

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-22002

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 CO.

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
1740' FNL and 1460' FWL
At proposed prod. zone
SAME

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 drilg. unit line, if any)

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
7394' GL

23. PROPOSED CASING AND CEMENTING PROGRAM

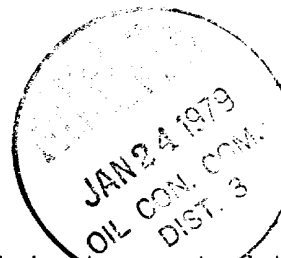
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	400' 500'	215 sx
7 7/8"	4 1/2"	10.5#	4425'	365 sx

It is proposed to drill a STRAIGHT HOLE TO A TD OF 4425' AND COMPLETE AS A PICTURED CLIFFS GAS WELL.

SEE ATTACHMENT FOR 10 POINT WELL PLAN.

SEE ATTACHED FOR 13 POINT SURFACE USE PLAN

ACREAGE IS DEDICATED TO A GAS PURCHASER.



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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 W. A. Butterfield TITLE Administrative Supervisor DATE 1-15-79

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

USGS DURANGO 6 c/c Frank

BEA

MJL

JFB RGL

*See Instructions On Reverse Side

NORTHWESTERN Pipeline - Salt Lake City, Utah

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 CONTINENTAL OIL COMPANY			Lease CONOCO 29-4		Well No. 13
Unit Letter F	Section 13	Township 29N	Range 4W	County Rio Arriba	
Actual Footage Location of Well: 1740 feet from the North line and 1460 feet from the West line					
Ground Level Elev. 7394	Producing Formation Pictured Cliffs		Pool Chaco Mesa Undesignated Pictured Cliffs	Dedicated Acreage: 16.0 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.

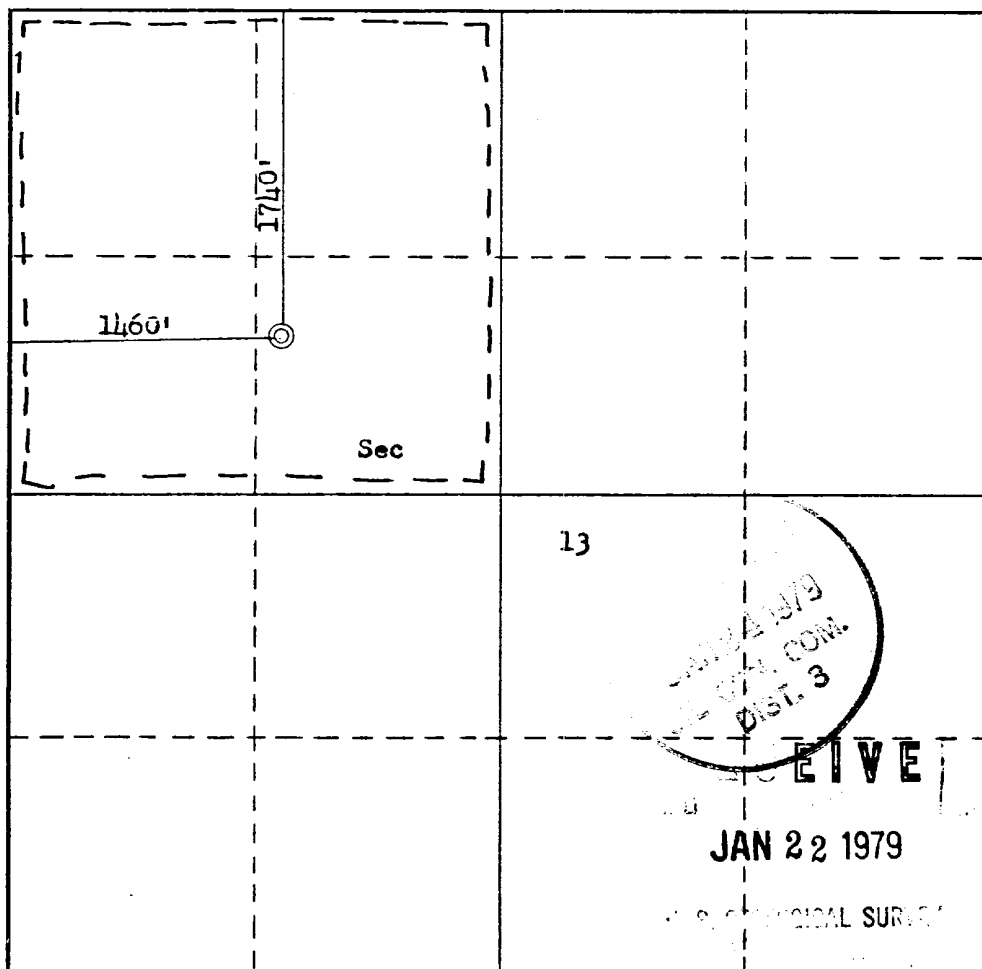
CERTIFICATION

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

Name **John A. Butterfield**
Position **Administrative Supervisor**
Company **Continental Oil Co**
Date **1-15-79**

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 19, 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
Conoco 29-4 No. 13
T29N R9W
Rio Arriba County, New Mexico

1. The geologic name of the surface formation is cretaceous.
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 - 500' 8 5/8", 24#, K-55, ST&C
0 - 4425' 4 1/2", 10.5#, K-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' 8.5-9.0 ppg spud mud
400' - 4425' 8.5 - 9.0 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 400' 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 for the well is March 24, 1979, with a duration of approximately seven days.

PEB:skr

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GEOLOGICAL SURVEY

PROPOSED WELL PLAN OUTLINE

WELL NAME: CONOCO 27-4 No. 13

COUNTY: Rio Arriba

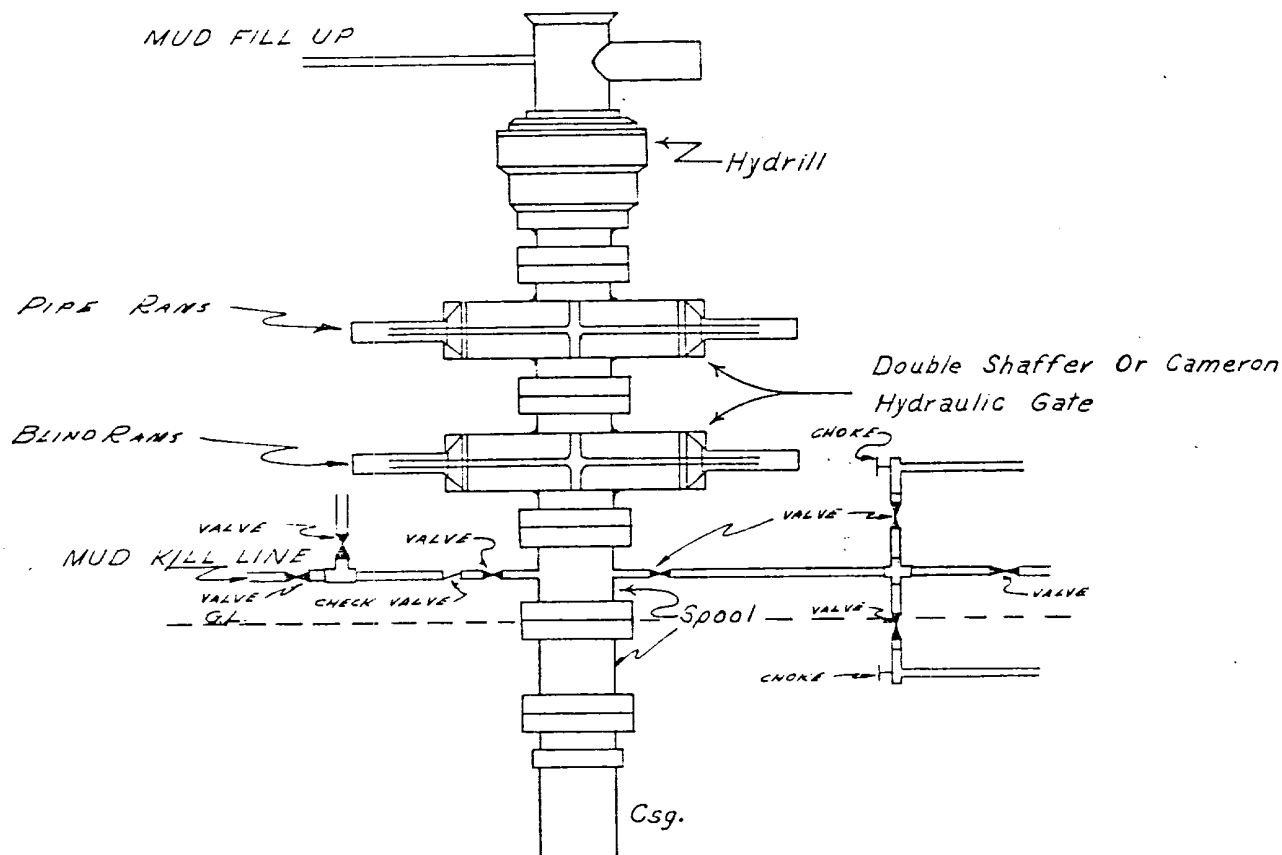
LOCATION: 1740 FNL 4/460 FWL

STATE: N. M.

Sec. 13, T29N, R4W

[illegible]

CONTINENTAL OIL COMPANY
Blow-out Preventer Specifications



API SERIES 900

NOTE:

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.

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SURFACE USE PLAN
Continental Oil Company
Conoco 29-4 Nos. 11, 12, and 13
T-29N, 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 well 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:

Well No. 11 - 1090' FSL and 990' FEL, Section 24

Well No. 12 - 1180' FNL and 990' FWL, Section 24

Well No. 13 - 1740' FNL and 1460' FWL, Section 13

B. Exhibit "A" is a portion of a New Mexico road map showing existing roads and location.

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: none required.

B. Gas gathering line to be installed by purchase of produced gas.

C. 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 La Jara wash located NW/NW Sec. 20, T-29N, R-4W.

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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 locations 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: La Jara Creek, see Exhibit "B" for relative location with respect to well site.
- F. Water Wells: None within one mile.
- G. Residences and Buildings: None within one mile.

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- 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: See attached archaeological report.
2. 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

3. 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.

1-17-79
(Date)

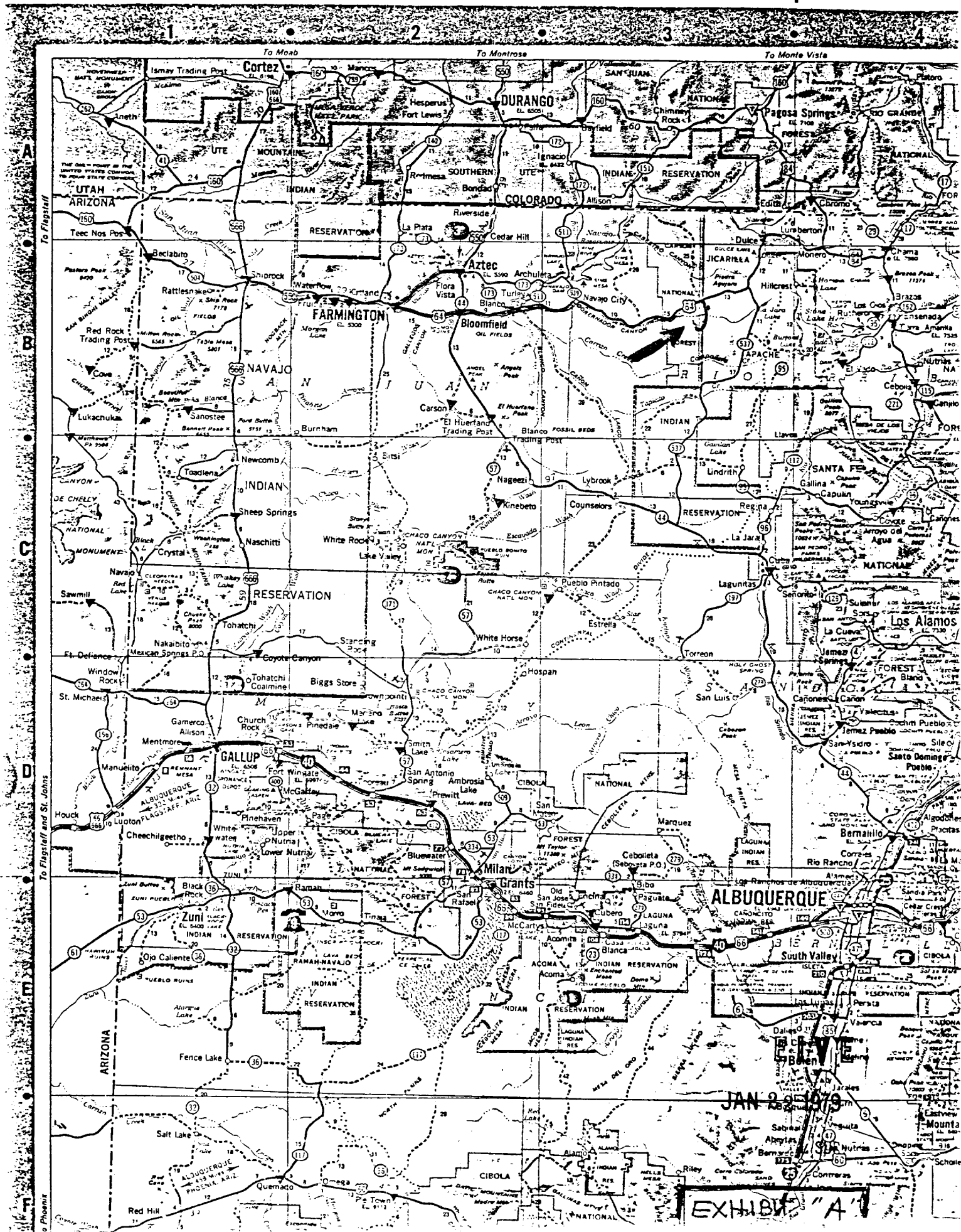
L. P. Thompson

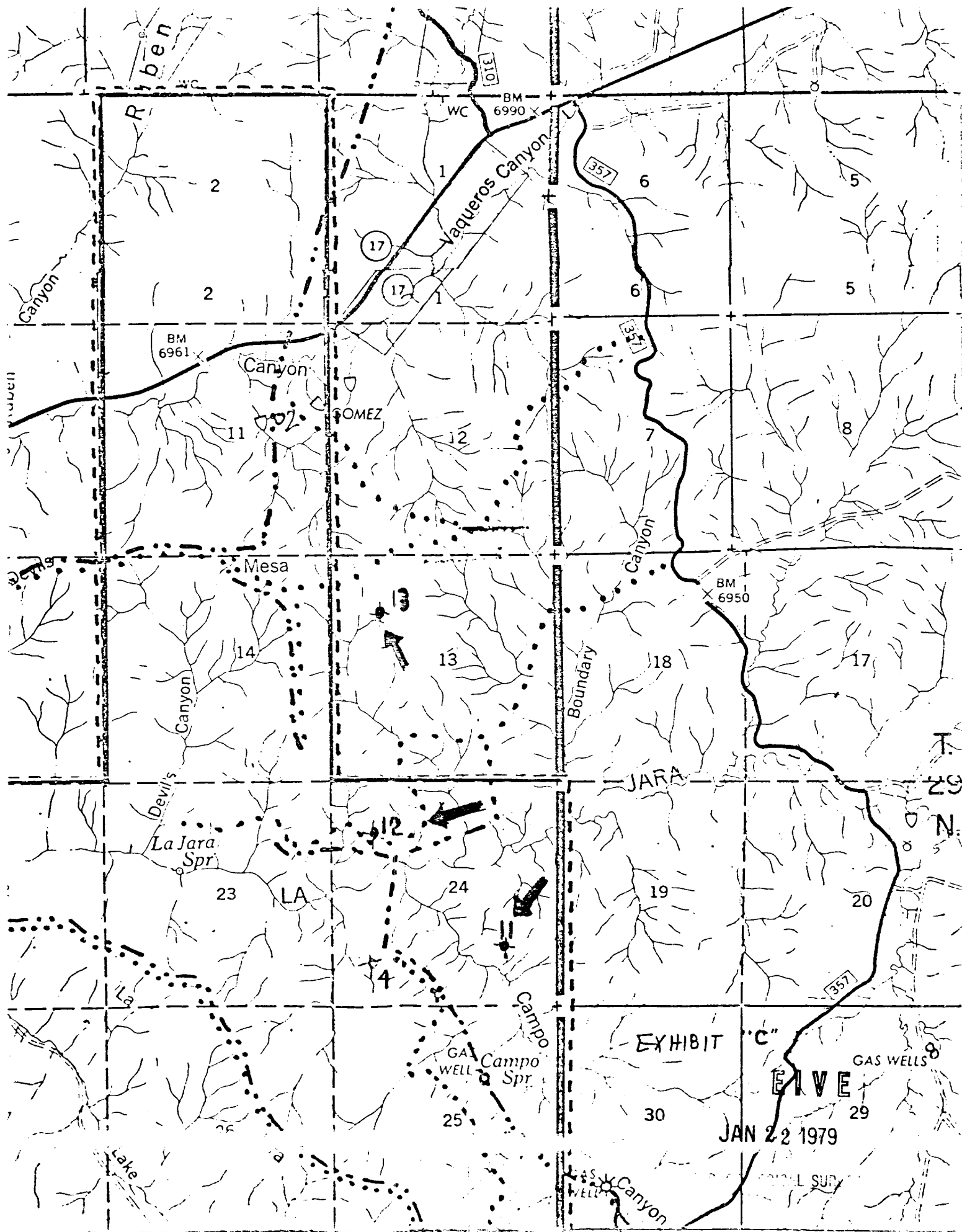
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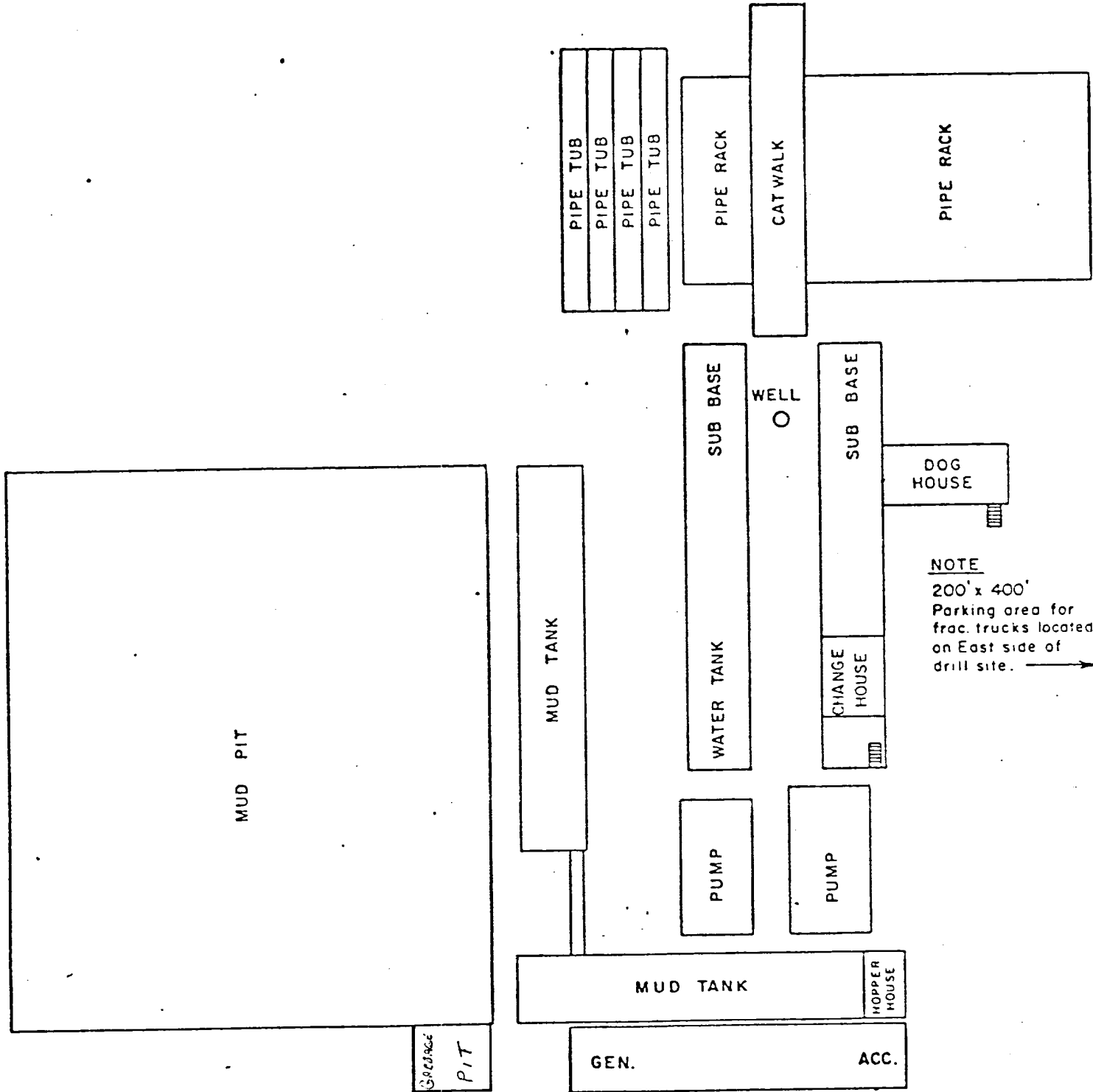
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ARCHAEOLOGICAL SURVEY







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

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EXHIBIT "D"

Engineers: ~~XXXXXXXXXX~~

Draftsman: ~~XXXX~~ Date: 1-4-73

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

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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

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CONTINENTAL SUPPLY

Total Area Inspected: 2.5 acres.

Terrain: Broken, rolling mesa top.

Soil: Sandy clay with sandstone boulders.

Vegetation: Piñon, juniper, sagebrush, narrow leaf yucca, broom snake-weed, blue grama.

Cultural Resources: None found.

Recommendations: Clearance is recommended.

Proposed Well: CONOCO 29-4 #13

Land Status: Carson National Forest - Jicarilla District

Location: 1740 feet from the north line and 1460 feet from the west line of Section 13, Township 29 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico. (Figure 4).

Access: Width: 20 feet Length: 300 feet along ridge from north.

Total Area Inspected: 2.58 acres.

Terrain: Narrow point on Devil's Mesa. Rugged broken topography.

Soil: Sandy with sandstone boulders and outcrops.

Vegetation: Douglas fir, piñon, juniper, gamble's oak, mountain mahogany, prickly pear cacti.

Cultural Resources: None found.

Recommendations: Clearance is recommended.

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Proposed Well: CONOCO 29-4 #11

Land Status: Carson National Forest

Location: 1090 feet from the south line and 990 feet from the east line of Section 24, Township 29 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico. (Figure 5).

Access: 3000 feet long and 20 feet wide approaching the location from the south and using an existing road where possible.

Terrain: Broken drainage bottom and ridge slope with westerly drainage, alluvial surface deposits, and sandstone outcrops.

Soil: Clayey loamy sand.

Vegetation: Juniper, piñon, sagebrush, ponderosa pine, gamble's oak, snakeweed, rabbitbrush, prickly pear cacti, winterfat, blue grama, wheat grass, galleta.

Cultural Resources: None found.

Recommendations: Clearance is recommended.

Proposed Well: CONOCO 29-4 #12

Land Status: Carson National Forest

Location: 1180 feet from the north line and 990 feet from the west line of Section 24, Township 29 North, Range 4 West, N.M.P.M., in Rio Arriba County, New Mexico. (Figure 5).

Access: 600 feet long and 20 feet wide approaching the well from the north.

Terrain: Broken ridge top with westerly drainage, alluvial surface deposits, and sandstone outcrops.

Soil: Sandy clay loam.

Vegetation: Juniper, piñon, ponderosa pine, sagebrush, prickly pear cacti, blue grama, galleta, bitterbrush, snakeweed, aster.

Cultural Resources: Site SJC-391 was found on the southern edge of the original location. The location was moved approximately 250 feet north to completely avoid the site. See site report and map for details.

Recommendations: Clearance is recommended.

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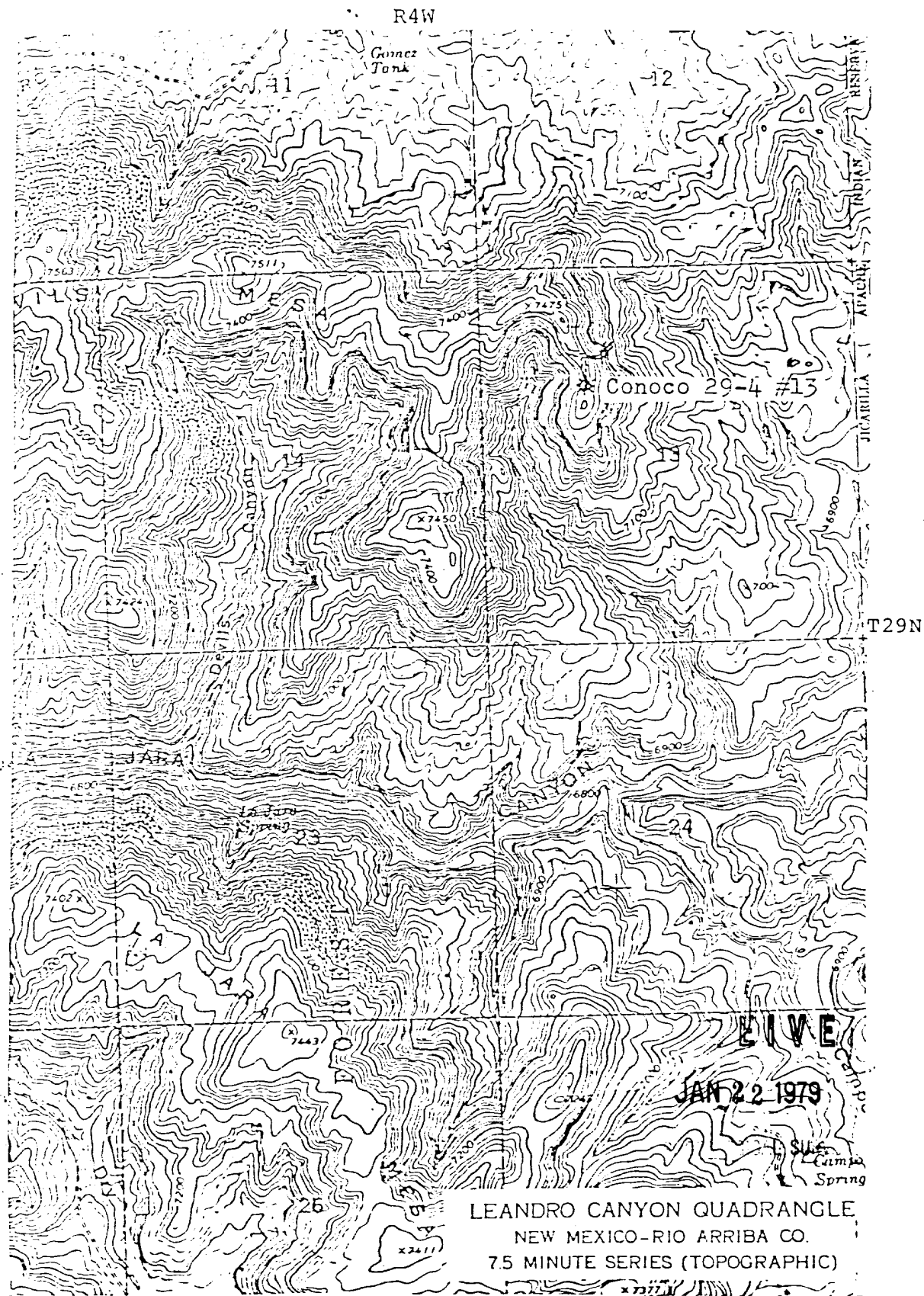


Figure 4

R4W R3W



T29N

LEANDRO CANYON, N. MEX.
N3637 5-W10707 5/7.5

1963

AMS 4557 II NW-SERIES V881

Figure 5

Archaeological Survey Canoco Project SITE NO. L.A.

Field number 29-4 #12

of the Section 24, T. 20 S., R. 4 W. County Rio Arriba State NM

Leandro Canyon, NM Quad Elevation 6980'

primary La Jara Canyon secondary San Juan River

On a high narrow ridge. Tip 200 feet above La Jara Cañon bottom on the north side of the cañon.

Nearest highway 17 Accessibility: foot XX sedan 4-wh. dr. XX backhoe

Carson National Forest

Fred Kerr

Location

ON (check ✓): Valley bottom Bench Slope Ridge XX Mesa top Cliff edge Overhang Cave Dune

Area of site 100m E-W, 50m N-S

PS (Indicate number): Pit houses 1 Kivas Surface rooms: Slab Masonry Adobe Other

(direction) E-W Hearths Burials Sherd/Chipping area E-W Grids/Dams/Terraces Photographs/Petroglyphs

Other

Room Linear Arc I-shaped C-shaped F-shaped E-shaped ()-shaped Enclosed plaza: by a wall

Scattered Indeterminate XX Other

Double tier -tiers Part double-tier Part tier Orientation open Exposure S

Depth of fill alluvial, 1.5 to 3.0 meters deep Est. Wall height Stratified? NO

Undisturbed XX Eroded Pot-hunted Pottery/Artifact abundance: 10's, 100's, 1000's, 80-100 Modern structures

Level Uneven Slopes to (direction) S Surface deposits: Alluvium XX Colluvium Aeolian Talus

Soil: Rocky Gravelly Sandy XXX Clayey XX Other loam

Outcrops: Sandstone X Limestone Shale Caliche Basalt Tuff Other

(type, distance & direction) arroyo flood plain 150 meters south

(name & direction) River Arroyo 200m S Confluence Spring Seeps

Local vegetation patterns Juniper, piñon, ponderosa pine, brush, blue grama, galleta, snakeweed, bitterbrush, rabbitbrush, aster

Perfat Photo: B/W Color

Notes Campo Spring 1 1/2 mile SSE, unnamed seeps and springs along La Jara

Cañon.

One pithouse and possibly a second to the east. Sherd and lithic

ter to the east and south. Sandstone rectangular mano with hole

led through. Sherds---Rosa Gray, Rosa B/W. Lithics chert, chalcedony

lt, pithouse 10m diameter.

Report 78-SJC-209

Requirements Labor Time Equipment

Anasazi / Rosa Phase/Date PI EIVE Top-850

Locality Lab. class 1 2 3 4 5 6 7 8 9 10

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ARCHAEOLOGICAL SURVEY

by Dabney Ford Date 10/19/78

Instructions storage Catalogue Nos

Site 8JC-391

Site 8JC-391 consists of at least one pithouse depression and an associated artifact scatter. The depression, 10 meters in diameter and 1.50 meter deep, is on the tip of a narrow ridge overlooking La Jara. There is a slight, ill-defined depression 25 meters to the east, which may indicate a second structure. The artifacts associated with this site are concentrated on the east and south of the pithouse. This concentration is probably due more to alluvial erosion than to cultural activities. Sherds found on the surface include Rosa Plain ware, one with basket impressions, and Rosa B/W. Flaked lithics are mostly of chert, quartzite, and chalcedony, and some basalt. No diagnostic tools were seen. One rectangular bifacial sandstone mano was found near the pithouse, and one found 300 meters to the north. The latter, a fragment, had a hole drilled through the ground surfaces and hardened as if it had been heated or burned.

The site is in good condition although there has been alluvial filling on the east side. The cultural fill may be from 1.5 to 3.0 meters deep and undisturbed. The well location was moved approximately 100 feet north, at the time it was staked, to avoid the site. No direct or indirect damage should result from construction, drilling, or maintenance.

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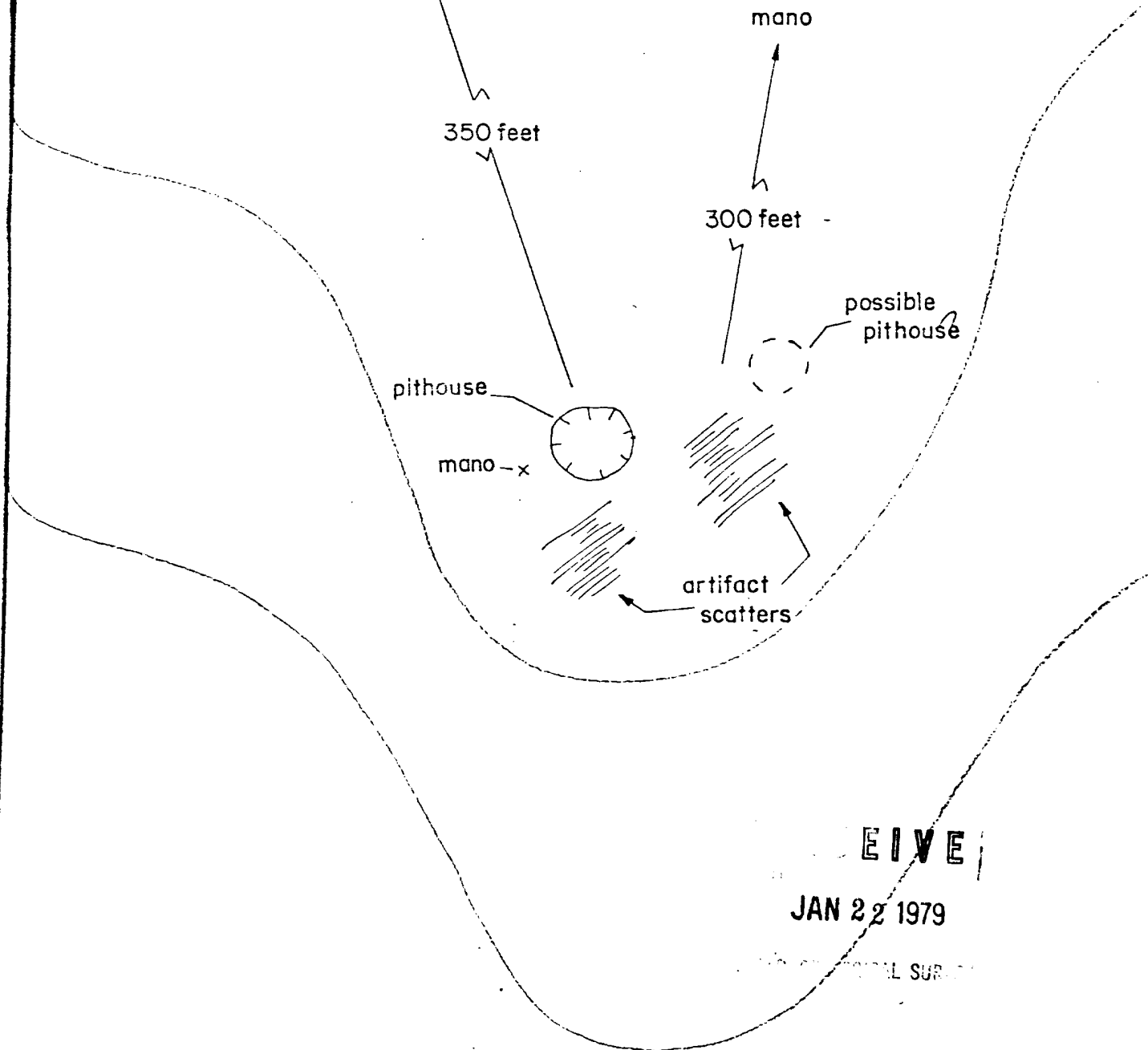
SITE SJC-391

NE 1/4 SW 1/4 NW 1/4
Section 24, T 29 N; R 4 W
Rio Arriba County, N.Mex.

Conoco 29-4
#12

0 10 20 meters
0 75 feet

TN MN



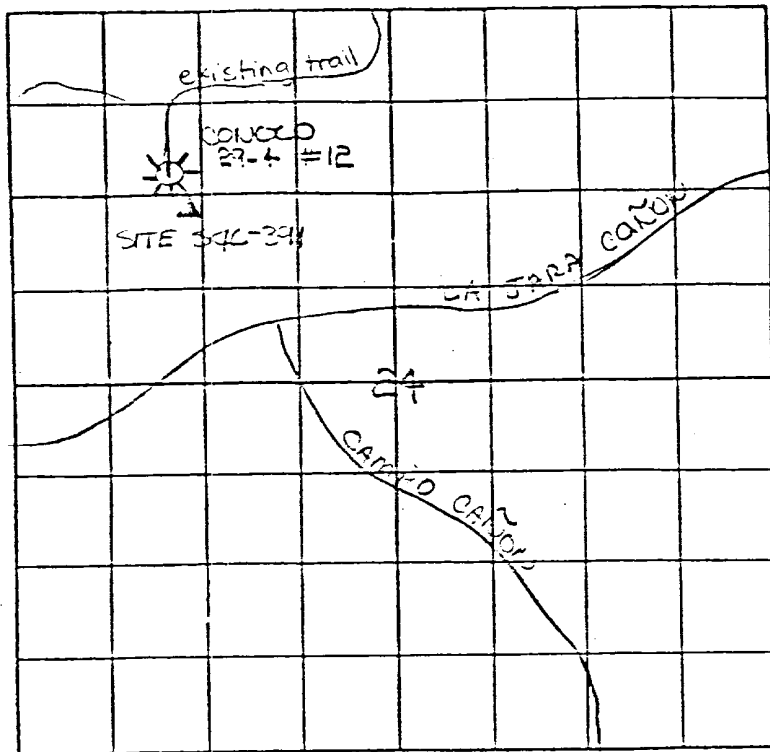
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US DEPARTMENT OF AGRICULTURE
FOREST SERVICE
SKETCH OF SITE SETTING

Section 24 Township 29 North
Range 4 West N.M. Principal Meridian
Subdivision N1/4



SITE No. - AR-03-_____-_____-_____

Give location with respect to roads and natural landmarks so that this site could be located again. Include key, north arrow, nearby sites, reference points, drainages, etc.

CONTINUATION SPACE: 36° 42' 39" N
107° 12' 36" W

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OFFICIAL SUPPLY