

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTSUBMIT 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 <b>DRILL</b> <input checked="" type="checkbox"/> <b>DEEPEN</b> <input type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. SF-079090
b. TYPE OF WELL OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME
2. NAME OF OPERATOR ENERGEN RESOURCES CORPORATION		7. UNIT AGREEMENT NAME San Juan 32-5 Unit
3. ADDRESS AND TELEPHONE NO. 2198 Bloomfield Highway; Farmington, NM 87401		8. FARM OR LEASE NAME, WELL NO. San Juan 32-5 Unit 110
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 155' FSL, 65' FEL At proposed prod. zone		9. API WELL NO. 30-039-26721
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 17 miles North of Gobernador, New Mexico		10. FIELD AND POOL, OR WILDCAT Basin Fruitland Coal
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 65'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA P Sec. 22, T32N, R6W, N.M.P.M.
16. NO. OF ACRES IN LEASE 480		12. COUNTY OR PARISH Rio Arriba
17. NO. OF ACRES ASSIGNED TO THIS WELL 320 S/L		13. STATE NM
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 15'		20. ROTARY OR CABLE TOOLS Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 6322' GL		22. APPROX. DATE WORK WILL START*

23. PROPOSED CASING AND CEMENTING PROGRAM				
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#	2902'	655 cu. ft., Circ to surface
6-1/4"			3057'	

Selective perforate and sand water fracture the Fruitland Coal.  
This gas is dedicated.  
A Williams Field Service Pipeline ROW Plat is attached.

THIS IS AN EXPEDITED APD.

This action is subject to additional and  
procedural review pursuant to 43 CFR 3163.3  
and appeal pursuant to 43 CFR 3165.4.

THIS ACTION IS SUBJECT TO ADDITIONAL AND  
PROCEDURAL REVIEW PURSUANT TO 43 CFR 3163.3  
AND APPEAL PURSUANT TO 43 CFR 3165.4.

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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 [Signature] TITLE Drilling & Completion Foreman DATE 3/20/01

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE 3/7/02

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:

APPROVED BY [Signature] TITLE Acting Asst Field Engr DATE 3/7/02

\*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.

NSL

NIMOTO

District I  
PO Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District II  
PO Drawer DD, Artesia, NM 88211-0719

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

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

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number <b>30-039-26721</b>		*Pool Code 71629	*Pool Name Basin Fruitland Coal
*Property Code <b>21996</b>	*Property Name SAN JUAN 32-5 UNIT		*Well Number 110
*GRID No. 162928	*Operator Name ENERGEN RESOURCES CORPORATION		*Elevation 6322

<sup>10</sup> Surface Location

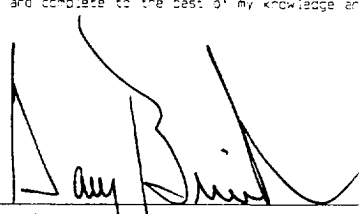
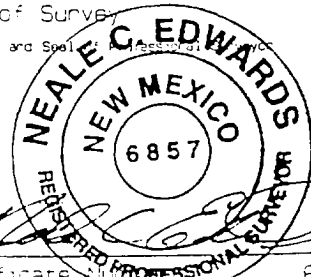
UL or lot no. P	Section 22	Township 32N	Range 6W	Lot Ion	Feet from the 155	North/South line SOUTH	Feet from the 65	East/West line EAST	County RIO ARriba
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ion	Feet from the	North/South line	Feet from the	East/West line	County
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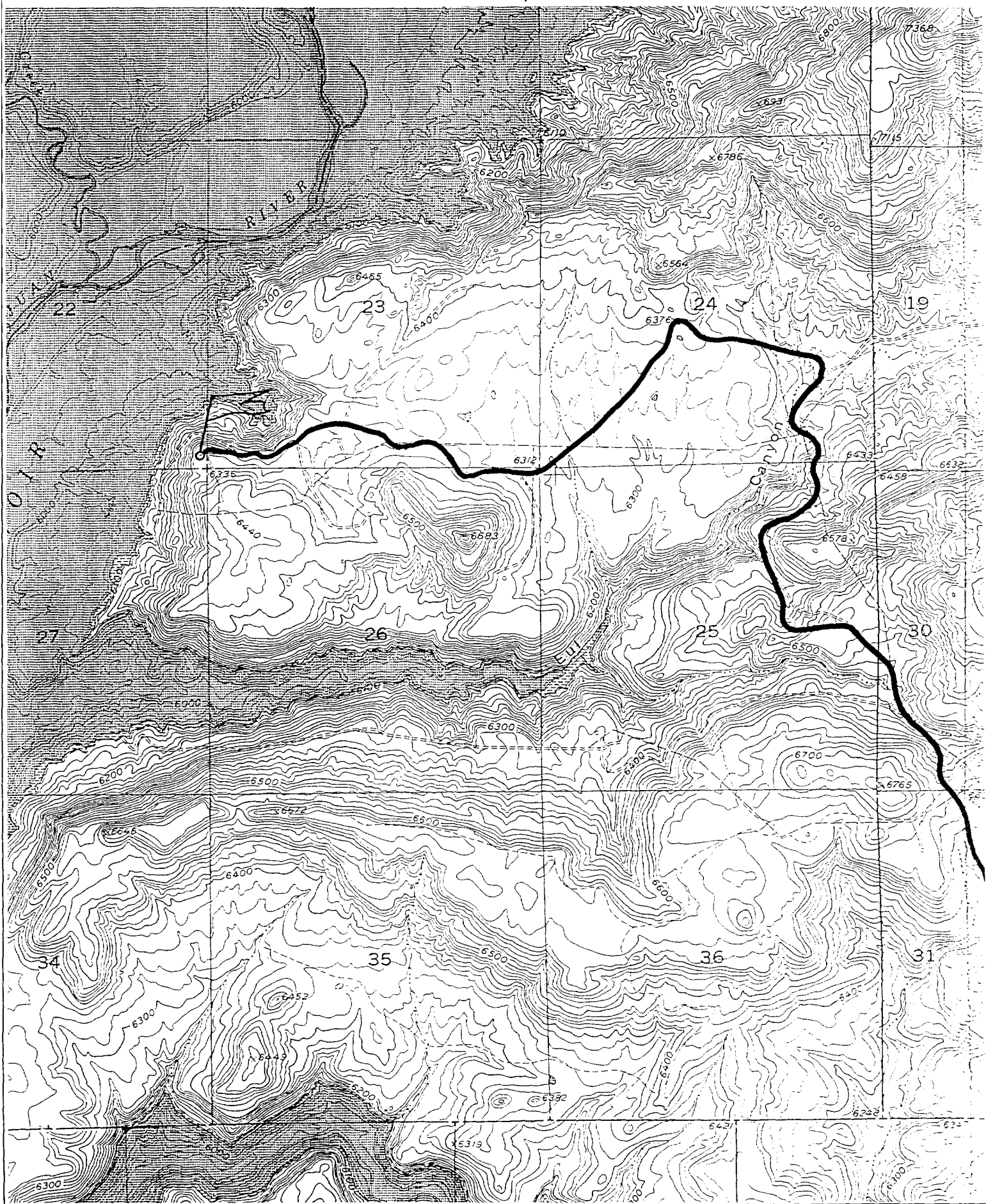
<sup>12</sup> Dedicated Acres 320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<sup>16</sup> 2691.48'		2619.54'		<sup>17</sup> 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 3/20/01 Date	
2615.24'		2634.72'			
2676.30'		2599.74'		<sup>18</sup> 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  Certificate	
2683.56'		2681.58'		65' 155' 685'	

ENERGEN RESOURCES CORPORATION SAN JUAN 32-5 UNIT #110

155' FSL & 65' FEL, SECTION 22, T32N, R6W, N.M.P.M.  
RIO ARriba COUNTY, NEW MEXICO



## OPERATIONS PLAN

WELL NAME: San Juan 32-5 Unit 110

LOCATION: 155' FSL, 65' FEL, Section 22, T32N, R6W, Rio Arriba County, NM

FIELD: Basin Fruitland Coal

ELEVATION: 6322' GL

### FORMATION TOPS:

Surface	San Jose
Nacimiento	982
Ojo Alamo	2262
Kirtland	2377
Fruitland	2742

Total Depth            3057

### 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"	2902'	7"	20#	J-55 – ST&C
6 1/4"	3057'			

### TUBING PROGRAM:

3000'	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 275 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. (655 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.

### OTHER INFORMATION:

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