

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

Jerome P. McHugh

## 3. ADDRESS OF OPERATOR

Box 208, Farmington, NM 87401

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

At surface

1670' FNL - 790' FWL

At proposed prod. zone

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

20 miles south of Bloomfield

15. DISTANCE FROM PROPOSED\*  
LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

790'

## 16. NO. OF ACRES IN LEASE

638.36

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

160 159.13

## 18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

2620'

## 19. PROPOSED DEPTH

1425'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5873'

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

11-20-79

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
8-3/4"	7"	23#	90'	20 sx class "B"
4-3/4"	2-7/8"	6.4#	1425'	50 sx of 2% Lodense w/1/4# cello flake per sx followed by 50 sx neat w/1/4# cello flake per sx. Total slurry 161 cu ft.

Plan to drill 4-3/4" hole to test Fruitland-Pictured Cliffs formation. Plan to run IES log to TD. If productive, plan to set 2-7/8" tbg for csg, cement, selectively perforate, frac, cleanout after frac, run 1-1/4" tbg and complete well.

Plan to use 3000 psi BOP per attached schematic diagram. Will use master valve and stripper head while completing well.

NMERB: Gas not dedicated

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give pertinent data on subsurface locations and measured and true vertical depths. If 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

Thomas A. Dugan

(This space for Federal or State office use)

TITLE

Agent

DATE

11-2-79

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

NM000

ok Frank

\*See Instructions On Reverse Side

5. LEASE DESIGNATION AND SERIAL NO.

NM 16471

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Bengal B

9. WELL NO.

#5

10. FIELD AND POOL OF WELL  
S. Gallegos Art cut  
South Gallegos PC ext11. SEC., T., R., M., OR BLK.  
AND SURVEY OR AREA

Sec 2 T26N R12W

12. COUNTY OR PARISH

San Juan

13. STATE

NM

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.

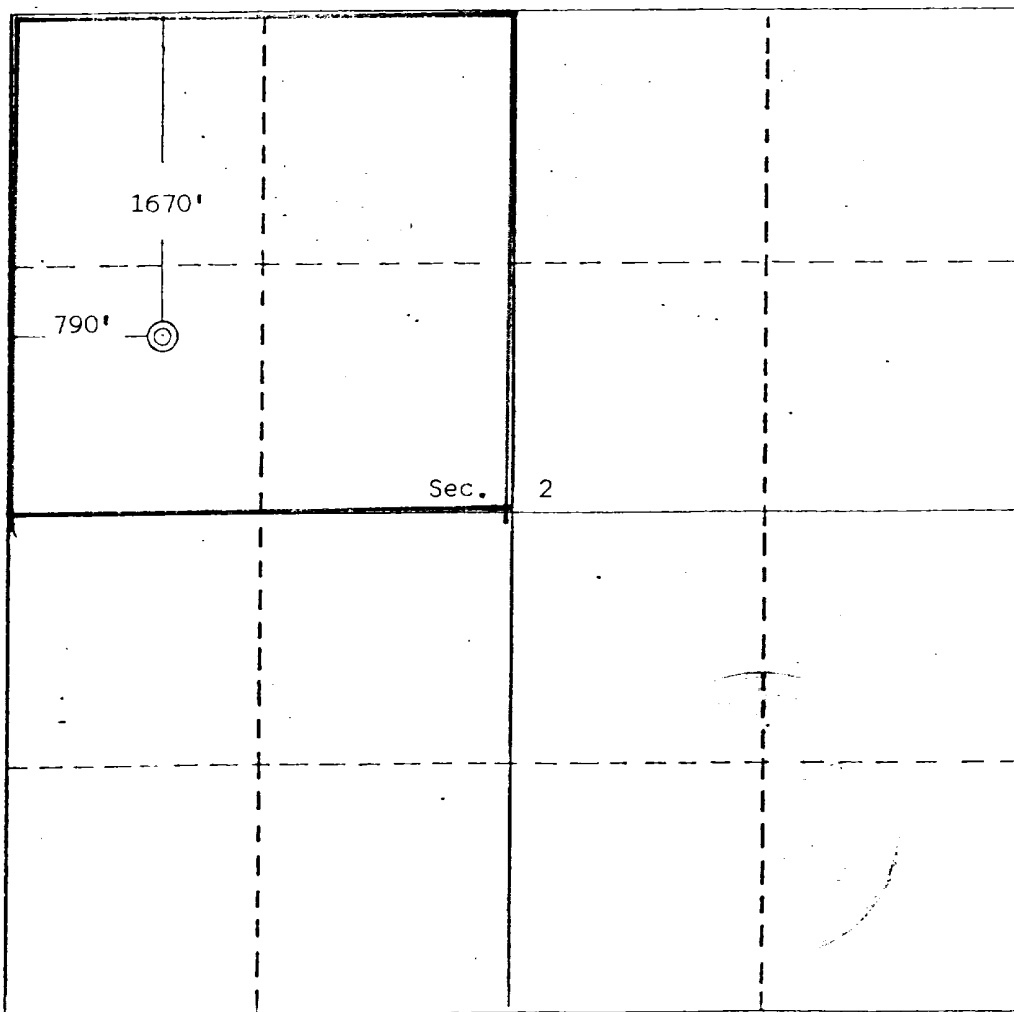
Operator Jerome P. McHugh		Lease Bengal <b>B</b>		Well No. <b>B5</b>
Unit Letter E	Section 2	Township 26 North	Range 12 West	County San Juan
Actual Footage Location of Well: 1670 feet from the North line and 790 feet from the West line				
Ground Level Elev. 5873	Producing Formation FR PC	Pool S. Gallegos <del>well</del> South Gallegos <del>well</del>		Dedicated Acreage: <b>159.13</b> <del>160</del> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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.

*Thomas A. Dugan*  
Name  
Thomas A. Dugan

Position  
Agent

Company  
Jerome P. McHugh

Date  
11-2-79

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 25, 1979

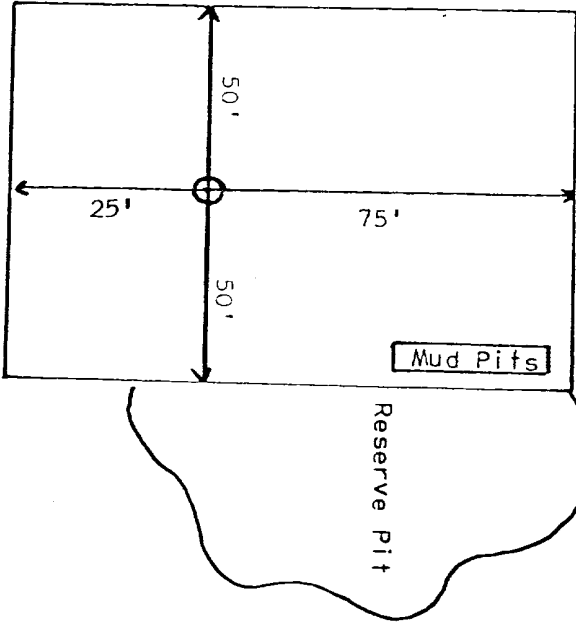
Registered Professional Engineer  
and/or Land Surveyor

*Edgar L. Risenhoover*  
Certificate No. 5979

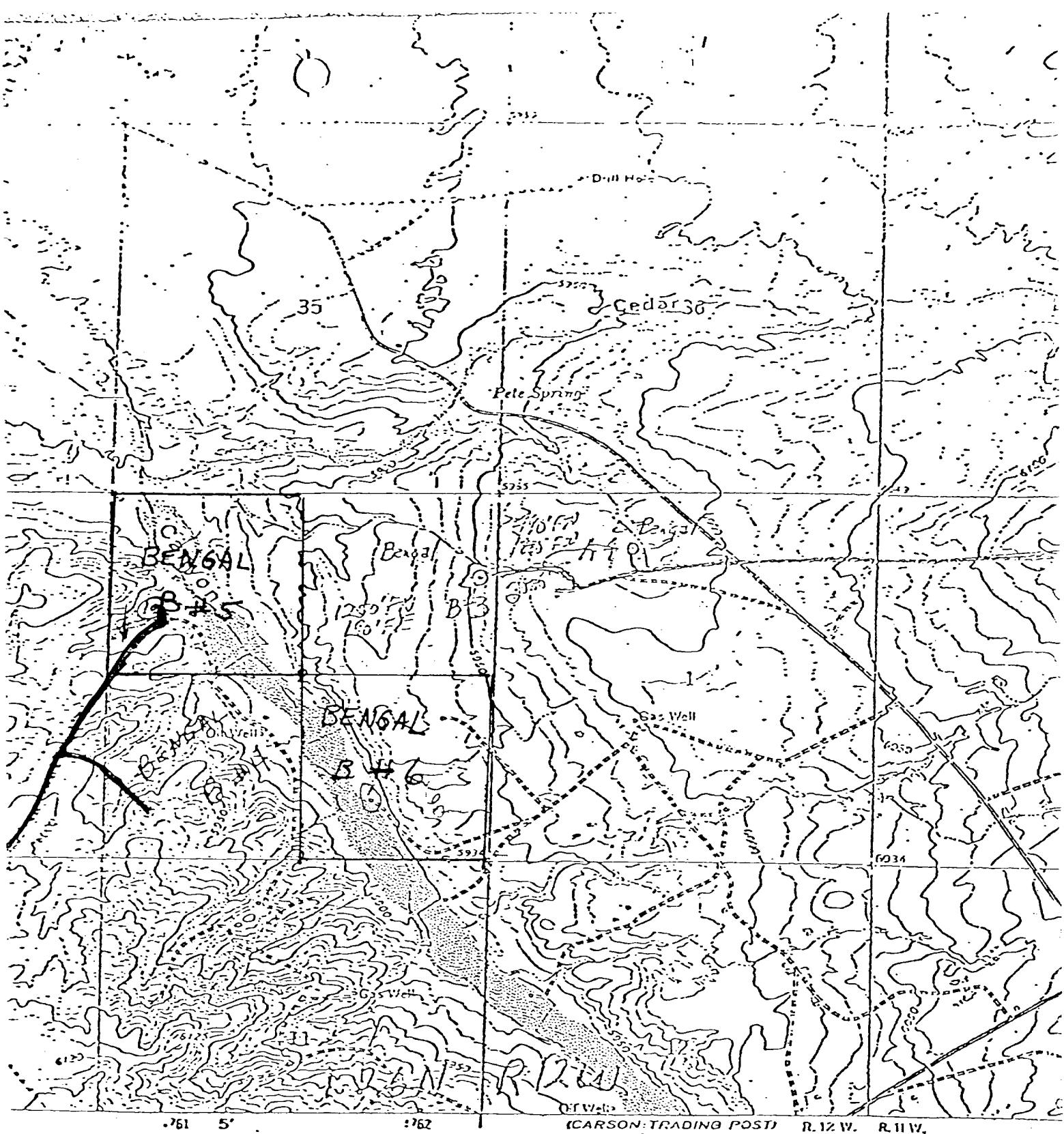
Edgar L. Risenhoover, L.S.

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

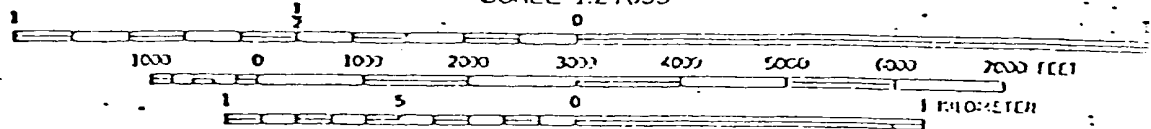
Jerome P. McHugh  
Bengal B #5  
PROPOSED LOCATION LAYOUT



A3250 ROAD



\* Access Road  
Existing Road



CONTOUR INTERVAL 10 FEET  
DATUM IS MEAN SEA LEVEL

1 BENGAL # B-5  
35 MAGNETIC NORTH  
CENTER OF SHEET

Existing Road  
Access Road

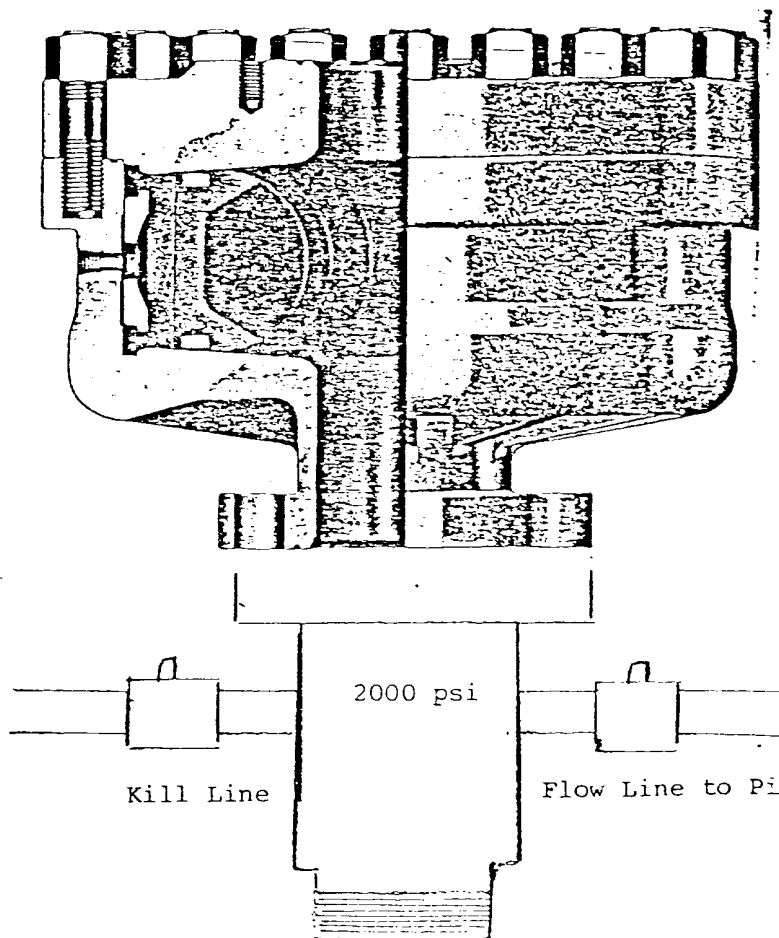
Jerome P. McHugh  
Bengal B #5

### SCHEMATIC DIAGRAM

#### TESTING PROCEDURES

Install BOP after setting surface pipe and  
pressure test to 1000 psi after drilling out  
from under surface pipe.

### REGAN BLOWOUT PREVENTERS



The Regan Torus Blowout Preventer is used  
primarily on production and workover rigs  
for well control up to 3000 PSI working  
pressure

#### DESIGN FEATURES

- The Torus Preventer is designed for minimum height to facilitate its use with production and workover rigs.
- The rubber packer will conform to any object in the well bore. Sealing ability is not affected by minor damage to the inner bore.
- The packer will seal on open hole at full working pressure.
- The dual packer design increases the reliability of the preventer since the outer rubber is never exposed to the well bore. Under ordinary service, the outer packer is rarely replaced.

### TORUS BLOWOUT PREVENTER PATENTED

#### SPECIFICATIONS

Nominal Size	Test Pressure (psi)	DIMENSIONS (In.)			Weight (lb.)	End Flanges (I)	R/RX Ring Grooves	Side Outlet
		Outside Diameter	Thru Bore	Overall Height				
6	3000	27	7 1/4	19 1/4	1360	Nom. 6	45	None

# OPERATIONS PLAN

OPERATOR: Jerome P. McHugh  
WELL NAME: Bengal B #5  
FIELD: South Gallegos FR PC  
LOCATION: 1670' FNL - 790' FWL Section 2 T26N R12W San Juan County, NM  
ELEVATION: 5873' GR

EXPECTED FORMATION TOPS:	Ojo Alamo	250'	Point Lookout	
	Kirtland	398'	Mancos	
	Fruitland	958'	Gallup	
	Pictured Cliffs	1298'	Greenhorn	
	Lewis		Graneros	
	Cliff House		Dakota	
	Menefee		Total Depth	1425'

LOGGING PROGRAM: IES

SAMPLES:

## CASING PROGRAM

<u>Hole Size</u>	<u>Depth</u>	<u>Csg Size, Wt, Grade, &amp; Condition</u>				<u>Cementing Program</u>
8-3/4"	90'	7"	23#	J-55	"B"	20 sx class "B"
4-3/4"	1425'	2-7/8"	6.4#	J-55	"A"	50 sx of 2% Lodense w/1/4# cello flake per sx followed by 50 sx neat w/1/4# cello flake per sx. Total slurry 161 cu ft.

WELLHEAD EQUIPMENT Huber non-flanged, 2000# working pressure

Office	-	325-0238
Tom Dugan		325-5694
Jim Jacobs		325-8353
Kurt Engelius		334-3381

DEVELOPMENT PLAN

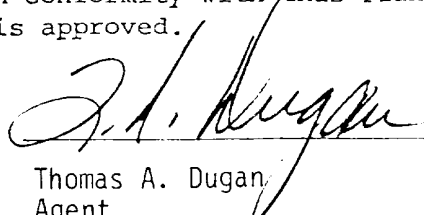
Jerome P. McHugh

Bengal B #5

1. Existing roads and existing wells are shown on attached plat.
2. Planned access from existing road approximately 1500' to new location. Will leave natural grass and small vegetation on roadway. Will remove large brush or trees from road. Do not plan to make road grade or bar ditches. Will bottom-out any arroyo we cross and not install culverts.
3. Location of well: 1670' FNL - 790' FWL  
Section 2 T26N R12W  
San Juan County, NM
4. One additional well(s) planned on this lease at this time.
5. Separator and flow line will be located within 50' of wellhead.
6. Water will be secured from Chaco Plant.
7. Waste materials will be buried on location or in reserve pit.
8. No permanent camp is planned; trailer house will be used on location while drilling.
9. Do not plan to build airstrip.
10. See attached plat for proposed location layout.
11. A general description of the topography, soil characteristics, geologic features, flora and fauna; other surface-use activities and surface ownership of involved lands, proximity of water, occupied dwellings, archeological, historical or cultural sites can be found in the archeologist's report.
12. Geologic name of surface formation: Recent sand dunes
13. Estimated tops of important geologic markers:  
Ojo Alamo - 250'      Kirtland - 398'      Fruitland - 958'      Pictured Cliffs - 1298'
14. Estimated depths of anticipated water, oil, gas, or other mineral bearing formations which are expected to be encountered:  
water - Ojo Alamo - 150'      gas - Fruitland 958'      gas - Pictured Cliffs 1298'
15. We do not anticipate to encounter any abnormal pressures or temperatures or any potential hazards such as those associated with hydrogen sulfide.
16. Will clean up location, fill and level pits, level ruts in road, reseed location and road with Seed Mixture #2 and paint equipment with Sandstone Brown.
17. Operator's Representative:  
Thomas A. Dugan  
Box 234  
Farmington, NM 87401
18. Certification: The following statement must be signed by the lessee's or operator's field representative who is identified in Item #17 of the Plan:

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 Jerome P. McHugh and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Date: 11-2-79

  
Thomas A. Dugan  
Agent