

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

O. C. D.

ARTESIA OFFICE

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

## 1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

## b. TYPE OF WELL

OIL  
WELL ☐GAS  
WELL ☒

OTHER

SINGLE  
ZONE ☒MULTIPLE  
ZONE ☐

## 2. NAME OF OPERATOR

Southland Royalty Company

## 3. ADDRESS OF OPERATOR

1100 Wall Towers West, Midland, Texas 79701

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

At surface

1980' FWL &amp; 660' FSL, Sec. 4, T-18-S, R-30-E

At proposed prod. zone

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

3 miles South of Loco Hills, New Mexico

## 15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any) 660'

## 16. NO. OF ACRES IN LEASE

2083.04'

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

320

## 18. DISTANCE FROM PROPOSED LOCATION\*

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

## 19. PROPOSED DEPTH

11,900'

## 20. ROTARY OR CABLE TOOLS

Roatry

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

3539.7' GR

## 22. APPROX. DATE WORK WILL START\*

8-1-82

## 23.

## PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	11 3/4"	42#	275'	500 sx. <del>CIRCULATE</del>
11 "	8 5/8"	28-24#	3350'	2000 sx. <del>CIRCULATE</del>
7 7/8"	4 1/2"	13.5-11.6#	11,900'	Volume may vary w/upper zone develop- ment (TOC by Temp survey)

Set surface csg @ 275' Anhydrite. Circ cmt. Drl 11" hole w/brine wtr & set 8 5/8" csg @ 3350'. Circ cmt. Drl to TD to tst Atoka & intermediate horizons. If commercial, run 4 1/2" csg to TD. Cmt w/sufficient volume to bring above all prospective zones. Estimated TOC @ 8500'. Perf & stimulate Atoka for production.

**MUD PROGRAM:** 0-275' spud mud; 275-3350' brine wtr; 3350-8300' cut brine wtr; 8300-10,500' cut brine, gel, Drispac; 10,500-TD cut brine, gel, Drispac & 3% KCL. MW 9.3-9.5, VIS 34-35, FL 6 cc thru Atoka. BHP @ TD expected to be 4000 psi.

**BOP PROGRAM:** BOP to be installed on 11 3/4" Double 10" Ser 900. BOP to be installed on 8 5/8" Double 10" Ser 900 plus 10" Ser 900 Hydril plus drillinghead. Test BOP w/Yellow Jacket, Inc. after setting on 8 5/8". Test BOP @ 8000'.

GAS 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. 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

*F. N. R.*

TITLE District Operations Engineer, DATE 5-18-82

(This space for Federal or State office use)

PERMIT NO.

(Orig. Sgd.) GEORGE H. STEWART

APPROVAL DATE

APPROVED BY

AUG 19 1982

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

FORM PREPARED BY JAMES A. GILLHAM  
Cathy Nokes OR 682-8641  
DISTRICT SUPERVISOR

\*See Instructions On Reverse Side

NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT

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

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

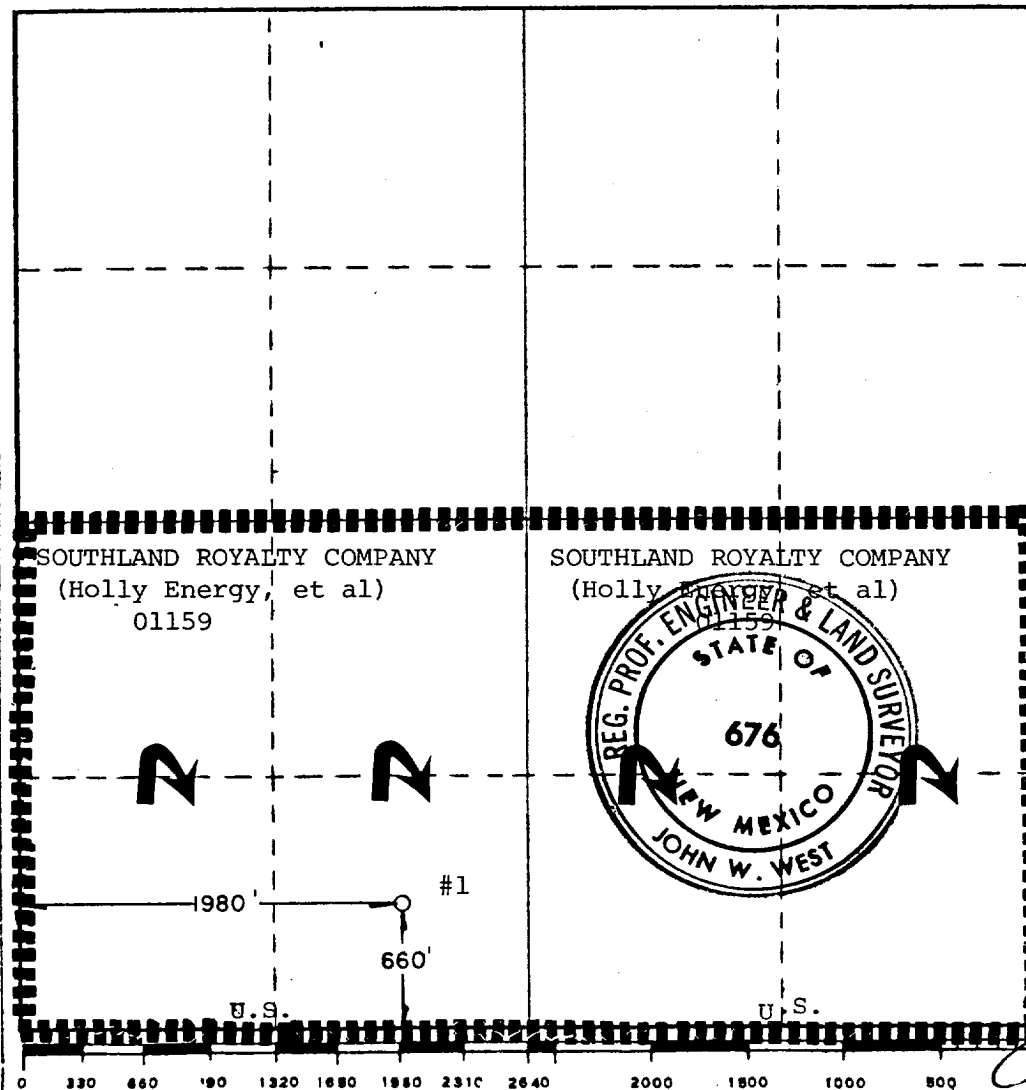
Operator <b>Southland Royalty Co.</b>		Lease <b>Holly Fed. "4"</b>		Well No. <b>1</b>	
Unit Letter <b>N</b>	Section <b>4</b>	Township <b>18 South</b>	Range <b>30 East</b>	County <b>Eddy</b>	
Actual Footage Location of Well: <b>660</b> feet from the <b>south</b> line and <b>1980</b> feet from the <b>west</b> line					
Ground Level Elev. <b>3539.7'</b>		Producing Formation <b>Atoka</b>		Pool <b>Undesignated</b>	Dedicated Acreage: <b>320</b> Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure 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 Communitization

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.



CERTIFICATION

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

Name F. N. Romero  
Position District Operations Engineer  
Company Southland Royalty Company  
Date 5/14/1982

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 1-14-82  
Registered Professional Engineer and/or Land Surveyor John W. West  
Certificate No. JOHN W. WEST 676  
PATRICK A. ROMERO 6663  
Ronald J. Eidson 3239

SOUTHLAND ROYALTY COMPANY

Holly Federal "4" No. 1  
660' FSL & 1980' FWL  
Sec. 4, T-18-S, R-30-E  
Eddy County, New Mexico  
NM 01159

To supplement USGS Form 9-331C "Application to Drill" the following additional information is submitted concerning questions on Page 5 of NTL-6:

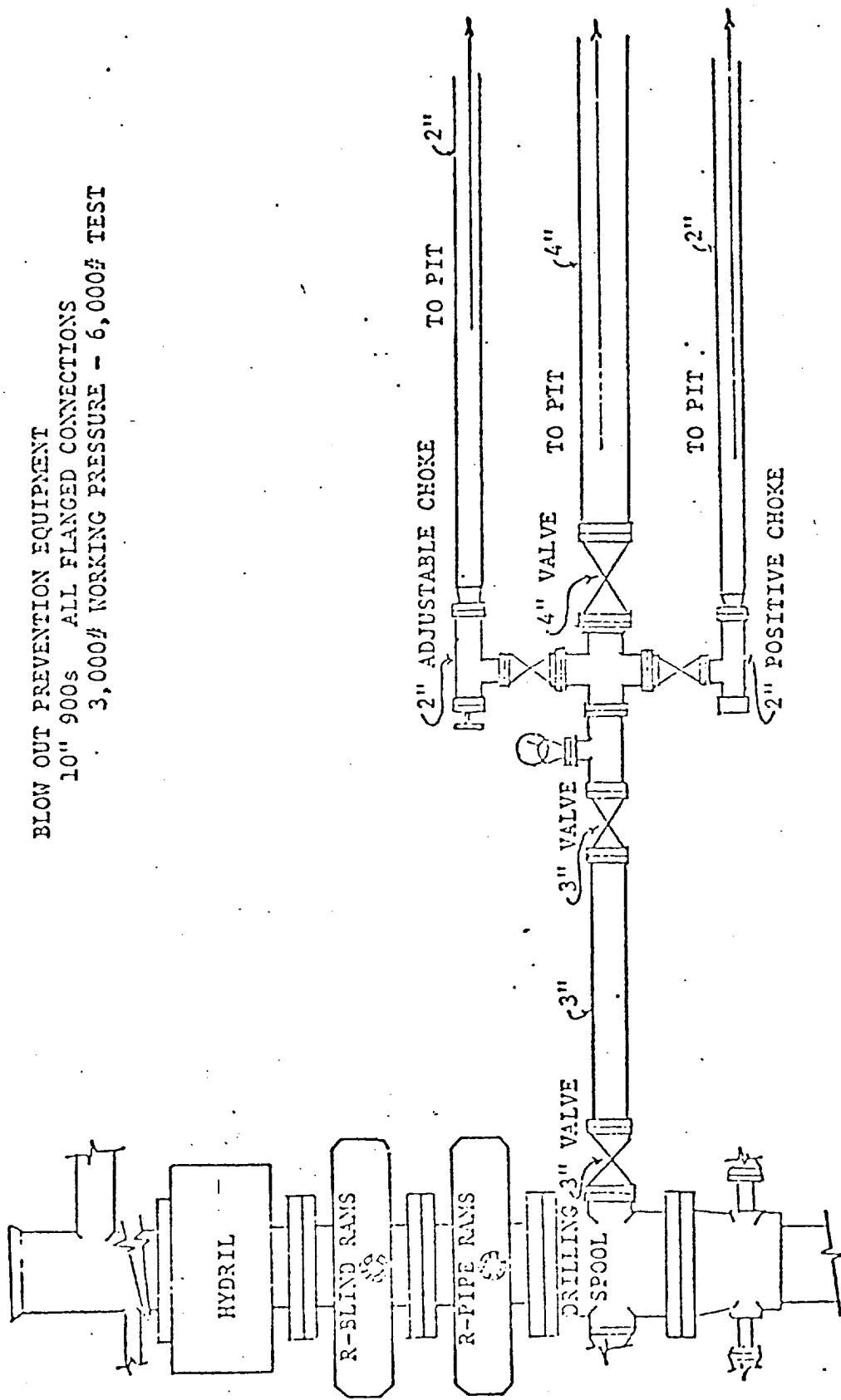
1. See Form 9-331C.
2. See Form 9-331C.
3. The geological name of surface formation is: Ochoa
4. See Form 9-331C.
5. See Form 9-331C.
6. The estimated tops of important geological markers are:

Anhydrite	260'	Glorietta	4640'	Atoka	10,750'
T/Salt	500'	1st Bone Springs	6725'	Atoka Lime	10,995'
B/Salt	1260'	2nd Bone Springs	7225'	Morrow	11,175'
Yates	1425'	3rd Bone Springs	8000'	B/Morrow	11,650'
Queen	2420'	Wolfcamp	8450'		
Grayburg	2800'	Cisco	9530'		
San Andres	3260'	Lower Strawn	10,490'		
7. The estimated depths at which anticipated water, oil, gas and mineral bearing strata are as follows:

San Andres	3260'	(Oil)
Wolfcamp	8450'	(Oil)
Cisco	9530'	(Gas)
Strawn	10,490'	(Gas)
Atoka	10,750'	(Gas)
8. See Form 9-331C. All casing will be new.
9. See Form 9-331C for depths of strings. Cement volumes and additions as follows:
  - a. 11 3/4" csg: Cement w/500 sxs Class "C" cmt w/2% CaCl. Circ to surface.
  - b. 8 5/8" csg: Cement w/1600 sxs lite wt cmt & 400 sxs Class "C". Circ cmt to surface. Caliper log to be run in conjunction w/GR/CNL/DLL/CDL/BVI/ Caliper log to determine open hole volume for computation of actual cement volume to circ to surface.
  - c. 4 1/2" csg: Cement w/435 sxs lite wt cmt & 300 sxs Class "H" 50-50 Pozmix  
A. Run caliper log in conjunction w/open hole logs to determine exact hole volume. Top of cmt anticipated at 8500'. Cmt volume could vary w/development of intermediate horizons.
10. The pressure control diagram is attached to Form 9-331C. The following additional information is as follows:

11 3/4" casing installation: 10" Ser 900 3000 psi double hydraulic pipe and blind rams.

BLOW OUT PREVENTION EQUIPMENT  
 10" 900s ALL FLANGED CONNECTIONS  
 3,000# WORKING PRESSURE - 6,000# TEST



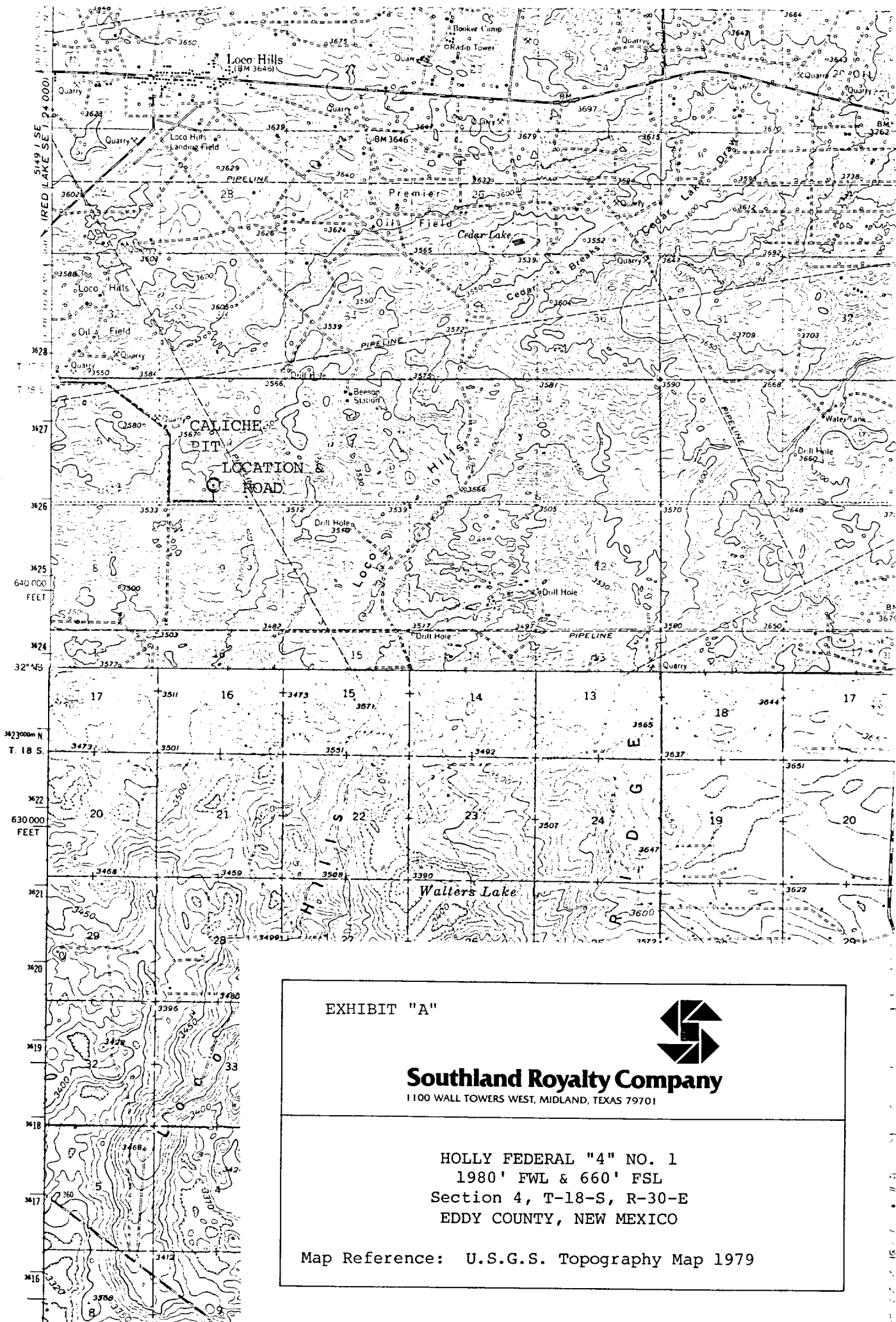


EXHIBIT "A"



**Southland Royalty Company**

1100 WALL TOWERS WEST, MIDLAND, TEXAS 79701

HOLLY FEDERAL "4" NO. 1  
1980' FWL & 660' FSL  
Section 4, T-18-S, R-30-E  
EDDY COUNTY, NEW MEXICO

Map Reference: U.S.G.S. Topography Map 1979

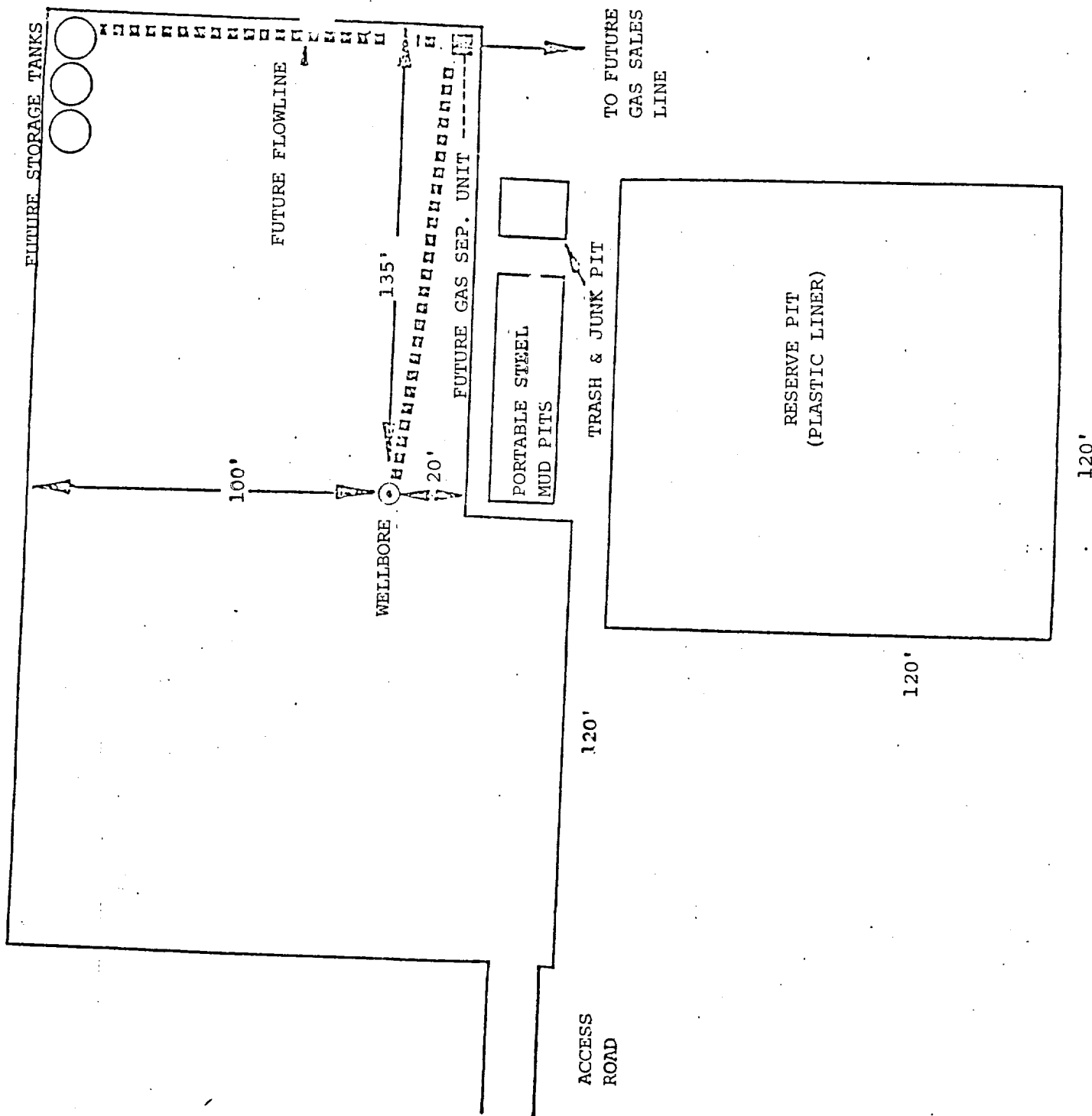


EXHIBIT "C"



**Southland Royalty Company**

1100 WALL TOWERS WEST, MIDLAND, TEXAS 79701

HOLLY FEDERAL "4" No. 1  
1980' FWL & 660' FSL  
Section 4, T-18-S, R-30-E  
EDDY COUNTY, NEW MEXICO

Scale 1" = 40'