

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
May 24, 1961

EXAMINER HEARING

IN THE MATTER OF:

CASE 2292

TRANSCRIPT OF HEARING

BEFORE THE  
OIL CONSERVATION COMMISSION  
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EXAMINER HEARING

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IN THE MATTER OF: :

CASE 2292 Application of Humble Oil & Refining Company :  
 for permission to take interference tests and :  
 transfer allowables in the Cha Cha-Gallup Oil :  
 Pool, San Juan County, New Mexico. Applicant, :  
 in the above-styled cause, seeks permission to :  
 take interference tests in the Cha Cha-Gallup :  
 Oil Pool, San Juan County, New Mexico, by shut- :  
 ting in its Navajo Tribe "L" Well No. 4, :  
 located in the SW/4 SE/4 of Section 26, Town- :  
 ship 29 North, Range 14 West, and transferring :  
 its allowable to other wells on the same basic :  
 lease in such a manner that no well will pro- :  
 duce more than 125% of its monthly allowable. :  
 :  
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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: We will call Case No. 2292.

MR. MORRIS: Application of Humble Oil & Refining Company  
for permission to take interference tests and transfer allowables  
in the Cha Cha-Gallup Oil Pool, San Juan County, New Mexico.

MR. BRATTON: Howard Bratton appearing for the Applicant,  
Humble Oil & Refining Company. We have one witness and I ask that  
he be sworn.

(Witness sworn.)

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MR. UTZ: Are there any other appearances in this case?

You may proceed.

H. JAMES FLATT,

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

DIRECT EXAMINATION

BY MR. BRATTON:

Q Will you state your name, by whom you are employed and in what capacity?

A H. James Flatt, I am employed by Humble Oil & Refining Company as District Engineer, Durango, Colorado.

Q Will you state briefly your educational and professional background?

A I was graduated from the University of Colorado in 1952 with a B.S. degree in civil engineering. Since that time I have worked with Humble Oil and 1957 I was made District Engineer and am now in that present capacity.

Q Are you familiar with the area in question in Case 2292?

A I am.

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

MR. UTZ: Yes, they are.

Q (By Mr. Bratton) What is the nature of your request in this case, Mr. Flatt?

A In Case No. 2292, Humble is seeking permission to take interference tests and transfer allowables in the Cha Cha-Gallup

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Pool, San Juan County, New Mexico.

Q For what purpose?

A The purpose of these tests are to study the drainage efficiency in the subject area.

Q What is the manner of your proposed test? What procedures do you want to follow?

A If you will refer to Exhibit 1, you'll see a plat which includes the Humble L Lease in the Cha Cha-Gallup Pool. Five wells have special notations. L-4 in Section 26 is considered an operation well. The four direct offset wells; 2, 3, and 7, colored in yellow, will be considered observation offsets. Our purpose is to shut in well L-4 and observe pressure while producing the other wells on the lease. Initially, all five wells, including 2, 3, 4, 6, and 7, will be shut in for seventy-two hours to approach stabilized reservoir conditions. Subsequent to this, L-4 will remain shut in while the other four wells, 2, 3, 6, and 7, will be returned to their normal producing status.

Immediately upon shutting in of Well No. 4, the seventy-two-hour pressure record will be run in the observation well. Following the three-day shut in, two subsequent three-day pressure measurements will be taken in L-4 well. After this, weekly tests or a single point test will be made until adequate interference is established. During the testing, the allowable from L-4 will be transferred to the other wells on the lease. However, at no time will any well produce in excess of 125% of its allowable. When



interference is established on the well, BHP on the direct offset will be made.

MR. UTZ: At what point will that be?

A When positive interference is established in the L-4 well. We anticipate this will be probably two weeks after the tests start.

MR. UTZ: You will take BHP tests?

THE WITNESS: Yes, sir.

Q (By Mr. Bratton) This pool is on a temporary 80-acre spacing?

A It's under a temporary 80-acre spacing order. It has been drilled on 160. We feel that these tests will provide evidence supporting the requested spacing in this particular area.

Q This will supplement other interference tests conducted in other areas of the pool?

A That is correct. There are two other tests, one being conducted by Benson-Montin-Greer, and one by Pan Am which will bracket the Humble proposed test. We feel this will give us a better aerial coverage to have the tests on the L lease.

Q In your L lease, what are the producing rates of the wells in the cumulative production?

A During April, the L lease averaged 1,767 barrels oil per day from ten producing wells. This number includes 4,096 barrels make-up oil. Cumulative production to the end of April was 208,353 barrels. Cumulative by wells are as follows: L-1, 30,433; L-2,



29,497; L-3, 26,499; L-4, 28,591; L-5, 23,458; L-6, 21,667; L-7, 16,436; L-8, 15,806; L-9, 12,966; L-10, 3,000.

Q Mr. Flatt, I see that Wells L-11 and 12 shown on the plat that you have not listed them. Are those wells capable of making their top allowable at this point?

A Both Wells 11 and 12 are not given cumulative listing because they were not completed until May. They were not producing during April. Neither well is capable of producing its full allowable of 164 barrel per well per day. L-11 on open choke test did 55 barrels of oil per day pumping. L-12 on open choke test did 44 barrels oil per day pumping. However, the remaining ten wells on the lease can't produce in excess of daily allowable.

Q You will have no problem in transferring your allowable to the other nine wells that will be producing?

A No, sir.

Q What is the producing GOR for the L lease?

A The producing GOR from L lease was approximately 700 standard cubic feet SPB. Current production GOR is estimated at approximately 900 standard cubic feet for the first week in May.

Q And what is the BHP?

A From the L lease, 1,560 psig plus 4 foot datum. At the end of April we anticipated this pressure was approximately 1,440 psig at the same datum.

Q These wells are all producing from the Gallup formation?

A Yes, sir.



Q In your opinion, would the transfer of this allowable and the increased production rate result in any damage to the resevoir?

A No, sir.

Q Would it result in any violation of correlative rights?

A No, sir.

Q Did you notify all of the offset operators of your application in this case?

A Yes.

Q Do feel the granting of this allowable is essential to obtain information in connection with the hearing in October?

A We feel very strongly so. Already, very satisfactory interference has been noted. The Benson, Montin, Greer test has registered over two hundred pounds draw down over a period of several months. At last report, Pan Am advised that they have already received some twenty pounds draw down on the interference test on their E Lease. We feel that Pan Am test was a wide spacing test; hence, we feel additional interference testing will very forcibly support wide spacing in this area.

Q Mr. Flatt, when would you like to commence interference testing?

A As soon as possible, especially in view of the schedule of the October show cause hearing. Field work may take up to -- we plan approximately a month -- it could go into a second month -- we will need additional time to process data and so forth.

Q Is there anything further you care to state in connection



with this application?

A No, sir.

Q Did you prepare Exhibit Number 1?

A Yes, sir.

MR. BRATTON: We offer Exhibit 1 in evidence; and we have no further direct examination.

MR. UTZ: Without objection, Exhibit 1 will be entered into the record.

MR. UTZ:

Q Mr. Flatt, the manner in which you intend to show the efficiency of the drainage on this will be by the taking of pressure on the offset wells to show the pressure between the producing well and the shut in well?

A Part of it. Primarily, of course, we simply want to establish pressure communication. This will indicate resevoir continuity and formation permeability. The second thing we are looking for is the rate of interference. This last question is a qualitative. It will give us a field for the extensive factures in the resevoir, the point being if you have extensive factures, in effect, this will eliminate storage capacity and you will get rapid and significant interference early. The third thing that we hope to develop would be enough permanent field data to calculate and plot pressure in the formation which would have a bearing on draining efficiency ultimately and in that respect, the interference plus the test pressure on the producing well will have a direct bearing.



Q Do you think you will be able to take the BHP to 200 barrels?

A Yes, sir.

MR. UTZ: Are there any other questions of the witness?

MR. MORRIS: Yes.

MR. MORRIS:

Q Mr. Flatt, did you say anything in your direct testimony regarding 125% limitation?

A I did.

Q I missed that.

A At no time would we produce in excess of -- n.u.l. in excess of 125% allowable.

Q Who owns the offset acreage in the area to the west and to the south?

A According to my lease map, El Paso owns Section 27 and 34 which is the acreage located to the west of Humble L lease in 29 North, 14 West. To the east of Section 36, Section 31, 29 North, 13 West, the ownership map shows Tennessee Gas. Incidentally, the map I have is probably not too accurate as far as acreage ownership is concerned. Section 30 also located to the east of Humble's L lease, 29 North, 13 West -- we show as owned by Aztec and apparently Elliott has a piece of this lease. The acreage to the south of Section 36 -- I believe this is Section 7, 29 North, 13 West, is currently owned by Aspen Drilling and relates to the cause you heard this morning.



Q According to your lease plat, all of the offset owners have been notified of this application?

A According to our map, that's correct.

Q Have you received any objections from any of your offset operators?

A No, sir.

MR. MORRIS: That's all I have; thank you.

MR. UTZ: Are there any other questions?

THE WITNESS: I can give you the operators who were notified to this application by letter: Pan American, El Paso, Aspen Drilling, Elliott and Tenaco.

MR. UTZ: Would you mind giving us that letter as a matter of record?

THE WITNESS: Yes, sir.

MR. BRATTON:

Q Exhibit No. 2 is a copy of the letter which was addressed to all the named addressees in connection with this hearing?

A Yes, sir.

Q And you received no objection from any of them?

A No, sir.

MR. BRATTON: We would like Exhibit 2 admitted in evidence.

MR. UTZ: Exhibit No. 2 will be entered into the record.

Are there any other statements in this case?

The witness may be excused.

(Witness excused.)



STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

I, THOMAS F. HORNE, 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, 12th day of June 1961, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

*Thomas F. Horne*  
NOTARY PUBLIC

My Commission expires:

May 4, 1965

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2292, heard by me on May 24, 1961.  
*[Signature]*, Examiner  
New Mexico Oil Conservation Commission

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