

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  
CONTINENTAL OIL COMPANY

3. ADDRESS OF OPERATOR  
P. O. Box 460, Hobbs, N.M. 88240

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*)  
At surface  
D 820' FNL and 610' FNL  
At proposed prod. zone

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)

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED TO THIS WELL

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

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

22. APPROX. DATE WORK WILL START\*

5. LEASE DESIGNATION AND SERIAL NO.  
30-037-22075  
contract no. 65

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
Jicarilla Apache

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME  
Jicarilla - 22

9. WELL NO.  
10

10. FIELD AND POOL, OR WILDCAT  
W. Lindrith Gallup Dakota ext

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
SEC 21 T25N R4W

12. COUNTY OR PARISH  
Rio Arriba

13. STATE  
NM

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#	400'	210 sk circ.
7 7/8"	5 1/2"	15.5# : 17#	8060'	840 sk TOC 3200'

It is proposed to drill a straight hole to a TD of 8060' and complete as a Gallup Dakota oil well

SEE ATTACHMENT FOR TEN point well plan.

SEE ATTACHED FOR 13 point SURFACE USE Plan.

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.

SIGNED Bern A. Lee TITLE Administrative Supervisor DATE 4-20-79

(This space for Federal or State office use)

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

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

USGS Durango 6  
BSA ok Frank  
MJJ  
REL. FOL.  
GI Paso.

\*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.

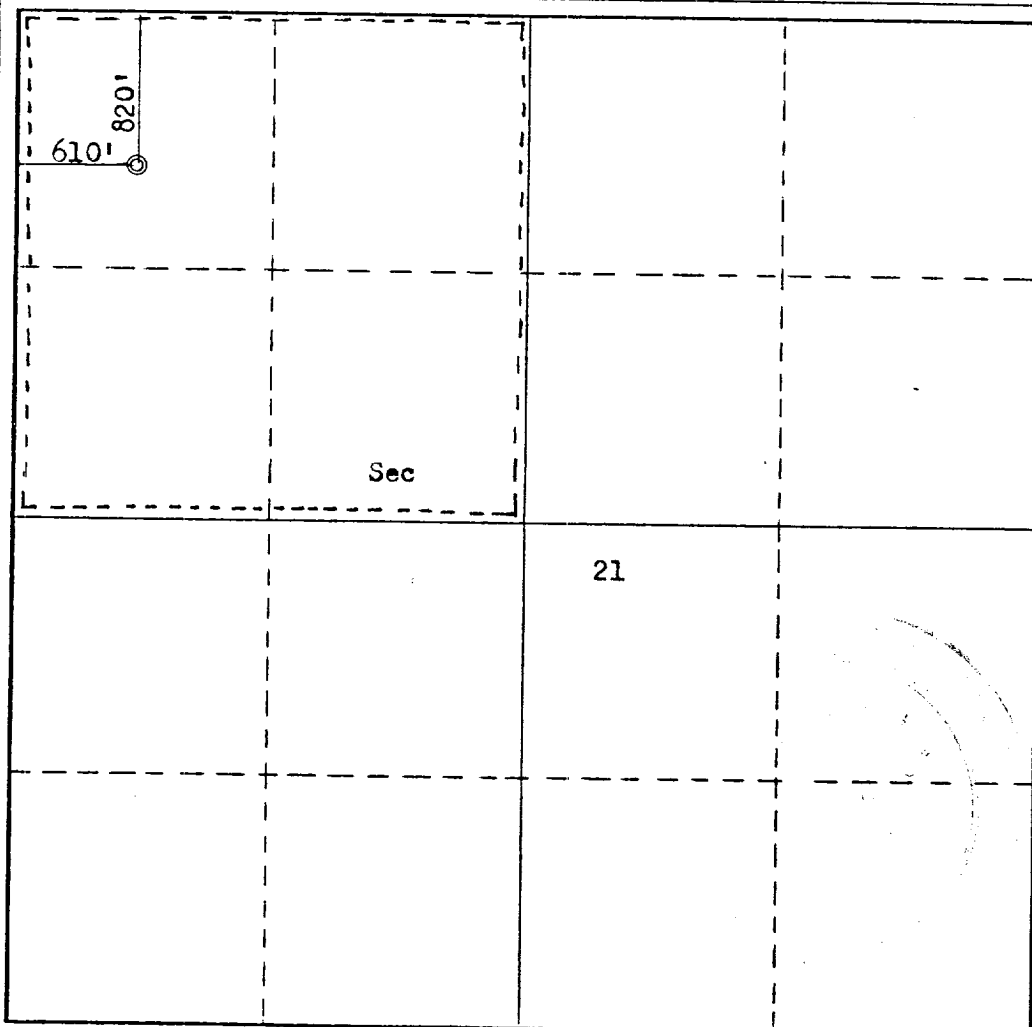
Operator <b>CONTINENTAL OIL COMPANY</b>			Lease <b>JICARILLA 22</b>		Well No. <b>10</b>
Unit Letter <b>D</b>	Section <b>21</b>	Township <b>25N</b>	Range <b>4W</b>	County <b>Rio Arriba</b>	
Actual Footage Location of Well: <b>820</b> feet from the <b>North</b> line and <b>610</b> feet from the <b>West</b> line					
Ground Level Elev. <b>7128</b>	Producing Formation <b>Dakota Gallup</b>		Pool <b>West Lindrith Gallup Dakota</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.



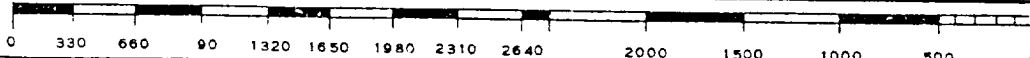
**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name  
*Ken R. Lee*  
Position  
*Administrative Supervisor*  
Company  
*Continental Oil Company*  
Date  
*April 20, 1979*

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  
**October 18, 1978**  
Registered Professional Engineer and/or Land Surveyor  
*Fred B. Kerr Jr.*  
Certificate No.  
**3950**



ATTACHMENT TO FORM 9-331 C  
APPLICATION FOR PERMIT TO DRILL

Continental Oil Company  
Jicarilla 22 No. 10  
Sec. 21 T25N R4W  
Rio Arriba County, New Mexico

1. The geologic name of the surface formation is Cretaceous Sand.
2. The estimated tops of important geologic markers are shown on the attached Proposed Well Plan.
3. The estimated depths at which anticipated water, oil, gas, or other mineral-bearing formations to be encountered are shown on attached Proposed Well Plan.
4. The proposed casing program is as follows:

0-400'	8 5/8", 24#, J-55, ST&C
0-6300'	5 1/2", 15.5#, J-55, ST&C
6300-8060'	5 1/2", 17#, J-55, ST&C
5. A drawing of an API Series 900 Blowout Preventer Specification is attached. Pipe rams and blinds will be checked to 1,000 PSI for 30 minutes when BOP is installed. BOP will be checked when casing string is set and operated daily for checks.
6. The proposed mud program is as follows:

0-400'	8.5-9.5 ppg spud mud
400-6700'	8.3-9.3 ppg fresh water gel (low solids)
6700-8060'	8.8-9.4 ppg fresh water gel
7. The auxiliary equipment to be used is:
  - (1) kelly cocks
  - (2) floats at the bit
8. It is proposed to run SP-IES log from TD to approximately 3200' and GR CAL CNL FDC PDC logs at selected intervals.
9. No abnormal pressures or temperatures are expected to be encountered in this well.
10. The anticipated starting date is June 1, 1979, with a duration of approximately 21 days.

PEB: cab

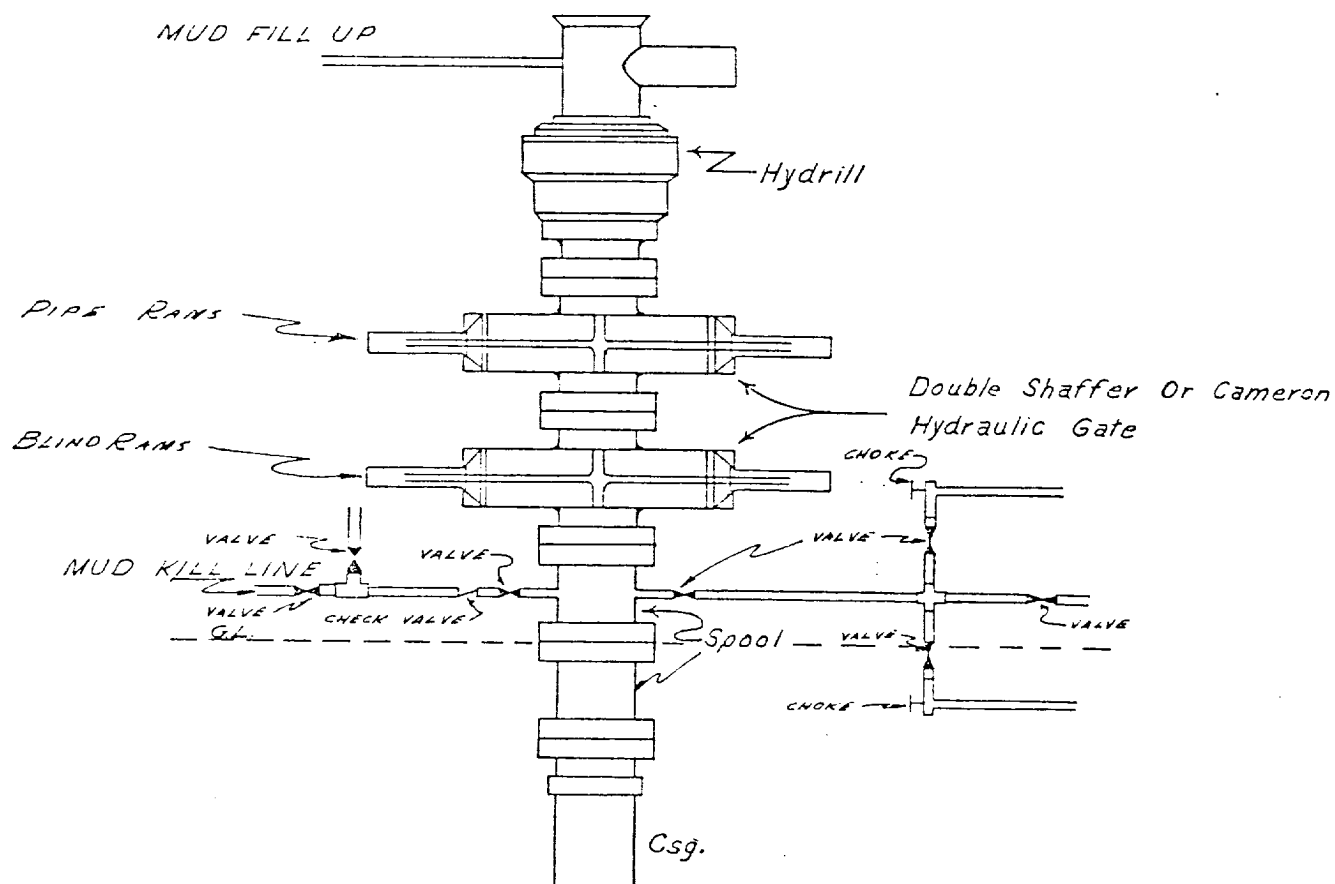
LOCATION: 820' FNL & 610' FWL  
Sec. 21, T25N, R4W

STATE: N. M.

~~STATE~~ GL: 7128 (surveyor)

DEPTH	FORMATION TOPS & TYPE	DRILLING PROBLEMS	TYPE OF FORMATION EVALUATION	HOLE SIZE (IN.)	CASING		FRACTURE GRADIENT (PPG)	FORMATION PRESSURE GRADIENT (PPG)	MUD	
					SIZE (IN.)	DEPTH (FT.)			WEIGHT (PPG)	TY
			GEOLOGRAPH O-TD DEFLECTION O-TD	12 1/4	8 5/8	400	-	-	8.5 TO 9.5	SH
<del>1500</del>										
<del>2500</del>										
	Ojo Alamo ss	2510								
<del>3000</del>	Kirtland sh	3070								
	Pic. Cliffs ss	3430								
<del>4000</del>										
	Chaco ss	4360								
<del>5000</del>										
	Mesa Verde ss	5150								
			SP-IES TD-3200' 2" & 5"							
<del>6000</del>	Mancos sh	5820								
			GR-CAL-FDC Selected Intervals (TD-3200') 2" & 5"							
	Gallup ss	6800				6700			8.8 TO 9.3	
<del>7000</del>										
	Dakota "D" ss	7670	PDC TD-6700'							
	"J" ss	7810								
<del>8000</del>	"M" ss	7910								
	TD	8060		7 7/8	5 1/2	8060	13.0 TO 14.0	LESS THAN 8.5	8.8 TO 9.4	F L C

CONTINENTAL OIL COMPANY  
Blow-out Preventer Specifications



NOTE:

API SERIES 900

Manual and Hydraulic controls with closing unit no less than 75' from well head.  
Remote controls on rig floor.

DUE TO SUBSTRUCTURE CLEARANCE,  
HYDRILL MAY OR MAY NOT BE USED.

SURFACE USE PLAN  
Continental Oil Company  
Jicarilla 20 Nos. 7 and 8  
Jicarilla 22 No. 10 ◀  
Jicarilla 30 No. 16  
T-25N, R-4W  
Rio Arriba County, New Mexico

The plan is to accompany "Application for Permit to Drill" the subject wells. The following is a discussion of pertinent information concerning possible effect which the proposed drilling of the wells may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

1. Existing Roads

A. The proposed well sites are as follows:

Jicarilla 20 No. 7 - 1670' FSL and 910' FEL, Section 19

Jicarilla 20 No. 8 - 770' FNL and 760' FWL, Section 19

▶ Jicarilla 22 No. 10 - 820' FNL and 610' FWL, Section 21

Jicarilla 30 No. 16 - 660' FSL and 1980' FWL, Section 29

B. Exhibit "A" is a portion of a Jicarilla area Lease map showing existing roads and proposed new road and location. A portion of a New Mexico road map is also included for further clarification.

C. The access roads are shown on Exhibits "A" and "B".

2. Planned Access Roads

Refer to the attached archaeological report.

3. Location of Existing Wells

See Exhibit "B".

4. Location of Existing and/or Proposed Facilities

A. Tank Batteries: Two 400 Bbl. tanks and a production unit will be located on each well site.

B. Rehabilitation: Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 45 days from commencement.

5. Water Supply

The supply of water will be hauled from Largo Wash (See Exhibit "C"), SE/4, Section 10, T-24N, R-4W, Rio Arriba County, New Mexico.

6. Source of Construction Materials

Not applicable. Drilling pad to be compacted.

7. Methods for Handling Waste Disposal

Waste Disposal: Well cuttings will be disposed in reserve pit. Barrel trash containers to be in accessible location within drill site area during drilling and completion procedures. All detrimental waste will be hauled away, burned or buried with a minimum cover of 24" of dirt. See Exhibit "D" for location of pits. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically.

8. Ancillary Facilities

None

9. Well Site Layout

Exhibit "D" shows the relative location and dimensions of the well pad, mud pit, reserve pit, etc.

10. Plans for Restoration of Surface

Pits will be backfilled and leveled as soon as practical to original condition. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 45 days from commencement. Surface will be leveled and properly conditioned as required by USGS after consulting with proper surface managing agency.

11. Other Information

A. Terrain: "A" through "C" refer to the attached archaeological report.

B. Soil:

C. Vegetation:

D. Surface Use: Suitable for grazing.

E. Ponds and Streams: None within one mile.

F. Water Wells: None within one mile.

G. Residences and Buildings: None within one mile.

H. Arroyos, Canyons, Etc: See attached topographic map, Exhibit "B".

- I. Well Sign: Sign identifying and locating well will be maintained at drill site with the spudding of the well.
- J. Open pits: All pits containing mud or other liquids will be fenced.
- K. Archaeological Resources: None observed.

12. Operator's Representative

Field personnel who can be contacted concerning compliance of this Surface Use Plan are as follows:

PRODUCTION AND DRILLING

B. E. Anderson  
Petroleum Center Building  
Room 215  
501 Airport Drive  
Farmington, New Mexico  
Phone: (505) 327-9557

L. P. Thompson  
1001 North Turner  
Hobbs, New Mexico 88240  
Phone: (505) 393-4141

J. R. Kemp  
1001 North Turner  
Hobbs, New Mexico 88240  
Phone: (505) 393-4141


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 Continental Oil Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

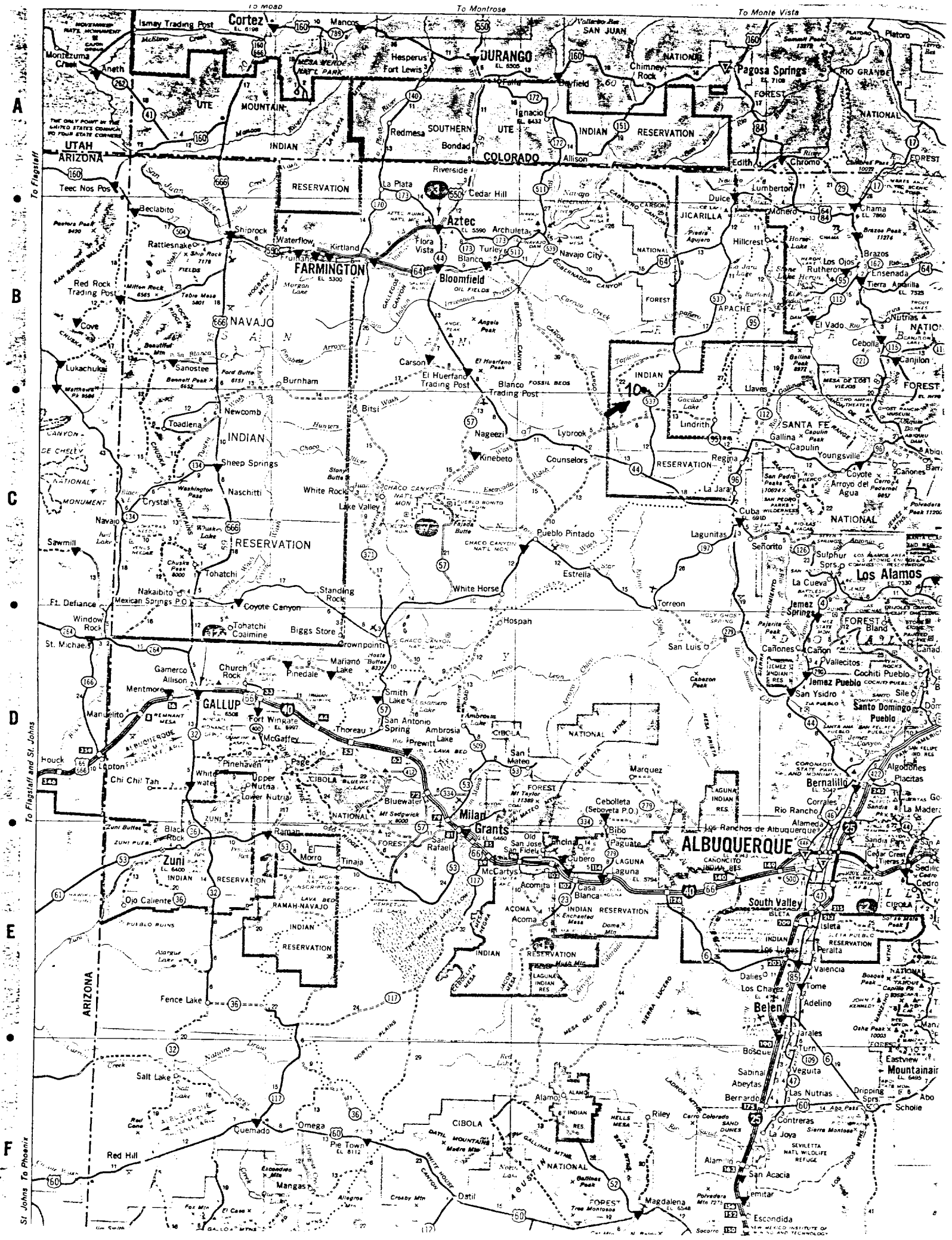
4-20-79

Date

PEB:skr

  
Assistant Division Manager

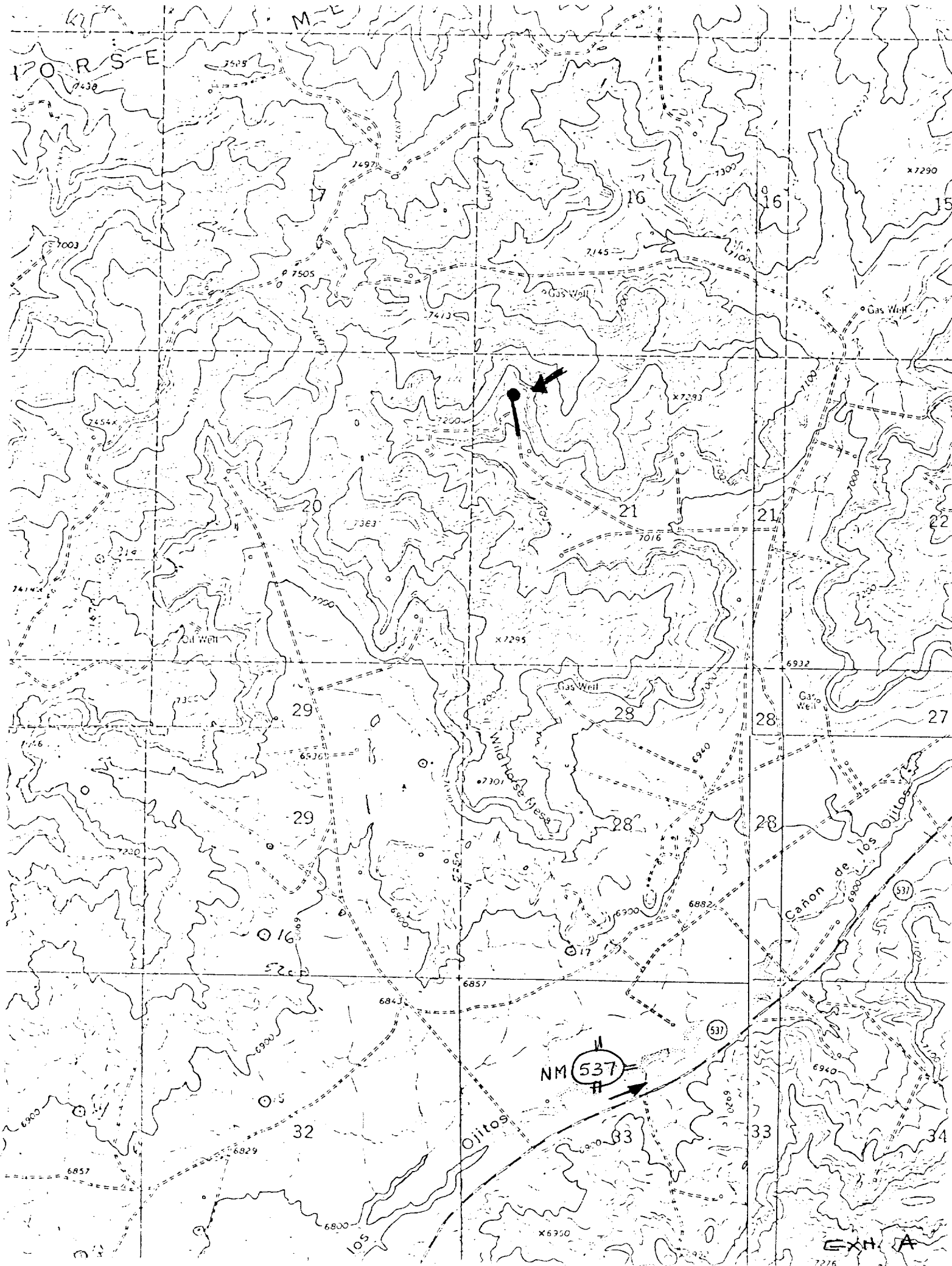




A  
B  
C  
D  
E  
F

To Flagstaff  
To Flagstaff and St. Johns  
To Phoenix

Ismael Trading Post  
Cortez  
Mancos  
Durango  
Pagosa Springs  
Rio Grande  
Pagosa  
Pitro  
Terra  
Hesperus  
Fort Lewis  
Chimney Rock  
NATIONAL FOREST  
UTAH  
ARIZONA  
COLORADO  
NEW MEXICO  
Indian Reservation  
SOUTHERN UTE  
BONAPA  
RIVERSIDE  
Cedar Hill  
Archuleta  
Blanco  
Navajo City  
Gallup  
Farmington  
Shiprock  
Waterflow  
Kirtland  
Flora Vista  
Bloomfield  
Oil Fields  
Carson  
El Huerfano Trading Post  
Blanco Trading Post  
Nageezi  
Lybrook  
Counselors  
Pueblo Pintado  
Estrella  
Hospan  
White Horse  
Standing Rock  
Biggs Store  
Crownpoint  
Mariano Lake  
Pinedale  
Church Rock  
Gallup  
Fort Wingate  
McGaffey  
Pinehaven  
Upper Nutria  
Lower Nutria  
Zuni  
Ojo Caliente  
Fence Lake  
Salt Lake  
Quemado  
Omega  
Pie Town  
Mangas  
Red Hill  
Alamo  
Alamogordo  
Magdalena  
Belen  
Las Lunas  
South Valley  
Albuquerque  
Los Ranchos de Albuquerque  
Bernalillo  
Placitas  
Algodones  
Sandoval  
Sage  
Cedro  
Cibola  
Valencia  
Tome  
Adelino  
Las Nutrias  
Dripping Spring  
Abo  
Schole  
Escobedo  
San Acacia  
Alamogordo  
Magdalena  
Belen  
Las Lunas  
South Valley  
Albuquerque  
Los Ranchos de Albuquerque  
Bernalillo  
Placitas  
Algodones  
Sandoval  
Sage  
Cedro  
Cibola  
Valencia  
Tome  
Adelino  
Las Nutrias  
Dripping Spring  
Abo  
Schole  
Escobedo  
San Acacia  
Alamogordo  
Magdalena



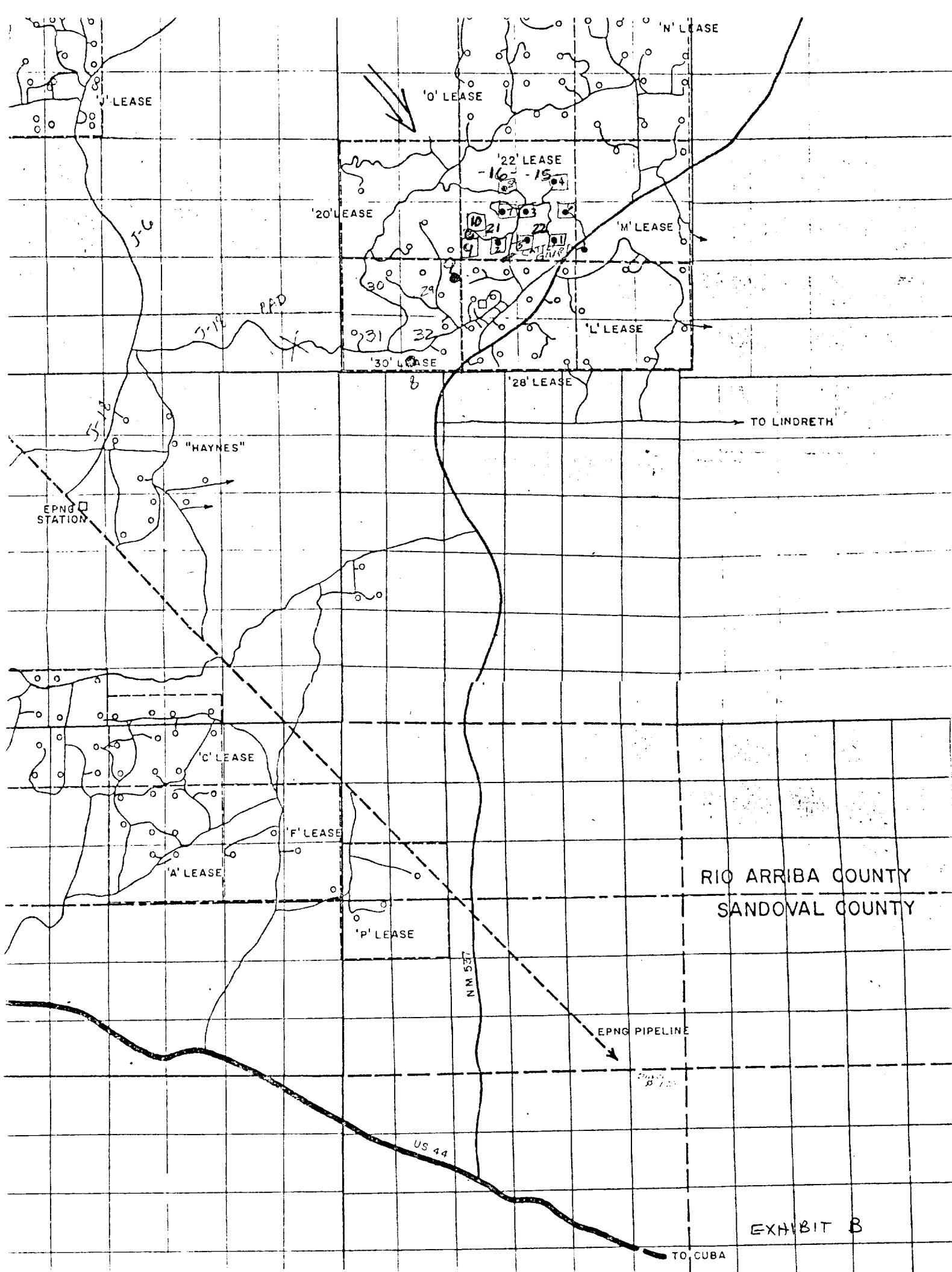
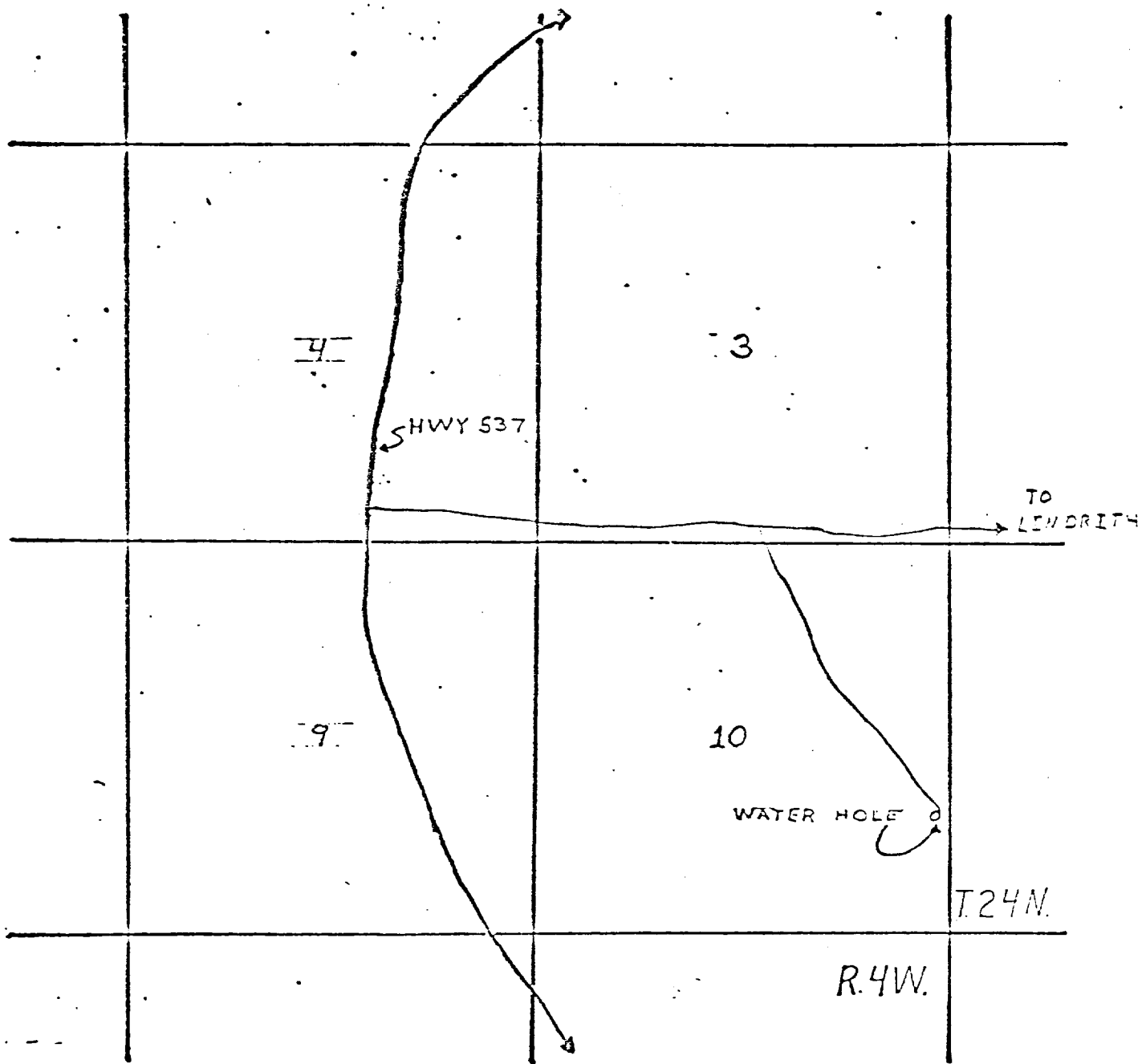


EXHIBIT B



CONOCO

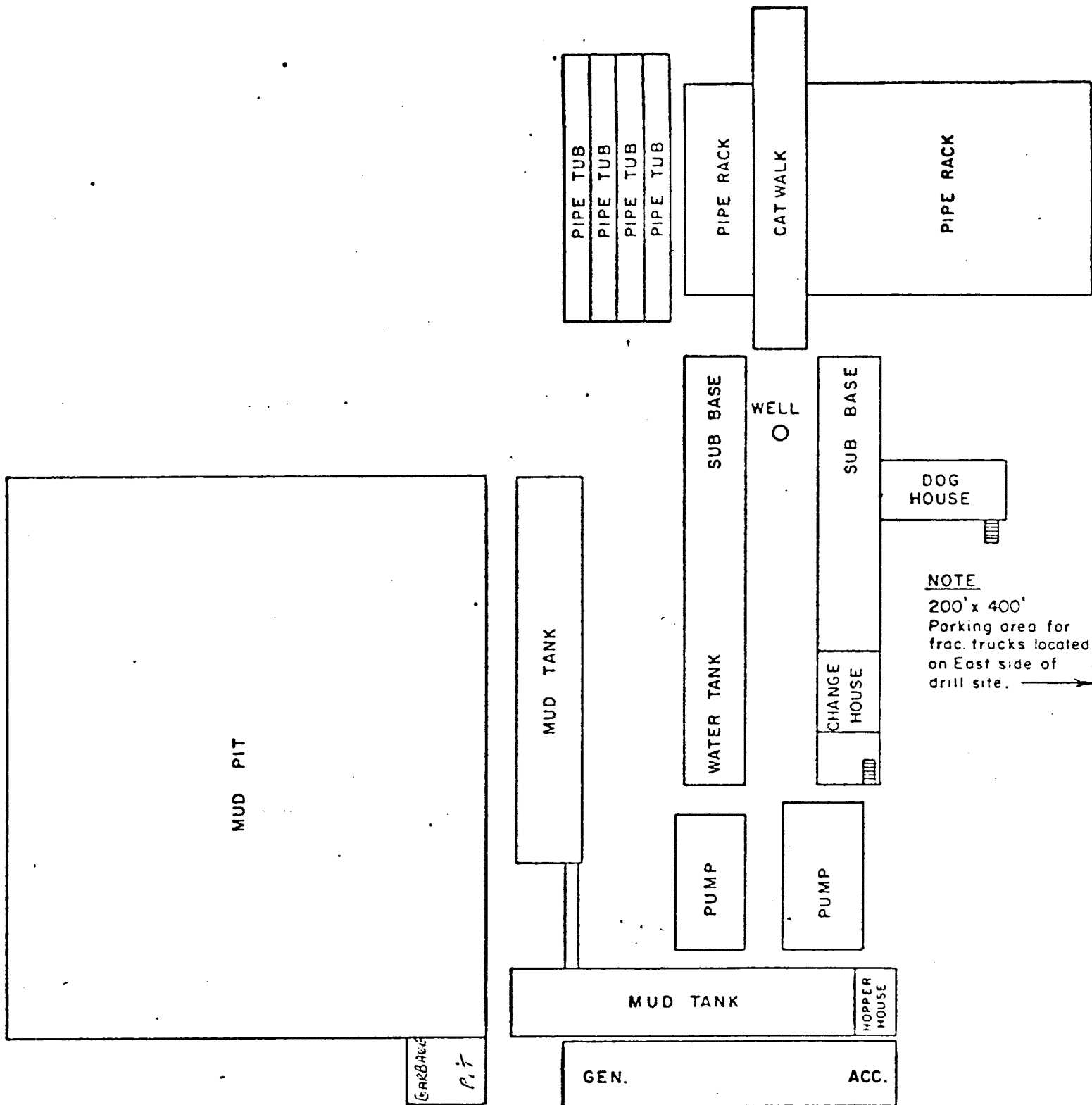
PRODUCTION DEPT. HOBBS DIV.  
LARGO WATER HOLE

LEGEND

- CONOCO WELL
- ▲ TANK BATTERY
- LEASE ROAD
- HWY.

EXHIBIT C

NTS  
CHAVEZ



NOTE  
 200' x 400'  
 Parking area for  
 frac. trucks located  
 on East side of  
 drill site. →

APPROX. RIG SITE DIMENSIONS  
 160' x 200'

**CONTINENTAL OIL COMPANY**  
 PRODUCTION DEPARTMENT  
 Casper, Wyoming



# RIG LAYOUT

EXHIBIT D

Engineer: ~~XXXXXXXXXX~~

Draftsman: ~~XXXXXXXXXX~~

Date: 1-4-73

Report 78-SJC-209  
Permit 404-77/NM-084  
A New Mexico  
Service Permit

An Archaeological Clearance Survey of  
Eight Proposed Wells and Access Routes  
Conducted for Continental Oil Company

Submitted by,  
Billy J. Naylor,  
Coordinator and  
Dabney Ford  
Cultural Resource  
Management Program  
San Juan Campus  
N. M. State University  
25 October 1978

An Archaeological Clearance Survey of  
Eight Proposed Wells and Access Routes  
Conducted for Continental Oil Company

On October 18 and 19, 1978, Billy J. Naylor and Dabney Ford of New Mexico State University's Cultural Resource Management Program, San Juan Campus, conducted an archaeological clearance survey of eight proposed wells and access roads for Continental Oil Company at the request of Mr. ~~Andrew~~ Anderson of Continental Oil Company and Mr. Joe McKinney of Atchison Construction Company.

Mr. Anderson, Mr. McKinney, and Mr. Fred Kerr of Kerr Land Survey were present during the inspections.

The proposed locations and access roads were inspected by walking transects over a 300 X 300 foot area for the location. The access routes were inspected by walking the length of each in a zig-zag pattern, under Federal Antiquities Permits, 404-77/NM-084 and New Mexico State University's Permit for New Mexico States National Forest Lands.

The most recent listings of the National Register of Historic Places have been consulted and no sites which appear on the Register and no sites which have been nominated to the Register occur on the Project area. The proposal complies with the provisions of the Historic Preservation Act of 1966 and with Executive Order 11593. It is recommended that archaeological clearance be given.

Proposed Well: CONTINENTAL OIL - JICARILLA 30 #16

Land Status: Jicarilla Apache Indian Reservation

Location: 660 feet from the south line and 1980 feet from the west line of Section 29, Township 25 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico. (Figure 1).

Access: Width: 20 feet Length: 500 feet to existing pipeline right-of-way.

Total Area Inspected: 2.6 acres

Terrain: Gently rolling sagebrush flat.

Soil: Sandy loam.

Vegetation: Sagebrush, winter fat, shadscale, russian thistle, wolfberry, blue grama.

Cultural Resources: None found.

Recommendations: Clearance is recommended.

Proposed Well: CONTINENTAL OIL - JICARILLA 22 #10 <

Land Status: Jicarilla Apache Indian Reservation

Location: 820 feet from the north line and 610 feet from the west line of Section 21, Township 25 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico. (Figure 1).

Access: Adjacent to existing location. No new access.

Total Acreage Inspected: 2.4 acres.

Terrain: Gently rolling to flat small cove.

Soil: Sandy clay loam.

Vegetation: Sagebrush, shadscale, russian thistle, broom snakeweed, black grama.

Cultural Resources: None found.

Recommendations: Clearance is recommended.

Proposed Well: CONTINENTAL OIL - JICARILLA 20 #8

Land Status: Jicarilla Apache Indian Reservation

Location: 770 feet from the north line and 760 feet from the west line of Section 19, Township 25 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico. (Figure 2).



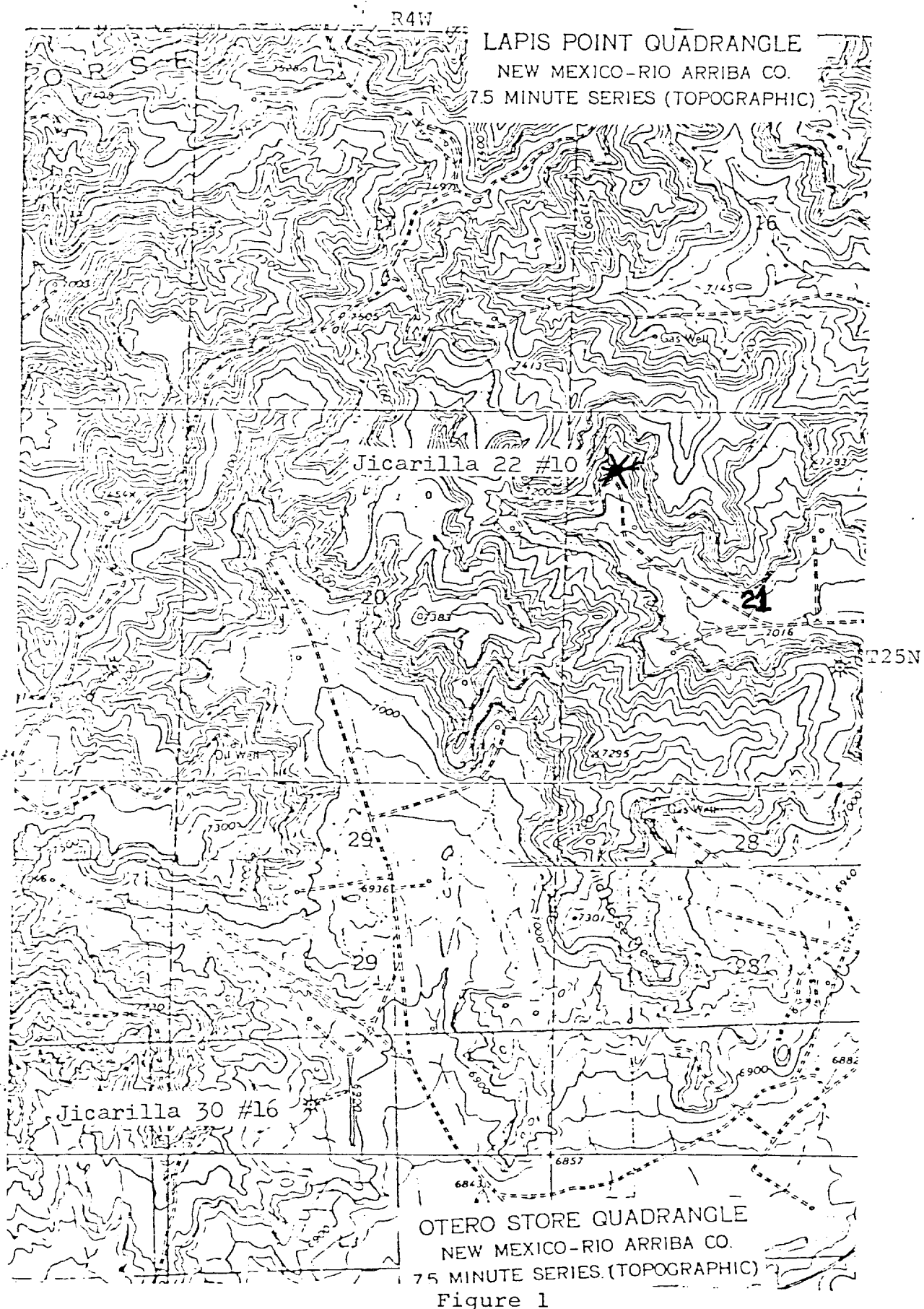


Figure 1



# United States Department of the Interior

## BUREAU OF INDIAN AFFAIRS

ALBUQUERQUE AREA OFFICE

P. O. BOX 8327

ALBUQUERQUE, NEW MEXICO 87198

IN REPLY REFER TO:

Environmental  
Quality - 305

NOV 29 1978

Mr. Andrew Anderson  
Continental Oil Company  
Petroleum Center Building, Rm 215  
501 Airport Drive  
Farmington, New Mexico 87401

Dear Mr. Anderson:

We have recently received an archeological survey report entitled, "An Archaeological Clearance Survey of Eight Proposed Wells and Access Routes Conducted for Continental Oil Company." This report was prepared by Mr. Billy J. Naylor and Ms. Dabney Ford, dated October 25, 1978, and numbered 78-SJC-209. We understand that you also have a copy of this report.

We have reviewed the portions of this report that deal with proposed activities on lands belonging to the Jicarilla Apache Tribe. We note that no cultural resources are encountered during the requisite field inspection. Therefore, no effect upon significant cultural resources is expected to result from the proposed action. Accordingly, archeological clearance for Jicarilla 30 #16, Jicarilla 22 #10, Jicarilla 20 #8, Jicarilla 20 #7, and AXI Apache K #6A is granted under the following stipulations: 1. that all land altering activity be confined to the archeologically surveyed area; and 2. that in the event that subterranean cultural resources are encountered, that land alteration be halted and the Area Archeologist notified.

If you have any questions regarding this matter, please contact Mr. William C. Allan, Area Archeologist, Environmental Quality Services, at 766-3374.

Sincerely yours,

*William C. Allan*  
Deputy Area Director



Save Energy and You Serve America!