- CASE 1696: Application of Caulkins Oil Company for a triple completion. Applicant, in the above-styled cause, seeks an order authorizing it to triple complete its Breech "F" Well No. PMD-8, located in the NE/4 NE/4 of Section 34, Township 27 North, Range 5 West, Rio Arriba County, New Mexico, in such a manner as to produce gas form the South Blanco-Pictured Cliffs Pool, gas from the Mesaverde formation, and gas from the Dakota formation through parallel strings of tubing.
- CASE 1697: Application of Universal Oil Corporation for the creation of a new oil pool for Gallup production, and for an exception to Rules 104 and 107 for wells in said pool. Applicant, in the above-styled cause, seeks an order creating a new pool for Gallup production to be designated the Shiprock-Gallup Oil Pool and located in Sections 16 and 17, Township 29 North, Range 18 West, San Juan County, New Mexico. Applicant further seeks the promulgation of pool rules to permit wells in said pool to be located closer than 660 feet to the nearest producing well in exception to Rule 104, and to permit certain exceptions to the casing requirements of Rule 107 of the Commission Rules and Regulations.
- CASE 1698: Application of Shell Oil Company for an exception to Rule 502 I (a).

  Applicant, in the above-styled cause, seeks an order which would exempt all wells in the Carson Unit Area and all other Shell wells in Township 25 North, Ranges Il and 12 West, Bisti-lower Gallup Oil Pool, San Juan County, New Mexico, from the daily tolerance provisions of Rule 502 I (a) of the Commission Rules and Regulations.
- CASE 1195: Application of Graridge Corporation for capacity allowables for certain wells in a water flood project. Applicant, in the above-styled cause, seeks an order authorizing capacity allowables for three wells in the project area of its water flood in the Caprock-Queen Pool in Lea and Chaves Counties, New Mexico.
- CASE 1196: Application of Graridge Corporation for an order amending Order No. R-966. Applicant, in the above-styled cause, seeks an order amending Order No. R-966 to establish administrative procedures for development of its Artesia Water Flood Projects No. 2 and 3, Artesia Pool, Eddy County, New Mexico, and for approval of unorthodox locations for 27 wells in said projects, for authority to convert six wells in said projects to water injection, and for capacity allowables for five wells in said projects.
- CASE 1185: Application of Graridge Corporation for an order amending Order No. R-952. Applicant, in the above-styled cause, seeks an order amending Order No. R-952 to establish administrative procedures for development of its Artesia Water Flood Project No. 1, Artesia Pool, Eddy County, New Mexico, and for approval of unorthodox locations for fifteen wells in said project, and for capacity allowables for five wells in said project.
- CASE 1699: Application of J. W. Brown for an order authorizing a pilot water flood project. Applicant, in the above-styled cause seeks an order authorizing it to institute a pilot water flood project in the Brown Pool, Chaves County, New Mexico, by the injection of water into the Queen formation through four wells located in the SE/4 NW/4 of Section 26, Township 10 South, Range 26 East, Chaves County, New Mexico.

# DOCKET: EXAMINER HEARING JUNE 24, 1959

OIL CONSERVATION COMMISSION - 1120 CERRILLOS ROAD, HIGHWAY DEPARTMENT AUDITORIUM, 8 a.m., SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or A. L. Porter, Jr., Secretary-Director.

## CONTINUED CASE

CASE 1666: Application of Sunray Mid-Continent Oil Company for approval of a unit agreement. Applicant, in the above-styled cause, seeks an order approving its Central Bisti-Lower Gallup Sand Unit embracing approximately 7389 acres of federal, state, and allotted Indian lands in the Bisti-Lower Gallup Oil Pool, San Juan County, New Mexico.

#### NEW CASES

- CASE 1692: Application of Continental Oil Company for the establishment of a non-standard gas proration unit in the Tubb Gas Pool. Applicant, in the above-styled cause, seeks the establishment of a 160-acre non-standard gas proration unit in the Tubb Gas Pool consisting of lot 15, the N/2 SE/4 and the SE/4 SE/4 of Section 3, Township 21 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to applicant's Hawk B-3 Well No. 2-T, located 1650 feet from the South and East lines of said Section 3.
- CASE 1693: Application of Amerada Petroleum Corporation for three non-standard oil proration units. Applicant, in the above-styled cause, seeks an order establishing three 43.7 acre non-standard oil proration units for Mississippian production in the SE/4 of Section 11, Township 13 South, Range 38 East, Lea County, New Mexico. Applicant further seeks approval of one unorthodox oil well location.
- CASE 1694: Application of Texas Crude Oil Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its Big Eddy Unit 1-30 Well, located in the SE/4 SE/4 of Section 30, Township 20 South, Range 31 East, Eddy County, New Mexico, in such a manner as to produce oil from an undesignated Tansil pool and to produce oil from an undesignated Delaware pool through parallel strings of tubing.
- CASE 1695: Application of Texaco, Inc. for a triple completion, for permission to commingle the production from three separate pools, and for the establishment of two non-standard gas proration units, Applicant, in the above-styled cause, seeks an order authorizing it to triple complete its A. H. Blinebry NCT-4 Well No. 1, located in the SE/4 SE/4 of Section 31, Township 22 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit production from the Blinebry formation, production of gas from the Tubb Gas Pool, and production of oil from the Drinkard Pool through tubing, the annulus via cross-over, and tubing respectively. Applicant further seeks the establishment of a 160-acre non-standard gas proration unit in both the Tubb Gas Pool and Blinebry Gas Pool each consisting of the S/2 S/2 of said Section 31. Applicant further seeks permission to commingle the liquid production from the Blinebry, Tubb, and Drinkard formations underlying said acreage.

- Application of Gulf Oil Corporation for an order amending Order No. R-1093-A.

  Applicant, in the above-styled cause, seeks an order amending Order No.

  R-1093-A to permit the commingling of Paddock production with the commingled Blinebry, Drinkard, and Langlie-Mattix production from its Learcy McBuffington lease consisting of the S/2 of Section 13, Township 25 South, Range 37 East, Justis Field, Lea County, New Mexico.
- CASE 1700: Application of Gulf Oil Corporation for permission to commingle the production from two separate leases: Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the East Millman Queen-Grayburg Pool from two separate non-contiguous leases in Township 19 South, Range 28 East, Eddy County, New Mexico.
- CASE 1703: Application of Tidewater Oil Company to commingle the production from several separate oil pools from two separate leases. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the intermediate grade crudes produced from its Coates "D" Lease comprising the SE/4 SW/4 of Section 24, Township 25 South, Range 37 East, Justis Field, Lea County, New Mexico, with the commingled production of all intermediate grade crudes produced from its Coates "C" Lease comprising the E/2, SE/4 NW/4, and the NE/4 SW/4 of said Section 24 and to pass such commingled production through its automatic custody transfer system.
- CASE 1704: Application of Cities Service Oil Company for capacity allowables for nine wells in a water flood project and for establishment of administrative procedure for expansion of said project. Applicant, in the above-styled cause, seeks an order authorizing capacity allowable for nine wells in the project area of its water flood project in the Caprock-Queen Pool, Chaves County, New Mexico. Said capacity allowables would be in exception to Order R-1128-A. Applicant further seeks establishment of an administrative procedure to expand said water flood project.
- CASE 1705: Application of Neville G. Penrose, Inc., for a capacity allowable for one well. Applicant, in the above-styled cause, seeks an order authorizing a capacity allowable for its Alston Well No. 2, located in the NW/4 NW/4 of Section 11, Township 14 South, Range 31 East, Caprock Queen Pool, Chaves County, New Mexico, due to a response from the adjoining Cities Service Oil Company water flood project. Said capacity allowable would be in exception to Order R-1128-A.

#### NEW MEXICO OIL CONSERVATION COMMISSION

Docket No. 23-59-a

In addition to the cases listed on Docket No. 23-59, the following cases will also be heard June 24, 1959, before Elvis A. Utz, Examiner, or A. L. Porter, Jr., Secretary-Director:

#### CASE 1701:

Application of Gulf Oil Corporation for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Learcy McBuffington Well No. 5, located in the NW/4 SE/4, Section 13, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to produce oil from an undesignated Paddock Pool and oil from the Justis-Ellenburger Pool through parallel strings of tubing.

## CASE 1702:

Application of Humble Oil & Refining Company for an oil-gas dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its South Four Lakes Unit Well No. 6, located in the SW/4 SE/4, Section 2, Township 12 South, Range 34 East, Lea County, New Mexico, in such a manner as to produce oil from a Four Lakes-Pennsylvanian Pool extension and gas from a Four Lakes-Devonian Gas Pool extension through parallel strings of tubing.

#### CASE 1706:

Application of Sunray Mid-Continent Oil Company for an order amending Order No. R-1414. Applicant, in the above-styled cause, seeks an order amending Order No. R-1414 to include the following additional acreage: NW/4 NW/4 of Section 6, Township 25 North, Range 12 West, and the SW/4 SW/4 of Section 31, Township 26 North, Range 12 West, San Juan County, New Mexico.

Place of hearing will be Highway Department Auditorium, 1120 Cerrillos Road, Santa Fe, New Mexico.

Time of hearing will be 8:00 o'clock a.m.

LAW OFFICES OF

### CAMPBELL & RUSSELL

J. P. WHITE BUILDING ROSWELL. NEW MEXICO 1 June 1959

JACK M. CAMPBELL JOHN F. RUSSELL TELEPHONES MAIN 2-4641 MAIN 2-4642

Re: In the Matter of the Application of J. W. Brown

Mr. A. L. Porter, Jr., Secretary-Director, New Mexico Oil Conservation Commission, P. O. Box 871, Santa Fe, New Mexico.

Dear Mr. Porter;

Enclosed please find application which we request to have set down for examiner's hearing on June 24th.

Very truly yours,

CAMPBELL & RUSSELL

Jack M. Campbell

JMC:bb Enclosures

# OIL CONSERVATION COMMISSION P. O. BOX 871

SANTA FE, NEW MEXICO

# January 22, 1964

Mr. J. W. Brown Nickson Hotel Roswell, New Mexico

Re: State E-92 Well No. 9

Dear Mr. Brown:

Reference is made to your letter of December 19, 1963, wherein you request authority to convert your State B-92 Well No. 9, located 1310 feet from the North line and 1980 feet from the West line of Section 26, Tewnship 10 South, Range 26 East, Brown Pool, Chaves County, New Mexico, to a water injection well. It is our understanding that this well was originally drilled as a producer, but that it is now needed to fill out the desired water injection pattern for the waterflood project which you are operating in the aforesaid pool. It is our understanding further that the well was drilled to a total depth of 800 feet, that 800 feet of 4 1/2inch casing was set at total depth and comented with 100 sacks of cement. Water injection will be into the Penrose member of the Queen formation through 144 perforations from approximately 750 to 785 feet.

Inasmich as the aforesaid casing and cementing program appear to be adequate for water injection purposes in this waterflood, the conversion of the subject Well No. 9 to water injection at the aforesaid unorthodox location is hereby approved.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

### ALP/DSN/esr

Oil Conservation Commission - Artesia Mr. J. E. Kapteins, Oil Conservation Commission - Santa Fe ILLEGIBLE

/OCC Case No. 1699 file

#### OIL CONSERVATION COMMISSION

P. O. BOX 871 SANTA FE, NEW MEXICO

July 2, 1959

Mr. Jack Campbell Box 721 Roswell, New Mexico

Dear Mr. Campbell:

On behalf of your client, J. W. Brown, we enclose two copies of Order No. R-1433 issued July 2, 1959 by the Oil Conservation Commission in Case No. 1699.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/ir

Enclosures

Copy sond & Hother och

# TREAT-RITE WATER LABORATORIES

INCORPORATED

BOX 548 - MONAHANS, TEXAS

# RESULT OF WATER ANALYSES

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| TO: Mr. J. W. Brown |                                  |            | SAMPLE            | SAMPLE RECEIVED |        |             |  |
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# TREAT-RITE WATER LABORATORIES, INC.

# WATER CONSULTANTS SINCE 1938

BACTERIAL AND CHEMICAL ANALYSIS
P. O. BOX 548 PHONE WI 3-4781

MONAHANS, TEXAS

August 2, 1958

Mr. J. W. Brown Brown & Coll Nickson Hotel Roswell, New Mexico

Subject: Recommendations relative to analysis #M75885 (7-30-58), State E-92 lease.

Dear Mr. Brown:

This laboratory is very familiar with waters of the type exemplified by this analysis. This water is very similar in characteristics to the Rustler water in the central basin platform area where we have several plants in operation using this water. This experience gives us a reasonably clear cut picture of what conditions are to be anticipated in the handling of this water.

The chemical characteristics of this water distinctly suggest that it comes from a limestone strata and will probably be a reasonably clear water as produced. These physical conditions of the natural water should be confirmed, but it is also doubtful that this well will produce any sand.

The following are the items recommended to take into consideration in planning a system to prepare this water for injection:

- 1. The water should be carried in a closed system. This includes a gas blanket on the water well and any tanks that may be found necessary to include.
- 2. It is strongly recommended that all lines, water well tubing, injection well casing (or tubing), and containers be effectively lined. The most difficulty with corrosion will probably occur at collars, nipples, and els in the form of disintegration of threads. These conditions result from electrolytic activity which is anticipated to be the major corrosion problem. This laboratory is not thoroughly familiar with how baked-on plastic linings resist this electrolysis at collars, but an effective connection with cement lining has proven to be reasonably good. I don't have the full figures on the costs of cement lined pipe, but they are comparable in proportion to that of plastic lined pipe. Some figures to go by in this relation are as follows:

# TREAT-RITE WATER LABORATORIES, INC. WATER CONSULTANTS SINCE 1938

BACTERIAL AND CHEMICAL ANALYSIS PHONE WI 3-4781

MONAHANS, TEXAS

Brown & Coll - Page 2

| Plastic lined   |                         | Cement lined |        |  |
|---|-------------------------|--------------|--------|--|
| 5½" casing 1" line pipe 1½" line pipe 2" line pipe 3" line pipe | 1.00/ft30/ft34/ft40/ft. | 5½ casing    | •45/ft |  |

These are estimated figures from the price lists I have available and not necessarily exact. I believe the cost for cleaning second hand pipe for applications is about .05/ft. It is suggested that plastic tubing be used in the water well, cement lining in the injection lines, and I am somewhat uncertain what will be the best application for the casing. You could probably confer with representatives of these two types of applications and come up with the best decision.

- 3. It is strongly recommended that confirmation of conditions of this water be made when the well is placed on pump before final plans are laid out for the treating system. It is possible that we may be able to handle this water through a very simple water system and even avoid the use of a plant filter. However, in the event this is deemed feasible, it would be recommended that wellhead filters be placed at the wellhead of the injection well for protection. The turbidity of the attached analysis would not indicate that we could avoid the use of a plant filter, but it is considered very likely that the natural water does not carry anything like this much turbidity.
- 4. In respect to chemical treatment, it is very doubtful that any whatsoever will be needed if the above recommendations are followed. In the event lined pipe is not used throughout the system, it will be necessary to use corrosion inhibition of a type to be decided when the plant is put into operation. It is possible that occasional slug for the control of bacteria may be necessary, but this will be a relatively insignificant application in respect to the economics of the project.

The above is a general run-down on the suggested general scheme of handling this water. The necessity of a sand trap filter and clear water storage tank at the treating plant will depend entirely on the results we obtain on a pumped water sample. In respect to the possibility of using this water, this laboratory can conceive of no characteristics that would prevent its use as a satisfactory injection water.

Please feel free to contact me for any further details, supplementary reports, or discussion concerning this project.

Yours very truly,
Waylan C. Martin

# OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

Date 6-26-59

| CASE NO. /699                                  | HEARING DATE            | 6-24-59      |            |
|--|-------------------------|--------------|------------|
| My recommendations for an order is as follows: |                         |              |            |
| 1. approve J. W. Brown<br>water flood in I     | is applical<br>be Brown | Juen Po      | l.         |
| 2. The pilot area o                            | hould cous              | int 7 =      | 105-268    |
| Sec. 26, 5 W/4 NE/4, 3                         | 5 E/4 NW/4.             | volucing w   | ell        |
| 3. The pilot will I the Brown-Stale            | # 1, 1880/w, 1          | 18 80/N Sec. | 26-108-26E |
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| 5. Monal Hoo flo                               | od order other          | - 5/ AC      | 1.767      |
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|  |                         |              |            |

Staff Member