

CASE 5481: PHILLIPS PETROLEUM COMPANY  
FOR DOWNHOLE COMMINGLING, EDDY COUNTY,  
NEW MEXICO.

CASE No.

5481

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Application,  
Transcripts,  
Small Exhibits

ETC.

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

14 May 1975

EXAMINER HEARING

-----  
IN THE MATTER OF:

Application of Phillips Petroleum Company  
for downhole commingling, Eddy County,  
New Mexico. Applicant, in the above-styled  
cause, seeks approval for the downhole com-  
mingling of South Carlsbad-Atoka and South  
Carlsbad-Morrow gas production in the well-  
bore of its Tidwell-A "COM" Well No. 1  
located in Unit E of Section 8, Township  
23 South, Range 27 East, Eddy County, New  
Mexico.

NO. 5481

-----  
BEFORE: Daniel S. Nutter, Examiner.

For the New Mexico Oil  
Conservation Commission:

William F. Carr, Esq.  
Legal Counsel for the Com-  
mission  
State Land Office Building  
Santa Fe, New Mexico 87501

For the Applicant,  
Phillips Petroleum Com-  
pany:

Tom Kellahin, Esq.  
KELLAHIN & FOX  
500 Don Gaspar  
Santa Fe, New Mexico 87501

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225 JOHNSON STREET  
SANTA FE, NEW MEXICO 87501  
TEL. (505) 982-0386

I N D E X

Testimony of William J. Mueller

Direct Examination by Mr. Kellahin

3

Questions by Mr. Nutter

10

E X H I B I T S

Exhibits One through Seven

9

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MR. NUTTER: The hearing will come to order, please. The first case this afternoon will be the application of Phillips Petroleum Company for downhole commingling, Case 5481.

MR. KELLAHIN: Tom Kellahin, Kellahin and Fox, Santa Fe, New Mexico, appearing in association with Mr. Joe Peacock, an attorney and a member of the Oklahoma Bar, on behalf of Phillips Petroleum Company, and we have one witness to be sworn.

(Witness sworn.)

WILLIAM J. MUELLER,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you please state your name, by whom you are employed, and in what capacity?

A My name is William J. Mueller. I'm employed by Phillips Petroleum Company as a Senior Reservoir Engineer for the north area of the southwest region.

Q Now, Mr. Mueller, have you previously testified before this Commission and had your qualifications as an expert accepted and made a matter of record?

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A Yes, sir.

Q And have you examined the facts surrounding this particular application by Phillips?

A Yes, sir.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, they are.

Q Mr. Mueller, please refer to Exhibit Number One and identify it, and state what Phillips is seeking.

A Exhibit Number One is an area plat of the South Carlsbad Gas producing area, particularly the area surrounding the location of our Tidwell "A" Common Well Number 1, located in the west half of Section 8, 23 South, excuse me, 23 South, 27 East.

Q What is the acreage dedicated to that well?

A The west half of the section.

Q And what do you desire to accomplish by this application?

A This application is to permit the downhole commingling of the Atoka gas zone with the Morrow gas zone in this borehole. Currently the well is dual completed under Administrative Order MC 2024, dated 3/4/73. A similar downhole commingling application was recently ap-

proved for the Pennzoil Well located in the north half of Section 12 of 23 South, 26 East. They had mechanical problems is why the downhole commingling was permitted there, but here we want to do it for increased recovery and more efficient production.

Q With regards to the ownership of the west half of Section 8, is the ownership the same for both zones of production?

A Yes, sir.

Q Would you please refer to Exhibit Number Two and identify it?

A Exhibit Number Two is a compensated borehole sonic log of the Tidwell "A" Well. You'll notice the well carries two company names up there. It was drilled in the name of Texas International Petroleum Company; however, Phillips assumed operation upon completion of the well. We drilled it as their agent and the drilling completion. The log has marked on it in the detail section, one, the Atoka Zone is colored blue at approximately 10,755 to 60, and Morrow Sand that are prorated in this well are shown in red in the intervals 11,450 to 11,825. Currently the well has a packer in it at 11,300 and the Morrow is producing up tubing from under a packer and the Atoka is es-

entially dead in the annulus and not producing.

Q Please refer to Exhibit Number Three and identify it.

A Exhibit Number Three is a diagrammatic sketch of the subject well showing our surface casing set at 397 feet; cement circulated to surface intermediate 8 and 5, cemented at 5511; top of cement was at 1630 on that casing string. We have 5 and 1/2 inch to TD; was cemented with 550 sacks with the top of the cement at 9250. The Atoka perforations are shown in blue here and the Morrow in red with the same intervals as shown in the sonic log. This shows the proposed completion would be one string of 2 and 7/8ths tubing set to the base of the Morrow perforation; no packer in the hole. This will permit us to use the annulus kind of a compression chamber to remove the wellbore accumulation of liquid which should give us not only increased gas but increased productivity.

Q In your opinion is this manner of completion the most sound from an engineering standpoint for lifting the two zones of production?

A This manner of completion is very good for gas wells that make small volumes of liquid and in the later stages of life are no longer able to flow them to the



surface, so if you have a packerless completion like this, you can shut in the annulus and let it build up and blow it around through the tubing. You can keep the wellbore clear of liquids.

Q Please refer to Exhibit Four and identify it.

A Exhibit Four and Exhibit Five are Phillips Petroleum Company gas analyses of the two producing formations in this well; Four being the Atoka formation, showing our methane content at approximately 94%, minor carbon dioxide, nitrogen, BTU 1035. It is almost identical to the Morrow formation gas analysis shown in Exhibit Five. There again we have minor carbon dioxide, nitrogen, methane content of approximately 96%, BTU of 1009. Specific gravity of one is .584 and the other is .602.

Q In your opinion, then, the composition of both gases -- of the two gases from both formations are compatible for downhole commingling?

A Yes, sir.

Q Please refer to Exhibit Six and identify it.

A Exhibit Six is a tabulation of monthly production from the two zones in this well since its completion and connection in April of 1973. The Morrow production has a decline from a high of 210 million in May of '73 to

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its current production of about 46 million per month. The Atoka production high was again in May of '73 at 23 million point four per month, and declined in October of 1974 to one million and subsequently has not been produced. In shut in pressures in the Morrow zone in August of '74 were 2230, excuse me, 2223, for a calculated bottom hole pressure of 2923 in August of '74, and the Atoka zone that same month had a shut in casing pressure of 1463, for a calculated bottom hole pressure of 1925.

Q Do you have a proposal as to how to allocate the production between the Morrow and the Atoka?

A Yes, Exhibit Number Seven is the same data we saw on Exhibit Six only plotted here on simulog paper, in which I show an extrapolated production decline of the Morrow zone from the current 46 million down to about 20 million per month by about October, and at that time if we were to take the Atoka production and combine it with it, I feel that the total well production would climb maybe 30 million per month, and then subsequently decline at this rate of about 70% per year. This would indicate that the area under the red from October on is about 400 million and the area lying between the curves, the red and blue, is about 150 million for the Atoka, so the percent

allocation would be about 37.5 for the Atoka and 62.5 for the Morrow. Initially the Atoka may be a little higher if it will by October this year have been shut in for almost a year.

Q Are the reservoir characteristics of the two formations such that by allowing the commingling of the two gas zones no waste will be caused?

A Definitely. In fact, increased recovery should be obtained.

Q In your opinion, then, will granting of this application be in the best interests of conservation, prevention of waste and the protection of correlative rights?

A Yes, sir.

Q Were Exhibits One through Seven either prepared by you directly or under your direction and supervision?

A Yes, sir.

MR. KELLAHIN: If the Examiner please, we move the introduction of Exhibits One through Seven.

MR. NUTTER: Phillips Exhibits One through Seven will be admitted in evidence.

MR. KELLAHIN: That concludes our direct examination.

QUESTIONS BY MR. NUTTER:

Q Mr. Mueller, has the Atoka always produced through the annulus in this well?

A Yes.

Q Now are both wells connected to the same pipeline?

A Yes, they both sell to El Paso on a BTU contract.

Q How about line pressures in here?

A They run around 400 pounds. At some times peak, El Paso will get them down to 250, but in the neighborhood of 400.

Q Was that the line pressure when the Atoka was shut in back in October of '74?

A I believe so.

Q So there hasn't been any appreciable change in line pressure since that time?

A No.

Q Did the Atoka quit producing or was it shut down?

A What happened then, as you'll see here in looking at the production curve, in October '74 the Morrow had declined drastically due to some wellbore fluid accumulation and we went in and worked on the well. We drilled

a packer out, reperforated and stimulated the Morrow, and then reset our packer and we were unable to unload the Atoka essentially at that time. NOW we are starting to see a pressure casing buildup --

Q Did you kill the well in order to work on it?

A Yes.

Q And the Atoka never has come back?

A That's right.

Q You weren't able to swab the Atoka?

A We tried but it was so dry and so low pressured it would take, you know, essentially too long a swabbing period to recover this load. It needs to be recovered slowly. Possibly with this downhole commingling.

Q Is there a sliding sleeve above the packer on the tubing string? So that you could swab?

A There was in the initial installation but right now I think that when we swabbed it after the workover, we had a packer bridge plug in there to isolate the intervals in testing.

Q And you were able to physically swab on the Atoka through the tubing but you weren't able to bring it back?

A Well, it flowed but it would not maintain con-

tinuous flow.

Q Had any change taken place in the liquid production or did you ever recover all of the liquids you used?

A No, in those workovers they haul the water out there. They do it as best they can estimating recovery and they didn't -- they estimate we still did not recover it all.

Q I see, so there's probably some water back in the formation yet. Now was the October production of 1250, was that a full month production or does that represent just a few days during that month?

A Dan, I'm going to have to say it was a full month. I just looked at the monthly totals and did not look at the days operated, but since the Morrow appears to have been on the full month, I'm going to say our workover was actually accumulated back in there -- I really don't have the data to answer that days operated.

Q Now you have a good increase in production between September and October for the Morrow. Was that the result of the workover on the Morrow?

A Yes, uh-huh. The Morrow workover here, I have the dates it started on, September of '74 and worked all

the way up to October the 18th.

Q What date in September?

A Huh?

Q What date in September?

A 9/4.

Q 9/4/74 to 10/18?

A Yes.

Q '74.

A That we moved in well service unit until we finally released them.

Q So apparently that October production there shown for the Atoka may have been a little gas that was on the swab or during the workover; the testing.

A Yes.

Q Is the well classified as a marginal well in the South Carlsbad-Morrow Pool?

A I'm sure it would be at these flow rates. Yes, it would have to be; both zones, because I believe that Harold Olive South Morrow is several million a day well, isn't it?

Q And the well is currently making approximately a million and one-half a day from the Morrow?

A Right.

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MR. NUTTER: Are there any further questions of this witness?

MR. KELLAHIN: No, sir.

MR. NUTTER: He may be excused. Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case 5481?

(No response.)

MR. NUTTER: We'll take the case under advisement and call Case Number 5482.

(Hearing concluded.)



STATE OF NEW MEXICO)

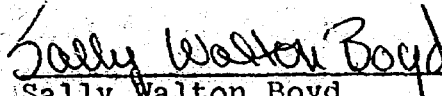
) SS

REPORTER'S CERTIFICATE

COUNTY OF SANTA FE )

I, Sally Walton Boyd, Notary Public and General Court Reporter, Santa Fe, New Mexico, DO HEREBY CERTIFY that the facts stated in the caption hereto are true and correct; that I reported the captioned proceedings; that the foregoing 14 pages, numbered 1 through 14 inclusive, is a full, true and correct transcript of my notes taken during the course of the hearing.

WITNESS my hand, this 24th day of May, 1975, at Santa Fe, New Mexico.



Sally Walton Boyd

Notary Public and General Court Reporter

My Commission expires:

10 September 1975

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5481 heard by me on 5-14 1975.

  
New Mexico Oil Conservation Commission

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# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501

**I. R. TRUJILLO**  
**CHAIRMAN**

LAND COMMISSIONER  
PHIL R. LUCERO  
MEMBER

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

**May 22, 1975**

Mr. .Tom Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: CASE NO. 5481  
ORDER NO. R-5027

**Applicant:**

Phillips Petroleum Company

Dear Sir:

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

Very truly yours,

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

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC	<u>X</u>
Artesia OCC	<u>X</u>
Aztec OCC	<u>  </u>

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. 5481  
Order No. R-5027

APPLICATION OF PHILLIPS PETROLEUM  
COMPANY FOR DOWNHOLE COMMINGLING,  
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 14, 1975,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 22nd day of May, 1975, 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, Phillips Petroleum Company, is  
the owner and operator of the Tidwell-A "COM" Well No. 1,  
located in Unit E of Section 8, Township 23 South, Range 27  
East, NMPM, Eddy County, New Mexico.

(3) That the applicant seeks authority to commingle  
South Carlsbad-Atoka and South Carlsbad-Morrow production  
within the wellbore of the above-described well.

(4) That from the South Carlsbad-Morrow zone, the subject  
well is capable of marginal production only.

(5) That from the South Carlsbad-Atoka zone, the subject  
well is capable of low rates of production only.

(6) That the proposed commingling may result in the  
recovery of additional hydrocarbons from each of the subject  
pools, thereby preventing waste, and will not violate  
correlative rights.

-2-

Case No. 5481  
Order No. R-5027

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Artesia district office of the Commission any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, Morrow production should be determined on the basis of the previously established production decline curve, and Atoka production should be determined by subtracting said Morrow production from total production.

IT IS THEREFORE ORDERED:

(1) That the applicant, Phillips Petroleum Company, is hereby authorized to commingle South Carlsbad-Atoka and South Carlsbad-Morrow production within the wellbore of the Tidwell-A "COM" Well No. 1, located in Unit E of Section 8, Township 23 South, Range 27 East, NMPM, Eddy County, New Mexico.

(2) That the Morrow production from the subject well shall be determined from the previously established production decline curve for the Morrow zone, and Atoka production shall be determined by subtracting the Morrow production from the well's total production.

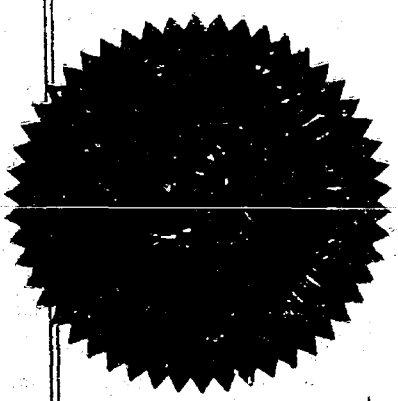
(3) That the operator of the subject well shall immediately notify the Commission's Artesia district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

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

-3-  
Case No. 5481  
Order No. R-5027

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION



*I. R. Trujillo*  
I. R. TRUJILLO, Chairman

*Phil R. Lucero*  
PHIL R. LUCERO, Member

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

S E A L

dr/

13 3/8"

13 3/8" CMTD. WITH 450 SACKS CLASS H MIXED AT 15.6 #/G. CIRCULATED 50 SACKS. CENTRALIZED AT 392' AND 333'

397'

8 5/8"

8 5/8" CMTD. WITH 1300 SACKS OF TLW MIXED WITH 3 LBS. /SACK GILSONITE AT 12.3 #/G FOLLOWED BY 250 SACKS OF CLASS H NEAT AT 15.6 #/G. TOP OF CMT. BY TEMPERATURE SURVEY AT 1630'. CENTRALIZED AT 5505, 5423 AND 5372' WITH ROTATING SCRATCHERS AT 5495' TO 5505'

5511'

5 1/2" CMTD. WITH 550 SACKS OF CLASS H MIXED WITH 0.75 % CFR-2 AND 8 #/SACK SALT AT 15.8 #/G. TOP OF CMT AT 9250' BY SURVEY. CENTRALIZED AT 11,965 11,830, 11,810, 11,660, 11,575, 11,495, 11,470, 11,410, 11,080, 11,020, 10,950, 10,770, 10,750 10,200, 9660, 9640 AND 9400. SCRATCHERS AT 11,965-75, 11,830-40, 11,800-10, 11,660-70, 11,565-75, 11,460-70, 11,400-10, 11,080-90, 11,010-20, 10,940-50, 10,770-80, 10,740-50, 9660-70 AND 9630-40.

5 1/2"

ATOKA

2 7/8" TUBING @ ± 11825'

MORROW

MORROW ZONE IS PERFORATED WITH 280 HOLES, 11,416'-11,824'.

ATOKA ZONE IS PERFORATED WITH 6 HOLES, 10,754'-10,760'

JUNK

11,902'

11,984'

12,000 TD

BARTLESVILLE, OKLAHOMA

BEFORE EXAMINER MUTTER

OIL CONSERVATION COMMISSION

EXHIBIT NO. 3

CASE NO.

5481

TIDWELL A-1

2310' FNL, 660' FWL, SECTION 8,

T23S, R27E, EDDY CO., NEW MEXICO.

PROPOSED COMPLETION

DRAWN 11-30-75

CRS

AFE NO.

DWG. NO.

CHECKED

1/2

SCALE NONE

SHEET NO.

REVISION

BY

DATE

APPROVED

FORM 1779 8-66

PHILLIPS PETROLEUM COMPANY  
S&W LAB - ODESSA, TEXAS

Run# 639  
Date Run 2-2-73  
Date Sec. 1-31-73  
Time \_\_\_\_\_

CHROMO ANALYSIS

Sample of DRY GAS Well, SOUTH CARLSBAD FIELD,  
ATOKA Formation, TEXAS INTERNATIONAL  
Secured from Lease #1, Tract "A" Lease County Eddy State N. Mex.  
Location 2310'N + 660'W 8-23-27 Purpose Survey Secured by WILLIS  
Sampling Condition : Atmos. Temp. 55 °F ; Gas Temp. 64 °F ; Volume/Day 2,580 MCF  
Field Gas Press. \_\_\_\_\_ # ; Line Press. \_\_\_\_\_ psig ; Weather Conditions \_\_\_\_\_

Calculations	Components	Vol %	Data to be Typed on Form 206	GPM Factors	BTU Factors	Sp. Gr. Factors
<u>1.50</u> x <u>1</u>	Helium		Propane GPM <u>189</u>			<u>1.13</u>
<u>1.21</u> x <u>1</u>	Carbon Dioxide	<u>60</u>	I-Ethane GPM <u>055</u>			<u>1.519</u>
<u>.61</u> x <u>1</u>	Oxygen		N-Ethane GPM <u>063</u>			<u>1.105</u>
<u>18</u> <u>565</u> x <u>1</u>	Nitrogen	<u>70</u>	Pentane + GPM <u>188</u>			<u>.97</u>
<u>159-2</u> <u>38-1</u>	Hydrogen Sulfide		Propane + GPM <u>495</u>		<u>637</u>	<u>1.156</u>
<u>760</u> x <u>1</u>	Methane	<u>93.94</u>	Test Gas GPM		<u>1010</u>	<u>.554</u>
<u>55.50</u> x <u>1</u>	Ethane	<u>3.24</u>	BTU CF SB <u>1035</u>		<u>1767</u>	<u>1.013</u>
<u>222-2</u> <u>38-7</u>	Propane	<u>69</u>	Calc. Sp. Gr. <u>602</u>	<u>2764</u>	<u>2517</u>	<u>1.522</u>
<u>891</u> x <u>1</u>	I-Ethane	<u>17</u>	H <sub>2</sub> S + CO <sub>2</sub> <u>60</u>	<u>32514</u>	<u>3253</u>	<u>2.006</u>
<u>156-10</u> <u>55-1</u>	N-Ethane	<u>20</u>	H <sub>2</sub> S GR/100 CF <u>Negative</u>	<u>31339</u>	<u>3262</u>	<u>2.006</u>
<u>104</u> <u>5.71</u> x <u>1</u>	I-Pentane	<u>10</u>	Mercaptans	<u>.35382</u>	<u>4000</u>	<u>2.191</u>
<u>213-1</u> <u>197-1</u>	N-Pentane	<u>08</u>		<u>.36014</u>	<u>4009</u>	<u>2.191</u>
<u>133</u> <u>3.10</u> x <u>1</u>	Hexanes	<u>11</u>		<u>.40789</u>	<u>4717</u>	<u>2.273</u>
<u>205-11</u> <u>182-1</u>	Heptanes +	<u>17</u>		<u>.45212</u>	<u>5192</u>	<u>3.159</u>

Run by Copyright 100.00/1 Checked by Edw. L...

Additional Data : Rx. Gravity \_\_\_\_\_ ; Flo. Tub. Press. 1630 #

Boil Press. \_\_\_\_\_ # ; Live <sup>Conv.</sup> Trap Press. 682 # @ 169 °F

Choke 1 1/2" ; \_\_\_\_\_

B. B. Brooks  
J. P. Kirk  
R. D. Schropp  
C. G. Mitchell  
(r) R. T. O'Neil  
Lab Files (2)

EXAMINER NUTTER  
CONSERVATION CO.  
EXHIBIT NO. 4  
NO. 6481

LOT 20 12-17-72 2117



PATENTS PATROL COMPANY  
AND LAB - CORPORA, TEXAS

Run# 640  
Date Run 2-2-75  
Date Sec. 1-31-75  
Time

CHROM ANALYSIS

Sample of DRY GAS WELL, SOUTH CARLETON FIELD,  
MORRIS FORMATION, TEXAS INTERNATIONAL  
Secured from 11#1, Tubell "A" Lease County Eddy State N.M.  
Location 2310' N + 660' W 8-23-27 Purpose SURVEY Secured by KEPLIS  
Sampling Condition : Atmos. Temp. 57 °F ; Gas Temp. 62 °F ; Volume/Day 4610 MCF  
Field Gas Press. # ; Line Press. psig ; Weather Conditions

Calculations	Components	Mol %	Data to be Typed on Form 206	GPM Factors	BTU Factors	Sp. Gr. Factors
<u>.50</u> x <u>x</u>	Hydrogen		Propane GPM <u>112</u>			<u>.133</u>
<u>1.21</u> x <u>x</u>	Carbon Dioxide	<u>80</u>	I-Butane GPM <u>029</u>			<u>1.519</u>
<u>.01</u> x <u>x</u>	Oxygen		N-Butane GPM <u>028</u>			<u>1.105</u>
<u>5.65</u> x <u>x</u> <u>159-2</u> <u>30-1</u>	Nitrogen	<u>52</u>	Pentane + GPM <u>067</u>			<u>.967</u>
<u>760</u> x <u>x</u> <u>520</u>	Hydrogen Sulfide		Propane + GPM <u>236</u>		<u>637</u>	<u>1.176</u>
<u>69.80</u> x <u>x</u> <u>222-4</u> <u>15-16</u>	Methane	<u>95.72</u>	Test Car GPM		<u>1010</u>	<u>.554</u>
<u>8.92</u> x <u>x</u> <u>156-6</u> <u>39-44</u>	Ethane	<u>2.21</u>	BTU CF SB <u>1009</u>		<u>1769</u>	<u>1.038</u>
<u>5.81</u> x <u>x</u> <u>213-3</u> <u>121-11</u>	Propane	<u>41</u>	Calc. Sp. Gr. <u>584</u>	<u>27364</u>	<u>2517</u>	<u>1.522</u>
<u>3.10</u> x <u>x</u> <u>200-16</u> <u>97-1</u>	I-Butane	<u>09</u>	H <sub>2</sub> S + CO <sub>2</sub> <u>80</u>	<u>32514</u>	<u>3253</u>	<u>2.006</u>
<u>2.93</u> x <u>x</u> <u>168-1</u> <u>87-1</u>	N-Butane	<u>09</u>	H <sub>2</sub> S GR/100 CF <u>NEGATIVE</u>	<u>31339</u>	<u>3262</u>	<u>2.006</u>
<u>.98</u> x <u>x</u> <u>40</u> <u>35-1</u>	I-Pentane	<u>01</u>	Mercaptans	<u>.36382</u>	<u>4000</u>	<u>2.491</u>
<u>.02</u> x <u>x</u> <u>152-11</u> <u>12-1</u>	N-Pentane	<u>04</u>		<u>.36014</u>	<u>4009</u>	<u>2.491</u>
<u>1.94</u> x <u>x</u> <u>888</u> <u>107-1</u>	Hexanes	<u>04</u>		<u>.40989</u>	<u>4747</u>	<u>2.975</u>
<u>1.93</u> x <u>x</u> <u>5032-1</u> <u>122-1</u>	Heptanes +	<u>07</u>		<u>.15812</u>	<u>5492</u>	<u>3.459</u>

Run by Copyright Checked by MAGEE  
Additional Data : Rx. Gravity 101.03 ; Flo. Tub. Press. 2193 #  
Bomb Press. # ; Line Conv. Trap Press. 210 # @ 153 °F  
Choke 19/32 ;

B. B. Brooks  
J. P. Kirk  
R. D. Schropp  
C. G. Mitchell  
(r) R. T. O'Neil  
Lab Files (2)

BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

EXHIBIT NO. 5  
CASE NO. 5481

LET 20 12-11-72 3/17



TIDWELL A "COM" WELL NO. 1

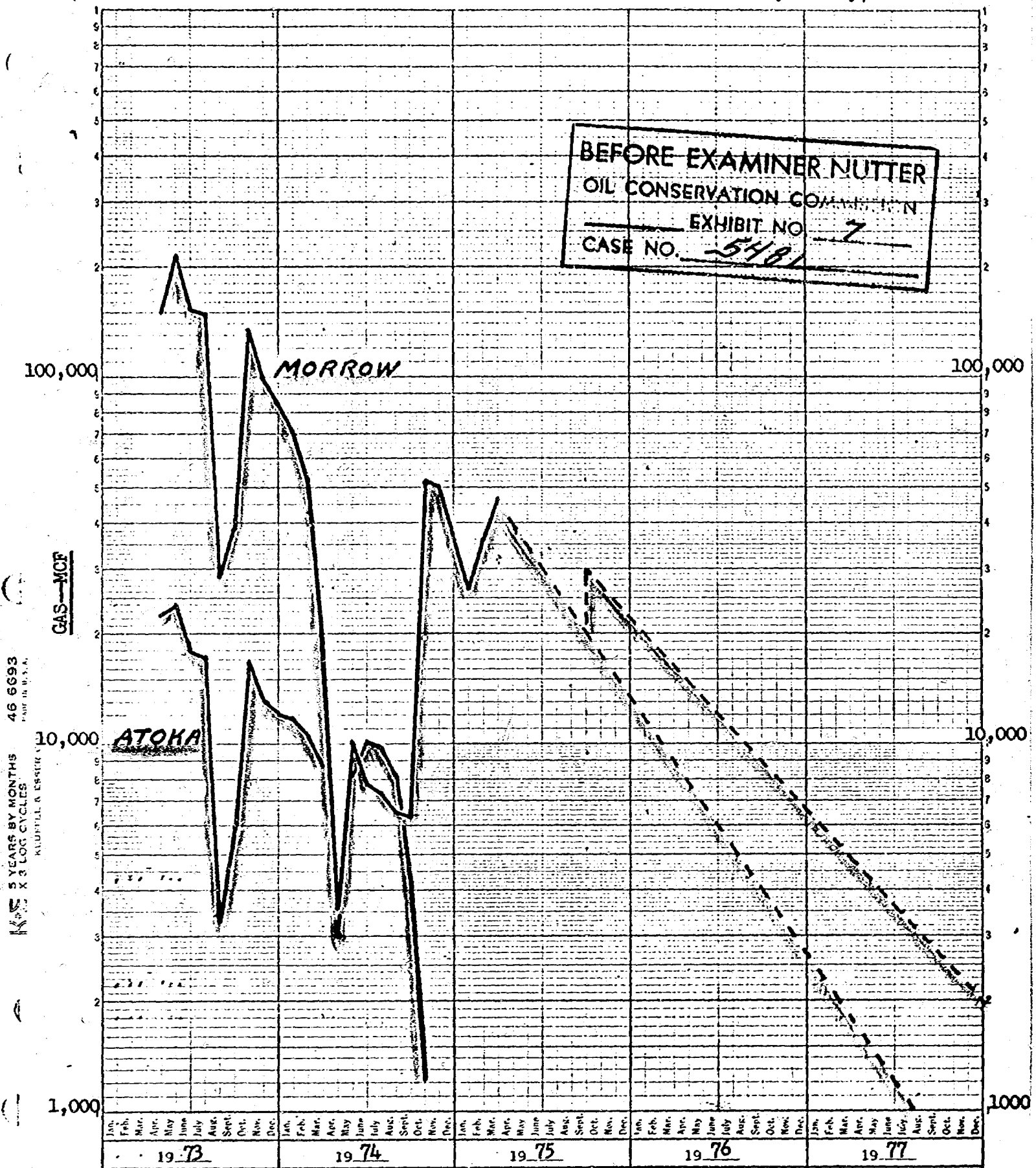
Unit E, Section 8, Township 23 South, Range 27 East, NMPM  
Eddy County, New Mexico  
Phillips Petroleum Company, ET AL

	South Carlsbad Morrow Production		South Carlsbad Atoka Production	
	Gas—Mcf	Cond.—Bbls.	Gas—Mcf	Cond.—Bbls.
<u>1973</u>				
April	149,119	99	22,439	40
May	210,764	84	23,385	164
June	153,234	111	17,891	91
July	149,278	69	17,270	57
August	28,500	0	3,257	18
September	38,256	0	5,981	0
October	131,871	0	16,598	0
November	98,885	79	13,367	169
December	84,746	60	12,261	87
<u>1974</u>				
January	70,501	0	11,741	71
February	52,780	0	10,550	142
March	18,038	0	8,725	98
April	3,569	0	3,016	0
May	10,055	0	8,187	19
June	7,835	0	10,020	40
July	7,237	0	9,710	52
August	6,556	0	8,070	22
September	6,390	0	4,151	0
October	51,427	0	1,250	0
November	50,202	0	0	0
December	37,511	11	0	0
<u>1975</u>				
January	26,700	40	0	0
February	35,878	0	0	0
March	46,253	0	0	0
Cumulative				
April 1, 1975	1,475,585	553	207,869	1,070

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 6  
CASE NO. 5481

TIDWELL A "COM" WELL NO. 1  
South Carlsbad Field  
Eddy County, New Mexico

BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
EXHIBIT NO. 7  
CASE NO. 5481



Dockets Nos. 12-75 and 13-75 are tentatively set for hearing on May 28 and June 11, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 14, 1975

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 Richard L. Stamets, Alternate Examiner.

- ALLOWABLE:
- (1) Consideration of the allowable production of gas from seventeen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico, for June, 1975.
  - (2) Consideration of the allowable production of gas from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for June, 1975.

CASE 5429: (Continued from the March 5, 1975 Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Charles M. Goad and United States Fidelity & Guaranty Company and all other interested parties to appear and show cause why the Charles M. Goad, State No. 1 Well located in Unit M of Section 28, Township 2 South, Range 26 East, De Baca County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5408: (Continued from the April 2, 1975 Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit W. E. Medlock and Reliance Insurance Company and all other interested parties to appear and show cause why the Queen Ridge No. 1 Well located in Unit M of Section 36, Township 10 South, Range 26 East, Chaves County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5469: Application of Read & Stevens for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox gas well location of a well to be drilled at a point 990 feet from the South and East line of Section 7, Township 15 South, Range 28 East, Chaves County, New Mexico, in exception to the Buffalo Valley-Pennsylvanian Gas Pool Rules.

CASE 5470: Application of Maralo, Inc. for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Butler Springs Unit Area comprising 3841 acres, more or less, of state and federal lands in Townships 14 and 15 South, Range 28 East, Chaves County, New Mexico.

- CASE 5471: Application of Union Texas Petroleum for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Justis Blinbry and Justis Tubb-Drinkard production in the wellbore of its Carlson "B" Wells Nos. 1 and 2 located in Unit P of Section 23 and Unit H of Section 26, respectively, Township 25 South, Range 37 East, Lea County, New Mexico.
- CASE 5472: Application of Mesa Petroleum Co. for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox gas well location of a well to be drilled at a point 660 feet from the North and East line of Section 6, Township 26 South, Range 33 East, Red Hills Field, Lea County, New Mexico.
- CASE 5473: Application of Mesa Petroleum Co. for pool creation and special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Drinkard production for its West Knowles Well No. 1 located in Unit P of Section 34, Township 16 South, Range 37 East, Lea County, New Mexico, and for the promulgation of special rules therefore, including a provision for 80-acre spacing units.
- CASE 5474: Application of Gulf Oil Company for two non-standard locations and the amendment of Order Nos. R-2904 and R-2909, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Central Drinkard Unit Wells Nos. 101 and 401 located, respectively, 554 feet from the North line and 766 feet from the East line, and 660 feet from the North and East lines of Section 28, Township 21 South, Range 37 East, Drinkard Pool, Lea County, New Mexico. Applicant further seeks the amendment of Order No. R-2904 which order approved the Central Drinkard Unit Agreement to provide that the vertical limits of the unitized formation shall include the entire Drinkard formation; application further seeks the amendment of Order No. R-4909 which approved the Central Drinkard Unit Waterflood Project to provide an administrative procedure for the approval of additional unorthodox well locations.
- CASE 5475: Application of Mobil Oil Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Lower Siluro-Devonian formation in the open-hole interval from 12,188 feet to 12,525 feet in its Santa Fe Pacific Well No. 9, located in Unit E of Section 35, Township 9 South, Range 36 East, Crossroads Siluro-Devonian Pool, Lea County, New Mexico.
- CASE 5476: Application of Cities Service Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp formation underlying the NE/4 of Section 30, Township 22 South, Range 27 East, and in the Pennsylvanian formation underlying the E/2 of said Section 30, to be dedicated to a proposed gas well to be drilled at an orthodox location for both formations. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs as well as actual operating costs and charges for supervision. Also to be considered will be the designation of the applicant as operator of the well and a charge for the risk involved in drilling said well.

CASE 5477: Application of Cities Service Oil Company for compulsory pooling and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 18, Township 22 South, Range 27 East, South Carlsbad Field, Eddy County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location for said unit 1650 feet from the South line and 1980 feet from the West line of said Section 18. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs as well as actual operating costs and charges for supervision. Also to be considered will be the designation of the application as operator of the well and a charge for the risk involved in drilling said well.

CASE 5478: Application of Continental Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Warren Unit Well No. 31 located in Unit O of Section 27, Township 20 South, Range 38 East, Lea County, New Mexico, in such a manner as to produce oil from the Blinbry Oil and Gas Pool and oil from the Warren-Tubb Gas Pool through parallel strings of tubing.

CASE 5479: Application of Continental Oil Company for two non-standard gas proration units, two unorthodox locations, and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a non-standard gas proration unit comprising Lots 1, 2, and 3 and Lots 6 through 11 of Section 4, Township 11 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to its Meyer B-4 Well No. 14 located in Unit G of said Section 4. Applicant further seeks approval of a 360-acre Eumont Gas proration unit comprising Lots 14, 15, and 16 and the SE/4 and E/2 SW/4 of said Section 4 to be simultaneously dedicated to its Meyer B-4 Well No. 4 and 29 at unorthodox locations in Units S and P, respectively, of said Section 4.

CASE 5480: Application of Continental Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Pennsylvanian formation through the perforated interval 7648 to 7690 feet in its SEMU Well No. 7 located in Unit F of Section 23, Township 20 South, Range 37 East, Cass-Pennsylvanian Gas Pool, Lea County, New Mexico.

CASE 5481: Application of Phillips Petroleum Company for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of South Carlsbad-Atoka and South Carlsbad-Morrow gas production in the wellbore of its Tidwell-A "COM" Well No. 1 located in Unit E of Section 8, Township 23 South, Range 27 East, Eddy County, New Mexico.

CASE 5482: Application of Phillips Petroleum Company for an unorthodox gas well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Lusk Deep Unit "A" Well No. 1 located in Unit A of Section 19, Township 19 South, Range 32 East, Lusk-Morrow Gas Pool, Lea County, New Mexico, and the simultaneous dedication of said Section 19 to the above well and to applicant's Lusk Deep Unit "A" Well No. 5 located in Unit J of said Section 19.

CASE 5483: Application of Phillips Petroleum Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval to dually complete its Lusk Deep Unit "A" Well No. 12 located in Unit G of Section 20, Township 19 South, Range 32 East, Lusk Field, Lea County, New Mexico, in such a manner as to produce oil from the Wolfcamp formation through the casing-tubing annulus and gas from the Lusk-Morrow Gas Pool through tubing.

CASE 5484: Southeastern New Mexico nomenclature case calling for the creation and extension of certain pools in Lea, Eddy, and Chaves Counties, New Mexico and for the assignment of certain oil well discovery allowables.

(a) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the East Carlsbad-Wolfcamp Gas Pool. The discovery well is the Champlin Petroleum Co. Nix-Yates Well No. 1, located in Unit G of Section 2, Township 22 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 36: SW/4

TOWNSHIP 22 SOUTH, RANGE 27 EAST, NMPM  
Section 1: NW/4  
Section 2: NE/4

(b) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the Cemetery-Wolfcamp Gas Pool. The discovery well is the Read & Stevens, Inc. Allirish Well No. 1, located in Unit P of Section 30, Township 20 South, Range 25 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 25 EAST, NMPM  
Section 30: SE/4

(c) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Strawn production and designated as the Crooked Creek-Strawn Gas Pool. The discovery well is the C & K Petroleum Inc. Lowe State Well No. 1, located in Unit C of Section 16, Township 24 South, Range 24 East, NMPM. Said pool would comprise:

TOWNSHIP 24 SOUTH, RANGE 24 EAST, NMPM  
Section 16: N/2

(d) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for San Andres production and designated as the Dickenson-San Andres Pool. The discovery well is the Hanson Oil Corporation Santa Fe Well No. 1, located in Unit F of Section 35, Township 10 South, Range 36 East, NMPM. Said pool would comprise:

TOWNSHIP 10 SOUTH, RANGE 36 EAST, NMPM  
Section 35: NW/4

(e) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Golden Lane-Atoka Gas Pool. The discovery well is the Meadco Properties Ltd. Harris 6 Well No. 1, located in Unit I of Section 6, Township 21 South, Range 29 East, NMPM. Said pool would comprise:



TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM

Section 6: Lots 1, 2, 7, 8, 9, 10, 15, and 16

(f) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Grayburg-Atoka Gas Pool. The discovery well is the Horizon Oil & Gas Co. of Texas State 28 Com Well No. 2, located in Unit K of Section 28, Township 17 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM

Section 28: S/2

Section 29: E/2

(g) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Premier production and designated as the High Nitro-Premier Gas Pool. The discovery well is the McClellan Oil Corporation Hinkle Federal Well No. 1, located in Unit A of Section 9, Township 16 South, Range 29 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 29 EAST, NMPM

Section 3: SW/4

Section 4: SE/4

Section 9: NE/4

(h) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Hoag Tank-Morrow Gas Pool. The discovery well is the Yates Petroleum Corporation Allison CQ Federal Well No. 1, located in Unit P of Section 22, Township 19 South, Range 24 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM

Section 22: E/2

(i) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the N. W. Indian Basin-Morrow Gas Pool. The discovery well is the Charles A. Dean Northwest Indian Basin Well No. 1Y, located in Unit K of Section 28, Township 20 South, Range 23 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 23 EAST, NMPM

Section 28: W/2

(j) CREATE a new pool in Chaves County, New Mexico, classified as an oil pool for San Andres production and designated as the Lonesome-San Andres Pool. The discovery well is the Phillips Petroleum Company Luther A Well No. 1 located in Unit N of Section 18, Township 8 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM

Section 18: SW/4

(k) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the South Rocky Arroyo-Wolfcamp Gas Pool. The discovery well is the El Paso Natural Gas Co. Patterson A Well No. 1, located in Unit N of Section 20, Township 22 South, Range 22 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 22 EAST, NMPM  
Section 20: SW/4

(l) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Sheep Draw-Atoka Gas Pool. The discovery well is the Hanagan Petroleum Corp. Mary Federal Well No. 1, located in Unit H of Section 11, Township 23 South, Range 25 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 25 EAST, NMPM  
Section 11: E/2

(m) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Sheep Draw-Morrow Gas Pool. The discovery well is the Hanagan Petroleum Corp. Mary Federal Well No. 1 located in Unit H of Section 11, Township 23 South, Range 25 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 25 EAST, NMPM  
Section 11: E/2  
Section 12: W/2

(n) CREATE a new pool in Lea County, New Mexico, classified as an oil pool and designated as the Shipp-Drinkard Pool and assign 41,650 barrels of discovery allowable to the discovery well, the Mesa Petroleum Company West Knowles Well No. 1, located in Unit P of Section 34, Township 16 South, Range 37 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM  
Section 34: SE/4

(o) EXTEND the Atoka-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM  
Section 2: All

(p) EXTEND the North Benson Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
Section 32: N/2 NE/4



(q) EXTEND the Blinebry Oil and Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM  
Section 27: SE/4

(r) EXTEND the Buffalo Valley-Pennsylvanian Gas Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 27 EAST, NMPM  
Section 3: N/2

(s) EXTEND the Burton Flat-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 27 EAST, NMPM  
Section 18: N/2

(t) EXTEND the South Carlsbad-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 26 EAST, NMPM  
Section 3: W/2  
Section 11: All

TOWNSHIP 23 SOUTH, RANGE 27 EAST, NMPM  
Section 8: All  
Section 17: N/2

(u) EXTEND the South Carlsbad-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 26 EAST, NMPM  
Section 16: S/2

TOWNSHIP 24 SOUTH, RANGE 26 EAST, NMPM  
Section 1: W/2

(v) ESTABLISH a discovery allowable in the Casey-Strawn Pool in Lea County, New Mexico, and assign 56,630 barrels of discovery allowable to the discovery well, the C & K Petroleum, Inc. Shipp "27" Well No. 1, located in Unit O of Section 27, Township 16 South, Range 37 East, NMPM.

(w) EXTEND the Cerca-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 34 EAST, NMPM  
Section 27: S/2 and NE/4

(x) EXTEND the East Chisum San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 11 SOUTH, RANGE 28 EAST, NMPM  
Section 16: NE/4 NE/4

(y) EXTEND the Double L Queen Associated Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 29 EAST, NMPM  
Section 23: NE/4

TOWNSHIP 14 SOUTH, RANGE 30 EAST, NMPM  
Section 32: N/2 and SW/4

TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM  
Section 17: N/2

(z) EXTEND the Double X-Delaware Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 32 EAST, NMPM  
Section 27: NE/4

(aa) EXTEND the Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM  
Section 36: SW/4

(bb) EXTEND the East Empire Yates Seven Rivers Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM  
Section 34: W/2 NE/4

(cc) EXTEND the Kennedy Farms-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 26 EAST, NMPM  
Section 22: E/2

(dd) EXTEND the Penasco Draw-San Andres-Yeso Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM  
Section 30: NW/4 SW/4

(ee) EXTEND the Ranger Lake-Bough Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 12 SOUTH, RANGE 34 EAST, NMPM  
Section 23: SW/4

(ff) EXTEND the Rock Tank-Lower Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 25 EAST, NMPM  
Section 18: All

(gg) EXTEND the Round Tank San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM  
Section 31: NW/4 NW/4

(hh) EXTEND the vertical limits of the Sand Hills-San Andres Pool in Lea County, New Mexico, to include the Grayburg formation.

(ii) EXTEND the Sulmar Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM  
Section 18: SW/4 SW/4

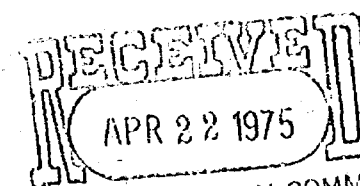
(jj) EXTEND the Tres Papalotes-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 34 EAST, NMPM  
Section 5: SW/4

(kk) EXTEND the Turkey Track Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM  
Section 32: NE/4 NE/4

Case 5481



BEFORE THE  
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
PHILLIPS PETROLEUM COMPANY FOR  
DOWNHOLE COMMINGLING, EDDY COUNTY,  
NEW MEXICO

A P P L I C A T I O N

COMES NOW PHILLIPS PETROLEUM COMPANY and applies to  
the Oil Conservation Commission of New Mexico for an order  
approving down-hole commingling of gas in its Tidwell-A  
"COM" Well No. 1, and in support thereof would show the  
commission:

1. Applicant has completed its Tidwell-A "COM" Well  
No. 1 in Unit E of Section 8, Township 23 South, Range 27  
East, Eddy County, New Mexico for production of gas from  
the Carlsbad South Atoka Gas Pool and the Carlsbad South  
Morrow Gas Pool.

2. Applicant proposes to produce the two zones by  
commingling production in the well-bore. Allocation of  
production to the two zones will be made on the basis of  
available well test data.

3. The Carlsbad South Atoka Gas Pool perforations  
are 10,754 feet to 10,760 feet and the Carlsbad South  
Morrow Gas Pool perforations are 11,416 feet to 11,824 feet.

4. Pressures and gas characteristics are such that  
no damage will occur to either reservoir by commingling  
production as proposed. The correlative rights of all  
parties will be protected.

DOCKET MAILED

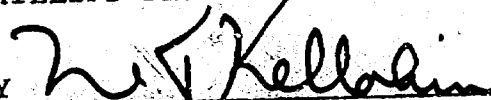
Date 5-2-75

WHEREFORE, applicant prays that this application be set for hearing before the Commission's duly appointed examiner and that after notice and hearing as required by law, the Commission enter its order approving commingling of production as proposed.

Respectfully submitted,

PHILLIPS PETROLEUM COMPANY

BY



KELLAHIN & FOX

Post Office Box 1769

Santa Fe, New Mexico 87501

ATTORNEY FOR APPLICANT

DRAFT

jr/

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. 5481

Order No. R- 5027

APPLICATION OF PHILLIPS PETROLEUM  
COMPANY FOR DOWNHOLE COMMINGLING,  
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 14, 1975,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this \_\_\_\_\_ day of May, 1975, 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, Phillips Petroleum Company, is the  
owner and operator of the Tidwell-A "COM" Well No. 1, located in  
Unit E of Section 8, Township 23 South, Range 27 East, NMPM,  
Eddy County, New Mexico.

(3) That the applicant seeks authority to commingle South Carlsbad-Atoka and South Carlsbad-Morrow production within the wellbore of the above-described well.

(5) That from the South Carlsbad-Atoka zone, the subject well is capable of low <sup>rates of</sup> ~~marginal~~ production only.

(4) That from the South Carlsbad-Morrow zone, the subject well is capable of ~~low~~ marginal production only.

(6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Artesia district office of the Commission any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, *to each of the commingled zones in the subject well, Morrow production should be determined on the basis of the previously established production decline curve, and Atoka production should be determined by subtracting said Morrow production from total production.*

IT IS THEREFORE ORDERED:

(1) That the applicant, Phillips Petroleum Company, is hereby authorized to commingle South Carlsbad-Atoka and South Carlsbad-Morrow production within the wellbore of the Tidwell-A "COM" Well No. 1, located in Unit E of Section 8, Township 23 South, Range 27 East, NMPM, Eddy County, New Mexico.



*That the Morrow production from the subject well shall be determined from the previously established production decline curve for the Morrow zone, and Atoka and production shall be determined by subtracting the Morrow production from the well's total production.*

(2) That ~~percent of the commingled production shall be allocated to the South Carlsbad Atoka zone and percent of the commingled production shall be allocated to the South Carlsbad Morrow zone.~~

(3) That the operator of the subject well shall immediately notify the Commission's Artesia district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

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

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