CASE 4090: Application GETTY OIL COMPANY FOR AN EXCEPTION TO COMMISSION ORDER NO. R-111-A.

Case Number. 4090

Application Transcripts.

Small Exhibits

MEXICO

# dearnley-meier

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

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING



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

I am Richard Morris of Montgomery, MR. MORRIS: 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:

Mr. Vest, please state your name and where you Q reside.

My name is Harold Vest, and I live in Hobbs, Α New Mexico.

- By whom are you employed, and in what capacity? Q
- 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.

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

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

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

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

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

This is correct.

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

That's correct.

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?

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.

- Now, that well, of course, penetrated the Yates-Q Seven Rivers Formation, did it not?
  - Α Yes.
- We will come back to that well in just a moment, Q 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?

- Yes, sir. They were drilled in the Teas Pool.
- Do you have any data concerning the productivity Q of those wells?
- Yes, sir. The well to the northwest was drilled Α by Talmadge and Cowell in 1951. It was the Dinnin No. 1, and it produced 1,988 barrels of oil. That was total production.
  - When was that Dinnin well plugged? Q
  - Α 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-T, 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 2,500 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

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-111-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

case?

- A Yes, sir, I am familiar with that.
- Q Where was that well located? Is it shown on your plat here, your Exhibit Number 1?
- A It is shown in Section 14, 990 from the west line, and 2,310 from the south line.
- Q All right. And what did the applicant propose there, and was his proposal approved by the Commission?
- A The applicant's casing and cementing program was approved. 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.
- Q So you are referring there to the provision of 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?
  - A Yes, sir.

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

A No, sir.

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

A 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:

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

A 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

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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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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 day of April, 1969.

My Commission Expires:

How hereby certify that the foregroung is a complete record of the productings in the Krantaer hearing of Case to 40.0, heard by so of the case to 19.67.

How Mexico Oll Conservation Commission



### OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87801 GOVERNOR DAVID F. CARGO CHAIRMAN

LAND COMMISSIONER ALEX J. ARMIJO MEMBER

STATE GEOLOGIST A. L. PORTER, JR. SECRETARY - DIRECTOR

April 15, 1969

Mr. Richard S. Morris Montgomery, Pederici, Andrews, Hannahs & Morris Post Office Box 2307	Re:	Case No Order No Applicant:	R-3726
Santa Fe, New Mexico		GETTY OI	COMPANY
Dear Sir:			
Enclosed herewith are two copies sion order recently entered in			ferenced Commis
	_	Carter,	Ži,
		PORTER, Jr.	
Se	ecreta	ry-Director	
ALP/ir			
Copy of order also sent to:			
Hobbs OCC X			
Artesia OCC			
1			
Aztec OCC			

# BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 4090 Order No. R-3726

APPLICATION OF GETTY OIL COMPANY FOR AN EXCEPTION TO COMMISSION ORDER NO. R-111-A, LEA COUNTY, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 26, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, or this 15th day of April, 1969, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Getty Oil Company, seeks authority to drill four wells at standard locations in Sections 19 and 30 of Township 20 South, Range 34 East, NMPM, Teas Yates-Seven Rivers Pool, Lea County, New Mexico, said area being situated in the Potash Oil Area governed by Commission Order No. R-111-A.
- (3) That the applicant also seeks approval of a special cementing and casing program for the subject wells as an exception to the casing and cementing rules prescribed for the Potash-Oil Area by said Order No. R-111-A.
- (4) That potash development does not presently exist and is not presently known to be contemplated within the vicinity of the proposed wells.

-2-CASE No. 4090 Order No. R-3726

(5) That approval of the proposed special casing and cementing program for the subject wells will prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED:

(1) That the applicant, Getty Oil Company, is hereby authorized to drill four wells at standard locations in Sections 19 and 30 of Township 20 South, Range 34 East, NMPM, Teas Yates-Seven Rivers Pool, Lea County, New Mexico, as follows:

Government "N" Well No. 2, located in Unit N of Section 19 Government "N" Well No. 3, located in Unit M of Section 19 Richardson Federal Well No. 1, located in Unit C of Section 30 Richardson Federal Well No. 2, located in Unit D of Section 30

(2) That as an exception to the provisions of Order No. R-111-A, the applicant is hereby authorized to complete and abandon the aforesaid four wells as follows:

### CASING, CEMENTING, AND ABANDONMENT PROCEDURE

- 1. Surface Casing String:
  - (a) Applicant shall set 8 1/2-inch new or used oil field casing in good condition at a depth of 1550 feet below the surface or deeper if necessary to protect any potable water. Cement shall be circulated back to the surface.
  - (b) Cement shall set a minimum of 24 hours before drilling the plug or instituting tests.
- 2. Salt Protection Casing String:

In lieu of the salt protection casing string, prior to drilling into the uppermost pay zone, the hole shall be filled with mud and the level of mud maintained to the surface during drilling and testing of pay zones.

-3-CASE No. 4090 Order No. R-3726

### 3. Production Casing String:

- (a) If production is encountered, applicant shall set a production string of 5 1/2-inch casing on top of or through the Seven Rivers formation.
- (b) The production casing string shall be cemented with sufficient cement to circulate back to the surface.
- 4. Cementing and Testing Procedure:

All cement mixtures and testing procedures shall be in accordance with the applicable provisions of Order No. R-111-A.

### 5. Abandonment Procedure:

Upon abandonment of the well, it shall be plugged and abandoned in accordance with the standard statewide rules and regulations of the New Mexico Oil Conservation Commission. Cement plugs of 25 sacks each (at least 100 feet in length) shall be spotted opposite the pay horizon, below the salt section, above the salt section, and at the base of the shoe of the surface casing, and 10 sacks shall be used at the surface. In addition, 25-sack cement plugs shall be spotted opposite any water bearing horizon encountered while drilling.

- 6. Applicant shall notify the Hobbs District Office of the date and hour casing is to be run and cemented and the date and hour the well is to be plugged.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-4-CASE No. 4090 Order No. R-3726

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Charleman

ALEX J ARMIJO Nemb

A. L. PORTER, Jr., Member & Secretary

## BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE No. 3264 Order No. R-2932

APPLICATION OF CARL ENGWALL FOR AN EXCEPTION TO COMMISSION ORDER R-111-A, LEA COUNTY, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 9, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 24th day of June, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Carl Engwall, seeks authority to drill his Sinclair-Federal Well No. 1 at a location 2310 feet from the South line and 990 feet from the West line of Section 14, Township 20 South, Range 33 East, NMPM, Teas Pool, Lea County, New Mexico, and that applicant also seeks approval of a special cementing and casing program for the subject well as an exception to the casing and cementing rules prescribed for the Potash-Oil Area by Order No. R-111-A.
- (3) That potash development does not presently exist and is not presently contemplated within the vicinity of the proposed well

-2-CASE No. 3264 Order No. R-2932

(4) That approval of the proposed special casing and cementing program for the subject well will prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED:

- (1) That the applicant, Carl Engwall, is hereby authorized to drill his Sinclair-Federal Well No. 1 at a location 2310 feet from the South line and 990 feet from the West line of Section 14, Township 20 South, Range 33 East, NMPM, Teas Pool, Lea County, New Mexico.
- (2) That as an exception to the provisions of Order No. R-111-A, the applicant is hereby authorized to complete and abandon said Sinclair-Federal Well No. 1 as follows:

### CASING, CEMENTING, AND ABANDONMENT PROCEDURE

- 1. Surface Casing String:
  - (a) Applicant shall set 9-6-8-inch,

    Residual and 13-3/8 inch new or used oil field casing in good condition at a depth of 9-6 feet below the surface or deeper if necessary to protect any potable water. Cement shall be circulated back to the surface.
  - (b) Cement shall set a minimum of 12 hours before drilling the plug or instituting tests.
- 2. Salt Protection Casing String:

In lieu of the salt protection casing string, prior to drilling into the uppermost pay zone, the hole shall be filled with mud and the level of mud maintained to the surface during drilling and testing of pay zones.

- 3. Production Casing String:
  - (a) If production is encountered, applicant shall set a production string of 4-1/2-inch, 5 1/2-inch, or 7-inch casing on top of or through the Seven Rivers formation.

-3-CASE No. 3264 Order No. R-2932

(b) The production casing string shall be cemented with sufficient cement to circulate back into the surface, casing thing.

### 4. Abandonment Procedure:

Upon abandonment of the well, it shall be plugged and abandoned in accordance with the standard statewide rules and regulations of the New Mexico Oil Conservation Commission. Cement plugs of 25 sacks each (100 feet in length) shall be spotted opposite the pay horizon, below the salt section, above the salt section, and at the base of the shoe of the surface casing, and 10 sacks shall be used at the surface. In addition, 25-sack cement plugs shall be spotted opposite any water bearing horizon encountered while drilling. In the event production string is run and the casing is later cut and pulled, a 25-sack cement plug shall be spotted at the point of cut-off.

- 5. Applicant shall notify the Hobbs District Office of the date and hour casing is to be run and cemented and the date and hour the well is to be plugged.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

SEAL

esr/

A. L. PORTER, JR., Member & Secretary

### DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 26, 1969

9 A.M. - OIL CONSERVACION COMMISSION CONFERENCE RCOM, STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

- CASE 4078: Application of J. Gregory Merrion for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Devils Fork-Gallup Pool and an undesignated Mesaverde oil pool in the well-bore of his NCRA State Well No. 3 located in Unit L of Section 16, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 4079: Application of Robert B. Holt for the creation of a new pool, assignment of a discovery allowable, and the promulgation of special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Middle Pennsylvanian oil pool for his Aztec State Well No. 2 located in Unit A of Section 26, Township 13 South, Range 32 East, Lea County, New Mexico, and for the assignment of an oil discovery allowable in the amount of approximately 48,715 barrels to said well. Applicant further seeks the promulgation of special pool rules for said pool, including a provision for 160-acre proration units and the assignment of 80-acre allowables.

### CASE 3975: (Reopened)

In the matter of Case No. 3975 being reopened pursuant to the provisions of Order No. R-3618, which order established 80-acre spacing units for the East Bluitt-San Andres Pool, Roosevelt County, New Mexico, for a period of approximately two months. All interested parties may appear and present evidence as to whether the subject area is indeed a separate common source of supply or an extension of the Bluitt-San Andres Gas Pool. Further, in the event said East Bluitt-San Andres Gas Pool, the Commission will consider the amendment of the Special Rules and Regulations governing the Bluitt-San Andres Gas Pool to provide for the classification of oil and gas wells, spacing and well location requirements for oil and gas wells, and an allocation formula for withdrawals from the gas cap and oil rim.

CASE 4080: Application of Monsanto Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Black River Unit Area comprising 14,961.23 acres, more or less, of State, Federal and Fee lands

-2-Docket No. 9-69 Examiner Hearing - March 26, 1969

### CASE 4080 - Continued

in Townships 25 and 26 South, Ranges 23 and 24 East, Eddy County, New Mexico.

- CASE 4081: Application of Curtis Hankamer for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Brushy Draw Deep Unit Area comprising 9,672.53 acres, more or less, of State and Federal lands in Township 26 South, Ranges 29 and 30 East, Eddy County, New Mexico.
- CASE 4082: Application of Sam D. Ares for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to inject produced salt water into the Yates-Seven Rivers formation in the open-hole interval from approximately 3358 to 3495 feet in his Arnott Ramsey "A" Well No. 3, located 560 feet from the North and West lines of Section 2, Township 25 South, Range 36 East, Jalmat Yates Seven Rivers Pool, Lea County, New Mexico.
- CASE 4083: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Penrose Skelly Pool and the Paddock Pool in the well-bore of its Eunice King Well No. 7 located in Unit G of Section 28, Township 21 South, Range 37 East, Lea County, New Mexico, with the provision that no more than one allowable will be produced from said well.
- CASE 4084: Application of Olen F. Featherstone for the creation of a new pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Wolfcamp oil pool for his Cabot State Well No. 1 located in the NE/4 NW/4 of Section 29, Township 15 South, Range 32 East, Lea County, New Mexico, and for the promulgation of special rules therefor including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.
- CASE 4085: Application of Tamarack Petroleum Corporation, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Queen formation in the perforated interval from approximately 4948 feet to 5043 feet in its Cabot 23 State Well No. 2 located in Unit C of Section 23, Township 19 South, Range 35 East, Pearl-Queen Pool, Lea County, New Mexico.

-3Docket No. 9-69
Examiner Hearing - March 26, 1969

- CASE 4086: Application of Hanson Oil Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its CSA Federal Well No. 1 located in Unit L of Section 29, Township 26 South, Range 37 East, Scarborough Yates-Seven Rivers Pool, Lea County, New Mexico, in such a manner as to permit production of oil from the Yates formation and the disposal of produced salt water into the Seven Rivers formation through parallel strings of tubing.
- CASE 4087: Application of Solar Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its McCallister Well No. 1 located in Unit C of Section 7, Township 22 South, Range 38 East, Lea County, New Mexico, to produce oil from undesignated Drinkard and Abo oil pools through parallel strings of tubing.
- CASE 4071: (Continued from the March 19, 1969, Regular Hearing)
  Application of T. J. Sivley for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Federal Silver Well No. 4 located in the SW/4 SE/4 of Section 28, Township 20 South, Range 34 East, Lynch Yates-Seven Rivers Pool, in such a manner as to permit production of oil from the Yates-Seven Rivers formations and the disposal of produced salt water into the Lower Seven Rivers formation.
- CASE 4088: Application of Paul M. Mershon, Jr., for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Upper Pennsylvanian formation underlying Section 21, Township 22 South, Range 23 East, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled at an unorthodox gas well location 990 feet from the North and East lines of said Section 21, and within one mile of the Indian Basin-Upper Pennsylvanian Gas Pool. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.
- CASE 4089: Application of Paul M. Mershon, Jr., for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the special rules and regulations governing the Indian Basin-Upper Pennsylvanian Gas Pool to permit the drilling of a well at an unorthodox gas well location 990 feet from the North and East lines of Section

-4-Docket No. 9-69 Examiner Hearing - March 26, 1969

> 21, Township 22 South, Range 23 East, Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico.

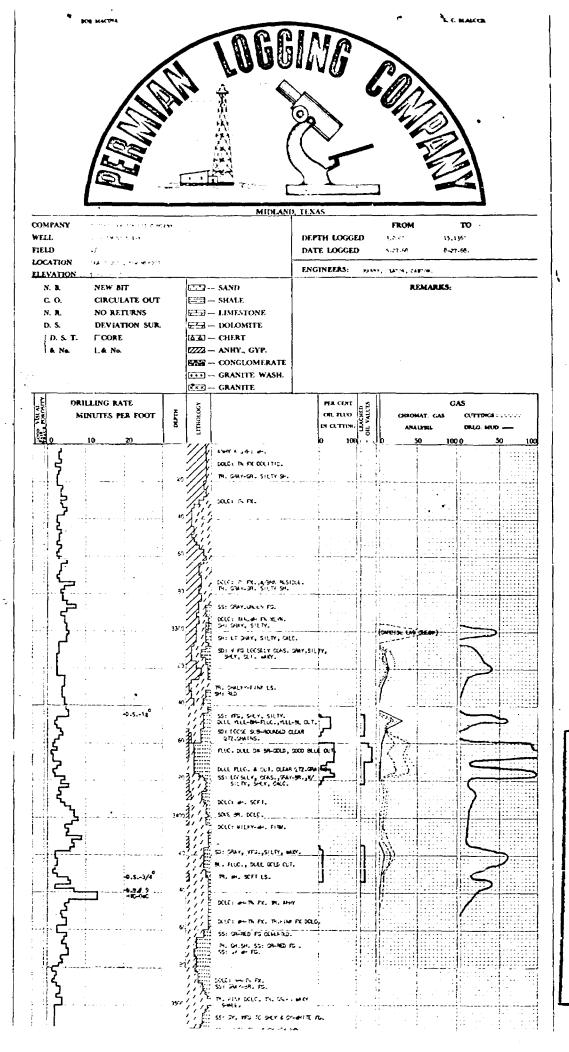
CASE 4090:

Application of Getty Oil Company for an exception to Commission Order No. R-111-A, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the potash-oil area casing and cementing rules as set forth in Commission Order No. R-111-A. Applicant proposes to re-enter and deepen approximately 3500 feet in the Yates formation four wells located in Sections 19 and 30 of Township 20 South, Range 34 East, Lea County, New Mexico, in such a manner as to eliminate the necessity of running the salt protection string provided the production string would be cemented to the surface.

CASE 4091: Application of Union Oil Company of California for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Elliott Federal Well No. 1 located in Unit O of Section 27, Township 11 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Field Ranch-Wolfcamp Pool and the disposal of produced salt water into the San Andres, Glorieta, Blinebry, Tubb and Abo formations in the open-hole interval from approximately 4458 feet to 8050 feet.

Case 4090 Keard 3-76 69 Rec. 3-2869 to R-111.A Setty consequent and abound only comentary R-2932

Free December 19



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
APPL EXHIBIT NO. 3
CASE NO. 4050

CASING AND CEMENT PROGRAM FOR PRODUCING WELL DRILLED TO SHALLOW ZONE IN POTASH AREA

	Top Tansill 3200'	Base Salt 3118'	Salt Section	Top Anhydrite 1510'  1550'  Top Salt 1646'	d Bed Sec.	ORDER R-111-A  Ground Level Elev. 3660'
(a) Stand 12 Hrs. w/press & 24 Hrs. before drlg. plug. (b) Displ. mud w/wtr. & apply 1000 psi for 30 min.		(d) Disp1. mud w/wtr. & apply 1000 psi for 30 min.  Cut & Pull	(a) Sat. Salt Wtr. drlg. fluid. (b) Salt Cement w/min. 1% CaCl. (c) Stand 12 Hrs. w/press. & 24 Hrs. before drlg. plug.	101	(a) Cement w/150% of calc. vol. (b) Stand 12 lirs. w/press. & 24 Hrs. before drlg. plug. (c) Displ. mud w/wtr. & apply	
		(c) 3	**************************************			ORDER R-111-A
BEFORE EXAMINER UTZ OIL CONSERVATION COMMISSION APPL EXHIBIT NO. + CASE NO. +070 TO 3500'		33# salt/sk. & 1# CaCl/sk. (to Surface) Stand 24 Hrs., displ. mud w/brine wtr., test w/1000 psi before & after. drlg. plug.  DV Tool @ 3100'	SALT PROTECTION STRING  AND PRODUCTION STRING  (5½" 15.5# J-55)  Stage #1: 100 sx. Class "C" w/2# CaC1 /sk. (to 3100')  Stage #2: 450 sx. Class "C" w/4% Ge1,	1 1 1	SURFACE CASING (8-5/8" 24# J-55) (a) 500 sx. Class "C" w/4% Gel, 5# salt/sk. & 2# CaCi/sk., (b) Stand 24 Hrs., displ. mud w/brine wtr., test w/600 psi	GETTY
Bottom 250' Csg. w/ Centralizers, scrat- chers & Rough-Coated		mud	7-7/8" Hole (1550' to 3200' w/ Brine wtr & 3200-3500' w/Salt Gel	Bottom Csg. w/Centralizers	11" Hole (0' to 1550' w/ Spud Mud)	PROPOSA_

### WAIVER

New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico 87501

### Gentlemen:

This is to advise that Getty Oil Company is the record owner of the following U.S.A. Oil and Gas Leases in Lea County, New Mexico:

NM 0550543	Lot 4 and SE/4 SW/4 of Section 19-20S-34E, N.M.P.M. (Getty Oil Company Title No. 40050)
NM 8258	Lot 1 and NE/4 NW/4 of Section 30-205-3 , N.M.P.M. (Getty Oil Company Title No. 5 '794)
LC 063783	S/2 SW/4 of Section 20-20S-34E, N.M.P.M. (Getty Oil Company Title No. 400185)

We have been duly notified by Getty Oil Company of their intent to drill one or more wells on the above oil and gas leases.

The undersigned is the record holder of Potash Lease NM 029245 underlying above oil and gas leases and hereby waives any objection to the drilling of said well or wells.

Very truly yours,

HARROUN AND HAWORTH

Dan S. Harroun

601 Riverside Drive Carlsbad, New Mexico 88220

AC 505-885-6808

OIL CONSERVATION COMMISSION APPL EXHIGIT NO. 5

BEFORE EXAMINER UTZ

CASE NO.\_\_ 4090

### BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF GETTY OIL COMPANY FOR AN EXCEPTION TO ORDER NO. R-111-A, LEA COUNTY, NEW MEXICO.

7.1

Case No. 4090

### APPLICATION

Comes now Getty Oil Company, by its attorneys, and seeks an order of the New Mexico Oil Conservation Commission granting it an exception to the casing and cement requirements of Order No. R-111-A with respect to four wells to be drilled and recompleted in the Potash-Oil Area, and in support of its application states:

1. Applicant is the operator of and intends to recomplete the following wells located in Township 20 South, Range 34 East, Lea County, New Mexico:

Government N Well No.2 Located in Unit N of Sec.19.

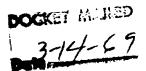
Government N Well No.3 Located in Unit M of Sec.19.

Richardson Federal Well No.1 Located in Unit C of Sec.30.

Richardson Federal Well No.2 Located in Unit D of Sec.30.

2. Applicant proposes to recomplete each of the four above described wells by drilling the said wells to a total depth of approximately 3500 feet and complete them in the Yates Formation.

Based upon the log of the Cities Service Government N Well No.1-Y, located 660 feet from the south line and 2084 feet from the west line of Section 19, Township 20 South, Range 34 East, Lea County, New Mexico, it may be reasonably assumed that in each of the four subject wells the top of the anhydrite will be encountered at approximately 1510 feet, the top of the salt at 1640 feet, the base of the salt at 3118 feet, the top of the Tansill formation



at 3200 feet, and the top of the Yates formation at 3300 feet. The porosity zones in the Yates formation may be expected in intervals of 3356 to 3370 feet, 3372 to 3382 feet, and 3420 to 3440 feet.

3. Applicant proposes to drill and equip each of the four subject wells in the following manner as an exception to the requirements of Order No. R-111-A:

Drill 11" hole to 1550 feet, set 8-5/8-inch casing at 1550 feet in the anhydrite, cement the surface string of casing with 300 sacks of Class C with 4% gel (5# salt per sack) plus 200 sacks of Class C with 2# calcium chloride per sack.

Circulate cement to surface (volume of cement used is equivalent to 200% of calculated volume necessary to cement to surface.

Drill 7-7/8-inch hole to 3500 feet, set  $5\frac{1}{2}$ " casing at 3500 feet. Cement  $5\frac{1}{2}$ " casing string in two stages as follows: 100 sacks of Class C (2# calcium chloride per sack) circulated back to 3100 feet; through a DV tool set at 3100 feet circulated to surface 450 sacks Class C with 4% gel (33# salt per sack and 1# calcium chloride per sack).

Displace drilling mud with saturated brine.

Test surface casing at 600 PSI before and after drilling out the casing shoe and test  $5\frac{1}{2}$ " casing at 1000 PSI.

Run R-type centralizers on bottom of surface casing and install bar centralizers and scratchers within 150 feet of the bottom of the  $5\frac{1}{2}$ " casing string.

Rough-coat the bottom 250 feet of the  $5\frac{1}{2}$ " casing string.

The mud program to be used in the drilling of the subject wells is as follows: spud mud (9# per gallon) from surface to 1550 feet: brine (10# per gallon) from 1550 to 3200 feet; salt gel mud (10# per gallon) from 3200 to 3500 feet.

- 4. The proposed drilling, casing, cementing and mud programs for the subject wells will adequately protect the salt section and will ensure separation of the oil and gas production from the potash zone.
- 5. Approval of this application will prevent waste and protect correlative rights of both the petroleum and potash interests in the affected area.

WHEREFORE, applicant requests that the Commission set this application for hearing before the Commission or one of its Examiners and that the Commission enter its order approving this application.

MONTGOMERY, FEDERICI, ANDREWS, HANNAHS & MORRIS

P.O. Box 2307 Santa Fe, New Mexico 87501

Attorneys for Getty Oil Company

10

GMH/esr April 1, 1969

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

HMK

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING

CASE No. 4090

Order No. R-3726

APPLICATION OF GETTY OIL COMPANY FOR AN EXCEPTION TO COMMISSION ORDER NO. R-111-A, LEA COUNTY, NEW MEXICO.

4.7.69

ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 26, 1969, at Santa Fe, New Mexico, before Examiner Elvis A. Utz

NOW, on this <u>day of April</u>, 1969, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Getty Oil Company, seeks authority to drill four wells at standard locations in Sections 19 and 30 of Township 20 South, Range 34 East, NMPM, Teas Yates-Seven Rivers Pool, Lea County, New Mexico, said area being situated in the Potash-Oil Area governed by Commission Order No. R-111-A.
- (3) That the applicant also seeks approval of a special cementing and casing program for the subject wells as an exception to the casing and cementing rules prescribed for the Potash-Oil Area by said Order No. R-111-A.
- (4) That potash development does not presently exist and is homeon to be not presently contemplated within the vicinity of the proposed wells.

(5) That approval of the proposed special casing and cementing program for the subject wells will prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED:

- (1) That the applicant, Getty Oil Company, is hereby authorized to drill four wells at standard locations in Sections 19 and 30 of Township 20 South, Range 34 East, NMPM, Teas Yates—Seven Rivers Pool, Lea County, New Mexico, as follows:

  Government "N" Well No. 2, located in Unit N of Section 19

  Government "N" Well No. 3, located in Unit M of Section 19

  Richardson Federal Well No. 1, located in Unit C of Section 30

  Richardson Federal Well No. 2, located in Unit D of Section 30
- (2) That as an exception to the provisions of Order No. R-111-A, the applicant is hereby authorized to complete and abandon the aforesaid four wells as follows:

### CASING, CEMENTING, AND ABANDONMENT PROCEDURE

- 1. Surface Casing String:
  - (a) Applicant shall set 8 1/2-inch new or used oil field casing in good condition at a depth of 1550 feet below the surface or deeper if necessary to protect any potable water.

    Cement shall be circulated back to the surface.
  - (b) Cement shall set a minimum of 24 hours before drilling the plug or instituting tests.
- 2. Salt Protection Casing String:
  In lieu of the salt protection casing string,
  prior to drilling into the uppermost pay zone,

the hole shall be filled with mud and the level of mud maintained to the surface during drilling and testing of pay zones.

- 3. Production Casing String:
  - (a) If production is encountered, applicant shall set a production string of 5 1/2-inch casing on top of or through the Seven Rivers formation.
  - (b) The production casing string shall be cemented with sufficient cement to circulate back to the surface.

Abandonment Procedure:

Upon abandonment of the well, it shall be plugged and abandoned in accordance with the standard statewide rules and regulations of the New Mexico Oil Conservation Commission. at least Cement plugs of 25 sacks each (100 feet in length) shall be spotted opposite the pay horizon, below the salt section, above the salt section, and at the base of the shoe of the surface casing, and 10 sacks shall be used at the surface. In addition, 25-sack cement plugs shall be spotted opposite any water bearing horizon encountered while drilling. In the event production string is run and the casing is later cut and pulled, a-25-sack-cement plug shall be spotted at at the point of cut-off:

Applicant shall notify the Hobbs District
Office of the date and hour casing is to

4. Committee and recting Procedure:

All cohord nictors, and to ching process

Ausse chart to in secondance with the

offlicable provisions of Order No. R. 1164.

be run and cemented and the date and hour the well is to be plugged.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.