### BEFORE THE OIL CONSERVATION COMMISSION MABRY HALL Santa Fe, New Mexico June 22, 1960

### EXAMINER HEARING

IN THE MATTER OF:

Case 2000

Application of Gulf Oil Corporation for permission to commingle the production from three separate leases and for permission to install an automatic custody transfer system. Applicant, in the above-styled cause, seeks permission to commingle the Monument Pool production from the following-described leases in Lea County, New Mexico: R. R. Bell (NCT-G) lease consisting of the S/2 SE/4 of Section 13, Graham State (NCT-H) lease consisting of the W/2 SW/4 of Section 13, and the H. T. Orcutt (NCT-D) lease consisting of the W/2 NE/4 of Section 13, all in Township 20 South, Range 36 East. Applicant further seeks permission to install an automatic custody transfer system to handle the Monument Pool production from said leases.

### BEFORE:

- D. S. Nutter, Chief Engineer
- O. E. Payne, General Counsel

### TRANSCRIPT OF HEARING

Mr. Nutter: Case 2000.

Mr. Payne: Application of Gulf Oil Corporation for permission to commingle the production from three separate leases and for permission to install an automatic custody transfer system.

Mr. Kastler: Bill Kastler, New Mexico. Our witness will be John Hoover.

(Witness sworn.)

Mr. Kastler: These have already been numbered Case Number 2000.

Mr. Payne: Yes, sir.



## ALBUQUERQUE, NEW MEXICO

### JOHN HOOVER

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

### DIRECT EXAMINATION

### BY MR. KASTLER:

- Q Will you state your name, your position, where you live, and what Company you work for?
- A John Hoover, Petroleum Engineer with Gulf Oil Corporation, Roswell, New Mexico.
- Q Mr. Hoover, have you previously appeared and qualified as an expert witness before the New Mexico Oil Conservation Commission?
  - A Yes, sir.
  - Are you familiar with Gulf's application in Case No. 2000?
  - A Yes, sir, I am.
- Mr. Kastler: Mr. Examiner, are the witness' qualifications satisfactory?
  - Mr. Nutter: They are, Mr. Kastler, and will you proceed?
- Q (By Mr. Kastler) Briefly, will you proceed and state what is being sought in Case 2000?
- A Gulf is asking for permission to commingle Monument oil production from three State leases described as the Orcutt "D" lease located in the West 1/2 of the Northeast 1/4, the Graham State "H" lease located in the West 1/2 of the Southwest 1/4 and the R. R. Bell "G" lease located in the South 1/2 of the Southeast



1/4 of Section 13, Township 20 South, Range 36 East, Lea County. New Mexico.

- Have you prepared for introduction here as an Exhibit, the lease plat?
- Yes. sir. and we have marked this as Exhibit 1. Α shows the location of the leases involved in this Case and they are outlined in red.
- **ର** Would you please give the numbers of the wells and the location of the wells, referring to Exhibit Number 1, which are involved in this application?
- On the Orcutt "D" there are two wells, being wells Number 1 and 2. The Graham State "H", two wells, Number 1 and 2, and the R. R. Bell "G", two wells, also Number 1 and Number 2. are producing from the Monument Oil Pool.
- Are all three of these leases actually developed at this time as to these three tracts?
  - Yes, sir, they are.
- Where will your common battery be located if this application is approved?
  - It will be located on the Orcutt "D" lease.
- Mr. Hoover, does Exhibit 1 also identify the offset operators?
  - Yes. sir. they are listed on this Exhibit.
  - And, have all of these offset operators been given a copy Q



of this application?

- A Yes, sir, they have.
- Q Who is the lessor in these three Gulf leases?
- A These are State leases with the Common Schools as beneficiary.
- Q And, now, I refer you to Exhibit Number 2, the Production and Test Flow Diagram.

Yes, sir, this is a schematic sketch of our proposed battery and to briefly go through to the Flow Diagram, we show, down in the left-hand corner, lines coming in which represent the flow lines from each well. On this Exhibit we show seven lines there and, actually, that should be sixty-six lines, one for each well, but the wells will come into the header at the central battery, the wells on production will go through the production facilities, being a separator, a free water knockout, then to the production heater treater through a BS and to the 250 barrel surge tank, the wells there are on test, will be diverted through with the test facilities and that has been described as through a separator, test separator, a test heater treater and then the production from the test heater treater ties back into the production line down a stem from the production heater treater where it is commingled with the wells that are on production, all other production then goes through the BS. and with monitor problem through the surge tank. On the test facilities, we will have a meter at the separator for taking gas



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tests that will be in addition to a regular gas sales meter on the production. On the test heater treater there will be a dump meter for the oil, and the dump meter for the water. The water, of course, will go into a disposal system and the oil through the meter back into the production string.

Q There is only one pool involved in this application, is that correct?

A Only one pool, the Monument Oil Pool. On this installation we will have safety shut-down equipment, we will have for high level in the surge tank, either the production heater treater or the separators, we will shut in the lease sheath 'in' valve on the left-hand side on the production line and test line.

Q Mr. Hoover, either the separators or heater treaters would have this sheath, would both of them have it?

A Yes, let me correct myself if I said "either". The high level will be in both the test heater treater and the test and production separators. This high level which shut in the lease valve which will, in turn, shut in valves at the wells and in the case of pumping wells, will shut down the pump. The production that goes into the surge tank will go through an ACT system and the description of that system is on Exhibit 3.

Q Before you go to Exhibit Number 3, Mr. Hoover, does the 205 gallon surge tank have a high level shut-off valve?

A Yes, sir, it does.



- Q So then, in this case, this proposed installation is designed for failure, a safeguard, is that correct?
  - A Yes, sir.
- Q In the event you have unmerchantable oil that shows up in your monitor and comes from the tank bottom pump would you, please, briefly review how that oil would be treated further before going into production?

A We show one pump, which is also a tank bottom pump, in addition to the pump for recirculating bad oil showing up through the monitor. The tank bottom pump, taking it separately in the monitor would be set to recirculate tank bottoms back through the heater treater at intervals that could be set at will. In the event that the BS and where monitor problems indicate there is bad oil passing by that point, it will override the circulating system on the tank bottoms and will recirculate all the oil back through the heater treater.

Mr. Nutter: Is that through that automatic divider valve?
The Witness: Yes, sir.

- Q (By Mr. Kastler) It runs it back up and then to the left?
- A Yes, sir. When the pump is not running.
- Q In other words, if the oil is indicated to be good that valve would be open in a position that the oil would go to the surge tank, left to right?
  - A If the oil indicates bad, the pump indicates that, and



the valve closes to the surge tank and opens around to the suction of the pump back there, back through the heater treater.

- Or you can turn on the tank bottom pump and withdraw the oil from the 205 gallon surge tank from the right to go back through the heater treater?
  - Yes, sir. Α
- Would you now refer to Exhibit 3 and explain what is shown on the proposed automatic custody transfer system diagram?
- This is a similar installation to other auto-Α Yes. sir. matic custody transfer systems that we have put in and received approval by this commission. The general equipment is through a pump, the oil coming from the tank through the pump strainer, and deaerated through a PD meter, in this case will be an A. O. Smith, Smith T-6 through a sampler to the pipeline. We will have a valving arrangement, that master meter can be installed for checking the PD meter. This particular meter will have a non-reset counter. will have a safety shutdown switch, and that is for the purpose if the meter fails to register, then it closes and shuts the in valve shown to the right, or if the pump should fail to operate. it will also close that valve when the pump starts under normal conditions. which is actuated by a low and high level switch in the surge tank. That valve is also closed and opened respectively.
- Q Mr. Hoover, have you obtained the permission of the Commissioner of Public Lands as a representative of the royalty owner



for this proposed installation?

A Yes, sir, we have, and we have a letter from the Land Commissioner's office approving the commingling of the production of these leases. We have made a copy of his letter and we would like to submit this original and then withdraw it and submit our copies.

Mr. Nutter: Photostats are adequate.

Q (By Mr. Kastler) That letter is dated May 31, 1960?

A Yes, sir, it is and he verifies that the beneficiary on all three leases is on common scales and are granted their permission to commingle the production.

Q In your opinion, will the commingling of the oil from these three leases freeze the Monument Pool, result in a substantial savings to the operator over the present installation of three separate tank batteries?

A No, sir. We have three tank batteries on these leases at the present time. However, we do have some wooden tanks that need to be replaced, but the cost of installing the tanks would be less than this installation, this is more efficient installation for handling the production and will save some in labor costs.

Q In your opinion, will the granting of this application impair anyone's correlative rights?

A No, sir, in my opinion it would not and by the fact that all three wells, all six wells, are in the Monument Oil Pool, we



would expect no decrease in royalty, or if an increase, they should all be approximately the same.

- Q Does Gulf propose to allocate production to the individual leases on the basis of individual well tests?
  - A Yes, sir.
- Q Does Gulf propose to comply with all required tests and reports of the O.C.C.?
  - A Yes, sir, we do.
- Q And, I think you already testified, all offset operators and pipeline operators concerned have been notified of this application?
  - A Yes, sir, they were furnished a copy of our application.
- Q What is the name of the pipeline which you are carrying in this production?
- A It's Shell pipeline and our proposed installation meets with their standards and approval.
- Q Were Exhibits 1, 2 and 3 prepared by you, or under your supervision?
  - A Yes, sir.
- Q And, you have already testified that Exhibit 4 is a true copy of a letter dated May 31, 1960, and received by Gulf from the Commission of Public Lands?
  - A Yes, sir.
    - Mr. Kastler: This completes my questions on direct exam-



ination and I would like to move the introduction of Exhibits Numbers 1, 2, 3 and 4.

Mr. Nutter: Gulf's Exhibits one through four will be admitted.

Mr. Payne: Gulf if working all three of these leases, is that right?

- A (By Witness) Yes.
- Q And the royalty owner is on common scales with the beneficiary?
  - A Yes, sir.
  - Q No diversity of overriding royalties?
  - A No.
- Q Have you taken care of all of your problems relative to Easements, since these leases are continuous?
  - A Insofar as--

Mr. Nutter: Right of way for your flow lines?

A We have not put in installations in the well.

Mr. Payne: You don't anticipate any problems in that regard?

- A No, sir.
- Q (By Mr. Nutter) Mr. Hoover, I believe you stated you have shut in float switches in test and production separators, correct?
  - A Yes, sir.



Q And, then you mentioned you had it in one of the treaters also?

A Both treaters.

Q Both treaters. So both separators and both treaters and the surge tank have shut in float switches?

A Yes, sir.

Mr. Nutter: I believe that is all. Any further questions of Mr. Hoover? You may be excused.

(Witness excused.)

Mr. Nutter: Do you have anything further, Mr. Kastler?

Mr. Kastler: Nothing further.

Mr. Nutter: Does anyone have anything further?

We will take the case under advisement.

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Page WITNESS

JOHN HOOVER

Direct Examination by Mr. Kastler

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### EXHIBITS

Number	Exhibit	Offered	Received
Applicant's	1-4.	10	10



STATE	OF	NEW	MEXICO	)	
				)	SS
COUNTY	OF	BEF	RNALILLO	)	

I, Lewellyn Nelson, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in Stenotype, and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

DATED this 8th day of July, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Lewelleyn 7- Melson NOTARY PUBLIC

My Commission Expires: June 14, 1964

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner learns of Case No. 19 Co.
heard by me on Examiner.
New Mexico Oil Conservation Commission

