

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NOO-C-14-20-2978	
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo	
2. NAME OF OPERATOR Petroleum Energy, Inc		7. UNIT AGREEMENT NAME none	
3. ADDRESS OF OPERATOR Box 2121, Durango, Colorado 81301		8. FARM OR LEASE NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface SW NW Sec.33 1850 1850 N: 1120 1850 W		9. WELL NO. 33-21 Navajo 1-33	
At proposed prod. zone		10. FIELD AND POOL, OR WILDCAT WC Organ Rock	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 33-27N-19W		12. COUNTY OR PARISH San Juan	
13. STATE New Mexico		14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 14 miles Southwest of Shiprock, New Mexico	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 1120		16. NO. OF ACRES IN LEASE 1,920	
17. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. none		18. PROPOSED DEPTH 3500'	
19. ELEVATIONS (Show whether DF, RT, GR, etc.) 5781 GR		20. ROTARY OR CABLE TOOLS rotary	
21. APPROX. DATE WORK WILL START* July 28, 1980		22. APPROX. DATE WORK WILL START* July 28, 1980	

PROPOSED CASING AND CEMENTING PROGRAM				
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
13 3/4	8 5/8	23#	200	200 scks CIRCULATE
6 3/4	4 1/2	10.5#	3,500	200 scks

Lease NOO-C-14-20-2978 covers Sections 33,34,35, 27N-19W San Juan Cty, N.M.
Plan to open hole complete in the Organ Rock formation.

Compliance Officer and Grazing Lessors have executed "Consent of Use of Navajo Tribal Lands", copy attached.

MINING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

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 Jay Magness TITLE agent DATE July 16, 1980
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
APPROVED BY Bruce W. Ramsey TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY: 3.0
ok Frank

NMOCG

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

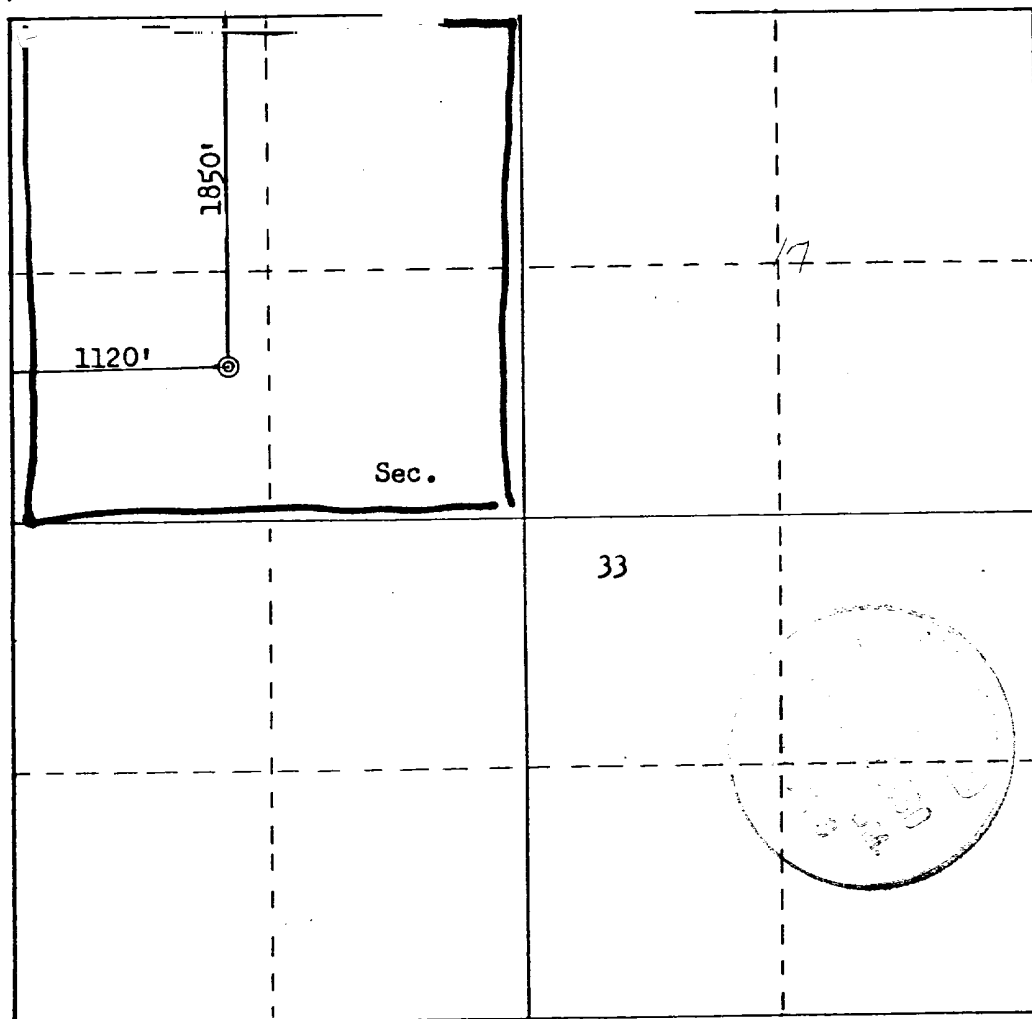
Operator PETROLEUM ENERGY, INCORPORATED			Lease NAVAJO 33		Well No. 1
Unit Letter E	Section 33	Township 27N	Range 19W	County San Juan	
Actual Footage Location of Well: 1850 feet from the North line and 1120 feet from the West line					
Ground Level Elev: 5781	Producing Formation Organ Rock	Pool Widdcat	Dedicated Acreage: 160 Acres		

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- 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.



Scale: 1"=1000'

CERTIFICATION

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

Name **Jay Magness**

Position **AGENT**

Company **Petroleum Energy Inc**

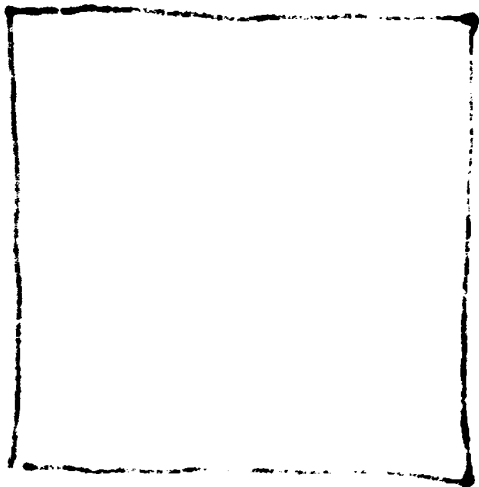
Date **July 17-86**

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 **July 17, 1986**
Registered Professional Engineer and Land Surveyor

Fred B. Kerr Jr.

Certificate No. **3950**



TEN POINT PROGRAM
PETROLEUM ENERGY, INC. - NAVAJO 1-33
Section 33, T-27-N, R-19-W
San Juan County, New Mexico

1. Will be spudded in the Mancos Formation.
2. Estimated tops of formations are:

Chinle - 1800'
DeChelly - 2960'
Organ Rock - 3500'
3. The estimated depth at which anticipated water, oil or gas may be encountered is Organ Rock - 3500' (helium).
4. Casing design:

<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CSG. SIZE</u>	<u>WT.</u>	<u>GRADE</u>
13 3/4	200	8 5/8	23#	K
6 3/4	3500	4 1/2	10.5#	K

5. Attached is a schematic diagram of the Series 900 pressure control equipment to be used on subject well. Pressure test on installation and test pipe rams daily and blind rams each trip.
6. Circulation medium will be water and gel-chem mud, about 9.5 weight, 30-45 viscosity, 7-10 water loss. Sufficient mud materials to maintain daily mud requirements, and to handle minor loss circulation and blowout problems shall be maintained at the well site.
7. A full opening valve to fit the drill string will be on the floor at all times, Kelly cocks will be installed in the kelly. Floats at the bit will not be used, and monitoring of the mud system will be visual unless otherwise specified.
8. Logging program will consist of a Gamma Ray density log. No drill stem tests are anticipated. Plan to set pipe on top of Organ Rock Formation for an open hole completion in that zone.
9. There are no anticipated abnormal pressures, temperatures or other potential hazards including H2S.
10. The anticipated starting date is July 28, 1980, and the expected duration of operation is 10 to 15 days.

MULTI-POINT SURFACE USE PLAN

PETROLEUM ENERGY, INC. - NAVAJO 1-33
NW Section 33, T-27-N, R-19-W
Navajo Tribal
NOO-C-14-20-2978
San Juan County, New Mexico

1. EXISTING ROADS

The location of the proposed well site is shown on the attached topographic map and certified surveyor's plat. The route to the well site is shown in red.

To reach the proposed well site Petroleum Energy 1-33 from Shiprock, New Mexico, leave town going south on Highway 666 for a distance of approximately 6.2 miles, turn west on Indian Highway #13 for a distance of 8.6 miles. Exit on a graded road in a southwesterly direction for a distance of about 8 miles. The proposed location adjoins the above dirt road on the east side. The graded road will be maintained by Petroleum Energy, Inc.

2. PLANNED ACCESS ROAD

No reconstruction or changes in the existing road, colored in red, is contemplated for the exploratory drilling phase. If production is found, the road will be improved in accordance with the guidelines outlined in the Oil and Gas Surface Operating Standards as prepared by the U. S. Department of the Interior. The access road is 1/4 mile long.

3. LOCATION OF EXISTING WELLS

The location of wells drilled in the vicinity of the proposed well-site are shown on Figure III. The status of all these exploratory wells is reported to be abandoned, except as noted in #4 below.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

Petroleum Energy, Inc. operates helium gas wells (2) located to the southeast of this location:

Navajo 1-32	(Sec. 32, 27N, 19W) and
Navajo 1- 5	(Sec. 5, 26N, 19W)

If oil production is found, a tank battery will be placed on the lease along side of the existing access road as shown on the attached topographic map (Figure II). The area to be used will be leveled with a dozer, and where tanks and other production facilities are installed, crushed rock will be placed.

In the event of production, it is proposed to bury the flowlines and restore the well pad area, except for the area needed for installation of production facilities. All areas containing pits and permanent production facilities will be adequately fenced to protect livestock and wildlife. These areas will be rehabilitated as outlined in Section 10 below.

5. LOCATION AND TYPE OF WATER SUPPLY

Water for the drilling and completing of this well will be transported by truck or a temporary pipeline on the surface, depending on the time of year that well is drilled, from the Big Gap Reservoir, which is located about two (2) miles to the east from the proposed well site.

6. SOURCE OF CONSTRUCTION MATERIAL

Minimal construction will be needed, as this is an existing access road and well site. Fill material needed to level the location and access road will be locally derived from cuts at the site.

7. METHODS FOR HANDLING WATER DISPOSAL

Cuttings and drilling fluids will be contained in an unlined reserve pit as shown on the attached location layout diagram. A tank will be set on the location for any produced fluids.

Garbage and other waste material will be burned in a 10' x 10' (6' deep) burning pit. The pit will be fenced with a small mesh wire to prevent wind scattering, and upon completion of operations, will be buried.

The well site will be properly cleaned up when the rig moves out and restored in accordance with Section 10 below.

Portable latrine will be furnished.

8. ANCILLARY FACILITIES

No ancillary facilities will be constructed.

9. WELL SITE LAYOUT

Attached is a copy of the well site layout plan showing the placement of drilling equipment (Figure VI). The parking area will be located on the southerly end of the location. Soil material stock piles, if necessary, will be placed on the west and east sides of the location.

The reserve pit will not be lined, and the trash pit will be located adjacent to the reserve pit.

10. PLANS FOR RESTORATION OF SURFACE

Upon completion of operations, the surface where changed topographically will be recontoured and rehabilitated in accordance with the guidelines outlined in the Oil and Gas Surface Operating Standards as prepared by the U. S. Department of the Interior, Bureau of Land Management and Geological Survey. Any area needed for production facilities and for the use by workover rigs will not be recontoured until final abandonment of the well bore. The pits will be filled in and covered with at least two (2) feet of cover material. All temporary structures will be removed and the permanent facilities, if any, will be painted the color chosen by the Bureau of Indian Affairs. All areas not needed for production purposes will be reseeded in the fall with seed mixtures selected by the Bureau of Indian Affairs.

Prior to cleanup and restoration, the pits will be fenced; if any oil accumulates on the pits it will be removed.

It is contemplated to start construction July 28, 1980, immediately followed by drilling operations. If the well is abandoned, operations should be completed within 90 days from the start of construction. Rehabilitation operations should start in due course following the removal of the drilling equipment.

11. OTHER INFORMATION

The location is on a low relief topographical surface area that dips to the northeast. The area is broken by shallow draws and the top soil for the most part is clay with some sands and conglomerates. Vegetation is principally sagebrush and scattered clumps of grass. No wildlife was observed at the location, but undoubtedly rabbits, coyotes, birds, and other small mammals can be found from time to time.

There is no evidence that the surface in the area is being used other than for grazing of livestock. The surface rights are held by the Navajo Tribe of Indians. Navajo resident (W. Yazzie) is located approximately 1/2 mile to the north. Consent of use has been executed by this resident.

There is no known source of surface water, archaeological, historical, or cultural sites in the immediate vicinity of this location. The site will be examined by a qualified archaeologist (Culture Resources Management Program) whose report will be filed accordingly when received.

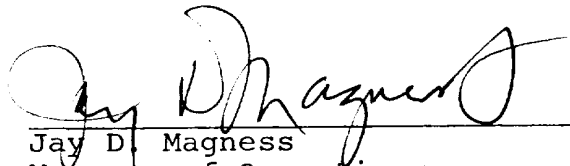
12. OPERATOR'S REPRESENTATIVE

Jay D. Magness
Petroleum Energy, Inc.
P. O. Box 2121
Durango, CO 81301
Telephone 303/259-0322

13. CERTIFICATION

CERTIFICATION
by
OPERATOR'S FIELD REPRESENTATIVE

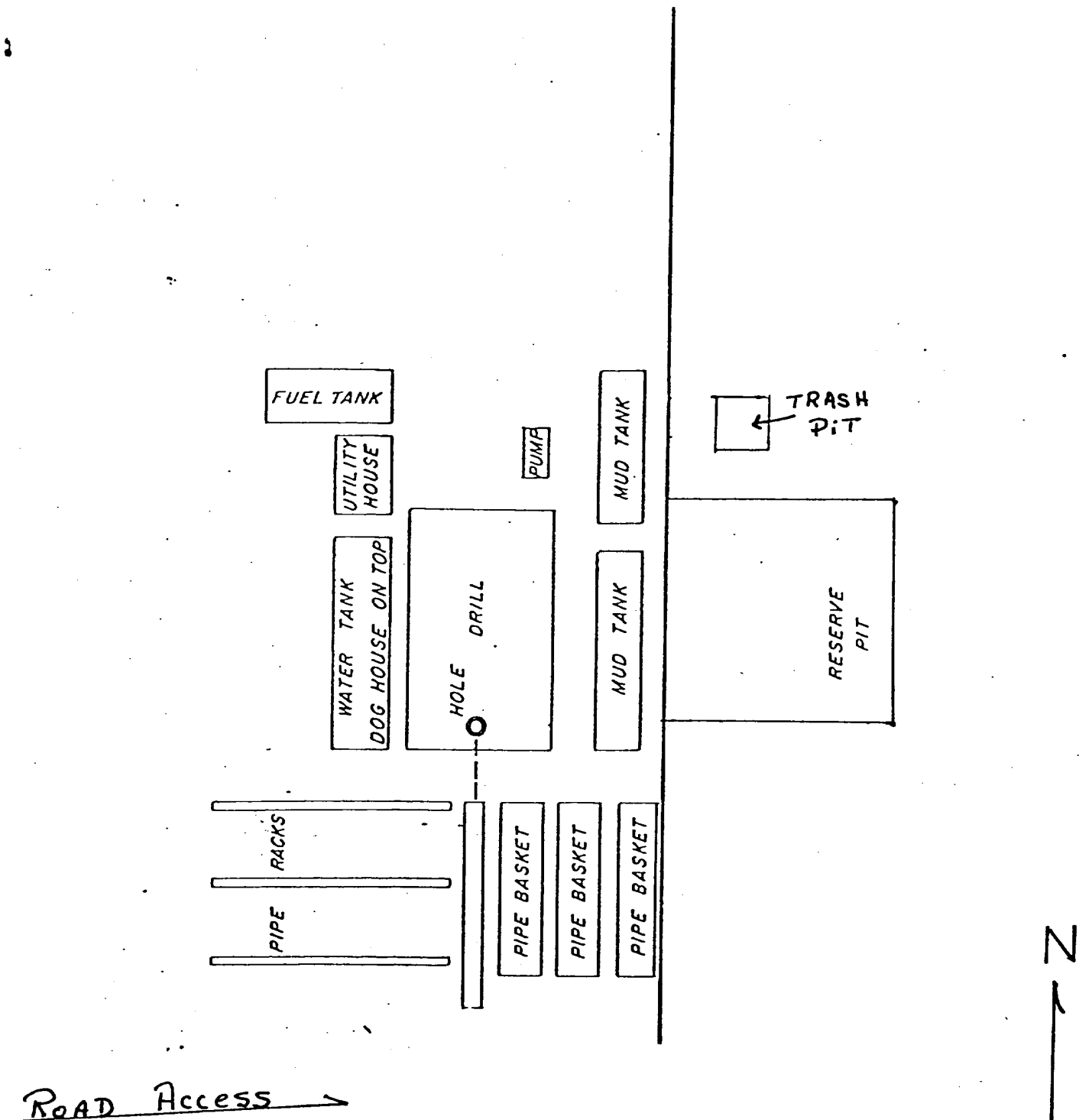
I HEREBY certify that I, or persons under my direct supervision, have inspected the proposed drill-site and access route; that I am familiar with the conditions which presently exist, that the statements made in this plan area, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroleum Energy, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.



Jay D. Magness
Manager of Operations

PETROLEUM ENERGY, INC.

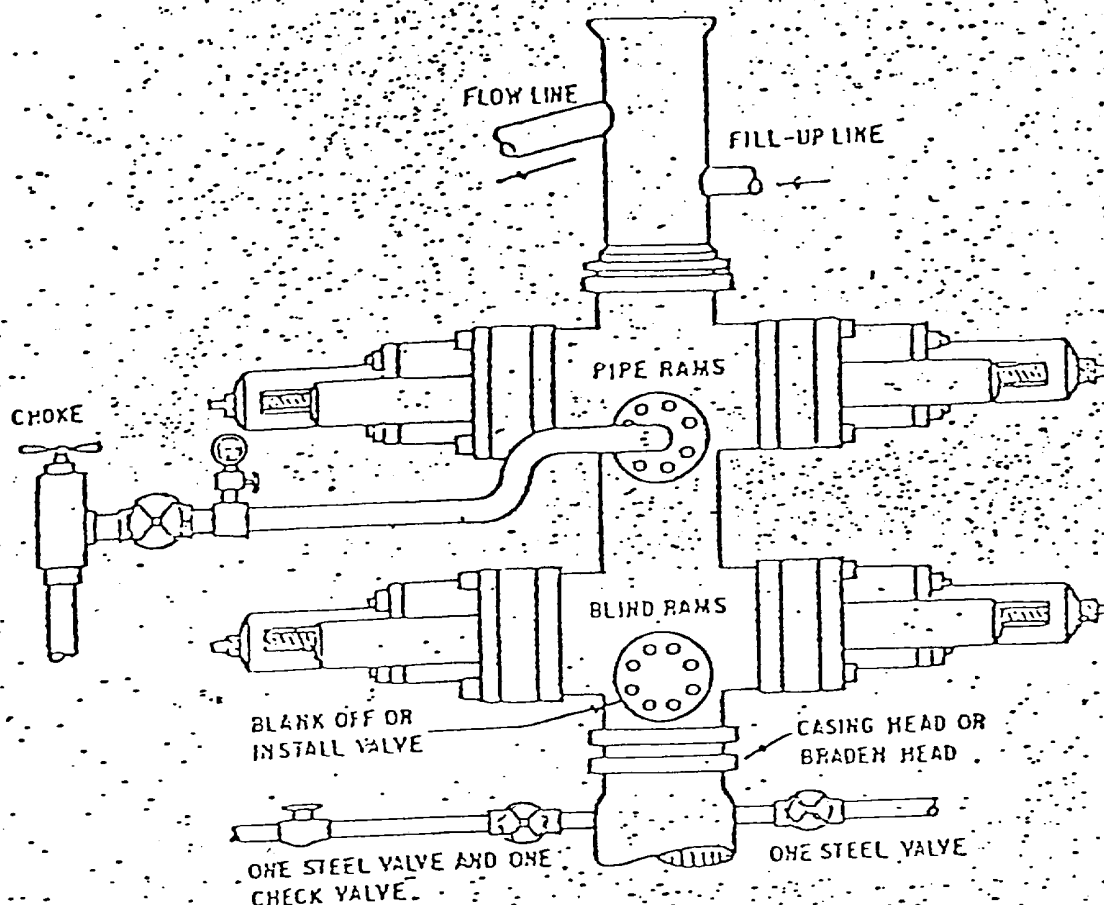
July 7, 1980



PETROLEUM ENERGY, INC. - NAVAJO 1-33
 Section 33, T-27-N, R-19-W
 San Juan County, New Mexico

Scale: 1"=30'

FIGURE VI



THE FOLLOWING CONSTITUTE MINIMUM BLOWOUT PREVENTER REQUIREMENTS

- ONE DOUBLE GATE BLOWOUT PREVENTER WITH LOWER RAMS BLIND AND UPPER RAMS FOR PIPE, ALL HYDRAULICALLY CONTROLLED. OPENING ON PREVENTERS BETWEEN RAMS.
- OPENING TO BE FLANGED, STUDDED OR CLAMPED AND AT LEAST TWO INCHES DIAMETER.
- ALL CONNECTIONS FROM OPERATING MANIFOLD TO PREVENTERS TO BE ALL STEEL HOSE OR TUBE A MINIMUM OF ONE INCH IN DIAMETER.
- THE AVAILABLE CLOSING PRESSURE SHALL BE AT LEAST 15% IN EXCESS OF THAT REQUIRED WITH SUFFICIENT VOLUME TO OPERATE THE PREVENTERS.
- ALL CONNECTIONS TO AND FROM PREVENTERS TO HAVE A PRESSURE RATING EQUIVALENT TO THAT OF THE B.O.P.
- MANUAL CONTROLS TO BE INSTALLED BEFORE DRILLING CEMENT PLUG.
- VALVE TO CONTROL FLOW THROUGH DRILL PIPE TO BE LOCATED ON RIG FLOOR.
- CHOKE MAY BE EITHER POSITIVE OR ADJUSTABLE.
- A choke spool may be used between preventers.

14.8 MILES TO SHIPROCK

NWY. 13

6.5 MILES (DIRT ROAD)

3.6

ROCK

NW PIPELINE Barbara Kay 3

355

NW PIPELINE Barbara Kay 2

INDIAN RESERVE

EL PASO NAT. GAS

TEXAS

1-33

PET. ENERGY 1-5

PET. ENERGY 2-5

PETROLEUM ENERGY, INC.

SAN JUAN CO., NEW MEXICO

PLAT SHOWING

WELL LOC. & ROADS

FIGURE

PLAT SHOWING
WELL LOC. & ROADS
FIGURE

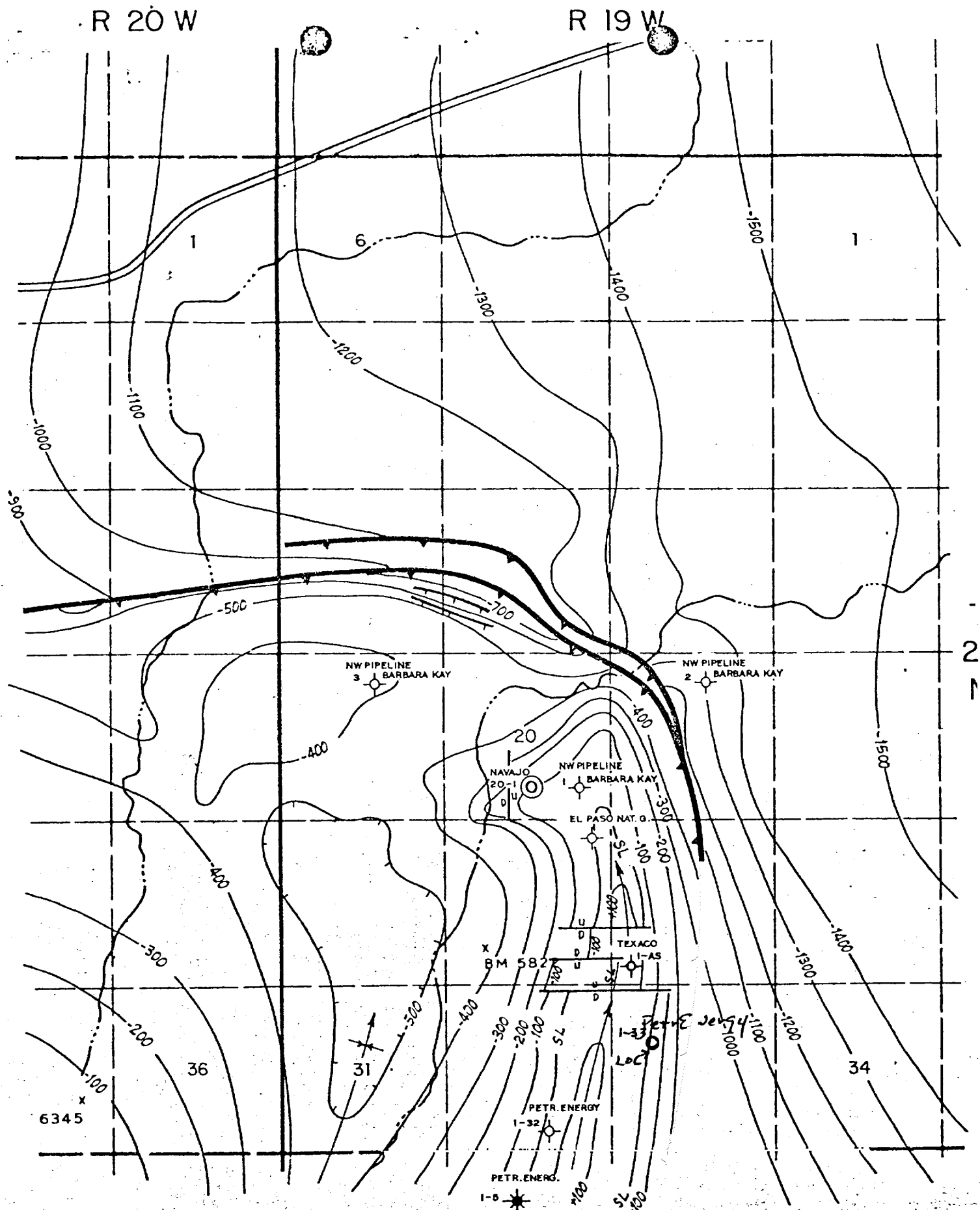


FIGURE III

PETROLEUM ENERGY, INC
 BEAUTIFUL MTN.
 SAN JUAN CO., NEW MEX.
 STRUCTURE TOP MISSISSIPPIAN
 C.I. = 100'
 1" = 4000'