

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☐GAS
WELL ☒

OTHER

SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Northwest Pipeline Corporation

3. ADDRESS OF OPERATOR

P.O. Box 90, Farmington, New Mexico 87401

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

At surface 1010' FNL & 930' FEL Sec 9 T29N R5W

At proposed prod. zone Same as above

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

30 Miles East of Blanco, New Mexico

15. DISTANCE FROM PROPOSED*

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

930'

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

N/A

16. NO. OF ACRES IN LEASE

N/A 320

19. PROPOSED DEPTH

4010'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

160

20. ROTARY OR CABLE TOOLS

Rotary

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

6797' GR

22. APPROX. DATE WORK WILL START*

September 1980

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#	120'	100 sks
6-1/4"	2-7/8"	6.4#	4010'	150 sks

Selectively perforate and stimulate the Pictured Cliff Formation.
Completion plans will be determined at Total Depth.

A BOP will be installed after the surface casing is set and cemented. All subsequent work will be conducted through the BOP's.

The North East quarter of Section 9 is dedicated to this well.

Gas is dedicated.

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

Paul C. Thompson

TITLE

Drilling Engineer

DATE

June 10, 1980

APPROVED
AS AMENDED

APPROVED BY

JAMES F. SIMS

DISTRICT ENGINEER

APPROVAL DATE

TITLE

This action is subject to administrative
appeal pursuant to 39 CFR 250.

*See Instructions On Reverse Side

OIL CONSERVATION DIVISION

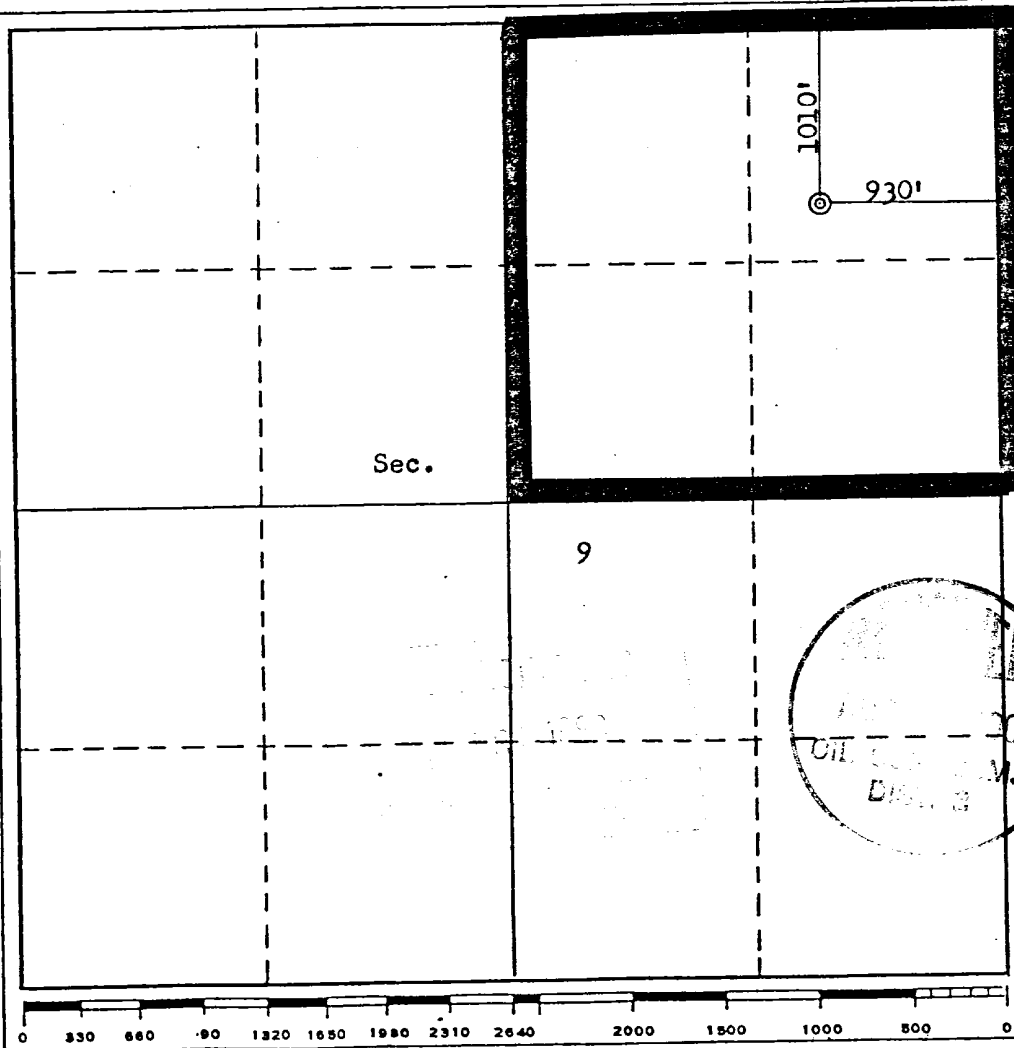
STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501

MAY 10 1980

Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section.

Operator NORTHWEST PIPELINE CORPORATION			Lease SAN JUAN 29-5 UNIT		Well No. 102
Unit Letter A	Section 9	Township 29N	Range 5W	County Rio Arriba	
Actual Footage Location of Well: 1010 feet from the North line and 930 feet from the East line					
Ground Level Elev. 6797	Producing Formation Pictured Cliffs		Pool Unesignated Pictured Cliffs	Dedicated Acreage: 160 Acres	
<p>1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.</p> <p>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).</p> <p>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?</p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If answer is "yes," type of consolidation <u>Unitization</u></p> <p>If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____</p> <p>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.</p>					



CERTIFICATION

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

Paul C. Thompson

Name

Paul C. Thompson

Position

Drilling Engineer

Company

Northwest Pipeline Corp.

Date

May 21, 1980

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 15, 1980

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

Certificate No.

3950

NORTHWEST PIPELINE CORPORATION
DRILLING PROGNOSIS

San Juan 29-5 Unit #102

I. LOCATION: 930' FEL & 1010' FNL
Sec 9 T29N R5W
Rio Arriba Co., New Mexico

DATE: June 16, 1980
ELEVATION: 6797' GR

FIELD: Undesignated Pictured Cliff

SURFACE: BLM
MINERALS: FED SF-080179

II. GEOLOGY: Surface formation - San Jose

<u>Formation Tops:</u>	<u>Depth</u>	<u>Formation Tops:</u>	<u>Depth</u>
Ojo Alamo	2987'	Pictured Cliffs	3782'
Kirtland	3312'	Total Depth	4010'
Fruitland	3417'		

B. Logging Program: I-ES and Neutron-Density with Gamma Ray at Total Depth.

III. DRILLING:

A. Contractor:

B. Mud Program: Mud and water will be furnished by Northwest Pipeline Corp.
a) From Surface to Total Depth to be drilled with mud.
b) While drill pipe is in use the pipe rams will be tested not less than once each day. The blind rams will be tested once each trip. All tests will be recorded in the Northwest Pipeline tour reports as to time and date.

IV. MATERIALS:

A. Casing Program:

<u>Hole Size</u>	<u>Depth</u>	<u>Casing Size</u>	<u>Wt & Grade</u>
12-1/4"	120'	8-5/8"	24# K-55
6-1/4"	4010'	2-7/8"	6.4# J-55

B. Float Equipment:

a) Surface Casing: 8-5/8" Larkin Guide Shoe (Fig 102).
b) Production Casing: 2-7/8" - 6' to 8' joint with notched collar on bottom and a 2-7/8" Halliburton Baffle (Fig 801.03095) on top of the shoe joint. Use two (2) 3-1/16" rubber balls and one (1) Halliburton Omega Latch-in Plug (Fig 801.0292) above cement in a 3-1/4" I.D. Plug container cementing head. Run six B&W centralizers (Fig 72281-00) on bottom six joints. Pump plug, followed by one barrel of 7-1/2% acetic acid. As soon as plug is bumped, pressure up to 4000 psi test casing.

C. Tubing: NONE.

D. Well Head Equipment: Larkin.

V. Cementing:

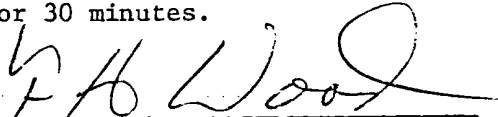
A. Surface Casing: 8-5/8" - Use 100 sacks of Class "B" cement with 1/4# Flocele/sack and 3% CaCl₂ (100% excess). WOC 12 hrs.

B. Production Casing: 2-7/8" - Use 50 sks Class "B" 65/35 poz w/ 12% gel and 12-1/2# of fine gilsonite per sack. Tail in with 100 sacks of Class "B" cement with 6% gel and 10# gilsonite/sk. (Slurry volume - 292 cu.ft). (70% excess to fill to the top of the Ojo Alamo).


Drilling Prognosis
San Juan 29-5 Unit #102
Page #2

V. Cementing Cont'd:
Run temp survey after 12 hrs.

***NOTE: Test Surface casing to 600 psi for 30 minutes.



F. H. Wood

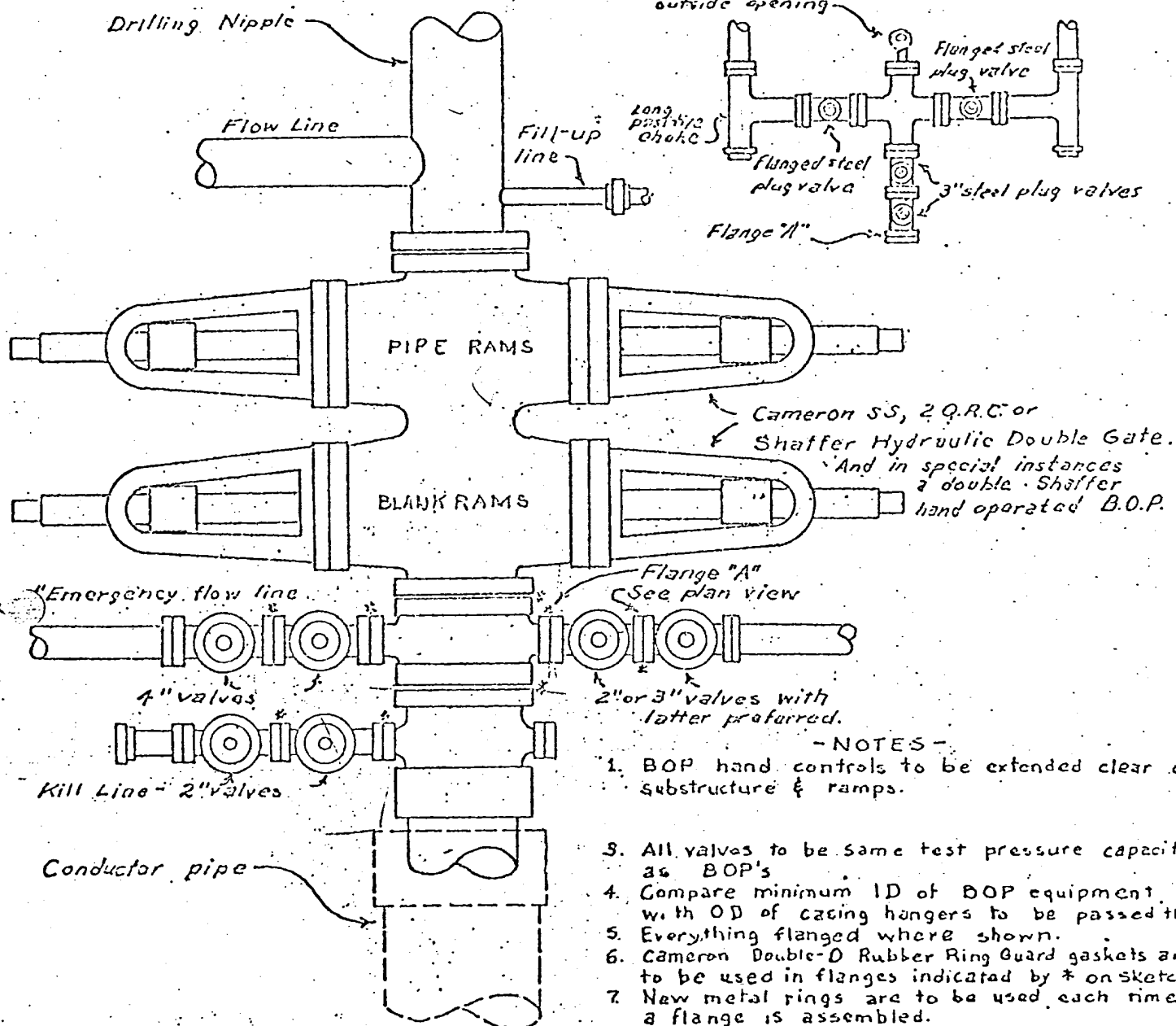

MJT/djb

Original: Well File
sc: Regular Distribution

PLAN VIEW - CHOKE MANIFOLD

Flanged cross with pressure gauge in outside opening

Screw connections are permissible but discouraged.



- NOTES -

1. BOP hand controls to be extended clear of substructure & ramps.
2. All valves to be same test pressure capacity as BOP's
3. Compare minimum ID of BOP equipment with OD of casing hangers to be passed thru.
4. Everything flanged where shown.
5. Cameron Double-O Rubber Ring Guard gaskets are to be used in flanges indicated by * on sketch.
6. New metal rings are to be used each time a flange is assembled.
7. BOP's to be well braced at all times.

If possible install head so kill line valves will be under BOP's for protection. These valves to be kept closed after BOP's tested & kill line removed (by use of quick union) to fill-up line. When used this way kill line must be high-pressure.

SINGLE PIPE RAM BLOWOUT PREVENTOR HOOKUP

1. Existing Roads: See attached topographic map. All existing roads used, shall be maintained in a serviceable condition at all times during the drilling operation.
2. Planned Access Roads: See attached topographic map. Maximum grade is approximately 1%. The road surface will not exceed twenty feet in width. Upon completion of drilling operations the access road will be adequately drained to control runoff and soil erosion. Drainage facilities may include ditches, water bars, culverts or any other measure deemed necessary. All activities will be confined to the access road and drill pad.
3. Location of Existing Wells: See attached topographic map.
4. Location of Tank Batteries; Production Facilities; and Production, Gathering and Service Lines: See attached topographic map for locations of existing and proposed gas gathering lines.
5. Location and Type of Water Supply: Water needed for the drilling operation will be hauled from the Conoco Water hole.
6. Source of Construction Materials: No additional materials will be needed.
7. Methods for Handling Waste Disposal: All garbage, debris, and trash will be buried at least three feet deep. A portable toilet will be supplied for human waste. After drilling operations have been completed the reserve pit will be fenced and the liquid portion will be allowed to evaporate before the location is cleaned up and leveled. The earthen pits will not be located on natural drainages and will be constructed in such a manner so that they will not leak. Any evaporator pit containing toxic liquids will be fenced.
8. Ancillary Facilities: There will be no camps or airstrips associated with the drilling of this well.
9. Well Site Layout: See attached location layout sheet. There will be a drainage ditch above the cut slope. *Blank*
10. Plans for Restoration of the Surface: Upon completion of drilling, the location will be cleaned, and leveled so that no cut or fill banks will be steeper than 3:1.

All of the area disturbed in connection with the drill site will be seeded as close as possible for any above ground equipment while still allowing for access to the equipment. Seeding will be done within one year after drilling is completed and during the period from July 1 through September 15. Seeding will be done with seed Mixture #1.

All equipment above ground will be painted a non-glare, non-reflective, non-chalking color that simulates the natural color of the site. For this well code number 595-34127, green.
11. Other Information: If, during operations, any historic or prehistoric ruin, monument or site, or any object of antiquity is discovered, then work will be suspended and the discovery will be reported to the District Manager of the BLM.

All liquids from the line will be contained at the site unless otherwise specified by the surface agency's representative.

Multi-Point Surface Use Plan

Page 2

When drilling with gas, the line used to discharge and burn off the gas will be located so as not to damage vegetation in the area, and if necessary an earthen screen will be constructed to protect the vegetation. All liquids from the line will be contained at the site unless otherwise specified by the surface agency's representative.

The area covered by the location and proposed access road is gently sloped with scattered brush and some grasses.

12. Operator's Representative: Paul Thompson - , P.O. Box 90 - Farmington, New Mexico 87401. Phone: 327-5351 Extension # 115
13. Certification:

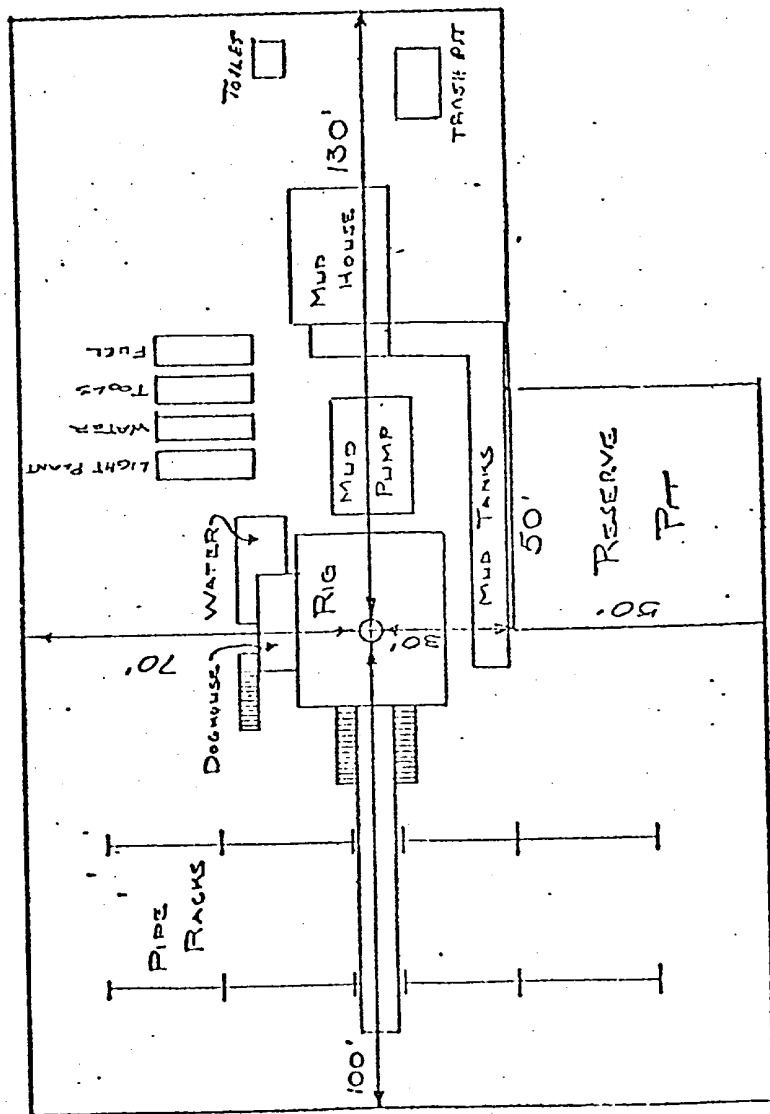
I hereby certify that I have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge true and correct; and, that the work associated with the operations proposed herein will be performed by Northwest Pipeline Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Paul C. Thompson
Paul Thompson
Drilling Engineer

WJB/ch

NORTH WEST PIPELINE CORPORATION

LOCATION LAYOUT SAN JUAN 29.5 UNIT #102



DATE: 6/11/80

SCALE: 1cm = 20'

ICHI

1 789000m E.

! 290

1291

20.

292

5.

469000 m N.

4068

4067

4066

4065
—
42'30"

BLOOMFIELD 39
BLANCO 39

4557 III NW
WHEELER CANYON

406

Vicinity Map for
NORTHWEST PIPELINE CORP. #102 SAN JUAN 29-5 UNIT
1010'FNL 930'FEL Sec. 9-T29N-R5W
RIO ARriba COUNTY, NEW MEXICO