NM OIL CONS. COMMISSION
Drawer
Artesia, NM 88210

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLI
(Other instructions o
reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-005-61300

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

5. LEASE DESIGNATION AND SERIAL NO.: NM-16804

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

DEC 23 1981
O. C. D.
ARTESIA, OFFICE

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

b. TYPE OF WELL
OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

8. FARM OR LEASE NAME: Sand Ranch "35"

9. WELL NO.: 1

2. NAME OF OPERATOR: Southland Royalty Company

3. ADDRESS OF OPERATOR: 1100 Wall Towers West, Midland, Texas 79701

10. FIELD AND POOL, OR WILDCAT: ~~Undesignated~~ (Morrow)

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
660' FNL, 1980' FEL, Sec. 35, T-10-S, R-29-E
At proposed prod. zone
Same

DEC 11 1981

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Unit B
Sec. 35, T-10-S, R-29-E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
33 miles East of Roswell, N.M.

12. COUNTY OR PARISH: Chaves
13. STATE: N.M.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
660'	320	320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
N.A.	9810'	Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3965.6' GR

22. APPROX. DATE WORK WILL START*
12-26-81

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/4"	11 3/4"	42#	350'	700 Sx. (Circ.)
11"	8 5/8"	24#	2650'	1600 Sx. (Circ.)
7 7/8"	4 1/2"	11.6#	9810'	700 Sx. (TOC by Temp. Surv.)

Set surface csg @ 350' T/salt. Circ cmt. Drill 11" hole w/brine wtr & set 8 5/8" csg @ 2650'. Circ cmt. Drill to TD to test Morrow & intermediate horizons. If commercial run 4 1/2" csg to TD. Cement w/sufficient volume to bring above all prospective zones. Estimated T/cmt @ 8000'. Perf & stimulate Morrow for production.

MUD PROGRAM: 0-350' spud mud; 350-2650' brine wtr; 2650-6000' cut brine wtr; 6000-7500' cut brine wtr w/4% oil, gel; 7500-8800' cut brine wtr w/1-2% oil, gel; 8800-TD cut brine, gel, drispac, 1% oil & 3% KCL. MW 9.0-9.2, vis 34, FL 6cc thru Morrow. BHP @ TD expected to be 4200 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 drlghead. Test BOP w/Yellow Jacket, Inc. after setting on 8 5/8". Test BOP @ 7500'.

GAS NOT DEDICATED.

Posted ID-1
API + NL Book
12-31-81

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 C. E. Thomas TITLE District Operations Engineer DATE 12-10-81

(This space for Federal or State office use)

PERMIT NO. APPROVED APPROVAL DATE

APPROVED BY TITLE DATE

CONDITIONS OF APPROVAL, IF ANY:

DEC 21 1981
JAMES A. GILLHAM
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	Lease	Well No.
Southland Royalty Company	Sand Ranch	21

Unit Letter	Section	Township	Range	County
B	35	10 South	29 East	Chaves

Actual Footage Location of Well:
660 feet from the north line and 1980 feet from the east line

Ground Level Elev.	Producing Formation	Pool	Designated Acreage:
3965.6'	Morrow	Undesignated	320 Acres

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

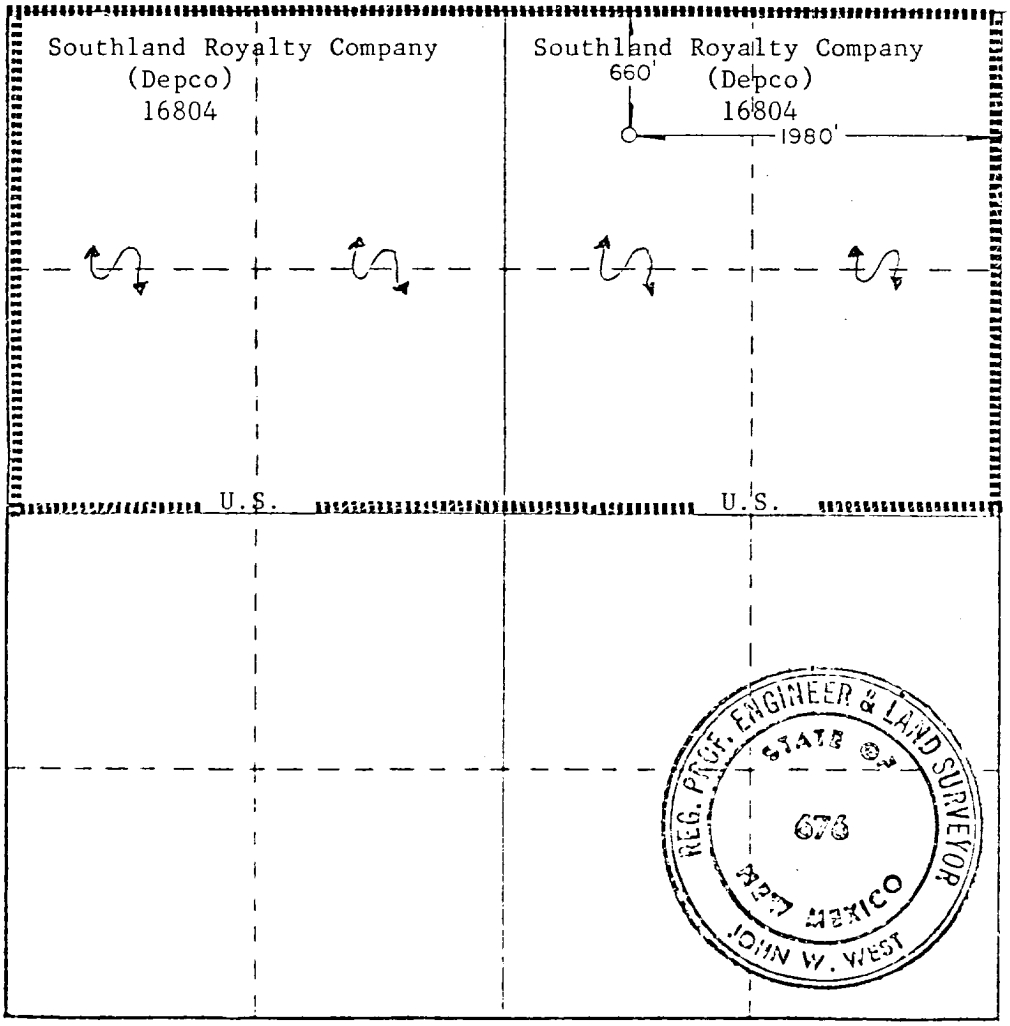
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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?

[X] 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: District Operations Engineer

Position: Southland Royalty Company

Company: 12-10-81

Date

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: 12-4-81

Registered Professional Engineer and/or Land Surveyor

Certificate No. JOHN W. WEST 676

SOUTHLAND ROYALTY COMPANY
SAND RANCH #2
660' FNL, 1980' FEL
Sec. 35, T-10-S, R-29-E
Chaves County, New Mexico
16804

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

Yates	1230'	Wolfcamp	6990'
Queen	2080'	Cisco	7875'
San Andres	2540'	Canyon	8270'
Glorietta	3840'	Strawn	8630'
Tubb	5370'	Atoka	8975'
Abo	6200'	Morrow	9200'
		Mississippian	9350'

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

San Andres	2540'
Wolfcamp	6990'
Atoka	8975'
Morrow	9200'

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/700 sxs. Cl "C" cement w/2% CaCl. Circ to surface.

   b. 8 5/8" csg: Cement w/1000 sxs. lite wt cement & 600 sxs. Cl "H". Circ cmt to surface. Caliper logs to be run in conjunction w/GR/CNL/FDC log to determine open hole volume for computation of actual cement volume to circ to surface.

   c. 4 1/2" csg: Cement w/350 sxs. lite wt cement & 350 sxs Cl "H" 50-50 Pozmix A. Run caliper log in conjunction w/open hole logs to determine exact hole volume. Top of cement anticipated to be at 8000'. Cement volume could vary w/development of intermediate horizons.

10. The pressure control diagram is attached to Form 9-331C and further described 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" casing-pressure to 1000 psi for 30 min. before drilling below 11 3/4" casing.
8 5/8" casing-pressure to 1500 psi for 30 min. before drilling below 8 5/8" casing. Yellow Jacket, Inc. to test 8 5/8" casing installation. Test @ 7500'.

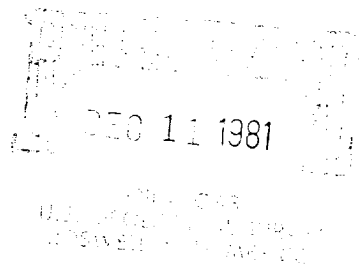
11. See Form 9-331C.
12. A. DST Program - None
    B. Cores - None
    C. Mud Logging - 10' samples to TD.
    D. Wire Line Logs:
    350-2650' - Dual Laterolog/RXO/GR, Compensated Neutron/Compensated Density/ GR-Caliper. Run GR only from 0-350'.
    2650'-TD - Dual Laterolog/RXO/GR, Compensated Neutron Compensated Density/ GR-Caliper.

13. No abnormal pressures anticipated with bottom hole pressures at TD expected to be 4200. Bottom hole temperature 169^{o}F. No Hydrogen Sulfide expected in this known drilling area. No crooked hole or abnormal deviation problems.

14. Anticipated starting date to spud - Must spud prior to 1-27-82. Anticipated drilling time expected to be 40 days from surface to TD.

SURFACE USE PLAN

SOUTHLAND ROYALTY COMPANY
SAND RANCH #2
660' FNL, 1980' FEL
Sec. 35, T-10-S, R-29-E
Chaves County, New Mexico
16804



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 leasee). 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 Roswell, NM go approx 33 miles East on Hwy 380. Turn South on new access road & go approx. 1400' turn West & go 200' to pad.

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 1600'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 of 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 SW/4 NE/4 in Sec. 25. The pit has been approved by BLM & suggested as source of caliche for pad & road construction.

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 form 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

Surface Leasee - Crawford Culp
407 W. Gold
Hobbs, New Mexico
1/505/392-5176

13. Survace Ownership:

Bureau of Land Management - (Federal)

14. Operators Representatives:

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, New Mexico
Home: 505/677-2295

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

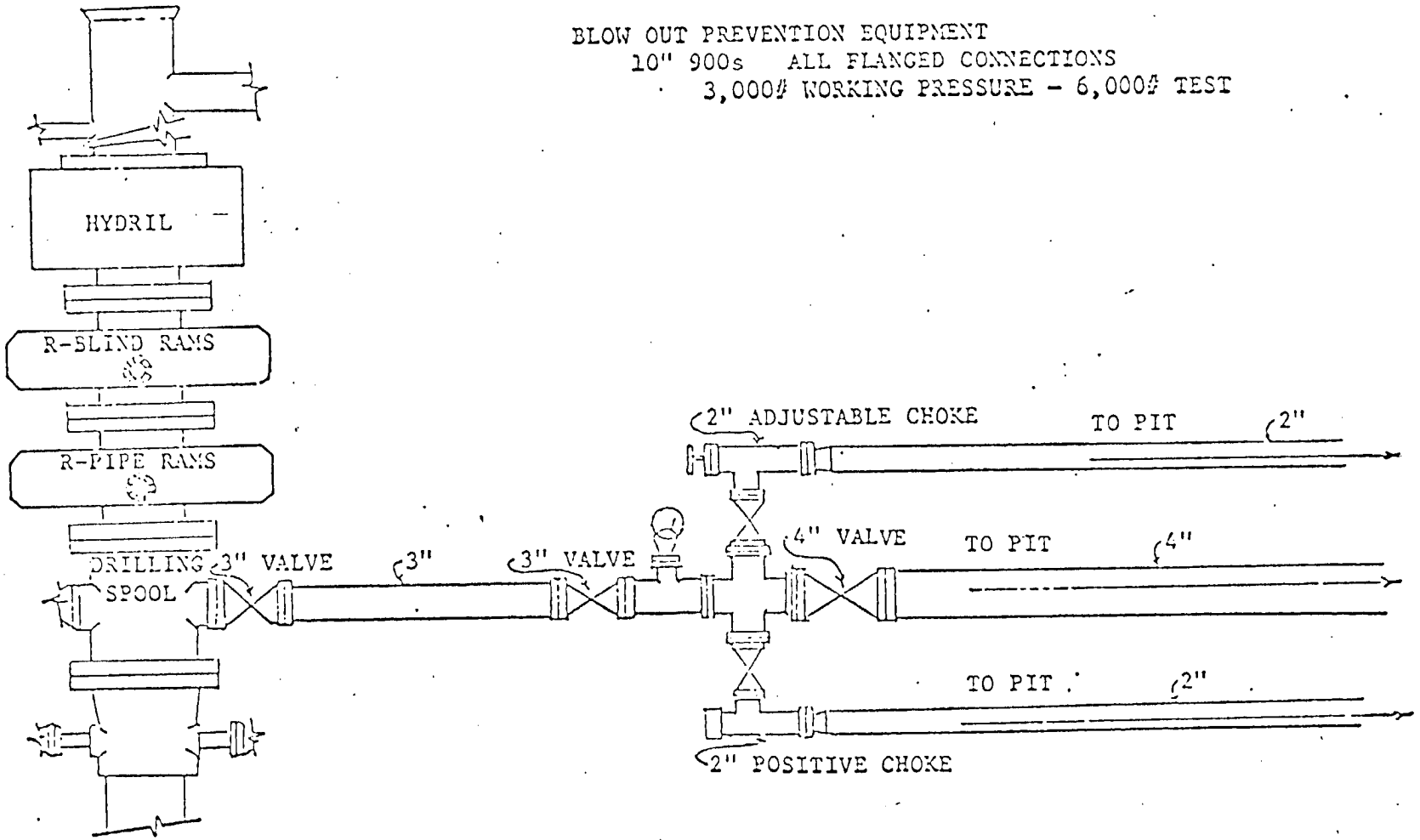
15. Certification:

I hereby certify that I, or persons under my supervision, have inspected the prosposed 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: 12-16-81

C. C. Parsons
District Operations Engineer
Southland Royalty Company

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



ATTACHMENT TO FORM 9-331-C

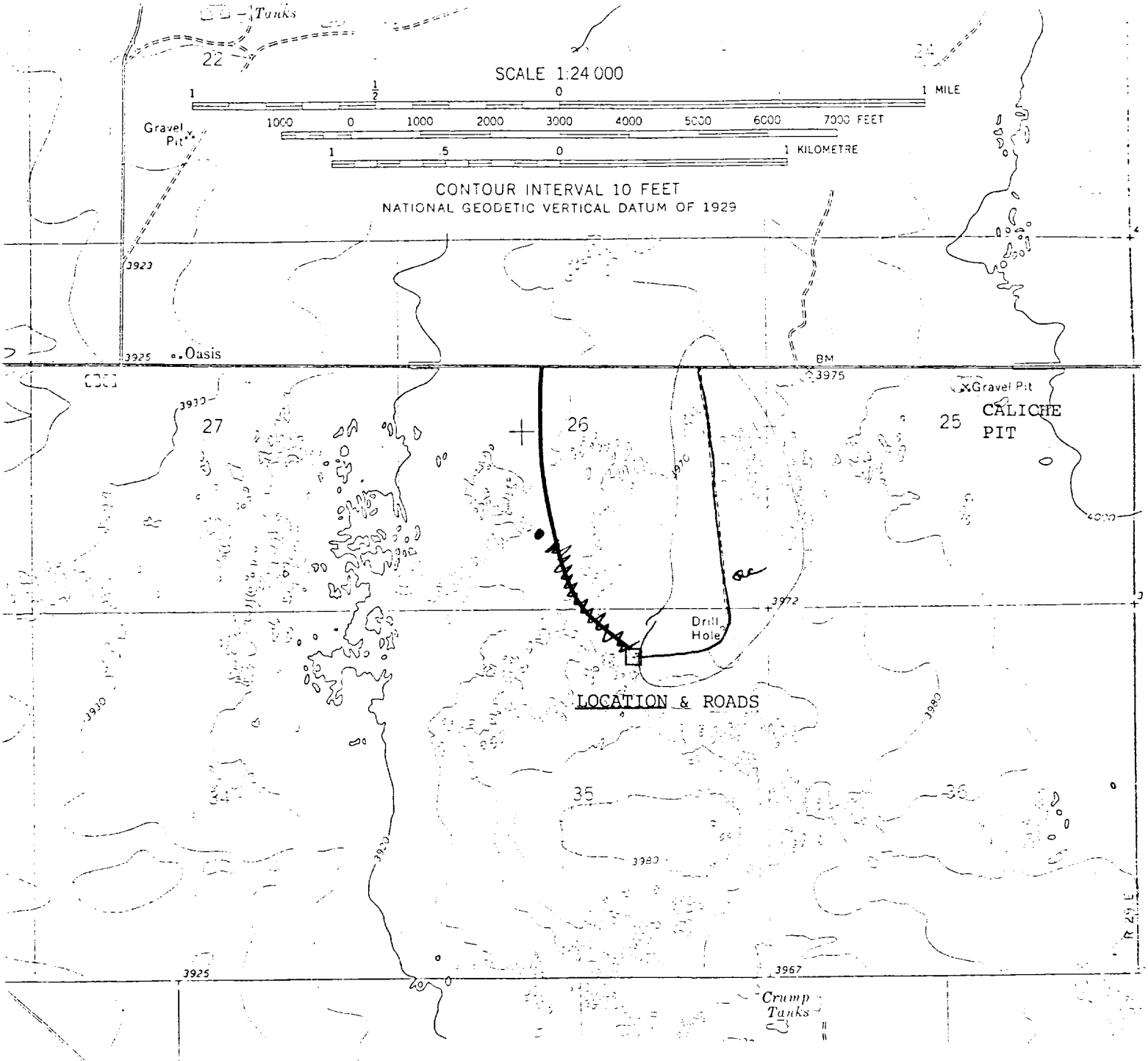


EXHIBIT "A"

Southland Royalty Company

1100 WALL TOWERS WEST, MIDLAND, TEXAS 79701

Sand Ranch #2
660' FNL & 1980' FEL
Section 35, T-10-S, R-29-E
Chaves County, New Mexico

Map Reference: Oasis 1973

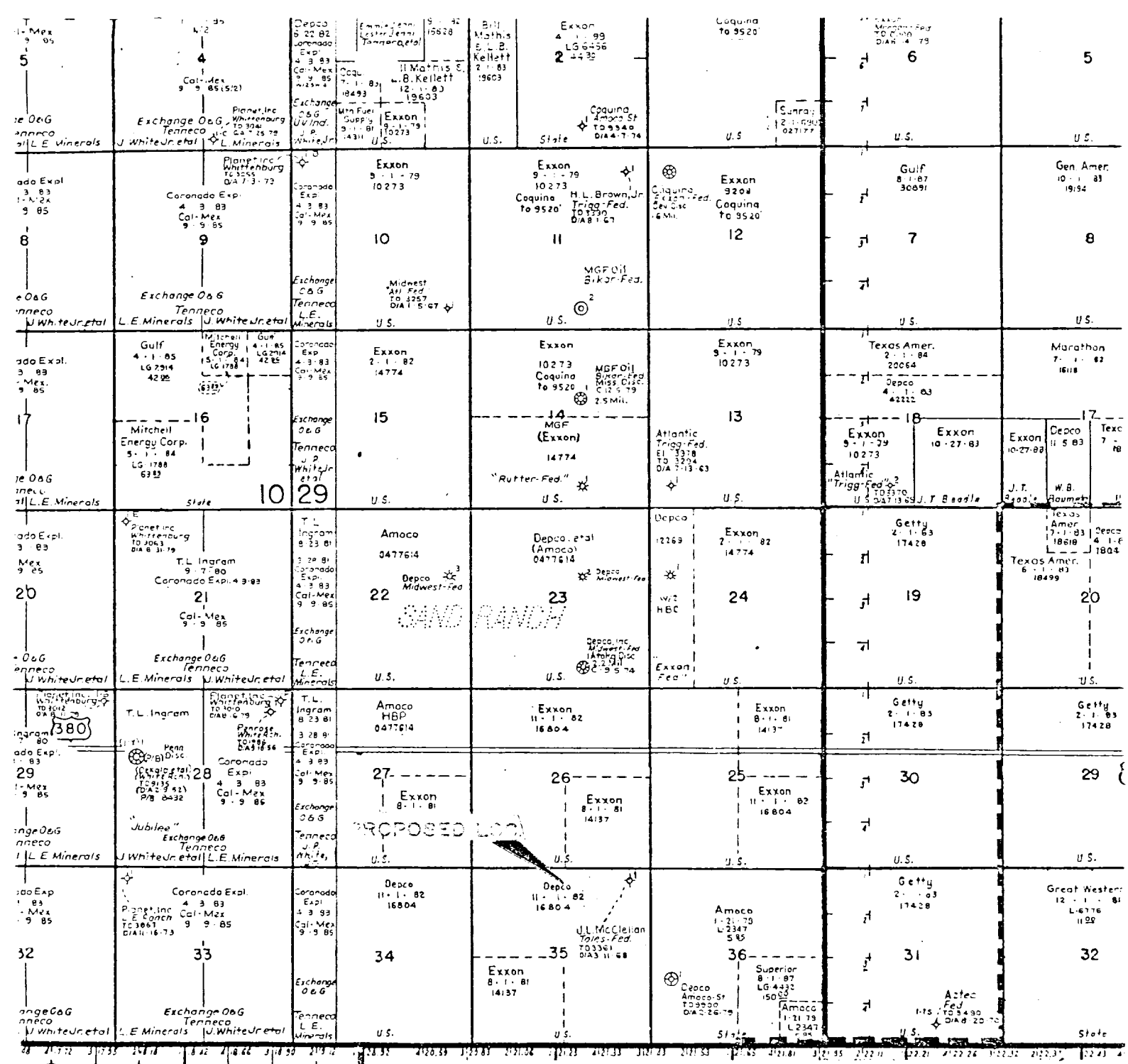


EXHIBIT "B"

Southland Royalty Company

1100 WALL TOWERS WEST, MIDLAND, TEXAS 79701

Sand Ranch #2
660' FNL & 1980' FEL
Section 35, T-10-S, R-29-E
Chaves County, New Mexico

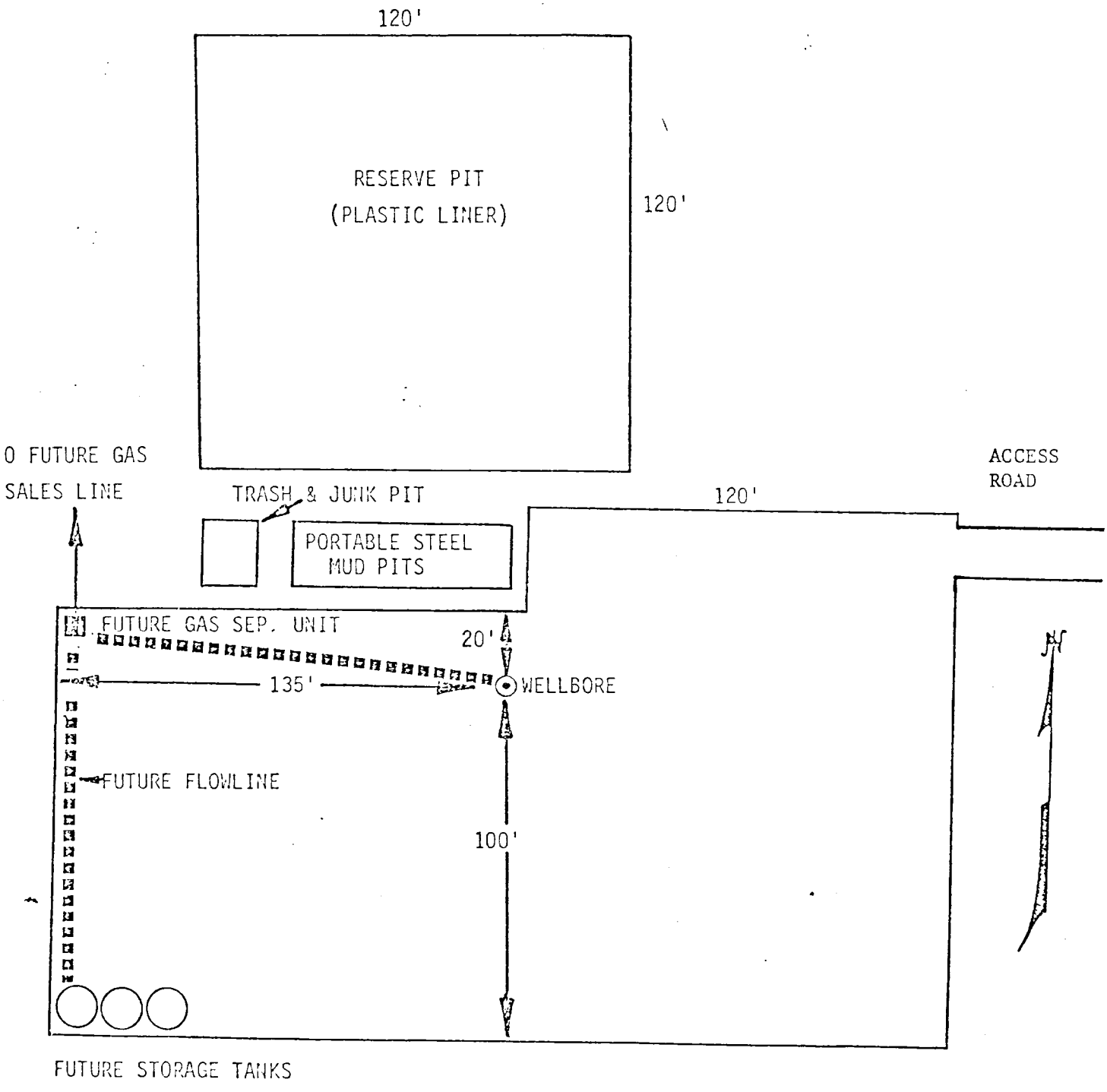


EXHIBIT "C"

Southland Royalty Company

1100 WALL TOWERS WEST, MIDLAND, TEXAS 79701

Sand Ranch # 2
660' FNL & 1980' FEL
Section 35, T-10-S, R-29-E
Chaves County, New Mexico

Scale 1"= 40'

Southland Royalty Company

July 29, 1980

United States Geological Survey
Drawer U
Artesia, New Mexico 88210

RE: Southland Royalty Company
Empire Federal "20" #1
660' FNL & 660' FEL
Sec. 20, T-18-S, R-29-E
Eddy County, New Mexico

Gentlemen:

Please find attached the following items concerning "Application for Permit to Drill" for the captioned well:

1. Form 9-331C Application for Permit to Drill
2. Form C-102 Well Location Plat
3. Supplement to Form 9-331C
4. Surface Use Plans
5. BOP Sketch
6. Eastern New Mexico University Archaelogical Survey
7. Exhibit A
8. Exhibit B
9. Exhibit C
10. Designation of Operator Forms will follow

Sincerely yours,

Don R. Craig

Don R. Craig
District Operation Engineer

DRC:RFN:cn

Attachments

1100 WALL TOWERS WEST (915) 682-8641 MIDLAND, TEXAS 79701