

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

C15E

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 <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <u>Salt Water Disposal</u>	5. Lease Designation and Serial No. <u>NM 29234</u>
2. Name of Operator <u>Sonat Exploration Co. - Midland</u>	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. <u>110 W. Louisiana, Ste. 500, Midland TX 79701</u>	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <u>660' FNL 1980' FEL Section 11 T24S R31E</u>	8. Well Name and No. <u>Littlefield Federal SWD #1</u>
	9. API Well No. <u>30 015 10259</u>
	10. Field and Pool, or Exploratory Area <u>Delaware</u>
	11. County or Parish, State <u>Eddy County New Mexico</u>

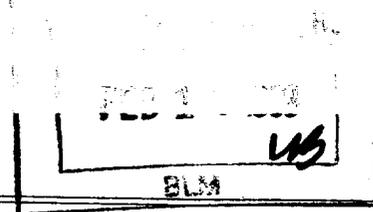
RECEIVED
OCD
ARTESIA

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

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>deepening of well</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

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.)

Sonat Exploration Company - Midland deepened the above wellbore from 4900' to a total depth of 6500' in order to increase salt water disposal injectivity. We deepened the well with a 3-7/8" bit, acidized and completed as an open-hole completion. The New Mexico Energy, Minerals and Natural Resources Department amended Administrative Order SWD-485 on November 20, 1997 to allow Sonat to deepen the subject well. Attached please find copies of Administrative Order SWD-485 and the approved Form 3160-3.



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

Signed Laura Clepper Title Engineering Technician Date 2/10/98

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____

Conditions of approval, if any _____

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.



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

cc: Glenn
Todd
Welton
M.L.

AMENDED ADMINISTRATIVE ORDER SWD-485

DEC 2 1997

APPLICATION OF SONAT EXPLORATION COMPANY FOR SALT WATER DISPOSAL,
EDDY COUNTY, NEW MEXICO.

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 701(B), Sonat Exploration Company made application to the New Mexico Oil Conservation Division on July 30, 1997, for permission to complete for salt water disposal its Littlefield Federal Well No.1 located 660 feet from the North line and 1980 feet from the East line (Unit B) of Section 11, Township 24 South, Range 31 East, NMPM, Eddy 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;
- (3) The applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 will be met; and
- (4) No objections have been received within the waiting period prescribed by said rule.

IT IS THEREFORE ORDERED THAT:

The applicant herein, Sonat Exploration Company is hereby authorized to complete its Littlefield Federal Well No.1 located 660 feet from the North line and 1980 feet from the East line (Unit B) of Section 11, Township 24 South, Range 31 East, NMPM, Eddy County, New Mexico, in such manner as to permit the injection of salt water for disposal purposes into the Bell Canyon and Cherry Canyon formations at approximately 4580 feet to 6500 feet through 2 3/8-inch plastic-lined tubing set in a packer located at approximately 4500 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 916 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 Cherry Canyon formations. 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 Artesia 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 Artesia 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.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of 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 operation on Form C-115 and in accordance with Rule Nos. 706 and 1120 of the Division Rules and Regulations.

Amended Administrative Order SWD-485

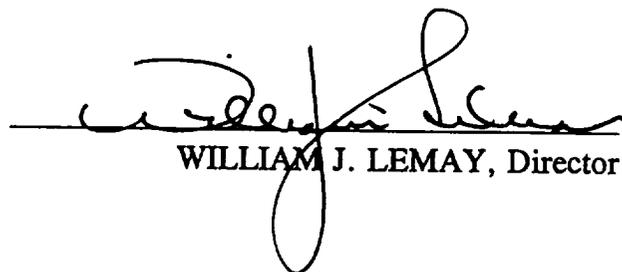
Sonat Exploration Company

November 20, 1997

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The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

Approved at Santa Fe, New Mexico, on this 20th day of November, 1997.


WILLIAM J. LEMAY, Director

WJL/BES

xc: Oil Conservation Division - Artesia

Form 3160-3
(July 1992)

SUBMIT IN TRIPPLICATE*
(Other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK
 DRILL DEEPEN
 b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SWD SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
Sonat Exploration Co. - Midland

3. ADDRESS AND TELEPHONE NO.
110 W. Louisiana Ste. 500 Midland Tx 79701 915/684-0400

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
 At surface
V 660' FNW/1980' FEL (Unit B) Sec. 11 T24S, R31E V
 At proposed prod. zone
Bill Canyon / Cherry Canyon

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
25 miles west of Jal

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest dirg. unit line, if any)
660

19. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL DRILLING, COMPLETED, OR APPLYING FOR, ON THIS LEASE, FT.
6500

21. ELEVATIONS (Show whether DP, RT, GR, etc.)
3527' DF

5. LEASE DESIGNATION AND SERIAL NO.
NM 29234 V

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

5. FARM OR LEASE NAME WELL NO.
Littlefield Federal SWD #1

9. API WELL NO.
30 015 10259

10. FIELD AND POOL OR WILDCAT
Delaware

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA
Sec. 11, T24S, R31E

12. COUNTY OR PARISH 13. STATE
Eddy NM

17. NO. OF ACRES ASSIGNED TO THIS WELL
40

20. NOTARY OR CABLE TOLAR
Rotary

22. APPROX. DATE WORK WILL START*
1/1/98

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8" J-55	24.0 #	368'	150 SXS circ 20 SXS (existing)
7-7/8"	4 1/2" J-55	9.5 #	4656'	1400 SXS circ 89 SXS (existing)
3 3/4"	None	-	4656-4900'	Openhole completion (existing)
3 7/8"	None	-	4900'-6500'	Openhole completion (proposed)

Sonat Exploration Company proposes to deepen the above wellbore from 4900' to a total depth of 6500' in order to increase salt water disposal injectivity. We plan to deepen the well with a 3-7/8" bit, acidize and complete as an open-hole completion. The New Mexico Energy, Minerals & Natural Resources Department amended administrative Order SWD-485 on November 20, 1997 to allow Sonat to deepen the subject well. Attached is a copy of amended administrative Order SWD-485.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED Aura Clepper TITLE Engineering Technician DATE 12-29-97

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval 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.
 CONDITIONS OF APPROVAL IF ANY:

APPROVED BY Alexis C. Swoboda TITLE PETROLEUM ENGINEER DATE DEC 31 1997

*See Instructions On Reverse Side