

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

TRANSCRIPT OF PROCEEDINGS

CASE NO. 410

October 15, 1952
Regular Hearing



BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico.

October 15, 1952.

In the Matter of:

El Paso Natural's application for
permission to drill State-LPG Storage
Well No. 1, 780' from W Line and 450'
from S Line 32-23S-37E, for storage
of liquefied petroleum gas.

CASE NO. 410

TRANSCRIPT OF HEARING

(Notice of publication read by Mr. Graham.)

WARREN L. TAYLOR,

having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. HOWELL:

Q Will you state your name for the record, please?

A Warren L. Taylor.

Q What is your present position with El Paso Natural Gas
Company?

A ~~Division~~ Geologist, Permian Division.

Q I don't believe you have filed with the Commission here any record of your qualifications. Will you state briefly, for the record, the training and experience you have had as a geologist to qualify you as an expert?

A Bachelor of Science Degree from Kansas State College, 1947, Master of Science Degree from the University of Illinois, 1949, one year in the geological department of Phillips Petroleum Company and three and one half years as Geologist for El Paso Natural Gas Company.

Q Mr. Taylor, the proposed location is within the boundaries of the El Paso Natural Gas Company, Jal No. 4 Plant site, is it not?

A Yes, it is.

Q That track of land was patented to the company by the State of New Mexico. It is located on State land, I believe, that has been patented?

A Yes, that is correct.

Q And does that plant produce liquid petroleum gasses in excess of the available market, during seasons of the year?

A Yes, due to seasonal fluctuations we have at certain times of the year an excess amount of liquid petroleum gasses.

Q What is done with the liquid petroleum gasses in excess of storage or market?

A In excess of present above ground steel tank storage, they are primarily flared or vented to the air.

Q Have you studied the formations underlying the proposed

location of this storage well?

A Yes, I have.

Q What data have you had available to study these formations?

A There are a number of oil wells in the immediate area of our plant site which are at the present time producing oil and the logs of these wells are available.

Q Will you state briefly to the Commission what formations are underlying at the depths to which you intend to drill this well?

A We propose to drill the well a maximum total depth of 2,700 feet, approximately 2,700 feet. A study of the logs in the area indicates that the salt bed which underlies the West Texas-New Mexico area or the Salado formation will be encountered at approximately 1,400 feet below the surface.

We propose to set 9 5/8 inch surface casing at a depth of approximately 250 feet, 7 inch casing at a depth of approximately 1,400 feet, continue to a total depth of approximately 2,700 feet, and install 3 1/2 tubing to total depth and dissolve a cavity in the salt bed for the storage of the product.

Q Approximately what will be the diameter of the cavity that will be dissolved around the tubing?

A There have - or there is in the West Texas-New Mexico area at the present time a number of such projects, and due to plotting data on the fill up and so on, it has been estimated that the maximum capacity of the present storage projects or the maximum diameter of the present storage projects having the capa-

city of, which we propose is approximately 16 to 20 feet in diameter.

Q What provisions have you made to protect any underground water supply that may be in the area?

A We have drilled a number of water wells at the plant site and test holes to develop water in the area. I have those logs of the water wells available. They show, in general, that water is encountered at a depth of about 120 feet. The red bed is encountered at a depth of approximately 170 feet and we propose to set 9 5/8 inch surface casing at 250 feet with sufficient cement to circulate cement to the surface, and that will adequately protect the fresh water in the area.

Q That will prevent any pollution of water supply in the area?

A Yes, sir. We have drilled one well, one water well to a depth of 500 feet and did not completely penetrate the red-bed at that depth. So, we feel that 250 feet of 9 5/8 casing will protect the fresh water and that is in line with the surface casing program of oil wells in the immediate area.

Q In drilling into the salt formation, will you penetrate any oil and gas producing formations known in that area?

A No, we will be approximately 300 feet above the first producing formation.

Q What will be the capacity of the proposed storage?

A We propose to initially complete a 50,000 barrel storage well.

Q Will that, when completed, result in conserving liquid petroleum gasses that otherwise would be vented or flared for lack of market or storage condition?

A It will in that during season of slack market conditions the cost of conventional above ground steel tank storage prohibits storage of all products made during that time. Since the economics of underground storage make the per barrel cost of storage considerably less, it will prevent and save products for seasons where the market demand is greater.

Q Are there any other similar projects operating in that locality?

A Yes, there are a number.

Q Would you introduce those well logs as Exhibits? Do you have any other logs, Mr. Taylor?

(Marked El Paso Natural Gas Company's Exhibits Nos. 1 and 2, for identification.)

A No, I have no others.

Q You have here --

A (Interrupting) I have prepared a plat of the area showing our plant site oil wells in the area, restricted drilling sites on the plant site, and so on. I also have prepared a profile of the storage well showing the casing depths, total depths and so on.

MR. HOWELL: We will offer these exhibits?

MR. SPURRIER: You have two exhibits?

MR. HOWELL: Exhibit 1 is a plat showing the location of the

site and producing wells in the vicinity, and restricted drilling sites on the plant site, pursuant to a contract between the co-owner of the land and the oil and gas lessee. Exhibit 2 is a profile of the proposed storage well showing the depths and types and size of casing that will be installed, is that correct?

A That is correct, yes. In addition to those two Exhibits, I also have prepared a detailed summary for the Commissions convenience.

MR. HOWELL: As Exhibit 3, we have a summary of the testimony that has been put on about the surrounding facts.

(Marked El Paso Natural Gas Company's Exhibit No. 3, for identification.)

MR. GRAHAM: Have you made any application to the Land Office for an underground easement for that area?

MR. HOWELL: It has been patented.

MR. GRAHAM: But the minerals are retained by the State.

MR. HOWELL: The minerals are under lease. I can answer that because I feel that I am more familiar with that.

MR. GRAHAM: Some procedure has been established whereby the State land issues underground easements 1,300 feet under the ground?

MR. HOWELL: Yes.

MR. GRAHAM: That has been done and deeded to the State?

MR. HOWELL: Yes, we shall certainly consult with you. We took the position that the patent covered everything but the oil and gas.

MR. GRAHAM: It is merely for the surface, as I understand.

MR. SPURRIER: Is there any question of this witness? If not the witness may be excused.

(Witness excused.)

MR. SPURRIER: Does anyone have a comment? Without objection these Exhibits 1, 2 and 3 will be received.

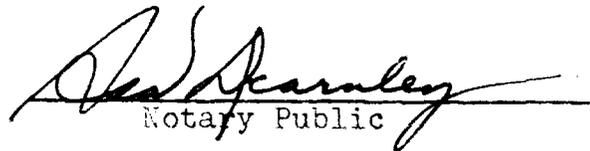
(El Paso Natural Gas Company's Exhibits Nos. 1, 2 and 3, previously marked for identification were received in evidence.)

MR. SPURRIER: Next case on the Docket is Case 411.

STATE OF NEW MEXICO)
 : SS.
COUNTY OF BERNALILLO)

I hereby certify that the above and foregoing transcript of proceedings in Case No. 410, taken before the Oil Conservation Commission on October 15, 1952, at Santa Fe, New Mexico, is a true and correct record.

Dated in Albuquerque, New Mexico, this 26th day of October, 1952.


Notary Public

My Commission Expires:
June 19, 1955.