

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
MARCH 22, 1961

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IN THE MATTER OF

CASE 2225: Application of Pan American Petroleum Cor-  
poration for an oil-oil dual completion.  
Applicant, in the above-styled cause, seeks  
an order authorizing the dual completion of  
its Hugh Corrigan Well No. 2, located in  
Unit I, Section 33, Township 21 South, Range  
37 East, Lea County, New Mexico, in such a  
manner as to permit the production of oil  
from the Wantz-Abo Pool and the production  
of oil from the Brunson-Ellenburger Pool  
through parallel strings of 2 3/8-inch tub-  
ing.

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BEFORE:

Elvis A. Utz, Examiner.

T R A N S C R I P T     O F     P R O C E E D I N G S

MR. UTZ: Case 2225.

MR. MORRIS: Application of Pan American Petroleum Cor-  
poration for an oil-oil dual completion.

MR. NEWMAN: Kirk Newman, Atwood & Malone, Roswell, New  
Mexico, representing the applicant.

(Witness sworn)

W. J. SANDIDGE, JR.,

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

DEARNLEY-MEIER REPORTING SERVICE, INC.

PHONE CH 3-6891

ALBUQUERQUE, NEW MEXICO



follows:

DIRECT EXAMINATION

BY MR. NEWMAN:

Q Would you state your name and employment, please?

A I am W. J. Sandidge, Jr. I am a petroleum engineer employed by Pan American Petroleum Corporation in their Lubbock District office.

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

A I have.

MR. NEWMAN: Qualifications accepted?

MR. UTZ: Yes, sir.

Q (By Mr. Newman) Would you state briefly the nature of the application?

A Pan American requests permission to dually complete its High Corrigan No. 2 Well in the Brunson Ellenburger Pool, and the Wantz-Abo Pool. We have asked for a hearing in this case rather than administrative handling since, to our knowledge, these two pools have never before been dually completed.

Q Would you refer to the pamphlet, which will be offered as the applicant's Exhibit 1, and state the nature of the contents, right and left of that pamphlet?

(Whereupon, Pan American's Exhibit No. 1 was marked for identification)

A On the left-hand side we have a general discussion per-



taining to the merits of the case. On the right side we have maps, diagrammatic sketches, et cetera, which pertain to this case.

Q The matters on the right are the Attachments which will be referred to in the testimony?

A That is correct.

Q Would you refer to Attachment I and state what that Attachment shows, please?

A Attachment I is a plat showing the location of the Pan American Hugh Corrigan lease. It is located in Unit I, Section 33, Township 21 South, Range 37 East, and a red arrow points to the location of Well No. 2, which is the well in question.

Q Would you refer to Attachment II, which is a schematic drawing, and state what that Attachment shows, please?

A This schematic drawing shows the mechanical aspects of this dual completion. The well has 13 3/8 inch casing set at 298 feet with 280 sacks of cement. There is 9 5/8 inch casing set at 2953 feet, and 7-inch casing set at 7452 feet.

The Ellenburger perforations are over the interval 7410 to 38. The Abo has been selectively perforated between the interval 7018 feet and 7280 feet. There are two parallel strings of 2 3/8 inch OD tubing in the well. The longer string is landed in a production packer set at 7350 and will serve the Ellenburger completion. The shorter string is landed into a parallel string anchor at 7007 feet, and will serve the Abo completion. Both strings consist of 2 3/8 inch OD tubing, which has an ID of 1.995 inches.



Q Is there any possibility of communication between the production from the separate pools with this installation?

A In my opinion, there is not.

Q Any possibility of communication at the wellhead?

A The strings are connected to separate master valves and flow wings, and there's no possibility of communication.

Q Is this installation of a common type previously approved by the Commission for a dual completion?

A Yes, it is. We have two similar installations on our State AG lease in the Justis Pool.

Q Would you refer to Attachment III, and state what that Attachment is for?

A Attachment III is a log of the well in question that has been included to show the approximately 60 feet of the material across the interval 7320 to 7380, which we feel is sufficient to separate the two pools.

Q Will you please refer to your Attachment IV and state what that Attachment shows?

A Since, to our knowledge, the vertical limits of these two pools have not been delineated, we have included pressure data here to the Brunson-Ellenburger Pool and Wantz-Abo Pool indicating that the Wantz-Abo Pool, the shallowest of the two pools, has a higher pressure than the Brunson-Ellenburger Pool, as further evidence of separation.

Q Your Attachment III, the log, also shows the location of



the perforations and clearly indicates that the perforations are from the separate pools, is that correct?

A That is correct.

Q Would you refer to your Attachment V, the letter from Socony Mobil, and state the purpose of that Attachment?

A This lease is offset by leases operated by Socony Mobil and by Pan American. We have a waiver from Socony Mobil, which is included as Attachment V.

Q It shows that they have no objection to the granting of this application for the oil-oil dual?

A That is correct.

Q Would you state what your Attachment VI shows?

A That is a copy of the application that was previously submitted to the Commission. It's included for information purposes only.

Q Mr. Sandidge, is there any possibility that the granting of this application and the resulting operations under it could in any way cause waste?

A No. We think it will prevent waste in that we'll be able to produce the Ellenburger reservoir for a longer period of time.

Q Is there any way that the granting of this application could adversely effect correlative rights?

A No. The ownership in the two reservoirs is the same in the Corrigan lease.

Q Was this Exhibit and the Attachments thereon prepared by



you or under your direction?

A They were.

MR. NEWMAN: We would like to offer Exhibit 1 with the Attachments into evidence.

MR. UTZ: Without objection, Pan American's Exhibit No. 1 will be entered into the record.

MR. NEWMAN: That's all of the direct.

CROSS-EXAMINATION

BY MR. UTZ:

Q Mr. Sandidge, do you have the GOR's, gravities and the type crude for the two zones?

A The gas-oil ratio of the Wantz-Abo is approximately 8450. The gravity of the Wantz-Abo oil is 42 degrees. The gravity of the Ellenburger oil is 43 degrees, and on latest production, this well produced 94 barrels of oil per month and 8474 MCF per month. I would have to juggle some numbers to come up with the gas-oil ratio on that.

Q What was that, 8000 what?

A 8474 MCF per month.

Q That would be divided by 94?

A Yes, sir.

Q What type crude does each zone have, sweet, intermediate?

A I believe the Ellenburger is sweet. I would classify the Abo as intermediate.

Q Neither being corrosive?



A Oh, not to any great extent.

Q The top of the cement on your 7-inch is 2758 by temperature survey?

A That is correct.

Q So that would put it some 200 feet up into the 9 5/8, is that correct?

A That is correct, yes, sir.

Q And your 13 3/8 is circulated?

A I checked very carefully in our records, I could find no evidence one way or the other on that. However, based on my field experience, that is enough to normally circulate a string of that size.

Q The Model "D" Packer is a permanent type packer, right?

A That is a permanent type packer.

Q Wasn't the bottom hole pressure for the Ellenburger unusually low for the Ellenburger in this area?

A This is taken from the data published by the Engineering Committee of New Mexico, and I would say that is about right. This area is very much depleted, the offset well, I believe, is shut in. We had considerable difficulty returning the Ellenburger to production after recompleting in the Abo.

MR. UTZ: Are there any other questions of the witness?  
The witness may be excused.

(Witness excused)



MR. UTZ: Any other statements in this case? If there are none, the case will be taken under advisement.

*DEARNLEY-MEIER REPORTING SERVICE, Inc.*

ALBUQUERQUE, NEW MEXICO

PHONE CH 3-6691





STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in machine shorthand and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the 1<sup>st</sup> day of April, 1961, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Glad A. Karpley  
NOTARY PUBLIC

My Commission expires:

June 19, 1963

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Exclusion Hearing of Case No. 2285  
heard by me on 22, 1961.  
[Signature] , Examiner  
New Mexico Oil Conservation Commission