



Home Office: Great Bend, Kansas  
P. O. Box 793 (316) 793-7903

Company Thunderbird Drilling, Inc. Lease & Well No. Pfaff #1  
Elevation 2197 Kelly Bushings Formation Marmaton Effective Pay \_\_\_\_\_ Ft. Ticket No. 16099  
Date Nov. 1, 1971 Sec. 14 Twp. 19S Range 23W County Ness State Kansas  
Test Approved by Glen C. Thrasher Western Representative Guy Max Knipe

Formation Test No. 1 O.K. \_\_\_\_\_ Misrun \_\_\_\_\_ Interval Tested From 4058' to 4110' Total Depth 4110'  
Size Main Hole 7 7/8" Rat Hole \_\_\_\_\_ Conv. \_\_\_\_\_ B.T. X Damaged Yes X No Conv. \_\_\_\_\_ B.T. X Damaged Yes X No  
Packer Depth 4053 Ft. Size 6 3/4" Packer Depth 4058 Ft. Size 6 3/4"  
Straddle Yes \_\_\_\_\_ No X Conv. \_\_\_\_\_ B.T. \_\_\_\_\_ Damaged Yes \_\_\_\_\_ No  
Packer Depth \_\_\_\_\_ Ft. Size \_\_\_\_\_  
Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 52 Ft. Size 31' D.P Perf. 21'

RECORDERS Depth 4102 Ft. Clock No. 6800 Depth 4105 Ft. Clock No. 9712  
Top Make Kuster Cap. 4150 No. 2605 Inside Bottom Make Kuster Cap. 4200 No. 1051 Inside  
Below Straddle: Depth \_\_\_\_\_ Clock No. \_\_\_\_\_ Inside Depth \_\_\_\_\_ Ft. Clock No. \_\_\_\_\_ Inside  
Top Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Inside Bottom Make \_\_\_\_\_ Cap. \_\_\_\_\_ No. \_\_\_\_\_ Inside

Time Set Packer 7:40 A. M  
Tool Open I.F.P. From 7:45 M. to 8:15 A.M. Hr. 30 Min. From (B) 41 P.S.I. To (C) 39 P.S.I.  
Tool Closed I.C.I.P. From 8:15 M. to 8:45 A.M. Hr. 30 Min. (D) 39 P.S.I.  
Tool Open F.F.P. From 8:45 M. to 9:15 A.M. Hr. 30 Min. From (E) 39 P.S.I. To (F) 39 P.S.I.  
Tool Closed F.C.I.P. From 9:15 M. to 9:45 M. Hr. 30 Min. (G) 39 P.S.I.  
Initial Hydrostatic Pressure (A) 2149 P.S.I. Final Hydrostatic Pressure (H) 2091 P.S.I.

SURFACE Size Choke 3/4 In. Max. Press. P.S.I. \_\_\_\_\_ Time \_\_\_\_\_ Description of Flow \_\_\_\_\_  
INFORMATION \_\_\_\_\_ M. \_\_\_\_\_  
\_\_\_\_\_ M. \_\_\_\_\_  
\_\_\_\_\_ M. \_\_\_\_\_

BLOW Weak for 5 minutes Died Bottom Choke Size 3/4 In.  
Did Well Flow Yes X No \_\_\_\_\_ Recovery Total Ft. 2 feet Drilling Mud

Reversed Out Yes X No \_\_\_\_\_ Mud Type Starch Viscosity 40 Weight 9.7 Water Loss 12.4 cc. Maximum Temp. 117 °F  
Type Circ. Sub. Pin Did Tool Plug? -- Jars: Size \_\_\_\_\_ Make \_\_\_\_\_ Ser. No. \_\_\_\_\_  
EXTRA EQUIPMENT: Dual Packers 2 Safety Joint -- Did Packer Hold? Yes Where? \_\_\_\_\_  
Length Drill Pipe 2961 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 1077 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars \_\_\_\_\_ ft.  
I. D. Drill Collars \_\_\_\_\_ in. Length D.S.T. Tool 72 ft.

Remarks \_\_\_\_\_

# WESTERN TESTING CO., INC.

## Pressure Data

Date November 1, 1971

Test Ticket No. 16099

Recorder No. 2605 Capacity 4150

Location 4102 Ft.

Clock No. 6800 Elevation 2397 Kelly Bushings

Well Temperature 117 °F

Point	Pressure		Time Given	Time Computed
A Initial Hydrostatic Mud	<u>2149</u> P.S.I.	Open Tool	<u>7:40</u> A. M.	
B First Initial Flow Pressure	<u>41</u> P.S.I.	First Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
C First Final Flow Pressure	<u>39</u> P.S.I.	Initial Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
D Initial Closed-in Pressure	<u>39</u> P.S.I.	Second Flow Pressure	<u>30</u> Mins.	<u>30</u> Mins.
E Second Initial Flow Pressure	<u>39</u> P.S.I.	Final Closed-in Pressure	<u>30</u> Mins.	<u>30</u> Mins.
F Second Final Flow Pressure	<u>39</u> P.S.I.			
G Final Closed-in Pressure	<u>39</u> P.S.I.			
H Final Hydrostatic Mud	<u>2091</u> P.S.I.			

### PRESSURE BREAKDOWN

#### First Flow Pressure

Breakdown: 6 Inc.  
of 5 mins. and a  
final inc. of      Min.

#### Initial Shut-In

Breakdown: 10 Inc.  
of 3 mins. and a  
final inc. of      Min.

#### Second Flow Pressure

Breakdown: 6 Inc.  
of 5 mins. and a  
final inc. of      Min.

#### Final Shut-In

Breakdown: 10 Inc.  
of 3 mins. and a  
final inc. of      Min.

Point Mins.	Press.	Point Minutes	Press.	Point Minutes	Press.	Point Minutes	Press.
P 1	<u>41</u>	<u>0</u>	<u>39</u>	<u>0</u>	<u>39</u>	<u>0</u>	<u>39</u>
P 2	<u>40</u>	<u>3</u>	<u>39</u>	<u>5</u>	<u>39</u>	<u>3</u>	<u>39</u>
P 3	<u>39</u>	<u>6</u>	<u>39</u>	<u>10</u>	<u>39</u>	<u>6</u>	<u>39</u>
P 4	<u>39</u>	<u>9</u>	<u>39</u>	<u>15</u>	<u>39</u>	<u>9</u>	<u>39</u>
P 5	<u>39</u>	<u>12</u>	<u>39</u>	<u>20</u>	<u>39</u>	<u>12</u>	<u>39</u>
P 6	<u>39</u>	<u>15</u>	<u>39</u>	<u>25</u>	<u>39</u>	<u>15</u>	<u>39</u>
P 7	<u>39</u>	<u>18</u>	<u>39</u>	<u>30</u>	<u>39</u>	<u>18</u>	<u>39</u>
P 8		<u>21</u>	<u>39</u>	<u>35</u>		<u>21</u>	<u>39</u>
P 9		<u>24</u>	<u>39</u>			<u>24</u>	<u>39</u>
P10		<u>27</u>	<u>39</u>			<u>27</u>	<u>39</u>
P11		<u>30</u>	<u>39</u>			<u>30</u>	<u>39</u>
P12							
P13							
P14							
P15							
P16							
P17							
P18							
P19							
P20							

