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ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

MEMORANDUM

TO: WILLIAM J. LEMAY, DIRECTOR and ROBERT G. STOVALL, GENERAL COUNSEL

FROM: MICHAEL E. STOGNER, EXAMINER/ENGINEER 200. S.

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SUBJECT: APPLICATION OF DOYLE HARTMAN - LANGLIE-MATTIX UNIT

DATE: JUNE 5, 1991

In response to Bob Stovall's Memorandum dated June 4, 1991, and to Stovall's and my meeting with Gene Gallegos, Thomas M. Domme and Dan Nutter on Monday, June 3, 1991 concerning this application, it would appear that setting this application directly to a Commission Hearing could best serve all concerned and does appear to meet your requirements for a direct Commission case. As I understand it, if a matter arises that is unique in nature, involves a situation with no prior precedent, and serves to set policy, than such an application may be set on a Commission docket. Also, in my opinion, many of the issues raised by Doyle Hartman Oil Operator, can and should be heard by one of the Examiners; however, a higher authority is needed in this instance to sort which issues are prevalent for the Division to hear and which ones belong in District Court.

Should you decide that this matter be taken to the Examiner level first, I would suggest that we limit that docket to this case and to just a few others (one to five depending upon the applications) so that the docket not be overloaded and the Examiner will not be overwhelmed.

Planning would also be required since a commitment would have to be made by all parties to attend the assigned hearing date and continuance of said matters to other Examiner hearing dates would not be an option.

I concur with Mr. Stovall and recommend this case be docketed before the full Commission.

dr/

HINKLE, COX, EATON, COFFIELD & HERSLEY N DIVISION

LEWIS C COX THOM PAUL W EATON FRAN CONRAD E COFFIELD GREG CONRAD E COFFIELD GREG STUART D SHANDOR MARK ERIC D LANPHERE KARE C D MARTIN FRED PAUL J KELLY, JR MARSHALL G MARTIN JEFF OWEN M. LOPEZ DOWEN M. LOPEZ DOWEN K. LOPEZ DOWEN K. LOPEZ MELLY REBER WILLIAM B. BURFORD T CALDER EZZELL, JR WILLIAM B. BURFORD THOMAS J. WIEFONG BETT THOMAS J. WIEFONG STEVEN D. ARNOLD JAMES J WECHSLER LIEFFREY D. HEWETT MARS J. WECHSLER ELLEP NARCY S. CUSACK JEFFREY D. HEWETT MARS J. MELBERG JEFFREY D. HEWETT MARS J. WECHSLER ELLEP NARCY S. CUSACK S. BAR JEFFREY D. HEWETT MARS JEFFREY D. HEWETT MARS JAMES BRUCE JERRY F SHACKELPORD JEFFREY M. HELLBERG JOHN C CHAMBERS' JOHN GARY D COMPTON' LISA I MICHAEL A GROSS JAMES

THOMAS D. HAINES, JR. FRANKLIN H. MCCALLUM* GREGORY J. NIBERT DAVID T. MARKETTE* MARK C. DOW KAREN M. RICHARDSON* FRED W. SCHWENDIMANN JAMES M. HUDSON JEFFREY S. BAIRO* PATRICIA A. MORRIS MACDONNELL GORDON REBECCA NICHOLS JOHNSON WILLIMP, J. JOHNSON STANLEY K. KOTOVSKY, JR BETTY H. LITLE* RUTH S. MUSGRAVE HOWARD R. HOMAS ELLEN S. CASEY S. BARRY PAISNER MARGARET CARTER LUDEWIG MARTIM MEYERS GREGORY S. WHEELER ANDREW J. CLOUTER JAMES A. GLILESPIE GARY W. LARSON STEPHANIE LANDRY JOHN R. KULSETH, JR. LISA K. SMTH* ATTORNEYS AT LAW

POST OFFICE BOX 10 91 FUR 27

ROSWELL, NEW MEXICO 88202

(505) 622-6510

FAX (505) 623-9332

OF COUNSEL O. M. CALHOUN* MACK EASLEY JOE W. WOOD RICHARD S. MORRIS

CLARENCE E. HINKLE (1901-1985) W. E. BONDURANT, J.R. (1913-1973) ROY C. SNODGRASS, J.R. (1914-1987) RE: 2800 CLAYDESTA NATIONAL BANK BUILDING

1700 TEAM BANK BUILDING POST OFFICE BOX 9238 AMARILLO, TEXAS 79:05 (806) 372-5569 FAX (806) 372-976

218 MONTEZUMA POST OFFICE BOX 2068 SANTA FE, NEW MEXICO 87504 (505) 982-4554 FAX (505) 982-8623

500 MARQUETTE N.W., SUITE 800 ALBUQUERQUE, NEW MEXICO 87102-2121 (505) 768-1500 FAX (505) 768-1529

*NOT LICENSED IN NEW MEXICO

August 26, 1991

William J. LeMay, Director Oil Conservation Division New Mexico Department of Energy, Minerals and Natural Resources State Land Office Building Santa Fe, New Mexico 87503

> Re: Oil Conservation Commission Case No. 10378 Application of Doyle Hartman for Enforcement of the Myers Langlie-Mattix Unit Agreement and Unit Operating Agreement and Order No. R-6447, Lea County, New Mexico; and Disapproval of Change of Operator and Development Plans

Dear Mr. LeMay:

Please find enclosed our Entry of Appearance on behalf of Texaco Exploration and Production, Inc. in the above referenced case. I have not filed a Prehearing Statement relative to this matter because I was informed that Mr. Hartman had been granted a continuance of the matter from its original August 29, 1991 setting to the September 12, 1991 hearing date. I have now received a copy of a hand delivered letter to you from the Gallegos Law Firm requesting, on behalf of Mr. Hartman, an additional continuance until the end of September or beginning of October. This letter cites ongoing settlement negotiations as the reason for the request. I am also in receipt of an August 23, 1991 letter, hand delivered to you, from William F. Carr of Campbell & Black, representing Sirgo Operating, Inc. This letter urges the Commission to hear Sirgo's Motion to Dismiss the Petition on the originally scheduled date of August 29, 1991.

Mr. William J. LeMay August 26, 1991 Page Two

Texaco Exploration and Production, Inc. has filed its Motion to Dismiss the Petition along with its Memorandum in support thereof and, as stated in the Memorandum, it is our position that no dispute exists at this time. Mr. Hartman's Petition arose from the erroneous and unilateral filing of Change of Operator forms by Sirgo Operating, Inc. reflecting that Sirgo was the successor operator of the Myers Langlie-Mattix Unit. As clearly set forth in the Memoranda and supporting Affidavits filed both by Sirgo and Texaco Exploration and Production, Inc., this is simply not the case. Texaco Exploration and Production, Inc. has not resigned as Unit Operator pursuant to the terms of the Unit Operating Agreement and continues to act as Unit Operator in all respects. Simply stated, there is no dispute for the Commission to hear. By a copy of this letter, I am urging counsel for Mr. Hartman to withdraw the Petition. Failing in that, we would urge the Commission to hear the matter on the earliest possible date. There is no discovery necessary, nor is there any evidence to prepare. Furthermore, Texaco Exploration and Production, Inc. is not aware of any settlement negotiations in process other than Mr. Hartman's efforts to sell his interest in the Myers Langlie-Mattix Unit.

Respectfully submitted,

HINKLE, COX, EATON, COFFIELD & HENSLEY

I Calden Ezzell f

T. Calder Ezzell, Jr.

TCE/tw Enclosure

cc: J. E. Gallegos, Esquire William F. Carr, Esquire Nanette J. Crawford, Esquire AL DOWSER N DIVISION

NEAL & NEAL, P.C.

Attorneys at Law

Neal Building, P.O. Box 278 Hobbs, New Mexico 88241-0278 Telephone 505-397-3614 Fax 505-393-7405

<u>С. Melvin Neal (1907-1968)</u> 5 АЛ 8 51 J. W. Neal

May 30, 1991

Energy, Minerals and Natural Resources Dept. Oil Conservation Division State Land Office Building Santa Fe, New Mexico 87501

Re: In the Matter of Doyle Hartman's Petition for Enforcement of the Myers Langlie-Mattix Unit Agreement and Unit Operating Agreement, Lea County, New Mexico and Disapproval of Change of Operator.

Gentlemen:

Enclosed herewith please find Entry of Appearance on behalf of L. Summers Oil Company for filing in the above matter.

	Very truly yours
	2-1-
	J. W. Neal
JWN/b	
Encl.	
cc: Gallegos La	
(₩/Сору	of Entry)

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES

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AUG 2 3 1991

PETITION FOR ENFORCEMENT OF THE MYERS-LANGLIE MATTIX UNIT AGREEMENT AND UNIT OPERATING AGREEMENT, AND ORDER NO. R-6447, LEA COUNTY, NEW MEXICO; AND DISAPPROVAL OF CHANGE OF OPERATOR AND DEVELOPMENT PLANS.

IN THE MATTER OF DOYLE HARTMAN'S

OIL CONSERVATION	DIVISION

CASE NO. _____

17. N. S

MEMORANDUM OF TEXACO EXPLORATION AND PRODUCTION INC. IN SUPPORT OF ITS MOTION TO DISMISS DOYLE HARTMAN'S PETITION REGARDING STATUS OF OPERATOR AND DEVELOPMENT PLAN FOR MYERS-LANGLIE MATTIX UNIT, LEA COUNTY, NEW MEXICO

The Myers-Langlie Mattix Unit, ("the Unit") located in Lea County, New Mexico, was formed as a voluntary unit in the early 1970's to implement a waterflood project in certain portions of the Langlie Mattix Pool. A large majority of the working and royalty interest owners have voluntarily joined the Unit. The remaining interests have been force pooled. Texaco Exploration and Production Inc. ("TEPI") is the current operator of the Unit. Of the other parties to this proceeding, Sirgo Operating, Inc. "(Sirgo") owns a 53.02046% working interest in the Unit and Doyle Hartman ("Hartman") owns a 4.86908% working interest acquired in 1988. Pursuant to Order No. R-6447 issued by the New Mexico Oil Conservation Division (the "OCD"), Skelly Oil Company, the then Unit Operator of the Unit, obtained statutory unitization of the area thereby enabling it to avoid duplication of facilities and otherwise institute more effective and efficient operating procedures. This Order incorporated by reference the Myers-Langlie Mattix Unit Agreement and Unit Operating Agreement. (See, Order No. R-6447, Finding 20, Order Paragraph 5).

Sirgo, as the owner of the majority working interest in the Unit, has stated a desire to succeed TEPI as operator of this Unit and in pursuit of this objective has had an engineering evaluation made of the unit operations by the consulting firm of T. Scott Hickman & Associates, Inc. of Midland, Texas. Although Sirgo has represented that this engineering evaluation was provided to all working interest owners in the Unit (including Hartman), TEPI did not authorize nor has it endorsed, the Hickman Study.

As part of its efforts to succeed TEPI as Unit Operator, Sirgo prepared change of operator forms (Division Form C-104), to notify the Division of a change in Unit operations. These forms were filed with the OCD without TEPI having resigned as operator. When this error was discovered, TEPI called the OCD to report the error and confirm that it continued as the operator of the Unit. This conversation was confirmed by letter dated May 13, 1991. Further, since that date, Texaco, as operator of the Unit, has filed all appropriate production reports (Division Form C-115) in a timely fashion. (See Affidavit of Helen C. Pattison, attached.)

On June 3, 1991, Doyle Hartman filed his petition regarding Status of Operator and Development Plan for Myers-Langlie Mattix Unit, Lea County, New Mexico, asking the Division to: (1) disapprove the change of operator forms (Division Form C-104) which were filed by Sirgo and other filings concerning change of operator; (2) enter its order enjoining Sirgo from assuming operation of the Unit; (3) disapprove the Plan of Development for the Unit; (4) evaluate current and past operations in the Unit to assure compliance with the Unit Agreement and the Statutory Unitization Act; and (5) enter orders insuring compliance with the Statutory Unitization Act including, if necessary, dissolving or reconfiguring the Unit. On August 23, 1991, TEPI filed its response to Hartman's Petition asking that the OCD dismiss the Petition.

I. HARTMAN'S PETITION IS BOTH PREMATURE AND MOOT

It is undisputed that the change of operator forms (C-104's) filed by Sirgo were filed in error and Hartman has been so notified of the error (See Exhibit "A" to Affidavit of Helen C. Pattison, attached). The OCD was also advised that TEPI remained operator of the Unit as soon as this error was discovered and TEPI has continued to conduct all unit operations and file all reports with government authorities. Furthermore, TEPI has filed with the OCD new forms correcting this error and redesignating TEPI as operator of this unit. Accordingly, there is no dispute regarding operatorship of the Unit.

Further, there is no basis for Hartman's request that the OCD disapprove any filings concerning a change in operator which is made in accordance with the provisions of the Unit Agreement. Since no such filings have been made, Hartman's request is at best premature. Similarly, Section 12 of the Unit Agreement provides that revisions to the Unit Plan of Operation shall be subject to the consent and approval of the Working Interest Owners, the Supervisor, the Commissioner and the Division. According to Sirgo, all it has done is review its engineering evaluation of this project with other working interest owners in this Unit. No Amendment to the Unit Plan of Operation has been proposed to the Division or any other governmental authority. Accordingly, there is no issue concerning amendments to the Plan of Operation before the Division for it to consider and Hartman's second prayer for relief should be dismissed.

II. HARTMAN'S REQUEST FOR RELIEF IS BEYOND THE JURISDICTION OF THE OCD

Hartman's petition for an order enjoining Sirgo from assuming operations of this Unit must likewise be dismissed. It asks the OCD to go outside its jurisdiction and interpret a contract and determine whether or not Sirgo's actions were authorized by and in compliance with the appropriate provisions of the Unit Agreement. Simply put, the OCD is simply not charged with such a duty. The Unit Agreement and Operating Agreement contain adequate provisions for the protection of the working interest owner. If these Agreements have been breached, then Mr. Hartman's remedy does not lie before the OCD.

III. HARTMAN'S REQUEST FOR REVIEW OF UNIT OPERATIONS SHOULD BE DISMISSED

Hartman also asserts that the participation factors in the Unit Agreement are inequitable and impair his correlative rights and that the Unit Operations should, therefore, be reviewed and redetermined.

Hartman's interest in the Unit was previously committed to the Unit by his predecessor in interest, thus binding Hartman to the Unit agreements and participation formula. The participation formula is set out in that agreement, including the portions of the Phase I and Phase II formula which considered historical cumulative production. The agreements are matters of public record in Lea County, New Mexico. Therefore, when Hartman acquired this interest he knew, or should have known, about the participation formula about which he now complains. Hartman cannot now challenge the factors in the formula to which he is contractually bound.

Both Hartman (as well as his predecessor in interest) have enjoyed the benefits of the unitization for some twenty (20) years. Any concern about the formula should have been raised before the Agreement was signed. Hartman is now estopped from reopening this matter and is mounting a collateral attack on factors to which his predecessor bound him years ago. It would simply be inequitable for the OCD, more than twenty (20) years after the Unit Agreement was signed by Hartman's predecessor in interest and OCD approval obtained, to review and revise the basic factors upon which this unitization rests, and on this basis have the Division set aside a unit which has been in operation for years. Further, Hartman's interest was committed to the Unit by private contract and, accordingly, may not be superseded by the OCD unless there is a direct conflict with the OCD's orders.

Hartman's Petition must also fail for he seeks relief the Division cannot give. The Division's role in unitization matters is to approve or disapprove a proposed unit. It should not conduct a retroactive day-by-day review of unit operations more than fifteen (15) years after unit operations began and it cannot then rewrite the Agreement for the parties by

changing its decision on the parameters in the participation formula or by redrawing the unit's boundaries.

CONCLUSION

The relationship between Hartman, TEPI and Sirgo is defined by the Unit Agreement for the Myers-Langlie Mattix Unit. This Agreement contains procedures concerning Unit Operations, Plans for Development and removal of the Unit Operator. Instead of availing himself of the previously approved procedures, Hartman filed his Petition with the OCD which, for the reasons stated herein, should be dismissed.

Respectfully submitted,

Texaco Exploration and Production Inc.

Bv:

NANETTE L CRAWFØRE P.O. Box 2100 Denver, CO 80201 (303) 793-4317

Calder Ezzell, Esq. Hinkle, Cox, Eaton & Coffield 700 United Bank Plaza Roswell, New Mexico 88201 (505) 622-6510

Attorneys for Texaco Exploration and Production Inc.

CERTIFICATE OF MAILING

I hereby certify that I have caused to be mailed a true and correct copy of the foregoing pleading to the following persons at the following addresses this 220 day of August, 1991:

Mr. William Carr Campbell, Carr, Berge & Sheridan 110 Guadalupe Street P.O. Box 2208 Santa Fe, New Mexico 87504-2208

J.E. Gallegos, Esq. THE GALLEGOS FIRM 141 East Palace Avenue Santa Fe, NM 87501

Thomas M. Domme, Esq THE GALLEGOS FIRM 141 East Palace Avenue Santa Fe, NM 87501

1 Janette J. Crawfuld

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

September 13, 1991

GALLEGOS LAW FIRM Attorneys at Law 141 East Palace Santa Fe, New Mexico 87501

RE: CASE NO. 10378 and CASE NO. 7827 ORDER NO. R-6447-A and ORDER NO. R-7316-A

Dear Sir:

Enclosed herewith are four copies of the above-referenced Division orders recently entered in the subject cases.

Sincerely,

Florene Clavidson

Florene Davidson OC Staff Specialist

FD/sl

cc: W. F. Carr BLM Carlsbad Office J. W. Neal Nanette Crawford T. Calder Ezzell, Jr. T. Kellahin



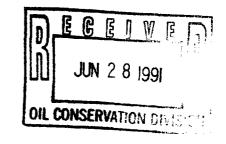
P. O. BOX 2100 DENVER, COLORADO 80201 (303) 793-4317

NANETTE J. CRAWFORD ATTORNEY

June 27, 1991

VIA OVERNIGHT DELIVERY

Oil Conservation Division State of New Mexico 310 Old Santa Fe Trail State Land Office Building, Room 206 Santa Fe, NM 87501



Re: In the Matter of Doyle Hartman's Petition Meyers Langlie-Mattix Unit

Dear Clerk:

Enclosed for filing is an original and one (1) copy of Texaco Exploration and Production Inc.'s Notice of Appearance for the above-referenced matter. I would appreciate you stamping the additional copy I have enclosed with the case number and a date stamp and returning a copy of the Notice in the self-addressed, stamped envelope provided for your convenience.

Should you have any questions in this regard, please do not hesitate to contact me at (303) 793-4317.

Very truly yours,

Nanette J. Crawford Nanette J. Crawford

NJC/jfm

Enclosures

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

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IN THE MATTER OF DOYLE HARTMAN'S PETITION FOR ENFORCEMENT OF THE MEYERS LANGLIE-MATTIX UNIT AGREEMENT AND UNIT OPERATING AGREEMENT, AND ORDER NO. R-6447, LEA COUNTY, NEW MEXICO AND DISAPPROVAL OF CHANGE OF OPERATOR AND DEVELOPMENT PLAN

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	OIL CONSERVATION DAVISION
CASE NO.	

NOTICE OF APPEARANCE

NOW COMES Texaco Exploration & Production Inc. (hereinafter called "TEPI") and files this its Notice of Appearance by and through its attorney of record Nanette J. Crawford.

You are requested to serve upon TEPI all notices, pleadings, briefs and other documents filed in this matter by serving the said Nanette J. Crawford at P. O. Box 2100, Denver, Colorado 80201.

Respectfully submitted,

TEXACO EXPLORATION AND PRODUCTION INC.

Nanétte J. Crawford New Mexico State Bar No. 5846 P. O. Box 2100 Denver, Colorado 80201

CERTIFICATE OF SERVICE

I hereby certify that on this $27^{\frac{10}{22}}$ day of June, 1991, a true and correct copy of the above and foregoing <u>NOTICE OF APPEARANCE</u> was placed in the U.S. mails and forwarded to the following:

Mr. J. E. Gallegos 141 East Palace Ave. Santa Fe, New Mexico 87501

Mr. William Carr Campbell & Black 110 Guadalupe Street Santa Fe, New Mexico 87504-2208

Aulte (Crayford

GALLEGOS LAW FIRM

A Professional Corporation

141 East Palace Avenue Santa Fe, New Mexico 87501 Telephone No. 505 • 983 • 6686 Telefax No. 505 • 986 • 0741

JILL Z. COOPER

August 8, 1991

VIA HAND DELIVERY

William J. LeMay, Director Oil Conservation Division Energy, Minerals & Natural Resources Department State Land Office Building Old Santa Fe Trail Santa Fe, New Mexico 87504 RECEIVED

AUG 8 1991

OIL CONSERVATION DIVISION

RE: Myers Langlie - Mattix Unit, Lea County, New Mexico NMOCD Case No. 10378

Dear Mr. LeMay:

The above-referenced matter is currently set for hearing before the Commission on August 29, 1991. By this letter, we are requesting that this case be postponed for one month pending possible settlement.

Thank you for your consideration.

Sincerely,

GALLEGOS LAW FIRM

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JILL Z. COOPER

JZC:ap

cc: Doyle Hartman, Oil Operator Texaco Exploration & Production, Inc.

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

IN THE MATTER OF DOYLE HARTMAN'S PETITION FOR ENFORCEMENT OF THE MYE'RS LANGLIE-MATTIX UNIT AGREEMENT AND UNIT OPERATING AGREEMENT, AND ORDER NO. R-6447, LEA COUNTY, NEW MEXICO AND DISAPPROVAL OF CHANGE OF OPERATOR AND DEVELOPMENT PLAN.

CASE NO. 10318

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COLLOCONSERVATION DOWLSOON

PETITION REGARDING STATUS OF OPERATOR AND DEVELOPMENT PLAN FOR MEYERS LANGLIE-MATTIX UNIT, LEA COUNTY, NEW MEXICO

Doyle Hartman ("Hartman") petitions the Oil Conservation Commission for the State of New Mexico ("NMOCD") for an Order disapproving all C-104s filed by Sirgo Operating Inc. ("Sirgo") which name Sirgo as Operator of the Meyers Langlie-Mattix Unit ("MLMU"); an Order enjoining Sirgo from replacing the current operator, Texaco Exploration & Production Inc. ("Texaco"); an Order disapproving a plan of development proposed by Sirgo; and for an evaluation of current and past operation of the MLMU to determine compliance by the Operators with the Unit Agreement and the Statutory Unitization Act. In support, Hartman states as follows:

GENERAL ALLEGATIONS AND FACTS

1. Hartman is the owner of a 4.8% working interest in the MLMU.

2. On January 1, 1973 a Unit Agreement was entered into by all working, royalty, or other oil and gas interest owners unitizing working and royalty

interests in the MLMU. A copy of the MLMU Unit Agreement is attached and incorporated as Exhibit 1.

3. The Unit Agreement was approved by the NMOCD, by Order No. R-4660. A copy of the order of approval is attached and incorporated as Exhibit 2. The Unit Agreement was approved by the Commissioner of Public Lands for the State of New Mexico, by Certificate of Approval dated December 26, 1973. The Unit Agreement was approved by the Supervisor, United States Geological Survey, by Certification-Determination dated January 31, 1974.

4. Pursuant to the provisions of § 6 of the Unit Agreement, Skelly Oil Company was named Unit Operator of the MLMU. Texaco, as successor in interest to Skelly, succeeded to Operator of the MLMU in approximately 1981, and has for years operated the Unit.

5. On August 27, 1980, the NMOCD, through Order No. R-6447, approved the MLMU for statutory unitization pursuant to the Statutory Unitization Act, §§ 70-7-1 through 70-7-21 NMSA 1978 ("the Act"). A copy of the Order approving statutory unitization is attached and incorporated as Exhibit 3. The NMOCD has jurisdiction pursuant to NMSA, 1978 § 70-7-1 et seq.

6. Notice of this Petition has been served on all interested parties, as identified in Exhibit 4, pursuant to NMOCD Rule 1207.

SIRGO'S CLAIM TO BE OPERATOR OF THE UNIT IS WITHOUT FOUNDATION OR SUPPORT.

7. On October 4, 1990, Sirgo represented to Hartman in a letter that as of October 4, 1990, Sirgo had purchased "60+% of the Unit and Texaco has agreed to relinquish operations to us." A copy of the October 4, 1990 letter is attached and incorporated as Exhibit 5.

8. Contrary to Sirgo's representation in the October 4 letter, Sirgo's ownership interest in the MLMU at that time was only approximately 7.3%. See copy of Joint Account Statement for October, 1990 attached and incorporated as Exhibit 6.

9. Apparently, as part of its misrepresentations regarding ownership of the unit, Sirgo has misrepresented to Texaco and to other third parties, including various working interest owners in MLMU, that Sirgo owns Hartman's working interest in the MLMU. Sirgo contracted to purchase Hartman's working interest in the MLMU but has failed and refused to close the transaction. Sirgo does not own the Hartman interest.

10. In November and December 1990, Sirgo's ownership interest in the MLMU rose to approximately 21%. See November and December 1990 Joint Account Statements attached and incorporated as Exhibit 7. Hartman has seen no records evidencing a greater ownership interest by Sirgo either before or since these referenced time periods.

11. On or About February 28, 1991 and March 8, 1991, Sirgo circulated ballots to various working interest owners in MLMU purporting to have the working interest owners vote for Sirgo to assume all rights, duties, and obligations of the unit operator under the MLMU Unit Agreement, thereby replacing Texaco as Unit Operator. Copies of the Ballots are attached and incorporated as Exhibit 8. No ballots were forwarded to Hartman.

12. On April 15, 1991, Texaco forwarded a letter to all working interest owners stating its intent to resign as Unit Operator "in the near future". Texaco's letter further states that Sirgo has furnished Texaco with documents regarding Sirgo's becoming the successor Unit Operator. A copy of the April 15, 1991 letter is attached and incorporated as Exhibit 9.

13. § 7 of the Unit Agreement provides for the resignation or removal of the Unit Operator. § 7 requires six months prior written notification of the Unit Operator's desire to resign. Texaco has not, as of this date, submitted a written notification of resignation.

14. § 8 of the Unit Agreement provides for the selection of a successor Unit Operator. § 8 requires documentation of approval of three or more working interest owners holding 65% or more of the Phase II Unit participation. Sirgo has not provided documentation of such approvals.

15. § 8 of the Unit Agreement also requires the approval by both the supervisor of the United States Geological survey and the Commissioner of Public Lands

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of the State of New Mexico of any change in Unit Operator. Sirgo has provided no evidence of having obtained such approval.

16. Sirgo has not complied with either §§ 7 or 8 of the Unit Agreement. Nevertheless, upon information and belief, Sirgo, on a date unknown at the present time, filed a form C-104 with the NMOCD claiming a change of operator from Texaco to Sirgo.

17. On May 13, 1991, Texaco wrote to the NMOCD denying the validity of the C-104's filed by Sirgo and reaffirming its operation of the subject unit. A copy of the May 13 letter is attached and incorporated as Exhibit 10.

18. On May 20, 1991, Sirgo forwarded to Hartman a ballot for Hartman's approval of a change of operator from Texaco to Sirgo. Hartman has neither executed nor returned the ballot. A copy of the May 20 letter and ballot are attached and incorporated as Exhibit 11. Contained in the May 20, 1991 letter are the following misrepresentations of fact: (1) "Sirgo's current ownership in conjunction with ballots received to date is sufficient for Sirgo to assume operatorship"; and (2) "Texaco has agreed to resign as operator to allow us to do so,..." No proof of either representation has ever been offered by Sirgo, and both representations fly in the face of Texaco's May 13, 1991 letter (Exhibit 10).

19. Hartman has been informed that the NMOCD has threatened to cancel the allowables for all wells on the MLMU because of Sirgo's having filed the C-104's reflecting a change in operator of the subject unit while the NMOCD does not recognize Sirgo as the operator of the unit. Because of its actions, Sirgo has jeopardized the allowables for each well within the MLMU, thereby jeopardizing each working interest

owner's rights under the Unit Agreement. Disapproval of the C-104's filed by Sirgo is therefore necessary to ensure continued operation of the unit without disruption and harm to all working interest owners.

SIRGO'S PROPOSED DEVELOPMENT PLAN IS DEFECTIVE AND IN VIOLATION OF THE UNIT AGREEMENT AND THE ACT

20. Attached to Sirgo's May 20, 1991 letter (Exhibit 11), was a proposed plan of development for the MLMU which Sirgo proposes implementing on July 1, 1991. A copy of the proposed plan of development is attached and incorporated as Exhibit 12. The proposed plan of development is defective and/or in violation of the Unit Agreement (Exhibit 1) for the following reasons, inter alia:

a. The plan purports to represent "a consensus of Texaco and Sirgo's combined engineering efforts", yet the plan does not detail or contain any discussion of Texaco's analysis and data. Texaco is the current operator of the unit and is required to inform all working interest owners of the proposed changes in the previously approved development plan. Its failure to do so in the proposed plan violates the current Unit Agreement.

b. The plan is based upon an analysis of only 23 of 232 wells in the unit. As acknowledged in the plan itself, a study of only 23 of 232 wells is not sufficient to properly predict reservoir performance: "the quantitative data coverage is minimal and may not be fully representative of the unitized area."

c. The plan's projected payout is 4.1 years. A more realistic payout period appears to be 8-10 years. The overly optimistic payout is apparently based

on <u>assumed</u> rather than <u>existing</u> economic parameters, and the use of such assumed economic parameters casts doubt on the overall economic viability of the project.

d. § 70-7-1 NMSA 1978, provides that "the Statutory Unitization Act applies to any type of operation that will substantially increase the recovery of oil <u>above the amount that would be recovered by primary recovery alone</u> and not to what the industry understands as exploratory units." The Unit Agreement (Exhibit 1) also specifically states that the purpose of the unitization is <u>secondary</u> recovery. According to the plan, a significant amount of primary reserves remain within the unitized area due to inefficient completions in many of the wells, and the intention of the plan is to recover these primary reserves. As a result, the plan violates the Unit Agreement by involving the recovery of primary reserves.

e. The plan is predicated upon 20-acre spacing for the Unit. It is Hartman's understanding that the NMOCD has not approved 20-acre spacing for this unit, and only special exception was granted for a pilot 5-well program in 1986. This program is not representative of Unit performance as a whole, meaning that the plan's 20-acre development constitutes an exploratory venture in violation of the Act's preclusion of exploratory units.

f. § 70-7-6(A)(6) NMSA 1978, provides "that the participation formula contained in the unitization agreement allocates the produced and saved unitized hydrocarbons to the separately owned tracts in the unit area on a fair, reasonable and equitable basis." The plan makes specific reference to the inefficient completion techniques used prior to 1970. Accordingly, the tracts upon which those wells are

located have not been given fair and equitable participation in the Unit due to low primary recoveries. Since the individual tract participation formulas in the Unit Agreement for the MLMU are based, in part, upon historical well by well cumulative production, the participation factors are inequitable and in violation of the Act. The inequitable participation factors also impair the correlative rights of the owners within those tracts that have inefficient well completions.

g. Finally, if the claims in the plan are true regarding the existence of primary reserves, the MLMU has been grossly mismanaged, and the current and former Unit Operators must be held accountable for such mismanagement.

21. For the foregoing reasons, inter alia, the development plan proposed by Sirgo under the guise of its claimed operatorship of the MLMU, and represented as having been approved by Texaco as current operator, is in direct violation of the Unit Agreement and/or the Act, and should be disapproved by the NMOCD, and Sirgo and Texaco should be prevented from going forward with it on July 1, 1991 or at any time. Also, because of certain representations in the plan, Texaco's operation of the unit is called into question, and the NMOCD needs to examine and determine whether the unit has been operated in violation of the Unit Agreement and/or the Act.

SIRGO IS NOT FINANCIALLY QUALIFIED TO ASSUME THE OPERATORSHIP OF THE MLMU

22. The MLMU is the largest unit in New Mexico. Operation of this unit requires significant financial and business resources. To date, the unit has been operated by large national corporations with substantial financial and business resources. Sirgo

proposes to replace the current operator yet, as set forth below, has not provided evidence of its financial or business ability to do so:

a. Upon information and belief, Sirgo is operating at the present time with a negative working capital.

b. Upon information and belief, Sirgo has not paid Texaco the approximately \$1,000,000.00 in past due joint interest billings due Texaco from the interests Sirgo has bought in the unit.

c. Sirgo's proposed plan of development calls for approximately \$44,000,000.00 in development, yet the plan is conspicuously lacking in detail regarding the source of the funds for this development.

23. Based on the foregoing, and otherwise as will be developed prior to the hearing on this Petition, Hartman seeks an Order from the NMOCD barring Sirgo from replacing Texaco as Operator of the MLMU, from going forward with the proposed plan of development, and from interfering further with the operation of the MLMU.

WHEREFORE, Hartman requests the Division:

A. Set aside and disapprove each and every NMOCD Form C-104 filed by Sirgo naming it as Unit Operator of the respective wells in MLMU and any other filing or request pursuing such a change of Operator, and further enjoin Sirgo from replacing the current operator, or from interfering in any manner with the operation of the MLMU by the current or successor operator.

B. Disapprove the plan of development proposed by Sirgo.

C. Evaluate the current and past operation of the MLMU to determine

compliance with the Unit Agreement and the Act, and enter such orders as are necessary to ensure compliance with the Act, including, if necessary, Orders dissolving the MLMU, or reconfiguring the MLMU as necessary.

D. Hearing on this Petition be placed on the July 11, 1991 Examiners Docket, or because of the unique nature of the claims made, before the entire Commission.

E. Order such further relief as appears appropriate.

Respectfully submitted,

GALLEGOS LAW ETRM, P.C. E. GALLEGOS

THOMAS M. DOMME 141 East Palace Avenue Santa Fe, New Mexico 87501 (505) 983-6686

Attorneys for Petitioner

min for 312 ME 349

UNIT AGREEMENT

FOR THE DEVELOPMENT AND OPERATION

OF THE

MYERS LANGLIE-MATTIX UNIT

LEA COUNTY, NEW MEXICO

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EXHIBIT

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UNIT ACCEPTION NYERS LANCLIS-NATTIK LATIT LEA COUNTY, NEH MEXICO

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ANIT ACREEDENT NYRRS LANGLIS-MATTIX UNIT LRA COUNTY, NEW MEXICO State of New Mexico No. ____

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THIS AGREDIENT, entered into as of the lat day of January, 1973, by end between the parties subscribing, ratifying or consenting herate, and herain referred to as "parties hereto",

WITNESSETH:

WHEREAS, the parties bereto are the owners of working, royalty or other oil or gas interests in the Unit Area subject to this agroement; and

WHIREAS, the Commissioner of Public Lands of the State of Nev Mexico is authorized by an Act of the Legislature (Sec. 3, Chap. 86, Laws 1943, as amended by Sec. 1 of Chap. 162, Laws of 1951, Chap. 7, Art. 11, Sec. 39, M.N.S. 1953 anno.) to consent to or approve this agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and

MEREAS, abs-Countigationer of Public-Lands of the State of New Maxico is authorized by an Act of the Legislature (Sec. 3, Chap. 88, Laws of 1943, as gmended by Sec. 1, Chap. 162, Laws of 1951, Chap. 7, Art. 11, Sec. 41, M.M.S. 1953 anno.) to gmend, with the approval of the lessee, any oil and gas lease embracing State lands so that the length of the term of said lease will coincide with the term of an agreement as to the unitized development and operation of State lands; and

WHEREAS, the Dil Conservation Commission of the State of New Mexico is authorized by law (Art. 111, Chap. 65, Vol. 9, Part 2, New Mexico Statutes, 1953 Annotated) to approve this agreement, and the conservation provisions hereof; and

WHEREAS, the Mineral Lessing Act of Pebruary 25, 1920 (41 Stat. 637, gs amended 30 U.S.C. Sections 181 et suq.) authorizes Pederal lessess and their representatives to unite with each other or jointly or sepatately with others in collectively adopting and operating a cooperative or unit plan of development or operation of any oil or gas puol, field or like area or any part thereof for the purpose of more properly conserving the

800K 312 NE 355 actural resources thereof whenever determined and cartified by the Secretary of the Interior to be necessary or advisable in the public interest; and

WHITHERS, the parties hereto hold sufficient interests in the Hyers Langlis-Mattix Unit Ares, covering the land hereinsfter described to give sussenably effective control of operations therein; and

WATREAS, it is the purpose of the parties hereto to enable institution and consummation of secondary recovery operations, conserve natural resources, to prevent waste and secure the other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions and limitations herein pet forth.

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MON, THEREFORE, in consideration of the promises and the promises herein contained, the parties hereto counit to this agreement their respective interest in the "Unit Area" and the "Unitized Formation" lying thereunder (as those terms are defined hereinsfeer), and agree geverally among themselves as follows:

SECTION 1. <u>EMALLING ACT AND REGULATIONS</u>. The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertirent regulations, including operating and unit plan regulations, heretofore §ssued thereunder and welid, pertinant and reasonable regulations hereafter issuel thereunder are accepted and made a part of this agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to mon-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State in which the non-Federal land is located, are hereby accepted and made a part of this agreement.

SECTION 2. INIT AREA AND DEFINITIONS. For the purpose of this agreement, the following terms and expressions as used herein shall mean:

(a) "Unit Area" is defined as the area described by tracts in Exhibit
"B" and depicted on Exhibit "A" attached hereto, containing 9.923.68 acres
more or less, or to which it way be extended as herein provided.

(b) "Commissionar" is defined as the Commissioner of Public Lends of the State of N v lowice,

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(c) "Commission" is defined as the Oil Conservation Commission of the State of New Mexico,

BOLK 312 MALE 356 (d) "Director" is defined as the Director of the Daited States Geological Survey.

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(e) "Secretary" is defined as the Secretary of the Interior of the United States of Americs of any other person duly anthorized to exercise powers wested in that office.

(f) "Department" is defined as the Department of the Interior of the Buited States of America.

(g) "Supervisor" is defined as the Dil and Gas Supervisor of the Daited States Geological Survey having jurisdiction over oil and gas operation on Faderal lands in the Unit Atea.

(h) "Unitized Pormation" manns that interval underlying the Unit Area the vertical limits of which extend from a point 100 fact above the base of the Seven Rivers fermation to the base of the Queen formation; said interval having been heretofore found to occur in Taxas Pacific Oil Company's Blinebry "B" Hn. 3 well (located 2310 fast from the west line and 330 feet from the morth line of Section 34, Township 23 South, Hange 37 East, Les County, New McKico) at an indicated depth interval of 3168 feet to 3570 feet, as recorded on the Schlumberger Electrical log Rum_No. 1 taken Theomber 26, 1952, said log being pessured from a derrick floor elevation of 3300 feet above see level.

(i) "Unitized Substances" means all oil, gas, gassous substances, sulphur contained in gas, condensate, distillate and all associated and constituent liquid or liquefiable hydrocarbons within and produced from the Unitized Formation underlying the lands unitized hereunder.

(j) "Tract" is defined as each parcel of land described as such and given a tract number in Exhibit "S".

(k) "Tract Participation" is defined as the percentage of Unitized Substances to be allocated to a Tract qualified for participation under this agreement, as shown on Exhibit "C".

(1) "Unit Participation" of each Working Interest Domer means the sum of the products obtained by multiplying the Working Interest phase of such Working Interest Owner in each Tract by the Tract Participation of such Tract.

(m) "Norking Interest" is defined as the right to search for, produce and acquire Unitized Substances whether held as an incident of swnership of minoral for simple title, under an oil or gas lease, or otherwise, and

BODE 312 Mil 357 includes any interest which is chargeable with and obligated to pay or bear, wither in cash or out of production, or otherwise, all or a portion of the cost of drilling, developing and producing operations.

(n) "Norking Interest Coner" is defined as and shall usen any party hereto avaing a Norking Interest. The samer of all and gos rights which are free of leases or other instruments conveying the Norking Interest to another shall be regarded as a Norking Interest Comer to the axtent of seven-sights (7/8) of his interest in Unitized Subtances, and as a Royalty Domer with respect to his remaining ane-sighth (1/8) interest therein.

(c) "Record Owner" is defined as the holder of the record title to a lasse covering Federal lands according to the applicable records of the Impartment of the Interior of the United States of America.

(p) "Royalty Interest" or "Royalty" is defined as an interest other than a Working Interest in or a right to receive a pertion of the Unitized Substances or the proceeds thereof and includes the royalty interest reserved by the lessor by an oil and gas lease and any overriding royalty interest, oil payment interest, not profit contract, or any other payment or burden which deep not carry with it the right to search for and produce Unitized Substances.

(q) "Boyalty Dumar" is defined as and shall mean the owner of a Boyalty Interest.

 (r) "Voting Interest" of each Working Interest Owner, unless otherwise specifically defined herein, shall equal its Unit Perticipation in effect at the time a vote is taken.

(g) "Usable Vell" shall mean a well which, in accordance with good sil figld practice, is adequately equipped and in condition with casing in good repair (hereinefter referred to as "Deable Condition") to permit production of Unitized Substances from the Unitized Formation to the surface by conventional production mehtods. ²

(5) "Unit Operating Agreement" is defined as and shall mean any agreement or agreements (whether one or more entered into separately or collectively) by and between the Unit Operator and the Working Interest Owners as provided in Section 9, Accounting Provisions and Unit Operating Agreement, infra, and shall be etyled "Unit Operating Agreement, Hyere Langlie-Mattix Unit, Les County, New Marico".

3Din 312 fits 355 (u) "Unit Hanager" is defined as the person or corporation appointed by the Working Interest Owners to perform the dutics of the Unit Operator until the selection and qualification of a successor Unit Operator as provided for in Section 8 hereof.

SECTION 3. <u>EXHIBITS</u>. Exhibit "A" attached hereto is a map showing the Unit Area and the boundaries and identity of Tracts and leases in said Unit Area to the extent known to the Unit Operator. Exhibit 3 attached hereto is a schedule showing, to the extent known to the Unit Operator, the acreage comprising each Tract and the percentage somerable of each Working Interest Owner, Exhibit "C" attached hereto is a schedule showing the participation of each Tract during Phases I and II. However, mothing hereis or in said schedule or map shall be construed as a representation by any party hereto as to the somership of any interest other than such interest or interests as are shown in said map or schedule as sumed by such party.

Whenever reference herein or in the Unit Operating Agreement is made to an Exhibit, the reference is to the Exhibit as originally attached or, if revised, to the latest approved revision.

The description and summarship of the respective Tracts have been established by using the best information available. If it subsequently appears that clorical errors, including arrors in Tract Ownership or mechanical miscalculations have been made. Unit Operator shall revise the Exhibits to conform with the facts. The revision shall not include any re-evaluation of engineering or geological interpretations used in determining Tract Perricipations. Errors and miscalculations discovered prior to the effective date of this agreement shall be corrected by Unit Operator in the first revision of Exhibits following the effective date and said first revisions shall be effective as of the effective date of this agreement. The correction of any error other than the correction of a clorical or mechanical error shall be made by Unit Operator only after first having obtained approval of Working Interest Owners, the Supervisor and the Countissioner.

Exhibits 4, 3, and C shall be revised by Unit Operator whenever changes render such revision necessary or when requested by the Supervisor or the Commissionsr. If an Exhibit is revised pursuant to this agreement, Unit Operator shall certify and file the required number of copies of the revised

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BUR 312 HE 353 Exhibit with the Commissionsy and the Supervisor, and one (1) copy for record with the County Clark, Las County, New Muxico. Except as specified above, a revised Exhibit shall become affective on such date as may be determined by the Morking Interest County with the approval of the Supervisor and the Commissioner, and shall be set forth on said revised Exhibit.

SECTION 4. <u>EXPANSION</u>. The Unit Area may, when practicable, be supunded to include therein any additional tract or tracte regarded as reasonably mecassary or advisable for the purposes of this groment. Such expansion shall be effected in the following menner:

(a) The Morking Istarest Owner or Owners of a Tract or Tracts desiring to commit such Tracts or Tracts to this Agreement, shall file an application therefor with Unit Operator requesting admission.

(1) After preliminary concurrence by the Birector and the Coumissioner prepare a motice of proposed expansion describing the contemplated shanges in the boundaries of the Unit Ares, the reason therefor, the basis for edmission of the additional tract or tracts, the Tract Participation to be assigned thereto and the proposed effective date thereof; and

(2) Deliver copies of axid motics to the Commissioner, the Supervisor, each Working Interest Owner and to each lesses and lessor whose interests are affected, advising such parties that thirty (30) days will be allowed for submission to the Unit Operator of any objection to such proposed expansion; and

(3) File, upon the ampiration of said thirty (30) day period as set out in (2) immediately above with the Commissioner and Supervisor the following: (a) Evidence of mailing or delivering copies of said motics of empansion; (b) An application for such empansion; (c) An instrument containing the appropriate joindars in compliance with the participation requirements of

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The expansion shall, after due consideration of all pertinent information and approval by the Commissionar, the Commission, and the Supervisor, becomaffective as of the data prescribed in the motice thereof, preferably the first day of a month subsequent to the data of motice or on such other date as may be agreed upon by the Working Interest Owners and approved by the Commissionar, the Commission, and the Supervisor. The revised Tract Participations of those Tracts which were committed prior to such expansion shall remain in the same ratio one to another.

BECTION 5. <u>INITIZED LAND AND UNITIZED SUBSTANCES</u>. All land committed to this agreement shall constitute land referred to herein as "unitized land" or "Land subject to this agreement". All "unitized land" and Unitized Substances grs unitized under the terms of this agreement. Nothing herein shall be construed to unitize, pool, or in any way affect the oil, gas and other minarals contained in or that may be produced from any formation other than the Unitized Formation as defined under Section 7 (h).

SECTION 6. IMIT OPERATOR. Skelly Oil Company is hereby designated as Unit Operator, and by signing this agreement as Unit Operator it agrees and consents to accept the duties and obligations of Unit Operator for the operation, development and production of Unitized Substances as herein provided. Whenover reference is made herein to the Unit Operator, such reference means the Enit Operator acting in that capacity and not as an owner of interests in Unitized Substances, and the term "Working Interest Owner" when used herein shall include or refer to the Unit Operator as the owner of a Working Interest when such an interest is availably it.

SECTION 7. <u>BESIGNATION OF REMOVAL OF UNIT OPERATOR</u>. Unit Operator shall have the right to resign at any time, but such resignation shall not become effective an as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of eix (6) months after written notice of intention to resign has been given by Unit Operator to all Working Interest Owners, the Commissioner and the Superviser, and until all anit wells are pleced in a satisfactory condition tor — Buspension, abandement; or continued operation, we required by the Supervisor as to Federal lands and the Commissioner as to State lands, unless a new Unit

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BOUK 312 ME 361 Operator shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

The Unit Operator shall, upon default or failure in the performance of its duties or obligations berounder, be subject to removal by furer (3) or more Marking Interest Owners having in the aggregate sighty percent (80%) or more of the Phase II Unit Participation remaining after excluding the Phase II Unit Participation of the Unit. Opurator. Such removal shall be effective upon motice thereof to the Commissioner and the Supervisor.

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In all such instances of offective resignation or removal, until a successor to Unit Operator is belected and approved as hereafter provided, the Morking Interest Owners shall be jointly responsible for the performance of the duties of the Unit Operator and shall, not later than thirty (30) days before such resignation or removal becomes effective, appoint a Unit Haneger to represent them in any action to be taken hereunder.

The resignation of transval of Unit Constator under this agreement shall not terminate its rights, title or interest as the owner of a Working Interest ar other interest in Unitized Substances, but upon the resignation or removal of Unit Operator becoming effective, such Unit Operator shall deliver possession of all wells, equipment, books and records, materials, gppurtenances and any other samets, used in connection with the unit operations and owned by the Working Interest Owners to the new duly qualified successor Unit Operator or to the Unit Manager if no such new Unit Operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as suthorizing the removal of any material, equipment, and appurtenances meeded for the preservation of any wells.

Nothing berein contained shall be construed to release, relieve or discharge a Unit Operator who resigns or is removed bersunder from any liability for default by it bersunder or from duties accruing or performable by it prior to the effective date of such resignation or removal.

SECTION 8. <u>EUCCESSON UNIT OPERATOR</u>. Whenever the Unit Operator shall tender its resignation as Unit Operator or shall be removed as hereinabove provided, the Working Internat Owners shall pelect a successor Unit Operator as herein provided. Such selection shall not become effective until (a) a Unit Operator so selected shall accept in writing, the duties and responsibilities of Unit Operator, and (b) the selection shall have been

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SUD. 312 MIL 362 approved by the Supervisor and the Commissioner. If no successor Unit Operator is selected as herein provided, the Commissioner or the Director, at his election, may declare this agreement terminated.

In selecting a successor that Operator the affirmative wote of three (3) or more Working Interest Owners awning a total of sixty-five percent (652) or more of the Phase II Unit Participation shall prevail, provided that if any one Working Interest Owner has a Phase II Unit Participation greater than thirty-five percent (352), its negative wote or failure to wote shall not be regarded as sufficient if the affirmative wote represents a majority of the woting interest, and such affirmative wote shall be controlling on all parties. If the Unit Operator who is removed wotes only to succeed itself or fails to wote, the successor Unit Operator may be selected by the affirmative wote of three or more Working Interest Owners awning a majority of the Phase II withny interest remaining after excluding the woting interest of Unit Operator so removed.

SECTION 9. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. Costs and supenses incurred by the Unit Operator in conducting unit operations horounder shall be apportioned among, borns and paid by the Working Interest Generg in accordance with the Unit Operating Agreement. The Unit Operating Agreement shall also provide the manner in which the Working Interest Comera shall be entitled to receive their respective proportionate and allocated share of the banefits occruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts and such other rights and obligations as between Unit Operator and the Working Interest Owners is may be agreed upon by the Unit Operator and the Working Interest Owners; however, no such Unit Operating Agreement shall be decased either to modify any of the terms and conditions of this apreament or to relieve the Unit Operator of any right or obligation established under this agreement, and in case of any inconsistency or conflict between this agreement and the Buit Operating Agroement, this agreement shall provail. Two true copies of any Unit Operating Agreement executed pursuant to this Section shall be filed with the Commissioner and thrus true ropies thereof shall be filed with the Supervisor prior to approval of this agreement.

SECTION 10. <u>FIGHTS AND OBLICATIONS OF UNIT OPERATOR</u>. Except ar otherwise specifically provided herein, the exclusive right, privilege and

BOUK 312 ME 363

duty of exercising any and all rights of the parties barets essary or convenient for prospecting for, producing, storing, allocating and distributing the Unitized Substances are hereby delegated to and shall be exercised by the Unit Operator as berein provided. Upon request, acceptable evidence of title to said rights shall be deposited with said Unit Operator and, together with this agreement, shall constitute and define the rights, privilages and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the Shit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use wasted in the parties hereto only for the purposes : 1 herein specified.

SECTION 11, BOULFMENT AND PACILITIES NOT FIRTURES ATTACHED TO BEALTY. Each Horking Interest Owner has heretofors placed and used on its Tract or Tracts committed to this agreement, various well and lesse equipment and other property, squipment and facilities. It is also recognized that additional aggingment and facilities may bereafter be placed and used mon the Unitized Land as now or hereafter constituted. Therefore, for all purposes of this agreement any and all such equipment shall be considered to be personal property and not fixtures attached to realty. Accordingly, subject to the limitations contained in Section 10, said well and leave equipment and personal property is hereby severed from the mineral estates affected by this accomment, and it is agreed that any and all such equipment and personal proparty shall be and remain personal property for all purposes.

SECTION 12. PLAN OF OPERATIONS. It is recognized and agreed by the parties hereto that the object and purpose of this agreement is to formulate and to put into effect a secondary recovery project in order to effect additional recovery of Unitized Substances, prevent waste and conserve natural resources. The parties bereto arres that the Unit Operator may, subject to the consent and approve of a plan of operation by the Working Interest Owners, the Supervisor, the Commissionsr and the Commission, inject into the Unitized Formation, through any well or wells completed therein, brine, water, air, gas, oil and any one or more other substances or combination of substances whether produced from the Unitfand Permetion or not, and that the location of imput wells and the rates of injection therein and the rate of production shall be governed by standards of

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BOUN 312 MLL 364 good geologic and petroleum engineering practices and conservation methods. The parties hereto, subject to prior rights, if any, grant to Unit Operator the use of brine or non-petable vater or both from any formation in and under the Unitized Land for injection into the Unitized Formation. After commencement of secondary operations, Unit Operator shall furnish the Commissioner and the Supervisor monthly injection and production reports for each well in the Unit. The Working Interest Owners, the Commissioner and the Supervisor shall be furnished periodic reports on the progress of the plan of operation and any revisions of the approved plan of operation shall be subject to the consent and approval of the Working Interest Owners, the Commission shall be and approval of the Working Interest Owners, the Commission and any revision of the approved plan of operation shall be subject to the consent and approval of the Working Interest Owners, the Commission, the Commissioner and the Supervisor.

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A plan of operation shall be filed with the Supervisor and the Conmissioner concurrently with the filing of this unit agreement for final approval. Said plan of operation and all revisions thereof shall be as somplete and adequate as the Supervisor and the Commissioner may determine to be necessary for timely operation consistent herewith. Upon approval of this agreement and the aforementioned plan by the Supervisor and the Commissioner, asid plan and all subsequently approved plans shall constitute the operation obligations of the Whit Operator under this agreement for the period specified therein. Thereafter, from time to time, before the expiration of any existing plan, the Unit Operator shall submit for like approval a plan of an additional specified period of eperation.

Butwitheranding anything to the conterpr herein contained, should the Unit Operator fail to company aperations for the secondary recovery of the unitized substances from the unit area within one year after the effective date of this agreement and any extension thereof approved by the Supervisor and the Commissioner, this agreement shall terminate sutomatically as of the date of default.

SECTION 13. <u>USE OF SUFFACE</u>. The parties hereto, to the extent of their rights and interest, hereby grant to Worldin; Interest Deners the right to use as much of the purface of the land with u the Unit Ares as may reasonably be necessar. for unit operations, including the free use of water from the Unit Ares is unit operations, except water to a sny well, lake, pond or

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BOUK 312 12: 365 irrigation ditch of a surface owner, provided that, mothing hercin shall be conatrued as lessing or otherwise conveying to Working Interest Domers a site for a water, gas injection, processing or other plant or camp site. Morking Interast Owners shall pay the owner for damages to growing crops, timber, fences, improvements, and structures on the Unit Area that result from Unit Operations,

SECTION 14. TRACT PARTICIPATION. Participation of each Tract is shown in Exhibit "C" and has been computed in accordance with the following: (a) These 1 Participation. Phase 1 begins the affective date hereof

and continues until the first day of the month next following the date that the sumulative volume of oil produced after January 1, 1969, from the Unitized Formation underlying all of the Tracts in the Unit Area totals 299,013 herrels. The Tract Participation of each Tract during Phase 1, shown on Exhibit "C", is

Tract Participation Parcentage

Phase 1 equals

based upon the following formula:

200

Where: "A" equals total income from oil and gas produced from such Tract from the Unitized Formation during the period January 1, <u>1968, zhrough Dacamber 31, 1968.</u>

"3" equals the summation of the total income from eil and

gas produced from all qualified Tracts from the Unitized Formation during the period January 1, 1968, through December 31, 1968.

(b) <u>Phase II Participation</u>. Phase II shall begin the first day of the month sext following the date on which the last of the 299,013 barrels referred to in (a) above is produced and shall continue for the remainder of the term of this agreement. The Participation of each Tract during Phase 11, shown on Exhibit "C", is based upon the following formula:

Tract Participation Percentage,

Phase II equals 85 $\frac{1}{2}$ plus 10 $\frac{1}{2}$ plus 5 $\frac{1}{3}$

Where: "F" equals the estimated quantity of all ultimately recoverable from the Unitized Formation by primary recovery operations credited to each Tract.

> """ equals the summation of the estimated quantity of oil ultimately recoverable from the Unitized Formation by

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BOIN 312 FILE 366 primery recovery operations credited to all qualified Tracts. "G" equals the cumulative oll produced from the Unitized Formation underlying each Tract as of July 1, 1966. """ equals the summation of the cumulative oil produced from the Unitized Formation underlying all qualified Tracts as of July 1, 1966.

> "I" equals the number of acres contained in each Tract. "J" equals the summation of the number of scres contained in all qualified Tracts.

If less than all Tracts within the Unit dres qualify for participation berounder as of the effective date bereof, Unit Operator shall file with the Supervisor, the Countrationer and the Countration a schedule showing the qualifind Tracts as of said effective date, which schedule shall be designated Bevised Exhibit C and considered for all purposes as a part of this agreement. Said revised Exhibit C shall set forth opposite each gualified Tract the revised Tract Participation therefor which shall be calculated by using the same factors and formula which were used to arrive at the Tract Participations set out in Exhibit C attached hereto, but applying the same only to the qualified Tracts. Sold revised Exhibit C, upon approval by the Supervisor and the Commissioner, shall supersade, effective as of the effective date hereof, the Exhibit C attached hereto.

The Tract Participations shown on Exhibit C attached hereto, or as may be shown on the Revised Exhibit C as above provided, shall govern the allocation of unitized substances on and after the effective date of this Unit Agreement, and until the Fract Participations are revised pursuant to this agreement and such r wised Tract Participations are approved by the Supervisor and the Commissioner.

(c) Within Sixty (60) days after the requirements for communcement of Phase II have been met, the Operator will notify the Oil and Cas Department of the New Mexico State Land Office of such conversion to Phase 11.

SECTION 15. TRACTS QUALIFIED FOR PARTICIPATION. On and after the offective date bereof, and until expansion as provided in Section 4 herent, the traces within the Unit Area which shall be entitled to participation (as provided in Section 14, Tract Participation, hereof) in the production of Unitized Substances shall be composed of the Tracts shown on Exhibir A and listed in Exhibit "B" which qualify as follows:

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(a) Sech-over as is which thereign Enterest Comers aming mas bundred percent (1003) of the Working Interest therein have become parties bereto and as to which Royalty or Record Comers owning seventyfive percent (752) or more of the Royalty or Record Interest therein have become parties bereto.

(b) Each Tract as to which Working Interest Owners owning one hundred percent (1002) of the Working Interest therein have become parties barets and as to which Royalty or Record Owners owning loss than oeventy-five percent (732) of the Boyalty and Record Interest therein have become parties bareto and, further, as to which:

(1) All Morking Interest Owners in such Tract have joined in a request for the qualification of such Tract, and

(ii) Eighty percent (802) of the combined voting interests of Working Interest Owners in all Tracts mosting the requirements of perceptage (c) hereof have woted in favor of qualifying such Tract.

For the purpose of this paragraph (b), a Working Interest Comer's "Woting interest" shall be equal to the ratio (expressed in percent) which its aggregate Phase II Participation in all Tracts qualifying under paragraph (a) bears to the total Phase II Participation of all Working Interest Comers in all Tracts qualifying under paragraph (a).

(c) Each Tract as to which Working Interest Owners owning less then one hundred percent (1002) of the Working Interest therein have become pertise hereto, regardless of the percentage of Royalty and Record Ingeness therein which is countited hereto and, further, as to which:

(i) The Morking Interest Owner operating such Tract and all of the other Morking Interest Owners in such Tract who have become parties harsto have joined im a request for qualification of such Tract and at least sighty-five percent (852) of such parties have executed and delivered an indomnity agreement indemnifying and agreeing to hold harmluse the other Working Interest Owners in the Unit, their successors and sesigns, against all claim: and demands which arise out of the qualification of such Tract which may be made by the owners of Interests in such Tract who are not parties hersto; and

(ii) Eighty parcent (80%) of the combined woting interest of

SUDA 312 144 368 Norking Interest Owners in all Tracts meeting the requirements of waraprephs (a) and (b) have wated in favor of the qualification of such Tract and Acceptance of the indemnity agreement.

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Por the purpose of this paragraph (c), a Working Interest Owner's "woting interest" shall be equal to the ratio (supressed in percent) which its aggregate Phase II Perticipation in all Tracts qualifying under paragraphs (a) and (b) bears to the total Phase II Perticipation of all Working Interest Owners in all Tracts qualifying under paragraphs (a) and (b). Upon the qualification of a Tract, the Unit Perticipation which would have been attributed to the monsubecribing owners of the Working Interest in such Tract, had they become parties to this agreement and the Unit Operating Agreement, shall be attributed to the Working Interest in such Tract who have become parties to the indemnity agreement, in proportion to their respective Working Interests in the Tract.

SECTION 16. <u>ALLOCATION OF UNITIZED SUBSTANCES</u>. All Unitized Bubstances produced and saved (less, save and except any part of such Unitized Substances used in conformity with good operating practices on unitized land for driling, operating, camp and other production or development purposes and for pressure meintenance in accordance with a plan of operation approved by the Supervisor and the Commissioner, or unavoidably lost) shell be apportioned smong and allocated to the qualified Tracts in accordance with the respective Tract Participations effective bersunder during the respective periods such Unitized Substances were produced, as sat forth in the schedule of participation in Exhibit C. The amount of Unitized Substances be allocated to each tract, and only that amount (regardless of whether it be more or less than the amount of the actual production of Unitized Substances from the well or wells, if any, on such Tract), shall, for all intente, uses and purposes, be desmed to have been produced from such Tract.

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BOUK 312 Mil 369 No Tract qualified for participation under this agreement shall be subsequently excluded from participation bersunder on account of depletion of Unitized Substances from said Tract.

If the Morking Interest and/or the Royalty Interest in any Tract is divided with respect to separate parcels ar portions of such Tract and owned severally by different persons, the Dnitised Substances allocated to such Tract shell, in the absence of a recordable instrument executed by the owners of such interest, furnished to Unit Operator and fixing the divisions of ownership, be divided among the owners of interest in such parcels or portions in proportion to the number of surface acres in each parcel or portion.

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The Unitized Substances allocated to each Tract shall be delivered in kind to the parties antitled thereto by wirtue of the ownership of all and use rights therein or by purchase from such owners. Each of the parties entitled thereto shall have the continuing right to receive such production is kind at a common point within the Unit Area and to sell or dispose of she game as it sees fit. Each such party shall have the right to construct, maintain and operate all necessary facilities for that purpose within the Unit Ares, provided the same are so constructed, maintained and operated as not to interfere with operations carried on pursuant herato. Subject to Section 13, Royalty Settlement, hereof, any extra expenditure incurred by Mait Operator by reason of the delivery in kind of any portion of the Unitized Substances shall be some by the party receiving the same in kind. In the -svent any Working Interest Owner shall fail to take or otherwise adequately dispose of its proportionate share of the production from the Unitized Formation currently as and when produced, Unit Operator, in order to avoid surtailing Unit operations, may sell or otherwise dispose of such production to itself or to others on a day-to-day besis at not less then the prevailing market price in the area for like production, and the account of auch Working Interest Owner shall be charged therewith as heving received such production. The net proceeds, if any, of the Unitized Substances so disposed of by Unit Operator shall be paid to the Working Interest Owner of the Tract or Tracts concerned or to a party designated in writing by such Morking Interest Owner. Notwithstanding the foregoing, Unit Operator shall not make a shis into interstate commerce of any Working Interest Owner's

BODK 312 MM 370 ... where of gas production without first giving such Working Interest Duner sixty (60) days motice of such intended sale.

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Any party receiving in kind or separately disposing of all or any part of the Unitized Substances allocated to any Tract, or Focsiving the proceeds therefrom if the same is sold or purchased by Unit Operator, shall be responsible for the payment of all Royalty due under the lease or leases movering said Tract, and each such party shall hold each other party hereto harmless against all claims, dominds and causes of action for Royalty due under the lease or leases covering said Tract.

SECTION 17. <u>MALANCING OF PRODUCTION</u>. Unit Operator shall make a proper and timely gauge of all lease and other tanks located on each committed Tract in order to escertain the amount of merchantable oil in such tanks, above the pipeline connection, on the effective date hereof. All such oil which is a part of the prior allowable of the well or wells from which the same was produced shall be and remain the property of the Owners entitled thereto as if this agreement had not been entered into and such Genere shall promptly remove same. Any such oil not so removed may be sold by the Unit Operator for the account of such Owners, subject to payment of all Acyalties due under the terms and provisions of the applicable lease or leases and other contracts. <u>All-oil</u> which is in excess of the

prior allowable for the wall or wells from which the same was produced shall be regarded and treated the same as Unifized Substances produced after the effective date hereo?. If, as of the effective date hereof, any Trace of unifized land is presproduced with respect to the allowable of the well or wells on that Tract and if the amount of such over-production has been sold or otherwise disposed of, such over-production shall be regarded and included as a part of the Unifised Substances produced after the effective date hereof, and the amount-thereof charged to such Tract as having been delivered to the parties entitled to Unifized Substances elleepted to such Tract.

SECTION 18. <u>BOYALTY SETTLEMENT</u>. The State of Now Mexico and the United States of America and all Boyalty Owners who, under an existing contract, are entitled to take in kind a share of the Unitized Substances produced from any Tract unitized hereundur, shall hereafter by entitled to take in lind their share of the Unitized Substances allocated to such

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BOOK 312 MIT 371 Treet, and Unit Operator shall make deliveries of such Boysliy share taken in kind in conformity with the applicable contracts, laws and regulations. Settlement for Boyslty Interests not taken in kind shall be made by Working Interest Owners responsible therefor under existing contracts, laws and regulations, on or before the last day of each month for Unitized Substances produced during the preceding calendar month; provided, however, that mothing berein contained shall operate to relieve the lessees of any land from their respective lesse abligations for the payment of any Boyslty due under their lasses, except that such Doyslty shall be computed in accordance with the terms of this Unit Agreement.

Royalty due the United States shall be computed as provided in the operating regulations and paid in value or delivered in kind as to all Unitised Substances on the basis of the amounts thereof ellocated to unitised Federal land as provided herein at the rate specified in the respartive Federal lands or at such lower rate or rates as may be authorised by low or regulation; provided, that for leases on which the royalty rate depends on the daily avarage oil production per well and/or the average gravity of such oil production and/or the daily average gas production per lease, such average production or average gravity shall be determined in accordance with the operating regulations as though the unitized lands were a single consolidated lease.

If the amount of production or the proceeds thereof accruing to any Boyalty Owner (except the United States of America) in a Tract depends spon the average production per well or the average pipeline run per well from a Tract during any period of time, then such production shall be determined from and after the effective date hereof by dividing the production allocated each Tract during such period of time by the number of wells "located thereon capable of producing as of the effective date hereof, provided, however, any Tract without a producible will on said effective date abail, for the purposes herein contained, be considered as having one such well thereon.

All Boysity due the State of Non-Mexico and the United States of America and the other Boysity Denors herounder shall be computed and paid on the basis of all Unitized Substances allocated to the respective Tract or Tracts qualified berounder, in lieu of actual production iron such Tract or Tracts.

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_ . _. BOR 312 NO 372 Bach Royalty Omer (other than the State of New Mexico and the United States of America) that ratifies this agreement represents and warrants that he is the owner of a Royalty Interest in a Tract or Tracts within the Unit dres as his interest appears in Exhibit "B" attached hereto. If the title to a Moyalty Interest fails but the lands to which it relates remain subject hereto, the party whose title failed shall not be entitled to share berounder with respect to such interest.

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- SECTION 19. RENTAL SETTLEMENT. Bentals or minimum royalties due on lesses counitted bereto shall be paid by Working Interest Comers responsible therefor under existing contracts, laws and regulations, prowided that nothing berein contained shall operate to relieve the lesses of any land from their respective lease obligations for the payment of any rental or minimum royalty in lisu thereof, due under their leases. Sentel for lands of the State of New Mexico subject to this agreement shall be paid at the rate spacified in the respective lasses from the State of New Mexico, Bental or minimum royalty for lands of the United States of America subject to this agreement shall be paid at the rate specified in the respective lesses from the United States of America, unless rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

SECTION 20. CONSERVATION. Operations bereunder and production of Builtiged Substances shall be conducted to provide for the most economical and efficient recovery of said substances without wests, as defined by or purguent to Federal and State laws and regulations.

SECTION 21. DRAINAGE. The Unit Operator shall take such measures as the Supervisor of the Commissioner deems appropriate and adequate to prevent drainage of the Unitized Substances from the Unitized Lands by wells on land not subject to this agreement.

SECTION 22. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions and provisions of all leases, subleases and other constarts relating to exploration, drilling, development or operation for sil or gas an lands committed to this agreement are hereby expressly modilied and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect, and the parties bareto hereby concent that the Secretary and the Commissioner,

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Without limiting the generality of the foregoing, all leases, subleases and contracts are particularly modified in accordance with the following:

(a) The development and operation of lands subject to this agreement under the terms bereof shall be deemed full performance of all obligations for development and operation with respect to each and every separately owned Tract committed to this agreement, regardless of whether there is any development of any partifular Tract of the Unitized Land.

(b) Drilling and producing operations performed hereunder upon any Tract of Unitized Land will be accepted and deemed to be performed upon and for the benefit of each and every Tract of Unitized Land, and no lease shall be deemed to appire by reason of failure to drill or produce wells situated on the land therein embraced.

(c) Suspension of drilling or producing operations on all Unitized Lands pursuant to direction or consent of the Commissioner and the Supervisor shall be deemed to constitute such suspension pursuant to such direction or emment as to such and every Tract of Unitized Land. A suspension of drilling or producing operations on specified lands shall be applicable only to such lands.

(d) Each lease, sublesse, or contract relating to the exploration, drilling, development or operation for Unitized Substances, which by its terms might expire prior to the termination of this ggreement, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for end during the term of this agreement, as to the land committed so long as such lease remains subject hereto.

(c) Any Federal lease committed hereto shall continue in force beyond the term so provided therein or by law as to the committed land so long as such land tempine committed hereto.

(f) Any lease ambracing lands of the State of Nov Mexico which is made subject to this agreement shall continue in force beyond the term prowided therein as to the lands committed herete until the termination hereof.

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SON 312 Her 374 movembracing lands of the State of New Mexico having only a portion of its lands conmitted hereto shall be segregated as to the portion committed and as to the portion not committed and the terms of such lease shall apply separately as to such segregated portions commencing so of the effective date hereof. Notwithstanding any of the provisions of this agroement to the contrary, any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force and effect beyond the term provided therein as to all lands embraced in such lesse (whether within or without the Unit Ares), if oil or gas are discovered and are capable of being produced in paying quantities from some part of the lands embraced in such lesse committed to this agreement at the expiration of the secondary tarm of such lasse; or if, at the expiration of the secondary term, the lesses or the Unit Operator is then engaged in bong fide drilling or reworking operations on gome part of the Lends embraced therein, any such lesse shall remain in full force and effect so long as such operations are being diligently prosecuted, and if they result in the production of Unitized Substances, said lesse shall sontinus in full force and effect as to all of the lands embraced therein, so long thereafter as Unitized Substances are produced in paying quantities from any portion of said lands:

(b) The sogregation of any Pederal lease committed to this agreement is governed by the following provision in the fourth paragraph of Sec. 17(j) of the Mineral Lessing Act as amended by the Act of September 2, 1960 (74 Stat. 781-784): "Any (Pederal) lease heretofore or horeafter committed to any such (unit) plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be asgregated into separate leases as to the lands committed and the lands not committed as of the effective date of unitization; provided, however, that any such lease as to the monunitized portion shall continue in force and effect for the term thereof but for not less than twp years from the date of puck segregation and so long thereafter as oil ar gas is produced in paying quantities."

SUCTION 33. <u>COMENANTS RUN WITH LAND</u>. The covenants herein shall be construed to be covenants funning with the land with respect to the interests of the parties horizo and their successors in interests until this agreement terminates, and any grant, transfor, or conveyance of interest

in land or income subject hereto shall be and herely in Wind the Mine of 25 the assumption of all privileges and obligations berounder by the granter, iransforme, or other successor in interest. Ho assignment or transfer of any Morking Interest subject hereto shall be binding upon Unit Operator until the first day of the calcular month ofter Unit Operator is furnished with the original, photostatic or cortified copy of the instrument of transfer; and no assignment or transfer of any Royalty Interest shall be binding upon the Working Interest Owner responsible therefor until the first day of the calcular month after said Working Interest Owner is furnished with the original, photostatic or cartified copy of the instrument of transfer.

SECTION 24. <u>EFFECTIVE DATE AND TERM</u>. This agreement shall become binding upon each party who executes or ratifies it as of the date of execution or ratification by such party and shall become affective as of the first day of the celendar month next following:

(a) The execution or ratification of this agreement and the Unit Operating Agreement by Working Interest Owners owning tracts with a combined Phase II Unit Participation of at least eighty-five percent (85%), and the execution or ratification of this agreement by Royalty and Record Damars owning interests in tracts having a combined interest of at least sixty-five percent (65%) of the Royalty and Record Interest in the Unit Area, calculated on the basis of Phase II Unit Participation; and

(b) The approval of this agreement by the Commissioner, the Supervisor, and the Commission;

(c) If (a) and (b) above are not accompliable on an perform Janusty 1, 1974, this agreement shall ipso facto empire on baid date (hereinafter called "expiration date") and thereafter be of no further forms ar effect, unless prior thereto this agreement has been executed or ratified by Working Interest Domers owning tracts with a combined Phase II Unit Participation of at least sighty percent (80%), and the Working Interest Owners eweing tracts with a combined Phase II Unit Participation of at least sighty percent (80%), and the Working Interest Owners evening tracts with a combined Phase II Unit Participation of at least sixty-five percent (65%) committed to this agreement have decided to extend eaid empiration date for a period mot to succeed six (6) months (hereinsfor called "extended expiration date"). If said expiration date is so extended and (a) and (b) are not accomplished on ar before said extended empiration date, this agreement shall ipso facto expire on said extended empiration date and thereafter be of no surther sorce and sifect.

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BOUN 312 Hill 376 Unit Operator shall file at least one counter part of this agreement for record in the office of the Housty Clerk of Las County, New Morico, Within thirty (30) days after the effective date of this agreement, Unit Operator shall file for record in each effice where a counterpart of this agreement is recorded, a cortificate to the offect that this agreement has become effective according to its terms and stating further the effective date.

The term of this agreement shall be for and during the time that Bnitized Bubatances are or can be produced in quantities sufficient to repay the cost of producing same from the Unitized Land and should production class so long thereafter as drilling, reworking or other operations to restore production (including secondary recovery operations) are projected thereon without ressetion of more than minety (90) consecutive days, and should production be restored so long thereafter as such Unitized Subarances can be produced as aforesaid.

This agreement may be terminated at any time with the approval of the Commissionar and the Suparvisor by Wolking Interest Owners owning tracts with a combined Phase II Unit Participation of at least seventy five percent (752). Notice of any such termination shall be given by Unit Operator to all parties hereto.

Upon termination of this agreement, the parties hereto shall be governed by the terms and provisions of the leases and contracts affecting the separate Tracts.

If not otherwise covered by the leases unified under this agreement, Royalty Dum-ra hereby grant Working Interest Dimers a parind of six (6) months after termination of this agreement in which to salvage, (ell, distribute or otherwise dispose of the personal property and facilities used in connection with Unit Querations.

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SECTION 25. <u>BATE OF PROSPECTING, DEPERDMENT AND PRODUCTION</u>. All production and the disposal thereof shall be in conformity with allocations and quotas made or fixed by any duly authorized person or regulatory body under any Pederal or State statute. "The Director is hareby yeared with authority to allur or modify from time to time, in his discretion, the rate of production under this development and to alter or modify the guantity and rate of production under this dgreement, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served

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BOUK 312 ME 377 thereby to be stated in the order of alteration of modification; provided, - Surther, that no such alteration or modification shall be effective as to any land of the State of New Mexico as to the rate of prospecting and development in the absence of the specific written approval thereof by the Commissioner and an te any lands of the State of New Mexico or privately-owned lands subject to this agreement as to the quantity and rate of production in the absence of specific written approval thereof by the Commission;

Powers in this Section vested in the Director and Commissioner shall only be exercised after motice to Unit Operator and opportunity for hearing to be held not less than fifteen (15) days from notice.

SECTION 26. <u>MONDISCRIMINATION</u>. In connection with the performance of work under this agreement, the Unit Operator agrees to comply with all of the provisions of Section 202 (1) to (7) inclusive, of Executive Order 11246 (30 F.R. 12319), which are hereby incorporated by reference in this agreement.

SECTION 27. <u>APPEARANCES</u>. Unit Operator shall have the right to appaar for or on behalf of any and all interests affected hereby before the Goumissioner, the Department, and the Commission, and to appeal from any arder issued under the rules and regulations of the Commissionar, the Department, or the Commission, or to apply for relief from any of said rules and regulations or in any proceedings relative to operations before the Commissioner, the Department, or the Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his or its own expense to be heard in any such proceeding.

SECTION 28. <u>NOTICES</u>. All notices, demands, objections or statements required bereunder to be given or rendered to the parties hereto shall be demand fully given if unde in writing and personally delivered to the <u>party of parties of sent by postpaid corpition mail</u>, <u>addressed to such party</u> of parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to such other address as any such party of parties may have furnished in writing to the **party sending** the notice, degand or statement.

BECTION 29. NO WAIVER OF CERTAIN BI HITS. Nothing in this agreement contained shall be construed as a waiver by any party barato of the

SUM 312 MS 378 right to assert any legal or constitutional right or defense as to the welidity or invalidity of any Vederal or State law or rule or regulation desued therounder is any way affecting such party, or as a valver by any such party of any right beyond his or its authority to waive.

SECTION 30. <u>MATVER OF RIGHTE TO PAUTITION</u>. Each party herato convenants that, during the existence of this agroement, it will not resort to any action to partition the Unitized Formation or the Unit Equipment, and to that extent waives the benefits of all laws authorizing such partition.

SECTION 31. <u>INAVOIDABLE DELAY</u>. All obligations under this agreement requiring the Unit Operator to commence or continue accondary recovery operations or to operate on or produce Unitized Substances from any of the lauds covered by this agreement shall be auspended while, but only so long as the Unit Operator despite the exercise of due care and diligence, is prevented from complying with such obligations, in whole or in part, by strikes, acts of God, Vederal, State or municipal law or agency, unavoidable accident, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not. Hothing herein shall be construed to require Unit Operator, against its will, to eatile strikes.

BECTION 32. <u>1055 OF TITLE</u>. In the event tiple to any tract of maitized [and shall rall so as to render the light not subject to this agreement and the true owner cannot be induced to join this Agreement, such Tract shall be successfully regarded as not committed hereto and there shall be <u>such readjuctment of future costs</u> and benefits as may be required on account of the loss of such Title. If a Tract reases to be subject to this agreement because of the failure of title, Unit Operator, subject to Section 14, Tract Participation, heruof, shall recompute the Tract Participation of each of the Tracts remaining qualified for participation and shall revise Exhibit "C" accordingly. The revised exhibit shall be effective as of the first day of the calendar month in which such failure of title is finally determined.

If title to a workin; Interest fails, the rights and obligations of Workin; Interest Owners by reason of the influre of title shall be governed by the Unit Operating Autopment. If title is a Asyalty Interest fails, but the Tract to which it relates remains qualified, the parties whose title failed shall not be entitled to share hereunder with respect to such interest. In the

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event of a title dispute at to any Royalty, Horing Interest or other ingarant of a title dispute at to any Royalty, Horing Interest or other ingarant subject hereto, payment or delivery on account thereof may be withheld without liability or interest until the dispute is finally settled; provided, that as to State or Federal land or lesses, no payments of funds due the State of New Maxico or the United States of America shall be withheld, but such funds shall be deposited as directed by the Commissioner or the Supervisor (as the case may be), to be held as unsarned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

Unit Operator as such is relieved from any repponsibility for any defect or failurs of any title berounder.

SECTION 33. JOINDER IN DUAL CAPACITY. Execution as herein provided by any party sither as a Working Interest Owner or as a Boyalty Owner shall commit all interests that may be owned or controlled by such party not specifically excluded by the terms of the joinder instrument, provided said party also executes the Unit Operating Agreement as owner of a Working Interest.

SELTION 34. MONJOINDER AND SUBSEQUENT JOINDER. If the owner of any substantial interest in a qualified Tract fails or refuses to subscribe of congent to this agreement, the owner of the bouning interest in that Tract may withdraw said Tract from this agreement by written motics to the Supervisor, the Commissioner and the Unit Operator prior to the approval of this surrement by the Supervisor and the Commissioner. Joinder by any Noyalty Owner, at any time, must be accompanied by appropriate joinder of the corresponding Working Interest Sumer in order for the interest of such Royalty Owner to be regarded as effectively committed. Joinder to this agreement by a Working Interest Owner, attany time, must be accompanied by appropriate joinder to the Unit Operating Agreement in order for such interest to be regarded as effectively committed to this agreement.

Any sil or gas interest in the Unitized Permation not committed hereto prior to the effective date of this auroement may thereafter be committed hereto upon compliance with the applicable provisions of this Section and of Section 15 (Tracts Qualified for Participation) hermof, at any time during a period of six months after the effective date of this agreement on the same basis of participation as provided in said Section 15, by the <u>avenue or conserventeror subscribing</u>, ratifying, or consending in writing to

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and 312 ME 380 this agreement and, if the interest is a Loring Interest, by the owner of such interest subscribing also to the Unit Operating Agreement.

It is understood and agreed, however, that after such Six months the right of subsequent joinder as provided in this Section shall be subject to such requirements or approvals and on such basis as may be agreed upon by Working Interest Geners owning tracts with Phase II Participation of at Jeast sighty percent (SOI) and approval of the Supervisor and the Commissioner, provided that the Tract participation of each previously qualified Tract shall runsin in the same ratio one to the other. Such joinder by a proposed Working Interest Gener must be evidenced by his execution or ratification of this agreement and the Unit Operating Agreement. Such joinder by a Royalty Gener must be evidenced by his execution or ratification of this agreement and must be consented to in writing by the Working Interest Gener responsible for the payment of any benefits that may accrue hereunder in behalf of such Royalty Gener.

Except as may be otherwise herein provided, subsequent joinder to this agreement shall be affective the first day of the month following the filing with the Convisuioner and the Supervisor of duly executed counturparts of any and all documents necessary to establish effective commitment of any Tract or interest to this agreement, unless objection to such joinder by the Commissioner or the Supervisor is duly made within sixty (60) days after such filing; provided, Movever, that as to State lands such subsequent joinder must be approved by the Commissioner.

It is expressly sgreed by the parties hareto that the provisions of this Section 34 are made subject to the provisions of Section 15 hereinabove set forth and nothing contained herein shall be construed in controvention or deregation thereof. <u>SECTION 15. COUNTERPARTS. This expressions may be executed in any</u> number of counterparts, no one of which meads to be executed by all parties and may be ratified or consented to by separate instrument in writing epecifically referring hereto, and shall be binding upon all those parties who have executed such a counterpart, ratification or consent hereto with the BBBB force and effect as if all parties had signed the same document, and regardless of whether or not it is executed by all other parties owningor claiming an interest in the land within the glove described Unit Ares.

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BUGG 312 ME 391 SECTION 36. TAXES: The Working Interest Owners shall render and pay or cause to be rendered and paid for their account and the account of the Royslty Owners all valid taxes on or measured by the amount or value of the Unitized Substances produced, gathered and sold from the land subject to this agreement. The Working Interest Owners in each Tract may charge the proper proportion of soid taxes to the Royalty Owners having interests in deid Tract, and may currently retain and deduct sufficient of the Unitized Substances or derivative products, or not proceeds thereof, from the allocated ohere of each Royalty Owner to secure reinbursement for the taxes so paid. No taxes shall be charged to the United States or the State of New Maxico or to any lossor who has a pontract with his lesses to pay such taxes.

In order to avoid title failures which might incidentally cause the title to a Morking Interest or Boyalty Interest to fail, the owners of (1) the surface rights to each committed Tract, (2) severad mimeral or Royalty Interest in said Tracts and (3) improvements located in said Tracts not utilized for Unit_megrations shall individually be responsible for the rendition and assessment, for ad valores tax purposes, of all such property, and for the payment of such taxes, except as otherwise provided in any contract or agreement between such owners and a Working Interest Owner or Owners. If any ad valorem taxes are not paid by such owner responsible therefor then due, Thir Sparator may, at any time prior to tax sale, pay the same, redeen such property and discharge such tax liens as may stile through non-segment. In the event Unit Operator makes any such payment or rodems any such property from tax.sele, Unit Operator shall be raimbursed therefor by the Horking Interest Owners in proportion to their respective Unit Participations then in effect, and Unit Operator shall withhold from any proceeds derived from the sale of Unitized Substances otherwise due to said delinguent taxpayer or taxpayers an amount sufficient to defrey the costs of such payment or redemption, such withho'ding . _to be distributed among the Working Interest Owners in proportion to their respective contributions toward such payment or redemption. Such withholding shall be without prejudice to any other remedy, either at law or in equity, which may be available for exercise by the Unit Operator or by the Working Interest Owners.

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BODH 312 MALE 382 SECTION 37, CONFLICT OF SUPERVISION. Metcher the Unit Operator nor the Worling Interest Owner, nor any of them, shall be subject to any forfeiture, terminetion or supiration of any rights bersunder or under any Jeases or contracts subject dereto, or to any penalty or liability on account of delay or failure in whole or in part to couply with any emplieable provisions thereof to the extent that the said Unit Operator or the Morking Interest Owners, or may of them, are hindered, delayed or preweated from complying therewith by reason of failure of the Unit Operator to obtain, in the exercise of due diligence, the concurrence of proper Tepresentatives of the United States and proper representatives of the State of New Mexico in and about any matters or things concerning which It is required herein that ouch concurrence be obtained. The parties hereto, including the Come Losion, agree that all powers and authority which by any provisions of this agreement are wested in the Commission shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject in any case to appeal or judicial review as may now or bargafter be provided by the laws of the State of New Mexico.

SECTION 38. <u>NO PARTNERSHIP</u>. The duties, obligations and liabilities of the parties hereig are intended to be several and not joint of collective. This agreement is not intended to create, and shall not be construed to create, an association or trust, or to impose a partnership duty, obligation or liability with regard to any one or more of the parties hereto. Each party hereto shall be individually responsible for its own obligations as herein provided.

SECTION 39. <u>NO SHARING OF MARKET</u>. This agreement is not intanded to provide, and shall not be construed to provide, directly or indirectly for any cooperative refining, joint sale, or marketing of Unitized Substances.

SECTION 40. <u>DORUTE AGREENENTS</u>. Unit Operator, with concurreace of Working interest Owners having a combined Phase II Unit Participation of sixty five percent (65%) or more, may, subject to approval of the Supervisor, onter into a border-protection agreement or agreements with thu Working Interest Owners of lands not subject hareto, when said agreements provide for operations designed to increase ultimate recovery, conserve

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and protect the parties and their interests. parties hereto have caused this agree-HEREOF . at deposite their respective es the ATTL IL CORPANY -1 sident 1973 INIT OPERATOR Asn HON-OPELATORS . •••• OKLAHOMA BTATE OF . . COUNTY OF THESA 2 . The foregoing instrument was acknowledged before no this <u>April</u>, 19<u>75</u> by <u>Oudd 24 Guallent</u> Vice SKELLY DIL CONFANY, on behalf of said company. .0 day of 4 Vice 71.04 ldent fo 4. Louise n. Z Notary Public . 64 dission Empires: 24,1975 ----1 and : 23 Ś 11 . . . 6. - 30-**977**

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BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 5086 Order No. R-4660

APPLICATION OF SKELLY OIL COMPANY FOR APPROVAL OF THE MYERS LANGLIE-MATTIX UNIT AGREEMENT, LEA COUNTY, NEW MEXICO.

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ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on October 31, 1973, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

• . •

NOW, on this <u>16th</u> day of November, 1973, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Skelly Oil Company, seeks approval of the Myers Langlie-Mattix Unit Agreement covering 9923.68 acres, more or less, of State, Federal and Fee lands described as follows:

LEA COUNTY, NEW MEXICO

TOWNSHIP 23 SOUTH, RANGE 36 EAST, NMPM Section 25: N/2 NE/4, SE/4 NE/4, E/2 SW/4, SW/4 SW/4, and SE/4 Section 36: N/2, SE/4, and E/2 SW/4

TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM Section 28: SW/4 NW/4 and SW/4 Sections 29 through 33: All Section 34: W/2

TOWNSHIP 24 SOUTH, RANGE 36 EAST, NMPM Section 1: NE/4 NE/4 Section 12: S/2 N/2, N/2 S/2, and SE/4 SE/4

EXHIBIT

-2-Case No. 5086 Order No. R-4660

> TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM Section 2: W/2 NE/4 and W/2NE/4, E/2 SE/4, and W/2 SW/4 Section 3: Sections 4 and 5: All Section 6: E/2, E/2 W/2, and NW/4 NW/4Section 7: **A11** Section 8: N/2, N/2 S/2, and SW/4 SW/4Section 9: N/2 and N/2 SW/4 Section 10: NW/4, W/2 NE/4, SE/4 NE/4, E/2 SW/4, and W/2 SE/4 Section 11: SW/4 NW/4

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED:

(1) That the Myers Langlie-Mattix Unit Agreement is hereby approved.

(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinguishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey; that this order shall terminate <u>ipso facto</u> upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.

(5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-3-Case No. 5086 Order No. R-4660

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



STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

I/ R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member L. PORTER, Jr., Member & Secretary A.

SEAL

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 6987 Order No. R-6447

APPLICATION OF GETTY OIL COMPANY FOR STATUTORY UNITIZATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 5, 1980, at Santa Fe, New Mexico, before the Dil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <u>27th</u> day of August, 1980, the Commission, a quorum being present, having considered the testimony and the record and being otherwise fully advised in the premises,

FINDS:

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

(2) That the applicant, Getty Oil Company, seeks the statutory unitization, pursuant to the "Statutory Unitization Act," Sections 70-7-1 through 70-7-21, NMSA 1978, of 9,360 acres, more or less, being a portion of the Langlie Mattix Pool, Lea County, New Mexico, said portion being known as the Myers Langlie-Mattix Unit Area and applicant further seeks approval of the Unit Agreement as revised and the Unit Operating Agreement as revised.

(3) That the Myers Langlie-Mattix Unit Agreement was approved by the Oil Conservation Commission by Order No. R-4680 entered in Case No. 5087 on October 31, 1973.

(4) That the Myers Langlie-Mattix Unit became effective on February 1, 1974, and has been operated by Getty Oil Company and its predecessor in interest, Skelly Oil Company, since that date.

	EXHIBIT
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-2-Case No. 6987 Order No. R-6447

(5) That the applicant seeks statutory unitization of this voluntary unit to enable it to institute more effective and efficient operating practices thereby extending the economic life of the unit.

(6) That the unit area should be designated the Myers Langlie-Mattix Unit Area and the horizontal limits of said unit area should be comprised of the following described lands:

TOWNSHIP 23 SOUTH, RANGE 36 EAST, NMPM
Section 25: N/2 NE/4, SE/4 NE/4 E/2
SW/4, SW/4 SW/4, and SE/4
Section 36: N/2, SE/4, and E/2 SW/4
TOUNCUTD DZ COUTU DANCE ZZ EACT NUDN
TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM
Section 28: SW/4
Section 29: W/2, W/2 E/2, and E/2 SE/4 Section 30: N/2, SW/4, N/2 SE/4, and
Section 50: N/2, SW/4, N/2 SE/4, and $SW/4$ SE/4
Sections 31 through 33: All
Section 34: W/2
Section 94. 072
TOWNSHIP 24 SOUTH, RANGE 36 EAST, NMPM
Section 1: NE/4 NE/4
Section 12: S/2 N/2, N/2 S/2, and SE/4
SE/4
TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM
Section 2: W/2 NE/4 and W/2
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4 Sections 4 and 5: All
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4 Sections 4 and 5: All Section 6: E/2, E/2 W/2, and NW/4
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4 Sections 4 and 5: All Section 6: E/2, E/2 W/2, and NW/4 NW/4
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4 Sections 4 and 5: All Section 6: E/2, E/2 W/2, and NW/4 NW/4 Section 7: N/2, SE/4, and S/2 SW/4
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4 Sections 4 and 5: All Section 6: E/2, E/2 W/2, and NW/4 NW/4 Section 7: N/2, SE/4, and S/2 SW/4 Section 8: N/2, N/2 S/2, and SW/4
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4 Sections 4 and 5: All Section 6: E/2, E/2 W/2, and NW/4 NW/4 Section 7: N/2, SE/4, and S/2 SW/4 Section 8: N/2, N/2 S/2, and SW/4 SW/4
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4 Sections 4 and 5: All Section 6: E/2, E/2 W/2, and NW/4 NW/4 Section 7: N/2, SE/4, and S/2 SW/4 Section 8: N/2, N/2 S/2, and SW/4
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4 Section 6: E/2, E/2 W/2, and NW/4 NW/4 Section 7: N/2, SE/4, and S/2 SW/4 Section 8: N/2, N/2 S/2, and SW/4 SW/4 Section 9: NW/4, N/2 SW/4, N/2 NE/4, and SE/4 NE/4
Section 2: W/2 NE/4 and W/2 Section 3: NE/4, E/2 SE/4, and W/2 SW/4 Section 6: E/2, E/2 W/2, and NW/4 NW/4 Section 7: N/2, SE/4, and S/2 SW/4 Section 8: N/2, N/2 S/2, and SW/4 SW/4 Section 9: NW/4, N/2 SW/4, N/2 NE/4, and SE/4 NE/4

Section 11: SW/4 NW/4

(7) That the vertical limits of said Myers Langlie-Mattix Unit Area should comprise that interval which extends from a point 100 feet above the base of the Seven Rivers formation to -3-Case No. 6987 Order No. R-6447

the base of the Queen formation; said interval having been heretofore found to occur in the Texas Pacific Oil Company's Blinebry "B" Well No. 3 located 330 feet from the North line and 2310 feet from the West line of Section 34, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico, at an indicated depth interval of 3168 feet to 3570 feet, as recorded on the Schlumberger Electrical Log Run No. 1 taken December 26, 1952, said log being measured from a derrick floor elevation of 3300 feet above sea level.

(8) That the portion of the Langlie Mattix Pool proposed to be included in the aforesaid Myers Langlie-Mattix Unit Area has been reasonably defined by development.

(9) That the applicant proposes to continue water flooding for the secondary recovery of oil, gas, gaseous substances, sulfur contained in gas, condensate, distillate and all associated and constituent liquid or liquifiable hydrocarbons within and to be produced from the proposed unit area.

(10) That the continuation of secondary recovery operations as a result of statutory unitization should result in the additional recovery of approximately 500,000 barrels of oil.

(11) That the unitized management, operation and further development of the Myers Langlie-Mattix Unit Area, as proposed, is reasonably necessary to effectively carry on secondary recovery operations and will substantially increase the ultimate recovery of oil from the unitized portion of the pool.

(12) That the proposed unitized method of operation as applied to the Myers Langlie-Mattix Unit Area is feasible and will result with reasonable probability in the increased recovery of substantially more oil from the unitized portion of the pool than would otherwise be recovered without unitization.

(13) That the estimated additional investment costs which result from statutory unitization are \$1.6 million from which can be deducted \$600,000, which will be saved by not having to maintain separate production facilities on certain tracts within the unit area for a net additional investment of \$1 million.

(14) That the additional recovery to be derived from the extended secondary recovery operations resulting from statutory unitization will have a gross value to the unit of \$18.24 million.

-4-Case No. 6987 Order No. R-6447

(15) That the estimated additional costs of the proposed operations (as described in Finding No. (13) above) will not exceed the estimated value of the additional oil (as described in Finding No. (14) above) plus a reasonable profit.

(16) That the applicant, the designated Unit Operator pursuant to the Unit Agreement and the Unit Operation Agreement, has made a good faith effort to secure voluntary unitization within the Myers Langlie-Mattix Unit Area.

(17) That the participation formula contained in the Unit Agreement allocates the produced and saved unitized substances to the separately owned tracts in the unit area on a fair, reasonable, and equitable basis.

(18) That statutory unitization and the adoption of the proposed unitized method of operation will benefit the working interest owners and royalty owners of the oil and gas rights within the Myers Langlie-Mattix Unit Area.

(19) That the granting of the application in this case will have no adverse effect upon other portions of the Langlie Mattix Pool.

(20) That applicant's Exhibits Nos. 9 and 11 as revised by Exhibits 10 and 12 in this case, being the Unit Agreement and the Unit Operating Agreement, respectively, should be incorporated by reference into this order.

(21) That the Myers Langlie-Mattix Unit Agreement and the Myers Langlie-Mattix Unit Operating Agreement provide for unitization and unit operation of the Myers Langlie-Mattix Unit Area upon terms and conditions that are fair, reasonable, and equitable, and which include:

(a) an allocation to the separately owned tracts in the unit area of all oil and gas that is produced from the unit area and which is saved, being the production that is not used in the conduct of unit operations or not unavoidably lost;

(b) a provision for the credits and charges to be made in the adjustment among the owners in the unit area for their respective investments in wells, tanks, pumps, machinery, materials, and equipment contributed to the unit operations; -5-Case No. 6987 Order No. R-6447

> (c) a provision governing how the costs of unit operations including capital investments shall be determined and charged to the separately owned tracts and how said costs shall be paid including a provision providing when, how, and by whom the unit production allocated to an owner who does not pay his share of the costs of unit operations shall be charged to such owner, or the interest of such owner, and how his interest may be sold and the proceeds applied to the payment of his costs;

> (d) a provision for carrying any working interest owner on a limited, carried, or net-profits basis, payable out of production, upon such terms and conditions which are just and reasonable, and which allow an appropriate charge for interest for such service payable out of production, upon such terms and conditions determined by the Commission to be just and reasonable, and allowing an appropriate charge for interest for such service payable out of such owner's share of production, providing that any nonconsenting working interest owner being so carried shall be deemed to have relinquished to the Unit Operator all of his operating rights and working interests in and to the unit until his share of the costs, service charge, and interest are repaid to the Unit Operator;

> (e) a provision designating the Unit Operator and providing for the supervision and conduct of the unit operations, including the selection, removal or substitution of an operator from among the working interest owners to conduct the unit operations;

(f) a provision for voting procedure for the decision of matters to be decided by the working interest owners in respect to which each working interest owner shall have a voting interest equal to his unit participation; and

(g) the time when the unit operation shall commence and the manner in which, and the circumstances under which, the operations shall terminate and for the settlement of accounts upon such termination.

(22) That applicant seeks establishment of an administrative procedure whereby the conversion of additional wells to injection may be approved without further notice or hearing.

(23) That the statutory unitization of the Myers Langlie-Mattix Unit Area is in conformity with the above findings, and -6-Case No. 6987 Order Nc. R-6447

will prevent waste and protect the correlative rights of all owners of interest within the proposed unit area, and should be approved.

IT IS THEREFORE ORDERED:

(1) That the Myers Langlie-Mattix Unit Area, comprising 9,360 acres, more or less, in the Langlie Mattix Pool, Lea County, New Mexico, is hereby approved for statutory unitization pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21 NMSA 1978.

(2) That the lands included within the Myers Langlie-Mattix Unit Area shall be comprised of:

> TOWNSHIP 23 SOUTH, RANGE 36 EAST, NMPM N/2 NE/4, SE/4 NE/4, E/2 Section 25: SW/4, SW/4 SW/4, and SE/4 -N/2, SE/4, and E/2 SW/4 Section 36: TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM Section 28: SW/4W/2, W/2 E/2, and E/2 SE/4 Section 29: N/2, SW/4, N/2 SE/4, and Section 30: SW/4 SE/4 Sections 31 through 33: All Section 34: W/2 TOWNSHIP 24 SOUTH, RANGE 36 EAST, NMPM Section 1: NE/4 NE/4 S/2 N/2, N/2 S/2, and Section 12: SE/4 SE/4TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM Section 2: W/2 NE/4 and W/2NE/4, E/2 SE/4, and W/2 SW/4 Section 3: Sections 4 and 5: All E/2, E/2 W/2, and NW/4 NW/4Section 6: N/2, SE/4, and S/2 SW/4 Section 7: N/2, N/2 S/2, and SW/4 SW/4 Section 8: Section 9: NW/4, N/2 SW/4, N/2 NE/4, and SE/4 NE/4

Section 10: NW/4, W/2 NE/4, SE/4 NE/4, E/2 SW/4, and W/2 SE/4 Section 11: SW/4 NW/4 -7- . Case No. 6987 Order No. R-6447

. . ..

(3) That the vertical limits of said Myers Langlie-Mattix Unit Area should comprise that interval which extends from a point 100 feet above the base of the Seven Rivers formation to the base of the Queen formation; said interval having been heretofore found to occur in the Texas Pacific Oil Company's Blinebry "B" Well No. 3 located 330 feet from the North line and 2310 feet from the West line of Section 34, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico, at an indicated depth interval of 3168 feet to 3570 feet, as recorded on the Schlumberger Electrical Log Run No. 1 taken December 26, 1952, said log being measured from a derrick floor elevation of 3300 feet above sea level.

(4) That the applicant shall waterflood for the secondary recovery of oil, gas, gaseous substances, sulfur contained in gas, condensate, distillate, and all associated and constituent liquid or liquified hydrocarbons within and produced from the unit area.

(5) That the Myers Langlie-Mattix Unit Agreement as revised and the Myers Langlie-Mattix Unit Operating Agreement as revised are approved and adopted and incorporated by reference into this order.

(6) That when, pursuant to the terms of Sections 70-7-9 NMSA 1978, the persons owning the required percentage of interest in the unit area have approved or ratified the Unit Agreement and the Unit Operating Agreement, the interests of all persons within the unit area are unitized whether or not such persons have approved the Unit Agreement or the Unit Operating Agreement in writing.

(7) That the applicant as Unit Operator shall notify in writing the Division Director of any removal or substitution of said Unit Operator by any other working interest owner within the unit area.

(8) That the applicant is authorized to convert additional wells to injection in accordance with the provisions of Division Rule 701 E 4.

(9) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-8-Case No. 6987 Order No. R-6447

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

ALEX J. ARMIJO, Member Mømber ARNOLD

JOE D. RAMEY, Member & Secretary

SEAL

fd/

INTEREST OWNERS MYERS LANGLIE-MATTIX UNIT

Amerada Hess Corporation P.O. Box 2040 Tulsa, OK 74102-2040

Arlene S. Anthony 721 Chatham Road Glenview, IL 60025

George R. Bentley P.O. Box 37 Pineville, KY 40977-0037

James C. Brown P.O. Box 10621 Midland, TX 79702-0621

James E. Burr P. O. Box 50233 Midland, Texas 7910-0233

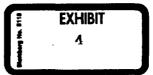
Ellen Harris Clay Trust c/o Texas American Bank Fort Worth P.O. Box 2605 Fort Worth, TX 76113-2605

Jennifer Ann Clay 4135 Glenwick, #25 Dallas, TX 75205

Joan Clay c/o Grant Thornton P.O. Box 19585 Irvine, CA 92713-9585

Clay Trusts 618-123 Ameritrust Texas N.A. P.O. Box 901004 Fort Worth, TX 76101-1004

John W. Clay, III 4005 Pin Oak Terrace, #304 Euless, TX 76040



Rufus "Pete" Clay, Jr. Trust P.O. Box 50688 Amarillo, TX 79159-0688

Susan Marie Clay 2737 Colonial Parkway Fort Worth, TX 76109

Adele Combs Clough 6926 Midbury Drive Dallas, TX 75230

Michael Clough 7717 Meadowhaven Dr. Dallas, TX 75240

Margaret Couch Trust P.O. Box 50688 Amarillo, TX 79159-0688

Cross Timbers Production Co. 810 Houston St., Ste 2000 Fort Worth, TX 76102

James A. Davidson P. O. Box 494 Midland, Texas 79702-0494

El Paso Natural Gas Company P.O. Box 1492 El Paso, TX 79978-1492

Jack Fletcher P. O. Box 10887 Midland, Texas 79702-0887

Geodyne Resources, Inc. NW-8045 P.O. Box 8045 Minneapolis, MN 55485-8045 Attention: R. L. Clemens, Vice President

HCW Income Properties The Historic Church Grn Bld, 101 Summer Street Boston, MA 21100 Headington Oil Company 7557 Rambler Road, #1150 Dallas, TX 74231 Attention: Brooks Purnell, Vice President

Edythe B. Prikryl 5708 Melstone Arlington, TX 76016

Lamar Hunt 2400 Thanksgiving Tower 1601 Elm Street Dallas, TX 75201

N. B. Hunt 2400 Thanksgiving Tower 1601 Elm Street Dallas, TX 75201

W. H. Hunt 2400 Thanksgiving Tower 1601 Elm Street Dallas, TX 75201

Kerr-McGee Corporation P.O. Box 730330 Dallas, TX 75373-0330

Weslynn McCallister P.O. Box 88 Nokomis, FL 34274

Lortscher Family Trust Marilyn A. Tarlton, Trustee 561 Orange Avenue Los Altos, CA 94022

Maralo, Inc. P.O. Box 832 Midland, TX 79702-0832 Attention: R. A. Lowery, Production Manager

Myers Partners, Inc. 214 W. Texas, Ste. 1200 Midland, TX 79701 Larry A. Nermyr HC-57 Box 4106 Sidney, MT 59270

Evelyn Clay O'Hara Trust c/o Juanita Jackson 3774 West Sixth Street Fort Worth, TX 76107

OXY USA, Inc. P.O. Box 300 Tulsa, OK 74102

PC Ltd. P.O. Box 911 Breckenridge, TX 76024-0911

Robert C. Scott 2400 N.E. 26th Avenue Fort Lauderdale, FL 33305

Sirgo Brothers, Inc. P.O. Box 3531 Midland, TX 79702-3531

L. Summers Oil Co. P.O. Box 776 Hobbs, NM 88240-0776 Attention: Louise Summers

Ruth Sutton 2826 Moss Midland, Texas 79702

Texaco E & P, Inc. P.O. Box 3109 Midland, TX 79702-3109

Sirgo Operating, Inc.

P. O. Box 3531, Midland, Texas 79702 (915) 685-0878

October 4, 1990

Mr. Doyle Hartman Midland, Texas

> Re: Offer to Purchase W.I. in Myers Langlie-Mattix Unit Lea County, New Mexico Via A Like Kind Exchange Transaction

Mr. Hartman,

Reference is made to my letter to you dated June 27, 1990 proposing a like kind exchange offer for your interests in the Myers Langlie-Mattix Unit. At that time, I proposed a transaction whereby we would have escrowed the purchase of your interests in the unit, and then identify a property within the following six months to acquire an interest in a property of your choice. This proposal was the result of our previous discussion with you whereby you indicated you were not interested in a cash sale, but a property exchange. We then began to identify tracts we thought were acceptable to you and pursued negotiations to purchase these interests.

When I had reached a point in those negotiations where I felt the opportunity for us to purchase these tracts was eminent, I sent you the June 27 proposal. You indicated at that time you would rather have confirmation of the exchange interests, than have it open ended. We have since received written confirmation from ARCO concerning three tracts that we can purchase. (See attached letter).

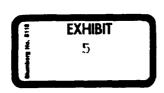
I submitted these to your people last week for review and evaluation. Needless to say, I cannot keep ARCO hanging and if you are no longer interested in this kind of trade, I need to make other arrangements with these interests, as I do not intend to not perform with ARCO.

As to the Myers Unit, we have now purchased 60+% of the Unit and Texaco has agreed to relinquish operations to us. I would propose to trade you the ARCO tracts for \$800,000 plus your interests in the Myers.

If at all possible, could you let me know by Monday, October 8, 1990 if you are interested in this transaction.

Singerely, 1. J. M. A. Sirgo, III

MAS/pr Attachment



OCT 8 1990

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	JOINT ACCOUNT STAT	IF WENT T	REPORT NO CT621
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REPORT NO 01621

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TPI-MIDLAND JOINT ACCOUNT STATEMENT MYERS LANGLIE-MATTIX ACCOUNT NO. 65002 NOVEMBER, 1990 UNIT

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REPORT NO 01621 41

TPI-MIDLAND JOINT ACCOUNT STATEMENT MYERS LANGLIE-MATTIX ACCOUNT NO. 65002 DECEMBER, 1990 UNIT

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	366-MYERS LANGLIE MATTIX UNIT 0/A 333000061300482 DIRECT LABOR HOLIDAY PREMIUM PAY OVERTIME OPERATING-NONSCHEDULD DIRECT LAGOR-REPAIRS & MAINT WELL SERVICE & PULLING UNITS TRANSPORTATION - HIREO CONTRACT WORK - GENERAL OPER SUBSURFACE PUMPS AND PARTS TOOLS AND SUPPLIES RENTALS-TOOLS AND EGUIPMENT RENTALS-OTHER ELECTRIC ENERGY PURCHASED SALES AND USE TAX COMPANY TRUCKING-DEGIT COMPANY AUTOMOBILE PRESSURE MAINT-SECOND RECOVERY PRODUCING OVERHEAD DISTRIBUTED-OTHER SEE DETAIL ATTACHED PROPERTY TOTAL		11 604856 2010 804856 22940 80056436 22940 97532474486 11 183316 12 97532474486 183316 1585601880 183316 188 183316 188 183316 188 183316 188 183316 188 183316 188 183316 188 183316 188 183316 188 183317 188 183316 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317 188 183317
	PROPERTY TOTAL	.00	238,377.68
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AFE:	60030068- MYERS LANGLIE MATTIX UT #55 0A Well Service 2 Pulling Units Afe Total	• 00 • 00	12,113.38 12,113.38
	TOTAL OHEAD/NO OHEAD Part interest account	.00	250,357.47 250,357.47

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CO-OWNER NAME AMERADA HESS CORP APLENE S ANTHOMY GEORGE R BENTLEY JAMES C EROWN ELLEN HARRIS CLAY ESTATE JENNIFER ANN CLAY JOAN CLAY CLAY TRUSTS 613-123 JOHN W. CLAY III RJFUS "PETE" CLAY JR TRUST SJSAN MARIE CLAY ADELE COMBS CLOUGH MICHAEL CLOUGH MARGARET COUCH TRUST CROSS TIMBERS PRODUCTION CO. EL PASO NATURAL GAS CO GEODYNE RESOURCES INC. HCW INCOME PROPERTIES DOYLE HARTMAN HEADINGTON MINERALS INC. EDYTHE B. HUMPHRIES LAMAR HUNT N B HUNT W H HUNT KERR-MCGEE CORPORATION WISLYNN MCCALLISTER LARSEN LORTSCHER FAMILY TRUST MARALO INC CRCK MEYERS PARTNERS INC EVELYN CLAY O'HARA TRUST OXY USA INC. PC LTD ROBERT C SCOTT SIRGO BROTHERS INC. L. SUMMERS OIL CO. TEXACO PRODUCING INC

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Sirgo Operating, Inc. P. O. Box 3531 Midland, Texas 79702

Gentlemen:

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By executing this letter, the undersigned working interest owner hereby acknowledges and represents that it will support a change in the operator on the Myers Langlie-Mattix Unit from the current Unit operator, Texaco, Inc., to the proposed new operator, Sirgo Operating, Inc.

. . .

The undersigned ratifies and confirms that this letter shall serve as the undersigned's ballot to cast its vote for Sirgo Operating, Inc. to assume all rights, duties, and obligations of Unit operator under the said Myers Langlie-Mattix Unit Agreement.

In consideration of the premises hereinbefore set forth and the promises hereinafter stated, Sirgo Operating, Inc. hereby covenants and agrees to fulfill the duties and assume the obligations of Unit operator under and pursuant to all the terms of the Myers Langlie-Mattix Unit Agreement, and the undersigned covenants and agrees that, effective upon approval of the change in operator by the authorized government agency, Sirgo Operating, Inc. shall be granted the exclusive right and privilege of exercise in any and all rights and privileges as Unit Operator, pursuant said Unit Agreement being hereby incorporated herein by reference and made a part hereof as fully and effectively as though said Unit Agreement were expressly set forth in this 4-449-0.5<u>1</u> instrument. AN TO FOR

Respectfully,

* PC, Ltd. red F. Dueser Sendral Pargner . L. McClymond, General Partner WORKING INTEREST OWNER MYERS LANGLIE-MATTIX UNIT <u>.140390 8 W.I.</u>

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E TO CONT

Agreed to and accepted this 8th day of March, 1991.

EXHIBIT

8

*PC, Ltd. has executed this letter SIRGO OPERATING, INC. conditioned on the understanding that Sirgo Production shall operate the Myers Langlie-Mattix Unit under the terms and conditions of all BY: agreements (including Unit Operating Agreements) covering said property.

Victor J. Sirgo

Vice President

Sirgo Operating, Inc. P. O. Box 3531 Midland, Texas 79702

Gentlemen:

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By executing this letter, the undersigned working interest owner hereby acknowledges and represents that it will support a change in the operator on the Myers Langlie-Mattix Unit from the current Unit operator, Texaco, Inc., to the proposed new operator, Sirgo Operating, Inc.

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Respectfully,

SIgnature

Print Name: R.W. Mullins Title: Manager, Joini Venture - U.S., Onshore WORKING INTEREST OWNER MYERS LANGLIE-MATTIX UNIT 6.38753 & W.I. ANTRADA ESS CORPORATICE

Agreed to and accepted this 8th day of March, 1991.

SIRGO OPERATING, INC BY: ctor Vice President

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February 28, 1991

Sirgo Operating, Inc. P. O. Box 3531 Midland, Texas 79702

Gentlemen:

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By executing this letter, the undersigned working interest owner hereby acknowledges and represents that it will support a change in the operator on the Myers Langlie-Mattix Unit from the current Unit operator, Texaco, Inc., to the proposed new operator, Sirgo Operating, Inc.

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Respectfully,

KERR-MCGEE CORPORATION

BY: 97 Name

TITLE: <u>Vice</u> Co<u>o</u><u>o</u> WORKING INTEREST OWNER MYERS LANGLIE-MATTIX UNIT 1.238220% W.I.

Agreed to and accepted this 28th day of February, 1991.

Kerr-McGee

SIRGO OPERATING, INC BY: Sirgo, ident III Pres

- RECEIVED HAVE 18 LES

February 28, 1991

Sirgo Operating, Inc. P. O. Box 3531 Midland, Texas 79702

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Gentlemen:

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Respectfully,

MARALO INC.

Vawere. BY: Name⁷⁷

Name R. A. Lowery Title: Production Manager WORKING INTEREST OWNER MYERS LANGLIE-MATTIX UNIT 0.596160% W.I.

Agreed to and accepted this 28th day of February, 1991.

SIRGO OPERATING, INQ BY: M. A. Sirgo, III President

40 20

Sirgo Operating, Inc. P. O. Box 3531 • Midland, Texas 79702

Gentlemen:

By executing this letter, the undersigned working interest owner hereby acknowledges and represents that it will support a change in the operator on the Myers Langlie-Mattix Unit from the current Unit operator, Texaco, Inc., to the proposed new operator, Sirgo Operating, Inc.

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Respectfully, Signature urgell Print Name: 1 cor

Title: <u>Vice President</u> WORKING INTEREST OWNER MYERS LANGLIE-MATTIX UNIT .207942 W.I.

Agreed to and accepted this 8th day of March, 1991.

Hendington

BY: Sirgo Victor J. Vice President

RECEIVED MAR 1 6 100

--- March 8, 1991 -

Sirgo Operating, Inc. P. O. Box 3531 Midland, Texas 79702

Gentlemen:

By executing this letter, the undersigned working interest owner hereby acknowledges and represents that it will support a change in the operator on the Myers Langlie-Mattix Unit from the current Unit operator, Texaco, Inc., to the proposed new operator, Sirgo Operating, Inc.

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Respectfully,

hom mallesta Signature

Print Name: WESLYAN MCCALLISTER. Title:

WORKING INTEREST OWNER MYERS LANGLIE-MATTIX UNIT .142940 & W.I.

Agreed to and accepted this 8th day of March, 1991.

BY: Victor J. Sirgo

Vice President

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Sirgo Operating, Inc. P. O. Box 3531 Midland, Texas 79702

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Gentlemen:

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	Respectfully,
<i>د</i>	Que & ummen
	Print Name: Louise C. Summe R.S.
	Title: WORKING INTEREST OWNER
	MYERS LANGLIE-MATTIX UNIT
	<u>.096490 </u> W.I.

Agreed to and accepted this 8th day of March, 1991.

BY: Victor J. Sirgo Vice President

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Sirgo Operating, Inc. P. O. Box 3531 Midland, Texas 79702

Goutlemen:

By executing this letter, the undersigned working interest owner hereby acknowledges and represents that it will support a change in the operator on the Myers Langlie-Mattix Unit from the current Unit operator, Texaco, Inc., to the proposed new operator, Sirgo Operating, Inc.

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Respectfully,

GEODYNE RESOURCES

Signature -

Print Name: Title: 4P CONAS .. Plan.

WORKING INTEREST OWNER MYERS LANGLIE-MATTIX UNIT 102970 \$ W.1.

Agreed to and accepted this 8th day of March, 1991.

SIRGO OPERATING, INC.

BY: Victor J. Sirgo

Vice President

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Sirgo Operating, Inc. P. O. Box 3531 Midland, Texas 79702

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Respectfully,

LORTSCHER FAMILY TRUST

on Usustie gnature > PRILYN L. TARLTON Priot Name:

Title: WORKING INTEREST OWNER MYERS LANGLIE-MATTIX UNIT 1255840 W.I.

Agreed to and accepted this 8th day of March, 1991.

BY: Victor J. Sirgo

Vice President

Texaco Exploration and Production Inc Midland Producing Division

P O Box 3109 Midland TX 79702-3109

April 15, 1991

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230830 - MYERS LANGLIE-MATTIX UNIT LEA COUNTY, NEW MEXICO Resignation of Operator

TO: ALL WORKING INTEREST OWNERS

Reference is made to ARTICLE 6, PARAGRAPHS 6.2 and 6.3 of the Unit Operating Agreement and SECTIONS 6, 7 and 8 of the Unit Agreement, both dated January 1, 1973 covering the subject unit. Texaco Exploration and Production Inc. (successor to Texaco Producing Inc.) will resign as Unit Operator of the Myers Langlie-Mattix Unit in the near future.

Texaco continues neutral in the matter of selecting a successor Unit Operator. It becomes the duty of the remaining Working Interest Owners in the Myers Langlie-Mattix Unit to select a successor Unit Operator based on their independent investigations and findings.

In this connection, Sirgo Operating, Inc. ("Sirgo") has furnished Texaco with copies of certain documents. These documents evidence the approval of the majority of the Unit Working Interest Owners to select Sirgo as successor Unit Operator, all as provided for in the aforementioned agreements.

Pending resolution of certain accounting matters, Texaco will submit to each of you its resignation as Unit Operator. Prior to that time, Texaco will continue to operate the Myers Langlie-Mattix Unit all in accordance with the unit agreements.

Yours very truly,

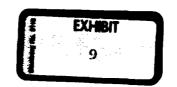
Texaco Exploration and Production Inc.

H. C. Pattison Assistant Division Manager

APR 1 8 1991

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RCD/srt





Texaco Exploration and Production Inc PO Box 3109 Midland Producing Division

Midland TX 79702-3109

May 13, 1991

230830 - MYERS LANGLIE-MATTIX UNIT LEA COUNTY, NEW MEXICO

State of New Mexico Oil Conservation Division P. O. Box 1980 Hobbs, New Mexico 88240

Attention: Mr. Jerry Sexton

Gentlemen:

Reference is made to our telephone conversation of this date wherein you were advised that Texaco Exploration and Production Inc. continues to operated the subject unit.

Although forms C-104 (Change of Operator) were filed by Sirgo Operating, Inc. covering the wells located in the unit, actual operations have not changed hands. Pending resolution of certain accounting matters, Texaco intends to submit its resignation as unit operator. Prior to that time, Texaco will continue to operate the Myers Langlie-Mattix Unit all in accordance with the unit agreements.

Yours very truly,

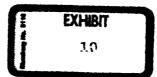
Texaco Exploration and Production Inc.

H. C. Pattison Assistant Division Manager

RCD/srt

cc: M. A. Sirgo, III Sirgo Operating Inc. P. O. Box 3531 Midland, TX 79702

JAH (Hobbs)



Sirgo Operating, Inc.

P. O. Box 3531, Midland, Texas 79702 (915) 685-0878

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D LAW FITTE P.O.

May 20, 1991

and the stand of the

Doyle Hartman 500 N. Main Street Midland, Texas 79701

Attention: Mr. Bryan Jones

Re: Myers Langlie-Mattix Unit Operator Ballot

Bryan,

As we have discussed with you, Sirgo Operating is soliciting the support of the working interest owners to be operator of the captioned unit. Enclosed is a ballot for your review, as well as a copy of the proposed project we intend to implement this summer.

Exclusive of Hartman's interest, Sirgo's current ownership in conjunction with ballots received to date is sufficient for Sirgo to assume operatorship. Texaco has agreed to resign as operator to allow us to do so, and we would also like to have your vote.

Additionally, it is our intent to initially develop Phase I of the proposed project, and then stop and review the results.

Phase I is a consensus of Texaco and Sirgo's combined engineering efforts as to the best place to start.

As with all the working interest owners, we are extending to you an invitation to sit down and review the proposed project with Sirgo's people or the Hickman engineering firm.

M. A. Sirgo, III



MAY 2 1 1991

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MAS/pr

Sirgo Operating, Inc. P. O. Box 3531 Midland, Texas 79702

Gentlemen:

By executing this letter, the undersigned working interest owner hereby acknowledges and represents that it will support a change in the operator on the Myers Langlie-Mattix Unit from the current Unit operator, Texaco, Inc., to the proposed new operator, Sirgo Operating, Inc.

The undersigned ratifies and confirms that this letter shall serve as the undersigned's ballot to cast its vote for Sirgo Operating, Inc. to assume all rights, duties, and obligations of Unit operator under the said Myers Langlie-Mattix Unit Agreement.

In consideration of the premises hereinbefore set forth and the promises hereinafter stated, Sirgo Operating, Inc. hereby covenants and agrees to fulfill the duties and assume the obligations of Unit operator under and pursuant to all the terms of the Myers Langlie-Mattix Unit Agreement, and the undersigned covenants and agrees that, effective upon approval of the change in operator by the authorized government agency, Sirgo Operating, Inc. shall be granted the exclusive right and privilege of exercise in any and all rights and privileges as Unit Operator, pursuant said Unit Agreement being hereby incorporated herein by reference and made a part hereof as fully and effectively as though said Unit Agreement were expressly set forth in this instrument.

Respectfully,

Signature
Print Name:
Title:
WORKING INTEREST OWNER
MYERS LANGLIE-MATTIX UNIT
4.80989 & W.I.

Agreed to and accepted this 8th day of March, 1991.

SIRGO OPERATING, INC.
BY: Theter Contractor
Victor J. Sirgo Vice President

EVALUATION OF WATERFLOOD DEVELOPMENT PROJECT MYERS LANGLIE MATTIX UNIT LEA COUNTY, NEW MEXICO



T. Scott Hickman & Associates, Inc.

PETROLEUM ENGINEEPS

February 15, 1991

Sirgo Production Company, Inc. P.O. Box 3531 Midland, TX 79702

Attention: Mr. M.A. Sirgo III

Gentlemen:

Re: Waterflood Development Project Myers Langlie Mattix Unit Lea County, New Mexico

In accordance with Mr. Sirgo's request, we have evaluated the Proved crude oil and gas reserves as of January 1, 1991 attributed to additional development and expansion of injection in the Myers Langlie Mattix Unit located in Lea County, New Mexico. The results of this study are discussed in the attached report as outlined in the Table of Contents. A summary of our evaluation to 100% working interest (75% net revenue interest) for the escalated case is as follows:

			<u>Future Net</u>	<u>Revenue</u>
	Net Reserves			Discounted
	Liquid	Gas	Undiscounted	@ 12%
•	(MBBL)	(MMCF)	<u>(M\$)</u>	<u>(M\$)</u>
Effective Date:		Janua	ary 1, 1991	
Proved				
Developed Producing	1,014	355	7,960	6,041
Undeveloped	8.250	<u>2.888</u>	167,444	54,419
Total Proved	9,264	3,243	175,404	60,460

Net oil and gas reserves are estimated quantities of crude oil, natural gas and natural gas liquid attributed to the composite revenue interests being evaluated after deduction of royalty and/or overriding royalty interests. The 1987 Oil and Gas Reserve Definitions, as endorsed by the SPE and SPEE and modified by use of assumed rather than existing economic conditions, were used to classify the reserves. Future net revenue was adjusted for capital expenditures,

> 550 WEST TEXAS SUITE 950 TWO FIRST CITY CENTER MIDLAND, TEXAS 79701

Sirgo Production Company, Inc. February 15, 1991 Page 2

operating costs, interest reversions, ad valorem taxes and wellhead taxes, but no consideration was given to Federal income taxes or any encumbrances that might exist against the evaluated interests. Present worth future net revenue shows the time value of money at certain discount rates, but does not represent our estimate of fair market value.

Reserves were determined using industry-accepted methods including extrapolation of established performance trends, volumetric calculations and analogy to similar producing zones as detailed in the attached study. Where applicable, the evaluator's own experience was used to check the reasonableness of the results.

In the preparation of this report, we have reviewed for reasonableness, but accepted without independent verification information furnished by Sirgo Production Company, Inc. with respect to interest factors, current prices, operating costs, current production and various other data. The price and expense escalation scheme and primary discount rate were applied at the direction of the client. The use of assumed rather than existing economic parameters affects both the cash flow projections by the difference in prices and expenses and also the reserve volumes by changing the economic limit at which production is terminated. The assumed pricing also has a major effect on the economic viability of nondeveloped potential and hence the volume of reserves that can be assigned to the non-producing categories.

We are qualified to perform engineering evaluations and do not claim any expertise in accounting or legal matters. As is customary in the profession, no field inspection was made of the properties nor have we verified that all operations are in compliance with any states and/or Federal conservation, pricing and environmental regulations that apply to them.

This study was performed using industry-accepted principles of engineering and evaluation that are predicated on established scientific concepts. However, the application of such principles involves extensive judgment and assumptions and is subject to changes in performance data, existing technical knowledge, economic conditions and/or statutory provisions. Consequently, our reserve estimates are furnished with the understanding that some revisions will probably be required in the future, particularly on new wells with little production history and for reserve categories other than Proved Developed Producing. Unless otherwise Sirgo Production Company, Inc. February 15, 1991 Page 3

noted, we have based our reserve projections on current operating methods and well densities.

This report is solely for the information of and the assistance to Sirgo Production Company, Inc. and the Myers Unit participants in the evaluation of the technical and economic feasibility of this project and is not to be used, circulated, quoted or otherwise referred to for any other purpose without the express written consent of the undersigned except as required by law. Persons other than those to whom this report is addressed shall not be entitled to rely upon the report unless it is accompanied by such consent. Data utilized in this report will be maintained in our files and are available for your use.

Yours very truly,

T. SCOTT HICKMAN & ASSOC., INC.

Ca Kente

C. Don Hunter, P. E.

glb attachment

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DISCUSSION

INTRODUCTION

The Myers Langlie Mattix Unit is an active waterflood project in the Langlie Mattix Seven Rivers-Queen-Grayburg Field, Lea County, New Mexico. The Unit produces from the Permian Age Queen and Penrose formations at a depth of approximately 3500'. Forty-acre development began in 1936 and although intermittent development continued through 1981, the major portion of the unit area was drilled prior to the mid-1960's. The Myers Unit currently has 232 wells on approximately 9600 acres.

Water injection commenced during 1975 with 121 producers and 111 injectors. Ultimate primary oil recovery has been 9000 MBBL. Currently 87 producers and 65 injectors are active. August 1990 oil rate was approximately 710 BOPD or 8.2 BOPD/well. Cumulative oil production as of September 1, 1990 was 14,424 MBBL. Remaining reserves under current operations are estimated at 1352 MBBL giving an ultimate recovery of 15,868 MBBLS, which is 13.8% of the estimated original oil-in-place. Secondary to primary ratio is 0.76.

Low primary recoveries are attributed to inefficient completions under 40-acre spacing. While response to injection has been satisfactory in isolated areas, project performance is generally characterized by inefficient injection, inadequate coverage due to completion practices and reservoir heterogeneity.

Five 20-acre infill producers were drilled during 1986 and although these wells were not within confined 5-spot patterns, the projected additional recoveries from increased production response has been sufficient to warrant an aggressive infill drilling program. Sirgo Production Company, Inc. acquired a major working interest position in this project for the purpose of redeveloping the waterflood by 20-acre infill drilling, well rework and reestablishing full-scale injection on 40-acre, 5-spot pattern configuration.

CONCLUSIONS

- 1. Productive limits of the field are controlled by structural and stratigraphic features.
- 2. Ultimate primary oil recovery is estimated at 9000 MBBL.

- Ultimate secondary under current operations is projected to be 6868 MBBL of which an estimated 1352 MBBL remain to be produced for an ultimate oil recovery of 15,868 MBBL.
- 4. While response to injection has been satisfactory in isolated areas of the Unit, pattern performance is generally characterized by inefficient injection and inadequate coverage due to completion practices and reservoir heterogeneity.
- 5. An estimated 11,000 MBBL of additional Proved Undeveloped reserves can be recovered from the Myers Unit through infill drilling, recompletion and reestablishment of unit wide water injection.
- An investment of 44,119 M\$ (8/8) is projected to result in a 50% rate of return and a 4.1 year payout. The investment cost does not include acquisition costs and investment costs do not include costs of financing.

RECOMMENDATIONS

- Proceed with 20-acre infill drilling, recompletions, workovers and establishment of water injection on 40-acre, 5-spot patterns in a phased procedure as outlined in this report.
- Development of each subsequent phase will depend, to some degree, upon results of the preceding phase. As additional petrophysical, technical and performance data becomes available, plans for subsequent phases may require revision or refinement.

GEOLOGY AND RESERVOIR PROPERTIES

The Langlie Mattix Seven Rivers-Queen-Grayburg Field is located along the western flank of the Central Basin Platform. Initial development in this field began in 1936. This is one of the largest fields in southwestern New Mexico with cumulative oil production in excess of 114 MMBBL.

The Myers Langlie Mattix Unit, which became effective February 1, 1974, currently encompasses approximately 9600 acres and 232 wells with cumulative oil production in excess of 14 MMBBL. The vertical limits of this Unit are 100 feet above the base of the Seven Rivers to the base of the Queen. The lower subdivision of the Queen formation is described locally as the Penrose interval and usually is treated as a separate zone. The Queen-Penrose formation consists of a complex sequence of sandstones, dolomites and shales at a depth of 3500'. A type log for this Unit is shown by Figure 1. Detail core descriptions were not available; however it is considered that the high gamma ray response in the pay zones is probably caused by high feldspar content, which is typical for these formations.

Structure maps constructed on top of the Queen and Penrose formations are shown by Figures 2 and 3, respectively. The Queen and Penrose formations are asymmetrical north to south trending anticlines. Hydrocarbon entrapment and productive limits were controlled by a combination of structural and stratigraphic factors. The determination of depositional environment was beyond the scope of this study.

The Lower Seven Rivers interval is primarily gas productive across the western portion of the Unit with only minimal oil pay development in localized areas. The Lower Seven Rivers formation was considered to have insignificant waterflood potential and was therefore excluded from this study.

The structure map on top of the Queen interval, Figure 2, shows a structural high trending northwest-southeast along the eastern portion of the Unit. The upper limit of oil production in the Queen formation is interpreted to be at a datum of approximately -125', as evidenced by higher gas-oil ratios above -125' subsea and apparent decrease in porosity development. Figure 3 is a structure map on top of the Penrose interval. The lowermost oil productive limits in the Penrose would not be definitively established based on limited core and quantitative log information. However, the Penrose was determined not to be oil productive below an approximate subsea datum of -350'. Structure is considered to have a bearing on the trapping mechanism; however, stratigraphy is regarded as being the dominant factor in defining oil productive limits.

Core data and well logs were utilized for determination of reservoir parameters, although the quantitative data coverage is minimal and may not be fully representative of the unitized area. Porosity logs and/or cores were not available within several areas of apparent high net pay, as inferred from individual well production performance.

Log analyses were performed on twenty-three wells for net pay determination. Only eight of these wells had been cored. Description from twenty-eight cored wells indicate that the Queen and Penrose members range from clean sands to limey or dolomitic sands. Core permeability is highly variable, ranging from 0.1 to 100 md. According to statistical permeability calculations furnished by Texaco, Dykstra-Parsons permeability variation for six wells ranged from 0.74 to 0.88, indicating a high degree of heterogeneity.

Net pay criteria was based on a porosity cutoff of 9%, which corresponds to permeabilities generally greater than 0.3 md. Average porosity of 13%, as determined from core data and log analyses, was utilized in volumetric calculations. Irreducible water saturations, determined from special core analyses, generally ranged from 29% to 42%. An irreducible water saturation of 40% was assumed for volumetric calculations. Residual oil saturation of 30% was obtained from special core analyses reports.

Net pay isopachs for the Queen and Penrose formations are shown by Figures 4 and 5, respectively. Net pay ranges in thickness from 1' to 40'. Reservoir net pay volume is 223,000 ac-ft for the composite Queen-Penrose reservoirs and original oil-in-place (OOIP) was calculated to be 115,000 MSTB. Reservoir saturations have been drastically altered by 15 years of water injection and no attempt was made to determine current saturation distribution.

PRIMARY PERFORMANCE

The Langlie-Mattix Field was discovered in 1936 and drilling within the current Myers Langlie Mattix Unit area began during that time. Although intermittent 40-acre development continued through 1981, the major portion of the Unit area was drilled prior to the mid-1960's. Figure 6 is a current well status map for the Unit. Primary production peaked during March 1956 at 1282 BOPD (Figure 7). Review of well performance and completion status was conducted with production data from commercial sources and public record and well completion status was reviewed from commercial sources.

It is not known whether a gas cap existed in the Queen formation prior to start of injection. However, high gas-oil ratios were prevalent across the northeastern portion of the Unit prior to 1974, coincident with Queen completions above a subsea datum of -125'. The Lower Seven Rivers interval is interpreted as primarily gas productive as evidenced by completion records and production histories. The high cumulative gas production in the western portion of the Unit is attributed to the Seven Rivers, which was open to production in the majority of wells. Method of completion, i.e., open hole completions and suspected poor cement jobs, has probably contributed to high gas-oil ratios. Once water injection commenced during 1975, the GOR eventually declined to approximately 500-600 SCF/BBL. Insufficient data was available to determine the GOR at initial reservoir conditions.

The lowermost limits of oil production in the Penrose is interpreted as a subsea datum of -350'. Oil production is controlled by porosity development and possibly by downstructure water. However, insufficient core data and quantitative well logs were available to confirm the lower limits of porosity and permeability development in the Penrose. The Penrose does not appear to be fully exploited in the southcentral portion of the Unit in areas interpreted as potentially oil productive. Eight wells in these areas did not penetrate the Penrose.

The primary producing mechanism in the Queen and Penrose formations is solution gas expansion with no apparent indications of natural water influx. Pressure data is not available and gas production data was not available prior to 1959. Therefore, determination of OOIP from material balance calculations was not possible. Ultimate primary recovery was estimated from extrapolation of established decline trends to be 9000 MBBL or an average of 40 MBBL/well for 227 wells. Primary recovery as a percentage of OOIP is 7.8%.

The effect of reservoir heterogeneity has been compounded by completion procedures. A review of well logs and completion data have revealed all of the pay may not be open in every well and many completions may also be open in the gas productive Seven Rivers zone. Also, technology was such prior to the 1970's that some completions are probably inefficient. As a result, the reservoir was not being efficiently drained on 40-acre spacing in many areas and this contributed to the low primary recovery.

UNIT WATERFLOOD PERFORMANCE

Due to the advanced stage of primary depletion and the apparent success of other Queen-Penrose waterfloods in the Langlie Mattix Field, the Myers Langlie Mattix Unit was formed for the purpose of waterflooding. The Unit became effective February 1, 1974 with Skelly as the operator. The unitized area encompassed approximately 10,000 acres and included 217 wells at that time. Water injection was initiated in August 1975 as a 5-spot pattern waterflood. The Unit responded within six months after start of injection. Peak oil rate of 2348 BOPD was reached in October 1979 (Figure 8). Table 1 is the Project Performance Summary for the Unit. An additional 10 wells were drilled prior to 1981 to complete 40-acre spacing. During full-scale operations, 121 producers and 111 injectors were active. Oil production rate has been on a steady decline since 1986. The stable water injection rates during the life of the project have contributed to the relatively shallow oil rate decline (Figure 8). Water-cut has also remained at 85-90% since 1984 (Figure 8). August 1990 oil rate for the Unit was 710 BOPD (8.2 BOPD/well).

A comparison of ultimate primary oil recoveries (Figure 9) and cumulative secondary oil recoveries (Figure 10) showed erratic waterflood response. Exceptional high secondary oil recoveries were noted within a southwestern portion of the Unit (Sections 5 and 7) which had very low primary oil recoveries. In contrast, the southeastern portion of the Unit (Sections 8 and 27) has poor secondary oil recoveries although primary oil recoveries were above average. A pattern analysis review was undertaken to evaluate production and injection performance and remaining reserve potential. Injection rates and wellhead injection pressures were included, but injection well profile surveys were not available.

The high injection-withdrawal ratios, prevalent throughout the low primary oil recovery areas in the eastern portion of the Unit, indicate poor conformance. Conversely, the high secondary oil recovery areas in the south-central portion of the Unit exhibited relatively high secondaryprimary ratios, low injection withdrawals ratios and good injectivities, suggesting good vertical and areal conformance. There are other isolated areas within the Unit which have exhibited good oil response to injection due apparently to localized conditions. Fifteen wells had peak oil response rates in excess of 100 BOPD/well and 14 wells have cumulative secondary oil recoveries in excess of 100 MBBLS/well (Figure 10).

While response to injection has been satisfactory in these isolated areas, over all the injection has been inefficient. Under current operations, ultimate secondary oil recovery is projected at 57 MBBL/well for 121 pro-ducers. As shown by Tables 1 and 2, ultimate recoveries under existing development is estimated to be approximately 13.8% of OOIP whereas various other Queen waterflood projects under 40-acre spacing have reported recoveries significantly higher.

Five 20-acre infill producers (253, 254, 255, 256 and 257) were drilled in the Myers Unit during 1986 (Figure 10). Although no additional wells were converted to provide injection backup, several of the infill wells have significant reserves. Unit Well No. 253 is projected to ultimately recover in excess of 200 MMBBL and several other wells should have recoveries in the 50-55 MMBBL/well range. Infill well performance has been sufficient to warrant an aggressive infill drilling program. Sirgo Production Company, Inc. acquired a major working interest position in this project for the purpose of redeveloping the waterflood by 20-acre infill drilling, well rework and reestablishing full-scale injection of 40-acre, 5-spot pattern configuration.

FUTURE PERFORMANCE PROJECTION

Additional Proved Undeveloped reserves of 11,000 MBBL were assigned for the selective drilling of 142 producers on 20-acre spacing and establishing injection on 40-acre, 5-spot patterns (Table 3). Total remaining Proved recovery under the proposed development is estimated at 12,352 MBBLS (Table 2). Potential recovery for each of the drilling well locations was developed from volumetric calculations of remaining mobile oil within each pattern area and from estimates of displacement efficiency. Remaining mobile oil for the total Unit was estimated at 31,265 MMBBL. Estimated recovery and producing rate predictions were influenced by experience in analogous projects and from the five Myers Unit 20-acre infill drilled wells. The limited scope of this evaluation and the limited data availability precluded the application of an analytical waterflood prediction technique or reservoir simulation. Achieving the projected oil rates and reserves are dependent upon adequate injection pressure support, improved overall conformance and close monitoring of the waterflood operations.

REDEVELOPMENT PLAN AND ECONOMICS

The 20-acre infill drilling, well recompletions and reestablishment of water injection on 40-acre, 5-spot patterns being recommended is set forth on Figure 11 and Tables 3 through 7. The program plan involves:

- 1. Drilling 142 producers.
- 2. Returning 15 wells to production status.
- 3. Drilling 2 injectors.
- 4. The reentry or conversion of 100 wells to injection.
- 5. Workover 94 injectors.

- 6. Reactivating 10 injectors.
- 7. Expansion and modification of injection facilities.
- 8. Expansion of production facilities.

Successful development of the project will depend upon the judicious utilization of information from the initial infill drilling. As additional geological and reservoir data becomes available, the reservoir characteristics and saturation distribution will be better defined. Therefore, plans for subsequent development will require revision and refinement. The completed project under current plans will have 157 producers and 206 injectors. The rate-time projections for the project is shown by Figure 12.

The price and escalation scheme were applied at the direction of Sirgo Production Company, Inc. with both an escalated and non-escalated cases being run. For the escalated pricing case, oil pricing of \$20/BBL, with no adjustments, was escalated starting immediately at 6% per annum to a maximum of \$50/BBL. Starting gas prices were based on actual prices as of September 30, 1990 and escalated starting immediately at 6% per annum until the oil price reached the maximum price.

Lease operating expenses were estimated by Sirgo Production Company, Inc. based on their experience for similar projects. The estimated expenses of \$800/well/month for producer and \$600/well/month for injector included general overhead. Expenses and investments were escalated starting immediately at 6% per annum until the primary product reached the maximum price. No equipment salvage value or abandonment costs were included for the properties. The cost for drilling, workovers and the reestablishment of injection were developed by Sirgo Production Company, Inc. We have reviewed their estimates for reasonableness, but made no independent determination. Investment costs do not include costs of financing.

Economics for the Myers Unit were based on a 100% working interest portion. Projections of incremental economics for the escalated case indicate that a capital investment of 44,119 M\$ will generate a 12% discounted future net revenue of 54,419 M\$ resulting in a 50% rate of return and a 4.1 year payout. The investment cost does not include acquisition costs and the investment costs does not include costs of financing. A summary of the escalated reserves and economics for the project is shown by Table 6. Table 8, 9 and 10 are escalated reserves and cash flow summaries for Total Proved, Proved Developed Producing and Proved Undeveloped, respectively. Tables 7 through 13 are the corresponding cash flow summaries for the unescalated case. The oil rate forecast for the Total Proved and Proved Developed Producing reserves is shown by Figure 12.

TABLE 1

Project Performance Summary Myers Langlie Mattix Unit Langlie Mattix-Seven Rivers-Queen-Grayburg Field Lea County, New Mexico

Field Discovery Date	1936
Initial Completion Date	1936
Unitization Date	February 1, 1974
Initial Water Injection Date	August 1975
Total Completions: Producers Injectors Total	121 <u>111</u> 232
Active Completions @ 9-1-90 Producers Injectors Total	87 <u>65</u> 152
Unitized Area (Acres)	9,560
Average Spacing (Acres/Well)	40
OOIP (MSTB)	115,000
Cumulative Oil Production @ 9-1-90 (MBBL)	14,424
Cumulative Oil Production @ 9-1-90 (BBL/Acre)	1,509
Average Oil Cumulative Per Well - 232 Wells (MBBL)	62
August 1990 Oil Rate - Total Unit (BOPD)	710
August 1990 Oil Rate - (Wells/BOPD)	8.2
Ultimate Primary Oil Recovery (MBBL)	9,000
Ultimate Primary Oil Recovery (BBL/Acre)	941
Recovery Factor (%)	7.8
Average Oil Recovery Per Well - 227 Wells (MBBL)	40
Cumulative Secondary Oil Recovery @ 9-1-90 (MBBL)	5,424
Ultimate Secondary Oil Recovery (MBBL)	6,868
Average Ultimate Secondary (Wells/MBBL)	56.8
Secondary : Primary Ratio	0.76
Ultimate Oil Recovery Under Current Mode (MBBL) Estimated Recovery Factor (%) Remaining Oil Recovery Under Current Mode @ 9-1-90 (MBBL)	15,868 13.8 1,352
Cumulative Gas Production @ 9-1-90 (MMCF)*	42,635
Cumulative GOR (SCF/BBL)	2,956
August 1990 Gas Rate (MCFPD)	381
August 1990 GOR (SCF/BBL)	537

TABLE 1

Project Performance Summary Myers Langlie Mattix Unit Langlie Mattix-Seven Rivers-Queen-Grayburg Field Lea County, New Mexico

Cumulative Water Production @ 9-1-90 (MBBL)	37,637
Cumulative WOR (Volume/Volume)	2.61
Cumulative Watercut (Percent)	72.3
August 1990 Water Rate (BWPD)	5,546
August 1990 WOR (Volume/Volume)	7.82
August 1990 Watercut (Percent)	88.7

Cumulative Water Injection @ 9-1-90 (MBBL)146,051Cumulative Injection-Secondary Oil Recovery Ratio (STB/STB)26.9Cumulative Injection-Withdrawal Balance (RBBL/RBBL)2.0August 1990 Injection Rate - Total Unit (BWPD)23,418August 1990 Injection Rate - Per Well (Range/BWPD)360

* Gas production records are incomplete prior to 1959.

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Recovery Calculations Texaco - Myers Langlie Mattix Unit Langlie Mattix - Seven Rivers - Queen - Grayburg Field Lea County, New Mexico Original Oil-in-Place Where Ah = Reservoir Volume (Ac-Ft) Ø = Porosity Sw = Connate Water Saturation Boi = Original Formation Volume Factor N = 7,758 Ah $\emptyset(1-Swi)/(Boi)$ = 7,758 (223,000)(.13)(1-0.40)/1.177 = 115,000 MSTB = 516 STB/Ac-Ft I. Project Status (Effective January 1, 1991) Ultimate Recoveries Under Current Mode of Operations 9,000 Ultimate Primary Recovery (MSTB) Primary Recovery Factor (%) 7.8 Ultimate Secondary Recovery (MSTB) 6,868 Secondary : Primary Ratio 0.76 Combined Ultimate Primary + Secondary (MSTB) 15,868 Recovery Factor (%) 13.8 II. Proposed Redevelopment (Effective January 1, 1991) Cumulative Oil Production @ January 1, 1991 (MSTB) 14,516 Cumulative Recovery Factor @ January 1, 1991 (%) 12.6 OIP @ May 1, 1990 (=115,000-14,516)(MSTB) 100.484 Estimated Oil Saturation @ January 1, 1991 Soi = (1-RF)(Bo/Boi)(1-Su)= (1-.126)(1.115/1.177)(1-0.45)= 0.455Where Swi = estimated average current water saturation oil at undrilled locations. Remaining Mobil Oil N_m = 7,758 Ah (Ø) (Soi - Sor)/Bo = 7,758 (223,000 (.13) (.455 - 0.30)/1.115 = 31,265 MSTB

Recovery Calculations Texaco - Myers Langlie Mattix Unit Langlie Mattix - Seven Rivers - Queen - Grayburg Field Lea County, New Mexico

II. Proposed Redevelopment (Effective January 1, 1991) - Continued Estimated Recoverable Mobil Oil (PDP and PUD) Npf = Nm (EV) = (31,265)(0.40) = 12,352 MSTB Where EV = Conformance Efficiency Cumulative Oil Production @ January 1, 1991 (MSTB)

cumulative off froduction & Sandary 1, 1991 (MSTB)	14,010
Remaining Proved Reserves @ January 1, 1991 (MSYB)	12.352
Ultimate Proved Reserves @ January 1, 1991 (MSTB)	26,868
Recovery Factor (%)	23.4

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Well Summary Proposed Redevelopment Plan Myers Langlie Mattix Unit Lea County, New Mexico

<u>Phase</u>	_I	<u>11</u>	<u>111</u>	IV	<u>TOTAL</u>
Producers					
Drill	35	38	35	34	142
Existing	<u>_3</u>	_2	_2	<u>_8</u>	<u> 15</u>
Total	38	40	37	42	157
_ ·					
<u>Injectors</u>			_		
Drill	0	1	0	1	2
Conversions	13	24	30	33	100
Existing	<u>18</u>	<u>25</u>	<u>28</u>	<u>33</u>	<u>104</u>
Total	31	50	58	67	206
Total Wells	69	90	95	109	363

TABLE 4 PROPOSED INVESTMENT SCHEDULE AND WELL SUMMARY MYERS LANGLIE MATTIX UNIT RE-DEVELOPMENT PLAN PHASE 1

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							INJ	ECTORS			INVES	THENT
			DR	ILL: PRODU	CERS	•••••		•••••	• • • • • •		•••••	
			• • • • • •	•••••	•••••			WORKOYER				CUM
		EST		RESERVES			WELL			FACILITY	187 M\$	74 194
PHASE		ATE	NO.	(MBBL)	М\$	NO.	NO.	NO.	M\$	M\$	•••••	
••••••		91	1.1	175	180.5		133		36		215.5	
1	-	91	1.5		180.5		143		35		215.5	433 0
1	1		1-8	150	180.5		168		36		216.5	649.5
1	1	91	1-15	150	180.5		172		106		286.5	936 0
1	2	91	1-19	150	180.5		176		33		213.5	1149.5
1	z	91	1-18	150	180.5		178		105		286.5	1435.0
I.	2	91	1-22	150	180.5		199		106		286.5	1722.5
ſ	2	91	1-17	140	180.5		201		33		213.5	1936.0
I	. 1	91	1 - 33	135	180.5		203		36		216.5	2152.5
F	3	91	1+4	125	180.5		213		106	205.1	492. 6	2645.1
1	3	91	1 • 9	125	180.5		215		106		286.5	2931.6
ł	3	91	1-14	125	180.5		234		36		218.5	3148.1
1	4	91	1-34	125	180.5		236		36		216.5	3364.6
1	4	91	1-31	115	180.5			130	- 41		221.5	3586.1
1	4	91	1-6	115	180.5			132	17		197.5	3783.6
l		91	1.7	115	180. 5			142	17		197.5	3981.1
1		91	1-24	115	180.5			144	61		241.5	4222.6
1	5	91	1-32	105	180.5			167		206.1	419.6	4642.2
i i	5	91	1-23	105	180. 5			169	36		216.5	4858.7
	5	91	1.3	100	180. 5			171	36		216.5	5075.2
i	6	91	1-10	110	180.5			177	106		286. 5	5361.7
i	6	91	1-26	100	180.5			179	106		286.5	5648.2
1	6	91	1-27	100	180.5			200	105		286. 5	5934.7
i i	6	91	1-29	100	180, 5			202	56		236.5	6171. 2
1	7	91	1-35	100	180.5			214	17		197.5	6368.7
1	7	91	1-11	95	180.5			216	17	206. 1	403.6	6772.3
1	7	91	1.21	95	180.5			233	16		196. 5	6968.8
1		91	1.2	90	180. 5						180.5	7149.3
1			1-25	90	180.5						180. 5	7329. 8
t	1		1.30	90	180.5						180. 5	7510.3
i	1		1-16	80	180.5					206. 1	386.6	7896. 9
	-	91	1-13	70	180.5						180.5	8077.4
I		91	1.20	70	180.5						180.5	8257.9
1	9		1-12	40	180. 5						180.5	\$438.4
1	-	91	1-28	40	180. 5						180. 5	\$61\$. 9
			••••	••••	•••••	•••••	••••	• • • • • • • • •	••••	•••••	•••••	••••
			35	3890	6317.5	0	13	14	1477	824.4	8618.9	8518.9
			••••	••••	•••••	•••••	• • • •	• • • • • • • • •	• • • • •	••••	•••••	••••

TOTAL PHASE

TABLE 4 PROPOSED INVESTMENT SCHEDULE AND WELL SUMMARY MYERS LANGLIE MATTIX UNIT RE-DEVELOPMENT PLAN PHASE 11

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							INJ	ECTORS			TOTAL P INVEST	MENT
			DR	ILL: PRODUC	ERS			WORKOVER	••••		• • • • • • • • • •	CUM
		NVEST	WELL	RESERVES	INY	WELL		WELL	INV	FACILITY	187	INY
PHASE		DATE	NO.	(MB8L)	K\$	NO.	NO.	NO.	M\$	K\$	M\$	MS
•••••					•••••	•••••		•••••	••••	••••	••••	
		9 91		105 100	180.5 180.5	36 - X	170		36 164		216.5 344.5	216.5 561.0
) 91) 91		100	180.5	30.7	38		46		432.6	993.6
	1(1(100	180.5		40		33		213.5	1207.1
				100	180.5		52		46		226.5	1433.6
	10 11			100	180.5		64		46		226.5	1650.1
				100	180.5		65		46		226.5	1886.6
	1 1			100	180.5		68		46		226.5	2113.1
	1 1			100	180.5		70		46		226.5	2339.6
				90	180.5		72		46		226.5	2566.1
	1 17			90	180.5		74		33		419.6	2985.7
				90	180.5		96		106		286.5	3272.2
		: 91 : 91		90	180.5		100		106		286.5	3558.7
				80	180.5		102		33		213.5	3772.2
	-				180.5		105		33		213.5	3985.7
		92		80			252		33		213.5	4199.2
		92		80	180.5		135		33		213.5	4412.7
		92		80	180.5							
		92		80	180.5		141		33		213.5	4626.2
		92		80	180.5		174		106		286.5	4912.7
		92		80	180.5		205		33		419.6	5332.3
		92		80	180.5		207		106		286.5	5618.8
1		92		70	180.5		209		106		286.5	5905.3
l		92		70	180.5		211		106		286.5	6191.8
1		92		70	180.5		240		36		216.5	6408.3
1		92		70	180.5		242		36		216.5	6624.8
1				70	180.5			35	46		226.5	6851.3
1				70	180.5			37	17		197.5	7048.8
1				70	180.5			39	106		286.5	7335.3
	1 4			70	180.5			61	17		197.5	7532.8
1		92		60	180.5			63	17		197.5	7730.3
1	1 5	92		60	180.5			65	106		286.5	8016.8
1				60	180.5			67	106		492.6	8509.4
1				60	180.5			69	17		197.5	8706.9
1				50	180.5			71	17		197.5	8904.4
I	E 6	-		50	180.5			73	17		197.5	9101.9
I	1 6			40	180.5			95	17		197.5	9299.4
I	i 6	92	11-31	40	180.5			97	106		286.5	9585.9
1	i 7	92	11-37	40	180. 5			, 99	46		226. 5	9812.4

TABLE 4 PROPOSED INVESTMENT SCHEDULE AND WELL SUMMARY MYERS LANGLIE MATTIX UNIT RE-DEVELOPMENT PLAN PHASE II

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				RILL: PRODU	~ E D Č		IN	ECTORS			TOTAL INVE	PHASE
				·····		DRILL	CONV	WORKOVER				CUM
	INVE	51	WELL	RESERVES	INV	WELL	WELL	WELL	ENV	FACILITY	INV	INV
PHASE	DAT	E	NO.	(MBBL)	M\$	NO.	NO.	ND.	M\$	M2	M2	M2
••••	••••	•• •	• • • •	•••••	•••••	•••••	••••	•••••	••••	•••••	•••••	•••••
11	7							101	46		46	9858.4
11	7	92						103	61		61	9919.4
	7	92						107	106		105	10025.4
11	8	92						134	17		17	10042.4
11		92						136	106		106	10148.4
11	1	92						140	17		17	10165.4
11	1 9	92						173	106		106	10271.4
11	9 9	92						204	17		17	10288.4
11	9 9	92						208	17		17	10305.4
11	9 9	92						210	106		106	10411.4
11	9 9	32						239	16		16	10427.4
		•	• • • •	••••	•••••		• • • •		• • • • •		• • • • • • • • •	••••
			38	2925	6859	1	24	24	2744	824.4	10427.4	10427.4
		•	• • • •	••••	•••••	×	••••	• • • • • • • • •	••••	••••	•••••	••••

TABLE 4 PROPOSED INVESTMENT SCHEDULE AND WELL SUMMARY MYERS LANGLIE MATTIX UNIT RE-DEVELOPMENT PLAN PHASE III

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				ILL: PRODU				JECTORS			INVES	TMENT
PHASE	DA	VEST TE	WELL NO.	RESERVES (MBBL)	ENV M\$	DRILL WELL NO.	CONV WELL NO,	WORKOVER	INV MS	FACILITY MS	1 N Y	CUM I NY MS
111		92	111-2		180.5		131				267.5	
111	10	92	111-12	150	180.5		145	7,16	140		320.5	588.0
111	10	92	111-25	130	205.5		98	17	123		328.5	916.5
111	10	92	111-30	130	205.5		139	30	123		328, 5	1245 0
111	11	92	111-11	110	180.5		2	25	123		303.5	1548.5
111	11	92	411-13	110	180.5		4	27	53	206.1	439.6	1988.1
111	11	92	111-25	110	205.5		6	28	123		328.5	2316. 6
111	11	92	111-7	90	180.5		14	43	102		282.5	2599.1
111	12	92	111-19	90	205.5		15	45	72		277.5	2876.6
111	12	92	111-1	80	180. 5		18	47	69		249. 5	3126.1
111	12	92	111-8	80	180.5		25	53	50		230.5	3356.6
111	12	92	111-14	80	180.5		29	55	94		274.5	3631.1
111	1	93	111-17	80	180.5		44	57, 77	140		320.5	3951.6
111	1	93	111-18	80	205.5		46	79	50	206.1	461.6	4413.2
111	1	93	111-33	20	205.5		54	89	94		299. 5	4712.7
111	1	93	111-20	70	205.5		56	91, 93	140		345.5	5058.2
111	2	93	111-29	65	205.5		58	109	50		255.5	5313.7
111	2	93	111-3	60	180.5		59	111	50		230.5	\$544.2
E E E	2	93	111-4	60	180.5	-	60	113	50		230.5	5774.7
111	2	93	111-31	50	205.5		75	128	58		263. 5	6038.2
111	3	93	111-34	60	205.5		76		33		238.5	6276.7
111	3	93	111-6	55	180.5		78		105	205.1	492.6	6769.3
111	3	93	111-9	50	180.5		80		105		286.5	7055. 8
111	3	93	111-21	50	205.5		90		36		241.5	7297.3
111	- 4	93	111-24	50	205.5		92		41		246.5	7543.8
111	4	93	111-28	45	205.5		94		33		238.5	7782.3
111	4	93	111-5	45	180.5		251		33		213.5	7995.8
111	4	93	111-10	40	180.5		112		33		213.5	8209.3
111	5	93	111-23	40	205.5		114		106		311.5	8520.8
111	5	93	111-15	35	180.5		166		33		213.5	8734.3
111	5	93	111-22	30	205.5			146	33	206.1	444.6	9178.9
111	5	93	111-32	30	205. 5			165	17		222.5	9401.4
111	6	93	111-16	25	180, 5			19	105		286. 5	9687.9
111	6	93	111-27	25	205.5			24	106		311.5	9999.4
111	6	93	111-35	20	205. 5						205.5	10204.9
			••••	••••	•••••	•••••	••••	••••		•••••	••••	•••••
			35	2465	5767.5	0	30	28	2613	824.4	10204.9	10204.9
			••••	••••	••••	• • • • • •	••••	•••••	••••	•••••	• • • • • • • • •	••••

TOTAL PHASE

TABLE 4 PROPOSED INVESTMENT SCHEDULE AND WELL SUMMARY MYERS LANGLIE MATTIX UNIT RE-DEVELOPMENT PLAN PHASE IV

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									ECTORS				TMENT
		1 N V	EST	•••••	RESERVES	•••••	DRILL	CONV	WORKOVER WELL		FACILITY	ENV	CUM INY
	PHASE		TE	NO.	(M88L)		NO.	NO.	NO.	M2	M2	M\$	М2
••	 I Y		93	11.27	 90	205.5	•••••		10, 13, 32	85		290. 5	290.5
	IY	7	93	18-29	90	205.5		147	81	67		272.5	563.0
	1 Y	7	93	18-20	80	205.5		9	85	77		282.5	845.5
	17	7	93	18-31	80	205.5		12	86	74		279.5	1125.0
	I Y	7	93	14-10	75	205.5		31	105	139		344.5	1469. 5
	11	1	93	14-6	70	205.5		33	115	66	206.1	477.6	1947 1
	IV	8	93	14.7	70	205.5		88	117	66		271.5	2218.6
	17	1	93	14-14	70	205.5		104	120	69		274.5	2493.1
	IY	8	93	1 V - 32	70	205.5		116	122	72		277.5	2770.6
	Ε¥	9	93	14-33	70	205.5		121	138	62		267.5	3038.1
	1 Y	9	93	17-34	70	205.5		123	148	139		344.5	3382.6
	17	9	93	17-16	70	205.5		127	152	69		274.5	3657.1
	I Y	9	93	17-8	60	205.5		137	154	139		344.5	4001.6
	I Y	10	93	18-24	60	205.5		153	157	139		344.5	4346.1
	E V	10	93	17-30	60	205.5		155		106	206.1	517.6	4863.7
	I Y	10	93	17-9	55	205.5		158	181	58		263. 5	5127.2
	IV	10	93	17-11	50	205.5		164	189	79		284.5	5411.7
	IY	11	93	18-17	50	205.5		180	192	152		357.5	5769.2
	١٧	11	93	17-22	50	205.5		182	218	50		255.5	6024.7
	11	11	93	14-2	45	205.5		188	222	79		284.5	6309.2
	1 Y	11	93	14-4	45	205.5		190	224	87		292.5	6601.7
	17	12	93	14-3	40	205.5		191	2 2 B	87		292.5	6894.2
	17	12		14-3	40	205.5		193	231	50	205.1	461.6	7355.8
	17	12	93	114-5	30	205.5		197	244	53		258.5	7614.3
	IV	12	93	14-12	30	205.5		217	245	50		255.5	7869.8
	17	1	94	14-13	30	205. \$		219	250	79		284.5	8154.3
	١V	1	94	I¥-18	30	205.5		223	159	212		417.5	8571.8
	14	1	94	19-23	30	205.5		227		106		311.5	8883.3
	I V	1	94	18-25	30	205.5		230		33		238.5	9121.8
	IV	2	94	17-26	30	205. 5	232 · X			164		369.5	9491.3
	ΕV	2	94	17-28	30	205.5		118		33	206.1	444.6	9935. 9
	EV.	2	94	18.15	30	205.5		245		106		311.5	10247.4
	EV	2	94	17.19	20	205. 5		247		106		311.5	10558.9
	I Y	3	94	18-24		205.5		249		36		241. 5	10800.4
					1770	 6987	1	33		2989	824.4		10800.4
				•••••		•••••	•••••	••••	• • • • • • • • • •	••••	•••••	••••	•••••

TABLE 4PAGE 5 OF 6

TOTAL PHASE

PROPOSED INVESTMENT SCHEDULE AND WELL SUMMARY MYERS LANGLIE MATTIX UNIT RE-DEVELOPMENT PLAN PHASE SUMMARY

						IN	JECTORS			TOTAL INVES	PHASE
			ILL: PRODU							•••••	CUM
PHASE	FNVEST DATE	WELL NO.	RESERVES (MBBL)	1 NV M\$	WELL NO.	WELL NO.	WELL NO.	NY Ny	FACILITY M\$	1NV M\$	ENV M\$
PHASE I-IV TOTALS	1 91- 3 94	142	11050	26931	2 	 100	94			40051.6	40051,6

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TABLE 4 PAGE 6 OF 6

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							{NJ	ECTORS			TOTAL F Invest	MENT
PHASE		VEST NTE	•••••	RESERVES	 INV		WELL	WORKOVER WELL NO.		FACILITY MS	INV MS	CUM INV MS
				(MDDL)	-			NU.				
I		91		175			133		36		216.5	216.5
t	1	91	1 - 5	150	180.5		143		36		216.5	433.0
1	1	91	1 - 8	150	180.5		168		36		215.5	649.5
1	1	91	1-15	150	180.5		172		105		286.5	936.0
1	2	91	1 - 19	150	180.5		176		33		213.5	1149.5
ł	2	91	1-18	150	180.5		178		106		286.5	1436.0
I	2	91	1 - 22	150	180.5		199		106		286.5	1722.5
1	2	91	1-17	140	180.5		201		33		213.5	1936.0
I.	3	91	1 - 33	135	180.5		203		36		216.5	2152.5
I	3	91	1 - 4	125	180.5		213		106	206.1	492.6	2645.1
ļ	3	91	1-9	125	180.5		215		105		286.5	2931.6
I	3	91	1-14	125	180.5		234		36		216.5	3148.1
i i	4	91	1-34	125	180.5		236		36		216.5	3364.6
t	4	91	1-31	115	180.5			130	41		221.5	3586.1
1	4	91	1 - 6	115	180.5			132	17		197.5	3783.6
1	4	91	1-7	115	180.5			142	17		197.5	3981.1
1	5	91	1-24	115	180.5			144	61		241.5	4222.5
I	5	91	1 - 32	105	180.5			167	33	206.1	419.6	4642.2
L	5	91	1-23	105	180.5			169	36		216.5	4858.7
ł	5	91	1 - 3	100	180.5			171	36		216.5	5075.2
1	5	91	1-10	110	180.5			177	105		286.5	5361 7
1	6	91	1-26	100	180.5			179	106		286.5	5648.2
1	6	91	1-27	100	180.5			200	106		286.5	5934.7
1	6	91	1-29	100	180.5			202	56		236.5	6171.2
I.	7		1.35	100	180.5			214	17		197.5	6368.7
1	7		1-11	95	180.5			216	17	206.1	403.5	6772.3
l	7	91	1-21	95	180.5			233	16		196.5	6968 8
1	7		1-2	90	180. 5						180.5	
1	8	91	1-25	90	180.5						180.5	
	-1	91	1 - 30	90	180.5						180.5	7510.3
			1-16	80	180.5					206.1	386.6	7896.9
	8	91	1-13	70	180.5						180.5	8077.4
	9	91	1-20	70	180. 5						180.5	8257.9
	9	91	1-12	40	180. 5						180. 5	8438.4
1	9	91	1-28	40	180.5						180.5	8618.9
1	9	91	11-30	105	180.5		170		36		216.5	8835.4
11	10	91	11-30	100	180.5	36 - X			164		344.5	9179.9
11		91	11-22	100	180.5	JU-N	38		46		432.6	9612.5
11	10	91	11.77	144	194.9				-0	544, I	- 32. 0	2016. J

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		01	RILL: PRODU	CFRS	IN	JECTORS		TOTAL INVES	
					DRILL CONV	WORKOVER			CUM
	INVEST	WELL	RESERVES	INV	WELL WELL		FACILITY	JNY	INV
PHASE	DATE	NO.	(MBBL)	M\$	NO. NO.	NO. M\$	М\$	M\$	MS
•••••	•••••	•••••	•••••	•••••		•••••	• ••••	•••••	• • • • • • • • •
11	10 91	11-19	100	180.5	40	3:	3	213.5	9826.0
H	10 91	i1-18	100	180.5	62	46	5	226.5	10052.5
11	11 91	11-13	100	180.5	64	41	5	226.5	10279.0
11	11 91	11-10	100	180.5	66	41	5	226.5	10505.5
11	11 91	11-9	100	180.5	68	41	5	226.5	10732.0
E I	11 91	11-15	100	180.5	70	46	5	225. 5	10958.5
11	12 91	11-4	90	180.5	72	46	5	226.5	11185.0
11	12 91	11-8	90	180.5	74	3:	3 205.1	419.6	11604 6
11	12 91	11-20	90	180.5	96	106	5	286.5	11891.1
11	12 91	11-35	90	180.5	100	106	5	286. 5	12177.6
		••••	••••	••••	•••••	•••••	• • • • • • • • •	• • • • • • • • •	••••
		48	5155	8664	1 25	14 2273	1235.6	12177.6	12177.6
		•••••	••••	•••••	•••••	•••••	•••••	•••••	•••••

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TABLE 5 PAGE 2 OF 8

PHASE SUMMARY

MYERS LANGLIE MATTIX UNIT

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RE-DEVELOPMENT PLAN

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							נאו	ECTORS			TOTAL P INVEST	MENT
	INV	EST	•••••	RESERVES		DRILL WELL		WORKOVER WELL		FACILITY	INV	CUM
PHASE	DA	TE	NO.	(MBBL)	M\$	NO.	NO.	NO.	M\$	М\$	M\$	M\$
•••••	•••			••••		••••		•••••	••••			••••
11		92	11-3	80	180.5		102 106		33 33		213.5	213.5
11	1	92 92	-7 -12	80 80	180.5 180.5		252		33		213.5 213.5	427.0 640.5
11	-	92	11-12	80	180.5		135		33		213.5	854.0
11		92	11-23	80	180.5		141		33		213.5	1067.5
	2		11-24	80	180.5		174		106		286.5	1354.0
11	2	92	11-32	80	180.5		205		33		419.6	1773.6
11	2	92	11-33	80	180.5		207		106		286.5	2060.1
11	3	92	11-2	70	180.5		209		106		286.5	2346.6
11	3	92	11-6	70	180.5		211		105		285.5	2633 1
11	3	92	11-11	70	180.5		240		36		216.5	2849.6
11	3	92	11-15	70	180.5		242		36		216.5	3066.1
11		92	11-21	70	180.5			35	46		226.5	3292.6
11		92	11-26	70	180.5			37	17		197.5	3490.1
H		92	11-27	70	180.5			39	106		286.5	3776.6
11		92	11-28	70	180.5			61	17		197.5	3974.1
11		92	11-36	60	180.5			63	17 106		197.5 286.5	4171.6 4458 1
11		92 92	11-38 11-34	60 60	180.5 180.5			65 67	106		492.6	4950 7
11		92	11-34	60	180.5			69	17		197.5	5148.2
11	6	92	11-1	50	180.5			71	17		197.5	5345.7
11	6	92	11-14	50	180.5			73	17		197.5	5543.2
11	6	92	11-29	40	180.5			95	17		197.5	5740.7
11	6	92	11-31	40	180.5			97	106		286.5	6027 2
11	7	92	11-37	40	180.5			99	46	•	226.5	6253.7
H	7	92						101	46	i	46	6299.7
11	7	92						103	61		61	6360.7
11	7	92						107	106	i	106	6466.7
EL .	8	92						134	17		17	6483.7
11	8	92						136	106		106	6589.7
11	8							140	17		17	6606.7
11	8	92						173	106		106	6712.7
11	9	92						204 208	17		17 17	6729.7 6745.7
11	9	92						208	106		106	6852.7
11	9	92 82						239	16		16	6868.7
11	9 10	92 92	111-2	150	180.5		131	3, 5	87		267.5	7136.2
111	10	92 92	111-12		180.5		145	7,16	140		320.5	7456 7
111	10	92	111-25		205.5		98	17	123		328.5	7785.2
111	10	92	111-30		205.5		139	30	123		328.5	8113.7
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TABLE 5PAGE 3 OF 8

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				ILL: PRODU			IR.	ECTORS			TOTAL INVES	PHASE
PHASE		IEST NTE	WELL NO.	RESERVES (MBBL)	INV M\$	DRILL WELL NO.	CONV WELL NO.	WORKOVER WELL NO.	INV MS	FACILITY MS	- INV M\$	CUM INV M\$
												••••
111	11	92	111-11	110	180.5		2	26	123		303.5	8417.2
111	11	92	111-13	110	180. 5		4	27	53	206. 1	439.6	8856.8
111	11	92	111-26	110	205.5		6	28	123		328.5	9185.3
111	11	92	111-7	90	180.5		14	43	102		282.5	9467.8
111	12	92	111-19	90	205.5		15	45	72		277.5	9745.3
HI	12	92	111-1	80	180.5		18	47	69		249.5	9994.8
111	12	92	111-8	80	180.5		25	53	50		230.5	10225.3
111	12	92	111-14	80	180.5		29	55	94		274.5	10499.8
				••••	• • • • • •	· · · · · ·	• • • •		• • • • •	•••••	· · · · · · · · · ·	•••••
			37	2970	6778.5	0	24	38	3103	618.3	10499.8	10499.8
				••••	•••••	•••••	••••	•••••	• • • • •	••••	••••	•••••

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			ħ₽	ILL: PRODUC		INJECTORS					TOTAL PHASE INVESTMENT		
PHASE	I NYE DAT		•••••		INY	DRILL WELL NO.	WELL	WORKOVER WELL NO.		FACILITY	1NV MS	CUM 1NV MS	
•••••		••	•••••	•••••	-			•••••	•	•	•		
111	1	93	111-17	80	180.5		44	57, 77	140		320. 5	320.5	
111	1	93	111-18	20	205.5		46	79	50	205.1	461.6	782.1	
111	1	93	111-33		205.5		54	89	94		299.5	1081.6	
111	1	93	111-20	70	205.5		56	91,93	140		345.5	1427.1	
111	2	93	111-29	65	205.5		58	109	50		255.5	1682.6	
111	2	93	111-3	60	180.5		59	111	50		230.5	1913.1	
111	2	93	111-4	60	180.5		60	113	50		230.5	2143.6	
111	2	93	111-31	60	205.5		75	128	58		263.5	2407.1	
111	3		111-34	60	205.5		76		33		238.5	2645.6	
111	3	93	111-6	55	180.5		78		105	206.1	492.6	3138.2	
111	3	93	111-9	50	180.5		80		106		286.5	3424.7	
111	3 (93	111-21	50	205.5		90		36		241.5	3666.2	
111	4 9		111-24	50.	205.5		92		41		246.5	3912.7	
111	4 9	93	111-28	45	205.5		94		33		238.5	4151.2	
111	4 9	93	111-5		180.5		251		33		213.5	4364.7	
111	4 1	93	111-10	40	180.5		112		33		213.5	4578.2	
111	5 9	93	111-23	40	205.5		114		105		311.5	4889.7	
111	5 !	93	111-15	35	180.5		¥66		33		213.5	5103.2	
111	5 9	93	111-22	30	205.5			146	33	206.1	444.5	5547.8	
111	5 9		111-32	30	205.5			165	17		222.5	5770.3	
111	6 9	93	111-16	25	180.5			19	106		286.5	6055.8	
111	6 9	93	111-27	25	205.5			24	106		311.5	6368.3	
111	6 9	93	111-35	20	205.5						205.5	6573.8	
14	6 9	93	18-27	90	205.5		129	10, 13, 32	85		290.5	6864.3	
14	7 9		18-29	90	205.5		147		67		272.5	7136.8	
14	75		14-20	80	205.5		9	85	77		282.5	7419.3	
14	7 9	33	14-31	20	205.5		12	86	74		279.5	7698.8	
L Y	7 9			75	205.5		31	105	139		344.5		
17	8 9		14.2	70	205. 5		33	115	66	206.1	477.6		
19	8 9		14-2	70	205. 5		88	117	66		271.5		
1¥	8 9		14-14	70	205.5		104	120	69		274.5	9066.9	
14		3	18-32	70	205.5		116	122	72		277.5	9344.4	
14		13	18-33	70	205. 5		121	138	62		267.5	9611.9	
· 1 V		3	14-34	70	205. 5		123	148	139		344.5	9956.4	
14		13	{ ¥•16	70	205.5		127	152	69		274.5		
14		13	1V-8	60	205.5		137	154	139		344. 5	10575.4	
14		3	18.24	60	205.5		153	157	139		344.5	10919 9	
19		3	14-30	60	205.5		155		106	206.1	517.6	11437.5	
1 ¥		3	14-9	55	205.5		158	181	58		263, 5	11701.0	
14		3	18-11	50	205. 5		164	189	79		284.5	11985.5	
14	11 9	3	18-17	50	205.5		180	192	152		357.5	12343.0	

TABLE 5 PAGE 5 OF 8

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							IN	JECTORS			TOTAL INVES	PHASE STMENT
			DR	ILL: PRODUC	CERS	•••••	• • • • •	• • • • • • • • • • •	•••••		•••••	• • • • • • • • • •
			• • • • • •	•••••		DRILL	CONV	WORKOVER				CUM
	EN/	/EST	WELL	RESERVES	ENY	WELL	WELL	WELL	INV	FACILITY	ENV	1 N Y
PHASE	D	ITE	NO.	(MBBL)	M\$	NO.	NO.	NO.	M\$	M\$	M\$	M\$
••••	•••			•••••	••••	•••••	••••	•••••	••••	•••••	••••	•••••
1 V	11	93	18.22	50	205.5		182	218	50		255.5	12598.5
1 V	11	93	17-2	45	205.5		188	222	79		284.5	12883.0
1 ¥	11	93	18-4	45	205.5		190	224	87		292.5	13175 5
E Y	12	93	17-1	40	205.5		191	228	87		292.5	13468.0
1 ¥	12	93	18-3	40	205.5		193	231	50	206.1	451.6	13929.6
۲V	12	93	18-5	30	205.5		197	244	53		258.5	14188.1
E V	12	93	11.12	30	205.5		217	246	50		255.5	14443.6
			••••	••••	••••	•••••	• • • •	• • • • • • • • •	••••	• • • • • • • •	•••••	• • • • • • • • •
			48	2675	9639	0	43	40	3568	1236.6	14443.6	14443 6
				• • • •			• • • •					

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							IN	JECTORS			TOTAL INVES	
			D	RILL: PRODUC	CERS	DRILL	CONV	WORKOYER			•••••	
	11	IVEST	WELL	RESERVES	INV .	WELL	WELL	WELL	INV	FACILITY	INV	INV
PHASE	0	ATE	NO.	(MBBL)	M2	NO.	NO.	NO.	M\$	M\$	M\$	М\$
•••••	•••	••••		••••	••••	•••••	• • • •	••••	•••••	•••••	•••••	•••••
11	1	94	18-13	30	205.5		219	250	79		284.5	284.5
11	1	94	18-18	30	205.5		223	159	212		417.5	702.0
١V	1	94	18-23	30	205.5		227		106		311.5	1013.5
1 Y	1	94	18.25	30	205.5		230		33		238.5	1252.0
١¥	2	94	17-26	30	205.5	232-X			164		369.5	1621.5
17	2	94	14-28	30	205.5		118		33	206.1	444.6	2065.1
I V	Z	94	14-15	30	205.5		245		106		311.5	2377.6
19	Z	94	14-19	20	205.5		247		106		311.5	2689.1
17	3	94	14-24	20	205.5		249		36		241.5	2930.6
			•••••	••••	•••••	• • • • • •	••••	•••••	• • • • •	•••••	•••••	• • • • • • • • •
			9	250	1849.5	1	8	2	875	205.1	2930.6	2930.6
				• • • •	•••••	•••••	• • • •	• • • • • • • • •	• • • • •	•••••	• • • • • • • • •	••••

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TABLE 5 PAGE 7 OF 8

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		DI	RILL: PRODU	CERS			ECTORS		TOTAL PHASE INVESTMENT		
		••••			DRILL	CONV	WORKOVER				CUM
	INVEST	WELL	RESERVES	INV	WELL	WELL	WELL	INY	FACILITY	INY	INV
PHASE	DATE	NO.	(MBBL)	М\$	NO.	NO.	NO.	M\$	M\$	M\$	М\$
•••••	• • • • • • •	••••	•••••	•••••	• • • • • •	• • • •	•••••	••••	•••••	•••••	• • • • • • • • •
	1991	48	5155	8664.0	1	25	14	2277	1236.6	12177.6	12177.6
	1992	37	2970	6778.5	0	24	38	3103	618.3	10499.8	10499.8
	1993	48	2675	9639.0	0	43	40	3568	1236.6	14443.6	14443.6
	1994	9	250	1849.5	1	8	2	875	206.1	-2930.6	2930.6
			•••••	•••••		• •••	••••••	••••		• • • • • • • • •	•••••
	1991-1994	142	11050	26931.0	2	100	94	9823	3297.6	40051.6	40051.6
		••••	•••••	• • • • • • •	• • • • • •	• • • •	• • • • • • • • •	• • • • •	•••••	•••••	•••••

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Summary of Economics - Escalated Case Project Waterflood Redevelopment Myers Langlie Mattix Unit Lea County, New Mexico

	Proved Developed <u>Producing</u>	Proved <u>Undevelope</u>	Total <u>Proved</u>
Effective Date:		- January 1, 199	91
Interest: Working, Decimal Net Revenue, Decimal		1.00	
Gross Reserves: Oil, MBBL Gas, MMCF	1,352 473	11,000 3,850	12,352 4,323
Net Reserves: Oil, MBBL Gas, MMCF	1,014 355	8,250 2,888	9,264 3,243
Net Operating Revenue, M\$	26,715	277,834	304,549
Expenses: Wellhead Taxes, M\$ Operating Costs, M\$	1,773 16,982	18,441 47,830	20,214 64,812
Total, M\$	18,755	66,271	85,026
Investments, M\$	0	44,119	44,119
Future Net Revenue: Undiscounted, M\$ Discounted @ 12% M\$	7,960 6,041	167,444 54,419	175,404 60,460
Payout, Years		4.10	
Annualized Rate of Return, %		49.90	
Income/Investment Ratio: Undiscounted Discounted @ 12%		4.80 2.50	

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Summary of Economics - Unescalated Case Project Waterflood Redevelopment Myers Langlie Mattix Unit Lea County, New Mexico

	Proved		
	Developed	Proved	Total
	<u>Producing</u>	<u>Undeveloped</u>	Proved
Effective Date:		January 1, 1991	
Interest:			
Working, Decimal Net Revenue, Decimal		1.00 75	
Gross Reserves:			
Oil, MBBL	1,352	11,000	12,352
Gas, MMCF	473	3,850	4,323
Net Reserves:			
Oil, MBBL	1,014	8,250	9,264
Gas, MMCF	355	2,888	3,243
Net Operating Revenue, M\$	21,046	171,179	192,225
Expenses:			
Wellhead Taxes, M\$	1,397	11,362	12,759
Operating Costs, M\$	12,768	26,064	38,832
Total, M\$	14,165	37,426	51,591
Investments, M\$	0	40,052	40,052
Future Net Revenue:			
Undiscounted, M\$	6,881	93,702	100,583
Discounted @ 12% M\$	5,342	31,414	36,756
Payout, Years		4.27	
Annualized Rate of Return, %		41.24	
Income/Investment Ratio:			
Undiscounted		3.34	
Discounted @ 12%		1.95	

*Payout based on project effective date

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RESERVES AND ECONOMICS

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SIRGD OPERATING INC ESC

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AS DF JAHUARY 1, 1991

					PRI	:ES	{	PERATIONS	ñ\$			12.00 PCT
MD-YR		GAS, MACE	KET PRDD DIL, MB&L	GAS, MMCF	\$/8	s/n	RE VENUE S	WF TAXES	EXPENSES	COSTS, MS	BTAX, MS	BTAX, MS
12-91	397.141		 297.856					421.373			-8554.044	
12-92	785, 431	245.902	529.073	185.177	21.78	2.33	11953.037	793.382				-10170.123
12-93	1141. 543	379.575	856.232	299.681	23.08	2.47	20505.00	1361.020			-518.022	
12-94	1280, 250	449.087	950.188	336.065	24. 47	2.62	24374.205	1617.838	3337. 012	3507.381	15911.978	123,720
12-95	1192.989	417,546	894.742	313.160	25.94	2.78	24075.650	1598.022	3759.769	. 000	18717.859	11369.962
12-95	1102.004	385, 702	826.503	289.277	27.49	2.94	23573.851	1564.714	3935. 868	. 000	18073.269	21065.457
12-97	9 85, 050	344.766	739.787	258.575	29.14	3.12	22336.29	1482.571	4172.020	. 000	16681.703	29055.620
12-98	843, 231	295.132	632.423	221.349	30.89	3.31	20267.74	1345.271	4236. 996	. 000	14685.480	35335.992
12-99	722. 152	252.753	541.614	189.565	32.74	3.50	18398.96	1221.232	4491. 216	. 900	12686.521	40180.189
12- 0	634. 167	221. 9 58	475.626	166.468	34, 71	3.71	17126.75	1136.787	4227.559	. 000	11762.405	441.90.308
12- 1	503. 608	176.263	377.706	132.197	36.79	3.94	14416.81	956.918	2494. 468	. 000	10965.427	47528.172
12- 2	453, 247	158,636	339.935	118.977	39.00	4.17	13753.62	912.897	2644. 136	. 000	10196.589	50299.450
12- 3	407.923	142.773	305.942	107.080	41.34	4.42	13120.97	870.98	2802. 784	. 000	9447.290	52591.976
12- 4	367.130	128.496	275.343	96.372	43.82	4.69	12517.42	2 830.843	i 2970. <mark>9</mark> 51	. 000	8715.626	54480, 348
12- 5	330. 417	115.646	247.813	86.735	46.45	4.97	11941.61	3 792.624	2926. 255	. 000	8222.734	56071.044
S TOT	11066.383	3873.234	8299.788	2904.928	29.58	3.17	254710.34	3 16906.39	49291.282	44119.119	144393.545	56071.044
REN.	1286. 023	450.108	964. 518	337 . 582	49.80	5.34	49838.90	\$ 3308 ,057	? 15520.389	. 000	31010.458	60459.698
TOTAL	12352.406	4323.342	9264.306	3242.510	31.69	3.39	304549.24	7 20214.45	4 64811.671	44119.119	175404.003	60459, 698
CUM.	14516.212	42654.774						293553.50				LE
								10995.74		PH DF HET		PH OF HET
ULT.	26868. 618	46978.116		TOTAL	REVERU	ES (NS)	304549.24	7 RATE	BTAX, MS		BTAX, HS
etax f	RATE OF RETUR	RH (PCT)		PROJECT	LIFE (YEARS)		20.37		175404.002	30.0	16859.521
ETAX P	AYDUT YEARS			DISCOUNT	RATE	(PCT)		12.00	D 2.0	143730.379		11948.959
RTAX F	PAYOUT YEARS	(DISC)		CROSS DI	L HELL	2		. 00	0 5.0	108597.314	40.0	8327.571
RTAX)	ET INCOME/IN	NEST		AN 22090	S WELL	2		. 00	0 8.0	83625.918		5600,763
BTAX }	ET INCOME/IN	WEST (DISC)		GROSS NE	LLS			. 00	0 10.0	70888.198		3511.880
		•							12.0	60459.698		611.732
									15.0	48086.066		-1215.531
									18.0	38606.555		-2403.815
									20.0	33485.887		-3193.317
									AF A	00/00 00	400 0	0004 / 44

25.0 23688.894 100.0 -3724.644

MYERS LANGLIE MATTIX UNIT (PDP) LANGLIE MATTIX 7 RVRS RK GRK LEA, NM DPR: TEXACD

TABLE 9

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RESERVES AND ECONDHICS

SIRCO OPERATING INC ESC

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AS DE JANUARY 1, 1991

					PR10	ES	08	ERATIONS, I	 \$			12.00 PCT
			KET PROD	WCTIEX	OIL	GAS	KET OPER	Sev+adu+	NET GPER	CAPITAL	CASH FLOW	
MD-YR	DIL, MRRL	GAS, MMCF	DIL, MR&L	GAS, MMCF			RE VERUES				BTAX, MS	BTAX, MS
12-91	252, 711	58, 44 9		66.337			4039 630		1627, 102	.000	2144. 398	2027.350
12-92	194. 575	63.137	145.007	51 103			3298.651		1554, 869		1524.834	3314.496
12-93	177.155	62.004	132.866	46.503				211.196	1648.161	. 000	1322.511	
12-94	143. 144	50.100	107.358	37 . 575	24. 47	2.62	2725.264	180.889	1556. 196	. 060	988.179	4976.221
12-95	130, 261	45, 592	97.696	34.194	25.94	2.78	2528.798	174. 487	1649. 568	. 000	804.743	5459.734
12-96	108, 789	38.076	81.592	28 .557			2327.199	154. 468		. 000	556.155	5758.086
12-97	98 99 9	34, 649	74.249	25.987			2244, 825	147.000	1713, 571	. 000	382.254	5941.177
12-98	90.088	31, 531	67.566	23 648			2165.339	143.724	1816.385	. 000	205.230	6028.945
12-99	81. 981	28.693	61, 486 55, 952	21 . 520	32.74	3.50	2088.717	138.638	1925. 368 1874. 287	. 000	24.711	6038.331
12- 0	74, 602	25.111	55.952	19.583	34.71	3.71	2014.768	133.729	1874. 287	. 000	6.752	6040.693
12- 1												
12- 2												
12- 3												
12- 4												
12- 5												
TOT 2	1352, 406	473.342	1014.305	355.007	25. 39	2.72	26715.05 9	1773.209	16982.083	. 000	7959.767	6040.683
REM.	. 000	. 000	. 080	. 000	. 00	. 00	.000	.000	. 000	. 000	. 060	6040.683
TOTAL	1352, 406	473.342	1014.305	355.007	25.39	2.72	26715.059	1773.209	16982.083	. 000	7959.767	6040.683
CUM.	14516. 212	42654.774		KET DIL I	REVENUE	ES (MS)		25750.696 964.363 26715.059		PRESENT	IDRTH PROFIL	E
				KET GAS I	REVERUI	ES (MS)		964.363	DISC	PH OF NET		PN OF NET
ULT.	15868, 618	43128.116								BTAX, MS		BTAX, MS
RTAX R	ATE OF RETUR	N (PCT)	100.00	PROJECT I	LIFE (rears)		10.000 12.000 .000	. 0	7959.767	30.0	4483.024
BIAX P	AYDUT YEARS		. 00	DISCOUNT	RATE	(PCT)		12.000	2.0	7558.607		4197.211
BTAX P	AYOUT YEARS	(DISC)	. 00	CR055 011	, HELLS	S		. 0 0 0	5.0	7026.985		3951.560
	ET INCOME/IN	VEST	. 00	GRUSS GA	S NELL!	. 2		. 000	8.0	6566.047	45.0	3738.401
BTAX N	ET INCOME/IN	VEST (DISC)	. 00	GROSS HE	15			.000	10.0	6291.883	50.0	3551,839
									12.0	6040.683	60.0	3241.104
AI TINI	L N. I. FRACT	IDK	1.000000	INITIAL	NET DI	FRACT	IDN	. 750000	15.0	5701.424	70.0	2992.920
	N.I. FRACT	ION	1.000000			FRACT	IDN	750000	18.0	5400.886	80.0	2790.199
	TIDH START D	ATE	5- 1-90	INITIAL	NET GA	S FRACI	NOI	. 7500.00	20.0	5219.085	90 .0	2621.470
	IN FIRST LI	KE	5- 1-90 12.00	FINAL	NET GA	S FRACI	אסו	. 7500 00 . 7500 00 . 7500 00	25. 0	4819.124	100.0	2478.788

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MYERS LANGLIE MATTIX UNIT (PUD) LANGLIE MATTIX 7 RURS ON GRB LEA, NM OPR: TEXACO

TABLE 10

DATE: 02/05/91 TIME: 09:23.39 FILE: PRD2 GET#: 43

RESERVES AND ECONDMICS

SIRCO OPERATING INC ESC

.

AS DF JANUARY 1, 1991

					PRIC	:ES	0	PERATIONS	N\$			12.00 PCT
			KET PRO				NET OPER		NET OPER			CUM. DISC
BU-TK	DIL, MERL	GAS, HINCF	UIL, MERL	GAS, MHCF				NF TAXES	EXPENSES	CUSIS, 55	RTAX, HS	ETAX, MS
12-91	144, 430	50.550	108.323				2308.753		345. 143		-10698.442	
12-92	510.755	178.765	383.066	134.074						11432.543		
12-93	964. 488	337, 571	723.366				17323.137		1343, 459		-1840.533	
12-94	1137.106	397.987	852,830	298.490	24. 47	2.62	21 648 . 9 45	1436.949	1780.816	3507.381	14923.799	-4852.501
12-95	1062.728	371.954	797.046	278.966	25.94	2.78	21 446. 852	1423.535	2110. 201	. 000	17913.116	5910.228
12-96	993. 215	347.626	744.911	260.720	27.49	2.94	21 246 . 6 52	1410.246	2319.292	. 000	17517.114	15307.371
12-97	886, 051	310.117	664.538	232.588	29.14	3.12	20091.469	1333.571	2458.449	. 090	16299.449	23114.443
12-98	753 143	263.601	564.857	197.701	30.89	3.31	18102.408	1201.547	2420. 611	. 000	14480.250	29307.047
12-99	640.171	224.050	480.128	163.045	32.74	3.50	16310.252	1082.594	2565. 848	. 000	12661.810	34141.808
12- 0	559, 565	195.847	419.674	146.885	34.71	3.71	15111.983	1003.058	2353. 272	. 000	11755.653	381 49, 625
12- 1	503, 60 8	176.263	377.706	132.197	36.79	3.94	14416.811	956.916	2494, 468	. 660	10965.427	41487.489
12- 2	453. 247	158.636	339, 935	118.977	39.00	4.17	13753.622	91 2.897	2644.136	. 000	10196.589	44258.767
12- 3	407.923	142.773	305.942	107.080	41.34	4.42	13120.979	870,905	2802. 784	. 000	9447.290	46551.293
12- 4	367.130	128.496	275, 348	96.372	43.82	4.69	12517.422	830, 845	2970. 951	. 660	8715.626	48439,665
12- 5	330.417	115.646	247.813	86.735	46, 45	4.97	11941.613	792.624	2926, 255	. 000	8222.734	50030.361
S TOT	9713, 977	3399,892	7285.483	2549.921	30.16	3.23	227995.284	15133.188	32309.199	44119.119	136433.778	50030.361
REM.	1286.023	450.108	964.518	337.582	49.80	5.34	49838.904	3308.057	15520, 389	. 000	31010, 458	54419.015
TOTAL	11000.000	3850.000	8250.001	2887.503	32.46	3.47	277834.188	18441.245	47829, 588	44119.119	167444.236	54419.015
CUM.	. 000	. 000		XET DIL R	EVERUE	S (NS))	267802.805		PRESENT I	NORTH PROFI	LE
				KET GAS R	EVENUE	S (#\$))	10031.383	DISC	PH DF KET	DISC	PH OF NET
ULT.	11000.000	3850.000		TOTAL R	EVENUE	(#\$) S (#\$))	277834.188	RATE	RTAX, MS		BTAX, MS
BTAX R	ATE OF RETUR	R (PCT)	49.89							167444.235	30.0	12376.497
ETAX P	AYDUT YEARS		A 10	DISCOUNT	RATE	(PCT)		12.000 .000	2.0	136171.772	35.0	7751.748
ETAX P	AYOUT YEARS	(DISC)	4. 45	SROSS DIL	MELL S	5		. 000	5.0	101570.329	40.0	4376.011
BTAX H	ET INCOMEZIN	WEST	4. 80	GRUSS GAS	WELLS	5		.000	8.0	77059.869	45.0	1862.362
PTAX R	ET INCOME/IN	VEST (DISC)	2. 50	CROSS NEL	LS			.000	10.0	64596.315	50.0	-39,959
									12.0	54419.015	60.0	-2629.372
INITIA	L N.I. FRACT	1 DM	1.000000	INITIAL N	ET DIL	FRACI	IDN	. 750000	15.0	42384.642	70.0	-4208.451
FINAL	N.I. FRACT	IBR	1.000000	FINAL N	ET DIL	FRACT		. 7500.00		33205.673	80.0	-5194.014
PRODUC	TIDN START D	ATE	1- 1-91	INITIAL N	ET GAS	FRACI	NOIN	. 75000	20.0	28266.802	90.0	-5814.787
SHTKOM	IN FIRST LI		12.00	FINAL N	ET GAS	FRACT	FIDH	. 750060	25. 0	18869.770	100.0	-6203.432

MYERS LANGLIE MATTIX UNIT (PROVED)

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TABLE 11

DATE: 02/05/91 TIME: 08:19.29 FILE: PRD2 GET 1: 0

RESERVES AND ECONDHICS

SIRGD OPERATING INC UNESC

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AS DF JANUARY 1, 1991

			KET PROL		PRIC	ES		ERATIONS,	H\$			12.00	PCT
	DITY WEBE		OIL, MERL	GAS, MMCF	\$/K	\$//H	REVENUES	WF TAXES	EXPERSES	COSTS, M	CASH FLOW BTAX, MS	BTAX,	Ħ\$
12-91	397.141	138 999	297.856				6180.215				-8327.597		
12-92	705, 431	246.902	529.073	185.177	20.00	2.14	10977.738	728.647	2138.400	10499.80	-2389.109	-9793.	186
12-93	1141 643	399.575	856.232	299.681	20.00	2.14	17765.957	1179.217	2592.000	14443.60	-44 8.860	-10079.	725
12-94	1280.250	448.087	960.188	335.065	20.00	2.14	19922.940	1322.386	2727.600	2930.60	12942.354	-1445.	265
12-95	1192. 989	417.546	894.7 4 2	313.160	20.60	2.14	18565.002	1232.252	28 99, 200	. 00	0 14433.550	7226.	838
12-96	1102. 004	385.702	826.503	289.277	20.00	2.14	17149.113	1138.273	2863, 200	. 00	0 13147.640	14279.	9 55
12-97	985, 050	344.765	738 787	258.575	20,00	2.14	15329.090	1017.469	2863, 200	. 00	0 11448.421	19763.	493
12-98	843. 231	295.132	632. 423	221.349	20.00	2.14	13122.147	870,984	2743.200	. 00	9507.963	23829.	655
12-99	722.152	252.753	541.614	189.565	20.00	2.14	11237.949	745.920	2743. 200	. 00	7748.829	26728.	453
12- 0	634. 167	221.958	475. 626	166.468	20. CO	2.14	9868.762	655.040	2436.000	. 00	0 6777.722	29097.	160
12- 1	503. 6 08	176.263	377.706	132.197	20.60	2.14	7837.022	520.183	1356.000	. 00	D 5960. 8 39	30913.	633
12- 2	453. 247	158.636	339. 935				7053.311				0 5229.148	32334.	836
12- 3	407.923	142.773	305.942				6347.991					33443.	971
12- 4	367,130	128.496	275.348	96.372	20.00	2.14	5713.196	379.214	1356.000	. 80	0 3977.982	34305.	851
12- 5	330. 417	115.646	247.813	86.735	20.00	2.14	5141.873	341.292	1260.000	. 00	0 3540.581	34990.	790
S TOT 8	11066, 383	3873, 234	8299.788	2904.928	20.00	2.14	172212, 306	11 430, 600	32610. 000	40051.60	0 88120, 106	34990.	790
REM.	1286, 023	450, 108	964. 518	337.582	20.00	2.14	20012.786	1328.350	6221. 789	. 00	0 12462.643	36756.	0 7 3
TOTAL	12352.406	4323, 342	9264.306	3242.510	20.00	2.14	192225.092	12758.950	38831. 788	40051.60	0 100582.754	36756.	073
CUM.	14516.212	42654.774) :				NORTH PROFI	LE	
)			PN OF ME		PN OF	
ULT.	2 5 9 6 8 . 5 1 9	46978.116		TDIAL	REVENUE	ES (#\$))	192225.092	RATE	rtax, h		BIAX,	
BTAX R	ATE OF RETUR	N (PCT)		PROJECT I	LIFE (YEARS)		20.376	. 0	100582.73		9704.	
RTAX P	AYOUT YEARS			DISCOUNT	RATE	(PCT)		12.000	2.0	83630.28		6455.	
RIAX P	AYDUT YEARS	(DISC)		CROSS DI	L MELLS	S		. 000	5.0	64352.67		4024.	
RTAX N	ET INCOME/IN	VEST		GROSS GA	S NELLS	2		. 090	8.0	50248.00		2173.	
PTAX N	ET INCOME/IN	VEST (DISC)		GROSS NE	LLS			. 0 0 0	10.0	42886 . 03		744.	453
									12. 0	36756.07		-1254.	459
									15.0	29341.09		-2517.	
									18.0	23537.61		-3335.	
				•					20.0	20351 . 28		-3872.	
									05 A	4 44 00 78	4 400 0	- #116	603

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25.0 14138.751 100.0 -4226.082

MYERS LANGLIE MATTIX UNIT (PDP) LANGLIE MATTIX 7 RURS AN GRB LEA, NM DPR: TEXACD TABLE 12

RESERVES AND ECONOMICS

SIRCE OPERATING INC UNESC

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AS DE JANUARY 1, 1991

HD- CRBSS PERDINCTIDM						PRIC	ΈS	0#	ERATIDNS,	NS			12.00 PC	T
12-91 252.711 68.449 189.533 66.37 0.00 2.14 3922.621 261.026 1524.000 .000 2007.553 1973.446 12-92 174.674 68.137 146.007 51.103 20.00 2.14 3027.500 201.083 1428.000 .000 1406.017 3155.769 12-94 173.7155 62.004 132.864 46.503 20.00 2.14 2275.51 1428.000 .000 100.017.36 37.575 20.00 2.14 2275.71 147.655 1272.000 .000 407.74 452.77 452.77 12-95 130.261 45.792 97.696 34.194 20.00 2.14 2275.571 147.655 127.00 .000 404.562 312.79 12-97 97.97 34.47 72.972 20.00 2.14 1401.927 9.041 1176.000 .000 404.562 312.78 44 12-9 97.97 84.484 1176.000 .000 15.093 3341.033 32.720 12.44 1405.977.73 84.480 1176.000 .000 160.973 <td< th=""><th>ND-YR</th><th>DIT' WERT</th><th>GAS, MMCF</th><th>DIL, MERL</th><th>GAS) MMCF</th><th>\$/8</th><th>\$/]]</th><th>RE VENUE S</th><th>NF TAXES</th><th>EXPERSES</th><th>COSTS, MS</th><th>BTAX, MS</th><th>CUM. DIS</th><th>0</th></td<>	ND-YR	DIT' WERT	GAS, MMCF	DIL, MERL	GAS) MMCF	\$/8	\$/]]	RE VENUE S	NF TAXES	EXPERSES	COSTS, MS	BTAX, MS	CUM. DIS	0
12-92 194 676 68.137 146.007 51.103 20.00 2.14 3029 500 201.08 1428.000 .000 1400.417 1155 769 12-93 177.155 62.004 132.866 46.503 02.00 2.14 2227.571 147.855 1272.000 .000 1145.850 4019.374 12-95 130.261 45 592 97.696 34.194 20.00 2.14 2227.571 147.855 1272.000 .000 607.714 652.910 12-95 130.261 45 592 97.696 34.194 20.00 2.14 2227.571 147.855 1272.000 .000 642.057 4935.753 12-95 130.261 45 592 97.696 34.194 20.00 2.14 1692.952 112.370 1176.000 .000 404.562 5152.793 12-97 96 979 34 649 72.249 25 967 20.00 2.14 1540 592 102.257 1176.000 .000 404.562 5152.793 12-97 96 979 34 649 72.249 25 97 20.00 2.14 1540 592 93.054 1176.000 .000 102.673 355.278 12-98 81.981 26.693 61.486 21.502 00 2.14 1205.973 84.680 1176.000 .000 122.673 355.278 12-97 98 1931 26.693 61.486 21.502 00 0.2.14 1205.973 84.680 1176.000 .000 152.673 3534.033 12-0 74.602 26.111 55.952 19.583 20.00 2.14 1160.948 77.058 1080.000 .000 3.870 5342.359 12-1 12-3 12-4 12-5 S T0T 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1352 406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1352 406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1352 406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1352 406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1352 408 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1352 408 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1352 408 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1352 408 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1352 408 473.342 1014.805 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 T0TAL 1556.212 42654.774 KET BILE KET KET KET KE													1973.64	~
12-94 143.144 50.100 107.358 37.575 20.00 2.14 2227.571 147.855 1272.000 .000 620.571 45.62.910 12-95 130.261 45.592 97.696 34.194 20.00 2.14 2227.071 147.855 1272.000 .000 620.571 45.62.910 12-95 100.761 45.592 97.696 34.194 20.00 2.14 1627.951 1176.000 .000 620.571 47.262 97.716 45.777 45.777 45.777 45.777 45.777 45.777 45.777 45.777	12-92	194, 676	68.137	146.007				3029.500		1428.000	. 600	1400.417		
12-95 130.261 45.592 97.696 34.194 20.00 2.14 2027.095 134.548 1272.000 .000 620.547 4935.753 12-96 108.789 38.076 81.592 28.557.20 00 2.14 1622.952 112.370 1176.000 .000 404.582 5152.793 12-97 98.999 34.647 74.249 25.987.20 00 2.14 1540.592 102.257 1176.000 .000 262.335 528.528 528.446 12-98 19.11 131.2 67.566 23.648 20.00 2.14 1540.922 102.257 1176.000 .000 12.673 5341.033 12-9 18.131 26.653 61.464 21.202.00 2.14 1126.948 1080.000 .000 15.073 5342.359 12-1 12-2 112-3 1135.0406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 680.896 5342.359 TDTAL 1352.406 473.342 1014.305 355.007 20.00 .000	12-93	177, 155	62.004	132.866	46.503	20. CO	2.14	2756.836	182.986	1428.000	. 000	1145.850	4019.37	4
12-96 108.789 38.076 81.592 28.557 20.00 2.14 1692.952 112.370 1176.000 .000 26.233 537.84 12-97 98.999 34.647 74.249 25.987 20.00 2.14 1540.592 102.257 1176.000 .000 132.873 5335.270 12-99 81.981 26.693 61.486 21.520 20.00 2.14 1401.927 93.054 1176.000 .000 132.873 5335.270 12-9 81.981 26.693 61.486 21.520 20.00 2.14 1401.927 93.054 1176.000 .000 15.093 5341.033 12-0 74.602 26.111 55.952 19.583 20.00 2.14 1160.948 77.058 1080.000 .000 .800 3642.359 12-1 12-3 12-3 12-4 12-5 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 .680.896 5342.359 CUH. 14516.212 4264 473.342 1014.30	12-94	143, 144	50.100	107.358	37.575	20.00	2.14	2227.571	147.855	1272.000	. 000	807.716	4562.91	0
12-97 98 999 34 647 74 249 25.987 20.00 2.14 1540.592 102.257 1176.000 .000 262 335 5278 446 12-98 90 088 31.531 67.566 23.648 20.00 2.14 1401.927 93 054 1176.000 .000 132.873 5335.270 12-99 81 981 26.693 61 486 21.520 2.00 2.14 1407.773 84.680 1176.000 .000 15.093 5341.033 12-0 74.602 26.111 55.952 19.583 20.00 2.14 1160.948 77.058 1080.000 .000 3.890 5342.359 12-1 12-2 12-3 12-4 12-5 5 TDT 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 TUTAL 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 TUTAL 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 TUTAL 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 TUTAL 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 TUTAL 1352.406 473.342 1014.305 355.007 20.60 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 TUTAL 1352.406 473.342 1014.305 355.007 20.60 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 TUTAL 1352.406 473.342 1014.305 355.007 20.60 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 TUTAL 1352.406 473.342 1014.305 355.007 20.60 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 TUTAL 1358.618 43128.116 TUTAL REVERVES (M5) 739.715 DISC PU DF WET DISC PU DF WET ULT. 15868.618 43128.116 TUTAL REVERVES (M5) 739.715 DISC PU DF WET DISC	12-95	130. 261	45, 592	97.696	34.194	20,00	2.14	2027.095	134.548	1272.000	. 000	620.547	4935.75	3
12-98 90 088 31.531 67.566 23.648 20.00 2.14 1401.927 93.054 1176.000 .000 132.873 5335.270 12-99 81 931 26.693 61.486 21.520 20.00 2.14 1275.773 84.680 1176.000 .000 15.093 5341.033 12-0 74.602 26.111 55.952 19.583 20.00 2.14 1160.948 77.058 1080.000 .000 3.890 5342.359 12-1 12-2 12-3 12-4 12-5 S TDT 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 REM000 .000 .000 .000 .000 .00 .000 .0		108.78 9	38.076				2.14	1692.952	112.370	1176.000	. 000	404.582	5152.79	3
12-99 81.931 26.693 61.486 21.520 20.00 2.14 1275.773 84.680 1176.000 .000 15.093 5341.033 12-0 74.602 26.111 55.952 19.583 20.00 2.14 1160.948 77.058 1080.000 .000 3.890 5342.359 12-1 12-2 12-3 12-4 12-4 12-5 5 5 55.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6800.896 5342.359 RER. .000			34, 647					1540.592	102.257	1176.000	. 600	262.335	5278.44	16
12-0 74.602 26.111 55.952 19.583 20.00 2.14 1160.948 77.058 1080.000 .000 3.890 5342.359 12-1 12-2 12-3 12-4 12-5 S TDT 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 REM000 .000 .000 .000 .000 .000 .000 .	12-98	90.088	31,531	67.566	23.648	20.00	2.14	1491.927	93.054	1176.000	. 000	132.873	5335.27	'0
12-1 12-2 12-3 12-4 12-5 S TDT 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 REH. .000 .00									84.680	1176.000		15.093	5341.03	33
12- 2 12- 3 12- 4 12- 5 S TDT 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 REM000 .000 .000 .000 .000 .000 .000 .	12- 0	74, 602	26.111	55.952	19,583	20.00	2.14	1160.948	77.058	1080.000	. 000	3.870	53 42, 35	i9
12-3 12-4 12-5 S TDT 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 REH. .000 .														
12- 4 12- 5 S TDT 1352.406 473.342 1014.305 355.007 20.00 2.14 21045.815 1396.919 12768.000 .000 6880.896 5342.359 REM. .000 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>														
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CUN. 14516.212 42654.774 NET DIL REVENUES (M\$) 20286.100 PRESENT NDRTH PROFILE ULT. 15868.618 43128.116 TOTAL REVENUES (M\$) 759.715 DISC PN DF NET DISC PN DF NET ETAX RATE DF RETURN (PCT) 100.00 PRDJECT LIFE (YEARS) 10.000 .0 6880.876 30.0 4058.784 ETAX RATE DF RETURN (PCT) 100.00 PRDJECT LIFE (YEARS) 10.000 .0 6880.876 30.0 4058.784 ETAX RATE DF RETURN (PCT) 100.00 PRDJECT LIFE (YEARS) 10.000 .0 6880.876 30.0 4058.784 ETAX RATE DF RETURN (PCT) 100.00 PRDJECT LIFE (YEARS) 10.000 .0 6880.876 30.0 4058.784 ETAX RATE DF RETURN (PCT) 100.00 PRDJECT LIFE (YEARS) 10.000 .0 6562.333 35.0 3818.622 ETAX PAYDUT YEARS (DISC) .00 CRDSS DIL NELLS .000 5.0 6137.865 40.0 3610.811 ETAX NET INCOME/INVEST (DISC) .00 CRDSS NELLS .000 10.0 5546.048 50.0 3269.613 INITIAL N.I. FRACTI	ren.	. 000	. 000	. 000	. 000	. 0 0	. 00	. 000	. 0 0 0	. 000	. 000	. 000	5342.3	59
NET GAS REVENUES (N\$) 759.715 DISC PN DF NET DISC PN DF NET ULT. 15868.618 43128.116 TUTAL REVENUES (N\$) 21045.815 RATE NTAX, N\$ RATE NTAX, N\$ ETAX RATE DF RETURN (PCT) 100.00 PRDJECT LIFE (YEARS) 10.000 .0 6880.896 30.0 4058.784 ETAX PAYDUT YEARS .00 DISCOUNT RATE (PCT) 12.000 2.0 6562.333 35.0 3818.622 ETAX PAYDUT YEARS .00 GRDSS DIL NELLS .000 5.0 6137.865 40.0 3610.811 STAX NET INCOME/INVEST .00 GRDSS MELLS .000 8.0 5767.485 45.0 3429.354 ETAX NET INCOME/INVEST (DISC) .00 GRDSS MELLS .000 10.0 5546.048 50.0 3269.613 INITIAL N.I. FRACTION 1.000000 INITIAL NET DIL FRACTION .750000 15.0 5065.958 70.0 2785.361 FINAL N.I. FRACTION 1.000000 FINAL NET DIL FRACTION .750000 18.0 4819.752	TOTAL	1352 406	473, 342	1014.305	355.007	20.00	2.14	21045.815	1396.919	12768.000	. 000	6880, 896	5342.3	39
ULT. 15868.618 43128.116 TOTAL REVENUES (M\$) 21045.815 RATE NAX. NS RATE NAX. NS PTAX RATE DF RETURN (PCT) 100.00 PROJECT LIFE (YEARS) 10.000 .0 6880.876 30.0 4058.784 PTAX PAYDUT YEARS .00 DISCOUNT RATE (PCT) 12.000 2.0 6562.333 35.0 3818.622 ETAX PAYDUT YEARS .00 GRUSS DIL NELLS .000 5.0 6137.865 40.0 3610.811 RTAX NET INCOME/INVEST .00 GRUSS CAS NELLS .000 8.0 5767.485 45.0 3269.613 INITIAL N.I. FRACTION 1.000000 INITIAL NET DIL FRACTION .2000 15.0 5065.958 70.0 2785.361 INITIAL N.I. FRACTION 1.000000 INITIAL NET DIL FRACTION .750000 15.0 5065.958 70.0 2785.361 FINAL N.I. FRACTION 1.000000 FINAL NET DIL FRACTION .750000 18.0 4819.752 80.0 <td>CUN.</td> <td>14516.212</td> <td>42654.774</td> <td></td> <td>KET DIL</td> <td>REVENUE</td> <td>S (NS)</td> <td></td> <td></td> <td></td> <td>PRESENT</td> <td>ADRTH PROFI</td> <td>LE</td> <td></td>	CUN.	14516.212	42654.774		KET DIL	REVENUE	S (NS)				PRESENT	ADRTH PROFI	LE	
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MONTHS IN FIRST LINE 12.00 FINAL NET GAS FRACTION .750000 25.0 4339.144 100.0 2331.294	PRODUC	TIDN START D	ATE	5- 1-90	INITIAL	NET GAS	S FRACT	IDX	. 756800	20.0	4670.156	90.0	2458.2	17
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TABLE 13

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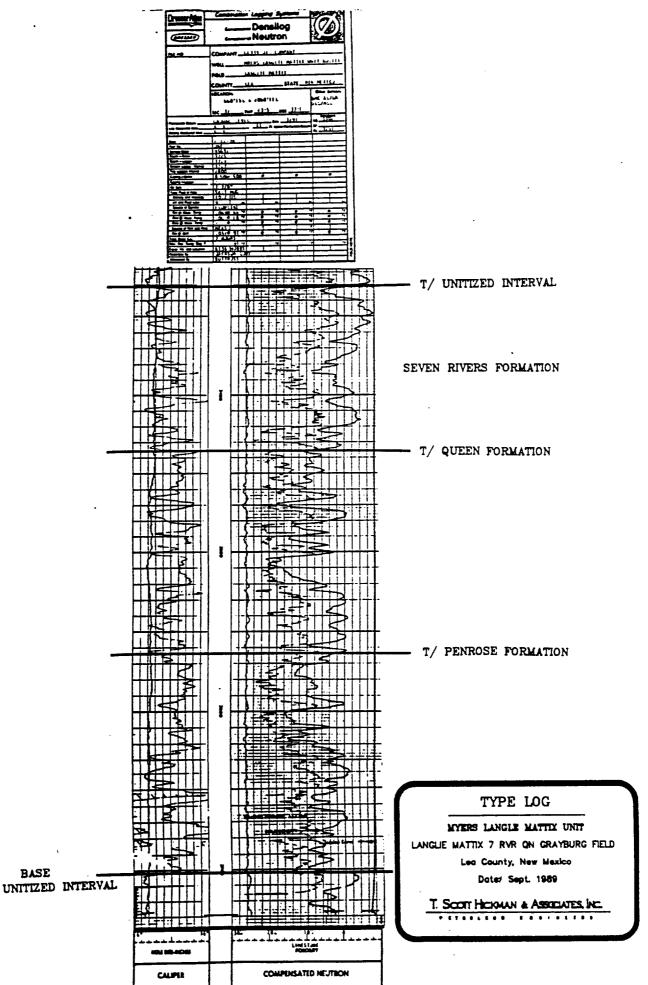
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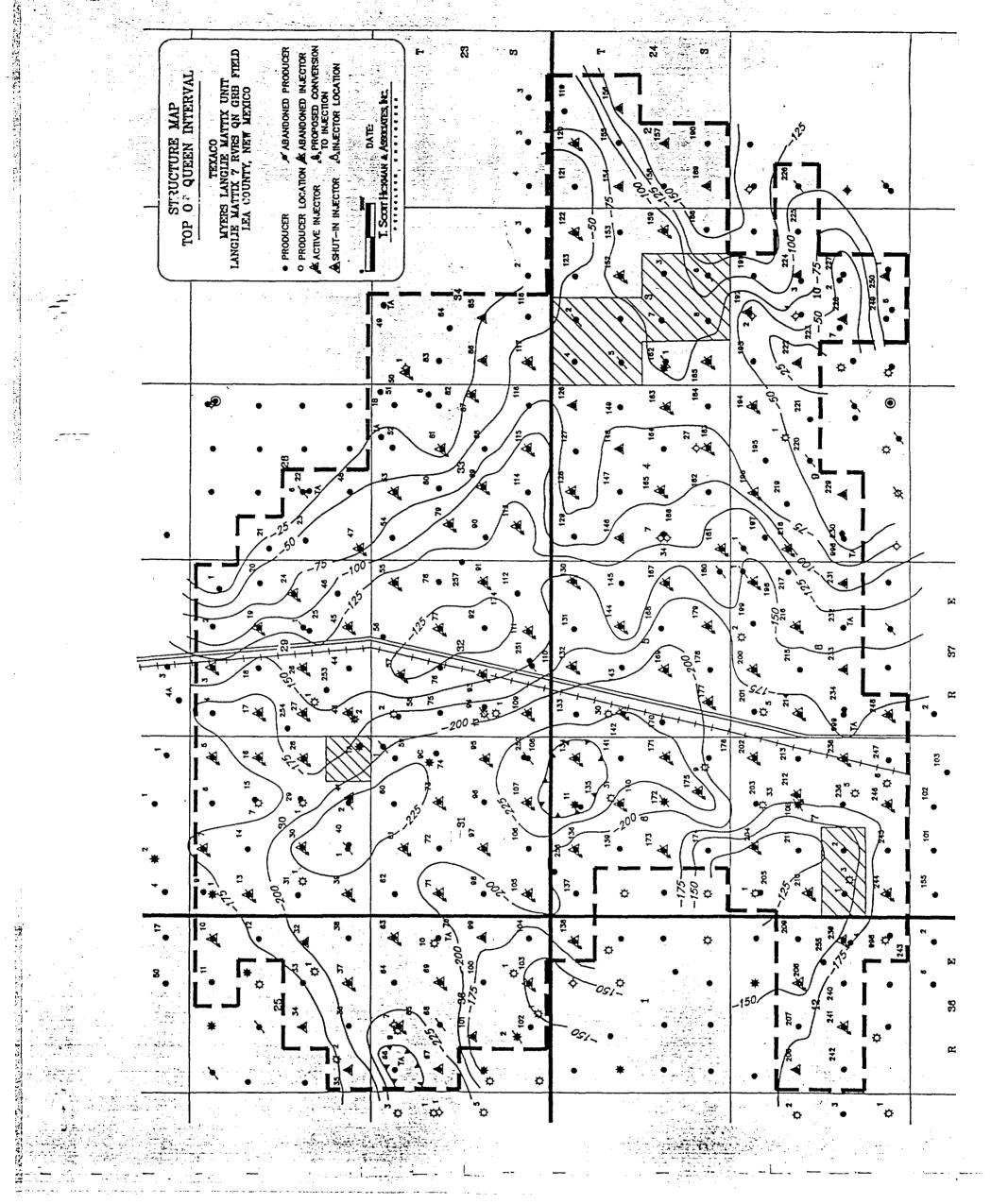
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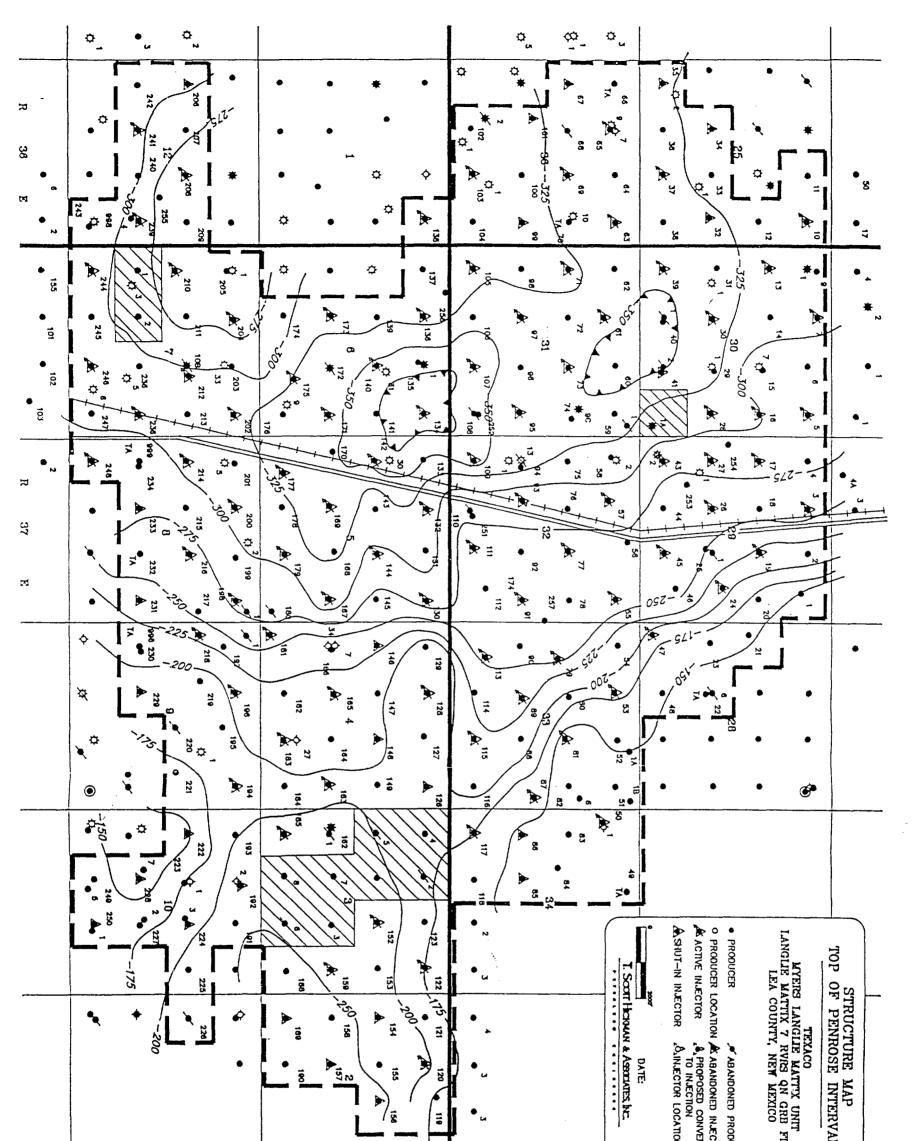
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12-91	144. 430	50, 550	108.323	37.913 20.00	2.14	2247.594	149.184	336.000	12177.600	-10415.190	
12-92	510, 755	178.765	383.066	134.074 20.00	2.14	7948.238	527.564	710. 400		-3789.526	
12-93	964. 48 8	337.571	723.366	253.178-20.80	2.14	15009.121	996.231	1164. 00 0	14443.600	-1594.710	-14099.099
12-94	1137.106	397.987	852.830	298.490 20.00	2.14	17695.369	1174.531	1455. 600	2930.600	12134.638	-6008.175
12-95	1062.728	371,954	797.046	278,966 20.00	2.14	16537.907	1097.704	1627.200	. 000	13813.003	2291.085
12-95	993. 215	347, 626	744.911	260.720 20.00				1687.200			91 27. 162
12-97	885.051	310.117	664.538	232.588-20.00				1687.200			14485.047
12-98	753, 143	263,601	564, 857	197.701.20.00		11720.220	777,930	1567.200	. 000	9375.090	
12-99	640.171	224.060	430.128	168,045 20.00				1567.200	. 600		21447.420
12- 0	559. 565	195.847	419.674	146.885 20.00	2.14	8707.814	577.982	1356.000	. 000	6773.832	23756.801
12- 1	503. 608	176.263	377.706	132 197 20.00				1356.000	. 000		25571.274
12- 2	453. 247	158.636	339, 935	118,977 20.00	2.14	7053.311	468.163	1356.000	. 000	5229,148	26992.477
12- 3	407.923	142.773	305.942	107.080 20.00	2.14	6347.991	421.348	1356.000	. 000	4570.643	28101.612
12- 4	367.130	128.495	275.348	96.372 20.00	2.14	5713.196	379.214	1356.000	. 000	3977.982	28963.502
12- 5	330. 417	115.646	247.813	86,735 20.00	2.14	5141.873	341.292	1260.000	. 000	3540.581	29648.431
3 TOT	9713, 977	3399.892	7285.483	2547.921 20.00	2.14	151166.491	10033.681	19842.000	40051.600	81239.210	29648.431
REN.	1285. 023	450.108	964.518	337.582 20.00	2.14	20012.786	1328.350	<u>6221.</u> 788	. 000	12462.648	31413, 714
TOTAL	11000.000	3850.000	8250.001	2887.503 20.00	2.14	171179.277	11362.031	26063, 788	40051.600	93701.858	31413,714
CUM.	. 000	. 000		NET DIL REVEN					PRESENT	IDRTH PROFI	LE
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ULT.	11000.000	3850.000		TUTAL REVEN	ES (MS)	171179.277	RATE	BTAX, MS		BTAX, MS
	ATE OF RETUR	(PCT) X	41.24 4.27	PROJECT LIFE DISCOUNT RATE GROSS DIL NELL GROSS GAS NELL	YEARS)		20.376 12.000	. 0	93701.858	30.0	5645.616
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ETAX N	ET INCOME/IN	VEST	3. 34		. S		.000	8. Û	44480.524		-1255, 424
BTAX H	ET INCOME/IN	WEST (DISC)	1. 95	GROSS WELLS			. 000	10.0	37339.990		-252 5,165
								12.0	31413.714		-4255.972
IRITIA	L N.I. FRACT	I DK	1.000000	INITIAL NET D	IL FRAC	TIDK	. 750000	15.0	24275.123		-5303,211
FINAL	N.1. FRACT	ION	1.000000		IL FRAC		. 750000	18.0	18717.867		-59 43, 152
PRODUC	TIDE START D	ATE	1- 1-91	INITIAL HET G	AS FRAC	TIDN	. 750000	20.0	15681.124		-6330.766
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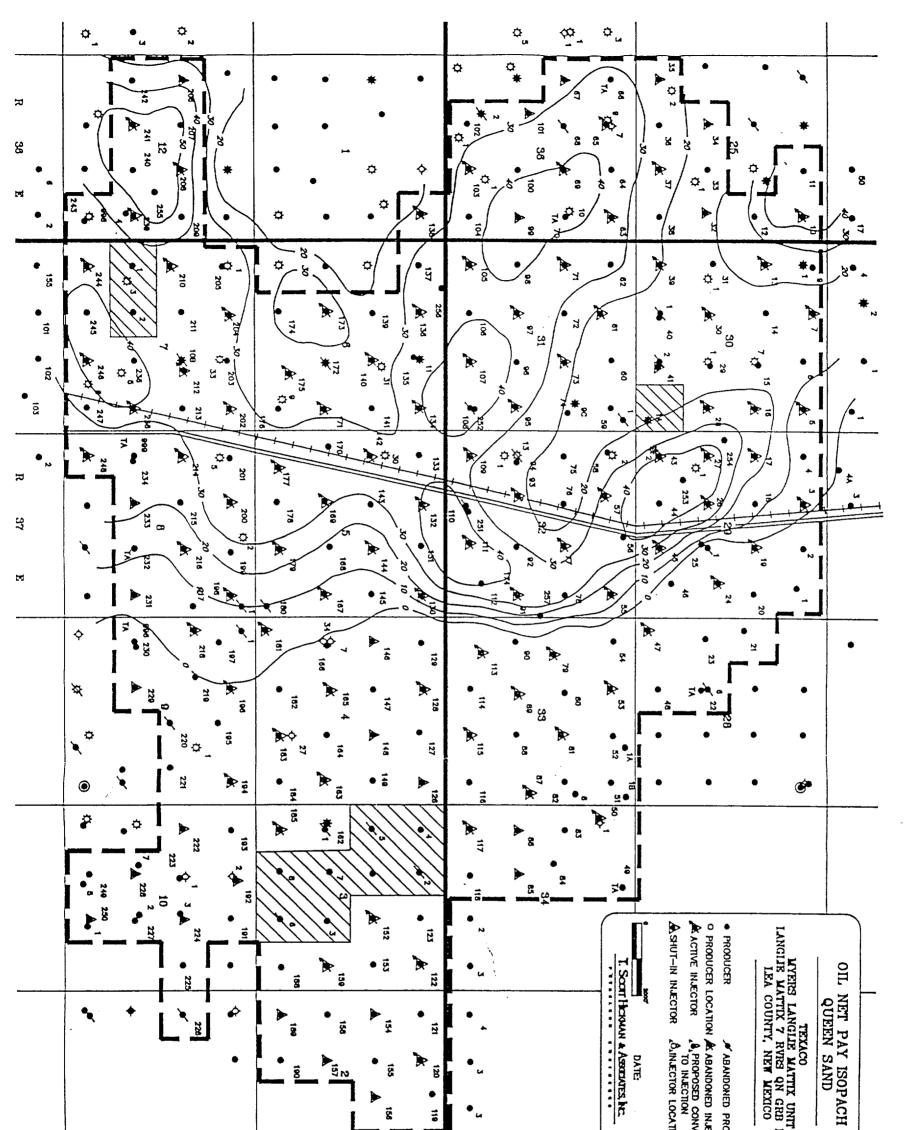
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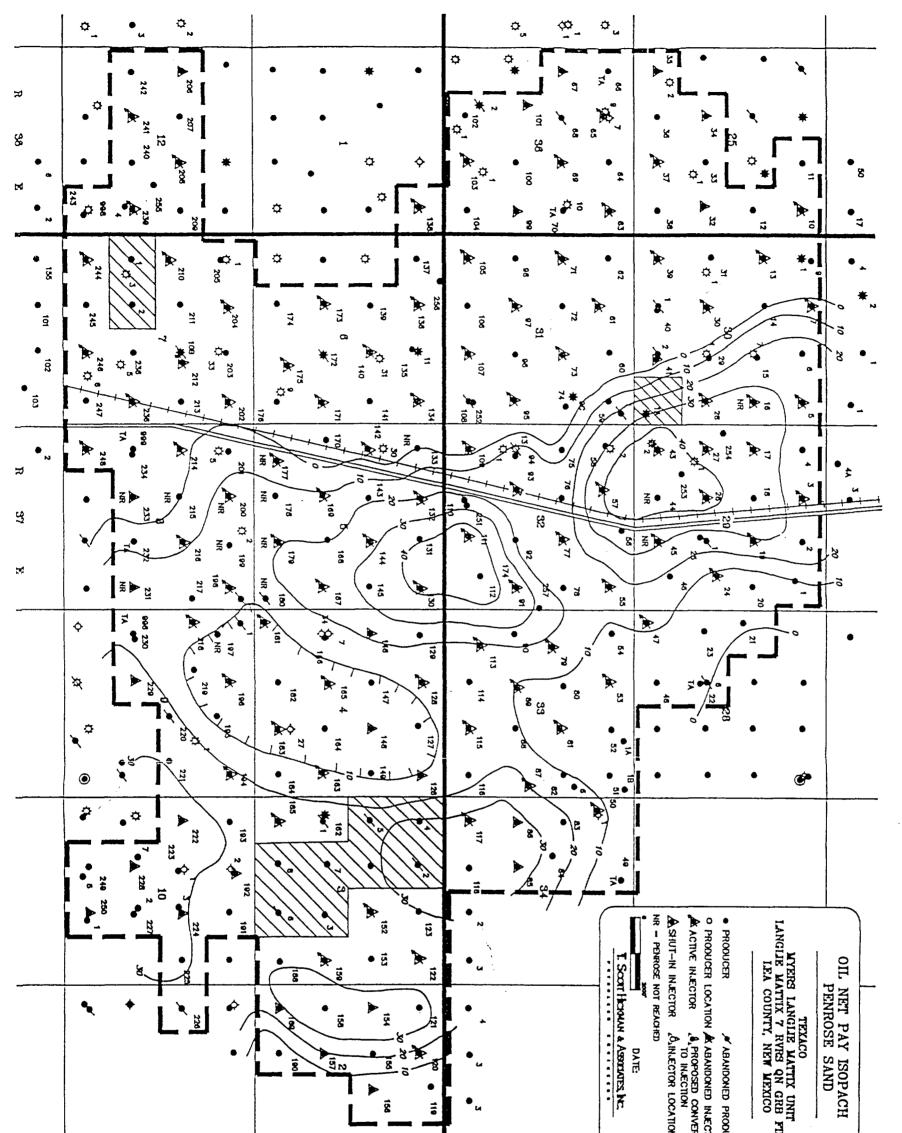
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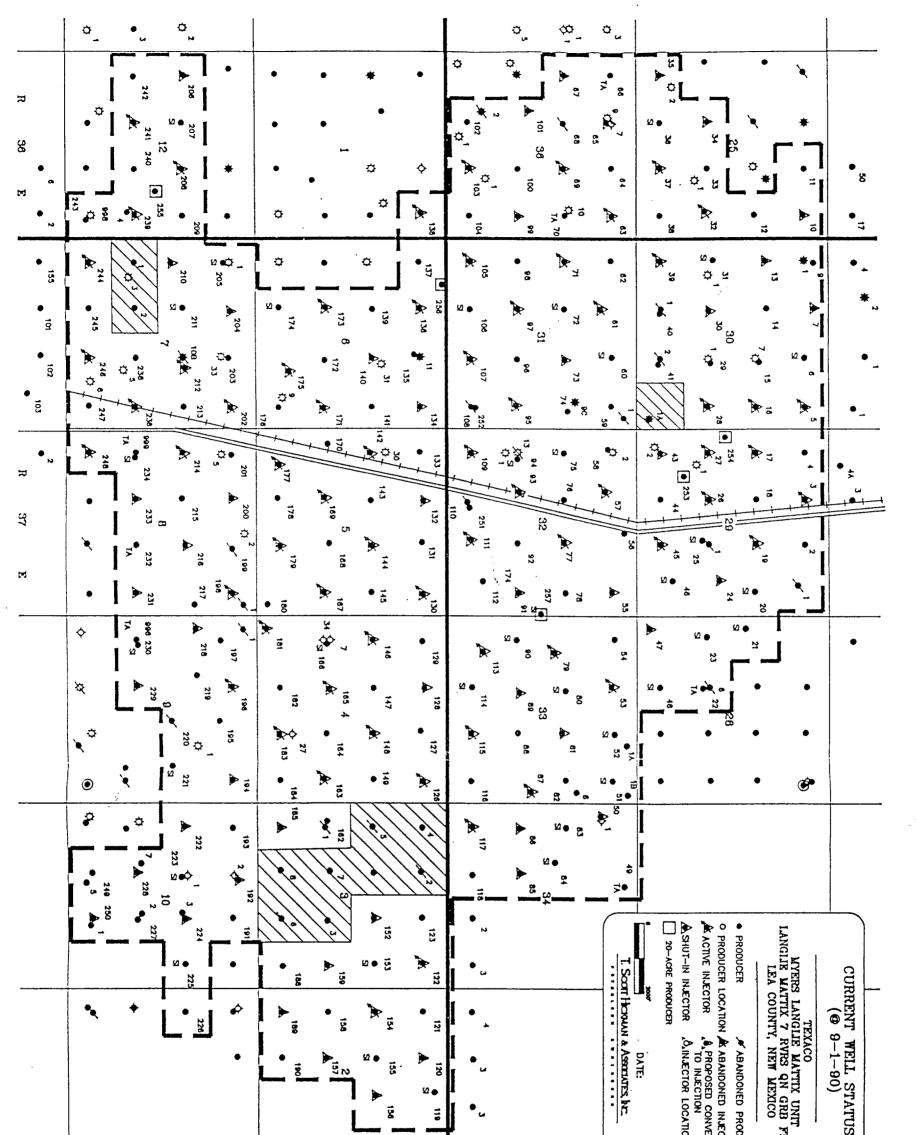
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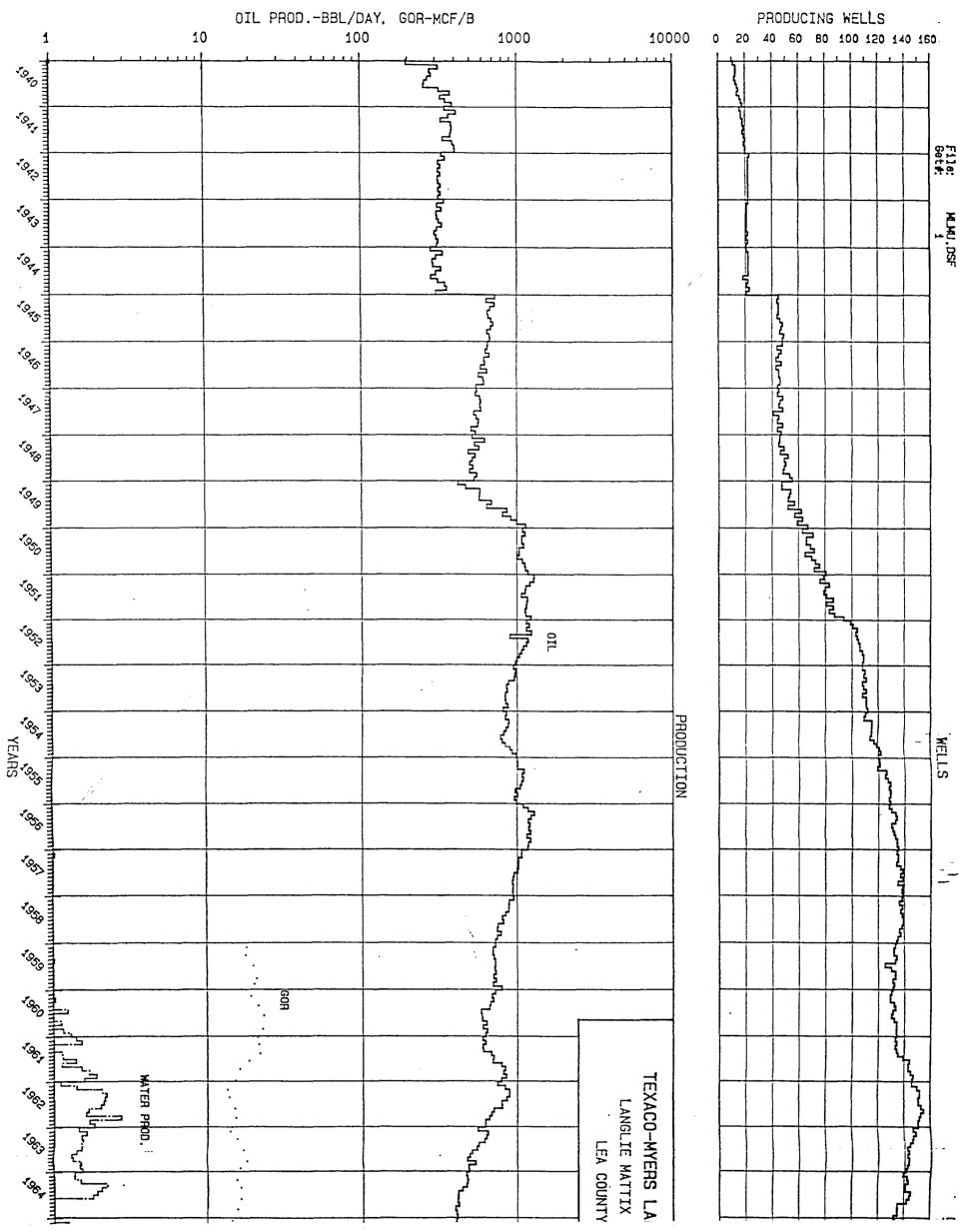
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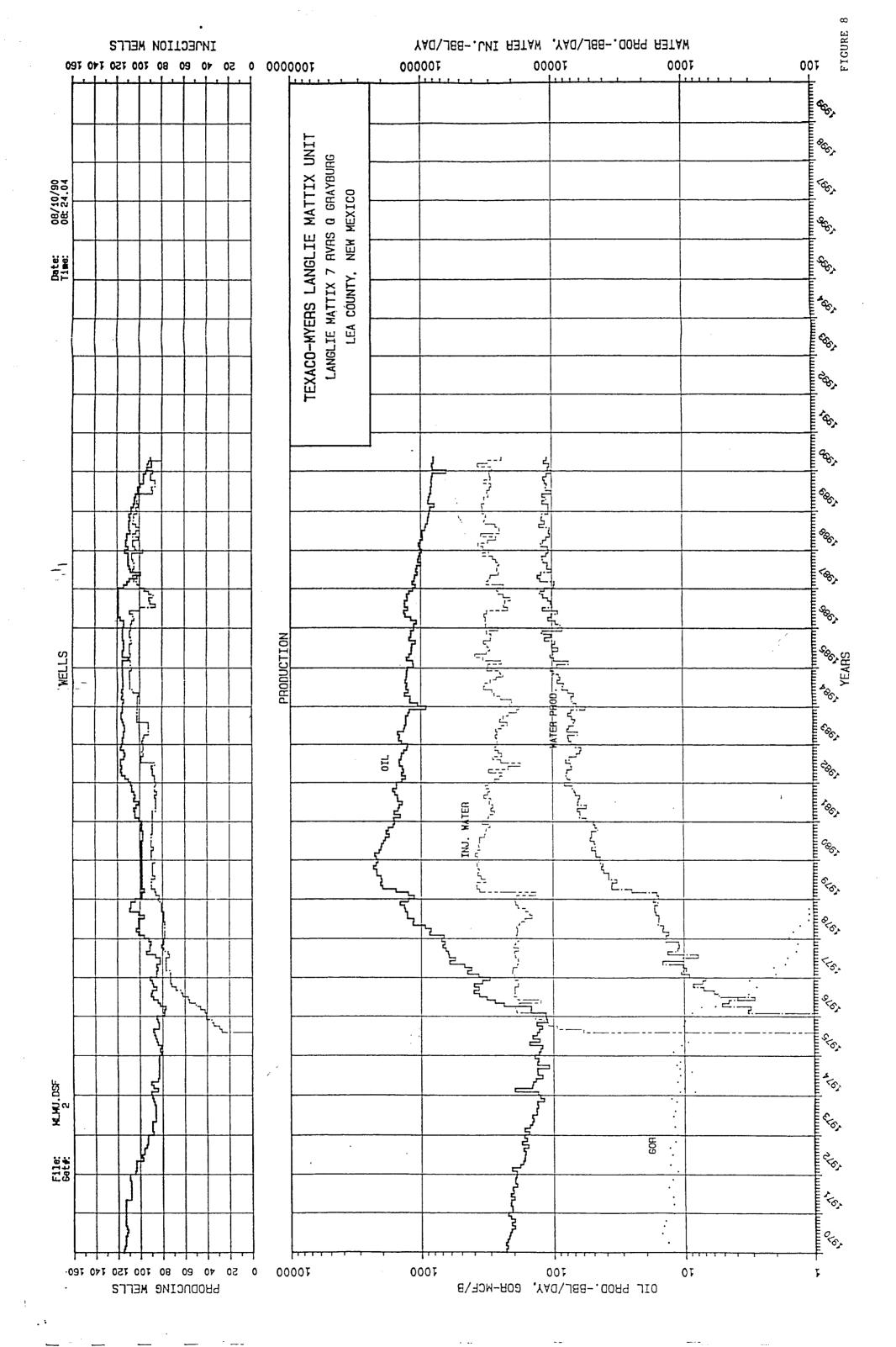
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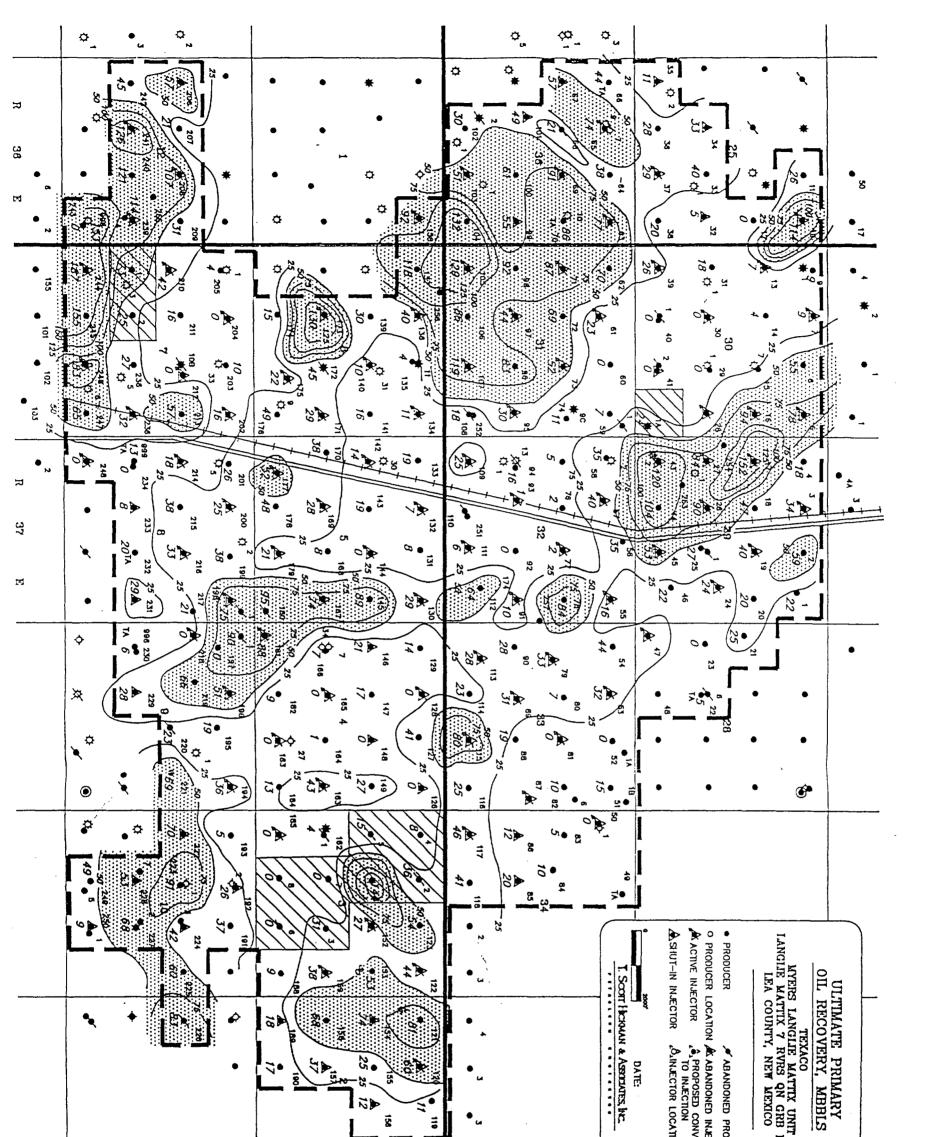
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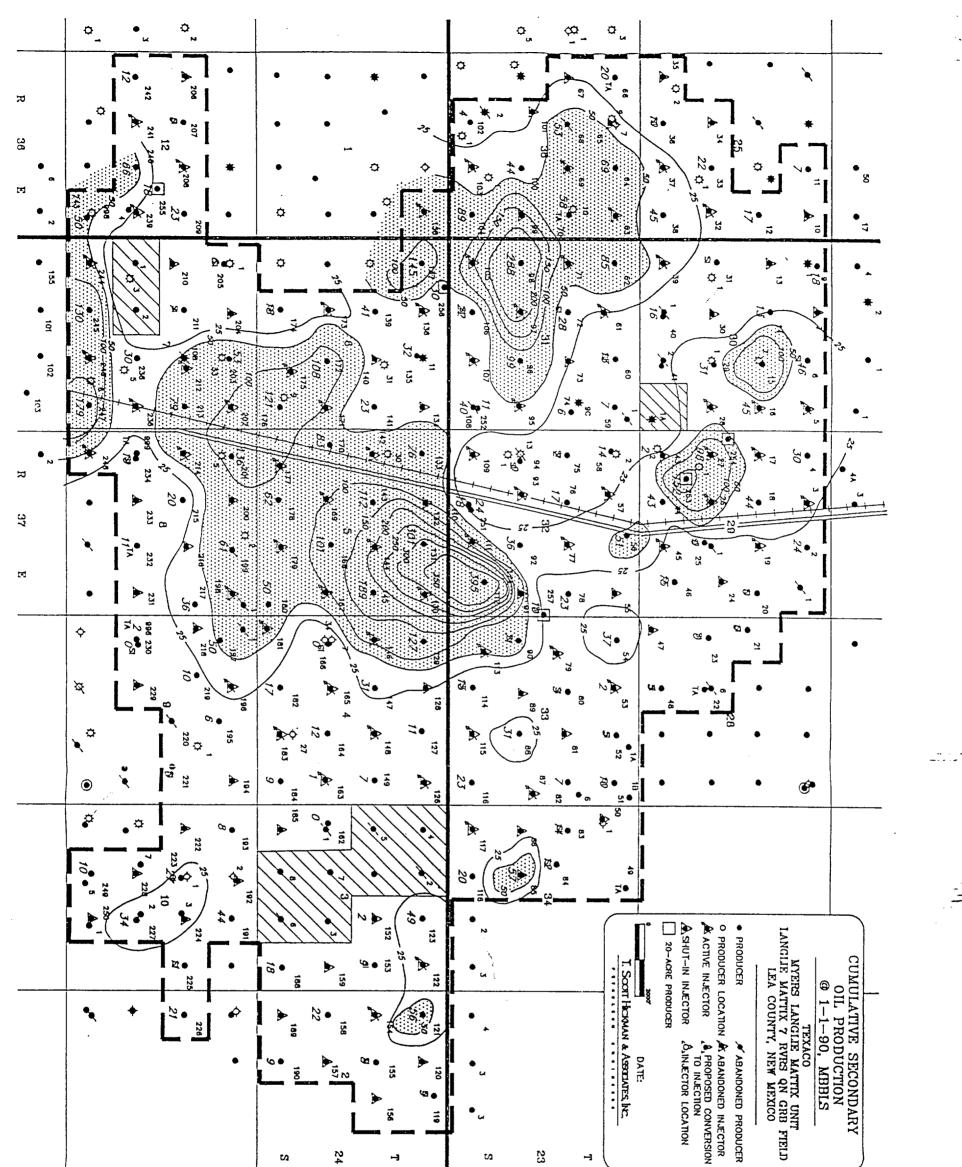
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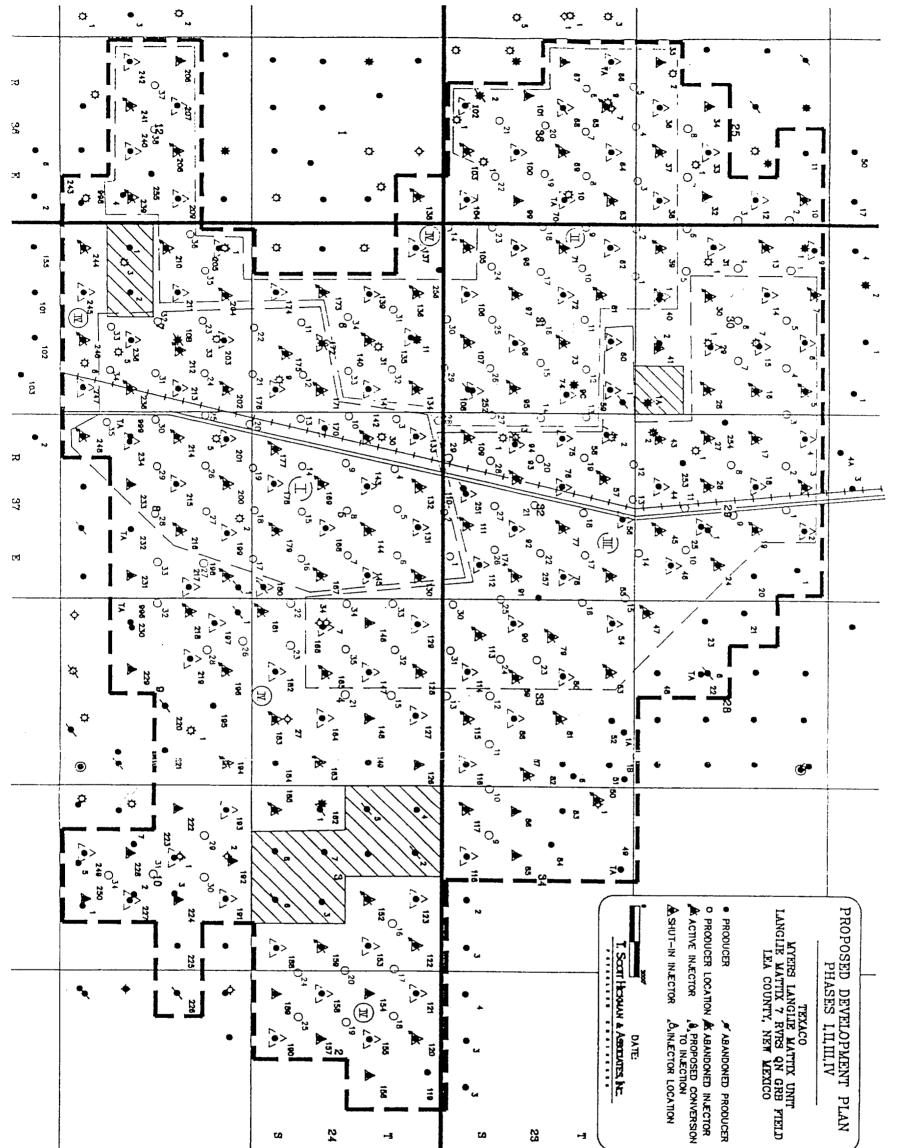
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