FIVING CONTACT Form-3160-3 **BLM Roswell** District OFFICE FOR MBER OF COPIES REQUIRED Modified Form No. (July 1989) IN SIL COLL UNITED STATES NM060-3160-2 (formerly 9-331C (Other instructions on -215 DEPARTMENT OF THE INTERIOR reverse side) 5. LEASE DESIGNATION AND BUREAU OF LAND MANAGEMENT LC-058709(a) 6. IF INDIAN, ALLOTTEE OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME DEEPEN [PLUG BACK DRILL 🛭 b. TYPE OF WELL MULTIPLE ZONE SINGLE X 8. FARM OR LEASE NAME GAS U OIL X OTHER 3a. AREA CODE & PHONE NO. Comanche "A" Federal NAME OF OPERATOR 915-686-5600 9. WELL NO. Southland Royalty Company V 3. ADDRESS OF OPERATOR 21 Desta Dr., Midland, TX 79705 10. FIELD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements RECEIVED Shugart (Delaware) 11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 2310' FSL & 1980' FWL FEB 2 0 1091 At proposed prod. zone Sec. 12, T18S, R31E O. C. D. 12. COUNTY OR PARISH | 13. STATE 14 DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* ARTESIA, OFFICE NM Eddv 9 miles southeast of Loco Hills, NM 17. NO. OF ACRES ASSIGNED 16, NO. OF ACRES IN LEASE DISTANCE FROM PROPOSED*
LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drig, unit line, if any) 1980 TO THIS WELL 40 160 20. ROTARY OR CABLE TOOLS 19 PROPOSED DEPTH 18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLE
OR APPLIED FOR, ON THIS LEASE, FT. Rotary 61001 N.A. 22. APPROX. DATE WORK WILL START * 21. ELEVATIONS (Show Whether DF, RT, GR, ETC.) 01 April 1991 3765' GR PROPOSED CASING AND CEMENTING PROGRAM 23. GRADE THREAD TYPE SETTING DEPTH QUANTITY OF CEMENT WEIGHT/FOOT CASING SIZE HOLE SIZE 400' 275 sx-Circ. K-55 STC 12-1/4 8-5/8" 24 1375 sx-Circ 6100 5-1/2" 15.5 K-55 STC 7-7/8" 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" csq. Port ID-1 3-8-91 New hat ARI Tt: APPROVAL SUBJECT TO 571 GENERAL REQUIREMENTS AND $\langle \rangle$ in Z SPECIAL STIPULATIONS 1 41 ATTACHED

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.

SIGNED DIENT L. Brada	TITLE	Sr. Staff Env./Reg. Specialist	DATE 22 January 1991
(This space for Federal or State office use)			
PERMIT NO.		APPROVAL DATE	
E OF STATE		DATE TO STATE OF A TORING	DATE 22591
CONDITIONS OF APPROVAL. IF ANY:	TITLE		_ DATE

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 I ederal 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.

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

1000 Kio Brazos Ka.,	, 1220, 1414	All Dis	tances must be tro	om the outer boundaries of	rine section	Well No.
Operator			110	case		_
SOU	THLAND PO	YALTY COMPANY	1	COMANCHE "A	"_FEDERAL	1
Just Letter	Section	Township	R	ange	County	EDDY
ĸ	, 12	18	-SOUTH		NMPM :	EDD I
Actual Footage Loca	tion of Well:					0.7
2310	feet from the	SOUTH	line and	1980	feet from the WE	Dedicated Acreage:
fround level Elev.		ducing Formation	P	ool		;
3765		DELAWARE		SHUGART		40 Acres
If more unitization	e than one lease than one lease tion, force-pooling	of different ownership ing, etc.?	outline each and id is dedicated to the was	lor hachure marks on the platentify the ownership thereof well, have the interest of all of of consolidation	(both as to working interest	
this form	if neccessary.	gned to the well until al	interests have been	n consolidated (by community		ooling, or otherwise)
or until a	non-standard un	it, eliminating such inte	rest, has been appro	oved by the Division.		
	Ţ				OPE	RATOR CERTIFICATION
	 			 	contained	reby certify that the information herein in true and complete to the knowledge and belief.
				-	Printed Na	RT L. BRADSHAW
					Company MERI Date	STAFF ENV/REG SPEC. DIAN OIL INC. ARY 22, 1991
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4		1 hereby	VEYOR CERTIFICATION certify that the well location shown
	/980'	2	idelite de de la company de la		actual su	las was plotted from field notes of everys made by me or under m n, and that the same is true and o the best of my knowledge and
			L		Date Sur	PEYENEW NEW
		2310'		; 1 1 1 1 1	Signature Professio	* BEZNER * NO. 7920
0 330 660	990 1320	1650 1980 2310	2640 200	0 1500 1000	Certifical V. LYN	N BEZNER, R.L.S. #7920

SURFACE USE PLAN

SOUTHLAND ROYALTY COMPANY (Operated by Meridian Oil Inc.)

Comanche "A" Federal No. 1 2310' FSL & 1980' 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 existing access road will be used. If it is necessary to upgrade this road, it will be done per 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. Surface Use Plan Comanche "A" Federal No. 1 page two

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 site.

7. <u>Handling Waste Disposal</u>:

- 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 Surface Use Plan Comanche "A" Federal No. 1 page three

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

RLB/bn

SOUTHLAND ROYALTY COMPANY (Operated by MERIDIAN OIL INC.)

Comanche "A" Federal No. 1 2310' FSL & 1980' 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 + %#/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.

Supplement to USGC Form 3160-3 Comanche "A" Federal No. 1 page two

- 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 - 2000 (GR/CNL to surface)
DDL/MSFL/CAL/GR TD - 2000

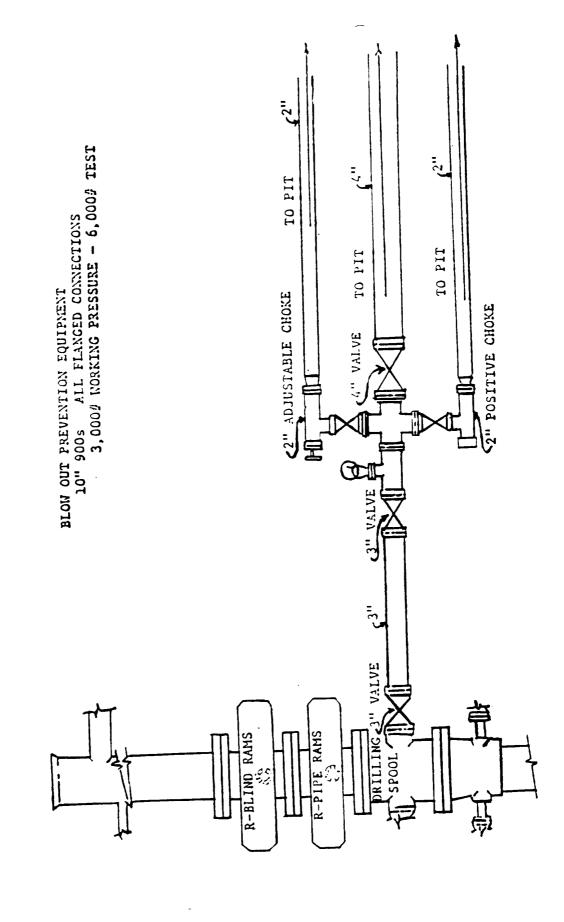
- 13. No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 2000 psi. Bottom hole temperature 110° F. No hydrogen sulfide expected in this known drilling area. No crooked hole or abnormal deviation problems.
- 14. Anticipated starting date to spud on or about 04-01-91. Anticipated drilling time expected to be 10 days from surface to TD.

FUTURE STORAGE TANKS

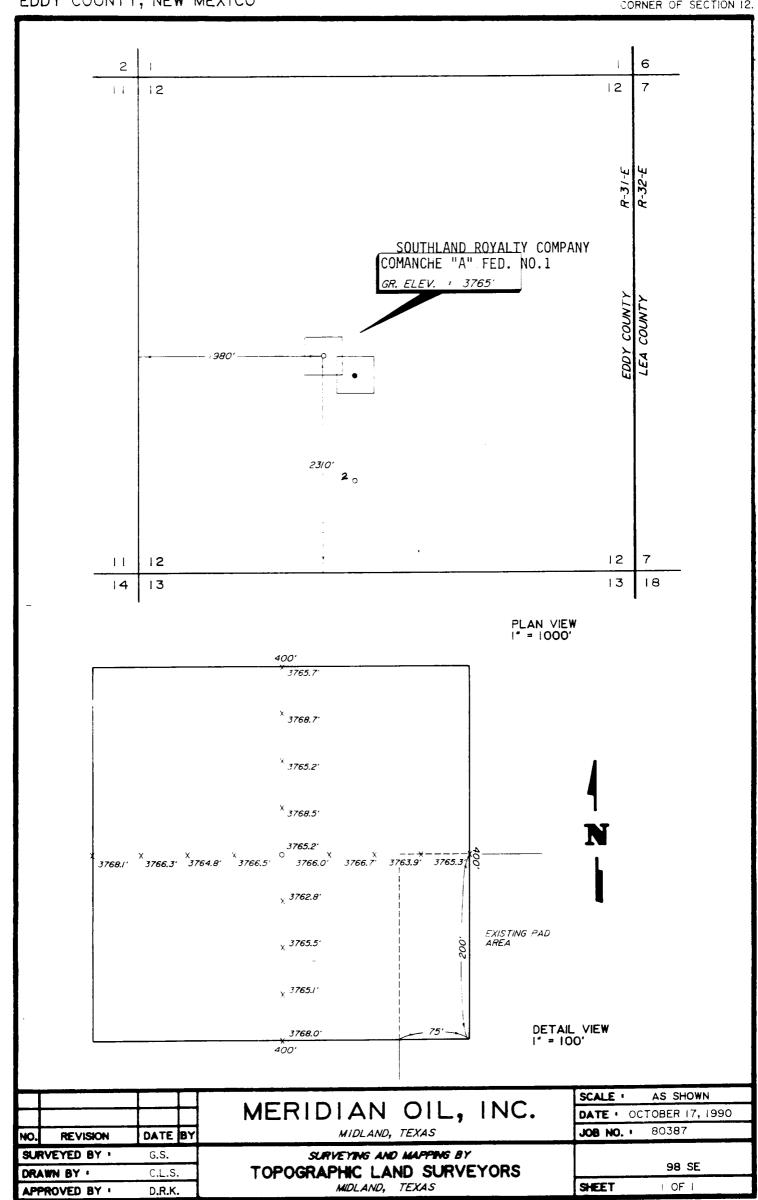
MERIDIAN OIL

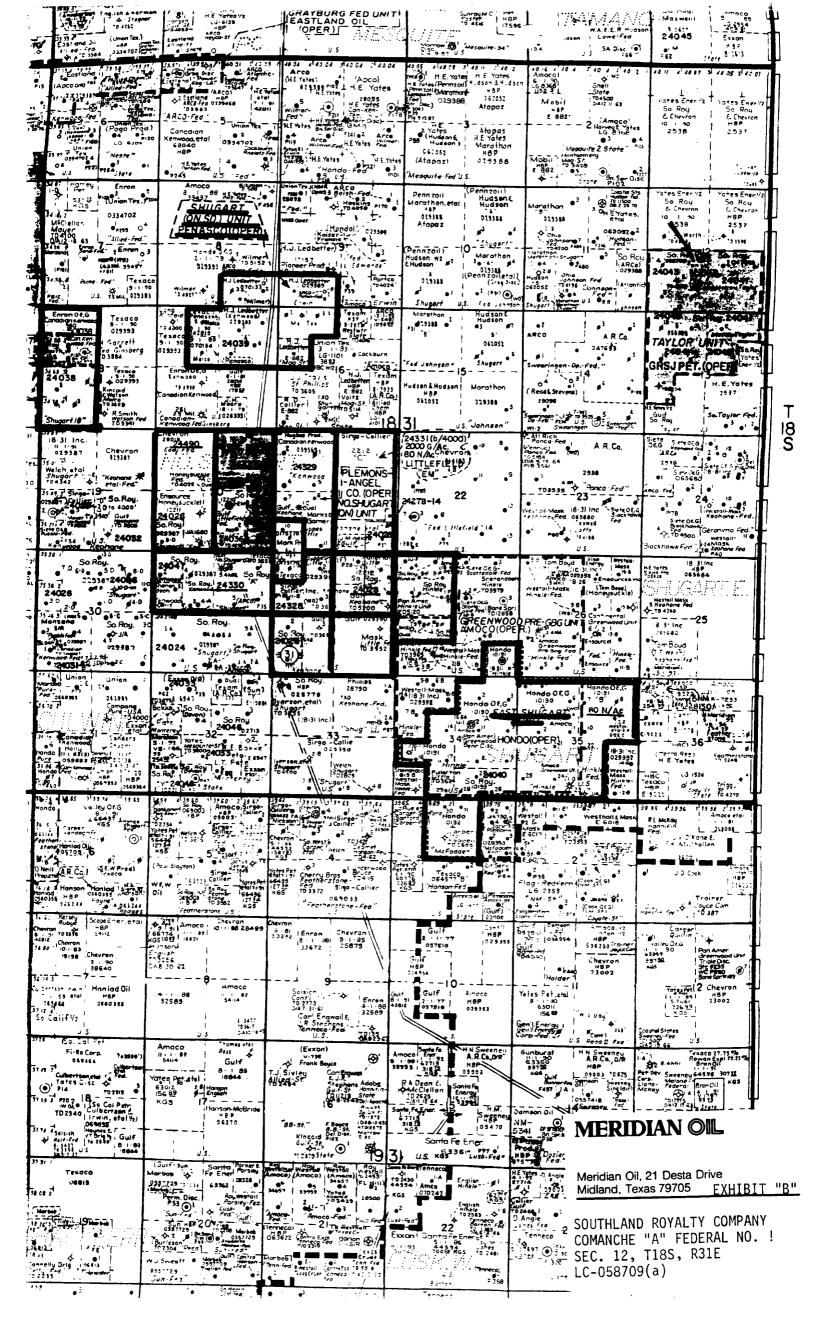
Meridian Oil, 21 Desta Drive Midland, Texas 79705 EXHIBIT "C"

SOUTHLAND ROYALTY COMPANY COMANCHE "A" FEDERAL 1 SEC. 12, T18S, R31E LC-058709(a)

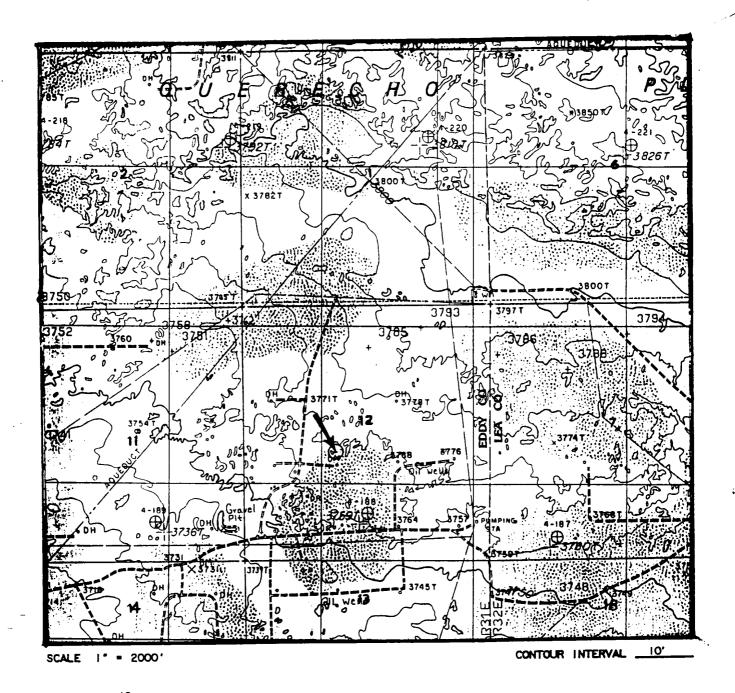


FROM 1 _ JCT. OF U.S. 82 & HWY 31, 6 MILES EAST 0 _ OCO HILLS, GO SOUTH 4.0 MILES ON HWY 31, THENCE SOUTHEAST ... MILES ON COUNTY ROAD. THENCE EAST 2.1 MILES ON LEASE ROAD TO THE SOUTHWEST CORNER OF SECTION 12.





LOCATION & ELEVATION VERI ICATION MAP



12 SEC.__ T-18-S, R-31-E SURVEY_ EDDY _STATE __N.M. COLINTY ... 2310' FSL & 1980' FWL DESCRIPTION __ 3765 ELEVATION _ SCUTHLAND ROYALTY COMPANY OPERATOR LEASE COMANCHE "A" FED. NO. 1 U.S.G.S. TOPOGRAPHIC MAP MALJAMAR, N. MEX. N 32°45'40" SCALED LATE.

W 103°49'19"

LONG: _



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 plat and notify us immediately of any possible discrepancy.

TOPOGRAPHIC LAND SURVEYORS

MERIDIAN OIL

Surveying & Mapping for the Oil & Gas Industr,

Meridian Oil, 21 Desta Drive Midland, Texas 79705 <u>EXHIBIT</u> "A*

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

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

SOUTHLAND ROYALTY COMPANY COMANCHE "A" FEDERAL NO.1 SEC. 12, T18S, R31E LC-058709(a)