

H E A R I N G  
BEFORE THE OIL CONSERVATION  
COMMISSION OF THE STATE  
OF NEW MEXICO

Held in the Office of Frank  
Worden, Commissioner of Public  
Lands at the Capitol Building,  
October 5, 1937, at nine o'clock,  
A. M.

PRESENT: Frank Worden, State Land Commissioner, Secretary;  
G. D. Macy, State Geologist;  
Herman Crile,  
Joseph B. Headley,  
A. Andreas  
Carl B. Livingston, Attorney for Oil Conservation  
Commission.

ABSENT: Governor Tingley, Chairman,

The Hearing was opened by Mr. Worden.

Thereupon, the notice for publication for the Hearing  
was read by Mr. Macy, as follows:

" NOTICE FOR PUBLICATION

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

"Pursuant to Chapter 72, Session Laws of 1935, State  
of New Mexico, by which Act the Oil Conservation Commission of  
New Mexico was created, investing said Commission with the  
jurisdiction and authority over all matters relating to the  
conservation of oil and gas in this State and of the enforce-  
ment of all provisions of said Act, notice is hereby given  
that a public hearing will be held at the Capitol, Santa Fe,  
New Mexico, on the 5th day of October, 1937, at 9:00 A. M.,  
for the purpose of considering the following:

"Case No. 9.

The application of the Two States Oil Company

to have a closer spacing than is at present provided by the rules of the Commission, upon the SE of the SE, Section 21, township 18 South, Range 38 East, N.M.P.M., which said location is 1260 Ft. from the East line of said Sec. 21, and 200 Ft. from the South line of said Sec. 21. The reason for such location being due to the right of way of the T. & N. M. Railroad, and State Highway No. 18.

Any person having any interest in the subject of the said hearing shall be entitled to be heard.

Given under the seal of said Commission at Santa Fe, New Mexico, on September 16, 1937.

OIL CONSERVATION COMMISSION

By Clyde Tingley  
Governor

By Frank Worden  
Commissioner of Public Lands

(SEAL)

By G. D. Macy  
State Geologist. "

BY MR. WORDEN: The purpose of this hearing is to consider the request of Two States Oil Company for a closer spacing than is at present provided by the rules of the Commission.

Entry of appearance and waiver of Samadan Oil Company duly filed with the Commission.

BY MR. CRILE: I hereby enter my appearance personally and as attorney for Harold Hurd as owners of a one-quarter interest in the well located in the SW $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Section 21, Township 18 South, Range 38 East, which is designated as Oil Well Drilling Company Morris No. 1, and for myself

and as attorney for Harold Hurd, make no objection whatsoever to the requested location of Two States Oil Company, and join in the request that it be granted.

MR. HEADLEY: I hereby enter my appearance as a representative of the Southern Petroleum Exploration Company, which is the owner of a one-half interest in the well drilled in the SW $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Section 21, Township 18 South, Range 38 East, and approve the location as requested by Two States Oil Company in the SE $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Section 21, Township 18 South, Range 38 East.

MR. MACY: Enter in evidence letter dated September 24, addressed to Oil Conservation Commission, Santa Fe, New Mexico, and signed by Herman R. Crile, Attorney Two States Oil Co., Exhibit A.

MR. LIVINGSTON: I introduce in evidence telegram dated September 17, 1937, directed to G. D. Macy, State Geologist, ElCortez Hotel, El Paso, Texas, signed Oil Well Drilling Co. Cunningham, Exhibit B; telegram dated September 17, 1937, directed to Oil Well Drilling Co. Cunningham, Hobbs, New Mexico, signed by G. D. Macy, Exhibit C; telegram dated October 4, 1937, directed to Oil Conservation Commission and signed by Oil Well Drilling Co. Cunningham, Exhibit D.

Thereupon, Joseph B. Headley was called and having been duly sworn by the Land Commissioner, testified as follows.

EXAMINATION BY MR. CRILE.

Q. State your name.

A. Joseph B. Headley.

Q. Mr. Headley, you are the geologist for the Southern Petroleum Exploration Company?

A. Yes, sir.

Q. You are also in charge of their general business in the State of New Mexico, with principal office at Roswell, within the State of New Mexico?

A. Yes.

Q. For how long a time have you represented the Southern Petroleum Company in that capacity in New Mexico?

A. Approximately 12 years in New Mexico.

Q. Have you made any geological investigation relative to the location requested by the Two States Oil Company in the SE $\frac{1}{4}$  SE $\frac{1}{4}$  S.21, T. 18 S., R. 38 E.?

A. I have.

Q. Have you also had any discussion with Mr. Ben Bowers of Hobbs regarding this matter and regarding the survey he made?

A. I have.

Q. I hand you a plat, and ask you what it is.

A. This is a plat made by Mr. Ben Bowers after he had made a survey locating the Southeast corner of Section 21, and measured over to the highway right of way and the railroad right of way, and locating the Southwest corner of the Southeast corner of the Southeast corner.

Mr. MACY. How did he locate the Southwest corner of the Southeast of the Southeast? Did he locate it by a subdivision?

Mr. HEADLEY: I just couldn't say, Mr. Macy. From the conversation I had with him, he located what he calls here on the map the Northwest corner of Section 27, which would be the Southeast corner of Section 21, and I think he measured from that corner to the other.

MR. MACY: Technically, he is wrong if he did that.

Mr. HEADLEY: I could not say as to his method.

(Plat introduced in evidence, Exhibit E)

Q. Mr. Headley, I hand you a tracing which is designated as a sketch of a portion of Hobbs Field, New Mexico, showing the structural position of SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Sec. 21, T. 18 S., R. 38 E., and ask you if this is your work?

A. It is.

Q. Upon what information did you base your work?

A. This is a structural map of a portion of the Hobbs Field surrounding the forty acres in question, and the contours are drawn on what is known as the Hobbs Crystalline Lime Datum. The map also shows the location of the surrounding wells and also shows the wells making water in the general vicinity. The purpose of the contour map is to show that the last contour which is designated as -560 is the contour limiting present known production, and also shows that there is water encroachment above this contour to the northwest, and, in one instance to the southeast, the point being that to get too far away from this contour there is a hazard of drilling into water.

MR. MACY: May I ask you, insofar as the adjoining property owners are concerned, in your opinion, is it a benefit to the property owners to have a 230-foot rather than a 500-foot location?

MR. HEADLEY: I would say that it would be better for them to have the 230-foot rather than the 500-foot location.

Q. From the standpoint of the neighboring lessees, the Southern Petroleum Company Well, and the Samadan well, it would be better to have a 230 foot location rather than a 500 foot location?

A. Yes.

Q. Why?

A. By drilling on a 230 foot location, you are further up-structure and therefore there is less hazard of getting water than you would be by drilling the location across the railroad and highway, which would be a considerable distance down-structure, thereby making the hazard of water greater.

MR. MACY: In your opinion, the location such as is proposed would not be unfair to the lessees on the West or on the East?

MR. HEADLEY: No.

MR. MACY: There would be no drainage there?

MR. HEADLEY: That is a problem we do not definitely know about, but the location makes the well proposed to be drilled approximately the same distance from well to well as the other wells, that is, approximately one quarter of a mile.

Q. You yourself have paced that, measured the distance from your car, and viewed the entire situation from a physical standpoint?

A. Yes.

Q. In that area, in the immediate vicinity, are there other irregular locations?

A. Yes. Do you want the names?

Q. Give the names and locations.

A. Shell Sanger No. 1, 287 feet from the west line and 300 feet from the South line of Section 27; Shell Sanger No. 2, 330 feet from the South line, and 1325 feet from the West line of Section 27; Samadan Moon No. 2, 1315 feet from the North line, 2310 feet from the East line of Section 28; Samadan Moon B-1, 2310 feet from the North line, 1120 feet from the East line of Section 28; Samadan Moon B-2, 1315 feet from the North line and 1120 feet from the East line of Section 28.

MR. MACY: Those are all that you checked?

MR. HEADLEY: Yes, those are all that I checked--all that are in the immediate vicinity. The one I particularly had in mind was Shell Sanger No. 1, which is 287 feet from the west line, and infringes on Continental Oil property. The others do not infringe on other peoples' property.

Q. Mr. Headley, do you know whether irregular locations of the other wells were brought about because of the same situation that exists here, namely, the rights of way of the Texas & New Mexico Railroad and the Highway?

A. Yes.

Q. Do you know why the Samadan made those locations so far from the section lines?

A. Mostly physical reasons. They were trying to keep up-structure.

Q. And those Samadan wells were located after the present spacing rules were put into effect?

A. I could not say as to that, because I do not know the effective date.

MR. ANDREAS: October 1, 1935.

MR. HEADLEY: That would be after, yes, likewise the Shell.

(Plat introduced in evidence, Exhibit F.)

MR. LIVINGSTON: Mr. Headley, the contour map which was introduced into evidence as an exhibit and which you have made shows certain contours. Those contours are based not on surface conditions, but data obtained from surface conditions, and it is, in effect a sub-surface contour map?

MR. HEADLEY: Yes.

MR. LIVINGSTON: That is all.

Thereupon A. ANDREAS was called and having been duly sworn by the Land Commissioner, testified as follows:

EXAMINATION BY MR. LIVINGSTON

Q. State your name.

A. A. Andreas

Q. What is your profession, and your official position with the State?

A. I am employed as State oil and gas inspector, and Assistant State Geologist.

Q. What experience have you had in connection with oil fields as a petroleum geologist?

A. I have been doing geological work with various companies and also for the U. S. G. S., for 19 years.

Q. Are you familiar with New Mexico oil fields?

A. Yes.

Q. And, in particular, with the Hobbs field in Lea County?

A. I am familiar with conditions there.

Q. Mr. Andreas, have you examined the particular tract upon the applicants now request a special spacing?

A. Yes, I have.

Q. What physical surface conditions, if any, are evident that would necessitate such a spacing as the applicant petitions the Commission for?

A. The railroad track and the right of way to the East of the Railroad track, the State Highway.

MR. MACY: Mr. Andreas, we are going to present this map as a part of the record. This is a plane table survey which you yourself made of the field?

Mr. ANDREAS: Yes, on September 27th.

MR. MACY: You made this map yourself?

Mr. ANDREAS: Yes.

MR. MACY: You feel certain that the information you have on it is correct?

MR. ANDREAS: Yes.

MR. MACY: You were assisted by Mr. Pettitt, Assistant Geologist for the Conservation Commission.

MR. ANDREAS: Yes, sir.

MR. MACY: I want to ask you certain questions about this map. In the NE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 28, Township 18 South, Range 38 East, you found the Samadan Moon B-2 well located 1315 feet South of the North line and 1110 feet West of the East Line?

MR. ANDREAS: Yes.

MR. MACY: You also found Samadan Well A-2 located in the Northwest quarter of the Northeast quarter of the same section, township and range located 1315 feet south of the north line, and 2310 feet west of the east line of this section?

MR. ANDREAS: Yes, sir.

MR. MACY: You also found Samadan Moon well 1-B located 1120 feet west of the east line of section 28 and 2310 feet south of the north line of said section?

MR. ANDREAS: Yes, sir.

MR. MACY: You also found the well on the NE $\frac{1}{4}$  of the SW $\frac{1}{4}$  of Section 21, same township and range to be located 1350 feet east of the west line and 1355 feet north of the south line, North Grimes No. 4.

MR. ANDREAS: Yes, Sir.

MR. MACY: You also found the Atlantic, W. D. Grimes No. 1, located 1320 feet west of the east line of Section 20 and 330 feet north of the south line of section 20.

MR. ANDREAS: Yes.

MR. MACY: Mr. Andreas, these locations that we have just asked about, which are part of the record, are probably all of them locations in violation of our present spacing regulations. Is that not true?

