2027

Poplistion, Transcript,

mill Exhibits, Etc.

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. 2027 Order No. R-1643-A

APPLICATION OF HONDO OIL & GAS COMPANY FOR AN AMENDMENT OF ORDER NO. R-1643 TO AUTHORIZE AN ALTERNATIVE TO THE FAIL-SAFE FEATURES REQUIRED IN THE AUTOMATIC CUSTODY TRANSFER SYSTEM AUTHORIZED THEREIN, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This rause came on for hearing at 9 o'clock a.m. on July 27, 1960, 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 4th day of August, 1960, the Commission, a querum 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 by Order No. R-1643, the applicant was authorized to install an automatic custody transfer system on its Hondo-Western-Yates State 647 lease in the Empire-Abo Pool, Eddy County, New Mexico, subject to the requirement that such system would be so equipped as to shut-in the flowing wells at the wellhead in the event of flow-line break.
- (3) That the applicant proposes, as an alternative to said fail-safe requirement, to utilize high pressure tubing tested to at least 1500 pounds per square inch as flow-lines.
- (4) That such utilization of high pressure tubing as flowlines is in accord with sound engineering practice and will prevent waste, provided that it is tested to at least 1500 pounds per square inch under field conditions after installation and prior to use.

-2-CASE No. 2027 Order No. R-1643-A

IT IS THEREFORE ORDERED:

That Order No. R-1643 be and the same is hereby amended to authorize, as an alternative to the fail-safe requirements of said order, the utilization of high pressure tubing as flow-lines.

PROVIDED HOWEVER, That such flow-lines shall have been tested to at least 1500 pounds per square inch under field conditions after installation and prior to use.

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

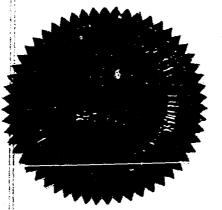
STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

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JOHN BURROUGHS, Chairman

MURRAY E. MORGAN, Member

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



GOVERNOR JOHN BURROUGHS

State of New Mexico Oil Conservation Commission

LAND COMMISSIONER MURRAY E. MORGAN



STATE GEOLOGIST A. L. PORTER, IR. SECRETARY DIRECTOR

P. O. BOX 871 SANTA FE

August 4, 1960

Mr. S. H. Cavin Box 660 Roswell, New Mexico

> Case No. 2027 Re: Order No. p. 1643-A Applicant:

> > Rondo Oil &

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case. Dear Sir:

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC X Aztec OCC

GIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

| | | | Date | July 28, 1960 | etigan kinga | | |
|------|--|---------------------|--------------------|-------------------------|--------------|--|--|
| CASE | 2027 | | Hearing Date DS | SN Santa Fe, 9 a.M. 7/ | 27 | | |
| | My recommondation | ons for an order in | the above numbered | d cases are as follows: | | | |
| * 1 | | | | | | | |
| | Approve the application of Hondo Oil & Gas Company for amendment of Order No. R-1643 to provide that applicant may substitute high pressure flowing lines which have been tested in the field after the welding to a minimum of 1500 PSI for the Fail-safe provisions of said Order R-1643. This order will be R-1643-A. | | | | | | |

Homewood & Gas Company

1980 JUN : 30 Box 660

Roswell, New Mexico

June 21, 1960

Oil Conservation Commission State of New Mexico Box 871 Santa Fe, New Mexico

Re: Application for an Order Amending Order R-1643 in Case No. 1926 to provide an alternative to Automatic Shut-in Provisions relating to LACT System for Abo Production on Hondo-Western-Yates State 647 Lease in Section 6-185-28E and Sections 31 and 32-175-28E, Eddy County, New Mexico.

Gentlemen:

Hondo Oil & Gas Company, Operator for Hondo Oil & Gas Company, a corporation, Western Development Company of Delaware, a corporation, and Yates Brothers, a partnership, doing business as Hondo-Western-Yates, hereby makes application for an order amending Order No. R-1643 in Case No. 1926, to authorize use of high pressure tubing tested to at least 1500 psi for flow-line as an alternative to the requirement that the LACT System be equipped so as to shutin flowing wells at the wellhead in the event of a flow-line break.

In support of this application Hondo Oil & Gas Company states the following:

1. By Order No. R-1643 dated April 4, 1960, applicant was authorized to install automatic custody transfer system to handle the Empire Abo Pool production from the subject lease insofar as it covers the following described lands in Eddy County, New Mexico:

Township 17 South, Range 28 East, N.M.P.M. Section 31: $E_2^{\frac{1}{2}}E_2^{\frac{1}{2}}$ Section 32: SW $_2^{\frac{1}{4}}$ and NE $_2^{\frac{1}{4}}$

Township 18 South, Range 28 East, N.M.P.M. Section 6: NE 1SE 1, S 2NE 1 and NE 1NE 1

subject to the requirement that such system "shall be so equipped as to shut-in the flowing wells at the wellhead in the event of a flow-line break".

- 2. The commission by letter dated April 26, 1960, granted applicant 90 days to test equipment to satisfy the above requirement of Order No. 1643.
- 3. Tests have not been concluded but we are far enough advanced to show that workable equipment would cost approximately \$300.00 per well installed and this cost on the basis of the number of wells to be served would make the use of the LACT System uneconomical.
- The use of high pressure tubing tested to at least 1500 psi for flow-line would adequately protect against loss of oil through flow-line breakage and will not create the danger of waste.
- 5. The granting of applicant's request in this case is in the interest of conservation, and will protect correlative rights.

It is respectfully requested that this matter be set for hearing at an early date.

Respectfully submitted,

HONDO-WESTERN-YATES
BY HONDO OIL & GAS COMPANY, OPERATOR

S. H. Cavin, Resident Attorney

OIL CONSERVATION COMMISSION F. O. BOX 871 SANTA FE, NEW MEXICO

July 25, 1960

Hondo Oil & Gas Company Box 660 Roswell, New Mexico

Attention: Mr. S. H. Cavin

Gentlemen:

Reference is made to our letter of April 26, 1960, which authorized Hondo Oil & Gas Company a 90-day test period prior to the installation of certain equipment required for the operation of your automatic custody transfer system authorized under the terms of Order No. R-1643.

Inasmuch as you have made application for an amendment of Order R-1643 and a case has been docketed for hearing on July 27, 1960, we are hereby extending the effective time of the exception granted by our letter of April 26, 1960, until August 15, 1960.

Very truly yours,

A. L. PORTER, Jr., Secretary-Director

ALP/DSN/og

Mr. J. R. McMinn Hondo Oil & Gas Company P. O. Box 660 Roswell, New Mexico

Subject: Resume of Experiments with Flow Line Safety Valves (excess flow valves), Hondo-Western-Yates Battery No. 1, SE 32 Sec. 31-T178-2288, Empire Abo Field, Eddy County, New Mexico

Dear Mr. McMinn:

Experimentation was accomplished on 2 of our longest flow lines for Hondo-Western-Yates "A" Lease, wells No. 1 and No. 8, served by Battery No. 1, in order to put together Flow Line Safety Control Equipment at loss cost than the usual expensive \$500 plus (specifically manufactured) equipment sold as a unit.

We experimented with Fisher P-125 motor valves, Masoneilan motor valves and Black, Sivalle and Bryson 1440 pilot control valves. Originally we wanted a normally closed motor valve that would require at least 50 psi pressure to hold the valve open. We wanted to use one regulator with 2,000 psi maximum capacity down to 50 psi. All normally closed motor valves manufactured that we could find only take about 10 psi to 20 psi to open them. Therefore, we had to devise a way of keeping 50 psi or more on the motor valves to make them suit our needs.

We tried Black, Sivalls and Bryson 1440 pilot valve, which is the high pressure separator dump valve that costs \$165. It proved to be costly and also did not function satisfactorily. This had a throttling type action which made the valve fluctuate closed and open. It requires a constant pressure gas supply which we didn't have. We tried Masoneilan valves. The most satisfactory motor valve we found is the Fisher P-125. We realized that we needed a snap action control device rather than a throttling action. We were able to find a second regulator to give us snap action regulation of pressure.

The final hook-up now being tested on H-W-Y No. 1 and No. 8 wells is shown on attached sketch which will be included as Exhibit 2 in the hearing.

Final Hook-up Explanation -

At up to 2,000 psi the Rdwards ball check valve stays closed from upstream pressure. Valve No. 1 regulates flow line pressure to 50 psi to valve No. 2.

Valve No. 2 is a snap action, 3 way valve set at 50 psi. The valve is so designed as to regulate pressure to eliminate throttling action. 50 psi pressure is directed to motor valve No. 3, if more than 50 psi pressure is placed against the system, gas is vented at valve No. 4, relief valve, down to 50 psi pressure.

Valve No. 3 is a normally closed motor valve. It is held open by 50 psi maintained by the automatic system.

If the flow line breaks or leaks to below 50 psi pressure, the Edwards ball check relieves the control system of its pressure back by letting gas oscape back into the leaking flow line and No. 3 motor valve closes the well in.

Very truly yours,

HOMDO OIL & GAS COMPANY

A. J. Denns

LID/=h

Hondo Oil & Gas Company Bill of Waterials - Flow Line Safety Valve

| | Total | | | 2235.36 |
|--------------|--|-------------|-------------|---------|
| . 5 * | 1/4" Copper Tabing | , 14 | ſŧ. | .70 |
| • | 1/4" 41-F Copper Tabing Flare But | .12 | ea. | .7ž |
| . 8 | 1/4" CT x 1/4" PT #60-Y Copper Tubing | .19 | ea. | .57 |
| 2 | 1/4" CT X 1/4" PT #68-Y Copper Tubing Malf Union | .15 | ea . | .45 |
| -1 | 1/4" Hale and Female Heedle Valve | 3.45 | ea. | 3.45 |
| 4 | 1/4" Forged Steel Tee | .97 | es. | 3.88 |
| 1 | l" Std. B. W. Street Ell | .47 | ea. | .47 |
| 1 | l" x 1/4" Std. C. I. Bushing | .20 | | .20 |
| 1 | 2" Fig. 200 Weed Hammer Union | 6.65 | 95 . | 6.65 |
| 1 | 2" Forged Steel Cplg. | 1.64 | 63. | 1.64 |
| 1 | 1/4" x 2" Ditto | .23 | 62. | . 23 |
| 5 | 1/4" x 1-1/2" Ditto | .21 | ea. | 1.05 |
| 2 | 2" x 6" Ditto | 1,03 | 64. | 2.06 |
| 1 | 2" x 18" XH Smlm. Nipple | 2.00 | ea. | 2.00 |
| 1 | 2" Extra Heavy Smls. Bull Plug Tapped 1/4" | 6.10 | ea , | 6.10 |
| : 1 | 2" Forgad Steel Tes 3000# | 5.09 | ea. | 5.09 |
| 1 | 1/4" 2672 Edwards Forged Steel Ball Check Valve | 13.60 | •4. | 13.60 |
| 1 | 1" 1805-F Fisher Relief Valve c/w/ Spring for 10 to 60# outlet set at 50# (Valve #4) | 7.80 | ea. | 7.80 |
| 1 | 1/4" 164-Al Fisher Valve c/w/ Spring for 39 to 60# outlet (Valve #2) | 16.07 | ca. | 16.07 |
| 1 | 1/4" 1301-F Fisher Regulator c/w/ Spring for 0 to 75# outlet. (Valve #1) | 21,06 | ea. | 21.06 |
| 1 | 2" P-125 Fisher Motor Valve (Valve #3) | \$141.57 | ea. | 141.57 |
| | · | | | |

DOCKET: EXAMINER HEARING JULY 27, 1960

Oil Conservation Commission - 9 a.m., Mabry Hall, State Capitol, Santa Fe, N.M.

The following cases will be heard before Daniel S. Nutter, Examiner, or Oliver E. Payne, Attorney, as alternate Examiner:

CASE NOS. 2023 through 2033 will not be heard before 1 p.m. on July 27, 1960. CASE NOS. 2034 through 2040 will not be heard before 9 a.m. on July 28, 1960.

- CASE 2017: Application of Continental Oil Company for an order authorizing an automatic custody transfer system to handle the Maljamar Pool production from its Miller "BX" lease comprising in pertinent part the E/2 of Section 14, Township 17 South, Range 32 East, Lea County, New Mexico.
- CASE 2018: Application of Continental Oil Company for an order authorizing the triple completion of its Jicarilla Apache Well No. 27-2, located in the NW/4 NW/4 of Section 27, Township 25 North, Range 4 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of oil from the Gallup formation, the production of oil from the Greenhorn formation and the production of oil from the Dakota formation through parallel strings of 4½ inch, 2 7/8 inch, and 4½ inch casing cemented in a common well bore. Applicant proposes to install tubing to the Gallup and the Dakota formations.
- CASE 2019: Application of Continental Oil Company for an order authorizing the triple completion of its Northeast Haynes Apache Well No. 9-1, located in the NW/4 SW/4 of Section 9, Township 24 North, Range 5 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the Mesaverde formation, the production of gas from the gallup formation and the production of gas from the Greenhorn formation through parallel strings of 2 7/8 inch, 4½-inch, and 4½-inch casing respectively, cemented in a common well bore. Applicant also proposes to install tubing in the latter two zones.
- CASE 2020: Application of Amerada Petroleum Corporation for an order authorizing the triple completion of its Wimberly Well No. 13, located in Unit M, Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Langlie Mattix Pool, the disposal of salt water into the Grayburg and San Andres formations in the interval from 3500 feet to 4200 feet, and the production of oil from the Justis-Blinebry Pool by means of two parallel strings of 3½-inch casing cemented in a common well bore. Applicant would dispose of the salt water through one string of casing, produce the Blinebry oil through 1½-inch tubing set in the second string of casing, and produce Langlie Mattix gas through the annulus of the 1½-inch tubing and the second casing string.

CASE 2021: Application of Shell Oil Company for authority to recomplete its State BUA Well No. 2 (formerly its Bluitt Unit Well No. 2) at an unorthodox oil well location in the Pennsylvanian formation within one mile of the Bluitt Pennsylvanian Pool. Said well is located 1980 feet from the North line and 660 feet from the West line of Section 16, Township 8 South, Range 37 East, Roosevelt County, New Mexico.

CASE 2022: Application of Sinclair Oil & Gas Company for an order authorizing the dual completion of its Turner "B" SP Well No. 67, located in Unit L, Section 20, Township 17 South, Range 31 East, Eddy County, New Mexico, in such a manner as to permit the production of oil from the Grayburg-Jackson Pool and the production of oil from an undesignated Abo pool through parallel strings of 2-inch tubing.

The following cases will not be heard before 1 p.m. on July 27, 1960:

CASE 2023: Application of Honolulu Oil Corporation for an order authorizing it to institute a pressure maintenance project in the Horseshoe-Gallup Oil Pool by the injection of water into the Gallup formation through its Navajo Well No. 4, located in the SE/4 SE/4 of Section 5, Township 31 North, Range 17 West, San Juan County, New Mexico; applicant further seeks the adoption of special rules governing the operation of said project.

CASE 2024: Application of Humble Oil & Refining Company for an order authorizing it to institute a pressure maintenance project in the Horseshoe-Gallup Oil Pool by the injection of water into the Gallup formation through 29 wells located in Sections 3, 4, 9, 10, and 11, Township 31 North, Range 17 West, San Juan County, New Mexico; Applicant further seeks the adoption of special rules governing the operation of said project.

CASE 2025: Application of Socony Mobil Oil Company for permission to convert to water injection its Navajo "A" Well No. 9, located in NE/4 NW/4 of Section 14, Township 31 North, Range 17 West, Rio Arriba County, New Mexico, in conjunction with a proposed adjacent pressure maintenance project in the Horseshoe-Gallup Oil Pool.

CASE 2026: Application of The British American Oil Producing Company for an order authorizing the "slim-hole" completion of its Fullerton Well No. 7, located 1850 feet from the South and West lines of Section 11, Township 27 North, Range 11 West, Dakota Producing Interval, San Juan County, New Mexico, utilizing 2 7/8-inch tubing as casing.

-3-Docket No. 21-60

CASE 2027:

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 2028:

Application of Pan American Petroleum Corporation for an order authorizing it to commingle the production from the Empire-Abo Pool from all wells on eight separate leases in Sections 27 and 34, Township 17 South, Range 28 East, Eddy County, New Mexico. Applicant also seeks authorization of an automatic sustody transfer system to handle said commingled production.

CASE 2029:

Application of Pan American Petroleum Corporation for an amendment of Order R-1399 to permit the commingling of Empire-Abo Pool production from Federal Lease No. IC-064050-A, E/2 SE/4 of Section 34 and NW/4 SW/4 of Section 35, Township 17 South, Range 27 East, with the Empire-Abo Pool production from those leases for which commingling was approved by paragraph one of said order and to permit the commingling of Empire-Abo Pool production from Federal Lease No. NM-025602, NW/4 and N/2 SW/4 of Section 15, Township 18 South, Range 27 East with the Empire-Abo Pool production from those leases for which commingling was approved by paragraph two of said order. Applicant also seeks an amendment of Order No. R-1399-A to permit production from the above-described leases in Eddy County, to be handled by the automatic custody transfer systems authorized in said order.

CASE 2030:

Application of Pan American Petroleum Corporation for permission to commingle the Empire-Abo Pool production from eleven separate State leases in Townships 17 and 18 South, Range 28 East, Eddy County, New Mexico. Applicant further seeks permission to install automatic custody transfer facilities to handle said commingled production.

CASE 2031:

Application of Union Oil Company of California for approval of its South Caprock Queen Unit Agreement, which unit is to embrace 9526 acres in Townships 14 and 15 South, Ranges 30 and 31 East, Caprock Queen Pool, Chaves County, New Mexico.

CASE 2032:

Application of Union Oil Company of California for an order authorizing it to institute a waterflood project in the Caprock-Queen Pool on its proposed South Caprock Queen Unit by the injection of water into the Queen formation through ten wells located in Township 15 South, Range 31 East, Chaves County, New Mexico, and for authority to drill a water injection well at an unorthodox location, being 330 feet West of the East line and 1320 feet South of the North line of Section 18, Township 15 South, Range 31 East.

-4-Docket No. 21-60

CASE 2033:

Application of Cabeen Exploration Corporation for permission to complete its State 1-K Well located 1980 feet from the South and West lines of Section 11, Township 10 South, Range 32 East, in an undesignated Permo-Pennsylvanian pool in Lea County, New Mexico as a "slim-hole" completion, using 2-7/8 inch casing.

The following cases will not be heard before 9 a.m. on July 28, 1960

CASE 2034:

Application of Gulf Oil Corporation for an order authorizing the dual completion of its J. N. Carson Well No. 6, located 330 feet from the South line and 965 feet from the East line of Section 28, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Penrose-Skelly Pool and the production of gas from the Blinebry Gas Pool through parallel strings of 2 3/8-inch tubing.

CASE 2035:

Application of Gulf Oil Corporation for an order authorizing the dual completion of its W. T. McCormack Well No. 12, located 554 feet from the North line and 1874 feet from the East line of Section 32, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard Pool and the production of oil from the Wantz-Abo Pool through parallel strings of 2 3/8-inch tubing.

CASE 2036:

Application of Charles Loveless, Jr., for the establishment of a 280-acre non-standard gas unit in the Atoka-Pennsylvanian Gas Pool consisting of the NE/4, N/2 NW/4 and SW/4 NW/4 of Section 21, Township 18 South, Range 26 East, Eddy County, New Mexico. Applicant proposes that said unit be dedicated to the Brunner No. 1 Dayton Townsite Well to be located on an unorthodox location at a point 1650 feet from the North line and 2310 feet from the East line of said Section 21.

CASE 2037:

Application of Sun Oil Company for the creation of a new oil pool for Wolfcamp production to be designated as the Jenkins-Wolfcamp pool and to consist of Sections 2, 3, 4, 8, 9, 10 and 11 of Township 9 South, Range 34 East, Lea County, and Sections 34 and 35, Township 8 South, Range 34 East, Roosevelt County, New Mexico. Applicant further seeks the promulgation of special rules and regulations for said pool including a provision for 80-acre drilling and proration units.

CASE 2038:

Application of Benson-Montin-Greer Drilling Corporation for an order authorizing the dual completion of the Jones Well No. 1, located in Unit P, Section 17, Township 28 North, Range 13 West, San Juan County, New Mexico, in such a manner as to permit the production of oil from an undesignated Gallup Pool and the production of gas from the West Kutz-Dakota Pool through parallel strings of 12-inch OD tubing.

H5Docket No. 21-60

CASE 2039:

Application of Southwest Production Company for approval of an unorthodox oil well location in the Gallegos-Gallup Oil Pool for its Rummel Federal Well No. 1, located 790 feet from the North line and 1190 feet from the West line of Section 36, Township 27 North, Range 12 West, San Juan County, New Mexico.

CASE 2040:

Application of Neville G. Penrose, Inc., for an order authorizing the dual completion of its Grizzel Well No. 1, located in Unit G, Section 5, Township 22 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Tubb Gas Pool and the production of oil from the Drinkard Pool through the casing-tubing annulus and 2 3/8-inch tubing respectively.

Hondo Vil & Gas Company Box 660 Roswell, New Mexico

July 28, 1960

Oil Conservation Commission State of New Mexico Box 871 Santa Fe, New Mexico

Re: Case No. 2027

Gentlemen:

Pursuant to our agreement we hereby submit two permanent copies of Exhibit No. 2 in the subject case for your files.

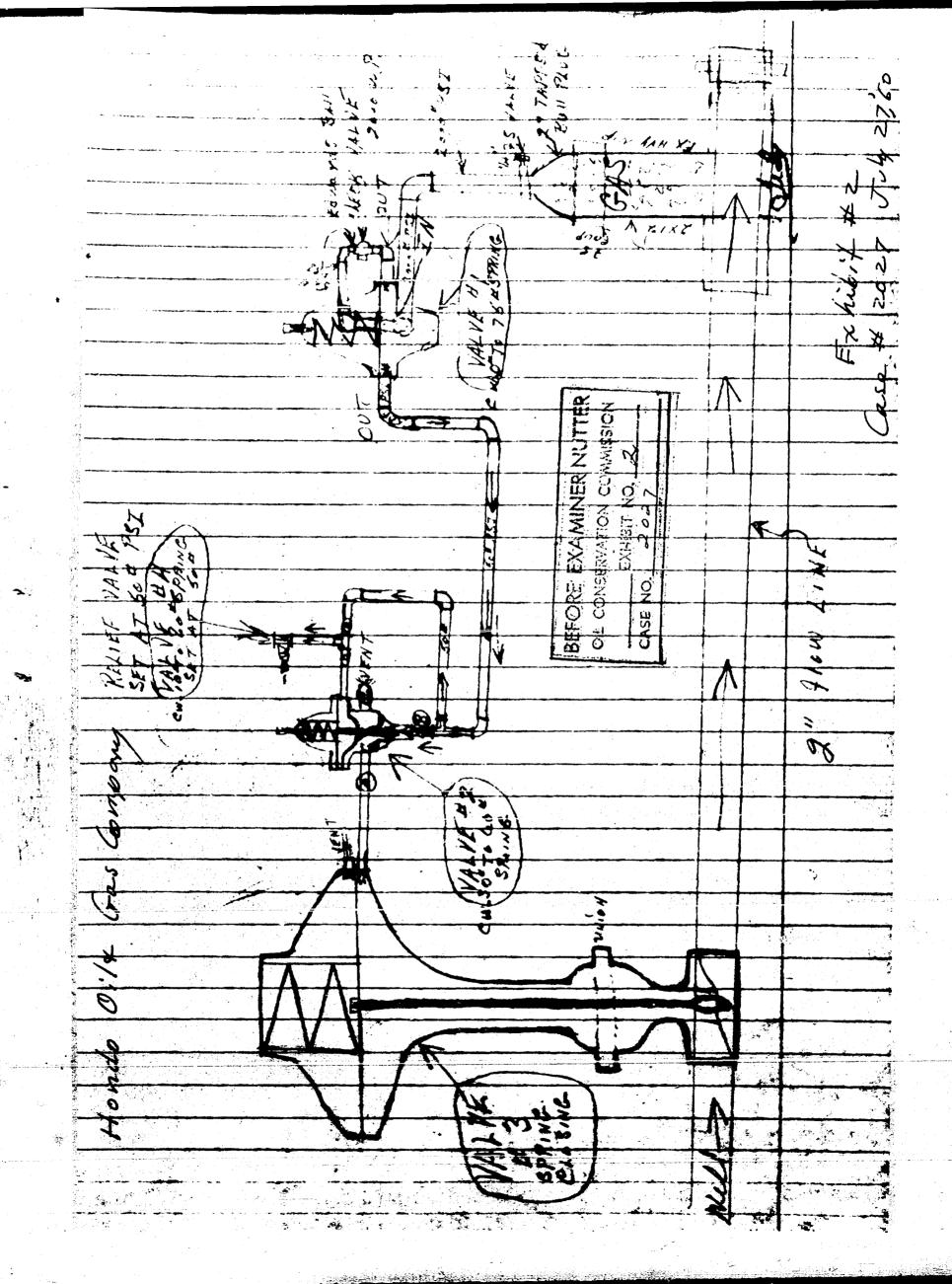
Thank you for your assistance and cooperation in this matter.

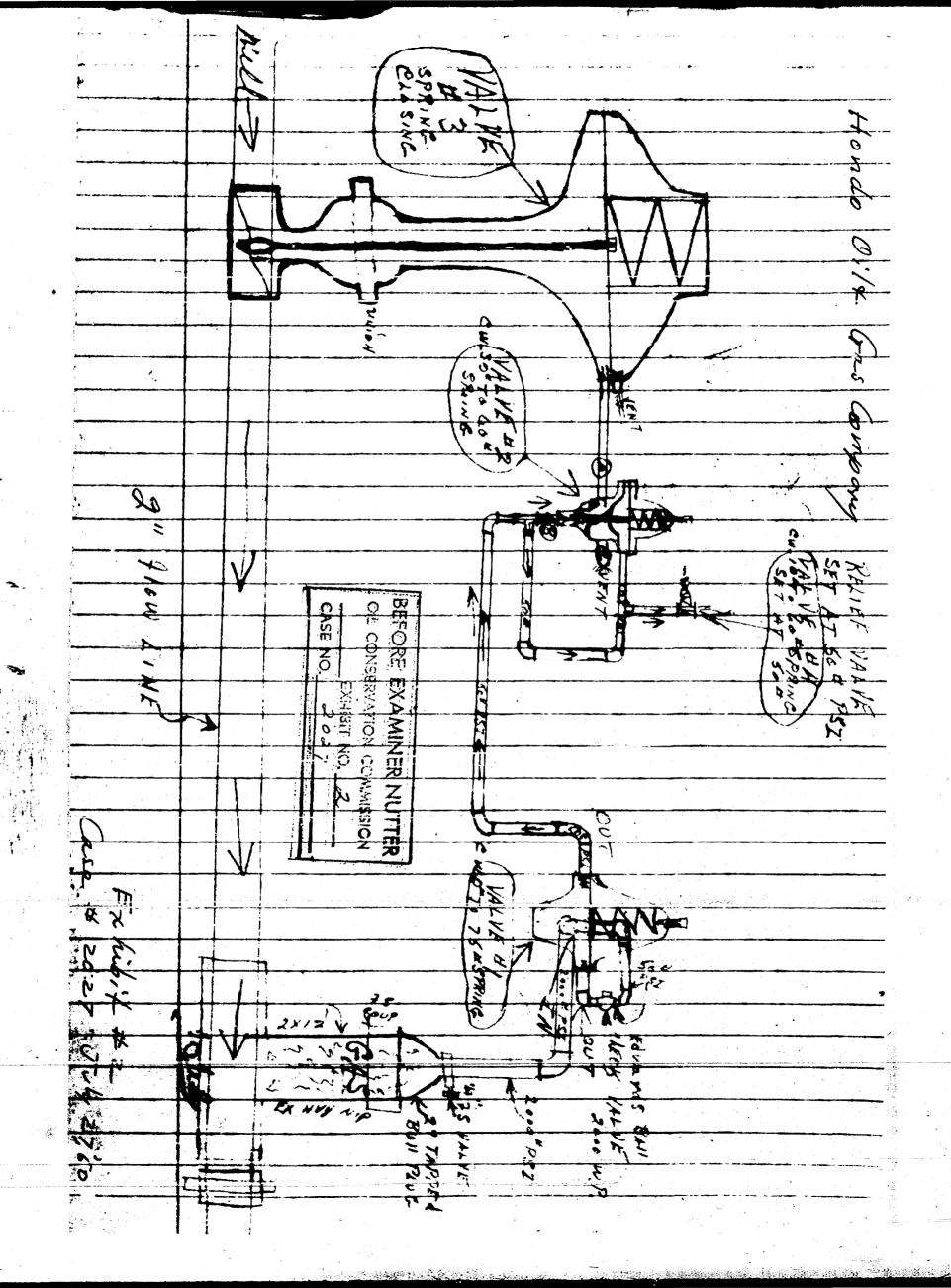
Yours very truly,

HONDO OIL & GAS COMPANY

Cavin, Resident Attorney

Enclosures





DEARNLEY-MEIER KEPORTING SERVICE,

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. Janiel 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.)

JACK MACLENNON, a witness, called by the Applicant, having been first duly sworn, was examined and testified as follows: DIRECT EXAMINATION

BY MR. CAVIN:

- Will you please state your name, position, employer, and your residence, please?
- 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.
- Have you previously appeared before the New Mexico Oil Commission, and where you qualified and testified as an expert witness?
 - I have.
- 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?
 - I am.

MR. CAVIN: If the Commission please, I move Mr. Mac-Lennon'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 (E½) of the East Half (E½) of Section Thirty-One (31), Southwest Quarter (SW¼) and the Northeast Quarter (NE¼) of Section Thirty-Two (32), Township Seventeen (17) South, Range Twenty-Eight (28) East, and the Northeast Quarter (NE½) of the Southeast Half (SE½) of the Northeast Quarter (NE¼), and the Northeast Quarter (NE¼) of the Northeast Quarter (NE¼) of Section Six (6), Township Eighteen (18) South, Range Twenty-Eight (28) East, all in Eddy County, New Mexico.
- 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



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.

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.)

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

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

MR. NUTTER: A little relief valve?

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.

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



- The over-all cost is \$235.36.
- And how does the equipment compare with the equipment Q that you mentioned previously as manufactured specifically for this purpose?
- This compares to about \$650.00 for specifically designed equipment which has been in use.
- The only difference in the equipment being that the equipment you referred to originally has been tested for extensive periods of time?
- 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.
- How would the use of the equipment that we have discussed here, affect the economics of the Lact installation?
- 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 walve equipment makes the use of the Lact system much less practicable economically.
- 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 Hine breakage?

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.

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

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.

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?

- Yes, sir, I believe that is correct.
- In your opinion, would the granting of this application be in the interest of conservation, and would it protect correlative rights?
 - 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:

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

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

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

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

- These flow-lines are above ground, are they?
- Yes, sir.

MR. PAYNE: Thank you.

QUESTIONS BY MR. NUTTER:

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 --

- That is correct.
- -- thereby resulting in the building of pressure on the flow-lines?
 - Yes, sir, that is correct.
- In a correction inserted in the order to protect against the loss in case the flow-line will break --
 - Yes, sir.
- -- 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?
- We actually have purchased and installed Republic pipe that has a 1,000 pound mill test.
- What do you propose to do, test it to 1500-pounds in the field?
- 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.
- Are these flow lines welded together at the joint, or a screwed joint?
 - Plain end pipe, welded together throughout the battery.
 - And all the flow-lines will be tested to at least 1500 Q



pounds, or have been?

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.



DEARNLEY-MEIER REPORTING SERVICE, Inc.

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO)

I, LLEWELYN NELSON, NO

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 Cil 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.

Leurllyn 9. Relan NOTARY PUBLIC.

My Commission Expires:

June 14, 1964.

I do hereby certify that the foregoing is a complete notated of the proceedings in the Equipment of the proceedings in the Equipment of Case to 2027 the Equipment of Case to 2027 the Equipment of Case to 2027 the Examiner of Commission of Conservation Commission

DEARNLEY-MEIER REPORTING SERVICE, Inc.

WITNESS PAGE J. R. (JACK) MACLENNON
Direct Examination by Mr. Cavin Cross Examination by Mr. Payne Questions by Mr. Nutter 2 8

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| App.#2 | Diagram | 4 | 7 | |

