

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-045-24005

## 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 1620' FSL &amp; 900' FEL (NE/SE)

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

Approx. 4 miles east of Farmington, NM

## 15. DISTANCE FROM PROPOSED\*

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

## 16. NO. OF ACRES IN LEASE

Unitized

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

3,000'

## 19. PROPOSED DEPTH

1700'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5522 GR (Ungraded)

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

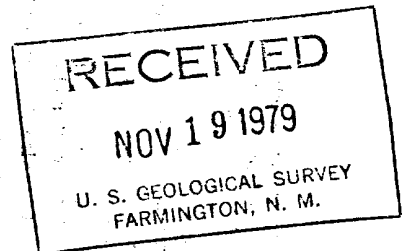
Nov-Dec 1979

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/2"	8-5/8"	24#	120'	Cmt to surface
6 3/4"	4 1/2"	9.5 #	1700'	Cmt to surface

Energy Reserves Group, Inc. proposes to drill the above referenced well with rotary tools from surface to T.D. The anticipated zone of completion is the Pictured Cliffs Formation @ 1400' - 1700'.

Gas is dedicated to the 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.

24.

SIGNED

TITLE Field Services Administ DATE 11-13-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NMOC

\*See Instructions On Reverse Side

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-107  
Revised 10-1-78

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

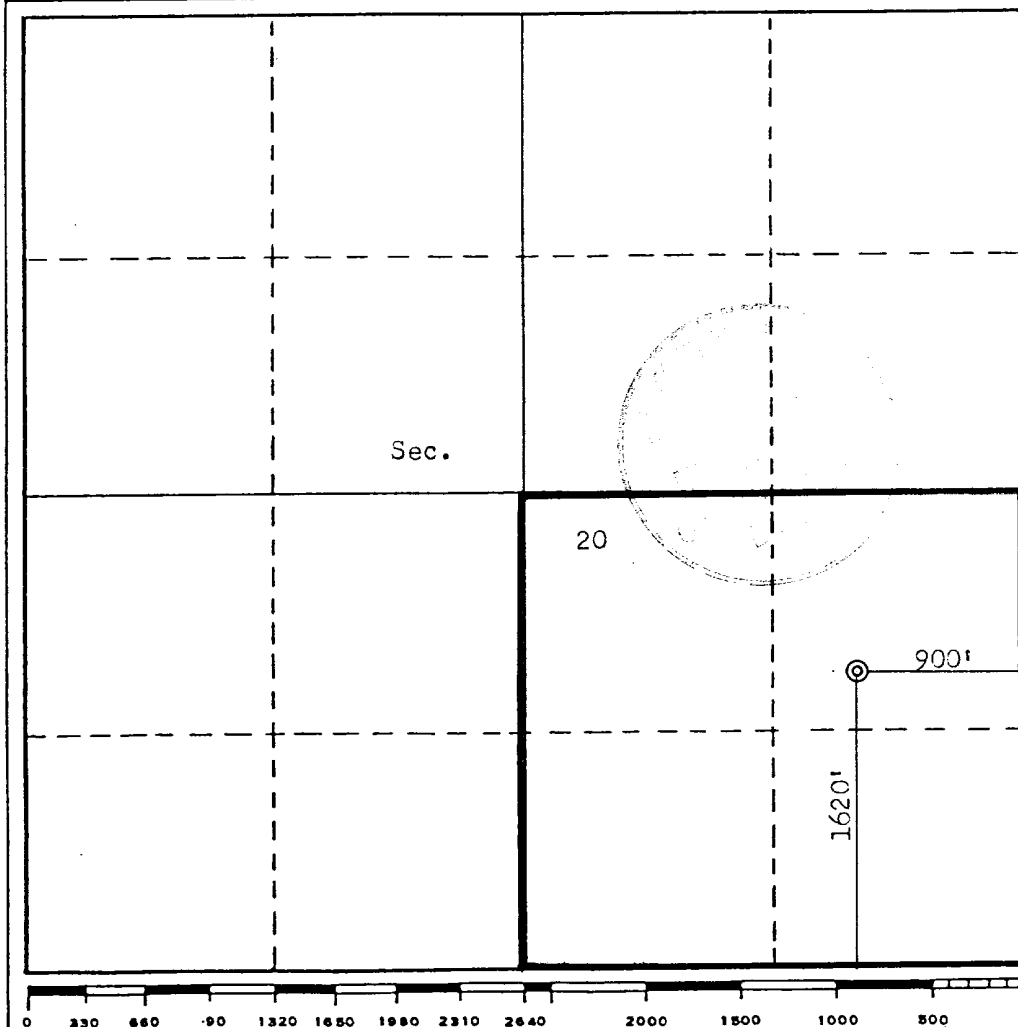
Operator ENERGY RESERVES GROUP			Lease GALLEGOS CANYON UNIT		Well No. 301
Unit Letter I	Section 20	Township 29N	Range 12W	County San Juan	
Actual Footage Location of Well: 1620 feet from the South line and 900 feet from the East line					
Ground Level Elev. 5522	Producing Formation Pictured Cliffs		Pool WEST KUTZ PICTURED CLIFF	Dedicated Acreage: 160 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.



## CERTIFICATION

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

Name

Position

FIELD SERVICES ADMINISTRATOR

Company

ENERGY RESERVES GROUP, INC.

Date

11-13-79

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

October 13, 1979

Registered Professional Engineer  
and/or Land Surveyor of

Fred B. Kerr, Jr.

Certificate No.

3955

F. B. KERR, JR.

Supplemental to Form 9-331C

1. The geologic name of the surface formation.

*Nacimiento*

2. The estimated tops of important geologic markers.

<i>Kirtland</i>	<i>200'</i>
<i>Fruitland</i>	<i>1000'</i>
<i>Pictured Cliffs</i>	<i>1400'</i>
<i>T.D.</i>	<i>1700'</i>

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

*The Pictured Cliffs Formation @ 1400' - 1700' 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# @ 120'-200' Cmt to surface*

*4½" 9.5# @ 1700' Cmt to 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.

*Pressure control equipment to consist of an 8" hydraulically operated double ram BOP series 900, 3000#. The BOP will be pressure 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.

*Well is to be drilled with gel mud plus required additives for hole conditions and formations to be drilled. Normally about 25 sx. of gel will be on location at one time.*

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.

*Kelly cock stop for 3½" drill pipe, and a full opening floor valve to stab into the drill pipe*

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

No coring is planned, no DST's are planned. Logs will probably be IES only. Nitrogen-water (foam) fracing consisting of approximately 20,000 gal. of 70% quality foam with 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.

No abnormal pressures or temperatures are anticipated. H<sub>2</sub>S is not a potential problem in the 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 can be obtained. It is anticipated it will take 3-4 days to drill and log this well.

MULTI-POINT SURFACE USE PLAN

1. EXISTING ROADS

Go east from Farmington 4 miles, turn North for approx 3/8 mile.

2. PLANNED ACCESS ROADS

Approx. 1/4 mile of new access road will be required.

3. LOCATION OF EXISTING WELLS

See attachments

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

A. (1) None anticipated

(2) A separator may be required if well produces fluid.

(3) N.A.

(4) If the well is a producer, El Paso Natural Gas Co. will install gathering line under a right-of-way permit.

(5) N.A.

(6) N.A.

B. If the well is productive, all facilities will be within the disturbed area. A small pit (20'x20') may be required if any water is produced. The pit will be fenced w/sheep wire to protect livestock and wildlife.

C. If the well is productive, the reserve pit will be fenced and allowed to dry up. As soon as it is dry, it will be filled and the area restored to its original contour. All trash and debris will be removed.

If the well is dry, the pit will be fenced and allowed to dry. The location and access road will be recontoured and reseeded as per BLM specifications.

5. LOCATION AND TYPE OF WATER SUPPLY

Water will be hauled by truck, probably from the San Juan River.

6. SOURCE OF CONSTRUCTION MATERIALS

None anticipated.

7. METHODS FOR HANDLING WASTE DISPOSAL

(1&2) All cuttings and drilling fluids will be contained in the reserve pit.

(3) Produced fluids, if any, will be contained in portable tanks, unless it is good water which will be directed into the pit and allowed to evaporate or soak into the ground.

(4) A portable toilet will be used during drilling and completion operations.

(5) All trash will be buried in a small trash pit along side of the reserve pit. (6) See item 4.C.

8. ANCILLARY FACILITIES

None required.

9. WELL SITE LAYOUT

(1) See attachment

(2) See attachment

(3) See attachment

(4) It is not planned to line any pits

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 area will be recontoured to its original contour and reseeded as per BLM's recommendations. It is planned to commence rehabilitation as soon as the pit has dried and weather permits.

11. OTHER INFORMATION

(1) The area is generally rolling hills near the well site. The soil is composed mostly of sand with only sparse vegetation. Sage brush, cactus and assorted native grasses. Wildlife consists of rodents and birds.

(2) The surface is public land and is not presently used for any activity, ie: grazing, recreation, etc.

(3) The San Juan River is approx. 1/2 mile south of the proposed well.

There was no evidence of any historical archaeological or cultural sites in the area to be disturbed.

CERTIFICATION ATTACHED.

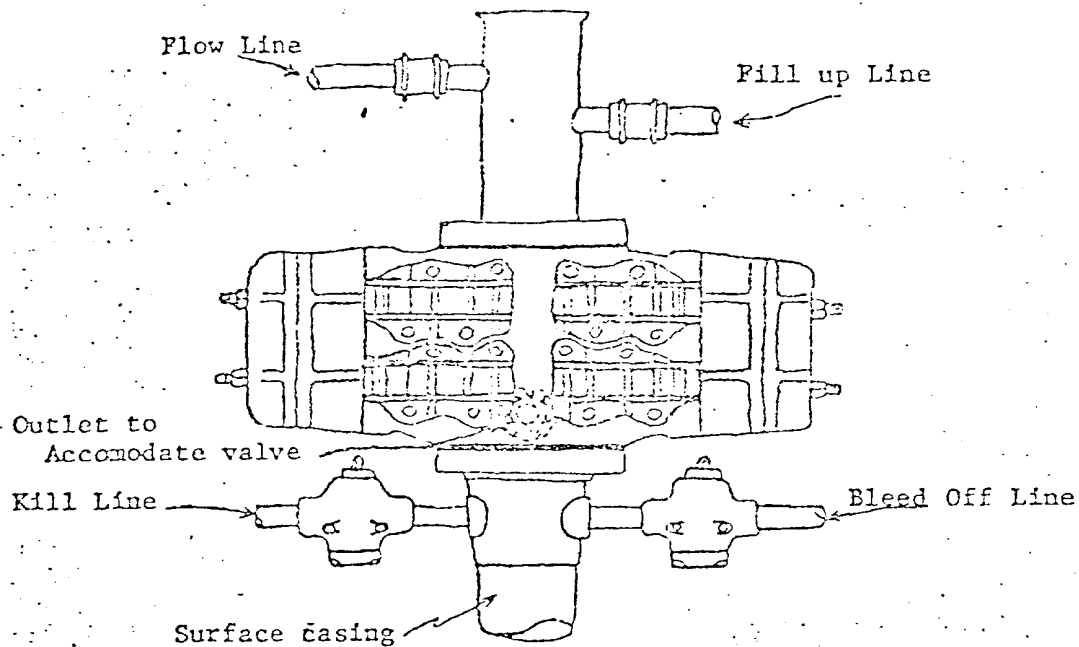
CERTIFICATION

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 \_\_\_\_\_

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

9-13-79  
Date

William J. Ryan  
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.

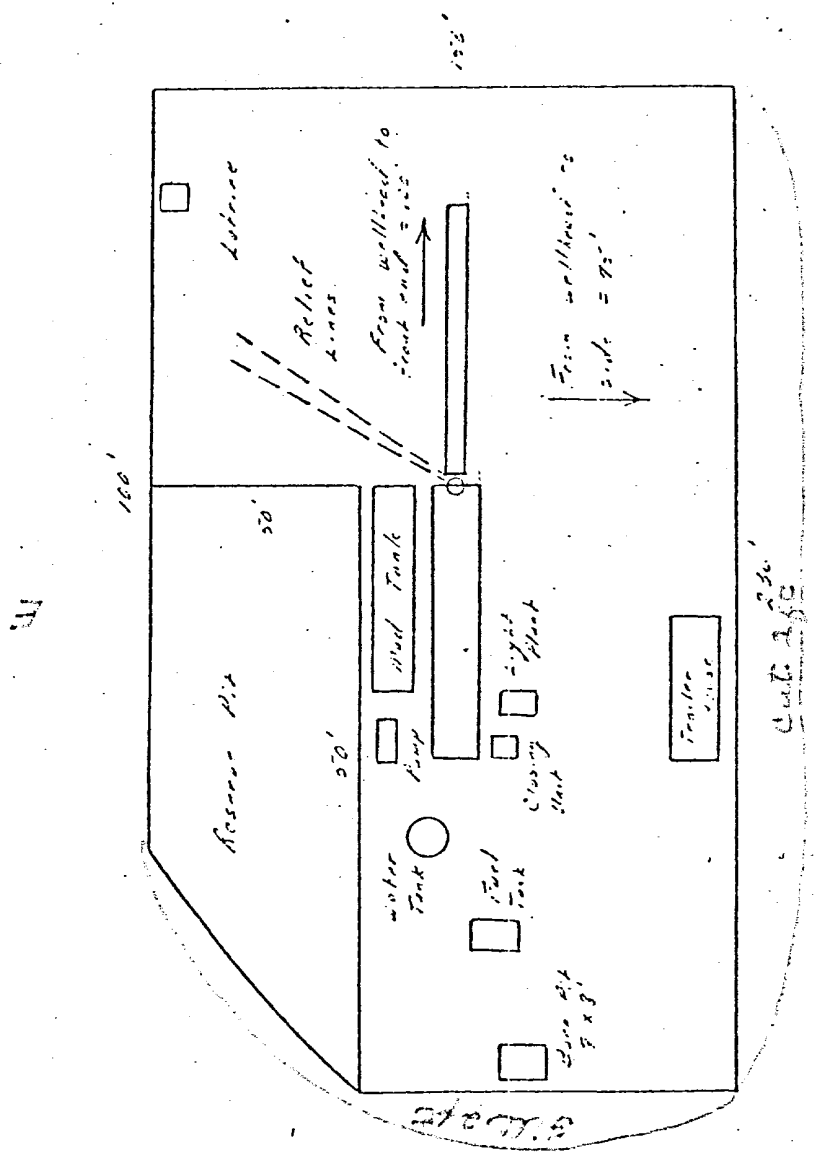
Blowout preventer closing unit is Kookey 30 gallon accumulator unit.

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.

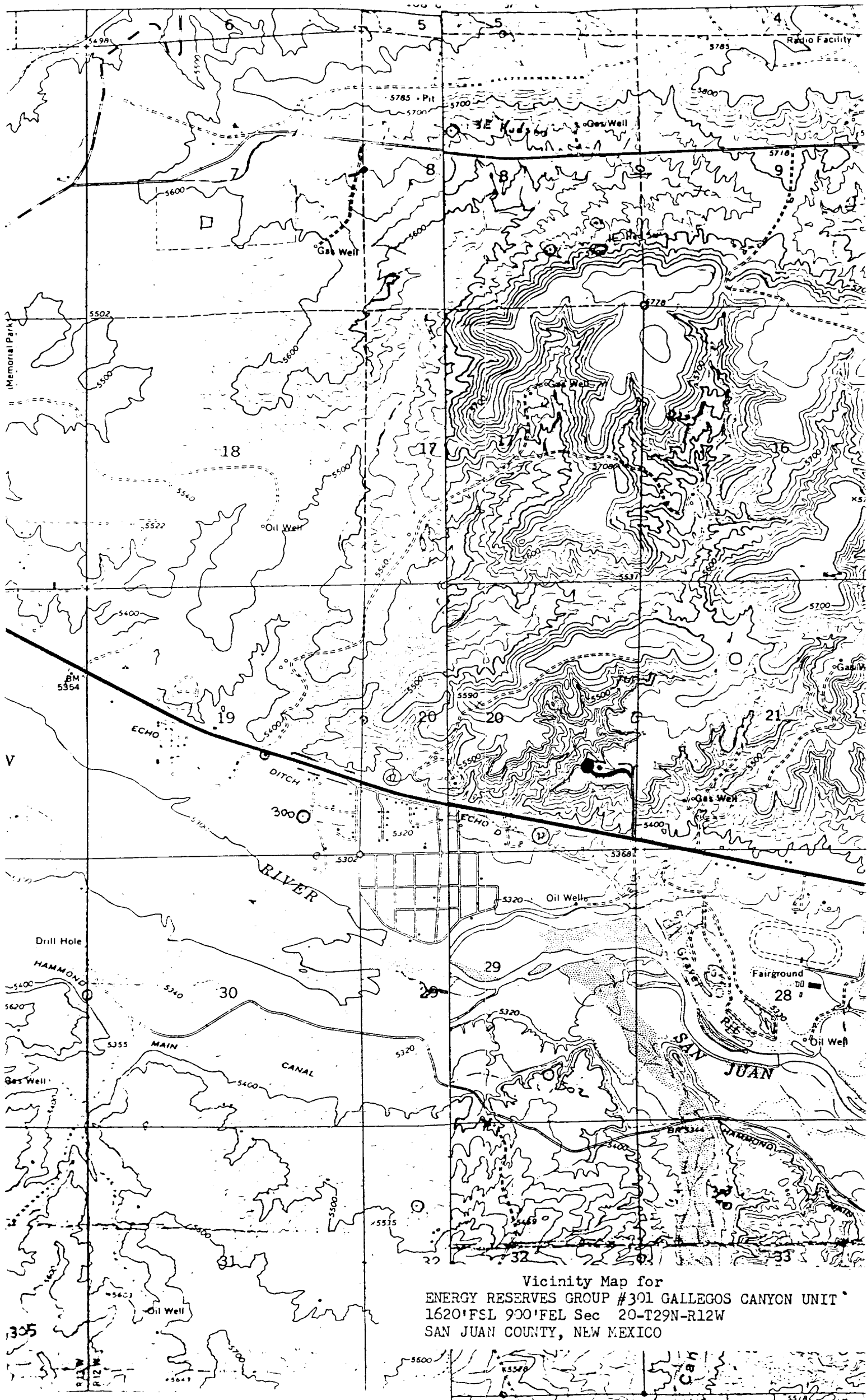
Walden Canyon well in 301

Typical location Plot for Pictured Wells Well



Scale: 1" = 25'





Vicinity Map for  
 ENERGY RESERVES GROUP #301 GALLEGOS CANYON UNIT  
 1620'FSL 900'FEL Sec 20-T29N-R12W  
 SAN JUAN COUNTY, NEW MEXICO

Well Name Gallegos Canyon Unit #301  
Location SE 20-29-12  
Formation P.C.

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

U. S. Forest Service  
D. J. Ford  
Archaeologist

Date  
10/16/79  
Date

Bureau of Indian Affairs Representative  
Bob Mat  
Bureau of Land Management Representative

Date  
10/16/79  
Date

A. Stump  
U. S. Geological Survey Representative

10/16/79  
Date

Seed Mixture: II

Equipment Color: BROWN

Road and Row: (Same) or (Separate) ?

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_