c/sr

NM OIL CONS COMMISSION
Drawer DD
Artesia, NM 88210

Form 3160-5
(December 1989)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

RECEIVED

SUBMIT IN TRIPLICATE

JUL 15 '94

O. C. D.
ARTESIA, OFFICE

5. Lease Designation and Serial No.: NM 026418

6. If Indian, Allottee or Tribe Name:

7. If Unit or CA, Agreement Designation: NE Square Lake Unit

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.: 31

2. Name of Operator: Evergreen Operating Corporation

9. API Well No.: 30-015-25943

3. Address and Telephone No.: 1512 Larimer Street, Suite 1000, Denver, CO 80202 (303) 534-0400

10. Field and Pool, or Exploratory Area: NE Square Lake

4. Location of Well (Footage, Sec., T., R., M., or Survey Description): 330' FSL, 1650' FEL, Sec. 4-T16S-R31E

11. County or Parish, State: Eddy, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other Shut-in	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

This well was approved for a SI status as per attached Sundry Notice.

Evergreen requests that this well remain in a SI status until a full evaluation, as shown in the attached plan of development, has been completed.

RECEIVED
JUN 16 11 01 AM '94
CARLSBAD AREA

APPROVED FOR 12 MONTH PERIOD
ENDING 6/16/95

14. I hereby certify that the foregoing is true and correct
Signed Stephanie Basey Title Petroleum Engineer Date 6/13/94

(This space for Federal or State office use)
Approved by (C.S. Signed by Shannon J. Shaw) Title Petroleum Engineer Date 7/13/94
Conditions of approval, if any:
This well will require M.I.T. if it is still inactive after 6/16/95.

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

*See Instruction on Reverse Side

BLM CARLSBAD

OPERATOR'S COPY

Form 3160-5
(December 1989)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: September 30, 1990

5. Lease Designation and Serial No.
NM [redacted] 026418

6. If Indian, Allottee or Tribe Name
SOS

SUNDRY NOTICES AND REPORTS ON WELLS

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Use "APPLICATION FOR PERMIT—" for such proposals

RECEIVED

SUBMIT IN TRIPLICATE

JUL 15 '94

O. C. D.
ARTESIA, OFFICE

7. If Unit or CA, Agreement Designation
NE Square Lake Unit

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
NE Square Lake #31

2. Name of Operator
Evergreen Operating Corporation

9. API Well No.
30-015-25943

3. Address and Telephone No.
1512 Larimer St. #1000, Denver, CO 80202 (303) 534-0400

10. Field and Pool, or Exploratory Area
NE Square Lake

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
330' FSL, 1650' FEL, Sec. 4-T16S-R31E

11. County or Parish, State
Eddy, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☐ Notice of Intent	☐ Abandonment	☐ Change of Plans
☒ Subsequent Report	☐ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☒ Other SI	

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

SI

This well was ~~temporarily abandoned~~ January, 1992 due to a stuck pump and the fact it was only producing water.

An evaluation of procedures and expenses required to bring this unit back to economic levels is currently underway.

ACCEPTED FOR RECORD
FEB 1 1994
SOS
CARLSBAD, NEW MEXICO

14. I hereby certify that the foregoing is true and correct
Signed Stephanie Basey Title Petroleum Engineer Date 12/29/93

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____
Conditions of approval, if any:
- Please submit plans to either P&A, perform csg. integrity test to TA, or return well to active status no later than 9/1/94. SOSharp

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

*See Instruction on Reverse Side

NE SQUARE LAKE UNIT PLAN OF DEVELOPMENT
T16S-R31E
EDDY AND LEA COUNTIES, NM

OPERATED BY:
EVERGREEN OPERATING CORPORATION

OBJECTIVE:

Evaluation of the entire field to determine feasibility of bringing this unit back to full waterflood status by obtaining individual well data required for a reservoir study.

CURRENT UNIT STATUS:

The #9 and #30 are being worked on now. The #30 has just been re-fraced and the #9 is being flowtested. The only operating injection well is the #21.

TESTING AND INFORMATION OBTAINED FROM DRILLING #30 IN 9/93:

- While drilling the #30 well, we ran a mud log from 2800' to 3741'. This log shows drilling rate, lithology and hydrocarbon shows on 10 foot intervals. Hydrocarbon shows were observed in the following intervals:
  - 2968' to 3016'
  - 3529' to 3538'
  - 3618' to 3741'

  The mud log also describes the core taken from 3657'-3701' on a foot-by-foot basis.
- 73% of a 60' Premier Sand core was recovered from 3657' to 3701'.
- A CNL/GR/Caliper log was run from surface to TD.
- A DLL/ML/GR log was run from 2600' to TD.
- Foot-by-foot core analysis gave us the following information:
  - Two permeability measurements, one relative to air and one taking into account the Klinkenberg Effect.
  - Porosity measurements.
  - Oil and water saturations.
  - Sample description.
- Relative permeability and capillary pressure evaluations were done at core depths of 3659.5', 3665.4', 3689.0', 3692.1' and 3695.3'. Conclusions of this analysis show that:
  - Relative permeability determinations indicate this reservoir may have mixed wettability properties with an average mobility ratio of 1.78 for water displacing oil.
  - Very little additional oil will be recovered after water breakthrough.
  - Injection of produced water should recover an average of 37% of OOIP.
  - Mercury injection capillary pressure curves suggest that greater than 75% of the pore volume space should have been originally occupied by oil.
- A complete fluid analysis was done on both produced water and oil.

- A five day pressure build-up test immediately following perforating showed a reservoir pressure of 2,580 psig. This reservoir pressure was 1,380 psi higher than our records show the original reservoir pressure to be.
- The first frac screened out after pumping only 358 bbls of Viking II-30 and 12,300 lbs of 12/20 sand.
- Due to low production levels, #30 was shut in on February 1, 1994 and a second build-up test was done. After 17 days, the pressure had built up to only 2,287 psig. This test took 12 days longer to build up to 300 psi less than the final build-up pressure from the previous test.
- The #30 was re-fraced on 6/1/94 and is currently flowing up the casing at 30# casing pressure and 60 BFPD with a 5-15% oil cut.

TENTATIVE PLANS FOR NEXT 12 MONTHS:

- Produce the #30 until stabilized production rates are achieved (or a maximum of three months) to obtain pre-waterflood information.
- Work over the #9 to evaluate whether to move on a pumping unit, re-frac or plug.
- Reinstate injection into the 3 injection wells surrounding the #30 while monitoring pressure and production rates from the #30 to obtain post-waterflood information.
- Evaluate and upgrade surface equipment as necessary.
- Evaluate infill drilling sites.
- Evaluate recompleting the #31.

LONG-TERM PLANS:

- Evaluate, recomplete and bring on all current wells, one five-spot at a time, if economically feasible.
- Drill infill wells as economically feasible.
- Return unit to economic production levels.