

ORIGINAL SIDE ONE

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACO-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

Operator: License # 5652

Name: Mustang Oil & Gas Corporation

Address P.O. Box 1609

City/State/Zip Great Bend, KS 67530

Purchaser: Koch

Operator Contact Person: J.P. Meroney

Phone ( 316 ) 792-7323

Contractor: Name: Mallard Drilling

License: 4958

Wellsite Geologist: Bob Douglass STATE CORPORATION COMMISSION

Designate Type of Completion  
 New Well  Re-Entry  Workover

Oil  SWD  Temp. Abandonment  
 Gas  Inj  Delayed Comp.  
 Dry  Other (Core, Water Supply, etc.)

If OWO: old well info as follows:  
Operator: \_\_\_\_\_

Well Name: \_\_\_\_\_

Comp. Date \_\_\_\_\_ Old Total Depth \_\_\_\_\_

Drilling Method:  
 Mud Rotary  Air Rotary  Cable

11-8-90 11-16-90 12-08-90  
Spud Date Date Reached TD Completion Date

API NO. 15- 163-23,126-00-00

County Rooks

C NE NW Sec. 34 Twp. 9S Rge. 20 East  West

4620 Ft. North from Southeast Corner of Section

3300 Ft. West from Southeast Corner of Section

(NOTE: Locate well in section plat below.)

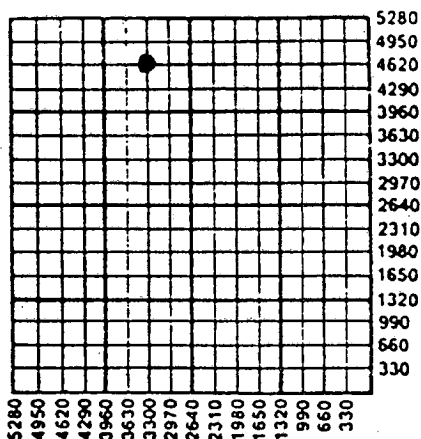
Lease Name Darrell Well # 8

Field Name Northampton

Producing Formation Arbuckle

Elevation: Ground 2271 KB 2279

Total Depth 3928 PBTD 3854



3-15-91

Amount of Surface Pipe Set and Cemented at 262' Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set 1783 Feet

If Alternate II completion, cement circulated from 1783

feet depth to surface w/ 350 sx -mt.

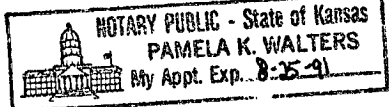
INSTRUCTIONS: This form shall be completed in triplicate and filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date of any well. Rule 82-3-130, 82-3-107 and 82-3-106 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form. See rule 82-3-107 for confidentiality in excess of 12 months. One copy of all wireline logs and drillers time log shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-1 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells. Any recompletion, workover or conversion of a well requires filing of ACO-2 within 120 days from commencement date of such work.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature J.P. Meroney  
Title Senior Vice President Date 3/1/91

Subscribed and sworn to before me this 1st day of March, 19 91.

Notary Public Pamela K. Walters  
Date Commission Expires August 25, 1991



K.C.C. OFFICE USE ONLY  
F  Letter of Confidentiality Attached  
C  Wireline Log Received  
C  Drillers Timelog Received  
Distribution  
 KCC  SWD/Rep  NGPA  
 KGS  Plug  Other (Specify)

PI

SIDE TWO

Operator Name Mustang Oil & Gas Corporation Lease Name Darrell Well # 8  
 Sec. 34 Twp. 9S Rge. 20  East  West  
 County Rooks

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken (Attach Additional Sheets.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>Formation Description</b> <input checked="" type="checkbox"/> Log <input type="checkbox"/> Sample <table border="1"> <thead> <tr> <th>Name</th> <th>Top</th> <th>Bottom</th> </tr> </thead> <tbody> <tr> <td>Topeka</td> <td>3283</td> <td>3487</td> </tr> <tr> <td>Lansing</td> <td>3527</td> <td>3748</td> </tr> <tr> <td>Arbuckle</td> <td>3825</td> <td>3928</td> </tr> </tbody> </table>	Name	Top	Bottom	Topeka	3283	3487	Lansing	3527	3748	Arbuckle	3825	3928
Name	Top		Bottom											
Topeka	3283		3487											
Lansing	3527		3748											
Arbuckle	3825	3928												
Samples Sent to Geological Survey	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No													
Cores Taken	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No													
Electric Log Run (Submit Copy.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No													

CASING RECORD

New  Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4	8 5/8	24	262	60/40 POZ	160	2% Gel 3% CaCl <sub>2</sub>
Production	7 7/8	5 1/2	14	327	EAZ Howco Lite	150 350	5% Calseal, 18% Sal

PERFORATION RECORD

Acid, Fracture, Shot, Cement Squeeze Record  
(Amount and Kind of Material Used)

Shots Per Foot	Specify Footage of Each Interval Perforated	Depth
4 SPF	3843' - 3847'	3843' - 3847'

TUBING RECORD

Size 3 1/2 Set At 3443 Packer At ---- Liner Run  Yes  No

Date of First Production 12-14-90	Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)							
Estimated Production Per 24 Hours	Oil 42	Bbls.	Gas 0	Mcf	Water 429	Bbls.	Gas-Oil Ratio ---	Gravity 25

Disposition of Gas:

METHOD OF COMPLETION

Production Interval

Vented  Sold  Used on Lease (If vented, submit ACO-18.)  
 Open Hole  Perforation  Dually Completed  Commingled  
 Other (Specify) \_\_\_\_\_ 3843' - 3847'

DISTRICT Hays, KS DATE 11-17-90

TO: HALLIBURTON SERVICES YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE THE SAME AS AN INDEPENDENT CONTRACTOR TO: Mustang Drilling (CUSTOMER) AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICING

WELL NO. Darrell LEASE Darrell SEC. 3 TWP. 36N RANGE 18E  
 FIELD Rooks COUNTY Rooks STATE KS OWNED BY Samp

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
CASING		<u>U</u>	<u>514</u>	<u>53</u>	<u>6L</u>	<u>3925</u>	<u>9</u>
FORMATION THICKNESS	FROM	TO					
PACKER: TYPE		SET AT					
TOTAL DEPTH		MUD WEIGHT					
BORE HOLE							
INITIAL PROD: OIL	BPD, H <sub>2</sub> O	BPD, GAS	MCF				
PRESENT PROD: OIL	BPD, H <sub>2</sub> O	BPD, GAS	MCF				
PERFORATIONS							
PERFORATIONS							
PERFORATIONS							

PREVIOUS TREATMENT: DATE TYPE MATERIALS

TREATMENT INSTRUCTIONS: TREAT THRU TUBING  ANNULUS  CASING  TUBING/ANNULUS  HYDRAULIC HORSEPOWER ORDERED

Cmt 12 Stage Long string w/ DU @ 1783' Cmt for Bot. stage  
Behm 500 gal Super Slick 150 SKS EA-2 5% col seal 1870 salt 1/4 #516610/SK  
2nd stage 350 SKS HLC

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

- As consideration, the above-named Customer agrees: THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED
- a) To pay Halliburton in accord with the rates and terms stated in Halliburton's current price list. Invoices are payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable, but never to exceed 18% per annum. In the event it becomes necessary to employ attorneys to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account.
  - b) To defend, indemnify, release and hold harmless Halliburton, its divisions, subsidiaries, parent and affiliated companies and the officers, directors, employees, agents and servants of all of them, from and against any claims, liability, expenses, attorneys fees, and costs of defense to the extent permitted by law for:
    - Damage to property owned by, in the possession of, or leased by Customer, and/or the well owner (if different from Customer), including, but not limited to, surface and subsurface damage. The term "well owner" shall include working and royalty interest owners.
    - Reservoir, formation, or well loss or damage, subsurface trespass or any action in the nature thereof.
    - Personal injury or death or property damage (including, but not limited to, damage to the reservoir, formation or well), or any damages whatsoever, growing out of or in any way connected with or resulting from pollution, subsurface pressure, losing control of the well and/or a well blowout or the use of radioactive material.
  - c) The defense, indemnity, release and hold harmless obligations of Customer provided for in this Section b) and Section c) below shall apply to claims or liability even if caused or contributed to by Halliburton's negligence, strict liability, or the unseaworthiness of any vessel owned, operated, or furnished by Halliburton or any defect in the data, products, supplies, materials, or equipment of Halliburton whether in the preparation, design, manufacture, distribution, or marketing thereof, or from a failure to warn any person of such defect. Such defense, indemnity, release and hold harmless obligations of Customer shall not apply where the claims or liability are caused by the gross negligence or willful misconduct of Halliburton. The term "Halliburton" as used in said Sections b) and c) shall mean Halliburton, its divisions, subsidiaries, parent and affiliated companies, and the officers, directors, employees, agents and servants of all of them.
  - d) That because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the effectiveness of the products, supplies or materials, nor the results of any treatment or service, nor the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be liable for and Customer shall indemnify Halliburton against any damages arising from the use of such information.
  - e) That Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.
  - f) That Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of, or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
  - g) To waive the provisions of the Deceptive Trade Practices - Consumer Protection Act, to the extent permitted by law.
  - h) That this contract shall be governed by the law of the state where services are performed or materials are furnished.
  - i) That Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.  
 SIGNED Walter Nelson CUSTOMER  
 DATE 11-17-90

Phone 913-483-2627, Russell, Kansas

Phone 316-793-5861, Great Bend, Kansas

Phone Plainville 913-434-2812

Phone Ness City 913-798-3843

GENERAL INVESTMENT CORPORATION

# ALLIED CEMENTING CO., INC. No. 9080

Home Office P. O. Box 31 Russell, Kansas 67665

Order No. 9080

Date	11-8-90	Sec.	34	Twp.	9S	Range	20W	AMU Called Out	5:00 P.M.	On Location	7:55 P.M.	Job Start	9:20 P.M.	Finish	9:45 P.M.
Lease	Dannell	Well No.	8	Location	Palco (Booster St.) 1/4 E 1/8 S			County	Rooks	State	Ks.				
Contractor	Mallard Joint Venture Reg #1														
Type Job	Set Surface Pipe														
Hole Size	12 1/4"		T.D.	265'											
Csg.	8 5/8"		Depth	262'											
Tbg. Size															
Drill Pipe															
Tool															
Cement Left in Csg.	15'		Shoe Joint												
Press Max.	Minimum														
Meas Line	Displace X														
Perf.															

## EQUIPMENT

No.	Cementer	Gary H.
Pumptrk #191	Helper	Wayne Ma.
No.	Cementer	
Pumptrk	Helper	
	Driver	Lawrence H.
Bulktrk #212	Driver	

DEPTH of Job	Reference	Amount
	#1 Pumptruck-surface	\$380.00
	#13 mileage @ 2.00/mi	28.00
	1-8 5/8" wooden plug	42.90
	Sub-Total	450.90
	Tax	
	Total	

Remarks: Cement Circulated to bottom of celler.

You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Charge To: Mustang Oil & Gas Corporation

Street: P.O. Drawer 1609

City: Great Bend, State: Ks. 67530

The above was done to satisfaction and supervision of owner agent or contractor.

Purchase Order No. *Don F. Dulak*

Amount Ordered: 160 sks 60/40 poz 2 legal, 320 C.C.

Consisting of		
Common	96 sks @ 5.25/sk.	\$504.00
Poz. Mix	64 sks @ 2.25/sk.	144.00
Gel.	3 sks	N/C.
Chloride	5 sks @ 21.00/sk.	105.00
Quickset		
Sales Tax		
Handling	@ 1.00/sk. (160 sks)	160.00
Mileage	@ 0.34/sk./mi. (14 mi.)	67.20
Sub-Total		980.20
Total		

Floating Equipment: Thanks

RECEIVED  
STATE CORPORATION COMMISSION  
MAR 13 1991  
CONSERVATION DIVISION  
Wichita, Kansas

MALLARD JV, INC.  
P.O. BOX 1009  
McPHERSON, KS 67460

ORIGINAL

15-163-23126-00-00

DRILLERS' LOG

RECEIVED  
STATE CORPORATION COMMISSION

MAR 13 1991

OPERATOR: Mustang Oil & Gas Corporation  
107 N. Market, Suite 703  
Wichita, KS 67202

WELL: Darrell #8

CONSERVATION DIVISION  
Wichita, Kansas

API#: 15-163-23,126

COMMENCED: November 8, 1990

LOCATION: C NE NW

COMPLETED: November 17, 1990

4620 Ft. FSL, 3300 Ft. FEL

TOTAL DEPTH: 3928 Ft.

SEC. 34 TWP. 9 S RGE. 20 W

ELEVATION: 2271 Ft. G.L.

COUNTY: Rooks

2279 Ft. K.B.

\*\*\*\*\*

STATUS: Set Casing - Arbuckle Formation

REMARKS:

Cut 12 1/4" hole to 262' and ran 6 joints 8-5/8" x 24# x 252.78' surface casing. Set at 262.38' and cemented with 160 sacks 60/40 Pozmix, 2% gel, 3% cc. Cement did circulate. P.D. at 9:45 p.m. 11-8-90.

Ran 4 DSTs.

Drilled 7-7/8" hole to 3928' and ran electric log. Ran 108 joints 5 1/2" x 14# x 3932' production casing and set at 3927'. Cemented 1st stage with 150 sacks EA-2, 5% Calseal, 18% salt, 1/4# Floseal/sack. Cemented 2nd stage with 350 sacks HLC. Cement did circulate. P.D. at 6:45 a.m. 11-17-90.

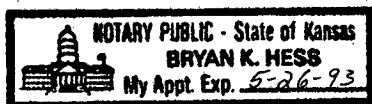
\*\*\*\*\*

STATE OF KANSAS )  
COUNTY OF MCPHERSON ) SS:

I, Dick Hess of MALLARD JV, INC. hereby certify that this is a true and correct copy of the log of the Darrell #8 well as reflected by the files of Mallard JV, Inc.

*Dick Hess*

Subscribed and sworn to before me this 26th day of November, 1990.



*Bryan K. Hess*  
NOTARY PUBLIC

MALLARD JV, INC.  
P.O. BOX 1009  
McPHERSON, KS 67460

ORIGINAL

RECEIVED  
STATE CORPORATION COMMISSION

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15-163-23126-00-00

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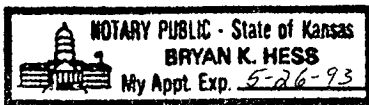
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COUNTY OF MCPHERSON ) SS:

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*Dick Hess*

Subscribed and sworn to before me this 26th day of November, 1990.



*Bryan K. Hess*  
NOTARY PUBLIC

# Superior Testers Enterprises, Inc.

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

(316) 792-6902

15-163-23126-00-00

ORIGINAL

Date 11 14 90 Location 34-95-20<sup>W</sup> Elevation 2271 County ROOKS

Company MUSTANG OIL & GAS Number of Copies 5

Charts Mailed to Suite 203 - 107N MARKET WICHITA, KS 67202

Drilling Contractor MALLARD DRILLING

Length Drill Pipe 3416 I.D. Drill Pipe 380 Tool Joint Size 4 1/2 XH

Length Weight Pipe - I.D. Weight Pipe - Tool Joint Size -

Length Drill Collars 244 I.D. Drill Collars 225 Tool Joint Size 4 1/2 XH

Top Packer Depth 3640 Bottom Packer Depth 3645 Number of Packers Two Packer Size 63

TESTED FROM 3645 TO 3712 ANCHOR LENGTH 67 TOTAL DEPTH 3712 Hole Size 78

LEASE & WELL NO. DARRELL #8 FORMATION TESTED LASSIP TEST NO. 3

Mud Weight 95 Viscosity 45 Water Loss 2.9 Chlorides - Pits 3900 D.S.T. 38,000

Maximum Temp. 116 °F Initial Hydrostatic Pressure (A) 1866 P.S.I. Final Hydrostatic Pressure (H) 1878 P.S.I.

Tool Open I.F.P. from 10 00 m to 19 30 m 30 min

Tool Closed I.C.I.P. from 10 30 m to 11 15 m 45 min

Tool Open F.F.P. from 11 15 m to 12 15 m 60 min

Tool Closed F.C.I.P. from 12 15 m to 14 5 m 90 min

from [B]	<u>91</u>	P.S.I. to [C]	<u>155</u>	P.S.I.
[D]	<u>724</u>			P.S.I.
from [E]	<u>192</u>	P.S.I. to [F]	<u>210</u>	P.S.I.
[G]	<u>457</u>			P.S.I.

Initial Blow WEAK BLOW Building slowly 11" INTO WATER

Final Blow WEAK Building slowly 8" INTO WATER

Total Feet Recovered 410 slight oil cut muddy water Gravity of Oil \_\_\_\_\_ Corrected \_\_\_\_\_

45 Feet of slight oil cut watery mud 0 % Gas 2 % Oil 58 % Mud 40 % Water

60 Feet of slight oil cut muddy water 0 % Gas 1 % Oil 42 % Mud 57 % Water

180 Feet of muddy water trace of oil 0 % Gas - % Oil 15 % Mud 85 % Water

120 Feet of '' '' '' '' '' '' 9 % Gas - % Oil 7 % Mud 93 % 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 \_\_\_\_\_ Safety Joint \_\_\_\_\_ Extra Packer \_\_\_\_\_ Straddle \_\_\_\_\_ Hook Wall \_\_\_\_\_

Top Recorder No. 5463 Clock No. 20692 Depth 3706 Cir. Sub \_\_\_\_\_ Sampler \_\_\_\_\_

Bottom Recorder No. 10208 Clock No. 23836 Depth 3709 Insurance \_\_\_\_\_

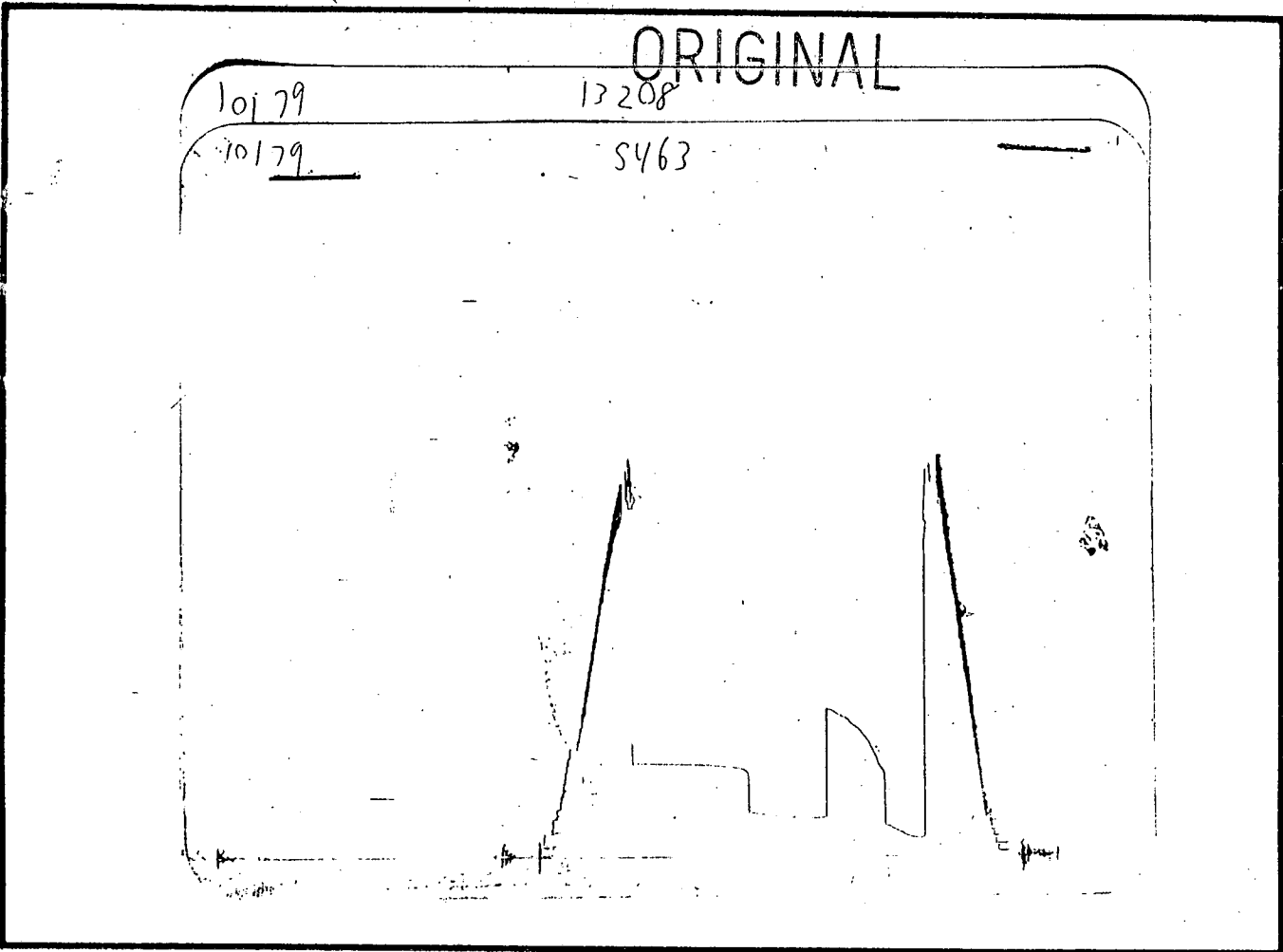
Price of Job \_\_\_\_\_

Tool Operator PAT STEVENSON

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

No 10179

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.



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud . . . . .	<u>1866</u>	<u>1908</u>	P.S.I.
(B) First Initial Flow Pressure . . . . .	<u>91</u>	<u>79</u>	P.S.I.
(C) First Final Flow Pressure . . . . .	<u>155</u>	<u>146</u>	P.S.I.
(D) Initial Closed-in Pressure . . . . .	<u>724</u>	<u>718</u>	P.S.I.
(E) Second Initial Flow Pressure . . . . .	<u>192</u>	<u>185</u>	P.S.I.
(F) Second Final Flow Pressure . . . . .	<u>210</u>	<u>207</u>	P.S.I.
(G) Final Closed-in Pressure . . . . .	<u>457</u>	<u>452</u>	P.S.I.
(H) Final Hydrostatic Mud . . . . .	<u>1831</u>	<u>1847</u>	P.S.I.



ORIGINAL

WELL IDENTIFICATION DATA

COMPANY : MUSTANG OIL AND GAS	WELL NAME : DARRELL #8
ADDRESS : 197 N. MARKET, WICHITA	LOCATION : 34-92-20W
STATE & COUNTY : KANSAS, ROCKS	FIELD :
ELEV. (OO) : 2262 (OB) : 2271	TEST DATE : 11-14-1990

EQUIPMENT AND HOLE DATA

FORMATION TESTED : LANOISIAN	DRILL PIPE LENGTH(ft) : 3416
TEST INT. KB : 3645 to 3712	DRILL PIPE O.D. (in) : 3.82
ANCHOR DEPTH(ft) : 67	WEIGHT PIPE LENGTH(ft) :
TYPE OF TEST : Conventional	WEIGHT PIPE ID : 2.75
TOTAL DEPTH(ft-OB) : 3712	DRILL COLLAR LENGTH(ft) : 244
MAIN HOLE SIZE(in) : 7 7/8	DRILL COLLAR I.D. (in) : 2.259
MUD WEIGHT : 9.5	TOP PACKER DEPTH(kb) : 3640
MUD VISCOSITY : 45	BOTTOM PACKER DEPTH(kb) : 3645
MUD CHLORIDES : 3000	DUAL PACKERS :
SURFACE CHISE : 3/4	PACKER SIZE(in) : 6 3/4
BOTTOM CHISE (in) : 3/4	PACKER HOLD : Yes
TOOL SIZE (O.D.) : 5 1/2	TOOL FLUX : No
TOOL JOINT SIZE (P.H.) : 4 1/2	REVERSED OUT : No
RESERVOIR TEMPERATURE(F) : 116	TEST TICKET NUMBER : 10179

EXTRA EQUIPMENT :

ELEMENT SERIAL NO. : 5463	
RANGE : 0 - 3650	CLOCK RANGE : 12 HOURS
CAL. ERR. : 922.07 * 1e-11 = 2.47	

SURFACE BLOW

1st Opening : WEAK BLOW BUILT TO 11 INCHES INTO THE WATER  
 2nd Opening : WEAK BLOW BUILT TO 8 INCHES INTO THE WATER

RECOVERY

Recovered 45 feet of SLIGHTLY OIL CUT WATERY MUD  
 Recovered 40 feet of SLIGHTLY OIL CUT MUDDY WATER  
 Recovered 300 feet of MUDDY WATER WITH A TRACE OF OIL

REMARKS :

WITNESSED BY : BOB DOUGLASS TOOL OPERATOR : PAI STEVENSON

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

# ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

15-143-23126-00-00

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : MUSTANG OIL AND GAS  
 DATE OF TEST : 11-14-1990  
 DEPTH : 3706.0

WELL NAME : DARRELL #8  
 LOCATION : 34-52-20W  
 SERIAL NO. : 5463

CORRENDER	TIME min	DEPT in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO. : 4					
Depth : 3706.0 ft. kb					
1ST H. PROSTATIC	0.0	2.075	1910.83	-2.16	1908.67
0:00	0.0	.087	77.75	2.06	79.82
-10:00 1ST FLOW	0.0	.087	77.75	2.06	79.82
- 10:05	5.0	.091	81.44	2.04	83.49
- 10:10	10.0	.097	86.97	2.02	88.99
- 10:15	15.0	.112	100.81	1.95	102.75
- 10:20	20.0	.127	114.64	1.88	116.51
- 10:25	25.0	.144	130.31	1.80	132.11
10:30	30.0	.160	145.06	1.72	146.79
-10:30 END FLOW	0.0	.160	145.06	1.72	146.79
- 10:35	5.0	.481	441.05	.24	441.28
- 10:40	10.0	.570	523.11	-.18	522.94
10:45	15.0	.628	576.59	-.45	576.15
- 10:50	20.0	.674	619.01	-.66	618.35
- 10:55	25.0	.700	642.98	-.78	642.20
- 11:00	30.0	.731	671.57	-.92	670.64
- 11:05	35.0	.751	690.01	-1.02	688.99
- 11:10	40.0	.772	709.37	-1.11	708.26
- 11:15	45.0	.783	719.51	-1.17	718.35
-11:15 1ST SHUT-IN	0.0	.783	719.51	-1.17	718.35
-11:15 2ND FLOW	0.0	.202	183.79	1.53	185.32
- 11:20	5.0	.200	181.95	1.54	183.49
- 11:25	10.0	.200	181.95	1.54	183.49
- 11:30	15.0	.200	181.95	1.54	183.49
- 11:35	20.0	.200	181.95	1.54	183.49
- 11:40	25.0	.202	183.79	1.53	185.32
- 11:45	30.0	.204	185.64	1.52	187.16
- 11:50	35.0	.208	189.32	1.50	190.83
- 11:55	40.0	.211	192.09	1.49	193.58
- 12:00	45.0	.213	193.93	1.48	195.41
- 12:05	50.0	.217	197.62	1.46	199.08
- 12:10	55.0	.224	204.08	1.43	205.50
- 12:15	60.0	.226	205.92	1.42	207.34
-12:15 END FLOW	0.0	.226	205.92	1.42	207.34
- 12:20	5.0	.458	419.84	.34	420.18
- 12:25	10.0	.466	427.22	.30	427.52
- 12:30	15.0	.470	430.91	.29	431.19
- 12:35	20.0	.473	433.67	.27	433.94
- 12:40	25.0	.476	436.44	.26	436.70
- 12:45	30.0	.479	439.20	.24	439.45

ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

15-163-23124-00-00

SUBSURFACE PRESSURE MEASUREMENTS

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COMPANY : MUSTANG OIL AND GAS  
 DATE OF TEST : 11-14-1990  
 DEPTH : 3706.0

WELL NAME : DARRELL #3  
 LOCATION : 34-92-20W  
 SERIAL NO. : 5463

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.: 3					
- 12:50	35.0	.485	444.74	.22	444.95
- 12:55	40.0	.485	444.74	.22	444.95
- 13:00	45.0	.486	445.66	.21	445.87
- 13:05	50.0	.487	446.58	.21	446.79
- 13:10	55.0	.487	446.58	.21	446.79
- 13:15	60.0	.488	447.50	.20	447.71
- 13:20	65.0	.489	448.43	.20	448.62
- 13:25	70.0	.489	448.43	.20	448.62
- 13:30	75.0	.490	449.35	.19	449.54
- 13:35	80.0	.492	451.19	.18	451.38
- 13:40	85.0	.493	452.11	.18	452.29
- 13:45	90.0	.493	452.11	.18	452.29
-1:45 2ND SHUT-IN	0.0	.493	452.11	.18	452.29
-2ND HYDROSTATIC	0.0	2.009	1849.97	-2.19	1847.79

# Superior Testers Enterprises, Inc.

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

15-163-23126-00-00

Date 11 13 90 Location 37-9S-20W Elevation 227' County Rooks

Company MUSTANG oil & GAS Number of Copies 5

Charts Mailed to Suite 703 107 N. MARKET Wichita Kc 67202

Drilling Contractor Mallard Drilling

Length Drill Pipe 3287 I.D. Drill Pipe 380 Tool Joint Size 4 1/2 XH

Length Weight Pipe - I.D. Weight Pipe - Tool Joint Size -

Length Drill Collars 244 I.D. Drill Collars 225 Tool Joint Size 4 1/2 XH

Top Packer Depth 3597 Bottom Packer Depth 2602 Number of Packers Two Packer Size 6 1/2

TESTED FROM 3602 TO 3615 ANCHOR LENGTH 13 TOTAL DEPTH 3615 Hole Size 7 7/8

LEASE & WELL NO. DARR #5 FORMATION TESTED Landing TEST NO. 2

Mud Weight 9.3 Viscosity 44 Water Loss - Chlorides - Pits 3000 D.S.T. 28,000

Maximum Temp. - °F Initial Hydrostatic Pressure (A) 1838 P.S.I. Final Hydrostatic Pressure (H) 1811 P.S.I.

Tool Open I.F.P. from 1245 m to 115 m 30 min

Tool Closed I.C.I.P. from 115 m to 200 m 45 min

Tool Open F.F.P. from 200 m to 300 m 60 min

Tool Closed F.C.I.P. from 300 m to 430 m 90 min

from [B] <u>109</u> P.S.I. to [C] <u>183</u> P.S.I.
[D] <u>430</u> P.S.I.
from [E] <u>247</u> P.S.I. to [F] <u>329</u> P.S.I.
[G] <u>430</u> P.S.I.

Initial Blow Weak Building To Bottom of Bucket 9"

Final Blow Weak Building To Bottom of Bucket 11"

Total Feet Recovered 230' slight oil cut muddy water Gravity of Oil - Corrected -

Feet of		% Gas	% Oil	% Mud	% Water
<u>25</u>	<u>CLEAN oil</u>	<u>49</u>	<u>76</u>	<u>0</u>	<u>-</u>
<u>105</u>	<u>Slightly gas oil cut muddy water</u>	<u>3</u>	<u>3</u>	<u>8</u>	<u>86</u>
<u>180</u>	<u>" " " "</u>	<u>2</u>	<u>1</u>	<u>3</u>	<u>94</u>
<u>240</u>	<u>muddy water trace of oil on top</u>	<u>0</u>	<u>-</u>	<u>4</u>	<u>96</u>
<u>180</u>	<u>" " " "</u>	<u>0</u>	<u>-</u>	<u>2</u>	<u>98</u>
<u>    </u>	<u>Feet of</u>	<u>% Gas</u>	<u>% Oil</u>	<u>% Mud</u>	<u>% Water</u>
<u>    </u>	<u>Feet of</u>	<u>% Gas</u>	<u>% Oil</u>	<u>% Mud</u>	<u>% Water</u>
<u>    </u>	<u>Feet of</u>	<u>% Gas</u>	<u>% Oil</u>	<u>% Mud</u>	<u>% Water</u>
<u>    </u>	<u>Feet of</u>	<u>% Gas</u>	<u>% Oil</u>	<u>% Mud</u>	<u>% Water</u>

Remarks -

Extra Equipment - Jars - Safety Joint - Extra Packer - Straddle - Hook Wall -

Top Recorder No. 5463 Clock No. 20692 Depth 3609 Cir. Sub - Sampler -

Bottom Recorder No. 13208 Clock No. 23836 Depth 3602 Insurance -

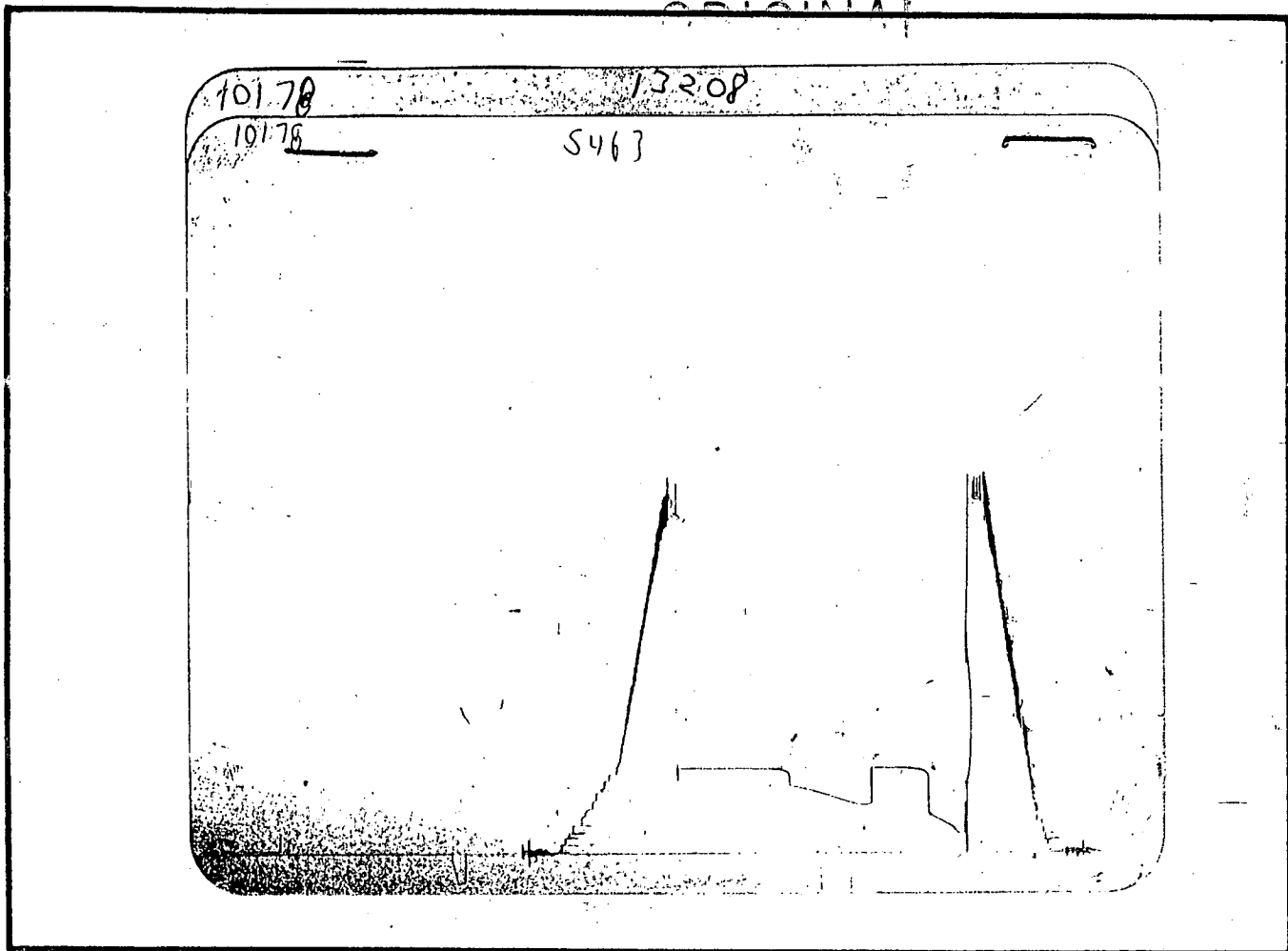
Price of Job -

Tool Operator PAT STEVENSON

Approved By -

No 10178

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.



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud .....	1838	1826	P.S.I.
(B) First Initial Flow Pressure .....	109	98	P.S.I.
(C) First Final Flow Pressure .....	183	182	P.S.I.
(D) Initial Closed-In Pressure .....	430	411	P.S.I.
(E) Second Initial Flow Pressure .....	247	238	P.S.I.
(F) Second Final Flow Pressure .....	329	328	P.S.I.
(G) Final Closed-In Pressure .....	430	412	P.S.I.
(H) Final Hydrostatic Mud .....	1811	1785	P.S.I.

## ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

## WELL IDENTIFICATION DATA

COMPANY : MUSTANG OIL & GAS                      WELL NAME : DARRELL #8  
 ADDRESS : 107 N. MARKET, WICHITA              LOCATION : 34-95-20W  
 STATE : COUNTY : KANSAS, ROOKS              FIELD :  
 ELEV. (GR) : 2262              (KB) : 2271              TEST DATE : 11-13-1990

## EQUIPMENT AND HOLE DATA

FORMATION TESTED : LANSING                      DRILL PIPE LENGTH(ft) : 3287  
 TEST INT. KB : 3602              to 3615              DRILL PIPE O.D. (in) : 3.82  
 ANCHOR LENGTH(ft) : 113              WEIGHT PIPE LENGTH(ft) :  
 TYPE OF TEST : Conventional              WEIGHT PIPE ID : 2.75  
 TOTAL DEPTH(fe-kb) : 3615              DRILL COLLAR LENGTH(ft) : 244  
 MAIN HOLE SIZE(in) : 7 7/8              DRILL COLLAR I.D. (in) : 2.259  
 MUD WEIGHT : 9.3              TOP PACKER DEPTH(kb) : 3597  
 MUD VISCOSITY : 44              BOTTOM PACKER DEPTH(kb) : 3602  
 MUD CHLORIDES : 3000              DUAL PACKERS :  
 SURFACE CHOKE : 3/4              PACKER SIZE(in) : 6 3/4  
 BOTTOM CHOKE(in) : 3/4              PACKER HOLD : Yes  
 TOOL SIZE(O.D.) : 5 1/2              TOOL PLUG : No  
 TOOL JOINT SIZE(F.H.) : 4 1/2              REVERSED OUT : No  
 RESERVOIR TEMPERATURE(F) : 0              TEST TICKET NUMBER : 10178

EXTRA EQUIPMENT :

ELEMENT SERIAL NO. : 5463  
 RANGE : 0 - 3650                      CLOCK RANGE : 12 HOURS  
 CAL. EQU. : 922.07 \* Defl. - 2.47

## SURFACE BLOW

1st Opening : WEAK BLOW BUILT TO BOTTOM OF BUCKET IN 9 MINUTES  
 2nd Opening : WEAK BLOW-BOTTOM OF THE BUCKET IN 11 MINUTES

## RECOVERY

Recovered 25 feet of CLEAN OIL 4% GAS 96% OIL  
 Recovered 185 feet of SLIGHTLY OIL & GAS CUT MUDDY WATER  
 Recovered 420 feet of MUDDY WATER WITH A TRACE OF OIL

REMARKS :

WITNESSED BY : BOB DOUGLASS                      TOOL OPERATOR : PAT STEVENSON

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

15-163-23126-00-00

# ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

---

COMPANY : MUSTANG OIL & GAS  
 DATE OF TEST : 11-13-1990  
 DEPTH : 3609.0

WELL NAME : DARRELL #8  
 LOCATION : 34-9S-20W  
 SERIAL NO. : 5463

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO. : 1					
Depth : 3609.0 ft-kb					
- 0:00	0.0	.984	906.69	-2.11	904.59
-1ST HYDROSTATIC	0.0	1.986	1828.76	-2.20	1826.57
-12:45 1ST FLOW	0.0	.107	96.19	1.97	98.17
- 12:50	5.0	.107	96.19	1.97	98.17
- 12:55	10.0	.125	112.79	1.89	114.68
- 13:00	15.0	.151	136.77	1.77	138.53
- 13:05	20.0	.168	152.44	1.69	154.13
- 13:10	25.0	.183	166.27	1.62	167.89
- 13:14	29.0	.199	181.03	1.54	182.57
-1	0.0	.199	181.03	1.54	182.57
- 12:48	3.0	.432	395.87	.46	396.33
- 12:51	6.0	.438	401.40	.43	401.83
+ 12:54	9.0	.441	404.17	.42	404.59
- 12:57	12.0	.446	408.78	.40	409.17
- 13:00	15.0	.447	409.70	.39	410.09
- 13:05	20.0	.449	411.54	.38	411.93
- 13:10	25.0	.449	411.54	.38	411.93
- 13:15	30.0	.449	411.54	.38	411.93
- 13:20	35.0	.449	411.54	.38	411.93
- 13:25	40.0	.449	411.54	.38	411.93
- 13:30	45.0	.449	411.54	.38	411.93
- 12:45	0.0	.409	374.66	.57	375.23
-2:00 1ST SHUT-IN	0.0	.449	411.54	.38	411.93
-2:00 2ND FLOW	0.0	.260	237.27	1.26	238.53
- 2:05	5.0	.256	233.58	1.28	234.86
- 2:10	10.0	.257	234.51	1.27	235.78
- 2:15	15.0	.263	240.04	1.25	241.28
- 2:20	20.0	.274	250.18	1.20	251.38
- 2:25	25.0	.283	258.48	1.15	259.63
- 2:30	30.0	.296	270.47	1.09	271.56
- 2:35	35.0	.306	279.69	1.05	280.73
- 2:40	40.0	.318	290.75	.99	291.74
- 2:45	45.0	.327	299.05	.95	300.00
- 2:50	50.0	.337	308.27	.90	309.17
- 2:55	55.0	.344	314.73	.87	315.60
- 3:00	60.0	.352	322.10	.83	322.94
- 3:03	63.0	.358	327.63	.81	328.44
-3:03 END FLOW	0.0	.358	327.63	.81	328.44
- 3:06	3.0	.435	398.63	.45	399.08
- 3:09	6.0	.440	403.24	.43	403.67

15-163-23126-00-00  
ORIGINAL

SUPERIOR TESTERS ENTERPRISES, INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : MUSTARD OIL & GAS  
DATE OF TEST : 11-13-1990  
DEPTH : 3509.0

WELL NAME : DARRELL #8  
LOCATION : 34-95-20W  
SERIAL NO. : 5463

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST BEGINS					
- 3:12	9.0	.443	406.01	.41	406.42
- 3:15	12.0	.445	407.85	.40	408.26
- 3:18	15.0	.447	409.70	.39	410.09
- 3:21	18.0	.447	409.70	.39	410.09
- 3:24	21.0	.447	409.70	.39	410.09
- 3:27	24.0	.447	409.70	.39	410.09
- 3:30	27.0	.448	410.62	.39	411.01
- 3:33	30.0	.448	410.62	.39	411.01
- 3:36	33.0	.448	410.62	.39	411.01
- 3:39	36.0	.449	411.54	.38	411.93
- 3:42	39.0	.449	411.54	.38	411.93
- 3:45	42.0	.449	411.54	.38	411.93
- 3:48	45.0	.449	411.54	.38	411.93
- 3:51	48.0	.449	411.54	.38	411.93
- 3:54	51.0	.449	411.54	.38	411.93
- 3:57	54.0	.449	411.54	.38	411.93
- 4:00	57.0	.449	411.54	.38	411.93
- 4:03	60.0	.449	411.54	.38	411.93
- 4:06	63.0	.449	411.54	.38	411.93
- 4:09	66.0	.449	411.54	.38	411.93
- 4:12	69.0	.450	412.46	.38	412.84
- 4:15	72.0	.450	412.46	.38	412.84
- 4:18	75.0	.450	412.46	.38	412.84
- 4:21	78.0	.450	412.46	.38	412.84
- 4:24	81.0	.450	412.46	.38	412.84
- 4:27	84.0	.450	412.46	.38	412.84
- 4:30	87.0	.450	412.46	.38	412.84
-4:30 2ND SHUT IN	0.0	.450	412.46	.38	412.84
-2ND HYDROSTATIC	0.0	1.941	1787.27	-2.22	1785.06



15-134-23126-00-00

# Superior Testers Enterprises, Inc.

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

ORIGINAL

Date 11 12 90 Location 34-9s-20<sup>w</sup> Elevation 2271<sup>6L</sup> County ROOKS

Company MUSTANG OIL & GAS CORPORATION Number of Copies 5

Charts Mailed to Suite 207, 107 N. MARKET WICHITA KS 67202

Drilling Contractor Mallard Drilling

Length Drill Pipe 3256 I.D. Drill Pipe 7 80 Tool Joint Size 4 1/2 x 11

Length Weight Pipe - I.D. Weight Pipe - Tool Joint Size -

Length Drill Collars 244 I.D. Drill Collars 2 25 Tool Joint Size 4 1/2 x 11

Top Packer Depth 3537 Bottom Packer Depth 3542 Number of Packers Two Packer Size 6 3/4

TESTED FROM 3542 TO 3594 ANCHOR LENGTH 52 TOTAL DEPTH 3594 Hole Size 7 7/8

LEASE & WELL NO. DARRELL # 8 FORMATION TESTED LANSING TEST NO. 1

Mud Weight 9.3 Viscosity 42 Water Loss 7 Chlorides - Pits 3,000 D.S.T. -

Maximum Temp. 109 °F Initial Hydrostatic Pressure (A) 1829 P.S.I. Final Hydrostatic Pressure (H) 1811 P.S.I.

Tool Open I.F.P. from 1230 m to 100 m 30 min

Tool Closed I.C.I.P. from 100 m to 100 m 30 min

Tool Open F.F.P. from 130 m to 200 m 30 min

Tool Closed F.C.I.P. from 200 m to 230 m 30 min

Initial Blow WEAK BLOW OFF Top Dried 9"

Final Blow NO BLOW

Total Feet Recovered 15' slightly oil cut mud less than 1% oil 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
Feet of	% Gas	% Oil	% Mud	% Water

Remarks -

Extra Equipment - Jars - Safety Joint - Extra Packer - Straddle - Hook Wall -

Top Recorder No. 5463 Clock No. 20692 Depth 35 88 Clr. Sub - Sampler -

Bottom Recorder No. 13208 Clock No. 23836 Depth 35 91 Insurance -

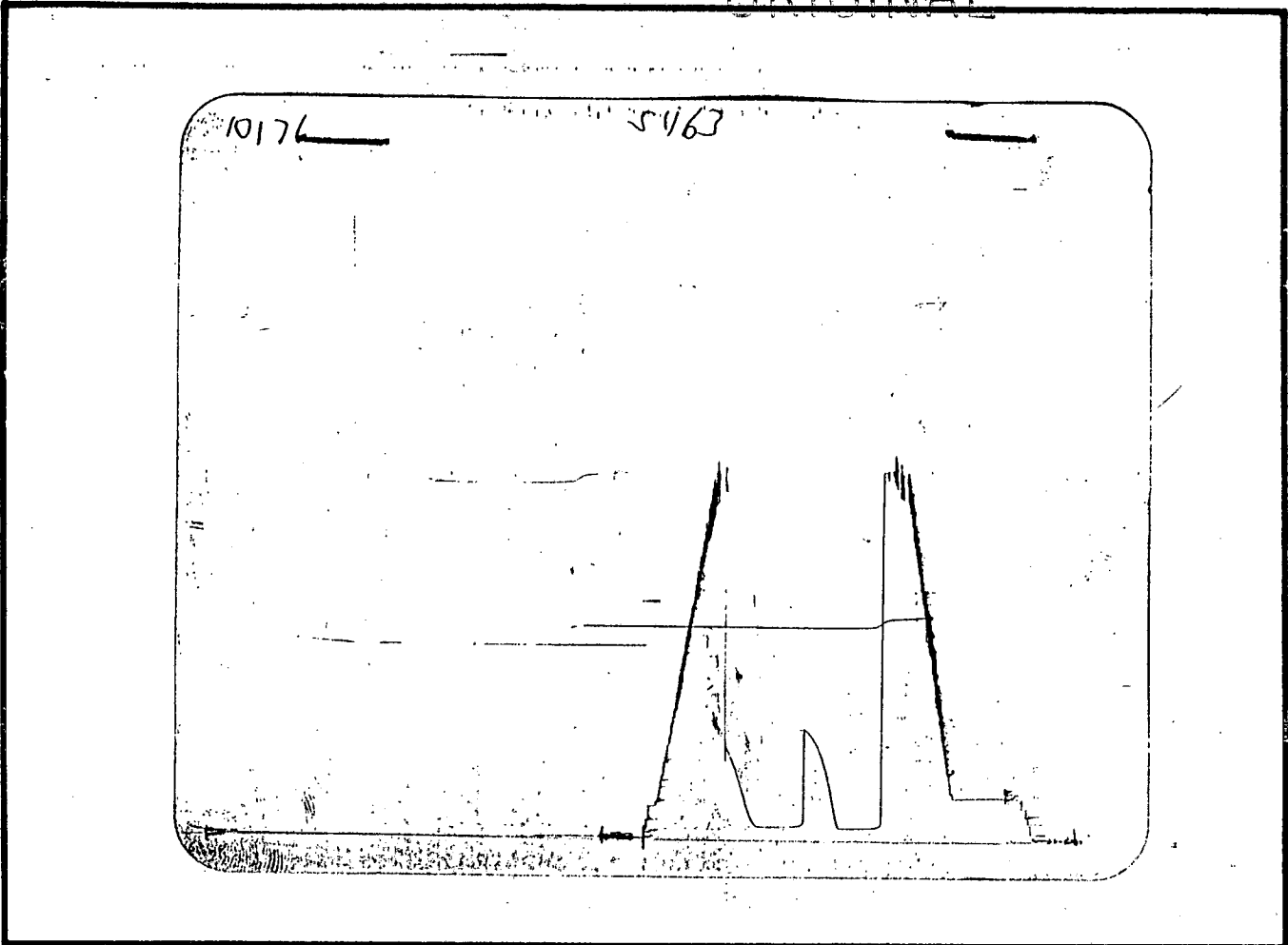
Price of Job -

Tool Operator PAT STEVENSON

Approved By -

No. 10177

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.



This is an actual photograph of recorder chart.

POINT	PRESSURE		P.S.I.
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud .....	1829	1820	P.S.I.
(B) First Initial Flow Pressure .....	73	78	P.S.I.
(C) First Final Flow Pressure .....	64	61	P.S.I.
(D) Initial Closed-In Pressure .....	549	545	P.S.I.
(E) Second Initial Flow Pressure .....	79	90	P.S.I.
(F) Second Final Flow Pressure .....	73	68	P.S.I.
(G) Final Closed-In Pressure .....	457	460	P.S.I.
(H) Final Hydrostatic Mud .....	1811	1820	P.S.I.

ORIGINAL

## SUPERIOR TESTERS ENTERPRISES INC.

## WELL IDENTIFICATION DATA

COMPANY : MUSTANG OIL & GAS  
 ADDRESS : 107 N. MARKET, WICHITA  
 STATE & COUNTY : KANSAS, ROOKS  
 ELEV. (GR) : 2266 (KB) : 2271  
 WELL NAME : DARRELL #8  
 LOCATION : 34-9S-20W  
 FIELD :  
 TEST DATE : 11-12-1990

## EQUIPMENT AND HOLE DATA

FORMATION TESTED : LANSING  
 TEST INT. KB : 3542 to 3594  
 ANCHOR LENGTH(ft) : 52  
 TYPE OF TEST : Conventional  
 TOTAL DEPTH(ft-kb) : 3594  
 MAIN HOLE SIZE(in) : 7 7/8  
 MUD WEIGHT : 9.3  
 MUD VISCOSITY : 42  
 MUD CHLORIDES : 3000  
 SURFACE CHOKE : 3/4  
 BOTTOM CHOKE(in) : 3/4  
 TOOL SIZE(O.D.) : 5 1/2  
 TOOL JOINT SIZE(F.H.) : 4 1/2  
 RESERVOIR TEMPERATURE(F) : 109  
 DRILL PIPE LENGTH(ft) : 3256  
 DRILL PIPE O.D.(in) : 3.82  
 WEIGHT PIPE LENGTH(ft) :  
 WEIGHT PIPE ID : 2.75  
 DRILL COLLAR LENGTH(ft) : 244  
 DRILL COLLAR I.D.(in) : 2.259  
 TOP PACKER DEPTH(kb) : 3537  
 BOTTOM PACKER DEPTH(kb) : 3542  
 DUAL PACKERS :  
 PACKER SIZE(in) : 6 3/4  
 PACKER HOLD : Yes  
 TOOL PLUG : No  
 REVERSED OUT : No  
 TEST TICKET NUMBER : 10177

EXTRA EQUIPMENT :

ELEMENT SERIAL NO. : 5463  
 RANGE : 0 - 3650  
 CAL. EQU. : 922.07 \* Defl. - 2.47  
 CLOCK RANGE : 12 HOURS

## SURFACE BLOW

1st Opening : WEAK BLOW DIED IN 9 MINUTES  
 2nd Opening : NO BLOW

## RECOVERY

Recovered 15 feet of SLIGHTLY OIL CUT MUD-LESS THAN 1%OIL

REMARKS :

WITNESSED BY : BOB DOUGLASS TOOL OPERATOR : PAT STEVENSON

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

15-163-23126-00-00

ORIGINAL

## SUPERIOR TESTERS ENTERPRISES INC.

## SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : MUSTANG OIL & GAS  
 DATE OF TEST : 11-12-1990  
 DEPTH : 3588.0

WELL NAME : DARFELL #8  
 LOCATION : 34-95-20W  
 SERIAL NO. : 5463

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.: 1					
Depth : 3588.0 ft-eb					
-1ST HYDROSTATIC	0.0	1.979	1822.31	-2.20	1820.11
-12:30 1ST FLOW	0.0	.086	76.83	2.07	78.90
- 12:35	5.0	.070	62.08	2.14	64.22
- 12:40	10.0	.070	62.08	2.14	64.22
- 12:45	15.0	.070	62.08	2.14	64.22
- 12:50	20.0	.070	62.08	2.14	64.22
- 12:55	25.0	.070	62.08	2.14	64.22
- 13:01	31.0	.067	59.31	2.16	61.47
-1:01 END FLOW	0.0	.067	59.31	2.16	61.47
- 1:06	5.0	.162	146.91	1.72	148.62
- 1:11	10.0	.342	312.88	.88	313.76
- 1:16	15.0	.461	422.61	.33	422.94
- 1:21	20.0	.535	490.84	-.02	490.83
- 1:26	25.0	.582	534.18	-.23	533.94
- 1:29	28.0	.595	546.17	-.29	545.87
-1:29 1ST SHUT-IN	0.0	.595	546.17	-.29	545.87
-1:20 2ND FLOW	0.0	.099	88.82	2.01	90.83
- 1:25	5.0	.083	74.07	2.08	76.15
- 1:30	10.0	.078	69.45	2.10	71.56
- 1:35	15.0	.075	66.69	2.12	68.81
- 1:40	20.0	.075	66.69	2.12	68.81
- 1:45	25.0	.075	66.69	2.12	68.81
- 1:50	30.0	.075	66.69	2.12	68.81
-1:59 END FLOW	0.0	.075	66.69	2.12	68.81
- 2:04	5.0	.076	67.61	2.11	69.72
- 2:09	10.0	.108	97.12	1.97	99.08
- 2:14	15.0	.190	172.73	1.59	174.31
- 2:19	20.0	.312	285.22	1.02	286.24
- 2:24	25.0	.414	379.27	.55	379.82
- 2:30	31.0	.502	460.41	.14	460.55
-2:30 2ND SHUT-IN	0.0	.502	460.41	.14	460.55
-2ND HYDROSTATIC	0.0	1.979	1822.31	-2.20	1820.11

15-163-23126-00-00

# Superior Testers Enterprises, Inc.

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

(316) 792-6902

ORIGINAL

Date 11 15 90 Location 34 95 20<sup>w</sup> Elevation 2271 County Rooks

Company MUSTANG oil & GAS Number of Copies 5

Charts Mailed to Suite 703 107 N Market Wichita, KS 67202

Drilling Contractor Mallard Drilling

Length Drill Pipe 3520 I.D. Drill Pipe 380 Tool Joint Size 4 1/2 x 1 1/2

Length Weight Pipe - I.D. Weight Pipe - Tool Joint Size -

Length Drill Collars 244 I.D. Drill Collars 225 Tool Joint Size 4 1/2 x H

Top Packer Depth 3811 Bottom Packer Depth 3821 Number of Packers Two Packer Size 6 3/4

TESTED FROM 3826 TO 3826.30 ANCHOR LENGTH 4 TOTAL DEPTH 3830 Hole Size 7 7/8

LEASE & WELL NO. DA 9511 #8 FORMATION TESTED Arb TEST NO. 4

Mud Weight 96 Viscosity 44 Water Loss 7.4 Chlorides - Pits 4000 D.S.T. 29,000

Maximum Temp. 119 °F Initial Hydrostatic Pressure (A) 2005 P.S.I. Final Hydrostatic Pressure (H) 1981 P.S.I.

Tool Open I.F.P. from 800 m to 830 m 30 min

Tool Closed I.C.I.P. from 830 m to 915 m 45 min

Tool Open F.F.P. from 915 m to 1015 m 60 min

Tool Closed F.C.I.P. from 1015 m to 1145 m 90 min

from [B] <u>91</u> P.S.I. to [C] <u>387</u> P.S.I.
[D] <u>76</u> P.S.I.
from [E] <u>457</u> P.S.I. to [F] <u>215</u> P.S.I.
[G] <u>76</u> P.S.I.

Initial Blow FAIR Blow Building Bottom of Overt 3 1/4

Final Blow STRONG BLOW OFF BOTTOM 6"

Total Feet Recovered 1595 Heavy oil cut muppy WATER Gravity of Oil 28 Corrected

665 Feet of CLEAR Gassy oil 3 % Gas 97 % Oil - % Mud - % Water

150 Feet of Slightly oil and mud cut WATER % Gas 10 % Oil 10 % Mud 80 % Water

180 Feet of " " " " % Gas 10 % Oil 8 % Mud 82 % Water

180 (180) Feet of " " " " % Gas 3 % Oil 5 % Mud 92 % Water

420 Feet of Slightly mud cut WATER % Gas % Oil 3 % Mud 97 % 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 \_\_\_\_\_ Safety Joint \_\_\_\_\_ Extra Packer \_\_\_\_\_ Straddle \_\_\_\_\_ Hook Wall \_\_\_\_\_

Top Recorder No. 5467 Clock No. 20672 Depth 3811 Cir. Sub \_\_\_\_\_ Sampler \_\_\_\_\_

Bottom Recorder No. 12208 Clock No. 20836 Depth 3827 Insurance \_\_\_\_\_

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

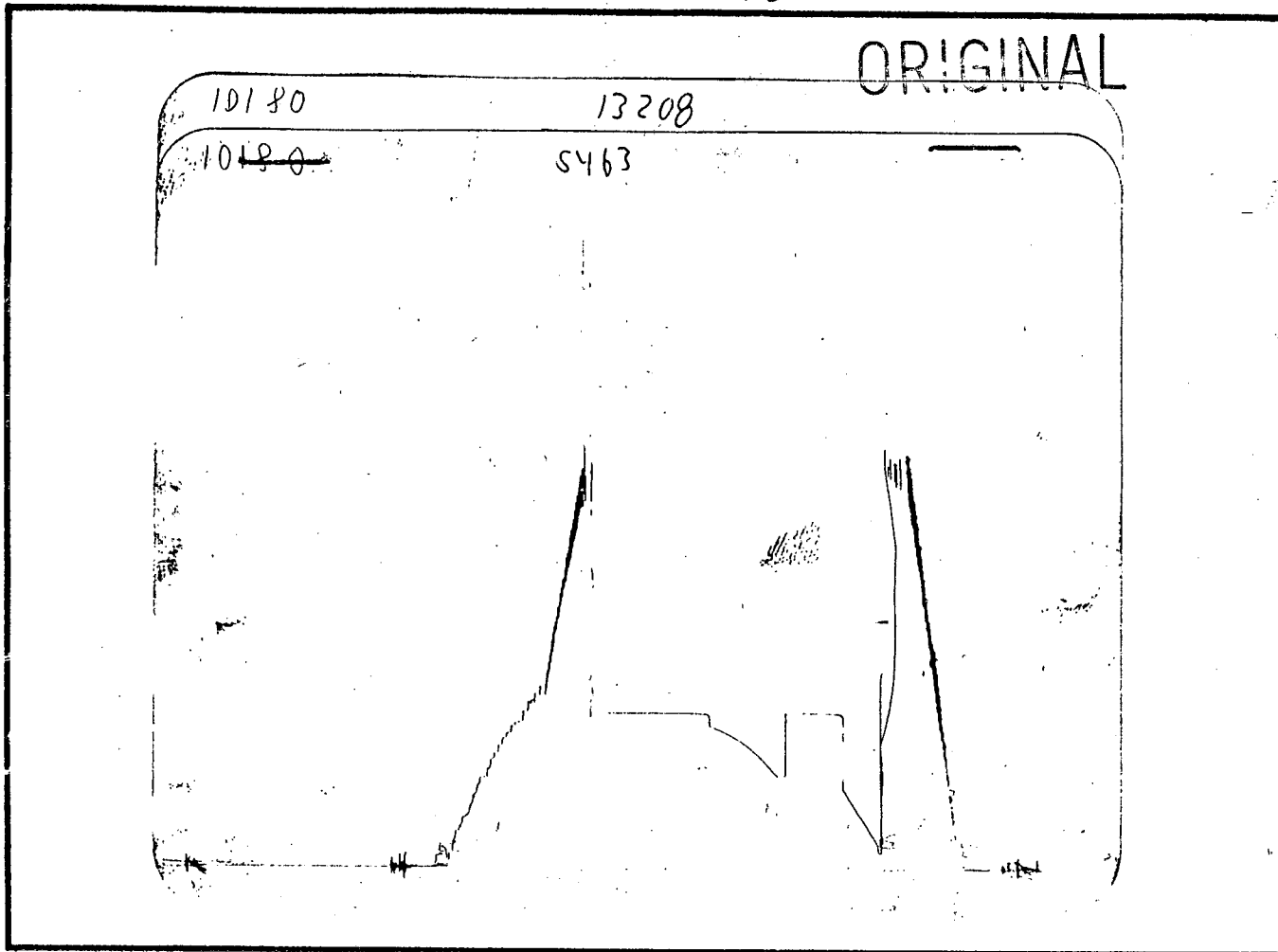
Tool Operator PAT STEVENSON

Approved By Bob Doughless

No. 10180

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.

ORIGINAL



This is an actual photograph of recorder chart.

POINT	PRESSURE		
	FIELD READING	OFFICE READING	
(A) Initial Hydrostatic Mud .....	2005	1997	P.S.I.
(B) First Initial Flow Pressure .....	91	77	P.S.I.
(C) First Final Flow Pressure .....	384	388	P.S.I.
(D) Initial Closed-in Pressure .....	761	761	P.S.I.
(E) Second Initial Flow Pressure .....	457	451	P.S.I.
(F) Second Final Flow Pressure .....	715	698	P.S.I.
(G) Final Closed-in Pressure .....	761	766	P.S.I.
(H) Final Hydrostatic Mud .....	1981	1966	P.S.I.

15-163-23126-00-00

ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

WELL IDENTIFICATION DATA

COMPANY : MUSTANG OIL AND GAS      WELL NAME : DARRELL #8  
ADDRESS : 107 N. MARKET, WICHITA      LOCATION : 34-92-20W  
STATE & COUNTY : KANSAS, ROOKS      FIELD :  
ELEV. (GR) : 2262      (KB) : 2271      TEST DATE : 11-15-1990

EQUIPMENT AND HOLE DATA

FORMATION TESTED : ARBUCKLE      DRILL PIPE LENGTH(ft) : 3520  
TEST INT. KB : 3826      to 3830      DRILL PIPE O.D. (in) : 3.82  
ANCHOR LENGTH(ft) : 4      WEIGHT PIPE LENGTH(ft) :  
TYPE OF TEST : Conventional      WEIGHT PIPE ID : 2.75  
TOTAL DEPTH(ft- kb) : 3830      DRILL COLLAR LENGTH(ft) : 244  
MAIN HOLE SIZE (in) : 7 7/8      DRILL COLLAR I.D. (in) : 2.259  
MUD WEIGHT : 9.6      TOP PACKER DEPTH(kb) : 3821  
MUD VISCOSITY : 44      BOTTOM PACKER DEPTH(kb) : 3826  
MUD CHLORIDES : 4000      DUAL PACKERS :  
SURFACE LIQ. : 3/4      PACKER SIZE (in) : 6 3/4  
BOTTOM LIQ. (in) : 3/4      PACKER HOLD : Yes  
TOOL SIZE (O.D.) : 5 1/2      TOOL PLUG : No  
TOOL JOINT SIZE (F.H.) : 4 1/2      REVERSED OUT : No  
RESERVOIR TEMPERATURE (F) : 119      TEST TICKET NUMBER : 10180

EXTRA-EQUIPMENT :

ELEMENT SERIAL NO. : 5443  
RANGE : 0 - 3650      CLOCK RANGE : 12 HOURS  
CAL. EQU. : 922.07 \* Defl. - 2.47

SURFACE BLOW

1st Opening : FAIR BLOW-BOTTOM OF THE BUCKET IN 3 MINUTES  
2nd Opening : STRONG BLOW-BOTTOM OF THE BUCKET IN 6 MINUTES

RECOVERY

Recovered 665 feet of CLEAN GASSY OIL  
Recovered 510 feet of SLIGHTLY OIL AND MUD CUT WATER  
Recovered 420 feet of SLIGHTLY MUD CUT WATER

REMARKS :

WITNESSED BY : ROB DOUGLASS      TOOL OPERATOR : PAT STEVENSON

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES INC.

15-143-23124-00-00  
ORIGINAL

SUPERIOR-TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : MUSTANG OIL AND GAS  
DATE OF TEST : 11-15-1990  
DEPTH : 3811.0

WELL NAME : DARRELL #8  
LOCATION : 34-92-20W  
SERIAL NO. : 5463

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.: 1					
Depth : 3811.0 ft-kb					
-1S HYDROSTATIC	0.0	2.171	1999.35	-2.12	1997.23
-8:00 1ST FLOW	0.0	.085	75.91	2.07	77.98
- 8:05	5.0	.158	143.22	1.73	144.95
- 8:10	10.0	.208	189.32	1.50	190.83
- 8:15	15.0	.270	246.49	1.21	247.71
- 8:20	20.0	.320	292.60	.98	293.58
- 8:25	25.0	.373	341.47	.74	342.20
- 8:30	30.0	.423	387.57	.50	388.07
-8:30 END FLOW	0.0	.423	387.57	.50	388.07
- 8:33	3.0	.825	758.24	-1.36	756.88
- 8:36	6.0	.828	761.01	-1.37	759.63
- 8:39	9.0	.830	762.85	-1.38	761.47
- 8:42	12.0	.830	762.85	-1.38	761.47
- 8:45	15.0	.830	762.85	-1.38	761.47
- 8:50	20.0	.830	762.85	-1.38	761.47
- 8:55	25.0	.830	762.85	-1.38	761.47
- 9:00	30.0	.830	762.85	-1.38	761.47
- 9:05	35.0	.830	762.85	-1.38	761.47
- 9:10	40.0	.830	762.85	-1.38	761.47
- 9:15	45.0	.830	762.85	-1.38	761.47
-9:15 1ST SHUT-IN	0.0	.830	762.85	-1.38	761.47
-9:15 2ND FLOW	0.0	.492	451.19	.18	451.38
- 9:20	5.0	.492	451.19	.18	451.38
- 9:25	10.0	.518	475.17	.06	475.23
- 9:30	15.0	.555	509.28	-.11	509.17
- 9:35	20.0	.590	541.55	-.27	541.28
- 9:40	25.0	.622	571.06	-.42	570.64
- 9:45	30.0	.650	596.88	-.55	596.33
- 9:50	35.0	.675	619.93	-.66	619.27
- 9:55	40.0	.698	641.14	-.77	640.37
- 10:00	45.0	.717	658.66	-.86	657.80
- 10:05	50.0	.734	674.33	-.94	673.39
- 10:10	55.0	.748	687.24	-1.00	686.24
- 10:15	60.0	.761	699.23	-1.06	698.17
-10:15 END FLOW	0.0	.761	699.23	-1.06	698.17
- 10:18	3.0	.828	761.01	-1.37	759.63
- 10:21	6.0	.831	763.77	-1.39	762.39
- 10:24	9.0	.833	765.62	-1.40	764.22
- 10:27	12.0	.834	766.54	-1.40	765.14
- 10:30	15.0	.834	766.54	-1.40	765.14



SUPERIOR TESTERS ENTERPRISES INC.

SUBSURFACE PRESSURE MEASUREMENTS

COMPANY : MUSTANG OIL AND GAS  
 DATE OF TEST : 11-15-1990  
 DEPTH : 3811.0

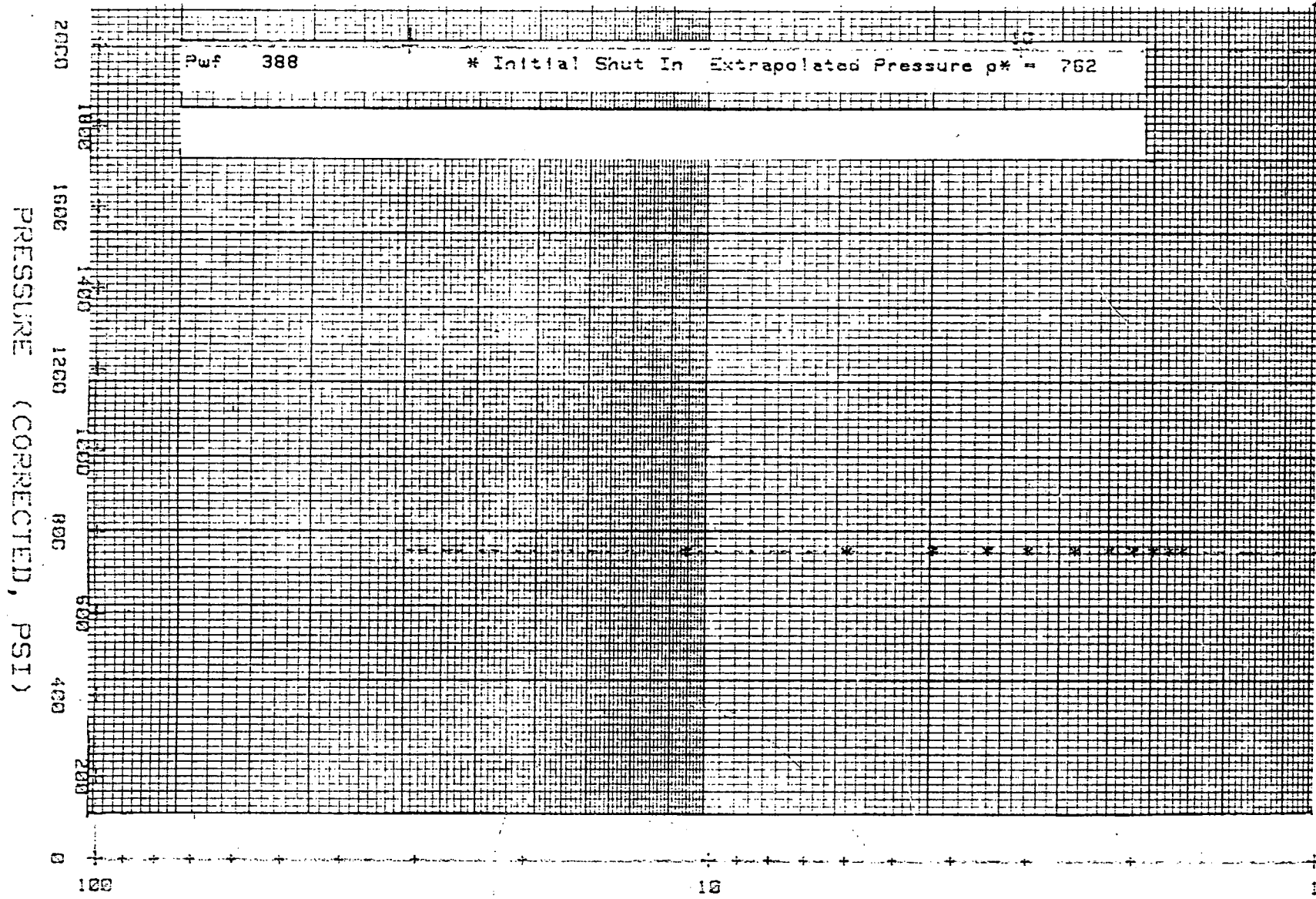
WELL NAME : DARRELL #8  
 LOCATION : 34-92-20W  
 SERIAL NO. : 5463

COMMENTS	TIME min	DEFL in	PRESSURE PSIG		
			CALC	CORR	CORRECTED
TEST NO.: 4					
- 10:35	20.0	.834	766.54	-1.40	765.14
- 10:40	25.0	.834	766.54	-1.40	765.14
- 10:45	30.0	.834	766.54	-1.40	765.14
- 10:50	35.0	.835	767.46	-1.41	766.06
- 10:44	29.0	.805	739.80	-1.27	738.53
- 11:00	45.0	.835	767.46	-1.41	766.06
- 11:05	50.0	.836	768.38	-1.41	766.97
- 11:10	55.0	.836	768.38	-1.41	766.97
- 11:15	60.0	.835	767.46	-1.41	766.06
- 11:20	65.0	.836	768.38	-1.41	766.97
- 11:25	70.0	.836	768.38	-1.41	766.97
- 11:30	75.0	.835	767.46	-1.41	766.06
- 11:35	80.0	.836	768.38	-1.41	766.97
- 11:40	85.0	.835	767.46	-1.41	766.06
- 11:45	90.0	.836	768.38	-1.41	766.97
- 11:47	92.0	.836	768.38	-1.41	766.97
-11:47 2ND SHUT-IN	0.0	.836	768.38	-1.41	766.97
-2ND HYDROSTATIC	0.0	2.138	1968.92	-2.13	1966.79

LOCATION : 34-92-23W

DATE : 11-15-1998

GAUGE # : 5463



$p_{wf}$  388

\* Initial Shut In Extrapolated Pressure  $p^*$  = 762

PRESSURE (CORRECTED, PSI)

TIME (MINUTES) :  $(T+dt)/dt$  - (Semilog scale)

ORIGINAL

15-163-23126-00-00

15-163-23126-00-00

SUPERIOR TESTERS ENTERPRISES, INC. ORIGINAL

HORNER ANALYSIS

COMPANY : MUSTANG OIL AND GAS  
WELL NAME : DARRELL #8  
LOCATION : 34-92-20W  
STATE & COUNTY : KANSAS, ROOKS  
DATE OF TEST : 11-15-1999  
TEST INT. KB : 3826 to 3830  
TOTAL INTERVAL (ft) F.R. : 4.00  
FLW. (GR) : 2267 (PB) : 2271  
FIELD :

ELEMENT SERIAL NO. : 5463  
LATEST CALIBRATION :

COMMENTS	TIME min	(T-tdt)/dt min	PRESSURES CORR PSIG
----------	-------------	-------------------	------------------------

Refer. depth : 3811.0 ft-kb

-9:30 END FLOW	9.00	0.00	388.07
	3.00	11.00	756.88
	6.00	6.00	759.63
	9.00	4.33	761.47
	12.00	3.50	761.47
	15.00	3.00	761.47
	20.00	2.50	761.47
	25.00	2.20	761.47
	30.00	2.00	761.47
	35.00	1.86	761.47
	40.00	1.75	761.47
	45.00	1.67	761.47
-9:15 1ST SHUT-IN	0.00	0.00	761.47

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

15-163-23126-00-00

ORIGINAL

SUPERIOR TESTERS ENTERPRISES INC.

DATA SUMMARY

COMPANY : MUSTANG OIL AND GAS  
DATE OF TEST : 11-15-1990  
DSL. NO : 4

WELL NAME : DARRELL #8  
LOCATION : 34-72-20W  
SHUT-IN PERIOD : 1

INTERPRETIVE DATA (OIL)

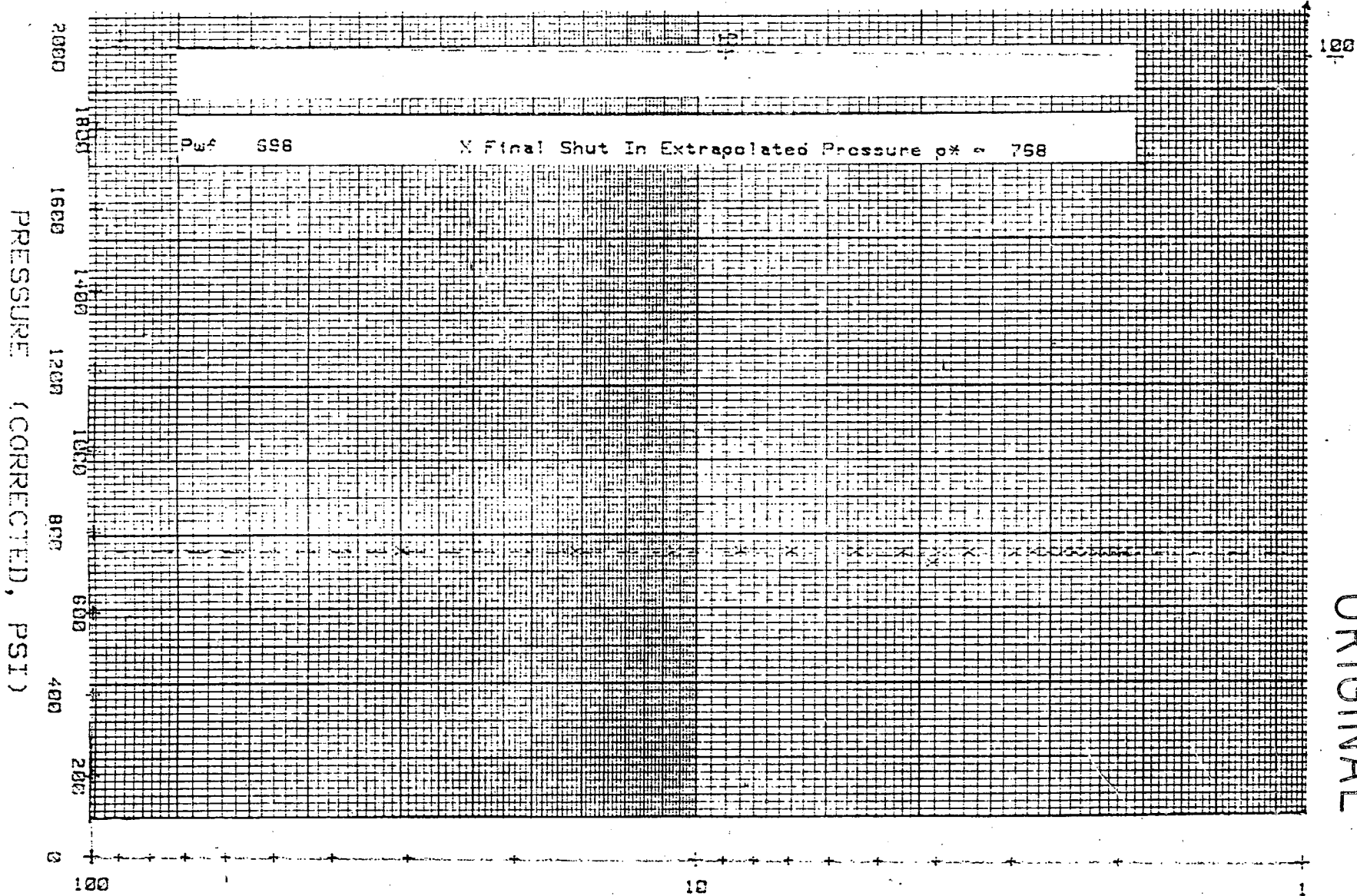
EXTRAPOLATED RESERVOIR PRESSURE (psi): .....	762.00
Slope of Build-up Curve (psi/log cycle): .....	2.33
Effective Producing Time (min): .....	30.00

INTERPRETATION BY : SUPERIOR TESTERS ENTERPRISES, INC.

LOCATION : 34-92-20W

DATE : 11-15-1992

GAUGE # : 5463



PRESSURE (CORRECTED, PSI)

TIME (MINUTES) : (T+dt)/dt - (Semi log scale)

ORIGINAL

15-163-23126-00-00

15-163-23126-00-00

SUPERIOR TESTERS ENTERPRISES, INC. ORIGINAL

HORNER ANALYSIS

COMPANY : MUSTANG OIL AND GAS
WELL NAME : DARRELL #8
LOCATION : 34-92-20W
STATE & COUNTY : KANSAS, ROOKS
DATE OF TEST : 11-15-1990
TEST INT. KB : 3826 to 3830
TOTAL INTERVAL (FT) R.B. : 4.00
FLY. (GR) : 2262 (RT) : 2271
FIELD :

ELEMENT SERIAL NO. : 5463
LATEST CALIBRATION :

COMMENTS TIME (T+dt)/dt PRESSURES
min min CORR PSIG

Refer. depth : 3811.0 ft-kb

Table with 4 columns: COMMENTS, TIME, (T+dt)/dt, PRESSURES. Rows include time intervals from 0:00 to 72:00 and a final row at 11:47.

INTERPRETATION BY : SUPERIOR TESTING ENTERPRISES, INC.

15-163-23126-00-00

SUPERIOR TESTERS ENTERPRISES INC.

ORIGINAL

DATA SUMMARY

COMPANY : MUSTANG OIL AND GAS      WELL NAME : DARRELL #8  
DATE OF TEST : 11-15-1990      LOCATION : 34-92-20W  
DST. NO : 4      SHUT-IN PERIOD : 2

INTERPRETIVE DATA      (OIL)

TRANSMISSIBILITY

Oil (md.ft/cp): ..... 3221.19  
Gas (md.ft/cp): ..... 0.00

EFFECTIVE PERMEABILITY

Oil (md): ..... 785.97  
Gas (md): ..... 0.00

TOTAL MOBILITY (md/cp): ..... 1673.76

TOTAL COMPRESSIBILITY (psi<sup>-1</sup>): ..... 6.64E-06

ESTIMATED DAMAGE RATIO: ..... 1.94

CALCULATED DAMAGE RATIO: ..... 1.27

Reservoir Temperature (F): ..... 119.00

Formation Porosity : ..... .18

Formation Thickness (ft): ..... 4.00

Wellbore Radius (in): ..... 3.74

Reservoir Compressibility (psi<sup>-1</sup>): ..... 4.80E-07

Calculated Skin Factor : ..... 2.15

PRODUCTION WITH DAMAGE REMOVED (bbl/D): ..... 196.44

PRODUCTIVITY INDEX (bbl/psi): ..... 2.22

Final Flow Pressure (psi): ..... 698.00

APPROXIMATE RADIUS OF INVESTIGATION (ft): ..... 1479.23

Total Flowing Time (min): ..... 90.00

EXTRAPOLATED RESERVOIR PRESSURE (psi): ..... 768.00

Slope of Build-up Curve (psi/log cycle): ..... 7.94

Effective Producing Time (min): ..... 90.00