



RAY POWELL, M.S., D.V.M.  
COMMISSIONER

State of New Mexico  
Commissioner of Public Lands

310 OLD SANTA FE TRAIL P.O. BOX 1148

SANTA FE, NEW MEXICO 87504-1148

(505) 827-5760  
FAX (505) 827-5766

January 5, 1994

Texaco E & P  
P.O. Box 730  
Hobbs, New Mexico 88241-0730

Attention: Mr. Larry D. Ridenour

Re: Request for Surface Commingling  
W. H. Rhodes B Fed NCT-1 Lease  
Rhodes NCT Coop Fed. Com-1  
Rhodes Yates Unit  
Lea County, New Mexico

Dear Mr. Ridenour:

This office is in receipt of your letter of December 21, 1993, wherein Texaco E & P has requested our approval to surface commingle production from the W. H. Rhodes B Fed NCT-1 Lease and the Rhodes NCT Coop Fed Com-1 Well Nos. 1, 2 and 3 at the W. H. Rhodes B Fed NCT-1 tank battery.

We regret to inform you that in as much as these wells are located on federal lands, approval from this office is not required. We are hereby returning your application unapproved.

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

BY: *Floyd O. Prando*

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

RBP/FOP/pm

cc: Reader File  
Rhodes Yates Unit  
OCD



Oil and Gas Division  
13 DE 1993 10 52

December 21, 1993

New Mexico Land Department  
P. O. Box 1148  
Santa Fe, New Mexico 87504

Attn: Mr. Floyd Prando  
Director, Oil/Gas and Minerals Division

RE: REQUEST FOR SURFACE COMMINGLING  
W. H. Rhodes B Fed NCT-1 Lease  
Rhodes NCT Coop Fed. COM-1

Gentlemen:

Texaco Exploration and Production Inc. respectfully requests approval to surface commingle production from the referenced leases at the W. H. Rhodes B Fed NCT-1 tank battery. The Rhodes NCT Coop Fed COM-1 wells No. 1, 2, and 3 are lease line wells bordering the Rhodes Yates Unit but are physically located on the W. H. Rhodes B Fed NCT-1 lease. (Please refer to attached map.) All of the wells will be producing from the Rhodes Yates 7 Rivers formation and commingling will not affect the value of the oil.


Production from the three Rhodes NCT Coop Fed COM-1 wells will be measured separately prior to commingling utilizing a three phase separator. Production will be allocated back to the W. H. Rhodes B Fed NCT-1 lease by subtracting the metered production of the Rhodes NCT Coop Fed COM-1 wells from the total facility production. All of the working interest owners have approved of this method (copies of the ballots are included.) Well tests will be obtained from a three phase separator. A battery diagram is included for your reference. Piping has been designed to meet the requirements outlined in the "Manual for the Installation and Operation of Commingling Facilities". Royalty payments for the lease line wells will be based on the formula that is currently in place for the Rhodes Yates Unit. Water will be disposed of via the Rhodes Coop Waterflood System.

Approval of this request will eliminate the need for separate facilities for the lease line wells. This reduction in equipment and manpower requirements will reduce the effective operating cost of the wells and therefore increase the life, reserves and royalties of the wells.

A check for \$30.00 for the filing fee is enclosed.

Please contact myself at (505) 397-0423 concerning any questions that you may have.

Yours Truly,



Larry D. Ridenour  
Associate Engineer

ldr/s

file

chrono

Attachments

cc: New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, NM 87504  
Attn: Mr. William J. Lemay

Bureau of Land Management  
P. O. Box 1778  
Carlsbad, NM 88220  
Attn: Mr. Shannon Shaw

New Mexico Oil Conservation Division  
P. O. Box 1980  
Hobbs, NM 88240  
Attn: Mr. Jerry Sexton



IN REPLY  
REFER TO:

# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

Roswell District Office  
1717 West Second Street  
Roswell, New Mexico 88201-2019

3180 (065)

SFP 27 1993

CERTIFIED MAIL RETURN RECEIPT REQUESTED  
P 665 381 054

Texaco E & P Inc.  
Attention: Charles Sadler  
P.O. Box 730  
Hobbs, NM 88241

Re: Approval of the Rhodes Area Cooperative Lease Line Agreement

Dear Mr. Sadler:

This office is in approval with your Rhodes Area Cooperative Lease Line Agreement, which includes the drilling of lease line producers to effectively downspace the injection patterns. Communitization agreements will need to be submitted for wells affected by the Lease Line Agreement.

Sincerely,

(Orig Sdg) Tony L. Ferguson

Tony Ferguson  
Assistant District Manager,  
Minerals

cc:  
✓ Commissioner of Public Lands (P. Martinez)



CRB ~~XXXXXX~~ 1-17-94

NOV 23 1993  
10 52

December 21, 1993

New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504

Attn: Mr. William J. LeMay  
Chairman and Director

RE: REQUEST FOR SURFACE COMMINGLING  
W. H. Rhodes B Fed NCT-1 Lease  
Rhodes NCT Coop Fed. COM-1

Gentlemen:

Texaco Exploration and Production Inc. respectfully requests approval to surface commingle production from the referenced leases at the W. H. Rhodes B Fed NCT-1 tank battery. The Rhodes NCT Coop Fed COM-1 wells No. 1, 2, and 3 are lease line wells bordering the Rhodes Yates Unit but are physically located on the W. H. Rhodes B Fed NCT-1 lease. (Please refer to attached map.) All of the wells will be producing from the Rhodes Yates 7 Rivers formation and commingling will not affect the value of the oil.

Production from the three Rhodes NCT Coop Fed COM-1 wells will be measured separately prior to commingling utilizing a three phase separator. Production will be allocated back to the W. H. Rhodes B Fed NCT-1 lease by subtracting the metered production of the Rhodes NCT Coop Fed COM-1 wells from the total facility production. All of the working interest owners have approved of this method (copies of the ballots are included.) Well tests will be obtained from a three phase separator. A battery diagram is included for your reference. Piping has been designed to meet the requirements outlined in the "Manual for the Installation and Operation of Commingling Facilities". Royalty payments for the lease line wells will be based on the formula that is currently in place for the Rhodes Yates Unit. Water will be disposed of via the Rhodes Coop Waterflood System.

Approval of this request will eliminate the need for separate facilities for the lease line wells. This reduction in equipment and manpower requirements will reduce the effective operating cost of the wells and therefore increase the life, reserves and royalties of the wells.

*Handwritten signature:* Tom [unclear]

Please contact myself at (505) 397-0423 concerning any questions that you may have.

Yours Truly,

*Larry D Ridenour*

Larry D. Ridenour  
Associate Engineer

ldr/s

file

chrono

Attachments

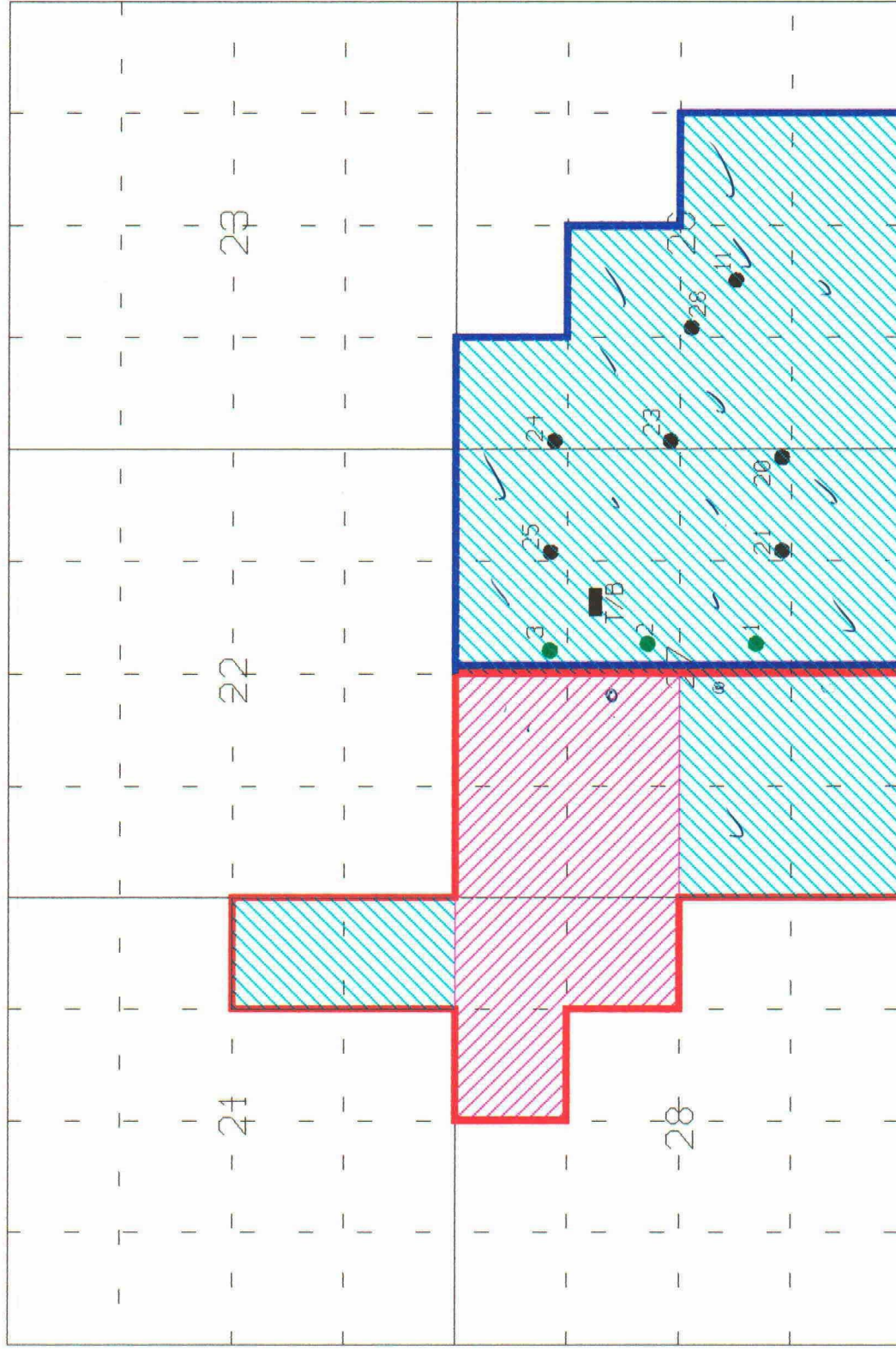
cc: New Mexico Land Department  
P. O. Box 1148  
Santa Fe, NM 87504  
Attn: Mr. Floyd Prando

Bureau of Land Management  
P. O. Box 1778  
Carlsbad, NM 88220  
Attn: Mr. Shannon Shaw

New Mexico Oil Conservation Division  
P. O. Box 1980  
Hobbs, NM 88240  
Attn: Mr. Jerry Sexton

*Is appears like Rhodes NFI Corp  
Fed Gov - 1 well how 1, 2, 3 are  
base line with boundary Ab WF and  
PM project. Share in production?*

# T-26-S, R-37-E



Federal Acreage



State Acreage



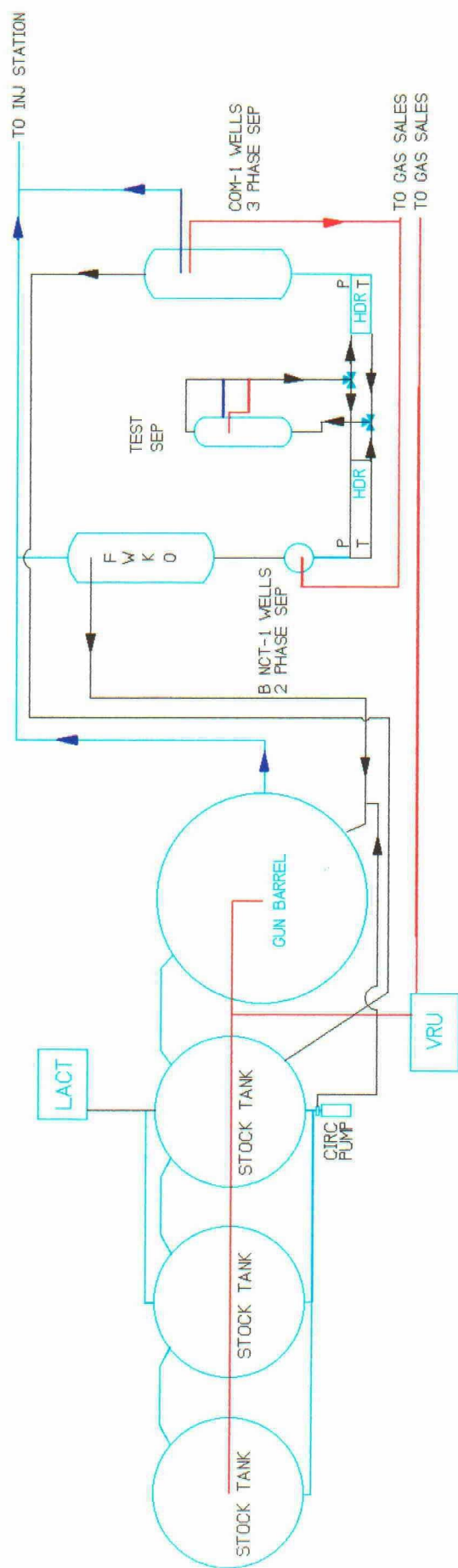
W.H. Rhodes Fed B NCT-1 - W.F. Project  
Rhodes Yates Unit *PM Project*



Rhodes NCT COOP Fed Com well



W. H. Rhodes Fed B NCT-1 well



TEXACO E & P Inc,  
W. H. RHODES B NCT-1 T/B



## PROCESS DESCRIPTION

### W. H. Rhodes Fed B NCT-1 Commingled Tank Battery

Wells producing into the facility are brought into one of two headers. One header is for the Rhodes NCT COOP Fed Com wells (lease line wells) and the other header is for the W. H. Rhodes Fed B NCT-1 non-lease line wells. The lease line wells production will go into a three phase separator where oil and water will be measured with meters that have  $\pm 1\%$  accuracy. The oil will be discharged directly to the sales tank where it will combine with oil from the non-lease line wells. Produced water from the lease line wells will be discharged into a line going to the Rhodes Coop Waterflood station. Gas from the lease line wells will be measured prior to combining with gas from the non-lease line wells.

The non-lease line wells will produce into a two phase separator where gas will be separated from the fluids. Gas from this separator will go directly to the gas sales meter. Fluid will be discharged into a free water knockout (FWKO) where a majority of the water will be separated from the oil and discharged to the line going to the Rhodes Coop Waterflood station. The remaining oil and water will be discharged into the gunbarrel where final separation of oil and water will occur. The oil from the gunbarrel will go into the sales tank where it will then combine with the measured oil from the lease line wells. All oil is then sold through a LACT unit.

Well tests will be obtained from a three phase separator. Control valves between the headers and test separator will be utilized to ensure that the test well's production is diverted back to the proper header for measurement before commingling takes place.

A vapor recovery unit will collect gases from the gunbarrel and stock tanks. Recovered gases will be sold and allocated back to wells based on oil production.



September 23, 1993

States, Inc.  
P. O. Box 911  
Breckenridge, TX 76024-0911

RE: Surface Commingling  
W. H. Rhodes B NCT-1 Wells  
W. H. Rhodes B NCT-1/Rhodes Yates Unit Lease Line Wells

Attn: Fred Dueser

Texaco Exploration & Producing Inc. (TEPI) will drill three lease line wells (W. H. Rhodes B NCT-1 Well No.s 22, 26, 27) between the W. H. Rhodes B NCT-1 lease and the Rhodes Yates Unit in the very near future. TEPI proposes to surface commingle the production in the existing W. H. Rhodes B NCT-1 Tank Battery.

Approval of all Working Interest Owners is required before the NMOCD will approve this request due to the fact that the different wells have a diverse working interest ownership.

A three phase separator will be set to produce the three lease line wells. Each phase will be metered before it is commingled with the other wells on the lease. Normal regulations would also require metering the production from the other wells before commingling with the lease line wells. TEPI further proposes to meter only the lease line wells and allocate production by subtracting the metered lease line production from the total lease production. The subtraction method will result in lower equipment costs and easier accounting procedures compared to separate metering of production before commingling.

The attached AFE will provide the equipment necessary to separately meter the lease line wells. This AFE represent only the funds required to handle production on the W. H. Rhodes B NCT-1 lease. Additional AFEs will follow as infill drilling progresses.

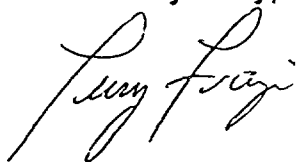
States, Inc.

-2-

September 23, 1993

Please sign the AFE, and one copy of this ballot indicating your approval/disapproval for commingling production and the proposed accounting method. The AFE and ballot should be returned to: TEPI, Laura Skinner, P. O. Box 3109, Midland, TX 79702. If you have any questions regarding this request, please contact Mr. Larry Ridenour at the Hobbs Area Office (505-393-7191).

Yours Very Truly,



T. L. Frazier  
Hobbs Area Manager

LDR/s

chrono

Attachments

☒ Approve surface commingling of production from W. H. Rhodes B NCT-1 non-lease line wells and lease line wells.

☐ Disapprove surface commingling of production from W. H. Rhodes B NCT-1 non-lease line wells and lease line wells.

If you approved of the surface commingling indicate your approval/disapproval for allocating production by the subtraction method.

☒ Approve of allocating production from W. H. Rhodes B NCT-1 non-lease line wells and lease line wells by the subtraction method.

☐ Disapprove of allocating production from W. H. Rhodes B NCT-1 non-lease line wells and lease line wells by the subtraction method

Company: STATES, INC.

By:



O.H. Reaugh Senior Vice-President

Date:

10-6-93



September 23, 1993

Stirling Oil & Gas Co.  
Fort Worth Club Bldg.  
306 W. 7th St. Suite 302  
Fort Worth, TX 76102

RE: Surface Commingling  
W. H. Rhodes B NCT-1 Wells  
W. H. Rhodes B NCT-1/Rhodes Yates Unit Lease Line Wells

Attn: Aaron Cawley

Texaco Exploration & Producing Inc. (TEPI) will drill three lease line wells (W. H. Rhodes B NCT-1 Well No.s 22, 26, 27) between the W. H. Rhodes B NCT-1 lease and the Rhodes Yates Unit in the very near future. TEPI proposes to surface commingle the production in the existing W. H. Rhodes B NCT-1 Tank Battery.

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September 23, 1993

Please sign the AFE, and one copy of this ballot indicating your approval/disapproval for commingling production and the proposed accounting method. The AFE and ballot should be returned to: TEPI, Laura Skinner, P. O. Box 3109, Midland, TX 79702. If you have any questions regarding this request, please contact Mr. Larry Ridenour at the Hobbs Area Office (505-393-7191).

Yours Very Truly,



T. L. Frazier  
Hobbs Area Manager

LDR/s

chrono

## Attachments

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☐

Disapprove surface commingling of production from W. H. Rhodes B NCT-1 non-lease line wells and lease line wells.

If you approved of the surface commingling indicate your approval/disapproval for allocating production by the subtraction method.

☒

Approve of allocating production from W. H. Rhodes B NCT-1 non-lease line wells and lease line wells by the subtraction method.

☐

Disapprove of allocating production from W. H. Rhodes B NCT-1 non-lease line wells and lease line wells by the subtraction method

Company: Stirling Oil and Gas CompanyBy: Date: October 4, 1993



September 23, 1993

OXY U.S.A. Inc.  
P. O. Box 50250  
Midland, TX 79710

RE: Surface Commingling  
W. H. Rhodes B NCT-1 Wells  
W. H. Rhodes B NCT-1/Rhodes Yates Unit Lease Line Wells

Attn: Joint Interest Group

Texaco Exploration & Producing Inc. (TEPI) will drill three lease line wells (W. H. Rhodes B NCT-1 Well No.s 22, 26, 27) between the W. H. Rhodes B NCT-1 lease and the Rhodes Yates Unit in the very near future. TEPI proposes to surface commingle the production in the existing W. H. Rhodes B NCT-1 Tank Battery.

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The attached AFEs will provide the equipment necessary to handle the increased production from the new non-lease line wells and separate metering for the lease line wells. These AFEs represent only the funds required to handle production on the W. H. Rhodes B NCT-1 lease. Additional AFEs will follow as infill drilling progresses.

OXY U.S.A. Inc..

-2-

September 23, 1993

Please sign the AFE's, and one copy of this ballot indicating your approval/disapproval for commingling production and the proposed accounting method. The AFEs and ballot should be returned to: TEPI, Laura Skinner, P. O. Box 3109, Midland, TX 79702. If you have any questions regarding this request, please contact Mr. Larry Ridenour at the Hobbs Area Office (505-393-7191).

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Hobbs Area Manager

LDR/s

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Company: OXY USA INC.

By: Edward J. Behr

Date: 11/2/93



September 23, 1993

Amerada Hess Corporation  
P. O. Box 2040  
Tulsa, Oklahoma 74102

RE: Surface Commingling  
W. H. Rhodes B NCT-1 Wells  
W. H. Rhodes B NCT-1/Rhodes Yates Unit Lease Line Wells

Attn: Attn: R W Mullins

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Amerada Hess Corporation

-2-

September 23, 1993

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Hobbs Area Manager

LDR/s

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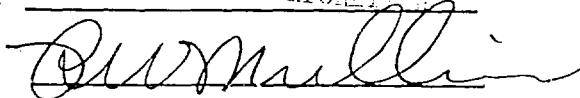
☐

Disapprove of allocating production from W. H. Rhodes B NCT-1 non-lease line wells and lease line wells by the subtraction method

Company:

AMERADA HESS CORPORATION

By:



Date:

11-29-93