

CASE 6759: SUN OIL COMPANY FOR UNORTHO-  
DOX LOCATION, NON-STANDARD GAS PRORATION  
UNIT, INFILL FINDINGS, SIMULTANEOUS DEDI-  
CATION, AND DOWNHOLE COMMINGLING, LEA  
COUNTY, NEW MEXICO

CASE NO.

6759

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APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,

ETC.



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

February 27, 1980

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Santa Fe, New Mexico

Re: CASE NO. 6759  
ORDER NO. R-6276

Applicant:

Sun Oil Company

Dear Sir:

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

Yours very truly,

JOE D. RAMEY  
Director

JDR/Ed

Copy of order also sent to:

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

Other \_\_\_\_\_

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 6759  
Order No. R-6276

APPLICATION OF SUN OIL COMPANY  
FOR AN UNORTHODOX LOCATION, NON-STANDARD  
GAS PRORATION UNIT, INFILL FINDINGS,  
SIMULTANEOUS DEDICATION AND DOWNHOLE  
COMMINGLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on December 12, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 26th day of February, 1980, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Sun Oil Company, seeks approval for the unorthodox location of its Reeves Well No. 6 to be drilled at a point 660 feet from the North line and 610 feet from the East line of Section 29, Township 20 South, Range 37 East, NMPM, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated with its Reeves Well No. 2 in Unit D of Section 29 to a 160-acre non-standard gas proration unit comprising the N/2 N/2 of Section 29.

(3) That the applicant also seeks approval for the downhole comingling of Eumont gas production and Monument oil and gas production in the wellbore of said well.

(4) That the applicant further seeks findings that the proposed well is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well on the proration unit.

Case No. 6759  
Order No. R-6276

(5) That the evidence presented demonstrated that the aforesaid Reeves Well No. 2 has junk in the hole and has been temporarily abandoned, and that it is incapable of effectively and efficiently draining the 160-acre Eumont proration dedicated to it, being the N/2 N/2 of the subject Section 29.

(6) That the evidence demonstrates that the new proposed well, the Reeves Well No. 6, should recover some 392 million cubic feet of gas which are not recoverable by the old well on the unit, the Reeves Well No. 2.

(7) That the evidence further demonstrates that between the two wells, the Reeves No. 2 and the Reeves No. 6, the subject 160-acre non-standard gas proration unit should be effectively and efficiently drained of the natural gas reserves in place.

(8) That there may be recoverable oil and gas reserves in the San Andres formation underlying the NE/4 NE/4 of Section 29, and applicant proposes to drill Reeves Well No. 6 to a total depth of approximately 4000 feet and attempt a completion in the San Andres formation.

(9) That should said well produce from the San Andres, it is expected that such production will be of low marginal nature, and uneconomic to produce separately, and applicant therefore proposes to commingle such San Andres production in the wellbore with the aforementioned Eumont production, and said downhole commingling may cause to be recovered oil and gas which would otherwise remain unrecovered, thereby preventing waste.

(10) That upon completion of the subject well, the Eumont or San Andres zone should be tested separately, and the applicant should consult with the Supervisor of the Hobbs District Office of the Division to determine an allocation formula for each of the zones commingled.

(11) That the proposed unorthodox location for the subject well results from having to move away from an existing well in the NE/4 NE/4 of Section 29.

(12) That the application of Sun Oil Company in this case for an unorthodox location, a 160-acre non-standard gas proration unit, downhole commingling, simultaneous dedication of acreage, and infill drilling findings are all in the interest of conservation, will not cause but will prevent waste, will not impair but will protect correlative rights, and should be approved.

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Case No. 6759

Order No. R-6276

IT IS THEREFORE ORDERED:

(1) That a 160-acre non-standard gas proration unit in the Eumont Gas Pool, comprising the N/2 N/2 of Section 29, Township 20 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby approved and simultaneously dedicated to the Sun Oil Company Reeves Well No. 2, located in Unit D of said Section 29, and to Sun's Reeves Well No. 6, to be drilled as an infill well at an unorthodox location, also hereby approved, at a point 660 feet from the North line and 610 feet from the East line of said Section 29. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by the 160-acre non-standard proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) That the applicant is hereby authorized to commingle Eumont and Monument production within the wellbore of the above-described Reeves Well No. 6.

(3) That the applicant shall separately test the Eumont or the San Andres zone, or both zones, of said Reeves Well No. 6 during completion operations, and shall thereafter consult with the Supervisor of the Hobbs District Office of the Division to determine an allocation formula for the allocation of production to each zone in the subject well.

(4) That the operator of said Reeves Well No. 6 shall immediately notify the aforesaid Supervisor at any time the well has been shut in for seven consecutive days, and shall present for approval by the Division a plan for remedial action to prevent crossflow between the zones.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
  
JOE D. RAMEY  
Director

fd/

STATE OF NEW MEXICO  
 ENERGY AND MINERALS DEPARTMENT  
 OIL CONSERVATION DIVISION  
 STATE LAND OFFICE BLDG.  
 SANTA FE, NEW MEXICO  
 12 December 1979

EXAMINER HEARING

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 IN THE MATTER OF: )

Application of Sun Oil Company for an ) CASE  
 unorthodox location, non-standard gas ) 6759  
 proration unit, infill findings, simul- )  
 taneous dedication, and downhole com- )  
 mingling, Lea County, New Mexico. )  
 -----

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation  
 Division:

Ernest L. Padilla, Esq.  
 Legal Counsel for the Division  
 State Land Office Bldg.  
 Santa Fe, New Mexico 87501

For the Applicant:

W. Thomas Kellahin, Esq.  
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MR. NUTTER: Call Case Number 6759.

MR. PADILLA: Application of Sun Oil Company for an unorthodox location, non-standard gas proration unit, infill findings, simultaneous dedication, and down-hole commingling, Lea County, New Mexico.

MR. KELLAHIN: I'm Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of the applicant, and I have two witnesses to be sworn.

(Witnesses sworn.)

BOB DAVIS

being called as a witness and having been 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're employed, and in what capacity?

A My name is Bob Davis, employed by Sun Oil Company as a geologist.

Q Mr. Davis, have you ever testified before the New Mexico Oil Conservation Division?

A No, sir.

Q Would you describe for the Examiner when and where you obtained your degree in geology?

A My Masters' degree in 1974 from Ball State University.

Q Subsequent to graduation in '74, when and where have you been employed as a geologist?

A Been employed with Sun Production Company since that time.

Q Pursuant to that employment as a geologist have you made a study of the geology of the area involved in this particular application?

A Yes, sir.

Q And have you prepared an exhibit with regards to your study?

A Yes, sir.

MR. KELLAHIN: We tender Mr. Davis as an expert geologist.

MR. NUTTER: Mr. Davis is qualified.

Q Mr. Davis, would you refer to what we've marked as Sun Production Company Exhibit Number One and identify that for us?

A This is a completion map of the A. B. Reeves lease area. The Sun A. B. Reeves lease is highlighted

in yellow. The blue arrow indicates the location of the log, designated as a type log, on the righthand side of the map. The red arrow indicates the proposed location for a Eumont gas Eunice-Monument test.

Q Let's look at the proposed location for a minute, Mr. Davis, the well location closest to the number six is the proposed location?

A Yes, sir.

Q That virtually overlaps the No. 5 Well?

A It's 50 feet east of the No. 5 Well.

Q And what is the status of the No. 5 Well?

A It's plugged and abandoned.

Q And where did it produce from?

A It was a dry hole; it never did produce. It tested the San Andres and was plugged.

Q What are the proposed producing horizons for the No. 6 Well?

A The No. 6 is proposing to produce Queen formation. The red dots on the type log indicate that interval. And we also propose to test the San Andres.

Q This well has not been drilled at this point?

A No, sir.

Q In your opinion is a separation of 50 feet between the proposed well and the abandoned well suf-

ficient separation?

A Yes, from a geological standpoint, it is.

Q Now, the proration unit, the 160-acre tract composed of the north half of the north half of Sections 29, is currently dedicated to what gas well?

A The A. B. Reeves No. 2 on the red dot on the Sun lease. It is currently shut-in.

Q It's your intention to downhole commingle production from the proposed No. 6 Well?

A Yes, sir.

Q All right. And what acreage will be dedicated to the gas production from that proposed well?

A The -- the whole 160.

Q That same 160 acres that's outlined in yellow?

A Uh-huh.

Q All right. What is a standard proration unit for the Eumont-Seven Rivers-Queen gas?

A It's 640.

Q 640 acres?

A Yes, uh-huh.

Q As a matter of practice, though, for this particular gas formation, it has been consistently developed on 160 acres, has it not?

A Yes, sir.

Q All right. Would you describe for us the type log on the right side of this exhibit?

A It's a sonic log; was drilled at that time, the A. B. Reeves No. 4, and it's currently in a Texaco-operated Eunice-Monument Unit, and it's now designated Well No. 40.

Q Would you locate for us on your plat where the Reeves No. 4 Well is?

A It's the blue arrow.

Q Okay. And based upon your study of the geology, Mr. Davis, in your opinion is the proposed 160-acre gas proration unit a logical configuration for dedication to this particular gas well?

A Yes, sir.

Q And in your opinion does the geology demonstrate that the proposed No. 6 Well will drain gas production that cannot now be produced or in the future produced from the existing No. 2 Well?

A Yes, sir.

Q Did you prepare Exhibit Number One?

A Yes, I did.

MR. KELLAHIN: We move the introduction of Exhibit Number One, and that concludes my examination of Mr. Davis.

MR. NUTTER: See Exhibit Number One will

be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Davis, you said you also plan to test the San Andres, so this would also be a Eunice-Monument well, if successful, is that it?

A Yes, sir.

Q And you have an existing Eumont gas well on this 160-acre tract. Will that well continue to produce from the Eumont?

A It's shut-in right now but I think the plans are to go in and clean it up a little bit.

Q So you would have simultaneous dedication in those wells, the No. 2 Well with your No. 6.

A Yes, sir.

MR. NUTTER: Are there further questions of this witness? He may be excused.

STEPHEN A. GILLET

being called as a witness and having been 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're employed, and in what capacity?

A Stephen A. Gillett, Sun Oil Company, Area Engineer.

Q Mr. Gillett, have you previously testified before the Conservation Division and had your qualifications as an expert accepted and made a matter of record?

A Yes, sir, I have.

MR. KELLAHIN: We tender Mr. Gillett as an expert engineer.

MR. NUTTER: Mr. Gillett is qualified.

Q I believe we've already discussed the first exhibit, the plat in your folder, Mr. Gillett. Would you please refer now to what we've marked as Exhibit Number Two and identify that?

A Exhibit Number Two is a wellbore sketch of our proposed completion in the Reeves No. 6 Well. You'll notice that we have tubing set below the -- with the seating nipple, perforating nipple, below the bottom part of the proposed Monument interval, if that will be physically possible, with fluid production up the tubing by means of rod pump, and gas production up the casing-tubing annulus.

Q Would you please refer back to the Exhibit Number One and in relation to that exhibit, Mr. Gillett,

describe for the Examiner where you propose to locate this well?

A This well will be located in the east 40 acres of our 160-acre lease. It will be located at a point 50 feet east of our Hardin No. 5 Well, and the exact location of that is 660 feet from the north line and 610 feet from the east line.

Q That footage location will be the No. 6 Well?

A Yes, sir, that will be the No. 6 Well.

Q Is that a standard location or an unorthodox location for purposes of the pools involved?

A That is an unorthodox location for the Eumont Pool and that is a standard location for the Monument Pool.

Q What would a standard location for the Eumont Gas Pool be?

A The standard location for the Eumont is 1980 feet from the lease line and 660 from the quarter section line.

Q Why have you sought permission to drill at an unorthodox location?

A Well, we feel that the heavy concentration of wells, as it can be seen on Exhibit One, along the west side of Section 29, have done an excellent job of producing



gas from that area, but the eastern side of Section 29 is a relatively undrained area. You can notice from Exhibit One that there are very few wells in that area. And we feel that our eastern 80 acres of our Reeves lease will not be drained and we will not recover gas reserves in that area without this well.

Q Let me ask you about the distance between the proposed well and the No. 5 Well. You've indicated that that's approximately 50 feet.

A Yes, sir.

Q In your opinion, Mr. Gillett, is that a sufficient separation between the two wells?

A Yes, sir, that is. The No. 5 Well was plugged and abandoned and casing cut off at 2198 feet. The top of cement on that well on the primary cementing job was 2300 feet, and that was determined by temperature survey. The perforations in that well were 3863 to 91 through 4-1/2 inch casing set at 3999, and a cement plug is across the interval, 20 sacks, 3627 to 3900. So we feel that that well has been plugged properly and that it will not at all affect this completion.

Q Let me ask you about the No. 6 Well, the well is proposed as a downhole commingling of the Eumont gas and the Monument oil. Is it possible to produce these

zones as a dual completion?

A No, sir, we do not believe it's -- it is physically possible but not economically feasible. Our primary target on this well is the Eumont Gas Pool, but since we are going to have a well drilled to 3700 feet, approximately, anyway, the economics of drilling an additional 300 feet are plausible. We feel that by drilling the additional 300 feet and exposing the Monument, we can recover hydrocarbon reserves.

In 1964 when the No. 5 was drilled and plugged, the value of gas was very minimal, on the order of 10 to 15 cents an Mcf, and as is known, that commodity is in larger and greater demand now than it was 15 years ago, and so it makes it feasible to produce that and go down that far, but not on its own account.

Q Would you turn to Exhibit Number Three and identify that?

A Exhibit Number Three is a production decline curve of the Reeves No. 2 Well, which is the existing gas well on this lease.

You can see from that a very steady and easily -- easy to extrapolate curve has been drawn by the history. We had a bottom hole pressure test on this well in early 1979 and were unable to recover the bomb from the tubing and the well has been shut-in since that time. The

well was making approximately 90 Mcf and was producing a trace of water, to the point where it is beginning to, if we were to produce it now, it would probably be loaded up and would have to be rod pumped.

Q This 90 Mcf is on what period of time?  
Monthly basis?

A That's a daily rate, 90 Mcf per day.

Q Would you turn to Exhibit Number Four and identify that?

A Exhibit Number Four is a 3-page exhibit, labeled 4-A, B, and C, and this is a tabulation of production from the Monument Oil Pool in the wells surrounding our subject well. Noted is oil, water, gas, and cumulative oil production for all these wells.

The average production from all wells on this exhibit, gaswise, is 55 Mcf per day.

Q Would you turn to Exhibit Five and identify that?

A Exhibit Five is a similar exhibit showing rates and cum gas production for the Eumont Pool gas wells in the same area. Also shown is bottom hole pressure data.

The average daily production rate for the gas wells listed on Exhibit Five is 380 Mcf per day.

Q Would you now turn to Exhibit Number Six

and identify that?

A Exhibit Number Six is a summary of our recommended allocation formula were our downhole commingling, our commingling permit approved.

Based on these average rates, as I mentioned on Exhibits Four and Five, the allocation of gas from the commingled wellbore would be 15 percent to the Monument and 85 percent to the Eumont zone. The Eumont has historically been a dry gas zone and we expect no oil or condensate to be produced from that, so all oil and condensate would be dedicated to the Monument Field.

Q Mr. Gillett, is the ownership the same with regards to both zones?

A Yes, it is. On this 40-acre tract, it is, and on -- throughout the 160 acres on the gas zone, it is. So in this wellbore it all is.

The other half of Exhibit Six is a statement as to what our contractual obligations are for this gas. Casinghead gas is dedicated to Phillips and gas well gas is dedicated to El Paso. Both these gatherers are interstate pipeline companies and all deliveries are interstate.

We have made arrangements with these pipeline companies so that all deliveries from both zones

will go to Phillips and then El Paso will receive their allocated volume at the tailgate of the Phillips Plant and Phillips will process the gas.

Q You have an Exhibit Number Seven, I believe?

A Yes, sir.

Q Would you describe that exhibit for us?

A Exhibit Number Seven is a calculation to show the additional reserves that will be recovered from this well that are not recoverable from the No. 2 Well, and this is a standard reserve calculation to be found in any textbook. We are identifying, based on the 80 acres that Sun has on the east half of our Reeves lease, on a net pay thickness of 60 foot, a water saturation of 35 percent, 7-1/2 percent porosity, formation volume factor of 1.389, recovery factor of 30 percent, will yield us a reserve of 392-million cubic feet not recoverable from the No. 2 Well.

Q Mr. Gillett, were Exhibits Two through Seven compiled by you directly or compiled under your direction and supervision?

A Yes, sir, they are. And were.

Q And in your opinion will approval of this application be in the best interests of conservation,

the prevention of waste, and the protection of correlative rights?

A Yes, sir.

MR. KELLAHIN: We move the introduction of Exhibits Two through Seven.

MR. NUTTER: I am Exhibits Two through Seven will be admitted in evidence.

#### CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Gillett, in arriving at your allocation formula for your proposed commingling, you've saying, well, the average Eunice well makes 380 Mcf and the average Monument well makes 55 Mcf, yet I look at these Eunice-Monument wells and I see the range of gas production in those wells running all the way from 2 Mcf up to 37,223 Mcf per day.

A Yes, sir.

Q That's quite a range. How could you say you're going to have a well that's in the middle between a range of 2 and 37,000; its average is going to 350 or 55?

A Well, sir, again, the wells in this exhibit are taken from a large area of over nine square miles.

If you'll look at the immediate offsets you'll find the west offset to our proposed location has a gas production in the Monument of 71 Mcf per day.

Q Which well is that?

A That's the Texaco Unit No. 40. That's on page 4-C.

Q Okay. That's the west offset?

A Yes, sir. The southwest offset, which is the Yuronka No. 1, has a gas production of 34 Mcf per day.

Q Wait a minute, I haven't found it yet.

A I believe that's on 4-B.

Q No.

A 4-A, then, it's in 4. Yes, 4-A, Reeves 1-G.

Q Okay, 34?

A 34 Mcf per day.

Q That's the southwest offset.

A Yes, sir.

Q Okay.

A Those are the two closest offsets, the new offsets that are producing.

If you go a location further away, the Texaco 39 is 2 Mcf; the north offset to that is 4 Mcf, and

the south offset is 141.

So if you average there, and the side opposite to that is 75. In the immediate area, 55 is a very good number.

The 13-million plus that is in this exhibit came out of the State reports and I question that number myself. It may be we may have some sort of a computer error, or something like that, in getting that number. It may be a gas well.

Q Now, how about Eumont? I see a range here from zero to 1405.

A Yes, sir.

Q From low to high.

A Okay, the two very high wells, the 1405 and the 1201, are over a mile away in Section 16, and they have also a higher bottom hole pressure, and they are in an area where is one well on every 160 acres, a long ways away.

Again, looking at the immediate offsets to our proposed No. 6, the north offset has is producing at a rate of 186 Mcf per day.

Q Okay, where is that on here?

A That's in Section 20, BWPA No. 1.

Q That's the north offset.

A Yes, sir.

Q Okay.



A The west offset, which is Sun's well, before we lost our bomb was making 103 Mcf a day, with a pressure of 124 pounds.

Q I thought it was making 90 Mcf a day, we heard awhile ago?

A Well, the test that we used on this data were the December reports.

Q I see.

A When we lost the bomb it was making 90, but for consistency we'll use the same data base.

As you go down, that row, in Section 29 you have 81 Mcf, then 285 Mcf, and then 289 Mcf.

Q Well, actually, this No. 6 Well is going to be a Eumont well right in the middle of a large area that has no Eumont production, isn't it?

A Yes, sir.

Q So wouldn't you kind of expect that you might have some better than average reserves in there?

A Yes, sir, that's what I'm pointing out, is that all of the offsets, 186, 103, 81, 93 on the Gulf Ramsey Well, I think we can make 380 out of that well, and not 150, as the offset wells are making.

Q But you don't think you can do as well as 1300 and 1200 and --

A Well, I certainly hope we can, but I

doubt it.

Q It just kind of concerns me that you're proposing a downhole commingling proposition here where you may not have marginal production at all. You may have good production in either of these two zones.

A I don't at all feel that there would be any way we could have economic production from the Monument, and the Monument is an addition we can get, that we couldn't complete and drill for on its own.

Q What was the No. 5 completed in?

A It was in the Monument.

Q How much did it produce prior to being plugged?

A I don't believe -- let me --

Q And why was it plugged, mechanical problems or depletion?

A No, sir, it was -- it was acidized with 1000 gallons, broke down from 1800 to 900 pounds, swabbed load water and 147 barrels of formation water in 14 hours with no show of oil or gas.

The next day it swabbed for 6 hours for 103 barrels of formation water with no show of oil or gas, and then plugged.

Q So it never actually produced.

A Never actually produced.

But we feel it's worth a gamble. We're going to drill this well with air and we think that it's worth a gamble, maybe, if we can get 100 Mcf, that's an added plus, and we're willing to take a risk to try and get that.

Q So it looks like it might be an edge well insofar as the Eunice-Monument is concerned?

A Yes, sir, it's very risky.

Q Although the Eumont is a good prospect?

A Yes, sir. We haven't seen a top allowable Eumont well anywhere in the area, and our experience from the vast amount of infill wells that have come before this body in the past eighteen months shows that even if you do get a good well immediately, it will fall off to marginal status quite fast.

Q Now, on your reserve calculations for your anticipated additional recovery for this well, for FERC purposes you've estimated you're going to get 392,000 Mcf of gas here. This is a straight volumetric calculation and why did you come up with 392,000 Mcf? I realize it's based on a recovery factor of 30 percent.

A Yes, sir.

Q Why did you pick a recovery factor of 30 percent?

A Basically that was the concensus of our

reservoir engineering staff and geological staff.

Q Because of the depletion of the general area?

A Yes, sir, the general area; the fact that this whole field has been producing since 1954. We have a tremendous amount of data, so --

Q An older well would be expected to produce more than 34 percent, wouldn't it?

A Yes, sir, a well that had been producing for a long time, but we say that there's going to be reserves that wouldn't be recovered, but we don't have a virgin situation here, either.

MR. NUTTER: Are there any further questions of Mr. Gillett?

Mr. Padilla?

# CROSS EXAMINATION

BY MR. PADILLA:

Q Mr. Gillett, you've asked for infill findings in this case, and I'm wondering, if you're going to dually complete this well in the Monument and the Eumont.

MR. NUTTER: No, not dually complete. He's going to downhole commingle.

MR. KELLAHIN: Downhole.

Q Downhole commingle it. The proration unit now contains the No. 2 Well, which is completed in the Eumont.

A Yes.

Q The other wells that are depicted in green here are completed in the Monument.

A Yes, sir, and they're operated by Texaco.

Q Now, yet in your Exhibit Seven do you have a breakdown of, say, the amount of reserves you're going to recover, say, from the Monument and the Eumont?

A Those are Eumont reserves. There's such a high risk factor in the Monument reserves that we're really not -- what we get is nice. We're going to test the Monument and see what we have, and then come up and test the other one and put them together.

We may not have anything in the Monument at all, so we'll just go on about our business.

Q When was the No. 5 Well plugged and abandoned?

A 1964.

Q Did that ever produce in commercial quantities at all?

A Not even a show.

MR. PADILLA: I have no further questions.

MR. NUTTER: Are there any further questions of Mr. Gillett? 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 6759?

We'll take the case under advisement.

(Hearing concluded.)

## REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Certified Shorthand Reporter,  
DO HEREBY CERTIFY that the foregoing and attached Transcript  
of Hearing before the Oil Conservation Division was reported  
by me; that the said transcript is a full, true, and correct  
record of the hearing, prepared by me to the best of my  
ability from my notes taken at the time of the hearing.

Sally W. Boyd C.S.R.  
Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the hearing of Case No. 6259,  
heard by me on 12/12 19 79.

[Signature], Examiner  
Oil Conservation Division

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO  
12 December 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Sun Oil Company for an  
unorthodox location, non-standard gas  
proration unit, infill findings, simul-  
taneous dedication, and downhole com-  
mingling, Lea County, New Mexico.

CASE  
6759

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation  
Division:

Ernest L. Padilla, Esq.  
Legal Counsel for the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

For the Applicant:

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## I N D E X

## BOB DAVIS

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~~STEPHEN~~ A. GILLETT

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MR. NUTTER: Call Case Number 6759.

MR. PADILLA: Application of Sun Oil Company for an unorthodox location, non-standard gas proration unit, infill findings, simultaneous dedication, and down-hole commingling, Lea County, New Mexico.

MR. KELLAHIN: I'm Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of the applicant, and I have two witnesses to be sworn.

(Witnesses sworn.)

BOB DAVIS

being called as a witness and having been 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're employed, and in what capacity?

A My name is Bob Davis, employed by Sun Oil Company as a geologist.

Q Mr. Davis, have you ever testified before the New Mexico Oil Conservation Division?

A No, sir.

Q Would you describe for the Examiner when and where you obtained your degree in geology?

A My Masters' degree in 1974 from Ball State University.

Q Subsequent to graduation in '74, when and where have you been employed as a geologist?

A Been employed with Sun Production Company since that time.

Q Pursuant to that employment as a geologist have you made a study of the geology of the area involved in this particular application?

A Yes, sir.

Q And have you prepared an exhibit with regards to your study?

A Yes, sir.

MR. KELLAHIN: We tender Mr. Davis as an expert geologist.

MR. NUTTER: Mr. Davis is qualified.

Q Mr. Davis, would you refer to what we've marked as Sun Production Company Exhibit Number One and identify that for us?

A This is a completion map of the A. B. Reeves lease area. The Sun A. B. Reeves lease is highlighted

in yellow. The blue arrow indicates the location of the log, designated as a type log, on the righthand side of the map. The red arrow indicates the proposed location for a Eumont gas Eunice-Monument test.

Q Let's look at the proposed location for a minute, Mr. Davis, the well location closest to the number six is the proposed location?

A Yes, sir.

Q That virtually overlaps the No. 5 Well?

A It's 50 feet east of the No. 5 Well.

Q And what is the status of the No. 5 Well?

A It's plugged and abandoned.

Q And where did it produce from?

A It was a dry hole; it never did produce. It tested the San Andres and was plugged.

Q What are the proposed producing horizons for the No. 6 Well?

A The No. 6 is proposing to produce Queen formation. The red dots on the type log indicate that interval. And we also propose to test the San Andres.

Q This well has not been drilled at this point?

A No, sir.

Q In your opinion is a separation of 50 feet between the proposed well and the abandoned well suf-

ficient separation?

A Yes, from a geological standpoint, it is.

Q Now, the proration unit, the 160-acre tract composed of the north half of the north half of Sections 29, is currently dedicated to what gas well?

A The A. B. Reeves No. 2 on the red dot on the Sun lease. It is currently shut-in.

Q It's your intention to downhole commingle production from the proposed No. 6 Well?

A Yes, sir.

Q All right. And what acreage will be dedicated to the gas production from that proposed well?

A The -- the whole 160.

Q That same 160 acres that's outlined in yellow?

A Uh-huh.

Q All right. What is a standard proration unit for the Eumont-Seven Rivers-Queen gas?

A It's 640.

Q 640 acres?

A Yes, uh-huh.

Q As a matter of practice, though, for this particular gas formation, it has been consistently developed on 160 acres, has it not?

A Yes, sir.

Q All right. Would you describe for us the type log on the right side of this exhibit?

A It's a sonic log: was drilled at that time, the A. B. Reeves No. 4, and it's currently in a Texaco-operated Eunice-Monument Unit, and it's now designated Well No. 40.

Q Would you locate for us on your plat where the Reeves No. 4 Well is?

A It's the blue arrow.

Q Okay. And based upon your study of the geology, Mr. Davis, in your opinion is the proposed 160-acre gas proration unit a logical configuration for dedication to this particular gas well?

A Yes, sir.

Q And in your opinion does the geology demonstrate that the proposed No. 6 Well will drain gas production that cannot now be produced or in the future produced from the existing No. 2 Well?

A Yes, sir.

Q Did you prepare Exhibit Number One?

A Yes, I did.

MR. KELLAHIN: We move the introduction of Exhibit Number One, and that concludes my examination of Mr. Davis.

MR. NUTTER: Sun Exhibit Number One will

be admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Davis, you said you also plan to test the San Andres, so this would also be a Eunice-Monument well, if successful, is that it?

A Yes, sir.

Q And you have an existing Eumont gas well on this 160-acre tract. Will that well continue to produce from the Eumont?

A It's shut-in right now but I think the plans are to go in and clean it up a little bit.

Q So you would have simultaneous dedication in those wells, the No. 2 Well with your No. 6.

A Yes, sir.

MR. NUTTER: Are there further questions of this witness? He may be excused.

STEPHEN A. GILLET

being called as a witness and having been 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're employed, and in what capacity?

A Stephen A. Gillett, Sun Oil Company, Area Engineer.

Q Mr. Gillett, have you previously testified before the Conservation Division and had your qualifications as an expert accepted and made a matter of record?

A Yes, sir, I have.

MR. KELLAHIN: We tender Mr. Gillett as an expert engineer.

MR. NUTTER: Mr. Gillett is qualified.

Q I believe we've already discussed the first exhibit, the plat in your folder, Mr. Gillett. Would you please refer now to what we've marked as Exhibit Number Two and identify that?

A Exhibit Number Two is a wellbore sketch of our proposed completion in the Reeves No. 6 Well. You'll notice that we have tubing set below the -- with the seating nipple, perforating nipple, below the bottom perf of the proposed Monument interval, if that will be physically possible, with fluid production up the tubing by means of rod pump, and gas production up the casing-tubing annulus.

Q Would you please refer back to the Exhibit Number One and in relation to that exhibit, Mr. Gillett,



describe for the Examiner where you propose to locate this well?

A This well will be located in the east 40 acres of our 160-acre lease. It will be located at a point 50 feet east of our Hardin No. 5 Well, and the exact location of that is 660 feet from the north line and 610 feet from the east line.

Q That footage location will be the No. 6 Well?

A Yes, sir, that will be the No. 6 Well.

Q Is that a standard location or an unorthodox location for purposes of the pools involved?

A That is an unorthodox location for the Eumont Pool and that is a standard location for the Monument Pool.

Q What would a standard location for the Eumont Gas Pool be?

A The standard location for the Eumont is 1980 feet from the lease line and 660 from the quarter section line.

Q Why have you sought permission to drill at an unorthodox location?

A Well, we feel that the heavy concentration of wells, as it can be seen on Exhibit One, along the west side of Section 29, have done an excellent job of producing

gas from that area, but the eastern side of Section 29 is a relatively undrained area. You can notice from Exhibit One that there are very few wells in that area. And we feel that our eastern 80 acres of our Reeves lease will not be drained and we will not recover gas reserves in that area without this well.

Q Let me ask you about the distance between the proposed well and the No. 5 Well. You've indicated that that's approximately 50 feet.

A Yes, sir.

Q In your opinion, Mr. Gillett, is that a sufficient separation between the two wells?

A Yes, sir, that is. The No. 5 Well was plugged and abandoned and casing cut off at 2198 feet. The top of cement on that well on the primary cementing job was 2300 feet, and that was determined by temperature survey. The perforations in that well were 3863 to 91 through 4-1/2 inch casing set at 3999, and a cement plug is across the interval, 20 sacks, 3627 to 3900. So we feel that that well has been plugged properly and that it will not at all affect this completion.

Q Let me ask you about the No. 6 Well, the well is proposed as a downhole commingling of the Eumont gas and the Monument oil. Is it possible to produce these

zones as a dual completion?

A No, sir, we do not believe it's -- it is physically possible but not economically feasible. Our primary target on this well is the Eumont Gas Pool, but since we are going to have a well drilled to 3700 feet, approximately, anyway, the economics of drilling an additional 300 feet are plausible. We feel that by drilling the additional 300 feet and exposing the Monument, we can recover hydrocarbon reserves.

In 1964 when the No. 5 was drilled and plugged, the value of gas was very minimal, on the order of 10 to 15 cents an Mcf, and as is known, that commodity is in larger and greater demand now than it was 15 years ago, and so it makes it feasible to produce that and go down that far, but not on its own account.

Q Would you turn to Exhibit Number Three and identify that?

A Exhibit Number Three is a production decline curve of the Reeves No. 2 Well, which is the existing gas well on this lease.

You can see from that a very steady and easily -- easy to extrapolate curve has been drawn by the history. We had a bottom hole pressure test on this well in early 1979 and were unable to recover the bomb from the tubing and the well has been shut-in since that time. The

well was making approximately 90 Mcf and was producing a trace of water, to the point where it is beginning to, if we were to produce it now, it would probably be loaded up and would have to be rod pumped.

Q This 90 Mcf is on what period of time?  
Monthly basis?

A That's a daily rate, 90 Mcf per day.

Q Would you turn to Exhibit Number Four and identify that?

A Exhibit Number Four is a 3-page exhibit, labeled 4-A, B, and C, and this is a tabulation of production from the Monument Oil Pool in the wells surrounding our subject well. Noted is oil, water, gas, and cumulative oil production for all these wells.

The average production from all wells on this exhibit, gaswise, is 55 Mcf per day.

Q Would you turn to Exhibit Five and identify that?

A Exhibit Five is a similar exhibit showing rates and cum gas production for the Monument Pool gas wells in the same area. Also shown is bottom hole pressure data.

The average daily production rate for the gas wells listed on Exhibit Five is 380 Mcf per day.

Q Would you now turn to Exhibit Number Six

and identify that?

A Exhibit Number Six is a summary of our recommended allocation formula were our downhole commingling, our commingling permit approved.

Based on these average rates, as I mentioned on Exhibits Four and Five, the allocation of gas from the commingled wellbore would be 15 percent to the Monument and 85 percent to the Eumont zone. The Eumont has historically been a dry gas zone and we expect no oil or condensate to be produced from that, so all oil and condensate would be dedicated to the Monument Field.

Q Mr. Gillett, is the ownership the same with regards to both zones?

A Yes, it is. On this 40-acre tract, it is, and on -- throughout the 160 acres on the gas zone, it is. So in this wellbore it all is.

The other half of Exhibit Six is a statement as to what our contractual obligations are for this gas. Casinghead gas is dedicated to Phillips and gas well gas is dedicated to El Paso. Both these gatherers are interstate pipeline companies and all deliveries are interstate.

We have made arrangements with these pipeline companies so that all deliveries from both zones

will go to Phillips and then El Paso will receive their allocated volume at the tailgate of the Phillips Plant and Phillips will process the gas.

Q You have an Exhibit Number Seven, I believe?

A Yes, sir.

Q Would you describe that exhibit for us?

A Exhibit Number Seven is a calculation to show the additional reserves that will be recovered from this well that are not recoverable from the No. 2 Well, and this is a standard reserve calculation to be found in any textbook. We are identifying, based on the 80 acres that Sun has on the east half of our Reeves lease, on a net pay thickness of 60 foot, a water saturation of 35 percent, 7-1/2 percent porosity, formation volume factor of 1.389, recovery factor of 30 percent, will yield us a reserve of 392-million cubic feet not recoverable from the No. 2 Well.

Q Mr. Gillett, were Exhibits Two through Seven compiled by you directly or compiled under your direction and supervision?

A Yes, sir, they are. And were.

Q And in your opinion will approval of this application be in the best interests of conservation,

the prevention of waste, and the protection of correlative rights?

A Yes, sir.

MR. KELLAHIN: We move the introduction of Exhibits Two through Seven.

MR. NUTTER: Sun Exhibits Two through Seven will be admitted in evidence.

#### CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Gillett, in arriving at your allocation formula for your proposed commingling, you've saying, well, the average Eumont well makes 360 Mcf and the average Monument well makes 55 Mcf, yet I look at these Eunice-Monument wells and I see the range of gas production in those wells running all the way from 2 Mcf up to 37,223 Mcf per day.

A Yes, sir.

Q That's quite a range. How could you say you're going to have a well that's in the middle between a range of 2 and 37,000; its average is going to 350 or 55?

A Well, sir, again, the wells in this exhibit are taken from a large area of over nine square miles.

If you'll look at the immediate offsets you'll find the west offset to our proposed location has a gas production in the Monument of 71 Mcf per day.

Q Which well is that?

A That's the Texaco Unit No. 40. That's on page 4-C.

Q Okay. That's the west offset?

A Yes, sir. The southwest offset, which is the Yuronka No. 1, has a gas production of 34 Mcf per day.

Q Wait a minute, I haven't found it yet.

A I believe that's on 4-B.

Q No.

A 4-A, then, it's in 4. Yes, 4-A, Reeves 1-G.

Q Okay, 34?

A 34 Mcf per day.

Q That's the southwest offset.

A Yes, sir.

Q Okay.

A Those are the two closest offsets, the new offsets that are producing.

If you go a location further away, the Texaco 39 is 2 Mcf; the north offset to that is 4 Mcf, and



the south offset is 141.

So if you average there, and the side opposite to that is 75. In the immediate area, 55 is a very good number.

The 13-million plus that is in this exhibit came out of the State reports and I question that number myself. It may be we may have some sort of a computer error, or something like that, in getting that number. It may be a gas well.

Q Now, how about Eumont? I see a range here from zero to 1405.

A Yes, sir.

Q From low to high.

A Okay, the two very high wells, the 1405 and the 1201, are over a mile away in Section 16, and they have also a higher bottom hole pressure, and they are in an area where is one well on every 160 acres, a long ways away.

Again, looking at the immediate offsets to our proposed No. 6, the north offset has -- is producing at a rate of 186 Mcf per day.

Q Okay, where is that on here?

A That's in Section 20, BWPA No. 1.

Q That's the north offset.

A Yes, sir.

Q Okay.

A The west offset, which is Sun's well, before we lost our bomb was making 103 Mcf a day, with a pressure of 124 pounds.

Q I thought it was making 90 Mcf a day, we heard awhile ago?

A Well, the test that we used on this data were the December reports.

Q I see.

A When we lost the bomb it was making 90, but for consistency we'll use the same data base.

As you go down, that row, in Section 29 you have 81 Mcf, then 285 Mcf, and then 289 Mcf.

Q Well, actually, this No. 6 Well is going to be a Eumont well right in the middle of a large area that has no Eumont production, isn't it?

A Yes, sir.

Q So wouldn't you kind of expect that you might have some better than average reserves in there?

A Yes, sir, that's what I'm pointing out, is that all of the offsets, 186, 103, 81, 93 on the Gulf Ramsey Well, I think we can make 380 out of that well, and not 150, as the offset wells are making.

Q But you don't think you can do as well as 1300 and 1200 and --

A Well, I certainly hope we can, but I

doubt it.

Q It just kind of concerns me that you're proposing a downhole commingling proposition here where you may not have marginal production at all. You may have good production in either of these two zones.

A I don't at all feel that there would be any way we could have economic production from the Monument, and the Monument is an addition we can get, that we couldn't complete and drill for on its own.

Q What was the No. 5 completed in?

A It was in the Monument.

Q How much did it produce prior to being plugged?

A I don't believe -- let me --

Q And why was it plugged, mechanical problems or depletion?

A No, sir, it was -- it was acidized with 1000 gallons, broke down from 1800 to 900 pounds, swabbed load water and 147 barrels of formation water in 14 hours with no show of oil or gas.

The next day it swabbed for 5 hours for 108 barrels of formation water with no show of oil or gas, and then plugged.

Q So it never actually produced.

A Never actually produced.

But we feel it's worth a gamble. We're going to drill this well with air and we think that it's worth a gamble, maybe, if we can get 100 Mcf, that's an added plus, and we're willing to take a risk to try and get that.

Q So it looks like it might be an edge well insofar as the Eunice-Monument is concerned?

A Yes, sir, it's very risky.

Q Although the Eumont is a good prospect?

A Yes, sir. We haven't seen a top allowable Eumont well anywhere in the area, and our experience from the vast amount of infill wells that have come before this body in the past eighteen months shows that even if you do get a good well immediately, it will fall off to marginal status quite fast.

Q Now, on your reserve calculations for your anticipated additional recovery for this well, for FERC purposes you've estimated you're going to get 392,000 Mcf of gas here. This is a straight volumetric calculation and why did you come up with 392,000 Mcf? I realize it's based on a recovery factor of 30 percent.

A Yes, sir.

Q Why did you pick a recovery factor of 30 percent?

A Basically that was the consensus of our

reservoir engineering staff and geological staff.

Q Because of the depletion of the general area?

A Yes, sir, the general area; the fact that this whole field has been producing since 1954. We have a tremendous amount of data, so --

Q An older well would be expected to produce more than 34 percent, wouldn't it?

A Yes, sir, a well that had been producing for a long time, but we say that there's going to be reserves that wouldn't be recovered, but we don't have a virgin situation here, either.

MR. NUTTER: Are there any further questions of Mr. Gillett?

Mr. Padilla?

CROSS EXAMINATION

BY MR. PADILLA:

Q Mr. Gillett, you've asked for infill findings in this case, and I'm wondering, if you're going to dually complete this well in the Monument and the Eumont.

MR. NUTTER: No, not dually complete. He's going to downhole commingle.

MR. KELLAHIN: Downhole.

Q Downhole commingle it. The proration unit now contains the No. 2 Well, which is completed in the Eumont.

A Yes.

Q The other wells that are depicted in green here are completed in the Monument.

A Yes, sir, and they're operated by Texaco.

Q Now, yet in your Exhibit Seven do you have a breakdown of, say, the amount of reserves you're going to recover, say, from the Monument and the Eumont?

A Those are Eumont reserves. There's such a high risk factor in the Monument reserves that we're really not -- what we get is nice. We're going to test the Monument and see what we have, and then come up and test the other one and put them together.

We may not have anything in the Monument at all, so we'll just go on about our business.

Q When was the No. 5 Well plugged and abandoned?

A 1964.

Q Did that ever produce in commercial quantities at all?

A Not even a show.

MR. PADILLA: I have no further questions.

MR. NUTTER: Are there any further questions of Mr. Gillett? 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 6759?

We'll take the case under advisement.

(Hearing concluded.)

1. The first part of the report  
is devoted to a description of the  
method used for the determination  
of the rate of reaction between  
the two substances. The results  
are given in the following table.

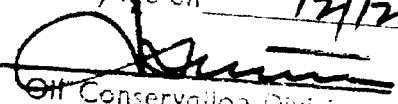
10/11/57



## REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Certified Shorthand Reporter,  
DO HEREBY CERTIFY that the foregoing and attached Transcript  
of Hearing before the Oil Conservation Division was reported  
by me; that the said transcript is a full, true, and correct  
record of the hearing, prepared by me to the best of my  
ability from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 6759,  
heard by me on 12/12 1979.  
 Examiner  
Oil Conservation Division

WELL COMPLETION SKETCHES  
SUN-5541-A

A. B. REEVES #6  
WELL

EUMONT & MONUMENT  
FIELD

12-12-79  
DATE S.A.G.

- ☐ PRESENT COMPLETION  
☒ SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

8 5/8" 24" J-55 @ 450' w/ 250sx  
7 7/8" hole

TOL: 5 1/2" x hole: 1500' (100% excess)

DV Tool @ 2500' w/ 250sx

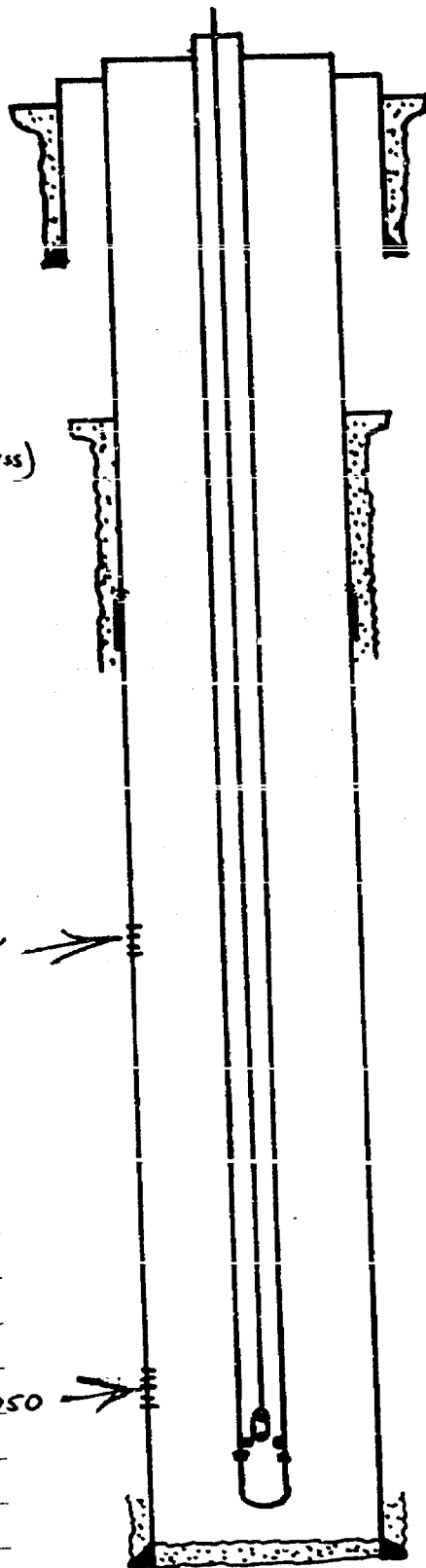
EUMONT PERFS: 3400-3700' →

MONUMENT PERFS: 3900-3950' →

PBTD - 3960'

5 1/2" 14" J-55 @ 4000' w/ 200sx

TD - 4000'



☐ ORIGINAL COMP.

WELL CLASS \_\_\_\_\_

DATA ON THIS COMPLETION

3/4" K ROOS w/ 1 1/4" EUMONT  
PUMP C 3920' MOD S.A.

2 3/8 TBG @ 3950'  
SN C 3920'

SUN OIL COMPANY

Date of Hearing: 12/12/79

Docket No.: 6759

Exhibit # 2



SUN PRODUCTION COMPANY  
EUNICE MONUMENT OIL POOL  
DAILY PRODUCTION DATA  
(December, 1978)

OPERATOR	ZONE AND WELL	BOPD	BWPD	MCFPD	CUM	LOCATION
Amoco	Gillully B Fed #2B - Last Prod Prior to 6/73				159586	2120S 37E
Amoco	Gillully B Fed #6A - Last Prod Prior to 6/73				43324	2120S 37E
Amoco	Gillully B Fed #6A - Last Prod Prior to 6/73			374	6918433	2120S 37E
Amoco	W. C. Roach #5F	0	0	160	1547	2120S 37E
Amoco	State 193 #1L - Plugging App 1975				132941	3020S 37E
Amerada	State W #1H - Last Prod Prior to 6/73				115612	3020S 37E
Amerada	State W #3F	2	2	42	138940	3020S 37E
Amerada	State W #4F - Last Prod Prior to 10/75				12386	3020S 37E
Amerada	State D #6P	46	6	-	59494	1620S 37E
Cities Service	State F #10	1	1	6	213665	3020S 37E
Cities Service	State F #3P - Plugging App 1972					
BWP, Inc.	State A #1I - Last Prod Prior to 6/73				166024	2020S 37E
BWP, Inc.	State A #2J	10	4	182	243520	2020S 37E
BWP, Inc.	State A #30 - Plugging App 1978					2020S 37E
Continental	Meyer B 28A CCM AC2 #3C - Last Prod 12/75				40403Gas	3320S 37E
Getty	Skelly F State #1P				3020i1	
Getty	State 1 #1N	26	117	354	373194	1720S 37E
John Youronkie	Reeves #1G	3	TSTM	34	47720	1620S 37E
Byrom	Shell GA State #1M	6	16	194	4776	2920S 37E
Byrom	Shell GA State #2M	4	16	186	330314	1620S 37E
John W. McMinnis & Hugh N. Word	A. B. Reeves #1F	2	8	141	286479	1620S 37E
Gulf	A. B. Reeves #2K	1	-	75	474	2920S 37E
Gulf	Sunshine #1M	3	1	10	229	2920S 37E
Gulf	Sunshine #3K	4	3	34	197777	3020S 37E
					220039	3020S 37E

SUN OIL COMPANY

Date of Hearing: 12/12/79  
Docket No.: 6759  
Exhibit #: 49

SUN PRODUCTION COMPANY  
EUNICE MONUMENT OIL POOL  
DAILY PRODUCTION DATA  
(December, 1978)

OPERATOR	ZONE AND WELL	BOPD	BWPD	MCFPD	CUM	LOCATION
Gulf	Sunshine #2N - Recomp to Eumont Yates Rvrs				150437	3020S 37E
Gulf	Sunshine #2N			37223 ✓	3366820	3020S 37E
Exxon	Aggies State #3D	8	19	24	370924	3120S 37E
Exxon	Aggies State #8C	2	7	3	184613	3120S 37E
Exxon	Aggies State #11A - Last Prod Date 9/76				261439	3120S 37E
Phillips	Hobbs #3M	28	TSTM	3	589248	1820S 37E
Phillips	Hobbs #70 - Plugging App 1962					
MKA Oil Corp.	New Mexico F State #2N	2	2	242	263723	1720S 37E
MKA Oil Corp.	New Mexico F State #4M	2	1	197	142789	1720S 37E

**SUN OIL COMPANY**

Date of Hearing: 12/12/79

Docket No.: 6259

Exhibit # 46

SUN PRODUCTION COMPANY  
EUNICE MONUMENT UNIT  
DAILY PRODUCTION DATA  
(December, 1978)  
(OPERATED BY TEXACO)

ZONE AND WELL	BOPD	BWPD	MCFPD	CUM	LOCATION
1D	11	117	4	238739	1920S 37E
2C	2	-	132	126523	1920S 37E
3B	2	.7	14	140972	1920S 37E
4A	7	3	12	199358	1920S 37E
5D	5	20	7	211553	2020S 37E
6C	31	-	100	340085	2020S 37E
7B	6	88	2	333509	2020S 37E
8A	6	15	7	352477	2020S 37E
9D	2	1	6	291050	2120S 37E
10C	TSTM	TSTM	-	266256	2120S 37E
11E	TSTM	10	2	197886	1920S 37E
12F	Last Prod Prior to 6/73			143185	
13G	Injection Well			(I)86442	
14H	15	43	26		1920S 37E
15B	Injection Well			(I)208413	2020S 37E
16F	18	2	12	448161	2020S 37E
17G	6	15	10	332035	2020S 37E
18H	TSTM	8	TSTM	342503	2020S 37E
19E	5	8	-	278296	2120S 37E
20I	Last Prod Prior to 6/73			147910	
21L	TSTM	8	-	151837	1920S 37E
22K	Injection Well			(I)304787	
23J	1	10	-	155876	1920S 37E
24I	Injection Well			-	1920S 37E
25L	3	7	15	223564	2020S 37E
26K	8	47	8	326533	2020S 37E
27P	TSTM	6	2	184634	2420S 36E
28M	4	9	4	403796	1920S 37E
29N	15	28	12	409386	1920S 37E
30O	Injection Well			(I)256237	1920S 37E
31P	2	TSTM	11	137929	1920S 37E
32M	Injection Well			(I)190784	2020S 37E
33N	1	-	4	6866	2020S 37E
34D	7	-	15	164045	3020S 37E
37A	3	5	22	92923	3020S 37E
38D	5	16	3	113943	2920S 37E
39C	8	11	2	36969	2920S 37E
40B	5	9	71	26172	2920S 37E

SUN OIL COMPANY

Date of Hearing: 12/12/79

Docket No.: 6259

Exhibit # 4c

SUN PRODUCTION COMPANY  
EUMONT POOL  
LEA COUNTY, NEW MEXICO  
GAS WELLS  
(DECEMBER, 1978)  
DAILY PRODUCTION

OPERATOR	ZONE AND WELL	MCFPD	CUM	PRESSURE SE/PSIG	LOCATION
Hudson & Hudson	Hudson Phillips Com #1B	124	1859546	170	3020S 37E
Gulf	Bell Ramsey NCT8 #1M	289	6904343	205	2920S 37E
Gulf	Bell Ramsey NCT8 #3L	93	2382372	322	2820S 37E
Gulf	A. B. Reeves #2E	81	2588465	196	2920S 37E
Gulf	A. B. Reeves #1L	285	3116971	204	2920S 37E
Bert Fields	Turner State #2C	214	6883820	203	3220S 37E
Arco	State -0- #2D	557	4036847	203	3220S 37E
Amerada	State W #2G	92	47417 (Oil) 2710701 (Gas)	183	3020S 37E
Amerada	State O #3Q	1405	6407 (Oil) 3843049 (Gas)	417	1620S 37E
Cities Service	State F #21	45	2186803	240	3020S 37E
BWP, Inc.	State A #1 <sup>r</sup>	186	2931958	372	2020S 37E
Continental Oil	Britt B18 #6P	136	6805	491	1820S 37E
Continental Oil	Meyer B 28A CCM AC1 #1G	539	4242416	175	2820S 37E
Continental Oil	Meyer B 28A CCM AC2 #20	115	3980276	160	2820S 37E
Getty	Skelly F State #20	419	287587	309	1720S 37E
Getty	Skelly F State #20	524	2947659	400	1720S 37E
Getty	State I CCM #3N	1201	3390890	400	1620S 37E

SUN OIL COMPANY  
Date of Hearing: 12/12/79  
Docket No.: 6259  
Exhibit # 5a

<u>OPERATOR</u>	<u>ZONE AND WELL</u>	<u>MCFPD</u>	<u>CUM</u>	<u>PRESSURE SI/PSIG</u>	<u>LOCATION</u>
Getty	Skelly G. State #1J	0	1181681		3020S 37E
Sun Oil	A. B. Reeves #2D	103	2364698	124	2920S 37E
Phillips	Hobbs #4N	156	3002842	675	1820S 37E
Exxon	Exxon Aggies State #7B	1304	3875991	257	3120S 37E
Texaco	New Mexico H State NCT 3 #25D	279	3052829		1920S 37E
Texaco	New Mexico H State NCT 2 #26C	581	8129312		2020S 37E
Texaco	New Mexico H State NCT 4 #27L	286	3104276		1920S 37E
Texaco	New Mexico H State NCT 2 #9B	101	2807382		1920S 37E

**SUN OIL COMPANY**

Date of Hearing: 12/12/79

Docket No.: 6259

Exhibit # 56



#### RECOMMENDED ALLOCATION FORMULA

	<u>Gas</u>	<u>Oil</u>
Monument	15%	100%
Eumont	85%	0%

This formula is based on data in the attached exhibits where Eumont wells average 380 mcf/d and Monument wells average 55 mcf/d.

#### GAS CONTRACTS

Casinghead	Phillips (interstate)
Gas well gas	El Paso (interstate)

All deliveries will be to Phillips. El Paso will take their allocated volume at the tailgate of Phillips' plant.

#### SUN OIL COMPANY

Date of Hearing: 12/12/79

Docket No.: 6259

Exhibit # 6

RESERVE CALCULATIONS

$$\frac{A \times h \times (1-S_w) \times \phi \times 7758}{FVF} \times RF = N_G$$

A = Acres

h = Net Ft.

S<sub>w</sub> = Water Saturation

φ = Average Porosity

FVF = Formation Volume Factor ( $\frac{\text{Res BBLs}}{\text{MCF}}$ )

RF = Recovery Factor

N<sub>G</sub> = Recoverable Gas

$$\frac{80 \times 60 \times (1-.35) \times 0.075 \times 7758}{1.389} \times 0.30 = 392100 \text{ MCF}$$

SUN OIL COMPANY

Date of Hearing: 12/12/79

Docket No.: 6259

Exhibit # 7

WELL COMPLETION SKETCHES  
SUN-6641 A

A. B. REEVES #6  
WELL

EUMONT & MONUMENT  
FIELD

12-12-79  
DATE S.A.G.

☐ PRESENT COMPLETION

☒ SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

8 5/8" 24" J-55 @ 450' w/250sx  
7 7/8" hole

TOL: 5 1/2" hole: 1500' (100% excess)

DV Tool @ 2500' w/250sx

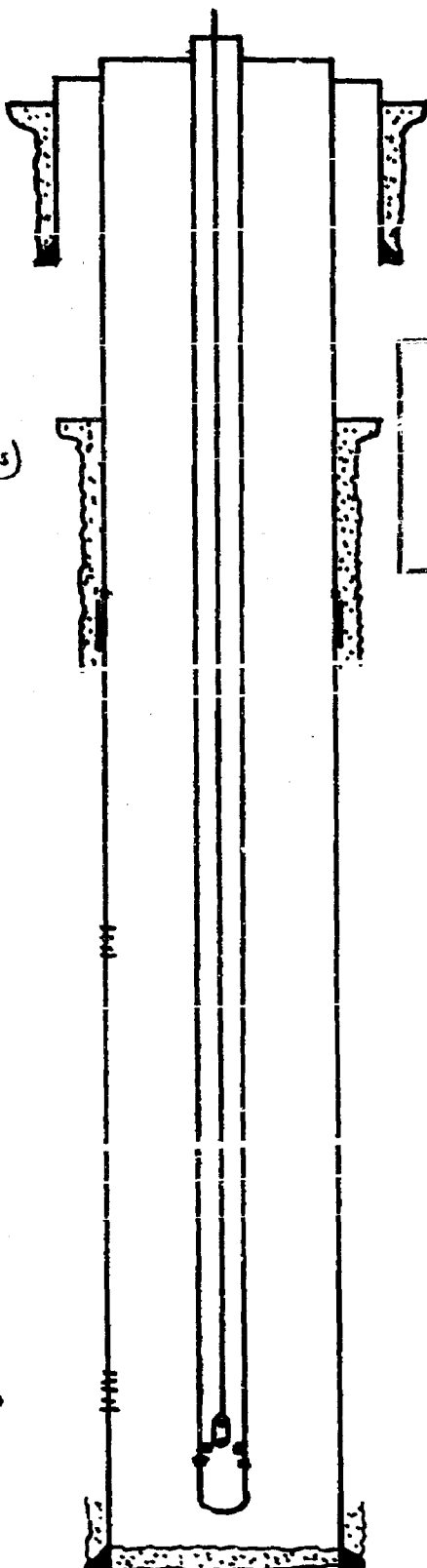
EUMONT PERES: 3400-3700'

MONUMENT PERES: 3900-3950'

PBTD - 3960'

5 1/2" 14" J-55 @ 4000' w/200sx

TD - 4000'



☐ ORIGINAL COMP.

WELL CLASS \_\_\_\_\_

DATA ON THIS COMPLETION

BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION

Sun EXHIBIT NO. 2

CASE NO. 6759

3/4" K RODS w/ 1 1/4" INSERT  
PUMP @ 3920'

2 3/8 TBG @ 3950'  
SN @ 3920'

**SUN OIL COMPANY**

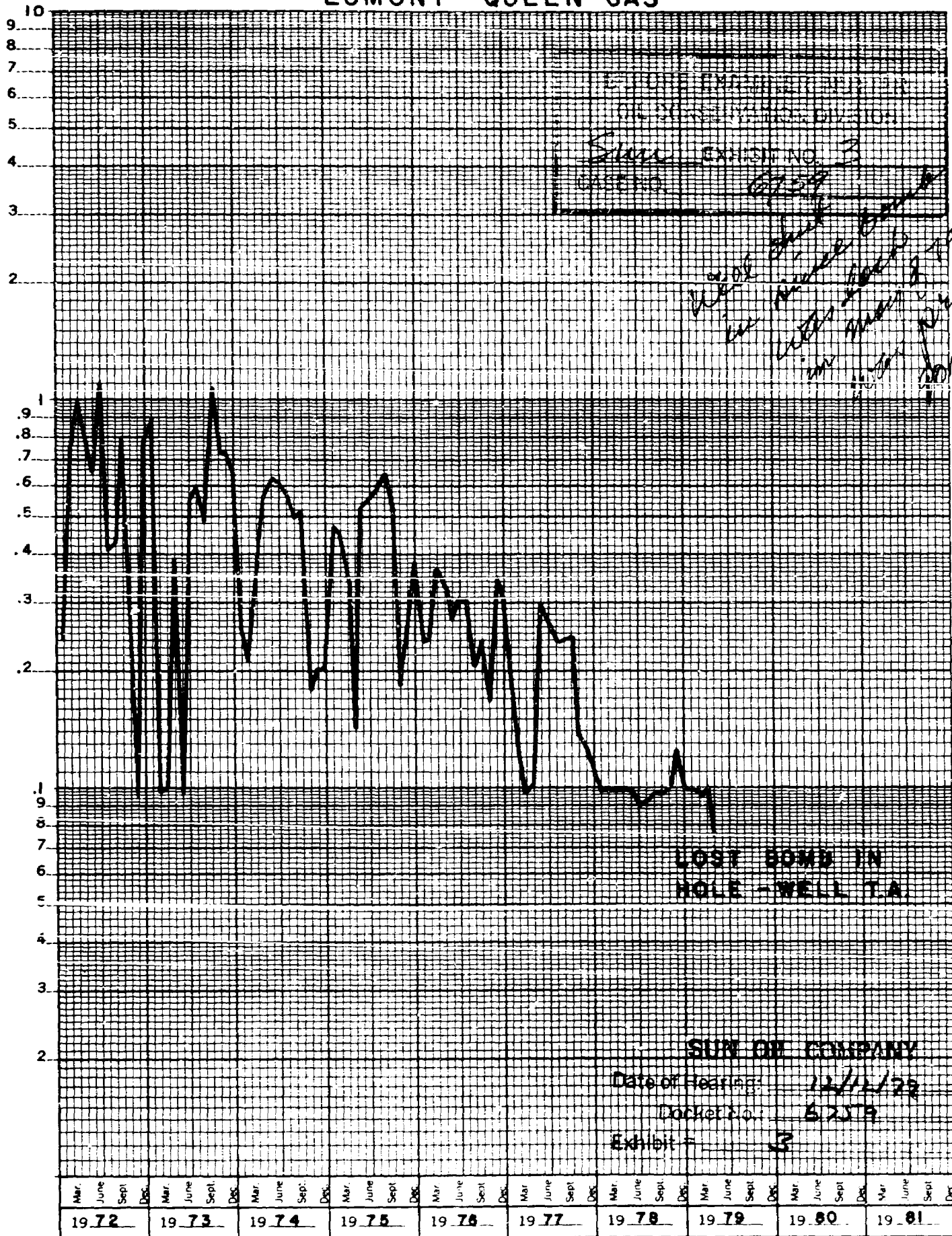
Date of Hearing: 12/12/79

Docket No.: 6759

Exhibit # 2

A.B. REEVES NO. 2  
EUMONT - QUEEN GAS

MMCF / DAY



EXISTING NO. 3  
CASE NO. 6759

*lost bomb in well TA*

LOST BOMB IN  
HOLE - WELL TA

SUN OF COMPANY  
Date of Hearing: 12/12/78  
Docket No. 6759  
Exhibit - 3

SUN PRODUCTION COMPANY  
EUNICE MONUMENT OIL POOL  
DAILY PRODUCTION DATA  
(December, 1978)

OPERATOR	ZONE AND WELL	BOPD	BWPD	MCFPD	CUM	LOCATION
Amoco	Gillully B Fed #25 - Last Prod Prior to 6/73				159586	2120S 37E
Amoco	Gillully B Fed #6A - Last Prod Prior to 6/73				43324	2120S 37E
Amoco	Gillully B Fed #6A - Last Prod Prior to 6/73			374	6918433	2120S 37E
Amoco	W. C. Roach #5F	0	0	160	1547	2120S 37E
Amoco	State 193 #1L - Plugging App 1975				132941	3020S 37E
Amerada	State W #1H - Last Prod Prior to 6/73				115612	3020S 37E
Amerada	State W #3F	2	2	42	138940	3020S 37E
Amerada	State W #4F - Last Prod Prior to 10/75				12386	3020S 37E
Amerada	State D #6P	46	6	-	59494	1620S 37E
Cities Service	State F #10	1	1	6	213665	3020S 37E
Cities Service	State F #3P - Plugging App 1972					
BWP, Inc.	State A #1I - Last Prod Prior to 6/73				166024	2020S 37E
BWP, Inc.	State A #2J	10	4	182	243520	2020S 37E
BWP, Inc.	State A #30 - Plugging App 1978					2020S 37E
Continental	Meyer B 28A CCM AC2 #3C - Last Prod 12/75				40403Gas 302011	3320S 37E
Getty	Skelly F State #1P			354	373194	1720S 37E
Getty	State 1 #1N	26	117	-	47720	1620S 37E
John Youronkie	Reeves #1G	3	TSTM	34	4776	2920S 37E
Byrom	Shell GA State #1M	6	16	194	330314	1620S 37E
Byrom	Shell GA State #2M	4	16	186	286479	1620S 37E
John W. McMinnis & Hugh N. Word	A. B. Reeves #1F	2	8	141	474	2920S 37E
	A. B. Reeves #2K	1	-	75	229	2920S 37E
Gulf	Sunshine #1M	3	1	10	197777	3020S 37E
Gulf	Sunshine #3K	4	3	34	220039	3020S 37E

*SW  
appur*

BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION  
*Sum* EXHIBIT NO. *4A*  
CASE NO. *6759*

SUN OIL COMPANY  
Date of Hearing: *12/12/79*  
Docket No.: *6759*  
Exhibit # *4a*

SUN PRODUCTION COMPANY  
EUNICE MONUMENT OIL POOL  
DAILY PRODUCTION DATA  
(December, 1978)

OPERATOR	ZONE AND WELL	BOPD	BWPD	MCFPD	CUM	LOCATION
Gulf	Sunshine #2N - Recomp to Eumont Yates Rvrs				150437	3020S 37E
Gulf	Sunshine #2N			37223	3366820	3020S 37E
Exxon	Aggies State #3D	8	19	24	370924	3120S 37E
Exxon	Aggies State #8C	2	7	3	184613	3120S 37E
Exxon	Aggies State #11A - Last Prod Date 9/76				261439	3120S 37E
Phillips	Hobbs #3M	28	TSTM	3	589248	1820S 37E
Phillips	Hobbs #70 - Plugging App 1962					
MKA Oil Corp.	New Mexico F State #2N	2	2	242	263723	1720S 37E
MKA Oil Corp.	New Mexico F State #4M	2	1	197	142789	1720S 37E

*ave gas  
prod =  
55 MCF/day*

BEFORE EXAMINER MATTER  
OIL CONSERVATION DIVISION

*Sun* EXHIBIT NO. *46*  
CASE NO. *6759*

SUN OIL COMPANY

Date of Hearing: *12/12/79*  
Docket No.: *6759*  
Exhibit # *46*

SUN PRODUCTION COMPANY  
EUNICE MONUMENT UNIT  
DAILY PRODUCTION DATA  
(December, 1978)  
(OPERATED BY TEXACO)

ZONE AND WELL	BOPD	BWPD	MCFPD	CUM	LOCATION
1D	11	117	4	238739	1920S 37E
2C	2	-	132	126523	1920S 37E
3B	2	.7	14	140972	1920S 37E
4A	7	3	12	199358	1920S 37E
5D	5	20	7	211553	2020S 37E
6C	31	-	100	340085	2020S 37E
7B	6	88	2	333509	2020S 37E
8A	6	15	7	352477	2020S 37E
9D	2	1	6	291050	2120S 37E
10C	TSTM	TSTM	-	266256	2120S 37E
11E	TSTM	10	2	197886	1920S 37E
12F Last Prod Prior to 6/73				143185	
13G Injection Well				(I)86442	
14H	15	43	26		1920S 37E
15B Injection Well				(I)208413	2020S 37E
16F	18	2	12	448161	2020S 37E
17G	6	15	10	332035	2020S 37E
18H	TSTM	8	TSTM	342503	2020S 37E
19E	5	8	-	278296	2120S 37E
20I Last Prod Prior to 6/73				147910	
21L	TSTM	8	-	151837	1920S 37E
22K Injection Well				(I)304787	
23J	1	10	-	155876	1920S 37E
24I Injection Well				-	1920S 37E
25L	3	7	15	223564	2020S 37E
26K	8	47	8	326533	2020S 37E
27P	TSTM	6	2	184634	2420S 36E
28M	4	9	4	403796	1920S 37E
29N	15	28	12	409386	1920S 37E
300 Injection Well				(I)256237	1920S 37E
31P	2	TSTM	11	137929	1920S 37E
32M Injection Well				(I)190784	2020S 37E
33N	1	-	4	6866	2020S 37E
34D	7	-	15	164045	3020S 37E
37A	3	5	22	92923	3020S 37E
38D	5	15	3	113943	2920S 37E
39C	8	11	2	36969	2920S 37E
40B	5	9	71	26172	2920S 37E

*west offset*

BEFORE EXAMINER NOTTER  
OIL CONSERVATION DIVISION  
*Sum* EXHIBIT NO. *4C*  
CASE NO. *6759*

SUN OIL COMPANY  
Date of Hearing: *12/12/77*  
Docket No.: *6759*  
Exhibit # *4c*

SUN PRODUCTION COMPANY  
EUMONT POOL  
LEA COUNTY, NEW MEXICO  
GAS WELLS  
(DECEMBER, 1978)  
DAILY PRODUCTION

OPERATOR	ZONE AND WELL	MCFPD	CUM	PRESSURE SE/PSIG	LOCATION
Hudson & Hudson	Hudson Phillips Com #1B	124	1859546	170	3020S 37E
Gulf	Bell Ramsey NCT8 #1M	289	6904343	205	2920S 37E
Gulf	Bell Ramsey NCT8 #3L	93	2382372	322	2820S 37E
Gulf	A. B. Reeves #2E	81	2588465	196	2920S 37E
Gulf	A. B. Reeves #1L	285	3116971	204	2920S 37E
Bert Fields	Turner State #2C	214	6883820	204	3220S 37E
Arco	State -0- #2D	557	4036847	203	3220S 37E
Amerada	State W #2G	92	47417(Oil) 2710701(Gas)	183	3020S 37E
Amerada	State O #3Q	1405 <i>hi</i>	6407(Oil) 3843049(Gas)	417	1620S 37E
Cities Service	State F #21	45 <i>next do low</i>	2186803	240	3020S 37E
BWP, Inc.	State A #11	186 <i>next do low</i>	2931958	372	2020S 37E
Continental Oil	Britt B18 #6P	136	6805	491	1820S 37E
Continental Oil	Meyer B 28A CCM AC1 #1G	539	4242416	175	2820S 37E
Continental Oil	Meyer B 28A CCM AC2 #20	115	3980276	160	2820S 37E
Getty	Skelly F State #20	419	287587	309	1720S 37E
Getty	Skelly F State #20	524	2947659	309	1720S 37E
Getty	State I CCM #3N	1201	3390890	400	1620S 37E

BEFORE EXAMINER BUTTER  
OIL CONSERVATION DIVISION

*Sum* EXHIBIT NO. *5a*  
CASE NO. *6759*

SUN OIL COMPANY

Date of Hearing: *12/12/79*  
Docket No.: *6259*  
Exhibit # *5a*



OPERATOR	ZONE AND WELL	MCFPD	CUM	PRESSURE SI/PSIG	LOCATION
Getty	Skelly G. State #1J <i>low</i>	0	1181681		3020S 37E
Sun Oil	A. B. Reeves #2D	103	2364698	124	2920S 37E
Phillips	Hobbs #4N <i>west 5 offset</i>	156	3002842	675	1820S 37E
Exxon	Exxon Aggies State #7B	1304	3875991	257	3120S 37E
Texaco	New Mexico H State NCT 3 #25D	279	3052829		1920S 37E
Texaco	New Mexico H State NCT 2 #26C	581	8129312		2020S 37E
Texaco	New Mexico H State NCT 4 #27L	286	3104276		1920S 37E
Texaco	New Mexico H State NCT 2 #9B	101	2807382		1920S 37E

*ave = 380  
MCK/day*

BEFORE EXAMINER NUTTER  
OIL CONSERVATION DIVISION

EXHIBIT NO. \_\_\_\_\_  
CASE NO. \_\_\_\_\_

**SUN OIL COMPANY**

Date of Hearing: 12/12/79

Docket No.: 6259

Exhibit # 56

# RECOMMENDED ALLOCATION FORMULA

	<u>Gas</u>	<u>Oil</u>
Monument	15%	100%
Eumont	85%	0%

This formula is based on data in the attached exhibits where Eumont wells average 380 mcf/d and Monument wells average 55 mcf/d.

## GAS CONTRACTS

Casinghead	Phillips (interstate)
Gas well gas	El Paso (interstate)

All deliveries will be to Phillips. El Paso will take their allocated volume at the tailgate of Phillips' plant.

BEFORE EXAMINER NUTTER  
OIL COMMISSION DIVISION  
Sun EXHIBIT NO. 6  
6759

SUN OIL COMPANY  
Date of Hearing: 12/12/29  
Docket No.: 6259  
Exhibit # 6

### RESERVE CALCULATIONS

$$\frac{A \times h \times (1-S_w) \times \emptyset \times 7758}{FVF} \times RF = N_G$$

A = Acres

h = Net Ft.

S<sub>w</sub> = Water Saturation

∅ = Average Porosity

FVF = Formation Volume Factor ( $\frac{\text{Res BBLs}}{\text{MCF}}$ )

RF = Recovery Factor

N<sub>G</sub> = Recoverable Gas

$$\frac{80 \times 60 \times (1-.35) \times 0.075 \times 7758}{1.389} \times 0.30 = 392,100 \text{ MCF}$$

# 5 was  
drilled &  
P & A  
in Nov & Dec  
64  
no prod from  
monument.

BEFORE EXAMINER NUTTER	
OIL CONSERVATION DIVISION	
<u>Sun</u>	EXHIBIT NO. <u>7</u>
CASE NO.	<u>6759</u>

**SUN OIL COMPANY**  
Date of Hearing: 12/12/79  
Docket No.: 6759  
Exhibit # 7

WELL COMPLETION SKETCHES  
SUN-6641-A

R. B. REEVES #6  
WELL

EUMONT & MONUMENT  
FIELD

12-12-79  
DATE S.A.G.

☐ PRESENT COMPLETION

☒ SUGGESTED COMPLETION

PERMANENT WELL BORE DATA

8 5/8" 24" J-55 @ 450' w/ 250sx  
7 7/8" hole

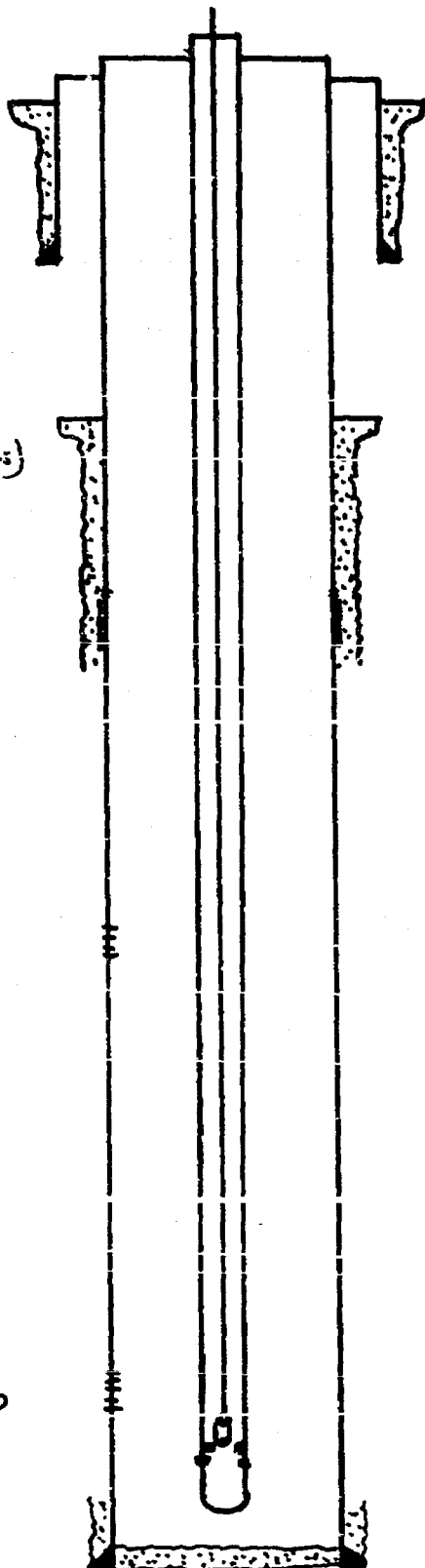
TOC: 5 1/2" hole: 1500' (100% excess)

DV Tool @ 2500' w/ 250sx

EUMONT PERFS: 3400-3700'

MONUMENT PERFS: 3900-3950'

PBTD - 3960'  
5 1/2" 14" J-55 @ 4000' w/ 200sx  
TD - 4000'



☐ ORIGINAL COMP.

WELL CLASS \_\_\_\_\_

DATA ON THIS COMPLETION

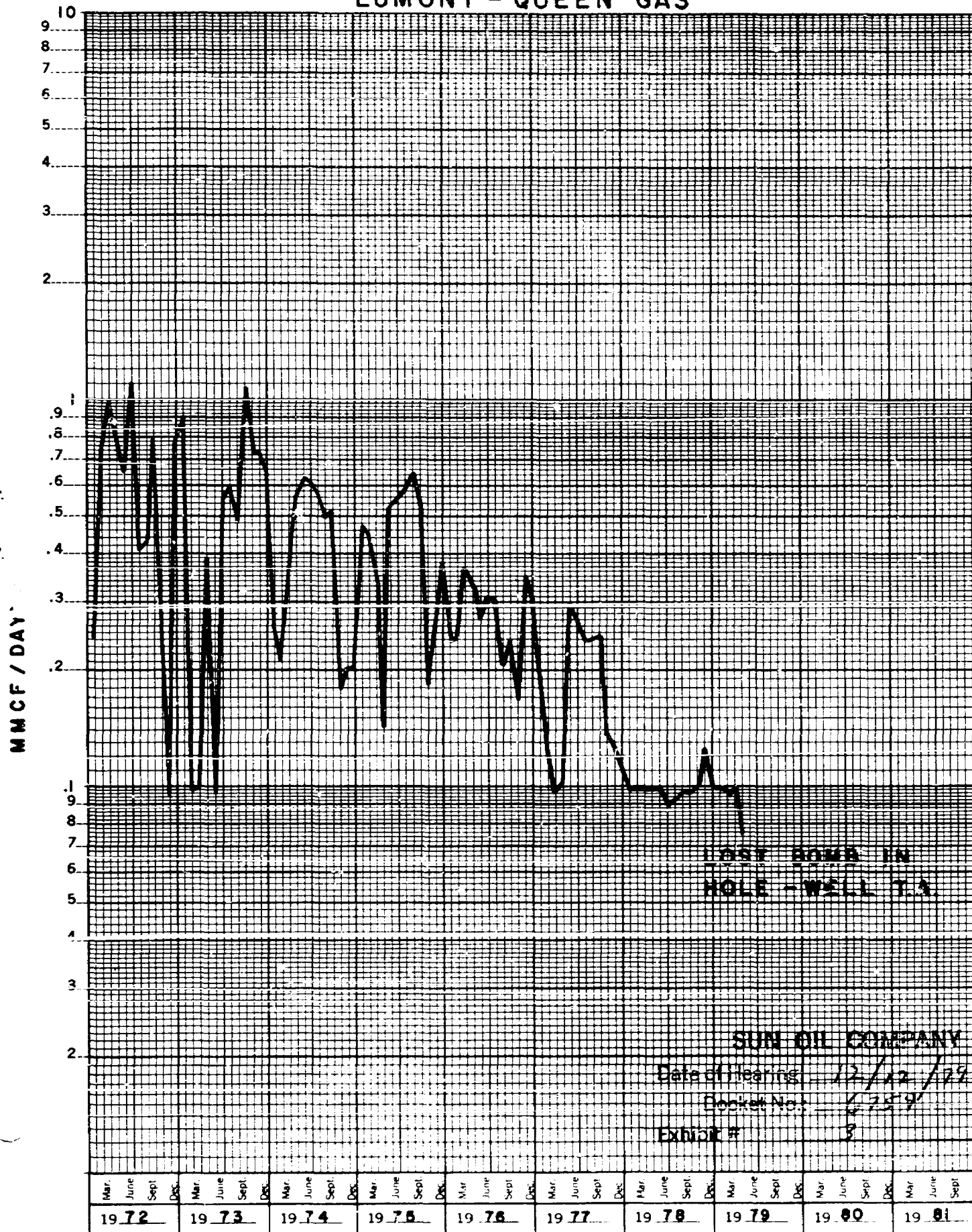
3/4" K ROOS w/ 1 1/4" INSERT  
PUMP @ 3920'

2 3/8 TBG @ 3950'  
SN @ 3920'

SUN OIL COMPANY

Date of Hearing: 12/12/79  
Docket No.: 6759  
Exhibit # 2

# A.B. REEVES NO. 2 EUMONT - QUEEN GAS



SUN PRODUCTION COMPANY  
EUNICE MONUMENT OIL POOL  
DAILY PRODUCTION DATA  
(December, 1978)

OPERATOR	ZONE AND WELL	BOPD	BWPD	MCFPD	CUM	LOCATION
Amoco	Gillully B Fed #2B - Last Prod Prior to 6/73				159586	2120S 37E
Amoco	Gillully B Fed #6A - Last Prod Prior to 6/73				43324	2120S 37E
Amoco	Gillully B Fed #6A - Last Prod Prior to 6/73					
				374	6918433	2120S 37E
Amoco	W. C. Roach #5F	0	0	160	1547	2120S 37E
Amoco	State 193 #1L - Plugging App 1975				132941	3020S 37E
Amerada	State W #1H - Last Prod Prior to 6/73				115612	3020S 37E
Amerada	State W #3F	2	2	42	138940	3020S 37E
Amerada	State W #4F - Last Prod Prior to 10/75				12386	3020S 37E
Amerada	State D #6P	46	6	-	59494	1620S 37E
Cities Service	State F #10	1	1	6	213665	3020S 37E
Cities Service	State F #3P - Plugging App 1972					
BWP, Inc.	State A #1I - Last Prod Prior to 6/73				166024	2020S 37E
BWP, Inc.	State A #2J	10	4	182	243520	2020S 37E
BWP, Inc.	State A #30 - Plugging App 1978					2020S 37E
Continental	Meyer B 28A CCM AC2 #3C - Last Prod 12/75				40403Gas 3020i1	3320S 37E
Getty	Skelly F State #1P			354	373194	1720S 37E
Getty	State 1 #1N	26	117	-	47720	1620S 37E
John Youronkie	Reeves #1G	3	TSTM	34	4776	2920S 37E
Byrom	Shell GA State #1M	6	16	194	330314	1620S 37E
Byrom	Shell GA State #2M	4	16	186	286479	1620S 37E
John W. McMinnis & Hugh N. Word	A. B. Reeves #1F	2	8	141	474	2920S 37E
	A. B. Reeves #2K	1	-	75	229	2920S 37E
Gulf	Sunshine #1M	3	1	10	197777	3020S 37E
Gulf	Sunshine #3K	4	3	34	220039	3020S 37E

SUN OIL COMPANY

Date of Hearing: 12/12/79  
Docket No.: 6759  
Exhibit # 4a

SUN PRODUCTION COMPANY  
EUNICE MONUMENT OIL POOL  
DAILY PRODUCTION DATA  
(December, 1978)

OPERATOR	ZONE AND WELL	BOPD	BWPD	MCFPD	CUM	LOCATION
Gulf	Sunshine #2N - Recomp to Eumont Yates Rvrs				150437	3020S 37E
Gulf	Sunshine #2N			37223	3366820	3020S 37E
Exxon	Aggies State #3D	8	19	24	370924	3120S 37E
Exxon	Aggies State #8C	2	7	3	184613	3120S 37E
Exxon	Aggies State #11A - Last Prod Date 9/76				261439	3120S 37E
Phillips	Hobbs #3M	28	TSTM	3	589248	1820S 37E
Phillips	Hobbs #70 - Plugging App 1962					
MKA Oil Corp.	New Mexico F State #2N	2	2	242	263723	1720S 37E
MKA Oil Corp.	New Mexico F State #4M	2	1	197	142789	1720S 37E

SUN OIL COMPANY

Date of Hearing: 12/12/79  
Docket No.: 6759  
Exhibit # 46

SUN PRODUCTION COMPANY  
EUNICE MONUMENT UNIT  
DAILY PRODUCTION DATA  
(December, 1978)  
(OPERATED BY TEXACO)

ZONE AND WELL	BOPD	BWPD	MCFPD	CUM	LOCATION
1D	11	117	4	238739	1920S 37E
2C	2	-	132	126523	1920S 37E
3B	2	.7	14	140972	1920S 37E
4A	7	3	12	199358	1920S 37E
5D	5	20	7	211553	2020S 37E
6C	31	-	100	340085	2020S 37E
7B	6	88	2	333509	2020S 37E
8A	6	15	7	352477	2020S 37E
9D	2	1	6	291050	2120S 37E
10C	TSTM	TSTM	-	266256	2120S 37E
11E	TSTM	10	2	197886	1920S 37E
12F Last Prod Prior to 6/73				143185	
13G Injection Well	15	43	26	(I)86442	
14H					1920S 37E
15B Injection Well	18	2	12	(I)208413	2020S 37E
16F	6	15	10	448161	2020S 37E
17G	TSTM	8	TSTM	332035	2020S 37E
18H	5	8	-	342503	2020S 37E
19E	Last Prod Prior to 6/73	8	-	278296	2120S 37E
20I	TSTM	8	-	147910	
21L				151837	1920S 37E
22K Injection Well	1	10	-	(I)304787	
23J				155876	1920S 37E
24I Injection Well	3	7	15	-	1920S 37E
25L	8	47	8	223564	2020S 37E
26K	TSTM	6	2	326533	2020S 37E
27P	4	9	4	184634	2420S 36E
28M	15	28	12	403796	1920S 37E
29N				409386	1920S 37E
30O Injection Well	2	TSTM	11	(I)256237	1920S 37E
31P				137929	1920S 37E
32M Injection Well	1	-	4	(I)190784	2020S 37E
33N	7	-	15	6866	2020S 37E
34D	3	5	22	164045	3020S 37E
37A	5	16	3	92923	3020S 37E
38D	5	11	2	113943	2920S 37E
39C	5	9	71	36969	2920S 37E
40B				26172	2920S 37E

SUN OIL COMPANY  
Date of Hearing: 12/12/79  
Docket No.: 6759  
Exhibit #: 4c



SUN PRODUCTION COMPANY  
EUMONT POOL  
LEA COUNTY, NEW MEXICO  
GAS WELLS  
(DECEMBER, 1978)  
DAILY PRODUCTION

OPERATOR	ZONE AND WELL	MCFPD	CUM	PRESSURE SE/PSIG	LOCATION
Hudson & Hudson	Hudson Phillips Com #1B	124	1859546	170	3020S 37E
Gulf	Bell Ramsey NCT8 #1M	289	6904343	205	2920S 37E
Gulf	Bell Ramsey NCT8 #3L	93	2382372	322	2820S 37E
Gulf	A. B. Reeves #2E	81	2588465	196	2920S 37E
Gulf	A. B. Reeves #1L	285	3116971		2920S 37E
Bert Fields	Turner State #2C	214	6883820	204	3220S 37E
Arco	State -0- #2D	557	4036847	203	3220S 37E
Amerada	State W #2G	92	47417(Oil) 2710701(Gas)	183	3020S 37E
Amerada	State O #3Q	1405	6407(Oil) 3843049(Gas)	417	1620S 37E
Cities Service	State F #21	45	2186803	240	3020S 37E
BWP, Inc.	State A #11	186	2931958	372	2020S 37E
Continental Oil	Britt B18 #6P	136	6805	491	1820S 37E
Continental Oil	Meyer B 28A CCM AC1 #1G	539	4242416	175	2820S 37E
Continental Oil	Meyer B 28A CCM AC2 #20	115	3980276	160	2820S 37E
Getty	Skelly F State #20	419	287587		1720S 37E
Getty	Skelly F State #20	524	2947659	309	1720S 37E
Getty	State I CCM #3N	1201	3390890	400	1620S 37E

SUN OIL COMPANY

Date of Hearing: 12/12/79  
Docket No.: 6759  
Exhibit # 5a

<u>OPERATOR</u>	<u>ZONE AND WELL</u>	<u>MCFPD</u>	<u>CUM</u>	<u>PRESSURE SI/PSIG</u>	<u>LOCATION</u>
Getty	Skelly G. State #1J	0	1181681		3020S 37E
Sun Oil	A. B. Reeves #2D	103	2364698	124	2920S 37E
Phillips	Hcbbs #4N	156	3002842	675	1820S 37E
Exxon	Exxon Aggies State #7B	1304	3875991	257	3120S 37E
Texaco	New Mexico H State NCT 3 #25D	279	3052829		1920S 37E
Texaco	New Mexico H State NCT 2 #26C	581	8129312		2020S 37E
Texaco	New Mexico H State NCT 4 #27L	286	3104276		1920S 37E
Texaco	New Mexico H State NCT 2 #9B	101	2807382		1920S 37E

**SUN OIL COMPANY**

Date of Hearing: 12/12/79  
Docket No.: 6759  
Exhibit # 56

# RECOMMENDED ALLOCATION FORMULA

	<u>Gas</u>	<u>Oil</u>
Monument	15%	100%
Eumont	85%	0%

This formula is based on data in the attached exhibits where Eumont wells average 380 mcf/d and Monument wells average 55 mcf/d.

## GAS CONTRACTS

Casinghead	Phillips (interstate)
Gas well gas	El Paso (interstate)

All deliveries will be to Phillips. El Paso will take their allocated volume at the tailgate of Phillips' plant.

## SUN OIL COMPANY

Date of Hearing: 12/12/79  
Docket No.: 6759  
Exhibit #: 6

# RESERVE CALCULATIONS

$$\frac{A \times h \times (1-S_w) \times \phi \times 7758}{FVF} \times RF = N_G$$

A = Acres

h = Net Ft.

S<sub>w</sub> = Water Saturation

φ = Average Porosity

FVF = Formation Volume Factor ( $\frac{\text{Res BBLs}}{\text{MCF}}$ )

RF = Recovery Factor

N<sub>G</sub> = Recoverable Gas

$$\frac{80 \times 60 \times (1-.35) \times 0.075 \times 7758}{1.389} \times 0.30 = 392100 \text{ MCF}$$

## SUN OIL COMPANY

Date of Hearing: 12/12/79

Docket No.: 6759

Exhibit # 7

  
SUN PRODUCTION COMPANY

CAMPBELL CENTRE II, P.O. BOX 2880, DALLAS, TEXAS 75221

December 4, 1979

*Case 6759*

New Mexico Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey

Re: Downhole commingling, unorthodox  
well location, non-standard  
gas proration unit, simultaneous  
dedication of acreage and  
infill drilling  
A. B. Reeves Well No. 6,  
Eumont Gas and Monument Oil Pools  
Lea County, New Mexico

Gentlemen:

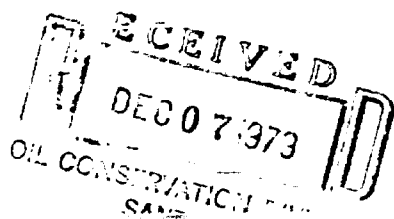
Sun Oil Company plans to drill Well No. 6 on our A. B. Reeves  
Lease containing 160 acres described as the N/2N/2 of Section 29  
T20S, R37E, Lea County, New Mexico. Well No. 6 will be located  
in Unit "A", 660' from the North line and 610' from the East line  
of Section 29.

In support of this request the following documents are being  
submitted to the Hobbs District Office:

1. Five (5) copies Form C-101 Application  
for Permit to Drill.
2. Three (3) copies Form C-102 Well Location  
and Acreage Dedication Plat.
3. Plat showing Offset Operators.

A copy of this letter and attachments are being sent by certified  
mail to each offset operator as their notice of this application  
and request for their waiver of objection. These offset operators  
are:

Amerada Hess Corp., Box 2040, Tulsa, Oklahoma 74102  
Arco Oil and Gas Company, Box 1610, Midland, Texas 79702



A DIVISION OF SUN OIL COMPANY (DELAWARE)

New Mexico Oil Conservation Division  
December 4, 1979  
Page 2


B.W.P., Inc., 1012 Alpine, Midland, Texas 79703  
Cities Service Co., Box 1919, Midland, Texas 79701  
Gulf Oil Production Co., Box 1150, Midland, Texas 79702  
Hudson & Hudson, et al, 1st National Bank Bldg.,  
Artesia, New Mexico 88210  
Phillips Petroleum Co., Phillips Bldg., 4th and  
Washington, Odessa, Texas 79761

This request has been set for hearing on December 12, 1979.

Yours very truly,

J. T. Power

By:

  
J. T. Harris

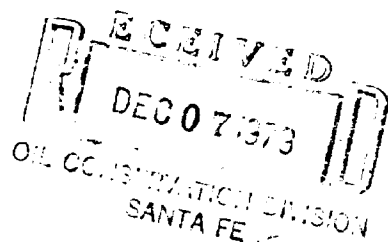
JTP/JTH/ag

Attachments

cc: Mr. Jerry T. Sexton  
New Mexico Oil Conservation Division  
Box 1980  
Hobbs, New Mexico 88240

Mr. Tom Kellahin  
500 Don Gaspar Ave., Box 1769  
Santa Fe, New Mexico 87501

Offset Operators



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FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

# NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101  
Revised 1-1-65

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK			
1a. Type of Work			
b. Type of Well DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			
c. Name of Operator			
d. Address of Operator			
e. Location of Well			
f. Field and Pool or Unit			
g. County			
h. Proposed Depth			
i. Formation			
j. Rotary or C.T.			
k. Elevations (Show whether DE, RI, etc.)			
l. Kind & Status Prev. Bond			
m. Drilling Contractor			
n. Approx. Date Work will start			

PROPOSED CASING AND CEMENT PROGRAM					
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
12 - 3/4"	8 - 5/8"	24th Grad	400'	250 Sacks	Circulate
7 - 7/8"	5 - 1/2"	14th	4000'	585 Sacks (*)	1600'

(\*) Will set DV Tool at approximately 3000', above the top of the Queen. Will cement with 300 sacks in first stage and 285 sacks thru DV tool.

## Blowout Prevention:

LWS 10", Series 900, Double Gate, 3000 lb. Working Pressure with pipe rams and blind rams, with Koomey remote operation station.

Casinghead Gas is dedicated to Phillips, Gas Well gas is dedicated to El Paso. All gas will be delivered to Phillips.

I ABOVE SPACE DESCRIBE PROPOSED PROGRAM. IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER INFORMATION IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

By J. H. HANNA Title Sr. Conservation Representative Date 12/4/79

(This space for State Use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

CONDITIONS OF APPROVAL, IF ANY:

**NEW MEXICO OIL CONSERVATION COMMISSION  
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102  
Supersedes C-128  
Effective 1-1-65

All distances must be from the outer boundaries of the Section

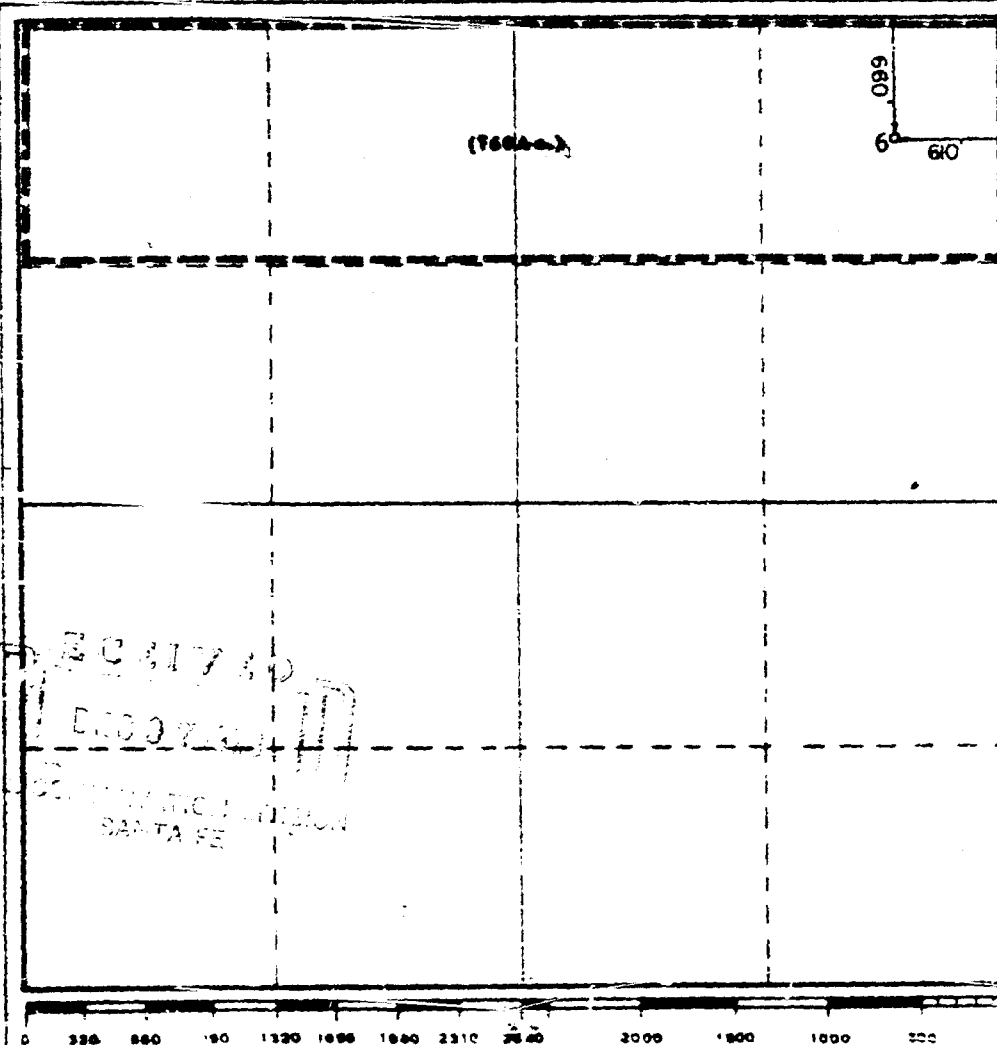
Operator <b>Sun Oil Co.</b>			Lease <b>A. B. Reeves</b>			Section <b>6</b>		
Unit Letter <b>A</b>	Section <b>29</b>	Township <b>20 South</b>	Range <b>37 East</b>	County <b>Lea</b>				
Actual Footage Location of Well: <b>660</b> feet from the <b>North</b> line and <b>610</b> feet from the <b>East</b> line								
Ground Level Elev. <b>3509.3</b>	Producing Formation <b>Queen - Gas San Andres - Oil</b>		Pool <b>Eumont 7 Rivers Queen Gas Monument Grayburg San Andres</b>	Dedicated Acreage: <b>160</b> Acres				

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation \_\_\_\_\_

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) \_\_\_\_\_

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



**CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

*J. J. Harris*  
Name

**Sr. Conservation Representative**

Position

**Sun Oil Company**

Company

**December 3, 1979**

Date

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

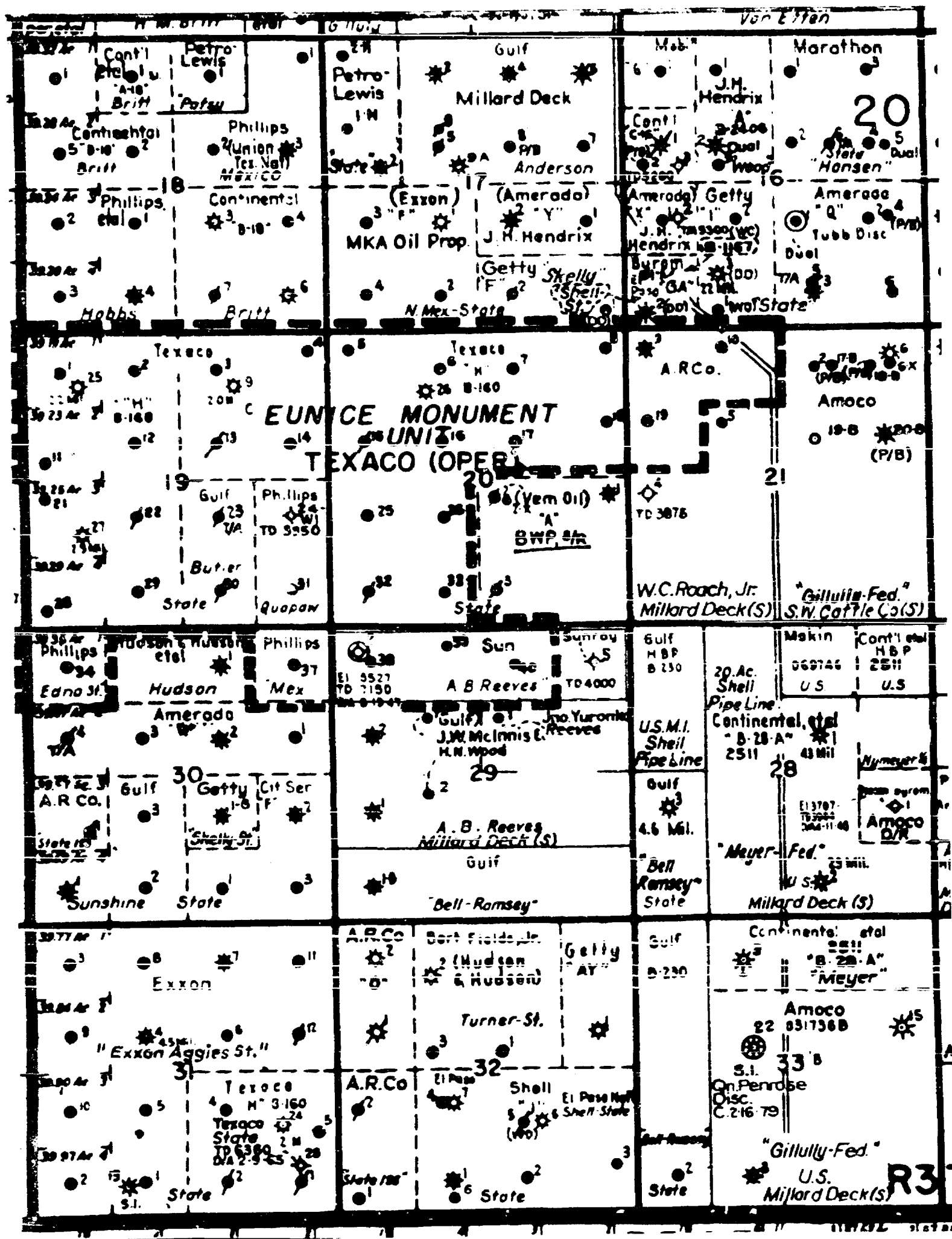
**11-26-79**

Registered Professional Engineer  
and/or Land Surveyor

*John W. West*

Certificate No **John W. West 676**  
**Ronald J. Eidson 3239**





Dockets Nos. 1-80 and 2-80 are tentatively set for January 3 and 16, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - DECEMBER 12, 1979

9 A.M. - OIL CONSERVATION DIVISION 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 for January, 1980, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for January, 1980, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- CASE 6752: Application of Bill Stapler for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Quark Unit Area, comprising 11,200 acres, more or less, of State and Federal lands in Township 22 South, Range 34 East.
- CASE 6753: Application of Amax Chemical Corporation for the amendment of Order No. R-111-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-111-A to extend the boundaries of the Potash-Oil Area by the inclusion of certain lands in Sections 26 and 27, Township 19 South, Range 29 East.
- CASE 6754: Application of Petroleum Development Corporation for a non-standard gas proration unit and an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location for a well to be drilled 660 feet from the North and West lines of Section 15, Township 19 South, Range 32 East, Lusk-Morrow Gas Pool, the W/2 of said Section 15 to be dedicated to the well as a non-standard 320-acre proration unit.
- CASE 6755: Application of Dome Petroleum Corporation for water disposal, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to extend the previously authorized water disposal interval in its Santa Fe 20 Well No. 2 located in Unit F of Section 20, Township 21 North, Range 8 West, Snake Eyes-Entrada Oil Pool, to include the perforated interval from 5756 feet to 5790 feet in the Entrada formation.
- CASE 6756: Application of Amoco Production Company for pool contraction and creation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the contraction of the vertical limits of the Air Strip-Bone Spring Pool to comprise the Middle Bone Spring formation only, from 9300 feet to 9460 feet, and the creation of the Air Strip-Upper Bone Spring Pool to comprise said formation from 9180 feet to 9260 feet and the Air Strip-Lower Bone Spring Pool to comprise said formation from 10,100 feet to 10,400 feet. All depths are from the log of the Amoco State FU Well No. 2 in Unit N of Section 25, Township 18 South, Range 34 East, for which well applicant also seeks 51,310 barrels of discovery allowable.
- CASE 6757: Application of Amoco Production Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its State FU Well No. 1 located in Unit K of Section 25, Township 18 South, Range 34 East, to produce oil from the Air Strip Upper and Middle Bone Spring Pools thru parallel strings of tubing.
- CASE 6758: Application of Amoco Production Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its State "C" Tract 11 Well No. 11 located in Unit X of Section 2, Township 21 South, Range 35 East, to produce oil from the Hardy-Blinbry Pool and an undesignated Drinkard pool through parallel strings of tubing.
- CASE 6719: (Continued and Readvertised)
- Application of Sam H. Snoddy for an amendment to Order No. R-5521, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-5521, which authorizes the directional drilling of the Federal Well No. 2 in Section 25, Township 20 South, Range 32 East, to permit the well to be bottomed within 400 feet of a point 1320 feet from the South and West lines of Section 25.
- CASE 6759: Application of Sun Oil Company for an unorthodox location, non-standard gas proration unit, infill findings, simultaneous dedication, and downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Reeves Well No. 6, 660 feet from the North line and 610 feet from the East line of Section 29, Township 20 South, Range 37 East, Eumont Gas Pool, to be simultaneously dedicated with its Reeves Well No. 2 in Unit D of Section 29 to a 160-acre non-standard gas proration unit comprising the N/2 N/2 of Section 29. Also sought are findings that the proposed well is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing unit well, and authority to commingle Eumont and Monument production in the wellbore of the proposed well.

- CASE 6760:** Application of Sun Oil Company for an unorthodox location, non-standard gas proration unit, infill findings, and simultaneous dedication, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its State "AY" Well No. 5, located in Unit E of Section 36, Township 7 South, Range 35 East, Todd-Upper San Andres Gas Pool, to be simultaneously dedicated with its State "AY" Well No. 3 in Unit F of Section 36 to a 160-acre non-standard gas proration unit comprising the NW/4 of Section 36. Also sought are findings that the proposed well is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing unit well.
- CASE 6761:** Application of Phillips Petroleum Company for an unorthodox gas well location and approval of infill drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of an Atoka-Morrow test well to be drilled 660 feet from the North and West lines of Section 2, Township 24 South, Range 28 East; applicant further seeks a finding that the drilling of said well is necessary to effectively and efficiently drain that portion of the proration unit, being the W/2 of said Section 2, which cannot be so drained by the existing well.
- CASE 6762:** Application of Joe Don Cook for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221 to permit disposal of produced brine into an unlined surface pit located in Section 1, Township 19 South, Range 31 East, Shugart Pool.
- CASE 6763:** Application of Adams Exploration Company for compulsory pooling and an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the North Osuda-Morrow Gas Pool underlying Section 16, Township 20 South, Range 36 East, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South and West lines of said Section 16. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6729:** (Continued from November 14, 1979, Examiner Hearing)  
Application of Adams Exploration Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying Section 16, Township 20 South, Range 36 East, North Osuda-Morrow Gas Pool, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6725:** (Continued from November 28, 1979, Examiner Hearing)  
Application of Tenneco Oil Company for three non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 291.23-acre non-standard gas proration unit comprising the W/2 of Section 6 and the NW/4 of Section 7, a 347.58-acre unit comprising the W/2 of Section 19 and the NW/4 of Section 30, and a 375.17-acre unit comprising the SW/4 of Section 30 and the W/2 of Section 31, all in Township 29 North, Range 8 West, Basin-Dakota Pool, each unit to be dedicated to a well to be drilled at a standard location thereon.
- CASE 6751:** (Continued from November 28, 1979, Examiner Hearing)  
Application of Tenneco Oil Company for the rescission of special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the rescission of the special pool rules for the Catclaw Draw-Morrow Gas Pool to provide for 320-acre spacing rather than 640 acres. In the absence of objection, the pool rules will be rescinded and the pool placed on standard 320-acre spacing for Pennsylvanian gas pools rather than the present 640-acre spacing.
- CASE 6764:** Application of Lee Crane for surface commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the surface commingling of undesignated Ojo Alamo and Oswell-Farmington production from his Martin Wells Nos. 1 and 3 located in Section 34, Township 30 North, Range 11 West.
- CASE 6765:** Application of Mesa Petroleum Company for an exception to Order No. R-111-A and an unorthodox well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the casing-cementing rules of Order No. R-111-A to complete its Bass Federal Well No. 2 to be drilled at an unorthodox location 1450 feet from the North line and 1850 feet from the West line and its Bass Federal Well No. 3 to be drilled in Unit D, both in Section 6, Township 20 South, Range 31 East, by setting surface casing in the "Red Bed" section of the basal Rustler formation and production casing at total depth. Both casing strings would have cement circulated to the surface.

**CASE 6766:** Application of Supron Energy Corporation for two non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of two non-standard gas proration units, the first being 192.97 acres comprising the W/2 of Section 7, Township 28 North, Range 10 West, and the E/2 E/2 of Section 12, Township 28 North, Range 11 West, for the Fruitland, Pictured Cliffs and Chacra formations, and the second being 190.89 acres comprising the W/2 and W/2 E/2 of said Section 12 for the Fruitland formation only, both units to be dedicated to wells to be drilled at standard locations thereon.

**CASE 6700:** (Reopened and Readvertised)

Application of Doyle Hartman to reopen Case No. 6700, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the reopening of Case No. 6700, heard October 17, 1979, to amend the original unorthodox well location 2310 feet from the North line and 330 feet from the West line of Section 29, Township 25 South, Range 37 East, to a new unorthodox location 1870 feet from the North line and 280 feet from the West line of said Section 29. All other aspects of Case No. 6700 would remain the same.

**CASE 6767:** Application of Alpha Twenty-One Production Company for two non-standard gas proration units, unorthodox well location, and approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 40-acre non-standard proration unit comprising the NW/4 NW/4 of Section 27, Township 25 South, Range 37 East, Jalmat Gas Pool, to be dedicated to El Paso Natural Gas Company's Harrison Well No. 2, and also a 200-acre unit comprising the S/2 N/2 and NE/4 NW/4 of said Section 27 to be dedicated to a well to be drilled at an unorthodox location 1980 feet from the North line and 560 feet from the West line of Section 27. Applicant further seeks a finding that the drilling of the latter well is necessary to effectively and efficiently drain that portion of an existing proration unit which cannot be so drained by the existing well.

**CASE 6768:** Application of Alpha Twenty-One Production Company for two non-standard gas proration units, compulsory pooling, unorthodox well location, and approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 40-acre non-standard gas proration unit comprising the SW/4 SW/4 of Section 21, Township 24 South, Range 37 East, Jalmat Gas Pool, to be dedicated to the El Paso Natural Gas Company Shell Black Well No. 2. Applicant also seeks an order pooling all mineral interests in the Jalmat Gas Pool underlying the E/2 SW/4 and NW/4 SE/4 of said Section 21 to form a 120-acre non-standard gas proration unit to be dedicated to a well to be drilled at an unorthodox location 990 feet from the South line and 1650 feet from the West line of said Section 21. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well. Applicant further seeks a finding that the drilling of said well is necessary to effectively and efficiently drain that portion of the existing proration unit which cannot be so drained by the existing well.

**CASE 6656:** (Continued from October 2, 1979, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Energy Oil & Gas Corp., The Travelers Indemnity Co., and all other interested parties to appear and show cause why the Sadler Well No. 1 located in Unit I of Section 3, Township 24 North, Range 29 East, Union County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

**CASE 6769:** In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating, reclassifying, and extending certain pools in Chaves, Eddy, Lea, and Roosevelt Counties, New Mexico:

(a) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the West Double X-Morrow Gas Pool. The discovery well is Union Oil Company of California Paduca Federal Well No. 1 located in Unit C of Section 30, Township 24 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 24 SOUTH, RANGE 32 EAST, NMPM  
Section 30: E/2

(b) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the Dublin Ranch-Atoka Gas Pool. The discovery well is J. C. Barnes Little Squaw Com Well No. 2 located in Unit N of Section 27, Township 22 South, Range 28 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 28 EAST, NMPM  
Section 27: S/2

(c) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the Gem-Morrow Gas Pool. The discovery well is Union Oil Company of California Maduro Unit Federal Well No. 1 located in Unit J of Section 29, Township 19 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM  
Section 29: S/2

(d) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the East Gem-Morrow Gas Pool. The discovery well is Union Oil Company of California Laguna Deep Unit Federal Well No. 1 located in Unit G of Section 35, Township 19 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 33 EAST, NMPM  
Section 35: N/2

(e) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Atoka production and designated as the Halfway-Atoka Gas Pool. The discovery well is Amoco Production Company Federal Y Com Well No. 1 located in Unit G of Section 27, Township 20 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 33 EAST, NMPM  
Section 27: E/2

(f) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Devonian production and designated as the Midway-Devonian Pool. The discovery well is David Fasken Warren Well No. 1 located in Unit G of Section 8, Township 17 South, Range 37 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 37 EAST, NMPM  
Section 8: NE/4

(g) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Atoka production and designated as the East Triste Draw-Atoka Gas Pool. The discovery well is Getty Oil Company State 29 J Well No. 1 located in Unit J of Section 29, Township 24 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 24 SOUTH, RANGE 33 EAST, NMPM  
Section 29: E/2

(h) CREATE a new pool in Roosevelt County, New Mexico, classified as an oil pool for Bough C production and designated as the Tucker Ranch-Bough C Pool. The discovery well is Pauley Petroleum, Inc. Tucker Well No. 1 located in Unit J of Section 9, Township 7 South, Range 33 East, NMPM. Said pool would comprise:

TOWNSHIP 7 SOUTH, RANGE 33 EAST, NMPM  
Section 9: SE/4

(i) RECLASSIFY the Oil Center-Glorieta Pool in Lea County, New Mexico, as the Oil Center-Glorieta Gas Pool. The pool was created by Order R-5988 as an oil pool but was advertised as a gas pool.

(j) EXTEND the Angell Ranch-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 27 EAST, NMPM  
Section 1: W/2  
Section 2: N/2

(k) EXTEND the Atoka-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM  
Section 28: S/2 SE/4

(l) EXTEND the Atoka-Yeso Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 26 EAST, NMPM  
Section 34: E/2 NW/4

(m) EXTEND the Austin-Mississippian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 36 EAST, NMPM  
Section 16: N/2

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

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

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM  
Section 18: SW/4

TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM  
Section 1: NW/4

- (o) EXTEND the Bluff-Wolfcamp Gas Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 37 EAST, NMPM  
Section 3: NE/4

- (p) EXTEND the South Brunson-Granite Wash Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM  
Section 31: NE/4

- (q) EXTEND the Cass Draw-Wolfcamp Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 27 EAST, NMPM  
Section 11: W/2

- (r) EXTEND the Chaveroo-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM  
Section 3: SE/4

- (s) EXTEND the Cinta Roja-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 35 EAST, NMPM  
Section 10: All

- (t) EXTEND the Comanche-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 11 SOUTH, RANGE 26 EAST, NMPM  
Section 14: NW/4 NW/4

- (u) EXTEND the Corbin-Queen Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM  
Section 34: NE/4

- (v) EXTEND the South Culebra Bluff-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM  
Section 35: S/2

- (w) EXTEND the Diablo-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 10 SOUTH, RANGE 27 EAST, NMPM  
Section 15: SW/4 SW/4

- (x) EXTEND the Golden Lane-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 29 EAST, NMPM  
Section 36: E/2

- (y) EXTEND the East Grama Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM  
Section 34: E/2

- (z) EXTEND the Langley-Devonian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM  
Section 20: E/2

- (aa) EXTEND the Lovington-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 37 EAST, NMPM  
Section 28: S/2  
Section 29: S/2

- (bb) EXTEND the North Lusk-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM  
Section 33: E/2

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM  
Section 4: E/2

- (cc) EXTEND the East McMillan Seven Rivers-Queen Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 27 EAST, NMPM  
Section 3: S/2 NE/4 and SE/4 NW/4

- (dd) EXTEND the Mescalero Permo-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 10 SOUTH, RANGE 32 EAST, NMPM  
Section 34: W/2

- (ee) EXTEND the Monument-Tubb Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM  
Section 12: NW/4

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

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM  
Section 1: E/2 E/2, NW/4 NE/4, E/2 NW/4 and NE/4 SW/4  
Section 12: NE/4

TOWNSHIP 19 SOUTH, RANGE 25 EAST, N/PM  
Section 6: N/2

- (gg) EXTEND the South Peterson-Fusselman Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM  
Section 30: SW/4

- (hh) EXTEND the East Red Lake Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 28 EAST, NMPM  
Section 36: NE/4

- (ii) EXTEND the Runyan Ranch-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 23 EAST, NMPM  
Section 18: E/2

- (jj) EXTEND the Salt Lake-Bone Springs Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 32 EAST, NMPM  
Section 14: SE/4  
Section 23: S/2 and NE/4

- (kk) EXTEND the North Shugart-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 31 EAST, NMPM  
Section 20: W/2

- (ll) EXTEND the Sioux-Yates Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 26 SOUTH, RANGE 36 EAST, NMPM  
Section 8: SE/4

(mm) EXTEND the Tomahawk-San Andres Pool in Chaves and Roosevelt Counties, New Mexico, to include therein:

TOWNSHIP 7 SOUTH, RANGE 32 EAST, NMPM  
Section 29: NW/4  
Section 32: S/2

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM  
Section 5: NE/4

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

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM  
Section 36: N/2

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM  
Section 31: NW/4

(oo) EXTEND the North Turkey Track-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM  
Section 26: E/2

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM  
Section 1: N/2

(pp) EXTEND the Twin Lakes-San Andres Associated Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 28 EAST, NMPM  
Section 25: SE/4

TOWNSHIP 8 SOUTH, RANGE 29 EAST, NMPM  
Section 19: S/2 SW/4 and SW/4 SE/4  
Section 30: W/2  
Section 31: NW/4

(qq) EXTEND the White City-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 25 SOUTH, RANGE 26 EAST, NMPM  
Section 12: All



STATE OF NEW MEXICO  
DEPARTMENT OF ENERGY AND MINERALS  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF  
SUN OIL COMPANY FOR APPROVAL OF  
DOWNHOLE COMMINGLING, UNORTHODOX LOCATION,  
NON-STANDARD PRORATION UNIT, SIMULTANEOUS  
DEDICATION OF ACREAGE, INFILL DRILLING,  
~~ROOSEVELT~~ COUNTY, NEW MEXICO.

LEA

Case 6759

APPLICATION

COMES NOW SUN OIL COMPANY, by and through its attorneys,  
KELLAHIN & KELLAHIN, and applies to the Oil Conservation  
Division of New Mexico for approval of downhole commingling,  
unorthodox well location, non-standard gas proration unit,  
simultaneous dedication of acreage and infill drilling,  
for its A. B. Reeves Well No. 6, Location in Unit A,  
Section 29, T20S, R37E, N.M.P.M., ~~Roosevelt County~~, NM  
and in support thereof would show:

1. Applicant is the operator of the N/2N/2 of  
Section 29 T20S, R37E, N.M.P.M.
2. Applicant desires approval to drill a well at  
an unorthodox well location 660 feet from the North line  
and 610 feet from the East line of Section 29, T20S,  
R37E, N.M.P.M.
3. Applicant further seeks approval to downhole  
commingling production from the Eumont / Rivers Queen  
Gas Pool and the Monument Grayburg San Andres Pool.
4. Applicant further seeks approval of a 160 acre  
non-standard gas proration unit for said well consisting  
of the N/2N/2 of Section 29.
5. Applicant further seeks approval to simultaneously  
dedicate the 160 acre unit to the subject well and to the

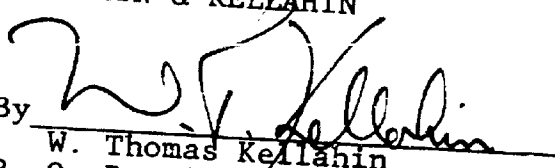
A. B. Reeves Well No. 2 located in Unit D of Section 29.

6. Applicant further seeks infill drilling determination that the subject well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit.

WHEREFORE, Applicant requests that this matter be set for hearing before the Division's Examiner and that after notice and hearing the application be granted as requested.

KELLAHIN & KELLAHIN

By

  
W. Thomas Kellahin  
P. O. Box 1769  
Santa Fe, New Mexico 87501  
ATTORNEYS FOR APPLICANT

STATE OF NEW MEXICO  
DEPARTMENT OF ENERGY AND MINERALS  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF  
SUN OIL COMPANY FOR APPROVAL OF  
DOWNHOLE COMMINGLING, UNORTHODOX LOCATION,  
NON-STANDARD PRORATION UNIT, SIMULTANEOUS  
DEDICATION OF ACREAGE, INFILL DRILLING,  
ROOSEVELT COUNTY, NEW MEXICO.

APPLICATION

*Case 6759*

COMES NOW SUN OIL COMPANY, by and through its attorneys,  
KELLAHIN & KELLAHIN, and applies to the Oil Conservation  
Division of New Mexico for approval of downhole commingling,  
unorthodox well location, non-standard gas proration unit,  
simultaneous dedication of acreage and infill drilling,  
for its A. B. Reeves Well No. 6, Location in Unit A,  
Section 29, T20S, R37E, N.M.P.M., Roosevelt County, NM  
and in support thereof would show:

1. Applicant is the operator of the N/2N/2 of  
Section 29 T20S, R37E, N.M.P.M.
2. Applicant desires approval to drill a well at  
an unorthodox well location 660 feet from the North line  
and 610 feet from the East line of Section 29, T20S,  
R37E, N.M.P.M.
3. Applicant further seeks approval to downhole  
commingling production from the Eumont 7 Rivers Queen  
Gas Pool and the Monument Grayburg San Andres Pool.
4. Applicant further seeks approval of a 160 acre  
non-standard gas proration unit for said well consisting  
of the N/2N/2 of Section 29.
5. Applicant further seeks approval to simultaneously  
dedicate the 160 acre unit to the subject well and to the

A. B. Reeves Well No. 2 located in Unit D of Section 29.

6. Applicant further seeks infill drilling determination that the subject well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit.

WHEREFORE, Applicant requests that this matter be set for hearing before the Division's Examiner and that after notice and hearing the application be granted as requested.

KELLAHIN & KELLAHIN

By   
W. Thomas Kellahin

P. O. Box 1769  
Santa Fe, New Mexico 87501  
ATTORNEYS FOR APPLICANT

STATE OF NEW MEXICO  
DEPARTMENT OF ENERGY AND MINERALS  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF  
SUN OIL COMPANY FOR APPROVAL OF  
DOWNHOLE COMMINGLING, UNORTHODOX LOCATION,  
NON-STANDARD PRORATION UNIT, SIMULTANEOUS  
DEDICATION OF ACREAGE, INFILL DRILLING,  
ROOSEVELT COUNTY, NEW MEXICO.

APPLICATION

*Case 6759*

COMES NOW SUN OIL COMPANY, by and through its attorneys,  
KELLAHIN & KELLAHIN, and applies to the Oil Conservation  
Division of New Mexico for approval of downhole commingling,  
unorthodox well location, non-standard gas proration unit,  
simultaneous dedication of acreage and infill drilling,  
for its A. B. Reeves Well No. 6, Location in Unit A,  
Section 29, T20S, R37E, N.M.P.M., Roosevelt County, NM  
and in support thereof would show:

1. Applicant is the operator of the N/2N/2 of  
Section 29 T20S, R37E, N.M.P.M.
2. Applicant desires approval to drill a well at  
an unorthodox well location 660 feet from the North line  
and 610 feet from the East line of Section 29, T20S,  
R37E, N.M.P.M.
3. Applicant further seeks approval to downhole  
commingling production from the Eumont 7 Rivers Queen  
Gas Pool and the Monument Grayburg San Andres Pool.
4. Applicant further seeks approval of a 160 acre  
non-standard gas proration unit for said well consisting  
of the N/2N/2 of Section 29.
5. Applicant further seeks approval to simultaneously  
dedicate the 160 acre unit to the subject well and to the

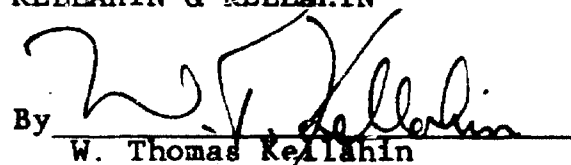
A. B. Reeves Well No. 2 located in Unit D of Section 29.

6. Applicant further seeks infill drilling determination that the subject well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit.

WHEREFORE, Applicant requests that this matter be set for hearing before the Division Examiner and that after notice and hearing the application be granted as requested.

KELLAHIN & KELLAHIN

By



W. Thomas Kellahin

P. O. Box 1769

Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT

ROUGH

dr/

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING  
CALLED BY THE OIL CONSERVATION  
DIVISION FOR THE PURPOSE OF  
CONSIDERING:

CASE NO. 6759

Order No. R-6276

APPLICATION OF SUN OIL COMPANY  
FOR AN UNORTHODOX LOCATION, NON-STANDARD  
GAS PRORATION UNIT, INFILL FINDINGS,  
SIMULTANEOUS DEDICATION AND DOWNHOLE  
COMMINGLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on December 12,  
19 79, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this February day of 19 80, the  
Division Director, 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 Division has jurisdiction of this cause and the  
subject matter thereof.

(2) That the applicant, Sun Oil Company, seeks approval for  
the unorthodox location of its Reeves Well No. 6 to be <sup>drilled at a point</sup> ~~located~~  
660 feet from the North line and 610 feet from the East line of  
Section 29, Township 20 South, Range 37 East, <sup>NMPM, Lea County, New Mexico,</sup> Eumont Gas Pool, <sup>to</sup>  
be simultaneously dedicated with its Reeves Well No. 2 in Unit D  
of Section 29 to a 160-acre non-standard gas proration unit  
comprising the N/2 N/2 of Section 29.

*(3) That the applicant also seeks approval for the  
downhole commingling of Eumont gas produc-  
tion and Monument oil and gas production  
in the wellbore of said well.*

(4) That the applicant <sup>furth</sup> ~~also~~ seeks findings that the proposed  
well is necessary to effectively and efficiently drain that portion  
of the proration unit which cannot be so drained by the existing  
well <sup>on the proration unit.</sup> ~~and authority to commingle Eumont and Monument production~~  
~~in the wellbore of the proposed well.~~

(5) That the evidence presented demonstrated that the aforesaid Reeves Well No. 2 <sup>is</sup> junk in the hole, <sup>and has been temporarily abandoned, and that</sup> it is incapable of effectively and efficiently draining the 160-acre <sup>exhaust</sup> proration dedicated to it, being the N/2 N/2 of the subject Section 29.

(6) That the evidence demonstrates that the new proposed well, the Reeves Well No. 6, should recover some 392 million cubic feet of gas which are not recoverable by the old well on the unit, the Reeves Well No. 2.

(7) That the evidence further demonstrates that between the two wells, the Reeves No. 2 and the Reeves No. 6, the subject 160-acre non-standard gas proration unit should be effectively and efficiently drained of the natural gas reserves in place.

(8) That there may be recoverable oil and gas reserves in the San Andres formation underlying the NE/4 NE/4 of Section 29, and applicant proposes to drill ~~the~~ Reeves Well No. 6 to a total depth of approximately 4000 feet and attempt a completion in the San Andres formation.

(9) That should said well produce from the San Andres, it is expected that such production will be of low marginal nature, and uneconomical to produce separately, and applicant therefore proposes to commingle such San Andres production in the ~~vicinity~~ <sup>with</sup> the aforementioned Eumout production, and said Donohoe commingling



(3)

~~should be approved, inasmuch as it may~~  
~~not~~ cause to be recovered oil and gas which  
would otherwise remain unrecovered, thereby  
preventing waste.

(10) That upon completion of the subject  
well, the ~~San~~ Eumont or San Andres  
zone should be tested separately, and  
the applicant should consult with the  
Supervisor of the Naama District Office  
of the Division to determine an appropriate  
formula for each of the zones commingled.

(11) That the proposed ~~unorthodox~~ location  
for the subject well results from having  
to move away from an existing well  
in the NE/4 NE/4 of Section 29, and will  
~~not cause waste nor impair correlative~~  
~~rights, and should be approved.~~

(12) That the application of ~~San Oil Company~~ <sup>in this case</sup>  
for an ~~unorthodox~~ location, a 160-acre  
non-standard gas production unit, down-  
hole commingling, simultaneous ~~deduction~~  
of acreage, and infill drilling findings  
are all in the interest of conservation, will  
not cause but will prevent waste, will not  
impair but will protect correlative rights, and  
should be approved.

IT IS THEREFORE ORDERED:

(1) That a 160-acre non-standard gas production  
unit in the Eumont Gas Pool, comprising the  
N/2 N/2 of Section 29, Township 20 South, Range  
37 East, NMPM, Lea County, New Mexico, is

(4)

herby approved and simultaneously dedicated to applicants the Sun Oil Company Reeves Well No. 2, located in Unit D of said Section 29, and to Sun's Reeves Well No. 6, to be drilled, <sup>as an infill well</sup> at an ~~unorthodox~~ location, also herby approved, at a point 660 feet from the North line and 610 feet from the East line of said Section 29. The authorization for infill drilling granted by this order is necessary to permit the drainage of a portion of the reservoir covered by the 160-acre non-standard production unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) That the applicant is herby authorized to commingle Eumant and Prominent production within the wellbore of the above-described Reeves Well No. 6.

(3) That the applicant shall separately test the Eumant or the San Andres zone, or both zones, of said Reeves Well No. 6 during completion operations, and shall thereafter consult with the Supervisor of the Hobbs District Office of the Division to determine an allocation formula for the allocation of production to each zone in the subject well.

(4) That the operator of said Reeves Well No. 6 shall immediately notify the aforesaid Supervisor, at any time the well has been shut in for seven consecutive days, and shall

②

present for approval by the Division a plan for remedial action to prevent crossflow between the zones.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

JOE D. RAMEY  
Director