

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

P. O. Drawer 570, Farmington, NM 87401

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surfaceL 1760' FSL & 800' FWL
At proposed prod. zone

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

Approximately 5 miles NW of Aztec, NM

15. DISTANCE FROM PROPOSED*

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

800'

16. NO. OF ACRES IN LEASE

2198.38

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

310'

19. PROPOSED DEPTH

7529'

17. NO. OF ACRES ASSIGNED
TO THIS WELL~~320/100~~ w/276.94 / 141.92

20. ROTARY OR CABLE TOOLS

Rotary

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

6257' GR

22. APPROX. DATE WORK WILL START*

March 15, 1980

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	9 5/8"	32.3#	200'	110 Sacks
8 3/4"	7"	23#	5115'	115 Sacks (Stage One)
				250 Sacks (Stage Two)
				300 Sacks
6 1/4"	4 1/2"	10.5#	4965'-7000'	
6 1/4"	4 1/2"	11.6#	7000'-7529'	

Surface formation is Nacimeinto.

Top of Ojo Alamo sand is at 1469'.

Top of Mesa Verde sand is at 4359'.

Fresh water mud will be used to drill from surface to Intermediate TD.

Gas will be used to drill from Intermediate TD to Total Depth.

It is anticipated that a GR-Induction and GR-Density log will be run at Total Depth.

No abnormal pressures or poisonous gases are anticipated in this well.

It is expected that this well will be drilled before August 31, 1980. This depends on time required for approval, rig availability and the weather.

Gas is 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

CC Davis

TITLE District Engineer

DATE 12-4-79

(This space for Federal or State office use)

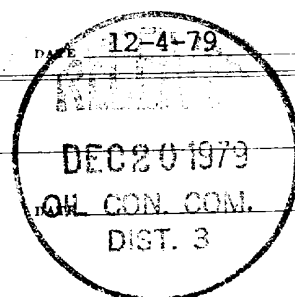
PERMIT NO.

APPROVAL DATE

APPROVED BY

CONDITIONS OF APPROVAL, IF ANY:

TITLE

ch Frank

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1-78

All distances must be from the outer boundaries of the Section

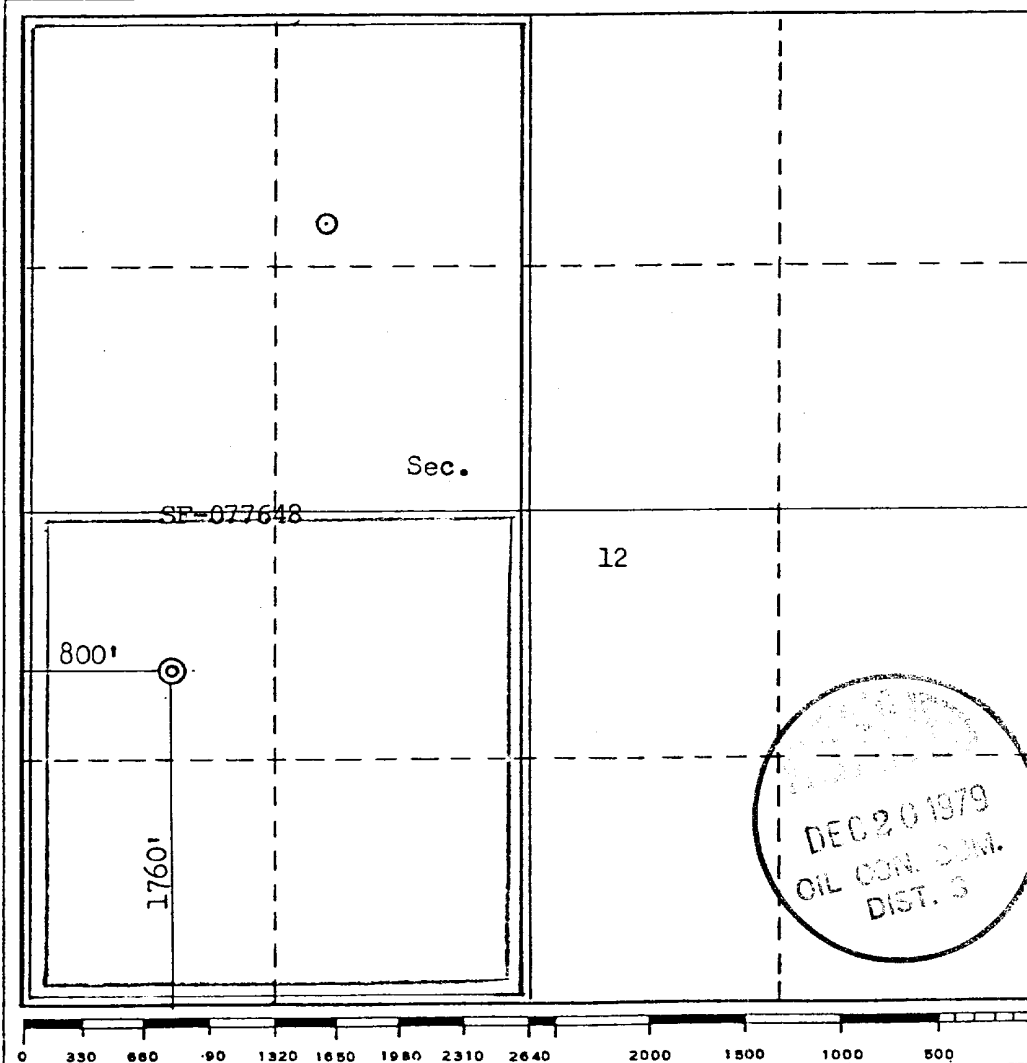
Operator SOUTHLAND ROYALTY COMPANY			Lease DAVIS		Well No. 10-E
Unit Letter L	Section 12	Township 31N	Range 12W	County San Juan	
Actual Footage Location of Well: 1760 feet from the South line and 800 feet from the West line					
Ground Level Elev. 6257	Producing Formation Dakota / Fruitland		Pool Basin / Undesignated		Dedicated Acreage: 276.94 320/160 141.92 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 _____

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

Curtis C. Parsons

Position

District Engineer

Company

Southland Royalty Company

Date

December 4, 1979

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

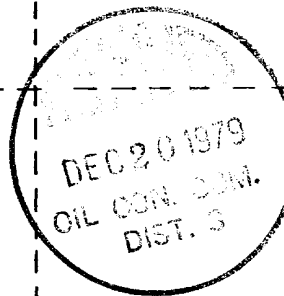
October 12, 1979

Registered Professional Engineer and/or Land Surveyor

[Signature]
FRED B. KERR, JR.

Certificate No.

3950



DRILLING SCHEDULE - DAVIS #10E

Location: 1760' FSL & 800' FWL, Section 12, T31N, R12W, San Juan County, New Mexico

Field: Basin Dakota/Undesignated Fruitland

Elevation: 6257' GR

Geology:

Formation Tops:	Ojo Alamo	1469'	Point Lookout	5072'
	Fruitland	2409'	Gallup	6434'
	Pictured Cliffs	2829'	Graneros	7199'
	Cliff House	4359'	Dakota	7329'
	* Intermediate TD	5020'	Total Depth	7529'

* INTERMEDIATE TD IS CRITICAL. DO NOT DRILL PAST 5020'. ACCURATE STRAP WILL BE NECESSARY.

Logging Program: IES and GR-Density from Intermediate TD to surface casing.
GR-Induction and GR-Density from Total Depth to Intermediate casing.

Coring Program: None

Natural Gauges: Gauge well at TD. Also gauge any noticeable increases in gas.
Record all gauges in tour book and turn in on morning report.

Drilling:

Contractor:

Tool Pusher:

SRC Ans. Service: 325-1841

SRC Representative:

Dispatch Number: 325-7391

Mud Program: Fresh water mud from surface to Intermediate TD.
Gas from Intermediate TD to TD.

Materials:

Casing Program:	Hole Size	Depth	Casing Size	Wt. & Grade
	12 1/4"	200'	9 5/8"	32.3# H-40
	8 3/4"	5115'	7"	23.0# K-55
	6 1/4"	4965'-7000'	4 1/2"	10.5# K-55
	6 1/4"	7000'-7529'	4 1/2"	11.6# K-55

Float Equipment:

9-5/8" Surface Casing: Pathfinder type "A" guide shoe.

7" Intermediate Casing: Pathfinder type "A" guide shoe. Self-fill insert float valve run 2 joints above shoe. 5 Pathfinder rigid stabilizers run every other joint above shoe. Run Dowell stage tool at 3030'. Run cement basket below and 5 Pathfinder rigid stabilizers above tool.

4-1/2" Liner: Liner hanger with neoprene pack-off. Pathfinder type "AP" guide shoe and type "A" float collar.

Wellhead Equipment: 9 5/8" x 10", 2000# casing head with 7" casing hanger
10', 2000# x 6", 2000# tubing head and tree

Cementing Program

9-5/8" surface casing: 110 sacks (125 cu. ft.) of Class "B" with 1/4# gel flake per sack and 3% CaCl_2 . WOC 12 hours. Test to 600# prior to drilling out. (Volume is 100% excess.)

7" Intermediate casing: STAGE ONE: 115 sacks (170 cu. ft.) of 50/50 Class "B" Poz w/6% gel (mixed with 7.2 gals. water/sack).
(Volume is 50% excess to cover top of Cliff House.)

STAGE TWO: 180 sacks (352 cu. ft.) of 50/50 Poz w/6% gel followed by 70 sacks of Class "B" w/2% CaCl_2 . (Volume is 50% excess to cover top of Ojo Alamo.)

WOC and circulate between stages as required by well conditions.
WOC 12 hours and test to 1000 psi prior to drilling out.

4-1/2" Liner: 300 sacks (447 cu. ft.) of 50/50 Poz w/6% gel, 1/4# gel flake/sk, 0.6% Halad 9 or equivalent. (Volume is 70% excess.)

If hole gets wet and mist drilling is required use 353 sacks (527 cu. ft.) for 100% excess.

L. O. Van Ryan

Date

BJM/ke



Southland Royalty Company

December 4, 1979

United States Geological Survey
Mr. James Sims
P. O. Box 959
Farmington, NM 87401

Dear Sir:

Enclosed please find a map showing existing roads and planned access roads to Southland Royalty Company's Davis #10E well.

The locations of tank batteries and flow lines will be on location with well. A burn pit will be provided for disposal of trash. Cuttings, drilling fluid and produced fluids will be put into the reserve pit and properly disposed of depending on amount and type of fluids.

There will be no camps or airstrips.

Also, enclosed is a location layout showing approximate location of rig, pits and pipe racks.

Water supply will be Farmer's Ditch.

The location will be restored according to Bureau of Land Management standards. This work will begin when all related construction is finished.

Mr. Ross Lankford will be Southland Royalty Company's field representative supervising these operations.

Yours truly,

CC Parsons
Curtis C. Parsons
District Engineer

CCP/ke



Southland Royalty Company

December 4, 1979

United States Geological Survey
Mr. James Sims
P. O. Box 959
Farmington, NM 87401

RE: Blowout Preventer Plan

Dear Sir:

All drilling and completion rigs will be equipped with 8" or larger double hydraulic blowout preventers and a hydraulic closing unit with steel lines.

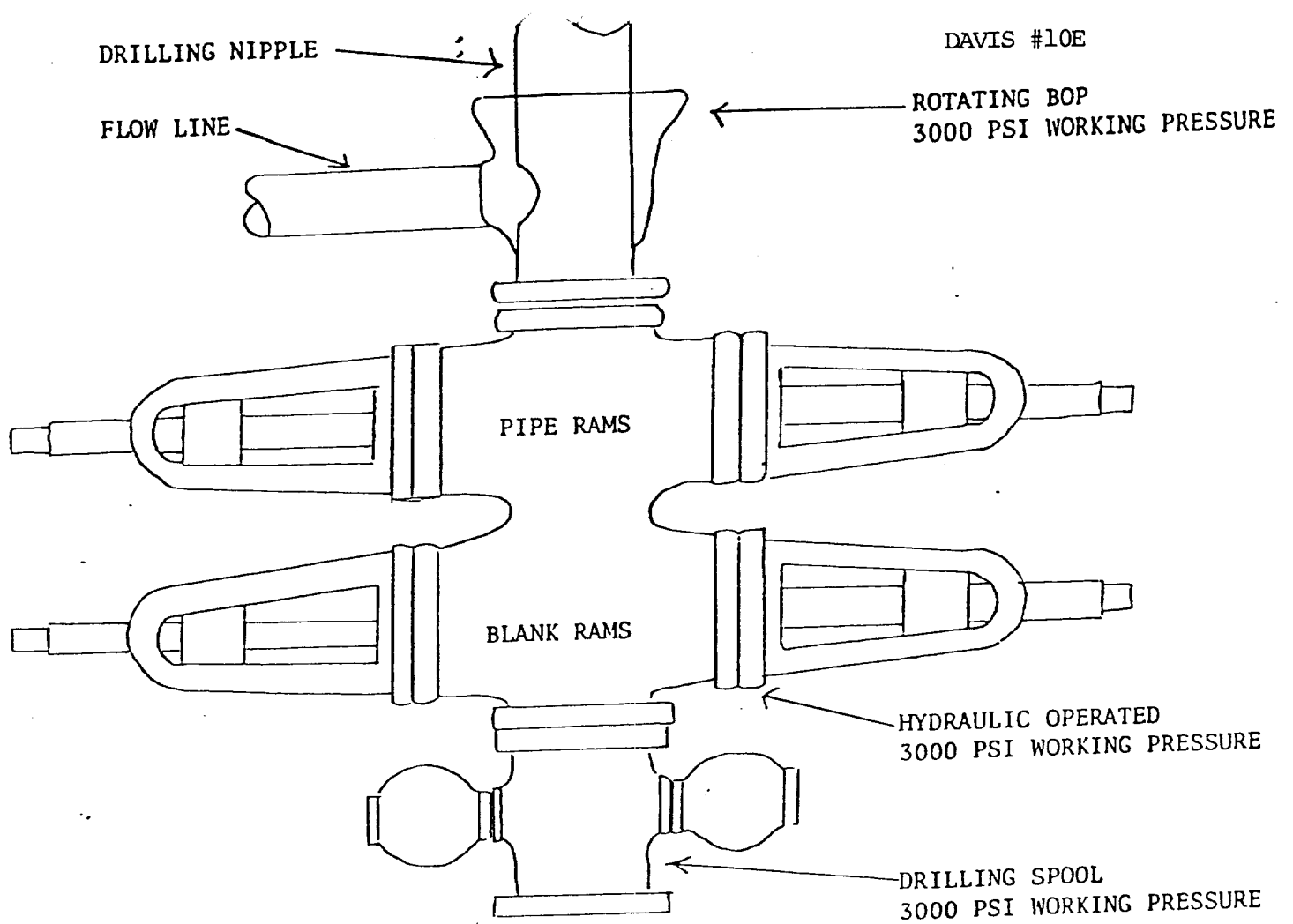
The preventer is 3000# working pressure and 6000# test pressure.

All crews will be thoroughly trained in the operation of this preventer. The preventer will be tested frequently enough to insure proper operation.

Yours truly,

Curtis C. Parsons
District Engineer

CCP/ke



PREVENTERS AND SPOOLS ARE TO HAVE
THROUGH BORE OF 6" - 3000 PSI OR LARGER



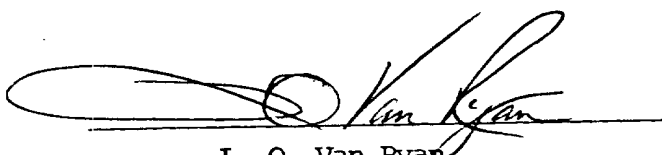
Southland Royalty Company

United States Geological Survey
Mr. James Sims
P. O. Box 595
Farmington, NM 87401

Dear Sir:

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

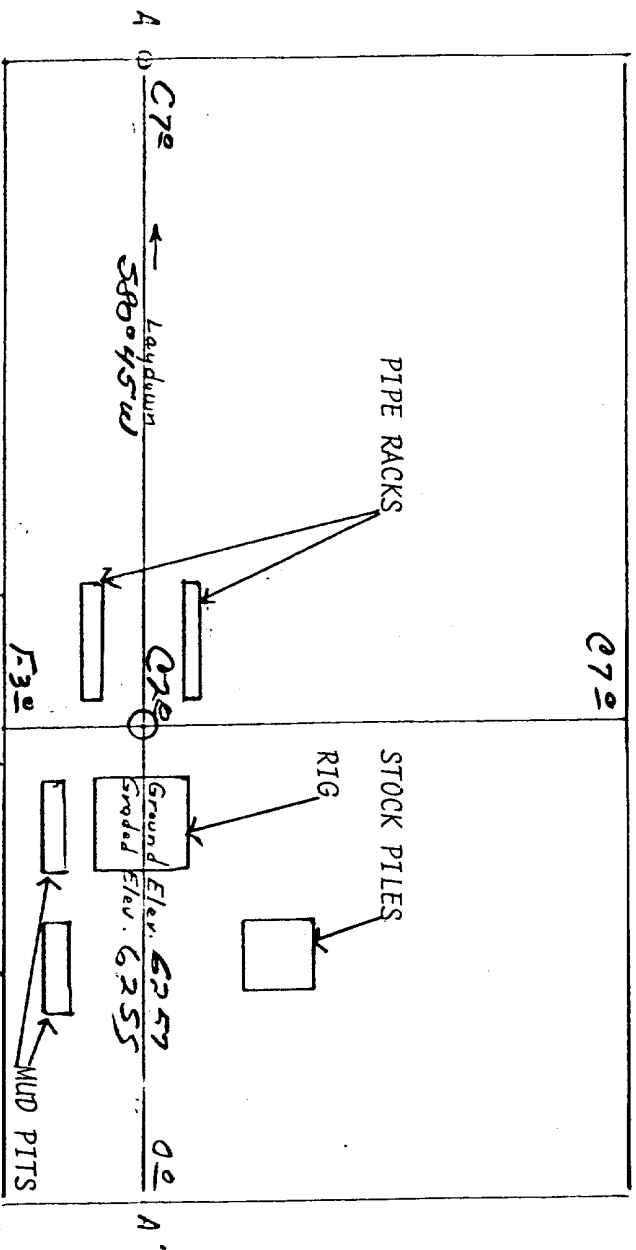
Date: December 4, 1979



L. O. Van Ryan
District Production Manager

LOVR/ke

Location Profile for
 SOUTHLAND ROYALTY CO. #10E DAVIS
 1760' FSL 800' FWL Sec 12-T31N-R12W San Juan County, New Mexico

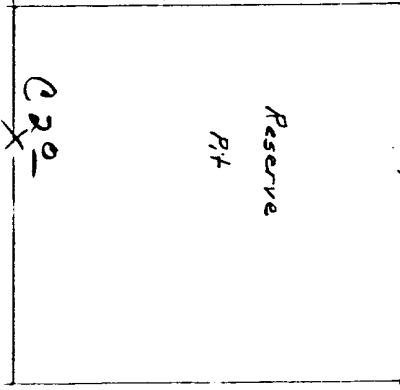


Vert. 1"=40' A-A' Horiz. 1"=100'

6260			
6250			

B-B' E

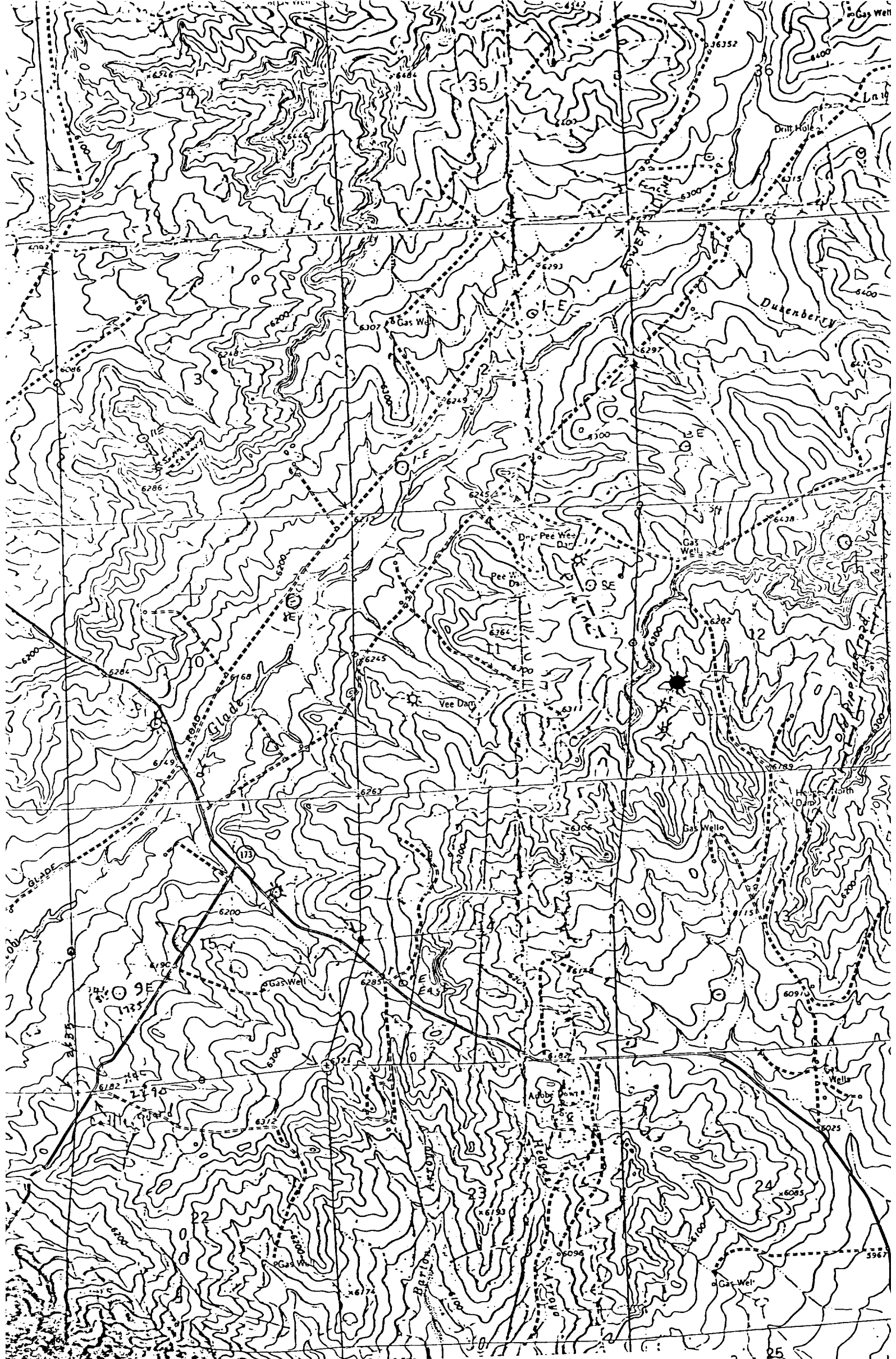
6260			
6250			



Vert. 1"=40' C-C' Horiz. 1"=100'

D-D' E

KERR LAND SURVEYING
 Date: _____



PROPOSED LOCATION *
EXISTING LOCATIONS ○
PROPOSED ROAD - - -
EXISTING ROADS —

Vicinity Map for
SOUTHLAND ROYALTY CO. #10E DAVIS
1760' FSL 800' FWL Sec 12-T31N-R12W
SOUTHERN COUNTY NEW MEXICO

R. 12 W. 23
1 MILE
0 1000 FEET