

Form 3160-3
(November 1983)
(formerly 9-331C)

NM Oil Cons. Commission
Drawer DD

Artesia, NM 88210

SUBMIT IN ☐ LICATE*

(Other instructions on
reverse side)

30-005-62809
Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

INJECTION
WELL ☐

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

BURK ROYALTY CO.

PH. 817-322-5421

3. ADDRESS OF OPERATOR

P.O. Box BRC

Wichita Falls, TX 76307

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

At surface

330' FSL 330' FEL, Sec. 21-15S-29E

At proposed prod. zone

Same

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

20 Miles southeast of Hagerman, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

330'

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

933'±

16. NO. OF ACRES IN LEASE

880 Ac. in Unit

19. PROPOSED DEPTH

1800' Queen

17. NO. OF ACRES ASSIGNED

TO THIS WELL

40

20. ROTARY OR CABLE TOOLS

Rotary

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

3929.1' G.L.

22. APPROX. DATE WORK WILL START*

November 3, 1990

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"	24.0# K-55	400' 250' ±	250 sx± (Circulate)
7-7/8"	4-1/2"	9.50# K-55	1800'	345 sx±

Drill with air to 1880'±. 4-1/2 Casing will be run to TD, cemented with sufficient cement to isolate all porosity zones and perforated to complete as a water injection well to prevent migration of oil into the gas cap. Plastic-lined tubing will be installed to a packer set 100' above the top perforation. The casing-tubing annulus will be filled with an inert fluid and a leak detection device attached to the annulus.

Part ID-1
11-16-90
Newark API

See attached "Drilling Data" and "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.

24.

SIGNED

JERRY W. LONG

TITLE

Permit Agent

DATE October 15, 1990

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY /s/ Sandra L. Porenta

TITLE

Area Manager

DATE

NOV 1 1990

CONDITIONS OF APPROVAL, IF ANY:

PLEASE BE ADVISED THAT THERE WILL BE NO EXCAVATION OF FEDERALLY OWNED MINERAL MATERIAL FOR CONSTRUCTION OF THE ACCESS ROAD OR PAD WITHOUT PAYMENT IN ADVANCE.

*See Instructions On Reverse Side

APPROVAL OF THIS APPLICATION DOES NOT WARRANT OR CERTIFY THAT THE APPLICANT HOLDS LEGAL OR EQUITABLE TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD ENTITLE THE APPLICANT TO CONDUCT OPERATIONS THEREON.

Under U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

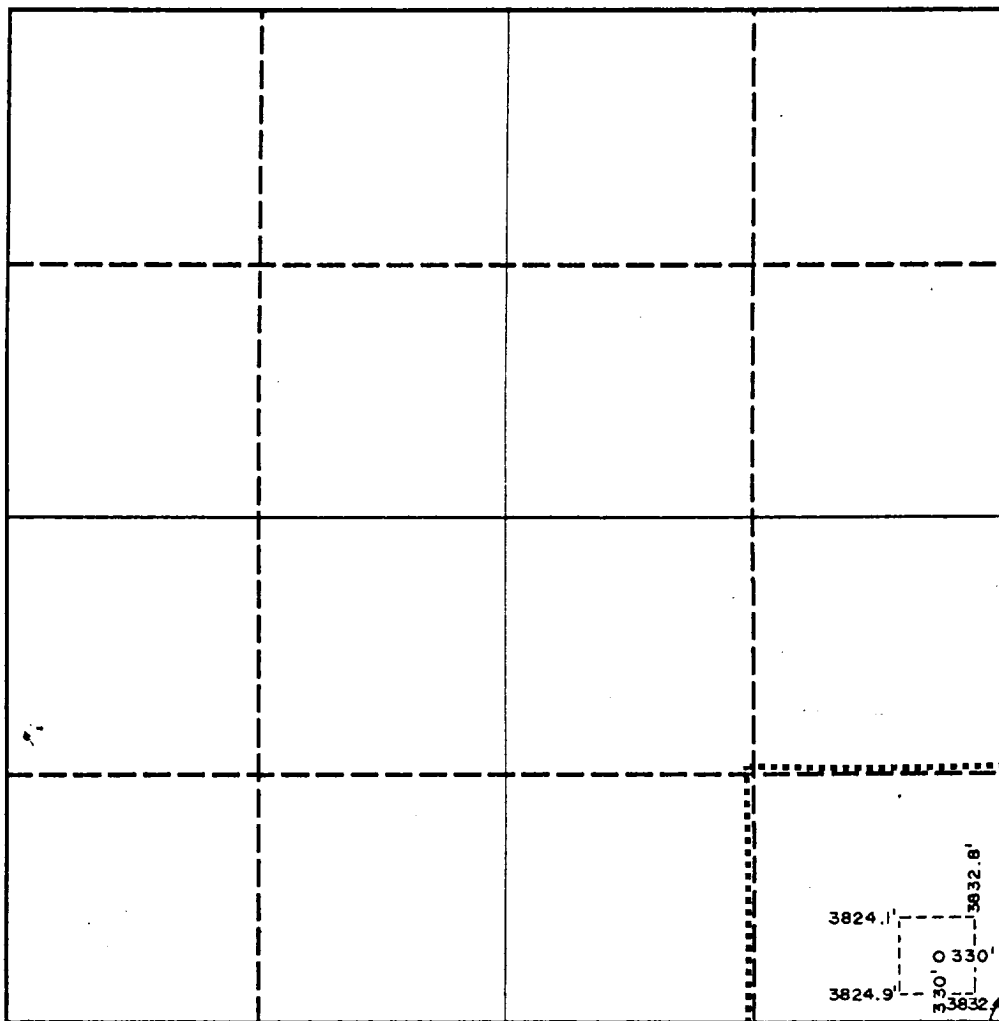
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator Burk Royalty Co			Lease South Lucky Lake Queen Unit Tr. 4		Well No. 3
Unit Letter P	Section 21	Township 15 South	Range 29 East	County Chaves	
Actual Footage Location of Well: 330 feet from the south line and 330 feet from the east line					
Ground level Elev. 3929.1'	Producing Formation Queen		Pool South Lucky Lake Queen	Dedicated Acreage: 40 Acres	

- Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
☐ Yes ☐ No If answer is "yes" type of consolidation Unitized Waterflood Project
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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature
Jerry W. Long
Printed Name
JERRY W. LONG
Position
Permit Agent

Company
BURK ROYALTY CO.

Date
October 15, 1990

SURVEYOR CERTIFICATION

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
September 15, 1990

Signature & Seal of
Professional Surveyor

John W. West
Certificate No. JOHN W. WEST, 678
RONALD J. EIDSON, 3239

PERTINENT INFORMATION

For

BURK ROYALTY CO.
No.3 South Lucky Lake Queen Unit, Tr.4
330'FSL 330'FEL Sec.21-15S-29E
Chaves County, N.M.

LOCATED: 20 air miles southeast
of Hagerman, New Mexico

FEDERAL LEASE NUMBER: NM-0390241

LEASE ISSUED: June 1, 1963 - HBP

ACRES IN LEASE: 320 Ac.

RECORD LESSEE: Bison Petroleum

BOND COVERAGE: Unit Bond

AUTHORITY TO OPERATE: Unit Agreement

SURFACE OWNERSHIP: Public

GRAZING PERMITTEE: Bogle Farms, Inc.
P.O. Drawer 460, Dexter, N.M. 88230
Ph.505-734-5442

POOL RULES: NMOCD Order No. R-8140-A

EXHIBITS: A. Road Map
B. Road and Contour Map
C. Rig Layout
D. BOP Diagram
E. Unit and Well Map

SUPPLEMENTAL DRILLING DATA

BURK ROYALTY CO.
No.3 South Lucky Lake Queen Unit, Tr.4
330'FSL 330'FEL Sec.21-15S-29E
Chaves County, N.M.

NM-0390241

The following items supplement Form 3160-3 in accordance with instructions contained in Onshore Oil and Gas Order No.1:

1. SURFACE FORMATION: Upper Permian

2. ESTIMATED TOPS OF GEOLOGIC MARKERS:

Rustler	200'	Seven Rivers	1150'
Salado	250'	Queen	1750'
Yates	1020'		

3. ESTIMATED DEPTHS TO WATER, OIL OR GAS FORMATION:

0 - 200': Surface water

1020' - TD: Oil, gas or water

4. PROPOSED CASING PROGRAM:

8-5/8" Casing - ^{250' +/-}~~400'~~ of 24#, K-55, ST&C

4-1/2" Casing - 1800' of 9.50#, K-55, ST&C

Both strings of casing will be satisfactorily tested to 1000 psi.

5. PRESSURE CONTROL EQUIPMENT: This well will be drilled with air using a rotating drilling head, rated at 1000# W.P. A blooie line will divert foam and cuttings to the reserve pit.

6. CIRCULATING MEDIUM: This well will be air drilled, using foam to circulate the cuttings.

7. AUXILIARY EQUIPMENT: No special blow-out equipment is necessary since intermediate and target zones are partially depleted and artificial pressure maintenance is being conducted.

8. TESTING, LOGGING AND CORING PROGRAM:

Samples: 10' intervals from 400' to TD.

DST and Cores: None

Logging: Gamma ray - Neutron log will be run

9. ABNORMAL PRESSURES, TEMPERATURES OR HYDROGEN SULFIDE:

None - All prospective porosity zones are in an advanced state of depletion. This will be a water injection well to maintain bottom-hole pressure.

10. ANTICIPATED STARTING DATE: Drilling will commence as soon as approval is obtained. Drilling and completion operations should require less than 30 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

BURK ROYALTY CO.
No.3 South Lucky Lake Queen Unit, Tr.4
330'FSL 330'FEL Sec.21-15S-29E
Chaves County, N.M.

NM-0390241

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a road map showing the location of the proposed well as staked. The well is approximately 20 air miles southeast of Hagerman, New Mexico.
- B. Directions: Go east from Hagerman, N.M. on NM 249 for 20 miles. Turn south on County Road 22 for 5.5 miles. Turn east on County Road and go 2 miles. Turn north on lease road and go 1.7 mile to No.2 SLLQU, Tr.2 well. Go 900' southwest on new road to drillsite.

2. PLANNED ACCESS ROAD:

- A. Length and Width: The new road will be about 900' long and about 20' wide. It will be constructed from the Burk No.2 South Lucky Lake Queen Unit, Tr.2 producing well to this proposed injection well.
- B. Surfacing Material: The new road and pad will be constructed of material-in-place, unless weather conditions dictate surfacing with caliche.
- C. Maximum Grade: Less than 2%
- D. Turnouts: Since the road is essentially flat and only 900' long, no traffic turnouts are necessary.
- E. Drainage Design: The road will be constructed with about 4" of crown and necessary water turnouts to provide drainage.

F. Culverts: None necessary

G. Cuts and Fills: The pad will require about 2' of cut on the east side and 2' of fill on the west side.

H. Gates, Cattleguards: None necessary

3. LOCATION OF EXISTING WELLS:

A. See attached EXHIBIT E.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

A. The water injection plant is located in the NSW, Sec.22-15S-29E.

5. LOCATION AND TYPE OF WATER SUPPLY:

A. The well will be air drilled. Water for completion operations will be purchased from a commercial water hauler and trucked over existing roads.

6. SOURCE OF CONSTRUCTION MATERIALS:

A. It is planned to use material-in-place for construction. If weather conditions require use of caliche, it will be removed from a Federal pit located in the NENW, Sec.27-15S-29E.

7. METHODS OF HANDLING WASTE DISPOSAL:

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry.

C. Water produced during test will be disposed of in the drilling pits.

D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

E. Trash, waste paper, garbage, and junk will be buried in a separate trash pit and covered with a minimum of 24 inches of soil. All waste material will be contained to prevent scattering by the wind. The trash pit will be located adjacent to the mud pit.

F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

A. A request for construction of a water injection pipeline will be filed at a later date.

9. WELL SITE LAYOUT:

A. The well-site and 400' X 400' area has been surveyed and flagged.

B. Dimensions and relative location of the drill pad, pit and equipment are shown on EXHIBIT C.

C. Top soil for rehabilitation of the location will be stock-piled at the west edge of the pad.

10. PLANS FOR RESTORATION OF THE SURFACE:

A. After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the wellsite in an aesthetically pleasing condition as possible.

B. Any unguarded pits containing fluids will be fenced until they are filled.

C. The unused disturbed area will be rehabilitated to Federal Agency requirements and will be accomplished as expeditiously as possible.

11. OTHER INFORMATION:

A. Topography: The regional area slopes west toward the Pecos River, which is about 15 miles west of the drillsite. The drillsite slopes west with about 2% grade.

B. Soil: The soil is sandy. There appears to be a layer of caliche a few inches below the surface.

C. Flora and Fauna: The flora includes mesquite, creosote and various range grasses. Fauna would include small birds, reptiles and rodents.

D. Ponds or Streams: None

E. Residences and Other Structures: None

- F. Archaeological, Historical and Other Cultural Sites: Archaeology Survey Consultants, of Roswell, N.M., have made a survey of the proposed new road and wellsite. They have recommended that construction work be approved.
- G. Land Use: The surface is semi-arid rangeland, used primarily for grazing.
- H. Surface Ownership: The new access road and wellsite are on Public Surface, all within the Unit boundary. Grazing lessee is Bogle Farms, Inc., P.O. Drawer 460, Dexter, New Mexico 88230.

12. OPERATOR'S REPRESENTATIVE:

Representative responsible for assuring compliance with the approved Surface Use Plan:

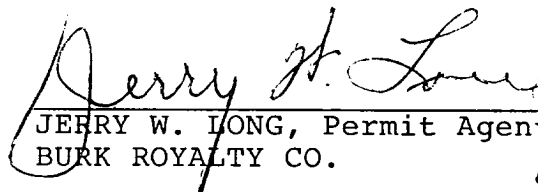
Mr. Fred Lynch
P.O. Box BRC
Wichita Falls, Texas 76307
Phone 817-322-5421

13. CERTIFICATION:

I hereby certify that I, or person 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 true and correct; that the work associated with the operations proposed herein will be performed by BURK ROYALTY CO. and its sub-contractors in conformity with this plan and the terms and condition under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

October 15, 1990

Date:


JERRY W. LONG, Permit Agent for:
BURK ROYALTY CO.

BURK ROYALTY CO.
No.3 South Lucky Lake Queen Unit, Tr.4
330'FSL 330'FEL Sec.21-15S-29E
Chaves County, N.M.

NM-0390241

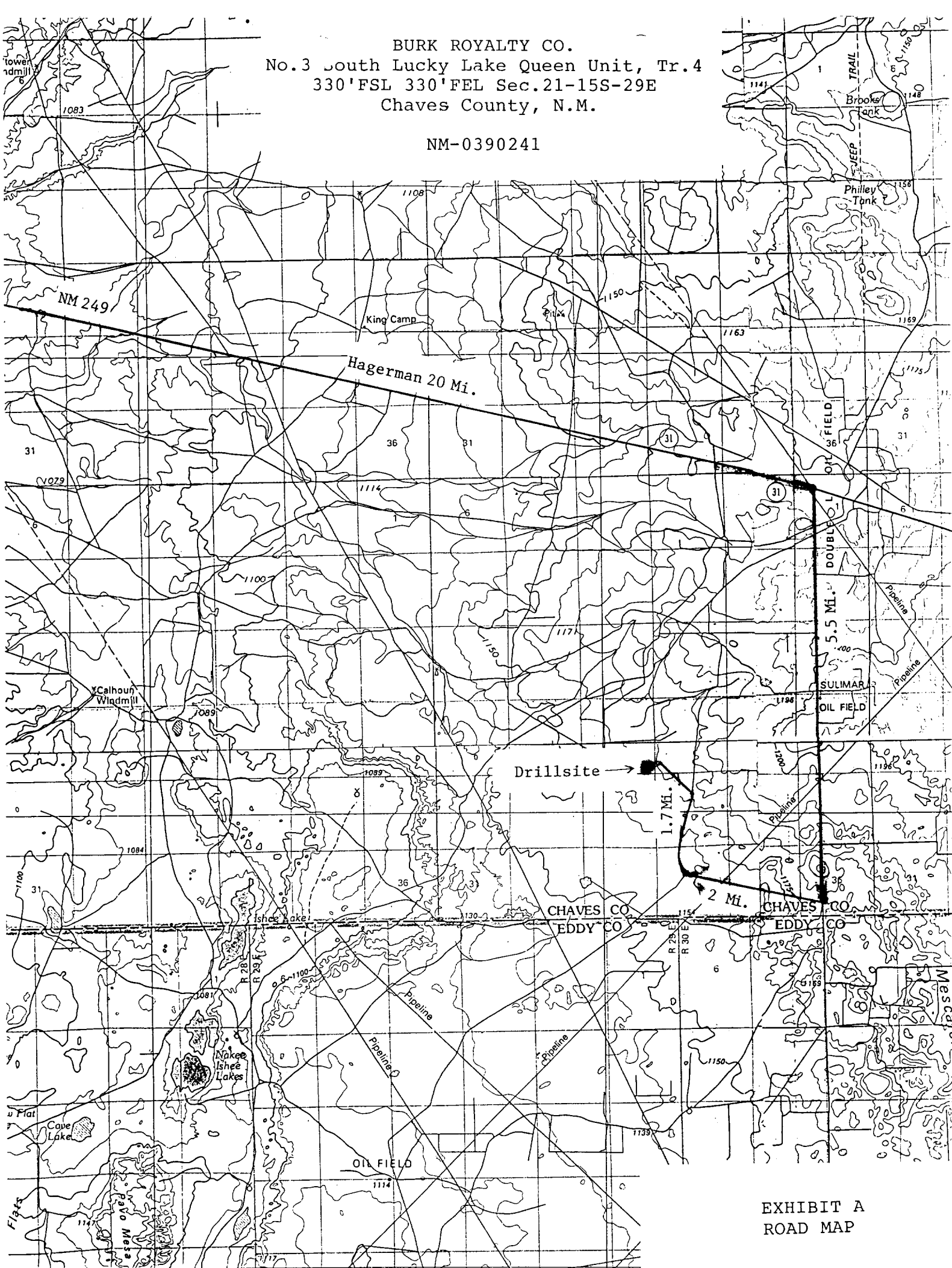


EXHIBIT A
ROAD MAP

BURK ROYALTY CO.
No.3 South Lucky Lake Queen Unit, Tr.4
330'FSL 330'FEL Sec.21-15S-29E
Chaves County, N.M.

NM-0390241

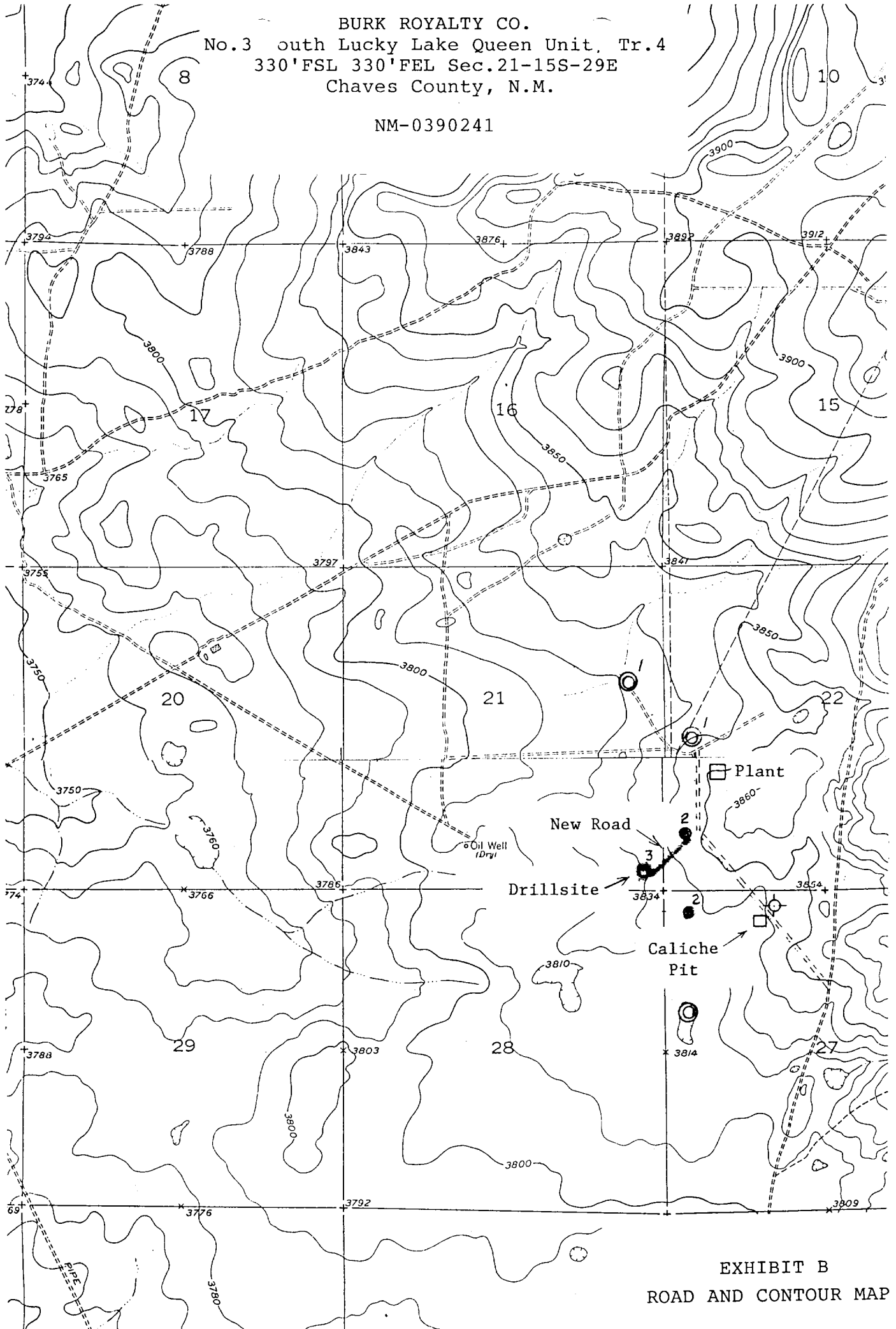
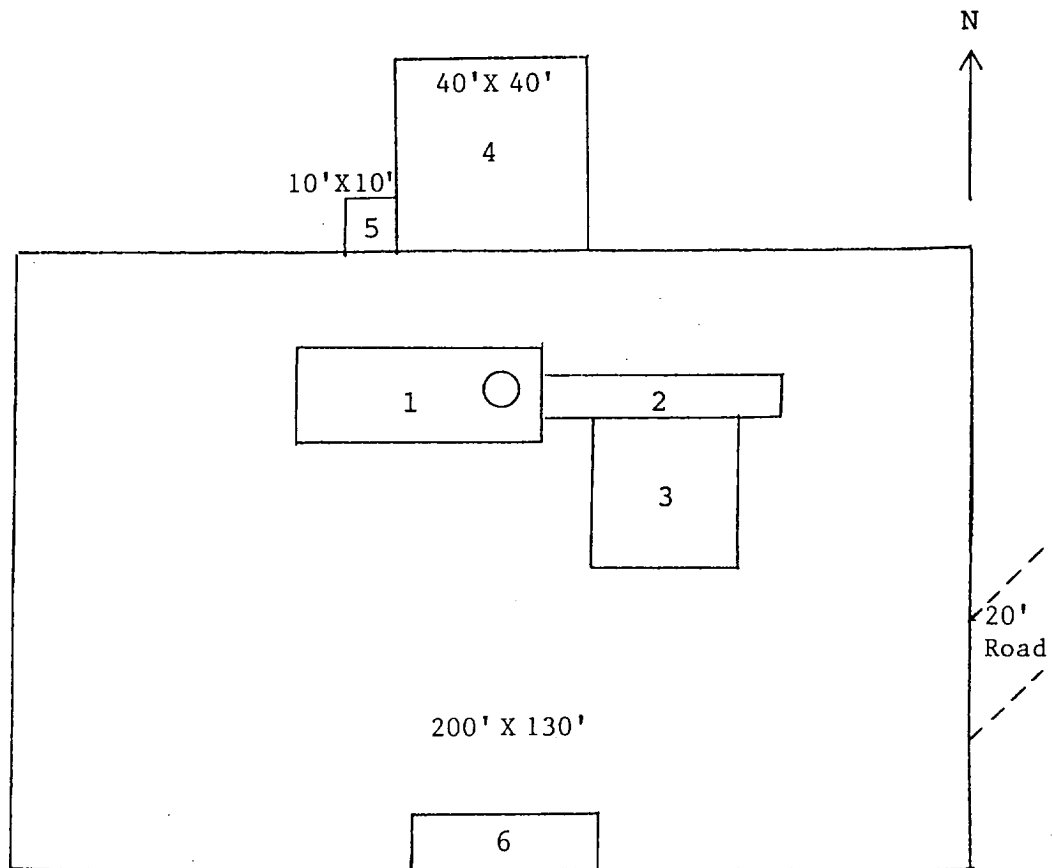


EXHIBIT B
ROAD AND CONTOUR MAP

BURK ROYALTY CO.
No.3 South Lucky Lake Queen Unit, Tr.4
330'FSL 330'FEL Sec.21-15S-29E
Chaves County, N.M.

NM-0390241

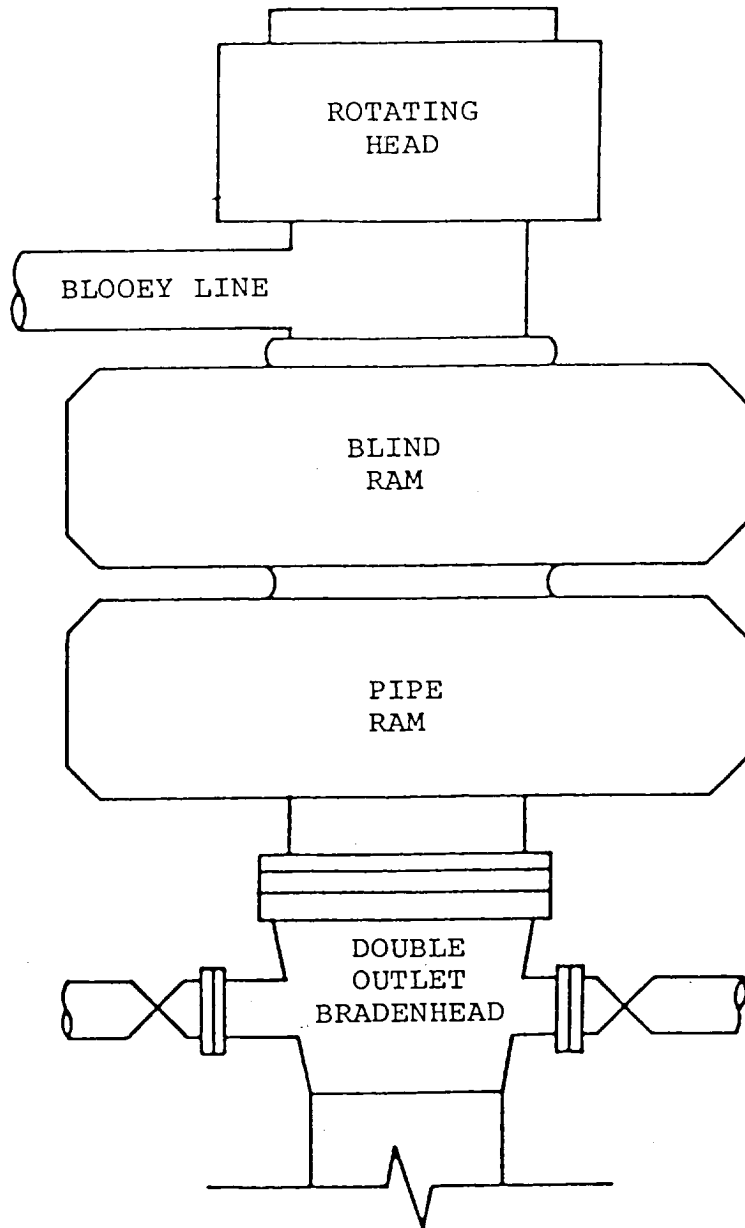


RIG LAYOUT

- | | |
|--------------|------------------|
| 1. Drill Rig | 4. Reserve Pit |
| 2. Catwalk | 5. Trash Pit |
| 3. Pipe Rack | 6. Trailer House |

BURK ROYALTY CO.
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Chaves County, N.M.

NM-0390241



BOP STACK

2000# WP

Rams Operated Daily

EXHIBIT D

BURK ROYALTY CO.
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Chaves County, N.M.

NM-0390241

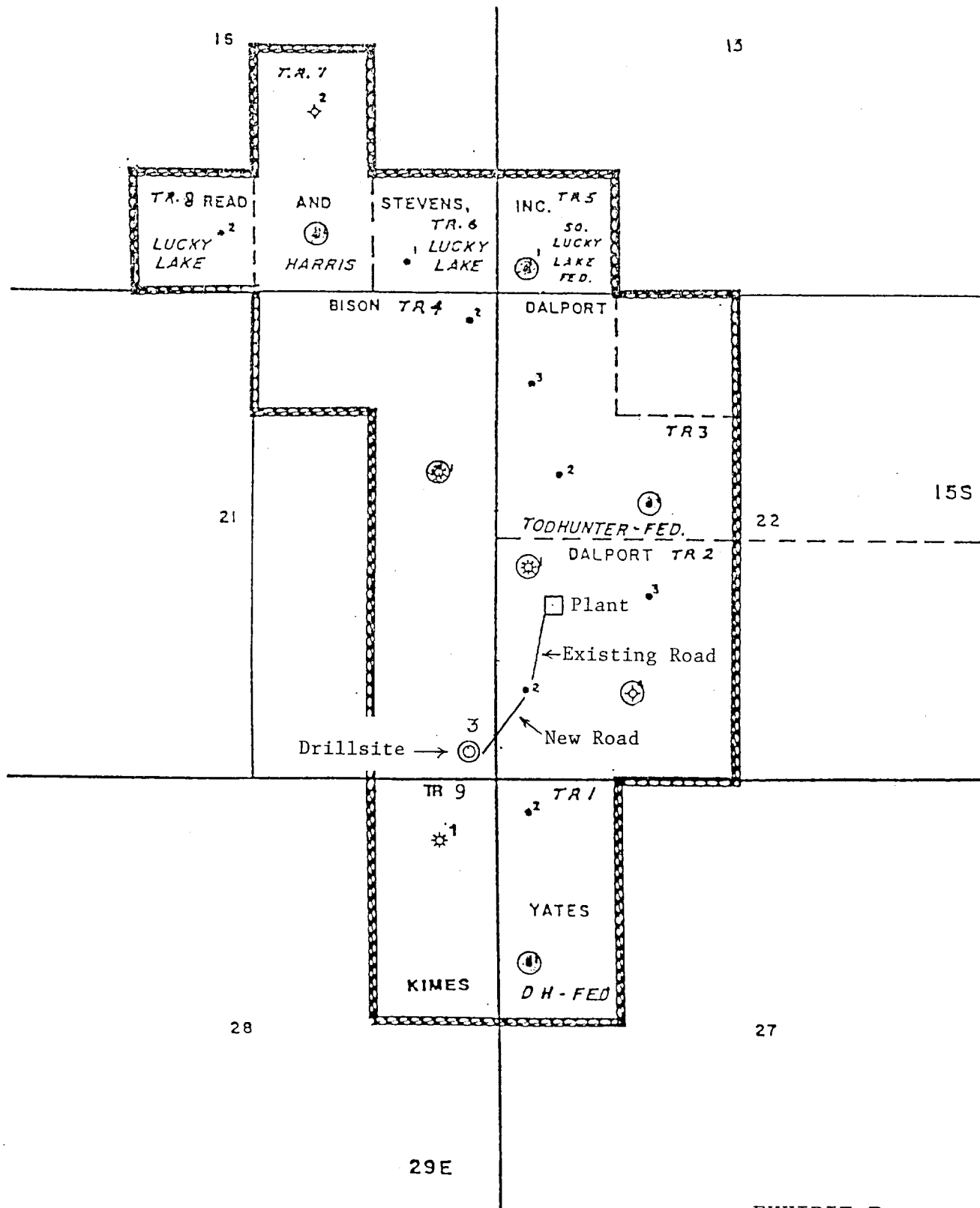


EXHIBIT E
UNIT AND WELL MAP