

30-015-23777

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

C/SF

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL [X] DEEPEN [] PLUG BACK []

b. TYPE OF WELL OIL WELL [] GAS WELL [X] OTHER [] SINGLE ZONE [X] 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' FNL & 1980' FEL, Sec 21, T-19-S, R-27-E At proposed prod. zone same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 14 miles north of Carlsbad

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 660' S

16. NO. OF ACRES IN LEASE 320

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. None

19. PROPOSED DEPTH 10,600

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3435.2' GR

22. APPROX. DATE WORK WILL START* April 15, 1981

23. PROPOSED CASING AND CEMENTING PROGRAM

Table with 5 columns: SIZE OF HOLE, SIZE OF CASING, WEIGHT PER FOOT, SETTING DEPTH, QUANTITY OF CEMENT. Rows include 17 1/2" hole with 11 3/4" casing, 11" hole with 8 5/8" casing, and 7 7/8" hole with 4 1/2" casing.

Propose to set 11 3/4" csg. @ 250', Circ cmt. Set 8 5/8" csg @ 2,000', circ cmt. Drill to TD of 10,600' to test Morrow & intermediate horizons. If commercial, will run 4 1/2" csg to TD. Cmt w/sufficient volume to bring cmt. back above all productive zones or to approx 8500' if Morrow only is productive. If intermediate horizons indicate production, will run DV tool @ + 9600' and use additional cmt. volumes to obtain better cmt. over intermediate zone. Will perf & stimulate Morrow for production. Acid treatment to be determined on sand interval present, will use approx. 200 gals/ft. MUD PROGRAM: 0-250' spud mud; 250-2,000' brine wtr, 2,000'-7,500' fresh wtr. 7500'-8000' Cut brine water, 8,000'-TD, Starch, Gel, Flosal, Drispac, 3% KCL, Weight 9.5-10#, Vis 40cc, Water loss 6cc thru Atoka/Morrow. No abnormal pressures anticipated w/BHP at TD expected to be 4000psi. BOP PROGRAM: Test BOP each new installation with Yellow Jacket, Inc. after setting 8 5/8" csg; test at 8,000'. 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. 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 District Operations Engineer DATE 4/7/81

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY [Signature] TITLE DATE

CONDITIONS OF APPROVAL, IF ANY: See attached

RECEIVED

APR - 8 1981

**U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO**

PTN

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.

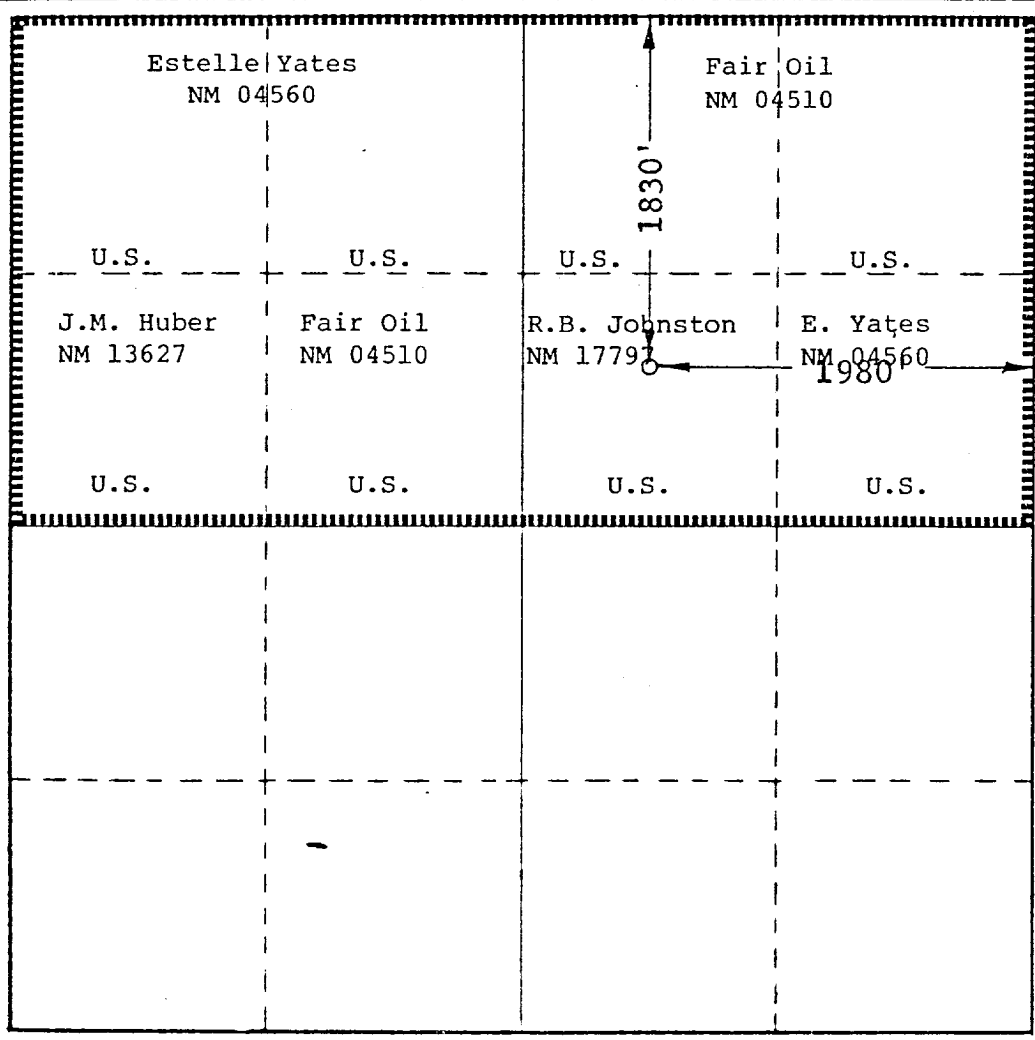
Operator Southland Royalty Co.		Lease Pecos River, Federal 2114		Well No. 1
Unit Letter G	Section 21	Township 19 South	Range 27 East	County Eddy
Actual Footage Location of Well: 1830 feet from the North line and 1980 feet from the East line				
Ground Level Elev.	Producing Formation Morrow	Pool North Part of Mars-Morrow Undesignated	Dedicated Acreage: 320 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?

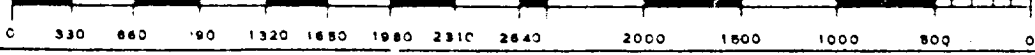
Yes No If answer is "yes," type of consolidation Communitized

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>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</i>
Name <i>C. Parsons</i>
Position District Operations Engineer
Company Southland Royalty Company
Date April 6, 1981
<i>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.</i>
Date Surveyed April 21, 1980
Registered Professional Engineer and/or Land Surveyor <i>Ronald J. Eidson</i>
Certificate No. JOHN V. WEST 876 PATRICK A. ROMERO 8663 Ronald J. Eidson 3239



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

5. LEASE DESIGNATION AND SERIAL NO.

NM 17797

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Pecos River Federal 25~~th~~ Com.

9. WELL NO.

1

10. FIELD AND POOL, OR WILDCAT

North P. C. Millan
Undesignated (Morrow)

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec 21, T-19-S, R-27-E

12. COUNTY OR PARISH 13. STATE

Eddy

NM

1. OIL WELL GAS WELL OTHER

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. See also space 17 below.)

At surface

1830

1980' FNL & 1980' FEL

Sec. 21, T-19-S, R-27-E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF

PULL OR ALTER CASING

WATER SHUT-OFF

REPAIRING WELL

FRACTURE TREAT

MULTIPLE COMPLETE

FRACTURE TREATMENT

ALTERING CASING

SHOOT OR ACIDIZE

ABANDON*

SHOOTING OR ACIDIZING

ABANDONMENT*

REPAIR WELL

CHANGE PLANS

(Other) Moved location

(Other)

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Moved location from 1980' FN & EL of Section 21, T-19-S, R-27-E to 1830' FNL & 1980' FEL of Section 21, T-19-S, R-27-E to comply with request of BLM.

See attached plat & surface use plan.

RECEIVED
APR 22 1981
U.S. GEOLOGICAL SURVEY

APPROVED
GEORGE E. STEWART
FOR
JAMES A. GILLHAM
DISTRICT SUPERVISOR

18. I hereby certify that the foregoing is true and correct

SIGNED

TITLE District Operation Engineer

DATE 4/21/81

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

N 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.

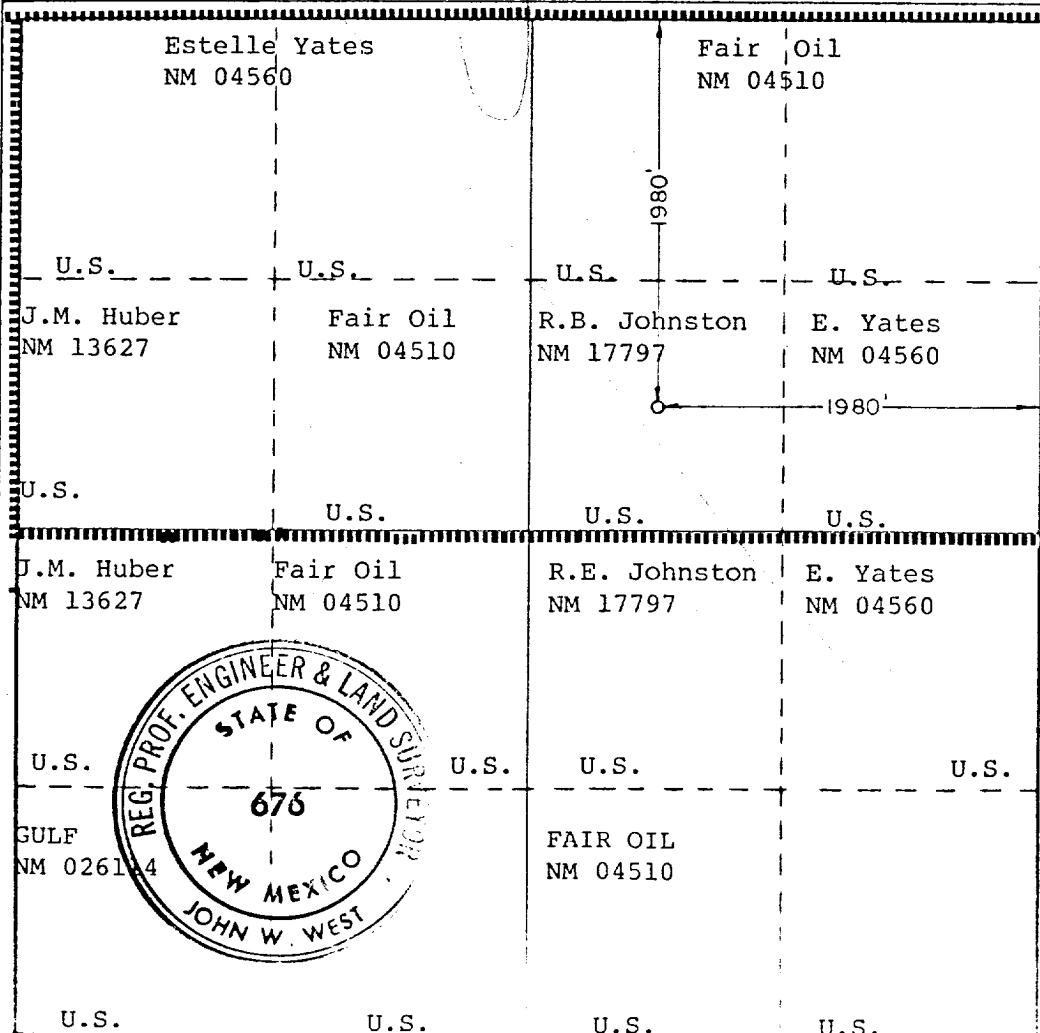
Operator Southland Royalty Co.			Lease Pecos River Federal 21A		Well No. 1
Unit Letter G	Section 21	Township 19 South	Range 27 East	County Eddy	
Actual Footage Location of Well: 1980/1830 feet from the north line and 1980 feet from the east line					
Ground Level Elev. 3435.2	Producing Formation MORROW	Pool Undesignated	Dedicated Acreage: 320 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 Communitized

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: *[Signature]*
Position: **District Operations Engineer**
Company: **Southland Royalty Company**
Date: **April 6, 1981**

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: **3-27-81**

Registered Professional Engineer and Land Surveyor

JOHN W. WEST 876
PATRICK A. POMERO 6865
BERRY V. ... 3219

SOUTHLAND ROYALTY COMPANY
Pecos River Federal "21-A" Com No. 1
Sec. 21, T-19-S, R-27-E, Eddy Co., New Mexico
1980' FNL & 1980' FEL
NM 17797

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: Guadalupian
4. See Form 9-331C.
5. See Form 9-331C.
6. The estimated tops of important geological markers are:

Grayburg	1300'	Atoka	9600'
San Andres	1850'	Morrow (NMOCD)	9970'
Bone Spring	2630'	Mississippian	10,375'
Wolfcamp	7445'		
Cisco	8220'		
Strawn	9070'		

7. The estimated depths at which anticipated water, oil, gas and mineral bearing strata are as follows:

San Andres	(Oil)	1850'
Wolfcamp	(Gas)	7745'
Cisco	(Gas)	8220'
Strawn	(Gas)	9070'
Atoka	(Gas)	9600'
Morrow	(Gas)	9970'

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" casing: Cement w/425 sx. Class "C" cement with 2% calcium chloride. Circulate cement back to surface. A caliper log will be run
 - b. 8 5/8" casing: Cement w/400 sx. class "C" Lite cement w/5# salt/sx. and 5# Gilsonite/sx and 1/4# Flocele/sx. plus 375 sx Class "C" cement w/2% calcium chloride. Circulate cement back to surface. A caliper log will be run in conjunction with other logs prior to running casing to obtain exact hole volumes. it is estimated that the volumes used will circulate back to surface of ground.

C-4 1/2" casing: Cement w/ 850sx. Class "H" cement consisting of 850 sxs. Class "H" cement w/5# KCL/sx. plus 3/4% fluid loss additive. Will run caliper in conjunction w/open hole logs prior to setting 4 1/2" casing to determine exact cementing volumes. Top cement estimated to be at 7000'. Cementing volumes could vary depending on development of intermediate horizons. Could add 1/4# Celloflake if lost circ. or seepage suspected.

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.

8 5/8" casing installation; 10" Ser 900 3000 psi double hydraulic pipe and blind rams plus 10" Ser 900 3000 psi Hydril plus 10" Ser 900 Rotating Head.

Testing Procedure:

11 3/4" csg. pressure to be 1000 psi for 30 min. before drilling below 11 3/4" csg.

8 5/8" csg. pressure to 1500 psi for 30 min. before drilling below 8 5/8" csg by Yellow Jacket, Inc. to test the 8 5/8" casing installation.

Test BOP daily while drilling and on all trips.

11. See Form 9-331C.

12. A. DST program - probable DST in Cisco after coring

b. Cores - 30' conventional core in Cisco at +8200'.

c. Mud Logging 250'-TD

d. Wireline logs

250'-2000'

2000'-TD Compensated Neutron/Formation Density/GR/Caliper/ Borehole Volume Intergrator

250'-2000'

2000'-TD Dual Laterolog/GR/RXO

13. No abnormal pressures anticipated with bottom hole pressures at TD expected to be 4000 . Bottom hole temperature 180° F. No Hydrogen Sulfide expected in this known drilling area. No crooked hole or abnormal deviation problems.

14. Anticipated starting date to spud- April 15, 1981 . Previous drilling in the area indicates 45 days from spud to setting 4 1/2" casing at TD.

SURFACE USE PLAN

SOUTHLAND ROYALTY COMPANY

Pecos River Federal "21-A" Com No. 1
Sec. 21, T-19-S, R-27-E, Eddy Co. New Mexico

1830' FNL & 1980' FEL
NM 17797

This plan is submitted with Application to Drill on above described well. The minerals are federal, and the surface is leased for grazing (See below for surface lessee). The purpose of this plan is to describe the location, proposed construction activities and operations plans, magnitude of necessary surface disturbance and procedures to be followed in rehabilitating the surface after completion of the operation so that complete appraisal can be made of the environmental effects associated with the operation.

1. Existing Roads:

Exhibit "A" is a portion of a USGS Topographic map showing the location of the proposed well as staked.

Directions to the well are as follows: From the center of Carlsbad, go North on paved county road (North Connell St.) for 17 miles. Turn Southwest and go four miles. Turn west and go 1/4 mile on lease road and then on new road along fence for approximately 1/2 mile.

2. Planned Access Road:

a. One road will be built from the existing lease road to the proposed location. New road required will be 12 feet wide and 2830' long. The center line of the proposed new road from the beginning to the well site has been staked and flagged with the stakes being visible from any one to the next.

b. Surfacing Material: 6" of caliche, watered, compacted and graded.

3. Location of Existing Wells in Area:

See Exhibit "B"

4. Location of Proposed Facilities:

Location of proposed well site and tank battery is shown on Exhibit "C". The battery will be located on proposed well pad, no additional surface disturbance will be necessary.

5. Water Supply:

a. No available surface or sub-surface fresh water exists in the vicinity of the proposed well. Drilling water will be transported to the drill site from the nearest commercial source.

6. Source of Construction Material:

Caliche for surfacing access road and pad will be obtained from existing pit located as shown on Exhibit "A" in NW/4 SW/4, Sec 22, T-19-S, R-27-E. The pit has been cleared by the agency for conservation archaeology. The Report clearing the pit will be submitted as soon as it is received.

7. Handling Waste disposal:

- a. Drill cuttings - disposed into drilling pits.
 - b. Drill fluids - allowed to evaporate in drill pits until pits dry.
 - c. Produced water during testing - drill pits.
 - d. Produced oil during testing - storage tank until sold.
 - e. Current laws and regulations pertaining to disposal of human waste will be observed.
 - f. Reserve pit will be plastic lined.
 - g. Waste paper, garbage, junk disposed of into special trash pit at location and covered with minimum of 24 inches of dirt upon completion of well. All waste material will be contained to prevent scattering by wind.
8. All trash and debris will be buried or removed from well site within 30 days after finish drilling and/or completion operations.

9. Ancillary Facilities:

None

10. Plans for Restoration of Surface:

- a. After completion of drilling and/or completion of operations, all equipment and other material not needed for operations will be removed. Pits will be filled and locations cleaned of trash and junk to leave well site in as aesthetically pleasing a condition as possible.
- b. Any unguarded pits containing fluids will be fenced until filled.
- c. After abandonment of well, surface restoration will be in accordance with the State of New Mexico Surface Requirements.

11. Topography and Soil:

See attached Eastern New Mexico University Report by Dr. Colleen Beck.

12. Land Use:

Grazing and hunting - Federal Land

Surface Lessee - Raymond Neatherland
P.O. Box 511
Artesia, new Mexico

13. Surface Ownership:

Bureau of Land Management

14. Operators Representative:

Field representatives (Responsible for compliance with approved surface use and operations plan):

Southland Royalty Company
P.O. Box 65
Loco Hills, New Mexico
Office: 505/677-2233

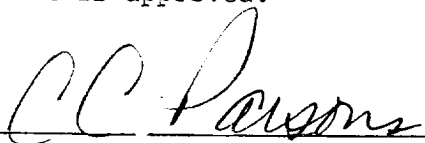
Mr. Wayne Grubbs, Drilling Foreman
Loco Hills Home: 505/677-2295

Mr. Bill Chrane, Production Superintendent
Midland, Texas office 915/682-8641
home 915/694-0730

15. Certification:

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route; that I am familiar with conditions which presently exist; That the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Southland Royalty Company and its contractors and sub-contractors in uniformity with this plan and the terms and conditions under which it is approved.

DATE: 4-21-81



C.C. Parsons
District Operations Engineer
Southland Royalty Company

EXHIBIT "A"

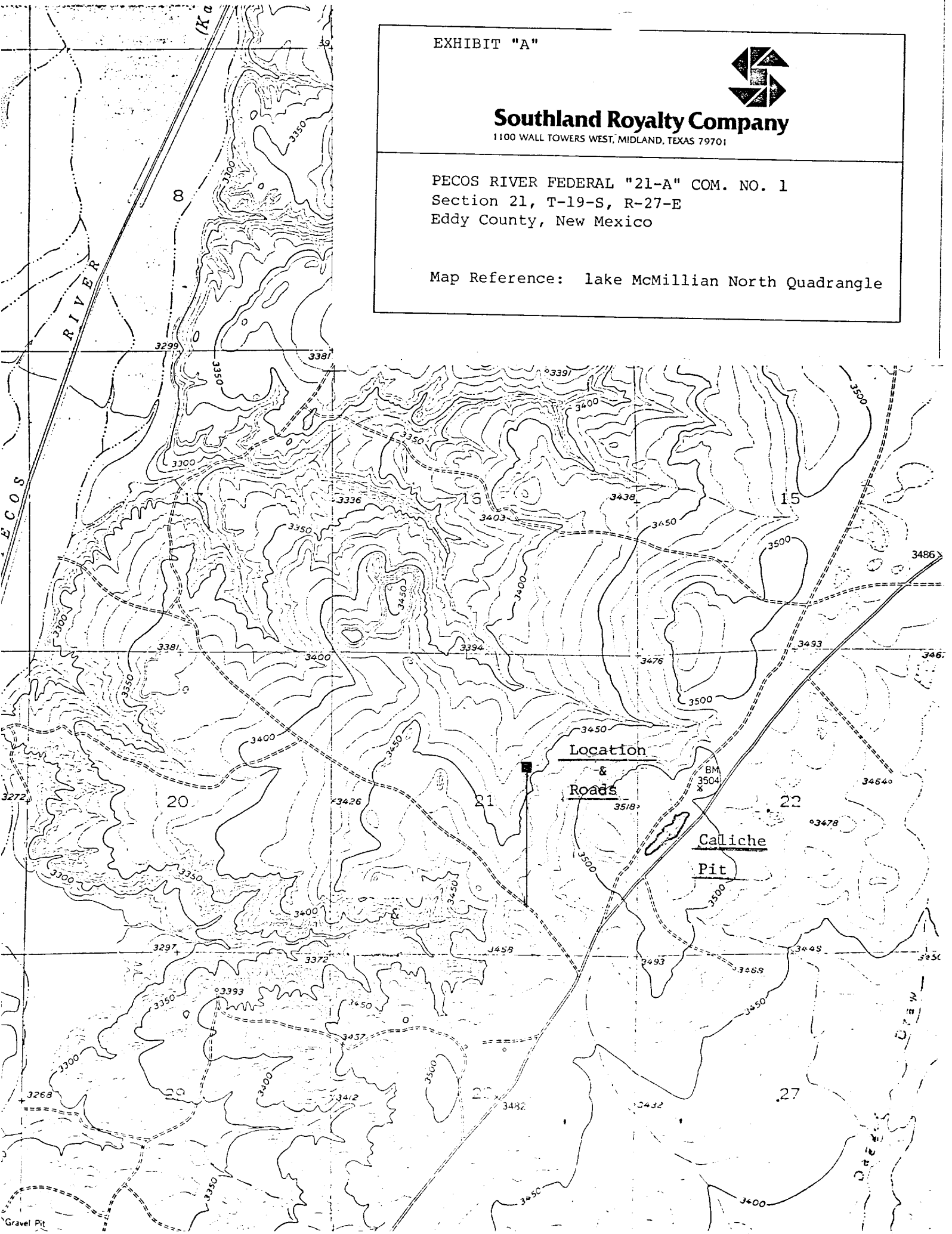


Southland Royalty Company

1100 WALL TOWERS WEST, MIDLAND, TEXAS 79701

PECOS RIVER FEDERAL "21-A" COM. NO. 1
Section 21, T-19-S, R-27-E
Eddy County, New Mexico

Map Reference: lake McMillian North Quadrangle



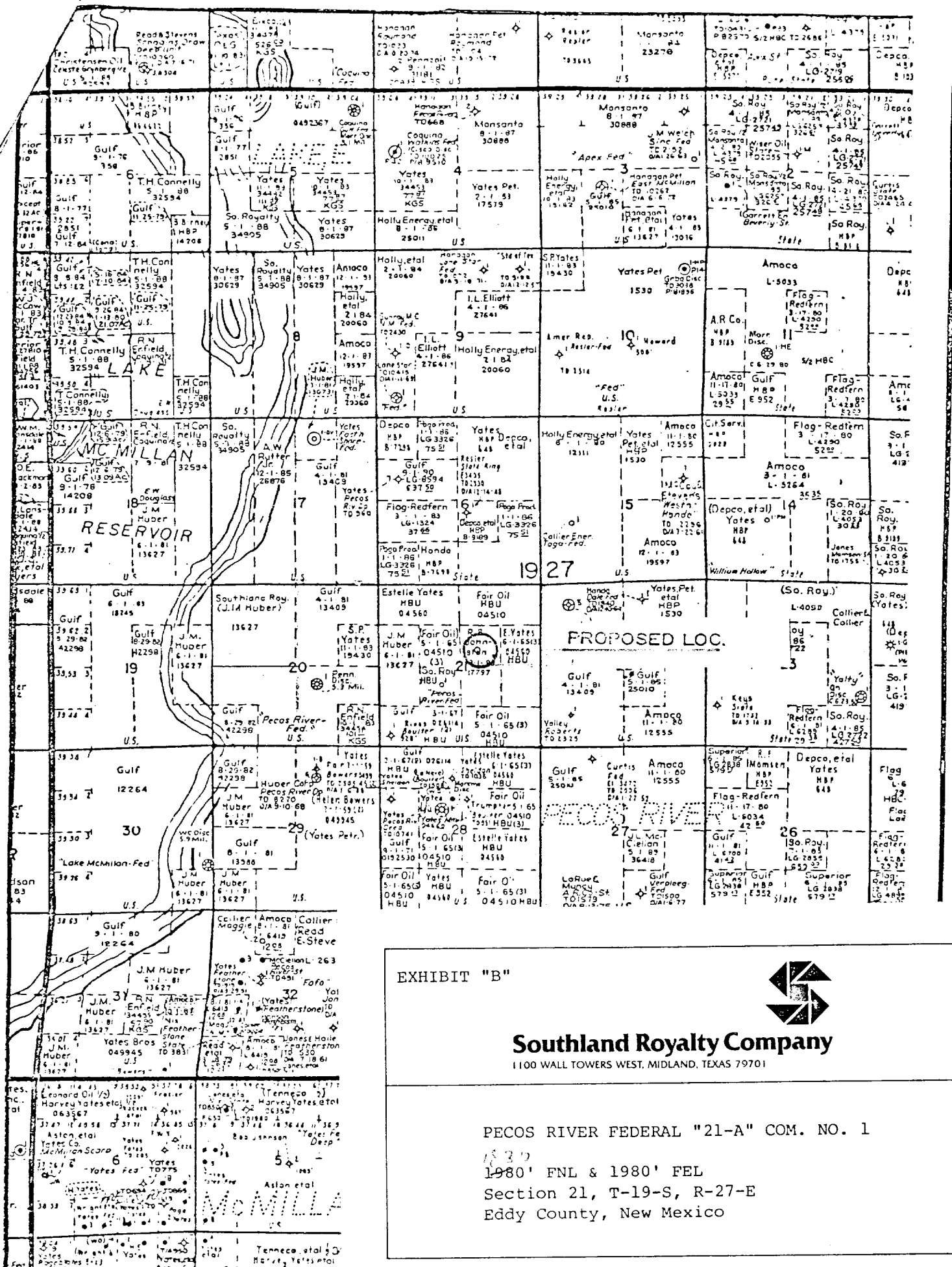



EXHIBIT "B"



Southland Royalty Company
1100 WALL TOWERS WEST, MIDLAND, TEXAS 79701

PECOS RIVER FEDERAL "21-A" COM. NO. 1
1980' FNL & 1980' FEL
Section 21, T-19-S, R-27-E
Eddy County, New Mexico

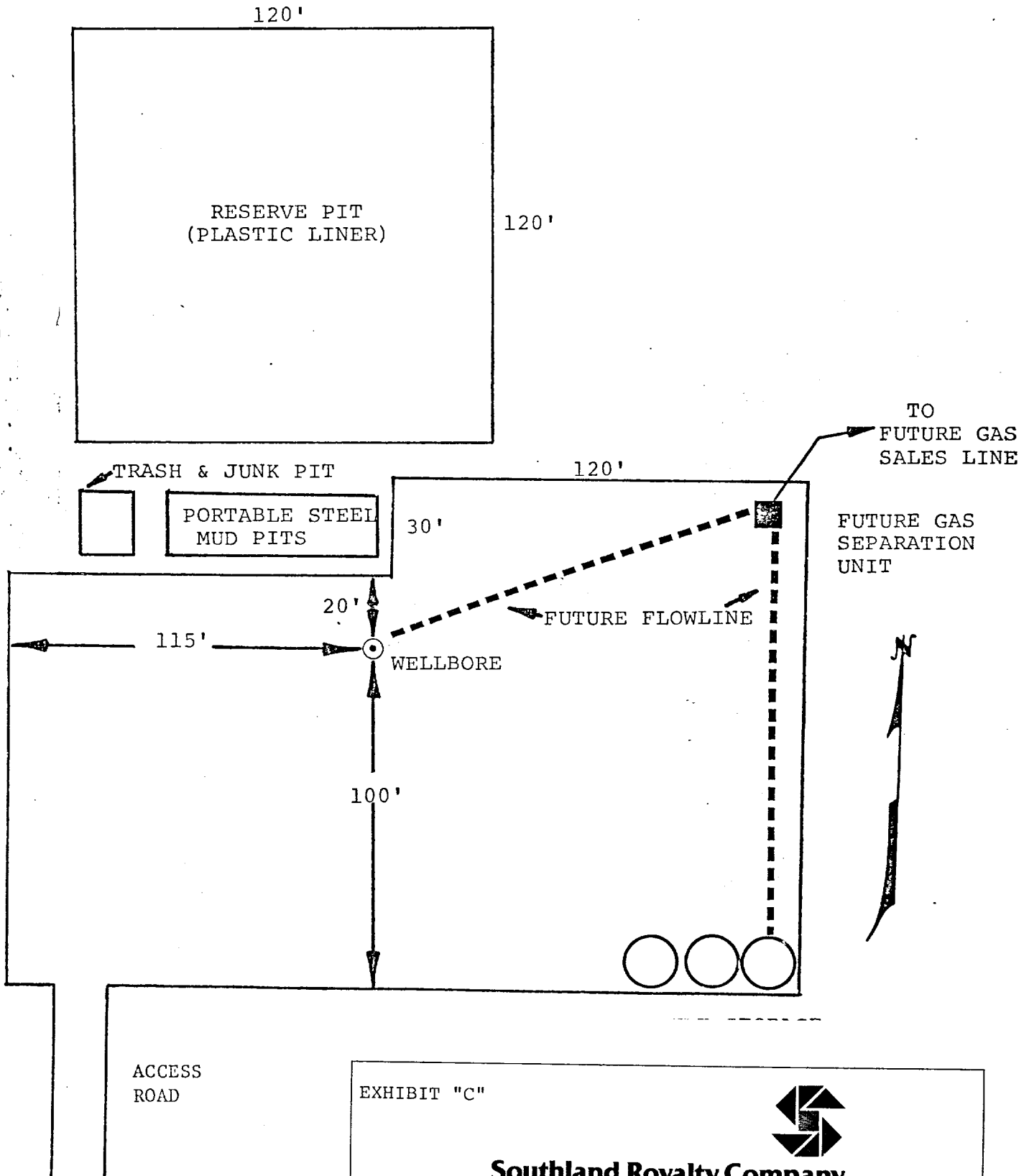


EXHIBIT "C"



Southland Royalty Company

1100 WALL TOWERS WEST, MIDLAND, TEXAS 79701

1830 Pecos River Federal "21-A" Com. No. 1
1980' FNL & 1980' FEL
Section 21, T-19-S, R-27-E
Eddy County, New Mexico

DESIGNATION OF OPERATOR

The undersigned is, on the records of the Bureau of Land Management, holder of lease

DISTRICT LAND OFFICE: Artesia, N.M.
SERIAL No.: NM-17797

and hereby designates

NAME: Southland Royalty Company
ADDRESS: 1100 Wall Towers West
Midland, Texas 79701

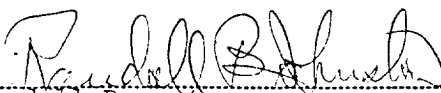
as his operator and local agent, with full authority to act in his behalf in complying with the terms of the lease and regulations applicable thereto and on whom the supervisor or his representative may serve written or oral instructions in securing compliance with the Operating Regulations with respect to (describe acreage to which this designation is applicable):

SW/4 NE/4 Section 21, T19S, R27E,
Eddy County, New Mexico

It is understood that this designation of operator does not relieve the lessee of responsibility for compliance with the terms of the lease and the Operating Regulations. It is also understood that this designation of operator does not constitute an assignment of any interest in the lease.

In case of default on the part of the designated operator, the lessee will make full and prompt compliance with all regulations, lease terms, or orders of the Secretary of the Interior or his representative.

The lessee agrees promptly to notify the supervisor of any change in the designated operator.


Randall B. Johnston
(Signature of lessee)

P. O. Box 1824, Midland, Texas 79702
(Address)

3/27/81
(Date)

