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NEW MEXICO OIL CONSERVATION DIVISION - Engineering Bureau -										
·····	•	ADMINISTRATIVE APPLICATION COVERSHEET								
	THIS COV	ERSHEET IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS								
App!icati	(F	[NSP-Non-Standard Proration Unit] [NSL-Non-Standard Location] [DD-Directional Drilling] [SD-Simultaneous Dedication] Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] -Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]								
[1] 7	FYPE OF A [A]	PPLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Directional Drilling WNSL NSP DD SD								
	Check [B]	Cone Only for [B] or [C] Commingling - Storage - Measurement DHC CTB PLC PC OLS OLM								
	[C]	Injection - Disposal - Pressure Increase - Enhanced Oil Recovery WFX PMX SWD IPI EOR PPR								
- <u>-</u> 2] N	NOTIFICAT [A]	ION REQUIRED TO: - Check Those Which Apply, or Does Not Apply Working, Royalty or Overriding Royalty Interest Owners								
	[B]	Offset Operators, Leaseholders or Surface Owner								
	[C]	Application is One Which Requires Published Legal Notice								
	[D]	Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office								
	[E]	G For all of the above, Proof of Notification or Publication is Attached, and/or,								
	[F]	U Waivers are Attached								

INFORMATION / DATA SUBMITTED IS COMPLETE - Statement of Understanding [3]

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I further verify that all applicable API Numbers are included. I understand that any omission of data, information or notification is cause to have the application package returned with no action taken.

James Bruce P.O. Box 1056 Santa Fe, NM 87504

Note: Statement must be completed by an individual with supervisory capacity. Signature

Amplicant

Print or Type Name

JAMES BRUCE ATTORNEY AT LAW

POST OFFICE BOX 1056 SANTA FE, NEW MEXICO 87504

SUITE B 612 OLD SANTA FE TRAIL SANTA FE, NEW MEXICO 87501

(505) 982-2043 (505) 982-2151 (FAX)

May 22, 1997

Hand Delivered

Michael E. Stogner New Mexico Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505

Dear Mr. Stogner:

Enclosed is an administrative application for an unorthodox gas well location, filed on behalf of Mallon Oil Company. As noted in the application, Mallon requests that the 20 day notice period be waived due to lack of objection and rig contracting issues. Thus, your prompt attention to this matter is appreciated.

Very truly yours,

James Bruce

6 MAY 2 2 1997 CONCERVATION DIVISION

JAMES BRUCE

ATTORNEY AT LAW

POST OFFICE BOX 1056 SANTA FE, NEW MEXICO 87504

SUITE B 612 OLD SANTA FE TRAIL SANTA FE, NEW MEXICO 87501

(505) 982-2043 (505) 982-2151 (FAX)

May 22, 1997

Hand Delivered

Michael E. Stogner New Mexico Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505

Dear Mr. Stogner:

Pursuant to Division Rule 104.F(2), Mallon Oil Company ("Mallon") hereby applies for administrative approval of an unorthodox gas well location for the following well:

Bell 3 State Com. Well No. 2 1330 feet FSL & 1980 feet FEL E½ §3, Township 24 South, Range 26 East, NMPM Eddy County, New Mexico

The well will be drilled to an approximate depth of 11,800 feet to test the Morrow formation (South Carlsbad-Morrow Gas Pool).

The proposed location is based upon geological reasons. Attached as Exhibit A is a net sand isopach of the Morrow C3 sandstone, as identified in Exhibit B, which is the reference well log for the Pool. The Morrow C3 is the primary target zone of the well. This zone consists of a marine bar sandstone which is interbedded with marine limestone and shale in the upper part of the Morrow C The prospective Morrow C3 interval. bar sandstone trends northwest-southeast across the map area, and reaches a maximum thickness of 18 feet. Open-hole log evaluations and gas production show the presence of gas throughout the Morrow C3 bar within the map area. Maximum gas production rates are expected along the axis of the bar trend, where the thickest reservoir sand occurs. The proposed location is necessary in order to (a) remain near the axis of the bar, and (b) encounter approximately 11 feet of net sandstone in the Morrow C3, which is necessary for a commercial well. This opinion is based on gas production from the Morrow C3 in (i) the Pennzoil United Inc. O'Neill Fed. Well No. 1 (in the NW4SW4 §11), which was recently completed in 11 feet of sand with

an initial rate of 1.4 MMCFG/Day, and (ii) the Read & Stevens, Inc. 9105 JV-P Crystal Well No. 1 (in the SW¼SE¼ §4), completed in 18 feet of Morrow C3 sand. Production from the Read & Stevens well is "commingled" with relatively tight sands in the Morrow B interval, and is producing 1.3 MMCFG/Day one year after completion.

The E½ §3 is currently dedicated to the Bell 3 State Com. Well No. 1, in the SE¼NE¼ §3. Pursuant to Division Memorandum dated August 3, 1990, upon successful completion of Well No. 2, Well No. 1 will be shut-in unless and until a simultaneous dedication application is filed with and approved by the Division.

Submitted as Exhibit C is a land plat which (a) outlines the proposed well unit, (b) marks the proposed well location, (c) highlights acreage which Mallon operates, (d) identifies offset operators, and (e) identifies wells in the area which have tested the Morrow.

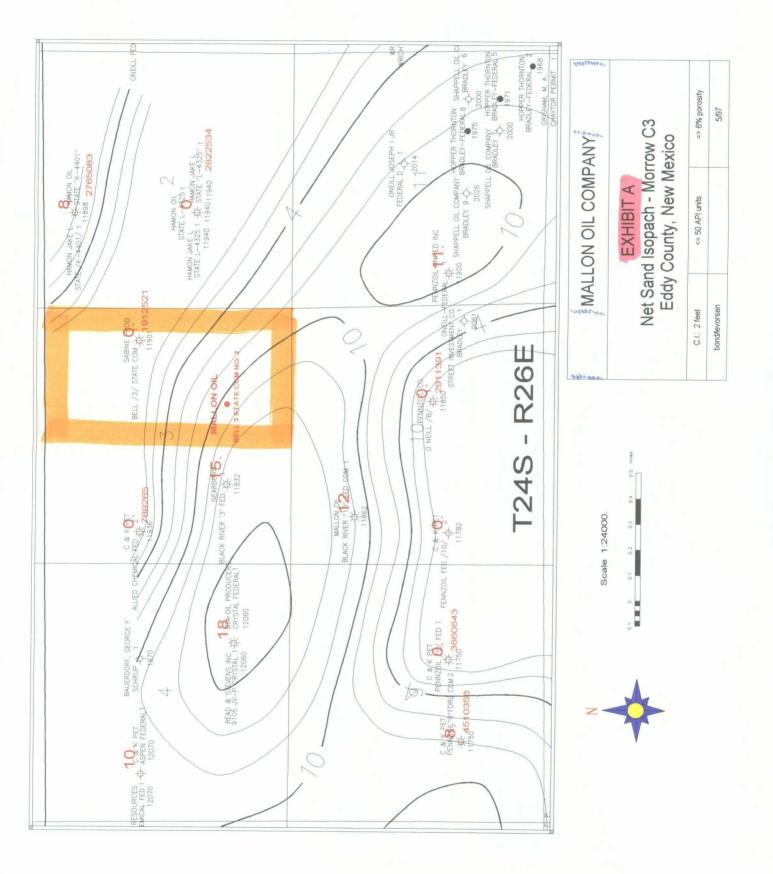
The only offset operator other than Mallon is Nearburg Exploration Company LLC ("Nearburg"). Notice of the proposed unorthodox location has been given to Nearburg, as indicated by Exhibit D attached hereto. <u>However, Mallon requests that the 20 day notice</u> <u>period be waived, for the following reasons</u>: (a) Mallon and Nearburg have entered into a letter agreement under which Mallon has agreed to a 20.6% penalty on production from the well, calculated on the same basis as in Division Order No. R-10601; (b) Nearburg owns a working interest in the proposed well; and (c) Mallon has located an available rig, and would like the well commenced as soon as possible. As a result, Mallon has requested a waiver of the 20 day notice period from Nearburg. <u>See</u> ¶2 of Exhibit D.

This application is submitted in duplicate. Please call me if you need anything further regarding this matter.

Very truly yours,

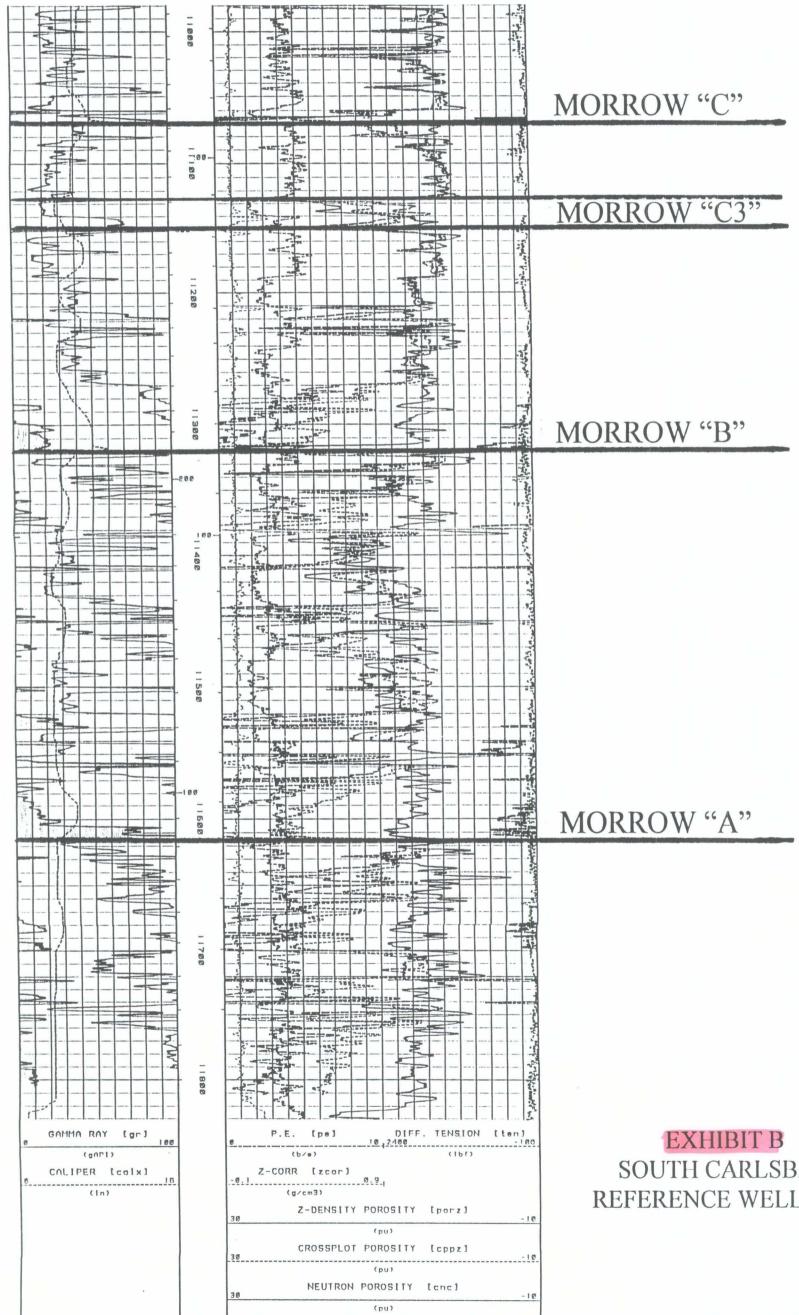
James Bruce Attorney for Mallon Oil Company

mal-aap.uol

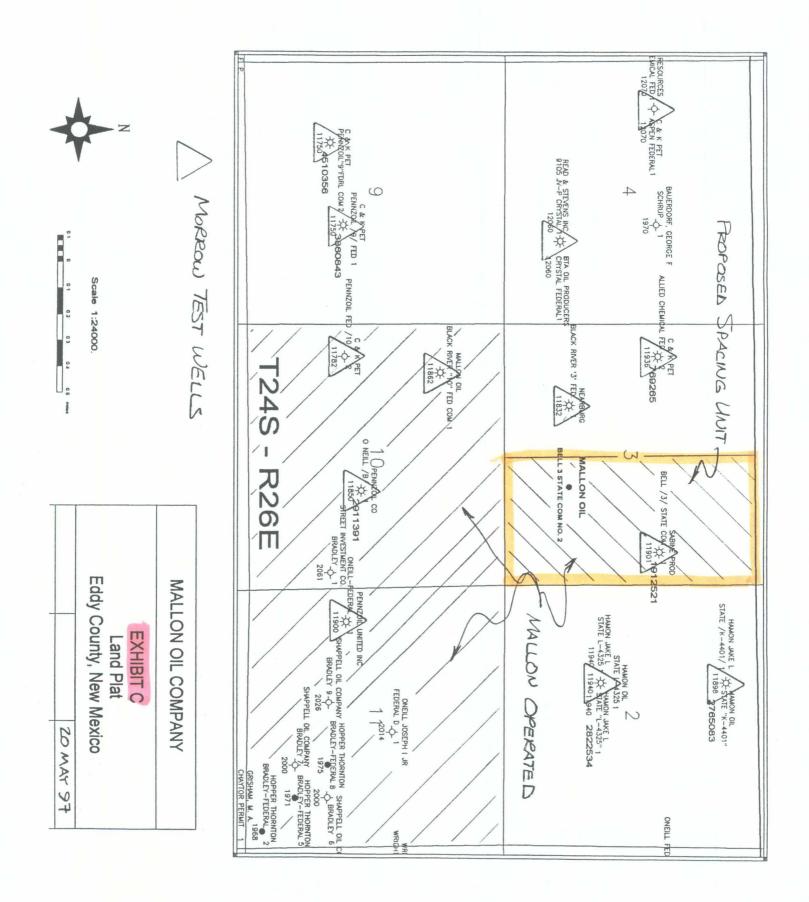


1.4.4

MALLON OIL COMPANY BLACK RIVER "10" FED. COM #1 1330 FNL 990 FWL SECTION 10 T24S-R26E EDDY COUNTY, NEW MEXICO **KB ELEVATION: 3369**



SOUTH CARLSBAD **REFERENCE WELL LOG**



05/22/1997 10:57 3032933601

MALLON REC

PAGE 02

Mallon Oil Company

Denver/Colorado + Carlsbad/New Mexico

a Mallon Resources subsidiary

LAND DEPARTMENT May 22, 1997

via facsimile (915) 686-7806

NEARBURG EXPLORATION COMPANY, LLC 3300 North "A" Street, Bidg. 2, Suite 120 Midland, TX 79705

Attn: Mike Gray

Re: E/2 Sec. 3-T24S-R26E Eddy County, New Mexico

Gentlemen:

Mallon Oil Company has filed an application for administrative approval of an unorthodox gas well location with the New Mexico Oil Conservation Division regarding the Bell 3 State Comm. No. 2 well, located 1330 feet from the South line and 1980 feet from the East line of Section 3, Township 24 South, Range 28 East, Eddy County, New Mexico. The well unit is the E/2 of Section 3. Mallon's records indicate that you are an offset operator to the well unit. The application was filed with the Division on May 22, 1997, and unless you object in writing to the Division by June 11, 1997, you will be precluded from contesting this matter at a later date. The Division's address is 2040 Pacheco Street, Santa Fe, New Mexico, 87505.

Because of rig contracting issues we ask that you sign and return this letter to us, waiving the 20 day notice period.

Sincerely,

MALLON QL COMPANY

Rav E. Jones

Vice President, Engineering

EXHIBIT

ON THIS _____ DAY OF MAY, 1997, NEARBURG EXPLORATION COMPANY, LLC HEREBY WAIVES THE 20 DAY NOTICE PERIOD REQUIRED BY DIVISION RULES.

BY:_____

TITLE:_____

♦ 999 18th Street ♦ Suite 1700 ♦ Denver, Colorado 80202 ♦ Phone: 303/293-2333 ♦ Fax: 303/293-3601 ♦

PAGE 02

JAMES BRUCE ATTORNEY AT LAW

POST OFFICE BOX 1056 SANTA FE, NEW MEXICO 87504 '

SUITE B 612 OLD SANTA FE TRAIL SANTA FE, NEW MEXICO 87501

(505) 982-2043 (505) 982-2151 (FAX)

May 23, 1997

<u>Via Fax</u>

Michael E. Stogner New Mexico Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505

> Re: Application of Mallon Oil Company ("Mallon") for administrative approval of an unorthodox gas well location:

Bell 3 State Com. Well No. 2 1330 feet FSL & 1980 feet FEL E½ §3, Township 24 South, Range 26 East, NMPM Eddy County, New Mexico

Dear Mr. Stogner:

Mallon gave notice of the application to the only offset operator, Nearburg Exploration Company, LLC ("Nearburg"), and Nearburg has waived the 20 day notice period. <u>See</u> Exhibit 1 attached hereto. As discussed in the application, Mallon and Nearburg have agreed to a stipulated penalty, which should be incorporated in the order.

Also, as requested in the application, Mallon requests <u>expedited</u> <u>approval</u> of the application because a rig is available in a few days. The Artesia District Office is awaiting an NSL order before approving Mallon's APD.

Please call me if you need anything further regarding this matter.

Very truly yours,

am James Bruce

Attorney for Mallon Oil Company



Denver/Colorado + Carlabad/New Madoo

JAMESBRUCE Mallon Rec Nearburg Prod CO PAGE 03

a Mailen Resources industriery

of pages >

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LAND DEPARTMENT May 22, 1997

vja fecelmilia (915) 686-7808

NEARBURG EXPLORATION COMPANY, LLC 3300 North "A" Street, Bidg, 2, Sülls 120 Midland, TX 79705

Attr: Mike Gray

Re: E/2 Sec. 3-T248-R26E Eddy County, New Mexico * Jim Bruce Minim SPRINGER Co. Co. MALLON UIL OUD. (303) 293-233 2 *** (505) 982-2157 (303) 293-3601

Post-It** brand fax transmittal memo 7671 |

Gentlemen: .

Mailon Oil Company has filed an application for administrative approval of an unorthodox gas well located 1330 feet from the South line and 1980 feet from the East line of Section 3, Township 24 South, Range 26 East, Eddy County, New Mexico. The well unit is the E/2 of Section 3. Melion's records indicate that you are an effect operator to the well unit. The application was filed with the Division on May 22, 1997, and unless you object in writing to the Civision by June 11, 1997, you will be precluded from contesting this matter at a later date. The Division's address is 2040 Pacheco Street, Santa Fe, New Mexico, 67505.

Because of rig contracting lasues we ask that you sign and return this letter to us, waiving the 20 day notice period.

Sincerely,

MALLON OIL COMPANY

Rim-E. Jones

Vice President; Engineering

EXHIBIT

ON THIS 22 NOT DAY OF MAY, 1997, NEARBURG EXPLORATION COMPANY, LLC HEREBY WAIVES THE 29 DAY NOTICE FERIOD REQUIRED BY DIVISION RULES.

na Stipula roude a production per arana 20.6 uslut 00 00 $\mathbf{n}\mathbf{n}$ in De) order # R-10640

999 18th Street + Suite 1700 + Denver, Colorado 80202 + Phone: 303/293-2233 + Fax: 303/293-3601 +

4

JAMES BRUCE Attorney at Law Post Office Box 1056 Santa Fe, New Mexico 87504 Telephone: (505) 982-2043 Fax: (505) 982-2151

FAX COVER SHEET

DELIVER TO: Michael E. Stogner

COMPANY: Oil Conservation Division

CITY: Santa Fe, New Mexico

FAX NUMBER: 827-1389

NUMBER OF PAGES: 3 (Including Cover Sheet)

DATE SENT: 5/23/97

MEMO:

CONFIDENTIALITY NOTICE

This transmission contains information which may be confidential and/or legally privileged. The information is intended only for the above-named recipient. If you are not the intended recipient, any copying or distribution of the information is prohibited. If you have received this transmission in error, please call us at the above number and return the document by United States mail. Thank you.

CMD	:
OG55	SECT

ONGARD INQUIRE LAND BY SECTION

06/02/97 07:58:12 OGOMES -EMD7 PAGE NO: 1

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ONGARD INQUIRE LAND BY SECTION

06/02/97 07:58:32 OGOMES -EMD7

Sec : 03 Twp : 24S Rng : 26E Section Type : NORMAL

PAGE NO: 2

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F01 HELP PF02	PF03 EXIT	PF04 GoTo PF05	PF06
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New Mexico Oil Conservation Division

Please Deliver This Fax:

TO: James Bruce

FROM: Michael E. Stogner

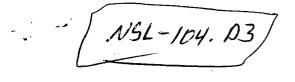
DATE: July 8, 1997

SUBJECT: Administrative application of Mallon Oil Company for an unorthodox Morrow gas well location for the Bell "3" State Com Well No. 2 to be drilled 1330' FSL & 1980'EL (Unit J) of Section 3, Township 24 South, Range 26 East, NMPM, Eddy County, New Mexico.

MESSAGE: Please review this rough draft order for your application filed on May 22, 1997 and comment accordingly. Call me at (505) 827-8185. Thanks.

PAGES: Including Cover Sheet - 5

If you should have any trouble receiving this "Fax" Please call: 505-827-7133



July 8, 1997

Mallon Oil Company c/o James Bruce P. O. Box 1056 Santa Fe, New Mexico 87504

Administrative Order NSL-*****

Dear Mr. Bruce:

Reference is made to: (i) your application dated May 22, 1997, on behalf of Mallon Oil Company ("Mallon"), for an unorthodox Morrow gas on an existing 320-acre, more or less, gas spacing and proration unit comprising the E/2 equivalent of Section 3, Township 24 South, Range 26 East, NMPM, South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico; (ii) to your subsequent correspondence dated May 23, June 2, and June 4, 1997; and, (iii) Division records in Santa Fe.

The Division Director Finds That:

- (1) Lots 1 and 2, the S/2 NE/4, and the SE/4 (E/2 equivalent) of said Section 3, which comprises 319.18 acres, is within the horizontal limits of the South Carlsbad-Morrow Gas Pool;
- (2) Rules, regulations, and policies currently governing the South Carlsbad-Morrow Gas Pool include, but are not necessarily limited to, the following:
 - (i) the "General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the South Carlsbad-Morrow Gas Pool", as promulgated by Division Order No. R-8170, as amended, which includes provisions for 320-acre spacing and requirements for well locations to be no closer than 660 feet to the side boundary nor 1980 feet from the end boundary of the proration unit nor closer than 330 feet to any quarterquarter section or subdivision inner boundary;
 - (ii) Division Order No. R-10328, issued by the New Mexico Oil Conservation Commission in Case 11211 on March 27, 1995, which order suspended gas prorationing in the South Carlsbad-Morrow Gas Pool; and,
 - (iii) Division General Rule 104.D(3), which limits the number of wells in a single spacing unit in non-prorated pools to one;
- (3) South Carlsbad-Morrow gas production from the subject 319.18-acre gas spacing

and proration unit is currently dedicated to the Bell "3" State Com Well No. 1 (API No. 30-015-21420), located at a standard gas well location that is 1980 feet from the North line and 660 feet from the East line (Unit H) of said Section 3;

- (4) Said Bell "3" State Com Well No. 1 is currently owned and operated by, producing gas for, and covered under a \$50,000.00 blanket plugging bond issued by The Aetna Casualty and Surety Company of Hartford, Connecticut in the name of the Prospective Investment and Trading Company, Ltd. of Tulsa, Oklahoma;
- (5) The applicant in this matter, Mallon, is proposing to drill the Bell "3" State Com Well No. 2 at an unorthodox gas well location within the existing 319.18-acre gas spacing and proration unit that is 1330 feet from the South line and 1980 feet from the East line (Unit K) of said Section 3;

J

- (6) Mallon, by prior agreement with Nearburg Exploration Company, L.L.C., an offset operator to the subject unit, seeks to included within the provisions of any order issued in this matter a 20.6 percent production penalty to be applied the Bell "3" State Com Well No. 2's ability to produce into a pipeline as determined from deliverability tests to be conducted on said Well No. 2 on a semi-annual basis;
- (7) The subject application has been duly filed under the provisions of Rule 104.F of the General Rules and Regulations of the New Mexico Oil Conservation Division ("Division"), revised by Division Order No. R-10533, issued by the Oil Conservation Commission in Case 11,351 on January 18, 1996; and,
- (8) The subject application, which serves to prevent waste and being in the best interest of conservation, should be approved pursuant to Division General Rule 104.F(2) and Rule 2(d) of said Order No. R-8170, as amended, provided however:
 - (i) only one operator of the subject 319.18-acre gas spacing unit be designated prior to the issuance and approval of the Form C-101, "Application for Authorization to Drill" for the Bell "3" State Com Well No. 2;
 - (ii) at the time of completion of the Bell "3" State Com Well No. 2, both wells will not be allowed to produce simultaneously and concurrently and only one of the two wells be allowed to produce from the South Carlsbad-Morrow Gas Pool at any one time; and,
 - (iii) the Bell "3" State Com Well No. 2 be assessed a production penalty of 20.6 percent to be applied towards the its ability to produce into a pipeline as determined from a deliverability test to be conducted on the well on a semi-annual basis.

It Is Therefore Ordered That:

(1) The existing 319.18-acre gas spacing and proration unit in the South Carlsbad-Morrow Gas Pool comprising Lots 1 and 2, the S/2 NE/4, and the SE/4 (E/2 equivalent) of Section 3, Township 24 South, Range 26 East, NMPM, Eddy County, New Mexico, currently dedicated to the Bell "3" State Com Well No. 1 (API No. 30-015-21420), located at a standard gas well location that is 1980 feet from the North line and 660 feet from the East line (Unit H) of said Section 3, be designated only one operator.

(2) This operator, once designated, shall be approved by the Supervisor of the Artesia District Office of the Division.

(3) The approved operator shall then be allowed to drill the proposed Bell "3" State Com Well No. 2 at an unorthodox gas well location within the existing 319.18-acre gas spacing and proration unit that is 1330 feet from the South line and 1980 feet from the East line (Unit K) of said Section 3.

(4) Once the Bell "3" State Com Well No. 2 is completed the operator shall elect which Morrow producing gas well on the subject 319.18-acre unit will produce and which will be either plugged or shut-in. Only one South Carlsbad-Morrow producing gas well shall be allowed to produce within the subject unit at any one time.

Provided However:

J

(5) The Bell "3" State Com Well No. 2 is hereby assessed a production penalty of 20.6 percent. The production penalty shall be applied towards the well's ability to produce into a pipeline as determined from a deliverability test to be conducted on the well on a semi-annual basis.

(6) The operator shall advise the supervisor of the Artesia district office of the Division of the date and time of conductance of the above-described production test(s) in order that they may be witnessed.

(7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

William J. LeMay Director

WJL/MES/kv

cc: Oil Conservation Division - Artesia New Mexico State Land Office - Santa Fe đ

JAMES BRUCE Attorney at Law Post Office Box 1056 Santa Fe, New Mexico 87504 Telephone: (505) 982-2043 Fax: (505) 982-2151

FAX COVER SHEET

DELIVER TO: Michael E. Stogner

COMPANY: Oil Conservation Division

CITY: Santa Fe, New Mexico

FAX NUMBER: 827-1389

NUMBER OF PAGES: 1 (Including Cover Sheet)

DATE SENT: 7/8/97 ,

MEMO: Mike: I looked at the draft order on Mallon's proposed Bell 3 State Com. Well No. 2, and it looks fine to me.

CONFIDENTIALITY NOTICE

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STATE OF NEW MEXICO ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT **OIL CONSERVATION DIVISION**

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION The second is the first of the **DIVISION FOR THE PURPOSE OF** · CONSIDERING: e to atoma entrational de At 一些一个的情况的 上上 机花头试验 网络

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CASE NO. 11481 **Order No. R-10601** the second of the second of the second second second second

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APPLICATION OF NEARBURG EXPLORATION ver josef (-F. jolf ryörf) COMPANY FOR AN UNORTHODOX GAS WELL Contraction of the strait LOCATION, EDDY COUNTY, NEW MEXICO.

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This cause came on for hearing at 8:15 a.m. on April 18, 1996, at Santa Fe, New Mexico, before Examiner David R. Catanach. HE THE VOLTOM A STATE OF STATE OF A DE ST

NOW, on this 21st day of May, 1996, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises.

FINDS THAT:

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(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Nearburg Exploration Company, seeks authority to drill its Black River "10" Federal Com Well No. 1 at an unorthodox gas well location 1330 feet from the North line and 990 feet from the West line (Unit E) of Section 10, Township 24 South, Range 26 East, NMPM, to test the Morrow formation, Undesignated South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico,

(3) The applicant proposes to dedicate the W/2 of Section 10 to the proposed Black River "10" Federal Com Well No. 1 thereby forming a standard 320-acre gas spacing and proration unit for said pool.

CASE NO. 11481 Order No. R-10601 Page -2-

(4) The subject well is located within one mile of the South Carlsbad-Morrow Gas Pool which is currently governed by the General Rules and Regulations for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the South Carlsbad-Morrow Gas Pool as promulgated by Division Order No. R-8170, as amended, which require standard 320-acre gas spacing and proration units with wells to be located no closer than 1980 feet from the end boundary nor closer than 660 feet from the side boundary of the proration unit, nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary.

(5) Although currently classified as a "Prorated Gas Pool", gas proration was suspended in the South Carlsbad-Morrow Gas Pool by Oil Conservation Commission Order No. R-10328, issued in Case No. 11211 on March 27, 1995, due to the fact that there are currently no "prorated wells" in the pool.

(6) The subject well is also located within one mile of the White City-Pennsylvanian Gas Pool which is currently governed by Special Rules and Regulations as promulgated by Division Order No. R-2429, as amended, which require standard 640-acre gas spacing and proration units with wells to be located no closer than 1650 feet from the outer boundary of the spacing unit nor closer than 330 feet from any quarter-quarter section line or subdivision inner boundary.

(7) Inasmuch as the E/2 of Section 10 is currently within the South Carlsbad-Morrow Gas Pool, it is projected that the Black River "10" Federal Com Well No. 1 will also be classified within this pool.

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(8) Read & Stevens, Inc., who currently operates a South Carlsbad-Morrow Gas Pool well in Section 4, Township 24 South, Range 26 East, NMPM, being the Crystal Federal Well No. 1 located 1150 feet from the South line and 1650 feet from the East line (Unit O), appeared at the hearing in opposition to the application. The E/2 of Section 4 is currently dedicated to the aforesaid Crystal Federal Well No. 1 forming a standard 320acre gas spacing and proration unit.

(9) The applicant presented extensive geologic evidence and testimony in support of its proposed unorthodox gas well location and in its attempt to demonstrate that:

a) the primary objectives within the subject well are what the applicant has termed the Early Middle Morrow and Late Middle Morrow intervals (For discussion purposes, the Early and Late Middle Morrow intervals will hereinafter be referred to as the "C" Sand interval and "B" Sand interval, respectively):

CASE NO. 11481 Order No. R-10601 Page -3-

e)

the "C" Sand interval is a typical Morrow sand channel which b) traverses Section 10 in a northwest to southeast direction. The "B" Sand interval is an elongated reservoir which traverses the N/2 of Section 10 in an east-west direction; 1996 Cob base

within the "C" Sand interval, the proposed unorthodox location has c) both a structural advantage (net 20 feet structural gain) and net sand thickness advantage (net 10 feet gain) over the closest standard well scolocation in the NW/4 of Section 10; Section 10;

d) accwithin the "B" Sand interval, the proposed unorthodox location has both a structural advantage (net 20 feet structural gain) and net sand transferra a service thickness advantage (net 5 feet gain) over the closest standard well may mission method location in the NW/4 of Section 10; upon so Blands Reservicements de la marte as esperar a dur printer l'anterio de menos e este seña hargen within the "C" Sand interval there is significant risk of encountering water production. Applicant has determined that the gas-water and the state of the contact in this reservoir occurs at a depth of approximately -8318 feet. Based upon this interpretation, applicant contends that the Crystal Federal Well No. 1 and the Mallon Oil Company O'Neill "B" Com Well No. 1, located in Unit J of Section 10, are located below the gas-water contact in this reservoir and are therefore nonproductive:

> f) a well at a standard gas well location in the NW/4 of Section 10 would place the well much closer to the C & K Petroleum Pennzoil Federal Well No. 2, located in Unit L, which was drill stem tested as non-productive in the "C" Sand interval by C & K Petroleum who failed to establish commercial production and who abandoned the well as a dry hole.

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(10) The applicant proposed that in order to offset any advantage gained by drilling the Black River "10" Federal Com Well No. 1 at the proposed unorthodox gas well location, the well should be assessed a production penalty of 3.35 percent (96.65 percent allowable).

(11) Applicant's proposed production penalty was derived by calculating the distance the subject well encroaches towards the corner of Sections 3, 4, 9 and 10 in the following manner:

Distance from the above-described corner point to the closest standard well location in the NW/4 of Section 10, (utilizing well setbacks of 1650 feet from the end boundary and 660 feet from the side boundary) = 1777 feet;

Distance from the above-described corner point to the proposed unorthodox location = 1658 feet;

Percentage Encroachment = 1 - (1658/1777) = 6.70 percent

(12) Applicant further contends that in Oil Conservation Commission Case No. 9954 (De Novo) which resulted in the issuance of Order No. R-9050-C on December 31, 1990, a precedent was set whereby it was determined that production penalties based upon encroachment should be reduced by 50 percent in cases where the objecting party was a diagonal offset as opposed to a direct offset. Utilizing this 50 percent reduction factor reduces the percentage encroachment to 3.35 percent.

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(13) Read & Stevens, Inc. also presented geologic evidence and testimony in its attempt to demonstrate that: for trategical with the second state with

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a) the Crystal Federal Well No. 1 is currently producing from the "B" Sand interval as well as various Upper Morrow Sand intervals;

- b) the "C" Sand interval can be differentiated into two distinct producing sands. The Upper "C" Sand interval is wet and nonproductive at the location of the Crystal Federal Well No. 1, however, the Lower "C" Sand interval should be productive at this well location. Read & Stevens, Inc. is precluded from producing the Lower "C" Sand interval in the Crystal Federal Well No. 1 due to pre-existing mechanical conditions in the wellbore, namely perforations in the Upper "C" Sand interval shot by BTA Oil Producers, previous operator of the well;
- c) at some point in the future, Read & Stevens, Inc. plans to drill an additional well within the SE/4 of Section 4 to recover the gas reserves from the Lower "C" Sand interval;

. . . .

 d) in mapping both the "B" and "C" Sand intervals, Read & Stevens, Inc. utilized a cross-plot porosity cutoff of 5 percent. Applicant utilized a cross-plot porosity cutoff of 8 percent in mapping the "C" Sand interval and utilized an 8 percent density porosity cutoff in mapping the "B" Sand interval. CASE NO. 11481 Order No. R-10601 Page -5-

f)

g)

h)

e) a cross-plot porosity cutoff of 5 percent is a more appropriate number to use in mapping the Morrow sands in the area of the South Carlsbad-Morrow Gas Pool. Read & Stevens, Inc. has utilized these porosity numbers in three successful well re-entries which will result in the recovery of gas that would otherwise not have been recovered;

utilizing cross-plot porosity cutoffs of 5 percent in mapping the "B" and "C" Sand intervals significantly shifts the geometry of the reservoirs as presented by the applicant; deciderated (C)

a well located at a standard gas well location in the NW/4 of Section 10 would encounter a greater amount of net sand in the "B" and "C" Sand intervals and at a structurally higher position in the reservoir than a well drilled at the proposed unorthodox gas well location;

as a result of using a cross-plot porosity of 8 percent, applicant 6 failed to honor any data from the C & K Petroleum Pennzoil Federal Well No. 2 which was tested at a rate of 1,700 MCF gas per day with no water.

(14) Read & Stevens, Inc. did not propose the assessment of a production penalty against the subject well but rather requested that the proposed unorthodox location be denied.

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(15) The evidence and testimony presented by both parties in this case indicates that:

a) the cross-plot porosities utilized by Read & Stevens, Inc. to map the subject Morrow reservoirs appear to be more accurate than those utilized by the applicant;

. . . .

- b) Read & Stevens, Inc. appears to have a better geologic understanding of the Morrow reservoirs underlying Sections 3, 4, 9 and 10;
- c) a well drilled at the proposed unorthodox location could adversely affect Read & Stevens, Inc.'s ability to recover its gas reserves in the "B" and "C" Sand intervals underlying the E/2 of Section 4.

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Order No.	R-10601
Page -6-	

(16) Although the evidence and testimony indicates that a standard well location within the NW/4 of Section 10 appears to be geologically superior to the proposed unorthodox well location, the geologic interpretation of the Morrow reservoirs underlying Sections 3, 4, 9 and 10 is highly subjective.

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(17) The applicant should not be precluded from drilling the Black River "10" Federal Com Well No. 1 at the location it believes, based upon its geologic interpretation, to be the best available location within the NW/4 of Section 10.

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(18) The application of Nearburg Exploration Company to drill its Black River "10" Federal Com Well No. 1 at an unorthodox gas well location 1330 feet from the North line and 990 feet from the West line (Unit E) of Section 10 should be approved.

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(19) In order to protect the correlative rights of Read & Stevens, Inc., a production penalty should be assessed against the subject well.

(20) A production penalty based upon the distance the subject well encroaches towards the corner of Sections 3, 4, 9 and 10 is fair and reasonable and should be adopted.

(21) Inasmuch as the South Carlsbad-Morrow Gas Pool is currently governed by Special Rules and Regulations as described in Finding No. (4) above, the standard gas wellsetback requirements of 1650 feet from the end boundary and 660 feet from the side boundary of the proration unit, as contained within Division General Rule No. 104 (C)(2), do not apply. The operation of the provided and the provided and the set of the standard set of the set of th

(22) The distance from the above-described corner point to the closest standard well location in the NW/4 of Section 10, (utilizing well setbacks of 1980 feet from the end boundary and 660 feet from the side boundary) equals 2,087 feet. The distance from the above-described corner point to the proposed unorthodox location equals 1658 feet.

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(23) The percentage encroachment equals:

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1 - (1658/2087) = 20.6 percent (79.4 percent allowable)

(24) Contrary to applicant's position, the subject encroachment percentage should not be discounted by 50 percent for the following reasons:

a) the reduction of a production penalty by 50 percent in cases where the diagonal offset operator objects assumes theoretical circular drainage; and, CASE NO. 11481 Order No. R-10601 Page -7-

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CASE NO. 1941 TRACE AN TABLE

b) due to the geometry of the Morrow reservoir, one of the primary directions of drainage from the Black River "10" Federal Com Well No. 1 will likely be along the channel sand axis towards the SE/4 of Section 4.

(25) Approval of the subject application with a 20.6 percent production penalty will afford the applicant the opportunity to produce its just and equitable share of the gas in the affected pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.

(26) The production penalty should be applied towards the Black River "10" Federal Com Well No. 1's ability to produce into a pipeline as determined from a deliverability test to be conducted on the well on a semi-annual basis.

(27) The applicant should advise the supervisor of the Artesia district office of the Division of the date and time of conductance of the above-described production test(s) in order that they may be witnessed.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Nearburg Exploration Company, is hereby authorized to drill its Black River "10" Federal Com Well No. 1 at an unorthodox gas well location 1330 feet from the North line and 990 feet from the West line (Unit E) of Section 10, Township 24 South, Range 26 East, NMPM, to test the Morrow formation. Undesignated South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico.

(2) The W/2 of Section 10 shall be dedicated to the subject well forming a standard 320-acre gas spacing and proration unit for said pool.

(3) The Black River "10" Federal Com Well No. 1 is hereby assessed a production penalty of 20.6 percent (79.4 percent allowable). The production penalty shall be applied towards the well's ability to produce into a pipeline as determined from a deliverability test to be conducted on the well on a semi-annual basis.

(4) The applicant shall advise the supervisor of the Artesia district office of the Division of the date and time of conductance of the above-described production test(s) in order that they may be witnessed.

(5) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

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STATE OF NEW MEXICO OIL CONSERVATION DIVISION

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NORTH KNOWLES-DEVONIAN POOL Lea County, New Mexico

Order No. R-8497, Adopting Temporary Operating Rules for the North Knowles-Devonian Pool, Lea County, New Mexico, August 28, 1987.

Order No. R-8497-A, March 22, 1989, continues in full force and effect the temporary rules adopted in Order No. R-8497.

Application of Marathon Oil Company for Pool Creation, Special Pool Rules and Discovery Allowable, Lea County, New Mexico.

> CASE NO. 9145 Order No. R-8497

ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 8:15 a.m. on June 3, 1987, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 28th day of August, 1987, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) Division Case Nos. 9145 and 9146 were consolidated at the time of the hearing for the purpose of testimony.

(3) The applicant, Marathon Oil Company (Marathon), seeks the creation of a new pool for the production of oil from the Siluro-Devonian formation consisting of the S/2 SE/4 of Section 14, Township 16 South, Range 38 East, NMPM, Lea County, New Mexico, and further seeks the promulgation of temporary special rules and regulations for said pool including a provision for 80-acre spacing and proration units and designated well locations.

(4) The applicant further seeks the assignment of an oil discovery allowable pursuant to Division General Rule 509 to its Benson Well No. 1 located 330 feet from the South line and 990 feet from the East line (Unit P) of Section 14, Township 16 South, Range 38 East, NMPM, Lea County, New Mexico.

(5) By Order No. R-8451 entered in Case No. 9133 and effective June 1, 1987, the Division, on its own motion and upon the recommendation of the Hobbs district office of the Division, defined the producing formation in the Benson Well No. 1 to be the Devonian formation and created the North Knowles-Devonian Pool consisting of the SE/4 of said Section 14, Township 16 South, Range 38 East, NMPM, Lea County, New Mexico.

(6) Inasmuch as the subject pool has already been created and defined by the Division, that portion of the application concerning the creation of a new Siluro-Devonian pool should be dismissed.

(7) James A. Davidson, an interest owner in the S/2 SE/4 of said Section 14 whose interest in the SE/4 SE/4 of said Section 14 was compulsorily pooled by Marathon by Division Order No. R-8282 entered in Case No. 8960, appeared at the hearing in opposition to the establishment of 80-acre spacing for the North Knowles-Devonian Pool.

(8) The applicant presented a decline curve analysis based upon the production history of the Benson Well No. 1 which indicates the total recoverable reserves to be 109,663 barrels of oil.

(9) The applicant further presented a volumetric reserve calculation based upon known reservoir parameters and assuming 80-acre drainage which indicates reserves to be approximately 106,835 barrels of oil.

(10) Comparison of reserve estimates obtained from the decline curve analysis and the volumetric analysis indicates that one well should be capable of draining an 80-acre area in this reservoir.

(11) The applicant further presented economic evidence which indicates that based upon the recoverable reserve estimates obtained for the Benson Well No. 1, it would be uneconomical to drill wells on 40-acre proration units.

(12) The evidence presented in this case justifies the establishment of 80-acre spacing and proration units and, therefore, in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the North Knowles-Devonian Pool.

(13) The applicant requested at the hearing that the temporary special rules and regulations be established for a period of two years but testified that sufficient data necessary to adopt permanent rules for the pool would be available in approximately one year.

(14) Temporary special rules and regulations should be established for a period of 18 months in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(15) Said temporary rules and regulations should also provide for well locations to be within 150 feet of the center of governmental quarter-quarter section.

(16) The applicant further requested at the hearing that an oil discovery allowable pursuant to Division General Rule 509 be assigned to its Benson Well No. 1.

(17) Evidence presented at the hearing indicates that the Benson Well No. 1 is currently producing at low rates and is incapable of producing its oil allowable and therefore the applicant's request for a discovery allowable should be denied.

(18) This case should be reopened at an examiner hearing in February, 1989, at which time the operators in the subject pool should appear and show cause why the pool rules promulgated herein should not be rescinded.

IT IS THEREFORE ORDERED THAT:

(1) The application of Marathon Oil Company for the creation of a new pool for Siluro-Devonian production is hereby dismissed.

(2) Temporary Special Rules and Regulations for the North Knowles-Devonian Pool are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS FOR THE NORTH KNOWLES-DEVONIAN POOL

R. W. Byram & Co., - May, 1989

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(NORTH KNOWLES-DEVONIAN POOL - Cont'd.)

RULE 1. Each well completed or recompleted in the North Knowles-Devonian Pool or in the Devonian formation within one mile thereof, and not nearer to or within the limits of another designated Devonian oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2, S/2, E/2, or W/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RULE 3. For good cause shown, the Director may grant an exception to the requirements of Rule 2 without notice and hearing when the application is for a non-standard unit comprising a single quarter-quarter section or lot. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application if, after a period of 30 days, no offset operator has entered an objection to the formation of such non-standard unit.

The allowable assigned to any such non-standard unit shall bear the same ratio to a standard allowable in the North Knowles-Devonian Pool as the acreage in such non-standard unit bears to 80 acres.

RULE 4. Each well shall be located within 150 feet of the center of a governmental quarter-quarter section or lot.

RULE 5. The Division Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proration unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Director may approve the application upon receipt of written waivers from all operators offsetting the proration unit or if no objection to the unorthodox location has been entered within 20 days after the Director has received the application.

RULE 6. Top unit allowable for a standard proration unit (79 through 81 acres) shall be based on a depth bracket allowable of 535 barrels per day, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED THAT:

(3) The portion of the application requesting that a discovery allowable be assigned to the Benson Well No. 1 is hereby denied.

(4) The locations of any other wells, presently drilling to or completed in the North Knowles-Devonian Pool or within one mile thereof, and not nearer to or within the limits of another designated Devonian pool, are hereby approved; the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Division in writing of the name and location of the well on or before November 1, 1987. (5) Pursuant to Paragraph A. of Section 70-2-18, NMSA 1978 Comp., contained in Laws of 1969, Chapter 271, existing oil wells in the North Knowles-Devonian Pool shall have dedicated thereto 80 acres in accordance with the foregoing pool rules; or, pursuant to Paragraph C. of said Section 70-2-18, existing wells may have non-standard spacing or proration units established by the Division and dedicated thereto.

Failure to file new Forms C-102 with the Division dedicating 80 acres to a well or to obtain a non-standard unit approved by the Division within 60 days from the date of this order shall subject the well to cancellation of allowable. Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the North Knowles-Devonian Pool or in its corresponding vertical limits as described in Ordering Paragraph No. (1) above, or within one mile thereof, shall receive no more than one-half of a standard allowable for said pool.

(6) This case shall be reopened at an examiner hearing in February, 1989, at which time the operators in the subject pool may appear and show cause why the North Knowles-Devonian Pool rules should not be rescinded.

(7) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

SOUTH SHOE BAR-UPPER PENNSYLVANIAN POOL Lea County, New Mexico

Order No. R-8518, Creating and Adopting Temporary Operating Rules for the South Shoe Bar-Upper Pennsylvanian Pool, Lea County, New Mexico, September 28, 1987.

Order No. R-8518-A, April 24, 1989, continues in full force and effect the temporary rules adopted in Order No. R-8518.

Application of Mobil Producing Texas and New Mexico Inc. for Pool Creation and Special Pool Rules, Lea County, New Mexico.

> CASE NO. 9200 Order No. R-8518

ORDER OF THE DIVISION

BY THE DIVISION: This cause came on for hearing at 8:15 a.m. on August 26, 1987, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 28th day of September, 1987, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof. JAMES BRUCE

POST OFFICE BOX 1056

SUITE B 612 OLD SANTA FE TRAIL SANTA FE, NEW MEXICO 87501

SANTA FE, NEW MEXICO 87504

(505) 982-2043 (505) 982-2151 (FAX)

June 2, 1997



Hand Delivered

Michael E. Stogner New Mexico Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505

Dear Mr. Stogner:

Regarding the administrative application for an unorthodox gas well location, filed by Mallon Oil Company on the Bell State 3 Com. Well No. 2, enclosed are: (a) a letter agreement between PITCO and Mallon, dated April 18, 1997, under which Mallon will earn an interest in Section 3 by drilling a well. PITCO will retain an interest (<u>see</u> the last page of the agreement); and (b) a supplemental letter agreement between the parties, dated April 21, 1997, under which the parties agree to shut-in one of the wells unless simultaneous dedication approval can be obtained from the Division. Please call if you need anything further in this matter.

Very truly yours,

James Bruce

TA the one well

Mallon Oil Company

a Mallon Resources subsidiary

LAND DEPARTMENT April 21, 1997

EXHIBIT "B"

THE PROSPECTIVE INVESTMENT AND TRADING COMPANY, LTD. 2162 E. 61st Street Tulsa. OK 74136

Attn: Adam Singer, President

Re: Letter Agreement E/2 Section 3-T24S-R26E Eddy County, New Mexico

Gentlemen:

The purpose of this letter is to reduce to writing our oral agreements which we chose not to place in the formal agreement dated April 18, 1997, ("Letter Agreement") also covering the captioned lands.

The parties hereto agree as follows:

- 1. In the event that, after having a hearing before the New Mexico Oil Conservation Division, the parties hereto cannot secure approval to produce the Bell State Com. #1 Well and the well to be drilled pursuant to our aforementioned agreement simultaneously, the well capable of delivering the most gas will be the well that is produced.
- 2. After Mallon Oil Company ("Mallon") has earned a permanent interest in the above captioned lands pursuant to that certain Letter Agreement dated April 18, 1997, any subsequent wells proposed between Mallon and Prospective Investment and Trading Company, Ltd., ("PITCO"), excluding Morrow tests, shall be governed solely under the terms of the Joint Operating Agreement attached to the aforementioned Letter Agreement as Exhibit "A" and not the terms of the Letter Agreement. Notwithstanding anything contained herein or in the Letter Agreement to the contrary and solely for purposes of clarification if Mallon does not complete a producing Morrow well which produces in paying quantities pursuant to the terms of the Letter Agreement, then Mallon will reconvey the assigned interests (as that term is defined in the Letter Agreement) to PITCO upon PITCO's request and at PITCO's option.

Sincerely

Randy Stalcup, CPL Vice President, Land 4/21/97 PITCO

AGREED AND ACCEPTED THIS 25 DAY OF APRIL, 1997

The Prospective Investment and Trading Company, Ltd.

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By: _

Adam C. Singer, President

Mallon Oil Company

EXHIBIT "A"

April 18, 1997

The Prospective Investment and Trading Company, Ltd. 2162 East 61st Street Tulsa, Oklahoma 74136

Attention: Adam Singer, President

Re: Letter Agreement E/2 Section 3-T24S-R26E Eddy County, New Mexico

Gentlemen:

When accepted by you in the manner provided below, this letter evidences an Agreement between The Prospective Investment and Trading Company, Ltd. (hereinafter sometimes called "PITCO") and Mallon Oil Company (hereinafter sometimes called "Mallon") ("Agreement").

I.

WHEREAS, PITCO represents but does not warrant in anyway that it owns an approximate 94.3623% working interest in the Contract Lands as hereinafter defined;

WHEREAS, subject to the terms and conditions of this Agreement, PITCO intends to deliver unto Mallon a 69.3623% working interest in the Contract Lands, as hereinafter defined, and a seventy-five percent (75%) net revenue interest in such Lands proportionately reduced in the same manner as the reduction of the conveyed working interest (all interests conveyed to Mallon pursuant to the terms of this Agreement, whether referenced in this paragraph or not will be collectively referred to as the "Assigned Interests");

WHEREAS, PITCO will have the option to retain up to a twenty-five percent (25%) working interest and the applicable net revenue interest in

a Mallon Resources subsidiary

the Contract Lands with the understanding that any interest not retained by PITCO will be delivered unto Mallon on the same terms and conditions as the Assigned Interests (except for PITCO's right to assign a portion of its interest to a third party investor in accordance with Section II. hereof); and

WHEREAS, at completion of the Test Well described below or any well on the Contract Lands as defined below at PITCO's option, Mallon will convey to PITCO a twenty-five percent (25%) working interest and the proportionate net revenue interest which is applicable in the Assigned Interests so that PITCO will have an additional working and net revenue interest, such assignment will be in a form reasonably satisfactory to the parties.

NOW, THEREFORE, IN CONSIDERATION of the sum of Ten and No/100 Dollars (\$10.00), and other good and valuable consideration paid to PITCO by Mallon, and subject to the terms and conditions herein contained, PITCO hereby assigns to Mallon:

69.3623% of PITCO's rights, title and interest in those oil, gas and mineral leases currently owned by PITCO specifically excluding any of PITCO's interest in the Bell State Com. 1 Well (which interests are specifically retained by PITCO), more particularly described in Exhibit "A," ("Contract Lands"). PITCO reserves unto itself an overriding royalty interest equal to the difference between current lease burdens and twenty-five percent (25%). It being PITCO's intention to deliver to Mallon only a seventy-five percent (75%) net revenue interest in and to its leasehold interest proportionately reduced to the interest assigned. The interests acquired by Mallon pursuant to the terms of this Agreement shall bear their proportionate part of all royalties, overriding royalties and other encumbrances with which the interests are burdened when acquired by Mallon herein, as well as any rights to which the interests are burdened pursuant to the terms of this Agreement. Mallon is accepting the interests being assigned to it, subject to and agrees to assume and perform any and all of the liabilities and obligations, or alleged or threatened liabilities and obligations of PITCO relating to the Assigned Interests and existing oil and gas leases, assignments, operating agreements, product purchase and sale contracts, leases, permits, right-of-ways, licenses, easements, options, orders and any other agreements or contracts attributable to and affecting the Assigned Interests, including, but not limited to, any and all obligations (i) to pay and deliver royalties, overriding royalties, non-participating royalties and other burdens on production, (ii) in connection with or arising out of balancing and overproduction or underproduction from the Assigned Interests, and (iii) in compliance with all laws and governmental regulations with respect to the Assigned Interests, including, but not limited to, the lawful plugging and abandonment of oil and gas wells, and the restoration and the surface of the land as nearly as possible to its pre-leased condition, whether or not such liabilities and obligations are alleged, or

threatened liabilities and obligations are caused by PITCO's negligence, and whether or not such liabilities and obligations are alleged, or threatened liabilities and obligations arise during the period of or from or in connection with PITCO's ownership or operation of the Assigned Interests. Without limitation of the foregoing, Mallon agrees to assume and perform any and all of the liabilities and obligations or alleged or threatened liabilities and obligations of PITCO, for claims, losses, damages, costs, expenses, diminutions in value suits and causes of action of any kind or character with respect to the environmental condition of the Assigned Interests, regardless of when the events occurred that caused such condition to exist, and whether or not caused by or attributable to PITCO's negligence. Mallon shall to the fullest extent permitted by law protect, defend and indemnify and hold PITCO and its directors, officers, shareholders, partners, employees, agents and representatives and each of them harmless from and against any and all claims, losses, damages, costs, expenses, diminutions in value suits, causes of action or judgments of any kind or character with respect to any and all liabilities and obligations or alleged or threatened liabilities and obligations, including, but not limited to, any interest, penalty and any attorneys' fees and other costs and expenses incurred in connection with the investigation, or defending any claims or actions whether or not resulting in any liability attributable to or arising out of (i) ownership or operation of the Assigned Interests subsequent to the effective date of this Agreement, and (ii) Mallon's assumption of any liability or obligation in accordance with this paragraph. THE INDEMNIFICATION, RELEASE AND ASSUMPTION PROVISION PROVIDED FOR IN THIS ASSIGNMENT SHALL BE APPLICABLE WHETHER OR NOT THE LOSSES, COSTS, EXPENSES AND DAMAGES IN OUESTION AROSE SOLELY OR IN PART FROM THE GROSS ACTIVE, PASSIVE OR CONCURRENT NEGLIGENCE OR OTHER FAULT OF PITCO.

Nothing contained herein affects PITCO's responsibilities with respect to its retained interests regarding the above and PITCO is not currently aware of any environmental claims, balancing claims, title defects or lawsuits whose effect would have a material adverse effect on the Assigned Interests.

In the event any payment of minimum royalties may be necessary to maintain in force any lease owned by the parties hereto, which lies within the Contract Lands hereafter owned by the joint interest, then PITCO shall use its best efforts to maintain and to pay or cause to be paid said lease obligations but shall incur no liability whatsoever for failure to pay or do same. In the event any such lease obligations are paid by PITCO, Mallon agrees, after receiving copies of the receipts, within thirty (30) business days to reimburse PITCO for its proportionate part of such lease obligations.

The assignment made herein to Mallon is made and accepted without any representation, warranty or covenant of title of any kind or nature, either expressed, implied or statutory.

Mallon shall endeavor to obtain an unorthodox well location at a mutually acceptable location as soon as practicably possible, as well as any other necessary permits required by the New Mexico Oil Conservation Division. Mallon, as Successor Operator (nothing contained herein suggests that Mallon will operate the Bell State Com. 1 Well), shall propose the drilling of a Morrow Test Well ("Test Well"). PITCO shall have fifteen (15) days from the receipt of a well proposal on the Test Well which will include a proposed location and AFE for drilling and completing said well to elect one (1) of the following options:

OPTION A. Participate in the Test Well for a twenty-five percent (25%) working interest in the Test Well on a heads up basis.

OPTION B. PITCO may elect to participate with any portion of said twenty-five percent (25%) working interest in the Test Well and shall assign its remaining working interest which it is not participating within the Test Well to Mallon, which interest will become part of the Assigned Interests and will be treated as such pursuant to the terms and conditions hereof. PITCO will retain, however, an overriding royalty equal to the difference between the existing lease burdens and twenty-five percent (25%) proportionately reduced to said interest.

If PITCO fails to notify Mallon of its election of one of these options within the fifteen (15) day period, it shall be irrevocably deemed to have elected Option B with PITCO assigning its twenty-five percent (25%) working interest on the same basis as the Assigned Interests. Any of the provisions contained in this Agreement dealing with a Test Well applies equally to a Substitute Well or any subsequent well drilled on the Contract Lands.

III.

On or before August 1, 1997, or the date the New Mexico Oil Conservation Division issues an Order for an unorthodox location for the Test Well, whichever comes first, and, subject to rig availability, Mallon, as Operator, shall commence, or cause to be commenced, operations for the drilling of the Test Well. Such Test Well shall be drilled at a location acceptable to the parties within the Contract Lands and shall thereafter continue the drilling of the well with due diligence to a sub-surface depth of 11,800' or to the Morrow Formation, whichever is the lesser depth, hereinafter sometimes referred to as "Contract Depth." The location of the Test Well or any well drilled on the Contract lands will not interfere or impede the operations or production of the Bell State Com. 1 Well and the parties will consult and agree on the location of all wells drilled on the Contract Lands. If Mallon has not commenced and spudded a Test Well within six (6) months from the date hereof, then Mallon will reconvey the entire Assigned Interests to PITCO upon PITCO's request. If, at any time, Mallon does not commence and spud any Substitute Well or other well in the Contract Lands within six (6) months from the date the last well which was drilled in such Lands is abandoned, then Mallon will reconvey the entire Assigned Interests to PITCO upon PITCO's request at the applicable time.

IV.

As it pertains to the Assigned Interests, prior to the time that Mallon makes its recommendation, as set out in Paragraph V.A. hereinbelow, Mallon agrees to pay all costs, risks and expenses of whatsoever nature incurred in connection with the permitting and drilling of the Test Well to casing point, including, if necessary, the cost of intermediate casing relating to the Assigned Interests.

V.

After the Test Well has been drilled to casing point, and all open hole Α. evaluations have been made. Mallon shall make copies of all logs run available to a representative of PITCO. Mallon shall notify the representative of PITCO whether Mallon recommends an attempt to set production casing and complete the well, or to plug and abandon the well. If Mallon decides to plug and abandon a well it will pay PITCO the amount referenced in Section V.A Option 1 below. Within forty-eight (48) hours of PITCO's receipt of the logs, PITCO shall elect whether or not to participate in If neither Mallon nor PITCO desire to attempt a Mallon's recommendation. completion of the well after conducting all tests or operations in the well, then Mallon and PITCO shall pay their proportionate share to plug and abandon the well based upon their respective working interests owned at that time. Should Mallon and PITCO decide to attempt a completion of the Test Well or Substitute Well or any well on the Contract Lands after conducting all open hole evaluations, then subsequent operations shall be in accordance with the terms and provisions of the Operating Agreement, attached hereto as Exhibit "A," which becomes effective at this point. PITCO shall have the following two options regarding the completion of the Test Well or any Substitute Well or any well on the Contract Lands once Contract Depth is reached:

OPTION 1: Mallon shall pay PITCO Four Hundred Ten and No/100 Dollars (\$410.00) per net acre delivered to Mallon as the Assigned Interests. The number of net acres shall be determined by multiplying the percentage of working interest delivered to Mallon in the total Assigned Interests by 319.28 acres, and Mallon will then convey to PITCO twenty-five percent (25%) of the Assigned Interests; or

OPTION 2: Mallon shall pay all completion costs to the tank attributable to the total Assigned Interests and will convey to PITCO twenty-five percent (25%) of the Assigned Interests at completion of any well.

B. If any party elects not to participate in further operations after the Test Well or any well drilled on the Contract Lands reaches Contract Depth and the open hole evaluation procedures have been concluded, then all further operations in the well shall be conducted pursuant to the Non-Consent Provision of Article 12 of Exhibit "A".

C. See Exhibit "B" which is attached hereto and incorporated herein by reference for all purposes for illustrative examples of the effect of PITCO's exercise of its various options pursuant to the terms of this Agreement.

If PITCO fails to notify Mallon of its election of one of these options within forty-eight (48) hours of PITCO's receipt of logs, it shall be irrevocably deemed to be under the terms of Option 2.

VI.

In the event the Test Well is abandoned prior to reaching Contract Depth due to heaving shale, salt water flow, rock salt, dome formation, lost circulation, impenetrable formation, mechanical difficulty or other conditions rendering further drilling impractical, each party hereto shall have the option, but not the obligation, to drill a Substitute Well in the same manner and in accordance with the same terms and conditions for the Test Well hereunder. The parties understand that the terms of this Agreement apply to any well drilled on the Contract Lands and the terms relating to Test, subsequent and/or Substitute Well(s), apply to any well drilled on such Lands.

VII.

Mallon shall notify PITCO when actual drilling of the Test Well is commenced and shall furnish PITCO with a copy of the location plat. During the drilling of any well on the Contract Lands, PITCO's duly authorized representative shall have access at his own risk at all times to the derrick floor and shall be given any available information requested regarding the well, including daily drilling reports, Monday through Friday, and sufficient notice of all tests or the running of a log in order for PITCO to have a representative present if it so desires. Mallon shall furnish PITCO with the following:

- A. Prior to selecting a location, copies of all geological maps and data;
- B. Copies of all logs run and cores taken;

C. Results of any tests made; and

D. Copies of all forms filed with regulatory agencies.

In addition to the information to be furnished PITCO by Mallon in connection with the drilling of the Test Well or any well drilled on the Contract Lands, as above provided, PITCO shall be entitled to all of the rights and entitled to receive all information to which it is entitled under the provision of the Operating Agreement as a Non-Operator in connection with the drilling of the well, and operations of the same, under the terms of the Operating Agreement. The provisions of the Operating Agreement with respect to such rights are incorporated herein by reference.

VIII.

All notices and reports to be furnished or given hereunder shall be at the following addresses:

MALLON OIL COMPANY 999 18th Street, Suite 1700 Denver, CO 80202 (303) 293-2333 (phone) (303) 293-3601 (fax)

THE PROSPECTIVE INVESTMENT AND TRADING COMPANY, LTD. 2162 E. 61st Street Tulsa, OK 74136 (918) 747-4999 (phone) (918) 747-4987 (fax) Attn: Adam C. Singer, President

IX.

Each of the parties hereto shall have the right to assign all or any portion of its rights and obligations pursuant to the terms and provisions of this Agreement. It is agreed, however, that no such assignment shall relieve Mallon of any obligations hereunder and Mallon and its assignee shall be jointly and severally bound to perform and satisfy all obligations of the assigning party unless the other party hereto shall expressly and in writing relieve and release the assigning party from such obligations. In any assignment, Mallon and/or PITCO shall furnish its respective assignee with a copy of the Agreement and all exhibits attached hereto and the other party shall agree to be bound by the terms and provisions hereof.

The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, representatives, successors and assigns.

Letter Agreement - Page 7

The provisions of the Operating Agreement shall be applicable to all operations hereunder. Provided, however, in the event of a conflict between this Agreement and the Operating Agreement, the provisions of this Agreement shall apply except for title failure as the same is defined in the Operating Agreement, and in the event of title failure the provisions of the Operating Agreement shall be controlling.

XII.

The parties hereto do covenant and agree that they, themselves, and their heirs, administrators, executors, successors and assigns will execute any and all instruments, releases, assignments and consents that may be required of them in accordance with the provisions of this Agreement. In case any term of this Agreement shall be held to be invalid, illegal, in whole or in part, or unenforceable, neither of the remaining part of such terms nor the validity of any other terms of this Agreement shall in any way be affected thereby.

XIII.

This Agreement shall not be binding upon Mallon until PITCO shall indicate acceptance of the terms and provisions herein contained by executing in the space provided below and returning a fully executed copy to Mallon via facsimile on or before April 23, 1997.

AGREED TO AND ACCEPTED THIS 23rd day of April, 1997.

THE PROSPECTIVE INVESTMENT AND TRADING COMPANY, LTD.

By:

Adam C. Singer, President

MALLON OIL COMPANY By: Randy Stalcup Vice President, Land

ACS/scg

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BELL STATE COM - REDRILL Sec. 311-245-26E Eddy Co., N.M.

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EXHIBIT "B"

PITCO'S OWNERSHIP:

NRI %	COMMENTS
82.5670	Current
52.0217	Assign to Mallon
30.5453	PITCO Retains Max. Int.
13.0055	*Mallon Assigns Back to PITCO
43.5508	PITCO's Final Ownership
	82.5670 52.0217 30.5453 13.0055

MALLON'S OWNERSHIP:

WI %	NRI %	COMNUENTS
5.6377	4.9330	Current
69.3623	52.0217	PITCO Assigns
75.0000	56.9547	Subtotal
17.3405	13.0055	*Mallon Assigns Back to PITCO Carried Interest
57.6595	43.9492	Mallon's Final Ownership

* NOTES:

Paragraph V.A. Option 1:

PITCO elects to have Mallon pay \$410 per acre:

410

x 221.46 Acres (69.3623% x 319.28 Acres = 221.46 Acres) \$90,798.58

Paragraph V.A. Option 2:

PITCO elects to have Mallon carry PITCO's 17.3405 WI to the tanks -- all Completion Costs.

JAMESBRUCE

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JAMES BRUCE ATTORNEY AT LAW

POST OFFICE BOX 1056 SANTA FE, NEW MEXICO 87504

SUITE B 612 OLD SANTA FE TRAIL SANTA FE, NEW MEXICO 87501

(505) 982-2043 (505) 982-2151 (FAX)

June 4, 1997

Via Fax: (505) 827-1389

Michael E. Stogner New Mexico Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505

Dear Mr. Stogner:

Regarding the application for an unorthodox gas well location filed by Mallon Oil Company on the Bell State 3 Com. Well No. 2:

- 1. The application, in paragraph 2 on page 2 of my letter, referenced Well No. 1 and stated that simultaneous dedication approval would be sought before producing both wells. Thus, I did inform you of that well.
- 2. It is intended that Well No. 1 will be shut-in on or before the date testing of Well No. 2 begins.
- 3. I am checking on who will operate Well No. 1, and will get back to you within the hour.

I respectfully request that the application be granted, with whatever conditions you deem necessary.

Very truly yours,

James Bruce