

Form 3160-3
(July 1989)
(formerly 9-331C)

NM OIL CONS. COMMISSION
Drawer 10
Artesia, NM 88210

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONTACT READING
OFFICE FOR NUMBER
OF COPIES REQUIRED
(Other instructions on
reverse side)

30-015-26661
BLM Roswell District
Modified Form No.
NM060-3160-2

5. LEASE DESIGNATION AND SERIAL NO. LC-058709(a)	
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME Comanche "A" Federal	
9. WELL NO. 2	
10. FIELD AND POOL, OR WILDCAT X Shugart (Delaware)	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 12, T18S, R31E	
12. COUNTY OR PARISH Eddy	13. STATE NM
22. APPROX. DATE WORK WILL START * 01 April 1991	

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>	
2. NAME OF OPERATOR Southland Royalty Company	3a. AREA CODE & PHONE NO. 915-686-5600
3. ADDRESS OF OPERATOR 21 Desta Dr., Midland, TX 79705	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface 990' FSL & 2310' FWL At proposed prod. zone ut. N	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 9 miles southeast of Loco Hills, NM	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any) 990'	16. NO. OF ACRES IN LEASE 160
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 1350'	19. PROPOSED DEPTH 6100'
20. ROTARY OR CABLE TOOLS Rotary	
21. ELEVATIONS (Show Whether DF, RT, GR, ETC.) 3755' GR.	

RECEIVED
MAR 5 1991
O. C. D.
ARTESIA OFFICE

23. PROPOSED CASING AND CEMENTING PROGRAM

HOLE SIZE	CASING SIZE	WEIGHT/FOOT	GRADE	THREAD TYPE	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24	K-55	STC	400'	275 sx-Circ.
7-7/8"	5-1/2"	15.5	K-55	STC	6100'	1375 sx-Circ.

Drill 12-1/4" hole to 400' & set 8-5/8" csg. Cmt w/275 sx--circulate.
Drill 7-7/8" hole to 6100' & set 5-1/2" csg. Cmt w/1375 sx--circulate.
MUD PROGRAM: 0-400', fresh water gel & lime; 400'-6100', salt water w/MW 9.8-10.2. No abnormal pressures or temperatures expected.
BOP PROGRAM: 10"-3M BOP stack to be installed on 8-5/8" and left for remainder of drilling. Stack to consist of annular BOP, blind ram BOP, and one pipe ram BOP. Test BOP's using and independent tester after setting the 8-5/8" csg.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

Post ID-1
2-15-91
New Loc & API

RECEIVED
JAN 22 1 05 PM '91

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 Robert L. Broadshaw TITLE Sr. Staff Env./Reg. Specialist DATE 22 January 1991

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
Orig. Signed by Richard L. Marcus AREA MANAGER
APPROVED BY _____ TITLE CARLSBAD RESOURCE - 877 DATE 3-4-91
CONDITIONS OF APPROVAL IF ANY:

APPROVAL OF THIS APPLICATION DOES NOT WARRANT
OR CERTIFY THAT THE TITLE IS VALID, OR THAT THE TITLE IS
ACQUITABLE TITLE TO THE LAND, OR THAT THE APPLICANT IS
THE OWNER OF THE LAND.

*See Instructions On Reverse Side

TITLE 18 U.S.C. SECTION 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill, deepen, or plug back an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the lessee elects to initiate drilling operation on an oil and gas lease.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the lessee elects to initiate drilling operations on an oil and gas lease.

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

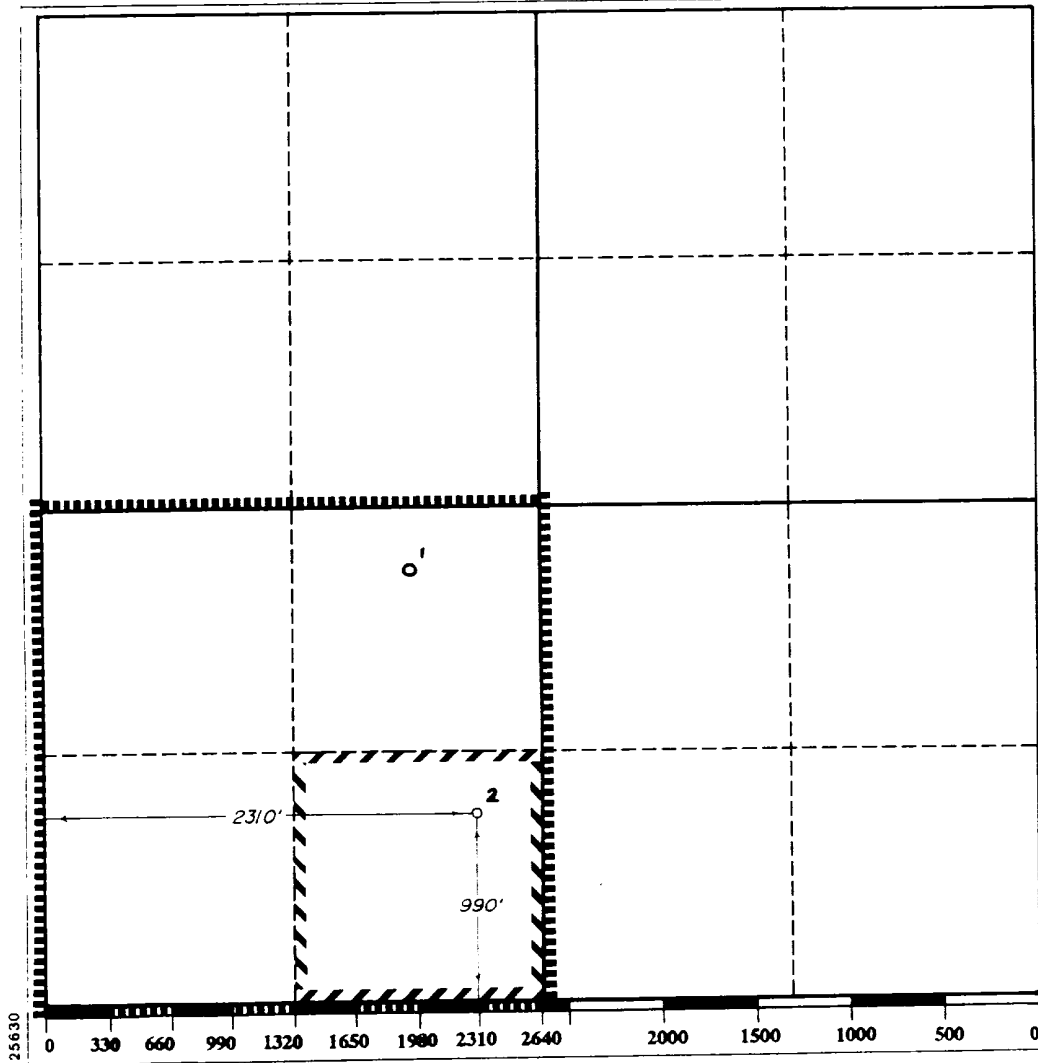
All Distances must be from the outer boundaries of the section

Operator		Lease		Well No.	
SOUTHLAND ROYALTY COMPANY		COMANCHE "A" FEDERAL		2	
Unit Letter	Section	Township	Range	County	
N	12	18-SOUTH	31-EAST	NMPM	EDDY

Actual Footage Location of Well:

990 feet from the SOUTH line and 2310 feet from the WEST line
Ground level Elev. 3755' Producing Formation DELAWARE Pool SHUGART Dedicated Acreage: 40 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 interest 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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature *Robert L. Bradshaw*
Printed Name ROBERT L. BRADSHAW
Position SR. STAFF ENV/REG SPEC.
Company MERIDIAN OIL INC.
Date JANUARY 22, 1991

SURVEYOR CERTIFICATION

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 OCTOBER 17, 1990
Signature of Professional Surveyor *V. Lynn Bezner*
Professional Surveyor LYNN BEZNER NO. 7920
REGISTERED LAND SURVEYOR

Certificate No. V. LYNN BEZNER, R.L.S. # 7920

SURFACE USE PLAN

SOUTHLAND ROYALTY COMPANY
(Operated by Meridian Oil Inc.)

Comanche "A" Federal No. 2
990' FSL & 2310' FWL
Sec. 12, T-18-S, R-31-E
Eddy County, New Mexico
LC-058709(a)

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 operations.

1. Existing Roads:

Exhibit "A" is a portion of a U.S.G.S. topographic map showing the location of the proposed well as staked.

Directions to the well are as follows: From the junction of US 82 and Hwy. 31, 6 miles east of Loco Hills, go south 4.0 miles on Hwy. 31, thence SE 1.1 miles on a county road, thence east 2.1 miles on a lease road to the SW corner of Section 12.

2. Planned Access Road:

An access road will extend south approximately 200' to an existing lease road. This access road will be constructed according to BLM standards.

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:

No available surface or sub-surface fresh water exists in the vicinity of the proposed well. Drilling water will be transported or pumped 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 an existing pit located in the SE/4 SE/4 of Sec. 11, or other BLM approved facility.

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, and junk will be disposed of into a special container on location. All waste material will be regularly removed to an approved landfill.
- h. All trash and debris will be buried or removed from well site within 30 days after drilling and/or completion operations are finished.

8. Ancillary Facilities:

None

9. 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 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 Bureau of Land Management Surface Requirements.

10. Topography and Soil:

New Mexico Archaeological Services, Inc. report by Dr. J. Loring Haskell will be submitted when ready.

11. Land Use:

Grazing and hunting - Federal

Surface Lessee -
NOT KNOWN

12. Surface Ownership:

Bureau of Land Management (Federal)

13. Operators Representatives:

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

Meridian Oil Inc.
P. O. Box 837
Hobbs, New Mexico 88240
Office: 505-393-5844

Mr. Johnny Ellis, Drilling Foreman, or a consultant
Hobbs, New Mexico
Home: 505-393-8150

Mr. Bill Dawson, Drilling Superintendent
Midland, Texas Office: 915-686-5600
Home: 915-682-9037

14. 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 Meridian Oil Inc. and its contractors and sub-contractors in uniformity with this plan and the terms and conditions under which it is approved.

Date: 1/22/91

S.J. Van Howe
S.J. Van Howe
Drilling Engineer
Meridian Oil Inc.

SOUTHLAND ROYALTY COMPANY
(Operated by MERIDIAN OIL INC.)

Comanche "A" Federal No. 2
990' FSL & 2310' FWL
Sec. 12, T-18-S, R-31-E
Eddy County, New Mexico
LC-058709(a)

To supplement USGC Form 3160-3 Application to Drill the following additional information is submitted concerning questions on Page 5 of NTL-6:

1. See Form 3160-3
2. See Form 3160-3
3. The geological name of surface formation is: Ochoa
4. See Form 3160-3
5. See Form 3160-3
6. The estimated tops of important geological markers are:

Redbeds, Base	900	Queen	3,550'
Delaware	5,590'	San Andres	4,090'
7. The estimated depths at which anticipated water, oil, gas, and mineral bearing strata are as follows:

San Andres	4,090' - Oil
Delaware	5,150' - Oil
Possible Water Flow @ 3,550'	
8. See Form 3160-3. All casing will be new.
9. See Form 3160-3 for depths of strings. Cement volumes and additions as follows:
 - a. 8 5/8" csg: Cement w/275 sx Cl "C" cmt + 2% CaCl₂ + 1/4#/sx Flocele. Circulate.
 - b. 5 1/8" csg: Cement w/1100 sx Cl "C" Lite + 9 pps salt + 1/4#/sx Flocele and tail in w/275 sx Cl "C" plus 5 pps salt + 0.5% Halad 9. Circulate.
10. The pressure control diagram is attached to Form 3160-3. The following additional information is as follows:

8 5/8" casing installation: 10" - 3M BOP stack to be installed and tested by an independent tester to 3000 psi before drilling the 8 5/8" casing shoe. The BOP stack to consist of an annular BOP, blind ram BOP, and one pipe ram BOP.

11. See Form 3160-3

12. A. DST Program: None

B. Core: None

C. Mud Logging: None

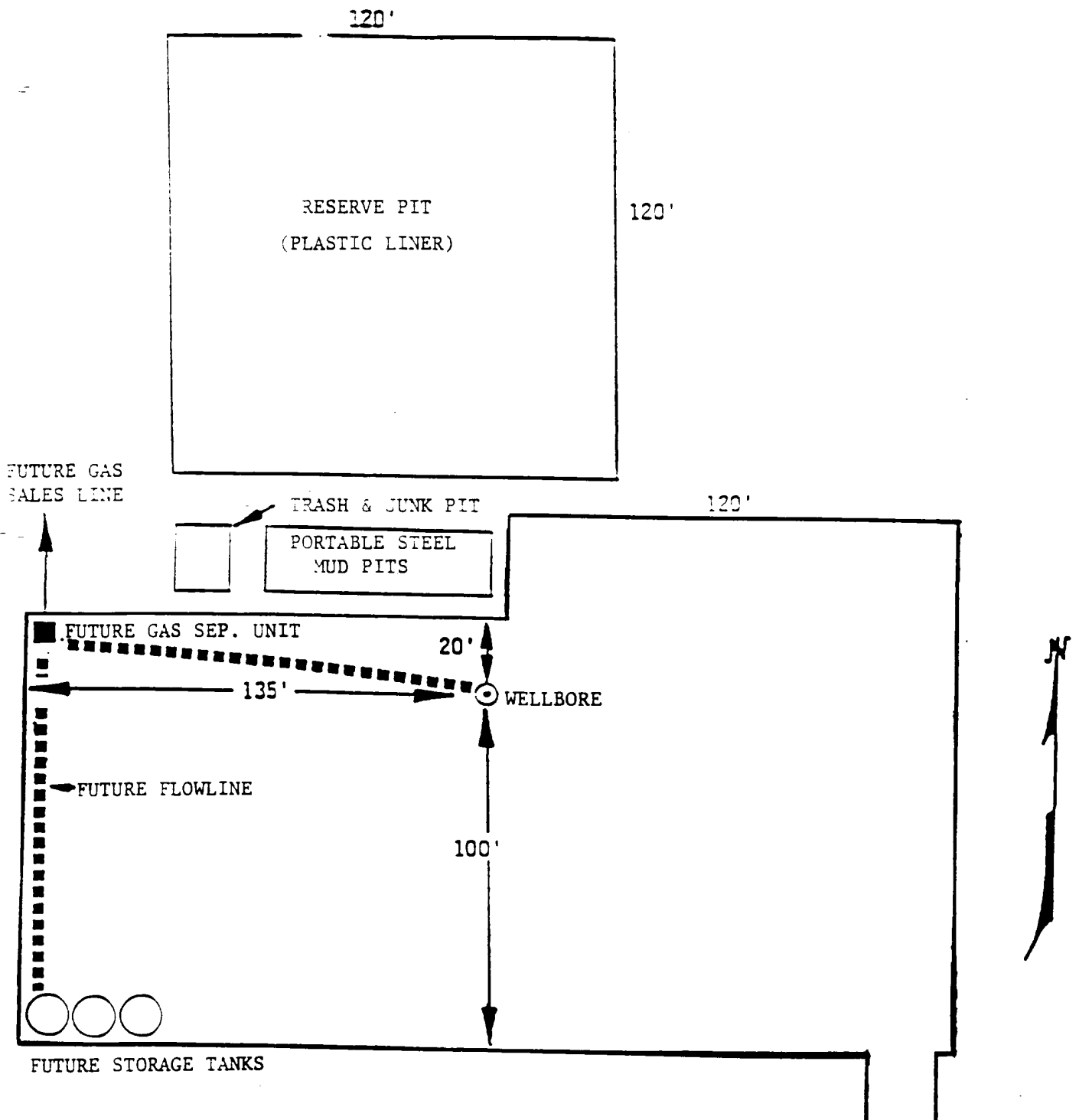
D. Wire Line Logs:

The following suite of logs will be run in both of the listed intervals:

CNL/LDT/CAL/GR	TD - SCP (GR/CNL to surface)
DDL/MSFL/CAL/GR	TD - SCP

13. No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 2000 psi. Bottom hole temperature 110° F. No hydrogen sulfide expected in this known drilling area. No crooked hole or abnormal deviation problems.

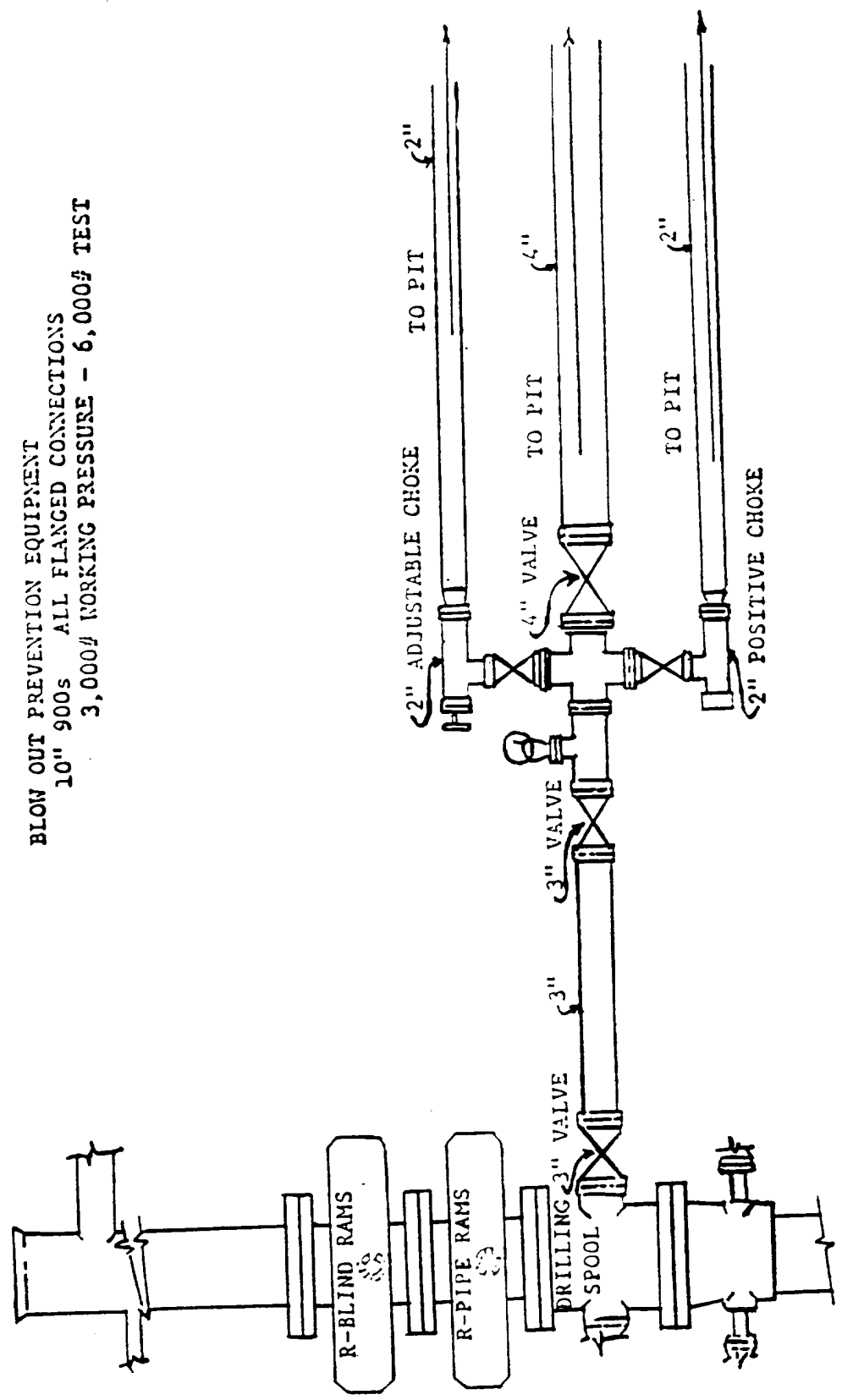
14. Anticipated starting date to spud - on or about 04-01-91. Anticipated drilling time expected to be 10 days from surface to TD.



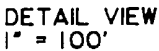
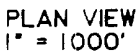
MERIDIAN OIL

Meridian Oil, 21 Desta Drive
 Midland, Texas 79705 **EXHIBIT "**
SOUTHLAND ROYALTY COMPANY
COMANCHE "A" FEDERAL NO. 2
 Sec. 12, T18S, R31E
 LC-058709(a)

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

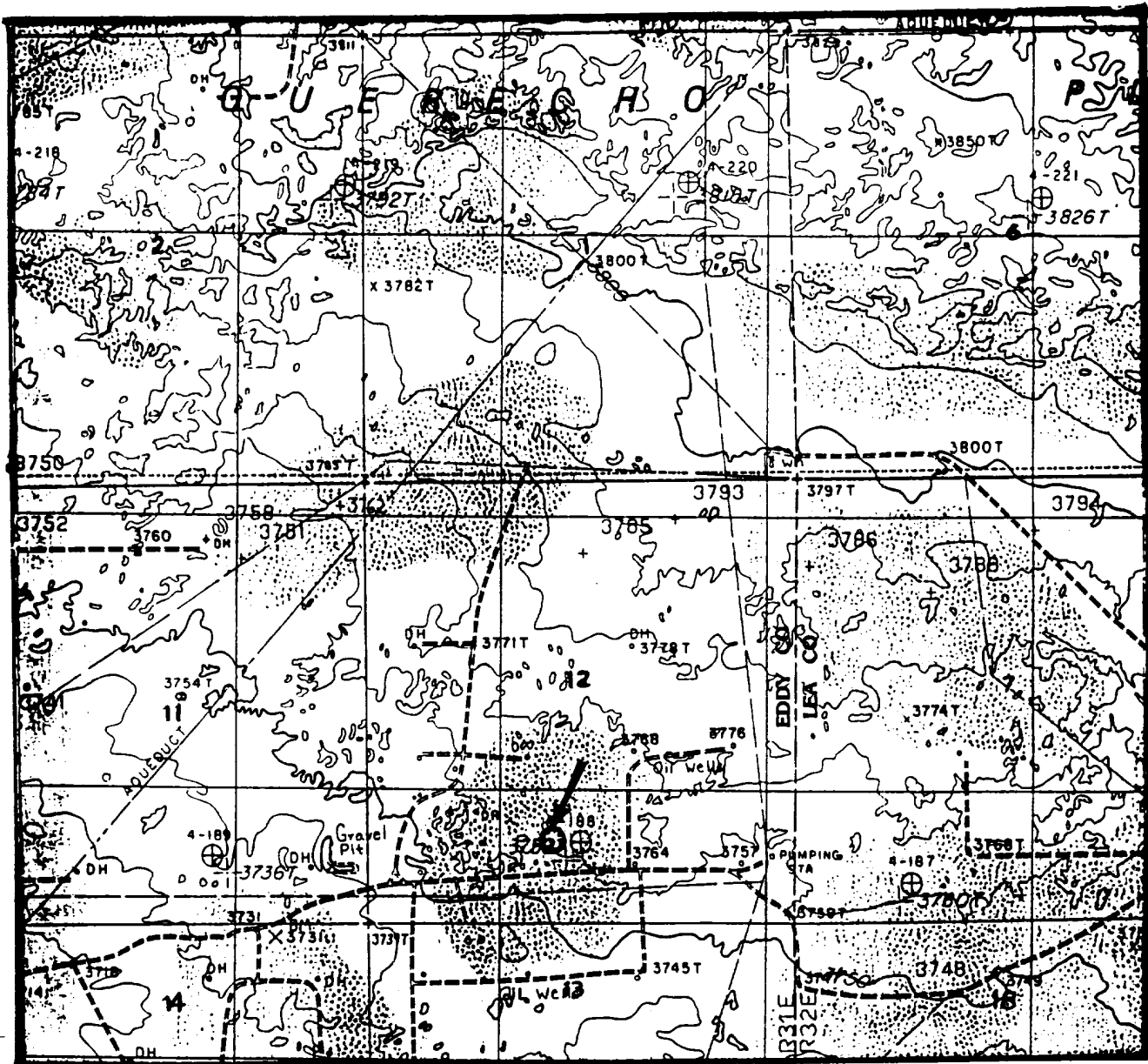


FROM THE SOUT. OF U.S. 82 & HWY 31, 6 MILES EAST OF
LOCO HILLS, GO SOUTH 4.0 MILES ON HWY 31, THENCE
SOUTHEAST 1.1 MILES ON COUNTY ROAD, THENCE EAST
2.1 MILES ON LEASE ROAD TO THE SOUTHWEST
CORNER OF SECTION 12.



				MERIDIAN OIL, INC. MIDLAND, TEXAS	SCALE : AS SHOWN
					DATE : OCTOBER 17, 1990
NO.	REVISION	DATE	BY		JOB NO. : 80388
SURVEYED BY :		G.S.		SURVEYING AND MAPPING BY TOPOGRAPHIC LAND SURVEYORS MIDLAND, TEXAS	98 SE
DRAWN BY :		C.L.S.			
APPROVED BY :		D.R.K.			SHEET 1 OF 1

LOCATION & ELEVATION VERIFICATION MAP



SCALE 1" = 2000'

CONTOUR INTERVAL 10'

SEC. 12
SURVEY T-18-S, R-31-E
COUNTY EDDY STATE N.M.
DESCRIPTION 990' FSL & 2310' FWL
ELEVATION 3755'

OPERATOR SOUTHLAND ROYALTY COMPANY
LEASE COMANCHE "A" FED. NO. 2

U.S.G.S. TOPOGRAPHIC MAP
MALJAMAR, N. MEX.

SCALED LAT: N 32°45'27"
LONG: W 103°49'15"



This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us, but its accuracy is not guaranteed.
Review this plot and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS MERIDIAN OIL

Surveying & Mapping for the Oil & Gas Industry

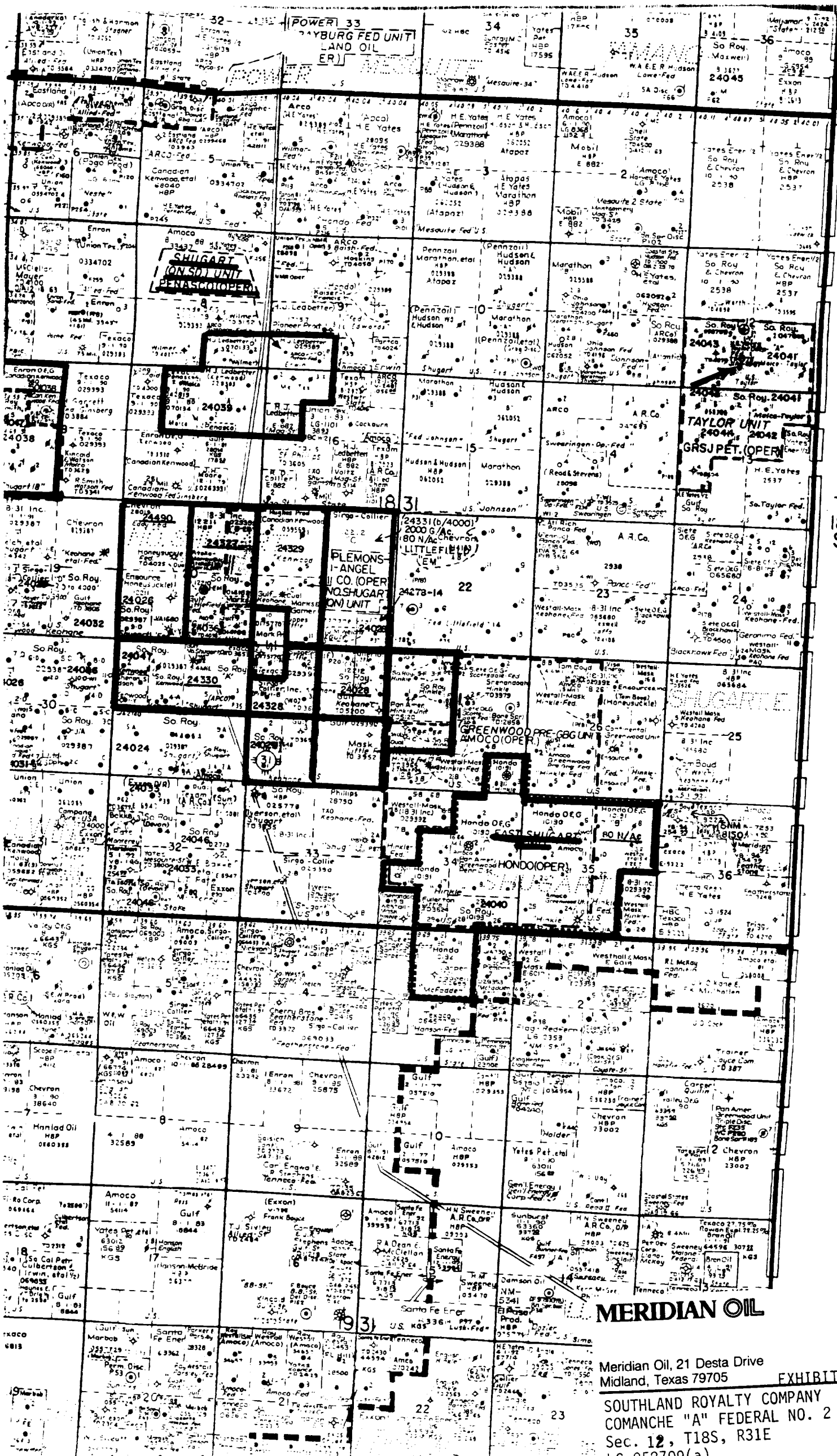
Meridian Oil, 21 Desta Drive
Midland, Texas 79705 EXHIBIT "A"

1305 N. HOBART
PAMPA, TX 79065
(806) 665-7218

910 W. WALL
MIDLAND, TX 79701
(915) 682-1653

215
MARSHA
(214)

SOUTHLAND ROYALTY COMPANY
COMANCHE "A" FEDERAL NO.2
SEC. 12, T18S, R31E
LC-058709(a)



T 18 S

MERIDIAN OIL

Meridian Oil, 21 Desta Drive
Midland, Texas 79705
SOUTHLAND ROYALTY COMPANY
COMANCHE "A" FEDERAL NO. 2
Sec. 12, T18S, R31E
LC-058709(a)

EXHIBIT "B"