# OIL CONSERVATION COMMISSION DISTRICT

| OIL CONSERVATION COMMISSION<br>BOX 2088 | DATE                     | Dec.                 | 16,1980                 |
|---|--------------------------|----------------------|-------------------------|
| SANTA FE, NEW MEXICO                    | RE:                      | Proposed<br>Proposed | DHC NSL SWD WFX         |
| Gentlemen:                              |                          | c an                 | •                       |
|   | ev #318 ase and Well No. | 0-                   | 26.78N-12w<br>it, S-T-R |
| and my recommendations are as follows   | •                        |                      |                         |
|   |                          |                      |                         |
|   |                          |                      |                         |
|   |                          |                      |                         |
|   | Your                     | s very tru           | ly,                     |
|   | Sn                       | 13.6                 | Dary_                   |

Energy Reserves Group, Inc. P.O. Box 3280 Casper, Wyoming 82602 Phone 307 265 7331



December 11, 1980

State of New Mexico Oil Conservation Division Northwest District Office 1000 Rio Brazos Road Aztec, New Mexico 87401

RE: Unorthodox Well Location - Gallegos Canyon
Unit Well No. 318

Gentlemen:

Energy Reserves Group, Inc. respectfully requests approval of an unorthadox location for the below listed well based on topographical problems.

Gallegos Canyon Unit - Well No. 318 1310' FSL & 1430' FEL Section 28, T28N-R12W

This well site is located in the Block I area of Navajo Irrigation Project. The well site was moved from its original stake to accomidate farming activities. The area is under cultivation and over head irrigation and would have created a problem to the existing surface activity. Energy Reserves Group is the Unit Operator of the Pictured Cliffs Formation. The site has been inspected and approved by BIA project representatives.

If there are any problems or questions please call anytime.

Very truly yours,

ENERGY RESERVES GROUP, INC.

William J. Fiant

Field Services Administrator

WJF/jh



APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

# SUBMIT IN TRIPLICATE\*

(Other instructions on reverse side)

Form approved. Budget Bureau No. 42-R1425.

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# UNITED STATES DEPARTMENT OF THE INTERIOR

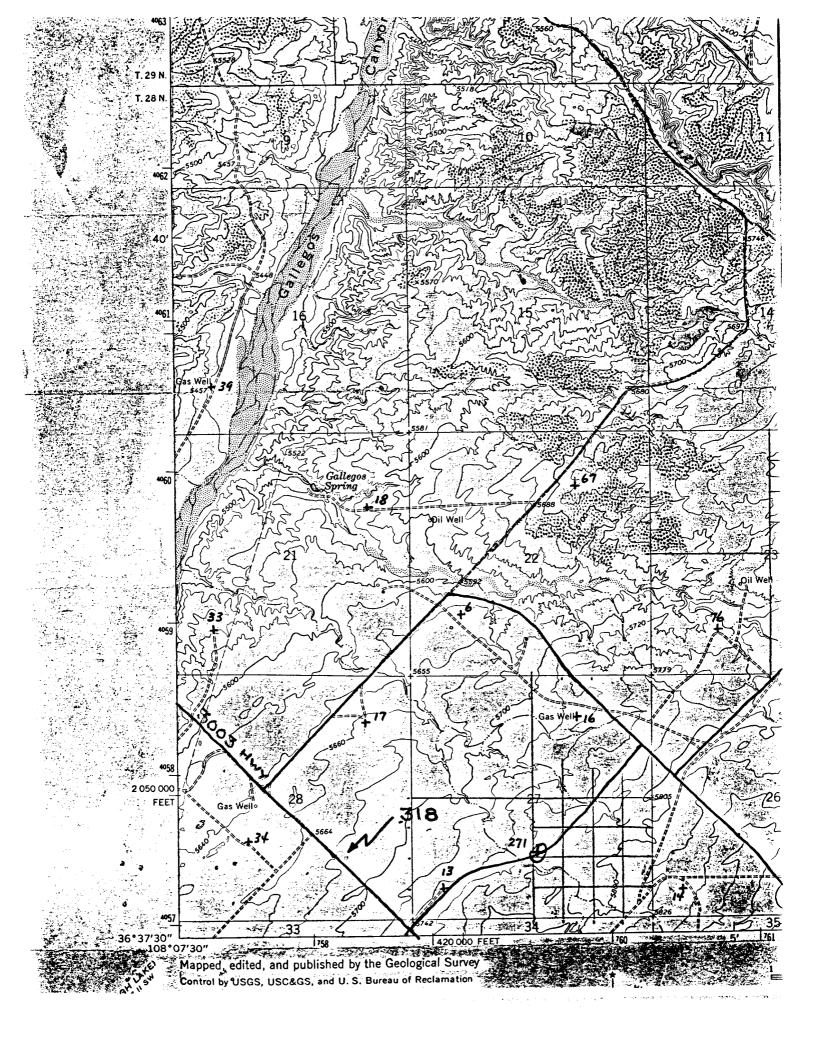
5. LEASE DESIGNATION AND SERIAL NO. **GEOLOGICAL SURVEY** SF078828-A 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME DEEPEN PLUG BACK 🗌 DRILL X b. TYPE OF WELL Gallegos Canyon Unit MULTIPLE ZONE SINGLE ZONE WELL X WELL OTHER 2. NAME OF OPERATOR 9. WELL NO. Energy Reserves Group, Inc 3. ADDRESS OF OPERATOR 318 P. O. Box 3280, Casper, Wyoming 82602

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)

At surface 10. FIELD AND POOL, OR WILDCAT West Jutz Pictured Cliffs 11. SEC., T., R., M., OR BLK. 1310' FSL & 1430' FEL At proposed prod. zone Sec. 28, T28N-R12W 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\* 12. COUNTY OR PARISH | 13. STATE Approximately seven miles south of Farmington, New Mexico
DISTANCE FROM PROPOSED\*

| 16. No. OF ACRES IN LEASE · New Mexico San Juan 17. NO. OF ACRES ASSIGNED TO THIS WELL 15. DISTANCE FROM PROPOSED\* .: 1.14 PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any) 1,110' Unitized 160 18. DISTANCE FROM PROPOSED LOCATION\*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS 2,300' 1,630' Rotary 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START\* Nov.-Dec., 1980 5,688' GR (ungraded) 23. PROPOSED CASING AND CEMENTING PROGRAM QUANTITY OF CEMENT SIZE OF CASING WEIGHT PER FOOT SETTING DEPTH SIZE OF HOLE 12-1/4" 8-5/8" 24# 120! cement to surface 4-1/2" 9.5# 630 cement to surface 6-3/4" Energy Reserves Group, Inc. proposes to drill the above referenced well with rotary tools from the surface to T.D. See attached plan of operations. Carlon Commence Gas is dedicated to El Paso Natural Gas Company. IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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.  $\overline{24}$ TITLE Field Services AdministratorATE 12-11-80 (This space for Federal or State office use) PERMIT NO. APPROVAL DATE

TITLE



#### Supplemental to Form 9-331C

4

- 1. The geologic name of the surface formation is the Nacimento.
- 2. The estimated tops of important geologic markers.

Kirtland @ 260'
Fruitland @ 1,110'
Pictured Cliffs @ 1,380'
Total Depth @ 1,630'

3. The estimated depths at which anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered.

The Ojo Alamo Formation is located between 100'-700' depending on the area. The Ojo Alamo is fresh water bearing sand.

Fruitland @ 1110' may be gas productive Pictured Cliffs @ 1380' is expected to be gas productive.

4. The proposed casing program, including the size, grade, and weight-per-foot of each string and whether new or used.

8-5/8", 24#, K-55, ST&C, New Casing 4-1/2", 9.5#, K-55, ST&C, New Casing (4-1/2" will be cemented to the surface)

5. The lessee's or operator's minimum specifications for pressure control equipment which is to be used, a schematic diagram thereof showing sizes, pressure ratings (or API series), and the testing procedures and testing frequency.

BOE will consist of and 8" series 900, 3000 psi double ram BOP. The BOP will be tested to 500 psi after installation and prior to drilling out from under surface casing.

6. The type and characteristics of the proposed circulating medium or mediums to be employed for rotary drilling and the quantities and types of mud and weighting material to be maintained.

This well will be drilled using a chemical gelmud plus required additives for hole conditions and formations drilled. Normally about 25 sacks of gel will be on location at one time. Additional materials are available locally in the Farmington Area which could be hauled to the location within thirty minutes.

7. The auxiliary equipment to be used, such as (1) kelly cocks, (2) floats at the bit, (3) monitoring equipment on the mud system, (4) a sub on the floor with a full opening valve to be stabbed into drill pipe when the kelly is not in the string.

A kelly cock stop for 3-1/2" drill pipe plus a sub with a full opeining valve with drill pipe thread will be available on the rig floor

9. The testing, logging, fracing, and coring programs to be followed with provision made for required flexibility.

No coring is planned and no DST's are planned. Logs will consist of IES, CNL and FDC. Fracing will consit of Nitrogen water (foam) fracing, approximately 20,000 gallons of 70% quality foan with 25,000 pounds of 10-20 sand.

9. Any anticipated abnormal pressures or temperatures expected to be encountered or potential hazards such as hydrogen sulfide gas, along with plans for mitigating such hazards.

No abnormal pressures or temperatures are anticipated.  $\rm H_2 s$  is not a problem in this area.

# Page 2

10. The anticipated starting date and duration of the operations.

It is planned to commence operations as soon as regulatory approval has been received and a rig becomes available. It is anticipated that it will take approximately 3 to 4 days to drill and log this well.

# MULTI POINT SURFACE USE PLAN

#### 1. Existing Roads

There is an existing improved (black top) road way adjacent to the proposed well site.

No maintenance is required on this public road

### 2. Planned Access Roads

None needed

#### 3. Location of Existing Wells

(See attached map)

This well is within the Gallegos Canyon Unit, Pictured Cliffs particapating area. There are numerous wells operated by Amoco and Energy Reserves Group.

# 4. Location of Existing and/or Proposed Facilities

(See attached map)

Most Energy Reserves Group wells in the Gallegos Canyon Unit are equipped with a separator to remove free water. El Paso Natural Gas Co. (gas purchaser) usually installs a Glycol unit at each site. In addition all gas gathering lines are owned by El Paso. There are 4 disposal systems within the Gallegos Canyon Unit. These systems consist of buried plastic pipelines. If the well becomes productive all facilities will be within the previously distrubed areas. A small (20'x20'x6') pit may be required if any water is produced. The pit will be fenced sheep tight to protect livestock and wildlife. The reserve pit will be fenced and allowed to dry. As soon as it is sufficiently dry it will be backfilled and recontoured to its original contour.

# 5. Location and Type of Water Supply

Water will be hauled from Energy Reserves Group's disposal system or from the San Juan River. Method of transportation will be by truck.

### 6. Sources of Construction Materials

None are necessary.

# 7. Methods for Handling Waste Disposal

All drill currings and fluids will be disposed of in the reserve pit. Any produced fluids will be contained in portable tanks. A portable chemical toilet will be used during drilling and completions operations. Trash will be disposed of in a small trash pit constructed along-side of the reserve pit.

#### 8. Ancillary Facilities

None are necessary.

#### 9. Well-Site Layout

#### Page 2

# 10. Plans for Restoration of Surface

Upon completion of the well the reserve pit will be fenced and allowed to dry. Any accumulation of oil will be skimmed off the pit and trucked to a disposal site. The disturbed areas will be recontoured to its original contour and re-seeded as per Bureau of Land Management or Bureau of Indian Affairs recommendations. It is planned to commence rehabilitation as soon as the pit has dried and weather permits.

#### 11. Other Information

The topography of the general area slopes from the south to the San Juan River Drainage. The majority of the surrounding drainages are of a non-perennial nature with a normal flow limited to spring run off and heavy rain storms.

The soils in this semi-arid area are of the Nacismento formation and are largely light brown, sandy soils with poorly graded gravels. Out crops of sanstone and conglomerates are common.

Due to the low precipitation average, climatic conditions, and this marginal types of soils, the vegitation that is found in the area is common of the semi arid region we are located in and consits of pinion pins and juniper trees, sagebrush, rabbit brush, some sparce grasses and cacti as the primary flora. The fauna of the area consists predominantly of mule deer, coyotes, rabits, and varities of small rodents.

The area is used by man for the primary purpose of domestic livestock grazing. Some of the area is within the Navajo Irrigation Project which is presently under cultivation. These areas are used for farming a variety of different crops.

#### 12. Lessee's or Operator's Representative

Bill Fiant P.O. Box 3280 Casper, Wyoming 82602

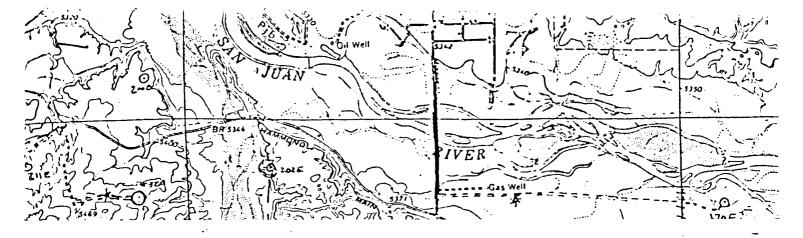
Telephone: 1-307-265-7331

#### 13. Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are to the best of my knowledge true and correct; and that the work associated with operations proposed herein will be performed by ENERGY RESERVES GROUP and its contractors and sub-contractors and in conformity with this and terms and conditions under which it is approved.

William J. Fiant

12-11-80



STATE OF NEW MEXICO ENERGY AND MINERALS UCPARTMENT

# OIL CONSERVATION DIVISION

P. O. DOX 2088 SANTA FE, NEW MEXICO 87501

Form C-107 Revised 10-1-;

All distances must be from the cuter haunderies of the Section.

| Operator  | Dperator Lease                           |                     |          |                        |  | Well No.    |           |  |
|---|--|---------------------|----------|------------------------|--|-------------|-----------|--|
| ENERGY RESERVES   | ERGY RESERVES GROUP GALLEGOS CANYON UNIT |                     |          |                        |  | 318         |           |  |
| Unit Letter Section                                       |  | Township            |          | Range                  | County   |             |           |  |
| 0 28  |  | 28N                 |          | 12W                    | San  | Juan        |           |  |
| Actual Footage Location of W                              | eli:                                     |                     |          |                        |  |             |           |  |
| 1310' feet fro  |  |                     | and      | 1430' feet             | from the   | East        |           | line   |
| •   | oducing For                              |                     | Poo      |                        |  |             | Dedica    | ted Acreage;   |
| 5688  | Picture                                  | d Cliffs            | We       | st Kutz Pictur         | ed Cliff   | s           | 11        | 60 Acres   |
| Outline the acrea     If more than one interest and royal | lease is                                 | ·                   |          | •                      |  |             | •         | •  |
| 3. If more than one l dated by community Yes No.          | tization, u                              |                     | ooling.  | etc?                   | have the i   | nterests    | of all o  | owners been consoli-   |
| this form if necess<br>No allowable will                  | sary.)<br>be assigne                     | ed to the well unti | l all in | terests have been      | consolidat   | ed (by co   | mmunit    | (Use reverse side of ization, unitization, oved by the Commis- |
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