Superior Testers Enterprises, Inc.

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

(316) 792-6902

Date 3-14-1996 Location N/E-N/W-N/W 20-28-5W Elevation 1423 K.B. 1415 GL. County KINGMAN

Company GRAVES Drilling Company Inc. Number of Copies 5

Charts Mailed to P.O. Box 8250 - 800 TallGrass Exec. Park, 8100 East 22nd Street North, Wichita 67208-0250

Drilling Contractor DUKE Drilling Company Rig #2

Length Drill Pipe 3815 I.D. Drill Pipe 3.80 Tool Joint Size 4½" X.H.

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 3828 Bottom Packer Depth 3833 Number of Packers 2 Packer Size 6¾"

TESTED FROM 3834 TO 3852 ANCHOR LENGTH 18 TOTAL DEPTH 3852 Hole Size 7⅞"

LEASE & WELL NO. Moorhouse #1 FORMATION TESTED Mississippi TEST NO. 1

Mud Weight 9.5+ Viscosity 42 Water Loss 8.4 Chlorides - Pits 8000 D.S.T.

Maximum Temp. 119 °F Initial Hydrostatic Pressure (A) 1957 P.S.I. Final Hydrostatic Pressure (H) 1891 P.S.I.

Tool Open I.F.P. from 2:40 Pm to 2:55 Pm 15 min

Tool Closed I.C.I.P. from 2:55 Pm to 3:40 Pm 45 min

Tool Open F.F.P. from 3:40 Pm to 4:40 Pm 60 min

Tool Closed F.C.I.P. from 4:40 Pm to 5:25 Pm 45 min

from [B]	66	P.S.I. to [C]	55 P.S.I.
[D]	717		P.S.I.
from [E]	66	P.S.I. to [F]	99 P.S.I
[G]	331		P.S.I.

Initial Blow STRONG blow built to the bottom of a 5 Gallon bucket in 15 Seconds

Final Blow STRONG blow - Gas to Surface in 22 minutes - SEE Gas Flow Report -

Total Feet Recovered 150 Gravity of Oil Corrected

45 Feet of GASSY & WATERY mud	%Gas	%Oil	%Mud	%Water
45 Feet of SLIGHTLY muddy water	0 %Gas	0 %Oil	55 %Mud	45 %Water
60 Feet of SLIGHTLY muddy water	0 %Gas	0 %Oil	9 %Mud	91 %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 NONE Extra Packer NONE Straddle NONE Hook Wall NONE

Top Recorder No. 11088 Clock No. 47441 Depth 3846 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 11087 Clock No. 47442 Depth 3849 Insurance NONE

Price of Job

Tool Operator Gene Budig

Approved By

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

No 11258

Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530
(316) 792-6902

GAS FLOW REPORT

Date 3-14-1996 Ticket # 11258 Company Graves Drilling Company Inc.

Well Name and No Moorehouse #1 DST No. 1 Interval Tested 3834-3852

County Kingman State Kansas Sec. 20 Twp. 28S Rg. 5W

Time Gauge Pre-Flow	Time Gauge in Min.	Inches of Water on Orfice Well Tester	Inches of Mercury on Orifice Well Tester	P.S.I. on Orifice Well Tester	P.S.I. on Pitot Tester	Choke Size	Gas Rate MCF
PRE FLOW							
SECOND FLOW							
Tool	OPEN	3:40					
4:02	Gas to	Surface	in 22 minutes				
4:05	25	6				3/8	8.74
4:15	35	7	Fluxuating between 6 & 7" water			3/8	9.45
4:25	45	7½	Fluxuating between 7 & 7½" water			3/8	9.80
4:35	55	8	Fluxuating between 7½ & 8" water			3/8	10.1
4:40	60	8½	Fluxuating between 8 & 8½" water			3/8	10.4

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____ Test Ticket # _____

Requisition and Provisions for high pressure steel gas bottles. Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Superior Testers Enterprises, Inc. within thirty (30) days free of charge or be invoiced in the amount of $125.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME _____

Authorized by _____

SUPERIOR TESTERS ENTERPRISES INC.
DRILL STEM TEST REPORT

GREAT BEND,KANSAS (316)792-6902

General Information

Test Company Name	SUPERIOR TESTERS ENTERPRISES INC.
Company Name	GRAVES DRILLING COMPANY INC.
Lease and Well Number	MOORHOUSE #1
Formation Tested	MISSISSIPPI
Test Number	1
State	KANSAS
County	KINGMAN
Field	WILDCAT
Test Date	14-Mar-96
Section Town Range	N/E-N/W-N/W 20-28S-5W
Report Number	11258
Elevation Ground Level	1415
Elevation Kelly Bushings	1423
Company Representative	ARDEN RATZLAFF
Testing Engineer	GENE BUDIG

Extra Equipment

Jars	No
Safety Joint	No
Extra Packes	No
Straddle	No
Hook Wall	No
Sampler	No
Circulating Sub	No
Electronic Recorder	No

Well Information

Drilling Contractor	DUKE DRILLING RIG #2
Drill Pipe Length	3815
Drill Pipe I.D.	3.8
Tool Joint Size	4 1/2 XH
Weight Pipe Length	
Weight Pipe I.D.	2.76
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.
Mud Weight #/gal	9.50
Viscosity	42.00
Water Loss	8
Chlorides - Pits	8,000
Chlorides - DST	

SUPERIOR TESTERS ENTERPRISES INC.
DRILL STEM TEST REPORT

GREAT BEND,KANSAS (316)792-6902

Tool Setting Information

Top Packer Depth	3829
Bottom packer Depth	3834
Number of Packers	2
Packer Size	6 3/4
Test Interval (from)	3834
Test Interval (to)	3852.00
Anchor Length	18
Total Depth (ft)	3852
Hole Size (in)	7 7/8

Pressure Readings

	Field Reading	*Office Reading*
Maximum Temp	119	
Initial Hydrostatic Pressure	1957	1895
Initial Flow Pressure	66	47
Final Initial Flow Pressure	55	27
Initial Shut-In Pressure	717	661
Initial Final Flow Pressure	66	40
Final Flow Pressure	99	22
Final Shut-In Pressure	331	244
Final Hydrostatic Pressure	1891	1876
Mechanical Recorder Depth (ft)	3846	
Recorder Number	11088	
Electronic Recorder Depth		
Recorder Number		

Comments

SUPERIOR TESTERS ENTERPRISES INC.
DRILL STEM TEST REPORT

GREAT BEND,KANSAS (316)792-6902

Flow Times

Initial Open

Tool Open (from) 2:40
Tool Open (to) 2:55
Duration (min) 15

Initial Shut-in

Tool Closed (from) 2:55
Tool Closed (to) 3:40
Duration (min) 45

Final Open

Tool Open (from) 3:40
Tool Open (to) 4:40
Duration (min) 60

Final Shut-in

Tool Closed (from) 4:40
Tool Closed (to) 5:25
Duration (min) 45

Recovery Description

Initial Blow ..... STRONG BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 15 SECONDS

Final Blow ..... STRONG BLOW-GAS TO SURFACE IN 22 MINUTES INTO THE SECOND OPENING-SEE GAS FLOW REPORT

	Description	Feet of Recovery	% Gas	%Oil	%Mud	% Water
1)	GASSY WATERY MUD	45	0	0		
2)	SLIGHTLY MUDDY WATER	45	0	0	55	45
3)	SLIGHTLY MUDDY WATER	60	0	0	9	91
4)						
5)						
6)						
7)						
8)						
9)						
10)						
11)						
12)						
13)						
14)						
15)						
	Total	150				

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND,KANSAS | **GAS FLOW RATE** | (316) 792-6902

MOORHOUSE #1 MISSISSIPPI

State ..... KANSAS	***Test Date*** ..... March 14, 1996
County ..... KINGMAN	***Sec Town Range*** ..... N/E-N/W-N/W 20-28S-5V
Field ..... WILDCAT	***Report Number*** 11258

Initial Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H20 Orfice Tester	PSI on Orfice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)

Final Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H20 Orfice Tester	PSI on Orfice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
TOOL OPENED	5:05:00	25	6.00				8.740
AT 3:40 WITH GAS	5:15:00	35	7.00				9.450
TO SURFACE IN	5:25:00	45	7.50				9.800
22 MINUTES	5:35:00	55	8.00				10.100
5:02	5:40:00	60	8.50				10.400

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : GRAVES DRILLING COMPANY WELL NAME : MOORHOUSE #1
DATE OF TEST : 3-14-1996 LOCATION : N/E-N/W-N/W 20-28S-5W
DEPTH : 3846.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG CALC	CORR	CORRECTED
TEST NO.:					
Depth : 3846.0 ft-kb					
-1ST HYDROSTATIC	0.0	1.723	1890.43	5.17	1895.60
- 4:41	0.0	.043	52.11	-4.76	47.36
-2:40 1ST FLOW	0.0	.042	51.02	-4.76	46.26
- 2:45	5.0	.036	44.45	-4.81	39.65
- 2:50	10.0	.030	37.89	-4.85	33.04
- 2:56	16.0	.025	32.42	-4.88	27.53
-2:56 END FLOW	0.0	.025	32.42	-4.88	27.53
- 2:59	3.0	.064	75.09	-4.61	70.48
- 3:02	6.0	.191	214.06	-3.71	210.35
- 3:05	9.0	.280	311.45	-3.08	308.37
- 3:08	12.0	.368	407.74	-2.45	405.29
- 3:11	15.0	.423	467.92	-2.06	465.86
- 3:14	18.0	.469	518.26	-1.74	516.52
- 3:17	21.0	.497	548.90	-1.54	547.36
- 3:20	24.0	.519	572.97	-1.38	571.59
- 3:23	27.0	.534	589.38	-1.28	588.11
- 3:26	30.0	.549	605.80	-1.17	604.63
- 3:29	33.0	.560	617.83	-1.09	616.74
- 3:32	36.0	.576	635.34	-.98	634.36
- 3:35	39.0	.587	647.38	-.90	646.48
- 3:38	42.0	.595	656.13	-.85	655.29
- 3:40	44.0	.601	662.70	-.80	661.89
-3:40 1ST SHUT-IN	0.0	.601	662.70	-.80	661.89
-3:40 2ND FLOW	0.0	.037	45.55	-4.80	40.75
- 3:45	5.0	.036	44.45	-4.81	39.65
- 3:50	10.0	.027	34.61	-4.87	29.74
- 3:55	15.0	.024	31.32	-4.89	26.43
- 4:00	20.0	.024	31.32	-4.89	26.43
- 4:05	25.0	.024	31.32	-4.89	26.43
- 4:10	30.0	.024	31.32	-4.89	26.43
- 4:15	35.0	.024	31.32	-4.89	26.43
- 4:20	40.0	.024	31.32	-4.89	26.43
- 4:25	45.0	.025	32.42	-4.88	27.53
- 4:30	50.0	.026	33.51	-4.88	28.63
- 4:35	55.0	.027	34.61	-4.87	29.74
- 4:40	60.0	.020	26.95	-4.92	22.03
-4:40 END FLOW	0.0	.028	35.70	-4.86	30.84
- 4:41	1.0	.037	45.55	-4.80	40.75
- 4:42	2.0	.044	53.21	-4.75	48.46
- 4:43	3.0	.048	57.58	-4.72	52.86

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : GRAVES DRILLING COMPANY WELL NAME : MOORHOUSE #1
DATE OF TEST : 3-14-1996 LOCATION : N/E-N/W-N/W 20-28S-5W
DEPTH : 3846.0 SERIAL NO. : 11087

COMMENTS	TIME min	DEFL in	PRESSURE PSIG CALC	CORR	CORRECTED
TEST NO.:					
- 4:44	4.0	.052	61.96	-4.69	57.27
- 4:45	5.0	.055	65.24	-4.67	60.57
- 4:46	6.0	.057	67.43	-4.66	62.78
- 4:47	7.0	.058	68.53	-4.65	63.88
- 4:48	8.0	.071	82.75	-4.56	78.19
- 4:49	9.0	.085	98.07	-4.46	93.61
- 4:50	10.0	.099	113.39	-4.36	109.03
- 4:53	13.0	.129	146.22	-4.15	142.07
- 4:55	15.0	.146	164.82	-4.03	160.79
- 4:58	18.0	.162	182.33	-3.91	178.41
- 5:01	21.0	.175	196.55	-3.82	192.73
- 5:05	25.0	.188	210.78	-3.73	207.05
- 5:08	28.0	.195	218.44	-3.68	214.76
- 5:10	30.0	.200	223.91	-3.64	220.26
- 5:12	32.0	.202	226.10	-3.63	222.47
- 5:15	35.0	.208	232.66	-3.59	229.07
- 5:18	38.0	.212	237.04	-3.56	233.48
- 5:21	41.0	.214	239.23	-3.55	235.68
- 5:23	43.0	.219	244.70	-3.51	241.19
- 5:26	46.0	.222	247.98	-3.49	244.49
-4:41 2ND SHUT-IN	0.0	.222	247.98	-3.49	244.49
-2ND HYDROSTATIC	0.0	1.706	1871.83	5.09	1876.92

SUPERIOR TESTERS ENTERPRISES INC.

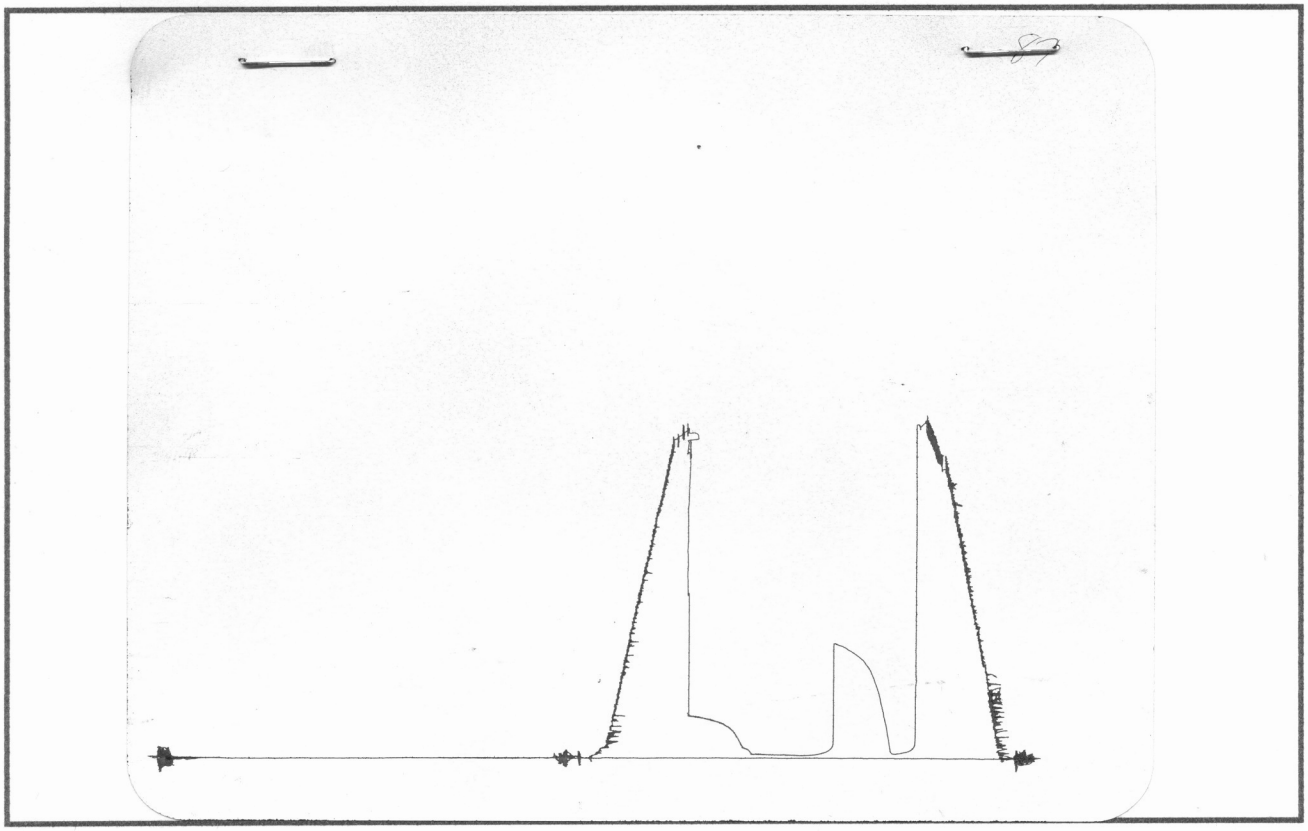
Great Bend, Kansas

CHART DATA

(316) 792-6902

MOORHOUSE #1 MISSISSIPPI

State ..... KANSAS	***Test Date*** ..... March 14, 1996
County ..... KINGMAN	***Sec Town Range*** ..... N/E-N/W-N/W 20-28S-
Field ..... WILDCAT	***Report Number*** 11258



		Field Reading	*Office Reading*	
(A)	Initial Hydrostatic Pressure	1957	1895	psi
(B)	Initial Flow Pressure	66	47	psi
(C)	Final Initial Flow Pressure	55	27	psi
(D)	Initial Shut-In Pressure	717	661	psi
(E)	Initial Final Flow Pressure	66	40	psi
(F)	Final Flow Pressure	99	22	psi
(G)	Final Shut-In Pressure	331	244	psi
(H)	Final Hydrostatic Pressure	1891	1876	psi

Mechanical Recorder Depth 3846 ft, Recorder Number 11088

Company:GRAVES DRILLING COMPANY INC.Lease-Well No:MOORHOUSE #1 Test #:1 Date:3-14-1996 Sec.20 TWP.28S RGE. 5W

Superior Testers Enterprises, Inc.

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

(316) 792-6902

Date 3-15-1996 Location N/E - N/W - N/W 20-28S-5W Elevation 1423 K.B. County Kingman

Company Graves Drilling Company Inc. Number of Copies 5

Charts Mailed to P.O. Box 8250 - 800 Tall Grass Exec. Park 8100 East 22nd Street North, Wichita 67208-025

Drilling Contractor Duke Drilling Company Rig #2

Length Drill Pipe 3833 I.D. Drill Pipe 3.80 Tool Joint Size 4½" X.H.

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 3847 Bottom Packer Depth 3852 Number of Packers 2 Packer Size 6¾"

TESTED FROM 3852 TO 3864 ANCHOR LENGTH 12 TOTAL DEPTH 3864 Hole Size 7⅞"

LEASE & WELL NO. moorhouse #1 FORMATION TESTED Mississippi TEST NO. 2

Mud Weight 9.5+ Viscosity 42 Water Loss 8.0 Chlorides - Pits 8000 D.S.T.

Maximum Temp. 121 °F Initial Hydrostatic Pressure (A) 1968 P.S.I. Final Hydrostatic Pressure (H) 1924 P.S.I.

Tool Open I.F.P. from 2:05 A m to 2:20 A m 15 min

Tool Closed I.C.I.P. from 2:20 A m to 3:05 A m 45 min

Tool Open F.F.P. from 3:05 A m to 4:05 A m 60 min

Tool Closed F.C.I.P. from 4:05 A m to 5:50 A m 45 min

from [B]	66	P.S.I. to [C]	44 P.S.I.
[D]	497		P.S.I.
from [E]	66	P.S.I. to [F]	88 P.S.I
[G]	132		P.S.I.

Initial Blow STRONG blow - ~~Gas to Surface~~ built to the bottom of a 5 GALLON bucket in 30 SECONDS

Final Blow STRONG blow - GAS to Surface in 27 minutes into the 2nd OPENING

Total Feet Recovered 160 Gravity of Oil Corrected

40 Feet of	OIL & GAS cut watery mud	2 %Gas	33 %Oil	38 %Mud	27 %Water
60 Feet of	OIL & GAS cut muddy water	15 %Gas	40 %Oil	10 %Mud	35 %Water
50 Feet of	SLIGHTLY GAS, oil & mud cut water	2 %Gas	12 %Oil	6 %Mud	80 %Water
10 Feet of	VERY SLIGHTLY oil cut WATER	0 %Gas	2 %Oil	0 %Mud	98 %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 NONE Extra Packer NONE Straddle NONE Hook Wall NONE

Top Recorder No. 11086 Clock No. 47441 Depth 3858 Cir. Sub NONE Sampler NONE

Bottom Recorder No. 11087 Clock No. 47442 Depth 3861 Insurance NONE

Price of Job

Tool Operator Gene Ludig

Approved By

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

No 11259

Superior Testers Enterprises, Inc.

R.R. 3, Box 295B, Great Bend, Kansas 67530
(316) 792-6902

GAS FLOW REPORT

Date 3-15-1996 Ticket # 11259 Company GRAVES Drilling ~~Co~~ COMPANY INC.

Well Name and No Moorehouse # 1 DST No. 2 Interval Tested 3852-3864

County KINGMAN State KANSAS Sec. 20 Twp. 28 S Rg. 5 W

Time Gauge Pre-Flow	Time Gauge in Min.	Inches of Water on Orfice Well Tester	Inches of Mercury on Orifice Well Tester	P.S.I. on Orifice Well Tester	P.S.I. on Pitot Tester	Choke Size	Gas Rate MCF
PRE FLOW							
SECOND FLOW							
4:05 TOOL OPEN							
4:32	GAS to	SURFACE	27 minutes				
4:35	30	1				1/4	1.680
4:45	40	9				1/4	5.050
4:55	50	9				1/4	5.050
5:05	60	9½				1/4	5.185

GAS BOTTLE

Serial No. _____ Date Bottle Filled _____ Date to be Invoiced _____ Test Ticket # _____

Requisition and Provisions for high pressure steel gas bottles. Superior Testers Enterprises, Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Superior Testers Enterprises, Inc. within thirty (30) days free of charge or be invoiced in the amount of $125.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

All charges subject to 1½% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME _____

Authorized by _____

SUPERIOR TESTERS ENTERPRISES INC.
DRILL STEM TEST REPORT

GREAT BEND,KANSAS (316)792-6902

General Information

Test Company Name	SUPERIOR TESTERS ENTERPRISES INC.
Company Name	GRAVES DRILLING COMPANY INC.
Lease and Well Number	MOORHOUSE #1
Formation Tested	MISSISSIPPI
Test Number	2
State	KANSAS
County	KINGMAN
Field	WILDCAT
Test Date	15-Mar-96
Section Town Range	N/E-N/W-N/W 20-28S-5W
Report Number	11259
Elevation Ground Level	1415
Elevation Kelly Bushings	1423
Company Representative	ARDEN RATZLAFF
Testing Engineer	GENE BUDIG

Extra Equipment

Jars	No
Safety Joint	No
Extra Packes	No
Straddle	No
Hook Wall	No
Sampler	No
Circulating Sub	No
Electronic Recorder	No

Well Information

Drilling Contractor	DUKE DRILLING RIG #2
Drill Pipe Length	3833
Drill Pipe I.D.	3.8
Tool Joint Size	4 1/2 XH
Weight Pipe Length	
Weight Pipe I.D.	2.76
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.
Mud Weight #/gal	9.50
Viscosity	42.00
Water Loss	8
Chlorides - Pits	8,000
Chlorides - DST	

SUPERIOR TESTERS ENTERPRISES INC.
DRILL STEM TEST REPORT

GREAT BEND,KANSAS (316)792-6902

Tool Setting Information

Top Packer Depth	3847
Bottom packer Depth	3852
Number of Packers	2
Packer Size	6 3/4
Test Interval (from)	3852
Test Interval (to)	3864.00
Anchor Length	12
Total Depth (ft)	3864
Hole Size (in)	7 7/8

Pressure Readings

	Field Reading	*Office Reading*
Maximum Temp	121	
Initial Hydrostatic Pressure	1968	1946
Initial Flow Pressure	66	64
Final Initial Flow Pressure	44	52
Initial Shut-In Pressure	497	492
Initial Final Flow Pressure	66	80
Final Flow Pressure	88	89
Final Shut-In Pressure	132	142
Final Hydrostatic Pressure	1924	1918
Mechanical Recorder Depth (ft)	3858	
Recorder Number	11088	
Electronic Recorder Depth		
Recorder Number		

Comments

SUPERIOR TESTERS ENTERPRISES INC.
DRILL STEM TEST REPORT

GREAT BEND,KANSAS (316)792-6902

Flow Times

Initial Open

Tool Open (from) 2:05
Tool Open (to) 2:20
Duration (min) 15

Initial Shut-in

Tool Closed (from) 2:20
Tool Closed (to) 3:05
Duration (min) 45

Final Open

Tool Open (from) 3:05
Tool Open (to) 4:05
Duration (min) 60

Final Shut-in

Tool Closed (from) 4:05
Tool Closed (to) 4:40
Duration (min) 45

Recovery Description

Initial Blow ..... STRONG BLOW BUILT TO THE BOTTOM OF A 5 GALLON BUCKET IN 30 SECONDS

Final Blow ..... STRONG BLOW-GAS TO SURFACE IN 27 MINUTES INTO THE SECOND OPENING-SEE GAS FLOW REPORT

Description	*Feet of Recovery*	*% Gas*	*%Oil*	*%Mud*	*% Water*
1) OIL AND GAS CUT WATERY MUD	40	2	33	38	27
2) OIL AND GAS CUT MUDDY WATER	60	15	40	10	35
3) SLIGHTLY OIL,GAS AND MUD CUT WATER	50	2	12	6	80
4) VERY SLIGHTLY OIL CUT WATER	10	0	2	0	98
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
Total	160				

SUPERIOR TESTERS ENTERPRISES INC.

GREAT BEND,KANSAS | **GAS FLOW RATE** | (316) 792-6902

MOORHOUSE #1 MISSISSIPPI

State	KANSAS	***Test Date***	March 15, 1996
County	KINGMAN	***Sec Town Range***	N/E-N/W-N/W 20-28S-5V
Field	WILDCAT	***Report Number***	11259

Initial Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H20 Orfice Tester	PSI on Orfice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)

Final Flow

Comments	Time (hh:mm:ss)	Period dt (min)	Inches H20 Orfice Tester	PSI on Orfice Tester	PSI on Pitot Tube	Choke Size (in)	Gas Rate (MCF/Day)
TOOL OPENED	4:35:00	30	1.00			0.25	1.680
AT 4:05 WITH GAS	4:45:00	40	9.00			0.25	5.050
TO SURFACE IN	4:55:00	50	9.00			0.25	5.050
27 MINUTES	5:05:00	60	9.50			0.25	5.185
4:32							

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : GRAVES DRILLING COMPANY WELL NAME : MOORHOUSE #1
DATE OF TEST : 3-15-1996 LOCATION : N/E-N/W-N/W 20-28S-5W
DEPTH : 3858.0 SERIAL NO. : 11088

COMMENTS	TIME min	DEFL in	PRESSURE PSIG CALC	CORR	CORRECTED
TEST NO.:					
Depth : 3858.0 ft-kb					
-1ST HYDROSTATIC	0.0	1.759	1944.93	1.38	1946.32
-2:05 1ST FLOW	0.0	.058	68.85	-4.21	64.64
- 2:10	5.0	.047	56.72	-4.33	52.38
- 2:15	10.0	.046	55.61	-4.35	51.27
- 2:20	15.0	.047	56.72	-4.33	52.38
-2:20 END FLOW	0.0	.047	56.72	-4.33	52.38
- 2:23	3.0	.066	77.67	-4.11	73.56
- 2:26	6.0	.115	131.72	-3.54	128.17
- 2:29	9.0	.171	193.48	-2.89	190.59
- 2:32	12.0	.225	253.04	-2.27	250.77
- 2:35	15.0	.274	307.08	-1.70	305.38
- 2:38	18.0	.312	348.99	-1.26	347.74
- 2:41	21.0	.343	383.18	-.90	382.29
- 2:44	24.0	.371	414.07	-.57	413.49
- 2:47	27.0	.387	431.71	-.39	431.33
- 2:50	30.0	.404	450.46	-.19	450.27
- 2:53	33.0	.419	467.01	-.02	466.99
- 2:56	36.0	.432	481.35	.14	481.48
- 2:59	39.0	.436	485.76	.18	485.94
- 3:02	42.0	.438	487.96	.21	488.17
- 3:05	45.0	.442	492.38	.25	492.63
- 2:20	0.0	.442	492.38	.25	492.63
-3:05 1ST SHUT-IN	0.0	.442	492.38	.25	492.63
3:05 2ND FLOW	0.0	.072	84.29	-4.04	80.25
- 3:10	5.0	.066	77.67	-4.11	73.56
- 3:15	10.0	.064	75.47	-4.14	71.33
- 3:20	15.0	.064	75.47	-4.14	71.33
- 3:25	20.0	.064	75.47	-4.14	71.33
- 3:30	25.0	.068	79.88	-4.09	75.79
- 3:35	30.0	.071	83.19	-4.06	79.13
- 3:40	35.0	.072	84.29	-4.04	80.25
- 3:45	40.0	.075	87.60	-4.01	83.59
- 3:50	45.0	.077	89.81	-3.99	85.82
- 3:55	50.0	.078	90.91	-3.97	86.93
- 4:00	55.0	.078	90.91	-3.97	86.93
- 4:05	60.0	.080	93.11	-3.95	89.16
-4:05 END FLOW	0.0	.080	93.11	-3.95	89.16
- 4:08	3.0	.085	98.63	-3.89	94.74
- 4:11	6.0	.092	106.35	-3.81	102.54
- 4:14	9.0	.098	112.97	-3.74	109.22

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : GRAVES DRILLING COMPANY WELL NAME : MOORHOUSE #1
DATE OF TEST : 3-15-1996 LOCATION : N/E-N/W-N/W 20-28S-5W
DEPTH : 3858.0 SERIAL NO. : 11088

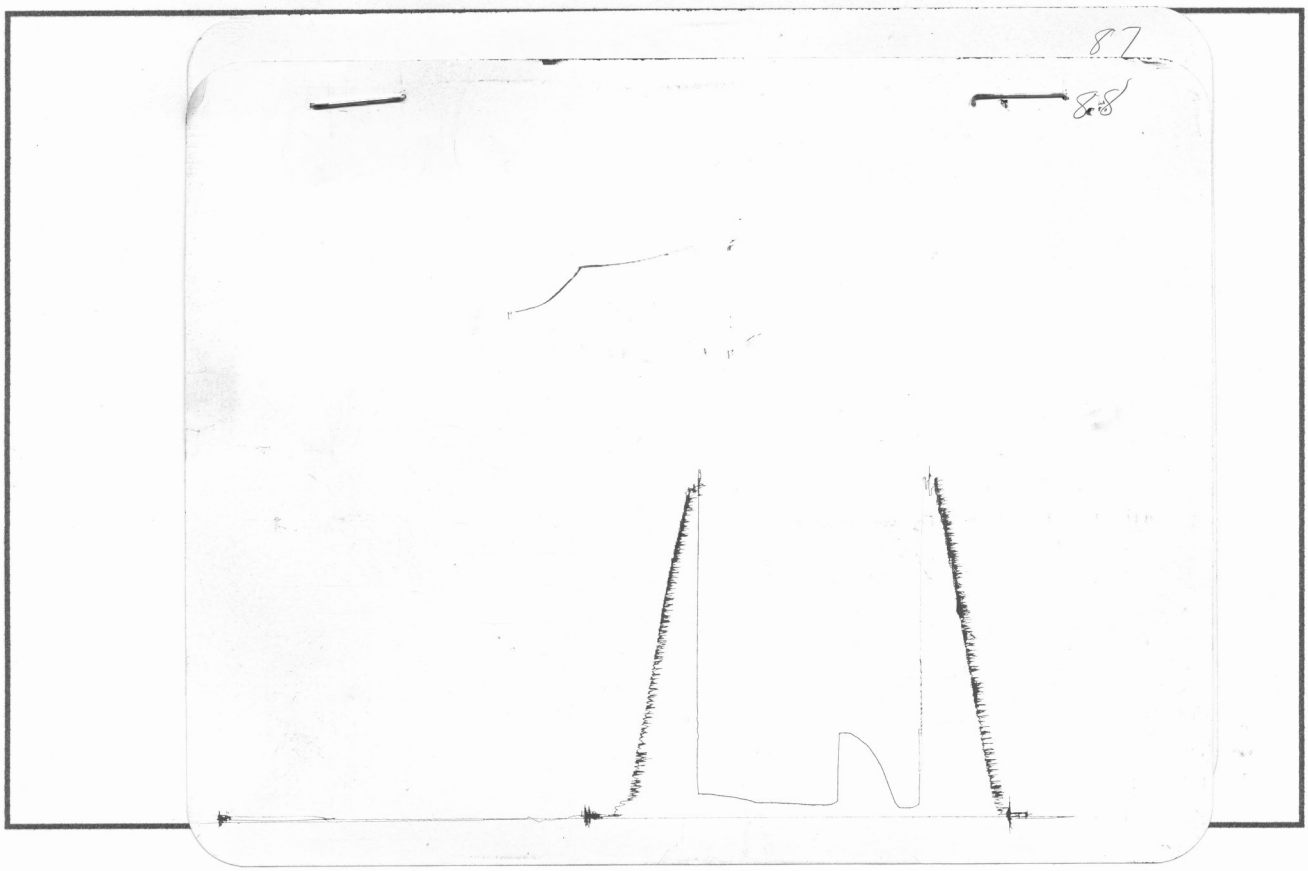
COMMENTS	TIME	DEFL	PRESSURE PSIG		
	min	in	CALC	CORR	CORRECTED
TEST NO.:					
- 4:17	12.0	.101	116.28	-3.71	112.57
- 4:20	15.0	.106	121.79	-3.65	118.14
- 4:23	18.0	.110	126.20	-3.60	122.60
- 4:26	21.0	.112	128.41	-3.58	124.83
- 4:29	24.0	.115	131.72	-3.54	128.17
- 4:32	27.0	.119	136.13	-3.50	132.63
- 4:35	30.0	.122	139.44	-3.46	135.97
- 4:38	33.0	.125	142.75	-3.43	139.32
- 4:41	36.0	.126	143.85	-3.42	140.43
- 4:44	39.0	.127	144.95	-3.41	141.55
- 4:47	42.0	.127	144.95	-3.41	141.55
- 4:50	45.0	.128	146.05	-3.39	142.66
-4:50 2ND SHUT-IN	0.0	.128	146.05	-3.39	142.66
-2ND HYDROSTATIC	0.0	1.734	1917.36	1.39	1918.76

SUPERIOR TESTERS ENTERPRISES INC.

Great Bend, Kansas — **CHART DATA** — **(316) 792-6902**

MOORHOUSE #1 MISSISSIPPI

State ..... KANSAS	***Test Date*** ..... March 15, 1996
County ..... KINGMAN	***Sec Town Range*** ..... N/E-N/W-N/W 20-28S-
Field ..... WILDCAT	***Report Number*** 11259



		Field Reading	*Office Reading*	
(A)	Initial Hydrostatic Pressure	1968	1946	psi
(B)	Initial Flow Pressure	66	64	psi
(C)	Final Initial Flow Pressure	44	52	psi
(D)	Initial Shut-In Pressure	497	492	psi
(E)	Initial Final Flow Pressure	66	80	psi
(F)	Final Flow Pressure	88	89	psi
(G)	Final Shut-In Pressure	132	142	psi
(H)	Final Hydrostatic Pressure	1924	1918	psi

Mechanical Recorder Depth 3858 ft, Recorder Number 11088

Company:GRAVES DRILLING COMPANY INC.Lease-Well No:MOORHOUSE #1 Test #2 Date:3-15-1996 Sec.20 TWP.28S RGE. 5W