WESTERN TESTERS

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

Company Monarch Oil & Gas Company Lease & Well No. Lauterbach #1

Elevation 1704 Kelly Bushings Formation Mississippian Effective Pay 21 Ft. Ticket No. 10837

Date 6-21-68 Sec. 20 Twp. 30 Range 9 County Kingman State Kansas

Test Approved by Roger McCoy Western Representative Leon Elmore

Formation Test No. 1 O.K. X Misrun Interval Tested From 4368' to 4389' Total Depth 4389'

Size Main Hole 7 7/8 Rat Hole Conv. X B.T. Damaged Yes X No Conv. B.T. Damaged Yes No

Packer Depth 4368 Ft. Size 6 3/4 Packer Depth Ft. Size

Straddle Yes No X Conv. B.T. Damaged Yes No

Packer Depth Ft. Size

Tool Size 5 1/2"OD Tool Jt. Size 4 1/2"FH Anchor Length 21 Ft. Size 5 1/2"OD

RECORDERS Depth 4382 Ft. Clock No. 6897 Depth 4385 Ft. Clock No. 6799

Top Make Kuster Cap. 4500 No. 3085 Inside Outside Bottom Make Kuster Cap. 4400 No. 2603 Inside Outside

Below Straddle: Depth Clock No. Inside Outside Depth Ft. Clock No. Inside Outside

Top Make Cap. No. Inside Outside Bottom Make Cap. No. Inside Outside

Time Set Packer 11:40 A. M

Tool Open I.F.P. From 11:41 M. to 11:56A. M. Hr. 15 Min. From (B) 31 P.S.I. To (C) 26 P.S.I.

Tool Closed I.C.I.P. From 11:56 M. to 12:26P. M. Hr. 30 Min. (D) 509 P.S.I.

Tool Open F.F.P. From 12:26 M. to 2:26P. M. 2 Hr. Min. From (E) 31 P.S.I. To (F) 31 P.S.I.

Tool Closed F.C.I.P. From 2:26 M. to 2:56 M. Hr. 30 Min. (G) 643 P.S.I.

Initial Hydrostatic Pressure (A) 2358 P.S.I. Final Hydrostatic Pressure (H) 2321 P.S.I.

| SURFACE INFORMATION | Size Choke | Max. Press. P.S.I. | Time | Description of Flow |
|---|---|---|---|---|
| | 3/4 In. | | M. | |
| | | | M. | |
| | | | M. | |

BLOW Strong - thurout Bottom Choke Size 3/4 In.

Did Well Flow Yes X No Recovery Total Ft. 95 feet mud with spots of oil - 3800 feet gas in pipe.

Reversed Out Yes X No Mud Type Starch Viscosity 48 Weight 9.6 Water Loss 9.2 cc. Maximum Temp. 131 °F

Type Circ. Sub. Plug Did Tool Plug? No Jars: Size Make Ser. No.

EXTRA EQUIPMENT: Dual Packers No Safety Joint No Did Packer Hold? Yes Where?

Length Drill Pipe 4353 ft. I.D. Drill Pipe 3.8 in. Length Weight Pipe ft. I.D. Weight Pipe in. Length Drill Collars ft.

I. D. Drill Collars in. Length D.S.T. Tool 36 ft.

Remarks Open tool for initial flow - weak blow - flush in 4 minutes - strong blow

# WESTERN TESTING CO., INC.
## Pressure Data

Date 6-21-68 Test Ticket No. 10837

Recorder No. 3085 Capacity 4500 Location 4382 Ft.

Clock No. 6897 Elevation 1704 Kelly Bushings Well Temperature 131 °F

| Point | Pressure | | Time Given | Time Computed |
|---|---|---|---|---|
| A Initial Hydrostatic Mud | 2358 P.S.I. | Opened Tool | 11:40 A.M | |
| B First Initial Flow Pressure | 31 P.S.I. | First Flow Pressure | 15 Mins. | 15 Mins. |
| C First Final Flow Pressure | 26 P.S.I. | Initial Closed-in Pressure | 30 Mins. | 29 Mins. |
| D Initial Closed-in Pressure | 509 P.S.I. | Second Flow Pressure | 120 Mins. | 118 Mins. |
| E Second Initial Flow Pressure | 31 P.S.I. | Final Closed-in Pressure | 30 Mins. | 30 Mins. |
| F Second Final Flow Pressure | 31 P.S.I. | | | |
| G Final Closed-in Pressure | 643 P.S.I. | | | |
| H Final Hydrostatic Mud | 2321 P.S.I. | | | |

## PRESSURE BREAKDOWN

**First Flow Press.**
Breakdown: 3 Inc. of 5 mins. and a final inc. of ____ Min.

| Point Mins. | Press. |
|---|---|
| P 1 0 | 31 |
| P 2 5 | 28 |
| P 3 10 | 26 |
| P 4 15 | 26 |
| P 5 | |
| P 6 | |
| P 7 | |
| P 8 | |
| P 9 | |
| P10 | |
| P11 | |
| P12 | |
| P13 | |
| P14 | |
| P15 | |
| P16 | |
| P17 | |
| P18 | |
| P19 | |
| P20 | |

**Initial Shut-In**
Breakdown: 9 Inc. of 3 mins. and a final inc. of 2 Min.

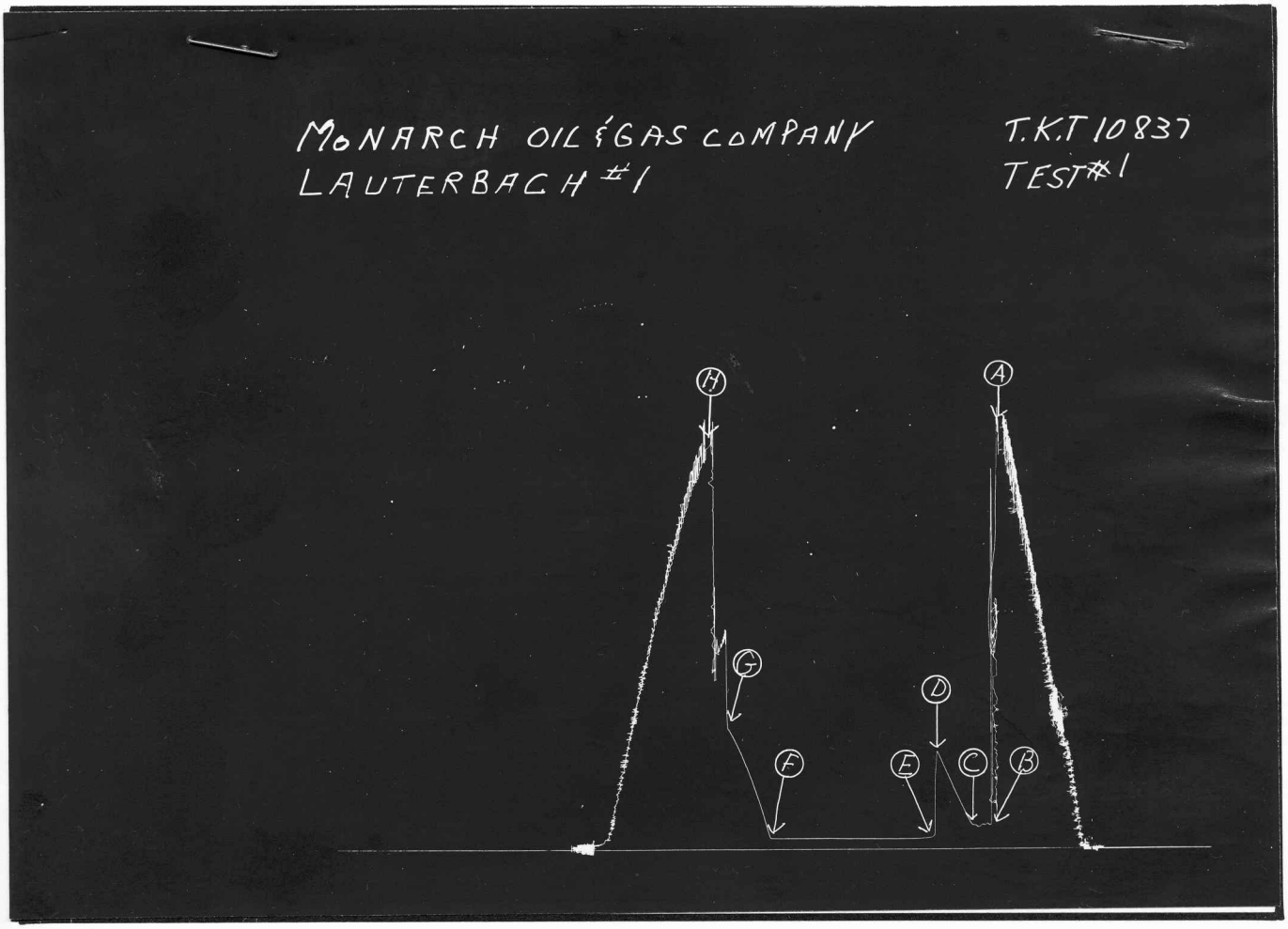
| Point Minutes | Press. |
|---|---|
| 0 | 26 |
| 3 | 90 |
| 6 | 138 |
| 9 | 188 |
| 12 | 241 |
| 15 | 293 |
| 18 | 341 |
| 21 | 394 |
| 24 | 461 |
| 27 | 492 |
| 29 | 509 |

**Second Flow Pressure**
Breakdown: 23 Inc. of 5 mins. and a final inc. of 3 Min.

| Point Minutes | Press. |
|---|---|
| 0 | 31 |
| 5 | 31 |
| 10 | 31 |
| 15 | 31 |
| 20 | 31 |
| 25 | 31 |
| 30 | 31 |
| 35 | 31 |
| 40 | 31 |
| 45 | 31 |
| 50 | 31 |
| 55 | 31 |
| 60 | 31 |
| 65 | 31 |
| 70 | 31 |
| 75 | 31 |
| 80 | 31 |
| 85 | 31 |
| 90 | 31 |
| 95 | 31 |
| 100 | 31 |
| 105 | 31 |
| 110 | 31 |
| 115 | 31 |
| 118 | 31 |

**Final Shut-In**
Breakdown: 10 Inc. of 3 mins. and a final inc. of ____ Min.

| Point Minutes | Press. |
|---|---|
| 0 | 31 |
| 3 | 107 |
| 6 | 191 |
| 9 | 260 |
| 12 | 339 |
| 15 | 404 |
| 18 | 468 |
| 21 | 520 |
| 24 | 567 |
| 27 | 609 |
| 30 | 643 |




This is an actual photograph of recorder chart.

| POINT | | PRESSURE Field Reading | Office Reading | |
|---|---|---|---|---|
| (A) | Initial Hydrostatic Mud | 2371 | 2358 | PSI |
| (B) | First Initial Flow Pressure | 27 | 31 | PSI |
| (C) | First Final Flow Pressure | 27 | 26 | PSI |
| (D) | Initial Closed-in Pressure | 513 | 509 | PSI |
| (E) | Second Initial Flow Pressure | 35 | 31 | PSI |
| (F) | Second Final Flow Pressure | 35 | 31 | PSI |
| (G) | Final Closed-in Pressure | 653 | 643 | PSI |
| (H) | Final Hydrostatic Mud | 2337 | 2321 | PSI |

COMPANY Monarch Oil & Gas Company LEASE AND WELL NO. Lauterbach #1 SEC. 20 TWP. 30 RGE. 9 TEST NO. 1 DATE 6-21-68