Budget Bureau No. 42-R1425.

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

30 - 095 - 23603 5. LI ASE DESIGNATION AND SURIAL NO. SF-078828

GEUL	OGICAL SURV	E. T			31 070020
APPLICATION FOR PERMIT	TO DRILL, I	DEEP	EN, OR PLUG B	ACK	6. IF INDIAN, ALLOTTEE OR THIRE NAME
DRILL (X) b. TYPE OF WELL	DEEPEN		PLUG BAC	:к 🗆	7. UNIT AGREEMENT NAME Gallegos Canyon Unit
OIL GAS WELL OTHER		81 Z0	INGIE MULTIP	T.E	8. FARM OR LEASE NAME
2. NAME OF OPERATOR Energy Reserves Group, Inc. 3. ADDRESS OF OPERATOR	•				9. WELL NO. 279
Box 3280 Casper, Wyoming	82602				10. FIELE THE EOPH OR WILDER
4. LOCATION OF WELL (Report location clearly a At surface		th any S	State requirements.*)		Pictured Cliffs &
At proposed prod. zone 1550' FNL & 990' FWL (SW NW)					11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 23, T28N-R12W
4. DISTANCE IN MILES AND LIBECTION FROM N	EAREST TOWN OR POS	T OFFIC	E •		12. COUNTY OF PARISH 13. STATE
Approx. 4 3/4 miles south				Mex.	San Juan New Mexico
LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	NA	U	Initized	160	HIS WELL
18. DISTANCE FROM PROPOSED LOCATION® TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	2600'	ì	800'	_	Cary
21. ELEVATIONS (Show whether DF, RT, GR, etc.)	2000	! -		1	22. APPROX. DATE WORK WILL START*
5767' Gr. (ungraded					July-August 1979
			O CEMENTING PROGRA	M	
9 7/811 711	WEIGHT PER F	тоот	SETTING DEPTH	50s>	QUANTITY OF CEMENT
$\frac{9}{6} \frac{7}{6} \frac{9}{1} \frac{7}{4} \frac{1}{2} \frac{11}{11}$	17# 9.5#		1800'	100s	
Energy Reserves Group, II tools from surface to T.I formation @ 1550'-1800'. be furnished upon comple	O. The antic No cores or	ipate DST'	d zone of compl s are planned.	etion Copies	is the Pictured Cliffs
n Arove space describe proposed program: tone. If proposal is to drill or deepen direction of the program, if any. 4. Signed	onally, give pertinen	t data o	on subsurface locations of	d measure	ductive zone and proposed new productive ed and true vertical depths. Give blowout
(This space for Federal of Stati-office use) PERMIT NO. APPROVED BY CONDITIONS OF APPROVAL, IF ANY:			APPROVAL DATE		

at Smil

NMBCC

*See Instructions On Reverse Side

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

		7(11 0241011044 10011 04 110	m the other countaines o	rine get dens		
Operator Energy	Reserves Gro	1	SF-07	88 28 Kan	well No.	
Unit Letter	Section 23	Township 28 North	Range 12 West	County San Juan	_	
Actual Footage Loc		20 101 01		Jeur Juan		
16 50	feet from the N	orth line and		thom the West	line	
Ground Level Elevi 5767	Producing For Picture	d Cliffs	Sallsass And	ION UNIT	Dedicated Acreage: Acres	
1. Outline th	e acreage dedica	ted to the subject well	by colored pencil	or hachure marks o	n 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 a	nswer is "yes," type of	consolidation	······································		
		owners and tract descri	ptions which have a	ctually been conso	lidated. (Use reverse side of	
	f necessary.) ble will be assign	ed to the well until all :	nterests have heen	consolidated (by a	ommunitization, unitization,	
	_			•	een approved by the Commis-	
sion.						
-)	1		CERTIFICATION	
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	6		1	1 1	by certify that the information con- I herein is true and complete to the	
1 ,	30		1	1 1	f my knowledge and belief.	
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	 			Name	00 11	
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	1		Į Į	Compan		
	1		!	Date	,,,	
		Section 23	1		7-79	
	1					
1	1		!	i i	eby certify that the well location	
]	i		1	1 1	on this plat was plotted from field of actual surveys made by me or	
	1		7	under	my supervision, and that the same	
	{ 			11 .	e and correct to the best of my edge and belief.	
	+	+			90:	
	1			Date Sur		
	1		1	1 1	d Professional Engineer	
	 		1	and L	and sorvexers, 64	
				Certifico		
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1. The geologic name of the surface formation.

Nacimiento

2. The estimated tops of important geologic markers.

Fruitland	12501
Coal Marker	1530'
Pictured Cliffs "A"	15501
Pictured Cliffs "B"	16201
T.D.	1800'

3. The estimated depths at which anticipated water, oil, gas, and other mineralbearing 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.

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7" k-55 17# used
4½" k-55 9.5# used
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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.

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 will consist of: a sub on the floor with a full opening valve w/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 w/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 1250' and 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 astimated that the drilling and completion operations can be completed in 10-12

MULTI-POINT SURFACE USE PLAN

1. EXISTING ROADS

- A. See attached topo map
- B. Approximately 4 3/4 miles south & 6 miles east of Farmington, New Mexico.
- C. See a tached topo map
- D. This is a development well
- E. See altached topo map
 - F. There is an existing road within 350' of the location. This road will not require any improvements to allow for rig traffic. Maintanence will be performed by Energy Reserves Group, Inc. and Amoco as needed.

2. PLANNED ACCESS ROADS

Approximately 350° of new access road will be required. Maximum grade will be less than 8%. No turn outs are necessary. Culverts will be installed as per BLM recommendations. No gates, fence cuts, or cattleguards will be required.

3. LOCATION OF EXISTING WELLS

See attached 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 BLM 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, any produced water 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

It is not planned to line any pit

10. PLANS FOR RESTORATION OF SURFACE

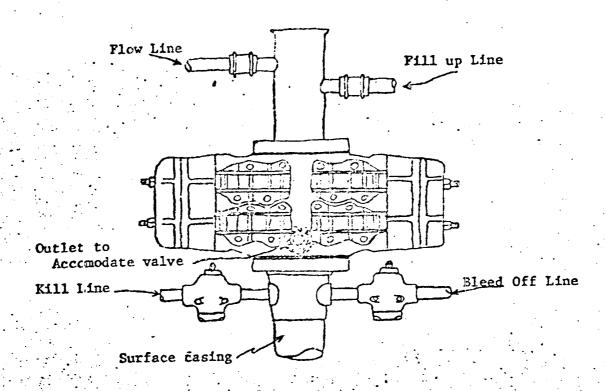
Upon completion of operations the pit will be fenced and allowed to dry before covering. The entire area will be policed up and all trash buried or burned. Any area not needed for further operations will be recontoured and reseeded as per BLM recommendations.

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 coasists of pinion and juniper trees with sage and other small scrub bushes, cactus and apported native grasses. Surface ownership is Public Lands under Administration of the be pau of Land Management.

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
Diag Cinc.
ith this nian and the country
which it is approved.
5-25-79 Warms and Title
Date
Field Services Administrator



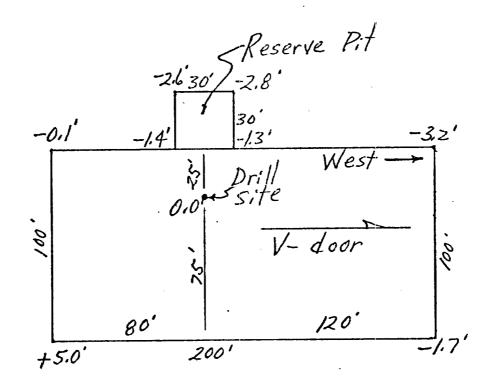
Blowout preventer is Shaffer double hydraulic equipped with drill pipe rams in the top and blind rams in the bottom.

Blowout preventer closing unit is 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 # 279
1650' FN & 990' FW SEC 23-28N-12W
San Juan County, New Mexico





May 18, 1979

