

THUNDERBIRD DRLG., INC.

TESTING DIVISION

Box 18407

WICHITA, KANSAS

Company Thunderbird Drilling Inc.

Lease and Well No. Elmore "B - 2"

County Ness State Kansas

Date 3-11-74

Formation Test No. 1 Total Depth 4185 Elev. _____
Interval Tested 4144 To 4185 Anchor Length 41'
Size Hole 7 7/8" Size Drill Pipe 4 1/2" XH FH Size Packer 6 3/4"
Mud Weight _____ Viscosity 44 Water Loss _____ c.c. Bottom Hole Temp. 112 ° F
Chokes: Top 1/2" Bottom 1/2" Ticket No. 463

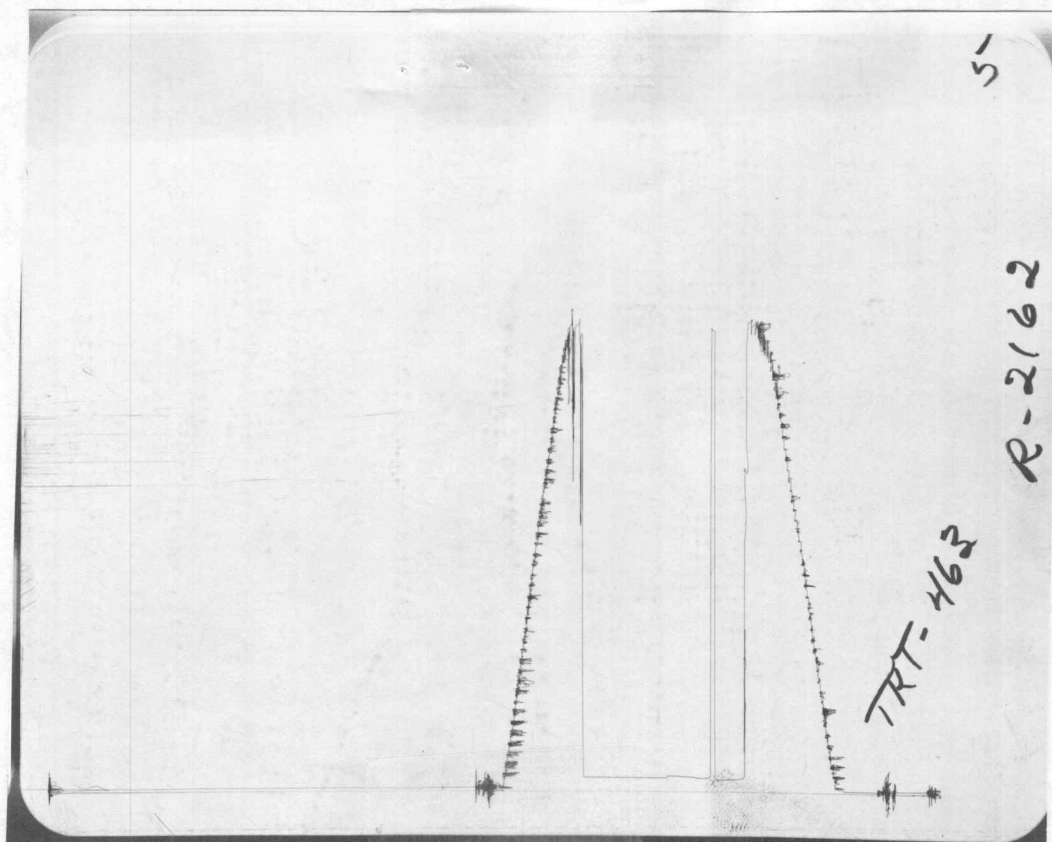
RECOVERY

Blow: Weak for 10 mins. Flushed tool

Recovery: 15' of mud

Lease and Well No. ELMORE "B - 2" Sec 16 Twn 18-S Rg 25-W

Formation Test No. 1



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

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2119</u>	<u>2119</u>
(B) Initial 1st Flow Pressure	<u>51</u>	<u>55</u>
(C) Final 1st Flow Pressure	<u>61</u>	<u>62</u>
(D) Initial Shut-in Pressure	<u>78</u>	<u>78</u>
(E) Initial 2nd Flow Pressure	<u>69</u>	<u>66</u>
(F) Final 2nd Flow Pressure	<u>69</u>	<u>66</u>
(G) Final Shut-in Pressure	<u>69</u>	<u>67</u>
(H) Final Hydrostatic Pressure	<u>2101</u>	<u>2110</u>

Ticket # 463

THUNDERBIRD DRLG., INC.

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Company Thunderbird Drilling Inc.

Lease and Well No. Elmore B - 2

County Ness State Kansas

Date 3-12-74

Formation Test No. 2 Total Depth 4330' Elev. _____
 Interval Tested 4291' To 4330' Anchor Length 39'
 Size Hole 7 7/8" Size Drill Pipe 4 1/2" XH FH Size Packer 6 3/4"
 Mud Weight 9.3 Viscosity 51 Water Loss 11.2 c.c. Bottom Hole Temp. 114 ° F
 Chokes: Top 1/2" Bottom 1/2" Ticket No. 464

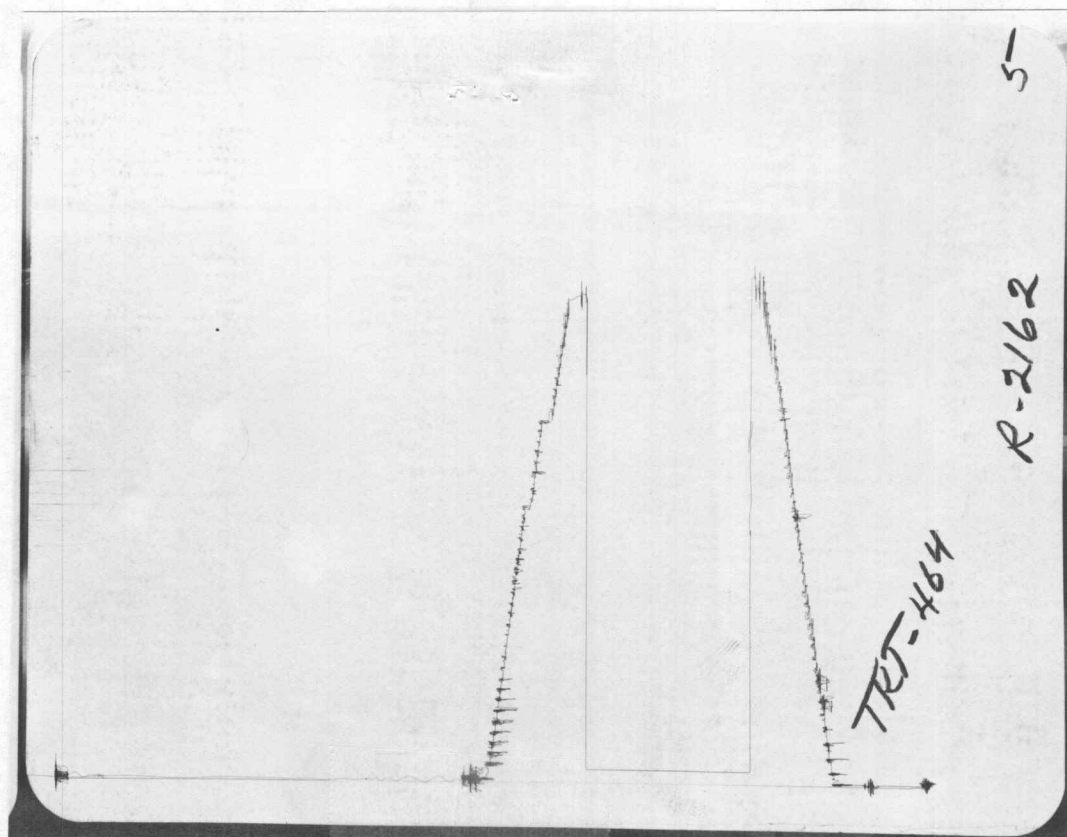
RECOVERY

Blow: Weak blow for 7 mins.

Recovery: 10' of mud

Lease and Well No. ELMORE " B - 2" Sec 16 Twn 18-S Rg 25-W NW NW

Formation Test No. 2



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>2277</u>	<u>2215</u>
(B) Initial 1st Flow Pressure	<u>61</u>	<u>57</u>
(C) Final 1st Flow Pressure	<u>61</u>	<u>61</u>
(D) Initial Shut-in Pressure	<u>61</u>	<u>61</u>
(E) Initial 2nd Flow Pressure	<u>61</u>	<u>61</u>
(F) Final 2nd Flow Pressure	<u>61</u>	<u>61</u>
(G) Final Shut-in Pressure	<u>61</u>	<u>61</u>
(H) Final Hydrostatic Pressure	<u>2241</u>	<u>2198</u>

Ticket # 464

THUNDERBIRD DRLG., INC.

TESTING DIVISION

Box 18407

WICHITA, KANSAS

Company Thunderbird Drilling Inc.

Lease and Well No. Elmore "B - 2"

County Ness State Kansas Date 3-13-74

Formation Test No. 3 Total Depth 4415' Elev. _____
 Interval Tested 4408' To 4415' Anchor Length 7'
 Size Hole 7 7/8" Size Drill Pipe 4 1/2" XH FH Size Packer 6 3/4"
 Mud Weight 9.5 Viscosity 47 Water Loss 11.2 c.c. Bottom Hole Temp. 114 ° F
 Chokes: Top 1/2" Bottom 1/2" Ticket No. 465

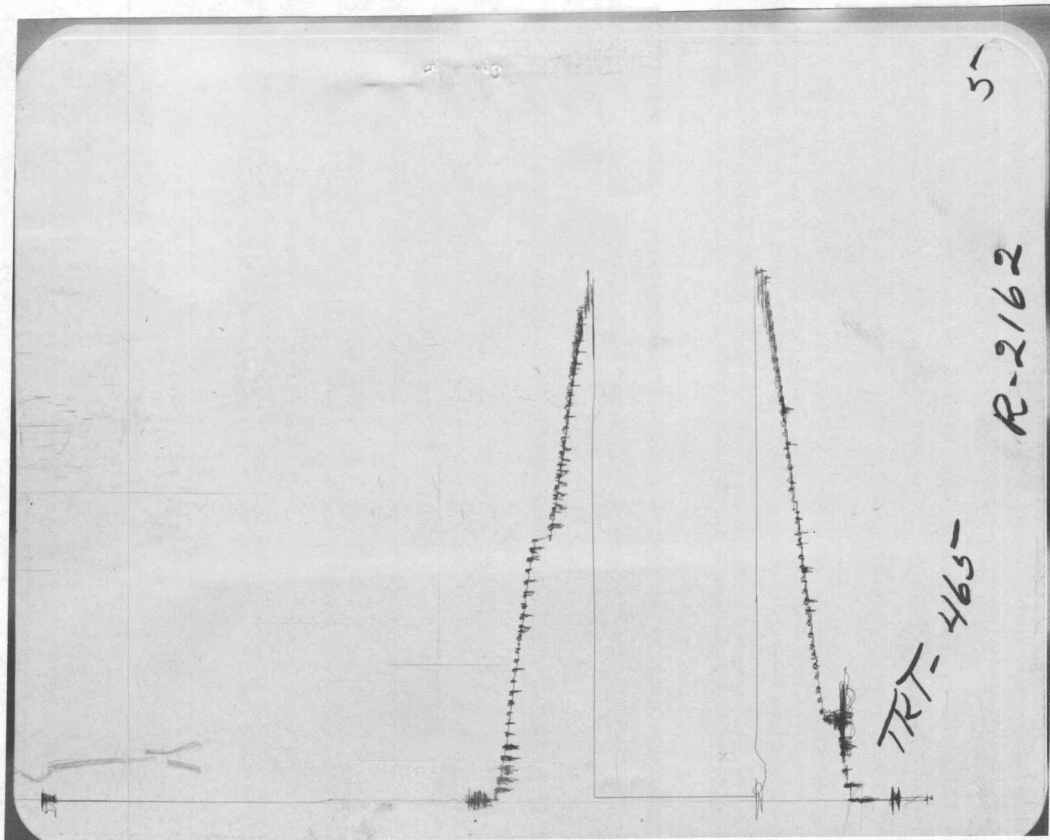
RECOVERY

Blow: Weak for 5 mins.

Recovery: 10' of mud

Lease and Well No. ELMORE "B - 2" Sec 16 Twn 18-S Rg 25-W NW NW

Formation Test No. 3



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

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2347</u>	<u>2285</u>
(B) Initial 1st Flow Pressure	<u>26</u>	<u>21</u>
(C) Final 1st Flow Pressure	<u>26</u>	<u>22</u>
(D) Initial Shut-in Pressure	<u>26</u>	<u>22</u>
(E) Initial 2nd Flow Pressure	<u>26</u>	<u>22</u>
(F) Final 2nd Flow Pressure	<u>26</u>	<u>22</u>
(G) Final Shut-in Pressure	<u>26</u>	<u>22</u>
(H) Final Hydrostatic Pressure	<u>2329</u>	<u>2277</u>

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Lease and Well No. Elmore "B - 2"

County Ness

State Kansas

Date 3-13-74

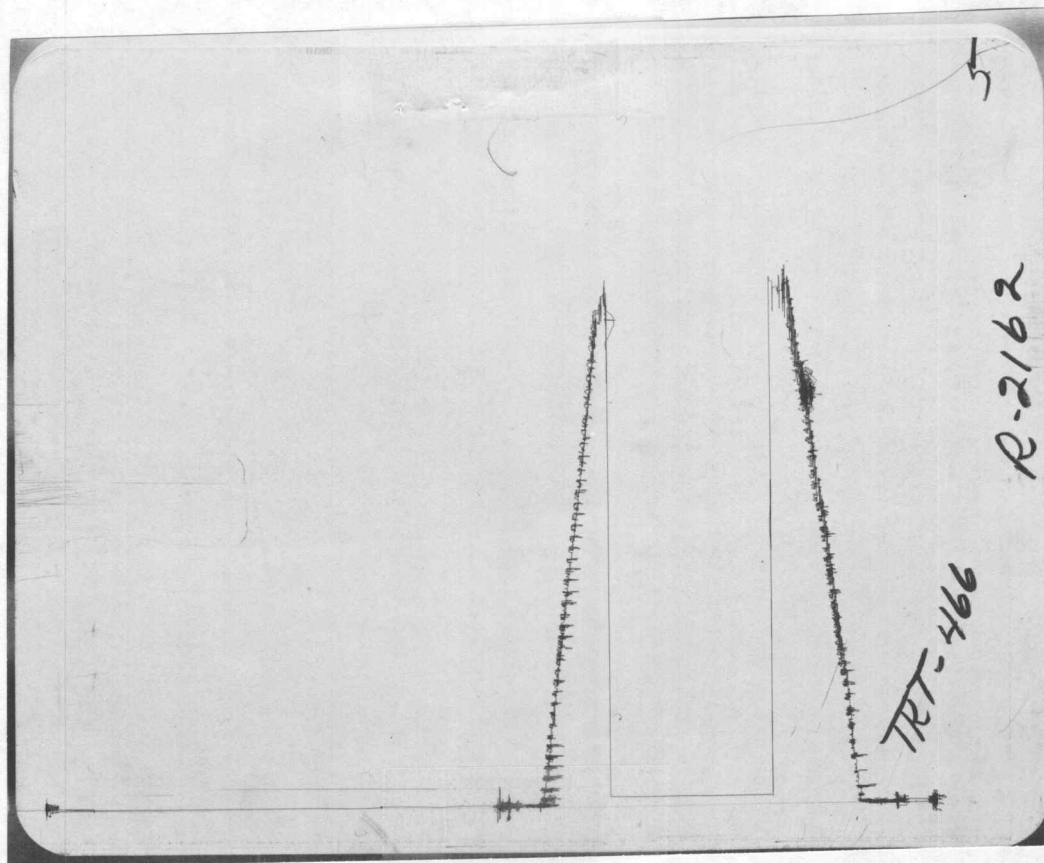
Formation Test No. 4 Total Depth 4430' Elev. _____
Interval Tested 4413' To 4430' Anchor Length 17'
Size Hole 7 7/8" Size Drill Pipe 4 1/2" XH FH Size Packer 6 3/4"
Mud Weight 9.7 Viscosity 51 Water Loss 12.2 c.c. Bottom Hole Temp. 114 ° F
Chokes: Top 1/2" Bottom 1/2" Ticket No. 466

RECOVERY

Blow: Weak intermittent blow for 20 mins.

Recovery: 15' of mud

Lease and Well No. ELMORE "B - 2" Sec 16 Twp 18-S Rg 25-W NW NW
Formation Test No. 4



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

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2347</u>	<u>2328</u>
(B) Initial 1st Flow Pressure	<u>35</u>	<u>41</u>
(C) Final 1st Flow Pressure	<u>35</u>	<u>43</u>
(D) Initial Shut-in Pressure	<u>35</u>	<u>43</u>
(E) Initial 2nd Flow Pressure	<u>35</u>	<u>43</u>
(F) Final 2nd Flow Pressure	<u>35</u>	<u>43</u>
(G) Final Shut-in Pressure	<u>35</u>	<u>43</u>
(H) Final Hydrostatic Pressure	<u>2349</u>	<u>2303</u>

Ticket # 466

THUNDERBIRD DRLG., INC.
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Box 18407
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Company Thunderbird Drilling Inc.

Lease and Well No. Elmore # B - 2

County Ness

State Kansas

Date 3-14-73

Formation Test No. 5 Total Depth 4438' Elev. _____
Interval Tested 4421' To 4438' Anchor Length 17'
Size Hole 7 7/8" Size Drill Pipe 4 1/2" XH FH Size Packer 6 3/4"
Mud Weight 9.5 Viscosity 45 Water Loss 12.4 c.c. Bottom Hole Temp. 116 ° F
Chokes: Top 1/2" Bottom 1/2" Ticket No. 467

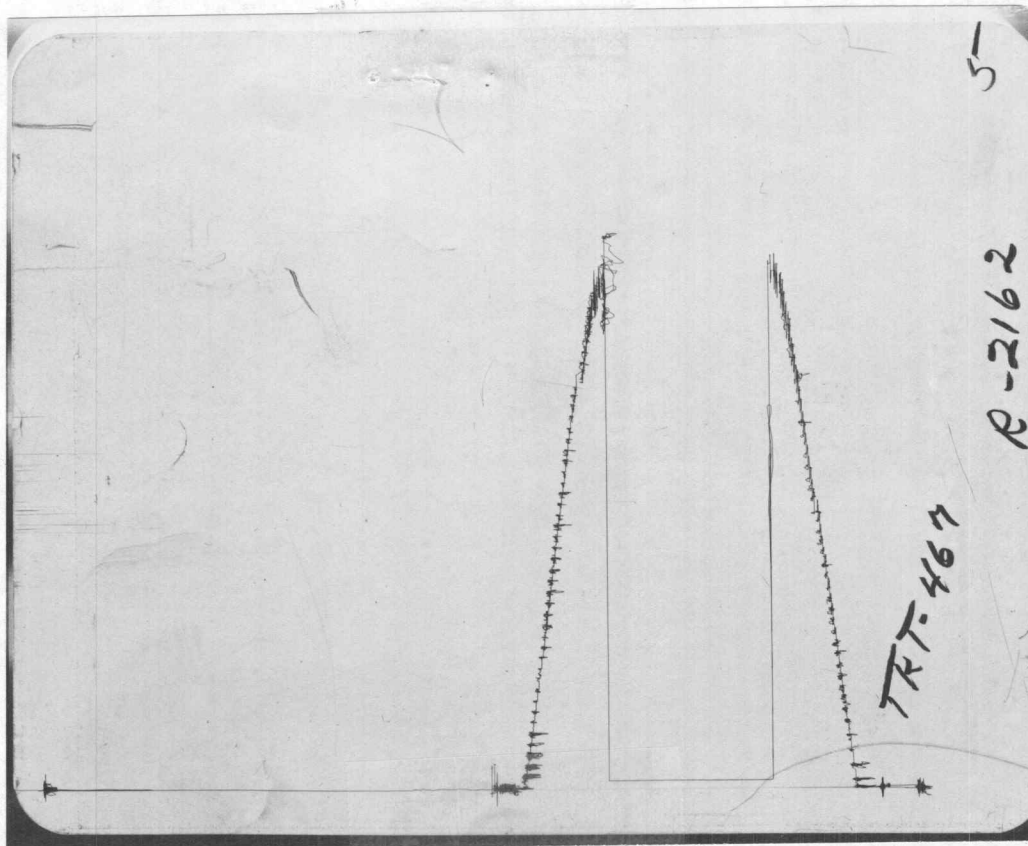
RECOVERY

Blow: Weak blow for 20 mins.

Recovery: 20' of mud

Lease and Well No. ELMORE " B - 2" Sec 16 Twn 18-S Rg 25-W NW NW

Formation Test No. 5



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

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2364</u>	<u>2320</u>
(B) Initial 1st Flow Pressure	<u>35</u>	<u>36</u>
(C) Final 1st Flow Pressure	<u>35</u>	<u>38</u>
(D) Initial Shut-in Pressure	<u>35</u>	<u>38</u>
(E) Initial 2nd Flow Pressure	<u>35</u>	<u>38</u>
(F) Final 2nd Flow Pressure	<u>35</u>	<u>38</u>
(G) Final Shut-in Pressure	<u>35</u>	<u>38</u>
(H) Final Hydrostatic Pressure	<u>2347</u>	<u>2303</u>

Ticket # 467