

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY30-045-23605  
5. LEASE DESIGNATION AND SERIAL NO.  
SF-078109

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Energy Reserves Group, Inc.

## 3. ADDRESS OF OPERATOR

PO Box 3280 Casper, Wyoming 82602

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

At surface

At proposed prod. zone 980' FSL &amp; 920' FWL (SW/SW)

## 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

Approx. 3½ miles south &amp; 3 miles east of Farmington, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

N/A

## 16. NO. OF ACRES IN LEASE

Unitized

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

158.66

18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

2240'

## 19. PROPOSED DEPTH

1625'

## 20. ROTARY OR CABLE TOOLS

Rotary

## 21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5522' Gr. (Ungraded)

## 22. APPROX. DATE WORK WILL START\*

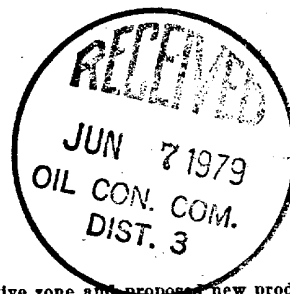
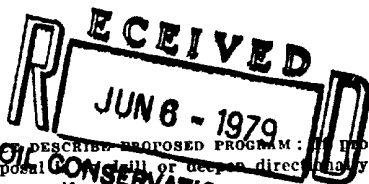
July-August 1979

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
9 7/8"	7"	17#	100'	50sx. (cement to surface)
6 1/4"	4 1/2"	9.5#	1625'	100sx.

Energy Reserves Group, Inc. proposes to drill the above well with rotary tools from surface to T.D. The anticipated zone for completion is the Pictured Cliffs Formation @ 1380'=1450'. No cores or DST's are planned. Copies of all logs run will be furnished upon completion of the well.

*gas is delineated*

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 directly, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

*[Signature]*

TITLE

Field Services Admn.

DATE

5-29-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*ok Fred*

\*See Instructions On Reverse Side

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

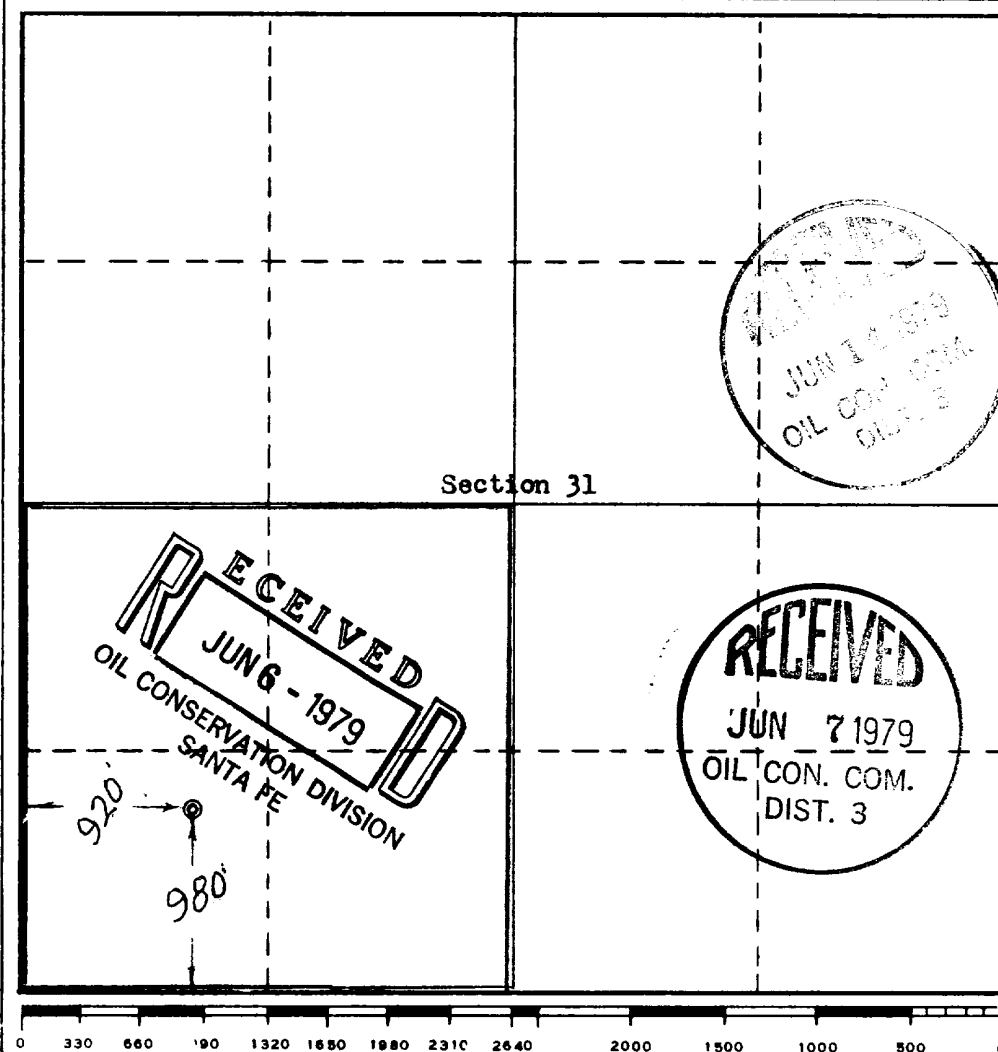
Operator <b>Energy Reserves Group, Inc.</b>			Lease <b>GALLEGO'S CANYON UNIT</b> <b>X (SF-078109)</b>		Well No. <b>285</b>
Unit Letter <b>M</b>	Section <b>31</b>	Township <b>29 North</b>	Range <b>12 West</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>980</b> feet from the <b>South</b> line and <b>920</b> feet from the <b>West</b> line					
Ground Level Elev. <b>5522</b>	Producing Formation <b>Pictured Cliffs</b>		Pool <b>West Kutze</b> <b>X Pictured Cliffs</b>	Dedicated Acreage: <b>X 160 158.66</b> Acres	

- X** 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- X** 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

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

Name **X William J. Chao**  
 Position **X Field Service Admin.**  
 Company **X Energy Reserves Group**  
 Date **X 6-12-79**

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed **May 16, 1979**  
 Registered Professional Engineer and Land Surveyor **5134**  
 Certificate No. **5680 - W. MONTGOMERY**

1. The geologic name of the surface formation.

Nacimiento

2. The estimated tops of important geologic markers.

Fruitland	765'
Coal Marker	1330'
Pictured Cliffs "A"	1380'
Pictured Cliffs "B"	1450'
T.D.	1625'

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

Fruitland - gas  
Coal Marker - water  
Pictured Cliffs - gas

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

7" k-55 17# used

4½" k-55 9.5# used

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.

A 10" or 7" series 900 or 600 dual ram hydraulic preventor will be used. The BOP will be pressure tested to 400 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.

A fresh water chemical mud gel will be used for drilling. Sufficient mud materials will be on hand to control minor lost circulation.

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.

Auxiliary equipment will consist of: a sub on the floor with a full opening valve w/drill pipe thread.

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

No DST's are planned. Logging will consist of DIL, Gamma Ray, Density-Neutron. Nitrogen-Water (foam) fracing, consisting of approx. 20,000 gal. of 70% quality foam w/25,000# 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.

An abnormal pressure high volume gas zone might be encountered between 1000' and 1500'. (Fruitland Interval)

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

It is planned to commence operations as soon as regulatory approval has been received. It is estimated that the drilling & completion operations can be completed in 10-12 days.

1. EXISTING ROADS

- A. See attached topo map
- B. Approximately 3½ miles south & 3 miles East of Farmington, New Mexico
- C. See attached topo map
- D. This is a development well
- E. See attached topo map
- F. There is an existing road adjacent to the location. This road will require some minor improvements to allow for rig traffic. Maintenance will be performed by Energy Reserves Group, Inc. and Amoco as needed.

2. PLANNED ACCESS ROADS

Approximately ¼ mile new access road will be required. Maximum grade will be less than 8%. No turn outs are necessary. Culverts will be installed as per BLM recommendations. No gates, fence cuts, or cattleguards will be required.

3. LOCATION OF EXISTING WELLS

See attached map

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. Energy Reserves Group, Inc. operates the Pictured Cliffs (gas) Wells within the Gallegos Canyon Unit. Gas gathering lines are owned by El Paso Natural Gas Company and are installed and operated under rights of way terms. All production facilities are located on the individual well site.
- B. Any new facilities required will be limited to the well site. If a pit is required it will be fenced to protect the livestock and wildlife.
- C. Any disturbed areas no longer needed after drilling and completion operations will be recontoured and rehabilitated as per BLM recommendations.

5. LOCATION AND TYPE OF WATER SUPPLY

Water used for drilling will be hauled by truck from Energy Reserves Group, Inc. disposal site located in the Gallegos Canyon Unit.

6. SOURCE OF CONSTRUCTION MATERIALS

None needed

7. METHODS FOR HANDLING WASTE DISPOSAL

The Reserve pit will be of adequate size to contain cuttings and drilling fluids. Any produced hydro carbons will be stored in tanks, produced water if any will be disposed of as per NTL-2B requirements. Garbage and other waste material will be burned or buried in a small trash pit. Upon completion of operations the entire area will be policed up and the reserves pit fenced. Any oil on the pit will be removed. The trash pit will be buried to prevent scattering of any additional trash.

8. ANCILLARY FACILITIES

None required

9. WELL SITE LAYOUT

- 1,2,&3 (see attached)
- 4 It is not planned to line any pit

10. PLANS FOR RESTORATION OF SURFACE

Upon completion of operations the pit will be fenced and allowed to dry before covering. The entire area will be policed up and all trash buried or burned. Any area not needed for further operations will be recontoured and reseeded as per BLM recommendations.

11. OTHER INFORMATION

The area is generally high desert type country with high erosion potential. Most areas are ddeeply eroded with gullies and washes. Vegetation consists of pinion and juniper trees with sage and other small scrub bushes, cactus, and assorted native grasses. Surface ownership is Public Lands under Administration of the Bureau of Land Management. There are no continuously flowing streams in the area. The San Juan River is the nearest water. There are no occupied dwellings within one mile of the well site. An archaeological inspection has been scheduled with the San Juan Museum.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVES

Bill Fiant and/or T.C. Durham will represent Energy Reserves Group, Inc. during the drilling and clean up operations in connection with this well.

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

307-265-7331 Office  
307-265-2529 Home

T.C. Durham  
1205 Camino Largo  
Farmington, New Mexico 87401

505-325-7978 Home  
505-327-1639 Office  
505-325-1873 Mobil  
(unit #539)

13. CERTIFICATION

See attached

CERTIFICATION

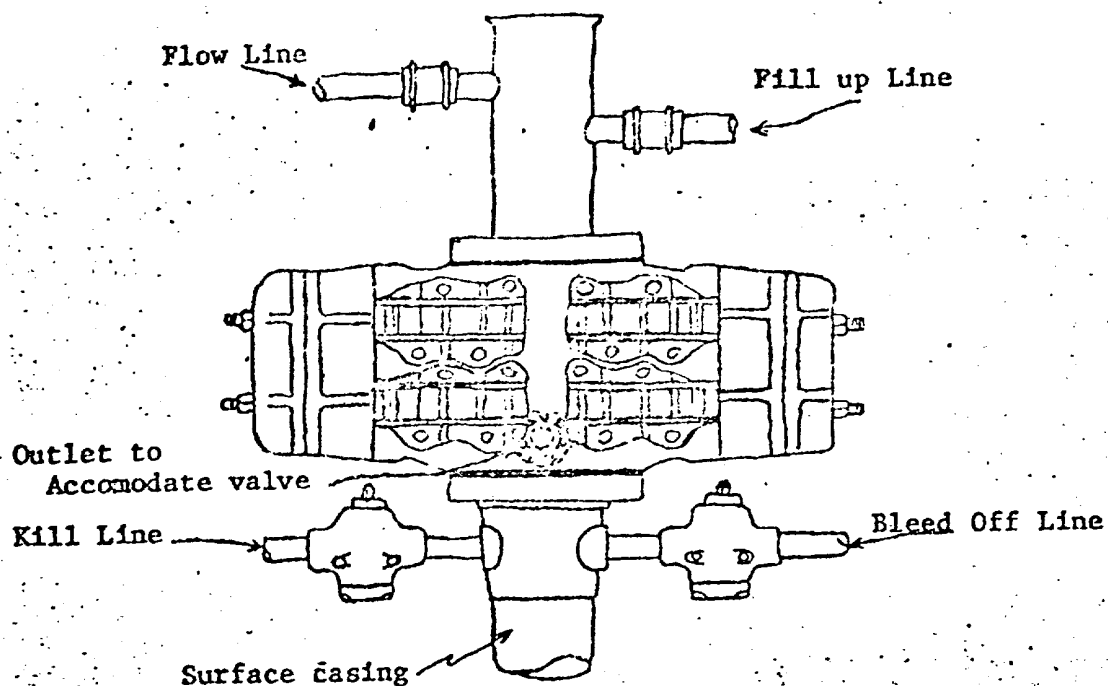
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by \_\_\_\_\_

Diag Inc.  
and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

5-25-79  
Date

William J. Yates  
Name and Title

Field Services Administrator



Blowout preventer is Shaffer double hydraulic equipped with drill pipe rams in the top and blind rams in the bottom.

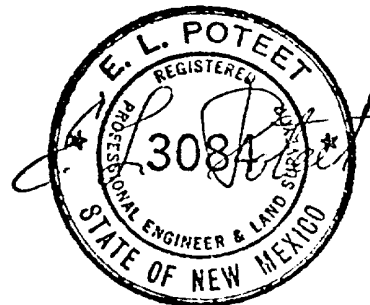
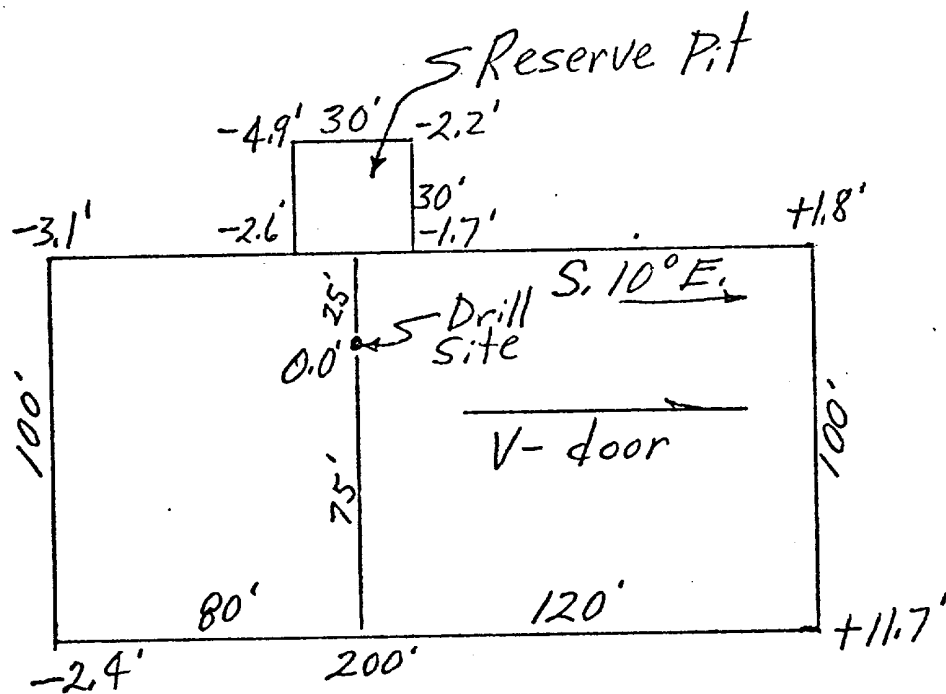
Blowout preventer closing unit is Koomey 30 gallon accumulator unit.

When choke manifold is used, it will be installed downstream from bleed off valve.

Kill line or bleed off line may be installed at flanged opening in blowout preventer.



Energy Reserves Group, Inc.  
GCU-PC # 285  
980' FS & 920' FW SEC 31-29N-12W  
San Juan County, New Mexico



May 18, 1979

Gallegos Canyon Unit  
 Well No. 285  
 980' FSL + 920' FWL  
 Sec. 31, T29N-R12W

