



# GREENHILL PETROLEUM CORPORATION

Incorporated in Delaware, U.S.A.

OIL CONSERVATION DIVISION

RECEIVED

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12777 JONES ROAD, SUITE 375  
HOUSTON, TEXAS 77070  
TELEPHONE (713) 955-1146  
FAX (713) 955-5105

August 14, 1990

Oil Conservation Division  
State of New Mexico  
Energy, Minerals and Natural Resources Dept.  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well No. 73  
West Lovington Unit  
Lea County, New Mexico

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Greenhill Petroleum Corporation respectfully requests the State of New Mexico Oil Conservation Division grant approval of the proposed unorthodox location and the attached permit to drill Well Number 73 in the West Lovington Unit, located in Lea County, New Mexico.

The West Lovington Unit is presently developed and being water-flooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve water-flood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 73 is located in the interior of the unit and is not competitive with offset wells outside the unit. Information gathered as a result of drilling this infill well will be utilized in evaluating additional infill development potential in the unit and ultimately may be used to evaluate the feasibility of tertiary recovery.

GREENHILL PETROLEUM CORPORATION

Greenhill Petroleum Corporation wishes to commence drilling operations on the proposed well as soon as possible and would appreciate a response to this request at your earliest convenience.

Respectfully yours,

GREENHILL PETROLEUM CORPORATION

A handwritten signature in cursive script, appearing to read "Michael J. Newport".

Michael J. Newport  
Landman

MJN:ntd  
Enclosures  
WLU040

Submit to Appropriate  
District Office  
State Lease - 6 copies  
Fee Lease - 5 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-101  
Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

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

|                                        |                                                                        |
|----------------------------------------|------------------------------------------------------------------------|
| API NO. (assigned by OCD on New Wells) |                                                                        |
| 5. Indicate Type of Lease              | STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No.<br>B1553  |                                                                        |

|                                                                                                                                                                                                                                                                                                                                                                                                 |                |                                                 |               |                                                             |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------------|---------------|-------------------------------------------------------------|----------|
| APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK                                                                                                                                                                                                                                                                                                                                           |                |                                                 |               |                                                             |          |
| 1a. Type of Work:<br>DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/><br>b. Type of Well:<br>OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/> |                |                                                 |               | 7. Lease Name or Unit Agreement Name<br>West Lovington Unit |          |
| 2. Name of Operator<br>GREENHILL PETROLEUM CORPORATION                                                                                                                                                                                                                                                                                                                                          |                |                                                 |               | 8. Well No.<br>73                                           |          |
| 3. Address of Operator<br>16010 Barker's Point Lane, Suite 325, Houston, TX                                                                                                                                                                                                                                                                                                                     |                |                                                 |               | 9. Pool name or Wildcat<br>Lovington San Andres West        |          |
| 4. Well Location<br>Unit Letter <u>0</u> : <u>1305</u> Feet From The <u>South</u> Line and <u>1335</u> Feet From The <u>East</u> Line<br>Section <u>4</u> Township <u>17S</u> Range <u>36 E</u> NMPM <u>Lea</u> County                                                                                                                                                                          |                |                                                 |               |                                                             |          |
| 10. Proposed Depth<br>5230'                                                                                                                                                                                                                                                                                                                                                                     |                |                                                 |               | 11. Formation<br>San Andres                                 |          |
| 13. Elevations (Show whether DF, RT, GR, etc.)<br>3881 GR                                                                                                                                                                                                                                                                                                                                       |                | 14. Kind & Status Plug. Bond<br>Blanket on file |               | 15. Drilling Contractor<br>TBD                              |          |
| 16. Approx. Date Work will start<br>8/30/90                                                                                                                                                                                                                                                                                                                                                     |                |                                                 |               |                                                             |          |
| 17. PROPOSED CASING AND CEMENT PROGRAM                                                                                                                                                                                                                                                                                                                                                          |                |                                                 |               |                                                             |          |
| SIZE OF HOLE                                                                                                                                                                                                                                                                                                                                                                                    | SIZE OF CASING | WEIGHT PER FOOT                                 | SETTING DEPTH | SACKS OF CEMENT                                             | EST. TOP |
| 12 1/4                                                                                                                                                                                                                                                                                                                                                                                          | 8 5/8          | 24#                                             | 350'          | 250                                                         | Surface  |
| 7 7/8                                                                                                                                                                                                                                                                                                                                                                                           | 5 1/2          | 15.5#                                           | 5197'         | 1400                                                        | Surface  |

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Michael J. Newport TITLE Landman DATE \_\_\_\_\_  
TYPE OR PRINT NAME \_\_\_\_\_ TELEPHONE NO. \_\_\_\_\_

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

Submit to Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised 1-1-89

OIL CONSERVATION DIVISION

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

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

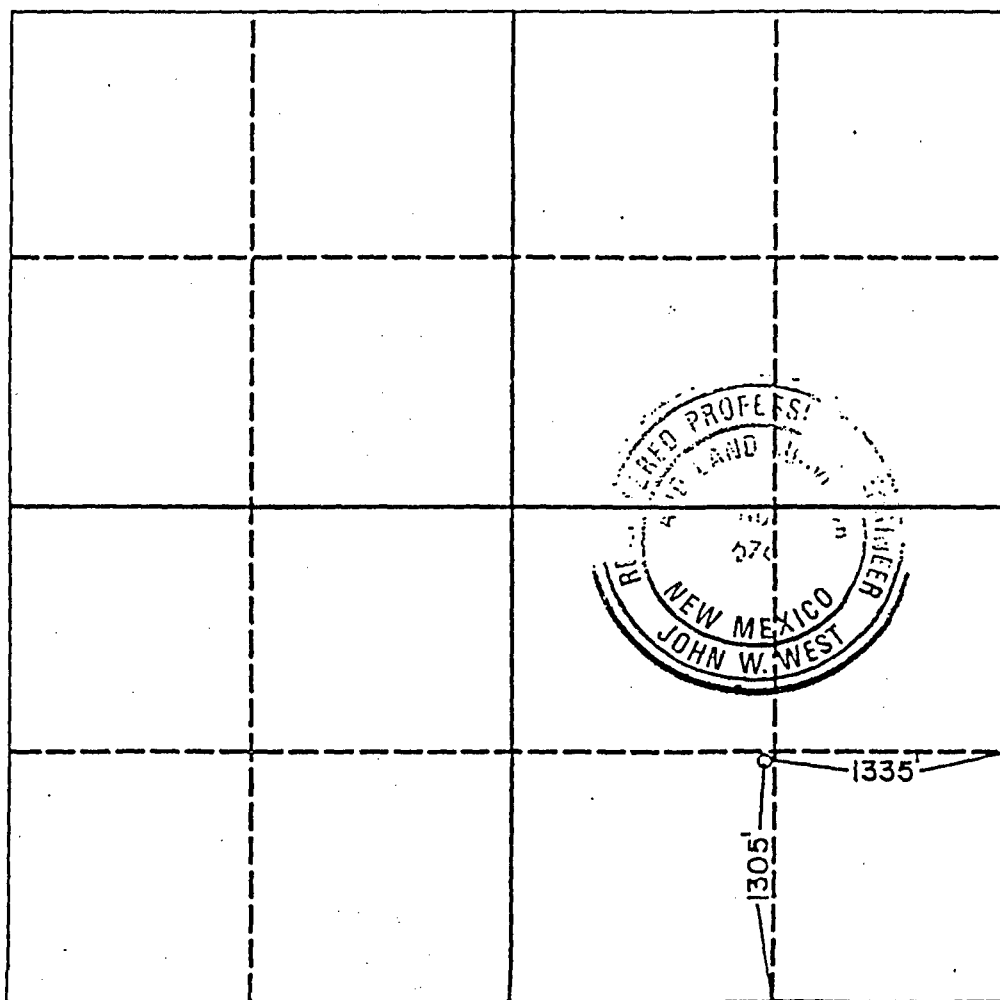
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

|                                                                                                    |                     |                      |                              |                             |                |
|----------------------------------------------------------------------------------------------------|---------------------|----------------------|------------------------------|-----------------------------|----------------|
| Operator<br>GREENHILL PETROLEUM CORPORATION                                                        |                     |                      | Lease<br>West Lovington Unit |                             | Well No.<br>73 |
| Unit Letter<br>O                                                                                   | Section<br>4        | Township<br>17 South | Range<br>36 East             | County<br>NMPM              | Lea            |
| Actual Footage Location of Well:<br>1305 feet from the South line and 1335 feet from the East line |                     |                      |                              |                             |                |
| Ground level Elev.<br>3881.0                                                                       | Producing Formation |                      | Pool                         | Dedicated Acreage:<br>Acres |                |

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☐ Yes ☐ No If answer is "yes" type of consolidation \_\_\_\_\_  
If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)  
No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature  
*Michael J. Newport*  
Printed Name  
Michael J. Newport  
Position  
\_\_\_\_\_  
Company  
\_\_\_\_\_  
Date  
\_\_\_\_\_

SURVEYOR CERTIFICATION

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 knowledge and belief.

Date Surveyed  
July 19, 1990  
Signature & Seal of Professional Surveyor  
*John W. West*  
Certificate No. JOHN W. WEST, 678  
RONALD J. EIDSON, 3239

# OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

## DISTRICT I

P.O. Box 1900, Hobbs, NM 88240

## DISTRICT II

P.O. Drawer DD, Aztec, NM 88210

## DISTRICT III

1000 Rio Buenos Rd., Aztec, NM 87410

## WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

|                                                                                                                                |                     |                             |                                     |                      |                                 |
|--------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------|-------------------------------------|----------------------|---------------------------------|
| Operator<br><b>GREENHILL PETROLEUM CORPORATION</b>                                                                             |                     |                             | Lease<br><b>West Lovington Unit</b> |                      | Well No.<br><b>73</b>           |
| Unit Letter<br><b>0</b>                                                                                                        | Section<br><b>4</b> | Township<br><b>17 South</b> | Range<br><b>36 East</b>             | County<br><b>Lea</b> |                                 |
| Actual Footage Location of Well:<br><b>1305</b> feet from the <b>South</b> line and <b>1335</b> feet from the <b>East</b> line |                     |                             |                                     |                      |                                 |
| Ground level Elev.<br><b>3881.0</b>                                                                                            | Producing Formation |                             | Pool                                |                      | Dedicated Acreage:<br><br>Acres |

- Outline the acreage dedicated to the subject well by colored pencil or ink lines on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?  
☐ Yes ☐ No If answer is "yes" type of consolidation \_\_\_\_\_  
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### OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name

Position

Company

Date

### SURVEYOR CERTIFICATION

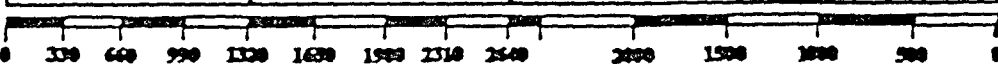
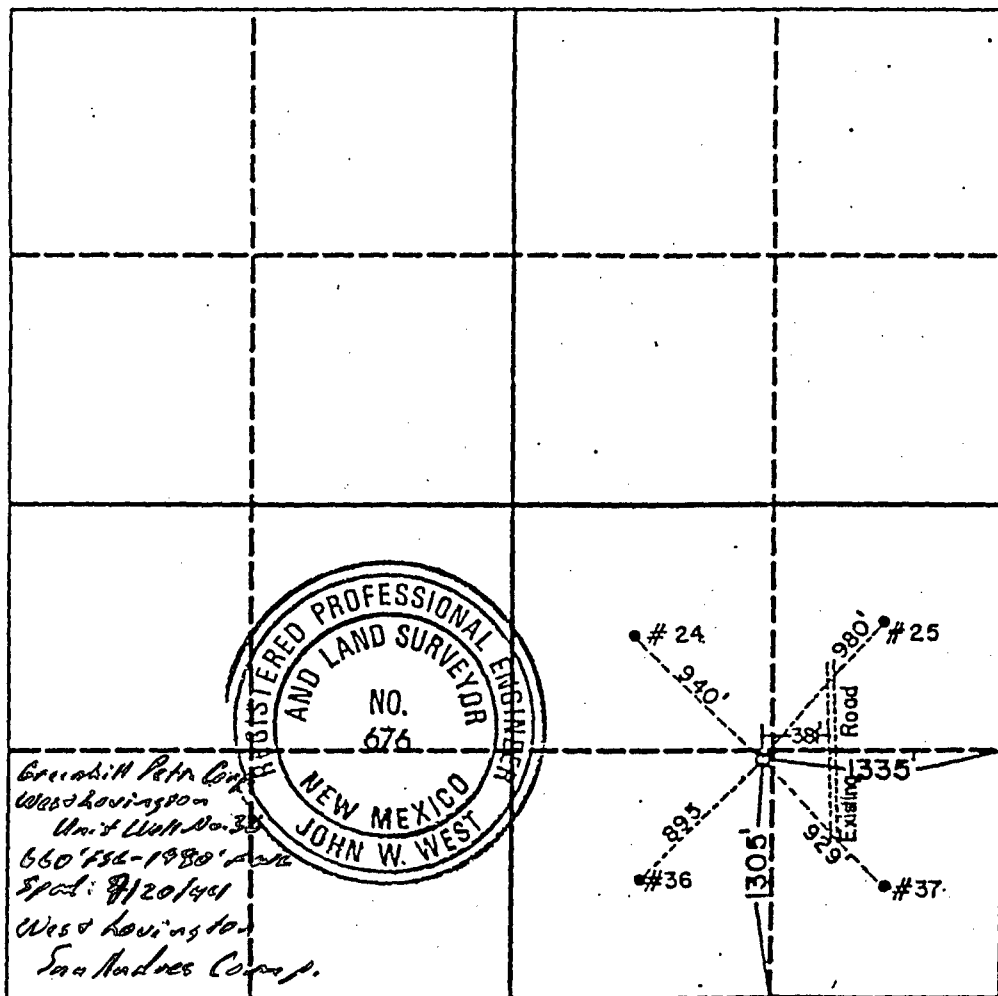
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

July 19, 1990

Signature & Seal of Professional Surveyor

JOHN W. WEST, 676  
RONALD J. EIDSON, 3239





GREENHILL PETROLEUM CORPORATION  
B O P PROGRAM FOR  
WEST LOVINGTON UNIT #73

| <u>Casing Program</u> |              |           |              | <u>B O P Program</u> |                     |
|-----------------------|--------------|-----------|--------------|----------------------|---------------------|
| <u>Size</u>           | <u>Depth</u> | <u>Wt</u> | <u>Grade</u> | <u>Configuration</u> | <u>Test Program</u> |
| 8 5/8"                | 350'         | 24#       | J55,STC      | RR or RA             | 250/1500 psi        |
| 5 1/2"                | 5230'        | 15.5#     | J55,STC      | N/A                  |                     |

\*RR - Ram Ram  
RA - Ram Annular