Mr. Frank E. Irby Santa Fe, New Mexico

September 1, 1965

Gulf-McBuffington No. 4 - 11-4-57 Gulf-McBuffington No. 12 - 7-27-59 Tidewater-Coates "D" No. 3 - 5-29-59 Atlantic-State "Y" No. 4 - 3-1-59

- 4. A 5-1/2" flush joint liner, 850', is planned to be set in the Gulf-McBuffington No. 12 well from 7050' to 7900' and squeezed to 1250 psi with 250 sacks of 50-50 Litepoze-1 cement with 3% salt. This will allow 180' of liner inside the 7" casing and complete isolation of the entire McKee interval for water injection.
- 5. The top of the cement surrounding the 7" casing on the Gulf-McBuffington No. 4 is indicated to be at 3610'. This was determined by a Temperature Survey which was run on 11-2-57.
- 6. The top of the cement on the Tidewater-Coates "D" No. 3 surrounding the 7" casing was calculated.
- 7. The top of the cement surrounding the 7" casing in the Atlantic State "Y" No. 4 was determined to be at 2115' by a Temperature survey run on 2-14-59.
- 8. The exact top of the cement surrounding the 5" casing in the Tidewater-Coates "C" No. 28 will be determined by a Temperature survey run when the well is completed.

We sincerely hope that we have adequately answered your questions concerning this project. Please advise if additional information is needed.

Yours truly,

Original signed by Robert N. Miller

Robert N. Miller District Engineer

HGV: RNM: rlt

Attach.

cc: Mr. Richard S. Morris, Attorney at Law P. O. Box 2307 Santa Fe, New Mexico 87501 Mr. F. H. Hennighausen State Engineer Office 909 E. 2nd St., Roswell, New Mexico

Mr. A. L. Porter, Jr., Secretary-Director,
New Mexico Oil Conservation Commission
P. G. Box 2088
Santa Fe. New Mexico



STATE OF NEW MEXICE

STATE ENGINEER OFFICE SANTA FE

S. E. REYNOLDS STATE ENGINEER

September 8, 1965

ADDRESS CORRESPONDENCE TO: STATE CAPITOL SANTA FE, NEW MEXICO 87501

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

Dear Mr. Porter:

Reference is made to the application of Tidewater Oil Company water flood project which seeks to convert four wells and drill one new injection well.

This office offers no objection to the granting of this application provided the construction and equipping of wells are in compliance with the plan set forth on the diagrammatic sketches submitted with the application and noted at the hearing as Exhibits 8 thru 12.

DEG:ma cc-Tidewater Oil Co. Richard S. Morris

F. H. Hennighausen

Yours truly,

S. E. Reynolds State Engineer

Re: Case 3301

By:

Engineer

Water Rights Div.

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

September 14, 1965

Mr. Summer G. Buell Seth, Montgomery, Pederici & Andrews Attorneys at Law Post Office Box 2307 Santa Fe, New Mexico

Dear Mr. Buell:

Reference is made to Commission Order No. R-2966, recently entered in Case No. 3301, approving the Tidewater Justis-McKee Unit Water-flood Project.

Injection is to be through the five authorized water injection wells, which shall be equipped with plastic-coated tubing and packers, said packers being set not more than 100 feet above the uppermost perforation.

As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 1372 barrels per day.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

-2-

Mr. Sumner G. Buell Attorney at Law Post Office Box 2307 Santa Pe, New Mexico

commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/DSN/ir

cc: Mr. Frank Irby

State Engineer Office Santa Fe, New Mexico

Oil Conservation Commission

Hobbs, New Mexico

Tidewater Oil Company



Box 1344
Min. May, Toxas 777.

R. H. Con
Wis & Lixas Distribut
To Penniction Mayor

H. G. Wishing
The Assumption Mayor

September 27, 1965

Mr. James Durett New Mexico Oil Conservation Commission Santa Fe, New Mexico

Re: Tidewater Oil Company
Case No. 3301
Application for Waterflood
Justis McKee Unit, Justis
McKee Field, Lea County, N.M.

Dear Mr. Durett:

The subject case was held before the New Mexico Conservation Commission on September 8, 1965. Exhibit No. 7 presented at that time had a typographical error on the location of a proposed injection well, Tidewater Coates "C" No. 28. This location was shown on Exhibit No. 7 as 1820 feet from the North line and 1820 feet from the South line of Section 24. This location should properly have been 1820 feet from the North line and 1820 feet from the West line of Section 24. This error was further reflected in Order R-2966 concerning this case.

It would be appreciated if you would correct this location and we hope this error has caused you no inconvenience. If you desire additional information in this regard, please advise.

Very truly yours,

Robert N. Miller District Engineer

cc: Mr. Frank Irby State Water Engineer Santa Fe, New Mexico

> Mr. Summer Buell Seth, Montgomery, Federici & Andrews Santa Fe, New Mexico

RNM: r1t

GOVERNOR JACK M. CAMPBELL CHAIRMAN

State of New Mexico

Bil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER



P.O.BOX 2088 SANTA FE STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

October 4, 1965

Mr. Sumner Buell

Seth, Montgomery, Federici & Andrews

Attorneys at Law

Post Office Box 2307

Santa Fe, New Mexico

Case No. 3301
Order No. R-2966-A
Applicant:

TIDEWATER 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. Secretary-Director

Carbon copy of order also sent to:

Hobbs OCC __X
Artesia OCC ___
Aztec OCC ___
OTHER __ Mr. Frank Irby

August 27, 1965

Mr. Richard S. Morris Attorney at Law P. O. Box 2307 Santa Fe, New Mexico

Dear Mr. Morris:

Reference is made to the application which you submitted on behalf of Tidewater Oil Company to the Oil Conservation Commission for approval of a water flood project in Lea County, New Mexico on August 24, 1965.

The description of the source water well in your paragraph 7 is not in sufficient detail for me to determine exactly which well it is. The water analysis by Martin Water Laboratories of Monohans indicates that it is from the A. B. Coates "C" water well and it appears that this may be the source well. I would appreciate knowing definitely whether the A. B. Coates "C" water well is the one to be used as a supply well. The application states that the water is to come from the Rustler formation, but the chloride concentration in the Rustler water is usually much higher than shown in the analysis submitted with the application. It is requested that Tidewater check the application, the analysis and any records they may have in the office and advise as to whether there has been an error in stating the formation, or an error in the analysis.

Please advise as to whether the system will be a closed system.

- 1. What casing tests will be made prior to injection?
- 2. What are the completion dates on the 4 injection wells which have been completed?
- 3. Please give specific information on the $5\frac{1}{2}$ inch liner and the cement program used in the installation of the liner on the Gulf-McBuffington No. 12.
- 4. Please give the top of the cement surrounding the 7 inch casing on the Gulf-McBuffington No. 4 and state how the top of the cement was determined.

- 5. Please state how the top of the cement on the Tidewater Coates "D" No. 3 surrounding the 7 inch casing was determined.
- 6. Please state how the top of the cement surrounding the 7 inch casing in the Atlantic State "Y" No. 4 was determined.
- 7. On the Tidewater Coates "C" No. 28, please state whether the exact top of the cement surrounding the 5 inch casing will be determined when the well is completed, in order that we may be assured that the tubing and packer will be set below that depth.

I will appreciate receiving the answers to these questions prior to the hearing.

FEI/ma

cc-A. L. Porter, Jr.

F. H. Hennighausen

Yours truly,

S. E. Reynolds State Engineer

By:

Frank E. Irby Chief

Water Rights Division

September 1, 1965

Mr. Frank E. Irby Chief, Water Rights Division State of New Mexico State Capitol Santa Fe, New Mexico 87501

Re: Justis McKee Waterflood Project Lea County, New Mexico

Dear Mr. Irby:

Mr. Richard S. Morris, our Attorney in Santa Fe, forwarded us a copy of your letter requesting additional information concerning our application submitted to the Oil Conservation Commission on August 24, 1965. In the interest of time, we are furnishing the answers to your questions directly to you with a copy to Mr. Morris.

The source water well, referred to as A. B. Coates "C" Water Well No. 1, is located 2700' FSL and 1370' FWL of Sec. 24, T258-R378 and is to be used as the supply well for the proposed Justis McKee flood. This well was drilled with cable tools to a depth of 901' and 9-5/8" casing was set at 806' with 425 sacks of cement on 2-18-65. A water sample was swabbed from the well and the Martin Laboratory analysis indicated relatively high concentration of sulphate, calcium and magnesium with low amounts of chloride and sodium. Martin states that this water is similar to that being referred to as Santa Rosa in the Dollarhide area with essentially the only difference being the significantly higher calcium and magnesium content. Otherwise the waters show to have essentially the same characteristics.

Please find attached a sheet on which a copy of the sample log of the Coates "C" Water Well and a Gamma Ray-Neutron Log of the Tidewater-Coates "C" No. 12 well have been placed in relative structural position to show the top of the Rustler Formation. These wells are approximately 600° apart. A Kodachrome copy of the sample log was submitted to Mr. Hennighausen at your Roswell Office in April 1965.

Following are answers to questions posed in your letter:

- 1. The entire water system will be a closed system with a gas blanket on the tanks to prevent oxygen contamination.
- 2. No casing tests are planned to be run prior to injection since all wells will have packers set below the top of the cement.
 - 3. The completion dates of the four injection wells are as follows: