

**THUNDERBIRD DRLG., INC.**  
**TESTING DIVISION**  
Box 18407  
**WICHITA, KANSAS**

Company Thunderbird Drilling Inc.

Lease and Well No. Petersilie # 4

County Ness State Kansas Date 6-18-74

Formation Test No. 1 Total Depth 4340' Elev. \_\_\_\_\_

Interval Tested 4293' To 4340' Anchor Length 47'

Size Hole 7 7/8" Size Drill Pipe 4 1/2" XH IF Size Packer 6 3/4"

Mud Weight 9.5 Viscosity 41 Water Loss 18.8 c.c. Bottom Hole Temp. 114 ° F

Chokes: Top 1/2" Bottom 1/2" Ticket No. 506

**RECOVERY**

**Blow:** Weak blow for 10 mins.  
**Recovery:** 15' of mud w/show of oil in tool

Lease and Well No. PETERSILIE # 4 SEC 7 T1N 20-S Rg 23-W C/NE SW

Formation Test No. 1

THUNDERBOLT DATA  
TESTING DIVISION  
WICHITA, KANSAS

TEST REPORT

DATE

TESTER

TEST NO.

TEST NAME

TEST DESCRIPTION

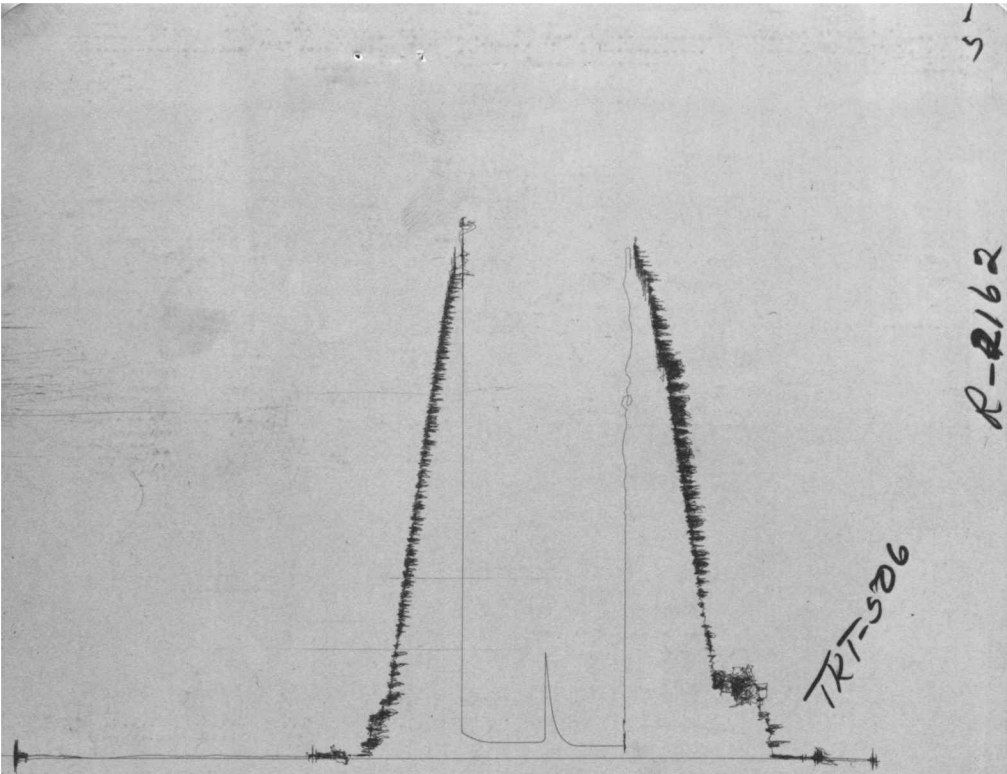
TEST RESULTS

TEST CONCLUSIONS

REMARKS

APPROVED

SIGNATURE



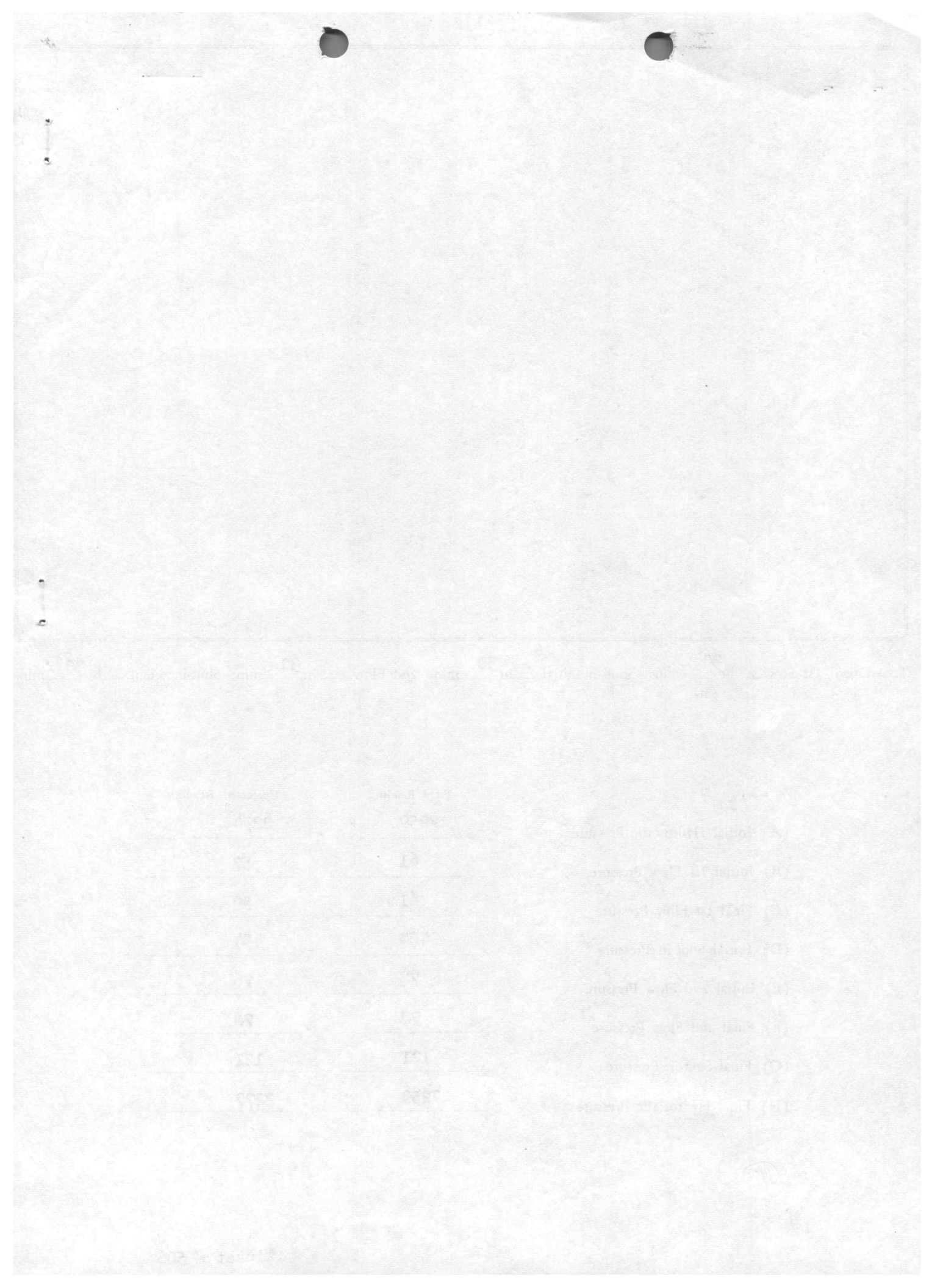
TRT-526

R-2162

51

Tool Open: 1st Flow 30 hr. 30 mins: Shut-in Initial 30 hr. 30 min: 2nd Flow 30 hr. 30 min: Shut-in Final 30 hr. 30 min.

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2259</u>	<u>2294</u>
(B) Initial 1st Flow Pressure	<u>61</u>	<u>57</u>
(C) Final 1st Flow Pressure	<u>61</u>	<u>59</u>
(D) Initial Shut-in Pressure	<u>484</u>	<u>484</u>
(E) Initial 2nd Flow Pressure	<u>78</u>	<u>76</u>
(F) Final 2nd Flow Pressure	<u>78</u>	<u>76</u>
(G) Final Shut-in Pressure	<u>121</u>	<u>121</u>
(H) Final Hydrostatic Pressure	<u>2259</u>	<u>2277</u>



**THUNDERBIRD DRLG., INC.**  
**TESTING DIVISION**  
 Box 18407  
**WICHITA, KANSAS**

**Thunderbird Drilling Inc.**

Company \_\_\_\_\_ **Petersilie # 4** \_\_\_\_\_

Lease and Well No. \_\_\_\_\_

County **Ness** State **Kansas** Date **6-18-74**

Formation Test No.	<b>2</b>	Total Depth	<b>4403'</b>	Elev.	
Interval Tested	<b>4375'</b>	To	<b>4403'</b>	Anchor Length	<b>28'</b>
Size Hole	<b>7 7/8"</b>	Size Drill Pipe	<b>4 1/2" XH IF</b>	Size Packer	<b>6 3/4"</b>
Mud Weight	<b>9.7</b>	Viscosity	<b>44</b>	Water Loss	<b>10.4</b>
Chokes: Top	<b>1/2"</b>	Bottom	<b>1/2"</b>	c.c. Bottom Hole Temp.	<b>116</b>
					<b>507</b> ° F
				Ticket No.	

**RECOVERY**

**Blow:** Weak blow for 3 mins. Flushed tool

**Recovery:** 5' of mud

Lease and Well No. **PETERSILIE # 4** Sec 7 Twn 20-S Rg 23-W C/NE SW Formation Test No. **2**

WICHITA KANSAS

1-1-24

Date

Amount

100.00

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TKT-509

R-2162

5

Tool Open: 1st Flow 30 hr. 30 mins: Shut-in Initial 30 hr. 30 min: 2nd Flow 30 hr. 30 min: Shut-in Final 30 hr. 30 min.

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2347</u>	<u>2347</u>
(B) Initial 1st Flow Pressure	<u>52</u>	<u>61</u>
(C) Final 1st Flow Pressure	<u>52</u>	<u>61</u>
(D) Initial Shut-in Pressure	<u>52</u>	<u>61</u>
(E) Initial 2nd Flow Pressure	<u>52</u>	<u>61</u>
(F) Final 2nd Flow Pressure	<u>52</u>	<u>61</u>
(G) Final Shut-in Pressure	<u>52</u>	<u>61</u>
(H) Final Hydrostatic Pressure	<u>2329</u>	<u>2338</u>

Ticket # 507



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 Box 18407  
**WICHITA, KANSAS**

Company Thunderbird Drilling Inc.  
 Lease and Well No. Petersilie # 4  
 County Ness State Kansas Date 6-19-74

Formation Test No. 3 Total Depth 4428' Elev. \_\_\_\_\_  
 Interval Tested 4414' To 4428' Anchor Length 14'  
 Size Hole 7 7/8" Size Drill Pipe 4 1/2" XH IF Size Packer 6 3/4"  
 Mud Weight 9.6 Viscosity 46 Water Loss 11.6 c.c. Bottom Hole Temp. 116 ° F  
 Chokes: Top 1/2" Bottom 1/2" Ticket No. 508

**RECOVERY**

**Blow:** Weak blow for 3 mins. Very weak intermittent thru 2 nd opening  
**Recovery:** 100' of heavy oil cut mud w/some free oil

Lease and Well No. PETERSILIE # 4 Sec 7 Twp 20-S Rg 23-W C/NE SW  
 Formation Test No. 3

MINNEAPOLIS, MINN. 55401  
WEST A DIVISION  
WILLIAM KAMBA

MINNEAPOLIS, MINN. 55401

DATE: 1-1-73

TO: [illegible]

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SUBJECT: [illegible]

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MINNEAPOLIS, MINN. 55401

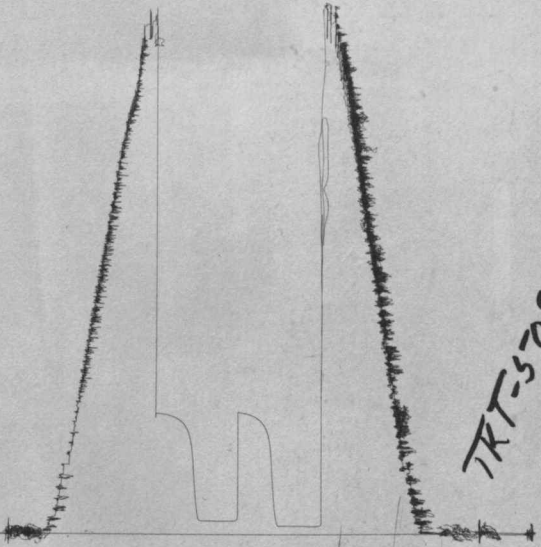
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5-

R-2162

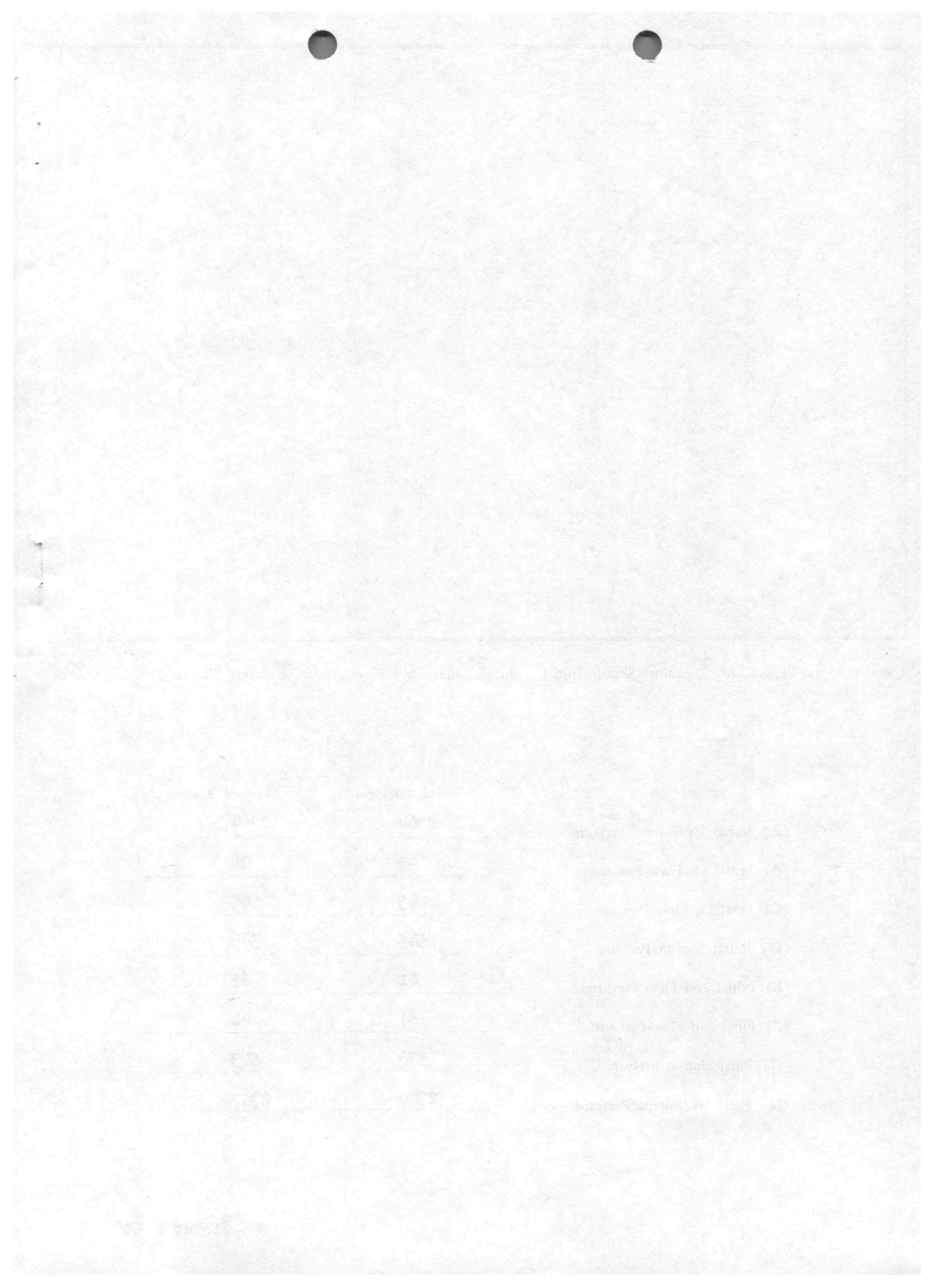
IRT-508



Tool Open: 1st Flow 30 hr. 30 mins: Shut-in Initial 30 hr. 30 min: 2nd Flow 30 hr. 30 min: Shut-in Final 30 hr. 30 min.

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2364</u>	<u>2364</u>
(B) Initial 1st Flow Pressure	<u>43</u>	<u>38</u>
(C) Final 1st Flow Pressure	<u>43</u>	<u>40</u>
(D) Initial Shut-in Pressure	<u>545</u>	<u>548</u>
(E) Initial 2nd Flow Pressure	<u>61</u>	<u>61</u>
(F) Final 2nd Flow Pressure	<u>61</u>	<u>64</u>
(G) Final Shut-in Pressure	<u>536</u>	<u>543</u>
(H) Final Hydrostatic Pressure	<u>2349</u>	<u>2347</u>

Ticket # 508



**THUNDERBIRD DRLG., INC.**  
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Company Thunderbird Drilling Inc.  
 Lease and Well No. Petersilie # 4  
 County Ness State Kansas Date 6-20-74

Formation Test No. 4 Total Depth 4433' Elev. \_\_\_\_\_  
 Interval Tested 4426' To 4433' Anchor Length 7'  
 Size Hole 7 7/8" Size Drill Pipe 4 1/2" XH IF Size Packer 6 3/4"  
 Mud Weight 9.6 Viscosity 46 Water Loss 11.6 c.c. Bottom Hole Temp. 116 ° F  
 Chokes: Top 1/2" Bottom 1/2" Ticket No. 509

**RECOVERY**

**Blow:** Fair blow thru-out test.  
**Recovery:** 300' clean gassy oil  
 60' froggy oil ( 36 Gravity Corr.)  
 360' Total Fluid

Lease and Well No. PETERSILIE # 4 SEC 7 T1N 20-S R6 23-W C/NB SW  
 Formation Test No. 4

WINDY HARBOR

Superior Milling Co.

Aberville

1900-1901

1901-1902

1902-1903

1903-1904

1904-1905

1905

1906-1907

1907-1908

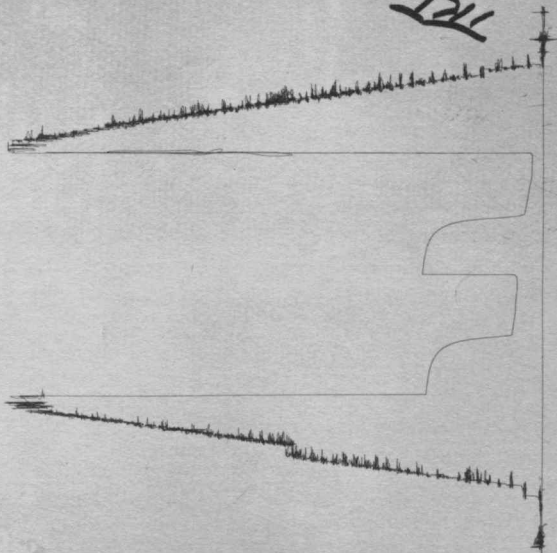
1908-1909

1909-1910

51

R-2162

TRT-529



Tool Open: 1st Flow \_\_\_ hr. 45 mins: Shut-in Initial \_\_\_ hr. 45 min: 2nd Flow \_\_\_ hr. 45 min: Shut-in Final \_\_\_ hr. 45 min.

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2400</u>	<u>2382</u>
(B) Initial 1st Flow Pressure	<u>52</u>	<u>52</u>
(C) Final 1st Flow Pressure	<u>87</u>	<u>87</u>
(D) Initial Shut-in Pressure	<u>545</u>	<u>545</u>
(E) Initial 2nd Flow Pressure	<u>104</u>	<u>118</u>
(F) Final 2nd Flow Pressure	<u>138</u>	<u>142</u>
(G) Final Shut-in Pressure	<u>536</u>	<u>529</u>
(H) Final Hydrostatic Pressure	<u>2364</u>	<u>2364</u>



COMPANY **Thunderbird Drilling Inc.**

DATE **6-20-74**

LEASE **Petersilie**

WELL NO. **4**

TEST NO. **4**

TICKET NO. **509**

	TIME	PSI
INITIAL HYDRO MUD PRESSURE		2382
INITIAL CLOSED IN PRESSURE	45 mins.	545
INITIAL FLOW	"	52 to 87
FINAL FLOW	"	118 to 142
FINAL CLOSED IN PRESSURE	"	529
FINAL HYDRO MUD PRESSURE		2364

TOTAL DEPTH **4433'**

PACKER DEPTH **4426'**

BT. NO. **2162** DEPTH **4428'**

1ST FLOW PRESSURE		INITIAL CIP		2ND FLOW PRESSURE		FINAL CIP	
	52		87		118		142
	54		355		121		381
	69		458		126		455
	87		490		142		481
			510				502
			522				514
			528				519
			538				524
			542				528
			545				529
<b>15</b>	MINUTE INTERVAL	<b>5</b>	MINUTE INTERVAL	<b>15</b>	MINUTE INTERVAL	<b>5</b>	MINUTE INTERVAL

REMARKS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**SPECIAL PRESSURE DATA**

