### SUBMIT IN TRIPLICATE.

Form approved. Budget Bureau No. 42-R1425.

QUANTITY OF CEMENT

160 sacks (Stage One)

175 sacks (Stage Two) 180 sacks (Stage Three)

140 sacks

UNITED STATES	reverse side)
AE TUE INTERIAR	

30-045-<u>339</u>14 DEPARTMENT OF THE INTERIOR 5. LEARS DESIGNATION AND SERIAL NO. GEOLOGICAL SURVEY SF-079634 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME PLUG BACK DEEPEN DRILL KT b. TYPE OF WELL MULTIPLE Z S. FARM OR LEASE NAME WELL K MELL OTHER **McClanahan** 2. NAME OF OPERATOR 9. WELL NO. Southland Royalty Company 3. ADDRESS OF OPERATOR #16E 10. FIELD AND POUL, OR WILDCAT P. O. Drawer 570, Farmington, NM 87401 Basin Dakota LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) Blanco Mesa Verde Ext 11. BEC, T., R., M., OR BLE. AND RURVET OR AREA 1520 FNL & 960' FWL At proposed prod. some Section 24, T28N, RlOW 12. COUNTY OR PARISH | 13. STATE 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE® San Juan New Mexico 5 miles SW of Blanco, New Mexico 15. DISTANCE FROM PROPURED\*
LOCATION TO KEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig, unit line, if any) 17. NO. OF ACRES ASSIGNED 16. NO. OF ACRES IN LEASE W/320 960' 2040 20. ROTARY OR CABLE TOOLS 18. DISTANCE FROM PROPOSED LOCATION®
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. 19. PROPOSED DEPTH 6488' Rotary 1150' 22. APPROX. DATE WORK WILL START\* 21. ELEVATIONS (Show whether DF, RT, GR, etc.) January 1, 1980 5756'\_GR PROPOSED CASING AND CEMENTING PROGRAM

SETTING DEPTH

2001

6488'

Surface formation is Nacimiento.

Top of Ojo Alamo sand is at 968'. Top of Pictured Cliffs sand is at 1930'.

BIZE OF CARING

200'

6488

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

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

WEIGHT PER FOOT

15.5#

24#

It is expected that this well will be drilled before June 30, 1980. This depends on time required for approvals, rig availability and the weather.

Gas is dedicated.

RIZE OF HOLE

12 1/4"

7 7/9"

ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If pine. If proposal is to drill or deepen directional eventer program, if any.	proposal is to deepen or plug back, give data on present productive ac illy, give pertinent data on subsurface locations and measured and tru	one and proposed new producti ue vertical depths: Give blows
MICHER De Kyten	District Production Manager	DATE 10-24-79
(This space for Federal or State office use)		
PREMIT NO.	APPROVAL DATE	
APPROVED BY	TITLE	DATE

ok French

NMOCC

#### STATE OF NEW MEXICO LHERGY AND MINERALS DEPARTMENT

# OIL CONSERVATION DIVISION P. O. BOX 2018

SANTA FE, NEW MEXICO 87501

Form C-102 kevised 10-1-7

All distances must be from the cuter foundative of the Section

				<del></del>			
Operator			Leas				Well No.
	ROYALTY COMPAI	<del></del>		MCCLANAHAN_	County		16-E
Unit Letter	Section 24	Township 28N		Romg∙ 10W	1	n Juan	-
E Actual Footage Loc	<del></del>	1 2014	L				
1520	feet from the	North	line and	960	feet from the	West	line
Ground Level Elev.	Producing For	mation	P∞l			Ded	licated Acreage:
5756	Dakota	- Mesa Verd	le	Basin - Bla	anco < × +		320 Acres
If more the interest ar     If more the	nd royalty). an one lease of d	dedicated to	the well, out	line each and	identify the	ownership there	of (both as to working owners been consoli-
dated by c Yes If answer ithis form if	No If a "no," list the f necessary.)	owners and tra-	type of con  ct descriptio  until all inter	c? solidation ns which have cats have bee	actually be	en consolidated	. (Use reverse side of itization, unitization, proved by the Commis-
				!		CE	RTIFICATION
1520						toined herein is best of my kno	y that the information con- is true and complete to the wledge and belief.
9601	)	Sec.	·			Position	Production Manager Royalty Company 1, 1979
	i			<u> </u>			
0	1	- sr-079634	24			shown on this notes of actua under my super	ify that the well location plat was plotted from field it surveys made by me or raision, and that the same orrect to the best of my belief.
				ON SIN	779 OM.)	Date Survey  Control  Registered part and in Control  Fred Rich	ANO SAN PROPERTY OF STREET
						Certificate No.	KEER. JA.
330 440 4	90 1320 1680 198	2310 2440	2000 1	1000	<b>300 0</b>	3950	



October 24, 1979

United States Geological Survey P. O. Box 959 Farmington, New Mexico

Attention: District Engineer

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's McClanahan #16E well. The locations of tank batteries and flow lines will be on location with well. A burn pit will be provided for disposal of trash. Cuttings, drilling fluid and produced fluids will be put into the reserve pit and properly disposed of depending on amount and type of fluids.

Contractor will furnish restroom facilities on location.

There will be no air strips or camps.

Also, encolsed is a location layout showing approximate location of rig, pits and pipe racks and cut required to build this location.

Water supply will be the San Juan River .....

The location will be restored according to Bureau of Land Management standards. This work will begin when all related construction is finished.

Mr. Ross Lankford will be Southland Royalty Company's field representative supervising these operations.

Yours truly,

L. O. Van Ryan

District Production Manager

LOVR/dg



October 24, 1979

United States Geological Survey P. O. Box 959 Farmington, New Mexico

Attention: District Engineer

Re: Blowout Preventer Plan

Dear Sir:

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

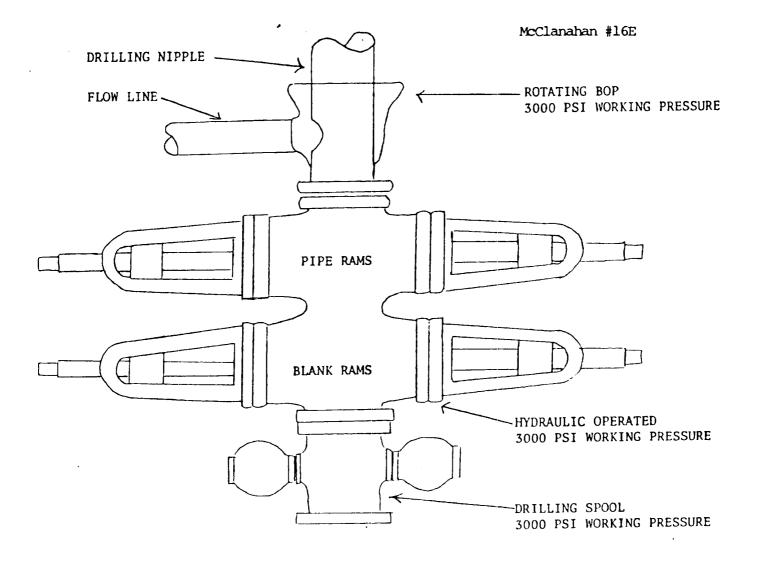
The preventer is 3000# working pressure and 6000# test.

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

Yours truly,

L. O. Van Ryan

District Production Manager



PREVENTERS AND SPOOLS ARE TO HAVE THROUGH BORE OF 6" - 3000 PSI OR LARGER



United States Geological Survey P. O. Box 959 Farmington, New Mexico 87401

Attention: James Sims

Dear Sir:

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 be performed by Southland Royalty Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: October 24, 1979

Title: District Production Manager

## SOUTHLAND ROYALTY COMPANY - DRILLING SCHEDULE

# MCCLANAHAN #16 E

1520' FWL & 960' FWL Section 24, T28N, RlOW San Juan County, New Mexico

Field: Basin Dakota/Blanco Mesa Verde <u>Elevation</u>: 5756' GR

# Geology:

Formation Tops:	Ojo Alamo	968'	Gallup	5398'
101	Fuitland	1568'	Graneros	6218'
	Pictured Cliffs	1930'	Dakota	633 <b>8'</b>
	Cliff House	3500 <b>'</b>	Total Depth	6488
	Point Lookout	4173'		

Logging Program: IES and GR-Density from surface to total depth.

Coring Program: None

Natural Gauges: None

## Drilling:

Contractor: Tool Pusher:

SRC Ans Svc: 325-1841 SRC Rep: SRC Dispatch: 325-7391

Mud Program: Fresh water from surface to 5200'.

Fresh water mud at 5200'.

Maintain mud weight of 8.9 - 9.4; Vis. of 35 - 40 sec.; Water Loss of 10 - 12 cc. Pretreat mud with 10% ICM at 5400' and

maintain thru Gallup formation.

#### Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12 1/4"	200 <b>'</b>	8 5/8"	24# H-40
	7 7/8"	6488'	5 1/2"	15.5# K-55

#### Float Equipment:

8 5/8" Surface Casing: Pathfinder type "A" guide shoe.

5 1/2" Production Casing: Pathfinder type "A" guide shoe. Self-fill flapper

type float collar run 1 joint off bottom. 5 Pathfinder bow type stabilizers (run every other joint above shoe). Dowell stage tools at 4500' and 2010' with 1 cement basket below and 5 Pathfinder rigid

stabilizers above each tool.

# Wellhead Equipment:

8 5/8"  $\times$  10", 2000# braden head with 5 1/2" casing hanger.

10", 2000# X 6", 2000# tubing head and tree.

## Cementing:

8 5/8" Surface Casing: 140 sacks (165 cu.ft.) of Class "B" with 1/4# gel flake per sack and 3% CaCl2. WOC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

5 1/2" Production Casing: STAGE ONE - 160 sacks (236 cu. ft.) of 50/50 Poz with 6% gel, 1/4# gel flake per sack followed by 50 sacks of neat with 2% CaCl<sub>2</sub>. (Volume is 25% excess to cover top of Gallup.)

> STAGE TWO - 175 sacks (260 cu. ft.) of 50/50 Poz with 6% gel followed by 50 sacks of neat with 2% CaCl2. (Volume is 50% excess to cover top of Cliff House.)

STAGE THREE - 180 sacks (271 cu. ft.) of 50/50 Poz with 6% gel. (Volume is 50% excess to cover top of Ojo Alamo.)

WOC and circulate between stages as required by well conditions.

> L. O. Van Ryan District Production Manager

BJM/ke

