



Home Office: Wichita, Kansas 67201

P.O. Box 1599

(316) 262-5861

Company Graves Drilling Company, Inc. Lease & Well No. Dresser #1  
Elevation 1659 Kelly Bushing Formation Mississippi Effective Pay ----- Ft. Ticket No. 4759  
Date 3/22/80 Sec. 9 Twp. 31S Range 8W County Harper State Kansas  
Test Approved by R. M. Lineham Western Representative Darrell Claphan

Formation Test No. 1 Interval Tested from 4420 ft. to 4442 ft. Total Depth 4442 ft.

Packer Depth 4415 ft. Size 6 3/4 in. Packer Depth 4420 ft. Size 6 3/4 in.

Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -

Top Recorder Depth (Inside) 4430 ft. Recorder Number 10266 Cap. 4650

Bottom Recorder Depth (Outside) 4433 ft. Recorder Number 6233 Cap. 4000

Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Grades Drlg. Etal., Inc. Drill Collar Length 89 I. D. 2.2 in.

Mud Type premix/chemical Viscosity 46 Weight Pipe Length - I. D. - in.

Weight 9.4 Water Loss 11.6 cc. Drill Pipe Length 4308 I. D. 3.8 in.

Chlorides 12,000 P.P.M. Test Tool Length 23 ft. Tool Size 4 1/2 in.

Jars: Make No Serial Number - Anchor Length 22 ft. Size 5 1/2 in.

Did Well Flow? No Reversed Out No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.

Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: First-Strong blow throughout. Second - strong blow (Gas to surface in  
forty-five minutes. See attached sheet for gas measurements.

Recovered 80 ft. of heavy oil and gas cut mud

Recovered 120 ft. of oil and gas cut water

Recovered        ft. of       

Recovered        ft. of       

Recovered        ft. of       

Remarks:       

Time Set Packer(s) 9:30 A.M. P.M. Time Started Off Bottom 1:15 A.M. P.M. Maximum Temperature 126°

Initial Hydrostatic Pressure 2252 P.S.I.

Initial Flow Period 10 Minutes (B) 75 P.S.I. to (C) 54 P.S.I.

Initial Closed In Period 63 Minutes (D) 1170 P.S.I.

Final Flow Period 80 Minutes (E) 89 P.S.I. to (F) 106 P.S.I.

Final Closed In Period 54 Minutes (G) 965 P.S.I.

Final Hydrostatic Pressure 2234 P.S.I.



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## GAS FLOW REPORT

Date 3/22/80 Ticket 4759 Company Graves Drilling Company, Inc.  
Well Name and No. Dresser #1 Dst No. 1 Interval Tested 4420'-4442'  
County Harper State Kansas Sec. 9 Twp. 31S Rg. 8W

| Time Gauge Pre-Flow | Time Gauge in Min. | P.S.I. on Merla Orifice Well Tester | P.S.I. on Pitot Tester | P.S.I. on Side Static Tester | P.S.I. on U-Tube Tester | Description of Flow |
|---------------------|--------------------|-------------------------------------|------------------------|------------------------------|-------------------------|---------------------|
| PRE FLOW            |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |
|                     |                    |                                     |                        |                              |                         |                     |

### SECOND FLOW

Gas to surface at 45 minutes of second opening.

|         |                |              |             |            |
|---------|----------------|--------------|-------------|------------|
|         | gas to surface | 1/8" orifice | 2" of water | 747 CFPD   |
| 10 min. | 1/8"           | orifice 15"  | of water    | 2,050 CFPD |
| 20 min. | 1/8"           | orifice 26"  | of water    | 2,690 CFPD |
| 30 min. | 1/4"           | orifice 10"  | of water    | 5,320 CFPD |
| 40 min. | 1/4"           | orifice 8"   | of water    | 4,760 CFPD |
| 45 min. | 1/4"           | orifice 5"   | of water    | 3,710 CFPD |
|         |                |              |             |            |
|         |                |              |             |            |
|         |                |              |             |            |
|         |                |              |             |            |
|         |                |              |             |            |

### GAS BOTTLE

Serial No. #84 Date Bottle Filled 3/22/80 Date to be Invoiced 3/22/80

Requisition and Provisions for high pressure stainless steel gas bottles. Western Testing Co., Inc. shall not be liable for damage of any kind to property or personnel of the one whom gas bottle is filled or for any loss suffered or sustained directly or indirectly through the use of these bottles. By signing of this ticket showing receipt of a gas testing bottle, the undersigned agrees for himself and as agent for operator, to return this bottle to Western Testing Co., Inc. within thirty (30) days free of charge, or be invoiced in the amount of \$75.00 (total charge). Should valve or seal plug be missing or damaged beyond repair, operator shall be invoiced for repairs at our invoiced price.

Graves Drilling Company, Inc.

All charges subject to 1 1/2% per month, equal to 18% interest per annum after 30 days from date of invoice. Any expense incurred for collection will be added to the original amount.

COMPANY'S NAME

R. M. Lineham

Authorized by

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

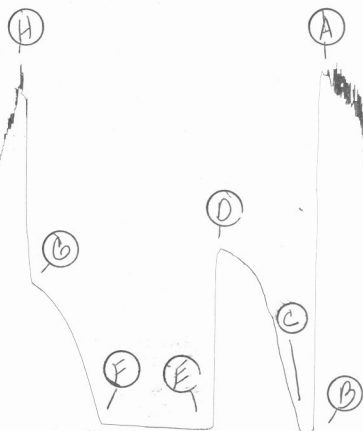
Date 3-22-80 Test Ticket No. 4759  
 Recorder No. 10266 Capacity 4650 Location 4430 Ft.  
 Clock No. 1659 Kelly Bushing Elevation 126 Well Temperature 126 °F  
 Point Pressure Time Given Time Computed  
 A Initial Hydrostatic Mud 2252 P.S.I. Open Tool 9.30A M  
 B First Initial Flow Pressure 75 P.S.I. First Flow Pressure 15 Mins. 10 Mins.  
 C First Final Flow Pressure 54 P.S.I. Initial Closed-in Pressure 60 Mins. 63 Mins.  
 D Initial Closed-in Pressure 1170 P.S.I. Second Flow Pressure 90 Mins. 80 Mins.  
 E Second Initial Flow Pressure 89 P.S.I. Final Closed-in Pressure 60 Mins. 54 Mins.  
 F Second Final Flow Pressure 106 P.S.I.  
 G Final Closed-in Pressure 965 P.S.I.  
 H Final Hydrostatic Mud 2234 P.S.I.

**PRESSURE BREAKDOWN**

| First Flow Pressure         |           | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |            |
|-----------------------------|-----------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|------------|
| Breakdown: <u>2</u> Inc.    |           | Breakdown: <u>21</u> Inc.   |             | Breakdown: <u>16</u> Inc.   |            | Breakdown: <u>18</u> Inc.   |            |
| of <u>5</u> mins. and a     |           | of <u>3</u> mins. and a     |             | of <u>5</u> mins. and a     |            | of <u>3</u> mins. and a     |            |
| final inc. of <u>0</u> Min. |           | final inc. of <u>0</u> Min. |             | final inc. of <u>0</u> Min. |            | final inc. of <u>0</u> Min. |            |
| Point Mins.                 | Press.    | Point Minutes               | Press.      | Point Minutes               | Press.     | Point Minutes               | Press.     |
| P 1 <u>0</u>                | <u>75</u> | <u>0</u>                    | <u>54</u>   | <u>0</u>                    | <u>89</u>  | <u>0</u>                    | <u>106</u> |
| P 2 <u>5</u>                | <u>56</u> | <u>3</u>                    | <u>106</u>  | <u>5</u>                    | <u>75</u>  | <u>3</u>                    | <u>171</u> |
| P 3 <u>10</u>               | <u>54</u> | <u>6</u>                    | <u>209</u>  | <u>10</u>                   | <u>73</u>  | <u>6</u>                    | <u>256</u> |
| P 4                         |           | <u>9</u>                    | <u>284</u>  | <u>15</u>                   | <u>73</u>  | <u>9</u>                    | <u>338</u> |
| P 5                         |           | <u>12</u>                   | <u>357</u>  | <u>20</u>                   | <u>77</u>  | <u>12</u>                   | <u>411</u> |
| P 6                         |           | <u>15</u>                   | <u>462</u>  | <u>25</u>                   | <u>81</u>  | <u>15</u>                   | <u>484</u> |
| P 7                         |           | <u>18</u>                   | <u>549</u>  | <u>30</u>                   | <u>84</u>  | <u>18</u>                   | <u>544</u> |
| P 8                         |           | <u>21</u>                   | <u>671</u>  | <u>35</u>                   | <u>86</u>  | <u>21</u>                   | <u>603</u> |
| P 9                         |           | <u>24</u>                   | <u>759</u>  | <u>40</u>                   | <u>87</u>  | <u>24</u>                   | <u>661</u> |
| P10                         |           | <u>27</u>                   | <u>797</u>  | <u>45</u>                   | <u>88</u>  | <u>27</u>                   | <u>708</u> |
| P11                         |           | <u>30</u>                   | <u>883</u>  | <u>50</u>                   | <u>90</u>  | <u>30</u>                   | <u>750</u> |
| P12                         |           | <u>33</u>                   | <u>942</u>  | <u>55</u>                   | <u>94</u>  | <u>33</u>                   | <u>783</u> |
| P13                         |           | <u>36</u>                   | <u>991</u>  | <u>60</u>                   | <u>98</u>  | <u>36</u>                   | <u>818</u> |
| P14                         |           | <u>39</u>                   | <u>1030</u> | <u>65</u>                   | <u>100</u> | <u>39</u>                   | <u>855</u> |
| P15                         |           | <u>42</u>                   | <u>1056</u> | <u>70</u>                   | <u>102</u> | <u>42</u>                   | <u>881</u> |
| P16                         |           | <u>45</u>                   | <u>1079</u> | <u>75</u>                   | <u>103</u> | <u>45</u>                   | <u>909</u> |
| P17                         |           | <u>48</u>                   | <u>1096</u> | <u>80</u>                   | <u>106</u> | <u>48</u>                   | <u>925</u> |
| P18                         |           | <u>51</u>                   | <u>1113</u> |                             |            | <u>51</u>                   | <u>944</u> |
| P19                         |           | <u>54</u>                   | <u>1130</u> |                             |            | <u>54</u>                   | <u>965</u> |
| P20                         |           | <u>57</u>                   | <u>1148</u> |                             |            |                             |            |
|                             |           | <u>60</u>                   | <u>1163</u> |                             |            |                             |            |
|                             |           | <u>63</u>                   | <u>1170</u> |                             |            |                             |            |

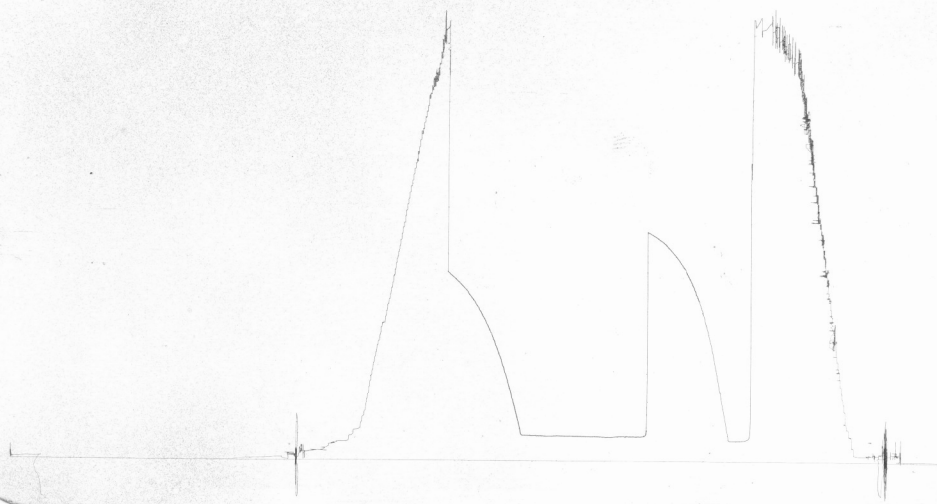
10266

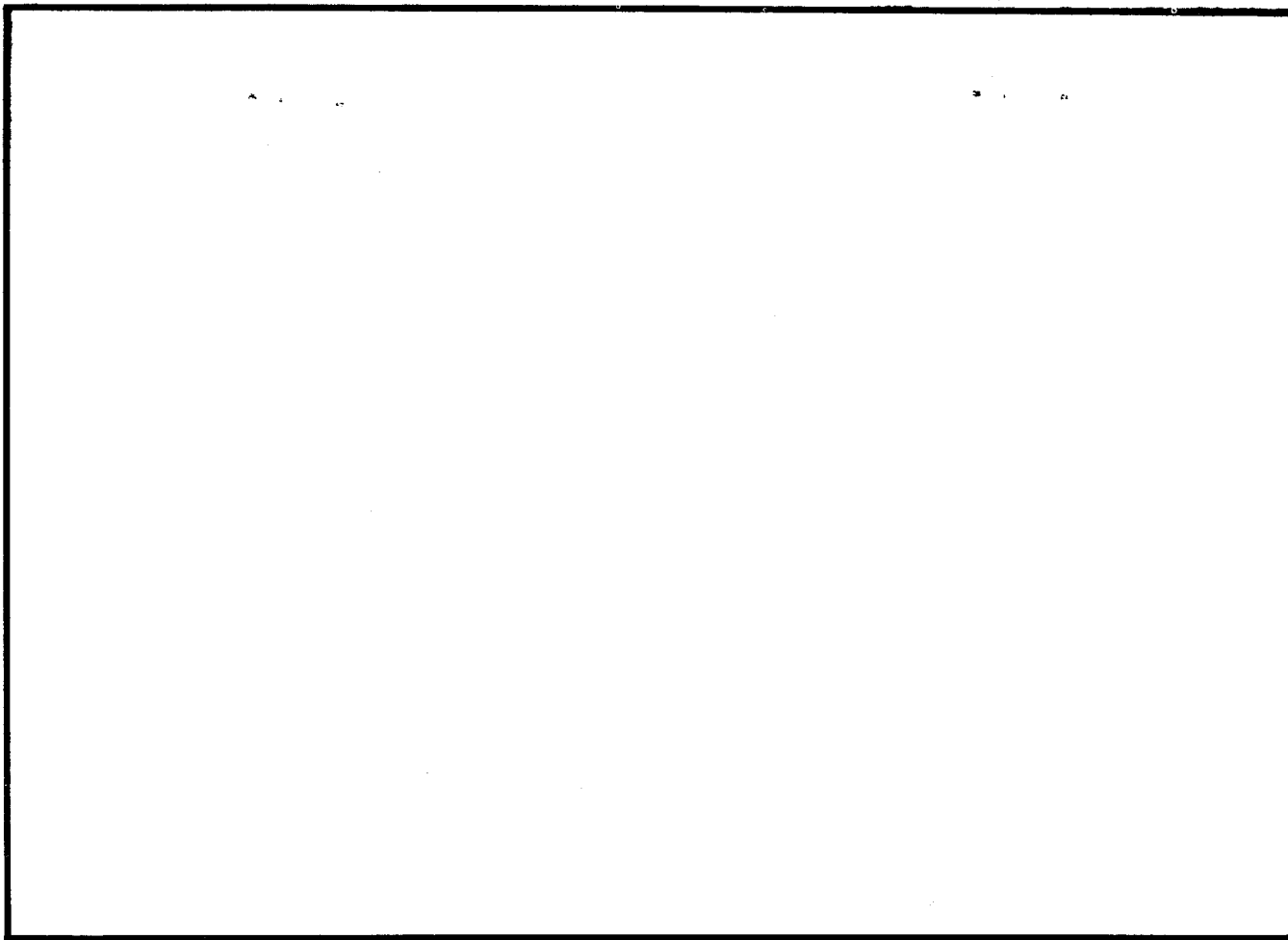
TKL # 4759  
I



6233

TKL # 4759  
O





This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE         |                   |
|----------------------------------------|------------------|-------------------|
|                                        | Field<br>Reading | Office<br>Reading |
| (A) Initial Hydrostatic Mud .....      | 2256             | 2252 PSI          |
| (B) First Initial Flow Pressure .....  | 111              | 75 PSI            |
| (C) First Final Flow Pressure .....    | 111              | 54 PSI            |
| (D) Initial Closed-in Pressure .....   | 1204             | 1170 PSI          |
| (E) Second Initial Flow Pressure ..... | 132              | 89 PSI            |
| (F) Second Final Flow Pressure .....   | 142              | 106 PSI           |
| (G) Final Closed-in Pressure .....     | 996              | 965 PSI           |
| (H) Final Hydrostatic Mud .....        | 2247             | 2234 PSI          |



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Company Graves Drilling Company, Inc. Lease & Well No. Dresser #1  
Elevation 1659 Kelly Bushing Formation Mississippi Effective Pay ---- Ft. Ticket No. 4760  
Date 3/23/80 Sec. 9 Twp. 31S Range 8W County Harper State Kansas  
Test Approved by R. M. Lineham Western Representative Darrell Claphan  
Formation Test No. 2 Interval Tested from 4442 ft. to 4470 ft. Total Depth 4470 ft.  
Packer Depth 4437 ft. Size 6 3/4 in. Packer Depth 4442 ft. Size 6 3/4 in.  
Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.  
Depth of Selective Zone Set -  
Top Recorder Depth (Inside) 4448 ft. Recorder Number 10266 Cap. 4650  
Bottom Recorder Depth (Outside) 4451 ft. Recorder Number 6233 Cap. 4000  
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
Drilling Contractor Graves Etal.Drlg. Co. Drill Collar Length 89 I. D. 2.2 in.  
Mud Type premix/chemical Viscosity 45 Weight Pipe Length - I. D. - in.  
Weight 9.4 Water Loss 11.6 cc. Drill Pipe Length 4330 I. D. 3.8 in.  
Chlorides 12,000 P.P.M. Test Tool Length 23 ft. Tool Size 4 1/2 in.  
Jars: Make -- Serial Number - Anchor Length 28 ft. Size 5 1/2 in.  
Did Well Flow? NO Reversed Out NO Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.  
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 in.

Blow: First-strong blow throughout.

Second - strong blow throughout (Bottom of bucket)

Recovered 20 ft. of gas cut mud  
Recovered 60 ft. of slightly gas cut muddy water  
Recovered 60 ft. of water  
Recovered - ft. of -  
Recovered - ft. of -

Remarks: -

Time Set Packer(s) 12:45 A.M. P.M. Time Started Off Bottom 3:30 A.M. P.M. Maximum Temperature 125°  
Initial Hydrostatic Pressure 2240 P.S.I.  
Initial Flow Period 10 Minutes (B) 99 P.S.I. to (C) 80 P.S.I.  
Initial Closed In Period 42 Minutes (D) 1079 P.S.I.  
Final Flow Period 60 Minutes (E) 110 P.S.I. to (F) 110 P.S.I.  
Final Closed In Period 39 Minutes (G) 761 P.S.I.  
Final Hydrostatic Pressure 2233 P.S.I. (H)

# WESTERN TESTING CO., INC.

## Pressure Data

Date 3-23-80 Test Ticket No. 4760  
Recorder No. 10266 Capacity 4650 Location 4448 Ft.  
Clock No. 1659 Kelly Bushing Elevation 125 Well Temperature °F  
Time Given 12:45A Time Computed .

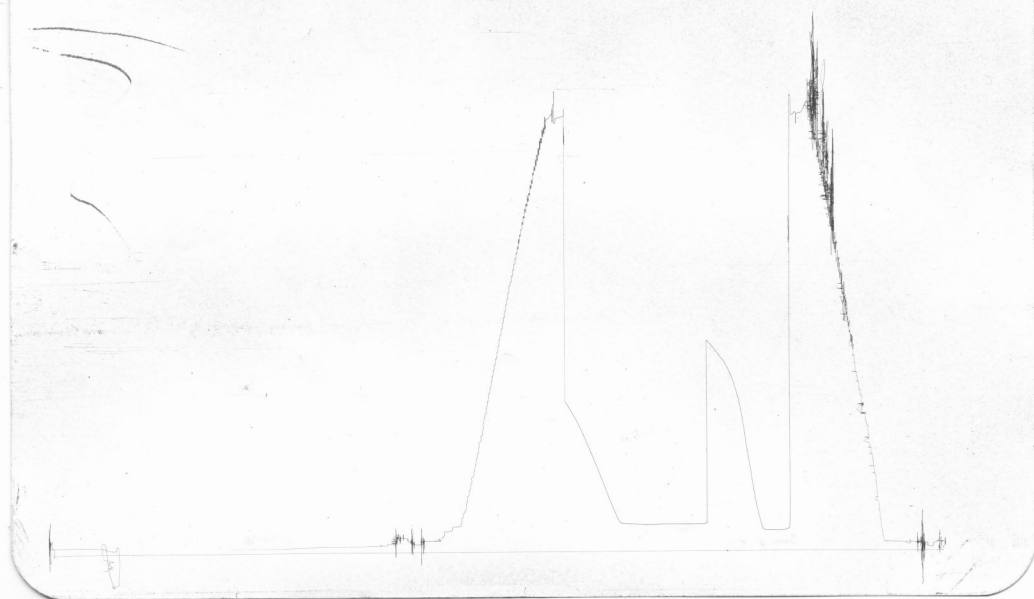
| Point                          | Pressure |        |                            |                   |
|--------------------------------|----------|--------|----------------------------|-------------------|
| A Initial Hydrostatic Mud      | 2240     | P.S.I. | Open Tool                  |                   |
| B First Initial Flow Pressure  | 99       | P.S.I. | First Flow Pressure        | 15 Mins. 10 Mins. |
| C First Final Flow Pressure    | 80       | P.S.I. | Initial Closed-in Pressure | 45 Mins. 42 Mins. |
| D Initial Closed-in Pressure   | 1079     | P.S.I. | Second Flow Pressure       | 60 Mins. 60 Mins. |
| E Second Initial Flow Pressure | 110      | P.S.I. | Final Closed-in Pressure   | 45 Mins. 39 Mins. |
| F Second Final Flow Pressure   | 110      | P.S.I. |                            |                   |
| G Final Closed-in Pressure     | 761      | P.S.I. |                            |                   |
| H Final Hydrostatic Mud        | 2233     | P.S.I. |                            |                   |

## PRESSURE BREAKDOWN

| First Flow Pressure         |           | Initial Shut-In             |             | Second Flow Pressure        |            | Final Shut-In               |            |
|-----------------------------|-----------|-----------------------------|-------------|-----------------------------|------------|-----------------------------|------------|
| Breakdown: <u>2</u> Inc.    |           | Breakdown: <u>14</u> Inc.   |             | Breakdown: <u>12</u> Inc.   |            | Breakdown: <u>13</u> Inc.   |            |
| of <u>5</u> mins. and a     |           | of <u>3</u> mins. and a     |             | of <u>5</u> mins. and a     |            | of <u>3</u> mins. and a     |            |
| final inc. of <u>0</u> Min. |           | final inc. of <u>0</u> Min. |             | final inc. of <u>0</u> Min. |            | final inc. of <u>0</u> Min. |            |
| Point Mins.                 | Press.    | Point Minutes               | Press.      | Point Minutes               | Press.     | Point Minutes               | Press.     |
| P 1 <u>0</u>                | <u>99</u> | <u>0</u>                    | <u>80</u>   | <u>0</u>                    | <u>110</u> | <u>0</u>                    | <u>110</u> |
| P 2 <u>5</u>                | <u>85</u> | <u>3</u>                    | <u>117</u>  | <u>5</u>                    | <u>96</u>  | <u>3</u>                    | <u>155</u> |
| P 3 <u>10</u>               | <u>80</u> | <u>6</u>                    | <u>200</u>  | <u>10</u>                   | <u>93</u>  | <u>6</u>                    | <u>216</u> |
| P 4                         |           | <u>9</u>                    | <u>322</u>  | <u>15</u>                   | <u>93</u>  | <u>9</u>                    | <u>272</u> |
| P 5                         |           | <u>12</u>                   | <u>432</u>  | <u>20</u>                   | <u>93</u>  | <u>12</u>                   | <u>331</u> |
| P 6                         |           | <u>15</u>                   | <u>575</u>  | <u>25</u>                   | <u>93</u>  | <u>15</u>                   | <u>408</u> |
| P 7                         |           | <u>18</u>                   | <u>703</u>  | <u>30</u>                   | <u>101</u> | <u>18</u>                   | <u>467</u> |
| P 8                         |           | <u>21</u>                   | <u>808</u>  | <u>35</u>                   | <u>103</u> | <u>21</u>                   | <u>519</u> |
| P 9                         |           | <u>24</u>                   | <u>895</u>  | <u>40</u>                   | <u>104</u> | <u>24</u>                   | <u>565</u> |
| P10                         |           | <u>27</u>                   | <u>942</u>  | <u>45</u>                   | <u>106</u> | <u>27</u>                   | <u>624</u> |
| P11                         |           | <u>30</u>                   | <u>984</u>  | <u>50</u>                   | <u>108</u> | <u>30</u>                   | <u>671</u> |
| P12                         |           | <u>33</u>                   | <u>1007</u> | <u>55</u>                   | <u>109</u> | <u>33</u>                   | <u>710</u> |
| P13                         |           | <u>36</u>                   | <u>1037</u> | <u>60</u>                   | <u>110</u> | <u>36</u>                   | <u>750</u> |
| P14                         |           | <u>39</u>                   | <u>1065</u> |                             |            | <u>39</u>                   | <u>761</u> |
| P15                         |           | <u>42</u>                   | <u>1079</u> |                             |            |                             |            |
| P16                         |           |                             |             |                             |            |                             |            |
| P17                         |           |                             |             |                             |            |                             |            |
| P18                         |           |                             |             |                             |            |                             |            |
| P19                         |           |                             |             |                             |            |                             |            |
| P20                         |           |                             |             |                             |            |                             |            |

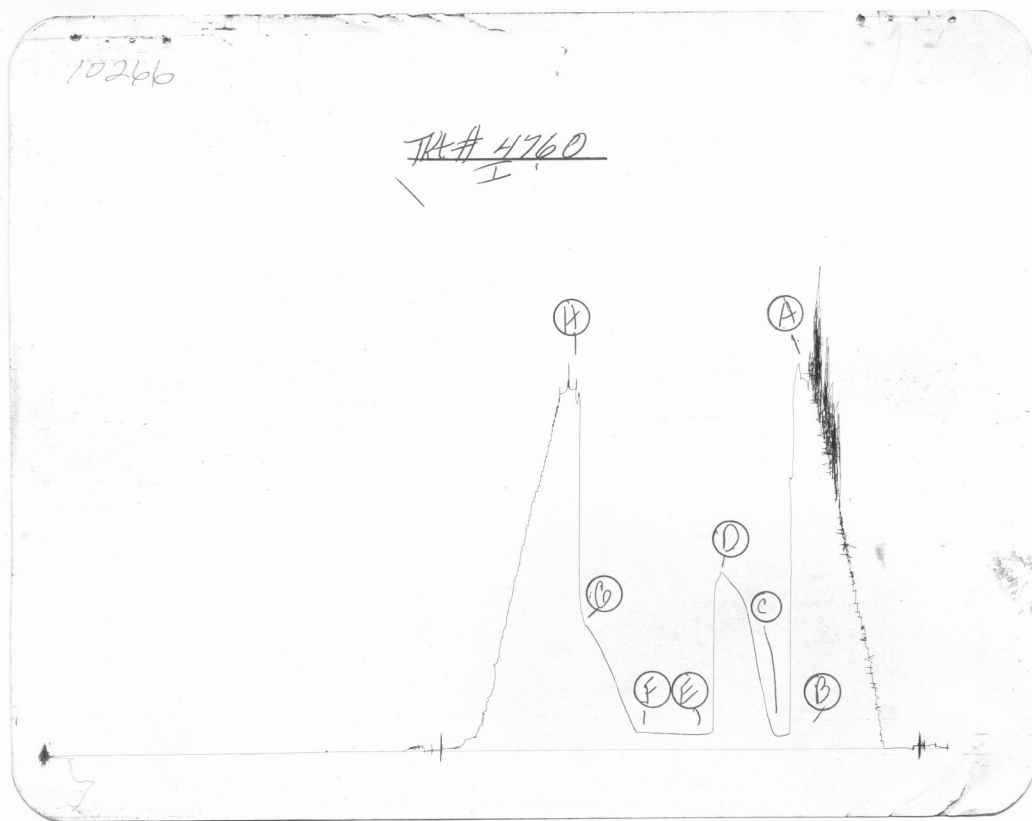
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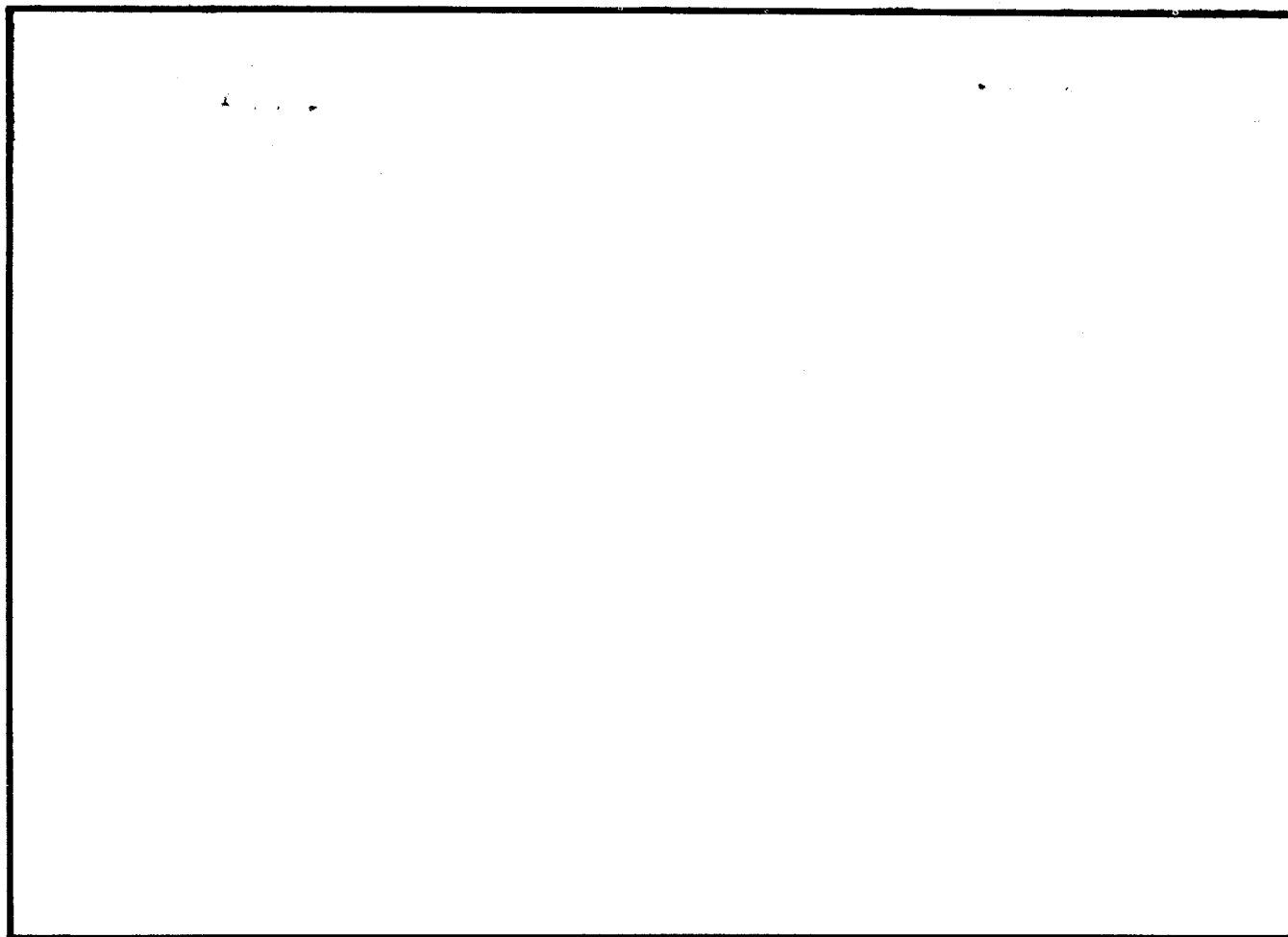
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10266

RA# 4760  
I





This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE         |                   |
|----------------------------------------|------------------|-------------------|
|                                        | Field<br>Reading | Office<br>Reading |
| (A) Initial Hydrostatic Mud .....      | 2256             | 2240 PSI          |
| (B) First Initial Flow Pressure .....  | 111              | 99 PSI            |
| (C) First Final Flow Pressure .....    | 111              | 80 PSI            |
| (D) Initial Closed-in Pressure .....   | 1105             | 1079 PSI          |
| (E) Second Initial Flow Pressure ..... | 142              | 110 PSI           |
| (F) Second Final Flow Pressure .....   | 152              | 110 PSI           |
| (G) Final Closed-in Pressure .....     | 796              | 761 PSI           |
| (H) Final Hydrostatic Mud .....        | 2247             | 2233 PSI          |