

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 25, 1969

EXAMINER HEARING

IN THE MATTER OF:)

Application of Plains Radio Broad-)
casting Company for an exception to)
Order No. R-3221, as amended, Chaves,)
County, New Mexico.)

Case No. 4262

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 4262.

MR. HATCH: Case 4262. Application of Plains Radio Broadcasting Company for an exception to Order No. E-3221, as amended, Chaves County, New Mexico.

MR. WHITTENBURG: Mr. Examiner, I am George Whittenburg, with the law firm of Folley, Snodgrass and Calhoun, in Amarillo, Texas.

I am here today representing Plains Radio Broadcasting Company. We propose the introduction of evidence from several wells, as shown by Rinehart's Oil and Gas Reports. And we have the testimony of one witness, Mr. J. P. White.

(Witness sworn).

MR. HATCH: The record should show that there is a letter of appearance from the New Mexico Attorneys.

MR. UTZ: Do you have more than one copy of the exhibits?

MR. WHITTENBURG: I just have these originals -- and I just have this one map.

(Whereupon, Applicant's Exhibits 1 and 2 were marked for identification.)

J. P. WHITE, JR.

called as a witness, having been first duly sworn, was examined and testified as follows.

DIRECT EXAMINATION

BY MR. WHITTENBURG:

Q State your name, please.

A J. P. White, Jr.

Q What is your residence?

A Roswell, New Mexico.

Q Are you familiar with the L. E. Ranch east of Roswell?

A Yes, sir.

Q Does this ranch include Section 34, Township 11 South, Range 29 East?

A Yes, sir.

Q What was this ranch known as in times past?

A It was always known as the L. E. Ranch -- that was the brand name, and it doesn't mean anything otherwise.

Q Are you familiar with the three wells drilled on Section 34, 11, 29?

A Yes, sir.

Q All right. Does this topographical accurately reflect the terrain and the location of these three wells and the water surface -- the surface water tanks in this area?

A Yes, sir.

Q All right. Does this line accurately represent the south boundary of the L. E. Ranch?

A Yes, sir.

MR. UTZ: Mr. Whittenburg, are you going to refer to that map anymore?

MR. WHITTENBURG: Not for him.

MR. UTZ: You don't need it anymore?

MR. WHITTENBURG: He will testify to some things that can be --

MR. UTZ: Well, you can put it on the wall, if you want to -- we both need to refer to it.

MR. WHITTENBURG: Well, I don't think he needs to refer to it.

Q (By Mr. Whittenburg) Are you familiar with the underground formations on the L. E. Ranch?

A Yes, I am, to a great extent.

Q What is the basis of your knowledge?

A From what standpoint?

Q From both; take water first, and then oil --

A This land is located east of Roswell. And practically all of the terrain is a mixture of red beds, salt deposits and gypsum -- overlying the San Andres, the Queen, first, and the San Andres Formations.

At this point that you referred to, these were public wells -- at that point, overlying portions of approximately seventeen hundred feet of the San Andres Formation.

Q Mr. White, at one time, did you own this ranch?

A Our family owned this ranch, yes, for over thirty years.

Q All right. Did you drill numerous water wells?

A Yes. My father drilled a good many water wells prior to his death in 1934. And for over twenty-five years. I was manager of the ranch and drilled enumerable attempts for water.

I also observed the drilling of possibly twenty-five or thirty oil tests, none of which, to my knowledge, had any water of any consequence.

Q Okay. Have you drilled water wells in this area near these three wells?

A Yes, that area was tested.

Q Did you discover any water in the vicinity --

A Nothing of any consequence -- there's nothing that you would call potable water.

Q Did you discover any salt beds in this area?

A Yes, sir.

Q Okay.

A At a location of approximately -- oh, I would say, a mile and a half to two miles, west of this location, we attempted a water well exploration, and we did find a small amount of water within the first twenty-five or thirty feet.

And we went on down, and for the next one hundred and fifty feet, it was pure salt. We abandoned the well at that time, and attempted to produce this shallow water. And we, in fact, put up a windmill on it -- but it was fed by surface water there, and it was soon exhausted.

Q All right.

A Other attempts were made in that area, by my father and by myself for potable water -- for livestock purposes, in particular.

Q What do you have to do for livestock water on this ranch? It's a rather large ranch --

A Well, during the time that I was manager and part owner of this ranch, I either built or had built over fifty earthen tanks, all of which were more or less selected from red bed formations, or red clay, a clay that was impervious -- and these tanks still exist out there. And the deeper tanks, in that period of time, even though were replenished, whole or part, in some years, have never been dry.

Q Do these water tanks that you built, the surface water tanks that you built in the red clay formations; did you have any experience with any of them leaking?

A No, sir. Not if they were in the red clay.

Q All right.

A If they were in the gypsum formation, yes, but we avoided the gypsum formations.

Q All right. Now, is there a great amount of water piped from one place to another --

A Yes. The last year that I had charge of this ranch, through one of the soil conservation programs, I intalled over one hundred and sixty thousand feet of plastic pipe on this ranch.

Q Where is the best water on this ranch?

A There is one small area -- I would say, two small areas on the ranch, that produce fairly good water -- it's an area approximately seven or eight miles to the northwest of this location we are referring to, covering not only two sections that produces fairly good water -- that's right on the highway, and can be easily shown.

And then, my father, after he acquired this property, back in the middle '25s, he started a well drilling program on the ranch, and after drilling -- oh, I don't

know -- ten or twelve dry holes, he decided to drill in an igneous dyke -- that's a geological formation, that runs east and west up through the ranch.

And even though, he had expert advice from some of the geologist that he would never find water in that igneous dyke -- he did -- a small amount, about three gallons of water a minute, at about three hundred feet in depth, in this igneous dyke -- and it was igneous all the way down.

That well is still in production, and it is drinking water.

MR. UTZ: Where is that well located?

THE WITNESS: It is -- now, this well would be -- I'm not familiar with the sections and so forth, but I could show it to you -- that map doesn't show the whole --

MR. WHITTENBURG: No, it does not.

THE WITNESS: It would be at least --

MR. WHITTENBURG: Seven to ten miles --

THE WITNESS: -- twelve to fourteen miles north of this location. It would be north of the 385 Highway that runs east from Roswell.

Q (By Mr. Whittenburg) Mr. White, going to the surface, there, around these three wells, which direction

would water drain, deposited on the surface there, at the three wells?

A This ranch is -- contains about one hundred and twenty-two thousand acres, and as we knew it, there was a drainage draw, known as -- along the arroyo, that entered this ranch on the northeast corner.

This draw ran diagonally through the ranch, and veered to the west. The water, in general, tried to work its way toward this draw -- in other words, the water at this point, the subject point, attempts to go to the southwest -- mostly to the west.

Q All right. Do you know, from your experience, from your observations, that the oil wells drilled in the area, which direction the underground formations dip?

A Well, I'm quite sure that all of the formations in that area dip to the southeast at approximately sixty feet to the mile.

This red bed formation that I referred to outcrops at the Pecos River, and soon after that to the west, the San Andres outcrops immediately west at Roswell.

Q Are you familiar with the Malstrom Windmill, south of these three wells?

A I have been there, yes, sir.

Q When were you first familiar with this windmill?

A Well, I was familiar with this ranch for five or six years prior to my father's death in 1934, and worked with him in developing that ranch -- and at that time, I knew the owner of that Malstrom Ranch -- his name was Douthitt.

Q Would you describe the water at that Malstrom Windmill?

A It was my understanding, and I can't tell you definitely, but I know that all of the ranchers in this red bed section, and I mean, from the Plains, west to the Pecos, and on south to Carlsbad, are more or less dependent on either rain water that they catch off their barns or houses, or they haul water -- with few exceptions.

The water at the Malstrom Ranch, to my understanding, it was not a real potable water -- it was water that could be used in part by stock, but it was supplemented by a tank -- by tank water for livestock purposes.

Q Are these the characteristics of that water prior to the time these three wells were drilled in this area?

A I'm sure it was.

Q Now, would you describe the type of soil underlying

the -- first, are you familiar with the disposal pit that was used in connection with these three wells?

A Yes. It was granted by us to Republic Natural Gas Company, who operated as part owners of the property at that time -- the oil properties at that time.

Q Did this pit handle all of the salt water from all three wells?

A Yes, sir.

Q Okay. To your knowledge, has water from the salt water disposal pit ever broken through the dykes on the salt water --

A Not to my knowledge. At least, not while we owned this property.

Q And that would be since --

A In 1962, we disposed of the property.

Q Now, would you describe the type of soil bed underlying this salt water disposal pit?

A Well, all of that country, as I stated, conglomerated of gypsum, red clay and salt beds.

Q Is this the same type bed that underlies the surface water tanks that you described earlier?

A Yes, sir. That's right, with the exception

that these red bed formations are not continuous -- in other words, sometimes they stop very abruptly, and gypsum will start in.

On occasion, I have dug tanks, in what I thought was a red bed formation, and on one side or another, I would hit gypsum -- well, gypsum is soluble, and does not hold water very good. And so, I would then take the red clay removed from other parts of the tank, and clape this gypsum apart -- and I would get good results, perfect results.

Q While you owned the ranch, did this salt water disposal pit ever leak?

A Not to my knowledge, no.

Q Okay. To your knowledge, is there any underground movement of shallow water through this area?

A Not to my knowledge. Not that we ever found -- nothing that we ever thought might exist. The only underground water that might exist there would be perhaps where these gypsum beds might be formed for a small distance and run into a clay bank -- and that would be the end of it.

Q Do you know whether or not the people there at the Malstrom Ranch hauled their drinking water?

A I don't know at this time.

Q Do you know at any time whether they --

A Well, they did -- the Douthitt's did, I know.

Q They did not drink this water from this well?

A I don't -- I don't think they use it for household use. Now, they might have used it for other purposes -- I don't know. It was not my business.

MR. WHITTENBURG: All right. I have no further questions on direct examination.

CROSS EXAMINATION

BY MR. UTZ:

Q Where is the pit located?

A I think you will find it -- well, Mr. Whittenburg will show you.

MR. WHITTENBURG: This pit -- the east line of this pit lines up at a point a quarter of a mile east -- and it starts in about here (indicating) -- it's very close -- it wouldn't be off two or three acres.

MR. UTZ: Now, what's this line across here? (Indicating).

MR. WHITTENBURG: That's the south boundary line of the Elliott Ranch.

MR. UTZ: I see.

Q (By Mr. Utz) Generally, is this below the

cap?

A Yes, it is. Yes, it is -- it's below the cap block, and of course, you know the cap block is a different geological formation.

In other words, the San Andres and the cap is much deeper than the seventeen hundred feet at this particular point.

Q Now, how many producing wells are they producing in this pit at the present time?

MR. WHITTENBURG: None, at the present time -- number one, the No. 1 well, the northern most well, is the one --

MR. UTZ: That you want to produce; is that correct?

MR. WHITTENBURG: Yes, that we want to produce.

MR. UTZ: Well, what is this two and three here? Are they abandoned wells?

MR. WHITTENBURG: Well, three -- if we can get an economical operation going -- they are very marginal wells -- and we would like to produce three at a later time, but we would like to see what we can do with one first.

Number two is producing some gas with which we pump number one with. Right now, I believe it has been -- they moved up the hole and plugged --

THE WITNESS: It's plugged back to the Mississippian.

MR. UTZ: Mississippian Gas?

THE WITNESS: Yes, sir. Plugged off of the Devonian and tried to produce gas out of the Mississippian.

Q (By Mr. Utz) What is the one and three producing from?

A The Devonian. It was drilled in 1953.

MR. WHITTENBURG: Mr. Examiner, this particular map shows the cap rock in this area, and Range 29 is in this area -- these two maps together, might be helpful to show the cap rock on these.

MR. UTZ: What is the one-thirty well in Section 30 of 11 South, 30 East, and the Gulf One at Section 29 -- why are they shown on this map; for any purpose in this case?

MR. WHITTENBURG: Yes, Mr. Examiner -- to enable me to understand the lay of the underground formations, I drew lines through those and took the information off of Rinehart's Oil and Gas Reports, to show this, and I have all of the reports for each one of those wells, and would

introduce all of them into evidence.

Primarily, these show -- these three show the anhydrate formation, coming up, slightly, to the south -- and this shows the anhydrate formation sloping drastically off in this direction -- (indicating) -- and it shows a salt -- well, I'll introduce these four reports into evidence or move that they be introduced in evidence.

Primarily, I want to show the reports that the upper formations dip up to the south and off in this direction (indicating), so, if there were any underground shallow water, it would first pick up this salt and contaminate it, and secondly, it would more than likely, go up in this direction (indicating), rather than over toward that mill.

Now, on this well down here (indicating) -- this was a dry hole, and it has the tops --

MR. UTZ: Now, you are referring to the east -- the Steinburger No. 1, in Section 33, of 12 South --

MR. WHITTENBURG: Yes. I haven't introduced that; but, it does not have the tops available for the shallow formations, but it does have the correlation for the tops of the Glorietta Formations -- in the San Andres.

Q (By Mr. Utz) Now, Mr. White, is it your testimony

that the beds dip sixty feet per mile southeast in this area?

A That's my understanding.

Q And the surface dips to the southwest?

A At this point, yes -- it dips toward the -- this long arroyo draw, which I referred to, which comes through the ranch.

Q Do you have any knowledge of the wells shown on some of our maps of Section 11 to the southeast on Section 34?

A I would just have to look at a map, sir.

MR. HATCH: Mr. Utz is referring to maps of the State of New Mexico, issued by the New Mexico State Highway Department, the transit division, quadrangle number 95.

MR. UTZ: This is the --

MR. HATCH: Ninety-four inlay.

MR. UTZ: Now, Section 3, of this well located here (indicating), is the Malstrom Well?

THE WITNESS: I'm not familiar with that.

MR. UTZ: I see. You don't know whether it would be a good well or a bad well or any well at all?

THE WITNESS: No, sir, I don't.

Q (By Mr. Utz) That location would be approximately two miles to the southeast; is that correct?

A I presume so.

Q And the Malstrom well is approximately one mile south?

A That's right; yes, sir.

Q How much water do you propose to produce into this pit of produced --

MR. WHITTENBURG: I think it's varied in times past -- I think it would be between fifty to eighty barrels per day -- I'm just not certain.

MR. UTZ: How salty is this water?

MR. WHITTENBURG: This water is pretty salty, to my understanding.

MR. UTZ: You never had any analysis run on it?

MR. WHITTENBURG: We have never had any analysis run on it. It would be my presumption that if it did get into fresh water, it would contaminate it.

MR. UTZ: Did you say how much oil these wells were producing?

MR. WHITTENBURG: The No. 1 -- I believe, when Mobil was the operator, and sold out -- I believe, it was between sixteen and twenty barrels a day.

MR. UTZ: It's not producing now at all?

MR. WHITTENBURG: It's not producing now at all.

MR. UTZ: Is this because it can't produce or have you got it shut-in --

MR. WHITTENBURG: We've got it shut-in pending this hearing.

MR. UTZ: Is it producing sixteen to twenty-one barrels per day before you shut it in?

MR. WHITTENBURG: That's my understanding -- prior to the time that Plains Radio Broadcasting Company purchased it.

MR. UTZ: Plains hasn't produced this well at all?

MR. WHITTENBURG: I think they pumped it -- I think a pumper put it together to see what it would pump, and it pumped some, and I think that was his estimate -- the sixteen to twenty.

MR. UTZ: And, in addition to this, you propose to produce the No. 3 Well if it will produce?

MR. WHITTENBURG: If in the -- in the alternative, of course, we have applied for a permit to dispose of salt water into the No. 3 Well.

If we did that, of course, we would not be able

to produce the No. 3 Well. If we were able to get the exception and were able to make it economical, at a later date, we would try to pump the No. 3 well.

MR. UTZ: Your application proposes an alternative?

MR. WHITTENBURG: Yes, sir. It is a marginal situation, and would not justify lining the pit -- probably would not justify -- to force the water into a salt water disposal well.

MR. UTZ: Now, if we should rule that you have to dispose in a No. 3 well: how is it completed?

MR. WHITTENBURG: I believe it is shown on those oil and gas reports -- it's completed also on the -- let's see here -- producing for perforations -- twenty-eight perforations, between eighty-seven forty-three and eighty-seven fifty.

MR. UTZ: Eighty-seven forty-three?

MR. WHITTENBURG: Eighty-seven forty-three -- at a depth of eighty-seven forty-three and eighty-seven fifty.

This, of course, as it stands now, would be going back into the same pay formation, at a lower -- well, at approximately the same depth, but I believe the formation --

a deeper formation dips to the south on these three wells.

MR. UTZ: Does this well have tubing in it now?

MR. WHITTENBURG: Yes.

MR. UTZ: Then, it would be your proposal to just inject down the well as it is now?

MR. WHITTENBURG: Yes.

MR. UTZ: No packer around the tubing?

MR. WHITTENBURG: I suspect we would do whatever we needed to get it down the tubing -- to that formation.

MR. UTZ: Questions of the witness?

MR. HATCH: Mr. White, do you know the depth of that Malstrom Windmill?

THE WITNESS: No, sir.

MR. HATCH: When were you last in this area?

THE WITNESS: As owner?

MR. HATCH: No, have you been preparing for this case?

THE WITNESS: No -- I've been out to the property, in general, quite often.

MR. HATCH: But not making investigations --

THE WITNESS: No.

MR. HATCH: -- looking for particular wells?

THE WITNESS: No.

MR. HATCH: Mr. Whittenburg, have you been to the area?

MR. WHITTENBURG: Yes, sir, I have.

MR. HATCH: Were you looking for any windmills?

MR. WHITTENBURG: Yes, I did not see a windmill in this area -- I was by this well -- (indicating) -- in this area, on Sunday.

MR. UTZ: You are referring to the Malstrom Well?

MR. WHITTENBURG: Yes. Yes, I was by there Sunday.

MR. HATCH: Did you find out the depth of the water?

MR. WHITTENBURG: No, I did not.

MR. HATCH: The windmill is still there?

MR. WHITTENBURG: Yes, it is.

MR. HATCH: And does it appear to be producing?

MR. WHITTENBURG: Yes, sir.

MR. UTZ: That is the only windmill you saw in the area?

MR. WHITTENBURG: Yes, sir. That's the only one I saw in the area.

MR. HATCH: Mr. Whittenburg, of course, you

were not sworn as a witness. Perhaps we should swear you as a witness.

MR. WHITTENBURG: All right, sir.

(Whereupon, at this point, Mr. Whittenburg was sworn upon his oath for the testimony previously given and for testimony given after this point.)

MR. HATCH: One reason I am interested in the size of this pit, as you realize, the order of the Commission requires the pits that have been used for salt water disposal, at one time, to be covered, filled and to be compacted within so many months after they are not used anymore.

And you have testified that this is a forty-acre pit?

MR. WHITTENBURG: Approximately, yes, sir. I suppose we would have to do that, if we were not able to use this -- this pit.

MR. HATCH: Do you know how many years this was used before this for a disposal?

MR. WHITTENBURG: I think every year, since they drilled the wells -- from '54 or '55.

MR. HATCH: Is this a natural pit or --

MR. WHITTENBURG: No, it's a -- it's actually a dug out pit, yes, sir.

MR. WHITE: I can answer that.

MR. HATCH: All right.

MR. WHITE: It's a bull dozier pit -- it's just four sides -- it's just a bull dozier type pit -- most of it is just a natural ground lift.

MR. HATCH: Did the water that was disposed in it, did it cover most of the area?

MR. WHITE: I never did see the pit covered completely -- the only water that was lost, I think, was about that much -- the pit was fenced.

MR. HATCH: That's all I have.

MR. UTZ: Approximately, how deep were the dykes around --

MR. WHITE: Well, as I recall, they were four -- not over five feet in heighth.

MR. UTZ: Any other questions of the witnesses?
You may be excused.

(Witnesses excused.)

MR. UTZ: Statements in this case?

MR. WHITTENBURG: I would like to make one sum up statement, if I might.

MR. HATCH: Excuse me, I don't believe he ever introduced the exhibits.

MR. UTZ: Do you want Exhibit Nos. --

MR. WHITTENBURG: That is all the -- all five cards are Exhibit No. 1 -- I mean No. 2.

MR. HATCH: Well, this would be Exhibit No. 1.

MR. WHITTENBURG: Yes, No. 1.

MR. UTZ: Exhibit No. 1, consisting of a map of the area in question, and Exhibit 2, consisting of four parts of well records, for wells in the area, will be introduced in the record of this case.

Statements?

MR. WHITTENBURG: The only statement that I would like to make is that there -- for this half mile, the anhydrate bed on the surface, does come up in this direction -- (indicating) -- and goes off in this direction (indicating) and, of course, to this well -- I don't know, I don't have the information off in this direction (indicating) -- but the anhydrate dips very drastically from this well to this well -- (indicating) -- and it does dip up -- and there is a salt formation shown on the reports for this No. 1 well and this well (indicating).

I believe that Mr. White testified there is no underground movement of shallow water in this area. If there were, it would go off in this direction or this

direction (indicating).

And if there were such movement, it would pick up the salt from this area (indicating) -- and contaminate the water of the wells.

The whole area is quite salty -- the water porosities are not very good, and they have been that way for an awful long time.

MR. UTZ: In other words, it is your contention, in your statement, that any drainage that might come from this pit would go to the east, rather than to the south?

MR. WHITTENBURG: Yes, sir. More so to the east.

MR. UTZ: Any other statements?

The case will be taken under advisement.

(Whereupon, a short recess was taken).

I N D E X

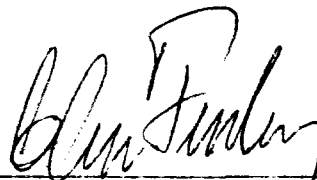
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STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, CA FENLEY, 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

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4262 heard before on Feb. 25 19 69


 _____, Examiner
 New Mexico Oil Conservation Commission