

Case Number.

4145

Application

Transcripts.

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. 4145
Order No. R-3775

APPLICATION OF TENNECO OIL COMPANY
FOR AN EXCEPTION TO ORDER NO. R-3221,
AS AMENDED, LEA AND EDDY COUNTIES,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 4, 1969,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 10th day of June, 1969, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, 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, Tenneco Oil Company, is the owner
and operator of certain leases in the Lusk Field comprising the
SW/4 NW/4 of Section 19, Township 19 South, Range 32 East, NMPM,
Lea County, New Mexico, and the NE/4 of Section 24, Township 19
South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) That effective January 1, 1969, Order (3) of Commission
Order No. R-3221, as amended, prohibits in that area encompassed
by Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, the
disposal, subject to minor exceptions, of water produced in
conjunction with the production of oil or gas, or both, on the
surface of the ground, or in any pit, pond, lake, depression,
draw, streambed, or arroyo, or in any watercourse, or in any

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other place or in any manner which would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.

(4) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

(5) That the State Engineer has designated, pursuant to Section 65-3-11 (15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.

(6) That the applicant seeks an exception to the provisions of the aforesaid Order (3) to permit the disposal of salt water, produced by applicant's wells completed on said Lusk Field leases, in unlined surface pits on said leases.

(7) That the subject wells presently produce approximately 60 barrels of water per day.

(8) That there appears to be no shallow fresh water in the vicinity of the subject leases for which a present or reasonably foreseeable beneficial use is or will be made that would be impaired by contamination from the subject pits.

(9) That the applicant should be permitted to dispose of salt water produced by wells located on said leases in unlined surface pits located on said leases.

IT IS THEREFORE ORDERED:

(1) That the applicant, Tenneco Oil Company, is hereby granted an exception to Order (3) of Order No. R-3221, as amended, to dispose of water produced in conjunction with the production of oil or gas, or both, by its wells located in the SW/4 NW/4 of Section 19, Township 19 South, Range 32 East, NMPM, Lusk Field, Lea County, New Mexico, and the NE/4 of Section 24, Township 19 South, Range 31 East, NMPM, Lusk Field, Eddy County, New Mexico, in unlined surface pits located in said subdivisions.

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(2) That the Commission may by administrative order rescind such authority whenever it reasonably appears to the Commission that such rescission would serve to protect fresh water supplies from contamination.

(3) 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.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



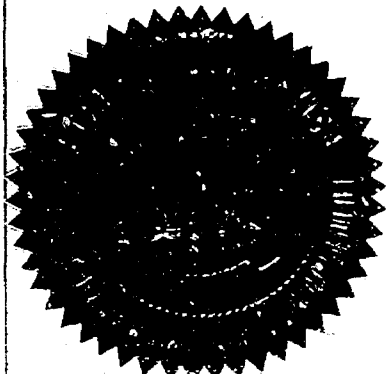
DAVID F. CARGO, Chairman



ALEX J. ARMIJO, Member



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



esr/

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SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

June 4, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Tenneco Oil
Company for an exception to
Order No. R-3221, as amended,
Lea And Eddy Counties, New
Mexico.

Case 4145

BEFORE: DANIEL S. NUTTER, Examiner

TRANSCRIPT OF HEARING

JUL 23 1969

MR. HATCH: Case 4145, application of Tenneco Oil Company for an exception to Order No. R-3221, as amended, Lea and Eddy Counties, New Mexico.

MR. KELLY: Booker Kelly of White, Gilbert, Koch and Kelly, appearing on behalf of the Applicant. I have one witness.

(Thereupon, Applicant's Exhibits 1 through 4 were marked for identification.)

LOUIS WILLIAMS

called as a witness by the Applicant, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLY:

Q Would you state your name, your position, and your employer, please?

A I am Louis Williams, a Petroleum Engineer employed by Tenneco Oil Company in Midland, Texas.

Q Have you previously qualified as an expert Petroleum Engineer before this Commission?

A Yes.

Q Referring to what has been marked as Exhibit No. 1, a plat of the area, would you briefly explain what

Tenneco seeks by this application?

A Tenneco seeks an exception to the State's No Pit Order No. R-3221 for the two leases which are outlined in orange in roughly the center of this plat; and we further seek permission to dispose of produced salt water from wells on these leases into unlined pits located on these leases.

Q How many wells are involved?

A On the little 40-acre tract located in Section 19 of 19-32, Lea County, there is one well. This is Tenneco's Miller lease. On the adjacent lease in Eddy County there, we have three wells completed in the Yates, which is the water producing formation of this area and one well in the Strawn, which does not produce water.

Q So there will be three wells which you are seeking to dispose of water in unlined pits?

A Right.

Q Will you explain what the area marked in red is?

A The area in red, below this red line near the bottom of the map, is the area excepted from this No Pit Order by the State's Order R-3221-B. Now, the area outlined in red above this horizontal red line is an area lease operated by Texaco, which has previously been granted an

exception to the same Order.

Q Is there any other areas in the general area of your three wells that have been granted exceptions?

A Yes, there is another lease, it is off this map, this came to light after this map was prepared. But the thing is located two miles north of the north edge of this map. There is a red arrow there at the top of your map pointing to where that location would be. It is a Pan American lease in Section 27 of 18-31 in Eddy County.

Q That is two sections north of the top edge of this map?

A Right.

Q What are the three blue circles?

A These three blue circles represent areas of fresh water wells.

Q Now, the three blue circles, are they the same location of wells that were shown in the Texaco case that you referred to?

A Yes.

Q In this area, is there natural salt water lakes?

A Yes, in this area, particularly in the area south of the leases of interest here, there are numerous

surface lakes where the water is highly saline.

Q Now, at the present time, what is Tenneco and other operators in the area doing as far as disposing of their salt water, produced water?

A Well, Tenneco's water from these leases encircled here in orange as well as all other Tenneco leases in this area, the produced water is trucked by commercial trucks down to tailing pits belonging to the Potash Mines located immediately below this red line in the excepted area.

Q As a matter of fact, does the excepted area, or so called Potash area actually extend west and north of the Tenneco property?

A Yes, it does. As you go on farther west of where this map shows, this excepted area goes back to the north. Actually, our leases in question here are south of the northernmost extremity of this no pit area.

Q As far as you are aware, is there any particular difference in the terrain or drainage, or underground water situation between the Tenneco property and the areas that have been excepted by the Commission previous to this?

A It is basically the same. The drainage, both

surface and sub-surface in this general area, is generally to the south and to the southwest. This has been demonstrated in the literature a number of times.

Q Actually, this has been found by the Commission at a previous Hearing, hasn't it?

A Yes, it has.

Q Now, how much water is presently being produced by the three Tenneco wells?

A The three Tenneco wells, the lease where the three wells are located produce currently about 18 barrels a day. The other lease where the one well is located, the Miller, produces approximately 42 barrels a day.

Q So you have roughly 60 barrels a day that you are disposing of?

A That's correct.

Q Are you aware of the figures that were given by Texaco and Pan American in their applications?

A Yes. Texaco in their testimony before the Commission for this excepted area in red down here in Section 32 cited the figure of 25 barrels per day, as I remember. And the Pan American application up here, I believe the number was 207 barrels a day.

Q Now, let's refer to what has been marked as

Exhibit No. 2, your water analysis. Will you go over that for the Examiner?

A This is simply the report or the results of the laboratory water analysis done by Halliburton for us, a sample from our Miller lease, from the Ohio Jones lease, and another sample of fresh water from a fresh water well located approximately 2 3/4 miles northeast of our Miller lease. And it simply demonstrates the salinity of the produced water as opposed to fresh water in the area.

Q Now, I believe you previously testified the Potash tailing pits which both the Potash Companies and oil companies are using, is about two miles south of this red line?

A Yes, one particular tailing pit that the water from the Ohio Jones and the Miller lease is going to. Now, there are other tailing pits in this area.

Q Are you aware of the chloride content of that water? Is it substantially more than the water that you are producing?

A Yes. I can't quote you a number for chloride in parts per million, but it is several times -- of the order of ten or twenty times more salty than the produced

water from the Yates formation.

Q In your opinion, based on your knowledge of the drainage conditions in this area, do you feel that putting water in unlined pits to the extent of 60 barrels a day would have any adverse effect or any contaminating effect on the fresh water wells that you have located on Exhibit No. 1?

A No, sir, I don't believe that our 60 barrels a day would have any effect on those fresh water wells.

Q Turning to what has been marked as Exhibits 3 and 4, will you explain what is shown on those exhibits to the Examiner?

A These are simply plots of water and oil production versus time for the two leases in question, and both curves have on them dash lines which are extrapolations of the general production trend of the two leases; and in both cases, there is a noticeable decline, indicating that one can expect water production to decrease with time.

Q I notice that there is a substantial increase in about the middle of 1968 on your water production. That is on Exhibit No. 3. What is the explanation for that?

A In both cases, on both the Miller and the Ohio Jones lease, let's take the Miller Lease first, when we were, as were other operators in the State, faced with a No Pit Order which was originally to be effective 1-1-69, and later extended to 3-1-69, recognizing that the Miller lease was approaching an economic limit, and if we did get into excessive salt water disposal costs, we would already be at an economic limit, we went in there and did some work on this well, installed larger pumping equipment and cleaned the well out in an attempt to increase production, and about all we succeeded in doing was increasing our water. We didn't help the oil situation at all.

And in the case of the Ohio Jones Lease, this was originally a three-well lease. We had the wells 1, 2, and 6. No. 6 declined to a non-commercial point, oh, some two-and-a-half years ago, and it was shut, pumping equipment removed, and temporarily abandoned. But there again, when we were faced with the 1-1-69 deadline, and in an attempt to make that lease more profitable in view of the pending extra salt water disposal costs, we reinstalled pumping equipment on the No. 6 Well, and put it back to pumping. Well, of course, as you might expect during this long shut-in period, liquids in the reservoir

had accumulated around the wellbore, and as a result when we started pumping the well, we pumped for the first few months what you might call flush production. That is now gone, and we anticipate that the lease will rapidly go back to its original trend, decreasing production.

Q You feel that the future, as far as the amount of water produced, will decline gradually over the life of these wells?

A Yes.

Q 60 barrels will be your initial production rate?

A That is our water production, and I would expect it to decrease in the future.

Q Now, what is your present daily oil production for these wells?

A Referring to the Miller, to the Miller curve, our present production, March is the latest figure plotted on here, and that lease for March produced approximately 150 barrels of oil, which would be five barrels a day, slightly less than five barrels a day for that lease, on the average.

And on the Ohio Jones, in March that lease

produced 240 barrels for the month, for an average of 80 barrels per well, or roughly 3 barrels per day per well.

Q So these wells are pretty far down the line?

A They are marginal, at best.

Q What is the cost to Tenneco, now, of hauling this water?

A We are presently paying Commercial Service 19 cents a barrel to truck this water to a tailing pit.

Q How does that come out on a monthly cost for the two leases?

A Monthly?

Q Yes, if you can calculate it?

A Oh, in the neighborhood of \$350.

Q Now, assuming that you would have to continue to truck this water at that cost, what would be the effect as far as the economic limit of production on these wells?

A Well, if we are allowed to dispose of our water in pits without any excessive salt water disposal costs, we have something like two years of remaining economic life for these two leases. However, with the added salt water disposal cost, the economic limit is

with us now for all practical purposes.

Q Now, I assume that this field is an old field, these are old wells, right?

A Right.

Q There probably has been a lot of water produced and dumped in unlined pits over the years, is that correct?

A That's correct.

Q How does the amount of water that you plan to put in unlined pits, what is the relationship as far as the total amount of water is that has been put in unlined pits over the years?

A In these two particular leases only now, I have estimated that there has been some 150,000 barrels of water disposed of in the past into these two pits. And I have also estimated that with the remaining economic life that we now figure on, we should have some 25,000 to 30,000 barrels of water to dispose of in the future before the leases are abandoned.

Q So, in your opinion, would the granting of this application to allow you to dispose of this salt water have any particular effect on this area, as far as increasing the contamination of any potable fresh water?

A I don't believe there will be any appreciable effect.

Q Would the granting of this application allow you to produce oil that would otherwise be left in place?

A Yes, it would.

Q Were Exhibits 1 through 4 prepared by you or under your supervision?

A Yes.

MR. KELLY: At this time, I move the introduction of Exhibits 1 through 4.

MR. NUTTER: Tenneco's Exhibits 1 through 4 will be admitted in evidence.

(Thereupon, Applicant's Exhibits 1 through 4 were admitted in evidence.)

MR. KELLY: That is all.

MR. NUTTER: Any questions of the witness?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Williams, this well over here in Section 27 on your Exhibit No. 1, apparently a water well there, what is the depth of that water?

A This water, Mr. Examiner, is, to my knowledge, is about 550 feet.

Q Was that well included in the Texaco exhibit?

A This well was referred to in their testimony.

Q I think the Texaco case gave the depth of all the water wells that they showed in the area?

A It might have, yes.

Q It was reported at that time as being about 550 feet, is that correct?

A I think so.

Q What about the well down in Section 34, do you have a depth on it?

A No, sir, I don't.

Q And the one up in the northeast in Section 8?

A I don't have a specific depth, but I believe I can safely say that all of these wells are approximately 500 feet or less in depth.

Q Or less. How much less?

A Let's say from 300 to 500 feet.

Q They are what they would refer to as being Triassic wells?

A That's correct. These fresh water sands come and go in that area. They are very erratic, as they are all over the State.

Q In this general area, there are two types of wells, the shallow wells which are producing from the

alluvium on the surface, and they run anywhere from 60 to 100 or 120 feet, and then the Triassic wells that run from 300 to 500 feet.

A These wells are of the class 300 to 500 feet.

Q All of them are?

A Yes.

Q You mentioned that you were paying this trucker 19 cents a barrel to truck the water down to the tailing pond about two miles south. Do you have to pay any additional fee to put the water into the pond then?

A No, sir, the 19 cents is the trucking charge only.

Q Does the trucker have to pay a fee to put the water into the pond?

A I'm not certain what these truckers have with the Potash companies, and I would hesitate to say. There is no additional cost to us.

Q The 19 cents you pay him to take it away?

A Right. Now, I do know in other cases, in fact, it is a common practice in the State -- we pay 19 cents. Well, now, this 19 cents I am talking about, this varies with the distance the water is to be trucked. This particular figure applies to not more than a ten-mile radius to the disposal point. And then in most cases, you are faced

then with an additional five cents a barrel to put it in a disposal well. But in this case, is going into these surface pits, and I am not sure what arrangement these truckers have with the Potash companies.

Q This is a contract trucker that you utilized?

A Yes.

Q I presume these wells are the shallow old Lusk, Yates, Seven Rivers, or whatever it is?

A Yes, sir the three wells that we are referring to now on the Ohio Jones, that is the 1, 2, and 6, are Yates. And the other well there in the southwest corner of this tract encircled in orange, there are two wells there close together, the one there is a Strawn well. And the Strawn historically in this area does not produce water.

Q That is what I was going to ask you, if you had any Strawn wells on your leases in this area?

A We have several Strawn wells in this area, and they all produce either none or minute quantities of water. But the three Yates wells do make the water, as does the one on the Miller lease adjacent to them.

Q Do you anticipate water production here on these marginal wells on these two leases will increase

as you approach the economic limit, or will it decrease with the oil?

A No, sir, I anticipate that the water will decrease right along with the well.

Q The total fluid production will decrease, in other words?

A Right.

MR. HATCH: On your contract to haul water from your different leases, not only this one but you mentioned the others. Is that contracted to be hauled to a particular place or just off the lease?

THE WITNESS: That is just off the lease. Now, what you do, when you make an agreement with these people, they will have a disposal source or points somewhere near your property.

MR. HATCH: Does Tenneco know what that source is?

THE WITNESS: Yes. Depending on how far that point is from your lease determines the rate that you pay.

MR. NUTTER: Up to a ten-mile radius, it is 19 cents, and then it graduates up as you get farther and farther away?

Any other questions of Mr. Williams? You may be excused. Do you have anything further, Mr. Kelly?

MR. KELLY: No.

MR. NUTTER: Does anyone have anything else they wish to offer in Case 4145? We will take the Case under advisement, and call Case 4146.

I N D E XWITNESSPAGE

LOUIS WILLIAMS

Direct Examination by Mr. Kelly

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Cross Examination by Mr. Nutter

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EXHIBITSMARKEDADMITTED IN
EVIDENCEApplicant's Exhibits
1 through 4

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STATE OF NEW MEXICO)
) SS.
 COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter in and
 for the County of Bernalillo, State of New Mexico, do
 hereby certify that the foregoing and attached Transcript
 of Hearing before the New Mexico Oil Conservation
 Commission was reported by me, and that the same is a
 true and correct record of the said proceedings, to the
 best of my knowledge, skill and ability.

Samuel R. Mortelette

I do hereby certify that the foregoing is
 a true and correct record of the proceedings in
 the case of 4145
 held on 6/4, 1969.

James Examiner
 New Mexico Oil Conservation Commission

Case
File
4145

NEW MEXICO
OIL CONSERVATION COMMISSION

MAILED
29 MAY 22 PM 1 36

FIELD TRIP REPORT

Date 5/20/69

Name of Employee R. L. Stamets

Time of Departure 9:30 a.m. Time of Return 4:30 p.m.

Miles Travelled 171

In the space below please indicate purpose of trip and duties performed, listing wells or leases visited.

Check two dry holes in Chaves County, 6-15-28, not ready, 36-14-27, o.k.

Picked up two windmill samples. Checked Dalport discovery well, 36-14-29. No water produced. Checked Lusk-Strawn, Lusk-Yates & West Lusk-Yates Pools for R-3221 violations. None apparent.

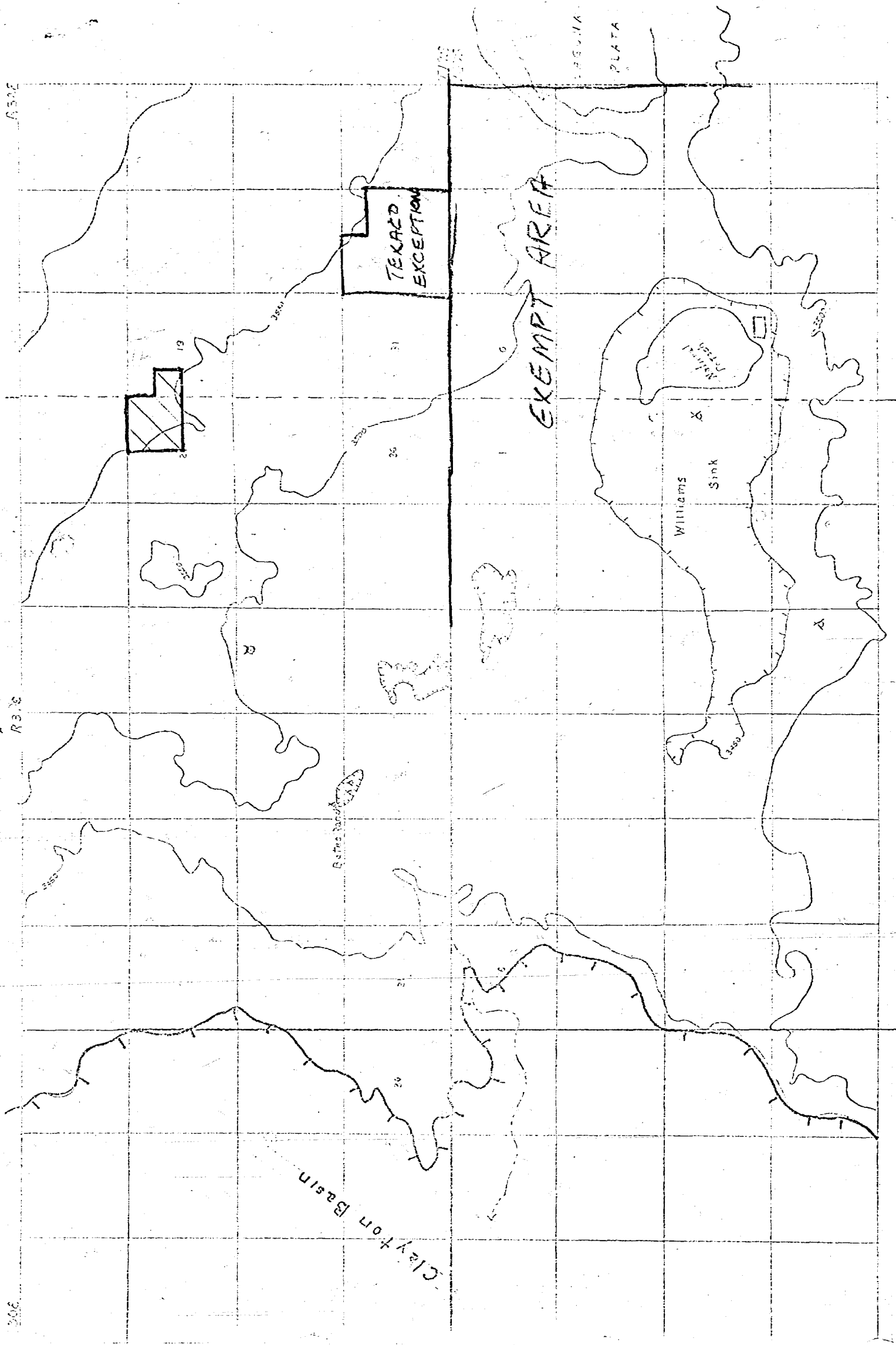
In reference to Case 4145, application by Tenneco for exception to R-3221, I checked with Bob Lindsey at the Phillips Lusk Plant. He said their water was piped in from near Buckeye. They had drilled a well at the plant but found only minor quantities of water. The drainage appears to be to the southwest. The closest water wells in that direction are the Bates Ranch wells 2½ miles W SW. The Phillips plant is located near the north NE quarter section line of Sec. 19-19-32.

R. L. Stamets
Employee's Signature
District # 2

A32E

R32E

206



TEXAS
EXCEPTION

EXEMPT AREA

Williams
Sink

Clayton Basin

PLATA

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 4, 1969

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or
Elvis A. Utz, Alternate Examiner:

CASE 4121: (Continued from the May 7, 1969, Examiner Hearing)
Application of Roger C. Hanks for special pool rules, Lea County,
New Mexico. Applicant, in the above-styled cause, seeks the
promulgation of special pool rules for the Bar U-Pennsylvanian
Pool, Lea County, New Mexico, including a provision for 160-
acre spacing and proration units and the assignment of 80-acre
allowables.

CASE 4143: (Continued from the May 21, 1969, Examiner Hearing)
Application of Amerada Petroleum Corporation for downhole
commingling and special gas-oil ratio limitation, Lea County,
New Mexico. Applicant, in the above-styled cause, seeks
authority to commingle production from the Eumont Gas Pool and
the Skaggs-Grayburg Pool in the wellbore of its Fred Turner,
Jr., "A" Well No. 2, the Eumont completion of which is presently
classified as a gas completion, located in Unit K of Section 18,
Township 20 South, Range 38 East, Lea County, New Mexico. Appli-
cant, further seeks the establishment of a special gas-oil ratio
limitation for the subject well.

CASE 3796: (Reopened)
In the matter of Case No. 3796 being reopened pursuant to the
provisions of Order No. R-3452, which order established 160-
acre spacing units for the Cerca-Upper Pennsylvanian Pool, Lea
County, New Mexico, for a period of one year. All interested
parties may appear and show cause why said pool should not be
developed on 40-acre or 80-acre spacing units.

CASE 4093: (Reopened)
Application of BTA Oil Producers for salt water disposal, Lea
County, New Mexico. Order No. R-3727, dated April 15, 1969,
authorized the applicant to dispose of produced salt water into
the Devonian formation in the intervals from approximately
12,233 feet to 12,275 feet in its Max Pray State "E" Well No. 1
and from approximately 12,088 to 12,164 feet in its Max Pray
State "E" Well No. 2 located, respectively, in Units F and C of
Section 5, Township 10 South, Range 36 East, adjacent to the
West Crossroads-Devonian Pool, Lea County, New Mexico. Applicant
now seeks authority to extend said Devonian zones of disposal
to 12,233 feet to 12,500 feet in said Well No. 1 and 12,088
feet to such depth as is necessary in said Well No. 2.

Examiner Hearing
June 4, 1969
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Docket No. 13-69

CASE 4144: Application of Sam G. Dunn Oil Operations for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 1910 feet to 1950 feet in its E. Faircloth "C" Well No. 1 located in Unit N of Section 32, Township 7 South, Range 27 East, Acme-San Andres Pool, Chaves County, New Mexico.

CASE 4138: (Continued and readvertised)

Application of Mallard Petroleum Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from approximately 3500 feet to 3700 feet in its Milton Federal Well No. 4, located in Unit C of Section 24, Township 20 South, Range 34 East, Lynch (Yates) Pool, Lea County, New Mexico.

CASE 4145: Application of Tenneco Oil Company for an exception to Order No. R-3221, as amended, Lea and Eddy Counties, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's Lusk Field leases comprising the SW/4 NW/4 of Section 19, Township 19 South, Range 32 East, Lea County, New Mexico, and the NE/4 of Section 24, Township 19 South, Range 31 East, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells completed on said leases in unlined surface pits on said leases.

CASE 4146: Application of V. S. Welch for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for the applicants lease comprising the NE/4 of Section 28, Township 18 South, Range 31 East, Shugart Field, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells completed or to be completed on said lease in unlined surface pits on said lease.

Examiner Hearing

June 4, 1969

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Docket No. 16-69

CASE 4147: Application of Mobil Oil Corporation for pool reclassification, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to have the North Vacuum-Morrow Pool, Lea County, New Mexico, reclassified from an oil pool to a gas pool.

CASE 4148: Application of Fannie Lee Mitchell, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Wolfcamp formation in the perforated interval from approximately 10,450 feet to 10,550 feet in the former Southern Petroleum Exploration Co., Inc. Machris State 36-3 Well No. 1 located in Unit W of Section 3, Township 16 South, Range 35 East, Townsend-Wolfcamp Pool, Lea County, New Mexico.

CASE 4149: Application of Jack L. McClellan for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's Harris Well No. 1 located in Unit P, Section 5, Township 16 South, Range 30 East, West Henshaw-Grayburg Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in unlined surface pits in the vicinity of the well.

PAN AMERICAN LEASE IN
Sec. 27, T-28-S, R-31-E
Exception Applied for
5-21-69

- REQUESTED EXCEPTED AREA
- FRESH WATER WELL
- EXCEPTED AREA.

TENNECO OIL COMPANY
BOK FIELD, TEA & EDDY COUNTIES
NEW MEXICO
EXCEPTION TO NO-PIT ORDER

HALLIBURTON DIVISION LABORATORY
HALLIBURTON COMPANY
MIDLAND DIVISION

LABORATORY WATER ANALYSISNo. WI-212-69To Tenneco Oil CompanyDate May 23, 1969Box 1031Midland, Texas 79701Attention: Lewis Williams

This report is the property of Halliburton Company and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operations by any person or concern and employees thereof receiving such report from Halliburton Company.

Submitted by _____

Date Rec. 5-21-69

Well No. _____

Depth _____

Formation _____

County _____

Field _____

Source _____

	Windmill	Ohio Jones	Miller
Resistivity	8.95 @ 78 F	.327 @ 78 F	.376 @ 78 F
Specific Gravity	1.000	1.013	1.012
pH	8.6	7.6	7.1
Calcium (Ca)	15	1,000	850 *MPL
Magnesium (Mg)	16	420	390
Chlorides (Cl)	90	12,000	11,500
Sulfates (SO ₄)	20	640	590
Bicarbonates (HCO ₃)	85	740	685
Soluble Iron (Fe)	Nil	Nil	Nil

Windmill = 2 3/4 Miles NE of Miller

Remarks:

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
opp EXHIBIT NO. 2
CASE NO. 4145

*Milligrams per liter

Respectfully submitted,

Analyst: Frank Whitfield

cc:

HALLIBURTON COMPANY

By Frank Whitfield

DIVISION CHEMIST

NOTICE

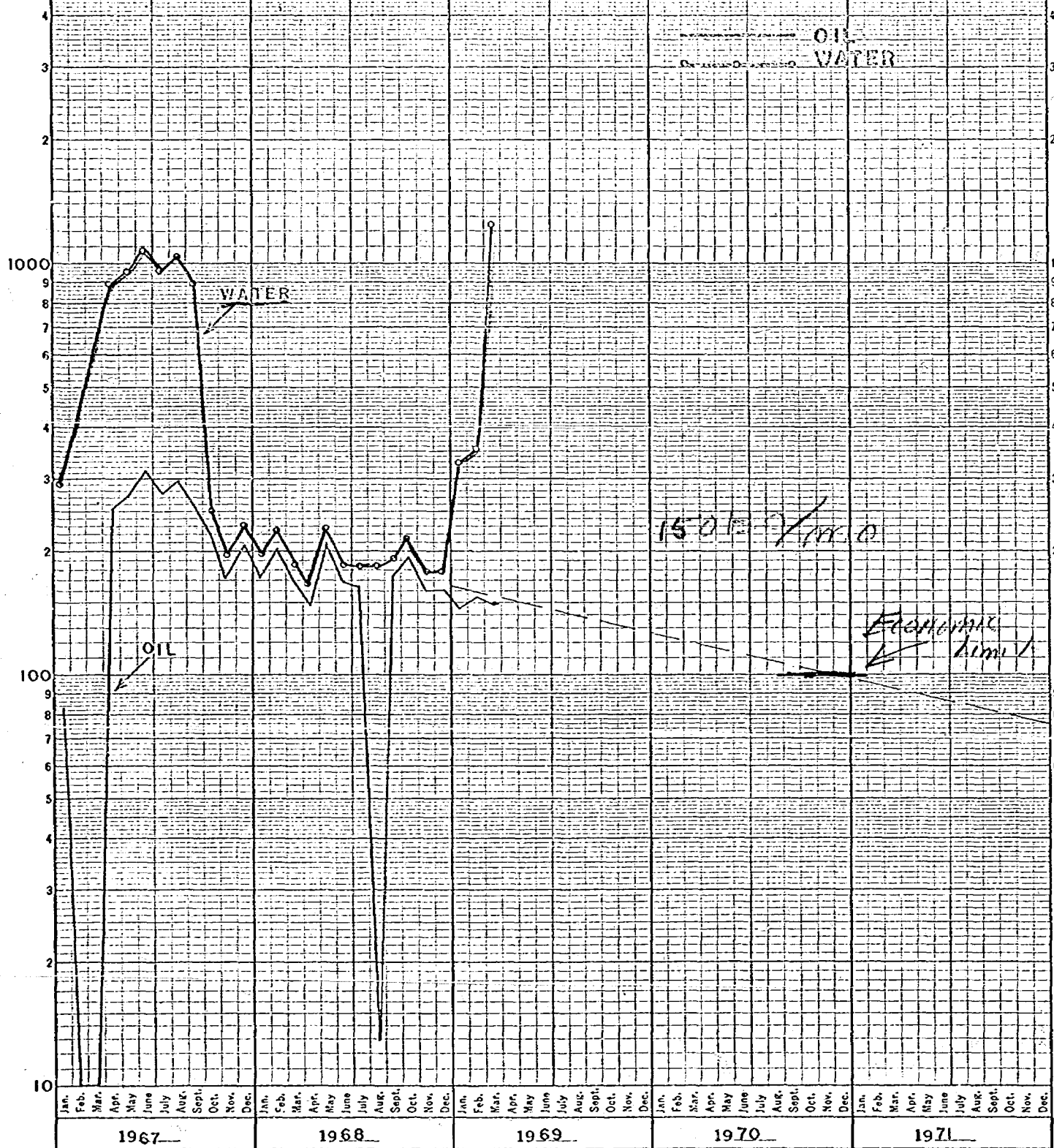
This report is limited to the described sample tested. Any user of this report agrees that Halliburton shall not be liable for any loss or damage, whether it be to act or omission, resulting from such report or its use.

5 YEARS BY MONTHS 46 6693
 X 3 LOG CYCLES
 KEUFFEL & ESSER CO.

PRODUCTION (BPM)

BEFORE EXAMINER NUTTER
 OIL CONSERVATION COMMISSION
 APP EXHIBIT NO. 3
 CASE NO. 4145

TEANECO OIL COMPANY
 PRODUCTION VS. TIME
 J. MILLER LEASE
 LUSK FIELD
 LICA CO., NEW MEXICO



BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

EXHIBIT NO. 4

CASE NO. 4145

LEDDERCO OIL COMPANY
PRODUCTION VS TIME
OHIO-JONES LEASE
LUSK FIELD
RODNEY COUNTY, NEW MEXICO

Oil
Water

PRODUCTION (BPM)

1000
WATER

OIL

240 B0/M3 3.02/15

Production Limit

46 6693
MADE IN U.S.A.

5 YEARS BY MONTHS
X 3 LOG CYCLES
KEUFFEL & ESSER CO.

Jan. 1967	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 1968	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 1969	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 1970	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 1971	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
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OIL CONSERVATION COMMISSION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

May 9, 1969

Case 4145

Tenneco Oil Company
P. O. Box 1031
Midland, Texas 79701

DOCKET MAILED

5-22-69

Attention: Mr. F. J. McDonald

Re: Application for an exception
to Order No. R-3221, as amended,
J. Miller and Ohio-Jones Leases,
Lea and Eddy Counties, New Mexico

Gentlemen:

The requested hearing will be heard before
an examiner on June 4, 1969.

As Order No. R-3221 does not have a provi-
sion for the extension of time in which to comply,
the requested temporary emergency order will not
be issued.

Very truly yours,

GEORGE M. HATCH
Attorney

GMH/esr

C
O
P
Y

TENNECO OIL COMPANY

A Major Component of Tenneco Inc.

P. O. BOX 1031 • 1800 WILCO BUILDING • MIDLAND, TEXAS 79701



May 7, 1969

MAY 8 1969

Case 4145

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

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

RE: Saltwater Disposal - Lusk Area -
Lea and Eddy Counties, New Mexico

Gentlemen:

Tenneco Oil Company respectfully requests an exception to the provisions of (3) of Order No. R-3221 in order to dispose of water produced from wells located on Tenneco's J. Miller and Ohio-Jones leases into unlined surface pits located on these leases. The J. Miller lease is composed of 40 acres, being Unit E, Section 19, T-19-S, R-32-E, Lea County and the Ohio-Jones lease is composed of the NE/4 of Section 24, T-19-S, R-31-E, Eddy County, New Mexico.

Tenneco asks that this exception be granted administratively by amending Order No. R-3221-B to enlarge the exception area established by said leases described above. Because of the proximity of the subject Tenneco leases to the excepted area, the conclusions of that Order would apply equally well to the Tenneco leases.

The three wells located on the Ohio-Jones lease and the one well on the J. Miller lease are completed in the Yates Formation. Water production from the three Ohio-Jones wells is currently running about 18 BHPD and from the one Miller well about 42 BHPD. These volumes are not expected to vary appreciably in the future. All of this water is currently gathered in tanks and trucked to National Potash Company's tailing pit located some 4.5 mi south of the subject properties.

Page 2
May 7, 1969

TENNECO OIL COMPANY

On February 28, 1969, the Conservation Commission, in Order No. R-3686, granted an exception to Order No. R-3221-B to Texaco covering all of Section 32, T-19-S, R-32-E, Lea County, with the exception of the N/2 of the NE/4 of that Section. This Texaco property is located 1.5 mi south and one mile east of the Tenneco leases covered by this application.

In the event that this application can not be granted administratively, Tenneco asks that it be scheduled for hearing and a temporary emergency order be issued allowing unlined surface pit disposal until said hearing can be held and a ruling issued.

By copy of this application, Tenneco is notifying all offset operators of its intentions.

Yours very truly,

TENNECO OIL COMPANY


F. J. McDonald

District Production Superintendent

LMW:dr

Copies to: Kerr-McGee Oil Industries
Kerr-McGee Building
Oklahoma City, Oklahoma

Trebol Drilling Company
1109 American Bank of Commerce Bldg.
Odessa, Texas

Continental Oil Company
P. O. Box 460
Hobbs, New Mexico

Phillips Petroleum Company
Phillips Building
4th & Washington Streets
Odessa, Texas

DRAFT

GMH/esr

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. 4145

Order No. R-3775

APPLICATION OF TENNECO OIL COMPANY
FOR AN EXCEPTION TO ORDER NO. R-3221,
AS AMENDED, LEA AND EDDY COUNTIES,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 4, 1969,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of June, 1969, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, 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, ^{The Lusk Field} ~~Tenneco Oil Company~~, is the owner
and operator of certain ~~lands~~ ^{leases} located ~~on its~~ ⁱⁿ ~~Lusk Field~~ ^{Lease} ~~Leases~~
comprising the SW/4 NW/4 of Section 19, Township 19 South, Range
32 East, NMPM, Lea County, New Mexico, and the NE/4 of Section 24,
Township 19 South, Range 31 East, NMPM, Eddy County, New Mexico.

(3) That effective January 1, 1969, Order (3) of Commission
Order No. R-3221, as amended, prohibits in that area encompassed
by Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, the
disposal, subject to minor exceptions, of water produced in
conjunction with the production of oil or gas, or both, on the
surface of the ground, or in any pit, pond, lake, depression,
draw, streambed, or arroyo, or in any watercourse, or in any

other place or in any manner which would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.

(4) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

(5) That the State Engineer has designated, pursuant to Section 65-3-11 (15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.

(6) That the applicant seeks an exception to the provisions of the aforesaid Order (3) to permit the ~~continued~~ disposal of salt water, produced by applicant's wells completed on said Lusk Field Leases, in unlined surface pits on said leases.

(7) That the subject wells presently produce approximately 60 barrels of water per day.

~~for that the nearest shallow water wells are in an area excepted from the provisions of said order and is located approximately 2 1/4 miles northwest of the subject leases.~~

(8) That there appears to be ^{shallow fresh} water in the vicinity of the subject leases for which a present or reasonably foreseeable beneficial use is or will be made that would be impaired by contamination from the subject pits.

(9) That the applicant should be permitted to dispose of salt water produced by wells located on ~~its~~ said ~~other and other~~ leases in unlined surface pits located on said leases.

-3-

Case No. 4145

Order No. R-_____

IT IS THEREFORE ORDERED:

(1) That the applicant, Tenneco Oil Company, is hereby granted an exception to Order (3) of Order No. R-3221, as amended, to dispose of water produced in conjunction with the production of oil or gas, or both, by its wells located in the SW/4 NW/4 of Section 19, Township 19 South, Range 32 East, Lusk Field, Lea County, New Mexico, and the NE/4 of Section 24, Township 19 South, Range 31 East, Lusk Field, Eddy County, New Mexico, in unlined surface pits located in said ~~areas~~ ^{subdivisions}.

(2) That the Commission may ~~by~~ administrative order rescind such authority whenever it reasonably appears to the Commission that such rescission would serve to protect fresh water supplies from contamination.

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

DONE at



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

June 10, 1969

Mr. Booker Kelly
White, Gilbert, Koch & Kelly
Attorneys at Law
Post Office Box 787
Santa Fe, New Mexico

Re: Case No. 4145
Order No. R-3775
Applicant:
Tenneco Oil Company

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC X

Artesia OCC X

Aztec OCC

Other State Engineer Office