

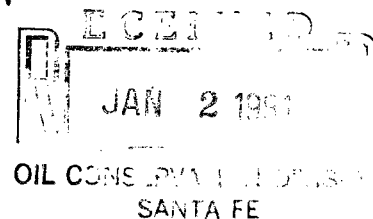
Energy Reserves Group, Inc.  
P.O. Box 3280  
Casper, Wyoming 82602  
Phone 307 265 7331

1302  
NSL-1302  
Φ Energy Reserves Group

December 30, 1980

State of New Mexico  
Energy and Minerals Dept.  
Oil Conservation Division  
Box 2088  
Santa Fe, New Mexico 87501

RE: Application for Non-Standard Location:  
Gallegos Canyon Unit, Well No. 318,  
Section 28, T28N-R12W  
San Juan County, New Mexico



Gentlemen:

This letter, attached information, and maps is the information as requested in your letter of December 17, 1980 concerning the above referenced location.

Gallegos Canyon Unit No. 318 is a proposed Pictured Cliffs Formation well. Energy Reserves Group, Inc. is the operator of the Pictured Cliffs Formation within the Gallegos Canyon Unit. (see map for unit boundary) Energy Reserves Group is therefore the operator of the off-setting lease's within the unit boundary. All unit working interest owners are notified prior to any drilling activity within the unit. Also attached is a map defining the Block 1 area of the Navajo Irrigation project along with roads, ect. This well is located along the edge of cultivated farm land. The site chosen was determined to have the least amount of adverse effect to the farming operations. The site is adjacent to a paved highway (3003 road). It is generally understood by the operators in the irrigation project area that well site selection must take into consideration the effects of the surface equipment and its adverse effect to the farming operations. With this consideration the operator normally contacts Block personnel for their assistance in site placement. This is done prior to surveying the well site. After the application for permit to drill has been filed, an authorized representative of the Bureau of Indian Affairs Irrigation Project, inspects the site along with a U.S.G.S. and operator representative. At the time of the inspection the personnel attending sign an inspection sheet (attached) acknowledging and agreeing to the placement of the well site and with the information supplied in the plan of operations. Attached is a copy of the inspection sheet signed by Mr. Gayle Crouse representative of the Bureau of Indian Affairs.

Page 2



State of New Mexico  
Energy and Minerals Dept.  
Oil Conservation Division  
Box 2088  
Santa Fe, New Mexico 87501

It is our hope that the information supplied is adequate for your consideration to process the application. If there is any additional information required, please let me know.

Very truly yours,

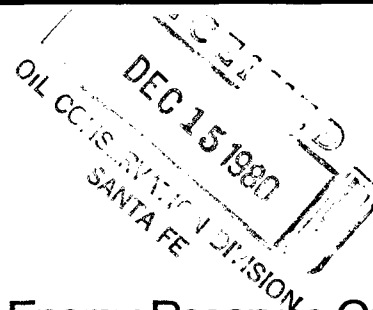
ENERGY RESERVES GROUP, INC.



William J. Fiant  
Field Services Administrator

WJF/dm

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 unorthodox 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 1 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.

A handwritten signature in dark ink, appearing to read "William J. Fiant".

William J. Fiant  
Field Services Administrator

WJF/jh

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

Operator <b>ENERGY RESERVES GROUP</b>			Lease <b>GALLEGOS CANYON UNIT</b>		Well No. <b>318</b>
Unit Letter <b>0</b>	Section <b>28</b>	Township <b>28N</b>	Range <b>12W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1310'</b> feet from the <b>South</b> line and <b>1430'</b> feet from the <b>East</b> line					
Ground Level Elev: <b>5688</b>	Producing Formation <b>Pictured Cliffs</b>		Pool <b>West Kutz Pictured Cliffs</b>		Dedicated Acreage: <b>160</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure 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 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.

		1430'	
		1310'	
<p><b>RECEIVED</b> <b>DEC 15 1980</b> OIL CONSERVATION DIVISION SANTA FE</p>			

Scale: 1"=1000'

<p align="center"><b>CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>William J. Kerr</i> Name Field Services Administrator Position Energy Reserves Group Company 12-11-80 Date</p>	
<p>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.</p> <p>Date Surveyed <b>August 21, 1980</b> Registered Professional Engineer and Land Surveyor <i>Fred B. Kerr Jr.</i> Fred B. Kerr Jr. Certificate No. <b>3950</b></p>	

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

P. O. 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 1310' FSL &amp; 1430' FEL

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

Approximately seven miles south of Farmington, New Mexico

## 15. DISTANCE FROM PROPOSED\*

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

1,110'

## 16. NO. OF ACRES IN LEASE

Unitized

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

2,300'

## 19. PROPOSED DEPTH

1,630'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5,688' GR (ungraded)

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

Nov.-Dec., 1980

## 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#	120'	cement to surface
6-3/4"	4-1/2"	9.5#	1,630'	cement to surface

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.

Gas is dedicated to El Paso Natural Gas Company.

DEC 15 1980

OIL CONSERVATION DIVISION  
SANTA FE

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.

## 24.

SIGNED

TITLE Field Services Administrator DATE 12-11-80

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

T. 29 N.

T. 28 N.

4062

40

4061

Gas Well

39

4060

Gallegos Spring

18

4059

33

4058

2 050 000

FEET

Gas Well

34

4057

36° 37' 30"

108° 07' 30"

1758

420 000 FEET

1760

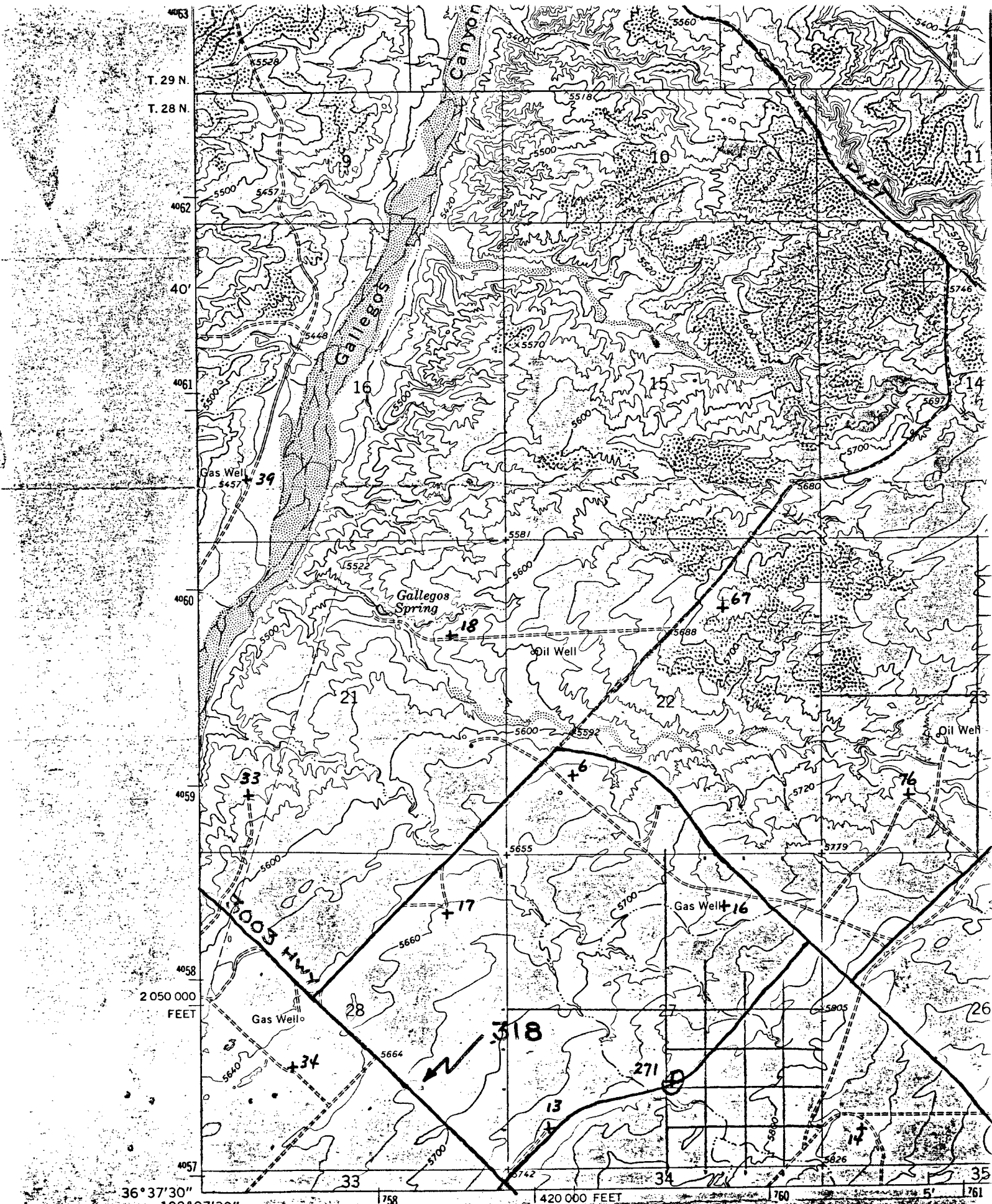
1761

Mapped, edited, and published by the Geological Survey  
Control by USGS, USC&GS, and U. S. Bureau of Reclamation

LAKE  
SW

1

E





ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

December 17, 1980

BRUCE KING  
GOVERNOR

LARRY KEHOE  
SECRETARY

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

Energy Reserves Group  
P. O. Box 3280  
Casper, Wyoming 82602

Re: Application for Non-Standard  
Location: Gallegos Canyon Unit  
Well No. 318, Sec. 28, T-29-N,  
R-12-W

We may not process the subject application for non-standard location until the required information or plats checked below (is) (are) submitted.

☒ A plat must be submitted clearly showing the ownership of the offsetting leases or the unit boundary if an inside well.

☒ A statement must be submitted that offset owners have been notified of the application by certified mail, if any.

☐ A plat must be submitted fully identifying the topography necessitating the non-standard location.

☒ Other: Please submit a copy of the letter from the project manager requesting that the location be moved.

\* Also please submit an original signed copy. The copy in hand bears only a xeroxed signature.

Very truly yours,

R. L. STAMETS  
Technical Support Chief

RLS/dr



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

BRUCE KING  
GOVERNOR  
LARRY KEHOE  
SECRETARY

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-2434

*Energy Reserves Group*

Re: Application for Non-Standard  
Location: Gallegos Canyon  
Unit Well No 318  
Sec 28-T29 N-R12 W

We may not process the subject application for non-standard location until the required information or plats checked below (is)(are) submitted.

- ☒ A plat must be submitted clearly showing the ownership of the offsetting leases *or the Unit boundary if an inside well.*
- ☒ A statement must be submitted that offset owners have been notified of the application by certified mail. *if any.*
- ☒ A plat must be submitted fully identifying the topography necessitating the non-standard location.
- ☒ Other: *Please submit a copy of the letter from the Project manager requesting that the location be moved.*

Very truly yours

*R. L. Stamets*

R. L. STAMETS  
Technical Support Chief

RLS/dr

\* *Also please submit an original signed copy. The copy in hand bears only a Xeroxed signature.*



File 1154-1302

OIL CONSERVATION COMMISSION  
Alto DISTRICT

RECEIVED  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

OIL CONSERVATION COMMISSION  
BOX 2088  
SANTA FE, NEW MEXICO

DATE Dec. 16, 1980

RE: Proposed MC \_\_\_\_\_  
Proposed DHC \_\_\_\_\_  
Proposed NSL   x   \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed PMX \_\_\_\_\_

Gentlemen:

I have examined the application dated Dec. 15, 1980  
for the Energy Resources Inc. SCU #318 O-28-78N-12W  
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours very truly,

Frank J. Gray

Supplemental to Form 9-331C

1. The geologic name of the surface formation is the Nacimiento.

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 opening valve with drill pipe thread will be available on the rig floor

8. 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 consist of Nitrogen water (foam) fracing, approximately 20,000 gallons of 70% quality foam with 25,000 pounds of 10-20 sand.

OIL CONSERVATION DIVISION

SANTA FE 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.  
H<sub>2</sub>S is not a problem in this area.

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 participating 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 disturbed 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 curreings 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

See attached plat.

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 Nacimento formation and are largely light brown, sandy soils with poorly graded gravels. Out crops of sandstone and conglomerates are common.

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

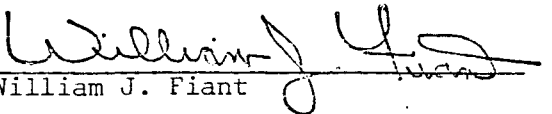
Bill Fiant  
P.O. Box 3280  
Casper, Wyoming 82602

Telephone: 1-307-265-7331

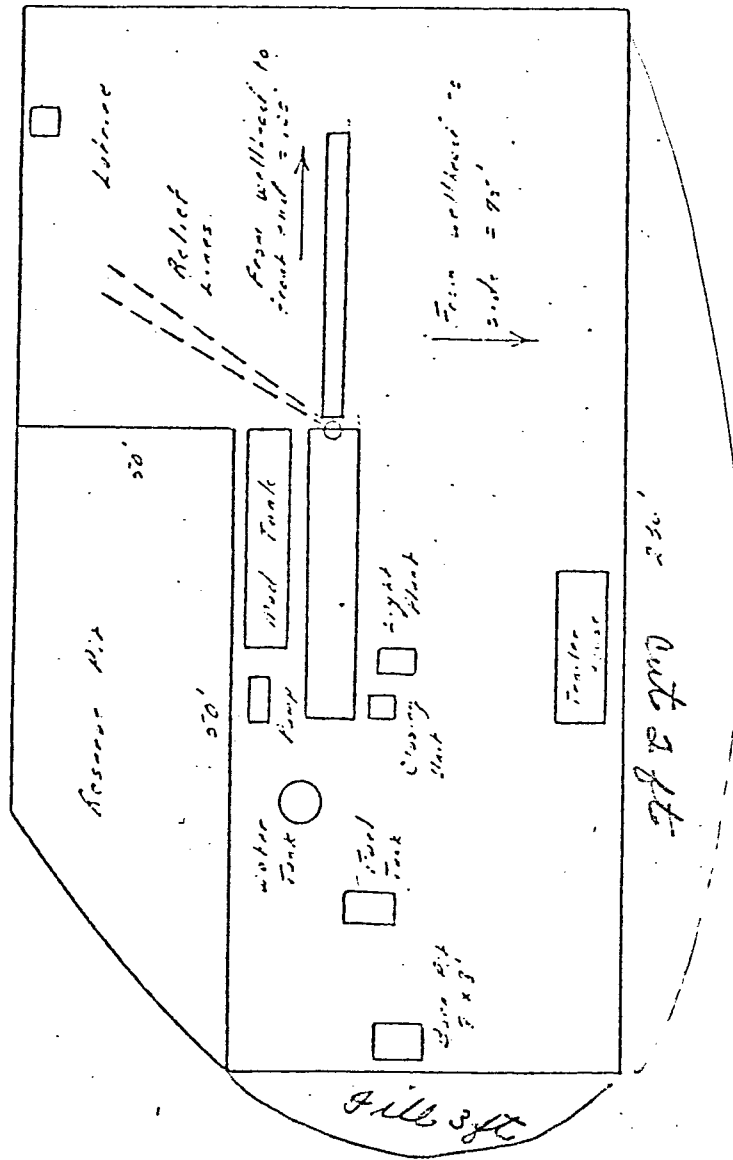
13. Certification

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 plan and terms and conditions under which it is approved.

12-11-80  
Date

  
William J. Fiant

Typical Location Plot for Pictured Rocks Well

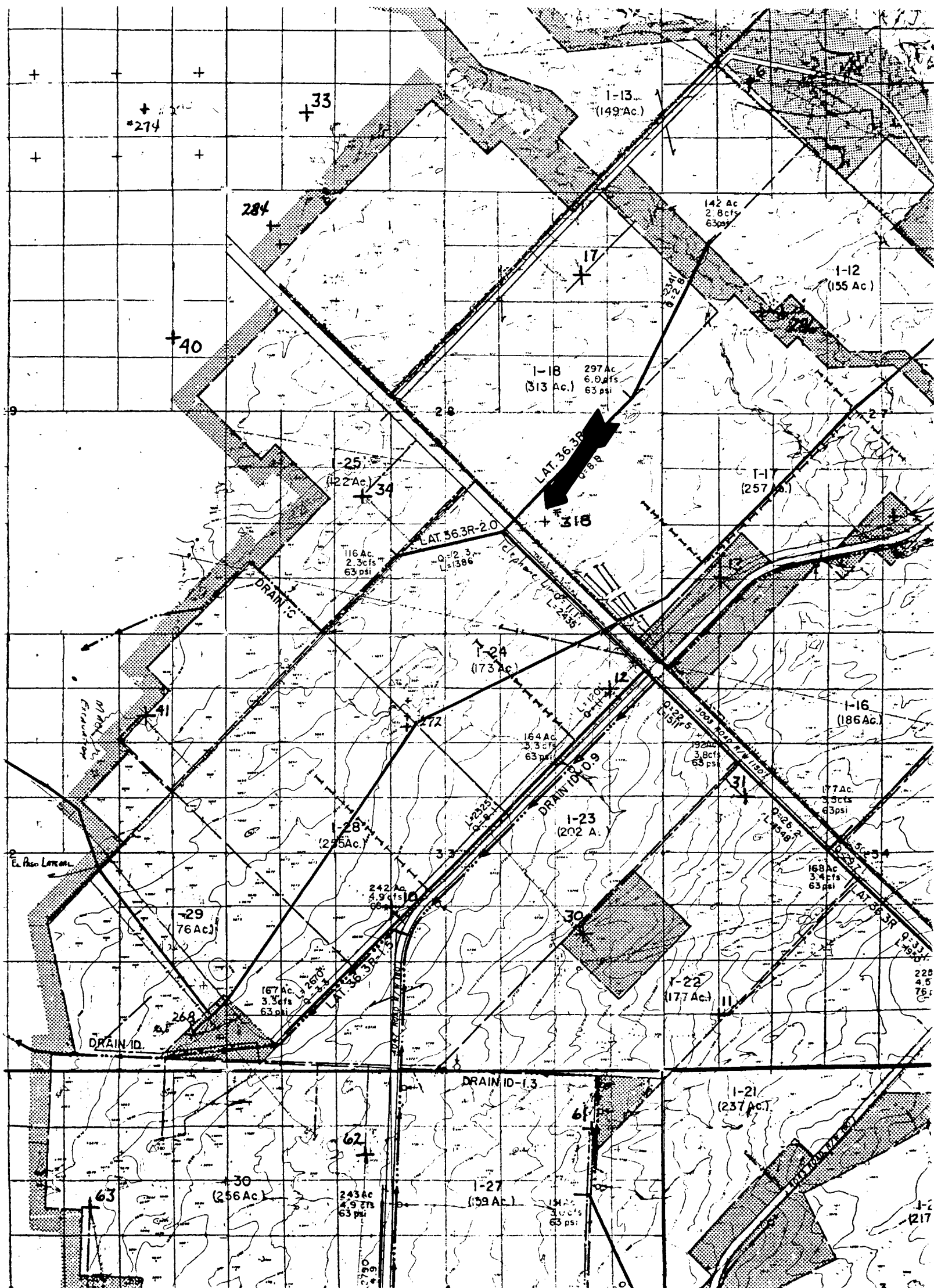




Vicinity Map for  
ENERGY RESERVES GROUP #318 GALLEGOS CANYON UNIT  
T1530' FEL Sec. 28-T26N-R12W  
NEW MEXICO

is in unplaned  
1/2 1/2 1/2

Shaded areas indicate area not cultivated but within project.





Well Name

Gallegos Canyon Unit #318

Location

SE 28-28-12

Formation

P.C.

We, the undersigned, have inspected this location and road.

U. S. Forest Service

Date

R. Henderson

9-12-80

Archaeologist

Date

E. J. Maer

9-12-80

Bureau of Indian Affairs Representative

Date

Bureau of Land Management Representative

Date

Steven Skofon

9-12-80

U. S. Geological Survey Representative - AGREES

Date

TO THE FOOTAGE LOCATION OF THIS WELL.

REASON:

Seed Mixture:

Equipment Color:

Road and Row: (Same) or (Separate)

Remarks: