

NO. OF COPIES RECEIVED	7
DISTRIBUTION	
SANTA FE	1
FILE	2
U.S.G.S.	1
LAND OFFICE	1
OPERATOR	2

# NEW MEXICO OIL CONSERVATION COMMISSION

30-045-23955

Form C-101  
Revised 1-1-65

5A. Indicate Type of Lease	
STATE <input checked="" type="checkbox"/>	FEE <input type="checkbox"/>
5. State Oil & Gas Lease No.	

## APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work		7. Unit Agreement Name	
b. Type of Well DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input checked="" type="checkbox"/>		8. Farm or Lease Name CAIN COM	
2. Name of Operator Southland Royalty Company		9. Well No. 12E	
3. Address of Operator P. O. Drawer 570, Farmington, NM 87401		10. Field and Pool, or Wildcat Basin Dakota Under Chacra	
4. Location of Well UNIT LETTER O LOCATED 820' FEET FROM THE South LINE AND 1840' FEET FROM THE East LINE OF SEC. 16 TWP. 28N RGE. 10W NMPM		12. County San Juan	
19. Proposed Depth 6710'		19A. Formation Dakota-Chacra	
20. Rotary or C.T. Rotary		21. Elevations (Show whether DE, RT, etc.) 5990' GR	
21A. Kind & Status Plug. Bond		21B. Drilling Contractor	
22. Approx. Date Work will start February 1, 1980			

## PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 1/4"	8 5/8"	24#	200'	140 Sacks	
7 7/8"	5 1/2"	15.5#	6710'	215 Sacks (Stg1)	
				325 Sacks (Stg2)	
				150 Sacks (Stg3)	

Surface formation is Nacimiento.

Top of Ojo Alamo sand is at 1302'.

Fresh water mud will be used to drill from surface to total depth.

It is anticipated that an IES and GR-Density log will be run from Total Depth to 1600'.

No abnormal pressures or poisonous gases are anticipated in this well.

It is expected that this well will be drilled before July 31, 1980. This depends on time required for approval, rig availability and the weather.

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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed [Signature] Title District Production Manager Date 11-7-79

(This space for State Use)

APPROVED BY [Signature] TITLE DEPUTY OIL DATE

CONDITIONS OF APPROVAL, IF ANY:



**Southland Royalty Company**

November 7, 1979

Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

Attention: Mr. Al Kendrick

Dear Sir:

All drilling and completion rigs will be equipped with 6" or larger double gate hydraulic blowout preventers and a hydraulic operated closing unit with steel lines.

The preventer is 3000# working pressure and 6000# test.

All crews will be thoroughly trained in the operation of this preventer. The preventer will be tested frequently enough to insure safe operation.

Yours truly,

L. O. Van Ryan  
District Production Manager

LOVR/dg

DRILLING SCHEDULE - CAIN COM #12E

LOCATION: 820' FSL & 1840' FEL, Section 16, T28N, R10W, San Juan County, New Mexico

FIELD: Basin Dakota/Undes. Chacra ELEVATION: 5990' GR TD: 6710'

GEOLOGY:

Formation Tops:

Ojo Alamo	1302'	Gallup	5582'
Fruitland	1827'	Graneros	6392'
Pictured Cliffs	2072'	Dakota	6512'
Chacra	3170'		
Cliff House	3652'		
Point Lookout	4352'		

Logging Program: IES and GR-Density from Total Depth to 1600'.

Coring Program: None

Natural Gauges: None

DRILLING:

Contractor:

Tool Pusher:

SRC Representative:

SRC Answering Service: 325-1841  
Dispatch Number: 325-7391

Mud Program: Fresh water to 5500'. Mud up at 5500'. Maintain mud wgt. of 8.9 - 9.3; vis of 35 - 40 sec; water loss of 10 - 12 cc. Anticipate losing circulation at top of Dakota formation - have ICM available on location.

MATERIALS:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12-1/4"	200'	8-5/8"	24# K-55
	7-7/8"	6710'	5-1/2"	15.5# K-55

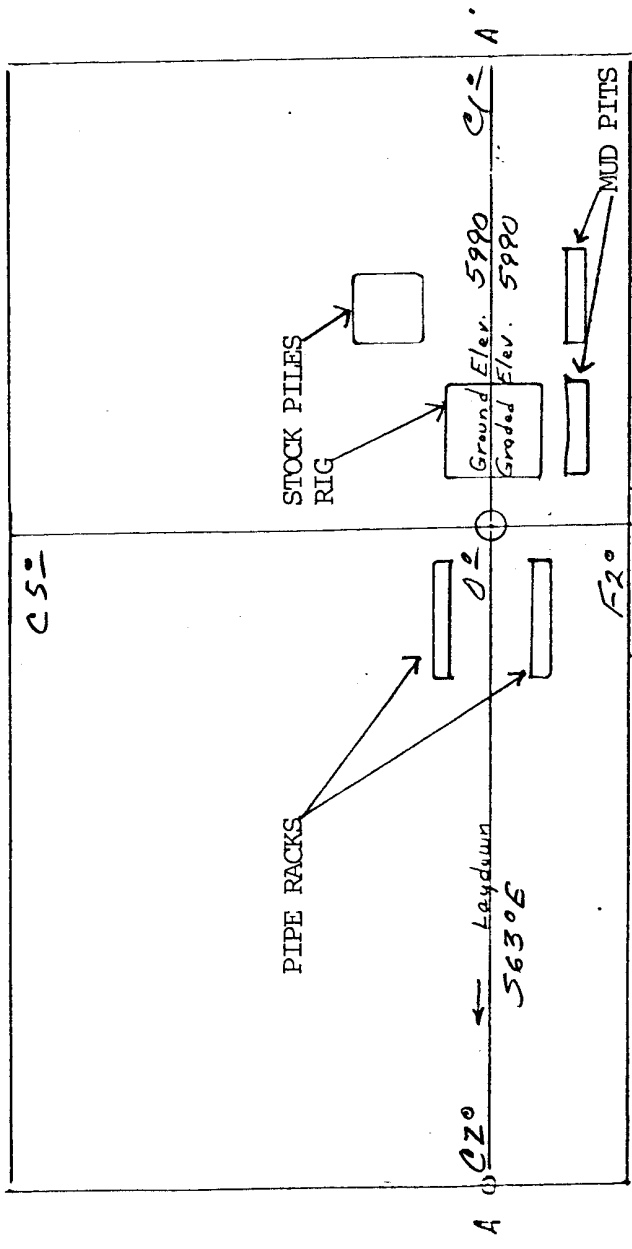
FLOAT EQUIPMENT:

8-5/8" Surface Casing: Pathfinder guide shoe.

5-1/2" Production Casing: Pathfinder guide shoe and Howco self-fill insert valve. Run 5 centralizers every other joint above shoe. Run Dowell stage tool at 4750' and 2170'. Run cement basket 1 joint below and 5 centralizers above each tool.

Wellhead Equipment: 8-5/8" X 10", 2000# Bradenhead with 5-1/2" casing hanger. 10" X 6", 2000# tubing head and tree.

Location Profile for 4F  
 SOUTHLAND ROYALTY CO. #12E CAIN COM  
 820' FSL 1810' FEL Sec 16-T28N-R10W SAN JUAN COUNTY, NEW MEXICO



Vert. 1"=40' Horiz: 1"=100'

6000					
5980					
5980					

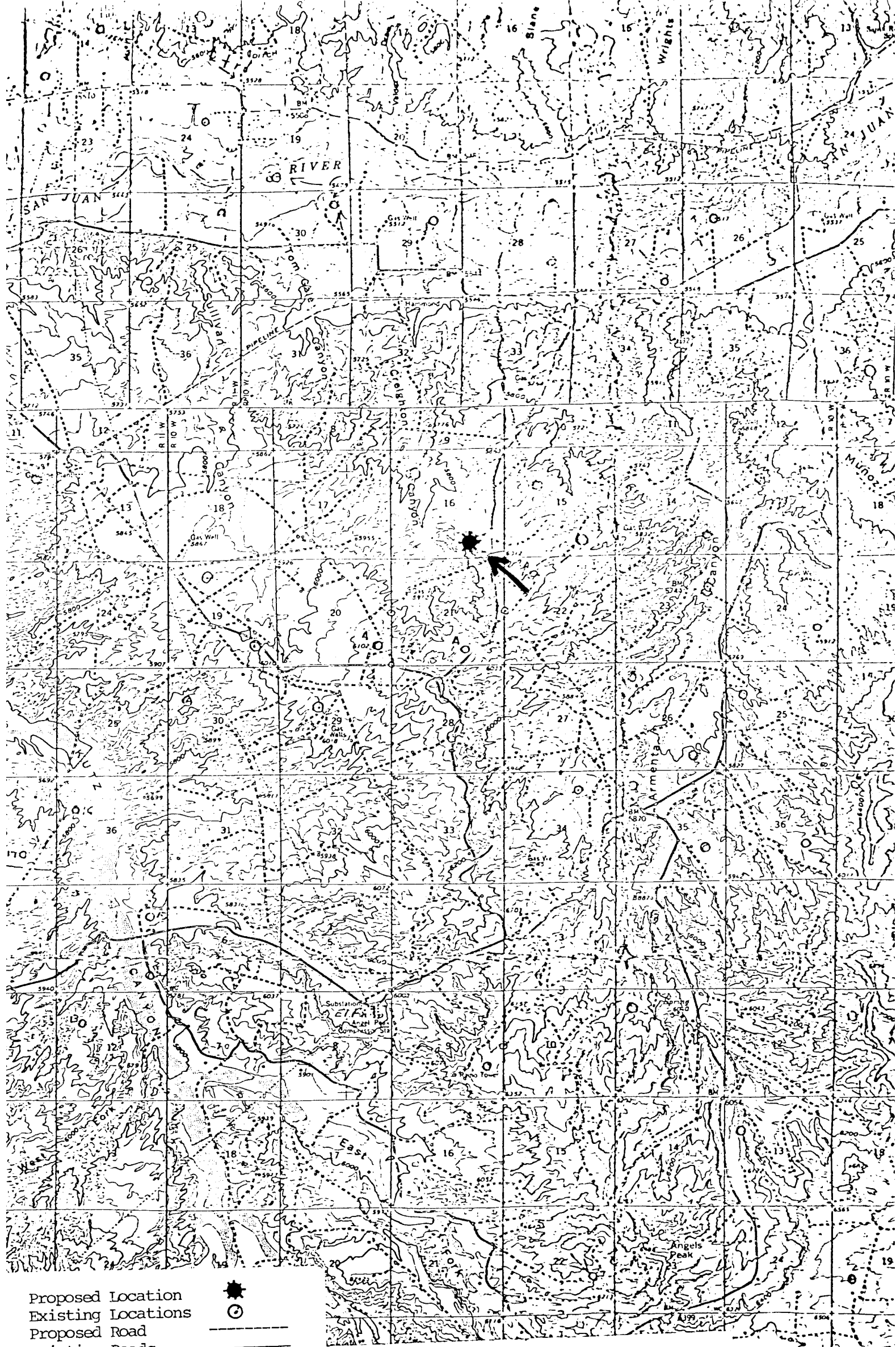
B-B'

6000					
5980					
5980					

Vert: 1"=40' C-C' Horiz: 1"=100'


D-D'


KERR LAND SURVEYING  
 Date: \_\_\_\_\_



Vicinity Map for  
 SOUTHLAND ROYALTY CO. #128 CAIN COM  
 820'FSL 1830'FEL Sec. 16-T28N-R10W  
 SAN JUAN COUNTY, NEW MEXICO