Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-043-20296

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Gulf Oil Corporation

3. ADDRESS OF OPERATOR
Box 670 Hobbs, NM 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
B 660'FNL & 1980' FEL Section 4, T-17-N, R-4-W
At proposed prod. zone

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

5. LEASE DESIGNATION AND SERIAL NO.
NM-14971

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
South Torreon Federal WI

9. WELL NO.
1

10. FIELD AND POOL, OR WILDCAT
Wildcat Dakota

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 4, T-17-N, R-4-W

12. COUNTY OR PARISH: Sandoval
13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
	1080.62	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	19. PROPOSED DEPTH	20. ROTARY OR CABLE TOOLS
	3400'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
6380' GL

22. APPROX. DATE WORK WILL START*
November 5, 1977

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#	500'	Circulate
7 7/8"	5 1/2"	14# or 15.5#	3400'	Circulate

BOP: See drawer No. 2 attached.

Mud program: 0 to 500' fresh water spud mud. 500' to 3400' fresh water low solid mud.

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 O. T. Berlin TITLE Assistant Area Manager DATE 10-5-77

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Okal

*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	Lease	Well No.
Gulf Oil Corporation	South Torreon Federal W- I	1

Unit Letter	Section	Township	Range	County
B	4	17 North	4 West	Sandoval

Actual Footage Location of Well:
660 feet from the North line and 1980 feet from the East line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
6380	Dakota	Wildcat	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

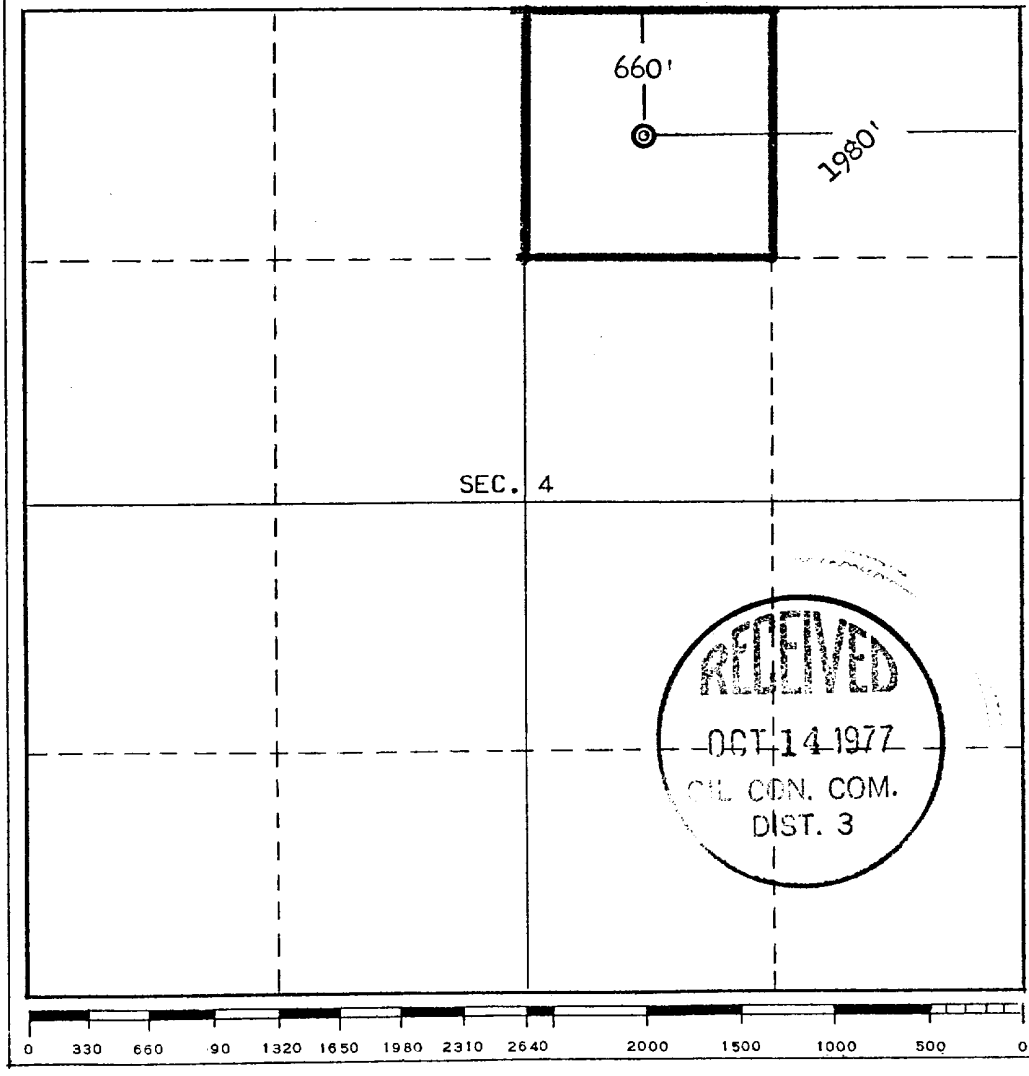
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

D.T. Berlin

Name: D.T. Berlin

Position: Assistant Area Manager

Company: Gulf Oil Corporation

Date: October 5, 1977

REGISTERED LAND SURVEYOR STATE OF NEW MEXICO ERNEST V. ECHOHAWK Reg. No. 3602

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: September 27, 1977

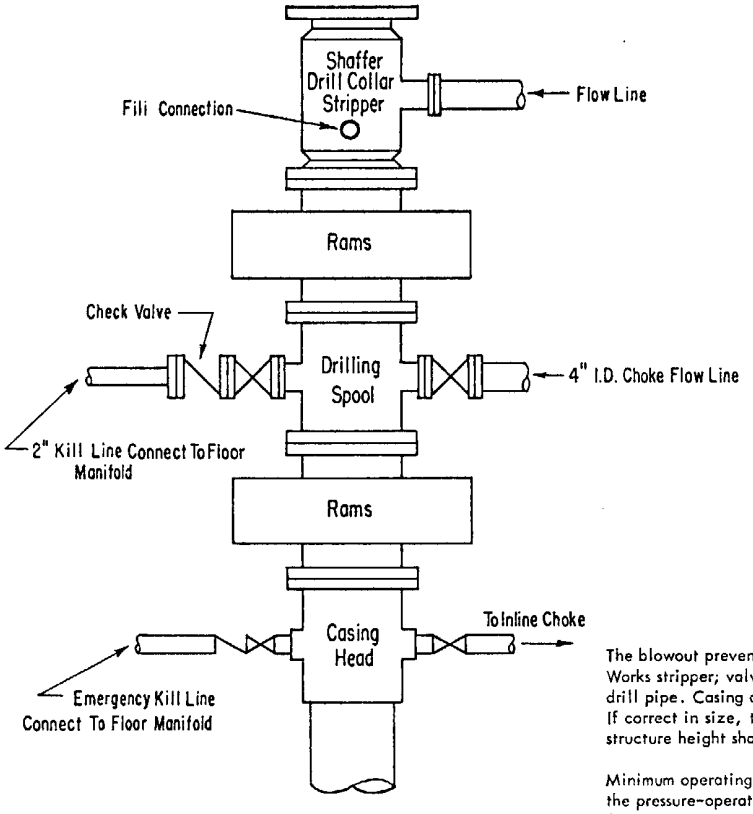
Registered Professional Engineer and/or Land Surveyor

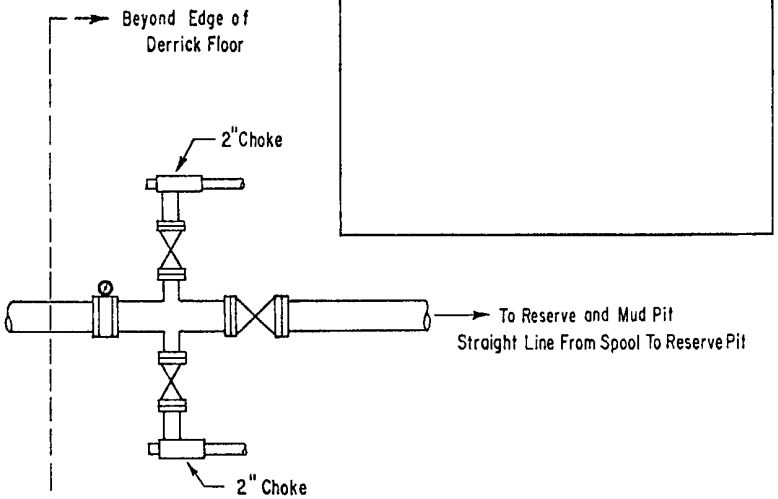
E. V. Echohawk

Certificate No. 3602
E.V.Echohawk LS

DRAWING NO. 2
Revised April, 1970

ADDITIONS – DELETIONS – CHANGES SPECIFY





3000 PSI WORKING PRESSURE BLOWOUT PREVENTER HOOK-UP

The blowout preventer assembly shall consist of one blind ram preventer and one pipe ram preventer, both hydraulically operated; a Shaffer Tool Works stripper; valves ; chokes and connections, as illustrated. If a tapered drill string is used, a ram preventer must be provided for each size of drill pipe. Casing and tubing rams to fit the preventers are to be available as needed. The ram preventers may be two singles or a double type. If correct in size, the flanged outlets of the ram preventer may be used for connecting to the 4-inch I.D. choke flow line and kill line. The substructure height shall be sufficient to install a rotating blowout preventer.

Minimum operating equipment for the preventers shall be as follows: (1) Pump (s), driven by a continuous source of power, capable of closing all the pressure-operated devices simultaneously within____seconds. The pump (s) is to be connected to a closed type hydraulic operating system. (2) When requested, accumulators with a precharge of nitrogen of not less than 750 PSI and connected so as to receive a fluid charge from the above pump (s). With the charging pump (s) shut down, the pressurized fluid volume stored in the accumulators must be sufficient to close all the pressure-operated devices simultaneously within____ seconds; after closure, the remaining accumulator pressure shall be not less than 1000 PSI with the remaining accumulator fluid volume at least_____percent of the original. (3) When requested, an additional source of power, remote and equivalent, is to be available to operate the above pump (s); or there shall be an additional pump (s) operated by separate power and equal in performance capabilities.

The closing manifold shall have a separate control for each pressure-operated device. Controls are to be labeled, with control handles indicating open and closed positions. A pressure reducer and regulator must be provided if a Hydril preventer is used. Gulf Legion No. 38 hydraulic oil, an equivalent or better, is to be used as the fluid to operate the hydraulic equipment.

The choke manifold, choke flow line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line and choke lines shall be constructed as straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. All valves are to be selected for operation in the presence of oil, gas,and drilling fluids. The choke flow line valve connected to the drilling spool and all ram type preventers must be equipped with stem extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other valves are to be equipped with handles.

Gulf Energy and Minerals Company-U.S.

SOUTHWEST DIVISION
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

P. O. Box 670
Hobbs, NM 88240

September 29, 1977

Application for Permit to Drill
Proposed South Torreon Federal
WI Unit No. 1 Sandoval Co., N.M.

U. S. Geological Survey
P. O. Box 1809
Durango, CO 81301

Gentlemen:

We are submitting the information requested in NTL-6 which sould accompany application for permit to drill.

Well: South Torreon Federal WI Unit Well No. 1.

1. Location: 660' FNL and 1980' FEL Section 4-T-17-N, R-4-W, Sandoval County, New Mexico.

2. Elevation of Unprepared Ground: 6380'

3. Geologic Name of Surface Formation: LaVentana.

4. Type Drilling Tools: Rotary.

5. Proposed Drilling Depth: 3400'.

6. Estimated Tops of Geologic Markers: Point Lookout 880'; Mancos 1050'; Graneros 2880'; Dakota 3080'; Morrison 3320'.

7. Estimated Depth at which Anticipated Gas or Oil-Bearing Formations Expected:

Dakota 3080' - 3150'.

8. Casing Program and Setting Depths:

	Size	Weight	Grade	Setting Depth
Surface	8-5/8"	24#	K-55	500'
Production	5-1/2"	14#	K-55	3400'

(continued)

9. Casing Setting Depth and Cementing Program:

   a. Surface casing will be set at 500', cemented with 150 sacks Class C with 6% gel and 200 sacks Class C neat with 2% $CaCl_2$.

   b. Production casing will be set at 3400'.

      I. 3400' to surface Class C with 16% gel, 3% salt and 0.2 of 1% CFR-2 and Class C neat with 0.2 of 1% CFR-2.

      NOTE: Volume of cement to be determined after running caliper log at total depth.

10. Pressure Control Equipment: The minumum specifications for pressure control equipment will be Gulf's blowout preventer hook-up #2 for 3000 PSI working pressure.

11. Circulating Media: 0-500' fresh water spud mud; 500' to 3400' fresh water low solid mud with the with the following properties: viscosity 32-37 sec., water loss 20 - 4 cc, weight 8.5 - 9.0 ppg. Heavier weight mud will be used if required by well conditions.

12. Testing, Logging and Coring Programs:

   a. Formation testing may be done at any depth where samples, drilling rate or log information indicate a possible show of oil or gas.

   b. Open hole logs will be run prior to running production casing at total depth.

   c. Coring is not planned.

13. Abnormal Pressure or Temperature and Hydrogen Sulfide Gas: We do not anticipate abnormal pressure, temperature or hydrogen sulfide gas; however, remote control BOP as shown on drawing No. 2 will be installed.

14. Anticipated Starting Date: Drilling operations should start December 1, 1977.

15. Other Facets of the Proposed Operation: None.

by: D. F. Berlin
C. D. BORLAND
Area Production Manager

Attachment
RLV/rm

Gulf Energy and Minerals Company-U.S.

SOUTHWEST DIVISION
HOBBS AREA

C. D. Borland
AREA PRODUCTION MANAGER

P. O. Box 670
Hobbs, NM 88240

September 29. 1977

Surface Development Plan,
Proposed South Torreon Federal
WI Unit No. 1, Sandoval Co., N.M.

U. S. Geological Survey
P. O. Box 1809
Durango, CO 81301

Gentlemen:

The surface use and operations plan for the proposed South Torreon Federal WI Unit No. 1, are as follows:

1. Existing Roads:

   A. Exhibit "A" is a portion of a general highway map showing the location of the proposed well as staked. Go south out of Cuba, New Mexico, approximately one mile on State Highway No. 44, turn southwest on State Highway No. 197 approximately 27 miles, leave black-top pavement at this point and drive approximately 3-1/4 miles south and then east one mile. The proposed location is approximately 200' north of the road.

   B. Exhibit "B" is a plat showing all existing roads within a one-mile radius of the wellsite, as well as the planned access road.

2. Planned Access Roads:

   A. Length and Width: The required new road will be 300' long and 12' wide, constructed of graded surface material compacted and watered to a depth of 6". The new road will leave existing road with a quarter turn and extend to the northeast corner of the drilling pad. This new road is labeled and color-coded red on Exhibits "A" and "B".

   B. Turnouts: None required.

   C. Culverts: None required.

   D. Cuts and Fills: No significant cuts or fills will be required in the road.

   E. Gates and Cattleguards: None required.

(continued)

3. Location of Existing Wells: No wells exist within a one-mile radius of the proposed location.

4. Tank Batteries, Production Facilities and Lease Pipelines: There are no tank batteries, production facilities or lease pipelines on this lease operated or owned by Gulf Oil Corporation. If production is encountered, the tank battery and other required producing equipment will be located 200' west of the well. All producing lines will be constructed on the pad on top of the ground. Refer to Exhibit "D".

5. Water Supply: Drilling water will be hauled by trucks over existing roads from Petro Lewis Dome Media Water Supply, 10 miles north of Torreon and 3 miles west.

6. Source of Construction Materials: The proposed roads and drilling pad will be constructed by leveling and compacting existing surface materials (mainly sand and clay). No outside materials will be hauled in for construction of roads or drilling pad.

7. Methods of Handling Waste Disposal:

   A. Drill cuttings will be disposed of in the drilling pits.

   B. Drilling fluids will be allowed to evaporate in drilling pits until pits are dry.

   C. Water produced during tests will be disposed of in drilling pits. Oil produced during tests will be stored in test tanks until sold.

   D. Current laws and regulations pertaining to disposal of human waste will be complied with.

   E. Trash, waste paper, sacks, garbage and junk will be burned or buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pit is shown on Exhibit "C".

   F. All trash and debris will be buried or removed from wellsite within 30 days after finishing drilling and/or completion operations.

8. Ancillary Facilities: None required.

9. Wellsite Layout:

   A. Exhibit "C" shows the relative location and dimensions of the well pad, mud pits, reserve pits, trash pits, and location of major rig components.

   B. Construction of drilling pad will require a cut of four to five feet on the northeast side, with the cut material being moved to the southeast side to be used as fill. A drainage ditch will be constructed to divert water run-off from north of location to the west side.

C. The reserve pit will be plastic-lined.

D. The wellsite has been staked.

(continued)

10. Plans for Restoration of Surface:

A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk to leave wellsite in as aesthetically pleasing condition as possible.

B. Any ungraded pits containing fluids will be fenced until they are filled.

C. After abandonment, any special rehabilitation and/or revegetation requirements (reseed with seed mixture No. 2) will be complied with and accomplished as expeditiously as possible. All pits should be filled and levelled within 90 days after abandonment.

11. Other Information:

A. Topography: Location is in a gently sloping area south of the rim of Cañon Ignacio Rico.

B. Soil: Soil is sandy strewn with large boulders.

C. Flora and Fauna: The vegetation cover generally consists of sagebrush, blue gramma and galleta.

D. Ponds and Streams: There are no streams or ponds in the immediate area.

E. Residences and Other Structures: Nearest occupied dwelling is an Indian house one mile southeast of the wellsite.

F. Land Use: Present land use is grazing.

G. Surface Ownwership: Wellsite is on Federal surface.

12. Operator's Representative: Gulf Energy and Minerals - U. S.
A Division of Gulf Oil Corporation
P. O. Box 670, Hobbs, NM 88240 Telephone 505/393-4121
Area Production Manager - C. D. Borland

13. 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 the 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 Gulf Oil Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: 10-4-77

O. F. Berlin
Asst. Area Production Manager

RLV/rm
Att'd

Exhibit 'A'
GEM Co. U.S.
South Torreon Federal
Unit No 1
660' FNL &
1980' FEL
Sec 4
T-19-N
R-4W
Proposed
Well Site
T19N
1 mi
1½ mi
MESA CHIJUILL
SAN ISIDRO
MESA PORTALES
FORK ROCK MESA
MESA AGUILA
VENTANA MESA
Zambarma Lake
Pine Spring
CUBA
TORREON MISSION
Torreon
Deadman Peak
M. AND S.
MONTOYA
GRANT
SAN LUIS
Angostura Hill
LA VENTANA

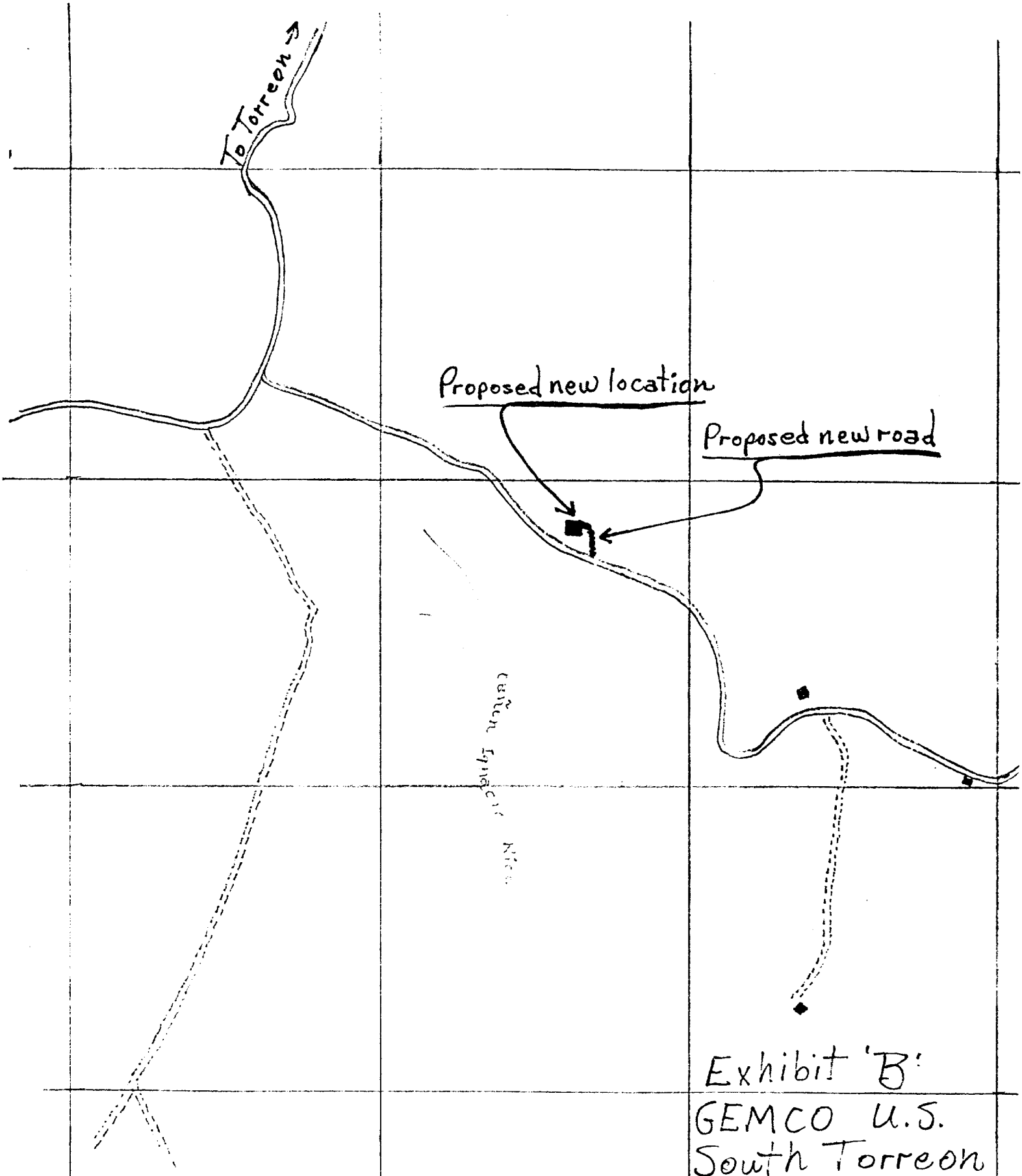


Exhibit 'B'
GEMCO U.S.
South Torreon
Fed. W1 Unit #1
660FNL-1980FEL Sec 4 T17N R4W
San Juan Co. N.M.

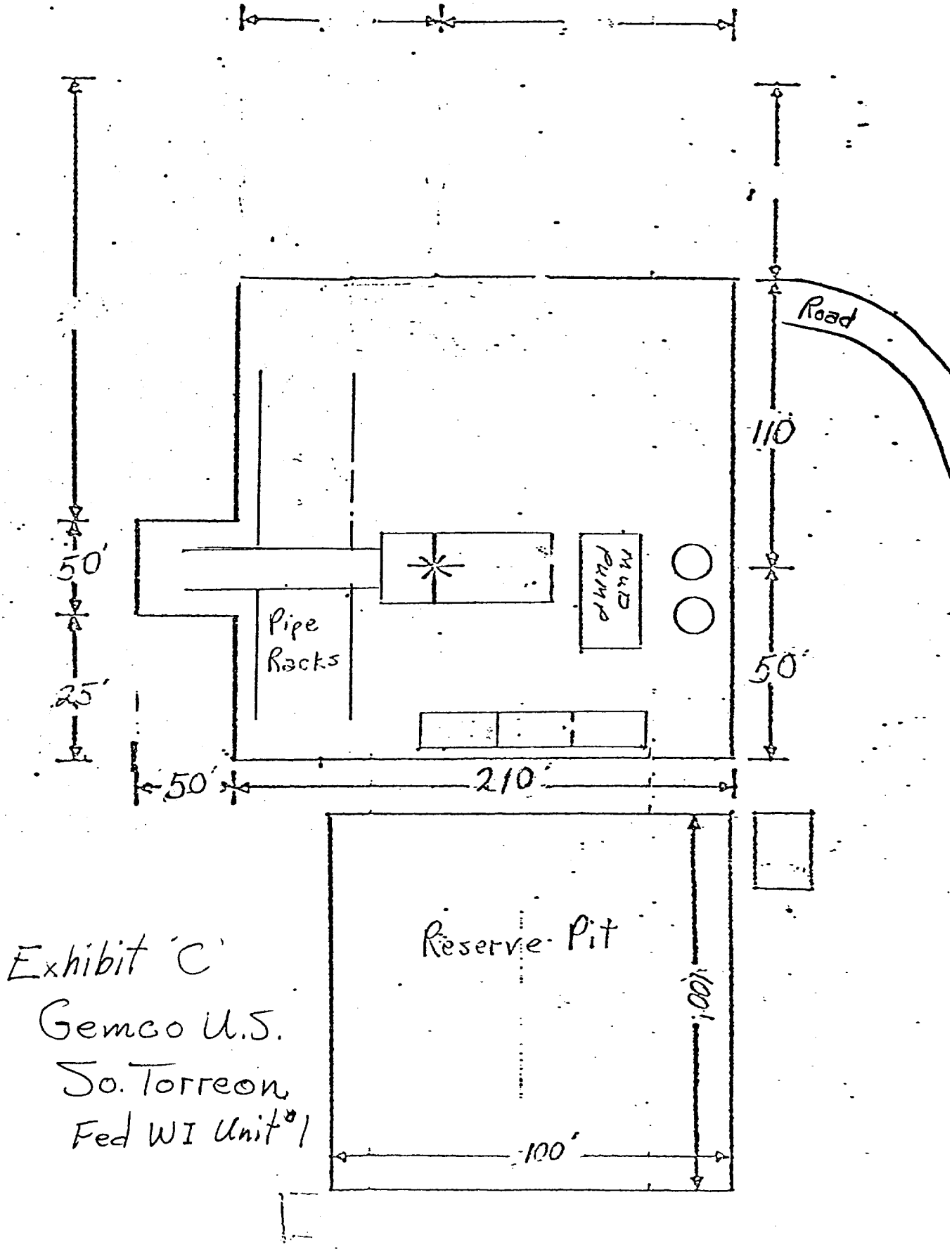


Exhibit 'C'
Gemco U.S.
So. Torreon
Fed WI Unit #1

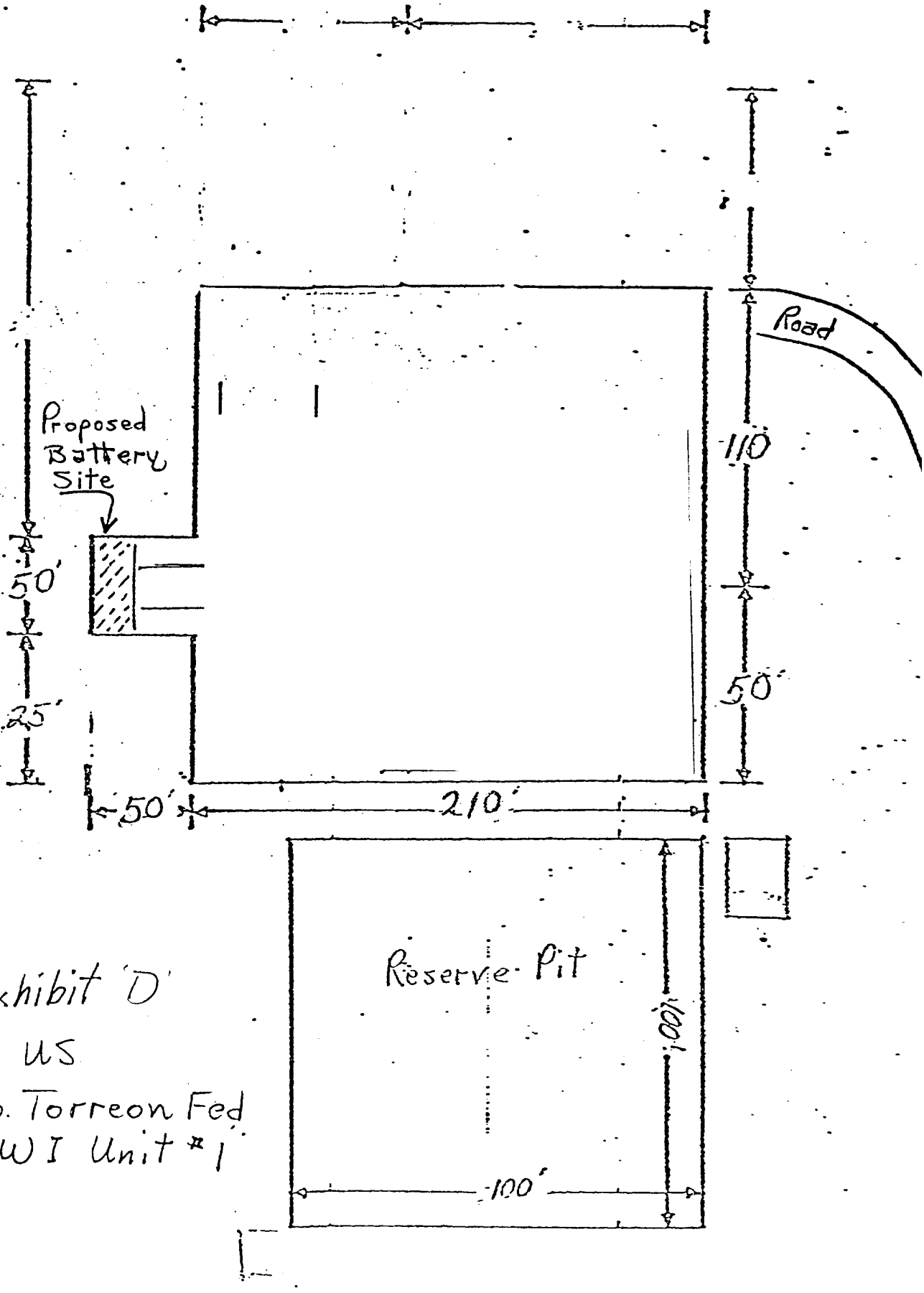


Exhibit 'D'

GEMCO US

So. Torreon Fed

WI Unit #1