

DATE Sept. 14, 1979SEC. 8 TWN 17S RG 36W

LEGAL DESCRIPTION _____

MILLERTICKET N^o 18161**TESTING COMPANY**TEST NO. 1P. O. BOX 547 PHONE (316) 793-3370
GREAT BEND, KANSASCOMPANY Thunderbird Drilling Inc.
ADDRESS Box 18407 Wichita, Ks 67218LEASE Whitham WELL NO. 1 COUNTY Wichita STATE KansINVOICES SENT TO: Same

DST COPIES SENT TO: _____

GENERAL INFORMATION

TOOL JT. 4 1/2 F.A. HOLE SIZE 7 7/8 PACKER O.D. 6 3/4
 ELEV. _____ TOTAL DEPTH 3971
 TESTED FROM 3930 TO 3971
 ANCHOR LENGTH BELOW 41' BETWEEN _____
 TOOL OPEN 1ST FLOW _____ A.M. 9:05 P.M. _____
 TOOL CLOSED INITIAL SHUT-IN _____ A.M. 9:50 P.M. _____
 TOOL OPEN 2ND FLOW _____ A.M. 10:35 P.M. _____
 TOOL CLOSED FINAL SHUT-IN _____ A.M. 11:20 P.M. _____
 MUD WT. 9.5 VISCOSITY 43 W.L. 9.6 C.C. _____
 SP. GRAVITY OIL _____ BOTTOM HOLE TEMPERATURE 110°
 LENGTH DRILL COLLAR _____ I.D. _____
 LENGTH WEIGHT PIPE 480' I.D. 2.75
 SUCCESSFUL TEST NO. 1 MISRUN NO. _____
 CHOKES: TOP 1/2" BOTTOM 1/2"

PRESSURE DATA & TIME

	FIELD READINGS	CORRECTED READING
1 INITIAL HYDROSTATIC	<u>2040</u>	<u>2086</u>
2 INITIAL 1ST FLOW	<u>80</u>	<u>158</u>
3 FINAL 1ST FLOW	<u>366</u>	<u>396</u>
4 INITIAL SHUT-IN	<u>1090</u>	<u>1108</u>
5 INITIAL 2ND FLOW	<u>435</u>	<u>488</u>
6 FINAL 2ND FLOW	<u>549</u>	<u>574</u>
7 FINAL SHUT-IN	<u>1090</u>	<u>1094</u>
8 FINAL HYDROSTATIC	<u>1972</u>	<u>1993</u>
TOOL OPEN: 1ST FLOW		HR. <u>45</u>
INITIAL SHUT-IN		HR. <u>45</u>
2ND FLOW		HR. <u>45</u>
FINAL SHUT-IN		HR. <u>45</u>
TOP RECORDER NO. <u>6234</u>	BOTTOM RECORDER NO. <u>5666</u>	

TYPE BLOW

1st opening - Strong blow thru-out.
2nd opening - Strong blow thru-out.
 RECOVERY: 1110' salt water

EXTRA EQUIPMENT NoneAPPROVED BY: Stanley C. MillerTESTER: Ann Neuburger

FORMATION TESTED _____

OPERATOR TIME: _____

MILLER TESTING COMPANY

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>480</u>
EXTRA PACKERS	\$ _____
JARS	\$ _____
SAFETY JOINT	\$ _____
HOOK WALL	\$ _____
MISRUN CHARGE	\$ _____
STAND-BY CHARGE	\$ _____
DST EVALUATION	\$ _____
STRADDLE	\$ _____
TOTAL	\$ <u>480</u>

MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. WHITHAM #1

County WICHITA State KANSAS Date 9-14-79

Formation Test No. 1 Total Depth 3971 Elev. _____
Interval Tested 3930 To 3971 Anchor Length 41'
Size Hole 7 7/8 Size Drill Pipe 4 1/2 F.H. Size Packer 6 3/4
Mud Weight 9.5 Viscosity 43 Water Loss 9.6 c.c. Bottom Hole Temp. 110 °F
Chokes: Top 1/2" Bottom 1/2" Ticket No. 18161
Length of Drill Collar _____ I. D. _____ Length Flexweight 480' I. D. 2.75

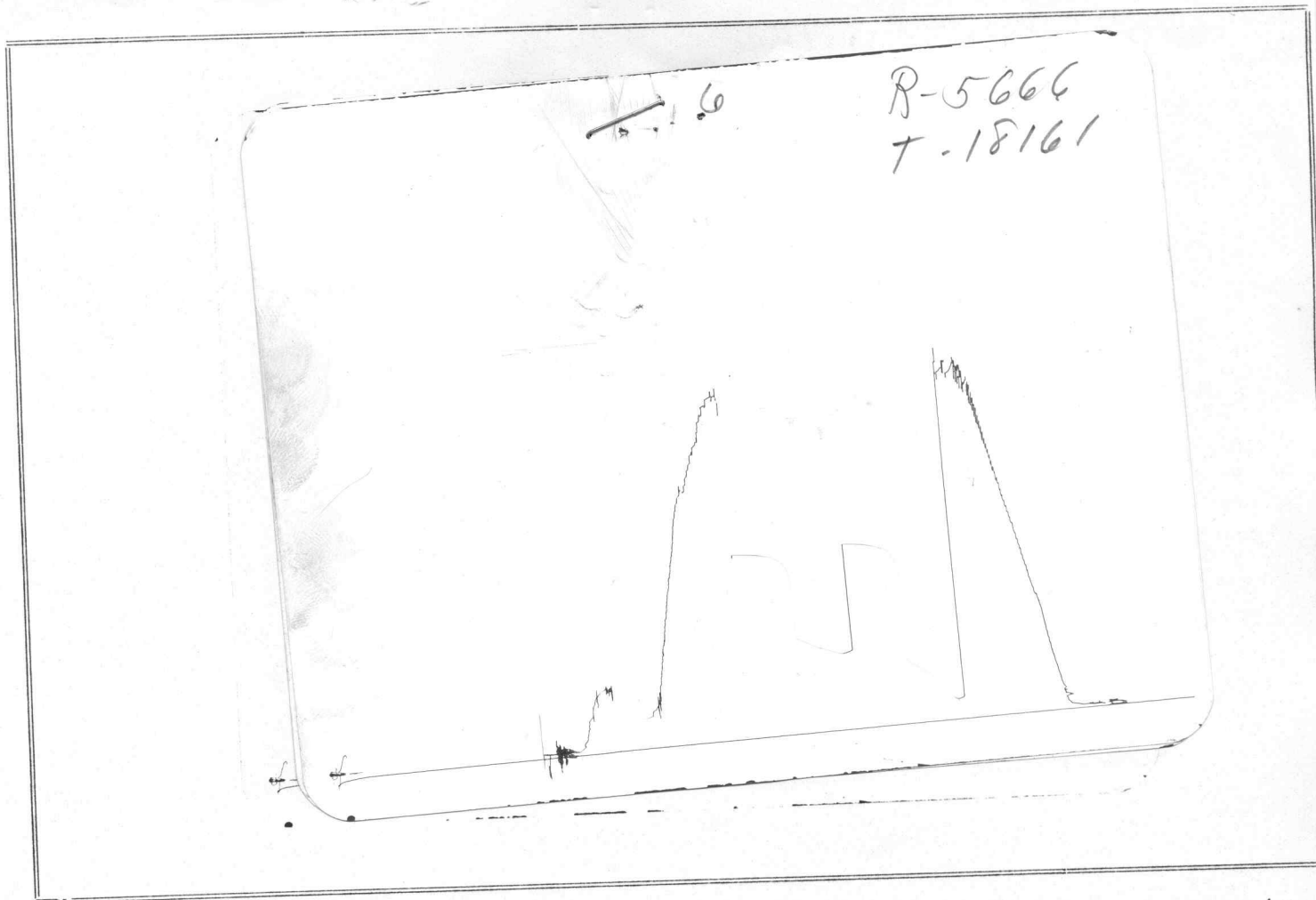
RECOVERY

FIRST OPENING: STRONG BLOW THROUGHOUT TEST.
SECOND OPENING: STRONG BLOW THROUGHOUT TEST.

1110 FEET OF SALT WATER.

Lease and Well No. WHITHAM #1 8-17S-36W

Formation Test No. _____



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

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2040</u>	<u>2086</u>
(B) Initial 1st Flow Pressure	<u>80</u>	<u>158</u>
(C) Final 1st Flow Pressure	<u>366</u>	<u>396</u>
(D) Initial Shut-in Pressure	<u>1090</u>	<u>1108</u>
(E) Initial 2nd Flow Pressure	<u>435</u>	<u>488</u>
(F) Final 2nd Flow Pressure	<u>549</u>	<u>574</u>
(G) Final Shut-in Pressure	<u>1090</u>	<u>1096</u>
(H) Final Hydrostatic Pressure	<u>1972</u>	<u>1993</u>

18161

DATE Sept. 15, 1979
SEC. 8 TWN 17S RG 36W

MILLER

TICKET N^o 18162

LEGAL DESCRIPTION _____

TESTING COMPANY

TEST NO. 2

P. O. BOX 547 PHONE (316) 793-3370
GREAT BEND, KANSAS

COMPANY Thunderbird

ADDRESS _____

LEASE Whitham WELL NO. 1 COUNTY Wichita STATE Kans

INVOICES SENT TO: Same

DST COPIES SENT TO: _____

GENERAL INFORMATION

TOOL JT. 4 1/2 FH HOLE SIZE 7 7/8 PACKER O.D. 6 3/4
ELEV. _____ TOTAL DEPTH _____
TESTED FROM 3984 TO 4030
ANCHOR LENGTH BELOW 36' BETWEEN _____
TOOL OPEN 1ST FLOW _____ A.M. 4:45 P.M. _____
TOOL CLOSED INITIAL SHUT-IN _____ A.M. 5:30 P.M. _____
TOOL OPEN 2ND FLOW _____ A.M. 6:15 P.M. _____
TOOL CLOSED FINAL SHUT-IN _____ A.M. 7:00 P.M. _____
MUD WT 9.5 VISCOSITY 42 W.L. 9.6 C.C. _____
SP. GRAVITY OIL _____ BOTTOM HOLE TEMPERATURE 111°
LENGTH DRILL COLLAR _____ I.D. _____
LENGTH WEIGHT PIPE 480' I.D. 2.75
SUCCESSFUL TEST NO. _____ MISRUN NO. _____
CHOKES: TOP 1/2" BOTTOM 1/2"

PRESSURE DATA & TIME

	FIELD READINGS	CORRECTED READINGS
1 INITIAL HYDROSTATIC	<u>2040</u>	<u>2040</u>
2 INITIAL 1ST FLOW	<u>68</u>	<u>113</u>
3 FINAL 1ST FLOW	<u>412</u>	<u>431</u>
4 INITIAL SHUT-IN	<u>1113</u>	<u>1128</u>
5 INITIAL 2ND FLOW	<u>458</u>	<u>482</u>
6 FINAL 2ND FLOW	<u>617</u>	<u>650</u>
7 FINAL SHUT-IN	<u>1113</u>	<u>1130</u>
8 FINAL HYDROSTATIC	<u>1995</u>	<u>1982</u>
TOOL OPEN: 1ST FLOW		HR. <u>45</u> MIN.
INITIAL SHUT-IN		HR. <u>45</u> MIN.
2ND FLOW		HR. <u>45</u> MIN.
FINAL SHUT-IN		HR. <u>45</u> MIN.
TOP RECORDER NO. <u>6234</u>		BOTTOM RECORDER NO. <u>5666</u>

TYPE BLOW 1st opening: strong blow throughout test
2nd opening: strong blow throughout test
RECOVERY: 1290' salt water

EXTRA EQUIPMENT None

APPROVED BY: Stanton Cox

TESTER: Jim Henninger

FORMATION TESTED _____

OPERATOR TIME: _____

MILLER TESTING COMPANY

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>510.00</u>
EXTRA PACKERS	\$ _____
JARS	\$ _____
SAFETY JOINT	\$ _____
HOOK WALL	\$ _____
MISRUN CHARGE	\$ _____
STAND-BY CHARGE	\$ _____
DST EVALUATION	\$ _____
STRADDLE	\$ _____
TOTAL	\$ <u>510.00</u>

MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. WHITHAM #1

County WICHITA State KANSAS Date 9-15-79

Formation Test No. 2 Total Depth 4020 Elev. _____

Interval Tested 3984 To 4020 Anchor Length 36'

Size Hole 7 7/8 Size Drill Pipe 4 1/2 F.H. Size Packer 6 3/4

Mud Weight 9.5 Viscosity 42 Water Loss 9.6 c.c. Bottom Hole Temp. 111 °F

Chokes: Top 1/2" Bottom 1/2" Ticket No. 18162

Length of Drill Collar _____ I. D. _____ Length Flexweight 480' I. D. 2.75

RECOVERY

FIRST OPENING: STRONG BLOW THROUGHOUT TEST.
SECOND OPENING: STRONG BLOW THROUGHOUT TEST.

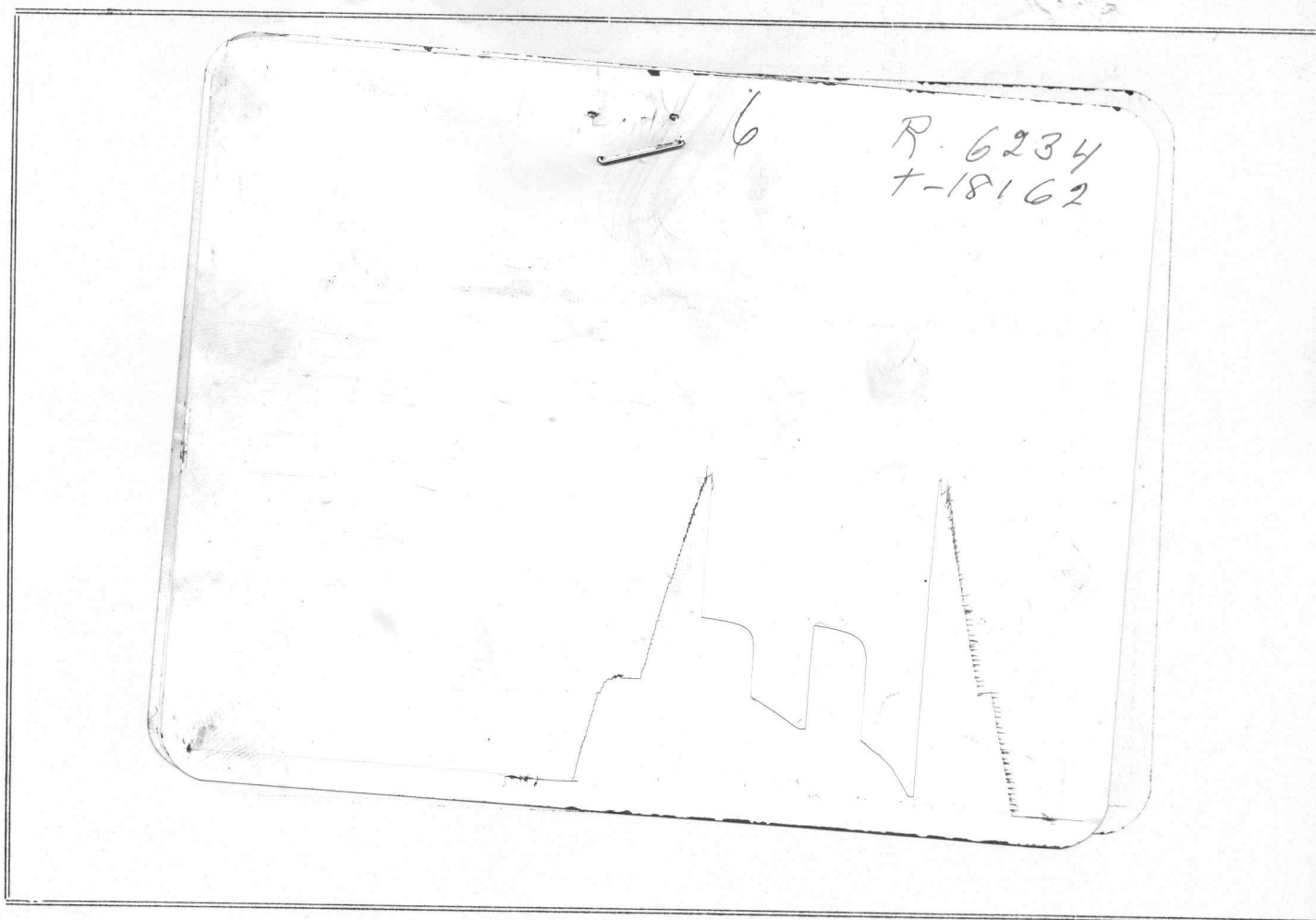
1290 FEET OF SALT WATER.

Lease and Well No.

WHITHAM #1

8-17S-36W

Formation Test No. 2

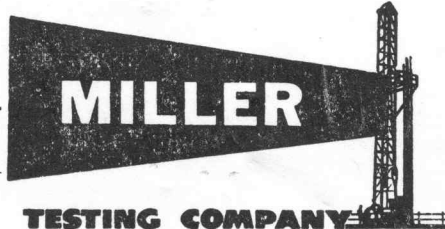


Tool Open: 1st Flow hr. 45 mins: Shut-in Initial hr. 45 min: 2nd Flow hr. 45 min: Shut-in Final hr. 45 min

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2040</u>	<u>2040</u>
(B) Initial 1st Flow Pressure	<u>68</u>	<u>113</u>
(C) Final 1st Flow Pressure	<u>412</u>	<u>431</u>
(D) Initial Shut-in Pressure	<u>1113</u>	<u>1128</u>
(E) Initial 2nd Flow Pressure	<u>458</u>	<u>482</u>
(F) Final 2nd Flow Pressure	<u>617</u>	<u>650</u>
(G) Final Shut-in Pressure	<u>1113</u>	<u>1130</u>
(H) Final Hydrostatic Pressure	<u>1995</u>	<u>1982</u>

18162

DATE Sept. 16th, 1979
SEC. 8 TWN 175 RG 36W



TICKET N^o 18163

LEGAL DESCRIPTION _____

TESTING COMPANY
P. O. BOX 547 PHONE (316) 793-3370
GREAT BEND, KANSAS

TEST NO. 3

COMPANY Thunderbird Drilg. Co.

ADDRESS _____

LEASE Whitham WELL NO. 1 COUNTY Wichita STATE Kans

INVOICES SENT TO: Same

DST COPIES SENT TO: _____

GENERAL INFORMATION

TOOL JT. 4 1/2 FH HOLE SIZE 1 7/8 PACKER O.D. 6 3/4
ELEV. _____ TOTAL DEPTH 4190
TESTED FROM 4135 TO 4190
ANCHOR LENGTH BELOW 55' BETWEEN _____
TOOL OPEN 1ST FLOW _____ A.M. 11:15 P.M. _____
TOOL CLOSED INITIAL SHUT-IN _____ A.M. 12:00 P.M. _____
TOOL OPEN 2ND FLOW 12:45 A.M. _____ P.M. _____
TOOL CLOSED FINAL SHUT-IN 1:30 A.M. _____ P.M. _____
MUD WT. 9.4 VISCOSITY 48 W.L. 15.2 C.C. _____
SP. GRAVITY OIL _____ BOTTOM HOLE TEMPERATURE 113°
LENGTH DRILL COLLAR _____ I.D. _____
LENGTH WEIGHT PIPE 480 I.D. 2.75
SUCCESSFUL TEST NO. _____ MISRUN NO. _____
CHOKES: TOP 1/2" BOTTOM 1/2"

PRESSURE DATA & TIME

	FIELD READINGS	CORRECTED READINGS
1 INITIAL HYDROSTATIC	<u>2131</u>	<u>2073</u>
2 INITIAL 1ST FLOW	<u>684</u>	<u>672</u>
3 FINAL 1ST FLOW	<u>1181</u>	<u>1202</u>
4 INITIAL SHUT-IN	<u>1181</u>	<u>1202</u>
5 INITIAL 2ND FLOW	<u>1203</u>	<u>1215</u>
6 FINAL 2ND FLOW	<u>1203</u>	<u>1215</u>
7 FINAL SHUT-IN	<u>1226</u>	<u>1215</u>
8 FINAL HYDROSTATIC	<u>2085</u>	<u>2059</u>

TOOL OPEN: 1ST FLOW _____ HR. 45 MIN.
INITIAL SHUT-IN _____ HR. 45 MIN.
2ND FLOW _____ HR. 45 MIN.
FINAL SHUT-IN _____ HR. 45 MIN.
TOP RECORDER NO. 6234 BOTTOM RECORDER NO. 5666

TYPE BLOW 1st opening: very strong blow for 30 min. Gradually decreasing to fair blow at end. 2nd opening: No blow. Flushed Tool
RECOVERY: 2530' Salt Water

EXTRA EQUIPMENT None

APPROVED BY: Stanley Coy

TESTER: Jim Neuburger

FORMATION TESTED _____

OPERATOR TIME: _____

MILLER TESTING COMPANY

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CHARGES

TEST CHARGE	\$ <u>510.00</u>
EXTRA PACKERS	\$ _____
JARS	\$ _____
SAFETY JOINT	\$ _____
HOOK WALL	\$ _____
MISRUN CHARGE	\$ _____
STAND-BY CHARGE	\$ _____
DST EVALUATION	\$ _____
STRADDLE	\$ _____
TOTAL	\$ <u>510.00</u>

MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING COMPANY

Lease and Well No. WHITHAM #1

County WICHITA State KANSAS

Date 9-16-79

Formation Test No. 3 Total Depth 4190 Elev. _____
Interval Tested 4135 To 4190 Anchor Length 55'
Size Hole 7 7/8 Size Drill Pipe 4 1/2 F.H. Size Packer 6 3/4
Mud Weight 9.4 Viscosity 48 Water Loss 15.2 c.c. Bottom Hole Temp. 113 °F
Chokes: Top 1/2" Bottom 1/2" Ticket No. 18163
Length of Drill Collar _____ I. D. _____ Length Flexweight 480 I. D. 2.75

RECOVERY

FIRST OPENING: VERY STRONG BLOW FOR 30 MINUTES. GRADUALLY DECREASING TO
FAIR BLOW AT END.
SECOND OPENING: NO BLOW. FLUSHED TOOL.

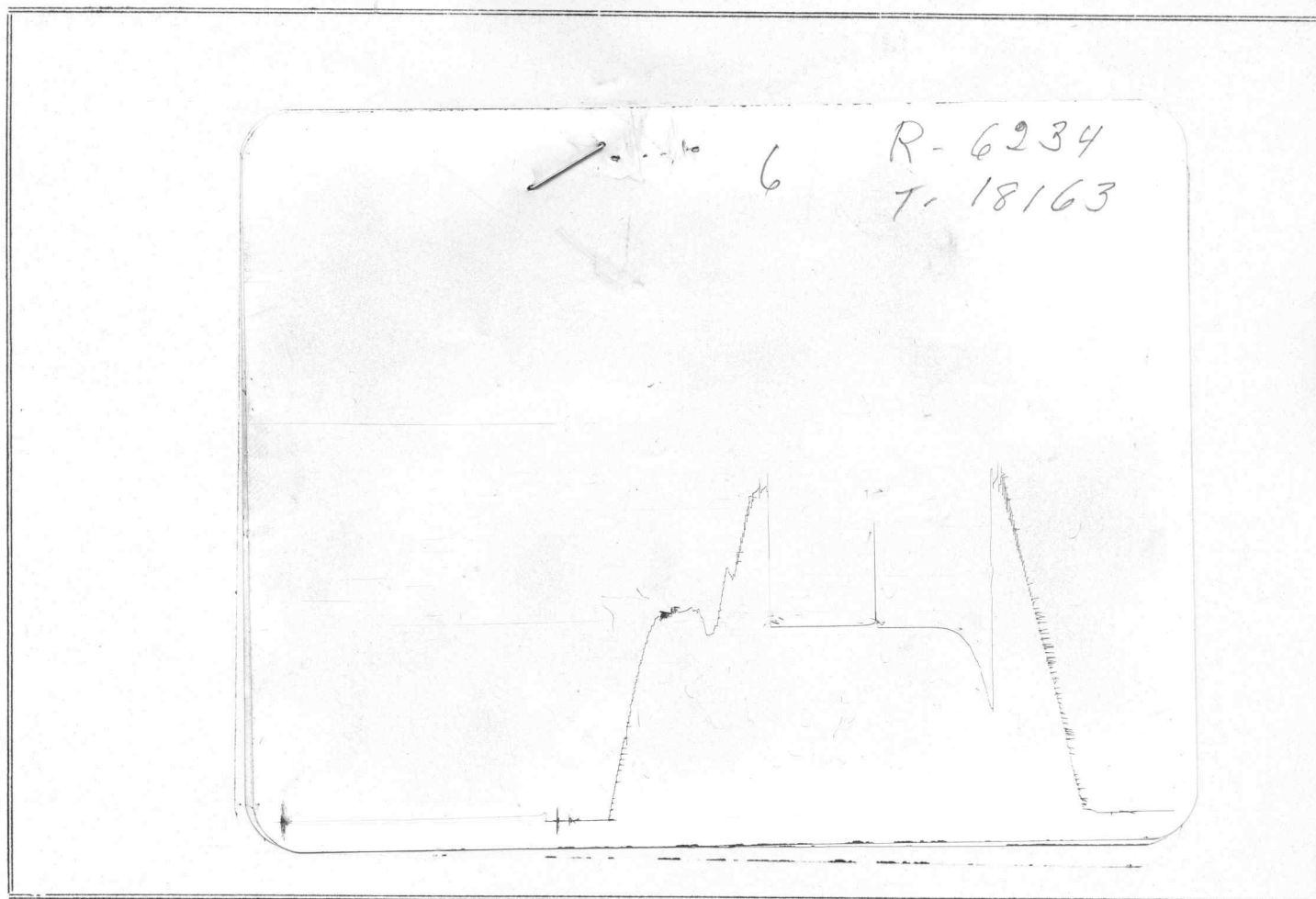
2520 FEET OF SALT WATER.

Lease and Well No.

WHITHAM #1

8-17S-36W

Formation Test No.



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>2131</u>	<u>2073</u>
(B) Initial 1st Flow Pressure	<u>684</u>	<u>672</u>
(C) Final 1st Flow Pressure	<u>1181</u>	<u>1202</u>
(D) Initial Shut-in Pressure	<u>1181</u>	<u>1202</u>
(E) Initial 2nd Flow Pressure	<u>1203</u>	<u>1215</u>
(F) Final 2nd Flow Pressure	<u>1203</u>	<u>1215</u>
(G) Final Shut-in Pressure	<u>1226</u>	<u>1215</u>
(H) Final Hydrostatic Pressure	<u>2085</u>	<u>2059</u>

18163

DATE Sept. 19, 1979
SEC. 8 TWN 17S RG 36W



TICKET N^o 18164

LEGAL DESCRIPTION _____

P. O. BOX 547 PHONE (316) 793-3370
GREAT BEND, KANSAS

TEST NO. 4

COMPANY Thunderbird

ADDRESS _____

LEASE Whitham WELL NO. 1 COUNTY Wichita STATE Kans.

INVOICES SENT TO: Same

DST COPIES SENT TO: _____

GENERAL INFORMATION				PRESSURE DATA & TIME			
				FIELD READINGS		CORRECTED READINGS	
TOOL JT. <u>4 1/2 F.H.</u>	HOLE SIZE <u>7 7/8</u>	PACKER O.D. <u>6 3/4</u>		1 INITIAL HYDROSTATIC	<u>2334</u>	<u>2206</u>	
ELEV. _____	TOTAL DEPTH <u>4590</u>			2 INITIAL 1ST FLOW	<u>68</u>	<u>81</u>	
TESTED FROM <u>4469</u>	TO <u>4590</u>			3 FINAL 1ST FLOW	<u>65</u>	<u>81</u>	
ANCHOR LENGTH BELOW <u>121'</u>	BETWEEN _____			4 INITIAL SHUT-IN	<u>572</u>	<u>588</u>	
TOOL OPEN 1ST FLOW _____	A.M. <u>12:30</u> P.M. _____			5 INITIAL 2ND FLOW	<u>68</u>	<u>92</u>	
TOOL CLOSED INITIAL SHUT-IN _____	A.M. <u>1:00</u> P.M. _____			6 FINAL 2ND FLOW	<u>68</u>	<u>92</u>	
TOOL OPEN 2ND FLOW _____	A.M. <u>1:30</u> P.M. _____			7 FINAL SHUT-IN	<u>458</u>	<u>429</u>	
TOOL CLOSED FINAL SHUT-IN _____	A.M. <u>2:00</u> P.M. _____			8 FINAL HYDROSTATIC	<u>2289</u>	<u>2204</u>	
MUD WT. <u>9.7</u>	VISCOSITY <u>45</u>	W.L. <u>16.0</u>	C.C. _____	TOOL OPEN: 1ST FLOW _____		HR. <u>30</u>	MIN. _____
SP. GRAVITY OIL _____	BOTTOM HOLE TEMPERATURE <u>116'</u>			INITIAL SHUT-IN _____		HR. <u>30</u>	MIN. _____
LENGTH DRILL COLLAR _____	I.D. _____			2ND FLOW _____		HR. <u>30</u>	MIN. _____
LENGTH WEIGHT PIPE <u>390'</u>	I.D. <u>2.75</u>			FINAL SHUT-IN _____		HR. <u>30</u>	MIN. _____
SUCCESSFUL TEST NO. _____	MISRUN NO. _____			TOP RECORDER NO. <u>6234</u>		BOTTOM RECORDER NO. <u>5666</u>	
CHOKES: TOP <u>1/2"</u>	BOTTOM <u>1/2"</u>						

TYPE BLOW 1st Opening: Weak blow for 8 min. Died
2nd Opening: No blow

RECOVERY: 30' Mud

EXTRA EQUIPMENT None

APPROVED BY: Steve Gyl

TESTER: Jim Newburger

FORMATION TESTED _____

OPERATOR TIME: _____

MILLER TESTING COMPANY

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>510.00</u>
EXTRA PACKERS	\$ _____
JARS	\$ _____
SAFETY JOINT	\$ _____
HOOK WALL	\$ _____
MISRUN CHARGE	\$ _____
STAND-BY CHARGE	\$ _____
DST EVALUATION	\$ _____
STRADDLE	\$ _____
TOTAL	\$ <u>510.00</u>

MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. WHITHAM #1

County WICHITA

State KANSAS

Date 9-19-79

Formation Test No. 4 Total Depth 4590 Elev. _____
Interval Tested 4469 To 4590 Anchor Length 121'
Size Hole 7 7/8 Size Drill Pipe 4 1/2 F.H. Size Packer 6 3/4
Mud Weight 9.7 Viscosity 45 Water Loss 16.0 c.c. Bottom Hole Temp. 116 °F
Chokes: Top 1/2" Bottom 1/2" Ticket No. 18164
Length of Drill Collar _____ I. D. _____ Length Flexweight 390' I. D. 2.75

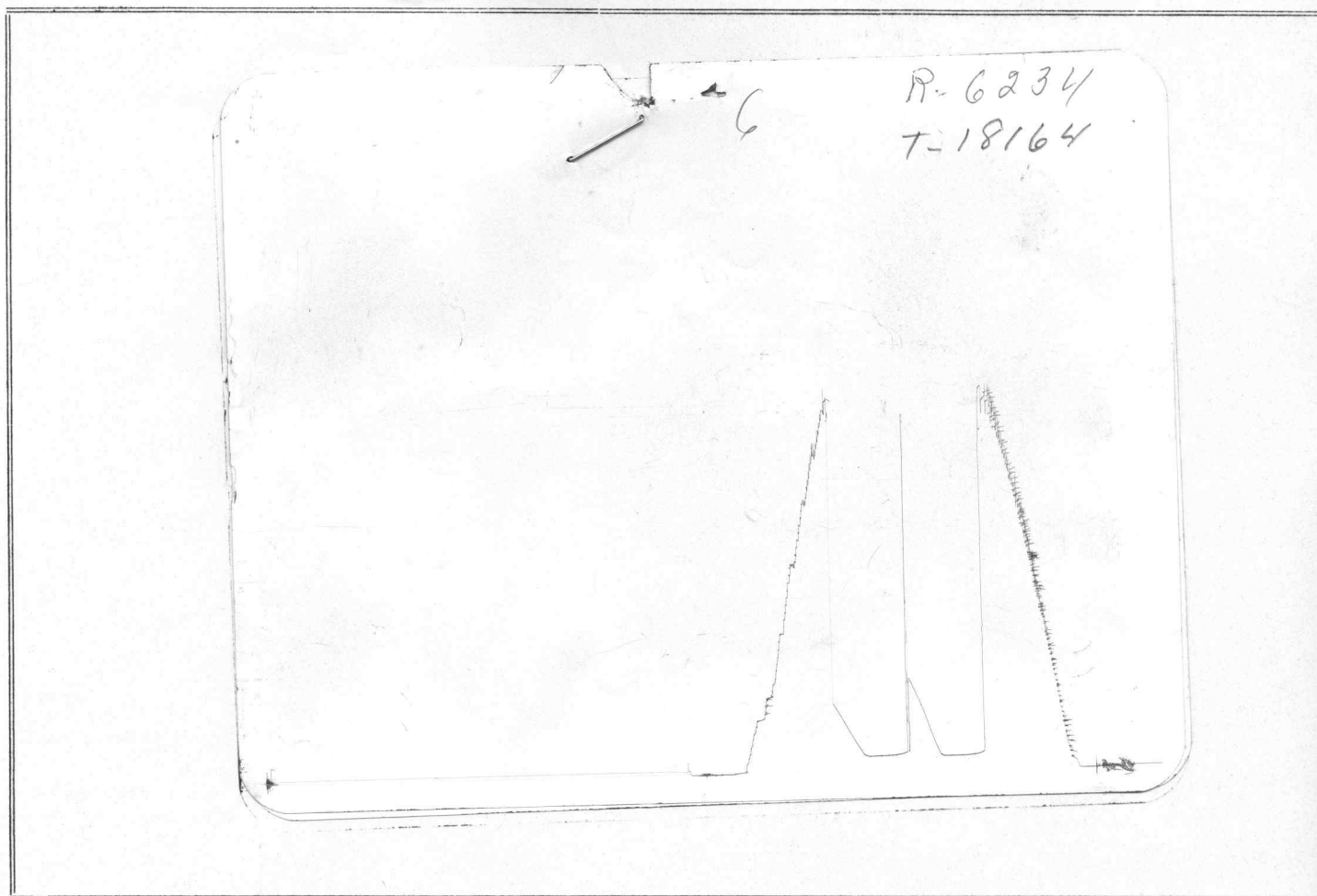
RECOVERY

FIRST OPENING: WEAK BLOW FOR 8 MINUTES, DIED.
SECOND OPENING: NO BLOW.

30 FEET OF MUD.

Lease and Well No. WHITHAM #1 8-17S-36W

Formation Test No. 4



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>2334</u>	<u>2206</u>
(B) Initial 1st Flow Pressure	<u>68</u>	<u>81</u>
(C) Final 1st Flow Pressure	<u>68</u>	<u>81</u>
(D) Initial Shut-in Pressure	<u>572</u>	<u>588</u>
(E) Initial 2nd Flow Pressure	<u>68</u>	<u>92</u>
(F) Final 2nd Flow Pressure	<u>68</u>	<u>92</u>
(G) Final Shut-in Pressure	<u>458</u>	<u>429</u>
(H) Final Hydrostatic Pressure	<u>2289</u>	<u>2204</u>

18164