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# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101  
Revised 1-1-65

5A. Indicate Type of Lease	
STATE <input type="checkbox"/>	FEE <input checked="" 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 checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		8. Farm or Lease Name Harper Valley	
2. Name of Operator Southland Royalty Company		9. Well No. 1	
3. Address of Operator P.O. Drawer 570, Farmington, NM 87499		10. Field and Pool, or Wildcat Basin Dakota	
4. Location of Well UNIT LETTER <u>C</u> LOCATED <u>1055</u> FEET FROM THE <u>North</u> LINE AND <u>1450</u> FEET FROM THE <u>West</u> LINE OF SEC. <u>15</u> TWP. <u>29N</u> RGE. <u>14W</u> NMPM		12. County San Juan	
19. Proposed Depth 5700'		19A. Formation Dakota	
20. Rotary or C.T. Rotary		21. Elevations (Show whether DE, RT, etc.) 5232' GL	
21A. Kind & Status Plug. Bond ----		21B. Drilling Contractor	
22. Approx. Date Work will start June 15, 1985			

23.

### 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#. K-55	200'	165 cuft/140 sxs	Surface
7-7/8"	4-1/2"	10.5#. K-55	5650'	Stage 1: 300 sxs	Gallup
				- 412 cu.ft.	
				Stage 2: 350 sxs	Cliff House
				- 500 cu.ft.	
				Stage 3: 145 sxs	Fruitland
				- 214 cu.ft.	

Surface formation is Kirtland Shale.  
Top of Fruitland sand is at 480'.  
Top of Pictured Cliffs sand is at 745'.  
Fresh water mud will be used to drill from surface to total depth.  
It is anticipated that an IEL and GR-CNL/FDC will be run from total depth to surface casing.  
No abnormal pressures or poisonous gases are anticipated in this well.  
It is expected that this well will be drilled before June 30, 1985.  
This depends on time required for approvals, rig availability and the weather.  
Gas is not 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 Operations Engineer Date April 12, 1985

(This space for State Use)

APPROVED BY [Signature] TITLE SUPERVISOR DISTRICT #3 DATE APR 15 1985

CONDITIONS OF APPROVAL, IF ANY:

*Hold C-104 for 160 acre approval*

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-4-65

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

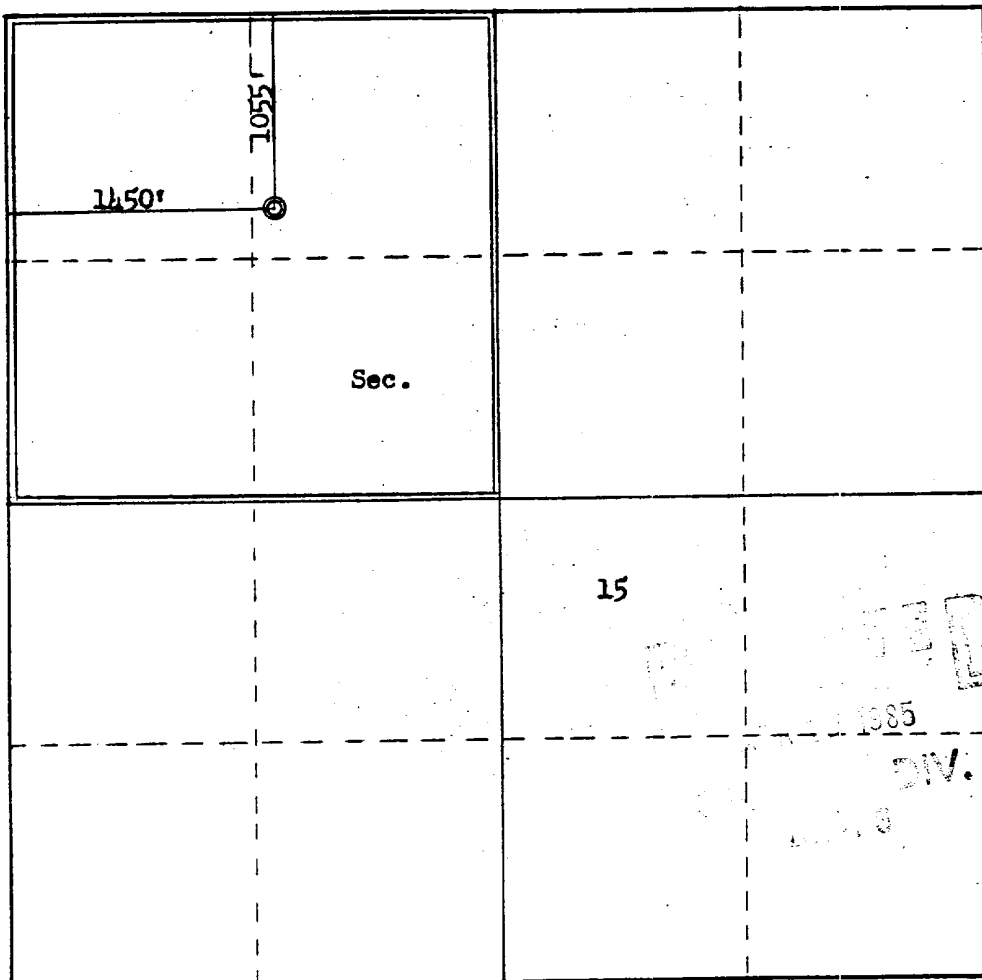
Operator <b>SOUTHLAND ROYALTY COMPANY</b>			Lease <b>HARPER VALLEY</b>		Well No. <b>1</b>
Unit Letter <b>C</b>	Section <b>15</b>	Township <b>29N</b>	Range <b>14W</b>	County <b>San Juan</b>	
Actual Footage Location of Well: <b>1055</b> feet from the <b>North</b> line and <b>1450</b> feet from the <b>West</b> line					
Ground Level Elev: <b>5232' GL</b>	Producing Formation <b>Dakota</b>	Pool <b>Basin</b>	Dedicated Acreage <b>160</b> Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
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).
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?

☐ Yes   ☐ No   If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

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.



Scale: 1"=1000'

**CERTIFICATION**

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

Name  
**C. Terry Hobbs**  
Position  
**Dist. Operations Engineer**  
Company  
**Southland Royalty Company**  
Date  
**April 12, 1985**

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  
**March 29, 1985**  
Registered Professional Engineer and Land Surveyor  
**Fred B. Kerr Jr.**  
Certificate No. **3950**

SOUTHLAND ROYALTY COMPANY - DRILLING SCHEDULE

HARPER VALLEY #1  
1055' FNL & 1450' FWL  
Section 15, T29N, R14W  
San Juan County, New Mexico

Field: Basin Dakota

Elevation: 5232' GL

Geology:

Formation Tops:	Fruitland	480'	Gallup	4475'
	Pictured Cliffs	745'	Greenhorn	5270'
	Cliff House	2250'	Dakota	5440'
	Point Lookout	3375'	Total Depth	5700'

Logging Program: IEL and GR-CNL/FDC from total depth to surface casing.  
(Induction curve to be traced on Density Log).

Drilling:

Contractor:

Tool Pusher:

SRC Rep:

Ross Lankford

SRC Ans. Service: 325-1841

Dispatch Number: 325-7391

Mud Program:

Fresh water mud from surface to total depth.

Materials:

Casing Program:	<u>Hole Size</u>	<u>Depth Set</u>	<u>Casing Size</u>	<u>Weight &amp; Grade</u>	
	12-1/4"	200'	8-5/8"	24#	K-55
	7-7/8"	5650'	4-1/2"	10.5#	K-55

Float Equipment:

8-5/8" Surface Casing: Cement nose guide shoe.

4-1/2" Production Casing: Cement nose guide shoe, self-fill flapper float collar run one joint above shoe, and 5 centralizers run every other joint above shoe joint. Run stage collars at + 3700' and + 1100' with cement basket one joint below, and five centralizers every other joint above stage collar.

Well Equipment:

8-5/8" X 10", 2000 psi casing head  
10", 2000 psi X 6", 2000 psi tubing head X 2-3/8" tubing hanger.

Cement Program:

8-5/8" Surface Casing: 140 sacks (165 cu.ft.) of Class "B" with 1/4# flocele per sack and 3% CaCl<sub>2</sub>. WOC 12 Hours. Pressure test to 600 psi prior to drilling out. (100% excess).

4-1/2" Production Casing: **STAGE ONE**

200 sacks (294 cu.ft.) of Class "B" 50/50 Poz with 4% gel, 1/4# flocele per sack, tail in with 100 sacks (118 cu.ft.) of Class "B" neat with 2% CaCl<sub>2</sub>.  
(Volume is 50% excess to cover Gallup.)

**STAGE TWO**

300 sacks (441 cu.ft.) of Class "B" 50/50 Poz with 4% gel, 1/4# flocele per sack, tail in with 50 sacks (59 cu.ft.) of Class "B" neat with 2% CaCl<sub>2</sub>.  
(Volume is 50% excess to cover Cliff House.)

**STAGE THREE**

145 sacks (214 cu.ft.) of Class "B" 50/50 Poz 4% gel and 1/4# flocele per sack.  
(Volume is 50% excess to cover Fruitland.)

WOC and circulate 4 hours between stages.  
Adjust cement volume to caliper log.

---

R. E. Fielder  
District Production Manager

MRL/CTH/eg

4/12/85



**Southland Royalty Company**

April 12, 1985

Mr. Frank Chavez  
Oil Conservation Division  
1000 Rio Brazos Road  
Aztec, New Mexico 87410

RE: Blowout Preventer Plan

Dear Mr. Chavez:

All drilling and completions 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 pressure. All crews will be thoroughly trained in the operation of this preventer. The preventer will be tested frequently enough to ensure proper operation.

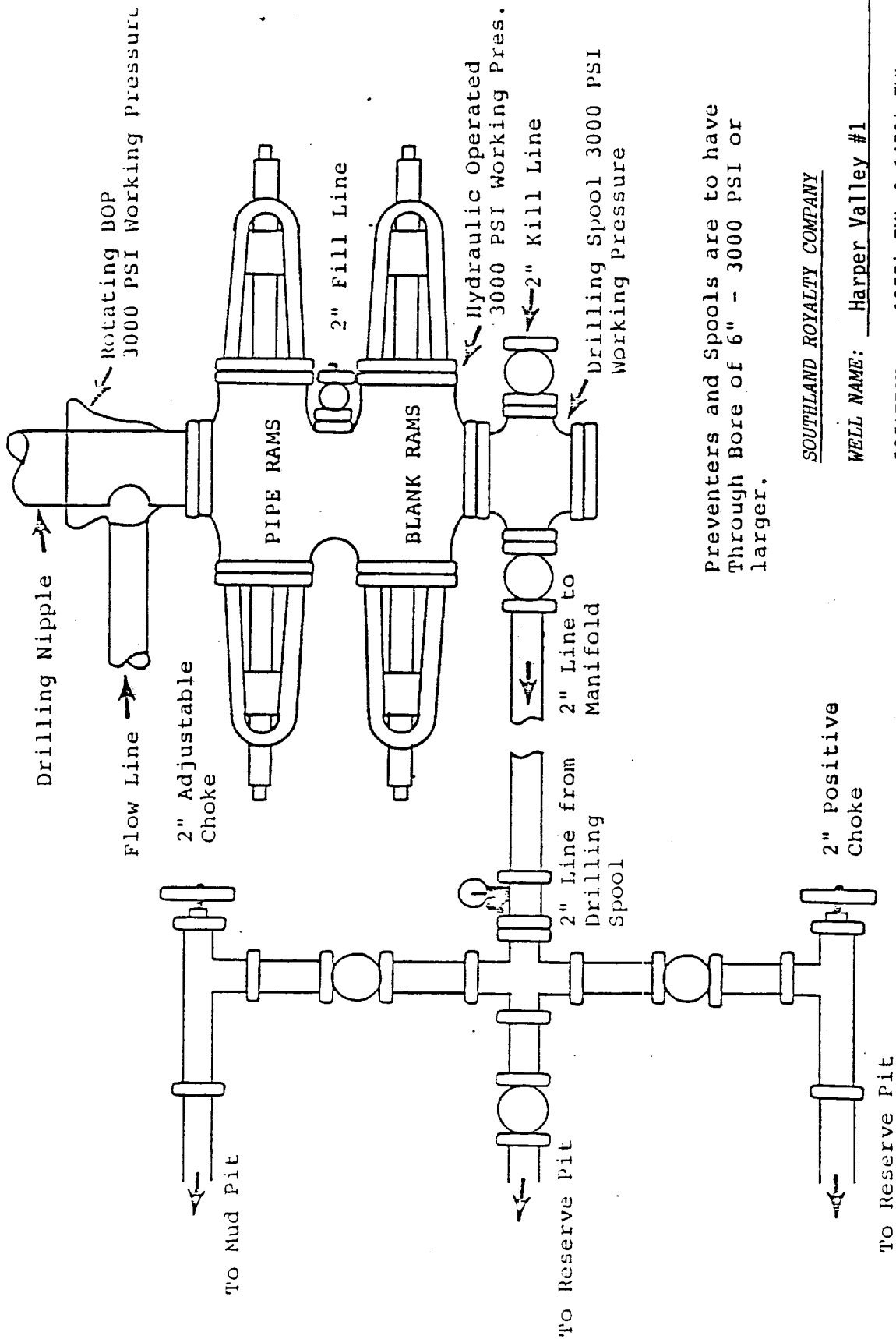
Sincerely,

SOUTHLAND ROYALTY COMPANY

C. Terry Hobbs  
District Operations Engineer

CTH/eg

Attachment



Preventers and Spools are to have Through Bore of 6" - 3000 PSI or larger.

SOUTHLAND ROYALTY COMPANY

WELL NAME: Harper Valley #1

LOCATION: 1055' FNL & 1450' FWL

Section 15, T29N, R14W

COUNTY: San Juan

STATE: New Mexico

