CASE 3229: Application of PAN

AMERICAN for a dual completion &
a non-standard gas proration unit.

TPP/ication, TYANSCY: PTS, SMAIL Exhibits

ETC.

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico

Bil Conservation Commission

LAND COMMISSIONER GUYTON B, HAYS MEMBER



P. O. BOX 2088

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

August 17, 1965

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

Attention: Mr. V. E. Staley

Re: Order R-2906

Gentlemen:

Reference is made to your letter dated July 16, 1965, wherein you advise that your South Mattix Unit Well No. 18 located in Unit G, Section 22, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, has been completed to produce oil from the Fowler-Blinebry Oil Pool and the Fowler Lower Paddock Gas (Oil Rim) Pool.

Order No. R-2906 authorized the completion of this well to produce gas from the Fowler-Lower Paddock Gas Pool and oil from the Fowler Blinebry Oil Pool through parallel strings of 2 3/8 inch tubing, with separation of the zones by a packer set at approximately 5350 feet.

Production of oil from the Lower Paddock Pool is hereby authorized, providing that the mechanical installation is similar to that authorized by the order. You are requested to furnish a schematic diagram of the installation.

The non-standard gas proration unit authorized by Order No. R-2906 is hereby placed in abeyance.

Very truly yours

A. L. Porter, Jr. Secretary-Director

ALP: DSN: sg

cc: Oil Conservation Commission - Hobbs

Post Office Box 68 Hobbs, New Mexico

July 16, 1965

MA 怒

File:

vgs-191-400.1

Subject:

Dual Completion Authorization NMOCC Order No. R-2906

South Mattix Unit Well No. 18 Unit G, Section 22, Township 24

South, Range 37 East

New Mexico Oil Conservation Commission (2)
Post Office Box 871
Santa Fe, New Mexico

Gentlemen:

New Mexico Oil Conservation Commission Order No. R-2906 dated April 7, 1965, authorized the conventional dual completion of our South Mattix Unit Well No. 18, located in Unit G of Section 22, Township 24 South, Range 37 East, NMPM, Lea County, to produce gas from the Fowler Lower Paddock Gas Pool and oil from the Fowler Blinebry Oil Pool. The order also provided for a non-standard, gas proration unit in the Fowler Lower Paddock Gas Pool comprising the NE/4, E/2 NW/4, and N/2 SE/2 of Section 22, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

During completion operations, the Fowler Lower Paddock interval 5280-90 tested barren; however, the interval 5227-54 was oil productive. The intervals opened for production are by correlation within the Fowler Lower Paddock, vertical limits as specified in NMOCC Order No. R-2864.

As a hearing has already been held designating the approximate intervals for dual completion in this well, it is respectfully requested that administrative approval be granted for amending Order No. R-2906 to provide for dual completion of the Fowler Blinebry Oil and the Fowler Lower Paddock Gas (Oil Rim) Pools. It is also requested that the non-standard, gas proration unit for the Fowler Lower Paddock Gas Pool be cancelled. All other provisions of the order would remain in effect.

Your favorable consideration of this request would be sincerely appreciated.

Yours very truly,

V. E. Staley Area Superintendent

New Mexico Oil Conservation Commission P. O. Box 1980 - Hobbs, New Mexico

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. 3229 Order No. R-2906

APPLICATION OF PAN AMERICAN PETROLEUM CORPORATION FOR A DUAL COMPLETION AND A NON-STANDARD GAS PRORATION UNIT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 7, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 10th day of May, 1965, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

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. 18 located in Unit G of Section 22, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce gas from the Fowler-Lower Paddock Gas Pool and oil from the Fowler-Blinebry Oil Pool through parallel strings of 2 3/8-inch tubing, with separation of zones by a packer set at approximately 5350 feet.
- (3) That the applicant also seeks approval of a 320-acre non-standard gas proration unit in the Fowler-Lower Paddock Gas Pool comprising the NE/4, E/2 NW/4, and N/2 SE/4 of Section 22, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, to be dedicated to its South Mattix Unit Well No. 18.

-2-CASE No. 3229 Order No. K-2906

- (4) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (5) That the proposed non-standard gas proration unit can be efficiently and economically drained and developed by the subject well.
- (6) That approval of the proposed dual completion will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and otherwise prevent waste and protect correlative rights.
- (7) That approval of the proposed non-standard gas proration unit will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, is hereby authorized to complete its South Mattix Unit Well No. 18 located in Unit G of Section 22, Township 24 South, Range 37 East, NMPM, Lea County, New Maxico, as a dual completion (conventional) to produce gas from the Fowler-Lower Paddock Gas Pool and oil from the Fowler-Elinebry Oil Pool through parallel strings of 2 3/8-inch tubing, with separation of zones by a packer set at approximately 5350 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 Annual Gas-Oil Ratio Test Period for the Fowler-Blinebry Oil Pool.

(2) That a 320-acre non-standard gas proration unit in the Fowler-Lower Paddock Gas Pool comprising the NE/4, E/2 NW/4, and N/2 SE/4 of Section 22, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby established and dedicated to the Pan American Petroleum Corporation South Mattix Unit Well No. 18.

-3-CASE No. 3229 Order No. R-2906

(3) 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

GUYTON B. HAYS, Member

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

esr/

GOVERNOR JACK M. CAMPBELL CHAIRMAN

State of New Mexico

Bil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER



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

May 10, 1965

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

Re: Case No. 3229
Order No. R-2906
Applicant:

Pan American Petroleum Corp.

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

Carbon copy of order also sent to:

Hobbs OCC_____
Artesia OCC____
OTHER____

PAN AMERICAN PETROLEUM CORPORATION

P. O. Box 268 Lubbock, Texas 79401 March 15, 1965

File:

RES-3135-986,510.1

Subject: Application of Pan American Petroleum Corporation For Dual Completion of the South Mattix Unit Well No. 18 in the Fowler Lower Paddock (Gas) and Fowler Blinebry (011) Pools and Non-Standard Proration Unit Assignment for Fowler Lower Paddock (Gas) Pool, Lea County

New Mexico

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

Dear Sir:

FORM 470 2-57

Pan American, as operator of the South Mattix Unit, respectfully requests that a hearing be docketed to consider an application for its South Mattix Unit Well No. 18, which will be the initial dual completion in these pools located 1980' FNL and 1830' FEL, Unit G, Section 22, T=24-S, R-37-R, Lea County, New Mexico. At this hearing it is also requested that a non-standard 320 acre provation unit be approved for the Lower Paddock (Gas) completion in this well.

As shown on the attached plat, the South Mattix Unit does not include all of the N/2 of Section 22. Therefore, the 320 acres to be assigned to the Lower Paddock (Gas) will require a non-standard proration unit for this particular well since temporary field rules specify the acreage will be located in either the M/2, S/2, E/2 or W/2 of a governmental section. Since this requirement will not be met, we also request approval for this non-standard proration unit. A copy of our application for multiple completion is also attached.

District Production Superintendent

WCC: jn Attachments

cc: Sinclair Oil & Gas Co. Humble Oil & Refining Co. Gulf Oil Corporation

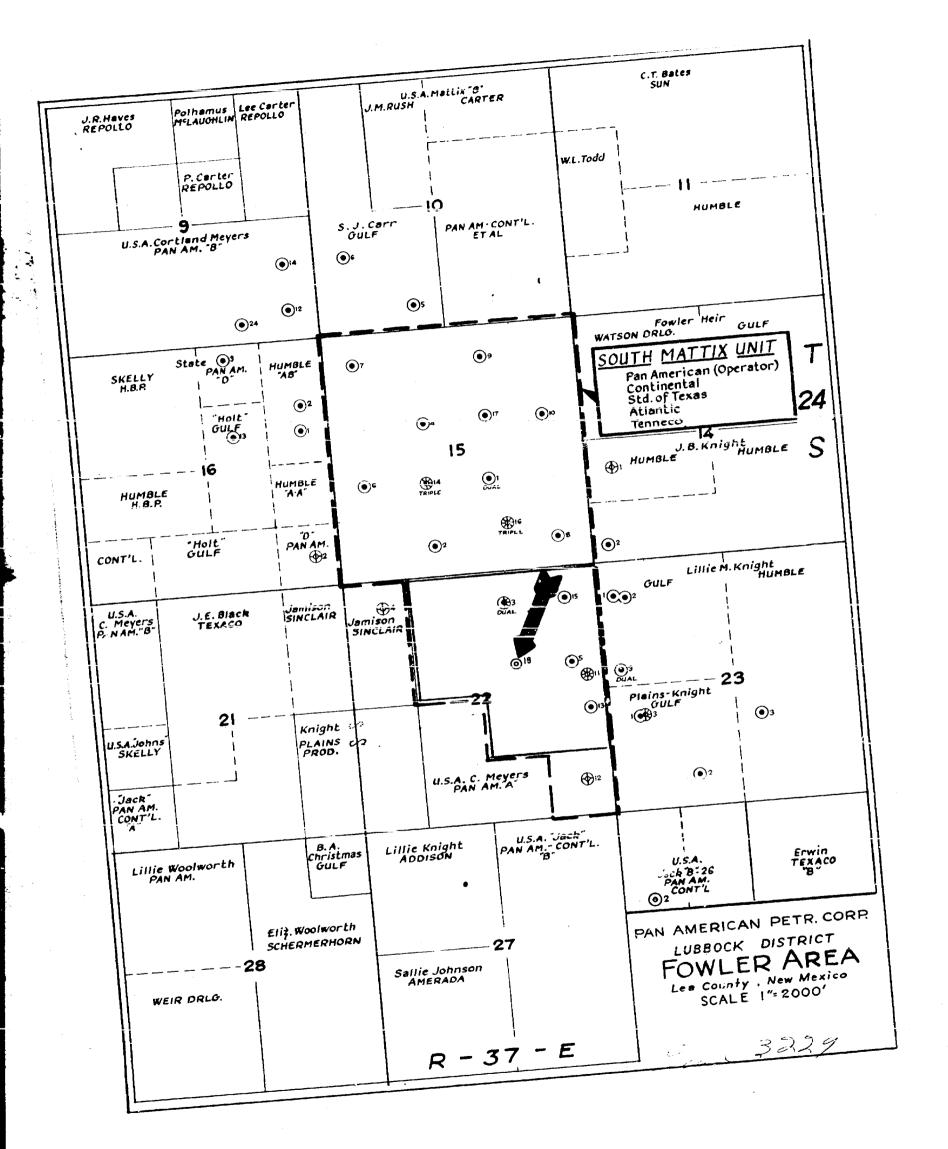
cc: Working Interest Owners

NEW MEXICO OIL CONSERVATION COMUSSION

CATION FOR MULTIPLE COMPLETION

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		TA FE, NEV	MEXICO		177	5-1-61	
Operator	non Returnioum Corpor	Cor	unty Lea	Date Ma	rch 15, 1965	,	
Pan American Petroleum Corporatio		Lea		Veli No.			
lucation Unit	Section 22	Towns	hip -South	Range	Range 37-East		
1. Has the New Mexico Oil Corsame zones within one mile 2. It answer is yes, identify one	servation Commission heretology the subject well? YES	NO_X	-			or in the	
3. The following facts are subm	itea: Epite Zore	ingang-gantarhyar mag map magamar , Photos	Intermediate		Lower Zone		
a. Name of Pool and Format	a. Name of Pool and Formation Lower Paddock				Blinebry		
5. Top and Bottom of Pay Section	b. Top and Bottom of Pay Section 5200-5300, est.			540		5400-5650, est.	
(Petforations) c. Type of production (Oil or	(Gil or (as)				Oil		
d. Method of Production (Flowing or Artificial 1	71	Flowing			Flowing		
have been furnish Nod. Electrical log of	Co P. O. Box 16	* og with tops application located tog 00, Midl	and bottoms of producing z is filed, it shall be submit ether with their correct mai	ones and in	itervals of perforation	tion indicated	
Gulf Oil Corporation	- P. O. Box 19	38, Rosv	ell, New Mexico				
6. Were all operators listed in los such notification	March 15, 1965 signed, state that I am the I)istrict	Engineer of	the Par	n American Pe	etroleum	
under my supervision and direct		C	A. J. Inderrieden	eden Signatur	n.	and the second s	
	offset operators not accompa- te application for a period of t						

after said twenty-day period, no protest not request for hearing is received by the Santa Fe office, the application will then be processed. NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in either or both or the producing zones, then separate application for approval of the same should be filed simultaneously with this application.



DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 7, 1965

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

The following cases will be heard before Elvis A. Utz, Examiner, or A. L. Porter, Jr., Alternate Examiner:

- CASE 3225: Application of Harold L. Runnels for directional drilling, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks authority to directionally drill his Millard Eidson B Well No. 3, the surface location of which is 660 feet from the South line and 1980 feet from the East line of Section 26, Township 16 South, Range 35 East, Shoebar Field, Lea County, New Mexico. Applicant proposes to set a whipstock at 6800 feet and directionally drill in a northwesterly direction bottoming said well at a true vertical depth of approximately 10,400 feet in the Permo-Pennsylvanian pay at a point not closer than 330 feet to the North and West lines of the SW/4 SE/4 of said Section 26.
- CASE 3226: Application of Skelly Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Grayburg Jackson Pool in its Dow Unit Area, by the injection of water into the Premier (Grayburg) and San Andres formations through six wells located in Section 22, Township 17 South, Range 31 East, Eddy County, New Mexico.
- CASE 3227: 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 C. H. Weir "B" Well No. 6 located in Unit P of Section 11, Township 20 South, Range 37 East, Lea County, New Mexico, to produce oil from the Skaggs Glorieta Pool through 2 7/8 inch casing, gas from the Skaggs Drinkard Pool through 1.61 inch ID tubing installed in a parallel string of 2 7/8 inch casing, and gas from the East Weir Blinebry Pool through the tubing-casing annulus, both strings of 2 7/8 inch casing being cemented in a common well-bore.
- CASE 3228: Application of Texaco Inc. for a waterflood project,
 Lea County, New Mexico. Applicant, in the above-styled
 cause, seeks authority to institute a waterflood project in the Skaggs Pool by the injection of water into
 the Grayburg formation through nine wells in Sections
 7, 12, and 13, Township 20 South, Range 37 East, Lea
 County, New Mexico.

CASE 3239: Application of Pan American Petroleum Corporation for a cual completion that a non-standard gras proration unit, Lea County, New Menico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its South Mattir Unit Well No. 18 located in Unit G of Section 12, Township 24 South, Range 37 East, Lan County, New Mexico, to produce gas from the Lower Padfock Jormation and oil from the Blinebry normation, Fowler Sield, through particles

From the Lower Paddock Jornation and oil from the Blinebry normation, Powler Field, through partilel strings of turing. Applicant, further socks approval of a Fowler-Lower Paddock non-standard gas providen unit for said well, comprising the NE/4, E/2 FM/6, and

N/2 SE/4, of said Section 22.

CASE 3002: In the matter of Case No. 3003 being reopened pursuant to the provisions of Order No. R-2684, which order established temporary 320-acre spacing for the Fowter-Lower Paddock Gas 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 160-acre spacing units.

CASE 3230: Application of The British-American Oil Producing Company for an unorthodox location and a non-standard gas unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval or an unorthodox gas well location for its North Wilson Deep Unit Well No. 1 located 650 feet from the South line and 1980 feet from the East line of Section 31, Township 20 South, Range 36 East; applicant further seeks approval of a non-standard Morrow gas unit to be dedicated to said well, said unit comprising the SE/4 of Section 31 and the SW/4 of Section 32, Township 20 South, Range 36 East, Lea County, New Mexico.

CASE 3231: Application of Vilas P. Sneldon for a unit agreement, Eddy County, New Mexico. Applicant, in the abovestyled cause, seeks approval of the Old Loco Unit Area comprising 720 acres, more or less, of State lands in Sections 31 and 32, Township 17 South, Range 29 East, Eddy County, New Mexico.

CASE 3232: Application of Vilas P. Sheldon for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Grayburg Jackson and Loco Hills Pools in the Old Loco Unit Area by the injection of water into the Lovington and Grayburg formations through six injection wells in Section 32, Township 17 South, Range 29 East, Eddy County, New Mexico.

- Examiner Hearing April 7, 1965
- CASE 3233: Application of Tidewater Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the East Eumont Unit Area comprising 5,535 acres, more or less, of Federal, State and Fee lands in Townships 18, 19, and 20 South, Range 37 East, Lea County, New Mexico.
- CASE 3234: Application of Tidewater Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Eumont Pool, Lea County, New Mexico, in its East Eumont Unit Area by the injection of water into the Yates, Seven Rivers and Queen formations through 69 wells in said unit area.

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico April 7, 1965 EXAMINER HEARING
IN THE MATTER OF:
APPLICATION OF PAN AMERICAN PETROLEUM CORPORATION FOR A DUAL COMPLETION AND A NON-STANDARD GAS PRORATION UNIT, LEA COUNTY, NEW MEXICO COUNTY, NEW MEXICO
BEFORE:
ELVIS A. UTZ
TRANSCRIPT OF HEARING



BOX 1092 . PM::NE 243-6691

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MR. UTZ: Case Number 3229.

MR. DURRETT: Application of Pan American Petroleum Corporation for a dual completion and a non-standard gas pro-ration unit, Lea County, New Mexico.

MR. MALONE: Nay it please the Commission, Charles Malone of Atwood & Malone for the applicant. We have one witness and five exhibits.

* * *

DIRECT EXAMINATION

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

BY MR. MALONE:

Q For the record, will you state your name and occupation, please, sir.

A My name is William C. Cowan; I am a petroleum engineer, senior grade, with Pan American Petroleum Corporation.

- Q In what office?
- A Lubbock, Texas.
- Q Is it correct that the Lubbock office of the applicant has jurisdiction of the lands described in this application?
 - A Yes, sir.
- Q Are you personally familiar with this application and with the wells and other information in question in the



92 . PHONE 243-6691 . ALBUQUERQUE, NEW MEXICO

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application?

- A Yes, sir.
- Q You have not previously testified before the Commission on matters of petroleum engineering, have you?
 - A No, sir, I have not.
- Q Could you briefly state your education and training in petroleum engineering, sir.
- A I am a graduate of Texas A&M, having graduated in January, 1953, and have been employed by Pan American since graduation at various locations, being in Andrews and Sweet-water, Abilene and Lubbock; and I have been in Lubbock for some four years.
 - Q How many total years' experience is that?
 - A Twelve years.
 - Q Was this degree in petroleum engineering?
 - A No, sir--mechanical engineering.
 - Q A BS degree?
 - A Right, sir.
- MR. MALONE: Would the qualifications of this witness be satisfactory, Mr. Examiner?
 - MR. UTZ: Yes, sir--he is qualified.
- MR. MALONE: Thank you. Briefly, Mr. Cowan, in one sentence, what does Pan American seek by this application?
 - A Pan American seeks approval of multiple completion

in its SMU Well Number 18, and also a non-standard proration



PECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVER-

unit assignment for the Lower Paddock zone of this well.

- Q And that multiple would be a dual, is that correct, sir?
 - A Yes, sir.
- $\ensuremath{\mathsf{Q}}$ Referring to what has been marked Exhibit 1, what does that reflect?
- A Exhibit 1 is a map showing the well completion information on pertinent wells in this area. There is a color code which is identified by a legend in the lower left-hand corner. The unit outline is shown by a heavy dotted line on the map, and is so identified. The red arrow indicates the proposed location for the SMU Well Number 19.
- Q This well has been stacked but not begun, is that correct?
 - A That is correct.
 - Q Go ahead.
- A There was a satisfactory drill site for information at this location.
- Q Is there anything further with respect to this exhibit, Mr. Cowan, that you would like to state?
 - A No, sir, I believe not.
- Q Going now to what is marked Exhibit 2, please state what that is.
 - A Exhibit 2 is a structure map contoured on top of

the Lower Paddock pay for this area. The structure is shown



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northwest to the southeast, which is similar to other structures in this area. The location of the proposed SMU Number 18 is indicated by a red arrow, and at this location we would expect it to be productive in the Lower Paddock gas zone. Well Number 18 is a standard location as defined by the Fowler Lower Paddock gas pool rules.

- Q I notice a cross-section there. Is that to be discussed later?
- A Yes, sir. This is a surface trace of a crosssection which will be presented as an exhibit later.
- Q Have you shown on this exhibit the proposed area to be dedicated to this well, which is SMU Number 18?
- A The Lower Paddock proration unit will be a non-standard proration unit, and this 320-acre area is so indicated by the red taped outline, and is identified as such in the lower left-hand corner.
- Q This Fowler Lower Paddock pay zone on the exhibit would be the upper zone to be dual-completed, is that correct, sir?
 - A That is correct.
- Q Is there anything else on that exhibit you would like to mention?
 - A We might mention that the only current completion



in the Lower Paddock is SMU Number 16, which has been color coded on the map and is identified again in the lower left-hand corner.

MR. UTZ: How much acreage is dedicated to that well?

This is a 320-acre proration unit.

MR. UTZ: The south half of 15?

Yes, sir, to that well. That is a correction--it is the east half of Section 15, is now dedicated to that.

MR. MALONE: SMU Number 16 was the discovery well in this pool?

yes, sir.

Is there anything else on that exhibit you'd like Q to mention?

I believe that's all.

Going now to Number 3, would you state what that Q. is, please, sir.

Exhibit 3 is a structure map contoured on top of the primary pay, which will be the other proposed completion interval for the SMU Number 18. It again is an asymmetrical anticline which trends from northwest to southeast, again similar to other structures in this area. The location of Well Number 18 is indicated by a red arrow, and this is a standard Blinebry well location.

The acreage to be dedicated to the Blinebry well Q



in that pool would be what?

- A The eighty-acre proration unit for Well Number 18 would be the south half of the northeast quarter of Section 22.
- O Now, the Blinebry completions up to date are shown in orange on this exhibit?
- A Yes, sir, current completions are so indicated on the exhibit.
- Q And this shows the same cross-section you mentioned on the previous exhibit, that would be discussed later?
 - A Yes, sir.
- Q Do you have anything further on this exhibit to mention?
- A I might mention that based on the structure, it would appear that the Blinebry zone in Well Number 18 should be productive.
- Q Going to Exhibit 4, please, sir, would you explain what that is.
- A Exhibit 4 is a cross-section which has been previously mentioned, showing the completions of wells in this area. This cross-section has previously been used, the last time in Case Number 3175 which was held in December of 1964. There are two exceptions to the same cross-section as was used on that date and this one.
 - Q You mean by that, that two changes have been made



NEW MEXICO

BOX 1092 • PHONE

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in this exhibit since it was used before?

- Yes, sir.
- What are those? O

On the old cross-section SMU Number 11 was shown, Α and this cross-section replaces Well Number 11 with Well Number 13. In addition, we have included the proposed SMU Well Number 18, which wasn't previously shown.

What does that exhibit show with respect to separation of the primary oil and Lower Paddock gas pays?

The Lower Paddock is separated from the primary by some seventy to eighty feet of apparently impermeable zone, based on log analyses.

What does it show with respect to separation of the Lower Paddock gas pay which is in question in this application, and the Upper Paddock pay which has been established as another pool?

The Upper Paddock contains gas-water contact, and based on that contact there should be some 200 feet of separation, which would be water-bearing, between the Paddock zone and the Lower Paddock completion interval.

Was any water produced in the Lower Paddock gas pay in the initial well, which was Number 16?

No, sir.

Have you also made log analyses of material separ-Q



¥ ALBUCHERQUE, Š ating the Upper and Lower Paddock?

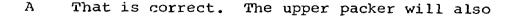
- None, except that it appears to be water-productive.
- Have these separations between the Upper and Lower Paddock and between the Lower Paddock and the Blinebry been recognized by this Commission in previous orders entered by them?

Yes, sir, both were recognized. I forget which order is which, but one order was R-2684 and the other order was R-2424. One partains to the Blinebry and the other to the Lower Paddock.

- Is there anything further you would like to mention on this exhibit?
 - No, sir, I don't believe so.
- Going to Exhibit 5, then, would you describe it, please, sir.

Exhibit 5 is a diagram of the proposed multiple completion procedure for the SMU Number 18, which will be a conventional multiple completion. It is noted that two production packers will be used to separate the zones of interest, and the approximate distances for setting these packers have been shown on the diagram.

And those packers are identified as the upper one being a Baker Model FA production packer, and the lower one a Baker Model D?





contain a parallel flow tube.

Q What about what this exhibit shows with respect to the cementing program?

A The cementing program for two strings of pipe has been indicated. The 9-5/8 inch surface casing will be set at approximately 1,000 feet and cement will be circulated to surface behind this casing. The oil string casing, which will be seven-inch, will be set at approximately 5,750 feet and sufficient cement will be placed behind the oil string so that the top of the cement will be at the approximate base of the salt, which should occur at about 2,400 feet.

Q That would mean about 3,300 feet of vertical length of cement outside the seven-inch?

- A Yes, sir, approximately--that's correct.
- Q And that 3,300 feet would more than cover and include the proposed productive zones, would it not?

A Yes, sir, the top of the cement would be some 2,800 feet above the uppermost perforated interval that is expected.

- Q Is there anything further you wish to mention on this exhibit?
 - A No, sir, I believe not.
- Q Is there anything further with respect to the entire application, Mr. Cowan, that you feel should be stated at this time?



- No, sir.
- Were these exhibits prepared either by you or under Q your direct supervision?
 - Yes, sir, they were.
- I would like to ask your opinion as to whether the granting of this application would be in the interest of the prevention of waste, and would protect correlative rights?
 - yes, sir, in both cases.

MR. MALONE: We would like to move for the admission of Exhibits 1 through 5, please, sir.

MR. UTZ: Without objection, Exhibits 1 through 5 will be entered into the record of this case.

MR. MALONE: That completes our direct examination.

MR. UTZ: Mr. Cowan, referring to Exhibit 2, which is your contour map of the top of the Lower Paddock pay, what control did you have on the southwest edge of this unit, as far as establishing these contours is concerned?

- There is only one point in the southwestern portion, and that would be the Sinclair-Jamison Well Number 4, which penetrated the Upper Paddock.
- And then going to the southeast, what was the next point of control?
- SMU Well Number 12 would be the south control point and on to the east, there were several there, on the offset



NEW MEXICO

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leases.

- Q What type drive does this pool have?
- A This is a solution gas drive, sir.
- Q And was the Sinclair well, Jamison Number 4--was it tested in the Lower Paddock?
- A No, sir, it was tested in the Upper Paddock, but not in the Lower.
- Q Is there anything in the record of that well to show that the Lower Paddock is productive in that area?
 - A No, sir, there was no completion attempt made.
- Q And the same questions in regard to your SMU Number 12.
- A There were no drill stem tests or completion attempts in the Lower Paddock in Number 12.
- Q So it would seem that along the southwest edge of that 320-acre unit, there would be some pretty serious doubt as to whether or not it's productive?
- Well Number 16 was somewhat of a surprise--we had not anticipated it to be productive in this area, based on the old available logs on these wells, and a better set of logs was run on Number 16, and from that we made our initial completion, so it's actually hard to condemn the area, based on available data. However, there is no data available that says it is productive.





- Q It is your intent, I presume, to make that determination by drilling the Number 18 well?
 - A Yes, sir, and running a good set of logs.
- Q In that event your control as far as productive acreage in this unit will be either confirmed or denied--right?
 - A Yes, sir.
- Q Let's take a look at Exhibit 3, insofar as the Blinebry zone is concerned. Were the same two wells used—that is, the Jamison Number 4 and the SMU Number 12, for control of this contouring also in this area?
- A In addition to the other wells, yes, sir. The SMU Well Number 13 is a recent Blinebry completion, and it would enter into the control for the SMU Number 18.
- Q How about productivity in the Blinebry, of the Jamison Number 4 and the SMU Number 12?
- A Again, there were no drill stem tests or completion attempts in the Blinebry on either well, based on our data.
- Q So actually as far as the productivity of the eighty-acre unit in that instance, the same condition exists--you have to prove that with the Number 18?
- A Yes, sir. We would expect it to be productive, based on the anticipated structure, but it would have to be proved.
 - Q What type of drive does that pool have?

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A It's a solution gas drive.

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

MR. DURRETT: One question, Mr. Cowan, concerning the Blinebry completion. What acreage do you propose to dedicate—the northeast of 22?

A The eighty acres that will be dedicated to the Blinebry and SMU 18 will be the south half of the northeast quarter.

Q The south half of the northeast quarter?

A Yes.

MR. UTZ: That's a standard unit, is it not?

A Yes, sir, it is.

MR. DURRETT: Then your Paddock completion would be the acreage you would dedicate to that?

A As shown on Exhibit 2, I believe it is--that would be the non-standard proration unit, yes, sir.

Q And that unit is non-standard only because of its configuration, not because of the amount of acreage involved, is it not?

A Yes, sir.

MR. UTZ: Are there any other questions of the witness? ... The witness may be excused. Are there other statements in this case? The case will be taken under advise-



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ment. Let's take a short break.

(Recess)

MR. UTZ: The hearing will come to order. Mr. Malone, do you want to make a correction in the testimony in regard to Case Number 3229?

MR. MALONE: Yes, sir. In the testimony in Case
Number 3229 Mr. Cowan, the witness, inadvertently stated that
the type drive in the Lower Paddock gas pool was solution yas.
I believe he was thinking about primary. Mr. Cowan, state the
type of drive in that pool.

A Just regular gas drive, is what I should have said.

MR. MALONE: Will that be satisfactory?

MR. UTZ: Yes.

Case. 3229
Heald 4-205
Rec. 4-27-65.

Lecut Pau Completion for their

5. Maddor with #18-5-22-2 \$5.3>E.

Lower Completion - Lower Paddock

2. Leant N.S.V. for Lower Paddock

Jone considering #2

2. Leant N.S.V. for Lower Paddock

NEIF, E/2 NW/4, N/2 SE/4. 325 Ac.

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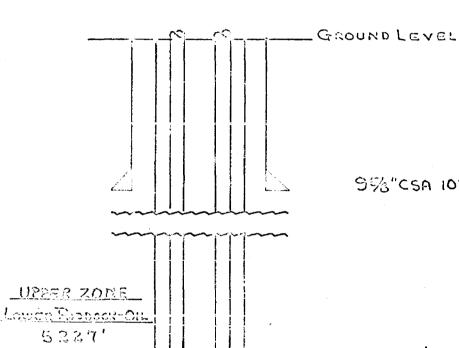
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SUBJECT SOUTH MATTIX UNIT No. 13 (G:-22-24-37)

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APPEDITE



9%"CSA 1034" WIBOO SX. CEMENT CIBO.

255"00(1995"ID) TUBING SET AT 5199.

BAKER MODEL D' PACKER @5335

235"OD(1995"TO) TUBING SET AT 5398.

7"CSA 5770 W 2000 SX.CEMENT.

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