

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

TEXACO Inc. Attention: G. L. Eaton

3. ADDRESS OF OPERATOR

P. O. Box 2100, Denver, Colorado 80201

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

NW 1/4 SW 1/4 Sec. 23

At proposed prod. zone

1340' FSL & 1300' FWL, Sec. 23

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

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1300'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1900'

16. NO. OF ACRES IN LEASE

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19. PROPOSED DEPTH

6480'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

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

5638' GR

22. APPROX. DATE WORK WILL START*

March 15, 1977

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48#	100'	Circulate to surface.
12-1/4"	8-5/8"	24#	1600'	Circulate to surface.
7-7/8"	5-1/2"	14, 17, 15.5#	6480'	Cement 600' above pay zone.

Propose to drill subject well to increase oil recovery from Tocito Dome field. Samples will be taken at 10' intervals from 5965' to TD. No cores are planned. One DST is scheduled for the Barker Creek if warranted. Logs will be run from surface casing to TD. Prospective zones will be perforated and treated as necessary. Blowout preventer will be as indicated on the attached exhibit and will be tested at regular intervals. Necessary steps will be taken to protect the environment. Any gas produced during the conduct of the above described work will be flared.

ESTIMATED FORMATION TOPS

Dakota	985'	Ismay	6065'
Todilto	2185'	Desert Creek	6175'
DeChelly	3855'	Akah	6280'
Organ Rock	4445'	Barker Creek	6350'

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: G. L. EATON

TITLE District Superintendent DATE Jan. 21, 1977

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

USGS (3) OGCC (2) GLE ARM(2) JHP The Navajo Tribe
Farmington Aztec

*See Instructions On Reverse Side



Okal
Held C-106 for NSL

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-128
Effective 1-1-65

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

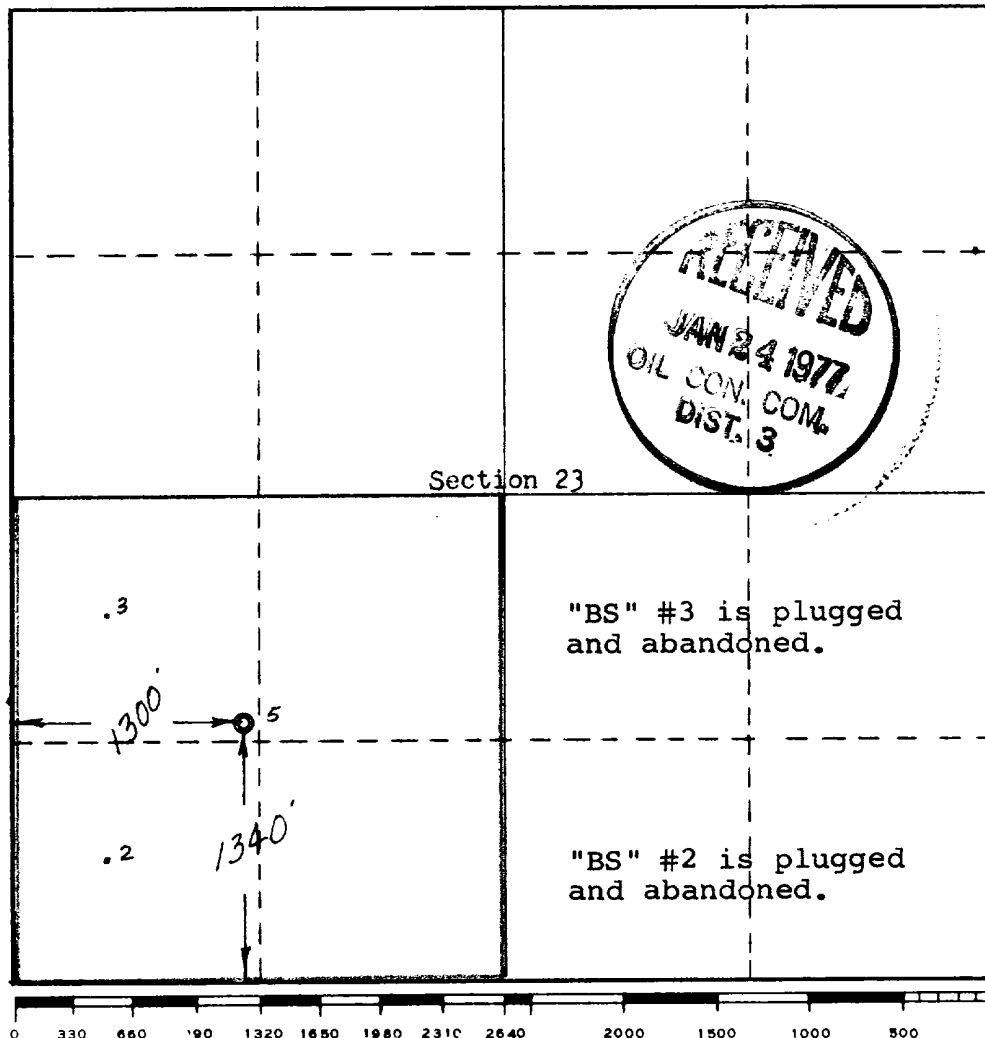
Operator Texaco Inc.			Lease Navajo Tribe "BS"		Well No. 5
Unit Letter L	Section 23	Township 26 North	Range 18 West	County San Juan	
Actual Footage Location of Well: 1340 feet from the South line and 1300 feet from the West line					
Ground Level Elev: 5638	Producing Formation Pennsylvania "D"	Pool Tocito Dome ✓	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.

SIGNED: G. L. EATON

Name G. L. Eaton
Position District Superintendent
Company Texaco Inc.
Date January 21, 1977

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 January 13, 1977
Registered Professional Engineer and Land Surveyor <i>[Signature]</i>
Certificate No. 3080

January 21, 1977

NAVAJO TRIBE "BS" WELL NO. 5
NW $\frac{1}{4}$ SW $\frac{1}{4}$ SEC 23 T26N-R18W
SAN JUAN COUNTY, NEW MEXICO
6.34

Mr. P. T. McGrath (3)
District Engineer
U. S. Geological Survey
P. O. Box 959
Farmington, New Mexico 87401

Dear Mr. McGrath:

As requested by your office, the following information is provided for the drilling of Navajo Tribe "BS" well No. 5, San Juan County, New Mexico:

1. SURFACE CASING: 1600' of 8-5/8" OD 24# K-55 ST&C new casing.
2. CASINGHEADS: 10-3/4" x 10" Series 600 2000# pressure rating.
3. PRODUCTION CASING: 6480' of 5-1/2" OD 14, 15.5, & 17# K-55 ST&C new casing.
4. BLOWOUT PREVENTER: 10" Series 600 with blind and pipe rams. See attached drawing.
5. AUXILIARY EQUIPMENT:
 - (a) Kelly cock will be used at all times and checked daily.
 - (b) Safety sub with full opening valve for drill pipe on floor.
 - (c) Manifold as shown on attached drawing.
6. ANTICIPATED BOTTOM HOLE PRESSURE: 2000 psi.
7. DRILLING FLUID: Water and water-base mud.

Very truly yours,

SIGNED: G. L. EATON

G. L. Eaton
District Superintendent

FME:RB
Attach.

Minimum equipment requirements are:

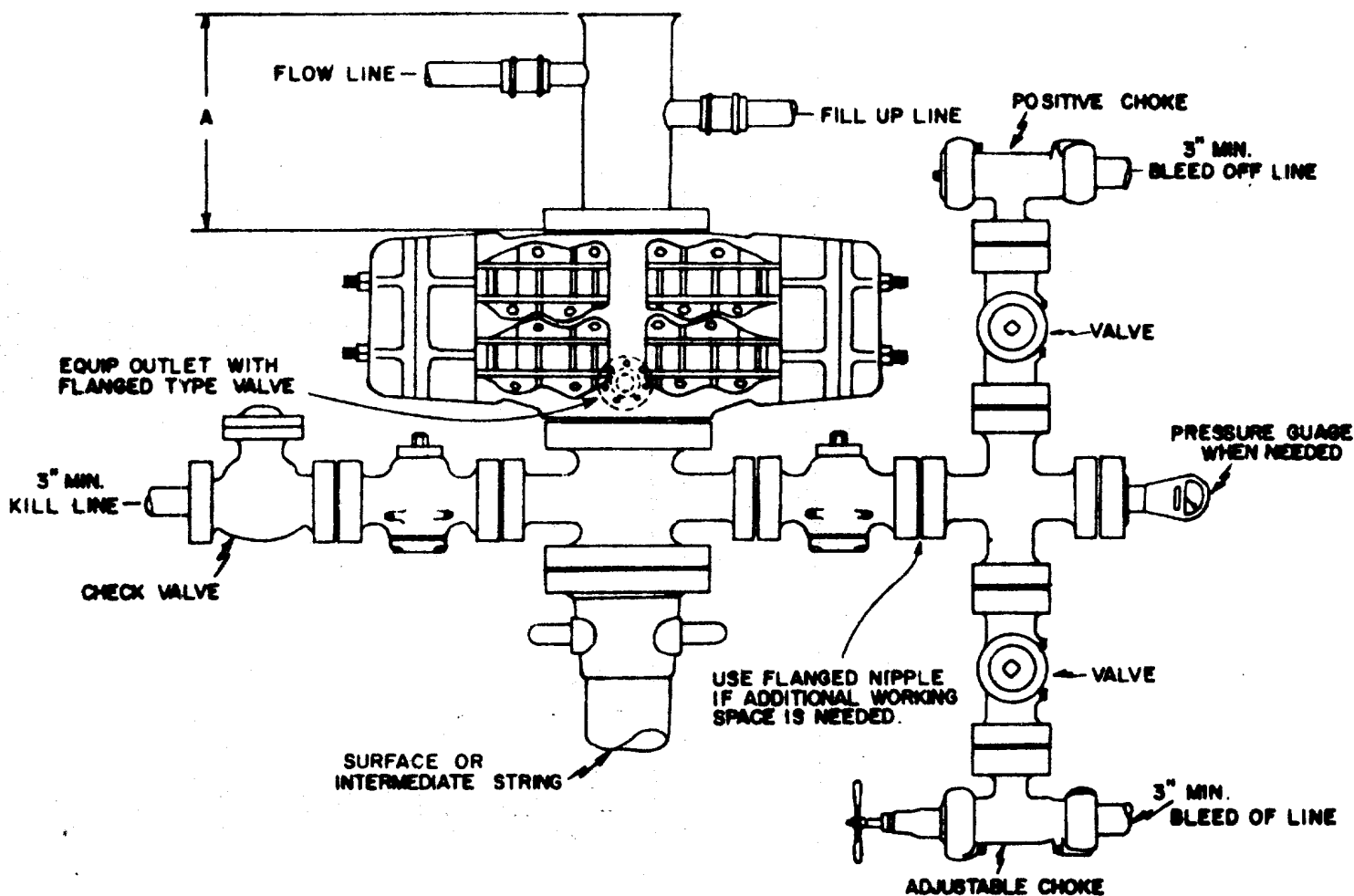
1. Blowout preventers must be capable of being operated both mechanically and hydraulically. Controls must be located so that the blowout preventer can be operated outside the drilling rig substructure. All steel tubing and connections must be used between the hydraulic controls and the blowout preventer.

2. Pressure rating of the blowout preventer and associated connections must be proportional to depth and pressure expectations. Use Figure 1 as a guide in unknown areas.

3. Distance "A" must be sufficient to accommodate a Hydril preventer if required.

4. Chokes, valves, manifold piping and kill line must be flanged and designed equal to or above the pressure rating of the blowout preventer.

5. Kelly cock must be used at all times and should be checked daily.



NOTE: BLOWOUT PREVENTER MUST HAVE DOUBLE RAMS; ONE BLIND & ONE PIPE RAM OR THE EQUIPMENT MUST CONSIST OF TWO BLOWOUT PREVENTERS, ONE EQUIPPED WITH BLIND RAMS & THE OTHER WITH PIPE RAMS. ALWAYS PLACE THE BLIND RAMS IN THE TOP PREVENTER.

NAVAJO TRIBE "BS" WELL NO. 5

NW $\frac{1}{4}$ SW $\frac{1}{4}$ SEC 23 T26N-R18W

SAN JUAN COUNTY, NEW MEXICO

APPROVED
[Signature]
J. J. [unclear]

TEXACO INC	
DENVER, COLORADO	
BLOWOUT PREVENTER ASSEMBLY	
STANDARD NO. 2	
DRAWN BY J.A.B.	CHECKED BY J.A.B.
DATE 11-8-51	FILE 44444
REVISED	RECAL J.A.B.

January 21, 1977

**SURFACE USE DEVELOPMENT PLAN
NAVAJO TRIBE "BS" WELL NO. 5
NW $\frac{1}{4}$ SW $\frac{1}{4}$ SEC 23 T26N-R18W
SAN JUAN COUNTY, NEW MEXICO
6.34**

Mr. P. T. McGrath (3)
District Engineer
U. S. Geological Survey
P. O. Box 959
Farmington, New Mexico 87401

Dear Mr. McGrath:

As requested by your office, the Surface Use Development Plan for Navajo Tribe "BS" well No. 5, San Juan County, New Mexico, is as follows:

1. Existing roads and exit to the location are shown on the attached plats.
2. The proposed location is adjacent to an existing road to the west, therefore no new access road will be required.
3. Offset wells to the proposed well are shown on the attached plat.
4. The flowline for subject well will run approximately 8800' southwest to an existing battery.
5. Water for drilling operations will be trucked from Navajo Tribe "AL" well No. 2 approximately 3 miles to the southwest.
6. No additional construction material will be required.
7. All waste material will be contained by earthen and steel pits. Earthen pits will be subsequently back-filled and buried. A portable chemical toilet will be furnished for drilling personnel.
8. No separate drill campsites are proposed.

The first part of the study focuses on the theoretical framework. It begins with a review of the literature on the topic, highlighting the key concepts and findings. The theoretical framework is then developed, drawing on the literature and the research objectives. This section sets the stage for the empirical research that follows.

The second part of the study focuses on the empirical research. It begins with a description of the data and the sample. The research design is then outlined, including the methods used for data collection and analysis.

The third part of the study focuses on the results. It begins with a description of the results of the empirical research. The results are then discussed in the context of the theoretical framework and the research objectives.

The fourth part of the study focuses on the conclusions. It begins with a summary of the findings of the study. The conclusions are then drawn, highlighting the implications of the findings for theory and practice. The study is then closed with a final statement.

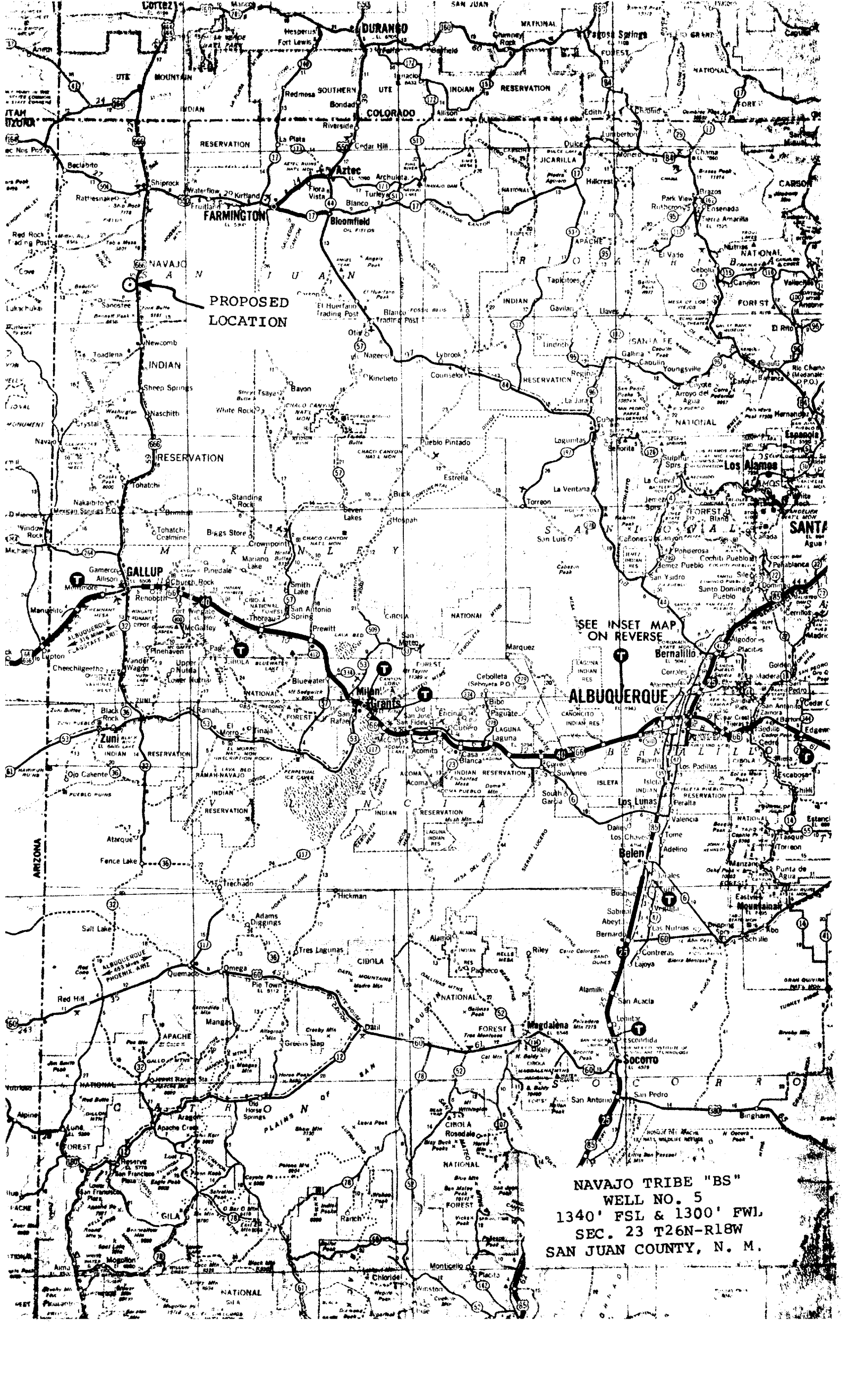
The fifth part of the study focuses on the references. It lists the sources used in the study, including books, articles, and other materials.

The sixth part of the study focuses on the appendices. It contains supplementary material that is not included in the main text of the study. This material may include additional data, tables, figures, or other information that is relevant to the study. The appendices are organized in a way that makes them easy to find and use.

The seventh part of the study focuses on the index. It lists the topics and pages of the study, making it easy for readers to find the information they need. The index is organized in a way that makes it easy to use.

The eighth part of the study focuses on the glossary. It defines the key terms and concepts used in the study, making it easy for readers to understand the meaning of the words. The glossary is organized in a way that makes it easy to use.

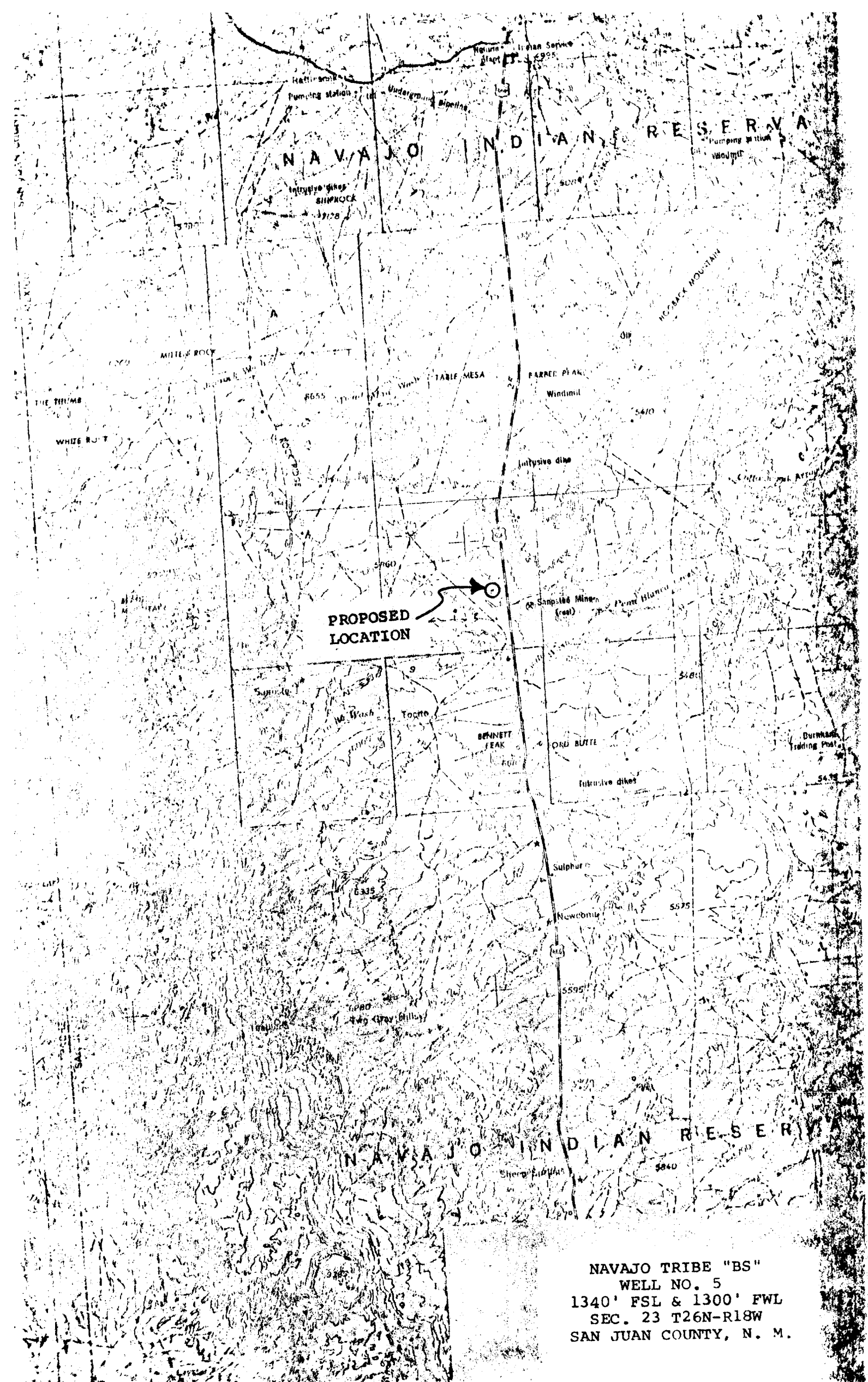
The ninth part of the study focuses on the bibliography. It lists the sources used in the study, including books, articles, and other materials. The bibliography is organized in a way that makes it easy to find and use.

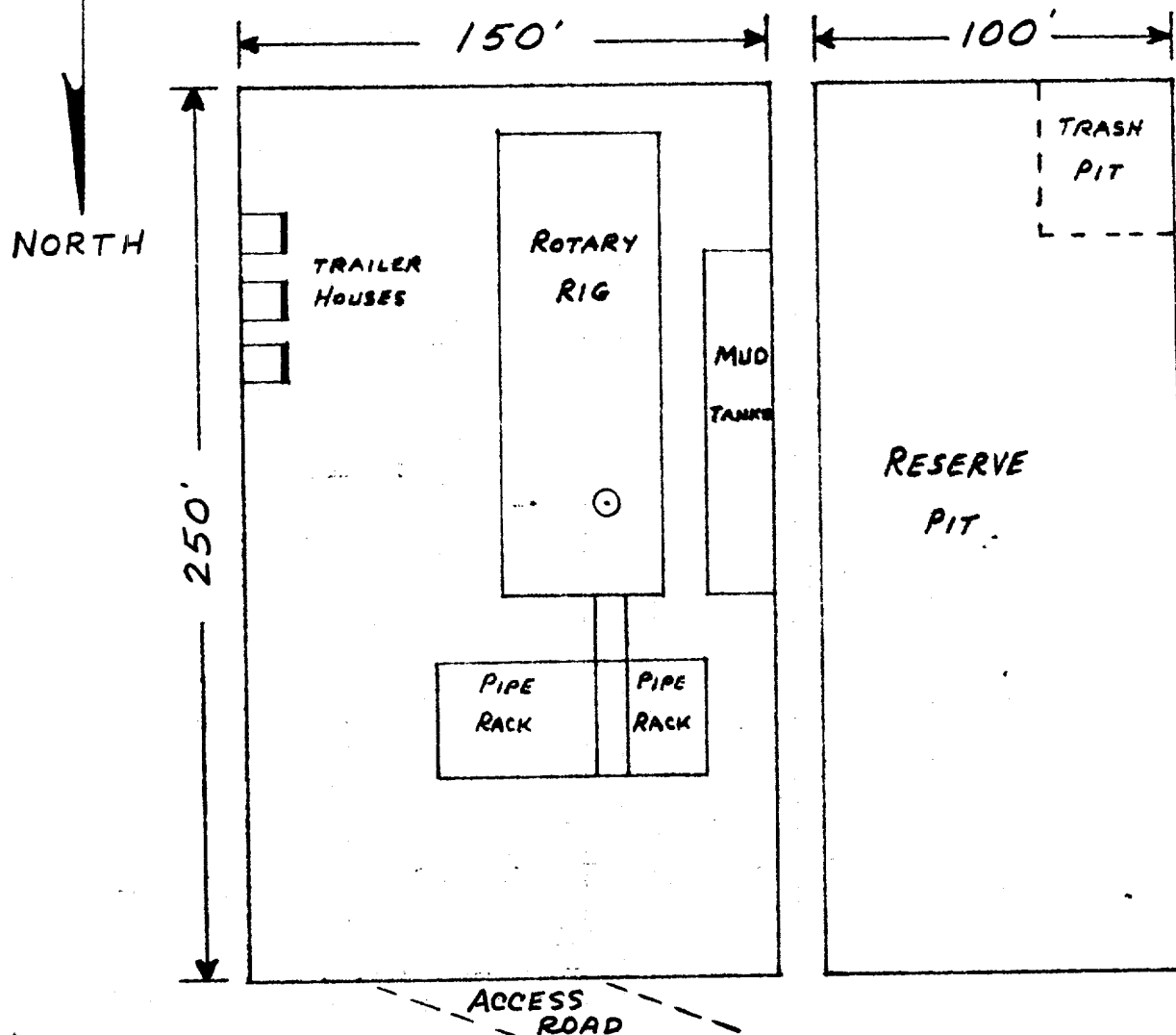


PROPOSED
LOCATION

SEE INSET MAP
ON REVERSE

NAVAJO TRIBE "BS"
WELL NO. 5
1340' FSL & 1300' FWL
SEC. 23 T26N-R18W
SAN JUAN COUNTY, N. M.





- A. Drilling pad will be compacted soil.
- B. Surface is slightly sloping, sandy soil with scattered weeds and brush.

LOCATION AND RIG LAYOUT PLAT
 NAVAJO TRIBE "BS" WELL NO. 5
 SAN JUAN COUNTY, NEW MEXICO