

MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING CO.

Lease and Well No. PFANNENSTIEL #3

County NESS State KANSAS Date JANUARY 10, 1971

Formation Test No. 1 Total Depth 4166 Elev. _____

Interval Tested 4137 To 4166 Anchor Length 29'

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

Mud Weight 9.3 Viscosity 43 Water Loss 10.4 c.c. Bottom Hole Temp. 107 °F

Chokes: Top 1/2 Bottom 1/2 Ticket No. 11046

Length of Drill Collar _____ I. D. _____ Length Flexweight 1012 I. D. 2.76

RECOVERY

WEAK BLOW FOR 9 MINUTES.

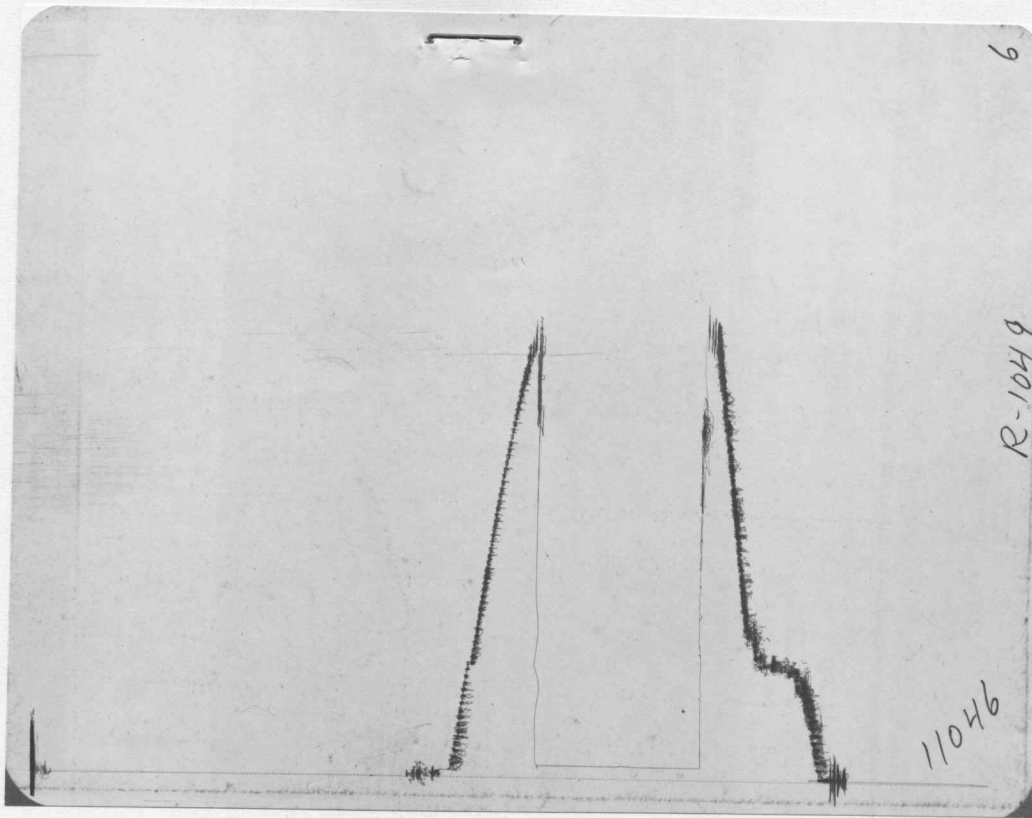
10 FEET OF MUD.

Lease and Well No. PFANNENSTIEL #3

1-18S-24W

SE NW

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>2141</u>	<u>2123</u>
(B) Initial 1st Flow Pressure	<u>45</u>	<u>59</u>
(C) Final 1st Flow Pressure	<u>51</u>	<u>59</u>
(D) Initial Shut-in Pressure	<u>56</u>	<u>68</u>
(E) Initial 2nd Flow Pressure	<u>56</u>	<u>60</u>
(F) Final 2nd Flow Pressure	<u>56</u>	<u>60</u>
(G) Final Shut-in Pressure	<u>56</u>	<u>62</u>
(H) Final Hydrostatic Pressure	<u>2129</u>	<u>2095</u>

11046

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Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING CO.

Lease and Well No. PFANNENSTIEL #3

County NESS

State KANSAS

Date JANUARY 12, 1971

Formation Test No.	<u>2</u>	Total Depth	<u>4300</u>	Elev.	
Interval Tested	<u>4268</u>	To	<u>4300</u>	Anchor Length	<u>32'</u>
Size Hole	<u>7 7/8</u>	Size Drill Pipe	<u>4 1/2 F.H. & X.H.</u>	Size Packer	<u>6 3/4</u>
Mud Weight	<u>9.2</u>	Viscosity	<u>43</u>	Water Loss	<u>10.4</u> c.c.
				Bottom Hole Temp.	<u>109</u> °F
Chokes: Top	<u>1/2</u>	Bottom	<u>1/2</u>	Ticket No.	<u>11047</u>
Length of Drill Collar		I. D.		Length Flexweight	<u>1012</u>
				I. D.	<u>2.76</u>

RECOVERY

WEAK BLOW FOR 7 MINUTES.

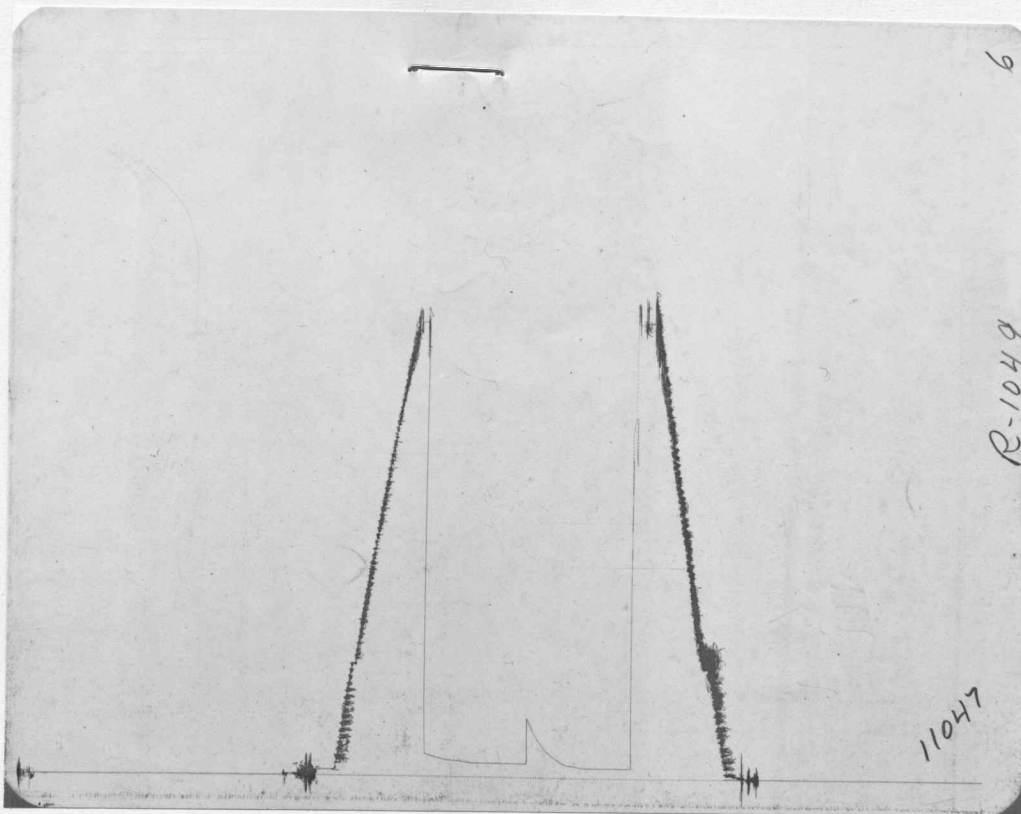
10 FEET OF MUD.

Lease and Well No. PFANNENSTIEL #3

1-18S-24W

SE NW

Formation Test No. 2



Tool Open: 1st Flow hr. 30 mins: Shut-in Initial hr. 45 min: 2nd Flow hr. 30 min: Shut-in Final hr. 45 min.

	Field Reading	Corrected Reading
(A) Initial Hydrostatic Pressure	<u>2174</u>	<u>2178</u>
(B) Initial 1st Flow Pressure	<u>40</u>	<u>49</u>
(C) Final 1st Flow Pressure	<u>45</u>	<u>51</u>
(D) Initial Shut-in Pressure	<u>274</u>	<u>284</u>
(E) Initial 2nd Flow Pressure	<u>64</u>	<u>70</u>
(F) Final 2nd Flow Pressure	<u>64</u>	<u>71</u>
(G) Final Shut-in Pressure	<u>102</u>	<u>112</u>
(H) Final Hydrostatic Pressure	<u>2159</u>	<u>2169</u>

11047

MILLER TESTING COMPANY

Box 547

GREAT BEND, KANSAS

Company THUNDERBIRD DRILLING CO.

Lease and Well No. PFANNENSTIEL #3

County NESS

State KANSAS

Date JANUARY 12, 1971

Formation Test No.	<u>3</u>	Total Depth	<u>4377</u>	Elev.	
Interval Tested	<u>4352</u>	To	<u>4377</u>	Anchor Length	<u>25'</u>
Size Hole	<u>7 7/8</u>	Size Drill Pipe	<u>4 1/2 F.H. & X.H.</u>	Size Packer	<u>6 3/4</u>
Mud Weight	<u>9.2</u>	Viscosity	<u>40</u>	Water Loss	<u>11.6 c.c.</u>
				Bottom Hole Temp.	<u>114 °F</u>
Chokes: Top	<u>1/2</u>	Bottom	<u>1/2</u>	Ticket No.	<u>11048</u>
Length of Drill Collar		I. D.		Length Flexweight	<u>1012</u>
				I. D.	<u>2.76</u>

RECOVERY

WEAK STEADY BLOW THROUGHOUT TEST.

140 FEET OF VERY HEAVY OIL CUT MUD.

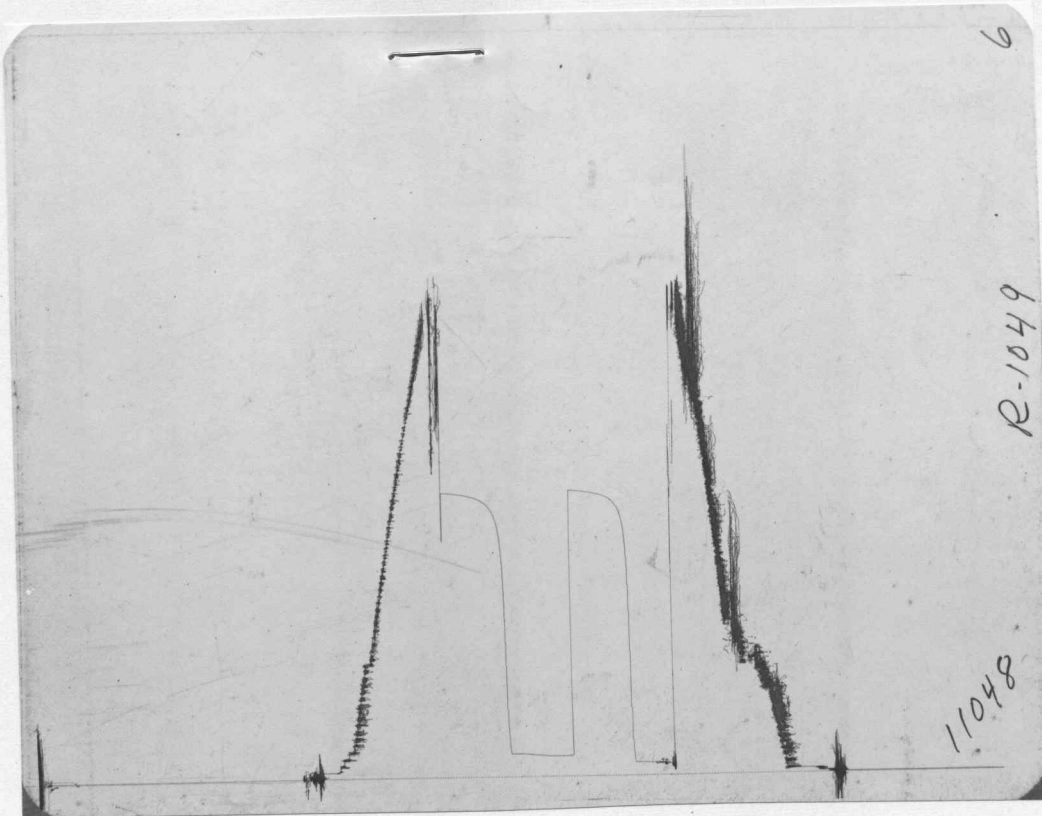
60 FEET OF HEAVY OIL CUT THIN MUD.

Lease and Well No. PFANNENSTIEL #3

1-18S-24W

SE NW

Formation Test No. 3



Tool Open: 1st Flow hr. 30 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	2214	2224
(B) Initial 1st Flow Pressure	38	46
(C) Final 1st Flow Pressure	64	64
(D) Initial Shut-in Pressure	1335	1354
(E) Initial 2nd Flow Pressure	91	95
(F) Final 2nd Flow Pressure	109	110
(G) Final Shut-in Pressure	1326	1351
(H) Final Hydrostatic Pressure	2201	2214

11048