



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No

219

P. O. BOX 1599 PHONE (316) 838-0601 WICHITA, KANSAS 67201

Elevation 1337 N.B Formation Miss. Eff. Pay Ft.

District Augusta Date 5-11-78 Customer Order No.

COMPANY NAME Season Energy Operation

ADDRESS 505 Insurance Building - Wichita, Kans. 67202

LEASE AND WELL NO. Lewis #2 COUNTY Cowley STATE Kans. Sec. 2 Twp 315 Rge 5E

Mail Invoice To same Co. Name Address No. Copies Requested 1

Mail Charts To same Address No. Copies Requested 5

Formation Test No. 1 Interval Tested from 3010 ft. to 3040 ft. Total Depth 3040 ft.

Packer Depth 3005 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Packer Depth 3010 ft. Size 6 3/4 in. Packer Depth ft. Size in.

Depth of Selective Zone Set

Top Recorder Depth (Inside) 3033 ft. Recorder Number 1559 Cap. 4200

Bottom Recorder Depth (Outside) 3036 ft. Recorder Number 1558 Cap. 4200

Below Straddle Recorder Depth ft. Recorder Number Cap.

Drilling Contractor Dumban #2 Drill Collar Length 144 I. D. 2 1/4 in.

Mud Type Chem Viscosity 42 Weight Pipe Length I. D. in.

Weight 9.4 Water Loss 14.6 cc. Drill Pipe Length 2847 I. D. 3.8 in.

Chlorides 1500 P.P.M. Test Tool Size 5 1/2 in. Tool Joint Size 4 1/2 J.N. in.

Jars: Make Serial Number Anchor Length 30 ft. Size 5 1/2 in. 3

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

Main Hole Size 7 3/8 in.

Blow: Very weak increasing to weak on 14-P. increasing to strong throughout F.F.P.

Recovered 502 ft. of Oil & Gas cut Only mud 5% oil 95% mud

Recovered 496 ft. of Heavily gas & oil cut mud 5% 95% mud

Recovered 124 ft. of Heavily gas & oil cut mud 9% 91% mud

Recovered 124 ft. of Heavily gas & oil cut mud 10% 90% mud

Recovered 1246 ft. of Total Fluid

Remarks: Hole in Drill Pipe 8th wt stand pulled

Time Set Packer(s) 10:32 AM Time Started Off Bottom 1:05 PM Maximum Temperature 119

Initial Hydrostatic Pressure (A) 1556 155 P.S.I.

Initial Flow Period Minutes 30 (B) 428 410 P.S.I. to (C) 428 411 P.S.I.

Initial Closed In Period Minutes 30 (D) 1022 1002 P.S.I.

Final Flow Period Minutes 60 (E) 449 439 P.S.I. to (F) 460 443 P.S.I.

Final Closed In Period Minutes 30 (G) 960 945 P.S.I.

Final Hydrostatic Pressure (H) 1525 1515 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By George Thomas Signature of Customer or his authorized representative

Western Representative Jim Wilson

on location 6:40 p.m. Job Complete 4:00 p.m.

FIELD INVOICE

Table with 2 columns: Item Name and Amount. Items include Open Hole Test, Misrun, Straddle Test, Jars, Selective Zone, Safety Joint, Standby, Evaluation, Extra Packer, Circ. Sub., Mileage, Extra Charts.

TOTAL \$ 2000

WESTERN TESTING CO., INC.

Pressure Data

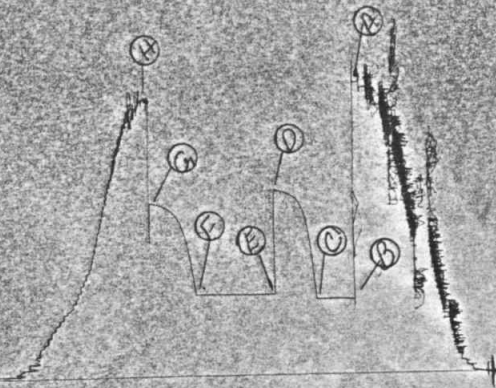
Date 5-11-78 Test Ticket No. 219
 Order No. 1559 Capacity 4200 Location 3033 Ft.
 Block No. Elevation 1327 K.B. Well Temperature 119 °F

| Point | Pressure | Open Tool | Time Given | Time Computed |
|------------------------------|--------------------|----------------------------|-------------------|-----------------|
| Initial Hydrostatic Mud | <u>1551</u> P.S.I. | | <u>10:32 A.M.</u> | |
| First Initial Flow Pressure | <u>410</u> P.S.I. | First Flow Pressure | <u>30</u> Mins. | <u>30</u> Mins. |
| First Final Flow Pressure | <u>411</u> P.S.I. | Initial Closed-in Pressure | <u>30</u> Mins. | <u>30</u> Mins. |
| Initial Closed-in Pressure | <u>1002</u> P.S.I. | Second Flow Pressure | <u>60</u> Mins. | <u>60</u> Mins. |
| Second Initial Flow Pressure | <u>439</u> P.S.I. | Final Closed-in Pressure | <u>30</u> Mins. | <u>33</u> Mins. |
| Second Final Flow Pressure | <u>443</u> P.S.I. | | | |
| Final Closed-in Pressure | <u>945</u> P.S.I. | | | |
| Final Hydrostatic Mud | <u>1515</u> P.S.I. | | | |

PRESSURE BREAKDOWN

| Point (ins.) | First Flow Pressure Breakdown | Initial Shut-In Breakdown | Second Flow Pressure Breakdown | Final Shut-In Breakdown |
|--------------|---|--|--|--|
| 0 | <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. | <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. | <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. | <u>11</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. |
| 0 | Press. <u>410</u> | Point Minutes <u>0</u> Press. <u>411</u> | Point Minutes <u>0</u> Press. <u>439</u> | Point Minutes <u>0</u> Press. <u>443</u> |
| 5 | Press. <u>411</u> | Point Minutes <u>3</u> Press. <u>629</u> | Point Minutes <u>5</u> Press. <u>439</u> | Point Minutes <u>3</u> Press. <u>612</u> |
| 10 | Press. <u>411</u> | Point Minutes <u>6</u> Press. <u>791</u> | Point Minutes <u>10</u> Press. <u>439</u> | Point Minutes <u>6</u> Press. <u>731</u> |
| 15 | Press. <u>411</u> | Point Minutes <u>9</u> Press. <u>880</u> | Point Minutes <u>15</u> Press. <u>439</u> | Point Minutes <u>9</u> Press. <u>802</u> |
| 20 | Press. <u>411</u> | Point Minutes <u>12</u> Press. <u>927</u> | Point Minutes <u>20</u> Press. <u>439</u> | Point Minutes <u>12</u> Press. <u>852</u> |
| 25 | Press. <u>411</u> | Point Minutes <u>15</u> Press. <u>954</u> | Point Minutes <u>25</u> Press. <u>439</u> | Point Minutes <u>15</u> Press. <u>884</u> |
| 30 | Press. <u>411</u> | Point Minutes <u>18</u> Press. <u>974</u> | Point Minutes <u>30</u> Press. <u>439</u> | Point Minutes <u>18</u> Press. <u>904</u> |
| 35 | Press. <u>411</u> | Point Minutes <u>21</u> Press. <u>985</u> | Point Minutes <u>35</u> Press. <u>441</u> | Point Minutes <u>21</u> Press. <u>918</u> |
| 40 | Press. <u>411</u> | Point Minutes <u>24</u> Press. <u>994</u> | Point Minutes <u>40</u> Press. <u>441</u> | Point Minutes <u>24</u> Press. <u>929</u> |
| 45 | Press. <u>411</u> | Point Minutes <u>27</u> Press. <u>998</u> | Point Minutes <u>45</u> Press. <u>442</u> | Point Minutes <u>27</u> Press. <u>936</u> |
| 50 | Press. <u>411</u> | Point Minutes <u>30</u> Press. <u>1002</u> | Point Minutes <u>50</u> Press. <u>443</u> | Point Minutes <u>30</u> Press. <u>941</u> |
| 55 | Press. <u>411</u> | Point Minutes <u>33</u> Press. <u>945</u> | Point Minutes <u>55</u> Press. <u>443</u> | Point Minutes <u>33</u> Press. <u>945</u> |
| 60 | Press. <u>411</u> | Point Minutes <u>36</u> Press. <u>945</u> | Point Minutes <u>60</u> Press. <u>443</u> | Point Minutes <u>36</u> Press. <u>945</u> |
| 65 | Press. <u>411</u> | Point Minutes <u>39</u> Press. <u>945</u> | Point Minutes <u>65</u> Press. <u>443</u> | Point Minutes <u>39</u> Press. <u>945</u> |
| 70 | Press. <u>411</u> | Point Minutes <u>42</u> Press. <u>945</u> | Point Minutes <u>70</u> Press. <u>443</u> | Point Minutes <u>42</u> Press. <u>945</u> |
| 75 | Press. <u>411</u> | Point Minutes <u>45</u> Press. <u>945</u> | Point Minutes <u>75</u> Press. <u>443</u> | Point Minutes <u>45</u> Press. <u>945</u> |
| 80 | Press. <u>411</u> | Point Minutes <u>48</u> Press. <u>945</u> | Point Minutes <u>80</u> Press. <u>443</u> | Point Minutes <u>48</u> Press. <u>945</u> |
| 85 | Press. <u>411</u> | Point Minutes <u>51</u> Press. <u>945</u> | Point Minutes <u>85</u> Press. <u>443</u> | Point Minutes <u>51</u> Press. <u>945</u> |
| 90 | Press. <u>411</u> | Point Minutes <u>54</u> Press. <u>945</u> | Point Minutes <u>90</u> Press. <u>443</u> | Point Minutes <u>54</u> Press. <u>945</u> |
| 95 | Press. <u>411</u> | Point Minutes <u>57</u> Press. <u>945</u> | Point Minutes <u>95</u> Press. <u>443</u> | Point Minutes <u>57</u> Press. <u>945</u> |
| 100 | Press. <u>411</u> | Point Minutes <u>60</u> Press. <u>945</u> | Point Minutes <u>100</u> Press. <u>443</u> | Point Minutes <u>60</u> Press. <u>945</u> |

TRF # 219
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P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Company Gevenson Energy Operation Lease & Well No. Lewis #2
Elevation 1337 Kelly Bushing Formation Mississippi Effective Pay ----- Ft. Ticket No. 219
Date 5/11/78 Sec. 2 Twp 31s Range 5e County Cowley State Kansas
Test Approved by George Ewonus Western Representative Tim Wilson

Formation Test No. 1 Interval Tested from 3010' ft. to 3040' ft. Total Depth 3040' ft.
Packer Depth 3005 ft. Size 6 3/4 in. Packer Depth ----- ft. Size ----- in.
Packer Depth 3010 ft. Size 6 3/4 in. Packer Depth ----- ft. Size ----- in.
Depth of Selective Zone Set -----

Top Recorder Depth (Inside) 3033 ft. Recorder Number 1559 Cap. 4200
Bottom Recorder Depth (Outside) 3036 ft. Recorder Number 1558 Cap. 4200
Below Straddle Recorder Depth ----- ft. Recorder Number --- Cap. -----

Drilling Contractor Dunbar #2 Drill Collar Length 144 I. D. 2 1/4 in.
Mud Type chemical Viscosity 42 Weight Pipe Length ----- I. D. --- in.
Weight 9.4 Water Loss 14.6 cc. Drill Pipe Length 2847 I. D. 3.8 in.
Chlorides 1,500 P.P.M. Test Tool Size 5 1/2 in. Tool Joint Size 4 1/2 FH in.
Jars: Make ----- Serial Number ----- Anchor Length 30 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.

Blow: Very weak increasing to weak on initial flow period. Increasing to strong throughout final flow period.

Recovered 502 ft. of oil and gas cut drilling mud 5% oil 95% mud
Recovered 496 ft. of heavily gas salt cut mud 5% 95% mud
Recovered 124 ft. of heavily gas and oil cut mud 9% 91% mud
Recovered 124 ft. of heavily gas and oil cut mud 10% 90% mud
Recovered 1246 ft. of total fluid.

Remarks: Hole in drill pipe 8th wet stand pulled.

Time Set Packer(s) 10:32 ~~P.M.~~ ^{A.M.} Time Started Off Bottom 1:05 ~~P.M.~~ ^{A.M.} Maximum Temperature 119
Initial Hydrostatic Pressure (A) 1551 P.S.I.
Initial Flow Period Minutes 30 (B) 410 P.S.I. to (C) 411 P.S.I.
Initial Closed In Period Minutes 30 (D) 1002 P.S.I.
Final Flow Period Minutes 60 (E) 439 P.S.I. to (F) 443 P.S.I.
Final Closed In Period Minutes 30 (G) 945 P.S.I.
Final Hydrostatic Pressure (H) 1515 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 5/11/78

Test Ticket No. 219

Recorder No. 1559

Capacity 4200

Location 3033 Ft.

Clock No. -----

Elevation 1337 Kelly Bushing

Well Temperature 119 °F

| Point | Pressure | | Time Given | Time Computed |
|--------------------------------|----------|--------|------------|----------------|
| A Initial Hydrostatic Mud | 1551 | P.S.I. | 10:32A | M |
| B First Initial Flow Pressure | 410 | P.S.I. | 30 | Mins. 30 Mins. |
| C First Final Flow Pressure | 411 | P.S.I. | 30 | Mins. 30 Mins. |
| D Initial Closed-in Pressure | 1002 | P.S.I. | 60 | Mins. 60 Mins. |
| E Second Initial Flow Pressure | 439 | P.S.I. | 30 | Mins. 33 Mins. |
| F Second Final Flow Pressure | 443 | P.S.I. | | |
| G Final Closed-in Pressure | 945 | P.S.I. | | |
| H Final Hydrostatic Mud | 1515 | P.S.I. | | |

PRESSURE BREAKDOWN

| Point Mins. | First Flow Pressure Breakdown: <u>6</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. | | Initial Shut-In Breakdown: <u>10</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. | | Second Flow Pressure Breakdown: <u>12</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. | | Final Shut-In Breakdown: <u>11</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. | |
|-------------|--|---------------|---|---------------|--|---------------|---|---------------|
| | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes |
| P 1 | 410 | 0 | 411 | 0 | 439 | 0 | 443 | 0 |
| P 2 | 411 | 3 | 629 | 3 | 439 | 3 | 612 | 3 |
| P 3 | 411 | 6 | 791 | 6 | 439 | 6 | 731 | 6 |
| P 4 | 411 | 9 | 880 | 9 | 439 | 9 | 802 | 9 |
| P 5 | 411 | 12 | 927 | 12 | 439 | 12 | 852 | 12 |
| P 6 | 411 | 15 | 956 | 15 | 439 | 15 | 884 | 15 |
| P 7 | 411 | 18 | 974 | 18 | 439 | 18 | 904 | 18 |
| P 8 | | 21 | 985 | 21 | 441 | 21 | 918 | 21 |
| P 9 | | 24 | 994 | 24 | 441 | 24 | 929 | 24 |
| P10 | | 27 | 998 | 27 | 442 | 27 | 936 | 27 |
| P11 | | 30 | 1002 | 30 | 442 | 30 | 941 | 30 |
| P12 | | | | | 442 | 33 | 945 | 33 |
| P13 | | | | | 443 | | | |
| P14 | | | | | | | | |
| P15 | | | | | | | | |
| P16 | | | | | | | | |
| P17 | | | | | | | | |
| P18 | | | | | | | | |
| P19 | | | | | | | | |
| P20 | | | | | | | | |



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET

NO

2588

P. O. BOX 1599 WICHITA, KANSAS 67201 PHONE (316) 838-0601

Elevation _____ Formation Dayton Eff. Pay _____ Ft.

District Augusta Date 5-24-79 Customer Order No. _____

COMPANY NAME Martin Oil Co

ADDRESS P.O. Box 36078 Denver Colo

LEASE AND WELL NO. Lewis #2 COUNTY Cowley STATE Ks Sec. 28 Twp 31 Rge 4E

Mail Invoice To Same Co. Name _____ Address _____ No. Copies Requested 1

Mail Charts To Same Address _____ No. Copies Requested 5

Formation Test No. 1 Interval Tested from 2441 ft. to 2452 ft. Total Depth 2452 ft.
Packer Depth 2441 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.
Packer Depth _____ ft. Size _____ in. Packer Depth _____ ft. Size _____ in.
Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 2445 ft. Recorder Number 1564 Cap. 3150
Bottom Recorder Depth (Outside) 2448 ft. Recorder Number 1562 Cap. 3150
Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____

Drilling Contractor Pioneer Drilling Co #1 Drill Collar Length 180 I. D. 2 1/4 in.
Mud Type Chem Viscosity 37 Weight Pipe Length 450 I. D. 2.7 in.
Weight 9.6 Water Loss 15 cc. Drill Pipe Length 1796 I. D. 3.8 in.
Chlorides 1700 P.P.M. Test Tool Length 26 in. Tool Size 4 1/2 00 in.
Jars: Make _____ Serial Number _____ Anchor Length 11 ft. Size 4 1/2 00 in.
Did Well Flow? No Reversed Out? No Surface Choke Size 3/4 in. Bottom Choke Size 3/4 in.
Main Hole Size 7 1/8 in. Tool Joint Size 4 1/2 FH in.

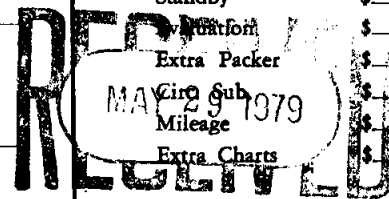
Blow: Break thru test

Recovered 60 ft. of Muddy oil 40% oil - 60% mud
Recovered 50 ft. of Oil cut muddy water 20% oil - 30% mud - 50% water
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Recovered _____ ft. of _____
Remarks: _____

Time Set Packer(s) 8:30 A.M. P.M. Time Started Off Bottom 11:15 A.M. P.M. Maximum Temperature 105
Initial Hydrostatic Pressure _____ (A) 1245 P.S.I.
Initial Flow Period _____ Minutes 120 (B) 30 P.S.I. to (C) 70 P.S.I.
Initial Closed In Period _____ Minutes 45 (D) 850 P.S.I.
Final Flow Period _____ Minutes None (E) Taken P.S.I. to (F) _____ P.S.I.
Final Closed In Period _____ Minutes _____ (G) _____ P.S.I.
Final Hydrostatic Pressure _____ (H) 1245 P.S.I.

COMPANY TERMS
Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.
All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.
Test Approved By Otto Berens (Otto Berens)
Signature of Customer or his authorized representative
Western Representative Norman Allen

FIELD INVOICE
Open Hole Test \$ 440.00
Misrun \$ _____
Straddle Test \$ _____
Jars \$ _____
Selective Zone \$ _____
Safety Joint \$ _____
Standby \$ _____
Extra Packer \$ _____
Mileage \$ _____
Extra Charts \$ _____
TOTAL \$ 440.00



WESTERN TESTING CO., INC.
Pressure Data

Date 5-24-79 Test Ticket No. 2588
 Recorder No. 1564 Capacity 3150 Location 2445 Ft.
 Clock No. _____ Elevation _____ Well Temperature 105 °F

| Point | Pressure | Time Given | Time Computed |
|---------------------------------|------------------------------------|------------------|------------------|
| A. Initial Hydrostatic Mud | <u>1245</u> 1245 P.S.I. | <u>8:30</u> P.M. | |
| B. First Initial Flow Pressure | <u>28</u> P.S.I. | <u>120</u> Mins. | <u>120</u> Mins. |
| C. First Final Flow Pressure | <u>71</u> P.S.I. | <u>45</u> Mins. | <u>45</u> Mins. |
| D. Initial Closed-in Pressure | <u>848</u> P.S.I. | _____ Mins. | _____ Mins. |
| E. Second Initial Flow Pressure | _____ P.S.I. | _____ Mins. | _____ Mins. |
| F. Second Final Flow Pressure | _____ P.S.I. | _____ Mins. | _____ Mins. |
| G. Final Closed-in Pressure | _____ P.S.I. | _____ Mins. | _____ Mins. |
| H. Final Hydrostatic Mud | <u>1234</u> P.S.I. | | |

PRESSURE BREAKDOWN

| | | | |
|---|---|--|---|
| First Flow Pressure Breakdown: <u>24</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. | Initial Shut-In Breakdown: <u>15</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. | Second Flow Pressure Breakdown: _____ Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. | Final Shut-In Breakdown: _____ Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. |
|---|---|--|---|

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|---------------|-----------|---------------|------------|---------------|--------|---------------|--------|
| P 1 0 | <u>28</u> | 0 | <u>71</u> | 0 | | 0 | |
| P 2 5 | <u>33</u> | 3 | <u>76</u> | 5 | | 3 | |
| P 3 10 | <u>43</u> | 6 | <u>91</u> | 10 | | 6 | |
| P 4 15 | <u>68</u> | 9 | <u>116</u> | 15 | | 9 | |
| P 5 20 | <u>53</u> | 12 | <u>163</u> | 20 | | 12 | |
| P 6 25 | <u>50</u> | 15 | <u>229</u> | 25 | | 15 | |
| P 7 30 | <u>48</u> | 18 | <u>321</u> | 30 | | 18 | |
| P 8 35 | <u>48</u> | 21 | <u>427</u> | 35 | | 21 | |
| P 9 40 | <u>48</u> | 24 | <u>528</u> | 40 | | 24 | |
| P10 45 | <u>49</u> | 27 | <u>623</u> | 45 | | 27 | |
| P11 50 | <u>50</u> | 30 | <u>697</u> | 50 | | 30 | |
| P12 55 | <u>53</u> | 33 | <u>748</u> | 55 | | 33 | |
| P13 60 | <u>54</u> | 36 | <u>781</u> | 60 | | 36 | |
| P14 <u>65</u> | <u>55</u> | 39 | <u>806</u> | 65 | | 39 | |
| P15 <u>70</u> | <u>57</u> | 42 | <u>824</u> | 70 | | 42 | |
| P16 <u>75</u> | <u>59</u> | 45 | <u>848</u> | 75 | | 45 | |
| P17 <u>80</u> | <u>60</u> | 48 | | 80 | | 48 | |
| P18 <u>85</u> | <u>62</u> | <u>57</u> | | 85 | | 51 | |
| P19 <u>90</u> | <u>64</u> | <u>54</u> | | 90 | | 54 | |
| P20 <u>95</u> | <u>65</u> | <u>57</u> | | | | 57 | |
| <u>100</u> | <u>67</u> | <u>60</u> | | | | 60 | |

WTC-4

(Cont)

WESTERN TESTING CO., INC.

Pressure Data

Date _____ Test Ticket No. 2588
 Recorder No. _____ Capacity _____ Location _____ Ft.
 Clock No. _____ Elevation _____ Well Temperature _____ °F

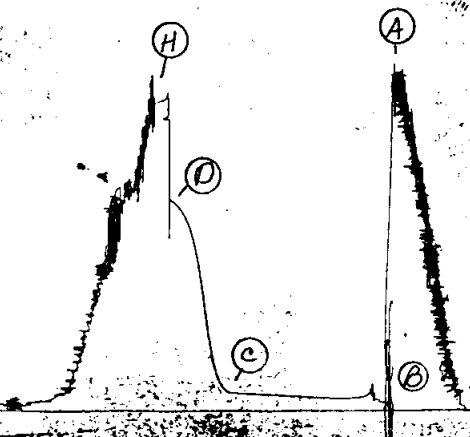
| Point | Pressure | Open Tool | Time Given | Time Computed |
|--------------------------------------|--------------|----------------------------------|-------------|---------------|
| A Initial Hydrostatic Mud _____ | P.S.I. _____ | _____ | M _____ | _____ |
| B First Initial Flow Pressure _____ | P.S.I. _____ | First Flow Pressure _____ | Mins. _____ | Mins. _____ |
| C First Final Flow Pressure _____ | P.S.I. _____ | Initial Closed-in Pressure _____ | Mins. _____ | Mins. _____ |
| D Initial Closed-in Pressure _____ | P.S.I. _____ | Second Flow Pressure _____ | Mins. _____ | Mins. _____ |
| E Second Initial Flow Pressure _____ | P.S.I. _____ | Final Closed-in Pressure _____ | Mins. _____ | Mins. _____ |
| F Second Final Flow Pressure _____ | P.S.I. _____ | | | |
| G Final Closed-in Pressure _____ | P.S.I. _____ | | | |
| H Final Hydrostatic Mud _____ | P.S.I. _____ | | | |

PRESSURE BREAKDOWN

| First Flow Pressure | | Initial Shut-In | | Second Flow Pressure | | Final Shut-In | |
|-----------------------------|----------------------|-----------------------------|---------|-----------------------------|---------|-----------------------------|---------|
| Breakdown: _____ Inc. | | Breakdown: _____ Inc. | | Breakdown: _____ Inc. | | Breakdown: _____ 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. | Point | Minutes | Point | Minutes | Point | Minutes |
| | Press. | | Press. | | Press. | | Press. |
| P 1 | <u>105</u> <u>68</u> | | 63 | | | | 63 |
| P 2 | <u>110</u> <u>69</u> | | 66 | | | | 66 |
| P 3 | <u>115</u> <u>70</u> | | 69 | | | | 69 |
| P 4 | <u>120</u> <u>71</u> | | 72 | | | | 72 |
| P 5 | | | 75 | | | | 75 |
| P 6 | | | 78 | | | | 78 |
| P 7 | | | 81 | | | | 81 |
| P 8 | | | 84 | | | | 84 |
| P 9 | | | 87 | | | | 87 |
| P10 | | | 90 | | | | 90 |
| P11 | | | 93 | | | | 93 |
| P12 | | | 96 | | | | 96 |
| P13 | | | 99 | | | | 99 |
| P14 | | | 102 | | | | 102 |
| P15 | | | 105 | | | | 105 |
| P16 | | | 108 | | | | 108 |
| P17 | | | 111 | | | | 111 |
| P18 | | | 114 | | | | 114 |
| P19 | | | 117 | | | | 117 |
| P20 | | | 120 | | | | 120 |

TKL # 2588
I

1231



Company Martin Oil Company Lease & Well No. Lewis #2
 Elevation -- Formation Layton Effective Pay -- Ft. Ticket No. 2588
 Date 5/24/79 Sec. 28 Twp. 31S Range 4E County Cowley State Kansas
 Test Approved by Otto Berens Western Representative Norman Allen
 Formation Test No. 1 Interval Tested from 2441 ft. to 2452 ft. Total Depth 2452 ft.
 Packer Depth 2441 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set -
 Top Recorder Depth (Inside) 2445 ft. Recorder Number 1564 Cap. 3150
 Bottom Recorder Depth (Outside) 2448 ft. Recorder Number 1562 Cap. 3150
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -
 Drilling Contractor Pioneer Drilling Company #1 Drill Collar Length 180 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 37 Weight Pipe Length 450 I. D. 2.7 in.
 Weight 9.6 Water Loss 15 cc. Drill Pipe Length 1796 I. D. 3.8 in.
 Chlorides 1,700 P.P.M. Test Tool Length 26 ft. Tool Size 4 1/2 OD in.
 Jars: Make -- Serial Number -- Anchor Length 11 ft. Size 4 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 throughout test.

Recovered 60 ft. of muddy oil 40% oil;60% mud
 Recovered 50 ft. of oil cut muddy water 20% oil;30% mud;50% water
 Recovered ft. of
 Recovered ft. of
 Recovered ft. of

Remarks: _____

Time Set Packer(s) 8:30 ~~A.M.~~ P.M. Time Started Off Bottom 11:15 ~~A.M.~~ P.M. Maximum Temperature 105
 Initial Hydrostatic Pressure 1245 (A) 1245 P.S.I.
 Initial Flow Period 120 Minutes (B) 28 P.S.I. to (C) 71 P.S.I.
 Initial Closed In Period 45 Minutes (D) 848 P.S.I.
 Final Flow Period Minutes (E) P.S.I. to (F) P.S.I.
 Final Closed In Period Minutes (G) P.S.I.
 Final Hydrostatic Pressure 1234 (H) 1234 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 5/24/79 Test Ticket No. 2588
 Recorder No. 1564 Capacity 3150 Location 2445 Ft.
 Clock No. -- Elevation -- Well Temperature 105 °F

| Point | Pressure | | Time Given | Time Computed |
|--------------------------------|----------|--------|------------|-----------------|
| A Initial Hydrostatic Mud | 1245 | P.S.I. | 8:30 P | M |
| B First Initial Flow Pressure | 28 | P.S.I. | 120 | Mins. 120 Mins. |
| C First Final Flow Pressure | 71 | P.S.I. | 45 | Mins. 45 Mins. |
| D Initial Closed-in Pressure | 848 | P.S.I. | -- | Mins. -- Mins. |
| E Second Initial Flow Pressure | -- | P.S.I. | -- | Mins. -- Mins. |
| F Second Final Flow Pressure | -- | P.S.I. | | |
| G Final Closed-in Pressure | -- | P.S.I. | | |
| H Final Hydrostatic Mud | 1234 | P.S.I. | | |

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 24 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 15 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 0 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 0 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|-------------|--------|---------------|--------|---------------|--------|---------------|--------|
| P 1 | 0 | 28 | 0 | 71 | | | |
| P 2 | 5 | 33 | 3 | 76 | | | |
| P 3 | 10 | 43 | 6 | 91 | | | |
| P 4 | 15 | 68 | 9 | 116 | | | |
| P 5 | 20 | 53 | 12 | 163 | | | |
| P 6 | 25 | 50 | 15 | 229 | | | |
| P 7 | 30 | 48 | 18 | 321 | | | |
| P 8 | 35 | 48 | 21 | 427 | | | |
| P 9 | 40 | 48 | 24 | 528 | | | |
| P10 | 45 | 49 | 27 | 623 | | | |
| P11 | 50 | 50 | 30 | 697 | | | |
| P12 | 55 | 53 | 33 | 748 | | | |
| P13 | 60 | 54 | 36 | 781 | | | |
| P14 | 65 | 55 | 39 | 806 | | | |
| P15 | 70 | 57 | 42 | 824 | | | |
| P16 | 75 | 59 | 45 | 848 | | | |
| P17 | 80 | 60 | | | | | |
| P18 | 85 | 62 | | | | | |
| P19 | 90 | 64 | | | | | |
| P20 | 95 | 65 | | | | | |

WESTERN TESTING CO., INC.

Pressure Data

Date 5/24/79 Test Ticket No. 2588
 Recorder No. 1564 Capacity 3150 Location 2445 Ft.
 Clock No. -- Elevation -- Well Temperature 105 °F

| Point | Pressure | | Open Tool | Time Given | | Time Computed | |
|--------------------------------|----------|--------|----------------------------|------------|-------|---------------|-------|
| | | P.S.I. | | 8:30 P | M | | |
| A Initial Hydrostatic Mud | 1245 | P.S.I. | | | | | |
| B First Initial Flow Pressure | 28 | P.S.I. | First Flow Pressure | 120 | Mins. | 120 | Mins. |
| C First Final Flow Pressure | 71 | P.S.I. | Initial Closed-in Pressure | 45 | Mins. | 45 | Mins. |
| D Initial Closed-in Pressure | 848 | P.S.I. | Second Flow Pressure | -- | Mins. | -- | Mins. |
| E Second Initial Flow Pressure | -- | P.S.I. | Final Closed-in Pressure | -- | Mins. | -- | Mins. |
| F Second Final Flow Pressure | -- | P.S.I. | | | | | |
| G Final Closed-in Pressure | -- | P.S.I. | | | | | |
| H Final Hydrostatic Mud | 1234 | P.S.I. | | | | | |

PRESSURE BREAKDOWN

| | | | |
|---|---|---|--|
| First Flow Pressure Breakdown: <u>24</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. | Initial Shut-In Breakdown: <u>15</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. | Second Flow Pressure Breakdown: <u>0</u> Inc. of <u>5</u> mins. and a final inc. of <u>0</u> Min. | Final Shut-In Breakdown: <u>0</u> Inc. of <u>3</u> mins. and a final inc. of <u>0</u> Min. |
|---|---|---|--|

| Point Mins. | First Flow Pressure | | Initial Shut-In | | Second Flow Pressure | | Final Shut-In | |
|-------------|---------------------|--------|-----------------|--------|----------------------|--------|---------------|--------|
| | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
| P 1 | 105 | 68 | | | | | | |
| P 2 | 110 | 69 | | | | | | |
| P 3 | 115 | 70 | | | | | | |
| P 4 | 120 | 71 | | | | | | |
| P 5 | | | | | | | | |
| P 6 | | | | | | | | |
| P 7 | | | | | | | | |
| P 8 | | | | | | | | |
| P 9 | | | | | | | | |
| P10 | | | | | | | | |
| P11 | | | | | | | | |
| P12 | | | | | | | | |
| P13 | | | | | | | | |
| P14 | | | | | | | | |
| P15 | | | | | | | | |
| P16 | | | | | | | | |
| P17 | | | | | | | | |
| P18 | | | | | | | | |
| P19 | | | | | | | | |
| P20 | | | | | | | | |



WESTERN TESTING CO., INC.
FORMATION TESTING

TICKET No 2176

P. O. BOX 1599 PHONE (316) 838-0601
WICHITA, KANSAS 67201

Elevation _____ Formation Burlesville Eff. Pay _____ Ft.

District Augusta Date 5/26/79 Customer Order No. _____

COMPANY NAME Martin Oil Co

ADDRESS P.O. Box 36028 Denver Colo

LEASE AND WELL NO. Lewis #2 COUNTY Cowley STATE Ks. Sec. 28 Twp 31 Rge 4E

Mail Invoice To Same Co. Name _____ Address _____ No. Copies Requested 1

Mail Charts To Same Address _____ No. Copies Requested _____

Formation Test No. 2 Interval Tested from 3027 ft. to 3034 ft. Total Depth 3039 ft.

Packer Depth 3027 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth _____ ft. Size _____ in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3033 ft. Recorder Number 3085 Cap. 45'00

Bottom Recorder Depth (Outside) 3036 ft. Recorder Number 1561 Cap. 3200

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

Drilling Contractor Francis DKL Co #1 Drill Collar Length 180 I. D. 2 1/4 in.

Mud Type Chem Viscosity 36 Weight Pipe Length 450 I. D. 2.7 in.

Weight 10.2 Water Loss 128 cc. Drill Pipe Length 2384 I. D. _____ in.

Chlorides 2600 P.P.M. Test Tool Length 27 in. Tool Size 5 1/2 in.

Jars: Make _____ Serial Number _____ Anchor Length 12' ft. Size 5 1/2 in.

Did Well Flow? NO Reversed Out Yes Surface Choke Size _____ in. Bottom Choke Size 3/4 in.

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

Blow: _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of Packer Failure when opening tool

Recovered _____ ft. of _____

Remarks: _____

Time Set Packer(s) 5:00 AM Time Started Off Bottom _____ AM Maximum Temperature _____

Initial Hydrostatic Pressure _____ (A) _____ P.S.I.

Initial Flow Period _____ Minutes (B) _____ P.S.I. to (C) _____ P.S.I.

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

Final Flow Period _____ Minutes (E) _____ P.S.I. to (F) _____ P.S.I.

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

Final Hydrostatic Pressure _____ (H) _____ P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss, suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By Neal Stephens
Signature of Customer or his authorized representative

Western Representative James Rogers

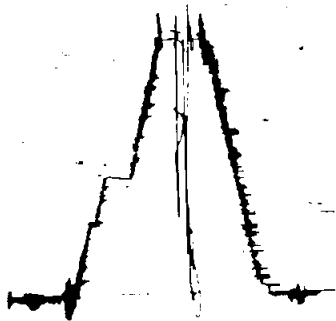
RECEIVED
MAY 29 1979

FIELD INVOICE

| | | |
|----------------|----|---------------|
| Open Hole Test | \$ | |
| Misrun | \$ | <u>225.00</u> |
| Straddle Test | \$ | |
| Jars | \$ | |
| Selective Zone | \$ | |
| Safety Joint | \$ | |
| Standby | \$ | |
| Evaluation | \$ | |
| Extra Packer | \$ | |
| Exc. Sub. | \$ | <u>25.00</u> |
| Mileage | \$ | |
| Extra Charts | \$ | |
| TOTAL | \$ | <u>250.00</u> |

PKL # 2176
I

3085





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

Company Martin Oil Company Lease & Well No. Lewis #2
Location -- Formation Bartlesville Effective Pay -- Ft. Ticket No. 2176
Date 5/26/79 Sec. 28 Twp. 31S Range 4E County Cowley State Kansas
Test Approved by Neal Letwich Western Representative James Rogers

Formation Test No. 2 Interval Tested from 3027 ft. to 3039 ft. Total Depth 3039 ft.
Packer Depth 3027 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
Packer Depth - ft. Size - in. Packer Depth - ft. Size - in.

Depth of Selective Zone Set -
Top Recorder Depth (Inside) 3033 ft. Recorder Number 3085 Cap. 4500
Bottom Recorder Depth (Outside) 3036 ft. Recorder Number 1561 Cap. 3200
Low Straddle Recorder Depth - ft. Recorder Number - Cap. -
Drilling Contractor Pioneer Drilling Co. #1 Drill Collar Length 180 I. D. 2 1/4 in.
Fluid Type chemical Viscosity 36 Weight Pipe Length 450 I. D. 2.7 in.
Weight 10.2 Water Loss 12.8 cc. Drill Pipe Length 2384 I. D. - in.
Solids 2,600 P.P.M. Test Tool Length 27 ft. Tool Size 5 1/2 OD in.
Make - Serial Number - Anchor Length 12 ft. Size 5 1/2 OD in.
Did Well Flow? No Reversed Out Yes 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.

Flow: _____
_____ covered _____ ft. of _____
_____ covered _____ ft. of _____
_____ covered _____ ft. of _____
_____ covered _____ ft. of **PACKER FAILURE WHEN OPENING TOOL** **MISRUN**
_____ covered _____ ft. of _____
Remarks: _____

Time Set Packer(s) 5:00 ~~A.M.~~ P.M. Time Started Off Bottom _____ A.M. P.M. Maximum Temperature _____
Initial Hydrostatic Pressure _____ (A) _____ P.S.I.
Initial Flow Period _____ Minutes (B) _____ P.S.I. to (C) _____ P.S.I.
Initial Closed In Period _____ Minutes (D) _____ P.S.I.
Normal Flow Period _____ Minutes (E) _____ P.S.I. to (F) _____ P.S.I.
Normal Closed In Period _____ Minutes (G) _____ P.S.I.
Final Hydrostatic Pressure _____ (H) _____ P.S.I.



WESTERN TESTING CO., INC.

FORMATION TESTING

TICKET No. 2177

P. O. BOX 1599 PHONE (316) 838-0601 WICHITA, KANSAS 67201

Elevation _____ Formation Bartlesville Est. Pay _____ Ft.

District Augusta Date 5/26/79 Customer Order No. _____

COMPANY NAME Martin Oil Co

ADDRESS P.O. Box 3628 Denver Colo.

LEASE AND WELL NO. Lewis #2 COUNTY Cowley STATE Ks Sec. 28 Twp 31 Rge. 48

Mail Invoice To Same Co. Name _____ Address _____ No. Copies Requested _____

Mail Charts To Same Co. Name _____ Address _____ No. Copies Requested _____

Formation Test No. 3 Interval Tested from 3023 ft. to 3039 ft. Total Depth 3039 ft.

Packer Depth 3078 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Packer Depth 3023 ft. Size 6 3/4 in. Packer Depth _____ ft. Size _____ in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 3033 ft. Recorder Number 3085 Cap. 4500

Bottom Recorder Depth (Outside) 3036 ft. Recorder Number 1561 Cap. 3200

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

Drilling Contractor Protek Oil Co Drill Collar Length 180' I. D. 2 1/2 in.

Mud Type Chem Viscosity 36 Weight Pipe Length 450' I. D. 2.7 in.

Weight 10.2 Water Loss 12.8 cc. Drill Pipe Length 2373 I. D. 2.8 in.

Chlorides 2000 P.P.M. Test Tool Length 36' in. Tool Size 5 1/2 OD in.

Jars: Make _____ Serial Number _____ Anchor Length 14' ft. Size 5 1/2 OD in.

Did Well Flow? No Reversed Out _____ 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 increasing to Fair. Blow through out test

Recovered 720' ft. of Gas in Pipe

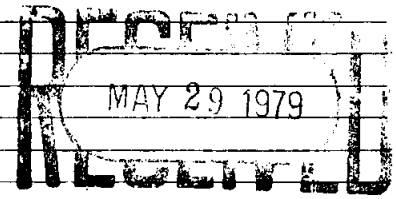
Recovered _____ ft. of _____

Recovered 65' ft. of Heavy Oil Cut Mud.

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____



Time Set Packer(s) 8:45 AM Time Started Off Bottom 11:30 AM Maximum Temperature 118

Initial Hydrostatic Pressure _____ (A) 1580 P.S.I.

Initial Flow Period _____ Minutes 120 (B) 11 P.S.I. to (C) 23 P.S.I.

Initial Closed In Period _____ Minutes 45 (D) 909 P.S.I.

Final Flow Period _____ Minutes _____ (E) _____ P.S.I. to (F) _____ P.S.I.

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

Final Hydrostatic Pressure _____ (H) 1575 P.S.I.

COMPANY TERMS

Western Testing Co., Inc. shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained directly or indirectly through the use of its equipment, of its statements or opinion concerning the results of any test. Tools lost or damaged in the hole shall be paid at cost by the party for whom the test is made.

All charges subject to 12% interest after 60 days from date of invoice. Any expense incurred for collection will be added to the original amount.

Test Approved By James R. Craig Signature of Customer or his authorized representative

Western Representative James Rogers

FIELD INVOICE

| | |
|----------------|------------------|
| Open Hole Test | \$ <u>440.00</u> |
| Misrun | \$ _____ |
| Straddle Test | \$ _____ |
| Jars | \$ _____ |
| Selective Zone | \$ _____ |
| Safety Joint | \$ _____ |
| Standby | \$ _____ |
| Evaluation | \$ _____ |
| Extra Packer | \$ _____ |
| Circ. Sub. | \$ _____ |
| Mileage | \$ _____ |
| Extra Charts | \$ _____ |

TOTAL \$ 440.00

WESTERN TESTING CO., INC.

Pressure Data

Date 5-26-79

Test Ticket No. 2177

Recorder No. 3085

Capacity 4500

Location 3033 Ft.

Clock No. _____ Elevation _____

Well Temperature 118 °F

| Point | Pressure | Open Tool | Time Given | Time Computed |
|---------------------------------|--------------------|----------------------------|------------------|------------------|
| A. Initial Hydrostatic Mud | <u>1608</u> P.S.I. | | <u>8:45</u> P.M. | |
| B. First Initial Flow Pressure | <u>12</u> P.S.I. | First Flow Pressure | <u>120</u> Mins. | <u>120</u> Mins. |
| C. First Final Flow Pressure | <u>31</u> P.S.I. | Initial Closed-in Pressure | <u>45</u> Mins. | <u>45</u> Mins. |
| D. Initial Closed-in Pressure | <u>937</u> P.S.I. | Second Flow Pressure | _____ Mins. | _____ Mins. |
| E. Second Initial Flow Pressure | _____ P.S.I. | Final Closed-in Pressure | _____ Mins. | _____ Mins. |
| F. Second Final Flow Pressure | _____ P.S.I. | | | |
| G. Final Closed-in Pressure | _____ P.S.I. | | | |
| H. Final Hydrostatic Mud | <u>1497</u> P.S.I. | | | |

PRESSURE BREAKDOWN

First Flow Pressure
Breakdown: 24 Inc.
of 5 mins. and a
final inc. of 0 Min.

Initial Shut-In
Breakdown: 15 Inc.
of 3 mins. and a
final inc. of 0 Min.

Second Flow Pressure
Breakdown: _____ Inc.
of 5 mins. and a
final inc. of 0 Min.

Final Shut-In
Breakdown: _____ Inc.
of 3 mins. and a
final inc. of 0 Min.

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|---------------|-----------|---------------|------------|---------------|--------|---------------|--------|
| P 1 0 | <u>12</u> | 0 | <u>31</u> | 0 | | 0 | |
| P 2 5 | <u>5</u> | 3 | <u>45</u> | 3 | | 3 | |
| P 3 10 | <u>1</u> | 6 | <u>79</u> | 6 | | 6 | |
| P 4 15 | <u>12</u> | 9 | <u>117</u> | 9 | | 9 | |
| P 5 20 | <u>14</u> | 12 | <u>172</u> | 12 | | 12 | |
| P 6 25 | <u>17</u> | 15 | <u>241</u> | 15 | | 15 | |
| P 7 30 | <u>19</u> | 18 | <u>339</u> | 18 | | 18 | |
| P 8 35 | <u>19</u> | 21 | <u>469</u> | 21 | | 21 | |
| P 9 40 | <u>22</u> | 24 | <u>607</u> | 24 | | 24 | |
| P10 45 | <u>22</u> | 27 | <u>727</u> | 27 | | 27 | |
| P11 50 | <u>22</u> | 30 | <u>814</u> | 30 | | 30 | |
| P12 55 | <u>22</u> | 33 | <u>858</u> | 33 | | 33 | |
| P13 60 | <u>22</u> | 36 | <u>886</u> | 36 | | 36 | |
| P14 <u>65</u> | <u>22</u> | 39 | <u>911</u> | 39 | | 39 | |
| P15 <u>70</u> | <u>22</u> | 42 | <u>925</u> | 42 | | 42 | |
| P16 <u>75</u> | <u>26</u> | 45 | <u>937</u> | 45 | | 45 | |
| P17 <u>80</u> | <u>26</u> | 48 | | 48 | | 48 | |
| P18 <u>85</u> | <u>27</u> | 51 | | 51 | | 51 | |
| P19 <u>90</u> | <u>31</u> | 54 | | 54 | | 54 | |
| P20 <u>95</u> | <u>31</u> | 57 | | 57 | | 57 | |
| <u>100</u> | <u>31</u> | 60 | | 60 | | 60 | |

(cont)

WESTERN TESTING CO., INC.

Pressure Data

Test Ticket No. 2177

Date _____

Recorder No. _____ Capacity _____ Location _____ Ft.

Clock No. _____ Elevation _____ Well Temperature _____ °F

| Point | Pressure | Open Tool | Time Given | Time Computed |
|---------------------------------|--------------|----------------------------|-------------|---------------|
| A. Initial Hydrostatic Mud | _____ P.S.I. | _____ | _____ M | _____ |
| B. First Initial Flow Pressure | _____ P.S.I. | First Flow Pressure | _____ Mins. | _____ Mins. |
| C. First Final Flow Pressure | _____ P.S.I. | Initial Closed-in Pressure | _____ Mins. | _____ Mins. |
| D. Initial Closed-in Pressure | _____ P.S.I. | Second Flow Pressure | _____ Mins. | _____ Mins. |
| E. Second Initial Flow Pressure | _____ P.S.I. | Final Closed-in Pressure | _____ Mins. | _____ Mins. |
| F. Second Final Flow Pressure | _____ P.S.I. | | | |
| G. Final Closed-in Pressure | _____ P.S.I. | | | |
| H. Final Hydrostatic Mud | _____ P.S.I. | | | |

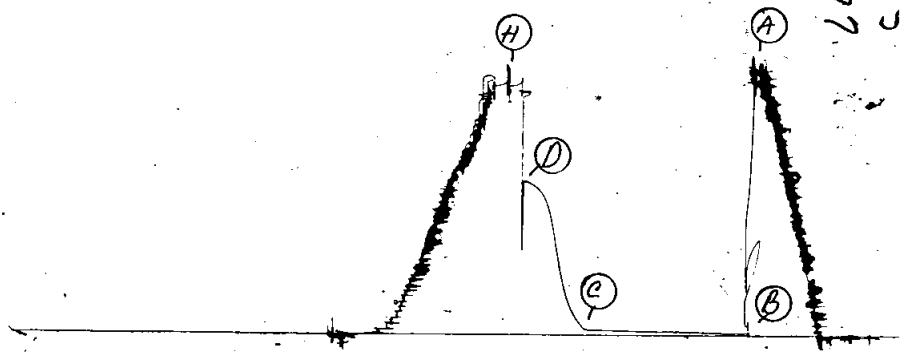
PRESSURE BREAKDOWN

| First Flow Pressure | | Initial Shut-In | | Second Flow Pressure | | Final Shut-In | |
|-----------------------------|-----------|-----------------------------|--------|-----------------------------|--------|-----------------------------|--------|
| Breakdown: _____ Inc. | | Breakdown: _____ Inc. | | Breakdown: _____ Inc. | | Breakdown: _____ 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>105</u> | <u>31</u> | 63 | _____ | _____ | _____ | 63 | _____ |
| P 2 <u>110</u> | } | 66 | _____ | _____ | _____ | 66 | _____ |
| P 3 <u>115</u> | | 69 | _____ | _____ | _____ | 69 | _____ |
| P 4 <u>120</u> | <u>31</u> | 72 | _____ | _____ | _____ | 72 | _____ |
| P 5 _____ | | 75 | _____ | _____ | _____ | 75 | _____ |
| P 6 _____ | | 78 | _____ | _____ | _____ | 78 | _____ |
| P 7 _____ | | 81 | _____ | _____ | _____ | 81 | _____ |
| P 8 _____ | | 84 | _____ | _____ | _____ | 84 | _____ |
| P 9 _____ | | 87 | _____ | _____ | _____ | 87 | _____ |
| P10 _____ | | 90 | _____ | _____ | _____ | 90 | _____ |
| P11 _____ | | 93 | _____ | _____ | _____ | 93 | _____ |
| P12 _____ | | 96 | _____ | _____ | _____ | 96 | _____ |
| P13 _____ | | 99 | _____ | _____ | _____ | 99 | _____ |
| P14 _____ | | 102 | _____ | _____ | _____ | 102 | _____ |
| P15 _____ | | 105 | _____ | _____ | _____ | 105 | _____ |
| P16 _____ | | 108 | _____ | _____ | _____ | 108 | _____ |
| P17 _____ | | 111 | _____ | _____ | _____ | 111 | _____ |
| P18 _____ | | 114 | _____ | _____ | _____ | 114 | _____ |
| P19 _____ | | 117 | _____ | _____ | _____ | 117 | _____ |
| P20 _____ | | 120 | _____ | _____ | _____ | 120 | _____ |

Tkt # 2177

I

5000
T-2177



Company Martin Oil Company Lease & Well No. Lewis #2
 Elevation -- Formation Bartlesville Effective Pay -- Ft. Ticket No. 2177
 Date 5/26/79 Sec. 28 Twp. 31 Range 4E County Cowley State Kansas
 Test Approved by James R. Craig Western Representative James Rogers

Formation Test No. 3 Interval Tested from 3023 ft. to 3039 ft. Total Depth 3039 ft.
 Packer Depth 3018 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Packer Depth 3023 ft. Size 6 3/4 in. Packer Depth - ft. Size - in.
 Depth of Selective Zone Set --

Top Recorder Depth (Inside) 3033 ft. Recorder Number 3085 Cap. 4500
 Bottom Recorder Depth (Outside) 3036 ft. Recorder Number 1561 Cap. 3200
 Below Straddle Recorder Depth - ft. Recorder Number - Cap. -

Drilling Contractor Pioneer Drilling Co. Drill Collar Length 180 I. D. 2 1/4 in.
 Mud Type chemical Viscosity 36 Weight Pipe Length 450 I. D. 2.7 in.
 Weight 10.2 Water Loss 12.8 cc. Drill Pipe Length 2373 I. D. 2.8 in.
 Chlorides 2,600 P.P.M. Test Tool Length 36 ft. Tool Size 5 1/2 OD in.
 Jars: Make -- Serial Number -- Anchor Length 16 ft. Size 5 1/2 OD in.
 Did Well Flow? No Reversed Out _____ 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 FJ in.

Blow: Weak increasing to fair blow throughout test.

Recovered 720 ft. of gas in pipe
 Recovered 65 ft. of heavy oil cut mud
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____
 Recovered _____ ft. of _____

Remarks: _____

Time Set Packer(s) 8:45 A.M. Time Started Off Bottom 11:30 A.M. Maximum Temperature 118
 Initial Hydrostatic Pressure _____ (A) 1608 P.S.I.
 Initial Flow Period _____ Minutes 120 (B) 12 P.S.I. to (C) 31 P.S.I.
 Initial Closed In Period _____ Minutes 45 (D) 937 P.S.I.
 Final Flow Period _____ Minutes -- (E) -- P.S.I. to (F) -- P.S.I.
 Final Closed In Period _____ Minutes -- (G) -- P.S.I.
 Final Hydrostatic Pressure _____ (H) 1497 P.S.I.

WESTERN TESTING CO., INC.

Pressure Data

Date 5/26/79 Test Ticket No. 2177
 Recorder No. 3085 Capacity 4500 Location 3033 Ft.
 Clock No. -- Elevation -- Well Temperature 118 °F

| Point | Pressure | | Time Given | Time Computed |
|--------------------------------|----------|--------|------------|-----------------|
| A Initial Hydrostatic Mud | 1608 | P.S.I. | 8:45P | M |
| B First Initial Flow Pressure | 12 | P.S.I. | 120 | Mins. 120 Mins. |
| C First Final Flow Pressure | 31 | P.S.I. | 45 | Mins. 45 Mins. |
| D Initial Closed-in Pressure | 937 | P.S.I. | -- | Mins. -- Mins. |
| E Second Initial Flow Pressure | -- | P.S.I. | -- | Mins. -- Mins. |
| F Second Final Flow Pressure | -- | P.S.I. | | |
| G Final Closed-in Pressure | -- | P.S.I. | | |
| H Final Hydrostatic Mud | 1497 | P.S.I. | | |

PRESSURE BREAKDOWN

First Flow Pressure
 Breakdown: 24 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Initial Shut-In
 Breakdown: 15 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

Second Flow Pressure
 Breakdown: 0 Inc.
 of 5 mins. and a
 final inc. of 0 Min.

Final Shut-In
 Breakdown: 0 Inc.
 of 3 mins. and a
 final inc. of 0 Min.

| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. |
|-------------|--------|---------------|--------|---------------|--------|---------------|--------|
| P 1 | 0 | 12 | 31 | | | | |
| P 2 | 5 | 12 | 45 | | | | |
| P 3 | 10 | 12 | 79 | | | | |
| P 4 | 15 | 12 | 117 | | | | |
| P 5 | 20 | 14 | 172 | | | | |
| P 6 | 25 | 17 | 241 | | | | |
| P 7 | 30 | 19 | 339 | | | | |
| P 8 | 35 | 19 | 469 | | | | |
| P 9 | 40 | 22 | 607 | | | | |
| P10 | 45 | 22 | 727 | | | | |
| P11 | 50 | 22 | 814 | | | | |
| P12 | 55 | 22 | 858 | | | | |
| P13 | 60 | 22 | 886 | | | | |
| P14 | 65 | 22 | 911 | | | | |
| P15 | 70 | 22 | 925 | | | | |
| P16 | 75 | 26 | 937 | | | | |
| P17 | 80 | 26 | | | | | |
| P18 | 85 | 27 | | | | | |
| P19 | 90 | 31 | | | | | |
| P20 | 95 | 31 | | | | | |

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WESTERN TESTING CO., INC.
Pressure Data

Date 5/26/79 Test Ticket No. 2177
 Recorder No. 3085 Capacity 4500 Location 3033 Ft.
 Clock No. -- Elevation -- Well Temperature 118 °F

| Point | Pressure | | Time Given | Time Computed |
|--------------------------------|----------|--------|------------|-----------------|
| A Initial Hydrostatic Mud | 1608 | P.S.I. | 8:45P | M |
| B First Initial Flow Pressure | 12 | P.S.I. | 120 | Mins. 120 Mins. |
| C First Final Flow Pressure | 31 | P.S.I. | 45 | Mins. 45 Mins. |
| D Initial Closed-in Pressure | 937 | P.S.I. | -- | Mins. -- Mins. |
| E Second Initial Flow Pressure | -- | P.S.I. | -- | Mins. -- Mins. |
| F Second Final Flow Pressure | -- | P.S.I. | | |
| G Final Closed-in Pressure | -- | P.S.I. | | |
| H Final Hydrostatic Mud | 1497 | P.S.I. | | |

PRESSURE BREAKDOWN

| Point Mins. | First Flow Pressure | | Initial Shut-In | | Second Flow Pressure | | Final Shut-In | |
|-------------|----------------------|---------------|----------------------|---------------|----------------------|---------------|----------------------|------|
| | Breakdown: | Inc. | Breakdown: | Inc. | Breakdown: | Inc. | Breakdown: | Inc. |
| | of 24 mins. and a | | of 15 mins. and a | | of 0 mins. and a | | of 0 mins. and a | |
| | final inc. of 5 Min. | | final inc. of 3 Min. | | final inc. of 5 Min. | | final inc. of 3 Min. | |
| | final inc. of 0 Min. | | final inc. of 0 Min. | | final inc. of 0 Min. | | final inc. of 0 Min. | |
| Point Mins. | Press. | Point Minutes | Press. | Point Minutes | Press. | Point Minutes | Press. | |
| P 1 | 105 | 31 | | | | | | |
| P 2 | 110 | 31 | | | | | | |
| P 3 | 115 | 31 | | | | | | |
| P 4 | 120 | 31 | | | | | | |
| P 5 | | | | | | | | |
| P 6 | | | | | | | | |
| P 7 | | | | | | | | |
| P 8 | | | | | | | | |
| P 9 | | | | | | | | |
| P10 | | | | | | | | |
| P11 | | | | | | | | |
| P12 | | | | | | | | |
| P13 | | | | | | | | |
| P14 | | | | | | | | |
| P15 | | | | | | | | |
| P16 | | | | | | | | |
| P17 | | | | | | | | |
| P18 | | | | | | | | |
| P19 | | | | | | | | |
| P20 | | | | | | | | |