State of New Mexico

Commissioner of Public Lands

Refer Reply to
Oil & Gas Royalty Division

MURRAY E. MORGAN
COMMISSIONER

P.O. BOX 791
SANTA FE, NEW MEXICO

March 9, 1960

Mr. James T. Jennings
J. P. White Building
Roswell, New Mexico

Re: Leases B-11594,
B-7966, B-2071

Dear Sir:

Permission is hereby granted to you to commingle production from Lot 4, Section 5, Township 18 South, Range 28 East with production from the lands contained in the Oil Conservation Commission Order No. R-1573, being

B-11594 $NE\frac{1}{4}NW\frac{1}{4}$, $S\frac{1}{2}NW\frac{1}{4}$, $N\frac{1}{2}SW\frac{1}{4}$ Sec. 6, T 18 S., R. 28 E.

B-7966 $SE\frac{1}{4}SW\frac{1}{4}$ Sec. 31, T. 17 S., R. 28 E.

B-2071 $W\frac{1}{2}SE\frac{1}{4}$ Sec. 31, T. 17 S., R. 28 E.

All of this acreage has a common beneficiary, that being Common Schools.

Yours very truly,
MURRAY E. MORGAN
Commissioner of Public Lands
By: Ted Bilberry
Ted Bilberry, Supervisor
Oil & Gas Division

MEM:TB:ML

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. C
CASE NO. 1928

ATTACHMENTS

I. Lease Plant Central Tank Battery and LACT Installation, State "BB" Lease.

II. LACT Unit Flow Drawing

III. Letter of Acceptance from Pipeline Company

IV. Letter of Approval from Commission of Public Lands, State of New Mexico

EXHIBIT

FRANKLIN, ASTON & FAIR, INC.

COMMINGLING AND AUTOMATIC CUSTODY TRANSFER
INSTALLATION
STATE "BB" LEASE - EMPIRE ABO POOL
EDDY COUNTY, NEW MEXICO

NEW MEXICO OIL CONSERVATION COMMISSION
EXAMINER HEARING
MARCH 23, 1960

EXHIBIT

FRANKLIN, ASTON & FAIR, INC.

COMMINGLING AND AUTOMATIC CUSTODY TRANSFER
INSTALLATION
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EDDY COUNTY, NEW MEXICO

NEW MEXICO OIL CONSERVATION COMMISSION
EXAMINER HEARING
MARCH 23, 1960

CONTENTS

INTRODUCTION

Franklin, Aston and Fair, Inc. respectfully submits this exhibit in support of its request to the Oil Conservation Commission of the State of New Mexico for:

1. Approval to commingle production from the State "BN" Lease, NW/4 NW/4 Section 5, T-18-S, R-28-E, Eddy County, New Mexico, with production from other state leases which is being commingled at State "BB" Lease central battery in the SE/4 NW/4 Section 6, T-18-S, R-28-E, Eddy County, New Mexico, as approved by Commission Order No. R-1573, and
2. Approval to install and operate lease automatic custody transfer facilities at the central tank battery location on the State "BB" Lease.

Attachment No. I is a plat of the subject leases showing the location of the central tank battery and the proposed LACT installation. Installation of facilities to accurately record temperature corrected volumes and automatically transfer lease produced crude to pipeline custody will:

1. Conserve natural resources in the form of light hydrocarbons which are now being lost from produced crude oil to the atmosphere during the gauging operation at which time accumulated light ends escape and others flash from the stored oil to the atmosphere.

2. Substantially reduce the crude oil residence time in the storage tanks thereby lessening vapor losses by way of normal tank venting or breathing.
3. Conserve manpower and improve lease operations by substantially reducing tank battery attendance time which will in turn release lease operating personnel and pipeline personnel for performance of other duties.
4. Release those monies in excess of the cost of LACT equipment which would otherwise be invested in conventional lease storage facilities for use in finding and developing additional oil reserves in the State of New Mexico.

CENTRAL TANK BATTERY AND LACT INSTALLATION - STATE "BB" LEASE

Lease Production and Well Test Metering

The lease production and well test metering procedure described below can be followed by referring to the schematic drawing included as Attachment II.

As proposed, oil from State Leases "BB", "BD", "BJ" and "BN" will enter the central tank battery through the respective lease production headers A-1, A-2, A-3 and A-4, pass through the lease production separators B-1, B-2, B-3 and B-4 and the lease production meters C-1, C-2, C-3 and C-4. Oil from the individual leases will not be commingled until after it has passed through the lease production meters.

With the proposed facilities all wells on all four leases can be individually tested by the proper manipulation of block valves in the lease production headers and flowing oil from the one well on test from the lease production header into the well test separator (D) and on through the well test meter (E).

Proving of the lease production and well test meters will be accomplished by individually closing the normally open block valves (X) and opening the normally closed block valves (Y) directing the lease production into the meter prover tank (Q). The oil accumulated in the prover tank (Q)during meter proving tests will be returned by way of the recycle pump (T) to the pipeline surge tank (F).

The positive displacement meters which are employed for measurement of individual lease production have proven highly accurate and dependable in service in the Empire Abo Pool.

LACT Unit Equipment

The positive displacement meter LACT unit to be installed at the State "BB" lease central tank battery is basically the same as the LACT units now in operation at the Pan American Storage System III and Malco "F" Batteries in the Empire Abo Pool. The State "BB" Lease LACT unit will include a pipeline pump; a strainer; a BS&W monitor; a valve to divert unmerchantable oil into a bad oil tank for further treating; a gas eliminator; a temperature compensated positive displacement meter (equipped with net barrels counter, set-stop counter, electric impulse transmitter to pace the pipeline sampler and a fail-safe safety shut-

down switch) a proportional pipeline sampler; a back pressure valve to assure that the line to and from the meter is packed with oil at a pressure in excess of the vapor pressure of the metered liquid; a calibrated meter prover tank; a back flow check valve and a LACT unit control panel.

LACT Unit Operation

Operation of the LACT system proposed for the State "BB" Lease central tank battery as described below can be followed by reference to the schematic flow drawing included as Attachment II.

After the production from each lease passes through its respective header A-1, A-2, A-3 and A-4 and separator B-1, B-2, B-3 and B-4 and lease production meter C-1, C-2, C-3 and C-4, it is commingled in a common header and flows into the pipeline surge tank (F). When the oil level in the surge tank (F) reaches the high working level float switch (G) the pipeline pump (I) is automatically started. Oil then passes through strainer (J) and the BS&W monitor (K). If the oil is of merchantable quality as determined by the BS&W monitor (K), flow continues through the diverting valve (L), gas eliminator (M), PD meter (N), sampling point (O), back pressure valve (P), check valve (R) and on to the pipeline past the meter prover tank (Q). When sufficient oil has been transferred to the pipeline to lower the fluid level in surge tank (F) to the low working level float switch (H), power is automatically shut off to the pipeline pump (I) and delivery of oil to the pipeline stops. When the fluid level in the surge tank (F) returns to the high working level float switch (G), automatic delivery to the pipeline again takes place.

In the event the BS&W (K) detects unmerchantable oil, valve (L) will close to the meter run and direct the flow into the bad oil tank (S). When the BS&W content of the oil entering the LACT unit returns to a satisfactory range as determined by the BS&W monitor (K) the diverting valve (L) will close to the bad oil tank and again direct the flow of oil to the LACT meter run. Any unmerchantable oil which is collected in the rerun tank (S) will be treated in the tank. After water is drawn from the tank bottom, the recycle pipe (T) will return the treated oil to the pipeline surge tank (F).

Pipeline Oil Sampling

A composite representative sample of all oil delivered to the pipeline will be obtained by the sampler (O). The positive displacement meter (N) will be equipped with an electric impulse transmitter which will signal the electrically driven sampler pump to extract proportionate samples of all oil passing through the meter. Collection of the composite sample will be accomplished in a vapor proof container for subsequent testing by a representative of the pipeline company. Calibration of the BS&W monitor and adjustment of the treating procedure will be made on the basis of the analysis of the composite sample.

LACT Unit Meter Proving

The LACT unit positive displacement meter will be proven periodically to the satisfaction of the New Mexico Oil Conservation Commission, Service Pipeline Company and Franklin, Aston & Fair, Inc. Meter proving tests will be witnessed by representatives of the producer and the pipeline.

The meter will be proven against a fixed volume calibrated prover tank constructed to conform to API standards. The inside surfaces of the prover tank will be plastic coated to prevent corrosion and the adherence of crude products, thereby maintaining the prover tank calibration.

Operational Safeguards

The LACT unit will be checked periodically by the producer's representative to assure satisfactory operation. In addition, the following features will be built into the LACT system to protect the royalty owner, the producer, and the pipeline and to prevent waste.

1. During normal operation no oil can be delivered to the pipeline from this battery without first passing through the positive displacement meter (N).
2. The inlet and outlet valves on the LACT unit side of the meter prover tank (Q) will be closed and equipped with pipeline seals during normal operations. This will prevent inadvertent by-passing of the LACT unit meter and transfer of non-recorded volumes of oil to the pipeline during the lease production and well test meter proving operation.
3. The positive displacement meter (N) will be equipped with set stop controls to prevent over production.
4. The positive displacement meter (N) will be equipped with a non-resettable barrels counter to maintain a positive record of the quantity of oil delivered to the pipeline.

5. The back pressure valve (P) will hold a positive head on the meter (N) thereby insuring proper conditions for accurate measurement.
6. The positive displacement meter (N) will be equipped with a safety switch which is geared to the counter shaft. In the event the shaft were to break the safety switch will assume a position that will cause power to the pipeline pump (I) to be shut off thereby preventing the delivery of non-recorded volumes of oil to the pipeline.
7. All oil produced into the State "BB" Lease central battery will be monitored for BS&W content and only that oil of merchantable quality will be delivered to the pipeline.
8. Performance of the BS&W monitor (K) will be checked by the manual determination of sample BS&W content at the end of each sample collection period.
9. The sampler (O) will collect and store under pressure, a representative composite sample of all oil delivered to the pipeline. Periodically, the sample thus collected will be analyzed for BS&W content and gravity by a representative of the pipeline.
10. In the event of failure of the low working level float switch (H) the fluid level in the surge tank (F) will be

drawn down to the point at which vapors will be drawn into the pipeline pump suction. Because a centrifugal pump (pipeline pump) designed to handle crude oil will not pump vapor, flow through the meter (N) will immediately drop below the pre-determined rate range and the safety switch built into the meter will cause the power to be shut-off to the pipeline pump.

11. In the event of failure of high working level float switch (G) the pipeline pump will not be energized and the surge tank (F) fluid level will rise to the point where oil will overflow through an equalizing line into the bad oil tank (S). Combined storage capacity of tanks (F) and (S) exceeds the total daily production from the leases served by the central battery.

Tamper Proof Design of LACT Unit

The BS&W monitor controller will be locked against tampering and the block valves on the LACT unit side of the proving tank will be sealed at all times except during proving runs by authorized personnel.

Pipeline Acceptance of LACT Unit

Attachment III is a copy of a letter from the Service Pipeline Company signifying approval of this LACT installation.

State of New Mexico

Commissioner of Public Lands

Refer Reply to
Oil & Gas Royalty Division

MURRAY E. MORGAN
COMMISSIONER

P.O. BOX 791
SANTA FE, NEW MEXICO

March 9, 1960

Mr. James T. Jennings
J. P. White Building
Roswell, New Mexico

Re: Leases B-11594,
B-7966, B-2071

Dear Sir:

Permission is hereby granted to you to commingle production from Lot 4, Section 5, Township 18 South, Range 28 East with production from the lands contained in the Oil Conservation Commission Order No. R-1573, being

B-11594 NE¼NW¼, S½NW¼, N½SW¼ Sec. 6, T 18 S., R. 28 E.

B-7966 SE¼SW¼ Sec. 31, T. 17 S., R. 28 E.

B-2071 W½SE¼ Sec. 31, T. 17 S., R. 28 E.

All of this acreage has a common beneficiary, that being Common Schools.

Yours very truly,

MURRAY E. MORGAN
Commissioner of Public Lands
By: Ted Bilberry
Ted Bilberry, Supervisor
Oil & Gas Division

MEM:TB:ML

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF FRANKLIN, ASTON & FAIR, INC. FOR AN ORDER AUTHORIZING THE INSTALLATION AND USE OF AUTOMATIC CUSTODY TRANSFER EQUIPMENT ON THREE SEPARATE STATE LEASES IN EDDY COUNTY, NEW MEXICO, AND FOR PERMISSION TO COMMINGLE PRODUCTION FROM ALL OF SAID LEASES

CONSENT

The undersigned, Bert Aston and Fair Oil Company, the record owners of State Lease B-2071 insofar as it covers the $W\frac{1}{2}SE\frac{1}{4}$ of Section 31, Township 17 South, Range 28 East, hereby consent to an amendment of Order R-1573 to include the $NW\frac{1}{4}NW\frac{1}{4}$ of Section 5, Township 18 South, Range 30 East, covered by State Lease B-11594, in the commingling authorization granted by said Order and further consents to the installation of automatic custody transfer equipment and request the Commission to issue an order granting permission to install an automatic custody transfer system to handle the commingled Empire Abo Pool production from the three separate leases authorized by Order R-1573.

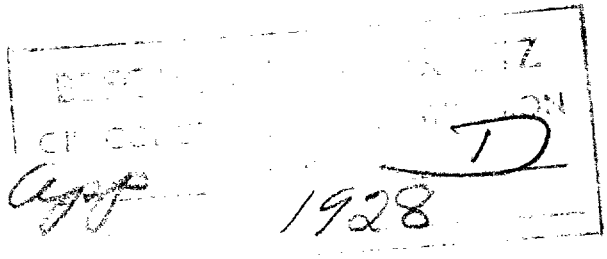
Bert Aston

ATTEST:

By Marvin N. Nelson
Secretary-Treasurer

FAIR OIL COMPANY

By James W. Fair
President



_____ County, _____

Township _____ Range _____ Township _____ Range _____

Township _____ Range _____ Township _____ Range _____

Form 104—(Four on Township)

6	5	4	3	2	1	6	5	4	3	2	1
7	8	9	10	11	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13
19	20	21	22	23	24	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28	27	26	25
31	32	33	34	35	36	31	32	33	34	35	36
6	5	4	3	2	1	6	5	4	3	2	1
7	8	9	10	11	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13
19	20	21	22	23	24	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28	27	26	25
31	32	33	34	35	36	31	32	33	34	35	36

B-11594
B-7966
B-2071

Franklin, Astor & Dair

No. 9-60

DOCKET: EXAMINER HEARING MARCH 23, 1960

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

The following cases will be heard before Elvis A. Utz, Examiner, or A. L. Porter, Jr., Secretary-Director:

CASE 1923: Application of Caulkins Oil Company for a gas-gas dual completion and an unorthodox gas well location. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Sanchez Well No. 1, located 560 feet from the North line and 660 feet from the West line of Section 24, Township 26 North, Range 6 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the South Blanco-Pictured Cliffs Pool and the production of gas from the Dakota Producing Interval through parallel strings of tubing. Applicant further seeks approval of an unorthodox gas well location for said Sanchez Well No. 1.

CASE 1924: Application of Caulkins Oil Company for a gas-oil dual completion, an unorthodox oil well location and an exception to the casing requirements of Order R-1191. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its D-140 Well, located 990 feet from the North and East lines of Section 11, Township 26 North, Range 6 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of gas from the South Blanco-Dakota Pool and the production of oil from the Tocito formation adjacent to the South Blanco-Tocito Oil Pool through parallel strings of tubing. Applicant also seeks an exception to the casing requirements of Order No. R-1191. Applicant further seeks approval of an unorthodox oil well location for said D-140 well.

CASE 1925: Application of Honolulu Oil Corporation for approval of a unit agreement. Applicant, in the above-styled cause, seeks approval of its North Mullis Unit Agreement, which unit will embrace approximately 1922 acres of State, Federal and fee land in Townships 14 and 15 South, Range 29 East, Chaves County, New Mexico.

CASE 1926: Application of Hondo Oil & Gas Company for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks an order authorizing it to install an automatic custody transfer system to handle the Empire-Abo Pool production from all wells located on its State 647 Lease consisting of the NE/4 SE/4, S/2 NE/4, and NE/4 NE/4 of Section 6, Township 18 South, Range 28 East, and the E/2 E/2 of Section 31 and the SW/4 and NE/4 of Section 32, all in Township 17 South, Range 28 East, Eddy County, New Mexico.

CASE 1927: Application of J. W. Brown for the establishment of special rules and regulations governing the Brown Pool in Eddy County, New Mexico, to provide for 2½-acre spacing in said pool.

CASE 1928: Application of Franklin, Aston & Fair, Inc. for an amendment of Order R-1573 and for permission to install an automatic custody transfer system. Applicant, in the above-styled cause, seeks an amendment of Order R-1573 to include the NW/4 NW/4 of Section 5, Township 18 South, Range 28 East, Empire-Abo Pool, Eddy County, New Mexico, in the commingling authorization granted by said order. Applicant further seeks permission to install an automatic custody transfer system to handle the commingled Empire-Abo Pool production from the three leases authorized by Order R-1573.

Western Development Company of Delaware

SENA PLAZA, SANTA FE, NEW MEXICO
TELEPHONE 3-5568
P. O. Box 427
Artesia, New Mexico
March 15, 1960

Franklin, Aston & Fair, Incorporated
Box 769
Roswell, New Mexico

Re: State Lease No. 647, Western
Development Company
Property File No. L-38

Dear Sirs:

It has been brought to our attention by a letter from Mr. James T. Jennings dated March 7, 1960 that Pan American Petroleum Corp. and Franklin, Aston and Fair, Inc. are drilling an Abo well in the NW/4 NW/4 (Lot 4), Section 5, T-18-S, R-28-E, Eddy County, New Mexico. We understand that there is an application before the New Mexico Oil Conservation Commission to commingle the production from the above well, by means of a L.A.C.T. unit, into a common tank battery with separately metered wells on State Leases B-11594, B-7966 and B-2071.

The production from the subject well will of necessity be transported by pipeline across State 647 lease to the tank battery located in the SE/4 NW/4, Section 6, T-18-S, R-28-E. Insofar as Western Development Company's ownership in State 647 lease is concerned we have no objection to the transportation of oil by Franklin, Aston and Fair, Inc. across the lease. This permission is granted with the provision that Franklin, Aston and Fair, Inc. is not authorized to enter the State 647 lease without securing permission of the land owners and other necessary or interested parties. It is further provided that Franklin, Aston and Fair, Inc. will protect Western Development Company from any and all claims or damages that may result from their work.

Very truly yours,

WESTERN DEVELOPMENT COMPANY
of Delaware

M. E. Spitler

M. E. Spitler
General Manager

MES:ds

cc: James T. Jennings
J. P. White Building
Roswell, New Mexico

Hondo Oil & Gas Company

Box 660
Roswell, New Mexico

March 18, 1960

Franklin, Aston & Fair, Inc.
J. P. White Building
Roswell, New Mexico

Gentlemen:

Pursuant to the recent request of your attorney, Mr. James T. Jennings, please be advised Hondo Oil & Gas Company has no objection to your transporting oil from your well in the $NW\frac{1}{4}NW\frac{1}{4}$ (Lot 4) of Section 5, across Hondo's lease B-647 in the $E\frac{1}{2}$ and $NW\frac{1}{4}$ of the $NE\frac{1}{4}$ of Section 6, to your tank battery in the $SE\frac{1}{4}NW\frac{1}{4}$ of Section 6, all in Township 18 South, Range 28 East, Eddy County, New Mexico.

You will, of course, be expected to use reasonable care to avoid disturbance of existing installations on our lease and to make your own arrangements with the surface owner.

Yours very truly,

HONDO OIL & GAS COMPANY

HHC

By Leonard B. Anderson
Vice President

B-2

Artesia, New Mexico
March 21, 1960

Franklin, Aston & Fair, Inc.
Box 769
Roswell, New Mexico

Gentlemen:

This is to advise that Yates Brothers consisting of Harvey E. Yates, S. P. Yates, Martin Yates III and John A. Yates, who are the owners of an interest in lease B-647 insofar as it covers the E½NE¼ and SW¼NE¼ Sec. 6, T. 18 S., R. 28 E. have no objections to your transporting oil from your well located in the NW¼NW¼ (Lot 4) Sec. 5, T. 18 S., R. 28 E. to a tank battery located in the SE¼NW¼ Sec. 6, T. 18 S., R. 28 E.

We will expect you to use reasonable care to avoid the disturbance of existing installations on our lease and it will be necessary for you to make your own arrangements with the surface owner for any surface damage, and you shall protect us from any and all claims for damages which may result from your operations on our lease.

Yours very truly,

YATES BROTHERS

BY: 

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