

THUNDERBIRD DRLG., INC.

TESTING DIVISION

Box 18407

WICHITA, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. BRANDT NO. 1

County FINNEY State KANSAS

Date 7-7-78

Formation Test No. 1 Total Depth 4695' Elev. _____
 Interval Tested 4540' To 4695' Anchor Length 155'
 Size Hole 7 7/8" Size Drill Pipe 4 1/2" XH FH Size Packer 6 3/4"
 Mud Weight 9.8 Viscosity 49 Water Loss 11. c.c. Bottom Hole Temp. 117 ° F
 Chokes: Top 1/2" Bottom 1/2" Ticket No. 885

RECOVERY

BLOW: WEAK BLOW FOR 20 MINUTES.

RECOVERY: 65' OF MUD.

Lease and Well No. BRANDT NO. 1 SEC 12 T1N 24-S RG 31-W SE NE

Formation Test No. 1

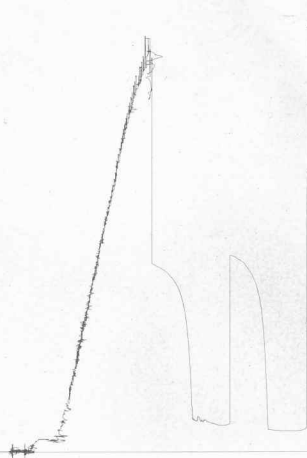
Tool Open: 1st Flow hr. 30 mins: Shut-in Initial hr. 30 min: 2nd Flow hr. 30 min: Shut-in Final hr. 30 min.

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2540</u>	<u>2540</u>
(B) Initial 1st Flow Pressure	<u>130</u>	<u>130</u>
(C) Final 1st Flow Pressure	<u>130</u>	<u>138</u>
(D) Initial Shut-in Pressure	<u>1211</u>	<u>1210</u>
(E) Initial 2nd Flow Pressure	<u>156</u>	<u>156</u>
(F) Final 2nd Flow Pressure	<u>156</u>	<u>156</u>
(G) Final Shut-in Pressure	<u>1159</u>	<u>1156</u>
(H) Final Hydrostatic Pressure	<u>2523</u>	<u>2530</u>

TICKET #885

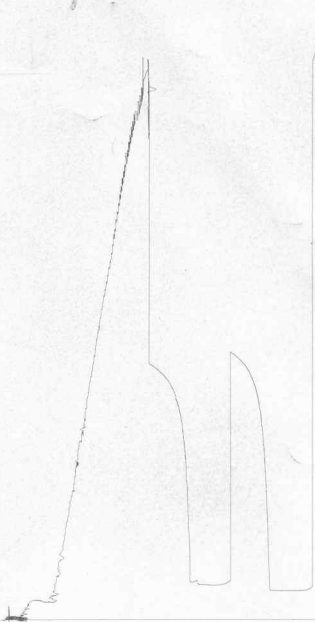
R-4333

~~TRT-885-~~



R-2162

TRT-885-



4

DATE 7-7-78

THUNDERBIRD DRILLING, INC.

TESTING DIVISION

TICKET N^o 885SEC. 12 TWN 24-S RG 31-W

BOX 18407 PHONE 316 685-1441

LEGAL DESCRIPTION SE NE

WICHITA, KANSAS 67218

TEST NO. 1

COMPANY

Thunderbird Drilling, Inc.

ADDRESS

Box 18407; Wichita, Mo. 67218

LEASE

BrandtWELL NO. 1

COUNTY

FinneySTATE Ks.INVOICES SENT TO: SameDST COPIES SENT TO: "

4 1/2" X. H. GENERAL INFORMATION				PRESSURE DATA & TIME	
TOOL JT. <u>F.H.</u>		HOLE SIZE <u>7 7/8"</u>	PACKER O.D. <u>6 3/4"</u>	FIELD READINGS	CORRECTED READINGS
ELEV. _____	TOTAL DEPTH <u>4695'</u>			INITIAL HYDROSTATIC <u>2540</u>	<u>2540</u>
TESTED FROM <u>4540'</u>	TO <u>4695'</u>			INITIAL 1ST FLOW <u>130</u>	<u>130</u>
ANCHOR LENGTH BELOW <u>155'</u>	BETWEEN <u>✓</u>			FINAL 1ST FLOW <u>130</u>	<u>138</u>
TOOL OPEN 1ST FLOW _____	A.M. <u>6:30</u> P.M. _____			INITIAL SHUT-IN <u>1211</u>	<u>1210</u>
TOOL CLOSED INITIAL SHUT-IN _____	A.M. <u>7:00</u> P.M. _____			INITIAL 2ND FLOW <u>156</u>	<u>156</u>
TOOL OPEN 2ND FLOW _____	A.M. <u>7:30</u> P.M. _____			FINAL 2ND FLOW <u>156</u>	<u>156</u>
TOOL CLOSED FINAL SHUT-IN _____	A.M. <u>8:00</u> P.M. _____			FINAL SHUT-IN <u>1159</u>	<u>1156</u>
MUD WT. <u>9.8</u>	VISCOSITY <u>49</u>	W.L. <u>11</u>	C.C. _____	FINAL HYDROSTATIC <u>2523</u>	<u>2530</u>
SP. GRAVITY OIL _____	BOTTOM HOLE TEMPERATURE <u>117°</u>			TOOL OPEN: 1ST FLOW _____	HR. <u>30</u> MIN.
LENGTH DRILL COLLAR <u>✓</u>	I.D. <u>✓</u>			INITIAL SHUT-IN _____	HR. <u>30</u> MIN.
LENGTH WEIGHT PIPE <u>575'</u>	I.D. <u>2.76</u>			2ND FLOW _____	HR. <u>30</u> MIN.
SUCCESSFUL TEST NO. <u>1</u>	MISRUN NO. <u>46"</u>			FINAL SHUT-IN _____	HR. <u>30</u> MIN.
CHOKES: TOP <u>1/2"</u>	BOTTOM <u>1/2"</u>			TOP RECORDER NO. <u>2162</u>	BOTTOM RECORDER NO. <u>4333</u>

TYPE BLOW Weak blow for 20 mins.RECOVERY: 65' of mud

EXTRA EQUIPMENT

None

APPROVED BY: _____

TESTER: _____

FORMATION TESTED

Pawnee

OPERATOR TIME: _____

THUNDERBIRD DRILLING, INC.

SHALL NOT BE LIABLE FOR ANY 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 WAS MADE.

CHARGES	
TEST CHARGE	\$ <u>440</u>
EXTRA PACKERS	\$ _____
JARS	\$ _____
SAFETY JOINT	\$ _____
HOOK WALL	\$ _____
MISRUN CHARGE	\$ _____
STAND-BY CHARGE	\$ _____
DST EVALUATION	\$ _____
STRADDLE	\$ _____
TOTAL	\$ <u>440</u>

THUNDERBIRD DRLG., INC.

TESTING DIVISION

Box 18407

WICHITA, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. BRANDT NO. 1

County FINNEY State KANSAS Date 7-9-78

Formation Test No. 2 Total Depth 4840' Elev. _____

Interval Tested 4798' To 4840' Anchor Length 42'

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

Mud Weight 9.2 Viscosity 43 Water Loss 11.2 c.c. Bottom Hole Temp. 118 ° F

Chokes: Top 1/2" Bottom 1/2" Ticket No. 886

RECOVERY

BLOW: WEAK BLOW FOR 4 MINS.

RECOVERY: 10' OF MUD WITH FEW SPOTS OF OIL

Lease and Well No. BRANDT NO. 1 SEC 12 T2N 24-S RG 31-W SE NE

Formation Test No. 2

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

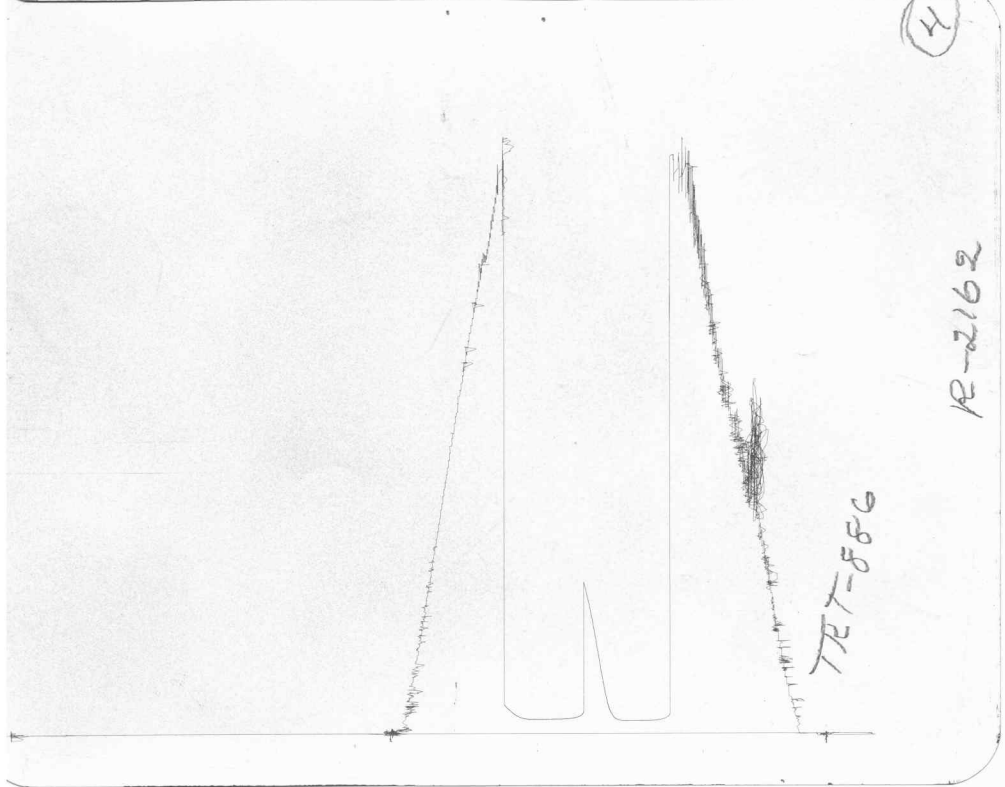
	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2523</u>	<u>2220</u>
(B) Initial 1st Flow Pressure	<u>56</u>	<u>56</u>
(C) Final 1st Flow Pressure	<u>56</u>	<u>56</u>
(D) Initial Shut-in Pressure	<u>692</u>	<u>692</u>
(E) Initial 2nd Flow Pressure	<u>69</u>	<u>69</u>
(F) Final 2nd Flow Pressure	<u>69</u>	<u>69</u>
(G) Final Shut-in Pressure	<u>242</u>	<u>142</u>
(H) Final Hydrostatic Pressure	<u>2523</u>	<u>2512</u>

TICKET #886



R-4333

TRT-886



R-2162

TRT-886

(4)

DATE 7-9-78

THUNDERBIRD DRILLING, INC.

TESTING DIVISION

TICKET **Nº** 886SEC. 12 TWN 24-S RG 31-W

BOX 18407 PHONE 316 685-1441

LEGAL DESCRIPTION SE NE

WICHITA, KANSAS 67218

TEST NO. 2COMPANY Thunderbird Drllg. Inc.ADDRESS Box 18407, Wichita, Ks. 67218LEASE Brandt WELL NO. 1 COUNTY Finney STATE Ks.INVOICES SENT TO: Jame

DST COPIES SENT TO: _____

4 1/2" X. H. GENERAL INFORMATION				PRESSURE DATA & TIME	
TOOL JT. <u>F.H.</u>		HOLE SIZE <u>7 7/8"</u>	PACKER O.D. <u>6 3/4"</u>	FIELD READINGS	CORRECTED READINGS
ELEV. _____	TOTAL DEPTH <u>4840'</u>			INITIAL HYDROSTATIC <u>2523</u>	<u>2220</u>
TESTED FROM <u>4798'</u>	TO <u>4840'</u>			INITIAL 1ST FLOW <u>56</u>	<u>56</u>
ANCHOR LENGTH BELOW <u>42'</u>	BETWEEN <u>✓</u>			FINAL 1ST FLOW <u>56</u>	<u>56</u>
TOOL OPEN 1ST FLOW <u>7:25</u>	A.M.		P.M.	INITIAL SHUT-IN <u>692</u>	<u>692</u>
TOOL CLOSED INITIAL SHUT-IN <u>7:55</u>	A.M.		P.M.	INITIAL 2ND FLOW <u>69</u>	<u>69</u>
TOOL OPEN 2ND FLOW <u>8:25</u>	A.M.		P.M.	FINAL 2ND FLOW <u>69</u>	<u>69</u>
TOOL CLOSED FINAL SHUT-IN <u>8:55</u>	A.M.		P.M.	FINAL SHUT-IN <u>242</u>	<u>142</u>
MUD WT. <u>9.2</u>	VISCOSITY <u>43</u>	W.L. <u>11.2</u>	C.C. _____	FINAL HYDROSTATIC <u>2523</u>	<u>2572</u>
SP. GRAVITY OIL _____	BOTTOM HOLE TEMPERATURE <u>118°</u>			TOOL OPEN: 1ST FLOW _____	HR. <u>30</u> MIN.
LENGTH DRILL COLLAR <u>✓</u>	I.D. <u>✓</u>			INITIAL SHUT-IN _____	HR. <u>30</u> MIN.
LENGTH WEIGHT PIPE <u>575'</u>	I.D. <u>2.76</u>			2ND FLOW _____	HR. <u>30</u> MIN.
SUCCESSFUL TEST NO. <u>2</u>	MISRUN NO. <u>✓</u>			FINAL SHUT-IN _____	HR. <u>30</u> MIN.
CHOKES: TOP <u>1/2"</u>	BOTTOM <u>1/2"</u>			TOP RECORDER NO. <u>2162</u>	BOTTOM RECORDER NO. <u>4333</u>

TYPE BLOW Weak blow for 4 mins.RECOVERY: 10' of mud w/few spots of OilEXTRA EQUIPMENT None

APPROVED BY: _____ THUNDERBIRD DRILLING, INC.

TESTER: Ed Cook

FORMATION TESTED: _____

OPERATOR TIME: _____

SHALL NOT BE LIABLE FOR ANY 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 WAS MADE.

	CHARGES
TEST CHARGE	\$ <u>440⁰⁰</u>
EXTRA PACKERS	\$ _____
JARS	\$ _____
SAFETY JOINT	\$ _____
HOOK WALL	\$ _____
MISRUN CHARGE	\$ _____
STAND-BY CHARGE	\$ _____
DST EVALUATION	\$ _____
STRADDLE	\$ _____
TOTAL	\$ <u>440⁰⁰</u>

THUNDERBIRD DRLG., INC.

TESTING DIVISION

Box 18407

WICHITA, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. BRANDT NO. 1

County FINNEY State KANSAS Date 7-9-78

Formation Test No. 3 Total Depth 4855' Elev. _____

Interval Tested 4841' To 4855' Anchor Length 14'

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

Mud Weight 9.7 Viscosity 45 Water Loss 11.4 c.c. Bottom Hole Temp. 118 ° F

Chokes: Top 1/2" Bottom 1/2" Ticket No. 887

RECOVERY

BLOW: WEAK BLOW FOR 17 MINS.

RECOVERY: 20' OF MUD

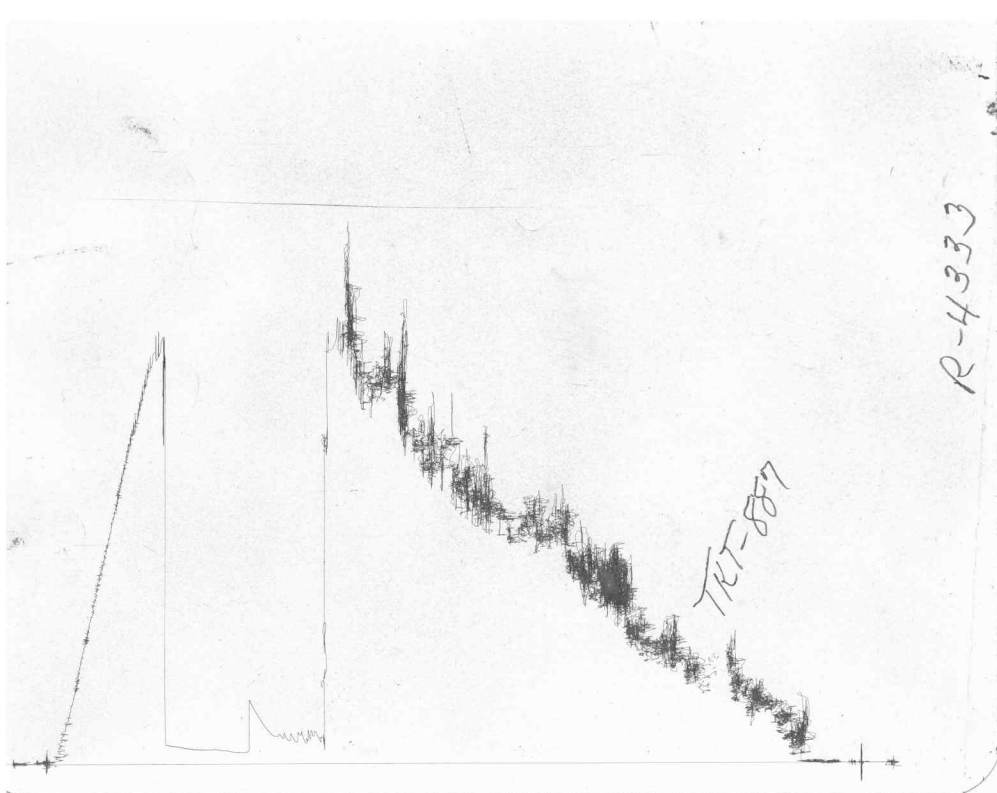
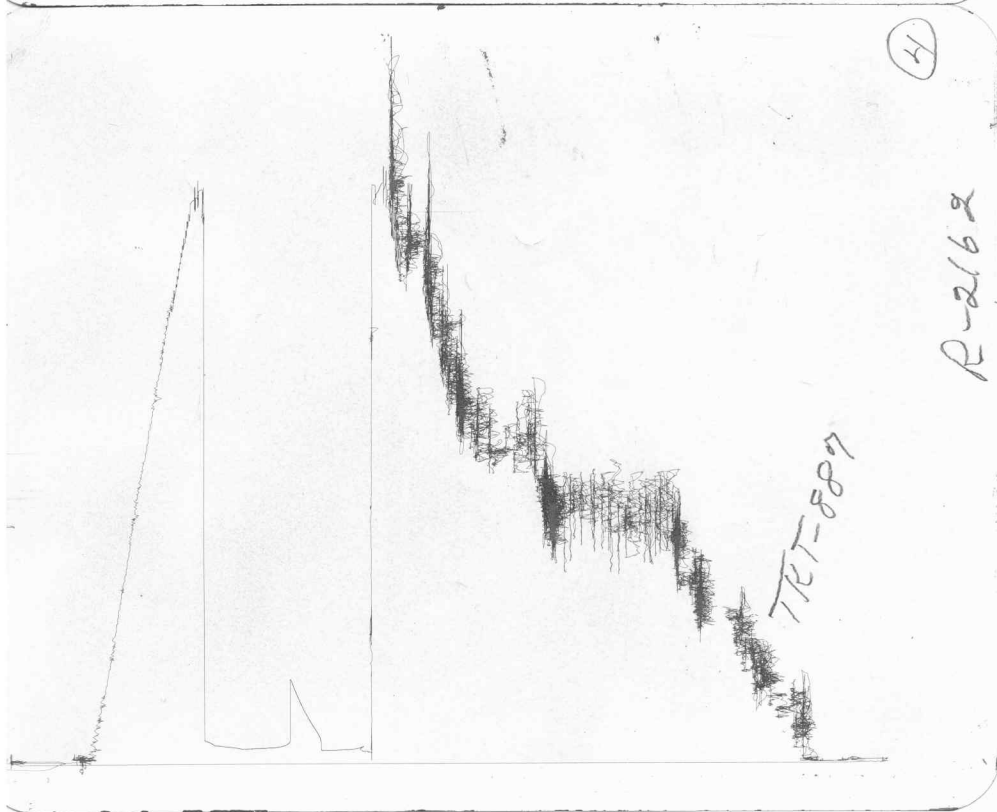
Lease and Well No. BRANDT NO. 1 SEC 12 T2N 24-S RG 31-W SE NE

Formation Test No. 3

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>2540</u>	<u>2538</u>
(B) Initial 1st Flow Pressure	<u>52</u>	<u>50</u>
(C) Final 1st Flow Pressure	<u>61</u>	<u>61</u>
(D) Initial Shut-in Pressure	<u>381</u>	<u>381</u>
(E) Initial 2nd Flow Pressure	<u>69</u>	<u>67</u>
(F) Final 2nd Flow Pressure	<u>69</u>	<u>69</u>
(G) Final Shut-in Pressure	<u>104</u>	<u>104</u>
(H) Final Hydrostatic Pressure	<u>2540</u>	<u>2532</u>

TICKET #887



DATE 7-9-78

THUNDERBIRD DRILLING, INC.

TESTING DIVISION

TICKET N^o 887SEC. 12 TWN 24-S RG 31-W

BOX 18407 PHONE 316 685-1441

LEGAL DESCRIPTION SE NE

WICHITA, KANSAS 67218

TEST NO. 3

COMPANY

Thunderbird Drilling, Inc.

ADDRESS

Box 864, Wichita, Ks. 67218

LEASE

BrandtWELL NO. 1

COUNTY

FinneySTATE Ks.

INVOICES SENT TO:

Same

DST COPIES SENT TO:

GENERAL INFORMATION				PRESSURE DATA & TIME	
				FIELD READINGS	CORRECTED READINGS
TOOL JT. <u>4 1/2" X.H.</u>	HOLE SIZE <u>7 7/8"</u>	PACKER O.D. <u>6 3/4"</u>		INITIAL HYDROSTATIC <u>2540</u>	<u>2538</u>
ELEV. _____	TOTAL DEPTH <u>4855'</u>			INITIAL 1ST FLOW <u>52</u>	<u>50</u>
TESTED FROM <u>4841'</u>	TO <u>4855'</u>			FINAL 1ST FLOW <u>61</u>	<u>61</u>
ANCHOR LENGTH BELOW <u>14'</u>	BETWEEN <u>✓</u>			INITIAL SHUT-IN <u>381</u>	<u>381</u>
TOOL OPEN 1ST FLOW _____	A.M. <u>9:15</u>	P.M. _____		INITIAL 2ND FLOW <u>381 69</u>	<u>67</u>
TOOL CLOSED INITIAL SHUT-IN _____	A.M. <u>9:45</u>	P.M. _____		FINAL 2ND FLOW <u>69</u>	<u>69</u>
TOOL OPEN 2ND FLOW _____	A.M. <u>10:15</u>	P.M. _____		FINAL SHUT-IN <u>104</u>	<u>104</u>
TOOL CLOSED FINAL SHUT-IN _____	A.M. <u>10:45</u>	P.M. _____		FINAL HYDROSTATIC <u>2540</u>	<u>2532</u>
MUD WT. <u>9.7</u>	VISCOSITY <u>45</u>	W.L. <u>11.4</u>	C.C. _____	TOOL OPEN: 1ST FLOW _____	HR. <u>30</u> MIN.
SP. GRAVITY OIL _____	BOTTOM HOLE TEMPERATURE <u>118°</u>			INITIAL SHUT-IN _____	HR. <u>30</u> MIN.
LENGTH DRILL COLLAR _____	I.D. <u>✓</u>			2ND FLOW _____	HR. <u>30</u> MIN.
LENGTH WEIGHT PIPE <u>5-75"</u>	I.D. <u>2.76</u>			FINAL SHUT-IN _____	HR. <u>30</u> MIN.
SUCCESSFUL TEST NO. <u>3</u>	MISRUN NO. <u>✓</u>			TOP RECORDER NO. <u>2162</u>	BOTTOM RECORDER NO. <u>4333</u>
CHOKES: TOP <u>1/2"</u>	BOTTOM <u>1/2"</u>				

TYPE BLOW Weak blow for 17 mins.RECOVERY: 20' of mud

EXTRA EQUIPMENT

None

APPROVED BY:

TESTER:

Ed Cook

FORMATION TESTED

Miss.

OPERATOR TIME:

THUNDERBIRD DRILLING, INC.

SHALL NOT BE LIABLE FOR ANY 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 WAS MADE.

	CHARGES
TEST CHARGE	\$ <u>440.00</u>
EXTRA PACKERS	\$ _____
JARS	\$ _____
SAFETY JOINT	\$ _____
HOOK WALL	\$ _____
MISRUN CHARGE	\$ _____
STAND-BY CHARGE	\$ _____
DST EVALUATION	\$ _____
STRADDLE	\$ _____
TOTAL	\$ <u>440.00</u>

THUNDERBIRD DRLG., INC.

TESTING DIVISION

Box 18407

WICHITA, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. BRANDT NO. 1

County FINNEY State KANSAS Date 7-10-78

Formation Test No. 4 Total Depth 4914 Elev.

Interval Tested 4860' To 4914' Anchor Length 54'

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

Mud Weight 9.9 Viscosity 52 Water Loss 14. c.c. Bottom Hole Temp. 122 ° F

Chokes: Top 1/2" Bottom 1/2" Ticket No. 888

RECOVERY

BLOW: GOOD BLOW THRU-OUT TEST.

RECOVERY: 665' OF MUDDY WATER

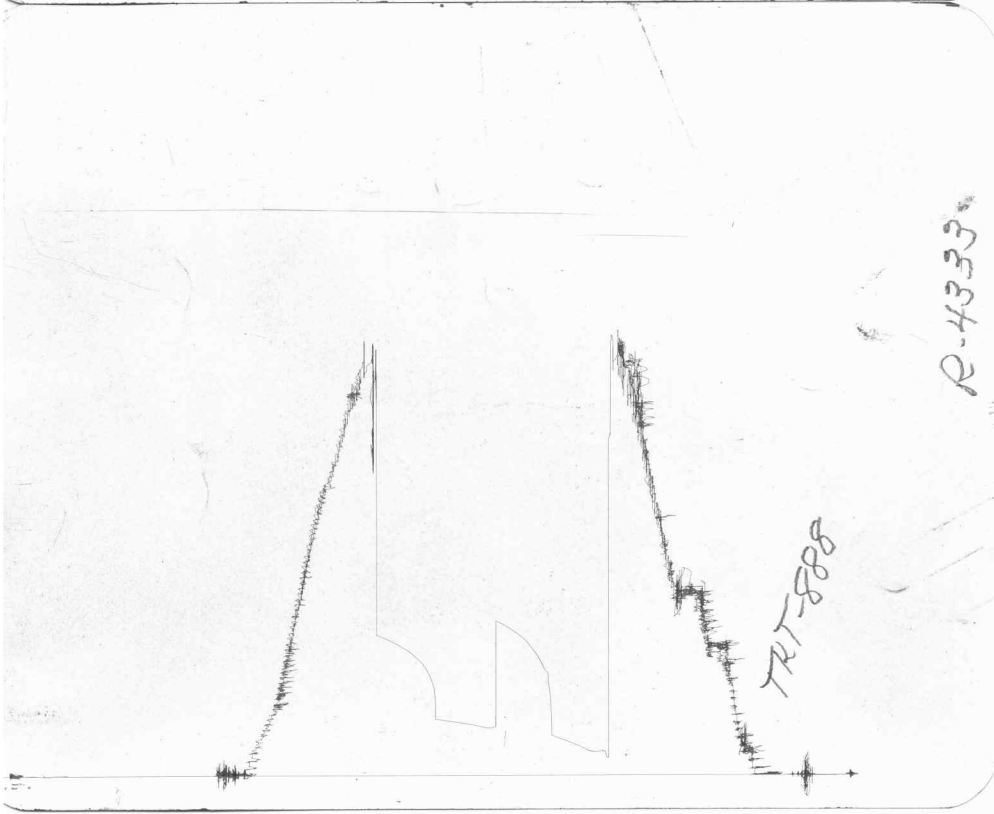
Lease and Well No. BRANDT NO. 1 SEC 12 T2N 31-S RG 21-W SE NE

Formation Test No. 4

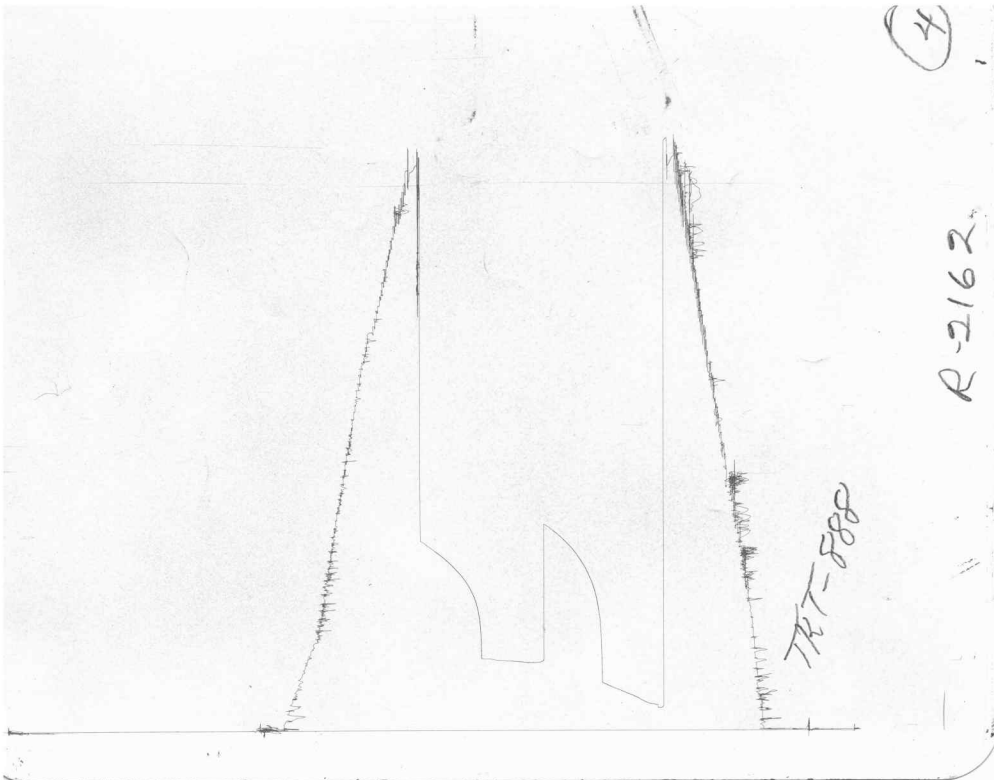
Tool Open: 1st Flow hr. 45 mins: Shut-in Initial hr. 45 min: 2nd Flow hr. 45 min: Shut-in Final hr. 45 min.

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2558</u>	<u>2548</u>
(B) Initial 1st Flow Pressure	<u>87</u>	<u>85</u>
(C) Final 1st Flow Pressure	<u>216</u>	<u>216</u>
(D) Initial Shut-in Pressure	<u>926</u>	<u>926</u>
(E) Initial 2nd Flow Pressure	<u>303</u>	<u>304</u>
(F) Final 2nd Flow Pressure	<u>320</u>	<u>320</u>
(G) Final Shut-in Pressure	<u>848</u>	<u>847</u>
(H) Final Hydrostatic Pressure	<u>2540</u>	<u>2540</u>

TICKET #888



888-127



888-127

(4)

DATE 7-10-78 THUNDERBIRD DRILLING, INC.
TESTING DIVISION
SEC. 12 TWN 31-S RG 21-W BOX 18407 PHONE 316 685-1441
LEGAL DESCRIPTION SE NE WICHITA, KANSAS 67218
TICKET N^o 888
TEST NO. 4

COMPANY Thunderbird Drllg. Inc.
ADDRESS Box 18407, Wichita, Ks. 67218
LEASE Brandt WELL NO. 1 COUNTY Finney STATE Ks.
INVOICES SENT TO: Same
DST COPIES SENT TO: "

4 1/2" X.H. GENERAL INFORMATION		PRESSURE DATA & TIME	
TOOL JT. <u>F.H.</u>	HOLE SIZE <u>7 7/8"</u> PACKER O.D. <u>6 3/4"</u>	FIELD READINGS	CORRECTED READINGS
ELEV. _____	TOTAL DEPTH <u>4914'</u>	INITIAL HYDROSTATIC <u>2538</u>	<u>2548</u>
TESTED FROM <u>4860'</u>	TO <u>4914'</u>	INITIAL 1ST FLOW <u>87</u>	<u>85</u>
ANCHOR LENGTH BELOW <u>54'</u>	BETWEEN <u>✓</u>	FINAL 1ST FLOW <u>216</u>	<u>216</u>
TOOL OPEN 1ST FLOW _____	A.M. <u>8:45</u> P.M. _____	INITIAL SHUT-IN <u>926</u>	<u>926</u>
TOOL CLOSED INITIAL SHUT-IN _____	A.M. <u>9:30</u> P.M. _____	INITIAL 2ND FLOW <u>303</u>	<u>304</u>
TOOL OPEN 2ND FLOW _____	A.M. <u>10:15</u> P.M. _____	FINAL 2ND FLOW <u>320</u>	<u>320</u>
TOOL CLOSED FINAL SHUT-IN _____	A.M. <u>11:00</u> P.M. _____	FINAL SHUT-IN <u>848</u>	<u>847</u>
MUD WT. <u>9.9</u>	VISCOSITY <u>5-2</u> W.L. <u>14</u> C.C. _____	FINAL HYDROSTATIC <u>2540</u>	<u>2540</u>
SP. GRAVITY OIL _____	BOTTOM HOLE TEMPERATURE <u>122.0</u>	TOOL OPEN: 1ST FLOW _____	HR. <u>45</u> MIN.
LENGTH DRILL COLLAR <u>✓</u>	I.D. <u>✓</u>	INITIAL SHUT-IN _____	HR. <u>45</u> MIN.
LENGTH WEIGHT PIPE <u>5-75'</u>	I.D. <u>2.76</u>	2ND FLOW _____	HR. <u>45</u> MIN.
SUCCESSFUL TEST NO. <u>4</u>	MISRUN NO. <u>✓</u>	FINAL SHUT-IN _____	HR. <u>45</u> MIN.
CHOKES: TOP <u>1/2"</u>	BOTTOM <u>1/2"</u>	TOP RECORDER NO. <u>2162</u>	BOTTOM RECORDER NO. <u>4333</u>

TYPE BLOW Good blow thru-out test.

RECOVERY: 665' of muddy water

EXTRA EQUIPMENT None
APPROVED BY: _____
TESTER: Eed Cook
FORMATION TESTED Miss
OPERATOR TIME: _____
THUNDERBIRD DRILLING, INC.
SHALL NOT BE LIABLE FOR ANY 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 WAS MADE.

CHARGES 440.00
TEST CHARGE \$
EXTRA PACKERS \$
JARS \$
SAFETY JOINT \$
HOOK WALL \$
MISRUN CHARGE \$
STAND-BY CHARGE \$
DST EVALUATION \$
STRADDLE \$
TOTAL \$ 440.00

THUNDERBIRD DRLG., INC.

TESTING DIVISION

Box 18407

WICHITA, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. BRANDT NO. 1

County FINNEY State KANSAS Date 7-12-78

Formation Test No. 5 Total Depth 5007' Elev. _____

Interval Tested 4983' To 5007' Anchor Length 24'

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

Mud Weight 9.8 Viscosity 54 Water Loss 12.6 c.c. Bottom Hole Temp. 118 ° F

Chokes: Top 1/2" Bottom 1/2" Ticket No. 889

RECOVERY

BLOW: WEAK BLOW FOR 19 MINS.

RECOVERY: 65' OF MUDDY WATER.

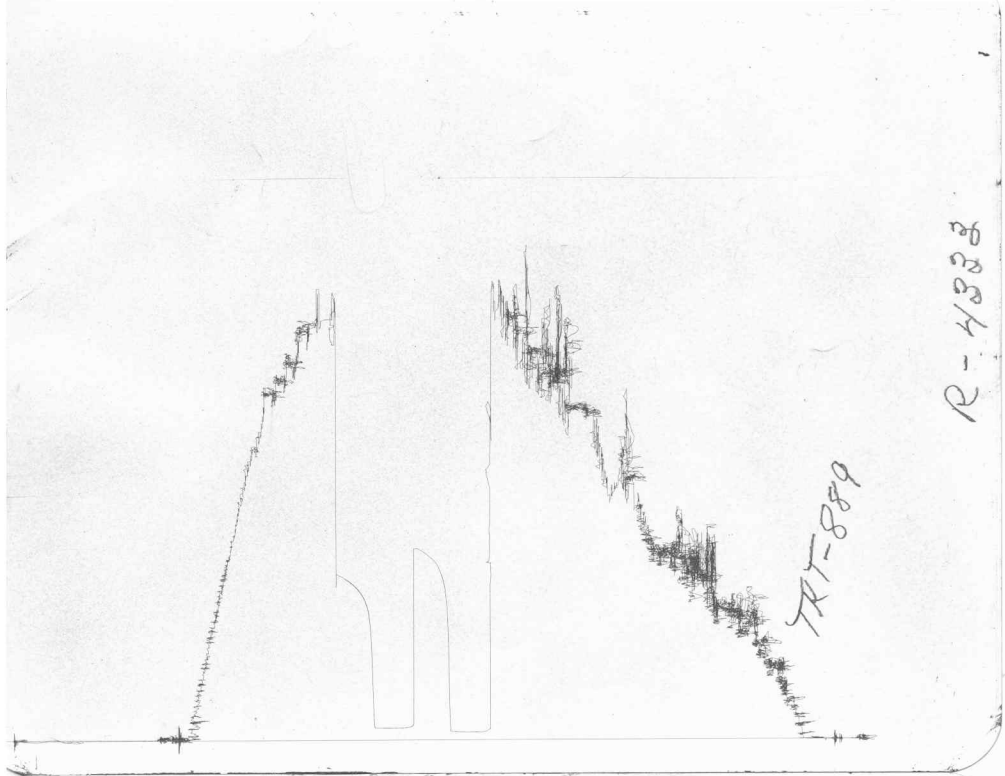
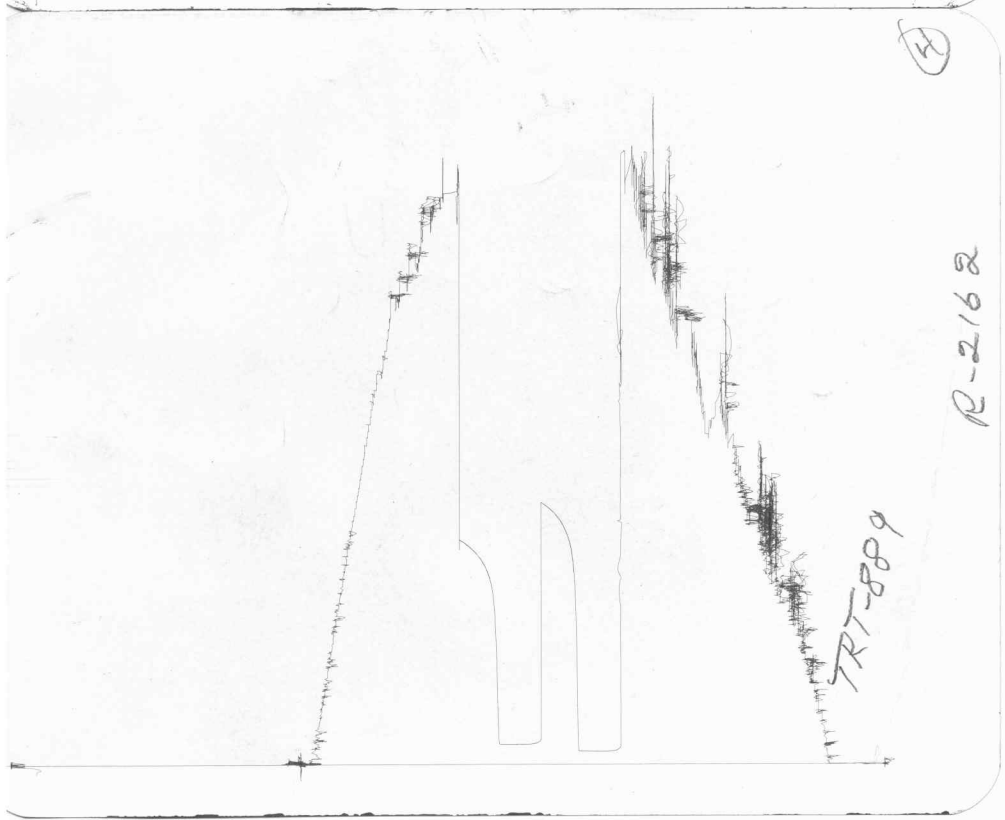
Lease and Well No. BRANDT NO. 1 SEC. 12 TWN 24-S RG 31-W SE NE

Formation Test No. 5

BLOND
WEARD BY OM FOR 18 MINS

RECOVERED: 12.01.1971

TICKET #889



DATE 7-12-76

THUNDERBIRD DRILLING, INC.

TESTING DIVISION

TICKET N^o 889SEC. 12 TWN 24-S RG 31-W

BOX 18407 PHONE 316 685-1441

LEGAL DESCRIPTION SE NE

WICHITA, KANSAS 67218

TEST NO. 5

COMPANY

Thunderbird Drlg. Inc.

ADDRESS

Box 18407; Wichita, Ks. 67218

LEASE

BrandtWELL NO. 1

COUNTY

FinneySTATE Ks.INVOICES SENT TO: SameDST COPIES SENT TO: "

4 1/2" X.H. GENERAL INFORMATION		PRESSURE DATA & TIME	
TOOL JT. <u>F.H.</u>	HOLE SIZE <u>7 7/8"</u>	PACKER O.D. <u>6 3/4"</u>	
ELEV. _____	TOTAL DEPTH <u>5007'</u>		
TESTED FROM <u>4983'</u>	TO <u>5007'</u>		
ANCHOR LENGTH BELOW <u>24'</u>	BETWEEN <u>✓</u>		
TOOL OPEN 1ST FLOW <u>5:25</u>	A.M. _____	P.M. _____	
TOOL CLOSED INITIAL SHUT-IN <u>5:53</u>	A.M. _____	P.M. _____	
TOOL OPEN 2ND FLOW <u>6:25</u>	A.M. _____	P.M. _____	
TOOL CLOSED FINAL SHUT-IN <u>6:53</u>	A.M. _____	P.M. _____	
MUD WT. <u>9.8</u>	VISCOSITY <u>54</u>	W.L. <u>12.6</u>	C.C. _____
SP. GRAVITY OIL _____	BOTTOM HOLE TEMPERATURE <u>118°</u>		
LENGTH DRILL COLLAR <u>✓</u>	I.D. <u>✓</u>		
LENGTH WEIGHT PIPE <u>5-75"</u>	I.D. <u>2.76</u>		
SUCCESSFUL TEST NO. <u>5</u>	MISRUN NO. <u>✓</u>		
CHOKES: TOP <u>1/2"</u>	BOTTOM <u>1/2"</u>		
		FIELD READINGS	
		CORRECTED READINGS	
		INITIAL HYDROSTATIC	<u>2646</u>
		INITIAL 1ST FLOW	<u>52</u>
		FINAL 1ST FLOW	<u>61</u>
		INITIAL SHUT-IN	<u>1176</u>
		INITIAL 2ND FLOW	<u>87</u>
		FINAL 2ND FLOW	<u>87</u>
		FINAL SHUT-IN	<u>1003</u>
		FINAL HYDROSTATIC	<u>2611</u>
		TOOL OPEN: 1ST FLOW	HR. <u>30</u> MIN.
		INITIAL SHUT-IN	HR. <u>30</u> MIN.
		2ND FLOW	HR. <u>30</u> MIN.
		FINAL SHUT-IN	HR. <u>30</u> MIN.
		TOP RECORDER NO. <u>2162</u>	BOTTOM RECORDER NO. <u>4333</u>

TYPE BLOW

Weak blow for 19 mins.

RECOVERY:

65' of muddy water

EXTRA EQUIPMENT

None

APPROVED BY:

TESTER:

Ed Cook

FORMATION TESTED

Miss

OPERATOR TIME:

THUNDERBIRD DRILLING, INC.

SHALL NOT BE LIABLE FOR ANY 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 WAS MADE.

TEST CHARGE

CHARGES

\$ 440.00

EXTRA PACKERS

\$

JARS

\$

SAFETY JOINT

\$

HOOK WALL

\$

MISRUN CHARGE

\$

STAND-BY CHARGE

\$

DST EVALUATION

\$

STRADDLE

\$

TOTAL

\$ 440.00