

CASE 4046: Application of TEXACO
FOR AN EXCEPTION TO ORDER R-3221,
AS AMENDED, LEA COUNTY, N. MEX.

Case Number

4046

Application
Transcripts.

Small Exhibits

ETC.

dearnley-meier

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

February 19, 1969

REGULAR HEARING

IN THE MATTER OF:)
)
)

Application of Texaco,)
Inc., for an exception to)
Order No. R-3221, as)
amended, Lea County, New)
Mexico.)

Case No. 4046

BEFORE: A. L. Porter, Jr., Secretary, Director
Alex J. Armijo, Land Commissioner
George Hatch, Counsel

TRANSCRIPT OF HEARING

MR. PORTER: Case No. 4046

MR. HATCH: Case 4046, Application of Texaco, Inc.,
for an exception to Order No. R-3221, as amended, Lea County,
New Mexico.

MR. WHITE: If the Commission please, Charles White
of Santa Fe, appearing for the applicant. I have one witness.

(Witness sworn.)

(Whereupon, Applicant's Exhibits
Numbers 1 through 7, inclusive,
were marked for identification.)

CARL L. WHIGHAM

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

DIRECT EXAMINATION

BY MR. WHITE:

Q State your full name, by whom you are employed, and in
what capacity?

A My name is Carl L. Whigham, Jr. I am employed by
Texaco, Inc., in Midland, Texas, as Division Proration Engineer
for the Midland Division.

Q Have you previously qualified before the Commission?

A Yes, I have.

Q What does Texaco seek by this application?

A In this application, Texaco, Inc., seeks an order from

the Commission granting an exception to the provisions of Order No. R-3221, to authorize the continued disposal of produced salt water into an earthen disposal pit located on Texaco's New Mexico CP Lease which is located in Unit F, Section 32, Township 19 South, Range 32 East, Lea County, New Mexico.

In the alternative, Texaco, Inc., seeks an extension of the area that was previously excepted from the provisions of Order No. R-3221, by Order No. R-3221B, to include Section 32, Township 19 South, Range 32 East.

Q Would you refer to Exhibit Number 1, and describe the lease as to its size, number of wells, and the present production of oil and water?

A Exhibit Number 1 is a large scale area map showing the location of the Texaco's State CP Lease, located in Section 32, Township 19 South, Range 32 East. The lease is designated or indicated by a yellow color. This lease has been developed with three wells. The No. 1 well is completed as a Lusk Strawn well. Well No. 2 was a dry hole, and well No. 3 was completed as a Lusk Strawn well, and is currently temporarily abandoned.

MR. POWERS: So we have one producing well?

A Yes, sir. That one producing well at the present time is producing 12 barrels of oil a day, and 25 barrels of water per day. As the operating, that is, the lease is being operated

would permit the continued disposal of the 25 barrels of water per day into that pit located on this particular lease.

Another exhibit to be presented later will show that both oil and water production are declining at a rather rapid rate, and we do not expect to be able to continue operating profitably for more than approximately one year from the present time.

Q Do you have any figures as to the amount of water that has been disposed of in this pit to the present time?

A Yes, we do. This lease was developed with the first completion in 1964. Since that time, 184,500 barrels of water have been disposed of in this pit.

Q Do you have any estimate as to the additional volume of water that you should like to have a right to dispose of in this pit?

A Yes, sir. Based upon an extrapolation of the production curves for an additional 12 months, we would estimate that an additional 9,000 barrels of water will be produced and will require disposal.

Q That would be the maximum?

A Yes, sir, that is not accounting for the decline. That is approximately 25 barrels a day times 365 days.

Q Will you explain Exhibit 2, please?

A Exhibit 2 is a set of performance curves for this lease. We have plotted since the lease was developed in 1964, oil production and water production on a daily basis.

The oil production reached a peak when the second well was completed in 1964, late in 1964, and the most that lease ever produced was 650 barrels of oil daily, and this has commenced an early decline and has continued to decline at a rapid rate to the present time.

This curve also shows the number of wells down at the bottom. This shows that the No. 3 well was temporarily abandoned in September, 1968. By that time it had ceased contributing any significant quantity of production. So since that time, only the No. 1 well is producing, and as mentioned previously, this production is down to 18 barrels of oil and 25 barrels of water daily, and continues to decline.

Q Now, will you explain Exhibit 3, and compare it with Exhibit Number 1, please?

A Exhibit 3 is a more detailed map of the area in the immediate vicinity of the subject lease.

Exhibit Number 1 has an area in the form of a square with seven sections on the side, surrounding Texaco's CP Lease, and this area shown on Exhibit 1 is the same area depicted in more detail by Exhibit Number 3.

In the center of this plat is Texaco's CR Lease in Section 32. The red border or boundary shown on both Exhibit Number 1 and Exhibit Number 3 shows the boundary of the large area that has previously been excepted from the Commission's no pit order.

Exhibit Number 3 also shows circled the water wells nearest to the CR Lease. In fact, all of the water wells within about a three and a half, three or three and a half-mile radius of the lease are shown on Exhibit 3. You will note in Section 34, Township 19 South, Range 32 East, there are three abandoned water wells. Then the other location is down in the Williams Sink, in Section 32 just across the county line in Eddy County, in Township 20 South, Range 31 East, and that well has also been abandoned.

The exhibit also shows, of course, all of the wells and the operators, the lessees and lessors in this area. And the legend down at the bottom of the map shows how the completion intervals of these various wells are indicated. Most of the wells in the area are completed in the Lusk Strawn Pool.

Q Now, will you refer to Exhibit Number 4, and explain that exhibit?

A In explaining Exhibit Number 4, we might make reference to Exhibit Number 1, because we will be talking about those

various oil and gas pools in the vicinity of Texaco's CR Lease.

Exhibit Number 4 is a tabulation of all of these fields or these oil and gas pools in this area. We show the number of wells, the daily oil production, and the daily water production, and the chloride content, and the date that the pools were discovered. I would like to mention briefly the pertinent information concerning each one.

The first one we have listed is the Halfway Yates Pool. Now, the Halfway Yates Pool is located in Township 20 South, Range 32 East, and it is noted here that this pool is within the previously designated excented area between Laguna Plata and Williams Sink, and this particular field produces, in addition to 20 barrels of oil a day, it produces 207 barrels of salt water daily, which is disposed of in open unlined earthen pits.

By far the largest field in the area is the Lusk Strawn in both Lea and Eddy Counties, and there are a total of 53 wells that produce 1,954 barrels of oil a day. However, the water production is practically nil. The water production from all of these wells is only 27 barrels daily, and as already mentioned, 25 of that is from this one well that Texaco has on the extreme southern limits of the Lusk Strawn area.

This is digressing a bit, but the main purpose of presenting Exhibit 4 is to show that not only could an exception

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be granted here for Texaco's lease, but very little water is being produced from all of the other pools in the immediate vicinity.

The next pool, for example, is the Lusk Yates, which is located just north about two miles from Texaco's lease with seven completions. And it produces 15 barrels of oil daily, and 14 barrels of water. The Lusk Yates west pool has four wells producing only five barrels of oil daily, and it produces no water. Then the Lusk Morrow Gas Pool has five wells, and these wells only produce 1 barrel of water daily. Then a recent completion is listed here as undesignated Delaware.

I was out in this area last week, and as best I could tell, that well is located about a mile northeast of Texaco's lease. It has tested 30 barrels of oil daily, and 4 barrels of water daily. I would mention here that the total water production in this area--

Q That is outside the excepted area?

A Well, the total water production that we have listed on this table is 253 barrels daily.

Q How many barrels are produced outside the excepted area?

A All except 207. 207 subtracted from the total of 253.

Q 46?

A Yes, sir, 46 barrels daily, all of the water that is being produced from all of the fields outside of the currently existing excepted area.

Q Now, your water well information shown on Exhibit 5, will you explain that and correlate it with Exhibit 1?

A We have examined this entire area rather extensively, and have attempted to locate every water well in this vicinity. These wells are listed on Exhibit Number 5, and each one is designated with a red circle and a number in the circle.

Now, the circles and numbers correspond with those shown on Exhibit Number 1. We might take them in order.

The No. 1 well is located in Section 27, approximately four and a half miles west of Texaco's lease. The well is about 300 feet deep, producing from the Triassic, and is used for domestic purposes.

Well No. 2, or wells No. 2 are located in Section 28, which is in the same general area as well No. 1, being about five and a half miles west of Texaco's CR lease. And these wells are also completed into the Triassic at about 250 feet depth.

The No. 3 well is located four miles north of the CR lease. This is a shallow well completed at a total depth of about 75 feet in the Quaternary or alluvium, and it is used for stock purposes.

Wells designated No. 4 are deeper wells completed in the Triassic. There are three wells here. However, as previously mentioned, they have been abandoned. We have water analyses on most of these wells, but we do not have any analyses on these wells since they have been abandoned.

Well No. 5, these are two shallow wells completed in the Quaternary alluvium sands at a depth of about 78 feet, and are used for domestic and stock purposes.

Q How far away are they from the subject lease?

A They are approximately five miles south, southeast from the subject lease. And then about a half mile further south-eastward are wells designated No. 6. They are shallow wells completed in the alluvium, and are used for stock purposes.

Now, over on the map again, approximately six or seven

miles east of Texaco's C2 lease, we have designated water well No. 7. We also have a water analysis on this particular well.

Q Have you made a personal inspection of the surface on this lease?

A Yes.

Q Will you describe the terrain, please?

A Yes, this area is in the plains area. It is part of about a 400 square mile area of extensive sand dunes in the extreme western edge of Lea County. The vegetation in this area is comprised entirely of the sparse scrub oak type.

Q What use is made of the surface, if any?

A Actually, driving through the area, it does not appear that it is used for any purpose. One can see an occasional cow out in that vicinity, but with this exception the land is not being used, and it doesn't appear that it could be used for any purpose.

Q In what direction is the surface runoff?

A The surface runoff in this area is generally toward this topographic feature indicated or designated Laguna Plata and Williams Sink. These are two depressions in the immediate vicinity. The Williams Sink is where National Potash Company is operating currently, and it is my understanding that approximately 3,000 barrels of brine are being disposed of into Williams Sink. But these two features, the Laguna Plata and the Williams Sink,

are approximately 50 to 100 feet lower surface elevation than the area three or four miles northward in the vicinity of Texaco's CR Lease.

Q What is the direction of the general flow of the underground water?

A The direction of flow or drainage of the underground water is the same as would be expected for the surface as we have just discussed. The drainage would appear to be southward. The ground water report Six entitled Geology and Ground Water Conditions in Southern Lea County, New Mexico, published by the State Bureau of Mines and Mineral Resources, contains an exhibit marked as Plate No. 1, and this shows the structural contours on top of the Red Beds. The structural contour on the Red Beds shows a low area in the same general vicinity as this area here where Williams Sink is located. So it could be assumed that any water that percolated or seeped through the alluvium and reached the top of the Red Beds would continue drainage down toward the area of Williams Sink, the same as any surface water that might drain on the surface.

Q In your opinion, will this pit in any way contaminate or affect any fresh water wells that you have shown on Exhibit 1?

A No, sir. 25 barrels of water daily placed in the pit on this lease could have no effect on well numbers 1 through 7,

all of the wells located here. That, of course, is based upon the assumption that all of the drainage is toward the south. And certainly all the information that we have been able to develop indicates that this is the case. It would be almost inconceivable that any of this water could drain upward toward any of these wells located to the east or to the west, or to the north.

And then, as far as wells No. 5 and 6 are concerned, the quantity and quality of the water produced there would be influenced so much more by the water disposal in the Halfway Yates Pool, and the brine condition in Laguna Plata, and all of the brine water over in Williams Sink.

Let me mention one other item that we haven't covered previously. On Exhibit 1, we also show an excepted area up here in the Tonto Yates-7 Rivers West. This is outlined in red. And the Salt Lake Yates Pool about six miles south is also circled in red, indicating that it is also excepted.

So in general, the water wells south of Williams Sink and Laguna Plata, if they are to be affected at all, would be affected by the large volumes of brine and salt water in the vicinity of Williams Sink, Laguna Plata, the Halfway Yates Pool, and the Salt Lake Yates Pool.

Q Exhibit 6 and 7 in regard to your water analysis, will

you point out the significant information that appears on these exhibits?

A Exhibits 6 and 7 are laboratory water analyses of the water wells that have previously been discussed and designated as numbers 1 through 7, with the exception of number 4, and a water sample was not available from that well.

Q That is the abandoned well?

A Yes, sir, that's correct. And all of these analyses indicate that the fresh water from these wells is of rather good quality.

Q The chlorides vary from 50 to 350?

A Yes, sir, that's correct. And total solid AP appear to be low, also.

Q Will this well provide for storage space and evaporative surface?

A Yes, it has been quite adequate in the past, and water production is continuing to decline, so the well pit that is located there now will continue to serve this purpose.

Q One thing has happened, the ground water level has dropped quite a bit, hasn't it?

A Yes, it has. The water level has dropped quite a bit, and the water production has decreased quite a bit. The water level has dropped quite a bit, and the water production has decreased quite a bit.

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Q It is marked No. 1 here. Exhibit Number 1 is this one, isn't it?

A Yes, sir.

Q The windmill marked seven there in Township 20-33.

MR. PORTER: Let's eliminate this confusion. Now, what is this exhibit?

THE WITNESS: Number 3.

MR. MUTTER: I was looking at the smaller one, Mr. Porter, the one that has the windmill circled.

Q And the windmill identified as No. 7 is not shown on Exhibit 5, which is the detail on the water wells?

A Yes, sir. However, the water analysis for this well was shown on Exhibit Number 6.

Q Would it be Section 5?

A That's correct.

Q And then the other data that you have shown on Exhibit 5 for the other wells, I wonder if you could fill me in on that well?

A Not at this time. Mr. Mutter, I don't believe I have any additional information with me at this time. However, I can obtain the depth and producing rates, and what not, and mail that in.

Q Referring to your Exhibits 6 and 7 in which you report

the water analyses, can we pin those down and determine which of the circled wells on Exhibit Number 1 they are? Now, this first one on Exhibit Number 6, it is stated to be six miles east of your New Mexico CR State?

A Is that the well designated as No. 1?

Q Well, I don't see any designation of anything. Oh, that is the one that is designated well No. 7.

A Yes, sir.

Q Well, mine doesn't have any designation on it.

MR. WHITE: The reason for that was that we had three complete exhibits, and then we tried to furnish additional exhibits.

Q Now, you don't have a structural or a surface topography map included in your exhibits here, do you?

A No, I don't. My verbal testimony was based upon a U. S. G. S. topographic quadrangle map for that immediate vicinity. Those maps are available, of course, and I can obtain one, but the information I testified to was obtained from those standard topo maps.

Q Now, Mr. Whigham, I think you mentioned in your direct testimony that your lease there in Section 32 was some 50 feet above the level of the Williams Sink and the Laguna Plata?

A I said between 50 and 100 feet.

Q How about the elevation of your lease with respect to the shallow well that is located approximately four or five miles north, what would be the difference in elevation there?

A I could only guess. I don't remember the exact elevations, but the terrain appears to be increasing in elevation northward, and my reference to the topo map also indicated that.

Q After you passed, coming from the north going south, after you passed this low area where Williams Sink, Laguna Plata, and Laguna Gatuna are located, proceeding farther south, then you start rising again, is that correct?

A That is my understanding.

Q Now, Mr. Whigham, you mentioned that that well immediately west of the depression in Williams Sink, the windmill there, you mentioned was abandoned. When was that well abandoned, do you know?

A No, I don't, Mr. Nutter. I wondered, myself, when I obtained this information. It occurred to me that National Potash has been dumping water out in this lake there, and this lake has been in existence for many years, or several years. I should think that that water well was actually under water at this time. That appears to be in the center of the depression, so I should say that it is inundated.

Q What is the area on Exhibit Number 1 inside Williams

Sink, what does that little dotted area represent?

A Well, at the time this map was made, that was intended to designate the actual water level.

Q That is the pond in the sink?

A Yes.

Q And the well was west of the pond at the time?

A Yes. And I did not go out there and observe that particular well or inspect it. I could not answer your question concerning that well at this time.

Q How did you determine that it was abandoned?

A I had someone else do that for me, and he reported to me that it had been abandoned.

Q Now, recapping your testimony Mr. Whigham, would you indicate the location of the Quaternary water well and approximate distance from your lease on each of those Quaternary wells shown on Exhibit Number 1?

A Yes, I would do that by referring to Exhibit Number 5. The well designated No. 3 is a Quaternary well, and this is located approximately four miles north of Texaco's CR lease.

Well No. 5 and well No. 6 are also Quaternary wells, and these wells are located about five miles south, southeast from Texaco's CR lease.

Q And those are the only ones, as far as Exhibit Number

5 is concerned, that would be indicated as Quaternary, and you are not sure about well No. 7 over in 20-33?

A That's correct.

Q And its location or distance from the lease is approximately what mileage?

A In excess of six miles.

MR. NUTTER: I believe that is all.

MR. PORTER: Any further questions? The witness may be excused. The Commission will take the case under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
CARL L. WHIGHAM	
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<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's Exhibits Numbers 1 through 7	2	

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.


COURT REPORTER



PETROLEUM PRODUCTS

PRODUCING DEPARTMENT
UNITED STATES
MIDLAND DIVISION
DARRELL SMITH
DIVISION MANAGER

February 26, 1969

TEXACO INC.
P. O. BOX 3109
MIDLAND, TEXAS 79701

REGULAR HEARING CASE 4046
LUSK POOL AREA
LEA COUNTY, NEW MEXICO

Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. D. S. Nutter

Gentlemen:

At the above subject hearing February 19, 1969 Texaco Inc. applied for an exception to Order No. R-3321 permitting continued use of a salt water disposal pit on the Texaco, New Mexico State CR lease in Section 32, Township 19 South, Range 32 East, Lea County, New Mexico.

Additional information was requested concerning a fresh water well located approximately six miles east of the subject lease designated as Water Well No. 7 on Texaco's Exhibit No. 1, a plat of the Lusk Pool Area, and Exhibit No. 5, Water Well Information. This is to advise that the subject water well is located in the SW/4, SE/4, SW/4, Section 5, Township 20 South, Range 33 East. The well produces from the triassic red bed section with a total depth of 680 feet. The water was originally used in oil well drilling operations. As shown by Texaco's Exhibit No. 6, a laboratory water analysis indicated the water to be of good quality with a chloride content of 340 PPM.

Yours very truly,

Darrell Smith

By

C. L. Whigham
C. L. Whigham

Division Proration Engineer

CLW/pw



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

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GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

March 3, 1969

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

Re: Case No. 4046
Order No. R-3686
Applicant:
Texaco Inc.

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

IN THE HYPERC OF THE HERBERT
CALLED BY THE OLD CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

APPLICATION OF THE PROVISIONS OF THE
EXCEPTION TO ORDER NO. 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 84

[illegible]

22. THE CONCLUSION:

This cause came on for trial and judgment on the 11th day of June, 1901, at San Francisco, California, before the Honorable the District Court of the United States for the Northern District of California, Judge Charles F. Smith presiding, and the parties and counsel appearing were:

day, on June 25th, and on the 26th, the Commission of Inquiry being present, having considered the testimony presented and the exhibits, and on the said morning, and being fully satisfied in the premises,

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CASE No. 4046

Order No. R-3886

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 located on its New Mexico State "CR" Lease in said Section 32, in an unlined surface pit located in Unit F of said Section 32.

(7) That the applicant is presently disposing of approximately 25 barrels of produced water per day in the subject pit.

(8) That the subject lease is adjacent to the area exempted by Order No. R-3221 from the provisions of Order (7) of Order No. R-3221 as amended.

(9) That the proposed disposal of salt water in said unlined surface pit located adjacent to the subject lease is in a location approximately 100 feet from the subject lease, with north and southward, respectively, from the subject lease.

(10) That the proposed disposal of salt water in said unlined surface pit is in a location approximately 100 feet from the subject lease, with north and southward, respectively, from the subject lease.

(11) That the proposed disposal of salt water in said unlined surface pit is in a location approximately 100 feet from the subject lease, with north and southward, respectively, from the subject lease.

-3-

CASE No. 4046

Order No. R-3686

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby granted an exception to Order (3) of Commission Order No. R-3221, as amended, to continue to dispose of water produced in conjunction with the production of oil or gas, or both, by its wells located on its New Mexico State "CR" Lease in Section 32, Township 19 South, Range 32 East, NMPM, Lusk Field, Lea County, New Mexico, in the unlined surface pit located in Unit F of said Section 32 until further order of the Commission.

(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.

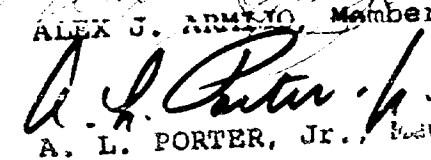
(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

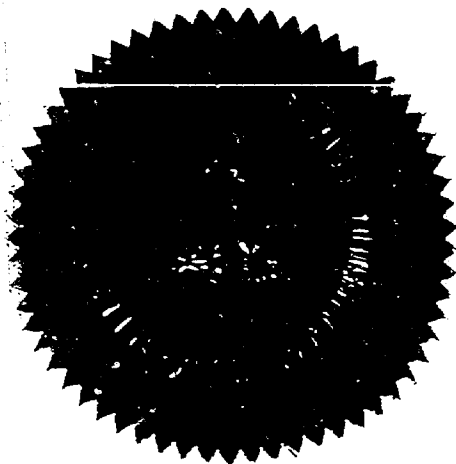
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


ALEX J. ARMILLO, Member


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



esr/

DOCKET: REGULAR HEARING - WEDNESDAY - FEBRUARY 19, 1969

OIL CONSERVATION COMMISSION - 8:30 A. M. - MORGAN HALL, STATE LAND OFFICE
BUILDING, SANTA FE, NEW MEXICO

- ALLOWABLE: (1) Consideration of the oil allowable for March, 1969;
- (2) Consideration of the allowable production of gas for March, 1969, from thirteen prorated pools in Lea, Eddy, and Roosevelt Counties, New Mexico; consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico.

CASE 3834: (Reopened):

In the matter of Case No. 3834 being reopened pursuant to the provisions of Order No. R-3479, which order suspended for a period of one year beginning August 1, 1968, certain portions of Rules 14 (A) and 15 (A) of the General Rules and Regulations for the prorated gas pools of Northwest New Mexico, promulgated by Order No. R-1670, as amended. All interested parties may appear and show why said Order No. R-3479 should or should not be rescinded.

CASE 3996 (Continued from the January 15, 1969, Regular Hearing)

Application of Martin Yates, III, 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 applicant's Cordie King Well No. 1 located in Unit L of Section 22, Township 23 South, Range 26 East, Kark Canyon (Delaware) Pool, Eddy County, New Mexico. Applicant seeks authority to continue to dispose of produced salt water in an unlined surface pit located in the aforesaid quarter-quarter section.

CASE 4026 (Continued from the January 15, 1969, Regular Hearing)

Application of Fred Pool Drilling Company 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 applicant's leases located in Sections 8 and 9, Township 25 South, Range 30 East, Corral Canyon-Delaware Pool, Eddy

(Case 4026 continued)

County, New Mexico. Applicant seeks authority to continue to dispose of produced salt water in three unlined surface pits located in the SW/4 NW/4 and the SE/4 SE/4 of said Section 8, and the SW/4 SW/4 of said Section 9.

CASE 4027: (Continued from the January 15, 1969, Regular Hearing)
Application of MacDonald Oil Corporation 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 applicant's Sinclair Parke Well No. 1 located in Unit F of Section 22, Township 17 South, Range 30 East, Jackson Abo Pool, Eddy County, New Mexico. Applicant seeks authority to continue to dispose of produced salt water in an unlined surface pit located in the aforesaid Unit F.

CASE 4046: Application of Texaco, Inc., for an exception to Order No. R-3221, as amended, Lea 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 or gas 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 applicant's New Mexico State CR Lease located in Section 32, Township 19 South, Range 32 East, Lusk Field, Lea County, New Mexico. Applicant seeks authority to continue to dispose of produced salt water in an unlined surface pit located in Unit F of said Section 32. In the alternative, applicant seeks the extension of that area excepted from the provisions of Order (3) of said Order No. R-3221 by Order No. R-3221-B to include the aforesaid Section 32.

CASE 4047: Application of Larry C. Squires for an exception to Order No. R-3221, as amended, Lea 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 or gas on the surface ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would authorize the applicant to dispose of produced salt water into three natural salt lakes located in Lea County, New Mexico, as follows:

(Continued Case 4047:)

Laguna Plata, sometimes referred to as Laguna Grande located in Sections 2, 3, 9, 10, and 11, Township 20 South, Range 32 East;

Laguna Gatuna, sometimes referred to as Salt Lake, located in Sections 7, 17, 18, 19, and 20, Township 20 South, Range 33 East;

Laguna Tonto, located in Sections 32 and 33, Township 19 South, Range 33 East, and Section 4, Township 20 South, Range 33 East.

CASE 4048: Application of C. W. Trainer for an exception to Order No. R-3221, as amended, Lea 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 or gas 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 applicant's leases located in Section 24, Township 19 South, Range 33 East and in Sections 19, 20, 29, 30, Township 19 South, Range 34 East, undesignated Queen pool, Lea 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 3993: (De Novo)

Application of Coastal States Gas Producing Company for the creation of a new pool and for special pool rules, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks the creation of a new Pennsylvanian oil pool to be designated the North Baum-Upper Pennsylvanian Pool comprising the following-described lands:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, Lea County, N.Mex.
Section 19: E/2
Section 20: NW/4 and S/2
Section 21: SW/4

and for the promulgation of temporary special rules therefor, including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.

Applicant further seeks the contraction of the Lazy J-Pennsylvanian Pool by the deletion from said pool of the E/2 of Section 20 and the W/2 of Section 21, both in the aforesaid Township and Range.

(Case 3993 continued)

Upon application of Max W. Coll, II, this case will be heard De Novo under the provisions of Rule 1220.

CASE 4049: Application of Standard Oil Company of Texas for an exception to Order No. R-3221, as amended, Lea 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 or gas on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, after January, 1969. Said exception would be for the applicant's wells located in Section 5, Township 24 South, Range 38 East, and in Section 32, Township 23 South, Range 38 East, Stateline-Ellenburger Pool, Lea County, New Mexico. Applicant seeks authority to continue to dispose of produced salt water in an unlined surface pit located in the NE/4 of said Section 5.

CASE 4050: Application of Texaco Inc. 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 or gas 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 applicant's T. W. Heflin Federal Well No. 1 located in Unit O of Section 24, Township 23 South, Range 31 East, Cotton Draw Brushy Canyon Pool, Eddy County, New Mexico. Applicant seeks authority to continue to dispose of produced salt water in an unlined pit located in said Unit O.

CASE 4051: Southeastern nomenclature case calling for an order for the creation, extension, and contraction of certain pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico:

(a) Create a new pool in Eddy County, New Mexico, classified as an oil pool for Delaware production and designated as the Revelation-Delaware Pool comprising the following:

TOWNSHIP 22 SOUTH, RANGE 25 EAST, NMPM
Section 18: NW/4 SE/4

Further, for the assignment of approximately 18,120 barrels of oil discovery allowable to the discovery well Marathon

(Case 4051 continued)

Oil Company's Miller Ranch Unit Well No. 1, located in Unit J of said Section 18.

(b) Create a new pool in Lea County, New Mexico, classified as an oil pool for San Andres Production and designated as the West Sawyer-San Andres Pool comprising the following:

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM
Section 33: SW/4 SW/4

Further, for the assignment of approximately 24,720 barrels of oil discovery allowable to the discovery well Coastal States Gas Producing Company's Santa Fe Well No. 1, located in Unit M of said Section 33.

(c) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Cisco production and designated as the Fordinkus-Cisco Gas Pool. The discovery well is Charles B. Read's Anderson State Well 1 Y, located in Unit G of Section 14, Township 18 South, Range 24 East. Said pool should comprise:

TOWNSHIP 18 SOUTH, RANGE 24 EAST, NMPM
Section 14: E/2

(d) Create a new pool in Lea County, New Mexico, classified as an oil pool for Devonian production, and designated as the Midway-Devonian Pool. The discovery well is Union Oil Company of California's Midway State Well No. 1, located in Unit F of Section 12, Township 17 South, Range 36 East, NMPM. Said pool should comprise:

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM
Section 12: NW/4

(e) Create a new pool in Chaves County, New Mexico, classified as a gas pool for Grayburg-San Andres production and designated as the Sams Ranch Grayburg-San Andres Gas Pool. The discovery well is Midwest Oil Corporation Federal A No. 1 located in Unit L of Section 10, Township 14 South, Range 28 East, NMPM. Said pool should comprise:

TOWNSHIP 14 SOUTH, RANGE 28 EAST, NMPM
Section 10: SW/4
Section 15: NW/4

(f) Contract the Inbe Permo-Pennsylvanian Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 10 SOUTH, RANGE 33 EAST, NMPM
Section 15: S/2, NE/4, and E/2 NW/4

(g) Extend the Vada-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 10 SOUTH, RANGE 33 EAST, NMPM
Section 15: All

(h) Extend the Baum-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 31: NE/4

TOWNSHIP 14 SOUTH, RANGE 32 EAST, NMPM
Section 1: SE/4

(i) Extend the East Benson-Yates Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 31 EAST, NMPM
Section 18: N/2 SW/4

(j) Extend the East Bluitt-San Andres Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 38 EAST, NMPM
Section 18: SW/4

(k) Extend the Bluitt-Wolfcamp Gas Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 37 EAST, NMPM
Section 32: E/2

(l) Extend the Cato-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 30 EAST, NMPM
Section 5: SW/4

(m) Extend the West Henshaw-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 30 EAST, NMPM
Section 4: Lot 8

(n) Extend the North Indian Hills-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 24 EAST, NMPM
Section 8: All
Section 16: All
Section 17: All

(o) Extend the Lazy J-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 33 EAST, NMPM
Section 19: NE/4
Section 20: NW/4

(p) Extend the McMillan-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 27 EAST, NMPM
Section 19: All

(q) Extend the Quail-Queen Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM
Section 11: E/2

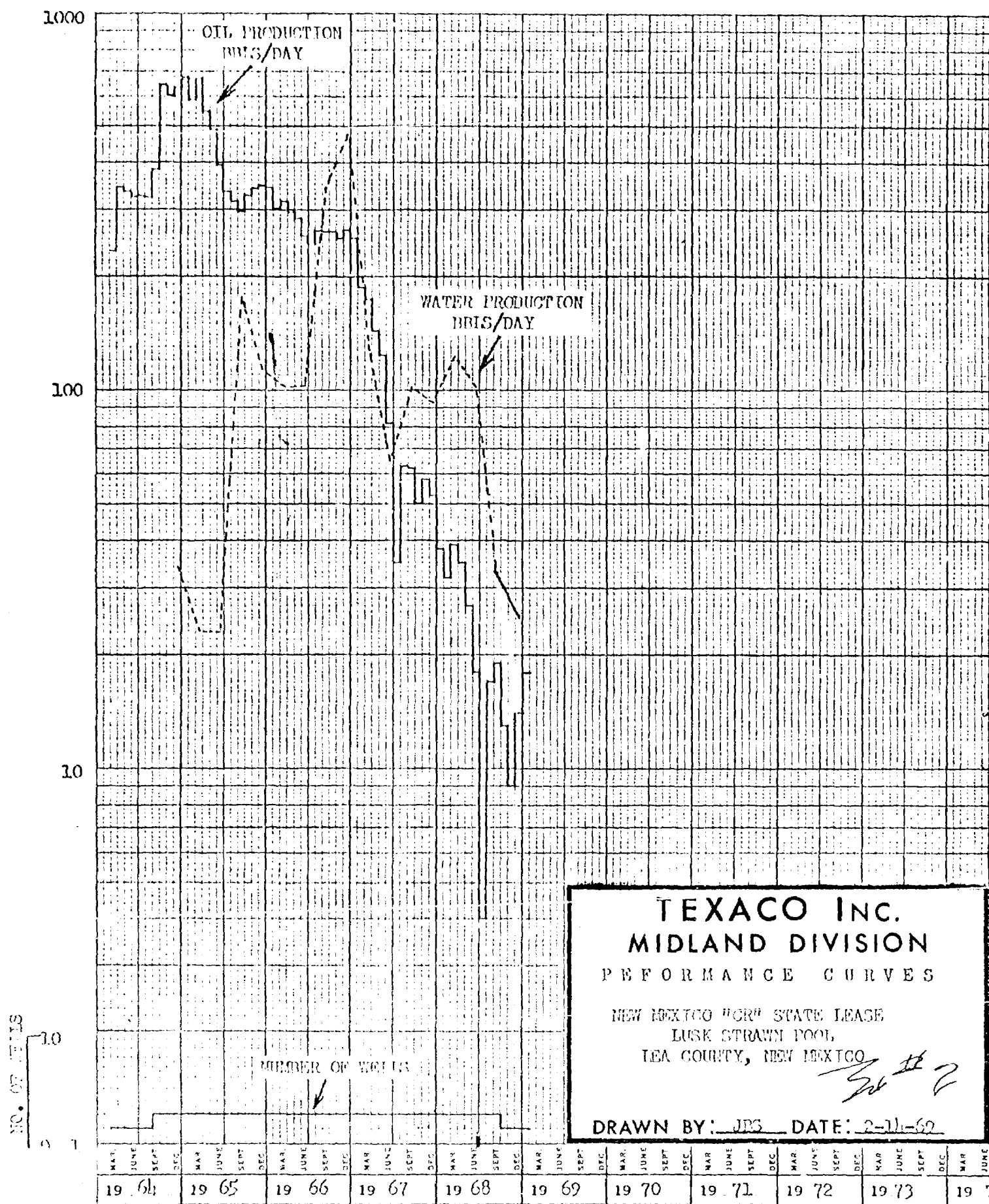
(r) Extend the Sulimar-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM
Section 13: S/2 SE/4
Section 24: NW/4 NE/4

(s) Extend the North Vacuum-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM
Section 24: SE/4

(t) Extend the vertical limits of the North Baum-Upper Pennsylvanian Pool in Lea County, New Mexico, to include all of the Upper Pennsylvanian formation in the interval from 9554 feet to 9814 feet on the log of the Coastal States Federal "20" Well No. 2, located in Unit N of Section 20, Township 13 South, Range 33 East, NMPM.



Handwritten signature/initials

4

OIL, GAS AND WATER PRODUCTION
POOLS LOCATED WITHIN THREE MILES
OF TEXACO'S NEW MEXICO 'CR' STATE LEASE

<u>Pools</u>	<u>No. of Prod. Wells</u>	<u>BOPD</u>	<u>BAPD</u>	<u>PPM Chlorides</u>	<u>Pool Created or Discovered</u>
Halfway Yates	5	20	207	17,000	1939
Lusk Strawn (Lea & Eddy)*	53	1,854	27	80,500	1960
Lusk Yates (Lea & Eddy)	7	16	14	11,500	1942
Lusk Yates, West	4	5	0	29,000	1944
Lusk Morrow Gas	5	12 (572 MCFGPD)	1	-	1960
Undesignated Delaware	1	30	4	-	1968

* A portion of this production (250 BOPD and 1 BAPD) is from wells in excess of three miles distance from TEXACO's 'CR' Lease.

Page 4
2000

Ex V

WATER WELL INFORMATION

all
Ex I

TOWNSHIP 19 SOUTH, RANGE 31 EAST

- (1) Section 27 - - - NW/4 NE/4 Triassic
TD 300'
Commercial and Stock
- (2) Section 28 - - - SW/4 SW/4 Triassic
Two Wells
TD 250' (estimated by rancher)
Domestic and Stock

TOWNSHIP 19 SOUTH, RANGE 32 EAST

- (3) Section 8 - - - NE/4 NE/4 Quaternary
TD 75'
Stock
- (4) Section 35 - - - NE/4 SE/4 Triassic
Three Wells
TD 575'
Temporary Abandoned

TOWNSHIP 20 SOUTH, RANGE 32 EAST

- (5) Section 22 - - - SE/4 SW/4 Quaternary
Two Wells
TD 70'
Domestic, and Stock
- (6) Section 26 - - - NW/4 NW/4 Quaternary
Two Wells
TD 65'
Stock
- 4
5
Township 20 S, Range 32 E
Appl Ex 5
4046

HALLIBURTON DIVISION LABORATORY
HALLIBURTON COMPANY
MIDLAND DIVISION

LABORATORY WATER ANALYSIS

No. W1-078-69

To Texaco, Inc.

Date Febvuary 14, 1969

Box 728

cc: Box 458

Hobbs, New Mexico 88240

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. 2-11-69

Well No. _____ Depth _____ Formation _____

County _____ Field _____ Source _____

	Water Well	Water Well	NM "CR" St. (Pit)'
Resistivity	3.82 @ 72 F	17.0 @ 72 F	.072 @ 72 F
Specific Gravity	1.000	1.000	1.089
pH	7.4	7.6	6.2
Calcium (Ca)	170	50	10,200 *MPL
Magnesium (Mg)	42	21	1,680
Chlorides (Cl)	340	50 ✓	82,500
Sulfates (SO ₄)	240	30	45
Bicarbonates (HCO ₃)	145	160	110
Soluble Iron (Fe)	N11	N11	N11

Source 6 miles E. NM "CR" St. 1/4 mile W. Duncan
(7) (1) Fed #1 (Tenneco)

Remarks:

*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.

HALLIBURTON DIVISION LABORATORY
HALLIBURTON COMPANY
MIDLAND DIVISION

LABORATORY WATER ANALYSIS

No. W1-043-69To Texaco, Inc.Date January 30, 1969Box 728Hobbs, New Mexico 88240Attention: E. D. McCarter

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. 1-24-69

Well No. _____ Depth _____ Formation _____

County _____ Field _____ Source _____

	Water Well @ Halfway	Lusk Ranch	Windmill
Resistivity	4.64 @ 78 F	4.90 @ 78 F	12.6 @ 78 F
Specific Gravity	1.000	1.000	.998
pH	7.1	7.2	8.3
Calcium (Ca)	125	130	70 *MPL
Magnesium (Mg)	90	85	35
Chlorides (Cl)	350 ✓	300	75
Sulfates (SO ₄)	140	160	30
Bicarbonates (HCO ₃)	70	65	110
Soluble Iron (Fe)	N11	N11	N11

Sample from S.E. of N.M. "CR" St. W. of N. M. "CR" St. No. of N.M. "CR" St.
(5) (6) (2) (3)
 cc: Texaco Inc.
Attn: A. Wilkinson
Hobbs, New Mexico

Remarks:

*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.

TO

TEXAS, INC

HOBBS, N. M.

WATERFLOOD

Source and Date of Sample

1. T. Herlin & S.E. Windmill
- 2.
- 3.
- 4.
- 5.

COUNTY

Wilchem, Inc.
Chemical, Div.

COMPONENT PPM	SAMPLE NO.				
	1	2	3	4	5
Hardness, Calcium	1,350				
Total	20				
Sulfate	14,000				
Chlorides	2.4				
Iron					
Silica	8.0				
PH					
Oxygen, Dissolved					
Hydrogen Sulfide					
Bacteria/ml.					
Aerobic					
Sulfate Reducing					
Specific Gravity	1.000				
Magnesium	30				

Case 42416

Act for Feb. Regular -

Case
4046

Texaco Inc

exception
to order

3221

improvement of well from 3 N.M. St.
CR see
Pit in
Unit F All 32 195 32 E

except N/2 N/E/4

or amendment 3221-B enlarging
exception area to incl 32
to deal to part of 32 to excepted
area, this is same, same
finder

State CR #1 G dual Lusk Str oil
" more gas

2 P P & A

3 D Lusk Str oil

4 L Lusk Str oil

SD BW/D

not exp to vary in future
windmill 4.5 mi N in 8-19-32
" 5 W 28-19-31
5.5 mi SW 26-20-32

Stat Report
N.M. CR St
#1-D-32
#3 L-32
Texaco Cities
Sec 4 St. Corr
#1 G-32

in in Secy Oil Pot area 5-65

large vols of wine by National Pot. Co.
in pit 2 mi S of sub lse.

15 day emerg order



PRODUCING DEPARTMENT
UNITED STATES
MIDLAND DIVISION
DARRELL SMITH
DIVISION MANAGER

PETROLEUM PRODUCTS
December 5, 1968

TEXACO INC.
P. O. BOX 3109
MIDLAND, TEXAS 79701

SALT WATER DISPOSAL
LUSK STRAWN
LEA COUNTY, NEW MEXICO

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

69 JAN 21 PM 1 51

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

Gentlemen:

Texaco Inc. respectfully requests exception from the provisions of Order (3) of Order No. R-3221 to authorize disposal of water produced in conjunction with the production of oil and gas from the three wells located on Texaco's New Mexico State "CR" lease in an unlined surface pit located in Unit F on said lease. The lease comprises all of Section 32, Township 19 South, Range 32 East, Lea County, New Mexico with the exception of the N/2 of the NE/4.

It is suggested that this exception be granted administratively by an amendment to Order No. R-3221-B enlarging the exception area established by said order so as to include Section 32. Due to the proximity of Section 32 to the excepted area defined by Order No. R-3221-B, the findings of this order would likewise apply to Texaco's subject lease and would justify its inclusion in the previously excepted area.

Three wells are located on the New Mexico State "CR" lease. The No. 1 well in Unit G is a dual completion in the Lusk Strawn oil and the Lusk Morrow gas reservoirs. The No. 2 well in Unit P was dry and abandoned. The other two wells in Units D and L are Lusk Strawn oil completions. Water production from all three wells in Section 32 currently totals approximately 50 barrels per day and is not expected to vary appreciably in the future. The nearest evidence of fresh water in this vicinity is indicated by a windmill located 4 1/2 miles north of the subject lease in Section 8. Another windmill is located 5 miles west in Section 28, Township 19 South, Range 31 East and a third windmill is located 5 1/2 miles southwest in Section 26, Township 20 South, Range 32 East. The subject lease lies within the oil-potash area designated by the Secretary of the Interior May 11, 1965 effective May 15, 1965. Large volumes of brine are disposed of in an earthen pit in this potash area by National Potash Company two miles south of the subject lease.

DOCKET NEEDED

Date 2-10-69

December 5, 1968

If this application cannot be approved administratively, it is requested that it be scheduled on the first available hearing docket. In this event, it is also requested that a fifteen day emergency order be issued as provided by Statewide Rule 12C2 to provide for a temporary exception to permit disposal of oil field brine in the unlined pit on Texaco's subject lease until January 15, 1969 or until such time as to permit a ruling by the New Mexico Oil Conservation Commission with regard to the requested hearing.

Attached is a list showing the names and addresses of all operators and lessees adjacent to the subject lease, all of whom are receiving a copy of this application.

Yours very truly,

Darrell Smith

By


C. L. Whigham

Division Proration Engineer

CLW/pw

Attach.

OFFSET OPERATORS

Atlantic Richfield Co.
Box 1610
Midland, Texas 79701

J. S. Burns - Address Unknown

Perry R. Bass
1200 Ft. Worth National Bank Bldg.
Ft. Worth, Texas 76102

W. N. Price Est.
804 Amarillo Bld.
Amarillo, Texas

Tenneco Oil Company
Box 1031
Midland, Texas 79701

Trebol Oil Co.
1109 American Bank of Commerce Bldg.
Odessa, Texas 79700

Shell Oil Company
Box 1509
Midland, Texas 79701

DRAFT

GHH/esr
2-20-69

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. 4046

Order No. R- 3686

APPLICATION OF TEXACO INC. FOR AN
EXCEPTION TO ORDER NO. R-3221, AS
AMENDED, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 8:30 a.m. on February 19, 1969, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this _____ day of February, 1969, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, 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, Texaco Inc., is the owner and operator of certain wells on its New Mexico State "CR" Lease located in Section 32, Township 19 South, Range 32 East, NMPM, Lusk Field, Lea 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 located on its New Mexico

State CR Lease in said Section 32, in an unlined surface pit located in Unit F of said Section 32.

(7) That the applicant is presently disposing of approximately 25 barrels of produced water per day in the subject pit.

(8) That the subject lease is adjacent to the area excepted by Order No. R-3221-B from ^{*the provisions of*} Order (3) of Order No. R-3221, as amended.

(9) That the nearest shallow water wells not in said excepted area are located approximately 4 1/2 miles and 5 1/2 miles north and southeast, respectively, from the subject pit.

(10) That there appears to be no water in the vicinity of the subject pit for which a present or reasonably foreseeable

beneficial use is or will be made that would be impaired by contamination from said pit.

(11) That the applicant should be permitted to continue to dispose of salt water, produced by its wells located on its New Mexico ^{State} CR Lease in said Section 32, in the above-described surface pit.

IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby granted an exception to Order (3) of Commission Order No. R-3221, as amended, to continue to dispose of water produced in conjunction with the production of oil or gas, or both, by its wells located on its New Mexico ^{State} CR Lease in Section 32, Township 19 South, Range 32 East, NMPM, Lusk Field, Lea County, New Mexico, in the unlined surface pit located in Unit F of said Section 32 until further order of the Commission.

(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.