

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

30-045-23942

## 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

Dugan Production Corp.

## 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 1800' FNL - 1800' FEL

At proposed prod. zone

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

2 miles north of Farmington, NM

## 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

400

## 17. NO. OF ACRES ASSIGNED

TO THIS WELL  
N/32018. DISTANCE FROM PROPOSED LOCATION\*  
TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

None

## 19. PROPOSED DEPTH

6125'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

5620' GR

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

Dec. 5, 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# New	225'	125 sx
7-7/8"	4-1/2"	10.5#	5250'	700 sx

Plan to drill with mud to test the Dakota Formation. Plan to run IES and CDL logs to TD. If productive, will set 4-1/2" csg, cement in two stages, selectively perforate, frac, clean out after frac, run 1-1/4" tbg and complete well.

Plan to use BOP furnished by rig while drilling (10" 3000 psi hydraulic)

Plan to use BOP rental while completing (6" 3000 psi double gate manual)

NMERB: Gas not dedicated.

The Jacobs #1 location will be used for this well as will the archaeological clearance which was issued for the Jacobs #1 well.

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

Petroleum Engineer

DATE

10-23-79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:



\*See Instructions On Reverse Side

NMOC

OCT 8 1979  
OIL CITY COM.

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-128  
Effective 1-1-55

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

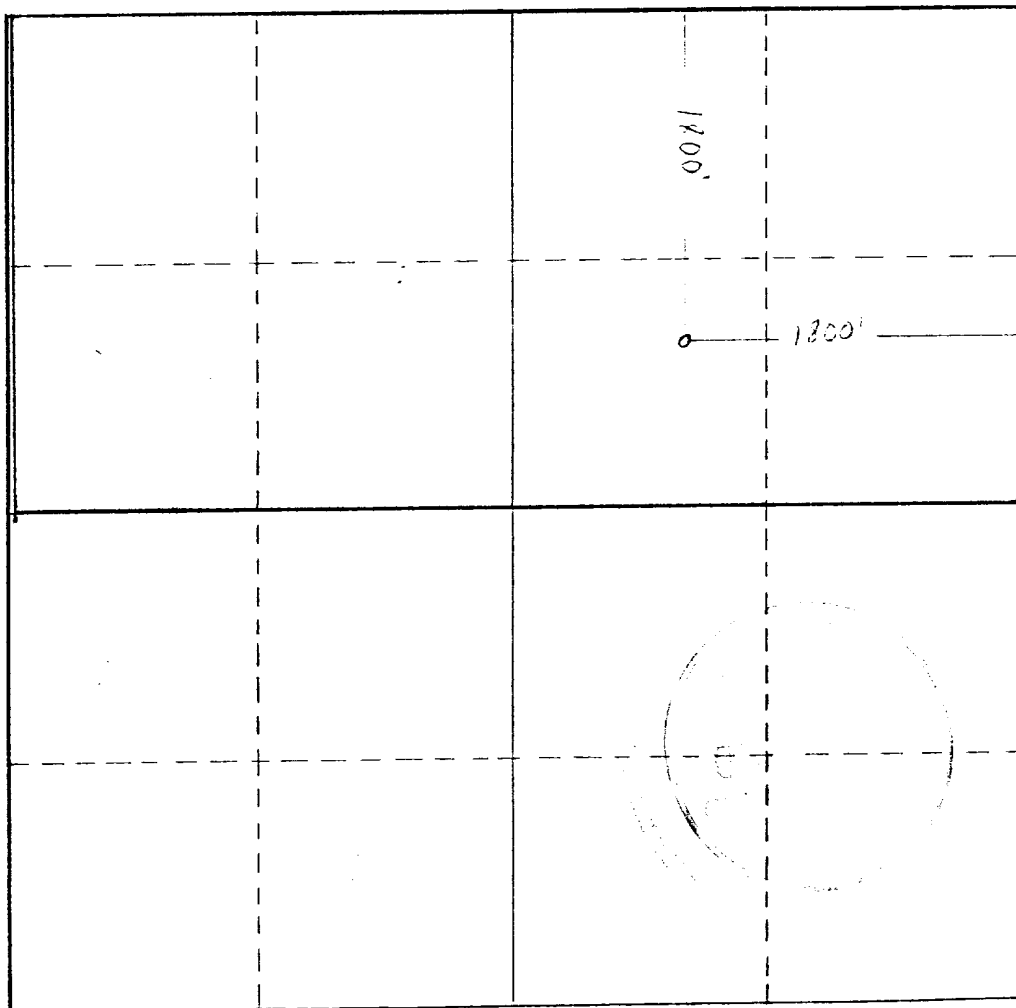
Operator Dugan Production Corp.		Lease Jacobs		Well No. 2
Unit Letter G	Section 26	Township 30 North	Range 14 West	County San Juan
Actual Footage Location of Wells: 1800 feet from the North line and 1800 feet from the East line				
Ground Level Elev. 5620'	Producing Formation Dakota	Pool Basin	Dedicated Acreage: 320 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.



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  
Petroleum Engineer

Company  
Dugan Production Corp.

Date  
10-23-79

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  
10-19-79

Registered Professional Engineer and/or Land Surveyor

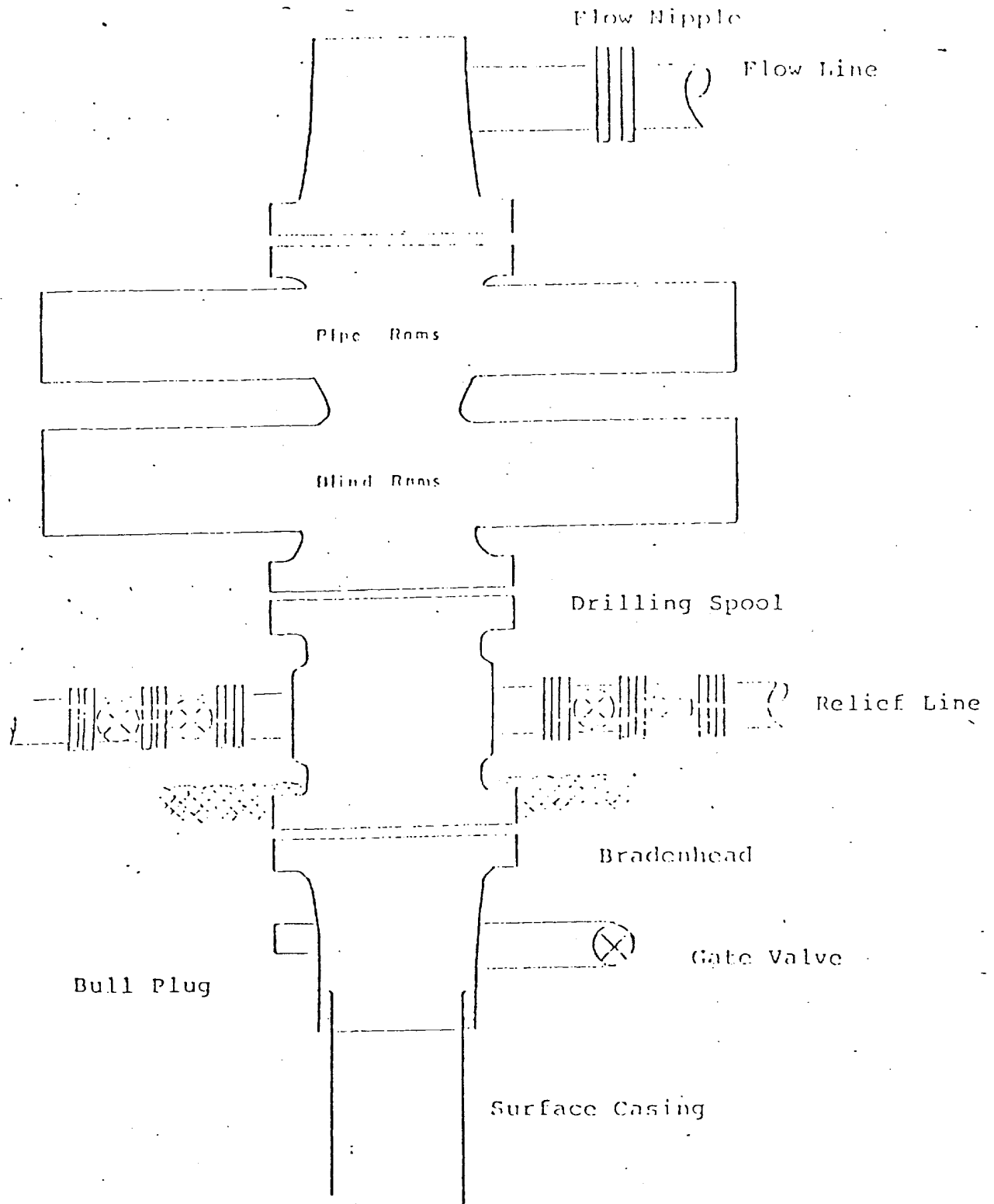
*Thomas A. Dugan*

Certificate No. 2373

Thomas A. Dugan

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

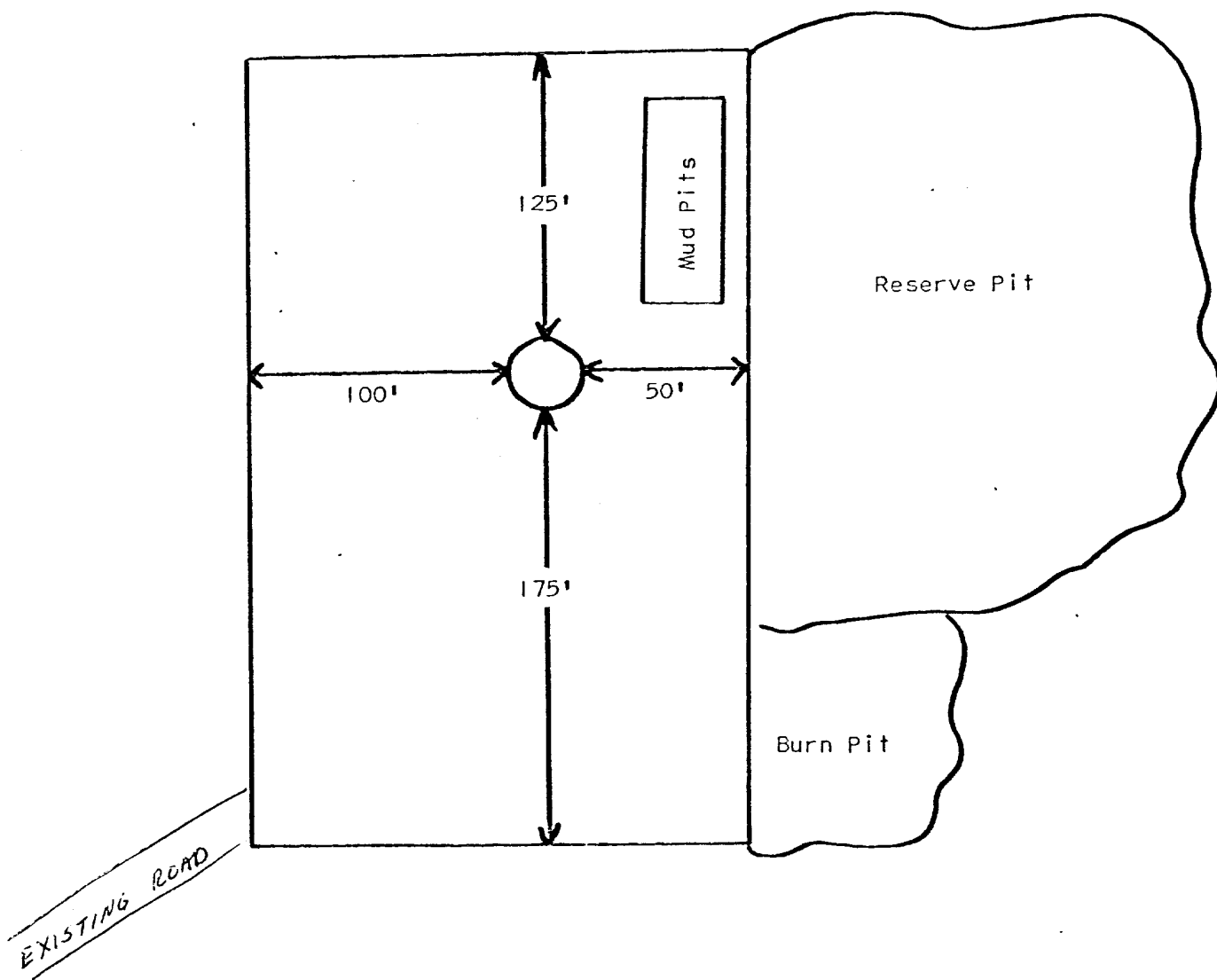
for Dakota Well



Series 900 Double Gate BOP, rated  
at 3000 psi Working Pressure

When gas drilling operations begin a Shaffer type  
50 or equivalent rotating head is installed on top of  
the flow nipple and the flow line is converted into  
a blowie line.

Dugan Production Corp.  
Jacobs #2  
Proposed Location Layout



DEVELOPMENT PLAN

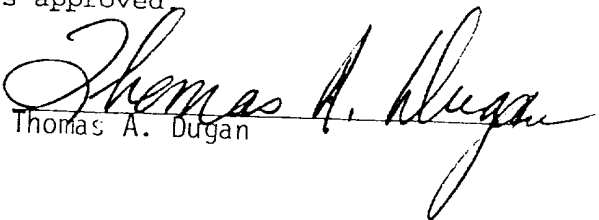
Dugan Production Corp.

Jacobs #2

1. Existing roads and existing wells are shown on attached plat.
2. Planned access from existing road approximately 0' 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: 1800' FNL - 1800' FEL  
Section 26 T30N R14W  
San Juan County, NM
4. No 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 San Juan River.
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: Kirtland
13. Estimated tops of important geologic markers:  
See Attached Operations Plan
14. Estimated depths of anticipated water, oil, gas, or other mineral bearing formations which are expected to be encountered;  
water - surface - Kirtland gas - Pictured Cliffs - 1275' gas - Dakota - 5880'
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 Dugan Production Corp. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Date: 10-19-79

  
Thomas A. Dugan

OPERATIONS PLAN

OPERATOR: Dugan Production Corp.  
WELL NAME: Jacobs #2  
FIELD: Basin Dakota  
LOCATION: 1800' FNL - 1800' FEL  
ELEVATION: 5620' GR

EXPECTED FORMATION TOPS:	Ojo Alamo	Point Lookout	3685'
	Kirtland	Mancos	4045'
	Fruitland	Gallup	5015'
	Pictured Cliffs	Greenhorn	5765'
	Lewis	Graneros	5830'
	Cliff House	Dakota	5880'
	Menefee	Total Depth	6125'

LOGGING PROGRAM: IES and CDL

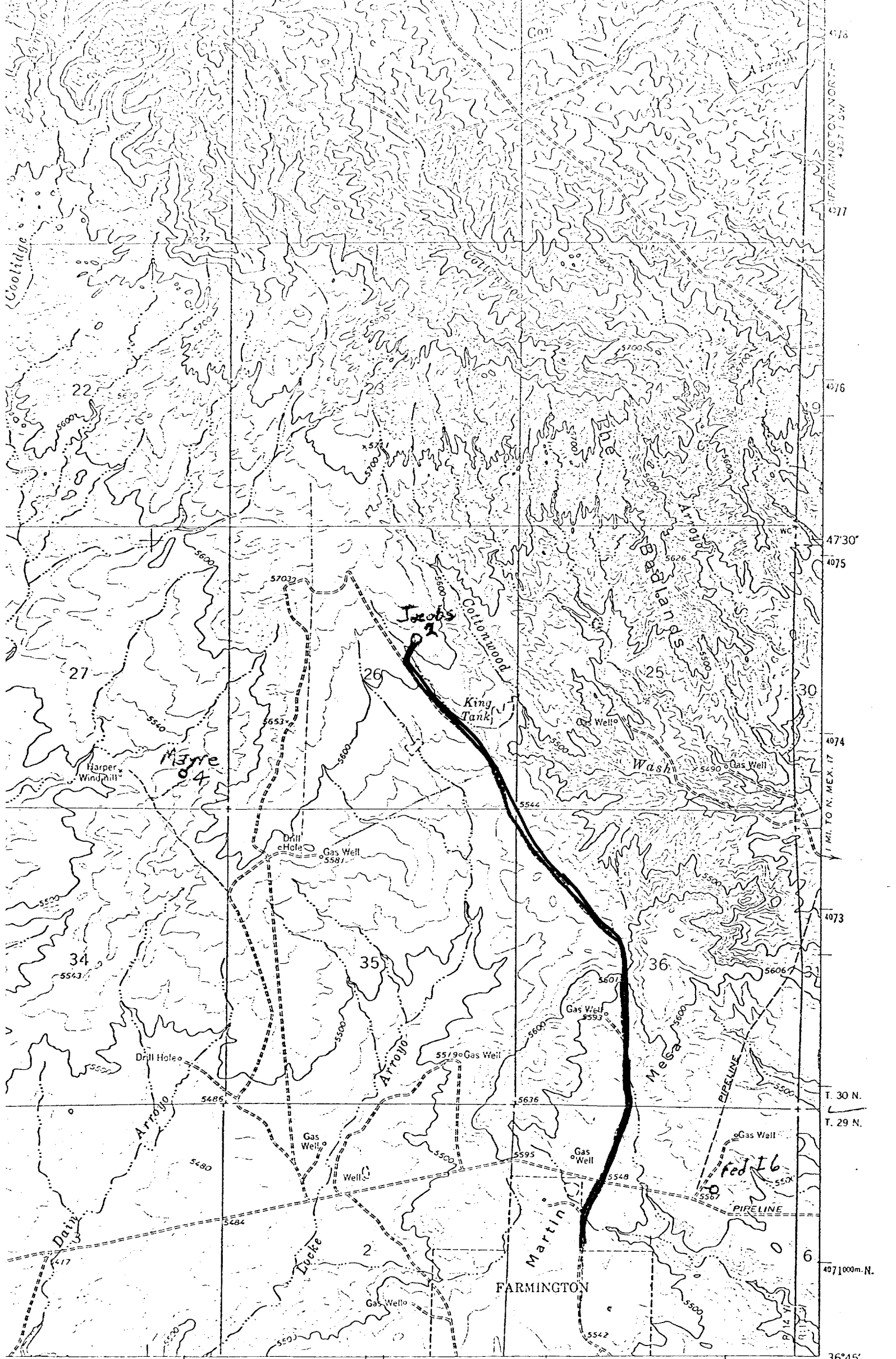
SAMPLES:

CASING PROGRAM

<u>Hole Size</u>	<u>Depth</u>	<u>Csg Size, Wt, Grade, &amp; Condition</u>	<u>Cementing Program</u>
12-1/4"	225'	8-5/8" 24# 9R ST&C csg	Cement w/125 sx class "B" w/2%
7-7/8"	6125'	4-1/2" OD 10.5# 8R ST&C csg	1st stage 200 sx class "B" w/8% gel and 1/4# flocele per sx  2nd stage 400 sx 65-35 w/12% gel and 1/4# flocele per sx followed by 100 sx class "B" w/4% gel and 1/4# flocele per sx.

WELLHEAD EQUIPMENT

Office	-	325-0238
Tom Dugan		325-5694
Jim Jacobs		325-8353
Kurt Fagrelus		334-3381
Bill Donovan		325-5692
James Hazen		



Existing Road

1 MILE  
7000 FEET

ROAD CLASSIFICATION

INTERIOR-GEOLOGICAL SURVEY, WASHINGTON, D.C. - 1966