

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPPLICATE*

(Other Instru
Tape or R)

FORM APPROVED
OMB NO. 1094-0136
Expires February 28, 1995

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

b. TYPE OF WELL

OIL
WELL ☒

GAS
WELL ☐

OTHER

SINGLE
ZONE ☐

MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Echo Production, Inc.

3. ADDRESS AND TELEPHONE NO

PO Box 1210, Graham, TX 76450 (940) 549-3292

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

At surface

660' FSL & 1980' FWL

At proposed prod. zone

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
REGULATORY STIPULATIONS

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

45 miles west of Jal, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drlg. unit line, if any)

660'

16. NO. OF ACRES IN LEASE

600

17. NO. OF ACRES ASSIGNED
TO THIS WELL

40

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

1360'

19. PROPOSED DEPTH

9000'

20. ROTARY OR CABLE TOOLS

rotary

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

3665' GR

CARLEIGH CONTROLLED WATER BASIN

22. APPROX. DATE WORK WILL START*

11/15/2000

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" 'H'	48#	800' 1200'	Circ to Surface
11"	8 5/8" 'J'	32#	4700'	Circ to Surface
7 7/8"	5 1/2" 'J' & 'H'	17#	9000'	600' above top to Delaware pay (+6400')

Echo Production, Inc. proposes to drill to a depth sufficient to test the Delaware formation. If productive, 5 1/2" casing will be set. If non-productive, the well will be plugged and abandoned in a manner consistent with Federal Regulations. Specific programs as set out in Onshore Oil and Gas Order #1 are outlined in the following attachments:

- NMOCD Form C-102 Well Location and Acreage Dedication Plat
- Hole Prognosis
- Surface Use and Operating Plan
- Exhibit "A" Equipment Description
- Exhibit "B" Planned Access Roads
- Exhibit "C" One Mile Radius Map
- Exhibit "D" Drilling Rig Layout Plan

OPER. OGRID NO. 6742
PROPERTY NO. 25280
POOL CODE 59930
EFF. DATE 12-21-00
API NO. 30-025-35312

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 Tam M. Sells TITLE Operations Manager DATE 10/10/00

(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:

APPROVED BY _____ TITLE _____ DATE _____

*See Instructions On Reverse Side

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 or deepen 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 operator elects to initiate drilling operation on an oil and gas lease.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 30 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 1849 C Street, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0136), Washington, D.C. 20503.

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 operator elects to initiate drilling operations on an oil and gas lease.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Arredondo, NM 88218
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised March 17, 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-35312		Pool Code 59930	Pool Name Triste Draw, Delaware
Property Code 25280	Property Name CORSAIR "27" FEDERAL		Well Number 2
OGRID No. 6742	Operator Name ECHO PRODUCTION INC.		Elevation 3665.

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	27	23-S	32-E		660	SOUTH	1980	WEST	LEA

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 40		Joint or Infill		Consolidation Code		Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief Signature: Tom Golden Printed Name: Title: Date:	
	18 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 belief. SEPTEMBER 26, 2000 Date of Survey Signature and Seal of Professional Surveyor	
	5412 NO. 5412	

HOLE PROGNOSIS
FORM 3160-3 APPLICATION FOR PERMIT TO DRILL
ECHO PRODUCTION, INC.
CORSAIR 27 FEDERAL #2
660' FSL & 1980' FWL
SECTION 27-23S-32E
LEA COUNTY, NEW MEXICO

In conjunction with Form 3160-3 Application for Permit to Drill, Echo Production, Inc. submits the following items in accordance with Onshore Oil and Gas Order Numbers 1 and 2, and all other applicable federal and state regulations.

1. Geological Name of Surface Formation:

Permian

2. Estimated Tops of Geologic Markers:

Rustler	1200'	Cherry Canyon	5950'
T. Lamar	4890'	Bone Spring	8700'
Bell Canyon	4920'	Avalon Sand	8860'
T.D.	9000'		

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

Surface	150'	Fresh Water
Delaware	4920'-8450'	Oil or Gas
Bone Spring	8700'	Oil or Gas
Avalon Sand	8860'	Oil or Gas

No other formations are expected to produce oil, gas or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 13 3/8" casing at 600' and circulating cement back to surface. Any shallower zones above TD that contain commercial quantities of oil and/or gas will have cement circulated across the zone.

HOLE PROGNOSIS
CORSAIR 27 FEDERAL #2
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4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight, Grade, JT. Cond, Type</u>
17 1/2"	0-600'	13 3/8"	48#, H-40, ST&C
11"	0-4700'	8 5/8"	32#, J-55, LT&C
7 7/8"	0-TD	5 1/2"	17#, J-55, N-80, LT&C

5. Cementing Program:

Surface Casing: 13 3/8" casing will be set at approximately 600' and cemented with approximately 650 sacks of Premium Plus cement with 2% CaCl and additives. The amount may be adjusted depending upon the fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

Intermediate Casing: 8 5/8" casing will be set at approximately 4700' and cemented with approximately 1500 sacks of 35/65 Poz "c" with additives. The amount may be adjusted dependent upon fluid caliper results, however, cement in sufficient quantities to circulate will be utilized.

Production Casing: If appropriate, 5 1/2" casing will be set at Total Depth. Echo will utilize cement in sufficient quantities to tie back 600' above any Delaware pay. Well will be cemented w/appropriate number of sacks of 50/50 POZ 'H' w/ additives and 100 sacks of 'C' Neat.

6. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) show in Exhibit "A" will consist of a double ram-type (3000 psi WP) preventer and a bag-type (hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram-type preventer will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom. Both BOP's will be nipped up on the 13 3/8" surface casing and used continuously until TD is reached. All BOP's and accessory equipment will be tested to 500 psi before drilling out of surface casing. Before drilling out of intermediate casing, the ram-type BOP and accessory equipment will be tested to 1000* psi and the hydril to 1000#.

7. Types and Characteristics of the Proposed Mud System:

O' to 600'	Fresh water with lime, gel paper and fiber will be used for drilling purposes. Weight 8.4 – 8.6, Vis 29-36, PH > 8.
600' to 4700'	Saturated brine water purchased from commercial sources with paper and fiber will be utilized. Weight 8.6-10.5, Vis 32-34, Ph 10.
4700' to 9000'	Brine and fresh water purchased from commercial sources with gel and starch, 3% KCl, 20-50 PPM Nitrates, Cl 30-75,000, caustic for control and paper for seepage will be utilized. Weight 8.5 – 8.9, Vis 29-34, Ph 9-10, WL 20-50.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be available at the well site at all times.

HOLE PROGNOSIS
CORSAIR 27 FEDERAL #2
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8. Auxiliary Well Control and Monitoring Equipment:

- A. A kelly cock will be kept in the drill string at all times.
- B. A full opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.

9. Testing, Logging and Coring Program:

A Mudlogging unit will be on location from top of Delaware formation to TD. Mudlogging unit will be employed from approximately 4920' (Top of Delaware) to 9000' (Total Depth).

If indicated, AIT-GR, CNL-LDT-GR logs and Caliper logs will be run at TD. The Gamma Ray AIT will be run from TD back to the intermediate casing. The Gamma Ray Compensated Neutron Log will be run from TD back to surface. If indicated, Echo may elect to run rotary sidewall cores from selected intervals from approximately 4920' to 9000' dependent upon logging results.

10. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

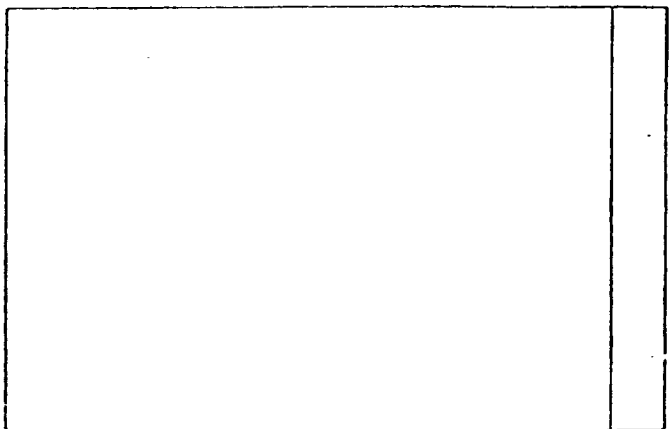
No abnormal pressures or temperatures are anticipated. Anticipated bottomhole pressure is 3600# PSI.

Loss of circulation is possible in the Delaware section of the hole, however, no major loss circulation zones have been reported in offsetting wells.

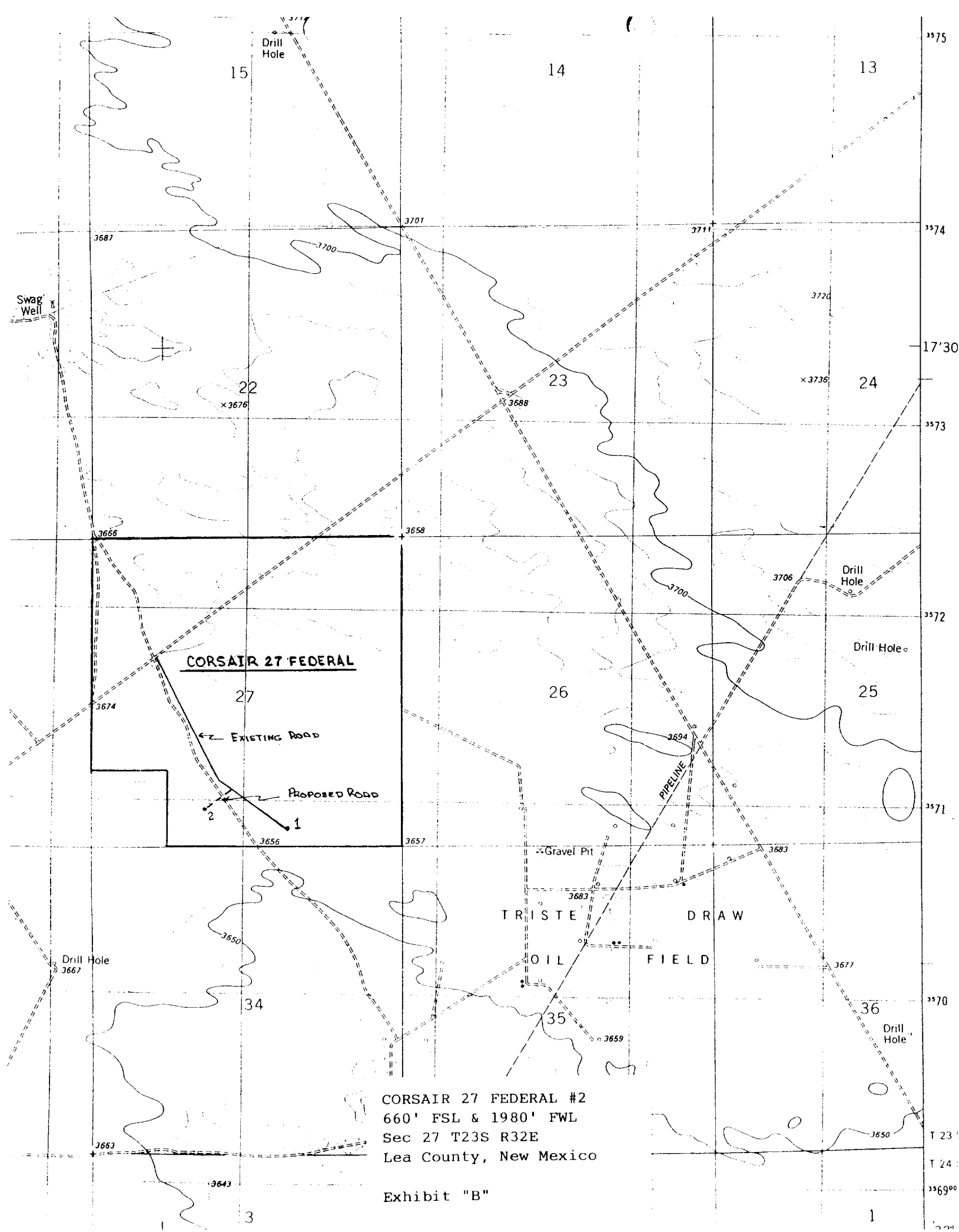
Multiple wells have been drilled and completed in the immediate area. To date, Hydrogen Sulfide has not been encountered. However, if Hydrogen Sulfide is encountered, a Hydrogen Sulfide training and appropriate breathing apparatus is located on site. If necessary, the well can be shut in utilizing the blow out preventer and other equipment to prevent the migration of Hydrogen Sulfide to the surface.

11. Anticipated Starting Date and Duration of Operations:

Road and location work will not begin until approval has been received from the BLM. The anticipated spud date is November 15, 2000. Once commenced, the drilling operation will be completed in approximately 20 days. If the well is productive, an additional 15 days will be required for completion and testing before a decision is made to install permanent facilities. In conjunction with Form 3160-3, Application for Permit to Drill, Echo Production, Inc submits the following items in accordance with Onshore Oil and Gas Order Numbers 1 and 2, and all other applicable federal and state regulations.



* To include derrick floor mounted controls.



STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Operator Name: ECHO PRODUCTION, INC.
Street or PO Box: PO Box 1210
City, State: Graham, Texas
Zip Code: 76450

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

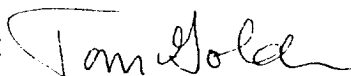
Lease No.: NM- LC 063228 (Corsair 27 Federal)

Legal Description of Land: All of Sec 27 T23S R32E except SW/4 of SW/4

Formation(s) (if applicable): Delaware

Bond Coverage: (State if individually bonded or another's bond)
Statewide Bond - Echo Production, Inc.

BLM Bond File No.: NM 2692

Authorized Signature: 

Title: Operations Manager

Date: January 7, 2000