

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE*
(Other instructions on
reverse side)

FORM APPROVED
OMB NO. 1004-0136
Expires: February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☐

GAS
WELL ☒

OTHER ☐

SINGLE
ZONE ☒

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

ENERGEN RESOURCES CORPORATION

3. ADDRESS AND TELEPHONE NO.

2198 Bloomfield Highway; Farmington, NM 87401

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

At surface

540' FSL, 2170' FEL

At proposed prod. zone

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

Eight (8) miles SE of Arboles, Colorado

15. DISTANCE FROM PROPOSED*

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

540'

16. NO. OF ACRES IN LEASE

1320

17. NO. OF ACRES ASSIGNED

TO THIS WELL

320 E/2

18. DISTANCE FROM PROPOSED LOCATION*

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

1300'

19. PROPOSED DEPTH

6104' —

20. ROTARY OR CABLE TOOLS

Rotary

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

6352' — GR

**This action is subject to technical and
procedural review pursuant to 43 CFR 3165.3
and appeal pursuant to 43 CFR 3165.4**

**DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
GENERAL REQUIREMENTS**

23.

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4	9 5/8	36#	200'	130 cu. ft., circ. to surface
8 3/4	7	20#	3604'	813 cu. ft., circ. to surface
6 1/4	4 1/2	10.5#	3454' - 6104' —	408 cu. ft., circ. liner

Selectively perforate and sand water fracture the Mesaverde.

This gas is dedicated.

A Williams Field Service Pipeline ROW Plat is attached.

THIS IS AN EXPEDITED APD.



IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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

John Graham

TITLE

Drilling & Completion Foreman

DATE

12-14-00

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval 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.

CONDITIONS OF APPROVAL, IF ANY:

/s/ Joel Farrell

MAR 28

APPROVED BY

TITLE

DATE

*See Instructions On Reverse Side

Title 18 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.

AMMOCD

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-26623		*Pool Code 72319	*Pool Name 070 Blanco Mesavende
*Property Code 21996	*Property Name SAN JUAN 32-5 UNIT		*Well Number 118
*GRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 6352

10 Surface Location

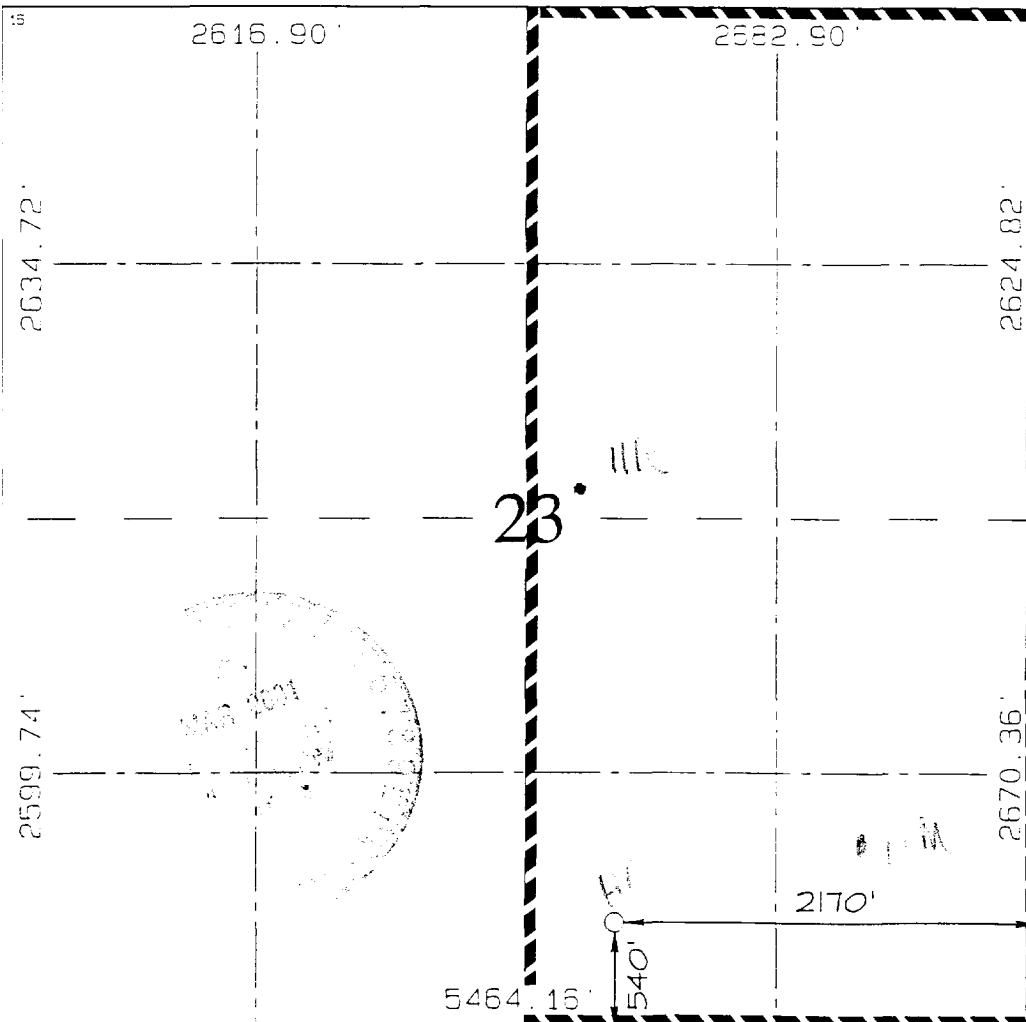
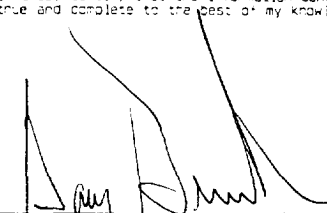
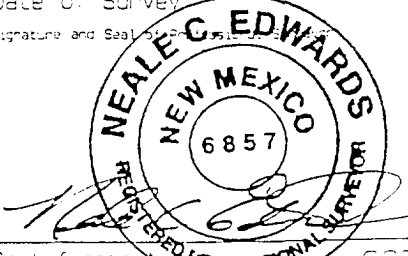
UL or lot no.	Section	Township	Range	Lot Id.	Feet from the	North/South line	Feet from the	East/West line	County
0	23	32N	6W		540	SOUTH	2170	EAST	RIO ARriba

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Id.	Feet from the	North/South line	Feet from the	East/West line	County

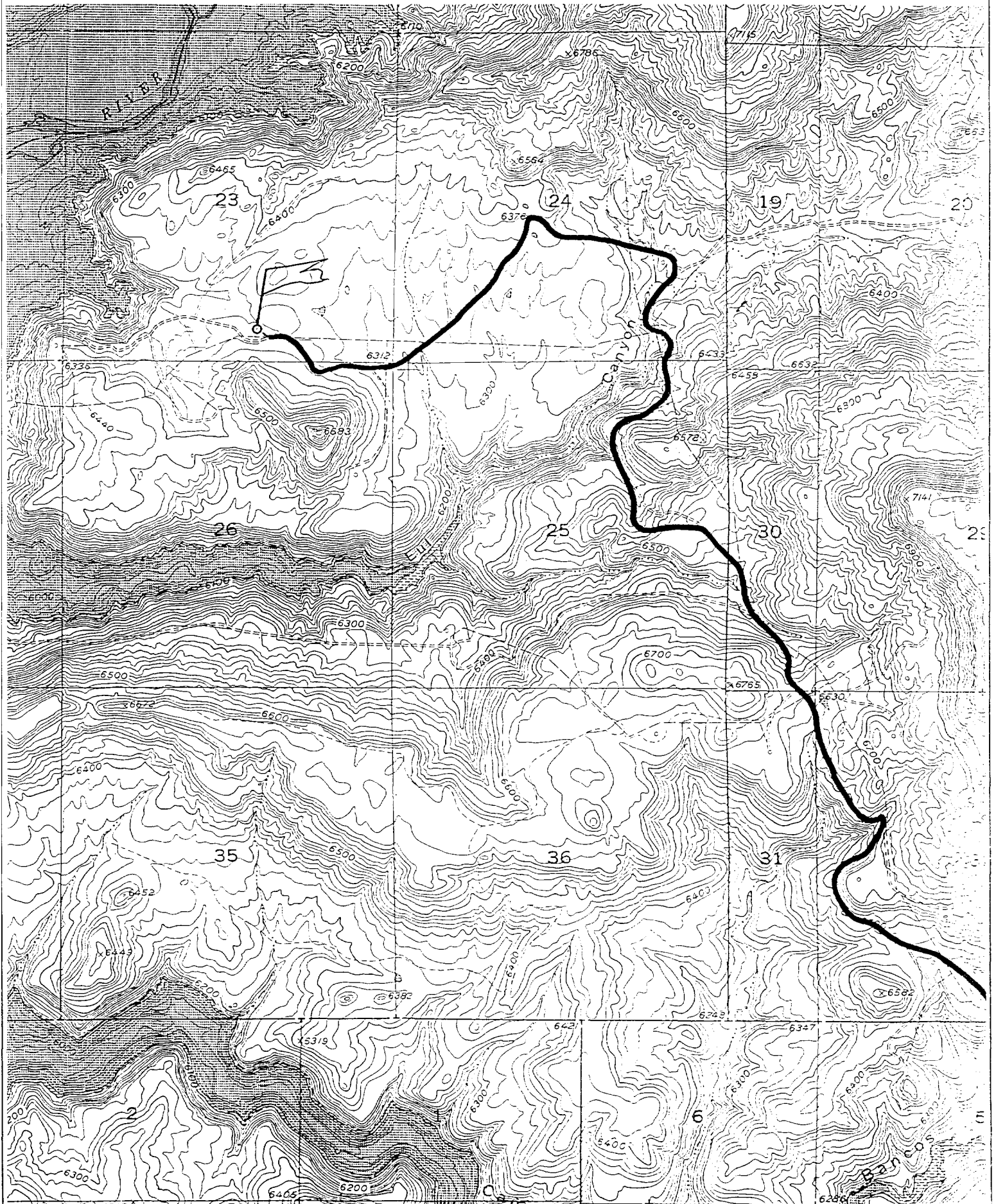
12 Dedicated Acres 320	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  Signature Gary Brink Printed Name Production Superintendent Title 12/14/00 Date
	18 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 belief. SEPTEMBER 12, 2000 Date of Survey  Signature and Seal NEALE G. EDWARDS NEW MEXICO 6857 REGISTERED PROFESSIONAL SURVEYOR Certificate 6857

ENERGEN RESOURCES CORPORATION SAN JUAN 32-5 UNIT #11B

540' FSL & 2170' FEL, SECTION 23, T32N, R6W, N.M.P.M.
RIO ARriba COUNTY, NEW MEXICO



OPERATIONS PLAN

WELL NAME: San Juan 32-5 Unit 11B

LOCATION: 540' FSL, 2170' FEL, Section 23, T32N, R6W, Rio Arriba County, NM

FIELD: Blanco Mesaverde

ELEVATION: 6352' GL

FORMATION TOPS:

Surface	San Jose	Huerfanito Benonite	4119
Nacimiento	984	Cliff House	5014
Ojo Alamo	2239	Menefee	5389
Kirtland	2354	Point Lookout	5554
Fruitland	2764	Total Depth	6104
Pictured Cliffs	3049		
Lewis	3404		

LOGGING PROGRAM:

Open Hole Logs:

Surface to intermediate: None

Inter TD to total depth: Temp/HRI/CNT, LDT/GR

Mud Logs: Intermediate to total depth

Coring: None

Natural Gauges: Every 500' from intermediate TD to total depth

MUD PROGRAM: Fresh water low solids mud from surface to intermediate TD (9.0 PPG).

Air/mist from intermediate casing point to total depth.

CASING PROGRAM:

<u>HOLE SIZE</u>	<u>DEPTH</u>	<u>CSG SIZE</u>	<u>WT.</u>	<u>GRADE</u>
12 1/4"	200'	9 5/8"	36#	J-55 – ST&C
8 3/4"	3604'	7"	20#	J-55 – ST&C
6 1/4"	3454'-6104'	4 1/2"	10.5#	J-55 – LT&C

TUBING PROGRAM:

6000'	2 3/8"	4.7#	J-55
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WELLHEAD: 11" 3000 x 9 5/8" casing head. 11" 3000 x 7 1/16" 3000 xmas tree.

BOP SPECIFICATIONS:

An 11" 2000 psi minimum double gate BOP stack (Figure 1) will be used following nipple up of casing head. During air drilling operations, a Shaffer Type 50 or equivalent rotating head will be installed on top of the stack. A 2" nominal, 2000 psi minimum choke manifold will be used. An upper Kelly Cock valve with handle available and drill string valve to fit each drill string will be available on the rig floor during drilling operations.

CEMENTING:

9 5/8" surface casing - cement with 110 sks Class B Cement with 1/4" flocele/sk and 2% calcium chloride (130 cu. ft. of slurry, 100% excess to circulate to surface). WOC 12 hrs. Test casing to 600# for 30 minutes.

Texas Pattern Guide Shoe on bottom. 3 bow type centralizers spaced throughout the string.

7" intermediate casing – cement with 355 sks 65/35 Class B Poz with 6% gel, 2% calcium chloride, 10% gilsonite, and 1/4# flocele/sk. Tail with 100 sks Class B w/2% calcium chloride, 10% gilsonite and 1/4# flocele/sk. (813 cu. ft. of slurry, 50% excess to circulate to surface). WOC 12 hrs. If cement does not circulate, run temperature survey in 8 hrs. to determine TOC. Test casing to 1200 psi for 30 minutes.

Cement nose guide shoe on bottom with a self-fill insert float valve on top of shoe joint. 10 bow spring centralizers spaced every 2nd joint off bottom. Two turbolating centralizers at the base of the Ojo Alamo.

4 1/2" Production Liner

Cement with 325 sks 50/50 Poz with 2% gel, 5 PPS gilsonite, and .4% halad – 9 and 1/4# flocele/sk (408 cu. ft., 50% excess to tie into intermediate casing string). WOC 18 hrs. prior to completion.

Cement nose guide shoe on bottom with float collar on top of shoe joint. Liner hanger will have neopreme packoff on top.

OTHER INFORMATION:

- 1) The Blanco Mesa Verde will be completed.
- 2) No abnormal temperatures or pressures are anticipated.
- 3) Anticipated pore pressure for the Mesa Verde is 1000.
- 4) If lost circulation is encountered sufficient LCM will be added to the mud system to maintain well control.
- 5) This gas is dedicated.
- 6) Anticipated pore pressure for the Fruitland is 700 psi and the Pictured Cliffs is 800 psi.