

15-087-20010



15-10s-19E

INC.

P. O. Box 1599

Wichita, Kansas 67201

Company Petroleum Energy, Inc. Lease & Well No. Hird #1  
 Elevation 1030 Ground Level Formation Kansas City Effective Pay - Ft. Ticket No. 25156  
 Date 9-10-76 Sec. 15 Twp. 10S Range 19E County Jefferson State Kansas  
 Test Approved by Earl Brandt Western Representative Norman Allen

Formation Test No. 1 O.K.  Misrun  Interval Tested From 563' to 592' Total Depth 592'  
 Size Main Hole 6 1/4 Rat Hole  Conv.  B.T.  Damaged  Yes  No Conv.  B.T.  Damaged  Yes  No  
 Top Packer Depth - Ft. Size - Bottom Packer Depth 563 Ft. Size 5 1/2  
 Straddle  Conv.  B.T.  Damaged  Yes  No Packer Depth - Ft. Size -

Tool Size 4 1/2 OD Tool Joint Size 3 1/2 IF Anchor Length 29 Ft. Size 4 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 585 Ft. Clock No. 9103 Depth 588 Ft. Clock No. 6859  
 Top Make Kuster Cap. 4200 No. 1558 <sup>Inside</sup> ~~Outside~~ Bottom Make Kuster Cap. 3150 No. 1564 <sup>Inside</sup> ~~Outside~~  
 Below Straddle: Depth - Rec. No. - Clock No. - <sup>Inside</sup> ~~Outside~~ Depth - Ft. Rec. No. - Clock No. - <sup>Inside</sup> ~~Outside~~

Time Set Packer 11:25 P.M.  
 Tool Open I.F.P. From 11:30 P.M. to 12:00 A.M. - Hr. 30 Min. From (B) 23 P.S.I. To (C) 23 P.S.I.  
 Tool Closed I.C.I.P. From 12:00 A.M. to 12:30 A.M. - Hr. 30 Min (D) 54 P.S.I.  
 Tool Open F.F.P. From 12:30 A.M. to 1:00 A.M. - Hr. 30 Min. From (E) - P.S.I. To (F) - P.S.I.  
 Tool Closed F.C.I.P. From 1:00 A.M. to 1:30 A.M. - Hr. 30 Min. (G) - P.S.I.  
 Initial Hydrostatic Pressure (A) 267 P.S.I. Final Hydrostatic Pressure (H) 263 P.S.I. Maximum Temp. 76

INFORMATION

BLOW Weak, steady blow for 20 minutes. Flushed tool after ICIP, packer seat lost some mud.

Did Well Flow - Yes  No  Recovery Total Ft. 90' drilling mud.

Reversed Out - Yes  No  Mud Type gel Viscosity 40 Weight 9.4 Water Loss - cc. Chlorides -

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint - Jars: Size - In. Make - Ser. No. -

Dual Packer NO Did Packers Hold? Yes Did Tool Plug? No Where? -

DRILLING CONTRACTOR B & N Drlg. Co. Length Drill Pipe? 440 Ft. I.D. Drill Pipe 2.7 In. Tool Joint Size 3 1/2 IF In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 115 Ft. I.D. Drill Collars 2 In.

Tool Joint Size 3 1/2 IF In. Length D.S.T. Tool 44 Ft.

Remarks: Miles from Augusta to Rig - 175 miles. Mileage charge 125 miles @ 60¢ per mile = \$75.00

Packer seat lost small amount of mud after flushing tool on FFP & FCIP.

**WESTERN TESTING CO., INC.**

**Pressure Data**

Date 9-10-76

Test Ticket No. 25156

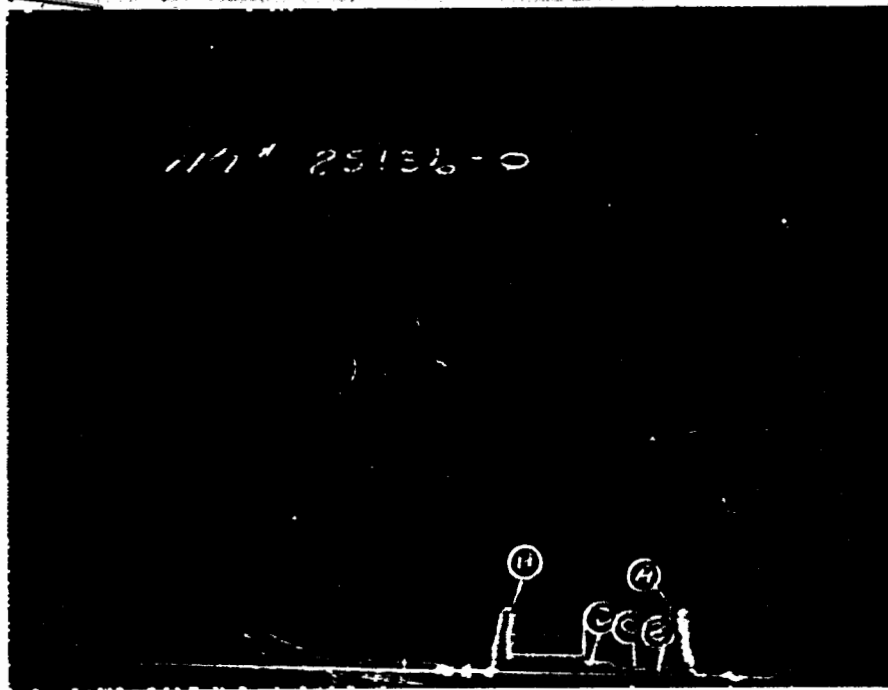
Recorder No. 1564 Capacity 3150 Location 588 Ft.

Clock No. 6859 Elevation 1030 Ground Level Well Temperature 76 °F

| Point                          | Pressure          |                            | Time Given       | Time Computed   |
|--------------------------------|-------------------|----------------------------|------------------|-----------------|
| A Initial Hydrostatic Mud      | <u>267</u> P.S.I. | Open Tool                  | <u>11:25 P M</u> |                 |
| B First Initial Flow Pressure  | <u>23</u> P.S.I.  | First Flow Pressure        | <u>30</u> Mins   | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>23</u> P.S.I.  | Initial Closed-in Pressure | <u>30</u> Mins   | <u>30</u> Mins. |
| D Initial Closed-in Pressure   | <u>54</u> P.S.I.  | Second Flow Pressure       | <u>30</u> Mins   | <u>-</u> Mins.  |
| E Second Initial Flow Pressure | <u>-</u> P.S.I.   | Final Closed-in Pressure   | <u>30</u> Mins   | <u>-</u> Mins.  |
| F Second Final Flow Pressure   | <u>-</u> P.S.I.   |                            |                  |                 |
| G Final Closed-in Pressure     | <u>-</u> P.S.I.   |                            |                  |                 |
| H Final Hydrostatic Mud        | <u>263</u> P.S.I. |                            |                  |                 |

**PRESSURE BREAKDOWN**

| First Flow Pressure<br>Breakdown: <u>6</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |           | Initial Shut-In<br>Breakdown: <u>10</u> Inc.<br>of <u>3</u> mins. and a<br>final inc. of <u>0</u> Min. |           | Second Flow Pressure<br>Breakdown: <u>-</u> Inc.<br>of <u>5</u> mins. and a<br>final inc. of <u>0</u> Min. |        | Final Shut-In<br>Breakdown: <u>-</u> Inc.<br>of <u>3</u> mins. and a<br>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>23</u> | <u>0</u>   | <u>23</u> |  |        |   |        |
| P 2 <u>5</u>  | <u>23</u> | <u>3</u>   | <u>31</u> |  |        |   |        |
| P 3 <u>10</u>   | <u>23</u> | <u>6</u>   | <u>37</u> |  |        |   |        |
| P 4 <u>15</u>   | <u>23</u> | <u>9</u>   | <u>44</u> |  |        |   |        |
| P 5 <u>20</u>   | <u>23</u> | <u>12</u>  | <u>49</u> |  |        |   |        |
| P 6 <u>25</u>   | <u>23</u> | <u>15</u>  | <u>50</u> |  |        |   |        |
| P 7 <u>30</u>   | <u>23</u> | <u>18</u>  | <u>51</u> |  |        |   |        |
| P 8   |           | <u>21</u>  | <u>52</u> |  |        |   |        |
| P 9   |           | <u>24</u>  | <u>53</u> |  |        |   |        |
| P10   |           | <u>27</u>  | <u>54</u> |  |        |   |        |
| P11   |           | <u>30</u>  | <u>54</u> |  |        |   |        |
| P12   |           |  |           |  |        |   |        |
| P13   |           |  |           |  |        |   |        |
| P14   |           |  |           |  |        |   |        |
| P15   |           |  |           |  |        |   |        |
| P16   |           |  |           |  |        |   |        |
| P17   |           |  |           |  |        |   |        |
| P18   |           |  |           |  |        |   |        |
| P19   |           |  |           |  |        |   |        |
| P20   |           |  |           |  |        |   |        |



This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE      |                |     |
|--|---------------|----------------|-----|
|  | Field Reading | Office Reading |     |
| (A) Initial Hydrostatic Mud .....      | 265           | 267            | PSI |
| (B) First Initial Flow Pressure .....  | 23            | 23             | PSI |
| (C) First Final Flow Pressure .....    | 23            | 23             | PSI |
| (D) Initial Closed-in Pressure .....   | 46            | 54             | PSI |
| (E) Second Initial Flow Pressure ..... | 70            | -              | PSI |
| (F) Second Final Flow Pressure .....   | 70            | -              | PSI |
| (G) Final Closed-in Pressure .....     | 70            | -              | PSI |
| (H) Final Hydrostatic Mud .....        | 265           | 263            | PSI |



INC.

P. O. Box 1599  
Wichita, Kansas 67201

Company Petroleum Energy, Inc. Lease & Well No. Hird #1  
Elevation 1030 Ground Level Formation Cherokee Sand Effective Pay - Ft. Ticket No. 25157  
Date 9-11-76 Sec. 15 Twp. 10S Range 19E County Jefferson State Kansas  
Test Approved by Edd Jackson Western Representative Norman Allen

Formation Test No. 2 OK  Misrun  Interval Tested From 1395' to 1420' Total Depth 1420'  
Size Main Hole 6 1/2 Rat Hole  Conv.  B.T.  Damaged  Yes  No Conv.  B.T.  Damaged  Yes  No  
Top Packer Depth - Ft. Size - Bottom Packer Depth 1395 Ft. Size 5 1/2  
Straddle  Conv.  B.T.  Damaged  Yes  No Packer Depth - Ft. Size -

Tool Size 4 1/2 OD Tool Joint Size 3 1/2 IF Anchor Length 25 Ft. Size 4 1/2 OD Surface Choke Size 3/4 In. Bottom Choke Size 3/4 In.

RECORDERS Depth 1413 Ft. Clock No. 9103 Depth 1416 Ft. Clock No. 6859  
Top Make Kuster Cap. 4200 No. 1558 Inside Bottom Make Kuster Cap. 3150 No. 1564 Outside  
Below Straddle: Depth - Rec. No. - Clock No. - Inside Depth - Ft. Rec. No. - Clock No. - Outside

Time Set Packer 10:27 P M  
Tool Open I.F.P. From 10:30 P M. to 11:00 P M. - Hr. 30 Min. From (B) 11 P.S.I. To (C) 11 P.S.I.  
Tool Closed I.C.I.P. From 11:00 M. to 11:30 P M. = Hr. 30 Min (D) 268 P.S.I.  
Tool Open F.F.P. From 11:30 P M. to 12:00 A M. - Hr. 30 Min. From (E) 32 P.S.I. To (F) 19 P.S.I.  
Tool Closed F.C.I.P. From 12:00 M. to 12:30 A M. - Hr. 30 Min. (G) 666 P.S.I.  
Initial Hydrostatic Pressure (A) 681 P.S.I. Final Hydrostatic Pressure (H) 680 P.S.I. Maximum Temp. 86

INFORMATION

BLOW Weak blow throughout test.

Did Well Flow - Yes  No  Recovery Total Ft. 10' drilling mud.

Reversed Out - Yes  No  Mud Type chem Viscosity 40 Weight 9.2 Water Loss 12.8 cc. Chlorides 800 P.P.M.

EXTRA EQUIPMENT: Type Circ. Sub. Pin Safety Joint  Jars: Size - In. Make - Ser. No. -

Dual Packer NO Did Packers Hold? Yes Did Tool Plug? NO Where? -

DRILLING CONTRACTOR B & N Drlg. Co. #12 Length Drill Pipe? 1265 Ft. I.D. Drill Pipe 2.7 In. Tool Joint Size 3 1/2 IF In.

Length Weight Pipe - Ft. I.D. Weight Pipe - In. Tool Joint Size - In. Length Drill Collars 115 Ft. I.D. Drill Collars 2 In.

Tool Joint Size 3 1/2 IF In. Length D.S.T. Tool 40 Ft.

Remarks: Mileage from Augusta to Rig 175 miles. Mileage charge 125 miles @ 60¢ per mile = &75.00.  
Had difficulty rotating pipe to shut tool in on FCIP. (damaged packer rubber) pulling tool loose to come out of hole.

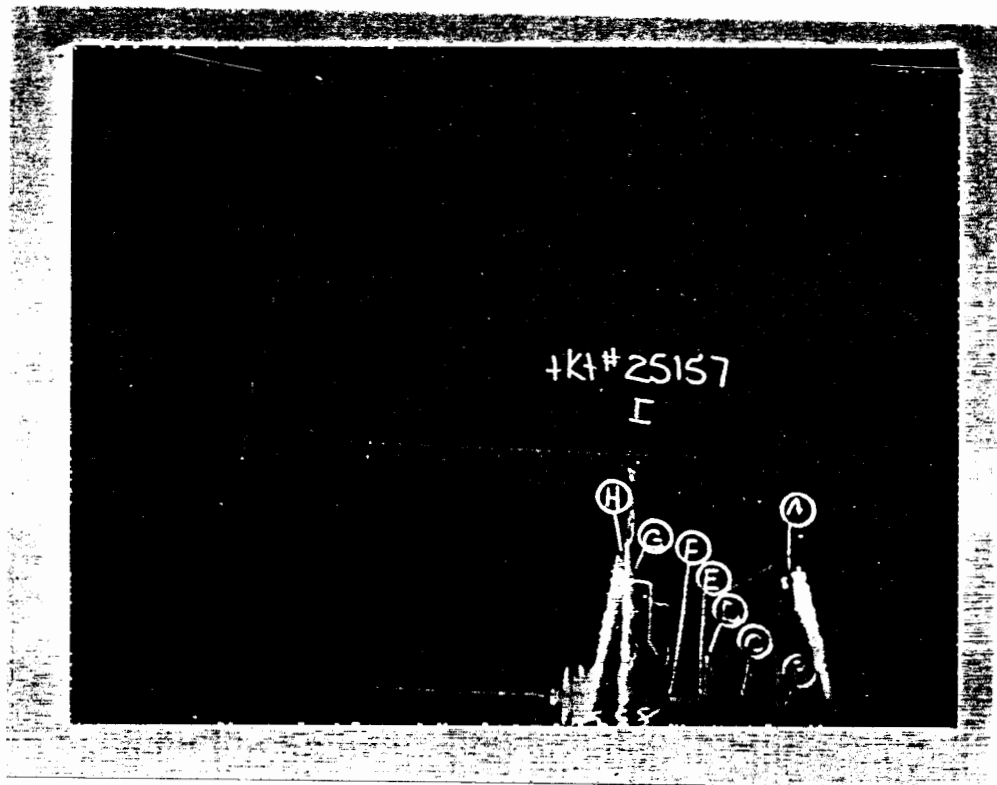
**WESTERN TESTING CO., INC.**  
**Pressure Data**

Date 9-11-76 Test Ticket No. 25157  
 Recorder No. 1558 Capacity 4200 Location 1413 Ft.  
 Clock No. 9103 Elevation 1030 Ground Level Well Temperature 86 °F

| Point                          | Pressure          |                            | Time Given       | Time Computed   |
|--------------------------------|-------------------|----------------------------|------------------|-----------------|
| A Initial Hydrostatic Mud      | <u>681</u> P.S.I. | Open Tool                  | <u>10:27</u> P M |                 |
| B First Initial Flow Pressure  | <u>11</u> P.S.I.  | First Flow Pressure        | <u>30</u> Mins.  | <u>30</u> Mins. |
| C First Final Flow Pressure    | <u>11</u> P.S.I.  | Initial Closed-in Pressure | <u>30</u> Mins.  | <u>27</u> Mins. |
| D Initial Closed-in Pressure   | <u>268</u> P.S.I. | Second Flow Pressure       | <u>30</u> Mins.  | <u>30</u> Mins. |
| E Second Initial Flow Pressure | <u>32</u> P.S.I.  | Final Closed-in Pressure   | <u>30</u> Mins.  | <u>27</u> Mins. |
| F Second Final Flow Pressure   | <u>19</u> P.S.I.  |                            |                  |                 |
| G Final Closed-in Pressure     | <u>666</u> P.S.I. |                            |                  |                 |
| H Final Hydrostatic Mud        | <u>680</u> P.S.I. |                            |                  |                 |

**PRESSURE BREAKDOWN**

| First Flow Pressure         |           | Initial Shut-In             |            | Second Flow Pressure        |           | Final Shut-In               |            |
|-----------------------------|-----------|-----------------------------|------------|-----------------------------|-----------|-----------------------------|------------|
| Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>9</u> Inc.    |            | Breakdown: <u>6</u> Inc.    |           | Breakdown: <u>10</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>11</u> | <u>0</u>                    | <u>11</u>  | <u>0</u>                    | <u>32</u> | <u>0</u>                    | <u>19</u>  |
| P 2 <u>5</u>                | <u>11</u> | <u>3</u>                    | <u>11</u>  | <u>5</u>                    | <u>19</u> | <u>3</u>                    | <u>202</u> |
| P 3 <u>10</u>               | <u>11</u> | <u>6</u>                    | <u>11</u>  | <u>10</u>                   | <u>19</u> | <u>6</u>                    | <u>217</u> |
| P 4 <u>15</u>               | <u>11</u> | <u>9</u>                    | <u>15</u>  | <u>15</u>                   | <u>19</u> | <u>9</u>                    | <u>262</u> |
| P 5 <u>20</u>               | <u>11</u> | <u>12</u>                   | <u>25</u>  | <u>20</u>                   | <u>19</u> | <u>12</u>                   | <u>295</u> |
| P 6 <u>25</u>               | <u>11</u> | <u>15</u>                   | <u>46</u>  | <u>25</u>                   | <u>19</u> | <u>15</u>                   | <u>329</u> |
| P 7 <u>30</u>               | <u>11</u> | <u>18</u>                   | <u>89</u>  | <u>30</u>                   | <u>19</u> | <u>18</u>                   | <u>660</u> |
| P 8                         |           | <u>21</u>                   | <u>148</u> |                             |           | <u>21</u>                   | <u>664</u> |
| P 9                         |           | <u>24</u>                   | <u>211</u> |                             |           | <u>24</u>                   | <u>666</u> |
| P10                         |           | <u>27</u>                   | <u>268</u> |                             |           | <u>27</u>                   | <u>666</u> |
| P11                         |           |                             |            |                             |           | <u>30</u>                   | <u>666</u> |
| P12                         |           |                             |            |                             |           |                             |            |
| P13                         |           |                             |            |                             |           |                             |            |
| P14                         |           |                             |            |                             |           |                             |            |
| P15                         |           |                             |            |                             |           |                             |            |
| P16                         |           |                             |            |                             |           |                             |            |
| P17                         |           |                             |            |                             |           |                             |            |
| P18                         |           |                             |            |                             |           |                             |            |
| P19                         |           |                             |            |                             |           |                             |            |
| P20                         |           |                             |            |                             |           |                             |            |



This is an actual photograph of recorder chart.

| POINT                                  | PRESSURE      |                |     |
|--|---------------|----------------|-----|
|  | Field Reading | Office Reading |     |
| (A) Initial Hydrostatic Mud .....      | 683           | 681            | PSI |
| (B) First Initial Flow Pressure .....  | 10            | 11             | PSI |
| (C) First Final Flow Pressure .....    | 10            | 11             | PSI |
| (D) Initial Closed-in Pressure .....   | 265           | 268            | PSI |
| (E) Second Initial Flow Pressure ..... | 20            | 32             | PSI |
| (F) Second Final Flow Pressure .....   | 20            | 19             | PSI |
| (G) Final Closed-in Pressure .....     | 315           | 666            | PSI |
| (H) Final Hydrostatic Mud .....        | 675           | 680            | PSI |