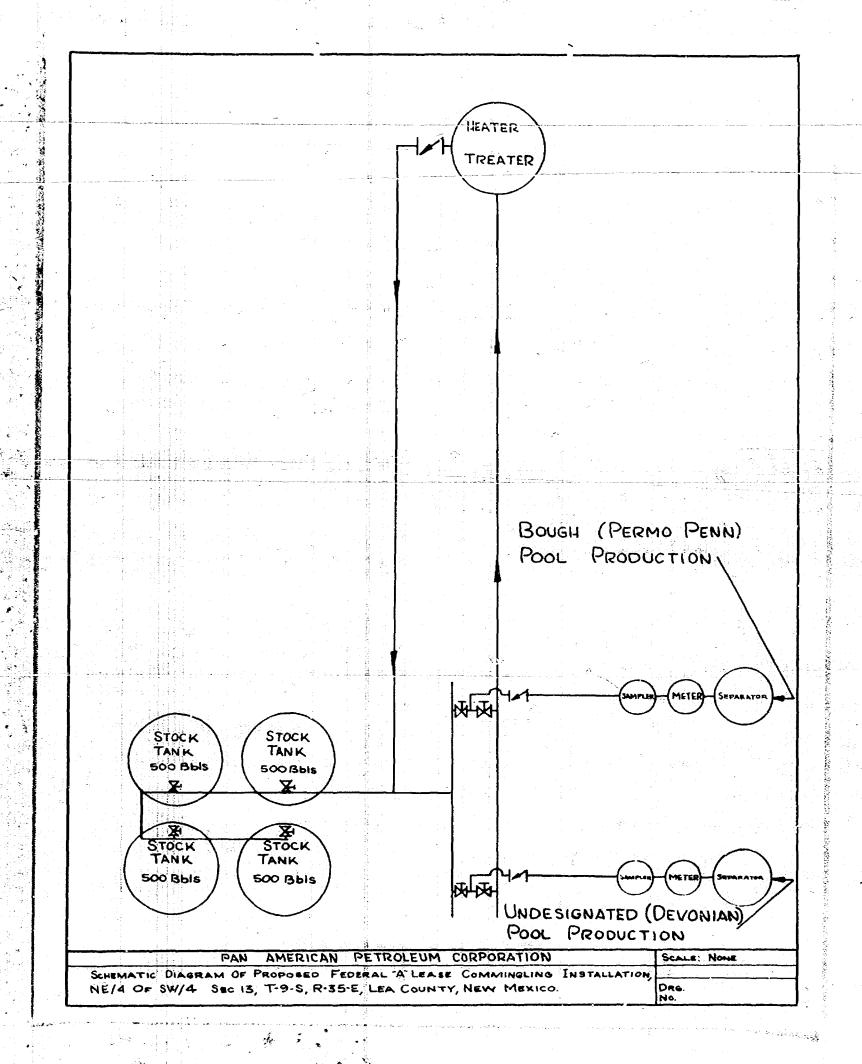
CASE 3266: Application of PAN AM.

for the dual completion of its

FEDERAL "A" WELL NO. 4.

Application,
Transcripts,
Small Exhibits
Etc.



# PERTINENT DATA REGALED COLORINGLING PRODUCTION FROM PAN AMERICAN'S FEDERAL "A" WILL NO. 4, BOUGH (PHO D PENN-OIL) AND UNDESIGNATED (DEVONIAN-OIL) POOLS, THE COUNTY, NEW MEXICO

In regards to this commingling request, certain pertinent data is listed below:

- 1. A plat showing the location of all wells on the Federal "A" Lease and pools in which each well is completed has been furnished.
- 2. A schematic diagram of the proposed tank battery installation which will serve this lease has been furnished.
- 3. Oil production from each of the two reservoirs will be measured and sampled separately.
- 4. The meters for each zone will be proven monthly into a strapped storage tank.
- 5. A BS&W reading will be taken every eight days and the production from each zone recorded.
- 6. Detailed data of liquid hydrocarbons are as follows:

Pool	Gravity Degrees, API	011 Value \$/331.	Estimated Annual Production, BO
Bough (Permo Penn)	47.5	\$ 2.95	52,560
Undesignated (Devo	nian) 43.8	3.01	78,840
Commingled	45.3	2.99	131,400

The commercial value of commingled production will be greater than the sum of the production from each common source of supply by approximately \$526 per year.



# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Drawer 1857 Roswell, New Mexico 88201

June 4, 1965

410, Televal A Sraw

REDEIVED					
	DS.				
	AUS				
	035				
	AC				
	ĐĘ		١.,.		
1	SPV	Y)L	1		
2	Qξ	Ĺ.,	_ٰ		
	Pt		L		
	KO				
	PI.				
7.		1	12		

Pan American Petroleum Corporation
P. O. Box 268
Lubbock, Texas

Attention: Mr. Neil S. Whitmore

Gentlemen:

Your telegram of June 3 requests approval to commingle oil production from the Bough Permo-Pennsylvanian and undesignated Devonian pools in the NWASWA sec. 13, T. 9 S., R. 35 E., Lea County, New Mexico, lease New Mexico 0450847. Oil from each pool will be separately metered prior to commingling in accordance with applicable provisions of the NMOCO Manual for the Installation and Operation of Commingling Facilities.

The method of commingling proposed in your telegram is hereby approved. You are requested to notify our Hobbs office when the installation is completed so that a field inspection of the system can be made.

Sincerely yours,

JOHN A. ANDERSON

Regional Oil and Gas Supervisor

and the second s					to the property of the second
No MEXICO	OH, CO	0222R	VAXB	08 CO	MHI STOP

SANTA	FE,	NEW	MEXICO
-------	-----	-----	--------

APP	LICATION	FOR	MULTIPLE	COMPLETION
-----	----------	-----	----------	------------

and the second of the second o		County		Dace	
destat modern assume	na Corporation			Vell No.	
est. vox 200, Libboot,	Veries	Palauci "A	iù .	•	
ation Unit 3.	Section	Township		Range	
Has the New Mexico Oil Conserva	1	a sush asia asi asia mulaini	a namel stanist		a chi
same zones within one mile of the It answer is yes, identify one such			or, Lease, and	Well No.:	
The following facts are submitted:	Upper	erga:	ntermediate Zone	Lower Zone	<del></del> .
a. Name of Pool and Formation	एक व्याप्त विषय				
5. Top and Bottom of				Grant bolis 3"	
Pay Section	9550=03		-	£2,	SJĹ
(Perforations)  e. Type of production (Oil or Gas)	<u> </u>				
e. Method of Production (OI) or Gas)					
(Flowing or Artificial Lift)	Moving			al all all and a second	
the following are attached. (Pleas	e mark YES or NO)				
203 c. Waivers consenting to s have been furnished cop d. Electrical log of the well	fsetting applicant's lease. Such multiple completion from the application.* Il or other acceptable log	om each offset operator	, or in lieu there	cof, evidence that said offset opes es and intervals of perforation in	erate
yes b. Plat showing the location operators of all leases of yes c. Waivers consenting to so have been furnished coperators d. Electrical log of the well	fsetting applicant's lease, such multiple completion from the application.*  Il or other acceptable log such available at the time application.	om each offset operator with tops and bottoms of opplication is filed, it should together with their	, or in lieu there f producing zone all be submitted	cof, evidence that said offset opes es and intervals of perforation in as provided by Rule 112—A.)	oerat
b. Plat showing the location operators of all leases of the second operators of all leases of the second operators consenting to second operators to the lease operators operators to the lease operators operators operators of the lease of the	fsetting applicant's lease, such multiple completion from the application.*  Il or other acceptable log such available at the time application.	om each offset operator with tops and bottoms of opplication is filed, it should together with their	, or in lieu there f producing zone all be submitted r correct mailing	cof, evidence that said offset opes es and intervals of perforation in as provided by Rule 112—A.)	oerat
b. Plat showing the location operators of all leases of the second operators of all leases of the second operators consenting to second operators to the lease operators operators to the lease operators operators operators of the lease of the	fsetting applicant's lease, such multiple completion from the application.*  Il or other acceptable log such available at the time application.	om each offset operator with tops and bottoms of opplication is filed, it should together with their	, or in lieu there f producing zone all be submitted r correct mailing	cof, evidence that said offset opes es and intervals of perforation in as provided by Rule 112—A.)	oetat
b. Plat showing the location operators of all leases of the second operators of all leases of the second operators consenting to second operators to the lease operators operators to the lease operators operators operators operators of all leases of the lease of the le	fsetting applicant's lease, such multiple completion from the application.*  Il or other acceptable log such available at the time application.	om each offset operator with tops and bottoms of opplication is filed, it should together with their	, or in lieu there f producing zone all be submitted r correct mailing	cof, evidence that said offset opes es and intervals of perforation in as provided by Rule 112—A.)	oetat
b. Plat showing the location operators of all leases of the second operators of all leases of the second operators consenting to second operators to the lease operators operators to the lease operators operators operators of the lease of the	fsetting applicant's lease, such multiple completion from the application.*  Il or other acceptable log such available at the time application.	om each offset operator with tops and bottoms of opplication is filed, it should together with their	, or in lieu there f producing zone all be submitted r correct mailing	cof, evidence that said offset opes es and intervals of perforation in as provided by Rule 112—A.)	oetat
b. Plat showing the location operators of all leases of the second operators of all leases of the second operators consenting to second operators to the lease operators operators to the lease operators operators operators operators of all leases of the lease of the le	fsetting applicant's lease, such multiple completion from the application.*  Il or other acceptable log such available at the time application.	om each offset operator with tops and bottoms of opplication is filed, it should together with their	, or in lieu there f producing zone all be submitted r correct mailing	cof, evidence that said offset opes es and intervals of perforation in as provided by Rule 112—A.)	oerat
b. Plat showing the location operators of all leases of the second operators of all leases of the second operators consenting to second operators of the second of the second of the second of the second operators of the second operators of all leases of the second operators op	fsetting applicant's lease, such multiple completion from the application.*  Il or other acceptable log such available at the time application.	om each offset operator with tops and bottoms of opplication is filed, it should together with their	, or in lieu there f producing zone all be submitted r correct mailing	cof, evidence that said offset opes es and intervals of perforation in as provided by Rule 112—A.)	oetat
b. Plat showing the location operators of all leases of yes c. Waivers consenting to a have been fumished coperators. (If such log is a list all offset operators to the lease to attached list.)	fsetting applicant's lease, such multiple completion from the pies of the application.*  Il or other acceptable log not available at the time agree on which this well is lost application and furnishes.	om each offset operator with tops and bottoms o oplication is filed, it sh cated together with their	, or in lieu there f producing zone all be submitted r correct mailing	cof, evidence that said offset opers and intervals of perforation in as provided by Rule 112-A.)	ndica
b. Plat showing the location operators of all leases of yes c. Waivers consenting to a have been fumished coperators. (If such log is a list all offset operators to the lease to attached list.)	fsetting applicant's lease, such multiple completion from the pies of the application.*  Il or other acceptable log soct available at the time agree on which this well is lost	om each offset operator with tops and bottoms o oplication is filed, it sh cated together with their	, or in lieu there f producing zone all be submitted r correct mailing	cof, evidence that said offset opers and intervals of perforation in as provided by Rule 112-A.)	ndica
b. Plat showing the location operators of all leases of greaters on senting to such a lease thereon. (If such log is a list all offset operators to the lease greaters all offset operators to the lease greaters of greaters greaters all operators listed in Item 5 and of such notification	fsetting applicant's lease, such multiple completion from the pies of the application.*  Il or other acceptable log set available at the time agree on which this well is looked and furnished.	om each offset operator with tops and bottoms of opplication is filed, it should together with their cated together with the cated t	or in lieu there for producing zone all be submitted a correct mailing	cof, evidence that said offset opers and intervals of perforation in as provided by Rule 112-A.)	ndica
Des b. Plat showing the location operators of all leases of 1968 c. Waivers consenting to a have been fumished copied. C. Electrical log of the well thereon. (If such log is a List all offset operators to the lease to attached lists all operators listed in Item 5 and such notification	setting applicant's lease, such multiple completion from the pies of the application.*  Il or other acceptable log set available at the time agree on which this well is looked and furnished acceptable and furnished acceptable.  It is not a complete the company of the complete that I am the company of the	om each offset operator with tops and bottoms of oplication is filed, it should be accepted together with their days of this application is a copy of this application of the company or ized by said company	or in lieu there f producing zone all be submitted r correct mailing  stion? YES of the to make this res	NO If answer is yes, years and that this report was provided.	ndic.
Des b. Plat showing the location operators of all leases of 1968 c. Waivers consenting to a have been fumished copied. C. Electrical log of the well thereon. (If such log is a List all offset operators to the lease to attached lists all operators listed in Item 5 and such notification	setting applicant's lease, such multiple completion from the pies of the application.*  Il or other acceptable log set available at the time agree on which this well is looked and furnished acceptable and furnished acceptable.  It is not a complete the company of the complete that I am the company of the	om each offset operator with tops and bottoms of oplication is filed, it should be accepted together with their days of this application is a copy of this application of the company or ized by said company	or in lieu there f producing zone all be submitted r correct mailing  ation? YES 22  of the to make this rep complete to the	NO If answer is yes, years and that this report was provided.	ndica
b. Plat showing the location operators of all leases of greaters of all leases of greaters. Waivers consenting to such a least log of the well thereon. (If such log is a list all offset operators to the least log of such activation.  Were all operators listed in Item 5 and of such notification.	setting applicant's lease, such multiple completion from the pies of the application.*  Il or other acceptable log set available at the time agree on which this well is looked and furnished acceptable and furnished acceptable.  It is not a complete the company of the complete that I am the company of the	om each offset operator with tops and bottoms of oplication is filed, it should be accepted together with their days of this application is a copy of this application of the company or ized by said company	or in lieu there f producing zone all be submitted r correct mailing  stion? YES of the to make this res	NO If answer is yes, years and that this report was provided.	ndica
Des b. Plat showing the location operators of all leases of 1968 c. Waivers consenting to a have been fumished copied. C. Electrical log of the well thereon. (If such log is a List all offset operators to the lease to attached lists all operators listed in Item 5 and such notification	setting applicant's lease, such multiple completion from the pies of the application.*  Il or other acceptable log set available at the time agree on which this well is looked and furnished acceptable and furnished acceptable.  It is not a complete the company of the complete that I am the company of the	om each offset operator with tops and bottoms of oplication is filed, it should be accepted together with their days of this application is a copy of this application of the company or ized by said company	or in lieu there f producing zone all be submitted r correct mailing  stion? YES 22  of the complete to the Signal By	NO If answer is yes, goot; and that this report was provided by Rule 112-A.)  Prod AMERICAN Record to the property and that this report was property and the property and	ndica
Des b. Plat showing the location operators of all leases of 1968 c. Waivers consenting to a have been fumished copied. C. Electrical log of the well thereon. (If such log is a List all offset operators to the lease to attached lists all operators listed in Item 5 and such notification	setting applicant's lease, such multiple completion from the application.*  Il or other acceptable log set available at the time agree on which this well is looked and furnished acceptable	om each offset operator with tops and bottoms of oplication is filed, it should be a copy of this application of the control of the copy of the application of the copy of the copy of the application of the copy of the copy of the application of the copy of the copy of the application of the copy of	or in lieu there f producing zone all be submitted r correct mailing  stion? YES 22  of the complete to the Signal By	NO If answer is yes, goot; and that this report was provided by knowledge.	ndica ndica
ves b. Plat showing the location operators of all leases of yes c. Waivers consenting to a have been furnished copy d. Electrical log of the well thereon. (If such log is a List all offset operators to the lease to attached lists all operators listed in Item 5 and such notification to the undersigned such notification (company supervision and direction and company supervision and direction and	setting applicant's lease, such multiple completion from the application.*  Il or other acceptable log set available at the time agree on which this well is looked and furnished and furnished acceptable log set available at the time agree on which this well is looked and furnished acceptable log set available at the facts well is looked and furnished and furnished acceptable accept	om each offset operator with tops and bottoms of oplication is filed, it so cated together with their days of this application of the operator of the content and application for administration for admini	or in lieu there f producing zone all be submitted r correct mailing  ation? YES 22  of the to make this rep complete to the Signal By	NO If answer is yes, goot; and that this report was provided by Rule 112-A.)  Per American Fource of my knowledge.  Internation	ndica ndica

# OFFSET OPERATORS TO PAN AMERICAN'S FEDERAL A LEASE LEA COUNTY, NEW MEXICO

### S/2 Section 12-95-35E

H. C. Hood, 802 V&J Tower, Midland, Texas

### 6E/4 Section 11-95-35E

Tom Schneider, V&J Tower, Midland, Texas

### NE/4 Section 14-98-35E

Pan American - 9/10

P. J. Danglade Estate, Z Ross Malone, Security Bank Bldg., Roswell, New Mexico J. E. Simmons, 617 W. Avenue A. Lovington, New Mexico J. E. Simmons, 617 W. Avenue A. Lovington, New Mexico Boward W. Jennings, Fort Worth National Bank Building, Fort Worth, Texas

M. H. McGrail, Box 604, Hobbs, New Mexico Mrs. Wade Shipley, 7 J. B. Simmons, 617 W. Avenue A., Lovington, New Mexico

### SE/4 Section 14-95-35E

Pun American - 1/8

Unlessed mineral owners:

Sunshine Royalty Co., Roswell, New Mexico
Leonard Oil Co., Box 400, Roswell, New Mexico
Lois C. Hobbs, 102 W. Adams, Lovington, New Mexico
J. E. Simmons, 617 W. Avenue A, Lovington, New Mexico

C. B. Markham, et al, % Jack Markham, Great Plains Building, Lubbock, Texas

### NE/4 Section 23-95-35E

Pan American - 1/2 Socony Mobil Oil Co., Inc., Hobbs, New Mexico Sunshine Royalty Co., Roswell, New Mexico Leonard Oil Company, Box 400, Roswell, New Mexico

## S/2 and SW/4 NW/4 Section 24-95-35B

Coastal States Gas Producing Company, Box 2498, Abilene, Texas

### Lot 1, Section 19-9S-36R

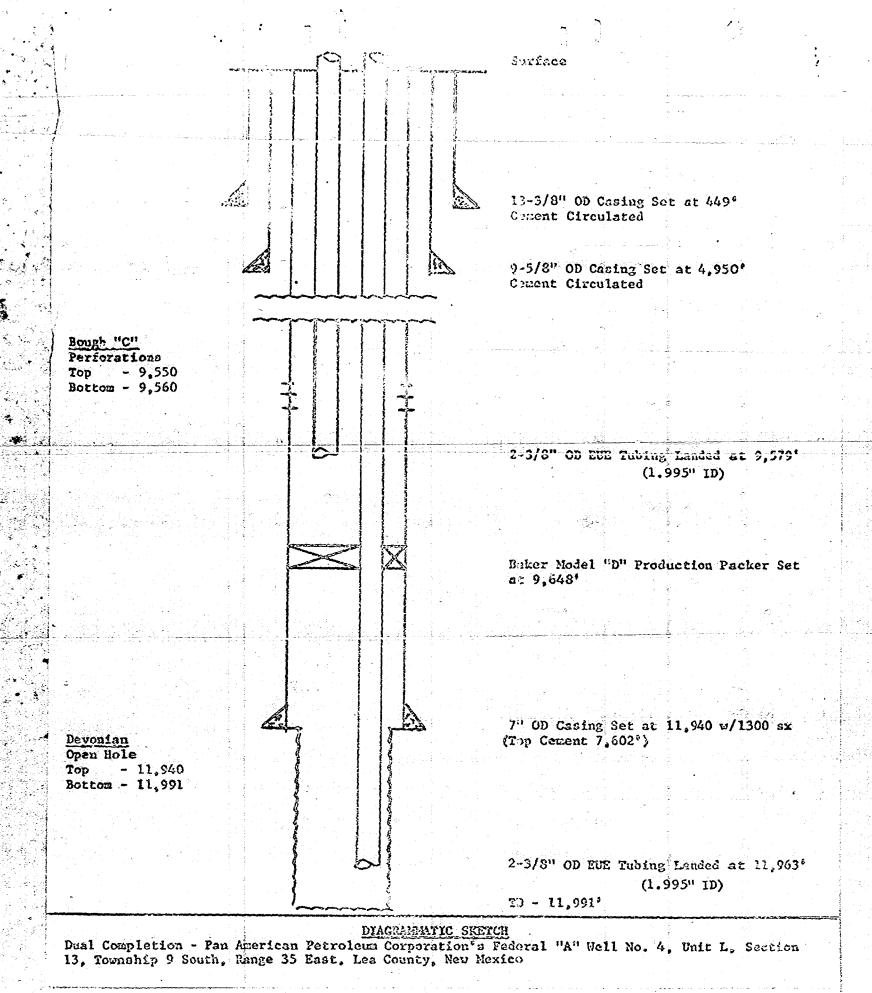
John Kelsey, 1207 W. Storey, Midland, Texas

Lots 3, 4, E/2 SW/4 Section 18-98-30E

Shell Oil Company, Roswell, New Mexico

SW/4 Section 7 and Lot 1 Section 18-98-36E

Unleased USA-KGS



PAN AMERICAN PETROLEUM CORPORATION'S
APPLICATION TO DUALLY COMPLETE ITS
FEDERAL "A" WELL NO. 4, UNIT L, SEC. 13
T-9-S, R-35-E, LEA COUNTY, NEW MEXICO
IN THE BOUGH (PERMO PENN-OIL) & UNDESIGNATED (DEVONIAN-OIL) POOLS AND COMMINGLE
PRODUCTION AFTER SEPARATELY METERING
PRODUCTION FROM EACH POOL.

CASE 3266 JUNE 9, 1965

## DISCUSSION

Pan American Petroleum Companies respectfully requests that the New Mexico Oil Conservation of Massion grant permission to dually complete its Federal "A" Mell No. 4 in Mexico Brant permission to dually complete its (Devonian - Oil) Pools, Lea County, New Mexico. It is also requested after separately metering the production from these pools,

The Federal "A" Well No. 4 is located 2300' from the south line and 990' from the west line, Unit L, Section 13, T-9-S, R-35-E, Lea County, New Mexico, being about 2 miles northeast of Crossroads, New Mexico. This will is to be completed from the Bough interval and is within the limits of the inactive Bough (Permo Penn) Pool. Completion also will be made duction is located about three miles to the southeast, being the Cross-in these two zones in this area, as shown on Attachment I.

Attachment II is a diagramatic sketch showing the mechanical aspects of this dual completion, which will be conventional, utilizing two tubing strings in order to Produce each zone separately. As noted, a packer will separate the Bough (Permo Penn) and Undesignated (Devonian) zones in the of oil from these two reservoirs.

Attachment III is a copy of a portion of the Gamma Ray-Sonic log run in the Federal "A" Well No. 4 with tops and bottoms of the producing zones and perforated intervals indicated in red.

For convenience, a copy of Pan American's application for multiple completion of this well is shown as Attachment IV. As noted, a copy of this application was furnished to each offset operator.

A diagramatic sketch of the tank battery installation for handling commingled production is shown as Attachment V. It is noted that each zone will be located in the NE/4 of the SW/4 of Section 13, T-9-S, R-35-E,

Pertinent data regarding the commingling of this production is shown on Attachment VI. As noted, Pan American plans to prove each meter monthly,

Attachment VII is a copy of the United States Geological Survey's consent of Pan American's commingling request. The USGS is the only royalty interest

Michigan words

STATE OF NEW MEXICO )

SS.

COUNTY OF BERNALILLO )

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission Examiner at Santa Fe New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, I have affixed my hand and notarial seal this 20th day of June, 1965.

Notary Public - Court deporter

My Commission Expires:

June 19, 1967.

TOE

do hereby certify that the foregoing is consider for the proceedings in the proceedings in the Landson in 18 of Care No.32.66.

New Hexico Cil Conservation Commission

Q Will these stock tanks be on the same lease as the wells?

A Yes, sir, they will be located in the northeast quarter of the southwest quarter of Section 13.

Q Actually, doesn't the metering of two pools come under administrative approval of our Commingling Manual?

A Yes, it does.

Q But you just threw this thing in?

A The reason it is included is just to have the total program in one form.

MR. UTZ: Are there any other questions of the witness?

If not the witness may be excused. Any other statements in this case? The case will be taken under advisement.



# LDG. . P.O. BOX 1092 . PHONE 243-6691 . ALBUQUERQUE, NEW MEXICO

- A Yes, sir, it will be submitted as required.
- Q Were the attachments to Exhibit 1 either prepared by you or under your direction and supervision?
  - A Yes, sir, they were.

MR. COOTER: We offer the exhibit and the attachments which comprise it into evidence.

MR. UTZ: Without objection the Exhibit 1 and -- Let me see, how many attachments are there?

A There are seven attachments.

MR. UTZ: -- and the seven attachments contained therein will be made a part of this record.

(Whereupon, Applicant's Exhibit No. 1 was admitted in evidence.)

MR. COOTER: That concludes the direct examination of the witness.

### CROSS EXAMINATION

### BY MR. UTZ:

- Q No doubt you've multiplied out this commercial value here?
  - A Yes, sir.
- Q Just from looking at it it doesn't look like it should be more.
- A Well, it's only slightly higher, but it is that much higher.



# dearnley-meier reporting service, inc

stated, oil production from the two reservoirs will be measured and sampled separately, and the meters for each zone will be proven monthly, into a strapped storage tank. The BS&W reading will be taken every eight days and the production from each zone recorded.

The gravities of the individual zones and the commingled zone are shown along with their value and the estimated annual production. It's noted that the commercial value of the commingled production will be greater than the sum of the production from each common zone of supply by some \$526.00 per year.

The only royalty interest owner under the Federal "A" Lease is the United States Geological Survey, and Attachment 7 indicates their approval of the commingling as requested.

- Mr. Cowan, have there been pressure tests made to determine whether or not any casing leaks exist?
- Yes, sir. When casing was set, it was tested to 1,500 pounds and there was no leak indicated.
- If approval is given by the Commission for the dual Q completion, Pan American will comply with Rule 112-A and the segregation test and packer-leakage tests, and all will be performed, will they not?
  - Is 112-A the packer-leakage test?
  - Q Yes.



bottoms of the producing zones and intermediate zones are shown on the log, and perforated intervals are shown on the log in red.

The Bough perforations are from 9,550 to 9,560; and the Devonian zone is producing from an openhole interval 11,940 feet to 11,991 feet. This means there is some 2,500 feet vertical distance between the two producing intervals. As noted, seven-inch casing is set on top of the openhole bevonian completion interval.

Q I notice a copy of your application for multi-completion is attached as Attachment 4.

A Yes, sir, this is attached just for convenience. There are two sheets. The second sheet indicates the offset operators with their addresses.

Q What is shown by attachment 5?

A Attachment 5 is a sketch showing the tank battery installation for handling the production from the two zones of completion in the Federal "A" Well Number 4. It's noted that each zone will be metered separately, prior to entering common storage, and the battery will be located in the northeast quarter of the southwest quarter of Section 13, Township 9 South, Range 35 East, Lea County, New Mexico.

Attachment 6 is presented to indicate pertinent data regarding the commingling of the two zones. As previously



will also be made in the undesignated Devonian Pool. Both zones will be oil completions. The nearest Devonian production is located about three miles to the southeast, being the Crossroads West Devonian Pool. This will be the first conventional multicompletion in these two zones in this area.

The Attachment Number 2 is a sketch showing the mechanical aspects of this dual completion, which will be conventional, utilizing two tubing strings in order to produce each zone separately. It's noted that a production packer will separate the Bough Permo Penn and the undesignated Devonian zones in the wellbore. This installation will permit safe and efficient production of oil from the two reservoirs.

- Q Before passing from Exhibit 2 and on to Exhibit, or Attachment 3 to the exhibit, the inside diameter of the casing and the perforations and all are as shown on the diagramatic sketch?
- A Yes, sir, these are correct. The equipment actually installed in the well is as shown.
- Q And the cement around the various strings of casing are as shown there?
  - A Yes, sir, that's correct.
  - Q Now, I direct your attention to Attachment 3.
- A Attachment 3 is a portion of a Gamma Ray-Sonic log which was run in the Federal "A" Well Number 4; tops and

Q What does Pan American Petroleum Corporation seck by its application in this case?

A Pan American requests approval to dually complete its Federal "A" Well Number 4 in the Bough Permo-Penn and an undesignated Devonian oil pool; Lea County, New Mexico; and also it seeks approval to commingle the production from these pools after separately metering the production from each pool.

Q I direct your attention to what has been marked as Exhibit Number 1, which consists of several attachments. Would you commence with the first attachment and relate that to the Examiner and tell him what is shown thereby and thereon?

A Yes, sir. The Attachment 1 is a plat of the area in which the Federal "A" Well Number 4 is located. All surrounding wells are shown on the plat and the completion intervals of the wells that are currently producing are shown; as noted, there are several wells which have been plugged and abandoned also shown on the plat.

Offset operators are also noted on the nearby acreage. The Federal "A" 4 is located 2300 feet from the south line and 990 feet from the west line, Unit L, Section 13, Township 9 South, Range 35 East, Lea County, New Mexico, which is about two miles northeast of Crossroads, New Mexico. This well is to be completed from the Bough interval and is located within the limits of the inactive Bough (Permo Penn) Pool. Completion



IALIZING IN: LIEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DALLY COPY, CO. SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO STATEMENT SANY EAST - BLONE 243-6691 • ALBUQUERQUE, NEW MEXICO

MR. UTZ: The next case will be Case Number 3266.

Application of Pan American Petroleum Corporation for a dual completion and commingling, Lea County, New Mexico.

MR. COOTER: Paul Cooter of Atwood and Malone, Roswell appearing for the Applicant. We have one witness, Bill Cowan.

### (Witness sworn.)

(Whereupon, Applicant's Exhibit No. 1 marked for identification.)

WILLIAM C. COWAN, called as a witness, having been first duly sworn, was examined and testified as follows:

### DIRECT EXAMINATION

### BY MR. COOTER:

- Q Would you state your name for the record, please?
- A William C. Cowan.
- Q By whom are you employed?
- A Pan American Petroleum Corporation.
- Q In what capacity are you employed by Pan American?
- A Petroleum engineer in their Lubbock District Office.
- Q Mr. Cowan, have you previously testified before the New Mexico Oil Conservation Commission?
  - A Yes, sir.
  - Q Have your qualifications been made a matter of record?
  - A Yes, sir.



Case No ..

# dearnley-meier reporting service, inc.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
June 9, 1965

### EXAMINER HEARING

IN THE MATTER OF: Application of Fan American )
Petroleum Corporation for a dual completion )
and commingling, Lea County, New Mexico.
Applicant, in the above-styled cause seeks approval of the dual completion (conventional) of its Federal "A" Well No. 4 located in Unit's Lof Section 13, Township 9 South, Range 35 East, Lea County, New Mexico, to produce oil ) from the Bough Permo-Penn and an undesignated Devonian pool through parallel strings of tubing. Applicant further seeks authority to commingle the production from said pools on said lease after separately metering the production from each pool.

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING



Car 3266

# OFFSET OPERATORS TO PAN AMERICAN'S FEDERAL A LEASE LEA COUNTY, NEW MEXICO

### S/2 Section 12-95-35E

H. C. Hood, 802 V&J Tower, Midland, Texas

### 8E/4 Section 11-95-35E

Tom Schneider, V&J Tower, Midland, Texas

### NE/4 Section 14-9S-35E

### Pan American - 9/10

Unleased mineral owners:

F. J. Danglade Estate, % Ross Malone, Security Bank Bldg., Roswell, New Mexico

J. E. Simmons, 617 W. Avenue A, Lovington, New Mexico

Howard W. Jennings, Fort Worth National Bank Building, Fort Worth, Texas

M. H. McGrail, Box 604, Hobbs, New Mexico

Mrs. Wade Shipley, 7 J. E. Simmons, 617 W. Avenue A, Lovington, New Mexico

### SE/4 Section 14-9S-35E

Pan American - 1/8

Unleased mineral owners:

Sunshine Royalty Co., Roswell, New Mexico

Leonard Oil Co., Box 400, Roswell, New Mexico

Lois C. Hobbs, 102 W. Adams, Lovington, New Mexico

J. E. Simmons, 617 W. Avenue A, Lovington, New Mexico

C. B. Markham, et al, % Jack Markham, Great Plains Building, Lubbock, Texas

### NE/4 Section 23-95-35E

Pan american - 1/2

Socony Mobil Oil Co., Inc., Hobbs, New Mexico

Sunshine Royalty Co., Roswell, New Mexico

Leonard Oil Company, Box 400, Roswell, New Mexico

### S/2 and SW/4 NW/4 Section 24-95-35B

Coastal States Gas Producing Company, Box 2498, Abilene, Texas

### Lot 1, Section 19-98-36B

John Kelsey, 1207 W. Storey, Midland, Texas

Lots 3, 4, E/2 SW/4 Section 18-95-30E

Shell Oil Company, Roswell, New Mexico

SW/4 Section 7 and Lot 1 Section 18-98-36E

Unlessed USA-KGS

# NEW MEXICO OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

APPLICATION FOR MULTIPLE COMPLETION Operator Pan American Petroleum Corporation County Address Date P. O. Box 268, Lubbock, Texas Lucation Well No. Federal "A" 4 Township 1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the 13 2. It answer is yes, identily one such instance: Order No. \_\_\_ NO No ; Operator, Lease, and Well No .: 3. The following facts are submitted: a. Name of Pool and Formation Intermediate Zone Bough Permo Penn-Lower Zone Top and Bottom of Pay Section Undesignated-Devonian (Perforations) c. Type of production (OH or Gas) 9550-60 Open hole: 11,940d. Method of Production (Flowing or Artificial Lift) 01 4. The following are attached. (Please mark YES of NO) Flowing No a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and /or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of Yes c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators d. Flectrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.) 5. List all offset operators to the lease on which this well is located together with their correct mailing address. See attached list 6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES \_\_ NO \_ CERTIFICATE: I, the undersigned, state that I am the District Engineer (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge. DOCKET MARLED Should waivers from all offset operators not accompany an application for administrative approval, the New Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. after said twenty-day period, no protest not request for hearing is received by the Santa Fe office, the application will then be processed. NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard protation unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

# PAN AMERICAN PETROLEUM CORPORATION Care 32

Pi O. Box 268 Lubbock, Texas 79401 May 7, 1965

RMB-3226-986.510.1 File:

Subject: Application of Pan American Petroleum Corporation

For Dual Completion (Conventional) of the Federal "A" Well No. 4 in the Bough Permo Penn (011) and Undesignated Devonian (011) Pools and Surface Commingling Request, Lea County,

New Mexico

Mr. A. L. Porter (3) Secretary-Director of New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

Dear Sir:

Pan American, as operator of the subject well, respectfully requests that a hearing be docketed to consider its application for a conventional multiple completion of its Federal "A" Well No. 4. The well is located 2300' FSL and 990' FWL, Unit L, Section 13, T-9-8, R-35-E, Lea County, New Mexico. As shown on the attached plat, this will be the first dual completion in these two zones in this

It is also requested that at this hearing approval be granted for surface commingling of the production from these two zones. A copy of our application for multiple completion is attached.

District Production Superintendent

wcc:jn Attachment

cc: Offset Operators

Care 3266 Lecul-6-6-6-Rec. 6-8-65 1. Frank Pan american permission to Dually completer. (Consentioned) their Declare 'A' + 4 L-13-725-356, Bough-Perms Perm. oil pool and emderguals 2. quant permission to womingle at surface the two above yourse for the well after separate metering

GOVERNOR JACK M. CAMPBELL CHAIRMAN

## State of New Mexico

# Bil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER



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

P. O. BOX 2088 SANTA FE

June 15, 1965

さん とうしょ ひじょう	Re:	Case No	3266
Mr. Paul Cooter		Order No	R-2926
Atwood & Malone		Applicant:	
Attorneys at Law			75 <b>4</b>
Post Office Box 700		PAN AMERIC	.A.B.
Post Office			

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

ir/	and the state of t		The state of the s
Carbon copy of order	also	sent to:	
Hobbs OCCx Artesia OCC			The state of the s
Aztec OCC	Account of the control of the contro		
<u> </u>	The control of the co		

-2-Docket No. 16-65

proposes to drill and complete a well in Unit L of Section 14, Township 20 South, Range 33 East, Teas Pool, Lea County, New Mexico, with surface casing set at approximately 950 feet, cement circulated, and production casing set at approximately 3400 feet and cemented to approximately 2500 feet above the casing point. The well would be plugged and abandoned in accordance with the provisions of Order R-111-A.

CASE 3265:

Application of Coastal States Gas Producing Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation through perforations from 4545 feet to 4590 feet in its Southern Minerals State Well No. 1-15 located in Unit L of Section 15, Township 9 South, Range 33 East, Flying "M" San Andres Pool, Lea County, New Mexico.

CASE 3112: (Reopened)

In the matter of Case 3112 being reopened pursuant to the provisions of Order No. R-2824, which order authorized Gallup-Dakota commingling in the wellbore by means of a dual-flow downhole choke assembly in its Jicarilla 28 Well No. 1 located in Unit J of Section 28, Township 25 North, Range 4 West, Rio Arriba County, New Mexico. All interested parties may appear and show cause why the authority granted under this order should not be terminated.

CASE 3266:

Application of Pan American Petroleum Corporation for a dual completion and commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Federal "A" Well No. 4 located in Unit L of Section 13, Township 9 South, Range 35 East, Lea County, New Mexico, to produce oil from the Ecugh Permo-Penn and an undesignated Devonian pool through parallel strings of tubing. Applicant further seeks authority to commingle the production from said pools on said lease after separately metering the production from each pool.

CASE 3258: (Continued from the May 26th examiner hearing)

Application of Midwest Oil Corporation for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its State "C" Well No. 1 located in Unit K of Section 32, Township 13 South, Range 34 East, Lea County, New Mexico, to produce oil from the Upper and Lower Pennsylvanian formations through parallel strings of tubing.

### DOCKET: EXAMINER HEARING! WEDNESDAY - JUNE 9, 1965

9 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 3251: (Continued from the May 26, 1965 Examiner Hearing)

Application of Continental Oil Company for a waterflood project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Rattlesnake Dakota Pool, San Juan County, New Mexico, by the injection of water into the upper and middle zones of the Dakota formation, through three injection wells in Sections 12 and 13, Township 29 North, Range 19 West.

### CASE 3260:

Application of Delaware Apache Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West Lusk Deep Unit Area comprising 1920 adves, more or less, of State and Federal lands in Township 19 South, Range 31 East, Eddy County, New Mexico.

### CASE 3261:

Application of Delaware Apache Corporation for a pool extension and special rules, Lea County, New Mexico. Applicant, in the above styled cause, seeks the extension of the Jenkins-Cisco Pool to include the S/2 of Section 19 and the NW/4 of Section 30, Township 9 South, Range 35 East, Lea County, New Mexico, and the SE/4 of Section 24, and the NE/4 of Section 25, Township 9 South, Range 34 East. Applicant further seeks the promulgation of special rules for said pool including a provision for 80-acre provation units.

### CASE 3262:

Application of Monsanto Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Queva Unit Area comprising 12,489 acres, more or less, of State, Federal and fee lands in Townships 22 and 23 South, Range 25 East, Eddy County, New Mexico.

### CASE 3263:

Application of Jake L. Hamon for the creation of a new gas pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Morrow Gas Pool for his Hamon State E-8913 Well No. 1 located in Unit A of Section 20, Township 20 South, Range 36 East, Lea County, New Mexico, and the promulgation of special pool rules including a provision for 640-acre spacing.

### CASE 3264:

Application of Carl Engwall for an exception to Commission Order R-111-A, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the potash-oil area casing and cementing rules as set forth in Commission Order R-111-A. Applicant

CASE No. 3266 Order No. R-2926

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

> STATE OF NEW MEXICO OIL COMSERVATION CONSISSION

JICK M. CAMPBELL, Chairman

GENTLES . HATE, Member

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

est/

CASE No. 3266 Order No. R-2926

- (5) That the applicant also seeks authority to commingle the Bough Permo-Pennsylvanian Pool and the undesignated Devonian pool production from its Federal "A" Well No. 4 after separately metering the production from each pool.
- (6) That approval of the proposed commingling installation will result in convenience and economy to the operator, will be in the interest of conservation, and will otherwise prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, is hereby authorized to complete its Federal "A" Well Mo. 4 located in Unit L of Section 13, Township 9 South, Range 35 Mast, MNPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Bough Permo-Pennsylvanian Pool and an undesignated Devonian pool through parallel strings of 2 3/8-inch tubing, with separation of zones by a packer set at approximately 9648 feet;

PROVIDED HOWEVER, 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;

PROVIDED FURTHER, that the applicant shall take packerleakage tests upon completion and annually thereafter during the Gas-Oil Ratio Test Period for the Devonian zone.

(2) That the applicant is hereby authorized to commingle the Bough Permo-Pennsylvanian Pool and the undesignated Devonian pool production from its Federal "A" Well No. 4 after separately metering the production from each pool;

PROVIDED HOWEVER, that said installation shall be operated in accordance with the provisions of the Commission's "Manual for the Installation and Operation of Commingling Facilities."

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

# 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. 3266 Order No. R-2926

APPLICATION OF PAN AMERICAN PETROLEUM COMPONATION FOR A DUAL COMPLETION AND COMMINGLING, LEA COUNTY, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION

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

NOW, on this 15th day of June, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FIMDS:

- (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, Pan American Petroleum Corporation, seeks authority to complete its Pederal "A" Well No. 4 located in Unit L of Section 13, Township 9 South, Range 35 East, HEPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from the Bough Permo-Pennsylvanian Pool and an undesignated Devonian pool through parallel strings of 2 3/8-inch tubing, with separation of zones by a packer set at approximately 9648 feet.
- (3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (4) That approval of the proposed dual completion will prevent waste and protect correlative rights.

# PAN AMERICAN PETROLEUM CORPORATION

Post Office Box 68
Hobbs, New Mexico
October 18, 1965

File:

VES-423-400

Subject: Commingling of Production Federal "A" No. 4 Lea County, New Mexico

3,26

Mr. A. L. Porter, Jr.
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Dear Sir:

commingling of Bough Permo-Pennsylvanian Pool and Bough Devonian Pool production on our Federal "A" No. 4 located in Section 13, Township 9 South, Range 35 East, Lea County, New Mexico.

Please cancel the above referenced order since the Bough Permo-Penn Pool is shut-in.

The referenced order also gives authority to dual complete the subject well and it is requested that this portion of the order remain in effect until final disposition is made of this zone.

Yours very truly,

V. E. Staley Area Superintendent

GAT: sh

# PAN AMERICAN PETROLEUM CORPORATION

Post Office Box 68 Hobbs, New Mexico

December 14, 1965

File:

VES-503-400 X 986.510.1

Subject: Commingling of Production Federal "A" No. 4

Lea County, New Mexico

Mr. A. L. Porter, Jr. Secretary-Director New Maxico Oil Conservation Con P. O. Box 2088 Santa Fe, New Mexico

Fle Parl Spor

Dear Sir:

Administrative Order R-2926 dated June 15, 1965, authorized the commingling of Bough Permo-Pennsylvanian Pool and Bough Devonian Pool for production on our Federal "A" No. 4 located in Section 13, Township 9 South, Range 35 East, Lea County, New Mexico.

Our letter of October 18, 1965, requested partial cancellation of this order. We are now requesting that the entire order be cancelled as the Bough Permo-Penn Pool is shut-in.

Area Superintendent

CAT: sh

Mr. I. R. Trujille Administrative Assistant New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, New Mexico

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

January 13, 1966

Pan American Petroleum Corporation P. O. Box 68 Hobbs, New Mexico

Attention: Mr. V. E. Staley

Gentlamen:

Re: Order No. R-2926

Reference is made to your letter dated December 14, 1965, requesting cancellation of Order No. R-2926 governing commingling on your Pederal "A" Lease in the Bough Field inseasch as the Bough Perno-Penn production on said lease is now shut in.

Order No. R-2926 is hereby put in abeyence.

Very truly yours,

A. L. FORTER, Jr. Secretary-Director

ALP: DENted

co: Mr. I. R. Trujillo - Santa Fe