

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

SINGLE  
ZONE ☐

MULTIPLE  
ZONES ☒

2. NAME OF OPERATOR

Bird Creek Resources, Inc.

NOV 25 1991

3. ADDRESS OF OPERATOR

810 South Cincinnati, Suite 110 Tulsa, Oklahoma 74104

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

At surface

640' FNL, 330' FEL, Unit A

At proposed prod. zone 640' FNL, 330' FEL, Unit A

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

4 miles NNE of Loving, New Mexico

16. DISTANCE FROM PROPOSED\*

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

330'

18. NO. OF ACRES IN LEASE

280

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

2500'

19. PROPOSED DEPTH

6400'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

80

20. ROTARY OR CABLE TOOLS

Rotary

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

3016.5' GR

22. APPROX. DATE WORK WILL START\*

12-1-91

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#             | 0-400'        | 300 sxs., sufficient to circulate |
| 7 7/8"       | 4 1/2"         | 11.6#           | 0-6400'       | Sufficient to circulate           |

This will be a vertically drilled well to TD 6400', which will expose two potentially productive formations, the Delaware and Bone Spring.

After logging and setting of casing, pay zones will be perforated and stimulated as necessary.

Attachments: Supplemental drilling data  
BOP sketch  
Surface use and operations plan

Post ID-1  
12-6-91  
Newick & APE

OCT 28 12 52 PM '91  
RECEIVED

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.

Brad D. Burks

SIGNED

*Brad D. Burks*

TITLE Agent for Bird Creek Resources

918-582-3855

10-25-91

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

DATE

11-27-91

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS

\*See Instructions On Reverse Side

ATTACHED  
The 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

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

OIL CONSERVATION DIVISION

P.O. Box 2088

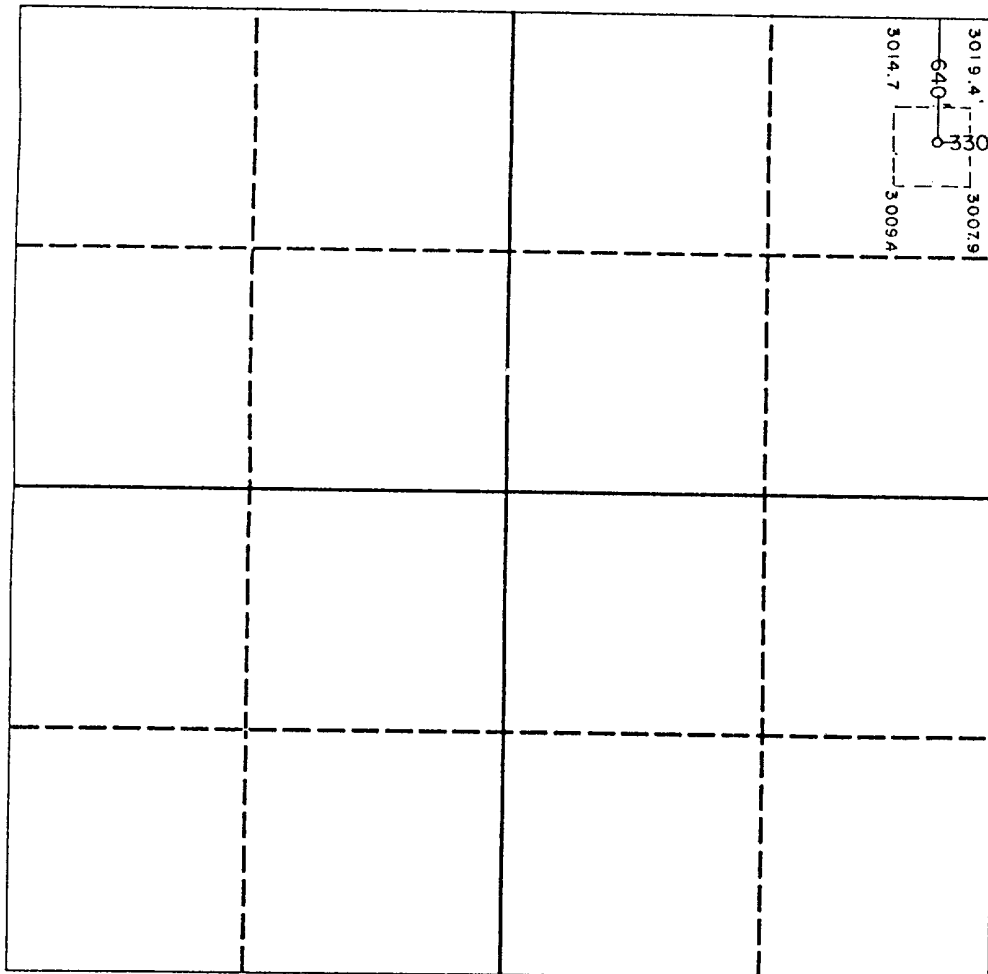
Santa Fe, New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

|  |   |                      |                                   |                |               |
|--|---|----------------------|-----------------------------------|----------------|---------------|
| Operator<br>BIRD CREEK RESOURCES INC.  |   |                      | Lease<br>B.C.R. FEDERAL           |                | Well No.<br>1 |
| Unit Letter<br>A   | Section<br>3                                | Township<br>23 SOUTH | Range<br>28 EAST                  | County<br>NMPM | EDDY          |
| Actual Footage Location of Well:<br>330 feet from the EAST line and 640 feet from the NORTH line |   |                      |                                   |                |               |
| Ground level Elev.<br>3016.5   | Producing Formation<br>Delaware/Bone Spring | Pool<br>Undesignated | Dedicated Acreage:<br>40/80 Acres |                |               |

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 interest 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 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

*Brad D. Burks*

Printed Name

Brad D. Burks, PE 16172

Position

Agent for

Company

Bird Creek Resources, Inc.

Date

11-01-91

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

10-25-91

Signature & Seal of  
Professional Surveyor

*Ronald J. Eidson*

Certificate No. JOHN W. WEST, 676

RONALD J. EIDSON, 3239

W.O. 91-11-0211

## SUPPLEMENTAL DRILLING DATA

BIRD CREEK RESOURCES, INC.  
BCR FEDERAL WELL NO. 1  
A - 3 - T23S - R28E  
EDDY COUNTY, NEW MEXICO

1. **SURFACE FORMATION:** Dense Triassic dolomite (locally named Culebra Bluff).
2. **ESTIMATED FORMATION TOPS:**

|                  |       |
|------------------|-------|
| Salado salts     | 230'  |
| Delaware sand    | 2600' |
| Bone Spring lime | 6200' |
| TD               | 6400' |
3. **POTENTIAL HYDROCARBON ZONES:**

|             |     |              |
|-------------|-----|--------------|
| Delaware    | Oil | 2600 - 6200' |
| Bone Spring | Oil | 6200 - 6400' |

#### 4. **PROPOSED CASING & CEMENTING PROGRAM:**

8 5/8", 24# J-55, STC casing is to be set @ 400' in 12 1/4" hole. Casing will be cemented with 300 sxs. of class "C", 2% CaCl, and 1/4 pps flocele. Cement to circulate to surface.

4 1/2", 10.5# and 11.6# J-55, STC casing is to be set @ 0 - 6400' in 7 7/8" hole. Casing will be cemented in 2 stages. The first stage will consist of approximately 700 sxs. 50-50 Poz-C, 10 pps NaCl, and 1/2 pps flocele, followed by 200 sxs. class "C", 10 pps salt, 1/4 pps flocele. With stage tool set at 4000', second stage will be cemented with 700 sxs. lite cement, 10 pps NaCl, 1/2 pps flocele, tailed with 100 sxs. class "C", 10 pps, 1/4 pps flocele. Cement to circulate to surface.

#### 5. **PRESSURE CONTROL EQUIPMENT:**

The BOP stack will consist of 3000 psi WP annular and ram type preventers while drilling below the surface casing shoe.

A BOP sketch is attached.

**6. CIRCULATING MEDIUM:**

Surface to 400' - Fresh water spud mud. Viscosity as required for good solids removal, 30-36 sec./1000 cc.

400' to TD 6400' - Brine water conditioned as necessary for control of PH, viscosity (28-32 sec.), and seepage. Weighted as necessary for well control.

**7. AUXILIARY EQUIPMENT:**

Geolograph from surface to total depth.

Mud logging trailer from 2500' to total depth.

**8. TESTING, LOGGING & CORING PROGRAM:**

No DST planned.

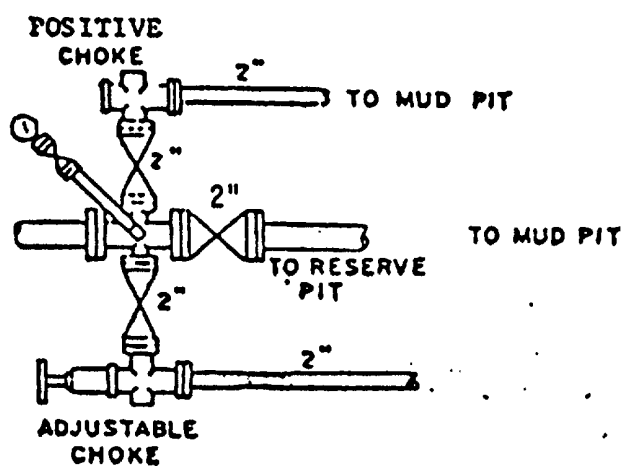
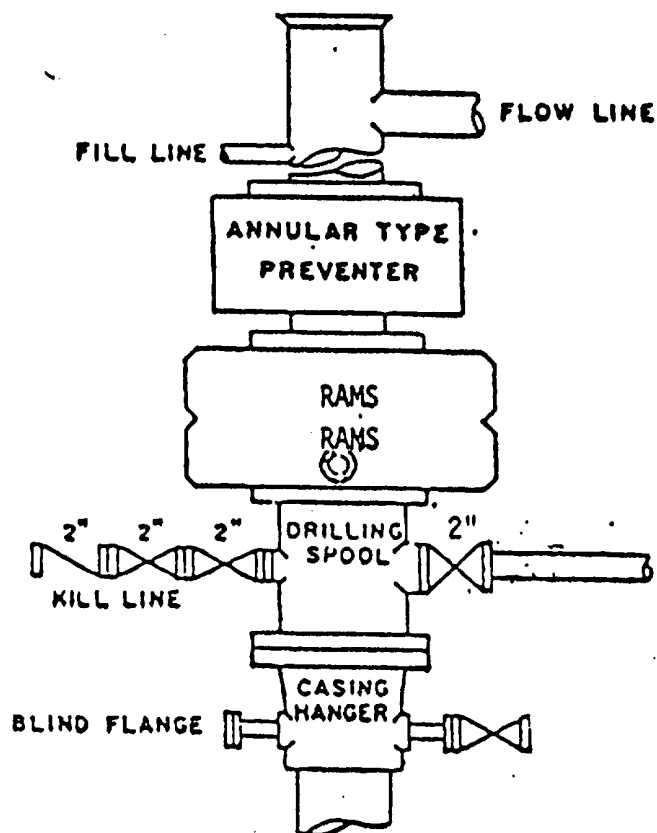
Open-hole logs include GR-CNL-LDT-CAL and GR-DLL-MSFL.

No cores planned.

**9. ABNORMAL PRESSURES OR TEMPERATURES:** None anticipated.

**10. ESTIMATED STARTING DATE:**

It is planned that work will commence upon approval of this application with drilling and completion operations lasting about 30 days.



### BOP STACK

3000 PSI WORKING PRESSURE

BIRD CREEK RESOURCES, INC.  
 BCR Federal Well No. 1  
 NE/NE/4 Unit Ltr. A  
 Section 3 T23S R28E  
 Eddy County, New Mexico

BOP ARRANGEMENT

## SURFACE USE AND OPERATIONS PLAN

BIRD CREEK RESOURCES, INC.  
BCR FEDERAL WELL NO. 1  
A - 3 - T23S - R28E  
EDDY COUNTY, NEW MEXICO

### LEASE INFORMATION

FEDERAL LEASE NUMBER: NM 16331

LEASE ISSUED: August 1, 1972. Lease is held by production.

LEASE ACREAGE: 280 acres, more or less

LEASE DESCRIPTION: All NE/4 of Section 3, T23S R28E  
N/2 of NW/4 of Section 3  
SE/NW/4 of Section 3

RECORD LESSEE: Union Oil of California, d/b/a UNOCAL

SURFACE OWNERSHIP: Federal

POOLS: Undesignated Delaware, Undesignated Bone Spring

POOL RULES: Statewide rules. Delaware oil has 40 acre  
spacing, Bone Spring oil has 80 acre spacing

LOCATION: 4 miles NNE of village of Loving, New Mexico

### SURFACE LOCATION

STAKED FOOTAGES: 640' FNL, 330' FEL, Unit A  
Section 3 - T23S - R28E

SURFACE OWNERSHIP: Federal

GRAZING PERMITTEE:

EXHIBITS

- A. Road Map
- B. Well and Road Map
- C. Drilling Rig Layout
- D. Topography Map

**1. EXISTING ROADS:**

- A. Exhibit "A" is a portion of a highway map showing southeast New Mexico. The proposed well is approximately 4 miles north-northeast of Loving, New Mexico. A red circle drawn near Loving encompasses the proposed site.
- B. Exhibit "B" shows existing pertinent roads in the vicinity of the proposed well site. To go to the site, go south from Carlsbad, New Mexico on U.S. 285. Near Loving, turn left on S.H. 31. Go east on S.H. 31 5.3 miles, turn left on County blacktop road (Refinery Rd.). Go northwest 2.4 miles on blacktop road, turn left onto primitive dirt road. Continue southwest on dirt road 0.3 mile to location. Location is just northwest 0.2 mile of a pumping oil well, Merit's State "60" No. 1. The surface location of the proposed well is on Federal land, Sec. 3, T-23-S, R-28-E.

**2. PLANNED ACCESS ROAD:**

- A. For the most part, existing roads will be used for access to the proposed site. A primitive, sinuous dirt road exists from the County blacktop road to the proposed well site. Only a portion of the primitive road leaving the well site will be utilized. Near the east section line of section 3, a new dirt road will be constructed that will lie to the north of the primitive road (see Exhibit B). This new caliche road is necessary for safe travel into and out of the location, and will not be subjected to cross-cut drainage as is seen on the primitive road. Caliche will be needed to build-up the dirt road to provide adequate drainage. All travel into the well site will occur on dirt roads situated on Federal lands. See Exhibits B and D.

**3. LOCATION OF EXISTING WELLS:**

- A. Existing wells in the immediate area are shown on Exhibit "B".

**4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:**

- A. Necessary production facilities for this well will be located on the well pad. Storage tanks will be isolated with an earthen firewall to prevent any loss of liquids off the pad.

5. LOCATION AND TYPE OF WATER SUPPLY:

- A. It is not contemplated that a water well will be drilled. Water necessary for drilling operations will be purchased and trucked to the well site.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. If possible, caliche needed for construction work will be taken from within the 200' X 200' well pad during the leveling of the site. A pit will be constructed on the north side of the well pad and will be reclaimed, after operations, in accordance with BLM requirements.

If there is no usable caliche within the area of the well site, caliche will be taken from an existing Federal pit located in the SE/SE/4 of Section 34, T22S, R28E. This pit is located just north of the proposed well site. See Exhibit D.

7. METHODS OF HANDLING WASTE MATERIAL:

- 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. The pits will then be reclaimed when dry.
- C. Water produced during tests will be disposed of into the drilling pits.
- D. Oil produced during tests will be stored in test tanks until sold.
- E. Trash, waste paper, garbage and junk will be disposed of in a portable trash bin and hauled to an authorized public dump. All waste material will therefore be contained to prevent scattering by the wind. Location of the trash bin is shown on Exhibit "C".
- F. All debris will be removed from the well site within thirty days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.



9. WELL SITE LAYOUT:

- A. Exhibit "C" shows the relative location and dimensions of the well pad, steel mud pits, reserve pits, and trash bin, and the location of major drilling rig components.
- B. The well pad will be oriented so the drilling rig will V-door east, allowing the pits to be north of the well. Cut and fill will be minimal; however, clearing and leveling of the well site will be necessary. Although drainage will not be hindered by the proposed pad, it will be constructed to divert sheetwash around the pad.
- C. The pad and pit area is staked and flagged.

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 will be cleaned of all debris to leave the well site in an as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced with barbed wire until the pits are dry.
- C. After abandonment, all equipment and any debris will be removed and the well site will be cleaned. Any special rehabilitation and/or special revegetation requirements of the will be complied with and will be accomplished as rapidly as possible.

11. OTHER INFORMATION:

- A. Topography: The pad is located on relatively flat terrain 0.4 mile north of the Pecos River. Sheetwash drainage is to the southwest towards draws that feed into the river. See attached Exhibit D.
- B. Soil: Any top soil in the area of the well site is thin, rocky sand and gypsum situated on top of solid dolomite.
- C. Flora and Fauna: The vegetative cover is minimal to moderate and includes mesquite, creosote bush, salt bush, weeds, and range grasses. Wildlife in the area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.

- D. Ponds and Streams: There are no ponds in this area. The Pecos River (fresh water, 3600 ppm chlorides) forms a bend 0.5 mile south of the proposed well pad. Water in the river flows to the east, then bends and flows south. A low water dam exists 1 mile down river which serves as a source of crop irrigation water.
- E. Residences and Other Structures: There are no occupied dwellings or structures within one mile of the proposed well site.
- F. Archaeological, Historical, and Other Cultural Sites: None observed in the area of the well site. Undocumented sites appear to exist to the south near the Pecos River.
- G. Land Use: Grazing.
- H. Surface/Mineral Ownership: Federal.

12. OPERATORS REPRESENTATIVE:

Brad D. Burks, Agent  
Bird Creek Resources, Inc.  
810 South Cincinnati, Suite 110  
Tulsa, Oklahoma 74119

Phone: 918-582-3855  
Fax: 918-582-3865

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 currently 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 Bird Creek Resources, Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions 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.

10-25-91  
Date:

Brad D. Burks  
Brad D. Burks, FE 16172  
Agent for  
Bird Creek Resources, Inc.

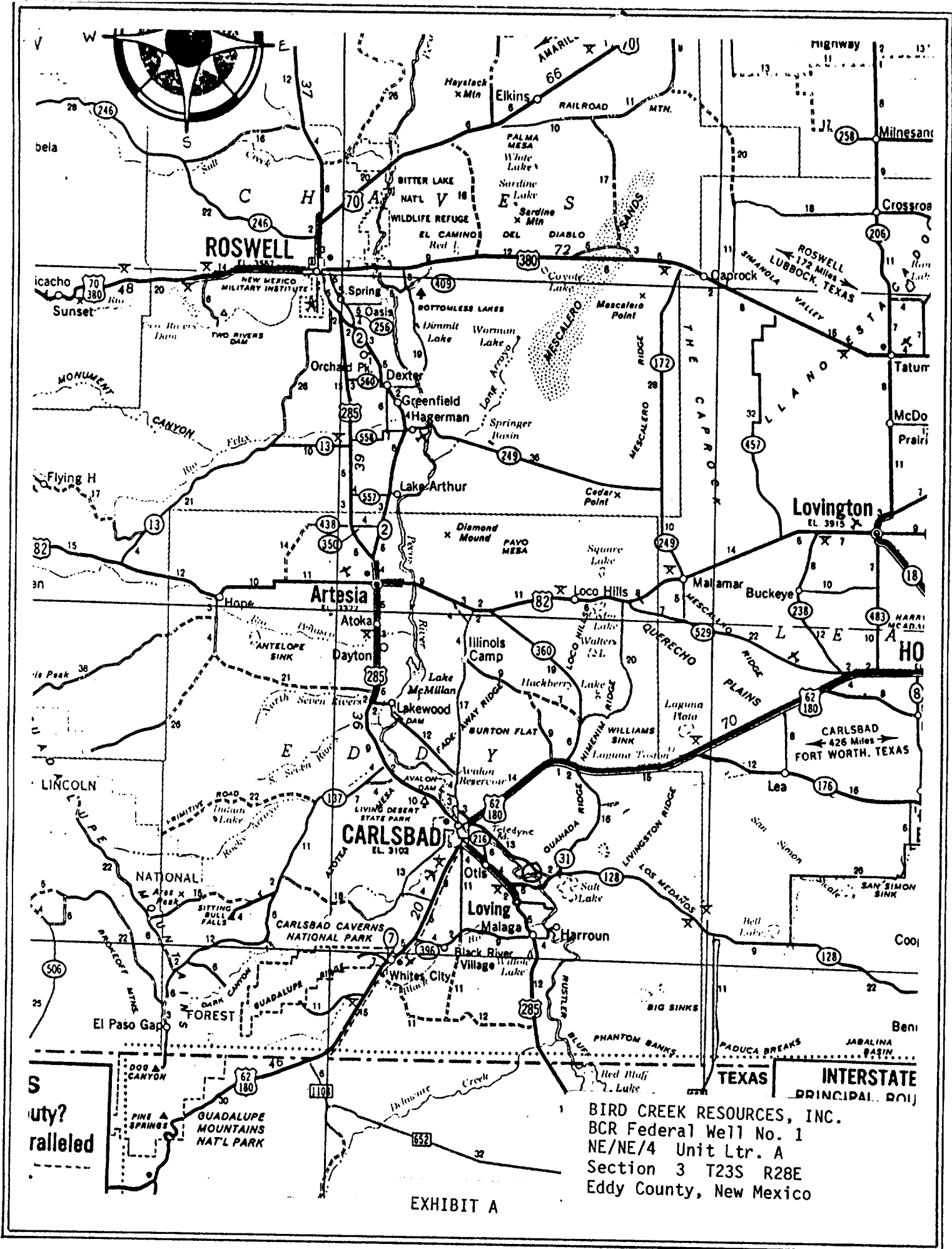
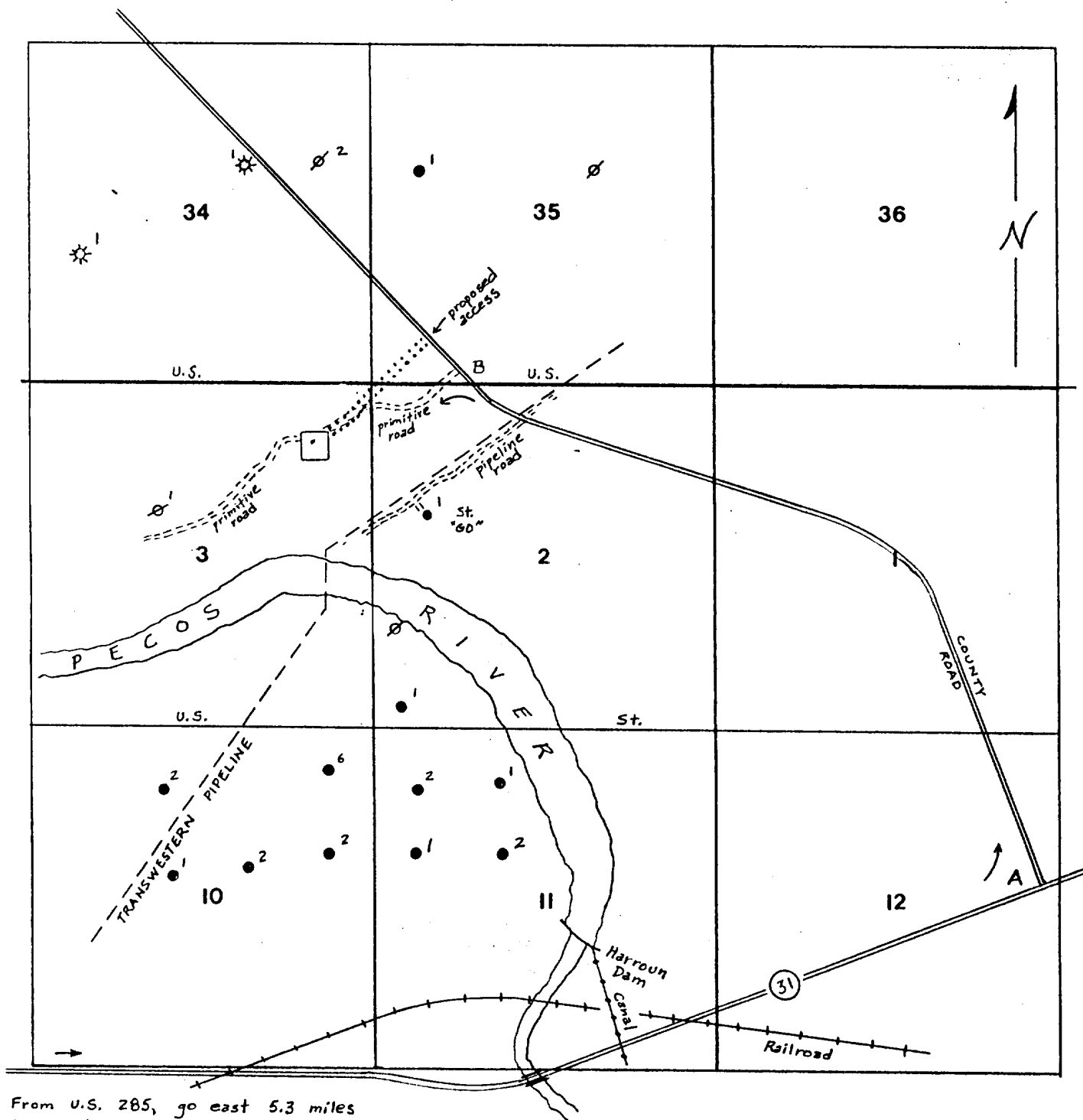


EXHIBIT A



From U.S. 285, go east 5.3 miles to County Road (blacktop, point A). Left on County Road, go northwest 2.4 miles to crude dirt road, point B. Left on dirt road, then 0.3 mile to location, just northwest of Merit's St. "60" #1.

EXHIBIT B

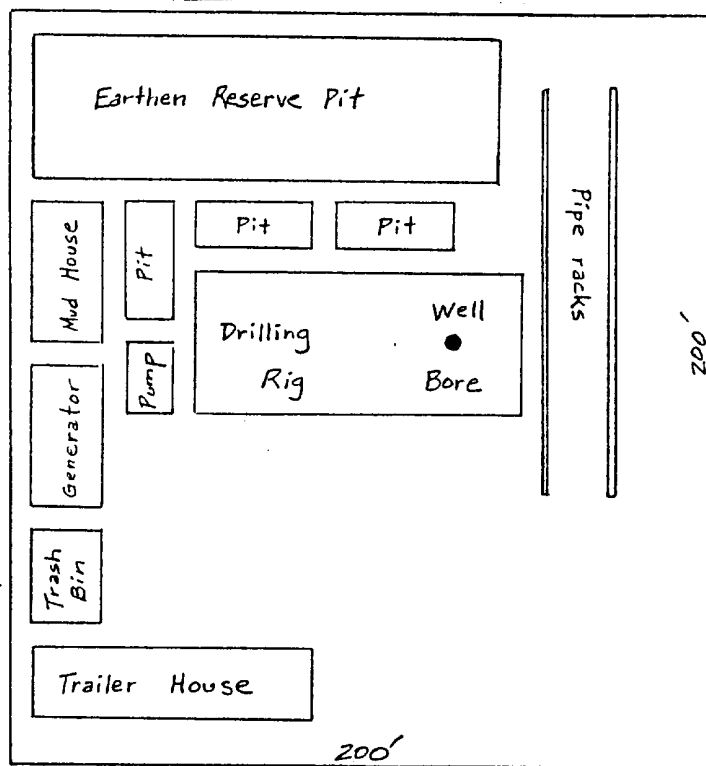
BIRD CREEK RESOURCES, INC.  
BCR Federal Well No. 1  
NE/NE/4 Unit Ltr. A  
Section 3 T23S R28E  
Eddy County, New Mexico

Drainage

Drainage

Archaeologic Study 400' x 400' area

Pad constructed to divert drainage



Primitive road

Proposed access road  
(caliche)

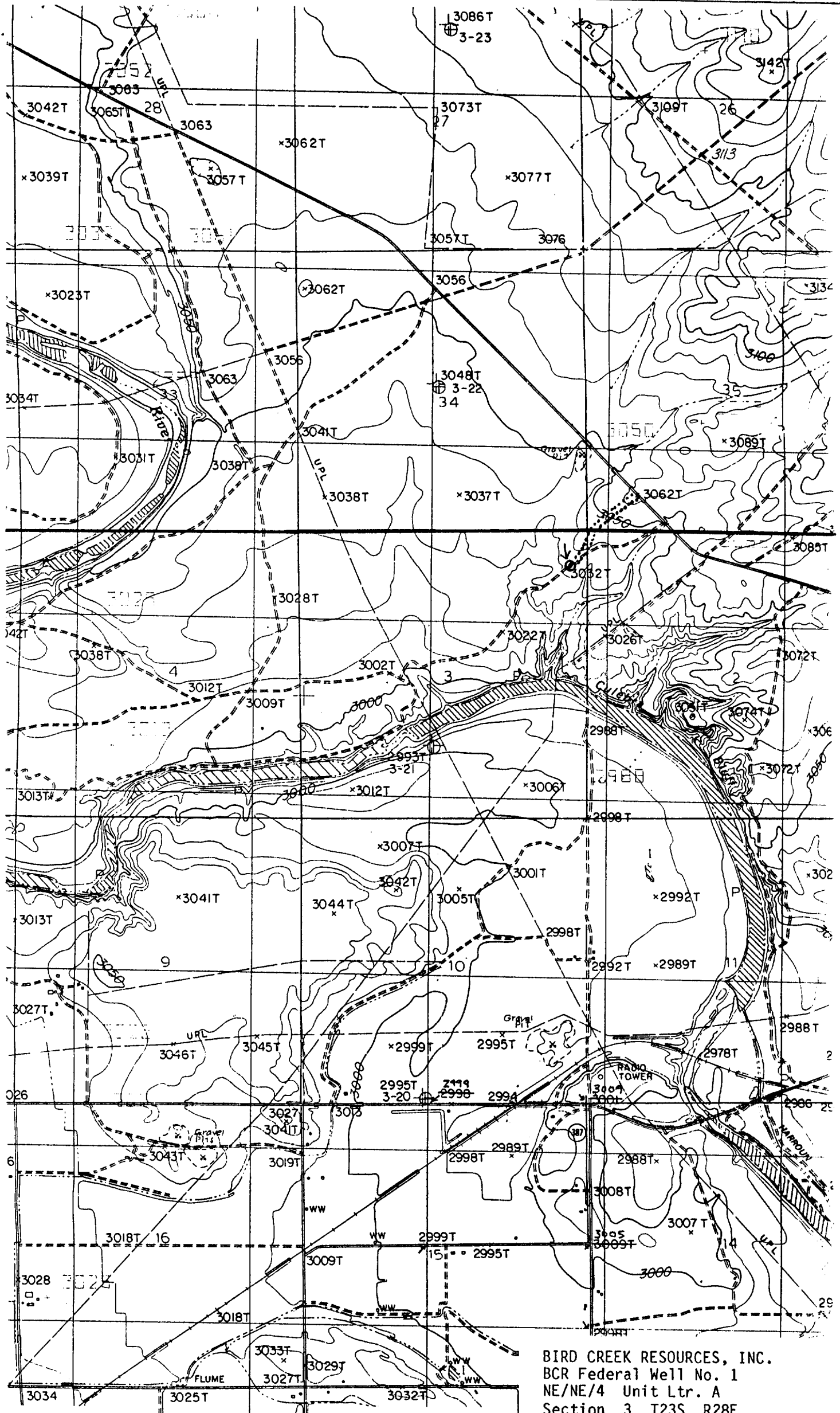
Drainage

Drainage

Not drawn to any scale

EXHIBIT C

BIRD CREEK RESOURCES, INC.  
BCR Federal Well No. 1  
NE/NE/4 Unit Ltr. A  
Section 3 T23S R28E  
Eddy County, New Mexico



1" = 2000'

EXHIBIT D

BIRD CREEK RESOURCES, INC.  
 BCR Federal Well No. 1  
 NE/NE/4 Unit Ltr. A  
 Section 3 T23S R28E  
 Eddy County, New Mexico