

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

MAR 02 2010

FORM APPROVED
OMB No. 1004-0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

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

2. Name of Operator **Strata Production Company**

3a. Address
PO Box 1030, Roswell, NM 88202-1030

3b. Phone No. (include area code)
575 622-1127

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

S15-T22S-R32E 862' FSL & 458' FWL

5. Lease Serial No.

NM-27805

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.

Lechuza Federal #01

9. API Well No.

3002531495

10. Field and Pool, or Exploratory Area **Livingston Ridge**

11. County or Parish, State

Lea County

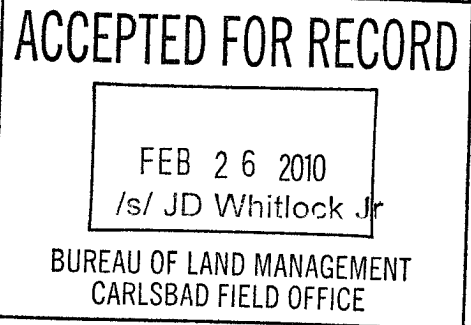
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION | TYPE OF ACTION | | | |
|--|---|---|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize | <input type="checkbox"/> Deepen | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Subsequent Report | <input type="checkbox"/> Alter Casing | <input type="checkbox"/> Fracture Treat | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Casing Repair | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete | <input type="checkbox"/> Other |
| | <input type="checkbox"/> Change Plans | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon | |
| | <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back | <input checked="" type="checkbox"/> Water Disposal | |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Request water disposal approval. See Attachment.

**SUBJECT TO LIKE
APPROVAL BY STATE**



14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

Jennifer Zapata

Title **Production Analyst**

Signature

Date

02/04/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

EG 3-4-10

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on page 2)

ATTACHMENT to Incident of Noncompliance # AJM-029-10

The following information is needed before your disposal of produced water can be approved, per Onshore Oil & Gas Order #7.

You may attach this information to your Sundry Notice (3160-5). Submit all required information as per this attachment, submit a Sundry Notice(3160-5), one original and five copies to this office within the required time.

1. Name(s) of all formation(s) producing water on the lease. Delaware
2. Amount of water produced from all formations in barrels per day. 41 BWP
3. A CURRENT water analysis of produced water from all zones showing at least the total dissolved solids, ph, and the concentrations of chlorides and sulfates.
4. How water is stored on the lease. Produced straight to disposal. No water tanks on lease.
5. How water is moved to the disposal facility. Transferred to water disposal via 3' poly-line.
6. Identify the Disposal Facility by:
 - A. Operators' Name Strata Production Company
 - B. Well Name Gilmore Federal #1
 - C. Well type and well number SWD
 - D. Location by quarter/quarter, section, township, and range S21-T22S-R32E 1980 FSL & 660 FEL
7. A copy of the Underground Injection Control Permit - issued for the injection well by the Environmental Protection Agency or New Mexico Oil Conservation Division where the State has achieved primacy.



BRUCE KING
GOVERNOR

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION



POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

ADMINISTRATIVE ORDER NO. SWD-470

APPLICATION OF STRATA PRODUCTION COMPANY

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Rule 701(B), Strata Production Company made application to the New Mexico Oil Conservation Division on March 23, 1992, for permission to complete for salt water disposal its Gilmore Federal No. 1 located in Unit I of Section 21, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been duly filed under the provisions of Rule 701(B) of the Division Rules and Regulations.
- (2) Satisfactory information has been provided that all offset operators and surface owners have been duly notified; and
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met.
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

- (1) The applicant herein, Strata Production Company is hereby authorized to complete its Gilmore Federal No. 1 located in Unit I of Section 21, Township 22 South, Range 32 East, NMPM, Lea County, New Mexico, in such a manner as to permit the injection of salt water for disposal purposes into the Bell Canyon formation at approximately 4755 feet to approximately 5110 feet through 2 3/8 inch plastic lined tubing set in a packer located at approximately 4655 feet.

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 951 psi.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluid from the Bell Canyon formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of disposal equipment and of the mechanical integrity test, so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

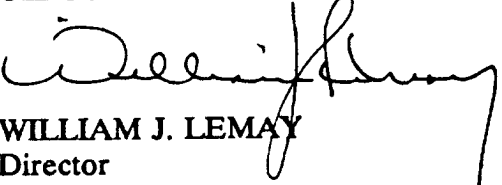
Administrative Order No. SWD-470
Strata Production Company
April 8, 1992
Page 3

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

The operator shall submit monthly reports of the disposal operations in accordance with Rule 706 and 1120 of the Division Rules and Regulations.

Approved at Santa Fe, New Mexico, on this 8th day of April, 1992.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



WILLIAM J. LEMAY
Director

S E A L

cc: Oil Conservation Division - Hobbs
US Bureau of Land Management - Carlsbad

jc\

Enviro-Chem, Inc.

OCT - 6 1997

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : Strata Oil Co.
Lease : Lechuza
Well No. : # 1
Salesman :

Sample Loc. :
Date Analyzed: 22-September-1997
Date Sampled : 10-September-1997

ANALYSIS

1. pH 5.000
2. Specific Gravity 60/60 F. 1.188
3. CaCO₃ Saturation Index @ 80 F. +0.788 SLIGHT
@ 140 F. +1.888

Dissolved Gasses

MG/L EQ. WT. *MEQ/L

4. Hydrogen Sulfide 0
5. Carbon Dioxide 200
6. Dissolved Oxygen Not Determined

Cations

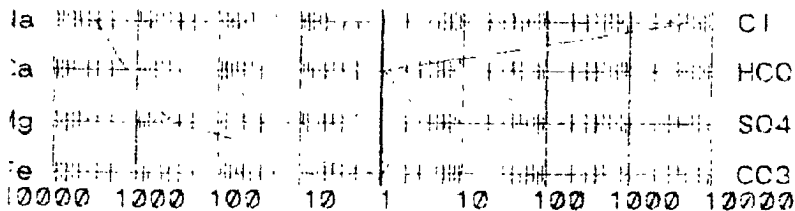
7. Calcium (Ca⁺⁺) 26,382 / 20.1 = 1,312.54
8. Magnesium (Mg⁺⁺) 4,364 / 12.2 = 357.70
9. Sodium (Na⁺) (Calculated) 71,802 / 23.0 = 3,121.83
10. Barium (Ba⁺⁺) Below 10

Anions

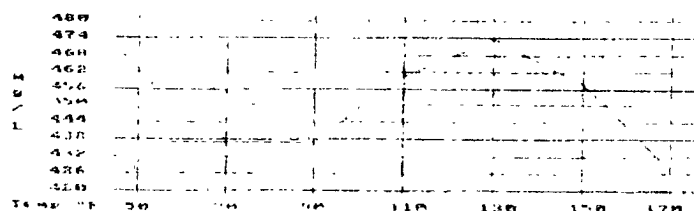
11. Hydroxyl (OH⁻) 0 / 17.0 = 0.00
12. Carbonate (CO₃⁼) 0 / 30.0 = 0.00
13. Bicarbonate (HCO₃⁻) 63 / 61.1 = 1.03
14. Sulfate (SO₄⁼) 175 / 48.0 = 3.59
15. Chloride (Cl⁻) 169,962 / 35.5 = 4,787.66
16. Total Dissolved Solids 272,748
17. Total Iron (Fe) 20 / 18.2 = 1.10
18. Total Hardness As CaCO₃ 83,851
19. Resistivity @ 75 F. (Calculated) 0.001 /cm.

LOGARITHMIC WATER PATTERN *meq/L.

PROBABLE MINERAL COMPOSITION COMPOUND EQ. WT. X *meq/L = mg/L.



Calcium Sulfate Solubility Profile



| COMPOUND | EQ. WT. | X | *meq/L | = mg/L. |
|------------------------------------|---------|----------|--------|---------|
| Ca(HCO ₃) ₂ | 91.04 | | 1.03 | 84 |
| CaSO ₄ | 68.07 | | 3.59 | 244 |
| CaCl ₂ | 55.50 | 1,307.92 | | 72,590 |
| Mg(HCO ₃) ₂ | 73.17 | | 0.00 | 0 |
| MgSO ₄ | 60.19 | | 0.00 | 0 |
| MgCl ₂ | 47.62 | 357.70 | | 17,034 |
| NaHCO ₃ | 84.00 | | 0.00 | 0 |
| NaSO ₄ | 71.03 | | 0.00 | 0 |
| NaCl | 58.46 | 3,122.04 | | 182,514 |

*Milli Equivalents per Liter

This water is moderately corrosive due to the pH observed on analysis.
The corrosivity is increased by the content of mineral salts, and the presence of CO₂ in solution.