

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

State of New Mexico  
**Oil Conservation Commission**



LAND COMMISSIONER  
E. B. JOHNNY WALKER  
MEMBER

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

P. O. BOX 871  
SANTA FE

December 7, 1964

DOCKET MAILED

Date 7-15-65

Mr. Jason Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

DOCKET MAILED

Date 6-16-65

DOCKET MAILED

Date 5-27-65

Re: Case No. 3112 and 3156  
Order No. R-2824 and R-2825  
Applicant:

Continental Oil Company

Dear Sir:

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

Very truly yours,

*A. L. Porter, Jr.*

A. L. PORTER, Jr.  
Secretary-Director

lr/

Carbon copy of order also sent to:

Hobbs OCC       x      

Artesia OCC           

Astec OCC       x       (R-2824)

OTHER R-2824 sent to Charles Roberts - Continental Oil Co., Durango, Colo

DOCKET MAILED

Date 5-27-65

DOCKET MAILED

Date 6-16-65

*Darius, Colo*

State of New Mexico  
Oil Conservation Commission



STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

**August 16, 1965**

3112  
3282  
&  
3281  
Re: Case No.                       
Order No. R-2824-A,  
Applicant: R-2947 & R-2949  
  
**Continental & Samuel Dunn**

*A. L. Porter, Jr.*  
A. L. PORTER, Jr.  
Secretary-Director

OTHER \_\_\_\_\_

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

-2-

October 3, 1968

Continental Oil Company  
200 North Wolcott  
Casper, Wyoming

Future applications for administrative approval utilizing the newly authorized equipment will be accepted if filed in accordance with the provisions of Order No. R-2978.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/DSH/esr

cc: United States Geological Survey  
Attention: Mr. John Anderson  
Drawer 1857  
Roswell, New Mexico 88201

United States Geological Survey  
Attention: Mr. Phil McGrath  
P. O. Box 959  
Farmington, New Mexico 87401

Oil Conservation Commission  
Attention: Mr. Emery C. Arnold  
1000 Rio Brason Road  
Aztec, New Mexico 87410

C  
O  
P  
Y

LAW OFFICES OF  
JOHN F. RUSSELL  
SUITE 1010 SECURITY NATIONAL BANK BUILDING  
P. O. DRAWER 640  
ROSWELL, NEW MEXICO 88201

TELEPHONE 622-4641  
AREA CODE 505

August 17, 1966

Miss Ida Rodriguez  
Secretary to Director  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

RE: Transcripts of Hearing  
Case No. 3112

Dear Ida:

I return herewith the two transcripts of hearing which  
you so kindly furnished me.

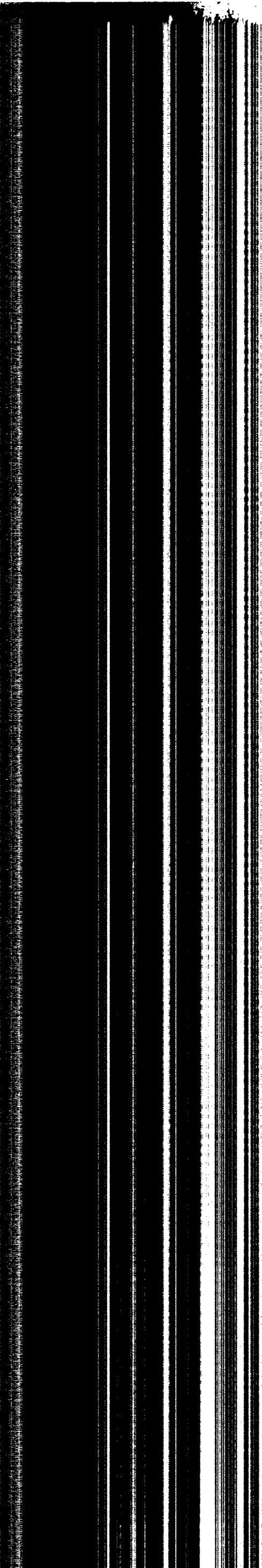
Thanking you for your courtesy and cooperation in this  
matter, I remain

Very truly yours,

  
John F. Russell

JFR:b1

Enclosures



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

P. O. Drawer 1857  
Roswell, New Mexico 88201

Continental Oil Company  
P. O. Box 3312  
Durango, Colorado

Attention: Mr. H. D. Haley

Gentlemen:

Your letter of August 11, with attachments, requests approval to commingle oil production from the Gallup and Dakota formations in your well No. 28-1 Jicarilla Apache on Jicarilla tribal Contract No. 66.

According to the system, as outlined in your proposal, communication between the reservoirs will be accomplished by the use of a downhole separation tool. By additional information submitted in a separate letter on September 8 you state the production from each reservoir will be allocated through the testing of each zone by manually blanking off one zone in the separation tool and producing the other zone. Form 9-361, Lessee's Monthly Report of Sales and Royalty, must show all computations used in the calculation of oil volume for each formation.

The method you propose for the downhole commingling is hereby approved. Any change in the system must be approved by this office.

Sincerely yours,

  
JOHN A. ANDERSON  
Regional Oil & Gas Supervisor

<b>RECEIVED</b>	
DURANGO PROJ.	
SEP 25 1964	
OFFICE MGR.	B
September 21, 1964	WJA
AS T. M.	
DIST. ENG.	JA
CAG	B



1964 AUG 15 AM 8 38  
33

## CONTINENTAL OIL COMPANY

P. O. Box 3312  
Durango, Colorado  
August 11, 1964

DOCKET MAILED

Date 8-18-64

New Mexico Oil Conservation Commission (1)  
P. O. Box 2088  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter - Secretary Director

Gentlemen:

A hearing before the New Mexico Oil Conservation Commission is requested for the purpose of presenting application by Continental Oil Company to install a downhole commingling tool on a test basis in an existing Gallup-Dakota dual-oil completion well. The test well is Jicarilla 28 Well No. 1, located in Unit J, Section 28, T25N, R4W, Rio Arriba County, New Mexico.

The two sources of supply are commonly owned and the proposed downhole installation is intended to prevent communication between the two reservoirs at all times. Application on a one-well test basis is proposed so that data and procedures for such tests as packer leakage and communication tests and production allocation tests can be established. The commingling installation will be observed to determine the effectiveness of the installation.

The primary purpose of the installation and testing is to establish a method whereby further development of the 16-section West Lindrith block in T25N, R4W, can be economically justified. Past producing histories indicate that further development cannot be economically justified by conventional single and dual completion methods and present producing methods.

The following data and exhibits are attached for preliminary information:

1. Lease plat showing wells on the lease and pools from which each are producing.
2. Data requirements for surface commingling installations.

3. Log of Jicarilla 28 Well No. 1, showing formation tops and location of present retainer production packer and perforations in the Gallup and Dakota formation.
4. Schematic diagram of Otis Engineering Corporation's "Dual Flow Choke Assembly" downhole commingling tool.
5. Schematic diagram showing present and proposed installations in Jicarilla 28 Well No. 1.
6. Composite Performance Curve for a typical Jicarilla Gallup and Dakota well.

If additional information is required, please advise.

Very truly yours,



H. D. Haley  
District Manager  
Durango District  
Production Department

GAB/ca

cc: Mr. E. A. Austin, Continental Oil Company, Denver, Colorado (2)  
U. S. Geological Survey, Roswell, New Mexico (1)



DATA REQUIREMENTS FOR SURFACE COMINGLING INSTALLATIONS

Average Daily Oil Production for 90-Day Period:

Jicarilla 28 Well No. 1	<u>Gallup</u>	<u>Dakota</u>
May	13 BOPD	8 BOPD
June	13 BOPD	5 BOPD
July	10 BOPD	8 BOPD

Top Unit Allowable: Gallup - 124 BOPD

Dakota - 164 BOPD

Crude Purchaser: Llaves Pipeline Ltd. - Farmington, New Mexico

Royalty Interest Owner: Jicarilla Apache Tribe

Liquid Hydrocarbon Gravities: Gallup - 44.4° API

Dakota - 48.4° API

Comingled Liquid Hydrocarbon Gravity - 46° API

Comingled gravity on adjacent lease (Jicarilla 22) over a six-month period has averaged 45.3° API.

Value of 44.4° API Crude = \$2.35 per barrel

Value of 48.4° API Crude = \$2.35 per barrel less \$.08 = \$2.27

Value of 46° API Crude = \$2.35 per barrel less \$.02 = \$2.33

Anticipated Producing Rates: Gallup - 14 BOPD

Dakota - 8 BOPD

Value Calculations: Gallup 14 BOPD x \$2.35 = \$32.90

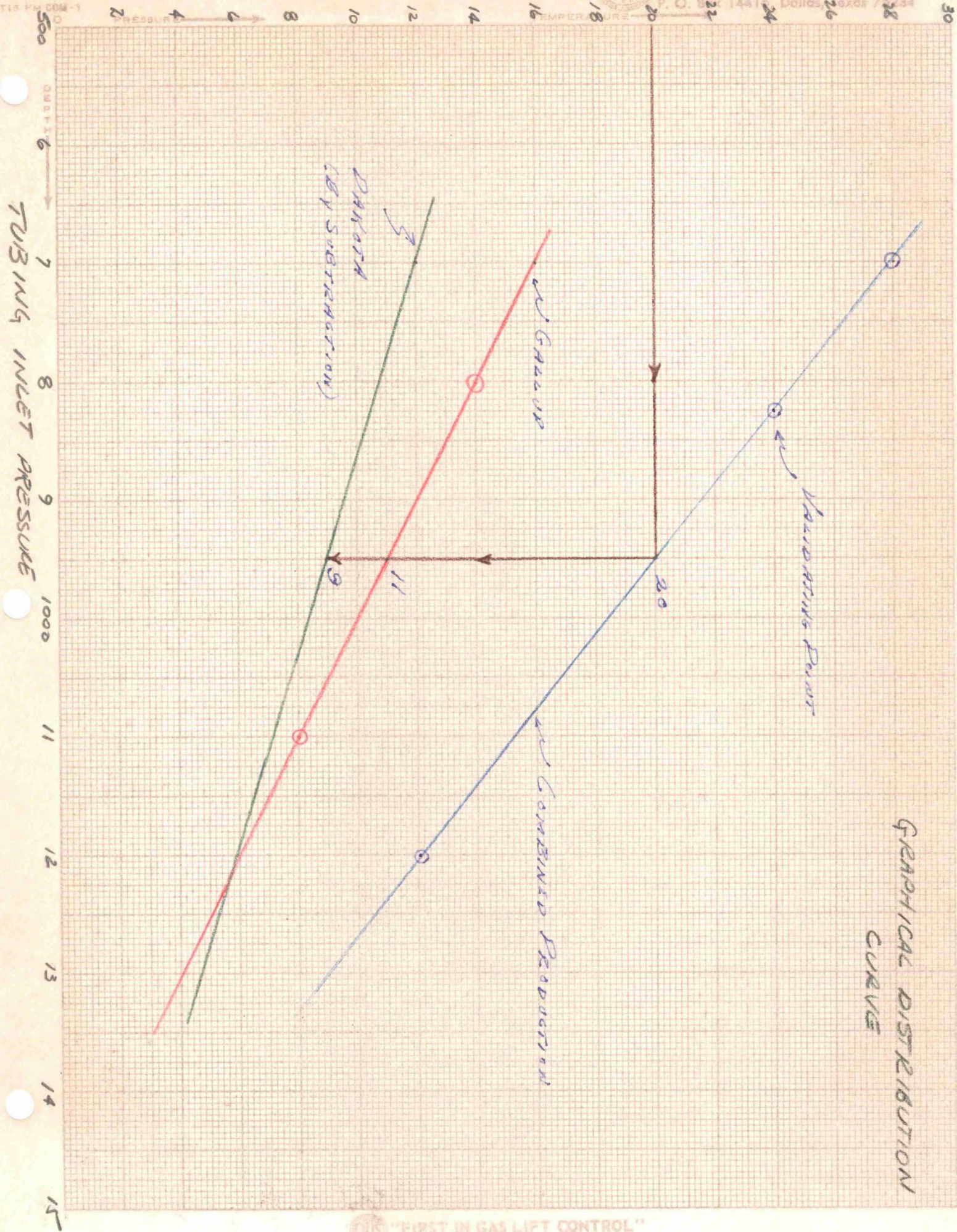
Dakota 8 BOPD x \$2.27 = 18.16

Total Separate Value = \$50.06/Day

Comingled Value - 22 BOPD x \$2.33 = \$51.26/Day

The value of the comingled production will not be less than the value of the production from each common source of supply.





GRAPHICAL DISTRIBUTION  
 CURVE



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

P. O. Drawer 1857  
Roswell, New Mexico 88201

<b>RECEIVED</b>	
DURANGO PROJ.	
SEP 25 1964	
OFFICE MGR.	<i>B</i>
September 21, 1964	<i>W</i>
ASST. MGR.	<i>W</i>
DIST. ENG.	<i>W</i>
<i>GAG</i>	<i>W</i>

Continental Oil Company  
P. O. Box 3312  
Durango, Colorado

Attention: Mr. H. D. Haley

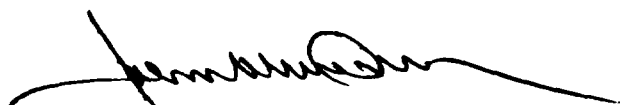
Gentlemen:

Your letter of August 11, with attachments, requests approval to commingle oil production from the Gallup and Dakota formations in your well No. 28-1 Jicarilla Apache on Jicarilla tribal Contract No. 66.

According to the system, as outlined in your proposal, communication between the reservoirs will be accomplished by the use of a downhole separation tool. By additional information submitted in a separate letter on September 8 you state the production from each reservoir will be allocated through the testing of each zone by manually blanking off one zone in the separation tool and producing the other zone. Form 9-361, Lessee's Monthly Report of Sales and Royalty, must show all computations used in the calculation of oil volume for each formation.

The method you propose for the downhole commingling is hereby approved. Any change in the system must be approved by this office.

Sincerely yours,



JOHN A. ANDERSON  
Regional Oil & Gas Supervisor

# SUN OIL COMPANY

MILLARD MOOR  
MANAGER  
FRED E. BUCHANAN  
ASSISTANT MANAGER

GULF COAST DIVISION  
THE PETROLEUM BUILDING  
P.O. BOX 2831  
BEAUMONT, TEXAS 77704

MAIN OFFICE JLC  
OCT 7 PM 1

October 5, 1964

Mr. Elvis A. Utz  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Elvis:

I am very appreciative of the time you and Jim Kapteima made available to Billy Hodges and me last Tuesday afternoon for a discussion of the Otis multiple completion choke assembly and our observations of its use.

Billy and I have each been acquainted with Karl Tunstall for the past three years. His experience with the use of this multiple completion tool has been abundant and he is well qualified to discuss and demonstrate the use of the tool.

Neither Billy nor I had met any of the Continental personnel prior to Tuesday, but I was very favorably impressed with the preparation George Brown appeared to have made for the presentation.

Yours very truly,



Joe A. Owens/smh



# CONTINENTAL OIL COMPANY

LEGAL DEPARTMENT

A. T. SMITH  
GENERAL ATTORNEY  
C. R. HAMPTON  
F. E. RADLOFF  
G. H. MAYBERRY  
C. R. ROBERTS  
J. D. TRESNER  
ATTORNEYS

1755 GLENARM PLACE  
DENVER, COLORADO 80202  
August 2, 1965

MAIN OFFICE  
'65 Aug 3 AM 10 22

Mr. D. S. Nutter, Chief Engineer  
New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

RE: Case 3112, Hearing of July 28,  
1965, in regard to Order No.  
R-2824 authorizing Gallup-Dakota  
commingling in the wellbore  
of Jicarilla 28 Well No. 1,  
Rio Arriba County, New Mexico

Dear Mr. Nutter:

In response to your request at the above captioned hearing, I am providing you the recommendations of Continental Oil Company as stated by Mr. George Brown at the close of direct examination of him by me. The following is the verbatim response of Mr. Brown.

"Initially we request and recommend that Continental Oil Company be permitted here today to continue producing the Jicarilla 28 Well No. 1 with the dualflow choke installed in it until such time as the Commission announces its ruling with respect to the hearing today.

We recommend that the Commission grant Continental Oil Company approval to install such a dualflow choke in the Jicarilla 28 Well No. 1 and to install such a dualflow choke in any existing Gallup-Dakota marginal oil wells located on its acreage in the West Lindrith Field and in any Gallup-Dakota marginal oil wells which may be drilled on its acreage in the West Lindrith Field,

Mr. D. S. Nutter  
August 2, 1965  
Page 2

the acreage being shown on Exhibit 1 of the hearing of September 30, 1964 and specifically that:

(1) The Commission make provision for administrative approval of future downhole commingling installations by use of the dualflow choke in existing Gallup-Dakota marginal oil wells and any Gallup-Dakota marginal oil wells which may be drilled within the Continental Oil Company's West Lindrith acreage which consists of four Jicarilla apache leases covering Sections 15 through 22 and 27 through 34, T 25 N, R 4 W, Rio Arriba County, New Mexico;

(2) Application for such administrative approval be filed in triplicate with the Commission and such applications contain detailed data as to gravity, value and volume of the liquid hydrocarbons from each pool, expected gravity and value of the commingled liquid-hydrocarbon production, a schematic diagram of the proposed installation, a plat showing the location of all wells on applicant's lease and the pool from which each well is producing, and whether the actual commercial value of the commingled production will be less than the sum of the values of the production from each common source of supply and if so how much less;

(3) Allocation of production to the Gallup and Dakota zones be by the subtraction method based on annual production tests of the commingled Gallup-Dakota and the Dakota at stabilized production rates;

(4) Continental conduct a packer leakage test and a seal leakage test upon installation of the dualflow choke;

(5) Continental conduct a production test of the commingled Gallup-Dakota and of the Dakota upon installation of the dualflow choke and annually thereafter;

(6) Continental conduct an annual packer leakage test with respect to each well so equipped;

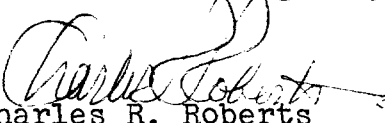
(7) Continental be granted an exception to Rule 303A and any other applicable Rules for the permanent installation of the dualflow choke in the Jicarilla 28 Well No. 1 and in any existing

Mr. D. S. Nutter  
August 2, 1965  
Page 3

Gallup-Dakota marginal oil wells or Gallup-Dakota marginal oil wells which may be drilled on Continental Oil Company's West Lindrith acreage, the location of which I have already described."

If we can provide you additional information, please do not hesitate to call on us.

Best Personal Regards,

  
Charles R. Roberts  
Attorney

CRR:kn

cc: Mr. J. M. Durrett, Jr.  
Mr. George Brown



# SHELL OIL COMPANY

SHELL BUILDING  
P. O. BOX 2099  
HOUSTON, TEXAS 77001

August 25, 1964

Subject: Jicarilla Apache 28 Well No. 1  
Sec. 28, T-25-N, R-4-W  
Rio Arriba County, New Mexico

RECEIVED	
AUG 27 1964	
OFFICE NO.	1 B
DATE	
TITLE	
DIST. LKA.	
By	

Continental Oil Company  
P. O. Box 3312  
Durango, Colorado

Attention Mr. H. D. Haley

Gentlemen:

In response to your letters of August 14, 1964, and August 21, 1964, and based on the facts set out therein, this is to advise that Shell Oil Company, as purchaser of the crude oil production, does not object to commingling the Gallup and Dakota production from the subject well.

Please advise us of the effective date of such commingling.

Yours very truly,

B. G. Crocker  
Crude Oil Representative

DKB:SMP



DATA REQUIREMENTS FOR SURFACE COMMINGLING INSTALLATIONS

Average Daily Oil Production for 90-Day Period:

Jicarilla 28 Well No. 1	Gallup	Dakota
May	13 BOPD	8 BOPD
June	13 BOPD	5 BOPD
July	10 BOPD	8 BOPD

Top Unit Allowable: Gallup - 124 BOPD -  $\frac{124}{46.0} = 2.35$  2.74  
Dakota - 164 BOPD

Crude Purchaser: Llaves Pipeline Ltd. - Farmington, New Mexico

Royalty Interest Owner: Jicarilla Apache Tribe

Liquid Hydrocarbon Gravities: Gallup - 44.4° API

Dakota - 48.4° API

Commingled Liquid Hydrocarbon Gravity - 46° API

Commingled gravity on adjacent lease (Jicarilla 22) over a six-month period has averaged 45.3° API.

Value of 44.4° API Crude = \$2.35 per barrel

Value of 48.4° API Crude = \$2.35 per barrel less \$.08 = \$2.27

Value of 46° API Crude = \$2.35 per barrel less \$.02 = \$2.33

Anticipated Producing Rates: Gallup - 14 BOPD

Dakota - 8 BOPD

Value Calculations: Gallup 14 BOPD x \$2.35 = \$32.90

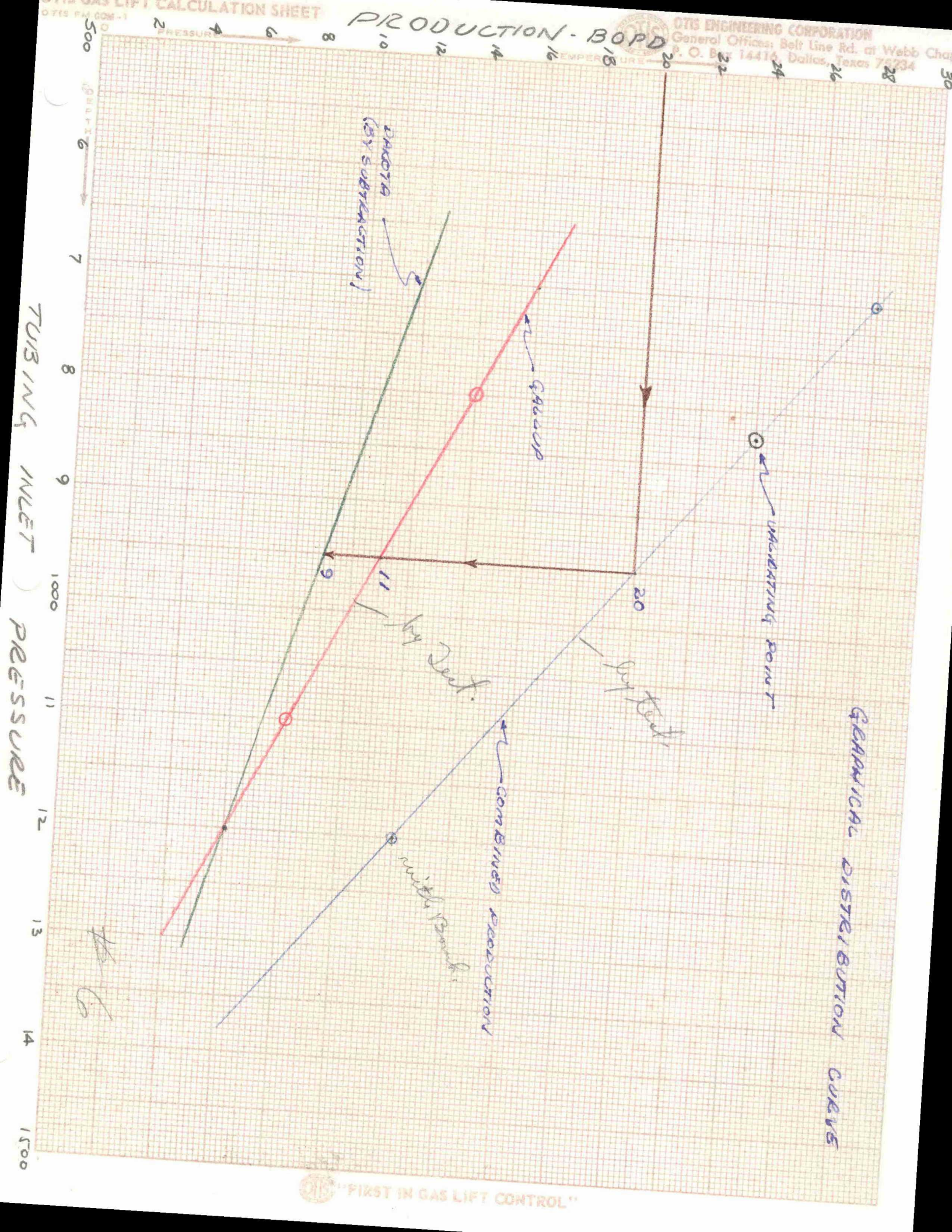
Dakota 8 BOPD x \$2.27 = 18.16

Total Separate Value = \$50.06/Day

Commingled Value - 22 BOPD x \$2.33 = \$51.26/Day

The value of the commingled production will not be less than the value of the production from each common source of supply.







# Railroad Commission of Texas

## OIL AND GAS DIVISION

COMMISSIONERS  
BEN RAMSEY  
Chairman  
ERNEST G. THOMPSON  
WILLIAM J. MURRAY, JR.  
O. D. HYNEMAN, Secretary



HARRY M. BATIS  
Chief Supervisor  
ARTHUR H. BARBECK  
Chief Engineer  
ROSS BELL  
Chief Accountant

AUSTIN, TEXAS

March 21, 1963

Sun Oil Company  
Box 2631  
Beaumont, Texas

ATTENTION: Mr. Joe A. Owens & Mr. J. W. Hodges

IN RE: Rule 15 exception in the STOWELL FIELDS, Chambers County.

Gentlemen:

The Commission, at conference March 21, 1963, approved your application for permission to operate a multiple completion choke assembly in your Hankamer Well No. 2-C and No. 2-T in the Stowell Fields. Testimony offered at the hearing indicated oil would be produced from the Upper Discorbis Zone through perforations 7,337' to 7,342' and gas with condensate would be produced from the Discorbis Zone through perforations 7,452' to 7,456'.

At the conclusion of a six months testing period, a review of the performance data obtained from the subject well will be made. Required testing of the subject completions shall include an initial test and additional tests to be made quarterly thereafter.

Yours very truly,

*Arthur H. Barbeck*  
Arthur H. Barbeck  
Chief Engineer

BDT:cbr  
cc - RRC - Houston, Texas  
Bob Harris  
Otis Engineering Corp.

*Og v2*

# Railroad Commission of Texas

OIL AND GAS DIVISION

COMMISSIONERS  
BEN RAMSEY  
*Chairman*  
ERNEST O. THOMPSON  
JIM C. LANGDON  
O. D. HYNDMAN, *Secretary*



AUSTIN, TEXAS

HARRY M. BATIS  
*Chief Supervisor*  
ARTHUR H. BARBECK  
*Chief Engineer*  
ROSS BELL  
*Chief Accountant*

October 18, 1963

Sun Oil Company  
P. O. Box 2831  
Beaumont, Texas

Attention: Mr. Joe A. Owens

In Re: Your Application for Purpose of  
Reviewing Performance Data on  
your Hankamer Well No. 2-U and  
Well No. 2-L, Stowell Fields,  
Chambers County, Texas

Gentlemen:

At a formal conference held October 18, 1963, the Commission considered the evidence submitted by you in connection with the operation of an Odis Multiple Completion Choke Assembly and ruled that you be allowed to continue operating the subject wells with the choke assembly in place since one zone is gas and the other zone is apparently a salvage oil operation.

You will be required to conduct quarterly tests and submit the results to this office on each of the subject wells.

Yours very truly,

Bob R. Harris, Director  
Research and Inspection

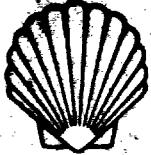
BRH:pw

cc: Mr. Winston D. Tyler  
RRC - Houston, Texas

Sun Oil Company  
P. O. Box 2831  
Beaumont, Texas  
Attention: Mr. J. W. Hodges

Mr. Carroll F. Burton  
P. O. Box 1511

①, ②, ③



# SHELL OIL COMPANY

SHELL BUILDING

P. O. BOX 2099

HOUSTON, TEXAS 77001

August 25, 1964

Subject: Jicarilla Apache 28 Well No. 1  
Sec. 28, T-25-N, R-4-W  
Rio Arriba County, New Mexico

RECEIVED	
AUG 27 1964	
OFFICE NO.	1 B
DATE	
TITLE	
DIST. OFF.	

Continental Oil Company  
P. O. Box 3312  
Durango, Colorado

Attention Mr. H. D. Haley

Gentlemen:

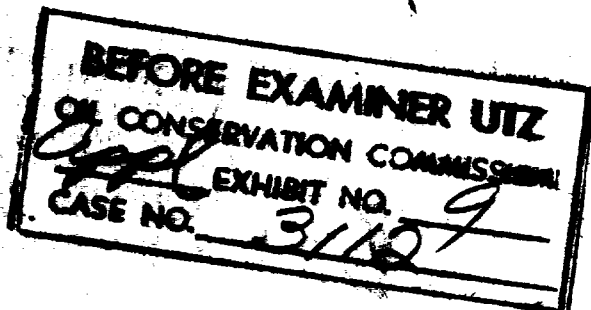
In response to your letters of August 14, 1964, and August 21, 1964, and based on the facts set out therein, this is to advise that Shell Oil Company, as purchaser of the crude oil production, does not object to commingling the Gallup and Dakota production from the subject well.

Please advise us of the effective date of such commingling.

Yours very truly,

B. G. Crocker  
Crude Oil Representative

DKB:SMP





# CONTINENTAL OIL COMPANY

MAIN OFFICE 0001

'65 AUG 2 AM 7 30

P. O. Box 3312  
Durango, Colorado 81302  
July 29, 1965

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

Attn: Mr. D. S. Nutter - Chief Examiner

Dear Mr. Nutter:

Attached is another copy of Exhibit No. 4 (Case #3112) which you requested be brought up to date.

Also attached are copies of the recorded pressures on Jicarilla 28 Well No. 1, which you requested, from May 4, 1965, to June 19, 1965. The charts show the surface pressure buildup on the Gallup (upper) zone during the Dakota allocation test and shut-in period for the packer leakage test taken near the end of the test period. A copy of the charts obtained during the packer leakage test are also included. A seven-day chart starting July 1, 1965, is also attached for your information which shows the casing and tubing pressures while producing both zones up the tubing through the dual flow choke. This chart was taken after the final packer leakage test.

If any additional information is required, please advise.

Very truly yours,

G. A. Brown  
Production Engineer  
Durango District  
Production Department

GAB/ae

Enc.



RECEIVED  
1964 AUG 15 AM 11  
33

# CONTINENTAL OIL COMPANY

P. O. Box 3312  
Durango, Colorado  
August 11, 1964

New Mexico Oil Conservation Commission (3)  
P. O. Box 2088  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter - Secretary Director

Gentlemen:

A hearing before the New Mexico Oil Conservation Commission is requested for the purpose of presenting application by Continental Oil Company to install a downhole commingling tool on a test basis in an existing Gallup-Dakota dual-oil completion well. The test well is Jicarilla 28 Well No. 1, located in Unit J, Section 28, T25N, R4W, Rio Arriba County, New Mexico.

The two sources of supply are commonly owned and the proposed downhole installation is intended to prevent communication between the two reservoirs at all times. Application on a one-well test basis is proposed so that data and procedures for such tests as packer leakage and communication tests and production allocation tests can be established. The commingling installation will be observed to determine the effectiveness of the installation.

The primary purpose of the installation and testing is to establish a method whereby further development of the 16-section West Lindrith block in T25N, R4W, can be economically justified. Past producing histories indicate that further development cannot be economically justified by conventional single and dual completion methods and present producing methods.

The following data and exhibits are attached for preliminary information:

1. Lease plat showing wells on the lease and pools from which each are producing.
2. Data requirements for surface commingling installations.

3. Log of Jicarilla 28 Well No. 1, showing formation tops and location of present retainer production packer and perforations in the Gallup and Dakota formation.
4. Schematic diagram of Otis Engineering Corporation's "Dual Flow Choke Assembly" downhole commingling tool.
5. Schematic diagram showing present and proposed installations in Jicarilla 28 Well No. 1.
6. Composite Performance Curve for a typical Jicarilla Gallup and Dakota well.

If additional information is required, please advise.

Very truly yours,



H. D. Haley  
District Manager  
Durango District  
Production Department

GAB/ca

cc: Mr. E. A. Austin, Continental Oil Company, Denver, Colorado (2)  
U. S. Geological Survey, Roswell, New Mexico (1)



DATA REQUIREMENTS FOR SURFACE COMINGLING INSTALLATIONS

Average Daily Oil Production for 90-Day Period:

Jicarilla 28 Well No. 1	<u>Gallup</u>	<u>Dakota</u>
May	13 BOPD	8 BOPD
June	13 BOPD	5 BOPD
July	10 BOPD	8 BOPD

Top Unit Allowable: Gallup - 124 BOPD

Dakota - 164 BOPD

Crude Purchaser: Llaves Pipeline Ltd. - Farmington, New Mexico

Royalty Interest Owner: Jicarilla Apache Tribe

Liquid Hydrocarbon Gravities: Gallup - 44.4° API

Dakota - 48.4° API

Commingled Liquid Hydrocarbon Gravity - 46° API

Commingled gravity on adjacent lease (Jicarilla 22) over a six-month period has averaged 45.3° API.

Value of 44.4° API Crude = \$2.35 per barrel

Value of 48.4° API Crude = \$2.35 per barrel less \$.08 = \$2.27

Value of 46° API Crude = \$2.35 per barrel less \$.02 = \$2.33

Anticipated Producing Rates: Gallup - 14 BOPD

Dakota - 8 BOPD

Value Calculations: Gallup 14 BOPD x \$2.35 = \$32.90

Dakota 8 BOPD x \$2.27 = 18.16

Total Separate Value = \$50.06/Day

Commingled Value - 22 BOPD x \$2.33 = \$51.26/Day

The value of the commingled production will not be less than the value of the production from each common source of supply.

August 2, 1965

Mr. D. S. Nutter, Chief Engineer  
New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

RE: Case 3112, Hearing of July 28,  
1965, in regard to Order No.  
R-2824 authorizing Gallup-Dakota  
commingling in the wellbore  
of Jicarilla 28 Well No. 1,  
Rio Arriba County, New Mexico

Dear Mr. Nutter:

In response to your request at the above captioned hearing, I am providing you the recommendations of Continental Oil Company as stated by Mr. George Brown at the close of direct examination of him by me. The following is the verbatim response of Mr. Brown.

"Initially we request and recommend that Continental Oil Company be permitted here today to continue producing the Jicarilla 28 Well No. 1 with the dualflow choke installed in it until such time as the Commission announces its ruling with respect to the hearing today.

We recommend that the Commission grant Continental Oil Company approval to install such a dualflow choke in the Jicarilla 28 Well No. 1 and to install such a dualflow choke in any existing Gallup-Dakota marginal oil wells located on its acreage in the West Lindrith Field and in any Gallup-Dakota marginal oil wells which may be drilled on its acreage in the West Lindrith Field,

Mr. D. S. Nutter  
August 2, 1965  
Page 2

the acreage being shown on Exhibit 1 of the hearing of September 30, 1964 and specifically that:

(1) The Commission make provision for administrative approval of future downhole commingling installations by use of the dualflow choke in existing Gallup-Dakota marginal oil wells and any Gallup-Dakota marginal oil wells which may be drilled within the Continental Oil Company's West Lindrith acreage which consists of four Jicarilla apache leases covering Sections 15 through 22 and 27 through 34, T 25 N, R 4 W, Rio Arriba County, New Mexico;

(2) Application for such administrative approval be filed in triplicate with the Commission and such applications contain detailed data as to gravity, value and volume of the liquid hydrocarbons from each pool, expected gravity and value of the commingled liquid-hydrocarbon production, a schematic diagram of the proposed installation, a plat showing the location of all wells on applicant's lease and the pool from which each well is producing, and whether the actual commercial value of the commingled production will be less than the sum of the values of the production from each common source of supply and if so how much less;

(3) Allocation of production to the Gallup and Dakota zones be by the subtraction method based on annual production tests of the commingled Gallup-Dakota and the Dakota at stabilized production rates;

(4) Continental conduct a packer leakage test and a seal leakage test upon installation of the dualflow choke;

(5) Continental conduct a production test of the commingled Gallup-Dakota and of the Dakota upon installation of the dualflow choke and annually thereafter;

(6) Continental conduct an annual packer leakage test with respect to each well so equipped;

(7) Continental be granted an exception to Rule 303A and any other applicable Rules for the permanent installation of the dualflow choke in the Jicarilla 28 Well No. 1 and in any existing

Mr. D. S. Nutter  
August 2, 1965  
Page 3

Gallup-Dakota marginal oil wells or Gallup-Dakota marginal oil wells which may be drilled on Continental Oil Company's West Lindrith acreage, the location of which I have already described."

If we can provide you additional information, please do not hesitate to call on us.

Best Personal Regards,

Original Sign  
CHARLES R. ROBERTS

Charles R. Roberts  
Attorney

CRR:kn

cc: Mr. J. M. Durrett, Jr.  
Mr. George Brown

bcc: Mr. Denny Watts

OIL CONSERVATION COMMISSION  
P. O. BOX 871  
SANTA FE, NEW MEXICO

LEGAL DIVISION  
PHONE 827-2741

November 10, 1964

VIA AIR MAIL

Mr. George E. Blake  
Division Manager  
Otis Engineering Corporation  
3813 West County Road  
Odessa, Texas

Re: Case 3112 ✓

Dear Mr. Blake:

We are today forwarding, via air mail freight, collect, the demonstration model downhole commingling tool that you left to be examined by the Commission's engineers concerning the above case. An order should be issued in this case in the near future.

We appreciate the opportunity to examine the model.

Very truly yours,

J. M. DURETT, Jr.  
Attorney

JMD/esr

OIL CONSERVATION COMMISSION  
P. O. BOX 871  
SANTA FE, NEW MEXICO

LEGAL DIVISION  
PHONE 827-2741

August 20, 1965

C  
O  
P  
Y  
  
Mr. Charles R. Roberts  
Attorney  
Continental Oil Company  
1755 Glenarm Place  
Denver, Colorado 80202

Re: Case No. 3112  
Order No. R-2824-A ✓

Dear Charlie:

This letter will confirm our recent telephone conversation concerning the above case and order.

The Commission felt that an order could not be entered in this case establishing an administrative procedure to authorize use of the dual-flow downhole choke in additional wells as the case was advertised only for the Jicarilla Well No. 28 and our jurisdiction to enter such an order would therefore be questionable. Although it will be necessary to docket and advertise another case to consider the establishment of such an administrative procedure, it should not be necessary to present additional evidence. The testimony presented in Case No. 3112 thoroughly covered your proposed administrative procedure and could be incorporated into the record by motion.

In order to create a complete record in the new case, I suggest you file a formal application requesting establishment of the administrative procedure and describing the area in which you propose the procedure would be applicable. As we discussed,

OIL CONSERVATION COMMISSION  
P. O. BOX 871  
SANTA FE, NEW MEXICO

-2-

August 20, 1965

Mr. Charles R. Roberts  
Attorney  
Continental Oil Company  
1755 Glenarm Place  
Denver, Colorado 80202

C  
I feel that the administrative procedure would have to be applicable to all operators within a given area.

O  
I am enclosing an additional copy of Order No. R-2824-A.  
Please contact me if we can be of further assistance.

Best personal regards.

Very truly yours,

J. M. DURBETT, Jr.  
Attorney

P  
Y  
JMD/esr  
Enclosure