



Home Office: Wichita, Kansas 67201  
P. O. Box 1599 (316) 838-0601

Company Graves Drilling Company, Inc. Lease & Well No. Dusenbury #1  
Elevation -- Formation Mississippi Effective Pay -- Ft. Ticket No. 4037  
Date 10/22/79 Sec. 1 Twp. 32S Range 9W County Harper State Kansas  
Test Approved by H. Deane Jirrels Western Representative Mike Tritt-Rod Tritt  
Formation Test No. 1 Interval Tested from 4395 ft. to 4405 ft. Total Depth 4405 ft.  
Packer Depth 4390 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.  
Packer Depth 4395 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.  
Depth of Selective Zone Set --  
Top Recorder Depth (Inside) 4397 ft. Recorder Number 3354 Cap. 4200  
Bottom Recorder Depth (Outside) 4400 ft. Recorder Number 2605 Cap. 4150  
Below Straddle Recorder Depth -- ft. Recorder Number -- Cap. --  
Drilling Contractor Graves Drilling Co. Drill Collar Length 156 I. D. 2 1/4 in.  
Mud Type drispac Viscosity 48 Weight Pipe Length -- I. D. -- in.  
Weight 9.5 Water Loss 14.4 cc. Drill Pipe Length 4219 I. D. 3.8 in.  
Chlorides 14,500 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 in.  
Jars: Make No Serial Number -- Anchor Length 10 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: Strong blow throughout test. Gas to surface in twelve minutes. See attached sheet for gas measurements.

Recovered 60 ft. of drilling mud -- gassy

Recovered -- ft. of --

Recovered -- ft. of --

Recovered -- ft. of --

Recovered -- ft. of --

Remarks: --

Time Set Packer(s) 9:45 A.M. Time Started Off Bottom 12:30 A.M. Maximum Temperature 125<sup>0</sup>  
Initial Hydrostatic Pressure -- (A) 2439 P.S.I.  
Initial Flow Period -- Minutes 15 (B) 46 P.S.I. to (C) 34 P.S.I.  
Initial Closed In Period -- Minutes 45 (D) 1403 P.S.I.  
Final Flow Period -- Minutes 60 (E) 42 P.S.I. to (F) 30 P.S.I.  
Final Closed In Period -- Minutes 45 (G) 1380 P.S.I.  
Final Hydrostatic Pressure -- (H) 2398 P.S.I.



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## GAS FLOW REPORT

Date 10/22/79 Ticket 4037 Company Graves Drilling Company, Inc.  
Well Name and No. Dusenbury #1 Dst No. 1 Interval Tested 4395' - 4405'  
County Harper State Kansas Sec. 1 Twp. 32S Rg. 9W

| 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 |
|-----------------------------------|--------------------|-------------------------------------|------------------------|------------------------------|-------------------------|---------------------|
| 9:45 AM Tool open <b>PRE FLOW</b> |                    |                                     |                        |                              |                         |                     |
|                                   | 5 min.             |                                     | 3/4" orifice           |                              |                         |                     |
|                                   | 12 min.            |                                     |                        |                              |                         | Gas to surface      |
|                                   |                    |                                     |                        |                              |                         |                     |
|                                   |                    |                                     |                        |                              |                         |                     |
|                                   |                    |                                     |                        |                              |                         |                     |
|                                   |                    |                                     |                        |                              |                         |                     |

|                                      |         |              |              |  |  |             |
|--------------------------------------|---------|--------------|--------------|--|--|-------------|
| 10:45AM Tool open <b>SECOND FLOW</b> |         |              |              |  |  |             |
|                                      | 5 min.  | 26" of water | 3/4" orifice |  |  | 72,400 CFPD |
|                                      | 10 min. | 19" of water | 3/4" orifice |  |  | 61,900 CFPD |
|                                      | 15 min. | 19" of water | 3/4" orifice |  |  | 61,900 CFPD |
|                                      | 20 min. | 19" of water | 3/4" orifice |  |  | 61,900 CFPD |
|                                      | 25 min. | 20" of water | 3/4" orifice |  |  | 63,500 CFPD |
|                                      | 30 min. | 20" of water | 3/4" orifice |  |  | 63,500 CFPD |
|                                      | 35 min. | 20" of water | 3/4" orifice |  |  | 63 500 CFPD |
|                                      | 40 min. | 22" of water | 3/4" orifice |  |  | 66,600 CFPD |
|                                      | 45 min. | 22" of water | 3/4" orifice |  |  | 66,600 CFPD |
|                                      | 50 min. | 22" of water | 3/4" orifice |  |  | 66,600 CFPD |
|                                      | 55 min. | 22" of water | 3/4" orifice |  |  | 66,600 CFPD |
|                                      | 60 min. | 22" of water | 3/4" orifice |  |  | 66,600 CFPD |

### GAS BOTTLE

Serial No. ---- Date Bottle Filled ---- Date to be Invoiced 10/22/79

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.

All charges subject to 1% per month, equal to 12% 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 Graves Drilling Company, Inc.

Authorized by H. Deane Jirrels

# WESTERN TESTING CO., INC.

## Pressure Data

Date 10/22/79 Test Ticket No. 4037  
 Recorder No. 3354 Capacity 4200 Location 4397 Ft.  
 Clock No. --- Elevation ---- Well Temperature 125 °F

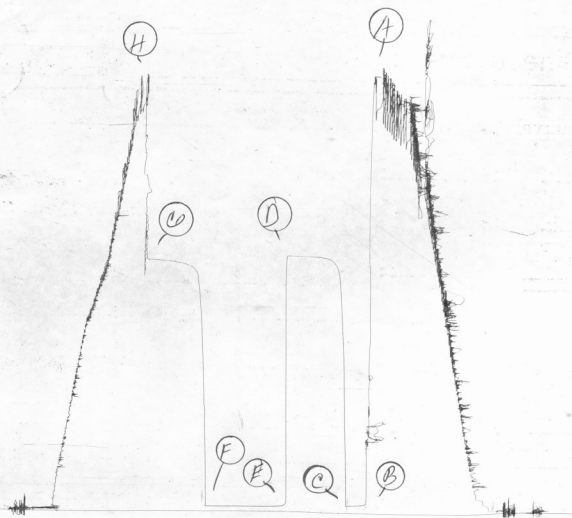
| Point                          | Pressure |        | Time Given | Time Computed  |
|--------------------------------|----------|--------|------------|----------------|
| A Initial Hydrostatic Mud      | 2439     | P.S.I. | 9:45A      | M              |
| B First Initial Flow Pressure  | 46       | P.S.I. | 15         | Mins. 15 Mins. |
| C First Final Flow Pressure    | 34       | P.S.I. | 45         | Mins. 45 Mins. |
| D Initial Closed-in Pressure   | 1403     | P.S.I. | 60         | Mins. 60 Mins. |
| E Second Initial Flow Pressure | 42       | P.S.I. | 45         | Mins. 45 Mins. |
| F Second Final Flow Pressure   | 30       | P.S.I. |            |                |
| G Final Closed-in Pressure     | 1380     | P.S.I. |            |                |
| H Final Hydrostatic Mud        | 2398     | P.S.I. |            |                |

## PRESSURE BREAKDOWN

| First Flow Pressure         |           | Initial Shut-In             |             | Second Flow Pressure        |           | Final Shut-In               |             |
|-----------------------------|-----------|-----------------------------|-------------|-----------------------------|-----------|-----------------------------|-------------|
| Breakdown: <u>3</u> Inc.    |           | Breakdown: <u>15</u> Inc.   |             | Breakdown: <u>12</u> Inc.   |           | Breakdown: <u>15</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>46</u> | <u>0</u>                    | <u>34</u>   | <u>0</u>                    | <u>42</u> | <u>0</u>                    | <u>30</u>   |
| P 2 <u>5</u>                | <u>36</u> | <u>3</u>                    | <u>677</u>  | <u>5</u>                    | <u>33</u> | <u>3</u>                    | <u>591</u>  |
| P 3 <u>10</u>               | <u>34</u> | <u>6</u>                    | <u>1120</u> | <u>10</u>                   | <u>30</u> | <u>6</u>                    | <u>1046</u> |
| P 4 <u>15</u>               | <u>34</u> | <u>9</u>                    | <u>1321</u> | <u>15</u>                   | <u>30</u> | <u>9</u>                    | <u>1278</u> |
| P 5                         |           | <u>12</u>                   | <u>1363</u> | <u>20</u>                   | <u>30</u> | <u>12</u>                   | <u>1331</u> |
| P 6                         |           | <u>15</u>                   | <u>1380</u> | <u>25</u>                   | <u>30</u> | <u>15</u>                   | <u>1346</u> |
| P 7                         |           | <u>18</u>                   | <u>1390</u> | <u>30</u>                   | <u>30</u> | <u>18</u>                   | <u>1357</u> |
| P 8                         |           | <u>21</u>                   | <u>1395</u> | <u>35</u>                   | <u>30</u> | <u>21</u>                   | <u>1361</u> |
| P 9                         |           | <u>24</u>                   | <u>1399</u> | <u>40</u>                   | <u>30</u> | <u>24</u>                   | <u>1365</u> |
| P10                         |           | <u>27</u>                   | <u>1400</u> | <u>45</u>                   | <u>30</u> | <u>27</u>                   | <u>1369</u> |
| P11                         |           | <u>30</u>                   | <u>1400</u> | <u>50</u>                   | <u>30</u> | <u>30</u>                   | <u>1373</u> |
| P12                         |           | <u>33</u>                   | <u>1400</u> | <u>55</u>                   | <u>30</u> | <u>33</u>                   | <u>1374</u> |
| P13                         |           | <u>36</u>                   | <u>1400</u> | <u>60</u>                   | <u>30</u> | <u>36</u>                   | <u>1376</u> |
| P14                         |           | <u>39</u>                   | <u>1401</u> |                             |           | <u>39</u>                   | <u>1378</u> |
| P15                         |           | <u>42</u>                   | <u>1402</u> |                             |           | <u>42</u>                   | <u>1379</u> |
| P16                         |           | <u>45</u>                   | <u>1403</u> |                             |           | <u>45</u>                   | <u>1380</u> |
| P17                         |           |                             |             |                             |           |                             |             |
| P18                         |           |                             |             |                             |           |                             |             |
| P19                         |           |                             |             |                             |           |                             |             |
| P20                         |           |                             |             |                             |           |                             |             |

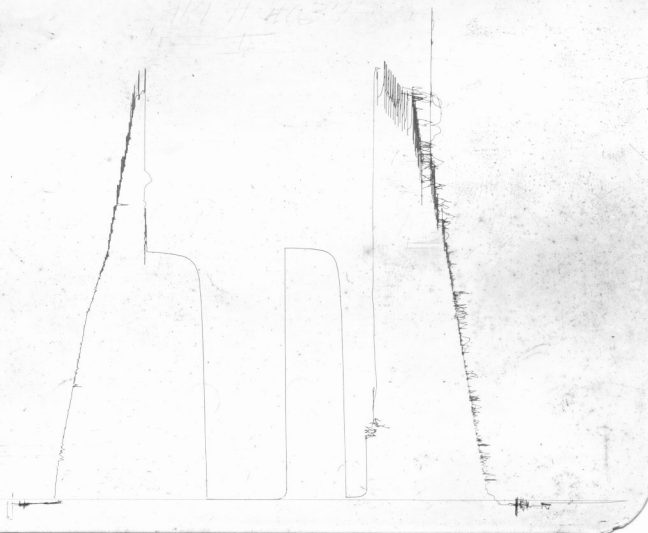
3354 DST#1

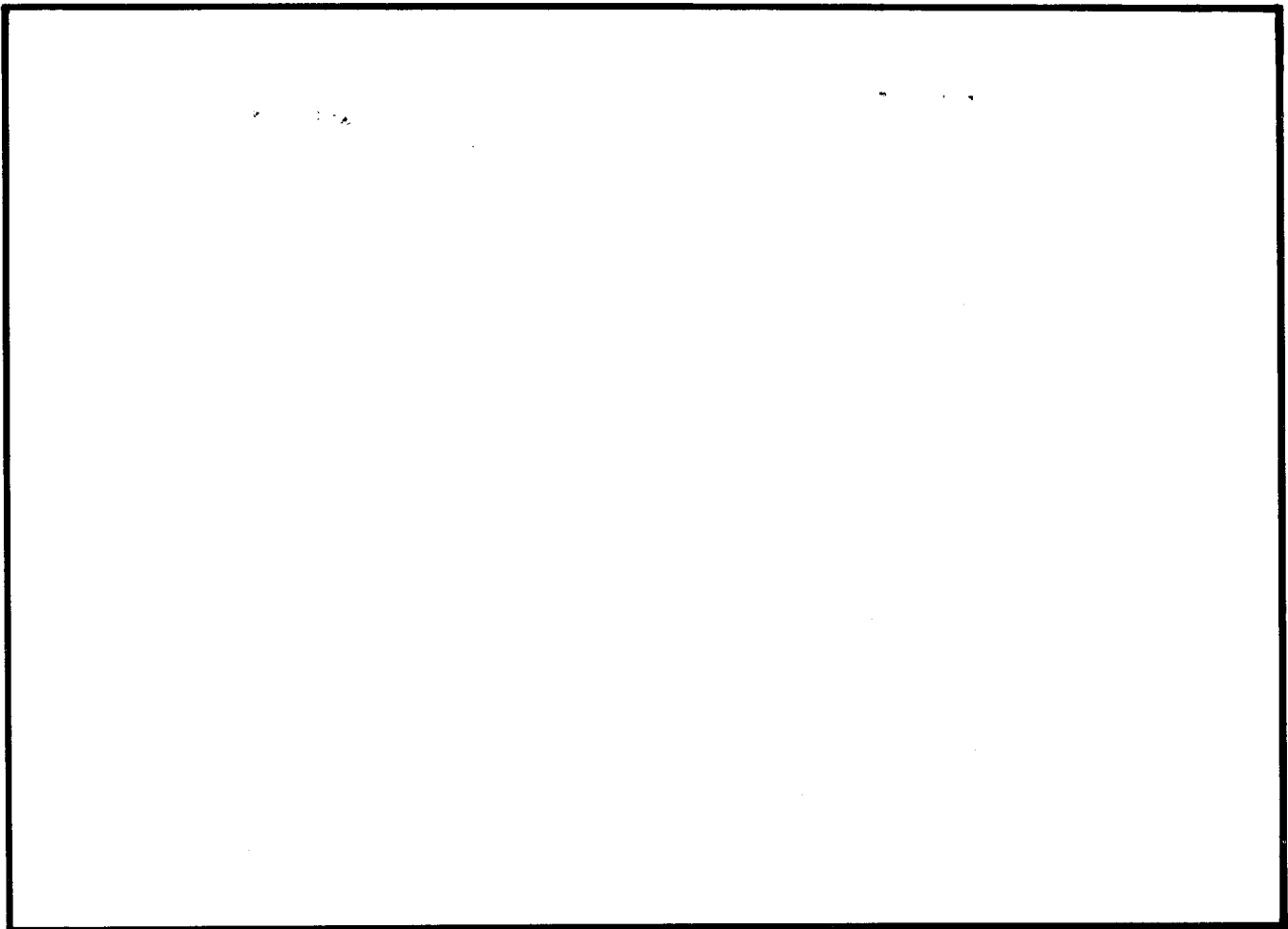
TKL # 4037  
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2605 DST#1

TKL # 4037  
O





This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE         |                   |     |
|----------------------------------------|------------------|-------------------|-----|
|                                        | Field<br>Reading | Office<br>Reading |     |
| (A) Initial Hydrostatic Mud .....      | 2430             | 2439              | PSI |
| (B) First Initial Flow Pressure .....  | 63               | 46                | PSI |
| (C) First Final Flow Pressure .....    | 52               | 34                | PSI |
| (D) Initial Closed-in Pressure .....   | 1424             | 1403              | PSI |
| (E) Second Initial Flow Pressure ..... | 42               | 42                | PSI |
| (F) Second Final Flow Pressure .....   | 31               | 30                | PSI |
| (G) Final Closed-in Pressure .....     | 1402             | 1380              | PSI |
| (H) Final Hydrostatic Mud .....        | 2408             | 2398              | PSI |



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Company Graves Drilling Company, Inc. Lease & Well No. Dusenbury #1  
Elevation --- Formation Mississippi Effective Pay ---- Ft. Ticket No. 4038  
Date 10/23/79 Sec. 1 Twp. 32S Range 9W County Harper State Kansas  
Test Approved by H. Deane Jirrels Western Representative Rod Tritt  
Formation Test No. 2 Interval Tested from 4405 ft. to 4415 ft. Total Depth 4415 ft.  
Packer Depth 4400 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Packer Depth 4405 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.  
Depth of Selective Zone Set -  
Top Recorder Depth (Inside) 4406 ft. Recorder Number 3354 Cap. 4200  
Bottom Recorder Depth (Outside) 4409 ft. Recorder Number 2605 Cap. 4150  
Below Straddle Recorder Depth - ft. Recorder Number - Cap. -  
Drilling Contractor Graves Drilling Company Drill Collar Length 156 I. D. 2 1/4 in.  
Mud Type drispac Viscosity 48 Weight Pipe Length - I. D. - in.  
Weight 9.5 Water Loss 14.4 cc. Drill Pipe Length 4229 I. D. 3.8 in.  
Chlorides 14,500 P.P.M. Test Tool Length 20 ft. Tool Size 5 1/2 OD in.  
Jars: Make No Serial Number - Anchor Length 10 ft. Size 5 1/2 OD 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 FH in.

Blow: Weak blow building to strong blow 12 minutes on Initial Flow Period. Strong blow throughout final flow period.

Recovered 60 ft. of drilling mud some oil spots  
Recovered 65 ft. of muddy water some oil spots (light scum of oil)  
Recovered - ft. of - Chlorides 76,000 ppm  
Recovered - ft. of -  
Recovered - ft. of -

Remarks: -

Time Set Packer(s) 11:45 -A.M. Time Started Off Bottom 2:30 -P.M. Maximum Temperature 123<sup>0</sup>  
Initial Hydrostatic Pressure ..... (A) 2451 P.S.I.  
Initial Flow Period ..... Minutes 15 (B) 52 P.S.I. to (C) 52 P.S.I.  
Initial Closed In Period ..... Minutes 48 (D) 1146 P.S.I.  
Final Flow Period ..... Minutes 60 (E) 63 P.S.I. to (F) 70 P.S.I.  
Final Closed In Period ..... Minutes 48 (G) 1175 P.S.I.  
Final Hydrostatic Pressure ..... (H) 2290 P.S.I.

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

Date 10-23-79 Test Ticket No. 4038  
Recorder No. 3354 Capacity 4200 Location 4406 Ft.  
Clock No. - Elevation - Well Temperature 123 °F

| Point                          | Pressure           |                            | Time Given       | Time Computed   |
|--------------------------------|--------------------|----------------------------|------------------|-----------------|
| A Initial Hydrostatic Mud      | <u>2451</u> P.S.I. | Open Tool                  | <u>11:45P.</u> M |                 |
| B First Initial Flow Pressure  | <u>52</u> P.S.I.   | First Flow Pressure        | <u>15</u> Mins.  | <u>15</u> Mins. |
| C First Final Flow Pressure    | <u>52</u> P.S.I.   | Initial Closed-in Pressure | <u>45</u> Mins.  | <u>48</u> Mins. |
| D Initial Closed-in Pressure   | <u>1146</u> P.S.I. | Second Flow Pressure       | <u>60</u> Mins.  | <u>60</u> Mins. |
| E Second Initial Flow Pressure | <u>63</u> P.S.I.   | Final Closed-in Pressure   | <u>45</u> Mins.  | <u>48</u> Mins. |
| F Second Final Flow Pressure   | <u>70</u> P.S.I.   |                            |                  |                 |
| G Final Closed-in Pressure     | <u>1175</u> P.S.I. |                            |                  |                 |
| H Final Hydrostatic Mud        | <u>2290</u> P.S.I. |                            |                  |                 |

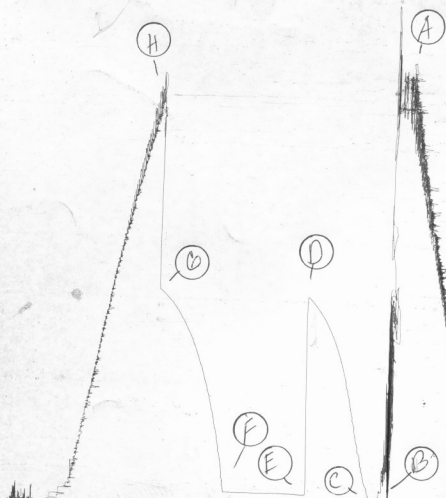
**PRESSURE BREAKDOWN**

| First Flow Pressure         |           | Initial Shut-In             |             | Second Flow Pressure        |           | Final Shut-In               |             |
|-----------------------------|-----------|-----------------------------|-------------|-----------------------------|-----------|-----------------------------|-------------|
| Breakdown: <u>3</u> Inc.    |           | Breakdown: <u>16</u> Inc.   |             | Breakdown: <u>12</u> Inc.   |           | Breakdown: <u>16</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<br>Mins.              | Press.    | Point<br>Minutes            | Press.      | Point<br>Minutes            | Press.    | Point<br>Minutes            | Press.      |
| P 1 <u>0</u>                | <u>52</u> | <u>0</u>                    | <u>52</u>   | <u>0</u>                    | <u>53</u> | <u>0</u>                    | <u>70</u>   |
| P 2 <u>5</u>                | <u>52</u> | <u>3</u>                    | <u>135</u>  | <u>5</u>                    | <u>54</u> | <u>3</u>                    | <u>241</u>  |
| P 3 <u>10</u>               | <u>52</u> | <u>6</u>                    | <u>226</u>  | <u>10</u>                   | <u>67</u> | <u>6</u>                    | <u>365</u>  |
| P 4 <u>15</u>               | <u>52</u> | <u>9</u>                    | <u>304</u>  | <u>15</u>                   | <u>68</u> | <u>9</u>                    | <u>477</u>  |
| P 5                         |           | <u>12</u>                   | <u>424</u>  | <u>20</u>                   | <u>69</u> | <u>12</u>                   | <u>678</u>  |
| P 6                         |           | <u>15</u>                   | <u>527</u>  | <u>25</u>                   | <u>70</u> | <u>15</u>                   | <u>658</u>  |
| P 7                         |           | <u>18</u>                   | <u>637</u>  | <u>30</u>                   | <u>70</u> | <u>18</u>                   | <u>732</u>  |
| P 8                         |           | <u>21</u>                   | <u>728</u>  | <u>35</u>                   | <u>70</u> | <u>21</u>                   | <u>791</u>  |
| P 9                         |           | <u>24</u>                   | <u>806</u>  | <u>40</u>                   | <u>70</u> | <u>24</u>                   | <u>859</u>  |
| P10                         |           | <u>27</u>                   | <u>869</u>  | <u>45</u>                   | <u>70</u> | <u>27</u>                   | <u>916</u>  |
| P11                         |           | <u>30</u>                   | <u>728</u>  | <u>50</u>                   | <u>70</u> | <u>30</u>                   | <u>964</u>  |
| P12                         |           | <u>33</u>                   | <u>973</u>  | <u>55</u>                   | <u>70</u> | <u>33</u>                   | <u>1002</u> |
| P13                         |           | <u>36</u>                   | <u>1017</u> | <u>60</u>                   | <u>70</u> | <u>36</u>                   | <u>1035</u> |
| P14                         |           | <u>39</u>                   | <u>1049</u> |                             |           | <u>39</u>                   | <u>1072</u> |
| P15                         |           | <u>42</u>                   | <u>1087</u> |                             |           | <u>42</u>                   | <u>1103</u> |
| P16                         |           | <u>45</u>                   | <u>1112</u> |                             |           | <u>45</u>                   | <u>1150</u> |
| P17                         |           | <u>48</u>                   | <u>1146</u> |                             |           | <u>48</u>                   | <u>1175</u> |
| P18                         |           |                             |             |                             |           |                             |             |
| P19                         |           |                             |             |                             |           |                             |             |
| P20                         |           |                             |             |                             |           |                             |             |

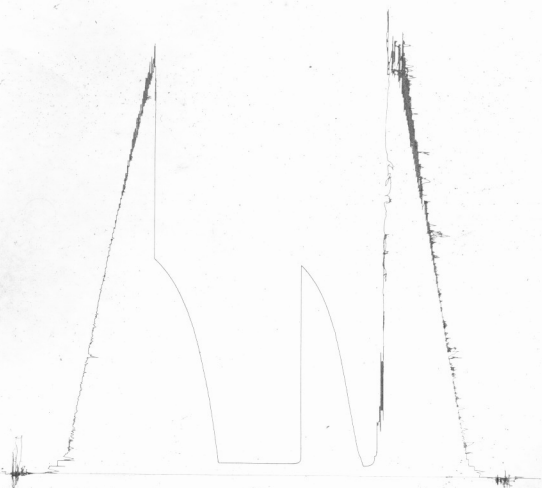
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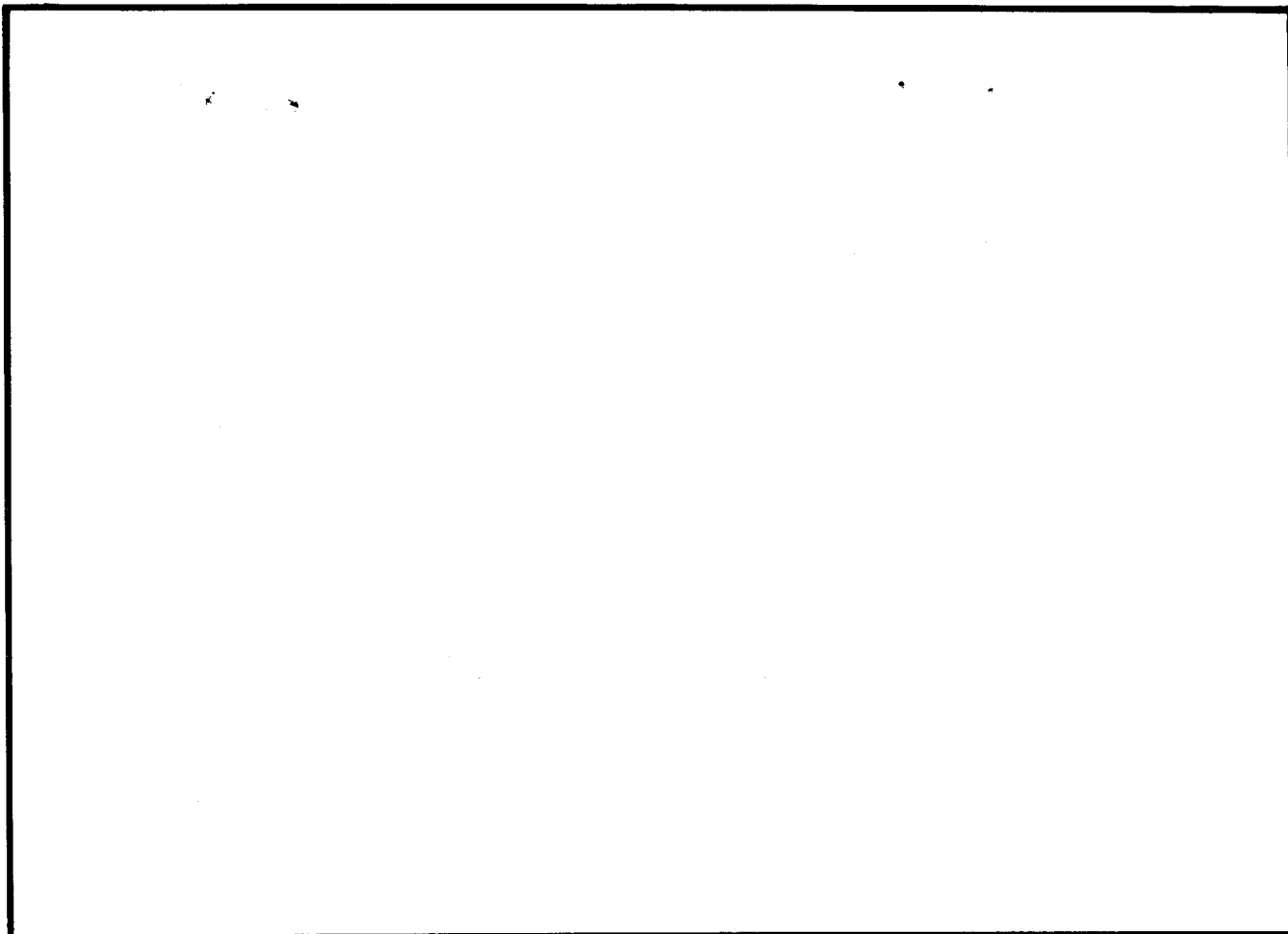
DST #2

TK # 4038  
I



TK # 4038  
O





This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE         |                   |     |
|----------------------------------------|------------------|-------------------|-----|
|                                        | Field<br>Reading | Office<br>Reading |     |
| (A) Initial Hydrostatic Mud .....      | 2355             | 2451              | PSI |
| (B) First Initial Flow Pressure .....  | 52               | 52                | PSI |
| (C) First Final Flow Pressure .....    | 52               | 52                | PSI |
| (D) Initial Closed-in Pressure .....   | 1149             | 1146              | PSI |
| (E) Second Initial Flow Pressure ..... | 52               | 63                | PSI |
| (F) Second Final Flow Pressure .....   | 63               | 70                | PSI |
| (G) Final Closed-in Pressure .....     | 1160             | 1175              | PSI |
| (H) Final Hydrostatic Mud .....        | 2324             | 2290              | PSI |