

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
William Gruenewald & Associates, Inc.

3. ADDRESS OF OPERATOR
P. O. Box 909 Colorado Springs, Colorado 80901

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface 1850' FNL & 780' FEL
Sec. 23-T23N-R20W San Juan County, New Mexico
At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* Approx. 10 miles by mountain logging road or 2 airline miles west of Toodlena (Indian School)

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
(Also to nearest drig. unit line, if any)
530'

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
+ 1,400'

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
Ground 9053'

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 lbs.	1,300'	500 sk or circulated
7-7/8"	4 1/2"	9 1/2 lbs.	4,300'	200 sk

Propose to drill 12 1/4" surface hole to approximately 1300' at a good casing seat. Set 8-5/8" surface casing at this point and circulate cement to surface. Drill out with 7-7/8" bit to a depth of approximately 4300'. Run Dual Induction, and Formation Density Logs. If productive, 4 1/2" casing will be set and cemented.



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 W. E. Bralley TITLE Engineer DATE Oct. 26, 1970
(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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

Instructions

General: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

Item 1: If the proposal is to re-drill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

Items 15 and 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

Item 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

Form C-102
Supersedes C-128
Effective 1-1-65

Operator WM. GRUENERWALD & ASSOCIATES		Lease Nava jo		Well No. 1
Unit Letter H	Section 23	Township 23 North	Range 20 West	County San Juan
Actual Postage Location of Well				
1850 feet from the North line and 780 feet from the East line				
Ground Level Elev. 9053	Producing Formation McCracken Sand	Pool Akah Nez	Dedicated Acreage 80 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.

1850'

780'

Sec. 23

OCT 30 1955
OIL CON. COM.
POST. 3

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

Name _____

Position

Engineer

Company

Date _____

Oct 26, 1970

I hereby certify that the above is a true and correct copy of the original as shown on the plat maps and from field notes of actual surveys made by me and under my personal supervision, and that the same are true and correct to the best of my knowledge and belief.

Date Surveyed _____

October 19, 1970

Registered Professional Engineer
and/or Land Surveyor

Certificate No.

3602