

Case No.

27

Application, Transcript,  
Small Exhibits, Etc.

315 PETROLEUM  
BUILDING

CULBERTSON & IRWIN, INC.

-- OIL --  
MIDLAND, TEXAS

TELEPHONE 968  
P. O. BOX 1071

July 7, 1941

Mr. J.M. Kelly, Sec.  
New Mexico Oil Conservation Commission,  
Santa Fe, N.M.

Re: Tentative Proposal for Repressuring  
Culbertson & Irwin, Inc. Liberty  
Royalty Corporation lease W/2 of  
W/2 of Section 3-Twp. 25S-Rge 37E,  
Lea County, N.M.

Gentlemen:

On May 24 Culbertson & Irwin, Inc. requested of the  
Oil Conservation Commission the use of their Liberty Royalty  
No. 3 well for an input well and to produce the allowable that  
came from this well out of their Liberty Royalty Nos. 1 and 2  
in connection with the repressuring project on this lease.

Culbertson & Irwin now requests the Commission to call a  
formal hearing to consider this matter and would appreciate it  
if the hearing could be held this month.

The formal petition is now being prepared and will be  
mailed to the Commission within the next few days.

Yours very truly,



President  
CULBERTSON & IRWIN, INC.

315 PETROLEUM  
BUILDING

CULBERTSON & IRWIN, INC.

-- OIL --

MIDLAND, TEXAS

TELEPHONE 968  
P. O. BOX 1071

July 7, 1941

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Re: Tentative Proposal for re-  
pressuring Culbertson & Irwin,  
Inc., Liberty Royalties Corp.  
Lease, W/2 of W/2 of Section 3,  
Township 25-South, Range 37-East,  
Lea County, New Mexico

Attention: Mr. John M. Kelly

Gentlemen:

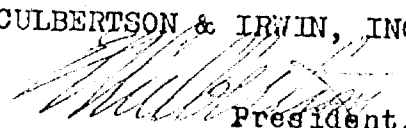
In our letter of June 19th, 1941,  
regarding the captioned lease we should have stated more  
clearly that we proposed to take our Liberty Royalties  
Corporation #3 well off of the proration schedule, use it  
as an input gas well and produce from wells # 1 and #2  
their respective allotments of allowable oil.

We are now advised that this procedure  
may require the approval of the Conservation Commission;  
if so, we desire to petition the Commission for consideration  
of the matter at their next executive meeting.

We will appreciate your assistance in  
the preparation of the proper form of petition.

Sincerely yours,

CULBERTSON & IRWIN, INC.

  
President.

EAC:lw

NEW MEXICO OIL CONSERVATION COMMISSION  
HOBBS, NEW MEXICO

June 26, 1941

C  
O  
P  
Y  
  
Culbertson & Irwin, Inc.,  
P. O. Box 1071  
Midland, Texas

Re: Tentative Proposal for repressuring Culbertson & Irwin,  
Inc., Liberty Royalties Corporation Lease, Section 3,  
T 25S, R 37E, Lea County, New Mexico.

Gentlemen:

I have your letter of June 19th in regard to the above  
captioned lease.

Some confusion exists in my mind as to whether or not you  
intend to use your Liberty Royalties Corporation Well #3 as  
an import well to return gas to the producing formation. If  
you do intend to use this well, please petition the Commission  
for consideration at their next Executive meeting. This  
matter has been taken up with the Legal Advisor of the  
Commission, Mr. Carl B. Livingston, for a statement as to  
whether or not a formal hearing would be necessary to allow  
you to use this well as an import well.

A copy of this letter is being sent to Mr. Glenn Staley,  
Proration Empire at Hobbs, who is familiar with the situation  
and I feel quite sure he can answer any questions you might  
bring up.

With kindest personal regards, I remain

Very truly yours,

John W. Kelly  
Secretary

JW:MS  
cc Glenn Staley

315 PETROLEUM  
BUILDING

CULBERTSON & IRWIN, INC.

-- OIL --

MIDLAND, TEXAS

TELEPHONE 968  
P. O. BOX 1071

June 19, 1941

New Mexico Conservation Commission  
Santa Fe, New Mexico

Gentlemen: Attention: Mr. John M. Kelly

Re: Tentative Proposal for repressuring  
Culbertson & Irwin, Inc., Liberty  
Royalties Corporation Lease, W/2 of  
W/2 of Section 3, Twp. 25-S., Rge.  
37-E., Lea County, New Mexico.

We refer to our letter of May 24th and your reply of  
May 29th by Mr. Carl B. Livingston relative to our proposal  
for the repressuring of the captioned lease.

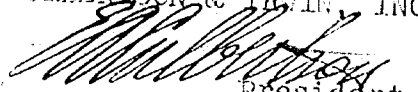
It was not our intention to ask at this time for the  
approval of a unitization project in this area. We merely wished to  
obtain your approval to the proposed use of our #3 well on this  
lease as a gas input well and to withdrawal of the lease allowable  
from wells Nos. 1 and 2.

Mr. Staley has recently advised us that even this pro-  
cedure would require a formal application and hearing, and in order  
to obviate the necessity of such a hearing we now propose to take  
our Liberty Royalties Corporation well #3 off the proration  
schedule and produce from wells Nos. 1 and 2 their respective  
allotments of allowable oil.

It is our understanding that this procedure may be  
undertaken without the formality of a special hearing. We will be  
glad to keep you fully advised as to the results obtained from this  
repressuring experiment and with your permission will handle further  
details through Mr. Staley.

Yours very truly,

CULBERTSON & IRWIN, INC.

  
President.

EAC:lw

cc: Mr. Glen Staley  
Hobbs, New Mexico

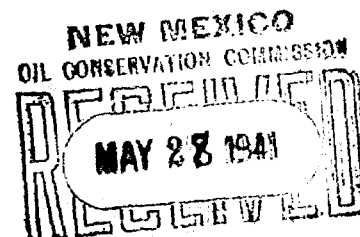
315 PETROLEUM  
BUILDING

CULBERTSON & IRWIN, INC.

-- OIL --  
MIDLAND, TEXAS

TELEPHONE 968  
P. O. BOX 1071

May 24, 1941



New Mexico Conservation Commission  
Santa Fe, New Mexico

Gentlemen:

Enclosed herewith is a Report outlining the possibilities of successfully repressuring a portion of the Langlie-Mattix Pool and, in more detail, the area surrounding and including the Culbertson & Irwin, Inc. Liberty Royalties lease located in Section 3, Township 25-South, Range 37-East, Lea County, New Mexico. Also attached thereto is a request for authority to do certain things pertinent to the successful operation of such a project.

We are at this time, in cooperation with the proration office at Hobbs, running bottom hole pressure tests on our Liberty Royalties lease and intend to do the same on the three wells on the Weiner-Smith lease.

In making this detailed study of the producing zone in this part of the pool, we feel that it is an ideal location for such a project and we are sure it can be carried on without injury to the remainder of the pool or adjacent lands.

Trusting that the enclosed data is sufficient to allow the Commission to grant our requests at an early date, we are

Yours very truly,

CULBERTSON & IRWIN, INC.

A handwritten signature in cursive script, appearing to read "Wallace W. Irwin".

Wallace W. Irwin.

WWI:lw  
encls.

May 25, 1941.

Gilbertson & Irwin Inc.,  
315 Petroleum Building,  
Midland, Texas.

40. Subpart 2 of the main law, tentative proposal of the anti-  
discriminating project in the disposition of the subject  
not embracing the act of 3-25-37, act 2., liberty regulation  
1944.

## Conclusions

reference is made to your letter of May 29, enclosing a report with regard to a tentative proposal of a unitized repressuring project for the area in the Langile Pool as noted in the caption. The matter in question will require a formal hearing before the Commission sitting in its quasi judicial capacity. Such matter takes the form of a case and as such should be presented before the Commission by a court petition setting forth concisely your plan. The procedure is of an such technical importance as the engineering involved itself. Our petition should be prepared by your counsel, skilled and experienced in procedure before oil and gas regulatory bodies. Such counsel should present the case for the petitioner at the hearing before the Commission not at a specific time for the case. Unnecessary delay can thereby be avoided.

The matter in the report referred to hereinabove would simply be evidence in support of the petitioner's petition, but the report itself is, of course, not in such form as would constitute a petition, especially setting forth your plan.

The area included in your tentative proposal encroaches on state land. The writer presumes that all tracts involved are lands patented from the United States, which matter reduces complications. However, if any of the tracts involved are U.S. lands, a proposal to the Department of the Interior in keeping with that department's conservation practices with regard to utilization should be presented. If more than one party should be involved, the plan to be presented to the Department of the Interior could take the form of a utilization agreement.

An extra copy of this letter is attached for the information of your council.

cc Glenn Hickey, Hobbs  
Ray Larruburn, Hobbs  
John Kelly, Hobbs

Very truly yours,

DATE: 11/11/2014

Carl A. Hirsigot II,  
Attorney

May 29, 1941.

Honorable J.C. Seth,  
Attorney at Law,  
Santa Fe, New Mexico.

RE: Culbertson & Irwin, Inc., tentative proposal  
of the unitized repressuring project in the NE  
portion of the Langlie Pool embracing the W<sup>1</sup>/<sub>2</sub>  
3-25S-37E, Lea County, Liberty Royalties Lease.

My dear Judge Seth:

Enclosed please find carbon copy of the writer's letter  
dated May 29, to Culbertson & Irwin, Inc. The area involved  
is in proximity of the existing Langlie Pool Unitization Pro-  
ject promulgated under Order No.340, Case No.22, of the  
Commission.

Very truly yours,

OIL CONSERVATION COMMISSION

By

Carl B. Livingston,  
Attorney



May 29, 1941.

Mr. John Kelly,  
State Geologist,  
Hobbs, New Mexico.

RE: Culbertson & Irwin, Inc., tentative proposal  
of the unitized repressuring project in the NE  
portion of the Langlie Pool embracing the ~~SW~~  
3-25S-37E, Lea County, Liberty Royalties Lease.

My dear Mr. Kelly:

Enclosed please find carbon copy of the writer's letter  
dated May 29, to Culbertson & Irwin, Inc. The area involved  
is in proximity of the existing Langlie Pool Unitization Pro-  
ject promulgated under Order No. 340, Case No. 22, of the  
Commission.

Very truly yours,

OIL CONSERVATION COMMISSION

By

Carl B. Livingston,  
Attorney

May 29, 1941.

Honorable Roy Yarbough  
State Oil and Gas Inspector,  
Hobbs, N.M.

RE: Culbertson & Irwin Inc., tentative proposal of the  
unitized repressuring project in the NE portion of  
the Langlie Pool embracing the W<sup>1/4</sup> 3-258-37E Lea  
County, Liberty Royalties Lease.

My dear Roy:

Enclosed please find carbon copy of the writer's letter  
dated May 29, to Culbertson & Irwin Inc. The area involved is  
in proximity of the existing Langlie Pool Unitization Project  
promulgated under Order No. 340, Case No. 22, of the Commission.

Very truly yours,

OIL CONSERVATION COMMISSION

By Carl B. Livingston.  
Attorney

May 29, 1941.

Honorable Glenn Staley  
Proration Umpire,  
Hobbs, New Mexico

RE: Culbertson & Irwin Inc., tentative proposal  
of the unitized repressuring project in the  
NE portion of the Langlie Pool embracing  
the NE 1/4 3-258-37E Lea County, Liberty  
Royalties Lease

My dear Glenn:

Enclosed please find carbon copy of the writer's letter  
dated May 29th, to Culbertson & Irwin Inc., The area involved  
is in proximity of the existing Langlie Pool Unitization  
Project promulgated under Order No.340, Case No.22 of the  
Commission.

Very truly yours,

OIL CONSERVATION COMMISSION

By Carl B. Livingston,  
Attorney

May 29, 1941.

Mr. Ernest O. Hanson,  
Roswell, New Mexico.

RE: Culbertson & Irwin, Inc., tentative proposal  
of the unitized repressuring project in the  
NE portion of the Langlie Pool embracing the  
WAB 3-25S-37E Lea County, Liberty Royalties Lease.

Dear Mr. Hanson:

Enclosed please find carbon copy of the writer's letter dated May 29,  
to Culbertson & Irwin Inc. The area involved is in proximity of the  
existing Langlie Pool Unitization Project promulgated under Order No.340,  
Case No.22, of the Commission.

Very truly yours,

OIL CONSERVATION COMMISSION

By Carl B. Livingston,  
Attorney

A. M. McCORKLE, CHAIRMAN  
OPERATORS COMMITTEE

GLENN STALEY, CHAIRMAN  
ENGINEERING COMMITTEE

## LEA COUNTY OPERATORS COMMITTEE

HOBBS, NEW MEXICO

August 2, 1941

*Effective 8-1-41  
8-1-41 (see production schedule for 8-41)*

Oil Conservation Commission

Santa Fe, N.M.

Attn. Hon. Carl Livingston

Gentlemen:

Complying with your order the high pressure line from El Paso Natural Gas Company's plant has been connected to Culbertson & Irwin's Liberty Royalty No. 3 and gas is now being returned to the producing formation.

Yours very truly,

GS:M

*Glenn Staley*  
Glenn Staley

cc: Culbertson & Irwin

NEW MEXICO OIL CONSERVATION COMMISSION  
HOBBS, NEW MEXICO

July 26, 1941

Honorable Glenn Staley  
Proration Umpire  
Hobbs, New Mexico

Re: Case No. 27, Order No. 388

Dear Mr. Staley:

Enclosed Please find the Commission's Order  
in the above captioned matter.

Yours very truly,

Oil Conservation Commission

By

Carl B. Livingston  
Chief Clerk

CBL:MS

C  
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NEW MEXICO OIL CONSERVATION COMMISSION  
HOBBS, NEW MEXICO

July 9, 1941

C  
O  
P  
Y

The Santa Fe New Mexican  
Santa Fe, New Mexico

Hobbs Daily News  
Hobbs, New Mexico

Re: Case #27, Notice for Publication

Gentlemen:

Please publish the enclosed notice once,  
immediately. Please proof read the notice carefully  
and send a copy of the paper carrying such notice.

Upon completion of the publication, please  
send publisher's affidavit.

For payment, please submit statement in  
duplicate accompanied by voucher executed in  
duplicate. The necessary voucher blanks are  
enclosed.

Very truly yours,

Oil Conservation Commission

By

Carl E. Livingston  
Chief Clerk & Legal Advisor

CBL:FS

cc Glenn Staley  
Roy Yarbrough

BEFORE THE OIL CONSERVATION  
COMMISSION OF THE STATE OF  
NEW MEXICO

IN THE MATTER OF THE HEARING CALLED  
BY THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO FOR THE  
PURPOSE OF CONSIDERING:

CASE NO. 27

ORDER NO. **388**

THE PETITION OF CULBERTSON & IRWIN, INC.,  
FOR AN ORDER OF THE COMMISSION REGARDING A  
PRESSURE MAINTENANCE PROJECT OR OTHER CON-  
SERVATION MEASURE AS TO THAT PORTION OF THE  
NE PART OF THE LANGLEY POOL, LEA COUNTY,  
DESCRIBED AS THE WEST ONE-HALF OF THE WEST  
ONE-HALF (W/2 of W/2) OF SECTION 3-25S-37E,  
TO INCREASE THE ULTIMATE RECOVERY THEREFROM,  
TO PERMIT THE USE OF LIBERTY ROYALTY WELL NO. 3  
THEREON AS AN INPUT WELL AND TO PERMIT THE  
PRODUCTION OF THE ALLOWABLE FOR THAT WELL FROM  
LIBERTY ROYALTY WELLS NOS. 1 AND 2 UPON SAID  
TRACT.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at two o'clock P. M.,  
July 25, 1941, at Santa Fe, New Mexico.

NOW, on the same said date, the Commission having  
before it for consideration the testimony adduced at the hearing  
of said case and being fully advised in the premises, the  
Commission finds:

FINDINGS

1. That notice by publication of the filing of the  
application herein, the time and place of the hearing thereon,  
and the purpose of said hearing, have been regularly given in  
all respects as required by law, and the Commission has  
jurisdiction of the subject matter embraced in said petition  
and of the parties interested therein, and jurisdiction to  
issue and promulgate the hereinafter prescribed order.

2. That the portion of the Langley Pool in Lea  
County, New Mexico, which is referred to in the petitioner's  
petition, should be defined as including the following tracts  
of land, to-wit:

W/2 of the W/2, Section 3, Township 25S, Range 37E.

D.S.P.F.



3. That the plan as set forth in the petitioner's petition is conducive to the conserving of reservoir energy and the making of greater ultimate recovery of crude oil, and should be approved in its general aspects in preventing waste and the conservation of the natural resources of the State.

4. That upon said tract are producing wells, to-wit:

Culbertson & Irwin, Inc. - Liberty Royalty Corp. Well #1, upon proration unit D (LNWN) Section 3, Township 25S, Range 37E.

Culbertson & Irwin, Inc. - Liberty Royalty Corp. Well #2, upon proration unit E (SWNW) Section 3, Township 25S, Range 37E.

Culbertson & Irwin, Inc. - Liberty Royalty Corp. Well #3, upon proration unit E (NWSW) Section 3, Township 25S, Range 37E.

5. That the use of said well #3 as an input well for gas in accordance with the plan set out in the petitioner's petition is advisable and a necessary portion of said plan.

6. That by reason of the use of said well as such input well, said well will be unable to produce during such use and should, so long as it is being used as such gas input well, be permitted to produce its present ~~allowable~~ <sup>production</sup>, as determined by official test, from said wells Nos. 1 and 2, or either of them as may seem advisable, without affecting the allowable assigned to latter two wells.

IT IS THEREFORE ORDERED:

1. That the portion of the Langlie Pool in Lea County, which is referred to in petitioner's petition, is hereby defined as including the following tracts of land, to-wit:

W/2 of the W/2, Section 3, Township 25S, Range 37E. N.E.P.M.

2. That the proposed plan as set out in petitioner's petition shall hereafter be designated as the "Culbertson & Irwin - Liberty Royalties Lease Project in NE Langlie Area."

3. That the plan set forth in the petitioner's petition is hereby approved in its general aspects.

4. That the use of said well No. 3 as an input well for gas in accordance with the plan set out in the petitioner's petition is hereby authorized.

5. That so long as said well #3 shall be used as a gas input well in accordance with the proposals set out in the petitioner's petition, said well No. 3 is hereby authorized to produce its present ~~allowable~~ <sup>production</sup>, as determined by official test, from wells Nos. 1 and 2, or either of them, as may be advisable; provided that said allowable for well No. 3 shall not at any time exceed the Tangle Pool unit top allowable for any particular month and provided further that the production of such allowable for said well No. 3, through said wells Nos. 1 and 2, or either of them, shall in no wise effect the allowable assigned to the latter two wells.

6. That this order shall become effective on the first day of the proration month succeeding the month during which the Commission is notified by the petitioner that the plan proposed in petitioner's petition is ready to go into operation and confirmation thereof by an authorized agent of the Commission.

OIL CONSERVATION COMMISSION

JOHN E. MILES, CHAIRMAN

H. R. RODGERS, MEMBER

JOHN M. KELLY, SECRETARY

CASE NO. 27

BEFORE THE OIL CONSERVATION COMMISSION OF  
THE STATE OF NEW MEXICO

IN THE MATTER OF THE PETITION OF CULBERTSON & IRWIN,  
INC., FOR AN ORDER OF THE COMMISSION REGARDING A PRESSURE  
MAINTENANCE PROJECT, OR OTHER CONSERVATION MEASURE AS TO  
THAT PORTION OF THE NE PART OF THE LANGLEY POOL, LEA  
COUNTY, DESCRIBED AS THE WEST ONE-HALF OF THE WEST ONE-  
HALF OF SECTION 3-25S-37E, TO INCREASE THE ULTIMATE RE-  
COVERY THEREFROM, TO PERMIT THE USE OF LIBERTY ROYALTY WELL  
NO. 3 THEREON AS AN INPUT WELL AND TO PERMIT THE PRODUCTION  
OF THE WELL ALLOWABLE FOR THAT WELL FROM LIBERTY ROYALTY  
WELLS NOS. 1 AND 2, UPON SAID TRACT.

TRANSCRIPT OF PROCEEDINGS AT HEARING  
STATE CAPITOL BUILDING  
SANTA FE, NEW MEXICO  
JULY 25, 1941

Pursuant to order of the Commission setting July 25, 1941, at  
two o'clock in the afternoon, for hearing in the above entitled matter,  
said hearing was convened at said hour in the hall of the House of  
Representatives, Capitol Building, Santa Fe, New Mexico, the Commission  
sitting as follows;

HON. JOHN M. KELLY, Secretary, State Geologist  
HON. H. R. ROGERS, Member, Commissioner of Public Lands  
HON. CARL B. LIVINGSTON, Chief Clerk and Legal Advisor.

APPEARANCES:

Wallace W. Irwin	Culbertson & Irwin, Inc.	Midland, Texas
E. A. Culbertson	" " " "	" "
W. W. LaFarge	Montecito Corp	" "
Ira VanTuyt	Gulf Oil Corp.	Hobbs, N. M.
Glenn Staley	Proration Office	" " "
W. K. Davis	El Paso Natural Gas Co.	Jal, N. M.
Keith F. Quail	Sallee & Yates	Artesia, N. M.
R. M. Sallee	" " "	" " "
S. P. Hannifin	Magnolia Pet. Co.	Roswell, N. M.
J. S. Griffith	Humble O. & R. Co.	" " "
Leo R. Manning	Land Office	Santa Fe, N. M.
Harry Leonard	Leonard Oil Co.	Roswell, N. M.
D. R. McKeithan	Phillips Pet. Co.	Bartlesville, Okla.
C. A. Daniels	" " "	Amarillo, Texas
Edgar Kraus	Atlantic Rfg. Co.	Carlsbad, N. M.

The hearing was called to order by Mr. Kelly, who requested Mr.  
Livingston to read the notice of hearing, as follows:  
BY MR. LIVINGSTON:

"The Oil Conservation Commission, by law invested with jurisdiction  
as the oil and gas regulatory body of the State of New Mexico, hereby gives  
notice of the following public hearing to be held at the Capitol, Santa Fe,  
New Mexico:

Case No. 27

The petition of Culbertson & Irwin, Inc., for an order of the Commission regarding a pressure maintenance project or other conservation measure as to that portion of the NE part of the Langlie Pool, Lea County, described as the West One-half of the West One-half (W/2 of W/2) of Section 3-25S-37E, to increase the ultimate recovery therefrom, to permit the use of Liberty Royalty Well No. 3 thereon as an input well and to permit the production of the allowable for that well from Liberty Royalty Wells Nos. 1 and 2, upon said tract. This case is set for 2 o'clock P. M., July 25, 1941.

Any person having any interest in the subject of the said hearing shall be entitled to be heard.

The foregoing Notice for Publication was made pursuant to the direction of the Commission at its Executive Meeting July 10, 1941.

Given under the seal of said Commission at Santa Fe, New Mexico, on July 10, 1941.

OIL CONSERVATION COMMISSION

(SEAL)

By (Sgd) John M. Kelly  
John M. Kelly  
Secretary"

E. A. CULBERTSON,

being first duly sworn to tell the truth, the whole truth, and nothing but the truth, testified as follows:

DIRECT TESTIMONY

My name is E. A. Culbertson, President of Culbertson & Irwin, Inc., a New Mexico Corporation, with its principal office at Midland, Texas. We are the operators, for oil and gas, known as the Liberty Royalty Corporation, on the west half of the west half of Sec. 3, T. 25 S., R. 37 E., Lea County. On this property there are three producing oil wells, designated, respectively, as Liberty Royalty Corporation Wells 1, 2 and 3.

We have heretofore filed with the Commission a formal petition requesting an order authorizing us, first, to set up a pressure maintenance project covering that particular tract of land. In that petition we are asking permission to use Liberty No. 3 as a gas input well. This well is 660 feet east of the west line, and 2310 feet north of the south line of Sec. 3. It is our request that we be permitted to inject compressed dry gas through this well No. 3 into the

formation from which the wells on this tract are produced. To inject that gas in such quantity, and under such pressure as may seem advisable, or as later determined, to accomplish our purpose of maintaining the reservoir pressure in this oil zone.

We are asking that the Commission allocate to this Well No. 3, for so long a time as it is being used as an input well, the allowable production as determined by tests, supervised by the Proration Office, which test was completed within the last few days. We are asking for permission to produce, for proration purposes, from Wells 1 and 2, or from either one of them, of a quantity of oil in addition to their respective allotments, which would be equivalent to the allowable credited to Well No. 3, while it is being used as an input well.

In support of this request and petition, we would respectfully point out and show that the gas from the three wells on this lease, which is now being produced in conjunction with the oil, is being delivered to the property of the El Paso Natural Gas into their casinghead gas plant, located in the Mattox Pool. This gas taken from this lease is metered as it is taken into the El Paso gas line and co-mingled with other casinghead gas from wells in this same area. All of this gas is run through the gas extraction plant for casinghead gas, the gasoline and other products extracted from the gas, and the reduced dry gas is then either sold and delivered into El Paso Gas Company line or is blown into the air. At the present time the greater part of this dry gas is being blown into the air and wasted.

We would show, in support of this project, it will accomplish conservation in several ways. In the first place, the gas now being blown into the air will be injected into the formation under pressure. So long as the project is in effect, this gas will be held in the reservoir, and the reservoir pressure will be kept up, so that, theoretically, at the end of the life of the pool, after taking out the available oil, we will still have a gas reservoir. I would not claim that is true in practice because probably the gas will be released with the oil.

We point out also that by the use of this injected compressed gas, we believe the level of cost of production of this property will be smaller -- smaller than by any other known means -- known at the present time, at least. The flow life of these wells, if the project is successful, will undoubtedly be lengthened by having this compressed gas as a lifting force. The flow life of the wells will be dependent upon the economic factors, which will be the cost of the input gas in relation to the amount of oil taken out. Principally, however, we maintain -- believe -- at least hope that the ultimate recovery of oil from this well will be increased. If possible, we would like to increase the pressure, but if we can maintain the pressure, - the bottom hole pressure of the oil zone, we believe results have indicated the ultimate recovery of oil will be greater by reason of this pressure maintenance project.

We do not know now, or are unable to say the amount of gas that will be injected, or the pressure at which it will be injected, but it will be our intention to inject gas at a uniform rate of pressure somewhat greater than the present bottom hole pressure, or formation pressure. It will also be our intention, and we will take regular tests of the gas-oil ratio on Wells Nos. 1 and 2. We will take bottom hole pressure tests on these wells, and we believe the operators of adjoining leases have verbally indicated their approval of this plan, and will cooperate in permitting the taking of gas-oil and bottom hole pressure tests at frequent and regular intervals. All of this information will, of course, be made available to the Commission or the Proration Office.

BY MR. LIVINGSTON:

Q This is merely for the record: Please qualify yourself. I believe you are an experienced oil man within this particular area?

A I could say I have been president of the corporation operating in this particular area for the past six years. We have been operating twenty-five wells in this particular area -- we and our associates -- and for this reason we feel we are well informed and fairly well versed in the conditions prevailing there.

BY MR. LIVINGSTON: Anyone who wishes, may interrogate this witness.

BY MR. CULBERTSON: If the Commission would care to hear him, we would be glad to have Mr. Irwin, Vice-President and Geologist, who has prepared a geological report, present it to the Commission in connection with this petition.

BY MR. KELLY: In this connection, would your company be willing to furnish the Commission with monthly reports as to the amount of input gas used and the pressure at which you put it in?

A Certainly, we intend to do that, and any other pertinent tests we make.

BY MR. KELLY: We are more particularly interested in the input gas, monthly, and gas-oil ratio tests on the other two wells.

Witness dismissed.

-----

WALLACE W. IRWIN,

being first duly sworn to tell the truth, the whole truth, and nothing but the truth, testified as follows:

DIRECT TESTIMONY

My name is Wallace W. Irwin, Vice-President and Geologist of Culbertson & Irwin, Inc. I have received a degree in geology from the University of Oklahoma; have had twelve years experience in southeastern New Mexico and west Texas.

I have prepared a geologic report to show why I believe this well we propose to use -- the gas injections into that particular well can be controlled. I want to submit this to the Commission as evidence in this case. (Marked "Petitioners' Exhibit No. 1")

There are three maps, the first map is the sub-surface contour on top of the Yates sand. It shows the location of the Liberty Royalty wells to be located well down the west flank of the Langlie-Mattix anticline.

The second, which is felt to be the most important to this report, is the extent, -- is a map showing the extent of the productive area of this particular field -- this particular sand that is producing in the Liberty Royalty lease, and what controls the production on the south,

east and west sides. This particular sand pinches out east, forming a closure; on the south it piles up, - dry holes. Immediately south of the Liberty. The structure dips to the west, and is controlled on the west by the structure. This sand strikes on to the northwest. It is too high to produce oil at that point (indicating) and is engaged in the gas cap field.

The third map is a cross section, - an east-west cross section across this lease. It shows the Liberty Royalty producing sand pinches out to the east, and the wells to the west shows it becomes too low to carry oil, and carries water.

We feel that gas put into this No. 3 well can be controlled on all three sides as shown. It is open to the north and northwest, but those will be our output wells, and we hope this may be controlled by them. We wish to present this as Exhibit No. 1.

Witness dismissed.

-----

BY MR. KELLY: The Commission would like to have Mr. Staley introduce the result of the tests on the No. 3 well.

GLENN STALEY,

being first duly sworn to tell the truth, the whole truth, and nothing but the truth, testified as follows:

DIRECT TESTIMONY

These are the charts taken by the representative of the Commission of the well in question, Well No. 3, Liberty Royalty, of Culbertson & Irwin. The test shows the gas-oil ratio of 865 cubic feet of gas per barrel of oil, with 12.80 barrels per day.

(Marked "Petitioners' Exhibit No. 2)

Witness dismissed.

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BY MR. LIVINGSTON: The Commission authorizes me to state that the Commission will take the present case under advisement.



PETITIONERS' EXHIBIT NO. 1

"A REPORT ON A PROPOSED REPRESSURING PROJECT IN THE LANGLIE  
POOL, LEA COUNTY, NEW MEXICO.

The area to be discussed in this Report surrounds and includes the Culbertson & Irwin, Inc., Liberty Royalties lease located in the Northeast part of the Langlie Pool, Lea County, New Mexico. This lease is described as the West One-half of the West One-half (W/2 of W/2) of Section No. 3, Township 25-South, Range 37-East, Lea County, New Mexico, and is shown on Figure 1 of this Report.

There are three producing wells on this lease. The #1 well is located 330' from the North line and 990' fr. the West line of the lease. This well was completed on March 25, 1938, at a total depth of 3396' for initial production of 322 barrels daily. Later this well was deepened to 3470' and completed as a natural producer, however, production declined and on April 13, 1941, the well was shot with 120 qts. of solidified glycerin from 3400-3460'.

The #2 well is located 1650' from the North line and 660' from the West line of the lease. This well was drilled to a total depth of 3467' and completed on May 19, 1938, for a natural production of 370 barrels daily. This well was later shot with 150 qts. of solidified glycerin from 3385-3461'.

The #3 well is located 2310' from the South line and 660' from the West line of the lease. This well was drilled to a total depth of 3468' and was completed on July 1, 1938, for 166 barrels daily after shooting with 160 qts. of glycerin from 3400-3467'.

The Langlie and Mattix Pools are located on the West flank of a sub-surface structure which has a Northwest-Southeast strike. The producing zones are sandstone members of the Queen formation. There are several individual sand zones producing in this field. The gas-oil contact is encountered at approximately -190' and the oil water contact at approximately -330'. The accumulation in the individual sands is controlled by structure, gradation and pinch-out of the sand members.

Figure #2 of this Report shows the approximate outline of the productive limits of the sand which is producing in the three wells on the

Liberty Royalties lease. Referring to Figure #3, it can be readily seen that the productive area of this sand is controlled on the West by the structural dip of the formation and on the East by the pinch-out of the pay section.

The pay section apparently grades into shale and becomes contaminated and non-porous on the South end of the Liberty Royalties lease. This conclusion is based on the type of section encountered in the Culbertson & Irwin, Inc. #1 Humphrey dry hole located 1980' from the West line and 660' from the South line of Section 3, Township 25-South, Range 37-East, and the two dry holes drilled in the Southeast One-fourth of the Southeast One-fourth (SE/4 of SE/4) of Section No. 4, Township 25-South, Range 37-East. As shown on the structural map, Figure #1, these tests were well located structurally and would have made producers if the pay section had not been contaminated with shale and silt. This pay section, however, becomes a clean sand again to the Southeast and as is shown on Figure #2, is the producing zone in the wells located on the West One-half (W/2) of Section No. 10, Township 25-South, Range 37-East.

The sand producing in the Liberty Royalties wells produces to the Northwest of and on strike with these wells for a distance of approximately two miles. At this point the axis of the structure takes more of a Northwest-Southeast strike and the Eastern limits of the Liberty Royalties sand zone becomes too high to produce oil and is included in the gas cap area, and becomes bentonitic and non-porous down dip.

It is our opinion that a repressuring or pressure maintenance program covering all or a portion of a sand zone of this nature would greatly increase the ultimate recovery, and lower the lifting cost over a period of years.

As shown on Figure #2, the Liberty Royalties lease is located on the South end of the North lens of this particular sand zone. It is our opinion that if a well on the South end of this lens is used as an input well, the input gas would be controlled in every direction except in the direction of the producing wells. Thus an increase in pressure and production should be noted in wells nearest the input well.

Referring to Figure #2 and using the Culbertson & Irwin, Inc. #3 Liberty Royalties well as the input well, it will be seen that the wells

that would be expected to be first effected would be the Culbertson & Irwin, Inc. #1 and #2 Liberty Royalties and the Weiner #1, #2 and #3 Smith wells. Inasmuch as these are similar wells and, as shown on Figure #3, are producing from the same sand, it would appear that the unitization of these two leases would be the ideal manner in which to operate such a project. However, due to the fact that this is an experiment we do not wish to unitize until we are satisfied that the project will be successful. However, the owners of the Weiner-Smith lease are willing to cooperate with us on this project and have given us permission to check these wells from time to time with reference to production, bottom hole pressure and gas-oil ratio change.

By a periodic check of Weiner-Smith wells and Culbertson & Irwin, Inc. Liberty Royalties wells, we should be able to ascertain the results of the input gas on the production and operation of the various wells, and whether it will be practical to operate the leases separately or as a unit.

In submitting this Report we beg that the Oil Conservation Commission of New Mexico:

- (1) Authorize Culbertson & Irwin, Inc., to convert their #3 Liberty Royalties well from a producing oil well to an input gas well for the purpose of maintaining or repressuring the sand zone which is producing on this lease.
- (2) That the monthly allowable be allocated to the lease as a whole, instead of to the 40-acre units, with authority to produce the same in the most efficient manner.

Yours very truly,

CULBERTSON & IRWIN, INC.

By (Sgd) Wallace W. Irwin  
Wallace W. Irwin."

WWI,lw

C E R T I F I C A T E

I hereby certify that the attached and foregoing eight and a fraction pages of typewritten matter are a true correct and complete transcript of the shorthand notes taken by me on the date of the hearing, and copy of the text of Petitioners' Exhibit No. 1, and by me extended into typewriting.

Witness my hand this 5th day of August, 1941.

*Ester Barton*

NOTICE FOR PUBLICATION  
STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

The Oil Conservation Commission, by law invested with jurisdiction as the oil and gas regulatory body of the State of New Mexico, hereby gives notice of the following public hearing to be held at the Capitol, Santa Fe, New Mexico:

Case No. 27.

The petition of Culbertson & Irwin, Inc., for an order of the Commission regarding a pressure maintenance project or other conservation measure as to that portion of the NE part of the Langlie Pool, Lea County, described as the West One-half of the West One-half (W/2 of W/2) of Section 3-28S-37E, to increase the ultimate recovery therefrom, to permit the use of Liberty Royalty Well No. 3 thereon as an input well and to permit the production of the allowable for that well from Liberty Royalty Wells Nos. 1 and 2, upon said tract. This case is set for 2 o'clock P.M., July 25, 1941.

Any person having any interest in the subject of the said hearing shall be entitled to be heard.

The foregoing Notice for Publication was made pursuant to the direction of the Commission at its Executive Meeting July 10, 1941.

Given under the seal of said Commission at Santa Fe, New Mexico, on July 10, 1941.

OIL CONSERVATION COMMISSION

By (S&D) John E. Kelly  
Secretary

(SEAL)

CASE NO. 27.

IN THE MATTER OF THE PROPOSED )  
PRESSURE MAINTENANCE PROJECT IN ) BEFORE THE  
THE NE PORTION OF THE LANGLEE POOL ) CONSERVATION COMMISSION  
EMBRACING THE LIBERTY ROYALTIES CORP. ) THE  
LEASE described as W/2 of W/2 of ) STATE OF NEW MEXICO  
Sec. 3, Twp. 25-S, Rge. 37-E, Lea County)

TO THE HONORABLE JOHN E. MILES,  
CHAIRMAN, AND THE HONORABLE H. R. RODGERS  
AND HONORABLE JOHN M. KELLY, MEMBERS OF THE  
NEW MEXICO OIL CONSERVATION COMMISSION:

NOW COMES Culbertson & Irwin, Inc., a New Mexico corporation,  
operator of the captioned Liberty Royalties Corporation lease, and  
files this its Petition to the New Mexico Oil Conservation  
Commission for an Order authorizing and granting the following:

1. Permission to set up and operate a pressure maintenance project in the Northeast portion of the Langlie Pool embracing the West One-half of the West One-half (W/2 W/2) of Section No. 3, Township 25-South, Range 37-East, Lea County, known as the Liberty Royalties Corporation lease.
2. Permission to use as a gas input well the Liberty Royalties Corporation well #3 located 660 feet East of the West Line and 2310 feet North of the South line of said Section No. 3, and through this well to inject into the oil and gas zone from which the wells now located on this lease are producing, compressed dry gas in such quantities and under such pressures as seem advisable in order to accomplish the purpose of this project, namely, the maintenance of the formation pressure in the aforesaid oil and gas zone.
3. The allocation to said well Liberty Royalties Corporation #3, so long as it is being used as a gas input well, of its present allowable as determined by official test.

4. Permission to produce for proration purposes from wells #1 and #2 on this lease, or from either of them, in addition to their respective allotments, an amount of oil equivalent to the allowable credited to said well #3.

In support of this Petition, petitioner respectfully states and would show that at the present time the casinghead gas being produced from the three wells on the Liberty Royalties Corporation lease is being delivered and sold to the El Paso Natural Gas Company casinghead gas plant located in the Mattix Pool. This gas is measured by meter at the lease and thereafter co-mingled with casinghead gas from other properties in this area. After extraction of the gasoline that portion of the residue dry gas for which there is a market is purchased by the Gas Company and taken into their gas lines; the remainder of the dry gas is blown to the air.

The El Paso Natural Gas Company has installed a compressor plant in conjunction with the casinghead gasoline plant and is now delivering compressed dry gas to the Langlie Repressuring Unit. This company has similarly agreed to deliver compressed dry gas to our Liberty Royalties Corporation lease, and it is such gas that we propose to return to the producing formation through our well Liberty Royalties Corporation #3.

The proposed pressure maintenance project would be a conservation measure in the following ways:

1. Under present conditions the gas which will be returned to the formation would otherwise be blown to the air. This gas, or at least a portion thereof, will be conserved by storing it in the original underground reservoir for future use. It is expected that a somewhat greater volume of gas will be injected into the formation than is being produced therefrom and thus over a period of time

and after the withdrawal of all available oil from the present producing zone this zone will be a gas reservoir.

2. By the use of the compressed gas as a lifting medium it is expected that the flowing life of the producing wells can be considerably lengthened. The flowing life of the wells will be largely determined by economic factors, that is, the relation between the cost of the input gas and the proceeds from the oil recovered and the relation between the cost of the input gas and the cost of other lifting methods; however, it is believed that under the proposed plan the cost of producing or lifting the oil will be materially less over the life of the wells than by any other means.
3. It is believed that the ultimate recovery of oil from the property will be considerably greater than could be obtained by any other means.

The volume of input gas and the pressure at which it is injected into the formation will be determined by various physical factors. It is our intention, however, to inject the gas at a pressure which will be slightly in excess of the bottom hole formation pressure and it is estimated that approximately 250,000 cubic feet of gas per day will be returned to the formation at the beginning of the experiment.

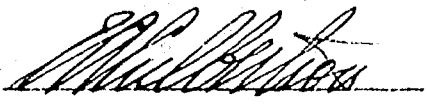
Bottom-hole pressure and gas-oil ratio tests of wells #1 and #2 on the Liberty Royalties Corporation lease will be taken at regular intervals, and in view of the fact that the operators of the leases adjoining this property on the East and the West have indicated their full approval of our proposed plan, we are confident that similar tests will be made of the wells on these adjoining leases.

All information obtained from and relative to this project will be made available to the proper State authorities.

WHEREFORE, your petitioner prays that the said Honorable Commission, after due notice of this Petition and a hearing hereon as provided for by law and the rules and regulations of said Commission, enter an Order granting this Petition and authorizing your petitioner to institute, create and operate in accordance with the plan as set forth herein a pressure maintenance project on its Liberty Royalties Corporation lease in the Northeast portion of the Langlie Pool embracing the land hereinbefore set out.

Respectfully submitted,

CULBERTSON & IRWIN, INC.

By .  
President.



AFFIDAVIT OF PUBLICATION

State of New Mexico, }  
County of Lea }

I, Robert L.

Summers

Of the Hobbs Daily News-Sun, a  
daily newspaper published at Hobbs,  
New Mexico, do solemnly swear that  
the clipping attached hereto was  
published once a week in the regular  
and entire issue of said paper, and  
not in a supplement thereof for a

period of one

day weeks.

beginning with the issue dated

July 11, 1941

and ending with the issue dated

Robert L. Summers  
Publisher.

Sworn and subscribed to before me

this 12th day of

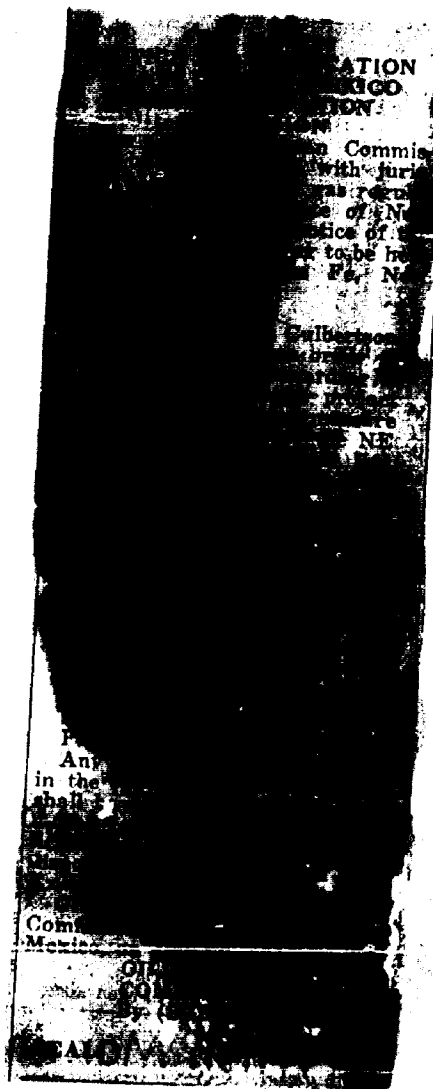
July, 1941.

John F. Quinn, Jr.  
Notary Public.

My commission expires

(Seal) EXPIRES JUNE 1943

This newspaper is duly qualified  
to publish legal notices or ad-  
vertisements within the mean-  
ing of Section 3, Chapter 167,  
Laws of 1937, and payment of  
fees for said publication has  
been made.



LEGAL ADVERTISING

NOTICE FOR PUBLICATION  
STATE OF NEW MEXICO  
OIL CONSERVATION  
COMMISSION

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Any person having any interest in the subject of the said hearing shall be entitled to be heard.

The foregoing Notice for Publication was made pursuant to the direction of the Commission at its Executive Meeting July 10, 1941.

Given under the seal of said Commission at Santa Fe, New Mexico, on July 10, 1941.

OIL CONSERVATION  
COMMISSION

By (Sgd.) JOHN M. KELLY,  
(SEAL) Secretary.

Publish July 11, 1941.

Tax \$

Total - - - - - \$ 3.76

Received payment,

By \_\_\_\_\_

Affidavit of Publication

State of New Mexico, } ss.  
County of Santa Fe

I, B. B. Floyd, being first duly sworn, declare and say that I am the (Business Manager) (~~Editor~~) of the Santa Fe New Mexican, a daily newspaper, published in the English Language, and having a general circulation in the City and County of Santa Fe, State of New Mexico, and being a newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 of the Session Laws of 1937; that the publication, a copy which is hereto attached, was published in said paper once each week for 1 consecutive weeks, and on the same day of each week in the regular issue of the paper during the time of publication, and that the notice was published in the newspaper proper, and not in any supplement, once each week for 11th weeks consecutively, the first publication being on the July day of July, 1941, and the last publication on the day of, 1941; that payment for said advertisement has been (duly made), or (assessed as court costs); that the undersigned has personal knowledge of the matters and things set forth in this affidavit.

[Signature]

Manager.

Subscribed and sworn to before me, this 12th day of July, A. D., 1941.

Anna K. Ormrod

Notary Public.

My Commission expires

June 11, 1945

Case # 1 CASE 28 PETITION OF SANEDAN OIL CORPORATION  
FOR UNORTHODOX WELL LOCATION  
well  
SESE 100-34-185-38E  
includes  
line in

NEW MEXICO OIL CONSERVATION COMMISSION  
HOBBS, NEW MEXICO

August 19, 1941

C  
O  
P  
Y  
  
Honorable John M. Kelly  
Oil Conservation Commission  
Hobbs, New Mexico

Re: Case 28. Petition of Samedan Oil  
Corporation for unorthodox well  
location for Turner-B #2 in SESE  
34-18S-38E.

Dear John:

Enclosed please find the Samedan's petition dated August 16th for an unorthodox well location within the unit designated above but at variance with their request of August 11th treated as their petition. The Samedan should withdraw their petition of August 16th, if that Concern is seeking a hearing on August 25th on the petition of August 11th.

The advertisement proceeded exactly as requested in their petition of August 11th. The publication was completed within the time required by law.

For your information enclosed is photostatic copy of the petition of August 11th accompanied by photostat of Notice of Intention to Drill.

With best good wishes, I am

Very truly yours,

Carl B. Livingston

CBL:MS