

Case No.

1580

Application, Transcript,  
Small Exhibits, Etc.

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

IN THE MATTER OF:

Case No. 1580

TRANSCRIPT OF HEARING

JANUARY 7, 1959

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

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

-----:  
IN THE MATTER OF: :

Case 1580 Application of Cities Service Oil Company for :  
permission to install lease automatic custody :  
transfer equipment. Applicant, in the above- :  
styled cause, seeks an order authorizing it to :  
install lease automatic custody transfer equip- :  
ment to receive and measure the oil produced :  
and marketed from its Government "D" Lease All :  
Sections 3 and 10, Township 14 South, Range :  
31 East, Chaves County, New Mexico. Appli- :  
cant proposes to utilize positive displace- :  
ment meters for measurement of the oil :  
delivered to the pipeline. :

-----:  
Mabry Hall  
Santa Fe, New Mexico  
January 7, 1959

BEFORE:

Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: We will take up Case 1580.

MR. PAYNE: Case 1580, "Application of Cities Service  
Oil Company for permission to install lease automatic custody  
transfer equipment."

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa Fe,  
New Mexico, representing the applicant. We have one witness,  
Mr. Motter.

(Witness sworn in).

(Whereupon, the documents were marked as Applicant's  
Exhibits One through Five for identification).

MR. UTZ: You may proceed.

E. F. MOTTER

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Will you state your name, please?

A E. F. Motter.

Q By whom are you employed?

A Cities Service Oil Company.

Q In what position?

A Division Engineer.

Q Have you previously testified before this Commission as an expert petroleum engineer and have your qualifications been accepted?

A Yes, sir.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. UTZ: They are.

Q (By Mr. Kellahin) Are you familiar with the application in Case Number 1580?

A Yes sir, I submitted the application myself.

Q Mr. Motter, generally are you familiar with the type of installation that is the subject of this application?

A Yes sir, we have numerous installations such as this, but this will be our first in New Mexico.

Q Now, have you prepared an exhibit in regard to the gathering system on this lease?

A Yes sir, Exhibit Number One shows our Government "B" Lease composed of 960 acres. It is composed of Section 3 and the north half of Section 10, Range 31 East, Township 13 South, Chaves County, New Mexico, and it is in the Caprock-Queen Pool. I have four wells circled there that are water injection wells allowed by Commission Order--I'll have to find it.

MR. UTZ: 1128.

A 1128, yes sir.

Q (By Mr. Kellahin) Exhibit Number One shows the lease ownership?

A Yes sir, Cities Service owns the lease, the Federal Government is the royalty owner.

Q Is the lease ownership and royalty ownership common throughout the area involved in this application?

A Yes sir, it is. To go a little bit further, Wells 1, 2, 3, 4, 5 and 6 are tank batteries on that Government "B" Lease now, composed of 19 tanks in the 6 batteries. We propose to remove 15 of those tanks, put in flow lines and test lines to where the various batteries are now located.

Q Now, would you refer to what has been marked as Exhibit Number Two and state what that is designed to show?

A Exhibit Number Two is the proposed gathering system that I have just outlined, it will enable us to reclaim 15 tanks.

Flow lines will be installed from the various positions where tanks are now located. The dotted lines indicate test lines from each one of those headers. We are in the process of forming a unit to be known as the Ricky-Queen water flood unit in this area. This installation is designed to accommodate considerably more production and area whenever this unit is formed.

A little bit further on this while I have this plat in front of me, our LACT unit will have an allowable shutdown switch which will pressure up the flow and test lines to these various wells, and we will use pressure operated motor control valves to drop the relays in the electric motors at each one of these wells. All wells on the lease are on a beam and are operated by electric motors.

Q Will you explain briefly the function of these test lines?

A Well, our testing procedure will be manual with this setup. We will be able to test any well on the lease at any time we choose through a manipulation of manual valves, both at the headers and at the location of the LACT unit.

Q Now, referring to that exhibit again, what is the approximate location of the central tank battery to be used?

A Well, it probably would be within a very few feet of the southeast corner of the northwest quarter of Section 3, Range 31 East, Township 13 South. The reason for choosing this particular location is that if this water flood unit is formed, this

will be more centrally located, not necessarily for the Government "B" Lease, but for our other wells that we plan to take into this unit. Furthermore, it is somewhat higher than our injection plant for our water flood and it will be very easy for us to grab the water for our LACT unit and to have the injection water rejected from the input wells.

Q Referring to what has been marked as Exhibit Number Three, state what that shows?

A That's the proposed LACT installation. We plan to incorporate the present four tanks that are in this battery, which I mentioned the location of previously, and add some components to it to form our LACT installation. I'll be glad to run through the flow diagram. Oil will come from the well through a header into the treater, from the treater through a monitor. The oil that goes through this will go through a diversion valve into tank "A," which is a good oil tank. Tank "A" will have liquid level switches at various levels to control the pipeline pump, and at present we plan to--anticipate to start the pipeline pump at about four feet. The pipeline pump, when the level reaches fourteen feet in tank "A," the valve which is also drilled into the monitor will diversify it over into tank "B" in case the pipeline pressure is not adequate to make delivery in the monitor. In case bad oil is coming from the treater, the oil will go to tank "B" and this will have liquid level controls in three positions. At six feet, it will start the bad oil pump and it will

run it back through the treater with chemical treatment. At the two-foot level, the pump will be stopped. If, for some reason, we are still unable to clear up the situation of the bad oil or if the pipeline is unable to make delivery, it will build up in tank "B" and will be equalized into tanks "C" and "D" and after equalization into those tanks, we will have a level of approximately fourteen and a half feet, which will shut in the lease. That is the valve which is shown just upstream of the header. And I omitted one valve in the drawing, we will actually have two valves in conjunction with the test line and one direct from the header, which shut in the lease.

Q Do those valves function automatically?

A Yes, these are electrically controlled and neumatically controlled.

Q The functions of the monitor are automatically?

A Yes sir, it is entirely electrically controlled.

Q Now, would you explain briefly the function of the test equipment?

A Well, as I stated previously, all testing or manipulation valves will be done manually, but we will be able to test any well on this lease or any of those that we propose to take into the unit later on. This is a Rollo test separator which we have already purchased and is in use now testing some wells on the lease. It is equipped with flood-type pump meters and two half barrel dump meters. We have checked it against some tanks and

found it to be very accurate. Wells will be tested probably at least once a month or perhaps sooner if necessary. They probably will be tested as often as once a week.

Q Under this type of equipment, is it sufficient to enable you to make the tests which may become necessary in connection with the flood program?

A Yes sir, and we can also use this same equipment to make any necessary GOR tests as requested by the Conservation Commission.

Q Do you have a GOR situation in this lease?

A No sir, all wells on the lease are under the 2,000 limit, I might point out, I know that on this one bottom pump on this drawing in the Caprock Pool we have had a bad parafin problem. We propose to pump the bottoms of the good oil tanks about once every six or eight hours. This pump will be operated by a time clock and it will probably operate for just a short amount of time, maybe ten minutes or something so we can get about five barrels of oil out to the treater and that way we will not be affected by the high bottoms.

Q You have a water injection pump here, but are you producing any quantities of water at the present time?

A No sir, we are not producing any water now, but we anticipate probably a good deal of water once we get water back from our injection wells. All this water will go to the treater and test separator and will go back to our injection plant where

We have facilities to treat this water and then it will be re-injected with any make-up water then coming from our supply wells.

Q Under this arrangement, is it going to be possible for you to measure the production from the individual wells on the lease?

A Yes sir, through this test meter, test separator.

Q Now, how about the line and delivery components on your --

A Well, that's outlined on Exhibit Number Four. These are the SR components, I'll just briefly run down through them. Item "A" is a filler which we plan to use, an AO Smith filler. "B" is an AO Smith deareator. Item "C" is an AO Smith S-12 PD meter, cast iron. It has a temperature compensating pack of 60 degrees and an automatic set stop counter to shut down the pipeline pump once each allowable has been produced. "D" is a prover connection and this will be set up so that we can use either a PD master meter or a prover tank. "E" is a Fischer back pressure valve. "F" is a McFarland gas operated sampler. It operates whenever delivery is being made to the pipeline and both the amount of oil taken and the frequency can be controlled with this type of sampler.

Q Your PD meter which is to be installed, is that a positive displacement meter?

A Yes, sir.

Q Is this type of equipment throughout the type of

equipment which has been recognized by the Commission?

A Yes sir, it is.

Q At various installations?

A At least four installations have been approved in New Mexico using this type of meter. We propose to prove this meter once each month for a period of three months and if we have no appreciable drift in that period, we would like to have the meter proven every six months thereafter. However, that is only for forms for the Commission that we are proposing that. We will probably prove this meter for our own satisfaction at least once a month and possibly much more often than that when it is first installed.

Q Now, is it possible then to effectively and accurately measure the production throughout?

A Yes, sir.

Q In your opinion, is this installation in the interests of conservation and the prevention of waste?

A We believe it is.

Q Now, have you made any check with the pipeline company, and who is the pipeline purchaser?

A Texas-New Mexico Pipe Line is the purchaser. We have gone over this installation numerous times with them and we have Exhibit Number Five, which is a copy of a letter from Texas-New Mexico stating that they are willing to co-operate and that this installation is acceptable to them.

Q Do you have the original of that letter in your files?

A Yes, I do have it.

Q In the event it was requested, would you make it available to the Commission?

A Yes sir, I have it with me now.

Q Were Exhibits One through Four prepared by you or under your direction?

A Yes sir, they were.

MR. KELLAHIN: At this time, we would like to offer in evidence Exhibits One through Five inclusive.

MR. UTZ: Without objection, Exhibits One through Five will be accepted.

Q (By Mr. Kellahin) Do you have anything you care to add to your testimony, Mr. Motter?

A I don't believe so.

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

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Motter, is the royalty working interest in this entire Government "B" Lease equal?

A Yes, it is.

Q Are you requesting exception to Rule 309 also in this case?

A Well, I assume that we should have made--there will be twenty wells when this is first put in the LACT unit; however,

as our need develops, there will only be twelve wells off of this particular lease that will be through the LACT unit in a five-spot pattern, so every other well will be converted to an injection well. I might --

Q Go ahead.

A I was going to say that we have storage with those four tanks for approximately eight hundred and fifty barrels on the levels that we have on tanks "A" and "B," which we feel is adequate perhaps when our flood is in full scale. That will only amount to some fifteen or sixteen hours storage, but we have switcher lifting within just a very short distance of here, which will be notified by signals if there is ever anything wrong, so we feel that we have adequate storage. Right now our production is approximately four hundred and fifty barrels a day, so that will give us about two days storage from those four tanks.

Q You will have more than six wells at first?

A Yes sir, we will have twenty on the Government "B" Lease when this system is first installed.

MR. UTZ: Mr. Kellahin, I believe this will be the proper time if you want to request exception to Rule 309, if you wish to do so.

MR. KELLAHIN: Mr. Examiner, in connection with this application, we do move for exception to Rule 309.

MR. UTZ: Is there objection to Counsel's request?

If not, it will be included in your application.

Q (By Mr. Utz) Do you intend to commingle in the Queen?

A That's correct, this is all Queen production.

MR. UTZ: Are there other questions of the witness?

MR. FISCHER: Yes, sir.

MR. UTZ: Mr. Fischer?

**CROSS EXAMINATION**

**BY MR. FISCHER:**

Q Is this treater a heater treater?

A Yes sir, that is a horizontal heater treater. The reason we are proposing to use a horizontal heater treater is that we feel we can drop out large quantities of free water without it being treated in the horizontal treater. That is about the only treater on the market that you can do that with.

Q Now, you will have gas for the heater treater?

A Yes, sir.

Q And you'll have gas operating some of your equipment here?

A Yes, sir.

Q Do you believe that when you get fully developed on your water flood plan of say twelve producing wells, that you will have enough gas left to perform the operation you need?

A If we do not have, we can safely install a compressor and operate on air then, but right now we feel we'll have an adequate supply of gas for all the pneumatic valves and controls.

Q Does the Texas-New Mexico Pipe Line require you to

heat your oil to any extent before delivery in the winter?

A Yes sir, in this particular pool, they sent a letter, I believe it was in 19--the winter of 1956, that they would not accept oil from any tank less than 50 degrees. We have heaters installed in all those--all of these tanks now, and we feel that our experience is adequate to show that our treater will be adequate to keep that oil at 50 degrees because it will almost be a continuous delivery to the pipe line.

Q Now, on these old tank batteries on your Exhibit One, there will be a heater there?

A Yes sir, those are all headers.

Q Except for the Well Number 8 and 9 and they will be delivering through the back header?

A That's correct.

MR. FISCHER: Thank you, that's all.

MR. UTZ: Any other questions of the witness?

CROSS EXAMINATION

BY MR. UTZ:

Q Did I understand you to state that in the event of line breakage between the header and the wellhead that you had arrangements made to shut down the pumps?

A We do not have any arrangements made and don't propose anything to shut down between the pumps. The only thing we have proposed currently is to install pressure switches at the pumps that will shut down the pump on pressure build-up in the line.

We are planning to install a pressure relief valve at the header in that it will, in the event one of the pumps will not shut down--say for instance lightening had struck the control box and frozen the contacts, we will put a pressure relief valve to pop at say some fifty pounds above what the well should shut in and this oil will be diversified to a pit and we will then have to pick it up from the pit and put it back through the heater treater. We investigated numerous types of controls and to be quite frank, we just think that they are a little too expensive to use. These are all fairly new lines and all the lines we propose to install will be new lines and we just don't feel we are going to have too much trouble with breakage because we will have very little corrosion and all the lines are laid in the surface and any severe corrosion would be easily visible, so we don't anticipate any trouble at all with flow lines on breakage.

Q These lines are buried or on the surface?

A They will all be on the surface.

Q Speaking of expense in order to protect this system against wasteage in case of line breakage, how much would each one of these valves cost?

A Well, the valve that we propose to use, the pressure operated valve, is very inexpensive. It runs about twenty-five dollars to put a valve that would operate both for pressure--your high and low pressure shut-down would entail some

four or five hundred dollars per well.

Q Couldn't that be done with two separate valves, low pressure valves --

A Not unless we could run electric controls back to each pumping unit to shut it in. It would mean the installation of separate valves at each pumping unit installation. We had thought about running an electric power line from the control at the back to the pumping unit, but it proved to be quite costly also.

Q There are some things I don't know about this unit, but it seems to me that if the high pressure valve only runs twenty-five dollars the low pressure valve couldn't run much more.

A Well, you have some other things to consider on that. That would also give us a lot of possible trouble on the low pressure shutdown due to the fact that the high pressure valve at the well to shut it down, it would probably be set at approximately a hundred pounds above what the normal line pressure is. The low pressure valve would have to be set somewhere below what that normal line pressure is. In the wintertime, you would have that line pressure possibly as much as fifty or sixty pounds above what you would in the summer and that would entail you to go around and make some adjustments on this. In other words, if we had our low pressure shutdown for say fifteen or twenty pounds past the breakage on the header, we may have that much flexion from the well to that point and it would never shut down until we had re-adjusted the valves in the wintertime.

Q Then it is not an operational problem you are speaking of, it is probably more of an expense problem?

A Yes. Of course, we have switchers that are practically continuously traveling over the field looking after the injection wells and everything. I just don't feel we will have any problem at all from line breakage, not any more than could be found in any other normal installation right now.

Q The switcher will be on it at all times?

A No sir, just daylight hours.

MR. UTZ: Any other questions of the witness?

MR. FISCHER: One other question. Mr. Motter, do you think that the salt behind the operation of those valves, the one coming off the header to the treater and the one to the test, in case that you did have a signal sent back to shut those valves in, wouldn't it seem like the salt might be behind the operation of those?

A Well, admittedly, the crude in the Caprock Pool carries a considerable amount of salt. We feel that once the water comes through with our crude production, it will probably eliminate any salt trouble we might have.

MR. FISCHER: That's all.

MR. UTZ: Are there other questions?

If not --

MR. KELIAHIN: In connection with your water, is that fresh water that is being injected?

A Yes, it is right now. When we get water returned from the wells, it will be used only as make-up.

MR. KELLAHIN: That's all.

MR. UTZ: Any other questions of the witness?

If not, the witness may be excused.

(Witness excused).

MR. UTZ: Any other statements to be made in this case?

If not, the case will be taken under advisement.

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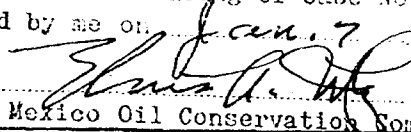
STATE OF NEW MEXICO )  
: ss  
COUNTY OF BERNALILLO )

I, JERRY MARTINEZ, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing was reported by me in Stenotype and that the same was reduced to typewritten transcript by me and contains a true and correct record of said hearing, to the best of my knowledge, skill and ability.

DATED this 22nd day of January, 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

  
Notary Public

My Commission Expires:  
January 24, 1962

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1580, heard by me on Jan. 7, 1959.  
 Examiner  
New Mexico Oil Conservation Commission

Case 1580



CITIES SERVICE OIL COMPANY

BOX 97

HOBBS, NEW MEXICO

December 15, 1958

New Mexico Oil Conservation Commission  
Box 871  
Santa Fe, New Mexico

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

Gentlemen:

Attached are three copies of corrected application for  
Lease Automatic Custody Transfer on the Cities Service Oil  
Company Government "B" Lease. In the first application the  
Government "B" Lease was erroneously reported in Lea County.  
Please make the necessary changes.

Very truly yours,

E. F. Motter  
Assistant Division Engineer

EFM/gk  
Attachs.

*Docket Mailed*  
*12-24-58 BP*

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. 1356  
Order No. R-1123

APPLICATION OF CITIES SERVICE OIL  
COMPANY FOR PERMISSION TO INSTITUTE  
A PILOT WATER FLOOD PROJECT IN THE  
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, 1958, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the New Mexico Oil Conservation Commission, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 12th. day of February, 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, Cities Service Oil Company, is the owner and operator of the following named oil wells in the Caprock-Queen Pool, Chaves County, New Mexico, to-wit:

|                        |           |             |
|------------------------|-----------|-------------|
| Government "B" No. 5,  | NW/4 NE/4 | Section 10; |
| Government "B" No. 6,  | SE/4 SE/4 | Section 3;  |
| Government "B" No. 10, | NE/4 SE/4 | Section 3;  |
| Government "B" No. 14, | SE/4 SW/4 | Section 3,  |

all in Township 14 South, Range 31 East, NMPM.

(3) That the applicant proposes to institute a pilot water flood project in Township 14 South, Range 31 East, NMPM, by the injection of water into the Queen formation in the Caprock-Queen Pool through the four wells described above at an approximate rate of 400 barrels of water per day per well.

(4) That at the time this case was heard the four proposed injection wells had a total productive capacity in excess of 2000 barrels of oil per month which is more or less representative of the average productive capacities of the other wells in the area.

(5) That the production of oil from the wells in the subject area has not declined to the point where additional oil may be recovered only by water flooding or by other secondary recovery methods, and that the subject area may be said to be in the primary recovery stage.

(6) That the injection of water, at the present time, into the Queen formation of the Caprock-Queen Pool through the four wells described above may stimulate the primary recovery of oil in the immediate area of the injection wells, but that the proposed program is not, however, a water flood project for purposes of secondary recovery as that term is generally understood.

(7) That no well should be allowed to receive a disproportionate share of the market demand for oil in the State of New Mexico when the production of oil from such well can be restricted without causing waste.

(8) That the production from the wells which might be affected by the proposed injection program could be curtailed without causing waste, provided the rate of injection is regulated.

(9) That the applicant should so regulate the injection of water in the proposed project as to permit the curtailment of production from the affected wells without causing waste.

(10) That the proposed program will not adversely affect the interests of any other operator in the Caprock-Queen Pool.

(11) That the applicant should be permitted to inject water into the Queen formation in the Caprock-Queen Pool through the four proposed injection wells described above, subject to the foregoing limitations:

IT IS THEREFORE ORDERED:

That the applicant, Cities Service Oil Company, be and the same is hereby authorized to inject water into the Queen formation in the Caprock-Queen Pool, Chaves County, New Mexico, through the following described wells:

|                        |           |             |
|------------------------|-----------|-------------|
| Government "B" No. 5,  | NW/4 NE/4 | Section 10; |
| Government "B" No. 6,  | SE/4 SE/4 | Section 3;  |
| Government "B" No. 10, | NE/4 SE/4 | Section 3;  |
| Government "B" No. 14, | SE/4 SW/4 | Section 3,  |

all in Township 14 South, Range 31 East, NMPM;

-3-

Case No. 1356  
Order No. R-1128

PROVIDED HOWEVER, That the applicant shall regulate the injection of water into the above-described wells so that the production from the wells affected by the injection project can be operated without causing waste.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

EDWIN L. NECHER, Chairman

MURRAY E. MORGAN, Member

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

S E A L

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OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO

Date 1-8-59

CASE NO. 1580

HEARING DATE 1-7-59

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

approve Cities service LACT unit as follows:

1. approve exception to Rule 309, more than 16 wells. or all producing wells on Gov't "B" lease.
2. Meters shall be tested each month and report to the commission the results of such tests. Such testing shall continue until further instructions from the sec. director.
3. Coaming being approved only in the Caprock. Queen.
4. Equipment shall be installed to prevent the loss of oil in the event of flow line break between wellhead and LACT header.

  
Staff Member

DOCKET: EXAMINER HEARING JANUARY 7, 1959

OIL CONSERVATION COMMISSION 9 a.m., Mabry Hall, State Capitol, Santa Fe

The following cases will be heard before Elvis A. Utz, Examiner:

CASES 1572 - 1580

CASE 1572:

Application of Mrs. E. G. Woods for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of her Federal-Simon "A" Well No. 1 located in the NW/4 NE/4 of Section 29, Township 17 South, Range 32 East, Lea County, New Mexico, in such a manner as to permit the production of oil from an undesignated Yates oil pool and oil from the Maljamar Pool through parallel strings of tubing.

CASE 1573:

Application of Southwestern, Inc. Oil Well Servicing for permission to make a "slim hole" completion. Applicant, in the above-styled cause, seeks an order authorizing it to utilize the "slim hole" method of completion for a well located in the SE/4 NW/4 Section 32, Township 16 South, Range 30 East, Square Lake Pool, Eddy County, New Mexico. Applicant proposes to utilize 2½ inch tubing as a substitute for casing in the above-described well.

CASE 1574:

Application of The Texas 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 W/2 NW/4, NE/4 NW/4, NW/4 NE/4 of Section 31, Township 22 South, Range 38 East, Lea County, New Mexico, said unit to be dedicated to applicant's A. H. Blinbry MCT-3 Well No. 1 located 660 feet from the North and West lines of said Section 31.

CASE 1575:

Application of The Texas Company for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its Henderson Well No. 5 located in the NW/4 NE/4 of Section 30, Township 21 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Penrose-Skelly Pool and oil from the Paddock Pool through parallel strings of tubing.

CASE 1576:

Application of Sinclair Oil & Gas Company for a salt water disposal well. Applicant, in the above-styled cause, seeks an order authorizing it to convert its dry and abandoned No. 2 State Lea 403 Well to a salt water disposal well in the Devonian formation, South Vacuum-Devonian Pool; said well is located 660 feet from the South and West lines of Section 22, Township 18 South, Range 35 East, Lea County, New Mexico.

CASE 1577:

Application of Pure Oil Company for permission to install lease automatic custody transfer equipment. Applicant, in the above-styled cause, seeks an order authorizing it to install lease automatic custody transfer equipment to receive and measure the oil produced and marketed from the South Vacuum Unit located in Township 18 South, Range 35 East, Lea County, New Mexico. Applicant proposes to utilize positive displacement meters for measurement of the oil delivered to the pipeline.

CASE 1578:

Application of Amerada Petroleum Corporation for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its Turner Well No. 1 located in the SW/4 SW/4 of Section 17, Township 20 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit the production of oil from an undesignated Abo pool and oil from the Warren-McKee Pool through parallel strings of tubing.

CASE 1579:

Application of Amerada Petroleum Corporation for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its Turner No. 2 Well located in the NW/4 SE/4 of Section 17, Township 20 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Warren-McKee Pool and oil from an undesignated Connell pool through parallel strings of tubing.

CASE 1580:

Application of Cities Service Oil Company for permission to install lease automatic custody transfer equipment. Applicant, in the above-styled cause, seeks an order authorizing it to install lease automatic custody transfer equipment to receive and measure the oil produced and marketed from its Government "B" Lease in Sections 3 and 10, Township 14 South, Range 31 East, Chavez County, New Mexico. Applicant proposes to utilize positive displacement meters for measurement of the oil delivered to the pipeline.

CONTINUED CASE

CASE 1516:

Application of El Paso Natural Gas Company for two non-standard gas proration units and for the approval of one unorthodox gas well location. Applicant, in the above-styled cause, seeks an order establishing a 120-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the N/2 SW/4 and the SW/4 SW/4 of Section 4, Township 25 South, Range 37 East, said unit to be dedicated to the applicant's Wells Federal No. 3 Well located 1980 feet from the South and West lines of said Section 4. Applicant further seeks the establishment of a 200-acre non-standard gas proration unit in the Jalmat Gas Pool consisting of the SE/4 SW/4 of Section 4 and the NW/4 of Section 9, Township 25 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to the applicant's Wells Federal No. 11 Well located 430 feet from the South line and 2317 feet from the West line of said Section 4. Applicant further seeks approval of the unorthodox gas well location of the said Wells Federal No. 11 Well.

THE MIDLAND OIL COMPANY

P. E. WESTLAND, JR.  
GENERAL MANAGER

January 2, 1958

P. O. BOX 1155  
MIDLAND, TEXAS

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

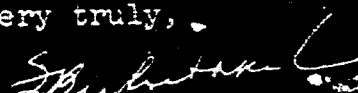
Attention: Mr. E. F. Motter  
Assistant Division Engineer

Gentlemen:

This is in reply to your letter of December 23, 1958, concerning your lease automatic custody transfer unit on the Government "B" Lease, Caprock Queen Pool, Sections 3 and 10, T-14-S, R-31-E, Chaves County, New Mexico.

We have examined your proposal and concur in it in every respect. We would be pleased to use the unit for automatic custody transfer.

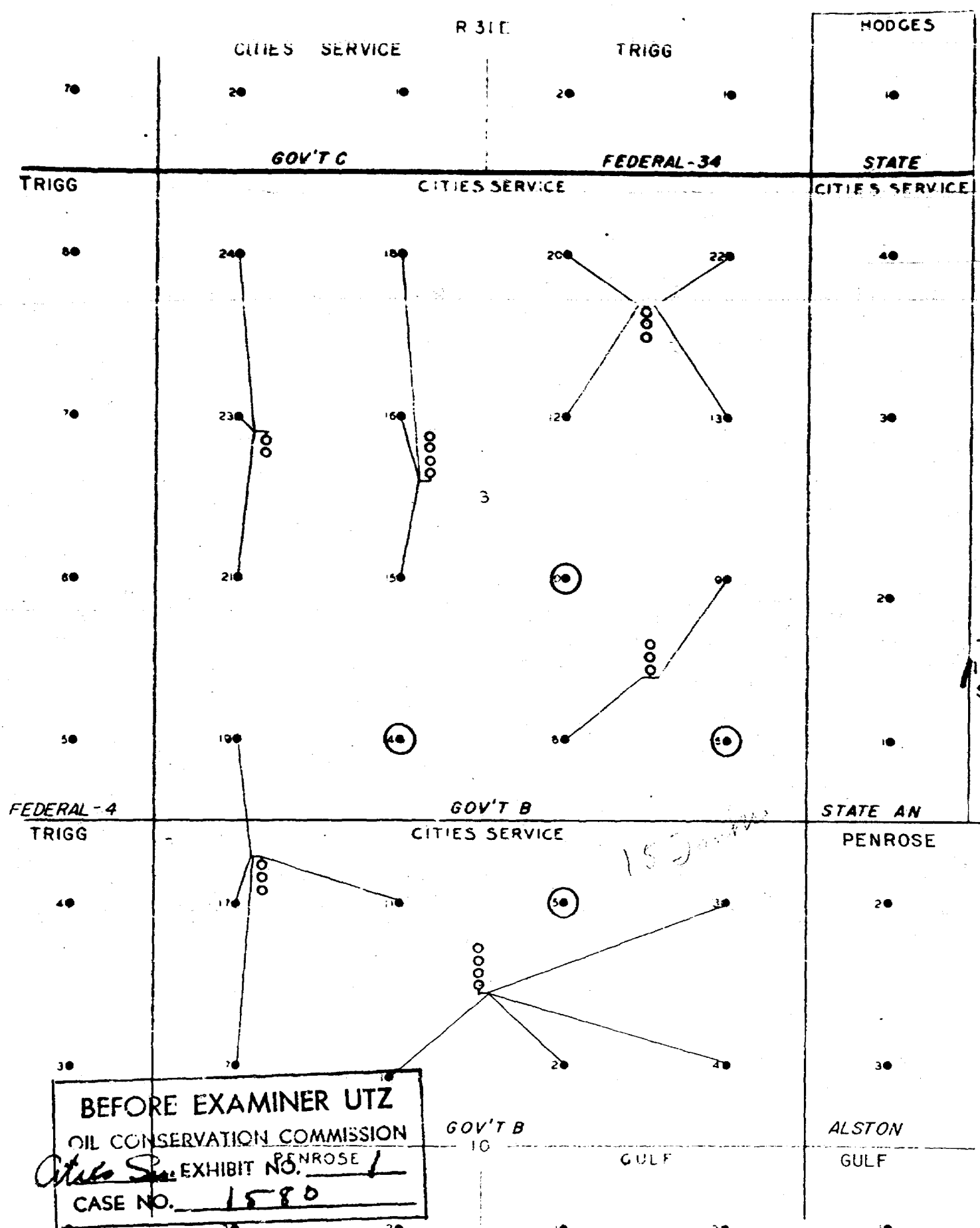
Yours very truly,



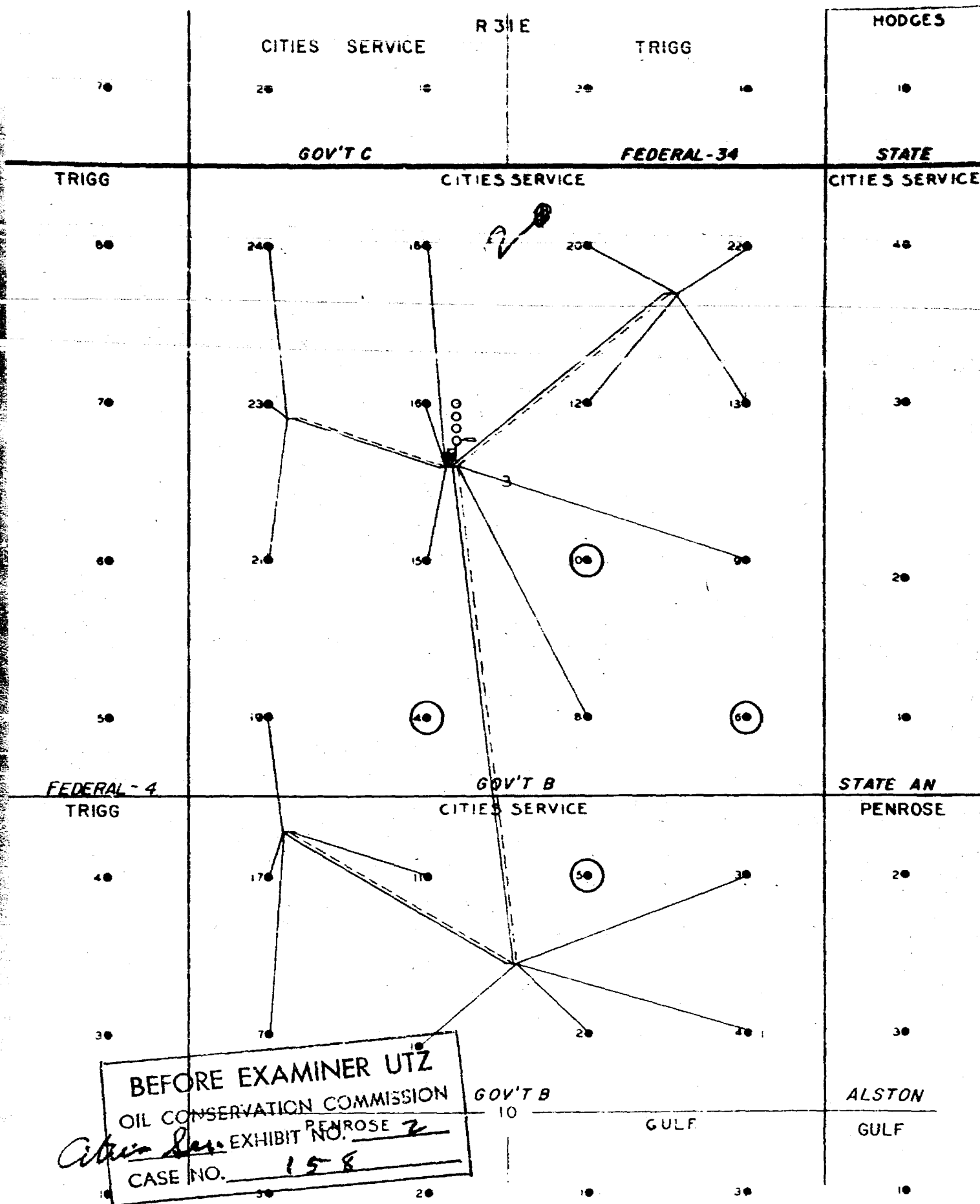
FBWjr-btk

Exhibit 5

BEFORE EXAMINER UTZ  
CIL CONSERVATION DIVISION  
*Citiz. Serv.* EXHIBIT NO. 5  
CASE NO. 1580



Cities Service Oil Co.  
 EXISTING GATHERING SYSTEM  
 GOV'T B LEASE



BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 2  
CASE NO. 158

Cities Service Oil Co.  
PROPOSED GATHERING SYSTEM & LACT  
GOV'T B LEASE

# CITIES SERVICE OIL CO.

## PROPOSED LACT INSTALLATION

### CAPROCK POOL, CHAVES CO., N.M.

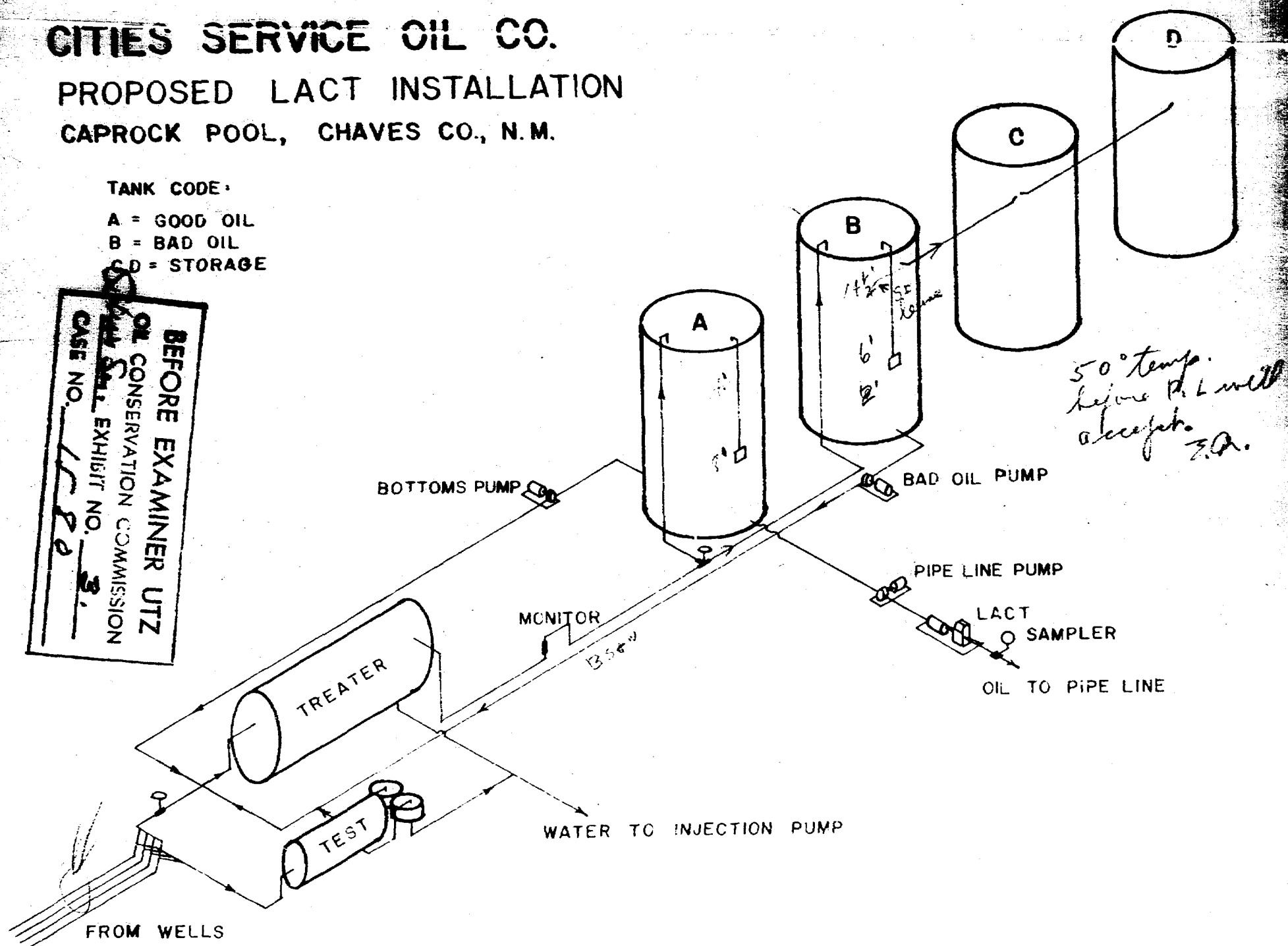
#### TANK CODE:

A = GOOD OIL

B = BAD OIL

CD = STORAGE

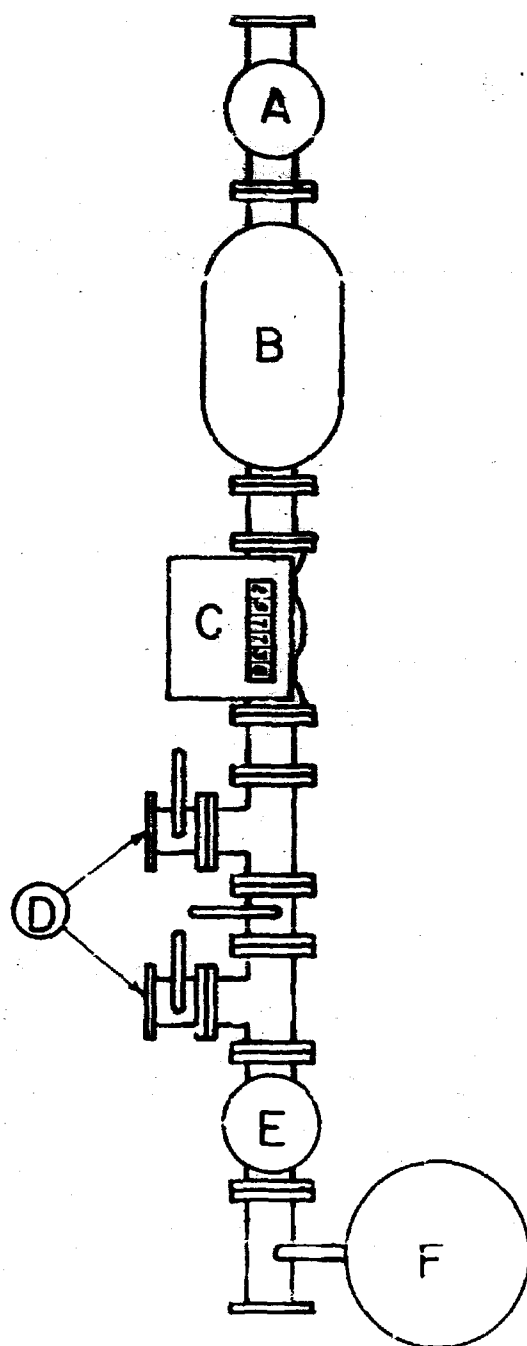
BEFORE EXAMINER UTZ  
OIL CONSERVATION COMMISSION  
CASE NO. 1582  
EXHIBIT NO. 3



# A C T COMPONENTS

CODE :

- A Filter
- B Decelerator
- C P.D. Meter
- D Proover Connection
- E Back Pressure Valve
- F Sampler



Cities Service Oil Co.

|                             |                      |
|-----------------------------|----------------------|
| BEFORE EXAMINER UTZ         |                      |
| OIL CONSERVATION COMMISSION |                      |
| <i>Cities Service</i>       | EXHIBIT NO. <u>4</u> |
| CASE NO. <u>1580</u>        |                      |

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. B-1323

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. Utn, 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 21<sup>st</sup> 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. Utn, 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 following-described acreage:

TOWNSHIP 14 SOUTH, RANGE 31 EAST, NEPM  
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.

-2-

Case No. 1580  
Order No. B-1326

(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 above-described 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 18, Township 14 South, Range 31 East, NEPM, 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.

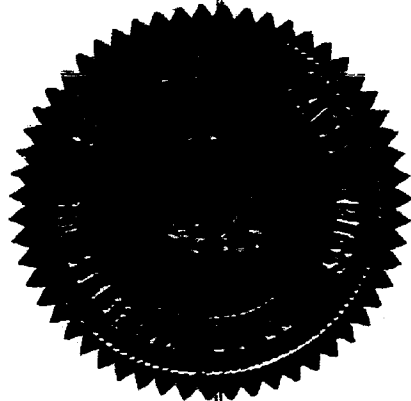
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*John Burroughs*  
John Burroughs, Chairman

*Murray E. Morgan*  
Murray E. Morgan, Member

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



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

January 22, 1959

Mr. Jason Kellahin  
Kellahin & Fox  
P.O. Box 1713  
Santa Fe, New Mexico

Dear Mr. Kellahin:

Enclosed herewith please find Order No. R-1326 entered in Case No. 1580 authorizing the installation of automatic custody transfer equipment on the Government "B" Lease. You will note that this order requires that the meters used in the automatic custody transfer equipment shall be checked for accuracy once each month until further order of the Secretary - Director.

Results of tests shall be filed with the appropriate district office of the Commission and shall be on the meter test report form which is available at all district offices.

Very truly yours,

A. L. Porter, Jr.  
Secretary - Director

ALP/DSN:bp  
Encls.

C  
O  
P  
Y



Case 1580

**CITIES SERVICE OIL COMPANY**

BOX 97

HOBBS, NEW MEXICO

December 12, 1958

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

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

Gentlemen:

It is respectfully requested that the Oil Conservation Commission schedule a hearing at an early date in Santa Fe, New Mexico, to consider our application to install Lease Automatic Custody Transfer on the Government "B" Lease, Caprock Queen Pool, Lea County, New Mexico. In support of this application, the following data is presented:

1. The installation of Lease Automatic Custody Transfer will allow handling of oil through positive displacement meters, sampling equipment and related facilities to measure and account for oil produced from the Government "B" Lease.
2. The Government "B" Lease is composed of 960 acres, fully developed by twenty-four wells. Four wells have been converted to water injection wells for pilot waterflood as per New Mexico Oil Conservation Commission Order No. R-1128 and the production from the remaining twenty wells will be periodically tested by dump type meters prior to delivery to the Automatic Custody Transfer unit.
3. Installation of Lease Automatic Custody Transfer is in the interest of conservation by preventing the loss of volatile fractions and reducing the hazards of ordinary tankage.
4. Delivery of crude will be made to the Texas-New Mexico Pipe Line Company who have verbally consented to the installation of a Lease Automatic Custody Transfer system.

A plat of the Government "B" Lease and all offset operators is attached hereto and indicates the location of the proposed installation.

Very truly yours,

E. F. Motter  
Asst. Division Engineer

EFM/gk  
Attach.