BEFORE THE

NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

March 26, 1969

#### EXAMINER HEARING

IN THE MATTER OF:

Application of Getty Oil )
Company for an exception to )
Commission Order No. R-111-A, )
Lea County, New Mexico. )

Case No. 4090

 $\omega$ 

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING



MR. UTZ: Case 4090, application of Getty
Oil Company for an exception to Commission Order No. R-111-A,
Lea County, New Mexico.

MR. MORRIS: I am Richard Morris of Montgomery, Federici, Andrews, Hannahs and Morris, Santa Fe, appearing on behalf of the Applicant, Getty Oil Company. We will have one witness, Mr. Harold Vest. I request that he stand and be sworn.

MR. UTZ:

Any other appearances?

(Whereupon Applicant's Exhibits 1 through 5 were marked for identification.)

## HAROLD VEST

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

## DIRECT EXAMINATION

BY MR. MORRIS:

- Q Mr. Vest, please state your name and where you reside.
- A My name is Harold Vest, and I live in Hobbs, New Mexico.
  - Q By whom are you employed, and in what capacity?
  - A I am employed by Getty Oil Company as the Area

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Engineer in Hobbs.

Q Have you previously testified before the Commission or one of its Examiners, and had your qualifications accepted as a matter of record?

A Yes, I have.

MR. MORRIS: Are the witness's qualifications acceptable?

MR. UTZ: Yes, they are.

Q Mr. Vest, please refer to what has been marked as Exhibit Number 1 in this case, and point out the features of that exhibit, please.

A Exhibit Number 1 is a plat drawn showning in green the Getty Oil Company lease in Sections 19 and 30 of Range 34 East, Township 20 South.

The contour lines are drawn on the top of the Yates Formation, and it is above sea level depths.

The blue wells to the northeast are considered in the North Lynch-Yates-Seven Rivers Pool.

The red wells shown to the southeast and the northwest are considered in the Teas-Yates-Seven
Rivers, and these wells have produced amounts of oil. There
are other wells that have been drilled as dry holes, which are

not covered.

Q What is the cross-hatched area shown on the exhibit?

A The cross-hatched area is what was considered the potash area in Rule 111-A, R-111-A, and it was just drawn on here as it was described in those rules.

Q On the green acreage, you have four red blocks shown, what are those? What do those indicate?

A These are proposed locations for wells to be drilled to the Yates zone.

Q Now, actually, as you have it shown here, one of those wells, being the southwest well of the four, would lie outside the potash area, is that correct?

A This is correct.

Q So these four wells actually are situated right on the southwest border of the potash area in this particular region?

A That's correct.

Q You have an arrow carrying a label Citgo Government 1-Y, leading to a well in the green area. What was the Citgo Government 1-Y?

A This well was drilled by Cities Service in 1968 as a deep test, the total depth at 15,137. It was a dry hole,

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and it was abandoned in August of 1968.

Q Now, that well, of course, penetrated the Yates-Seven Rivers Formation, did it not?

A Yes.

 $\Omega$  We will come back to that well in just a moment, Mr. Vest.

While we are talking about this exhibit, I note that you have shown on this exhibit two wells, one to the northwest of the green acreage, and the other one immediately east or southeast of the green acreage shown as dry holes — or abandoned wells, rather. Were those Yates wells?

- A Yes, sir. They were drilled in the Teas Pool.
- Q Do you have any data concerning the productivity of those wells?

A Yes, sir. The well to the northwest was drilled by Talmadge and Cowell in 1951. It was the Dinnin No. 1, and it produced 1,988 barrels of oil. That was total production.

- Q When was that Dinnin well plugged?
- A In 1951.

The abandoned well to the east or southeast was drilled by Gacco, and it is called the Texas Company Federal No. 1, and it produced 2,322 barrels, and it

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was plugged in 1963.

Q You are proposing to drill four Yates wells right between two wells that were previously completed in the Yates and subsequently abandoned?

A Yes.

Q Coming back to this Cities Service well, Government 1-Y, will you refer to your Exhibits 2 and 3, being a log and a log section, respectively, on that well, and point out the formation tops, and the pay zone in the Yates referring to those two exhibits.

A Exhibit 2 is a copy of a sonic gamma ray log of the Cities Service Government N No. 1-Y. The base of the Rustler and the top of the Anhydrite is shown at 1,510 feet.

Top of the salt section is shown at 1,646 feet. Base of the salt at 3,118. Top of the Tansill at 3,200, and the top of the Yates at 3,298.

Exhibit Number 3 is a log of the same well, showing the drilling time, the lithology, oil and gas contact in the mud, and the cuttings over an interval from 3,200 feet to 3,500 feet. The yellow area shows the Yates porosity zones that we are interested in.

Q I take it, Mr. Vest, that you would anticipate that the tops of the formations, or that the formations would

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be encountered in your four proposed wells at approximately the same depths as were encountered in the Citgo Government 1-Y well?

- A Yes, sir. They should be reasonably close.
- Q And your drilling casing and completion programs for these four wells have been based upon the experience of the Cities Service well?
  - A Yes, sir.
- Q If you will please refer to Exhibit Number 4, explain what your proposal is for drilling casing and completing your four proposed wells, and in so doing please point out where your program differs from the requirements of Order No. R-111-A.
- A Yes, sir. Exhibit 4, we show three profiles, the first one being one case under R-lll-A, and the second being another case under the same order, the third being Getty's proposal for the four wells.

In Getty's proposal, we propose to set surface pipe at approximately 1,550 feet, which is below the top of the Anhydrite, and above the top of the salt. This conforms to the rules as set out. We do not differ there.

Then we propose to drill to a TD

of 3,500 feet, which would be through the Yates section, and set a production string at that depth, and cement this string to the surface, using a DV tool at approximately 3,100 feet. This is where we differ from the rules as set out, in that we are considering the production string and the salt protection string as one. We have eliminated the need for three strings of pipe. Yet, we feel that we will be protecting the potash deposits within the salt section by cementing to the surface the production string.

Q In the actual drilling of the well, Mr. Vest, will mud be used in the drilling?

A Yes, it is proposed to drill from the surface to 1,550 feet, using stud mud, and then drill from 1,550 to 3,200 feet, which is about the top of the Tansill, with brine water, and then we will mud up at 3,200 and drill through the Yates zone with brine mud.

- Q When you mud up at 3,200 and drill on into the Yates, will you keep the hole filled with mud at all times to the surface during that portion of the drilling?
  - A Yes, sir.
  - Q And will you have blowout preventers on the well?
  - A Yes, we will have blowout preventers.
  - Q I notice on your exhibit that you state that the

bottom of your pipe is going to be rough coated. What is the purpose of that?

A This is the application of Epoxy with a gravel, or small gravel. This is a help in getting a better cement bond to the pipe over the pay area.

Q By following the procedures that you have proposed here, will this result in a cost saving to Getty in connection with each of these wells?

A Yes, we have estimated approximately \$14,000.00 savings per well.

Now, I think you previously have pointed out you are drilling between these two very poor wells here. In your opinion, is there a high economic risk involved in the drilling of these wells?

A Yes, there is.

Q Would your wells have to be better than the offsets in order for you to even expect to break even on the well costs?

A Yes, sir.

Q Let me ask you, Mr. Vest, if you are familiar with Order No. R-2932 that was entered in Case No. 3264, which was an application of Carl Ingwald for an exception to Order R-111-A, and if you are familiar with where that well is located and what approval was given by the Commission in that

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case?

- Α Yes, sir, I am familiar with that.
- Where was that well located? Q Is it shown on your plat here, your Exhibit Number 1?
- Α It is shown in Section 14, 990 from the west line. and 2,310 from the south line.
- All right. And what did the applicant propose there, and was his proposal approved by the Commission?
- Α The applicant's casing and cementing program was They were allowed to set surface casing at 950 feet, and cement to surface. This was casing from 950 feet, nine and five-eighths, or ten and three-quarters, or thirteen and three-eighths. The second point was in lieu of a salt protection string prior to drilling the pay zone, they kept the hole full of mud. Then they ran a production casing string of size from four and a half, five and a half, or seven inch to the top or through the Seven Rivers, then being cemented to the surface. This was approved.
- So you are referring there to the provision of 0 that Order No. 2 where they were required to mud up the hole and keep the level of mud maintained to the surface during the drilling into and testing of the pay zone?
  - Yes, sir. Α

- Q And that is the same proposal that you are making in this case for these wells?
  - A Yes.
- Q Where are the nearest potash mine workings from the area of these four wells?
- A I understand that Kerr-McKee has some workings approximately twelve miles to the southwest.
  - Q And that is the closest one?
  - A That is the closest one.
- Q Was this information checked against the information that the Commission has shown on its maps?
  - A Yes, it was.
- Q What company or individual is the owner of the potash leases underlying your oil and gas leases?
  - A Harroun and Haworth.
- Q Have you been in touch with Mr. Harroun concerning your intent to drill these wells?
  - A Yes, we have.
- Q And have you received a waiver from him with respect to these wells?
  - A Yes, this is as Exhibit 5.
- Q In your opinion, Mr. Vest, will the granting of the application as you have presented it here, cause waste or

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violate correlative rights, either from the standpoint of the oil and gas operator, or the potash operator?

Α No, sir.

Were Exhibits 1, 2, 3, and 4 prepared by you or Q under your usupervision?

Yes, they were.

MR. MORRIS:

Mr. Examiner, we offer Exhibits 1

through 5 into evidence.

MR. UTZ:

Without objection, Exhibits 1

through 5 will be entered into the record of this case.

(Whereupon Applicant's Exhibits 1 through 5 were admitted into evidence.)

MR. MORRIS:

That is all I have on direct

examination.

#### CROSS EXAMINATION

BY MR. UTZ:

Mr. Vest, is there anything in Order R-2932 in the case of cementing that would differ from your proposal?

Α The surface casing in 2932 is less than the rules called for. In our case, we will be conforming to the rules in that particular case. The portion 2 and 3 of that order are very similar to our application.

Q How long will it take you to drill after setting

your surface casing at 1,550 to the top of the first pay zone?

- A After we drill out from the surface pipe?
- Q Right.
- A We have estimated five days to drill, and one day to set pipe.
- Q So the potash will be exposed to the brine and mud? Will you drill for six days?
  - A Yes, no more than six.
- Q Will the mud on the potash in that area contaminate it to any extent? You do not feel that it will cause any contamination to the potash?
- A Well, we will be using a highly concentrated salt brine.
- Q You are using that to keep from washing out of the salt section of the potash?

A Yes.

MR. UTZ: Any other questions of the witness?

You may be excused. Are there any statements in this case?

The case will be taken under

advisement, and the hearing is adjourned.

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STATE OF NEW MEXICO )
) ss
COUNTY OF BERNALILLO )

I, SAMUEL J. MORTELETTE, Notary Public 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.

Witness my Hand and Seal this

NOTARY PUBLIC

My Commission Expires:

Her Maxice Cil Conservation Campington



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501 GOVERNOR
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# April 15, 1969

Mr. Richard S. Morris Montgomery, Federici, Andrews,	Re:	Case No	
Hannahs & Morris Post Office Box 2307		Applicant:	
Santa Fe, New Mexico		GETTY OI	COMPANY
Dear Sir:			
Enclosed herewith are two copic sion order recently entered in			erenced Commis-
	-	Carter,	J.
		PORTER, Jr. ary-Director	
		_	
ALP/ir			
Copy of order also sent to:			
Hobbs OCC X			
Artesia OCC			
Aztec OCC			
Other			