

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYForm approved.  
Budget Bureau No. 42-R355.5.

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ DRY ☐ Other ☐  
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐  
2. NAME OF OPERATOR  
McClellan Oil Corporation  
3. ADDRESS OF OPERATOR  
P.O. Drawer 730, Roswell, NM 88202  
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 1650' FNL & 660' FWL  
At top prod. interval reported below  
At total depth  
14. PERMIT NO. DATE ISSUED  
15. DATE SPUDDED 3/22/87 16. DATE T.D. REACHED 3/30/87 17. DATE COMPL. (Ready to prod.) 4/7/87 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 3617' G.L. 19. ELEV. CASINGHEAD 3617' G.L.  
20. TOTAL DEPTH, MD & TVD 4420' 21. PLUG, BACK T.D., MD & TVD 4392' 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY 0-TD  
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\* 4128' - 4223' Abo  
25. WAS DIRECTIONAL SURVEY MADE Yes  
26. TYPE ELECTRIC AND OTHER LOGS RUN CNL-LDT-DLL  
27. WAS WELL CORED

| CASING RECORD (Report all strings set in well) |                 |                |           |                           |               |
|------------------------------------------------|-----------------|----------------|-----------|---------------------------|---------------|
| CASING SIZE                                    | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | CEMENTING RECORD          | AMOUNT PULLED |
| 8-5/8"                                         | 24              | 960'           | 12 1/4"   | 250 sx Halliburton Lite   |               |
|                                                |                 |                |           | 200 sx Class C            |               |
| 4-1/2"                                         | 9.5             | 4392'          | 7-7/8"    | 250 sx 65/35 Poz + 250 sx | 1"            |

| LINER RECORD |          |             |               |             | TUBING RECORD |                |                 |
|--------------|----------|-------------|---------------|-------------|---------------|----------------|-----------------|
| SIZE         | TOP (MD) | BOTTOM (MD) | SACKS CEMENT* | SCREEN (MD) | SIZE          | DEPTH SET (MD) | PACKER SET (MD) |
|              |          |             |               |             | 2-3/8"        | 4120'          | -               |

| 31. PERFORATION RECORD (Interval, size and number) |               |  |  | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. |                                     |
|----------------------------------------------------|---------------|--|--|------------------------------------------------|-------------------------------------|
| 4128, 29, 30, 30 1/2, 31, 32                       | 6 shots total |  |  | DEPTH INTERVAL (MD)                            | AMOUNT AND KIND OF MATERIAL USED    |
| 4221, 22, 22 1/2, 23                               | 4 shots total |  |  | 4128' - 4223'                                  | 1000 gals. 7 1/2% NEFE acid         |
| 1 SPF, .50" holes                                  |               |  |  |                                                | 40,000 gal gelled 2% KCL water      |
|                                                    |               |  |  |                                                | 40,000 lbs 20-40 & 20,000 lbs 12-20 |

| 33. PRODUCTION        |                 |                                                                      |                         |          |            |                                    |               |
|-----------------------|-----------------|----------------------------------------------------------------------|-------------------------|----------|------------|------------------------------------|---------------|
| DATE FIRST PRODUCTION |                 | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) |                         |          |            | WELL STATUS (Producing or shut-in) |               |
| 4/7/87                |                 | flowing                                                              |                         |          |            | shut-in                            |               |
| DATE OF TEST          | HOURS TESTED    | CHOKE SIZE                                                           | PROD'N. FOR TEST PERIOD | OIL—BBL. | GAS—MCF.   | WATER—BBL.                         | GAS-OIL RATIO |
| 4/21/87               | 24              | 3/4                                                                  |                         | -        | 733        | -                                  | -             |
| FLOW. TUBING PRESS.   | CASING PRESSURE | CALCULATED 24-HOUR RATE                                              | OIL—BBL.                | GAS—MCF. | WATER—BBL. | OIL GRAVITY-API (CORR.)            |               |
| 225                   | 334             |                                                                      | -                       | 850      | -          | - Post ID-2                        |               |

|                                                            |                             |
|------------------------------------------------------------|-----------------------------|
| 34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) | TEST WITNESSED BY           |
| Shut-in                                                    | James Rowe 5-8-87 comp + BK |

35. LIST OF ATTACHMENTS  
4 Point, Deviation Survey  
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records  
SIGNED [Signature] TITLE Operations Manager DATE 4/29/87  
BUREAU OF LAND MANAGEMENT  
WELL RESOURCE AREA

\* (See Instructions and Spaces for Additional Data on Reverse Side)



LESLIE K. EVERTSON - ROSWELL  
KENNETH D. REYNOLDS - ARTESIA

DRILLING CO., INC. - OIL WELL DRILLING CONTRACTORS

P. O. Box 1498 ROSWELL, NEW MEXICO 88201  
TELEPHONES: ARTESIA 505/746-6757  
ROSWELL 505/623-5070

April 3, 1987

McClellan Oil Corporation  
P.O. Box 730  
Roswell, New Mexico

RE: M M Federal #5

Gentlemen:

The following is a Deviation Survey on the above referenced well  
located in Chaves County, New Mexico.

|              |              |                   |
|--------------|--------------|-------------------|
| 500' - 1/4°  | 1952' - 3/4° | 3465' - 1/2°      |
| 710' - 1/2°  | 2147' - 3/4° | 3760' - 1/2°      |
| 960' - 3/4°  | 2480' - 1/2° | 4066' - 1/2°      |
| 1456' - 1/2° | 2975' - 1/2° | 4420' - 1/4° T.D. |

Sincerely,

WEK DRILLING CO., INC.

Arnold Newkirk

STATE OF NEW MEXICO)

)

COUNTY OF CHAVES )

The foregoing was acknowledged before me this 3<sup>rd</sup> day of April,  
1987 by Arnold Newkirk.

My Commission Expires

5-4-87

  
Notary Public

NORTHERN NATURAL GAS COMPANY  
OBSERVED SURFACE DATA WORKSHEET  
SHEET 1

TYPE TEST: 1-Point ☒ INITIAL ☐ ANNUAL ☐ RETEST ☒ SPECIAL TEST DATE: 4-22-87

OPERATOR McClellan Oil Corp. LEASE M and M Federal WELL NO. #5  
SEC. E) 25 TWP. 9S RING. 25E COUNTY Chaves STA. NO. None PIPELINE CONN. Vent  
GA SYSTEM Bitterlakes Area FIELD South Pecos Slope RESERVOIR ABO

CSG. 4 1/2 @ 4392 WT. 95\* TBG. SIZE 2 3/8 WT. 4.7\* PERFS. TO  
TYPE COMPLETION: SINGLE GAS-GAS( ) GAS-OIL( ) PACKER@ None ft. FLOW STRING@ ft.

DATE ON PREFLOW DATE SHUT IN 4-22-87 TIME 10:30am LENGTH OF PREFLOW AVG. PREFLOW RATE

DATE SHUT IN PRESS. TAKEN 4-21-87 TIME 10:00 am LENGTH OF SHUT IN CSG. PRESS 902.2 psig TBG. PRESS 902.2 psig

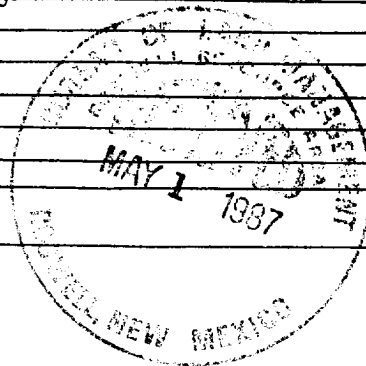
GAS GRAVITY (Gm) API GRAVITY OF LIQUID @ 60°F PROVER SIZE 2" METER RUN SIZE ORIFICE 3/8" TYPE TAPS

| DATE<br>TIME OF<br>READING | ELAP<br>TIME<br>HRS. | W.H. PRESSURE DATA |             |                |             | WELL<br>HEAD<br>TEMP | METER OR PROVER DATA |         |       | LIQUID<br>HYDRO-<br>CARBONS<br>BBLs | WATER<br>PRODUCED<br>BBLs | REMARKS PERTINENT TO<br>TEST DATA QUALITY |
|----------------------------|----------------------|--------------------|-------------|----------------|-------------|----------------------|----------------------|---------|-------|-------------------------------------|---------------------------|-------------------------------------------|
|                            |                      | CASING<br>psig     | Δ P<br>CSG. | TUBING<br>psig | Δ P<br>TBG. |                      | PRESS<br>psig        | DIFF.   | TEMP. |                                     |                           |                                           |
| 4-21-87                    |                      |                    |             |                |             |                      |                      |         |       |                                     |                           |                                           |
| 10:00am                    |                      | 902.2              | -0-         | 902.2          | -0-         | 60°                  |                      |         |       |                                     |                           | SHUT-IN Pressure only                     |
| 4-21-87                    |                      |                    |             |                |             |                      |                      |         |       |                                     |                           |                                           |
| 10:30am                    | Zero                 | 902.2              | -0-         | 902.2          | -0-         | 60°                  | START                | 1-Point | TEST  |                                     |                           | Test started from ST                      |
| 10:45am                    | 0.25                 | 741.1              | -161.1      | 762.6          | -131.6      | 52°                  | 762.6                | -       | 52°   |                                     |                           | Test started 10:30am 2" CGP 3/8" Plat     |
| 11:00am                    | 0.50                 | 703.8              | -198.4      | 699.4          | -203.8      | 52°                  | 699.4                | -       | 52°   |                                     |                           | Q=2512.4 mcf/d                            |
| 11:15 am                   | 0.75                 | 698.3              | -203.9      | 645.7          | -256.5      | 52°                  | 645.7                | -       | 52°   |                                     |                           | ALL Pressures Deadweighted                |
| 11:30am                    | 1.00                 | 652.7              | -249.5      | 610.0          | -292.2      | 51°                  | 610.0                | -       | 51°   |                                     |                           | Q=1989.8 mcf/d                            |
| 11:45 am                   | 1.25                 | 641.8              | -260.4      | 593.6          | -308.6      | 51°                  | 593.6                | -       | 51°   |                                     |                           | Transwestern Connection on                |
| 12:00 pm                   | 1.50                 | 607.2              | -295.0      | 547.1          | -355.1      | 50°                  | 547.1                | -       | 50°   |                                     |                           | Site Gas Analysis 4-21-87                 |
| 12:15 pm                   | 1.75                 | 575.9              | -326.3      | 496.5          | -405.7      | 50°                  | 496.5                | -       | 50°   |                                     |                           | COP. eo Attached.                         |
| 12:30 pm                   | 2.00                 | 538.7              | -363.5      | 477.7          | -424.5      | 50°                  | 477.7                | -       | 50°   |                                     |                           | Q=1548.2 mcf/d                            |
| 12:45 pm                   | 2.25                 | 526.7              | -375.5      | 455.1          | -447.1      | 50                   | 455.1                | -       | 50    |                                     |                           | Mist AT Vent.                             |
| 1:00 pm                    | 2.50                 | 510.7              | -391.5      | 439.0          | -463.2      | 50                   | 439.0                | -       | 50    |                                     |                           | Tested To Vent Pit - NOT Flared.          |
| 1:15 pm                    | 2.75                 | 506.3              | -395.9      | 427.8          | -474.4      | 50                   | 427.8                | -       | 50    |                                     |                           |                                           |
| 1:30 pm                    | 3.00                 | 502.1              | -400.1      | 421.0          | -481.2      | 50                   | 421.0                | -       | 50    |                                     |                           | Q=1360.9 mcf/d                            |
|                            |                      |                    |             |                |             |                      |                      |         |       |                                     |                           |                                           |
|                            |                      |                    |             |                |             |                      |                      |         |       |                                     |                           | 25" H <sub>2</sub> O                      |
| 4-22-87                    |                      |                    |             |                |             |                      |                      |         |       |                                     |                           |                                           |
| 9:30am                     | 23.0                 | 336.2              | -566.0      | 225.0          | -677.2      | 48                   | 225.0                | -       | 48°   |                                     |                           | Q=732.7 mcf/d                             |
| 9:45am                     | 23.25                | 335.7              | -566.5      | 224.5          | -677.7      | 48                   | 224.5                | -       | 48°   |                                     |                           | Heavy mist AT vent                        |
| 10:00am                    | 23.50                | 334.9              | -567.3      | 225.0          | -677.2      | 50                   | 225.0                | -       | 50    |                                     |                           |                                           |
| 10:15 am                   | 23.75                | 334.6              | -567.6      | 225.3          | -676.9      | 50                   | 225.3                | -       | 50    |                                     |                           | 75% Drawdown                              |
| 10:30am                    | 24.0                 | 334.2              | -568.0      | 225.1          | -677.1      | 50                   | 225.1                | -       | 50    |                                     |                           | Q=733.0 mcf/d                             |
|                            |                      |                    |             |                |             |                      |                      |         |       |                                     |                           | Tubing @ 100% Stable                      |
|                            |                      |                    |             |                |             |                      |                      |         |       |                                     |                           | Casing @ 99% Stable.                      |
| 10:30am                    | 24.0                 | 334.2              | -568.0      | 225.1          | -677.1      | 50                   | Shut                 | WELL IN |       |                                     |                           |                                           |
| 10:45                      | 0.25                 | 397.1              | +62.9       | 373.8          | +48.7       | 52                   | Shut                 | in      |       |                                     |                           |                                           |
| 11:00                      | 0.50                 | 439.5              | +105.3      | 421.3          | +118.2      | 54                   | Shut                 | in      |       |                                     |                           |                                           |

TESTED BY: James Rowe

WITNESSED BY:

PAGE 1 OF 1



# NORTHERN NATURAL GAS COMPANY

## BACK-PRESSURE CALCULATION SHEET

TYPE TEST: 1-Point ☒ INITIAL ☐ ANNUAL ☐ RETEST ☒ SPECIAL TEST DATE: 4-22-87

OPERATOR McClellan Oil Corp. LEASE m and m Federal WELL NO. #5  
SEC. E25 TWP. 9S RNG. 2SE COUNTY Chaves STA. NO. NONE PIPELINE CONN. Vent  
GA SYSTEM Bitter Lakes FIELD South Pecos Slope RESERVOIR ABO

CSG. SIZE 4 1/2 WT. 9.5 TBG. SIZE 2 3/8 WT. 4.7 PERFS: \_\_\_\_\_ TO \_\_\_\_\_  
TYPE COMPLETION Single Gas PACKER @ NONE ft. AVG. VERTICAL DEPTH \_\_\_\_\_ ft.

TYPE LIQUID PRODUCED \_\_\_\_\_ LIQUID COMPOSITION \_\_\_\_\_ API GRAVITY \_\_\_\_\_  
GAS GRAVITY ( $G_g$ )( $G_m$ ) 0.650 CO<sub>2</sub> 0.12 % N<sub>2</sub> 7.21 % H<sub>2</sub> N/A  $P_{cr}$  658 psia  $T_{cr}$  355 °R  
PRODUCING THRU Tubing TYPE TAPS NONE (PROVER)(METER) SIZE 2 BAR. PRESS. 15.025

### METER OR PROVER DATA

| RATE NO. | ORIFICE SIZE IN. | OBSERVED DATA                     |                                         |                            |                    | COMPRESSABILITY FACTOR         |                                |       | REMARKS<br>(QUALITY OF MEASUREMENT)                        |
|----------|------------------|-----------------------------------|-----------------------------------------|----------------------------|--------------------|--------------------------------|--------------------------------|-------|------------------------------------------------------------|
|          |                  | (METER)<br>(PROVER)<br>TEMP<br>°F | (METER)<br>(PROVER)<br>PRESSURE<br>PSIG | ( $P_m$ )( $P_p$ )<br>PSIA | DIFF.<br>( $H_w$ ) | ( $P_m$ )( $P_p$ )<br>$P_{cr}$ | ( $T_m$ )( $T_p$ )<br>$T_{cr}$ | Z     |                                                            |
| 1        | 0.3750           | 52                                | 762.6                                   | 777.63                     | -                  | 1.182                          | 1.44                           | 0.867 | Pseudocritical Property                                    |
| 2        | 0.3750           | 51                                | 610.0                                   | 625.03                     | -                  | 0.950                          | 1.44                           | 0.892 | Corrections                                                |
| 3        | 0.3750           | 50                                | 477.7                                   | 492.73                     | -                  | 0.749                          | 1.44                           | 0.914 | CO <sub>2</sub> = Per <u>X</u> T <sub>cr</sub> <u>X</u>    |
| 4        | 0.3750           | 50                                | 421.0                                   | 436.03                     | -                  | 0.663                          | 1.44                           | 0.923 | N <sub>2</sub> = Per <u>-12</u> T <sub>cr</sub> <u>-20</u> |
| 5        | 0.3750           | 50                                | 225.1                                   | 240.13                     | -                  | 0.365                          | 1.44                           | 0.954 |                                                            |

### FLOW RATE CALCULATION

| RATE NO. | COEFF. MCF/DAY | ( $P_m$ )( $H_w$ )<br>( $P_p$ ) | EXTENSION<br>$\sqrt{P_m H_w}$ | GRAVITY FACTOR | METER TEMP. FACTOR | DEVIATION FACTOR | FLOW RATE MCF/DAY | LENGTH OF FLOW | REMARKS<br>(TYPE OF FLOW)  |
|----------|----------------|---------------------------------|-------------------------------|----------------|--------------------|------------------|-------------------|----------------|----------------------------|
| 1        | 2.378          | 777.63                          | -                             | 1.240          | 1.008              | 1.074            | 2482.4            | 2.25 hrs       | All Pressures Deadweighted |
| 2        | 2.378          | 625.03                          | -                             | 1.240          | 1.009              | 1.059            | 1969.3            | 1.0 hrs        |                            |
| 3        | 2.378          | 492.73                          | -                             | 1.240          | 1.010              | 1.046            | 1534.9            | 3.0 hrs        |                            |
| 4        | 2.378          | 436.03                          | -                             | 1.240          | 1.010              | 1.041            | 1351.8            | 3.0 hrs        |                            |
| 5        | 2.378          | 240.13                          | -                             | 1.240          | 1.010              | 1.024            | 732.3             | 24.0 hrs       |                            |

### WELLHEAD SHUT-IN AND FLOWING DATA

| RATE NO. | CASING PRESSURE DATA |                                           |                             |                                         | TUBING PRESSURE DATA |                                           |                             |                                         | WELL-HEAD TEMP °F | REMARKS<br>(QUALITY OF PRESSURES) |
|----------|----------------------|-------------------------------------------|-----------------------------|-----------------------------------------|----------------------|-------------------------------------------|-----------------------------|-----------------------------------------|-------------------|-----------------------------------|
|          | PSIG                 | ( $P_c$ ) &<br>( $P_p$ )( $P_i$ )<br>PSIA | ( $P_w$ )( $P_i$ )<br>$P_c$ | ( $P_c^2$ ) &<br>( $P_w^2$ )( $P_i^2$ ) | PSIG                 | ( $P_c$ ) &<br>( $P_p$ )( $P_i$ )<br>PSIA | ( $P_w$ )( $P_i$ )<br>$P_c$ | ( $P_c^2$ ) &<br>( $P_w^2$ )( $P_i^2$ ) |                   |                                   |
| SHUT IN  | 902.2                | 917.23                                    | 1.000                       | 841.30                                  | 902.2                | 917.23                                    | 1.000                       | 841.30                                  | 60°               | Hours shut in:                    |
| 1        | 741.1                | 756.13                                    | 0.8244                      | 571.73                                  | 762.6                | 777.63                                    | 0.8478                      | 604.71                                  | 52                |                                   |
| 2        | 652.7                | 667.73                                    | 0.7280                      | 445.86                                  | 610.0                | 625.03                                    | 0.6814                      | 390.66                                  | 51                |                                   |
| 3        | 538.7                | 553.73                                    | 0.6037                      | 306.62                                  | 477.7                | 492.73                                    | 0.5272                      | 242.72                                  | 50                |                                   |
| 4        | 502.1                | 517.13                                    | 0.5638                      | 267.42                                  | 421.0                | 436.03                                    | 0.4754                      | 190.12                                  | 50                |                                   |
| 5        | 324.2                | 349.23                                    | 0.3807                      | 121.96                                  | 225.1                | 240.13                                    | 0.2612                      | 57.66                                   | 50                |                                   |

### SUMMARY

| RATE NO. | WATER PROD. BBLs. | LIQUID PETR. BBLs. | GOR MCF/BBL | ( $P_c^2 - P_w^2$ ) | Q      | ( $P_c^2 - P_i^2$ ) | WH slope (n): 1.000                    | ABS slope (n): 1.000  |
|----------|-------------------|--------------------|-------------|---------------------|--------|---------------------|----------------------------------------|-----------------------|
| 1        |                   |                    |             | 269.57              | 2482.4 | 236.59              | WH potential: 780                      | MCF/D after: 24.0 hr. |
| 2        |                   |                    |             | 395.44              | 1969.3 | 450.64              | ABS potential: 850                     | MCF/D after: 24.0 hr. |
| 3        |                   |                    |             | 534.68              | 1534.9 | 598.52              | 72 hr. WH potential _____              | MCF/D                 |
| 4        |                   |                    |             | 573.88              | 1351.8 | 651.18              | Stabl. WH potential _____              | MCF/D                 |
| 5        |                   |                    |             | 719.34              | 732.3  | 783.64              | DEL @ _____ after _____ hr: _____      | MCF/D                 |
|          |                   |                    |             |                     |        |                     | DEL @ 0.8 $P_c$ after 72 hr: _____     | MCF/D                 |
|          |                   |                    |             |                     |        |                     | Stabl. DEL @ $P_c$ = _____ psig: _____ | MCF/D                 |
|          |                   |                    |             |                     |        |                     | 72 hr to $t_{hr}$ stabl factor: _____  |                       |
|          |                   |                    |             |                     |        |                     | _____ hr to 72 hr stabl factor: _____  |                       |

REMARKS: \_\_\_\_\_

TESTED BY: James Rowe  
CALCULATED BY: James Rowe

WITNESSED BY: NONE  
CHECKED BY: NONE

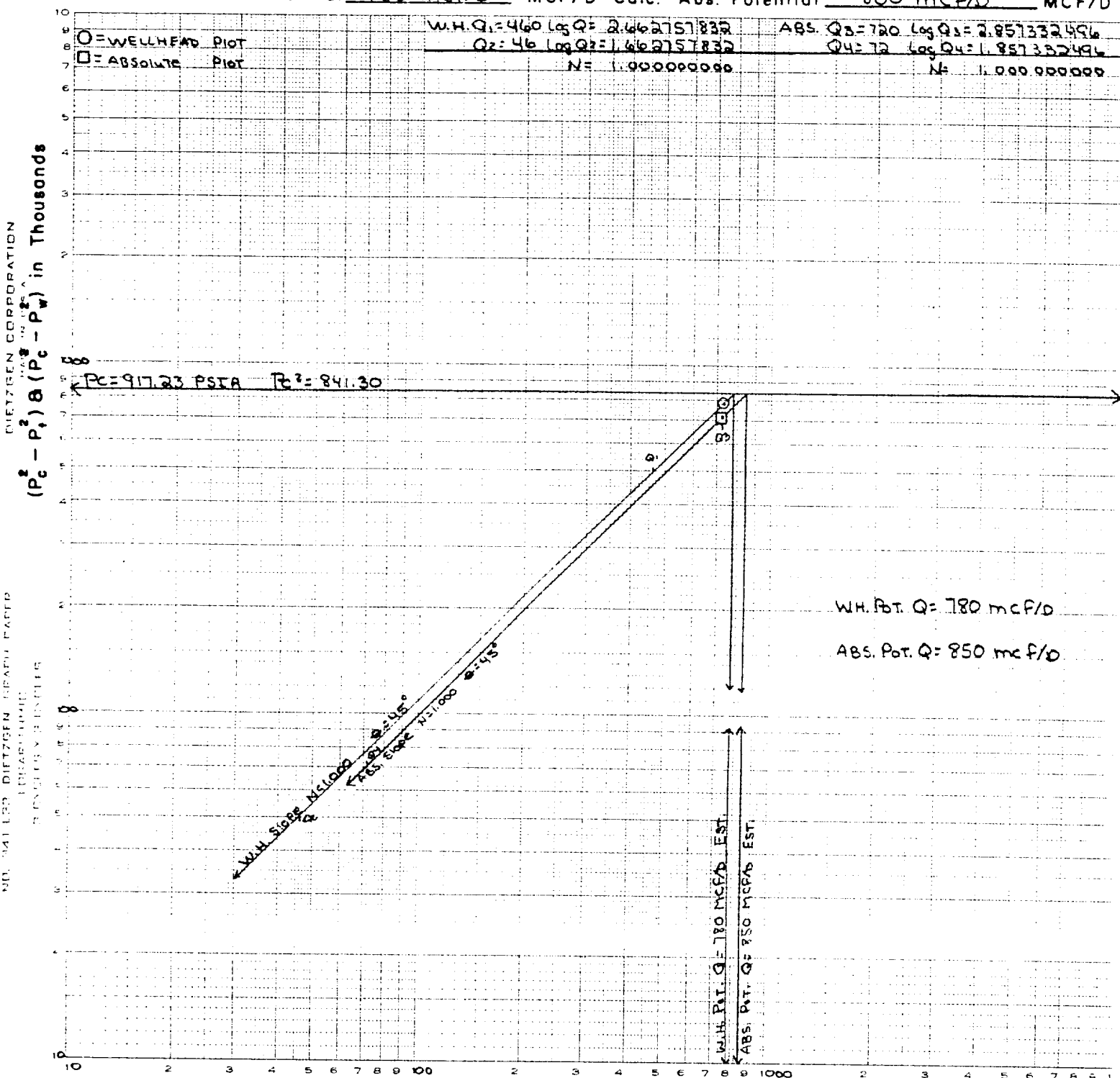
# BACK PRESSURE CURVE

Field Plot > Only

Operator McClellan Oil Corp Lease M and M Federal Well No. #5  
County Chaves Field S. Pecos Slope / ABO Location E) 25-9s-25E

Date of Test 4-22-87 Slope "n" 1.000 W.H. 1.000 Abs.

Calc. W.H. Potential 780 mcf/d MCF/D Calc. Abs. Potential 850 mcf/d MCF/D



Tested Thru 2" CFP 3/8" plate  
Total Test Time 24 Hours.

TRANSWESTERN PIPELINE COMPANY  
(A SUBSIDIARY OF ENRON CORPORATION)

\*\*\*\*\*  
GAS QUALITY TEST REPORT  
\*\*\*\*\*

PRODUCER MCCLELLAN OIL CO STATION NO. N/A  
FIELD SOUTH PECOS SLOPE  
EFFECTIVE DATE 4/21/87  
RESERVOIR ABO LAB NUMBER 4  
STATION NAME M&M FED #5

| COMPONENTS                       | SPECIFIC GRAVITY | MOLE FRACTION | LIQUEFIABLE HYDROCARBONS        | COMPONENT GPM | GPM CONTENT |
|----------------------------------|------------------|---------------|---------------------------------|---------------|-------------|
| NITROGEN                         | .9672            | .0721         | PROPANE                         | 27.514        | .4815       |
| CARBON DIOXIDE                   | 1.5195           | .0012         | ISOBUTANE                       | 32.698        | .0916       |
| HELIUM                           | .1382            |               | N-BUTANE                        | 31.510        | .1755       |
| OXYGEN                           | 1.1048           | .0000         | LPG                             |               | .7495       |
| HYDROGEN SULFIDE                 | 1.1766           | .0000         | ISOPENTANE                      | 36.382        | .0622       |
| WATER VAPOR                      | .6220            | .0000         | N-PENTANE                       | 36.213        | .0616       |
|                                  |                  |               | HEXANES                         | 41.111        | .0493       |
|                                  |                  |               | HEPTANES+                       | 46.126        | .0507       |
|                                  |                  |               | NATURAL GASOLINE                |               | .2238       |
| METHANE                          | .5539            | .8512         | TOTAL LIQUEFIABLE GPM           |               | .9733       |
| ETHANE                           | 1.0382           | .0439         | WATER VAPOR CONTENT:            |               |             |
| PROPANE                          | 1.5225           | .0175         | GAS MIXTURE STATIC PSIG         |               | 565.0       |
| ISOBUTANE                        | 2.0068           | .0028         | FLOWING GAS TEMP (F)            |               | 50.0        |
| N-BUTANE                         | 2.0068           | .0056         | WATER VAPOR DEW POINT (F)       |               | 50.0        |
| ISOPENTANE                       | 2.4911           | .0017         | LBS WATER VAPOR / MMCF          |               | 25.0        |
| N-PENTANE                        | 2.4911           | .0017         | DEHY INSTALLED (TW)             |               | NO          |
| HEXANES                          | 2.9753           | .0012         | INSTRUMENT TYPE                 |               | RAN         |
| HEPTANES+                        | 3.5807           | .0011         | MOL FRACTION                    |               | .0005       |
| COMPOSITION-----                 |                  | 1.0000        | SULFUR CONTENT (GR. PER 100 CF) |               |             |
|                                  |                  |               | HYDROGEN SULFIDE                |               |             |
|                                  |                  |               | MERCAPTANS                      |               |             |
|                                  |                  |               | SULFIDES                        |               |             |
|                                  |                  |               | RESIDUALS                       |               |             |
|                                  |                  |               | TOTAL SULFUR                    |               |             |
|                                  |                  |               | MOLE FRACT H2S                  |               |             |
| MIXTURE SPECIFIC GRAVITY         |                  |               | COMPRESSIBILITY (Z)             |               | .9977       |
| CALC. FROM ANAL. (REAL)          |                  | .649          |                                 |               |             |
| DETERMINED BY TEST INST.         |                  | .650          |                                 |               |             |
| MIXTURE HEATING VALUE            |                  |               |                                 |               |             |
| (BTU/CF @ 14.73 PSIA, 60F, SAT.) |                  |               |                                 |               |             |
| CALCULATED FROM ANALYSIS         |                  | 1021          |                                 |               |             |
| BY CALORIMETRY                   |                  | NONE          |                                 |               |             |

SP. GR. DEVIATION ALLOWED FOR WATER VAPOR: .003  
PR: 13:20 APR 21, 1987

ANALYST----- [TW]

REMARKS: NEW WELL TEST