

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

Benson Mineral Group, Inc.

## 3. ADDRESS OF OPERATOR

3200 Anaconda Tower, 555 17th St., Denver, CO 80202

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

At surface

1570' FSL &amp; 840' FEL Section 4-T22N-R8W

At proposed prod. zone

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

7 miles southeast of Nageezi, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

840

## 16. NO. OF ACRES IN LEASE

640

## 17. NO. OF ACRES ASSIGNED

160

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

None

## 19. PROPOSED DEPTH

1825

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6832 GR.

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

As soon as permitted

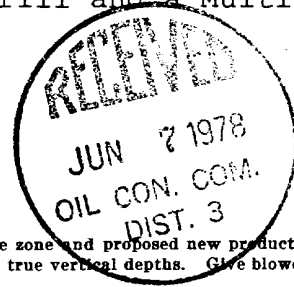
## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 $\frac{1}{2}$	7" used	23	100	100 sx circ.
6 $\frac{1}{2}$	4 $\frac{1}{2}$ " new	9.5	1825	190 sx circ.

The above well is being drilled to evaluate the Chacra formation. Completion intervals and stimulation program will be determined from the study of logs. This acreage is not dedicated to a gas purchaser. Additional information required by NTL-6 for the application to drill and a Multi-Point Surface Use Plan are attached.

RECEIVED



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

Paul C. Ellison

TITLE

Production Manager

DATE

June 2, 1978

(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

**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.

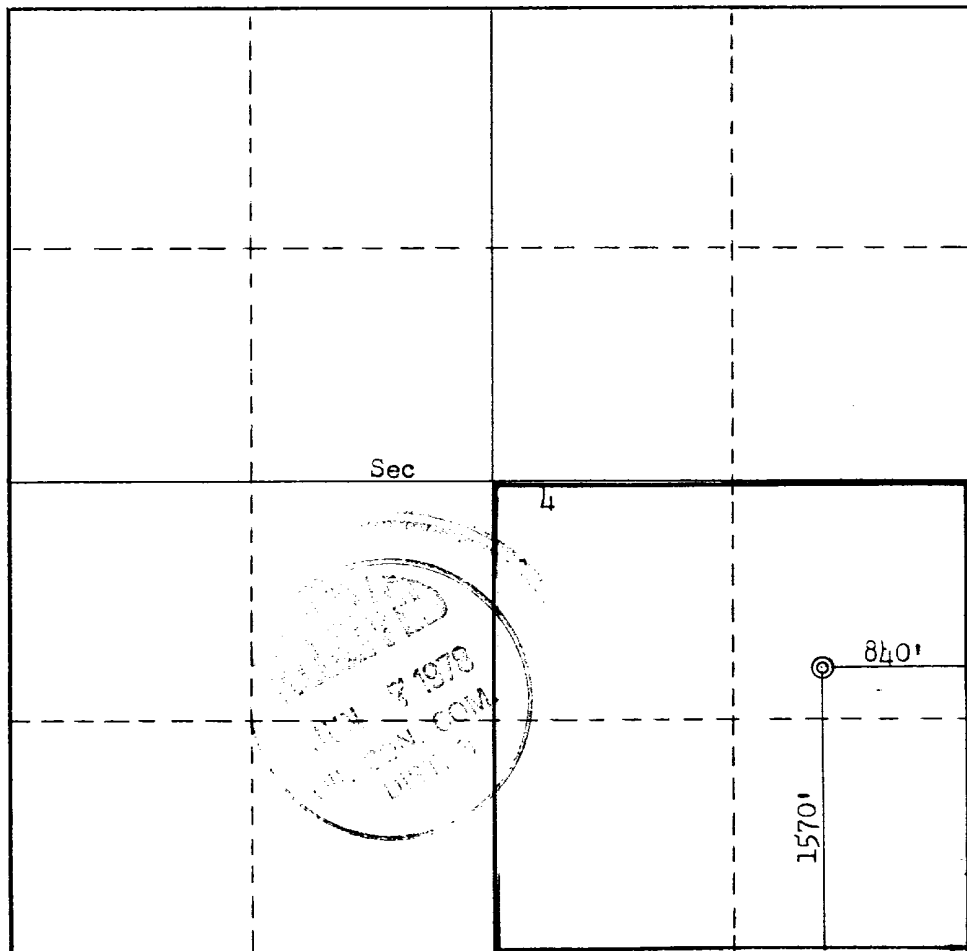
Operator <b>BENSON MINERAL GROUP, INC.</b>			Lease <b>FEDERAL 4-22-8</b>		Well No. <b>1</b>
Unit Letter <b>I</b>	Section <b>4</b>	Township <b>22N</b>	Range <b>8W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1570</b> feet from the <b>South</b> line and <b>840</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6332</b>	Producing Formation <b>Chacra</b>		Pool <b>Wildcat Undesignated</b>	Dedicated Acreage: <b>160</b> Acres	

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



SUPPLEMENTAL INFORMATION TO FORM 9-331C  
REQUIRED BY NTL-6

Federal 4-22-8 Well #1  
1570' FSL & 840' FEL Section 4-T22N-R8W  
San Juan County, New Mexico

The geologic name of the surface formation is: Tertiary Paleocene

The estimated tops of important geological formations bearing hydrocarbons to be drilled are:

<u>Formation</u>	<u>Depth</u>	<u>Elevation</u>
Pictured Cliffs	1063	+5775
Chacra	1448	+5390
Total Depth	1825	

Estimated K.B. elevation: 6838

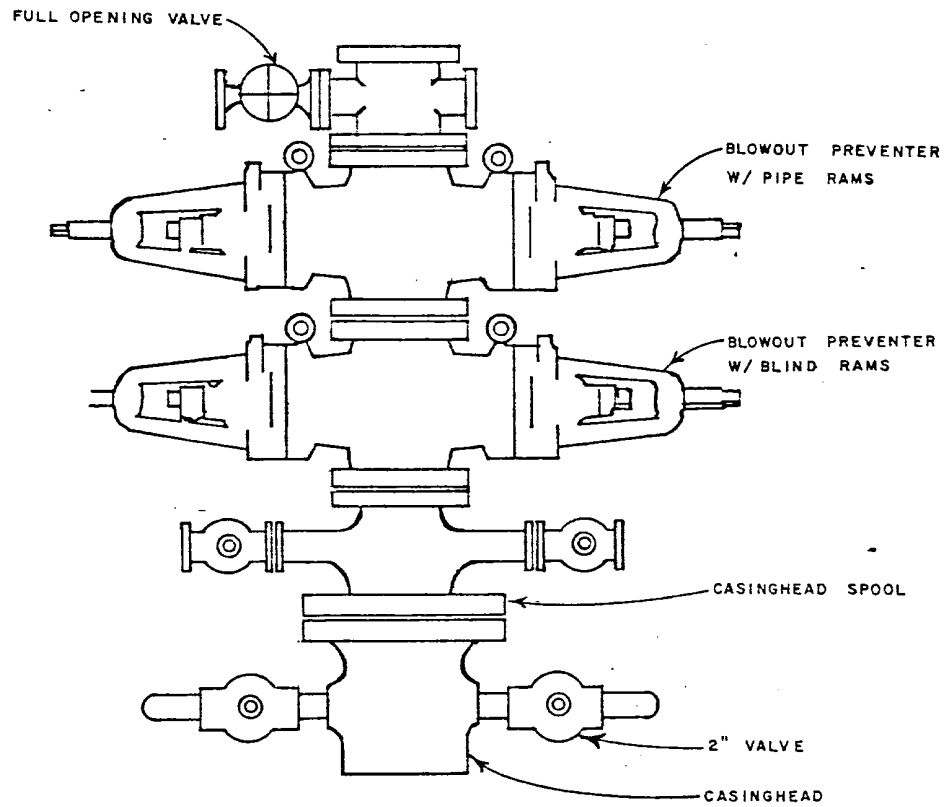
<u>Estimated Depth</u>	<u>Casing Size</u>	<u>Casing Weight</u>	<u>Hole Size</u>	<u>Sacks Cement</u>	<u>Type</u>
100	7" Used	23	12 $\frac{1}{4}$ "	100	Class "B" 2% CaCl <sub>2</sub>
1825	4 $\frac{1}{2}$ " New	9.5	6 $\frac{1}{4}$ "	50 140	Class "B" Class "B" 50-50 Poz mix, 6% gel with $\frac{1}{4}$ # Celloflake/sack

Benson Mineral Group Inc.'s standard blowout prevention will be employed, see the attached drawing of the preventor design.

Drilling fluid to be a low solids non-dispersed mud system.

The logging program will be as follows: Induction-Electric and Compensated Density-Gamma Ray from surface casing point to total depth.

Past experience in this area has shown that no abnormal pressures, temperatures, or hydrogen sulfide gas will be encountered.



**BENSON  
MINERAL  
GROUP, INC.**

3200 Anaconda Tower  
555 17th Street  
Denver, Colorado 80202

STANDARD BLOWOUT PREVENTER  
ASSEMBLY  
6" 900 SERIES

GEOLOGY BY:

DATE:

POSTED:

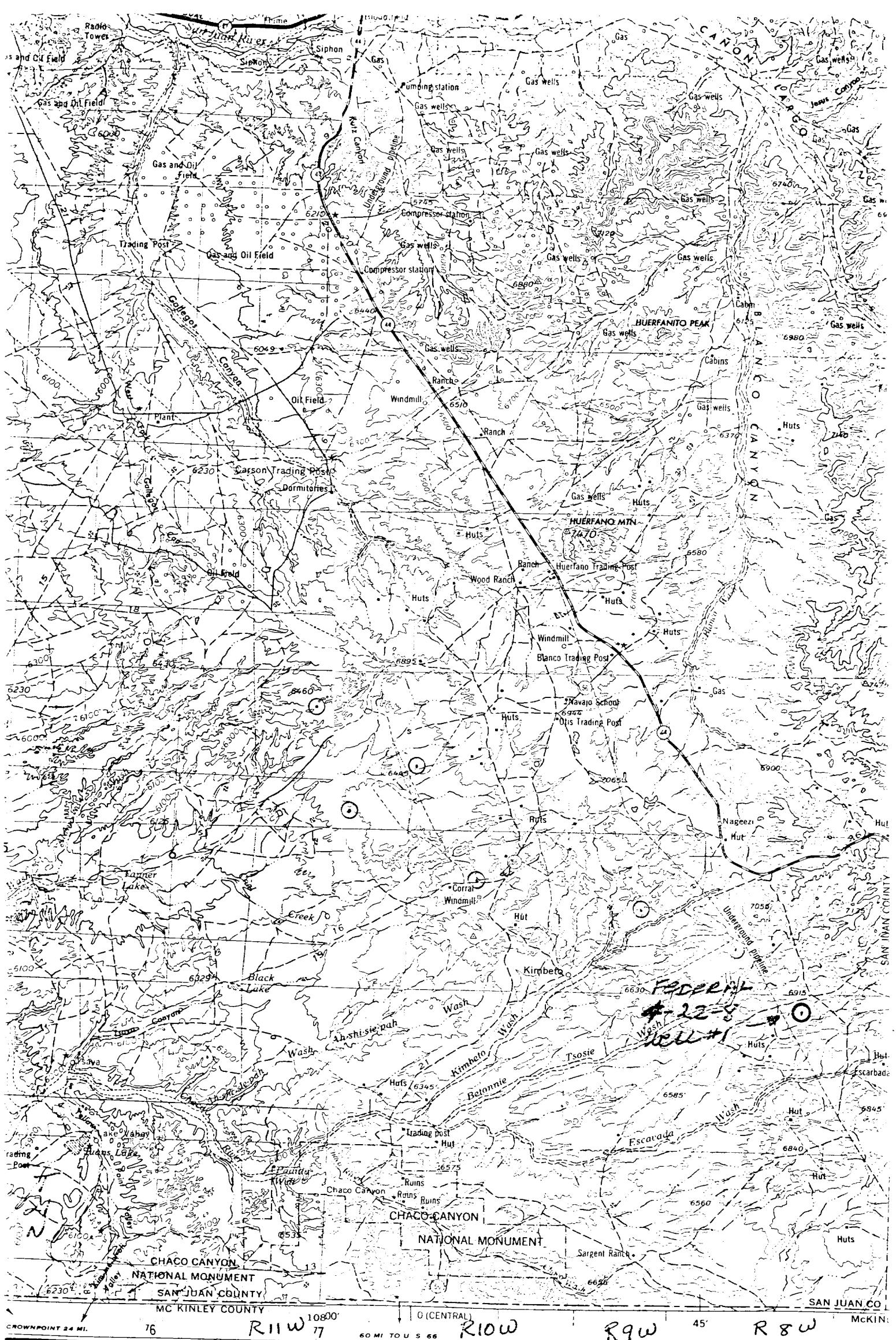
APPROVED BY:

DRAFTING BY:  
G W R

MULTI-POINT SURFACE USE PLAN

Federal 4-22-8 Well #1  
1570' FSL & 840' FEL Section 4-T22N-R8W  
SAN JUAN COUNTY, NEW MEXICO

1. The attached road map and sketch show the proposed route to the location and distances from towns.
2. An access road of 3,500 ft. ~~will~~ will be constructed as a new permanent road to location.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the vicinity map.
4. There are no storage tanks or facilities located within a one-mile radius of our proposed location.
5. Water will be hauled by truck from various existing water sources over existing permanent roads.
6. No construction materials will be hauled in for this location. Material from high points on location will be used to level location for proper drilling.
7. A 20' X 120' pit will be built on location to hold all drilling waste. Upon completion of well, all waste and liquid will be hauled by truck and bladed into existing roads. All other waste will be covered in 20' X 120' reserve pit.
8. There are neither airstrips nor camps in the vicinity.
9. The well site layout, reserve, burn and trash pits are shown on the attached Drill Site Specification Sheet.
10. Restoration of the surface will be accomplished by cleaning up and leveling upon completion of the well. Drilling mud will be hauled away and the reserve pit back filled. Reseeding of the site will be carried out as detailed by the Surface Management Agency at the time at the site examination.
11. The general topography and soil characteristics consist of fairly level terrain with vegetation of sagebrush and a few small pinion trees.  
  
Representatives of the U.S. Geological Survey's Farmington Office and Bureau of Land Management's Farmington Office will inspect the site. Cultural resources inspection will be conducted by an archaeologist from San Juan College or Salmon Ruins.
12. A Certification Statement by Benson Mineral Group, Inc.'s representative is included.



● INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D.

GRID ZONE DESIGNATION:  
12S  
100,000 M. SQUARE IDENTIFICATION

WR XR YR

TO GIVE A STANDARD REFERENCE OF  
THIS SHEET TO NEAREST 1000 METER  
SAMPLE POINT: RED ROCK

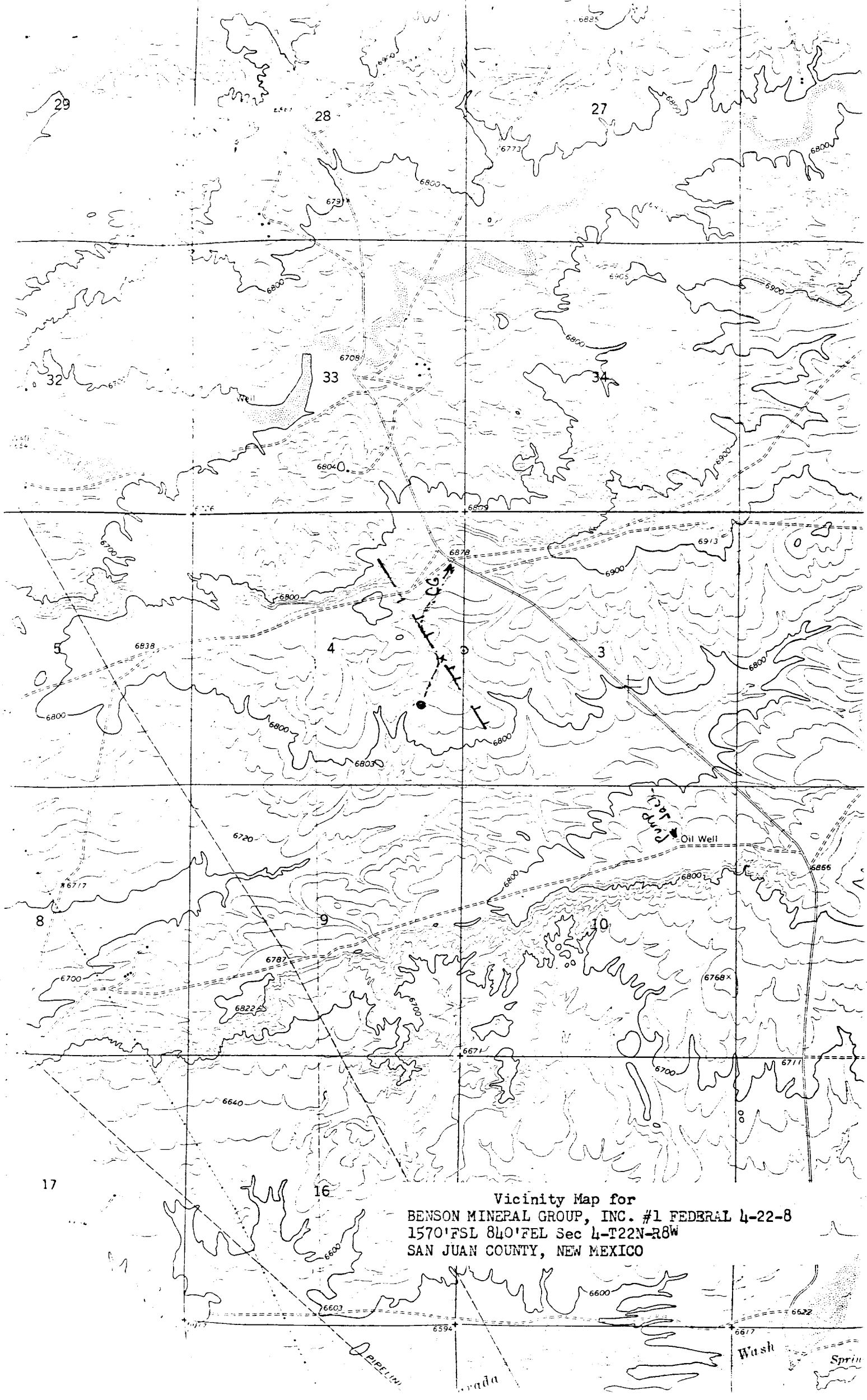
1. Read letters identifying 100,000 meter square in which the point lies.
2. Locate first VERTICAL grid line to LEFT of point and read LARGE figure labeling the

by the Army Map Service (BEGN), Corps of Engineers, U.S. Army, Washington, D.C. Compiled in 1955 by photogrammetric methods USGS quadrangles, 1:24,000 and 1:62,500, 1940-53. Planimetry revised by photo-planimetric methods. Aerial photography dated 1954. Horizontal and vertical control by USGS, USFS, and USCE. Map not field checked.

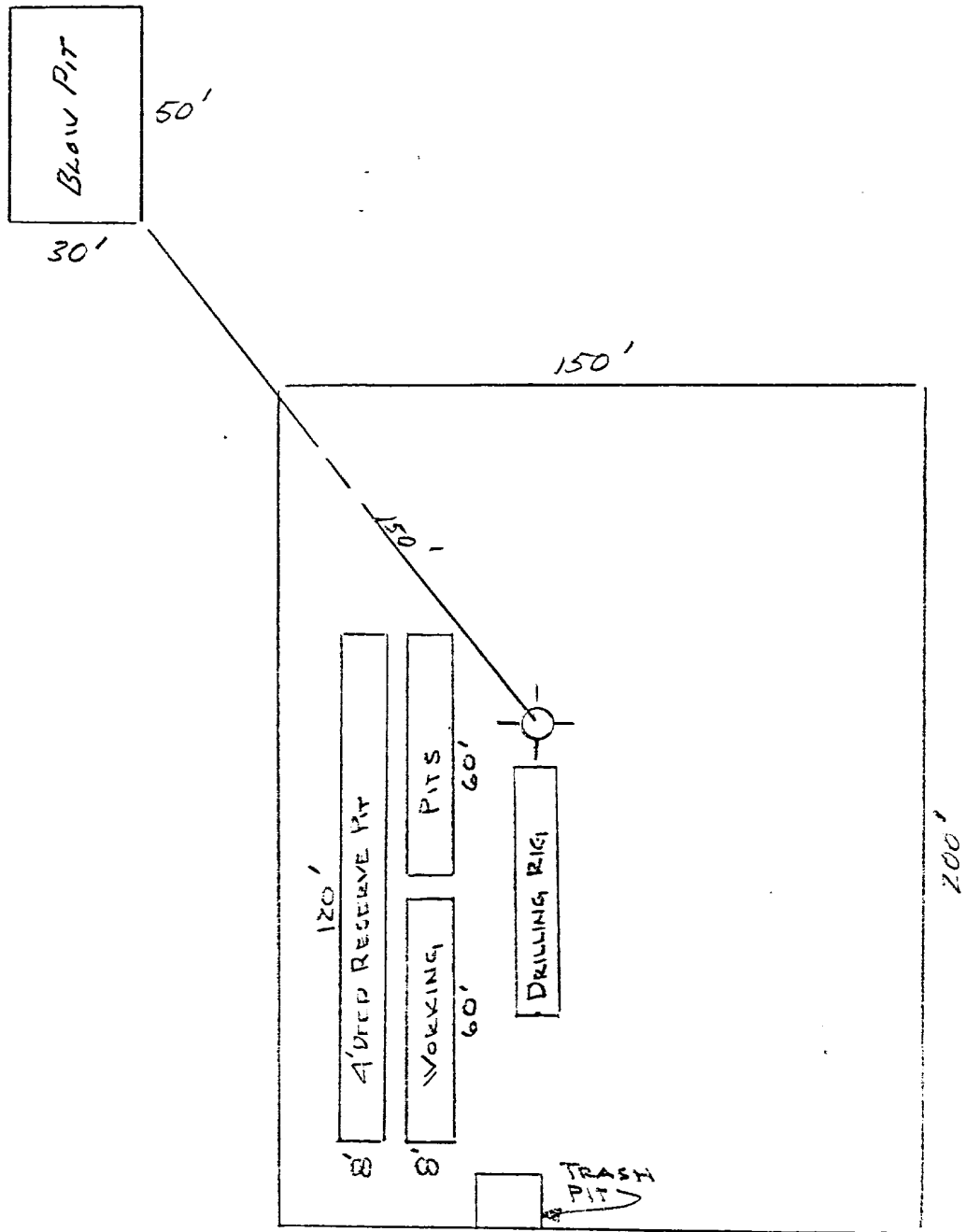
POPULATED PLACES

Over 500,000

100,000 to 500,000



Vicinity Map for  
BENSON MINERAL GROUP, INC. #1 FEDERAL 4-22-8  
1570'FSL 840'FEL Sec 4-T22N-R8W  
SAN JUAN COUNTY, NEW MEXICO



PROPOSED LOCATION  
DIAGRAM



Federal 4-22-8 Well #1  
1570' FSL & 840' FEL Section 4-T22N-R8W  
San Juan County, New Mexico

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 BENSON MINERAL GROUP, INC. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

June 2, 1978  
Date

  
Paul C. Ellison

Production Manager

Benson Mineral Group Inc.'s Representative:

Paul C. Ellison  
Phone: Office: 303-893-0883; Home: 303-979-9021  
Address: 3200 Anaconda Tower  
555 17th Street  
Denver, Colorado 80202