BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 27, 1960.

IN THE MATTER OF:

APPLICATION OF HONDO OIL & GAS COMPANY for an amendment of Order No. R-1643 to provide an alternative to the fail-safe features required in the automatic custody transfer system authorized therein for the Hondo-Western-Yates State 647 lease, Empire-Abo Pool, Eddy County, New Mexico.

CASE NO. 2027

BEFORE:

Hon. Daniel S. Nutter, Examiner.

TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: The hearing will come to order, please. Next case will be Case 2027.

MR. PAYNE: Case 2027. Application of Hondo Oil & Gas Company for an amendment of Order No. R-1643.

MR. CAVIN: If the Commission please, S. H. Cavin. I am employed by the Hondo Oil and Gas Company, Law Department, in Roswell. I am appearing for Hondo in this case. Hondo is seeking an order to amend Order R-1643 in Case 1926, to provide an alternative to the flow-line safety valves required for the Lact unit which was approved in that case. We would like for the record in Case 1926 to be incorporated in this case, which we so move at

this time.

MR. NUTTER: The record in Case 1926 will be incorporated.

MR. CAVIN: Case 1926 will be incorporated by reference. Our only witness is Jack MacLennon.

(Witness sworn.)

*****

J A C K M A C L E N N O N, a witness, called by the Applicant, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CAVIN:

Q Will you please state your name, position, employer, and your residence, please?

A My name is J. R. MacLennon, employed by Hondo Oil and Gas Company at their Roswell office; I am a petroleum engineer, living in Roswell.

Q Have you previously appeared before the New Mexico Oil Commission, and where you qualified and testified as an expert witness?

A I have.

Q Are you familiar with Hondo's application for amendment to Order R-1643, to provide an alternative to the flow-line safety valves required therein?

A I am.

MR. CAVIN: If the Commission please, I move Mr. MacLennon's qualifications as an expert be received.

MR. NUTTER: They are. Will you proceed.

Q (By Mr. Cavin) Mr. MacLennon, have you prepared, or at your direct supervision, prepared a plat showing the up-to-date status of the Hondo 647 lease involved in this case?

A Yes, I have.

Q The plat of the Hondo State 647 lease, involved in this case, is offered as Exhibit Number 1.

(Whereupon, Applicant's Exhibit 1 marked for identification.)

Q Mr. MacLennon, would you please state what is shown on this Exhibit?

A This is a Western -- portion of Hondo-Western-Yates 647 lease insofar as it covers the East Half ($E\frac{1}{2}$) of the East Half ($E\frac{1}{2}$) of Section Thirty-One (31), Southwest Quarter ($SW\frac{1}{4}$) and the Northeast Quarter ($NE\frac{1}{4}$) of Section Thirty-Two (32), Township Seventeen (17) South, Range Twenty-Eight (28) East, and the Northeast Quarter ($NE\frac{1}{4}$) of the Southeast Quarter ($SE\frac{1}{4}$) of the Southeast Half ($SE\frac{1}{2}$) of the Northeast Quarter ($NE\frac{1}{4}$), and the Northeast Quarter ($NE\frac{1}{4}$) of the Northeast Quarter ($NE\frac{1}{4}$) of Section Six (6), Township Eighteen (18) South, Range Twenty-Eight (28) East, all in Eddy County, New Mexico.

Q In person, to the Order 1643, you requested permission, and by a letter dated April 26, 1960, were granted permission from the New Mexico Oil Conservation Commission to test various types of equipment to satisfy the flow-line safety valve requirement of that order?

A Yes.

Q Did you investigate equipment that was expressly designed for this purpose?

A Yes, we requested and received price quotations from manufacturers of specific equipment. We followed up these recommended pieces of equipment with discussions with other operators who had used this type of equipment, and we determined that for about $650.00 for installation, we could buy equipment of the highest reliability.

Q Now, have you prepared, or at your direction had prepared Exhibit Number 2, a schematic diagram which shows in detail the flow-line safety valve equipment which your Artesia office made from items of ordinary supply, which was actually tested in the field?

(Whereupon, Applicant's Exhibit 2 marked for identification.)

A Yes.

Q Would you explain this diagram?

A We attempted to make up items of equipment out of normal supply, which would be the safest to be used as flow-line safety control valves.

Q On this diagram which is on the Steno Copy sheet, will you explain the application and the hook-up of that?

A The lower line is a flow-line, which at the well head is 2 inches. The flow is from left to right. At the -- up to 2,000 pounds per square inch pressure with an Edwards balance check

valve at the upper right hand corner of the sketch, holds the flow-line pressure that happens to exist at the moment off of the equipment. At the center of valve number 1, it's a little bit hard to visualize, that is an outlet going back from the pipeage upstream, pipeage into the base of the regular core. This regulator valve number 1 is putting 50 pounds per square inch pressure down the line to the valve number 2. Valve number 2 is a snap action 3-way valve, set at 50 pounds per square inch pressure. The valve is so designed to regulate pressure, to eliminate throttling action.

Gas is vented at the top center at valve number 4, for relief down to 50 pounds per square inch pressure.

MR. NUTTER: Which is valve number 4?

A The one at the top center of the relief valve, pointing straight up.

MR. NUTTER: A little relief valve?

A Yes, sir. Valve number 3 is normally closed; the motor valve is held open at 50 pounds per square inch by the substitute system. If the flow-line breaks or leaks to below 50 pounds per square inch pressure, the Edwards balance check relieves the control system of its pressure by letting the gas escape back into the leaking flow-line, or Brown flow-line, and number 3 motor valve closes the well in.

Q (By Mr. Cavin) What is the per well cost of this particular equipment that you all have put together here?

A The over-all cost is $235.36.

Q And how does the equipment compare with the equipment that you mentioned previously as manufactured specifically for this purpose?

A This compares to about $650.00 for specifically designed equipment which has been in use.

Q The only difference in the equipment being that the equipment you referred to originally has been tested for extensive periods of time?

A That is correct, it is something that has been arrived at through research experimentation, and then usage. The specifically designed equipment, we feel at the moment, is more superior, even though our equipment will function and we have tested it for this short period of time.

Q How would the use of the equipment that we have discussed here, affect the economics of the Lact installation?

A We expect to have twelve wells served by this battery. Of course, the specifically designed equipment at $650.00 would amount to $7800.00 to equip all of the wells with the specifically designed equipment. On the basis of our cost of $235.36 per well, the twelve wells would cost $2824.32. In either case, the cost of the flow-line valve equipment makes the use of the Lact system much less practicable economically.

Q In your opinion, would the alternative to this, in using flow-line tests to at least 1500 pounds per square inch on the

equipment, will it protect oil of flow-line breakage?

A It is our considered opinion that a 1500 pound per square inch test of each flow-line will suffice to assure us that the flow-line will adequately contain the wells in this battery.

Q Have the flow lines in use on the above described lease been tested inso -- What tests have been made?

A We have tested one flow-line to 1800 pounds per square inch pressure, and all flow-lines to 1500 pounds per square inch pressure, with no leaks. The flow-lines now in use are 3-inch; I had lines 7.58 pounds per foot, electric welded. They are subjected to 1,000-pound test pressures at the mill, and it is the same pipe we use for 6 cents, 2,000-pound test at the mill. It is -- They are new Republic Steel flow lines with a 3240-pound per square inch for pressure at the yield point.

Q Has the use of flow-lines tested to 1500-pounds per square inch pressure, been approved by the New Mexico Oil Conservation Commission for use in connection with other Lact units, as an alternative to the flow-line safety valves?

A Yes, sir, I believe that is correct.

Q In your opinion, would the granting of this application be in the interest of conservation, and would it protect correlative rights?

A Yes, I believe so.

MR. CAVIN: If the Commission please, I would like to move at this time for the admission into evidence of Exhibits 1

and 2.

MR. NUTTER: That will be satisfactory, Mr. Cavin, however, these exhibits, this type of reproduction that Exhibit Number 2, has a habit of defacing. We would like to have one copy of the original drawing, with permanent reproduction there.

MR. CAVIN: We will substitute those as soon as possible.

MR. NUTTER: Otherwise, the exhibits are admissible. Does anyone have any questions?

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. MacLennon, what is the shut-in pressure of the average well in the Empire-Abo Pool?

A Within this battery, we have a maximum of about 150 pounds per square inch.

Q Do you propose to pressure test your tubing at 1500 pounds?

A Yes, we propose -- we have tested each flow-line to 1500 pounds as satisfaction to ourselves that we had adequate strength there.

Q These flow-lines are above ground, are they?

A Yes, sir.

MR. PAYNE: Thank you.

QUESTIONS BY MR. NUTTER:

Q Mr. MacLennon, I don't recall the exact hook-up that you had on the original hearing for the automatic custody transfer,

but didn't that system provide that in the event of malfunction, or the failure of the Act system to deliver oil to the pipeline, the wells are shut in at the head, or at the Act --

A That is correct.

Q -- thereby resulting in the building of pressure on the flow-lines?

A Yes, sir, that is correct.

Q In a correction inserted in the order to protect against the loss in case the flow-line will break --

A Yes, sir.

Q -- you said, you get the pipe from the mill and it has been tested to 1,000 pounds at the mill and for 6 cents. The Department tested it to 2,000 pounds, which pipe did you buy?

A We actually have purchased and installed Republic pipe that has a 1,000 pound mill test.

Q What do you propose to do, test it to 1500-pounds in the field?

A As a matter of fact, we have, previous to this hearing, tested our pipe. As I mentioned, in one case, we tested 1800 pounds with no leaks, and we have tested all flow-lines to 1500, previous to this hearing.

Q Are these flow lines welded together at the joint, or a screwed joint?

A Plain end pipe, welded together throughout the battery.

Q And all the flow-lines will be tested to at least 1500

pounds, or have been?

A That is correct.

MR. NUTTER: Any further questions of Mr. MacLellon? You may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Cavin?

MR. CAVIN: No, sir.

MR. NUTTER: Does anyone have anything further for Case 2027?

(No response.)

MR. NUTTER: We will take the case under advisement.

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, LLEWELYN NELSON, Notary Public 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 stenotype and reduced to typewritten transcript, 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 1st day of August, 1960, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Llewellyn F. Nelson
NOTARY PUBLIC.

My Commission Expires:

June 14, 1964.

I do hereby certify that the foregoing
a complete record of the proceedings in
the Examiner hearing of Case No. 2027
heard by me on 7/27, 1960
, Examiner
New Mexico Oil Conservation Commission

I N D E X

NUMBER	EXHIBIT	MARKED FOR IDENTIFICATION	OFFERED	RECEIVED
App.#1	Plat	3	7	8
App.#2	Diagram	4	7	8