

Case No.

1477

Application, Transcript,
Small Exhibits, Etc.

CASE 1477: Amerada Petr. Corp. applica-
tion for oil and gas completion, Ida Wimper-
ley #4 Well-24-25S-37E.

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. 1477
Order No. R-1219

APPLICATION OF AMERADA PETROLEUM
CORPORATION FOR AN OIL-OIL DUAL
COMPLETION IN THE DRINKARD FORMATION
ADJACENT TO THE JUSTIS-DRINKARD POOL
AND IN THE FUSSELMAN FORMATION ADJACENT
TO THE JUSTIS-FUSSELMAN POOL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 2, 1958, at Santa Fe, New Mexico, before Daniel S. 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 Commission Rules and Regulations.

NOW, on this 16th day of July, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. 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, Amerada Petroleum Corporation, is the operator of the Ida Wimberly Well No. 4, located 660 feet from the South line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant proposes to dually complete the said Ida Wimberly Well No. 4 in such a manner as to permit the production of oil from the Drinkard formation adjacent to the Justis-Drinkard Pool and the production of oil from the Fusselman formation adjacent to the Justis-Fusselman Pool through parallel strings of 2 3/8-inch tubing.

(4) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(5) That approval of the subject application will not cause waste nor impair correlative rights.

(6) That the subject application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Amerada Petroleum Corporation, be and the same is hereby authorized to dually complete its Ida Wimberly Well No. 4 located 660 feet from the South line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard formation adjacent to the Justis-Drinkard Pool and the production of oil from the Fusselman formation adjacent to the Justis-Fusselman Pool through parallel strings of 2 3/8-inch tubing.

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,

PROVIDED HOWEVER, That prior to the actual dual completion the operator shall make pressure tests of the casing to prove that no casing leaks exist. In the event a casing leak is apparent the operator shall take appropriate steps to adequately repair the leak. The results of these tests shall be reported to the Commission on Form C-103.

PROVIDED FURTHER, That upon the actual dual completion of such subject well applicant shall submit to the appropriate District Office of the Commission copies of Oil Conservation Commission Form C-103, Form C-104, Form C-110, and Form C-122, outlining the information required on those forms by existing Rules and Regulations, and two copies of the electric log of the well.

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 recording meters to be installed and used at any time as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil or gas-liquid ratio thereof determined, and

PROVIDED FURTHER, That the operator shall make any and all tests, including segregation and packer-leakage tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the Justis-Drinkard Pool, commencing in the year 1959, and whenever the packer is disturbed, but not excluding any other tests and/or determinations as deemed necessary by the Commission; the original and all subsequent 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, shall be filed with the Commission within fifteen (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 fifteen (15) days of the dual completion or whenever the packer is disturbed, and

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Case No. 1477
Order No. R-1219

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 production, gas-oil ratio or gas-liquid ratio, and reservoir pressure determination 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 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-zone production in the interests of conservation.

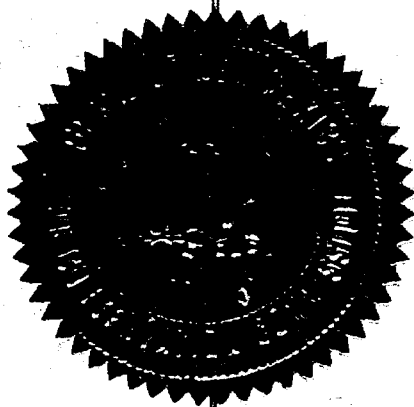
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


EDWIN L. MECHEM, Chairman


MURRAY E. MORGAN, Member


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



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OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

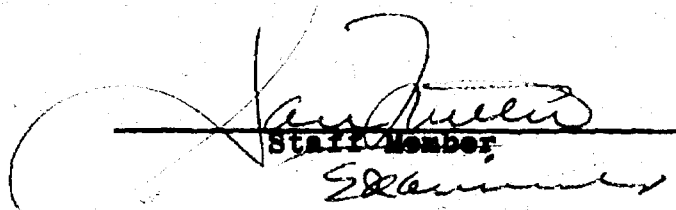
Date July 7, 1958

CASE NO. 1477

HEARING DATE 9:00 A. M. July 2, 1958 DSN - SF

My recommendations for an order in the above numbered case(s) are
as follows:

Enter an order approving the dual completion of Amerada's Ida Wimberly Well No. 4 located in the SW/4 SW/4 Section 24, Township 25 South, Range 37 East. Said well to be dually completed in the Drinkard formation adjacent to the Justis Drinkard Pool and Justis Fusselman Pool. Applicant proposed to use parallel strings of 2 3/8 inch tubing and separate the zones by means of a Baker Model D Production Packer. No waste will occur and no violation of correlative rights will result. Previous dual completions for these two zones have been authorized.


Staff Member
Edgar

No. 19-58

DOCKET: EXAMINER HEARING JULY 2, 1958

Oil Conservation Commission 9 a. m., Mabry Hall, State Capitol, Santa Fe, New Mexico

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 354:

In the matter of the application of Skelly Oil Company to amend Order No. R-179-A. Applicant, in the above-styled cause, seeks an order amending Order No. R-179-A to permit the transfer of allowables from water injection wells to producing wells on the same basic lease and to establish a lease allowable for its H. O. Sims pilot water flood project in the Penrose-Skelly Pool in Lea County, New Mexico, to enable the production of six times the normal unit allowable from any well or wells in said project.

CASE 1475:

Application of Sinclair Oil and Gas Company for permission to commingle oil from two separate pools in common storage. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the Kemnitz-Wolfcamp Pool and Kemnitz-Pennsylvanian Pool production from its State Lea 692 Well No. 1 located 660 feet from the South lines of Section 24, Township 16 South, Range 33 East, Lea County, New Mexico.

CASE 1476:

Application of Austral Oil Exploration Company for permission to commingle production from two separate leases. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the Townsend-Wolfcamp Pool production from its W. M. Snyder "D" Lease, comprising Lots 5 and 6, and its W. M. Snyder "E" Lease, comprising Lot 2 of Section 6, all in Township 16 South, Range 36 East, Lea County, New Mexico. Applicant proposes to measure the production from each of the above-described leases by means of metering separators.

CASE 1477:

In the matter of the application of Amerada Petroleum Corporation for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Ida Wimbeley No. 4 Well located 660 feet from the South line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard formation adjacent to the Justis-Drinkard Pool and oil from the Fusselman formation adjacent to the Justis-Fusselman Pool through parallel strings of 2-3/8" tubing.

CASE 1478:

In the matter of the application of R. Olsen Oil Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 160-acre non-standard gas proration unit in the Tubb Gas Pool consisting of the N/2 NW/4, SW/4 NW/4, and NW/4 SW/4 of Section 25, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 1294:

Application of Ambassador Oil Corporation for an order amending Order No. R-1053. Applicant, in the above-styled cause, seeks an order amending Order No. R-1053 to approve a development pattern for the entire water flood project operated by the applicant in the Caprock-Queen Pool, Chaves and Lea Counties, New Mexico, and to permit administrative approval for the conversion of water injection wells in said project, which is within the limits of the North Caprock-Queen Unit No. 2, authorized by Commission Order R-1194.

CASE 1402:

Application of Neville G. Penrose, Inc. for an order amending Order R-1151. Applicant, in the above-styled cause, seeks an order amending Order No. R-1151 to extend the time allowed for the flaring of gas from its McCallister Well No. 1, located 660 feet from the North and West lines of Section 7, Township 22 South, Range 38 East, Tubb Gas Pool, Lea County, New Mexico.

CASE 1479:

Application of Aztec Oil and Gas Company for an oil-oil dual completion and for permission to commingle production from two separate pools. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its State BD-36 Well No. 1, located 1980 feet from the South and East lines of Section 36, Township 22 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Blinebry formation adjacent to the Blinebry Oil Pool and oil from the Drinkard Pool through parallel strings of 1 1/2 inch tubing. The applicant further proposes to commingle the Blinebry and Drinkard production from said well in common storage.

June 16, 1958

ga

AMERADA PETROLEUM CORPORATION
P. O. BOX 2040
TULSA 2, OKLAHOMA

Case 1477

Drawer D
Monument, New Mexico
June 5, 1958

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

Dr. adj.
Ena adj.
Re: Application to Dually Complete Amerada
Ida Wimberley #4, Justis Field, Lea
County, New Mexico, in such a manner
as to permit production of oil from
the Drinkard and Fusselman Formations
through parallel strings of tubing.

Gentlemen:

By this letter of application Amerada Petroleum Corporation wishes
to state the following:

- A. That the Amerada Ida Wimberley #4 is located 660 feet
FSL and 990 feet FWL of Section 24, T-25-S, R-37-E,
Lea County, New Mexico. The attached Exhibit A shows
the location of this well on the Ida Wimberley Lease
together with the locations of all offset wells.
- B. That the applicant proposes to dually complete the
subject well in the following manner:
 - (1) Drill to a total depth of 7050' and set 7"
casing at 7000' with 400 sacks of cement.
The top of the cement behind the 7" casing
will be at approximately 4100'.
 - (2) Perforate the 7" casing within an interval
5905' to 5955' in the Justis-Drinkard
Formation.
 - (3) Complete the Justis-Fusselman Formation in
an open hole interval 7000' to 7050'.
 - (4) Run two strings of 2-3/8" OD EUE tubing
with Baker Model "D" production packer set
at approximately 6850'.
 - (5) Produce the Justis-Fusselman Formation
through the lower 2-3/8" tubing string and
the Justis-Drinkard Formation through the
upper 2-3/8" tubing string.

The attached Exhibit "B" is a diagrammatic sketch of the pro-
posed dual completion.

Packet mailed
6-21-58
BP

June 5, 1958

- C. That the granting of this application to this well as a dual completion with oil from the Justis-Fusselman Formation and oil from the Justis-Drinkard is in the interest of conservation and the protection of correlative rights.
- D. That the applicant will comply with all the rules and regulations of the New Mexico Oil Conservation Commission to maintain separation of production from the two pay zones.
- E. That the proposed manner and method of dually completing the subject well is mechanically feasible and practical.
- F. That by copy of this letter of application all offset operators are notified of this proposed dual completion.

Therefore, Amerada Petroleum Corporation requests that the Oil Conservation Commission set a certain day on which this application can be heard and after said hearing grant permission to dually complete the subject well in the manner proposed in this application.

Respectfully submitted,

AMERADA PETROLEUM CORPORATION



A. S. Troop
Assistant District Superintendent

HCK/vh

cc: El Paso Natural Gas Company
Box 1384
Jal., New Mexico

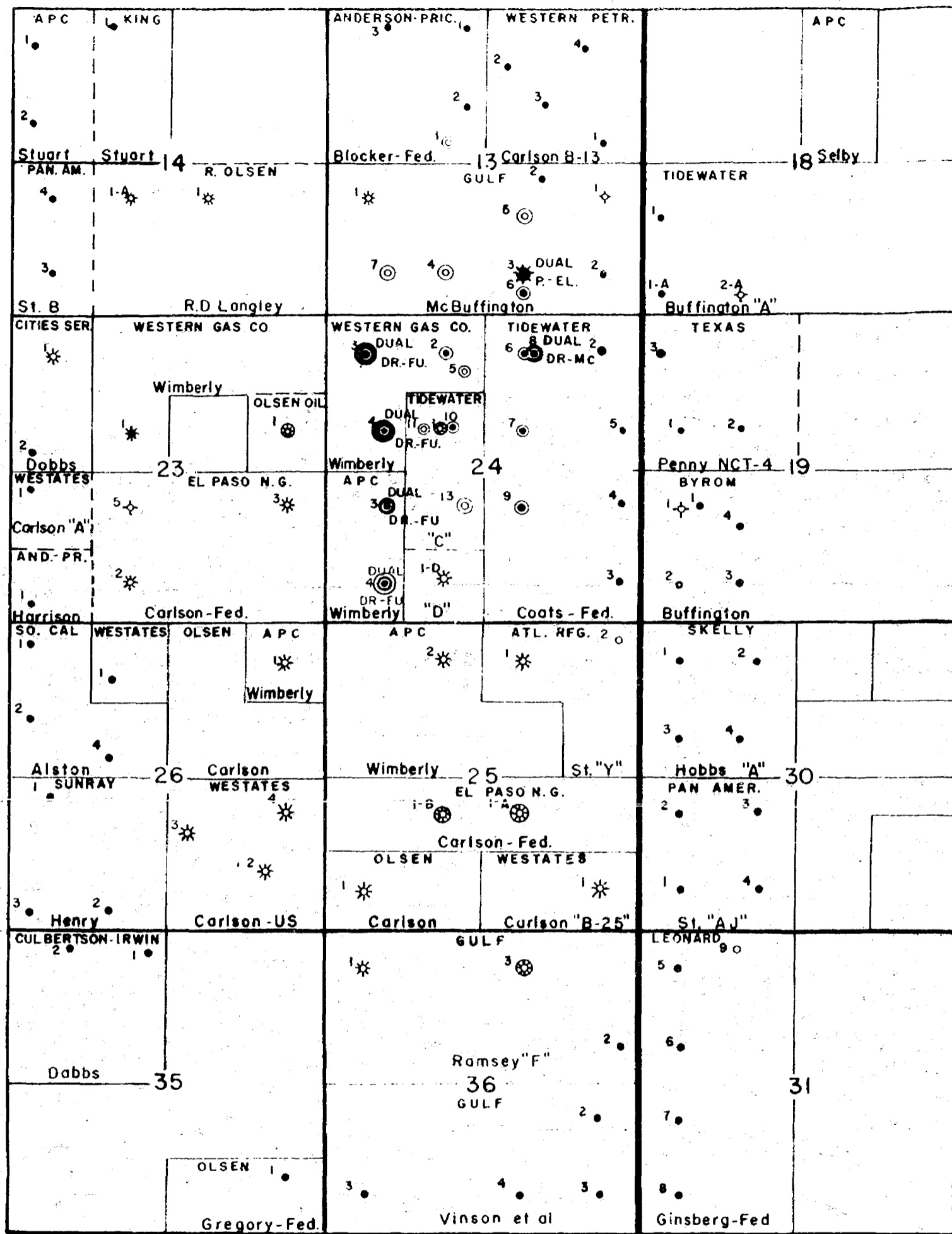
Olsen Oil Company
2811 Liberty National Bank Bldg.
Oklahoma City, Oklahoma

Tidewater Oil Company
Box 547
Hobbs, New Mexico

Western Natural Gas Company
Box 1060
Jal., New Mexico

R-37-E

R-38-E

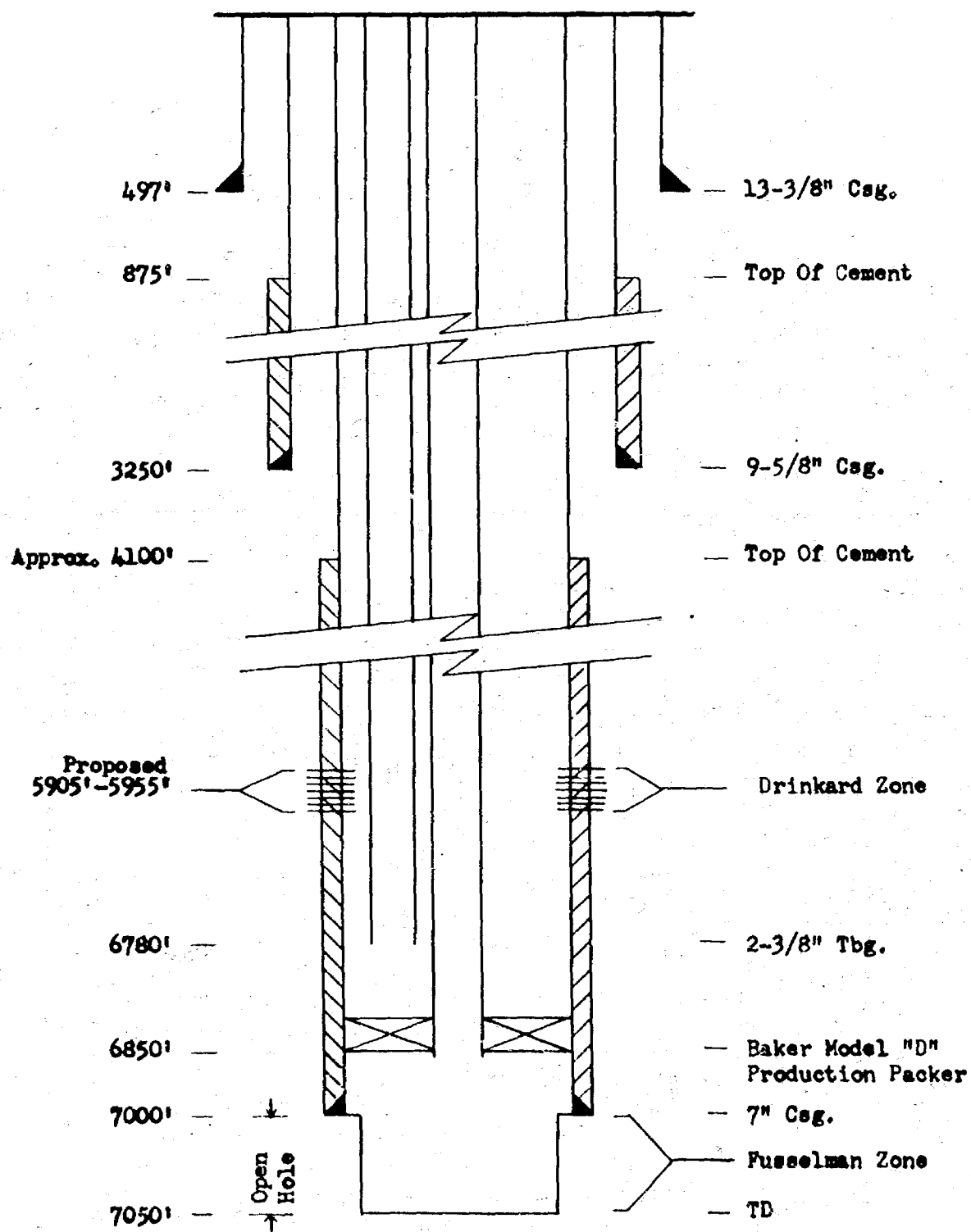
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25
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JUSTIS AREA

LEA COUNTY, NEW MEXICO

SCALE: 1" = 2000'

Exhibit No. _____



AMERADA PETROLEUM CORPORATION

Oil-Oil Dual

Ida Wimberly No. 4

Exhibit No. _____

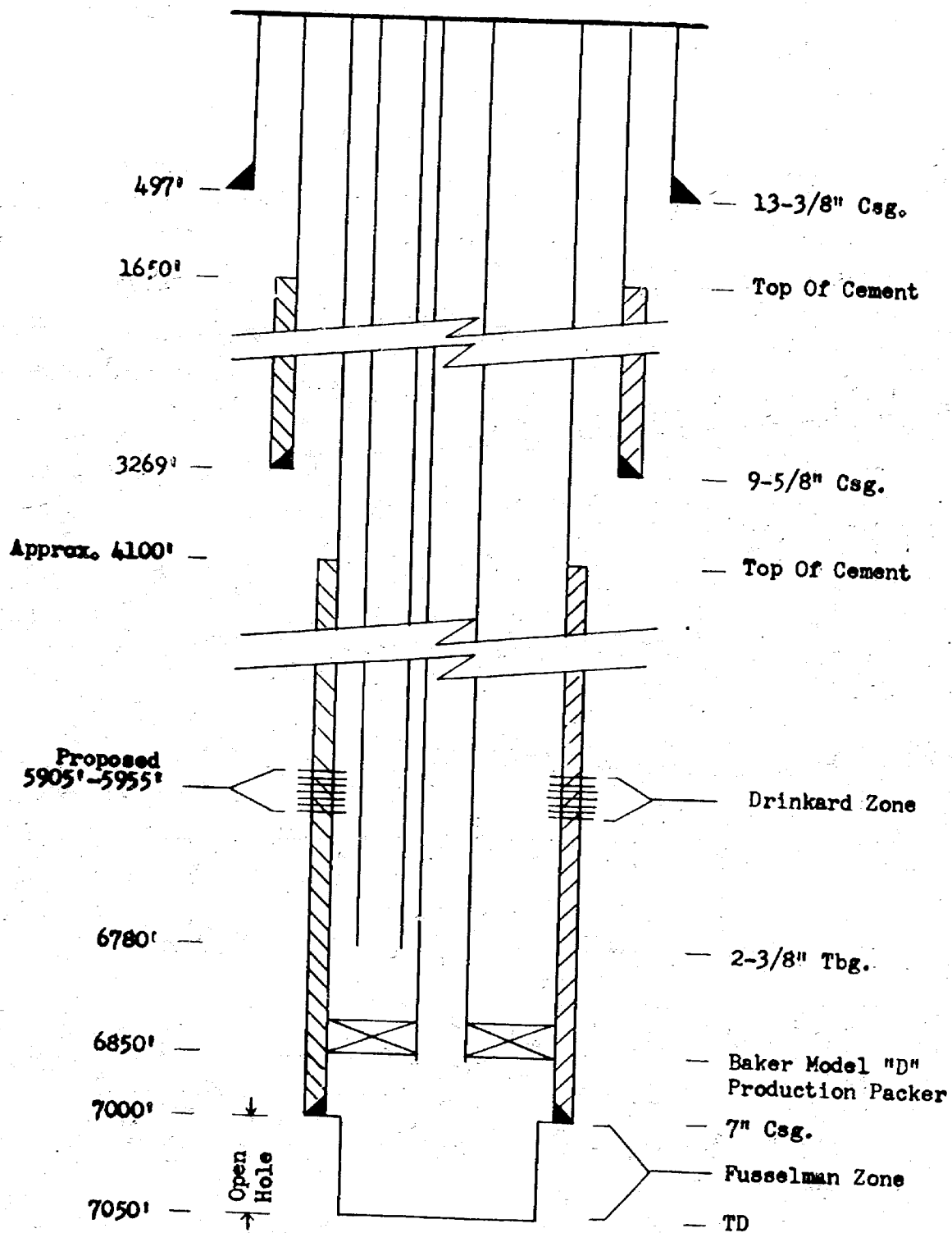
BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico

July 2, 1958

TRANSCRIPT OF HEARING

Case 1477

DEARNLEY - MEIER & ASSOCIATES
GENERAL LAW REPORTERS
ALBUQUERQUE NEW MEXICO
Phone CHapel 3-6691



AMERADA PETROLEUM CORPORATION

Oil-Oil Dual

Ida Wimberly No. 4

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

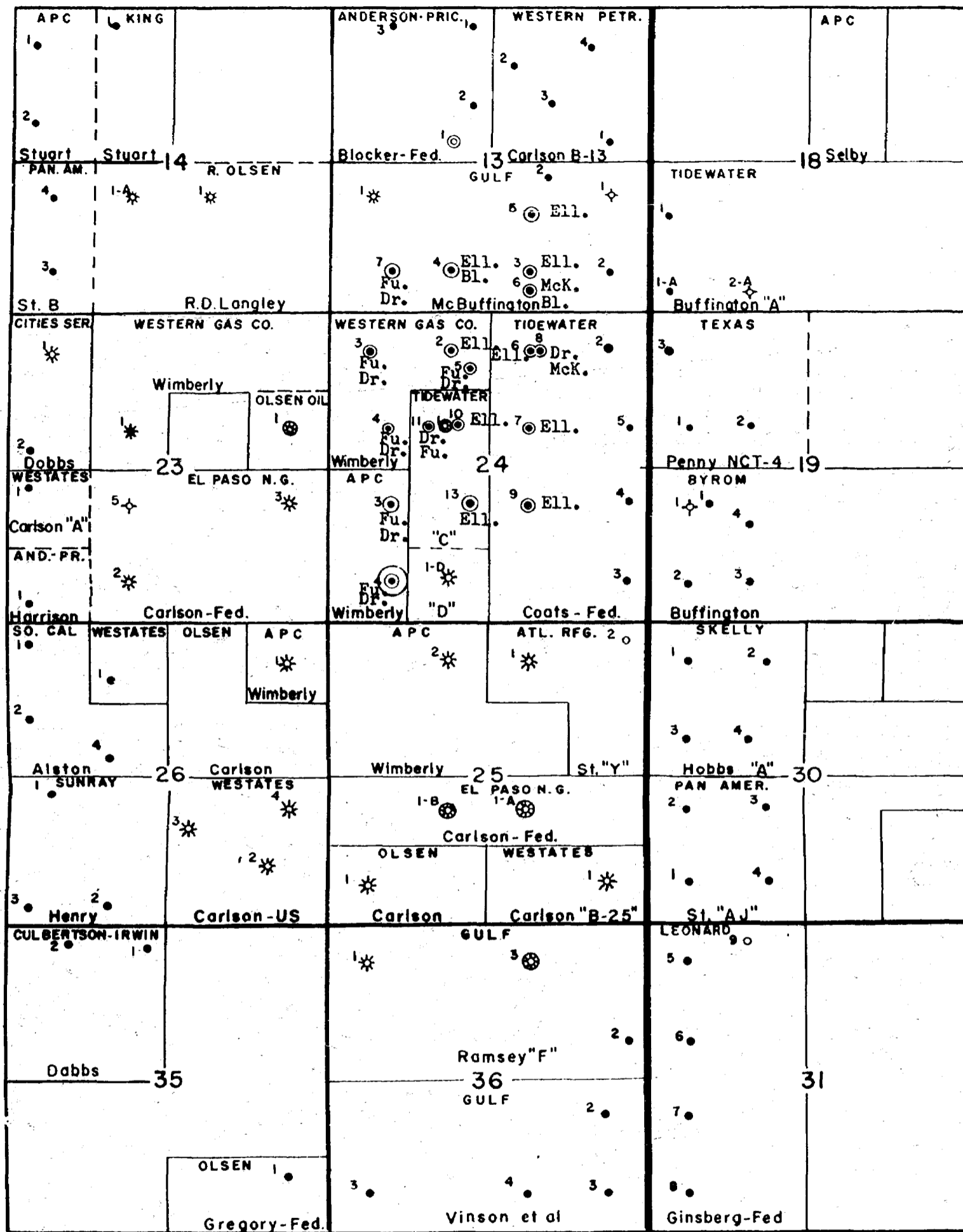
Amerada EXHIBIT NO. 2

CASE NO. 1477

Exhibit No. _____

R-37-E

R-38-E



JUSTIS AREA

LEA COUNTY, NEW MEXICO

SCALE: 1" = 2000'

Exhibit No. _____

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico
July 2, 1958

-----: :
IN THE MATTER OF: :
: :
Application of Amerada Petroleum Corporation :
for a dual completion. Applicant, in the above- :
styled cause, seeks an order authorizing the :
dual completion of its Ida Wimbeley No. 4 Well :
located 660 feet from the South line and 990 :
feet from the West line of Section 24, Township :
25 South, Range 37 East, Lea County, New Mexico, :
in such a manner as to permit the production of :
oil from the Drinkard formation adjacent to the :
Justis-Drinkard Pool and oil from the Fusselman :
formation adjacent to the Justis-Fusselman Pool :
through parallel strings of 2-3/8" tubing. :
-----: :

Case
1477

BEFORE:

Mr. Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. PAYNE: Case 1477. In the matter of the application
of Amerada Petroleum Corporation for a dual completion.

MR. KELLAHIN: Jason Kellahim with Kellahin and Fox,
Santa Fe, New Mexico, representing the Applicant. We have one
witness, Mr. Broschat.

(Witness sworn.)

RICHARD E. BROCHAT

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

DIRECT EXAMINATION

By MR. KELLAHIN:

Q Will you state your name and spell it for the Reporter, please?

A My name is Richard E. B-r-o-s-c-h-a-t.

Q By whom are you employed and in what position, Mr. Broschat?

A I'm employed by Amerada Petroleum Corporation as District Engineer, Monument, New Mexico.

Q Have you previously testified before this Commission?

A No, I have not.

Q Would you state briefly your education and experience as a petroleum engineer?

A I received a Bachelor of Science degree from North Dakota State College in mechanical engineering in 1949, and I received a Master of Science degree in mechanical engineering in Iowa State College in 1950. I then spent two years in the service and since 1953 I have been employed by Amerada Petroleum Corporation as a petroleum engineer in North Dakota, Texas and New Mexico.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. NUTTER: They are. Please proceed.

Q Mr. Broschat, are you familiar with the application in Case 1477?

A I am.

Q Referring to what has been marked as Exhibit No. 1, would you state what that is?

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A Exhibit No. 1 is a map of the Justis Area, Lea County, New Mexico, showing a location of the wells, the subject well Wimberly No. 4 circled in red. It also shows lease ownership and it also shows formations in which wells have been dually completed.

Directly to the North of the Wimberly 4 is the Amerada Wimberly 3 which has been dually completed in the Drinkard and Fusselman, and the Commission has just granted this application and the type of completion used in Wimberly 3 is similar to this completion proposed here.

Q The other completions shown in the vicinity where there are duals, it does show that a number of them have been dually completed in the Drinkard and Fusselman? A Yes.

Q That is designated by the Fu. and Dr.?

A Yes.

Q Could you tell us what the location of that well is?

A The well is located in the Southwest Quarter of the Southwest Quarter of Section 24, Township 25 South, Range 37 East.

Q It is 660 from the South line and 990 from the West line of the section, is that correct? A That is correct.

Q Now, are you familiar with what is proposed to be done with this well? A Yes, I am.

Q Would you refer to what has been marked as Exhibit No. 2 and outline to the Commission what is the proposal?

A Exhibit No. 2 is a diagrammatic sketch of the proposed

dual completion. It shows the setting of the surface pipe at 479 feet, setting of the intermediate string of 2 3/8" casing and 3269. The top of the cement around the mediate string at 1650 feet, it shows the depth of the 7" oil string at 7,000 feet, top of the cement around this oil string will be approximately 4100 feet. It shows the proposed perforations in the Drinkard Zone from 5905 to 5955, proposed open hole completion in the Fusselman from 7,000 feet to 7,050 feet. It shows the setting of a Baker Model "D" Production Packer at 6650 feet.

Q What size tubing do you propose to use?

A We propose to use two parallel strings of 2 3/8" tubing.

Q Do you know the inside diameter?

A It is normally two inches.

Q What is the present status of this well?

A At the present time the well has been completed in the Fusselman and we are now testing the Drinkard.

Q With this type of completion, Mr. Broschat, will that prevent communication between the two producing zones?

A Yes, with a Baker Model "D" Production Packer, it will prevent communication.

Q Will it enable you to make any necessary tests and remedial work that may be indicated in this well?

A Yes. It will enable us to take the Packer leakage tests as required by the Commission and any other tests, and it will

enable us to do any remedial work that we can't foresee at the present time.

Q Are you familiar with the gravities of the fluids in the two zones in which you propose to dually complete?

A Yes, the gravity of the oil in the Fusselman is 36.6 degrees; the gravity of oil in the Drinkard is 38.3 degrees.

Q How about the pressures?

A We have static bottomhole pressures on our Wimberly 3. Bottomhole pressure in the Drinkard at a minus 2800 feet was 2662, the bottomhole pressure in the Fusselman at minus 3900 feet is 2853 P.S.I.

Q Do you have any information on the gas-oil ratios?

A Yes, the gas-oil ratio in the Drinkard is measured in our Wimberly 3, was 711 and in the Fusselman was 885.

Q Are there any appreciable amounts of water produced from either zone?

A At the present time neither zone is producing any appreciable water.

Q It is primarily a solution gas drive reservoir in both zones?

A Information we have at present would indicate that.

Q In the event it were necessary to put either or both of these zones on a pump, would it be possible with this type of completion to produce them in that fashion?

A Yes, it would.

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Q Do you have any information on the recent cost of a single completion in the two zones as compared to the proposed dual?

A Yes. The cost of a single well to the Drinkard would be approximately \$113,600.00. The cost of a single well to the Fusselman, \$136,000.00, making a total of \$249,600.00 for two single completions. The cost of a dual completion is \$156,800.00. So a dual completion would result in a saving of \$92,800.00.

Q In your opinion, is the proposed application in the interest of conservation and the prevention of waste?

A Yes.

MR. KELLAHIN: At this time we would like to offer in evidence Exhibits No. 1 and 2.

MR. NUTTER: Is there objection to the introduction of Amerada's Exhibits 1 and 2? If not they will be received.

MR. KELLAHIN: That's all the questions I have.

MR. NUTTER: Anyone have any questions of Mr. Broschat? If not, the witness may be excused.

(Witness excused.)

Does anyone have anything further they wish to offer in this case? We will take the case under advisement and take a ten minute break.

(Recess.)

C E R T I F I C A T E

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 2nd day of July, 1958.

Red Kearney
Notary Public-Court Reporter

My commission expires:

June 19, 1959.

I do hereby certify that the foregoing is a complete record of the proceedings in the Board hearing of Case No. 1477 heard by me on 7-2-, 1958.

[Signature] Examiner
New Mexico Oil Conservation Commission