

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

1480' FSL &amp; 870' FEL, Sec. 4-T21N-R7W

At proposed prod. zone

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

2 miles southwest of Counselor, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

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

870'

## 16. NO. OF ACRES IN LEASE

1120

## 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

1100'

## 20. ROTARY OR CABLE TOOLS

Rotary

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

6734 GR.

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

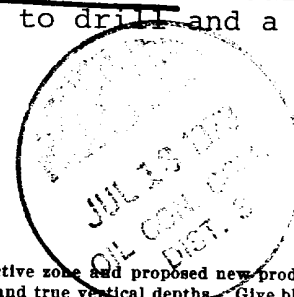
As soon as permitted

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	7" used	23	100	100 sx. circ.
6 1/4	4 1/2" new	9.5	1100	120 sx. circ.

The above well is being drilled to evaluate the Pictured Cliffs 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 to 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 July 10, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

ok Frank

JUL 12 1978

\*See Instructions On Reverse Side

U. S. GEOLOGICAL SURVEY  
FEDERAL BUREAU OF

## 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 redrill 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.

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102  
Supersedes C-123  
Effective 1-1-65

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

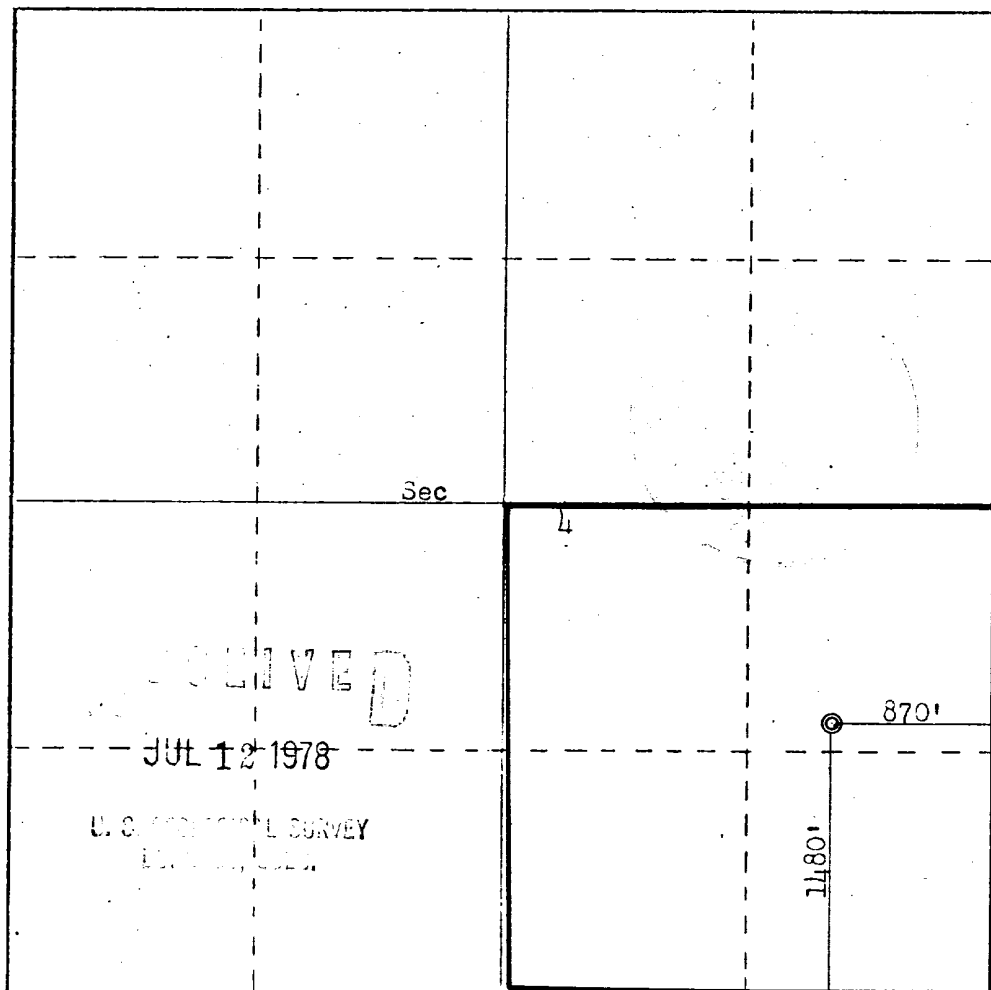
Operator <b>BENSON MINERAL GROUP, INC.</b>			Lease <b>FEDERAL 4-21-7</b>		Well No. <b>1</b>
Unit Letter <b>I</b>	Section <b>4</b>	Township <b>21N</b>	Range <b>7W</b>	County <b>Sandoval</b>	
Actual Footage Location of Well:					
<b>1480</b> feet from the <b>South</b> line and		<b>870</b> feet from the <b>East</b> line			
Ground Level Elev. <b>6734</b>	Producing Formation <b>Pictured Cliffs</b>	Pool <b>Undesignated Wildlife</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.



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

**July 10, 1978**

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

**July 3, 1978**

Registered Professional Engineer and or Land Surveyor

*Fred E. Kerr Jr.*

**Fred E. Kerr Jr.**

Certification No.

**3950**

330 600 900 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

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

Federal 4-21-7 Well #1  
1480' FSL & 870' FEL, Sec. 4-T21N-R7W  
Sandoval Co., N.M.

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	780	+5950
Total Depth	1100	

Estimated K.B. elevation: 6740

<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>
1100	4½" New	9.5	6¼"	50 70	Class "B" Class "B" 50-50 Poz mix, 6% gel with ¼# Celloflake/sack

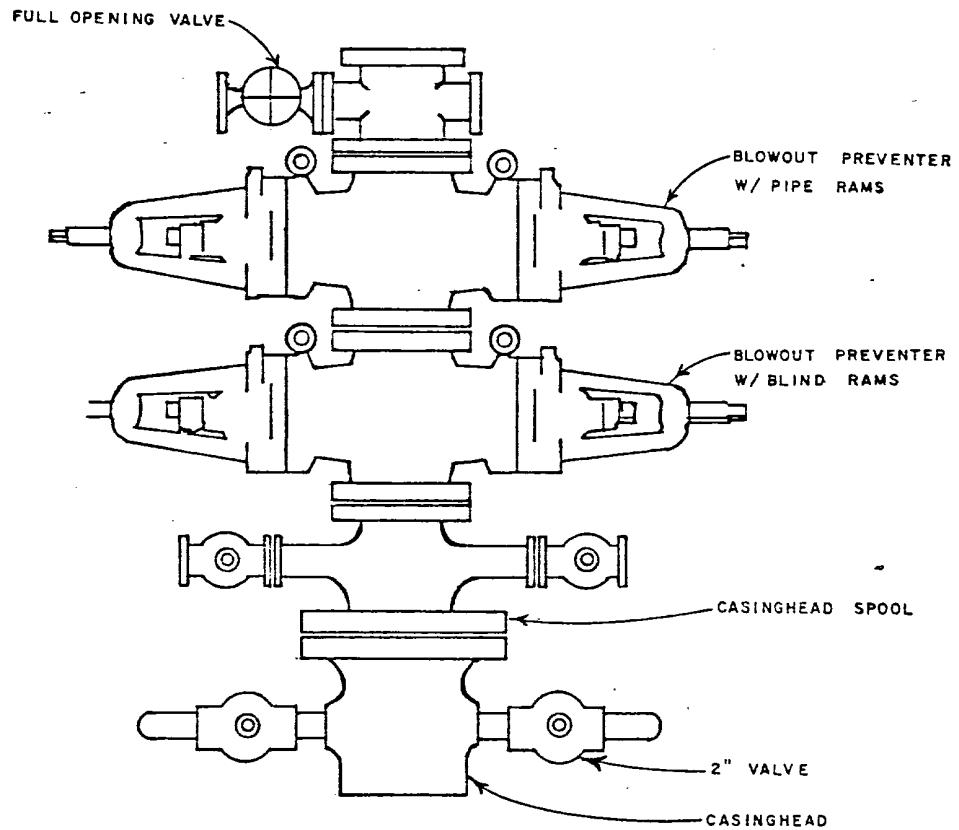
Benson Mineral Group Inc.'s standard blowout prevention will be employed, see the attached drawing of the preventor design.

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.

RECEIVED  
JUL 12 1978  
U.S. GEOLOGICAL SURVEY  
DALLAS, TEXAS



**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
-------------	-------	---------	--------------	-----------------------

RECEIVED

JUL 12 1978

U. S. GEOLOGICAL SURVEY  
BUREAU OF MINALS

MULTI-POINT SURFACE USE PLAN

Federal 4-21-7 Well #1  
1480' FSL & 870' FEL, Sec. 4-T21N-R7W  
Sandoval County, N. M.

1. The attached road map and sketch show the proposed route to the location and distances from towns.
2. An access road of  $\frac{1}{4}$  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 private 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.

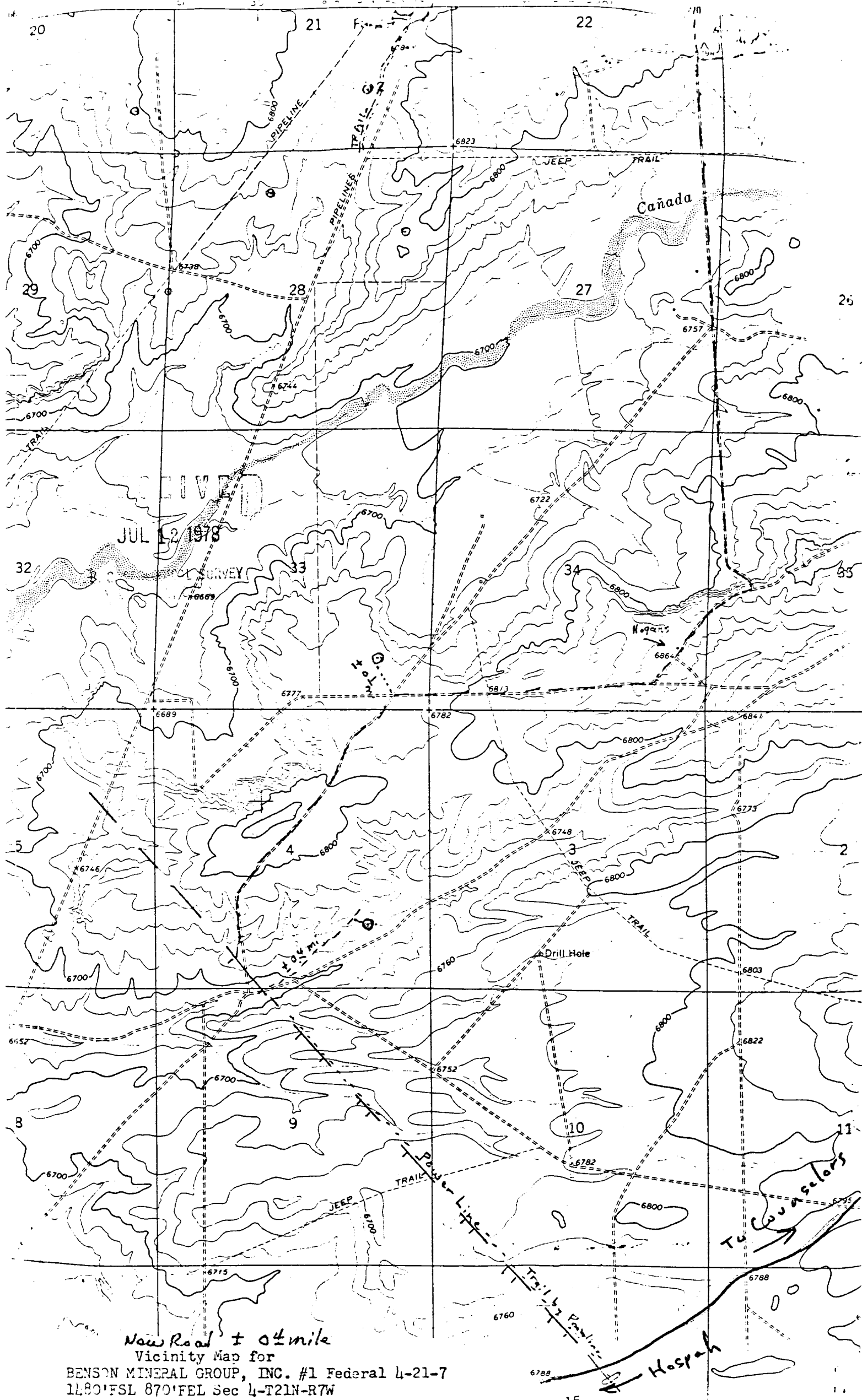
Representatives of the U.S. Geological Survey's Durango Office and Bureau of Land Management's Farmington Office will inspect the site. Cultural resources inspection will be conducted by an archaeologist from San Juan College or Salmon Ruins.

12. A Certification Statement by Benson Mineral Group, Inc.'s representative is included.

RECEIVED

JUL 12 1978

U.S. GEOLOGICAL SURVEY  
DURANGO OFFICE



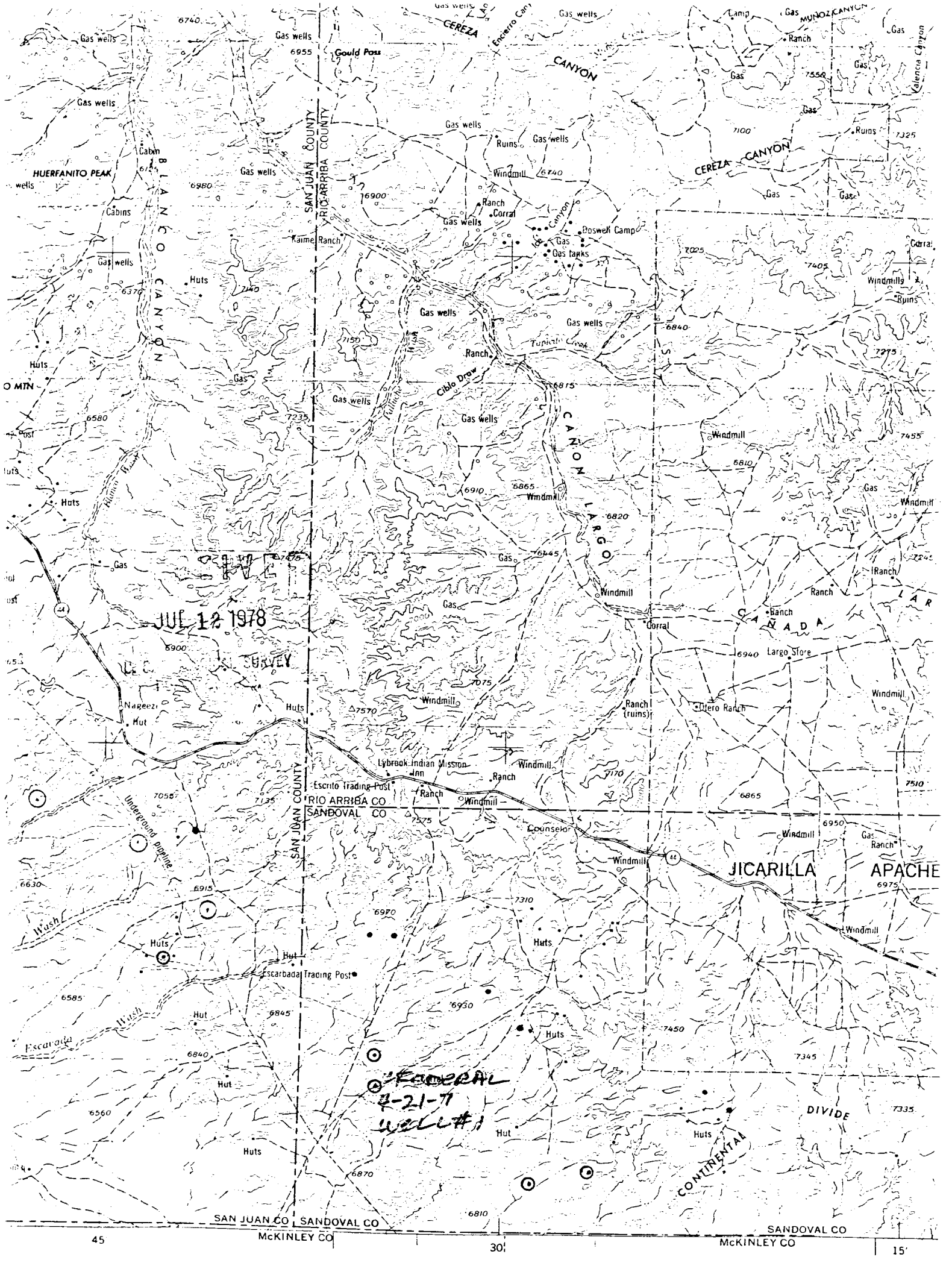
New Road  $\pm 0.4$  mile

Vicinity Map for

BENSON MINERAL GROUP, INC. #1 Federal 4-21-7

1180' FSL 870' FEL Sec 4-T21N-R7W

Sandoval County, New Mexico



**LEGEND**

ROAD DATA 1960

Figures in red denote approximate distances in miles between stars

**ROADS**

Hard surface, heavy duty	More than two lanes wide	3 LANES, 4 LANES	
Two lanes wide; Federal route marker	Hard surface, medium duty	More than two lanes wide	3 LANES, 4 LANES
Two lanes wide; State route marker	Improved light duty	Unimproved dirt	Trail

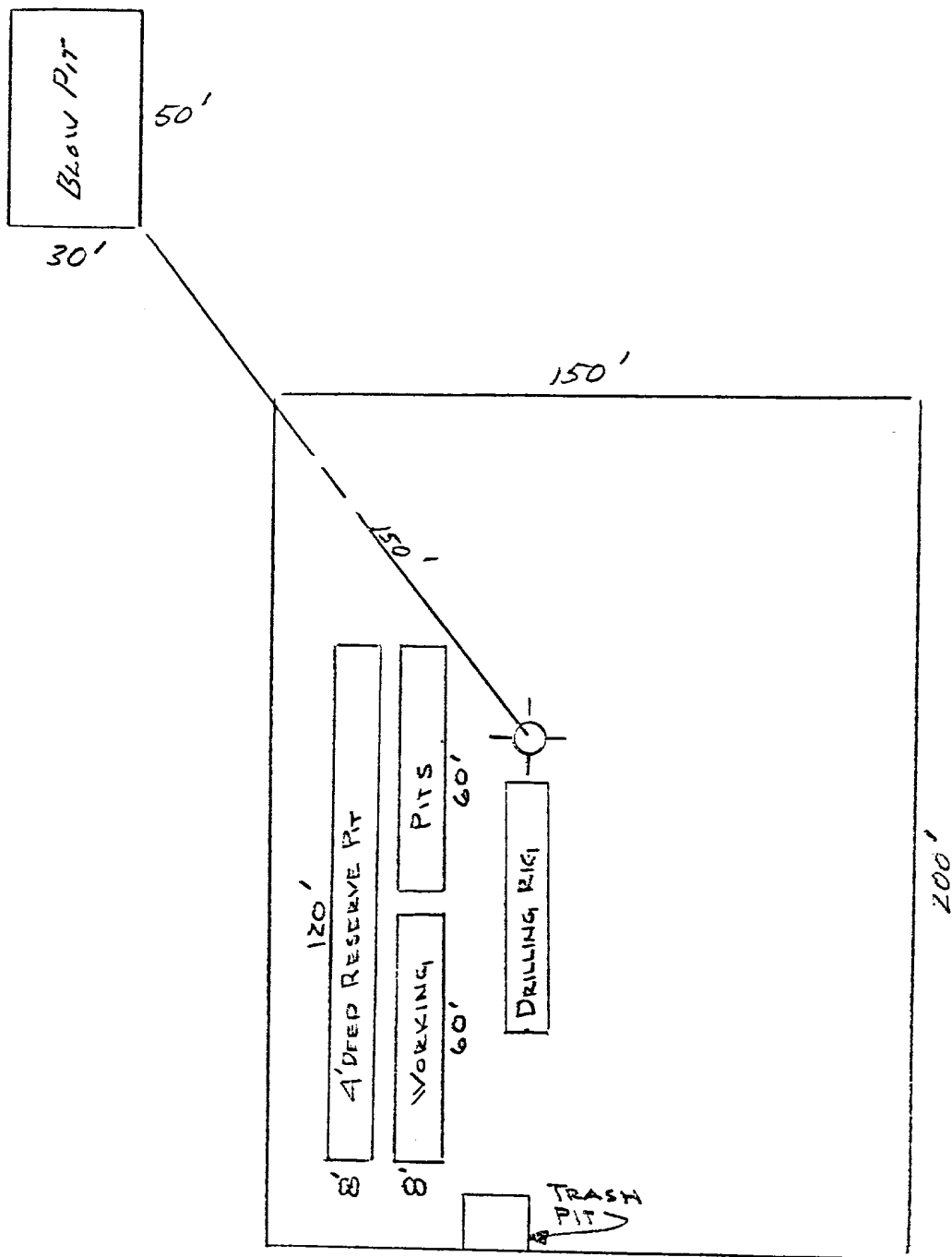
**LAND PLACES**

LOS ANGELES	OMAHA	GALVESTON	Laramie	Grand Coulee	Sun Valley
-------------	-------	-----------	---------	--------------	------------

**LANDMARKS**

Landplane airport	Landing area	Seaplane airport	Seaplane anchorage	Woods-brushwood	
Landmarks: School; Church; Other	Horizontal control point	Spot elevation in feet	Marsh or swamp	Intermittent or dry stream	Power line





RECEIVED

JUL 12 1978

U. S. NATIONAL SURVEY  
WASHINGTON, D. C.

PROPOSED LOCATION  
DIAGRAM

Federal 4-21-7 Well #1  
1480' FSL & 870' FEL, Sec. 4-T21N-R7W  
Sandoval Co., N.M.

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.

July 10, 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

RECEIVED  
JUL 12 1978  
U.S. GEOLOGICAL SURVEY  
L. J. WILSON