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# BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico October 14, 1970

## **EXAMINER HEARING**

IN THE MATTER OF:

Application of Eastland Oil Company for an exception to Order No. R-3221, as amended, Eddy County, New Mexico.

) Case No. 4438

BEFORE: Daniel S. Nutter, Examiner.



TRANSCRIPT OF HEARING

## NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARING		
SANTA FE	, new	MEXICO

Hearing Date OCTOBER 14, 1970

\_\_\_\_TIME: 9:30 A.M.

NAME	REPRESENTING	LOCATION
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MR. NUTTER: The hearing will come to order. We are, at the present time, on Case No. 4437. However, the witness is not here. We will continue that case until later. We will call now Case No. 4438.

MR. HATCH: Application of Eastland Oil Company for an exception to Order No. R-3221, as amended, Eddy County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, Santa Fe, appearing for the Applicant. I have one witness I would like to have sworn.

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

## GEORGE NEAL,

having been first duly sworn according to law, upon his oath, testified as follows:

## DIRECT EXAMINATION

(Witness sworn.)

# BY MR. KELLAHIN:

- Q Would you state your name, please?
- A George Neal.
- Q By whom are you employed and in what position, Mr.
  Neal?
- A Eastland Oil Company, vice-president in charge of



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- Have you ever testified before the Oil Conservation 0 Commission?
- A I have not.
- For the benefit of the Examiner, would you briefly Q summarize your education and experience in the petroleum business?
- I was graduated from Rice Institute in 1943 with a BS A in mechanical engineering. Worked for Humble Oil and Refining Company as a petroleum engineer for eight years; Eastland Oil Company as an engineer and production superintendent for fifteen years.
- Q In connection with your work, was any of it in the Southeastern New Mexico area?
- Α Yes.
- Is the area involved in the application of Eastland Q Oil Company in Case 4438 under your jurisdiction?
- That's correct. Α

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

(By Mr. Kellahin) Mr. Neal, are you familiar with the Q application of Eastland Oil Company in Case 4438?



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- A I am.
- Q What is sought by Eastland Oil Company in this case?
- A We are asking for an exception for the disposal of salt water on surface pits in Section 5 and 6, 18-31; in the northwest northwest of 5 and the northeast northeast of Section 6.
- Q Is that in the Grayburg-Jackson Field Area, Eddy County?
- A It's in the area. It's undesignated as a pool.
- Q It is in Eddy County?
- A Correct.
- Now, referring to what has been marked as the Applicant's Exhibit 1, would you identify that exhibit?
- A It's a land plat of the area with the two leases involved colored in yellow and the areas colored in red are exemptions that have been granted for surface salt water disposal.
- Now, there are some individual tracts colored in red and those are specific exemptions that have been granted, is that correct?
- A That is correct.
- Now, in the lower right-hand corner of the exhibit there are areas, solid areas colored. What is that?

- A That is the beginning of the general area of the potash mine area that covers several townships that is exempt.
- Q That was a blanket exemption from the Commission?
- A Correct.
- Now, the area you have marked in yellow is the acreage that is operated by Eastland Oil Company, is that correct?
- A That is correct, two quarter sections.
- Q Two quarter sections? Do you propose to dispose on the surface water produced from wells on those two quarter sections?
- A That is correct. Yes, sir.
- Now, referring to what has been marked as the Applicant's Exhibit No. 2, would you identify that exhibit?
- A It's a composit of two USGS maps showing contoured the general drainage area adjacent to Cedar Lake Draw which is the general drainage area and drainage for the area --

MR. NUTTER: What was the name of that, please?

THE WITNESS: Cedar Lake Draw.

MR. NUTTER: Cedar Lake Draw?

THE WITNESS: Right. And movement of surface





water is to the -- from our leases it would be to the south and to the salt lake area of potash mine area.

- Q (By Mr. Kellahin) Would the surface drainage then, in your opinion, be toward that area which is exempt by the Commission?
- A Yes, sir, it would.
- Q Did you personally make an inspection to determine if there were any water sources present in this area?
- A I did.
- Q What did you find?
- A I could find no surface water being produced in -within at least a five-mile radius of this surface
  area and considerably further, but I just found no
  surface water being produced at all in the area.
- Q Do you know whether any water was encountered in any of the oil wells that were drilled in this area?
- A The knowledge that I have, none. The drilling contractor has stated that there was no surface water encountered.
- Q I believe the exhibit does show a tank, water tank, within the area which is marked yellow. What is that?
- A That is a steel water tank that the person ranching

- this area hauls water by truck to this steel water tank from which he waters his cattle.
- Q Do you know where he is getting his water?
- A From the Caprock Line that comes off the Caprock water system in Loco Hills.
- Q He has no fresh water supply there to supply that tank, is that correct?
- A None whatsoever.
- Now, referring to what has been marked as the Applicant's Exhibit No. 3 and 4, would you identify those exhibits?
- A They are acreage dedication plats filed on the two
  wells that are presently producing, one well in Section
  5 and one well in Section 6 and the location of the
  salt water pit indicated being in the same unit area
  as the well.
- Q Could you give the location of the well and the pits for the record?
- A Identifying the well as Arco Federal, the Arco Federal Lease, which comprises 160 acres of northwest quarter of Section 5, the well is located in the northwest northwest of Section 5 and also the surface pit is located in Unit "D".



- Now, that shows the footage location of the surface pit, does it not?
- A Yes, 960 feet from the west line, 910 feet from the north line.
- Q That's for the well in Section 5. Now, the one in Section 6, do you show the same information?
- A Yes. It's identified as the Allied Federal Lease.

  It's 160 acres. The 160 acres of the northeast

  quarter section of Section 6 in the well is in the

  Unit "A" and the pit is also in Unit "A" identified as

  900 feet from the north line and 460 feet from the east

  line.
- Now, at the present time, you have two producing wells on these two leases.
- A That's correct.
- Q What volumes of water do they make?
- A The Arco Federal has been in for approximately 60 days and is producing 8 barrels of water a day at the allowable rate of 70 barrels of oil and the Allied Federal Well has only been producing approximately a week and it is presently making 20 barrels of water a day and it's my opinion that it will reduce somewhat to approximately the level of the Arco Federal Well and



maybe in the order of 10 barrels a day.

- Q Was your experience with the Arco Well similar to that?
- A Yes. It came in at a higher rate of water production and has leveled off at the present rate around 10 barrels a day.
- Q And you anticipate the other one will?
- A I would think the other one would do the same, yes, sir.

MR. NUTTER: How much oil does that one make?

THE WITNESS: It is making allowable rate.

MR. NUTTER: Both of them are?

THE WITNESS: Yes, sir.

- Q (By Mr. Kellahin) You anticipate that in the future there would be an increase in the amount of water?
- A Not from the present zone which is the Grayburg Zone being produced, no; but there is a possiblity of San Andres production there that is undetermined at the present time.
- O That isn't developed yet?
- A No, sir.
- So the water you are talking about is from the Grayburg?





- Grayburg section, right. Α
- Do you anticipate other wells will be drilled in this Q area?
- Yes, we plan to develop both 160-acre tracts which will Α be four wells to each battery.
- Mr. Neal, on the basis of your investigation and your Q opinion, would the use of surface pits for the disposal of salt water or produced water cause any damage to any underground waters or any surface waters?
- I can see none that would be damaged. Α
- Q Are there any surface waters in the area?
- There's no stored water on the surface and No, sir. Α there is no ground water being produced on the surface.
- Did you find any tanks or earthen tanks for livestock? 0
- None whatsoever. A
- Were Exhibits 1 through 4 prepared by you or under Q your supervision?
- They were. A

At this time I would like to offer MR. KELLAHIN: in evidence Exhibits 1 through 4 inclusive.

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

MR. KELLAHIN: That's all I have, Mr. Nutter.

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MR. NUTTER: Does anyone have any questions of the witness? He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr.

Kellahin?

MR. KELLAHIN: Nothing.

MR. NUTTER: Does anyone have anything they wish to offer in Case No. 4438? We will take the case under advisement.



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Direct Examination by Mr. Kellahin

WITNESS

GEORGE NEAL

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PAGE

EXHIBITS

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Applicant's 1 through 4

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STATE OF NEW MEXICO )
) ss
COUNTY OF BERNALILLO )

I, GLENDA BURKS, 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



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