| Uu/ | 611 | ビロロン | 10.00 | 1 AA | ULU | U J H | 0010 |
|-----|-----|------|-------|------|-----|-------|------|
|     |     |      |       |      |     |       |      |

DOYLE HARTMAN

manual

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| District I<br>PO Box |       | Hobbs, | NM | 88241-1980 |
|----------------------|-------|--------|----|------------|
| PO Box               | 1980. | Hobbs, | NM | 88241-1980 |

District II 811 South First, Artesia, NM 88210

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

District IV 2040 South Pacheco, Santa Fe, NM 87505

## OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

State of New Mexico

Energy, Minerals & Natural Resources Department

Form C-101 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office State Lease - 6 Copies Fee Lease - 5 Copies

AMENDED REPORT

# APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

|  |                | ₂OGRID Number |                           |  |  |
|--|----------------|---------------|---------------------------|--|--|
| Doyle Hartman<br>P.O. Box 10426        |                | 6473          |                           |  |  |
| Midland, Tx 79702-7426<br>915-684-4011 |                | 30 -          | ₃API Number<br>0 25-11969 |  |  |
| Property Code                          | sProperty Name |               | ₅Well No.                 |  |  |
| 13411                                  | C. T. Bates    |               | 1                         |  |  |
|  |                |               |                           |  |  |

#### "Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West Line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| L             | 10      | 26S      | 37E   |         | 660           | West             | 1980          | South          | Lea    |

# "Proposed Bottom Hole Location If Different From Surface

| UL or lot no.          | Section         | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the     | Easl/West Line | County |  |  |
|------------------------|-----------------|----------|-------|---------|---------------|------------------|-------------------|----------------|--------|--|--|
|                        | ₽roposed Paol 1 |          |       |         |               |                  | 10Proposed Pool 2 |                |        |  |  |
| Rhodes (Yates-7Rivers) |                 |          |       |         |               |                  |                   |                |        |  |  |

| 11Work Type Code<br>E | 12Well Type Code<br>G | 13Cable/Rotary | 14Lease Type Code<br>P | 16Ground Level Elevation |
|-----------------------|-----------------------|----------------|------------------------|--------------------------|
| ⊷Multiple             | 17Proposed Depth      | 10Formation    | 19Contractor           | ∞Spud Date               |
| NO                    | 3600                  | Queen          | Lucky                  | 01-10-02                 |

#### <sup>21</sup>Proposed Casing and Cement Program

| Hole Size    | Casing Size | Casing weight/foot | Setting Depth | Sacks of Cement | 1. Estimated TOC |
|--------------|-------------|--------------------|---------------|-----------------|------------------|
| 12 1/4"      | 9 5/8"      | 36#                | 1022'         | 600 sx          | Circulated       |
| 6 3/4"       | 5 1/2"      |                    | 2698'         | 350 sx          | 1400 (CBL) 20    |
| 4 3/4" to 6" | 4 1/2"      | 11.6#              | 2600'-3600'   | 1600 sx         | 2600"            |
|              |             |                    |               |                 | 1                |

<sup>22</sup>Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

In an attempt to avoid encountering a 15,000 BPD to 30,000 BPD waterflow, we propose to re-enter Bates No. 1 well, and return well to beneficial use, so as to recover remaining Yates reserves underlying the subject Rhodes (Yates-7R) proration unit.

| Permit Expires 1 Year From Approval      | : |
|--|---|
| Date Unless <del>Drilling</del> Underway |   |
| Re-Entry                                 |   |

| <sup>23</sup> ihereby co<br>best of my k | ertify that the information give<br>cnowledge and belief. | an above is true and complete to the |  |                    |  |  |  |
|--|---|--------------------------------------|--|--------------------|--|--|--|
| Signature:                               |   | word                                 | Approved By:                           | PAUL F. KAUTZ      |  |  |  |
| Printed nan                              |   |                                      |  | PETROLEUM ENGINEER |  |  |  |
| Title:<br>Pro                            | duction Analyst   |                                      | Approval Date                          | Expiration Date:   |  |  |  |
| Date:                                    | 12-17-01  | Phone: 915-684-4011                  | Conditions of Approval:<br>Attached: 🗖 |                    |  |  |  |
| · · · · · · · · · · · · · · · · · · ·    |   |                                      | · · · · · · · · · · · · · · · · · · ·  |                    |  |  |  |

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Page 2 of 3 NMOCD Form C-113 dated 12-17-01 Doyle Hartman Bates 1 L-10-26S-37E API No. 30-025-11969

### **Description of Proposed Well Work**

- 1. Move in and rig up well service unit.
- 2. Drill out cement to top of 5 1/2" retainer, at 961'.
- 3. Pressure test 5 1/2" O.D. casing, from 0' to 961', to 2000 psi.
- 4. Drill 5 1/2" retainer, and cement below retainer. Bottom of cement should be encountered at or about 1061'.
- 5. Pressure test 5 1/2" O.D. casing.
- 6. Run 5 1/2" Model "C" packer. Spot acid from 1000' to 1250'. Establish an injection rate into Rustler formation, between 1011' and 1230'.
- 7. Perform squeeze job through squeeze holes, at 1061', and through any corrosion holes, with 800 sx of API Class "C" cement containing 3% CaCl<sub>2</sub>, followed by 200 sx of API Class "C" cement containing 2% CaCl<sub>2</sub>.
- 8. Drill out cement. Pressure test 5 1/2" O.D. casing.
- 9. Clean out wellbore, to 2627' (top of 5 1/2" CIBP).
- 10. Drill 5 1/2" CIBP, until slips relax. Push remainder of 5 1/2" CIBP to top of 5 1/2" packer. Pull bottom-hole drilling assembly.
- 11. Run wash pipe. Recover remainder of 5 1/2" CIBP.
- 12. Run bottom-hole fishing assembly. Recover 5 1/2" O.D. packer, between 2628' and 2698'.
- 13. Run bottom-hole drilling and clean out assembly. Clean out open hole, from 2698' to 3150'.
- 14. Deepen well to approximately 3600'.
- 15. Run under-reamer assembly. Ream porosity intervals, as necessary, to 6" diameter hole.
- 16. Thoroughly circulate and clean up wellbore.

Page 3 of 3 NMOCD Form C-113 dated 12-17-01 Doyle Hartman Bates 1 L-10-26S-37E API No. 30-025-11969

- 17. Run 4 1/2" O.D., 11.6 lb/ft, J-55, ST-L flush-joint liner, from 2600' to 3600'. Pull liner setting tool.
- 18. Run and set 5 1/2" Model "C" packer, at 2550'.
- 19. Squeeze cement 4 1/2" O.D. flush-joint liner, at a cementing rate of 12 BPM to 14 BPM, with 1500 sx of API Class "C" cement containing 2.5 % CaCl<sub>2</sub>, followed by 100 sx of API Class "C" Neat cement. Pull packer.
- 20. Run bottom-hole drilling assembly. Drill out cement, to bottom of 4 1/2" O.D. flush-joint liner.
- 21. Displace wellbore with clean 2 % KCL water.
- 22. Rig up Schlumberger. Log wellbore with VDCBL-GR-CCL log and DS-CNL-GR-CCL log.
- 23. Perforate, acidize, and frac well.
- 24. Return well to active producing status, as Rhodes Pool producer.

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DOYLE HARIMAN

→ NMUCD HUBBS K2000

District | PO Box 1980, Hobbs, NM 88241-1980

District II 811 South First, Artesia, NM 88210

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

District IV 2040 South Pacheco, Santa Fe, NM 87505 State of New Mexico Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505 Form C-102 Revised October 18, 1994 Instructions on back Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| 1API Number<br>30-025-11969 |                             |                       | 2Pool Code<br>83810 Rh |              |  | Pool Name<br>Rhodes (Yates-7Rivers) |                                |   |                    |              |  |  |
|-----------------------------|-----------------------------|-----------------------|------------------------|--------------|--|-------------------------------------|--------------------------------|---|--------------------|--------------|--|--|
| 4Property C                 |                             |                       | 1                      |              | ۶Pro   | perty Na                            |                                | ,   | ·                  | ۰۷           | Vell Number                                |  |
| 1341 <sup>-</sup>           |                             | C. T. Bates           | 6                      |              |  |                                     |                                |   | 1                  |              |  |  |
| <sup>7</sup> OGRID          | No.                         |                       |                        |              | •  | arator N                            |                                |   |                    |              | sElevation                                 |  |
| 6473                        | 3                           | Doyle Harti           | man P.C                | D. Box 10426 | 6, Midlan                                    | d, Tx 7                             | 79702-7426                     |   |                    |              | 2993                                       |  |
|                             |                             |                       |                        | 1            | "Surfa                                       | ce Lo                               | ocation                        |   |                    |              |  |  |
| UL of lot no.               | Section                     | Township              | Range                  | Lot Idn      | Feet from                                    | n the                               | North/South line               | Feet from the   |                    | est Line     | County                                     |  |
| L                           | 10                          | 26S                   | 37E                    |              | 1980   | 5                                   | South                          | 660   | We                 | est          | Lea  |  |
|                             |                             |                       | "Botto                 | m Hole L     | ocatio                                       | n If C                              | Different From                 | Surface   |                    |              | <u> </u>                                   |  |
| UL or lot no.               | Section                     | Township              | Range                  | - Lot Idn    | Feet from                                    | m the                               | North/South line               | Feet from the   | East/W             | est Line     | County                                     |  |
| IzDedicated A               | cres 13J0                   | int or Infill 14      | Consolidat             | on Code      | nOrder No.                                   |                                     | L                              |   |                    |              | <b>I</b>                                   |  |
| 160                         |                             | Y                     |                        | 1            | SP-12952                                     | 2-A (*                              | 1/11/91)                       |   |                    |              |  |  |
| NO ALLOV                    | VABLE V                     | VILL BE AS            | SIGNE                  | TO THIS      | COMP   |                                     | ON UNTIL ALL II<br>EN APPROVED | NTERESTS H  | AVE BE             | EN CO!       | NSOLIDATED                                 |  |
| 16                          |                             | ORAN                  | UN-ST                  |              |  |                                     |                                | "OPERA  | TOR                | CERT         | IFICATION                                  |  |
| Re-e                        | entry Rh                    | nodes Poc             | bi                     |              |  |                                     |                                | I hereby certify that the information contained herein is<br>true and complete to the best of my knowledge and belief |                    |              |  |  |
| (Yates-                     | Upper                       | 7R) Gas V             |                        |              |  |                                     |                                | irue and comp   | lete to the        | oest of my r | nomeoge and bener                          |  |
|                             |                             | es No. 1              | <i>a</i> 、             |              |  |                                     |                                |   |                    |              | _  |  |
| 4 8                         |                             | 660' FWL<br>6-S, R-37 | · · ·                  |              |  |                                     |                                | $\varphi_{\alpha\alpha}$  | <u>.</u>           | 1            | Dard                                       |  |
| Sec.                        | 10, 1-2                     | 0-3, N-37-            | <u> </u>               |              | Heretta (                                    |                                     |                                | rau   | yer _              |              |  |  |
|                             |                             |                       |                        |              |  | <u> </u>                            |                                | Loretta Ci  | awford             |              | U  |  |
|                             |                             |                       |                        | Blow         | Blowout Well (P&A'd 1/22/91)                 |                                     |                                | Printed Name  |                    |              |  |  |
|                             |                             |                       |                        | 10           | C.T. Bates No. 2<br>1980' FSL & 760' FWL (L) |                                     |                                |   | Production Analyst |              |  |  |
|                             | /                           |                       |                        |              |  |                                     | 6-S, R-37-E                    | 12-18-01  |                    |              |  |  |
|                             | 1                           |                       |                        |              |  |                                     |                                | Date  |                    |              |  |  |
|                             | +                           |                       | <u> </u>               |              |  |                                     |                                | "SURVI  | EYOR               | CERT         | IFICATION                                  |  |
| í . N                       | L                           |                       | ~                      | ĺ            |  |                                     |                                | I hereby certify  | that the w         | ell location | shown on this plat<br>I surveys made by me |  |
|                             |                             | 80'                   | 3                      |              |  |                                     |                                | ar under my s   | upervision,        | and that th  | e same is true and                         |  |
|                             | ` <b>T_</b> 2 <sup>''</sup> | Ĭ                     |                        |              |  |                                     |                                | correct to the  | uusi ui my         |              |  |  |
| 7                           | $\mathbf{T}$                |                       | ` '\                   |              | NOD  | 4000                                | D & (4/44/04)                  |   |                    |              |  |  |
|                             |                             |                       |                        |              | INSP   | -1292                               | 2-A (1/11/91)                  | Date of Surv<br>Signature an  | •                  | rolessional  | Surveyer:                                  |  |
|                             |                             |                       | <b></b>                |              | ting P                                       | hode                                | es Pool                        | ן ד<br>ר  |                    |              |  |  |
|                             | P&A 1/22/9                  | 1 I                   | 110                    |              |  |                                     | <u>leen) Gas We</u>            |   |                    |              |  |  |
| P&A 2/26/88                 |                             | -1980'                |                        |              | C.T. Bat                                     |                                     |                                | -11   |                    |              |  |  |
|                             |                             |                       |                        |              |  |                                     | )' FWL (K)                     |   |                    |              |  |  |
| ł                           |                             |                       |                        | Sec.         | 10, T-2                                      | 26-S                                | , R-37-Е                       | Certificate N   | umber              |              |  |  |
| L                           |                             | ι                     |                        |              |  |                                     |                                |   |                    |              |  |  |

\* 100% OF LEASEHOLD OWNED BY DOYLE HARTMAN