CASE 1291: Tidewater Cil Co. application for cil all dupl completion in an undesignated Dripter Foot & an undesignated principal Coates "C" Well #8.

The property of the second second

# Casa Mo.

1291

Application, Transcript,
Small Exhibits, Etc.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 15, 1957

TRANSCRIPT OF HEARING
Case 1291

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE, NEW MEXICO
3-6691 5-9546

#### BEFORE THE

# Santa Fe, New Mexico August 15, 1957

#### AFTERNOON SESSION

#### IN THE MATTER OF:

Application of Tidewater Oil Company for approval : of an oil-oil dual completion in an undesignated : Drinkard Pool and an undesignated McKee Pool underlying Section 24, Township 25 South, Range 37 : East, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing an oil-oil dual completion, by means of parallel strings of tubing, in an undesignated Drinkard Pool and an undesignated McKee Pool underlying Section 24, Township 25 South, Range 37 East, Lea : County, New Mexico, for its Coates "C" Well No. : 8 located 660 feet from the North line and 1880 : feet from the East line of said Section 24.

Case 1291

#### BEFORE:

Mr. A.L. Porter Mr. Murray Morgan Honorable Edwin L. Mechem

#### TRANSCRIPT OF HEARING

MR. PORTER: The meeting will come to order, please. The Commission has decided that the normal unit allowable for September will be 37 barrels. We will consider next Case 1291.

MR. COOLEY: Application of Tidewater Oil Company for approval of an oil-oil dual completion in an undesignated Drinkard Pool and an undesignated McKee Pool underlying Section 24, Township 25 South, Range 37 East, Lea County, New Mexico.

MR. HOLLOWAY: I am J. B. Holloway, Supervisor of Proration

DEARNLEY: MEIER & ASSOCIATES INCORPORATED GENERAL LAW PEPDRIERS ALBUQUERQUE NEW MEXICO 3-6691 5-9546 and Unitization for the Southern Division of Midwater. I have appeared a good many times before this Commission, and I believe I will handle the case myself.

MR. COOLEY: Will you raise your hand?

(Witness sworn.)

#### J. B. HOLLOWAY

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

#### DIRECT EXAMINATION

#### By MR. COOLEY:

- Q State your full name for the Commission, please.
- A J. B. Holloway.
- Q What is your position, Mr. Holloway?
- A I am a Supervisor of Proration and Unitization for the Southern Division of Tidewater Oil Company, located in Houston, Texas.
- Q Have you previously testified before this Commission as an expert witness, Mr. Holloway?
- A Not necessarily as an expert. I have in connection with factual data, and in handling cases where that type of testimony wasn't particularly necessary. As for being an expert, I have been in the production end of this business for thirty-seven years. I have no degree. They didn't issue petroleum engineering degrees in those days. I don't think they did. That's about the way

DEARNLEY - MEIER & ASSOCIATES INCORPORATED GENERAL LAW PERDETERS ALBUQUERQUE NEW MEXICO 3-6691 5-9546 I've grown up in this tusiness.

MR. PORTER: The witness's qualifications are acceptable.

MR. COOLEY: Would you proceed, please?

A Yes, We haven't thought it would be necessary in this case to bring in technical witnesses and experts in connection with material technique that the industry uses now adays in dually completed wells, using parallel strings of tubing. That sort of testimony has been presented here a number of times. I believe the Commission and its Staff are familiar with the methods and the materials that are available. Possibly we have had more experience than the Commission inasmuch as I believe there are only three cases of this type that have been granted by the Commission. They were more or less salvage cases. Tidewater, has however, quite a number of dual completions using parallel strings of tubing.

Our first job was in June 1955 in the Shoestone Field in Louisiana. The upper zone soon commenced producing water and was put on artificial lift, and a few months after it was completed and has since been operating very satisfactorily. There have been no problems that could be associated with the well having been dually completed.

We have dually completed some twenty wells in the Venice

Field, which is located on the Mississippi delta. A number of them

are being artificially produced, artificially lifted, and none have

DEARNLEY - MEIER & ASSOCIATES INCORPORATED GENERAL LAW REPORTERS ALBUQUERQUE NEW MEXICO 3-6691 5-9546 given any trouble. We are a member of the CATC group that operates offshore, that is the Continental, Atlantic, Tidewater and city service. Continental is the operator, and ten of those wells offshore have been dually completed using parallel strings of tubing, some as far as twenty-three miles from land, some in waters deep as one hundred feet. I mention that, although we are not the operator there, I mention that to show you the confidence that that group of operators have in this type of dually completing wells, because certainly out there is no place to complete a well in any manner that's going to bring about a lot of expensive workover jobs. It is pretty expensive as it is when they are working properly.

We will confine our testimony more or less to the well that
we want to dually complete, and why. We recently completed as a
new field discovery well our Coates "C" Well #6. It was completed
in the Ellenburger and is located in Section 24, Township 25 South
Range 37 East in Lea County. In drilling this well, we made drill
stem tests of the Drinkard zone as we drilled through it. I want
to read you those tests if I can locate it here in my notes.

The first test was for the interval from 5920 to 6000 feet, the well flowed at an estimated rate of 20 barrels of oil an hour. This flow was through a 5/8 inch bottom hole choke with surface choke of one inch. The tool was open two hours and thirty minutes. Free oil reached the surface in one hour and forty minutes

sure was 1040 pounds. Final shutin pressure after thirty minutes was 2245 pounds. A second test from 6030 feet to 6080 feet recovered 5000 feet of sulphur water.

Three drill stem tests were made of the McKee zone, the first being for the interval from 7192 to 7290 feet. Recovery from that test was only a small amount of gas and some slightly oil-cut mud. A second test was made of the interval from 7166 to 7338. The gas reached surface in five minutes, oil reached the surface in forty-five minutes, and flowed 41.1 gravity oil at the rate of 25 to 30 barrels an hour. The chokes were 5/8 inch on bottom and 1 inch on top. Initial flowing pressure was 1323 pounds. Final flowing pressure, 1732 pounds. Shutin pressure after 30 minutes, 2680 pounds. Two days later a third test was run for the interval 7173 to 7383. Recovery was gas to surface in seven minutes. Oil to surface in fifty-six minutes, and the well flowed 52.44 barrels of 40.2 gravity oil in one hour, with gas-oil ratio of 850 to 1. We reversed out 7100 feet of oil and gas with no water. The initial flowing pressure was 1410 pounds, and the final flowing pressure was 1695 pounds, shutin pressure after 30 minutes was 3020 pounds.

We have since drill stem tested the Drinkard pay in another well, the Coates "C" No. 7, which is being drilled at one location south of the discovery well. The interval from 5880 to 5940 was

DEARNLEY - MEIER & ASSOCIATES INCORPORATED GENERAL LAW REPORTERS ALBUQUERQUE, NEW MEXICO 3-6691 5-95-46 tested for two hours and twenty minutes. Gas surfaced in three minutes, oil in fifteen minutes, and flowed into tanks 39.87 barrels the first hour and 41.24 barrels the second hour, or at a daily rate of 973 barrels with no water, 750 to 1 gas-oil ratio, gravity was 36.1, corrected.

I might call your attention that we have four difference in gravity between the McKee and the Drinkard so we can identify what At a point 660 feet South of the North line we are producing. and 1880 feet West of the East line of Section 24, 25 South, 37 East. the location has been staked for the Coates "C" Well No. 8. This location is 100 feet East of the discovery well. We propose to drill this well to the McKee zone, set seven inch casing approximately 7450 feet and cement the casing with sufficient cement to protect all productive horizons or formations, and to prevent any communication of reservoirs behind the pipe. 850 sacks of cement were set in the discovery well for the producing string. and this amount of pipe was calculated to bring the cement up into or behind the intermediate string. I would anticipate that we would set no less than that amount of cement in this "C" No. 8. We propose to perforate the casing opposite the McKee zone from 7290 to 7360 feet, and are now making a request that we also be permitted to dually complete the well by perforating the Drinkard zone from 5930 to 5950 feet, and produce both zones as an oil-oil completion. A packer will be set at a depth of approximately

7100 feet to any communication of fluids within the well bore. Each zone will be produced through individual strings of two inch tubing. It is our opinion that the manner and method proposed for the dual completion of this well has been proven to be mechanically feasible and practical, and it should be in the interest of conservation and the protection of correlative rights. We will observe and comply with all the rules and regulations of this Commission and will maintain separation of production between the two zones.

Our estimated cost of drilling and completing a well in the Drinkard zone is \$115,000.00. We estimate the cost of a McKee zone completion would be \$145,000.00. Two wells drilled, one completed in each zone, would then add up to \$260,000.00. We have estimated that a dually completed well can be drilled and completed in each zone for \$155,000.00. This would be a saving of \$105,000. We have 400 acres in the lease on which the discovery well was drilled, and 40 acres within this same Section 24. Of course, we do not know now how much will be productive, but hope that all of it will be, and one or two zones of dual completions over all if permitted, would permit us to save an unnecessary expenditure, in our opinion, of more than a million dollars. We really believe that it would be in the interest of conservation because we feel the ultimate recoveries would be increased in that possibly certain locations would be drilled for dual completions.

that economically we might not think could be desired. We can to drill two of them on that particular 40 acre tract. We can think of no reason why wells completed in this manner, where each zone can be artificially produced, where each string can be individually run, and packers are available now, that effectively separate the two zones, we can't think of any reason why any less oil should be produced in this manner than would be through two wells.

We have sent copies of this application to all of our neighbors and we have received letters waiving objections to this application from Atlantic Refining Company, from Amerada Petroleum Corporation, from W. K. Byrom, from Skelly Oil Company, from The Texas Company, from the Western Natural Gas Company, and the Gulf Oil Corporation I believe has wired direct to the Commission, I have a copy of its telegram, also waiving objection, and as this is on a Federal Lease, I sent a copy to the United States Geological Survey, and I have a letter from them waiving objection to this application provided only that we file with them certain necessary forms and change of plan.

I would like to give the Commission these letters of waiver for its record, and I have brought with me a copy of the electric log of the discovery well on which we have marked the top and bottom of the Drinkard and the proposed perforations that we would like to make in the "C" No. 8, and being only 100 feet distant, it

DEARNLEY: MEIER & ASSOCIATES INCORPORATED GENERAL LAW REPORTERS ALBUQUERQUE, NEW MEXICO 3-669: 5-9546 should be identical when drilled, to this log. I believe the Commission, if it doesn't have a copy of same, would like to have a copy of the discovery welllog and will offer it not necessarily as an exhibit.

- Q How many letters do you have there?
- A I have one from Amerada Petroleum, the Atlantic Refining Company, W. K. Byrom, Skelly Oil Company, The Texas Company, Western Natural Gas and the United States Geological Survey.
  - Q Five in all?
  - A Yes, sir, and the telegram from Gulf.
- Q Would you identify the letters and the electric log as Exhibit 1, please?
  - A All of them as Exhibit 1?
  - Q Yes.

A Just a minute.

(Marked Tidewater's Exhibit No. 1, for identification.)

- Q And the electric log as Exhibit 2?
- A Yes, sir.

(Marked Tidewater's Exhibit No. 2, for identification.)

A That completes my testimony, my direct testimony. I would be glad to answer any questions.

MR. PORTER: You had Exhibits No. 1 and 2?

A Yes, sir, I gave the reporter the Exhibits 1, all letters being marked Exhibit No. 1, and the electric log being marked No.

DEARNLEY - MEIER & ASSOCIATES INCORPORATED GENERAL LAW PEPORTERS ALBUQUERQ'IE, NEW MEXICO 3-6691 5-9546 the record. Anyone have a question of Mr. Holloway? Mr. Utz.

#### CROSS EXAMINATION

#### By MR. UTZ:

- Q Just to run through briefly your method of completion, I didn't quite pick it up, you are setting seven inch casing?
  - A Yes, sir.
  - Q Cement circulated into the intermediate?
- A We set 850 feet in the discovery well, as I stated, and it was calculated that amount would reach the intermediate string.

  I would say that they would set at least that amount, or at least a thousand string. We will set enough to get up to the intermediate string, yes, sir.
  - Q What size tubing?
- A Two inch. One will be just a normal regular two inch, the other will have streamline or high drill joints on it so there won't be any possibility of getting tangled up when you go by the collars.
  - Q You will use the ordinary method of tubing anchors?
- A We set the long string on the packer, the other string will be suspended, the short string will be suspended.
  - Q Will this be a flowing well, or do you know?
- A Right now indications are it will be flowing, yes. We are prepared to produce it artificially if we have to, either by

DEARNLEY MEIER & ASSOCIATES INCORPORATED GENERAL LAW REPORTERS ALBUQUERQUE NEW MEXICO 3-6691 5-9546 also. We don't have any compressor, but that could be set and the wells produced by flow well.

- Q If it shouldn't be a flowing well, how do you propose to test the packer?
  - A How do we propose to test the packer?
  - Q Yes.
  - A You can test the long string by putting pressure on it.
- Q We had dual completions in both strings of pumping, and we had a little bit of trouble testing the packer. I wanted to clarify that point. I believe that is all I had. I have one further question. Do you know now what type of packer you are going to set?

A We showed on our application that we would set a Baker Model D production packer. It's entirely possible, if there's any particular reason you have, Mr. Utz, for asking that question, it's entirely possible we could set a Baker retainer packer, there are a number of packers available. This is the type of packer they seem to choose in the field setting this casing.

Q This packer you intend to set is comparable to packers that have been set for dual completions? A That's right.

MR. UTZ: That's all I have.

MR. PORTER: Anyone else have a question? No further questions, the witness may be excused.

DEARNLEY - MEIER & ASSOCIATES INCORPORATED GENERAL LAW REPORTERS ALBUQUERQUE, NEW MEXICO 3-6691 5-9546 Anyone have a statement?

MR. COOLEY: If the Commission please, I have a telegram from Gulf Oil Corporation. It is in substance, states that Gulf has no objection to the application in this case.

MR. PORTER: Anything else? Mr. Kastler.

MR. KASTLER: Bill Kastler, representing Gulf Oil Corporation. I would like to state that while we have not yet made our first deep completion in this field, we are in the process of drilling right now. Our studies indicate that the most feasible method of completion would be dual completion, and we therefore wish to enter our concurrence in Tidewater's application.

MR. PORTER: Anyone have anything further in the case?
MR. UTZ: I have one additional question.

#### J. B. HOLLOWAY

recalled as a witness, having previously been sworn, testified further as follows:

#### CROSS EXAMINATION

#### By MR. UTZ:

Q How about the pressure on the formation? Would you give us the pressure on those?

A We have only the drill stem pressures which I read. They were normal, and the differential, I believe, is only indicated by the difference in depth, one being 58 and the other 71.

Dearnley - Meier & Associates Incorporated General Law Reporters Albuqu'erque, New Mexico 3-6691 5-9546 I think there was only 70 some pounds difference, about 400 pounds difference.

- Q 400 pounds difference?
- A That is the way I remember.
- Q Which is the higher? A The lower is higher.

MR. UTZ: That is all.

MR. PORTER: Any more questions or statements or anything? We will take the case under advisement.

(Witness excused.)

#### <u>C</u> <u>E</u> <u>R</u> <u>T</u> <u>I</u> <u>F</u> <u>I</u> <u>C</u> <u>A</u> <u>T</u> <u>E</u>

STATE OF NEW MEXICO )
: SS
COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this day of August, 1957.

Notary Public-Court Reporter

My commission expires:
June 19, 1959.



TOUT OFFILE BOX 1404 HOUSTON 1 TEXAS

J. B. HOLLOWAY
DIVISION SUPERVISOR
PROBATION & UNITIZATION

July 8, 1957

Re: Application for Permit to
Dually Complete as an oil-oil
well Tidewater Oil Company's
Coates "C" Well #8, undesignated
pool in the Drinkard and McKee
Reservoirs, Section 24, 25-S,
37-E, Lea County, New Mexico.

1.1.2

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

#### Gentlemen:

By this letter Tidewater Oil Company respectfully requests a hearing, to consider this our application for permission to dually complete Coates "C" #8 Well in such manner that the Drinkard and McKee reservoirs may be produced through parallel strings of tubing, and in support thereof states as follows:

- 1. Tidewater 0il Company's Coates "C" Well #8 is located 660 feet South and 1880 feet West of the Northeast corner of Section 24, 25-S, 37-E.
- 2. The subject well will have 7" casing set at a depth of approximately 7450 feet and cemented with sufficient cement to protect all productive formations and prevent communication of reservoirs behind the pipe.
- 3. We propose to perforate 7" casing opposite the Drinkard pay zone from 5930 feet to 5950 feet. This interval was found to be productive of oil on drill stem test in Tidewater Oil Company's Coates "C" Well #6, an Ellenburger completion, located 100 feet West.
- 4. We propose to perforate 7" casing opposite the McKee zone from 7290 to 7360 feet, which interval was also found to be productive of oil on drill stem test in Coates "C" #6. The two zones will be separated within the well bore by a production packer set at approximately 7100 feet.
- 5. We are attaching a plat showing the acreage to be dedicated to the well, well location, and offset ownership.

- 6. Also attached is a diagrammatic sketch showing the proposed mechanical completion of the well.
- 7. It is the opinion of the applicant that the manner and method proposed for the dual completion of this well is mechanically feasible and practical, and is in the interest of conservation and the protection of correlative rights.
- 8. The applicant will comply with all rules and regulations of the New Mexico Oil Conservation Commission to maintain separation of production from the two pay zones.
- 9. By copy of this letter of application, all offset operators are notified of the proposed dual completion.

Respectfully submitted,

TIDEWATER OIL COMPANY

& mare

JBH: vh Enclosures

#### Mailing List

Gulf Oil Corporation P. O. Box 2167 Hobbs, New Mexico

Western Natural Gas Company 823 Midland Tower Midland, Texas

W. K. Byrom 817 North Turner Hobbs, New Mexico

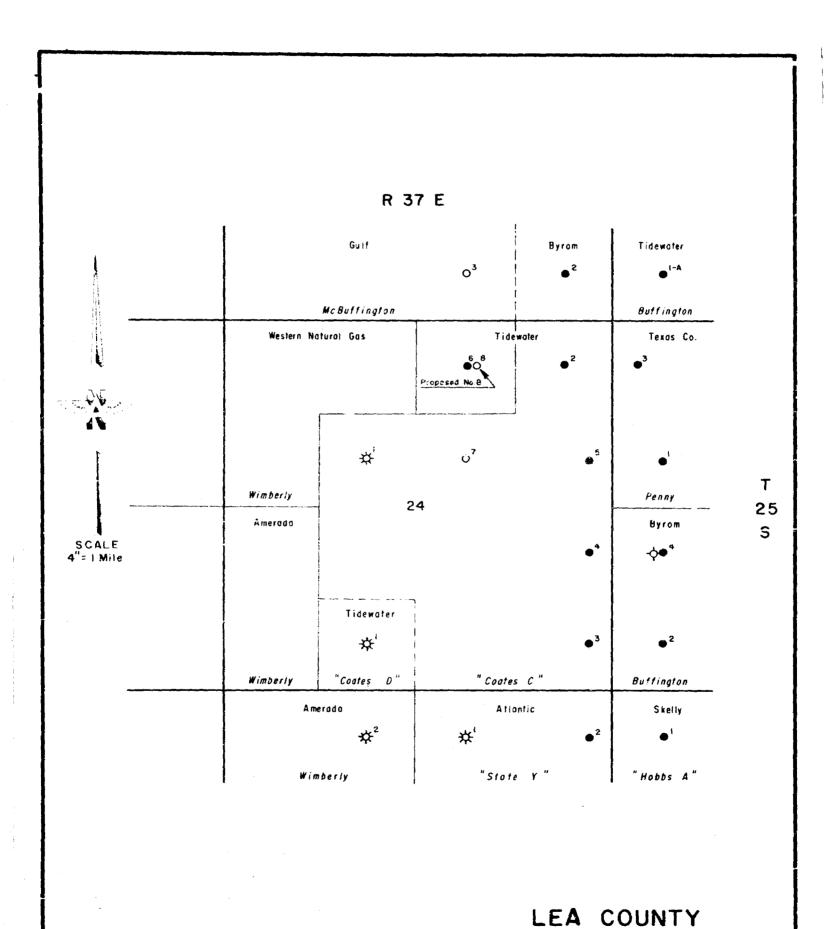
The Texas Company 1001 Petroleum Life Building P. O. Box 1270 Midland, Texas

Skelly Oil Company P. O. Box 993 Midland, Texas

The Atlantic Refining Company P. O. Box 871 Midland, Texas

Amerada Petroleum Corporation P. O. Box 312 Midland, Texas

U. S. Department of the Interior Geological Survey P. O. Box 1346 Hobbs, New Mexico

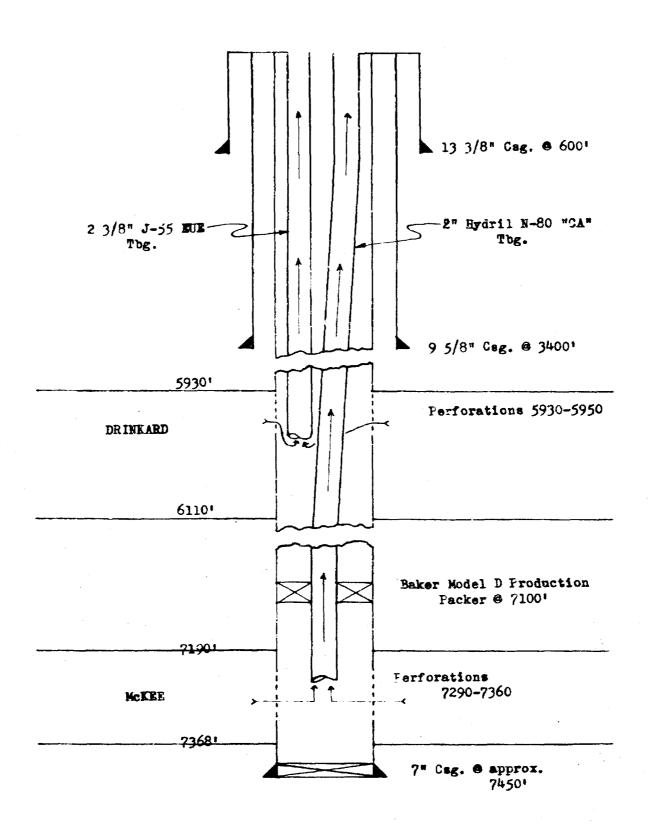


NEW MEXICO

TIDEWATER OIL COMPANY

DIAGRAMMATIC SKETCH DUAL COMPLETION

PROPOSED WELL A. B. COATES "C" 8



GENERAL OFFICES

AMERADA PERROLEL & COURTORITION

BEACON BUILDING
FOR BOX 2040
TULSA 2, ORIA.

July 22, 1957

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

#### Gentlemen:

We are advised Tidewater Oil Company will drill its Coates "C" Well No. 8, 660' South and 1880' West of the Northeast Corner of Section 24, Township 25 South, Range 37 East, and further, an application has been filed for permission to dually complete said well in such manner that the Drinkard and McKee reservoirs may be produced through parallel strings of tubing.

This is to advise that Amerada Petroleum Corporation, as an offset operator, waives objection to the proposed method of completion.

Yours very truly,

R. S. Christie

RSC:mt

cc: Tidaater Oil Company Box 1404 Houston 1, Texas DIL CONS THE SION SANT F, NEW MEXICO CASE 12 9

Francisco 1



## THE ATLANTIC REFINING COMPANY INCORPORATED - 1870

DETROLEUM PRODUCTS

DOMESTIC PRODUCING DEPARTMENT WEST TEXAS NEW MEXICO REGION

N. B. WINTER, MANAGER

F. P. CASTLEBERRY, LAND MANAGER
P. E. PLETCHER, CPERATIONS MANAGER
MARYIM L. MILLS, ORILLING MANAGER
E. L. SMITH, EXPLORATION MANAGER

July 25, 1957

PETROLEUM LIFE BLDG MAILING ADDRESS P. O. BOX 871 MIDLAND, TEXAS

Tidewater Oil Company P. O. Bex 1202 Housten 1, Texas

Attention: Mr. J. B. Holleway

Dear Sir:

The Atlantic Refining Company waives objection to an oiloil dual completion between the Drinkard and McKee reservoirs in
your proposed Coates "C" well No. 8, located in Section 24, T-25-S,
R-37-E, Los County, New McKice. We hope that you are successful
in your venture.

Yours very truly,

THE ATLANTIC REFINING COMPANY

R. I. Howard

Regional Petroleum Engineer

W. K. Byrom OIL PROPERTIES

July 12, 1957

Tide Water Gil Company Box 1404 Houston 1, Texas

Attention: Nr. J. B. Holloway

#### Gentlemen:

As requested in your letter of July 3, 1957, we waive all objections to your proposed dual oil-oil completion on Coates "C" Well #8, undesignated pool in the Drinkard and McKee Reservoirs, Section 24, 25-S, 37-E, Lea County, New Nexico.

Why Syrocu



### **SKELLY OIL COMPANY**

PRODUCTION DEPARTMENT
C. L. BLACKSHER, MANAGER

**TULSA 2, OKLAHOMA** 

July 19, 1957

Re: Application for Permit to dually complete as an oil-oil well Tidewater Oil Company's Coates "C" Well #8, undesignated pool in the Drinkard and McKee Reservoirs, Section 24, 25S - 37E, Lea County, New Mexico

Tidewater Oil Company P. O. Box 1404 Houston 1, Texas

Gentlemen:

In line with your letter of July 8 and the request contained therein, please be advised that as offset operator we waive objections to your proposed method of dually completing as an oil-oil well, Tidewater Oil Company's Coates "C" Well No. 8, undesignated pool in the Drinkard and McKee Reservoirs.

It is our understanding that applicant will run 7m casing and produce the two oil zones thru parallel strings of 2" tubing.

Yours very truly,

George W. Selinger

GWS:dc

cc: Mr. J. N. Dunlavey

## THE TEXAS CCMPANY

TEXACO PETROLEUM PRODUCTS

PRODUCING DEPARTMENT
WEST TEXAS DIVISION
O. F. SEBESTA, ASSISTANT DIVISION MANAGER



P. O. BOX 1720 FORT WORTH 1, TEXAS

July 19, 1957

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

Gentlemen:

The Texas Company has been notified of Tide-water Oil Company's application for permission to dually located in an undesignated pool in the Drinkard and McKee reservoirs, Section 24, 25-S, 37-E, Lea County, New reservoirs may be produced through parallel strings of tubing.

The Texas Company, as an offset operator, waives any objection to the dual completion of this well.

Yours very truly,

THE TEXAS COMPANY

O. F. Sebesta

Assistant Division Manager

JEB/s

# Western Natural Gas Company

1006 MAIN STREET

Houston 2, Texas

W. K. DAVIS VICE-PRESIDENT OPERATIONS

August 1, 1957

Tidewater Oil Company Mellie Esperson Building Houston, Texas

Gentlemen:

This is to acknowledge receipt of your application to the New Mexico Oil Conservation Commission for a permit to dually complete as an oil-oil well your Coates #C-8 well in the Drinkard and McKee reservoirs, Section 24-25S-37E, Lea County, New Mexico. We also wish to advise you that we have no objection to your proposed method of completion.

Yours very truly,

faul C. Wright

PCW:mn cc : R. H. McKoy Copies to:

Mr. H. P. Shackelford Mr. F G. Wesberry

Mr. idell Haugh

IN REPLY REFER TO:



UNITED STATES

## DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

T. C. Pox 1338 Hobbs, New Mexico

July 5, 1957

Tidewater Oil Company F. O. Fox 1404 Houston 1, Texas

Attention: Mr. J. B. Holloway

Re: Lease Las Gruces 32653(6), Well No. 3 A. 3. Jourses 404 Mail Sec. 24-258-37E Lea County, New Mexico

Gentlemen:

Reference is made to your letter of July 2, 1957, reducating to be advised whether we have any objection to your dually completing the subject well to produce from the NeWee and Drinkard formations Greath parallel strings of tabing.

This office has no objection to such a dual completion provided that you comply with the following:

- (a) Perform the work in such a manner so as to indure that there will be no commission of fluid from the swo coras.
- (b) Equip the well to permit separate neasuring of production from, and determination of reservoir pressure of, each formation or zone.
- (c) Obtain approval to dually complete the well from the New Menico Cil Conservation Commission for propation purposes.
- (d) File a "Notice of Intention to Change Plans" on our Form 9-33la, stating details of your proposed dual completion operations. Such notice is necessary because your "Notice of Intention to Drill", approved today by letter addressed to your Hobbs office, proposed a single completion in the McNew Formation only.

Very truly yours,

N. a. but t

H. A. DuFont District Engineer

Copy to: Tidewater Cil Company

Attn: Ilr. H. P. Schackelford

Pex 547

Hobbs, New Merrico

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

# WESTERN UNION

TELEGRAM

1201

DL=Day Letter
NL=Night Letter

LT=International

The filing time shown in the filed the Octomestic referans is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of Jestination

. LA 198 DC 182 74 25

(05)

D FWB340 PD=FAX FORT WORTH TEX 13 151PMC=

\*NEW MEXICO OIL CONSERVATION COMM=

1957 AUG 13 PM 1 22

SANTAFE NMEX=

=ATTENTION: A L PORTER, JR.

RE NMOCC CASE 1291 SCHEDULED AUGUST 15, 1957 • GULF OIL CORPORATION HAS BEEN GIVEN DUE NOTICE OF TIDEWATER OIL COMPANY S APPLICATION FOR AN ORDER AUTHORIZING AN OIL-OIL DUAL COMPLETION IN THEIR COATES "C" WELL NO. 8, LOCATED IN SECTION 24, T-25-8, R-37-E, LEA COUNTY, NEW MEXICO. GULF OIL CORPORATION HAS NO OBJECTION TO THE GRANTING OF TIDEWATER S REQUEST AS ADVERTISED=

B E THOMPSON GULF OIL CORP ==

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

TIDEWATER OIL COMPANY
TIDE WATER ASSOCIATED OIL COMPANY

POST OFFICE BOX 1404
HOUSTON 1, TEXAS

J. B. HOLLOWAY
DIVISION SUPERVISOR
PRORATION & UNITIZATION

July 8, 1957

Re: Application for Permit to
Dually Complete as an oil-oil
well Tidewater Oil Company's
Coates "C" Well #8, undesignated
pool in the Drinkard and McKee
Reservoirs, Section 24, 25-S,
37-E, Lea County, New Mexico.

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

Gentlemen:

By this letter Tidewater Oil Company respectfully requests a hearing, to consider this our application for permission to dually complete Coates "C" #8 Well in such manner that the Drinkard and McKee reservoirs may be produced through parallel strings of tubing, and in support thereof states as follows:

- 1. Tidewater Oil Company's Coates "C" Well #8 is located 660 feet South and 1880 feet West of the Northeast corner of Section 24, 25-S, 37-E.
- 2. The subject well will have 7" casing set at a depth of approximately 7450 feet and cemented with sufficient cement to protect all productive formations and prevent communication of reservoirs behind the pipe.
- 3. We propose to perforate 7" casing opposite the Drinkard pay zone from 5930 feet to 5950 feet. This interval was found to be productive of oil on drill stem test in Tidewater Oil Company's Coates "C" Well #6, an Ellenburger completion, located 100 feet West.
- 4. We propose to perforate 7" casing opposite the McKee zone from 7290 to 7360 feet, which interval was also found to be productive of oil on drill stem test in Coates "C" #6. The two zones will be separated within the well bore by a production packer set at approximately 7100 feet.
- 5. We are attaching a plat showing the acreage to be dedicated to the well, well location, and offset ownership.

Page 2 New Mexico Oil Conservation Commission

July 8, 1957

- 6. Also attached is a diagrammatic sketch showing the proposed mechanical completion of the well.
- 7. It is the opinion of the applicant that the manner and method proposed for the dual completion of this well is mechanically feasible and practical, and is in the interest of conservation and the protection of correlative rights.
- 8. The applicant will comply with all rules and regulations of the New Mexico Oil Conservation Commission to maintain separation of production from the two pay zones.
- 9. By copy of this letter of application, all offset operators are notified of the proposed dual completion.

Respectfully submitted,

TIDEWATER OIL COMPANY

JBH: vh Enclosures

#### Mailing List

Gulf Oil Corporation P. O. Box 2167 Hobbs, New Mexico

Western Natural Gas Company 823 Midland Tower Midland, Texas

W. K. Byrom 817 North Turner Hobbs, New Mexico

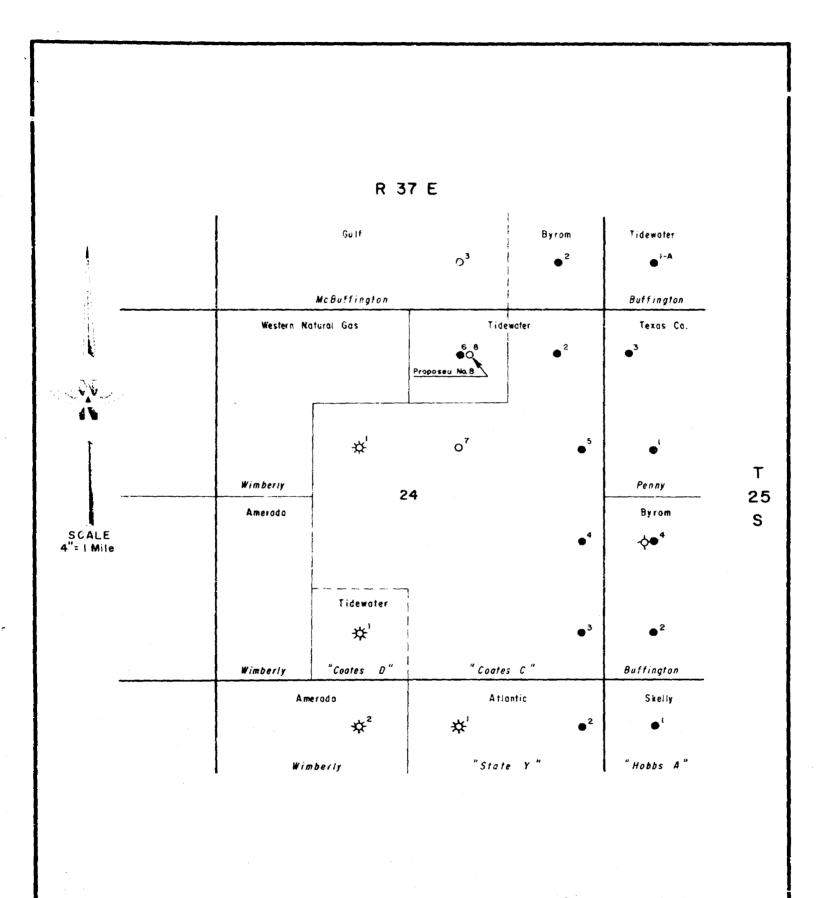
The Texas Company 1001 Petroleum Life Building P. O. Box 1270 Midland, Texas

Skelly 0il Company P. O. Box 993 Midland, Texas

The Atlantic Refining Company P. O. Box 871 Midland, Texas

Amerada Petroleum Corporation P. O. Box 312 Midland, Texas

U. S. Department of the Interior Geological Survey
P. O. Box 1346
Hobbs, New Mexico

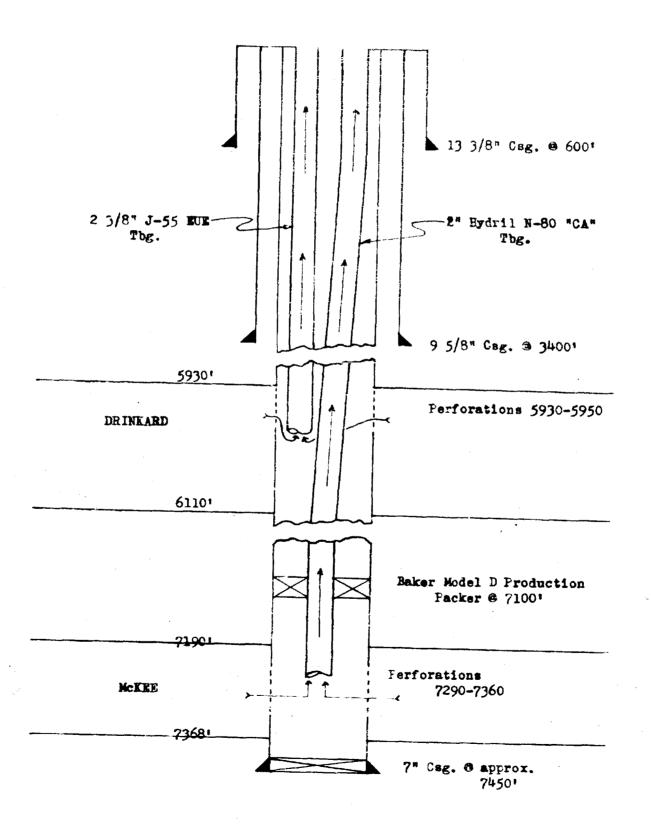


LEA COUNTY
NEW MEXICO

TIDEWATER OIL COMPANY

#### DIAGRAMMATIC SKETCH DUAL COMPLETION

PROPOSED WELL A. B. COATES "C" 8



#### DOCKET: REGULAR HEARING AUGUST 15, 1957

#### Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe, NM

ALLOWABLE: (1) Consideration of the oil allowable for September, 1957.

(2) Consideration of the allowable production of gas for September, 1957, from the seven prorated pools in Lea County, New Mexico; also consideration of the allowable production of gas from the six prorated pools in San Juan and Rio Arriba Counties, New Mexico, for September, 1957.

#### **NEW CASES**

In the matter of the hearing ordered to be held by Paragraph 3 of Order R-794-A, Case 977, to permit Southern Union Gas Company and other interested parties to show cause why 320-acre spacing should be continued in the Tapacito-Pictured Cliffs Gas Pool.

CASE 1291: Application of Tidewater Oil Company for approval of an oil-oil dual completion in an undesignated Drinkard Pool and an undesignated McKee Pool underlying Section 24, Township 25 South, Range 37 East, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order authorizing an oil-oil dual completion, by means of parallel strings of tubing, in an undesignated Drinkard Pool and an undesignated McKee Pool underlying Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, for its Coates "C" Well No. 8 located 660 feet from the North line and 1880 feet from the East line of said Section 24.

CASE 1292: Application of John H. Trigg for an order authorizing a pilot program for the injection of gas into the Caprock-Queen Pool, Chaves County, New Mexico, for purposes of pressure maintenance, and further, authorizing the transfer of allowables for the injection well to other wells on the same basic lease, and further, to exempt certain of his wells from gas-oil ratio penalties. Applicant, in the above-styled cause, seeks an order authorizing the injection of gas into the Caprock-Queen Pool through his Federal Trigg No. 10-9 Well located in the NW/4 SE/4 of Section 9, Township 14 South, Range 31 East, Chaves County, New Mexico. Applicant further requests that the allowables assigned to the injection well be transferred to another well or wells on the same basic lease, and further, that during the period of the pilot program all wells in Section 9, which are on the same lease as the injection well, be exempt from gas-oil ratio penalties.

Application of Amerada Petroleum Corporation for an order amending the Special Rules and Regulations for the Justis Gas Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order amending the Special Rules and Regulations for the Justis Gas Pool provided by Order R-586, as amended, to provide for 320-acre gas proration units in the Justis Gas Pool, Lea County, New Mexico.

CASE 1294:

Application of Ambassador Oil Corporation, Graridge Corporation and Gulf Oil Corporation for an order authorizing a pilot water flood project in the Caprock-Queen Pool in Lea and Chaves Counties, New Mexico, and further, authorizing the applicants to produce at capacity their wells located within and offsetting the pilot water flood program Applicants, in the above-styled cause, seek an order authorizing the injection of water into the Queen formation of the Caprock-Queen Pool through six wells located in Sections 1 and 12, Township 13 South, Range 31 East, Chaves County, New Mexico, and further, authorizing capacity production from ten wells located within and offsetting the pilot water flood area located in Sections 1, 11, and 12, Township 13 South, Range 31 East, and Section 6, Township 13 South, Range 32 East, in Chaves and Lea Counties, New Mexico.

CASE 1295: Application of Southern Union Gas Company and Southern Union Gathering Company for the suspension for a period of not less than six months of the cancellation of underproduction in the six prorated gas pools in San Juan and Rio Arriba Counties, New Mexico. Applicants, in the above-styled cause, seek an order extending until a date not earlier than January 31, 1958, the date upon which accumulated underproduction accrued to certain of their connections as of January 31, 1957, will be cancelled for non-production under the provisions of the Special Rules and Regulations for the Aztec-Pictured Cliffs, Ballard-Pictured Cliffs, Fulcher Kutz-Pictured Cliffs, South Blanco-Pictured Cliffs, West Kutz-Pictured Cliffs, and Blanco Mesaverde Gas Pools in San Juan and Rio Arriba Counties, New Mexico. Applicants further request similar relief for any and all wells of other producers in the same pools if the facts and circumstances are such as to make similar relief necessary.

Application of the Oil Conservation Commission of New Mexico upon its own motion for the suspension for a period of not less than six months of the overage shut-in provisions of the Special Rules and Regulations for the six prorated gas pools in San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks an order suspending until a date not earlier than January 31, 1958, the overage shut-in provisions of Special Rules and Regulations for the Aztec-Pictured Cliffs, Ballard-Pictured Cliffs, Fulcher Kutz-Pictured Cliffs, South Blanco-Pictured Cliffs, West Kutz-Pictured Cliffs, and Blanco Mesaverde Gas Pools in San Juan and Rio Arriba Counties, New Mexico.

CASE 1297: Southeastern New Mexico Nomenclature case calling for an order creating new pools and extending and deleting certain areas from existing pools in Lea, Roosevelt and Eddy Counties, New Mexico.

(a) Create a new oil pool for Paddock production, designated as the Grayburg-Paddock Pool, and described as:

TOWNSHIP 17 SOUTH, RANGE 30 EAST Section 18: SE/4

-3-Docket No. 24-57

(b) Create a new oil pool for Ellenburger production designated as the Justis-Ellenburger Pool, and described as:

TOWNSHIP 25 SOUTH, RANGE 37 EAST Section 24: NE/4

(c) Create a new oil pool for San Andres production, designated as the Premier-San Andres Pool, and described as:

TOWNSHIP 17 SOUTH, RANGE 31 EAST Section 30: NE/4

(d) Create a new oil pool for Grayburg production, designated as the Teague-Grayburg Pool, and described as:

TOWNSHIP 23 SOUTH, RANGE 37 EAST Section 20: SE/4

(e) Create a new oil pool for Seven Rivers production, designated as the Vacuum-Seven Rivers Pool and described as:

TOWNSHIP 17 SOUTH, RANGE 35 EAST Section 34: NW/4

(f) Extend the Atoka Pool to include:

 $\begin{array}{c} \text{TOWNSHIP 18 SOUTH} \,,\,\, \text{RANGE 26 EAST} \\ \text{Section 23:} \quad \text{N/2 NE/4} \end{array}$ 

(g) Extend the Crossroads Pool to include:

TOWNSHIP 9 SOUTH, RANGE 36 EAST Section 23: SE/4

(h) Extend the Grayburg-Keely Pool to include:

TOWNSHIP 17 SOUTH, RANGE 29 EAST Section 23: NE/4

(i) Extend the Hume-Queen Pool to include:

TOWNSHIP 16 SOUTH, RANGE 34 EAST Section 8: S/2 NE/4

(j) Extend the Jalmat Gas Pool to include:

TOWNSHIP 23 SOUTH, RANGE 36 EAST Section 17: SW/4 & W/2 SE/4

(k) Extend the Lynch Pool to include.

TOWNSHIP 20 SOUTH, RANGE 34 EAST Section 26: SW/4

(1) Extend the West Henshaw-Grayburg Pool to include:

TOWNSHIP 16 SOUTH, RANGE 30 EAST Section 4: SE/4

Section 5: SE/4 Section 8: NE/4

(m) Extend the Millman Pool to include:

TOWNSHIP 19 SOUTH, RANGE 28 EAST Section 18: S/2 NE/4

(n) Extend the Milnesand-Pennsylvanian Pool to include:

TOWNSHIP 8 SOUTH, RANGE 34 EAST Section 13: SE/4

(o) Extend the Ranger Lake-Pennsylvanian Pool to include:

TOWNSHIP 12 SOUTH, RANGE 34 EAST Section 25: NW/4 NW/4 Section 26: N/2 NE/4

(p) Extend the Turkey Track Pool to include:

TOWNSHIP 18 SOUTH, RANGE 29 EAST Section 34: NW/4

(q) Extend the Vacuum Pool to include:

TOWNSHIP 17 SOUTH, RANGE 34 EAST Section 2: NW/4

(r) Extend the Terry-Blinebry Oil Pool to include:

TOWNSHIP 21 SOUTH, RANGE 37 EAST Section 3: Lot 16 Section 4: Lot 1

(s) Delete the following area from the Blinebry Gas Pool:

TOWNSHIP 21 SOUTH, RANGE 37 EAST Section 3: Lot 16 Section 4: Lot 1

(t) Delete the following area from the Blinebry Oil Pool:

TOWNSHIP 21 SOUTH, RANGE 37 EAST Section 3: Lot 16 Section 4: Lot 1

CASE 1298: Northwestern New Mexico Nomenclature case calling for an order extending existing pools in San Juan and Rio Arriba Counties, New Mexico.

(a) Extend the Blanco Mesaverde Pool to include:

TOWNSHIP 28 NORTH, RANGE 9 WEST
Section 30: E/2
Section 31: E/2
Section 32: All

(b) Extend the Ballard-Pictured Cliffs Pool to include:

TOWNSHIP 25 NORTH, RANGE 7 WEST Section 7: W/2

(c) Extend the Blanco-Pictured Cliffs Pool to include:

TOWNSHIP 29 NORTH, RANGE 9 WEST Section 5: All

(d) Extend the Otero-Pictured Cliffs Pool to include:

TOWNSHIP 23 NORTH, RANGE 5 WEST Section 3: W/2
Section 4: E/2
Section 5: W/2
Section 6: E/2
Section 7: NE/4
Section 8: NW/4
Section 10: W/2

TOWNSHIP 24 NORTH, RANGE 5 WEST Section 32: SW/4

(e) Extend the South Blanco-Pictured Cliffs Pool to include:

TOWNSHIP 24 NORTH, RANGE 2 WEST Section 5: S/2 Section 6: S/2 Section 7: All

TOWNSHIP 24 NORTH, RANGE 3 WEST Section 12: All Section 13: N/2

TOWNSHIP 24 NORTH, RANGE 4 WEST Section 6: All

TOWNSHIP 25 NORTH, RANGE 6 WEST Section 23: E/2 Section 24: W/2

TOWNSHIP 26 NORTH, RANGE 5 WEST Section 19: N/2

TOWNSHIP 27 NORTH, RANGE 8 WEST Section 3: All

TOWNSHIP 28 NORTH, RANGE 9 WEST Section 25: N/2 Section 33: W/2 & NE/4

(f) Extend the Tapacito-Pictured Cliffs Pool to include:

TOWNSHIP 25 NORTH, RANGE 3 WEST Section 3: E/2

(g) Extend the Bisti-Lower Gallup Oil Pool to include:

TOWNSHIP 24 NORTH, RANGE 10 WEST Section 4: N/2

TOWNSHIP 25 NORTH, RANGE 10 WEST All of Sections 29 & 30 Section 31: N/2 All of Sections 32, 33 & 34

TOWNSHIP 25 NORTH, RANGE 11 WEST Section 16: S/2
All of Sections 17 thru 23, incl. All of Sections 25 & 26
Section 27: N/2 & SE/4

TOWNSHIP 25 NORTH, RANGE 12 WEST

Section 4: SE/4, N/2 SW/4, and SE/4 SW/4
All of Sections 13 & 14
Section 15: E/2 & E/2 NW/4
All of Sections 23 & 24
Section 25: N/2

#### CONTINUED CASES

CASE 1261: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interests of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the SW/4 Section 30, Township 22 South, Range 38 East, Lea County, New Mexico.

CASE 1262: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interest of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the SE/4 Section 30, Township 22 South, Range 38 East, Lea County, New Mexico.

Docket No. 24-57

CASE 1263: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interests of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the NE/4 Section 25, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 1264: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interests of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the SE/4 Section 25, Township 22 South, Range 37 East, Lea County, New Mexico.

## BEFORE THE CIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW CONSIDERING:

CASE NO. 1291 Order No. R-1041

APPLICATION OF TIDEWATER CIL COMPANY FOR AN ORDER AUTHORIZING AN OIL-OIL DUAL COMPLETION IN AN UNDESIGNATED DRINKARD POOL AND IN AN UNDESIGNATED MCKEE POOL UNDERLYING SECTION 24, TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on August 15, 1957, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this <u>29</u> day of August, 1957, the Commission, a quorum being present, having considered the application, and the evidence adduced 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, Tidewater Oil Company, is the owner and operator of the Coates "C" Well No. 8, located 660 feet from the North line and 1880 feet from the East line of Section 24, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That the applicant proposes to complete as an oil-oil dual the above-described Coates "C" Well No. 8 by means of separate and parallel strings of tubing in an undesignated Drinkard Pool and an undesignated McKee Pool underlying said Section 24.
- (4) That the mechanics of the proposed dual completion as outlined by the applicant are consonant with good conservation practices.

#### IT IS THEREFORE ORDERED:

That the applicant, Tidewater Oil Company, be and the same is hereby authorized to complete as an oil-oil dual by means of separate and parallel strings of tubing, its Coates "C" Well No. 8, located 660 feet from the North line and 1880 feet from the east line of Section 24, Township 25 South, Range 37 East,

-2-Case No. 1291 Order No. R-1041

NMPM, Lea County, New Mexico, in an undesignated Drinkard Pool and an undesignated McKee Pool underlying said Section 24.

PROVIDED HOWEVER, That upon the actual completion of said subject well, applicant shall submit to the district office of the Commission in which the subject well is located, Form C-104 and Form C-110, outlining the information required on these forms by existing Rules and Regulations.

PROVIDED HOWEVER, That subject well shall be completed and thereafter produced in such a manner that there will be no commingling within the well bore either within or outside the casing of gas, oil and gas, or oil produced from either or both of the separate strata, and

PROVIDED FURTHER, That said subject well for dual completion and production shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata and further be equipped with all necessary connections required to permit the recording meters to be installed and used at any time as may be required by the Commission or its representatives, in order that the oil and gas from each separate stratum may be accurately measured and the gas-oil ratio thereof determined, and

PROVIDED FURTHER, That the applicant shall make segregation tests and packer leakage tests upon completion of the subject well and annually thereafter during the GOR Test Period which may hereafter be established by the Commission for the undesignated Drinkard Pool, and whenever the packer is disturbed, and any and all other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission. All tests shall be witnessed by representatives of offset operators if any there be at their election, and the results of each test properly attested to by the applicant herein and all witnesses, and shall be filed with the Commission within 15 days after the completion of such tests and, further, that applicant shall file with the Commission in duplicate a packer-setting affidavit, which affidavit shall be due within 15 days of the dual completion or whenever the packer is disturbed.

PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata and a special report of producing gas—oil ratio and reservoir pressure for each producing zone or stratum immediately following completion.

IT IS FURTHER ORDERED: That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights. Upon failure of

-3-Case No. 1291 Order No. u-1041

applicant to comply with any requirement of this order after proper notice and hearing the Commission May terminate the authority hereby granted and require applicant or its successors and assigns to limit its activities to regular single-some production in the interests of conservation.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

EDWIN L. MECHEN, Chairman

MURRAY E. MORGAN, Member

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

