CASE 2252: Application of CITIES SERVICE for an automatic custody transfer system (State B "J" lease).

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### ESFORE THE DIE CONSTRUMPTON AND TESTO, OPERES VEST NO.

IN THE PARTER OF THE APPLICATION OF CITIES SERVICE PETROLEUM COMPANY FOR APPROVAL OF MEASE AUTONATIC CUSTODY TRANSFER SYSTEM ON ITS STATE R "J" (FROM NO. 1, SECURIOS 3K. TOWNSHIP 17 SOUTH, RANGE 35 MAST, N.H.P.H., GEA COUNTY, NEW LEKICO

CASE NO. 7,2,5,2

# APPLICATION

Comes now Cities Service Petroleum Company and applies to the Oil Conservation Commission of New Mexico for approval of a Lease Automatic Custody Transfer System to be used on its State B "J" Well No. 1 located 990 feet from the East line and 2310 feet from the South line of Section 35, Township 17 South, Range 35 East, N.M.P.M., Lea County, New Mexico.

Said well is completed for Abo production in the Vacuum-Abo Pool and is located on a lease composed of the South Half of said Section 35.

Applicant proposes to install a TACT Unit in conformity with units heretofore approved by the Commission and production will be measured through accurate meters prior to delivery to the pipe line.

MHEREFORE, applicant requests that this application be set for hearing before the Oil Conservation Commission of New Mexico or the Commission's duly appointed examiner and that after notice and hearing, as required by law, the Commission approve the proposed installation.

Respectfully submitted.

CITIES SERVICE PETROLEUM COMPANY

Jason W. Kellahi Aellahin &

Attorneys for Applicant

P. O. Box 1713

Santa Fe, New Mexico

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# State of New Wexico Oil Conservation Commission

LAND COMMISSIONER E. S. JOHNNY WALKER MEMBER

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STATE GEOLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

2252 R-1950

April 28, 1961

	Re: Case No.			
r. Jason Kellahin	Order No. 2-1950			
allahin & Fox	Applicant:			
ex 1713	Cities Service Petroleum Co.			
	A STATE OF THE PROPERTY OF THE			

Dear Sir:

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

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

Carbon copy of order also sent to: Hobbs OCC Artesia CCC Aztec OCC OTHER

# 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. 2252 Order No. R-1950

APPLICATION OF CITIES SERVICE PHTROLEUM COMPANY FOR APPROVAL OF AN AUTOMATIC CUSTODY TRANSFER SYSTEM IN THE VACUUM-ABO POOL, LEA COUSTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 19, 1961, at Santa Fe, New Mexico, before A. L. Porter, Jr., 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 28th day of April, 1961, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, A. L. Porter, Jr., 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 Petroleum Company, is the owner and operator of the State B "J" Lease, comprising the S/2 of Section 35, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico.
- (3) That the applicant proposes to install an automatic custody transfer system to handle the Vacuum-Abo Pool production from all wells presently completed or hereafter drilled on the above-described State B "J" Lease.
- (4) That the installation should conform to Exhibit Nos. 3 and 4 in this case, except that a set-stop counter equipped with a non-reset totalizer should be installed to automatically stop the flow of oil through the automatic custody transfer system at or prior to the time the allowable has been run.
- (5) That the previous use of automatic custody transfer equipment, similar to that proposed by the applicant, has shown

-2-CASE No. 2252 Order No. 8-1950

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, provided adequate safety features are incorporated therein.

## IT IS THEREFORE ORDERED:

That the applicant, Cities Service Petroleum Company, is hereby authorized to install an automatic custody transfer system to handle the Vacuum-Abo Pool production from all wells presently completed or hereafter drilled on the State B "J" Lease, comprising the S/2 of Section 35, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico.

PROVIDED HOWEVER, That the installation shall conform to Exhibit Nos. 3 and 4 in this case, except that at set-stop counter equipped with a non-reset totalizer shall be installed to automatically stop the flow of oil through the automatic custody transfer system at or prior to the time the allowable has been run.

PROVIDED FURTHER, That the applicant shall install adequate facilities to permit the testing of all wells located on the above-described State B "J" Lease at least once each month to determine the individual production from each well.

PROVIDED FURTHER, That in order to prevent the overflow and waste of oil in the event the automatic custody transfer system fails to transfer oil to the pipeline, the applicant shall so equip the existing facilities as to automatically shut-in the lease production at the well-head in the event the storage facilities become full.

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.

That meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director.

That maters shall be calibrated against a master mater 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."

#### IT IS FURTHER ORDERED:

That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-3-CASE No. 2252 Order No. R-1950

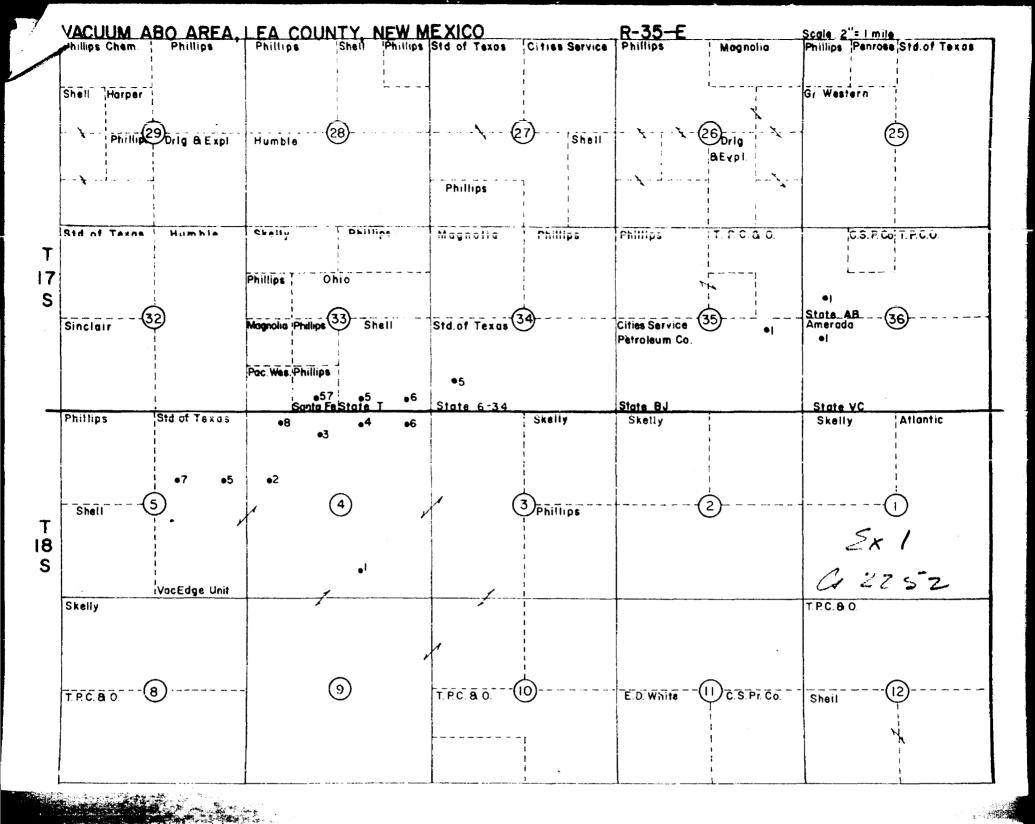
DOME at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

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



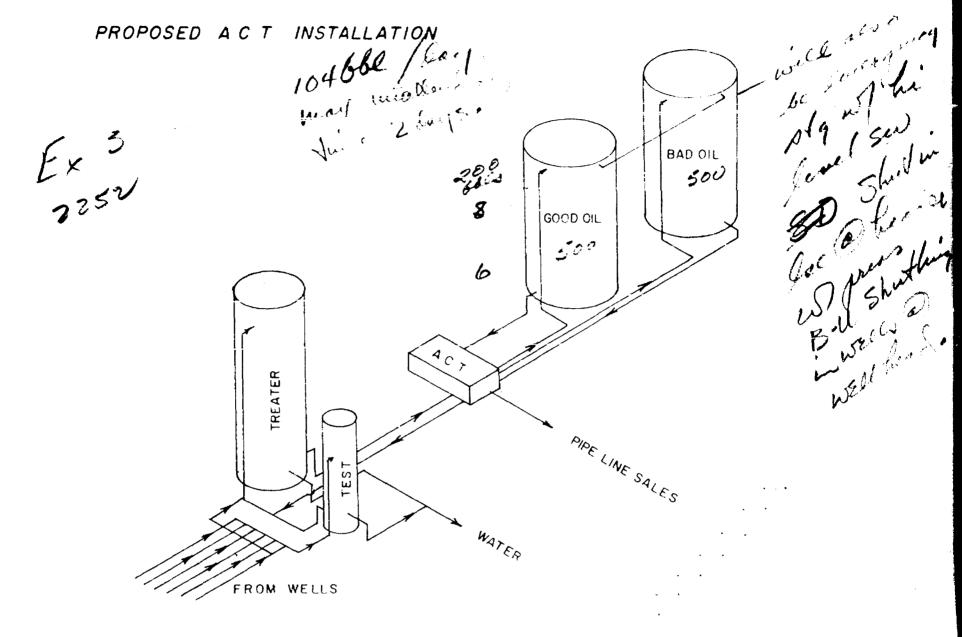
agen. Ex. 2 2252

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# STATE BJ LEASE

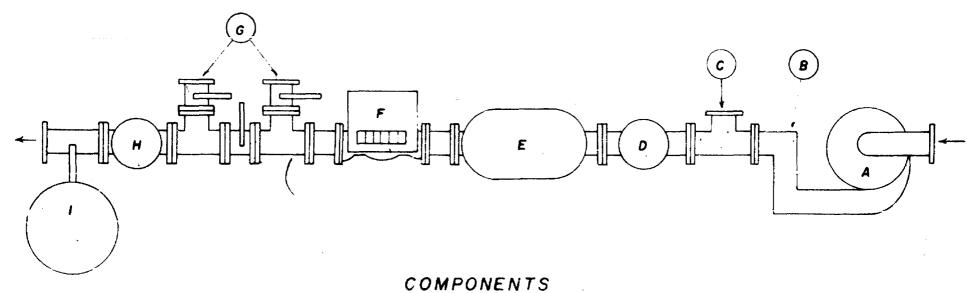
Cities Service Petroleum Company — Operator Vacuum Abo Pool Lea County, New Mexico



# STATE BJ LEASE

Cities Service Petroleum Company — Operator Vacuum Abo Pool Lea County, New Mexico 2×57

# PROPOSED ACT INSTALLATION



- A PUMP
- B BS&W MONITOR
- C 3 WAY 2 POSITION VALVE
- D FILTER
- **E** DEAERATOR

- F PO METER tumque 5-5 cm
- G PROVER CONNECTION
- H BACK PRESSURE VALVE
- 1 SAMPLER

PIG BOX 1510 MIDLAND TEXAS S. S. WHITAKSE, J. . - 1 11, 1 201 DIVISION MAIL 125" Re. Proposed ACT Installation Cities Service recroteum co. State "BJ" Lease Vacuum Abo Fool Lea County, New Mexico Cities Service Petroleum 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 April 7, 1961, concerning your ACT unit that you propose to install on your State "BJ" Lease located in the Vacuum Abo Pool, Lea County, New Mexico. We have examined your proposal in some detail and think that it should prove satisfactory from both of our viewpoints. We would be pleased to receive fluid through this installation following a minimum testing period. Yours very bruin, Bur Crack FBWjr-btk

BEFORE THE OIL COUSERVATION COMMISSION SAMPA PE, TER MENICO APRIL 19, 1961

# EXAMINER HEARING

IN THE MATTER OF

CASE 2252: Application of Cities Service Petroleum Com-: pany for an automatic custody transfer sys-: tem. Applicant, in the above-styled cause, : seeks permission to install an automatic custody transfer system to handle the production from the Vacuum-Abo Pool from all wells presently completed or hereafter dril-: led on its State B "J" lease, S/2 of Section: 35, Township 17 South, Range 35 East, Les County, New Mexico.

BEF ORE:

A. L. Porter, Examiner.

TRANSCRIPT <u>0 F</u> PROCEEDINGS

MR. PORTER: We'll call the hearing to order again. Because of transportation commitments, we will take up Case 2252.

MR. MORRIS: Case 2252. Application of Cities Service Petroleum Company for an automatic custody transfer system.

MR. KELLAHIM: Jason Kellahin, Kellahin & Fox, representing the applicant. We'll have one witness, Mr. E. F. Motter.

(Witness sworn)

E. F. MOTTER,



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

## DIRECT EXAMINATION

# BY MR. MELLAHIM:

- Q Will you state your name, please?
- A E. F. Motter.
- Q By whom are you employed and in what position?
- A Cities Service Petroleum Company as Division Engineer,
  Hobbs Division.
- Q Mr. Motter, are you familiar with the application of Cities Service in Case 2252?
  - A Yes, I am.
- Q Would you state briefly what's proposed in this application?
- A Yes. We propose to deliver crude from production on our State BJ lease through ACT system, using a positive displacement meter.
- Q How many wells are located on the lease at the present time?
  - A Only one, at present.
- Q Have you prepared a plat showing the location of the lease involved?
- A Yes. This first Exhibit, which is entitled "Vacuum Abo Area, Lea County, New Mexico," indicates the south half of Section 36. Township 17 South, Range 37 Each is the Cities Corvice State 35



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lease. We have drilled the Mo. I Well to the Abo formation in the northeast of the southeast quarter of that particular section. I might also add that this particular plat shows all Abo wells drilled to date in this particular area.

PR. MORRIS: Could we have that marked as Exhibit Mo. 1, please?

(Thereupon, Cities Service Exhibits 1 through 5 were marked for identification)

(By Mr. Kellahin) Now, referring to what has been marked as Exhibit No. 2, will you discuss the information that was shown on that Exhibit?

A This is a plat or an enlargement of the subarea showing the No. 1 Well, which has been drilled, the proposed LACT location, and the proposed well locations in the future. Those are simply one well to a 40. We anticipate there will be additional development. Only time will tell how far this will go.

Q Now, referring to what has been marked as Exhibit No. 3, would you discuss the type of installation that you propose to make?

A This is a proposed ACT installation and schematic diagram indicating production from the various wells, which will enter either a treater or in the future a test separator. The production from the treater, after removal of water, goes to the ACT unit reservoir. The next Exhibit will show that in more detail, but it will monitor the crude, and if it is good, it will be stored in a good oil tank, and if had, stored in a bad oil tank. Delivery of crude



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from the good oil tank is made to the pipeline through the positive displacement meter located on the ACT unit. I might add that since we have only the one well, we do not propose to install the test separator, as shown, as yet, but it will be installed upon the completion of a second well.

The two tanks shown, will be 300-barrel capacity. The bad oil tank will also provide emergency storage, and will be equipped with a high level shut-off, which will operate the valve at the header, and, in turn, the wells will be shut-in with valves on each particular well by pressuring up on the flow lines.

- Will the type of installation that you propose enable you to make the test/which may be required from time to time by this Commission of the individual wells?
- Yes, sir, I am quite sure we can accomplish all tests that are required as of this date.
- Will adequate storage facilities be available for the maximum unattended time on the lease?
- Well, as I've said, these are two 500-barrel tanks. I will assume that we will probably carry, due to requirements of the pipeline, a twenty-four hour storage in the good oil tank. Anything above that will be used as storage, and also the capacity of the bad oil tank will be used as storage. Our current allowable for this present month is 104 barrels a day, so we have adequate storage for any unattended time on the lease. In the future, when this loude fally developed to sight wells, why, so sell probably



provide one more emergency storage tank.

- What will be the maximum unattended time on the lease, Mr. Motter?
- This lease will probably switch with a resident switcher. Λ and I would think that two days will be the maximum unattended.
- Referring to what has been marked as Exhibit Mo. 4, would you discuss that Exhibit?

This is in detail the components of the ACT installation. and reading from right to left, first is a pump designated as "A." "B" is the BS&W monitor. "C" is a three-way two-position valve. "D" is the filter. "E" is the deaerator. "F" is a PD meter, which will be equipped with ticket printer and will also have a timing device to stop delivery of oil should there be any malfunction of the meter after a certain time delay. In other words, when a pump starts delivering through the meter, a timing device is started. and if the counter on the PD meter does not stop this counter within a certain length of time, the controls shut down the delivery of the pump and the crude through the meter. "G" is the prover connections; we propose to use master meter for proving. "H" is a back pressure valve, and "I" is the sampler. I might add that on Figure "C" the three-way two-position valve, that will also be timed into delivery of crude with the pump, crude will be taken back through the good oil tank for some short period of time, say, about five minutes, to bring the temperature of the oil up to what it normally is at tank. We have found, especially in the wintertime, if this



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ALBUQUERQUE, NEW MEXICO

crude stands in these facilities and starts immediately through the 'PD meter, we have some fluctuation of our temperature compensator. He feel we get more accurate results by doing this other method.

- sho is the pipeline transporter?
- Texas-Mew Mexico Pipeline Company, and I have a copy of a letter here which I believe is designated No. 5, dated April 11, 1961, advising us that this proposed setup is acceptable to them. This did not print very good, but this is Mr. Whitaker, the general superintendent in Texas.

MR. PORTER: Mr. Whitaker signed the letter?

- Yes, sir, he did. F. B. Whitaker. I see his name at the top.
- (By Mr. Kellahin) Were Exhibits 1 through 4 prepared by you or under your direction or supervision?
  - Yes. Α
- Q Exhibit 5 is a copy of a letter from the Pipeline Company and in your files?
  - Yes. I have the original with me.
- MR. KELLAHIN: At this time I would like to offer the Exhibits in evidence.
- MR. PORTER: They will be admitted in evidence without objection.

(Whereupon, Applicant's Exhibits 1 through 3 were received in evidence)

(Dy Mr. Rellahin) under the system that Cities Service



proposes, will there be any comming ling of fluida?

- A We do not think there will be at present. If you will notice on Exhibit 1, we have a ho-acce tract northeast of there. We may commingle that at a later date.
  - Q Would that be from the Abo formation?
  - A Yes.
  - 9 Will it call for the production of oil?
  - A Not at this time.
- Q Is this type of installation similar to those which have heretofore been approved by this Commission?
- A Yes. We have three installations almost identical to this in operation in the Drickey-Queen cand unit, which has been approved by the Commission at various times.
- Q In your opinion, is this installation in the interest of conservation and prevention of waste?
  - A It is.

NR. KELLAHIN: That's all the questions I have of the witness.

MR. PORTER: Do you have any questions, Mr. Mutter?

MR. NUTTER: Yes, sir.

CROSS-EXAMIMATION

# BY MR. NUTTER:

- Q What are the normal working levels of the oil in the good oil tank, Mr. Motter?
  - A Mr. Mutter, we normally operate off of one control. It



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will operate both a start and stop, and, as I stated previously, the pipeline in this instance normally requires twenty-four hour storage for weathering time, with a minimum of twelve hours. I would assume that in this case we would seat the float about half way up the tank, or probably about eight fect.

- Mow, that would be the low level, or the high level?
- The low level would possibly be six feet; the high level Λ about eight feet.
  - Q You would have a range there of two feet?
  - A That's right. For delivery.
  - Q What amount of capacity is available above eight feet?
- That would be the remainder tank, or slightly over 200 A barrels for a 500-barrel tank.
- And normally the bad oil tank won't have any oil in it unless the monitor has detected that oil, is that correct?
- That's right. We will carry a very low level in there. I would assume possibly not over two and a half to three feet, perhaps 50 barrels.
- Does treating of the bad oil in the bad oil tank have to be done manually?
- It can be equipped either way. Since this is only a one Ą or two well lease, to start with, we will, and since we are producing no water, we will set our facilities up for manual treating. I might add that our proposed system of ACT has a red light indica-

tor. At any time that there has been bad oil stored in the bad oil



comes up and sees the light on, he tank, any time the suitcher knows there has been bad oil passed since he has been there, and resets the equipment.

- C You are not relying on additional storage to prevent the waste of oil, in the event or malfunction you have automatic shutdown facilities?
- Yes, we propose automatic shut-down on all the wells on the header.
- ् Oh, does this PD meter incorporate a set stop counter for the allowable?
- We have not been required by the transporter of this crude to put on set stop counters. They're handling crudes in other installations similar to this for us in New Mexico. We have personally one feeling about a set stop counter for an allowable in that if the allowable is set for some figure, say, 10,000 barrels per month, that is gross oil, and net oil is not figured until the sample is run at the end of the month. We feel that on our top allowable lease that you would continuously run less than your allowable if a set stop counter were used. Since this is a lease that is unattended, as I stated before, not over two days, we feel that we could manually shut this lease in upon production of its allowable.
- If a set stop counter were incorporated, and if the set stop counter were set at the allowable, plus the last known BS&W content, you wouldn't lose any allowable?



ALBUQUERQUE, NEW MEXICO

i. That is correct. If we were allowed to do that, that would be entirely satisfactory, or say, some one percent --

- Whatever last month's figure was?
- It's all right.

MR. MUMMPR: I believe that's all. Thank you.

MR. PORTER: Anyone else have a question? The witness may be excused.

(Witness excused)

MR. PORTER: If nothing further to be offered in Case 2252, we'll take it under advisement and adjourn the hearing until 1:30.



I, ADA BRARMEY, Court Reporter, 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 machine shorthand and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITHESS my Hand and Seal this, the 19th day of April 1961, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

My Commission expires:

June 19, 1963

I do hereby certify that the foregoing is a complete receid of the proceedings in the Email or to a Case No. 2212.

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New Mexico Oll Conservation Commission

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Memo

From

A. L. Porter, Jr

To Lugal Dept

Secretary-Director
4/20/61

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# DRAFT

RSM/esr April 20, 1961

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. 2252

Order No. R- 1950

APPLICATION OF CITIES SERVICE PETROLEUM COMPANY FOR APPROVAL OF AN AUTOMATIC CUSTODY TRANSFER SYSTEM IN THE VACUUM-ABO POOL, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

#### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 19, 1961, at Santa Fe, New Mexico, before A. L. Porter, Jr. 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 day of April , 1961, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, A. L. Porter, Jr. , 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 Petroleum Company, is the owner and operator of the State B "J" Lease, comprising the S/2 of Section 35, Township 17 South, Range 35 East, NMPM, Lea County, New Mexico.
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That meters shall be checked for accuracy at least once each month until further direction by the Secretary-Director.

That 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."

# IT IS FURTHER ORDERED:

That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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