

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 21, 1976

EXAMINER HEARING

IN THE MATTER OF:

Application of La Rue and Muncy,)	CASES
Harvey E. Yates, H & S Oil Company,)	5719, 5720,
Gene Snow and Marbob Energy Corpora-)	5721, 5722,
tion for an exception to Order)	5723
No. R-3221, Eddy County, New Mexico.)	

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil	William F. Carr, Esq.
Conservation Commission:	Legal Counsel for the Commission
	State Land Office Building
	Santa Fe, New Mexico

For the Applicants:	A. J. Losee, Esq.
	LOSEE & CARSON, P.A.
	Attorneys at Law
	300 American Home Building
	Artesia, New Mexico

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HERBERT R. SPENCER

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1 MR. STAMETS: We will call Case 5719.

2 MR. CARR: Case 5719, application of La Rue and
3 Muncy for an exception to Order No. R-3221, Eddy County,
4 New Mexico.

5 MR. LOSEE: Mr. Examiner, A. J. Losee, Losee and
6 Carson, Artesia appearing on behalf of the applicant in this
7 case and 5720, 5721, 5722 and 5723 and I really would like to
8 move at this time 5719, 20, 21, 22 and 23 that inasmuch as
9 they are all for exceptions to the salt water disposal order
10 in the same identical area, move that they be consolidated
11 for hearing purposes.

12 MR. STAMETS: I would like to call these cases and
13 then they will be consolidated.

14 MR. CARR: Case 5720, application of Harvey E. Yates
15 for an exception to Order No. R-3221, Eddy County, New Mexico.

16 Case 5721, application of H & S Oil Company for an
17 exception to Order No. R-3221, Eddy County, New Mexico.

18 Case 5722, application of Gene Snow for an exception
19 to Order No. R-3221, Eddy County, New Mexico.

20 Case 5723, application of Marbob Energy Corporation
21 for an exception to Order No. R-3221, Eddy County, New Mexico.

22 MR. STAMETS: These cases are all consolidated at
23 this time for purposes of testimony. You may proceed.

24 MR. LOSEE: If the Examiner will give me a moment
25 I will try to get them marked appropriately by number.

1 MR. STAMETS: Okay.

2 MR. LOSEE: For your purposes if I say 5719, et al
3 or dash twenty-three, which would you prefer?

4 MR. STAMETS: For the case, whatever seems appropriate
5 and reference to one of these cases shall be reference to
6 all for my purposes.

7 MR. LOSEE: Okay, thank you.

8 Mr. Examiner, I have one witness, Mr. Herb Spencer.
9 If you will stand and be sworn.

10 (THEREUPON, the witness was duly sworn.)

11
12 HERBERT R. SPENCER

13 called as a witness, having been first duly sworn, was
14 examined and testified as follows:

15
16 DIRECT EXAMINATION

17 BY MR. LOSEE:

18 Q State your name, please?

19 A Herbert R. Spencer.

20 Q Do you live in Artesia, New Mexico?

21 A Yes.

22 Q What is your occupation?

23 A Partner in H & S Oil Company.

24 Q You have not previously testified before the
25 Commission?

1 A. No, I have not.

2 Q. Have you had any formal education in geology or
3 petroleum engineering?

4 A. No, I have not.

5 Q. Have you been engaged in the oil field work and if so,
6 for how long?

7 A. Since 1951.

8 Q. For whom were you working at that time?

9 A. For Sims and Reece Oil Company and myself.

10 Q. You were a partner in Sims and Reece Oil Company?

11 A. Yes.

12 Q. And you remained with that company until it was
13 acquired by H & S Oil Company?

14 A. That's right.

15 Q. And you are a partner in that company?

16 A. That's right.

17 Q. During that period of time, Mr. Spencer, what were
18 your responsibilities?

19 A. Oil maintenance, production and development for this
20 company.

21 Q. And was that work all done in Southeastern
22 New Mexico?

23 A. Yes.

24 MR. LOSEE: Mr. Examiner, are Mr. Spencer's
25 qualifications acceptable?

1 MR. STAMETS: Mr. Losee, I understand that you are
2 qualifying Mr. Spencer as a practical oil man with experience
3 in operations and production.

4 MR. LOSEE: Yes, sir.

5 MR. STAMETS: And he is testifying for all of the
6 applicants in this case?

7 MR. LOSEE: Yes, sir.

8 MR. STAMETS: The witness is considered qualified.

9 Q (Mr. Losee continuing.) Mr. Spencer, will you
10 explain to the Examiner the purpose of this hearing in these
11 cases?

12 A It is to permit disposal into six earthen pits on
13 leases on which each of the applicants that applied that are
14 producing salt water from the twelve wells of the applicants.

15 Q I will hand you what has been marked as Exhibit One
16 and ask you to explain what is shown by this exhibit?

17 A Well, I tried to show on this the applicants at this
18 time. At the north here the coloring, I guess that's orange,
19 is Marbob and to the left here in Section 32 in the blue is
20 Elk Oil Company or Gene Snow and Hayco or Harvey Yates Company
21 in green, H and S Oil Company in the red and La Rue and
22 Muncy colored in the blue and the pit locations.

23 Q Does it also show the twelve wells?

24 A Yes, it does.

25 Q And the pit location on each lease?

1 A. Yes.

2 Q. Do these leases offset any water flood?

3 A. Yes, they do, they offset this Texaco North Benson-
4 Queen Unit Waterflood.

5 Q. I will hand you what has been marked as Exhibit Two,
6 being a summary of fluids produced from these wells and ask if
7 you will explain the data shown on this exhibit.

8 A. Well, this is the oil produced per day and the water
9 produced per day. The Hayco leases are contained in a central
10 battery. I think all of the rest of it is self-explanatory
11 except for this Marbob, they are individual at this time.

12 Q. They are producing into separate batteries?

13 A. Yes.

14 Q. And is that data current?

15 A. Yes, it is.

16 Q. Based upon your actual knowledge or the best
17 information received from the operators?

18 A. That is correct.

19 Q. Okay, let me ask you, it's not shown on this sheet,
20 if you will relate the cumulative production to May 31, 1976
21 of each of these wells if you can?

22 A. Okay, this Yates State No. 1 the cumulative at that
23 time was twenty-two hundred and twelve barrels. The No. 2
24 was --

25 Q. Wait a second.

1 MR. STAMETS: And you are giving us cumulative oil
2 production through what date now?

3 MR. LOSEE: May 31, '76.

4 MR. STAMETS: I would like to note this as you go
5 through here. Okay, you may proceed.

6 A The Yates State 1 is twenty-two hundred and twelve
7 barrels. The No. 2 is seventy-one hundred and twenty. The
8 No. 3 is eighteen hundred and fifty-one and the No. 4 is
9 five hundred and sixty-three and the No. 6 is relatively new,
10 it was just completed.

11 Gene Snow, Elk Oil Company, six hundred and fourteen
12 barrels; Marbob Oil Company Elliot No. 1, forty-one hundred
13 and seventeen barrels. The No. 2, one hundred and thirty-one
14 barrels, his No. 3, three hundred and thirty-one barrels.

15 H & S Oil Company McClay No. 7, fifty-six hundred and
16 four barrels.

17 The La Rue and Muncy No. 9, forty-eight hundred and
18 eighteen, the No. 10 is eight hundred fifty-four.

19 Q (Mr. Losee continuing.) Okay, with respect to this
20 exhibit, some of these wells have recently been drilled and
21 completed, what about the Yates State Wells?

22 A To the best of my knowledge the Yates State 4 and
23 6 are relatively new, they were both completed this spring.
24 I believe this Elk Oil Company has too.

25 Q Completed this spring, spring of '76?

1 A Yes.

2 Q What about the Marbob?

3 A I think the Marbob Elliott 2 and 3 are both relatively
4 new and this La Rue and Muncy, both of those were completed
5 this spring.

6 Q So what you are saying is the only wells that have
7 been completed prior to this spring are the La Rue and Muncy
8 No. 9, your McClay No. 7, the Elliott No. 1, let me ask you if
9 that wasn't completed last fall in November?

10 A In November.

11 Q And the first three Yates State Wells?

12 A That's right.

13 Q To your knowledge has the water production as shown
14 on this chart increased recently. I mean, has it increased to
15 the point recently at which it is shown on this chart?

16 A Yes, it has.

17 Q Do you yourself pump any of these wells?

18 A Yes, I do. I take care of the Yates State and this
19 H & S Oil Company.

20 Q Okay, did the Yates State No. 6 when it was completed
21 have any water?

22 A Yes, it showed water.

23 Q How much, do you know?

24 A No, I do not.

25 Q Because it has gone into the central battery?

1 A Yes.

2 Q Please turn to what has been marked as Exhibit
3 Three, which on the cover of it is a summary of the separate
4 water analysis made on each lease by United Chemical. Did you
5 take the samples from which this analysis was made?

6 A Yes, sir, I did.

7 Q Where did you take them?

8 A I took it at Amax Corporation at their tailings
9 dump; H & S Oil Company at their separator; La Rue and Muncy
10 at their separator; Gene Snow's and Hayco and Marbob at their
11 separators.

12 Q And was that on or about July 15th?

13 A Yes, it was.

14 Q Now, as far as the water in those separators, why,
15 if you know, is there any such great distinction in the
16 dissolved solids?

17 A Well, the only explanation I can give there is that
18 I think it comes from the very bottom of these separators so
19 it is more than likely just settled solids.

20 Q Do you think the actual produced water would have
21 that much solids in it?

22 A I don't see how it could really. I'm sure this
23 merely has to be an accumulation that would be in the bottom
24 of these separators.

25 Q Why did you take the water analysis out of Amax's

1 Southwest Potash plant?

2 A Well, actually because they are putting it on the
3 ground and they have covered some eight hundred acres as best
4 I can figure it and it is very, very high in dissolved solids
5 and chlorides.

6 Q Okay, will your Exhibit Four show the location of
7 Amax's Potash mine and refinery with respect to these leases?

8 A Yes, it does. It starts here in Section 10, in the
9 middle of this exhibit.

10 Q Now, before you start talking about Amax, can you
11 briefly explain what is shown by this exhibit?

12 A Well, it basically still carries the leases that we
13 have up above and down here it shows the Amax plant proper and
14 I've tried to outline the total pit area and water runoff as
15 it is contained at this time.

16 Q Does it look like about eight hundred acres,
17 approximately?

18 A Well, that's a guesstimation on my part. That's as
19 close as I could get it by stepping it off and by mileage.

20 Q How far is it from the leases?

21 A It is about a mile-and-a-quarter.

22 Q To the closest lease?

23 A Yes.

24 Q Okay, please proceed with the other mines or --

25 A I have another location up here on this Duvall North

1 Shaft marked in here and I also have a rancher's house here
2 in 26.

3 Q Let me ask you about that Duvall Shaft. Do they
4 refine up there?

5 A No, they do not. To my knowledge they have just
6 pulled over there but they do have quite a substantial dump up
7 there. I don't understand why but it's there and you can
8 certainly see it.

9 Q Will one of your aerial photographs which is a
10 subsequent exhibit show this?

11 A Yes, it does, very much.

12 Q What effect is rain water on that?

13 A Well, at this time you can see it in the aerial
14 photograph that it has run to the east and north.

15 Q To the north?

16 A To the east and to the north, yes, and, of course,
17 I have an aerial photograph of this Amax plant also.

18 Q Does PCA also have a mine on the map?

19 A Yes, they do and this covers considerably more
20 area than this but I do not have it all.

21 Q How many acres is that pit? I guess that's not the
22 proper term, the proper term is where they put their tailings.

23 A Well, it looks like about a section and a half to me,
24 a section and three-quarters.

25 Q Now, you have some red markings on this map, what

1 do they reflect?

2 A Yes, I do. These are water tubs that I have been
3 able to find that belong to the rancher and one principally
4 in Section 23, 18, 30.

5 Q That is a water tub, explain what you mean by that?

6 A Well, it is just a vessel sitting on the ground that
7 the water is piped to and I don't know where from. I think it
8 comes from the north to the northeast up here someplace.
9 Part of this line is in the road and that's how I found it.

10 Q In other words, a water line feeds that tub?

11 A Yes, sir.

12 MR. STAMETS: Did you say Section 23?

13 A I'm sorry, 28. Also I have one listed down here in
14 Section 17 of 19.

15 Q (Mr. Losee continuing.) Of 30. Now, is that a
16 tub or a windmill?

17 A It's a tub. This used to be a mill years ago but
18 it's a tub now, I looked at it the other day, it's just a
19 water vessel with a pipe to it.

20 Q With a pipe to it?

21 A Yes, sir.

22 Q Is that the same water line that feeds the earlier
23 mentioned tub?

24 A Well, I can't answer that because I can't see just
25 where it is, the right-of-way or what direction. I do have

1 another tub and I know there are more right east of the Amax
2 plant itself in Section 11 and there are more on up in 12 and
3 7 going on east. They take off of Amax's water line off of
4 the caprock. I don't know just how many there are up there.

5 Q Okay, now, these tubs that you are talking about,
6 would any water falling on the surface bother those?

7 A No, it would not.

8 Q Contaminate them or otherwise?

9 A No, sir, they are controlled strictly by float and
10 they are up off the ground.

11 Q Please proceed with your discussion of the fresh
12 water in the area.

13 A I do have a windmill that is inoperative at this
14 time and has been to my knowledge for the past four or five
15 years here in Section 32.

16 Q Of 19, 30?

17 A Of 19, 30.

18 Q Okay and that's just offsetting?

19 A Excuse me, 18, 30.

20 Q In 18, 30?

21 A Yes.

22 Q Whose lease does that offset?

23 A It offsets Hayco. Even when Hayco drilled this
24 No. 4 Well which is right there by it, right beside it, we
25 didn't have any water.

1 Q At all?

2 A No, not all.

3 Q Did you drill it with cable tool?

4 A Yes, we did. We had the first water show at
5 twenty-one hundred feet.

6 Q In that well?

7 A In that well and the two wells to the north of it,
8 the No. 2 and the No. 3 on the north end of this Section 32,
9 there was no water show at all on those two and we went way
10 below the salt which was in the oil zone.

11 Q How many feet below the surface, approximately?

12 A Twenty-six or twenty-seven hundred feet.

13 Q Below the salt though, were they?

14 A Yes, they were.

15 Q Okay, now, what do you mean the well is inoperative,
16 are the rods still in it?

17 A No, they are not.

18 Q They've been pulled?

19 A Yes. It has been broken and there is nothing
20 there, everything is gone and the mill has just been standing
21 there.

22 Q Okay, now, you have another red marking over to
23 the northeast of your leases, would you explain what that
24 marking indicates?

25 A I assume this is his line camp or ranch house for

1 the Snider ranches in Section 26 and it sets in a hole over
2 here and there is one well there. It's not a mill though,
3 it's a subsurface pump and it produces water.

4 Q Does he pump that to a line to some of these tubs
5 on the ranch?

6 A Yes, he does. He produces it to a tank that is up
7 on the hill here and then from that point produces it back
8 over to a high spot that's on the hill. I believe it's in
9 Section 22 of 18, 30 and from that point he branches off and
10 supplies these tubs, at least two that I do know about that
11 run down through this area.

12 Q Through the area of your leases?

13 A Yes, in Section 28 and 32 and I think there is one
14 in 5 but I never did find it. Now, this down in 17 I do not
15 know where that comes from.

16 Q Okay, now, Mr. Spencer, would you -- this is a
17 topography map from the Department of Interior?

18 A Yes, it is.

19 Q Would you explain what would happen to any water
20 that flowed on the surface from any of those leases as to
21 which direction it would go?

22 A Well, primarily it would go southwest. You can
23 see this is the Loco Hills and this is on the west break off
24 of this and as you can see the contours come down approximately
25 to Section 9 into a point and at this time I think most of this

1 runs right in with the Amax potash.

2 MR. STAMETS: For the purposes of the record, you
3 are referring to this ridge then that runs from the purple
4 square marked Duvall in Section 27 of 18, 30 down through the
5 lease that is colored in red in Section 33 and then it drops to
6 the south and starts back towards the Amax mine in Section 10
7 and 15 of 19, 30?

8 A That's right. Also on the east side of this same
9 hill we list in the blue area the La Rue Muncy, it runs right
10 straight down as you can see a dim road cuts through this
11 Section 3. There is an old railroad track cuts through this
12 area. It also follows part of a drainage area or lake bed.
13 I'm going to call it a lake bed, it's a dry wash and it runs
14 right into the north end of this Amax tailings dump.

15 Q (Mr. Losee continuing.) So, for the record, Mr.
16 Spencer, what you are stating is the portion of the leases
17 that lie to the south and east of this ridge that cuts
18 through all of them, surface drainage off of that would run
19 to the south and east into the Amax pit?

20 A Yes, it would. I've been caught down here a time
21 or two, you know, in a flash flood or water and had to walk
22 out. This area is very susceptible to the run off. It just
23 disappears pretty quick when it comes in this area.

24 Q Have you actually seen it go from that area into the
25 Amax pit?

1 A Yes, I have.

2 Q What kind of soil is on the eastern portion of
3 that ridge?

4 A This east and west is a solid sand, deep sand and
5 I mean deep because we have problems even finding the caliche
6 some places.

7 Q Is there any fresh water in the vicinity of your
8 pits or the five proposed pits for which there is a present
9 or reasonably foreseeable use that you know of?

10 A No.

11 Q The only water well that you have discussed is the
12 water well over at the Snider camp which is to the north?

13 A Yes, in Section 26.

14 Q That is approximately how far from the nearest lease
15 line?

16 A It's a mile-and-a-half.

17 Q Is it downdip or updip?

18 A Yes, it is.

19 Q Is it downdip or updip?

20 A It's updip from these leases, downdip from Duvall's
21 North Shaft.

22 Q And that is reflected by the surface topography?

23 A Yes, it is, very definitely. From Walter's lake
24 here you can see that the contour runs down the east side of
25 Section 26 and then comes right on around.

1 MR. STAMETS: When you are referring to dip there,
2 you are talking about surface and not subsurface?

3 A. Yes, sir. And I understand that there was one more
4 well that they had up here in Section 24 that they abandoned.
5 I don't know anything about it. They said it was too salty.

6 Q. (Mr. Losee continuing.) Okay, now, you have in the
7 area portrayed on this map, has the Commission heretofore
8 approved exceptions to this no-pit order?

9 A. Yes, they have.

10 Q. Would you point out those areas?

11 A. In Section 17 in the north part of this map.

12 Q. Township 18?

13 A. 18, 30.

14 Q. Okay.

15 A. Order R-3820, Franklin, Aston and Fair. I also
16 have one more down here in Section 30 of 19,30, David Collier,
17 Order No. R-4016.

18 Q. And with respect to those two areas, do your leases
19 generally lie in between them?

20 A. Yes, they do.

21 Q. And in between them also as far as the surface
22 topography is concerned?

23 A. Yes, it does.

24 Q. Okay, now, is there an area to the east of your
25 leases in which Hanson Oil Corporation applied for an exception

1 and was denied by the Commission?

2 A Yes, they did. It was in Sections 26, 25 and 30
3 of the next Township. This is the only ones I can recall
4 right now.

5 Q Please turn to what has been marked as Exhibit
6 Number Five, Mr. Spencer, which are some calculations and
7 explain what is shown by those calculations?

8 A Well, this is a calculation that I did when I took
9 this sample from the Amax plant to run a water analysis. This
10 is just the best I could do with the calculations that I had.
11 It shows a gallon per minute equal of two point fifty-six X,
12 D squared over the square root of Y. All right, what I did
13 here was take the diameter of the pipe in inches. All right,
14 and X is the inches from the end of the pipe out to where
15 the waterflow hits the ground. Y is the flow from the top of
16 this same pipe to where the water hit the ground. All right,
17 this calculation comes up in gallons per minute or at least
18 the best I could do. I did not have any way of accurately
19 measuring it and I had to guess at it and I came up with
20 four hundred and forty-three gallons per minute or ten point
21 five barrels a minute and calculated this out to fifteen
22 thousand, a hundred and ninety-two barrels a day.

23 Q And that is being discharged a mile-and-a-quarter
24 to the south and east of your leases?

25 A Yes, it is.

1 Q And that fluid contains something around four
2 hundred parts per million of solids?

3 A Yes, it does. This sample was taken from the top of
4 the pipe and that was as close to it as I could get and out of
5 a ten-inch pipe with as much solids as this thing runs the best
6 I could tell after I got the sample back and just measured it,
7 it looks like the solids were twenty-eight to twenty-nine
8 percent of my sample that I took and this was in the top of the
9 ten-inch pipe so in the lower end of this and standing back
10 from the pipe you could hear gravel and tailings running down
11 in the bottom of it. So this is certainly conservative as far
12 as the solids.

13 Q And the total amount of water output on the leases
14 is, I believe, shown by your Exhibit Two as fifty-one barrels
15 per day?

16 A Yes, that's right.

17 Q And that's in comparison to the over fifteen thousand
18 by Southwest Potash?

19 A Yes.

20 Q Now, we only have one set of the aerial photos so
21 let me ask you to go up, you and the Examiner, if you will, and
22 maybe I can get you to number each of them A, B or something
23 like that as he goes through them.

24 MR. STAMETS: As we go through these I will mark
25 each one of these A, then B and so on.

1 A Just looking at this top one for the first pass by
2 the plant and you can see this is the tailings dump proper.

3 MR. STAMETS: This is at the Amax plant?

4 A Yes, it is. This dump at this time is considerably
5 higher than even their warehouses.

6 MR. STAMETS: And it is on the right-hand side of
7 the photograph?

8 A Yes, and this is the water tailings part of it.

9 MR. STAMETS: To the left?

10 A Yes.

11 MR. STAMETS: That's Photograph A. Now, I'm
12 marking Photo B.

13 A Okay, this is just another sequence that is run on
14 down the same trend, it is still to the south. It just takes
15 in that much more of the same area.

16 This is Amax again. See, it is just another shot of
17 it. It covers a little bit better the water tailings end of
18 it and then D covers it completely, I think. This is the old
19 railroad line that has now been taken up.

20 MR. STAMETS: Kind of a brown line running from
21 left to right on the photograph?

22 A You can get a perspective of the whole pit at that
23 time.

24 These are samples of Duvall's North Shaft.

25 Q (Mr. Losee continuing.) They are pictures, aren't

1 they?

2 A Yes.

3 Q Okay.

4 A This is the first one that I took. You can see
5 the rainfall and what it has done around it. This is very
6 high, it's on top of this hill. This is your Walter's lake
7 as shown on the other exhibit.

8 MR. STAMETS: That's to the left-hand side of the
9 photograph?

10 A Yes, over to the east.

11 All right, looking back down this same picture you
12 can see the leases of Texaco, Marbob and the Amax plant right
13 here.

14 MR. STAMETS: And those are on the upper right-hand
15 side of the photograph?

16 A So, you can readily see that the leases are in between
17 these two.

18 MR. STAMETS: And the photograph does show a large
19 pile of whitish looking material in the center of the photo-
20 graph to the left-hand side of the hoist?

21 A Yes, and the railroad track.

22 MR. STAMETS: And that is Part E of Exhibit Number
23 Six.

24 A This is the same, it is just another picture back
25 down towards Walter's lake and you can see the area it

1 encompasses. This is the picture of the lease as I was directly
2 over Duval, still looking back toward Southwest Potash to
3 depict the area between the two.

4 MR. STAMETS: The last one is Part G.

5 Q (Mr. Losee continuing.) Did you take those pictures,
6 Mr. Spencer?

7 A Yes, I did, yesterday afternoon.

8 Q Were Exhibits One through Five prepared by you or
9 under your direction?

10 A Yes, sir.

11 MR. LOSEE: We move the introduction of Exhibits One
12 through Six.

13 MR. STAMETS: These exhibits will be admitted.

14 (THEREUPON, Exhibits One through Six
15 were admitted into evidence.)

16 MR. LOSEE: That's all at this time, Mr. Examiner.

17

18 CROSS EXAMINATION

19 BY MR. STAMETS:

20 Q Mr. Spencer, has any research or any investigation
21 been done on perhaps putting this water back in the reservoir
22 through an injection well?

23 A Not to my knowledge it hasn't. La Rue and Muncy
24 down there in No. 8 was a hole that we are still going to play
25 with, I think. They were talking about making it into an

sid morrish reporting service
General Court Reporting Service
 825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
 Phone (505) 982-9212

1 injection well but I'm afraid it is going to be too tight.
 2 This is the only thing I do know about him to talk of.

3 Q On Exhibit Number Two you show no current production
 4 from the Yates State No. 1, 2, 3 and 4, is that correct?

5 A This is a consolidated battery and these are all
 6 total pictures.

7 A A total of fifty barrels of oil and eighteen barrels
 8 of water is the combined production from all five of those
 9 wells?

10 A That's right. I'm sorry, I thought I made that
 11 statement.

12 Q So, the one well that you're referring to is the only
 13 shut-in well on any of these leases that could be used for
 14 salt water disposal?

15 A It's really not even here, no. The La Rue and
 16 Muncy No. 8 and it's on the south end of his lease here in
 17 Section 33. It would be the southeast corner.

18 Q That one little forty that sits down there all by
 19 itself?

20 A Yes. They have tried to complete it and they are
 21 working on it and they've been kicking this around but that is
 22 as far as it has been. It took a lot of pressure to frac the
 23 well so I don't know whether it would justify it. There is
 24 still somemore study needs to be done on this.

25 Q Mr. Spencer, the leases shown here appear to offset

1 that north Benson Queen waterflood project of Texaco?

2 A. Yes, they do.

3 Q Are these wells completed in that same formation?

4 A. Yes, sir. Some of them are completed places where
5 Texaco isn't.

6 Q Would you expect the water production to increase
7 in these wells?

8 A. Well, yes, I do.

9 Q Do you have any idea what Texaco is producing out
10 of there as far as water cuts on some of their wells?

11 A. I'm sorry, I do not. Their oil production on those
12 run five to six hundred a day at this time but their water cuts,
13 no, I do not.

14 Q That would be reflected on the Form C-120's filed
15 by Texaco, I would presume?

16 A. Yes.

17 Q Perhaps those should be available to the Examiner in
18 making a decision in this case.

19 A. Okay.

20 MR. LOSEE: I have no objection.

21 Q (Mr. Stamets continuing.) In the mining operations
22 for potash, to your knowledge does secondary mining ever
23 result in fracturing of the surface formations in this
24 particular area?

25 A. Oh, it certainly has.

1 Q What about right in the area of these leases, have
2 you ever seen any evidence of that fracturing?

3 A Well, I'll just have to guess, this was about a
4 year-and-a-half to two years ago, I followed one of these
5 features on top of the ground in Section 4 of 19, 30 and
6 paced it off and it was a hundred and fifty yards long across
7 the highway and down off of this hill and at one point it was
8 about three-and-a-half feet wide and I can't say how deep. And
9 this whole highway between in Section 5 of 19,30 and on all the
10 way into the plant and then our highway or the paved road that
11 goes down the top of this Loco Hills has cracked and has
12 features in it. The Highway Department has a little problem
13 trying to keep these patched up so at least we don't have
14 any big problem.

15 Q Which direction do these surface fractures run,
16 north and south or east and west?

17 A No, they are east and west, the ones that I have
18 seen on this hill anyway and I understand back to the south
19 you can see across the highway south of the Amax plant that
20 there is quite a few that run east and west across that
21 highway but I did not stop and get out and walk across the
22 prairie on those.

23 Q Mr. Spencer, is it possible that these fractures
24 which run east and west could provide avenues for water
25 movement below the surface of the ground, east and west

1 from the area that we are discussing here today, from the
2 pits?

3 A Yes, it's very possible inasmuch as it is on top
4 of the hill and any rain water from this would certainly
5 wash it out.

6 Q And I believe you testified there is a water well
7 in Section 26 of 18 South, 30 East and it looks like the
8 northwest quarter of the southeast quarter?

9 A Right.

10 Q To you knowledge is there anything that would
11 prevent this water from migrating through some of these
12 fractures over to this producing water well?

13 A Well, I have not seen any of these features or
14 these cracks this far up, up here close to where this water
15 well and this house is. Now, as I say, it was just up this
16 pavement along the top of this road, just as it comes onto
17 our lease and if there is one back to the north then I
18 haven't seen it.

19 Q So, what you are saying is that at least the surface
20 cracks are fairly well localized around the road and the
21 Duvall mine?

22 A Yes.

23 Q Have you been over to this house?

24 MR. LOSEE: Let me stop you. You said the Duvall
25 mine, I think he meant the Amax mine.

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1 A. It's the Amax, it's not the Duvall that's doing
 2 this. It's down toward -- did I give you the wrong section?

3 MR. STAMETS: Let's go off the record and see.

4 (THEREUPON, a discussion was held
 5 off the record.)

6 A. I would like to reiterate that the only features
 7 that I have seen close to this lease are in Section 5, they
 8 run right up the east side of it and go into the corner of
 9 this Section 33. That is about the extent of it. Most of the
 10 rest of them that I have found are to the west of the Amax
 11 plant and south. Now, it may extend quite away out, I don't
 12 know about that.

13 Q (Mr. Stamets continuing.) In making this application
 14 did you or did anybody else contact the Snider Ranch and
 15 advise them of this application?

16 A. No, I did not.

17 Q Somewhat earlier the Hanson application in the area
 18 of Section 26, 18, 30 was mentioned and I believe the record
 19 will show that was Case Number 4710. Mr. Spencer, were you
 20 aware that in that case the foreman of the Snider Ranch
 21 indicated he would object to any application to dispose of
 22 salt water on the surface of the ground within three miles
 23 of that water well in Section 26?

24 A. Well, inasmuch and you can see here on the topography
 25 of the land, he is primarily interested and he says so, I

1 believe, that his surface water is right here in this hole
2 and it would be in the southeast corner of Section 26 and the
3 northeast corner of 35, the one below it, and there is quite
4 a large hill to the east of it. It's contained at that
5 point, so the surface drainage at that time would be to the
6 southwest. All right, then immediately behind the house there
7 in Section 26, there is quite a large hill that runs through
8 the parts of 26 and 27 and then turns south in 34. Now,
9 we are downdip topography-wise from this house and from this
10 water or from this surface water.

11 As I pointed out before that our drainage, that
12 I have seen anyway from this Section 33, runs southeast
13 through Section 3 of 19, 30.

14 Q Getting back to my question, though, I believe that
15 your answer is probably going to be, "No, that you were not
16 aware in this earlier case that the ranch foreman had
17 indicated he would object to any surface disposal within
18 three miles of this particular well"?

19 A Well, no.

20 Q I believe the record in this earlier case also
21 indicates that he testified that this was the only good
22 water well in the general vicinity and that a number of these
23 other wells had gone bad over the years for one reason or
24 another?

25 Mr. Losee, I believe that the record in this

1 Case 4710 should be incorporated in the record of this
2 particular case.

3 MR. LOSEE: Mr. Examiner, recognizing that my
4 objection thereto would be wasted, I will not so do, except
5 I would, one, point out that to the extent that it bears
6 upon this application but not to show that there is an
7 objection or protest to it. We were not aware of their
8 protesting the Hanson application until just prior to this
9 hearing when you furnished us with the application and I
10 would urge that if they intended to, this is the hearing
11 that they should be present so that we can cross examine them
12 with respect to the matters that Mr. Spencer has testified to
13 and I guess having qualified my lack of objection, I have
14 none.

15 MR. STAMETS: The record in Case 4710 will be
16 admitted in this particular case.

17 Q (Mr. Stamets continuing.) Mr. Spencer, you have
18 indicated that you are not a geologist, is that correct?

19 A Yes, sir.

20 Q And you are not a hydrologist?

21 A No, I'm not.

22 Q And you don't have any testimony to indicate to
23 the Examiner what might happen to this water once it
24 disappears into the sand or once it flows down to the south
25 away from this area if it happens to flow on the surface?

1 A It disappears very readily. In fact, in this
2 Walter's lake I have seen it rain awfully hard and it doesn't
3 stay there very long.

4 Q You can't tell me if it runs directly toward
5 Section 26 or directly away or any other particular direction?

6 A. No.


7 MR. STAMETS: Any other questions of this witness?
8 He may be excused.

9 (THEREUPON, the witness was excused.)

10 MR. STAMETS: Anything further in this case?
11 The case will be taken under advisement.

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter,
do hereby certify that the foregoing and attached Transcript
of Hearing before the New Mexico Oil Conservation Commission
was reported by me, and the same is a true and correct record
of the said proceedings to the best of my knowledge, skill and
ability.


Sidney F. Morrish, C.S.R.

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 5719 4th 5723
heard by me on 7-31, 19 76.


Richard H. Stewart, Examiner
New Mexico Oil Conservation Commission