

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
P. O. Box 1809
Durango, Colorado 81301

Gentlemen:

BOLIN OIL COMPANY is filing this application for permit to drill a developmental gas well to be designated Candado #19 in the SW/4 of Section 3, Township 26 North, Range 7 West, Rio Arriba County, New Mexico. Some estimated tops of geologic markers in the area are as follows: Kirtland @ 2175', Pictured Cliffs @ 2780', Chacra @ 3700', and Point Lookout @ 5100'. Gas production is projected for the Chacra formation and the Point Lookout member of this Mesaverde 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 500' long and 12' wide. The maximum gradient is approximately 2%. 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 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 the map: 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,

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.....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 6/17/77

Name F. P. Crum Jr.

Title agent

BOLIN OIL COMPANY