

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

5. Lease Designation and Serial No.

NM 67111

6. If Indian, Allottee or Tribe Name

N/A

7. If Unit or CA, Agreement Designation

N/A

8. Well Name and No.

Geronimo Fed #4 Battery

9. API Well No.

10. Field and Pool, or Exploratory Area

Gem (Bone Spring)

11. County or Parish, State

Lea, NM

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

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil
Well

☐ Gas
Well

☒ Other

Facility

2. Name of Operator

Mitchell Energy Corporation

3. Address and Telephone No.

P. O. Box 4000, The Woodlands, TX 77387-4000

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

Unit F, Sec 31, T19S, R33E

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

TYPE OF SUBMISSION

☐ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

TYPE OF ACTION

☐ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☐ Other

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut-Off

☐ Conversion to Injection

☒ Dispose Water

(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.)*

Produced Water Disposal

- (a) Producing water from Bone Spring formation.
- (b) Producing 35 BWPD.
- (c) Water analysis attached.
- (d) Water is stored in 400 bbl closed top fiberglass tank @ battery.
- (e) Water is hauled by tank truck to disposal facility.
- (f) Disposal well is the Cooper Disposal Well G-8 located @ SW/4, NE/4, Sec 8, T20S, R37E, operated by Rice Engineering. The NMOCD permit # is R-6855.

CARD
AREA
NOV 16 11 19 AM '93

RECEIVED

14. I hereby certify that the foregoing is true and correct

Signed Shirley Blair

Title Engineer

Date 11/08/93

(This space for Federal or State office use)

(ORIG. SGD.) DAVID R. GLASS

Approved by
Conditions of approval, if any:

Title Petroleum Engineer

Date DEC 07 1993

SEE ATTACHED

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

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated, on Federal and Indian lands pursuant to applicable Federal law and regulations, and, if approved or accepted by any State, on all lands in such State, pursuant to applicable State law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

SPECIFIC INSTRUCTIONS

Item 4—If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 5—Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by local Federal and/or State offices. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to top of any left in the hole; method of closing top of well; and date well site conditioned for final inspection looking to approval of the abandonment.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et. seq., 351 et. seq., 25 U.S.C. et. seq.; 43 CFR 3160.

PRINCIPAL PURPOSE — The information is to be used to evaluate, when appropriate, approve applications, and report completion of secondary well operations, on a Federal or Indian lease.

ROUTINE USES:

(1) Evaluate the equipment and procedures used during the proposed or completed subsequent well operations.

(2) Request and grant approval to perform those actions covered by 43 CFR 3162.3-2(2).

(3) Analyze future applications to drill or modify operations in light of data obtained and methods used.

(4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations, or prosecutions.

EFFECT OF NOT PROVIDING INFORMATION — Filing of this notice and report and disclosure of the information is mandatory once an oil or gas well is drilled.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501, et. seq.) requires us to inform you that: This information is being collected in order to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases. This information will be used to report subsequent operations once work is completed and when requested, to obtain approval for subsequent operations not previously authorized. Response to this request is mandatory for the specific types of activities specified in 43 CFR Part 3160.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 25 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0135), Washington, D.C. 20503.

MARTIN WATER LABORATORIES, INC.

P.O. Box 1468 Phone 943-3234 or 563-1040
Monahans, Texas 79756

RESULT OF WATER ANALYSES

709 W. Indiana Phone 683-4521
Midland, Texas 79701

TO: Mr. Jim Blount

LABORATORY NO. 692160

400 W. Illinois, Suite 1000, Midland, TX

SAMPLE RECEIVED 6-16-92

RESULTS REPORTED 6-26-92

API WATER ANALYSIS REPORT FORM

Company Mitchell Energy Corporation			Sample No.		Date Sampled
Field <u>GEM</u>		Legal Description		County or Parish <u>Lea</u>	State <u>NM</u>
Lease or Unit <u>Geronimo Federal</u>		Well <u>#4</u>	Depth	Formation 1st <u>Bone Springs</u>	Water, B/D
Type of Water (Produced, Supply, etc.) <u>Produced</u>			Sampling Point		Sampled By

DISSOLVED SOLIDS

CATIONS	mg/l	me/l
Sodium, Na (calc.)	65,591	2,851.8
Calcium, Ca	2,040	102.0
Magnesium, Mg	413	34.0
Barium, Ba		

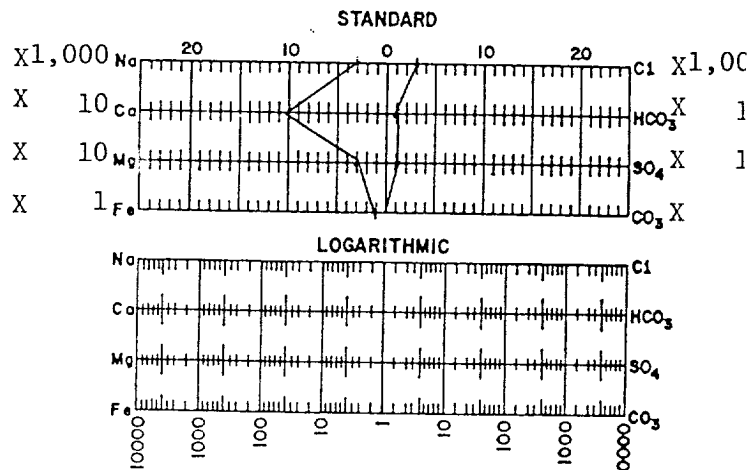
OTHER PROPERTIES

pH	6.62
Specific Gravity, 60/60 F.	1.1118
Resistivity (ohm-meters) 77°F.	0.063
Total Hardness, as CaCO ₃	6,800

ANIONS

Chloride, Cl	105,108	2,964.0
Sulfate, SO ₄	468	9.7
Carbonate, CO ₃	0	0.0
Bicarbonate, HCO ₃	854	14.0

WATER PATTERNS — me/l



Total Dissolved Solids (calc.)

174,474

Iron, Fe (total) 28.0 1.1

Sulfide, as H₂S 0.0

REMARKS & RECOMMENDATIONS: We have no records of Bone Springs in this field. Though our nearest record in the Pearl field does not resemble this water, we find the surrounding area records show substantial fluctuations in characteristics of Bone Springs. This water is similar to some of our distant records, and it is very similar to the water from well #5 in the accompanying report on that well. Therefore, we could not conclude with confidence that this is anything other than natural Bone Springs.


Waylan C. Martin, M.A.

BUREAU OF LAND MANAGEMENT
CARLSBAD RESOURCE AREA

Disposal of Produced Water From Federal Wells

Conditions of Approval

Approval of the produced water disposal methodology is subject to the following conditions of approval:

1. This agency be notified of any change in your method or location of disposal.
2. Compliance with all provisions of NTL-2B.
3. This agency shall be notified of any spill or discharge as required by NTL-3A.
4. This agency reserves the right to modify or rescind approval whenever it determines continued use of the approved method may adversely affect the surface or subsurface environments.
5. All aboveground structures on the lease shall be painted sandstone brown, Federal Std. 595-20318, or 30318, within 90 days if you have not already done so.
6. Any on lease open top storage tanks or pits shall be covered with a wire screen or plastic/nylon netting to prevent entry by birds and other wildlife.
7. This approval does not constitute right-of-way approval for any off lease activities. If water is transported via a pipeline that extends beyond the lease boundary, then you need to submit within 30 days an application for right-of-way approval to the Realty Section in this office if you have not already done so.