CASE 2950: Application of AMERADA for creation of Morrow-Penn. Pool & contraction of vertical limits of an existing pool.



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APP/iCAtion, Transcripts, SMALL Exhibits ETC.





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MR. UTZ: Case 2950. MR. DURRETT: Application of Amerada Petroleum Corporation for the creation of a new gas pool and for the contraction of the vertical limits of an existing pool. 243-660 MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, appearing on behalf of the Applicant, in association with Mr. Thomas W. Phone . Lynch, a member of the Oklahoma Bar, who will present the case for the Applicant. MR. LYNCH: I think at the beginning I should mention Mexico that the application asks that the horizontal limits of the pool **General Court Reporting Service** New include four quarter sections. I would like to dismiss the application as to all of those quarter sections except the Southeast Albuquerque, Quarter of Section 19, Township 9 South, Range 35 East, Lea County. MR. UTZ: Without objection the application will be amended to include only the Southeast Quarter of Section 19. Building MR. LYNCH: We will have two witnesses. (Witnesses sworn.) Simms LAWRENCE MYERS called as a witness, having been first duly sworn on oath, was Suite 1120 examined and testified as follows: DIRECT EXAMINATION BY MR. LYNCH: Would you state your name and your occupation and by Q whom you are employed? My name is Lawrence Myers. I am a Petroleum Geologist A

DEARNLEY, MEIER, WILKINS and CROWNOVER



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PAGE employed by Amerada Petroleum Corporation. Have you testified previously before this Commission?  $\circ$ No, sir, I have not. А Where did you obtain your degree in Geology and when  $\cap$ 243-6601 was that obtained? А I have a Bachelor of Science Degree in Geological Phone Engineering from the South Dakota School of Technology and Science in Rapid City. I graduated with a degree in 1950. Have you been with Amerada since that time? Q New Mexico А Yes, sir. General Court Reporting Scrvice Have you testified before other State conservation Q agencies? Albuquerque, А Yes, I have. MR. LYNCH: Are his qualifications acceptable? MR. UTZ: Yes, they are. Building (Whereupon, Applicant's Exhibit No. 1 marked for identification.) Q (By Mr. Lunch) Referring first to a map marked Exhibit Simms . 1, will you state briefly what that map shows? Suite 1120 А The map marked Exhibit 1 is a plat or a map of a portion of Township 9, South, Range 35 East, Lea County, New Mexico. It is a plat encompassing the application area. It's a structural map drawn on the top of the Atoka formation, contour lines as marked, intervals of 25 feet. It shows by datum three control points, which are wells which have penetrated the formation involved in

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the application. It further shows in red a line of Section  $A-A^+$  which will be part of our discussion.

For the sake of clarity, at this time I might state that we will be discussing two wells here, primarily, the S. E. Anderson A No. 1 in the Southeast Quarter of Section 19, and the S. E. Anderson No. 1, which is in the Northeast Quarter of Section 30.

O Now the S.E. Anderson No. 1 which is in the Northeast Quarter of Section 30, what horizons is that well completed in?

A The S. E. Anderson No. 1 Well was the discovery well in the Bough "C" zone of the Upper Pennsylvanian and in the Devonian formation, a dual oil discovery.

Q It is also capable of producing from the Devonian?A It is, dually completed.

Q What horizon is the S. E. Anderson A No. 1 completed

in?

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A The A No. 1 is a gas completion in the Atoka formation of the Lower Pennsylvanian.

Q It is the unit well for the unit which Amerada is seeking to be established in this hearing?

A This is true.

MR. UTZ: Is this well considered to be the discovery well for the Atoka?

A This is true.

(Whereupon, Applicant's Exhibit No. 2 marked for identification.)



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Turning now to a cross section marked Exhibit 2, would Q you describe briefly what that cross section shows?

λ Exhibit No. 2 is a cross section referred to on the plat as A-A', which encompasses the three control points included in the plat. It is a structural cross section, vertical limits of which include the Atoka formation from our regional correlation work. It shows the producing horizon, I should say the producing interval of the Atoka formation in the S. E. Anderson Well No. 1-A, and it shows the correlation of a comparable unit in the other two control points.

New From the electric logs incorporated into this section, the pay interval in the downdip southeast well, the Ralph Lowe Albuquerque, No. 1 Marathon State located in the Northwest Northwest of Section 32 is indicated to be incipient only in its development, progressing in a northwesterly direction to the Amerada No. 1 Anderson Building Well. The producing zone is correlatable but still is not developed from log examination to be of reservoir quality; while in the Simms Amerada S. E. Anderson No. 1-A Well, the producing well, the interval has developed in porosity and permeability into a pay type of Suite 1120 lithology and a pay section.

This indicates that the interval found productive in the 1-A Anderson improves and develops in a northwesterly direction. Ω Based on your general knowledge of Atoka reservoirs, is it your opinion that this reservoir is probably a small one?

А Atoka reservoirs in general in this part of New Mexico

one

PAGE 6 to date have proved to be limited in area, yes, sir. It is for this reason, at least in part, that Amerada 0 has restricted its spacing application to one quarter section? Λ Yes. 243-6691 Amerada has proposed, has it not, that the pool being 0 produced by its S. E. Anderson No. 1, the pool now called the Phone : South Bough-Pennsylvanian, that that pool have its vertical limits contracted and that the pool name be changed, is that correct? Α Yes, sir. New Mexico Q What name do you propose for the pool in which the S. E. Anderson No. 1 is producing? We would like to suggest that the S. E. Anderson No. 1 А Albuquerque, Well pool name be designated Jenkins-Cisco, and continue to call the Devonian producing horizon the Jenkins-Devonian as it is now called. Building Q What is the approximate interval of the Cisco formation in the S. E. Anderson No. 1? Simms А The Cisco formation would be correlated to lie approximately between 9600 and 10,200 below the surface of the ground. 1120 MR. LYNCH: If a more precise definition -- we don't Swite have the log on the S. E. Anderson, the full log, with us; but if a more precise definition of the vertical limits of the Jenkins-Cisco Pool is desired, Mr. Examiner, we will supply that either by telephone or by mail. (By Mr. Lynch) What name does Amerada propose for the Q

DEARNLEY, MEIER, WILKINS and CROWNOVER General Court Reporting Service Atoka Pool found in the S. E. Anderson No. 1-A?

A We would suggest the name Jenkins-Atoka.

Q what interval is that found in the Anderson No. 1-A?

A In the No. 1-A, our correlation of the Atoka would limit the vertical Atoka to be between 11,183 and 11,674 feet

below the surface of the ground.

MR. LYNCH: That's all we have of this witness. CROSS EXAMINATION

BY MR. UTZ:

Q What was the Atoka interval again? Would you read those figures to me again?

A Our correlation of the Atoka would be the top of the Atoka at 11,183, as indicated on the cross section; the base of the Atoka or top of the Morrow at 11,674, these being depths below the surface.

Q In the Anderson A-1?

A In the Anderson 1-A, yes, sir.

Q You and our Hobbs geologist haven't been discussing this top matter, have you? Your figures are exactly the same.

A No, sir, I don't know your Hobbs man.

Q It might be well, Mr. Myers, for you to give me what you consider to be the top and the base of the Cisco on your Anderson No. 1. You have no idea what that is at the present time?

A No, sir, I would like to have some time. We did not bring the logs and I would like to have some time to pick out the



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for the reason that the Jenkins name in two other pools in the immediate area seems to have taken over the South Bough?

A Yes, sir, this is true, and this is in keeping with attaching a place name to the area and designating pool names to formations. We think this would be well in line with previous policy.

MR. UTZ: Any other questions of the witness? The witness may be excused.

(Witness excused.)

MR. LYNCH: The next witness will be Mr. L. E. Thomas.

L. E. THOMAS

called as a witness, having been first duly sworn on oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. LYNCH:



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		PAGE 9
		O Mr. Thomas, for the record will you state your name
		and occupation and by whom you are employed?
		A My name is L. E. Thomas. I am District Engineer in
		the Hobbs District for Amerada Petroleum Corporation.
	Phone 243-6691	Q Have you testified previously before this Commission?
		A I have.
>		Q Mr. Thomas, when was the S. E. Anderson A No. 1
+		completed?
	0	A August 21, 1963.
) 3 .8	Aexic	Q At what interval is it perforated?
ULTIEN, WILMIND AND UNUWINUVEN General Court Reporting Service	New Mexico	A Perforations are 11,477 to 11,484 feet.
		Q Is it producing at the present time
Repo	Albuquerque,	A No.
Court		$\Omega$ or has it produced into the pipeline?
neral		A The well has never produced into the pipeline. We've
Ce.	lding	tested it but not produced it commercially.
1	Build	Q What is the calculated open flow potential of that well
	l sm	A 4.6 million cubic feet per day.
	Simms	Q What is the permeability of the Atoka pay section as
	1120	found in that well?
4	Suite 1120	A The permeability calculated from a pressure build-up
	S	test is 46.3 millidarcies.
		Q Based on the facts which you now know, is it your
		opinion that one well wili adequately and efficiently drain a
		minimum of 160 acres in the Atoka?

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It's my opinion that with this permeability and data Λ that we know, it will drain in excess of 160 acres. One of the principal problems is how much reservoir  $\cap$ 

we have in excess of 160 acres here?

Right. А

> (Whereupon, Applicant's Exhibit No. 3 marked for identification.)

Q I hand you a tabulation which is marked Exhibit 3. Would you explain briefly what this tabulation shows?

Λ This tabulation is reserve calculations and economics based on 160-acre spacing. Using this data taken from electric logs, so forth, the recoverable gas reserves is a little over a billion cubic feet; the recoverable distillate associated with the gas is 78,256 barrels. This would give us a gross income of \$347,756. The cost of the existing well was \$229,961, which gives us a profit of \$117,795, and this is before taxes, before operating expenses, or before any discount on the time involved to deplete the reservoir. It is 8/8ths rather than 7/8ths, strictly gross income.

If you were to take the working share of this profit, 0 figuring the working share being 7/8ths, or discount it and then deduct from that the operating expenses and taxes, you would pretty well eat up the profit, would you not?

А That's correct.

Q

Based on these figures, in your opinion would it be



PAGE 10

			PAGE 11			
			economically feasible to develop this pool on a spacing pattern			
			closer than one well per 160 acres?			
			A It would not be economically feasible to do this.			
			0 In your opinion would the establishment of 160-acre			
/ER		1690	spacing or proration prevent waste and prevent the drilling of			
		243-6691	unnecessary wells and protect correlative rights?			
VOV		Phone 2	A It would.			
NA			Q The spacing unit which has been proposed by Amerada			
RO		0	consists solely of the Southeast Quarter of Section 19, Township			
MEIER, WILKINS and CROWNOVER	ice	Mexico	9 South, Range 35 East, is that correct?			
o an	General Court Reporting Service	New 1	A That's correct.			
INE	orting		Q The unit well will be the Amerada S. E. Anderson			
ILK	t Rep	prou	A NO. 1?			
M.	Cour	Albuquerque,	A That's correct.			
IER	neral	Y	Q Where is that well located with respect to the unit			
ME	Ğ	ilding	boundary?			
'		Buila	A 660 feet from the section lines.			
VLE		Simms	0 660 feet from the East unit boundary and 660 from the			
DEARNLEY,			South unit boundary?			
DE		Suite 1120	A That's correct.			
			Q What well location requirement would Amerada propose			
			here as to wells drilled within a mile of this pool?			
			A We would recommend that no well be closer than 660			
			feet to a quarter section boundary.			
			MR. LYNCH: That's all we have of this witness. We			

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			would 1	e to offer Exhibit 1 through 3 in evidence.
				MR. UTZ: Without objection Exhibits 1, 2, and 3 will
			be ente	d into the record of this case.
	601	uy1		(Whercupon, Applicant's Exhibits Nos. 1, 2, and 3 received in evidence.)
ER	1099 243 2007			CROSS EXAMINATION
TOV	C S	2 and	BY MR.	<u>Z</u> :
NA	η	ž	Q	Do you consider the Anderson A-l a gas well?
'RO	ţ	0	А	Yes, sir.
id C	ice V	nex I	Q	Do you have a GOR on that well?
Y, MEIER, WILKINS and CROWNOVER	General Court Reporting Service	TYRU MARKICO	А	The gas-oil ratio was 14,500 cubic feet per barrel,
	ortine		this is	62 gravity distillate. It's a high gravity clear
	t Rep	luerq	distill	е.
A '	l Court Reporti A 11	bnait	Q	Is it your opinion that that distillate is a retrograde
IER	meral		or in t	reservoir under existing pressures do you feel it's a
ME	Ge J.	buir	liquid	zgas?
	0 B11		А	Possibly some is in the formation as a liquid; primarily
NLE			it's co	ensate. Bottom hole pressure in this case is 3321
DEARNLE			pounds,	oottom hole temperature is approximately 180 degrees.
DE			Q	If this is a gas pool as you contend, then you already
4		nunc	have 16	acre spacing, do you not, under the State-wide rules?
	-		А	That's correct.
			Q	And 660 locations?
			А	Yes.
		L		MR. LYNCH: The locations are 990 under the State-wide



rule, unless I'm mistaken.

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ER. DURRETT: 660.

MR. UTZ: 660 for gas.

MR. LYNCH: I might mention here that this case is in preparation for another case which we have set for the 16th. We have attempted to get voluntary pooling of the interest in the Southeast Quarter of Section 19 and thus far we have been unsuccessful in doing so. It does not appear that we're going to be able to do so. In preparation for the force pooling case which is set for December 16th we thought it necessary to get a spacing or proration unit established by the Commission.

MR. KELLAHIN: The State-wide rule only applies to a Albuquerque, designated pool and this has not been designated as a pool as yet.

MR. DURRETT: You mean that's your legal opinion, that it applies only to a designated pool on a forced pooling?

MR. KELLAHIN: That's my feeling.

MR. LYNCH: There's perhaps some argument that it's necessary for the Commission to make a finding that one well will drain 160 acres before you can force pool.

Suite 1120 MR. UTZ: In effect, what you are asking for here is to ask that the State-wide rules be made applicable?

MR. LYNCH: That is in effect what we are asking.

MR. UTZ: Any other questions of the witness?

Q (By Mr. Utz) Going into the gas well business a

little further, is it your opinion from the GOR or the gravity of

the liquids that causes you to have an opinion that this is a gas well?

A There's quite a wide range of opinions on this. It's my general well practice in my own mind to analyze the liquid and the gas-oil ratio together. In other words, if we have a high gravity liquid, as we do in this case, it's practically gasoline and you find that associated in a gas well. Of course, your gas-oil ratio is obviously very low for a gas well, but in other areas we would call this a gas well because of the liquid characteristics of it. We haven't run a distillation test on this liquid, but the characteristics is that of gasoline.

This is a very clear liquid? Q

А Yes.

MR. UTZ: Are there any other questions of the witness? The witness may be excused.

(Witness excused.)

MR. UTZ: Any statements in this case?

MR. LYNCH: I would just like the Examiner -- if it's j, possible, we would like to have an order here prior to the 16th, if we could. The 16th is the date on which the subsequent case will be heard.

MR. UTZ: Any other statements? The case will be taken under advisement and the hearing is adjourned to 1:15. (Whereupon, the hearing was recess until 1:15 o'clock P.M.)

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STATE OF NEW MEXICO ) ) ss COUNTY OF BERNALILLO ) I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the Phone 243-6691 foregoing and attached Transcript of Hearing before the New DEARNLEY, MEIER, WILKINS and CROWNOVER 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 16th day of December, 1963. Albuquerque, New Mexico General Court Reporting Service Ole NOTARY PUBLIC My Commission Expires: June 19, 1967. Suite 1120 Simms Building I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2-95-9. Leard by me on 1963 leard by 19.6.3.. ., Examiner -New Maxico 011 Conservation Commission







# ECONOMICS OF 160-ACRE SPACING

SE/4 Section 19-T9S-R35E Lea County, New Mexico

Completed Well:	Amerada Petroleum Corporation - S.	E. Anderson "A"-1						
Formation:	Atoka (Pennsylvanian)							
Net Pay:	8'							
Porosity:	18%							
Water Saturation:	22%	· · · ·						
Bottom-Hole Pressure:	3321 PSI							
Recovery Factor (Gas):	75%							
Recovery Factor (Distillate): 60%								
Recoverable gas reserved be	1,072 MMCF							
Recoverable distillate rese	78,256 bbls							
Gross Income @ \$2.80/bb1 an	\$128,640.00							
	Distillate	219,116.00						
		\$347,756.00						
Cost of Well		\$229,961.00						
Profit before taxes, operat	\$117,795,00							

BEFORE EXAMINER UTZ CUNSERVATION COMMISSION R EXHIGIT NO. 2.957 140

<u>DRAFT</u> JMD/esr December 12, 1963

> 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. 2950 Order No. R-

NOMENCLATURE

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR THE CREATION OF A NEW GAS POOL AND FOR THE CONTRAC-TION OF THE VERTICAL LIMITS OF AN EXISTING QUES POOL.

ORDER OF THE COMMISSION

## BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on <u>December 4</u>, 1963, at Santa Fe, New Mexico, before <u>Elvis A. Utz</u> Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this \_\_\_\_\_\_ day of \_\_\_\_\_ December, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, <u>Elvis A. Utz</u>\_\_\_\_\_, 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, Amerada Petroleum Corporation, seeks An Atokathe creation of AMMERICAN-Pennsylvanian Gas Pool comprising the SE/4 of Section 19, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico, and the contraction of the vertical limits of the South Bough-Pennsylvanian Pool to include the Bough "C" zone of the Pennsylvanian formation only.

(3) That the applicant completed its S. E. Anderson Well No. 1 located in Unit B of Section 30, Township 9 South, Range 35 East. Name, Lea County, New Mexico, on April 4, 1963; that said well encountered the Cisco formation at a depth of -5378 to -6114 feet. -2-CASE No. 2950

(4) That the applicant completed its S. E. Anderson Well No. 1-A located in Unit P of Section 19, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico, on August 15, 1963; that said well encountered the Atoka formation at a depth of -7001 to -7492 feet.

(5) That the Atoka formation underlying the SE/4 of Section19, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico,is a separate common source of supply.

(6) That in order to prevent waste and protect correlative rights, the vertical limits of the South Bough-Pennsylvanian Pool should be contracted to include only the Cisco formation, the South Bough-Pennsylvanian Pool should be redesignated the Jenkins-Cisco Gas Pool, and a new gas pool should be created and designated the Jenkins-Atoka Gas Pool with vertical limits comprising the Atoka formation and horizontal limits comprising the SE/4 of Section 19, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico.

### IT IS THEREFORE ORDERED:

(1) That the vertical limits of the South Bough-Pennsylvanian Pool are hereby contracted to include only the Cisco **gene** *the Pennsylvanian* formation.

(2) That the South Bough-Pennsylvanian Pool is hereby redesignated the Jenkins-Cisco <del>Sap</del> Pool.

(3) That a new gas pool is hereby created and designated
the Jenkins-Atoka Gas Pool with vertical limits comprising the *your of the County/Pacien*.
Atoka formation and horizontal limits comprising the SE/4 of
Section 19, Township 9 South, Range 35 East, NMPM, Lea County,
New Mexico.

(4) 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.

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BEFORE THE OIL CONSERVATION COLLESSION OF NET LEXICO

IN THE FATTER OF THE APPLICATION OF AMERADA PETROLEUM CORPORATION FOR ESTABLISHMENT OF THE SOUTH BOUGH-ATOKA POOL IN LEA COUNTY, NEW MEXICO, AND FOR PROMULGATION OF RULES AND REGULATIONS FOR SAID POOL.

# APPLICATION

Comes now Amerada Petroleum Corporation and applies to the Oil Conservation Commission of New Mexico for an order creating a new pool for the production of gas from the Morrow Pennsylvanian Formation, as discovered by applicant's S. E. Anderson "A" No. 1 Well, located in the SE/4 SE/4 of Section 19, Township 9 South, Range 35 East, N.M.P.M., Lea County, New Mexico, for contraction of the vertical limits of the South Bough Pennsylvanian Oil Pool, and for the adoption of pool rules for the pool in conformity with the state-wide rules of the Oil Conservation Commission for the production of gas, including 160-acre units and for such other rules as may be proper for the development of said pool.

Applicant proposes that said pool be designated as the South Bough Atoka Pool and that it consist of the SE/4 of Section 19, the SW/4 of Section 20, the NM/4 of Section 29, and the NE<sup>1</sup> of Section 30, all in Township 9 South, Range 35 East, N.M.P.M.

WHEREFORE, applicant prays that this application be set for hearing and that after notice and hearing the commission enter its order as requested herein.

AMERADA PETROLEUN CORPORATION

By Attack the Millichan Rellahin & Pox P. O. Box 1713 Santa Fe, New Lexico

ATTORNEYS FOR APPLICANT

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11674-1182 -- 7492

Case 2950 Neurd 12-4-63 Rez. 12-5-63 1. Recommend that amenadai request he gruntes as follows! (a) contract S. Bough Perm and to include the Circo formation only that your formation Quere da - anderson #1-B-30-93-35E. at - 5358 7 -61/4 10 - 5366 7 -6+32, and Change the Hame from . S. Bough- Perm. (h) Creake a new pool & he known os the fenkinset atoka consisting of the 5574 sec. 19-95-35E. Dhe Juguel A. M. P-19-97 A. H. P-19-95.35E from-2001 \$ . - 7492. 1 11 De

## 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. 2950 Order No. R-2619 NOMENCLATURE

APPLICATION OF AMERADA PETROLEUM CORPORATION FOR THE CREATION OF A NEW GAS POOL AND FOR THE CONTRAC-TION OF THE VERTICAL LIMITS OF AN EXISTING POOL.

#### ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on December 4, 1963, at santa Fe, New Mexico, before Elvis A. Utz, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 13th day of December, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Elvis A. Utz, 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, Amerada Petroleum Corporation, seeks the creation of an Atoka-Pennsylvanian Gas Pool comprising the SE/4 of Section 19, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico, and the contraction of the vertical limits of the South Bough-Pennsylvanian Pool to include the Bough "C" zone of the Pennsylvanian formation only.

(3) That the applicant completed its 3. E. Anderson Well No. 1 located in Unit B of Section 30, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico, on April 4, 1963; that said well encountered the Cisco formation at a depth of -5378 to -6114 feet.

(4) That the applicant completed its S.E. Anderson Well No. 1-A located in Unit P of Section 19, Township 9 South, Range -2-CASE NO. 2950 Order No. R-2619

35 East, NMPM, Lea County, New Maxico, on August 15, 1963; that said well encountered the Atoka formation at a depth of -7001 to -7492 feet.

(5) That the Atoka formation underlying the SE/4 of Section 19, Township 9 South, Range 35 East, NMPM, Lea County, New Mexico, is a separate common source of supply.

(6) That in order to prevent waste and protect correlative rights, the vertical limits of the South Bough-Pennsylvanian Pool should be contracted to include only the Cisco zone of the Pennsylvanian formation, the South Bough-Pennsylvanian Pool should be redesignated the Jenkins-Cisco Pool, and a new gas pool should be created and designated the Jenkins-Atoka Gas Pool with vertical limits comprising the Atoka zone of the Pennsylvanian formation and horizontal limits comprising the SE/4 of Section 19, Township 9 South, Range 35 East, NMPM, Lee County, New Mexico.

IT IS THEREFORE ORDERED:

(1) That the vertical limits of the South Bough-Pennsylvanian Pool are hereby contracted to include only the Cisco zone of the Pennsylvanian formation.

(2) That the South Bough-Pennsylvanian Pool is hereby redesignated the Jenkins-Cisco Pool.

(3) That a new gas pool is hereby created and designated the Jenkins-Atoka Gas Pool with vertical limits comprising the Atoka zone of the Pennsylvanian formation and horizontal limits comprising the SE/4 of Section 19, Township 9 South, R nge 35 East, NMPM, Lea County, New Mexico.

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

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



STATE OF NEW MEXICO OIL CONSERVATION COMMISSION ACK M. CAMPBELL, Chairman

WALKER, Member

A. L. PORTER, Jr., pember & secretary

DOVERNOR JACK M. CAMPBELL CHAIRMAN

# State of New Mexico Bil Conserbation Commission



P. D. BOX 871 BANTA FE

Land Commissioner E. S. Johnny Walker Member STATE BEOLOGIST A. L. PORTER, JR. SEGRETARY - DIRECTOR

December 13, 1963

Nr. Jason Kellahin Kellahin & Fox Attorneys at Law Box 1713 Santa Fe, New Mexico Re: Case No.\_\_\_

Applicant:

AMERADA PETROLEUM CORPORATION

**29**50

Dear Sire

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

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Carbon copy of order also sent to:

Hobbs OCC \_\_\_\_

Artesia OCC\_\_\_\_\_

Astec OCC \_\_\_\_\_

OTHER Mr. Tom Lynch, Amerada - Tulsa, Oklahoma

Note: There will be no EXAMINER HEARING in the Second Half of December

LOCKET NO. 35-63

#### DOCKET: EXAMINER HEARING - WEDNESDAY - DECEMBER 4, 1963

9:00 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM, 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 2945: Application of Shell Oil Crapany for the creation of a Devonian Gas Pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the creation of a new Devonian gas pool for its Harris-Federal Well No. 1 located in Section 27, Township 23 South, Range 34 East, Lea County, New Mexico, said pool to comprise all of Sections 27, 28, 33 and 34, Township 23 South, Range 34 East, and all of Sections 3 and 4, Township 24 South, Range 34 East. Applicant further seeks the establishment of special pool rules, including a provision for 640-acre spacing units and for fixed well locations.
- Application of Sheil Oil Company for a dual completion, Lea County, New CASE 2946: Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its State V Well No. 5 located in Unit I of Section 27, Township 17 South, Range 35 East, Lea County, New Mexico, to produce oil from the Vacuum-Yates and Vacuum-Paddock Pools through parallel strings of tubing.
- CASE 2947: Application of Charles B. Read for an unorthodox location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval of the unorthodox location of his Bates Well No. 1 located 660 feet from the North line and 330 feet from the East line of Section 21, Township 8 South, Range 36 East, South Prairie-Pennsylvanian Pool, Roosevelt County, New Mexico.
- CASE 2948: Application of the Atlantic Refining Company for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the approval of a cooperative pressure maintenance project for the injection of water into the Gallup (Tocito) formation, Many Rocks-Gallup Oil Pool, San Juan County, New Mexico, by the injection of water through 13 wells located in Sections 6, 7, 8, 17 and 18, Township 31 North, Range 16 West. Applicant further seeks the designation of a project area comprising approximately 1,480 acres in the aforesaid five sections and the adoption of appropriate project rules therefor.
- CASE 2949: Application of Phillips Petroleum Company for an exception to Rule 309-A, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to produce up to a maximum of 24 proration units into its Santa Fe Battery No. 14, Santa Fe Lease, Vacuum Abo Reef Pool, Lea County, New Mexico.

Application of Amerada Petroleum Corporation for the creation of a new gas pool and for the contraction of the vertical limits of an existing pool. Applicant, in the above-styled cause, seeks the creation of a Morrow-Pennsylvanian Gas Pool, Lea County, New Mexico. Said pool was discovered by applicant's S. E. Anderson "A" Well No. 1 located in Unit P of Section 19, Township 9 South, Range 35 East, and would comprise the SE/4 of Section 19, SW/4 of Section 20, NW/4 of Section 29 and the NE/4

CASE 2950:

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of Section 30 in the aforesaid township. Applicant further seeks the contraction of the vertical limits of the South Bough-Pennsylvanian Pool to include the Bough "C" zone of the Pennsylvanian formation only.

- CASE 2951: Application of Sunray DX Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Hope Unit Area comprising 3822.96 acres, more or less, of State land in Township 18 South, Range 23 East, Eddy County, New Mexico.
- CASE 2952: Application of Sunray DX Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the South Hope Unit Area comprising 3778.27 acres, more or less, of State land in Township 18 South, Ranges 21 and 23 East, and Township 19 South, Range 23 East, Eddy County, New Mexico.
- CASE 2953: Application of Curtis R. Inman for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Walt Canyon Unit Area comprising 11, 100.63 acres, more or less, of State, Federal and fee lands in Townships 21 and 22 South, Range 24 East, and Township 22 South, Range 25 East, Eddy County, New Mexico.
- CASE 2954: Application of Ambassador Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Langlie Mattix-Penrose Sand Unit Area comprising 3,920 acres, more or less, of State, Federal and Fee lands in Township 22 South, Range 37 East, Lea County, New Mexico.
- CASE 2955: Application of Ambassador Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the expansion of the existing Langlie Mattix Waterflood Project in Section 34, Township 22 South, Range 37 East, Lea County, New Mexico, by the conversion to water injection of 5 wells located in Sections 27, 33 and 34 of said township. Applicant further seeks the establishment of special rules governing further expansion and operation of the waterflood project in the Langlie Mattix-Penrose Sand Unit Area, including a provision for capacity allowables for wells in said project.