

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-SF-060246																
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME Navajo "KZ"																
2. NAME OF OPERATOR GULF OIL CORPORATION		7. UNIT AGREEMENT NAME																
3. ADDRESS OF OPERATOR P. O. Box 670, Hobbs, New Mexico 88240		8. FARM OR LEASE NAME Rusty Chacra																
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 870' FSL & 1760' FEL At proposed prod. zone		9. WELL NO. 1																
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 7 miles southeast of Counselors, New Mexico		10. FIELD AND POOL, OR WILDCAT Sec. 13, T-22N, R-7W																
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 13, T-22N, R-7W																
16. NO. OF ACRES IN LEASE 160		12. COUNTY OR PARISH Sandoval																
17. NO. OF ACRES ASSIGNED TO THIS WELL 160		13. STATE New Mexico																
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 2000'		19. PROPOSED DEPTH 2000'																
20. ROTARY OR CABLE TOOLS Rotary		21. APPROX. DATE WORK WILL START* August 15, 1978																
22. ELEVATIONS (Show whether DF, RT, GR, etc.) 6868' GL		23. PROPOSED CASING AND CEMENTING PROGRAM																
<table border="1"><thead><tr><th>SIZE OF HOLE</th><th>SIZE OF CASING</th><th>WEIGHT PER FOOT</th><th>SETTING DEPTH</th><th>QUANTITY OF CEMENT</th></tr></thead><tbody><tr><td>11"</td><td>8-5/8"</td><td>24.00#</td><td>250'</td><td>Circulate</td></tr><tr><td>6-3/4"</td><td>4-1/2"</td><td>9.50#</td><td>2000'</td><td>Circulate</td></tr></tbody></table>				SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT	11"	8-5/8"	24.00#	250'	Circulate	6-3/4"	4-1/2"	9.50#	2000'	Circulate
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11"	8-5/8"	24.00#	250'	Circulate														
6-3/4"	4-1/2"	9.50#	2000'	Circulate														

NOTE: See Attached BOP Drawing No. 2

Mud: 0' - 250' Fresh water spud mud;  
250' - TD Fresh water Benex type mud

Gas is not dedicated.



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 [Signature] TITLE AREA PRODUCTION MANAGER DATE 06-29-78

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE JUL 3 1978

CONDITIONS OF APPROVAL, IF ANY:

ok FrankTate

\*See Instructions On Reverse Side

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.

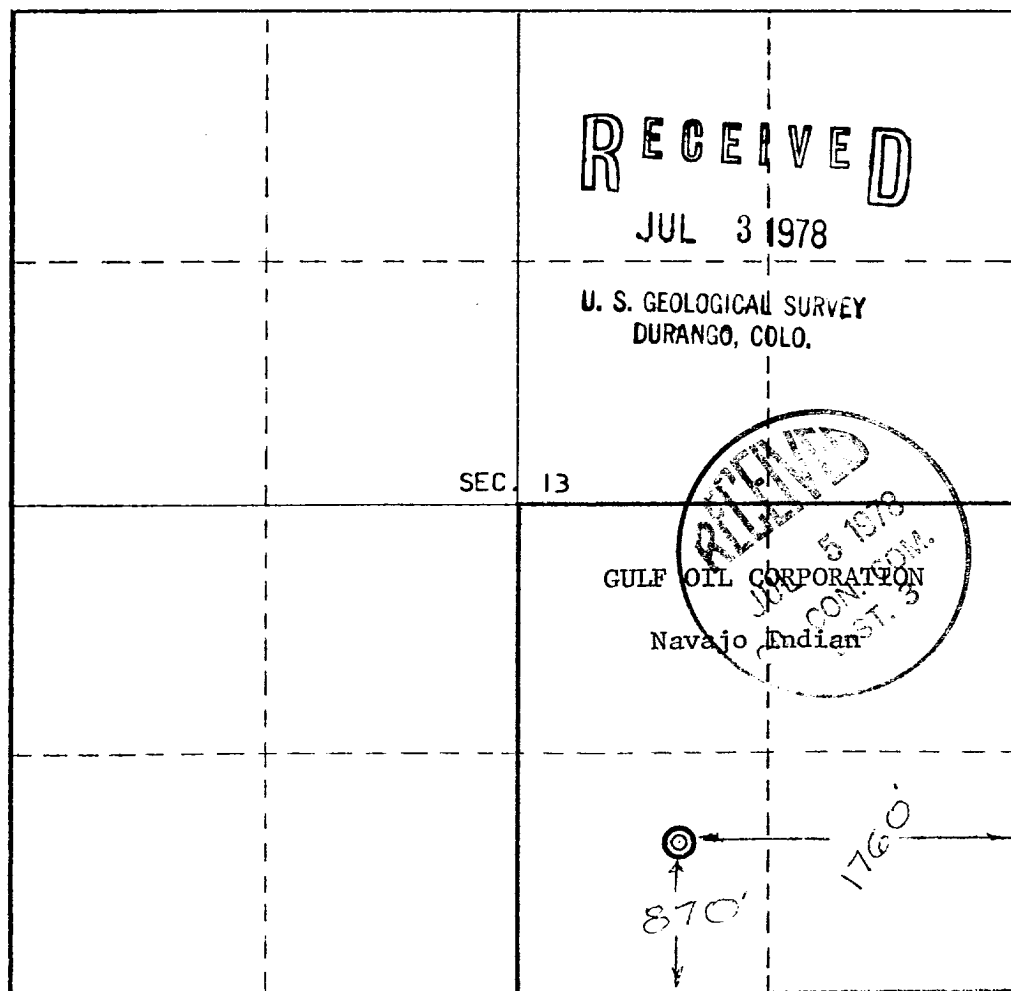
Operator <b>Gulf Oil Corporation</b>			Lease <b>Navajo KZ</b>		Well No. <b>1</b>
Unit Letter <b>0</b>	Section <b>13</b>	Township <b>22 North</b>	Range <b>7</b>	County <b>Sandoval</b>	
Actual Footage Location of Well: <b>870</b> feet from the <b>South</b> line and <b>1760</b> feet from the <b>East</b> line					
Ground Level Elev. <b>6868</b>	Producing Formation <b>Chacra</b>		Pool <b>Rusty Chacra</b>	Dedicated Acreage: <b>160</b> Acres	

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

*C. D. Borland*

Name

**C. D. BORLAND**

Position

**Area Production Manager**

Company

**GULF OIL CORPORATION**

Date

**June 29, 1978**

I hereby certify that the location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same are true and correct to the best of my knowledge and belief.

**REGISTERED PROFESSIONAL ENGINEER**

**ERNEST V. ECHOHAWK**

Date Surveyed

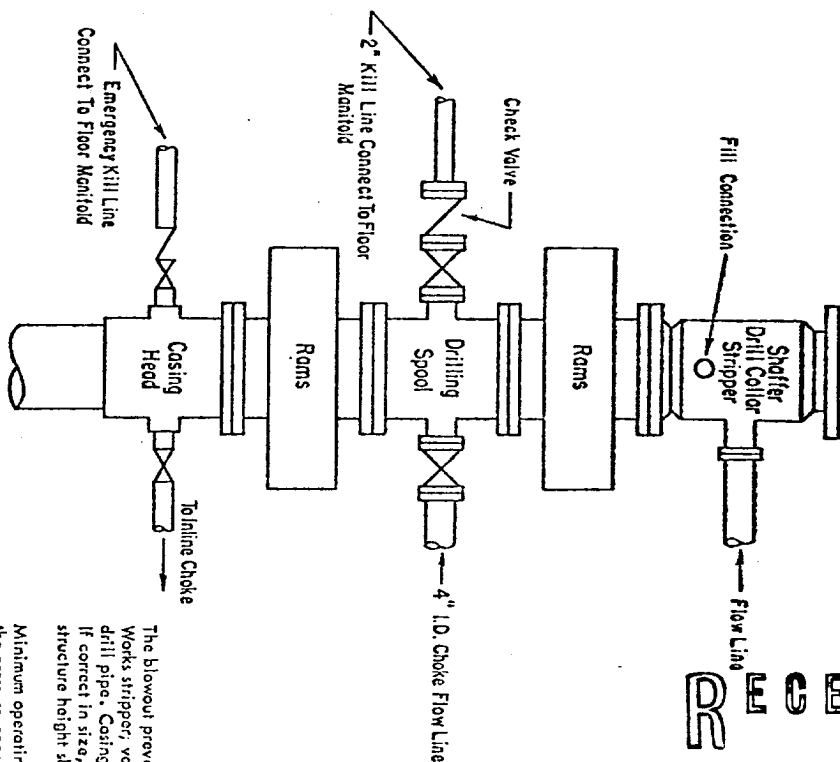
**June 22, 1978**

Registered Professional Engineer and/or Land Surveyor

*E. V. Echohawk*

Certificate No. **3602**

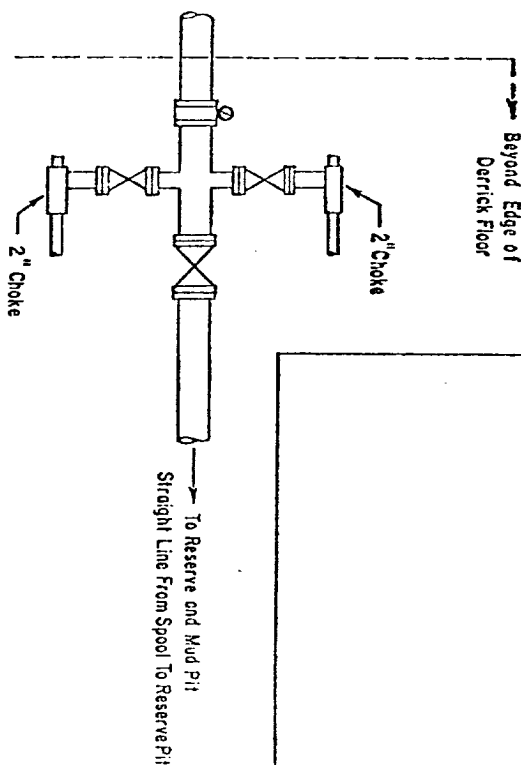
**E. V. Echohawk LS**



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ADDITIONS - DELETIONS - CHANGES  
SPECIFY

Delete Shaffer Drill  
Collar Stripper

# 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, or 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 Oil Exploration and Production Company

C. D. Borland  
"PRODUCTION MANAGER, HOBBS AREA"

June 29, 1978

P. O. Box 670  
Hobbs, NM 88240

Re: Application for Permit to Drill  
Proposed Navajo "KZ" Well No. 1,  
Sandoval County, New Mexico

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

Gentlemen:

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

Well: Navajo "KZ" Well No. 1

1. Location: 870' FSL & 1760' FEL of Section 13, T-22N, R-7W, Sandoval County, NM
2. Elevation of Unprepared Ground: 6868' GL
3. Geologic Name of Surface Formation: Quarternary Alluvium
4. Type Drilling Tools: Rotary
5. Proposed Drilling Depth: 2000'
6. Estimated Top of Geologic Markers: Picture Cliffs, 1540'; Chacra, 1900'
7. Estimated Depths at which Anticipated Gas or Oil-Bearing Formations Expected:  
Chacra - 1900'
8. Casing Program and Setting Depths:

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	<u>SIZE</u>	<u>WEIGHT</u>	<u>GRADE</u>	<u>SETTING DEPTH</u>
Surface	8-5/8"	24.00#	K55	250'
Production	4-1/2"	9.50#	K55	2000'

9. Casing Setting Depth and Cementing Program:
  - a. Surface casing will be 8-5/8" set at 250' and cemented with Class "B" with 2% CaCl<sub>2</sub>. Volume of cement will be sufficient to circulate cement to surface.
  - b. Production casing will be 4-1/2" set at approximately 2000' and cemented with Class "B" with 16% gel, 3% CaCl<sub>2</sub> and .2% friction reducer plus Class "B" Neat cement. Volume of cement will be determined by caliper survey. Cement will be circulated.



10. Pressure Control Equipment:

The minimum specifications for pressure control equipment can be seen on the attached Drawing No. 2 of Gulf's blowout preventer hook-up for 3000 psi working pressure.

11. Circulating Media: 0' - 250' fresh water spud mud; 250' - 2000' fresh water with Benex gel added as needed for samples and DST's.

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 at total depth.
- c. No coring is planned.

13. Abnormal Pressure or Temperature and Hydrogen Sulfide Gas:

We do not anticipate any abnormal pressure or temperature; however, BOP's with remote control and choke manifold as shown on Drawing No. 2 will be installed prior to drilling below surface casing.

14. Anticipated Starting Date: Drilling operations should begin between August 10, 1978 and August 25, 1978.

15. Other Facets of the Proposed Operation: None



C. D. BORLAND  
Area Production Manager

RMQ:bp

Att'd

# Gulf Oil Exploration and Production Company

C. D. Borland  
PRODUCTION MANAGER, HOBBS AREA

June 29, 1978

P. O. Box 670  
Hobbs, NM 88240

Re: Surface Development Plan for  
Proposed Navajo "KZ" Well No. 1,  
Sandoval County, New Mexico

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

Gentlemen:

The surface use and operations plan for the proposed Navajo "KZ" Well 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 east of Lybrook, New Mexico, approximately one-half (1/2) mile on State Highway No. 44; turn south approximately six (6) miles and turn left and go approximately 1-1/2 miles; turn left and go about one (1) mile, then turn right and go about one (1) mile. The proposed location will be about 1300' to the left.
- b. Exhibit "B" is a plat showing all existing roads within a one mile radius of the well site as well as the planned access road.

2. Planned Access Roads:

- a. Length and Width: The existing road to be improved will be about 1300' long and 12' wide, constructed of graded surface material compacted and watered to a depth of 6". This road is labeled and color-coded brown on Exhibits "A" and "B".
- b. Turnouts: None required
- c. Culverts: None required
- d. Cuts and Fills: The road will follow contour lines to reduce cuts and fills. The road will be drained with water bars as needed. The road will cross a dry wash about 400' south of the location. A low water road crossing will be made and will require approximately 7 feet of cut on both sides of the dry wash.
- e. Gates and Cattleguards: None required



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3. Location of Existing Wells: Only four (4) wells exist within a one mile radius of the proposed location. The location of these wells is shown on Exhibit "B".
4. Tank Batteries, Production Facilities and Lease Pipelines: Should this well be completed as a commercial producing well, new tank battery facilities will be required. These facilities will be constructed within the 260' X 260' work area as staked. All lines will be installed above ground and located as shown on Exhibit "D".
5. Water Supply: Drilling water will be hauled by trucks over existing roads.
6. Source of Construction Materials: The proposed roads and drilling pad will be constructed by levelling 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. The location of trash pit is shown on Exhibit "C".
  - f. All trash and debris will be buried or removed from well site within 30 days after finishing drilling and/or completion operations.
8. Ancillary Facilities: None required
9. Well Site 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 3' cut and fill from North to South. A drainage ditch will be constructed to divert water run-off from the west side of location to the south side.
  - c. The reserve pit will be on the north side of the pad.
  - d. The well site has been staked.

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 well site in as aesthetically and pleasing condition as possible.
- b. Any unguarded pits containing fluids will be fenced until they are filled.
- c. After abandonment, any special rehabilitation and/or revegetation requirements (reseed with seed mixture #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: Relatively flat, sandy surface.
- b. Soil: Soil is sandy clay loam.
- c. Flora and Fauna: The vegetation cover generally consists of sagebrush, blue gramma, galleta, juniper, sand drop and other annual grass.
- d. Ponds and Streams: There are no streams or ponds in the immediate area.
- e. Residences and Other Structures: The nearest occupied dwelling is an Indian house one-quarter of a mile east of the well site.
- f. Land Use: Present land use is grazing.
- g. Surface Ownership: Well site is on allotted Indian land.

12. Operator's Representative:

GULF OIL EXPLORATION & PRODUCTION COMPANY  
A Division of GULF OIL CORPORATION  
P. O. Box 670, Hobbs, New Mexico 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.



C. D. BORLAND  
Area Production Manager

Date: June 29, 1978



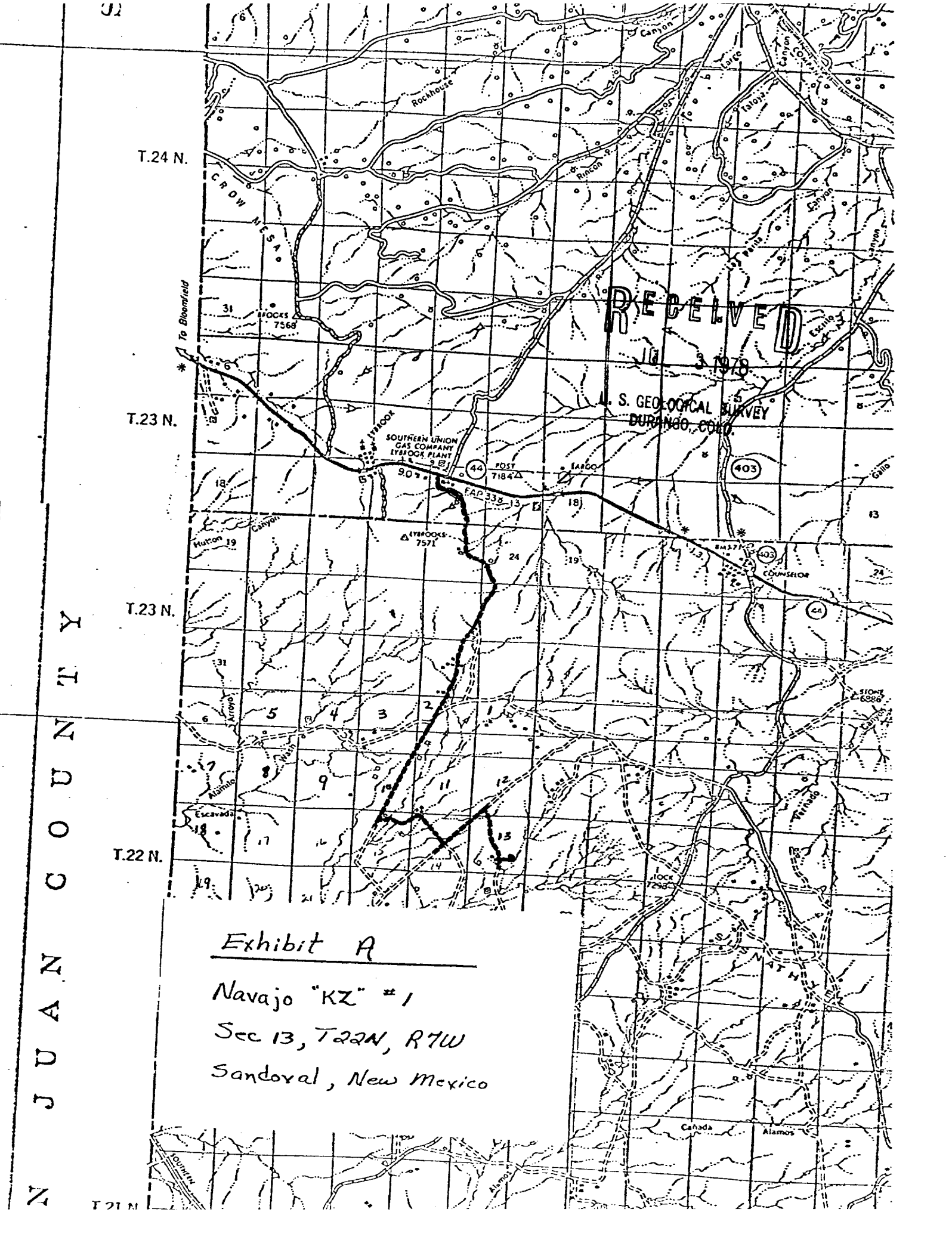
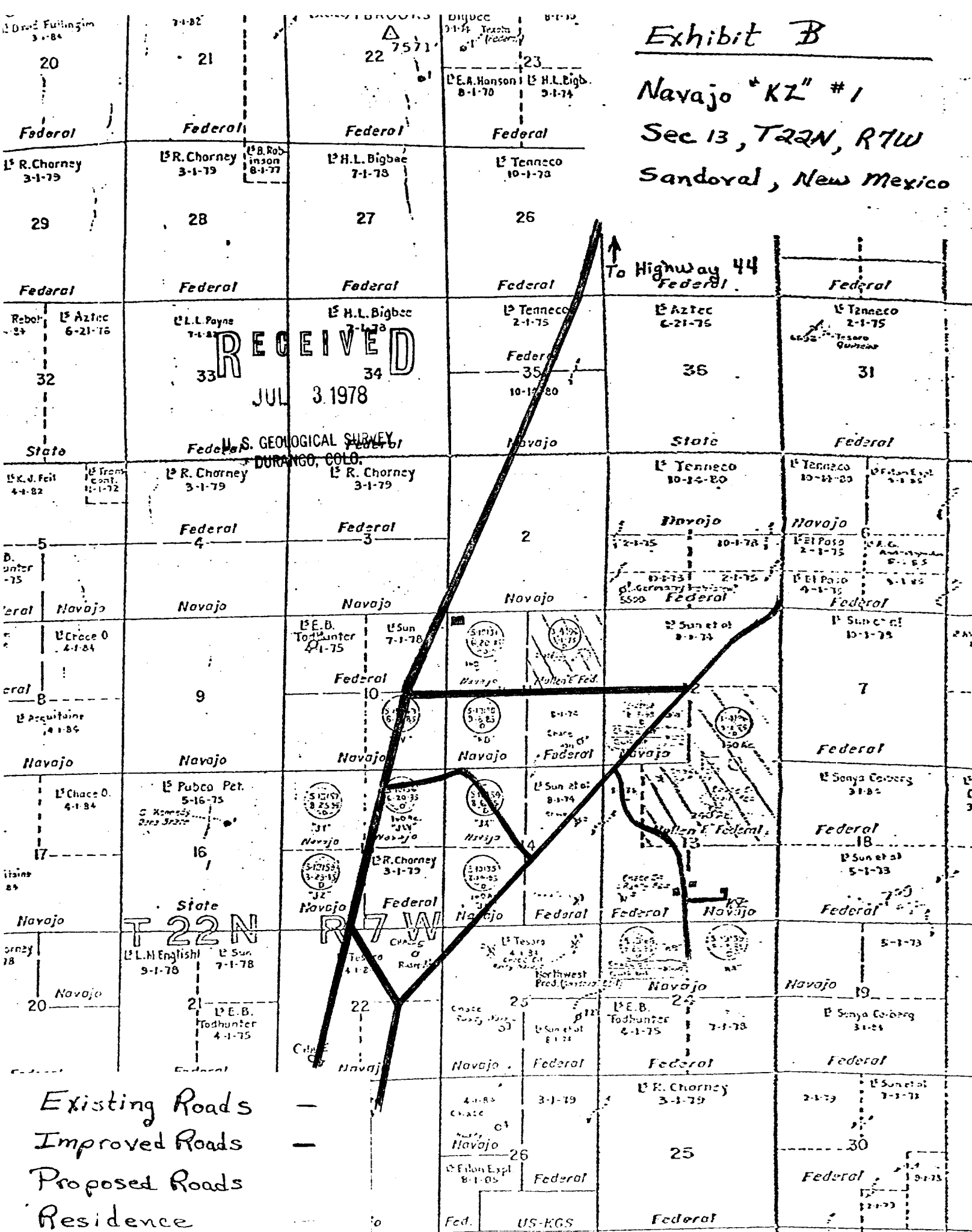


Exhibit A  
Navajo "KZ" #1  
Sec 13, T22N, R7W  
Sandoval, New Mexico

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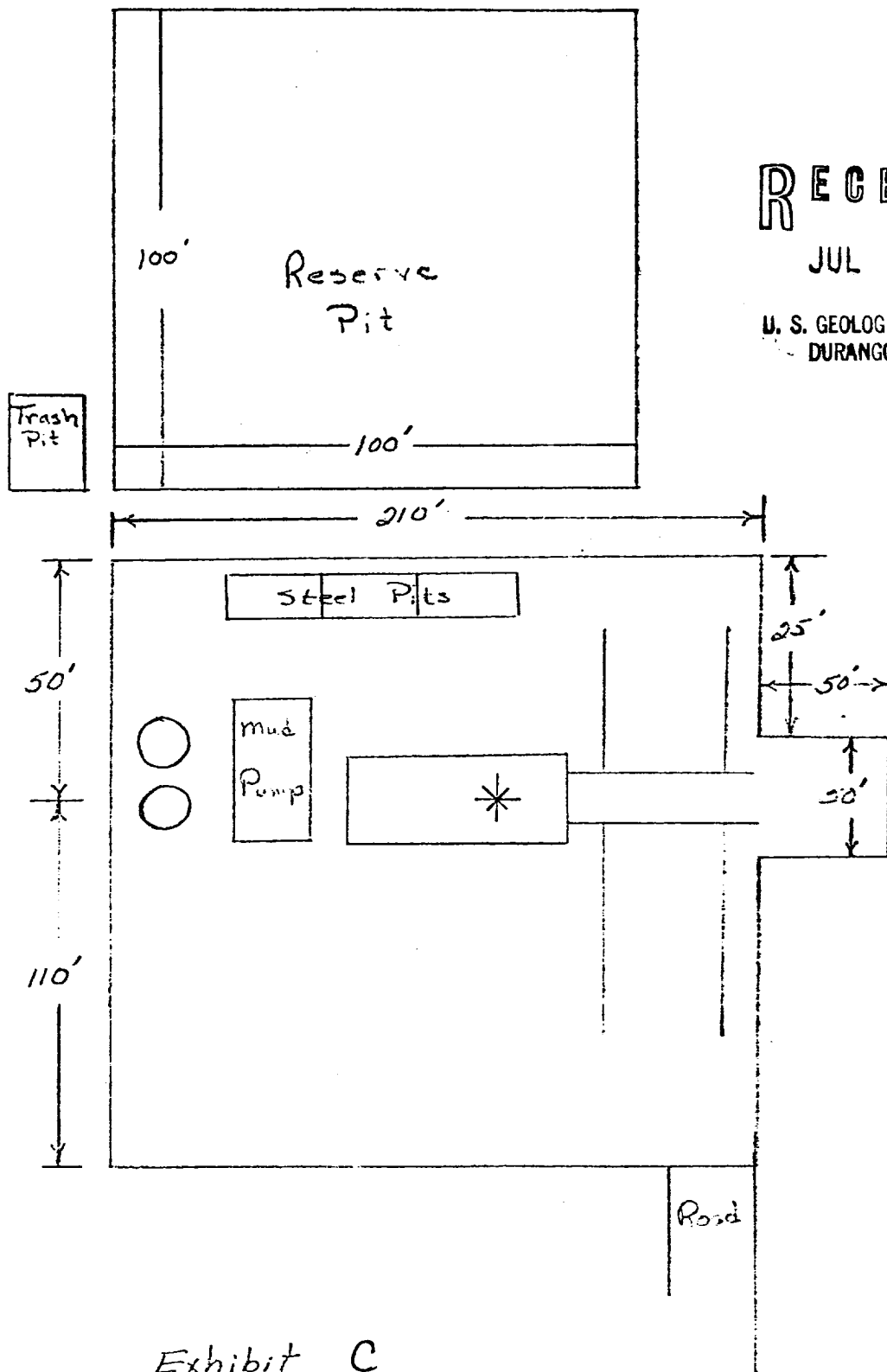
Sandoval, New Mexico



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Navajo "KZ" #1  
Sec 13, T22N, R7W  
Sandoval, New Mexico



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Exhibit C

Navajo "KZ" #1

Sec 13, T22N, R7W

Sandoval, New Mexico

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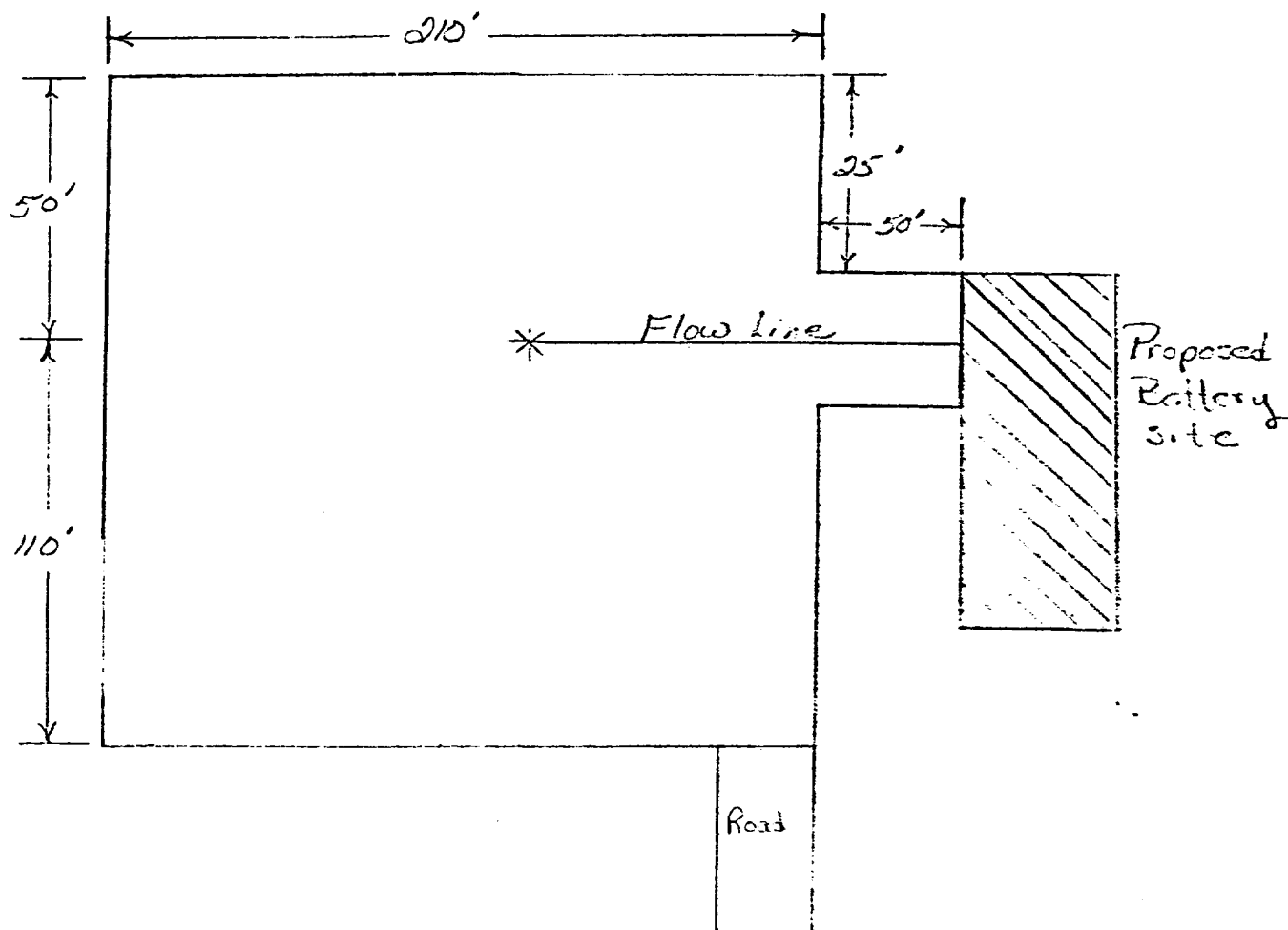


Exhibit D

Navajo "KL" #1

Sec 13, T22N, R7W

Sandoval, New Mexico