MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. WELLS A-1

County NESS State KANSAS Date MAY 17, 1973

Formation Test No. 1 Total Depth 4120 Elev. 2312 K.B.

Interval Tested 4084 To 4120 Anchor Length 36'

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

Mud Weight 9.9 Viscosity 42 Water Loss 8 c.c. Bottom Hole Temp. 105 °F

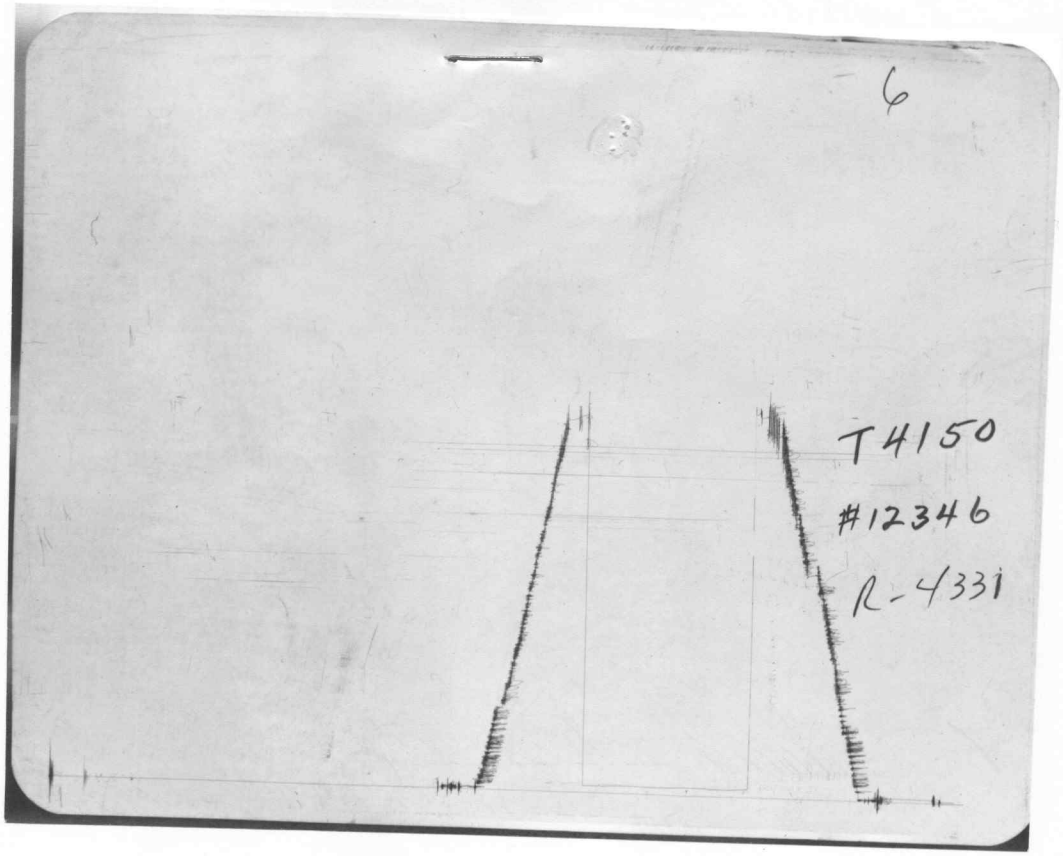
Chokes: Top 1/2 Bottom 1/2 Ticket No. 12346

Length of Drill Collar I. D. Length Flexweight 600 I. D. 2.76

RECOVERY

VERY WEAK BLOW. DEAD IN 7 MINUTES.

2 FEET OF DRILLING MUD.



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

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	2109	2141
(B) Initial 1st Flow Pressure	43	43
(C) Final 1st Flow Pressure	43	43
(D) Initial Shut-in Pressure	48	43
(E) Initial 2nd Flow Pressure	43	43
(F) Final 2nd Flow Pressure	43	43
(G) Final Shut-in Pressure	48	43
(H) Final Hydrostatic Pressure	2067	2109

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GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. WELLS A-1

County NESS State KANSAS Date MAY 18, 1973

Formation Test No. 2 Total Depth 4265 Elev. 2312 K.B.

Interval Tested 4208 To 4265 Anchor Length 57'

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

Mud Weight 9.7 Viscosity 48 Water Loss 20 c.c. Bottom Hole Temp. 98 °F

Chokes: Top 1/2 Bottom 1/2 Ticket No. 12347

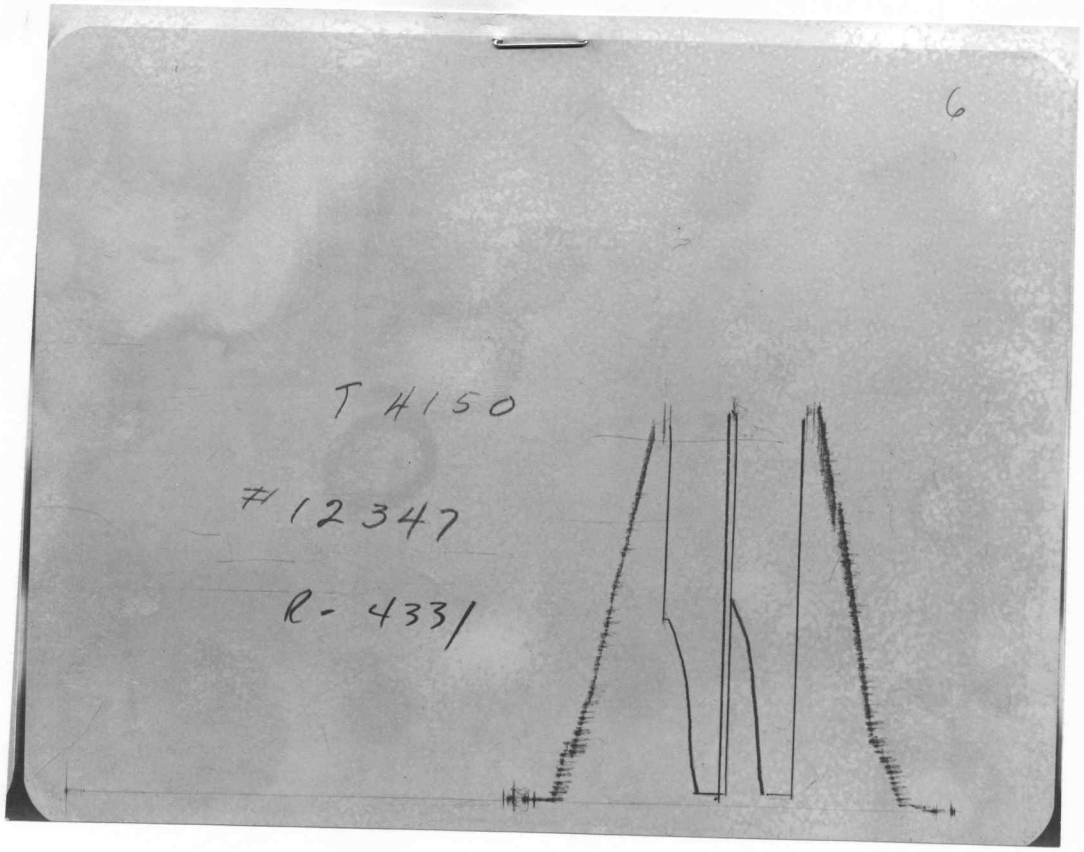
Length of Drill Collar I. D. Length Flexweight I. D.

RECOVERY

VERY WEAK BLOW. DEAD IN 1 MINUTE. FLUSHED TOOL. NO HELP.

5 FEET OF MUD.

Lease and Well No. WELLS A-1 10-18S-24W C NW NE Formation Test No. 2



Tool Open: 1st Flow ___ hr. 15 mins: Shut-in Initial ___ hr. 30 min: 2nd Flow ___ hr. 15 min: Shut-in Final ___ hr. 30 mi

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	2224	2183
(B) Initial 1st Flow Pressure	54	52
(C) Final 1st Flow Pressure	54	54
(D) Initial Shut-in Pressure	1161	1179
(E) Initial 2nd Flow Pressure	54	54
(F) Final 2nd Flow Pressure	54	54
(G) Final Shut-in Pressure	1082	1093
(H) Final Hydrostatic Pressure	2140	2161

12347

MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. WELLS A-1

County NESS State KANSAS Date MAY 19, 1973

Formation Test No. 3 Total Depth 4330 Elev. 2312 K.B.

Interval Tested 4303 To 4330 Anchor Length 27'

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

Mud Weight 9.7 Viscosity 48 Water Loss 20 c.c. Bottom Hole Temp. 106 °F

Chokes: Top 1/2 Bottom 1/2 Ticket No. 12348

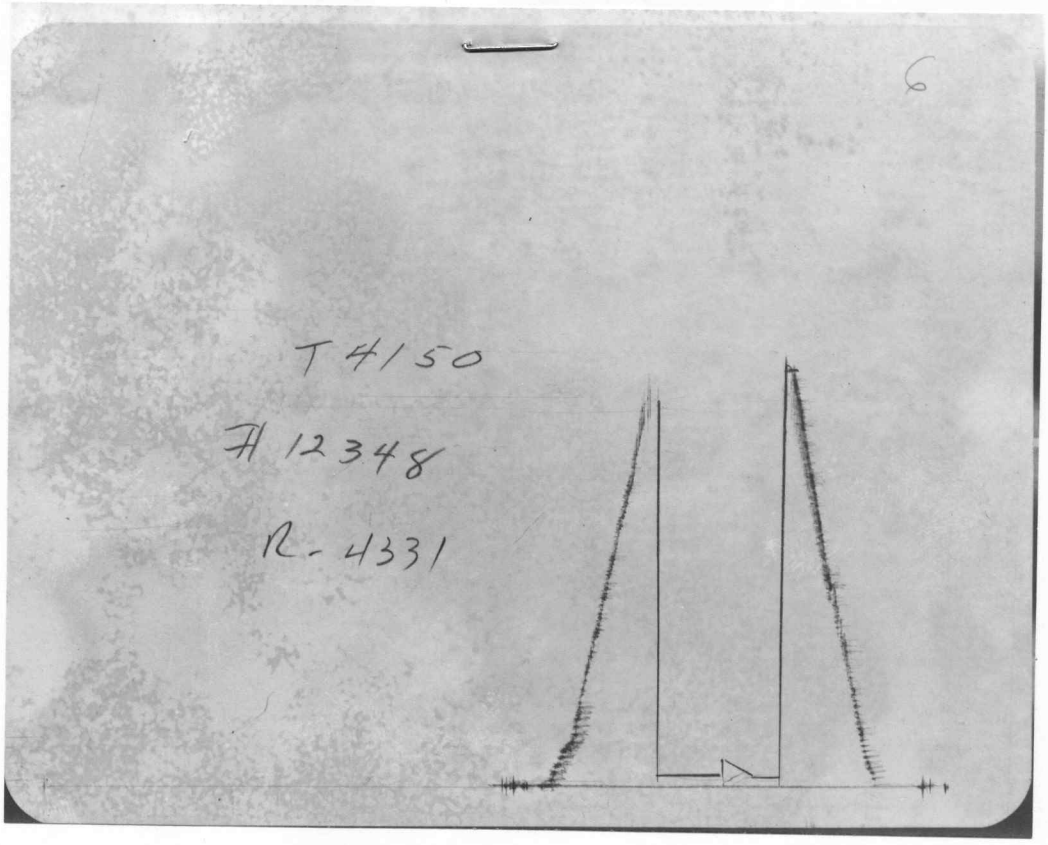
Length of Drill Collar I. D. Length Flexweight I. D.

RECOVERY

VERY WEAK BLOW. DEAD IN 7 MINUTES.

5 FEET OF OIL SPECKLED MUD.

Lease and Well No. WELLS A-1 16-18S-24W C NW NE Formation Test No. 3



Tool Open: 1st Flow ___ hr. 15 mins: Shut-in Initial ___ hr. 30 min: 2nd Flow ___ hr. 15 min: Shut-in Final ___ hr. 30 m

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	2206	2225
(B) Initial 1st Flow Pressure	38	37
(C) Final 1st Flow Pressure	38	39
(D) Initial Shut-in Pressure	163	174
(E) Initial 2nd Flow Pressure	38	43
(F) Final 2nd Flow Pressure	38	43
(G) Final Shut-in Pressure	54	76
(H) Final Hydrostatic Pressure	2140	2172

12348

MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING, INC.

Lease and Well No. WELLS A-1

County NESS State KANSAS Date MAY 20, 1973

Formation Test No. 4 Total Depth 4360 Elev. 2312 K.B.

Interval Tested 4303 To 4360 Anchor Length 50'

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

Mud Weight 9.5 Viscosity 49 Water Loss 18.2 c.c. Bottom Hole Temp. 106 °F

Chokes: Top 1/2 Bottom 1/2 Ticket No. 12349

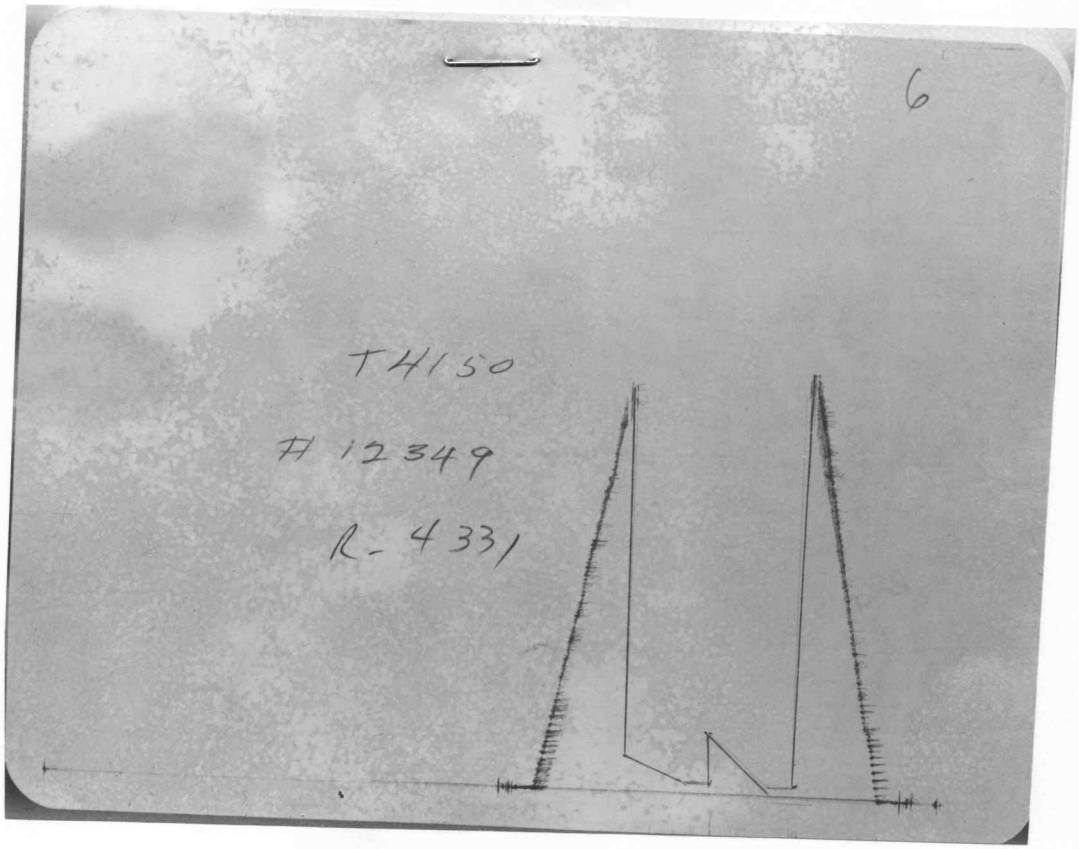
Length of Drill Collar I. D. Length Flexweight 600 I. D. 2.76

RECOVERY

VERY WEAK BLOW. DEAD IN 10 MINUTES.

15 FEET OF MUD.

Lease and Well No. WELLS A-1 16-18S-24W C NW NE Formation Test No. 4



Tool Open: 1st Flow ___ hr. 15 mins: Shut-in Initial ___ hr. 45 min: 2nd Flow ___ hr. 15 min: Shut-in Final ___ hr. 45 mi

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	2245	2225
(B) Initial 1st Flow Pressure	54	59
(C) Final 1st Flow Pressure	54	59
(D) Initial Shut-in Pressure	349	354
(E) Initial 2nd Flow Pressure	67	70
(F) Final 2nd Flow Pressure	67	76
(G) Final Shut-in Pressure	207	218
(H) Final Hydrostatic Pressure	2240	2193

12349