

REPORT NO:  
00296F

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O. C. D. TESTING™ REPORT

ARTESIA, OFFICE

Production System Analysis (NODAL)  
Based on Model Verified™ Interpretation

FLOPETROL JOHNSTON

Schlumberger

TEST DATE:  
4/22/86

PAGE NO: One

Company: CITATION OIL & GAS CORP.

Well: BEAR FEDERAL #1

#### TEST IDENTIFICATION

Test Type ..... OH DST CONV.  
Test No. .... ONE B  
Formation ..... PENN  
Test Interval (ft) ..... 8799 TO 8877  
Reference Depth ..... RKB

#### WELL LOCATION

Field ..... WILDCAT  
County ..... EDDY  
State ..... NEW MEXICO  
Sec/Twn/Rng ..... 24/16S/29E  
Elevation (ft) ..... 3182

#### HOLE CONDITIONS

Total Depth (MD/TVD) (ft) .... 8877  
Hole Size (in) ..... 7.875  
Csg/Liner I.D. (in) ..... --  
Perf'd Interval/Net Pay (ft) .... --/52  
Shot Density/Diameter (in) .... --

#### MUD PROPERTIES

Mud Type ..... SALT GEL/STARCH  
Mud Weight (lb/gal) ..... 8.9  
Mud Resistivity (OHM-M) ..... 0.20 @ 60°F  
Filtrate Resistivity (OHM-M) .. --  
Filtrate Chlorides (PPM) ..... 44000

#### INITIAL TEST CONDITIONS

Initial Hydrostatic (psi) ..... 4248  
Gas Cushion Type ..... NONE  
Surface Pressure (psi) ..... --  
Liquid Cushion Type ..... NONE  
Cushion Length (ft) ..... --

#### TEST STRING CONFIGURATION

Pipe Length (ft)/I.D. (in) ..... 8212/3.83  
Collar Length (ft)/I.D. (in) ..... 549/2.25  
Packer Depth(s) (ft) ..... 8791 & 8799  
BH Choke Size (in) ..... 0.94 (15/16")  
Gauge Depth (ft)/Type ..... 8822/J-200

#### NET PIPE RECOVERY

| Volume   | Fluid Type                    | Properties                 |
|----------|-------------------------------|----------------------------|
| 85.1 BBL | Formation Water & Drlg. Fluid |                            |
|          | TOP= Mud cap                  | Rw=.2 @ 60F 42000          |
|          | MID=                          | Rw=.27 @ 60F, 30000 PPM CL |
|          | BTM=                          | Rw=.26 @ 60F, 32000 PPM CL |

#### NET SAMPLE CHAMBER RECOVERY

| Volume        | Fluid Type   | Properties                     |
|---------------|--------------|--------------------------------|
| 2450 CC       | Sulfur Water | Rw=.34 @ 60°F,<br>23000 PPM CL |
| Trace         | GAS          | H <sub>2</sub> S               |
| Pressure: 260 | GOR: NA      | GLR: NA                        |

#### INTERPRETATION RESULTS

Model of Behavior ..... --  
Fluid Type Used for Analysis .. --  
Reservoir Pressure (psi) ..... --  
Transmissibility (md-ft/cp) .... --  
Effective Permeability (md) .... --  
Skin Factor/Damage Ratio .... --  
Storativity ratio ..... --  
Interporosity Flow Coeff ..... --  
Distance To An Anomaly (ft) .. --  
Radius of Investigation (ft) .... --  
Potentiometric Surface (ft) .... --

#### ROCK/FLUID/WELLBORE PROPERTIES

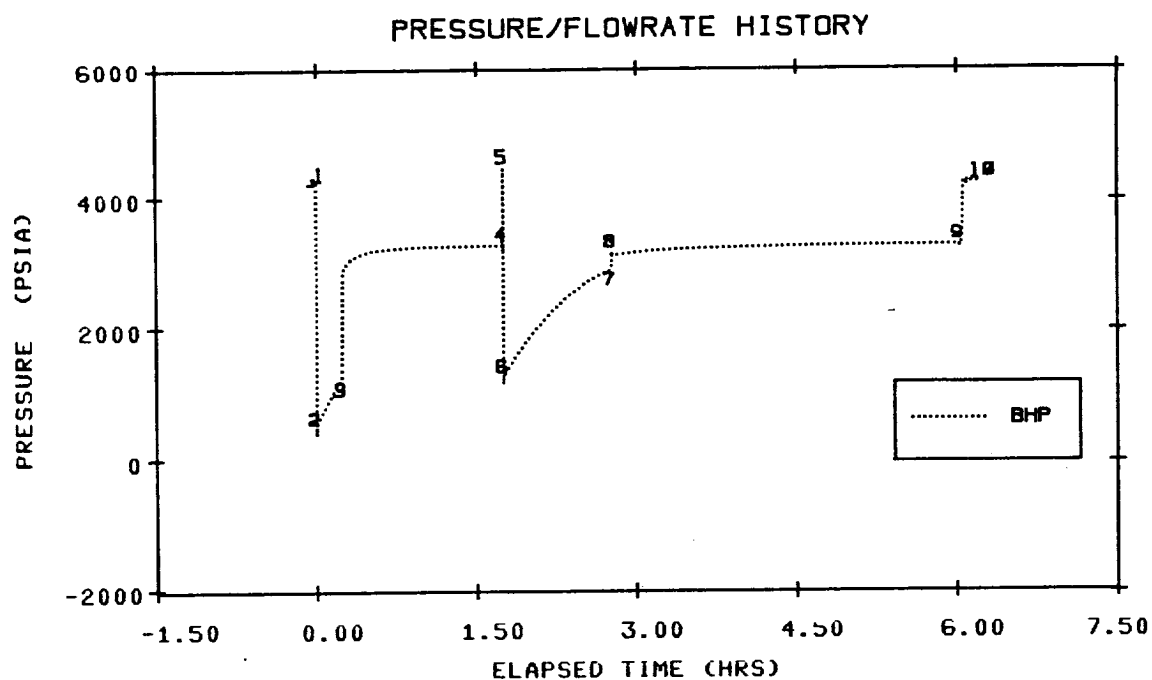
Oil API ..... --  
Basic Solids ..... --  
Gas Gravity ..... --  
Water Cut (%) ..... 100  
Viscosity (cp) ..... --  
Total Compressibility (1/psi) .. --  
Porosity (%) ..... 10-15 (Est.)  
Reservoir Temperature (F) .... 132

PRODUCTION RATE DURING TEST: ----

#### COMMENTS:

Test One B was mechanically successful, although no trace of hydrocarbons were recovered with the sulfur water and sour gas. Visual interpretation of the charts tend to indicate a layering effect, and that more than one homogeneous zone was tested within the interval. Further interpretation can be provided upon request.

## DATA SUMMARY



## SEQUENCE OF EVENTS

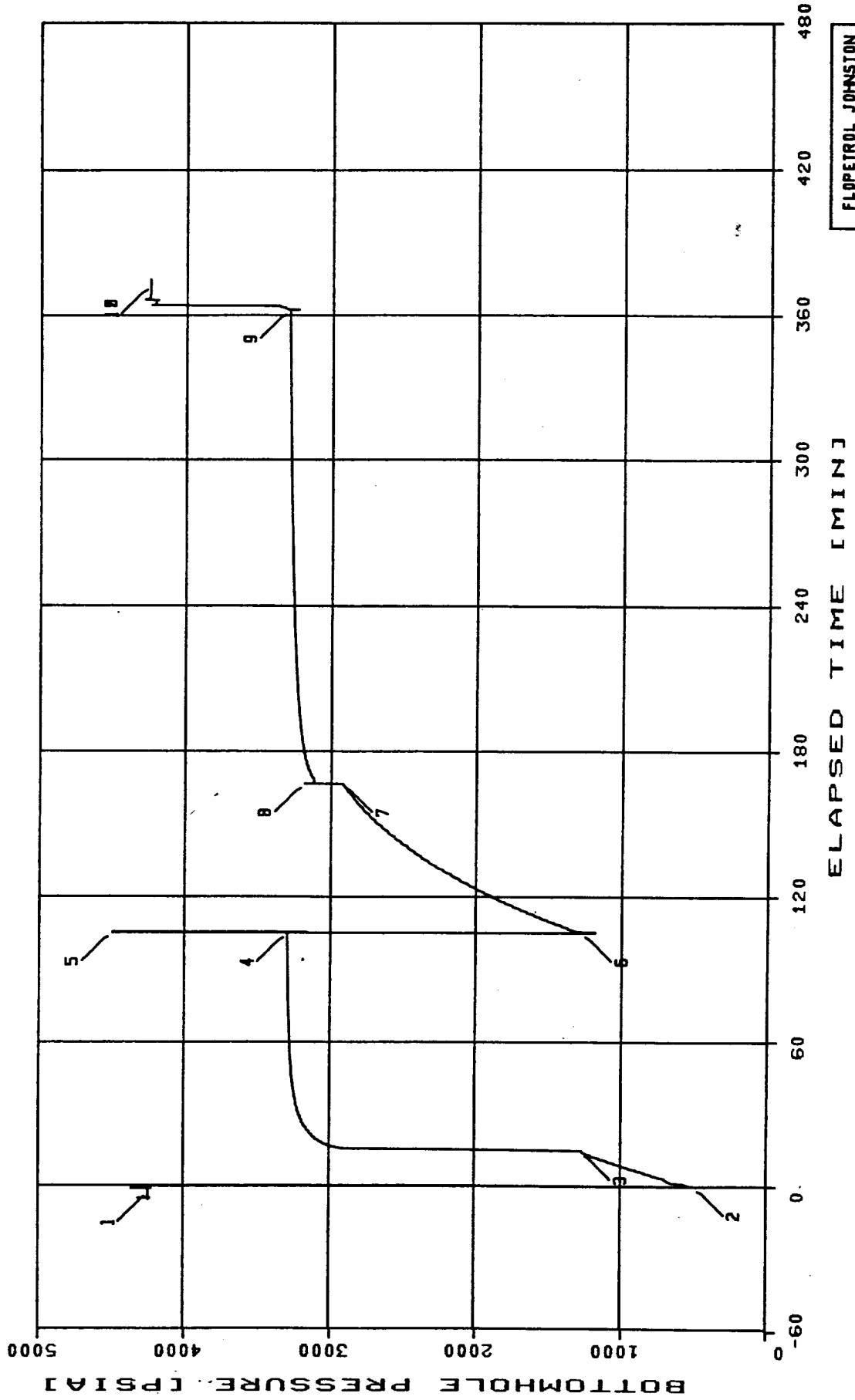
| EVENT NO. | DATE   | TIME (HR:MIN) | DESCRIPTION              | ELAPSED TIME (HR:MIN) | BHP (PSIA) | WHP (PSIA) |
|-----------|--------|---------------|--------------------------|-----------------------|------------|------------|
| 1         | 22-APR | 9:23          | HYDROSTATIC MUD          | 0:03                  | 4248.      | 0.         |
| 2         | 22-APR | 9:20          | START FLOW               | 0:00                  | 500.       | 0.         |
| 3         | 22-APR | 9:34          | END FLOW & START SHUT-IN | 0:15                  | 1277.      | 0.         |
| 4         | 22-APR | 11:05         | END SHUT-IN              | 1:45                  | 3299.      | 0.         |
| 5         | 22-APR | 11:05         | PULLED LOOSE             | 1:45                  | 4506.      | 0.         |
| 6         | 22-APR | 11:05         | START FLOW               | 1:46                  | 1279.      | 0.         |
| 7         | 22-APR | 12:06         | END FLOW & START SHUT-IN | 2:46                  | 2924.      | 0.         |
| 8         | 22-APR | 12:06         | BYPASSED MUD             | 2:46                  | 3183.      | 0.         |
| 9         | 22-APR | 15:22         | END SHUT-IN              | 6:02                  | 3297.      | 0.         |
| 10        | 22-APR | 15:32         | HYDROSTATIC MUD          | 6:12                  | 4254.      | 0.         |

## DST EVENT SUMMARY

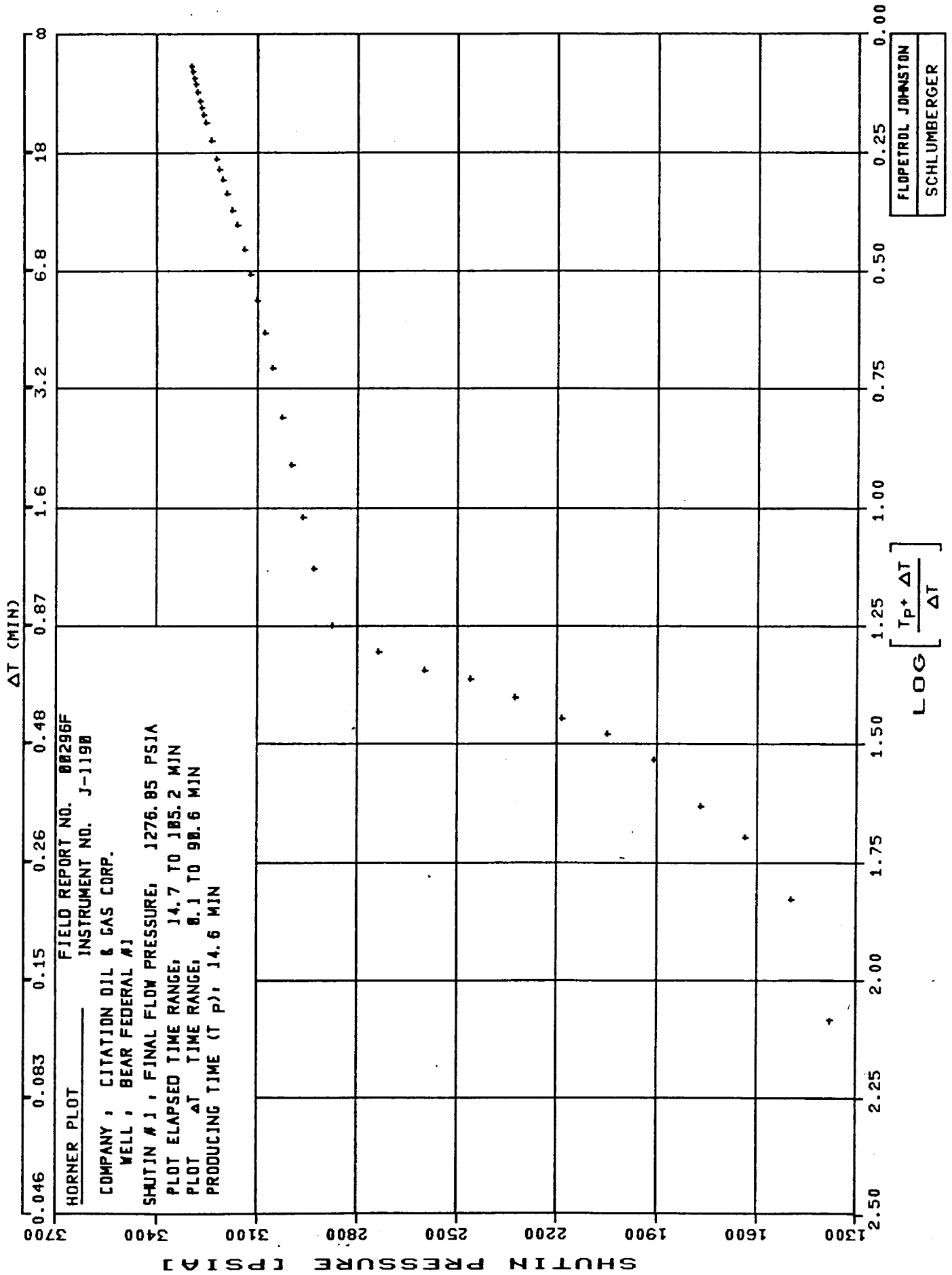
| DATE<br>(M/D/Y) | TIME<br>(HR:MIN) | EVENT<br>E.T.<br>(MIN) | EVENT DESCRIPTION                      | SURFACE<br>PRESSURE<br>(PSIG) | FLOOR MANIFOLD<br>CHOKE SIZE<br>(INCH) |
|-----------------|------------------|------------------------|----------------------------------------|-------------------------------|----------------------------------------|
| 4/22/86         | 9:18             | —                      | SET PACKER                             |                               |                                        |
|                 | 9:20             | —                      | OPENED TEST TOOL FOR INITIAL FLOW      | 4 oz.                         | Bubble Hose                            |
|                 | 9:21             |                        | Fair blow increasing to strong blow    | 8 oz.                         |                                        |
|                 | 9:24             |                        | during the initial flow period.        | 1 PSI                         |                                        |
|                 | 9:31             |                        |                                        | 3 "                           |                                        |
|                 | 9:35             |                        | 15 minute initial flow period.         | 4 "                           |                                        |
|                 | 9:35             | —                      | CLOSED TEST TOOL FOR INITIAL SHUT-IN   |                               |                                        |
|                 |                  |                        | No gas to surface during initial       |                               |                                        |
|                 |                  |                        | shut-in period blowdown.               |                               |                                        |
|                 |                  |                        |                                        |                               |                                        |
|                 | 11:05            |                        | Ended 90 minute initial shut-in        |                               |                                        |
|                 | 11:07            | —                      | OPENED TEST TOOL FOR FINAL FLOW        | 2 oz.                         | Bubble Hose                            |
|                 | 11:08            |                        | Fair blow increasing to strong blow    | 8 oz.                         |                                        |
|                 | 11:09            |                        | initially.                             | 1 PSI                         |                                        |
|                 | 11:17            |                        |                                        | 3 "                           |                                        |
|                 | 11:23            |                        | Constant incremental increase through- | 5 "                           |                                        |
|                 | 11:29            |                        | out final flow period.                 | 7 "                           |                                        |
|                 | 11:35            |                        |                                        | 9 "                           |                                        |
|                 | 11:40            |                        |                                        | 11 "                          |                                        |
|                 | 11:46            |                        |                                        | 13 "                          |                                        |
|                 | 11:51            |                        | No flare, will not burn.               | 15 "                          |                                        |
|                 | 12:03            |                        | 60 minute final flow period            | 19 "                          |                                        |
|                 | 12:07            | —                      | CLOSED TEST TOOL FOR FINAL SHUT-IN     |                               |                                        |
|                 |                  |                        | No gas to surface during final         |                               |                                        |
|                 |                  |                        | shut-in blowdown.                      |                               |                                        |
|                 |                  |                        |                                        |                               |                                        |
|                 |                  |                        | 195 minute final shut-in period        |                               |                                        |
|                 | 15:22            | —                      | FINISHED FINAL SHUT-IN                 |                               |                                        |
|                 | 15:30            | —                      | UNSEATED PACKER & pulled to fluid      |                               |                                        |
|                 | 17:20            | —                      | REVERSED OUT                           |                               |                                        |
|                 |                  |                        | Reversed recovery to pit               |                               |                                        |
|                 |                  |                        |                                        |                               |                                        |
|                 |                  |                        |                                        |                               |                                        |
|                 |                  |                        |                                        |                               |                                        |
|                 | 18:30            | —                      | BEGAN TRIP OUT OF HOLE                 |                               |                                        |
|                 |                  |                        |                                        |                               |                                        |

# BOTTOMHOLE PRESSURE LOG

FIELD REPORT NO. 88296F COMPANY: CITATION OIL & GAS CORP.  
 INSTRUMENT NO. J-1198 WELL: BEAR FEDERAL #1  
 DEPTH: 8822 FT  
 CAPACITY: 4700 PSI  
 PORT OPENING: INSIDE



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# LOG LOG PLOT

COMPANY : CITATION OIL & GAS CORP.

WELL : BEAR FEDERAL #1

FIELD REPORT NO. 00296F

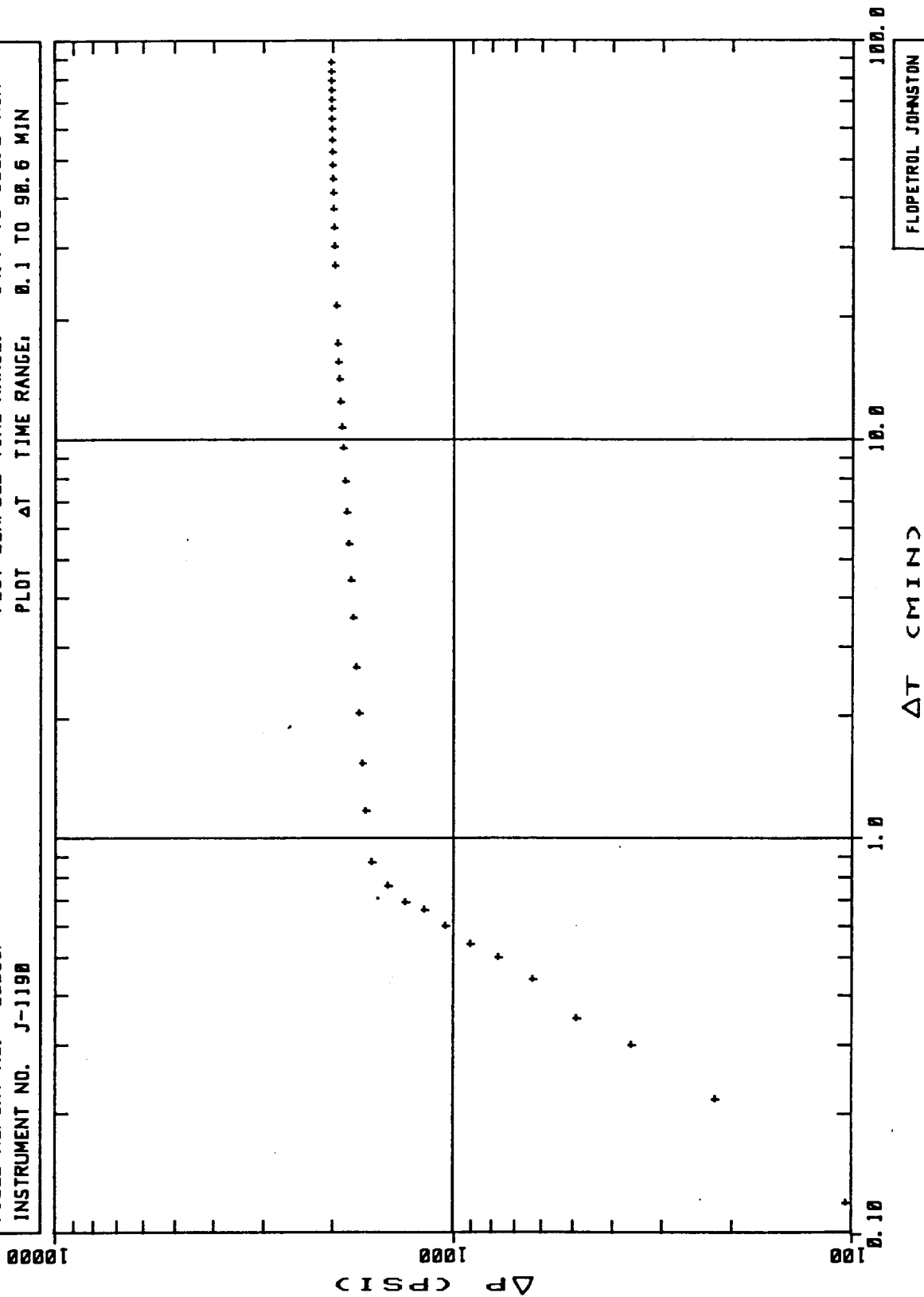
INSTRUMENT NO. J-1190

SHUTIN # 1 ,

FINAL FLOW PRESSURE (PWF), 1276.85 PSIA

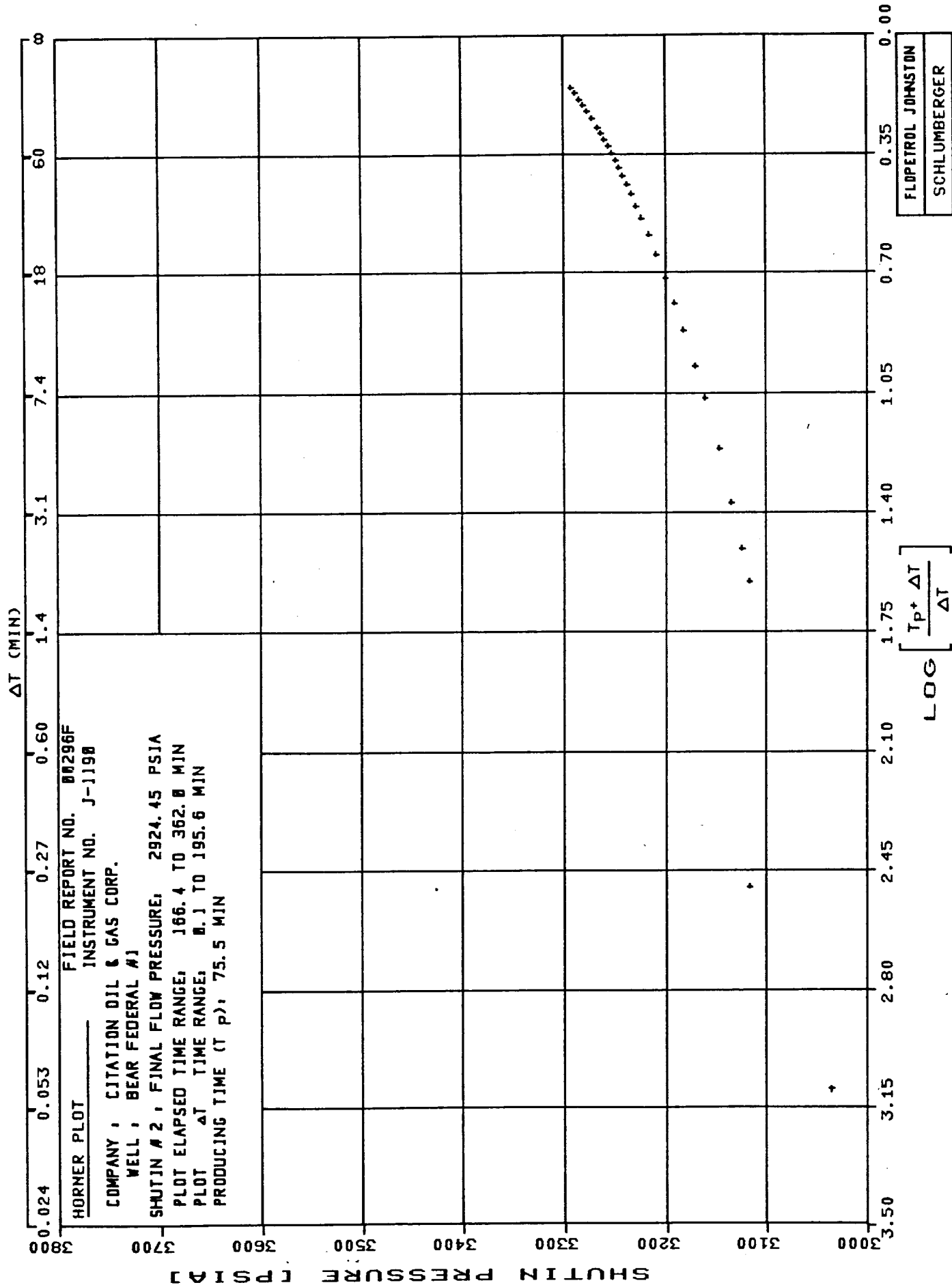
PLOT ELAPSED TIME RANGE, 14.7 TO 105.2 MIN

PLOT  $\Delta T$  TIME RANGE, 0.1 TO 90.6 MIN



FLOPETROL JOHNSTON

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 \* WELL TEST DATA PRINTOUT \*  
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FIELD REPORT # : 00296F

COMPANY : CITATION OIL & GAS CORP.  
 WELL : BEAR FEDERAL #1

INSTRUMENT # : J-1190  
 CAPACITY [PSI] : 4700.  
 DEPTH [FT] : 8822.0  
 PORT OPENING : INSIDE  
 TEMPERATURE [DEG F] : 132.0

LABEL POINT INFORMATION

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| #  | TIME<br>OF DAY |  | DATE<br>DD-MM | EXPLANATION              | ELAPSED<br>TIME, MIN | BOT HOLE<br>PRESSURE<br>PSIA |
|----|----------------|--|---------------|--------------------------|----------------------|------------------------------|
|    | HH:MM:SS       |  |               |                          |                      |                              |
| 1  | 9:16:38        |  | 22-AP         | HYDROSTATIC MUD          | -3.36                | 4248                         |
| 2  | 9:20: 0        |  | 22-AP         | START FLOW               | 0.00                 | 500                          |
| 3  | 9:34:37        |  | 22-AP         | END FLOW & START SHUT-IN | 14.61                | 1277                         |
| 4  | 11: 5:14       |  | 22-AP         | END SHUT-IN              | 105.23               | 3299                         |
| 5  | 11: 5:28       |  | 22-AP         | PULLED LOOSE             | 105.47               | 4506                         |
| 6  | 11: 5:32       |  | 22-AP         | START FLOW               | 105.53               | 1278                         |
| 7  | 12: 6:23       |  | 22-AP         | END FLOW & START SHUT-IN | 166.38               | 2924                         |
| 8  | 12: 6:26       |  | 22-AP         | BYPASSED MUD             | 166.44               | 3183                         |
| 9  | 15:22: 0       |  | 22-AP         | END SHUT-IN              | 362.00               | 3297                         |
| 10 | 15:32:22       |  | 22-AP         | HYDROSTATIC MUD          | 372.37               | 4254                         |

SUMMARY OF FLOW PERIODS

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| PERIOD | START<br>ELAPSED<br>TIME, MIN | END<br>ELAPSED<br>TIME, MIN | DURATION<br>MIN | START<br>PRESSURE<br>PSIA | END<br>PRESSURE<br>PSIA |
|--------|-------------------------------|-----------------------------|-----------------|---------------------------|-------------------------|
|        |                               |                             |                 |                           |                         |
| 1      | 0.00                          | 14.61                       | 14.61           | 500                       | 1277                    |
| 2      | 105.53                        | 166.38                      | 60.85           | 1278                      | 2924                    |

SUMMARY OF SHUTIN PERIODS

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| PERIOD | START<br>ELAPSED<br>TIME, MIN | END<br>ELAPSED<br>TIME, MIN | DURATION<br>MIN | START<br>PRESSURE<br>PSIA | END<br>PRESSURE<br>PSIA | FINAL FLOW<br>PRESSURE<br>PSIA | PRODUCING<br>TIME, MIN |
|--------|-------------------------------|-----------------------------|-----------------|---------------------------|-------------------------|--------------------------------|------------------------|
|        |                               |                             |                 |                           |                         |                                |                        |
| 1      | 14.61                         | 105.23                      | 90.62           | 1277                      | 3299                    | 1277                           | 14.61                  |
| 2      | 166.38                        | 362.00                      | 195.62          | 2924                      | 3297                    | 2924                           | 75.46                  |



## TEST PHASE : FLOW PERIOD # 1

| TIME<br>OF DAY | DATE  | ELAPSED<br>TIME, MIN | DELTA<br>TIME, MIN | BOT HOLE<br>PRESSURE<br>PSIA |
|----------------|-------|----------------------|--------------------|------------------------------|
| HH:MM:SS       | DD-MM |                      |                    |                              |

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|         |       |       |       |      |
|---------|-------|-------|-------|------|
| 9:20: 0 | 22-AP | 0.00  | 0.00  | 500  |
| 9:25: 0 | 22-AP | 5.00  | 5.00  | 813  |
| 9:30: 0 | 22-AP | 10.00 | 10.00 | 1074 |
| 9:34:37 | 22-AP | 14.61 | 14.61 | 1277 |

## TEST PHASE : SHUTIN PERIOD # 1

FINAL FLOW PRESSURE [PSIA] = 1277

PRODUCING TIME [MIN] = 14.61

| TIME<br>OF DAY | DATE  | ELAPSED<br>TIME, MIN | DELTA<br>TIME, MIN | BOT HOLE<br>PRESSURE<br>PSIA | DELTA P<br>PSI | LOG<br>HORNER<br>TIME |
|----------------|-------|----------------------|--------------------|------------------------------|----------------|-----------------------|
| HH:MM:SS       | DD-MM |                      |                    |                              |                |                       |

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|          |       |        |       |      |      |       |
|----------|-------|--------|-------|------|------|-------|
| 9:34:37  | 22-AP | 14.61  | 0.00  | 1277 | 0    |       |
| 9:35:37  | 22-AP | 15.61  | 1.00  | 2902 | 1625 | 1.193 |
| 9:36:37  | 22-AP | 16.61  | 2.00  | 2997 | 1720 | 0.919 |
| 9:37:37  | 22-AP | 17.61  | 3.00  | 3039 | 1762 | 0.769 |
| 9:38:37  | 22-AP | 18.61  | 4.00  | 3069 | 1793 | 0.668 |
| 9:39:37  | 22-AP | 19.61  | 5.00  | 3094 | 1817 | 0.594 |
| 9:40:37  | 22-AP | 20.61  | 6.00  | 3114 | 1837 | 0.536 |
| 9:41:37  | 22-AP | 21.61  | 7.00  | 3130 | 1853 | 0.490 |
| 9:42:37  | 22-AP | 22.61  | 8.00  | 3144 | 1867 | 0.451 |
| 9:43:37  | 22-AP | 23.61  | 9.00  | 3156 | 1880 | 0.419 |
| 9:44:37  | 22-AP | 24.61  | 10.00 | 3169 | 1892 | 0.391 |
| 9:46:37  | 22-AP | 26.61  | 12.00 | 3189 | 1912 | 0.346 |
| 9:48:37  | 22-AP | 28.61  | 14.00 | 3204 | 1928 | 0.310 |
| 9:50:37  | 22-AP | 30.61  | 16.00 | 3218 | 1941 | 0.282 |
| 9:52:37  | 22-AP | 32.61  | 18.00 | 3226 | 1950 | 0.258 |
| 9:54:37  | 22-AP | 34.61  | 20.00 | 3234 | 1957 | 0.238 |
| 9:56:37  | 22-AP | 36.61  | 22.00 | 3241 | 1964 | 0.221 |
| 9:58:37  | 22-AP | 38.61  | 24.00 | 3247 | 1970 | 0.206 |
| 10: 0:37 | 22-AP | 40.61  | 26.00 | 3252 | 1975 | 0.194 |
| 10: 2:37 | 22-AP | 42.61  | 28.00 | 3257 | 1980 | 0.182 |
| 10: 4:37 | 22-AP | 44.61  | 30.00 | 3261 | 1984 | 0.172 |
| 10: 9:37 | 22-AP | 49.61  | 35.00 | 3268 | 1992 | 0.152 |
| 10:14:37 | 22-AP | 54.61  | 40.00 | 3274 | 1997 | 0.135 |
| 10:19:37 | 22-AP | 59.61  | 45.00 | 3279 | 2002 | 0.122 |
| 10:24:37 | 22-AP | 64.61  | 50.00 | 3283 | 2006 | 0.111 |
| 10:29:37 | 22-AP | 69.61  | 55.00 | 3285 | 2009 | 0.102 |
| 10:34:37 | 22-AP | 74.61  | 60.00 | 3288 | 2011 | 0.095 |
| 10:39:37 | 22-AP | 79.61  | 65.00 | 3290 | 2013 | 0.088 |
| 10:44:37 | 22-AP | 84.61  | 70.00 | 3292 | 2016 | 0.082 |
| 10:49:37 | 22-AP | 89.61  | 75.00 | 3295 | 2018 | 0.077 |
| 10:54:37 | 22-AP | 94.61  | 80.00 | 3296 | 2019 | 0.073 |
| 10:59:37 | 22-AP | 99.61  | 85.00 | 3297 | 2020 | 0.069 |
| 11: 4:37 | 22-AP | 104.61 | 90.00 | 3299 | 2022 | 0.065 |
| 11: 5:14 | 22-AP | 105.23 | 90.62 | 3299 | 2022 | 0.065 |

## TEST PHASE : FLOW PERIOD # 2

| TIME<br>OF DAY | DATE  | ELAPSED<br>TIME, MIN | DELTA<br>TIME, MIN | BOT HOLE<br>PRESSURE<br>PSIA |
|----------------|-------|----------------------|--------------------|------------------------------|
| HH:MM:SS       | DD-MM |                      |                    |                              |
| 11: 5:32       | 22-AP | 105.53               | 0.00               | 1278                         |
| 11:10:32       | 22-AP | 110.53               | 5.00               | 1525                         |
| 11:15:32       | 22-AP | 115.53               | 10.00              | 1726                         |
| 11:20:32       | 22-AP | 120.53               | 15.00              | 1911                         |
| 11:25:32       | 22-AP | 125.53               | 20.00              | 2078                         |
| 11:30:32       | 22-AP | 130.53               | 25.00              | 2225                         |
| 11:35:32       | 22-AP | 135.53               | 30.00              | 2368                         |
| 11:40:32       | 22-AP | 140.53               | 35.00              | 2489                         |
| 11:45:32       | 22-AP | 145.53               | 40.00              | 2598                         |
| 11:50:32       | 22-AP | 150.53               | 45.00              | 2696                         |
| 11:55:32       | 22-AP | 155.53               | 50.00              | 2779                         |
| 12: 0:32       | 22-AP | 160.53               | 55.00              | 2850                         |
| 12: 5:32       | 22-AP | 165.53               | 60.00              | 2916                         |
| 12: 6:23       | 22-AP | 166.38               | 60.85              | 2924                         |

## TEST PHASE : SHUTIN PERIOD # 2

FINAL FLOW PRESSURE [PSIA] = 2924

PRODUCING TIME [MIN] = 75.46

| TIME<br>OF DAY | DATE  | ELAPSED<br>TIME, MIN | DELTA<br>TIME, MIN | BOT HOLE<br>PRESSURE<br>PSIA | DELTA P<br>PSI | LOG<br>HORNER<br>TIME |
|----------------|-------|----------------------|--------------------|------------------------------|----------------|-----------------------|
| HH:MM:SS       | DD-MM |                      |                    |                              |                |                       |
| 12: 6:23       | 22-AP | 166.38               | 0.00               | 2924                         | 0              |                       |
| 12: 7:23       | 22-AP | 167.38               | 1.00               | 3117                         | 192            | 1.883                 |
| 12: 8:23       | 22-AP | 168.38               | 2.00               | 3118                         | 193            | 1.588                 |
| 12: 9:23       | 22-AP | 169.38               | 3.00               | 3131                         | 206            | 1.418                 |
| 12:10:23       | 22-AP | 170.38               | 4.00               | 3140                         | 215            | 1.298                 |
| 12:11:23       | 22-AP | 171.38               | 5.00               | 3147                         | 223            | 1.207                 |
| 12:12:23       | 22-AP | 172.38               | 6.00               | 3154                         | 230            | 1.133                 |
| 12:13:23       | 22-AP | 173.38               | 7.00               | 3161                         | 236            | 1.071                 |
| 12:14:23       | 22-AP | 174.38               | 8.00               | 3166                         | 241            | 1.018                 |
| 12:15:23       | 22-AP | 175.38               | 9.00               | 3171                         | 247            | 0.972                 |
| 12:16:23       | 22-AP | 176.38               | 10.00              | 3175                         | 251            | 0.932                 |
| 12:18:23       | 22-AP | 178.38               | 12.00              | 3184                         | 259            | 0.863                 |
| 12:20:23       | 22-AP | 180.38               | 14.00              | 3190                         | 265            | 0.806                 |
| 12:22:23       | 22-AP | 182.38               | 16.00              | 3196                         | 271            | 0.757                 |
| 12:24:23       | 22-AP | 184.38               | 18.00              | 3201                         | 277            | 0.715                 |
| 12:26:23       | 22-AP | 186.38               | 20.00              | 3206                         | 281            | 0.679                 |
| 12:28:23       | 22-AP | 188.38               | 22.00              | 3210                         | 286            | 0.646                 |
| 12:30:23       | 22-AP | 190.38               | 24.00              | 3214                         | 289            | 0.617                 |
| 12:32:23       | 22-AP | 192.38               | 26.00              | 3217                         | 292            | 0.591                 |
| 12:34:23       | 22-AP | 194.38               | 28.00              | 3220                         | 296            | 0.568                 |
| 12:36:23       | 22-AP | 196.38               | 30.00              | 3224                         | 299            | 0.546                 |
| 12:41:23       | 22-AP | 201.38               | 35.00              | 3230                         | 306            | 0.499                 |
| 12:46:23       | 22-AP | 206.38               | 40.00              | 3235                         | 311            | 0.460                 |
| 12:51:23       | 22-AP | 211.38               | 45.00              | 3241                         | 316            | 0.428                 |

TEST PHASE : SHUTIN PERIOD # 2

FINAL FLOW PRESSURE (PSIA) = 2924

PRODUCING TIME (MIN) = 75.46

| TIME<br>OF DAY | DATE  | ELAPSED<br>TIME, MIN | DELTA<br>TIME, MIN | BOT HOLE<br>PRESSURE<br>PSIA | DELTA P<br>PSI | LOG<br>HORNER<br>TIME |
|----------------|-------|----------------------|--------------------|------------------------------|----------------|-----------------------|
| HH:MM:SS       | DD-MM | TIME, MIN            | TIME, MIN          | PSIA                         | PSI            | TIME                  |
| 12:56:23       | 22-AP | 216.38               | 50.00              | 3245                         | 321            | 0.400                 |
| 13: 1:23       | 22-AP | 221.38               | 55.00              | 3249                         | 324            | 0.375                 |
| 13: 6:23       | 22-AP | 226.38               | 60.00              | 3252                         | 328            | 0.354                 |
| 13:11:23       | 22-AP | 231.38               | 65.00              | 3255                         | 331            | 0.335                 |
| 13:16:23       | 22-AP | 236.38               | 70.00              | 3259                         | 334            | 0.318                 |
| 13:21:23       | 22-AP | 241.38               | 75.00              | 3262                         | 337            | 0.302                 |
| 13:26:23       | 22-AP | 246.38               | 80.00              | 3264                         | 340            | 0.289                 |
| 13:31:23       | 22-AP | 251.38               | 85.00              | 3266                         | 342            | 0.276                 |
| 13:36:23       | 22-AP | 256.38               | 90.00              | 3269                         | 344            | 0.264                 |
| 13:41:23       | 22-AP | 261.38               | 95.00              | 3271                         | 346            | 0.254                 |
| 13:46:23       | 22-AP | 266.38               | 100.00             | 3273                         | 349            | 0.244                 |
| 13:51:23       | 22-AP | 271.38               | 105.00             | 3275                         | 351            | 0.235                 |
| 13:56:23       | 22-AP | 276.38               | 110.00             | 3277                         | 353            | 0.227                 |
| 14: 1:23       | 22-AP | 281.38               | 115.00             | 3278                         | 354            | 0.219                 |
| 14: 6:23       | 22-AP | 286.38               | 120.00             | 3280                         | 355            | 0.212                 |
| 14:11:23       | 22-AP | 291.38               | 125.00             | 3281                         | 357            | 0.205                 |
| 14:16:23       | 22-AP | 296.38               | 130.00             | 3283                         | 358            | 0.199                 |
| 14:21:23       | 22-AP | 301.38               | 135.00             | 3284                         | 360            | 0.193                 |
| 14:26:23       | 22-AP | 306.38               | 140.00             | 3286                         | 361            | 0.187                 |
| 14:31:23       | 22-AP | 311.38               | 145.00             | 3287                         | 363            | 0.182                 |
| 14:36:23       | 22-AP | 316.38               | 150.00             | 3288                         | 363            | 0.177                 |
| 14:41:23       | 22-AP | 321.38               | 155.00             | 3289                         | 365            | 0.172                 |
| 14:46:23       | 22-AP | 326.38               | 160.00             | 3290                         | 366            | 0.168                 |
| 14:51:23       | 22-AP | 331.38               | 165.00             | 3291                         | 367            | 0.164                 |
| 14:56:23       | 22-AP | 336.38               | 170.00             | 3292                         | 368            | 0.160                 |
| 15: 1:23       | 22-AP | 341.38               | 175.00             | 3293                         | 369            | 0.156                 |
| 15: 6:23       | 22-AP | 346.38               | 180.00             | 3294                         | 369            | 0.152                 |
| 15:11:23       | 22-AP | 351.38               | 185.00             | 3295                         | 370            | 0.149                 |
| 15:16:23       | 22-AP | 356.38               | 190.00             | 3296                         | 371            | 0.145                 |
| 15:21:23       | 22-AP | 361.38               | 195.00             | 3297                         | 372            | 0.142                 |
| 15:22: 0       | 22-AP | 362.00               | 195.62             | 3297                         | 372            | 0.142                 |

REPORT NO: 00296F

PROCESSING DATE: 4/23/86

CUSTOMER: CITATION OIL &amp; GAS CORP.

WELL: BEAR FEDERAL #1

TEST # (s): ONE B

THIS TEST ONLY xxx ALL TESTS ON THIS WELL      PAGE 1 of 1

FLOPETROL JOHNSTON has sent this report to the following companies:

5 CITATION OIL & GAS CORP.  
SOUTH ATRIUM, STE 300  
16800 GREENSPPOINT PARK DR.  
HOUSTON, TX 77060  
ATTN: CAROL ANDERSON

2 MOBIL PRODUCING TX & NM INC.  
P.O. BOX 633  
MIDLAND, TX 79702  
ATTN: GARY A. STUMPF

2 McCLELLAN OIL CORP.  
P.O. DRAWER 730  
ROSWELL, NM 88202  
ATTN: MARK McCLELLAN

4 PHILLIPS PETROLEUM CO.  
4001 PENBROOK  
ODESSA, TX 79762  
ATTN: R.G. STRAUSS

2 CAMBRIDGE RELATED ASSETS, INC. 1  
1200 SAN JACINTO BLDG.  
911 WALKER STREET  
HOUSTON, TX 77002  
ATTN: BARBARA WYNN

CITATION OIL & GAS CORP.  
P.O. BOX 663  
MIDLAND, TX 79702  
ATTN: ANDY LATTU

2 H.J. LEDBETTER  
P.O. BOX 5879  
ABILENE, TX 79608

1 COLUMBIA GAS DEVELOPMENT CORP.  
P.O. BOX 1350  
HOUSTON, TX 77251-1350  
ATTN: BOB MYERS

2 GRACE PETROLEUM CORP.  
6501 NORTH BROADWAY  
OKLAHOMA CITY, OK 73116-8298  
ATTN: JIM COLLINS