

2983

APR 9 1965

RECEIVED

APR 8 1965

U. S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

APR 2 1965

The Pure Oil Company  
Post Office Box 671  
Midland, Texas 79701

Gentlemen:

On March 30, 1965, effective as of March 19, 1965, Arthur A. Baker, Acting Director of the Geological Survey, approved the termination of the Brinnatool Deep unit agreement, Lea County, New Mexico, No. 14-03-0001-8570, pursuant to the last paragraph of section 20 thereof.

Enclosed are five copies of the approved application for your records. We request that you furnish notice of this approval to each interested working interest owner, lessee, and lessor at their last known address.

Sincerely yours,

H. J. DUNCAN

For the Director

Enclosures 5

✓ cc: Roswell 2 (w/2 copies approved application)

NOTED & STAMPED

COPY TO HOBBS

" " COMM OF PUB. LANDS  
" " NMOCV ✓

50th YEAR



## THE PURE OIL COMPANY

SOUTHERN PRODUCING DIVISION • MIDLAND DISTRICT EXPLORATION  
P. O. BOX 671 • MIDLAND, TEXAS 79701 • AREA CODE 915—MU 2-3725

March 17, 1965

The Director, United States  
Geological Survey  
Through: Regional Oil and Gas Supervisor  
Mr. John A. Anderson  
P. O. Drawer 1857  
Roswell, New Mexico

RE: Brinninstool Deep Unit,  
No. 14-08-0001-8578  
Lea County, New Mexico

Dear Sir:

The Pure Oil Company, unit operator, drilled the No. 1 Brinninstool Deep Unit Well to a total depth of 17,649' in the Siluro-Devonian Formation and plugged and abandoned such well as a dry hole on January 26, 1965. Based upon our recently completed evaluation of the data obtained from this test well, it is our opinion that the No. 1 Unit well adequately tested the concepts upon which this unit was formed and further drilling is unwarranted. It is also our opinion that the unit should be terminated.

Accordingly, we enclose the following:

- (1) Three (3) counterpart instruments, in quadruplicate, styled "Termination of Unit Agreement for the Development and Operation of the Brinninstool Deep Unit, Lea County, New Mexico - No. 14-08-0001-8578", which have been executed by Pure, Gulf and Continental, who collectively own in excess of 75% of the committed working interests.
- (2) Nine (9) copies of "Certificate of Approval" executed by the Commissioner of Public Lands and providing for the execution of the Director.

We respectfully request your approval of the termination of this unit and especially request that the effective date of termination be the date hereon.

Page 2  
The Director, United States  
Geological Survey  
March 17, 1965

Please return to us five (5) completely executed copies of item (2)  
for further handling. Item (1) enclosures are for your file.

Very truly yours,

THE PURE OIL COMPANY

ORIGINAL SIGNED BY

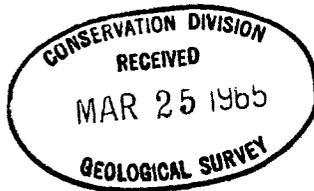
E. B. WHITE

E. B. White

EBW:md  
Encls.

cc: Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico  
Attn: Mrs. Marian M. Rhea

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico  
Attn: Mr. A. L. Porter, Jr.



1965 APR 7 PM 1:30

CERTIFICATE OF APPROVAL  
OF  
TERMINATION OF BRINNINSTOOL DEEP UNIT AGREEMENT  
BY COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO

The undersigned Commissioner of Public Lands, State of New Mexico does hereby approve the attached Termination of Unit Agreement for the Development and Operation of the Brinninstool Deep Unit Area, Lea County, New Mexico, No. 14-08-0001-8578.

Dated this the 17th day of March, 1965.

*Gayton B. Hays*  
COMMISSIONER OF PUBLIC LANDS

CERTIFICATE OF APPROVAL  
OF  
TERMINATION OF BRINNINSTOOL DEEP UNIT AGREEMENT  
BY DIRECTOR, UNITED STATES GEOLOGICAL SURVEY

Effective as of March 19, 1965, the date of filing in the Supervisor's office, the undersigned Director of the United States Geological Survey does hereby approve the attached Termination of Unit Agreement for the Development and Operation of the Brinninstool Deep Unit Area, Lea County, New Mexico, No. 14-08-0001-8578.

Dated this the 30<sup>th</sup> day of March, 1965.

MAR 30 1965

*Arthur S. Davis*  
ACTING DIRECTOR, UNITED STATES GEOLOGICAL SURVEY

RECEIVED  
MAR 16 8 17 AM '65  
STATELAND OFFICE  
SANTA FE, N.M.

RECEIVED  
MAR 19 1965  
U.S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF  
BRINNINSTOOL DEEP UNIT, LEA COUNTY, NEW MEXICO - NO. 14-08-0001-8578

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) percent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the Brinninstool Deep Unit Area, Lea County, New Mexico, dated January 22, 1964, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico, and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

Date: MAR 8 1965

THE PURE OIL COMPANY  
Unit Operator  
By [Signature]  
W. K. Lewright, Division  
Manager, Southern Producing  
Division

APPROVED
Desc. <u>B</u>
Form <u>D-1</u>
Terms <u>B</u>
<u>now</u>

Date: \_\_\_\_\_

CONTINENTAL OIL COMPANY  
By \_\_\_\_\_

Date: \_\_\_\_\_

GULF OIL CORPORATION  
By \_\_\_\_\_

STATE OF TEXAS    §  
                          §    ss  
COUNTY OF HARRIS §

The foregoing instrument was acknowledged before me this 8 day of March, 1965, by W. K. Lewright, Division Manager, of the Southern Producing Division of THE PURE OIL COMPANY, a Corporation, on behalf of said Corporation.

*John Brewer* JO ANN BREWER  
Notary Public

My Commission Expires:

June 1, 1965

STATE OF NEW MEXICO §  
                          §  
COUNTY OF CHAVES    §

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1965, by \_\_\_\_\_, \_\_\_\_\_ of CONTINENTAL OIL COMPANY, a \_\_\_\_\_ corporation, on behalf of said corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

STATE OF NEW MEXICO §  
                          §  
COUNTY OF CHAVES    §

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1965, by \_\_\_\_\_, \_\_\_\_\_ of GULF OIL CORPORATION, a \_\_\_\_\_ corporation, on behalf of said corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE  
BRINNINSTOOL DEEP UNIT, LEA COUNTY, NEW MEXICO - NO. 14-08-0001-8578

RECEIVED  
MAR 19 1965  
U. S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) percent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the Brinninstool Deep Unit Area, Lea County, New Mexico, dated January 22, 1964, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico, and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

THE PURE OIL COMPANY  
Unit Operator

Date: \_\_\_\_\_

By \_\_\_\_\_  
W. K. Lewright, Division  
Manager, Southern Producing  
Division

CONTINENTAL OIL COMPANY

Date: \_\_\_\_\_

By \_\_\_\_\_

GULF OIL CORPORATION

Date: March 9, 1965

By [Signature]

with  
HAR

ATTEST:

[Signature]  
Assistant Secretary

Attorney in Fact

STATE OF TEXAS    §  
                          § ss  
COUNTY OF HARRIS §

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day  
of \_\_\_\_\_, 1965, by W. K. Lewright, Division Manager, of the  
Southern Producing Division of THE PURE OIL COMPANY, a Corporation, on behalf  
of said Corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:  
  
\_\_\_\_\_

STATE OF NEW MEXICO §  
                          §  
COUNTY OF CHAVES   §

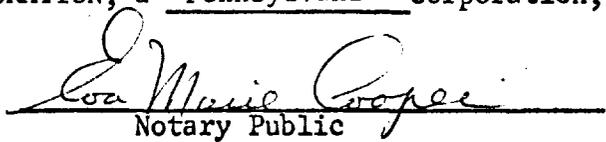
The foregoing instrument was acknowledged before me this \_\_\_\_\_ day  
of \_\_\_\_\_, 1965, by \_\_\_\_\_,  
of CONTINENTAL OIL COMPANY, a \_\_\_\_\_ corporation, on  
behalf of said corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:  
  
\_\_\_\_\_

STATE OF NEW MEXICO §  
                          §  
COUNTY OF CHAVES   §

The foregoing instrument was acknowledged before me this 9th day  
of March, 1965, by F. O. MORTLOCK,  
Attorney in Fact of GULF OIL CORPORATION, a Pennsylvania corporation,  
on behalf of said corporation.

  
\_\_\_\_\_  
Notary Public

My Commission Expires:  
My Commission Expires August 15, 1966  
  
\_\_\_\_\_

RECEIVED  
MAR 19 1965  
U. S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF  
BRINNINSTOOL DEEP UNIT, LEA COUNTY, NEW MEXICO - NO. 14-08-0001-8578

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) percent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the Brinninstool Deep Unit Area, Lea County, New Mexico, dated January 22, 1964, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico, and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

THE PURE OIL COMPANY  
Unit Operator

Date: \_\_\_\_\_

By \_\_\_\_\_  
W. K. Lewright, Division  
Manager, Southern Producing  
Division

CONTINENTAL OIL COMPANY

Date: March 9, 1965

By [Signature]  
Attorney-in-Fact

GULF OIL CORPORATION

Date: \_\_\_\_\_

By \_\_\_\_\_

STATE OF TEXAS    §  
                          § ss  
COUNTY OF HARRIS §

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1965, by W. K. Lewright, Division Manager, of the Southern Producing Division of THE PURE OIL COMPANY, a Corporation, on behalf of said Corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

STATE OF NEW MEXICO §  
                          §  
COUNTY OF CHAVES    §

The foregoing instrument was acknowledged before me this 9th day of March, 1965, by W. R. Hall, Attorney-in-Fact of CONTINENTAL OIL COMPANY, a Delaware corporation, on behalf of said corporation.

*Grower Ray Pate*  
\_\_\_\_\_  
Notary Public

My Commission Expires:

August 19, 1968

STATE OF NEW MEXICO §  
                          §  
COUNTY OF CHAVES    §

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 1965, by \_\_\_\_\_, \_\_\_\_\_ of GULF OIL CORPORATION, a \_\_\_\_\_ corporation, on behalf of said corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE  
BRINNINSTOOL DEEP UNIT, LEA COUNTY, NEW MEXICO - NO. 14-08-0001-8578

15 APR 1965  
ccc

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) percent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the Brinninstool Deep Unit Area, Lea County, New Mexico, dated January 22, 1964, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico, and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

Date: MAR 8 1965

THE PURE OIL COMPANY  
Unit Operator  
By [Signature]  
W. K. Lewright, Division  
Manager, Southern Producing  
Division

APPROVED
Desc. <u>B</u>
Form <u>252</u>
Terms <u>B</u>
<u>now</u>

Date: \_\_\_\_\_

CONTINENTAL OIL COMPANY  
By \_\_\_\_\_

Date: \_\_\_\_\_

GULF OIL CORPORATION  
By \_\_\_\_\_

STATE OF TEXAS    §  
                          § ss  
COUNTY OF HARRIS §

The foregoing instrument was acknowledged before me this 8 day of March, 1965, by W. K. Lewright, Division Manager, of the Southern Producing Division of THE PURE OIL COMPANY, a Corporation, on behalf of said Corporation.

Jo Ann Brewer    JO ANN BREWER  
Notary Public

My Commission Expires:  
June 1, 1965

STATE OF NEW MEXICO §  
                          §  
COUNTY OF CHAVES   §

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 1965, by \_\_\_\_\_, \_\_\_\_\_ of CONTINENTAL OIL COMPANY, a \_\_\_\_\_ corporation, on behalf of said corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:  
\_\_\_\_\_

STATE OF NEW MEXICO §  
                          §  
COUNTY OF CHAVES   §

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 1965, by \_\_\_\_\_, \_\_\_\_\_ of GULF OIL CORPORATION, a \_\_\_\_\_ corporation, on behalf of said corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:  
\_\_\_\_\_

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE  
BRINNINSTOOL DEEP UNIT, LEA COUNTY, NEW MEXICO - NO. 14-08-0001-8578

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) percent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the Brinninstool Deep Unit Area, Lea County, New Mexico, dated January 22, 1964, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico, and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

THE PURE OIL COMPANY  
Unit Operator

Date: \_\_\_\_\_

By \_\_\_\_\_  
W. K. Lewright, Division  
Manager, Southern Producing  
Division

CONTINENTAL OIL COMPANY

Date: \_\_\_\_\_

By \_\_\_\_\_

GULF OIL CORPORATION

Date: March 9, 1965

By [Signature]

*WKL*  
*HAR*

Attorney in Fact

ATTEST:

[Signature]  
Assistant Secretary

STATE OF TEXAS    )
                  ) ss
COUNTY OF HARRIS )

The foregoing instrument was acknowledged before me this \_\_\_ day
of \_\_\_\_\_, 1965, by W. K. Lewright, Division Manager, of the
Southern Producing Division of THE PURE OIL COMPANY, a Corporation, on behalf
of said Corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

STATE OF NEW MEXICO )
                      )
COUNTY OF CHAVES    )

The foregoing instrument was acknowledged before me this \_\_\_ day
of \_\_\_\_\_, 1965, by \_\_\_\_\_,
of CONTINENTAL OIL COMPANY, a \_\_\_\_\_ corporation, on
behalf of said corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

STATE OF NEW MEXICO )
                      )
COUNTY OF CHAVES    )

The foregoing instrument was acknowledged before me this 9th day
of March, 1965, by F. O. MORTLOCK,
Attorney in Fact of GULF OIL CORPORATION, a Pennsylvania corporation,
on behalf of said corporation.

*Lois Marie Cooper*  
\_\_\_\_\_  
Notary Public

My Commission Expires:

My Commission Expires August 15, 1966

\_\_\_\_\_

002

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT AND OPERATION OF THE  
BRINNINSTOOL DEEP UNIT, LEA COUNTY, NEW MEXICO - NO. 14-08-0001-8578

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) percent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the Brinninstool Deep Unit Area, Lea County, New Mexico, dated January 22, 1964, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico, and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

THE PURE OIL COMPANY  
Unit Operator

Date: \_\_\_\_\_

By \_\_\_\_\_  
W. K. Lewright, Division  
Manager, Southern Producing  
Division

CONTINENTAL OIL COMPANY

Date: March 9, 1965

By *W. B. Hall*  
Attorney-in-Fact

GULF OIL CORPORATION

Date: \_\_\_\_\_

By \_\_\_\_\_

STATE OF TEXAS    )
                      ) ss
COUNTY OF HARRIS )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day
of \_\_\_\_\_, 1965, by W. K. Lewright, Division Manager, of the
Southern Producing Division of THE PURE OIL COMPANY, a Corporation, on behalf
of said Corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

STATE OF NEW MEXICO )
                      )
COUNTY OF CHAVES    )

The foregoing instrument was acknowledged before me this 9th day
of March, 1965, by W. R. Hall, Attorney-in-Fact
of CONTINENTAL OIL COMPANY, a Delaware corporation, on
behalf of said corporation.

*Grover Ray Peck, Jr.*  
\_\_\_\_\_  
Notary Public

My Commission Expires:

August 19, 1968

STATE OF NEW MEXICO )
                      )
COUNTY OF CHAVES    )

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day
of \_\_\_\_\_, 1965, by \_\_\_\_\_,
of GULF OIL CORPORATION, a \_\_\_\_\_ corporation,
on behalf of said corporation.

\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_

March 16, 1965

The Pure Oil Company  
P. O. Box 671  
Midland, Texas 79701

Attention: Mr. E. B. White

Re: Brinninstool Deep Unit  
Lea County, New Mexico

Gentlemen:

This office has received an Application for the Termination of the Brinninstool Deep Unit Agreement, Lea County, New Mexico. This application is signed by the owners of more than Seventy-five percent on an acreage basis of the working interest in and to oil and gas leasehold interests which are committed to the Unit Agreement.

The Commissioner of Public Lands approves the termination of Brinninstool Deep Unit Agreement as of March 17, 1965, subject to like approval by the United States Geological Survey.

We are handing to Mr. E. B. White nine Certificates of Approval of termination of Brinninstool Deep Unit Agreement, which were originally signed by the Commissioner.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

BY:

(Mr.) Ted Bilberry, Director  
Oil and Gas Department

GBH/mar/d  
Enclosures

cc: United States Geological Survey  
P. O. Drawer 1857, Roswell, New Mexico  
Attention: Mr. John A. Anderson  
Oil Conservation Commission  
P. O. Box 2088, Santa Fe, New Mexico

50th YEAR



**THE PURE OIL COMPANY**

SOUTHERN PRODUCING DIVISION • MIDLAND DISTRICT EXPLORATION  
P. O. BOX 671 • MIDLAND, TEXAS 79701 • AREA CODE 915—MU 2-3725

March 12, 1965

Mr. Guyton B. Hays  
Commissioner of Public Lands  
State of New Mexico  
P. O. Box 1148  
Santa Fe, New Mexico

Attention: Mrs. Marian M. Rhea,  
Supervisor Unit Division

RE: Brinninstool Deep Unit,  
No. 14-08-0001-8578  
Lea County, New Mexico

Dear Sir:

The Pure Oil Company No. 1 Brinninstool Deep Unit well was drilled to a total depth of 17,649' in the Siluro-Devonian Formation and was plugged and abandoned as a dry hole on January 26, 1965. In our opinion, the No. 1 Unit well adequately tested the concepts upon which this unit was formed. It is our opinion that further drilling is unwarranted and the Unit should be terminated. Accordingly, we enclose the following:

- (1) Three (3) counterpart instruments, in duplicate, styled "Termination of Unit Agreement For the Development and Operation of the Brinninstool Deep Unit, Lea County, New Mexico - No. 14-08-0001-8578", which have been executed by Pure, Gulf and Continental, who collectively own in excess of 75% of the committed working interests.
- (2) Nine (9) copies of "Certificate of Approval", to be executed by the Commissioner and the Director.

We respectfully request your early approval of the termination of this unit and ask that you execute all copies of item (2) in the

Page 2  
Mr. Guyton B. Hays  
March 12, 1965

space so provided and return all copies to us for submittal to the U.S.G.S. Upon complete approval, we will furnish you your required number of copies. Item (1) enclosures are for your file.

Very truly yours,

THE PURE OIL COMPANY

ORIGINAL SIGNED BY  
E. B. WHITE  
E. B. White

EBW:md  
Encls.

cc: New Mexico Oil Conservation Commission, w/encls.  
P. O. Box 2088  
Santa Fe, New Mexico  
Attn: Mr. A. L. Porter, Jr.

United States Geological Survey  
P. O. Drawer 1857  
Roswell, New Mexico  
Attn: Mr. John A. Anderson

REGIONAL OFFICE 000

Drawer 1857  
1964 MAR 15 PM 4:01, New Mexico 88201

March 3, 1964

The Pure Oil Company  
P. O. Box 671  
Midland, Texas 79701

Gentlemen:

We hereby acknowledge receipt of the following described ratification and joinder relating to the Brinninstool Deep unit agreement No. 14-08-0001-8578, Lea County, New Mexico:

<u>Joinder to</u>	<u>Date Received</u>	<u>Executed by</u>
Unit agreement	February 27, 1964	Palmer and McCarver, d/b/a P-M Drilling Company, lessee of State land unit tract 28

State land unit tract 28 will be considered fully committed effective March 1, 1964, subject to approval by the Commissioner of Public Lands of the State of New Mexico, pursuant to section 29 of the Brinninstool Deep unit agreement.

Copies of the ratification and joinder are being distributed to the appropriate Federal offices.

Sincerely yours,

JOHN A. ANDERSON  
Regional Oil and Gas Supervisor

cc:  
Washington (w/cy joinder)  
BLM-Santa Fe (w/cy joinder)  
Hobbs (w/cy joinder)  
NMOCC-Ltr. only  
Com. of Public Lands-Ltr. only  
Accounts

50th YEAR



**THE PURE OIL COMPANY**

SOUTHERN PRODUCING DIVISION • MIDLAND DISTRICT EXPLORATION  
P. O. BOX 671 • MIDLAND, TEXAS 79701 • AREA CODE 915—MU 2-3725

February 13, 1964

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

RE: Brinninstool Deep Unit Area  
Lea County, New Mexico

Gentlemen:

Pursuant to your Order No. R-2648, enclosed is complete executed copy of Unit Agreement covering the captioned.

Attached to such agreement is a copy of CERTIFICATION - DETERMINATION NO. 14-08-0001-8578 whereby the U.S.G.S. has approved the captioned effective as of February 12, 1964, together with a letter from the U.S.G.S. dated February 12, 1964, advising of such approval.

Also attached thereto is a copy of Certificate of Approval executed by the Commissioner of Public Lands, State of New Mexico.

Very truly yours,

THE PURE OIL COMPANY

E. B. White

EBW:md  
Encls.



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WASHINGTON 25, D. C.

FEB 12 1964

000

The Pure Oil Company  
P. O. Box 671  
Midland, Texas 79701

Gentlemen:

On February 12, 1964, Acting Director of the Geological Survey, approved the Brinninstool Deep unit agreement, Lea County, New Mexico, filed by your company as unit operator. This agreement has been designated No. 14-08-0001-8578 and is effective as of the date of approval.

Enclosed are 3 copies of the approved unit agreement for your records. We request that you furnish the State of New Mexico and any other interested principal with whatever evidence of this approval is deemed appropriate.

Sincerely yours,

  
For the Director

Enclosures 3

RECEIVED  
FEB 6 2 4 17

2983

February 6, 1964

The Pure Oil Company  
P. O. Box 671  
Midland, Texas

Re: Brinninstool Deep Unit  
Lea County, New Mexico

Attention: Mr. E. B. White

Gentlemen:

The Commissioner of Public Lands has approved as of February 6, 1964, the Brinninstool Deep Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey.

We are handing to Mr. E. B. White twelve (12) Certificates of Approval also Official Receipt No. G-36471 in the amount of One Hundred Thirty Five (\$135.00) Dollars which covers the filing fee.

Upon approval by the United States Geological Survey please furnish a fully conformed copy of the Unit Agreement.

Very truly yours,

E. S. JOHNNY WALKER  
Commissioner of Public Lands

BY:  
(Mrs.) Marian M. Rhea, Supervisor  
Unit Division

ESW/mmr/v

cc: Oil Conservation Commission

United States Geological Survey

State of New Mexico



Commissioner of Public Lands

E. S. JOHNNY WALKER  
COMMISSIONER



P. O. BOX 781  
SANTA FE, NEW MEXICO

January 29, 1964

The Pure Oil Company  
P. O. Box 671  
Midland, Texas

Re: Proposed Brinninstool Deep Unit  
Lea County, New Mexico

Attention: Mr. E. B. White

Gentlemen:

This office is approving as to form and content your Proposed Brinninstool Deep Unit, subject to the two changes which I discussed with you on the telephone this morning.

These changes are as follows,

- (1) Section 21, Page 20, line 34 end of sentence delete period insert semicolon and add = " Provided, further, that no such alteration or modification shall be effective as to any land of the State of New Mexico, as to the rate of prospecting and developing in the absence of the specific written approval thereof by the Commissioner and as to any lands of

The Pure Oil Company  
Attention: Mr. E. B. White  
January 29, 1964  
- page 2 -

the State of New Mexico or privately owned lands subject to this Agreement as to the quantity and rate of production in the absence of specific written approval thereof by the Commissioner."

- (2) Section 29, Page 24, line 5, delete line five and insert:  
"within 60 days by the Director or the Land Commissioner, provided, however, that as to State Lands such subsequent joinder must be approved by the Land Commissioner."

We thank you for your courtesy in this matter.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

BY: *Marian M. Rhea*  
(Mrs.) Marian M. Rhea, Supervisor  
Unit Division

ESW/mmr/v

cc:

Oil Conservation Commission  
Santa Fe, New Mexico

United States Geological Survey  
P. O. Drawer 1857  
Roswell, New Mexico

CERTIFICATE OF APPROVAL

BY COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO

**BRINNINSTOOL DEEP UNIT  
LEA COUNTY, NEW MEXICO**

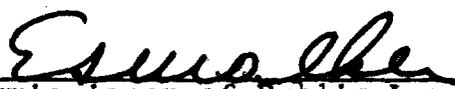
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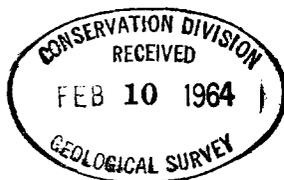
There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, the attached Agreement for the development and operation of acreage which is described within the attached Agreement, dated January 22, 1964, which has been executed or is to be executed by parties owning and holding oil and gas leases and royalty interests in and under the property described, and upon examination of said Agreement, the Commissioner finds:

- (a) That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said area.
- (b) That under the proposed agreement the State of New Mexico will receive its fair share of the recoverable oil or gas in place under its lands in the area.
- (c) That each beneficiary Institution of the State of New Mexico will receive its fair and equitable share of the recoverable oil and gas under its lands within the area.
- (d) That such agreement is in other respects for the best interests of the state, with respect to state lands.

NOW, THEREFORE, by virtue of the authority conferred upon me under Sections 7-11-39, 7-11-40, 7-11-41, 7-11-47, 7-11-48, New Mexico Statutes Annotated 1953 Compilation, I, the undersigned, Commissioner of Public Lands of the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the said Agreement, and any leases embracing lands of the State of New Mexico within the area shall be and the same are hereby amended to conform with the terms thereof, and shall remain in full force and effect according to the terms and conditions of said Agreement. This approval is subject to all of the provisions of the aforesaid statutes.

IN WITNESS WHEREOF, this Certificate of Approval is executed, with seal affixed, this 6th day of February 1964.

  
Commissioner of Public Lands  
of the State of New Mexico



RECEIVED  
FEB 3 1964

U. S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

CERTIFICATION - DETERMINATION

NO. 14-08-0001 8578

Pursuant to the authority vested in the Secretary of Interior as to Federal Lands, under the Act approved February 25, 1920, 41 Stat. 437, as amended, 30 U.S.C. Secs. 181, et seq., and delegated to the Director of the Geological Survey pursuant to Departmental Order No. 2365 of October 8, 1947, 43 C.F.R. Sec. 4.611, 12 F.R. 6784, I do hereby:

A. Approve the attached agreement for the development and operation of the Brinninstool Deep Unit Area, Lea County, State of New Mexico.

B. Certify and determine that the unit plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.

C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of this agreement.

FEB 12 1964

DATED

Arthur J. Baker  
Acting DIRECTOR, UNITED STATES GEOLOGICAL SURVEY.

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U. S. GEOLOGICAL SURVEY  
ROSNELL, NEW MEXICO  
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Case 2983

50th YEAR



**THE PURE OIL COMPANY**

SOUTHERN PRODUCING DIVISION • MIDLAND DISTRICT EXPLORATION  
P. O. BOX 671 • MIDLAND, TEXAS 79701 • AREA CODE 915-MU 2-3725

January 13, 1964

**CONFIDENTIAL GEOLOGICAL REPORT**

**PROPOSED BRINNINSTOOL DEEP UNIT  
LEA COUNTY, NEW MEXICO**

**THE DIRECTOR - UNITED STATES GEOLOGICAL SURVEY  
WASHINGTON, D. C.**

This is a proposed Federal-State-type Unit covering 17,237.30 acres to drill a 16,300 foot Devonian wildcat to be located in the south one-half of Section 36, Township 23 South, Range 32 East, Lea County, New Mexico. The proposed Unit, as shown on Exhibit "A", is located on the north flank of the Delaware Basin about twenty-seven miles northwest of Jal, New Mexico. A seismograph interpretation, from profiles using conventional techniques, shows a large structural feature trending northeast-southwest which is approximately seven miles long and four miles wide. The seismic interpretation as shown on Exhibit "C" has 400 feet of structural closure. The basis for the Unit boundary, as shown on the Devonian Seismograph Map, Exhibit "C", is the lowest closing contour at (-12,600).

The prospect is located in an area of relatively low rolling hill topographic relief with the Ogallala formation and Quaternary alluvium exposed on the surface. No surface exposure is present on which surface mapping could be accomplished to substantiate a deep-seated structural anomaly.

Regional dip of the Devonian formation is to the southeast at the rate of approximately 100 feet per mile. Subsurface control in the area is practically nil, with the nearest control, the Continental Oil Company #5 Bell Lake Unit located in Section 1, Township 24 South, Range 33 East, approximately four miles to the east. The Continental Oil Company #5 Bell Lake Unit well, a 16,100 foot Devonian failure, tested 12,085 feet of salt water in the Devonian formation and was subsequently completed in the Pennsylvanian Morrow formation from 14,417 to 14,727 feet for 7,400 MCFGPD. Nearest Devonian production is in the Bell Lake Field approximately five miles east of the Unit. The Bell Lake Field has five producers operated by the Continental Oil Company. The Continental #1-A Bell Lake Unit was completed in the Devonian formation from 14,942 to 15,025 feet for

15,500 MCFGPD plus 14.4 barrels of formation water. The #2 Bell Lake Unit was completed in the Pennsylvanian Strawn formation for 140 barrels of distillate per day plus 13,100 MCFGPD. The #3 Bell Lake Unit was completed in the Bone Spring formation from 8,670 to 8,817 feet for 53 barrels of oil per day plus 2 barrels of formation water. The #4 Bell Lake Unit was completed in the Devonian formation from 14,736 to 14,938 feet for 64,000 MCFGPD.

The Brinninstool proposed Unit is in an area favorable for production from the upper Delaware Mountain group as shown on Exhibit "B". The Cruz Field, Triste Draw Field and the north one-half of the Double "X" Field are productive from the uppermost Delaware Sand member of the Delaware Mountain group from depths of 4,900 feet down to 5,200 feet within the proposed Unit area. Exhibit "E" is a Gamma Ray - Acoustic correlation log of the Max Wilson #1 Continental Federal, located 1980 feet FWL and 660 feet FNL of Section 28, Township 23 South, Range 32 East, and is the deepest test drilled in the proposed unit area. It was completed as a dry hole in the Cherry Canyon formation of the Delaware Mountain group. The top of the Cherry Canyon formation was picked from the log at a depth of 5,923 feet. Unitization of rights will begin at the top of Cherry Canyon formation at an estimated depth of approximately 5,923 feet in the proposed Brinninstool Unit test. Exhibit "F" is a Gamma Ray - Sonic correlation log of the Continental Oil Company's #7 Bell Lake Unit, a Wolfcamp dry hole located 660 feet FNL and FEL of Section 1, Township 24 South, Range 33 East and approximately four miles east of the Unit outline. The top of the Cherry Canyon formation was picked from the log of the #7 Bell Lake Unit at a depth of 6,260 feet. The Cherry Canyon formation in the Unit test will be encountered well below the deepest producing depth in any of the fields located within the Unit outline. No production has been established from the Cherry Canyon formation in this area of the Delaware Basin.

The proposed Brinninstool Unit test should penetrate about 1,200 feet of red beds before encountering the top of the Rustler Anhydrite. The evaporite and salt section should be about 3,800 feet thick. Approximately 3,900 feet of basin type Delaware sandstone, shale, and limestone should be present. The Bone Spring limestone, sandstone, and shale section should be 2,400 feet in thickness. The Wolfcamp may vary from 900 to 1,350 feet in thickness. The Pennsylvanian formation should contain approximately 2,200 feet of limestone, sandstone, and shale. The Mississippian section should contain 1,200 feet of limestone and shale. In all, the test should penetrate 16,000 feet of sediments; however, on a structurally high test, it is not unreasonable to expect considerable thinning of pre-Wolfcamp beds over Devonian highs. The columnar section is shown on Exhibit "D".

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WASHINGTON 25, D. C.

JAN 21 1964

The Pure Oil Company  
P. O. Box 671  
Midland, Texas 79701

Attention: Mr. E. B. White

Gentlemen:

Your application of January 13, filed with the Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of 17,237.30 acres, more or less, Lea County, New Mexico, as logically subject to exploration and development under the unitization provisions of the Mineral Leasing Act, as amended.

Pursuant to unit plan regulations of December 22, 1950, 30 CFR 226.3 (1961 reprint), the land requested as described in your application and outlined on your map marked "Exhibit A, Brinninstool Unit, Lea County, New Mexico," is hereby designated as a logical unit area. Inasmuch as unitization will be limited to all formations below the top of the Cherry Canyon formation of the Delaware Mountain Group, Permian Age, the unit should be identified as the "Brinninstool Deep Unit" by the unit agreement submitted for the area hereby designated. Our review of the area indicates the total acreage to be 17,237.32 acres. Accordingly, if your recheck confirms our figure, your records should be so conformed.

The unit agreement submitted for the area designated should provide for the drilling of the initial exploratory well to test formations of Devonian age, or to a depth of 16,300 feet. The 1961 reprint of the standard form of unit agreement should be used, with the modifications proposed by your application, the addition of the language required by the State of New Mexico, and the following additional modification to update the Nondiscrimination section:

The "Fair Employment" section of the 1961 reprint should be replaced with the following:

"Nondiscrimination: In connection with the performance of work under this agreement, the operator agrees to comply with all of the provisions of 301 (1) to (7) inclusive, of Executive Order 10925, as amended, (28 F.R. 6485), which are hereby incorporated by reference in this agreement."

In the absence of any type of land requiring special provisions or any objections not now apparent, a duly executed agreement identical

BEFORE EXAMINED NUTTER  
OIL CONSERVATION COMMISSION  
PURE'S EXHIBIT NO. 4  
CASE NO. 2583

to the 1961 reprint, modified only as outlined above, will be approved if submitted in approvable status within a reasonable time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have full commitment of sufficient lands to afford effective control of unit operations.

When the executed agreement is transmitted to the Supervisor for approval, include the latest status of all acreage. In preparation of Exhibits A and B, follow closely the format of the sample exhibits attached to the 1961 reprint of the standard form.

Inasmuch as this unit contains State of New Mexico lands, we are sending a copy of this letter to the Commissioner of Public Lands at Santa Fe, and you are requested to contact said Commissioner in connection with this letter prior to soliciting joinders.

Sincerely yours,



Acting Director

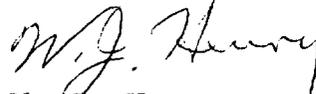
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Orig sent to White  
B

The potential pay zones and expected depths are as follows:

Cherry Canyon sandstone	6,100 feet
Bone Spring limestone	8,900 feet
Wolfcamp limestone	11,300 feet
Pennsylvanian limestone	12,650 feet
Pennsylvanian sandstone	13,800 feet
Devonian dolomite	16,000 feet

Considering the inherent difficulties of shallow high velocity sediments, we feel the data are of fair to good quality, and we have mapped the probable existence of a deep structure which should be tested for probable entrapment of hydrocarbons.

Respectfully submitted,

  
W. J. Henry  
Geologist

WJH:bh