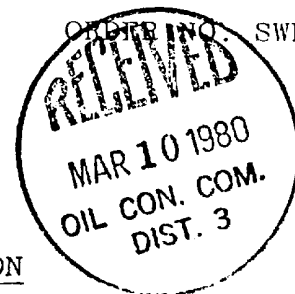


3-17 6
2-18 6
0-1 6
5-12 6

SUBJECT: SALT WATER DISPOSAL WELL

THE APPLICATION OF ENERGY RESERVES GROUP
FOR A SALT WATER DISPOSAL WELL

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION



Under the provisions of Rule 701 (C), Energy Reserves Group made application to the New Mexico Oil Conservation Division on February 15, 1980, for permission to complete for salt water disposal its Gallegos Canyon Unit Well No. 225 located in Unit G of Section 17, Township 28 North, Range 12 West, NMPM, San Juan County, New Mexico.

The Division Director finds:

(1) That application has been duly filed under the provisions of Rule 701 (C) of the Division Rules and Regulations;

(2) That satisfactory information has been provided that all offset operators and surface owners have been duly notified; and

(3) That the applicant has presented satisfactory evidence that all requirements prescribed in Rule 701 (C) will be met.

(4) That no objections have been received within the waiting period as prescribed by said rule.

IT IS THEREFORE ORDERED:

That the applicant herein, Energy Reserves Group, is hereby authorized to complete its Gallegos Canyon Well No. 225 located in Unit G of Section 17, Township 28 North, Range 12 West, NMPM, in such a manner as to permit the injection of salt water for disposal purposes into the Mesaverde formation at approximately 3873 feet to approximately 4128 feet through 2 3/8" inch plastic lined tubing set in a packer located at approximately 3825 feet.

PROVIDED HOWEVER:

That prior to commencement of injection into said Gallegos Canyon Unit Well No. 225, Gallegos Canyon Unit Well No. 149 shall be replugged in such a manner that cement shall be placed at least 150 feet above and below the injection interval within the casing-formation annulus and a cement plug, at least 100 feet in length, shall be placed inside the casing immediately above the injection interval.

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.

That 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.

That injection pressure shall not exceed 900 pounds per square inch as measured at the surface.

That the operator shall notify the supervisor of the Division's Aztec District Office before injection is commenced through said well;

That the operator shall immediately notify the Supervisor of the Division Aztec District Office of the failure of the tubing, casing, or packer in said well or the leakage of water from or around said well and shall take such steps as may be timely or necessary to correct such failure or leakage.

PROVIDED FURTHER: That jurisdiction of this cause is hereby retained by the Division for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after notice and hearing, the Division may terminate the authority hereby granted in the interest of conservation. That applicant shall submit monthly reports of the disposal operations in accordance with Rule 704 and 1120 of the Commission Rules and Regulations.

APPROVED at Santa Fe, New Mexico, on this 3rd day of March, 1980.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY
Division Director

SEAL

OIL CONSERVATION COMMISSION

Albuquerque DISTRICT

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE February 26, 1980

RE: Proposed MC _____
Proposed DHC _____
Proposed NSL _____
Proposed SWD o _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated February 15, 1980
for the Energy Reserve Group Gallagher Canyon Unit #225 G-17-28-12
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve Gallagher Canyon Unit #149 F-17-28-12
must be reentered and casing set from 1300' to 1800' inside
the pipe. From 1549' - 1800' cement must be squeezed
behind the pipe.

Yours very truly,

Frank J. Lang

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

| | | | |
|--|-----------------|--|--------------------|
| OPERATOR ENERGY RESERVES GROUP, INC. | | ADDRESS P.O. BOX 3280 CASPER, WYOMING 82602 | |
| LEASE NAME GALLEGOS CANYON UNIT | WELL NO. 225 | FIELD BASIN DAKOTA | COUNTY SAN JUAN |
| LOCATION UNIT LETTER <u>G</u> ; WELL IS LOCATED <u>1620</u> FEET FROM THE <u>NORTH</u> LINE AND <u>2030</u> FEET FROM THE <u>EAST</u> LINE, SECTION <u>17</u> TOWNSHIP <u>28N</u> RANGE <u>12W</u> NMPM. <u>SAN JUAN COUNTY, NM</u> | | | |

| NAME OF STRING | SIZE | SETTING DEPTH | SACKS CEMENT | TOP OF CEMENT | TOP DETERMINED BY |
|----------------|--------|---------------|--|---------------|-------------------|
| SURFACE CASING | 8-5/8" | 351' | 215 | Surface | Circulated |
| INTERMEDIATE | | | | | |
| LONG STRING | 4-1/2" | 6108' | 1400 | Surface | Circulated |
| TUBING | | | NAME, MODEL AND DEPTH OF TUBING PACKER | | |

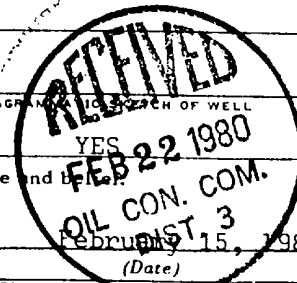
| | | | |
|--|---|---|--|
| NAME OF PROPOSED INJECTION FORMATION MESA VERDE | | TOP OF FORMATION 2965' | BOTTOM OF FORMATION 4150' |
| IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? TUBING | | PERFORATIONS OR OPEN HOLES? PERFORATIONS | PROPOSED INTERVAL(S) OF INJECTION 3873-3950, 4060-4128 |
| IS THIS A NEW WELL DRILLED FOR DISPOSAL? NO | IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? DAKOTA PRODUCTION | | HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? YES |

| | | | |
|--|--|--|--|
| LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH DAKOTA 6002'-10', 6022'-32', 5920'-34' Plugged w/40sx 5700'-6075' & 5sx Surface - 50' | | | |
| DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 100' | DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 1600' | DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA 5500' | |
| ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 200 | MINIMUM 700 | MAXIMUM Open | IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure |
| ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - YES | | WATER TO BE DISPOSED OF YES | NATURAL WATER IN DISPOSAL ZONE YES |
| NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) NAVAJO TRIBAL | | ARE WATER ANALYSES ATTACHED? YES | |

| | |
|---|--|
| LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL AMOCO PRODUCTION COMPANY - SECURITY LIFE BUILDING - DENVER COLORADO 80202 SUN OIL COMPANY - BOX 35567 - TULSA, OKLAHOMA 74135 | |
|---|--|

| | | |
|---|----------------------|--|
| HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? | SURFACE OWNER YES | EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL YES |
| ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) | PLAT OF AREA YES | ELECTRICAL LOG YES |

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

Curtis J. MacIntyre
(Signature)Production Engineer
(Title)

NOTE: Should waivers from the surface owner and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.