

TKT-15346-I

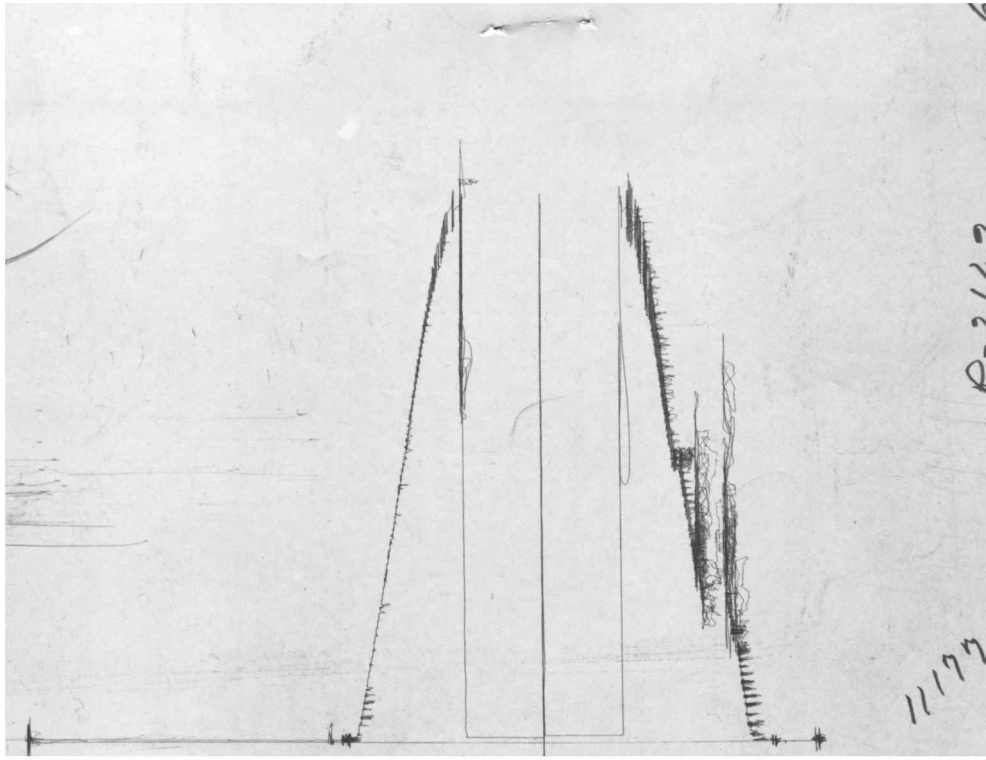


Bird 5



Home Office: Great Bend, Kansas
P. O. Box 793 (316) 793-7903

Company Thunderbird Drilling Inc. Lease & Well No. Campbell #1
Elevation 2380 Kelly Bushings Formation Marmaton Effective Pay _____ Ft. Ticket No. 15346
Date 12-27-70 Sec. 9 Twp. 22S Range 23W County Hodgeman State Kansas
Test Approved by R. B. Jenkins Western Representative Guy Max Knife
Formation Test No. 1 O.K. ☒ Misrun _____ Interval Tested From 4414' to 4455' Total Depth 4455'
Size Main Hole 7 7/8" Rat Hole _____ Conv. _____ B.T. ☒ Damaged _____ Yes ☒ No Conv. _____ B.T. ☒ Damaged _____ Yes ☒ No
Packer Depth 4409 Ft. Size 6 3/4" Packer Depth 4414 Ft. Size 6 3/4"
Straddle _____ Yes _____ No ☒ Conv. _____ B.T. _____ Damaged _____ Yes _____ No
Packer Depth _____ Ft. Size _____
Tool Size 5 1/2" O.D. Tool Jt. Size 4 1/2" F.H. Anchor Length 41 Ft. Size 5 1/2" O.D.
RECORDERS Depth 4447 Ft. Clock No. 6800 Depth 4450 Ft. Clock No. 9712
Top Make Kuster Cap. 4150 No. 2605 Inside Outside Bottom Make Kuster Cap. 4250 No. 1051 Inside Outside
Below Straddle: Depth _____ Clock No. _____ Inside _____ Outside _____
Top Make _____ Cap. _____ No. _____ Inside _____ Outside _____
Bottom Make _____ Cap. _____ No. _____ Inside _____ Outside _____
Time Set Packer 8:27 A.M.
Tool Open I.F.P. From 8:30 M. to 9:00A. M. Hr. 30 Min. From (B) 46 P.S.I. To (C) 46 P.S.I.
Tool Closed I.C.I.P. From 9:00 M. to 9:30A. M. Hr. 30 Min. (D) 48 P.S.I.
Tool Open F.F.P. From 9:30 M. to 10:00A. M. Hr. 30 Min. From (E) 46 P.S.I. To (F) 46 P.S.I.
Tool Closed F.C.I.P. From 10:00 M. to 10:30A. M. Hr. 30 Min. (G) 46 P.S.I.
Initial Hydrostatic Pressure (A) 2271 P.S.I. Final Hydrostatic Pressure (H) 2267 P.S.I.
SURFACE Size Choke 3/4 In. Max. Press. P.S.I. _____ Time _____ Description of Flow _____
INFORMATION _____ M. _____
_____ M. _____
_____ M. _____
BLOW Weak blow for 30 min. Bottom Choke Size 3/4 In.
Did Well Flow _____ Yes ☒ No _____ Recovery Total Ft. 40 feet mud slight show of oil in tool
Reversed Out _____ Yes ☒ No _____ Mud Type Starch Viscosity 45 Weight 9.5 Water Loss 9 cc. Maximum Temp. 118 °F
Type Circ. Sub. Pin Did Tool Plug? No Jars: Size _____ Make _____ Ser. No. _____
EXTRA EQUIPMENT: Dual Packers 2 Safety Joint No Did Packer Hold? Yes Where? _____
Length Drill Pipe 3464 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe 930 ft. I.D. Weight Pipe 2.7 in. Length Drill Collars _____ ft.
I. D. Drill Collars _____ in. Length D.S.T. Tool 61 ft.
Remarks _____



MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING CO.

Lease and Well No. CAMPBELL #1

County HODGEMAN State KANSAS Date DEC 28, 1970

Formation Test No. 2 Total Depth 4628 Elev. _____

Interval Tested 4614 To 4628 Anchor Length 14'

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

Mud Weight 9.3 Viscosity 43 Water Loss 5.5 c.c. Bottom Hole Temp. 122 °F

Chokes: Top 1/2 Bottom 1/2 Ticket No. 11177

Length of Drill Collar _____ I. D. _____ Length Flexweight 930 I. D. 2.76

RECOVERY

WEAK BLOW FOR 10 MINUTES. FLUSHED TOOL 2 MINUTES AFTER SECOND
OPENING.

5 FEET OF MUD.

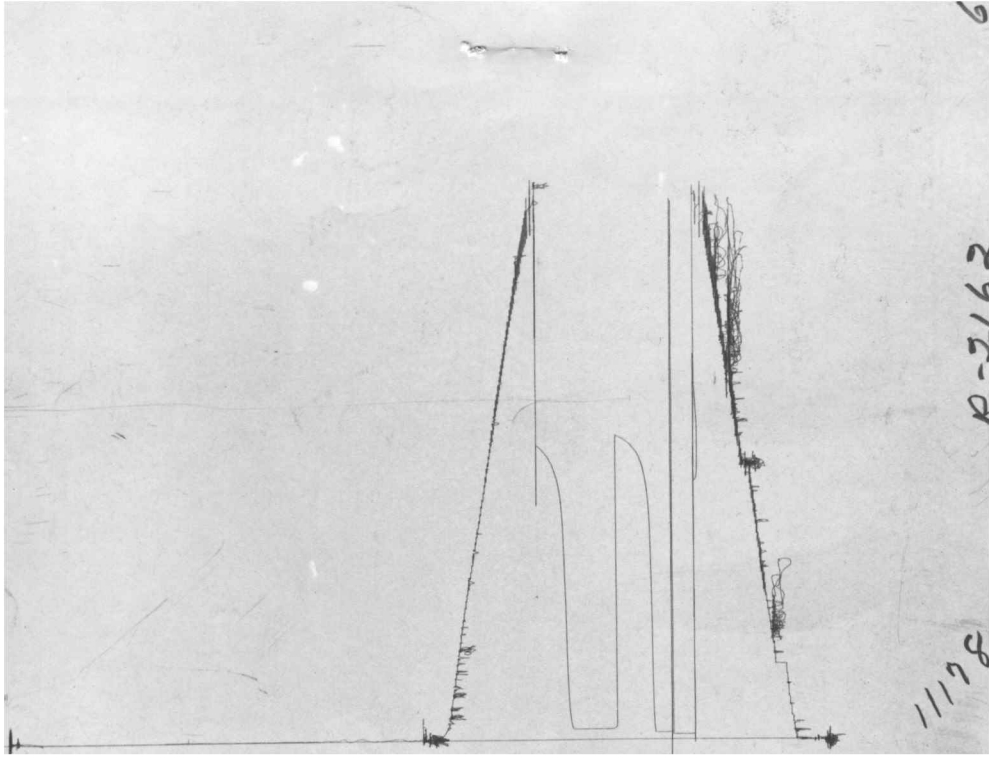
2 PACKERS USED.

Lease and Well No. CAMPBELL #1 9 22S 23W

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>2470</u>	<u>2461</u>
(B) Initial 1st Flow Pressure	<u>35</u>	<u>33</u>
(C) Final 1st Flow Pressure	<u>35</u>	<u>33</u>
(D) Initial Shut-in Pressure	<u>35</u>	<u>33</u>
(E) Initial 2nd Flow Pressure	<u>26</u>	<u>21</u>
(F) Final 2nd Flow Pressure	<u>26</u>	<u>21</u>
(G) Final Shut-in Pressure	<u>26</u>	<u>21</u>
(H) Final Hydrostatic Pressure	<u>2435</u>	<u>2435</u>



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>2470</u>	<u>2461</u>
(B) Initial 1st Flow Pressure	<u>26</u>	<u>26</u>
(C) Final 1st Flow Pressure	<u>35</u>	<u>33</u>
(D) Initial Shut-in Pressure	<u>1367</u>	<u>1372</u>
(E) Initial 2nd Flow Pressure	<u>43</u>	<u>48</u>
(F) Final 2nd Flow Pressure	<u>43</u>	<u>48</u>
(G) Final Shut-in Pressure	<u>1332</u>	<u>1324</u>
(H) Final Hydrostatic Pressure	<u>2417</u>	<u>2435</u>

MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING CO.

Lease and Well No. CAMPBELL #1

County HODGEMAN

State KANSAS

Date DEC 29, 1970

Formation Test No. 3 Total Depth 4644 Elev. _____
Interval Tested 4630 To 4644 Anchor Length 14'
Size Hole 7 7/8 Size Drill Pipe 4 1/2 FH Size Packer 6 3/4
Mud Weight 9.3 Viscosity 43 Water Loss 5.5 c.c. Bottom Hole Temp. 122 °F
Chokes: Top 1/2 Bottom 1/2 Ticket No. 11178
Length of Drill Collar _____ I. D. _____ Length Flexweight 930 I. D. 2.76

RECOVERY

WEAK BLOW FOR 4 MINUTES. FLUSHED TOOL 18 MINUTES AFTER FIRST OPENING.

50 FEET OF MUD.

10 FEET OF SLIGHTLY OIL CUT MUD.

SOME FREE OIL IN TOOL.

2 PACKERS USED.

Lease and Well No. CAMPBELL #1 9 22S 23W

Formation Test No. 3

DATE DEC 29, 1970

LEASE CAMPBELL

WELL NO. 1

TEST NO. 3

TICKET NO. 11178

	TIME	PSI
INITIAL HYDRO MUD PRESSURE		2461
INITIAL CLOSED IN PRESSURE	30 mins.	1372
INITIAL FLOW	30 mins.	26 to 33
FINAL FLOW	30 mins.	48 to 48
FINAL CLOSED IN PRESSURE	30 mins.	1324
FINAL HYDRO MUD PRESSURE		2435

TOTAL DEPTH 4644

PACKER DEPTH 4630

BT. NO. 2162 DEPTH 4639

1ST FLOW PRESSURE		INITIAL CIP		2ND FLOW PRESSURE		FINAL CIP	
	26		33		48		48
	26		1038		48		87
	33		1211		48		865
	33		1298		48		1176
			1332				1254
			1358				1289
			1372				1324
	10 MINUTE INTERVAL		5 MINUTE INTERVAL		10 MINUTE INTERVAL		5 MINUTE INTERVAL

REMARKS

SPECIAL PRESSURE DATA