Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-045-23652

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
O
At proposed prod. zone 870' FSL & 1730' FEL (SW/SE)

5. LEASE DESIGNATION AND SERIAL NO.
SF-078106

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
Gallegos Canyon Unit

8. FARM OR LEASE NAME

9. WELL NO.
278

10. FIELD AND POOL, OR WILDCAT
West
Kutz Pictured Cliffs

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 17, T28N-R12W

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
4½ miles south & 4 miles east of Farmington, New Mexico

12. COUNTY OR PARISH
San Juan

13. STATE
New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
NA

16. NO. OF ACRES IN LEASE
Unitized

17. NO. OF ACRES ASSIGNED TO THIS WELL
160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
2600

19. PROPOSED DEPTH
1450'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5589 (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'	cement to surface
6 1/4"	4½"	9.5#	1600'	100sx

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'-1600'. No cores or DST's are planned. Copies of all logs run will be furnished upon completion of the well.

gas is dedicated

1979
OIL CON. COM.
DIST. 3

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 June 28, 1979

(This space for Federal or State office use)

PERMIT NO. ____ APPROVAL DATE ____

APPROVED BY ____ TITLE ____ DATE ____
CONDITIONS OF APPROVAL, IF ANY:

ok Frank

NMOCC

*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 Energy Reserves Group, Inc.		Lease SF-078106		Well No. 278
Unit Letter O	Section 17	Township 28 North	Range 12 West	County San Juan
Actual Footage Location of Well: 870 feet from the South line and 1730 feet from the East line				
Ground Level Elev. 5589	Producing Formation Pictured Cliffs	Pool Gallegos Canyon Unit		Dedicated Acreage: 160 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

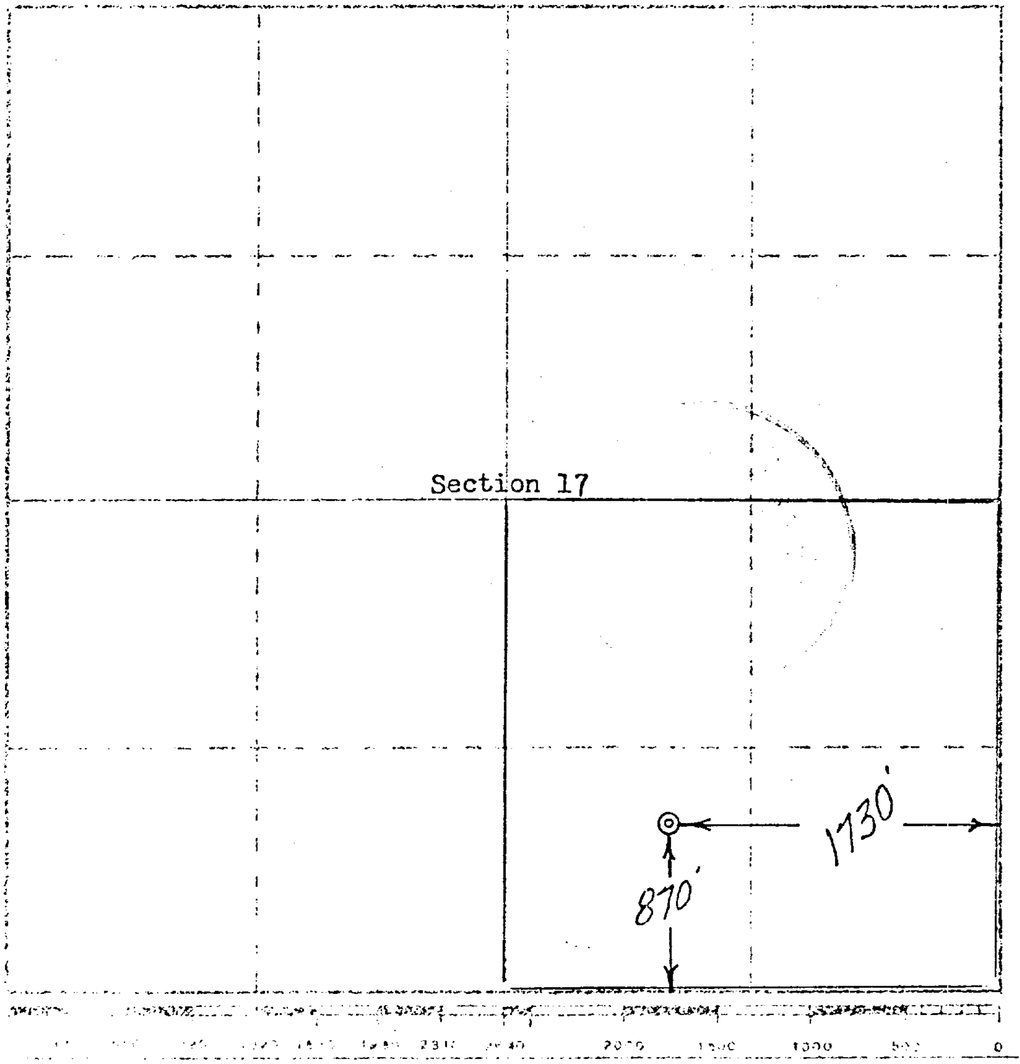
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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
June 28, 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
June 13, 1979
Registered Professional Engineer and/or Land Surveyor

L. POTEET
3084

Certificate No.
3084

SUPPLEMENTAL TO FORM 9-331C

1. The geologic name of the surface formation.

   Nacimiento

2. The estimated tops of important geologic markers.

Fruitland	1000'
Coal Marker	1350'
Pictured Cliffs "A"	1400'
Pictured Cliffs "B"	1450'
T.D.	1600'

3. The estimated depths at which anticipated water, oil, gas, and 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 drawing 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 to be used will consist of: a sub on the floor with a full opening valve with 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 approximately 20,000 gals. 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.

   An abnormal pressure high volume gas zone might be encountered between 1000'-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 and completion operations can be completed in 10 to 12 days.

MULTI-POINT SURFACE USE PLAN

1. EXISTING ROADS

A. See attached topo map
B. Approximately 4½ miles south and 4 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 within ½ mile of the location. This road will not require any improvements to allow for rig traffic.

2. PLANNED ACCESS ROADS

Approximately ½ mile of new access road will be required. Maximum grade will be less than 10-12%. No turn outs are necessary. Culverts will be installed as per BIA recommendations. No gates, fence cuts, or cattleguards will be required. The road will require two (2) switch backs and considerable side hill cuts.

3. LOCATION OF EXISTING WELLS

See attached topo 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 BIA 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 reserve 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 future operations will be recontoured and reseeded as per BIA recommendations.

11. OTHER INFORMATION

The area is generally high desert type country with high erosion potential. Most areas are deeply 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 Navajo Tribal under Administration of the Bureau of Indian 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 Archaeologica Inspection has been scheduled with the San Juan Museum.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE

Bill Fiant, T.C. Durham or Roscoe Gillespie will be responsible for assuring compliance with approved surface use and operations plan.

BILL FIANT	T.C. DURHAM	R. GILLESPIE
Box 3280	Box 977	Box 3280
Casper, Wyoming	Farmington, New Mexico	Casper, Wyoming
307-265-7331 Office	505-327-1639 Office	307-265-7331 Office
307-265-2529 Home	505-325-7978 Home	307-234-0745 Home
	505-325-1873 #539 Mobil	307-265-4541 Mobil

13. CERTIFICATION

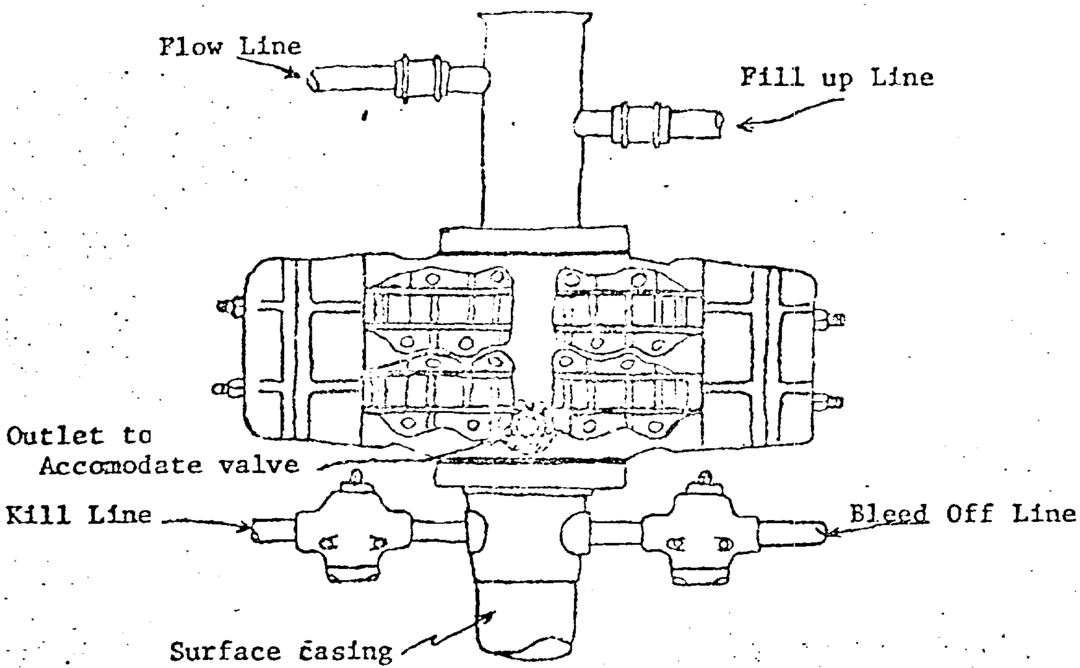
See attached

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

6-28-79
Date

William J [illegible]
Name and Title
F. SERVICES ADM.

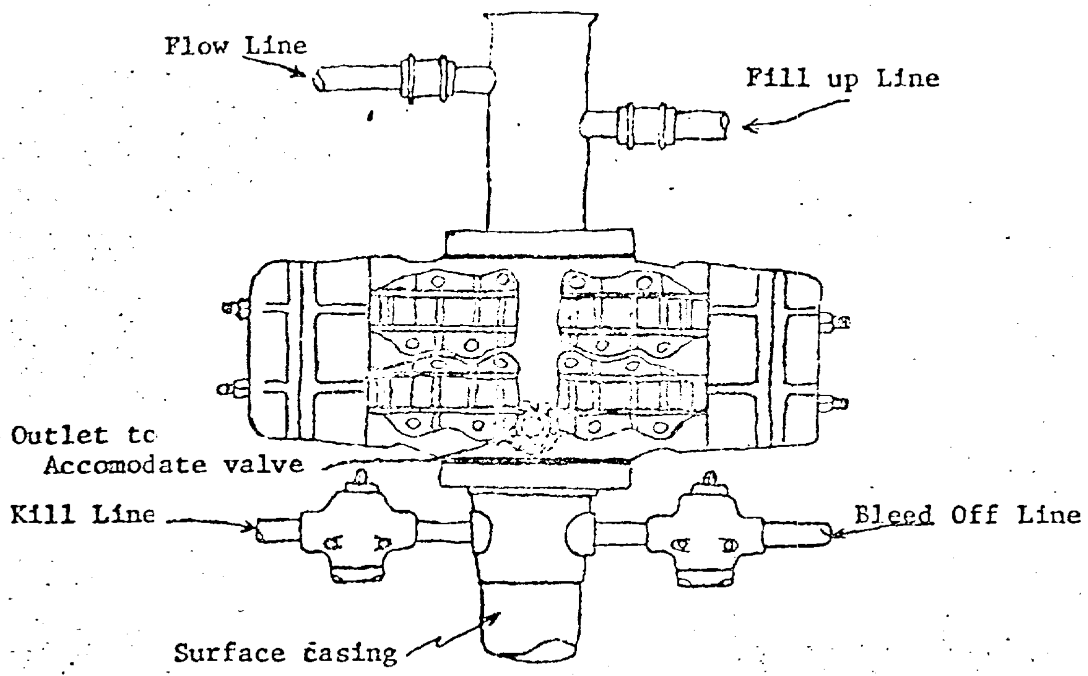


Blowout preventer is Shaffer double hydraulic equipped with drill pipe rams in the top and blind rams in the bottom.

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.



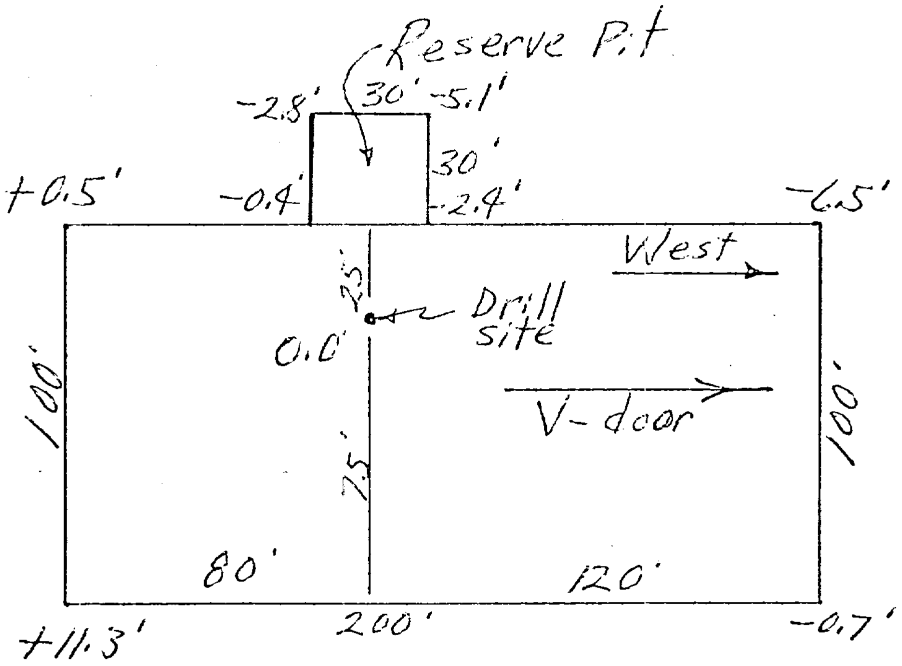
Blowout preventer is Shaffer double hydraulic equipped with drill pipe rams in the top and blind rams in the bottom.

Blowout preventer closing unit is Koomey 30 gallon accumulator unit.

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

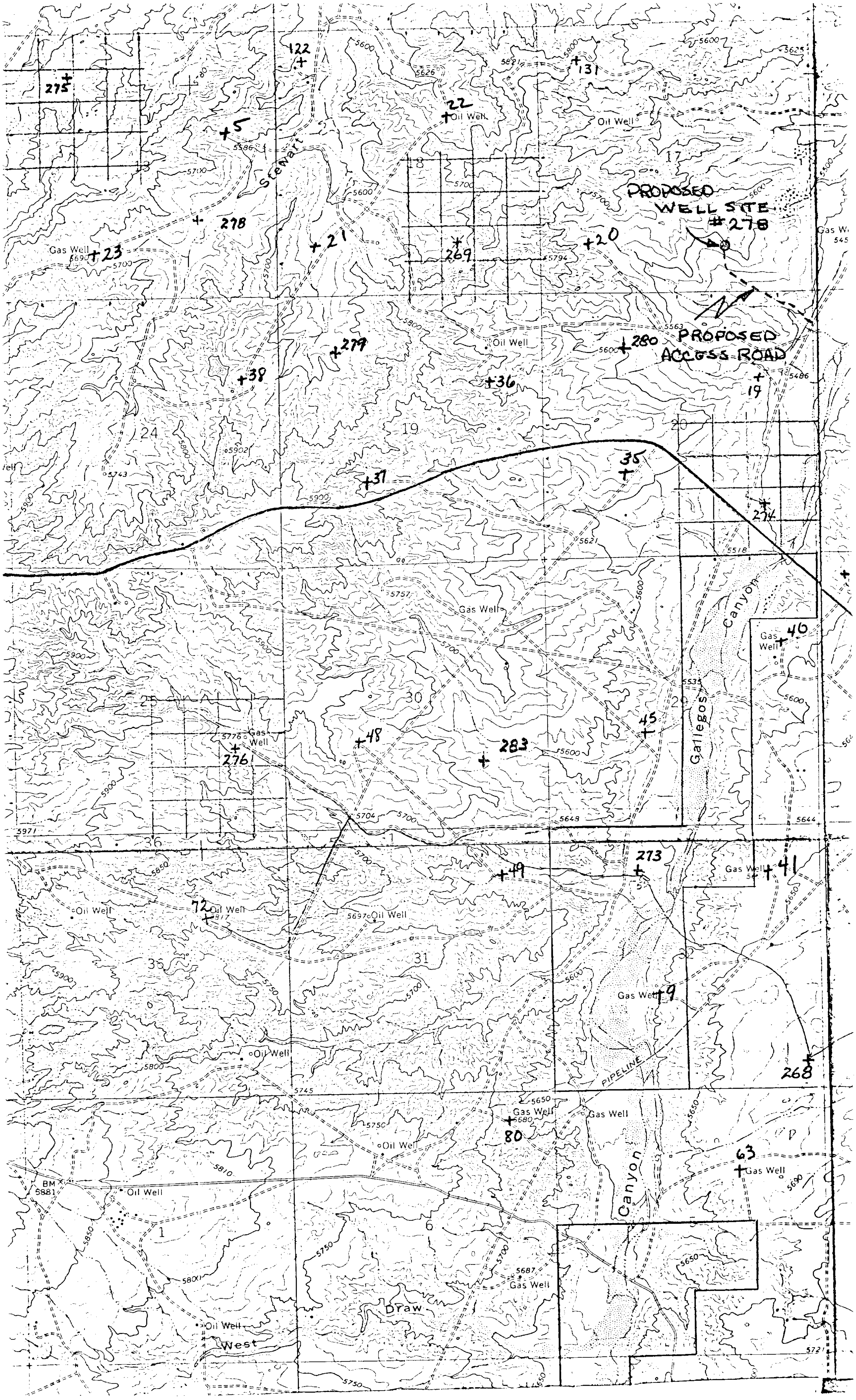
Kill line or bleed off line may be installed at flanged opening in blowout preventer.

Energy Reserves Group, Inc.
GCU-PC # 278
870' FS & 1730' FE Sec 17-28N-12W
San Juan County, New Mexico



E. L. POTEET
REGISTERED
PROFESSIONAL ENGINEER & LAND SURVEYOR
3084
STATE OF NEW MEXICO

June 14, 1979


PROPOSED WELL SITE #278
PROPOSED ACCESS ROAD
275
122
131
22
Oil Well
+5
5586
Stewart
13
17
18
278
+23
Gas Well
5690
+21
269
5794
+20
Gas Well
280
5600
5563
Oil Well
+279
+38
+36
19
19
5486
24
5902
5743
20
35
+37
5900
274
5621
5518
Canyon
5757
Gas Well
46
Gas Well
30
5535
29
25
Gas Well
5776
276
+48
283
5600
45
Gallegos
5971
36
5704
5648
5644
1
273
+49
Gas Well
+41
72
Oil Well
Oil Well
5697 Oil Well
31
35
Gas Well
9
PIPELINE
Oil Well
268
5745
5650
Gas Well
5680
80
Gas Well
Oil Well
5750
Canyon
63
Gas Well
5810
BM 5881
Oil Well
1
6
5687
Gas Well
Draw
Oil Well
West
5750
5721