

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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
MYCO INDUSTRIES, INC.

3. ADDRESS AND TELEPHONE NO.
P.O. BOX 840, Artesia, NM 88211-0840 (505)748-4274

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface
660' FNL & 1980' FWL (UNIT C)
At proposed prod. zone
SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
39-MILES WEST AND NORTH OF JAL, NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

16. NO. OF ACRES IN LEASE
240

17. NO. OF ACRES ASSIGNED TO THIS WELL
40

19. PROPOSED DEPTH
8700'

20. ROTARY OR CABLE TOOLS
ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
GL 3532'

22. APPROX. DATE WORK WILL START*
30-DAYS

5. LEASE DESIGNATION AND SERIAL NO.
NM-86923

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
BITSY FEDERAL #3

9. AM WELL NO.
30-025-35254

10. FIELD AND POOL, OR WILDCAT
SAND DUNES DELAWARE EAST

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
SEC. 7-T23S-R32E

12. COUNTY OR PARISH
LEA

13. STATE
NM

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"	48# H-40	860' 900'	500-SXS (CIRCULATE)
12-1/4"	8-5/8"	32# J-55	4600'	1500-SXS (CIRCULATE)
7-7/8"	5-1/2"	17# K-55	8700'	900-SXS (TIE BACK TO 8-5/8")

MYCO INDUSTRIES, INC. PROPOSES TO DRILL AND TEST THE DELAWARE AND INTERMEDIATE FORMATIONS. APPROXIMATELY 860' OF SURFACE W/CMT. CIRC. AND APPROXIMATELY 4600' OF INTERMEDIATE W/CMT. CIRC. WILL BE PERFORATED AND STIMULATED AS NEEDED FOR PRODUCTION. A 640-PUMPING UNIT WITH ELECTRICITY IS ANTICIPATED FOR PRODUCTION.

A FIELD SURVEY *Outside Sand Dunes Delaware, East* AREA AND A CO

MINED THAT THERE ARE NO PRAIRIE CHICKENS IN THE R. TROY L. BEST, AUBURN UNIVERSITY IS ATTACHED.

** REQUEST E

R DRILLING, COMPLETION AND WORKOVER PURPOSES.

*** REQUEST EX

Standard Location
OPEL GRID NO. 15445
PROPERTY NO. 18884
POOL CODE 53817
EFF. DATE 11-14-00
API NO. 30-025-35254

OPEL GRID NO. 15445
PROPERTY NO. 18884
POOL CODE 53817
EFF. DATE 11-14-00
API NO. 30-025-35254

IN ABOVE SPACE DE
deepen directionally, giv

24.

resent productive zone and proposed new productive zone. If proposal is to drill or
ths. Give blowout preventer program, if any.

SIGNED *AM*
(This space for)

TIONS MANAGER DATE 9/13/2000

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

APPROVED FOR LEASE

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-025-35254	Pool Code 53817	Pool Name Sand Dunes; Delaware, East
Property Code 18884	Property Name BITSY FEDERAL	Well Number 3
OGRID No. 15445	Operator Name MYCO INDUSTRIES, INC.	Elevation 3531

Surface Location

UL or lot No. C	Section 7	Township 23 S	Range 32 E	Lot Idn	Feet from the 810	North/South line NORTH	Feet from the 1980	East/West line WEST	County LEA
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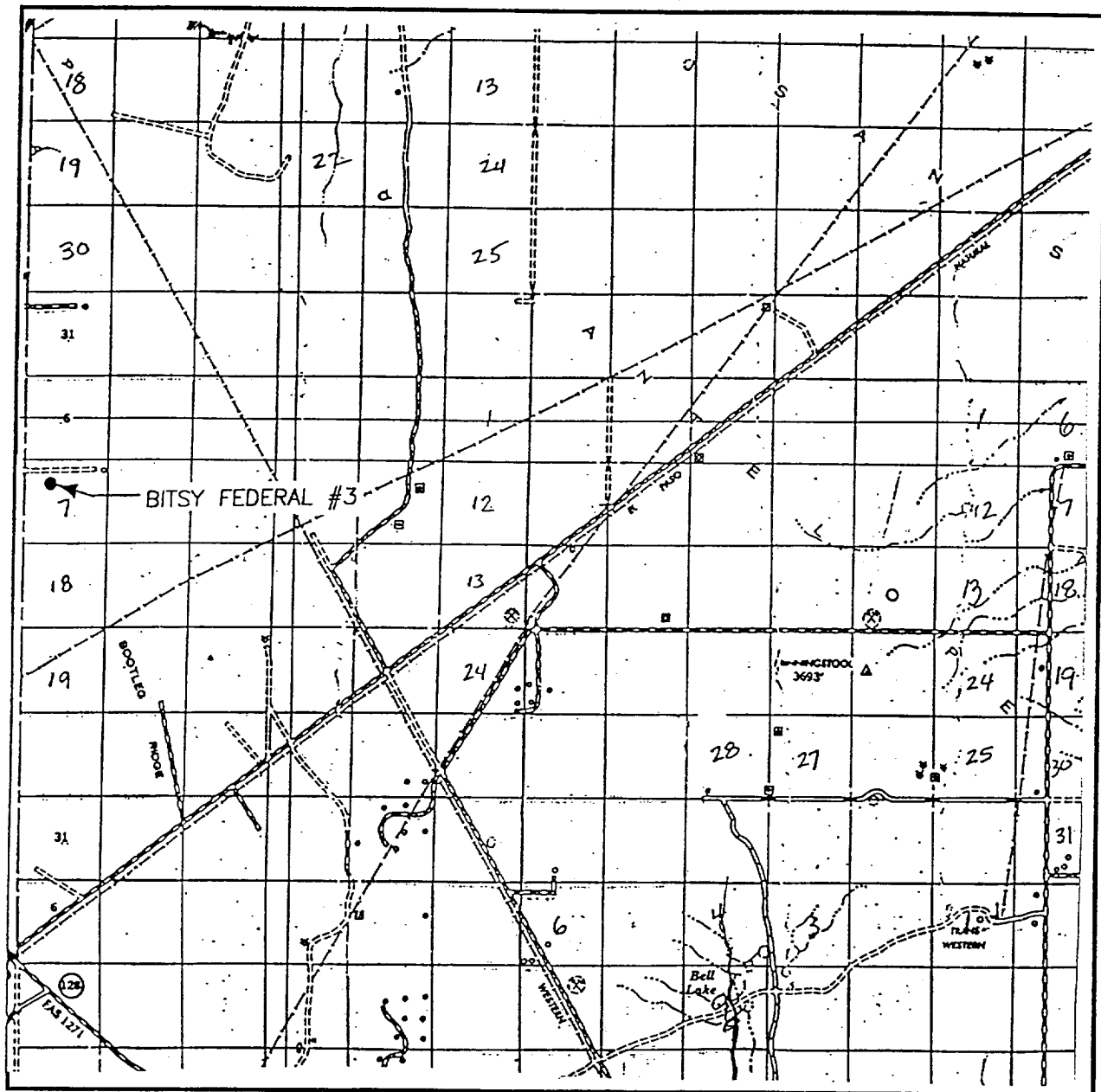
Bottom Hole Location If Different From Surface

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

<p>LOT 1</p> <p>45.96 ACRES</p> <p>LOT 2</p> <p>45.98 ACRES</p> <p>LOT 3</p> <p>45.98 ACRES</p> <p>LOT 4</p> <p>46.00 ACRES</p>	<p>SEE DETAIL</p> <p>DETAIL</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>MINIMUNY, PELS Signature A.N. MUNCY Printed Name MYCO OPER MGR. Title 9/23/2000 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>SEPTEMBER 21, 2000</p> <p>Date Surveyed Signature & Seal of Professional Surveyor Ronald J. Edson 9-22-00 00-11-1167</p> <p>Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641</p>
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VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 7 TWP. 23-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 810' FNL & 1980' FWL

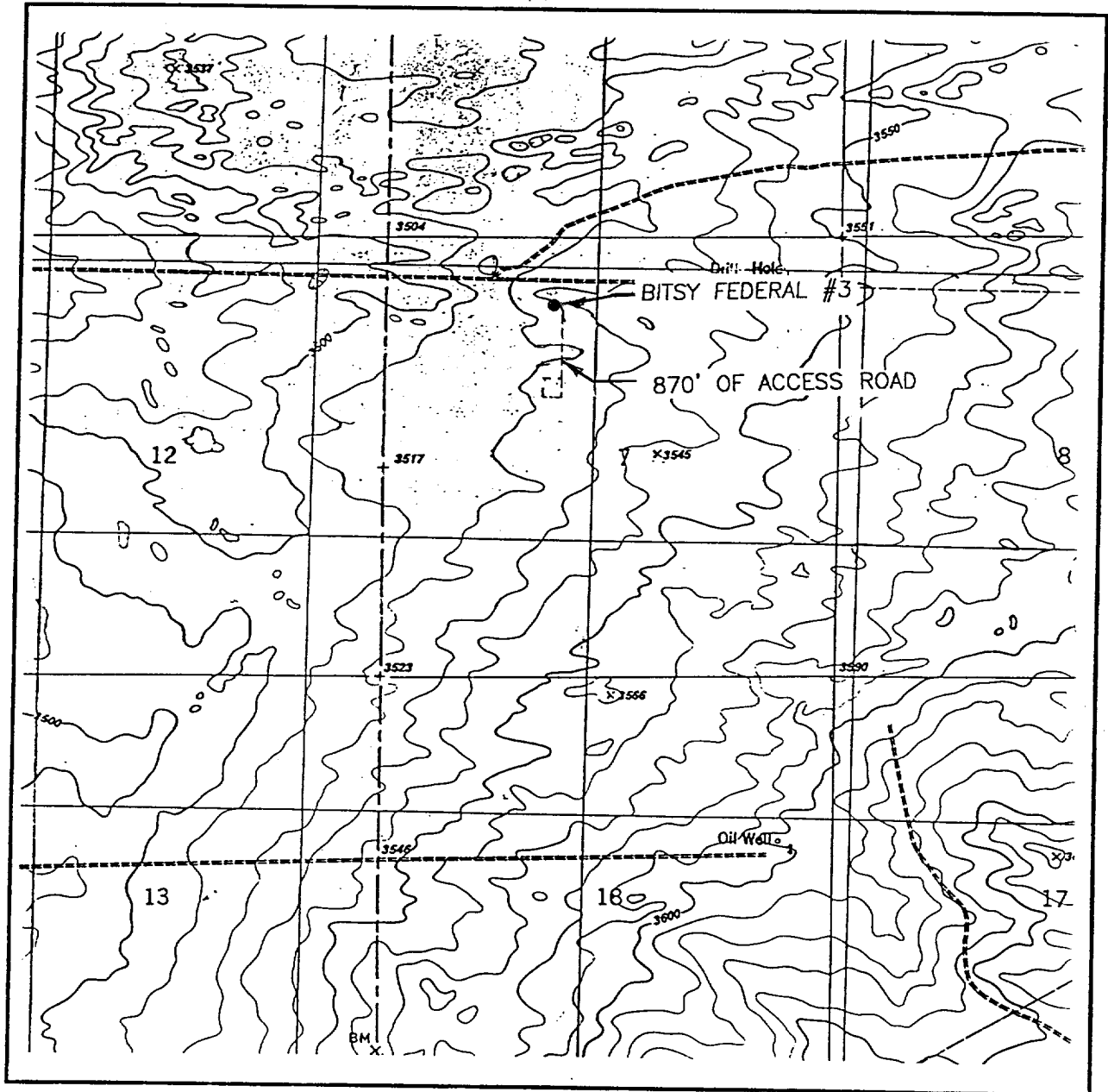
ELEVATION 3531

OPERATOR MYCO INDUSTRIES, INC.

LEASE BITSY FEDERAL

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
BOOTLEG RIDGE, N.M. - 10'

SEC. 7 TWP. 23-S RGE. 32-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 810' FNL & 1980' FWL

ELEVATION 3531

OPERATOR MYCO INDUSTRIES, INC.

LEASE BITSY FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
BOOTLEG RIDGE, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

MYCO INDUSTRIES, INC.
BITSY FEDERAL #3
810' ~~660'~~ FNL & 1980' FWL (UNIT C)
S7-T23S-R32E NMPM
LEA COUNTY, NM
NM-86923

1. The estimated tops of geologic markers are as follows:

Rustler	1020'	Cherry Canyon	5650'	TD	8600'
Bottom of Salt	4420'	Brushy Draw	7500'		
Top of Delaware	4650'				

2. The estimated depths at which anticipated water, oil or gas formations are expected to be encountered:

Water:	150-250'
Oil or Gas	6000' and 8600'

3. **PRESSURE CONTROL EQUIPMENT:** BOP will be installed on the 13 3/8" casing and rated for 3M BOP systems will be consistent with API RP 53. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented in place. blowout preventor controls will be installed prior to drilling the surface plug and will remain in use until the well is completed or abandoned. Preventors will be inspected and operated at least daily to ensure good mechanical working order, and this inspection recorded on the daily drilling report. See Exhibit B.

AUXILIARY EQUIPMENT:

- A. Auxiliary Equipment: Kelly cock, pit level indicators, and flow sensor equipment, and a sub with full opening valve to fit the drill pipe and collars will be available on the rig floor in the open position at all times for use when kelly in not in use.

4. **THE PROPOSED CASING AND CEMENTING PROGRAM:**

- A. Casing Program: (All New)

<u>Hole Size</u>	<u>Casing Size</u>	<u>Wt./Ft.</u>	<u>Grade</u>	<u>Thread</u>	<u>Coupling</u>	<u>Interval</u>	<u>Length</u>
17 1/2"	13 3/8"	48#	H-40	8R	ST&C	0-860' ^{700'}	860' ^{900'}
12 1/4"	8 5/8"	32#	J-55	8R	LT&C	0-4600	4600'
7 7/8"	5 1/2"	17#	K-55	8R	LT&C	0-8600'	8600'

Minimum Casing Design Factor: Collapse 1.3, Burst 1.5, Tensile Strength 2.0

- B. **CEMENTING PROGRAM:**

Surface casing : 300 sx. "C" w/ 4% Gel, 2% Cacl2
 (wt. 13.5 ppg. Yield 1.74 cu. ft) & 200 sx. Class "C" w/ 2% Cacl2 (wt. 14.8 ppg. yield 1.34 cu. ft)
Circulate to surface.

Intermediate Casing: 1300 sx. 35/65 Poz "H" w/6% Gel 5% NaCl, 1/4# Flocele (12.8 ppg. 1.94 cu. ft.) + 200 sx. Class"H"(wt. 15.6 ppg. Yield 1.18 cu ft.) Circulate to surface.

Production Casing: Tie back to 8-5/8" with 500-sxs "C" lit (wt. 14.2 ppg. yield 1.35 ft. 3) + 400-sxs "C" modified (wt. 14.8 ppg. yield 1.35 ft.)

5. **MUD PROGRAM AND AUXILIARY EQUIPMENT:**

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Viscosity</u>	<u>Fluid Loss</u>
900 0- 860 700	FWGel	8.4/8.9	32-36	N/C
860 860-4600	Brine	10.0	28	N/C
4600-TD	Cut Brine	8.9/9.3	28	<15cc

Sufficient mud material(s) to maintain mud properties, control lost circulation and contain a blow out will be available at the well site during drilling operations. Mud will be checked hourly by rig personnel.

6. **EVALUATION PROGRAM:**

Samples: Every 10' from intermediate casing to TD

Logging: G/R from surface to TD; CNL/LTD & DLL/MSFL 4600' to TD.

Coring: None anticipated

DST's: None anticipated

7. **Abnormal Conditions, Bottom hole pressure and anticipated BHP:**

From: 0	To: 860'	Anticipated Max. BHP: 250 PSI
From: 860	To: 4600'	Anticipated Max. BHP: 750 PSI
From: 4600	To: 8600' (TD)	Anticipated Max. BHP: 2800 PSI

Anticipated Potential Hazards: None

Abnormal Pressures Anticipated: None

Lost Circulation Zones Anticipated: None

H2S Zones Anticipated: None – Based on the 6-Myco wells drilled in Sec. 7 (Blue Quail Fed. #1 & #2, Sharbro Fed #1, #6, #7 & Bitsy Fed. #1). REQUEST EXEMPTION FOR H2S DRILLING STIPS.

Maximum Bottom Hole Temperature: 165 Degrees F

8. **ANTICIPATED STARTING DATE:**

Plans are to drill this well as soon as possible after receiving approval. It should take approximately 15 days to drill the well with completion taking another 20 days. This well lies in the CRMA prairie chicken area as defined by the 1996 NM GAP analysis study; NM State University. MYCO INDUSTRIES, INC. REQUESTS AN EXEMPTION FROM THE MARCH 15 – JUNE 15 PRAIRIE CHICKEN STIPS FOR THE DRILLING, COMPLETION & WORKOVER PHASES OF THIS WELL. Myco contends that there are no prairie chickens in this area. A field survey has been performed which has determined that there are no prairie chickens in the area and a copy of the field survey prepared by Dr. Troy L. Best of Auburn University is attached.

MULTI-POINT SURFACE USE AND OPERATIONS PLAN
MYCO INDUSTRIES, INC.
BITSY FEDERAL #3
610' ~~660'~~ FNL & 1980' FWL (UNIT C)
S7-T23S-R32E NMPM
LEA COUNTY, NM
NM-86923

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 well, the proposed construction activities and operations plan, the magnitude of the surface disturbance involved and procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operations.

1. EXISTING ROADS:

Exhibit A is a portion of the BLM map showing the well and roads in the vicinity of the proposed location. The proposed wellsite is located approximately 39 miles West and North of Jal, New Mexico and the access route to the location is indicated in red and green on Exhibit A.

DIRECTIONS: 1320' due north of the Myco Bitsy Federal #2. (1980' FNL & 1980' FWL/SEC. 7-T23S-R32E).

2. PLANNED ACCESS ROAD

- A. The proposed new access road will be approximately 1320' in length due North from the Myco Bitsy Federal #2 as shown on the attached plat (Exhibit A).
- B. The new road will be 14 feet in width (driving surface) and will be adequately drained to control runoff and soil erosion.
- C. The New road will be bladed with drainage on one side. Two traffic turnouts will be built.
- D. The route of the road is visible.
- E. Existing roads will be maintained in the same or better condition.

3. LOCATION OF EXISTING WELL

- A. There is drilling activity within a one-mile radius of the wellsite.
- B. Exhibit D shows existing wells within a one-mile radius of the proposed wellsite.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

- A. The common tank battery for the Sharbro Federal #1, #6, #7, #8, Bitsy Federal #1, #2 & Blue Quail Federal #1, #2 will be used for this well. The common tank battery is located in the SE/4 SE/4 (Unit P) of Section 7. Produced water will be disposed in the Yates Petroleum Corp. Kiwi "Akx" #8, NMOCD SWD-510, S16-T-23S-R32E (Unit H). (See Exhibit A for details).

5. **LOCATION AND TYPE OF WATER SUPPLY:**

- A. It is planned to drill the proposed well with a fresh water system. The water will be obtained from commercial sources and will be hauled to the location by truck over the existing and proposed roads shown in Exhibit A.

6. **SOURCE OF CONSTRUCTION MATERIALS:**

- A. It will be the responsibility of the dirt contractor to obtain caliche from a source of their choice.

7. **METHODS OF HANDLING WASTE DISPOSAL:**

- A. Drill cuttings will be disposed of in the reserve pits.
- B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
- C. Water produced during operations will be collected in tanks until hauled to an approval disposal system, or separate disposal application will be submitted.
- D. Oil produced during operations will be stored in tanks until sold.
- E. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- F. All trash, junk and other waste materials will be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary land fill. Burial on site is not approved.

8. **ANCILLARY FACILITIES: NONE**

9. **WELLSITE LAYOUT:**

- A. Exhibit C shows the relative location and dimensions of the well pad, the reserve pits, the location of the drilling equipment, rig orientation and access road approach.
- B. The reserve pits will be plastic lined.
- C. A 400' x 400' area has been staked and flagged and is detailed on NMOCD Form C-102 (Attached).

10. **PLANS FOR RESTORATION**

- A. After finishing drilling and/or completion operations, all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and debris to leave the wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any, containing fluids will be fenced until they have dried and been leveled.
- C. If the proposed well is non-productive, all rehabilitation and/or vegetation requirements of the Bureau of Land Management will be complied with and will be accomplished as expeditiously as possible. All pits will be filled level after they have evaporated and dried.

11. **SURFACE OWNERSHIP:** Federal surface administered by BLM.

12. **OTHER INFORMATION:**

- A. Topography: Refer to the existing archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- B. The primary surface use is for grazing.

13. **OPERATOR'S REPRESENTATIVE**

Nelson Muncy, PELS
Operations Manager
Myco Industries, Inc.
P.O. Box 840
Artesia, New Mexico 88211-0840
Phone (505) 748-4274

14. **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 Myco Industries, Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Gini Munny, PELS
OPERATIONS MANAGER

9/13/2000 Date

14 April 2000

Field Survey to Determine the Status of the Lesser Prairie Chicken
(*Tympanuchus pallidicinctus*) in Southeastern New Mexico:

all 51 Sharbro Federal #1 (T23S R32E Sec. 7) and
ADM #1 #8 #6 #9 7/12/00 2154 #2 1
Sharbro Federal #2 (T23S R32E Sec. 17), Lea County

Submitted to: Ernest L. Carroll, Law Offices of Losee, Carson, Haas, and Carroll, 311 West Quay Avenue, P.O. Box 1720, Artesia, NM 88211-1720, 505/746-3505, FAX 505/746-6316

Submitted by: Troy L. Best, Dept. of Biological Sciences, 331 Funchess Hall, Auburn University, Alabama 36849-5414, 334/844-9260, FAX 334/844-9234, besttro@mail.auburn.edu

Purpose:

To determine if breeding sites (leks) of the lesser prairie chicken (*Tympanuchus pallidicinctus*) are present within the vicinity of the following oil and gas operations sites (please see "A" and "B" on the attached map):

A.--MYCO Industries, Inc., Sharbro Federal #1, 660' FSL and 660' FEL, Sec. 7-T23S-R32E, Lea Co., NM;

B.--MYCO Industries, Inc., Sharbro Federal #2, 1980' FSL and 660' FEL, Sec. 17-T23S-R32E, Lea Co., NM.

Methods:

Census transects were evaluated using standard scientific techniques. Beginning 0.5-1 hour before sunrise, an experienced field biologist began the census transect at Site 1 (see below), listened for 3-5 minutes for the calls made by lesser prairie chickens on leks, recorded GPS coordinates, date, time of observation, and weather conditions, the observer proceeded to the next monitoring site, repeated this protocol, and continued this process until no later than 3 hours after sunrise. Census transects were not conducted under adverse weather conditions.

Survey Sites:

Please see circled numbers 1-11 on the attached map.

<u>GPS Coordinates and Legal Description</u>	<u>Date</u>	<u>Time (MST)</u>	<u>Weather Conditions</u>
Site 1.--32°18.341'N, 103°41.698'W T23S R32E, Sec. 17, NE 1/4	27Mar00 12Apr00	0530-0535 0455-0500	high clouds, calm high thick overcast, nearly calm
Site 2.--32°17.922'N, 103°41.377'W T23S R32E, Sec. 16, SW 1/4	27Mar00 12Apr00	0538-0543 0503-0508	high clouds, calm high thick overcast, nearly calm
Site 3.--32°18.351'N, 103°42.539'W T23S R32E, Sec. 18, NE 1/4	27Mar00 12Apr00	0611-0616 0536-0541	clear, calm high thick overcast, nearly calm
Site 4.--32°18.768'N, 103°43.699'W T23S R31E, Sec. 12, SE 1/4	27Mar00 12Apr00	0620-0625 0546-0551	clear, calm high thick overcast, nearly calm
Site 5.--32°19.016'N, 103°43.482'W T23S R31E, Sec. 12, SE 1/4	27Mar00 12Apr00	0627-0632 0553-0558	clear, calm high thick overcast, nearly calm
Site 6.--32°19.692'N, 103°43.012'W T23S R32E, Sec. 6, SW 1/4	27Mar00 12Apr00	0638-0643 0604-0609	clear, calm high thick overcast, nearly calm
Site 7.--32°19.449'N, 103°42.452'W T23S R32E, Sec. 7, NE 1/4	27Mar00 12Apr00	0645-0650 0612-0617	clear, calm high thick overcast, nearly calm
Site 8.--32°18.816'N, 103°42.460'W T23S R32E, Sec. 7, SE 1/4	27Mar00 12Apr00	0652-0657 0619-0624	clear, calm high thick overcast, nearly calm
Site 9.--32°18.804'N, 103°42.705'W T23S R32E, Sec. 7, SE 1/4	27Mar00 12Apr00	0658-0703 0627-0632	clear, calm high thick overcast, nearly calm

Site 10.--32°19.472'N, 103°41.707'W T23S R32E, Sec. 5, SE 1/4	12Apr00	0640-0645	high thick overcast, nearly calm
	14Apr00	0515-0520	clear, wind 5-10SE
Site 11.--32°19.444'N, 103°41.440'W T23S R32E, Sec. 5, SE 1/4	12Apr00	0650-0655	high thick overcast, nearly calm
	14Apr00	0505-0510	clear, wind 5-10SE

Results:

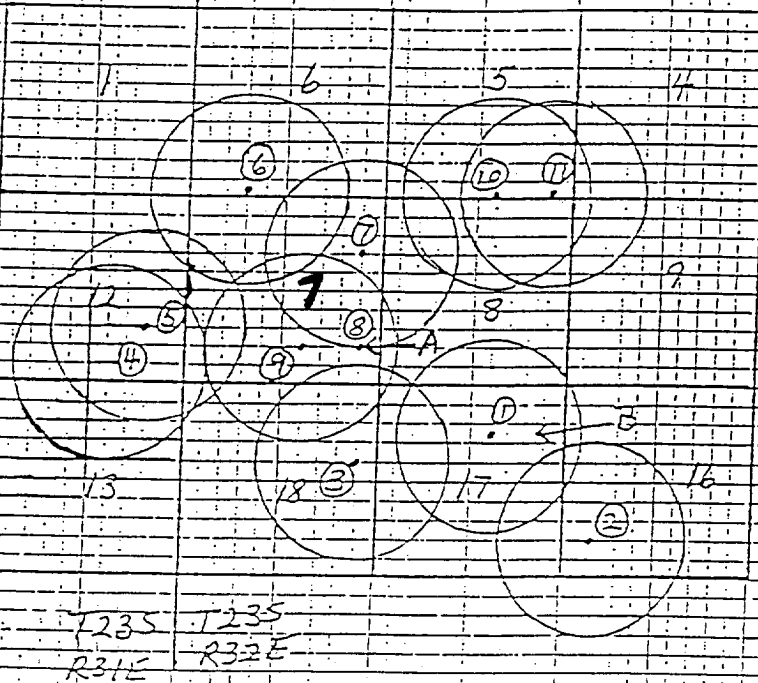
Please see the attached map. No evidence of lesser prairie chickens was heard or observed within the 0.5-mile radius encircling each of the 11 survey sites.

Conclusions:

There are no breeding leks within at least 0.5 mile of Sharbro Federal #1 or Sharbro Federal #2, Lea Co., NM.

AUBURN UNIVERSITY MAP LPC-001

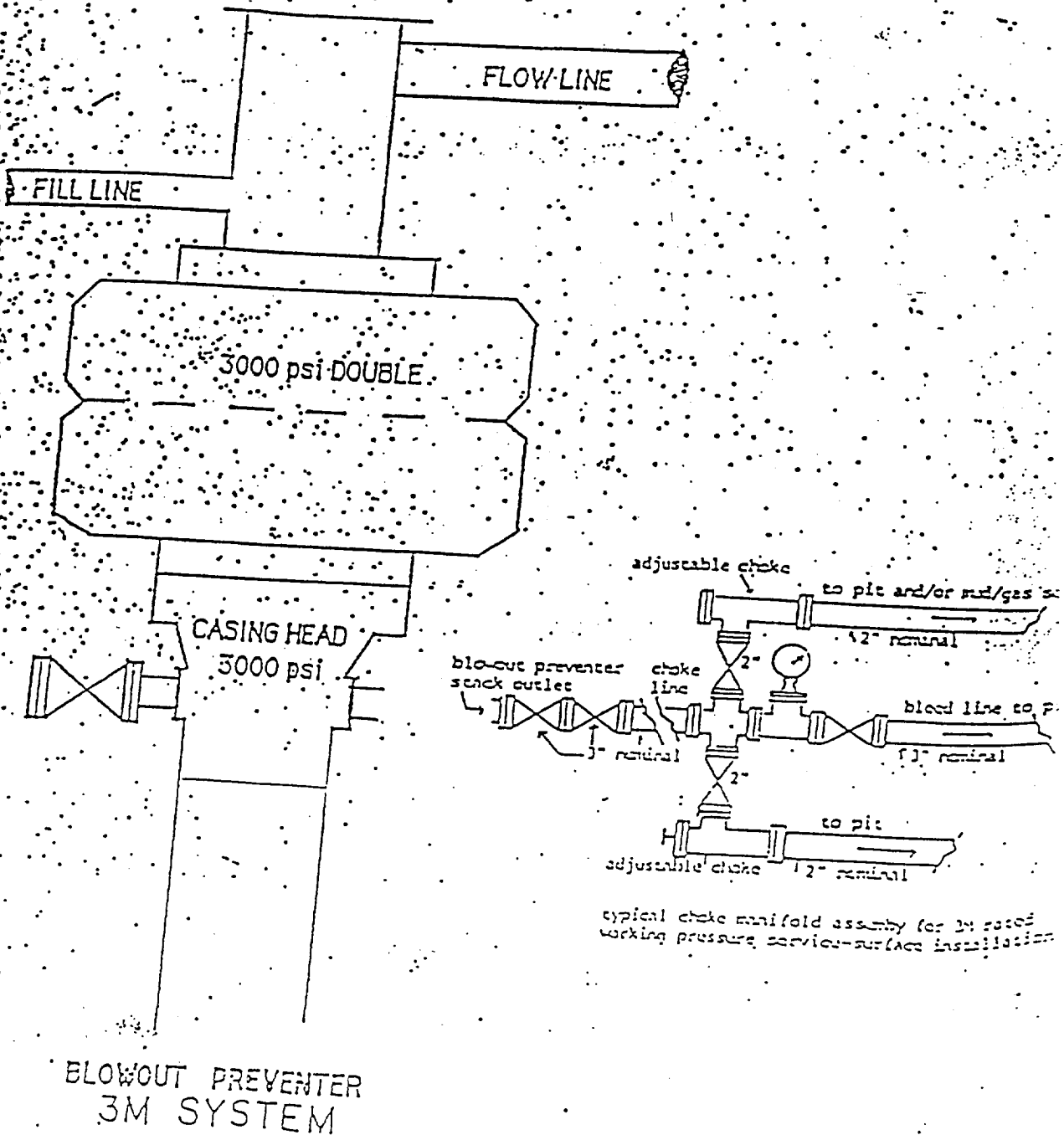
Approximate location of monitoring sites for Sharbro Federal #1 (A) and Sharbro Federal #2 (B), Lea Co., NM; circled numbers are monitoring sites. A circle with a radius of 0.5 mile is drawn around each monitoring site to indicate minimum size of survey area.



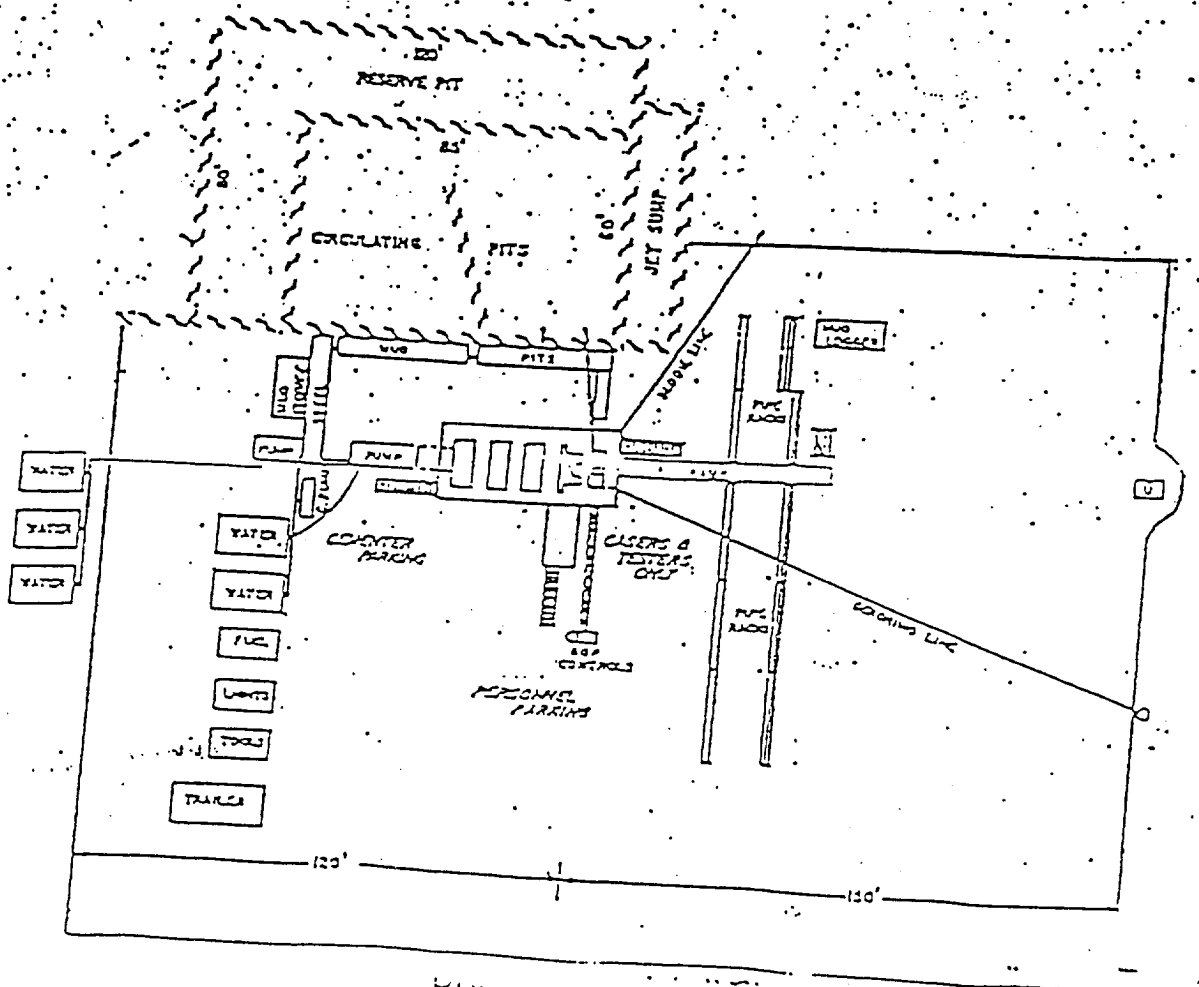
MYCO INDUSTRIES, INC.
BITSY FEDERAL #3

810' 660' FNL & 1980' FWL UNIT C
SEC. 7-T23S-R32E NMPM
LEA CO, NM NM-62223

Exhibit B



810

$$B \xrightarrow{a} \frac{8}{1} \xrightarrow{1} 1$$




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-62223 :

Bond Coverage: Individually Bonded.

Legal Description of Land:
Township 23 South Range 32 East
 Section 7: SE/4SE/4
 Lea County, New Mexico

BLM Bond File No.: 58 59 71

Formation (s) (if applicable):

N/A

Date: 7-17-95

MYCO INDUSTRIES, INC.

Frank Yates