

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other instructions on reverse side)

FOR APPROVED  
OMB NO. 1004-0137  
Expires: December 31, 1991

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. REMVR. ☒ Other \_\_\_\_\_

2. NAME OF OPERATOR  
Gruy Petroleum Management Co.  
3. ADDRESS AND TELEPHONE NO.  
P O Box 140907 Irving Tx. 75014-0907  
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*  
At surface 330' FNL & 1980' FEL  
At top prod. interval reported below 1065' FNL & 1803' FEL  
At total depth 1817' FNL & 1613' FEL

14. PERMIT NO. \_\_\_\_\_ DATE ISSUED \_\_\_\_\_  
12. COUNTY OR PARISH Eddy 13. STATE NM  
15. DATE SPUDDED 08-20-03 16. DATE T.D. REACHED 10-02-03 17. DATE COMPL. (Ready to prod.) 06-13-04 18. ELEVATIONS (DF, RKB, RT, OR, ETC.)\* 3265' GR 19. ELEV. CASINGHEAD  
20. TOTAL DEPTH, MD & TVD 12300 MD 12020 TVD 21. PLUG, BACK T.D., MD & TVD 12300' MD 12300' TVD 22. IF MULTIPLE COMPL., HOW MANY\* 23. INTERVALS DRILLED BY 24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
Cottonwood Draw Upper Penn 10372' - 10412' Up Casing  
Cottonwood Draw Morrow Undesignated 11836' - 12263' Through Tubing  
25. WAS DIRECTIONAL SURVEY MADE Yes  
26. TYPE ELECTRIC AND OTHER LOGS RUN Dual Spaced Neutron & DLL Microguard 27. WAS WELL CORRED No

| 28. CASING RECORD (Report all strings set in well) |                 |                |           |                                             |               |
|----------------------------------------------------|-----------------|----------------|-----------|---------------------------------------------|---------------|
| CASING SIZE/GRADE                                  | WEIGHT, LB./FT. | DEPTH SET (MD) | HOLE SIZE | TOP OF CEMENT, CEMENTING RECORD             | AMOUNT PULLED |
| 13 - 3/8" H-40                                     | 48 #            | 431'           | 17-1/2"   | 490 sx Prem Plus circ 183 sx to pit         |               |
| 9-5/8" J-55                                        | 40#             | 3200'          | 12-1/4"   | 1050 sx Inter C/PremPlus circ 233 sx to pit |               |
| 7" P-110                                           | 26#             | 10790'         | 8-3/4"    | 950sx Inter H/Sup H TOC 5434'               |               |

| 29. LINER RECORD |          |             |               |             | 30. TUBING RECORD |                |                 |
|------------------|----------|-------------|---------------|-------------|-------------------|----------------|-----------------|
| SIZE             | TOP (MD) | BOTTOM (MD) | BACKS CEMENT* | SCREEN (MD) | SIZE              | DEPTH SET (MD) | PACKER SET (MD) |
| 4-1/2"           | 10491'   | 12299'      | 160 sx Sup H  |             | 2 7/8"            | 11738'         | 11738'          |

| 31. PERFORATION RECORD (Interval, size and number) |       |           |  | 32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC. |                                                 |
|----------------------------------------------------|-------|-----------|--|------------------------------------------------|-------------------------------------------------|
| 12150' - 12263'                                    | 6 SPF | 216 Holes |  | DEPTH INTERVAL (MD)                            | AMOUNT AND KIND OF MATERIAL USED                |
| 12036' - 12046'                                    | 6 SPF | 40 Holes  |  | 12150' - 12233'                                | 147000 gal 45# gel 7% KCL+CO2/94500# 18/40 Vrsp |
| 11836' - 11934'                                    | 6 SPF | 198 Holes |  | 12036' - 12046'                                | 36000 gal 45# gel 7% CO2/ 25000# 18/40 Vrsp     |
| 10372' - 10412'                                    | 6 SPF | 78 Holes  |  | 11836' - 11934'                                | 147000 gal 45# gel 7% KCL+CO2/94500# 18/40 Vrp  |

| 33.* PRODUCTION                |                     |                                                                              |                         |              |                |                                              |                   |
|--------------------------------|---------------------|------------------------------------------------------------------------------|-------------------------|--------------|----------------|----------------------------------------------|-------------------|
| DATE FIRST PRODUCTION 06-14-04 |                     | PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) Flowing |                         |              |                | WELL STATUS (Producing or shut-in) Producing |                   |
| DATE OF TEST 06-14-04          | HOURS TESTED 24     | CHOKER SIZE 30/64                                                            | PROD'N. FOR TEST PERIOD | OIL—BSL. -0- | GAS—MCF. 584   | WATER—BSL. -0-                               | GAS-OIL RATIO N/A |
| FLOW. TUBING PRESS. 1196       | CASINO PRESSURE -0- | CALCULATED 24-HOUR RATE                                                      | OIL—BSL. -0-            | GAS—MCF. 584 | WATER—BSL. -0- | OIL GRAVITY-API (CORR.) NA                   |                   |

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) Sold TEST WITNESSED BY

35. LIST OF ATTACHMENTS NM C-122 & C-102. Logs and Inclination Summary previously submitted.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Zero Farris TITLE Manager Operations Administration DATE June 23, 2004

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

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

38. GEOLOGIC MARKERS

| FORMATION | TOP | BOTTOM | DESCRIPTION, CONTENTS, ETC. | NAME         | TOP         |                  |
|-----------|-----|--------|-----------------------------|--------------|-------------|------------------|
|           |     |        |                             |              | MEAS. DEPTH | TRUE VERT. DEPTH |
|           |     |        |                             | Cysco Canyon | 10204'      |                  |
|           |     |        |                             | Strawn       | 10450'      |                  |
|           |     |        |                             | Atoka        | 10727'      |                  |
|           |     |        |                             | Morrow       | 11385'      |                  |

DISTRICT I  
P.O. Box 1880, Hobbs, NM 88241-1880

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

|                            |                                                |                                             |
|----------------------------|------------------------------------------------|---------------------------------------------|
| API Number<br>30-015-32918 | Pool Code<br>Pending                           | Pool Name<br>Cottonwood Draw Morrow Wildcat |
| Property Code              | Property Name<br>CHOSA DRAW 27 FEDERAL COM     | Well Number<br>1                            |
| OGRID No.<br>162683        | Operator Name<br>GRUY PETROLEUM MANAGEMENT CO. | Elevation<br>3265'                          |

Surface Location

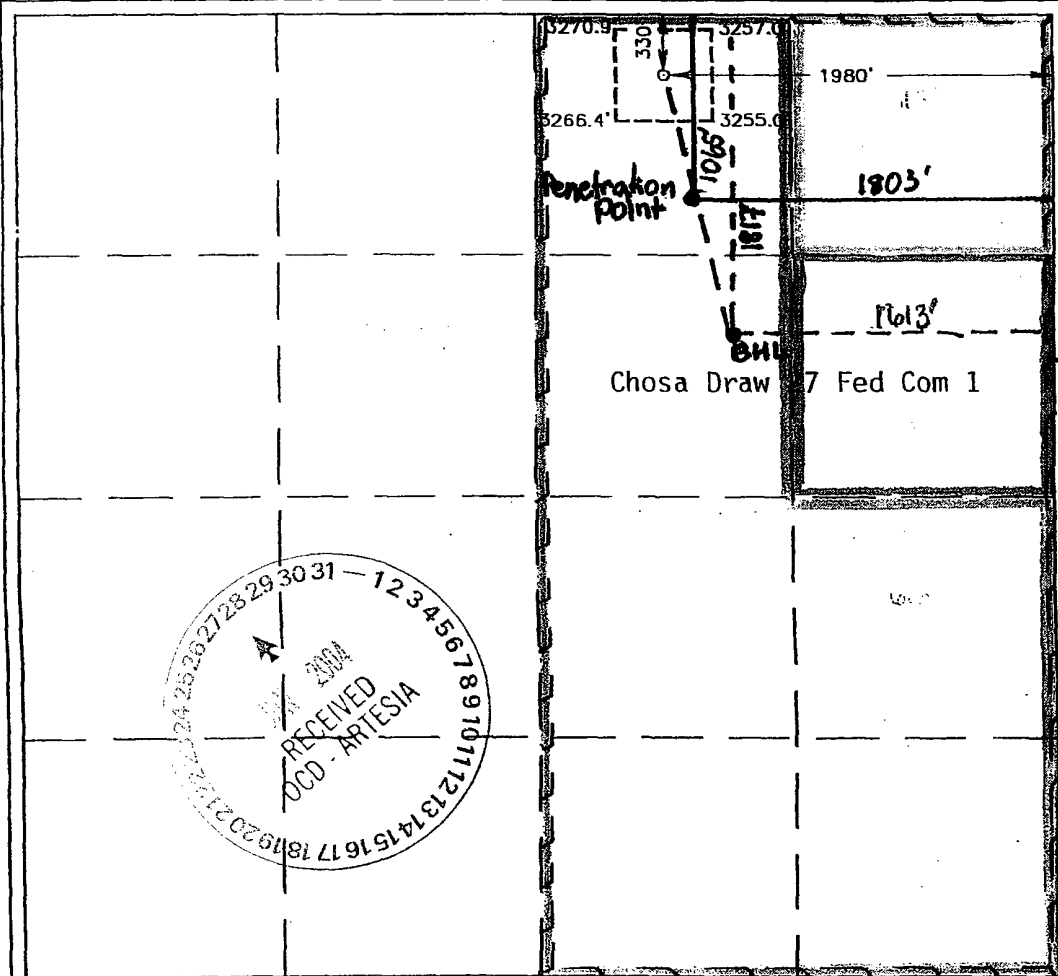
|                    |               |                  |               |         |                       |                           |                        |                        |                |
|--------------------|---------------|------------------|---------------|---------|-----------------------|---------------------------|------------------------|------------------------|----------------|
| UL or lot No.<br>B | Section<br>27 | Township<br>25-S | Range<br>26-E | Lot Idn | Feet from the<br>330' | North/South line<br>NORTH | Feet from the<br>1980' | East/West line<br>EAST | County<br>EDDY |
|--------------------|---------------|------------------|---------------|---------|-----------------------|---------------------------|------------------------|------------------------|----------------|

Bottom Hole Location If Different From Surface

|                     |               |                  |               |         |                        |                           |                        |                        |                |
|---------------------|---------------|------------------|---------------|---------|------------------------|---------------------------|------------------------|------------------------|----------------|
| UL or lot No.<br>BG | Section<br>27 | Township<br>25-S | Range<br>26-E | Lot Idn | Feet from the<br>1817' | North/South line<br>NORTH | Feet from the<br>1613' | East/West line<br>EAST | County<br>EDDY |
|---------------------|---------------|------------------|---------------|---------|------------------------|---------------------------|------------------------|------------------------|----------------|

|                        |                      |                         |           |
|------------------------|----------------------|-------------------------|-----------|
| Dedicated Acres<br>320 | Joint or Infill<br>N | Consolidation Code<br>C | Order No. |
|------------------------|----------------------|-------------------------|-----------|

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

|                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Zeno Farris</i><br/>Signature<br/>Zeno Farris<br/>Printed Name<br/>Manager, Operations Admin<br/>Title<br/>June 25, 2004<br/>Date</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>May 02, 2003</p> <p>Date Surveyed<br/>Signature &amp; Seal of Professional Surveyor<br/>Professional Surveyor<br/>Certificate No. RONALD J. ELLISON 3238<br/>GARY KIDSON 12641</p> |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Submit in duplicate to  
appropriate district office.  
See Rule 401 & Rule 1122

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

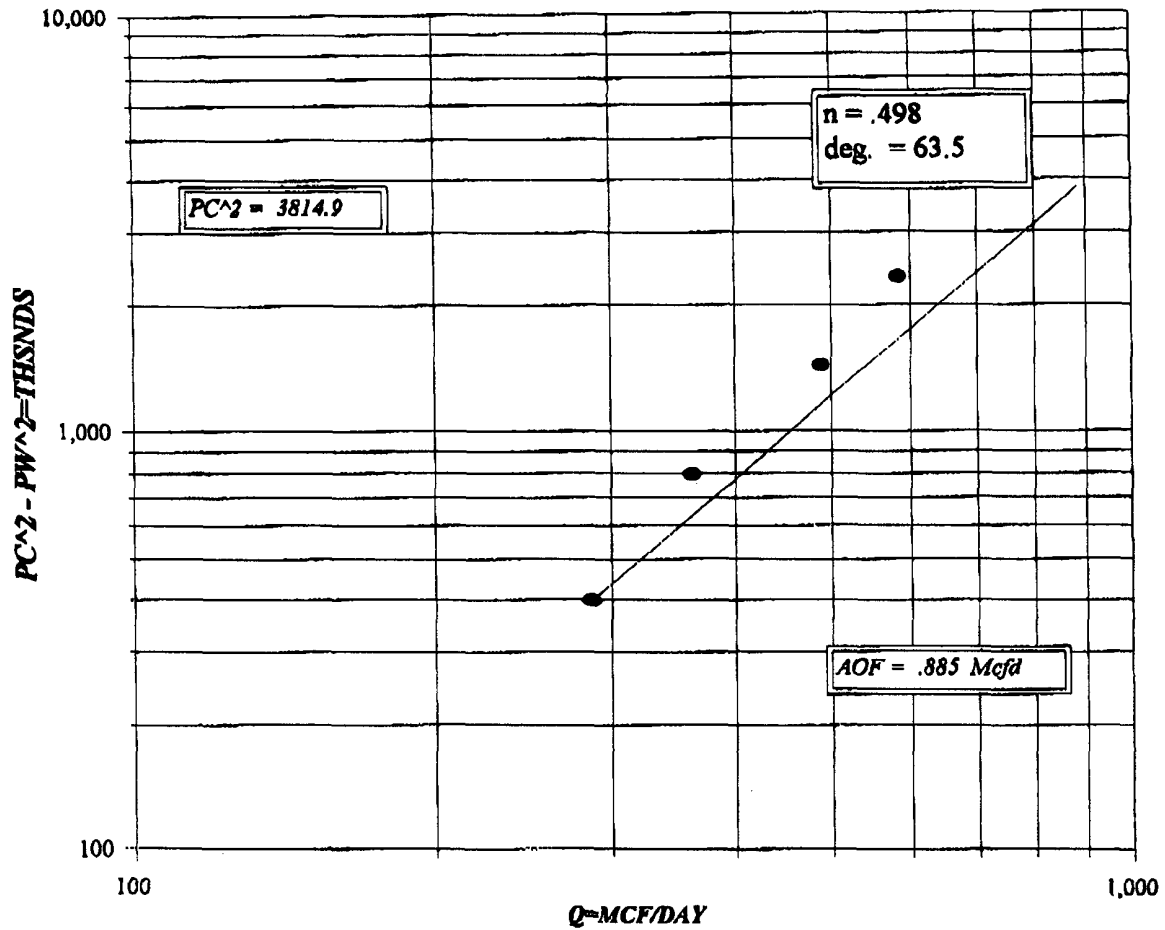
Form C-122  
Revised October, 1999

### MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

|                                                                                                                           |                             |                                   |                             |                                                          |                                                                                                      |                                                                 |                                    |
|---------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------------------|-----------------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------|
| Operator<br><b>GRUY PETROLEUM MANAGEMENT</b>                                                                              |                             |                                   |                             | Lease or Unit Name<br><b>CHOSA DRAW "27" FED COM</b>     |                                                                                                      |                                                                 |                                    |
| Type Test<br><input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special |                             |                                   |                             | Test Date<br><b>6/14/04</b>                              |                                                                                                      | Well No.<br><b>1</b>                                            |                                    |
| Completion Date<br><b>6/10/04</b>                                                                                         |                             | Total Depth<br><b>12300</b>       |                             | Plug Back TD<br><b>10475</b>                             |                                                                                                      | Elevation<br><b>Unit Ltr - Sec - TWP - Rge<br/>B 27 25S 26E</b> |                                    |
| Cag. Size<br><b>4 1/2</b>                                                                                                 | Wt.<br><b>13.5</b>          | d<br><b>3.92</b>                  | Set At<br><b>12300</b>      | Perforations:<br>From: <b>11836</b> To: <b>12234</b>     |                                                                                                      | County<br><b>EDDY</b>                                           |                                    |
| Tbg. Size<br><b>2 7/8</b>                                                                                                 | Wt.<br><b>6.5</b>           | d<br><b>2.441</b>                 | Set At<br><b>11738</b>      | Perforations:<br>From: To:                               |                                                                                                      | Pool                                                            |                                    |
| Type Well-Single-Bradenhead-G.G. or G.O. Multiple<br><b>SINGLE</b>                                                        |                             |                                   |                             | Packer Set At<br><b>11738</b>                            |                                                                                                      | Formation<br><b>MORROW</b>                                      |                                    |
| Producing Thru<br>TUBING                                                                                                  |                             | Reservoir Temp.<br><b>177</b>     |                             | Mean Annual Temp.<br><b>60</b>                           |                                                                                                      | Baro. Press.-P <sub>e</sub><br><b>13.2</b>                      |                                    |
| L<br><b>11738</b>                                                                                                         |                             | H<br><b>11738</b>                 |                             | Gg<br><b>0.674</b>                                       | %CO <sub>2</sub><br><b>11.7</b>                                                                      | %N <sub>2</sub><br><b>0.425</b>                                 | %H <sub>2</sub> S<br><b>Prover</b> |
|                                                                                                                           |                             |                                   |                             | Meter Run<br><b>4.026</b>                                |                                                                                                      | Tape<br><b>FLG</b>                                              |                                    |
| FLOW DATA                                                                                                                 |                             |                                   |                             | TUBING DATA                                              |                                                                                                      | CASING DATA                                                     |                                    |
| No.                                                                                                                       | Prover<br>Line<br>Size      | Orifice<br>x<br>Size              | Press.<br>p.s.i.g.          | Diff.<br>h <sub>w</sub>                                  | Temp.                                                                                                | Press.<br>p.s.i.g.                                              | Temp.                              |
| SI                                                                                                                        |                             |                                   |                             |                                                          |                                                                                                      |                                                                 |                                    |
| 1                                                                                                                         | 4.026 X .875                |                                   | 564                         | 5.9                                                      | 92                                                                                                   | 1835                                                            | 1 HRS                              |
| 2                                                                                                                         | 4.026 X .875                |                                   | 553                         | 9.8                                                      | 94                                                                                                   | 1725                                                            | 1 HRS                              |
| 3                                                                                                                         | 4.026 X .875                |                                   | 556                         | 18.2                                                     | 92                                                                                                   | 1530                                                            | 1 HRS                              |
| 4                                                                                                                         | 4.026 X .875                |                                   | 565                         | 31.1                                                     | 93                                                                                                   | 1196                                                            | 1 HRS                              |
| 5                                                                                                                         |                             |                                   |                             |                                                          |                                                                                                      |                                                                 |                                    |
| RATE OF FLOW CALCULATIONS                                                                                                 |                             |                                   |                             |                                                          |                                                                                                      |                                                                 |                                    |
| No.                                                                                                                       | COEFFICIENT<br>(24 Hour)    | $\sqrt{h_w P_m}$                  | Pressure<br>P <sub>m</sub>  | Flow Temp.<br>Factor Ft.                                 | Gravity Factor<br>F <sub>g</sub>                                                                     | Super Compress<br>Factor F <sub>pv</sub>                        | Rate of Flow<br>Q, Mcfd            |
| 1                                                                                                                         |                             |                                   |                             |                                                          |                                                                                                      |                                                                 | 287                                |
| 2                                                                                                                         | TOTAL                       | FLOW                              | METER                       |                                                          |                                                                                                      |                                                                 | 362                                |
| 3                                                                                                                         |                             |                                   |                             |                                                          |                                                                                                      |                                                                 | 489                                |
| 4                                                                                                                         |                             |                                   |                             |                                                          |                                                                                                      |                                                                 | 584                                |
| 5                                                                                                                         |                             |                                   |                             |                                                          |                                                                                                      |                                                                 |                                    |
| No.                                                                                                                       | P <sub>r</sub>              | Temp. R                           | T <sub>r</sub>              | Z                                                        | Gas Liquid Hydrocarbon Ratio<br>N/A Mcfbbl.                                                          |                                                                 |                                    |
| 1                                                                                                                         |                             |                                   |                             |                                                          | A.P. I. Gravity of Liquid Hydrocarbons<br>N/A Deg.                                                   |                                                                 |                                    |
| 2                                                                                                                         |                             |                                   |                             |                                                          | Specific Gravity Separator Gas<br>0.674 XXXXXXXX                                                     |                                                                 |                                    |
| 3                                                                                                                         | TOTAL                       | FLOW                              | METER                       |                                                          | Specific Gravity Flowing Fluid<br>XXXXXX                                                             |                                                                 |                                    |
| 4                                                                                                                         |                             |                                   |                             |                                                          | Critical Pressure<br>716 P.S.I.A. P.S.I.A.                                                           |                                                                 |                                    |
| 5                                                                                                                         |                             |                                   |                             |                                                          | Critical Temperature<br>363 R R                                                                      |                                                                 |                                    |
| P <sub>o</sub> 1953.2 P <sub>o2</sub> 3814.9                                                                              |                             |                                   |                             |                                                          |                                                                                                      |                                                                 |                                    |
| No.                                                                                                                       | P <sub>i</sub> <sup>2</sup> | P <sub>w</sub>                    | P <sub>w</sub> <sup>2</sup> | P <sub>o</sub> <sup>2</sup> -P <sub>w</sub> <sup>2</sup> | (1) $P_c^2 = \frac{1.625}{P_o^2 - P_w^2}$ (2) $\left[ \frac{P_c^2}{P_o^2 - P_w^2} \right]^n = 3.082$ |                                                                 |                                    |
| 1                                                                                                                         |                             | 1848.5                            | 3416.9                      | 398                                                      |                                                                                                      |                                                                 |                                    |
| 2                                                                                                                         |                             | 1738.7                            | 3023                        | 791.9                                                    |                                                                                                      |                                                                 |                                    |
| 3                                                                                                                         |                             | 1544.2                            | 2384.5                      | 1430.4                                                   |                                                                                                      |                                                                 |                                    |
| 4                                                                                                                         |                             | 1211                              | 1466.6                      | 2348.3                                                   |                                                                                                      |                                                                 |                                    |
| 5                                                                                                                         |                             |                                   |                             |                                                          |                                                                                                      |                                                                 |                                    |
| Absolute Open Flow<br>0.885                                                                                               |                             |                                   |                             | Mcf/d @ 15.025                                           | Angle of Slope (°):<br>63.5                                                                          | Slope n:<br>0.498                                               |                                    |
| Remarks:<br>* NO LIQUID MADE DURING TEST.                                                                                 |                             |                                   |                             |                                                          |                                                                                                      |                                                                 |                                    |
| Approved By Division:                                                                                                     |                             | Conducted By:<br>PRO WELL TESTING |                             | Calculated By:<br>MERV BUECKER                           |                                                                                                      | Checked By:<br>BM                                               |                                    |

Cottonwood Draw  
Under Wildcat

**GRUY PETROLEUM MANAGMENT**  
CHOSA DRAW "27" FED COM #1



C122D FORM IMPORTED FROM SYMPHONY ON 9-9-01

| COMPANY : GRUY PET. MANAGEMENT CO                                                                                                                             |              | LEASE : CHESA DRAW '27' WED WELL NO. 1 |           | TOWNSHIP : 26S |           | RANGE : 26E |           | DATE : 6/16/04 |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------------------------|-----------|----------------|-----------|-------------|-----------|----------------|------------|
| UN/T                                                                                                                                                          | SECTION : 27 | L/H                                    | M2S       | Q/QMUK         | DATE      | RANGE       | DATE      | RANGE          | DATE       |
| L                                                                                                                                                             | 11738        | M                                      | 11738     | 1              | 0.674     | 0.674       | 0.674     | 0.674          | 0.674      |
| ACO2                                                                                                                                                          | 11.7         | M2S                                    | 0.428     | 1              | 0.674     | 0.674       | 0.674     | 0.674          | 0.674      |
| d                                                                                                                                                             | 2.441        | Fr                                     | 0.010763  | QH             | 8197.0    | 0.674       | 0.674     | 0.674          | 0.674      |
| VOL 1 : 287 P8IA 1 : 1846.2 RESV.TEMP 177.0<br>VOL 2 : 362 P8IA 2 : 1738.2 SMUT-IN PRE = 1988.2<br>VOL 3 : 489 P8IA 3 : 1843.2<br>VOL 4 : 584 P8IA 4 : 1209.2 |              |                                        |           |                |           |             |           |                |            |
| PCR : 716<br>TCR : 363                                                                                                                                        |              |                                        |           |                |           |             |           |                |            |
| LINE                                                                                                                                                          | RATE 1       | RATE 2                                 | RATE 3    | RATE 4         | RATE 5    | RATE 6      | RATE 7    | RATE 8         | RATE 9     |
|                                                                                                                                                               | '1ST         | '2ND                                   | '1ST      | '2ND           | '1ST      | '2ND        | '1ST      | '2ND           | '1ST       |
| 1 QM                                                                                                                                                          | 0.287        | 0.287                                  | 0.362     | 0.362          | 0.489     | 0.489       | 0.584     | 0.584          | 0.584      |
| 2 TW                                                                                                                                                          | 594          | 594                                    | 594       | 594            | 594       | 594         | 594       | 594            | 594        |
| 3 Ts                                                                                                                                                          | 637.0        | 637.0                                  | 637.0     | 637.0          | 637.0     | 637.0       | 637.0     | 637.0          | 637.0      |
| 4 T                                                                                                                                                           | 585.5        | 585.5                                  | 585.5     | 585.5          | 585.5     | 585.5       | 585.5     | 585.5          | 585.5      |
| PR (est)                                                                                                                                                      | 2.58         | 2.43                                   | 2.16      | 2.16           | 1.69      | 1.69        | 1.69      | 1.69           | 1.69       |
| 5 Z(est)                                                                                                                                                      | 0.822        | 0.811                                  | 0.827     | 0.818          | 0.837     | 0.823       | 0.860     | 0.846          | 0.846      |
| 6 T2                                                                                                                                                          | 481.2        | 476.1                                  | 484.1     | 476.9          | 480.2     | 481.7       | 503.5     | 494.5          | 494.5      |
| 7 QH/T2                                                                                                                                                       | 17.038       | 17.253                                 | 16.938    | 17.187         | 16.722    | 16.722      | 17.018    | 16.578         | 16.578     |
| 8 es                                                                                                                                                          | 1.894        | 1.810                                  | 1.887     | 1.906          | 1.872     | 1.898       | 1.841     | 1.862          | 1.862      |
| 9 Le-S                                                                                                                                                        | 0.472        | 0.476                                  | 0.470     | 0.475          | 0.466     | 0.472       | 0.467     | 0.463          | 0.463      |
| 10 Pt                                                                                                                                                         | 1848.2       | 1848.2                                 | 1798.2    | 1738.2         | 1643.2    | 1543.2      | 1209.2    | 1209.2         | 1209.2     |
| 11 P12 /1000                                                                                                                                                  | 3415.8       | 3415.8                                 | 3021.3    | 3021.3         | 2381.5    | 2381.5      | 1462.2    | 1462.2         | 1462.2     |
| 12 Fr                                                                                                                                                         | 0.010763     | 0.010763                               | 0.010763  | 0.010763       | 0.010763  | 0.010763    | 0.010763  | 0.010763       | 0.010763   |
| 13 Fc-Fr/T2                                                                                                                                                   | 5.179        | 5.114                                  | 5.210     | 5.133          | 5.276     | 5.185       | 5.419     | 5.322          | 5.322      |
| 14 FcQm                                                                                                                                                       | 1.49         | 1.47                                   | 1.89      | 1.88           | 2.58      | 2.64        | 3.16      | 3.11           | 3.11       |
| 15 L/H(FcQm)2                                                                                                                                                 | 2.2          | 2.2                                    | 3.6       | 3.8            | 6.7       | 6.4         | 10.0      | 9.7            | 9.7        |
| 16 Fw                                                                                                                                                         | 1.043093     | 1.0260456                              | 1.6721643 | 1.6403950      | 3.1007388 | 3.0321198   | 4.5784525 | 4.47191504     | 4.47191504 |
| 17 Pw2                                                                                                                                                        | 3416.9       | 3416.9                                 | 3023.0    | 3023.0         | 2384.6    | 2384.6      | 1466.7    | 1466.6         | 1466.6     |
| 18 Pa2                                                                                                                                                        | 6472.0       | 6625.4                                 | 5704.4    | 5769.0         | 4464.2    | 4813.6      | 2700.8    | 2730.9         | 2730.9     |
| 19 Ps                                                                                                                                                         | 2544.0       | 2554.5                                 | 2388.4    | 2398.8         | 2112.9    | 2124.5      | 1643.4    | 1653.5         | 1653.5     |
| 20 P                                                                                                                                                          | 2196.1       | 2201.3                                 | 2063.3    | 2069.0         | 1826.0    | 1833.9      | 1426.3    | 1430.9         | 1430.9     |
| 21 Pr                                                                                                                                                         | 3.07         | 3.07                                   | 2.88      | 2.89           | 2.55      | 2.56        | 1.99      | 2.00           | 2.00       |
| 22 Tr                                                                                                                                                         | 1.61         | 1.61                                   | 1.61      | 1.61           | 1.61      | 1.61        | 1.61      | 1.61           | 1.61       |
| 23 Z                                                                                                                                                          | 0.811        | 0.811                                  | 0.815     | 0.814          | 0.823     | 0.823       | 0.845     | 0.844          | 0.844      |

Pa = 1963.2 Pc2 = 3814.9  
 P12 = 3415.8 Pw = 1946.6  
 3021.3 1738.7  
 2381.5 1644.2  
 1462.2 1211.0  
 Pc2-Pw2 = 388.0 Pw2 = 3416.9  
 791.9 3023.0  
 1430.4 2394.5  
 2348.3 1466.6  
 n = 0.498  
 Pc2/(Pc2-Pw2) = 9.584  
 4.817  
 2.567  
 1.825  
 [Pc2/Pc2-Pw2]n = 3.082  
 2.188  
 1.680  
 1.279  
 AOF = Q 0.885  
 0.792  
 0.797  
 0.744  
 FORM C122-D



# **Laboratory Services, Inc.**

4016 Fiesta Drive  
Hobbs, New Mexico 88240

Telephone: (505) 397-3713

FOR: Pro Well Testing & Wireline  
Attention: Mr. Merv Buecker  
P. O. Box 791  
Hobbs, New Mexico 88241

SAMPLE: IDENTIFICATION: Chosas Draw 27 Federal #1  
COMPANY: Gruy Petroleum  
LEASE:  
PLANT:

SAMPLE DATA: DATE SAMPLED: 6/14/04  
ANALYSIS DATE: 6/15/04  
PRESSURE - PSIG 566  
SAMPLE TEMP. °F  
ATMOS. TEMP. °F 91

REMARKS: Taken At The Separator

GAS (XX) LIQUID ( )  
SAMPLED BY: Merv Buecker  
ANALYSIS BY: Rolland Perry

## **COMPONENT ANALYSIS**

| COMPONENT              | MOL<br>PERCENT | GPM   |
|------------------------|----------------|-------|
| Hydrogen Sulfide (H2S) |                |       |
| Nitrogen (N2)          | 0.425          |       |
| Carbon Dioxide (CO2)   | 11.709         |       |
| Methane (C1)           | 86.950         |       |
| Ethane (C2)            | 0.851          | 0.227 |
| Propane (C3)           | 0.065          | 0.018 |
| I-Butane (IC4)         | 0.000          | 0.000 |
| N-Butane (NC4)         | 0.000          | 0.000 |
| I-Pentane (IC5)        | 0.000          | 0.000 |
| N-Pentane (NC5)        | 0.000          | 0.000 |
| Hexane Plus (C6+)      | 0.000          |       |
|                        | 100.000        | 0.245 |

BTU/CU.FT. - DRY 895  
AT 14.650 DRY 892  
AT 14.650 WET 877  
AT 14.73 DRY 897  
AT 14.73 WET 881

SPECIFIC GRAVITY -  
CALCULATED 0.674  
MEASURED

MOLECULAR WT. 19.5035