

ARROW TESTING COMPANY
P. O. BOX 1051 GREAT BEND, KANSAS 67530

DRILL-STEM TEST DATA

| | |
|--|----------------------------------|
| Well Name Stoppel | Test No. 1 |
| Well Number 1 | Zone Tested Tark |
| Company American Drilling Corporation | Date 2-7-70 |
| Comp. Rep. Toby Elster | Tester Don Fabricius |
| Contractor Co tools | Ticket No. 430 |
| Location 17-14-11 | Elevation 1696 GL |

| | | | |
|--|-------------------|--------------------------------------|------------------|
| Recorder No. 3088 | Clock Range 12 | Recorder No. 207 | Clock Range 8 |
| Depth 2095 | | Depth 2124 | |
| Initial Hydro Mud Press. 1169 | | Initial Hydro Mud Press. 1150 | |
| Initial Shut-in Press. 739 | | Initial Shut-in Press. 730 | |
| Initial Flow Press. 23 | | Initial Flow Press. 0 | |
| Final Flow Press. 23 | | Final Flow Press. 0 | |
| Final Shut-in Press. 727 | | Final Shut-in Press. 730 | |
| Final Hydro Mud Press. 1169 | | Final Hydro Mud Press. 1150 | |
| Temperature _____ | | Tool Open Before I. S. I. 30 | Mins. |
| Mud Weight 10.4 | Viscosity 45 | Initial Shut-in 60 | Mins. |
| Fluid Loss 10 | | Flow Period 90 | Mins. |
| Interval Tested 2105-24 | | Final Shut-in 60 | Mins. |
| Top Packer Depth 2100 | | Surface Choke Size 1" | |
| Bottom Packer Depth 2105 | | Bottom Choke Size 3/4" | |
| Total Depth 2124 | | Main Hole Size 7 7/8" | |
| Drill Pipe Size _____ Wt. _____ | | Rubber Size 6 3/4 | |
| Drill Collar I. D. _____ Ft. Run _____ | | | |
| Recovery—Total Feet 30 | | | |
| Recovered 30 | Feet Of Mud | | |
| Recovered _____ | Feet Of _____ | | |
| Recovered _____ | Feet Of _____ | | |
| Recovered _____ | Feet Of _____ | | |

Remarks

Strong blow thru test Gas to surface in 90 minutes. T.S.T.M.

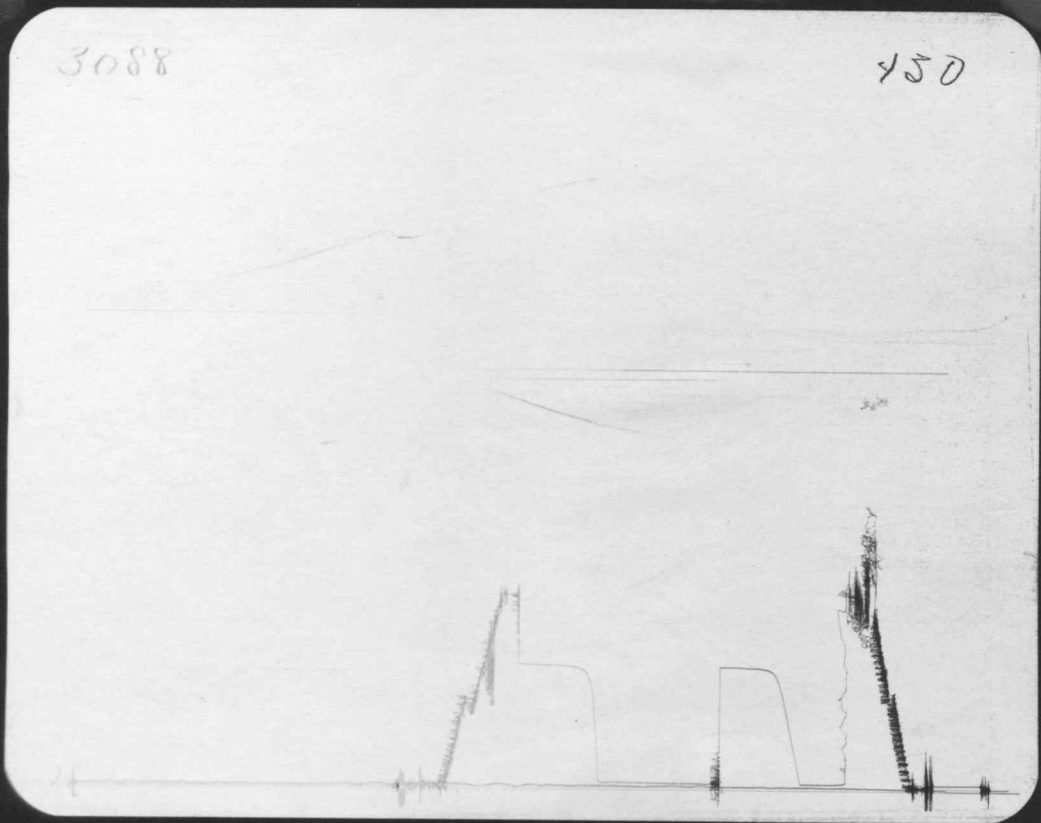
THIS ORDER MUST BE SIGNED BEFORE WORK IS COMMENCED. CONDITIONS: It is expressly understood and agreed that the above described work shall be done under the exclusive control, direction and supervision of the owner or contractor. As a part of the consideration for this agreement, it is expressly understood and agreed that Arrow Testing Company shall not be responsible for damages or losses of any kind whatsoever occasioned by or incident to the use of the above described Tools, whether run or operated by customer, or by anyone employed directly or indirectly by Arrow Testing Company, nor whether resulting from the acts or omissions of Arrow Testing Company, or any of its agents, servants or employees in any way connected with or related to the use of such Tools.

It is expressly understood and agreed that Arrow Testing Company, shall not be bound by any agreement, not herein contained, and no agent or representative connected with or employed by Arrow Testing Company has authority to alter or extend the terms of this agreement. I have read and understand the terms of this agreement and represent that I am authorized to sign the same as agent of customer.

By _____
Owner, Operator or his Agent

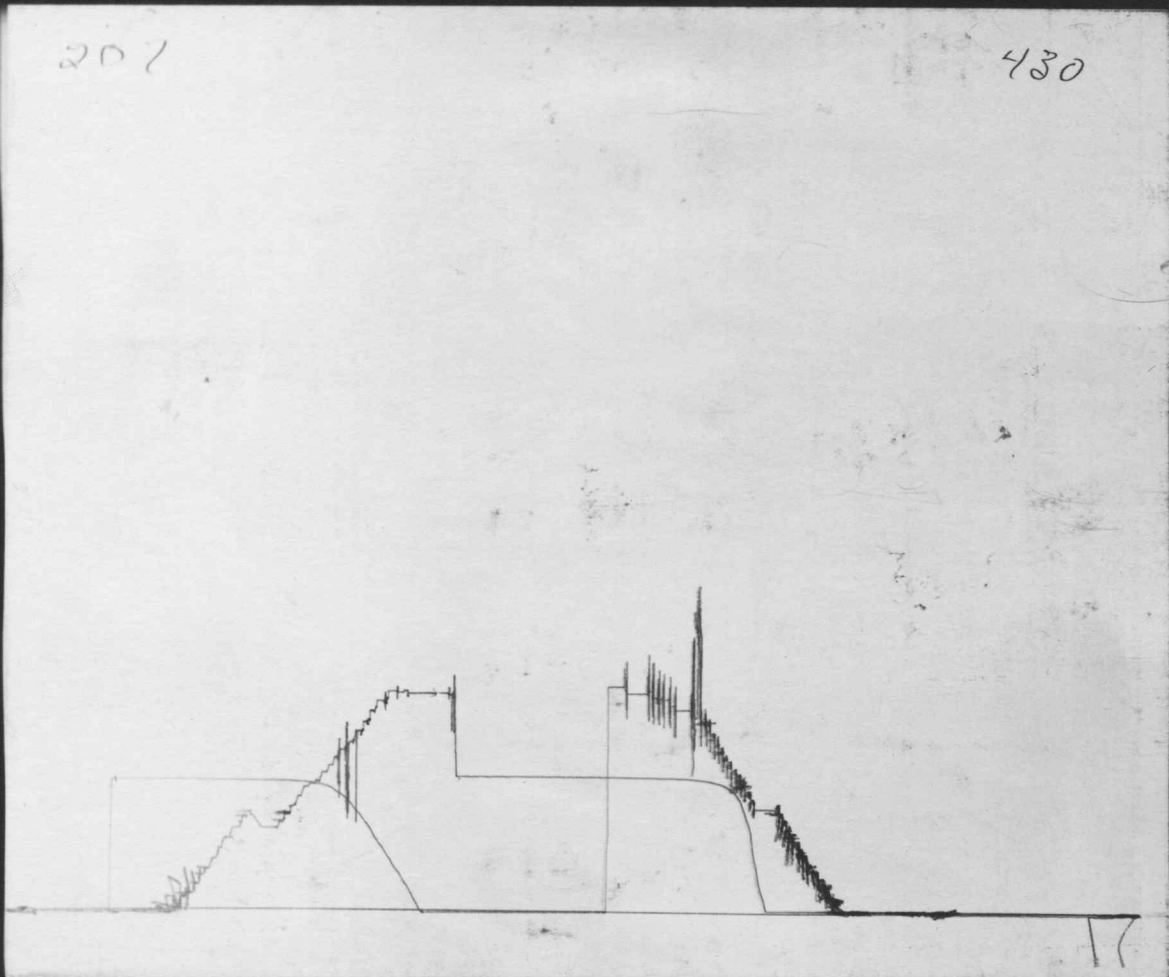
3088

450



207

430



17

ARROW TESTING COMPANY
P. O. BOX 1051 GREAT BEND, KANSAS 67530

DRILL-STEM TEST DATA

| | |
|--|-----------------------------|
| Well Name <u>Stoppel</u> | Test No. <u>2</u> |
| Well Number <u>1</u> | Zone Tested <u>Tark</u> |
| Company <u>American Drilling Corporation</u> | Date <u>2-7-70</u> |
| Comp. Rep. <u>Toby Elster</u> | Tester <u>Don Fabricius</u> |
| Contractor <u>Co tools</u> | Ticket No. <u>431</u> |
| Location <u>1-17-14</u> | Elevation <u>1696 GL.</u> |

Recorder No. 3088 Clock Range 12 Recorder No. 207 Clock Range 8

Depth 2115 Depth 2153

Initial Hydro Mud Press. 1176 Initial Hydro Mud Press. 1140

Initial Shut-in Press. 140 Initial Shut-in Press. 70

Initial Flow Press. 46 Initial Flow Press. 0

Final Flow Press. 46 Final Flow Press. 0

Final Shut-in Press. 117 Final Shut-in Press. 60

Final Hydro Mud Press. 1176 Final Hydro Mud Press. 1140

Temperature _____ Tool Open Before I. S. I. 30 Mins.

Mud Weight 10 Viscosity 43 Initial Shut-in 60 Mins.

Fluid Loss 10 Flow Period 90 Mins.

Interval Tested 2125-53 Final Shut-in 60 Mins.

Top Packer Depth 2120 Surface Choke Size 1"

Bottom Packer Depth 2125 Bottom Choke Size 3/4"

Total Depth 2153 Main Hole Size 7 7/8

Drill Pipe Size 4 1/2 FH Wt. 1660 Rubber Size 6 3/4

Drill Collar I. D. _____ Ft. Run _____

Recovery—Total Feet 20

Recovered 20 Feet Of Mud

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Recovered _____ Feet Of _____

Remarks

Weak blow dead in 80 minutes.

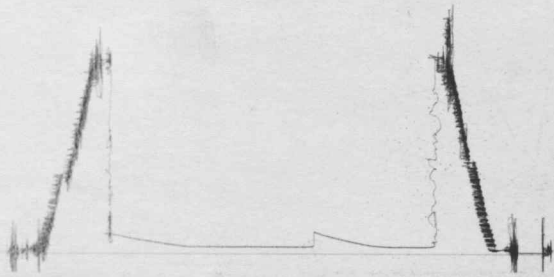
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It is expressly understood and agreed that Arrow Testing Company, shall not be bound by any agreement, not herein contained, and no agent or representative connected with or employed by Arrow Testing Company has authority to alter or extend the terms of this agreement. I have read and understand the terms of this agreement and represent that I am authorized to sign the same as agent of customer.

By _____
Owner, Operator or his Agent

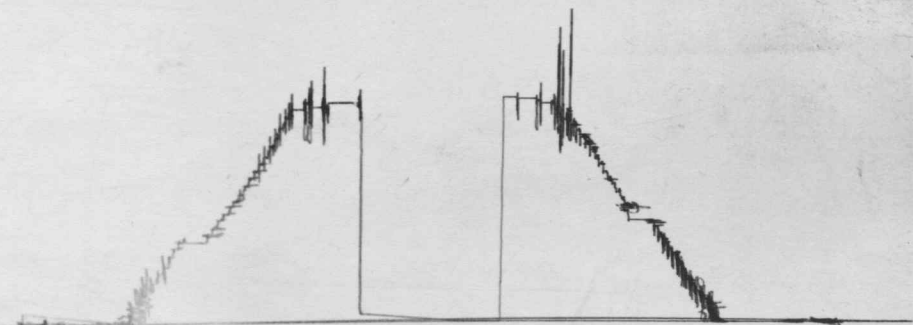
3088

431



807

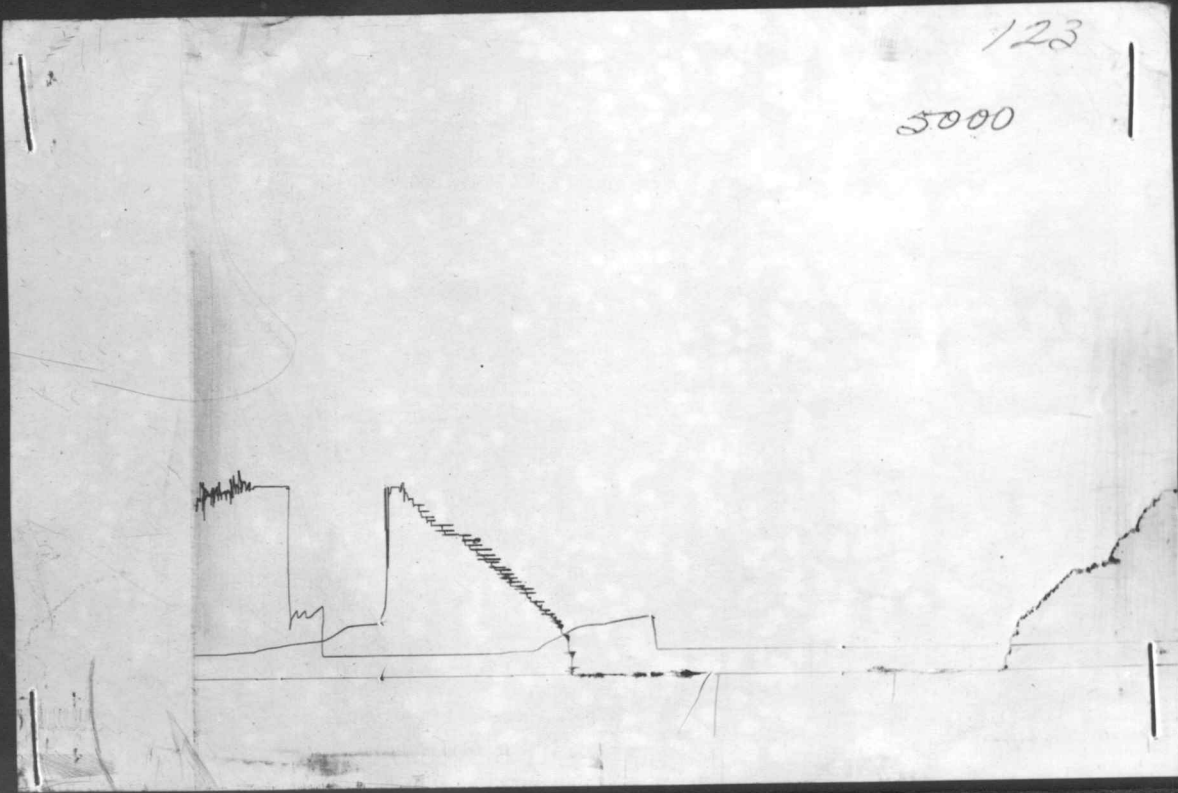
431





Date 2-8-70

Ticket No. 123

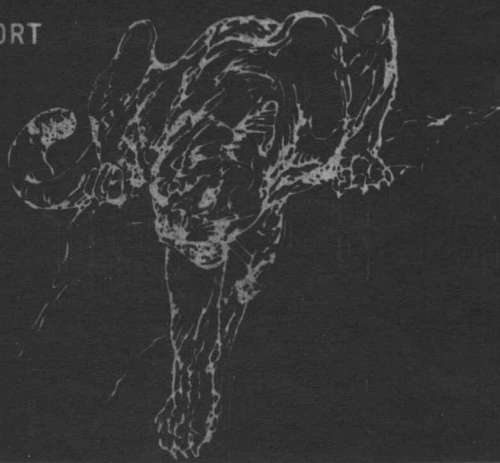


Company AMERICAN DRILG. CO. Contractor SAME
 Well No. 1 Lease STOPPEL County RUSSELL Sec. 17 Rg. 14 Twp. 11
 Test No. 3 Size Hole 7 7/8 Packer Size 6 3/4 Drill Pipe Size 4 1/2 XH
 Interval Tested From 2431 To 2466 Depth of Well 2466 Size Choke 1/2
 Fluid Recovered In LEXWEIGHT Temp. 96 Elev.
 Initial Hyd. 1410 P.S.I. Final Hyd. 1410 P.S.I.
 First Initial Flow Pressure 85 P.S.I. Opened Pool 11:56 A.M. ###
 First Final Flow Pressure 85 P.S.I. First Flow Pres. 30 Min.
 Initial Closed-in Pressure 360 P.S.I. Initial Closed-in Pres. 75 Min.
 Second Initial Flow Pressure 130 P.S.I. Second Flow Pres. 120 Min.
 Second Final Flow Pressure 130 P.S.I. Final Closed-in Pres. 75 Min.
 Final Closed-in Pressure 360 P.S.I.
 Blow STRONG BLOW THRU-OUT TEST.

Recovery 1175 FT., . GAS IN PIPE.
 65 FT. OIL # SPECK & GAS OUT MUD.

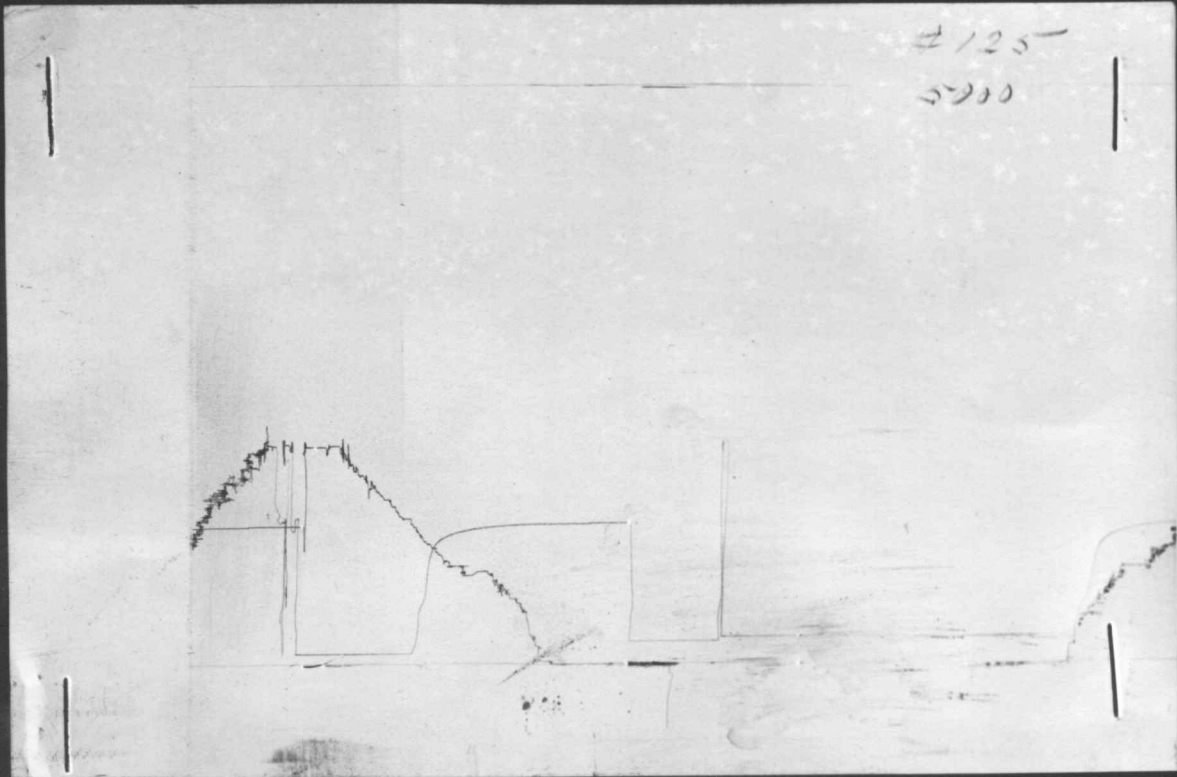
Remarks

Approved By TOBY ELSTER Tester ED PHILBERN



Date 2-11-70

Ticket No. 125



Company AMERICAN DRLG. CO. Contractor AMERICAN DRLG. CO.
 Well No. 1 Lease STOPPEL County RUSSELL Sec. 17 Rg. 14 Twp. 11
 Test No. 5 Size Hole 7 7/8 Packer Size 6 3/4 Drill Pipe Size 4 1/2 XH.
 Interval Tested From 2880 To 2892 Depth of Well 2892 Size Choke 1/2
 Fluid Recovered In FLEXWEIGHT Temp. 114 Elev. _____
 Initial Hyd. 1600 P.S.I. Final Hyd. 1600 P.S.I.
 First Initial Flow Pressure 30 P.S.I. Opened Tool 1:05 A.M. ###
 First Final Flow Pressure 30 P.S.I. First Flow Pres. 30 Min.
 Initial Closed-in Pressure 990 P.S.I. Initial Closed-in Pres. 60 Min.
 Second Initial Flow Pressure 110 P.S.I. Second Flow Pres. ~~100~~ 120 Min.
 Second Final Flow Pressure 110 P.S.I. Final Closed in Pres. 60 Min.
 Final Closed-in Pressure 990 P.S.I.
 Blow WEAK STEADY BLOW THRU-OUT TEST.
 Recovery 95 FT. THIN WATERY DRLG. MUD.

Remarks _____

Approved By TOBY ELSTER Tester ED PHILBERN

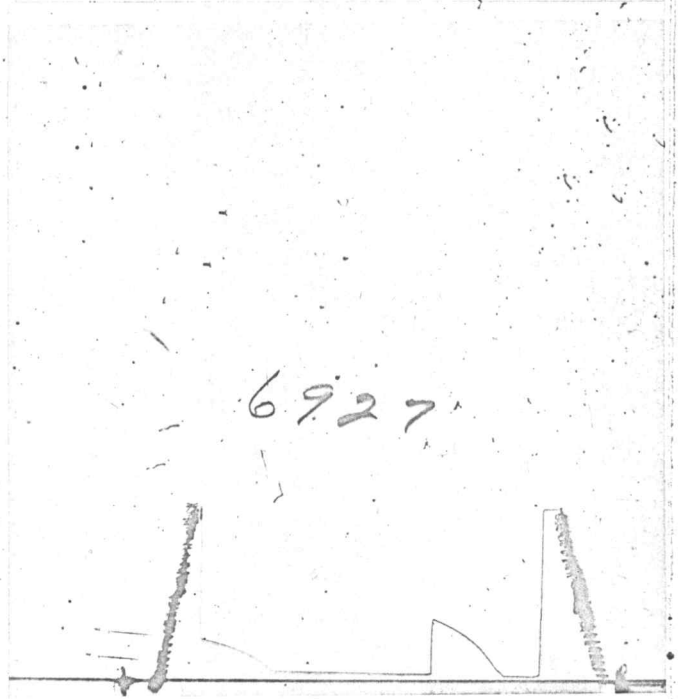
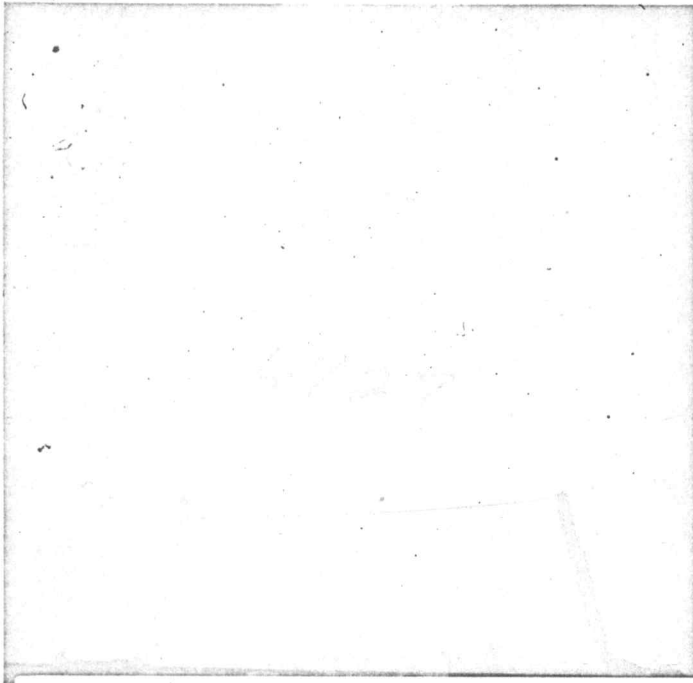


OIL WELL CEMENTING INC.

Date 2/11/70

DRILL STEM TEST RECOVERY REPORT

Ticket No. 6927



Company American Exp. Contractor Co Tools

Well No. 1 Lease Stoppel County Russell Sec. 17 Twp 14 Rng 11

Test No. 6 Size Hole 7 7/8 Packer Size 6 3/4 Drill Pipe Size 4 1/2 E.H.

Interval Tested From 1453 To 1470 Depth of Well 2892 Size Choke 5/8

Fluid Recovered In _____ Temp. _____ Elev. _____

Initial Hyd. 841 P.S.I. Final Hyd. _____ P.S.I.

First Initial Flow Pressure 26 P.S.I. Opened Tool 5:30 ~~###~~ P.M.

First Final Flow Pressure _____ P.S.I. First Flow Pres. 30 Min.

Initial Closed-in Pressure 302 P.S.I. Initial Closed-in Pres. 60 Min.

Second Initial Flow Pressure 44 P.S.I. Second Flow Pres. 120 Min.

Second Final Flow Pressure _____ P.S.I. Final Closed-in Pres. 60 Min.

Final Closed-in Pressure 195 P.S.I.

Blow Good Thru-Out Test

Recovery 65' Drlg. Mud

Remarks _____

Approved By Elster

Tester Bowman