

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

Mark D. Wilson ✓

3. ADDRESS OF OPERATOR

1705 Briscoe Ave., Artesia, New Mexico 88210

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

At surface

1980' FNL 330' FWL

At proposed prod. zone

Same

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

44.5 miles south and west of Artesia, New Mexico

15. DISTANCE FROM PROPOSED*

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

330'

16. NO. OF ACRES IN LEASE

320.10

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*

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

None

19. PROPOSED DEPTH

1750'

20. ROTARY OR CABLE TOOLS

CT & Rotary

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

4241' GR

22. APPROX. DATE WORK WILL START*

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8"	48# K-55	120'	300 sx
12-1/4" - 11"	8-5/8"	24# K-55	1750'	Circulate

Mud Program: Fresh Water

Gas sales will be dedicated to El Paso Natural Gas Company.

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ARTESIA, NEW MEXICO

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



TITLE

Owner

DATE

2/19/79

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

3-2-79

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

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 MARK WILSON		Lease Rocky Arroyo Federal 3		Well No. 1
Unit Letter E	Section 3	Township 22 South	Range 22 East	County Eddy
Actual Footage Location of Well: 1980 feet from the North line and 330 feet from the West line				
Ground Level Elev. 4241	Producing Formation Wildcat (Glorieta-Yeso)		Pool None	Dedicated Acreage: 40 Acres

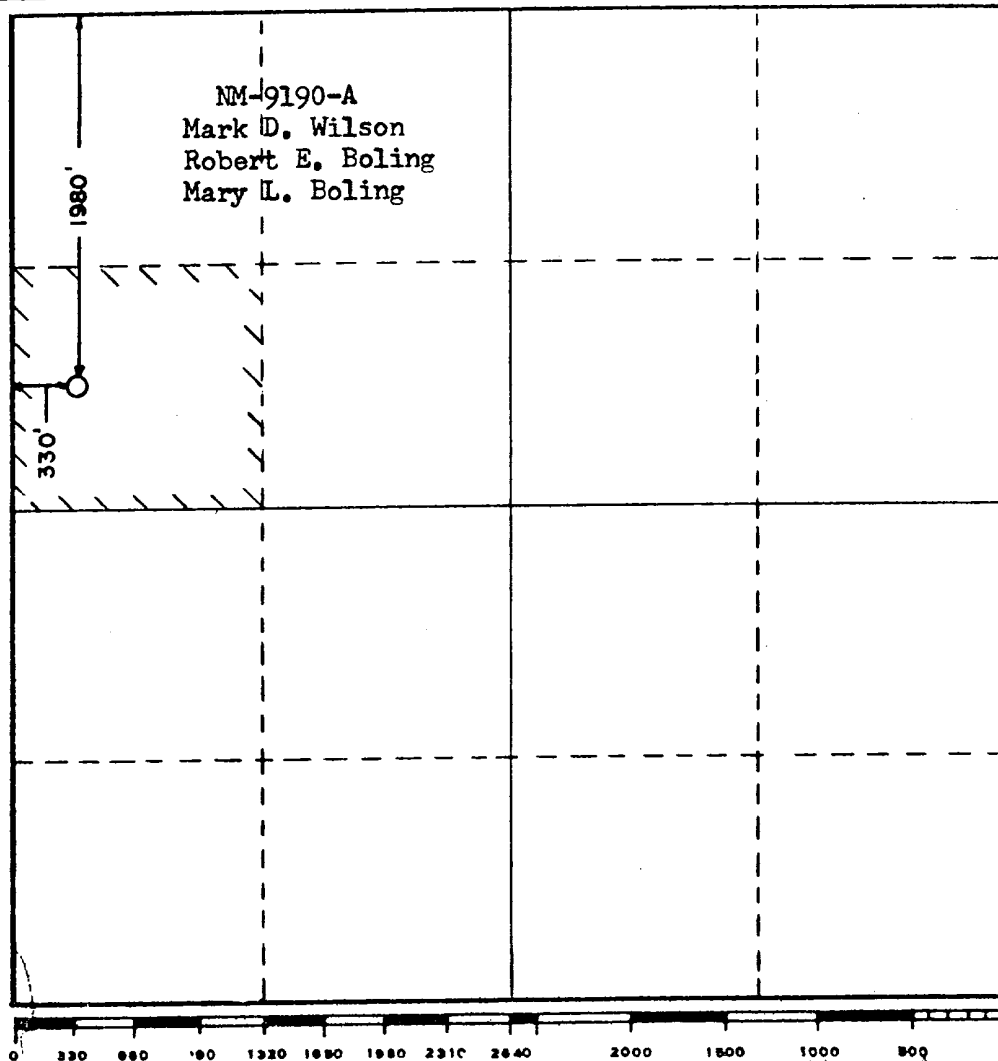
- Outline the acreage dedicated to the subject well by colored pencil or hachure mark on this plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation Will be communitized.

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.

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ARTESIA, NEW MEXICO



CERTIFICATION

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

Mark D. Wilson

Name

Position

Company

Independent Geologist

Date

2-19-79

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:

February 8, 1979

Registered Professional Engineer and/or Land Surveyor

Certificate No.

3640



EX-100 COPY
United States Department of the Interior

GEOLOGICAL SURVEY
P. O. Drawer U
Artesia, New Mexico 88210

MAR 02 1979

Mark D. Wilson
1705 Brisco Avenue
Artesia, New Mexico 88210

MARK D. WILSON Rocky Arroyo Fed. 3 Well No. 1 1980 FNL 330 FWL Sec. 3, T22S, R22E Eddy County Lease No. NM-9190-A
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Gentlemen:

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 1,750 feet to test the Glorieta formation is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

1. Drilling operations authorized are subject to compliance with the GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL LEASES, dated July 1, 1978.
2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the SURFACE USE PLAN and this approval including the GENERAL REQUIREMENTS.
3. Submit a Daily Report of Operations from spud date until the Well Completion Report (form 9-330) is filed. The progress report should be not less than 8" x 5" in size and each page should identify the well.
4. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Requirements. The color used should simulate sandstone brown (Federal Standard Color #595A, color 20318 or 30318).
5. Cement behind the 13-3/8" and 8-5/8" casing must be circulated.
6. Notify the Survey in sufficient time to witness the cementing of the 8-5/8" casing.

Sincerely yours,

ALBERT R. STALL

Albert R. Stall
Acting District Engineer

APPLICATION FOR DRILLING

Mark D. Wilson
Rocky Arroyo Federal 3 No. 1
Section 3-T22S-R22E
Eddy County, New Mexico

In conjunction with Form 9-331C, Application for Permit to Drill subject well, Mark D. Wilson submits the following items of pertinent information:

1. The geologic surface formation is the San Andres dolomite with a cover of alluvium.
2. The estimated tops of geologic markers are as follows:

Glorieta Sandstone	1657'
Yeso Formation	1760'

3. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water: Lost circulation is expected from the surface to 1650 feet. Position of water table not known.

Oil: Glorieta Sandstone 1657'-1760'

4. Proposed casing program: See Form 9-331C.
5. Pressure control equipment: None with cable tools.
6. Mud Program: See Form 9-331C.
7. Auxiliary equipment: None
8. Testing, logging and coring programs: No coring. Bail testing while drilling with cable tools. Logs: Sample log only.
9. No abnormal pressures or temperatures are anticipated.
10. Anticipated starting date: March 30, 1979.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

RECEIVED

Mark D. Wilson
Rocky Arroyo Federal 3 No. 1
1980' FNL and 330' FWL
Section 3-T22S-R22E
Eddy County, New Mexico
(Wildcat Well)

FEB 21 1979

U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

This plan is submitted with Form 9-331C, Application for Permit to Drill, covering the above described well. The purpose of this 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 operations, so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS.

- A. Exhibit "A" is a road map showing the proposed location and the surrounding area on a scale of 1" = 3 miles. Exhibit "B" is a portion of a land map (1" = 4000') of the wellsite area showing the roads in the immediate vicinity of the location. Exhibit "C" is a topographic map showing the terrain in the vicinity of the proposed location. The well site is located at the driving distance of approximately 44.60 miles south and west of Artesia, New Mexico, and can be reached as follows:
- (1) From the intersection of US Highway 285 and Hermosa Street (on the south edge of Artesia), proceed south on US 285 18.5 miles to the junction with the asphalt topped county road (the "Indian Basin Cutoff"), and turn right on this county road.
 - (2) Proceed 12.9 miles to the asphalt topped main Indian Basin road and turn right (west).
 - (3) Drive 8.1 miles to junction with improved gravel road (wrecked car hulk at this junction).
 - (4) Drive 2.4 miles and turn left (south) onto good gravel road.
 - (5) Proceed 2.3 miles to ranch road and turn right (intersection flagged).
 - (6) Go .4 miles to corral and water tank. Location is about 200 feet northwest of water tank.
- B. All of the roads to the ranch road listed as Item 5 above are in good condition and do not require improvement. This ranch road will require grading and widening to 12' and surfacing with gravel, rock or caliche. The archaeologist surveyed this ranch road and found nothing of archaeological value.

2. PLANNED ACCESS ROAD.

- A. A newly constructed access road, approximately 500 feet in length will be constructed along the south side of the corral and water tank, then northwest to the south side of the pad as indicated in Exhibit B. This road will be 12' in width and will be covered with six inches of gravel, rock or caliche.
- B. The route of the proposed new access road is entirely on a flat, soil-covered alluvial plain just south of Cawley Draw. Surface is thick alluvial soil with a covering mainly of short grass and creosote bushes.
- C. The surface of the road will be crowned in the center with drainage on both sides of the road. No turnouts or culverts will be needed. No fences are involved so no cattleguards are required.
- D. The route of the proposed new road is shown on Exhibit B, and has been flagged with each flag clearly visible from the flag nearest to it.

3. LOCATION OF EXISTING WELLS.

- A. Existing wells in the area of the wellsite are shown on Exhibit B.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES.

- A. There are no existing production facilities on this lease at the present time.
- B. In the event that the well is productive, the necessary production facilities will be installed on the drilling pad. If the well is productive of oil, a gas or diesel self-contained unit will be used to provide the necessary power. No power will be required if the well is productive of gas.

5. LOCATION AND TYPE OF WATER SUPPLY.

- A. It is planned to drill the proposed well with a fresh water system. The probable water source (by surface pipeline) will be a water well drilled on the pad of the Great Western, Cawley Draw No. 1, an abandoned Morrow gas well located 660' FNL and 1980' FEL of Section 4, T22S-R22E. Alternatively, the water will be obtained from privately owned or commercial sources and will be hauled to the location over existing and proposed roads.

6. SOURCE OF CONSTRUCTION MATERIALS.

- A. Road surfacing materials will be obtained principally or entirely from road construction (cut and fill) and location construction. If more materials are needed they will come from the nearest existing facility.

7. METHODS OF HANDLING WASTE DISPOSAL.

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be disposed of in the reserve pits. Oil produced during operations will be stored in tanks until sold.
- 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 dirt. All waste material will be contained to prevent scattering by the wind.
- F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling and/or completion operations.
- G. All pits will be fenced with normal fencing material to prevent livestock from entering.

8. ANCILLARY FACILITIES.

- A. None required.

9. WELLSITE LAYOUT.

- A. No pad will be constructed but we plan to clear an area approximately 80' x 80' for cable tool operations.
- B. The ground surface at the well site is a flat grassy alluvial plain with thick soil covering and scattered bushes. Virtually no cut and fill will be required to level the location. Surfacing materials, if required, will be obtained from road building in connection with our Rocky Arroyo Fed. 4 No. 1.
- C. A very small, shallow pit about 6' x 10' will be dug to contain the cable tool cuttings.
- D. The pad and pit area have been staked and flagged and the access road (also flagged) will come to the south edge of the pad.

10. PLANS FOR REHABILITATION OF THE SURFACE.

- A. After completion of drilling and/or completion operations, all equipment and other materials not needed for further operations will be removed. Pits will be filled and the location cleaned of all trash and junk, so as to leave the wellsite in aesthetically pleasing a condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they have been filled.

- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Reclamation and the United States Geological Survey will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11. OTHER INFORMATION.

- A. Topography. The land surface in the area surrounding the wellsite is a flat, soil-covered, grassy alluvial plain with scattered bushes. (See archaeologist's report for more detail).
- B. The topsoil at the wellsite is a soft sandy loam.
- C. Flora and fauna: The vegetation cover is principally short grass with scattered creosote bushes. No wildlife was observed, but rabbits and other animals probably traverse this place on their way to and from water at the nearby tank. Cattle mill around this area near the tanks.
- D. There are no occupied dwellings in the area of the drillsite. No windmills are present, but an active stock watering tank is present about 200 feet to the southeast.
- E. There are no ponds, lakes, or flowing rivers or streams in the immediate vicinity of the wellsite. Cawley Draw (a dry creek), lies several hundred feet to the north.
- F. Surface ownership: Federal
- G. There is no evidence of any archaeological, historical, or cultural sites in the area. An archaeological survey has been conducted by New Mexico Archaeological Services, Inc., P. O. Box 1341, Carlsbad, New Mexico, and their report has been submitted to the government agencies concerned.

12. OPERATOR'S REPRESENTATIVE.

- A. The field representative responsible for assuring compliance with the approved surface use plan is:

Mark D. Wilson
1705 Briscoe Avenue
Artesia, New Mexico 88210
Telephone: 505-746-6246

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, true and correct; and that the work associated with the operations proposed herein will be performed by myself or my assigns and our contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

February 19, 1979

Date

Mark D. Wilson

Mark D. Wilson

Independent Geologist

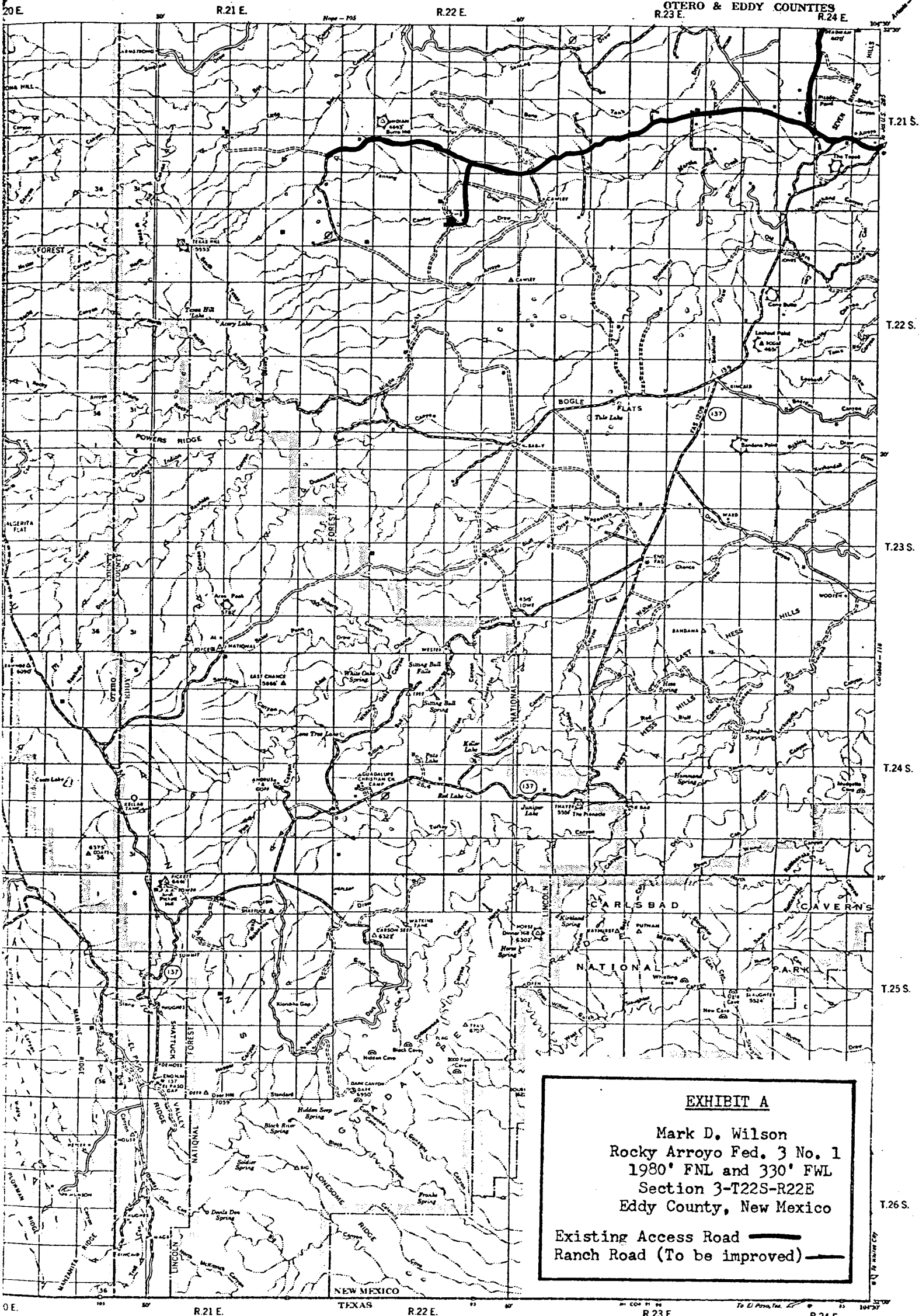


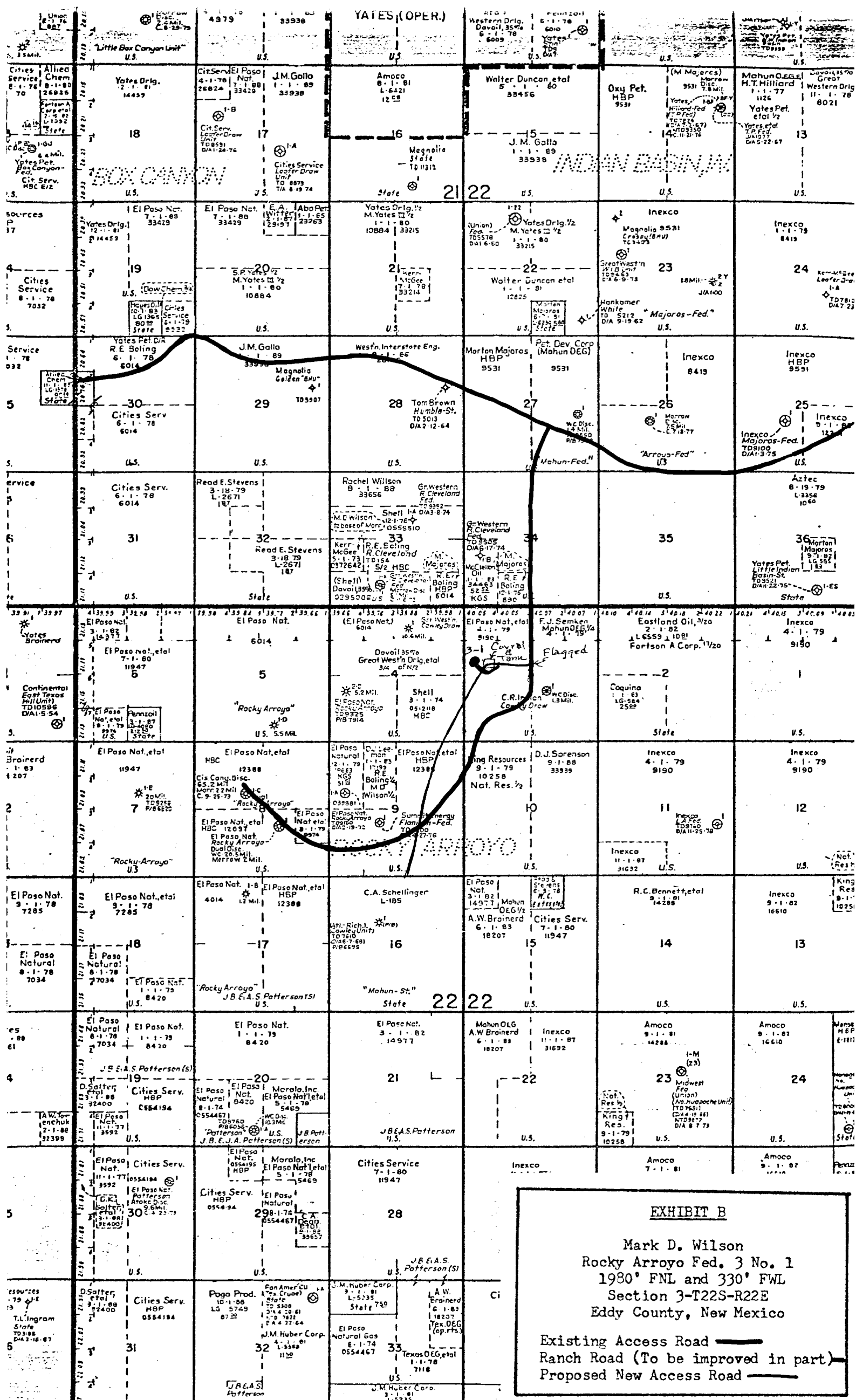
EXHIBIT A

Mark D. Wilson
Rocky Arroyo Fed. 3 No. 1
1980' FNL and 330' FWL
Section 3-T22S-R22E
Eddy County, New Mexico

Existing Access Road ———
Ranch Road (To be improved) - - -

Scale 1/4" = 3 Miles
1 1/2 0 1 2 3 4
STATUTE MILES

EL PASO GAP
QUADRANGLE
117



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

10-4186
23-4275

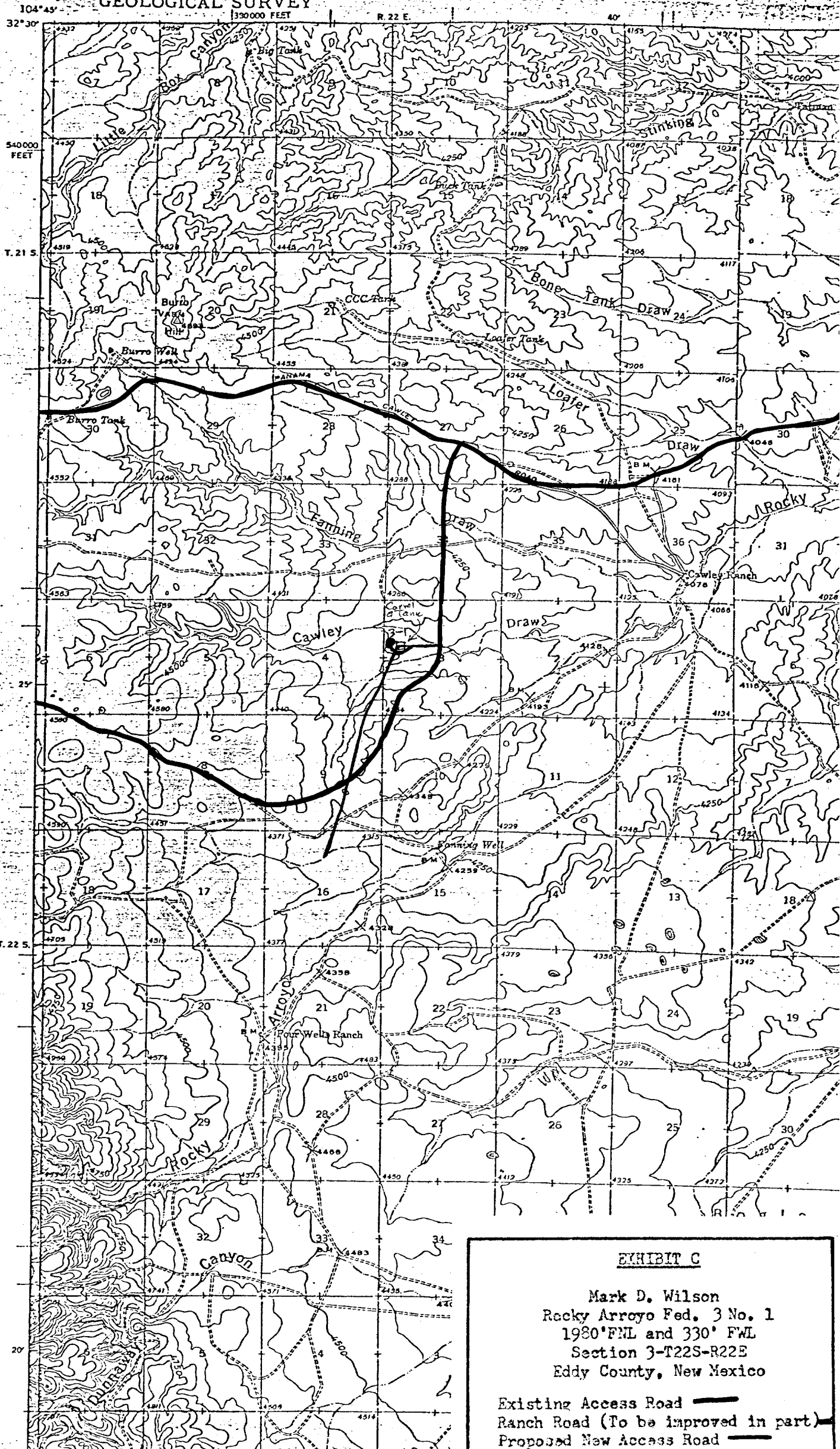


EXHIBIT C

Mark D. Wilson
Rocky Arroyo Fed. 3 No. 1
1980' FNL and 330' FWL
Section 3-T22S-R22E
Eddy County, New Mexico

Existing Access Road ———
Ranch Road (To be improved in part) - - -
Proposed New Access Road ———