# CHSE Mo. 24821

Application,

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
CONFERENCE HALL, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
September 13, 1972

## EXAMINER HEARING

# IN THE MATTER OF:

Application of Getty Oil Company for downhole commingling, Lea County, New Mexico.

CASE NO. 4821

BEFORE: Daniel S. Nutter Examiner

TRANSCRIPT OF HEARING

SIMMS BLOG. P.O. BOX 1002 PHONE 243-6691 ALBUQUERQUE, NEW MEXICO AT

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MR. NUTTER: Call Case 4821.

MR. HATCH: Case 4821: Application of Getty Oil Company for downhole commingling, Lea County, New Mexico.

MR. MORRIS: Mr. Examiner, I'm Richard Morris
of Montgomery, Federici, Andrews, Hannahs & Morris, appearing
on behalf of the Applicant.

We have one witness, Mr. Suresh Sutaria, I'd like to have him sworn, at this time.

## SURESH SUTARIA,

was called as a witness and, having been duly sworn according to law, testified as follows:

### DIRECT EXAMINATION

## BY MR. MORRIS:

- Q Mr. Sutaria, will you please state your full name and where you reside?
- A My name is Suresh Sutaria, S-u-t-a-r-i-i, from Hobbs,
  New Mexico.
- Q How are you employed, Mr. Sutaria? By whom are you employed?
- A I'm employed by Getty Oil Company.
- 21 Q And what is your position?
  - A My title is production engineer, or petroleum engineer.
  - Q Will you state briefly your education, and your experience in the petroleum industry?
  - A I graduated from Texas A. & M. University in May,

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state what that shows?

1968, majored in petroleum engineering. I joined Getty Oil Company in June, 1968. For the first two years I was employed by Getty Oil Company in south Louisiana. I was transferred to Hobbs, New Mexico, in July, 1970, and ever since, I have been in Hobbs. And are you familiar with the Getty Oil Company's Application in this Case, Case 4821? Yes, I am. A MR. MORRIS: Are the witness' qualifications acceptable? MR. NUTTER: Yes, they are. (By Mr. Morris) Mr. Sutaria, what is it that Getty Oil Company seeks by this Application? Getty Oil Company requests an exception to Rule 303 of the Commission Rules and Regulations to commingle production from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum-Pennsylvanian Pools in the wellbore of its State "BA" Well Number 8 located in Unit B of Section

NEW MEXICO 87103 MEXICO 87108 303

Exhibit Number 1 is a property plat for the State "BA" lease. The State "BA" lease is outlined in red, the proration unit B is colored in green, Well Number 8

36, Township 17 South, Range 34 East, Lea County, New

Please refer to the lease plat, Exhibit Number 1, and

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itself is located in the proration unit B. 2 What are the other wells shown in the proration unit? 3 Well Number 2 and Well Number 9. All right. Would you refer to Exhibit Number 2 and 5 review the completion history of the subject well? 6 Exhibit Number 2 is the completion history for the 7 subject well. The well was originally completed as 8 a tripling in the Abo, Wolfcamp, and Pennsylvanian 9 zones. 10 Does this Exhibit show the perforations and the Q 11 treatment given to each of these zones? 12 Yes, they do. Α 13 All right. Please refer to Exhibit Number 3, the 14 mechanical sketch of the subject well. Does this 15 Exhibit show the manner in which the well is presently 16 completed and producing? 17 A Yes. 18 All right. Would you briefly describe the manner in Q 19 which the well is presently completed and producing? 20 The Abo zone is produced through string number 3 and A 21 it's pumping, the Wolfcamp is produced through string number 2 and it's flowing, the Pennsylvanian zone is 22 produced through string number 1 and it's flowing. 23 These three zones are isolated by a single packer and 24 25 a dual packer.

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Q	Do you	have	the	most	recent	packer	leakage	test	on
	this we	211?							

- A The last scheduled packer leakage test was in September, 1971. On Exhibit Number 4 is the packer leakage test.
- Now, what is Getty seeking by this Application and why are you seeking to change the methods of completion and producing from that shown on Exhibit Number 3, and how will you complete the well if your Application is approved?
  - The reason Getty seeks authorization in the Application is to reduce the workover costs dealing with any further pooling of the job, to redo the bottomhole equipment and shut producing the workover and operating costs and salvage some equipment. Third, to run larger tubing and longer rods in order to pump the well from a depth of approximately 10,000 feet; four, to reduce the operating costs since these three zones would be pumped with one bottomhole pump and one pumping unit and finally, to reduce the economic limit which would result in the recovery of additional oil and gas and thus increase the accumulative oil and gas production and prevent the underground waste of hydrocarbon.

The way we are planning to do this is pull this

				a single tapered tube.
	ja J	1	bo	ottomhole equipment and run a single tapered tube.
		2	. %	ottomhole equipment unit
•				Į.
		3	s	ketch?
		4	A Y	es, it is.
·	** *	5	_ •	and how would this well be produced under this
	Table		_	
	¥	6	•	arrangement?
	E	7	A	The well would be pumped from a seating nipple at
	בו בי	8		The well would be purposed to perforated nipples in this 10,067 feet. There are two perforated nipples is located
	2			10,067 feet. There are the tubing, one is located at 10,169 and another is located tubing, one is located at 10,169 and another is located
	dearmley, meier & mc cormick each	9		at 10,068. The upper Pennsylvanian perforations
	<u>.</u>	10		at 10,068. The upper remay.
	me	11		would be pumped through the tubing at 10,169, while
				the Abo and Wolfcamp zones would be pumped through
	arınk	12		the tubing perforated at 10,068 feet.
		<u> </u>		the tubing periorated to the tubing period to the tubing periorated to the tubing period to the tubing periorated to tubi
		13 00148 00 14 00 14	Q	Do you have any current gas-oil ratio tests on each
	į	X X W W Z Z	_	of these three zones?
		: 15 Z		
		16 16 17	A	Yes, I do.
		17	Q	Yes, 1 do.  Are those contained here as Exhibit 6, 7, and 8?
		9 T B		Yes.
		18	A	no you want to point out any of the data
		N 0 0 19	Q	shown on those Exhibits to the Examiner, or are they
		3002 NA BLDG. 3	0	shown on those Exhibits to
		a)		self-explanatory?
		0.00 8 4 7	:1	lf-explanatory.
		0.0 0.0 BOX	22 A	They are self-cape.  And these tests have all been run during September,
		1 E	23 Q	And these tests have a
		51MM 1216	24	1972?
		605		Yes, that's correct.
			محا A	The second secon

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:00 SIMMS BLDG.# P.O. BOX 1092.#PHONE 245.6691.#ALBUQUERQUE, NEW MEXICO 67108 Izigfirst national bank blog. East.#Albuquerque; new mexico 67108 All right, would you please refer to Exhibit 9, 10, and 11, and point out the features shown on those Exhibits relating to the production history from each of the three zones as well?

A Exhibit Number 9 is a production decline chart for the Vacuum-Abo zone. The solid line on the chart is oil, and the dotted line is water. The decline starts from January 1968, to July 1972.

Q That would be from January of 1969, wouldn't it?

Q That would be from January of 1989, wouldn't fire

A Instead of '68, yes.

Exhibit Number 10 is the production decline chart for the Wolfcamp, for the subject well, and it's in the same manner as Exhibit Number 9.

Exhibit Number 11 is the production decline chart for the Vacuum upper Pennsylvanian zone.

- Q All right. I will refer you to Exhibits 12, 13, and 14, and ask you if those are the bottomhole pressures on the three zones contained in this well?
- A Yes, they are.
- Q Would you like to point out any particular features of those Exhibits?
  - Exhibit Number 12 is the bottomhole pressure for the Abo zone, which was run during May 1972. On the right-hand corner, bottomhole pressure is given, and the depth is given also.

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Exhibit Number 13 is the bottomhole pressure 9 survey for the Vacuum-Wolfcamp. It was run during May, 1972. It has the same features as Exhibit Number 12.

Exhibit Number 14 is the bottomhole pressure survey for the Vacuum upper Pennsylvanian zone. was run during May, 1972, and has the same features as Exhibit Number 12.

Please refer to Exhibit 15 and explain to the Examiner Q what this Exhibit is and what it shows.

Exhibit 15 is a compilation of the bottomhole pressure data for the Abo-Wolfcamp and Pennsylvanian zones. On the left-hand side all these three bottomhole pressure charts are plotted as a functional depth. Now, what does this Exhibit show as far as the Q pressures and the differential pressures that you expect will be experienced acros. these perforations in each of these three z .es?

The pressure differential in the Abo would be in the range of 535 PSI of Abo, to 880 PSI of Wolfcamp. amounts to about 345 PSI pressure differential. The pressure differential across the Wolfcamp zone ranges from 810 PSI to 1,090 PSI which amounts to 280 PSI pressure differential; and the pressure across the upper Pennsylvanian zone ranges from 885 PSI to 1,140

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209 SIMMS BLDG. 8 P.O. BOX 1092 • PHONE 243-4691• • ALBUQUENQUE, NEW MEXICO 87108
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1		PSI which is about 255 pressure differential.
2	Q	Now, will this pressure differential exist if the
3		well is produced under pump, as you have outlined?
4	λ	No, this pressure wouldn't exist while the well is
5		pumping because we would be pumping off the well all
6		the time and this bottomhole pressure at the perforation
7		would be reduced.
8	Q	All right. So these pressure differentials that you've
9		shown on this Exhibit are the differentials that would
10		exist if the well were not being pumped and would be
11		the static pressure?
13	A	Yes.
13	Q	Does the differential in pressure that you've shown
14		on this Exhibit create production problems, or
15		would it cause any problems in the production and
16		operation of this well?
17	λ	Would you repeat the question, please?
18	Q	Let me phrase it a different way. Is the proposed
19		completion that you are applying for here consistent
20		with good engineering practices?
21	A	Yes, it is.
22	Ď	If you produce the well in accordance with your
23		Application here, would there be any particular problems
24		that you would have to deal with that would be caused
25		by these pressure differentials that you have testified

to and shown on Exhibit 15?

A No, I don't think so. The only problem could be during shut-in period at which time there might be a little bit of cross-flow, but that would be something like a workover. Well, it would be just temporary and it wouldn't amount to anything.

Q In your opinion, can the well be operated in accordance with your proposal without causing waste?

Yes, the way we have planned to produce this well, because we would be pumping below the perforations of the Abo and the Wolfcamp zones and the economic limit would go down, which would prolong the life of the well and, thus, cumulative oil and gas prorations.

MR. MORRIS: Mr. Examiner, may I inquire whether you have received written waivers from Mobil and Phillips?

MR. NUTTER: If we have, they are not in the Case file. We have something here from Gulf.

MR. MORRIS: I don't know that these need to be marked as Exhibits, but I would offer in addition to the communication from Gulf, a waiver of any objection on behalf of Mobil and Phillips Petroleum.

MR. NUTTER: For the record, the waiver from Gulf pertains to a different case.

Q (By Mr. Morris) Were Exhibits 1 through 15 prepared by you or under your direction and supervision?

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Yes, they were.

MR. MORRIS: Mr. Examiner, we offer Exhibits 1 through 15 into evidence.

MR. MUTTER: Applicant's Exhibits 1 through 15 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 15 were marked and received into evidence.)

MR. NUTTER: Do you have anything further you wish to state with regard to this Case?

MR. MORRIS: No, that's all we have on Direct.

# CROSS-EXAMINATION

# BY MR. NUTTER:

Mr. Sutaria, I notice here on your tests that you show, let's see, it's Exhibit 6, you show that the north Vacuum Abo tested nine barrels of oil in September. Exhibit 7 shows that the Wolfcamp tested 15 and that the upper Pennsylvanian tested 32 barrels of oil. Now, when I look at your production decline curve here, it looks like in the month of June, on Exhibit 9, the Abo, check me if I am wrong in reading this, looks like the Abo produced about -- well, I am wrong in reading the chart. It produced about 330 barrels, I guess? Yes, that's correct.

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1	δ	Which corresponds pretty closely to the nine barrels
2		on the test?
3	A	Yes.
4	Q	The Wolfcamp produced 480, which corresponds pretty
5		closely to the 15 on the test?
6	A	Yes.
7	Q	And the upper Pennsylvanian produced 860, which would
8		be a little less than the 32 barrels on the test?
9	A	Yes.
10	Ö	Okay. Now, how much is that pressure on that chart
11		down there at the depth of 9,760, or whatever it is,
12		9,775?
13	A	About 10,075 or 10,080.
14	Q	And what's the pressure?
15	A	Pardon me, 1,085.
16	Q	Now, didn't you mention, when you were going through
17		the three tubing strings, that the Number 1 to the
18		upper Pennsylvanian is flowing at the present time?
19	λ	Yes, sir.
20	Q	And the Number 2 to the Wolfcamp is flowing?
21	A	Yes, sir.
22	Q	Well, now, do you expect them to continue flowing
23	}	very long?
24	A	Well, as a matter of fact, we would like to get these
25		applications approved, time being, we are planning to

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200 SIMMS BLDC.+ P.O. BOX 10023-PHONE 243-6691+ALBUQUERQUE. NEW MEXICO 67108 1216 First national bank bldg. East+Albuquirque, new mexico 67106 produce as it is. In case in the future we have to pull the tubing for some reason, we would like to convert this operation in a simple manner and that could be six months.

- You don't have any workover proposed right now?
- A No, but we would like to have this Application approved before any problem occurs, like communication or anything.
- But as you have right now, you mentioned that the reasons you are asking for it was economy of operation that you could pump them all with one tubing string in one pumping unit, that's all you're using is one pumping unit?
- A Right, but this is for the future. In the future, we could pump with one pumping unit and according to rules and regulations in downhole in one zone in pumping, we have to pump both zones, so this is what I am asking.
- Q Well, that's for administrative approval without a hearing.

They have to be both pumping zones or both flowing zones. The reason for that, would be to handle administratively without a hearing, only those cases where there is very little differential in pressure, and we do have a fairly severe differential

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15 in pressure here on these. Now, I agree with you, as long as the well is kept pumping and you have little differential. But in the evidence, it has shown you could have cross-flow, just as --It would be very nominal cross-flow, I think. Refer to Exhibit Number 8. The flowing pressure of the Pennsylvanian zone is only 50 PSI, which could cease to flow in the near future. That's the upper Pennsylvanian? Yes. And what is your flowing pressure? The Wolfcamp flowing pressure is about 200 PSI. So it should continue to flow longer than the upper Pennsylvanian, then?

Probably, yes. A

I imagine those high gas-oil ratios limit them to flow, too?

In Wolfcamp, yes. It's a little high gas-oil ratio.

MR. NUTTER: Are there further questions of the

witness?

MR. MORRIS: Yes, sir, just a couple.

## REDIRECT EXAMINTION

BY MR. MORRIS: 24

What problems would you have if you were required to

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dearnley, meier & mc cormick 200 SIMMS BLDG. 8 DOX 1002 8 PHONE 243-6681 8 ALBUQUERQUE, NEW MEXICO 87103 1210 FIRST NATIONAL BANK BLDG. EAST 8 ALBUQUERQUE, NEW MEXICO 87103 12 13 14 15 16 17 18 19 20 21 22

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PAGE 16 pull the tubing in this well, or work it over and did not at that time have approval of this Application? The main reason is the workover cost. It would cost around \$14,000 to \$16,000 to try to repair this communication or run this equipment back in the well and with these productions of nine barrels and 15 barrels and 32 barrels, it would be a long time to pay it out. If you were allowed to commingle in the manner that you have outlined, would it possibly cause premature abandonment of this well, or some of the zones in this well?

Talking about this well, if the Abo production is Α declined to five harrels, so, it could; if we commingled these three zones we would be getting five barrels, in other wells it could very well do that. MR. MORRIS:

All right. That's all I have.

# RECROSS-FXAMINATION

# BY MR. NUTTER:

Well, Mr. Sutaria, in order to obtain a means of allocating production to each of the three zones in here, what would you suggest as a percentage from each of the three zones, if we permitted to commingle at this time? Α

I would suggest the earnings based on this production

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		PAGE 17
1		decline curve.
2	Q	It looks like the Abo is about to go anyway?
3	A	It is declining, yes. The Pennsylvanian and the Wolfcam
4		they are pretty well established in decline and we
5		could give more concentration to these two declines
6		other than the Abo.
7	Q	I suppose if you do this six months from now, you may
8		have a different picture on this curve?
9	A	It could be.
10		MR. NUTTER: Are there further questions of the
11	witne	ss?
12		(No response.)
13		MR. NUTTER: Do you have anything further,
24	Mr. M	orris?
15		MR. MORRIS: No, sir.
16		MR. NUTTER: Does anyone have anything they wish
17	to of	fer in Case 4821?
18		(No response.)
19		MR. NUTTER: We will take the Case under
20	advis	ement.
21		We now call Case Number 4823.
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100 67103	8	EXHIBITS OFFERED	ADMITTED
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# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2008 - SANTA FE 87501

September 27, 1972

GOVERNOR BRUCE KING CHAIRMAN LAND COMMISSIONER ALEX J. ARMIJO MEMBER

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

	Re:	Case No. 4821
Mr. Richard S. Morris	Andrews,	order No. R-4406
Montgomery, Federici, A Hannahs & Morris		Applicant:
Attorneys at Law Post Office Box 2307		GETTY OIL COMPANY
Santa Fe, New Mexico		

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

very truly yours. A. L. PORTER, Jr. Secretary-Director

ALP/ir	
Copy of order also sent to:	
Hobbs OCCxArtesia OCCx	
Aztec OCC	
Other	

# 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. 4821 Order No. R-4406

APPLICATION OF GETTY OIL COMPANY FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

### ORDER OF THE COMMISSION

## BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 13, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 27th day of September, 1972, 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, is the owner and operator of the State "BA" Well No. 8, located in Unit B of Section 36, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.
- (3) That pursuant to authority granted by Administrative Order MC-1497, said Well No. 8 was completed by the applicant as a triple completion (conventional) to produce oil from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum-Upper Pennsylvanian Pools.
- (4) That each of the three zones in the subject well is capable of only low marginal production.
- (5) That the applicant now seeks authority to complete said Well No. 8 in such a manner as to produce oil from the subject well through one string of 2 7/8-inch tubing, commingling in the well-bore the production from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum-Upper Pennsylvanian Pools.

-2-CASE NO. 4821 Order No. R-4406

- (6) That the proposed commingling in the subject well of the three zones may substantially extend the productive lives of said zones in the subject well.
- (7) That the reservoir characteristics of each of the zones in the subject well are such that underground waste would not be caused by the proposed commingling in the well-bore.
- (8) That the proposed commingling may result in the recovery of additional oil from each of the commingled zones in the subject well, thereby preventing waste, and will not violate correlative rights.
- (9) That the mechanics of the proposed completion are feasible and in accord with good conservation practices.
- (10) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action the operator should notify the Hobbs District Office of the Commission any time the subject well is shut-in for seven consecutive days.
- (11) That the commingled production should be allocated upon the basis of updated production tests and decline curves submitted to the Santa Fe Office of the Commission at the time of conversion.
- (12) That approval of the subject application will prevent waste and protect correlative rights.
  - (13) That Administrative Order MC-1497 should be superseded.

## IT IS THEREFORE ORDERED:

- (1) That the applicant, Getty Oil Company, is hereby authorized to complete its State "BA" Well No. 8, located in Unit B of Section 36, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, in such a manner as to produce cil from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum-Upper Pennsylvanian Pools through one string of 2 7/8-inch tubing, commingling in the well-bore the production from the pools.
- (2) That immediately upon conversion of the above-described well to a single string of tubing the operator shall furnish the Santa Fe Office of the Commission updated production tests and decline curves for each of the zones, whereupon, the Commission shall establish a formula for allocating the commingled oil production and commingled gas production to the various zones.

-3-CASE NO. 4821 Order No. R-4406

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- (3) That the commingling in the well-bore authorized by this order shall continue only so long as the commingled production of the two zones does not exceed 80 barrels of oil per day nor 80 barrels of water per day.
- (4) That the maximum amount of gas which may be produced daily from the commingled zones in the subject well shall be determined by multiplying 2,000 by the top unit allowable for the Vacuum-Upper Pennsylvanian Pool.
- (5) That the operator of the subject well shall immediately notify the Commission's Hobbs district office any time the well has been shut-in for seven consecutive days and shall concurrently present, to the Commission, a plan for remedial action.
- (6) That the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order.
  - (7) That Administrative Order MC-1497 is hereby superseded.
- (8) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deam necessary.

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

STATE OF NEW MEXICO
QLL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

SEAL

### DOCKET: EXAMINER HEARING - WEDNESDAY - SEPTEMBER 13, 1972

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for October, 1972, from seventeen prorated pools in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico;
  - (2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for October, 1972.
- CASE 4808: Application of Skelly Oil Company for a waterflood expansion and dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks to expand its Grayburg-Jackson Skelly Unit Water-flood Project, Grayburg-Jackson Pool, Eddy County, New Mexico, by the injection of water through its Unit Well No. 114 located in Unit D of Section 14, Township 17 South, Range 31 East. Said Well No. 114 to be completed as a dual completion in such a manner as to permit the production of oil from the Fren-Sevens Rivers Pool and the injection of water into the Grayburg-Jackson Pool.
- CASE 4809: Application of Saturn Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Antebellum Unit Area comprising 3,840 acres, more or less, of State and Federal lands in Township 23 South, Range 34 East, Lea County, New Mexico.
- CASE 4810: In the matter of the application of the Oil Conservation Commission on its own motion to consider the revision of the special rules for the Devils Fork Gallup Associated Pool and the Escrito Gallup Associated Pool, Rio Arriba and San Juan Counties, New Mexico, promulgated by Orders Nos. R-1670-B and R-1793-A, respectively, to permit taking of gas-oil ratio and bottom-hole pressure tests on an annual basis rather than quarterly and semi-annually, as is now required.

### CASE 4747: (Continued from the July 26, 1972, Examiner Hearing)

Application of Union Texas Petroleum, a Division of Allied Chemical Corporation for compulsory pooling, Lea County, New Mexico, Applicant, in the above-styled cause, seeks an order pooling all mineral interests below the base of the Devonian formation underlying the N/2 of Section 33, Township 25 South, Range 37 East, Crosby Field, Lea County, New Mexico. Said acreage to be dedicated to its well to be located 1650 feet from the North line and 2310 feet from the East line of said Section 33. 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 4577: (Reopened)

In the matter of Case 4577 being reopened pursuant to the provisions of Order No. R-4181, which order established special rules and regulations for the Parkway-Wolfcamp Pool, Eddy County, New Mexico, including a provision for 160-acre spacing units. All interested persons may appear and show cause why said pool should not be developed on 40-acre or 80-acre spacing units.

- CASE 4811: Application of Atlantic Richfield Company for a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 120-acre non-standard gas proration unit comprising the N/2 SE/4 and NE/4 SW/4 of Section 36, Township 21 South, Range 37 East, Blinebry Gas Pool, Lea County, New Mexico, to be dedicated to its State 367 Well No. 3 located in Unit K of said Section 36.
- CASE 4812: Application of Midwest Oil Corporation for an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to Rule 104, authority to drill a wildcat gas well to test the Morrow formation at an unorthodox location 1320 feet from the South and East lines of Section 1, Township 18 South, Range 28 East, Eddy County, New Mexico, with the S/2 of said Section 1 to be dedicated to the well.
- CASE 4813: Application of Inexco Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Sitting Bull Unit Area comprising 6,665 acres, more or less, of Federal lands in Sections 28, 29, 31, 32, and 33 of Township 23 South, Range 22 East, and Sections 4 through 9 of Township 24 South, Range 22 East, Eddy County, New Mexico.
- CASE 4814: Application of Inexco Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Four Forks Unit Area comprising 3,133 acres, more or less, of Federal and Fee lands in Sections 3, 10, 11, 14 and 15 of Township 22 South, Range 25 East, Eddy County, New Mexico.
- CASE 4815: Application of Inexco Oil Company for pool creation and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn gas pool for its well located 1980 feet from the South and West lines of Section 18, Township 21 South, Range 26 East, Eddy County, New Mexico. Applicant further seeks the promulgation of special rules therefor, including a provision for 640-acre spacing units.
- CASE 4816: Application of Penroc Oil Corporation for a special gas-oil ratio limitation increase, Lea County, New Mexico. Applicant, in the above-styled cause, seeks amendment of the special rules and regulations for the Hobbs-Drinkard Pool promulgated by Order No. R-3811, as amended,

(Case 4816 continued from Page 2)

to establish a limiting gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil in said pool.

- CASE 4817: Application of Phillips Petroleum Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Drag "B" Well No. 1 located in Unit K of Section 18, Township 23 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce gas from the South Carlsbad-Morrow Gas Pool through tubing and an undesignated Canyon gas pool through the casing-tubing annulus.
- CASE 4818: Application of Tipperary Land and Exploration Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the North Bagley-Pennsylvanian Pool by the injection of water into the Strawn and possibly other formations by the injection of water through its Bess Well No. 1 located 660 feet from the North line and 1980 feet from the East line of Section 20, Township 11 South, Range 33 East, Lea County, New Mexico.
- CASE 4819: Application of D. L. Hannifin for compulsory pooling, Eddy County,
  New Mexico. Applicant, in the above-styled cause, seeks an order
  pooling all mineral interests in and under the S/2 of Section 24,
  Township 22 South, Range 26 East, South Carlsbad Field, Eddy County,
  New Mexico, to be dedicated to a well to be drilled 1980 feet from
  the South and East lines of said Section 24. 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 4820: Application of Anadarko Production Company for the creation of an associated pool, special rules therefor, downhole and surface commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new associated pool for the production of oil and gas from the Yates and Seven Rivers formations for its Loco Hills Federal "B" Wells Nos. 1 and 8 located, respectively, in Units P and K of Section 9, Township 17 South, Range 30 East, Eddy County, New Mexico, and the promulgation of special rules therefor including provisions for the classification of oil and gas wells, oil and gas well spacing, and an unlimited gas-oil ratio.

Applicant further seeks authority to commingle in the well-bore of said Well No. 1 the Yates-Seven Rivers production from the newly created pool and the Grayburg-Jackson Pool and to commingle on the surface the Yates-Seven Rivers production from said Well No. 8 with production from the Grayburg-Jackson Pool.

CASE 4821: Application of Getty Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks as an exception

Examiner Hearing - Wednesday - September 13, 1972

(Case 4821 continued from Page 3)

to Rule 303 of the Commission Rules and Regulations, authority to commingle production from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum-Pennsylvanian Pools in the wellbore of its State "BA" Well No. 8 located in Unit R of Section 36, Township 17 South, Range 34 East, Lea County, New Mexico.

- CASE 4822: Application of Getty Oil Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its State "BA" Well No. 9 located 660 feet from the North line and 2310 feet from the East line of Section 36, Township 17 South, Range 34 East, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico. Said well being nearer than 660 feet to another well capable of producing from the same pool.
- CASE 4823: Application of Getty Oil Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its A. B. Coates "C" Well No. 28 located 1820 feet from the North and West lines of Section 24, Township 25 South, Range 37 East, Justis Blinebry Pool, Lea County, New Mexico. Said well being located nearer than 660 feet to another well capable of producing from the same pool.
- CASE 4824: Application of Getty Oil Company for an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox location for its H. D. McKinley Well No. 11 located 750 feet from the North line and 550 feet from the East line of Section 30, Township 18 South, Range 38 East, Hobbs Grayburg-San Andres Pool, Lea County, New Mexico. Said well being nearer than 660 feet to another well capable of producing from the same pool.
- CASE 4825: Application of Hanagan Petroleum Corporation for dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Catclaw Draw Unit Well No. 3 located in Unit D of Section 36, Township 21 South, Range 25 East, Eddy County, New Mexico, in such a manner as to produce gas from an undesignated Strawn gas pool through tubing and from the Catclaw Draw-Morrow Gas Pool through the casing-tubing annulus.
- CASE 4826: Application of Hanagan Petroleum Corporation for pool creation, special pool rules, and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn gas pool for its well located 920 feet from the North and West lines of Section 36, Township 21 South, Range 25 East, Eddy County, New Mexico, and the promulgation of special rules therefor, including a provision for 640-acre spacing units. Applicant further seeks approval of an unorthodox location for the above-described well.
- CASE 4827: Application of Robert N. Enfield for an unorthodox location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks

Examiner Hearing - Wednesday - September 13, 1972

Docket No. 20-72

(Case 4827 continued from Page 4)

authority to drill a gas well at an off-pattern unorthodox location 990 feet from the North and East lines of Section 11, Township 15 South, Range 27 East, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico, with the E/2 of said Section 11 to be dedicated to the well.

CASE 4828: Application of Inexco Oil Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority for the dual completion of its McMinn State Well No. 1 located 1980 feet from the South and West lines of Section 18, Township 21 South, Range 26 East, Eddy County, New Mexico, in such a manner as to produce gas from the Strawn formation and the Morrow formation adjacent to the Catclaw Draw-Morrow Gas Pool.

TEXACO for Seft. 13th him.

PRODUCING DEPARTMENT CENTRAL UNITED STATE
MIDLAND DIVISION

TEXACO INC. P. O. BOX 3109 AND, TEXAS 79701 August 25, 1972 CONSERVATION COMM.

WAIVER - DOWNHOLE COMMINGLING
GETTY OIL COMPANY
STATE "BA" WELL NO. 8
LEA COUNTY, NEW MEXICO

New Mexico Oil Conservation Commission P. O. Box 2008 87501 Santa Fe, New Mexico

Gentlemen:

Texaco Inc. has been advised of Getty Oil Company's application to downhole commingle production from the North Vacuum Abo, Vacuum Wolfcamp, and Vacuum Pennsylvanian Pools in the State "BA" Well No. 8.

Texaco Inc., as an offset operator to the subject lease, waives objection to this application.

Yours very truly,

Darrell Smith Division Manager

Assistant to Division Manager

# **Mobil Oil Corporation**

Obse 4821

P.O. BOX 633 MIDLAND, TEXAS 79701

August 21, 1972 South Pa

New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

GETTY OIL COMPANY APPLICATION FOR DOWNHOLE COMMINGLING OF STATE "BA" WELL NO. 8 NORTH VACUUM ABO, VACUUM WOLFCAMP AND VACUUM PENNSYLVANIAN PRODUCTION LEA COUNTY, NEW MEXICO

Mobil Oil Corporation has received notice of Getty's request to downhole commingle production in the triple completion, State "BA" Well #8, Unit Research B, Section 36, T-17-S, R-34-E, Lea County, New Mexico, and hereby waives any objection to this application.

24 monis J. A. Morris Production Engineering Supervisor

JHSeerey/eg

Getty Oil Company P. O. Box 249 Hobbs, New Mexico 88240

Date 8-31-12

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GETTY OIL COMPANY APPLICATION FOR DOWNHOLE COMMINGLING NORTH VACUUM ABO, VACUUM WOLFCAMP AND VACUUM PENNSYLVAMIAN POOLS LEA COUNTY, NEW MEXICO

PERFORATIONS: 9,024-26; 9,093-95; 9,106-08'; 9,154-56'; 9,164-66'; 9,168-74', AND COMPLETION HISTORY 9,188-90' WITH TWO JETS PER FOOT.

STIMULATION: 3,000 Gals. NE Acid.

POTENTIAL: Pumped 127 BO, 53 BW in 24 Hours with GOR of 811/1 STB/scf.

WOLFCAMP ZONE: August 1964
PROPRATIONS: 9,948-80' with two jets per foot.

STIMULATION: 1,000 gals. 15% NE Acid.

POTENTIAL: Flowed 242 EO, 3 BW in 15-1/2 hours with GOR of 947/1 STB/SCF.

PERFORATIONS: 10,080-88'; 10,150-60' AND 10,168-76' with two jets per foot.

STIMULATION: 500 gals. LSTNE Acid.

POTENTIAL: Flowed 301 BO, 2% Acid Water in 23 hours with GOR of 1,113/1 STB/SCF.

TOP OF FORMATIONS:

ABO @ 7,921'

WOLFCAMP @ 9,222

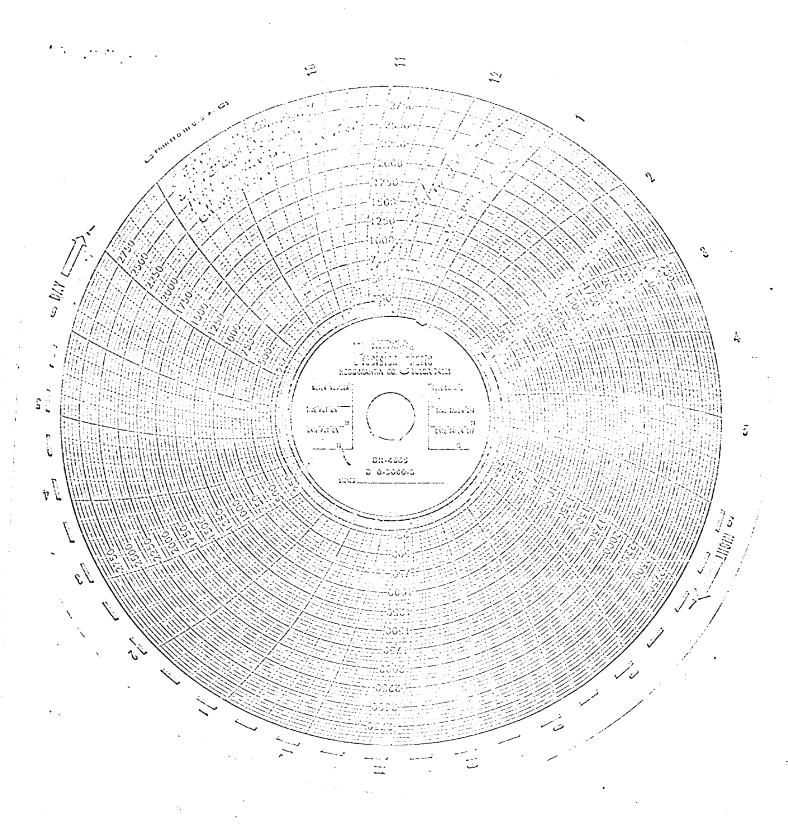
PENNSYLVANIAN @ 10,074

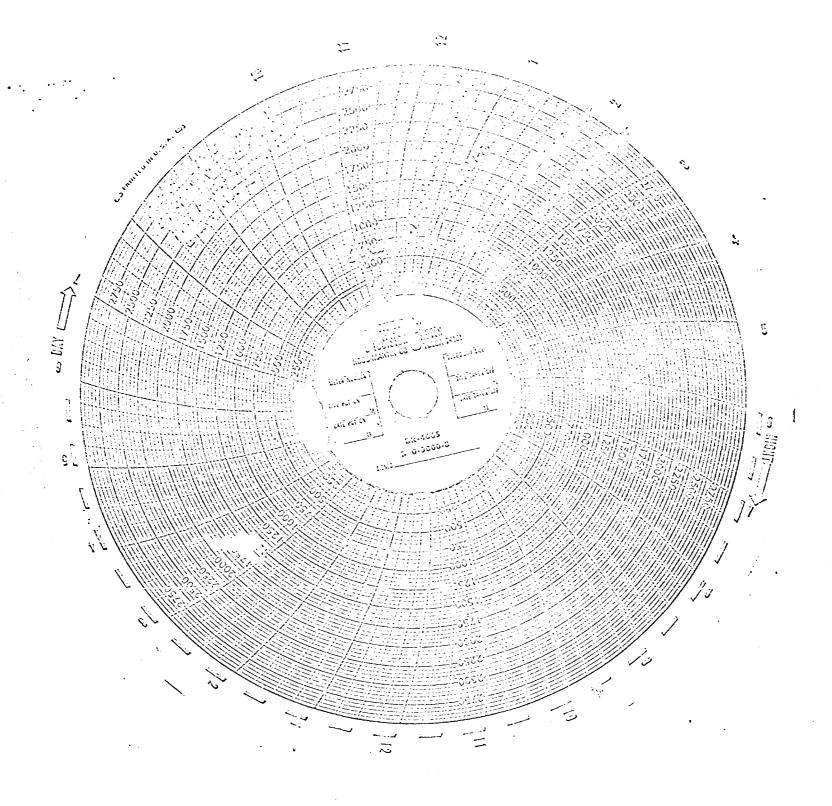
BEFORE EXAMINED NUTTER Oil (SPE) 11 NO. 2

CELLLA OIF COMBYHA STATE "BA" LEASE WELL KO. 6 VACUUM FIRED LEA COUNTY, NEW MEXICO BEFORE EXAMINER NUMBER STATE "BA" LEASE STUDY OIL CONSERVATION COMMISSION MECHANICAL SKETCH EXHIBIT NO. 3 NOVEMBER 18, 1971 LASE NO. 4821 #2 String: 2-3/8",4.6#,J-55 Acme 8 Tbg. SA 9836' Submitted by\_\_\_\_ Hearing Date #3 String: 2-3/8", 4.6#, J-55 Acme 8 Tbg. SA 9214' 13-3/8" 35.6 ε 44.2# Armco CSA 399' Cmt. w/350 Sks. Top of Cement behind 7" @ 2000 (Temp. Survey) 9-5/8", 36 & 40#, J-55 8 Rd CSA 48371 Cmt w/3,550 Sks.(Circ. 256 Sks.) Abo Perfs: 9024'-26'; 9093'-95'; 9106'п 08'; 9154'-56'; 9164'-66'; 9168'-74'; and 9188'-90'. -SN in #3 String 0 9171' Baker Parallel String Anchor @ 9214' SN in #2 String @ 9803' Daker Mod. "KH" Dual Pkr. @ 9836' Wolfcamp Perfs: 99481 - 301 Type "ER" Tbg. Receptacle @ 10,063' PSI Type "L" SS 0 10,068' Baker Med. "D" Pkr. 0 10,0701 PSI Mod. "R" SN 0 10,073' Upper Pena. Perfo: 10,080'-88'; 10,150'-60' and 10,163' - 76' PH G 10,1691 #1 String: 2-3/8",4.7#,N-80 Tbg. W/T.D. Coupling & B.P. Collar SA 10,173' 7", 23%, N-80 & S-95 8 Rd. CSA 10,4871 Cmc. w/1480 8ks.

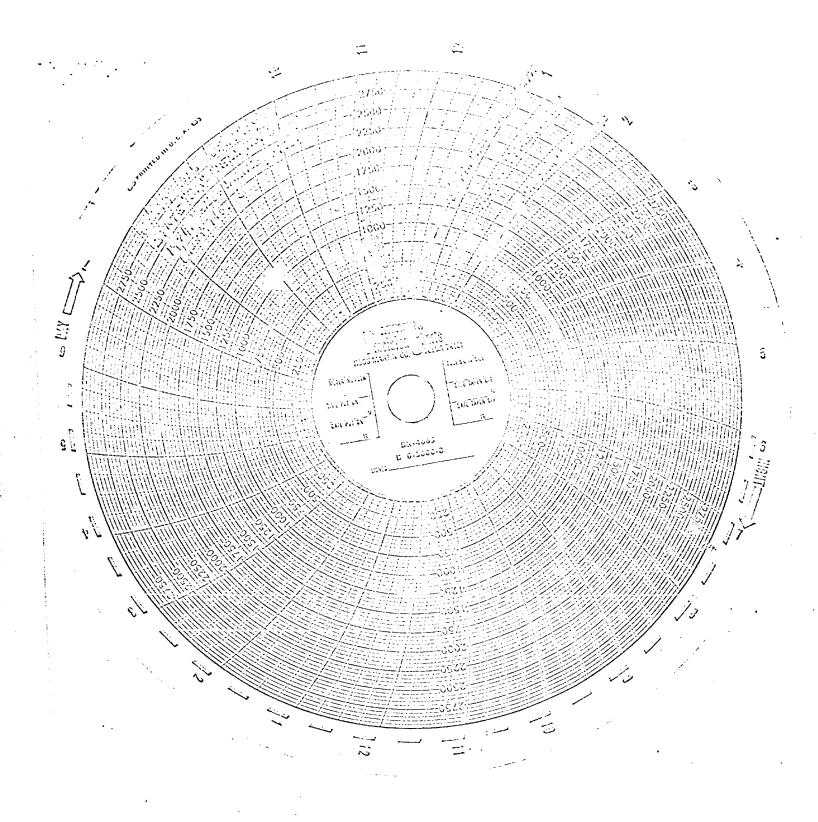
# NEW MEXICO OIL CONSERVATION COMMISSION SOUTHEAST NEW MEXICO PACKER LEAKAGE TEST

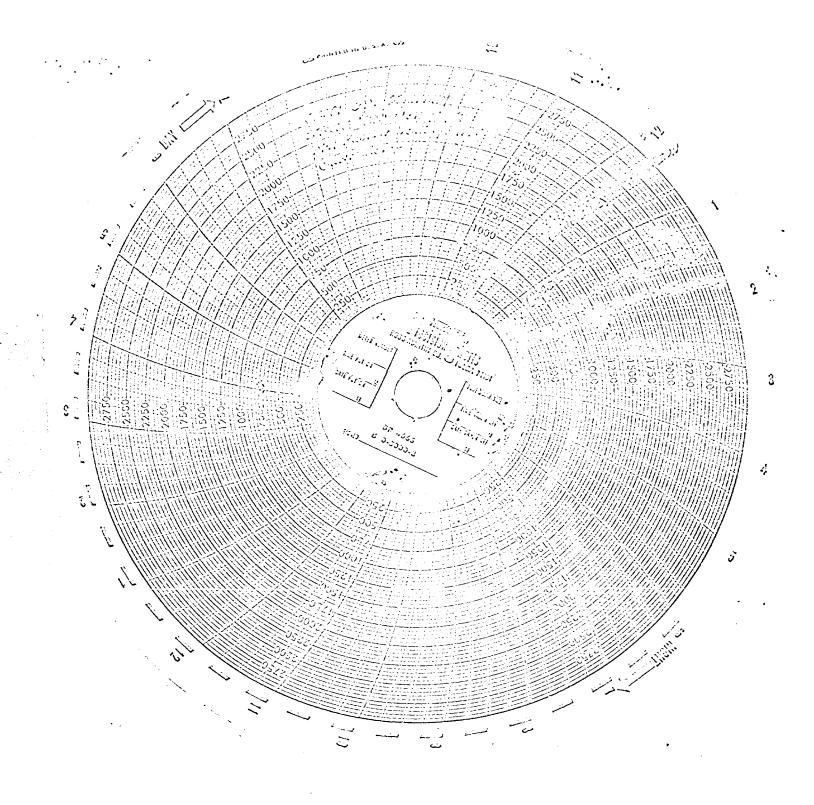
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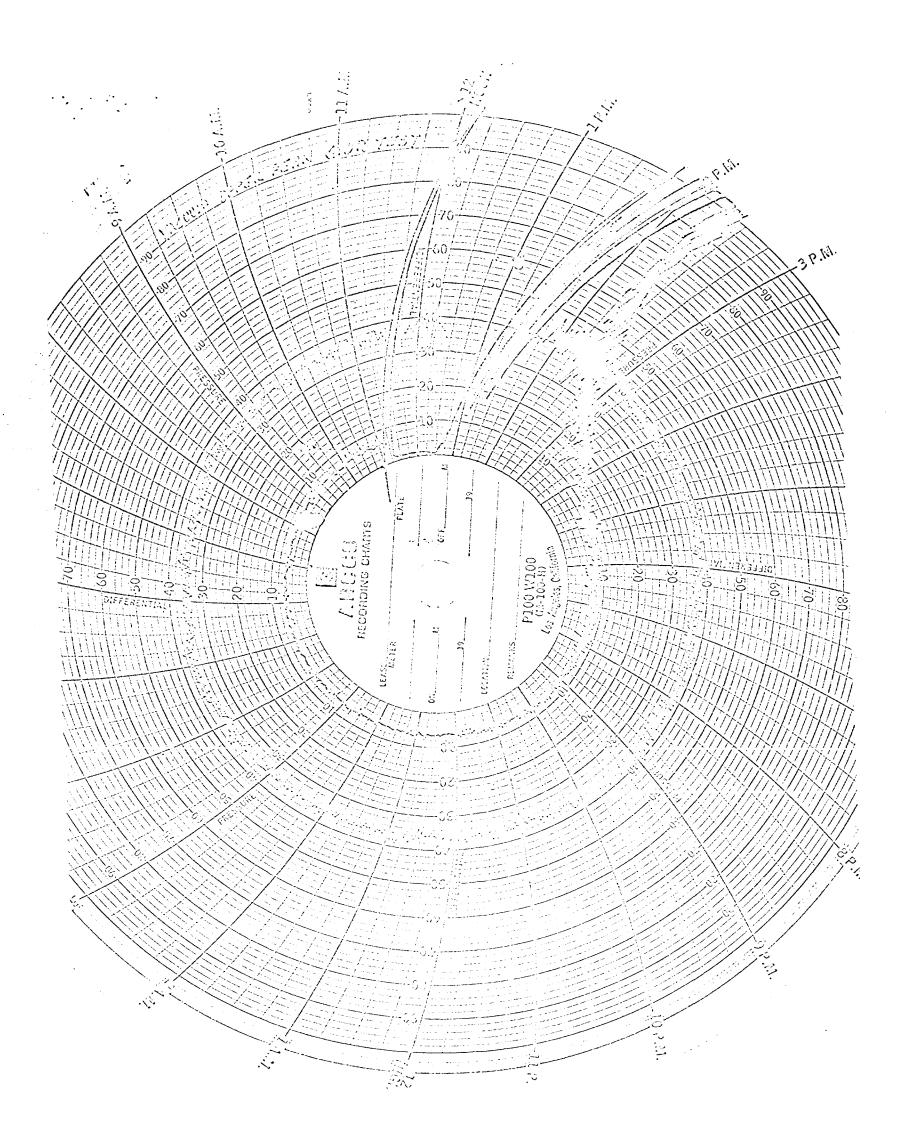


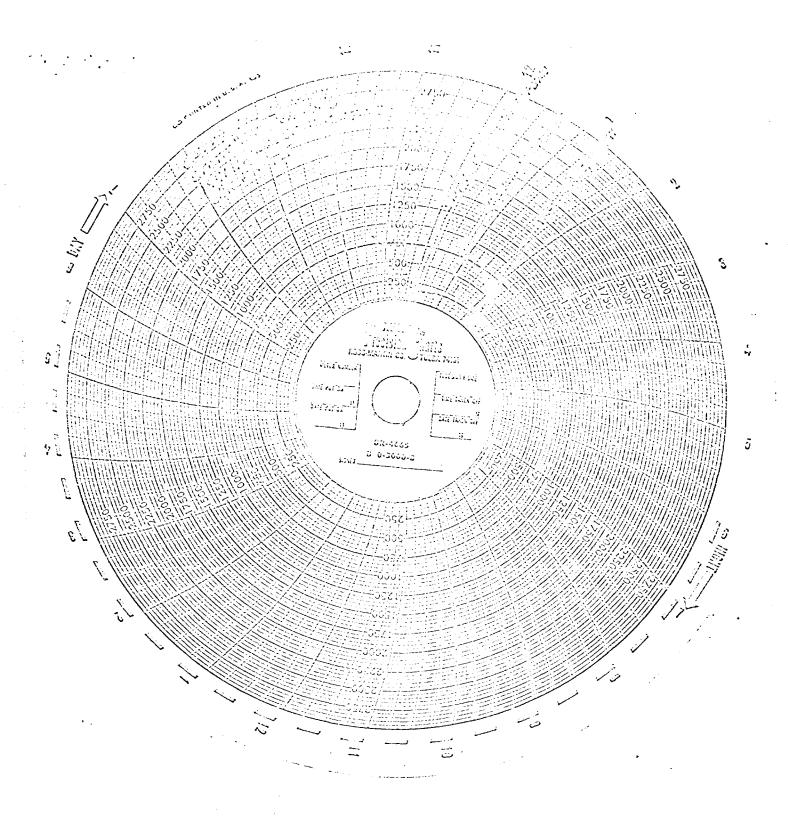


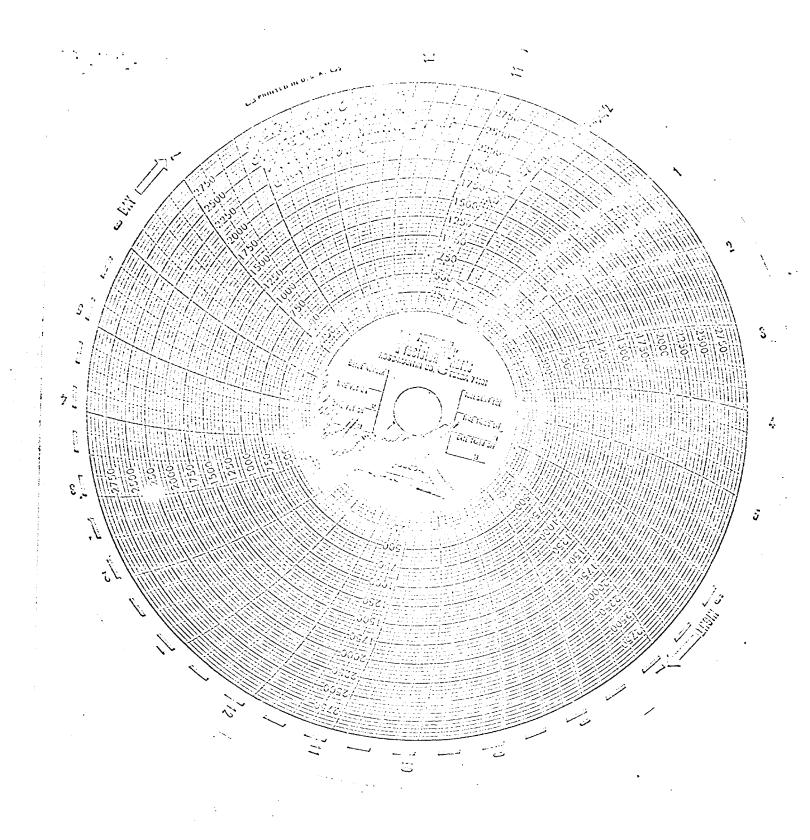
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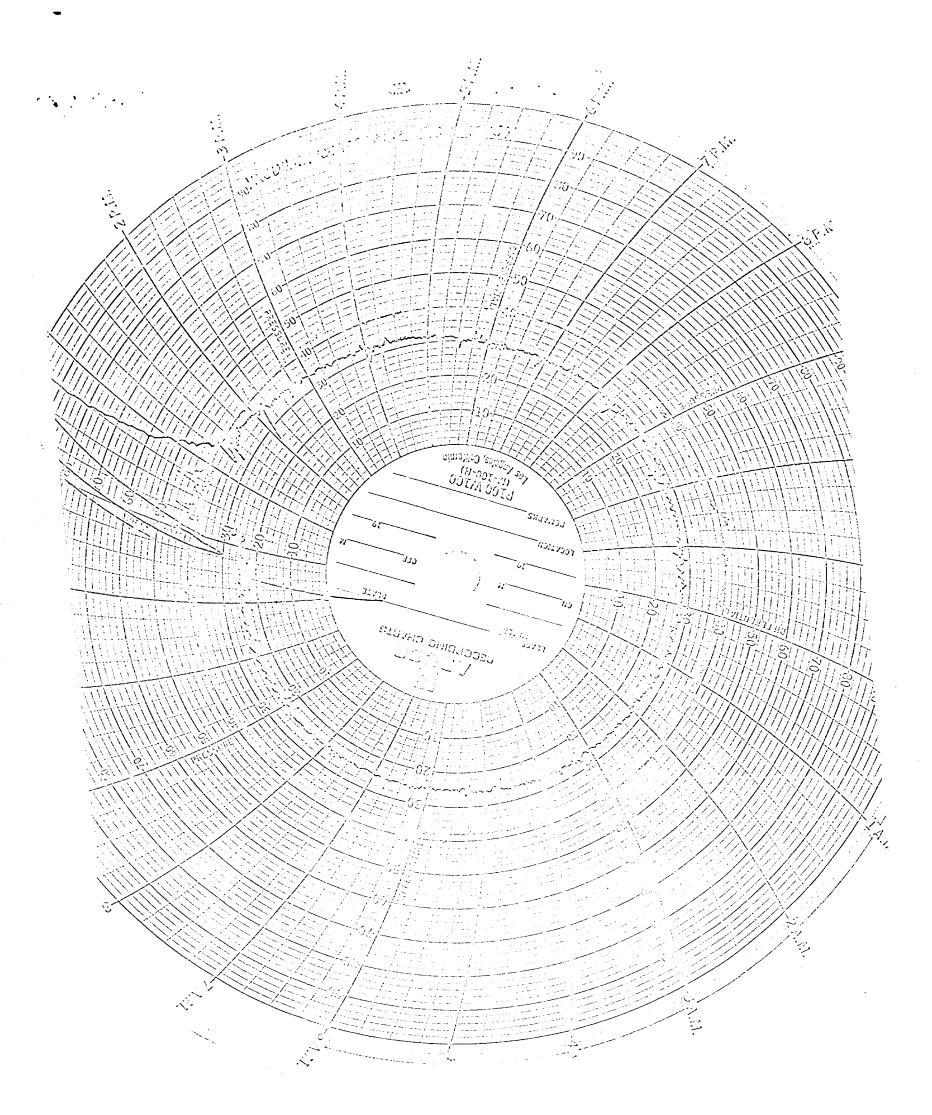




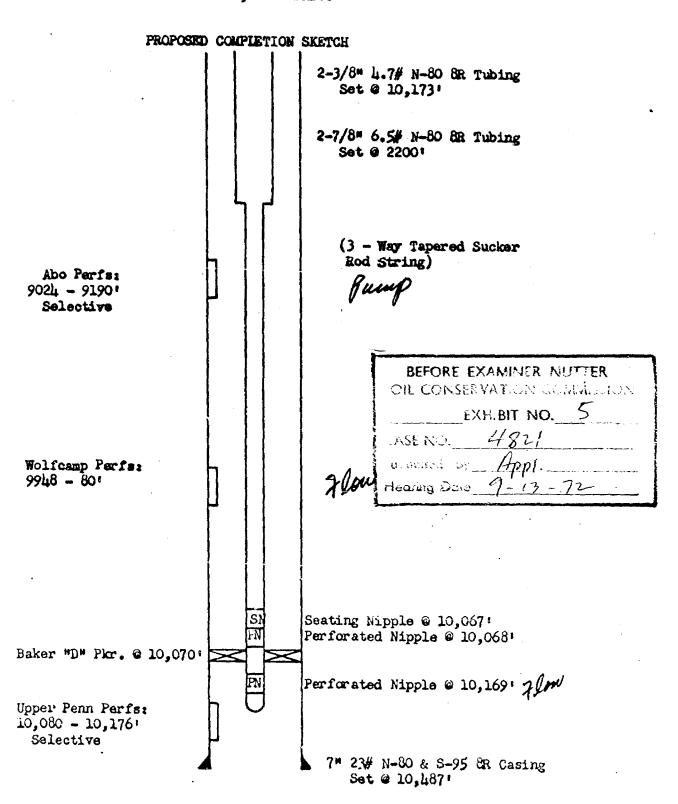








# GETTY OIL COMPANY STATE "BA" WELL NO. 8 APPLICATION TO DOWNHOLE COMMINGLE ABO NORTH, WOLFCAMP, AND UPPER PENN ZONES LEA COUNTY, NEW MEXICO



C-116 Revised 1-1-65

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During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission. Gas volumes must be reported in MCF measured at a pressure base of 15,025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

is true and complete to the best of my knowledge and belief.

Car. Wade (Signature) C.L.Wade AREA SUPERINTENDENT (Title) SEPTEMBER 11, 1972

HBS/bh .

Revised 1-1-65

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Operator	GETTY OIL COMPANY			Po		M WOL	FCMIP					Cou	LEA					
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No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mall original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

C.L. Wade (Signature)
AREA SUPERINTENDENT
(Title)
SEPTEMBER 11, 1972

(Date)

HBS/bh

C-116 Revised 1-1-65

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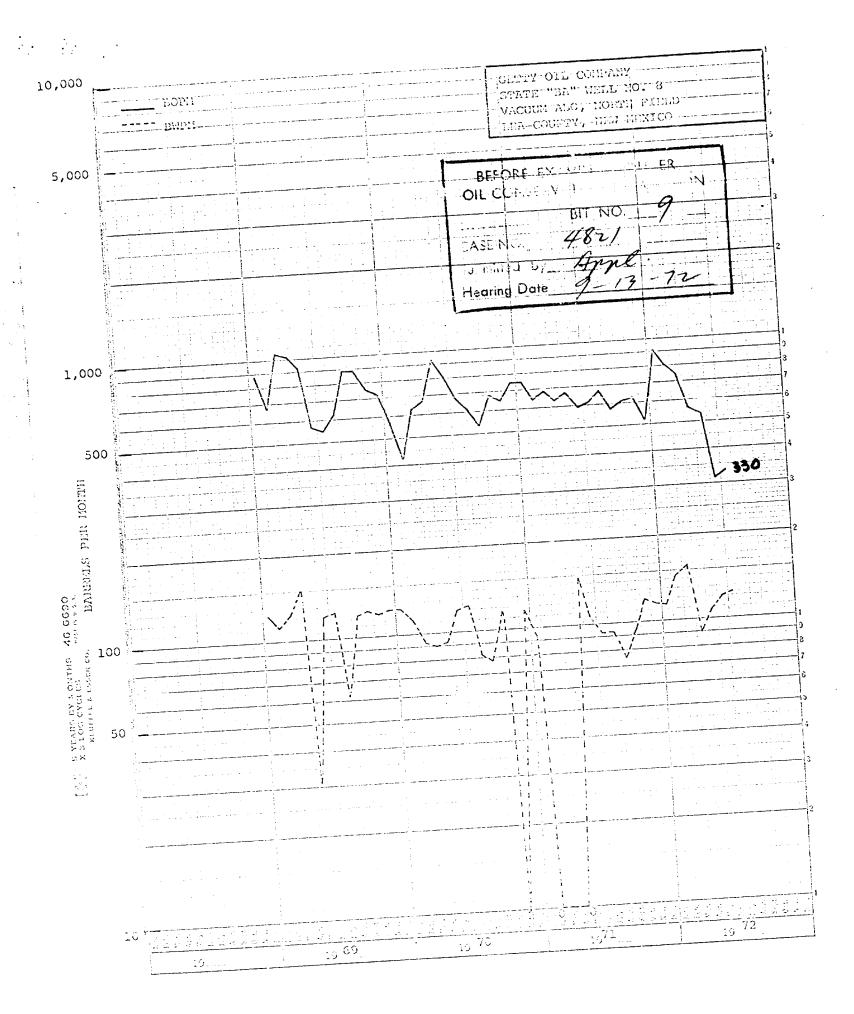
Mall original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

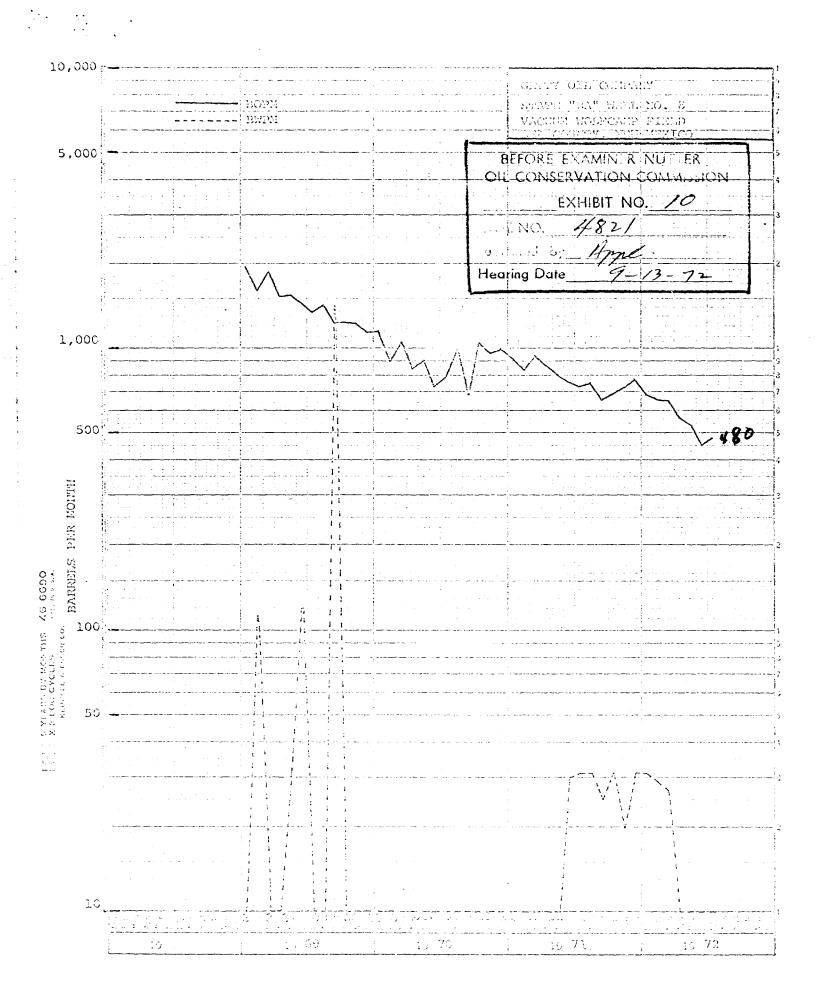
I hereby certify that the above information is true and complete to the best of my knowledge and belief.

C.L. Wade (Signature)
AREA SUPERINTENDENT
(Titte)
September 11, 1972

(Date)

HBS/bh



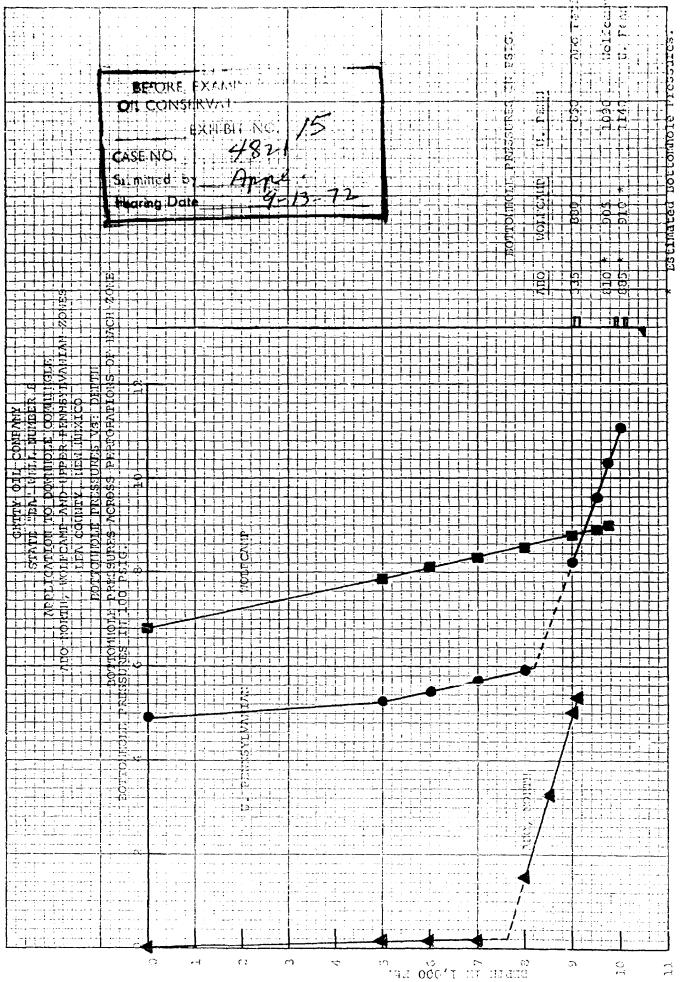


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## OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE, NEW MEXICO 87501

August 7, 1972

Chro 4821

Getty 011 Company P. 0. Box 249 Hobbs, New Mexico 88240

Attention: Mr. Eugene J. Miller

DOCKET MARIO

Re: Application for Downhole Commingling Getty Oil Co. State "BA" No. 8
North Vacuum Abo, Vacuum Wolfcamp, and Vacuum Pennsylvanian Pools
Lea County, New Mexico

Gentlemen:

As the above-described downhole commingling request cannot be granted administratively, we have set this for hearing before an examiner on September 13, 1972. A copy of the docket will be mailed to you at a later date.

Very truly yours,

GEORGE M. HATCH Attorney

GMH/dr

Getty Oil Company

#### MINIMULTIMENT MORTH AMERICAN EXPLORATION AND PRODUCTION DIVISION

P. O. Box 249 Nobbs, New Mexico 88240

Oil Conservation Commission State of New Musico P. O. Best 2008 Santa Po, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Ref: Application for Downhole Commingling Getty Oil Company State "BA" No. 8 North Vacuum Abo, Vacuum Wolfcamp, and Vacoum Pennsylvanian Pools; Lea County, New Mexico

#### Gentlemen:

Getty Oil Company respectfully requests Administrative Approval for downhole mingling in its State "BA" Well No. 8, located 766' FNL and 2086' FRL of Jection 36, Township 17 South, Range 34 East, Lea County, New Mexico.

Although the subject well is a triple completion, the well qualifies for Administrative Approval in accordance with Statewide Rule 303, Paragraph "C"; and in support thereof, the following facts are submitted:

- 1. The attached plat shows the State "BA" Lease outlined in Red and located in Section 36, Township 17 South, Range 34 East, Lea County, New Mexico. Well No 8 is marked with an arrow on the plat.
- 2. The well was completed as a triple completion in the Vacuum Abo North, Vacuum Wolfoamp, and Vacuum Pennsylvanian Pools and approved by Commission (Order No. MC 1497 on June 8, 1964).
  - 3. Current tests for each zone are as follows:

VACUUM ABO, NORTH: On May 19, 1972 the Abo pumped at a rate of 12 BOPD, 3.5 BWPD, 34 MCFGPD at 0 PSI tubing pressure. (Perforations: 9024' to 9190' selective).

VACUUM WOLFCAMP: On May 16, 1972, the Wolfcamp flowed at a rate of 17 BOPD, 1 BWPD, 344 NCFGPD at 680 PSI tubing pressure. (Perforations: 9948' to 9980' selective).

VACUUM PENNSYLVANIAM: On May 17, 1972, the Upper Penn flowed at a rate of 30 BOPD, 1 BWPD, 261 MCFGPD at 490 PSI tubing pressure. (Perforations: 10,080' to 10,176' selective).

New Mexico Oil Conservation Commission Forms C-116 are attached. These producing rates do not exceed the limit set out in Paragraph "C", (b); i.e. 80 BOPD.

STATE "BA" NO. 8 - COMMINGLING NMOCC - SANTA PE, N.H. Mr. A. L. Porter, Jr. August 4, 1972

#### PAGE NO. 2

- 4. Home of the zones produce more water than the combined oil limit as determined in Rule 303, Paragraph  ${}^{n}C^{n}$ , (d).
- 5. Getty Oil Company has commingled the fluids at the surface since completion (Administrative Order No. PC-147), and has encountered no incompatibility problems; therefore, no reservoir damage will result from downhole commingling these three mones.
- 6. The surface commingling resulted in no reduction of oil value; therefore, downhole commingling will not reduce the oil value.
  - 7. The ownership of the zones to be commingled is common.
- 8. Attached is a production decline curve showing the monthly production of oil and water for each zone since January, 1969.
- 9. The oil from the Vacuum Abo, North is produced by artificial lift and the production from the Vacuum Wolfcamp and the Vacuum Pennsylvanian is by Natural flow. If the application for downhole commingling is approved, the commingled production will be artificially lifted. Twenty-four hours shut-in Bottom hole pressures taken on the State "Bk" Well No. 8 are 536 PSI at 9100, 897 PSI at 9750', and 1104 PSI at 10,000' respectively for the Vacuum Abo, North; Vacuum Wolfcamp; and Vacuum Pennsylvanian Zones. The bottom hole pressure surveys are enclosed.
- 10. Downhole commingling will not jeopardize the efficiency of future secondary operations in any mone.
  - 11. Copies of this application have been furnished to offset operators.

History of State "BA" Well No. 8: The well was a triple completion in the Vacuum Abo, North; Vacuum Wolfcamp; and Vacuum Pennsylvanian Zones. The last Packer Leakage Test run in October, 1971 indicated no communication.

Very truly yours, GETTY OIL COMPANY

ORIGINAL SIGNED BY EUGENE I. MILLER Eugenie J. Miller Area Engineer

FS-SDS/bh ATTACHMENTS

## MAILING LIST

2 CC:	NMOCC P. O. Box 2088 Santa Fe, New Mexico 87501	l CC:	NMOCC P. O. Box 1980 Hobbs, New Mexico 88240
1 CC:	Getty Oil Company P. O. Box 1231 Midland, Texas 79701	l CC:	Octty Oil Company Attn: Mr. E. H. Shuler P. O. Box 1404 Houston, Texas 77001
1 CC:	Continental Oil Company P. O. Box 460 Hobbs, New Mexico 88240		Marathon Oil Company P. O. Box 2409 Hobbs, New Mexico 88240
1 CC:	Mobil Oil Corporation P. O. Box 1800 Hobbs, New Mexico 88240	1 CC:	Phillips Petroleum Company P. O. Box 2130 Hobbs, New Mexico 88240
1 CC:	Texaco, Inc. P. O. Box 728 Hobbs, New Mexico 88240	1 CC:	Getty Oil Company P. O. Box 249 Hobbs, New Mexico 88240 (FILE)
1 CC:	Mr. R. S. Morris Montgomery, Federici, Andrews, Hannahs and Morris Post Office Box 2307 Santa Fe. New Mexico 87501	•	

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Mall original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

HBS/bh Case 482/

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

AREA SUPERINTNEDENT (Title)

Hay 24, 1972

(Date)

C116 Revised 1-1-65

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AREA SUPERINTENDENT (Title)

May 24, 1972

(Date)

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No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be applied increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mall original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

ledge and belief. (Signature)

I hereby certify that the above information

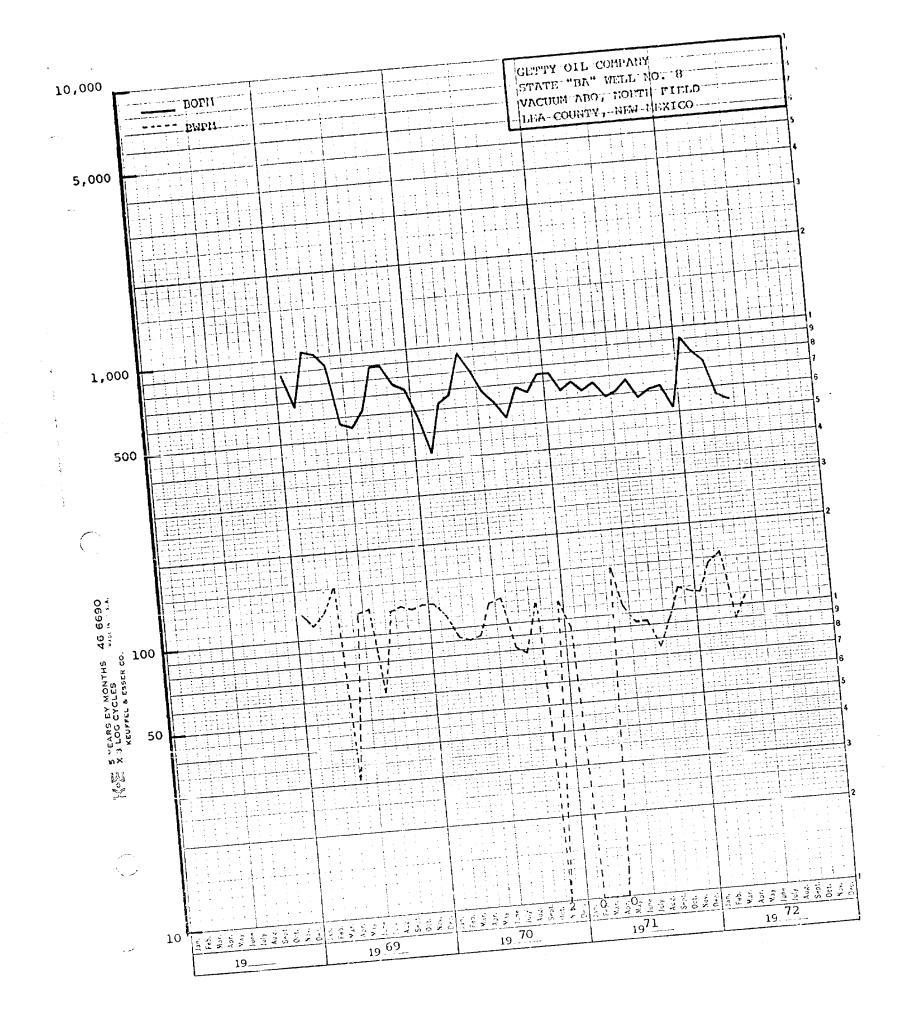
is true and complete to the best of my know-

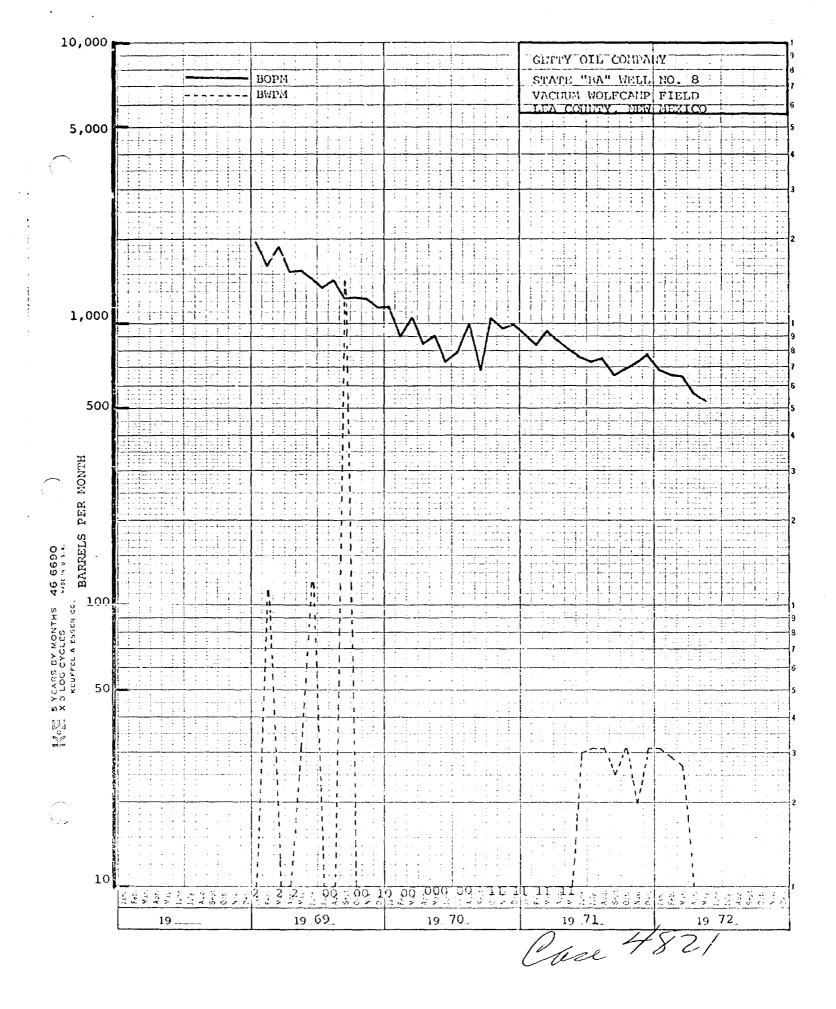
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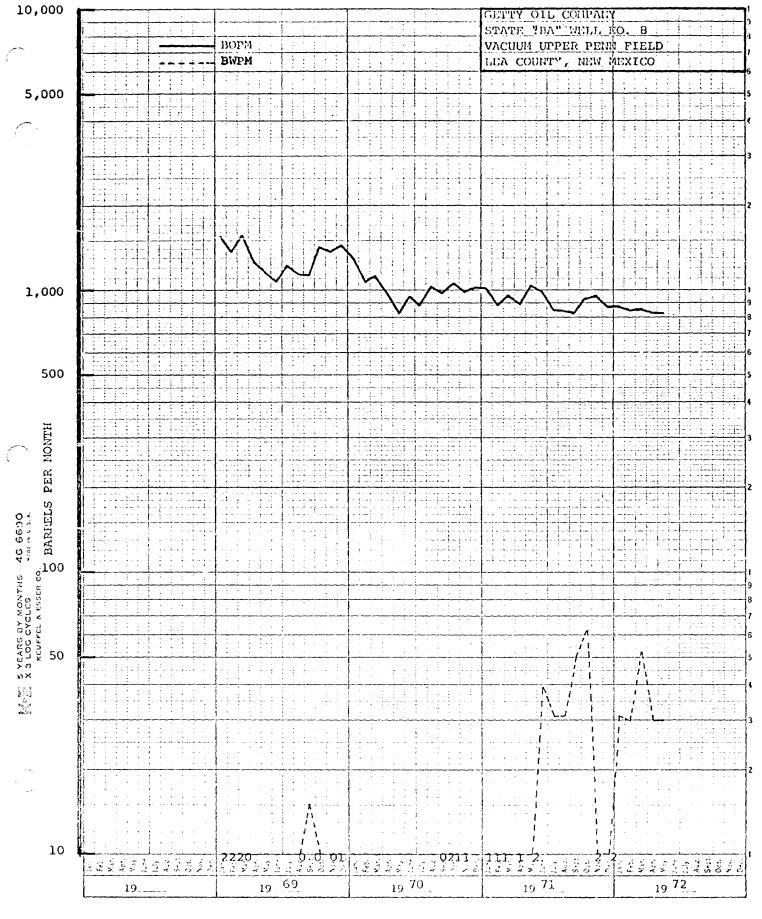
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Operator Getty C	и сопран	Υ		•	0	0	
Well No 8				500		14	•
Finld North N	acuun Abo			600		16	•002
Date 5/16/72	) 	Time	9100	700		18	•002
Status Pump Time S. I. 24 hour	••	Test Depth	Oato	. 800 . 850		153 326	•135 •346
Cas. Pros. NA		BHP Last Te	est.			500	•348
Tub. Pres. 0		BHP Change		•			.360
Elev. 3995		Fluid Top	7560	•			-
Tub. Pres. 0 Elev. 3995 Temp.		Run By Ral	ph E. Erwin				
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Operator Getty Oil Company Loase State "BA" Well No 8	Depth	Prossure	Gradient
Field Vacuum Wolfcamp  Date 5/5/72 Time  Status Flowing Test Depth 9750  Time S. I. 25 hours Last Tost Date  Gas. Pres. BliP Last Test  Tub. Pres. 680# BHP Change  Elev. 3995 Fluid Top  Temp. Run By Ralph E. Erwin  Gauge No. Element No.	0 5000 6000 7000 8000 9000 9500 9750	680 785 807 830 853 877 889	.021 .022 .023 .023 .024 .024

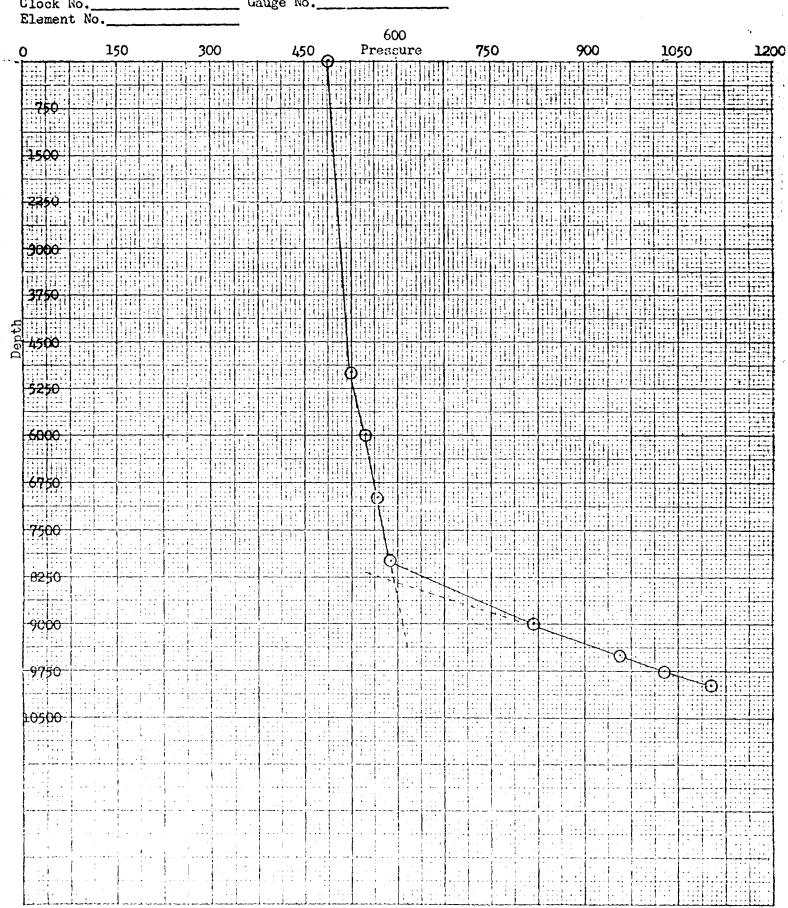
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### BOTTOM HOLE PRESSURE SURVEY REPORT

			<u>Depth</u>	<u>Pressure</u>	<u>Gradient</u>
Operator_	Getty Oil Compa	any			
Lease	State "BA"		0	. 490	
Well No_	8		5000	525	.007
Field	Vacuum Upper Pe	nn	6000	546	•051
Date	5/5/72	Time	7000	567	.021
Status	Flowing	Test Depth 10,000	8000	5 <b>89</b>	.022
Time S. I.	26 hours	Last Tost Date	9000	820	.231
Cas. Pres.		BHP Last Test	9500	<del>9</del> 59	.278
Tub. Pres.	490#	BHP Change	9750	1029	.280
Elev		Fluid Top 8325	10000	1104	.298
Temp.		Run By Ralph E. Erwin			
Clock No.		Gauge No			
Element No	)				
		600			



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GMH/dr

## 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. Order No.

APPLICATION OF GETTY OIL COMPANY FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

## THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 13 at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

day of September , 1972, 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, is the owner and operator of the State "BA" Well No. 8, located in Unit B of Section 36, Township 17 South, Range 34 East, NMPM Lea County, New Mexico.

-2-CASE NO. 4821 Order No. R-

- Order MC-1497, said well No. 8 was completed by the applicant as a triple completion (conventional) to produce oil from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum-Hennsylvanian Pools.
- (4) That each of the three zones in the subject well is capable of only low marginal production.
- (5) That the applicant now seeks authority to complete said Well No. 8 in such a manner as to produce oil from the subject well through one string of 2 7/8-inch tubing, commingling in the well-bore the production from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum Pennsylvanian Pools.
- (6) That the proposed commingling in the subject well of the three zones may substantially extend the productive lives of said zones in the subject well.
- (7) That the reservoir characteristics of each of the zones in the subject well are such that underground waste would not be caused by the proposed commingling in the well-bore.
- (8) That the proposed commingling may result in the recovery of additional oil from each of the commingled zones in the subject well, thereby preventing waste, and will not violate correlative rights.
- (9) That the mechanics of the proposed completion are feasible and in accord with good conservation practices.
- (10) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action the operator should notify the Hobbs District Office of the Commission any time the subject well is shut-in for seven consecutive days.

-3-CASE NO. 4821 Order No. R-

- (11) That the Commingled production should be allocated upon the basis of updated production tests and decline curves submitted to the Santa Fe Office of the Commission at the time of conversion.
- (12) That approval of the subject application will prevent waste and protect correlative rights.
  - (13) That Administrative Order 1497 should be superseded.

    IT IS THEREFORE ORDERED:
- authorized to complete its State "BA" Well No. 8, located in Unit B of Section 36, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico, in such a manner as to produce oil from the North Vacuum-Abo, Vacuum-Wolfcamp, and Vacuum Pennsylvanian Pools through one string of 2 7/8-inch tubing, commingling in the well-bore the production from the pools.
- (2) That immediately upon conversion of the above-described well to a single string of tubing the operator shall furnish the Santa Fe Office of the Commission updated production tests and decline curves for each of the zones, whereupon, the Commission shall establish a formula for allocating the Commingled oil production and commingled gas production to the various zones.
- (3) That the commingling in the well-bore authorized by this order shall continue only so long as the commingled production of the two zones does not exceed \_\_\_\_\_\_\_\_ barrels of oil per day nor \_\_\_\_\_\_\_\_ barrels of water per day.
- (4) That the maximum amount of gas which may be produced daily from the commingled zones in the subject well shall be determined by multiplying 2,000 by the top unit allowable for the Maximum Pool.

-4-CASE NO. 4821 ORDER NO. R-

- (5) That the operator of the subject well shall immediately notify the Commission's Hobbs district office any time the well has been shut-in for seven consecutive days and shall concurrently present, to the Commission, a plan for remedial action.
- (6) That the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order.
  - (7) That Administrative Order MC-1497 is hereby superseded.
- (8) 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.