

CASE 2974: Application of PAN AM.
for a triple completion, Lea
County, New Mexico.

CASE No.

2974

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 268
Lubbock, Texas 79401
December 18, 1963

File: RES-3815-986,510.1

Subject: Application of Pan American
Petroleum Corporation For
Triple Completion in the
Fowler Paddock (Gas), Fowler
Tubb (Gas), and Undesignated
Lower Paddock (Gas) Pools
South Mattix Unit Well No. 16
Lea County, New Mexico

Mr. A. L. Porter, Jr. (3)
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Sir:

Pan American Petroleum Corporation, operator of the South Mattix Unit, respectfully requests that a hearing be docketed to consider its application for the subject triple completion for its South Mattix Unit Well No. 16, located 990' FS X WL, SE/4 Section 15, T-24-S, R-37-E, Lea County, New Mexico.

By Administrative Order MC-1395, administrative approval for a triple completion of the subject well in the Fowler Paddock, Tubb and Blinebry Pools was granted. Upon testing the Blinebry it was determined that this formation was non-commercial. A test of the Lower Paddock interval has produced gas which we consider to be a separate reservoir from the Fowler Paddock pay and which constitutes a discovery. This interval is not producing in any other well in the vicinity.

Attached is a copy of Application for Multiple Completion and a plat of the area.

Currently South Mattix Unit No. 10 located in Unit H of Section 15 T-24-S, R-37-E, in the same proration unit with Well No. 16, is completed in the Fowler Paddock Field. This is to certify that the Fowler Paddock pay in Well No. 16 will not be produced concurrently with Well No. 10.

Yours very truly,

Neil S. Whitmore
District Superintendent

RES/jn
Attachment
cc: Sinclair Oil & Gas Co.
Humble Oil & Refining Co.
Gulf Oil Corporation

DOCKET MAILED

Date 1-4-64

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

5-1-61

APPLICATION FOR MULTIPLE COMPLETION

Operator Pan American Petroleum Corporation		County Lea	Date December 18, 1963
Address P. O. Box 268, Lubbock, Texas		Lease South Mattix Unit	Well No. 16 21
Location or Well	Unit 0	Section 15	Township 24 South
			Range 37 East

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 X _____
2. If answer is yes, identify one such instance: Order No. _____ ; Operator, Lease, and Well No.: _____

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Paddock	Lower Paddock	Tubb
b. Top and Bottom of Pay Section (Perforations)	4833-80	5160-80	5862-6101
c. Type of production (Oil or Gas)	Gas	Gas	Gas
d. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing	Flowing

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

- 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 operators of all leases offsetting applicant's lease.
- No 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.*
- No 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.

Humble Oil & Refining Co. - Box 1600, Midland, Texas

Sinclair Oil & Gas Co. - 520 Broadway, Hobbs, New Mexico

Gulf Oil Corporation - Box 2167, Hobbs, New Mexico

6. Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO ____ . If answer is yes, give date of such notification **12-18-63**

CERTIFICATE: I, the undersigned, state that I am the **District Engineer** of the **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.

APPLICATION FOR A TRIPLE COMPLETION

THE AMERICAN OIL CORP.
SOUTH TEXAS UNIT #16
Unit O, Sec. 15, T24S R37E

FOR
FOWLER PADDOCK GAS POOL
UNDESIG. LOWER PADDOCK GAS
FOWLER TUBE GAS POOL

N.M.O.C.C.
Hobbs, N.M.
Jan. 8, 1964
J.W.R.

TRIPLE COMPLETION APPLICATION

Pan American
South Mattix Unit #16
Unit O, Sec. 15, T24S R37E

Fowler Paddock Gas Pool,	Perf. 4949'-85'	Top Glorieta 4902'
Lower Undesig. Paddock Gas,	Perf. 5160'-80'	Top Blinebry 5274'
Fowler Tubb Gas Pool,	Perf. 5936'-6115'	Top Tubb 5790'

-FINDINGS

1. A check on the other four (4) wells in the Fowler Paddock Gas pool shows that all completions are in the upper Paddock/Glorieta sand.
2. There are no completions in the lower Paddock.
3. That all wells completed in the Fowler Blinebry oil pool are at /or below the Blinebry Marker. (No completions presently cross the Blinebry Marker).
4. There is 275' between the upper Paddock completion and the lower undesignated Paddock completion, and 114' between the lower Paddock completion and the top of the Blinebry Marker, in the Pan American So. Mattix unit #16. See figure No. 1.
5. That a water/gas contact at -1673' separates the Fowler Paddock Gas Pool from the lower Paddock gas zone.
6. Laterologs and Sonic logs indicate that the lithology and porosity is continuous from the lower Paddock @ 5080' through the Blinebry.
7. Sample logs indicate that shows of hydrocarbons and porosity are continuous from the lower Paddock through the Blinebry.
8. That the Gulf Plains Knight #2 well was originally completed 50' above the Blinebry Marker, (5290-5590') and this well had a COR of 19,120, with 57 BOPD, indicating a partial completion in the gas cap of the Fowler Blinebry oil Pool.
9. That the Fowler Blinebry oil Pool has a solution gas drive and therefore has to have a gas cap. ? ? ? ? ?
10. The Fowler structure is in the same geologic position in relation to the Delaware Basin as the Oil Center Blinebry, the Monument Blinebry, the Weir Blinebry, the Blinebry pool, the North Justis and Justis Blinebry pools, all of which have reservoirs (& porosity) crossing the Blinebry Marker into the lower Paddock.

SUMMARY

1. That the Fowler Paddock Gas Pool is separated from the lower Paddock Gas zone by a water/gas contact; and is therefore separate reservoirs.
2. There is a strong indication that the lower Paddock Gas zone is actually a gas cap for the Fowler Blinebry oil Pool. This is evidenced by well logs, sample logs, and a previous well completion across the Blinebry Marker.

CONCLUSIONS

In order to receive approval for this triple completion, Pan American should prove that the Lower Paddock Gas Zone is a separate reservoir from the Fowler Blinebry oil pool; not a gas cap of the Fowler Blinebry oil pool.

John W. Runyan
Geologist
N.M.O.C.C., Hobbs, N.M.

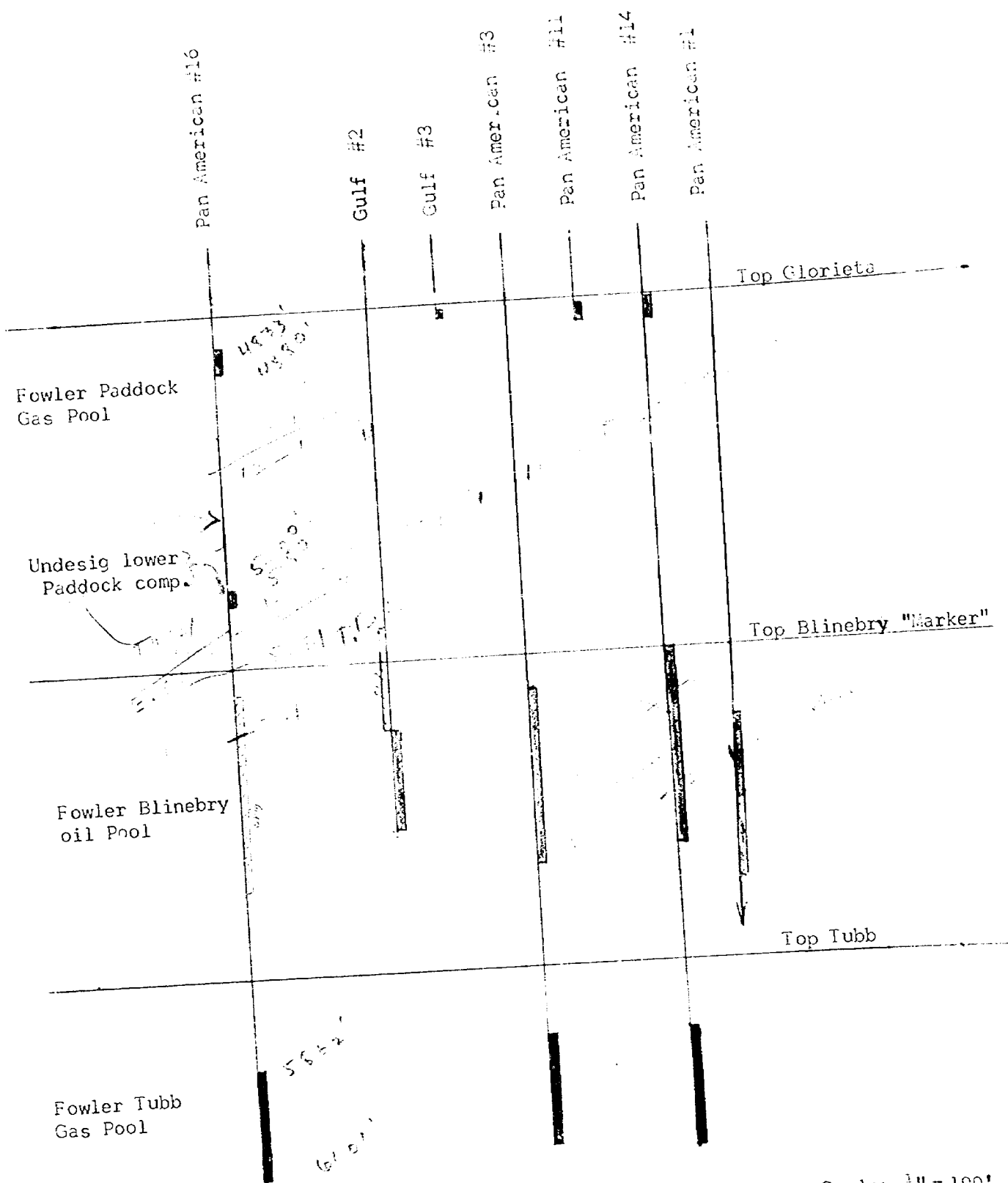


FIGURE 1.

Completions inrelation to formation tops.

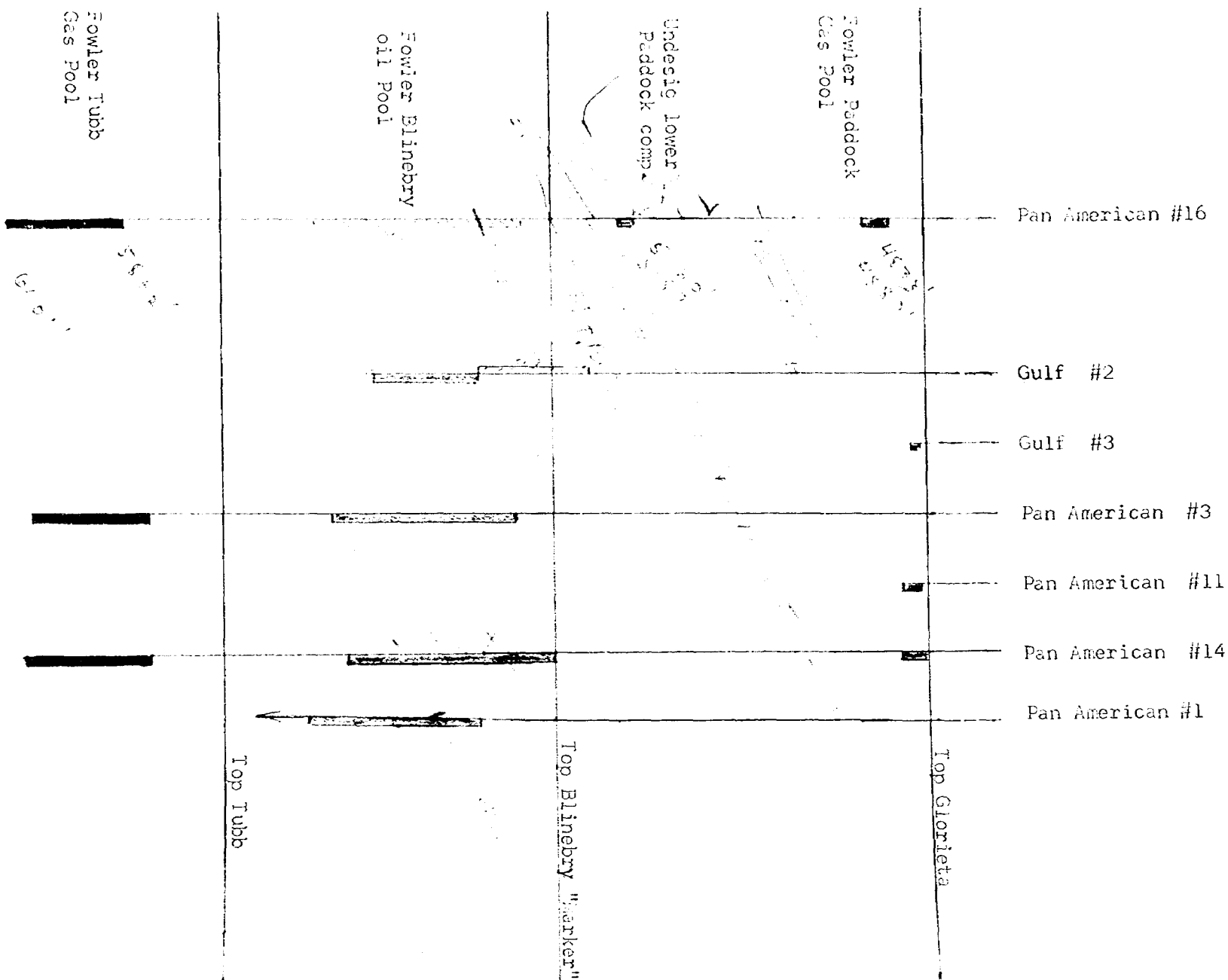


FIGURE 1.

Completions in relation to formation tops.

Scale: 1/2" = 100'

FOWLER BLINEBRY FIELD
RESERVES

Average net pay, feet.	36
Porosity, %	5.5
Water Saturation, %	20
Reservoir control	Solution Gas Drive
Recovery Factor, %	18
Original RVF	1.6
Solution GOR	1060
Ultimate Recovery, Bbls/Acre	1375
Gravity	38° API
Original BHP, psi.	2041

STRUCTURE

The Blinebry structure is a plunging asymmetrical anticline, the major axes of which trends northwest southeast. The pay closure is approximately 150'.

GENERAL

The Fowler Blinebry pool was discovered by Gulf Oil Corporation's Plains Knight No.2. Unit N-23-24-37. February 1954.

Reservoir characteristics for the lower Paddock Gas zone is not available at this time.

PRESSURES, GOR, AND GRAVITIES for
the FOWLER PALDACK & BLINNEY
FIELDS

FOWLER PALDACK GAS FIELD

	<u>Date</u>	<u>Press.</u>	<u>GOR</u>	<u>Grav.</u>	<u>Type test</u>
Gulf- Plains Knight #3	June 1963	1513#	xxxx	xxxx	Workover-72 hrs.
Pan Am.-So. Mattix #14	Jan. 1963	1632#	xxxx	xxxx	Packer - 21 hrs.
	Nov. 1962	1660#	xxxx	xxxx	Packer - 24 hrs.

FOWLER BLINNEY (oil) POOL

Gulf- Plains Knight #2	June 1960	xxxxx	9800	xxxx	Before workover
	June 1960	xxxxx	2543	xxxx	After workover
	Feb. 1954	xxxxx	19120	xxxx	Before Recomp.
	Jan. 1954	xxxxx	xxxx	42.1°	Original.
Pan Am.-So. Mattix #1	Nov. 1963	1650#	9180	38.0°	Packer - 24 hrs.
Pan Am.-So. Mattix #3	Dec. 1963	1650#	7390	38.1°	Packer - 21 hrs.
	Aug. 1963	1280#	2220	xxxx	Workover.
		TPF			
Pan Am.-So. Mattix #14	Jan. 1963	2020#	765	39.2°	Packer - 21 hrs.
	Nov. 1962	1740#	1286	38.1°	Packer - 24 hrs.
	Oct. 1962	xxxxx	1060	38.1°	Original test.

COMPLETION SHEET

FOWLER Paddock GAS POOL

	<u>Location</u>	<u>Elev.</u> <u>DF</u>	<u>Top</u> <u>Glor.</u>	<u>Top</u> <u>Eli.</u>	<u>Top</u> <u>Tubb</u>	<u>Perf.</u>
Gulf-Plains Knight #3	L-23-24-37	3225	4830	5345	5790	4839-45'
Pan Am.-So. Mattix #10	H-15-24-37	3247	—	—	—	4878-94'
Pan Am.-So. Mattix #11	H-22-24-37	3242	4800	5311	5792	4810-35'
Pan Am.-So. Mattix #14	K-15-24-37	3262	4849	5380	5836	4849-85'
Pan Am.-So. Mattix #16	O-15-24-37	3256	4802	5274	5790	4848-85'

UNDESIG. LOWER Paddock GAS POOL

Pan Am.-So. Mattix #16	O-15-24-37	3256	4802	5274	5790	5160-80'
------------------------	------------	------	------	------	------	----------

FOWLER BLINERY (oil) POOL

Gulf-Plains Knight #2	N-23-24-37	3217	4825	5340	5830	5441-5590'
Pan Am.-So. Mattix #1	J-15-24-37	3259	4805	5310	5820	5413-5653'
Pan Am.-So. Mattix #3	B-22-24-37	3264	4820	5320	5822	5372-5630'
Pan Am.-So. Mattix #14	K-15-24-37	3263	4849	5380	5836	5380-5670'

FOWLER TUBB GAS POOL

Pan Am.-So. Mattix #3	B-22-24-37	3264	4820	5320	5822	5930-6087'
Pan Am.-So. Mattix #14	K-15-24-37	3263	4849	5380	5836	5936-6115'
Pan Am.-So. Mattix #16	O-15-24-37	3256	4802	5274	5790	5936-6115'

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

February 4, 1964

Mr. Enderrieden
Pan American Petroleum Corp.
P. O. Box 268
Lubbock, Texas

Re: Case 2974
Order R-2644

Dear Sir:

This letter is in response to your telephone call of this date pertaining to the above-captioned order.

Permission is hereby given to temporarily abandon the SMU Well #10, H - 15-24S-37E, in the Fowler-Paddock Zone in lieu of complying with the provisions of the second paragraph of said order. The Paddock completion of the #10 well must however, be physically disconnected and a disconnect notice be furnished to the Commission offices in Santa Fe and Hobbs. This notice should be filed by your purchasing pipeline.

Very truly yours,

ELVIS A. UTZ
Gas Engineer

EAU/og

C
O
P
Y

State of New Mexico
Oil Conservation Commission



P. O. BOX 871
SANTA FE

January 29, 1964

Re: Case No. 2974
Order No. R-2644
Applicant:

Pan American Petroleum Corporation

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

Very truly yours,
A. L. Porter, Jr.

15/

Carbon copy of order also sent to:

Robbs OCC X

Arteria OCC _____

Astec OCC ~~XXXXXXXXXXXXXXXXXXXX~~

OTHER _____

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 2974
Order No. R-2644

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
January 22, 1964, at Santa Fe, New Mexico, before Examiner Elvis
A. Utz.

NOW, on this 29th day of January, 1964, the Commission,
a quorum being present, having considered the testimony, the
record, and the recommendations of the Examiner, and being fully
advised in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Pan American Petroleum Corporation,
seeks authority to complete its South Mattix Unit Well No. 16,
located in Unit 0 of Section 15, Township 24 South, Range 37 East,
NMPM, Lea County, New Mexico, as a triple completion (conventional)
to produce gas from the Fowler-Paddock Gas Pool, an undesignated
Lower Paddock pool, and the Fowler-Tubb Gas Pool through parallel
strings of 2-inch tubing, with separation of zones by packers set
at approximately 4989 feet, 5334 feet, and 5810 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.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation,
is hereby authorized to complete its South Mattix Unit Well No. 16,

-2-

CASE No. 2974

Order No. R-2644

located in Unit O of Section 15, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, as a triple completion (conventional) to produce gas from the Fowler-Paddock Gas Pool, an undesignated Lower Paddock pool, and the Fowler-Tubb Gas Pool through parallel strings of 2-inch tubing, with separation of zones by packers set at approximately 4989 feet, 5334 feet, and 5810 feet.

PROVIDED HOWEVER, That said well shall not be produced from the Fowler-Paddock Gas Pool until non-standard 160-acre units have been approved for the subject well and for applicant's SMU Well No. 10, located in Unit H of said Section 15 or approval has been obtained after notice and hearing for the dedication of both of said wells to the E/2 of said Section 15.

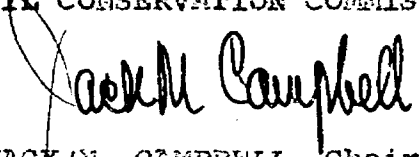
PROVIDED FURTHER, That the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order.

PROVIDED FURTHER, That the applicant shall take packer-leakage tests upon completion and annually thereafter during the Gas-Oil Ratio Test Period for the Fowler-Tubb Pool.

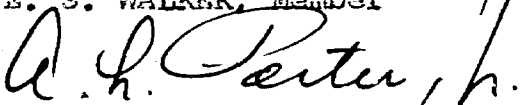
(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

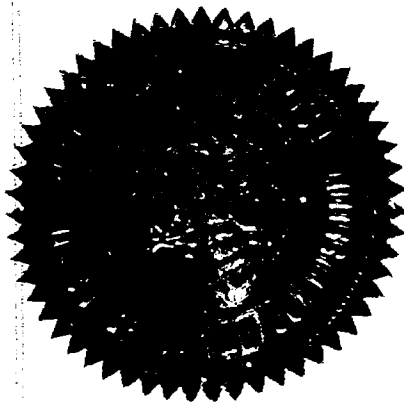
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


JACK M. CAMPBELL, Chairman


E. S. WALKER, Member


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



CSR/

DRAFT

JMD/esr

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. 2974

Order No. R- 2644

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
January 22, 1964, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.
~~Examiner duly appointed by the Oil Conservation Commission of New
Mexico, hereinafter referred to as the Commission, in accordance
with Rule 114 of the Commission Rules and Regulations.~~

NOW, on this _____ day of January, 1964, the Commission,
a quorum being present, having considered the ~~application, the~~ testimony,
the record, ~~evidence adduced,~~ and the recommendations of the Examiner.
_____, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Pan American Petroleum Corporation,
seeks authority to complete its South Mattix Unit Well No. 16,
located in Unit O of Section 15, Township 24 South, Range 37 East,
NMPM, Lea County, New Mexico, as a triple completion (conventional)
to produce gas from the Fowler-Paddock ^{Gas Pool} and ~~Fowler-Tubb Gas Pools~~
~~and from an undesignated Lower Paddock pool~~ ^{and the Fowler-Tubb Gas Pool} through parallel strings
of 2 -inch tubing, ~~and from the Fowler-Tubb Gas Pool~~
with separation of zones by packers set at
approximately ~~4257 feet, and 4489 feet,~~ ^{4257 feet, and 4489 feet, 5334 feet, and 5810 feet.}

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

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

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, is hereby authorized to complete its South Mattix Unit Well No. 16, located in Unit 0 of Section 15, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, as a triple completion (conventional) to produce gas from the Fowler-Paddock ~~and Fowler-Tubb Gas Pools~~ *and the Fowler-Subt Gas Pool* and from an undesignated Lower Paddock pool, through parallel strings of 2-inch tubing, with separation of zones by packers set at approximately ~~4257~~ feet, ~~and~~ 4989 feet, 5334 feet and 5810 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 Fowler-Subt 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.

Provided however, That said well shall not be produced from the Fowler-Paddock Gas Pool until such time as new standard H&O-act units have been approved for the subject well and for applicants SMU well no 10, located in Unit H of said Section 15 as well. Approval has been obtained after notice and hearing for the dedication of both of the said wells to the E/V of said Section 15.

Case 2874
Heard 1-22-64
Rec. 1-23-64

1. Grant Pan Am a triple completion
for their S. Mattis unit Well #16
in Lower Paddocks. - Undesignated
Lower Paddocks & Lower Subb.
All Gas Pools.

2. Applicant proposed to set packers
at 4757, 4989, 5334 & 5810 as
shown on Ex. 4 of this case.

3. Applicant showed to my
satisfaction that the Lower Paddocks
zone is a separate pool from
the Upper Paddocks & Bleneby.
Gas Analysis & pressures ~~and~~
in the three pools vary sub-
stantially. There is also a 170'
water table below the Lower
Paddocks & above the Bleneby
which lends affirmation to
separation.

Eric A. [Signature]

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 22, 1964

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 2682: (Reopened and continued from January 8, 1964 Examiner Hearing.)

In the matter of Case 2682 being reopened pursuant to the provisions of Order No. R-2375, which order established temporary 80-acre oil proration units for the Simpson-Gallup Oil Pool, San Juan County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.

CASE 2967: (Continued from the January 8th Examiner Hearing)

Application of Standard Oil Company of Texas for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Jurnegan Point Unit Area comprising 7680 acres, more or less, of State and Fee land in Township 24 South, Ranges 24 and 25 East, Eddy County, New Mexico.

CASE 2969: Application of H. N. Sweeney for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Good Hope Unit Area comprising 1919.72 acres, more or less, of State and fee land in Township 19 South, Range 23 East, Eddy County, New Mexico.

CASE 2970: Application of Cima Capitan Incorporated for an amendment of Order No. R-2395, Eddy County, New Mexico. Applicant, in the above styled cause, seeks amendment of Order No. R-2395 to delete the seven water injection wells authorized therein for its Artesia Pool Waterflood Project, Eddy County, New Mexico, and to substitute therefor the following four injection wells in Section 17, Township 18 South, Range 28 East:

Welch State No. 1-W, 1330 feet from the South and West lines;

Welch State No. 4-W, 2630 feet from the South line and 2230 feet from the West line;

Case 2970 continued from page 1

Adkins Williams State No. 1-W, 10 feet from the South line and 2630 feet from the East line;

Adkins Williams State No. 6-W, 1180 feet from the South line and 1595 feet from the East line.

CASE 2971: Application of Caulkins Oil Company for unorthodox locations, dual completions, and expansion of a waterflood project, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Breech C No. D-189 and Breech C No. D-248 wells to produce oil from the Tocito formation through 2½ inch tubing and gas from the Dakota formation through the casing-tubing annulus at unorthodox locations 1850 feet from the South line and 790 feet from the West line of Section 12 and 1140 feet from the North line and 900 feet from the East line of Section 13, Township 26 North, Range 6 West, Rio Arriba County, New Mexico. Applicant also seeks expansion of the South Blanco-Tocito Pressure Maintenance Project Area to include said wells.

CASE 2727: (Reopened)

In the matter of Case No. 2727 being reopened pursuant to the provisions of Order No. R-2408 which order established temporary 80-acre proration units for the Oil Center-Blinebry Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.

CASE 2972: Application of Pan American Petroleum Corporation for force-pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Basin Dakota Pool underlying the W/2 of Section 22, Township 29 North, Range 13 West, City of Farmington, San Juan County, New Mexico.

CASE 2973: Application of Pan American Petroleum Corporation for force-pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Basin-Dakota Pool underlying the W/2 of Section 13, Township 30 North, Range 12 West, San Juan County, New Mexico.

CASE 2974: 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 South Mattix Unit Well No. 16, located in Unit O of Section 15, Township 24 South, Range 37 East, Lea County, New Mexico, to produce gas from the Fowler Paddock and Fowler Tubb Gas Pools and from an undesignated Lower Paddock through parallel strings of tubing.

CASE 2975: Application of Amerada Petroleum Corporation for an un-orthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an un-orthodox location for a proposed triple completion in the Vacuum-Devonian, Vacuum-Wolfcamp, and North Vacuum-Abo Pools, Lea County, New Mexico, said well to be drilled at a point within 200 feet of the center of the NE/4 SW/4 of Section 36, Township 17 South, Range 34 East.

STANDARD OIL COMPANY OF TEXAS
A DIVISION OF CALIFORNIA OIL COMPANY
HOUSTON 1, TEXAS

P. O. BOX 1249

January 17, 1964

Case file
gmo

CASE 2974

APPLICATION OF PAN AMERICAN
PETROLEUM CORPORATION FOR
TRIPLE COMPLETION OF ITS
SOUTH MATTIX UNIT WELL NO. 16
Lea County, New Mexico

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

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

Gentlemen:

Standard Oil Company of Texas, a Division of California Oil Company,
a working interest owner in the South Mattix Unit, has reviewed the
subject application scheduled to be heard before the Examiner on
January 8, 1964.

Jim 22nd
gmo Please be advised that Standard Oil Company of Texas has no objections
to the triple completion of this well and supports the application of
Pan American Petroleum Corporation.

Yours very truly,

C. N. Segnar
C. N. Segnar
Chief Engineer

MEM:ja

cc: Pan American Petroleum Corporation
P. O. Box 268
Lubbock, Texas 79401
Attention: Mr. Neil S. Whitmore

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF PAN AMERICAN PETROLEUM COR-
PORATION FOR APPROVAL OF THE
TRIPLE COMPLETION (CONVENTIONAL)
OF ITS SOUTH MATTIX UNIT WELL NO.
16, LOCATED IN UNIT O OF SECTION 15,
TOWNSHIP 24 SOUTH, RANGE 37 EAST,
LEA COUNTY, NEW MEXICO.

No. 2974

ENTRY OF APPEARANCE

The undersigned, Atwood & Malone, of Roswell, New Mexico,
a firm of attorneys, all of whose members are duly licensed to practice
law in the State of New Mexico, hereby enters its appearance as local
counsel with Guy Buell, Esquire, of the Texas Bar, for Pan American
Petroleum Corporation.

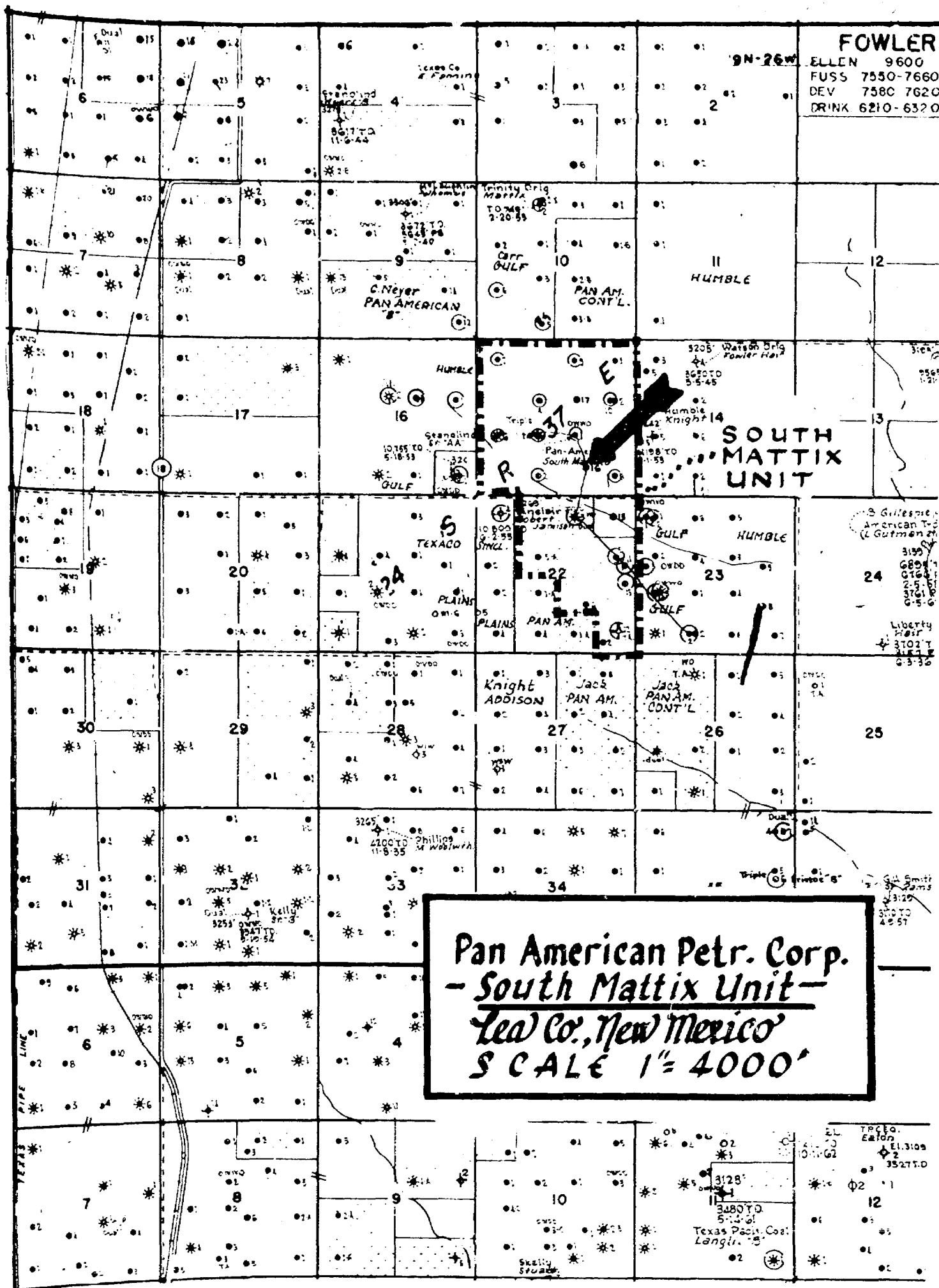
DATED at Roswell, New Mexico, this 16th day of January,

1964.

ATWOOD & MALONE

By 

P. O. Drawer 700
Roswell, New Mexico



2" OD (1.67" ID) Buttruss Tbg
Internally coated

2" OD (1.67" ID) Buttruss Tbg
Internally coated
2-3/8" EUE (1.995" D) Tbg.
PSI Sleeve

Model "FA" Pkr 4757'

Paddock Perfs
4833-80'

Flow Tube
3-1/2" OD NU w/Cplg 3-15/16"
externally & internally plastic
coated

Model "P" Pkr 4989'

Lower Paddock Perfs.
5160-80'

Model "D" Pkr 5334'

Blincbry Perfs (Squeezed)
5413-5747

2" OD (1.67" ID) Buttruss
External Plastic Coated

Tubb Perfs

Model "D" Pkr 5810'

5852-6101

Tubing landed at 5975'

TD 6150'
PBTD 6101'

7" CSA 6150

Exhibit 4
NMOCC CASE 2974
January 22, 1964

PAN AMERICAN PETROLEUM CORPORATION

SCALE none

SOUTH MATTIX UNIT No. 16

ORG
NO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 22, 1964

EXAMINER HEARING

IN THE MATTER OF:

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

Case No. 2974

BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 22, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of Pan American Petroleum) NO. 2974
Corporation for a triple completion,)
Lea County, New Mexico.)

BEFORE: ELVIS A. UTZ, EXAMINER

TRANSCRIPT OF HEARING

MR. UTZ: Call Case 2974.

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

MR. BUELL: For Pan American Petroleum Corporation, Guy
Buell. We have one witness, Mr. Burnside.

(Witness sworn)

JOHN C. BURNSIDE,
having been called as a witness herein, being first duly sworn,
was examined and testified as follows:

DIRECT EXAMINATION



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

BY MR. BUELL:

Q Mr. Burnside, would you state your complete name, by whom you are employed, and in what location and in what capacity, please?

A My name is John C. Burnside. I am employed by Pan American Petroleum Corporation, in Lubbock, Texas, as Petroleum Engineer.

Q Does the Pan American office in Lubbock have direct supervision and control over our operations in the Fowler Pool area?

A Yes, sir, they do.

Q Mr. Burnside, what is your educational background in engineering?

A I have a BS degree in Petroleum Engineering from Oklahoma University.

Q When did you obtain that degree, Mr. Burnside?

A I obtained it in January of 1959.

Q What have you done since graduation?

A Since graduation, as of January of 1959, I have been employed by Pan American at various locations, various capacities of petroleum engineering.

Q All right.

MR. BUELL: Is there any question as to this witness' qualifications with particular respect to the Fowler area?

MR. UTZ: No, sir.



Q (By Mr. Buell) Mr. Burnside, would you direct your attention to what has been marked as Pan American's Exhibit Number One, and briefly state for the record what that exhibit reflects?

A This is a map showing the Fowler Fields, particularly showing the South Mattix Unit as outlined, showing all of Section 15, and portions of Section 22, 24 South, 37 East, Lea County, New Mexico. Also shown on this map are the various wells producing from the Paddock formation, down to the Ellenberger formation in that area.

Q Have you shown these different producing zones by different colors?

A Yes, sir, the legend for the various colors is shown on the lower left-hand side or corner of the map.

Q Is the well that is the subject matter of this hearing the SMU No. 16, I know it is on this exhibit, but would you locate it for the record?

A Yes, sir. It is in Section 15, it is in the Southwest Quarter of the Southeast Quarter of Section 15, 24 South, 37 East.

Q And that well is a proposed triple completion in the Paddock gas producing zone, the Lower Paddock gas producing zone, and the Tubb gas producing zone?

A That is correct.

Q And I believe it is also correct that the Lower Paddock is a new producing zone for this area?

A That is correct.



C All right, sir. What is the significance of the line, Mr. Burnside, that connects many of the wells in this area?

A That is a trace of the cross section through this area to the various wells, correlating the various producing horizons from the Paddock down through the Drinkard.

Q Mr. Burnside, that has been identified as our Exhibit Number Two, and we have a copy on the board there. I believe that cross section includes the logs from seven wells in this area. Is my arithmetic correct?

A That is correct.

Q All right, sir. Now, with respect to the zones of interest in SMU No. 16, it might be well for you to state for the record the completion interval in each of these three zones?

A All right. Starting at the top, in the South Mattix Unit Number 16, the Paddock zone is producing through perforations of 4833 to 46, 4852 to 66 and 4868 to 80.

MR. UTZ: Give the top over.

A The top being 4833, the bottom being 4880. The next lower producing zone is the Lower Paddock zone. It is producing through perforations of 5160 to 80. The next producing zone, the bottom zone, the Tubb zone, is producing through perforations of six intervals, the top being 5862, the bottom being 6101.



DEARNLEY, MEIER, WILKINS and CROWNOVER
General Court Reporting Service
Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6601

Q (By Mr. Buell) Now, Mr. Burnside, one of the purposes of this hearing as to establish to the Commission's satisfaction that this new undesignated Lower Paddock producing zone is a distinct and separate accumulation of hydrocarbons that has not been produced before in this area, or is not a portion of one of the recognized producing zones. So, with that thought in mind, let me ask you this with respect to the Lower Paddock zone, what zone is immediately above it?

A The Paddock zone is immediately above the Lower Paddock zone.

Q From a geological standpoint, what information or what data do you have which shows conclusively that the Lower Paddock producing zone is separate by nature from the Paddock producing zone?

A We have a log analysis and drillstem tests data showing approximately 170 feet of water separation between these two zones.

Q Based on these data, have you established a gas-water contact for the Paddock producing zone?

A Yes, sir. As may be seen on this exhibit, it is at minus 1673.

Q Minus 1673?

A That is correct.

Q Is that shown by the red horizontal line on our Exhibit Number Two?



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

A Yes, sir.

Q All right, sir. Now, what is the immediate or the next producing zone below the Lower Paddock? Is the Tubb the other zone of interest in this well?

A Yes, sir, the Tubb, in this well.

Q Is there another producing zone between the Lower Paddock and the Tubb that is producing or productive in some of the wells in that area?

A Yes, sir, there is. The Blinebry formation is separating the Lower Paddock and the Tubb zones.

Q Did Pan American attempt to make a completion in the Blinebry in SMU 16?

A Yes, sir, we did, and were unsuccessful.

Q All right, sir. What geological evidence do you have as reflected by Exhibit Two, which shows separation between the Lower Paddock and what is referred to in this area as the Blinebry producing zone?

A There we have approximately 70 feet of non-productive formation.

Q In your opinion, Mr. Burnside, is it conclusive to you that the Lower Paddock is a separate and distinct accumulation of hydrocardons separated by nature from any of the other producing zones in that area?

A Yes, sir.

Q All right, sir. Now, you engineers also have another



tool by which you can use to confirm your geological interpretation, do you not?

A That is correct.

Q In this case, to ascertain separation or communication or similarity, would a comparison of the different fluids that are produced from these zones in question give you any help in determining separation?

A Yes, sir. It is a very useful means of determining separation or non-communication between zones.

Q In that connection, let me direct your attention to our Exhibit Number Three, and I will ask you to briefly state what that exhibit is?

A This is a graphical presentation of the comparison of gas analysis run on gases from the Blinebry, Lower Paddock and Paddock zones in the Fowler Fields.

Q Now, using Blinebry here instead of Tubb, because if the Lower Paddock is separate, the Blinebry has got to be separate from the Tubb, so the Commission recognizes the Blinebry as a separate producing formation?

A That is correct.

Q All right, sir. What do these comparisons of the different gases from each of these zones reveal from the standpoint of similarity or dissimilarity? You might pick two or three of the individual graphical presentations and recite the differences for the record, if you will?



A All right. They very conclusively indicate that these zones are not in communication and are not similar. As an example in the upper left-hand corner, we have the hydrogen sulfide content shown there and you will see the Blinebry was 23.72 grains per hundred cubic feet. The Lower Paddock was 251.5 grains per hundred cubic feet, and the Paddock was 891.27 grains per hundred cubic feet.

Q Now, Mr. Burnside, on each one of these bar graphs, there is some three, six, nine, and the Blinebry bar is always in the yellow, Lower Paddock in the pink and the Paddock in the blue; is that correct?

A That is correct.

Q All right, sir. You want to pick out another one or two and give the differences for the record?

A Another good example is the middle of the bottom row of graphs. There we have grouped the isopentanes or isopentanes and heavier components, and the percent varies from a high of 1.70 percent for the Blinebry to .73 percent for the Lower Paddock and .31 for the Paddock formation.

Q Mr. Burnside, in your opinion, do these data reflected on Exhibit Three confirm your geological interpretation that the Lower Paddock is a separate and distinct accumulation of hydrocarbons?

A Yes, sir, very conclusively.

Q All right, sir. Another tool you engineers quite often



use in determining separation or communication is tool pressure.

A Yes, sir.

Q All right. In that connection, let's compare some pressures. Do you have the original virgin pressure for the Paddock producing zone?

A Yes, the virgin pressure, original virgin pressure, as measured soon after completion of our South Mattix Unit Well Number 16, the Paddock zone was determined to be 1930 PSI, as of March 15, 1960.

Q All right, sir. Do you have the initial virgin pressure in the Blinebry producing zone?

A Yes, sir. Again, South Mattix Unit Well, Pan American Number 14, immediately following completion of the discovery well, the pressure was measured in October, the 4th, 1962, and determined to be 2241 PSI.

Q A virgin pressure of 2241 PSI?

A Yes, correct.

Q Do you have a recent pressure on the Blinebry? That zone has been producing for some time. Do you have a fairly recent pressure?

A Yes, sir. In November, the 21st of November, of '63, we took a bottom hole pressure, bomb pressure, and found it to be 2014 PSI at that time.

Q All right, sir. Now, give us the initial pressure in SMU No. 16, the well that is the subject matter of this hearing,



for the Paddock producing zone?

A Pressure was taken--

MR. UTZ: Now, you mean this is the Upper Paddock?

MR. BUELL: It is the Paddock as distinguished from the Lower Paddock, it would be above the Lower.

MR. UTZ: You are giving current pressure?

A Yes, sir. Pressure that we have just recently measured in Well Number 16.

Q Well Number 16.

A In the Paddock zone, and this is a well that we have just recently drilled. The pressure measured on the 19th day of December of '63, in the Paddock zone was 1876 PSI.

Q All right, sir. Is that about what you expect that zone to be since it has been producing now for some two years?

A Yes, sir.

Q All right, sir. What was the virgin pressure in the Lower Paddock zone as determined in SMU No. 16?

A We measured a pressure of the Lower Paddock zone on December 10, 1963, and found it to be, the virgin reservoir pressure to be 2214 PSI in the Lower Paddock.

Q So, when we compare that with the virgin pressure in the Paddock, we see that the Lower Paddock has a pressure of some 300 pounds higher than the virgin pressure in the Paddock?

A That is correct.

Q And that pressure is some 360 pounds higher than the



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

PAGE 12

current existing pressure in the Paddock formation?

A Yes, sir. That is correct.

Q All right, sir. Let's compare it with the discovery pressure in the Blinebry; the discovery pressure in the Lower Paddock and discovery pressure in the Blinebry are very similar, are they not?

A That is correct.

Q What is the difference in the discovery virgin pressure in the Lower Paddock with the existing pressure in the Paddock as of November, 1963?

A We find an exact difference of 200 PSI.

Q In your opinion, do these pressure data which you have just reviewed also conclusively confirm your geological interpretation that the Lower Paddock is a separate and distinct accumulation of hydrocarbons?

A Yes, sir, they do.

Q Mr. Burnside, another important part of this hearing is to request triple completion approval of the SMU No. 16. In that connection, would you look at what has been marked as our Exhibit Number Four? -

MR. UTZ: Let me interrupt you just a minute. This 2014 pounds you gave me, what was the date of that pressure?

A Beg your pardon?

MR. UTZ: The 2014 pounds?

MR. BUELL: That is the Blinebry pressure in Number 14.



November 14, 1963.

MR. UTZ: All right, sir. You may continue.

Q (By Mr. Buell) What is Exhibit Four, Mr. Earnside?

A Exhibit Four is a schematic drawing of the equipment we propose to install in the South Mattix Unit Well Number 16 in order to permit production from three zones separately.

Q Would you, just as briefly as possible for the record, review the proposed mechanical installations in Number 16?

A Yes, sir. As shown, we have four permanent type packers set in this well. They are shown here at the various depths, starting at the bottom, the lower most producing zone is the Tubb, the Tubb is producing through perforations of 5862 to 6101. Production from this zone will go up the center string of tubing and to the surface direct. Coming up from that, you will note we show Blinebry perforations. We have squeezed these and they are 5413 to 5747, various intervals.

Q That was attempted, completion was attempted in the Blinebry, which we abandoned?

A Right. We abandoned it by squeezing it, however, to be certain that we had separation within the well bore and had no communication with the perforations that were at one time only open in the Blinebry, and possibly the Lower Paddock perforations.

We set a packer there at 5334 to isolate the Blinebry zone. Coming on up, you will see that the Lower Paddock is producing to perforations of 5160 to 80. Production from that



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

zone goes into a flow tube which is a concentric tool and will proceed up the tool and ultimately be produced through the string of tubing shown on the right-hand side of the sketch, or diagram. Coming on up above that, we come to the Paddock zone. It is producing through perforations of 4833 to 80. It is also producing into this concentric flow tube and will ultimately be produced at the surface through the tubing shown on the left-hand side of the diagram.

Q Mr. Burnside, are we currently in process of installing equipment you have just described in the SMU No. 16?

A Yes, sir, we are.

Q So, we don't have any tests from each of these three zones through the triple completion equipment, do we not, since it hasn't been installed?

A No, sir.

Q Now, has one of these three zones of interest been tested individually?

A Yes, sir. As may be seen on Exhibit Two, immediately to the right of the log of the subject well, South Mattix Unit Well No. 16, production tests were measured at the time we attempted initial completion in each one of these zones.

Q Would you not suspect that when we install the triple completion equipment and conduct tests through that equipment, that they will be very similar to what you have shown on your Exhibit Two?



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

A Yes, sir. I feel that the information shown would be very representative of what the initial production will be through the triple completion equipment.

Q Since we are in the process of installing this triple completion equipment, of course, it has been impossible to run any packer leakage tests?

A That is true.

Q As soon as these tests are completed or conducted, will the results and information be furnished directly to the Commission to complete their file on this triple completion application?

A It will be, yes.

Q Mr. Examiner, I will direct your attention to Exhibit Five, and we won't comment on it. It is simply a log of SMU No. 16 with the pertinent completion intervals and tops, et cetera, marked on it. Mr. Burnside, do you have anything else you care to add at this time with respect to this application?

A No, sir.

MR. BUELL: That is all that we have, Mr. Examiner. I would like to formally offer Pan American's Exhibits One through Five, inclusive.

MR. UTZ: Without objection, the Pan American Exhibits, One, through Five, will be entered into the record of this case.

CROSS EXAMINATION

BY MR. UTZ:



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

Q Mr. Burnside, how did you take the gas samples in which you developed Exhibit Number Three?

A The samples were all obtained for us by El Paso Natural Gas Company, which is the gas purchaser in this area. They actually obtained them for us and analyzed them for us and furnished us with the results.

Q I believe the only well head sample from Well Number 16 was the Lower Paddock sample?

A The Paddock analysis, I am sure, came from a meter run, from other wells in the South Mattix Unit that are producing from the Paddock formation. The same being true with the Tubb.

Q How about the Lower Paddock?

A The Lower Paddock was actually a well head sample obtained at the well head, yes, sir.

Q Was it obtained with this equipment that you show on Exhibit Four?

A No, it was not.

Q What kind of equipment did you have?

A We had a packer, a bridge plug, retrievable bridge plug. I do not know the exact setting of it, but it was below the Lower Paddock perforation and above the top of the Blinbry formation, and a packer setting immediately above the Lower Paddock perforation and tubing running to the surface.

Q I see. In your opinion, these gas samples show that this gas is coming from the Lower Paddock and is not the same as



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

the Blinebry gas in this immediate area?

A Yes, sir, I think it is very conclusive that there is no similarity at all with the Blinebry.

Q You have stated that you have 170 feet of water between the Lower Paddock and the Blinebry Pool; is that correct?

A Yes, sir, in this well.

Q Do you know what the depths were of that water?

A Yes, sir. By log analysis in that well, we determined the gas-water contact to be approximately 4931.

Q That was the basis- -

A That is the oil- - I mean the water-gas contact, yes, sir; that is the top of the water in the Paddock formation.

Q And then, that would extend 170 feet below that point?

A Yes, sir.

Q I don't suppose you have any analyses run on that water?

A No, sir. The best of my knowledge, there has not been any water produced from the Paddock formation in the South Mattix Unit Number 16.

Q What was the top of the zone, your perforations that you tried to complete in the Blinebry, 6413, wasn't it?

A The top perforation in the Blinebry was 5413.

Q Would you say that was the top of the Blinebry zone in this well?

A No, sir, I would not.

Q It would be somewhat down into the Blinebry then?



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

A Yes, sir. As shown here on the log analysis.

Q What is the top of the Blinebry in that well?

A The top of the Blinebry, we picked the top to be at 5231 in this well.

Q So, your water table goes down into the Blinebry a ways, doesn't it?

A No, sir.

Q That is right, it is above the Blinebry about 130 feet?

A Right.

Q In your opinion, then, your analysis of this situation is that the Lower Paddock zone, which you have encountered in that well is definitely not a part of the Blinebry zone?

A That is correct.

Q Therefore, there could not be a gas cap to the Blinebry zone?

A That is correct.

Q Did you run into the Lower Paddock pay in any of these other wells?

A This is the first time that we have attempted a completion in this zone, and the only information we have in this area as to the extent, of course, are logs and we have not carefully analyzed all of the logs, one of the reasons being that several of these wells were completed several years ago and we do not have a full set of logs that we would need in order to analyze on the surface, and say, well, it is extended through here or not. Now, the zones



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

or the intervals, extend and can be correlated through the field, but as to whether it is productive elsewhere, or not, we have not investigated that.

Q This 2014 pound pressure that you took 11-21-63, on the Number 14 Well, was that a surface pressure?

A No, sir, that was- -

Q Bottom hole?

A That is a bottom hole pressure at a datum which all pressures are at a datum. This one on the Blinebry is minus 2271. The two pressures that we have given you on the Blinebry are pressures both measured bottom hole and both at the same depth.

Q Both at minus 2271?

A That is correct.

Q And how about the pressure in the Lower Paddock?

A The pressure in the Lower Paddock was measured at minus 1912 datum, which, I believe, is the mid point of the perforations.

Q How long was the Number 14 well shut in when you took this pressure?

A That is a 72 hour pressure.

Q In your opinion, was it a stabilized pressure?

A Yes, sir. That Paddock pressure at minus 1912 is mid point of the perforations.

Q That was also a 72 hour pressure?

A Yes, sir.

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



witness may be excused. Are there statements in this case? The case will be taken under advisement.

* * * * *

STATE OF NEW MEXICO }

COUNTY OF BERNALILLO }

I, ROY D. WILKINS, 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 of Office, this 30th day of January, 1964.

Roy D. Wilkins
NOTARY PUBLIC

My Commission Expires:
September 6, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Ex. hearing of Case No. 2874 heard on Jan. 22, 1964.
Thurston, Examiner
New Mexico Oil Conservation Commission

DEARNLEY, MEIER, WILKINS and CROWNOVER
General Court Reporting Service
Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6601

