 TO 2830 ANCHOR LENGTH 44 TOTAL DEPTH 2830 Hole Size 7 7/8"LEASE & WELL NO. Miller # 6-13 FORMATION TESTED Americus TEST NO. 6Mud Weight 9.7 Viscosity 44 Water Loss 10.6 Chlorides - Pits 37000 D.S.T. _____Maximum Temp. 91 °F Initial Hydrostatic Pressure (A) 1401 P.S.I. Final Hydrostatic Pressure (H) 1391 P.S.I.Tool Open I.F.P. from 5:15 pm to 5:30 pm 15 minTool Closed I.C.I.P. from 5:30 pm to 6:00 pm 30 minTool Open F.F.P. from 6:00 pm to 6:15 pm 15 minTool Closed F.C.I.P. from 6:15 pm to 8:45 pm 30 minInitial Blow WEAK blow for 3 minutes & DISCFinal Blow no blowTotal Feet Recovered 40 Gravity of Oil _____ Corrected40 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 YES Safety Joint YES Extra Packer NONE Straddle NONE Hook Wall NONETop Recorder No. 78225 Clock No. Electronic Depth 2823 Cir. Sub NONE Sampler NONEBottom Recorder No. 47441 Clock No. 47441 Depth 2827 Insurance NONE

Price of Job _____

Tool Operator Don Aubrey

Approved By _____

Nº 12087

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SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

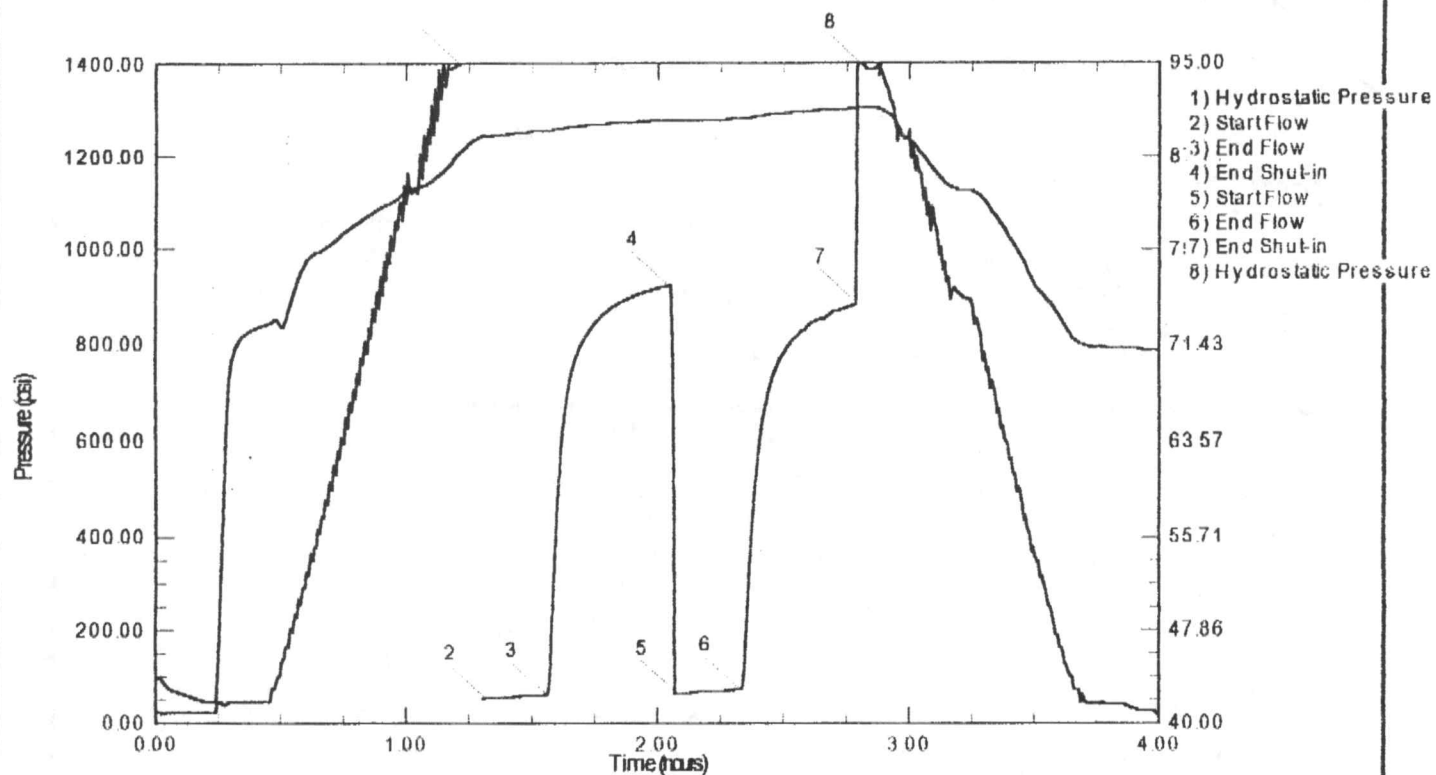
CHART DATA

(316) 792-6902

ORIGINAL

State KANSAS
County EDWARDS
Field

Test Date November 1, 2002
Sec Town Range 13-24S-17W
Report Number 12087



Field Reading

(1)	Initial Hydrostatic Pressure	1401
(2)	Initial Flow Pressure	54
(3)	Final Initial Flow Pressure	60
(4)	Initial Shut-In Pressure	923
(5)	Initial Final Flow Pressure	63
(6)	Final Flow Pressure	71
(7)	Final Shut-In Pressure	887
(8)	Final Hydrostatic Pressure	1391

ELECTRONIC RECORDER DEPTH 2823 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	MILLER # 6-13
TEST DATE	11/1/02	FORMATION TESTED	AMERICUS
SECTION-TOWN-RANGE	13-24S-17W	DRILL STEM TEST NUMBER	6
STATE	KANSAS	REPORT NUMBER	12087
COUNTY	EDWARDS	ELEVATION KELLY BUSHINGS	2111
ELEVATION GROUND LEVEL	2102	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	BILL REE		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	2786	TOP PACKER DEPTH	2781
TEST INTERVAL (to)	2830	BOTTOM PACKER DEPTH	2786
ANCHOR LENGTH	44	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	2830	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN	
TOOL OPEN (from)	5:15
TOOL OPEN (to)	5:30
DURATION (min.)	15
INITIAL SHUT-IN	
TOOL CLOSED (from)	5:30
TOOL CLOSED (to)	6:00
DURATION (min.)	30
FINAL OPEN	
TOOL OPEN (from)	6:00
TOOL OPEN (to)	6:15
DURATION (min.)	15
FINAL SHUT-IN	
TOOL CLOSED (from)	6:15
TOOL CLOSED (to)	6:45
DURATION (min.)	30

PRESSURE READINGS

INITIAL HYDROSTATIC	1401	
INITIAL FLOW	54	
FINAL INITIAL FLOW	60	
INITIAL SHUT-IN	923	
INITIAL FINAL FLOW	63	
FINAL FLOW	71	
FINAL SHUT-IN	887	
FINAL HYDROSTATIC	1391	
MAXIMUM TEMPERATURE		91
TOP RECORDER DEPTH	2823	
RECORDER NUMBER	78225	
BOTTOM RECORDER DEPTH	2827	
RECORDER NUMBER	13208	

INITIAL BLOW

WEAK BLOW FOR 3 MINUTES AND DIED

FINAL BLOW

NO 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 **DUKE DRILLING RIG #4**

DRILL PIPE LENGTH **2759**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH

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 **44**

WATER LOSS **10.6**

CHLORIDES-PITS **37000**

CHLORIDES-DST

FEET OF RECOVERY	RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1) 40	DRILLING MUD				
2)					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
	TOTAL RECOVERY				

COMMENTS

ORIGINAL

(316) 792-6902

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

Drilling Contractor Duke Drilling Rig #4

Length Drill Pipe 2297 I.D. Drill Pipe 4 1/2" x .14 Tool Joint Size 3.80

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

Length Drill Collars NONE I.D. Drill Collars NONE Tool Joint Size NONE

Top Packer Depth 2319 Bottom Packer Depth 2324 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 2324 TO 2360 ANCHOR LENGTH 36 TOTAL DEPTH 2360 Hole Size 2 7/8

LEASE & WELL NO. M. 111 Fr # 6-13 FORMATION TESTED Fort Riley TEST NO. 3

Mud Weight 89 Viscosity 41 Water Loss 89 Chlorides - Pits 30000 D.S.T. _____

Maximum Temp. 89 °F Initial Hydrostatic Pressure (A) 1178 P.S.I. Final Hydrostatic Pressure (H) 1137 P.S.I.

Tool Open I.F.P. from 9:00 A.m to 9:30 A.m 30 min

Tool Closed I.C.I.P. from 9:30 A.m to 10:30 A.m 60 min [D] 653 P.S.I.

Tool Open F.F.P. from 10:30 A m to 11:15 A m 45 min from [E] 295 P.S.I. to [F] 281 P.S.I.

Tool Closed F.C.I.P. from 11:15 A.m to 12:45 A.m 90 min. [G] 647 P.S.I.

Initial Blow Strong blow - Gas to surface in 1 1/2 minutes

Final Blow Strong blow - See Gas Flare Report

Total Feet Recovered _____ Gravity of Oil _____ Corrected _____

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. Electronic Depth 2359 Cir. Sub NO UE Sampler NONE

Bottom Recorder No. 11208 Clock No. 42441 Depth 2357 Insurance NONE

Price of Job _____

Tool Operator Gene Burdick

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.

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas

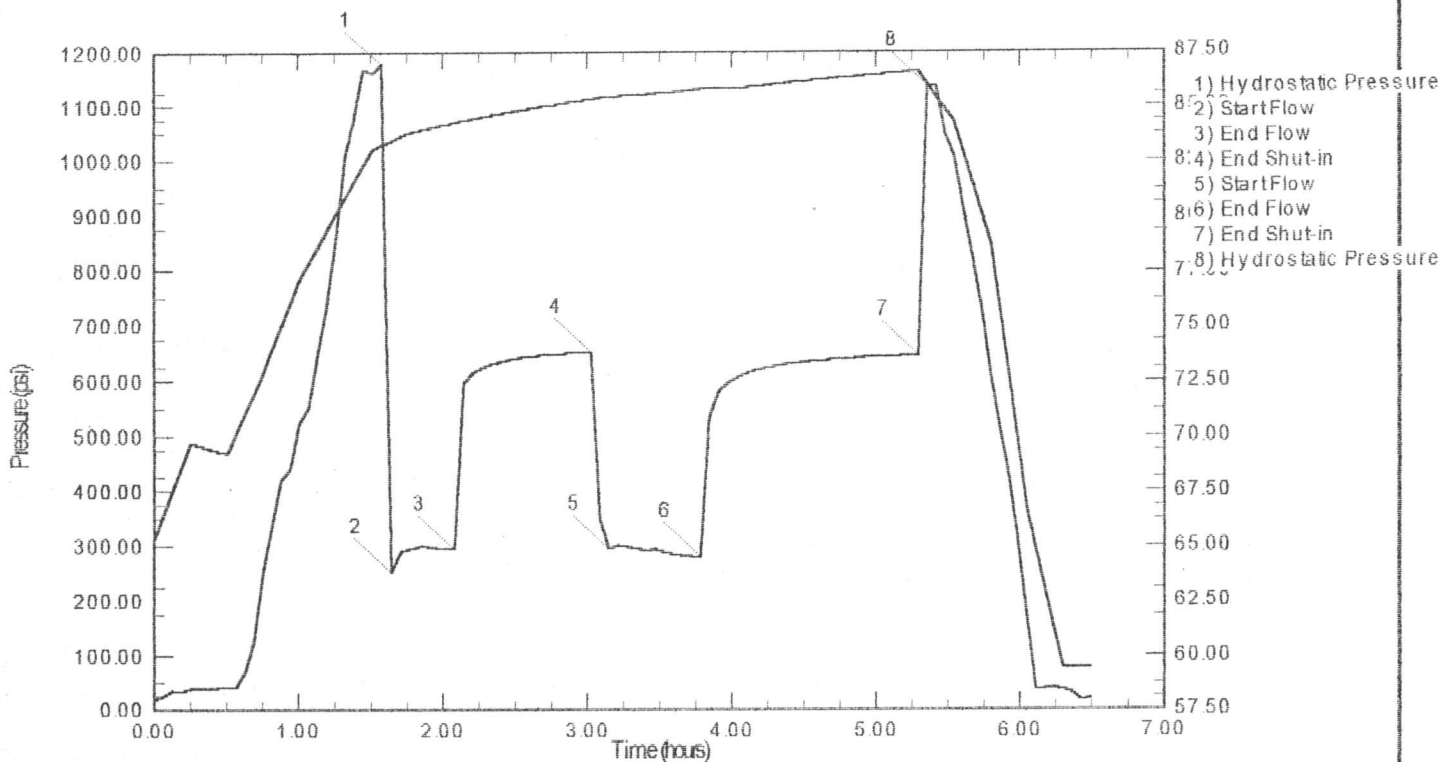
CHART DATA

(316) 792-6902

ORIGINAL

State KANSAS
County EDWARDS
Field

Test Date October 30, 2002
Sec Town Range 13-24S-17W
Report Number 12084



Field Reading

(1)	Initial Hydrostatic Pressure	1178
(2)	Initial Flow Pressure	253
(3)	Final Initial Flow Pressure	294
(4)	Initial Shut-In Pressure	653
(5)	Initial Final Flow Pressure	295
(6)	Final Flow Pressure	281
(7)	Final Shut-In Pressure	647
(8)	Final Hydrostatic Pressure	1137

ELECTRONIC RECORDER DEPTH 2353 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	MILLER #5-13
TEST DATE	10/30/02	FORMATION TESTED	FORT RILEY
SECTION-TOWN-RANGE	13-24S-17W	DRILL STEM TEST NUMBER	3
STATE	KANSAS	REPORT NUMBER	12084
COUNTY	EDWARDS	ELEVATION KELLY BUSHINGS	2111
ELEVATION GROUND LEVEL	2102	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	BILL REE		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	2324	TOP PACKER DEPTH	2319
TEST INTERVAL (to)	2360	BOTTOM PACKER DEPTH	2324
ANCHOR LENGTH	36	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	2360	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

<i>INITIAL OPEN</i>	
TOOL OPEN (from)	9:00
TOOL OPEN (to)	9:30
DURATION (min.)	30
<i>INITIAL SHUT-IN</i>	
TOOL CLOSED (from)	9:30
TOOL CLOSED (to)	10:30
DURATION (min.)	60
<i>FINAL OPEN</i>	
TOOL OPEN (from)	10:30
TOOL OPEN (to)	11:15
DURATION (min.)	45
<i>FINAL SHUT-IN</i>	
TOOL CLOSED (from)	11:15
TOOL CLOSED (to)	12:45
DURATION (min.)	90

PRESSURE READINGS

INITIAL HYDROSTATIC	1178
INITIAL FLOW	253
FINAL INITIAL FLOW	294
INITIAL SHUT-IN	653
INITIAL FINAL FLOW	295
FINAL FLOW	281
FINAL SHUT-IN	647
FINAL HYDROSTATIC	1137
MAXIMUM TEMPERATURE	89
TOP RECORDER DEPTH	2353
RECORDER NUMBER	78225
BOTTOM RECORDER DEPTH	2357
RECORDER NUMBER	13208

INITIAL BLOW**STRONG BLOW WITH GAS TO SURFACE IN 1 1/2 MINUTES****FINAL BLOW****STRONG BLOW-SEE GAS FLOW REPORT****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 DUKE DRILLING RIG #4

DRILL PIPE LENGTH 2297

DRILL PIPE I.D. 3.8

TOOL JOINT SIZE 4 1/2 X.H.

DRILL COLLAR LENGTH

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 41

WATER LOSS 8

CHLORIDES-PITS 30000

CHLORIDES-DST

FEET OF RECOVERY	RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1) 65	GASSY DRILLING MUD				
2)					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
TOTAL RECOVERY					

COMMENTS

(316) 792-6902

#

Test Date #####
 Sec Town Range 13-24S-17W
 Report Number 12084

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	9:05			4		1 1/2	764.000
AT 9:00	9:15			5		1 1/2	863.000
WITH GAS TO	9:25			5		1 1/2	863.000
SURFACE IN 1 1/2 MINUTES	9:35			5		1 1/2	863.000

[illegible]

#5

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

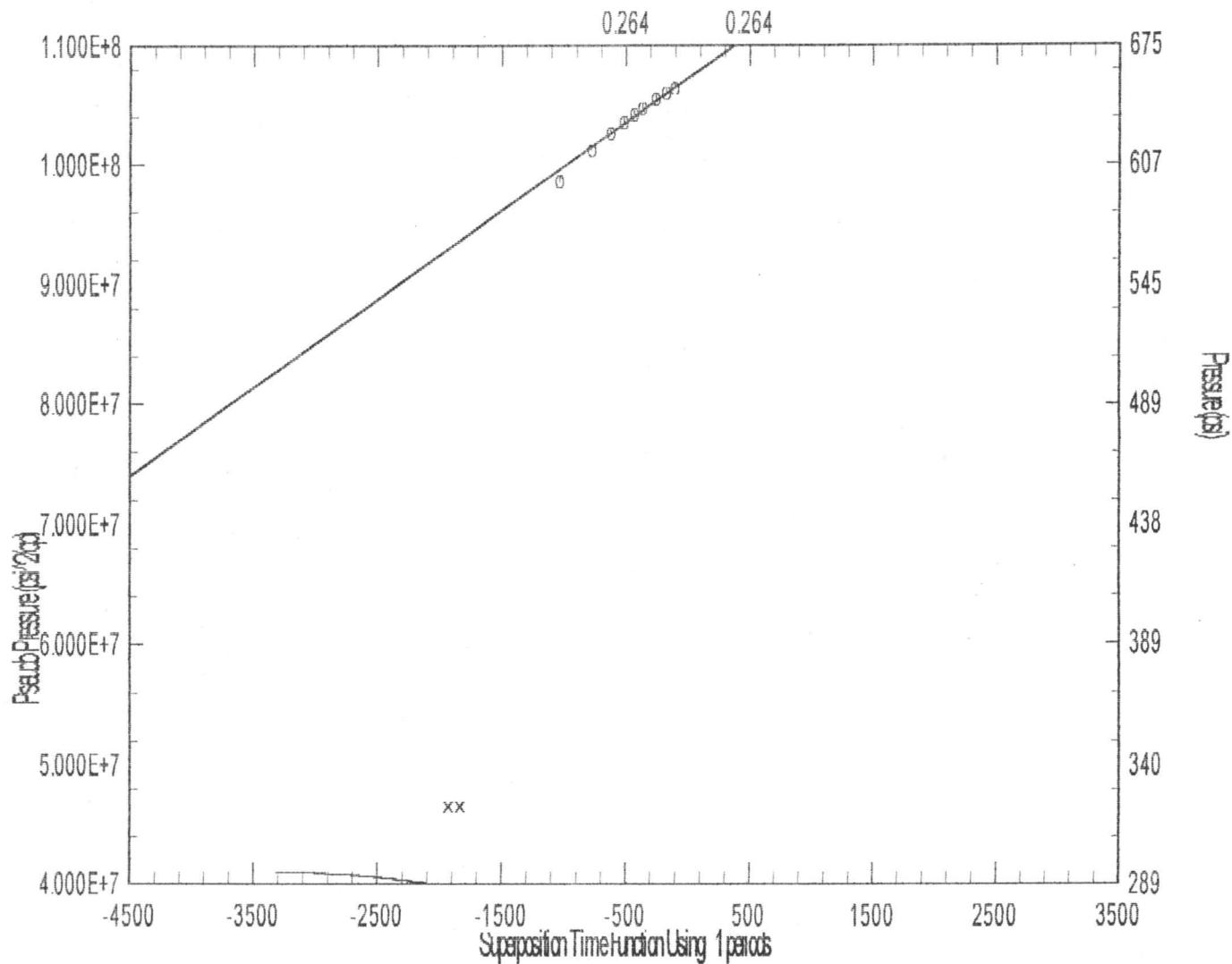
SUPERPOSITION ANALYSIS

(316) 792-6902

1ST SHUT-IN

State KANSAS
County EDWARDS
Field

Test Date 10/30/02
Sec Town Range 13-24S-17W
Report Number 12084



MODEL RESULTS

Constant Storage
C1 : 0.009 bbl/psi

Skin Model
Skin : -3.98

Homogeneous
k : 0.545 md
Est Pi: 294.5 psi

No Boundaries

h : 10 ft
mu : 0.024 cp
phi : 20.0%
ct : 3.353E-03 1/psi
rw : 0.333 ft
BHT : 89 F
FVF : 1.13

MSB2f

#3

Field :
County or Parish :
State :

Date Printed: 10/31/02 01:08:51
Analysis Period : End Flow - End Shut-in
Comment : Line #

Superposition Slope -> m' 7381.184000
Horner Slope -> m 6.369962E+6
Intercept 1.072E+8
P(dt=1 hr) 1.072E+8
Pwf 4.108E+7
R Sqr 0.9895

Intercept (psi) 656.029
k (md) 12.17573
kh (md-ft) 121.75729
k/u (md/cp) 507.32205
kh/uB (md-ft/cp) 5073.22054
Skin -16.1007
DP Skin -525.2276
Total DP 361.5382
Percent DP -145.28%

Radius Invest (ft) 26
Radius Time (hrs) 0.88

Delta Q = 863
h (ft)= 10
mu (cp) = 0.0240
B (stb/scf) = 1.1310

First Point # 2
Second Point # 15
Start Real Time 0.063
End Real Time 0.882
Start SF Time -1036.110

14562g

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

SUPERPOSITION ANALYSIS

(316) 792-6902

2ND SHUT-IN

State KANSAS

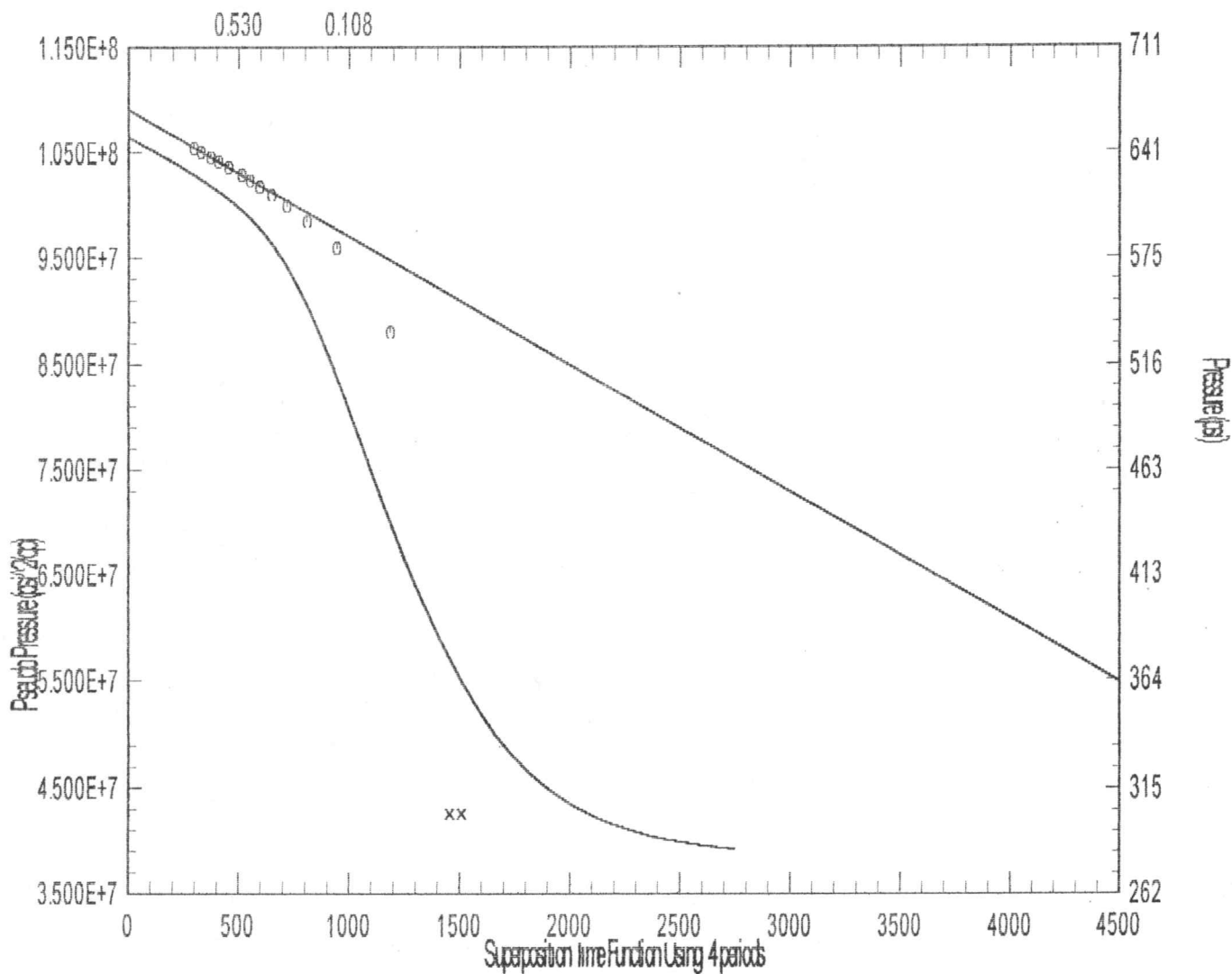
Test Date 10/30/02

County EDWARDS

Sec Town Range 13-24S-17W

Field

Report Number 12084



MODEL RESULTS

Constant Storage
C1 : 0.011 bbl/psi

Skin Model
Skin : 4.31

Homogeneous
k : 8.292 md
Est Pi: 650.7 psi

No Boundaries

h : 10 ft
mu : 0.024 cp
phi : 20.0%
ct : 3.353E-03 1/psi
rw : 0.333 ft
BHT : 89 F
FVF : 1.13

141322

Field :
County or Parish :
State :

Date Printed: 10/31/02 01:12:52
Analysis Period : End Flow - End Shut-in
Comment : Line #

Superposition Slope -> m' -12071.540000
Horner Slope -> m -1.041773E+7
Intercept 1.091E+8
P(dt=1 hr) 1.049E+8
Pwf 3.853E+7
R Sqr 0.9989

Intercept (psi) 669.083
k (md) 7.44489
kh (md-ft) 74.44894
k/u (md/cp) 310.20392
kh/uB (md-ft/cp) 3102.03915
Skin 3.4306
DP Skin 155.0211
Total DP 387.9554
Percent DP 39.96%

Radius Invest (ft) 26
Radius Time (hrs) 1.45

Delta Q = 863
h (ft)= 10
mu (cp) = 0.0240
B (stb/scf) = 1.1310

First Point # 7
Second Point # 21
Start Real Time 0.378
End Real Time 1.260
Start SF Time 594.781

Superior Testers Enterprises, Inc.

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

(316) 792-6902

ORIGINAL

Date 10-31-2001 Location 10 1/2 E 27 N 12 W 13 25 17 W Elevation 2111 Kts. County Edwards

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

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

Drilling Contractor Duke Drilling Rig #4

Length Drill Pipe 2352 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 NONE I.D. Drill Collars NONE Tool Joint Size NONE

Top Packer Depth 2374 Bottom Packer Depth 2379 Number of Packers 2 Packer Size 6 3/4

TESTED FROM 2379 TO 2399 ANCHOR LENGTH 20 TOTAL DEPTH 2399 Hole Size 7 1/4

LEASE & WELL NO. Miller #6-13 FORMATION TESTED Flourence TEST NO. 4

Mud Weight 9.2 Viscosity 38 Water Loss 10.4 Chlorides - Pits 38000 D.S.T. _____

Maximum Temp. 92 °F Initial Hydrostatic Pressure (A) 1177 P.S.I. Final Hydrostatic Pressure (H) 1163 P.S.I.

Tool Open I.F.P. from 10:00 am to 10:30 am 30 min

Tool Closed I.C.I.P. from 10:30 pm to 11:30 am 60 min

Tool Open F.F.P. from 11:30 pm to 12:00 am 30 min

Tool Closed F.C.I.P. from 12:00 am to 1:00 am 60 min

Initial Blow Fair blow built to the Bottom of a 5 Gallon Bucket in 3 minutes

Final Blow Fair blow built to the Bottom of a 5 Gallon Bucket in 2 minutes

Total Feet Recovered 75 Gravity of Oil _____ Corrected _____

75 Feet of mud no show of Gas %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. Electronic Depth 2390 Cir. Sub none Sampler none

Bottom Recorder No. 18206 Clock No. 77441 Depth 2394 Insurance none

Price of Job _____

Tool Operator Don Budz

Approved By _____

N2 12085

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

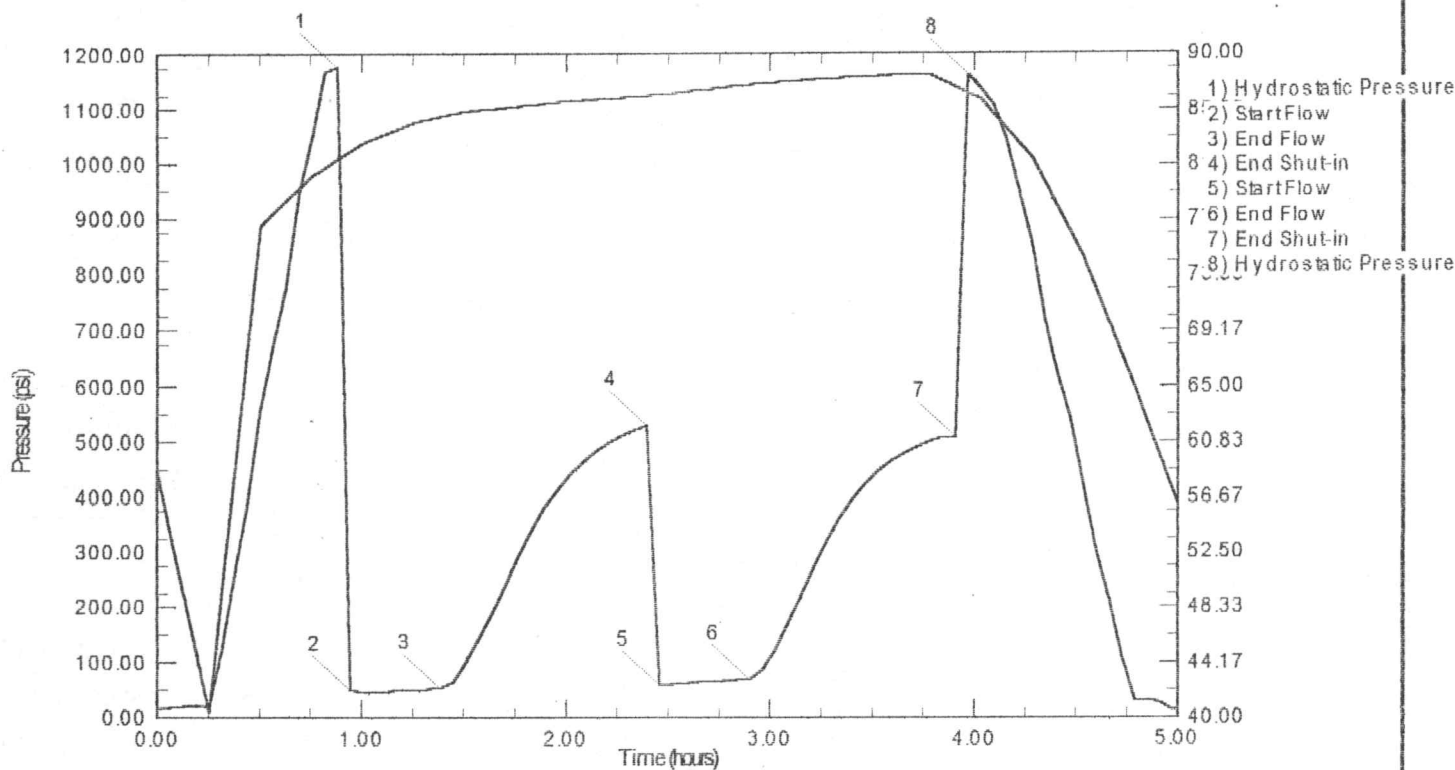
CHART DATA

(316) 792-6902

ORIGINAL

State KANSAS
County EDWARDS
Field

Test Date October 31, 2002
Sec Town Range 13-24S-17W
Report Number 12085



Field Reading

(1)	Initial Hydrostatic Pressure	1177
(2)	Initial Flow Pressure	50
(3)	Final Initial Flow Pressure	53
(4)	Initial Shut-In Pressure	529
(5)	Initial Final Flow Pressure	59
(6)	Final Flow Pressure	69
(7)	Final Shut-In Pressure	509
(8)	Final Hydrostatic Pressure	1163

ELECTRONIC RECORDER DEPTH 2390 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	MILLER #6-13
TEST DATE	10/31/02	FORMATION TESTED	FLOURENCE
SECTION-TOWN-RANGE	13-24S-17W	DRILL STEM TEST NUMBER	4
STATE	KANSAS	REPORT NUMBER	12085
COUNTY	EDWARDS	ELEVATION KELLY BUSHINGS	2111
ELEVATION GROUND LEVEL	2102	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	BILL REE		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	2379	TOP PACKER DEPTH	2374
TEST INTERVAL (to)	2399	BOTTOM PACKER DEPTH	2379
ANCHOR LENGTH	20	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	2399	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

INITIAL OPEN	
TOOL OPEN (from)	10:00
TOOL OPEN (to)	10:30
DURATION (min.)	30
INITIAL SHUT-IN	
TOOL CLOSED (from)	10:30
TOOL CLOSED (to)	11:30
DURATION (min.)	60
FINAL OPEN	
TOOL OPEN (from)	11:30
TOOL OPEN (to)	12:00
DURATION (min.)	30
FINAL SHUT-IN	
TOOL CLOSED (from)	12:00
TOOL CLOSED (to)	1:00
DURATION (min.)	60

PRESSURE READINGS

INITIAL HYDROSTATIC	1177
INITIAL FLOW	50
FINAL INITIAL FLOW	53
INITIAL SHUT-IN	529
INITIAL FINAL FLOW	59
FINAL FLOW	69
FINAL SHUT-IN	509
FINAL HYDROSTATIC	1163
MAXIMUM TEMPERATURE	92
TOP RECORDER DEPTH	2390
RECORDER NUMBER	78226
BOTTOM RECORDER DEPTH	2393
RECORDER NUMBER	13208

INITIAL BLOW**FAIR BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 3 MINUTES
AND DECREASED TO A WEAK BLOW****FINAL BLOW****FAIR BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 2 MINUTES
AND DECREASED TO A WEAK 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 **DUKE DRILLING RIG #4**

DRILL PIPE LENGTH **2352**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH

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 **38**

WATER LOSS **10.6**

CHLORIDES-PITS **38000**

CHLORIDES-DST

FEET OF RECOVERY		RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1)	75	DRILLING MUD WITH NO SHOWS OF GAS				
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

ORIGINAL

Date 10-31-2002 Location 10 1/2 mi N 1/2 W 1/4 Sec 13 T4S R12W Elevation 2111 K.B. County Edwards

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

Charts Mailed to 9431 East Central P.O. Box 780167 Wichita Kansas 67228-0167

Drilling Contractor Duke Drilling Rig #4

Length Drill Pipe 2600 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 NONE I.D. Drill Collars NONE Tool Joint Size NONE

Top Packer Depth 2622 Bottom Packer Depth 2627 Number of Packers 2 Packer Size 6 3/4"

TESTED FROM 2627 TO 2675 ANCHOR LENGTH 48 TOTAL DEPTH 2675 Hole Size 7 7/8"

LEASE & WELL NO. Miller # 6-13 FORMATION TESTED Cottonwood TEST NO. 2

Mud Weight 9.4 Viscosity 44 Water Loss 8.4 Chlorides - Pits 42000 D.S.T. _____

Maximum Temp. 95 °F Initial Hydrostatic Pressure (A) 1295 P.S.I. Final Hydrostatic Pressure (H) 1320 P.S.I.

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

Tool Closed I.C.I.P. from 7:45 p.m. to 8:45 p.m. 60 min

Tool Open F.F.P. from 8:45 p.m. to 9:15 p.m. 30 min

Tool Closed F.C.I.P. from 9:15 p.m. to 10:15 p.m. 60 min

Initial Blow Weak building blow built to the bottom of a 5 Gallon Bucket in 8 min

Final Blow Strong blow Gas in 4 min

Total Feet Recovered 150 Gravity of Oil _____ Corrected _____

150 Feet of Gassy 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. 78226 Clock No. Electronic Depth 2668 Cir. Sub none Sampler none

Bottom Recorder No. 13208 Clock No. 47441 Depth 2672 Insurance none

Price of Job \$

Tool Operator Gene Bully

Approved By _____

No 12086

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.

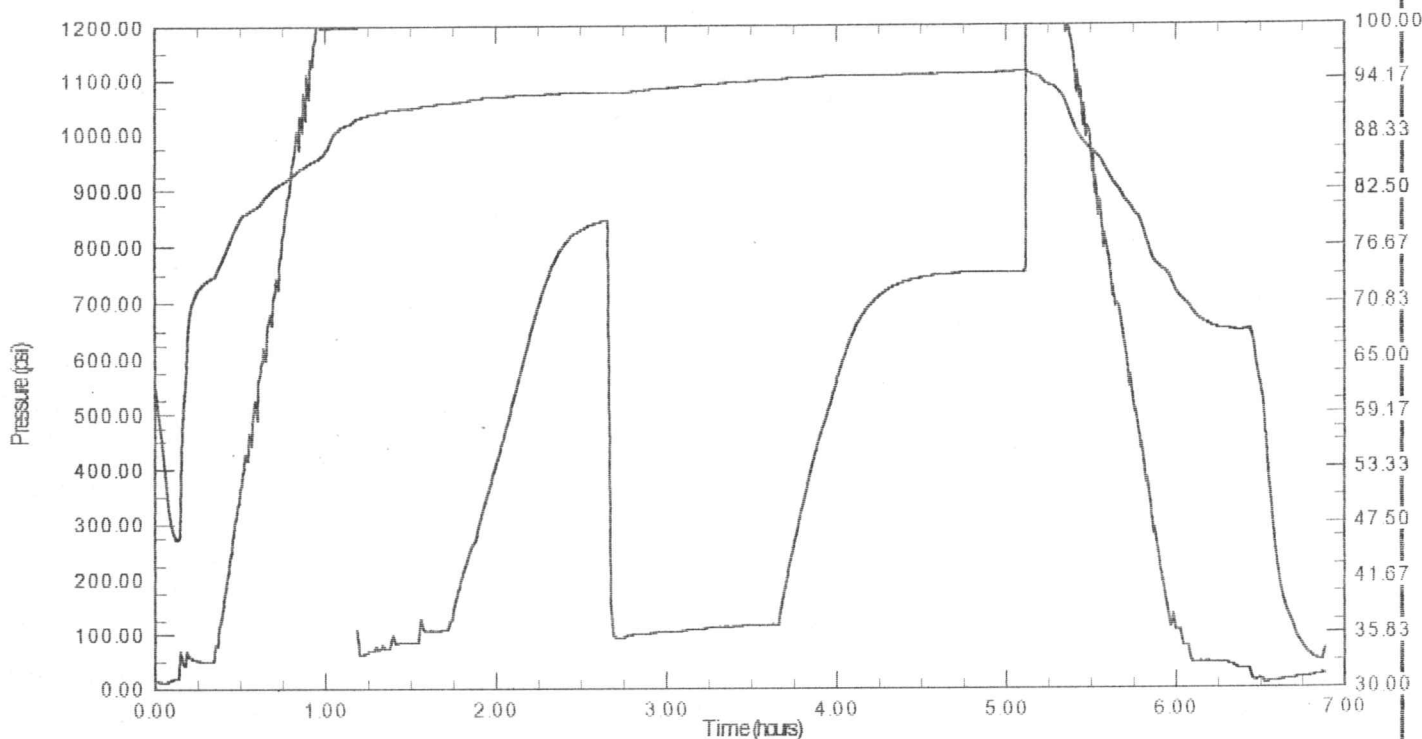
Great Bend, Kansas

CHART DATA

(316) 792-6902

State KANSAS
County EDWARDS
Field

Test Date October 31, 2002
Sec Town Range 13-24S-17W
Report Number 12086



Field Reading

(1)	Initial Hydrostatic Pressure	1295
(2)	Initial Flow Pressure	66
(3)	Final Initial Flow Pressure	108
(4)	Initial Shut-In Pressure	848
(5)	Initial Final Flow Pressure	96
(6)	Final Flow Pressure	116
(7)	Final Shut-In Pressure	755
(8)	Final Hydrostatic Pressure	1320

ELECTRONIC RECORDER DEPTH 2668 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	MILLER #6-13
TEST DATE	10/31/02	FORMATION TESTED	COTTONWOOD
SECTION-TOWN-RANGE	13-24S-17W	DRILL STEM TEST NUMBER	5
STATE	KANSAS	REPORT NUMBER	12086
COUNTY	EDWARDS	ELEVATION KELLY BUSHINGS	2111
ELEVATION GROUND LEVEL	2102	TESTING ENGINEER	GENE BUDIG
COMPANY REPRESENTATIVE	BILL REE		

TOOL SETTING INFORMATION

TEST INTERVAL (From)	2627	TOP PACKER DEPTH	2622
TEST INTERVAL (to)	2675	BOTTOM PACKER DEPTH	2627
ANCHOR LENGTH	48	NUMBER OF PACKERS	2
TOTAL DEPTH (ft)	2675	PACKER SIZE	6 3/4
		HOLE SIZE	7 7/8

FLOW TIMES

<i>INITIAL OPEN</i>	
TOOL OPEN (from)	7:15
TOOL OPEN (to)	7:45
DURATION (min.)	30
<i>INITIAL SHUT-IN</i>	
TOOL CLOSED (from)	7:45
TOOL CLOSED (to)	8:45
DURATION (min.)	60
<i>FINAL OPEN</i>	
TOOL OPEN (from)	8:45
TOOL OPEN (to)	9:15
DURATION (min.)	30
<i>FINAL SHUT-IN</i>	
TOOL CLOSED (from)	9:15
TOOL CLOSED (to)	10:15
DURATION (min.)	60

PRESSURE READINGS

INITIAL HYDROSTATIC	1295
INITIAL FLOW	66
FINAL INITIAL FLOW	108
INITIAL SHUT-IN	848
INITIAL FINAL FLOW	96
FINAL FLOW	116
FINAL SHUT-IN	755
FINAL HYDROSTATIC	1320
MAXIMUM TEMPERATURE	
95	
TOP RECORDER DEPTH	2668
RECORDER NUMBER	78225
BOTTOM RECORDER DEPTH	2672
RECORDER NUMBER	13208

INITIAL BLOW

WEAK BUILDING BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 8 MINUTES

FINAL BLOW

STRONG BLOW WITH GAS TO IN 4 MINUTES

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 **DUKE DRILLING RIG #4**

DRILL PIPE LENGTH **2600**

DRILL PIPE I.D. **3.8**

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

DRILL COLLAR LENGTH

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 **9.1**

VISCOSITY **44**

WATER LOSS **8.4**

CHLORIDES-PITS **42000**

CHLORIDES-DST

FEET OF RECOVERY	RECOVERY DESCRIPTION	% GAS	% OIL	% MUD	% WATER
1) 150	GASSY DRILLING MUD				
2)					
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
	TOTAL RECOVERY				

COMMENTS

#

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND, KANSAS

SUPERPOSITION ANALYSIS

(316) 792-6902

2ND SHUT-IN

State KANSAS

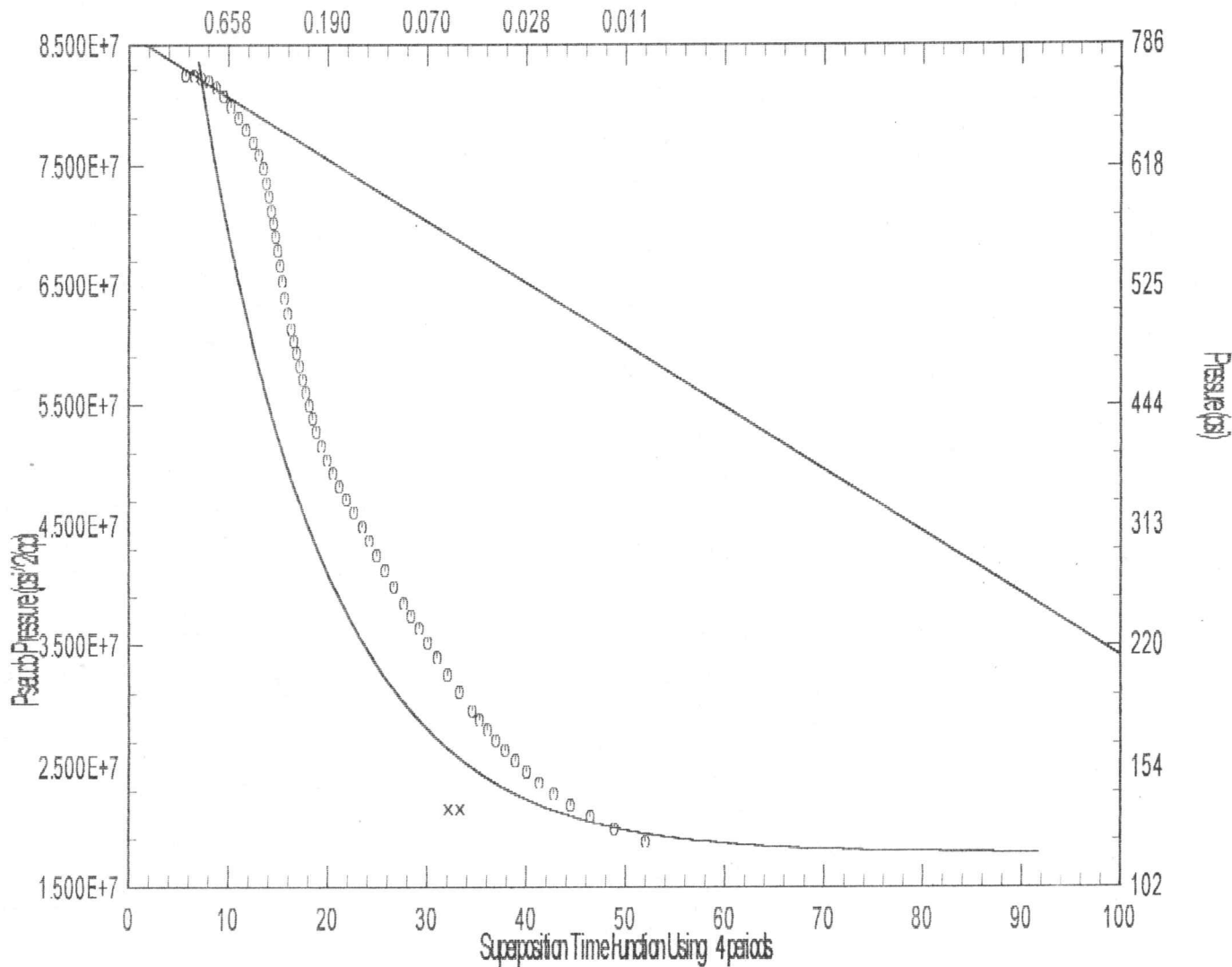
Test Date 10/31/02

County EDWARDS

Sec Town Range 13-24S-17W

Field

Report Number 12086



MODEL RESULTS

Constant Storage
C1 : 0.001 bbl/psi

Skin Model
Skin : 0.00

Homogeneous
k : 0.032 md
Est Pi: 1261.3 psi

No Boundaries

h : 5 ft
mu : 0.021 cp
phi : 20.0%
ct : 3.824E-03 1/psi
rw : 0.333 ft
BHT : 95 F
FVF : 1.50

Field :
County or Parish :
State :

Date Printed: 11/01/02 01:25:16
Analysis Period : 2ND
Comment : Line #

Superposition Slope -> m' -5.180110E+5
Horner Slope -> m -1.326108E+7
Intercept 8.590E+7
P(dt=1 hr) 8.202E+7
Pwf 1.787E+7
R Sqr 0.9358

Intercept (psi) 795.419
k (md) 0.35078
kh (md-ft) 1.75389
k/u (md/cp) 16.46846
kh/uB (md-ft/cp) 82.34232
Skin 3.1968
DP Skin 325.1138
Total DP 679.1407
Percent DP 47.87%

Radius Invest (ft) 6
Radius Time (hrs) 1.46

Delta Q = 26
h (ft)= 5
mu (cp) = 0.0213
B (stb/scf) = 1.4970

First Point # 227
Second Point # 298
Start Real Time 0.684
End Real Time 1.371
Start SF Time 9.750

11/60 g