

6-USGS, Durango, Colo.

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

30-039-21668
5. LEASE DESIGNATION AND SERIAL NO.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

SE #079161

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

Bolin Oil Company

3. ADDRESS OF OPERATOR

P. O. Box 400, Aztec, New Mexico 87410

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

At surface

840' FSL / 935' FEL (Unit P) Sec.4 T26N R7W

At proposed prod. zone

Mosavardo

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

25 miles SE/Blanco, New Mexico

15. DISTANCE FROM PROPOSED*

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

840'

16. NO. OF ACRES IN LEASE

2,561

17. NO. OF ACRES ASSIGNED TO THIS WELL

E/ 320

18. DISTANCE FROM PROPOSED LOCATION*

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

760'

19. PROPOSED DEPTH

5,300'

20. ROTARY OR CABLE TOOLS

Rotary

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

6566' GL

22. APPROX. DATE WORK WILL START*

As soon as possible

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#	300'	To circulate to surface.
7 7/8"	5 1/2"	15.5#	5300'	To circulate to surface.

Proposed Drilling Program:

Drill 12 1/4" hole to 300' Set 8 5/8" csg. & circulate to surface.

W.O.C. 12 hrs.

Drill 7 7/8" hole to estimated 5300'.

Run necessary logs for adequate evaluation.

Complete by setting 5 1/2" csg. & circulate cement to surface. Perforate & sand frac.

If dry, will P & A as per regulation.

Hydraulic B.O.P. will be installed & operated daily; results to be noted on daily drilling report. (Schematic diagram attached.)

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

J. P. Crum Jr.

TITLE agent

DATE

3/13/78

(This space for Federal or State office use)

PERMIT NO.

Gas is dedicated

APPROVAL DATE

DATE

MAR 14 1978

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

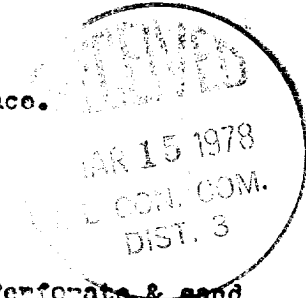
Okaf

TITLE

ST

*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.

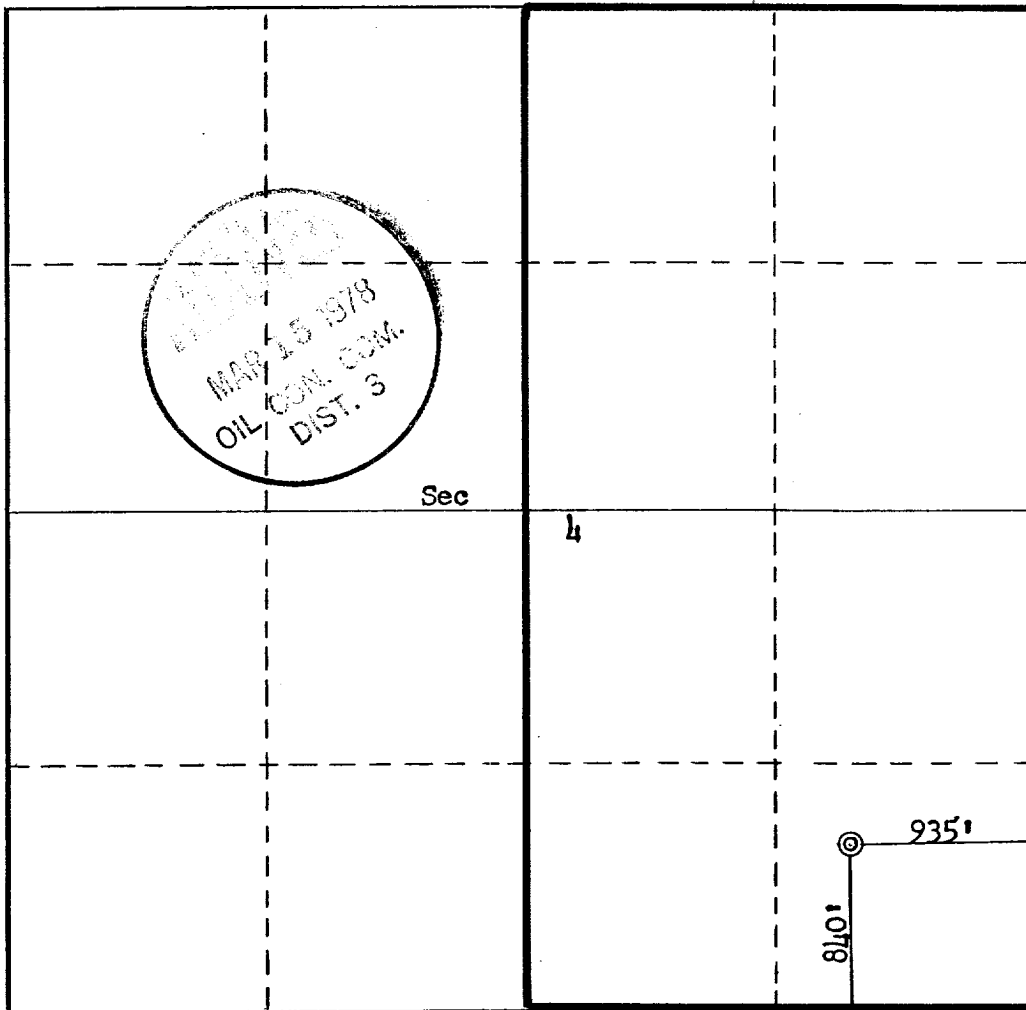
Operator Bolin Oil Company			Lease Candado			Well No. 21A		
Unit Letter P	Section 4	Township 26N	Range 7W	County Rio Arriba				
Actual Footage Location of Well: 840 feet from the South line and 935 feet from the East line								
Ground Level Elev. 6566	Producing Formation Mesa Verde		Pool Blanco			Dedicated Acreage: 320 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
J. P. Crum Jr.

Position
Geologist

Company
BOLIN OIL COMPANY

Date
3/13/78

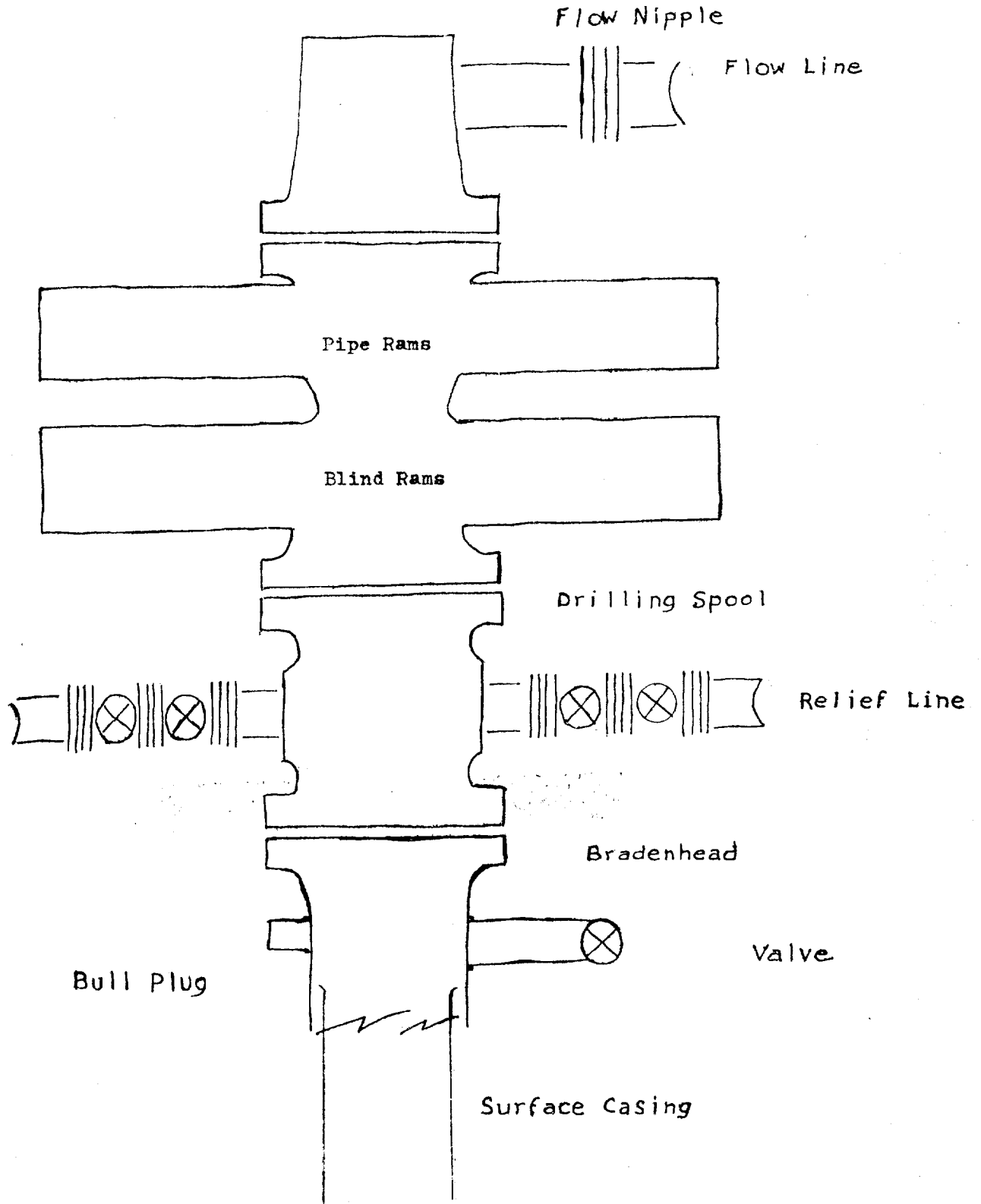
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
May 9, 1977

Registered Professional Engineer and/or Land Surveyor
Fred B. Kerr Jr.
Fred B. Kerr Jr.

Certificate No.
3950

Schematic Diagram B.O.P.



Series 900 Double Gate BOP rated at 3000 psi Working Pressure

BOLIN OIL COMPANY

1120 Oil and Gas Building — WICHITA FALLS, TEXAS 76301 — (817) 723-0733

Local address:

P. O. Box 400
Aztec, New Mexico 87410

United States Geological Survey
Federal Building
Camino Del Rio
Durango, Colorado 81301

Gentlemen:

BOLIN OIL COMPANY is filing this application for permit to drill a developmental gas well to be designated Candado #21-A in the SE/4 of Section 4, Township 26 North, Range 7 West, Rio Arriba County, New Mexico. Some estimated tops of geologic markers in the area are as follows: Kirtland @ 2180', Pictured Cliffs @ 2800', Chacra @ 3720', and Point Lookout @ 5100'. Gas production is projected for the Chacra formation and the Point lookout member of this Mesa-verde test.

The proposed casing program is as stated on the accompanying Federal form 9-331 C. New pipe will be used in all instances and cemented to the surface.

Hydraulic blow-out preventors, as shown on the schematic diagram attached to the Application for Permit to Drill, will be used. The drilling medium will be fresh water and gel to 300' and fresh water and low water loss mud to total depth. Mud will be monitored through out operation. No abnormal pressures/temperatures are anticipated in this well.

The expected starting date of this operation is as soon as possible, as indicated on Form 9-331 C, subject to availability of equipment.

The following measures are proposed as a surface use plan:

- 1) Existing roads: The accompanying U.S.G.S. topographic Map I (2" = 1 mile) includes a readily identified reference point and the main access road as well as all existing access roads within a mile of the proposed location.

- 2) Planned access roads: The planned access road to the location is indicated on the accompanying Map I. It will leave an already existing access road used in servicing field wells. The road will be about 1200' long and 15' wide. The maximum gradient is approximately 4%. Adequate drainage is easily accomplished by slightly elevating the center line of the road in this arid locale. The proposed route of the road has been inspected. There are no gates, cattle guards or fences involved in the construction of the planned road.
- 3) Location of existing wells: All existing wells within a mile radius of the proposed location are shown on the vicinity map included for your information. There are no abandoned wells or water wells in the area.
- 4) Location of tank batteries, production facilities, and production gathering and service lines: Please refer to vicinity map #2. Any tanks or production facilities needed by the operator will be situated on the wellsite. The applicant for this permit to drill does not own nor control any gathering facilities and consequently, only the location of the proposed flow line to the existing facility is shown on Map I; the line will be buried. Plans for rehabilitation of any disturbed areas are included in Step 10 of this plan for surface use and operations.
- 5) Location and type of water supply: Fresh water for drilling will be hauled by tank truck from ponds in Largo Canyon.
- 6) Source of construction materials: No additional materials will be required.
- 7) Methods for handling waste disposal: There are but small amounts of cuttings, drilling fluid, garbage and other waste involved in drilling a test of this type; such waste will be placed in the reserve pit. The pit will be filled and leveled immediately upon completion of drilling, when possible, or fenced and allowed to dry before filling. The material used in filling the pit will be the spoil resulting from constructing it.
- 8) Ancillary facilities: No camps or airstrips are to be constructed.
- 9) Well site layout: See attached Exhibit #3.

- 10) Plans for restoration of the surface: Successful well - All waste material will be picked up and deposited in the reserve pit. The pit will be fenced until it can be filled and leveled. The location will be dressed with a dozer or blade. The access road will have borrow pits or other drainage facilities added, if necessary. Re-seeding operations will be carried out as prescribed using Mixture #1, Farmington Resource Area. Paint for surface equipment will be Green #595 34127. Dry Hole: Waste material will be handled as stated above. In addition to filling and leveling the reserve pit, the access road will be dressed so the original contour is restored as much as possible. The road and drillsite will then be re-seeded using the time period, equipment and Mixture #1, as set forth in BLM "Requirements in the Farmington Resource Area".
- 11) Other information: Rocks of Eocene age are exposed at the surface throughout the general area. Individual sandstone members of the San Jose formation weather into a series of massive cliffs interspersed by plateaus receding from the drainage pattern. Largo Canyon and its tributaries comprise the major drainage system. It carries water only intermittently. Topographic relief in excess of 700 feet is present between the Canyon floor and the higher plateaus. The soil mantle, where present, is derived from the sandstones of the San Jose and the sparse vegetation. Juniper and Pinon are present on the table lands, as well as some native grasses and sagebrush. Wild life is not abundant in the area and consists mostly of coyotes, rabbits and occasionally deer. The surface land in this entire area is owned by the Federal government.
- There are no occupied dwellings in the vicinity. Water wells, permanent ponds and flowing streams are non-existent.
- The archeological aspects of the location are covered in the attached report by Mr. Billy J. Naylor, archeologist.
- 12) Lessee's or operator's representative: Mr. Fred Crum, P. O. Box 400, Aztec, New Mexico 87410. Phone: 505 / 334-6003. Please direct all correspondence regarding this application to this address.
- 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 this plan are, to the best of my knowledge,

U.S.G.S.
page 4

.....true and correct; and, that the work associated with the operations proposed herein will be performed by BOLIN OIL CO. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

Date 3/11/78

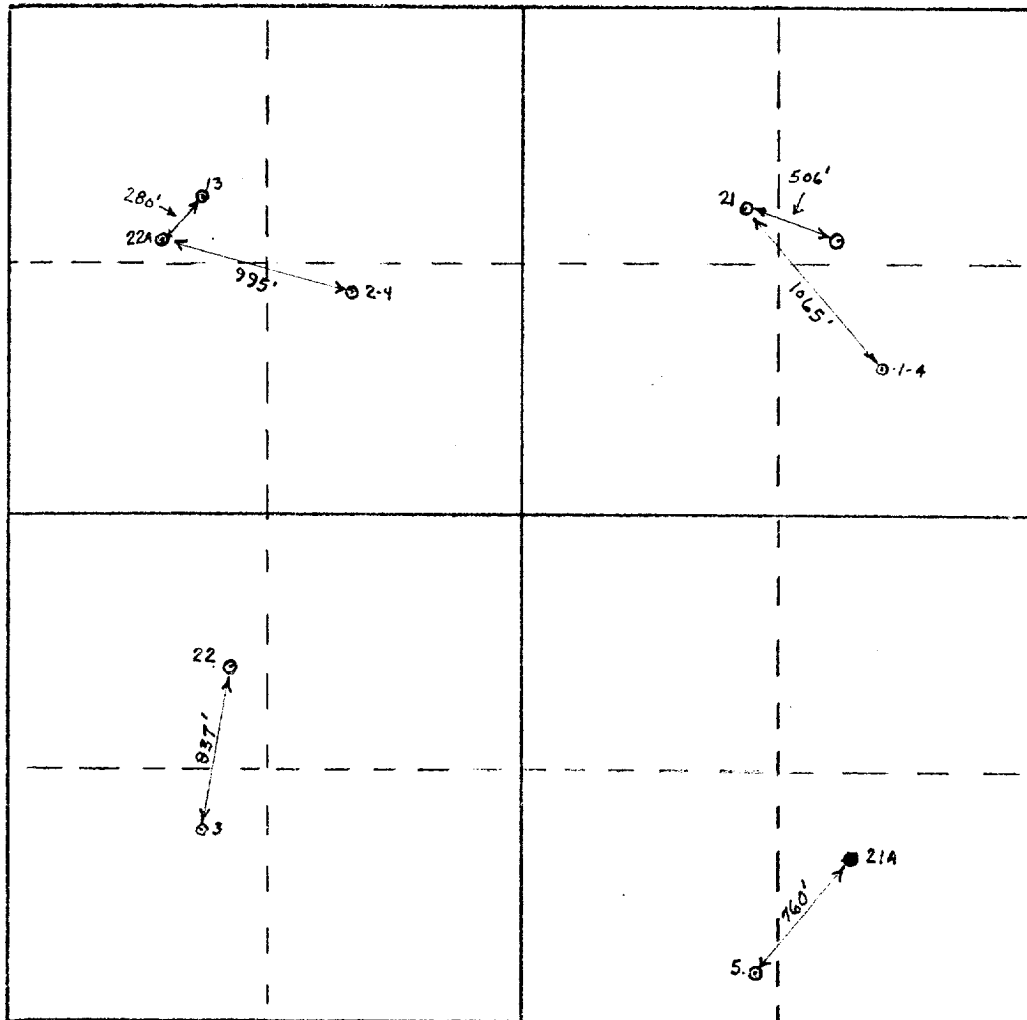
Name F. P. Crum Jr.

Title agent

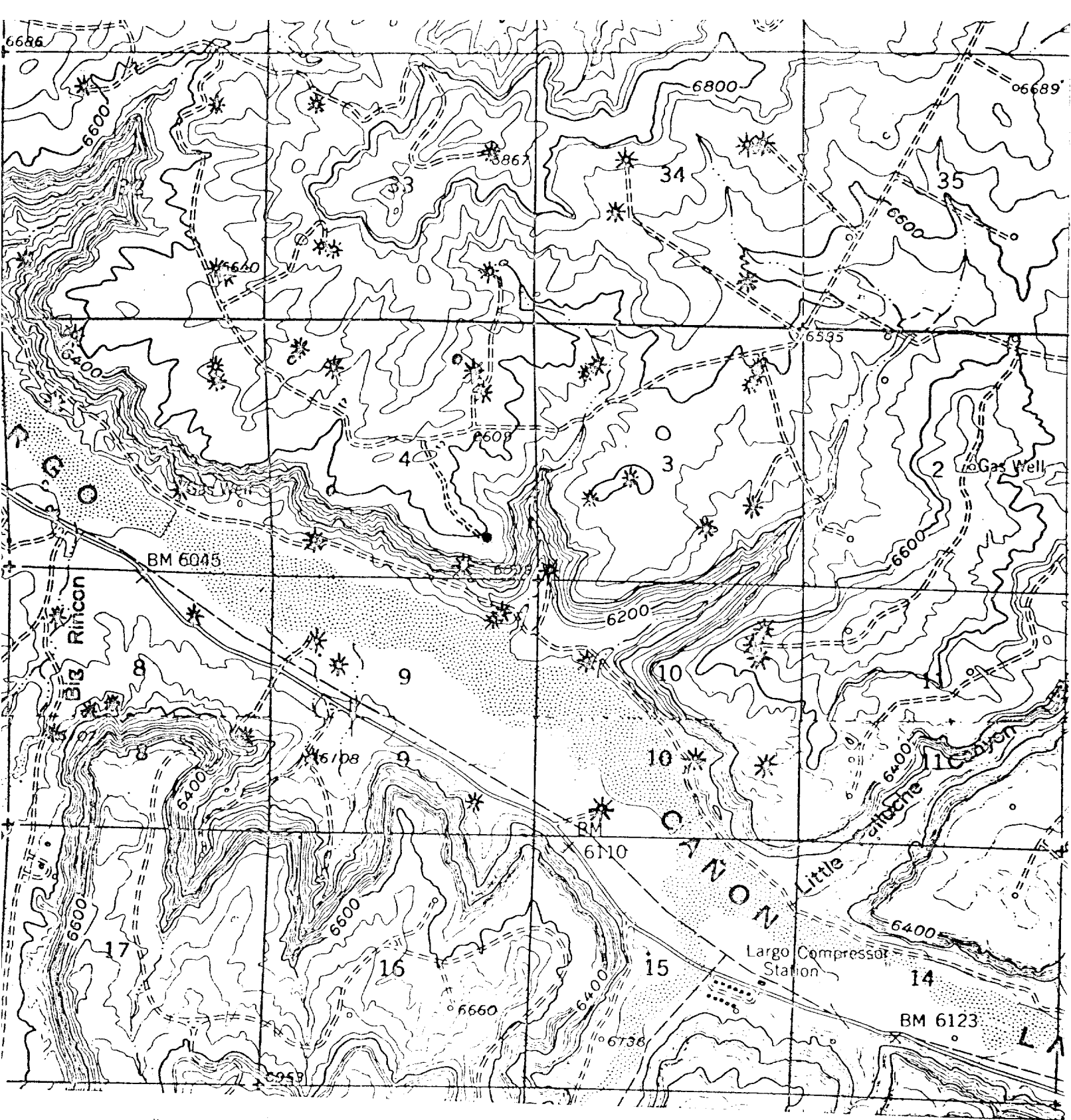
BOLIN OIL COMPANY

Plat to show the relationship to and distances from
new locations to existing wells in Section 4-T26N-R7W
Rio Arriba County, New Mexico

New Locations: #21 Candado NE/4
✓ #21A Candado SE/4
#22 Candado SW/4
#22A Candado NW/4



Fred B. Kerr Jr.
Fred B. Kerr Jr.
New Mex. Reg. #3950



KEY

- Locatable reference point
- Planned access road
- Existing road
- Proposed location
- Producing wells as far as known
- Route of proposed flow line to existing gathering line (EPNG)

MAP I

CANDADO # 2 / A

BOLIN OIL COMPANY



#2 Vicinity Map for
POLIN OIL COMPANY #21A Gadsden
SLOPEL 935' ELL Sec 4-336N-17W
Big Arroyo

Archaeological Clearance Survey of
Five Proposed Well Locations, & their
Accesses Conducted for Balle Oil Co., Inc.

On May 18, 1977 Billy D. Naylor of New Mexico State University's Cultural Resource Management Program, San Juan College, conducted an archaeological clearance survey of five proposed well locations and their access routes at the request of Mr. F. P. Crum, Jr. Also present during the investigations were Mr. Crum, Mr. Bob Moore, BLM and Mr. Don Englishman, U.S.G.S.

All five of the locations are on Bureau of Land Management lands and the survey was conducted under Federal Antiquities Permit 75-NM-013.

✓ #21A CANDADO

Proposed well #21A Candado is 840 feet from the south line and 935 feet from the east line of Section 4, Township 26 North, Range 7 West, Rio Arriba County, New Mexico, N.M.P.M. (Figure 1)

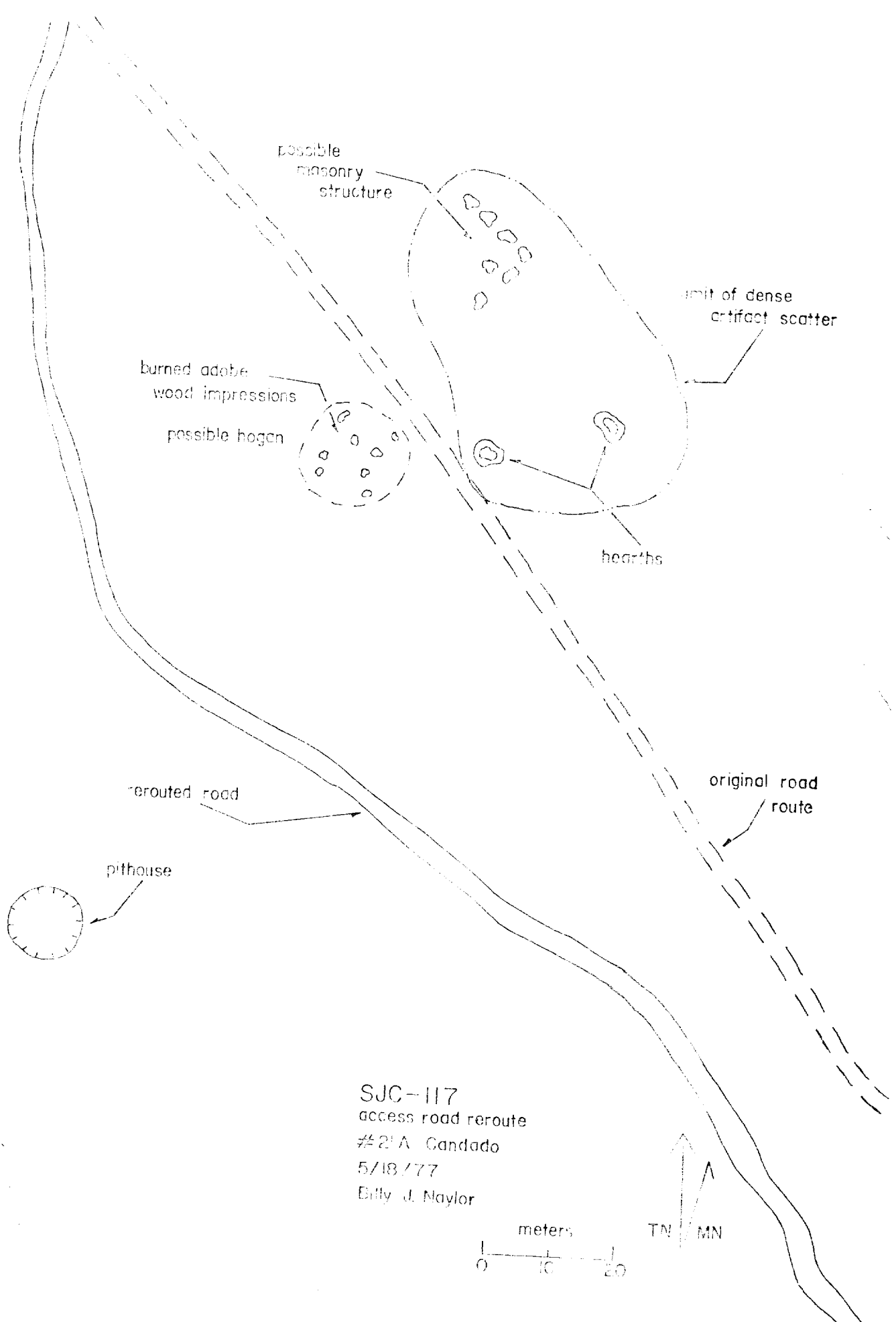
The location will be on a terrace overlooking Largo Canyon to the south in rolling broken terrain. The sandy soil contains some sandstone outcroppings and vegetation is composed of pinon, sagebrush, blue grama, Ephedra, prickly pear cactus, and yucca.

Archaeological site FJC-117 was found near the original route which was moved 50 meters south to avoid adverse impact on the cultural resources. (Figure 2)

The site is actually a multi component one consisting of an

Anasazi Pueblo I - Pueblo II transitional pit house and a Navajo forked stick hogan, which had been burned, and a possible masonry structure. The two components are approximately 80 meters apart and since they are separated temporally and there was no cultural debris between them, it was felt that the access road would have no adverse effect if placed between the separate components.

Clearance is recommended with the stipulation that construction of the access remain within the flagged right-of-way.



SJC-117
 access road reroute
 #21A Candado
 5/18/77
 Billy J. Naylor

