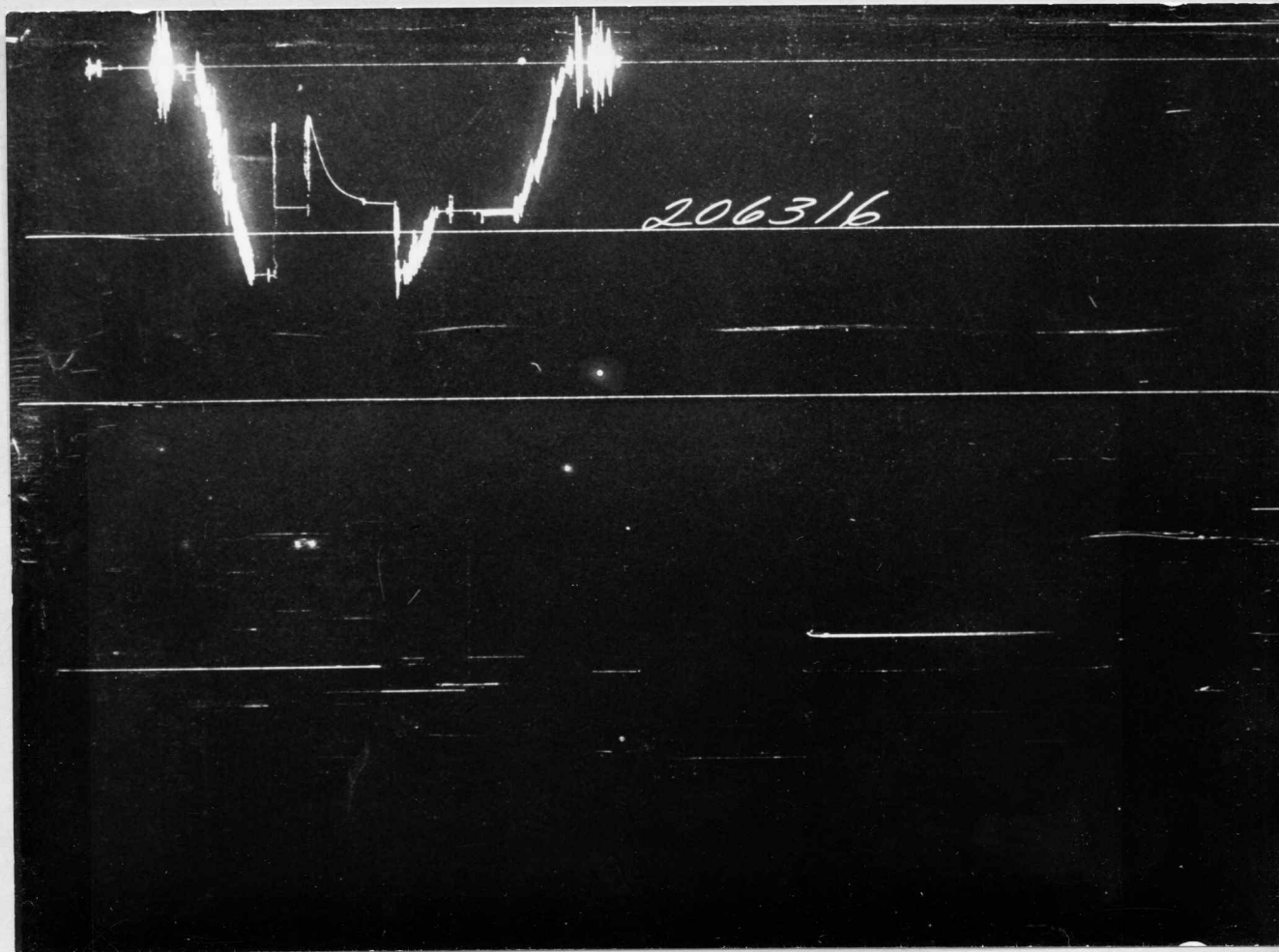
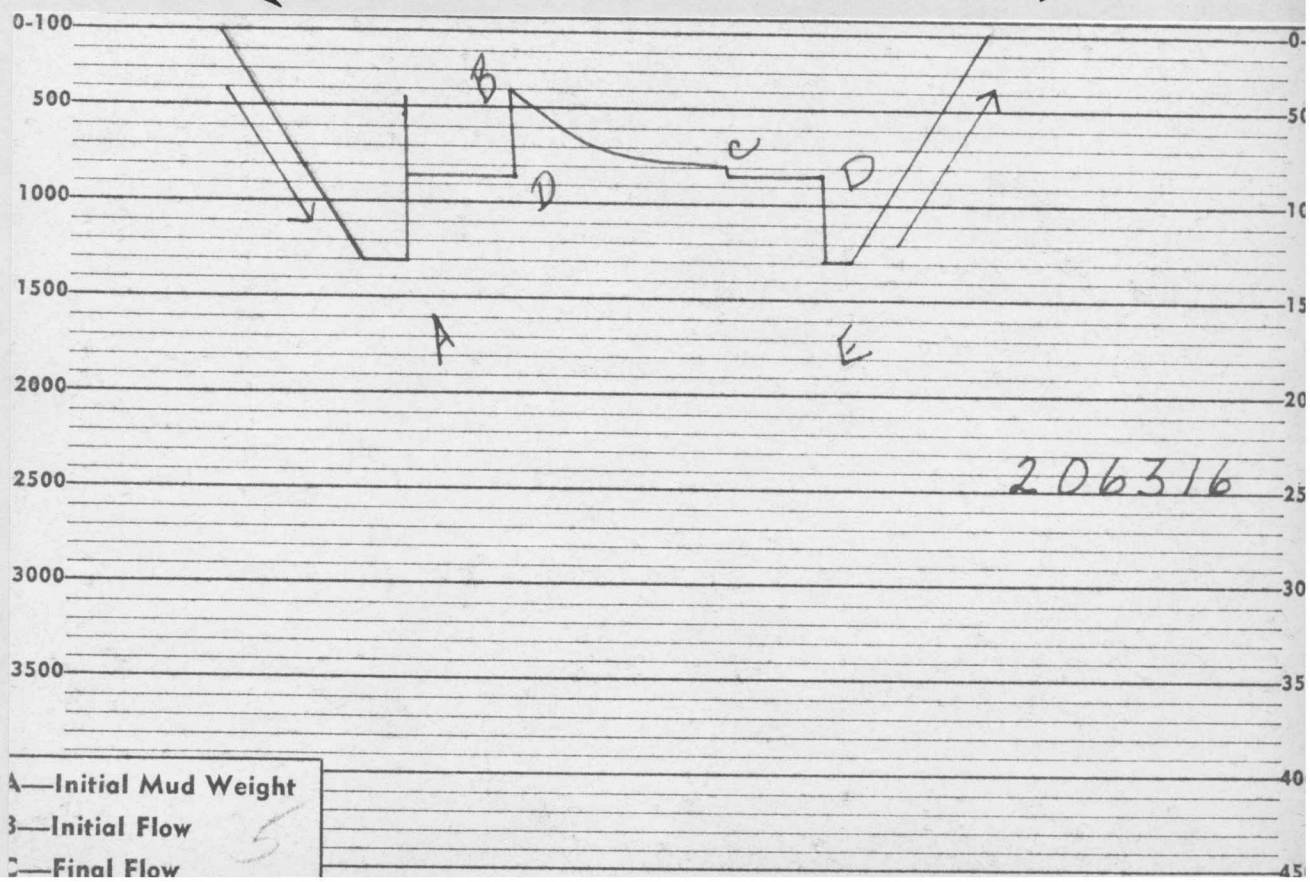




↑  
PRESSURE  
↓

← TIME →



|                            |       |                  |                                                                                   |                |                           |              |
|----------------------------|-------|------------------|-----------------------------------------------------------------------------------|----------------|---------------------------|--------------|
| Initial Closed In Time     | 20    | Minutes          |  | Date           | 1-24-59                   |              |
| Tool Open Flow Period      | 30    | Minutes          |                                                                                   | Ticket No.     | 206316                    |              |
| Final Closed In Time       | 20    | Minutes          |                                                                                   | HOWCO DISTRICT | Eldorado                  |              |
| Depth Top Gauge            | 2431  | Ft.              |                                                                                   | Blanked Off    | No                        |              |
| BT. P.R.D. No              | 291   | 12               | Hr. Clock                                                                         | CONTRACTOR     | Martin Drlg. Co.          |              |
| Pressure Readings          | Field | Office Corrected | HOLE & TOOL DATA                                                                  |                |                           |              |
| Initial Hydro Mud Pressure | 1245  | 1248             | Elevation                                                                         | -              | Top Packer Depth          | -            |
| Initial Closed in Pres.    | 850   | 844              | Total Depth                                                                       | 2450'          | Bottom Packer Depth       | 2441'        |
| Initial Flow Pres.         | 305   | 308              | Casing or Hole Size                                                               | 7 7/8"         | Size & Type Wall Packer   | 6 3/4" ESA   |
| Final Flow Pres.           | 805   | 804              | Liner or Rathole Size                                                             | 7 7/8"         | Size Bottom Choke         | 7/8"         |
| Final Closed in Pres.      | 835   | 828              | Casing Perforations                                                               | Top<br>Bottom  | Size Surface Choke        | 1/4"         |
| Final Hydro Mud Pressure   | 1245  | 1240             | Interval Tested                                                                   | 2441-2450'     | ID & Length Air Chamber   | 4 1/2" x 5'  |
| Depth Center Gauge         | Ft.   | Blanked Off      | Formation Tested                                                                  | Simpson        | ID & Length Drill Collars | 2 3/8" x 85' |
| BT. P.R.D. No              |       | Hr. Clock        | Est. Gauge Depth Temp.                                                            | calc. 100 F.   | Size Drill Pipe           | 4 1/2" FH    |
| Pressure Readings          | Field | Office Corrected | MUD DATA Weight                                                                   | 9.9            | Viscosity                 | 39           |
| Initial Hydro Mud Pressure |       |                  | All depths measured from                                                          | Kelly Bushing  | No...Folders Reproduced   | 5            |
| Initial Closed in Pres.    |       |                  | REMARKS: Set packer, opened tool and took a                                       |                |                           |              |
| Initial Flow Pres.         |       |                  | 20 Minute Initial closed in pressure. Tool                                        |                |                           |              |
| Final Flow Pres.           |       |                  | opened with a strong blow throughout test.                                        |                |                           |              |
| Final Closed in Pres.      |       |                  |                                                                                   |                |                           |              |
| Final Hydro Mud Pressure   |       |                  |                                                                                   |                |                           |              |
| Depth Bottom Gauge         | 2445  | Ft.              | Blanked Off                                                                       | Yes            |                           |              |
| BT. P.R.D. No              |       | Hr. Clock        |                                                                                   |                |                           |              |
| Pressure Readings          | Field | Office Corrected |                                                                                   |                |                           |              |
| Initial Hydro Mud Pressure |       |                  |                                                                                   |                |                           |              |
| Initial Closed in Pres.    |       |                  | Recovered                                                                         | 1900           | Feet of                   | water        |
| Initial Flow Pres.         |       |                  | Recovered                                                                         |                | Feet of                   |              |
| Final Flow Pres.           |       |                  | Recovered                                                                         |                | Feet of                   |              |
| Final Closed in Pres.      |       |                  | Recovered                                                                         |                | Feet of                   |              |
| Final Hydro Mud Pressure   |       |                  | Witnessed By Earl Wentworth                                                       |                |                           |              |

LOCATION 3-26-4

FIELD

TOWANDA

COUNTY

BUTLER

STATE KANSAS

NELSON  
LEASE NAME

WELL NO. 4

TEST NO. 1

J. P. GATY  
LEASE OWNER

WICHITA  
OWNERS DISTRICT

3-26-4

Company J.P. GATYDate 1-24-59Lease NELSONWell No. 4Test No. 1Ticket No. 206316

|                            | Time    | PSI  |
|----------------------------|---------|------|
| Initial Hydro Mud Pressure |         | 1248 |
| Initial Closed In Pressure | 20 Min. | 844  |
| Initial Flow               |         | 308  |
| Final Flow                 | 30 Min. | 804  |
| Final Closed In Pressure   | 20 Min. | 828  |
| Final Hydro Mud Pressure   |         | 1240 |

Total Depth 2450'Packer Depth 2441'BT No. 291 Depth 2431'12 Hr. Clock No. 4094Temperature Corrected to CALC. 100 ° F

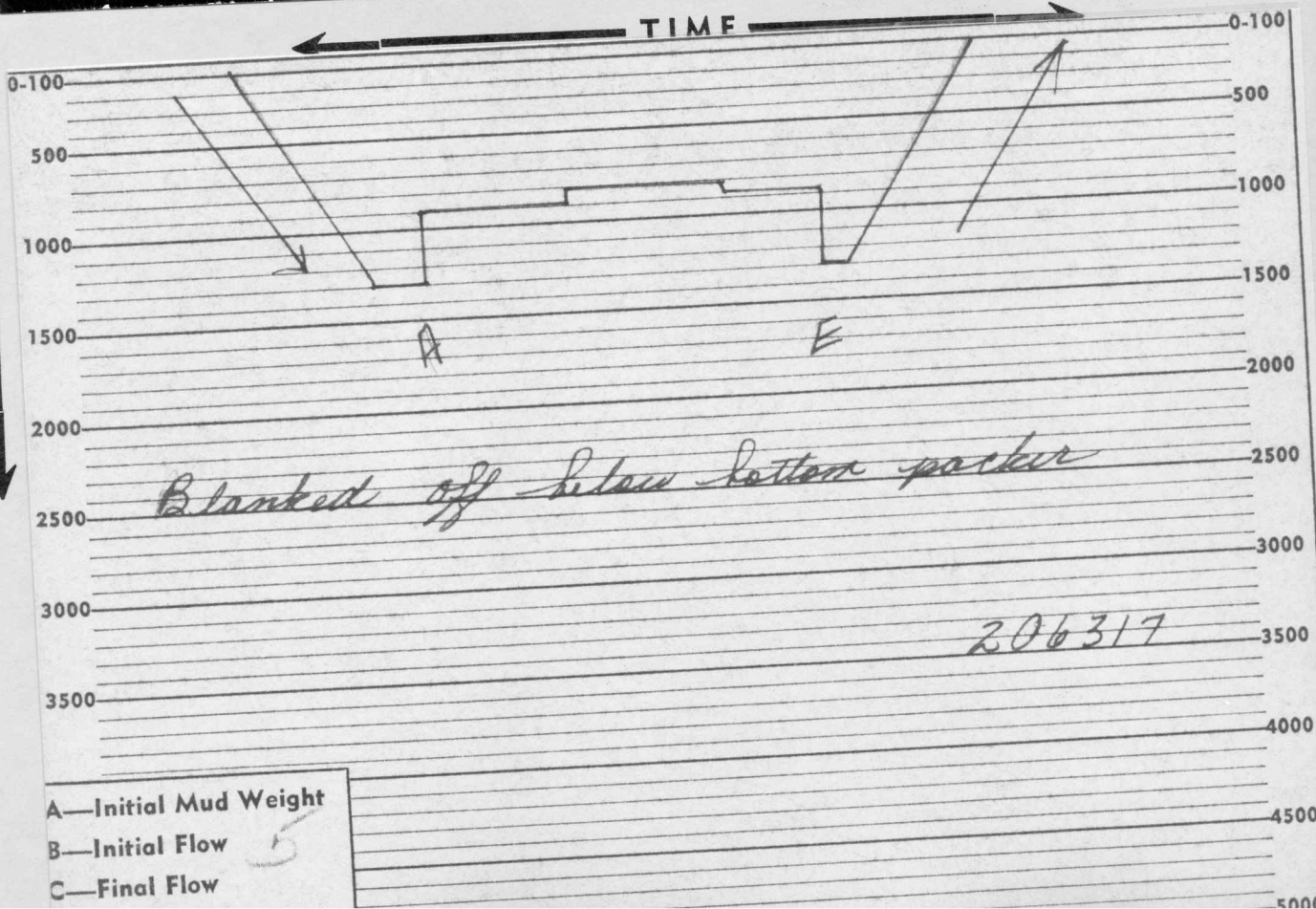
|     | Initial CIP        |                 | Flow Pressure      |                 | Final CIP          |                 |
|-----|--------------------|-----------------|--------------------|-----------------|--------------------|-----------------|
|     | Time Defl. .000"   | PSI Temp. Corr. | Time Defl. .000"   | PSI Temp. Corr. | Time Defl. .000"   | PSI Temp. Corr. |
| PO  | .000               | 347             | .000               | 308             | .000               | 804             |
| P1  | .0135              | 843             | .0365              | 489             | .013               | 820             |
| P2  | .027               | 843             | .073               | 634             | .026               | 822             |
| P3  | .0405              | 844             | .1095              | 718             | .039               | 822             |
| P4  | .054               | 844             | .146               | 764             | .052               | 823             |
| P5  | .0675              | 844             | .1825              | 789             | .065               | 825             |
| P6  | .081               | 844             | .219               | 804             | .078               | 825             |
| P7  | .0945              | 844             |                    |                 | .091               | 825             |
| P8  | .108               | 844             |                    |                 | .104               | 826             |
| P9  | .1215              | 844             |                    |                 | .117               | 828             |
| P10 | .135               | 844             |                    |                 | .130               | 828             |
|     | 2 Minute Intervals |                 | 5 Minute Intervals |                 | 2 Minute Intervals |                 |

Remarks:

206317

↑  
PRESSURE  
↓

← TIME →



|                                   |  |  |                                                                                   |                         |  |
|-----------------------------------|--|--|-----------------------------------------------------------------------------------|-------------------------|--|
| Initial Closed In Time 15 Minutes |  |  |  | Date 1-25-59            |  |
| Tool Open Flow Period 30 Minutes  |  |  |                                                                                   | Ticket No. 206317       |  |
| Final Closed In Time 15 Minutes   |  |  |                                                                                   | HOWCO DISTRICT Eldorado |  |
| Depth Top Gauge 2424 Ft.          |  |  |                                                                                   | Kind of Job Open Hole   |  |
| BT. P.R.D. No 291                 |  |  | CONTRACTOR Martin Drilling Co.                                                    |                         |  |
| Pressure Readings Field           |  |  | HOLE & TOOL DATA                                                                  |                         |  |
| Initial Hydro Mud Pressure 1245   |  |  | Elevation - Top Packer Depth 2429'                                                |                         |  |
| Initial Closed in Pres. -         |  |  | Total Depth 2450' Bottom Packer Depth 2441'                                       |                         |  |
| Initial Flow Pres. 0              |  |  | Casing or Hole Size 7 7/8" Size & Type Well Packer 6 3/4" ESA                     |                         |  |
| Final Flow Pres. 505              |  |  | Liner or Rathole Size 7 7/8" Size Bottom Choke 7/8"                               |                         |  |
| Final Closed in Pres. 815         |  |  | Casing Perforations Top Bottom Size Surface Choke 1/4"                            |                         |  |
| Final Hydro Mud Pressure 1245     |  |  | Interval Tested 2429-2441' ID & Length Air Chamber 4 1/2" x 5'                    |                         |  |
| Depth Center Gauge Ft.            |  |  | Formation Tested Viola ID & Length Drill Collars 2 5/8" x 85'                     |                         |  |
| BT. P.R.D. No                     |  |  | Est. Gauge Depth Temp. calc. 100F° Size Drill Pipe 4 1/2" FH                      |                         |  |
| Pressure Readings Field           |  |  | MUD DATA Weight 9.9 Viscosity 39                                                  |                         |  |
| Initial Hydro Mud Pressure        |  |  | All depths measured from Kelly Bushing No. Folders Reproduced 5                   |                         |  |
| Initial Closed in Pres.           |  |  | REMARKS: Set packer, opened tool and took a                                       |                         |  |
| Initial Flow Pres.                |  |  | 15 Minute Initial closed in pressure. Tool                                        |                         |  |
| Final Flow Pres.                  |  |  | opened with a weak blow increasing to a                                           |                         |  |
| Final Closed in Pres.             |  |  | strong blow.                                                                      |                         |  |
| Final Hydro Mud Pressure          |  |  |                                                                                   |                         |  |
| Depth Bottom Gauge 2445 Ft.       |  |  | Blanked Off Yes                                                                   |                         |  |
| BT. P.R.D. No 1698                |  |  | Hr. Clock                                                                         |                         |  |
| Pressure Readings Field           |  |  | Office Corrected                                                                  |                         |  |
| Initial Hydro Mud Pressure        |  |  |                                                                                   |                         |  |
| Initial Closed in Pres.           |  |  | Recovered 530 Feet of water                                                       |                         |  |
| Initial Flow Pres.                |  |  | Recovered Feet of                                                                 |                         |  |
| Final Flow Pres.                  |  |  | Recovered Feet of                                                                 |                         |  |
| Final Closed in Pres.             |  |  | Recovered Feet of                                                                 |                         |  |

NELSON  
 LEASE NAME  
 WELL NO. 1  
 TEST NO. 2  
 COUNTY BUTLER  
 STATE KANSAS  
 J. P. GATY  
 LEASE OWNER  
 WICHITA  
 OWNERS DISTRICT

Company J.P. GATYDate 1-25-59Lease NELSONWell No. 4Test No. 2Ticket No. 206317

|                            | Time    | PSI  |
|----------------------------|---------|------|
| Initial Hydro Mud Pressure |         | 1243 |
| Initial Closed In Pressure | 15 Min. | 65   |
| Initial Flow               |         | 3    |
| Final Flow                 | 30 Min. | 491  |
| Final Closed In Pressure   | 15 Min. | 828  |
| Final Hydro Mud Pressure   |         | 1225 |

Total Depth 2450'Packer Depth 2429' - 2441'BT No. 291 Depth 2424'12 Hr. Clock No. 4094Temperature Corrected to CALC. 100 ° F

|                  | Initial CIP      |                 | Flow Pressure    |                 | Final CIP            |                 |
|------------------|------------------|-----------------|------------------|-----------------|----------------------|-----------------|
|                  | Time Defl. .000" | PSI Temp. Corr. | Time Defl. .000" | PSI Temp. Corr. | Time Defl. .000"     | PSI Temp. Corr. |
| PO               |                  |                 | .000             | 3               | .000                 | 491             |
| P1               |                  |                 | .204             | 491             | .0075                | 819             |
| P2               |                  |                 |                  |                 | .015                 | 822             |
| P3               |                  |                 |                  |                 | .0225                | 823             |
| P4               |                  |                 |                  |                 | .030                 | 825             |
| P5               |                  |                 |                  |                 | .0375                | 826             |
| P6               |                  |                 |                  |                 | .045                 | 828             |
| P7               |                  |                 |                  |                 | .0525                | 828             |
| P8               |                  |                 |                  |                 | .060                 | 828             |
| P9               |                  |                 |                  |                 | .0675                | 828             |
| P10              |                  |                 |                  |                 | .075                 | 828             |
| Minute Intervals |                  |                 | Minute Intervals |                 | 1.5 Minute Intervals |                 |

Remarks:

HOWCO 1297--SANDEFER