

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

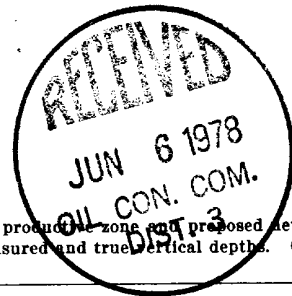
## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. NM-8888		
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
2. NAME OF OPERATOR Benson Mineral Group, Inc.			7. UNIT AGREEMENT NAME		
3. ADDRESS OF OPERATOR 3200 Anaconda Tower, 555 17th St., Denver, CO 80202			8. FARM OR LEASE NAME Federal 8-20-2		
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) At surface 1650' FSL & 790' FWL Section 8-T20N-R2W At proposed prod. zone			9. WELL NO. 1		
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 7.5 miles southwest of Cuba, New Mexico			10. FIELD AND POOL, OR WILDCAT Wildcat <i>Chacra</i>		
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 790			11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 8-T20N-R2W NW SW		
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. None			12. COUNTY OR PARISH 13. STATE Sandoval N.M.		
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6874 GR.			17. NO. OF ACRES ASSIGNED TO THIS WELL 160		
22. APPROX. DATE WORK WILL START* As soon as permitted			20. ROTARY OR CABLE TOOLS Rotary		

## 23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	7" used	23	100	100 sx circ.
6 1/4	4 1/2" new	9.5	1550	165 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.



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 \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

ok Frank

\*See Instructions On Reverse Side

RECEIVED

JUN 5 1978

U. S. GEOLOGICAL SURVEY  
DURANGO, COLO.

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.

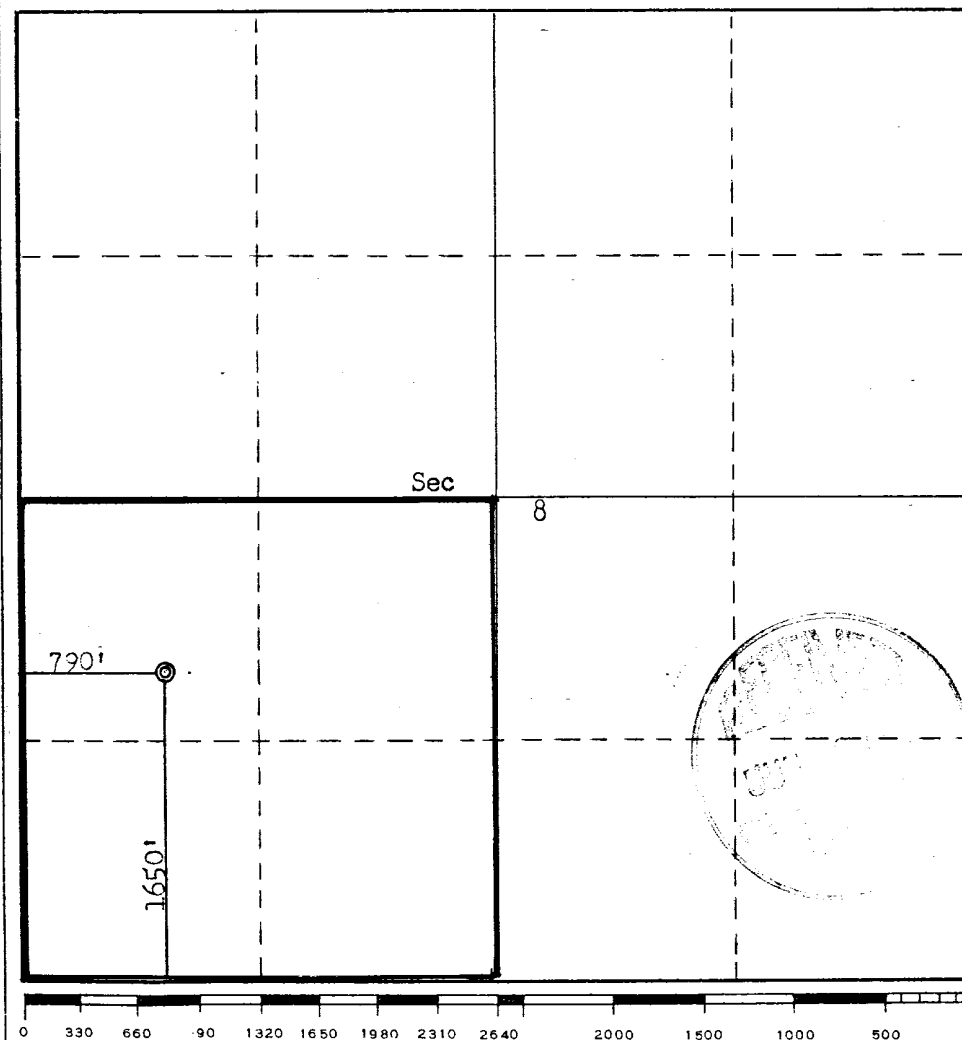
Operator <b>BENSON MINERAL GROUP, INC.</b>			Lease <b>FEDERAL 8-20-2</b>		Well No. <b>1</b>
Unit Letter <b>L</b>	Section <b>8</b>	Township <b>20N</b>	Range <b>2W</b>	County <b>Sandoval</b>	
Actual Footage Location of Well: <b>1650</b> feet from the <b>South</b> line and <b>790</b> feet from the <b>West</b> line					
Ground Level Elev. <b>6874</b>	Producing Formation <b>Chacra</b>		Pool <b>Undesignated</b>	Dedicated Acreage: <b>160</b> Acres <input checked="" type="checkbox"/>	

- 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.

*Paul C. Ellison*

Name **Paul C. Ellison**  
Position **Production Manager**

Company **Benson Mineral Group, Inc**

Date **June 2, 1978**

Date

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

**May 20, 1978**

Registered Professional Engineer and/or Land Surveyor

*Fred B. Kerre Jr.*  
Fred B. Kerre Jr.

Certificate No. **3950**

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

Federal 8-20-2 Well #1  
1650' FSL & 790' FWL Section 8-T20N-R2W  
Sandoval County, New Mexico

The geologic name of the surface formation is: Tertiary Nacimiento

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

<u>Formation</u>	<u>Depth</u>	<u>Elevation</u>
Pictured Cliffs	560	+6320
Chacra	1420	+5460
Total Depth	1550	

Estimated K.B. elevation: 6880

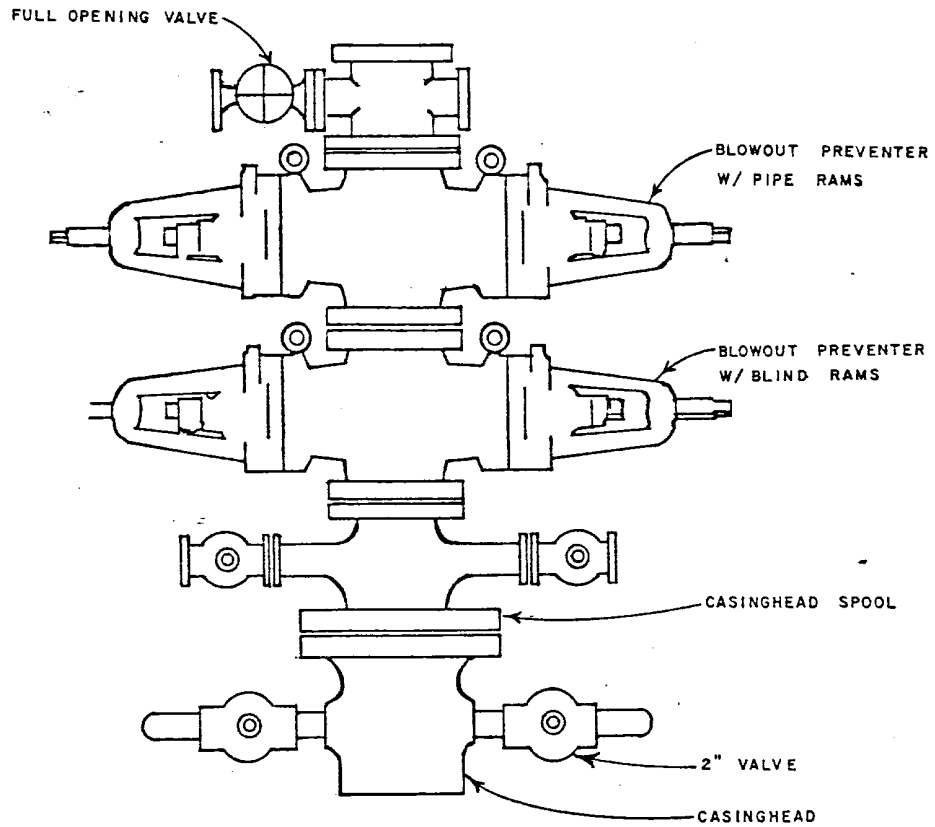
<u>Estimated Depth</u>	<u>Casing Size</u>	<u>Casing Weight</u>	<u>Hole Size</u>	<u>Sacks Cement</u>	<u>Type</u>
100	7" Used	23	12¼"	100	Class "B" 2% CaCl <sub>2</sub>
1550	4½" New	9.5	6¼"	50 115	Class "B" Class "B" 50-50 Poz mix, 6% gel with ¼# Celloflake/sack

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

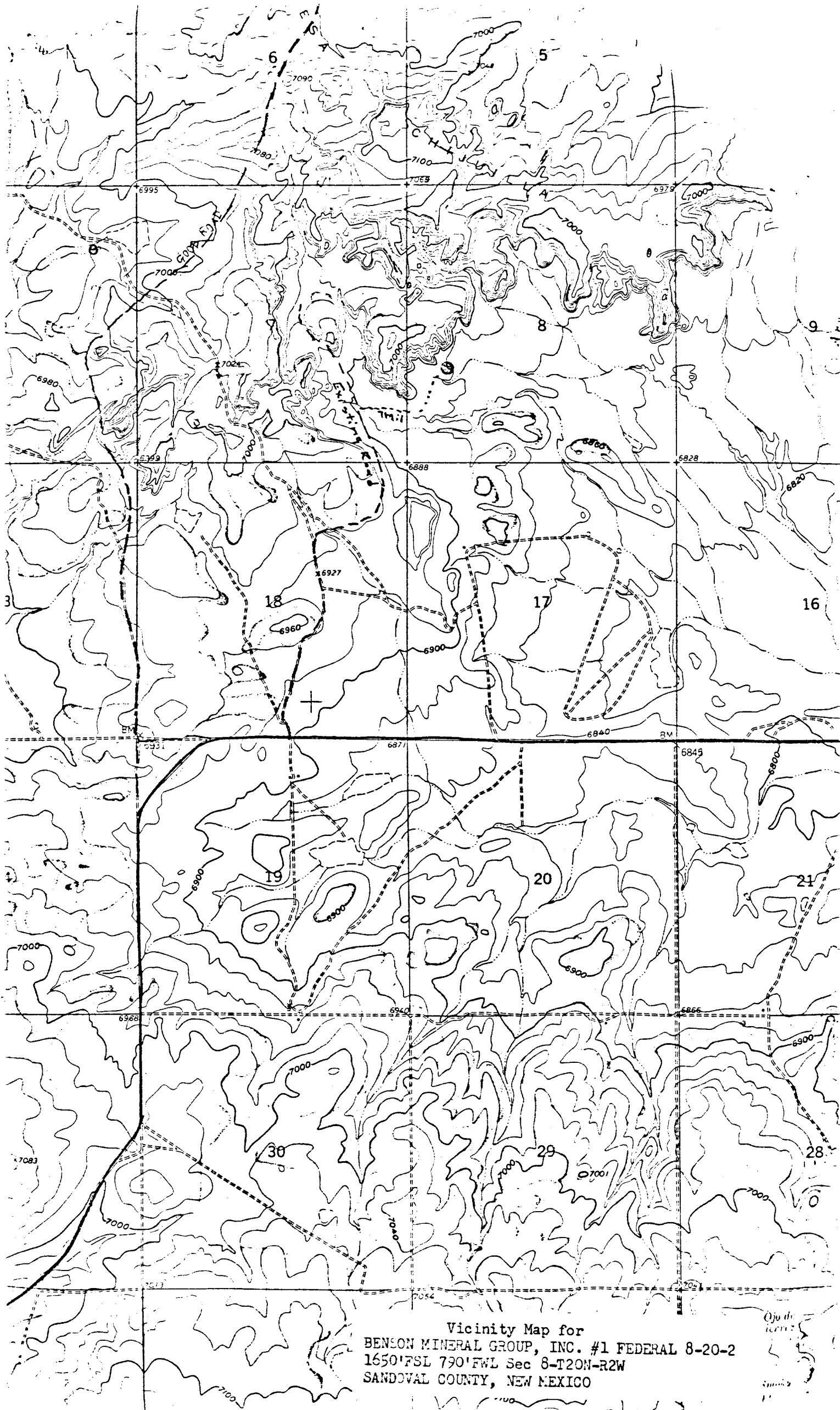
MULTI-POINT SURFACE USE PLAN

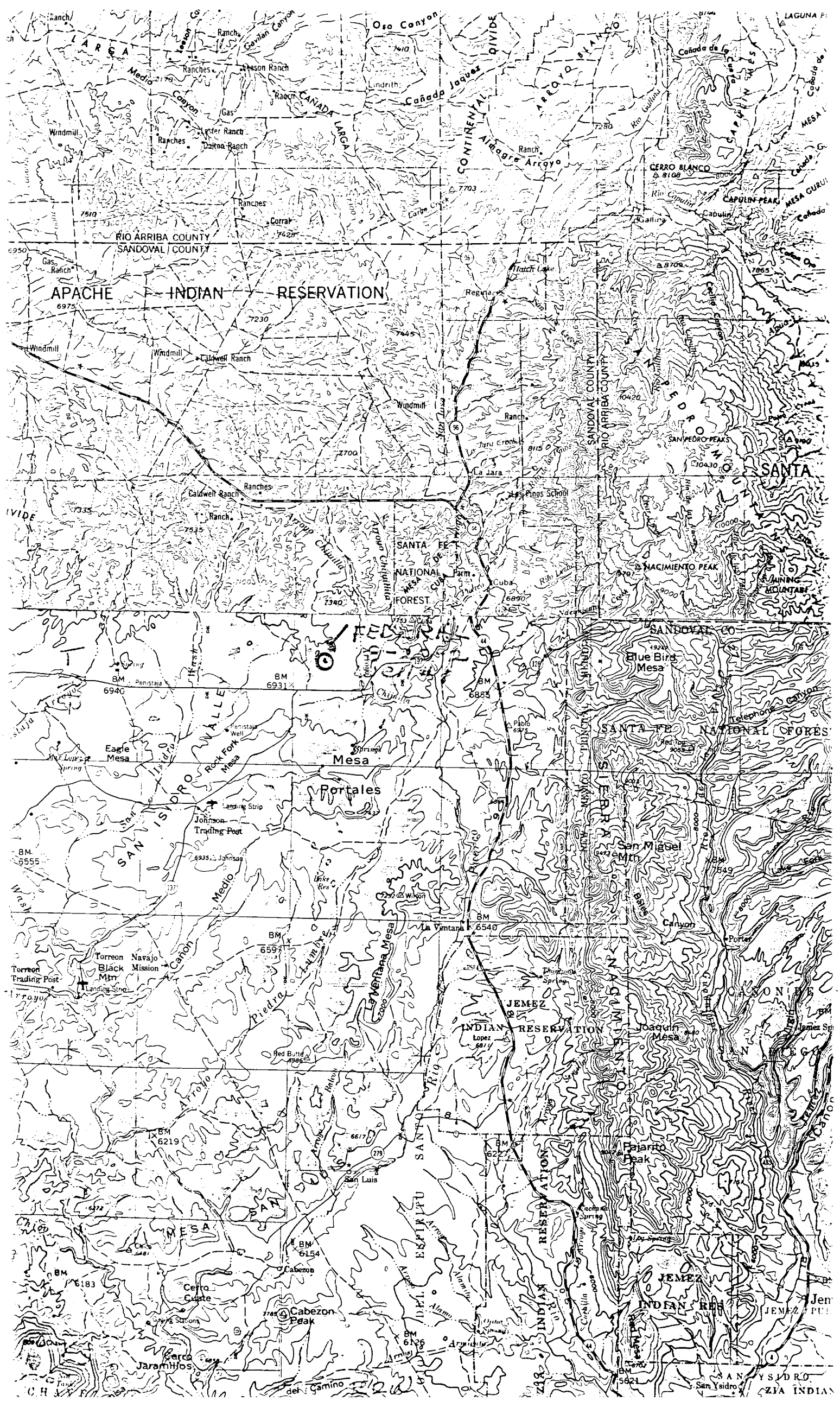
Federal 8-20-2 Well #1  
1650' FSL & 790' FWL Section 8-T20N-R2W  
Sandoval County, New Mexico

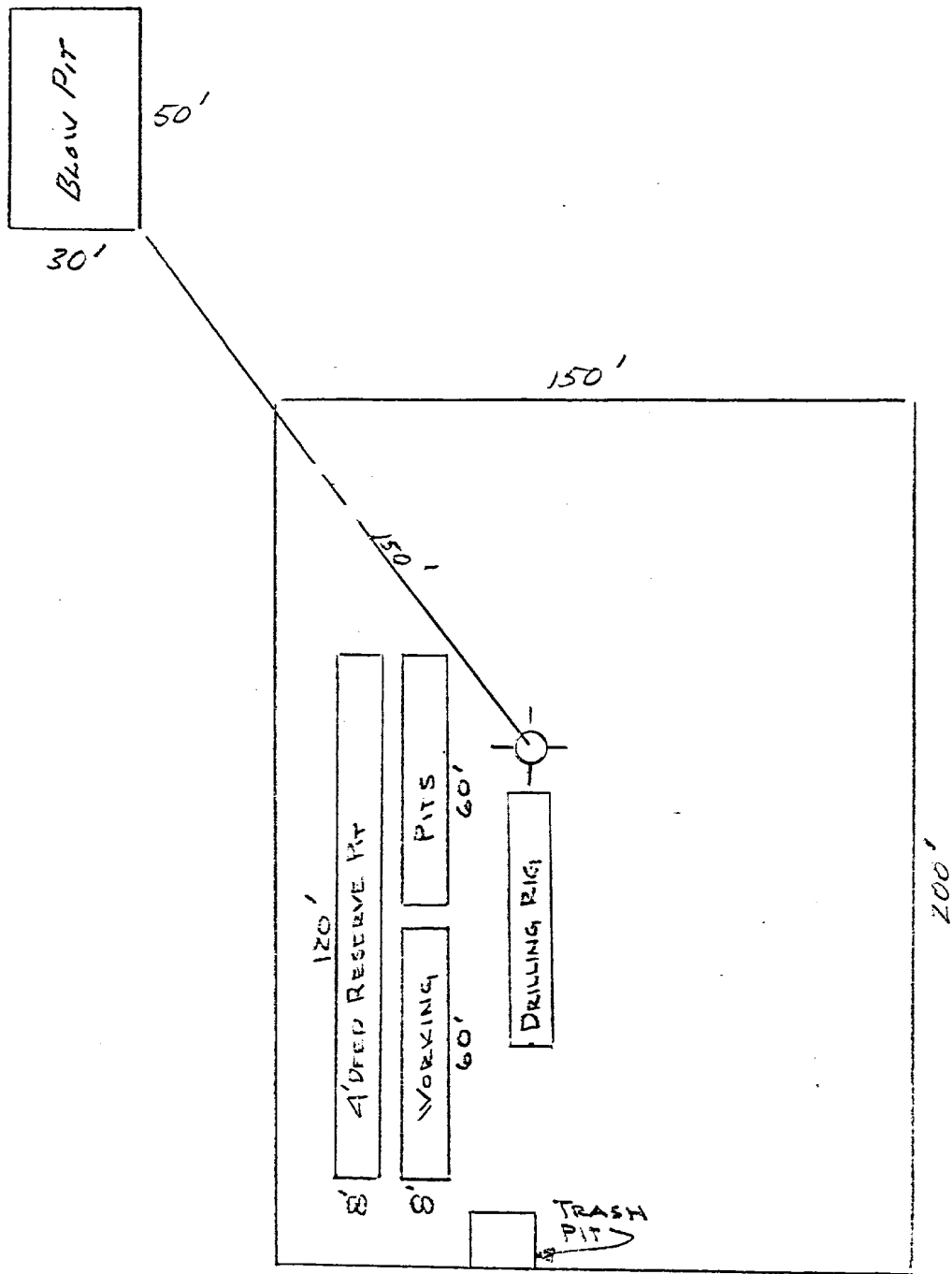
1. The attached road map and sketch show the proposed route to the location and distances from towns.
2. An access road of one half mile will be constructed as a new permanent road to location.
3. Existing oil and gas wells within a one-mile radius of our proposed well have been spotted on the vicinity 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 Albuquerque Office and Bureau of Land Management's Durango 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.







PROPOSED LOCATION  
DIAGRAM



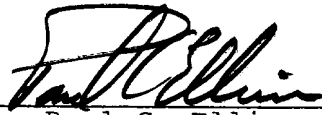
Federal 8-20-2 Well #1  
1650' FSL & 790' FWL Section 8-T20N-R2W  
Sandoval County, New Mexico

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