

AREA CODE 505
983-1228

BCO, Inc.
OIL WELL OPERATOR
135 GRANT
SANTA FE, N. M. 87501

OIL CONSERVATION DIVISION
RECEIVED
'91 NOV 15 AM 9 09

November 14, 1991

Mr. Michael Stogner
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

Dear Mr. Stogner:

I enclose a copy of a Non-Standard Location Application for the State "J" No. 5 located 1170' FNL 2040' FWL (Unit Letter "C") in Section 16 T23N R7W, Rio Arriba County, New Mexico, Lybrook Gallup Pool.

If we can provide additional information, please contact either me or Neel Duncan. Your attention to this matter is appreciated.

Very truly yours,

Elizabeth B. Keeshan
Elizabeth B. Keeshan
President

EBK:dyl

Enclosure

c: Frank T. Chavez, Director (w/o enclosures)
Oil Conservation Division, Aztec

BCO, Inc.

OIL WELL OPERATOR
135 GRANT

SANTA FE, N. M. 87501

AREA CODE 505
983-1228

12 November 1991

Mr. Frank T. Chavez, Director
Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico 87410

Re: Non-Standard Location Application
State "J" No. 5
1170' FNL x 2040' FWL (UL "C") Sec 16 T23N R7W
Rio Arriba County, New Mexico
Lybrook Gallup Pool

Dear Mr. Chavez:

BCO, Inc respectfully requests administrative approval to drill the above referenced well in a non-standard location. An orthodox location is not possible because of topographic restrictions.

The topography consists of a hillside sloping upward on the south side of highway 44. This hillside is dominated by rocks and drainage arroyos which are 50-75 feet wide and 15-20 feet deep.

In addition to the terrain features which prevent construction there are three beautiful ponderosa pines on the hillside. Ponderosa pines are scarce in this area and we do not wish to disturb these trees.

A topographical map which shows the terrain features is presented as Exhibit "F". The orthodox window and proration unit are mapped in Exhibit "E".

Attached is a copy of the APD and the exhibits required by Bill LeMay's memorandum 1-90. A list of exhibits follows this letter.

Directional drilling is not feasible to reach a legal bottom-hole location. Straight hole drilling economics are marginally profitable (rate of return less than 15%) and an additional \$48,083 in horizontal displacement costs would kill the project by bringing the rate of return down below the cost of money.

Additionally, beam lift may be required to produce this well. Beam pumping operations in deviated holes are very complex and sometimes uneconomical.

Offset operators have been notified of our application. A notification affidavit which includes a list of the operators and a sample letter are provided in Exhibit "G". Please note that the proposed location is unorthodox only with respect to our own acreage and the correlative rights of the offset operators are protected.

Respectfully,

A handwritten signature in dark ink, appearing to read "Neel L. Duncan", with a horizontal line extending to the right.

Neel L. Duncan
Petroleum Engineer & Production Manager

LIST OF EXHIBITS
Non-Standard Location Application
State "J" No. 5

<u>Exhibit</u>	<u>Description & Purpose</u>
A	Copy of Application for Permit to Drill
B	OCD Form C-102. Shows location & dedicated acreage.
C	Plat showing proposed wellsite, offset operators, and offset wells.
D	Listing of working interest owners for offset wells.
E	Topographic map showing proposed location, orthodox windows, and terrain features.
F	Enlarged topographic map showing details of the canyons and mesas.
G	Affidavit that notice has been sent & sample letter.

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-101
Revised 1-1-89

OIL CONSERVATION DIVISION

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

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

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

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

API NO. (assigned by OCD on New Wells)

5. Indicate Type of Lease

STATE ☒

FEE ☐

6. State Oil & Gas Lease No.

V-2258

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:

DRILL ☒

RE-ENTER ☐

DEEPEN ☐

PLUG BACK ☐

b. Type of Well:

OIL

WELL ☒

GAS

WELL ☐

OTHER ☐

SINGLE

ZONE ☒

MULTIPLE

ZONE ☐

7. Lease Name or Unit Agreement Name

STATE "J"

2. Name of Operator

BCO, INC.

8. Well No.

5

3. Address of Operator

135 GRANT

SANTA FE, NEW MEXICO 87501

9. Pool name or Wildcat

4. Well Location

Unit Letter

C

: 1170

Feet From The

NORTH

Line and

2040

Feet From The

WEST

Li

Section 16

Township 23N

Range 7W

NMPM

RIO ARRIBA

County

10. Proposed Depth

5800'

11. Formation

GALLUP

12. Rotary or C.T.

ROTARY

13. Elevations (Show whether DF, RT, GR, etc.)

GL: 7295'

KB: 7307'

14. Kind & Status Plug. Bond

50,000 BLANKET PLUGGING

15. Drilling Contractor

WALTERS

DRILLING

16. Approx. Date Work will start

01 MARCH 1992

17. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12.250	8.625"	24# J-55	360'	275	SURFACE
7.875	4.500"	11.6# J-55	5800'	1550	SURFACE

Plan to drill a 12.250" hole and set 360' of 8.625" casing. Thence drill a 7 7/8" hole to total depth with gel-water mud program to test Gallup formation. Plan to run dual induction and density log. If productive, will set 4 1/2" casing and cement in two stages with stage tool at +/- 4900'. Cement volumes and location of the stage tool will be adjusted after logging to ensure that cement is successfully circulated.

Well will be perforated, fracture stimulated, and placed on production following the drilling process.

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. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

SIGNATURE

TITLE

PETROLEUM ENGINEER

DATE 11/4/91

TYPE OR PRINT NAME

TELEPHONE NO.

(This space for State Use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

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 BOC, Inc.			Lease State J		Well No. 5
Unit Letter C	Section 16	Township 23 North	Range 7 West	County Rio Arriba	
Actual Footage Location of Well: 1170 feet from the North line and 2040 feet from the West line					
Ground level Elev. 7240 Est.	Producing Formation		Pool	Dedicated Acreage: 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.?

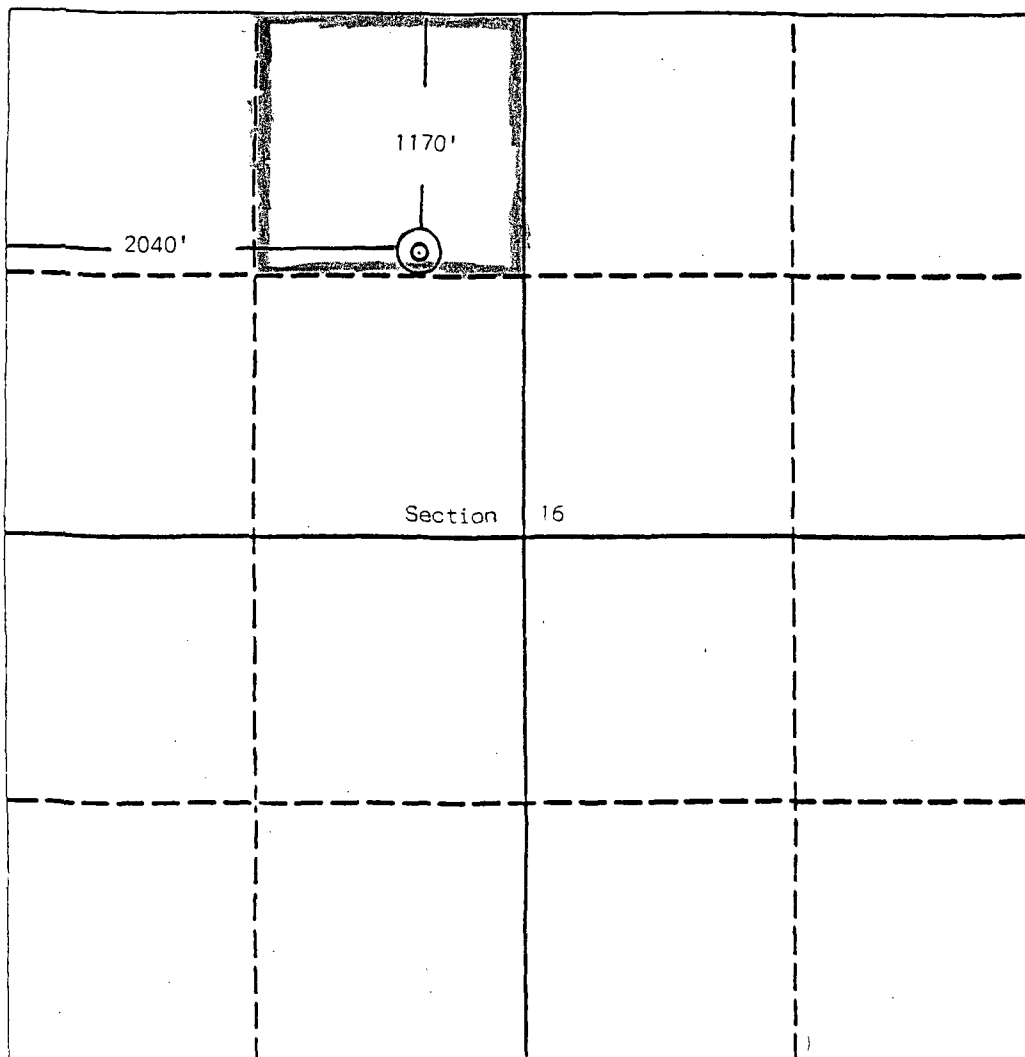
☐ Yes

☐ No

If answer is "yes" type of consolidation

If answer is "no" list 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 interest, has been approved by the Division.



OPERATOR CERTIFICATION

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

Signature

Printed Name

NEEL L. DUNCAN

Position

PETROLEUM ENGINEER

Company

BOC INC.

Date

04 NOV 91

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

October 23, 1991

Signature & Seal of
Professional Surveyor

Edgar L. Risenbover

Certificate No. 5979

Edgar L. Risenbover, P.S.

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

EXHIBIT "D"
NON-STANDARD LOCATION APPLICATION
Offset Well WI Owners

Well: State "J" No. 1
Operator: BCO, Inc.

Location: NE/4 NE/4 Sec 16 T23N R7W
NM.P.M. Rio Arriba Co., NM

1. Harry L. Bigbee
2. Harry R. Bigbee
3. Nancy B. Jensen
4. Elizabeth B. Keeshan
5. Donnan Stephenson
6. NM Commissioner of Public Lands (ORRI)

Well: State "J" No. 3
Operator: BCO, Inc.

Location: SW/4 NW/4 Sec 16 T23N R7W
NM.P.M. Rio Arriba Co., NM

1. Harry L. Bigbee
2. Harry R. Bigbee
3. Nancy B. Jensen
4. Elizabeth B. Keeshan
5. NM Commissioner of Public Lands (ORRI)

Well: State "J" No. 4
Operator: BCO, Inc.

Location: NE/4 SW/4 Sec 16 T23N R7W
NM.P.M. Rio Arriba Co., NM

1. Harry L. Bigbee
2. Harry R. Bigbee
3. Elizabeth B. Keeshan
4. Nancy B. Jensen
5. NM Commissioner of Public Lands (ORRI)

Well: Dunn No. 15
Operator: BCO, Inc.

Location: SW/4 SW/4 Sec 09 T23N R7W
NM.P.M. Rio Arriba Co., NM

1. Harry L. Bigbee
2. Harry R. Bigbee
3. Nancy B. Jensen
4. Elizabeth B. Keeshan
5. Donnan Stephenson
6. Minerals Management Service (ORRI)



NON-STANDARD LOCATION APPLICATION
STATE "J" No. 5

BCO, INC

EXHIBIT
"E"



ENLARGED TOPOGRAPHICAL MAP
NON-STANDARD LOCATION APPLICATION
STATE "J" No. 5

BCO, INC

EXHIBIT
"F"

EXHIBIT "G"
OFFSET OPERATOR NOTIFICATION
Non-Standard Location Application
BCO, Inc.

I certify that notice has been served to the following operators of BCO Inc.'s application for permit to drill State "J" No. 5 in a non-standard location at 1170' FNL x 2040' FWL Sec 16 T23N R7W, Lybrook Gallup, Rio Arriba County, New Mexico:

1. Giant Exploration & Producing
Attention: Charlie Foster
P.O. Box 2810
Farmington, New Mexico 87499-2810

2. Meridian Oil Inc.
Attention: Van Goebel, Senior Landman
P.O. Box 4289
Farmington, New Mexico 87499-4289

Copies of the return receipt cards and a sample letter are attached.



Neel L. Duncan Date

BCO, Inc.

OIL WELL OPERATOR
135 GRANT

SANTA FE, N. M. 87501

AREA CODE 505
983-1228

*Sample Letter
Exhibit G*

05 November 1991

-CERTIFIED-
RETURN RECEIPT REQUESTED
P- 757 734 270

Mr. Van Goebel
Senior Landman
Meridian Oil Inc.
P.O. Box 4289
Farmington, New Mexico 87499-4289

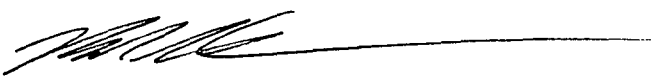
Re: Notice of Non-Standard Location
State "J" No. 5
1170' FNL x 2040' FWL Sec 16 T23N R7W
Lybrook Gallup Pool
Rio Arriba County, New Mexico

Dear Mr. Goebel:

Please be advised that BCO, Inc. has applied to drill State "J" No. 5 at the non-standard location listed above due to extensive topographical constraints. The location is only unorthodox with respect to our own acreage and the correlative rights of Meridian should not be adversely affected.

Please call me at (505) 983-1228 if you have any questions. Thank you for your consideration.

Respectfully,

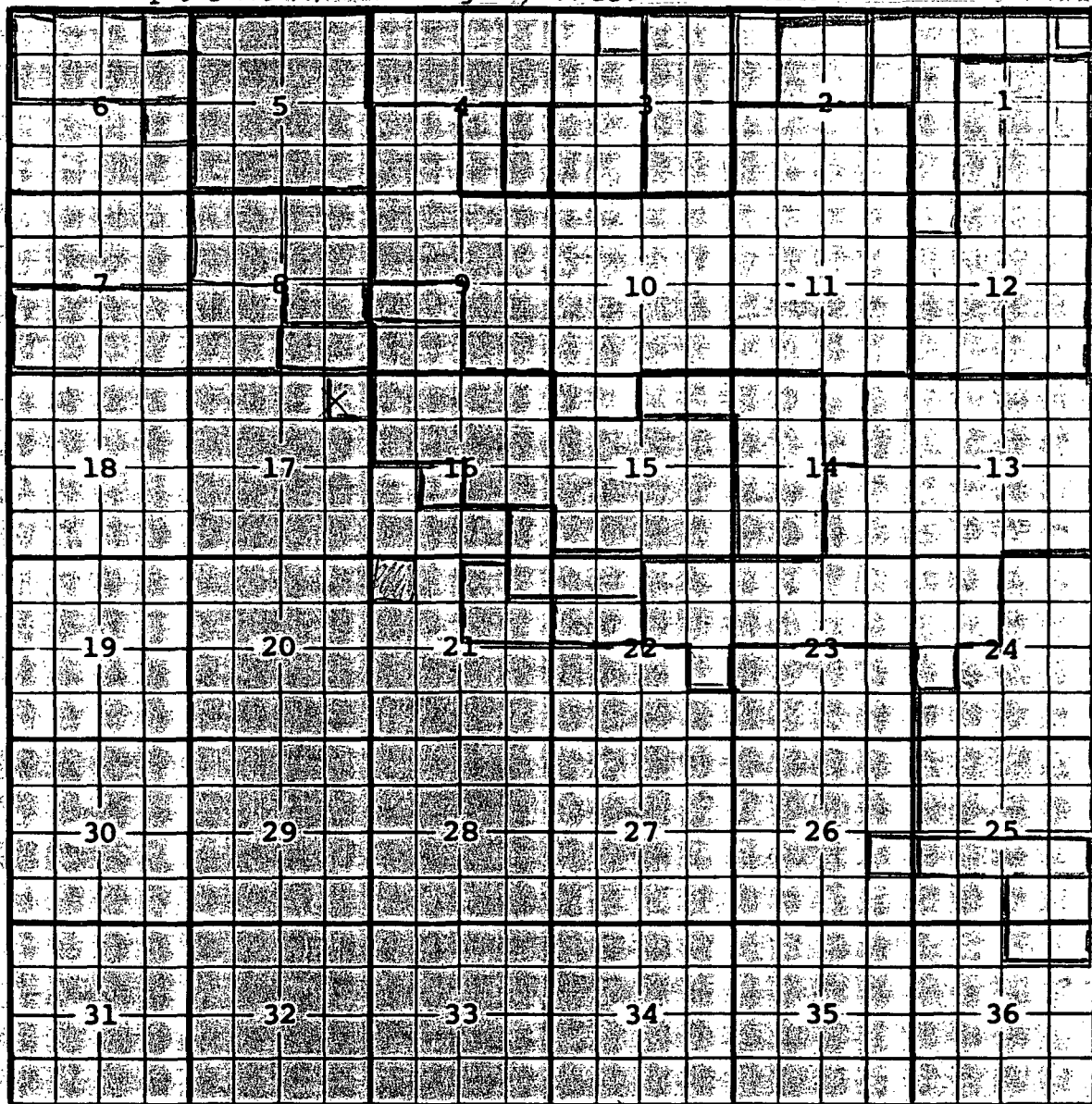

Neel L. Duncan
Petroleum Engineer & Production Manager

County Rio Arriba & Sandoval Pool Lybrook - Gallup Oil

Township 23 North

Range 7 West

NMPM



Description: $\frac{3}{4}$ Sec. 2, $\frac{SW}{4}$ Sec. 4, $\frac{N}{2}$ & $\frac{SE}{4}$ Sec. 9, All Sec. 10 & 11;
 $\frac{N}{2}$ NE $\frac{1}{4}$ Sec. 14; $\frac{N}{4}$ NW $\frac{1}{4}$ Sec. 15 (R-7767, 6-21-67)
Ext: $\frac{W}{2}$ SE $\frac{1}{4}$ Sec. 4 (R-3281, 8-1-67) - $\frac{SW}{4}$ Sec. 3; $\frac{E}{2}$ SE $\frac{1}{4}$ Sec. 4; All Secs. 5 & 13;
 $\frac{SE}{4}$ & $\frac{NE}{4}$ Sec. 14; $\frac{NE}{4}$ & $\frac{SE}{4}$ Sec. 22; $\frac{N}{2}$ Sec. 23; $\frac{NW}{4}$ & $\frac{NW}{4}$ SW $\frac{1}{4}$ Sec. 24 (R-4260, 3-1-72)
Ext: $\frac{NW}{4}$ Sec. 8 (R-5779, 8-1-78) Ext: $\frac{NE}{4}$ NE $\frac{1}{4}$ Sec. 6 (R-6421, 8-1-80)
Ext: $\frac{W}{2}$ SW $\frac{1}{4}$ & $\frac{SW}{4}$ NW $\frac{1}{4}$ sec. 1, $\frac{NW}{4}$, $\frac{W}{2}$ NE $\frac{1}{4}$ & $\frac{SE}{4}$ NE $\frac{1}{4}$ sec. 6,
NE $\frac{1}{4}$ & $\frac{N}{2}$ SE $\frac{1}{4}$ sec. 8, $\frac{NW}{4}$ NW $\frac{1}{4}$ sec. 12, $\frac{W}{2}$ sec. 14, $\frac{N}{2}$ NE $\frac{1}{4}$ sec. 15,
(R-6886, 1-22-82) Ext: $\frac{W}{2}$ NW $\frac{1}{4}$ sec. 2, $\frac{NE}{4}$ SE $\frac{1}{4}$ sec. 6, $\frac{N}{2}$ SW $\frac{1}{4}$ sec. 9 (R-7016, 8-6-82)
Ext: $\frac{E}{2}$ Sec. 3 (R-7185, 1-13-83) Ext: $\frac{S}{2}$ Sec. 7, $\frac{SW}{4}$ Sec. 8 (R-7277, 5-5-83)
Ext: $\frac{NE}{4}$ NW $\frac{1}{4}$ Sec. 3 (R-7495, 4-5-84) Ext: $\frac{N}{2}$ $\frac{3}{4}$ Sec. 25 (R-7764, 1-8-85)
Ext: $\frac{NE}{4}$ SE $\frac{1}{4}$ Sec. 26 (R-7957, 6-12-85) Ext: $\frac{NE}{4}$ NE $\frac{1}{4}$ sec. 1, $\frac{E}{2}$, $\frac{S}{2}$ SW $\frac{1}{4}$, and
NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 24, $\frac{N}{2}$ sec. 25 (R-8273, 8-6-86) Ext: $\frac{S}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$, $\frac{E}{2}$ SW $\frac{1}{4}$, and
SE $\frac{1}{4}$ sec. 1, $\frac{S}{2}$ NE $\frac{1}{4}$, $\frac{E}{2}$ NW $\frac{1}{4}$, and $\frac{SW}{4}$ NW $\frac{1}{4}$ Sec. 12, $\frac{S}{2}$ SE $\frac{1}{4}$ Sec. 25, $\frac{N}{2}$ NE $\frac{1}{4}$ Sec. 36,
(R-8417, 3-24-87) Ext: $\frac{NW}{4}$, $\frac{NE}{4}$ & $\frac{N}{2}$ NW $\frac{1}{4}$ Sec. 1, $\frac{E}{2}$ NE $\frac{1}{4}$ Sec. 2 (R-8585, 11-11-88)
Ext: $\frac{W}{2}$ NE $\frac{1}{4}$ & $\frac{E}{2}$ NW $\frac{1}{4}$ Sec. 2 (R-8640, 4-8-88) Ext: $\frac{S}{2}$ SW $\frac{1}{4}$ sec. 9 (R-8828, 12-22-88)
(SEE PAGE #2)



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

OIL CONSERVATION DIVISION
RECEIVED

1000 MIDWAY ROAD
AZTEC, NEW MEXICO 87410
(505) 334-0170

JARREY CARRUTHERS
GOVERNOR

Date: 11-14-91 '91 NOV 27 AM 9:20

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87504-2088

Re: Proposed MC _____
Proposed DMG _____
Proposed NSL X _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____

Gentlemen:

I have examined the application dated 11-13-91
for the BCO, INC. STATE J#5
Operator Lease & Well No.

C-16-23N-7W and my recommendations are as follows:
Unit, S-T-R

Approved

Yours truly,

Eric Burch