

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

In the Matter of:

Case No. 2090 Application of Hudson and Hudson for an unorthodox oil well location. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its Puckett Well No. 19-B to be located in an undesignated Abo pool at a point 2615 feet from the South and West lines of Section 25, Township 17 South, Range 31 East, Eddy County, New Mexico.

Oil Conservation Commission
State Capitol Building
September 30, 1960

BEFORE:

Daniel S. Nutter, Examiner.

TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: The hearing will come to order, please.

The first case this morning will be Case Number 2090.

MR. PAYNE: Case 2090, "Application of Hudson and Hudson for an unorthodox oil well location."

MR. HUDSON: Edward Hudson, Junior, of Fort Worth appearing individually for ourselves and on behalf of other individuals, on our Puckett Lease, which covers the--on Section 25, Township 17 South, Range 31 East, Eddy County, New Mexico. First, I would like to introduce three waivers from adjoining lease owners, from Continental and the Magnolia Oil Companies and Skelley,

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I N D E X

WITNESS

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HARRY A. MILLER

Direct Examination by Mr. Hudson

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and we ask that they be made a part of the record, and I believe you have a letter in your file from the Corporation Drilling Company --

MR. NUTTER: Yes sir, we do.

MR. HUDSON: --to the same effect, and we ask that it be made a part of the record.

MR. NUTTER: We can identify these as exhibits in this record if you so desire.

MR. HUDSON: All right, Exhibits A, B, C and D.

(Thereupon, the documents were marked as Exhibits A, B, C and D for identification.)

MR. HUDSON SR.: And it may be noted the Hudsons own the acreage on the lease to the north.

MR. NUTTER: Do you have a plat showing the location of this lease with relation to the other leases?

MR. HUDSON: Yes, sir; I don't believe this actually sets forth the ownership of the other leases.

MR. NUTTER: Let's see, which is 17, 31, right here, this is Section 25.

MR. HUDSON: Yes sir, Skelley owns this whole section here, Carper owns this whole section here, and Magnolia and Continental here.

MR. HUDSON SR.: Continental owns the east half and --

MR. HUDSON: Mobile.

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MR. HUDSON SR.: Mobile owns the west half.

MR. HUDSON: And Hudson and Hudson own these three.

MR. NUTTER: And also 12?

MR. HUDSON: Right.

MR. NUTTER: And owns all of Section 25?

MR. HUDSON: Right, all of Section 25, and we have as a witness Harry Miller of Midland.

MR. PAYNE: Would you stand and be sworn, sir?

(Witness sworn in.)

HARRY A. MILLER, JR.

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

DIRECT EXAMINATION

BY MR. HUDSON:

Q Would you state your name?

A My name is Harry A. Miller, Junior.

Q Would you tell the Commission the schools you attended and what degrees you received?

A I attended the University of Texas, obtained a BS Degree, Bachelor of Science Degree in geology.

Q Are you a member of professional societies?

A I am a member of the American Association of Petroleum Geologists, West Texas Geological Association API.

Q And what experience in this area have you had?

A I have been in West Texas and New Mexico since the end



of the war, 1946; I was associated with the Ohio Oil Company to 1952, at which time I opened a division office for the Hancock Oil Company of California.

Q And have you made a special study of the Abo to see which way it runs?

A Yes, I became an independent and consulting geologist in 1954.

MR. HUDSON: Will the Commission accept his qualifications?

MR. NUTTER: Yes sir, please proceed.

Q (By Mr. Hudson) In what capacity are you serving the Hudsons?

A As a consultant.

Q And you have an exhibit which you have prepared yourself?

A Yes.

MR. HUDSON: Which is the map before you. May we mark it Exhibit E?

(Thereupon, the document was marked as Exhibit E for identification.)

Q (By Mr. Hudson) Would you explain that exhibit and tell what the Hudsons propose to do and why they propose to do it?

A The map is a portion of the Abo trend which extends from the Empire Field in Eddy County to the Lovington Field, as indicated by several zones, several areas of production along this



trend. On the basis of knowing well control, the Hudsons drilled their Number B-16 Puckett 1980 feet from the north and west of Section 25, Township 17 South, Range 31 East. This well encountered a considerable amount of reefing, but it was tight in the upper part and had a transition zone of oil and water below. Recent development east and west of this well indicated that we are in an area of probable small reefing pinnacles which are extremely narrow, but show considerable reef buildup. We can determine this reef buildup by the tight section encountered as we find a back reef, green shale, bedded lime section to the north, and a black salititious shaly lime to the south--excuse me, shaly dolomite, noting the extreme falloff from the pinnacle of the reef, and being unable to determine exactly why we have such a good reception but not production, we did encounter a slight amount of free oil here on the top, and in an attempt to complete were unable to--we feel that we are getting close to the crest of the reef and that by moving a full location to the south, we will miss the pinnacle or the crest and fall off on the reef side, it will possibly be low and possibly out. In the picture as seen here, this is the Carper, Corbin area, which the full south offset was dry.

MR. NUTTER: In that instance, they drilled a dry hole in the north pinnacle, on the one to the south, correct?

A That's correct, right; we also find here a heavy sedimentary lake area of Sinclair's where the north well did make a showing, but they immediately completed a back reef well, and the



location of the south again was extremely fore reefed and very low.

MR. NUTTER: Were they able to make a well on that?

A No, they were not.

MR. PORTER: Where is this proposed location?

A 2615 feet from the south and west of Section 25.

MR. PORTER: How far does that put you from the unit line, that is, the quarter quarter section line?

A From the quarter section line, twenty-five feet. We feel that we were fairly close to making a well, and we are afraid to move too far south of that location because of the extreme fore reef side falloff. We have an enigma in the fact that we had a beautiful reception, but the upper part of it was extremely tight, and there is no explanation for that in the Abo trend. I have seen in West Texas in refills, Scurry County and Salt Creek, dry holes, a dry hole right in the productive area where we were fairly close to where it will produce, it just seemed that it became impermeable upon the deposition of it for some reason, and in a localized area, and that's the only reason I can give to the Hudsons as to why that well was dry.

Q (By Mr. Hudson) Did the Hudsons test all of the prospective zones in that well?

A Yes.

MR. NUTTER: All of the possible producing interval was tested by your Number B-16 well?

A That's correct, I have a log.

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A But because of the sub-surface structural relationship, no.

MR. PAYNE: Are you crowding any offset operator who has not waived objection?

A No, we are not.

Q (By Mr. Hudson) And you feel that from drilling on the unorthodox location, that you will encounter the reef further down?

A That's correct.

Q Since the drive of the reef is water from bottom, you will not recover the oil in the top part of the reef?

A Correct; well, I also feel that from the water encountered in the Sinclair Cedarlake Area and the section which we had above water here, that we had two separate reservoirs. The water in the Cedarlake area has been found by test at a minus 3475.

MR. NUTTER: 3475?

A Correct, and the water-oil contact encountered by drill stem tests in the Hudson B-16 was a minus 3777.

MR. NUTTER: So you feel that the water in the pinnacle that you are working on here is at a lower elevation than the water in the pinnacle that Sinclair is working on?

A That's correct.

MR. NUTTER: And for that reason, you feel that they were able to complete a well on the back side of the reef relatively low down on the structure, whereas you were unable to complete a well at all?



A That's correct.

MR. NUTTER: Because of the drive in the water tolerance?

A Right.

MR. NUTTER: Now, will it be possible for you to ascertain where the bottom of this well is located if you drilled this well at that location, which is 25 feet out of the corner of the 40-acre tract?

A Only by survey, of course, which we did not make on the B-16.

MR. HUDSON SR.: Let me correct my testimony there, I am mixed in this well. That well is now completed in the San Andres, but it is permanently plugged in the Abo; it is a regular location in the San Andres.

MR. HUDSON: He's speaking of the B-16 being a regular producing location in the San Andres and is now a producing well in that --

MR. NUTTER: However, this B-16 is completely and permanently plugged in the Abo formation?

MR. HUDSON SR.: That's correct, but it is completed in the San Andres. I'm sorry, what I was thinking about was that if this well were dry, see, we would leave the 8 5/8 casing in the hole and use it as an injection well. I'm sorry, I just wasn't thinking.

MR. NUTTER: Your name is Mr. Miller, correct?

A That is correct.

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MR. NUTTER: Mr. Miller, I am drawing here a plat of Section 25 --

A All right.

MR. NUTTER: --and designating by an "X" mark, twenty-five feet out of the northeast corner of the northeast quarter of the southwest quarter, the proposed location of the well, is that correct?

A That is correct.

MR. NUTTER: So that the well will be located twenty-five feet out of the northeast quarter of Unit K of Section 25?

A Yes.

MR. NUTTER: Now, will Hudson and Hudson be willing to make surveys as would be necessary to determine that the bottom of this well if drilled at that location is on this 40-acre tract?

MR. HUDSON SR.: I think we'd have to, wouldn't we?

A Yes.

MR. NUTTER: You are willing to make such tests?

A Yes, excuse me.

MR. NUTTER: Very well; do you have anything further, Mr. Miller?

Q (By Mr. Hudson) Do you feel that the reservoir we would encounter in the proposed location is the same as the reservoir encountered in the Continental Baish A-27?

A No, it is not. The Baish A-27 is an Abo producer, but it is in the Baish-Abo section and in the back reef or shelf



facies, and is a bedded productive zone.

Q Rather than a reef?

A Rather than a reef, not reef in characteristic.

MR. NUTTER: Do you have an opinion as to whether the area between the pinnacle will not be productive from the Abo where the pinnacle is marked, or in the Sinclair area and in the Hudson area?

A No, but I do think that these two areas will be separated by a non-productive zone.

MR. NUTTER: That's what I mean, will the production be continued across the two pinnacles?

A No.

MR. HUDSON SR.: The Skelley dry well was in between those two zones.

A But it is possible that it is still on the fore reef side.

MR. NUTTER: What would the location be?

MR. HUDSON SR.: 1980 from the north and west of Section 27, 17 South, 31 East, named Skelley Number 6-B Lynch.

MR. NUTTER: And that was a dry hole?

A Correct.

MR. NUTTER: Do you have any further direct testimony, Mr. Hudson?

MR. HUDSON: No.

MR. NUTTER: Does anyone have any questions of Mr. Miller?



He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further you would care to offer?

MR. HUDSON SR.: In the event--on the survey now, would that be a requirement in the--that is, a survey of the bottom of the hole, would that be a requirement in the drilling of the well, or would that be only in the event that someone contested the location of that well, the bottom of the hole?

MR. NUTTER: I think it is pertinent that the Commission should be assured that the bottom of the hole is on the 40-acre unit which is assigned to the well by the proration schedule, Mr. Hudson, and that would probably be a requirement for the drilling of the well.

MR. HUDSON SR.: It would probably be.

MR. HUDSON: If the bottom of the hole were found to be in another 40-acre unit --

MR. NUTTER: Then the other 40-acre unit would be carried as the assigned unit.

MR. HUDSON SR.: In other words, you would require the survey, regardless, as to where the production actually is coming from. The reason I asked you is that there would be no change in ownership anywhere in that--the only change in ownership would be on the "A" Lease, which would be "A" Lease 24 Well, it's 3/4 of a mile north to a change in ownership, and it's a half a mile

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because Commission rules allow you to drill more than one well on a 40-acre unit if you want to, but you'll just get one 40-acre allowable, so it's imperative that we know which 40 the well was actually producing from.

MR. HUDSON SR.: Yes sir, I understand the reason for the survey, but I was just wondering in this situation where they are on a deep hole, you won't want to drill more than one Abo well on a 40-acre tract, and those holes that--we have very little straight hole trouble on that well; however, in the Carper Unit, we have had quite a bit of trouble over here. This well was way off, the south well was way off on the vertical, but I think we can keep the hole straight enough to --

MR. MILLER: Yes. We want to say that it is for our own benefit to stay away from the dry hole, and if it starts going --

MR. NUTTER: It is for your own good to stay away from the dry hole.

MR. HUDSON SR.: Oh yes, I understand that; however, there's one thing I would like to stress a little further here, though, that there is a--in other words, this field has no connection with this, the production has no connection with this area --

MR. MILLER: These are two dry holes.

MR. HUDSON SR.: Isn't there another dry hole here?

MR. MILLER: Here in 28.



MR. HUDSON SR.: There is a dry hole between the Sinclair area and the area that we are speaking of.

MR. MILLER: Correct.

MR. HUDSON SR.: There are two dry holes between the Carper area and this area, is that correct?

MR. HUDSON: This well, the Dunnagan.

MR. NUTTER: Is the Dunnagan well of Section 26, 17, 32 a dry hole?

MR. HUDSON SR.: That's correct, and that's dry and the Abo --

MR. NUTTER: This is an Abo well and --

MR. HUDSON SR.: And that is --

MR. NUTTER: The well is on the northwest northwest of 28, 17, 32, and is an Abo well?

MR. HUDSON SR.: An Abo well, and it's dry.

MR. NUTTER: As well as the Continental well on Section 20?

MR. HUDSON SR.: It's producing from the Abo, but --

MR. HUDSON: That's on 21.

MR. MILLER: This is the one that's a dry hole.

MR. NUTTER: As well as the B-41 well in Section 19?

MR. HUDSON SR.: That is a dry hole.

MR. NUTTER: Do you gentlemen have anything further you wish to offer?

MR. HUDSON SR.: I think that's all.

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MR. NUTTER: Mr. Hudson, did you wish to offer these as exhibits in this case?

MR. HUDSON: Please, and ask that they be made a part of the record.

MR. NUTTER: Hudson and Hudson Exhibit Numbers A, B, C, D and E will be made a part of the record in this case. Do you have anything further?

MR. HUDSON: No.

MR. HUDSON SR.: I would like to add this for the benefit of Mr. Porter here, that this is almost an emergency with us in that if we do get a well here, we would like to drill one more well this year. It takes at least forty-five days to drill the hole, and we would like to get permission to start, if the Commission sees fit to grant the location, as soon as possible, and there's only about ninety-one days left in the year.

MR. PAYNE: Would you like for us to send you a telegram as soon as the order is signed?

MR. HUDSON SR.: Yes, I would; I was just wondering, would it be possible to pass on this today?

MR. NUTTER: We'll make every effort to expedite the order as much as possible, Mr. Hudson.

MR. PORTER: It would depend on the recommendation at lot, it would depend on the recommendation from the Examiner and whether we catch another Commissioner in. The Governor is out of town, I think the Land Commissioner will be here. I think



MR. HUDSON SR.: Fine.

MR. PORTER: One way or the other.

MR. NUTTER: If there's nothing further in this case,
we'll take the case under advisement, and the hearing is adjourned.

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STATE OF NEW MEXICO)
 : ss
 COUNTY OF BERNALILLO)

I, JERRY MARTINEZ, Notary Public in and for the county of Santa Fe, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings was reported by me in Stenotype and reduced to typewritten transcript by me, and that the same is a true and correct record of the proceedings, to the best of my knowledge, skill and ability.

Dated at Albuquerque, New Mexico, this 30th day of September, 1960.

 Notary Public

My Commission Expires:

January 24, 1962

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2071, heard by me on 9/30, 1960.
 _____ Examiner
 New Mexico Oil Conservation Commission

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