

con a so pla. 1822 Replication, Transcript, Small Exhibits, Etc.

#### BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE No. 1822 Order No. R-1326-A

APPLICATION OF CITIES SERVICE OIL COMPANY FOR APPROVAL OF THREE AUTOMATIC CUSTODY TRANSFER SYSTEMS ON THE DRICKEY-QUEEN SAND UNIT, CAPROCK-QUEEN POOL, LEA AND CHAVES COUNTIES, NEW MEXICO

## ORDER OF THE COMMISSION

#### WY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 24, 1959, at Santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinefter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 16th day of December, 1959, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, operator of the Drickey-Queen Sand Unit in Chaves County, New Mexico, proposes to handle all Caprock-Queen Pool production from said Unit by means of three automatic custody transfer systems, more particularly described as follows:

(a) An automatic custody transfer system to handle all Caprock-Queen Pool production from the following-described acreage in said Unit:

 TOWNSHIP 13 SOUTH, RANGE 31 EAST, NUPM

 Section 33:
 S/2 SW/4, NE/4 SW/4, SE/4,

 S/2 NE/4, NE/4 NE/4
 SE/4,

 Section 34:
 SW/4

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> TOWNSHIP 14 SOUTH, RANGE 31 EAST, NMPM Section 3: All Section 10: N/2

(b) An automatic custody transfer system to handle all Caprock-Queen Pool preduction from the following-described acroage in said Unit:

> TOWNSHIP 13 SOUTH, RANGE 31 EAST, NMPM Section 35: S/2

> TOWNSHIP 14 SOUTH, RANGE 31 EAST, NumPa Section 1: N/2 NW/4, SW/4 NW/4 Section 2: All Section 11: W/2, W/2 E/2 Section 14: NE/4 NW/4, NN/4 NE/4

(c) An automatic custody transfer system to handle all Caprock-Queen Poel production from the following-described acreage in said Unit:

 TOWNSHIP
 14
 SOUTH, RANGE 31
 EAST, NAPL

 Section
 10:
 5/2

 Section
 14:
 S/2
 NW/4, NW/4, NW/4, N/2

 Section
 14:
 S/2
 NW/4, NW/4, NW/4, N/2

 Section
 15:
 All
 Section
 16:
 N/2, SE/4, N/2
 SW/4, SE/4
 SW/4

 Section
 16:
 N/2, SE/4, N/2
 SW/4, SE/4
 SW/4

(3) That Order No. R-1326 authorizing an automatic custody transfer system for a portion of the acreage proposed to be served by the system described in paragraph (2) (a) of the findings herein should be superseded by the order issued in this case.

(4) That the applicant proposes to measure the oil passing through the three automatic custody transfer systems by means of positive displacement meters.

(5) That the meters to be used in the above-described systems should be checked for accuracy once each month and the results of such tests furnished to the Commission.

(6) That the above-described systems should be so equipped as to prevent the undue waste of oil in the event of malfunction or flow-line break.

(7) That the previous use of automatic custody transfer equipment, similar to that proposed by the applicant, has shown that such equipment is a reliable and economic means of transferring the custody of oil, and that the use of such equipment should be permitted. -3-Cuse Ne. 1822 Order No. R-1326-A

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## IT IS THEREFORE ORDERED:

(1) That Order No. R-1326 be and the same is hereby superseded.

(2) That the applicant be and the same is hereby anthorized to install the three following-described automatic custody transfer systems in the Drickey-Queen Sand Unit in Chaves County, New Mexicot

(a) A system to handle all Caprock-Queen Poel production from the following-described acreage in said Unit:

## ACT SYSTEM NO. 1

TOWNSHIP 13 SOUTH, RANGE 31 EAST, NMPM Section 33: 5/2 SW/4, NE/4 SW/4, SE/4, S/2 NE/4, NE/4 NE/4 Section 34: SW/4

TOWNSHIP 14 SOUTH, RANGE 31 EAST, NorPh Section 3: All Section 10: N/2

(b) A system to handle all Caprock-Queen Pool production from the following-described acreage in said Unit:

#### ACT SYSTEM NO. 2

TOWNSHIP 13 SOUTH, RANGE 31 EAST, MAPA Section 35: 5/2

TOWNSHIP 14 SOUTH, RANGE 31 EAST, NMPM Section 1: N/2 NW/4, SW/4 NW/4 Section 2: All Section 11: W/2, W/2 E/2 Section 14: NE/4 NW/4, NW/4 NE/4

(c) A system to handle all Caprock-Queen Pool production from the following-described acreage in said Unit:

#### ACT SYSTEM NO. 3

## TOWNSHIP 14 SOUTH, RANGE 31 EAST, MAPL

Section 10: 5/2 Section 14: 5/2 NW/4, NW/4 NW/4, N/2 SW/4, SW/4 SW/4 Section 15: All Section 16: N/2, SE/4, N/2 SW/4, SE/4 SW/4 Section 22: NW/4

PROVIDED HOWEVER, That the applicant shall install adequate facilities to permit the testing of all wells on said Drickey-Queen Sand Unit at least once each month to deter ine the individual production from each well. -4-Case No. 1822 Order No. R-1326-A

PROVIDED FURTHER, That the above-described systems shall be so equipped as to prevent the undue waste of eil in the event of malfunction or flow-line break.

PROVIDED FURTHER, That all meters used in the above-described automatic custody transfer system shall be operated and maintained in such a manner as to ensure an accurate measurement of the liquid hydrocarbon production at all times.

**PROVIDED FURTHER**, That all meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director. Meters shall be calibrated against a master meter or against a test tank of measured volume and the results of such calibration filed with the Commission on the Commission form entitled "Meter Test Report."

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

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JOHN BURROUGHS, Chairman

NURRAY E. MORGAN, Momber

attin

A. L. PORTER, JR., Member a Secretary

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BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO NOVEMBER 24, 1959 IN THE MATTER OF: CASE 1822 Application of Cities Service Oil Company for: approval of automatic custody transfer faci- : lities. Applicant, in the above-styled cause: seeks an order authorizing the installation : of automatic custody transfer facilities to : handle the Caprock-Queen Pool production from: the Drickey Queen Sand Unit in Chavez County,: New Mexico. BEFORE: Elvis A. Utz, Examiner. <u>T R A N S C R I P T</u> <u>0</u> <u>F</u> PROCEEDINGS MR. UTZ: Case 1822. MR. PAYNE: Case 1822. Application of Cities Service Oil Company for approval of automatic custody transfer facilities. MR. KELLAHIM: Jason Kellahin, Kellahin & Fox, Santa Fe, New Mexico, representing the Applicant. We have one witness, Mr. E. F. Motter. (Witness sworn) E. F. MOTTER, called as a witness, having been first duly sworn, testified as follows:

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BY MR. KEL	LAHIN:	
ି କି	Will you state your name, please?	
A	E. F. Motter.	
ବ	By whom are you employed and in what position?	
A	Cities Service Oil Company, assistant division en-	
gineer for	West Texas New Mexico Division.	
Q	Mr. Motter, have you testified before the Oil Conser	
vation Com	mission of New Mexico as a petroleum engineer and had	
your quali	fications accepted?	
А	Yes, sir.	
	MR. KELLAHIN: Are the witness' qualifications satis	
factory?		
	MR. UTZ: Yes, sir.	
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	Mr. Motter, are you familiar with the application in	
	Mr. Motter, are you familiar with the application in	
Case 1822?	Mr. Motter, are you familiar with the application in Yes, sir. I am.	
Case 1822?	Mr. Motter, are you familiar with the application in Yes, sir. I am. Would you state briefly what is proposed in that ap-	
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Case 1822? A Q plication? A	Mr. Motter, are you familiar with the application in Yes, sir. I am. Would you state briefly what is proposed in that ap-	
Case 1822? A Q plication? A ties be in	Mr. Motter, are you familiar with the application in Yes, sir. I am. Would you state briefly what is proposed in that ap-	

Q In connection with the application, if the Commission please, I would like to point out that the Commission has hereto-



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fore approved automatic custody transfer equipment on the Government "B" Lease, which is now a part of the Drickey Queen Sand Unit. That is by virtue of Order R-1326. Included in the present application is an expansion of the facilities and the wells to be served by that Unit, and the installation of two more units.

> (Whereupon, Applicant's Exhibit No. 1 was marked for identification.)

Q Now, Mr. Motter, referring to what has been marked as Exhibit No. 1, would you discuss what is shown on that Exhibit?

A Yes, sir. This is the Drickey Queen Sand Unit showing the unit area with the exception of three small tracts which are not numbered by tract number. We hope to bring those into the unit quite soon.

Q Are those the tracts located in Sections 35 and 2? A That's correct. Township 13, 14 South, Range 31 East. To begin with, we have installed and have had in operation since sometime in August an automatic custody transfer system which is located in the SE of the NM/4 of Section 3, Township 14 South, Range 31 East. We would like to include all production into this unit outlined in red on Exhibit No. 1. To start with, there will be twenty-seven wells, producing wells, and eventually sixteen producing wells. I say that because a considerable number of these wells will be converted to injection wells during the life of our flood. We may not connect all twenty-seven wells into



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this unit due to the fact that some of the wells are temporarly abandoned, that will be possibly injection wells at a lator date, to I ask not to be held to that figure, but that is the number of producing wells in that particular area. Over in the SV/4 of the NW/4 of Section 2 is a small square numbered 2, and outlined in the blue area is oil production which will go into automatic custody transfer system located in that position. To start off again, there are thirty-three producing wells in this area. Eventually there will be sixteen. This, of course, does not include those three non-participating at this time. Like I say, that number may change somewhat. In the SM/4 of the NM/4 of Section 15, in a small rectangle is the number 3, and we desire to locate automatic custody transfer system to handle all production outlined by green pencil there. I would like to point out one thing, that you'll notice there is a little nonconformity, or at least we didn't stick to section lines in placing these units and also selecting from where the production would come. He were faced with the proposition there that the Caprock goes down almost through the center of this unit, and when it gets into Section 10 it diverts in a southeasterly direction, and we have tried to keep production on top of the cap and down below the cap separate for physical consons.

> (Mnereupon, Applicant's Exhibit Nd. 2 was marked for identification.)

teremetry to what has been marked Exhibit Mo. 2, will

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# you discuss that Exhibit, please?

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Yes, sir. This is a proposal of automatic custody A transfer installation. It's very similar to that which we have already installed. The wells will -- production from each well will come through the flow lines, as shown, into a manifold where we can manually divert the wells through a test separator or through a heater treater. The test separator, of course, will measure and record the production of oil, water and gas. Production of oil from the test will be dumped into the treater. Oil from the treater goes over to the automatic custody transfer system which I'll explain in more detail on another exhibit. If the oil is good, it enters a storage tank. Upon reaching certain levels, it comes back to the automatic custody transfer system and If the monitor system in the automatic goes to pipeline sales. custody transfer system indicates the oil is bad, the oil is diverted to the bad oil tank, and upon reaching a certain level in there, it is pumped back through the heater treater for further treating.

We have also several emergency storage tanks. Our plans are now to install some twenty-four hours capacity of emergency storage. One thing I would like to point out, we do not have any controls to shut in any wells upon failure of the automatic custody transfer system, but the diversion valve on the BS & M monitor will be so designed that upon power failure or any other failure, it will fall in position, which will send all oil from

the treater to the bad oil tank. Once this tank is filled, it will spill on over into emergency storage. We have three switchers plus a supervisor that live in a camp on this particular lease, and we feel that twenty-four hours is adequate storage time. They attend this system several times a day, and any time that they find that bad oil is being diverted or going over into emergency storage, they will correct the situation, and by doing such, we do not feel it is necessary to install any controls on any of our producing wells.

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Q Now, in your opinion, will twenty four hour storage be adequate time?

A Yes. Personally, I feel with attendants throughout the day that probably sixteen hours would be adequate. Twentyfour hours is just a little extra precautionary measure, and if we find that we have some undue trouble, to start with, we may even set storage for more than twenty-four hours.

Q Now, will the testing facility enable you to make adequate tests of the production from the wells in order to keep adequate records on the operation of the water flood project?

A Yes, I believe they will. For instance, if you'll refer again to Exhibit No. 1, eventually there will be only about from sixteen to twenty wells going through one of these installations, and that will mean that the wells could be tested at least once, and most of them which are probably further stimulated or more stimulated can be tested at least twice a month. Now, down

in the automatic custory transfer Unit No. 1, where we start out with forty-four wells, we may find it necessary down there to have test data once a month. We may have to move in some portable test facilities for a short period of time until we get some of the wells down there to put on injection wells, which will allow us to test at least once a month through the permanent equipment.

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(Whereupon, Applicant's Exhibit No. 3 was marked for identification.)

Q Referring to what has been marked as Exhibit No. 3, will you discuss that, please?

A Yes, sir. This is a schematic diagram of the automatic custody transfer Unit with an index. I believe it is pretty selfexplanatory, and we have nearly all the essential equipment to start with. I may point out a few features. The item No. 8 will be the incoming crude from the heater treater. No. 9 is the valve which is operated by a BS & W monitor which, of course, is located right after the oil enters where it is numbered No. 8. If the oil is found to be good, it discharges through line No. 12 to the good oil tank. If it is bad, it discharges through line No. 10.

Q You have a reversal, don't you?

A No. The good oil goes out No. 12 and if I'm -- that's right, bad oil goes out -- good oil goes out No. 10, bad out No. 12. That's right, I'm sorry. Any good oil, of course, then

enters the pump on the lower right-hand portion of the skid indicated as 15, goes through the strainer indicated as 13, through the deserator, item No. 11. Item 7 is an A.O.Smith type 12 meter with temperature compensated. Item No. 5 are the prover connections. Item No. 3 is a back pressure valve, and item No. 2 is a -- excuse me -- I've got those reversed. Item No. 3 is a motor valve, and item No. 2 is back pressure valve. Item No. 3 is so designed as to prevent any gravity of fluid through the meter. It is only in an open position when poweris mand poes to the pipeline pump by means of certain levers in the good oil tank. Item No. 6 is the sampler, and Item No. 1 is the sampler container.

The pump in the upper right-hand corner of the skid is a bad oil pump which pumps oil back to the heater treater for further treating. Item No. h, of course, are the BS & W monitors and all the necessary electrical controls for the system.

Q How will the oil be measured as it goes into the pipeline?

A It will be metered through the meter. It is a positive displacement meter which has been approved by this Commission numerous times, and we have had an identical unit in operation in this unit since August. We've found it to be quite satisfactory. The drift on this meter was surprisingly small whenever we tested it. It has been tested as per Commission requirements once each month.





Q Will the same requirement be complied with in the event the application for this installation is approved?

A If it is so desired. We will test upon their request. Q Have you any indication that the pipeline will be able to handle the oil from this type of installation?

A Yes, sir. Of course, we have gone over this installation in some detail with the pipeline company, and Exhibit No. 4 is a letter from Mr.Botts of the Texas-New Mexico Pipeline Company's Midland office, stating that they will be glad to accept the oil from the two automatic custody transfer installations. I might further add that location of these units as we have proposed in Exhibit No. 1 may be moved a little ways. I still think they will remain in the forty acres as we have described them, but we have not physically been in the field with members of the pipeline. We have only selected these locations under our own understanding, and they may desire that the unit be moved a little ways to perhaps give them better access or some other particular reason. But to the best of our knowledge, they will be located, as close as we can tell right now, where they are.

Q Now, were Exhibits 1, 2 and 3 prepared by you or under your supervision?

A Yes, sir, they were.

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Inc.

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(Whereupon, Applicant's Exhibit Nd. 4 was marked for identification.)

Is Exhibit No. 4 a copy of a letter received by your



Company from Texas-New Mexico Pipeline Company?

A That is correct, it is a copy. I might add also that we have advised the U.S.G.S. of this application. We've advised the State Land Office, and we feel that advertisement of this matter was adequate information to the few royalty owners holding fee land in this unit.

MR. KELLAHIN: At this time we would like to offer in evidence Exhibits 1, 2, 3 and 4.

MR. UTZ: Without objection, they will be accepted.

(Thereupon, Applicant's Exhibits Nos. 1,2,3 and 4 were received in evidence.)

Q Now, Mr. Motter, the entire area you have been discussing is subject to a unit agreement, is it not?

A That is correct.

Q And the only exceptions to that are those exceptions which you mentioned at the outset, of non-participating areas?

A Yes. Of course, I might point out that our unit area is much larger than this and anybody that was included in the original unit area can come into this unit upon request. I believe that under the terms of our unit agreement, that after six months they can be negotiated back into the unit. We feel that these, the northeastern portion of the unit, will probably come in in a short time, and there are some properties to the south



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which may come in.

Q The point I'm getting at, Mr. Motter, in operation of this custody transfer system, there will be no problem in accounting to royalty owners or overriding royalty owners or any accounting problems?

A Nc, sir. All production from this unit was paid on a percentage participation basis regardless of whether the production is taken from the unit.

MR. KELLAHIN: That's all the questions I have.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Motter, will all these wells be pumping or flowing wells?

A They will all be pumping wells. I might add one thing not there. I say they are pumping wells. We have had occasions on our Tract No. 6, Well No. 8, which is the inside location of our pilot, has kicked off and flowed several times. There is pumping equipment on the well, however.

MR. PAYNE: That was without applying back pressure on it?

A That is correct.

(By Mr. Utz) What's the flow line operating pressure ordinarily?

A Well, it would be the separator pressure which normally would be about fifteen pounds.

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Q Do you feel that is too low a pressure to properly operate a low cut switch?

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Well, we could probably operate low cut switches, A but we have investigated this situation to quite some extent, and we find that in properly equipping wells so that they will shut down upon failure of the equipment or if there was an undue or unforeseen flow line break, that this expense would probably run somewhere in the neighborhood of four hundred to six hundred dollars per well, and then we actually would not have any. There is no reason to believe why they wouldn't be absolutely safe due to the fact that this, that the crude in this field carries a very high paraffin content, and in the winter months it becomes quite viscose, and we feel that that alone would probably increase our flow line pressures considerably from the separator to the wellhead. In so doing, if we install such equipment, we will probably have to go around at least twice a year and adjust that equipment to protect the flow lines. We feel it is easier protected by the use of emergency storage.

Q Do you think that this entire patch will be inspected once every day?

A I wouldn't say every flow line is inspected even today, but at least we have three men running over there, and they will visit each one of these automatic custody transfer units. They will read the meters each day, and if there is any loss, they will certainly go out and see where it is.



PAGE 11:

Q Each well wouldn't be metered separately? A No, but the total production coming in for each unit will be metered, and if for some reason or another we have lost some production from what it normally runs, the boys will usually go out and test to see if there are any wells or if there are any flow line breaks or for what reason it did occur.

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Q In other words, that is the manner in which you detect a flow line break?

A Yes, sir. It would be no different than what we are doing right now. Our only reason for this request is to deliver to the pipeline automatically. We see no reason to automate the lease operations any further.

MR. PAYNE: On a malfuncation, your emergency storage would take care of that situation?

A That's correct. Emergency storage will be kept. The tanks will be kept empty until there is some malfunction to put storage in there. I probably did not state, but this equipment is so equipped that any time there is bad oil going to the bad oil tank, if there is not a power failure, there will be a light to show that bad oil is going to the tanks. Of course, if the power is off, it automatically diverts to bad oil, but we don't have any power to show that the light was burned itself. Any time a switcher visits the automatic custody transfer unit, it is only a matter of looking at the diversion valve, which diverts the good and bad oil, to tell in which position it is flowing the



STATE OF	NEW MEXICO	
COUNTY OF	BERNALILLO	SS

I, J. A. Trujillo, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in Stenotype and reduced to typewritten transcript by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this, the  $2^{-\frac{t}{2}}$  day of <u>Alcunke</u> 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

My Commission Expires:

October 5, 1960

DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, NEW MEXICO

I do hereby certify that the foregoing is and of the proceedings in 822 heard New Mexico Oil Conservation Countission Examiner

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## TEXAS-NEW MEXICO PIPE LINE COMPANY

F. B. WHITAKER, JR. Division Manager

November 16, 1959

T. D. FOR 1310 MIDLAND, TEXAS

Cities Service Oil Company P. O. Box 97 Hobbs, New Mexico

Attention: Mr. E. F. Motter Assistant Division Engineer

Gentlemen:

This is in reply to your letter dated November 6, 1959, concerning your two proposed LACT installations in the Drickey Queen Sand Unit, Caprock Queen Pool, Chaves County, New Mexico, namely, LACT No. 2 in the SW/NW, Section 2, and LACT No. 3 in the SW/NW, Section 15, all in T-14-S, R-31-E.

After examining your proposal in some detail, we think that it will serve your purpose and ours very nicely. We would be pleased to accept oil from these two LACT installations with only the minimum testing period after the installations are made. Experience has shown us that a few operational bugs always exist in any installation that need to be corrected. However, please be assured that after these corrections are made, the test period will be a very nominal one.

If you find that you need any further information, please let us know.

Texas-New Mexico Pipe Line Company will accept these two LACT installations.

Yours very bruly, ) Idd B<u>ara</u>ac

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BEFORE EXAMINER UTZ CIL CONSERVITE COMPOSION CASE NO. 1977

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C. S. WHITAKER, JR. GIVINION MANAGER

#### November 16, 196

THE AVEL TELAS

Cities Service Oil Company P. O. Box 97 Hobbs, New Mexico

#### Attention: Mr. E. F. Motter Assistant Division Engineer

#### Geritlemen:

This is in reply to your letter dated November 5, 1959, concerning your two proposed LACE Unstablished in the Drickey Queen Sand Unit, Caprock Queen Pool, Chaves County, New Mexico, namely, LACT No. 2 in the SW/NW, Section 2, and LACT No. 3 in the SW/NW, Section 15, all in P-18-8, R-31-E.

After examining your proposal in some detail, we think that it will serve your purpose and ours very nicely. We would be pleased to accept oil from these two LACT installations with only the minimum testing period after the installations are made. Experience has shown us that a few operational bugs always exist in any installation that need to be corrected. However, please be assured that after these corrections are made, the test period will be a very nominal one.

If you find that you need any Curther information, please let us know-

Texas-New Mexico Pipe Line Company will accept these two LACF installations.

Yours wary amily;

RWB-btk

## 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. 1580 Order No. R-1326

APPLICATION OF CITIES SERVICE OIL COMPANY FOR PERMISSION TO INSTALL AUTOMATIC CUSTODY TRANSFER EQUIPMENT ON ITS GOVERNMENT "B" LEASE, CAPROCK-QUEEN POOL, CHAVES COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 7, 1959, at Santa Fe, New Mexico, before Elvis A. Utz, 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 21si., day of January, 1959, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Elvis A. Utz, 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, Cities Service Oil Company, is the owner and operator of the Government "B" Lease in the Caprock-Queen Pool, Chaves County, New Mexico, comprising the followingdescribed acreage:

> TOWNSHIP 14 SOUTH, RANGE 31 EAST, NMPM Section 3: All Section 10: N/2

(3) That the applicant proposes to install automatic custody transfer equipment on said Government "B" Lease and to produce all Caprock-Queen Pool wells on said Lease into a common tank battery.

(4) That the applicant proposes to measure the oil passing through the automatic custody transfer equipment by means of positive displacement meters.

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(5) That positive displacement meters provide an accurate and reliable means for measuring oil and their use should be permitted.

(6) That the previous use of automatic custody transfer equipment, similar to that proposed by the applicant, has shown that such equipment is a reliable and economic means of transferring the custody of oil and that the use of such equipment should be permitted.

(7) That the applicant should be permitted to produce more than sixteen wells into a common tank battery provided that each well which is producing into said battery is periodically tested to determine the individual production from said well.

(8) That the positive displacement meters used in the abovedescribed system should be checked for accuracy once each month until further order of the Secretary-Director.

#### IT IS THEREFORE ORDERED:

(1) That the applicant, Cities Service Oil Company, be and the same is hereby authorized to produce into a common tank battery all wells producing from the Caprock-Queen Pool on its Government "B" Lease, which comprises all of Section 3 and the N/2 of Section 10, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico.

(2) That the applicant be and the same is hereby authorized to install automatic custody transfer equipment utilizing positive displacement meters on the aforementioned Government "B" Lease.

**PROVIDED HOWEVER**, That the applicant shall make periodic production tests of all wells producing into the said common tank battery to determine the individual production of said wells.

**PROVIDED FURTHER**. That the positive displacement meters used in the automatic custody transfer equipment referred to above shall be checked for accuracy once each month until further order of the Secretary-Director and the results of such tests shall be furnished to the Commission.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OJL CONSERVATION COMMISSION

John Burroughs, Chairman Murray E. Morgan, Member

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

SEAL ir/

Date 1822 Cont. CASE Hearing Date My recommendations for an order in the above numbered cases are as follows: 3. Cities Service - Caprock LACT # 3. 145-31E Sec. 14. SUNW, NWSW, ElzW/2. 11 15 A (1 Custody transfere facilities to be located in SWNN sec 15 135-BIE. 4. Ho wellhead safety features to be required since these wells are all pumpers with low line pressures. Zhu

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

Date 822 CASE Hearing Date My recommendations for an order in the above numbered cases are as follows: Grant as follows: 1. I believe R-1326 pertainy to the Loon't B" leave should be approximated to nouse additional acreage e.i. 35-31E. Sec. 33, NENE, S/2NE, NESW, S/2SW, SE. sec. 34 5 W/4 The should be designated Cities Service, Caprock # 1 LACT. E. 2. Cities Service that Caprock LACT #2, 135-31E sec. 35 5/2 145 - 31E seen1, N/2 NW/4, SWNW sec. Z. AU . u 11, W/2 E/2, W/2 11 14, NWNE, NENW Custody transfere equipment to be located in SWNW & see 2, 135-316 

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

NO. 40-59

#### DOCKET: EXAMINER HEARING NOVEMBER 24, 1959

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

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

- CASE 1811: Application of The Atlantic Refining Company for permission to commingle the production from three separate pools from three separate leases. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the Tubb, Blinebry, and Drinkard production from three Federal leases in Section 14, Township 25 South, Range 37 East, Lea County, New Mexico.
- CASE 1812: Application of Gulf Oil Corporation for permission to commingle the production from two separate leases. Applicant, in the above-styled cause, seeks permission to commingle the production from the Eumont Pool from its Ramsay (NCI-D) Lease consisting of the NE/4 of Section 35 and from its Ramsay (NCI-J) Lease consisting of the SW/4 SW/4 of Section 25, both in Township 20 South, Range 37 East, Lea County, New Mexico.
- CASE 1813: Application of Gulf Oil Corporation for a gas-oil dual completion and for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Travis Well No. 1, located 1980 feet from the South line and 660 feet from the East line of Section 21, Township 23 South, Range 37 East, Les County, New Mexico, in such a manner as to permit the production of gas from an undesignated Abo gas pool and the production of oil from the Teague Pool. Applicant further seeks permission to commingle the oil produced from the Feague Pool from said well with the distillate produced from an undesignated Abo gas pool from said well.
- CASE 1814: Application of Leonard Latch for two water flood projects. Applicant, in the above-styled cause, seeks an order authorizing it to institute two water flood projects in the Empire Pool in Eddy County, New Mexico. In one project, applicant proposes to inject water into the Seven Rivers formation through ten wells located in the N/2 of Section 19, Township 17 South, Range 28 East. In the other project, applicant proposes to inject water into the Seven Rivers formation through seven wells located in the S/2 SE/4 of Section 12 and the NE/4 of Section 13, Township 17 South, Range 27 Fast-

CASE 1815: Application of Leonard Oil Company for an unorthodox gas well location. Applicant, in the above-styled cause, seeks an order authorizing an unorthodox gas well location in the Jalmat Gas Pool at a point 2310 feet from the North and East lines of Section 21, Township 25 South, Range 37 East, Les Gounty, New Mexico. Applicant proposes that said well serve as the unit well for a non-standard gas proration unit in the Jalmat Gas Pool consisting of the E/2 NW/4 and W/2 NE/4 of said Section 21.

CASE 1816: Application of Small Old Company for permission to commingle the production from several reparate pools from several separate leases. Applicant, in the apove-styled cause, seeks permission to commingle the production from an undesignated Atoka pool and an undesignated San Andres pool from two separate leases to Sections 23, 26, and 35, Township 19 South, Range 35 East, les Coupte New Mexico, and to transport said production from said leases

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> prior to measurement and to commingle such production with the commingled Pearl-Queen production authorized by Order No. R-1101. Applicant further seeks authorization to expand the automatic custody transfer system authorized by said Order No. R-11Q1.

CASE 1817: Application of Sunray Mid-Continent Oil Company for an automatic custody transfer system and for permission to produce more than sixteen wells into a common tank battery. Applicant, in the above-styled cause, seeks an order authorizing it to install an automatic custody transfer system to handle the production from all Bisti-Lower Gallup Oil Pool wells on its Central Bisti Unit comprising certain acreage in Townships 25 and 26 North, Range 12 West, San Juan County, New Mexico

CASE 1818: Application of Texaco Inc., for a gas-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its State "BN" Well No. 1, located in the NW/4 SW/4 of Section 25, Township 11 South, Range 32 East. Lea County, New Mexico, in such a manner as to produce gas from the Moore-Wolfcamp Gas Pool and to produce oil from the Moore-Pennsylvanian Pool through the casing-tubing annulus and tubing respectively.

#### CASE 1819: Application of Hamilton Dome Oil Company, Ltd., for an order authorizing the commingling of production from two separate pools. Applicant, in the above-atyled cause, seeks permission to commingle the Blinebry and Tubb production from a lease consisting of the S/2 SE/4 of Section 25, Township 25 South, Range 37 East, Lea County, New Mexico.

<u>CASE 1820:</u> Application of Carper Drilling Company, Inc., and T. J. Sivley for permission to commingle the production from two separate leases. Applicant, in the above-styled cause, seeks permission to commingle the Empire-Abo Pool production from that portion of State Lease B-1483 consisting of lot 2 of Section 2 and that portion of State lease 2029 consisting of lot 3 of said Section 2, Township 18 South, Range 27 East, Eddy County, New Mexico.

CASE 1821: Application of Cities Service Oil Company for establishment of a water flood project allowable. Applicant, in the above-styled cause, seeks an order establishing a project allowable for its Drickey Queen Sand Unit in Chaves County, New Mexico, and providing for the conversion of wells to water injection at the operator's election.

CASE 1822: Application of Cities Service Oil Company for approval of automatic custody transfer facilities. Applicant, in the above-styled cause, seeks an order authorizing the installation of automatic custody transfer facilities to handle the Caprock-Queen Pool production from the Drickey Queen Sand Unit in Chaves County, New Mexico.

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#### BEFORE THE OIL CONSERVATION COMMISSION

#### OF NEW MEXICO

Clase 1829

IN THE MATTER OF THE APPLICATION OF CITIES SERVICE OIL COMPANY FOR APPROVAL OF AN AUTOMATIC CUSTODY TRANSFER IN THE DRICKEY QUEENSAND UNIT, CAPROCK QUEEN POOL, CHAVES COUNTY, NEW MEXICO.

## <u>A P P L I C A T I O N</u>

Comes now Cities Service Oil Company, operator of the Drickey Queen Sand Unit, and respectfully requests approval of the installation of an automatic custody transfer system for the Drickey Queen Sand Unit, Caprock Queen Pool, Chaves County, New Mexico, and in support thereof would show:

 That the Commission by its Order No. R→1326 has heretofore approved the use of automatic custody transfer equipment on the Government B lease in said unit.

2. That applicant proposes to handle all production in the Drickey Queen Sand Unit by automatic custody transfer, as follows:

a. It is desired to amend Order No. R-1326 to include production through the installation on the Government B lease from participating tracts in the Drickey Queen Sand Unit in Sections 33 and 34, Township 13 South, Range 31 East, Chaves County, New Mexico.

b. Additional automatic custody transfer equipment is proposed to handle production from participating tracts in the Drickey Queen Sand Unit in Sections 2, 11, and 14, Township 14 South, Range 31 East; and another to handle production from participating tracts in the Drickey Queen Sand Unit in Sections 10, 15, 16, and 22, Township 14 South Range 31 East, all in Chaves County, New Mexico. Unit Sec. 35, 7-13-5,  $\mathcal{R} = S/-E^{-1}$  3. It is proposed to use automatic custody transfer equipment consisting of positive displacement meters, sampling equipment and other related facilities to accurately measure and account for oil produced from the Drickey Queen Sand Unit. Installation of automatic custody transfer is in the interest of conservation by the prevention of loss of volatile fractions and reduction of the hazards of ordinary tankage.

4. Delivery of the crude oil will be to the Texas-New Mexico Pipeline Company, who have consented to the installation of automatic custody transfer facilities.

5. Periodic production tests of all wells will be made and the positive displacement meters will be checked for accuracy by a master meter at times designated by the New Mexico Oil Conservation Commission.

6. Copies of this application have been sent to all offset operators.

WHEREFORE, Applicant requests that this matter be set for hearing before the Oil Conservation Commission or before the Commission's duly appoint examiner, in Santa Fe, New Mexico, at as early a date as possible, and that after notice and hearing as provided by law, the Commission enter its order approving applicant's proposal.

> Respectfully submitted, CITIES SERVICE OIL COMPANY

son W. Kell Kellahin

KELLAHIN & FOX P. O. Box 1713 Santa Fe, New Mexico

Attorneys for Applicant

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