

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-076-03822

5. LEASE DESIGNATION AND SERIAL NO.

SF-078109

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

Gallegos Canyon Unit

8. FARM OR LEASE NAME

Gallegos Canyon Unit

9. WELL NO.

291

10. FIELD AND POOL, OR WILDCAT

West Kutz Pictured Cliffs

11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

Section 23, T28N-R12W

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

## 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

Box 3280 Casper, Wyoming 82602

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

J At proposed prod. zone 1850' FSL &amp; 1830' FEL (NW/SE)

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

6 miles east &amp; 3 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)18. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

1500'

16. NO. OF ACRES IN LEASE

Unitized

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160

19. PROPOSED DEPTH

1800'

20. ROTARY OR CABLE TOOLS

Rotary

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

5660' Gr. (ungraded)

22. APPROX. DATE WORK WILL START\*

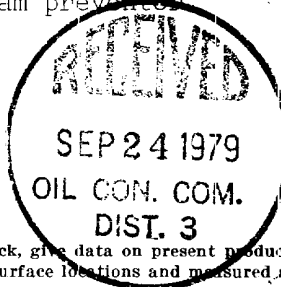
Sept-Oct, 1979

## 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#	120'-200'	Cement to surface
6 3/4"	4 1/2"	9.5#	1800'	250 sx.

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 @ 1550'-1800'. No DST's are planned. Copies of all logs run will be furnished upon completion of the well. It is planned to drill a 12 1/4" hole 120'-200' maximum, set 8 5/8", 24# casing to that depth. Drill 6 3/4" hole to T.D. and set 4 1/2", 9.5# casing. Cement to surface if the Ojo Alamo Formation has not been cemented off by the surface casing. BOP will consist of an 8" series 900, 3000# dual ram preventer.

gas dedicated



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

September 14, 1979

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

NYMOC

\*See Instructions On Reverse Side

## Instructions

**General:** This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

**Item 1:** If the proposal is to return to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 14:** Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

**Items 15 and 18:** If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

**Item 22:** Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

## OIL CONSERVATION DIVISION

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088  
SANTA FE, NEW MEXICO 87501Form C-102  
Revised 10-1-78

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

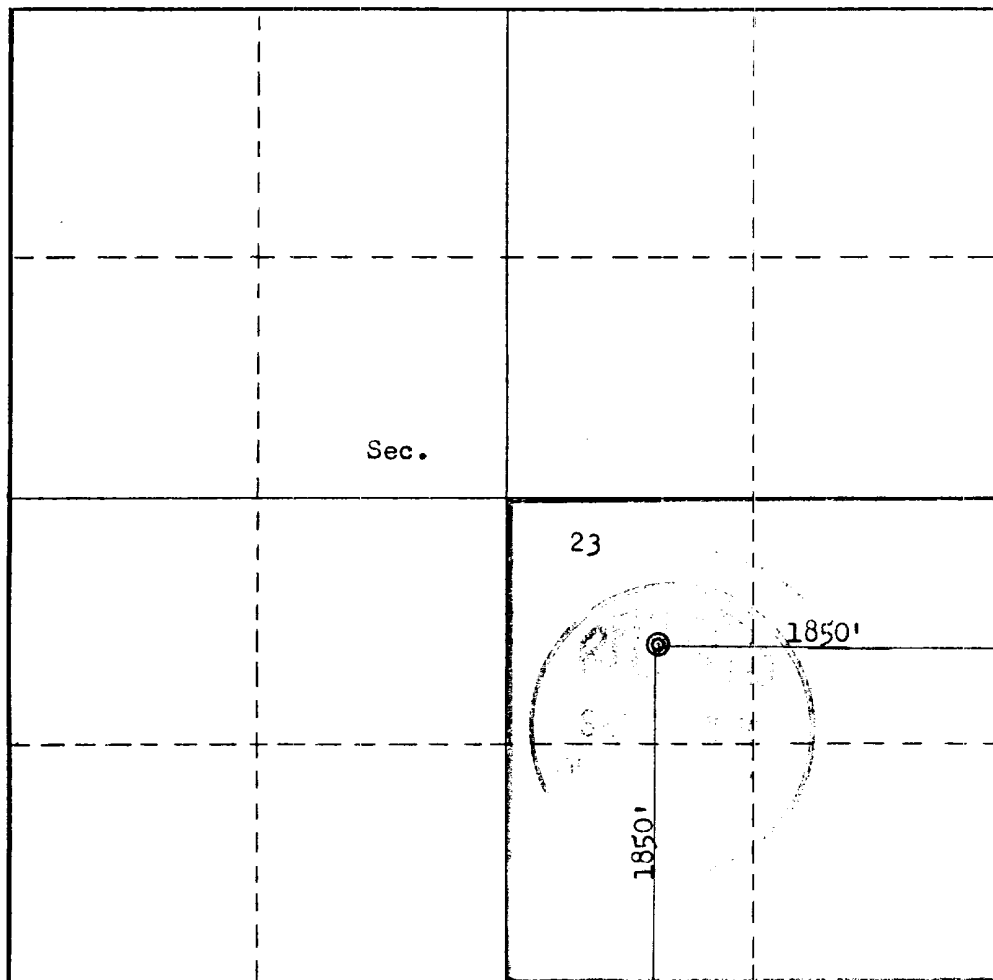
Operator <b>ENERGY RESERVES GROUP</b>			Lease <b>GALLEGOS CANYON UNIT</b>		Well No. <b>291</b>
Unit Letter <b>J</b>	Section <b>23</b>	Township <b>28N</b>	Range <b>12W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1850</b> feet from the <b>South</b> line and <b>1850</b> feet from the <b>East</b> line					
Ground Level Elev. <b>5760</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.



## CERTIFICATION

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

Name  
*William J. Kerr*  
Position  
**Field Services Administrator**  
Company  
**Energy Reserves Group, Inc.**  
Date  
**September 10, 1979**

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  
**August 11, 1979**  
Registered Professional Engineer  
and/or Land Surveyor  
*Fred B. Kerr Jr.*  
**Fred B. Kerr Jr.**  
Certificate No.  
**3950**

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

Supplemental to Form 9-331C

1. The geologic name of the surface formation.

*Ojo Alamo*

2. The estimated tops of important geologic markers.

<i>Fruitland</i>	<i>1250'</i>
<i>Coal Marker</i>	<i>1350'</i>
<i>Pictured Cliffs</i>	<i>1550' - 1800'</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 @ 1550'-1800' 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' cement to surface*

*4 1/2" 9.5# @1800' cement with 250 sx.*

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 6½ miles, turn south for approximately 2 miles, turn west 1½ miles, go south one mile.

### 2. PLANNED ACCESS ROADS

Approximately 300' of new road will be required

### 3. LOCATION OF EXISTING WELLS

#### 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 Company will install gathering lines under 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 with 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 recommendations.

### 5. LOCATION AND TYPE OF WATER SUPPLY

Water will be hauled by truck, probably from well 267 injection facilities or Hammond Ditch.

### 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 fluid, 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

ENERGY RESERVES GROUP, INC.

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 has been policed up.

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 appx. 2½ miles north 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 Fritz~~  
and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

9-14-79  
Date

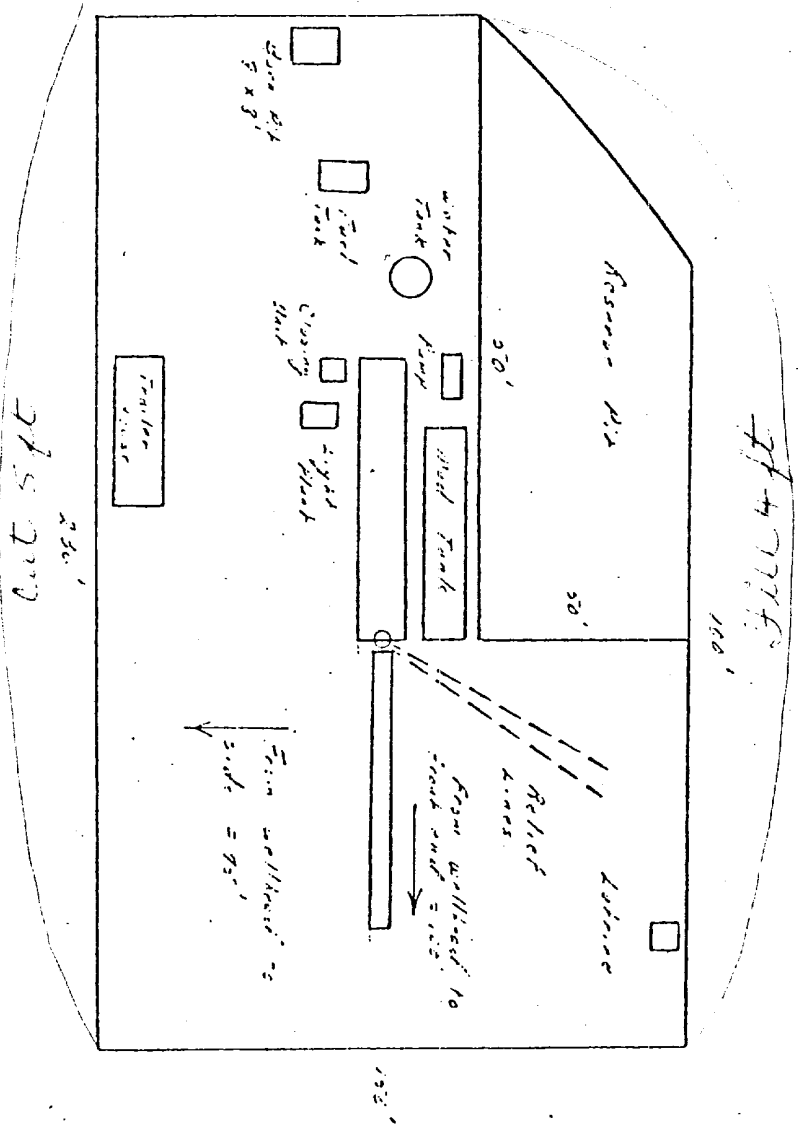
William J. Ford  
Name and Title  
**FIELD SERVICES ADMINISTRATOR**



# Gallegos Canyon Unit #291

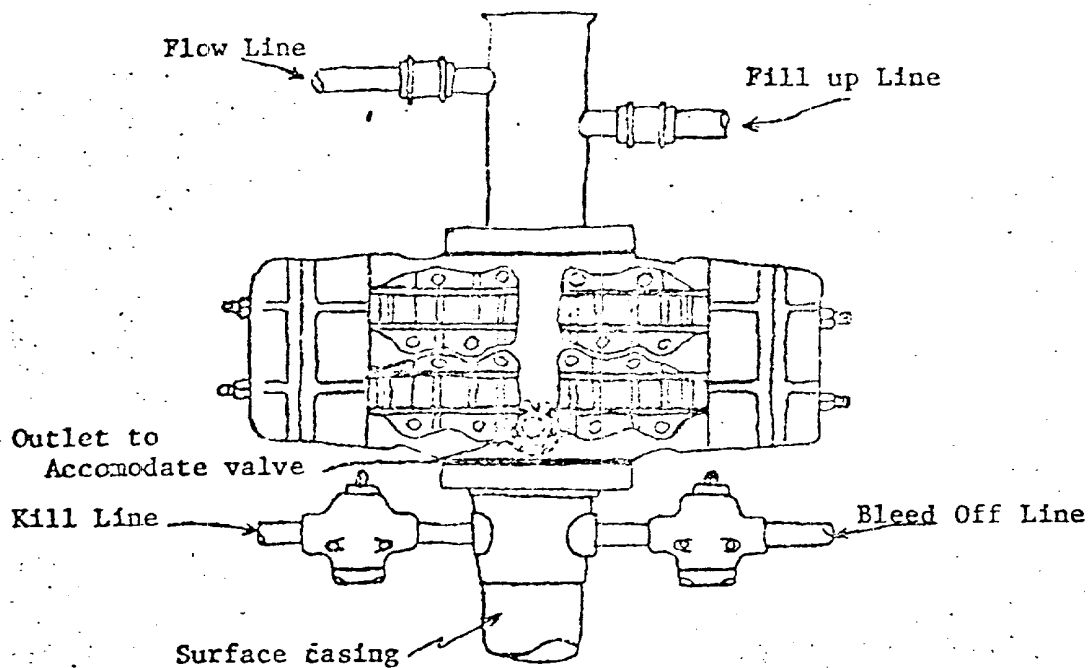
Typical Location Plt for Richard Smith's Well

S



Scale 1" = 20'

24

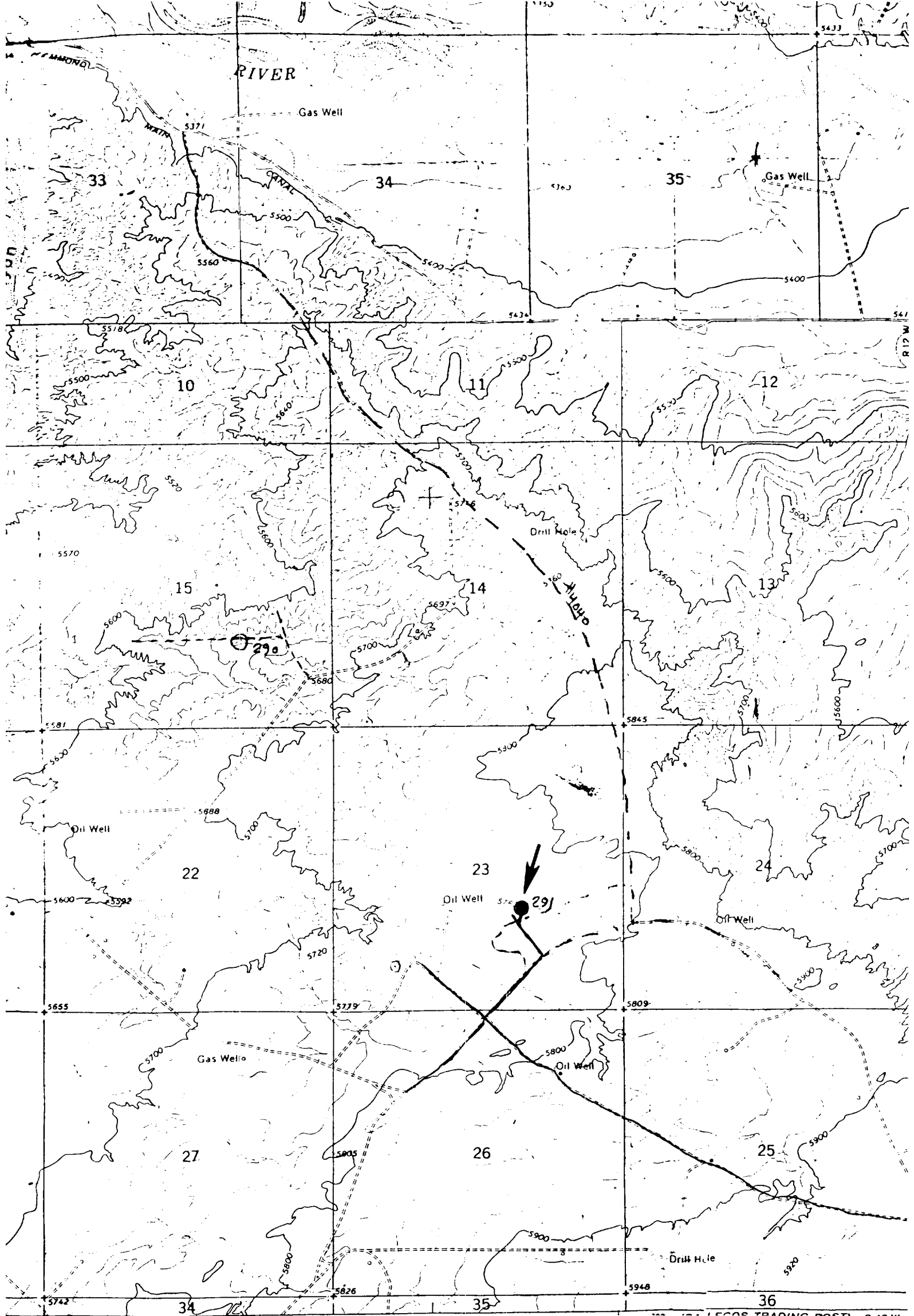


Blowout preventer is Shaffer double hydraulic equipped with drill pipe rams in the top and blind rams in the bottom.

Blowout preventer closing unit is Koomey 30 gallon accumulator unit.

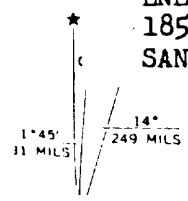
When choke manifold is used, it will be installed downstream from bleed off valve.

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



Geological Survey  
Bureau of Reclamation  
from aerial  
surveys of the  
made by USGS 1965  
datum  
ordinate system.

Vicinity Map for  
ENERGY RESERVES GROUP #291 GALLEGOS CANYON UNIT  
1850' FSL 1850' FEL Sec 23-T28N-R12W  
SAN JUAN COUNTY, NEW MEXICO



SE  
24000  
4000 5000

CONTOUR INTERVAL 20 FEET  
DOTTED LINES REPRESENT 10-FOOT CONTOURS  
DATUM IS MEAN SEA LEVEL

Well Name Gallegos Canyon Unit # 291  
Location SE 23-28-12  
Formation P.C.

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

U. S. Forest Service  
DANIEL FORD  
Archaeologist

Date  
9/5/79  
Date

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

Date  
9/5/79  
Date

Bob Mader  
U. S. Geological Survey Representative

9/5/79  
Date

Seed Mixture: 2

Equipment Color: Brown

Road and Row: (Same) or (Separate)

Remarks: