

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## 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 1980' FSL &amp; 660' FWL (NW/SW)

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

Approximately 20 miles south west of Farmington, New Mexico

## 15. DISTANCE FROM PROPOSED\*

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

3300'

## 16. NO. OF ACRES IN LEASE

2560'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

80

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

990'

## 19. PROPOSED DEPTH

4970'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6075' Gr. (ungraded)

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

July, 1979

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	500'	Cement to surface
7 7/8"	5 1/2"	14#	4970'	250 sx.

Energy Reserves Group, Inc. proposes to drill the above referenced well with rotary tools from surface to T.D. (4970') Proposed zone of completion is the L. Gallup Sand @ 4980'. One DST of the Gallup may be run. No cores are planned. BOE will consist of a 10" series 600 or 900 dual ram hydraulic BOP pressure tested to 1000 psi.

RECEIVED

JUN 4 - 1979

JUN 5 1979  
OIL CON. COM.  
DIST. 3

U.S. GEOLOGICAL SURVEY

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 location, and measured and true vertical depths. Give blowout preventer program, if any.

## 24.

SIGNED

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 Frank

Wynock

NW - R-5464

\*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

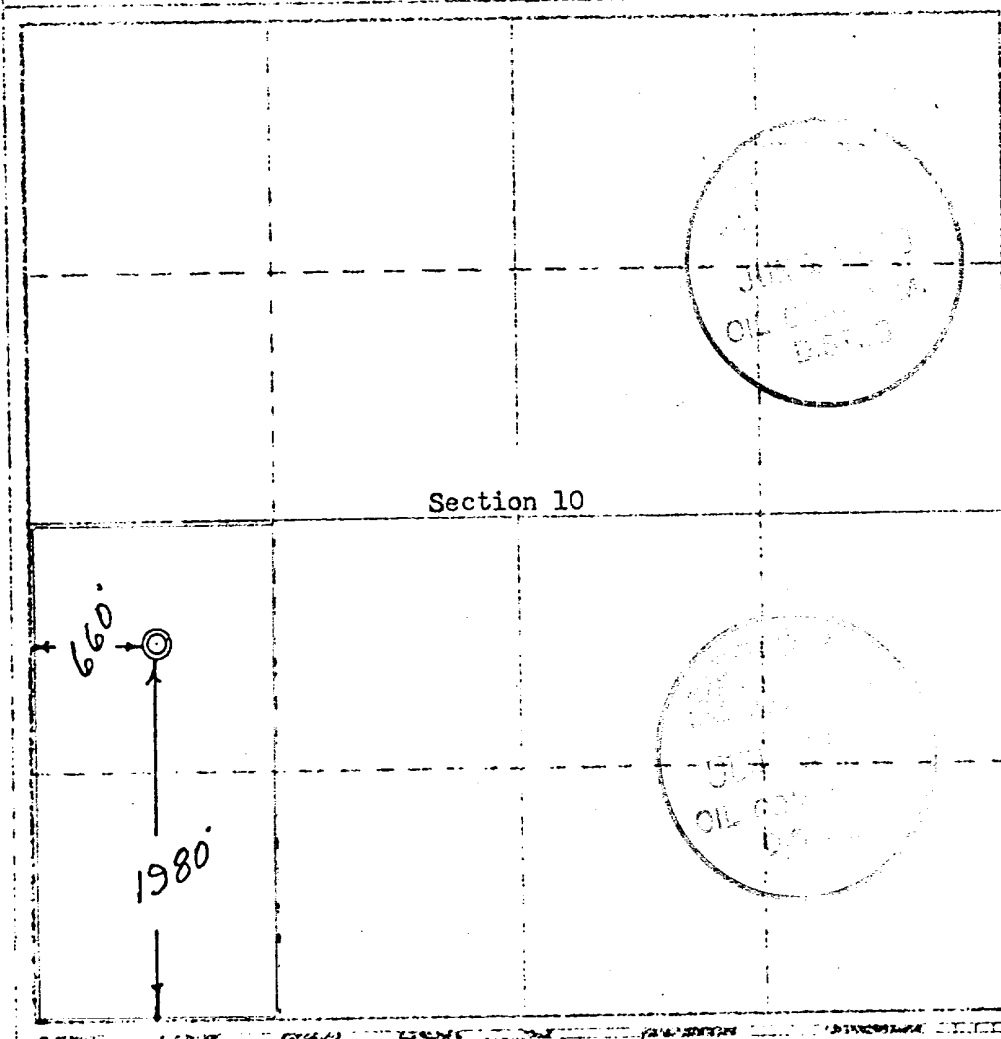
Operator <b>Energy Reserves Group, Inc.</b>			Lease <b>(14-26-603-2085)</b> <i>Old Survey Post</i>		Well No. <b>4</b>
Well Letter <b>L</b>	Section <b>10</b>	Township <b>26 North</b>	Range <b>14 West</b>	County <b>San Juan</b>	
Actual Well Location of Well:					
<b>1980</b>	feet from the <b>South</b>	<b>660</b>	feet from the <b>West</b>		
Ground Level Elev. <b>6075</b>	Producing Formation <b>Gallup</b>	Pool <b>BISTI</b>	Dedicated Acreage <b>80</b>	Acres	

- ✓ 1. Outline the acreage dedicated to the subject well by colored pencil or anchure marks on the plat below.
- ✓ 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 communization, 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 communization, unitization, force 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 *William J. Ford*  
 Position *Field Services Adm.*  
 Company *Energy Reserves Group*  
 Date *6-11-79*

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.

**E. L. POTEET**  
 REGISTERED  
 PROFESSIONAL SURVEYOR  
 No. **3084**  
 STATE OF NEW MEXICO  
 Date Surveyed **APR 11 1980**  
 Registered Professional Surveyor  
 and  
 E. L. POTEET  
 3084

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

Pictured Cliffs	1175'
Mesaverde	1915'
Mancos	3825'
Gallup	4725'
L. Gallup	4890'
T.D.	4970'

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

The Lower Gallup @ 4890' is expected to be oil 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"	k-55	24#	new
5 1/2"	k-55	14#	new & 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.  
BOE will consist of a 10" series 900, 3000# dual ram hydraulic preventor w/pipe and blind rams, pressure tested to 800 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 base gel mud will be used through out the entire operation. Mud weights will be controlled by controlling drilling fluids. Sufficient mud materials to maintain mud requirements and to control minor lost circulation and blow out problems, will be stored at the well site.

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:

Kelly cock, a float at the bit, monitoring equipment on the mud system, and a stab in valve w/drill pipe thread on the rig floor.

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

One DST of the Lower Gallup may be run. No cores are planned. Logs will consist of DIL, Gamma Ray, Density & CNL. It is planned to fracture the well with a water base gel containing approximately 60,000 gals. of liquid & 60,000# of sand, after breaking down with 1000 gal. 15% HCL.

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 expected. No H<sub>2</sub>S is anticipated.

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

It is planned to commence operations as soon as regulatory approval has been obtained. It is estimated that it will take 15 days to drill, test, log, and complete this well.

1) EXISTING ROADS

(A,B,C,D,& E)

See attached topographic map

(F) The existing road into Section 10 is serving a producing well. This road is presently maintained by Energy Reserves Group, Inc.

2) PLANNED ACCESS ROADS

Well #6 will require that approximately  $\frac{1}{4}$  mile of new access road be constructed.

Well #4 will require that approximately 200' of new access road be constructed.

Well #5 will require that approximately  $\frac{1}{4}$  mile of new access road be constructed.

Well #7 will require that approximately  $\frac{3}{8}$  mile of new access road be constructed.

(1) The maximum width of roads will be limited to a 20' running surface.

(2) Maximum grades will be less than 8% maximum.

(3) No turn outs are planned

(4) It is planned to ditch & crown the road to provide adequate drainage.

(5) Culverts will be installed as prescribed by the BIA.

(6) No surfacing material will be required.

(7) NA

(8) Roads are flagged.

3) LOCATION OF EXISTING WELLS

See attached map

4) LOCATION OF EXISTING AND/OR PROPOSED FACILITIES.

See attached topographic map

A. Energy Reserves Group's existing tank battery serving Well #1 is located near the center of Section 10. There is flowline from Well #1 to the existing battery. Well #3 is presently shut-in.

B. If production is established it is planned to install a pipeline from each well to the existing battery. The pipe line will consist of a 3" welded line, buried to approximately 3' parallel with the access road. If production volume is significant it may be necessary to install an additional 400 Bbl. tank @ the existing battery site. The tank battery and pumping equipment will be fenced to protect livestock and wildlife.

C. Any areas not needed for production purposes will be rehabilitated and reseeded to BIA recommendations.

5) LOCATION AND TYPE OF WATER SUPPLY

Water used for drilling and completion operations will be hauled by truck over existing improvised roads to the well site. Water will be used from Energy Reserves Group disposal system in the Gallegos Canyon Field.

6) SOURCE OF CONSTRUCTION MATERIALS

Access will be across lands controlled by the Navajo Nation. It is not planned to gravel any roads.

7) METHODS FOR HANDLING WASTE DISPOSAL

The reserves pit will be of adequate size to handle well cuttings and drilling fluids. If well produces any water, the disposal will comply with NTL-2B requirements. Garbage and other waste material will be put into a deep trash pit and buried or burned. The pit will be fenced with sheep wire to prevent the scattering of trash. When the rig has completed operations the area will be policed up and the trash pit buried.

8) ANCILLARY FACILITIES

No Ancillary facilities will be necessary.

9) WELL SITE LAYOUT

See attached drawing

It is not planned to line any pits.

10) PLANS FOR RESTORATION OF SURFACE

After drilling and completion operations are terminated, the reserve pit will be fenced and allowed to dry. If there is any oil on the pit it will be removed. As soon as the pit is dry and weather permits, the entire disturbed area will be re-contoured and reseeded as per BIA recommendations. Rehabilitation operations will commence as soon as weather permits.

11) OTHER INFORMATION

The area is generally arid high desert country with gentle rolling hills and numerous small dry gulleys and washes. Vegetation consists of sage and other small scrub bushes, cactus and assorted native grasses. Soil is mostly sandy loam with some blow sand. Wildlife is sparse, coyotes, mule deer, rabbits, badgers, and other small rodents and birds. The surface and minerals belong to the Navajo Nation. There are no occupied dwellings in the immediate area. An archaeological inspection has been completed with no significant material in the areas to be disturbed. The only known use of the surface is for livestock grazing. Surface lessor is Mr. Jonas Blue Eyes of Fruitland, New Mexico.

12) LESSEE'S OR OPERATORS REPRESENTATIVE

Mr. Bill Fiant or Mr. T.C. Durham will be responsible for compliance with the approved plan.

Bill Fiant  
Box 3280  
Casper, Wyoming 82602

T.C. Durham  
Box 977  
Farmington, New Mexico 87401

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

Office: 505-327-1639  
Home: 505-325-7978  
Mobile: 505-325-1873 #539

13) CERTIFICATION

See attached

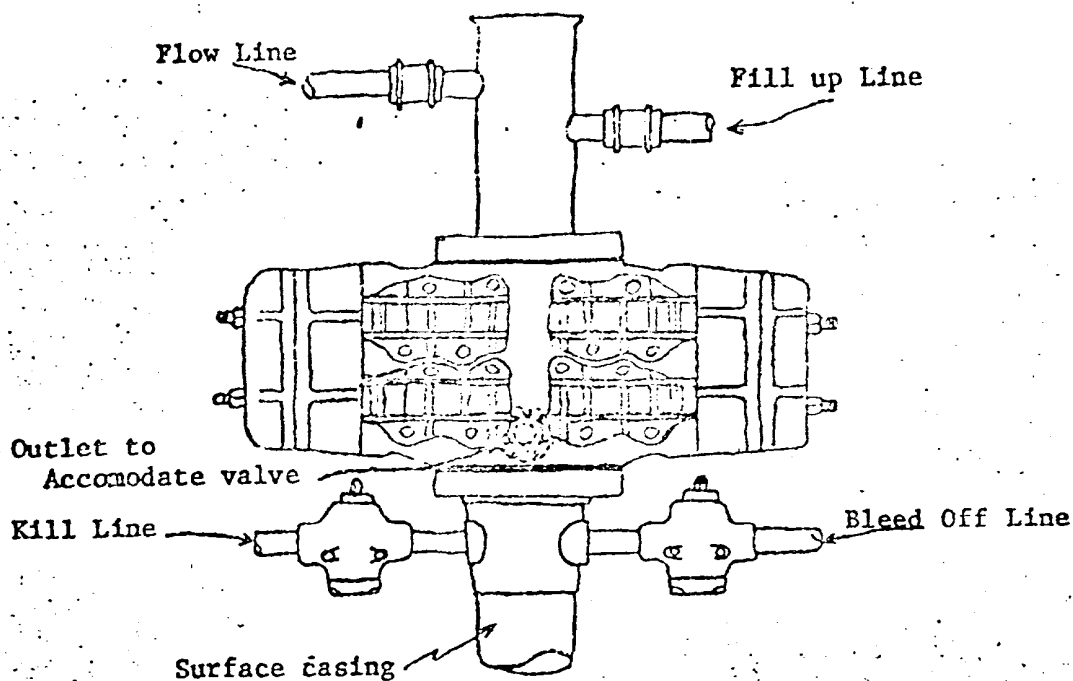
CERTIFICATION

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 \_\_\_\_\_

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

5-7-79  
Date

William J. Grant  
Name and Title



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 Kookey 30 gallon accumulator unit.

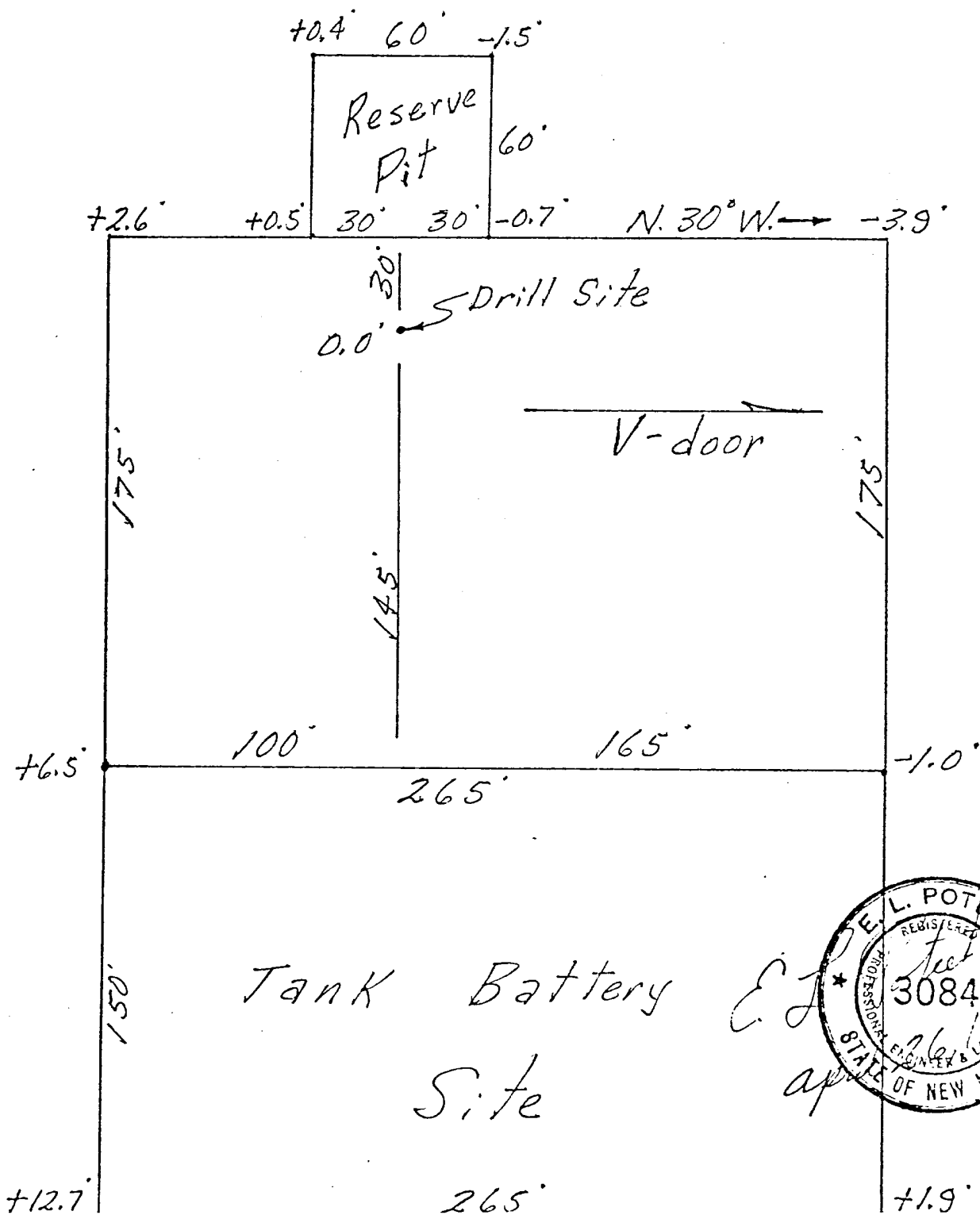
When choke manifold is used, it will be installed downstream from bleed off valve.

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



Energy Reserves Group, Inc.

1980' FS & 660' FW Sec 10-26N-14W  
San Juan County, New Mexico



WELL NO. 4  
 1980' FSL + 660' FWL  
 SEC 10, T 26N - R 14W

