

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

| | | | |
|---|--|--|--|
| 2. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> | | 5. LEASE DENIGATION AND SERIAL NO. Jicarilla 37-B Cont. 13 | |
| 3. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> NAME OF OPERATOR Ken Blackford | | 6. IF INDIAN, ALLOTTEE OR TRIBE NAME Jicarilla | |
| 4. ADDRESS OF OPERATOR P. O. Box 108 Lubbock, Texas 79408 | | 7. UNIT AGREEMENT NAME | |
| 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements) At surface 800' fnl & 800' fel At proposed prod. zone | | 8. FARM OR LEASE NAME Jicarilla 37B | |
| 4. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 800' | | 9. WELL NO. 37-B-8 | |
| 15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drilg. unit line, if any) 1400' | | 10. FIELD AND POOL, OR WILDCAT Ballard PC | |
| 16. NO. OF ACRES IN LEASE 1600 | | 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 26, T 24 N - R 5 W NMPM | |
| 17. NO. OF ACRES ASSIGNED TO THIS WELL 160 | | 12. COUNTY OR PARISH Rio Arriba | |
| 18. PROPOSED DEPTH 2500' | | 13. STATE N. M. | |
| 20. ROTARY OR CABLE TOOLS Rotary | | 22. APPROX. DATE WORK WILL START* 7/15/80 | |
| 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6680 GL (topo) | | | |

PROPOSED CASING AND CEMENTING PROGRAM

| SIZE OF HOLE | SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH | QUANTITY OF CEMENT |
|--------------|----------------|-----------------|---------------|--------------------|
| 11" | 8-5/8" | 32.0 | 100' | 50 sx. |
| 6-3/4" | 4-1/2" | 10.5 | 2500' | 100 sx. |

Drill approximately 100' of 11" hole, set 100' of 8-5/8" 32.0 lb. surface casing, circulate cement.

Drill 6-3/4" hole to 2500', set 4-1/2" casing 10.5 lb. to total depth, cement with 100 sx class B, to cover Ojo Alamo.

Selectively perforate approximately 30 feet of sandstone, sand water frac selected zones.

Run 2-3/8" tubing to 2450', place on production.

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 B. F. Latch TITLE Agent - Geologist DATE June 10, 1980

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY [Signature] TITLE _____ DATE _____

CONDITIONS OF APPROVAL _____

NMOC

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.

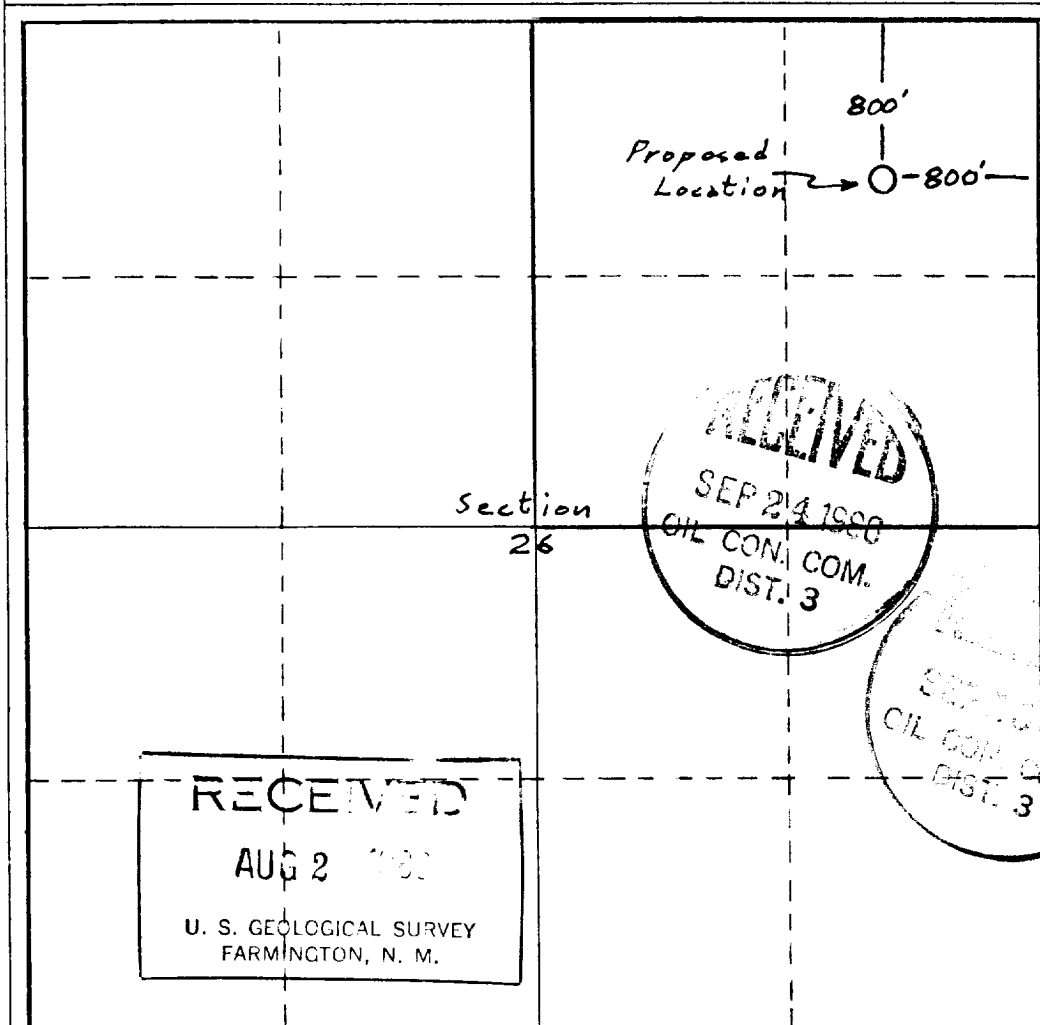
| | | | | | | | | |
|--|--|-------------------------|--------------------------------|-----------------------------|--|--|--|--|
| Operator Ken Blackford | | | Lease Jicarilla 37 B | | | Well No. 37 8 | | |
| Unit Letter | Section 26 | Township 24 N | Range 5 W | County Rio Arriba | | | | |
| Actual Footage Location of Well: 800 feet from the North line and 800 feet from the East line | | | | | | | | |
| Ground Level Elev. 6664 | Producing Formation PICTURED CLIFF | | Pool BALLARD | | | Dedicated Acreage: 160 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.

Name **Billy F. Lohr**
Position **Agent**
Company **Ken Blackford**
Date **9/22/80**

I hereby certify that the well location shown on this plat was plotted and field notes of actual location were taken under my supervision and that the location is true and correct to the best of my knowledge and belief.

Date Surveyed **August 15, 1980**

Date Surveyed **Frederick H. Reed**
Registered Professional Engineer and/or Land Surveyor

Frederick H. Reed

Certificate No. **3795**

0 330 660 990 1320 1650 1980 2310 2640 2970 3300 3630 3960 4290 4620 4950 5280 5610 5940 6270 6600

Operations Plan
Ken Blackford, Jicarilla 37-B-8

1. Location:

800' fnl & 800' fel
Sec. 26, T 24 N - R5W N.M.P.M.
Rio Arriba County, New Mexico

2. Geology:

| | | |
|--------------------|-------------------|------|
| A. Formation tops: | T Wasatch | Spud |
| | T Ojo Alamo | 1900 |
| | K Kirtland | 2050 |
| | K Fruitland | 2205 |
| | K Pictured Cliffs | 2370 |
| | K Lewis | 2440 |
| | TD | 2500 |

B. Logging program:

IES, surface casing to TD.
GR-CNL-FDC-Caliper, 2500' to 1000'
GR correlation log in casing for perforations

C. Coring program:

None

3. Drilling:

- A. Rotary tools, surface to TD
- B. Surface hole with fresh water & spud mud
- C. Fresh water gel mud from surface to TD

4. Materials:

A. Casing program:

| Hole size | Depth | Casing size | Wt. & Grade |
|-----------|-------|-------------|-------------|
| 11" | 100' | 8-5/8" | 32.0 K-55 |
| 6-3/4" | 2500' | 4-1/2" | 10.5 K-55 |

B. Float equipment:

Halliburton Texas pattern guide shoe for surface.

Halliburton 4-1/2" guide shoe w/ insert float valve
one joint above shoe.

Use four Halliburton 4-1/2" centralizers, every
other joint above shoe.

C. Tubing:

2450' of 2-3/8" 4.7 lb. 8rd EUE tubing w/ common
pump seating nipple above perforated nipple & bull plugged

full joint for mud anchor.

D. Well head equipment:

2000 psi test tree.

5. Cementing:

- A. 8-5/8" surface casing, use 50 sx class B w/ 2% Ca Cl. Yields 59 cu. ft. = 125% excess to circulate. WOC 12 hrs. test casing to 500 psi for 30 minutes.
- B. 4-1/2" production casing. Precede cement w/ 20 bbls. fresh water. Cement w/ 100 sx class B, yields 118 cubic feet = 40% excess to cover Ojo Alamo.

6. Completion:

- A. Selectively perforate approximately 30' of ss and treat w/ sand water frac. Use approximately 40,000 gals. water and 60,000 lbs. 20/40 sand.

Multi-Point Surface Use Plan
Ken Blackford, Jicarilla 37-B-8
ne/nw Sec. 26, T24N - R5W

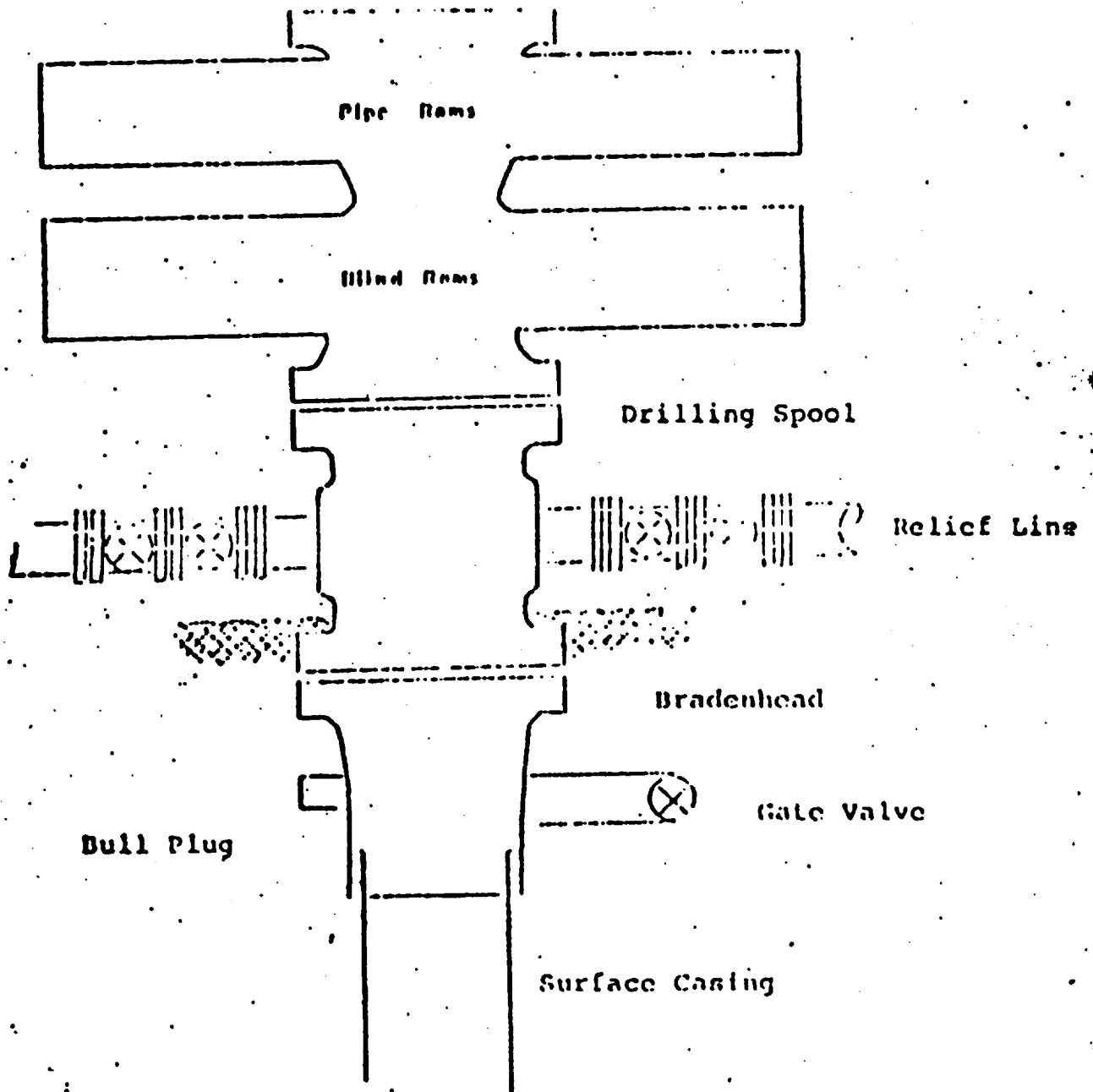
1. Existing Road- Please refer to map No. 1, which shows the the existing roads.
2. Planned access roads- Please refer to map No. 1, approximately 100' of road will have to be constructed in a southwesterly direction from the existing well traveled road. The grade of the access road will be consistent with that of the local terrain. The road surface will not exceed thirty feet in width. Upon completion of the project, the access road will be properly drained to control soil erosion. Drainage facilities may include ditches, water bars, culverts, or any other measures deemed necessary by trained company personnel to secure proper drainage.
3. Location of existing wells- Please refer to map No. 1.
4. Location of tank batteries, production facilities, and production gathering and service lines- Please refer to map No. 1. No tank batteries are utilized in this area. Production facilities consist of a meter run which is constructed on the well site. Gathering lines are all buried and their true positions are unknown to myself although I am sure that this is a matter of record, filed by the purchaser, with the proper regulatory agencies.
5. Location and type of water supply- Water for the proposed project will be obtained from the Largo Wash.
6. Source of construction materials- No additional materials will be required to build either the access road or the proposed location.
7. Methods of handling waste materials- All garbage and trash materials will be put into a burn pit, shown on the attached location plat No. 1. When cleanup operations are begun on the proposed project, the burn pit with its refuse will be buried to a depth of at least three feet. A latrine, the location of which is shown on plat No. 1, will be provided for human wastes. If large amounts of liquids are left in the reserve pit after completion of the project,

Multipoint Surface Use Plan

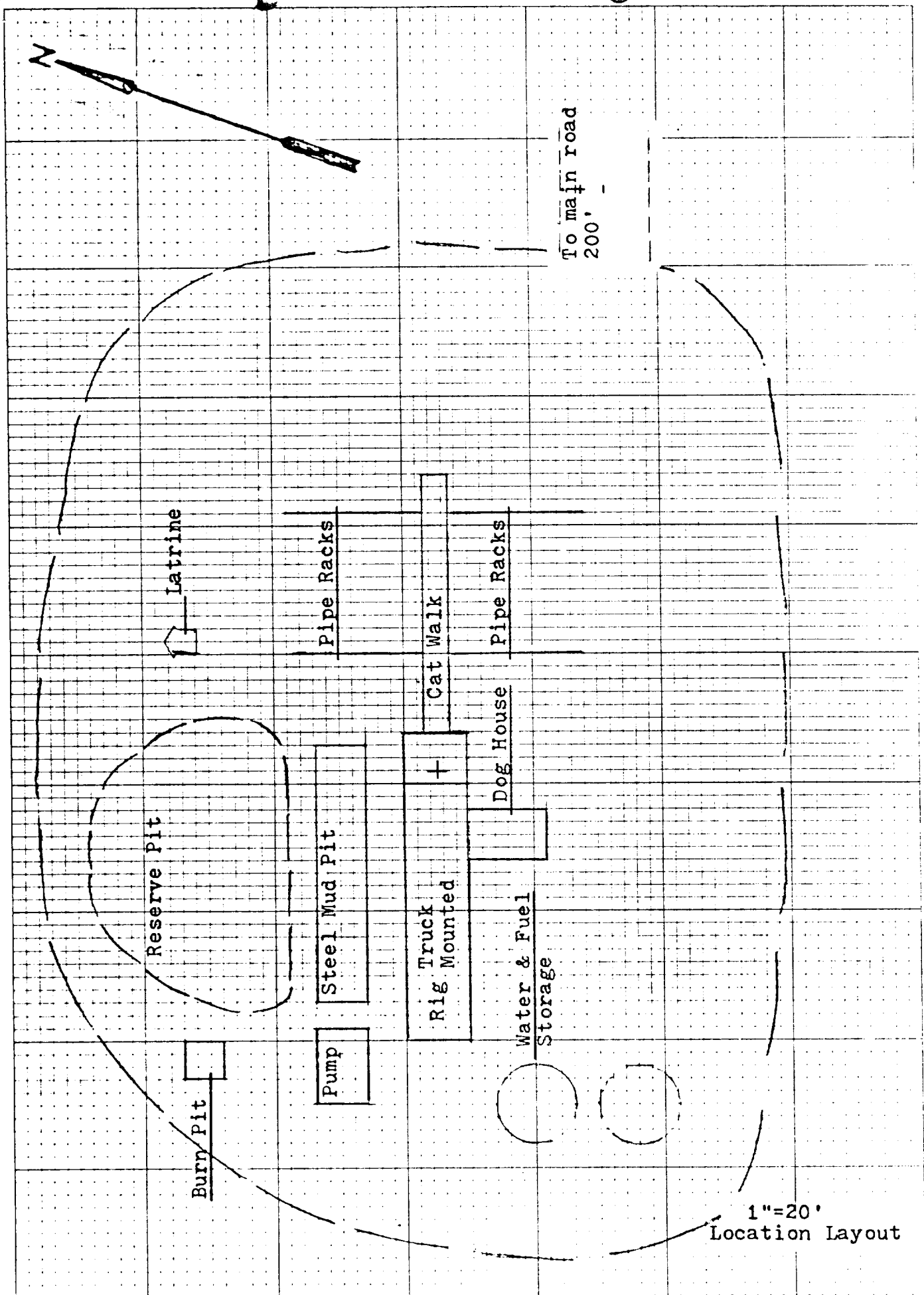
the pit will be fenced until the liquids have had adequate time to dry. The location clean up will not take place until such time as the reserve pit can be properly covered over to prevent run off from carrying any of these materials into the watershed. No earthen pit will be located on natural drainages; all earthen pits will be so constructed as to prevent leakage from occurring.

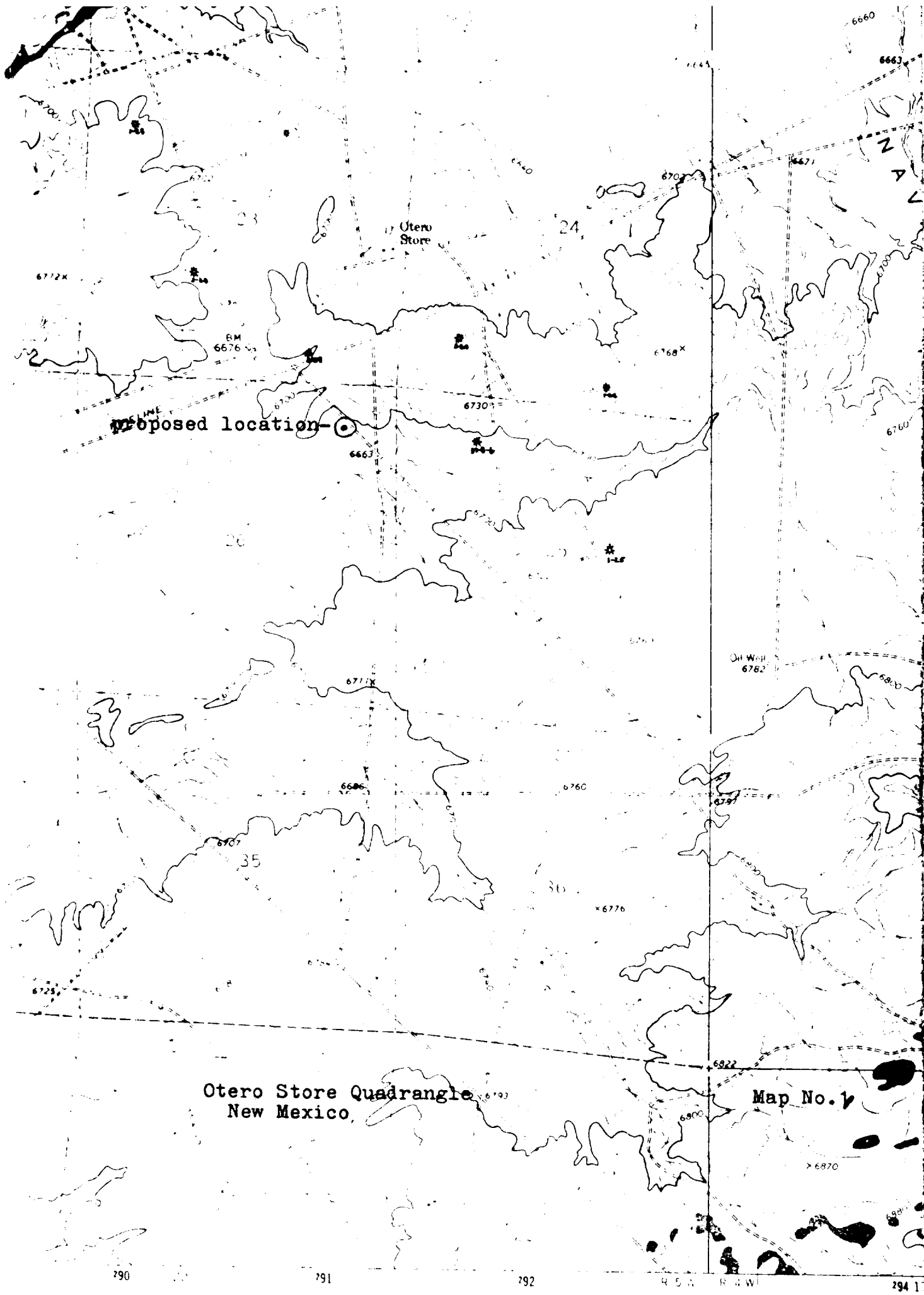
8. Ancillary facilities- No camps or airstrips will be associated with this project.
9. Wellsite layout- Please refer to the attached plat Ex. No. 2.
10. Plans for restoration of the surface- After completion of the project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. We await specific instructions as to the reseeding. The reseeding operation will be performed during the time period set forth by the proper regulatory body.
11. Other information- The immediate area is relatively flat and sandy. A few head of cattle and sheep occasionally graze the proposed project site.
12. Operators representative- B.F. Latch
93 Riverview Drive
Durango, Colo. 81301
303-247-5050
13. Certification- I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Ken Blackford, (operator) and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

B. F. Latch 4/10/80
B.F. Latch
Agent for Ken Blackford
(operator)



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





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R 5 N R 4 W

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RECEIVED

APR 20 1921

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