



# GREENHILL PETROLEUM CORPORATION

Incorporated in Delaware, U.S.A.

CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 76  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 76 in the Lovington San Andres Unit, located in Lea County, New Mexico.

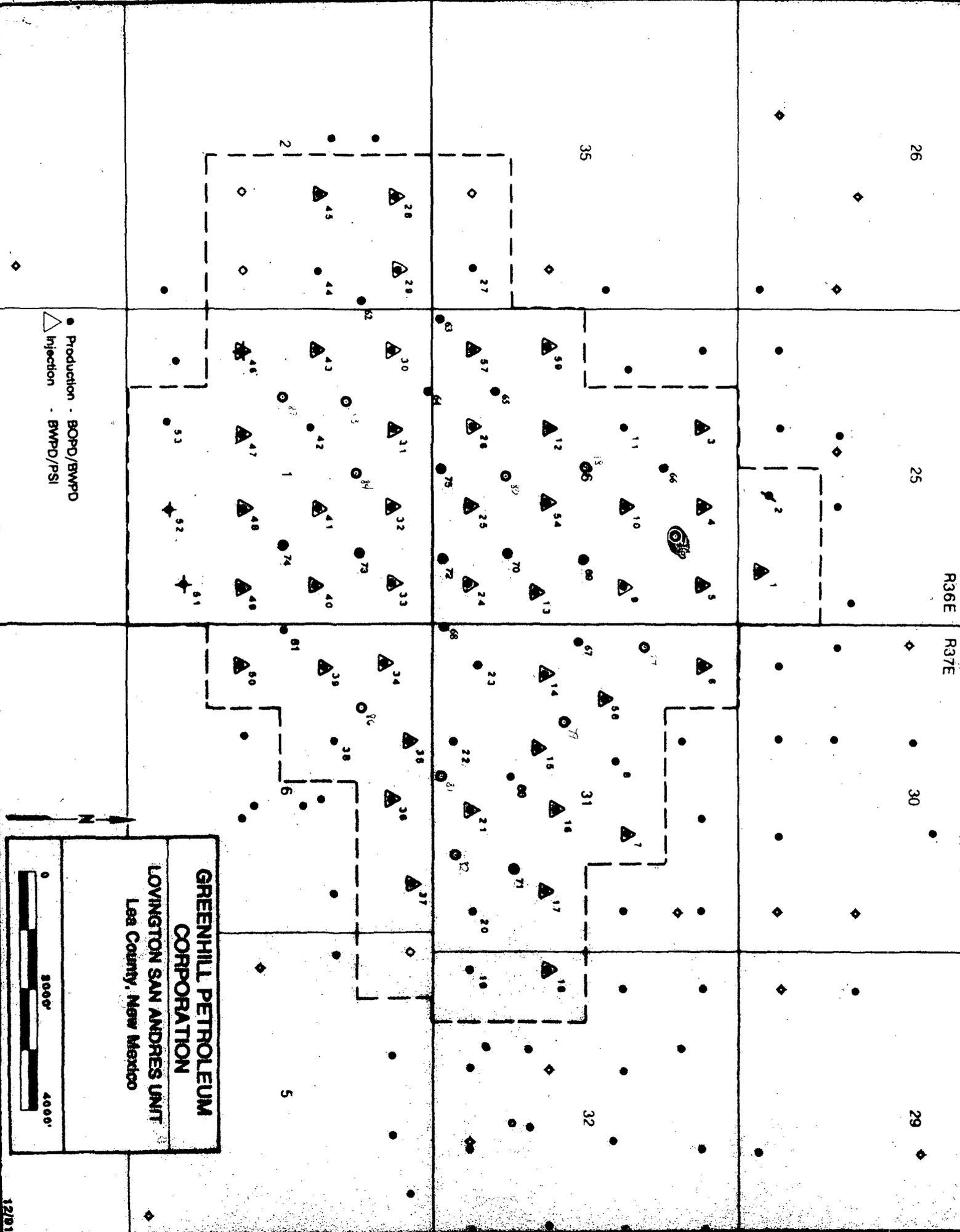
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 76 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



● Production - BOPD/BMPD  
 △ Injection - BMPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





# GREENHILL PETROLEUM CORPORATION

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

RECEIVED

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 76  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 76 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 76 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 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,

*Michael Newport*  
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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  FEE

6. State Oil & Gas Lease No.  
 B 2411

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. Type of Work:  
 DRILL  RE-ENTER  DEEPEN  PLUG BACK   
 b. Type of Well:  
 OIL WELL  GAS WELL  OTHER   
 SINGLE ZONE  MULTIPLE ZONE

7. Lease Name or Unit Agreement Name  
 Lovington San Andres Unit

2. Name of Operator  
 Greenhill Petroleum Corporation

8. Well No.  
 #76

3. Address of Operator  
 11490 Westheimer, Ste. 200; Houston, Tx. 77077

9. Pool name or Wildcat  
 Lovington Grayburg San Andres

4. Well Location  
 Unit Letter B : 1058 Feet From The North Line and 1480 Feet From The East Line  
 Section 36 Township 16 South Range 36 East NMPM Lea County

10. Proposed Depth  
 5150'

11. Formation  
 San Andres

12. (Rotary) or C.T.

13. Elevations (Show whether DF, RT, GR etc.)  
 3830

14. Kind & Status Plug. Bond  
 On File

15. Drilling Contractor  
 TBD

16. Approx. Date Work will start  
 4/92

**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	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Richard Newport TITLE Land Manager-Permian Basin DATE 3-23-92  
 (713)  
 TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**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., Artec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator <b>GREENHILL PETROLEUM CORP.</b>		Lease <b>LOVINGTON SAN ANDRES UNIT</b>		Well No. <b>76</b>	
Unit Letter <b>B</b>	Section <b>36</b>	Township <b>16 SOUTH</b>	Range <b>36 EAST</b>	County <b>NMPM LEA</b>	
Actual Footage Location of Well: <b>1058</b> feet from the <b>NORTH</b> line and <b>1480</b> feet from the <b>EAST</b> line					
Ground Level Elev. <b>3830.0'</b>	Producing Formation <b>San Andres</b>	Pool <b>Lovington Grayburg San Andres</b>		Dedicated Acreage: <b>40 Acres</b>	

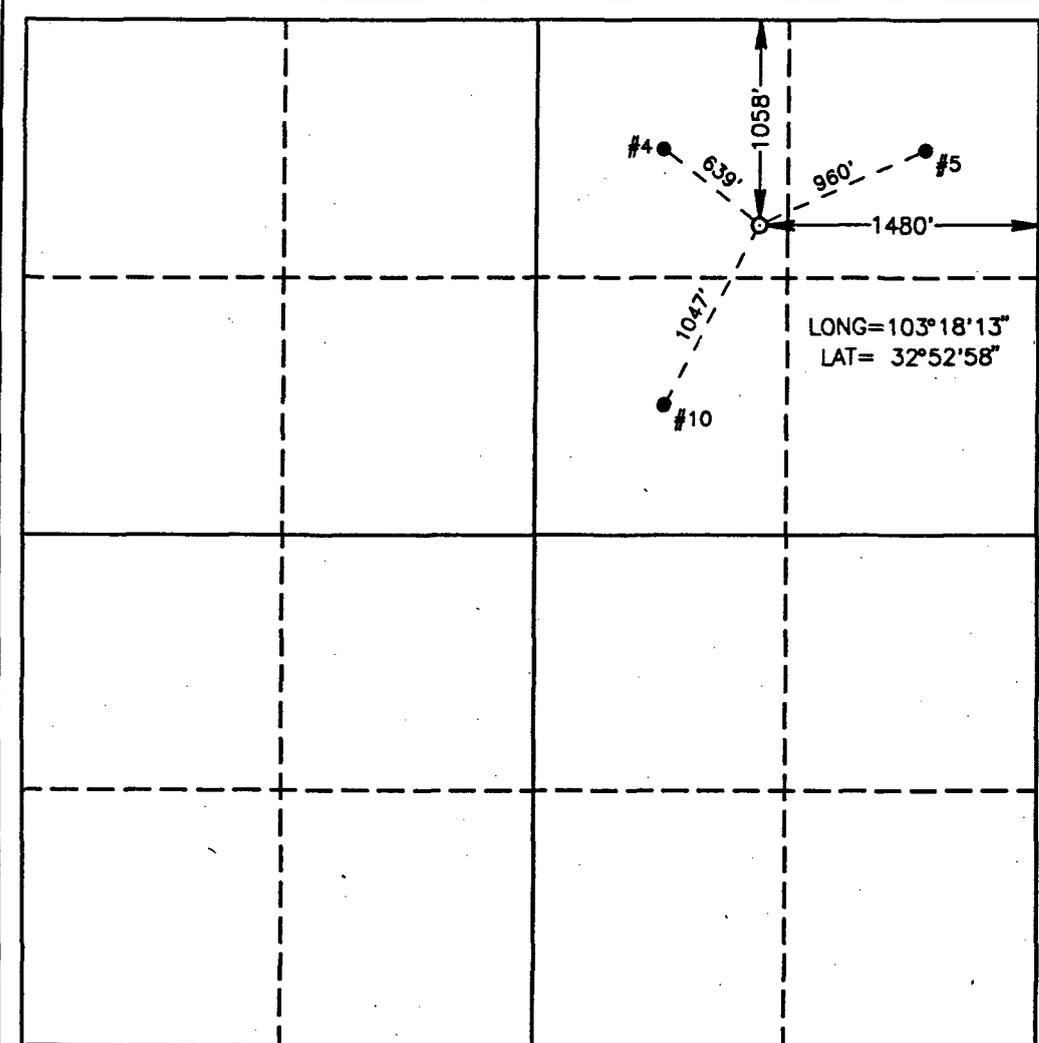
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. 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 unitized

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, 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 Newport*  
 Printed Name: **Michael J. Newport**  
 Position: **Land Manager-Permian Basin Company**  
 Company: **Greenhill Petroleum Corp.**  
 Date: **3-23-92**

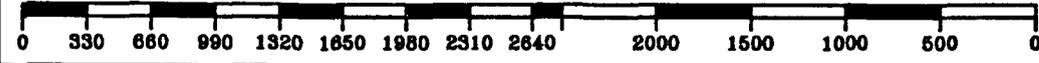
**SURVEYOR CERTIFICATION**

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: **MARCH 5, 1992**

Signature & Seal of Professional Surveyor

Professional Surveyor Seal for **RONALD J. EIDSON**, No. **676**.  
 Other listed surveyors include JOHN W. WEST (No. 3239) and GARY E. JONES (No. 7977).



GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 76

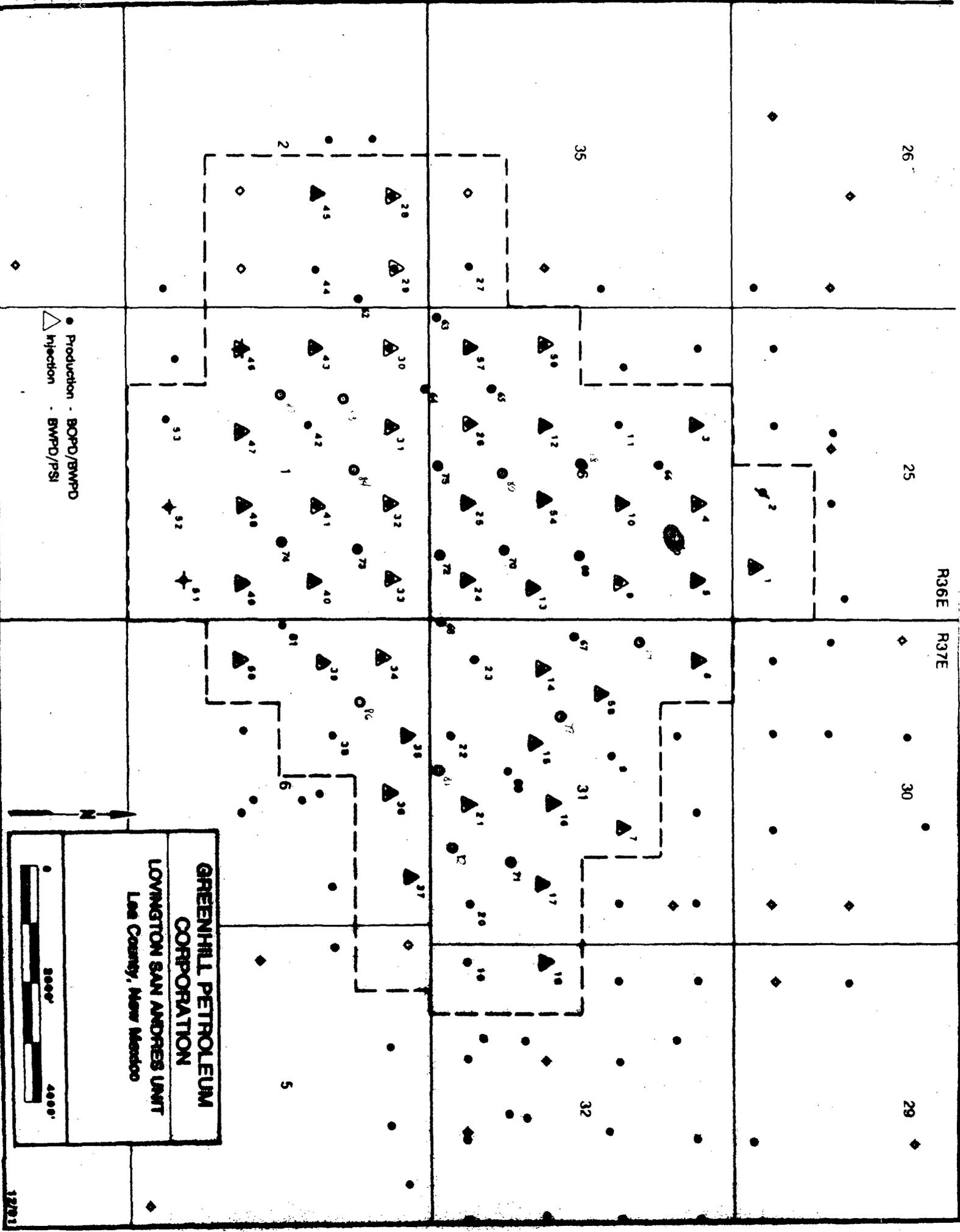
<u>CASING PROGRAM</u>			<u>BOP PROGRAM</u>		
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

\*RR-Ram Ram

RA-Ram Annular

Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



26

25

R36E

R37E

30

29

35

32

● Production - BOPD/BWPD  
 ▲ Injection - BWPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





**GREENHILL PETROLEUM CORPORATION**

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

RECEIVED

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 77  
Lovington San Andres Unit  
Lea County, New Mexico

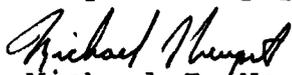
Dear Mr. Stogner:

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 77 in the Lovington San Andres Unit, located in Lea County, New Mexico.

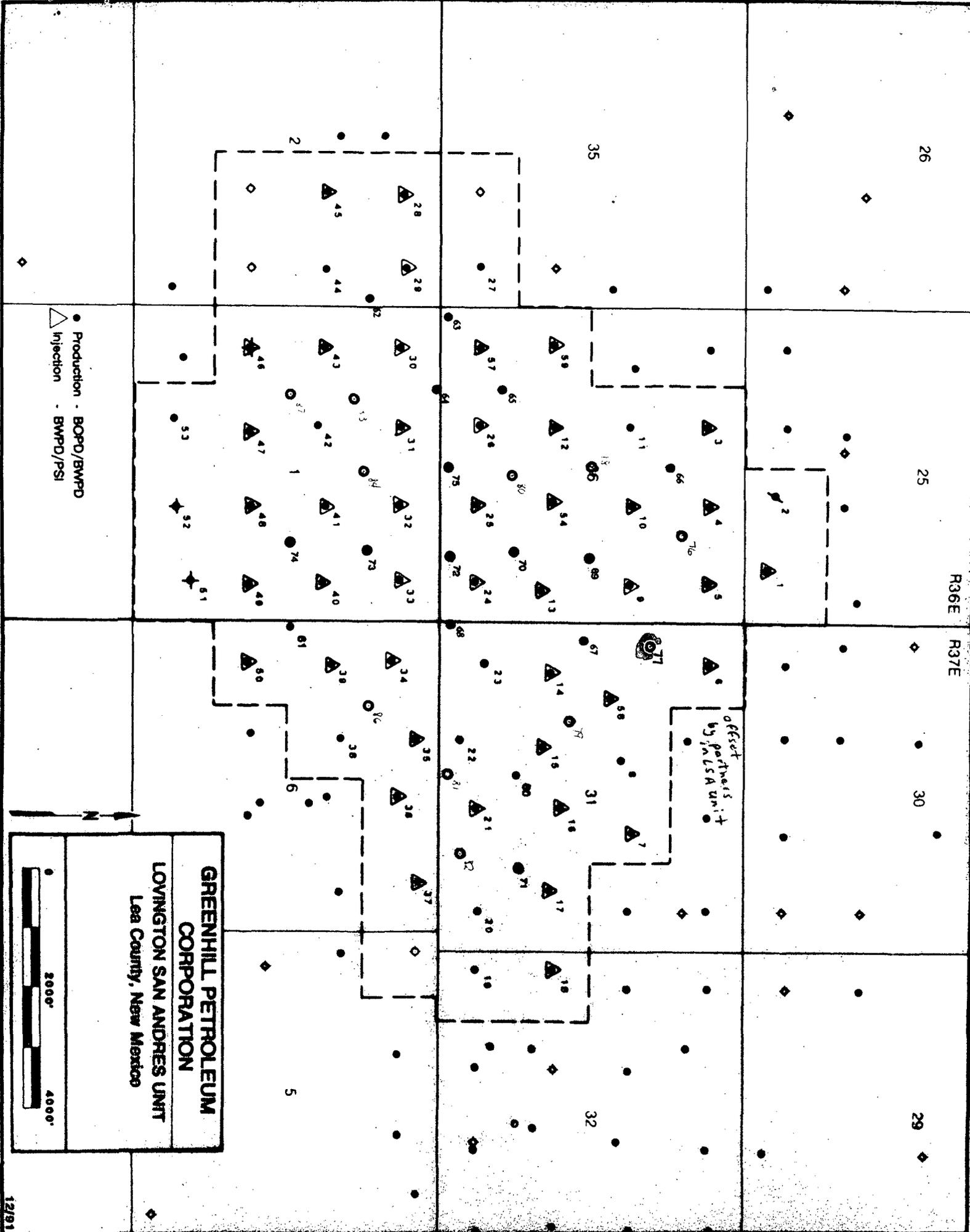
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 77 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 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,

  
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



26

25

R36E

R37E

30

29

35

32

- Production - BOPD/BWPD
- △ Injection - BWPD/PSI

*offset  
by partners  
by LSA unit*

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





**GREENHILL PETROLEUM CORPORATION**

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

RECEIVED

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 77  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 77 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 77 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 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,

*Michael J. Newport*  
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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  FEE

6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. Lease Name or Unit Agreement Name Lovington San Andres Unit		
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			8. Well No. #77		
2. Name of Operator Greenhill Petroleum Corporation			9. Pool name or Wildcat Lovington Grayburg San Andres		
3. Address of Operator 11490 Westheimer, Suite 200; Houston, Tx. 77077					
4. Well Location Unit Letter <u>E</u> : <u>1582</u> Feet From The <u>North</u> Line and <u>381</u> Feet From The <u>West</u> Line Section <u>31</u> Township <u>16 South</u> Range <u>37 East</u> <u>NMPM</u> <u>Lea</u> , County					
		10. Proposed Depth 5150'		11. Formation San Andres	12. <input checked="" type="radio"/> Rotary or C.T.
13. Elevations (Show whether DF, RT, GR etc.) 3830		14. Kind & Status Plug. Bond On File	15. Drilling Contractor TBD		16. Approx. Date Work will start 4/92
17. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/2	8 5/8	24	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Richard J. Newport TITLE Land Manager-Permian Basin DATE 3-23-92  
 (713)  
 TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**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, Artesia, NM 88210

**DISTRICT III**

1000 Rio Brazos Ed., Artec, NM 87410

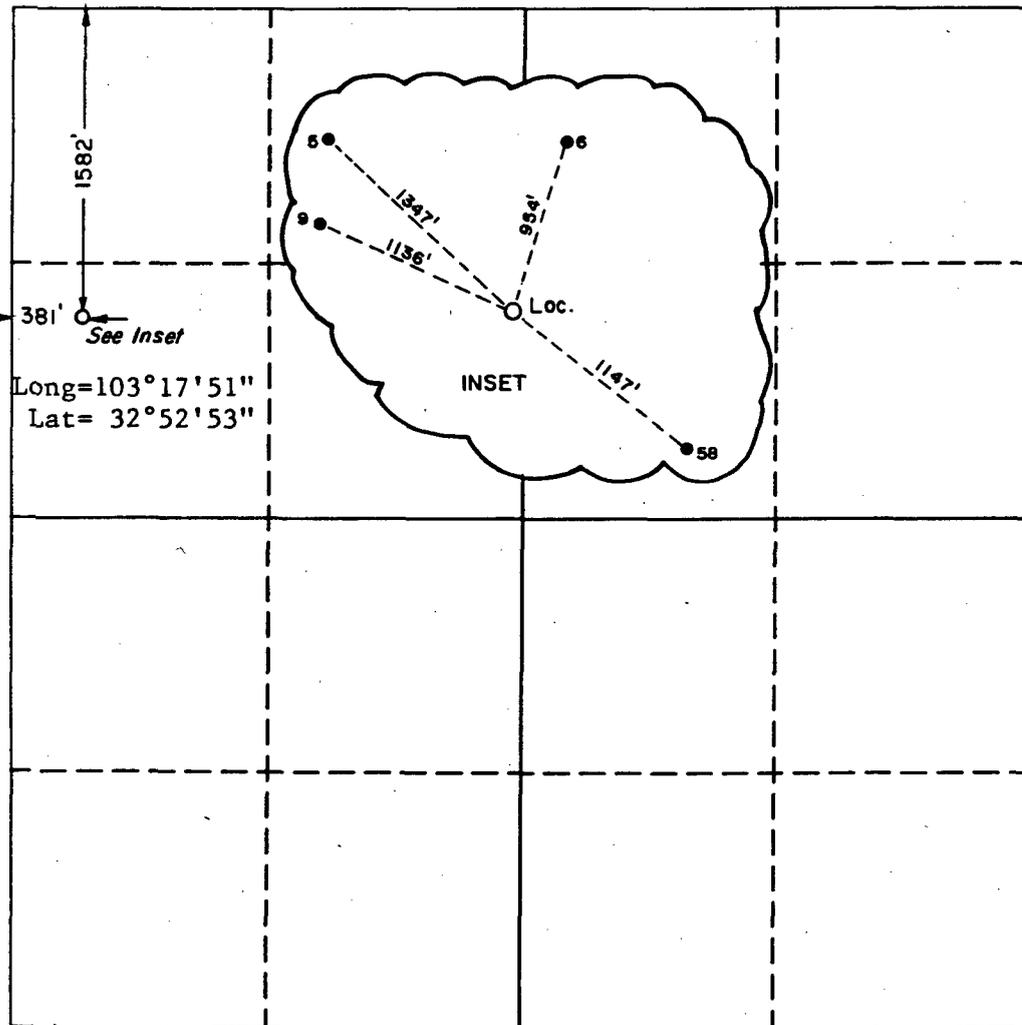
**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator Greenhill Petroleum Corp			Lease Lovington San Andres		Well No. 77
Unit Letter E	Section 31	Township 16 South	Range 37 East	County Lea	
Actual Footage Location of Well: 1582 feet from the north line and 381 feet from the west line					
Ground Level Elev. 3830.9'	Producing Formation San Andres		Pool Lovington Grayburg San Andres		Dedicated Acreage: 40 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 unitized
- If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)
- No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



Long=103°17'51"  
Lat= 32°52'53"



**OPERATOR CERTIFICATION**

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

Signature: *Richard Newport*  
 Printed Name: Michael J. Newport  
 Position: Land Manager-Permian Basin  
 Company: Greenhill Petroleum Corp.  
 Date: 3-23-92

**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: February 19, 1992  
 Signature & Seal of Professional Surveyor:

Professional Surveyor Seal: REGISTERED LAND SURVEYOR  
 Signature: *Ronald J. Edson*  
 Certificate No. JONAS WEST 876  
 RONALD EDSON 3839  
 W.O. 92-11-0238

GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 77

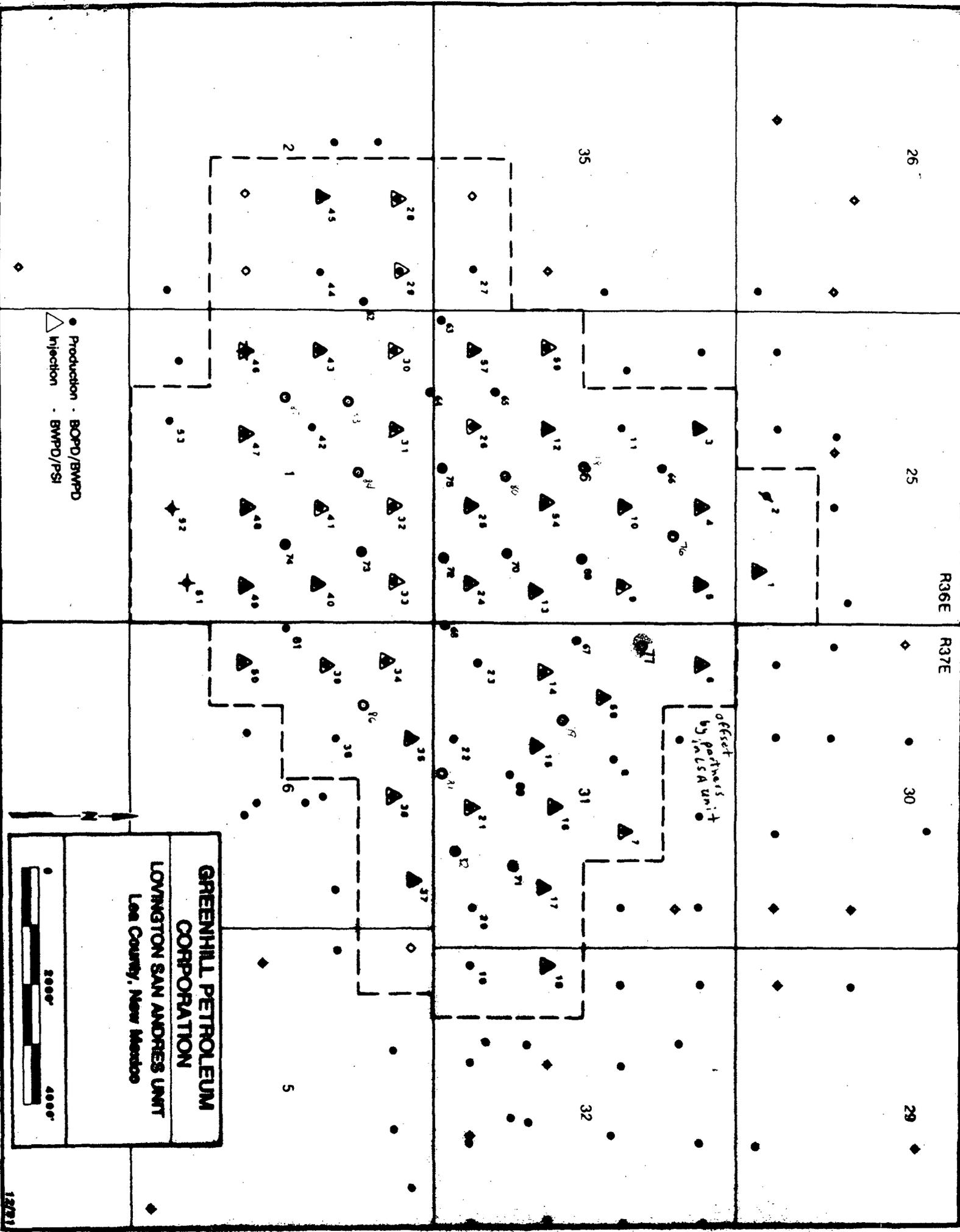
<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>		
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>	
8 5/8"	1300'	24	H40, STC	RA*	200 psi	
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi	

\*RR-Ram Ram

RA-Ram Annular

Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



● Production - BOPD/BWPD  
 △ Injection - BWPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





# GREENHILL PETROLEUM CORPORATION

CONSERVATION DIVISION  
RECEIVED

1490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 78  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 78 in the Lovington San Andres Unit, located in Lea County, New Mexico.

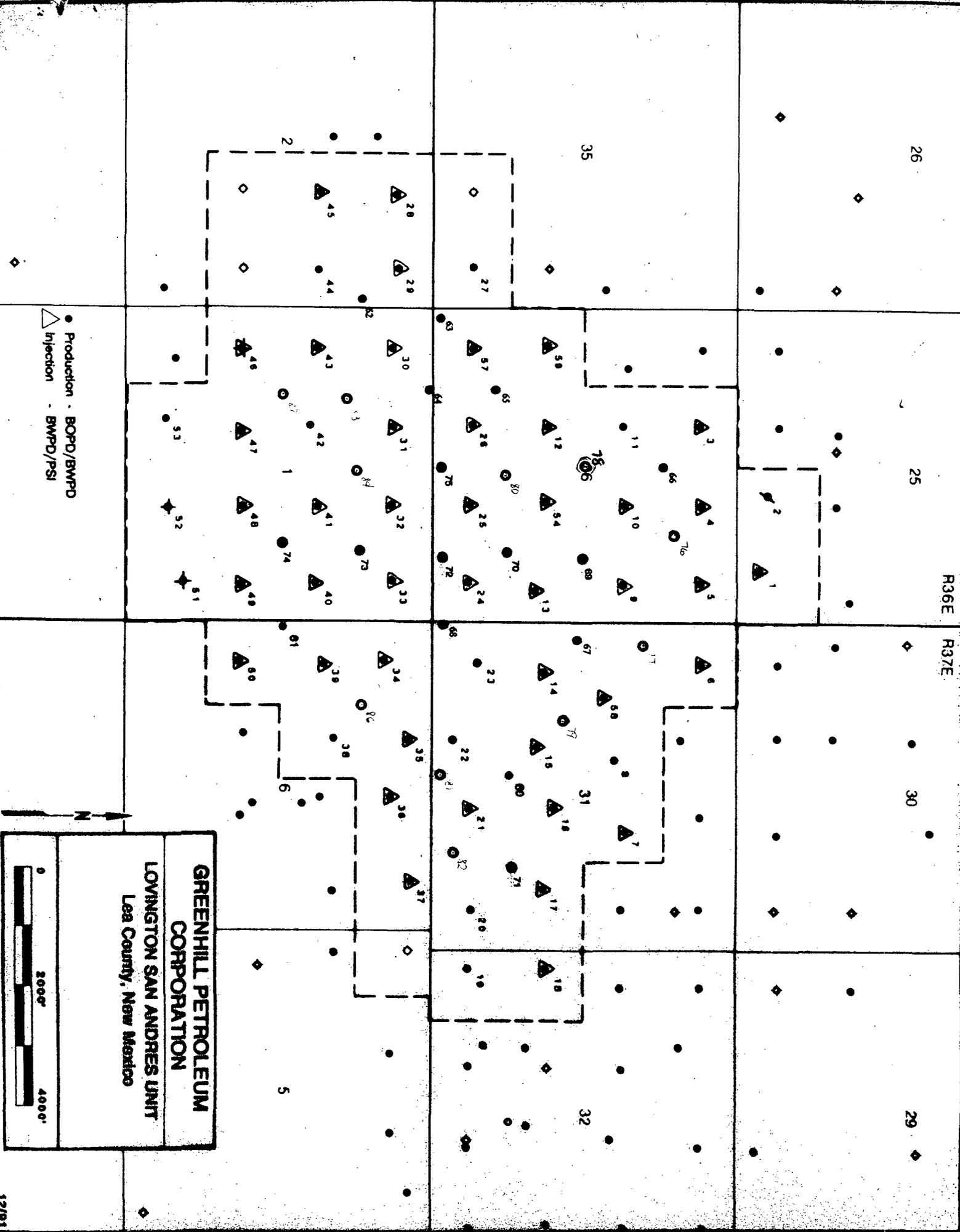
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 78 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 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,

*Michael Newport*  
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



26

25

R36E

R37E

30

29

35

32

2

5

● Production - BOPD/BWPD  
 △ Injection - BWPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOWINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





# GREENHILL PETROLEUM CORPORATION

CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 78  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 78 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 78 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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  FEE

6. State Oil & Gas Lease No.  
B 2894

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		7. Lease Name or Unit Agreement Name Lovington San Andres Unit
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. Name of Operator Greenhill Petroleum Corporation		8. Well No. #78
3. Address of Operator 11490 Westheimer, Suite 200; Houston, Tx. 77077		9. Pool name or Wildcat Lovington Grayburg San Andres
4. Well Location Unit Letter <u>G</u> : <u>2575</u> Feet From The <u>North</u> Line and <u>2630</u> Feet From The <u>West</u> Line Section <u>36</u> Township <u>16 South</u> Range <u>36 East</u> NMPM Lea, County		

10. Proposed Depth 5150'		11. Formation San Andres	12. Rotary or C.T.
13. Elevations (Show whether DF, RT, etc.) 3833	14. Kind & Status Plug. Bond On File	15. Drilling Contractor TBD	16. Approx. Date Work will start 4/92

17. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/2	8 5/8	24	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Newport TITLE Land Manager-Permian Basin DATE 3-23-92  
(713)  
TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**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 Ed., Artec, NM 87410

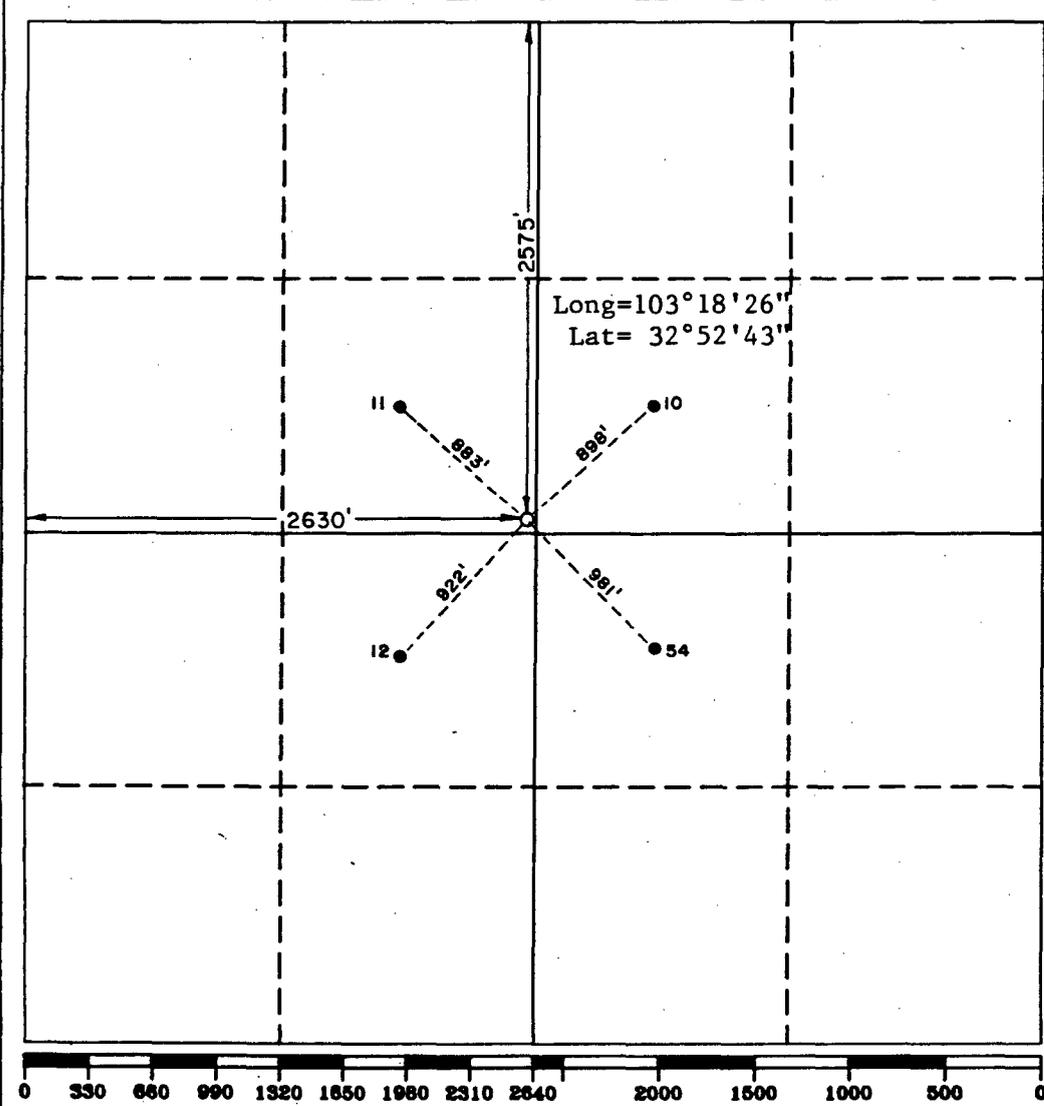
**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator Greenhill Petroleum Corp.			Lease Lovington San Andres		Well No. 78
Unit Letter G	Section 36	Township 16 South	Range 36 East	County Lea	

Actual Footage Location of Well: 2575 feet from the north line and 2630 feet from the west line					
Ground Level Elev. 3833.3'	Producing Formation San Andres		Pool Lovington Grayburg San Andres	Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 unitized
- If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)  
 No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**

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

Signature: *Michael Newport*  
 Printed Name: Michael J. Newport  
 Position: Land Manager-Permian Basin Company  
 Greenhill Petroleum Corporation  
 Date: 3-23-92

**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: February 20, 1992  
 Signature & Seal of Professional Surveyor

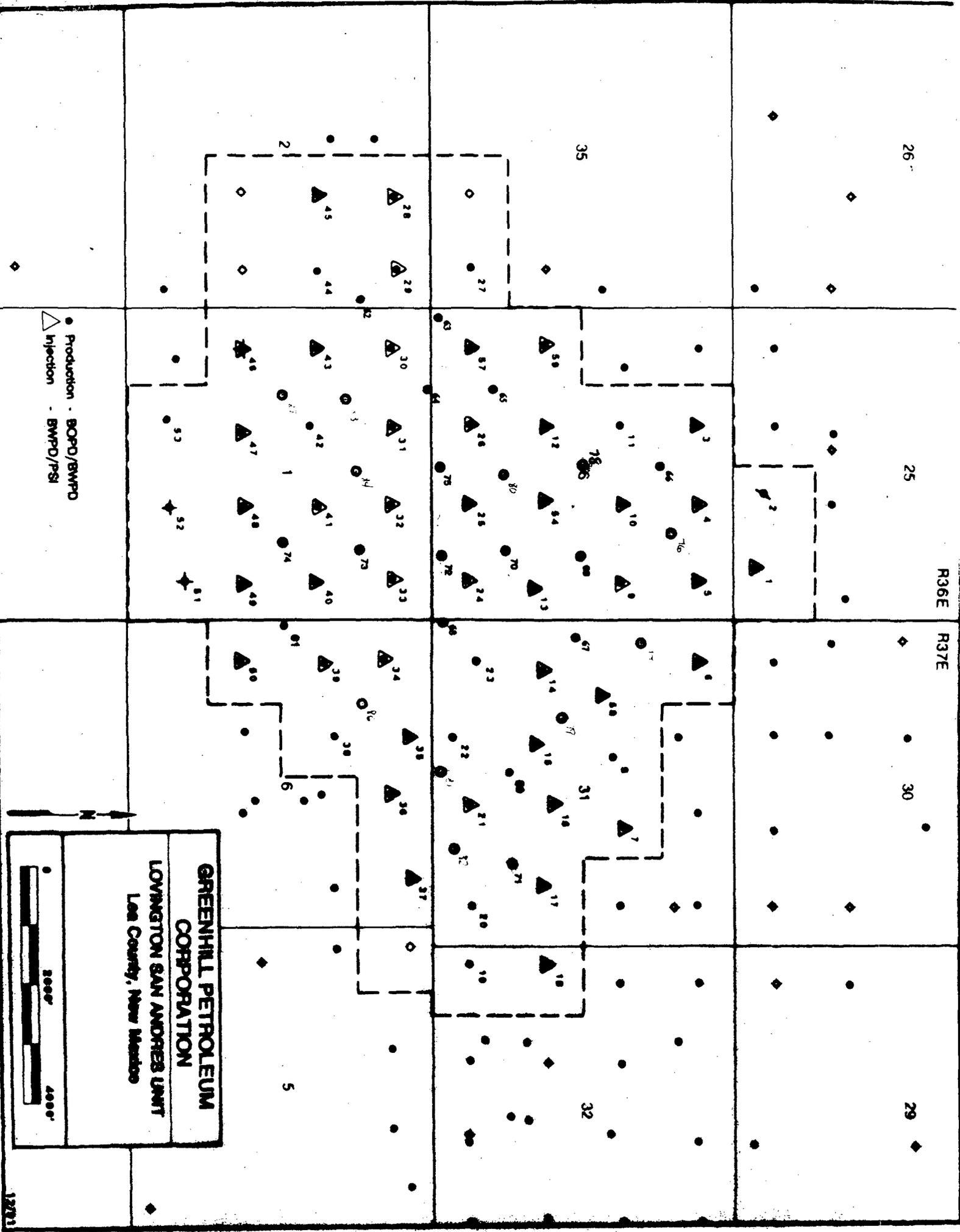
*Ronald J. Edson*  
 Registered Land Surveyor  
 Certificate No. JOHN W. WEST 878  
 RONALD J. EDSON 2829  
 BARRY L. JONES 7877  
 W.O. 92-11-0239

GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 78

<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>		
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>	
8 5/8"	1300'	24	H40, STC	RA*	200 psi	
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi	

\*RR-Ram Ram  
RA-Ram Annular  
Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



26

25

R36E

R37E

30

29

35

32

● Production - BOPD/BWPD  
 △ Injection - BWPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

0 2000' 4000'



# GREENHILL PETROLEUM CORPORATION

RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX. (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 79  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 79 in the Lovington San Andres Unit, located in Lea County, New Mexico.

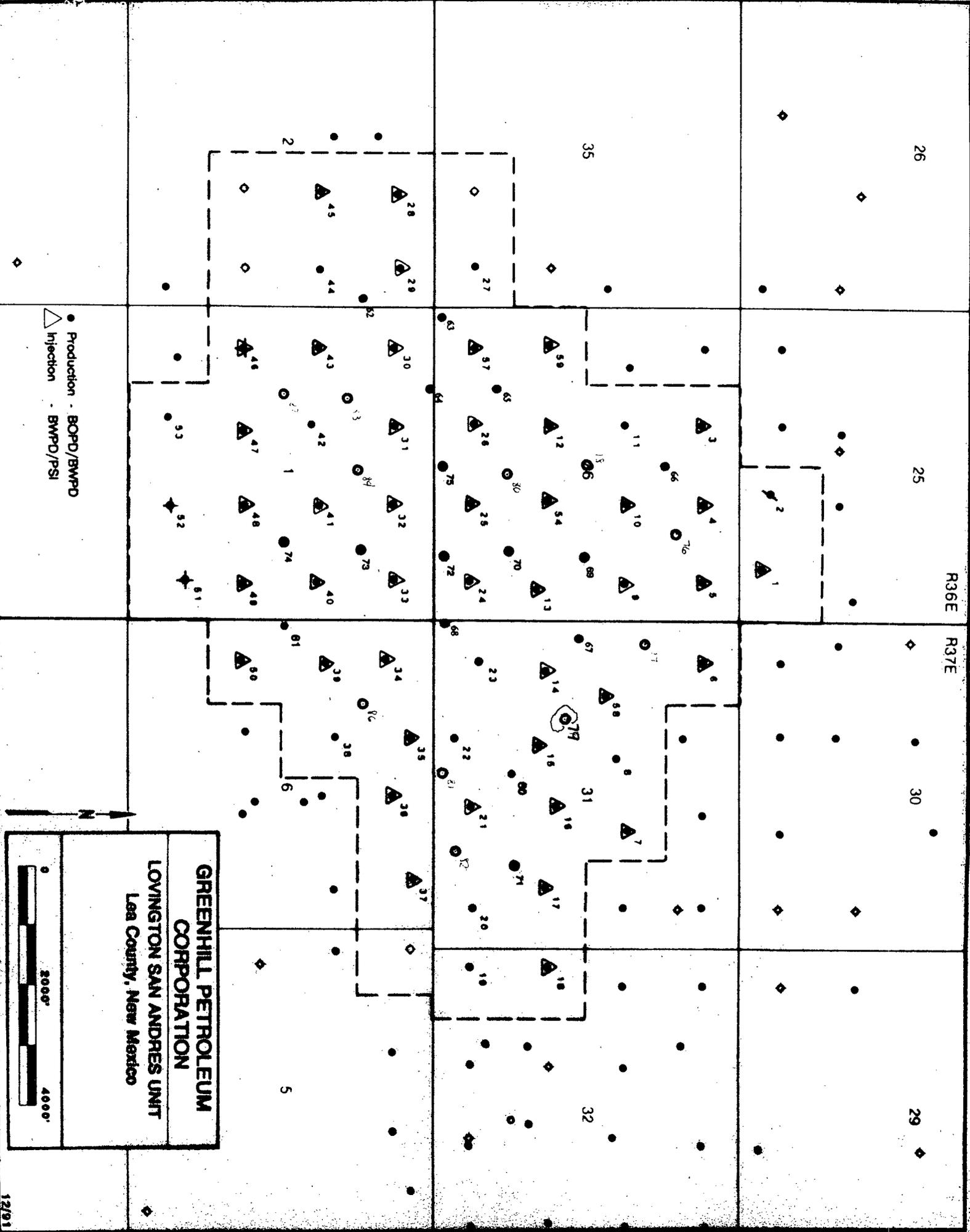
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 79 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



26

25

R36E

R37E

30

29

35

32

● Production - BOPD/BWPD  
 ▲ Injection - BWP/D/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





**GREENHILL PETROLEUM CORPORATION** OIL CONSERVATION DIVISION

RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX. (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 79  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 79 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 79 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 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,

*Michael J. Newport*  
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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  FEE

6. State Oil & Gas Lease No.  
B 1505

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. Lease Name or Unit Agreement Name Lovington San Andres Unit		
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			8. Well No. #79		
2. Name of Operator Greenhill Petroleum Corporation			9. Pool name or Wildcat Lovington Grayburg San Andres		
3. Address of Operator 11490 Westheimer, Suite 200; Houston, Tx. 77077					
4. Well Location Unit Letter <u>K</u> : <u>2225</u> Feet From The <u>South</u> Line and <u>1605</u> Feet From The <u>West</u> Line Section <u>31</u> Township <u>16 South</u> Range <u>37 East</u> NMPM Lea, County					
10. Proposed Depth 5150'		11. Formation San Andres		12. Rotary or C.T.	
13. Elevations (Show whether DF, RT, GR etc.) 3818	14. Kind & Status Plug. Bond On File	15. Drilling Contractor TBD	16. Approx. Date Work will start 4/92		
17. PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/2	8 5/8	24	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Newport TITLE Land Manager-Permian Basin DATE 3-23-92  
(713)  
TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**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., Artec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

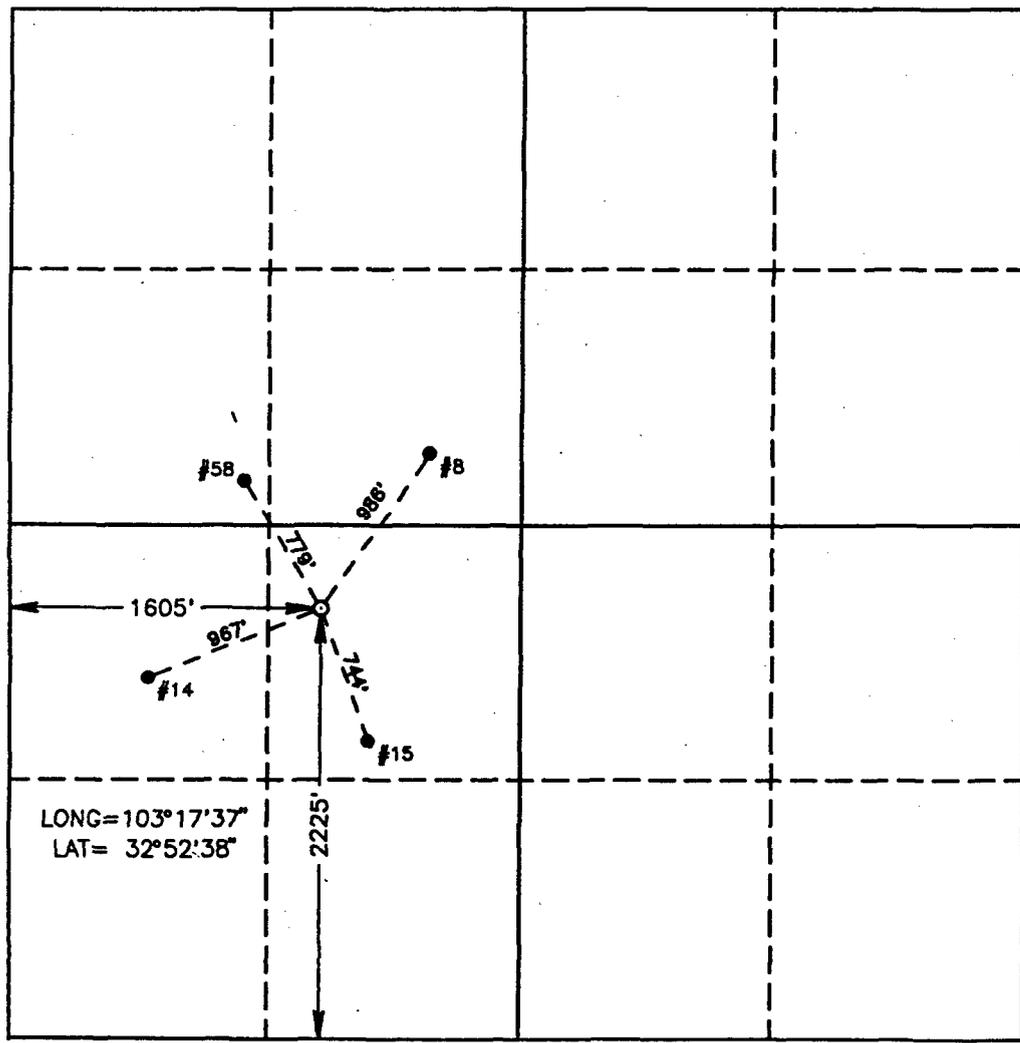
Operator GREENHILL PETROLEUM CORP.			Lease LOVINGTON SAN ANDRES UNIT		Well No. 79
Unit Letter K	Section 31	Township 16 SOUTH	Range 37 EAST	NMPM	County LEA
Actual Footage Location of Well: 2225 feet from the SOUTH line and 1605 feet from the WEST line					
Ground Level Elev. 3818.3'	Producing Formation San Andres	Pool Lovington Grayburg San Andres		Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. 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 unitized

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, 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 Newport*  
 Printed Name: Michael J. Newport  
 Position: Land Manager-Permian Basin  
 Company: Greenhill Petroleum Corp.  
 Date: 3-23-92

**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.

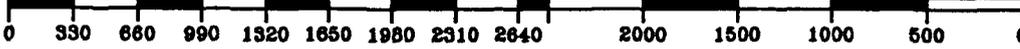
Date Surveyed: FEBRUARY 20, 1992

Signature & Seal of Professional Surveyor

REGISTERED LAND SURVEYOR

*Donald J. Eidson*

Certificate No. JOHN W. WEST 676  
 RONALD J. EIDSON 3239  
 GARY V. JONES 7877

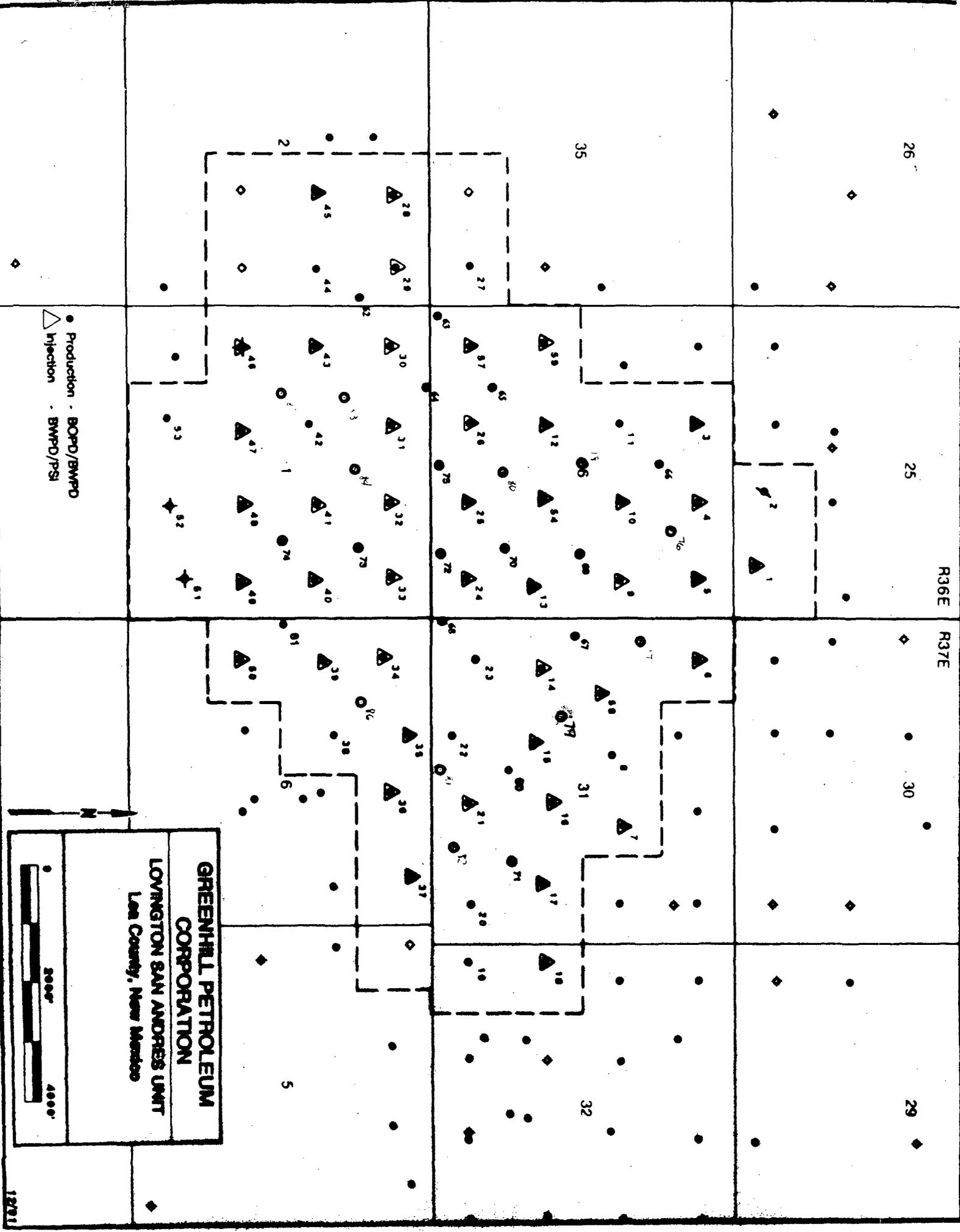


GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 79

<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>	
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

\*RR-Ram Ram  
RA-Ram Annular  
Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



● Production - BOPD/BWPD  
 ▲ Injection - BOPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





**GREENHILL PETROLEUM CORPORATION** OIL CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 80  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 80 in the Lovington San Andres Unit, located in Lea County, New Mexico.

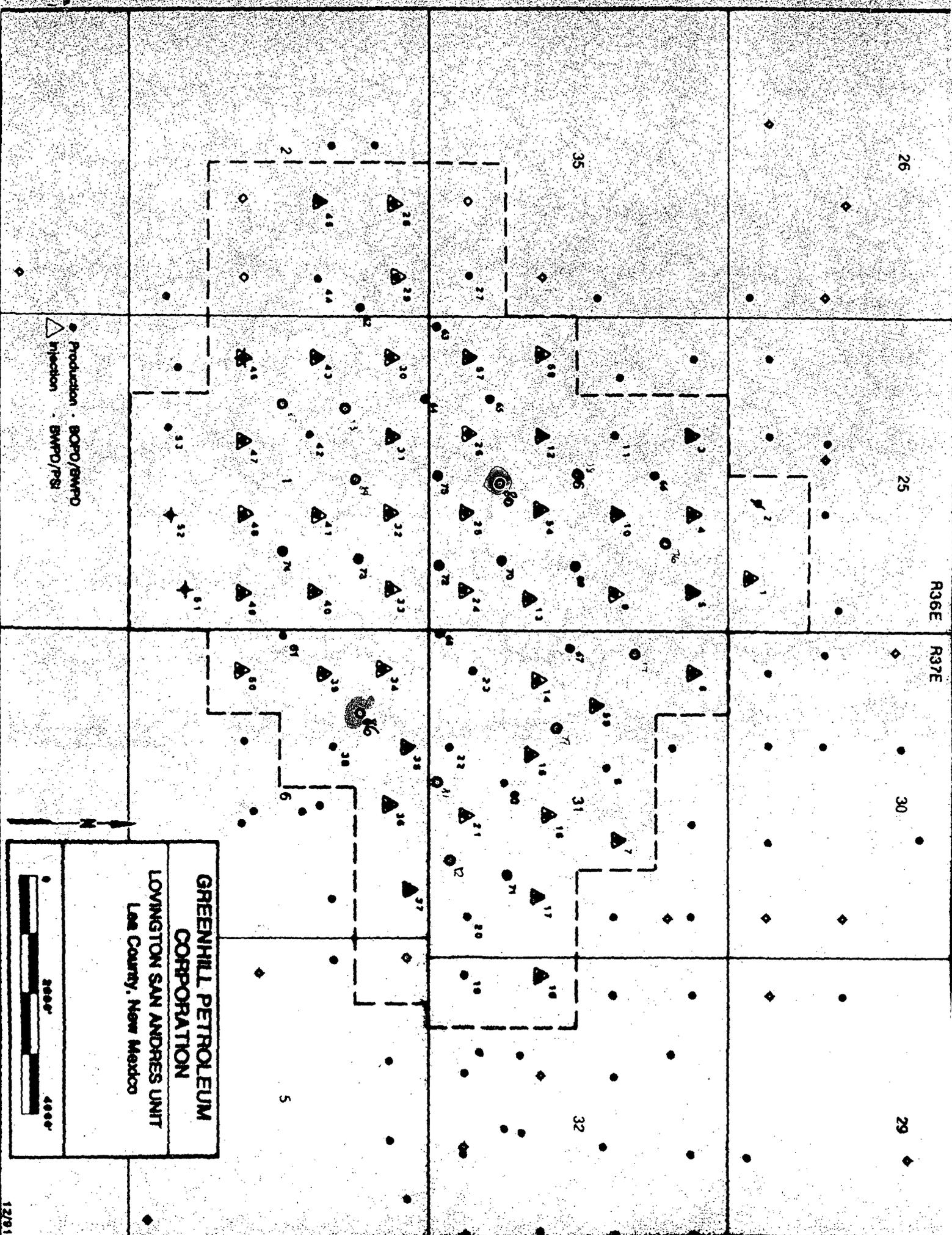
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 80 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



26

25

R36E

R37E

30

29

35

32

2

5

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

● Production - BOPD/BWPD  
 △ Injection - BWPD/PSI



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  FEE

6. State Oil & Gas Lease No.  
B 7845

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. Lease Name or Unit Agreement Name Lovington San Andres Unit		
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>					
2. Name of Operator Greenhill Petroleum Corporation			8. Well No. #80		
3. Address of Operator 11490 Westheimer, Suite 200; Houston, Tex. 77077			9. Pool name or Wildcat Lovington Grayburg San Andres		
4. Well Location Unit Letter <u>0</u> : <u>1225</u> Feet From The <u>South</u> Line and <u>2485</u> Feet From The <u>East</u> Line Section <u>36</u> Township <u>16 South</u> Range <u>36 East</u> NMPM <u>Lea</u> County					
10. Proposed Depth 5150'		11. Formation San Andres		12. Rotary or C.T.	
13. Elevations (Show whether DF, RT, GR etc.) 3823		14. Kind & Status Plug. Bond On File	15. Drilling Contractor TBD		16. Approx. Date Work will start 4/92
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	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Newport TITLE Land Manager-Permian Basin DATE 3-23-92  
(713)  
TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:



GREENHILL PETROLEUM CORPORATION OIL CONSERVATION DIVISION

RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX. (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 80  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 80 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 80 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 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,

  
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

**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**

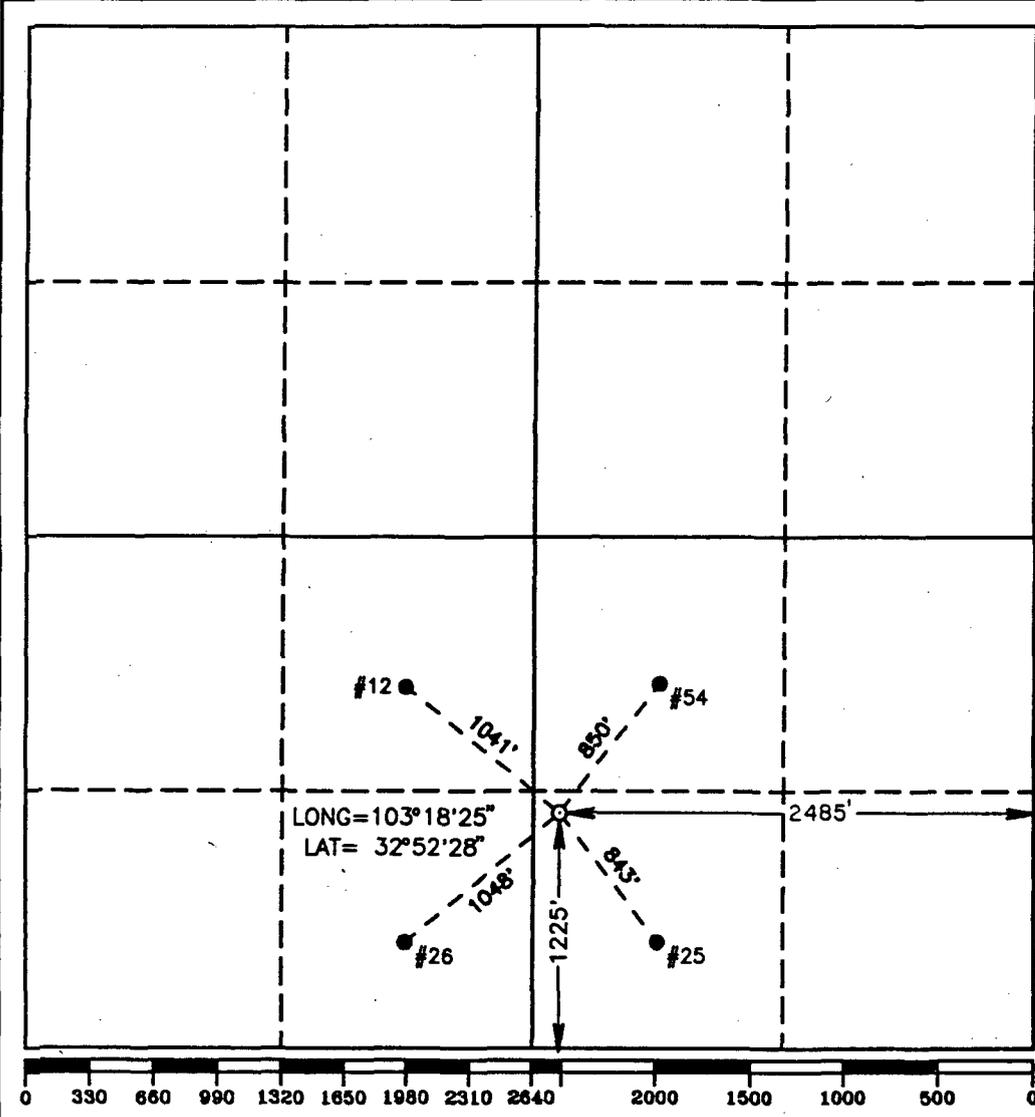
1000 Rio Brazos Rd., Artesia, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator <b>GREENHILL PETROLEUM CORP.</b>			Lease <b>LOVINGTON SAN ANDRES UNIT</b>		Well No. <b>80</b>
Unit Letter <b>0</b>	Section <b>36</b>	Township <b>16 SOUTH</b>	Range <b>36 EAST</b>	County <b>NMPM LEA</b>	
Actual Footage Location of Well: <b>1225</b> feet from the <b>SOUTH</b> line and <b>2485</b> feet from the <b>EAST</b> line					
Ground Level Elev. <b>3823.4'</b>	Producing Formation <b>San Andres</b>	Pool <b>Lovington Grayburg San Andres</b>			Dedicated Acreage: <b>40</b> Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 unitized
- If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)
- No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**

I hereby certify the 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  
**Land Manager-Permian Basin Company**  
**Greenhill Petroleum Corp.**

Date  
**3-23-93**

**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  
**FEBRUARY 20, 1992**

Signature & Seal of Professional Surveyor



GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 80

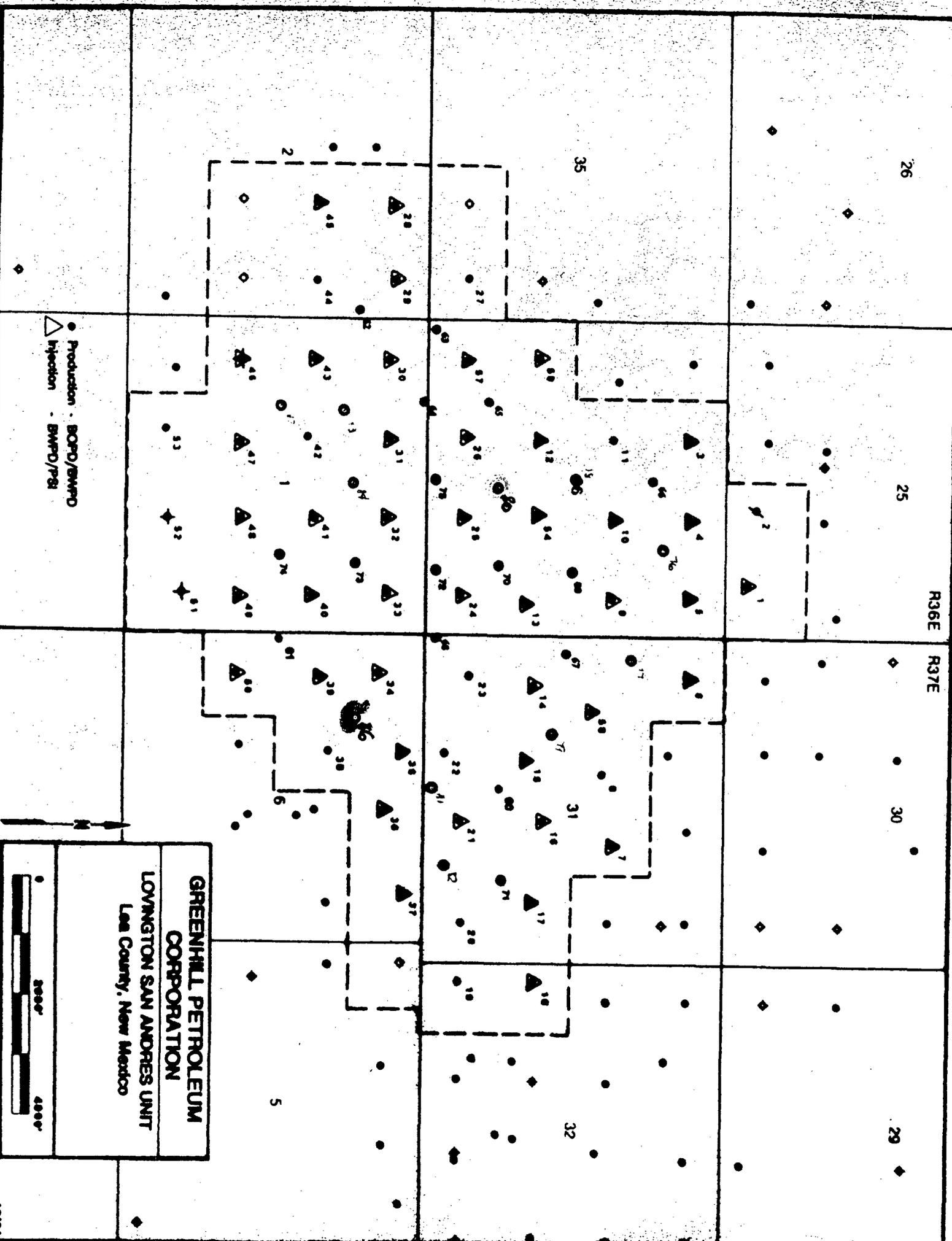
<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>	
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

\*RR-Ram Ram

RA-Ram Annular

Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



● Production - BOPD/BMPD  
 ▲ Injection - BMAPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
 LOVINGTON SAN ANDRES UNIT  
 Lea County, New Mexico





GREENHILL PETROLEUM CORPORATION OIL CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX. (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 81  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 81 in the Lovington San Andres Unit, located in Lea County, New Mexico.

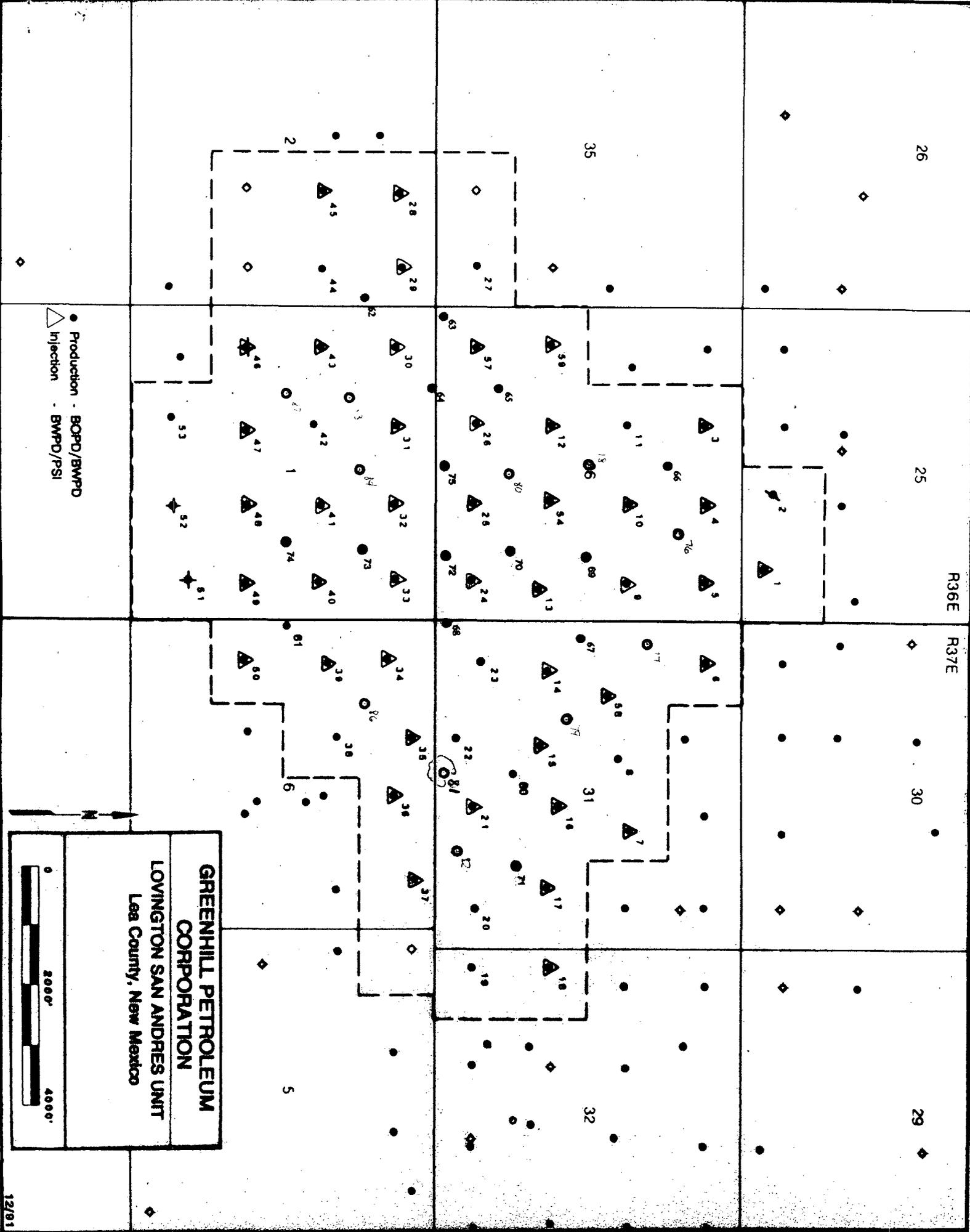
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 81 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



26

25

R36E

R37E

30

29

35

32

● Production - BOPD/BWPD  
 ▲ Injection - BWPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico



12/91



GREENHILL PETROLEUM CORPORATION OIL CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner  
Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 81  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 81 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 81 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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

FEE

6. State Oil & Gas Lease No.

B 1505

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. Type of Work:

DRILL  RE-ENTER  DEEPEN  PLUG BACK

b. Type of Well:

OIL WELL  GAS WELL  OTHER   
 SINGLE ZONE  MULTIPLE ZONE

7. Lease Name or Unit Agreement Name

Lovington San Andres Unit

2. Name of Operator

Greenhill Petroleum Corporation

8. Well No.

#81

3. Address of Operator

11490 Westheimer, Suite 200; Houston, Tx. 77077

9. Pool name or Wildcat

Lovington Grayburg San Andres

4. Well Location

Unit Letter N : 2532 Feet From The West Line and 122 Feet From The South Line

Section 31 Township 16 South Range 37 East NMPM Lea, County

10. Proposed Depth  
 5150'

11. Formation  
 San Andres

12. Rotary or C.T.

13. Elevations (Show whether DF, RT, GR etc.)

3808

14. Kind & Status Plug. Bond

On File

15. Drilling Contractor

TBD

16. Approx. Date Work will start

4/92

17.

**PROPOSED CASING AND CEMENT PROGRAM**

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/2	8 5/8	24	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Newport TITLE Land Manager-Permian Basin DATE 3-23-92

TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**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., Artec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

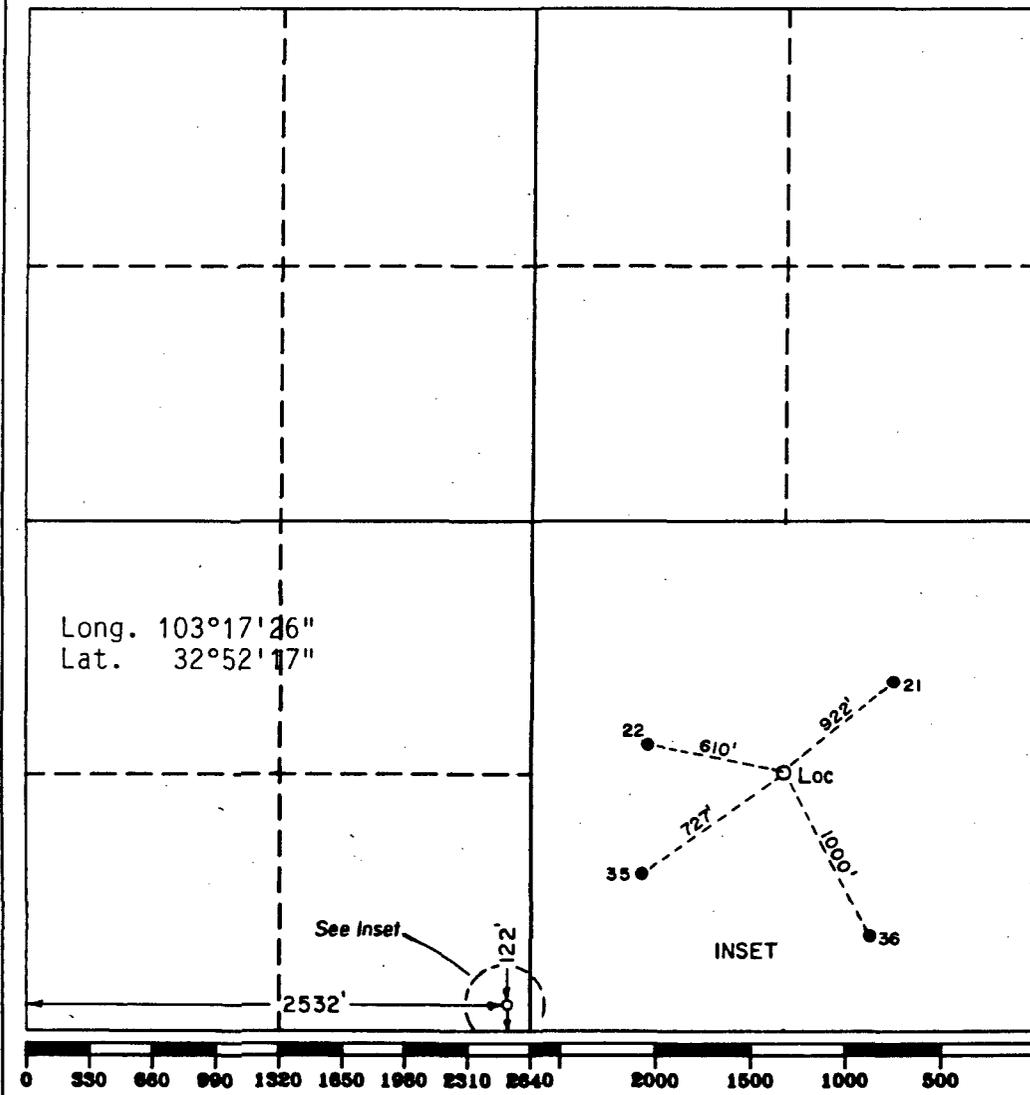
Operator Greenhill Petroleum Corp.		Lease Lovington San Andres Unit		Well No. 81
Unit Letter N	Section 31	Township 16 South	Range 37 East	County Lea
Actual Footage Location of Well: 2532 feet from the West line and 122 feet from the South line				
Ground Level Elev. 3808.6	Producing Formation San Andres	Pool Lovington Grayburg San Andres	Dedicated Acreage: 40 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 unitized

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**

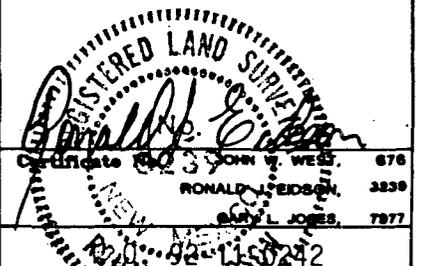
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature: *Richard Newport*  
 Printed Name: Michael J. Newport  
 Position: Land Manager-Permian Basin  
 Company: Greenhill Petroleum Corp.  
 Date: 3-23-92

**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: March 6, 1992  
 Signature & Seal of Professional Surveyor

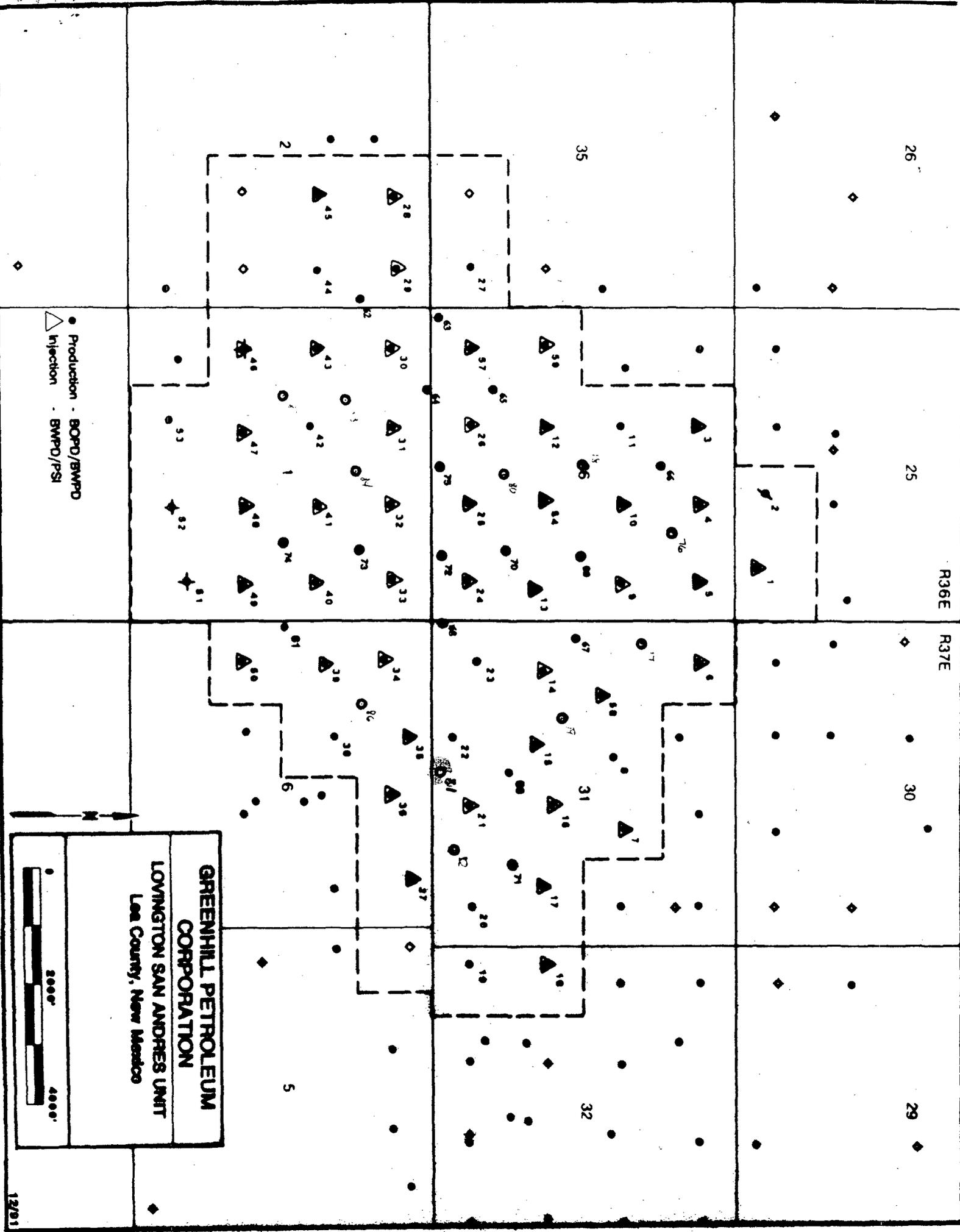


GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 81

<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>		
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>	
8 5/8"	1300'	24	H40, STC	RA*	200 psi	
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi	

\*RR-Ram Ram  
RA-Ram Annular  
Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



26

25

R36E

R37E

30

29

35

32

2

5

● Production - BOPD/BWPD  
 ▲ Injection - BWPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
 LOVINGTON SAN ANDRES UNIT  
 Lea County, New Mexico





# GREENHILL PETROLEUM CORPORATION

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX. (713) 589-7892

Incorporated in Delaware, U.S.A.

OIL CONSERVATION DIVISION  
RECEIVED

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 82  
Lovington San Andres Unit  
Lea County, New Mexico

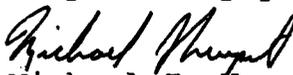
Dear Mr. Stogner:

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 82 in the Lovington San Andres Unit, located in Lea County, New Mexico.

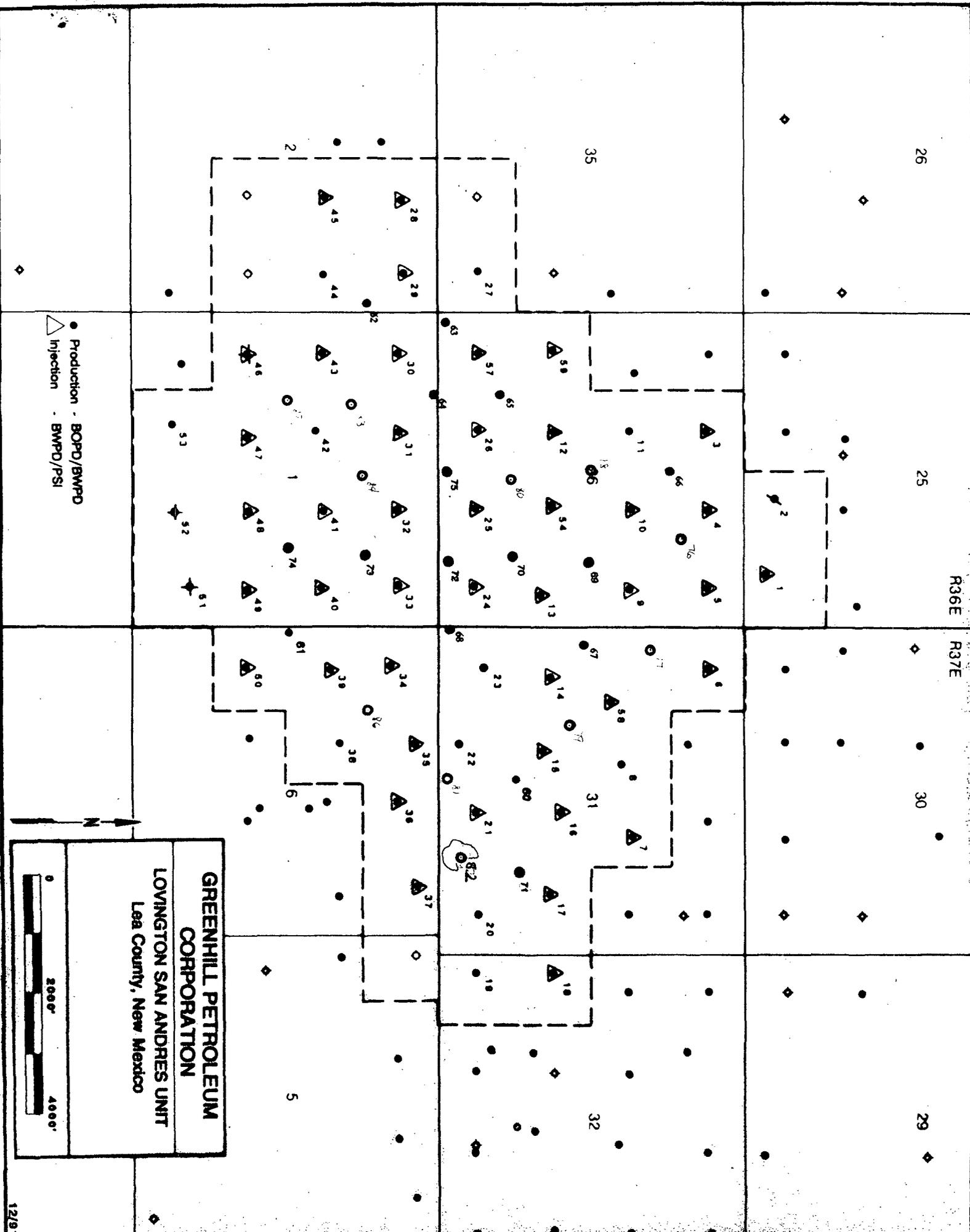
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 82 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 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,

  
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



● Production - BOPD/BWPD  
 △ Injection - BMPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





# GREENHILL PETROLEUM CORPORATION

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

Incorporated in Delaware, U.S.A.

OIL CONSERVATION DIVISION  
RECEIVED

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 82  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 82 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 82 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 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,

  
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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  FEE

6. State Oil & Gas Lease No.  
 B 7896

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. Type of Work:  
 DRILL  RE-ENTER  DEEPEN  PLUG BACK   
 b. Type of Well:  
 OIL WELL  GAS WELL  OTHER   
 SINGLE ZONE  MULTIPLE ZONE

7. Lease Name or Unit Agreement Name  
 Lovington San Andres Unit

2. Name of Operator  
 Greenhill Petroleum Corporation

8. Well No.  
 #82

3. Address of Operator  
 11490 Westheimer, Suite 200; Houston, Tx. 77077

9. Pool name or Wildcat  
 Lovington Grayburg San Andres

4. Well Location  
 Unit Letter 0 : 1630 Feet From The East Line and 350 Feet From The South Line  
 Section 31 Township 16 South Range 37 East NMPM Lea, County

10. Proposed Depth 5150'  
 11. Formation San Andres  
 12. (Rotary or C.T.)

13. Elevations (Show whether DF, RT, CR, etc.) 3806  
 14. Kind & Status Plug. Bond On File  
 15. Drilling Contractor TBD  
 16. Approx. Date Work will start 4/92

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	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Newport TITLE Land Manager- Permian Basin DATE 3-23-92  
 TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO.

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**OIL CONSERVATION DIVISION**

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

**DISTRICT I**

P.O. Box 1990, Hobbs, NM 88240

**DISTRICT II**

P.O. Drawer DD, Artesia, NM 88210

**DISTRICT III**

1000 Rio Erasos Rd., Aztec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator Greenhill Petroleum Corp.			Lease Lovington San Andres Unit		Well No. 82
Unit Letter 0	Section 31	Township 16 South	Range 37 East	County Lea	

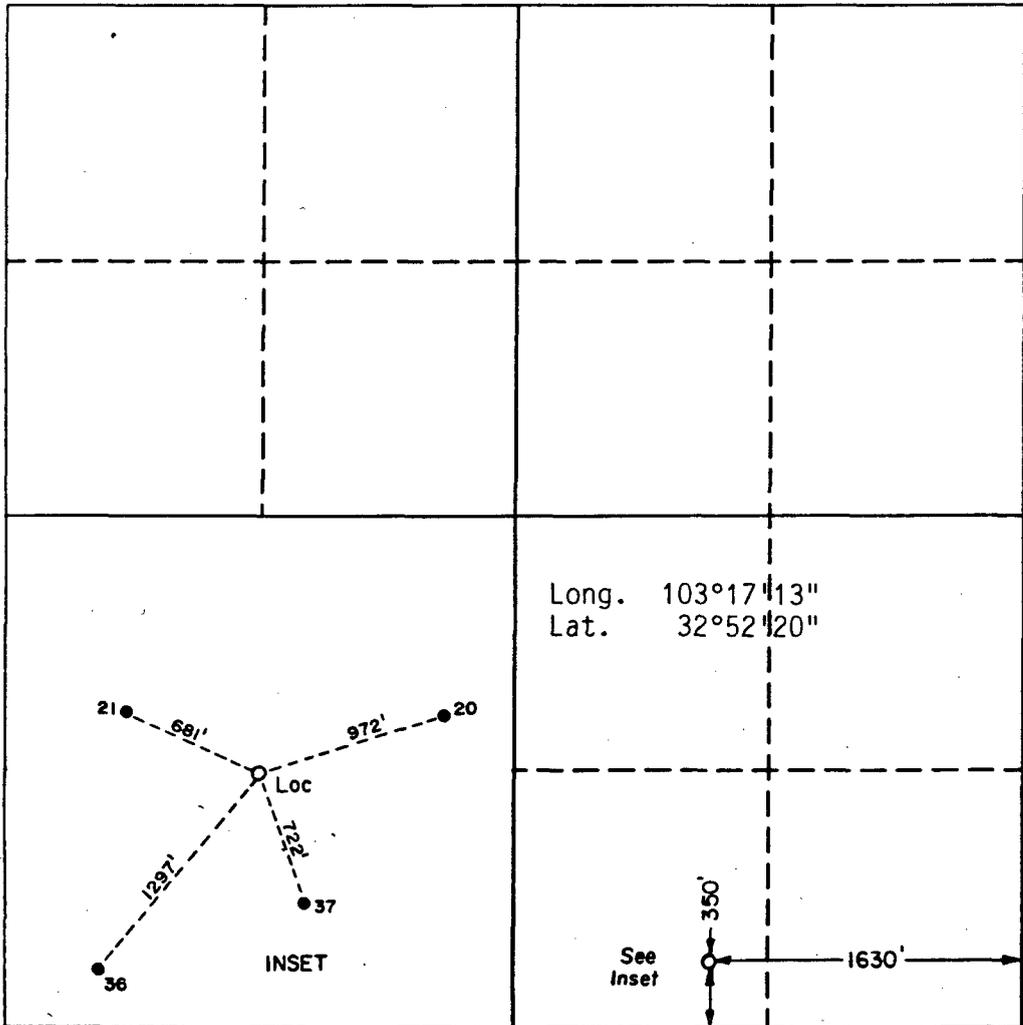
Actual Footage Location of Well:					
1630 feet from the East		350 feet from the South			
Ground Level Elev. 3806.3	Producing Formation San Andres	Pool Lovington Grayburg San Andres	Dedicated Acreage: 40 Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 unitized

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**

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

Signature: *Michael J. Newport*  
 Printed Name: Michael J. Newport  
 Position: Land Manager-Permian Basin  
 Company: Greenhill Petroleum Corp.  
 Date: 3-23-92

**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: March 6, 1992

Signature & Seal of Professional Surveyor

Professional Surveyor Seal for Donald J. Gibson, Registered Land Surveyor No. 878. The seal includes the text: REGISTERED LAND SURVEYOR, DONALD J. GIBSON, JOHN W. WEST, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000. Below the seal is the text: W.O. 924011-0243

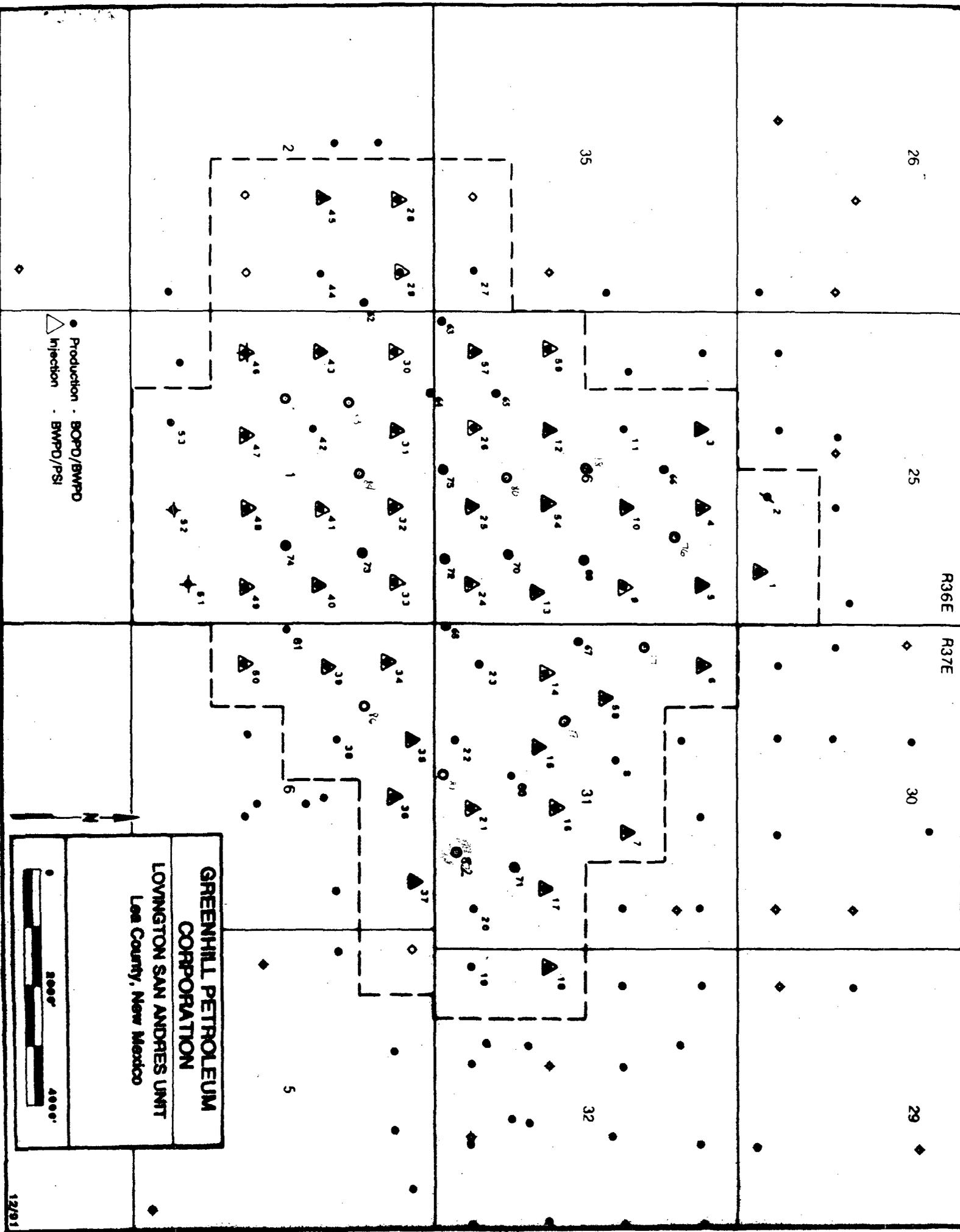


GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 82

<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>	
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

\*RR-Ram Ram  
RA-Ram Annular  
Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



● Production - BOPD/BMPD  
 △ Injection - BMPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





**GREENHILL PETROLEUM CORPORATION**

OIL CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

Incorporated in Delaware, U.S.A.

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 83  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 83 in the Lovington San Andres Unit, located in Lea County, New Mexico.

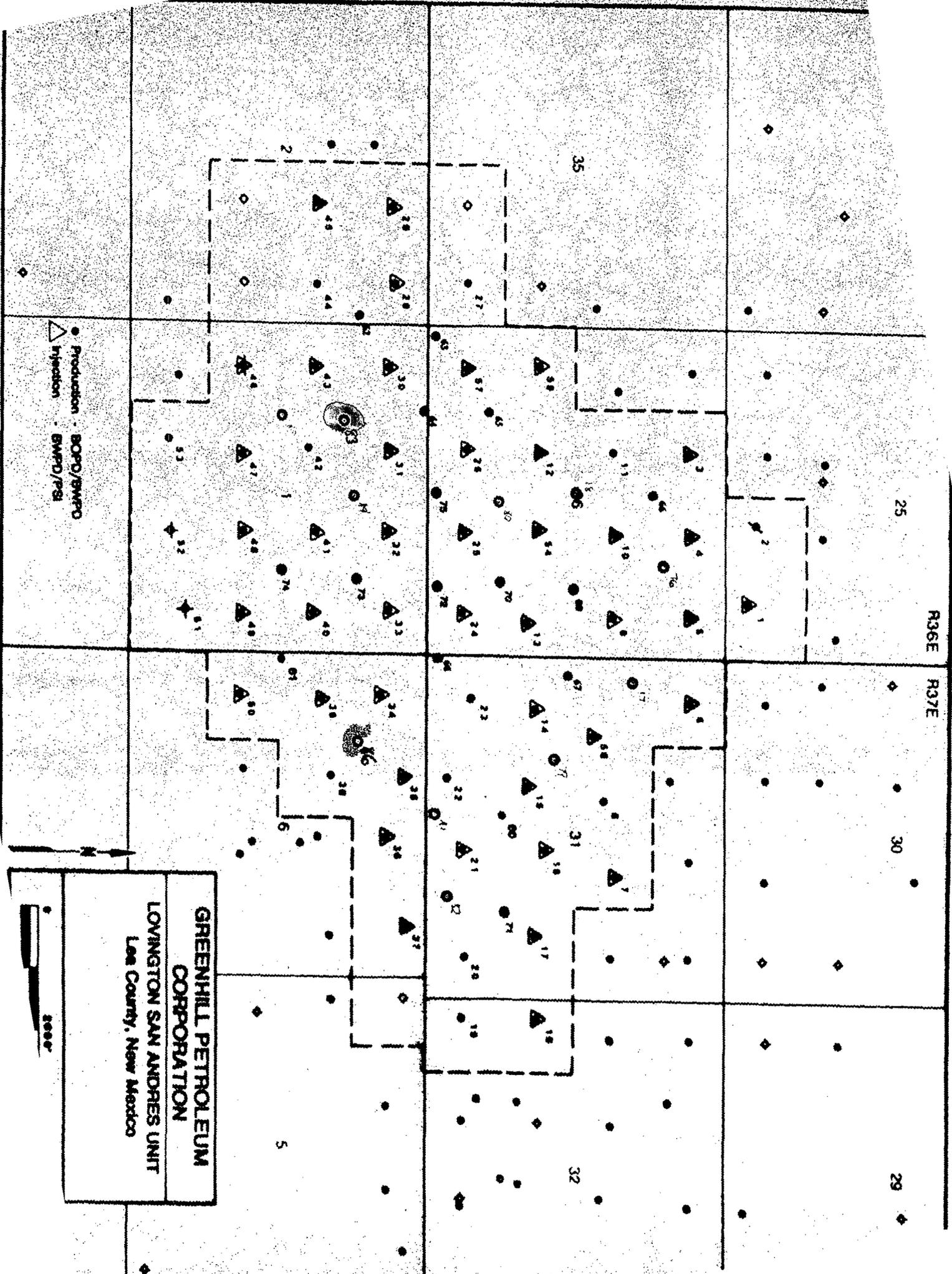
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 83 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



25

R36E

R37E

30

29

35

32

2

5

- Production - BOPD/BWPD
- △ Injection - BWPD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico





# GREENHILL PETROLEUM CORPORATION

OIL CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX: (713) 589-7892

Incorporated in Delaware, U.S.A.

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 83  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 83 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 83 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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.	B 1553

<b>APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK</b>					
1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. Lease Name or Unit Agreement Name Lovington San Andres Unit		
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>			8. Well No. #83		
2. Name of Operator Greenhill Petroleum Corporation			9. Pool name or Wildcat Lovington Grayburg San Andres		
3. Address of Operator 11490 Westheimer, Suite 200; Houston, Tx. 77077					
4. Well Location Unit Letter <u>F</u> : <u>1520</u> Feet From The <u>West</u> Line and <u>1472</u> Feet From The <u>North</u> Line Section <u>1</u> Township <u>17 South</u> Range <u>36 East</u> NMPM <u>Lea</u> , County					
		10. Proposed Depth 5150'		11. Formation San Andres	12. Rotary or C.T.
13. Elevations (Show whether DF, RT, GR etc.) 3831		14. Kind & Status Plug. Bond On File	15. Drilling Contractor TBD		16. Approx. Date Work will start 4/92
<b>17. PROPOSED CASING AND CEMENT PROGRAM</b>					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/2	8 5/8	24	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Land Manager-Permian Basin DATE 3-23-92  
(713)  
TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**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 Ed., Artec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator GREENHILL PETROLEUM CORP.			Lease LOVINGTON SAN ANDRES UNIT		Well No. 83
Unit Letter F	Section 1	Township 17 SOUTH	Range 36 EAST	NMPM	County LEA

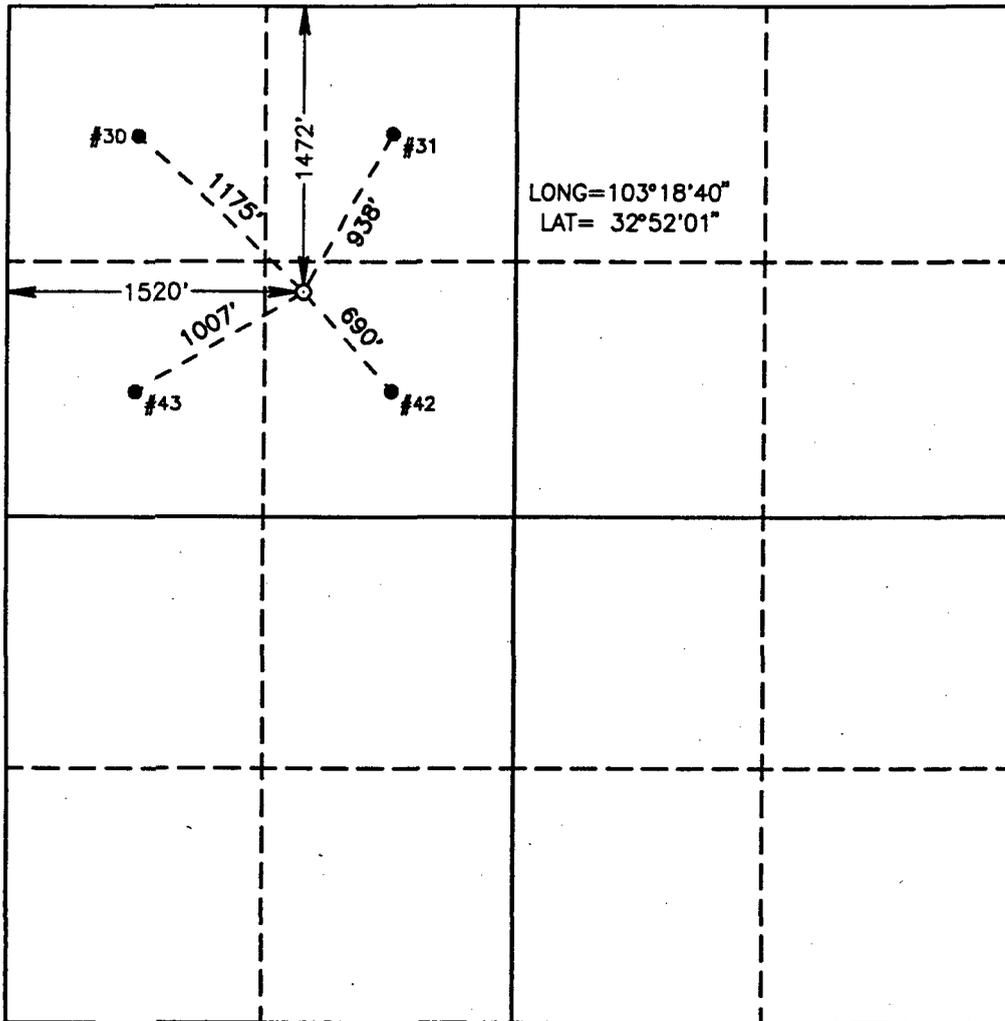
Actual Footage Location of Well:  
 1520 feet from the WEST line and 1472 feet from the NORTH line

Ground Level Elev. 3831.2'	Producing Formation San Andres	Pool Lovington Grayburg San Andres	Dedicated Acreage: 40 Acres
-------------------------------	-----------------------------------	---------------------------------------	--------------------------------

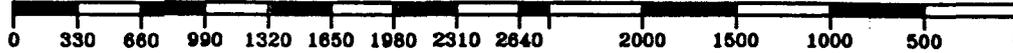
- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated 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 unitized

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



LONG=103°18'40"  
 LAT= 32°52'01"



**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  
 Land Manager-Permian Basin

Company  
 Greenhill Petroleum Corporation

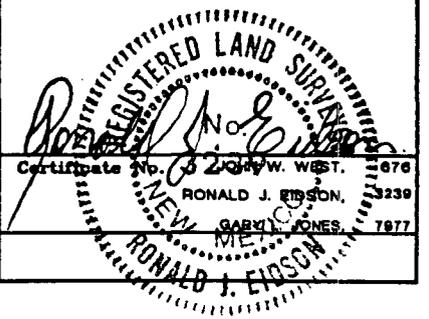
Date  
 3-23-92

**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  
 MARCH 6, 1992

Signature & Seal of  
 Professional Surveyor

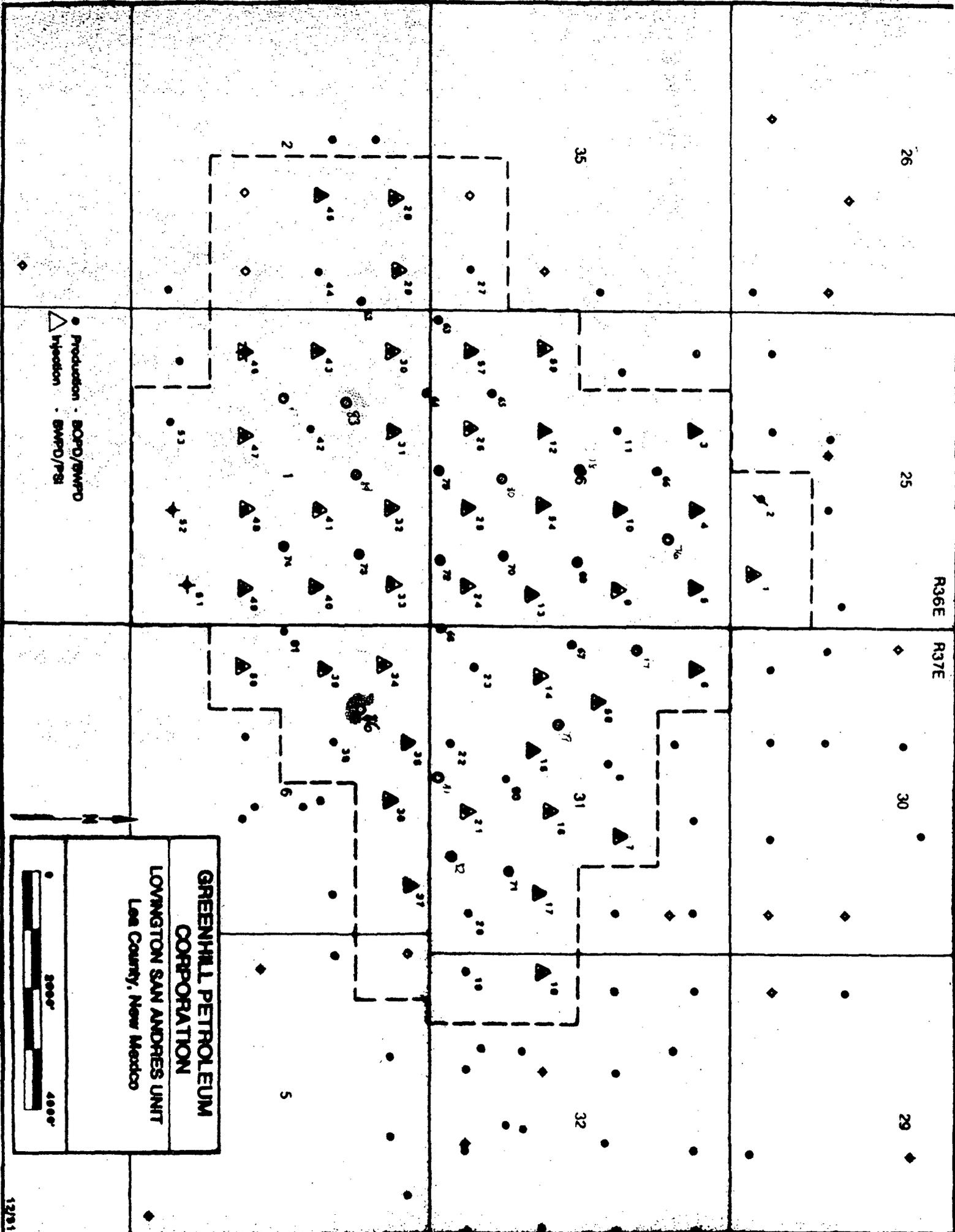


GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 83

<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>	
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

\*RR-Ram Ram  
RA-Ram Annular  
Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



26

25

R36E

R37E

30

29

35

2

● Production - BOPD/BWPD  
 ▲ Injection - BWPD/RSI

**GREENHILL PETROLEUM CORPORATION**  
 LOWINGTON SAN ANDRES UNIT  
 Lea County, New Mexico





# GREENHILL PETROLEUM CORPORATION

OIL CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

Incorporated in Delaware, U.S.A.

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 84  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 84 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 84 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

R36E

R37E

29

25

26

32

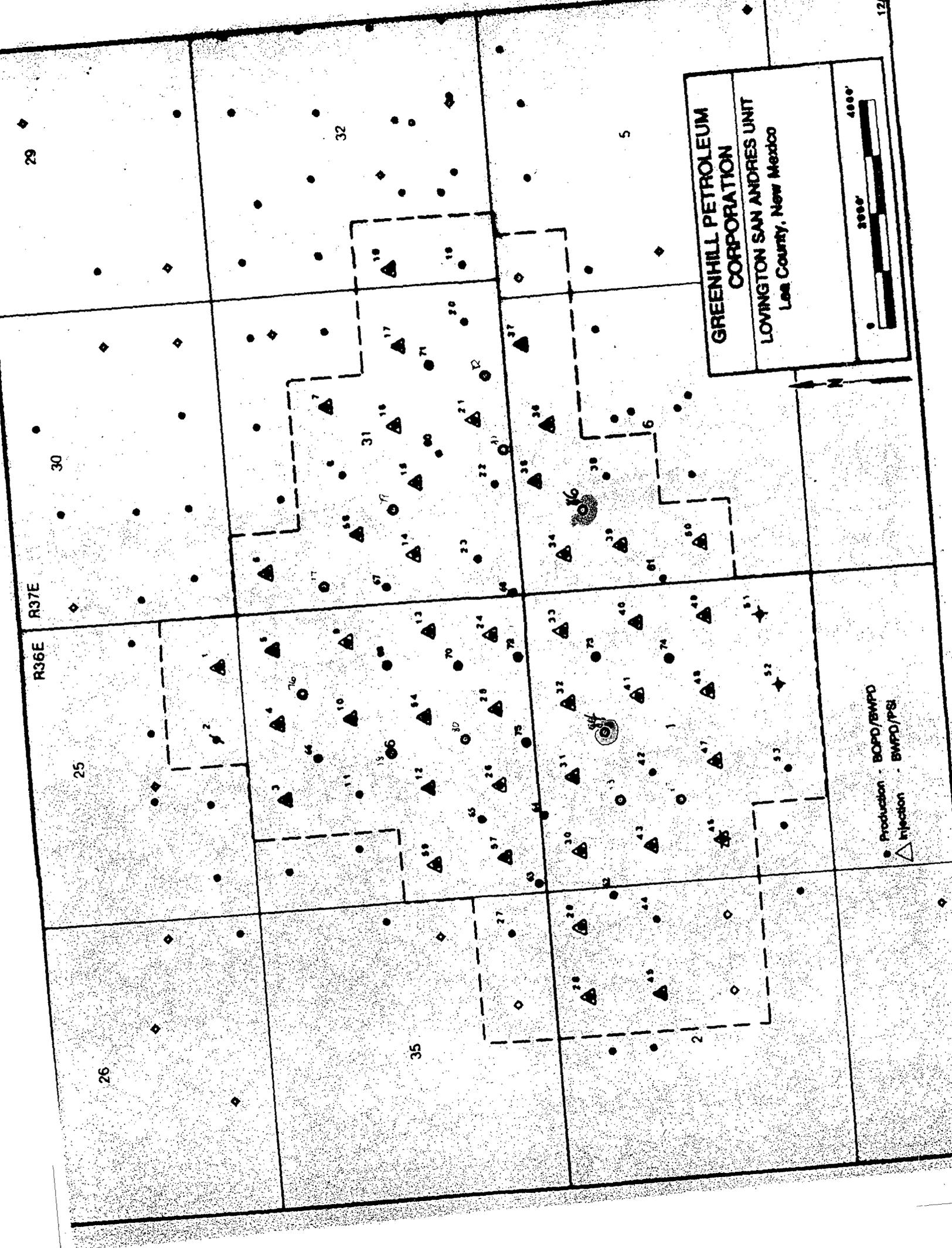
35

5

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

0 2000' 4000'

● Production - BOPD/BWPD  
 ▲ Injection - BWPD/PSI





# GREENHILL PETROLEUM CORPORATION

OIL CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX: (713) 589-7892

Incorporated in Delaware, U.S.A.

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 84  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 84 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 84 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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  FEE

6. State Oil & Gas Lease No.  
B 2359

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. Lease Name or Unit Agreement Name Lovington San Andres Unit		
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>			SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. Name of Operator Greenhill Petroleum Corporation			8. Well No. #84		
3. Address of Operator 11490 Westheimer, Suite 200; Houston, Tx. 77077			9. Pool name or Wildcat Lovington Grayburg San Andres		
4. Well Location Unit Letter <u>B</u> : <u>1290</u> Feet From The <u>North</u> Line and <u>2490</u> Feet From The <u>East</u> Line Section <u>1</u> Township <u>17 South</u> Range <u>36 East</u> NMPM Lea, County					
10. Proposed Depth 5150'		11. Formation San Andres		12. Rotary or C.T.	
13. Elevations (Show whether DF, RT, GR, etc.) 3830		14. Kind & Status Plug. Bond On File		15. Drilling Contractor TBD	
16. Approx. Date Work will start 4/92					
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	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Land Manager-Permian Basin DATE 3-23-92  
(713)  
TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**OIL CONSERVATION DIVISION**

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

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

**DISTRICT III**  
 1000 Rio Brazos Rd., Artesia, NM 87410

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

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

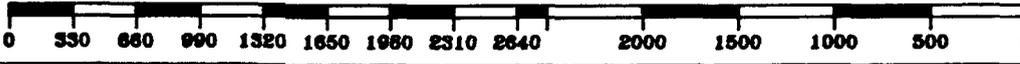
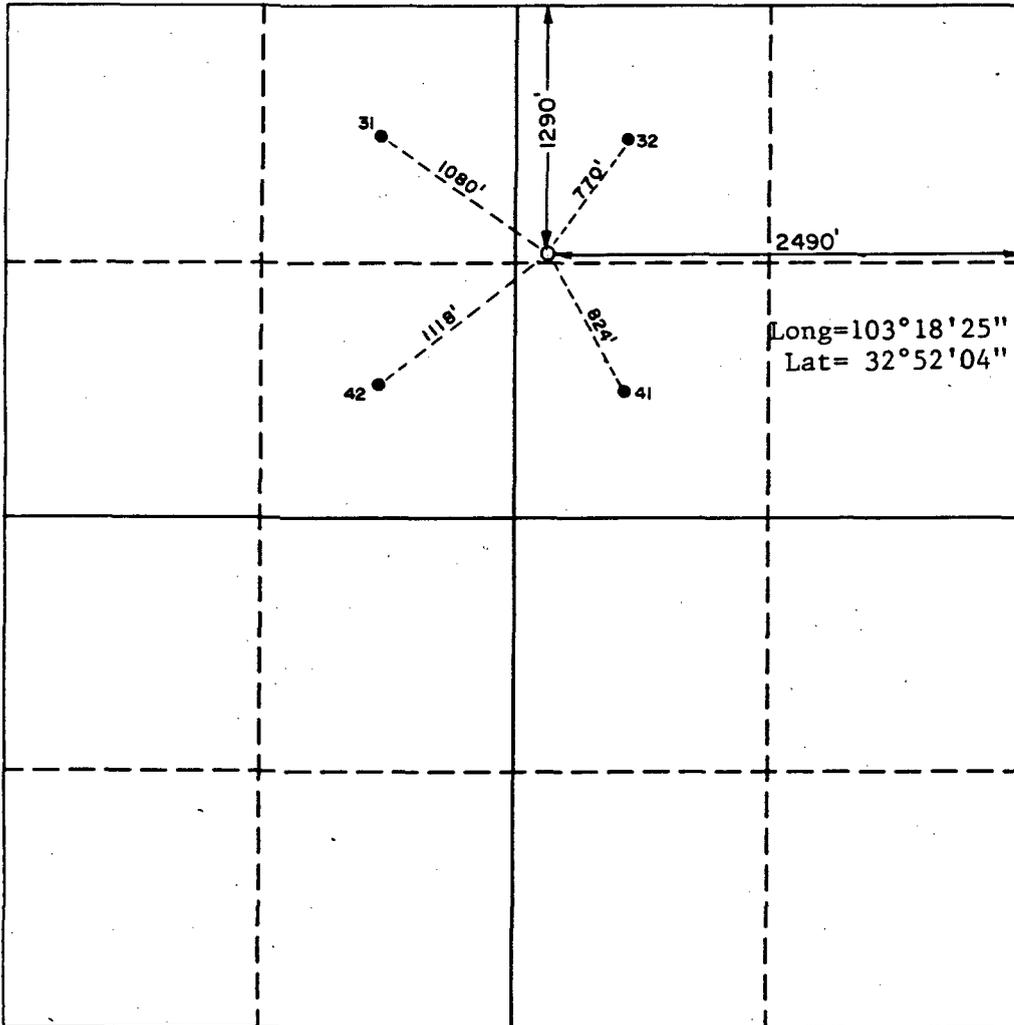
Operator Greenhill Petroleum Corp.			Lease Lovington San Andres		Well No. 84
Unit Letter B	Section 1	Township 17 South	Range 36 East	County Lea	
Actual Footage Location of Well:					
1290 feet from the north line and		2490 feet from the east line			
Ground Level Elev. 3830.3'	Producing Formation San Andres		Pool Lovington Grayburg San Andres	Dedicated Acreage: 40 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 unitized

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**

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

Signature  
*Michael Newport*  
 Printed Name  
 Michael J. Newport  
 Position  
 Land Manager-Permian Basin  
 Company  
 Greenhill Petroleum Corp  
 Date  
 3-23-92

**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.

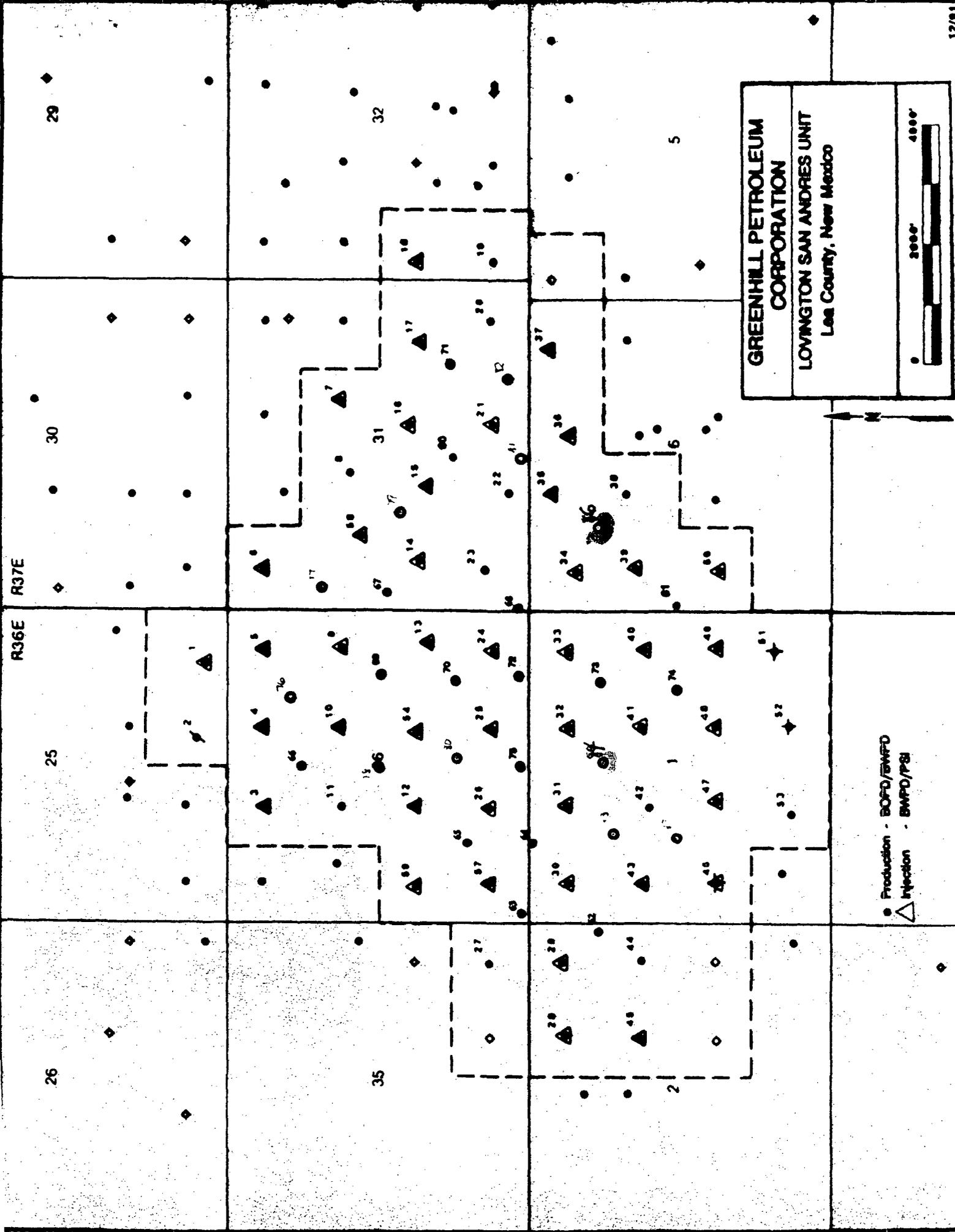
Date Surveyed  
 February 27, 1992  
 Signature & Seal of Professional Surveyor  
  
 Certificate No. 976  
 RONALD J. EASON  
 2228  
 2512 S. GILES, 7877  
 W.O. 92-11-0245

GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 84

<u>CASING PROGRAM</u>			<u>BOP PROGRAM</u>		
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

\*RR-Ram Ram  
RA-Ram Annular  
Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

● Production - BOPD/BWPD  
 ▲ Injection - BMPD/PBI





# GREENHILL PETROLEUM CORPORATION

RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX. (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 85  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 85 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 85 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

R37E

R36E

29

30

25

26

32

31

35

35

5

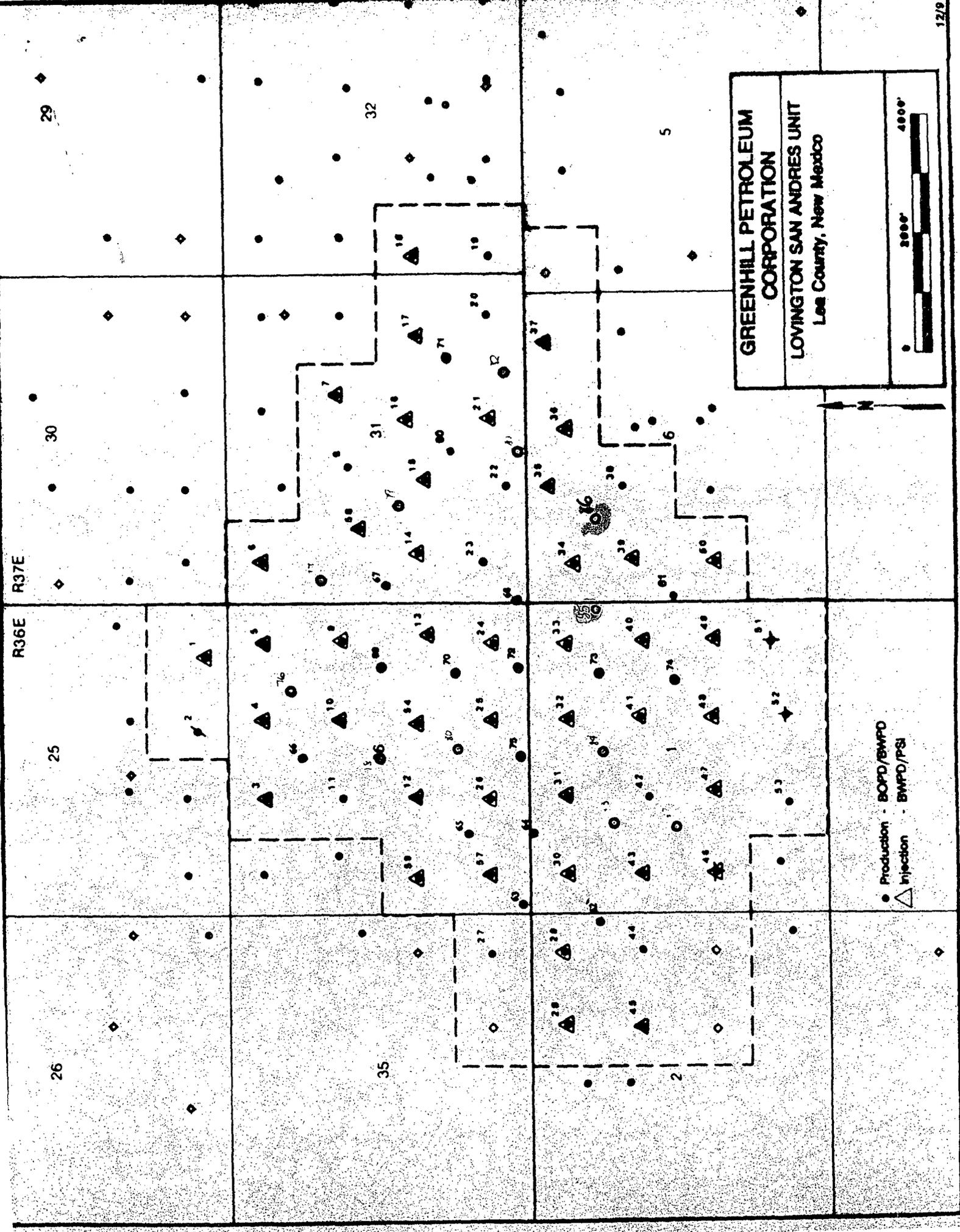
6

1

2

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

● Production - BOPD/BWPD  
 ▲ Injection - BOPD/PSI





**GREENHILL PETROLEUM CORPORATION** DIVISION

RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 85  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 85 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 85 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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**

**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

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

API NO. (assigned by OCD on New Wells)

5. Indicate Type of Lease  
 STATE  FEE

6. State Oil & Gas Lease No.  
 B 2359

**APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK**

1a. Type of Work:  
 DRILL  RE-ENTER  DEEPEN  PLUG BACK   
 b. Type of Well:  
 OIL WELL  GAS WELL  OTHER  SINGLE ZONE  MULTIPLE ZONE

7. Lease Name or Unit Agreement Name  
 Lovington San Andres Unit

2. Name of Operator  
 GREENHILL PETROLEUM CORPORATION

8. Well No.  
 85

3. Address of Operator  
 11490 Westheimer, Suite 200, Houston, Texas 77077-6841

9. Pool name or Wildcat  
 Lovington Grayburg San Andres

4. Well Location  
 Unit Letter H : 1,335 Feet From The North Line and 120 Feet From The East Line  
 Section 1 Township 17S Range 36E NMPM Lea County

10. Proposed Depth 5,150 ft. 11. Formation San Andres 12. Rotary or C.T. Rotary

13. Elevations (Show whether DF, RT, GR, etc.) 14. Kind & Status Plug. Bond on file 15. Drilling Contractor TBD 16. Approx. Date Work will start 04/92

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	1,300 ft.	550	Surface
7-7/8	5-1/2	15.5	5,150 ft.	1,000	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 Land Manager -- Permian Basin DATE 03/23/92  
 TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 713 589-8484

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
 CONDITIONS OF APPROVAL, IF ANY:

**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., Artec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

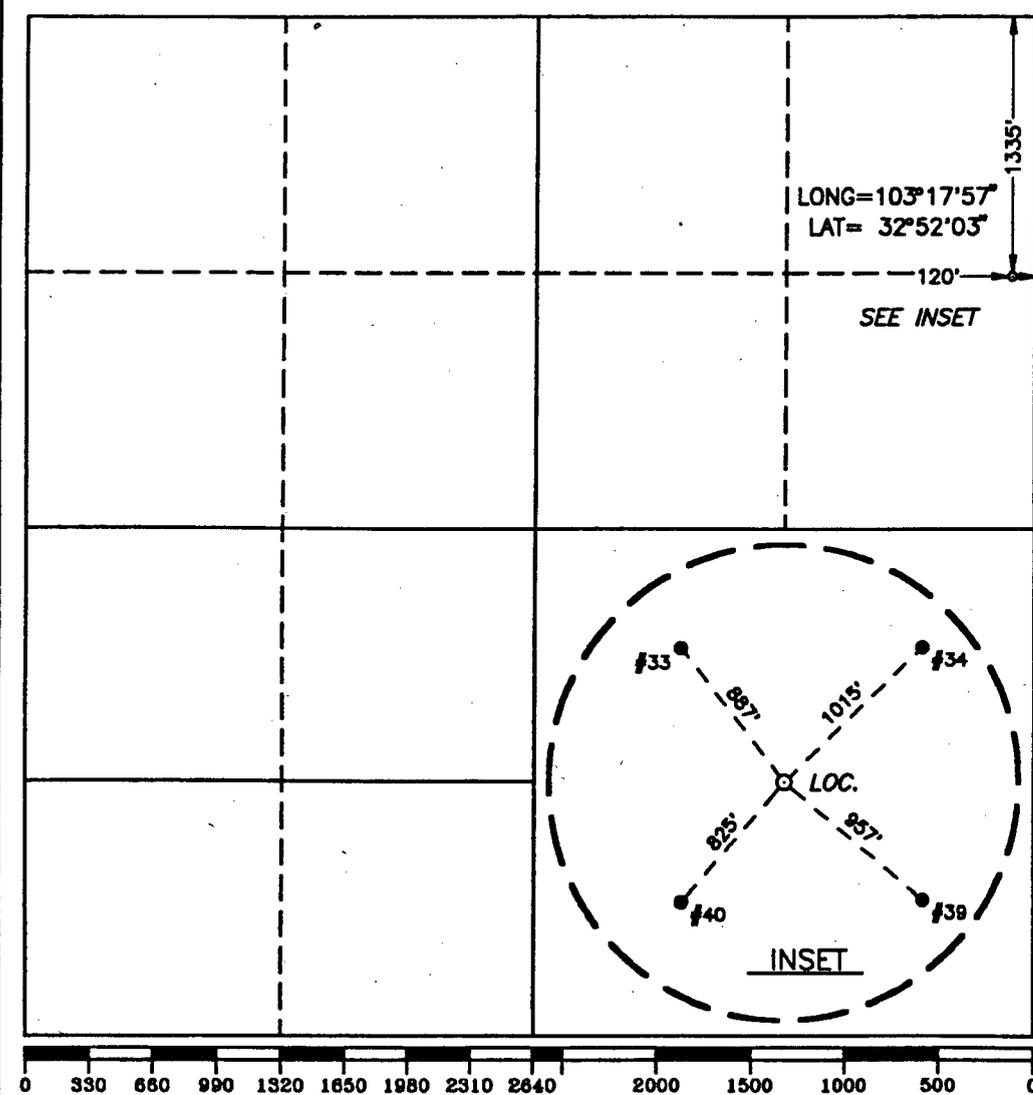
All Distances must be from the outer boundaries of the section

Operator <b>GREENHILL PETROLEUM CORP.</b>			Lease <b>LOVINGTON SAN ANDRES UNIT</b>		Well No. <b>85</b>
Unit Letter <b>H</b>	Section <b>1</b>	Township <b>17 SOUTH</b>	Range <b>36 EAST</b>	County <b>LEA</b>	

Actual Footage Location of Well:  
**1335** feet from the **NORTH** line and **120** feet from the **EAST** line

Ground Level Elev. <b>3822.6'</b>	Producing Formation <b>San Andres</b>	Pool <b>Lovington Grayburg San Andres</b>	Dedicated Acreage: <b>40</b> Acres
--------------------------------------	--	--	---------------------------------------

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 unitized
- If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)
- No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**

I hereby certify the 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: **Land Manager-Permian Basin**  
 Company: **Greenhill Petroleum Corp.**  
 Date: **03/23/92**

**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.

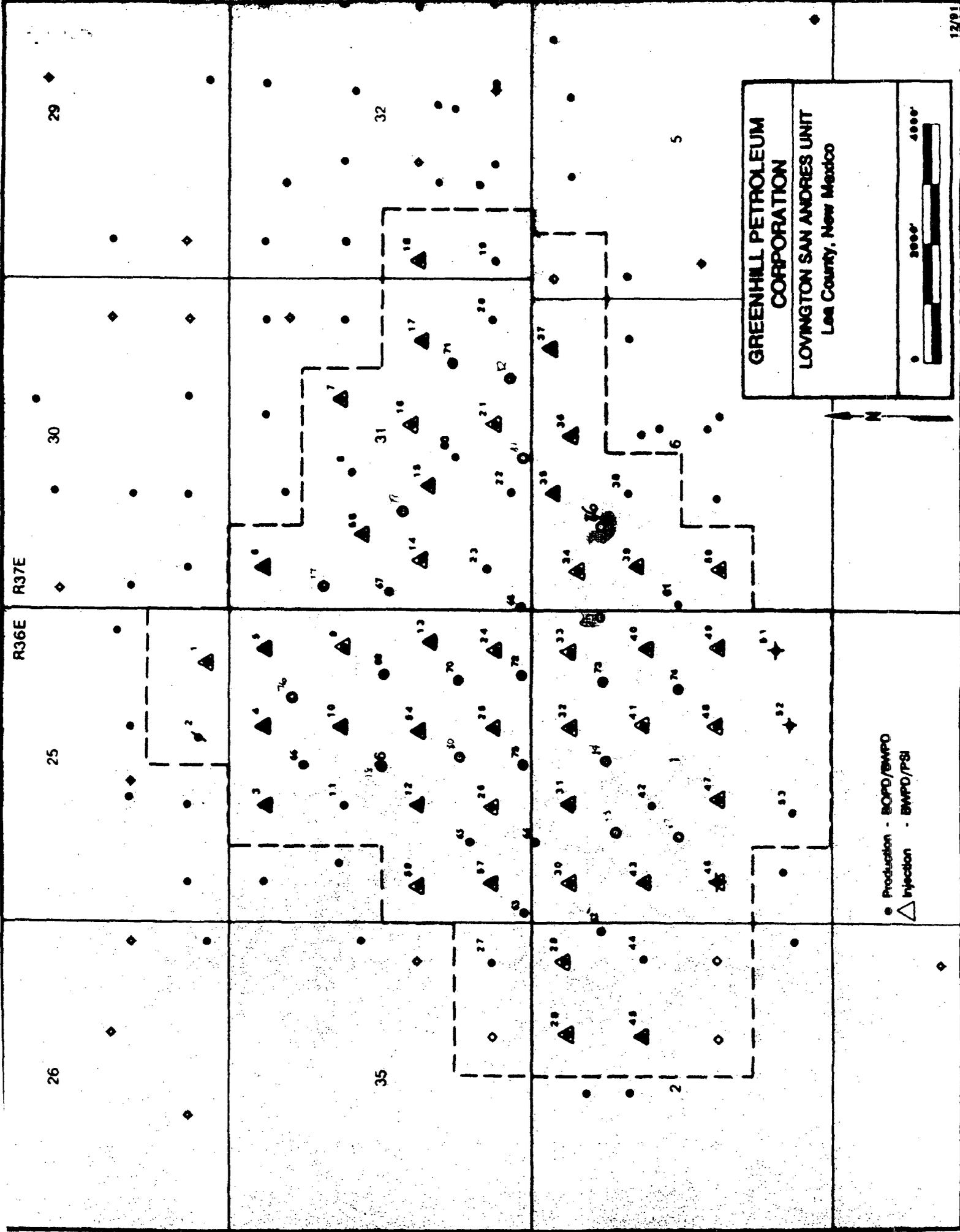
Date Surveyed: **MARCH 6, 1992**  
 Signature & Seal of Professional Surveyor:  
  
 Certificate No. **JOHN W. WEST 676**  
**RONALD J. EIDSON 3239**  
**GARY L. JONES 7877**  
**92-11-0246**

GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 85

<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>	
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

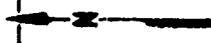
\*RR-Ram Ram  
RA-Ram Annular  
Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

● Production - SCFD/BWPD  
 ▲ Injection - BWPD/PSI



R37E

R36E

29

30

25

26

32

31

35

35

5

2

17

67

76

11

15

56

89

97

45

54

70

72

74

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336



OIL CONSERVATION DIVISION  
**GREENHILL PETROLEUM CORPORATION**

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX. (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 86  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 86 in the Lovington San Andres Unit, located in Lea County, New Mexico.

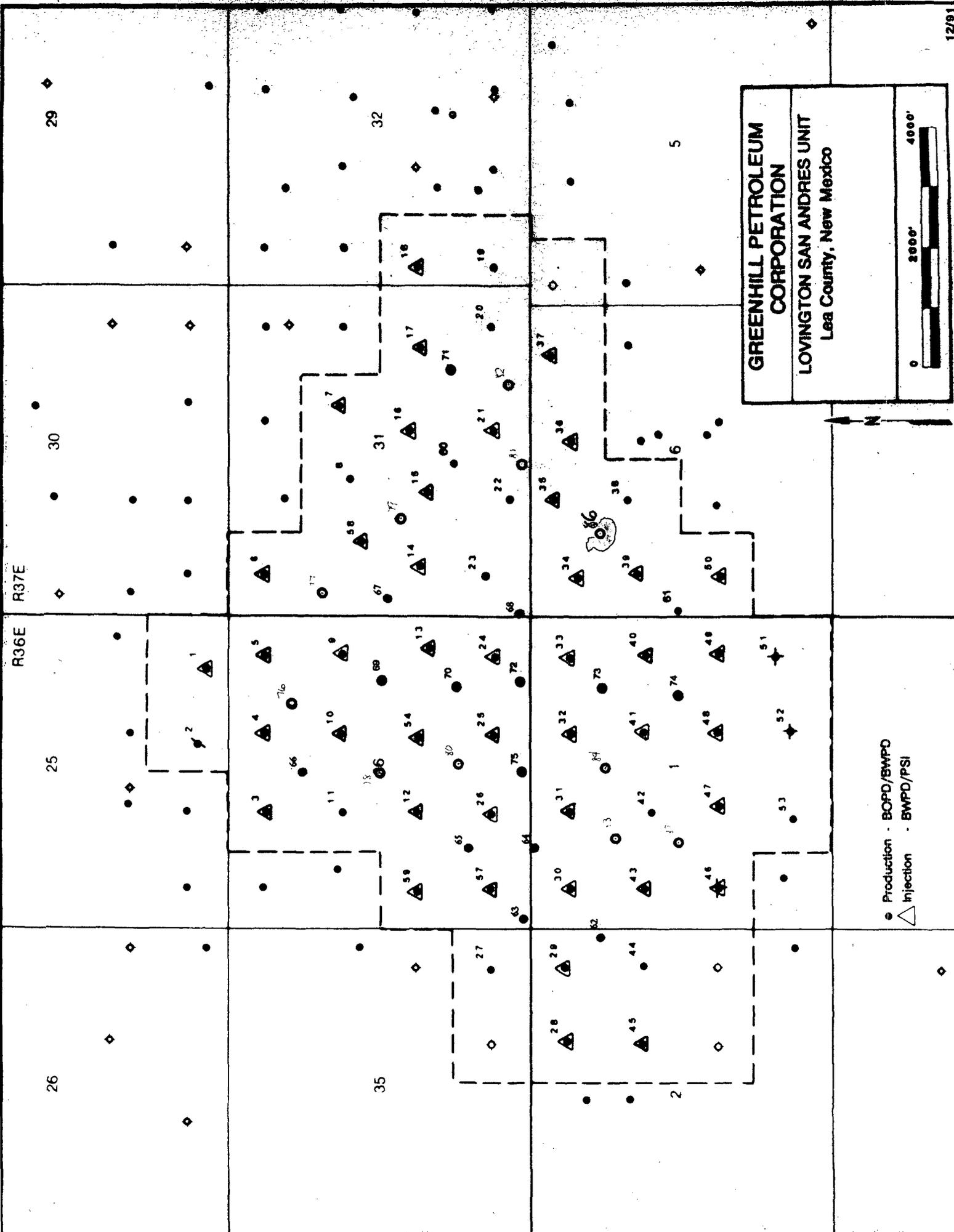
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 86 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 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,

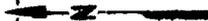
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

● Production - BOPD/BWPD  
 ▲ Injection - BMPD/PSI





OIL CONSERVATION DIVISION  
**GREENHILL PETROLEUM CORPORATION**

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX. (713) 589-7892

'92 MAR 27 AM 9 47

Incorporated in Delaware, U.S.A.

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 86  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 86 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 86 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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 type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. Lease Name or Unit Agreement Name Lovington San Andres Unit		
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>			SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. Name of Operator Greenhill Petroleum Corporation			8. Well No. #86		
3. Address of Operator 11490 Westheimer, Suite 200; Houston, Tx. 77077			9. Pool name or Wildcat Lovington Grayburg San Andres		
4. Well Location Unit Letter <u>C</u> : <u>1170</u> Feet From The <u>North</u> Line and <u>1400</u> Feet From The <u>West</u> Line Section <u>6</u> Township <u>17 South</u> Range <u>37 East</u> <u>NMPM</u> <u>Lea</u> , County					
10. Proposed Depth 5150'		11. Formation San Andres		12. Rotary or C.T.	
13. Elevations (Show whether DF, RT, GP, etc.) 3811		14. Kind & Status Plug. Bond On File		15. Drilling Contractor TBD	
16. Approx. Date Work will start 4/92					
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	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Newport TITLE Land Manager-Permian Basin DATE 3-23-92  
 (713)  
 TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**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., Artec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator GREENHILL PETROLEUM CORP.			Lease LOVINGTON SAN ANDRES UNIT		Well No. 86
Unit Letter C	Section 6	Township 17 SOUTH	Range 37 EAST	County NMPM LEA	
Actual Footage Location of Well: 1170 feet from the NORTH line and 1400 feet from the WEST line					
Ground Level Elev. 3811.9'	Producing Formation San Andres		Pool Lovington Grayburg San Andres	Dedicated Acreage: 40 Acres	

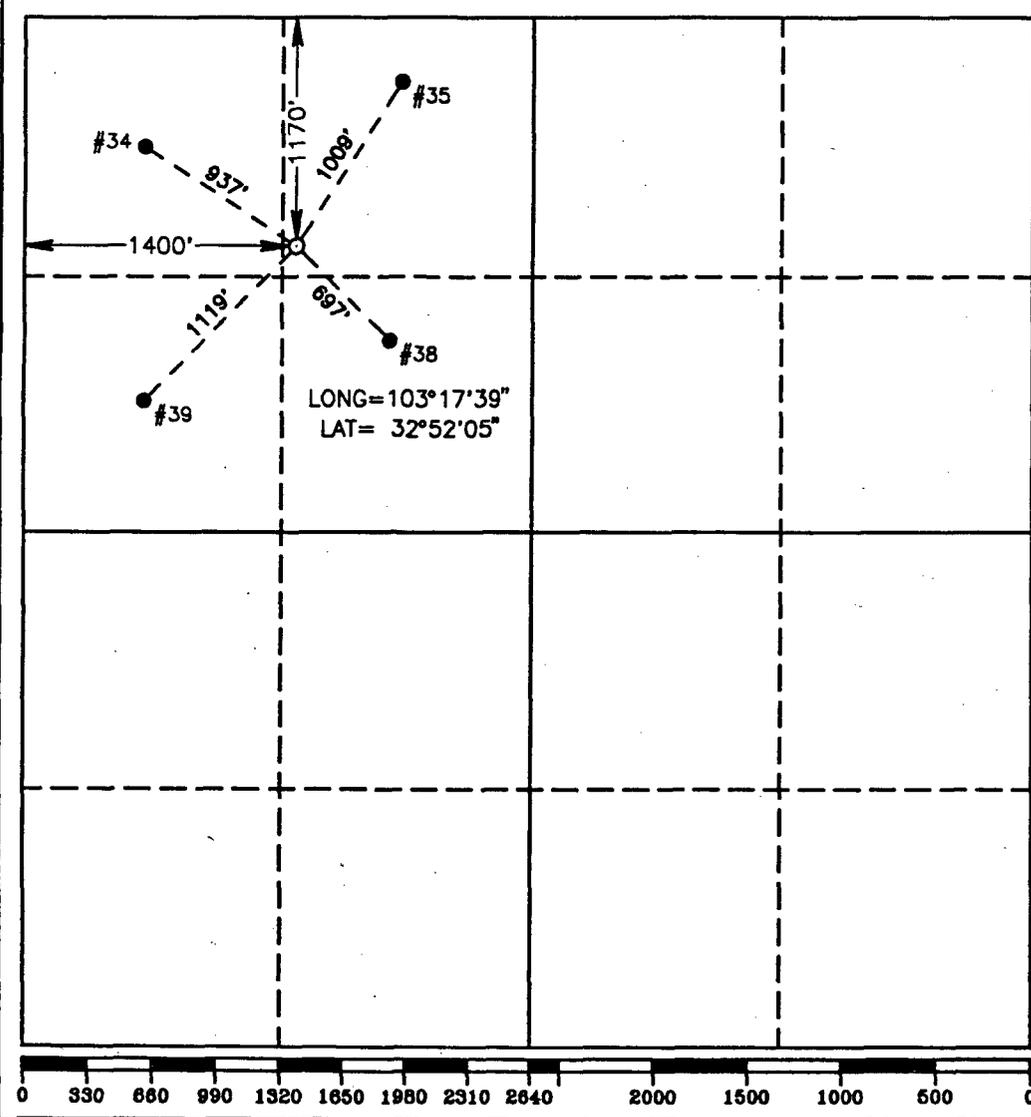
1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. 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 unitized

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, 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: Land Manager-Permian Basin  
 Company: Greenhill Petroleum Corp.  
 Date: 3-23-92

---

**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: FEBRUARY 20, 1992

Signature & Seal of Professional Surveyor: *Ronald J. Eidson*

Certificate No. *3238*    JOHN W. WEST 876  
 RONALD J. EIDSON 3238  
 MEASURING ENGINEER 7977  
 RONALD J. EIDSON

GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 86

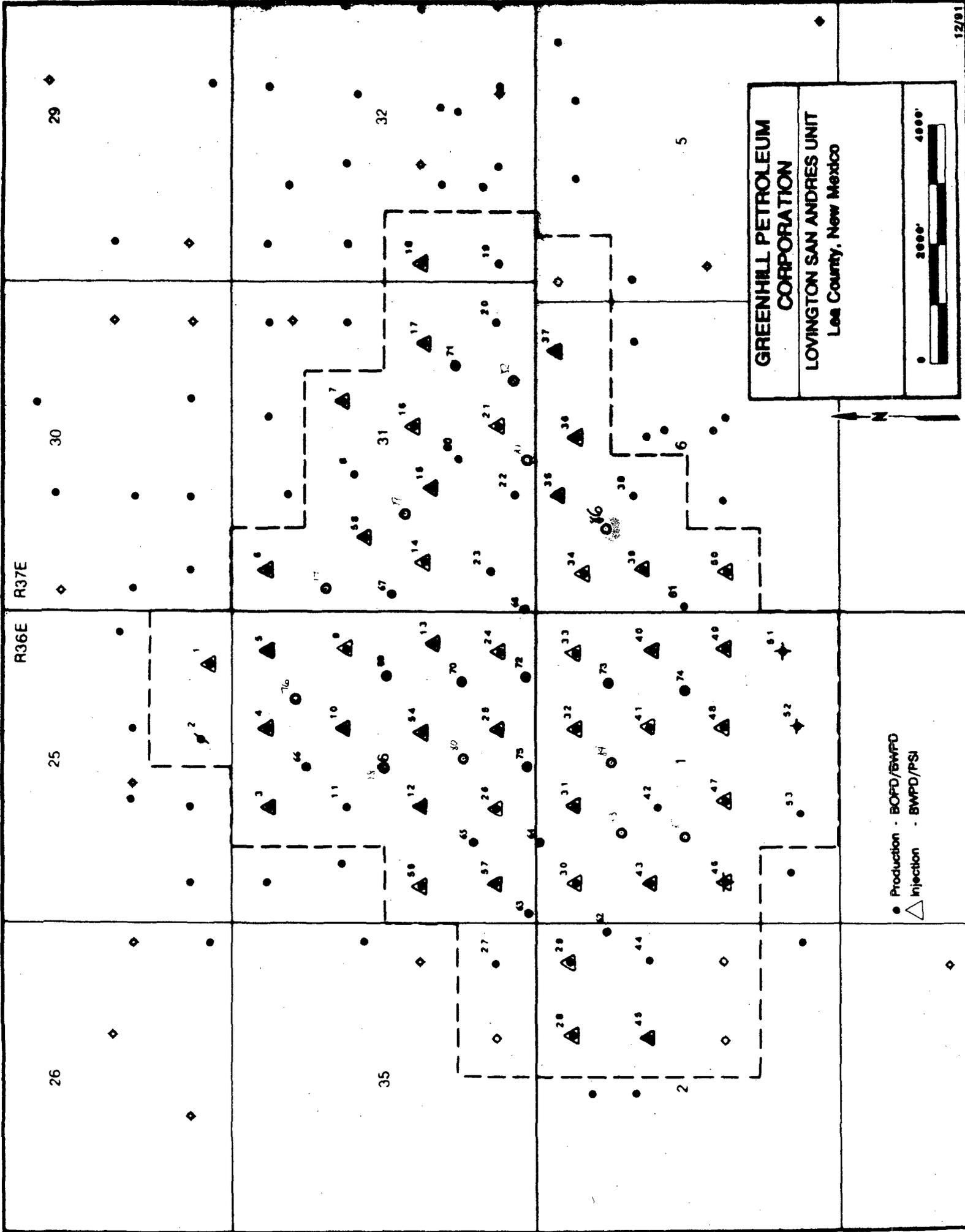
<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>	
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

\*RR-Ram Ram

RA-Ram Annular

Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



R37E

R36E

26

25

30

29

35

31

32

2

1

6

5

- Production - BOFD/BWFD
- △ Injection - BWFD/PSI

**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

2000' 4000'

N



# GREENHILL PETROLEUM CORPORATION

OIL CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX. (713) 589-7892

Incorporated in Delaware, U.S.A.

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 87  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 87 in the Lovington San Andres Unit, located in Lea County, New Mexico.

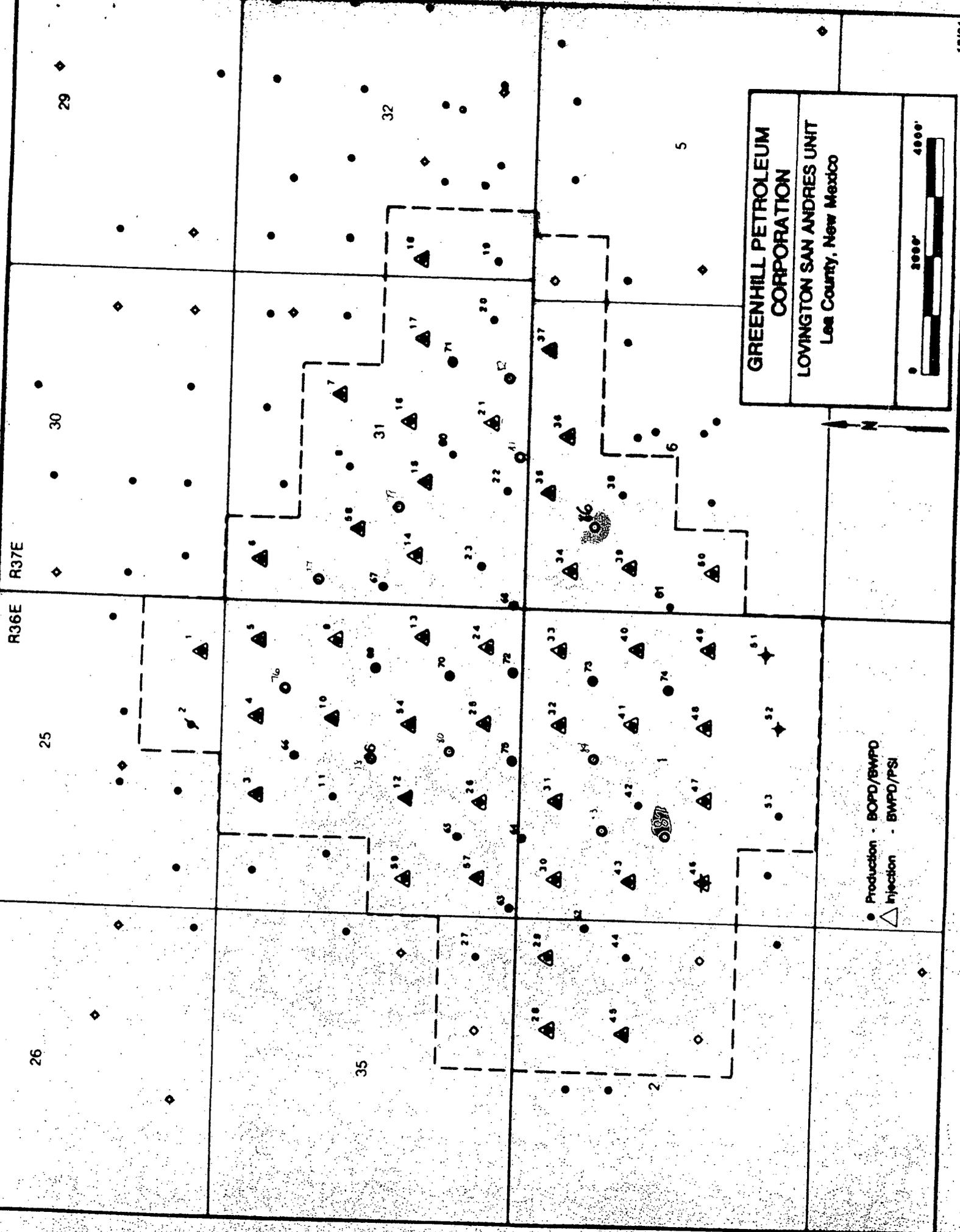
The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 87 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 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,

  
Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures



**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

● Production - BOPD/BWPD  
 ▲ Injection - BMPD/PSI



# GREENHILL PETROLEUM CORPORATION

OIL CONSERVATION DIVISION  
RECEIVED

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX (713) 589-7892

Incorporated in Delaware, U.S.A.

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 87  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 87 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 87 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 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,

Michael J. Newport  
Land Manager-Permian Basin

MJN:sjs  
92. 204  
Enclosures

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. B 1553

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK					
1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. Lease Name or Unit Agreement Name Lovington San Andres Unit		
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>			8. Well No. #87		
2. Name of Operator Greenhill Petroleum Corporation			9. Pool name or Wildcat Lovington Grayburg San Andres		
3. Address of Operator 11490 Westheimer, Suite 200; Houston, Tx. 77077			10. Proposed Depth 5150'		
4. Well Location Unit Letter <u>F</u> : <u>2515</u> Feet From The <u>North</u> Line and <u>1462</u> Feet From The <u>West</u> Line Section <u>1</u> Township <u>17 South</u> Range <u>36 East</u> NMPM <u>Lea</u> , County			11. Formation San Andres		12. <u>Rotary</u> or C.T.
13. Elevations (Show whether DF, RT, GR etc.) 3830		14. Kind & Status Plug. Bond On File		15. Drilling Contractor TBD	
16. Approx. Date Work will start 4/92					
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	1300'	550	Surface
7 7/8	5 1/2	15.5	5150'	1000	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 Newport TITLE Land Manager-Permian Basin DATE 3-23-92  
 (713)  
 TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**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., Artec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator Greenhill Petroleum Corp.			Lease Lovington San Andres		Well No. 87
Unit Letter F	Section 1	Township 17 South	Range 36 East	County Lea	

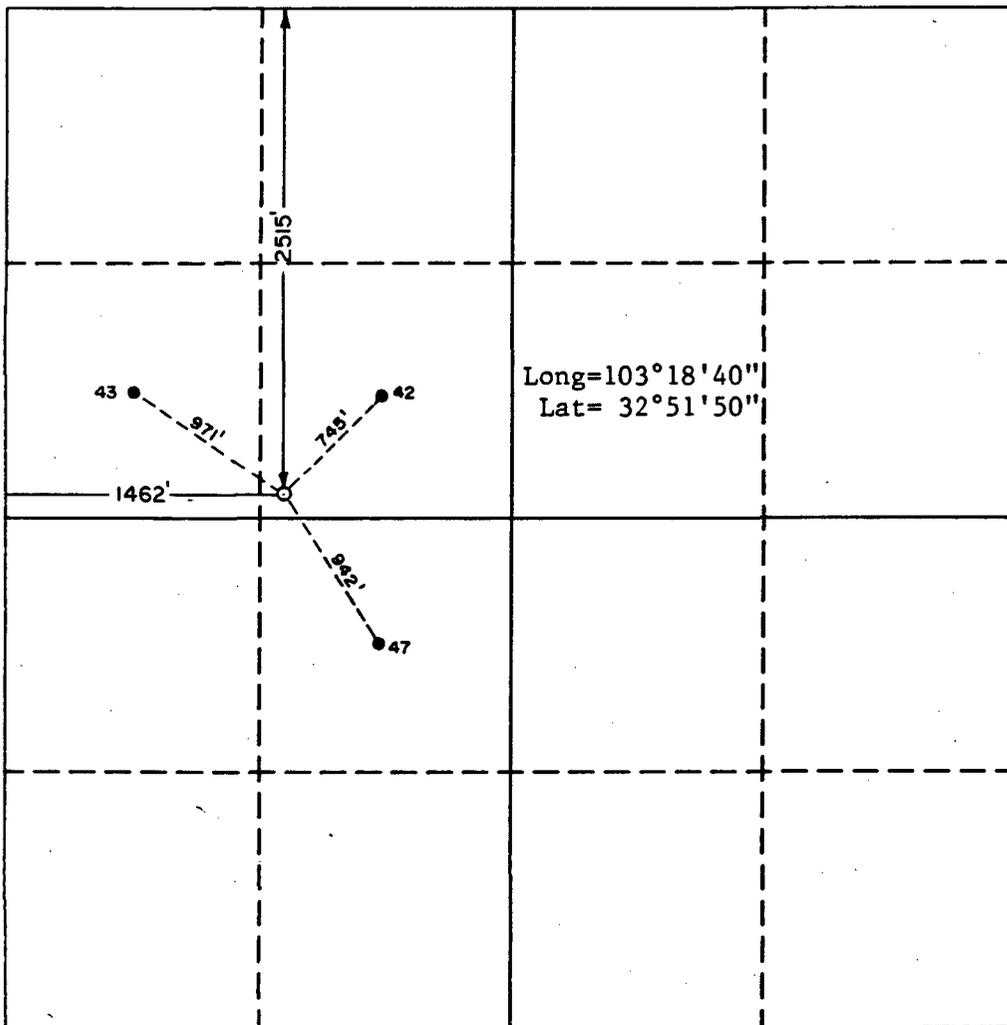
Actual Footage Location of Well:

2515 feet from the north line and		1462 feet from the west line	
Ground Level Elev. 3830.0'	Producing Formation San Andres	Pool Lovington Grayburg San Andres	Dedicated Acreage: 40 Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**

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

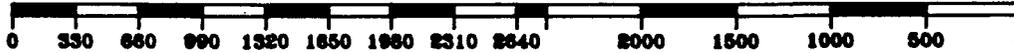
Signature: *Michael Newport*  
 Printed Name: Michael J. Newport  
 Position: Land Manger-Permian Basin Company  
 Greenhill Petroleum Corp.  
 Date: 3-23-92

**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: February 26, 1992

Signature & Seal of Professional Surveyor  
  
 Certificate No. RONALD J. EDSON, 2839  
 W.O. 92-4110248

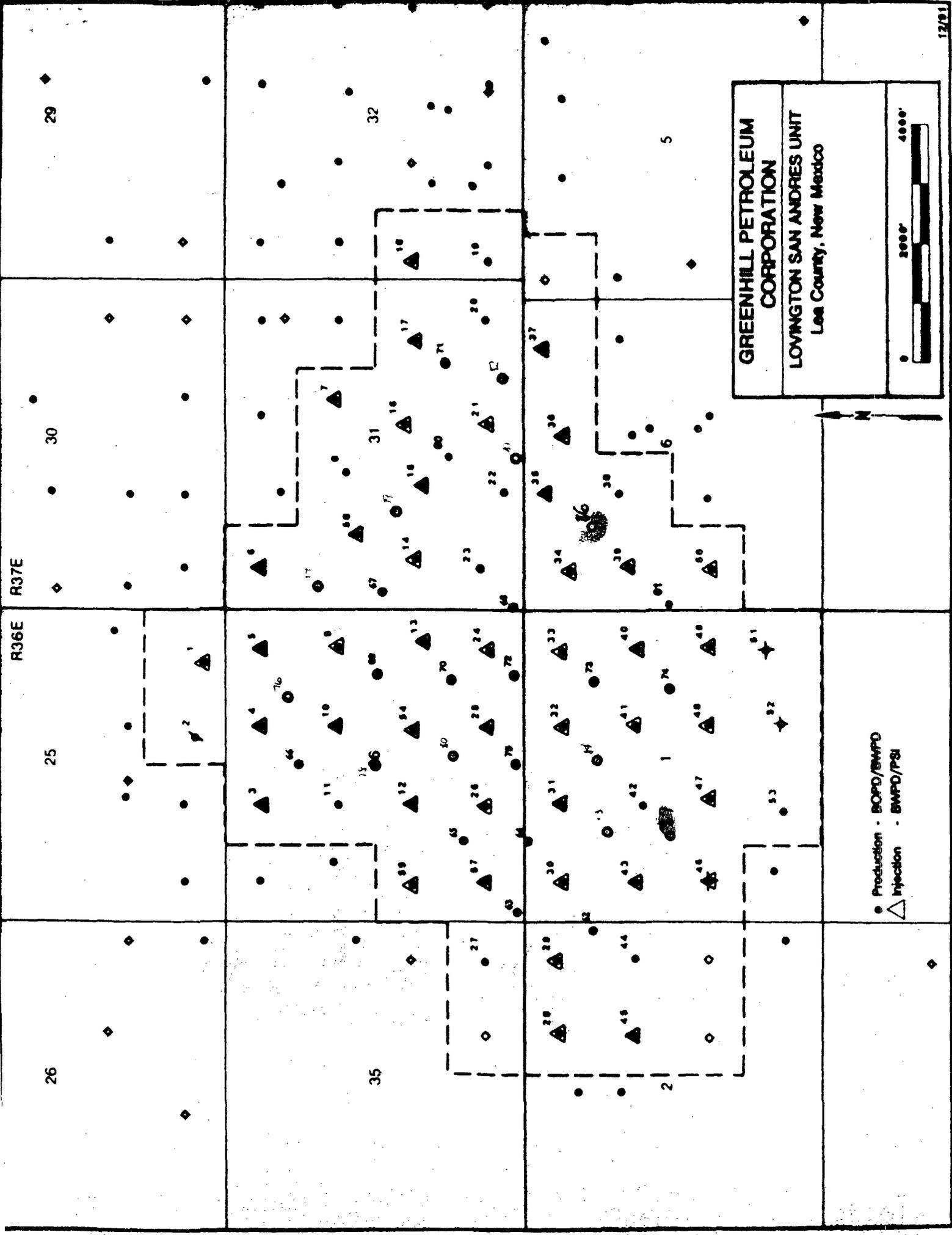


GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 87

<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>	
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

\*RR-Ram Ram  
RA-Ram Annular  
Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222





# GREENHILL PETROLEUM CORPORATION

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX: (713) 589-7892

Incorporated in Delaware, U.S.A.

OIL CONSERVATION DIVISION  
RECEIVED

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 88  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 88 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 88 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.

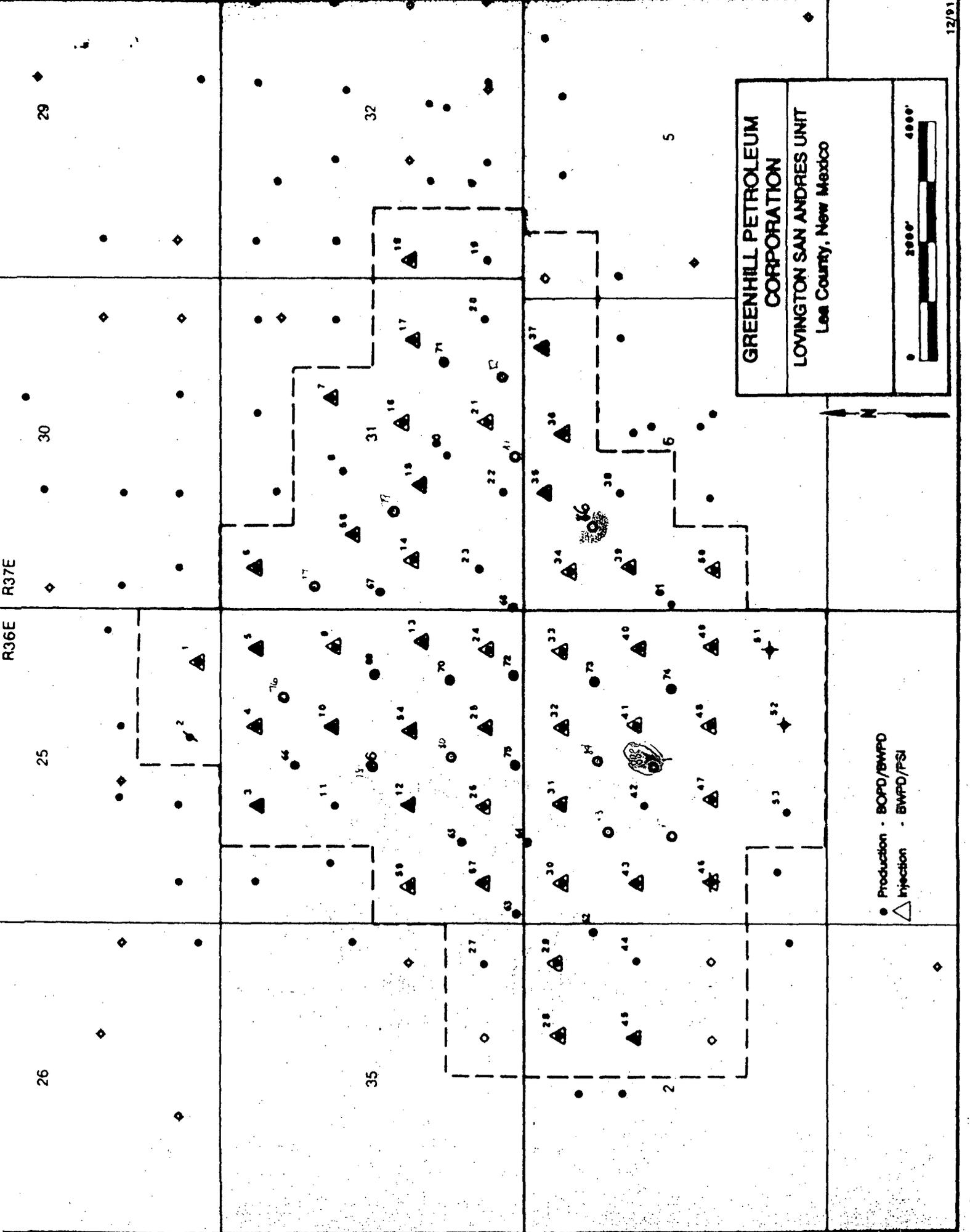
Greenhill Petroleum Corporation wishes to commence drilling operations on the proposed well as soon as possible and would appreciate a response to this request at your earliest convenience.

Respectfully yours,

  
Michael J. Newport

Land Manager-Permian Basin

MJN:sjs  
92. 204



**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

● Production - BOPD/BWPD  
 △ Injection - BWPD/FSI



# GREENHILL PETROLEUM CORPORATION

Incorporated in Delaware, U.S.A.

11490 WESTHEIMER ROAD, SUITE 200  
HOUSTON, TEXAS 77077-6841  
TELEPHONE (713) 589-8484  
FAX: (713) 589-7892

OIL CONSERVATION DIVISION  
RECEIVED

'92 MAR 27 AM 9 47

March 23, 1992

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

Attention: Mr. Mike Stogner

Re: Unorthodox Location and Drilling Permit  
Proposed Well Number 88  
Lovington San Andres Unit  
Lea County, New Mexico

Dear Mr. Stogner:

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 88 in the Lovington San Andres Unit, located in Lea County, New Mexico.

The Lovington San Andres Unit is presently developed and being waterflooded utilizing a 40-acre well density. It is believed that infill development using a 20-acre well density will improve waterflood sweep efficiency and will increase secondary oil recovery. The proposed location for Well Number 88 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 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,

  
Michael J. Newport

Land Manager-Permian Basin

MJN:sjs  
92. 204

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  FEE

6. State Oil & Gas Lease No.  
 B 1553

<b>APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK</b>					
1a. Type of Work: DRILL <input checked="" type="checkbox"/> RE-ENTER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			7. Lease Name or Unit Agreement Name Lovington San Andres Unit		
b. Type of Well: OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>			SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		
2. Name of Operator Greenhill Petroleum Corporation			8. Well No. 88		
3. Address of Operator 11490 Westheimer, Suite 200, Houston, Texas 77077			9. Pool name or Wildcat Lovington Grayburg San Andres		
4. Well Location Unit Letter <u>F</u> : <u>2,522</u> Feet From The <u>North</u> Line and <u>2,600</u> Feet From The <u>West</u> Line Section <u>1</u> Township <u>17S</u> Range <u>36E</u> NMPM <u>Lea</u> County					
		10. Proposed Depth 5,150 ft.		11. Formation San Andres	12. Rotary or C.T. Rotary
13. Elevations (Show whether DF, RT, GR, etc.) 3,827.7 ft.		14. Kind & Status Plug Bond on file	15. Drilling Contractor TBD		16. Approx. Date Work will start 04/92
<b>17. PROPOSED CASING AND CEMENT PROGRAM</b>					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12-1/4	8-5/8	24	1,300 ft.	550	Surface
7-7/8	5-1/2	15.5	5,150 ft.	1,000	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 Newport TITLE Land Manager -- Permian Basin DATE 03/23/92  
 TYPE OR PRINT NAME Michael J. Newport TELEPHONE NO. 713 589-8484

(This space for State Use)

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

CONDITIONS OF APPROVAL, IF ANY:

**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

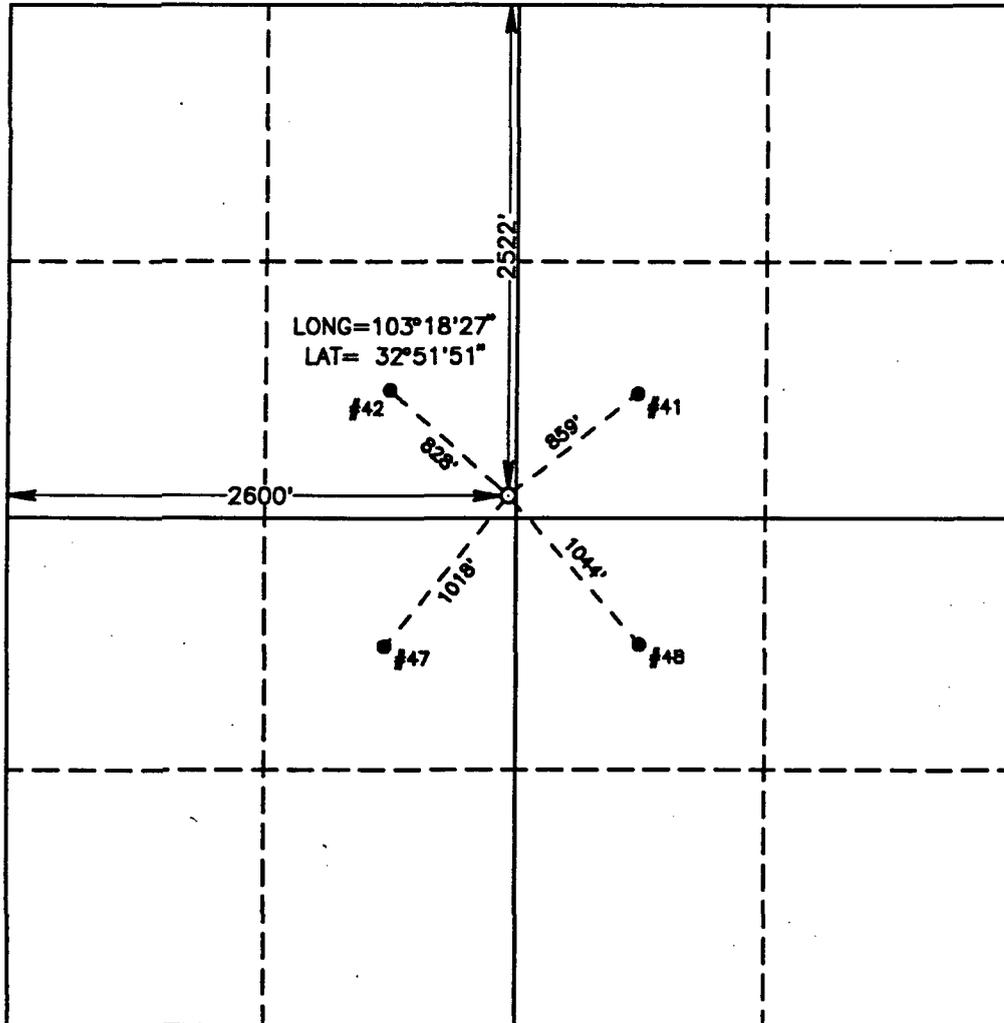
**DISTRICT III**  
 1000 Rio Brazos Rd., Aztec, NM 87410

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

All Distances must be from the outer boundaries of the section

Operator <b>GREENHILL PETROLEUM CORP.</b>			Lease <b>LOVINGTON SAN ANDRES UNIT</b>		Well No. <b>88</b>
Unit Letter <b>F</b>	Section <b>1</b>	Township <b>17 SOUTH</b>	Range <b>36 EAST</b>	County <b>NMPM LEA</b>	
Actual Footage Location of Well: <b>2522</b> feet from the <b>NORTH</b> line and <b>2600</b> feet from the <b>WEST</b> line					
Ground Level Elev. <b>3827.7'</b>	Producing Formation <b>San Andres</b>		Pool <b>Lovington Grayburg San Andres</b>		Dedicated Acreage: <b>40</b> Acres

- Outline the acreage dedicated to the subject well by colored pencil or hachure 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 unitized
- If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)  
 No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



**OPERATOR CERTIFICATION**

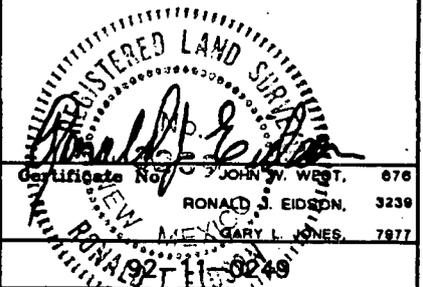
I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Signature  
*Michael J. Newport*  
 Printed Name  
**Michael J. Newport**  
 Position  
**Land Manager-Permian Basin**  
 Company  
**Greenhill Petroleum Corp.**  
 Date  
**03/23/92**

**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  
**MARCH 4, 1992**  
 Signature & Seal of  
 Professional Surveyor



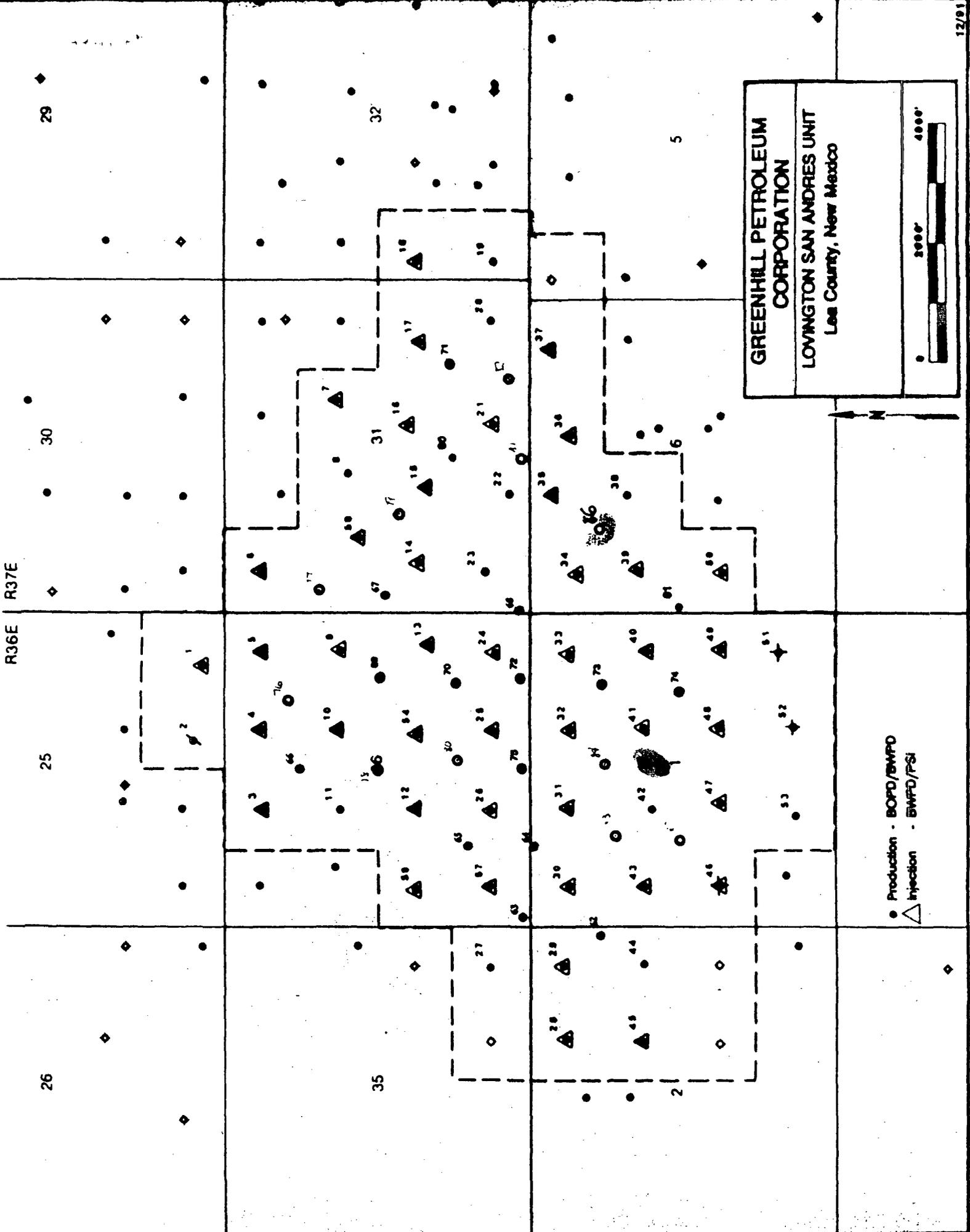
0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

GREENHILL PETROLEUM CORPORATION  
BOP PROGRAM FOR  
LOVINGTON SAN ANDRES UNIT NUMBER 88

<u>CASING PROGRAM</u>				<u>BOP PROGRAM</u>	
<u>Size</u>	<u>Depth</u>	<u>Wt.</u>	<u>Grade</u>	<u>Configuration</u>	<u>Test Pressure</u>
8 5/8"	1300'	24	H40, STC	RA*	200 psi
5 1/2"	5150'	15.5	K55, STC	RR*	250/1500 psi

\*RR-Ram Ram  
RA-Ram Annular  
Diverter-Hydrill may be substituted for a diverter.

sjs:s  
92.222



**GREENHILL PETROLEUM CORPORATION**  
**LOVINGTON SAN ANDRES UNIT**  
 Lea County, New Mexico

● Production - BOPD/BWPD  
 ▲ Injection - BWPD/PSI

