

CASE 1916: Application of HUMBLE
Oil & Mfg. to commingle Empire-Abo
Pool production.

Casa No.

1916

Application, Transcript,
Small Exhibits, Etc.

DRAFT

FHF:ear
March 10

7.4.3
5/11
J.P. 2/11
J.P. 3/14
A.P. 3/14

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 1916

Order No. R- ~~16~~ 1630

APPLICATION OF HUMBLE OIL & REFINING
COMPANY FOR PERMISSION TO COMMINGLE
THE PRODUCTION FROM TWO SEPARATE
LEASES ~~FOR~~ EDDY COUNTY, NEW MEXICO

IN

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 1:30 o'clock P.m. on
March 9, 1960, at Santa Fe, New Mexico, before
Daniel B. Nutter, Examiner duly appointed by the Oil
Conservation Commission of New Mexico, hereinafter referred to
as the "Commission," in accordance with Rule 1214 of the Com-
mission Rules and Regulations.

NOW, on this day of March, 1960, the Commission,
a quorum being present, having considered the application, the
evidence adduced, and the recommendations of the Examiner,
Daniel B. Nutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required
by law, the Commission has jurisdiction of this cause and the
subject matter thereof.

(2) That the applicant is the owner of a ^{Federal} ~~United States Oil~~
~~and Gas~~ lease covering the NW/4 of Section 9, Township 18 South,
Range 27 East, NMPM, Eddy County, New Mexico.

(3) That Hondo Oil & Gas Company is the owner of ^{a Federal} ~~the~~
~~United States Oil and Gas~~ lease covering the SW/4 of said
Section 9.

(4) That all of the above-described acreage is committed
to the Chalk Bluff Draw Unit of which the applicant is the
unit operator.

(5) That the applicant proposes to commingle the Empire-
Abo Pool production from all wells presently ^{completed} ~~drilled~~ or here-
after ^{drilled} ~~completed~~ on ^{that portion of} the two above-described leases after ^{comprising the E/2. W/2}
separately metering said Hondo lease production and passing
said Humble lease production through a production separator.

(6) That this application is made necessary by the fact
that while all the subject acreage is within the Chalk Bluff
Draw Unit, a participating area for Empire-Abo Pool production
has not yet been established.

(7) That each of the two wells presently completed on the
subject acreage ^{is} ~~are~~ capable of producing ~~substantially in its~~
~~excess of the top unit~~ allowable ⁱⁿ for the Empire-Abo Pool, and
~~the owners of all interests in said acreage have consented to~~
~~the proposed commingling.~~

(8) That under the terms of the Chalk Bluff Draw Unit
Agreement, when an initial participating area for Empire-Abo
Pool production is established, ^{participation} ~~it~~ will be applied retro-
actively to the date of the first Empire-Abo production.

(9) That approval of the subject application will neither
cause waste nor impair correlative rights, provided adequate
treating, testing, and storage facilities are installed.

IT IS THEREFORE ORDERED:

That the applicant be and the same is hereby authorized to
commingle in a common tank battery the Empire-Abo Pool produc-
tion from all wells presently ^{completed} ~~drilled~~ or hereafter ^{drilled}
on ^{that portion of} the Humble Federal lease comprising the NW/4 of Section 9
and from ^{that portion of} the Hondo Federal lease comprising the E/2 of Section 9.

~~all in~~ Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico, after separately metering said Hondo lease production and passing said Humble lease production through a production separator.

PROVIDED HOWEVER, That the applicant shall provide adequate facilities to permit the testing of all ^{Empire - Abo Pool} wells located on ^{the} ~~same~~ ^{subject} ~~area~~ ^{at} least once each month to determine the individual production from each well, ~~on each lease~~

IT IS FURTHER ORDERED:

That all meters shall be operated and maintained in such a manner as to insure an accurate measurement of the liquid hydrocarbon production at all times.

That meters shall be checked for accuracy at intervals not to exceed one month until further direction by the Secretary-Director.

That meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

DONE at Santa Fe, New Mexico -----



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P. O. Box 6721
Roswell, New Mexico

IN REPLY REFER TO:

March 8, 1960

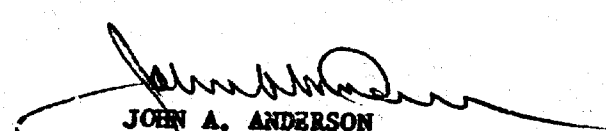
Humble Oil and Refining Company
P. O. Box 1287
Roswell, New Mexico

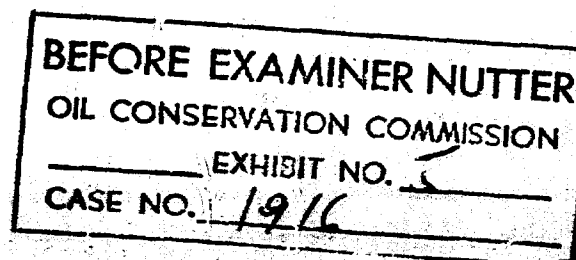
Attention: Mr. R. M. Richardson

Gentlemen:

Your letter of March 1, requests approval to commingle production from leases Las Cruces 07093 and New Mexico 031186 until such time as an Abo formation participating area is set up for the Chalk Bluff Draw unit.

The method you propose for measuring and shipping oil from the above mentioned leases is satisfactory to this office provided that no wells other than those currently proposed for the Bluff and Bluff sec. 9, T. 18 S., R. 27 E., N.M.P.M., be produced into the common storage battery unless prior approval has been received from this office.


JOHN A. ANDERSON
Regional Oil and Gas Supervisor



DOCKET: EXAMINER HEARING MARCH 9, 1960

Oil Conservation Commission - 1:30 p.m., Mabry Hall, State Capitol, Santa Fe, N. M.

The following cases will be heard before Daniel S. Nutter, Examiner, or A. L. Porter, Jr., Secretary-Director:

CONTINUED CASE

CASE 1891: Application of Val R. Reese & Associates, Inc. for extension of the Escrito-Gallup Oil Pool and for the promulgation of special rules and regulations governing said pool. Applicant, in the above-styled cause, seeks an order extending the Escrito-Gallup Oil Pool, Rio Arriba County, New Mexico, to include acreage in Sections 19 and 30, Township 24 North, Range 6 West, and acreage in Sections 24 and 25, Township 24 North, Range 7 West. Applicant also proposes the promulgation of special rules and regulation governing the drilling, spacing and allocation of allowables to oil wells and gas wells in said pool, including gas-oil ratio limitations.

NEW CASES

CASE 1914: Application of Great Western Drilling Company for approval of a unit agreement, for establishment of a water injection project and an allowable therefor, and for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks approval of its Pebble Queen Unit Agreement, which unit comprises approximately 961 acres in Townships 12 and 13 South, Range 31 East, Chaves County, New Mexico. Applicant further seeks permission to institute a water injection project on said unit by the injection of water into the Queen formation through six injection wells located in Sections 1, 2 and 11 of said Township 13 South, Range 31 East, with a special allowable to be assigned to said project. Applicant also seeks permission to install an automatic custody transfer system to handle the Caprock-Queen production from all wells on said unit.

CASE 1915: Application of Redfern and Herd for the creation of a new gas pool for Gallup production consisting of portions of Sections 17, 18, and 19, Township 24 North, Range 6 West, and consisting of portions of Sections 13 and 24, Township 24 North, Range 7 West, all in Rio Arriba County, New Mexico.

CASE 1916: Application of Humble Oil & Refining Company for permission to commingle the production from two separate leases. Applicant, in the above-styled cause, seeks permission to commingle the Empire-Abo Pool production from all wells located on two separate leases, one of which comprises the SW/4 of Section 9, the other of which comprises the NW/4 of said Section 9, all in Township 18 South, Range 27 East, Eddy County, New Mexico.

#1-INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Deliver **ONLY** to addressee ☐ Show address where delivered

(Additional charges required for these services)

RETURN RECEIPT

Received the numbered article described on other page.

SIGNATURE OR NAME OF ADDRESSEE (must always be filled in)

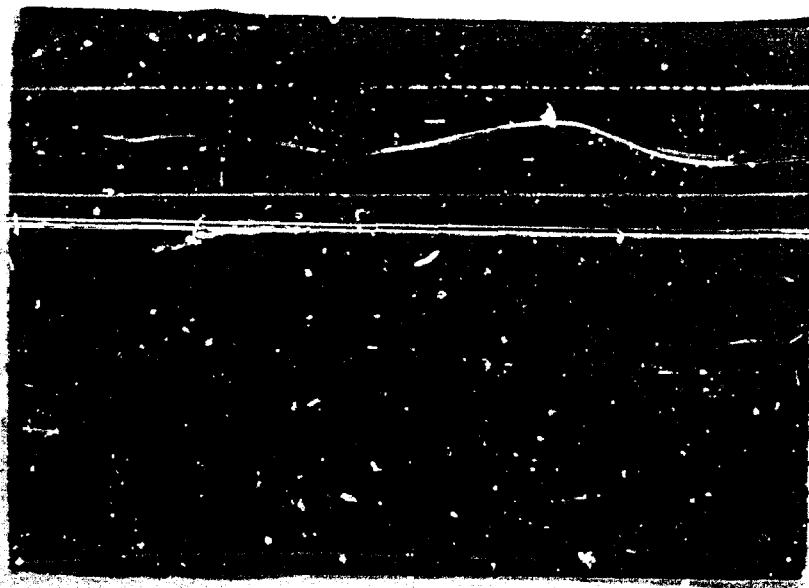
Pan American

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

Barbara G. Stevenson

DATE DELIVERED **DEC 11 1960** ADDRESS WHERE DELIVERED (only if requested in item #1)

65-15-100-1 400



POST OFFICE DEPARTMENT
SPECIAL DELIVERY

INSTRUCTIONS: Fill in tears below and complete 21 on other side, when applicable. Mailed stamped ends and attach to back of article. Print on front of article RETURN RECEIPT REQUESTED.

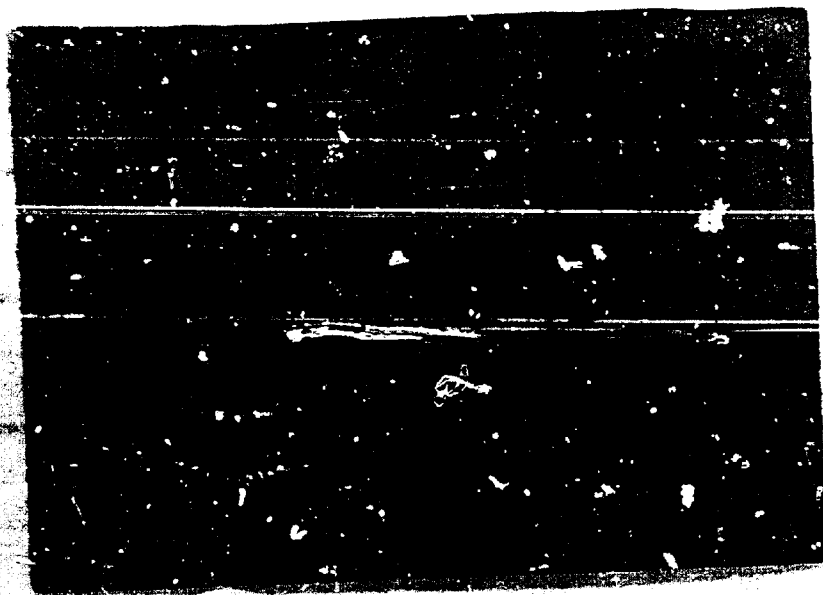
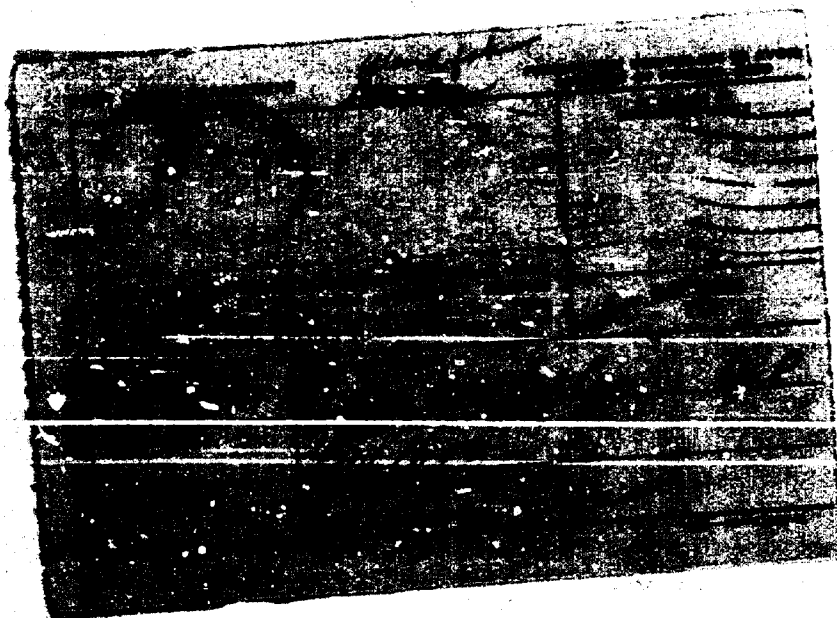
NAME OF ADDRESSEE
21822
CITY, STATE AND ZIP
Midland Texas

NAME OF SENDER
H. N. R. 10
STREET AND NO. OR P. O. BOX
Box 1600
CITY, STATE AND ZIP
Midland Texas

POSTAGE PAID
MIDLAND
FEB 23 1961

RETURN TO

60-11540-4



COPY

HUMBLE OIL & REFINING COMPANY

February 22, 1960

Humble Oil & Gas, Box 640, Roswell, New Mexico
 Pan American Petroleum Corporation, Box 1540, Midland, Texas
 Robert F. Windfohr, 1107 Continental Life Bldg., Fort Worth,
 Texas

Gentlemen:

This is to advise that we have made Application to the Oil
 Conservation Commission for an Exception to Statewide Rule 309
 requesting permission to commingle the production from the
 Abo Formation into a common tank battery located in the NW/4
 of Section 5, T-15-S, R-27-E, Gray County, New Mexico.

A copy of our Application is attached in accordance with
 Paragraph 6, Rule 309(b).

Very truly yours,

R. E. MCCARTY

By _____

JEP:lw

Enc.

cc Mr. A. F. McNeely
 Mr. R. E. Alworth
 Petroleum Engineering Section
 Fort Worth

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
Appl	EXHIBIT NO. 3
CASE NO.	1946



PETROLEUM AND ITS PRODUCTS

ROSWELL DISTRICT

W. A. SHELLSHEAR
District Manager

F. O. MORTLOCK
District Exploration Manager

M. I. TAYLOR
District Production Manager

G. A. PRICE
District Services Manager

GULF OIL CORPORATION

P. O. DRAWER 669 — ROSWELL, NEW MEXICO

FORT WORTH
PRODUCTION DIVISION

March 7, 1960

Humble Oil & Refining Company
P. O. Box 1287
Roswell, New Mexico

Attention: Mr. R. M. Richardson

Re: Humble's Application to New Mexico Oil
Conservation Commission of recent date
proposing commingling production from
the W/2 of Section 9-18S-27E, Eddy County,
New Mexico, from the Abo Pool.

Gentlemen:

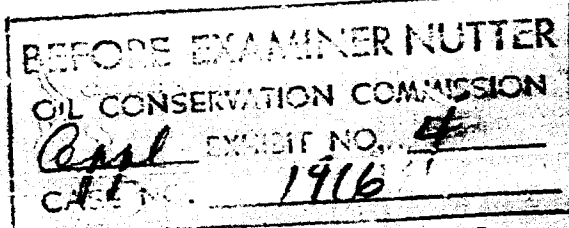
This will confirm the fact that Gulf has no objection
to the proposed commingling of Abo oil production from the
Chalk Bluff Draw Unit on the W/2 of Section 9-18S-27E. Gulf
is an offset operator to the South owning the $\frac{3}{4}$ NW/4 of
Section 16-18S-27E. As a member of the Chalk Bluff Draw Unit
Agreement, Gulf concurs with your application.

Very truly yours,

W. A. Shellshear

W. A. Shellshear

WVK:ej1



BEFORE THE OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF HUMBLE OIL & REFINING COMPANY
FOR PERMISSION TO COMMINGLE PRO-
DUCTION FROM THE ABO FORMATION
FROM TWO SEPARATE LEASES COVERING
THE SW $\frac{1}{4}$ OF SECTION 9, TOWNSHIP 18
SOUTH, RANGE 27 EAST, N.M.P.M.,
AND THE NW $\frac{1}{4}$ OF SECTION 9, TOWNSHIP
18 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

CASE NO. 1916

TO: OIL CONSERVATION COMMISSION
P. O. BOX 871
Santa Fe, New Mexico

Gentlemen:

Humble Oil & Refining Company states as follows:

1. Humble Oil & Refining Company is the owner of a United States Oil and Gas Lease covering the NW $\frac{1}{4}$ of Section 9, Township 18 South, Range 27 East, N.M.P.M., Eddy County, New Mexico. Hondo Oil & Gas Company is the owner of a United States Oil and Gas Lease covering the SW $\frac{1}{4}$ of Section 9, Township 18 South, Range 27 East, N.M.P.M., Eddy County, New Mexico.

2. Applicant hereby requests an exception to the provisions of Rule 309 that would permit the commingling of production from the Abo formation in a common tank battery to be located upon the NW $\frac{1}{4}$ of said Section 9.

3. Applicant proposes to use a metering separator to meter the production from each lease.

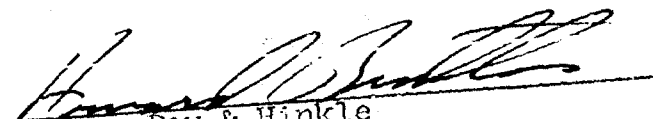
4. The granting of this Application will be in the interest of conservation and will not violate correlative rights.

WHEREFORE, Applicant prays that this matter be set down for hearing at the first available Examiner Hearing, and that it be advertised as required by law, and that upon hearing, the Commission authorize an exception to the provisions of Rule 309 as requested above, and for

*Don't
Missed
2-26-6
P*

such other relief as may be deemed proper.

HUMBLE OIL & REFINING COMPANY

By 
Hervey, Dow & Hinkle
P. O. Box 547
Roswell, New Mexico

DOCKET: EXAMINER HEARING MARCH 9, 1960

Oil Conservation Commission - 1:30 p.m., Mabry Hall, State Capitol, Santa Fe, N. M.

The following cases will be heard before Daniel S. Nutter, Examiner, or A. L. Porter, Jr., Secretary-Director:

CONTINUED CASE

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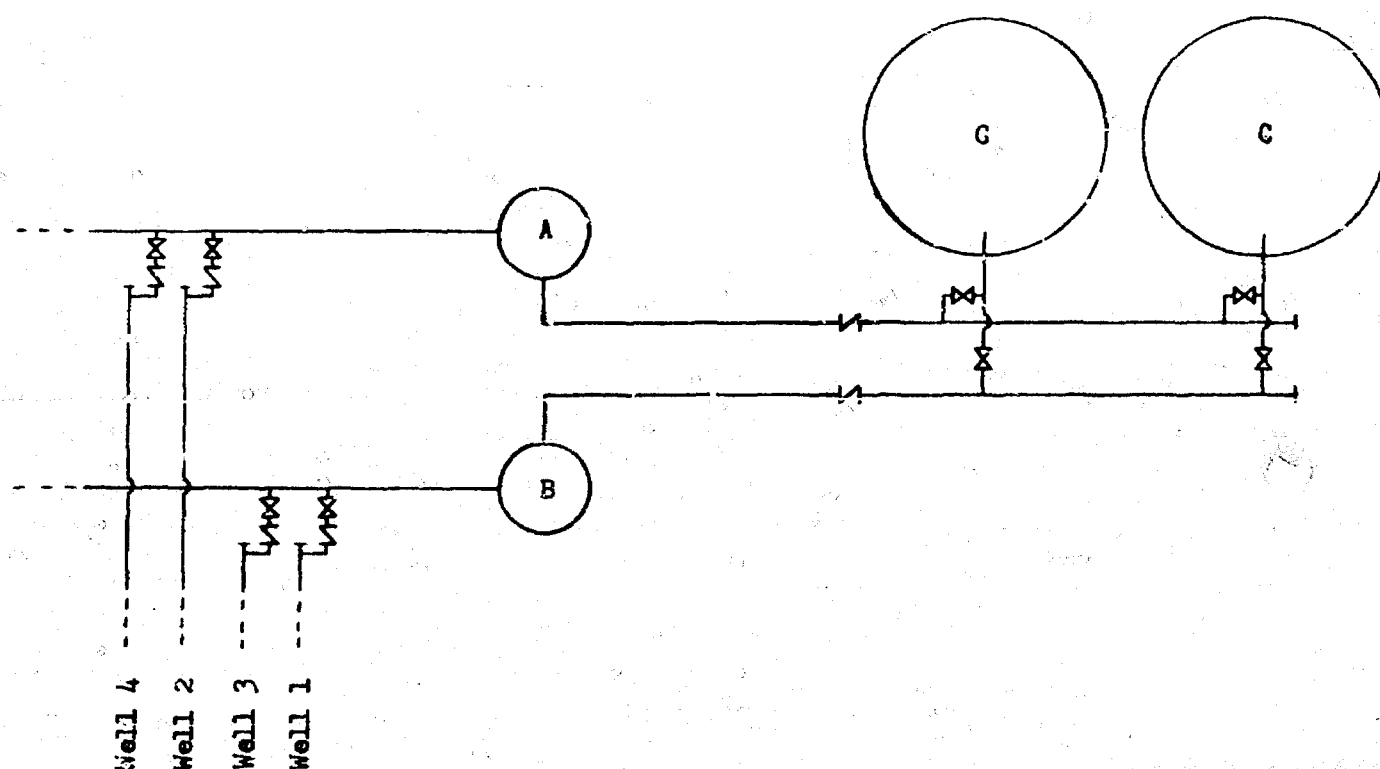
NEW CASES

CASE 1914: Application of Great Western Drilling Company for approval of a unit agreement, for establishment of a water injection project and an allowable therefor, and for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks approval of its Pebble Queen Unit Agreement, which unit comprises approximately 961 acres in Townships 12 and 13 South, Range 31 East, Chaves County, New Mexico. Applicant further seeks permission to institute a water injection project on said unit by the injection of water into the Queen formation through six injection wells located in Sections 1, 2 and 11 of said Township 13 South, Range 31 East, with a special allowable to be assigned to said project. Applicant also seeks permission to install an automatic custody transfer system to handle the Caprock-Queen production from all wells on said unit.

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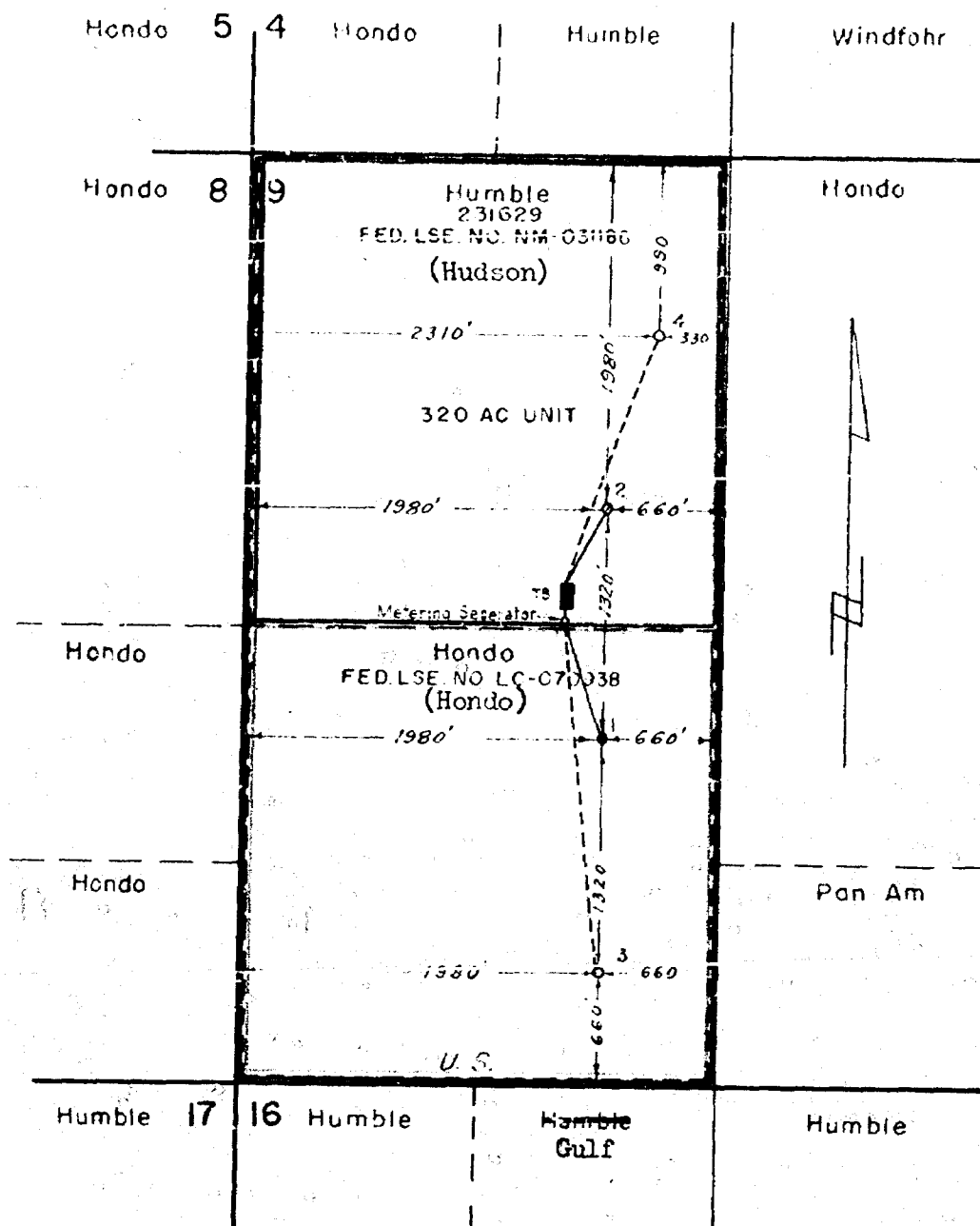
CASE 1916: Application of Humble Oil & Refining Company for permission to commingle the production from two separate leases. Applicant, in the above-styled cause, seeks permission to commingle the Empire-Abo Pool production from all wells located on two separate leases, one of which comprises the SW/4 of Section 9, the other of which comprises the NW/4 of said Section 9, all in Township 18 South, Range 27 East, Eddy County, New Mexico.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
CASE NO. 1916
EXHIBIT NO. 1



Legend: A - Production separator
B - Test separator (metering type)
C - Storage tank

SCHEMATIC DIAGRAM OF PROPOSED METHOD
FOR COMMINGLING PRODUCTION FROM
ABO - CHALK BLUFF DRAW UNIT LEASES
W₁ OF SECTION 9, T-18-S, R-27-E
EMPIRE ABO POOL, EDDY COUNTY, NEW MEXICO



T-18-S R-27-E

THIS APPLICATION FOR WELL NO. _____

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION

EXHIBIT NO. 1
CASE NO. 1916

ABO - CHALK BLUFF DRAW UNIT
W 1/2 SEC. 9, T-18-S, R-27-E
EDDY CO., NEW MEXICO

HUMBLE OIL & REFINING COMPANY
PRODUCTION DEPARTMENT
MIDLAND, TEXAS

CIVIL ENG. DIV.

SCALE 1"=1000'

PRIMARY DESIGN BY

H.M. SELBY

DATE 12-11-59

DRAWN BY

H.M. SELBY

CIVIL ENGINEER

APPROVED BY

H.M. SELBY

FILE NO.

REVISED

W-42814

EXHIBIT ABO FIELD

9.6 MI. S.E. OF ARTESIA

HUMBLE OIL & REFINING COMPANY

EXPLORATION DEPARTMENT

P. O. BOX 1287

ROSWELL, NEW MEXICO

February 24, 1960

In re: Chalk Bluff Draw Unit Abo Production

Mrs. Mildred Crane Hudson
Box 476
Artesia, New Mexico

Dear Mrs. Hudson:

Prior to the establishment of a participating area under the terms of the Chalk Bluff Draw Unit Agreement, Humble, as unit operator, feels that it is necessary to co-mingle Abo oil produced from certain federal leases lying within the Chalk Bluff Draw Unit.

The oil production will be separately metered from each base lease so that proper royalty and working interest credit may be given. The co-mingling is necessary at this time in order that Humble as operator may produce and sell such oil prior to the completion of the next 4 or 5 wells, and to enable Humble to produce such oil without constructing a separate tank battery for each lease. Once additional Abo wells have been drilled a participating area will be established and the oil produced on a unitized basis pursuant to the unit agreement and unit operating agreement.

You are the owner of an overriding royalty, basic royalty, or working interest as shown above the place provided below for your signature, and in order to protect the rights of all parties, it is necessary that you consent to the co-mingling of this Abo production.

In the event it is satisfactory for Humble, as unit operator, to co-mingle your share of production from one lease with production from another lease, please evidence your consent by executing two copies of this letter in the space provided below, returning them ~~to Roswell~~ **BEFORE EXAMINER NUTTER**

OIL CONSERVATION COMMISSION	
EXHIBIT NO.	6
CASE NO.	1916

Yours very truly,

HUMBLE OIL & REFINING COMPANY

By:

R. M. Richardson

RMR/dm

Interest Owned:

12 1/2% overriding royalty under the
NW 1/4 Sec. 9, T-18-S, R-27-E, Eddy
County, New Mexico, Federal Lease
New Mexico 031186.

Satisfactory to co-mingle Abo production.

Signed: Mildred Crane Hudson

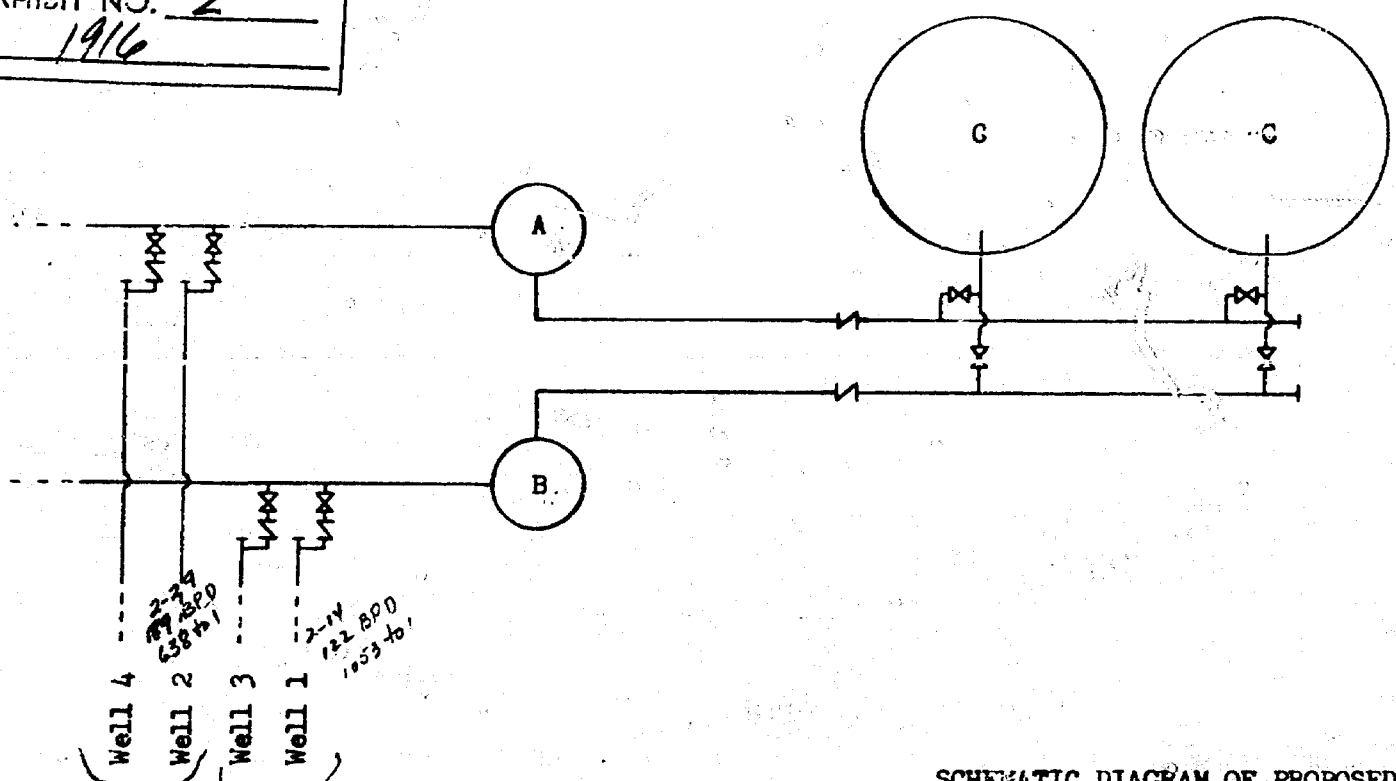
Date: 2-24-60

Note:

Production from SW 1/4 Sec. 9 (LC-070938)
to be co-mingled with production from
NW 1/4 Sec. 9 (NM-031186), T-18-S, R-27-E,
Eddy County, New Mexico.

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BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Apple EXHIBIT NO. 2
CASE NO. 1916



Humble-Hudson
Hondo Lease
Legend: A - Production separator
B - Test separator (metering type)
C - Storage tank

SCHEMATIC DIAGRAM OF PROPOSED METHOD
FOR COMMINGLING PRODUCTION FROM
ABO - CHALK BLUFF DRAW UNIT LEASES
W₁ OF SECTION 9, T-18-S, R-27-E
EMPIRE ABO POOL, EDDY COUNTY, NEW MEXICO

HUMBLE OIL & REFINING COMPANY
EXPLORATION DEPARTMENT
P. O. BOX 1267

ROSWELL, NEW MEXICO
February 24, 1960

In re: Chalk Bluff Draw Unit Abo Production

Rondo Oil & Gas Company
P. O. Box 660
Roswell, New Mexico

Gentlemen:

Prior to the establishment of a participating area under the terms of the Chalk Bluff Draw Unit Agreement, Humble, as unit operator, feels that it is necessary to co-mingle Abo oil produced from certain federal leases lying within the Chalk Bluff Draw Unit.

The oil production will be separately metered from each base lease so that proper royalty and working interest credit may be given. The co-mingling is necessary at this time in order that Humble as operator may produce and sell such oil prior to the completion of the next 4 or 5 wells, and to enable Humble to produce such oil without constructing a separate tank battery for each lease. Once additional Abo wells have been drilled a participating area will be established and the oil produced on a unitized basis pursuant to the unit agreement and unit operating agreement.

You are the owner of an overriding royalty, basic royalty, or working interest as shown above the place provided below for your signature, and in order to protect the rights of all parties, it is necessary that you consent to the co-mingling of this Abo production.

In the event it is satisfactory for Humble, as unit operator, to co-mingle your share of production from one lease with production from another lease, please evidence your consent by executing two copies of this letter in the space provided below, returning them to us here in Roswell.

Yours very truly,

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

EXHIBIT NO. 7

CASE NO. 1916

By:

R. M. Richardson

Note:
Production from Sec. 9
(10-07093) to be co-mingled
with production from Sec. 9
(24-031186), T-18-S, R-27-S,
Hddy County, New Mexico.

RMR/dm

Interest Owned:

All working interest and 7% overriding
royalty under the SW 1/4 Sec. 9, T-18-S,
R-27-S, Hddy County, New Mexico, Federal
Lease Las Cruces 07093.

Satisfactory to co-mingle Abo production.

Signed:

Date:

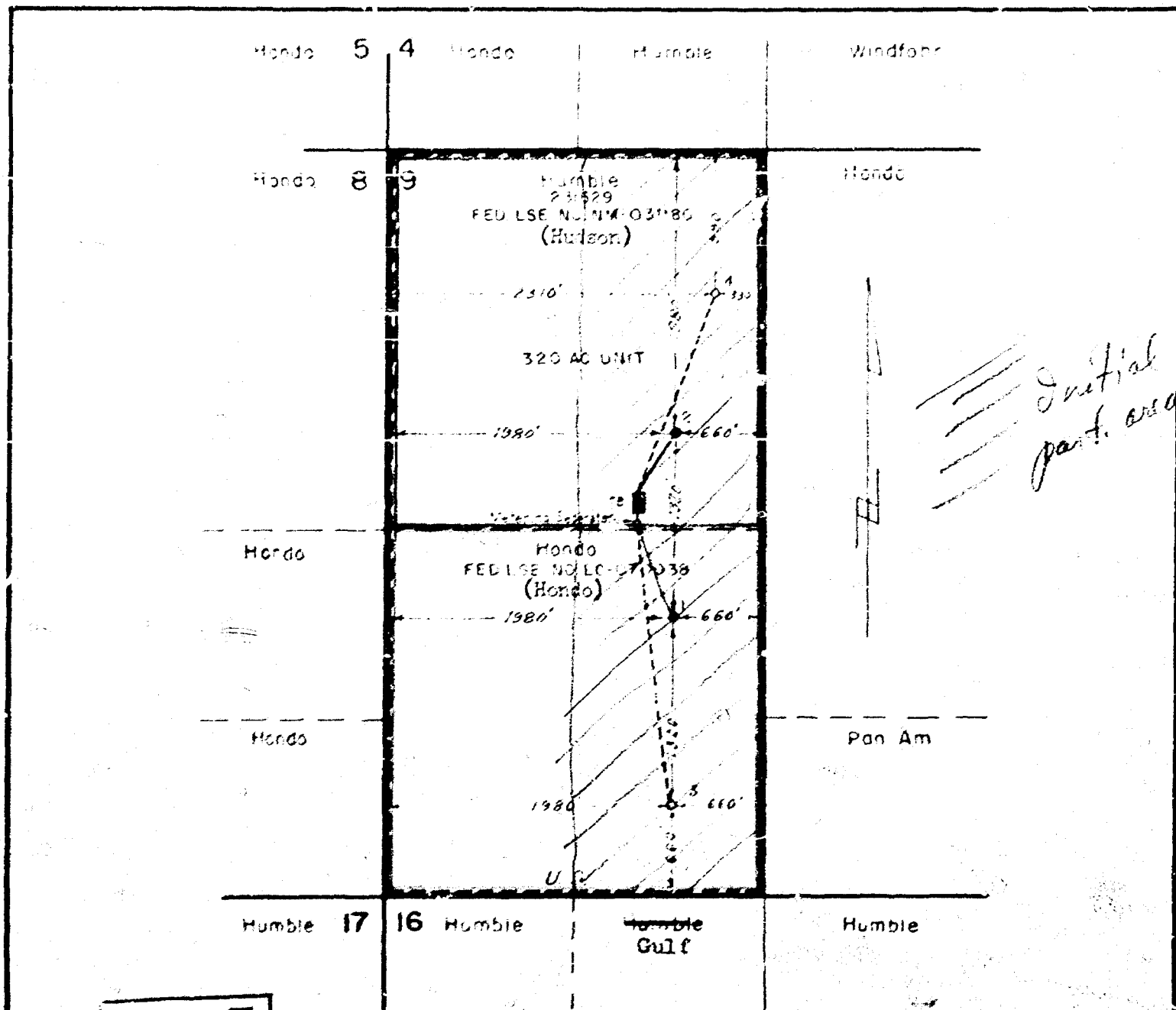
Memo

From
Oliver E. Payne
General Counsel

To

Law -

This order limits commencing
to the 4 wells (2 drilled &
2 to be drilled) primarily
because that is as far as U.S.G.S.
approval went.



T-18-S R-27-E

BEFORE EXAMINER NUTTER
 OF CONSERVATION COMMISSION
 EXHIBIT NO. 1
 1916

THIS APPLICATION FOR WELL NO. _____	
ABO - CHALK BLUFF DRAW UNIT W/2 SEC. 9, T-18-S, R-27-E EDDY CO., NEW MEXICO	
HUMBLE OIL & REFINING COMPANY PRODUCTION DEPARTMENT MIDLAND, TEXAS	
CIVIL ENG. DIV.	SCALE 1"=1000'
DATE 12-18-59	
PRIMARY DESIGN BY DRAWN BY CHECKED BY APPROVED BY REVIDED	H. N. SELBY <i>[Signature]</i> H. N. Shivers, Jr.
	CIVIL ENG. DIV. FILE NO. W-A2814

EMPIRE-ABO FIELD

0.6 MI. S.E. OF ARTESIA

C
O
P
Y

March 14, 1960

Mr. Sam Christy
Harvey, Dow & Minkie
Box 847
Roswell, New Mexico

Dear Mr. Christy:

On behalf of your client, Humble Oil & Refining
Company, we enclose two copies of Order R-1630
in Case 1916 issued by the Oil Conservation
Commission this date.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

in/

Enclosures: (2)

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 1916
Order No. R-1630

APPLICATION OF HUMBLE OIL & REFINING
COMPANY FOR PERMISSION TO COMBINE
THE PRODUCTION FROM TWO SEPARATE
LEASES IN EDDY COUNTY, NEW MEXICO

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 1:30 o'clock p.m. on March 9, 1960, at Santa Fe, New Mexico, before Daniel S. Hutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 14th day of March, 1960, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Hutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant is the owner of a Federal lease covering the SW/4 of Section 9, Township 18 South, Range 27 East, NEMH, Eddy County, New Mexico.

(3) That Mondo Oil & Gas Company is the owner of a Federal lease covering the SW/4 of said Section 9.

(4) That all of the above-described acreage is committed to the Chalk Bluff New Unit of which the applicant is the unit operator.

(5) That the applicant proposes to combine the surface-the pool production from all wells presently completed or hereafter drilled on that portion of the two above-described leases comprising the N/2 W/2 of said Section 9, after separately metering said Mondo lease production and passing said Mondo lease production through a production separator.

-2-

Case No. 1916
Order No. R-1630

(6) That this application is made necessary by the fact that while all the subject acreage is within the Chalk Bluff Draw Unit, a participating area for Empire-Abo Pool production has not yet been established.

(7) That each of the two wells presently completed on the subject acreage is capable of producing its allowable in the Empire-Abo Pool.

(8) That under the terms of the Chalk Bluff Draw Unit Agreement, when an initial participating area for Empire-Abo Pool production is established, participation will be applied retroactively to the date of the first Empire-Abo production.

(9) That approval of the subject application will neither cause waste nor impair correlative rights, provided adequate treating, testing, and storage facilities are installed.

IT IS THEREFORE ORDERED:

That the applicant be and the same is hereby authorized to commingle in a common tank battery the Empire-Abo Pool production from all wells presently completed or hereafter drilled on that portion of the Hamble Federal lease comprising the N/2 NW/4 of Section 9 and from that portion of the Hamble Federal lease comprising the N/2 SW/4 of Section 9, Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico, after separately metering said Hamble lease production and passing said Hamble lease production through a production separator.

PROVIDED HOWEVER, That the applicant shall provide adequate facilities to permit the testing of all Empire-Abo Pool wells located on the subject acreage at least once each month to determine the individual production from each well.

IT IS FURTHER ORDERED:

That all meters shall be operated and maintained in such a manner as to insure an accurate measurement of the liquid hydrocarbon production at all times.

That meters shall be checked for accuracy at intervals not to exceed one month until further direction by the Secretary-Director.

That meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

-3-
Case No. 1916
Order No. R-1630

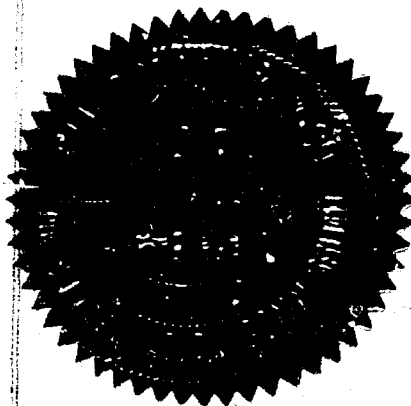
DONE at Santa Fe, New Mexico on the day and year here-
inafter designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

John T. Burroughs
JOHN BURROUGHS, Chairman

Murray E. Morgan
MURRAY E. MORGAN, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary



cc:/

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
MARCH 9, 1960

IN THE MATTER OF:

CASE 1916 Application of Humble Oil & Refining Company for :
permission to commingle the production from two :
separate leases. Applicant, in the above-styled :
cause, seeks permission to commingle the Empire- :
Abo Pool production from all wells located on two :
separate leases, one of which comprises the SW/4 :
of Section 9, the other of which comprises the :
NW/4 of said Section 9, all in Township 18 South, :
Range 27 East, Eddy County, New Mexico. :

BEFORE:

Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We will now take Case No. 1916.

MR. PAYNE: Application of Humble Oil & Refining Company
for permission to commingle the production from two separate leases.

MR. CHRISTY: S. B. Christy of Hervey, Dow & Hinkle, for
the Applicant, Humble Oil & Refining Company. We have one witness,
Mr. Examiner. Mr. Carpenter.

(Witness sworn)

A. L. CARPENTER

called as a witness, having been duly sworn, testified as follows:

MR. CHRISTY: As will be brought out in the testimony,
Mr. Examiner, offset operators to the land and wells in question

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are Pan American Petroleum Company, Robert W. Windforh, Hondo Oil & Gas Company, Humble, and Gulf Oil Corporation. As Exhibits 3 and 4, we would like to offer in evidence the letter mailed to Hondo, Pan American, and Mr. Windforh, with the registered return receipts, and a waiver and consent by Gulf Oil Corporation. We also have the consent of the working interest owners and royalty owners within the area involved which will be brought out in the testimony.

DIRECT EXAMINATION

BY MR. CHRISTY:

Q Will you please state your name, address and occupation?

A A. L. Carpenter, 1101 Rose Lane, Hobbs, New Mexico. I am District Supervisor Engineer, Humble Oil & Refining Company.

Q I believe you are a petroleum engineer, Mr. Carpenter?

A Yes, sir.

Q Have you previously testified before this commission as a petroleum engineer?

A No, sir.

Q Would you briefly tell us where you went to school and your education and degrees you have received?

A Bachelor of Science Degree in Petroleum Engineering, Texas A & M College.

Q Have you been actively engaged in the practice of petroleum engineering, and if so, for how long?

A Yes, sir. Petroleum engineering, twelve years.

Q And with whom?



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A Humble Oil & Refining Company.

Q What general areas, Mr. Carpenter?

A All over Texas and down into Mexico.

Q Are you familiar with the matters contained in the application of this case, Case 1916, now before the New Mexico Oil Conservation Commission?

A Yes, sir.

Q Are you familiar with the wells and the general area surrounding the west half of Section 9 in Township 18 South, Range 27 East, NMPM, Eddy County, New Mexico?

A Yes, sir.

MR. CHRISTY: Does the Commission have any questions concerning the qualifications of the witness?

MR. NUTTER: No, sir. Please proceed.

Q (By Mr. Christy) Now, would you tell us briefly what the nature of this application is and what it seeks, sir?

A Well, we are requesting an exception to Rule 309A to permit the commingling of the Empire-Abo Pool production from two leases covering the west half of Section 9, Township 18 South, Range 27 East, Eddy County, New Mexico, into a common tank battery located in the northwest quarter of Section 9.

Q Could this request have been handled administratively under Rule 309B?

A No, sir. All of the provisions of Rule 309B are met in this request, except the ownership of the leases is not common

throughout.

Q Now, what is the essence of your application, your request?

A Well, Humble Oil & Refining Company is the operator of a unit, the Chauk Bluff Draw unit, which embraces certain acreage in Townships 17 and 18 South, Range 27 East, Eddy County, New Mexico.

Q I believe the Chauk Bluff Draw unit was approved by this Commission in Case 960, Order R-705 on October 13, 1955. Is that correct, sir?

A Yes, sir, that is correct.

Q Please proceed.

A A portion of the unit is the west half of Section 9, Township 18 South, Range 27 East, and this 320 acres is the area that we are concerned with at this hearing.

Q That is shown in Exhibit No. 1?

A Yes, sir, it is. And it is outlined in red on Exhibit No. 1. The unit members of this particular area are Humble, which has the working interest, northwest quarter of Section 9, outlined in green on Exhibit No. 1. And Hondo Oil & Gas Company with the southwest quarter of Section 9, outlined in yellow on Exhibit No. 1. The land is owned by the Federal Government. However, Mrs. M. C. Hudson has a 12½ percent override on the acreage held by Humble, and Hondo has the 5 percent override on their own acreage. Royalty payment to the Federal Government is the same for all acreage, except the northwest quarter of the northwest quarter of Section 9.

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Q I believe that royalty is $12\frac{1}{2}$ percent throughout the entire west half of 9, except the northwest northwest which is a step-scale royalty.

A Humble unit operation is currently making development in the Empire-Abo Pool underlying the subject acreage. For Abo production, the Abo Chalk Bluff Draw unit designation is used. Two Abo wells, Abo Chalk Bluff unit wells 1 and 2 have been completed and are currently producing, and wells 3 and 4 are being drilled. A provision of the unit agreement is that participation in a given field development is not set until production has been established. As yet, no participating area has been designated for Empire-Abo Pool production. At present, Humble is producing Well No. 1 which is located on Hondo's lease for Hondo, and the oil is stored in temporary tankage located on the lease. Well No. 2 is located on Humble's lease and is produced into a tank battery which has been constructed on the lease.

Q I believe that is shown on Exhibit No. 1?

A That is correct.

Q All right, sir.

A The oil produced from Humble and Hondo's property has not been placed in common tankage since the participation has not been established, and there are different interests involved. As things stand now, the initial participating area covering Section 9 will include only the east half of the south half of Section 9. That acreage now is dedicated to the Abo Chalk Bluff Draw unit Wells

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1, 2, 3 and 4. As additional wells are completed, the participating area will be expanded to include them. So, we are really not concerned with commingling Abo oil from wells in Section 9, except that produced from Wells 1, 2, 3 and 4. We are, therefore, requesting permission to produce into common storage, Empire-Abo Pool production from Abo Chauk Bluff Draw unit Wells 1, 2, 3 and 4. Commingling as we propose, if approved, will continue only until such time when the initial participating area is established. Once this participating area, including Wells 1, 2, 3 and 4 is in effect, production from wells within the area can be produced into common storage, since each tract of land will have its participation set.

Q Now, how do you propose to commingle this production from the two leases you mentioned?

A Well, the production from the four wells involved will be produced into the tank battery located on Humble's lease. Just how this is accomplished is shown by Exhibit No. 2.

Q Would you identify this for us, Exhibit No. 2? I believe it is a schematic diagram of the proposed method for commingling the production.

A That is correct.

Q All right, sir. Go ahead.

A It's shown on the tank separator. This exhibit illustrates oil flow in a standard Humble tank battery. Except for the manifold hookup in this case, they are separated. The battery had been installed, except for the test separator that is shown as "B" on



the Exhibit. The test separator will be the metering type. A dump type metering vessel is going to be used there. Hondo production from Wells 1 and 3 will be directed through the test site and metered.

Q That would be going through channel "B" on Exhibit No. 2?

A That is correct.

Q Humble production from Wells 2 and 4 will be directed through the production side?

A That's true. And on the schematic drawing, the amount of production from Wells 2 and 4 will be determined by subtracting the metered volume from the total volume gauged in the tanks. When a participating area is established, this separate metering is no longer required. The two manifolds will be combined and tied together. The final tank battery installation will be as shown in Exhibit #2, except that the flow lines will be tied into both the production and test manifolds. By this combining method, commingling will be accomplished without the expense of changing out the regular production separator with a metering type separator. Only top allowable wells will go into the participating areas. So, there is no danger of shorting any lease on production. It will simply be a matter of dividing the total allowable by leases. We have discussed this procedure with the USGS, and they are in accord.

Q Now, do you have a method of calibrating these meters?

A Yes, sir, we do. In looking at the schematic diagram, you simply shut one of the wells in. We will take a Hondo well,

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1 or 3. Shut one of them in, and produce the wells 2 and 4 through the production separator into one tank, and produce the other Hondo well into a tank through the metering vessel. And you can check the calibration meter in that manner. So, making up your production is no problem, because the 125 percent of the top allowable is permissible, and these are all very capable wells.

Q So that you simply calibrate against the tank itself?

A That is correct.

Q I see. Do you have an approval to commingle from the royalty owner which, I believe, is the Federal Government, and the override owners, Hondo and Mrs. Hudson?

A Yes, sir, we sure do.

(Whereupon, Humble's Exhibits Nos. 5, 6 and 7 were marked for identification.)

Q I have had Exhibits Nos. 5, 6 and 7 marked.

A Yes, sir.

Q The consent letters?

A Yes, sir.

Q Now, this type of metering vessel you mentioned, has that ever been approved by the commission?

A Yes, sir. It will be, as I said previously, a drop metering vessel type, which has been previously approved by the Commission many times, as has the PD meter.

Q Is this oil pipeline quality oil at this time?

A Yes, sir, it is.

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Q There is no treating required?

A No, sir. No water.

Q Have you run any tests on these wells, and if so, will you give us the test dates and what the results of the tests were?

A Yes, sir. There is some new -- all we have on them is the potentials. And Well 1, on February 14, produced at a rate of 122 barrels of pipeline oil per day. It's oil-gas ratio was 1053. Well 2, on leap year day, February 29, produced at a rate of 189 barrels of oil per day, pipeline oil. The gas-oil ratio was 638.

Q Is this oil corrosive?

A Yes, sir, we feel that it must be. And this metering vessel is going to be plastic coated so that we will have no corrosion inside for the possible -- and the measurement of the vessel should be very accurate at all times.

Q What do you feel the advantages would be to this commingling of production?

A Well, as I stated previously, eventually the subject wells will be a unit participating area in common tankage, if permissible. When Well 3 is permissible, temporary storage facilities will have to be provided for it. If the formation of participating areas is delayed, we may have to install a temporary tank battery in the southwest quarter of Section 9, and that is in the order of \$15,000.00. It's the expense that we wish to avoid. In any case, the most economical and logical method for us to file is to combine production from Wells 1 and 3, with Wells 2 and 4 until such

time when a participating area is formed. The oil is being hauled now at thirty-seven cents a barrel.

Q In your opinion, would the granting of this application be in the interest of conservation and the protection of the correlative rights of the interested parties?

A Yes, sir, it certainly will.

Q Is there any need, in your mind, for the expediting of this petition or application?

A Yes, sir. It would be greatly appreciated. The temporary storage facilities in the southwest quarter now, as the oil is being produced, is being trucked at a thirty cent per barrel expense, and we would like to defer that as soon as possible.

Q Were Exhibits Nos. 1 and 2 made by you or under your direct supervision?

A Yes, sir.

MR. CHRISTY: That is all the questions of this witness.

MR. NUTTER: Does anyone have questions of the witness?

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Carpenter, as I understand it, all the parties owning interests in these two leases have agreed to this proposal?

A Yes, sir.

Q Which could probably be considered tantamount to common ownership, in effect?

A Yes, sir.

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MR. PAYNE: That is all. Thank you.

QUESTIONS BY MR. NUTTER:

Q Mr. Carpenter, do I understand correctly that separator "A" will be a standard production separator?

A Yes, sir.

Q And separator "B" will be a dump type test separator?

A Correct.

Q And the production in the Hondo lease will go through the test separators; production from the Humble-Hudson lease will go through the standard production separator?

A Yes.

Q Then production from the two separators will go into one of these tanks, "C"?

A Yes, sir.

Q How do you know when you have made your allowable from each one of these leases?

A We have daily gauging, and all the wells are top allowable produced on positive choke, and they are wonderful wells. After you test one a little while, you can set it on a given size choke, and it's pretty reliable, and they are gauged every morning and adjusted, if necessary.

Q Well, now, if the switcher goes off there, and the gauge attendant finds out that he has made the allowable for the two leases --

A Yes, sir.

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Q -- and then goes back and subtracts the reading on his test separator, separator "B," and subtracts that from the total in the tank, would he know how much oil came from lease "A," from the Humble-Hudson lease, then?

A Yes, sir, I think he would.

Q The difference would be the production from the Humble-Hudson?

A Yes, sir.

Q What about the shrinkage that the oil may be incurring during the night while the pumper wasn't there? All that shrinkage would have to be attributed to one of the leases, wouldn't it?

A Yes, sir, it would. It would be a very small amount in this case, I believe, a negligible amount.

Q Are you aware that shrinkage in southwest New Mexico does vary up to three percent and five percent when the oil is sitting in the tank?

A Yes, sir, depending on the temperature.

Q What size are these tanks?

A Those are 500's.

Q You have four wells that will be producing into them?

A Yes, sir. We have currently two. We only have one producing in temporary storage, and then we have one just recently completed, producing into the tank battery. And as I have previously reiterated, I will reiterate it again, this is a stop-gap measure to prevent a large expenditure for a short period of time. As soon



as the participating area is presented and agreed upon, which is anticipated shortly, this will no longer be in effect.

QUESTIONS BY MR. PAYNE:

Q Both wells are top allowable?

A Yes, sir.

Q And in all probability will remain so for many years?

A Yes, sir.

Q So, there is no problem as to the allowable, then?

A No, sir.

Q And the parties have all agreed?

A Yes, sir. And we plan on testing the wells at short intermittent intervals during this period.

QUESTIONS BY MR. NUTTER:

Q Now, the reason I was asking these questions, Mr. Carpenter, about using this production separator on the Humble-Hudson lease, the application for this hearing stated that Applicant proposes to use a metering separator to meter the production from each lease.

A Yes, sir, I know that.

Q And it appears now that we have a metering separator for production from one lease.

A Yes, sir.

Q What would be actually involved in putting a test separator on both leases?

A Merely installing it when it gets here. It's already

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ordered. We ordered two. What it would boil down to, dollars and cents wise, as soon as the participating area is agreed on, we certainly won't need two there then. And accounting wise, thirty-five percent of the cost of that vessel would be chopped against that well, and there is no way you can remove it. And it's a negligible loss, but on paper, it looks like a pretty good size.

Q If I know of any wells in New Mexico that could sustain this thirty-five percent loss, these would be the ones.

A Yes, sir.

MR. NUTTER: I believe that is all. Any further questions of Mr. Carpenter?

MR. CHRISTY: The Applicant has no further questions. We would like to offer in evidence Exhibits Nos. 1 and 2, Mr. Examiner. That is all we have for the Applicant.

MR. NUTTER: Humble's Exhibits Nos. 1 and 2 may be entered.

(Whereupon, Humble's Exhibits Nos. 1 and 2 were received in evidence.)

MR. NUTTER: Does anyone have anything further on Case 1916? We will take the Case under advisement and adjourn the hearing.

(Whereupon, the hearing was concluded at 3:55 p.m.)



STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, Thomas T. Tarkenton, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in Stenotype and reduced to typewritten transcript by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 16th day of March, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Thomas T. Tarkenton
Notary Public

My Commission Expires:

Jan 7, 1964

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner's Report of Case No. 1916 heard by me on 3-9, 1960.

Examiner, Examiner
New Mexico Oil Conservation Commission

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