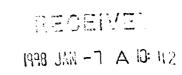
Plan of Operation

JAN 1 3 1973

Jennifer San Andres Unit Chaveroo San Andres Field Unit No. NM 82040 X Roosevelt County, New Mexico



Permian Resources, Inc. (the "Company") operates the Jennifer San Andres Unit ("JSAU") which is located in part of the Chaveroo Field, Roosevelt County, New Mexico. The JSAU covers approximately 5,147 acres of land including the following lands:

Sections 18, 19, 20, 29, and 30 in Township 7 South, Range 34 East Section 25, 26(S/2), 35, and 36 in Township 7 South, Range 33 East.

CURRENT OPERATIONS

There are 69 total wells in the JSAU of which 58 are actively producing into 2 central tank batteries. The producing wells produced 7,806 barrels of oil and 9,400 mcf of gas from January through October, 1997. There are also 2 water injection wells(JSAU #29-6 and JSAU #36-7) currently servicing the field.

The accompanying production decline curve shows that the production rates have been increased during the years the company has operated the property.

A personnel field management and staff change during middle 1997 has resulted in a dramatic decrease in daily production and profitability of the JSAU. The company believes that over time the current personnel will be able to better manage the property. Because of the isolation from typical oilfield services, the low producibility of the unit, and low oil prices, the company has to use its own employees to do all of well servicing operations. To date the company employs 13 people who drive to the field from the towns of Lovington and Tatum, New Mexico.

SHUT IN WELLS

There are several wells which have been inactive and they will be re-entered to place back on production or plugged during 1998. These include the following:

JSAU 26-16	JSAU 26-9
JSAU 26-15	JSAU 26-10
JSAU 26-14	JSAU 26-12
JSAU 26-13	JSAU 18-15
JSAU 19-1	JSAU 20-5
JSAU 20-6	

Work on these wells is scheduled to be completed on or before October 15, 1998 with the permission of the Bureau of Land Management.

WELL PLUGGING

If any of the above wells have to be plugged they will be plugged in accordance with the NMOCD rules and regulations. They will be plugged as follows:

- 1. Set CIBP above perforations and dump 35' of cement on top or set a 25 sack plug
- 2. 100' plugs at 2300' and 1850' (bottom and top of salt section)
- 3. If 4 1/2" casing is not pulled below 2500' place a 25 sack cement plug inside 4 1/2" casing in interval 2300-2500, or 100' plug in and out of 4 1/2" stub.
- 4. 100' plug across surface casing shoe and 50' plug in top of surface casing with dry hole marker installed.

PRODUCTION ENHANCEMENT

The company is planning workovers on several wells that are either producing or shut-in. A detailed well file and electric log analysis of every well in the JSAU has been completed. That study has revealed several added new pay zones and workover candidates that will be perforated and treated(acid, frac, or CO2) and if successful will greatly increase the daily production. The depressed oil and gas prices will dictate the number of wells worked over and the amount of capital spent on this enhancement project but the company believes that significant reserves can be found.

Work on these wells will begin on or before July 15, 1998 with the permission of the Bureau of Land Management.

FUTURE OPERATIONS

The company firmly believes that the influx of production technology especially in the secondary recovery field will enable the field to ultimately produce substantial secondary reserves. The company has reviewed several opportunities which include continuos hot water systems, polymer waterflooding, water flow obstruction methods, CO₂ Huff and Puff, and CO₂ Flooding. It is believed that only 5% of the original oil in place has been produced using conventional primary production methods.

In many of the San Andres secondary recovery fields in New Mexico and Texas a 1:1 primary to secondary oil recovery ratio is used. If this ratio is achieved in the JSAU then there may be 4.5 million barrels of oil possible recovery.

PRODUCT PRICING

Oil production is sold via to Scurlock Permian Corporation(not an affiliate or business relation to Permian Resources, Inc.). The company has been able to negotiate with Scurlock to have the 20 degree sour crude sold at a better 34 degree sour price. The isolation from market pipelines forces even lower oil prices because of the higher trucking costs than can be anticipated at locations further south and east.

-Plan of Operation
Jennifer San Andres Unit
Chaveroo Field
Roosevelt County, New Mexico
Page 3 (cont.)

Gas production is sold via pipeline to Warren Petroleum to a plant located near Bluitt, New Mexico. The company has recently re-negotiated a gas contract with Warren that should increase the previously poor gas prices.

Robert H. Marshall Vice President December 31, 1997

APPROVED

Jonn & Fliguson

AUTHORIZED OFFICER, MINERALS BUREAU OF LAND MANAGEMENT



State of Rem Mexico

OFFICE OF THE

Commissioner of Aublic Tunds

Sania Fe

PO BOX 1148 SANTA FE, NEW MEXICO 87504-1148

SLO REF NO. OG-1331

November 24, 1993

Permian Resources, Inc. P.O. Drawer 590 Midland, Texas 79702

Attn: Mr. Robert Marshall

1993 Plan of Development

Jennifer Chaveroo San Andres Unit

Roosevelt County, New Mexico

Gentlemen:

The Commissioner of Public Lands has this date approved the above captioned Plan of Development. Our approval is subject to like approval by all other appropriate agencies.

The possibility of drainage by wells outside of the Unit Area and the need for further development of the unit may exist. You will be contacted at a later date regarding these possibilities.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY B. POWELL, M.S., D.V.M. COMMISSIONER OF PUBLIC LANDS Donle Ran

FLOYD O. PRANDO, Director Oil and Gas Division (505) 827-5744

RBP/FOP/pm cc: OCD BLM

RAY B. POWELL COMMISSIONER

State of New Mexico

OFFICE OF THE

Commissioner of Public Lands

Santa Fe

P.O. BOX 1148

July 12, 1993

Permian Resources Inc. P.O. Drawer 590 Midland, Texas 79702

Mr. Robert H. Marshall

Re:

Designation of Successor Unit Operator Jennifer Chaveroo San Andres Unit Area

Roosevelt County, New Mexico

Dear Mr. Marshall:

The Bureau of Land Management has advised this office that Permian Resources, Inc. has been Designated as the Successor Unit Operator of the Jennifer Chaveroo San Andres Unit Area, Roosevelt County, New Mexico.

Our records reflect that Snyder Oil Company is still the operator of record for this unit. Pursuant to the terms of the Jennifer Chaveroo San Andres Unit Agreement, any change in unit operators must also be approved by the Commissioner of Public Lands.

In view of the above, please submit a resignation/designation of successor unit operator or other authorization to operate in this unit to this office for approval. If the change of operator has not been filed with and approved by this office, you are operating the Jennifer Chaveroo San Andres Pool Unit without authority.

Please submit the appropriate documents for designation of successor operator of the Jennifer Chaveroo San Andres Pool Unit within thirty (30) days from receipt of this letter. Failure to timely submit the requested documents may jeopardize the state leases committed to this unit agreement.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY B. POWELL

COMMISSIONER OF PUBLIC LANDS

- Couple Num

FLOYD O. PRANDO, Director Oil/Gas and Minerals Division (505) 827-5744 RBP/FOP/pm

encls.

Reader File CC:

> BLM OCD



State of New Mexico

OFFICE OF THE

Commissioner of Public Lands

Santa Fe

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

July 26, 1993

Permian Resources, Inc. P.O. Drawer 1359 Midland, Texas 79702

Attention: Mr. L. Kent Burkhart

Resignation/Designation of Successor Unit Operator Re:

Jennifer Chaveroo San Andres Unit

Roosevelt County, New Mexico

Dear Mr. Burkhart:

This office is in receipt of a designation of successor unit operator, wherein Snyder Oil Corporation has resigned as unit operator of the Jennifer Chaveroo San Andres Unit designated Permian Resources, Inc. as the successor unit operator.

The Commissioner of Public Lands has this date approved the resignation of Snyder Oil Corporation and the designation of Permian Resources, Inc. as the successor unit operator of this unit. This change in operators is effective June 15, 1993. accordance with this approval, Permian Resources, Inc. is now responsible for all operations and the reporting of production from the unit.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY B. POWELL

COMMISSIONER OF PUBLIC LANDS

loyle Han FLOYD O. PRANDO, Director Oil/Gas and Minerals Division

(505) 827-5744 RBP/FOP/pm

encls.

Reader File CC:

BLM - Roswell

Snyder Oil Company

OCD - Ben Stone

TRD

#9742

DESIGNATION OF SUCCESSOR UNIT OPERATOR Jennifer Chaveroo San Andres Unit County of Roosevelt, State of New Mexico

THIS INDENTURE, dated as of the 1st day of October, 1991, by and between SNYDER OIL CORPORATION, hereinafter designated as "Successor Operator", MURPHY OPERATING CORPORATION, as Operator and as an owner of unitized working interests, hereinafter designated as "Resigning Unit Operator", and P.A.J.W. CORPORATION, as an owner of unitized working interests.

WITNESSETH

WHEREAS, under the provisions of the Mineral Leasing Act of February 25, 1920, 41 Stat. 437, 30 U.S.C. §181, et seq, as amended by the Act of August 3, 1946, 60 Stat. 950, the Secretary of the Interior, on the 1st day of October, 1989, approved the Unit Agreement for the Jennifer Chaveroo San Andres Unit, wherein Murphy Operating Corporation is designated as Unit Operator; and

WHEREAS, under the provisions of an Act of the Legislature (§3, Chap. 88, Laws of 1943, as amended by §1, Chapter 162, Laws of 1951; Chapter 19, Article 10, Section 47, New Mexico Statutes 1978 Annotated), the Commissioner of Public Lands on the 1st day of October, 1989, approved a Unit Agreement for the Jennifer Chaveroo San Andres Unit, wherein Murphy Operating Corporation is designated as Unit Operator; and

WHEREAS, said Murphy Operating Corporation has resigned as such Operator, and the designation of a Successor Unit Operator is now required pursuant to the terms hereof; and

WHEREAS, Successor Unit Operator has been and hereby designated by Resigning Unit Operator as the Unit Operator, and said Successor Operator desires to assume all the rights, duties, and obligations of Unit Operator under the said Unit Agreement.

NOW, THEREFORE, in consideration of the premises herein set forth and the promises hereinafter stated, the Successor Unit Operator hereby covenants and agrees to fulfill the duties and assume the obligations of Unit Operator under and pursuant to all terms of the Jennifer Chaveroo San Andres Unit Agreement, and the Resigning Operator covenants and agrees that, effective upon the approval of this indenture by the authorized officer in the proper Bureau of Land Management office and the Commissioner of Public Lands, Successor Operator shall be granted exclusive right and privilege of exercising any and all rights and privileges of Unit Operator pursuant to the terms and conditions of said Unit Agreement; said Unit Agreement being hereby incorporated by references and made a part hereof as fully and effectively as though said Unit Agreement were expressly set forth in this instrument.

My Commission Expires:

IN WITNESS WHEREOF, the parties hereto have executed this instrument as of the date hereinabove set forth. SUCCESSOR UNIT OPERATOR: SNYDER OIL CORPORATION Lualler RESIGNING UNIT OPERATOR: MURPHY OPERATING CORPORATION Chairman & Chief Executive Officer UNITIZED WORKING INTEREST OWNER: P.A.J.W. CORPORATION By: John H. Slawton Vice-President/Secy. THE STATE OF New Mexi SS. COUNTY OF Chaves The foregoing instrument was acknowledged before me this , 1991, by Rodney L. Weller, of SNYDER OIL CORPORATION, a Texas 27th day of August corporation, on behalf of said corporation.

GIL CONSERVE UN DIVISION RETULTED

SICISnyder Oil Corporation

<u>192 FE# 711 AM 9 28</u>

777 Main Street, Suite 2500 Fort Worth, Texas 76102

7-13-92

January 30, 1992

Oil Conservation Division
Energy and Minerals Department
State of New Mexico
Post Office Box 2088
Sante Fe, New Mexico 87504-2088

Attention: Mr. David R. Catanach, Engineer

Re: Plan Of Operation for 1992

Jennifer Chavaroo (San Andres) Unit

Chavaroo (San Andres) Field Roosevelt County, New Mexico

Gentlemen:

Snyder Oil Corporation ("SOCO") assumed operatorship of the referenced unit on 10/1/91. Pursuant to the provisions of the existing unit agreement, Snyder respectfully submits for your consideration and approval, this Plan of Operation for 1992.

- I. Review of 1991: All wells in the unit capable of producing oil at economic levels were active throughout the year. All water production was reinjected into the productive zone using one permitted disposal well.
- II. Proposed 1992 Plan of Operation: SOCO and the working interest owners of the Jennifer Unit propose that unit development be deferred until the end of 1992. This will allow more time to evaluate the performance of the immediately adjacent Haley Chavaroo and Kerr-McGee Chavaroo Units.
- III. <u>Discussion:</u> The two units mentioned above have been injecting water into the Chavaroo reservoir for about 2 1/2 years. There has been little or no increase in oil production during that time. Although a significant time lag between first injection and production response was expected, some unanticipated problems have emerged. The most troubling of these is premature water breakthrough in some areas of the Haley Unit. Given this situation, it appears prudent to defer development activity on the Jennifer Unit until the offsetting waterfloods respond and/or the breakthrough problems are more clearly understood.

The impact of this delay on the remaining Jennifer Unit hydrocarbon resource will be minimal. The unit area is extremely depleted with very low fluid levels in each wellbore. Consequently, a delay in development will not materially alter reservoir conditions or effect the success of future secondary operations. In addition, this depleted condition eliminates the threat of contaminating shallow fresh water supplies.

Another factor to consider is the significant capital investment required to install a waterflood in the Jennifer Unit. If this investment is made without full understanding of all reservoir parameters, some of this financial resource could be wasted.

IV. <u>Modification:</u> Subject to your further approval, the Plan of Operation may be modified or supplemented during the year to meet changed conditions and to protect the interests of all parties to the unit agreement.

If you have any questions or need further information, please contact the undersigned at (817) 882-5932.

Respectfully submitted,

Matt Eagleston

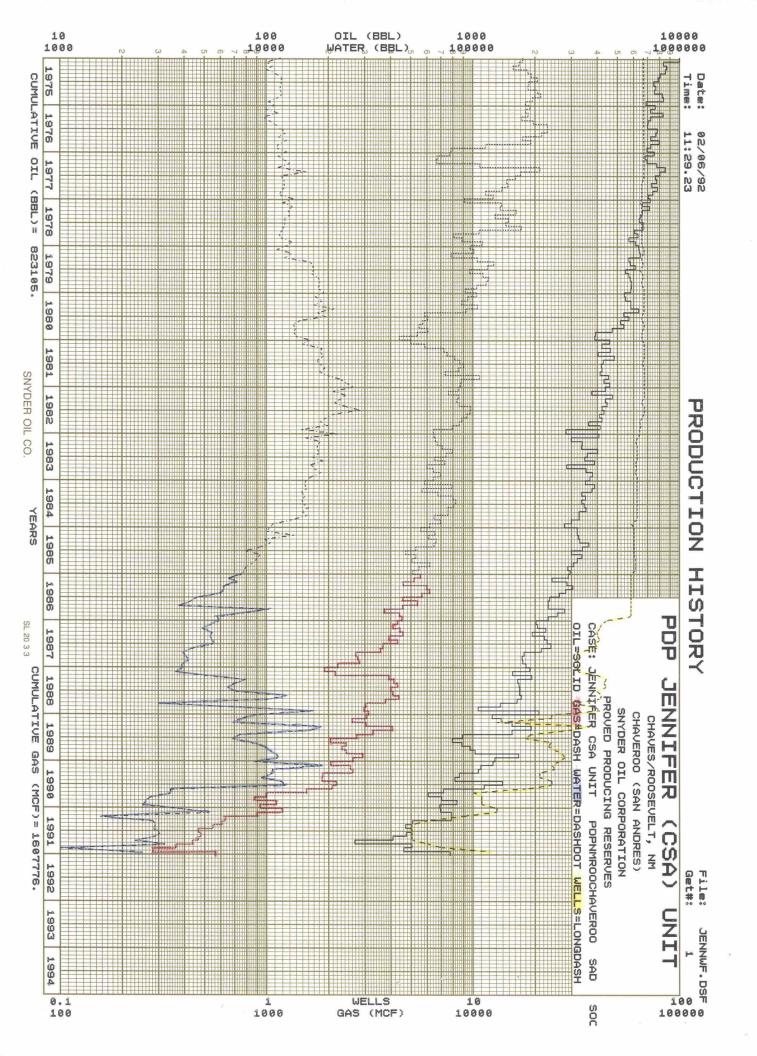
Production Engineer

attachments: Unit Map

Unit Performance Curve

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State of New Mexico

OFFICE OF THE

Commissioner of Public Cands

Santa Fe

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

May 4, 1992

Snyder Oil Corporation 777 Main Street, Suite 2500 Fort Worth, Texas 76102

Attn: Ms. Janet Dryden

Re: Designation of Successor Unit Operator, Jennifer Chaveroo Unit

Roosevelt County, New Mexico

Dear Ms. Dryden:

This office is in receipt of your letter of April 15, 1992 together with a copy of your designation of successor unit operator for the Jennifer Chaveroo San Andres Unit, Roosevelt County, New Mexico.

The Commissioner of Public Lands has this date approved the designation of Snyder Oil Corporation as the unit operator for the Jennifer Chaveroo San Andres Unit effective October 1, 1991.

Our approval is subject to like approval by the Bureau of Land Management.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

JIM BACA COMMISSIONER OF PUBLIC LANDS

BY: I Copl & Man FLOYD O. PRANDO, Director Oil/Gas and Minerals Division (505) 827-5744 JB/FOP/pm encls.

cc: Reader File
BLM - Roswell
OCD



State of New Mexico

OFFICE OF THE

Commissioner of Public Tands

Santa **N**e

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

April 6, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Murphy Operating Corporation United Bank Plaza, Suite 300 400 North Pennsylvania Avenue P.O. Box 2648 Roswell, New Mexico 88202-2648

Attn: Mr. Mark B. Murphy

Change of Unit Operator Jennifer (San Andres) Unit Roosevelt County, New Mexico

Dear Mr. Murphy:

Our records reflect that Murphy Operating Corporation is the current operator of record for the Jennifer Chavaroo San Andres Unit. It has been brought to our attention that Synder Oil Corporation is now operating this unit.

Pursuant to Section 8 (b) of the Jennifer Chaveroo San Andres Unit Agreement, the selection of a successor unit operator shall be approved by the Commissioner and Division.

Please be advised that you have thirty days from the date of this letter to submit for approval to this office, the resignation of Murphy Operating Corporation and the designation of Snyder Oil Corporation as the successor unit operator of the Jennifer Chaveroo San Andres Unit. Also, our records indicate that a Surface Improvement Damage Bond has not been filed with this office by Snyder Oil Corporation. Snyder Oil Corporation cannot be approved as the successor operator until the proper bonds have been filed.

Failure to submit the above required information will subject the Jennifer Chaveroo San Andres Unit to termination pursuant to Section 8 of Unit Agreement.

Murphy Operating Corporation Jennifer Chavaroo (San Andres) Unit April 6, 1992 Page 2

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

JIM BACA COMMISSIONER OF PUBLIC LANDS

BY: - Coyy Marchando, Director Oil/Gas and Minerals Division (505) 827-5744
JB/FOP/pm

cc: Reader File
Snyder Oil Corporation
OCD



State of New Mexico Commissioner of Public Lands

#9742

W. R. Humohries COMMISSIONER

Advisory Board April 23, 1990

George Clark Chairman

Kristin Conniff

Murphy Operating Corporation

Vice Chairman P.O. Box 2648

RE:

Melvin Cordova Roswell, New Mexico 88202-2648

Joe Kelly

Robert Portillos

ATTN: Mr. Mark Murphy

Nancy Lynch Vigil

Rex Wilson

Jennifer Chaveroo San Andres Unit

1990 Plan of Development

Gentlemen:

The Commissioner of Public Lands has this date approved the 1990 Plan of Development for the Jennifer Chaveroo San Andres Unit. Our approval is subject to like approval by all other appropriate agencies.

The possibility of drainage by wells outside of the Unit Area and the need for further development of the Unit may exist. You will be contacted at a later date regarding these possibilities.

Enclosed is an approved copy of the 1990 Plan of Development for your files. If we may be of further help, please do not hesitate to contact this office at (505) 827-5746.

Very truly yours,

W.R. HUMPHRIES,

COMMISSIONER OF PUBLIC LANDS

Thomas Chan

BY:

FLOYD O. PRANDO, Director Oil and Gas Division

(505) 827-5746

OCD - Santa Fe, New Mexico cc:

BLM

Unit Correspondence File

Unit P.O.D. File

WRH/FOP/SMH

P.O. Box 1148 Santa Fe, NM 87504-1148 (505) 827-5760

#9742



MURPHY OPERATING CORPORATION

UNITED BANK PLAZA, SUITE 300 400 NORTH PENNSYLVANIA AVENUE POST OFFICE BOX 2648

TELEPHONE 505 623-7210

ROSWELL, NEW MEXICO 88202-2648

April 5, 1990

Mr. Francis R. Cherry, Jr., District Manager United States Department of the Interior Bureau of Land Management Roswell District Office Post Office Box 1397 Roswell, New Mexico 88202-1397

Attention: Mr. Armando Lopez, Branch Chief

Branch of Fluids

Mr. William J. LeMay, Director Oil Conservation Division Energy and Minerals Department State of New Mexico Post Office Box 2088 Santa Fe, New Mexico 87504-2088

Attention: Mr. David R. Catanach, Engineer

Mr. Floyd O. Prando Director Oil and Gas Division State of New Mexico Commissioner of Public Lands Post Office Box 1148 Santa Fe, New Mexico 87504-1148 46-90 D-Unit letter The Ry

Re: PLAN OF OPERATION FOR 1990

Proposed Jennifer Chaveroo San Andres Unit Chaveroo San Andres Field Roosevelt County, New Mexico

Gentlemen:

Pursuant to the provisions of Section 11. of the Unit Agreement, Murphy Operating Corporation ("MOC"), designated Unit Operator of the Jennifer Chaveroo San Andres Unit, Roosevelt County, New Mexico, respectfully submits for your consideration and approval, this Plan of Operation for the secondary recovery of oil by waterflood on the subject unitized land.

- I. Review of 1989: The Jennifer Unit became effective on November 1, 1989.

 All wells capable of production were activated to establish baseline well production tests. These wells have been continuously produced until April 1, 1990.
- II. <u>Proposed 1990 Plan of Operation</u>: MOC and the working interest owners of the Jennifer Unit propose that unit development be immediately undertaken in three phases as proposed below:

<u>Phase I:</u> Initiate injection by gravity into six (6) proposed injection Wells #26-14, #26-16, #35-06, #35-08, #35-14, and #35-16. The conversion of these wells to injection will facilitate a double inverted nine-spot pattern allowing MOC to monitor injection and production performance.

In addition to the injection conversions, rework and return to production the following twenty-three (23) wells: #25-13, #26-09, #26-10, #26-11, #26-12, #26-13, #26-15, #35-01, #35-02, #35-03, #35-04, #35-05, #35-07, #35-09, #35-10, #35-11, #35-12, #35-13, #35-15, #36-04, #36-05, #36-12, and #36-13.

After monitoring injection and production for approximately 90 days, MOC will perform tracer surveys on the six initial injectors. If indications are favorable and injection rates and pressures are satisfactory, then MOC proposes to implement Phase II.

Phase II: Upon completion of the injection plant and related facilities, MOC proposes to convert the existing inverted nine-spot pattern to a five-spot pattern. Utilizing existing well bores, MOC also proposes to expand the inverted nine-spot pattern to evaluate injection

characteristics in undeveloped unit areas. The reworking of certain producing wells located in developed injection areas to monitor performance will also be required.

To convert the initial inverted nine-spot pattern to a five-spot pattern, the following eight (8) wells will be converted to injection: #26-10, #26-12, #35-02, #35-04, #35-10, #35-12, #36-04, and #36-12.

To expand the inverted nine-spot pattern in undeveloped unit areas, the following nine (9) wells will be converted to injection: #25-06, #25-16, #36-07, #18-15, #19-07, #19-15, #20-05, #29-06, and #30-07.

To monitor waterflood performance, the following thirty-three (33) wells will be worked over and returned to production: #25-01, #25-02, #25-03, #25-04, #25-05, #25-09, #25-10, #25-11, #25-15, #36-03, #36-06, #36-11, #19-01, #19-02, #19-08, #19-09, #19-10, #19-11, #19-14, #19-16, #20-03, #20-06, #29-03, #29-04, #29-05, #30-01, #30-02, #30-03, #30-06, #30-08, #30-09, #30-10, and #30-11.

After monitoring injection and production for 120 to 180 days, MOC plans to perform injection profiles on the seventeen (17) proposed Phase II injectors. If indications are favorable and injection rates and pressures are satisfactory, then MOC proposes to implement Phase III.

<u>Phase III</u>: Complete unit-wide development by establishing five-spot pattern. This will require converting the following fourteen (14) wells to injection: #25-02, #25-04, #25-10, #36-06, #19-01, #19-09, #19-11, #20-03, #29-03, #29-05, #30-01, #30-03, #30-09, and #30-11.

To fully develop the Jennifer Unit, a total of eleven (11) wells will be drilled in the third or fourth quarter of 1991. These eleven (11) wells consist of seven (7) injection wells (#25-08, #25-12, #25-14, #36-02, #19-03, #20-11, and #20-13) and four (4) producing wells (#25-07, #19-06, #20-12, and #20-14.)

- II. Operating Guidelines: MOC plans to monitor all injection wells through daily rate and pressure checks. After 90 to 180 days of initiation of injection into any given well, a tracer survey will be run in order to insure acceptable injection profiles. If unacceptable injection profiles are observed, appropriate remedial work will be performed. As wells are converted to injection status, the annuluses of each well will be filled with inert ("packer") fluid containing corrosion inhibiting chemicals. The downhole integrity of each injection well will be determined by "pressuring up" the annulus of each well and maintaining a positive pressure of 300 psig for at least thirty (30) minutes. The precedure for conversion to injection status and all remedial and drilling operations will be performed in strict adherence to the Rules and Regulations of the Oil Conservation Division and the Bureau of Land Management.
- IV. <u>Modification</u>: Subject to your further approval, this Plan of Operation may be modified or supplemented during the year to meet changed conditions and to protect the interests of all parties to the Unit Agreement.

Should you have any questions or comments, please contact the undersigned.

Respectfully submitted,

MURPHY OPERATING CORPORATION

Mark B. Murphy

President and Chief Operating Officer

MBM/js

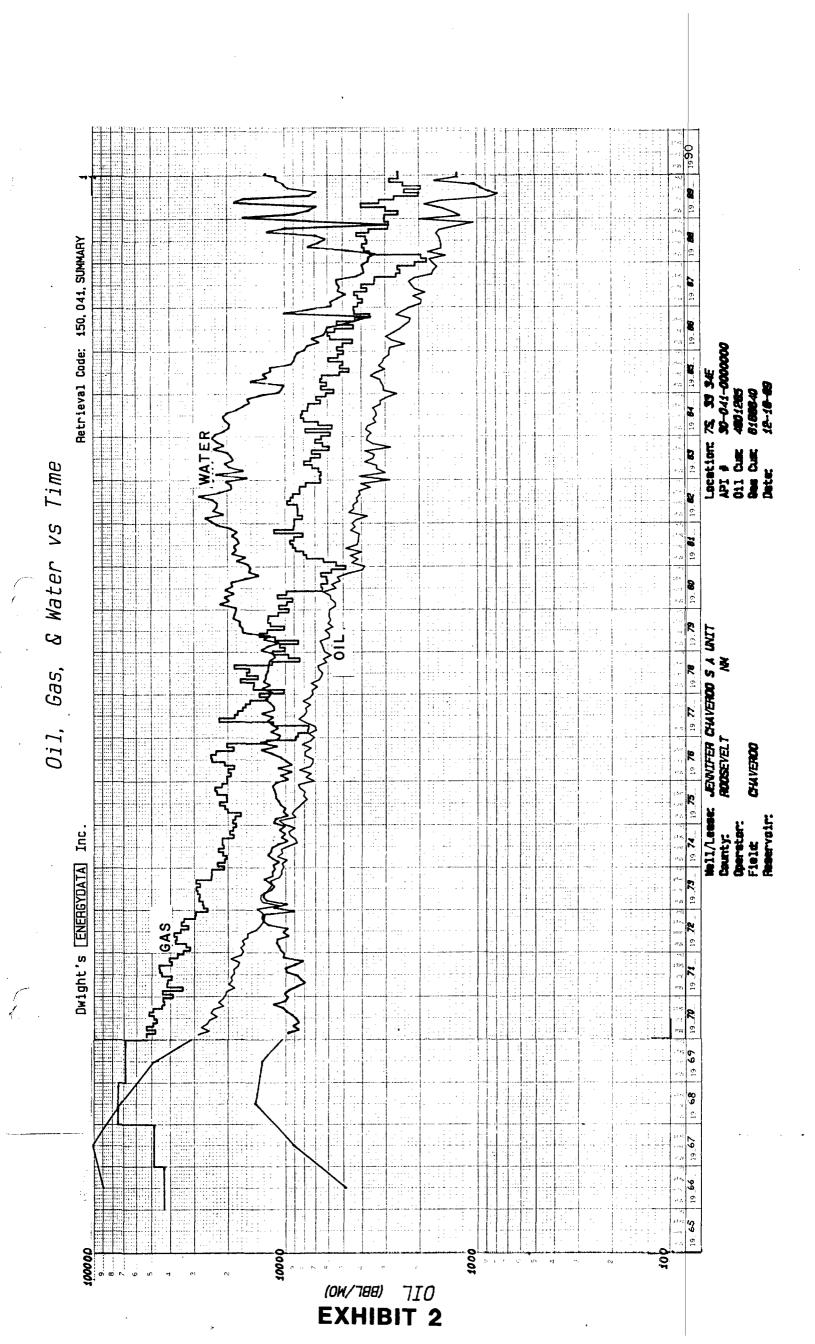
Attachments: Jennifer Chaveroo San Andres Unit Well Location and Status Map;

Jennifer Chaveroo San Andres Unit Reservoir Performance Curve; Jennifer Chaveroo San Andres Unit 1989 Tabulated Production and

Injection Data.

cc: Mr. Jerry E. Sexton, Supervisor State of New Mexico Energy and Minerals Department Oil Conservation Division Post Office Box 1980 Hobbs, New Mexico 88240-1980

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6 6 6 729	Researchim. 4.1.36 64501 M.I. Saffing & M.I. Saffin	N. 4.	Sabine Roy, M. W. H. Hardingika Krank Googwingth	Paul Davis	д ; В с в р	T T	R.T. Pate, etal Janes Robinson. Co.	C.W. Alconur. 2-1-91 reuit (S) Henry Seebe
Vartes Pet trail V. 2559 V. 2559 V. 2559 V. 2559 T. M. Vess Pet Gaelic Fet M. H. Box Fet Straft, St. T. Straft, St.	Clinton dil HBP 0147393 S.E.Wisdan to base of 3A L.S. D.W. Bro		T.E. Davie, Jr. M.E., H.H. E. Paul Davis	T.E. Dav's, Jr. M.E., H.H.E. Poul Davis	J. J.	1 69 T	RT p	Set Bet, etal C.W. Alec 3.4.83 12089 C.Z. 1.79 Top Previt (5) Set Sullivan Etz Oil, etal Henry Se
(Shell) NRM 2 2 4 7 7 1 10 NRM 174550	(Amoco) 1 of Muphy Oper. 1 of Muphy Oper. 1 of Muphy Oper. 2 of 1323 (S.E. Wisdom) 3 of 1323 (S.E. Wisdom) 3 of 1323 (S.E. Wisdom)	10 Schutz 11 - 1 - 93 VA - 142 23 13	29 - Teneco HBP 	1.8 C.B.Repd Sincleif TD4650	1	7 7 7	Jr, etal	TAL Beall 11:99 16:6252 6000
Shell) NRM Per E.H.E. Sieber H.C. Sieber M. Markham M. Marker John M. Marker D. W. Brown D. W. Bro	A Maria Mari	Murphy Open, X 1370 X 1370	N D	Mare to 10-1-93 VA-127 21 SB	• • • • • • • • • • • • • • • • • • •	93.181K 83.1K	ຫົ	Epstland Oil 10 - 1 - 93 VA - 129 25 %
(Amoco) C. 64 650 Ti Murshy Oper. (S.E. Wisdom) The seas of Ed. Ti 18 Welf-Fed. (6) U.S. (6) U.S. (7) (6) U.S. (7) (7) T.E. Tucker(S)	1.24 Murphy Oper. 2.14 Murphy Oper. 3.15 Michael Michael	_ £ = }	EROO SAN ANDRES	77.56 25 gr 31	17.19 J	11.75 121.35 121.	-	."
(Amoco (**10) (**	Saliki Saliki Saliki		JENNIFER CHAVE	Myco Pet Marathan Marathan 1 (1)		Manage Margares.		
E. Burgland. etg. (Amoco) Haseloff Corp. Sasses Amoco Worgant. Fed.: #7	Mims Texas O C.G. (Clinton Oil) 13 pc.2 (Mary Oil) 14 pc.2 (Mary Oil) 1	(Amoco, DR) Dalport Mins Texas Geleort B Color Col	Clinton 0 - 0 50 -2	Someogy Murphy Murphy Inurghy 1 351 (1 18 18 20) (10 18 18 18 18 18 18 18 18 18 18 18 18 18	A 22 K. 405 F. W. 1953 10 POF. LT. 10 POF.	C . K.D. S. S. S. K M CHAVEROO SA	Kegrim Congression	
O O		Yares Feu 13 Amaco High Plains Oil 122	9	Champling 1	HALEY CHAVEROO SAN ANDRES UNIT WITH HOLD STORES IN 18. 15. 18. 18. 18. 18. 18. 18. 18. 18. 18. 18	18.82 21.8.61 1 48.16 2 12.9.12 314.12, 214.18 (6.13 4 240.18 3145.1) 2148.16 The Tax Property Charles Control Dristol Murphy Chest (Fally Notes Control Western Charles Control Western Charles Control Western Charles Control Western Charles Control Charles Char	18 18 18 18 18 18 18 18 18 18 18 18 18 1	Chambers 6. 194 Arco's Wally 194 194 194 194 194 194 194 194 194 194



MURPHY OPERATING CORPORATION
4TH QUARTER PRODUCTION REPORT
JANUARY 1, 1990
JENNIFER CHAVEROO SAN ANDRES UNIT

		STATE DE		051060	STATE DE		STATE DA		090121	STATE DA			STATE CV		090125		000110	000118		721060	STATE CV	100	Computer #	PRODUCTION
		E TOTAL	77-14	ງ ⊢ ໄ			A TOTAL) ()					CV TOTAL	35-08	3 1		35-02	N D	00-11	วก กัก		1		
			+				'					,	'					35-T	•		ა ი		NAME,	R00 S/
				35-1/3-8036	76 D 23				35-T7S-R33E						35-T7S-R33E			35-T7S-R33E		35-1/3-8336	76 023		, ד	AND.
					n 0				ιπ						-c			S			о П		STATUS	N CHAVEROO SAN ANDRES UNIT
	WAT	010	WAT			WA.	GAS OIL	WA1	GAS		WAT	GAS	011	WAT	_	WAT			WAT				SUT	
							л 42 6 2		56			3 483		211									THRU :	
	1,554	8,153	11,554	7,706	8 153		2,792 6,598	1			4,304	3,520	7,310	1,839	7,096	5,283	2,214	9,554	7,182	5.391	560		CUMULATIVE HRU 12/31/88	
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			0			0	-		00														1989 JAN. F	
	52	722	52	o l	222	0	0 0	0	0 0	•	204	28	91	0	> c	o c	0	0	204	28	91		FEB.	
	8	o 0	8	0	60	0	0 0	0	00	>	33	10	51	0	> c	-	0	0	႘ၟ	10	5 <u>1</u>		MAR.	JENNIFER EFFEC
		0 2	0	0	62	0	0 0	0	0 0	o	1830	0	48	0	> c	0 56/T	0	0	37	0	48		APR.	CHAVEROO CTIVE OCT
	32	4 0	32	0	48	0	00	0	00	5	1630		45	0	-	1614 0	0	0	16	0	45		MAY	SAN OBER
	ω «	ر د د	5 0	0	ဌ	0	00	0	0 0	>	1530		65	1515	-) C	0	0	15	0	65		JUN.	ANDRES UNIT
	ω «	o c	8	0	40	0	00	0	0 0	o	666) 	41	0	0 0	5 C	0	0	999	0	41		JUL.	
	8	0 44	8	0	44	0	00	0	00	5	069) C	44	0 (0 0	780	200	0	œ	0	44		AUG.	
	8	0 43	ည်ထ	0	43	0	00	0	0	>	110	, , ,	32	0	0	>	0	0	110	0	32		SEP.	
	0	o ‡	20	0	43	0	0 0	0	0	>		o C	44	0	0	-	0	0	0	0	44		ост.	
	7	o `	7	0	37	0	0 0	0	0	5	7.5	i c	34 6	0	0 (o c	o C	0	15	0	34		NOV.	
	8	0 0	40	0	40	0	00	0	0	o o	10	i c	41	15	o i	4 c	o C	· 0	. 0	0	0		DEC.	
	139	0	139	0	692	0	0 0	0	0	5	10,011		542	3,485	43	47	>		2,437	38	495		TOTAL	
٠.,	1 .	ر. د	11,693	5	ω		56 ,5 98	4	56,598	>	117	ນັດ	ň	215,324	, O	 (J K	ប់	Ň	5,4	<u>, </u>	٠	TOTALS_	

MURPHY OPERATING CORPORATION 4TH QUARTER PRODUCTION REPORT JANUARY 1, 1990

090110	090109	090105	HOBBS W 090106	STATE G	090024	090019	090023	090020	090022	STATE G 090021	Computer Well #	PRODUCTION JENNIFER C
4 H 3 30-08	3 G ; 30-07	2 A 30-01	1 B 3	TOTAL	6 P 19-16	5 I 19-09	4 0 19-15	3 J 19-10	2 N 19-14	(Kerr-McGee 1 K 19- 19-11	WELL !	ION R CHAVEROO
30-T7S-R34E	30-T7S-R34E	30-T7S-R34E	30-T7S-R34E	٠.	19-T7S-R34E	19-T7S-R34E	19-T7S-R34E	19-T7S-R34E	19-T7S-R34E	Corpora T7S-R34E	T R	OO SAN ANDRES
S	S	ρ	۰		S	S	٥	S	S	5 (S	STATUS	UNIT
GAS WAT	GAS WAT	GAS WAT	OIL GAS WAT	OIL GAS WAT	OIL GAS WAT	OIL GAS WAT	OIL GAS WAT	OIL GAS WAT	GAS WAT	OIL GAS	S	
		65,313 28,937 25,653	51,082 34,868 20,525	202,948 265,514 20,501	44,611 55,538 4,449	30,678 31,647 1,769	35,548 56,802 4,672	24,987 26,180 2,739		29,473 39,907 4.790	THRU 12/31/88	
000	000	000	109 306 93	28 342 7	1	!	28 342 7		1 1 1		JAN.	
000	000	000	74 170 84	37 296 4	Last prod.	Last prod.	37 296 4	Last prod.	Last prod.	Last prod.	FEB.	
000	000	000	125 237 193	319 0	l .		22 319 0		date	date	MAR.	JENNIFE!
79 116 91	79 111 29	120 175 60	121 180 60	24 358 8	3/87	12/86	24 358 8	3/87	2/83	2/83	APR.	R CHAVEROO
53 100 93	95 31	80 150 62	80 154 62	26 348 8			26 348 8				MAY	SAN OBER
000	000	0 179 0	48 179 0	17 410 8			17 410 8				.NUC	ANDRES UNIT
000	000	0 85 0	8 0 0	46 373 8			46 373 8				JUL.	
000	000	0 88 0	87 0	25 386 8			386 8				AUG.	
000	000	81 0	800	26 374 8			26 374 8				SEP.	
000	000	0 22 0	0 22 0	23 376 0			23 376 0				0СТ.	
000	000	000	000	25 394 7			25 394 7				NOV.	
000	000	000	000	349 8			28 349 8	1			DEC.	
132 216 184	၈၀ ယ	200 780 122	995	327 4,325 74	4		327 4,325 74				TOTAL	
မှ ရ (၂၈၈)	9,8 3,1 7,4	65,513 29,717 25,775	ļ,	203,275 269,839 20,575		,	35,875 61,127 4,746				TOTALS	

Page 1

MURPHY OPERATING CORPORATION 4TH QUARTER PRODUCTION REPORT JANUARY 1, 1990

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090030	090027	HOMME F 090029	HOBBS W		090094		090091	090093	0	090092	HOBBS W 090112	Computer Well #	PRODUCTION JENNIFER C
3 F 20-06	2 C 20-03	EDERAL 1 E 20-05	W TOTAL	v.	29-06	U	သ တ က	7 E 29-05	29-04	ກ ວ	(cont 5 J 30-1	r LEASE	ION R CHAVEROO
1		. 1					29-	29-	ļ	29-17	(continued): 5 J 30-T7S-R 30-10	NAME,	EROO SAN
20-T7S-R34E	20-T7S-R34E	20-T7S-R34E			79-1/J-RJ4E	7	T7S-R34E	T7S-R34E		-T7S-R34E	S-R34E	T R	N ANDRES
-	S	- 4			F	-1	S	S	,	ഗ	S	STATUS	TINU
OIL GAS WAT	GAS	OIL GAS	OIL GAS INJ	LN1	GAS WAT	E W S	OIL OIL	GAS WAT	GAS	OIL	OIL		
25,505 71,014 14,729	27,465 44,306 14,796		453,298 281,618 482,314 595,621	595,621				68,701 32,967 39,154		192,591 67,244	44,321 26,958	THRU 12/31/88	
0000	000	000	306 93 93	93 @0	000	000	- 0	000	000	00	00	JAN.	
0000	000	000	74 170 84 84	84 @0	000	00) 0	000	000	00	00	FEB.	
000	000	000	125 237 193 193	193 @0	000	000	0	000	000	00	000	MAR.	JENNIFER EFFE
000	0000	000	399 582 240 360	360 @0	000	00	00	000	000	00	000	APR.	CHAVER
000	000	000	266 499 248 293	293 @0	000	00	00	000	000	00	000	МАҮ	O SAN A
000	000	000	358 358	000	000	00	00	000	000	00	000	NUC.	NDRES UN 1989
000	000	000	169	@ 0	000	o o :	0 0		000	00	000	JUL.	
000	000	:	175 0 310	310 @0	000	- 0 (00	0000	000	0 C	000	AUG.	
000	000	000	161 0 300	300 @0	00	-	0 0	0000	000	00	000	SEP.	
000	000	000	44 0 260	260 @0	000	00	0 0	0000	000	00	000	0СТ.	
000	000	000	0000	90 0	00	00	0 0	0000	000	0 0	000	NOV.	
000	000	000	0000	00	000	00	0 0	000	000	00	000	DEC.	
000	000	000	1,021 2,343 1,216 2,251	s o	1	> 0	0 0	0000	000	00	000	TOTAL	
4 - 5	27,465 44,306 14,796	თ თ ა	454,315 283,961 483,530 597,872			4-	NΩ	32,967 32,154	حر ي	77	ათ. <u>გ</u>	TOTALS_	

MURPHY OPERATING CORPORATION 4TH QUARTER PRODUCTION REPORT JANUARY 1, 1990

090070	090067	090069	090062	090068	090059	090061	STATE DB 090060	HOMME FE	Computer Well #	PRODUCTION JENNIFER C
8 N 25-14	7 K 25-11	6 M 25-13	л	4 L 25-12	3 C 25-03	2 E 25-05	3 1 D 25-04	EDERAL		CHAVEROO
25-T7S-R33E	25-T7S-R33E	25-T7S-R33E	25-T7S-R33E	25-T7S-R33E	25-T7S-R33E	25-T7S-R33E	25-T7S-R33E	(continued) TOTAL	S A	ROO SAN ANDRES
A	و	H	ס־	A	סי	S	S		ادما	S UNIT
OIL GAS WAT	OIL GAS WAT	GAS TAW INJ	OIL GAS WAT	GAS WAT	OIL GAS	GAS	OIL GAS	OIL GAS WAT		
55,065 33,682 27,988	76,711 97,431 24,212	70,955 71,682 35,588 3,303	73,421 70,915 14,959	76,257 82,412 30.858	147,639 195,680 70,409	79,087 63,957	70,715 46,565 16.762	115,260 222,250 46,304	CUMULATIVE THRU 12/31/88	
000	000	4 @00 000	446 0	000	000	000	000	000	1989 JAN.	
000	000	364 0	426 0	000	000	000	000	000	FEB.	بر
000	000	0 0 398 0	000	000	000	000	000	000	MAR.	JENNIFER (
000	75 167 274	0 0 720 00	74 167 209	000	000	000	000	0 0	APR.	CHAVEROO TIVE OCT
000	71 172 279	0 0 879 80	71 133 216	000	000	000	000	000	MAY	OBER 1,
000	88 221 274	0 0 720 0	88 169 209	000	000	000	000	000	JUN.	ANDRES UNIT
000	87 200 279	0 0 744 00	86 200 217	000	000	000	000	000	JUL.	
000	81 207 279	0 0 0 744 00	82 207 217	000	000	000	000	000	AUG.	
•	77 187 270	720 , @0	77 187 210	000	000	000	000	000	SEP.	
000	87 192 279	0 0 0 744 00	87 192 217	000	000	000	000	000	OCT.	
000	80 198 270	0 0 720 00	80 198 210	000	000	000	000	000	NOV.	
000	81 165 279	0 0 0 744 00	81 165 217	000	000	000	000	000	DEC.	
000	727 1,709 2,483	7,900	726 2,490 1,922	000	000	000	000	000	1989 TOTAL	
7,98 7,98	77,438 99,140 26,695	1,5	3,40 6,88	6,25 2,41 0,85	7,63 5,68 0,40	5,9 9,0 9,0	0,71 6,56	115,250 222,250 46,304	TOTALS	

MURPHY OPERATING CORPORATION 4TH QUARTER PRODUCTION REPORT JANUARY 1,1990

090013 4 19			 	ם ביים ביים ביים ביים ביים ביים ביים בי	STATE DF TOTAL	STATE DF 090065 1 25		STATE DB TO	STATE DB (C 090071 9 25	Computer LEAS	PRODUCTION JENNIFER CHAVEROO SAN
4 A 19-1/5-K34E 19-01	15	02)7		TAL	1 I 25-T7S-R33E 25-09		TOTAL	(Continued): 9 0 25-T7S-R33E 25-15	WELL S T R	AVEROO SAN ANDRES
~	, –	· -	סי וּ			SWD			P	STATUS	SUNIT
GAS	GAS	GAS	OIL GAS WAT		OIL GAS WAT	OIL GAS WAT	INJ	OIL GAS	OIL GAS WAT	=	
20,714 20,714 14,447	32,667 27,747 13,106	24,578 24,687	32,250 25,626 17,211		26,633 11,571 38,216	26,633 11,571 38,216	269,313	713,867 729,995	64,017 67,671 32,672	CUMULATIVE THRU 12/31/88	
155	3000	000	0000				248 403	165 446	165 0 248	1989 JAN.	
140	n 0 0 0	000	0000			INACTIVE	224 364	175 426	175 0 224	FEB.	
150	2000	000	000			1 1	248 398	19/ 389	197 389 248	MAR.	JENNIFER EFFE
0 120) , , , ,	000	000				720 720	557	99 223 237	APR.	R CHAVEROO
63	1000	000	14 0 62				744 879	458	94 153 249	МАҮ	SAN
00+	-000	000	0000				720 720	581	58 191 237	JUN.	ANDRES UNIT
45	2000	000	000				744 744	533	133 248	ี ปีบน.	
0 217	<u></u>	000	31 0 186				744 744	544	130 248	AUG.	
210)	000	26 0 180				720 720	206 49 2	52 118 240	SEP.	
26	1000	000	14 0 21				744 744	504	57 120 248	0СТ.	
210	2000	000	28 0 180				720 720	522 522	53 126 240	NOV.	
217	, ,, , , , , , , , , , , , , , , , , ,	000	16 0 186				744 744	433	54 103 248	DEC.	
CT -	ے م	000	129 0 815				,90	,88	1,117 1,686 2,915	T0TAL	
0,71 6,00	7,74 7,74 3,10	4,57 4,68	32,379 25,626 18,026	.·			76,63	5,88	65,134 69,357 35,587	TOTALS	

MURPHY OPERATING CORPORATION 4TH QUARTER PRODUCTION REPORT JANUARY 1, 1990

STATE J TOTAL	090072	090057	090063 25-07	STATE J 090058	WOLF FE	WÓLF FEDERAL 090018 5 H 19-1	PRODUCTION JENNIFER C Computer L Well # W
TOTAL	4 P 25-16	3 A 25-01	2 G) (Myco 1 B 25-02	FEDERAL TOTAL	9	R CHAVER Pr LEASE WELL
	25-T7S-R33E		25-T7S-R33E	Petroleum Co. 25-T7S-R33E	OTAL	(continued): 19-T7S-R34E 8	RODUCTION ENNIFER CHAVEROO SAN ANDRES UNIT omputer LEASE NAME, ell # WELL S T R STATU
	ס	S	P&A	s		סי	S UNIT
GAS WAT	OIL GAS WAT	OIL GAS	OIL GAS	OIL GAS	OIL GAS WAT	OIL GAS WAT	S
197,217 135,494 107,032	23,528 19,182 21,345	52,490 43,062 38,130	47,557 47,492	73,707 73,250	158,415 127,312 82,902	37,670 28,647 23,451	CUMULATIVE THRU 12/31/88
186	43 186	000		000	35 0 155	000	1989 JAN.
168	49 0 168	000	g	000	63 0 140	000	FEB.
186	52 186	000	ed 1	000	60 0 150	000	JENNIFER EFFE MAR.
30	300	000	980	000	35 0 120	000	CHAVERO TIVE OC
30	000	19 0 30	c	000	28 0 125	000	O SAN ANI TOBER 1,
29 29	34 29	000	c	000	001	000	JUN.
31	000	22 0 31	c	000	20 0 45	000	ງທະ.
31	31 0 33	000	C	000	62 0 403	000	AUG.
30	<u>ಅ</u>	000		000	52 0 390	000	SEP.
30	30 30	000	C	000	42 0 300	14 0 253	0CT.
30	30	000	C	000	56 0 390	0 0 0	NOV.
30	41 0 30	000	C	000	31 0 403	000	DEC.
425 0 811	384 0 750	41 0 61	c	000	485 0 2,621	14 0 253	1989 TOTAL
197,642 135,494 107,843	23,912 19,182 22,095	9 9 9	•	73,707		37,681 28,647 23,704	CUM. TOTALS

MURPHY OPERATING CORPORATION 4TH QUARTER PRODUCTION REPORT JANUARY 1, 1990

STATE I 090066	STATE K	090143	090138	090145	090144	090135	090137	STATE K 090136	Computer Well #	PRODUCTION JENNIFER C
(Kerr-M 1 J 25-10	K TOTAL	7 K 36-11	6 F 36-06	5 M 36-13	4 L 36-12	3 C 36-03	2 E 36-05	(Myco P 1 D 36-04	WELL	ON CHAVEROO
Kerr-McGee Corporation) 1 J 25-T7S-R33E P 25-10		36-T7S-R33E	36-T7S-R33E	36-T7S-R33E	36-T7S-R33E	36-T7S-R33E	36-T7S-R33E	Petroleum Co.) 36-T7S-R33E	ME,	SAN ANDRES
	₹ © O	P OIL GAS WAT	P 	ν €0.0≅	ာ ဧစ္ပဒ္	S OIL	P OIL	S OD S	STATUS	TINU
OIL 53,127 GAS 26,670 WAT 2,269	OIL 497,761 GAS 550,441 WAT 700,823		រ ១១១១	2	- 0 0 0	120 146 301	OIL 74,701 GAS 74,503 WAT 43,068	277	CUMULATIVE THRU 12/31/88	
93 0 7	465 93	000	000	000	000	000	101 465 93	000	1989 JAN.	
91 0 4	325 84	000	000	000	000	000	78 325 84	000	FEB.	
92 0	533 93	000	000	000	000	000	177 533 93	000	MAR.	JENNIFER EFFE
87 0 8	644 2820	26 76 1804	47 142 254	47 142 310	47 142 367	000	47 142 85	000	APR.	CHAVE CTIVE
90	531 2914	24 63 1836	41 117 291	41 117 321	41 117 379	000	41 117 87	000	MAY	SAN OBER
85 0	579 2520	20 411 1789	41 64 277	000	41 81 353	000	40 23 101	000	.NUC	ANDRES UN 1, 1989
73 0 8	553 2604	25 79 1860	51 158 279	000	50 158 372	000	158 93	000	JUL.	TINU
96 8	11	21 58 1860							AUG.	: : :
91 0	349 2160	32 46 1800	62 101 270	000	101 0	000	101 ÷	000	SEP.	
89 0 7	355 2325	22 46 1860	. 47 103 279	000	47 103 93	000	47 103 93	000	OCT.	
87 0 7	338 2760	26 44 1800	50 98 270	000	600 98	000	90 90 90	000	NOV.	
84 0	312 2542	27 42 1860	52 90 279	000	26 90 310	000	93 5 5 93 6 75	000	DEC.	
1,058 0 73	23 5 1	1	21		2 -		<u>~ 2</u>		TOTAL	
54,185 26,670 2,342	Lume	29,365 45,679 102,962	- w w m	0,01	2,40	100 40 40	5,4 6,7	77,26; 76,35; 34,16;	TOTALS	

MURPHY OPERATING CORPORATION 4TH QUARTER PRODUCTION REPORT JANUARY 1, 1990

090129	STATE 9 090128	HOBBS	090132	090131	090117	090119	HOBBS 1 090126	PRODUCTION JENNIFER C Computer L Well # W
2 M 35-13	SECTION 1 L 35-12	L TOTAL	19 P 35-16	18 0 35-15	17 A 35-01	16 C 35-03	T - T-2 14 J 35-10	1 1 10
35-T7S-R33E	35 (Marathon 0 35-T7S-R33E		35-T7S-R33E	35-T7S-R33E	35-T7S-R33E	35-T7S-R33E	BATTERY 35-T7S-R33E	CHAVEROO SAN ANDRES UNIT LEASE NAME, WELL S T R STATL
٥-	p ii		ס־	סי	9	٥٦	٦	STATUS
GAS WAT	Company) OIL GAS WAT	OIL GAS 1	GAS	GAS WAT	GAS	GAS	GAS	IS T
44,151 62,570 20,313	68,993 132,644 47,244	556 256 424		103,771 255,058 44,494	114,624 251,470 138.504	1/1,43/ 94,174 194,519 20,005	140,139 296,734	CUMULATIVE THRU 12/31/88
000	000	296 983 164	133 413 82	163 570 82	000	0000	000	1989 JAN.
000	000	171 781 76	77 328 38	94 453 38	000	0000	000	FEB.
000	000	390 881 186	175 370 93	215 511 93	000	0000	000	JENNIFER EFFE MAR.
63 218 338	41 142 424	273 808 3540	68 202 106	90 267 71	22 65 1770	22 65 1522	71 209	CHAVEROO CTIVE OCT
59 172 237	29 112 296	334 541 4458	101 135 134	134 179 89	33 43 2051	33 44 1783	33 140	SAN OBER
000	000	000	000	000	000	0000	000	ANDRES UNIT 1, 1989 JUN.
000	000	000	000	000	000	0000	000	JUL.
000	000	000	000	000	000	0000	000	AUG.
000	000	000	000	000	000	000	000	SEP.
000	114 0 596	000	000	000	000	000	000	OCT.
000	83 0 300	624 0 1920	9 6	166 0 60	\sim		126 0	NOV.
25 0 62	51 0 310	381 0 1984	102 0 93	101 0 62	51 0 744	930 930	76 0	DEC.
147 390 637	ろらる	69 94 28	82 63	96 ,98	, 10 28	189 109 5,135	041	1989 TOTAL
44,298 62,960 20,950	9,31 9,31 2,89 9,17	6,96	0,04	4,7 0,4 4,9	3,1,8 3,75	94,363 194,628 25,140	0,70 40,0	CUM. TOTALS

MURPHY OPERATING CORPORATION 4TH QUARTER PRODUCTION REPORT JANUARY 01, 1990

STATE TOTAL	STATE (STATE S 090139	STATE S	090124	090123	090122	Computer Well # STATE SEC	PRODUCTION
OTAL	Jim Coni 1 H 25-08	SECTION 3	SECTION 35 TOTAL	5 H 35-08	4 G 35-07	3 F 35-06	WELL	PRODUCTION
	(Jim Conine Incorporated) 1 H 25-T7S-R33E T 25-08	36 (Marathon Oil Company) 36-T7S-R33E SWD INJ 2,051,807	35 TOTAL	35-T7S-R33E	35-T7S-R33E	35-T7S-R33E	R tinued)	OO SAN ANDRES UNIT
		il Com SWD		P	٦	סר	STATUS	T
GAS WAT	OIL GAS WAT	pany) INJ 2,	OIL GAS WAT	OIL GAS	MAT GAS	OIL GAS WAT		
39,758 26,870 45,925	39,758 26,870 45,925		364,624 548,409 190,955	102,078 127,722 72,294	79,365 144,067	70,037 81,406 25,578	CUMULATIVE THRU 12/31/88	
	p	10517	199 443 5580	141 337 2455	3125 106	000	1989 JAN.	
	Plugging	9058	174 543 5040	123 413 2218	130 2822	000	FEB.	
	approved	8496	234 638 5580	000	5580 5580	000	MAR.	JENNIFE
	d 1974 -	15840	314 1089 8460	103 359 3299	44 152 4230	63 218 169	APR.	ER CHAVEROO
		15158	266 858 5921	91 282 2191	29 120 3079	58 172	МАҮ	ROO SAN
		14029	172 775 2460	115 744 2362		57 31 98	1 1	ANDRES L
		5897	74 392 2263	37 196 2170	000	37 196 93	יוחר.	TINU
		7659	122 639 2263	61 320 2170	000	61 319 93	AUG.	
		8780	135 674 2263	68 337 2100	000	67 337 90	SEP.	
		9350	229 756 2573	378 0	000	115 378 1977	ост.	
		10515	250 1135 2490	84 567 2100	000	568 90	NOV.	
		10423	178 984 2635	51 492 2170	000	51 492 93	DEC.	
		125,722	2,347 8,926 47,528	874 4,425 23,235	1,146 18,836	592 2,711 2.821	1989 TOTAL	
		2,177,529	366,971 557,335 238,483	102,952 132,147 95,529	25,0	70,629 84,117 28.399	CUM. TOTALS	

4TH QUARTER PRODUCTION REPORT JANUARY 1, 1990

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PRODUCTION	ON CHAVEROO SAN	NO SAN ANDRES UNIT				JENNI FER	CHAVEROO	SAN	ANDRES UNIT	i ⊣							
Computer Well #	1 1	R (a		CUMULATIVE 1989 THRU 12/31/88 JAN.	FEB.	MAR.	APR.	MAY	.NUC	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	1989 TOTAL	CUM. TOTALS
STATE V 090107	1 C 30-03	30-T7S-R34E P	OIL GAS	46952 29718 25225					000	000	0 0 8	28 0	41 0	32 0	27 0	156 0	5,9,7
090108	2 F 30-06	30-T7S-R34E P	GAS	49633 34102 33168					000	000	310 28	310 310	41 133 300	300 300	27 124 310	1.530 1.530	
090113	3 K 30-11	30-T7S-R34E S	GAS	19839 27074 6593					000	000	000	000	000	000	000	(6,79
090111	4 I 30-09	30-T7S-R34E P	GAS	19831 23107 21300					000	70 0 64	0 0 8	28 0	000	32 0	26 0	224 0 64	20,055 23,107 21,364
STATE V	TOTAL		OIL GAS WAT	136255 114001 86286					000	70 0 64	310	186 56 300	122 133 300	300 300	80 12 4 310	638 411 1,584	7,46
FEDERAL 090085	26 i M 26-13	26-T7S-R33E S	OIL GAS	62819 80362 39895					000	000	000	000	000	000	000	000	2,81 0,36 9.89
090084	2 L 26-12	26-T7S-R33E S	GAS	71687 140337 24902					000	000	000	000	000	000	000	000	1,68 0,33 4.90
090083	3 K 26-11	26-T7S-R33E S	GAS WAT	64457 112972 25399					000	000	000	000	000	000	000	000	4,45 2,97 5,39
090086	4 N 26-14	26-T7S-R33E S	OIL GAS	65965 82051					000	000	000	000	000	000	000	000	5,96 2,05 2,56
090082	5 J 26-10	26-T7S-OR33E P	GAS	62823 104771 27938					000	000	588 0	0 43 1800	0 55 1860	0 88 1800	0 87 1860	36 90	5,13 5,82
090087	6 0 26-15	26-T7S-R33E S	GAS WAT	64066 75042 53074					000	000	000	000	000	000	000	•	64,066 75,042 53,074
090081	7 I 26-09	26-T7S-R33E S	GAS	63263 95611 33760		·			>	>00	200	200	,00	,00	,00	,00	3,26 5,61

4TH QUARTER PRODUCTION REPORT JANUARY 1, 1990

AVERAGE BBLS/WELL	JENNIFER CHAVEROO SAN ANDRES	SHACKELFORD TOTAL		SHACKELFORD 090149 1 D 4-T8S-R33E S		FEDERAL 26 TOTAL	50-10	FEDERAL 26 (continued): 090088 8 P 26-T7S-R33E P	Computer LEASE NAME, Well # WELL S T R STATUS	PRODUCTION JENNIFER CHAVEROO SAN ANDRES UNIT
1	OIL	OIL GAS WAT	GAS WAT	01L	WAT	OIL GAS	WAT	OIL		
	4589386 5715909				299779	525765 783471	62246	70685 02325	CUMULATIVE THRU 12/31/88	
8488 11013 90	1075								1989 JAN.	
9506 94	1225 2569								FEB.	
9087	1460 3007								MAR.	JENNIFER EFFE
16920	1724 4038								APR.	CHAVI
16330	1546 3235								МАҮ	SAN)BER
15107 53	851 2345				0	00	0 (00	.NUC	ANDRES UNIT
6641 50	793 2020				0	00	0 (00	JUL.	II
8713 46	878 2395				1260	0 203	672	110	AUG.	
9800 9800 54	963 1989				3690	0 187	1890	140	SEP.	
10354	1022 2408	000	00	0	3875	0 240	2015	1 2 7 0	ост.	
11235	1663 2870	000	00	0	2400	383 383	600) 50 50	NOV.	
11167 11167 49	1283 2582	000	00	0	2480	380 380	620	ა ი ი	DEC.	
135,873	14,483	000	00	0	13,705	56 1,393	5,797	1 56	1989 TOTAL	
,428	4,603,86				السا	525,8% 784,86	ست مسا	70,74	CUM. TOTALS	

STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS GOVERNOR

October 3, 1989

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

Mr. Calder Ezzell	
Hinkle, Cox, Eaton,	
Coffield & Hensley	
Attorneys at Law	
Post Office Box 10	
Roswell, New Mexico	88201

lorene Davidson

Re: CASE NO. 9742 ORDER NO.R-9006

Applicant:

Murphy Operating Corporation

Dear Sir:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

FLORENE DAVIDSON OC Staff Specialist

Copy of order also sent to:

. v._

Hobbs OCD Artesia OCD Aztec OCD_

Other Karen Aubrey

State of New Mexico





Commissioner of Public Lands

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

September 29, 1989

Murphy Operating Corporation P.O. Box 2648 Roswell, New Mexico 88202-2648

#9742

ATTN: Ann Murphy Ezzell

RE: Approval of Jennifer Chaveroo San Andres Unit

Roosevelt County, New Mexico

Gentlemen:

Please be advised that the Commissioner of Public Lands has this date granted final approval to the Jennifer Chaveroo San Andres Unit Agreement, Roosevelt County, New Mexico. It is our understanding that all tracts are committed at this time.

Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management. Enclosed are five (5) Certificates of Approval.

Your total filing fee in the amount of three hundred dollars (\$300.00) was received. This includes the original thirty dollar (\$30.00) check submitted to this office and the supplemental two hundred seventy dollar (\$270.00) check we received with your letter dated September 27, 1989.

If we may be of further help, please do not hesitate to contact Susan Howarth at (505) 827-5791.

Very truly yours,

W.R. HUMPHRIES COMMISSIONER OF PUBLIC LANDS

Lope Phan -

BY:

FLOYD O. PRANDO, Director Oil and Gas Division (505) 827-5749

WRH/FOP/SMH enclosures

cc: OCD - Santa Fe, New Mexico BLM - Roswell, New Mexico

State of New Mexico





Commissioner of Public Lands

September 29, 1989

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

Murphy Operating Corporation P.O. Box 2648 Roswell, NM 88202-2648

ATTN:

Ann Murphy Ezzell

RE:

Jennifer Chaveroo San Andres Unit

Roosevelt County, New Mexico Initial Plan of Operations

Gentlemen:

The Commissioner of Public Lands has this date approved the above captioned Initial Plan of Operations. Our approval is subject to like approval by all other appropriate agencies.

Enclosed is an approved copy for your files. If we may be of further help, please do not hesitate to contact Susan Howarth at (505) 827-5791.

Very truly yours,

W.R. HUMPHRIES COMMISSIONER OF PUBLIC LANDS

BY:

FLOYD O. PRANDO, Director Oil and Gas Division

(505) 827-5749

cc: OCD - Santa Fe, New Mexico

Theylo hour

BLM

Únit Correspondence File

Unit P.O.D. File

WRH/FOP/SMH

Unit Name JENNIFER CHAVEROO SAN ANDRES UNIT (W.F.)

Operator County ROOSEVELT COUNTY, NM MURPHY OPERATING CORPORATION

September 29, 1989	DATE APPROVED
Case No.: 9742 Order No.: R-9006	OCC CASE NO.
October 1, 1898	EFFECTIVE DATE
98 5147.00	TOTAL ACREAGE
3597.07	STATE
1549.93	FEDERAL
-0-	INDIAN-FEE
Modified	SEGREGATION CLAUSE
so long	TERM

UNIT AREA

T-7-S, R-33-E

Section 25: All Section 35: All Section 36: All

T-7-S, R-34-E

Section 18: Section 19: Section 20: Section 21: Section 29: Section 30:

All
All
NW/4
NW/4
N/2, SW/4, NW/4SE/4, S/2SE/4
All

ALL Tracts are Committed to the Unit Agreement

BENEFICIARY

REPORT TO DEPARTMENTS

ភ	4.	ω.	;		Tract
State DB, State DF T-7-S, R-33-E Sec. 25: W%, SW%SE%, NE%SE% 400.00 acres	Federal "19" T-7-S, R-34-E Sec. 19: Lots 1 & 2 90.77 acres Roosevelt County, N.M.	Wolf Federal T-7-S, R-34-E Sec. 18: Lots 1-4, E% Sec. 19: NE% 659.16 acres Roosevelt County, N.M.	Homme Federal T-7-S, R-34-E Sec. 20: N% Sec. 21: NW% 480.00 acres Roosevelt County, N.M.	Federal "26" T-7-S, R-33-E Sec. 26: S% 320.00 acres Roosevelt County, N.M.	Lease Name, t Description of Land, and No. Acres
K-1276-3 03/21/61	NM-81278 04/01/89	NM-0164650 08/01/61	NM-0142393 06/01/61	NM-0108997-B 09/01/60	Serial No. & Lease Date
Murphy Operating Corporation	Murphy Operating Corporation	ENE Resources GP, Inc.	ENE Resources GP, Inc.	BHP Petroleum (Americas), Inc.	Lessee of Record
State of N.M. 12.5	United States of America 12.5	United States of America 12.5	United States of America 12.5	United States of America 12.5	Basic Royalty & Percentage
None	None	Mark Daniel Wolf	Murphy Operating Corporation Barbara B. Sweeney Santa Fe Andover Oil Co.	Amoco Production Co. M. McDonnold, Jr. William F. Pipes Westway Petro Southwest Royalties, Inc.	Overriding Royalty Owner or Production Payment Interest (PPI)
;	1	5.00000	1.50000 1.00000 2.50000	1.00000 0.75000 0.75000 2.50000 2.50000	Percent Ownership
Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	San Andres Production W.I. Ownership
12.50000 31.25000 56.25000 100.00000	12.50000 31.25000 56.25000 100.00000	12.50000 31.25000 56.25000 100.00000	12.50000 31.25000 56.25000 100.00000	12.50000 31.25000 56.25000 100.00000	W.I. Percent Ownership
1.751963 Lln. 4.379908 7.883834 14.015705	0.058478 0.146195 0.263151 0.467824	0.531294 1.328234 2.390821 4.250349	0.369763 0.924408 1.663934 2.958105	1.309590 3.273973 5.893152 10.476715	Percent Unit Participation

10.			Ö	7.	o	Tract
Hobbs "T" T-7-S, R-33-E Sec. 35: NEKNEK, NEKNWK, WKSEK, SEKSEK 200.00 acres Roosevelt County, N.M.	State "DA" T-7-S, R-33-E Section 35: SWKNWK 40.00 acres Roosevelt County, N.M.	State "DE" T-7-5, R-33-E Sec. 35: SEXSWX 40.00 acres Roosevelt County, N.M.	State "I" T-7-S, R-33-E Sec. 25: NW%SE% 40.00 acres Roosevelt County, N.M.	State Conine T-7-S, R-33-E Sec. 25: SE%NE% 40.00 acres Roosevelt County, N.M.	State "J" T-7-S, R-33-E Sec. 25: N%NE%, SW%NE%, SE%SE% 160.00 acres Roosevelt County, N.M.	Lease Name, t Description of Land, and No. Acres
K-1369-3 04/18/61	0G-1191-24 08/16/57	0G-1191-23 08/16/57	0G-575-5 02/11/57	VA-125-1 10/01/88	K-2671 08/21/62	Serial No. & Lease Date
Murphy Operating Corporation	Murphy Operating Corporation	Sun Operating Ltd. Partnership	Murphy Operating Corporation	Murphy Operating Corporation	The Wiser Oil Co.	Lessee of Record
State of N.M. 12.5	State of N.M. 12.5	State of N.M. 12.5	State of N.M. 12.5	State of N.M. 12.5	State of N.M. 12.5	Basic Royalty & Percentage
Murphy Operating Corporation	Murphy Operating Corporation	Helen Hebblin Clemens A. Werner Murphy Operating Corporation	None	None	None	Overriding Royalty Owner or Production Payment Interest (PPI)
2.34375	5.78125	4.00000 1.00000 0.78125	;	1	I	Percent Ownership
Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	P.A.J.W. Corporation	Murphy Operating Corporation Snyder Oil Company	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	San Andres Production W.I. Ownership
12.50000 56.25000 31.25000 100.00000	181:25888	12.50000 56.25000	12.50000 56.25000 31.25000 100.00000	12.50000 31.25000 56.25000 100.00000	12.50000 31.25000 56.25000 100.00000	W.I. Percent Ownership
1.277089 5.746902 3.192723 10.216714	2:12/3844 2:12/3841	0.265938 1.196719	0.138318 0.622432 0.345793 1.106543	0.084971 0.212426 0.382367 0.679764	0.496050 1.240127 2.232228 3.968405	Percent Unit Participation
Cair		Univ	Univ	Univ.	Univ	BENEFI

16.	.	14.	13.	12.	11.	Tract
State "20" T-7-S, R-34-E Sec. 20: S% 320.0 acres Roosevelt County, N.M.	State "G" T-7-S, R-34-E Sec. 19: Lots 3 & 4, SEX 251.59 acres Roosevelt County, N.M.	State "K" T-7-S, R-33-E Sec. 36: W%, NWXSEX 360.00 acres Roosevelt County, N.M.	State "35" & "36" T-7-S, R-33-E Sec. 35: W%SW%, SEKNW%, S%NEX Sec. 36: NEX, NEXSEX, S%SEX 480.00 acres Roosevelt County, N.M.	Shackelford T-7-S, R-33-E Sec. 35: NWXNWX 40.00 acres Roosevelt County, N.M.	State "CV" <u>T-7-S, R-33-E</u> Sec. 35: NWKNEK, NEKSWK, NEKSEK 120.00 acres	Lease Name, Description of Land, and No. Acres
VA-141-1 11/01/88	OG-1193-1 08/20/57	K-2672 08/21/62	0G-929-1 06/18/57 }Univ. }CS.	V-2821-1 01/01/89	K-4058-3 04/21/64	Serial No. & Lease Date
Murphy Operating Corporation	Murphy Operating Corporation	The Wiser Oil Co.	Murphy Operating Corporation	Murphy Operating Corporation	Sun Operating Ltd. Partnership	Lessee of Record
State of N.M. 12.5	State of N.M. 12.5	State of N.M. 12.5	State of N.M. 12.5	State of N.M. 16.3334	State of N.M. 12.5	Basic Royalty
None	None	None	None	None	Murphy Operating Corporation	Overriding Royalty Owner or Production Payment Interest (PPI)
ŀ	ı	I	i	;	2.34375	Percent Ownership
Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	San Andres Production W.I. Ownership
12.50000 31.25000 56.25000 100.00000	12.50000 56.25000 31.25000 100.00000	12.50000 31.25000 56.25000 100.00000	12.50000 31.25000 56.25000 100.00000	12.50000 31.25000 56.25000 100.00000	12.50000 56.25000 31.25000 100.00000	W.I. Percent Ownership
0.514392 1.285982 2.314767 4.115141	0.597946 2.690757 1.494865 4.783568	1.231573 3.078933 5.542079 9.852585	1.015953 2.539883 4.571789 8.127625	0.195949 0.489874 0.881773 1.567596	0.995136 4.478113 2.487841 7.961090	(rev. 09/27/89) Percent Unit Participation
0.5	CS	CS	daiv/cs	Univ	Uhiv	BENEFICIARY

19.	18.	17.	Tract
State "V" T-7-S, R-34-E Sec. 30: Lots 1-4, E%SE% 265.48 acres Roosevelt County, N.M.	Hobbs "W" T-7-S, R-34-E Section 29: W%, W%SEK, Section 30: NEW, W%SEK 680.00 acres Roosevelt County, N.M.	State "20" T-7-S, R-34-E Sec. 29: NEX 160.00 acres Roosevelt County, N.M.	Lease Name, t Description of Land, and No. Acres
0G-4897-3 12/16/58	K-1370-3 04/18/61	VA-142-1 11/01/88	Serial No. & Lease Date
TOC Gulf Coast, Inc. State of N.M.	Murphy Operating Corporation	Murphy Operating Corporation	Lessee of Record
State of N.M. 12.5	State of N.M. 12.5	State of N.M. 12.5	Basic Royalty & Percentage
Southwest Royalties Inc. 3.75000 Ralph Dreyer, Trustee 2.50000 Cherilyn Priddy Loving 1.25000	Murphy Operating Corporation	None	Overriding Royalty Owner or Production Payment Interest (PPI)
. 3.75000 2.50000 1.25000	2.34375	ŀ	Percent Ownership
Murphy Operating Corporation American Energy Capital Corp. Snyder Oll Company	Murphy Operating Corporation Snyder Oil Company P.A.J.W. Corporation	Murphy Operating Corporation American Energy Capital Corp. Snyder Oil Company	San Andres Production W.I. Ownership
12.50000 31.25000 56.25000 100.00000	12.50000 56.25000 31.25000 100.00000	12.50000 31.25000 56.25000 100.00000	W.I. Percent Ownership
0.412514 1.031285 1.856312 3.300111	1.233654 5.551441 3.084134 9.869229	0.019429 0.048572 0.087429 0.155430	(rev. 09/27/89) W.I. Percent Percent Unit Ownership Participation
3		CS	BENEFICIARY

STATE ACREAGE: FEDERAL ACREAGE: TOTAL ACREAGE: 5,147.00 3,597.07 = 69.89% OF UNIT AREA 1,549.93 = 30.11% OF UNIT AREA 100.00%

State of New Mexico





Commissioner of Public Lands

P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148

August 31, 1989

Murphy Operating Corporation P.O. Box 2648 Roswell, New Mexico 88202-2648

ATTN: Ann Ezzell

RE: Proposed Jennifer Chaveroo San Andres Unit

Roosevelt County, New Mexico

Gentlemen:

This office has reviewed the unexecuted copy of the unit agreement submitted for the proposed Jennifer Chaveroo San Andres Unit Area, Roosevelt County, New Mexico. This agreement meets the general requirements of the Commissioner of Public Lands who has this date granted you preliminary approval as to form and content.

Preliminary approval shall not be construed to mean final approval of this agreement in any way and will not extend any short term leases until final approval and an effective date have been given.

When submitting your agreement for final approval, please include the following items:

- Application for final approval by the Commissioner setting forth the tracts that have been committed and those that are not committed.
- 2. All ratifications from the Lessees of Record and Working Interest Owners. All signatures should be acknowledged by a notary and one set must contain original signatures.
- 3. Order of the New Mexico Oil Conservation Division. Our approval will be contingent upon subsequent favorable approval by the New Mexico Oil Conservation Division.

- 4. The filing fee. The filing fee for a Unit Agreement is thirty dollars (\$30.00) for every section or partial section thereof. Ten (10) sections or partial sections are included in the Unit Area. You have submitted \$30.00 of the required three hundred dollars (\$300.00). Please submit the remaining two hundred seventy dollars (\$270.00).
 - 5. Please send an original and one copy of the final Unit Agreement and Unit Operating Agreement for our files.

We received a copy of the letter sent to you by the Bureau of Land Management designating the Unit Area as a logical Unit. Please be advised that our final approval will be subject to like approval by the Bureau of Land Management.

If we may be of further help, please do not hesitate to call Susan Howarth at (505) 827-5791.

Very truly yours,

W.R. HUMPHRIES COMMISSIONER OF PUBLIC LANDS

BY: LCoylo Vhom
FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5744

cc: OCD - Santa Fe, NM BLM - Roswell, NM Unit Files



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell District Office
P.O. Box 1397
Roswell, New Mexico 88202-1397

IN REPLY REFER TO:

Jennifer Chaveroo Unit 3180 (065)

AUG 2 4 1989

OIL CONSERVATION DIV.

5110 od 1989

9742

M.S.

Murphy Operating Corporation P. O. Box 2648 Roswell, New Mexico 88202-2648

Gentlemen:

Your application of July 18, 1989, filed with the BLM requests the designation of the Proposed Jennifer Chaveroo unit area, embracing 5,147.00 acres, more or less, in Roosevelt County, New Mexico, as logically subject to exploration and development under the unitization provisions of the Mineral Leasing Act as amended for waterflood operations.

Pursuant to unit plan regulations 43 CFR 3180, the land requested as outlined on your plat marked "Murphy Operating Corporation, Proposed Jennifer Chaveroo Unit, Roosevelt, County, New Mexico", is hereby designated as a logical unit area for the San Andres Formation, 4,116 - 4,424 feet as measured on the Compensated Formation Density Log Run in the Murphy Operating Corporation Hobbs "W" Well No. 2.

Your proposed use of the Form of Agreement for Secondary/Enhanced Recovery Areas as submitted for preliminary review will be accepted with the modifications requested in your application.

If conditions are such that further modification of said form is deemed necessary, three copies of the proposed modifications with appropriate justification must be submitted to this office for preliminary approval.

In the absence of any other type of land requiring special provisions or any objections not now apparent, a duly executed agreement identical with said form, modified as outlined above, will be approved if submitted in approvable status within a reasonable period of time. However, notice is hereby given that the right is reserved to deny approval of any executed agreements submitted which, in our opinion, does not have the full commitment of sufficient lands to afford effective control of operations in the unit area.

When the executed agreement is transmitted to the BLM for approval, include the latest status of all acreage. In preparation of Exhibits "A" and "B", follow closely the format of the exhibits attached to the aforementioned form.

Inasmuch as this unit agreement involves State land, we are sending a copy of this letter to the Commissioner of Public Lands.

Sincerely,

Jol J. Lan

Joe G. Lara Assistant District Manager, Minerals



MURPHY OPERATING CORPORATION

UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE 505 623-7210



OCT - 2 1989

OIL CONDERVATION DIV. SANTA FE

August 29, 1989

Mr. Michael E. Stogner, Examiner Oil Conservation Division Energy and Minerals Department State of New Mexico Post Office Box 2088 Santa Fe, New Mexico 87504-2088

9742

Re: RATIFICATIONS OF UNIT DOCUMENTS: Jennifer Chaveroo San Andres Unit Roosevelt County, New Mexico.

Dear Mr. Stogner:

I have enclosed herewith to complete your files the following documents:

- 1. Schedule "A" contains a complete list of the working interest owners in the Jennifer Chaveroo San Andres Unit and copies of counterpart signature pages to the Unit Agreement;
- 2. Schedule "B" contains a complete list of the working interest owners in the Jennifer Chaveroo San Andres Unit and copies of counterpart signature pages to the Unit Operating Agreement;
- 3. Schedule "C" contains a complete list of the overriding royalty interest owners in the Jennifer Chaveroo San Andres Unit and copies of Ratifications of the Unit Agreement; and
- 4. Schedule "D" contains a complete list of the record title owners for leases within the Jennifer Chaveroo San Andres Unit and copies of Ratifications of the Unit Agreement.

Please do not hesitate to contact me if I may be of further assistance to you in this matter.

Sincerely,

MURPHY OPERATING CORPORATION

Nadine R. Reed

Assistant to the Chairman & C.E.O.

:nrr



MURPHY OPERATING CORPORATION UNITED BANK PLAZA, SUITE 300 400 NORTH PENNSYLVANIA AVENUE POST OFFICE BOX 2648 ROSWELL, NEW MEXICO 88202-2648

TELEPHONE 505 623-7210

JENNIFER CHAVEROO SAN ANDRES UNIT ROOSEVELT COUNTY, NEW MEXICO

SCHEDULE A Signature Pages to Unit Agreement Working Interest Owners

X = Signature pages attached.

STATUS	WI	OWNER	PERCENT UNIT PARTICIPATION
X	American Energy 1201 Louisiana, Houston, Texas		n 19.97980
Х	P.A.J.W. Corpor Suite 953, Wate 600 New Hampshi Washington, Dis	rgate 600	11.27020 20037
X	Murphy Operatin Post Office Box Roswell, New Me		12.50000
Х	Snyder Oil Comp 801 Cherry Stre Fort Worth, Tex	et, Suite 2500	56.25000
	TOTAL PERCEN	T COMMITTED	<u>100.00000</u>

SECTION 37. PERSONAL PROPERTY EXCEPTED. Each Working Interest Owner has heretofore placed and used on its Tract or Tracts committed to this Agreement various well and lease equipment and other property, equipment or facilities. It is also recognized that additional equipment and facilities may hereafter be placed and used upon the Unitized Land as now or hereafter constituted. Therefore, for all purposes of this Agreement, any such equipment shall be considered to be personal property and not fixtures attached to realty. Accordingly, said well and lease equipment and personal property is hereby severed from the mineral estates affected by this Agreement, and the rights and interests therein as among Working Interest Owners are covered by the Unit Operating Agreement.

EXECUTED and effective for all purposes this 1st day of August, 1989.

"UNIT OPERATOR" AND "WORKING INTEREST OWNER"

ATTEST:

Nadine Reed, Secretary

MURPHY OPERATING CORPORATION Post Office Box 2648 Roswell, New Mexico 88202-2648

Ann Murphy Excell, Chairman and Chief Executive Officer

"NON-OPERATORS"

ATTEST:

John E. Funk, Secretary

DAVID ROWLAND

ATTEST:

AMERICAN ENERGY CAPITAL CORPORATION
-1111 Fannin, Suite 1470 1201 Louisiana Suite 3320
Houston, Texas 77002

Manus C. Rowland, C. E.O. PRESIDENT

SNYDER OIL COMPANY 801 Cherry Street Fort Worth, Texas 76102

, Secretary

Rodney L. Waller, Senior Vice President

P.A.J.W. CORPORATION Suite 953, Watergate 600 600 New Hampshire Avenue, N.W. Washington, District of Columbia 20037

ATTEST:

John H. Slayton, Vice President/ Secretary

Marc E. Leland, President

SECTION 37. PERSONAL PROPERTY EXCEPTED. Each Working Interest Owner has heretofore placed and used on its Tract or Tracts committed to this Agreement various well and lease equipment and other property, equipment or facilities. It is also recognized that additional equipment and facilities may hereafter be placed and used upon the Unitized Land as now or hereafter constituted. Therefore, for all purposes of this Agreement, any such equipment shall be considered to be personal property and not fixtures attached to realty. Accordingly, said well and lease equipment and personal property is hereby severed from the mineral estates affected by this Agreement, and the rights and interests therein as among Working Interest Owners are covered by the Unit Operating Agreement.

EXECUTED and effective for all purposes this 1st day of August, 1989.

"UNIT OPERATOR" AND "WORKING INTEREST OWNER"

ATTEST:

MURPHY OPERATING CORPORATION Post Office Box 2648 Roswell, New Mexico 88202-2648

Nadine Keed

Ann Murphy Ezzel, Glairman and Chief Executive Officer

"NON-OPERATORS"

AMERICAN ENERGY CAPITAL CORPORATION 1111 Fannin, Suite 1470 Houston, Texas 77002

ATTEST:

John E. Funk, Secretary

Marcus C. Rowland, C.E.O.

SNYDER OIL COMPANY 801 Cherry Street, Suite 2500 Fort Worth, Texas 76102

ATTEST:

Linda Gosdin

Secretary

Rodney L. Waller, Senior Vice Presiden

ATTEST:

P.A.J.W. CORPORATION
Suite 953, Watergate 600
600 New Hampshire Avenue, N.W.
Washington, District of Columbia 20037

John H. Slayton, Vice President/ Secretary Marc E. Leland, President

PERSONAL PROPERTY EXCEPTED. Each Working Interest Owner has SECTION 37. heretofore placed and used on its Tract or Tracts committed to this Agreement various well and lease equipment and other property, equipment or facilities. It is also recognized that additional equipment and facilities may hereafter be placed and used upon the Unitized Land as now or hereafter constituted. Therefore, for all purposes of this Agreement, any such equipment shall be considered to be personal property and not fixtures attached to realty. Accordingly, said well and lease equipment and personal property is hereby severed from the mineral estates affected by this Agreement, and the rights and interests therein as among Working Interest Owners are covered by the Unit Operating Agreement.

EXECUTED and effective for all purposes this 1st day of August, 1989.

"UNIT OPERATOR" AND "WORKING INTEREST OWNER"

ATTEST:

MURPHY OPERATING CORPORATION Post Office Box 2648 Roswell, New Mexico 88202-2648

Chief Executive Officer

"NON-OPERATORS"

AMERICAN ENERGY CAPITAL CORPORATION 1111 Fannin, Suite 1470 Houston, Texas 77002

John E. Funk, Secretary

Marcus C. Rowland, C.E.O.

ATTEST:

ATTEST:

SNYDER OIL COMPANY 801 Cherry Street Fort Worth, Texas 76102

, Secretary

Rodney L. Waller, Senior Vice President

ATTEST:

P.A.J.W. CORPORATION Suite 953, Watergate 600 600 New Hampshire Avenue, N.W.

Washington, District of Columbia 20037

Lice President/

Secretary

Marc E. Leland President

STATE OF NEW MEXICO	
COUNTY OF CHAVES)	•
The foregoing instrument was acknowledged before me this 8 August, 1989, by Ann Murphy Ezzell, Chairman and Chief Executive MURPHY OPERATING CORPORATION, a New Mexico corporation, on behal corporation.	Officer of
My commission expires:	
, Not	ary Public
STATE OF TEXAS	
COUNTY OF TARRANT	
The foregoing instrument was acknowledged before me this $\frac{15t}{200}$ August, 1989, by Marcus C. Rowland, C.E.O. of AMERICAN ENERG CORPORATION, a Texas corporation, on behalf of said corporation.	,
My commission expires: LINDA GOSDIN Notary Public State Of Texas	den
My Comm. Exp. June 17, 1993 Line a Gosdin , Not.	ary Public
STATE OF TEXAS) .	
COUNTY OF TARRANT)	
The foregoing instrument was acknowledged before me this August, 1989, by RODNEY L. WALLER, Senior Vice President of SNYDER Of a Texas corporation, on behalf of said corporation.	day of IL COMPANY,
My commission expires:	
, Not	ary Public
DISTRICT OF COLUMBIA)	
The foregoing instrument was acknowledged before me this August, 1989, by MARC E. LELAND, President of P.A.J.W. CORPORATION, corporation, on behalf of said corporation.	
My commission expires:	
December 14, 1989	
Joanne Burke, Notary Publ	10

STATE OF NEW MEXICO)	
COUNTY OF CHAVES)	
The foregoing instrument was acknowledg August, 1989, by Ann Murphy Ezzell, Chairman MURPHY OPERATING CORPORATION, a New Mexico corporation.	and Chief Executive Officer of
My commission expires:	:
May 6, 1991 Debi	Selv Rodgus Rodgers, Notary Public
STATE OF TEXAS)	·
j	
COUNTY OF HARRIS)	
The foregoing instrument was acknowledged August, 1989, by Marcus C. Rowland, C.E.O CORPORATION, a Texas corporation, on behalf of s	. of AMERICAN ENERGY CAPITAL
My commission expires:	
	, Notary Public
STATE OF TEXAS) COUNTY OF TARRANT)	
The foregoing instrument was acknowledged August, 1989, by RODNEY L. WALLER, Senior Vice a Texas corporation, on behalf of said corporati	President of SNYDER OIL COMPANY,
My commission expires:	
10-24-91 No	nna A Macharline H. Macfarline, Notary Public
DISTRICT OF COLUMBIA)	
The foregoing instrument was acknowledged August, 1989, by MARC E. LELAND, President of Corporation, on behalf of said corporation.	
My commission expires:	
December 14, 1989 Joan	ne Burke, Notary Public



MURPHY OPERATING CORPORATION UNITED BANK PLAZA, SUITE 300 400 NORTH PENNSYLVANIA AVENUE

POST OFFICE BOX 2648 ROSWELL, NEW MEXICO 88202-2648 TELEPHONE 505 623-7210

JENNIFER CHAVEROO SAN ANDRES UNIT ROOSEVELT COUNTY, NEW MEXICO

SCHEDULE B Signature Pages to Unit Operating Agreement Working Interest Owners

X = Signature pages attached.

<u>STATUS</u>	WI OWNER	PERCENT UNIT PARTICIPATION
X	American Energy Capital Corporation 1201 Louisiana, Suite 3320 Houston, Texas 77002	19.97980
Χ	P.A.J.W. Corporation Suite 953, Watergate 600 600 New Hampshire, N.W. Washington, District of Columbia 20037	11.27020
Χ	Murphy Operating Corporation Post Office Box 2648 Roswell, New Mexico 88202-2648	12.50000
X	Snyder Oil Company 801 Cherry Street, Suite 2500 Fort Worth, Texas 76102	56.25000
	TOTAL PERCENT COMMITTED	100.00000

ARTICLE 23 SUCCESSORS AND ASSIGNS

23.1 Successors and Assigns. This Agreement shall extend to, be binding upon, and inure to the benefit of the parties hereto and their respective heirs, devisees, legal representatives, successors and assigns, and shall constitute a covenant running with the lands, leases and interests covered hereby.

EXECUTED and effective for all purposes this 1st day of August, 1989.

"UNIT OPERATOR" AND "WORKING INTEREST OWNER"

ATTEST:	
11	
Nadine Keed	
Nading Pand Secretary	

MURPHY OPERATING CORPORATION Post Office Box 2648 Roswell, New Mexico 88202-2648

By: Murphy Ezzell Charman and Chief Executive Officer

"NON-OPERATORS"

ATTEST:

John E. Funk, Secretary

DAVIO ROWLAND

AMERICAN ENERGY CAPITAL CORPORATION
-1111 Fannin; Suite 1470 Izon Louisiana, Ste 3320
Houston, Texas 77002

Marcus C. Rowland, G.E.O. President

ATTEST:

SNYDER OIL COMPANY 801 Cherry Street

Fort Worth, Texas 76102

, Secretary

Rodney L. Waller, Senior Vice President

P.A.J.W. CORPORATION
Suite 953, Watergate 600
600 New Hampshire Avenue, N.W.
Washington, District of Columbia 20037

ATTEST:

John H. Slayton, Vice President/ Marc E. Leland, President
Secretary

ARTICLE 23 SUCCESSORS AND ASSIGNS

23.1 <u>Successors and Assigns</u>. This Agreement shall extend to, be binding upon, and inure to the benefit of the parties hereto and their respective heirs, devisees, legal representatives, successors and assigns, and shall constitute a covenant running with the lands, leases and interests covered hereby.

EXECUTED and effective for all purposes this 1st day of August, 1989.

"UNIT OPERATOR" AND "WORKING INTEREST OWNER"

ATTEST:
11/3020
Vadine Reid
Nadine Reed, Secretary

MURPHY OPERATING CORPORATION Post Office Box 2648 Roswell, New Mexico 88202-2648

By: Ann Murphy Ezzell, Chafride and Chief Executive Officer

"NON-OPERATORS"

ATTEST:

AMERICAN ENERGY CAPITAL CORPORATION 1111 Fannin, Suite 1470 Houston, Texas 77002

John E. Funk, Secretary

Marcus C. Rowland, C.E.O.

ATTEST:

SNYDER OIL COMPANY 801 Cherry Street, Suite 2500 Fort Worth, Texas 76102

Linda Gosdin , Secretary

Rodney L. Waller, Senior Vice President

ATTEST:

P.A.J.W. CORPORATION Suite 953, Watergate 600 600 New Hampshire Avenue, N.W. Washington, District of Columbia 20037

John H. Slayton, Vice President/ Secretary Marc E. Leland, President

ARTICLE 23 SUCCESSORS AND ASSIGNS

23.1 Successors and Assigns. This Agreement shall extend to, be binding upon, and inure to the benefit of the parties hereto and their respective heirs, devisees, legal representatives, successors and assigns, and shall constitute a covenant running with the lands, leases and interests covered hereby.

EXECUTED and effective for all purposes this 1st day of August, 1989.

"UNIT OPERATOR" AND "WORKING INTEREST OWNER"

MURPHY OPERATING CORPORATION

Post Office Box 2648

ATTEST:	Roswell, New Mexico 88202-2648
Nadine Reed, Secretary	By: <u>her) Alumbur En</u> Ann Murphy Ezze v i, (hairman) Chief Executive Officer
	INON ODEDATORSII

"NON-OPERATORS'

AMERICAN ENERGY CAPITAL CORPORATION
1111 Fannin, Suite 1470
Houston, Texas 77002

Marcus C. Rowland, C.E.O.

SNYDER OIL COMPANY
801 Cherry Street
Fort Worth, Texas 76102

, Secretary

Rodney L. Waller, Senior Vice President

P.A.J.W. CORPORATION
Suite 953, Watergate 600
600 New Hampshire Avenue, N.W.
Washington, District of Columbia 20037

John H. Slayton, Vice President/ Secretary

ATTEST:

Marc E. Leland President

STATE OF NEW MEXICO)	
COUNTY OF CHAVES)	
August, 1989, by Ann Murphy Ezzell, (cknowledged before me this 1st day of Chairman and Chief Executive Officer of Mexico corporation, on behalf of said
My commission expires:	
	, Notary Public
STATE OF TEXAS)	
COUNTY OF TARRANT)	
	nowledged before me this $15{ m th}$ day of O. of AMERICAN ENERGY CAPITAL CORPORATION, corporation.
My commission expires: LINDA GOSE Notary Publi State Of Te:	cas Juda Hosden
My Comm. Exp. June	Linda Gosdin , Notary Public
STATE OF TEXAS	
COUNTY OF TARRANT)	
The foregoing instrument was ack August, 1989, by RODNEY L. WALLER, Senio Texas corporation, on behalf of said co	or Vice President of SNYDER OIL COMPANY, a
My commission expires:	
	, Notary Public
DISTRICT OF COLUMBIA)	
The foregoing instrument was ack August, 1989, by MARC E. LELAND, Presi corporation, on behalf of said corporat	dent of P.A.J.W. CORPORATION, a Delaware
My commission expires:	
December 14, 1989	
	Joanne Burke, Notary Public

STATE OF NEW MEXICO)	
COUNTY OF CHAVES)	
August, 1989, by Ann Murphy Ezzell,	acknowledged before me this 1st day of Chairman and Chief Executive Officer of w Mexico corporation, on behalf of said
My/commission expires:	
May 6, 1991	Debi Rodgers, Notary Public
STATE OF TEXAS)	
COUNTY OF HARRIS)	
	cknowledged before me this <u>day of</u> E.O. of AMERICAN ENERGY CAPITAL CORPORATION, d corporation.
My commission expires:	
	, Notary Public
STATE OF TEXAS) COUNTY OF TARRANT)	
The foregoing instrument was a August, 1989, by RODNEY L. WALLER, Ser Texas corporation, on behalf of said	cknowledged before me this 15th day of nior Vice President of SNYDER OIL COMPANY, a corporation.
My commission expires:	
10-24-91	Donna H. Macfarline Notary Public
DISTRICT OF COLUMBIA)	
The foregoing instrument was a August, 1989, by MARC E. LELAND, Pre corporation, on behalf of said corpor	sident of P.A.J.W. CORPORATION, a Delaware
My commission expires:	
December 14, 1989	

Joanne Burke, Notary Public

STATE OF NEW MEXICO)	
COUNTY OF CHAVES)	
The foregoing instrument was acknowled August, 1989, by Ann Murphy Ezzell, Chairma MURPHY OPERATING CORPORATION, a New Mexico corporation.	n and Chief Executive Officer of
My commission expires:	
May 6, 1991	Seli Rodgers, Notary Public
STATE OF TEXAS)	•
COUNTY OF HARRIS)	
The foregoing instrument was acknowledge August, 1989, by Marcus C. Rowland, C.E.O. of A a Texas corporation, on behalf of said corporation.	MERICAN ENERGY CAPITAL CORPORATION,
My commission expires:	
	, Notary Public
STATE OF TEXAS)	
COUNTY OF TARRANT)	
The foregoing instrument was acknowledged August, 1989, by RODNEY L. WALLER, Senior Vice Texas corporation, on behalf of said corporation	President of SNYDER OIL COMPANY, a
My commission expires:	
	, Notary Public
DISTRICT OF COLUMBIA)	,
The foregoing instrument was acknowledge August, 1989, by MARC E. LELAND, President of corporation, on behalf of said corporation.	
My commission expires:	9000
	panne Burke, Notary Public



MURPHY OPERATING CORPORATION UNITED BANK PLAZA, SUITE 300 400 NORTH PENNSYLVANIA AVENUE POST OFFICE BOX 2648 ROSWELL, NEW MEXICO 88202-2648

TELEPHONE 505 623-7210

JENNIFER CHAVEROO SAN ANDRES UNIT ROOSEVELT COUNTY, NEW MEXICO

SCHEDULE C Ratification of Unit Agreement Overriding Royalty Interest Owners

X = Ratification attached.

STATUS	ORRI OWNER	COMMENTS
X	Amoco Production Company Post Office Box 3092 Houston, Texas 77253	
X	M. McDonnold, Jr. 505 North Big Spring, Suite 204 Midland, Texas 79701	
Х	William F. Pipes 7611 Woodhaven San Antonio, Texas 78204	
X	Westway Petro Lock Box 70 500 North Akard Street Dallas, Texas 75201-3320	
Х	Southwest Royalties, Inc. 407 North Big Spring, Suite 300 Post Office Box 11390 Midland, Texas 79701	
Х	Murphy Operating Corporation Post Office Box 2648 Roswell, New Mexico 88202-2648	
X	Barbara B. Sweeney Post Office Box 8248 Santa Fe, New Mexico 87504-8248	
Х	Santa Fe Andover Oil Co. c/o Santa Fe Minerals, Inc. 13455 Noel Road, Suite 1100 Dallas, Texas 75240-6620	
Х	Mark Daniel Wolf 1675 Broadway, Suite 1600 Denver, Colorado 80202	
Х	Ralph Dreyer, Esq., Trustee 40 West Twohig, Suite 402 San Angelo, Texas 76903	
Х	Helen B. Hebbeln 4470 - 270th Street Stockton, Iowa 52769	
Х	Clemens A. Werner 410 Union Arcade Avenue Davenport, Iowa 52801	
X	Cherilyn Priddy Loving 1607 Hillcrest Drive Graham, Texas 76046	

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

ATTEST: APPROVED Secretary (Printed Name/Title) STATE OF The foregoing instrument was acknowledged before me this 18th day of with 1989, by V.P. Whitfield, Attirney in Fact (Title) Amous Production Company, a Delaware corporation, on behalf of corporation.

My Commission Expires:

said corporation.

Jane ann Clery Notary Public

Notary Public

(Overriding Royalty Interest/Individual)

RATIFICATION OF AGREEMENT ENTITLED "UNIT AGREEMENT" JENNIFER CHAVEROO SAN ANDRES UNIT ROOSEVELT COUNTY, NEW MEXICO

KNOW ALL MEN' BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

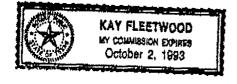
WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this <u>31st</u> day of <u>August</u>, 1989, but made effective for all purposes on the 1st day of August, 1989.

Brendak Cunningham	By: M. M. Jounges D.
Bunda K. Cuminghan, Witness	(Signature) M. McDonnold, Jr. Shirley J McDonnold
COUNTY OF MIDLAND) ss	,
	s acknowledged before me this <u>31st</u> day of Jr. and Shirley J. McDonnold, his wife .



My Commission Expires:

10-2-93

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this 15^{12} day of 15^{12} , 1989, but made effective for all purposes on the 1st day of August, 1989.

Lucile W. Lipes, Witness

By: Will coin

Printed Name)

STATE OF /exas) s

The foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before with the foregoing instrument was acknowledged before with the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged before me this day of the foregoing instrument was acknowledged by the foregoing instrument was acknowledge

My Commission Expires:

10-22-9/

, Notary Public

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this $\frac{15}{0}$ day of $\frac{August}{0}$, 1989, but made effective for all purposes on the 1st day of August, 1989.

WESTWAY PETRO, a Texas Joint Venture

By: Signature)

W.E. Read, Managing Venturer

(Printed Name)

STATE OF Texas

COUNTY OF Dallas

SS

The foregoing instrument was acknowledged before me this 15 day of W.E. Read, Managing Venturer on behalf of Westway

Petro, a Texas Joint Venture.

My Commission Expires:

3/1/090

C. Benavides Notary Public

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement: and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this // day of \cancel{August} , 1989, but made effective for all purposes on the 1st day of August, 1989.

ATTEST:

Jon P. Tate. Secretary

By: No.

(Signature)

H.H. Wommack. Ill. President

(Printed Name/Title)

STATE OF Texas) so

The foregoing instrument was acknowledged before me this // day of hugust, 1989, by H.H. Wommack, III, President (Title) of Southwest Royalties, Inc., a Delaware corporation, on behalf of said corporation.

My Commission Expires:

March 29, 1992

(Notary Public

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this $\underline{14th}$ day of $\underline{}$ August , 1989, but made effective for all purposes on the 1st day of August, 1989.

MURPHY OPERATING CORPORATION

By: Level Murphy Ezzell, Chairman & C.E.O.

STATE OF NEW MEXICO

SSS

COUNTY OF CHAVES

MURPHY OPERATING CORPORATION

By: Level Murphy Ezzell, Chairman & C.E.O.

The foregoing instrument was acknowledged before me this $\underbrace{14th}_{August}$, 1989, by Ann Murphy Ezzell , Chairman & C.E.O. (Title) of Murphy Operating Corporation , a New Mexico corporation, on behalf of said corporation.

My Commission Expires:

OF THE STATE

August 24, 1990

Clara Talbert, Notary Public

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this 15^{22} day of 1989, but made effective for all purposes on the 1st day of August, 1989.

By: Barbara B. Sweeney
(Printed Name)

STATE OF NEW MEXICO
SS

COUNTY OF SANTA FE

The foregoing instrument was acknowledged before me this 15th day of BARRARA R. SWEENEY

My Commission Expires:

OFFICIAL SEAL

Page 5. Santa Public

OFFICIAL SEAL

Page 5. Santa Public

NOTARY PUBLIC - STATE OF NEW MEXICO

My Commission Expires 5/22/93

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this day of August, 1989, but made effective for all purposes on the 1st day of August, 1989.

Entity: SANTA FE-ANDOVER OIL COMPANY

By:

Signature)

J. C. WELCH, Vice President-Land

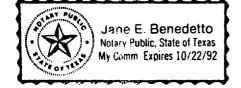
(Printed Name/Title)

COUNTY OF DALLAS

The foregoing instrument was acknowledged before me this 18th day of Output, 1989, by J. C. WELCH, VICE PRESIDENT - LATE (Title) of Late 4- (Indoor Oil Company a Wyoming corporation, on behalf of said corporation.

My Commission Expires:

Jane C. Benedette, Notary Public



(Overriding Royalty Interest/Individual)

RATIFICATION OF AGREEMENT ENTITLED "UNIT AGREEMENT" JENNIFER CHAVEROO SAN ANDRES UNIT ROOSEYELT COUNTY. NEW MEXICO

; 8-16-89 ; 1U:44AM ;

KNOW ALL MEN BY THESE PRESENTS. THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument , 1989, but made effective for all 14th day of August purposes on the 1st day of August, 1989.

**************************************	,	Witness	By: (Signatur Da (Printed	niel Wolf	f
STATE OF	COLORADO			٠	
AugusaRV	Puol 969, by ton Expines: DELL	instrument w Daniel Wo	vas acknowledged	Paridel	14th day of

S Mardell Davis Notary Public - State of Colorado Bank Western Tower 1675 Broadway Suite 1600 Denver, Colo.ado 80202-4613

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this /// day of / ust / , 1989, but made effective for all purposes on the 1st day of August, 1989.

, Witness

By: / bly/ /reser (Signature)

(Printed Name)

STATE OF

COUNTY OF 1000

The foregoing instrument was acknowledged before me this 1/th day of 1989, by ________.

My Commission Expires:

7-22-90

VALORIE J. HARPER, Notary Public

STATE OF TEXAS

Mv Commission Expires 7-22-90

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

The foregoing instrument was acknowledged before me this $\frac{14}{\text{My Commission Expires:}}$ day of My Commission Expires: $\frac{8-22-90}{\text{Notary Public}}$

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this \underline{llth} day of \underline{August} , 1989, but made effective for all purposes on the 1st day of August, 1989.

purposes on the 1st day of August, 1989	9•
Sand M. ()4. £. Scarlet M. White, Witness	By: (Signature) Clemens A. Werner (Printed Name)
STATE OFIOWA) ss COUNTY OF _SCOTT)	
The foregoing instrument was August , 1989, by Clemens A.	acknowledged before me this <u>llth</u> day of Werner
My Commission Expires: 8/9/90	()////////////////////////////////////
	Clemens A. Werher, Jr , Notary Public

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of an overriding royalty interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," which said agreement is hereinafter referred to as the Unit Agreement; and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which may become a part of the Jennifer Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of the undersigned represents that it is an Overriding Royalty Interest Owner, as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, each undersigned Overriding Royalty Interest Owner, being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, each of the undersigned who is the owner of an overriding royalty interest or interests only does hereby ratify and confirm said Unit Agreement, each owner with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument this 2th day of unit, 1989, but made effective for all purposes on the 1st day of August, 1989.

Ву

STATE OF Jefa) ss

E OF

My Commission Expires:

, Notary Public



MURPHY OPERATING CORPORATION UNITED BANK PLAZA, SUITE 300 400 NORTH PENNSYLVANIA AVENUE POST OFFICE BOX 2648 ROSWELL, NEW MEXICO 88202-2648

TELEPHONE 505 623-7210

JENNIFER CHAVEROO SAN ANDRES UNIT ROOSEVELT COUNTY, NEW MEXICO

SCHEDULE D
Ratification of Unit Agreement
Lessees of Record

X = Ratification attached.

STATUS	LESSEE OF RECORD	COMMENTS
X	BHP Petroleum (Americas), Inc. 6 Desta Drive, Suite 300 Midland, Texas 79705-5510	
Χ	Energy Reserves Group, Inc. c/o BHP Petroleum (Americas), Inc. 6 Desta Drive, Suite 300 Midland, Texas 797905-5510	
Х	The Wiser Oil Company Post Office Box 192 210 Charles Street Sisterville, West Virginia 26175	
X	Sun Operating Limited Partnership c/o Oryx Energy Company, Managing General Partner Post Office Box 2880 Dallas, Texas 75221-2880	
Х	TOC Gulf Coast, Inc. 6 Desta Drive, Suite 4400 Post Office Box 2990 Midland, Texas 79705	s.
X	Murphy Operating Corporation Post Office Box 2648 Roswell, New Mexico 88202-2648	

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the undersigned owner of a record title interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," (hereinafter the "Unit Agreement"); and and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which became a part of the Jennifer Chaveroo San Andres Unit as initially approved; and

WHEREAS, the undersigned represents that it is a "Lessee of Record" as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, the undersigned "Lessee of Record", being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, the undersigned who is the owner of a record title interest or interests only does hereby ratify and confirm said Unit Agreement with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument on the $\frac{27 \, \text{th}}{100}$ day of $\frac{3 \, \text{uly}}{100}$, 1989, but made effective for all purposes on the $\frac{100 \, \text{uly}}{1000}$.

BHP PETROLEUM (AMERICAS), INC.

ATTEST: , Secretary	By: Colombia Colombia (Signature)
	Robert G. Elliott/Attorney-in-Fact (Printed Name/Title)
STATE OF TEXAS) ss COUNTY OF MIDLAND)	
The foregoing instrument w July , 1989, by Robert G. Elli of BHP PETROLEUM (AMERICAS), INC., said corporation.	as acknowledged before me this <u>27th</u> day of <u>ott</u> , <u>Attorney-in-Fact</u> (Title) a <u>Delaware</u> corporation, on behalf of
My Commission Expires:	Gail Caudle , Notary Public

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the undesigned owner of a record title interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," (hereinafter the "Unit Agreement"); and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which become a part of the Jennifer Chaveroo San Andres Unit as initially approved; and

WHEREAS, the undersigned represents that it is a "Lessee of Record" as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, the undersigned "Lessee of Record", being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, the undersigned who is the owner of a record title interest or interests only does hereby ratify and confirm said Unit Agreement with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument on the 18th day of August, 1989, but made effective for all purposes on the 1st day of August, 1989.

BHP PETROLEUM (AMERICAS) INC. SUCCESSOR TO

ENERGY RESERVES GROUP, INC.

Robert G. Elliott
Attorney-in-Fact

STATE OF TEXAS)
COUNTY OF MIDLAND)

The foregoing instrument was acknowledged before me on this 18th day of August, 1989, by Robert G. Elliott, Attorney-in-Fact of BHP PETROLEUM (AMERICAS) INC., successor to ENERGY RESERVES GROUP, INC. a Delaware corporation, on behalf of said corporation.

My Commission Expires:

<u>12-16-92</u>

Gail Caudle, Notary Public in and for the State of Texas

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the undersigned owner of a record title interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroc San Andres Unit, County of Roosevelt, State of New Mexico," (hereinafter the "Unit Agreement"); and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which became a part of the Jennifer Chaveroo San Andres Unit as initially approved; and

WHEREAS, the undersigned represents that it is a "Lessee of Record" as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, the undersigned "Lessee of Record", being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, the undersigned who is the owner of a record title interest or interests only does hereby ratify and confirm said Unit Agreement with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument on the $\frac{14\text{th}}{14\text{th}}$ day of August , 1989, but made effective for all purposes on the 1st day of August, 1989.

Entity: THE WISER OIL COMPANY

ATTEST:	
Richard Harly	By: White will
Richard L. Starkey , Secretary/	(Signature)
	John e. Wright, President (Printed Name/Title)
The second of th	
STATE OF <u>west virginia</u>)	
COUNTY OF TYLER) ss	
The foregoing instrument was August, 1989, by John C. Wr of The Wiser Oil Company, said corporation.	vas acknowledged before me this <u>14th</u> day of <u>ight</u> , <u>President</u> (Title) a <u>Delaware</u> corporation, on behalf of
My Commission Expires:	
November 13, 1998	Betty L. Slatt
	Betty Blatt , Notary Public



KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the undersigned owner of a record title interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroc San Andres Unit, County of Roosevelt, State of New Mexico," (hereinafter the "Unit Agreement"); and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which became a part of the Jennifer Chaveroo San Andres Unit as initially approved; and

WHEREAS, the undersigned represents that it is a "Lessee of Record" as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, the undersigned "Lessee of Record", being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, the undersigned who is the owner of a record title interest or interests only does hereby ratify and confirm said Unit Agreement with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument 22nd day of August _____, 1989, but made effective for all purposes on the 1st day of August, 1989.

ATTEST:	Entity: Sun Operating Limited Partnership, By Oryx Energy Company Its Managing General Partner	
, Secretary	By: Thuch 2. Mishin (Signature)	
	Frank L. McColloch, Attorney-in-Fact (Printed Name/Title)	
STATE OF TEXAS) ss		
COUNTY OF DALLAS)	of was acknowledged before me this 22nd day as	
August , 1989, by Frank L.	t was acknowledged before me this 22nd day of McColloch , Attorney-in-Fact (Title) , a Delaware corporation, on behalf of	
My Commission Expires:		
	Patricia C. Gross, Notary Public	
	PATRICIA C GROSS	

Notary Public STATE OF TEXAS

My Comm. Exp. Oct. 20, 1992

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the undersigned owner of a record title interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit. County of Roosevelt, State of New Mexico," (hereinafter the "Unit Agreement"); and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which became a part of the Jennifer Chaveroo San Andres Unit as initially approved; and

WHEREAS, the undersigned represents that it is a "Lessee of Record" as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, the undersigned "Lessee of Record", being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, the undersigned who is the owner of a record title interest or interests only does hereby ratify and confirm said Unit Agreement with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument on the $\frac{7 \, \text{th}}{100}$ day of $\frac{100 \, \text{September}}{1000 \, \text{September}}$, 1989, but made effective for all purposes on the 1st day of August, 1989.

ATTEST:	Entity:	OC-GULF COAST, INC.	
, Secretary	By: homas (Signature		B LED
	Thomas M. (Printed)	Wadsworth/Attorney-in-Falame/Title)	<u>ct</u>
STATE OF			
The foregoing instrument w Autonity. 1989, by Thomas M. Wa of TOC-Gulf Coast, Inc.	as acknowledged	before me this 1th da torney-in-Fact (Ti	y of tle)
said corporation.	Delaware	corporaction, on benai	
adia corporations			
My Commission Expires:			, ,
·	<u>Opa</u> Charlotte	Nath Witchell Witchell . Notary Publ	

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, the undersigned owner of a record title interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 1, 1989, entitled "Unit Agreement, Jennifer Chaveroo San Andres Unit, County of Roosevelt, State of New Mexico," (hereinafter the "Unit Agreement"); and

WHEREAS, Exhibits "A" and "B", attached to and made a part of said Unit Agreement, identify the separately owned tracts which became a part of the Jennifer Chaveroo San Andres Unit as initially approved; and

WHEREAS, the undersigned represents that it is a "Lessee of Record" as defined in said Unit Agreement, in one or more of the Tracts identified by said Exhibits; and

WHEREAS, the undersigned "Lessee of Record", being familiar with the contents thereof, desires to ratify and confirm said Unit Agreement.

NOW THEREFORE, the undersigned who is the owner of a record title interest or interests only does hereby ratify and confirm said Unit Agreement with respect to all of its interests in all of the separately owned Tracts identified by said Exhibits, thereby becoming a party thereto.

IN WITNESS WHEREOF, the undersigned party has executed this instrument on the 14th day of August, 1989, but made effective for all purposes on the 1st day of August, 1989.

By: then Sheephy Engli Ann Murphy Ezzell, Chairman & C.E.O.

MURPHY OPERATING CORPORATION

Nadine R. Reed,

ATTEST:

STATE OF NEW MEXICO

COUNTY OF CHAVES

))ss

My Commission Expires:

Ell Sand

August 24, 1990

Clara Talbert Notary Public