

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒ (Re-enter) DEEPEN ☐

b. TYPE OF WELL

OIL WELL ☒ GAS WELL ☐ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Bettis, Boyle & Stovall

3. ADDRESS AND TELEPHONE NO.

P.O. Box 1240, Graham, TX 76450 817-549-0780

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface

1977' FNL & 1938' FWL

At proposed prod. zone

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

25 Mi. SE of Loving, NM

15. DISTANCE FROM PROPOSED\*

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

1938'

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

NA

16. NO. OF ACRES IN LEASE

640

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

40

19. PROPOSED DEPTH

8500'

20. ROTARY OR CABLE TOOLS

rotary

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

3528.5 G.L.

22. APPROX. DATE WORK WILL START\*

12/1/92

23.

PROPOSED CASING AND CEMENTING PROGRAM Secretary's Potash / R-111-P Potash

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
26"	20"	94#	600'	(already existing) 1060 sx
12-1/4"	8-5/8" K55	32# STC	4400'	1200 sx - circ.
7-7/8"	5-1/2" J55	15.5# 17# LTC	8500'	500 sx. (see slips-tie back)

DV@i6200'

Surface casing is existing in well as this is a re-entry of Texas American Todd Federal #1-Z plugged 9/11/74. The existing location will need to be extended, therefore a new archaeological survey has been ordered.

Attachments include: mud program  
BOP program  
surface use plan  
location plats

Part ID-1  
12-4-92  
Re-entry

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 Steve Gray Steve Gray

TITLE Petroleum Engineer

DATE 9-24-92

(This space for Federal or State office use)

PERMIT NO. \_\_\_\_\_

APPROVAL DATE \_\_\_\_\_

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
CONDITIONS OF APPROVAL, IF ANY: All APD Modification Are As Per Telecons w/s. Gray & H. Bettis on 10/15/92 and on 10/20/92, Respectively. (535)

APPROVED BY \_\_\_\_\_

TITLE \_\_\_\_\_

DATE 11-16-92

\*See Instructions On Reverse Side

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 <b>BETTIS, BOYLE &amp; STOVALL</b>		Lease <b>SOTOL FEDERAL</b>		Well No. <b>3</b>
Unit Letter <b>F</b>	Section <b>1</b>	Township <b>24 SOUTH</b>	Range <b>31 EAST</b>	County <b>EDDY</b>
Actual Footage Location of Well: <b>1977</b> feet from the <b>NORTH</b> line and <b>1938</b> feet from the <b>WEST</b> line				
Ground Level Elev. <b>3528.5'</b>	Producing Formation <b>Delaware</b>	Pool <b>Delaware Wildcat</b>	Dedicated Acreage: <b>40</b> Acres	

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

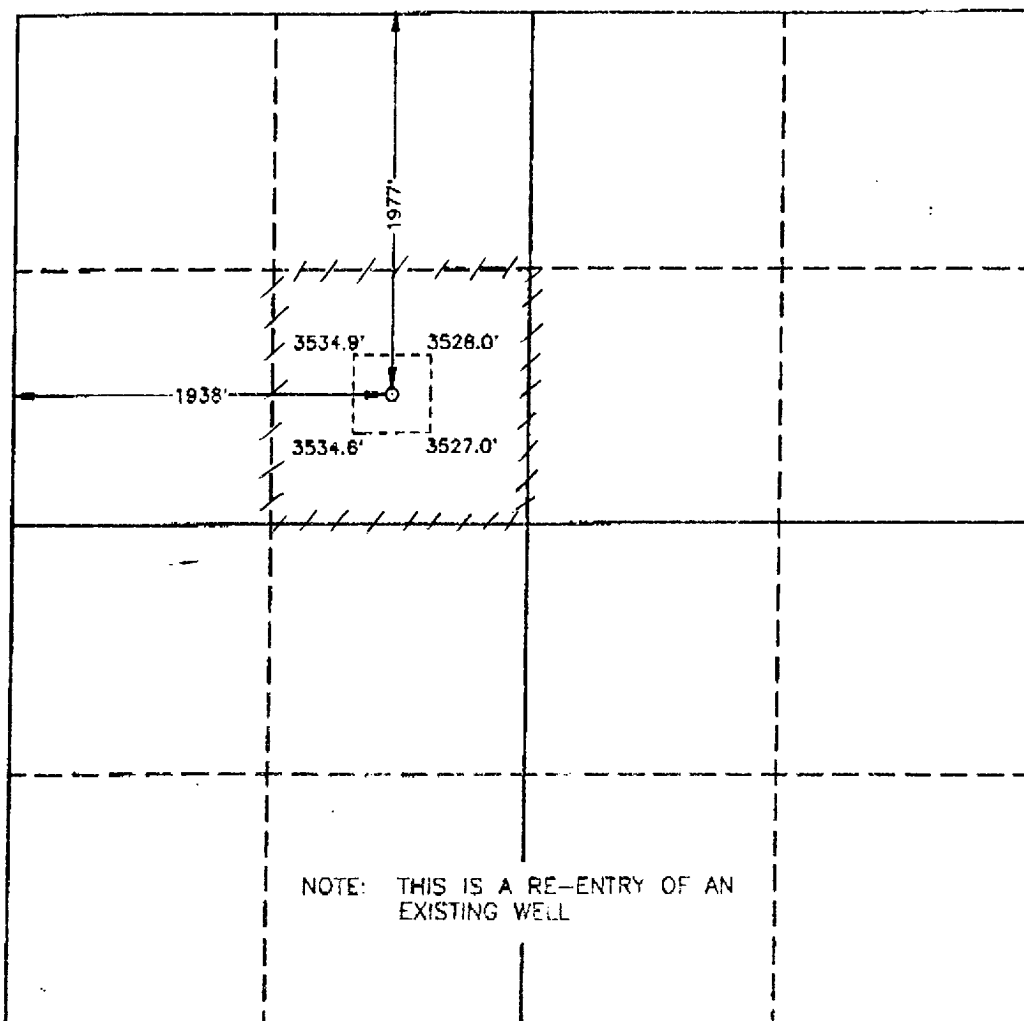
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature **Steve Gray**

Printed Name **Steve Gray**

Position **Petroleum Engineer**

**Bettis, Boyle & Stovall**  
Company

**9/24/92**  
Date

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  
**SEPTEMBER 16, 1992**

Signature & Seal of  
Professional Surveyor

**GARY L. JONES**  
NEW MEXICO  
79X  
Certification No. **JOHN W. WEST, 876**  
**RONALD J. EDISON, 2239**  
**GARY L. JONES, 7877**  
**92-11-1317**

SOTOL FEDERAL #3

The following information is furnished with the Application to Drill (Re-enter), Form 3160-3, in compliance with NTL-6, effective July 1, 1976.

1. The geologic surface formation is Permian.
2. The estimated tops of important geologic markers are as follows:

Rustler	784'
T/Delaware LS	4,500'
T/Delaware SS	4,546'
Bone Springs	8,500'

3. The depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Fresh Water:	Less than 500'
Top Salt:	952'
Base Salt:	4265'

4. For proposed casing program, please see Form 3160-3.
5. Pressure control will be effected with a dual ram, 3000 psi WP blowout preventer with 3000 psi annular preventer. (See Exhibit A).
6. Proposed Mud Program is attached. (See Exhibit B).
7. A drilling rig with normal auxillary equipment, mud tanks, pumps, generator and 4-1/2" drill pipe will be used to drill this well.
8. Drill stem tests may be performed on any valid oil or gas shows in the Delaware. Resistivity and porosity logs will be run as required to evaluate the productive potential of the well.
9. No abnormal pressures are anticipated. NO H<sub>2</sub>S EXPECTED.
10. The anticipated starting date for this well is December 1992.  
Duration: 20 days.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN  
BETTIS, BOYLE & STOVALL  
SOTOL FEDERAL #3  
1977' FNL & 1936' FWL  
SEC 1, T24S, R31E  
EDDY COUNTY, NEW MEXICO

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This plan is submitted with Form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effects associated with the operation.

1. EXISTING ROADS.

- A. The proposed well to be located as stated below.
- B. Exhibit "C" is a portion of a USGS Topographic map of the area. Directions to the location are as follows:  
  
Travel east from Loving on State Rd. 31 and 128 for 26 mi. Turn left onto location road and follow 100 ft. to location.
- C. See Exhibits attached.
- D. Road to be maintained by grader when required.

2. PLANNED ACCESS ROADS

Exhibits "C" and "D" are maps showing access roads in the area.

- 1. The width of access road will be 12 feet.
- 2. The maximum grade will be nominal.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN  
PAGE 2

3. No turnouts will be constructed.
4. Because this is a re-entry, the existing road and location will be utilized. No culverts or major fills are necessary.
5. A cattleguard will be installed at Hiway 128.

3. LOCATION OF EXISTING WELLS.

1. There are no water wells.
2. There are 2 dry holes immediately east of this location in north half of Section 1 approximately 1/4 mile away that are 382' and 347' deep.
3. No temporarily abandoned wells.
4. No disposal wells.
5. No drilling wells.
6. The Sotol #2 produces in Section 1 approximately 1/4 mile South.
7. No shut-in wells.
8. No injection wells.
9. No monitoring, observation, or resource wells known.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES.

- A. Existing facilities are present on the Sotol #2 location.. If production is established a line will be run under Hiway 128 to the facilities. Locking devices will be placed on all production equipment. No unattended open pits or reservoirs to be left at the well site.
- B. The land will be restored as much as possible to the original condition.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN  
PAGE 3

5. LOCATION AND TYPE OF WATER SUPPLY.

- A. Drilling water is to be purchased and hauled to the proposed drilling site.
- B. Water to be hauled by trucks.
- C. No well is to be drilled.

6. SOURCE OF CONSTRUCTION MATERIALS.

- A. Caliche will be used for construction material. Caliche will be purchased and hauled from an approved Caliche pit.

7. METHODS OF HANDLING WASTE DISPOSAL.

- 1. Drill cuttings will be disposed of in the drilling pits.
- 2. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
- 3. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- 4. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- 5. Trash, waste paper, garbage, and junk will be hauled to proper disposal site.
- 6. All trash and debris will be buried or removed from the well site within 30 days after finishing drilling and/or completion operations.

↓  
Burial of refuse  
on-site is prohibited.

*SSS*

MULTI-POINT SURFACE USE AND OPERATIONS PLAN  
PAGE 4

8. ANCILLARY FACILITIES. None required.

9. WELL SITE LAYOUT.

A. Exhibit "E" shows the well site layout with general dimensions for the location and reserve pit.

1. The reserve pit will be lined.

10. PLAN FOR RESTORATION OF THE SURFACE.

1. All pits will be back filled and all waste material removed. Land adjacent to drilling pad will be levelled.

2. Re-vegetation and rehabilitation to be completed as per BLM recommendations.

3. Prior to rig release, pits will be fenced and maintained until clean up.

4. Any oil in pit will be transferred to steel stock tank and separated and sold.

5. All clean up should be completed within 6 months of well completion.

11. OTHER INFORMATION.

1. The well location and access road is situated entirely in Section 1, which is Federally owned. The existing access road shall be reconstructed.

2. No ponds, lakes, streams, water wells, or occupied dwellings exist in the area.

12. LESSEE'S OR OPERATOR'S REPRESENTATIVE:

Steve Gray, P.O. Box 1240, Graham, TX 76450  
Phone: (817)549-0780

13. CERTIFICATION.

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site 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 Successful Bidder and its contractors in conformity with this plan and the terms and conditions under which it is approved.

DATE 9/24/92

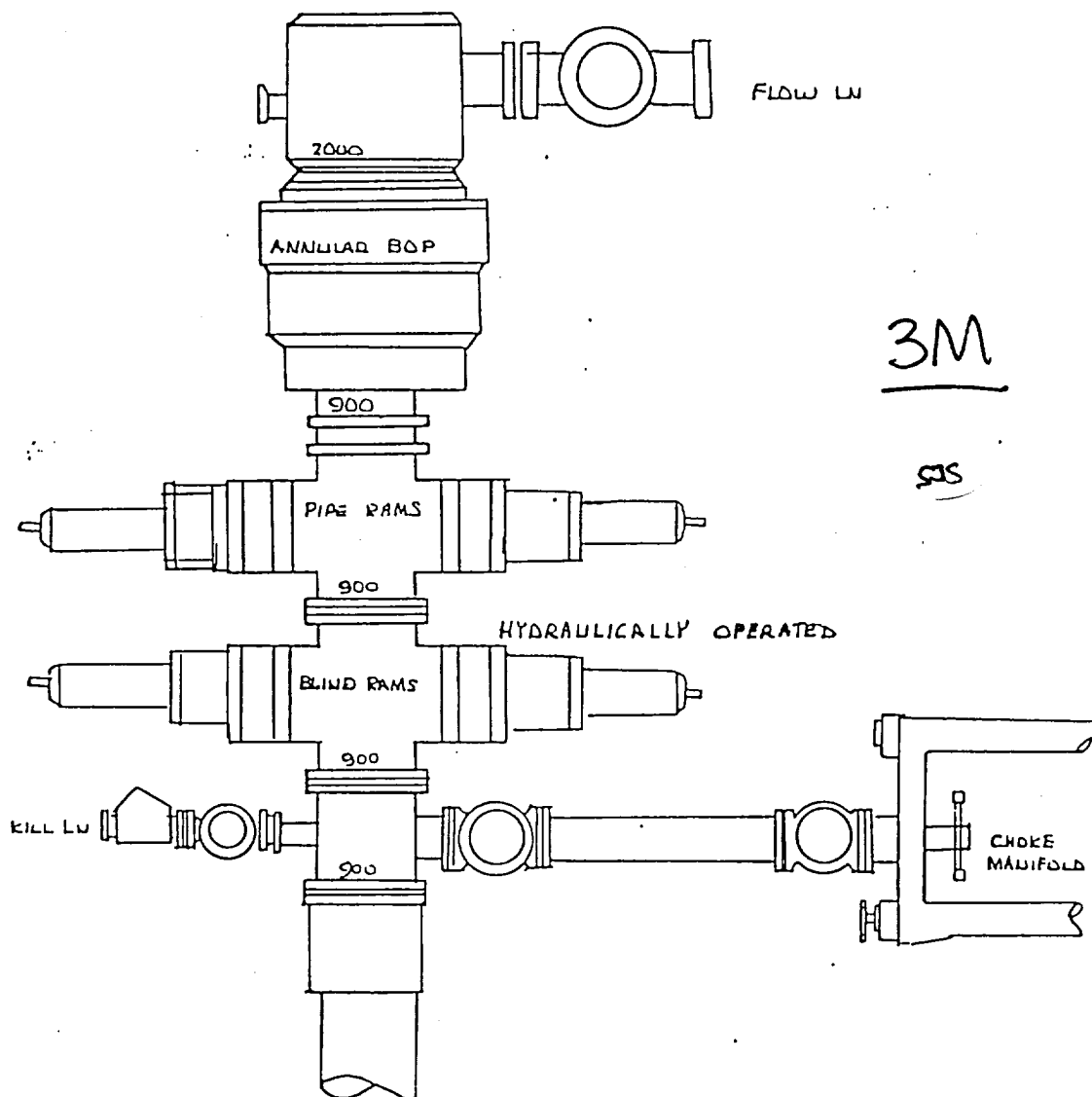
Steve Gray  
Steve Gray  
Petroleum Engineer

EXHIBIT "B"

Sotol Federal #3  
Proposed Drilling Fluids Program

1. Surface to 600': Use fresh water, native mud to clean out surface hole.
2. 600-4400': mud weight 10-10.2, Viscosity 32-34.  
Use commercial brine, paper, and caustic for PH control.
3. 4400-8400': mud weight 8.5-8.6, Viscosity 32-36.  
Use fresh water and gel for viscosity as needed. Use paper to control lost circulation. Lime or caustic for PH control.





3M

SS

BOP

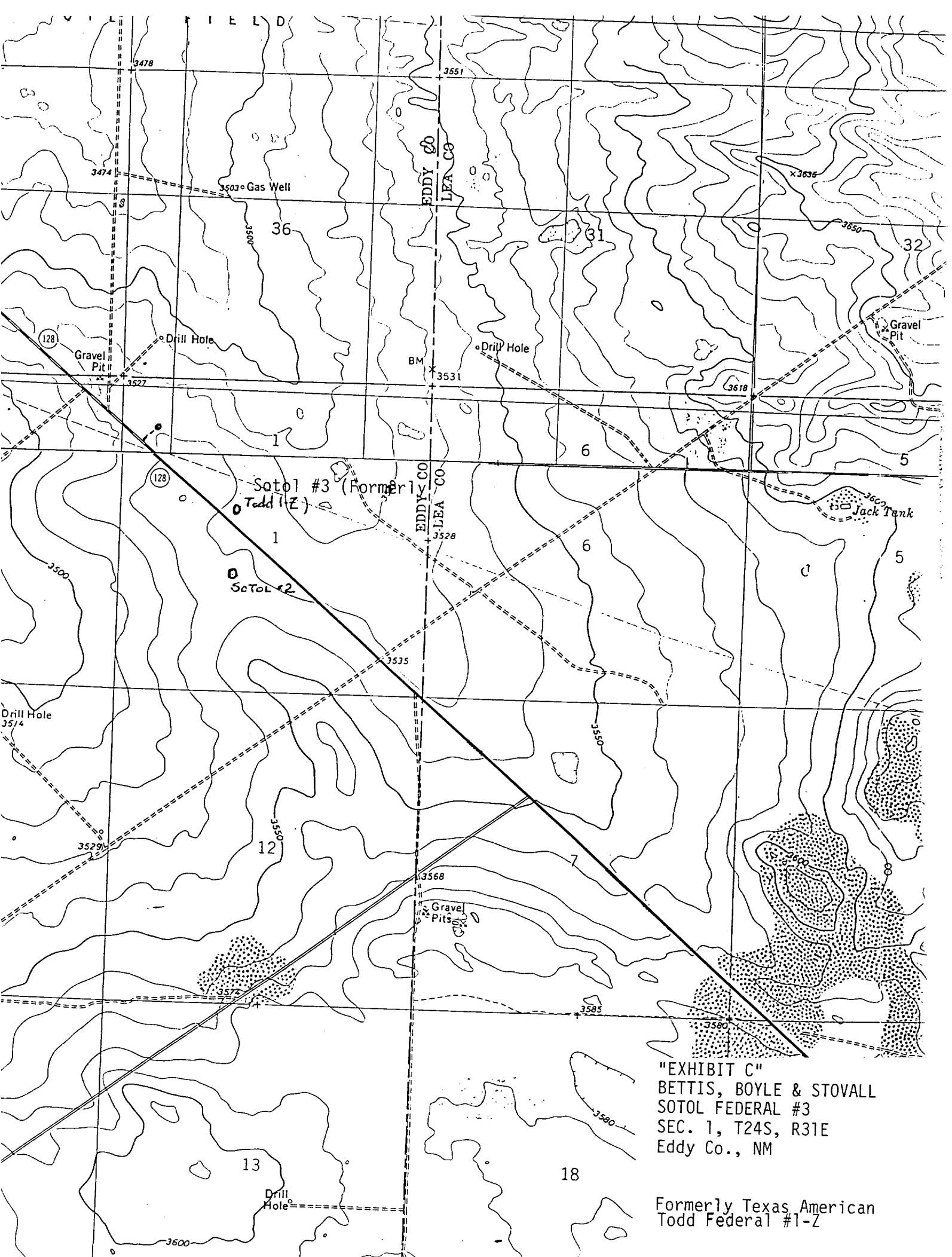
"EXHIBIT A"  
 BETTIS, BOYLE & STOVALL  
 SOTOL FEDERAL #3  
 SEC. 1, T24S, R31E  
 EDDY COUNTY, NEW MEXICO

Formerly Texas American  
 Todd Federal #1Z

EXHIBIT "B"

Sotol Federal #3  
Proposed Drilling Fluids Program

1. Surface to 600': Use fresh water, native mud to clean out surface hole.
2. 600-4400': mud weight 10-10.2, Viscosity 32-34.  
Use commercial brine, paper, and caustic for PH control.
3. 4400-8400': mud weight 8.5-8.6, Viscosity 32-36.  
Use fresh water and gel for viscosity as needed. Use paper to control lost circulation. Lime or caustic for PH control.



"EXHIBIT C"  
BETTIS, BOYLE & STOVALL  
SOTOL FEDERAL #3  
SEC. 1, T24S, R31E  
Eddy Co., NM

Formerly Texas American  
Todd Federal #1-Z

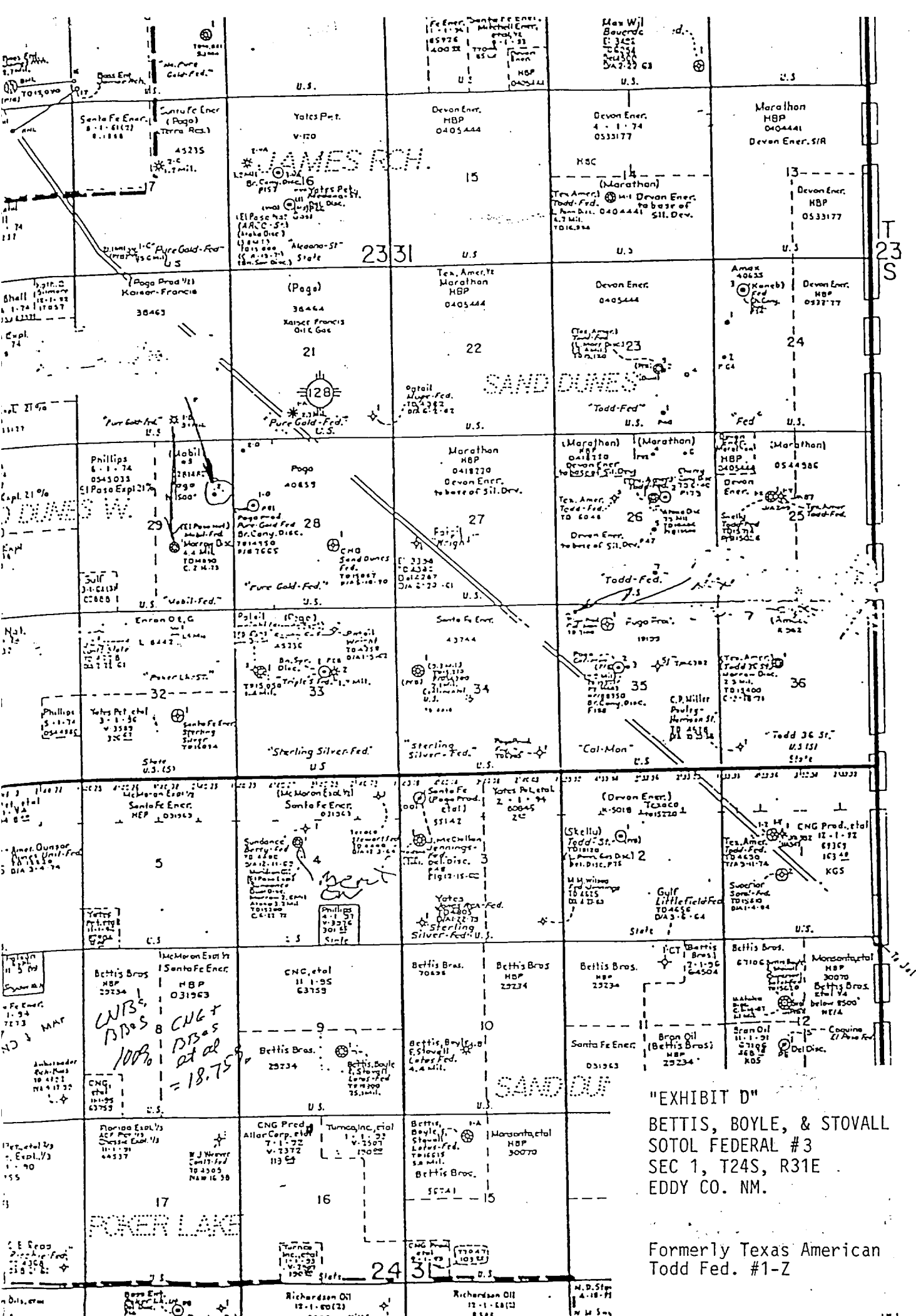


EXHIBIT E  
BETTIS, BOYLE & STOVALL  
Proposed Re-entry  
SOTOL FEDERAL #3  
(Formerly Texas American Todd #1-Z)  
Sec. 1-T24S-R31E  
Eddy Co., New Mexico

