

CASE 2823: Application of PAN AMER.
for the triple completion of its
SOUTHLAND ROYALTY "A" WELL NO. 1

CASE No.

2823

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

DISCUSSION

Pan American Petroleum Corporation respectfully requests that the New Mexico Oil Conservation Commission grant permission to triple complete its Southland Royalty 'A' No. 4, an existing dual well in the Drinkard (oil) and Tubb (gas) Pools with the Blinebry (oil) Pool of Lea County, New Mexico.

The Southland Royalty 'A' No. 4 is located ~~4620 feet from the north line and~~ in Unit 'X' ~~660 feet from the east line,~~ Section 4, T-21-S, R-37-E, which is approximately 4 miles north of Eunice, New Mexico.

This well is located in a multipay area as shown by Attachment I, a plat of the area. The west offset is Pan American Petroleum Corporation's Southland Royalty 'A' No. 8, a triple completion in the Blinebry (oil), Tubb (oil), and Drinkard (oil) zones. The southwest offset is Pan American Petroleum Corporation's Southland Royalty 'A' No. 2, a triple completion in Blinebry (oil), Tubb (gas), and Drinkard (oil) zones. The triple completions of Southland Royalty 'A' Nos. 2 and 8 were recently approved by the New Mexico Oil Conservation Commission Order Nos. R-2343 and R-2465, respectively. Blinebry gas for the subject well is presently dedicated to Pan American's Southland Royalty 'A' No. 5, the north offset. The present 80-acre Blinebry (gas) proration unit assigned to Well No. 'A'-5 will be reduced by 40 acres if permission is granted to triplely complete the subject well in the Blinebry (oil) zone.

Attachment II is a diagrammatic sketch showing the mechanical aspects of the proposed triple completion. This is a conventional triple completion utilizing dual tubing strings to produce the Blinberry and Drinkard oil zones, and utilizing the production casing - dual tubing string annulus to produce the Tubb gas. Packers will be used to maintain separation in the well bore. This installation will permit safe and efficient production for the three reservoirs.

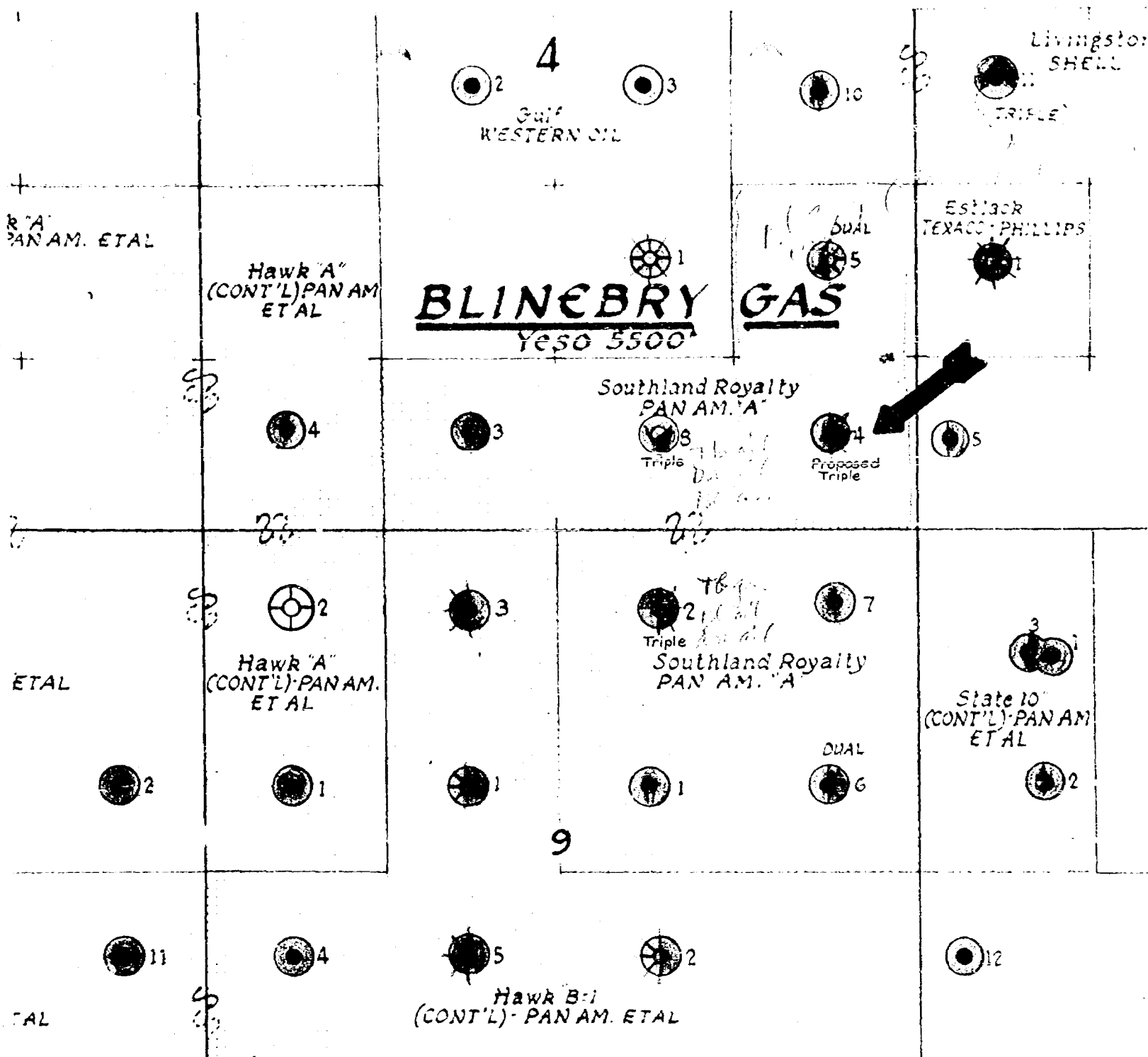
Attachment III is an Electrical Log of the Southland Royalty 'A' No. 4 with the top and bottom of the producing zones and the perforated intervals shown in red.

Attachment IV is a copy of Pan American Petroleum Corporation's application for multiple completion of the Southland Royalty 'A' No. 4. A copy of this application was furnished each offset operator.

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Applicant's EXHIBIT NO. 1
CASE NO. 2823

EXHIBIT
PAN AMERICAN PETROLEUM CORPORATION
APPLICATION FOR PERMISSION TO TRIPLE
COMPLETE ITS SOUTHLAND ROYALTY "A" NO. 4
UNIT "X", SECTION 4, T-21-S, R-37-E
LEA COUNTY, NEW MEXICO, IN THE DRINKARD
(OIL), TUBB (GAS), AND BLINEBRY (OIL)
POOLS OF LEA COUNTY, NEW MEXICO

CASE 2823
May 22, 1963



- BLINEBRY & TERRY BLINEBRY OIL
- BLINEBRY GAS
- TUBB OIL WELL
- TUBB GAS WELL
- PADDOCK OIL
- DRINKARD OIL
- WANTZ ABO OIL
- BRUNSON & HARE POOL

Attachment I

Pan American Petroleum Corp
— Lubbock District —

EUNICE T21S R37E AREA

(Lea County), New Mexico

Scale 1" = 1000'

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

5-1-61

APPLICATION FOR MULTIPLE COMPLETION

Operator Pan American Petroleum Corporation		County Lea	Date 4/30/63
Address P. O. Box 268 Lubbock, Texas		Lease Southland Royalty "A"	Well No. 4
Location of Well X	Unit 4	Township 21-S	Range 37-E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES ☒ NO ☐

2. If answer is yes, identify one such instance: Order No. R-2343; Operator, Lease, and Well No.:
Pan American Petroleum Corporation
Southland Royalty A-2

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Blinebry	Tubb	Drinkard
b. Top and Bottom of Pay Section (Perforations)	To be selected between 5800 & 6000'	6176-6392	6595-6655
c. Type of production (Oil or Gas)	Oil	Gas	Oil
d. Method of Production (Flowing or Artificial Lift)	est flow	flow	flow

4. The following are attached. (Please mark YES or 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.
- ☒ b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- ☐ c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
- ☐ d. Electrical 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.

Continental Oil Co., Attn: Mr. W. A. Mead, 825 Petroleum Bldg., Roswell, New Mexico

Western Oil Fields Inc., Attn: Mr. R. H. Swarthout, Box 1147, Hobbs, New Mexico

Texaco Inc., Attn: Mr. W. C. Lentz, Box 3109, Midland, Texas

Shell Oil Company, Attn: Mr. R. L. Rankin, Box 845, Roswell, New Mexico

Humble Oil & Refining Co., Attn: Mr. H.L. Hensley, Box 1600, Midland, Texas

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES ☒ NO ☐ . If answer is yes, give date of such notification 4-30-63

CERTIFICATE: I, the undersigned, state that I am the District Engineer of the Lubbock District Pan American Pet. Corp (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.

A.J. Inderrieden Signature

- * Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor 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 proration unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

Attachment IV

DRAFT

JMD/esr
May ____, 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. 2823

Order No. R- 2497

APPLICATION OF PAN AMERICAN PETROLEUM
CORPORATION FOR A TRIPLE COMPLETION,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 22, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, 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 June day of May, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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, Pan American Petroleum Corporation, seeks authority to complete its Southland Royalty "A" Well No. 4, located in Unit X of Section 4, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, as a triple completion (conventional) to produce oil from the ~~Brinkard~~ ^{Blindery} and ~~Blindery~~ ^{Brinkard} Oil Pools through parallel strings of 2 -inch tubing and to produce gas from the Tubb Gas Pool through the ~~casing~~ ^{casing-tubing} annulus, with separation of zones by packers set at approximately 6050 feet and 6500 feet.

(3) That the mechanics of the proposed triple completion are feasible and in accord with good conservation practices.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, is hereby authorized to complete its Southland Royalty "A" Well No. 4, located in Unit X of Section 4, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, as a triple completion (conventional) to produce oil from the ~~Drinkard~~ ^{Blumby} and ~~Blumby~~ ^{Drinkard} Oil Pools through parallel strings of 2 -inch tubing and to produce gas from the Tubb Gas Pool through the ~~casing~~ ^{Casing - tubing} annulus, with separation of zones by packers set at approximately 6050 feet and 6500 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 ^{packer} ~~leakage~~ tests upon completion and annually thereafter during the gas-oil ratio Test Period for the Drinkard Oil Pool.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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

PAN AMERICAN PETROLEUM CORPORATION

Lubbock, Texas
April 30, 1963

13

File: WJS-3342-986.510.1 x 400.1

Subject: Application for Permission
To Triple Complete
Pan American Petroleum Corporation's
Southland Royalty "A" Well No. 4
In the Drinkard-Tubb-Blinebry Pools
Lea County, New Mexico

Mr. A. L. Porter
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Sir:

In accordance with provisions set out in statewide Rule 112, Pan American Petroleum Corporation respectfully requests that you schedule a hearing to consider its application for permission to triple complete (conventional) the subject well in the pools specified above.

As shown on the attached plat, this well is located in Unit "X" of Section 4, T-21-S, R-37-E, Lea County, New Mexico. This completion will be conventional, utilizing separate tubing strings to produce the Drinkard and Blinebry which will be oil production with the Tubb gas production produced through the annulus of the 5-1/2" casing which is set at 6,748'. Packers will be utilized to separate production of the three zones in the wellbore. The Southland Royalty "A" Well No. 8 is offset by properties operated by the five operators shown on the attached application for multiple completion and copies of this application are being furnished these operators.

Yours very truly,

Neil S. Whitmore
Neil S. Whitmore
District Superintendent

RES/jn
Attachment

DOCKET MAILED

Date 5-10-63

JK

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

5-1-61

APPLICATION FOR MULTIPLE COMPLETION

Operator Pan American Petroleum Corporation		County Lea	Date April 30, 1963
Address P. O. Box 268, Lubbock, Texas		Lease Southland Royalty "A"	Well No. 4
Location of Well X	Unit 4	Township 21-S	Range 37-E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES ☒ NO ☐
2. If answer is yes, identify one such instance: Order No. **R-2343**; Operator, Lease, and Well No.: **Pan American Petroleum Corporation Southland Royalty "A" No. 2**

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Blinebry	Tubb	Drinkard
b. Top and Bottom of Pay Section (Perforations)	To be selected between 5800' and 6000'	6176-6392'	6595-6655'
c. Type of production (Oil or Gas)	Oil	Gas	Oil
d. Method of Production (Flowing or Artificial Lift)	Est. flow	flow	flow

4. The following are attached. (Please mark YES or NO)

- ☐ a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, controllers 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.
- ☒ b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.
- ☐ c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*
- ☐ d. Electrical 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.

Continental Oil Company, Attn: Mr. W. A. Mead, 825 Petroleum Bldg., Roswell, New Mexico

Western Oil Fields, Inc., Attn: Mr. R. H. Swarthout, Box 1147, Hobbs, New Mexico

Texaco, Inc., Attn: Mr. W. C. Lenz, Box 3109, Midland, Texas

Shell Oil Company, Attn: Mr. R. L. Rankin, Box 845, Roswell, New Mexico

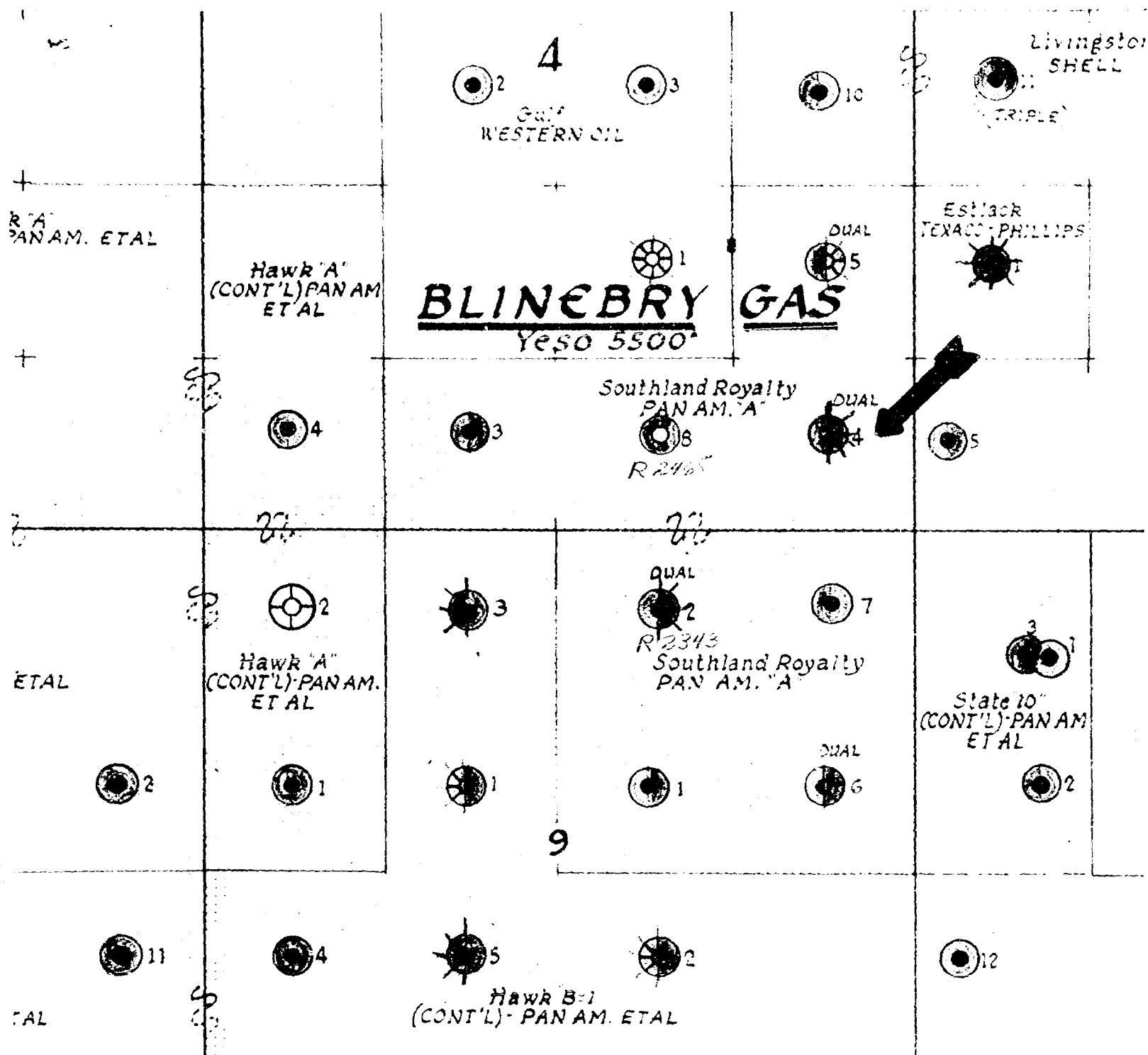
Humble Oil and Refining Co., Attn: Mr. H. L. Hensley, Box 1600, Midland, Texas

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES ☒ NO ☐ . If answer is yes, give date of such notification **April 30, 1963**

CERTIFICATE: I, the undersigned, state that I am the **District Engineer** of the **Lubbock District** **Pan American Petroleum Corporation** (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.

A. J. Inderrieden Signature

- * Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor 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 proration unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.



- BLINEBRY & TERRY BLINEBRY OIL
- BLINEBRY GAS
- TUBB OIL WELL
- TUBB GAS WELL
- PADDOCK OIL
- DRINKARD OIL
- WANTZ ABO OIL
- BRUNSON & HARE POOL

Pan American Petroleum Corp
Lubbock District

EUNICE T-21-S R-37-E AREA

Lea County, New Mexico

Case 2823 Scale: 1" = 1000'

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 22, 1963

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, as alternate examiner:

- CASE 2814: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Stanley L. Jones and Sam Watkins and all other interested parties to appear and show cause why La Esperanza State Well No. 1, located in Unit D of Section 10, Township 19 South, Range 29 East, Eddy County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2815: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Corine Foster dba Corine Foster Oil Company and all other interested parties to appear and show cause why the Corine Foster Oil Company Ohio Farris Well No. 1, located in Unit P of Section 4, Township 19 South, Range 26 East, Eddy County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2816: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit C. T. Robertson and all other interested parties to appear and show cause why the Honolulu-State "B" Wells Nos. 4 and 5 in Units G and H respectively, of Section 11, Township 11 South, Range 27 East, Chaves County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2817: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Fred M. Allison and C. T. Robertson and all other interested parties to appear and show cause why the Honolulu State "A" Wells Nos. 1, 2, 3, 4, and 5, located in Units D, C, E, F, and D, respectively, of Section 14; the Honolulu State "B" Wells Nos. 1, 2, and 3, located in Units I, O, and J, respectively, of Section 11; and the Magnolia State Well No. 1, located in Unit P of Section 11, all in Township 11 South, Range 27 East, Chaves County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.
- CASE 2818: Application of Union Oil Company of California for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the West McDonald Unit Area comprising 2,560 acres of State and Fee lands in Township 14 South, Range 35 East, Lea County, New Mexico.
- CASE 2819: Application of M. F. Abraham for a unit agreement, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Star Lake Unit Area comprising 22,358 acres of Federal, State, Indian and Fee lands in Townships 18 and 19 North, Ranges 5 and 6 West, McKinley County, New Mexico.
- CASE 2820: Application of Texas Pacific Coal & Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration

unit comprising the NE/4 of Section 20 and the NW/4 of Section 21 Township 23 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its State "A" A/c-1 Well No. 6, located 2310 feet from the North line and 1650 feet from the West line of said Section 21.

CASE 2821: Application of D. W. Falls, Inc. for an extension of Order No. R-2213, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the extension of Order No. R-2213, which order assigned a temporary deliverability for allowable purposes to applicant's Federal Well No. 2-11, located in Unit O of Section 11, Township 28 North, Range 13 West, Basin-Dakota Gas Pool, San Juan County, New Mexico.

CASE 2822: Application of Gulf Oil Corporation for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard gas proration unit comprising the SE/4 SE/4 of Section 28 and the NE/4 NE/4 of Section 33, Township 21 South, Range 37 East, Blinebry Gas Pool, Lea County, New Mexico, to be dedicated to its J. N. Carson Well No. 6 located in Unit P of said Section 28.

CASE 2823: Application of Pan American Petroleum Corporation for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (conventional) of its Southland Royalty "A" Well No. 4, located in Unit X of Section 4, Township 21 South, Range 37 East, Lea County, New Mexico, to produce oil from the Drinkard and Blinebry formations through parallel strings of tubing and gas from the Tubb Gas Pool through the casing annulus.

CASE 2824: Application of Texaco Inc. for a triple completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "O" Well No. 14, located in Unit J of Section 36, Township 17 South, Range 34 East, Lea County, New Mexico, to produce oil from the North Vacuum-Abo and the Vacuum-Wolfcamp Pools through parallel strings of 2 7/8-inch casing and from the Vacuum-Devonian Pool through 1 1/2-inch tubing installed within 3 1/2-inch casing, all casing strings to be cemented in a common well bore.

CASE 2825: Application of Sinclair Oil & Gas Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its State Lea 403 Well No. 4 located in Unit D of Section 17, Township 18 South, Range 35 East, Lea County, New Mexico, to produce oil from the Bone Springs and Devonian formations through parallel strings of tubing.

CASE 2826: Application of Texaco, Inc. for a triple completion and for certain administrative procedures, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the triple completion (combination) of its State "L" Well No. 6 located in Unit B of Section 1, Township 18 South, Range 34 East, Lea County, New Mexico, to produce oil from the Vacuum Wolfcamp Pool and an undesignated Pennsylvanian pool through

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Docket No. 15-63

parallel strings of 2 7/8 inch casing and from the Vacuum-Devonian Pool through 1½ inch tubing installed within 3½ inch casing, all casing strings to be cemented in a common well bore. Applicant further seeks a procedure whereby 1½ inch tubing for Devonian production in this field may be approved administratively.

CASE 2806:

(Continued from May 15, 1963 Hearing)

Application of Sun Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force pooling all mineral interests in the Oil-Center Blinebry Pool underlying the W/2 SW/4 of Section 3, Township 21 South, Range 36 East, Lea County, New Mexico.

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

P. O. BOX 871
SANTA FE

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

June 11, 1963

Mr. Charles Malone
Atwood & Malone
Attorneys at Law
Box 700
Roswell, New Mexico

Re: Case No. 2823
Order No. R-2497
Applicant:

Pan American Petroleum Corporation

Dear Sir:

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

Very truly yours,

A handwritten signature in cursive script, reading "A. L. Porter, Jr.".

A. L. PORTER, JR.
Secretary-Director

ix/

Carbon copy of order also sent to:

Hobbs OCC X

Artoria OCC

Astec OCC

OTHER Guy Buell

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 5/22/63

CASE 2823

Hearing Date 9am 5/22/63
DEN@SF

My recommendations for an order in the above numbered cases are as follows:

Enter an order approving
the ~~low~~ triple completion (conven-
tional) of Pan Americans Southland
Payalty "A" no 4, located in Unit X
of Sec 4, Twp 21 S, Rge 37 E, to produce
oil from the Blinkey and Drinkard
oil pools thru parallel strings
of 2 inch OD button thread tubing
and gas from the Tuba gas
pool thru the casing tubing
annulus, separation of the productive
zones to be achieved by packers
set at approx 6050' and at 6500'
Packer leakage tests upon completion
& annually thereafter during the
Drinkard GOR test period.

Vandusen

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. 2823
Order No. R-2497

APPLICATION OF PAN AMERICAN PETROLEUM
CORPORATION FOR A TRIPLE COMPLETION,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on May 22, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, 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 11th day of June, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, 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, Pan American Petroleum Corporation, seeks authority to complete its Southland Royalty "A" Well No. 4, located in Unit X of Section 4, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, as a triple completion (conventional) to produce oil from the Blinbry and Drinkard Oil Pools through parallel strings of 2-inch tubing and to produce gas from the Tubb Gas Pool through the casing-tubing annulus, with separation of zones by packers set at approximately 6050 feet and 6500 feet.

(3) That the mechanics of the proposed triple completion are feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent waste and protect correlative rights.

-2-

CASE No. 2823
Order No. R-2497

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, is hereby authorized to complete its Southland Royalty "A" Well No. 4, located in Unit X of Section 4, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, as a triple completion (conventional) to produce oil from the Blinbry and Drinkard Oil Pools through parallel strings of 2-inch tubing and to produce gas from the Tubb Gas Pool through the casing-tubing annulus, with separation of zones by packers set at approximately 6050 feet and 6500 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 packer-leakage tests upon completion and annually thereafter during the Gas-Oil Ratio Test Period for the Drinkard Oil Pool.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


Jack M. Campbell
JACK M. CAMPBELL, Chairman

E. S. Walker
E. S. WALKER, Member

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

esr/

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

6-1-56

PACKER-SETTING AFFIDAVIT
(Dual Completions)

STATE OF NEW MEXICO)
County of Lea) ss

Dewey E. Taylor, being first duly sworn according to law, upon his oath deposes and says:

That he is of lawful age and has full knowledge of the facts herein below set out.

That he is employed by Amoco Production Company in the capacity of Field Foreman and as such is its authorized agent.

That on May 21, 19 75, he personally supervised the setting of a Guiberson KVL-30 in Amoco Production Company's
(Make and Type of Packer) (Operator)

Southland Royalty "A" Well No. 4, located in Unit
(lease)
Letter X, Section 4, Township 21-S, Range 37-E, NMPM,
Lea County, New Mexico.

That said packer was set at a subsurface depth of 6423' feet,
said depth measurement having been furnished by Dewey E. Taylor.

That the purpose of setting this packer was to effect a seal in the annular space between the two strings of pipe where the packer was set so as to prevent the commingling, within the well-bore, of fluids produced from a stratum below the packer with fluids produced from a stratum above the packer. That this packer was properly set and that it did, when set, effectively and absolutely seal off the annular space between the two strings of pipe where it was set in such manner as that it prevented any movement of fluids across the packer.

Amoco Production Company
(Company)

Dewey E. Taylor
(its Agent)

Subscribed and sworn to before me this the 27th day of June, AD, 19 75.

R. W. Samail
Notary Public in and for the County
of ANDREWS, TEXAS.

My Commission Expires JUNE 1, 1977.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
May 22, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Pan American Petroleum Corporation
for a triple completion, Lea County, New Mexico.
Applicant, in the above-styled cause, seeks
approval of the triple completion (conventional)
of its Southland Loyal y Unit No. 4, located
in Unit X of Section 2, Township 21 South, Range
37 East, Lea County, New Mexico, to produce oil
from the Drinkard and underlying formations through
parallel strings of tubing and gas from the Tull
Gas Pool through the casing annulus.

CASE 2823

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We'll call Case 2823.

MR. DURRETT: Application of Pan American Petroleum
Corporation for a triple completion, Lea County, New Mexico.

MR. HARVEY: I'm Carl Harvey, the technical witness.
We are to be represented by Mr. Malone from Roswell. He anticipated
getting a later charter flight out this morning if he couldn't
leave there to be here by 1:30 o'clock by plane. I anticipated
that he would be here by 1:00 o'clock. He asked that I request
this be moved back on the docket.

MR. NUTTER: Have you heard anything from him yet?

MR. HARVEY: No, sir, I haven't.

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MR. BUTTER: In that case, we'll recess the hearing until 1:15. We will call this case at that time.

(Whereupon, the hearing was recessed.)

X Y X

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal this 4th day of June, 1963.

NOTARY PUBLIC

My Commission Expires:

June 19, 1963.

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(The hearing was declared reconvened by Mr. Nutter at the hour of one fifteen o'clock in the afternoon, on the 22nd day of May, 1963, in the hearing room of the Oil Conservation Commission State Land Office Building, Santa Fe, New Mexico.)

(The Applicant was represented by Mr. Charles F. Malone, Attorney at Law, Roswell, New Mexico.)

MR. NUTTER: The hearing will come to order. Mr. Durrett, you may proceed.

MR. DURRETT: Thank you.

MR. MALONE: We will use Mr. Harpke.

CARL F. HARPKE

was called as a witness for the applicant, and having been first duly sworn, testified upon his oath as follows:

DIRECT EXAMINATION

BY MR. MALONE:

Q. Would you state your name, please, sir.

A. Carl F. Harpke.

Q. Your address?

A. 3008 37th Street, Lubbock, Texas.

Q. You are a petroleum engineer in the office of Pan American Petroleum Corporation at Lubbock, is that right?

A. Yes, sir.

Q. And the Lubbock office has jurisdiction over the Lea County, New Mexico area?



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A. Yes, sir.

Q. You have not heretofore testified before this Commission, have you?

A. No, I have not.

Q. Would you briefly state your education and experience in the petroleum engineering field?

A. I graduated from the Colorado School of Mines with a degree of petroleum engineer in 1954, and I have since been employed by Pan American, with the exception of two years military service. I had roughly six years experience in the Rock Mountain and one year experience in the Lubbock district office.

Q. Are you familiar with the exhibit offered by Pan American in this case?

A. Yes.

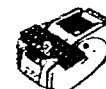
Q. Would you very briefly state the purpose of it?

A. The purpose of this application is to request permission for a triple completion of Pan American royalty "A"4, in the Drinkard oil and Blinebry oil pool in Lea County New Mexico.

Q. Are the qualifications of this witness satisfactory to the Commission?

MR. NUTTER: Yes, sir, they are.

Q. (Mr. Malone, continuing) Would you begin now with attachment No. 1 in Exhibit No. 1 and describe briefly what it shows.



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Attachment No. 1 is a plat of the general area surrounding the well for which we are requesting the triple completion. I have Southland royalty "A", No. 6 marked with an arrow. This is presently a dual Drinkard Tubb gas completion. Most of the wells in this area are dual completions. However, the west offset to this well on No. 8 is a triple completion in the Tubb oil, Drinkard oil, and Blinebry oil zones. This triple completion should be -- was recently approved by the Commission's order No. R-2465. Also the southwest offset to the proposed triple completion is a triple completion in the Tubb (gas) Blinebry (oil), and Drinkard (oil) zones.

This triple completion was authorized by the Commission's No. R-2343. There is one other triple completion in the immediate area, which is Shell Oil Company's Livingston No. 11, which is located approximately a half mile to the northeast of our proposed triple completion.

Q. Have the offset operators shown on Attachment No. 1 been furnished a copy of this application and notice of this hearing?

A. Yes, sir, they have. A copy of this notice, or rather a copy of our application to the Commission, was furnished each offset operator and is shown here as Attachment No. 4.

Q. In Exhibit 1?

A. In Exhibit 1.



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Q. Has Pac American received any objection or comment from any offset operator concerning this application?

A. No, sir, we have not.

Q. Anything further on Attachment No. 1, Mr. Harpke?

A. One thing. We presently have an eighty acre Brinebry (oil) proration unit set up for well No. 5. This includes forty acres for the -- excuse me. This is an eighty acre Brinebry (gas) exploration unit. It includes forty acres dedicated to the Brinebry (gas) surrounding well 5, and forty acres dedicated to the Brinebry surrounding well 4. If we receive our approval of our application to triple complete in the Brinebry (oil) zone, we will then reduce the eighty acre gas proration unit by forty acres.

Q. All right, sir. Would you go now to Attachment No. 2 of the exhibit and describe briefly the manner in which you propose to complete the well.

A. Attachment No. 2 is a diagrammatical sketch of the mechanical hook-up of the proposed completion.

We have here color-coded the produce fluids from the various formations and the flow path through which we are going to get them to the surface. The red indicates the lower zone, which is the Drinkard (oil) zone. The yellow is the middle zone, which is the Tubb (gas) zone, and the green will be the proposed Blinebry (oil) zone.



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We presently have thirteen and three-eighths in surface casings set at three hundred and five feet with three hundred sacks of cement circulated at surface; eight and five-eighths of intermediate casing set at twenty-nine oh-five with one hundred sacks of cement and three hundred and seventy-five sacks containing eight per cent gel.

We found the top of the cement at seventeen hundred and fifty feet by temperature surveys. Behind this intermediate string we have a five and a half inch oil string set at sixty-seven forty-eight, with a hundred and eighty sacks, four per cent gel, and forty-five sacks of signalite.

The top of the cement was located by temperature survey at forty-five hundred and seventy in our production string five and a half inch production string.

Q. In your opinion, are the three productive zones effectively separated?

A. By the primary cement job, you mean?

Q. Yes.

A. Yes, sir.

Q. Now, then, are the Baker model "FA" and "F" and "D" packers, which you propose to use, accepted in the industry as being satisfactory and effective?

A. Yes, sir.

Q. What else is there that you believe should be



mentioned in connection with that Attachment No. 2, Mr. Harpke?

A. Well, as shown here, by the sketch, both the Blinebry (oil) zone and the Drinkard (oil) zone will be produced through two inch O. D. buttress tubing. Our Tubb (gas) zone will be produced through the annulus of the five and a half inch production string. We will have a triple-flow tube set in our Baker model "E" packer, and a dual-flow tube crossover set in our Baker model "F" packer. In the tubing string, the Drinkard tubing string, we will have a Garrett sleeve, which will normally be in a closed position. However, we can open this to permit swabbing in the Tubb (gas) zone in the event we had any work orders and had to kill this zone. That is the purpose of this Garrett sleeve.

Q. All right, sir.

A. The Blinebry (oil) zone will be perforated at an interval between fifty-eight hundred and six thousand feet. We have not been able to determine the exact interval yet, since we are running a gamma ray neutron log and selecting actual perforating intervals upon work order of the well. The Tubb (gas) zone is presently producing from various perforated intervals between sixty-one seventy-six and sixty-three ninety-two, and the Drinkard (oil) zone is producing from a continuous perforated interval between sixty-five ninety-five and sixty-six fifty-five.

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Q. So I understand, then, this is a workover of a producing well, which you propose?

A. That is correct.

Q. All right, sir. Now, going to Attachment No. 2, would you describe briefly what it shows.

A. Attachment No. 3 is an electrical log of the subject well showing the tops and bottoms of the various producing formations, and also the producing formation, the Blinbry. I have noted here in red the present producing, or the present perforated intervals in the Tubb and in the Drinkard zones.

Q. And, as you stated before, the actual perforations in the Blinbry will be made on the basis of a subsequent survey?

A. Yes, sir.

Q. Is there anything else in connection with Attachment No. 3?

A. No.

Q. You have previously testified that Attachment No. 4 is the application, is that correct?

A. Yes, sir.

Q. Now, then, if I have not previously asked you, was this exhibit prepared by you or under your supervision?

A. Yes, it was.

Q. Is the proposed triple, here, similar to the two triples previously approved by the Commission in this area?



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Yes, with the exception that in this triple we are going to produce the Tubb (gas) through the five and a half inch annulus, between the five and a half inch casing and the two tubing strings, which will be found between the Blinebry (oil) and the Drinkard (oil). I believe in the other two completions a third tubing string was run.

Q. Will the granting of this application prevent economic waste, Mr. Harpke?

A. Yes, it will.

Q. In what respect?

A. In the respect that the estimated cost to triple complete this well is approximately twenty-four thousand dollars. The estimated cost of drilling a single completion to the Blinebry (oil) zone would be between seventy to eighty thousand dollars, and we have an offset -- an offset well on the Shell Livingston lease here, well No. 5, which is presently an able well in the Blinebry (oil) zone, and we wish to offset that.

Q. Is there any question in the opinion of Pan American, and in your opinion, as to whether the drilling of this separate well solely to Blinebry might be economic?

A. I have not personally looked at that.

Q. All right, sir. With respect to the entire application, Mr. Harpke, is there anything further that you feel the Examiner should be given in the way of information?



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Q. No, sir, I have nothing additional.

MR. MALONE: We move the admission of Exhibit No. 1 of the Applicant.

MR. NUTTER: Applicant's Exhibit 1 will be admitted in evidence.

MR. MALONE: That's all of our examination.

MR. NUTTER: Does anyone have any questions of the witness?

MR. DURRETT: Yes, sir, I have one question.

MR. NUTTER: Mr. Durrett.

CROSS EXAMINATION

BY MR. DURRETT:

Q. First, would you spell your last name.

A. H-a-r-p-k-e.

Q. The specific question I had, Mr. Harpke, was referring to the packers involved.

A. Yes, sir.

Q. I am not familiar with all these types of packers. Are all these permanent type packers?

A. Yes, sir, they are permanent type packers, and they are all similar in construction to the Baker model "D" packer, with the exception that the internal diameters of the model "F" and "FA" packers are larger than the other packer. Other than that, the construction is the same.



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Q. And they are permanent?

A. Yes.

MR. BURRETT: That's all.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Mr. Harpke, at this time this is a Tubb (gas) and Drinkard (oil) completion. Is the Tubb (gas) being produced through the annulus, or is it being produced through the tubing?

A. I am sorry. I can not answer that.

Q. Do you know what the gas liquid ratio is on the Tubb (gas)?

A. Yes, sir. The Tubb (gas) zone averaged thirty-nine m.c.f. per day with just a trace of distillate during March, 1963.

Q. So it is a high ratio?

A. Yes, sir, it is.

Q. Very high?

A. Very high.

Q. And you don't anticipate there will be any fluid problem in producing through the annulus?

A. No, sir, I sure don't.

MR. NUTTER: If there are no further questions of the witness, he may be excused. Do you have anything further, Mr. Malone?



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MR. MALONE: Not unless the Commission would wish to have an answer to the question, which we did not have. We could supply that by telegram or letter, if you would like.

MR. NUTTER: Well, in view of the fact that the high ratio is extremely high, I don't think there would be any problem there.

MR. MALONE: Fine. Thank you very much.

MR. NUTTER: Does anyone have anything they wish to offer in this case, 2823? If not, we will take the case under advisement and the hearing is adjourned.

(Thereupon, the hearing was adjourned at approximately one forty-five in the afternoon.)

* * *

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, HOWARD W. HENRY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal this 13th day of June, 1963.

Howard W. Henry
NOTARY PUBLIC

I do hereby certify that the foregoing is a true and correct record of the proceedings in the Examiner hearing of Case No. 2823 heard by me on 5/22, 1963

[Signature], Examiner
New Mexico Oil Conservation Commission

