

HINKLE, COX, EATON, COFFIELD & HENSLEY

LEWIS C. COX
PAUL W. EATON
CONRAD E. COFFIELD
HAROLD L. HENSLEY JR.
STUART D. SHANOR
C. D. MARTIN
PAUL J. KELLY, JR.
OWEN M. LOPEZ
DOUGLAS L. LUNSFORD
T. CALDER EZZELL, JR.
WILLIAM B. BURFORD*
RICHARD E. OLSON
RICHARD A. SIMMS
RICHARD R. WILFONG*
STEVEN D. ARNOLD
JAMES J. WECHSLER
NANCY S. CUSACK
JEFFREY L. FORNACIARI
JEFFREY D. HEWETT*
JAMES BRUCE
JERRY F. SHACKELFORD*
JEFFREY W. HELLBERG*

ALBERT L. PITTS
THOMAS M. HNASKO
JOHN C. CHAMBERS*
THOMAS D. HAINES, JR.
FRANKLIN H. MCALLUM*
GREGORY J. NIBERT
DAVID T. MARKETTE*
FRED W. SCHWENDIMANN
JAMES R. MCADAMS*
JAMES M. HUDSON
MACDONNELL GORDON
REBECCA NICHOLS JOHNSON
PAUL R. NEWTON
WILLIAM R. JOHNSON
KAREN M. RICHARDSON*
ELLEN S. CASEY
JAMES C. BROCKMANN
SUSAN L. NIESER*
MARK A. WILSON*
GREGORY S. WHEELER
ANDREW J. CLOUTIER*

ATTORNEYS AT LAW
700 UNITED BANK PLAZA

POST OFFICE BOX 10
ROSWELL, NEW MEXICO 88202
(505) 622-6510

2800 CLAYDESTA NATIONAL BANK BUILDING
POST OFFICE BOX 3580
MIDLAND, TEXAS 79702
(915) 683-4691

1700 TEXAS AMERICAN BANK BUILDING
POST OFFICE BOX 9238
AMARILLO, TEXAS 79105
(806) 372-5569

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

OF COUNSEL
O. M. CALHOUN
MACK EASLEY
JOE W. WOOD
STEPHEN L. ELLIOTT

CLARENCE E. HINKLE (1901-1985)
W. E. BONOURANT, JR. (1913-1973)
ROY C. SNOODGRASS, JR. (1915-1987)

*NOT LICENSED IN NEW MEXICO

September 20, 1988

Mr. David R. Catanach
Oil Conservation Division
Energy & Minerals Department
P. O. Box 2088
Santa Fe, New Mexico 87504

Re: Cases 9477 and 9478
Murphy Operating Corporation Haley Chaveroo
San Andres Unit

Dear David:

Pursuant to your request at the September 14, 1988 hearing on the captioned cases, please find enclosed supplemental C-108 data relative to all wells within the area of review; that is wells within 1/2 mile of a proposed injection well. This exhibit is submitted under the Affidavit of Mr. Bert H. Murphy, one of my expert witnesses, who entered our Exhibit 8 into evidence. As you noted, Exhibit 8 covered only the wells within 1/2 mile of the initial seven proposed injectors. Please accept this new Exhibit 8 in lieu of the Exhibit 8 which was entered into evidence at the hearing.

You had also requested that I submit the authority by which Skelly Oil Company, predecessor in title to Murphy Operating Corporation, was injecting water into the Hobbs "T" Well No. 11, located in Unit P of Section 33, Township 7 South, Range 33 East. This well is within the unit and under the unit well numbering system, this well would be the Haley Unit Well No. 33-16. The authority to inject was pursuant to Order No. R-4597, entered in Case No. 5023 on July 23, 1973. A copy of this Order is attached.

After you have had a chance to review the new Exhibit 8, I will be discussing the waterflood order with you. As you will recall, you asked me to prepare a draft of this Order.

Mr. David Catanach
September 20, 1988
Page Two

In addition, you will also find a plugging diagram for the Collier Energy, Inc. Mary Ella No. 1 well located in Unit D of Section 11, Township 8 South, Range 33 East. I assume because of the Collier bankruptcy this well was not shown as being plugged and abandoned, but when my client was researching it as being a well in the area of review, they discovered that it in fact had been plugged. I have enclosed three sets of the plugging diagram and Form C-103 which should be inserted in Exhibit 2 VI C as pages 53 and 54.

As you will recall from one of our discussions in Santa Fe, my clients are most anxious to have this unit approved by October 1st so that they may begin work on their injection plant in order to be injecting before winter weather sets in. Please advise me if there is anything that my clients or I can do to help expedite unit approval.

Thanking you in advance for your cooperation on this matter,
I remain,

Yours very truly,

HINKLE, COX, EATON, COFFIELD & HENSLEY


T. Calder Ezzell, Jr.

TCE/tw
Enclosures



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

September 21, 1988

VIA FEDERAL EXPRESS

State of New Mexico
Oil Conservation Division
310 Old Santa Fe Trail
Santa Fe, New Mexico 87501

Attention: Mr. David R. Catanach
Energy & Minerals Department

Re: Murphy Operating Corporation's
Proposed Haley Chaveroo San Andres Unit
Exhibit III. File #2
Chaves & Roosevelt Counties, N.M.

Gentlemen:

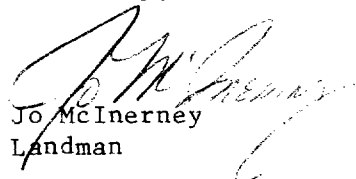
During the compilation of the supplemental information to the C-108 which is enclosed, we were double checking the injection wells inside the proposed unit as captioned and found two errors under the Unit Well # column.

Please note on page 1 of 10, Well #3-4 should read #33-04 and on page 6 of 10, Well #34-1 should read Well #34-16. We have enclosed three sets of the two pages that show the correct well numbers.

We respectfully request that the Oil Conservation Division replace these pages in File #2 of the unit packages Murphy Operating Corporation previously mailed prior to our hearing on September 14, 1988.

Thank you for your attention to this matter and if you have any questions regarding any of the enclosed information, please don't hesitate to contact us.

Sincerely,


Jo McInerney
Landman

JM:dr

Enclosures: as stated

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 2038
STATE LAND OFFICE BUILDING
SANTA FE NEW MEXICO 87501
(505) 827-5800

Murphy Operating Corporation

Other _____

State of New Mexico



W.R. HUMPHRIES
COMMISSIONER



Commissioner of Public Lands

August 29, 1988

*CASE FILE
SEPTEMBER 14, 1988*

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

Murphy Operating Corporation
Attn: Ms. Ann Murphy Ezzell, Esq.
P. O. Box 2648
Roswell, New Mexico 88202-2648

Case 9477

Re: Proposed Haley Chaveroo S/A
Unit Chaves and Roosevelt
Counties, New Mexico

Gentlemen:

This office has reviewed the unexecuted copy of unit agreement for the proposed Haley Chaveroo San Andres Unit, Chaves and Roosevelt Counties, New Mexico. This agreement meets the general requirements of the Commissioner of Public Lands and 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 submit the following:

1. Application for formal approval by the Commissioner setting forth the tracts that have been committed and the tracts that have not been committed.
2. All ratifications from the Lessees of Record and Working Interest Owners. All signatures should be acknowledged before a notary and one set must contain original signatures.
3. Order of the New Mexico Oil Conservation Division. Our approval will be subject to like approval by the New Mexico Oil Conservation Division.

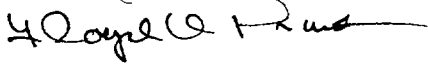
Murphy Operating Corporation
August 24, 1988
Page 2

Enclosed is a copy of your agreement reflecting the date received in this office.

If we may be of further help please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES
COMMISSIONER OF PUBLIC LANDS

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

WRH/FOP/pm
encls.
cc: OCD



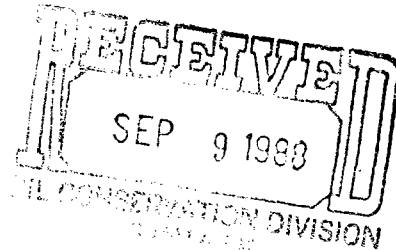
MURPHY OPERATING CORPORATION
UNITED BANK PLAZA, SUITE 300
400 NORTH PENNSYLVANIA AVENUE
POST OFFICE BOX 2648
ROSWELL, NEW MEXICO 88202-2648

TELEPHONE
505 623-7210

September 7, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David R. Catanach, Examiner
Oil Conservation Division
Energy and Minerals Department
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87504-2088



Re: SUBMITTAL OF RATIFICATION OF LESSEE
OF RECORD.
Proposed Haley Chaveroo San Andres Unit
Chaves and Roosevelt Counties, New Mexico.

Dear Mr. Catanach:

I have enclosed herewith a copy of Murphy Operating Corporation's ("MOC") recent letter to the New Mexico State Land Office containing certain material fulfilling the requirements of their letter dated August 29, 1988 (copy enclosed herewith). To complete the requirements outlined in paragraph 2 of the State Land Office's correspondence, we have enclosed herewith three (3) original fully-executed and notarized ratifications from the sole Lessee of Record (other than MOC) in the Unit Area. We would very much appreciate your cooperation in placing these ratifications in the appropriate files previously submitted to your office.

We are gathering material in preparation for the hearings docketed as Case 9477 and 9478 on Wednesday, September 14, 1988. Should you need any additional material prior to the hearing, please feel free to contact me.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:fnr

Enclosures: as stated.

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

September 7, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Attention: Mr. Pete Martinez

Re: REQUEST FOR FINAL APPROVAL:
Proposed Haley Chaveroo San Andres Unit
Chaves and Roosevelt Counties, New Mexico.

Gentlemen:

Reference is hereby made to your correspondence number SLO REF NO OG-864, dated August 29, 1988. In fulfillment of the additional requirements set forth in said correspondence, please be advised that:

1. Murphy Operating Corporation's ("MOC") original application for approval under cover letter dated August 19, 1988 contained three (3) sets of original unit documents executed (and notarized) by 100% of the working interest owners thereby committing to the Unit all tracts within the proposed Unit Area (see File 1-Exhibit "C"). (Except for the State of New Mexico, there are no royalty interests within the Unit Area.) Additionally, File 1-Exhibit "B" sets forth by tract a legal description of the lands and leases committed to the Unit.
2. To complete the requirements outlined in paragraph 2 of your correspondence, we have enclosed herewith three (3) original fully-executed and notarized ratifications from the sole Lessee of Record other than MOC. We would very much appreciate your cooperation in placing these ratifications in the appropriate files previously submitted to your office.
3. The fulfillment of the requirement of paragraph 3 of your correspondence (the Order of the New Mexico Oil Conservation Division) awaits the outcome of the hearings docketed as Case 9477 and 9478 on Wednesday, September 14, 1988.

If the material enclosed herewith completes the application process, please consider this letter to be Murphy Operating Corporation's formal request to the New Mexico State Land Office for final approval of the Haley Chaveroo San Andres Unit, subject to a like order by the New Mexico Oil Conservation Division.

Thank you for your prompt and courteous assistance in our unitization effort. Please let us know should you have any questions or need additional material.

Sincerely,

MURPHY OPERATING CORPORATION



Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:fnr

cc: Mr. David R. Catanach, Examiner ← THIS COPY IS FOR
Oil Conservation Division
Energy and Minerals Department
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

RATIFICATION OF AGREEMENT ENTITLED
"UNIT AGREEMENT"
HALEY CHAVEROO SAN ANDRES UNIT
ROOSEVELT AND CHAVES COUNTIES, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of a record title interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 15, 1988, entitled "Unit Agreement, Haley Chaveroo San Andres Unit, Counties of Roosevelt and Chaves, 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 Haley Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of 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, each undersigned "Lessee of Record", 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 a record title 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, each of the undersigned parties has executed this instrument on the date set forth below opposite its signature.

SUN OPERATING LIMITED PARTNERSHIP
Entity: by SUN EXPLORATION AND PRODUCTION COMPANY
its Managing General Partner
(Name of business entity if applicable)

WITNESS OR ATTEST:

By: David R. Gould
(Signature of "Lessee of Record")

DATE:

9-2-88

Its: Attorney-in-Fact
(Signature and capacity as fiduciary if applicable)

APPROVED
LOCAL
COUNTY
LAND
UNIT
REG. MGR.

is me
DM

STATE OF Texas)(
COUNTY OF Dallas)(
))

The foregoing instrument was acknowledged before me this 2 day of September, 1988, by David R. Gould, Attorney-in-Fact of Sun Exploration and Production Company, Managing General Partner on behalf of SUN OPERATING LIMITED PARTNERSHIP, a limited partnership.

My Commission Expires:
10-1-90



RATIFICATION OF AGREEMENT ENTITLED
"UNIT AGREEMENT"
HALEY CHAVEROO SAN ANDRES UNIT
ROOSEVELT AND CHAVES COUNTIES, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of a record title interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 15, 1988, entitled "Unit Agreement, Haley Chaveroo San Andres Unit, Counties of Roosevelt and Chaves, 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 Haley Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of 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, each undersigned "Lessee of Record", 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 a record title 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, each of the undersigned parties has executed this instrument on the date set forth below opposite its signature.

SUN OPERATING LIMITED PARTNERSHIP
by SUN EXPLORATION AND PRODUCTION COMPANY
Entity: its Managing General Partner
(Name of business entity if applicable)

WITNESS OR ATTEST:

By: *David R. Gould*
(Signature of "Lessee of Record")

APPROVED	
Legal	<i>LS</i>
C & LA	<i>MC</i>
Land	<i>DM</i>
Unit	<i>DM</i>
Reg. Mgr.	

DATE:

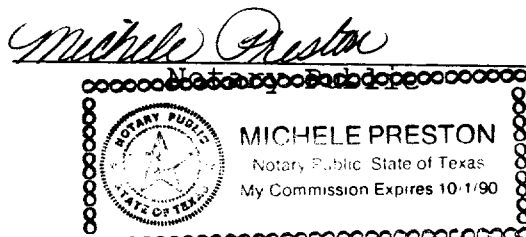
9-2-88

Its: Attorney-in-Fact
(Signature and capacity as fiduciary if applicable)

STATE OF Texas)(
COUNTY OF Dallas)(
)

The foregoing instrument was acknowledged before me this 2 day of September, 1988, by *David R. Gould*, Attorney-in-Fact of Sun Exploration and Production Company, Managing General Partner on behalf of SUN OPERATING LIMITED PARTNERSHIP, a limited partnership.

My Commission Expires:
10-1-90





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

September 7, 1988

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Attention: Mr. Pete Martinez

Re: REQUEST FOR FINAL APPROVAL:
Proposed Haley Chaveroo San Andres Unit
Chaves and Roosevelt Counties, New Mexico.

Gentlemen:

Reference is hereby made to your correspondence number SLO REF NO OG-864, dated August 29, 1988. In fulfillment of the additional requirements set forth in said correspondence, please be advised that:

1. Murphy Operating Corporation's ("MOC") original application for approval under cover letter dated August 19, 1988 contained three (3) sets of original unit documents executed (and notarized) by 100% of the working interest owners thereby committing to the Unit all tracts within the proposed Unit Area (see File 1-Exhibit "C"). (Except for the State of New Mexico, there are no royalty interests within the Unit Area.) Additionally, File 1-Exhibit "B" sets forth by tract a legal description of the lands and leases committed to the Unit.

2. To complete the requirements outlined in paragraph 2 of your correspondence, we have enclosed herewith three (3) original fully-executed and notarized ratifications from the sole Lessee of Record other than MOC. We would very much appreciate your cooperation in placing these ratifications in the appropriate files previously submitted to your office.

3. The fulfillment of the requirement of paragraph 3 of your correspondence (the Order of the New Mexico Oil Conservation Division) awaits the outcome of the hearings docketed as Case 9477 and 9478 on Wednesday, September 14, 1988.

If the material enclosed herewith completes the application process, please consider this letter to be Murphy Operating Corporation's formal request to the New Mexico State Land Office for final approval of the Haley Chaveroo San Andres Unit, subject to a like order by the New Mexico Oil Conservation Division.

Thank you for your prompt and courteous assistance in our unitization effort. Please let us know should you have any questions or need additional material.

Sincerely,

MURPHY OPERATING CORPORATION

Ann Murphy Ezzell, Esq.
Chairman and Chief Executive Officer

AME:fmr

cc: Mr. David R. Catanach, Examiner
Oil Conservation Division
Energy and Minerals Department
State of New Mexico
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
EXHIBIT NO.	5
CASE NO.	

RATIFICATION OF AGREEMENT ENTITLED
"UNIT AGREEMENT"
HALEY CHAVEROO SAN ANDRES UNIT
ROOSEVELT AND CHAVES COUNTIES, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS, THAT:

WHEREAS, each of the undersigned owners of a record title interest or interests hereby acknowledges receipt of a true and correct copy of that certain agreement dated August 15, 1988, entitled "Unit Agreement, Haley Chaveroo San Andres Unit, Counties of Roosevelt and Chaves, 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 Haley Chaveroo San Andres Unit as initially constituted; and

WHEREAS, each of 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, each undersigned "Lessee of Record", 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 a record title 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, each of the undersigned parties has executed this instrument on the date set forth below opposite its signature.

SUN OPERATING LIMITED PARTNERSHIP
Entity: by SUN EXPLORATION AND PRODUCTION COMPANY
its Managing General Partner
(Name of business entity if applicable)

WITNESS OR ATTEST:

By: *David R. Moulton*
(Signature of "Lessee of Record")

DATE:

Attorney-in-Fact

9-22-88

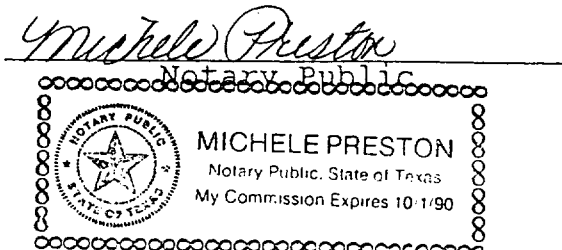
Its: _____
(Signature and capacity as fiduciary if applicable)

APPROVED
Legal <i>mc</i>
C & L <i>mc</i>
Land <i>SM</i>
Unit <i>SM</i>
Reg. Map

STATE OF Texas)(
COUNTY OF Dallas)(
)

The foregoing instrument was acknowledged before me this 2 day of September, 19 88, by *David R. Moulton*, Attorney-in-Fact of Sun Exploration and Production Company, Managing General Partner on behalf of SUN OPERATING LIMITED PARTNERSHIP, a limited partnership.

My Commission Expires:
10-1-90

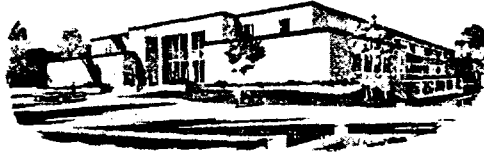


SLO REF NO OG-864



W.R. HUMPHRIES
COMMISSIONER

State of New Mexico



Commissioner of Public Lands

August 29, 1988

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

Murphy Operating Corporation
Attn: Ms. Ann Murphy Ezzell, Esq.
P. O. Box 2648
Roswell, New Mexico 88202-2648

Re: Proposed Haley Chaveroo S/A
Unit Chaves and Roosevelt
Counties, New Mexico

Gentlemen:

This office has reviewed the unexecuted copy of unit agreement for the proposed Haley Chaveroo San Andres Unit, Chaves and Roosevelt Counties, New Mexico. This agreement meets the general requirements of the Commissioner of Public Lands and 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 submit the following:

1. Application for formal approval by the Commissioner setting forth the tracts that have been committed and the tracts that have not been committed.
2. All ratifications from the Lessees of Record and Working Interest Owners. All signatures should be acknowledged before a notary and one set must contain original signatures.
3. Order of the New Mexico Oil Conservation Division. Our approval will be subject to like approval by the New Mexico Oil Conservation Division.

BEFORE EXAMINER CATANACH
OIL CONSERVATION DIVISION

EXHIBIT NO: 6

CASE NO: _____

Murphy Operating Corporation
August 24, 1988
Page 2

Enclosed is a copy of your agreement reflecting the date received in this office.

If we may be of further help please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES
~~COMMISSIONER OF PUBLIC LANDS~~

BY: 

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

WRH/FOP/pm
encls.
cc: OCD

EXHIBIT XIII.

PROPOSED HALEY CHAVEROO SAN ANDRES UNIT
SUPPLEMENTAL DATA REQUIRED BY FORM C-108

LEASEHOLD OPERATORS WITHIN ONE-HALF MILE OF PROPOSED UNIT AREA.

- | | |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X Mr. Tommy Willyard, Jr.
Myco Petroleum Company
Route 1, Box 104
Lovington, New Mexico 88260 | X Mr. Steve Moses, Landman
The Wil-Mc Oil Corporation
Post Office Box 152510
Irving, Texas 75015-2510 |
| X Mr. Cliff Hjelm, President
Mims Texas Oil & Gas Company
7060 South Yale, Suite 707
Tulsa, Oklahoma 74136 | X Mr. Randy G. Patterson, Land Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210 |
| X Ms. Gayla Grosbeck
Milford Oil Company
Post Office Box 427
Tatum, New Mexico 88267 | X Mr. Wylie Barrow, Regional Land Manger
Union Oil Company of California
Post Office Box 671
Midland, Texas 79702 |
| X Mr. Bill Graham, President
Chaveroo Operating Company, Inc.
4800 San Felipe, Suite 620
Houston, Texas 77056 | X Mr. Brian Sirgo
Collier Energy Corporation
Post Office Box 3551
Midland, Texas 79702 |
| X Mr. Craig Schraub, Region Landman
Marathon Oil Company
Post Office Box 552
Midland, Texas 79702 | X Mr. Mike Hinze, Division Landman
Tenneco Oil Company
7990 I H 10 West
San Antonio, Texas 78230 |
| X Mr. Alan Roberts
Manager, U. S. Onshore Production
Kerr-McGee Corporation
Post Office Box 25861
Oklahoma City, Oklahoma 73125 | X Mr. R. A. See, Regional Land Manager
Champlin Petroleum Company
Union Pacific Resources Company
Post Office Box 1257
Englewood, Colorado 80150 |
| X Mr. Rob Hopkins, Landman
Kaneb Operating Company Ltd.
Post Office Box 4502
Houston, Texas 77210 | |

OWNER OF SURFACE OF THE LAND UPON WHICH PROPOSED INJECTORS ARE LOCATED.

- X 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

Attention: Mr. Pete Martinez

BEFORE EXAMINER CATANACH	
OIL CONSERVATION DIVISION	
_____	EXHIBIT NO. <u>7</u>
CASE NO. _____	

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
(Extra charge)†

3. Article Addressed to: Mr. Craig Schraub, Region Landman Marathon Oil Company Post Office Box 552 Midland, Texas 79702	4. Article Number P 665 399 499 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED .
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X <i>Tommy Willyard</i>	
7. Date of Delivery 8-22-88	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
(Extra charge)†

3. Article Addressed to: Mr. Tommy Willyard, Jr. Myco Petroleum Company Route 1, Box 104 Lovington, New Mexico 88260	4. Article Number P 665 399 490 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED .
5. Signature — Addressee X <i>Tommy Willyard</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X	
7. Date of Delivery 8-25-88	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
(Extra charge)†

3. Article Addressed to: Mr. Alan Roberts Manager, U. S. Onshore Production Kerr-McGee Corporation Post Office Box 25861 Oklahoma City, Oklahoma 73125	4. Article Number P 665 399 498 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED .
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X <i>Tommy Willyard</i>	
7. Date of Delivery 8-22-88	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
(Extra charge)†

3. Article Addressed to: Mr. Cliff Hjeltn, President Mims Texas Oil & Gas Company 7060 South Yale, Suite 707 Tulsa, Oklahoma 74136	4. Article Number P 665 399 455 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED .
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X <i>Cliff Hjeltn</i>	
7. Date of Delivery 8-22-88	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
(Extra charge)†

3. Article Addressed to: Mr. Rob Hopkins, Landman Kaheh Operating Company Ltd. Post Office Box 4502 Houston, Texas 77210	4. Article Number P 665 399 497 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED .
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X	
7. Date of Delivery AUG 22 1988	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
(Extra charge)†

3. Article Addressed to: Ms. Gayla Grosbeck Milford Oil Company Post Office Box 427 Tatum, New Mexico 88267	4. Article Number P 665 399 454 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED .
5. Signature — Addressee X <i>Gayla Grosbeck</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X	
7. Date of Delivery 8-23-88	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
(Extra charge)†

3. Article Addressed to: Mr. Steve Moses, Landman The Wil-Mc Oil Corporation Post Office Box 152510 Irving, Texas 75015-2510	4. Article Number P 665 399 495 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED .
5. Signature — Addressee X <i>Steve Moses</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X	
7. Date of Delivery 8-22-88	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery
(Extra charge)†

3. Article Addressed to: Mr. Bill Graham, President Chaveroo Operating Company, Inc. 4800 San Felipe, Suite 620 Houston, Texas 77066	4. Article Number P 665 399 500 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail Always obtain signature of addressee or agent and DATE DELIVERED .
5. Signature — Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature — Agent X <i>Bill Graham</i>	
7. Date of Delivery 8-22-88	

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:
Mr. R. A. See, Regional Land Manager
Champion Petroleum Company
Union Pacific Resources Company
Post Office Box 1257
Englewood, Colorado 80150

4. Article Number
P 665 399-496

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

5. Signature — Addressee
X *R. A. See*

6. Signature — Agent
X

7. Date of Delivery
AUG 22 1988

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:
Mr. Randy G. Patterson, Land Manager
Yates Petroleum Corporation
105 South Fourth Street
Artesia, New Mexico 88210

4. Article Number
P 665 399 494

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

5. Signature — Addressee
X

6. Signature — Agent
X

7. Date of Delivery
9/22/88

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:
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

4. Article Number
P 665 399 487

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

5. Signature — Addressee
X *Floyd O. Prando*

6. Signature — Agent
X

7. Date of Delivery
AUG 23 1988

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:
Mr. Wylie Barrow, Regional Land Manager
Union Oil Company of California
Post Office Box 671
Midland, Texas 79702

4. Article Number
P 665 399 493

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

5. Signature — Addressee
X

6. Signature — Agent
X *Wylie Barrow*

7. Date of Delivery
AUG 23 1988

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:
Mr. Brian Sirgo
Collier Energy Corporation
Post Office Box 3551
Midland, Texas 79702

4. Article Number
P 665 399 492

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

5. Signature — Addressee
X

6. Signature — Agent
X *Brian Sirgo*

7. Date of Delivery
AUG 23 1988

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

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1. ☐ Show to whom delivered, date, and addressee's address. 2. ☐ Restricted Delivery (Extra charge)

3. Article Addressed to:
Mr. Mike Hinz, Division Landman
Tenneco Oil Company
7990 I H 10 West
San Antonio, Texas 78230

4. Article Number
P 665 399 491

Type of Service:
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

5. Signature — Addressee
X

6. Signature — Agent
X *Mike Hinz*

7. Date of Delivery
9-22-88

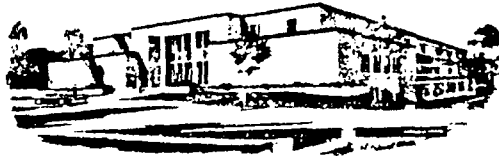
8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1987 * U.S.G.P.O. 1987-178-268 DOMESTIC RETURN RECEIPT

State of New Mexico



W.R. HUMPHRIES
COMMISSIONER



Commissioner of Public Lands

August 29, 1988

*CASE FILE
SEPTEMBER 14, 1988*

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

Case 9477

Murphy Operating Corporation
Attn: Ms. Ann Murphy Ezzell, Esq.
P. O. Box 2648
Roswell, New Mexico 88202-2648

Re: Proposed Haley Chaveroo S/A
Unit Chaves and Roosevelt
Counties, New Mexico

Gentlemen:

This office has reviewed the unexecuted copy of unit agreement for the proposed Haley Chaveroo San Andres Unit, Chaves and Roosevelt Counties, New Mexico. This agreement meets the general requirements of the Commissioner of Public Lands and 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 submit the following:

1. Application for formal approval by the Commissioner setting forth the tracts that have been committed and the tracts that have not been committed.
2. All ratifications from the Lessees of Record and Working Interest Owners. All signatures should be acknowledged before a notary and one set must contain original signatures.
3. Order of the New Mexico Oil Conservation Division. Our approval will be subject to like approval by the New Mexico Oil Conservation Division.

Murphy Operating Corporation
August 24, 1988
Page 2

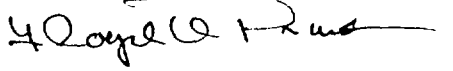
Enclosed is a copy of your agreement reflecting the date received in this office.

If we may be of further help please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES
~~COMMISSIONER OF PUBLIC LANDS~~

BY:



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

WRH/FOP/pm
encls.
cc: OCD



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

April 5, 1990

Mr. Floyd O. Prando
Director, Oil & Gas Division
State of New Mexico
Commissioner of Public Lands
Post Office Box 1148
Santa Fe, New Mexico 87504-1148

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

Attention: Mr. David R. Catanach, Engineer

Re: PLAN OF OPERATION FOR 1990
Haley Chaveroo San Andres Unit
Chaveroo San Andres Field
Chaves & Roosevelt Counties, New Mexico

Gentlemen:

Pursuant to the provisions of Section 11A. of the Unit Agreement, Murphy Operating Corporation ("MOC"), designated Unit Operator of the Haley Chaveroo San Andres Unit, Chaves and Roosevelt Counties, 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: Injection into four (4) wells (#34-2, #34-4, #34-10 and #34-12) began in June and July, 1989 and has continued uninterrupted to present. Beginning in September, 1989 injection profiles (i. e. tracer surveys) were performed on each of the wells. Based upon the results of the injection profiles and the initial injection activity, three (3) additional wells (#33-8, #34-6, and #34-8) were converted to injection in November, 1989. In January, 1990 injection profiles were performed on the three additional injectors. As of March 1, 1990, over 350,000 barrels of water has been injected into the seven wells.

Beginning in May, 1989 nine (9) wells located in close proximity to the seven initial injection wells were worked over and returned to production. These producing well workovers include Wells #34-01, #34-03, #34-05, #34-07, #34-09, #34-11, #34-13, #34-14, and #34-15.

- II. Proposed 1990 Plan of Operation: Based upon favorable indications, the working interest owners have elected to proceed with unit-wide development. This development will entail converting twelve (12) producing wells to injection status in order to establish a unit-wide five-spot injection pattern. The proposed injectors consist of Wells #33-02, #33-06, #33-10, #33-12, #33-14, #34-14, #34-16, #03-02, #03-06, #03-08, #03-10, and #03-16. Two (2) existing salt water disposal wells (#33-04 and #33-16) will also be converted to injection status.

An expansion of the injection system will be required in order to accommodate these additional injectors. The expansion will entail the installation of approximately forty-five thousand feet (45,000") of 4", 3" and 2" high-pressure fiberglass injection line. Two (2) high-volume, high-pressure injection pumps will also be installed which will increase injection capacity to approximately 16,000 BWPd.

The unit-wide development activity also requires the working over and returning to production of fifteen producing wells. These producers are Wells #33-01, #33-03, #33-05, #33-07, #33-09, #33-11, #33-13, #33-15, #34-13, #34-15, #03-01, #03-03, #03-07, #03-09, and #03-15.

In order to accommodate anticipated increased volumes of produced fluids, the existing six (6) tank batteries will be consolidated into three (3) larger facilities.

- III. Further Development: The ultimate development of the Haley Unit provides for the drilling of two (2) injection wells. These proposed injectors are to be located in the NW/NW and the SE/SW of Section 3, T8S-R33E. It is anticipated that these wells will be drilled in the second quarter of 1991.
- IV. Operating Guidelines: MOC monitors all injection wells through daily rate and pressure checks. Approximately every 180 days, but at least once per year, a tracer survey will be run on each injection well 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 procedure 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.
- V. Modification: Subject to 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

Enclosure: Haley Chaveroo San Andres Unit Well Location and Status Map;
Haley Chaveroo San Andres Unit Reservoir Performance Curve;
Haley 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

MURPHY OPERATING CORPORATION

CHAVEROO SAN ANDRES FIELD
CHAVES & ROOSEVELT COUNTIES
NEW MEXICO

HALEY CHAVEROO SAN ANDRES UNIT
MURPHY OPERATOR

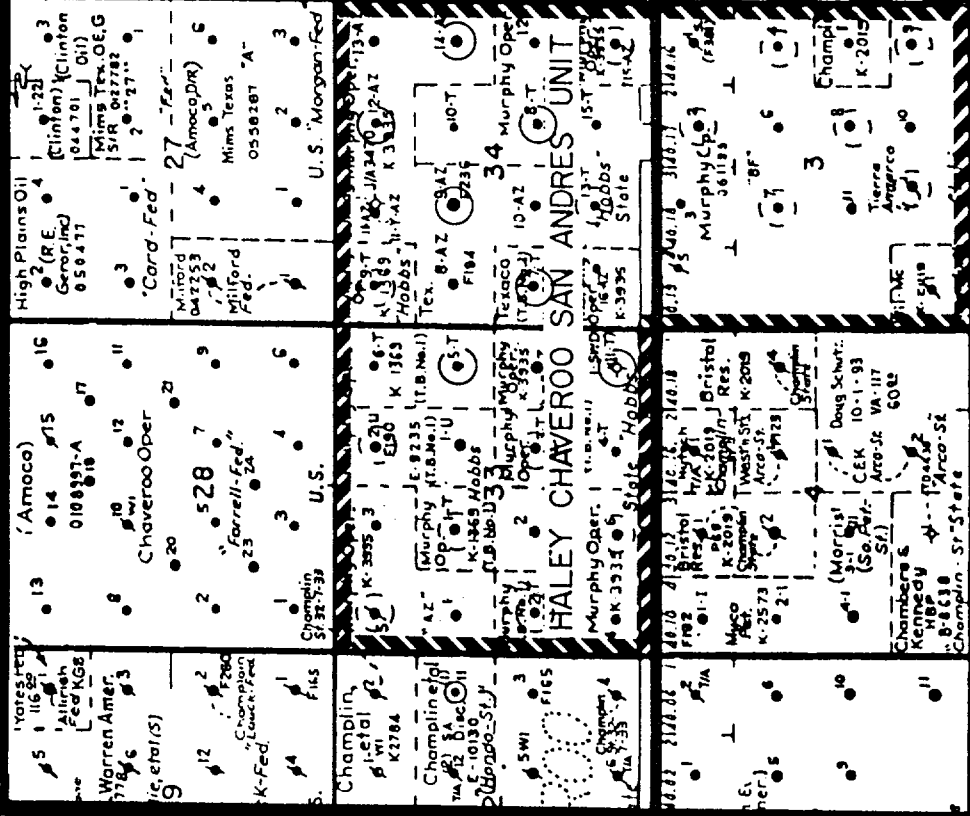
K-M CHAVEROO SAN ANDRES UNIT
KERR MCGEE OPERATOR

JENNIFER CHAVEROO SAN ANDRES UNIT
MURPHY OPERATOR

ACTIVE INJECTOR

PROPOSED INJECTOR

ACTIVE PRODUCER



JENNIFER CHAVEROO SAN ANDRES UNIT

HALEY CHAVEROO SAN ANDRES UNIT

K-M CHAVEROO SAN ANDRES UNIT

HALEY CHAVEROO SAN ANDRES UNIT

K-M CHAVEROO SAN ANDRES UNIT

HALEY CHAVEROO SAN ANDRES UNIT

K-M CHAVEROO SAN ANDRES UNIT

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K-M CHAVEROO SAN ANDRES UNIT

HALEY CHAVEROO SAN ANDRES UNIT

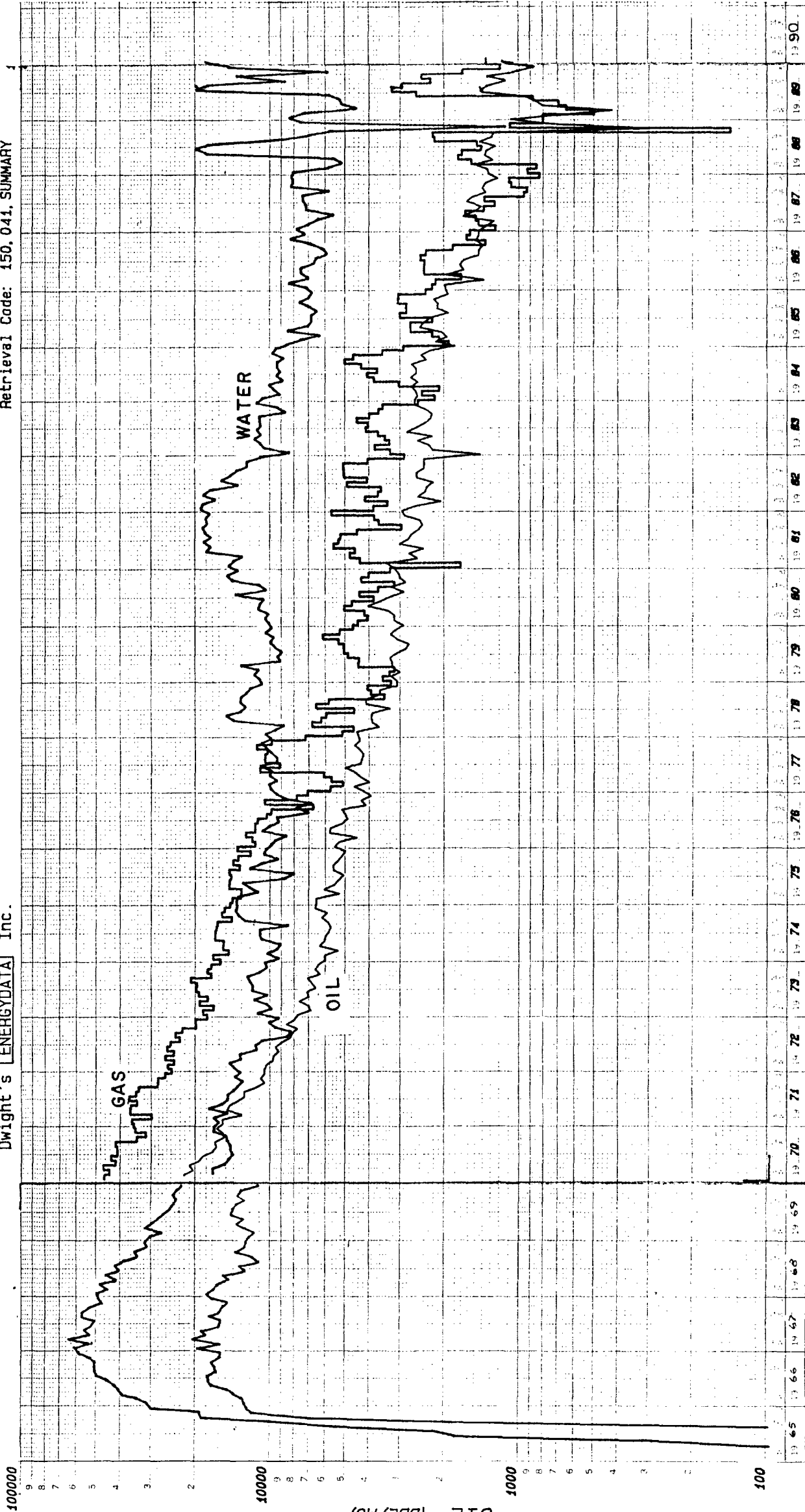
K-M CHAVEROO SAN ANDRES UNIT

HALEY CHAVEROO SAN ANDRES UNIT

Oil, Gas, & Water vs Time

Dwight's ENERGYDATA Inc.

Retrieval Code: 150,041, SUMMARY



Location: 7 BS 33 34E
API # 30-041-0000000
Oil Curc 322303
Gas Curc 4450421
Date: 12-18-89

Well/Lease: HALEY CHAVERO SA UNIT
County: ROOSEVELT NM
Operator: MURPHY OPERATING
Field: CHAVERO SAN ANDRES
Reservoir:

JANUARY 1, 1990

HALEY CHAVEROO SAN ANDRES UNIT

EFFECTIVE OCTOBER 1, 1988

[illegible]

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

PRODUCTION
CHAVEROO SAN ANDRES POOL

HALEY CHAVEROO SAN ANDRES UNIT
EFFECTIVE OCTOBER 1,1988

Computer LEASE NAME, Well # WELL S T R			CUMULATIVE THRU 12/31/88	1989 JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	1989 TOTAL	CUM. TOTALS
T-1 BATTERY TOTAL			OIL 749,918	63	58	110	148	183	169	170	103	199	173	148	134	1,658	751,576
			GAS 1,033,679	0	0	0	0	0	0	0	0	0	0	0	0	0	1,033,679
			WAT 1,090,157	404	295	752	1635	950	856	769	611	961	1162	676	979	10,050	1,100,207
			INJ 1,665,179	5642	4546	3407	6187	2803	8298	18009	32648	23189	32118	29207	31428	197,482	1,862,661

HCSAU SEC. 33 (Hobbs U) HOBBS U BATTERY			OIL 66,609	128	120	86	0	0	0	0	0	0	0	0	0	334	66,943
080002 2 B 33-T7S-R33E S			GAS 88,803	0	0	0	0	0	0	0	0	0	0	0	0	0	88,803
(#2)			WAT 30,487	3017	2548	2015	0	0	0	0	0	0	0	0	0	7,580	38,067
080007 7 G 33-T7S-R33E S			OIL 101,581	0	0	0	70	32	10	0	0	0	0	0	0	112	101,693
(#1)			GAS 136,455	0	0	0	0	0	0	0	0	0	0	0	0	0	136,455
			WAT 246,533	0	0	0	802	796	0	0	0	0	0	0	0	1,598	248,131
HOBBS U BATTERY TOTAL			OIL 168,190	128	120	86	70	32	10	0	0	0	0	0	0	446	168,635
			GAS 225,258	0	0	0	0	0	0	0	0	0	0	0	0	0	225,258
			WAT 277,020	3017	2548	2015	802	796	0	0	0	0	0	0	0	9,178	286,198

HCSAU SEC. 33 (NM AZ State) AZ BATTERY			OIL 60,122	0	0	0	0	0	0	0	0	0	0	0	0	0	60,122
080003 3 C 33-T7S-R33E S			GAS 69,658	0	0	0	0	0	0	0	0	0	0	0	0	0	69,658
(#3)			WAT 41,227	0	0	0	0	0	0	0	0	0	0	0	0	0	41,227
080005 5 E 33-T7S-R33E S			OIL 87,440	0	0	0	0	0	93	0	0	0	0	0	0	93	87,533
(#1)			GAS 109,168	0	0	0	0	0	0	0	0	0	0	0	0	0	109,168
			WAT 73,384	0	0	0	0	0	2164	0	0	0	0	0	0	2,164	75,548
080004 4 D 33-T7S-R33E INJ			OIL 40,372	0	0	0	0	0	0	0	0	0	0	0	0	0	40,372
(#5)			GAS 41,294	0	0	0	0	0	0	0	0	0	0	0	0	0	41,294
			WAT 7,590	0	0	0	0	0	0	0	0	0	0	0	0	0	7,590
			INJ 615,670	0	0	0	0	0	0	0	0	0	0	0	0	0	615,670

080009 9 I 33-T7S-R33E P			OIL 20,282	132	49	2	0	0	92	147	0	8	7	3	13	453	20,735
(#7)			GAS 24,740	168	170	190	29	150	622	231	0	0	0	0	0	1,560	26,300
			WAT 81,983	1901	587	454	0	1057	2164	1277	731	415	450	334	702	10,072	92,055
080011 11 K 33-T7S-R33E S			OIL 67,376	0	0	0	0	0	0	0	0	0	0	0	0	0	67,376
(#2)			GAS 68,549	0	0	0	0	0	0	0	0	0	0	0	0	0	68,549
			WAT 96,555	0	0	0	0	0	0	0	0	0	0	0	0	0	96,555
080013 13 M 33-T7S-R33E P			OIL 47,936	0	0	0	0	0	0	0	0	0	0	69	157	226	48,162
(#4)			GAS 60,004	0	0	0	0	0	0	0	0	0	0	0	0	0	60,004
			WAT 57,824	0	0	0	0	0	0	0	0	0	0	398	835	1,233	59,057

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Computer LEASE NAME, Well # WELL S T R				CUMULATIVE THRU 12/31/88	1989 JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	1989 TOTAL	CUM. TOTALS
HCSAU SEC. 33 (NM AZ State) AZ BATTERY (continued):																		
080014	14 N	33-T7S-R33E (#6)	OIL GAS WAT	56,354 109,288 53,273	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	56,354 109,288 53,273
HCSAU SEC. 34 (NM Z State) AZ BATTERY																		
080029	13 M	34-T7S-R33E (#16)	OIL GAS WAT	72,911 108,060 86,506	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	35 75 699	74 279 480	133 421 404	150 190 493	149 197 536	69 161 397	0 103 0	610 1,426 3,009	73,521 109,486 89,515
080018	2 B	34-T7S-R33E (#12)	OIL GAS WAT INJ	63,375 76,316 19,620	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	63,375 76,316 19,620 34,752
080032	16 P	34-T7S-R33E (#15)	OIL GAS WAT	50,591 58,628 23,490	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	50,591 58,628 23,490
AZ BATTERY TOTAL				493,848 617,645 454,946 615,670	132 168 1901 0	49 170 587 0	2 190 454 0	0 29 0 0	0 150 1057 0	185 622 4328 0	147 231 1277 5438	133 421 1135 6069	158 190 908 6333	156 197 986 6283	141 161 1129 5722	170 103 1537 4907	1,273 2,632 15,299 34,752	495,121 620,277 470,245 650,422
HCSAU SEC. 3 (State BF) BF BATTERY																		
080033	1 A	3-T8S-R33E (#1)	OIL GAS WAT	104,982 117,746 21,486	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	104,982 117,746 21,486
080034	2 B	3-T8S-R33E (#2)	OIL GAS WAT	54,794 103,373 18,538	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	54,794 103,373 18,538
080035	3 C	3-T8S-R33E (#3)	OIL GAS WAT	39,794 48,734 11,025	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	39,794 48,734 11,025
080036	4 D	3-T8S-R33E (#5)	OIL GAS WAT	111	0	0	0	0	0	0	0	0	0	0	0	0	0	111
---Plugging approved 1975---																		
080037	6 F	3-T8S-R33E (#7)	OIL GAS WAT	52,178 48,579 24,746	0 0 0	0 0 0	0 0 0	84 0 362	102 0 372	81 0 878	75 0 284	52 0 218	56 0 147	89 0 445	76 0 243	23 0 399	638 0 3,348	52,816 48,579 28,094
080038	7 G	3-T8S-R33E (#6)	OIL GAS WAT	89,935 87,358 24,193	0 0 0	0 0 0	0 0 0	84 0 341	102 0 350	80 0 823	75 0 260	79 0 266	56 0 134	89 0 405	76 0 221	23 0 363	664 0 3,163	90,599 87,358 27,356
080039	8 H	3-T8S-R33E (#4)	OIL GAS	92,543 91,866	0 0	0 0	0 0	0 0	0 0	52 0	50 0	52 0	56 0	89 0	76 0	23 0	398 0	92,941 01,866

4TH QUARTER PRODUCTION REPORT
JANUARY 1, 1990

PRODUCTION
CHAVEROO SAN ANDRES POOL
HALEY CHAVEROO SAN ANDRES UNIT
EFFECTIVE OCTOBER 1, 1990

Computer LEASE NAME, Well #			S T R		STATUS		CUMULATIVE THRU 12/31/88		1989												1989		CUM.	
									JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEP. OCT. NOV. DEC.												TOTAL		TOTALS	
HCSAU SEC. 3 (STATE BF) BF BATTERY (continued):																								
080040	10	J	3-T8S-R33E		P	OIL	99,190	0	0	0	110	134	109	100	105	75	119	101	31	884	100,074			
			(#8)			GAS	84,276	0	0	0	0	0	0	0	0	0	0	0	0	0	84,276			
						WAT	68,797	0	0	0	277	285	659	213	217	201	607	331	545	3,335	72,132			
080041	11	K	3-T8S-R33E		S	OIL	3,868	0	0	0	0	0	0	0	0	0	0	0	0	0	3,868			
			(#11)			GAS	8,388	0	0	0	0	0	0	0	0	0	0	0	0	0	8,388			
						WAT	20,296	0	0	0	0	0	0	0	0	0	0	0	0	0	20,296			
080043	15	O	3-T8S-R33E		P	OIL	127,232	245	205	512	163	199	173	150	157	112	178	152	46	2,292	129,524			
			(#10)			GAS	147,871	510	337	346	0	0	0	0	0	905	1299	990	371	4,758	152,629			
						WAT	375,722	1779	1030	1325	895	919	2086	686	701	803	2428	1323	1271	15,246	390,968			
080044	16	P	3-T8S-R33E		P	OIL	93,132	0	0	0	84	102	80	74	78	56	89	76	23	662	93,794			
			(#9)			GAS	77,146	0	0	0	0	0	0	0	0	0	0	0	0	0	77,146			
						WAT	36,151	0	0	0	255	263	604	189	193	160	486	263	435	2,848	38,999			
BF BATTERY TOTAL						OIL	757,759	245	205	512	525	639	575	524	523	411	653	557	169	5,538	763,297			
						GAS	815,337	510	337	346	0	0	0	0	0	905	1299	990	371	4,758	820,095			
						WAT	656,491	1779	1030	1325	2130	2189	5489	1845	1764	1579	4776	2602	3376	29,884	686,375			

HCSAU SEC. 3 (State 3) STATE 3 BATTERY:																						
080050	9 I	3-T8S-R33E	P	OIL	171,900	134	98	117	142	115	123	124	113	118	120	106	12	1,322	173,222			
		(#1)		GAS	123,153	134	105	125	681	749	1184	1158	1321	0	0	0	92	5,549	128,702			
				WAT	67,247	124	112	620	690	803	510	775	589	630	620	600	60	6,133	73,380			
STATE 3 BATTERY TOTAL				OIL	171,900	134	98	117	142	115	123	124	113	118	120	106	12	1,322	173,222			
				GAS	123,153	134	105	125	681	749	1184	1158	1321	0	0	0	92	5,549	128,702			
				WAT	67,247	124	112	620	690	803	510	775	589	630	620	600	60	6,133	73,380			

HCSAU SEC. 34 HOBBS T-2 BATTERY																						
080017 1 A			34-T7S-R33E			P	OIL	65,803	0	0	0	0	0	34	0	0	0	0	0	0	34	65,837
			(#13)				GAS	109,262	0	0	0	0	0	74	0	0	0	0	0	0	74	109,336
							WAT	13,956	0	0	0	0	0	698	1705	1382	698	1672	0	1348	7,503	21,459
080019 3 C			34-T7S-R33E			P	OIL	87,215	0	0	0	0	0	34	0	0	0	0	0	0	34	87,249
			(#11V)				GAS	194,752	0	0	0	0	0	74	0	0	0	0	0	0	74	194,826
							WAT	30,076	0	0	0	0	0	698	666	671	342	712	0	1138	4,227	34,303
080021 5 E			34-T7S-R33E			P	OIL	94,747	0	0	0	0	0	34	49	77	0	0	0	0	160	94,907
			(#8)				GAS	101,537	0	0	0	0	0	74	186	145	117	99	82	95	798	102,335
							WAT	98,633	0	0	0	0	0	698	2051	1422	0	0	0	1348	5,519	104,152
080022 6 F			34-T7S-R33E			I	OIL	103,085	0	0	0	0	0	34	49	115	0	0	0	0	198	103,283
			(#9)				GAS	177,900	0	0	0	0	0	75	186	145	117	99	0	0	622	178,522
							WAT	83,481	0	0	0	0	0	698	2051	2438	0	0	0	0	5,187	88,668
							IND												5073	5514	10,587	10,587

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EFFECTIVE OCTOBER 1, 1988

CHAVEROO SAN ANDRES POOL

1989	CUM.
TOTAL	TOTAL

WELL	DATE	TIME	DEPTH	TEMP	PRESS	SURF	DOWN	UP	TOTAL
80023	7 G	34-T7S-R33E	P	OIL	84,558	0	0	0	0
	(#10)	GAS	175,322	0	0	0	0	0	0
		WAT	61,578	0	0	0	0	0	0
80024	8 H	34-T7S-R33E	I	OIL	60,623	0	0	0	0
	(#14)	GAS	86,843	0	0	0	0	0	0
		WAT	28,842	0	0	0	0	0	0
80025	9 I	34-T7S-R33E	P	OIL	69,872	0	0	0	0
	(#12)	GAS	152,876	0	0	0	0	0	0
		WAT	32,780	0	0	0	0	0	0
80027	11 K	34-T7S-R33E	P	OIL	48,196	0	0	0	0
	(#10)	GAS	145,186	0	0	0	0	0	0
		WAT	15,216	0	0	0	0	0	0
80030	14 N	34-T7S-R33E	P	OIL	79,540	0	0	0	0
	(#13)	GAS	195,959	0	0	0	0	0	0
		WAT	166,641	0	0	0	0	0	0
80031	15 O	34-T7S-R33E	P	OIL	107,491	0	0	0	0
	(#15)	GAS	219,910	0	0	0	0	0	0
		WAT	89,377	0	0	0	0	0	0
OBBS T-2 BATTERY TOTAL				OIL	874,041	0	0	0	0
				GAS	1,667,607	0	0	0	0
				WAT	707,086	0	0	0	0
CSAU SEC. 3 (Annarco)									
80042	14 N	3-T8S-R33E	P&A	OIL					
	(#1)	GAS							
		WAT							
NNARCO TOTAL				OIL					
				GAS					
				WAT					
ALEY SAN ANDRES UNIT TOTAL				OIL	3,260,656	702	530	827	885
				GAS	4,482,679	812	612	661	710
				WAT	3,252,947	7225	4572	5166	5257
				INJ	2,280,849	5642	4546	3407	6187
AVERAGE BBL/S/WELL						142	106	165	89



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

April 5, 1990

Mr. Floyd O. Prando
Director, Oil & Gas Division
State of New Mexico
Commissioner of Public Lands
Post Office Box 1148
Santa Fe, New Mexico 87504-1148

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

Attention: Mr. David R. Catanach, Engineer

Re: PLAN OF OPERATION FOR 1990
Haley Chaveroo San Andres Unit
Chaveroo San Andres Field
Chaves & Roosevelt Counties, New Mexico

Gentlemen:

Pursuant to the provisions of Section 11A. of the Unit Agreement, Murphy Operating Corporation ("MOC"), designated Unit Operator of the Haley Chaveroo San Andres Unit, Chaves and Roosevelt Counties, 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: Injection into four (4) wells (#34-2, #34-4, #34-10 and #34-12) began in June and July, 1989 and has continued uninterrupted to present. Beginning in September, 1989 injection profiles (i. e. tracer surveys) were performed on each of the wells. Based upon the results of the injection profiles and the initial injection activity, three (3) additional wells (#33-8, #34-6, and #34-8) were converted to injection in November, 1989. In January, 1990 injection profiles were performed on the three additional injectors. As of March 1, 1990, over 350,000 barrels of water has been injected into the seven wells.

Beginning in May, 1989 nine (9) wells located in close proximity to the seven initial injection wells were worked over and returned to production. These producing well workovers include Wells #34-01, #34-03, #34-05, #34-07, #34-09, #34-11, #34-13, #34-14, and #34-15.

- II. Proposed 1990 Plan of Operation: Based upon favorable indications, the working interest owners have elected to proceed with unit-wide development. This development will entail converting twelve (12) producing wells to injection status in order to establish a unit-wide five-spot injection pattern. The proposed injectors consist of Wells #33-02, #33-06, #33-10, #33-12, #33-14, #34-14, #34-16, #03-02, #03-06, #03-08, #03-10, and #03-16. Two (2) existing salt water disposal wells (#33-04 and #33-16) will also be converted to injection status.

An expansion of the injection system will be required in order to accommodate these additional injectors. The expansion will entail the installation of approximately forty-five thousand feet (45,000") of 4", 3" and 2" high-pressure fiberglass injection line. Two (2) high-volume, high-pressure injection pumps will also be installed which will increase injection capacity to approximately 16,000 BWPD.

The unit-wide development activity also requires the working over and returning to production of fifteen producing wells. These producers are Wells #33-01, #33-03, #33-05, #33-07, #33-09, #33-11, #33-13, #33-15, #34-13, #34-15, #03-01, #03-03, #03-07, #03-09, and #03-15.


In order to accommodate anticipated increased volumes of produced fluids, the existing six (6) tank batteries will be consolidated into three (3) larger facilities.

- III. Further Development: The ultimate development of the Haley Unit provides for the drilling of two (2) injection wells. These proposed injectors are to be located in the NW/NW and the SE/SW of Section 3, T8S-R33E. It is anticipated that these wells will be drilled in the second quarter of 1991.
- IV. Operating Guidelines: MOC monitors all injection wells through daily rate and pressure checks. Approximately every 180 days, but at least once per year, a tracer survey will be run on each injection well 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 procedure 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.
- V. Modification: Subject to 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

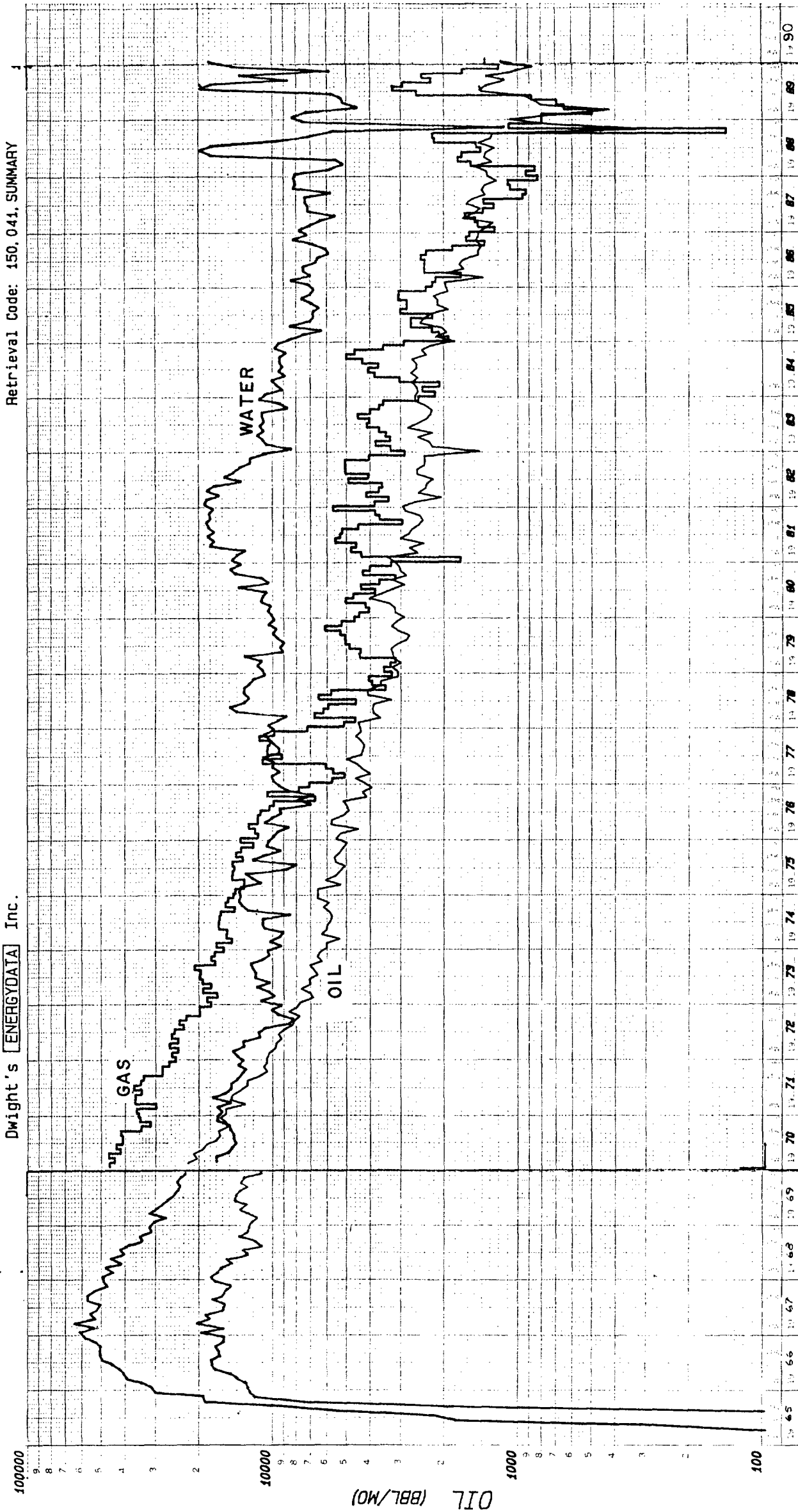
Enclosure: Haley Chaveroo San Andres Unit Well Location and Status Map;
Haley Chaveroo San Andres Unit Reservoir Performance Curve;
Haley Chaveroo San Andres Unit 1989 Tabulated Production and
Injection Data.

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

ACTIVE PRODUCER

JENNIFER CHAVEROO SAN ANDRES UNIT

Oil, Gas, & Water vs Time



Well/Lease: HALEY CHAVEROO SA UNIT
County: ROOSEVELT NM
Operator: MURPHY OPERATING
Field: CHAVEROO SAN ANDRES
Reservoir:
Location: 7 SS, 39 34E
API #: 30-041-0000000
Oil Cur: 3226309
Gas Cur: 4450421
Date: 12-18-89

JANUARY 1, 1990

HALEY CHAVEROO SAN ANDRES UNIT
EFFECTIVE OCTOBER 1, 1988

Computer LEASE NAME, Well # WELL S T R STATUS													CUMULATIVE 1989 JAN. FEB. MAR. APR. MAY JUN. JUL. AUG. SEP. OCT. NOV. DEC. TOTAL												CUM. 1989 TOTALS
HCSAU SEC. 33 (Hobbs T) T-1 BATTERY																									
080001	1	A	33-T7S-R33E	P	OIL	99,177	0	0	0	49	40	24	21	26	50	58	49	45	362	99,539					
			(#6)		GAS	98,733	0	0	0	0	0	0	0	0	0	0	0	0	0	98,733					
					WAT	29,917	0	0	0	916	342	163	218	164	264	407	236	343	3,053	32,970					
080006	6	F	33-T7S-R33E	P	OIL	82,345	0	0	0	49	63	73	64	26	50	58	49	45	477	82,822					
			(#1)		GAS	73,948	0	0	0	0	0	0	0	0	0	0	0	0	0	73,948					
					WAT	30,990	0	0	0	425	124	223	160	119	226	348	203	294	2,122	33,112					
080008	8	H	33-T7S-R33E	I	OIL	84,989	0	0	0	0	40	23	42	25	50	0	0	0	180	85,169					
			(#5)		GAS	80,466	0	0	0	0	0	0	0	0	0	0	0	0	0	80,466					
					WAT	55,640	0	0	0	0	342	205	203	149	207	0	0	0	1,106	80,466					
					INJ							205	203	149	207	0	0	0	9,220	56,746					
080010	10	J	33-T7S-R33E	P	OIL	73,596	0	0	0	0	0	0	0	0	0	0	0	0	0	73,596					
			(#3)		GAS	80,828	0	0	0	0	0	0	0	0	0	0	0	0	0	80,828					
					WAT	178,211	0	0	0	0	0	0	0	0	0	0	0	0	0	178,211					
080012	12	L	33-T7S-R33E	P	OIL	77,083	0	0	0	0	0	0	0	0	0	0	0	0	0	77,083					
			(#2)		GAS	76,256	0	0	0	0	0	0	0	0	0	0	0	0	0	76,256					
					WAT	50,612	0	0	0	0	0	0	0	0	0	0	0	0	0	50,612					
080015	15	O	33-T7S-R33E	P	OIL	72,966	63	58	110	50	40	49	43	26	49	57	50	44	639	73,605					
			(#4)		GAS	69,066	0	0	0	0	0	0	0	0	0	0	0	0	0	69,066					
					WAT	127,172	404	295	752	294	142	265	188	179	264	407	237	342	3,769	130,941					
080016	16	P	33-T7S-R33E	I	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
			(#11)		GAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
					WAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
					INJ	1,665,179	5642 @0	4546 @0	3407 @0	6187 @0	2803 @0	2063 @0	1411 @0	13613 @80	4633 @0	13664 @0	5893 @0	14817 @0	78,679	1,743,858					
																			80	80					
HCSAU SEC. 34																									
080020	4	D	34-T7S-R33E	I	OIL	140,125	0	0	0	0	0	0	0	0	0	0	0	0	0	140,125					
			(#9)		GAS	132,380	0	0	0	0	0	0	0	0	0	0	0	0	0	132,380					
					WAT	86,545	0	0	0	0	0	0	0	0	0	0	0	0	0	86,545					
					INJ	0						5824 @0	9282 @0	9111 @0	8957 @0	8545 @0	5534 @0	47,253	47,253	0	0				
080026	10	J	34-T7S-R33E	I	OIL	80,334	0	0	0	0	0	0	0	0	0	0	0	0	0	80,334					
			(#8)		GAS	194,222	0	0	0	0	0	0	0	0	0	0	0	0	0	194,222					
					WAT	39,673	0	0	0	0	0	0	0	0	0	0	0	0	0	39,673					
					INJ	0						3121 @0	5184 @0	6378 @0	6178 @0	6176 @0	6108 @0	4127 @0	37,272	37,272	0	0			
080028	12	L	34-T7S-R33E	I	OIL	84,303	0	0	0	0	0	0	0	0	0	0	0	0	0	84,303					
			(#7)		GAS	227,780	0	0	0	0	0	0	0	0	0	0	0	0	0	227,780					
					WAT	491,397	0	0	0	0	0	0	0	0	0	0	0	0	0	491,397					

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

PRODUCTION
CHAVEROO SAN ANDRES POOL
HALEY CHAVEROO SAN ANDRES UNIT
EFFECTIVE OCTOBER 1, 1988

Computer LEASE NAME, Well # WELL		S T R		STATUS		THRU 12/31/88		1989 JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	1989 TOTAL	CUM. TOTALS
T-1 BATTERY TOTAL								63	58	110	148	183	169	170	103	199	173	148	134	1,658	751,576
								0	0	0	0	0	0	0	0	0	0	0	0	0	1,033,679
								404	295	752	1635	950	856	769	611	961	1162	676	979	10,050	1,100,207
								5642	4546	3407	6187	2803	8298	18009	32648	23189	32118	29207	31428	197,482	1,862,661

HCSAU SEC. 33 (Hobbs U) HOBBS U BATTERY																					
080002 2 B 33-T7S-R33E S								128	120	86	0	0	0	0	0	0	0	0	0	334	66,943
								0	0	0	0	0	0	0	0	0	0	0	0	0	88,803
								3017	2548	2015	0	0	0	0	0	0	0	0	0	7,580	38,067
								0	0	0	70	32	10	0	0	0	0	0	0	112	101,693
								0	0	0	0	0	0	0	0	0	0	0	0	0	136,455
								0	0	0	802	796	0	0	0	0	0	0	0	1,598	248,131
080007 7 G 33-T7S-R33E S								128	120	86	70	32	10	0	0	0	0	0	0	446	168,635
								0	0	0	0	0	0	0	0	0	0	0	0	0	225,258
								3017	2548	2015	802	796	0	0	0	0	0	0	0	9,178	286,198
HOBBS U BATTERY TOTAL								128	120	86	70	32	10	0	0	0	0	0	0	446	168,635
								0	0	0	0	0	0	0	0	0	0	0	0	0	225,258
								3017	2548	2015	802	796	0	0	0	0	0	0	0	9,178	286,198

HCSAU SEC. 33 (NM AZ State) AZ BATTERY																					
080003	3 C	33-T7S-R33E	S	OIL	60,122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60,122	
		(#3)		GAS	69,658	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69,658	
				WAT	41,227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41,227	
080005	5 E	33-T7S-R33E	S	OIL	87,440	0	0	0	0	0	0	0	93	0	0	0	0	0	93	87,533	
		(#1)		GAS	109,168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109,168	
				WAT	73,384	0	0	0	0	0	0	0	2164	0	0	0	0	0	75,548		
080004	4 D	33-T7S-R33E	INU	OIL	40,372	0	0	0	0	0	0	0	0	0	0	0	0	0	40,372		
		(#5)		GAS	41,294	0	0	0	0	0	0	0	0	0	0	0	0	0	41,294		
				WAT	7,590	0	0	0	0	0	0	0	0	0	0	0	0	0	7,590		
				INU	615,670	0	0	0	0	0	0	0	0	0	0	0	0	0	615,670		
080009	9 I	33-T7S-R33E	P	OIL	20,282	@0	@0	@0	@0	@0	@0	@0	@0	@0	@0	@0	@0	@0	20,735		
		(#7)		GAS	24,740	132	49	2	0	0	0	92	147	0	8	7	3	13	453		
				WAT	81,983	168	170	190	29	150	622	231	0	0	0	0	0	0	26,300		
						1901	587	454	0	1057	2164	1277	731	415	450	334	702	10,072	92,055		
080011	11 K	33-T7S-R33E	S	OIL	67,376	0	0	0	0	0	0	0	0	0	0	0	0	0	67,376		
		(#2)		GAS	68,549	0	0	0	0	0	0	0	0	0	0	0	0	0	68,549		
				WAT	96,555	0	0	0	0	0	0	0	0	0	0	0	0	0	96,555		
080013	13 M	33-T7S-R33E	P	OIL	47,936	0	0	0	0	0	0	0	0	0	0	0	0	0	48,162		
		(#4)		GAS	60,004	0	0	0	0	0	0	0	0	0	0	0	0	0	60,004		
				WAT	57,824	0	0	0	0	0	0	0	0	0	0	398	835	1,233	59,057		

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4TH QUARTER PRODUCTION REPORT
JANUARY 1, 1990

PRODUCTION
CHAVEROO SAN ANDRES POOL
HALEY CHAVEROO SAN ANDRES UNIT
EFFECTIVE OCTOBER 1, 1990

Computer LEASE NAME, Well # WELL				S	T	R	STATUS	CUMULATIVE THRU 12/31/88												1989	CUM.	
				JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL	TOTALS					
HCSAU SEC. 3 (STATE BF) BF BATTERY (continued):																						
080040	10 J	3-T8S-R33E (#8)	P	0	0	0	110	134	109	100	105	75	119	101	31	884	100,074					
			OIL	99,190													84,276					
			GAS	84,276	0	0	0	0	0	0	0	0	0	0	0	0	72,132					
			WAT	68,797	0	0	277	285	659	213	217	201	607	331	545	3,335	3,868					
080041	11 K	3-T8S-R33E (#11)	S	0	0	0	0	0	0	0	0	0	0	0	0	0	8,388					
			OIL	3,868	0	0	0	0	0	0	0	0	0	0	0	0	20,296					
			GAS	8,388	0	0	0	0	0	0	0	0	0	0	0	0						
			WAT	20,296	0	0	0	0	0	0	0	0	0	0	0	0						
080043	15 O	3-T8S-R33E (#10)	P	0	0	0	163	199	173	150	157	112	178	152	46	2,292	129,524					
			OIL	127,232	245	205	512	199	173	150	157	112	178	152	46	2,292	152,629					
			GAS	147,871	510	337	346	0	0	0	0	905	1299	990	371	4,758	390,968					
			WAT	375,722	1779	1030	1325	895	919	2086	686	701	803	1323	1271	15,246	93,794					
080044	16 P	3-T8S-R33E (#9)	P	0	0	0	84	102	80	74	78	56	89	76	23	662	77,146					
			OIL	93,132	0	0	0	102	80	74	78	56	89	76	23	662						
			GAS	77,146	0	0	0	0	0	0	0	0	0	0	0	0	38,999					
			WAT	36,151	0	0	255	263	604	189	193	160	486	263	435	2,848						
BF BATTERY TOTAL				245	205	512	525	639	575	524	523	411	653	557	169	5,538	763,297					
			OIL	757,759													820,095					
			GAS	815,337	510	337	346	0	0	0	0	905	1299	990	371	4,758						
			WAT	656,491	1779	1030	1325	2130	2189	5489	1845	1764	1579	4776	2602	3376	686,375					

HCSAU SEC. 3 (State 3) STATE 3 BATTERY:																			
080050	9 I	3-T8S-R33E	P	OIL	171,900	134	98	117	142	115	123	124	113	118	120	106	12	1,322	173,222
		(#1)		GAS	123,153	134	105	125	681	749	1184	1158	1321	0	0	0	92	5,549	128,702
				WAT	67,247	124	112	620	690	803	510	775	589	630	620	600	60	6,133	73,380
STATE 3 BATTERY TOTAL				OIL	171,900	134	98	117	142	115	123	124	113	118	120	106	12	1,322	173,222
				GAS	123,153	134	105	125	681	749	1184	1158	1321	0	0	0	92	5,549	128,702
				WAT	67,247	124	112	620	690	803	510	775	589	630	620	600	60	6,133	73,380

HCSAU SEC. 34		HOBBS T-2 BATTERY	
080017	1 A	34-T7S-R33E (#13)	P
		OIL	65,803
		GAS	109,262
		WAT	13,956
080019	3 C	34-T7S-R33E (#11Y)	P
		OIL	87,215
		GAS	194,752
		WAT	30,076
080021	5 E	34-T7S-R33E (#8)	P
		OIL	94,747
		GAS	101,537
		WAT	98,633
080022	6 F	34-T7S-R33E (#9)	I
		OIL	103,085
		GAS	177,900
		WAT	83,481
		INJ	

MURKIN - 4TH QUARTER PRODUCTION REPORT
JANUARY 1, 1990

HALEY CHAVEROO SAN ANDRES UNIT
EFFECTIVE OCTOBER 1, 1988

[illegible]



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

April 5, 1990

Mr. Floyd O. Prando
Director, Oil & Gas Division
State of New Mexico
Commissioner of Public Lands
Post Office Box 1148
Santa Fe, New Mexico 87504-1148

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

Attention: Mr. David R. Catanach, Engineer

Re: PLAN OF OPERATION FOR 1990
Haley Chaveroo San Andres Unit
Chaveroo San Andres Field
Chaves & Roosevelt Counties, New Mexico

Gentlemen:

Pursuant to the provisions of Section 11A. of the Unit Agreement, Murphy Operating Corporation ("MOC"), designated Unit Operator of the Haley Chaveroo San Andres Unit, Chaves and Roosevelt Counties, 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: Injection into four (4) wells (#34-2, #34-4, #34-10 and #34-12) began in June and July, 1989 and has continued uninterrupted to present. Beginning in September, 1989 injection profiles (i. e. tracer surveys) were performed on each of the wells. Based upon the results of the injection profiles and the initial injection activity, three (3) additional wells (#33-8, #34-6, and #34-8) were converted to injection in November, 1989. In January, 1990 injection profiles were performed on the three additional injectors. As of March 1, 1990, over 350,000 barrels of water has been injected into the seven wells.

Beginning in May, 1989 nine (9) wells located in close proximity to the seven initial injection wells were worked over and returned to production. These producing well workovers include Wells #34-01, #34-03, #34-05, #34-07, #34-09, #34-11, #34-13, #34-14, and #34-15.

II. Proposed 1990 Plan of Operation: Based upon favorable indications, the working interest owners have elected to proceed with unit-wide development. This development will entail converting twelve (12) producing wells to injection status in order to establish a unit-wide five-spot injection pattern. The proposed injectors consist of Wells #33-02, #33-06, #33-10, #33-12, #33-14, #34-14, #34-16, #03-02, #03-06, #03-08, #03-10, and #03-16. Two (2) existing salt water disposal wells (#33-04 and #33-16) will also be converted to injection status.

An expansion of the injection system will be required in order to accommodate these additional injectors. The expansion will entail the installation of approximately forty-five thousand feet (45,000") of 4", 3" and 2" high-pressure fiberglass injection line. Two (2) high-volume, high-pressure injection pumps will also be installed which will increase injection capacity to approximately 16,000 BWPD.

The unit-wide development activity also requires the working over and returning to production of fifteen producing wells. These producers are Wells #33-01, #33-03, #33-05, #33-07, #33-09, #33-11, #33-13, #33-15, #34-13, #34-15, #03-01, #03-03, #03-07, #03-09, and #03-15.

In order to accommodate anticipated increased volumes of produced fluids, the existing six (6) tank batteries will be consolidated into three (3) larger facilities.

- III. Further Development: The ultimate development of the Haley Unit provides for the drilling of two (2) injection wells. These proposed injectors are to be located in the NW/NW and the SE/SW of Section 3, T8S-R33E. It is anticipated that these wells will be drilled in the second quarter of 1991.
- IV. Operating Guidelines: MOC monitors all injection wells through daily rate and pressure checks. Approximately every 180 days, but at least once per year, a tracer survey will be run on each injection well 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 procedure 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.
- V. Modification: Subject to 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

Enclosure: Haley Chaveroo San Andres Unit Well Location and Status Map;
Haley Chaveroo San Andres Unit Reservoir Performance Curve;
Haley 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

MURPHY OPERATING CORPORATION

CHAVEROO SAN ANDRES FIELD
CHAVES & ROOSEVELT COUNTIES
NEW MEXICO

HALEY CHAVEROO SAN ANDRES UNIT
MURPHY OPERATOR

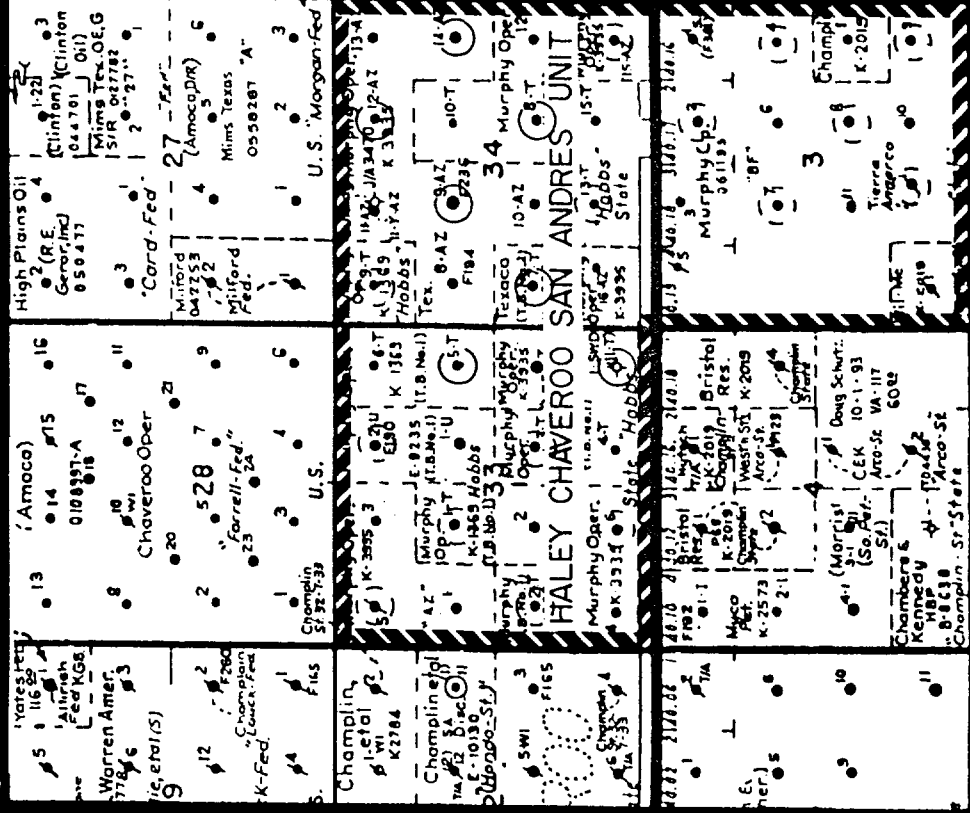
K-M CHAVEROO SAN ANDRES UNIT
KERR MCGEE OPERATOR

JENNIFER CHAVEROO SAN ANDRES UNIT
MURPHY OPERATOR

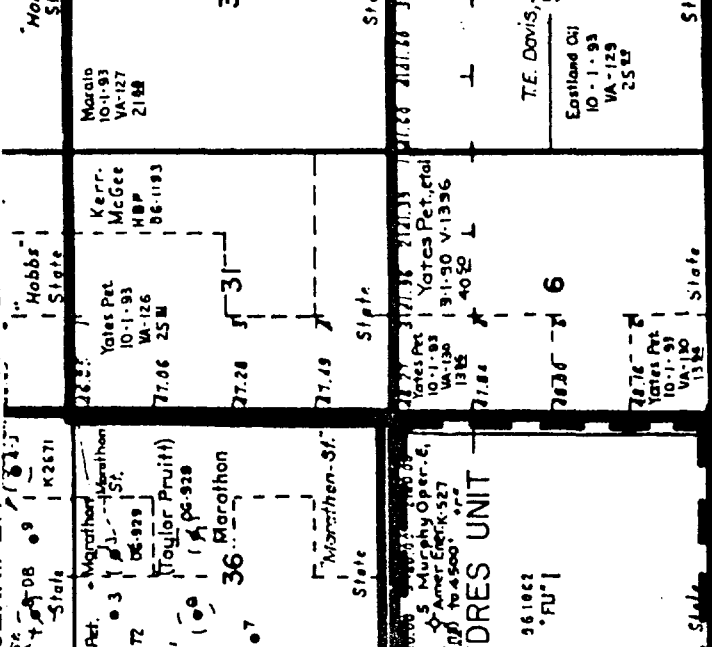
ACTIVE INJECTOR

PROPOSED INJECTOR

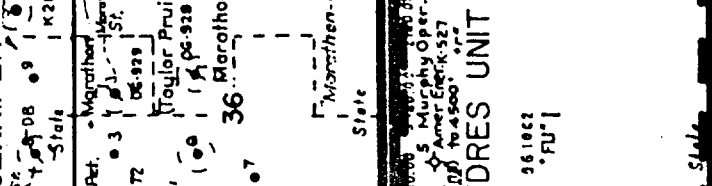
ACTIVE PRODUCER



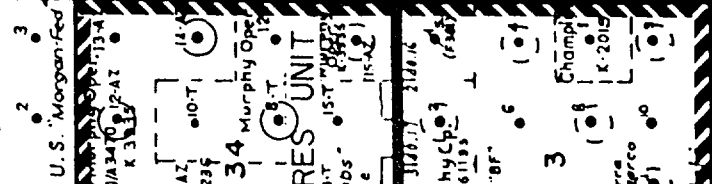
JENNIFER CHAVEROO SAN ANDRES UNIT



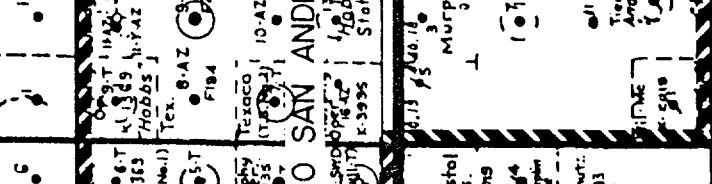
K-M CHAVEROO SAN ANDRES UNIT



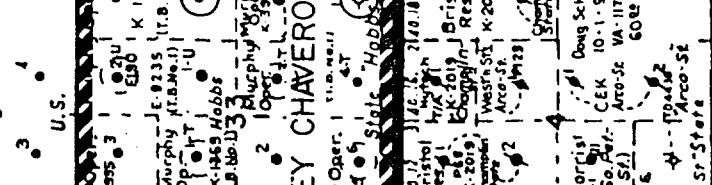
HALEY CHAVEROO SAN ANDRES UNIT



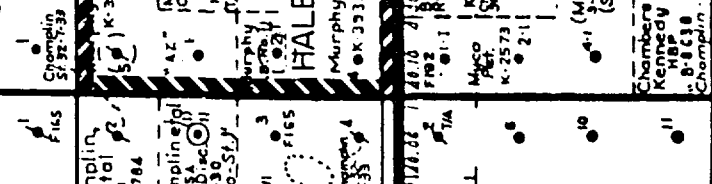
HALEY CHAVEROO SAN ANDRES UNIT



HALEY CHAVEROO SAN ANDRES UNIT



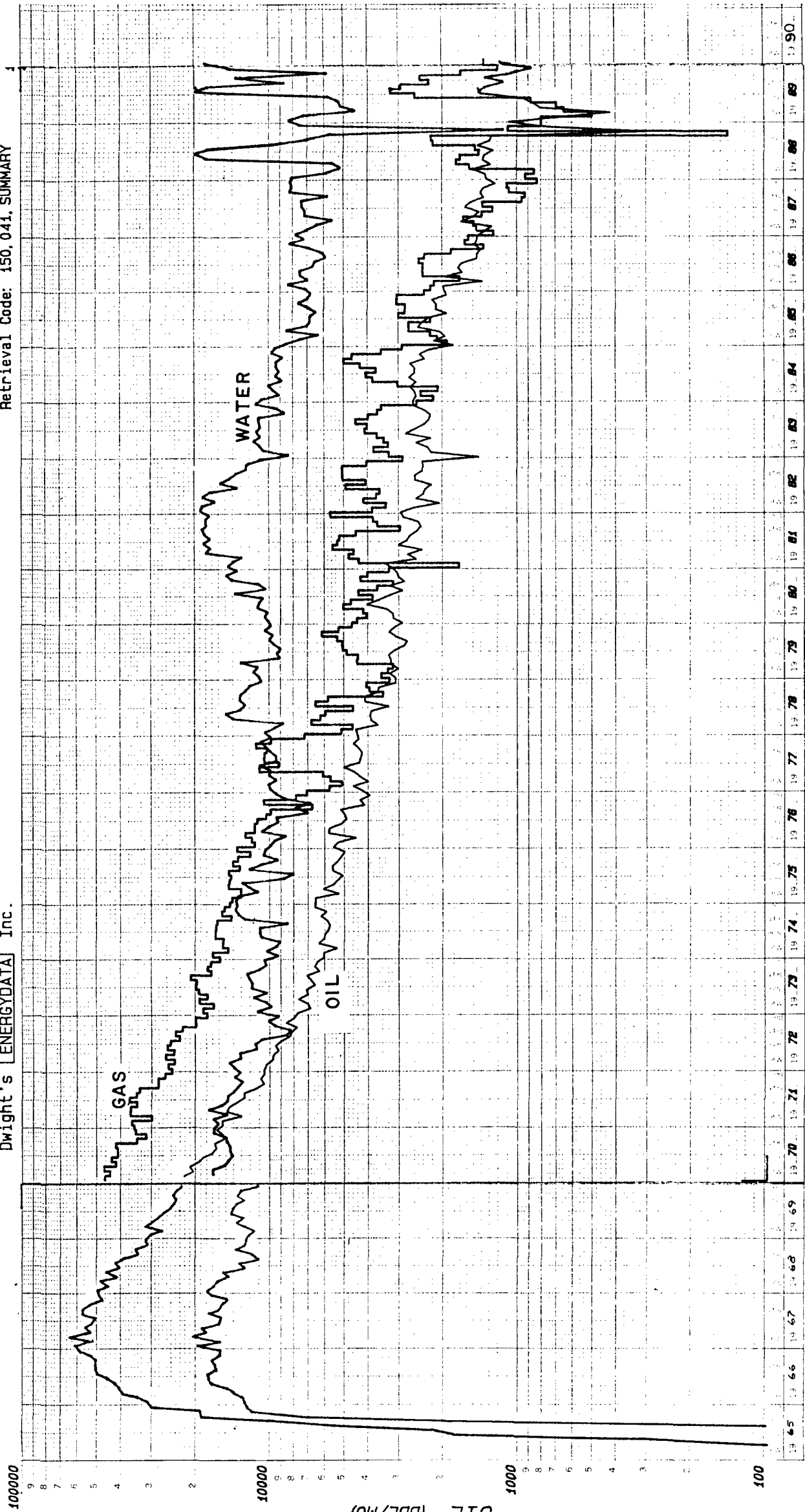
HALEY CHAVEROO SAN ANDRES UNIT



Oil, Gas, & Water vs Time

Dwight's ENERGYDATA Inc.

Retrieval Code: 150,041, SUMMARY



Well/Lease: HALEY CHAVEROO SA UNIT
County: ROOSEVELT NM
Operator: MURPHY OPERATING
Field: CHAVEROO SAN ANDRES
Reservoir:

Location: 7 SE, 39 34E
API #: 90-041-0000000
Oil Cur: 3228003
Gas Cur: 4450421
Date: 12-18-89

JANUARY 1, 1990

HALEY CHAVEROO SAN ANDRES UNIT
EFFECTIVE OCTOBER 1, 1988

Computer Lease Name, S T R STATUS																			CUMULATIVE		1989		CUM.	
Well #	WELL	S	T	R	STATUS	THRU	12/31/88	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL	TOTALS			
HCSAU SEC. 33 (Hobbs T) T-1 BATTERY																								
080001	1	A			P	OIL	99,177	0	0	0	49	40	24	21	26	50	58	49	45	362	99,533			
						GAS	98,733	0	0	0	0	0	0	0	0	0	0	0	0	0	98,733			
						WAT	29,917	0	0	0	916	342	163	218	164	264	407	236	343	3,053	32,977			
080006	6	F			P	OIL	82,345	0	0	0	49	63	73	64	26	50	58	49	45	477	82,822			
						GAS	73,948	0	0	0	0	0	0	0	0	0	0	0	0	0	73,948			
						WAT	30,990	0	0	0	425	124	223	160	119	226	348	203	294	2,122	33,111			
080008	8	H			I	OIL	84,989	0	0	0	0	40	23	42	25	50	0	0	0	180	85,166			
						GAS	80,466	0	0	0	0	0	0	0	0	0	0	0	0	0	80,466			
						WAT	55,640	0	0	0	0	342	205	203	149	207	0	0	0	1,106	56,744			
						INJ														9,220	9,220			
080010	10	J			P	OIL	73,596	0	0	0	0	0	0	0	0	0	0	0	0	0	73,596			
						GAS	80,828	0	0	0	0	0	0	0	0	0	0	0	0	0	80,828			
						WAT	178,211	0	0	0	0	0	0	0	0	0	0	0	0	0	178,211			
080012	12	L			P	OIL	77,083	0	0	0	0	0	0	0	0	0	0	0	0	0	77,083			
						GAS	76,256	0	0	0	0	0	0	0	0	0	0	0	0	0	76,256			
						WAT	50,612	0	0	0	0	0	0	0	0	0	0	0	0	0	50,612			
080015	15	O			P	OIL	72,966	63	58	110	50	40	49	43	26	49	57	50	44	639	73,600			
						GAS	69,066	0	0	0	0	0	0	0	0	0	0	0	0	0	69,066			
						WAT	127,172	404	295	752	294	142	265	188	179	264	407	237	342	3,769	130,944			
080016	16	P			I	OIL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
						GAS	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
						WAT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
						INJ	1,665,179	5642	4546	3407	6187	2803	2063	1411	13613	4633	13664	5893	14817	78,679	1,743,858			
HCSAU SEC. 34																								
080020	4	D			I	OIL	140,125	0	0	0	0	0	0	0	0	0	0	0	0	0	140,125			
						GAS	132,380	0	0	0	0	0	0	0	0	0	0	0	0	0	132,380			
						WAT	86,545	0	0	0	0	0	0	0	0	0	0	0	0	0	86,545			
						INJ	0						0	5824	9282	9111	8957	8545	5534	47,253	47,253			
080026	10	J			I	OIL	80,334	0	0	0	0	0	0	0	0	0	0	0	0	0	80,334			
						GAS	194,222	0	0	0	0	0	0	0	0	0	0	0	0	0	194,222			
						WAT	39,673	0	0	0	0	0	0	0	0	0	0	0	0	0	39,673			
						INJ	0						3121	5184	6378	6178	6176	6108	4127	37,272	37,272			
080028	12	L			I	OIL	84,303	0	0	0	0	0	0	0	0	0	0	0	0	0	84,303			
						GAS	227,780	0	0	0	0	0	0	0	0	0	0	0	0	0	227,780			
						WAT	491,397	0	0	0	0	0	0	0	0	0	0	0	0	0	491,397			

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

PRODUCTION
CHAVEROO SAN ANDRES POOL
HALEY CHAVEROO SAN ANDRES UNIT
EFFECTIVE OCTOBER 1, 1988

Computer LEASE NAME, Well # WELL		S	T	R	STATUS	THRU 12/31/88	1989 JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	1989 TOTAL	CUM. TOTALS	
T-1 BATTERY TOTAL																					
	OIL	749,918		63		58		110		148		183		169		170		103		1,658	751,576
	GAS	1,033,679		0		0		0		0		0		0		0		0		0	1,033,679
	WAT	1,090,157		404		295		752		1635		950		856		769		611		10,050	1,100,207
	INJ	1,665,179		5642		4546		3407		6187		2803		8298		18009		32648		197,482	1,862,661

HCSAU SEC. 33 (Hobbs U) HOBBS U BATTERY																					
080002	2 B	33-T7S-R33E	S	OIL	66,609	128	120	86	0	0	0	0	0	0	0	0	0	0	0	334	66,943
		(#2)		GAS	88,803	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88,803
				WAT	30,487	3017	2548	2015	0	0	0	0	0	0	0	0	0	0	0	7,580	38,067
080007	7 G	33-T7S-R33E	S	OIL	101,581	0	0	0	70	32	10	0	0	0	0	0	0	0	0	112	101,693
		(#1)		GAS	136,455	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136,455
				WAT	246,533	0	0	0	802	796	0	0	0	0	0	0	0	0	0	1,598	248,131
HOBBS U BATTERY TOTAL				OIL	168,190	128	120	86	70	32	10	0	0	0	0	0	0	0	0	446	168,636
				GAS	225,258	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	225,258
				WAT	277,020	3017	2548	2015	802	796	0	0	0	0	0	0	0	0	0	9,178	286,198

HCSAU SEC. 33 (NM AZ State)		AZ BATTERY																			
080003	3 C	33-T7S-R33E	S	OIL	60,122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60,122
		(#3)		GAS	69,658	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69,658
				WAT	41,227	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41,227
080005	5 E	33-T7S-R33E	S	OIL	87,440	0	0	0	0	0	93	0	0	0	0	0	0	0	0	93	87,533
		(#1)		GAS	109,168	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109,168
				WAT	73,384	0	0	0	0	0	2164	0	0	0	0	0	0	0	0	2,164	75,548
080004	4 D	33-T7S-R33E	INJ	OIL	40,372	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40,372
		(#5)		GAS	41,294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41,294
				WAT	7,590	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7,590
				INJ	615,670	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	615,670
080009	9 I	33-T7S-R33E	P	OIL	20,282	@0	@0	@0	@0	@0	92	@0	0	0	8	@0	@0	@0	@0	0	20,735
		(#7)		GAS	24,740	132	49	2	0	0	622	147	0	0	7	0	3	13	453	0	26,300
				WAT	81,983	168	170	190	29	150	2164	231	0	0	0	0	0	0	1,560	0	92,055
						1901	587	454	0	1057		731	415	450	334	702	10,072				67,376
080011	11 K	33-T7S-R33E	S	OIL	67,376	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67,376
		(#2)		GAS	68,549	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68,549
				WAT	96,555	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96,555
080013	13 M	33-T7S-R33E	P	OIL	47,936	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48,162
		(#4)		GAS	60,004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60,004
				WAT	57,824	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	59,057

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HALEY CHAVEROO SAN ANDRES UNIT
EFFECTIVE OCTOBER 1, 1990

Computer LEASE NAME, WELL #				CUMULATIVE 1989				1989				CUM.						
WELL #	WELL	S T R	STATUS	THRU 12/31/88	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.	TOTAL	TOTAL
HCSAU SEC. 3 (STATE BF) BF BATTERY (continued):																		
080040	10 J	3-T8S-R33E	P	OIL	99,190	0	0	0	110	134	109	100	105	75	119	101	31	884
		(#8)		GAS	84,276	0	0	0	0	0	0	0	0	0	0	0	0	0
				WAT	68,797	0	0	277	285	659	213	217	201	607	331	545	3,335	72,13
080041	11 K	3-T8S-R33E	S	OIL	3,868	0	0	0	0	0	0	0	0	0	0	0	0	0
		(#11)		GAS	8,388	0	0	0	0	0	0	0	0	0	0	0	0	0
				WAT	20,296	0	0	0	0	0	0	0	0	0	0	0	0	0
080043	15 O	3-T8S-R33E	P	OIL	127,232	245	205	512	163	199	173	150	157	112	178	152	46	2,292
		(#10)		GAS	147,871	510	337	346	0	0	0	0	0	905	1299	990	371	4,758
				WAT	375,722	1779	1030	1325	895	919	2086	686	701	803	2428	1323	1271	15,246
080044	16 P	3-T8S-R33E	P	OIL	93,132	0	0	0	84	102	80	74	78	56	89	76	23	662
		(#9)		GAS	77,146	0	0	0	0	0	0	0	0	0	0	0	0	0
				WAT	36,151	0	0	255	263	604	189	193	160	486	263	435	2,848	77,14
BF BATTERY TOTAL				OIL	757,759	245	205	512	525	639	575	524	523	411	653	557	169	5,538
				GAS	815,337	510	337	346	0	0	0	0	0	905	1299	990	371	4,758
				WAT	656,491	1779	1030	1325	2130	2189	5489	1845	1764	1579	4776	2602	3376	29,884
HCSAU SEC. 3 (State 3) STATE 3 BATTERY:																		
080050	9 I	3-T8S-R33E	P	OIL	171,900	134	98	117	142	115	123	124	113	118	120	106	12	1,322
		(#1)		GAS	123,153	134	105	125	681	749	1184	1158	1321	0	0	0	92	5,549
				WAT	67,247	124	112	620	690	803	510	775	589	630	620	600	60	6,133
STATE 3 BATTERY TOTAL				OIL	171,900	134	98	117	142	115	123	124	113	118	120	106	12	1,322
				GAS	123,153	134	105	125	681	749	1184	1158	1321	0	0	0	92	5,549
				WAT	67,247	124	112	620	690	803	510	775	589	630	620	600	60	6,133
HCSAU SEC. 34 HOBBS T-2 BATTERY																		
080017	1 A	34-T7S-R33E	P	OIL	65,803	0	0	0	0	0	34	0	0	0	0	0	0	34
		(#13)		GAS	109,262	0	0	0	0	0	74	0	0	0	0	0	0	74
				WAT	13,956	0	0	0	0	0	698	1705	1382	698	1672	0	1348	7,503
080019	3 C	34-T7S-R33E	P	OIL	87,215	0	0	0	0	0	34	0	0	0	0	0	0	34
		(#11Y)		GAS	194,752	0	0	0	0	0	74	0	0	0	0	0	0	74
				WAT	30,076	0	0	0	0	0	698	666	671	342	712	0	1138	4,227
080021	5 E	34-T7S-R33E	P	OIL	94,747	0	0	0	0	0	34	49	77	0	0	0	0	160
		(#8)		GAS	101,537	0	0	0	0	0	74	186	145	117	99	82	95	798
				WAT	98,633	0	0	0	0	0	698	2051	1422	0	0	0	1348	5,519
080022	6 F	34-T7S-R33E	I	OIL	103,085	0	0	0	0	0	34	49	115	0	0	0	0	198
		(#9)		GAS	177,900	0	0	0	0	0	75	186	145	117	99	0	0	622
				WAT	83,481	0	0	0	0	0	698	2051	2438	0	0	0	0	5,187
				INJ							698	2051	2438	0	5073	5514	10,587	10,58

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EFFECTIVE OCTOBER 1, 1988

EFFECTIVE OCTOBER 1, 1988

[illegible]

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OIL CONSERVATION DIVISION
RECEIVED

OCT 9 1991



Snyder Oil Corporation

777 Main Street, Suite 2500
Fort Worth, Texas 76102
817 / 338-4043

October 1, 1991

New Mexico Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Attention: Roy Johnson

**RE: CHANGE OF OPERATOR
JENNIFER AND HALEY UNITS
ROOSEVELT COUNTY, NEW MEXICO**

10-8-91
D-Unit letter
Tx Ky

Dear Mr. Johnson:

Attached for your further handling are Designations of Successor Unit Operator for the captioned units. Forms C-104's have been filed with the Hobbs District Office.

If you have questions regarding this matter, please do not hesitate to contact me at (817) 882-5931.

Sincerely,

A handwritten signature in cursive script that reads "Betty Usry".

Betty Usry

Attachments

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.

W I T N E S S E T H

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.

IN WITNESS WHEREOF, the parties hereto have executed this instrument as of the date hereinabove set forth.

SUCCESSOR UNIT OPERATOR:

SNYDER OIL CORPORATION

By: Rodney L. Waller

RESIGNING UNIT OPERATOR:

MURPHY OPERATING CORPORATION

By: Ann Murphy Ezzell
Ann Murphy Ezzell
Chairman & Chief Executive Officer

UNITIZED WORKING INTEREST OWNER:

P.A.J.W. CORPORATION

By: John H. Slayton
John H. Slayton
Vice-President/Secretary

THE STATE OF New Mexico)
COUNTY OF Chaves) ss.

The foregoing instrument was acknowledged before me this 27th day of August, 1991, by Rodney L. Waller, Senior Vice President, of SNYDER OIL CORPORATION, a Texas corporation, on behalf of said corporation.

My Commission Expires: August 25, 1992
Ernie A. Young Notary Public

~~District of Columbia~~
~~THE STATE OF~~)
~~COUNTY OF~~) ss.

The foregoing instrument was acknowledged before me this 26th day of August, 1991, by John H. Slayton, VP/Secy. of P.A.J.W. CORPORATION, a Delaware corporation, on behalf of said corporation.

My Commission Expires: December 14, 1994
Joanne E. Burke Notary Public

THE STATE OF NEW MEXICO)
COUNTY OF CHAVES) ss.

The foregoing instrument was acknowledged before me this 27th day of August, 1991, by ANN MURPHY EZZELL, Chairman and Chief Executive Officer of MURPHY OPERATING CORPORATION, a New Mexico corporation, on behalf of said corporation.

My Commission Expires: August 25, 1992
Ernie A. Young Notary Public