

Case No.

1475

Application, Transcript,  
Small Exhibits, Etc.

CASE 1475: Sinclair Oil & Gas Co. applica-  
tion to commingle oil from Kennitz-Wolf-  
Lea Well #1-24-16S-33E, Lea County,  
New Mexico, Pennsylvania Pools, State

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

July 17, 1958

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Y

Mr. H. F. Defenbaugh  
Sinclair Oil & Gas Company  
Box 1470  
Midland, Texas

Dear Mr. Defenbaugh:

We enclose two copies of Order No.  
R-1218 issued July 16, 1958, by the Oil Conservation  
Commission in Case No. 1475, which was heard July 2,  
1958, before an Examiner at Santa Fe.

Very truly yours,

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

ALP/ir

Enclosures

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. 1475  
Order No. R-1218

APPLICATION OF SINCLAIR OIL & GAS  
COMPANY FOR PERMISSION TO COMMINGLE  
OIL FROM TWO SEPARATE POOLS IN  
COMMON STORAGE.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 2, 1958, 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 16<sup>th</sup> day of July, 1958, the Commission, a quorum 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 the applicant, Sinclair Oil & Gas Company, by letter dated July 11, 1958, has requested that the case be dismissed.

IT IS THEREFORE ORDERED:

That Case 1475 be and the same is hereby dismissed.

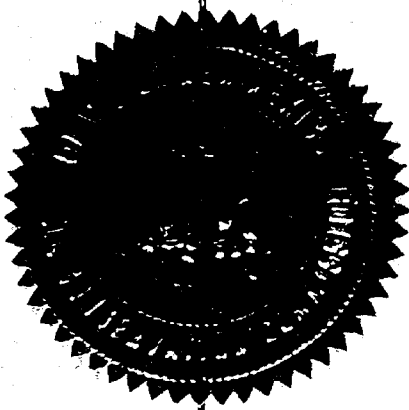
DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
EDWIN L. MECHEM, Chairman

  
MURRAY E. MORGAN, Member

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



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OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Date July 7, 1958

CASE NO. 1475

HEARING DATE 9:00 A. M. July 2, 1958 DSN - SF

My recommendations for an order in the above numbered case(s) are  
as follows:

Enter an order approving the commingling of oil by Sinclair Oil & Gas Company,  
said oil being produced from its dually completed State Lea 692 Well No. 1  
in the Kemnitz Wolfcamp Pool and the Kemnitz Pennsylvanian Pool. No violation  
of correlative rights nor waste will occur from said commingling provided  
that applicant shall measure the oil produced from each of the two common  
sources of supply prior to commingling.

*Samuel J. [Signature]*  
Staff Member  
Examiner

1475  
Case File  
SINCLAIR OIL & GAS COMPANY

1958 JUL 14 AM 8:35

PETROLEUM LIFE BUILDING

MIDLAND, TEXAS

G. D. ALMEN, JR.  
VICE PRES. & DIVISION MANAGER

R. L. ELSTON  
ASSISTANT DIVISION MANAGER

P. O. Box 1470

July 11, 1958

C. S. TINKLER  
DIVISION EXPLORATION SUPT.

H. F. DEFENBAUGH  
DIVISION PRODUCTION SUPT.

F. C. ROGERS  
DIVISION GAS & GAS PRODUCTS SUPT.

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attn: Mr. A. L. Porter, Jr.

Re: Sinclair Oil & Gas Company's  
State Lea 692 Well No. 1  
Kemnitz (Wolfcamp) & (Penn) Pools  
Lea County, New Mexico

Case No. 1457 - Order No. R-1200  
Approval to dually complete

Case No. 1475 - Hearing 7/2/58  
Application to commingle  
Wolfcamp & Penn. production.

Gentlemen:

Please refer to the two above captioned cases, whereby Sinclair Oil & Gas Company secured approval of the New Mexico Oil Conservation Commission to dually complete subject well, and have under consideration application to commingle, into common storage, the production from the Kemnitz-Wolfcamp and Penn. zones.

This well was drilled to total depth 11,700', and was found to be dry in the Wolfcamp and Penn. formations, and has been plugged and abandoned as of July 9, 1958. For this reason it is respectfully requested that Order No. R-1200, covering permit to dually complete, be cancelled, and that no further action be taken on Case No. 1475 to commingle production.

Yours very truly,

SINCLAIR OIL & GAS COMPANY

*H. F. Defenbaugh*  
H. F. Defenbaugh

HFD:RLB:ssk

cc: New Mexico OCC - Hobbs  
Mr. L. J. Forche  
Mr. R. E. Powers

Mr. C. C. Salter  
Mr. H. N. Burton  
File

DOCKET: EXAMINER HEARING JULY 2, 1958

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

The following cases will be heard before Daniel S. Nutter, Examiner:

CASE 354:

In the matter of the application of Skelly Oil Company to amend Order No. R-179-A. Applicant, in the above-styled cause, seeks an order amending Order No. R-179-A to permit the transfer of allowables from water injection wells to producing wells on the same basic lease and to establish a lease allowable for its H. O. Sims pilot water flood project in the Penrose-Skelly Pool in Lea County, New Mexico, to enable the production of six times the normal unit allowable from any well or wells in said project.

CASE 1475:

Application of Sinclair Oil and Gas Company for permission to commingle oil from two separate pools in common storage. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the Kemnitz-Wolfcamp Pool and Kemnitz-Pennsylvanian Pool production from its State Lea 692 Well No. 1 located 660 feet from the South lines of Section 24, Township 16 South, Range 33 East, Lea County, New Mexico.

CASE 1476:

Application of Austral Oil Exploration Company for permission to commingle production from two separate leases. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the Townsend-Wolfcamp Pool production from its W. M. Snyder "D" Lease, comprising Lots 5 and 6, and its W. M. Snyder "E" Lease, comprising Lot 2 of Section 6, all in Township 16 South, Range 36 East, Lea County, New Mexico. Applicant proposes to measure the production from each of the above-described leases by means of metering separators.

CASE 1477:

In the matter of the application of Amerada Petroleum Corporation for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Ida Wimbeley No. 4 Well located 660 feet from the South line and 990 feet from the West line of Section 24, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Drinkard formation adjacent to the Justis-Drinkard Pool and oil from the Fusselman formation adjacent to the Justis-Fusselman Pool through parallel strings of 2-3/8" tubing.

CASE 1478:

In the matter of the application of R. Olsen Oil Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order establishing a 160-acre non-standard gas proration unit in the Tubb Gas Pool consisting of the N/2 NW/4, SW/4 NW/4, and NW/4 SW/4 of Section 25, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 1294:

Application of Ambassador Oil Corporation for an order amending Order No. R-1053. Applicant, in the above-styled cause, seeks an order amending Order No. R-1053 to approve a development pattern for the entire water flood project operated by the applicant in the Caprock-Queen Pool, Chaves and Lea Counties, New Mexico, and to permit administrative approval for the conversion of water injection wells in said project, which is within the limits of the North Caprock-Queen Unit No. 2, authorized by Commission Order R-1194.

CASE 1402:

Application of Neville G. Penrose, Inc. for an order amending Order R-1151. Applicant, in the above-styled cause, seeks an order amending Order No. R-1151 to extend the time allowed for the flaring of gas from its McCallister Well No. 1, located 660 feet from the North and West lines of Section 7, Township 22 South, Range 38 East, Tubb Gas Pool, Lea County, New Mexico.

CASE 1479:

Application of Aztec Oil and Gas Company for an oil-oil dual completion and for permission to commingle production from two separate pools. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its State BD-36 Well No. 1, located 1980 feet from the South and East lines of Section 36, Township 22 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Blinebry formation adjacent to the Blinebry Oil Pool and oil from the Drinkard Pool through parallel strings of 1 1/2 inch tubing. The applicant further proposes to commingle the Blinebry and Drinkard production from said well in common storage.

June 16, 1958

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**SINCLAIR OIL & GAS COMPANY**

P. O. Box 1470  
~~XXXXXXXXXXXXXXXXXXXX~~

**MIDLAND, TEXAS**

LEGAL DEPARTMENT

May 26, 1958

*Heuring*

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Re: Application of Sinclair Oil & Gas Company  
for an order permitting and authorizing  
the commingling of oil into common storage  
produced from the Kemnitz Wolfcamp Pool  
and from the Pennsylvanian Pool in its  
State Lea 692 Well No. 1 in Lea County,  
New Mexico

Gentlemen:

Enclosed in triplicate is Sinclair Oil & Gas  
Company's application for an order permitting and authoriz-  
ing the commingling of oil into common storage produced  
from the Kemnitz Wolfcamp Pool and from the Pennsylvanian  
Pool in its State Lea 692 Well No. 1 in Lea County, New  
Mexico.

Very truly yours,

*Horace N. Burton*  
Horace N. Burton  
Attorney

HNB:my

Encl.

*Docket mailed  
6-24-58  
BP*

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION  
OF SINCLAIR OIL & GAS COMPANY FOR  
AN ORDER PERMITTING AND AUTHORIZING  
THE COMMINGLING OF OIL INTO COMMON  
STORAGE PRODUCED FROM THE KEMNITZ  
WOLFCAMP POOL AND FROM THE PENNSYLV-  
ANIAN POOL IN ITS STATE LEA 692  
WELL NO. 1 IN LEA COUNTY, NEW MEXICO

CASE NO. 1475

ORDER NO. \_\_\_\_\_

A P P L I C A T I O N

Sinclair Oil & Gas Company, a Maine corporation with an operating office in Midland, Texas, hereby files this application, in triplicate, seeking permission and authority for the commingling of oil into common storage produced from the Kemnitz Wolfcamp Pool and from the Pennsylvanian Pool in its State Lea 692 Well No. 1 in Lea County, New Mexico, and in support thereof shows:

I.

Applicant, Sinclair Oil & Gas Company, is the owner and operator of its State Lea 692 lease insofar as the same covers the Southwest Quarter (SW $\frac{1}{4}$ ) of Section 24, T-16-S, R-33-E, in Lea County, New Mexico. Applicant has commenced the drilling of its "No. 1 State Lea" Well located 660 feet from the South line and 660 feet from the West line of said Section 24 and intends to test the porosity expected to be encountered in the Wolfcamp formation and also in the Pennsylvanian formation. Applicant further anticipates successful oil completions. Said well will be completed as an oil-oil dual subject to the approval of the Commission pursuant to application therefor in Case No. 1457, now pending.

II.

Adequate facilities will be provided to assure at all times accurate determination of the production from the separate pools which may be commingled into common storage.

III.

Applicant by reference incorporates Exhibits "A" and "B" attached to its application for an oil-oil dual completion in Case No. 1457, now pending. Exhibit "A" is a plat showing the location of all wells on applicant's lease and all offset wells on offset leases. Exhibit "B" is a list of the names and addresses of all the offset operators and all interested parties known to applicant.

IV.

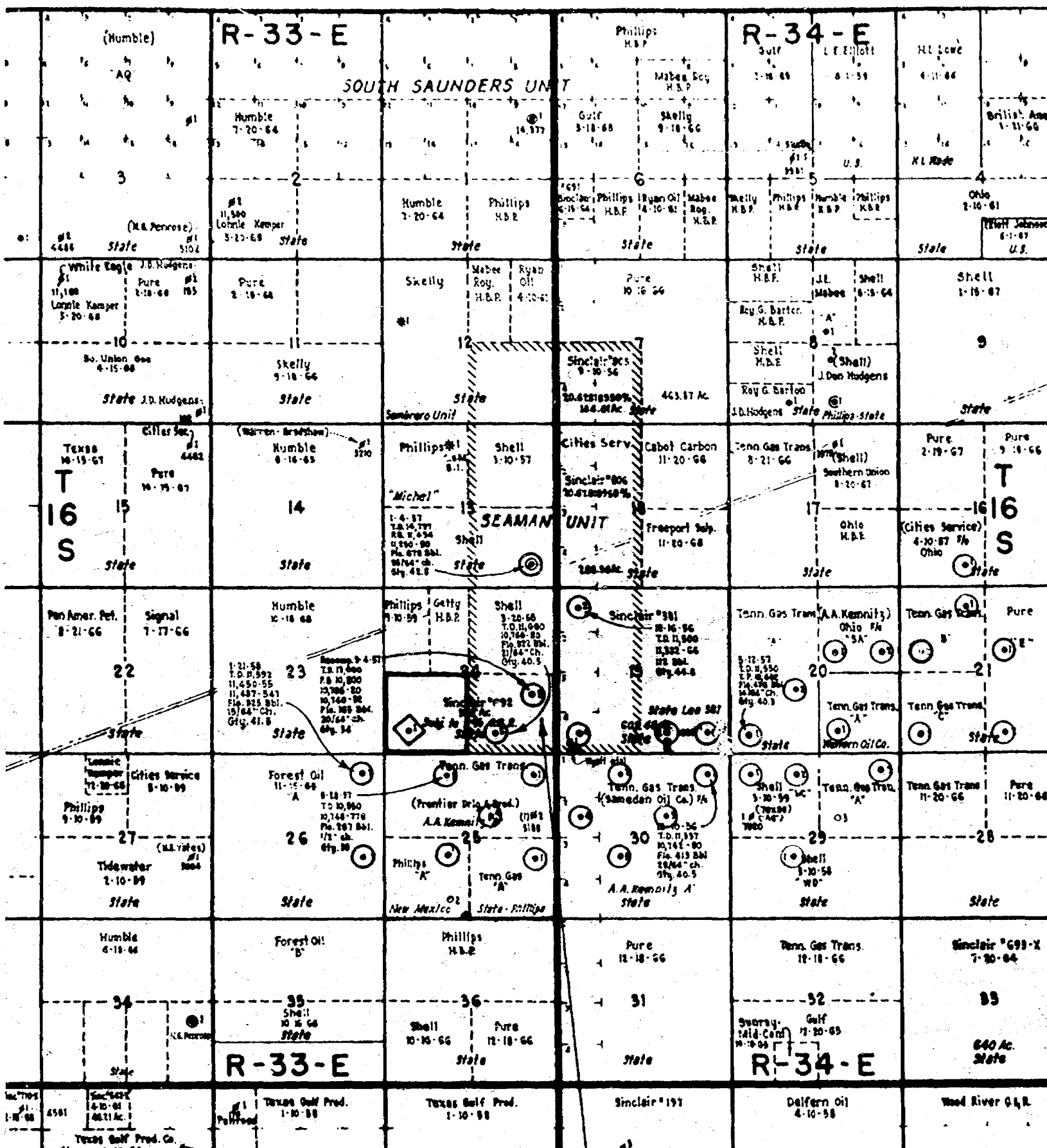
Applicant believes and, therefore, alleges that the commingling of such production into common storage is mechanically feasible and that the same will not adversely affect correlative rights and is in the interest of prevention of waste.

WHEREFORE, applicant requests that this application be set for hearing before an Examiner either in Hobbs or Santa Fe, New Mexico, at the earliest convenience and that upon such hearing authority and permission be granted to applicant for the commingling of production from separate pools.

Horace N. Burton

Horace N. Burton  
P. O. Box 1470  
Midland, Texas

ATTORNEY FOR APPLICANT  
SINCLAIR OIL & GAS COMPANY



BEFORE EXAMINER **W. A. CO. N.M.**  
 OIL CONSERVATION COMMISSION  
 EXHIBIT NO. **1475-1**  
 1-10-68

SINCLAIR OIL & GAS COMPANY  
KEMNITZ WOLF CAMP & PENNSYLVANIAN POOLS  
LEA COUNTY, NEW MEXICO

COST DATA

Metering Separator (Complete) 30" x 8' (1000 Bbls/Day)	\$ 1161.00
Regular Separator (Complete) 30" x 10' (1850 Bbls/Day)	\$ 953.00
500 Bbl Tank (Complete)	\$ 2000.00
1000 Bbl Tank (Complete)	\$ 3000.00
Cost Separate Batteries (200 BOD each)	
Tankage (4-500)	\$ 8000.00
Separators (2)	\$ 1906.00
Total	<u>\$ 9906.00</u>

Cost Commingled Battery (400 Bbls/Day)	
Tankage (2-1000)	\$ 6000.00
Metering Separator	\$ 1161.00
Regular Separator	\$ 953.00
Total	<u>\$ 8114.00</u>

Tankage (2-1000)	\$ 6000.00
Metering Separators (2)	\$ 2322.00
Total	<u>\$ 8322.00</u>

Tankage (2-1000)	\$ 6000.00
Separators (2)	\$ 1906.00
PD Meter (1)	\$ 209.00
Total	<u>\$ 8115.00</u>

Tankage (2-1000)	\$ 6000.00
Separators (2)	\$ 1906.00
PD Meters (2)	\$ 118.00
Total	<u>\$ 8324.00</u>

Savings due to commingling (Measure 1 zone)   \$ 1792.00

Savings due to commingling (Measure 2 zones)   \$ 1583.00

BEFORE EXAMINER NUTTER  
OR CONSERVATION COMMISSION  
CASE NO. 1475-2  
EXHIBIT NO. 2

EXHIBIT 2

BEFORE THE  
OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO  
Santa Fe, New Mexico  
July 2, 1958

TRANSCRIPT OF HEARING

Case 1475

DEARNLEY - MEIER & ASSOCIATES  
GENERAL LAW REPORTERS  
ALBUQUERQUE NEW MEXICO  
Phone CHapel 3-6691

BEFORE THE  
OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO  
Santa Fe, New Mexico  
July 2, 1958

-----:  
IN THE MATTER OF: :  
 :  
 :  
Application of Sinclair Oil and Gas Company for :  
permission to commingle oil from two separate :  
pools in common storage. Applicant, in the :  
above-styled cause, seeks an order authorizing :  
it to commingle the Kemnitz-Wolfcamp Pool and : Case  
Kemnitz-Pennsylvanian Pool production from its : 1475  
State Lea 692 Well No. 1 located 660 feet from :  
the South lines of Section 24, Township 16 :  
South, Range 33 East, Lea County, New Mexico. :  
-----:

BEFORE:  
  
Mr. Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. PAYNE: Case 1475. Application of Sinclair Oil and Gas Company for permission to commingle oil from two separate pools in common storage.

MR. BURTON: Mr. Examiner, I am Horace Burton from Midland, Texas, representing Sinclair Oil and Gas Company, and Mr. Powers will be our engineering witness in support of this application.

(Witness sworn.)

RICHARD E. POWERS

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

DIRECT EXAMINATION

By MR. BURTON:

Q Give your name and employment.

A Richard E. Powers. I am employed as Division Engineer with Sinclair in Midland, Texas.

Q Have you previously testified before the Commission?

A No, sir.

Q Will you state your training and experience in the field of petroleum engineering?

A I received a B. S. degree in petroleum engineering from Louisiana State University in 1947. Following graduation I was employed by Arkansas Natural Companies which included the Arkansas Field Oil and Arkansas-Louisiana Natural Gas Company as a Junior Petroleum Engineer. Subsequent jobs were as Foreman, District Engineer and as Chief Production Engineer up until 1952, at which time I accepted employment with Southern Production Company as Senior Engineer. At the time of the sale of Southern Production Company to Sinclair in November, 1956, I accepted employment with Sinclair and was transferred to Midland as Division Engineer at that time and have been there since.

Q You have been working in the West Texas-New Mexico area for about the last year, year and a half?

A Year and a half.

MR. BURTON: Are there any objections to the qualification



of the witness?

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MR. NUTTER: The witness is qualified.

Q The records of the Commission will show, will they not, that an order has been issued you for the dual completion of this well that is the subject of this application?

A Yes, sir, I believe it was Order No. 1200, dated June 18, 1958.

Q Have you made a study of the facts concerning the commingling into common storage that is concerned with this hearing?

A I have.

Q Will you proceed with your testimony in narrative form and inform the Examiner as to the status of the well at the present time, and explain the method of commingling and the separate measurement that you propose and state whether or not it will be accurate, and explain the savings in cost that will be accomplished.

A Well 692 No. 1, which this application concerns, is a proposed dual completion in the Wolfcamp and the Pennsylvanian zones of the Kemnitz Field. At the current time the well is drilling at approximately 11,200 feet. It's anticipated that the well will be completed within the next two weeks. Our application request is to permit commingling the production from the Wolfcamp-, Kemnitz-Wolfcamp and Kemnitz-Pennsylvanian Pools into common storage.

~~Under our proposal we would like to use either a P. D. or~~

metering separator measuring the production from one zone into the common storage, subtracting that total production from the measurement device from the total production into common storage to obtain the production from the other zone. Both means of measurement have been proven satisfactory in other areas and acceptable. The equipment that we propose to use at this time as a metering separator gives a thousand barrel capacity. We have costed out our various means of effecting this manner of measuring in the area.

Q Do you have a plat of the lease and adjoining leases?

A Yes, sir, marked Exhibit 1. On Exhibit 1 is the area showing the Kemnitz Field area. There are the present time 33 Wolfcamp wells, one Pennsylvanian well in the Kemnitz Pool, and in the Kemnitz Cisco Pool there are two Pennsylvanian wells. The Well No. 1, 692 No. 1 is located in the Southwest Quarter, Section 24, Township 16 South, Range 33 East.

Exhibit 2 is a cost analysis of the proposed means of measuring and commingling the production into common storage. The first item is cost of the metering separator, regular separator, cost of 500 barrel tanks, thousand barrel tanks, cost of separate battery for each zone to handle 200 barrels per day production, cost of commingling both zones with 400 barrels per day production into 2,000, two 1,000 barrel tanks using one regular separator, one metering separator, using the two 1,000 barrel tanks, two metering separators, using the same tankage, using two separators,

one P. D. meter, two separators and two P. D. meters. Savings in cost proposal of measuring one zone would be \$1792. Measuring both zones, \$1583 dollars. A difference of around \$209.00.

Q That is the difference between using one metering separator and two metering separators?

A That is correct. We feel that this proposal would not impair the protection of correlative rights and would result in economic saving.

Q What is the total savings here as shown on your Exhibit 2 under your proposal? Did you state that?

A Total savings measuring one zone, metering one zone, would be \$1792 over separate installations.

Q Do you believe that the granting of this application would be in the interest of waste prevention?

A Economic waste prevention.

Q You don't have a well yet in either zone, do you?

A No, sir. We have drillstem tested in the Wolfcamp. Recoveries were not too favorable. However the pressure data indicated the possibility of production. The well is offset to the southwest by Forest Oil Company's well which was productive in both zones. They had an application for dual completion which the Commission denied. They are currently producing from the Wolfcamp Zone at this time.

Q Which well is that?

A The Forest Oil State A No. 1 in Section 24. It was originally completed and produced from the first of this year to May, I believe it was, in the Pennsylvanian Zone, and was then plugged back to the Wolfcamp. The well is offset to the east by the Seeman Unit No. 5 which Sinclair operates which is producing from the Wolfcamp Zone.

Q What are the gravities of the oil from those two zones, pretty much the same or do you know?

A The gravity of the oil from the Pennsylvanian is approximately 39. From the Wolfcamp around 41 A.P.I. gravity. In that connection I might mention that there is a slight price differential which commingling these oils 50-50 would put it above the 40 gravity breaking point, approximately two cents per barrel additional revenue.

Q This well is located on a State lease, is it not?

A That is correct.

Q If the Commission feels that two metering separators should be used, you are willing to make that installation?

A Yes, sir. However, we feel that the method we are proposing is adequate and will result in accurate measurement of the production from both zones.

Q What kind of production in quantity do you expect to encounter in the Wolfcamp?

A ~~We anticipate to that allowable well which at the current~~

time is 188 barrels per day.

MR. BURTON: That's all.

CROSS EXAMINATION

By MR. NUTTER:

Q What did you say the depth is of your well?

A Approximately 11,200. I don't have that exactly.

Q You stated that you expected it to be completed in two weeks?

A Yes, sir.

Q For both zones?

A Yes, sir, if we don't run into any difficulties in the completion techniques.

Q I note down here at the bottom of your Exhibit No. 2, you show a savings of approximately \$209.00, being the difference of measuring one zone and subtracting the difference of the total, or measuring both zones separately, is that correct?

A Yes, sir. That is the difference in the cost of a P. D. meter or the difference in cost approximately between a regular separator and a metering separator.

Q Is there that much difference in the cost --

A (Interrupting) The regular separator complete is approximately \$935.00. The metering separator is approximately \$1161.00 installed.

Q In either case, it is going to be just slightly more than \$200.00?

A Yes, sir, it happens to work out that way. There are a number of separators, T. D. meters, metering separators on the market today, they're pretty competitive and the prices run approximately the same for the same size.

Q By commingling the oils here, the value of the average is not going to be the average of the gravities, it's going to be in excess of that average. You will make money on this commingling besides saving money?

A It depends on what the gravities run, the Pennsylvanian runs 39 plus a little bit, and some of the Wolfcamp runs 41 plus, some of it is down below, but the average is around 39 to 41. So it just happens to fall on that and it might or might not, it depends on the amount of production if we get top allowable wells.

Q Has your purchaser offered a waiver in this case?

A Well, I imagine that they wouldn't mind. I don't imagine they would mind.

MR. NUTTER: Does anyone have any questions of Mr. Powers? If not, he will be excused.

(Witness excused.)

MR. BURTON: Applicant offers these Exhibits 1 and 2.

MR. NUTTER: Without objection, Sinclair's Exhibits will be received in Case 1475. Does anyone have anything further they wish to offer in the case? If not we will take the case under advisement and take 1477 next.

NOTARIAL STATE

STATE OF NEW MEXICO )  
                              : SS  
COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 7<sup>th</sup> day of July, 1958.

*Ada Dearnley*  
Notary Public-Court Reporter

My commission expires:  
June 19, 1959.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1475 heard by me on 7-2, 1958.

*William* Examiner  
New Mexico Oil Conservation Commission