

CASE 4464: Application of PAN AM.  
FOR AUTHORITY TO OVERPRODUCE A  
GAS WELL'S ALLOWABLE.

Case. Number.

4464

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Application,  
Transcripts.

Sm all Exhibts.

ETC.

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
November 18, 1970

EXAMINER HEARING

IN THE MATTER OF:

Application of Pan American  
Petroleum Corporation for  
authority to over-produce a  
gas well's allowable, San Juan  
County, New Mexico.

Case No. 4464

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 4464.

MR. HATCH: Application of Pan American Petroleum Corporation for authority to over-produce a gas well's allowable, San Juan County, New Mexico.

MR. RYAN: Gordon D. Ryan, appearing on behalf of the Applicant, Pan American Petroleum Corporation, Denver, Colorado, and also in association with Mr. Charles Malone of the firm of Atwood and Malone in Roswell, New Mexico.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1 through 4 were marked for identification.)

MR. UTZ: Do we have other appearances? You may proceed.

CHARLES BOYCE,

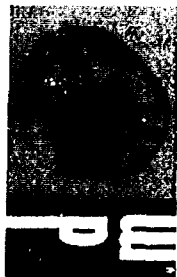
having been first duly sworn according to law, upon his oath, testified as follows:

DIRECT EXAMINATION

BY MR. RYAN:

Q I have one witness and I'll ask that he state his name, by whom he is employed and in what capacity.

A My name is Charles Boyce. I am employed by Pan American Petroleum Corporation in Denver as a senior petroleum engineer.



Q Mr. Boyce, you have heretofore testified before this Commission and had your qualifications as an expert witness admitted, have you not?

A That's correct.

Q Are you familiar with the application that is presently pending before this body?

A Yes.

Q Would you briefly state what Pan American seeks in this application?

A For the purpose of reinjecting and workover, we injected a net 18,111 MCF into Gallegos Canyon Unit 185. We request that this well be entitled to produce an equivalent low gas volume after workover, free of tax and royalty and that this volume of gas not be applied against the well's current normal allowable.

Q Now, would you please refer to what the reporter has marked as Exhibit No. 1 and identify that exhibit and explain it?

A Exhibit 1 is a plat of the well Number 185 indicated by an arrow in the general surrounding area in Township 28 North, Range 12 West of San Juan County, New Mexico. The well is Gallegos Canyon Unit No. 185 in Section D -- Unit D of Section 33 thereof.

This well is approximately a mile from the unit boundary. It's within the present Gallegos Canyon-Dakota participating area and actually more than two miles from any outside operated Dakota Well as a well outside the Dakota Unit.

MR. HATCH: May I interrupt just a moment? I think when you are speaking of free of tax and royalty that really doesn't have anything to do with the hearing before the Commission, does it?

THE WITNESS: Not directly, no.

MR. HATCH: You are asking for the allowable?

THE WITNESS: Yes.

MR. HATCH: Because the Oil Commission has no authority over this.

THE WITNESS: I discussed this with our accounting people and if the gas used is so designated to be low gas they will handle any matters as far as royalty and taxes if it can be taken care of.

MR. HATCH: You are not asking the Commission here to issue an order and say this could be produced free of tax or free of royalty?

MR. RYAN: Well, I don't know that you would have any jurisdiction over that. I think that if the, from what

I understand, gas is found to be already produced under another allowable and is just low gas that was injected into this well, then that would tend to show that the gas has already been produced and royalty paid and that sort of thing, although I don't know that you have any jurisdiction over that.

THE WITNESS: I think it probably relates to the matter of jurisdiction. Possibly, you cannot and would not anyway issue an order that would free it from taxes and royalty.

MR. UTZ: I doubt the USGS or Government would pay much attention to what we say about that.

THE WITNESS: I imagine so. Primarily a matter of allowable and production after workover. I believe that about covers Exhibit No. 1.

Q (By Mr. Ryan) Would you go into Exhibit No. 2 and identify that and explain it?

A Exhibit No. 2 is basically a copy of our daily reports on the workover of this well, generally to point out the sequence of the events and where they occurred and when.

On the first page, about the fourth line down, I have indicated that the gas injection commenced into

this well on June 27th. The pressure shown in the item of July 1st, the injection pressure of 850 gives some indication of the pressure of the well at the time gas injection was commenced.

On the second page, under date of September 17th -- these are all in 1970 -- injections were ceased on 9-16-'70. The discharge pressure of the compressor at that time was 1460 pounds. The net gas injected during the entire injection operation was 18,111 MCF. We actually obtained 19,311 MCF from El Paso Natural Gas Company but an estimated 1,200 MCF was flared during well clean up.

As shown on September 17th and September 18th, two different periods, we did blow the well down the annulus in order to unload it and that gas was vented. On September 21st, the well was placed into El Paso's line at twelve noon and has been on production since that time.

On the third page of Exhibit 2 I have indicated the September and October production of the well; in September, seven days after workover was completed, 5345 MCF. In October, during thirty-two metering days, 21,465 MCF. Of no particular significance, other than the fact that the well is on production, up through



October, a volume greater than the net injected gas had been produced so the gas that was injected into the reservoir has been produced back or equivalent volumes.

Q Is that all on Exhibit 2?

A Yes.

Q Would you go on, please, and explain Exhibit 3?

A Exhibit 3 is a copy of the 1970 well deliverability test report for Gallegos Canyon Unit 185. Basically, the only significance indicates that this well is a Dakota completion and the seven day shut-in pressure at the time of the test during May of 1970 was 835 pounds.

This compares with an injection pressure at the termination of injection of 1460 pounds. Generally, just further indication the gas was injected in the well.

I believe that's all of significance on Exhibit 3.

Q Now, explain Exhibit 4, please.

A Exhibit 4 consists of copies of monthly reports Form C115, which Pan American submits to the Commission from the months June through September, again indicating by the volume shown during June, twenty-one days, produced 7,730 MCF.

During the latter week of that month, the well was

down for injection. No production, of course, during July and August since the well was being injected into. Seven days' production in September, which I stated earlier, was 5345 MCF, so essentially the well was off production about two and a half months during the injection period.

I believe that's all that's significant on those Exhibits.

Q Now, Mr. Boyce, what would have happened to this well if we had not injected this gas into this well?

A The gas was injected to attempt to improve the recovery efficiency of the water fract on the well. This was an older Dakota completion. We were attempting to restimulate production to increase deliverability.

Past history has shown that water fracts on Dakota wells which are partially depleted many times have difficulty in clean up and in fact, some cases complete load up of water and loss of the well. It was our thinking that by pressuring up the immediate well bore area we would recover whatever recoverable load water does come back in water fracts much faster and in a better manner and this did prove to be the case.

I believe this can be seen on the exhibit of daily

reports. We had very minimal swabbing time which, of course, improves the overall economic of the fract and the well did return to production very satisfactorily.

Q As a matter of fact, didn't we just sort of borrow this gas to accomplish this and now we are paying it back?

A Well, it was actually obtained from El Paso Natural Gas Company through one of their meters which obtained gas from Gallegos Canyon and this amount of gas was deducted from their purchases, so we actually did purchase the gas.

It was through a crate of figures on El Paso's part, but the gas had been produced by Gallegos Canyon wells and was purchased from the purchaser.

Q Well, has the gas already been subject to allowable and, as we mentioned here, royalty and taxes?

A Yes, it has as far as the allowable of the well, since this is gas which was injected and will be again produced, we ask that it be allowed in addition to the normal unit allowable as a supplement to the current allowable, that is, to the extent of 18,111 MCF, so that we will not be restricted due to the fact that we are reproducing gas which was injected.

Q Do you have anything further to offer?



A No, I believe that covers my testimony.

Q Were Exhibits 1 through 4 prepared by you or under your direct supervision?

A Well, yes, with the exception of those which are obvious copies of previous forms submitted.

MR. RYAN: I would offer Exhibits 1 through 4 into evidence.

MR. UTZ: Without objection, Exhibits 1 through 4 will be entered into the record of this case.

MR. RYAN: This is all the testimony we have. I would comment that it's kind of a strange sort of application but I'm not sure how else to handle the matter.

MR. UTZ: Well, it is a first, I'll say that and as you indicated, it may not be the only such instance. Before I forget, in that regard, you are asking here for administrative procedure for accomplishing administratively what you want to accomplish through hearing today, is that correct?

THE WITNESS: Yes. That's correct. I should mention that through correspondence on this matter between our area office and the Commission staff and with El Paso, we really couldn't determine how it should be handled as far as the administrative procedure was concerned.

Our area clerk in Farmington did discuss this matter with Mr. Arnold and it was upon the results of that discussion that we felt it might be simplest to handle by our formally requesting a supplemental gas volume of this amount.

MR. UTZ: Mr. Boyce, as far as allowables are concerned to the well, I think that is a very convenient way of handling it. As far as showing that you have injected this amount of gas when you make the application for such allowable, I'm not exactly sure at this time but I think something could be worked out as to maybe a form or what you should put in a letter --

THE WITNESS: Yes.

MR. UTZ: -- on this.

THE WITNESS: I assume you are referring to the evidence that the gas was injected whether it be charged or certified statements and the purchaser, something like that?

MR. UTZ: Yes. That's correct.

THE WITNESS: I see what you are getting at.

MR. UTZ: Because we do need to know that this gas actually has been put back in the reservoir before we issue additional allowable to the well.

THE WITNESS: Yes.

MR. UTZ: And as far as your accounting with the purchaser or your royalty people, I don't know that we have any concern other than the fact that --

MR. ARNOLD: I think we probably need to identify it as being gas upon which is originally been produced and charged. Beyond that, it's a matter of paying royalty all right. It's a matter between you and the royalty owner.

MR. RYAN: I think that's all you can do is to identify the gas as you stated which has been produced and charged and then the royalty and taxes are our problem.

MR. UTZ: Correct. But when you report the production from this well after we have given you an additional allowable the question arises in my mind whether you should report that as production or not.

THE WITNESS: I believe that point did come up and I think the problem was arrayed to the fact that the way gas sales are actually reported, they are, as I understand, reported by the purchaser himself and, of course, that would get in the problem of him subtracting that from the reported production.

It's a little different with oil production. With gas production the purchaser's records are utilized.

MR. ARNOLD: That's right. The purchaser actually

is going to show on a Cll a volume of gas which isn't going to identify it as to what kind of gas it is, so the problem is going to be to get that volume of gas either out of the production or to get an additional allowable assigned to cover --

MR. UTZ: As far as the wells allowable status is concerned, by assigning an additional allowable of 18,000 and you going ahead and reporting, or your purchaser reporting this same 18,000 to balance your allowable status so to speak, the well will end up with cumulative production of 18,000 too much.

THE WITNESS: Yes.

MR. UTZ: Whether that's of any consequence or not, I wouldn't venture to state at this time.

THE WITNESS: Yes.

MR. UTZ: But, as far as your allowables are concerned, it can be handled in this way. Now, somebody may have another opinion on that. What do you think?

MR. ARNOLD: Actually, I don't see why it really couldn't be handled with just a report by the operator that this much gas was injected and will be reported as production by the operator and the form could come through here and it's really just a bookkeeping matter back in the proration

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section; there would be some advantages, it seems to me, to remove the production rather than to add allowable from a statistical standpoint if nothing else, actually so far as the proration department is concerned, removing the production from the well would have the same effect as issuing additional allowable.

MR. KENDRICK: I think this might be handled more appropriately like load oil such as a certificate of 100 percent owned product be attached to all reporting forms until this volume of gas has been repaid.

In most cases with gas wells, it will be repaid to the same party from which it was obtained due to the existence of the gas lines in the area, but a certificate of 100 percent owned product, accountable with your production report to us, to the oil and gas accounting authorities, to your royalty interest, to your partners within the unit, to the USGS, a copy of this could be attached with each of those subsequent reports showing until such time as all this gas is made up that this is a 100 percent owned product which is similar to an affidavit utilized for removing load oil from a lease and then this would not be charged as production from this well since you are returning 100 percent owned product, which would be similar to load oil, be considered in underground storage until such time as it is all recovered, which



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would keep your accounting department, the pipe line accounting department, our tax people and our proration people all advised as to the percent of the 100 percent owned product which has been returned to date of each report until it is completely made up.

THE WITNESS: As I gather, this affidavit you are referring to, this is actually a Pan American form; the Commission does not have one, is that correct?

MR. KENDRICK: That is correct. It would be your form.

THE WITNESS: Here's our actual affidavit of oil ownership.

MR. KENDRICK: Similar affidavits are maintained by all operating companies for accounting for purchases of load oil such that they will not be charged against the storage or production of oil wells and this oil is not ever entered into the storage as production from a lease, not entered as transportation from a lease as produced oil and is by use of the affidavit maintained separate from new production or production from the lease.

THE WITNESS: Yes, that would -- of course, as I understand it, the method of handling and, of course, reporting the allowable status of oil wells is different than gas.

Now, possibly, this would operate the same way without -- to the extent that El Paso would become involved. I can't really say that they would be able to easily handle it. I would assume they could, though.

MR. ARNOLD: Actually, at the moment we don't use this affidavit. We would use the C126.

MR. KENDRICK: We use a C126 by which we authorize the transportation of the load oil but this does not necessarily mean that the same transporter of the load oil would be the transporter of the produced crude from the well.

In those instances, it could possibly be separate transporters but with gas wells, due to the pipe line facilities being available at the location, it would usually be back to the same source from which it is acquired but a copy of this affidavit would be an assist for our people in the proration department of accounting for the amount of gas taken from the well until such time as this volume is made up.

THE WITNESS: Well, possibly, this could be submitted right with our evidence, our certified letter stating that we did inject the gas and as you said, you can either give us a supplemental allowable or erotematically subtract it from the gas wells production.

MR. KENDRICK: Actually, if it is subtracted from the production it would tend to make the operations much cleaner in my opinion because until this amount is made up there would be no charge against your well.

THE WITNESS: Yes.

MR. KENDRICK: And the pipe line company would then have no charge as buying new gas from the well.

THE WITNESS: Yes.

MR. UTZ: As far as our allowable accounting is concerned, if the reported volume from the purchaser was less this amount or some later date allowable adjustment for that amount, it would take care of it.

MR. ARNOLD: They will never get that done.

MR. UTZ: I'm afraid that's right.

MR. ARNOLD: They are computerized and that does away with that possibility.

MR. UTZ: As far as paper work is concerned as related to gas allowable, the simplest thing for us is to issue a supplement for that amount of gas. It may not be the right way, I don't know, but I think --

MR. ARNOLD: Rather than issuing a supplement, Elvis, why couldn't you just write a letter saying 18,000 cubic feet of gas has been deducted from the reported

production volume for the month of whatever it is.

MR. KENDRICK: May extend to more than one reporting month to recover the gas.

MR. ARNOLD: Well, you could show it in a net status.

MR. UTZ: Well, gentlemen, I think you have put your case on. You have got your problem before the Commission. We will figure out some way to solve it.

THE WITNESS: We didn't offer a solution to the problem. We mainly attempted to indicate we did inject the gas.

MR. KENDRICK: I wonder if Mr. Ryan would object to working with Mr. Utz and Mr. Nutter into having a rule for load gas set up in our rules and regulations for handling load gas as load gas.

MR. RYAN: No, I would be happy to.

MR. HATCH: Well, I think they have made application for that, Mr. Kendrick, at this hearing and we will have to work up something in the order.

MR. KENDRICK: I didn't think possibly the call of the hearing here was sufficient to establish rules for handling --

MR. UTZ: Administrative procedure.

MR. HATCH: I think Mr. Kendrick is asking for an

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addition to the statewide rules.

MR. KENDRICK: Rules and regulations, paragraph or two, which would handle reporting of the injections and the authority to move that volume of gas from the well, similar to the way load oil is identified and handled.

MR. UTZ: Any other questions of the witness? He may be excused.

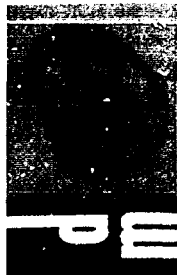
(Witness excused.)

MR. UTZ: Statements in the case? The case will be taken under advisement and the hearing is adjourned.

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I N D E X

WITNESS

PAGE

CHARLES BOYCE

Direct Examination by Mr. Ryan

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E X H I B I T S

Applicant's 1 through 4

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STATE OF NEW MEXICO )  
COUNTY OF BERNALILLO ) ss

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

*Glenda Burks*

Court Reporter

I do hereby certify that the foregoing is a complete record of the above the hearing of Case No. 4164 heard by the Commission. 70.  
*[Signature]*  
New Mexico Oil Conservation Commission



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

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

December 1, 1970

Re: Case No. 4464  
Order No. R-4069

Applicant:

Mr. Gordon Ryan  
Pan American Petroleum Corporation  
Security Life Building  
Denver, Colorado 80202

Pan American Petroleum Corp.

Dear Sir:

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

Very truly yours,

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

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC **x**

Artesia OCC

Aztec OCC x

State Engineer

Other \_\_\_\_\_



# PAN AMERICAN PETROLEUM CORPORATION

SECURITY LIFE BUILDING  
DENVER, COLORADO 80202

November 2, 1970

File: AMR-1828-986.511

Re: Load Gas During Workover  
Gallegos Canyon Unit No. 185  
Basin Dakota Field  
San Juan County, New Mexico

Mr. A. L. Porter, Jr. (3)  
Secretary-Director  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Mr. Porter:

In recent correspondence with Mr. Elvis Utz of your office, our Area Superintendent in Farmington, New Mexico, Mr. L. O. Spear, advised you of the circumstances surrounding the use of 18,111 MCF as "load gas" during a workover of the above referenced well. While in Santa Fe on October 28 to attend the hearing on another case in which Pan American was involved, we were advised by Mr. Utz that a hearing would probably be required to properly act upon our request that the subject well be entitled to produce an equivalent "load gas" volume after workover, tax and royalty free, and that the recovery of this "load gas" not be applied against the well's normal gas allowable.

In a phone conversation with Mr. Utz on Thursday, October 29, Mr. Charles Boyce of this office further discussed this matter and Mr. Utz indicated the case would be set for hearing on the November 18 docket. This letter will serve to confirm our request for a hearing of this matter.

The gas which was obtained from El Paso Natural Gas Company, compressed and injected into Well No. 185 prior to a water frac workover was intended to pressure up the formation surrounding the wellbore to a level higher than normal shut-in pressure in order to improve the frac efficiency by faster and more complete return of the frac water. In several past workover attempts of older producing Dakota gas wells, the partial or in some cases nearly complete flooding out of the formation has resulted in workover failure. The gas which was injected and retained in the reservoir prior to the sand water fracture treatment of Well No. 185 consisted of 19,311 MCF, less 1,200 MCF which was flared, leaving a net "load gas" volume of 18,111 MCF. Since taxes and royalty would have already been paid on this amount of gas when originally produced and delivered to El Paso, Gallegos Canyon Unit No. 185 should be entitled to produce an equivalent

File: AMR-1828-986.511

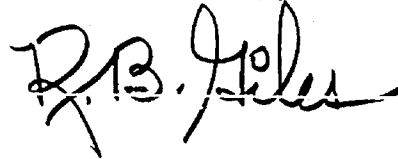
- 2 -

November 2, 1970

volume after workover free of tax and royalty. In addition, this amount of gas should not be applied against the well's normal allowable after workover.

Although the injection of gas into Well No. 185 for workover purposes was the first case of this kind that Pan American is aware of, the workover treatment proved to be highly successful and we expect to perform additional treatments of this type with the injection of varying amounts of "load gas" preceding the sand water fracturing treatment or other well repair operations. It is requested, therefore, that a procedure for administrative approval of "load gas" usage and subsequent production be established similar to that now used for well operations where "load oil" is utilized in conjunction with well repairs.

Yours very truly,



cc: Mr. E. C. Arnold (2)  
New Mexico Oil Conservation Commission  
1000 Rio Brazos Road  
Aztec, New Mexico 87401

United States Geological Survey  
Drawer 1857  
Roswell, New Mexico 88201

Mr. L. O. Speer, Jr.  
Pan American Petroleum Corporation  
501 Airport Drive  
Farmington, New Mexico 87401

United States Geological Survey  
P. O. Box 965  
Farmington, New Mexico 87401

Case 4464  
Heard 11-18-70

Rec. 11-23-70

X  
Grant Pan Am. permission  
to produce without charge to  
allowable 18, III Mcf of Gas from  
their H.C.V. # 185, Basin #2 -  
Gas Pool.

Also authorize the purchaser  
Gas Ex. P.M.A. to deduct  
this volume of gas from their  
C-III report on a monthly  
basis until such volume  
have been deducted from  
the well's production.

Require the operator to  
report to the O.G.C. each month  
by the 15th of each month,  
for gas produced the previous  
month, the volume of production  
and the volume "Lost Gas"  
~~to be~~ remaining to be made  
up.

True O.W.

DOCKET: REGULAR HEARING - WEDNESDAY - NOVEMBER 18, 1970

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

ALLOWABLE: Consideration of the allowable production of gas for December, 1970, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico, and also presentation of purchaser's nominations for said pools for the six-month period beginning January 1, 1971. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for December, 1970.

CASE 4453: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the promulgation of an order prohibiting the flaring or venting of casinghead gas in the State of New Mexico on or after December 31, 1970, when certain conditions exist. Copies of the proposed order will be circulated by way of the Commission's general mailing list and will be available upon request made to the Commission at its Santa Fe office.

\* \* \* \* \*

THE FOLLOWING CASES WILL BE HEARD BEFORE DANIEL S. NUTTER, EXAMINER, OR ELVIS A. UTZ, ALTERNATE EXAMINER, IN THE OIL CONSERVATION COMMISSION CONFERENCE ROOM ON THE SECOND FLOOR OF SAID BUILDING AT 9:30 A.M.

CASE 4454: Southeastern New Mexico nomenclature case calling for the extension of certain pools in Lea, Chaves and Roosevelt Counties, New Mexico.

(a) Extend the Baum-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 32 EAST, NMPM  
SECTION 11: N/2 and SW/4

(b) Extend the Double L-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 30 EAST, NMPM  
SECTION 31: SE/4

(c) Extend the Maljamar Grayburg-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM  
SECTION 27: SE/4

(d) Extend the North Vacuum-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM  
SECTION 14: NW/4  
SECTION 27: NE/4

(e) Extend the Vada-Pennsylvanian Pool in Roosevelt County,

Examiner Hearing  
November 18, 1970  
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Docket No. 25-70

(Case 4454 continued)

New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 35 EAST, NMPM  
SECTION 33: NE/4

- CASE 4455: In the matter of the hearing called by the Oil Conservation Commission for the creation of a new oil pool and for the assignment of a discovery allowable, Sandoval County, New Mexico. The Commission, at the request of Refiners Petroleum Corporation, will consider the creation of a new oil pool for the production of oil from the Dakota formation comprising the NE/4 of Section 25, Township 22 North, Range 3 West, Sandoval County, New Mexico, said pool having been discovered by said corporation's Cuba Union Well No. 1 located in Unit A of said Section 25. Also to be considered will be the assignment of approximately 34,390 barrels of discovery allowable to said well.
- CASE 4456: Application of Pan American Petroleum Corporation for expansion of pressure maintenance project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Cato Baskett Pressure Maintenance Project, Cato-San Andres Pool, by the conversion to water injection of its Baskett "D" Wells Nos. 1 and 2, located respectively, in Units G and A of Section 11, Township 8 South, Range 30 East, Chaves County, New Mexico.
- CASE 4457: Application of Tenneco Oil Company for the creation of a new pool, assignment of discovery allowable, and promulgation of special pool rules, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of oil from the "D" zone of the Dakota formation for its Don Ne Pah Well No. 1 located in Unit D of Section 18, Township 17 North, Range 8 West, McKinley County, New Mexico, and for the assignment of an oil discovery allowable to said well. Applicant further seeks the promulgation of special rules for said pool, including provisions for 80-acre spacing units with wells to be drilled in either the northwest or southeast quarter-quarter sections.
- CASE 4458: Application of Continental Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the South Eunice Unit Area comprising 2720 acres, more or less, of Federal and Fee lands in Sections 20, 21, 22, 28, 29, and 33, Township 22 South, Range 36 East, South Eunice Pool, Lea County, New Mexico.
- CASE 4459: Application of Continental Oil Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its South Eunice Unit Area by the injection of water into the Seven Rivers and Queen formations through 30 wells located in Sections 20, 21, 22, 28, 29, and 33, Township 22 South, Range 36 East, South Eunice Pool, Lea County, New Mexico.
- CASE 4460: Application of Continental Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause,

(Case 4460 continued)

seeks the consolidation of two existing non-standard gas proration units into one 480-acre non-standard unit comprising the N/2 and SE/4 of Section 23, Township 22 South, Range 36 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its Meyer B-23 Wells Nos. 1, 2, and 3, located in Units C, O, and E, respectively, of said Section 23. Applicant further seeks authority to produce the allowable from any of said wells in any proportion.

CASE 4461: Application of Continental Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of two existing non-standard gas proration units into one 120-acre non-standard unit comprising the E/2 SW/4 and NW/4 SE/4 of Section 9, Township 21 South, Range 37 East, Blinebry Gas Pool, Lea County, New Mexico, to be dedicated to its Hawk B-1 Wells Nos. 2 and 6, located in Units J and N, respectively, of said Section 9. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.

CASE 4462: Application of Continental Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from an undesignated Gallup oil pool and undesignated Dakota oil pool in the wellbores of four wells to be drilled in Township 25 North, Range 4 West, West Lindrith Field, Rio Arriba County, New Mexico, as follows:

Jicarilla 22 Well No. 5 - Unit L - Section 22  
Jicarilla 28 Well No. 9 - Unit A - Section 28  
Jicarilla 28 Well No. 10 - Unit L - Section 28  
Jicarilla 28 Well No. 11 - Unit B - Section 33

CASE 4463: Application of Roger C. Hanks 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 the NE/4 of Section 18, Township 9 South, Range 36 East, Vada-Pennsylvanian Pool, Lea County, New Mexico, said acreage to be dedicated to applicant's Ford Federal Well No. 1 located in the NW/4 NE/4 of said Section 18. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4451: (Readvertised)

Application of Union Oil Company of California for a non-standard oil proration unit, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for an 80-acre non-standard oil proration unit comprising the SW/4 SE/4 of Section 17 and the NW/4 NE/4 of Section 20, Township 8 South, Range 38 East, Bluit-San Andres Associated Pool, Roosevelt County, New Mexico, to be dedicated to a well to be drilled at a standard location in the NW/4 NE/4 of said Section 20.

Examiner Hearing  
November 18, 1970  
-4-

Docket No. 25-70

CASE 4464: Application of Pan American Petroleum Corporation for authority to over-produce a gas well's allowable, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to over-produce the allowable of its Gallegos Canyon Unit Well No. 185, located in Unit D of Section 33, Township 28 North, Range 12 West, Basin-Dakota Pool, San Juan County, New Mexico, in the amount of 19,311 MCF. According to applicant, this amount of gas, produced by other wells in the Gallegos Canyon Unit and with royalty and taxes already paid, was injected into the subject well to create a reservoir back-pressure prior to fracturing on work-over. Applicant seeks authority to produce, without being subject to allowable, royalty, or taxes, the volume of gas injected into the well.



western union

# Telegram

KA064 SSG 197

(238)

1970 NOV 17 PM 2 47

K RWA020 HO PDF=ROSWELL NMEX 17 237P MST=

A L PORTER JR=

OIL CONSERVATION COMMISSION STATE LAND OFFICE BLDG  
SANTA FE NMEX=

PLEASE CONSIDER THIS OUR ENTRY OF APPEARANCE WITH GORDON  
RYAN OF DENVER FOR PAN AMERICAN PETROLEUM CORP IN CASE  
NUMBER 4464 AT THE EXAMINER HEARING NOVEMBER 18 1970  
APPLICATION FOR OVER PRODUCING GAS WELL ALLOWABLE SAN  
JUAN COUNTY NEW MEXICO. THANK YOU=

ATWOOD MALONE MANN AND COOTER==

- 4464 18 1970=1

*Recd 11-17-76 67*



BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4464  
Order No. R-4069

APPLICATION OF PAN AMERICAN PETROLEUM  
CORPORATION FOR AUTHORITY TO OVER-PRODUCE  
A GAS WELL'S ALLOWABLE, SAN JUAN COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:30 a.m. on November 18, 1970, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 1st day of December, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Pan American Petroleum Corporation, recently injected into its Gallegos Canyon Unit Well No. 185, located in Unit D of Section 33, Township 28 North, Range 12 West, NMPM, Basin-Dakota Pool, San Juan County, New Mexico, 19,311 MCF of gas in order to pressure up the formation surrounding the well-bore of said well prior to commencing water fracture on workover of the well.

(3) That the applicant seeks authority to produce that volume of injected gas from said Well No. 185 in addition to the regular allowable assigned to the well.

(4) That 18,111 MCF of said gas remained in the reservoir and that 1,200 MCF of said gas was flared.

-2-

CASE No. 4464  
Order No. R-4069

(5) That said 19,311 MCF of gas was obtained during July, August, and September from El Paso Natural Gas Company, having been previously purchased by said company.

(6) That the applicant should be permitted to produce 18,111 MCF of gas from said Well No. 185 in addition to the regular allowable assigned to said well in order to allow the operator to recover gas previously purchased and injected into the reservoir surrounding the subject well.

IT IS THEREFORE ORDERED:

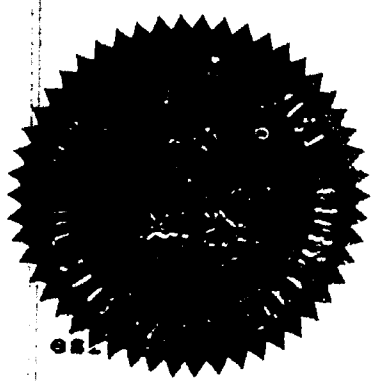
(1) That the applicant, Pan American Petroleum Corporation, is hereby authorized to produce 18,111 MCF of gas from its Gallegos Canyon Unit Well No. 185, located in Unit D of Section 33, Township 28 North, Range 12 West, NMPM, Basin-Dakota Pool, San Juan County, New Mexico, in addition to the allowable regularly assigned to said well.

(2) That the purchaser of gas from the above-described Gallegos Canyon Unit Well No. 185 shall indicate on its Gas Purchaser's Monthly Report of production from the subject well a credit for the amount of gas produced until such time as the 18,111 MCF of additional gas authorized to be produced by the above-described well has been produced.

(3) That the operator of the above-described well shall file, by the 15th day of each month, with the Santa Fe Office of the Commission a special report setting forth the production from the subject well for the previous month and the amount of the authorized 18,111 MCF of gas remaining to be produced.

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

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



STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*David F. Cargo*  
DAVID F. CARGO, Chairman

*Alex J. Armiijo*  
ALEX. J. ARMIJO, Member

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



FARMINGTON AREA

1970

GALLEGOS CANYON UNIT NO. 185 (Repair)

6/26

GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. PREP TO START COMPRESSOR. / SET CH AT 5860. RU AZTEC SERVICE UNIT 6-22-70. PTG. SI. RREL 6-22-70.

6/25

GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. PREP START COMPRESSOR. / STARTED COMPRESSOR X HEAD LEAKED. REMOVED FOR REP.

6/26

GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. REP COMPRESSOR.

6/29

GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. INJ GAS. / COMMENCED GAS INJ 9:30 AM 6-27-70.

6/30

GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. INJ GAS.

7/1

TD 6100. PBD 6067. Inj Gas at 850 psi

7/2

" " " " " " 875 "

7/3

" " " " " " SI for compressor rep.

7/4

" " " " " " " " " "

7/5

" " " " " " " " " "

7/6

" " " " " " Inj / Compressor Rep Comp 9:45 AM 7-7-70. Deal In 930 psi at 375 mfg.

7/6

GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. SI FOR COMPRESSOR REP. / SI 7-3-70 1:00 PM. PRIOR TO SI INJ PR 928.

7/13

GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. INJ. / DISH PR 1008 LB AT 430 MCFD.

7/14

TD 6100. PBD 6067. Inj Gas

7/15

GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. COMP DOWN 22-1/2 HR. HAD GASKET LEAK IN COMP HEAD. PR 1000. DROPPED TO 950 DURING DOWN TIME.

7/16

TD 6100. PBD 6067. Inj Gas

7/17

" " " " " " " " " "

7/20

" " " " " " Down for Comp Rep.

7/21

" " " " " " " " " "

7/22

" " " " " " " " " "

7/23

" " " " " " " " " "

7/24

" " " " " " " " " "

7/27

" " " " " " " " " "

7/28

" " " " " " " " " "

7/29

" " " " " " " " " "

7/30

" " " " " " " " " "

Case 4464 Ex. 11

BEFORE EXAMINER UTZ  
OIL CONSERVATION  
App EXHIBIT NO. 2  
CASE NO. 4464

Farmington Area

1970

Gallegos Canyon Unit #185

- 7/31 TD 6100, PBD 6067. WO rep.
- 8/3 " " " " " On Off 10:30 am 8-2-70. Cap. PR 1000  
psi prior to Inf.
- 8/4 TD 6100, PBD 6067. Inj gas x 1055 psi.
- 8/5 " " " " " " at 1030 psi. Compressor (Vander) 19  
Hv. x Engine heat.
- 8/6 TD 6100, PBD 6067. Inj gas at 1090 psi.
- 8/7 " " " " " " " 1100 " x Air 429 MCFD
- 8/10 GALLEGOS CANYON UNIT NO. 185. TD 6100 PED 6067. 8-7-70 INJ GAS AT 1120 X AIR 398  
MCFD. 8-8-70 INJ GAS AT 1130 X AIR 396 MCFD. 8-9-70 INJ GAS AT 1138 X AIR 416 MCFD.
- 8/11 TD 6100, PBD 6067. Inj Gas at 1150 X Air 435 MCFD
- 8/12 " " " " " " " 1120 " " 441 "
- 8/13 " " " " " " " 1150 " " 400 "
- 8/14 " " " " " " " 1145 " " " "
- 8/17 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. BLEW TO CO. / COMP INJ  
23 HR X DIS 1460 X SUC 350, AIR 658 MCFD. MI SU 9-16-70. LOADED HOLE X WT  
TRT X 0.8% KCL X 20 LB GEL PER 1000 GAL. NO BKN. PMP IN 2900. SWHYF X  
75,590 GAL WT TRT X 0.8% KCL X 7 LB GEL PER 1000 GAL X 60,000 LB 20-40 SN X  
20,000 LB 10-20 SN. DROPPED 30 X RCN BALLS AFTER 30,000 GALLONS WT. IR 56  
BPM TO 52 BPM AT 2900 PSI. AFTER 36,500 GAL DROPPED 30 RCN BALLS X PR  
INCREASED 2900 TO 3000 X IR 52 BPM TO 48 BPM. TRT PR 3200-2900-2800.  
INJ RATE 58-52-45 BPM. TOTAL FLUID 97,440 GAL WT. ISIP 1700, 5 MIN 1100, 15  
MIN 800, 1-1/2 HR ON VACUUM. USED 3696 HHP. TI X TBG X BIT. BLEW WELL X COMP.  
TAG SN 5960 X CO 107' SN TO PBD.
- 9/18 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. FLW TST. / WELL LOGGED OFF  
AT 6067. TO TBG. TI 2-3/8" PROD TBG X TAGGED SN AT 6054. LANDED TBG 5929.  
REMOVED BOP X HIPPLED UP WELLHEAD. PMP OUT TBG PLUG. PR 4-1/2" ANNULUS TO  
1500 X COMPRESSOR. SWB 1 HR. WELL KICKED OFF. BLEW 10 HR THRU 2" LINE X  
COMPRESSOR. TPF 150 X CPF 500. HEAVY SPRAY X SLUGS WT. RREL 6130 AM 9-18-70.
- 9/22 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. PROD. / EL PASO PUT  
WELL ON LINE AT 12:00 NOON 9-21-70. TPC 1170 X CPC 1170. GAUGED 826 MCFD.
- 9/23 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. PROD. / PROD 7 HR X CH  
FROZE OFF BECAUSE FIRE WENT OUT IN UNIT. BACK ON LINE AT 9:45 AM. GAUGED  
829 MCFD.
- 9/24 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. PROD. / PROD 24 HR X TPF  
855 X CPF 930. WELL GAUGED 964 MCFD X 2 BF.
- 9/25 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. PROD. / PROD 24 HR X TPF 865 X  
CPF 970. WELL GAUGED 842 MCFD. OPEN CH TO 15/64".

BEFORE EXAMINED BY  
OIL CONSERVATION  
EXHIBIT  
CASE NO.

Case 4464 Ex. 11

FARMINGTON AREA

1970

GALLEGOS CANYON UNIT NO. 185

9/28 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. PROD. / 9-25-70 PROD 24 HR X TPF 640 X CPF 835. 15/64" CH. WELL GAUGED 689 MCFD. CHANGED PLATE SIZE FROM 1" TO 1-1/2" X OPEN CH TO 25/64". 9-26-70 PROD 24 HR X TPF 405 X CPF 560 X 25/64" CH. WELL GAUGED 1024 MCFD. OPEN CH TO 30/64". 9-27-70 PROD 24 HR X TPF 390 X CPF 490 X 30/64" CH. WELL GAUGED 987 MCFD. OPEN CH 48/64". STARTED MAKING A LITTLE WT.

9/29 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. FLW TST. / PROD 24 HR X TPF 375 X CP 455 PSI. CH WIDE OPEN AT 3/4". RATE 1235 MCFD. WELL MAKING WT.

10/1 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. FLW TST. / FLW 1087 MCFD X TPF 350 X CP 415. MADE 20 BO IN LAST 9 DAYS.

10/2 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. TST. / PROD 24 HR X TPF 360 X CP 420 PSI. PROD 1040 MCFD. 10-3-70 PROD 24 HR X TPF 360 X CP 400. PROD 1009 MCFD X 3.3 BC. 10-4-70 PROD 24 HR X TPF 365 X CP 410. PROD 946 MCFD X 1.7 BC.

10/6 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. FLW TST. / FLW 946 MCFD. TPF 355 X CP 405.

10/8 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. FLW TST. / FLW 908 MCFD IN 24 HR X TPF 375 X CPF 418.

10/9 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. FLW TST. / FLW 928 MCFD X TPF 365 X CPF 405.

10/12 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. FLW TST. / 10-9-70 PROD 24 HR X TPF 360 X CP 400. PROD 959 MCFD X 1" STREAM OF OIL. 10-10-70 PROD 24 HR X TPF 400 X CPF 440. PROD 934 MCFD X 1" STREAM OF OIL. 10-11-70 PROD 24 HR X TPF 375 X CPF 420 X PROD 908 MCFD X 1" STREAM OF OIL.

10/13 GALLEGOS CANYON UNIT NO. 185. TD 6100. PBD 6067. FLW. / FLW 822 MCFD X TPF 300 X CPF 425. FL.

Sept. 1970 (C-115)

Prod. 15 Bbls  
5,345 MCF 7 days

Oct. 1970 (C-115)

Prod. 70 Bbls  
21,465 MCF 32 days

Case 4464 Ex 11

# NEW MEXICO OIL CONSERVATION COMMISSION

WELL DELIVERABILITY TEST REPORT FOR 19 72

Form OI-22-A  
Revised 1-1-63

POOL NAME <b>BASIN</b>	POOL SLOPE <b>0 = .75</b>	FORMATION <b>SARGIA</b>	COUNTY <b>SJ</b>
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73-015

COMPANY <b>PAN AMERICAN PET CORP</b>			WELL NAME AND NUMBER <b>GALLEGO CANYON 2 #185</b>		
UNIT LETTER <b>D</b>	SECTION <b>33</b>	TOWNSHIP <b>28</b>	RANGE <b>12</b>	PURCHASING PIPELINE <b>EL PASO NATURAL GAS CO.</b>	
CASING O.D. - INCHES <b>4.500</b>	CASING I.D. - INCHES <b>4.052</b>	SET AT DEPTH - FEET <b>6094</b>	TUBING O.D. - INCHES <b>2.375</b>	TUBING I.D. - INCHES <b>1.995</b>	TOP - TUBING PERF. - FEET <b>5860</b>
GAS PAY ZONE FROM <b>5343</b> TO <b>5440</b>		WELL PRODUCING THRU CASING <b>X</b> TUBING <b>X</b>		GAS GRAVITY <b>0.666</b>	GRAVITY X LENGTH <b>3908</b>
DATE OF FLOW TEST FROM <b>05/07/70</b> TO <b>05/15/70</b>			DATE SHUT-IN PRESSURE MEASURED <b>05/22/70</b>		

## PRESSURE DATA - ALL PRESSURES IN PSIA

(a) Flowing Casing Pressure (DWI) <b>501</b>	(b) Flowing Tubing Pressure (DWI) <b>434</b>	(c) Flowing Meter Pressure (DWI) <b>425</b>	(d) Flow Chart Static Reading <b>621</b>	(e) Meter Error (Item c - Item d) <b>5</b>	(f) Friction Loss (a-c) or (b-c) <b>10</b>	(g) Average Meter Pressure (Integr.) <b>354</b>
(h) Corrected Meter Pressure (g+e) <b>389</b>	(i) Avg. Wellhead Press. $P_i = (h+f)$ <b>344</b>	(j) Shut-in Casing Pressure (DWI) <b>835</b>	(k) Shut-in Tubing Pressure (DWI) <b>831</b>	(l) $P_c$ = higher value of (j) or (k) <b>835</b>	(m) Del. Pressure $P_d = 50$ % $P_c$ <b>418</b>	(n) Separator or Dehydrator Pr. (DWI) for critical flow only

## FLOW RATE CORRECTION (METER ERROR)

Integrated Volume - MCF/D <b>408</b>	Quotient of $\frac{\text{Item c}}{\text{Item d}}$ <b>1.0119</b>	$\sqrt{\frac{\text{Item c}}{\text{Item d}}}$ <b>1.0059</b>	Corrected Volume <b>Q = 471 MCF/D</b>
---	--	---	--

## WORKING PRESSURE CALCULATION

$(1-e^{-S})$ <b>.247</b>	$(F_c Q_m)^2 (1000)$ <b>19.607</b>	$R^2 = (1-e^{-S})(F_c Q_m)^2 (1000)$ <b>4843</b>	$P_i^2$ <b>159231</b>	$P_w^2 = P_i^2 + R^2$ <b>164044</b>	$P_w = \sqrt{P_w^2}$ <b>405</b>
-----------------------------	---------------------------------------	---	--------------------------	--	------------------------------------

## DELIVERABILITY CALCULATION

$$D = Q \left[ \frac{P_c^2 - P_d^2}{P_c^2 - P_w^2} \right]^n = \frac{471}{\left[ \frac{522501}{551131} \right]^n} = \frac{471}{0.9949} = 464 \text{ MCF/D}$$

REMARKS:

## SUMMARY

Item h **339** Psia  
 $P_c$  **835** Psia  
 $Q$  **471** MCF/D  
 $P_w$  **405** Psia  
 $P_d$  **418** Psia  
 $D$  **464** MCF/D

Company **PAN AMERICAN PET CORP**  
 By **[Signature]**  
 Title **Area Engineer**  
 Witnessed By \_\_\_\_\_  
 Company \_\_\_\_\_


TD/RT/AG

Case 4464 EX III

50031 73-01

BEFORE EXAMINER USE  
 OIL CONSERVATION COMMISSION  
 -App. EXAMINER NO. 3  
 CASE NO. 4464

I J K EE  
CG M CO

NEW MEXICO OIL CONSERVATION COMMISSION  
BOX 2088 SANTA FE, NEW MEXICO  
OPERATOR'S MONTHLY REPORT

11-2

STATE OF NEW MEXICO  
MINISTRY OF OIL AND GAS  
ONE COPY TO OGC BY 01/01/01  
ONE COPY TO TRANSPORTATION

Company - PAN AMERICAN PETROLEUM CORPORATION

Location - Farmington, New Mexico

FOR MONTH

June, 1970

WELL NO.	UNIT	SEC.	TWP.	RNG.	LEASE NAME (UNDERLINED)	LEASE NAME AND STATE LAND LEASE NUMBER OR FEDERAL LEASE NUMBER	TOTAL LIQUIDS PRODUCED	TOTAL LIQUIDS PRODUCED		GAS PRODUCED MCF	DATE PROD.	DISPOSITION OF GAS						DISPOSITION OF OIL									
								MONTHLY OIL ALLOWABLE	ACTUAL BARRELS PRODUCED			BARRELS OF WATER PRODUCED	VENTED	USED ON LEASE	SOLD	PURCH.	OTHER	C O D E	OIL ON HAND BEG. OF MONTH	BARRELS TO TRANS. PORTER	OTHER	C O D E	TRANS. PORTER	OIL ON HAND END OF MONTH			
Gallegos Canyon Unit No. 1 Section 844																											
166 K 34	28N 12W	F					0	0	0						0	EPG				44	0					PIA 44	
167 C 18	28N 11W	F					20	0	0						0	EPG				67	0					PIA 77	
168 A 19	28N 11W	F					64	9230	3						9230	EPG				239	189					PIA 104	
169 I 35	29N 12W	F					8	0	0						0	EPG				74	0					PIA 32	
170 K 35	29N 12W	F					30	0	0						0	EPG				84	0					PIA 114	
171 D 25	29N 13W	F					70	5921	20						5921	EPG				223	194					PIA 99	
172 P 25	29N 13W	F					21	2715	2						2715	EPG				51	0					PIA 72	
173 A 29	29N 12W	F					201	1807	19						1807	EPG				159	199					COG 141	
174 K 28	28N 12W	F					104	20026	20						20026	EPG				164	199					PIA 69	
175 I 25	28N 13W	F					0	20026	20						20026	EPG				269	202	2				PIA 45	
176 C 25	28N 13W	F					70	16708	32						16708	EPG				141	0					PIA 211	
177 P 31	28N 12W	F					1	3202	2						3202	EPG				193	90					PIA 104	
178 D 4	28N 12W	F					58	11333	32						11333	EPG				86	0					PIA 104	
182 I 19	28N 11W	F					80	3005	20						3005	EPG				144	0					PIA 224	
184 A 23	28N 12W	F					25	7631	23						7631	EPG				144	0					PIA 129	
185 D 23	28N 12W	F					58	7733	21						7733	EPG				76	0					PIA 134	
186 I 33	28N 12W	F					0	0	0						0	EPG				214	0					PIA 214	
187 F 30	29N 12W	F					15	2604	2						2604	EPG				211	0					PIA 206	
188 J 30	29N 12W	F					166	5580	20						5580	EPG				182	201					PIA 151	
189 E 36	29N 13W	F					176	14576	30						14576	EPG				134	196					PIA 104	
190 C 32	28N 12W	F					0	1904	2						1904	EPG				47	0					PIA 47	
191 P 32	28N 12W	F					18	2932	20						2932	EPG				201	0					PIA 219	
192 P 30	28N 12W	F					0	2953	2						2953	EPG				136	0					PIA 136	
193 E 30	28N 12W	F					0	6015	2						6015	EPG				109	110					PIA 119	
194 D 5	27N 12W	F					2	2723	2						2723	EPG				144	107					PIA 84	

OTHER GAS DISPOSITION CODE  
1 - USED OFF LEASE  
2 - USED FOR DRILLING  
3 - GAS LIFT  
4 - LOSS IN GAS ESTIMATED  
5 - EXPLANATION ATTACHED  
6 - REPRESENTING OR PRESSURE MAINTENANCE

OTHER OIL DISPOSITION CODE  
1 - CIRCULATING OIL  
2 - LOSS  
3 - REDUCTION (BURN)  
4 - EXPLANATION ATTACHED

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.  
(SIGNATURE)  
(DATE)

Case 4464  
EX IV E = WATER DRAW

BEFORE EXAMINER  
OIL CONSERVATION  
App. Date 6/4  
CASE NO. 4464



I J K EE  
CG 34 00

NEW MEXICO OIL CONSERVATION COMMISSION  
BOX 2088 SANTA FE, NEW MEXICO  
OPERATOR'S MONTHLY REPORT

11-2

STATE OF NEW MEXICO  
BUREAU OF OIL CONSERVATION  
ONE COPY TO OIL DIST. DIV.  
ONE COPY TO TRANSPORTATION

PAN AMERICAN PETROLEUM CORPORATION

14444444

Farmington, New Mexico

FOR MONTH

JULY, 1970

WELL NO. UNIT SEC. TWP. RMB.	TOTAL LIQUIDS PRODUCED	GAS PRODUCED ACT	DAYS PROD.	DISPOSITION OF GAS					DISPOSITION OF OIL			
				VENTED	USED ON LEASE	SOLED	PURCH.	OTHER	OIL ON HAND BEG. OF MONTH	BARRELS TO TRANS. PORTER	OTHER	OIL ON HAND END OF MONTH
166 K 34 28N 12W F	20	6474	4		6474	EPC			44	0		PLA 64
167 C 18 28N 11W F	0	3771	2		3771	EPC			87	0		PLA 87
168 A 19 28N 11W F	168	15591	19		15591	EPC			104	198		PLA 74
169 I 35 29N 12W F	12	2602	2		2602	EPC			82	0		PLA 82
170 K 35 29N 12W F	0	4385	2		4385	EPC			114	0		PLA 114
171 D 25 29N 13W F	14	7324	32		7324	EPC			99	0		PLA 163
172 P 25 29N 13W F	129	25854	23		25854	EPC			72	0		PLA 201
173 A 29 29N 12W F	255	44204	22		44204	EPC			161	197		GOO 319
174 K 28 28N 12W F	23	13924	15		13924	EPC			69	0		PLA 92
175 I 25 28N 13W F	39	37061	23		37061	EPC			65	0		PLA 158
176 C 25 28N 13W F	37	6445	14		6445	EPC			211	194		PLA 156
177 P 31 28N 12W F	109	9601	25		9601	EPC			104	0		PLA 216
178 D 4 27N 12W F	109	2762	32		2762	EPC			134	199		PLA 134
182 A 28 28N 12W F	78	15552	32		15552	EPC			139	195		PLA 22
185 D 33 28N 12W F	0	0	0		0	EPC			134	0		PLA 134
186 I 33 28N 12W F	57	7794	11		7794	EPC			211	200		PLA 29
187 F 30 29N 12W F	63	21270	24		21270	EPC			211	194		PLA 91
188 J 30 29N 12W F	145	4552	32		4552	EPC			151	0		PLA 214
189 E 36 29N 13W F	32	10051	8		10051	EPC			144	193		PLA 116
190 C 32 28N 12W F	18	4268	32		4268	EPC			217	193		PLA 77
191 P 32 28N 12W F	72	12294	7		12294	EPC			136	0		PLA 209
192 P 30 28N 12W F	215	58083	23		58083	EPC			79	0		PLA 324
193 E 30 28N 12W F	105	25346	26		25346	EPC			84	0		PLA 159

OTHER OIL DISPOSITION CODE  
C - CIRCULATING OIL  
L - LOST  
S - SEDIMENTATION (BASKET)  
E - EXPLANATION ATTACHED  
R - REPRESENTING OR PRESSURE W. ATTACHMENT

OTHER GAS DISPOSITION CODE  
X - USED OFF LEASE  
O - USED FOR DRILLING  
G - GAS LIFT  
L - LOST (WATER ESTIMATED)  
E - EXPLANATION ATTACHED  
R - REPRESENTING OR PRESSURE W. ATTACHMENT

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

CASE 4464  
EX. 10

(SIGNATURE) \_\_\_\_\_

(POSITION) \_\_\_\_\_

DATE: \_\_\_\_\_

BEFORE  
OIL COM.  
CASE NO.

STATISTIC FROM C-119 REF. TO C-1.  
SUBMIT ORIGINAL TO QCC SANITARIUM  
ONE COPY TO QCC DIST. CORP.  
ONE COPY TO TRANSPORTER

15.

15.

[illegible]

I J K E E  
CG 31 00

NEW MEXICO OIL CONSERVATION COMMISSION  
BOX 2038 SANTA FE, NEW MEXICO  
OPERATOR'S MONTHLY REPORT

11-2

STATE OF NEW MEXICO  
MAY BE OBTAINED FROM THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
ONE COPY TO OIL DIST. OFFICE  
ONE COPY TO TRANSPORTATION

Operator - PAN AMERICAN PETROLEUM CORPORATION

Field Office -

Farmington, New Mexico

For Month -

September, 1970

Page 16

Well No. Unit Sec. Twp. Rnd.	LEASE NAME AND STATE LAND LEASE NUMBER OR FEDERAL LEASE NUMBER	TOTAL LIQUID PRODUCED	MONTHLY OIL ALLOWABLE		ACTUAL BARRELS PRODUCED	BARRELS OF WATER PRODUCED	GAS PRODUCED MCF	DAYS PROD.	DISPOSITION OF GAS				DISPOSITION OF OIL							
			VENTED	USED ON LEASE					SOLD	PURCH.	OTHER	C O D E	OIL ON HAND BEG. OF MONTH	BARRELS TO TRANS. PORTER	OTHER	C O D E	TRANS. PORTER	OIL ON HAND END OF MONTH		
EASIN CANOTA																				
Gallegos Canyon Unit No. 1 Section 844																				
166 K 34	28N 12W F	5					6288	9			6288	EPC			64	0			PIA	64
167 C 16	28N 11W F						9504	6			9504	EPC			156	176			PIA	21
168 A 19	28N 11W F						4043	3			4043	EPC			104	0			PIA	151
169 I 35	29N 12W F						23299	20			23299	EPC			134	92			PIA	224
170 K 35	29N 12W F						14519	16			14519	EPC			153	202			PIA	94
171 D 25	29N 13W F						10143	32			10143	EPC			253	202			PIA	239
172 P 25	29N 13W F						0				0	EPC			201	179		1	PIA	21
173 A 29	29N 12W F						2312	3			2312	EPC			19	0			GOC	19
174 K 28	28N 12W F						3959	6			3959	EPC			184	0			PIA	179
175 I 25	28N 13W F						0	0			0	EPC			158	0			PIA	158
176 C 25	28N 13W F						8845	16			8845	EPC			79	0			PIA	59
177 P 31	28N 12W F						0	0			0	EPC			25	0			PIA	25
178 D 4	27N 12W F						9094	24			9094	EPC			224	195			PIA	77
182 I 19	28N 11W F						3203	25			3203	EPC			201	185			PIA	94
184 A 23	28N 12W F						16578	27			16578	EPC			144	0			PIA	194
185 D 33	28N 12W F						5345	7			5345	EPC			134	0			PIA	149
186 I 33	28N 12W F						1415	10			1415	EPC			23	111			PIA	21
187 F 30	29N 12W F						18851	19			18851	EPC			91	0			PIA	168
188 J 30	29N 12W F						5851	32			5851	EPC			221	190			PIA	146
189 E 36	29N 13W F						13545	27			13545	EPC			256	194			PIA	269
190 C 32	28N 12W F						2525	19			2525	EPC			79	91			PIA	87
191 P 32	28N 12W F						3812	32			3812	EPC			49	0			PIA	69
192 P 30	28N 12W F						0	0			0	EPC			208	0			PIA	268
193 E 30	28N 12W F						0	0			0	EPC			128	0			PIA	128
194 D 5	27N 12W F						1796	2			1796	EPC			189	0			PIA	187

OTHER GAS PRODUCTION CODE  
A - USED FOR LEASE  
B - USED FOR DRILLING  
C - GAS LIFT  
D - LOSS (NOT ESTIMATED)  
E - EXPLANATION ATTACHED  
F - REPAIRING OR PRESSURE MAINTENANCE

OTHER OIL DISPOSITION CODE  
A - CIRCULATING OIL  
B - LOSS  
C - EXPLANATION ATTACHED  
D - EXPLANATION ATTACHED  
E - EXPLANATION ATTACHED

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

(Signature)

(Date)

Case 4464  
EX IV

(Position)

# PAN AMERICAN PETROLEUM CORPORATION

501 Airport Drive, Farmington, New Mexico  
October 26, 1970

File: GLH-217-960.4 x 986.510

Subject: 100% Owned Load Gas  
Gallegos Canyon Unit No. 185  
Basin Dakota Field  
San Juan County, New Mexico

70 OCT 27 AM 8 28

*Case 4464*

Mr. Elvis A. Utz  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

*19,311  
1200*

Dear Sir:

*18,111*

This has reference to the questions raised in your letter of October 21, 1970, regarding our letter of October 16, 1970, File: GLH-210-960.4 x 986.510, above subject.

The 19,311 MCF used in the workover could be considered "trade" or "exchange" gas. However, it is the same as purchased gas since El Paso deducts this volume from their settlement statements for gas they purchased through their Meter No. 7576901. We fail to see where the accounting between El Paso and Pan American is pertinent in this respect. Our primary concern here is that the recovery of "load gas" not be charged against the normal allowable of Well No. 185.

With regard to your second question, after reviewing workover details we find there was some waste and we estimate approximately 1,200 MCF, or 6.2% of the 19,311 MCF, was flared. The balance was retained in the reservoir.

If we can be of further assistance, please advise.

Yours very truly,

PAN AMERICAN PETROLEUM CORPORATION

*L. O. Speer, Jr.*  
L. O. Speer, Jr.  
Area Superintendent

GLH:en

DOCKET 1A-NEED

cc: Mr. E. C. Arnold  
New Mexico Oil Conservation Commission  
Aztec, New Mexico

Date *11-5-70*

*Pan. Am. - Letter to Mr. E. C. Arnold, 11-5-70  
on the subject of 11-1-70*

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

October 21, 1970

6-11464

Pan American Petroleum Corporation  
501 Airport Drive  
Farmington, New Mexico 87401

Attention: Mr. L. O. Speer

Dear Mr. Speer:

Your letter of October 16, 1970 regarding supplemental allowable for gas used in reworking your Callegos Canyon Unit Well No. 185 has been referred to me.

Before we can act on your request it will be necessary to have some more detail. Was all of the 19,311 Mcf purchased from El Paso or was it a trade? Was all of this gas retained in the reservoir or was some flared in the process of workover?

Very truly yours,

ELVIS A. UTZ  
Gas Engineer

EAU/ig

C  
O  
P  
Y

# PAN AMERICAN PETROLEUM CORPORATION

501 Airport Drive, Farmington, New Mexico 87401  
October 16, 1970

File: GLH-210-960.4 X 986.510

Subject: 100% Owned Load Gas  
Gallegos Canyon Unit No. 185  
Basin Dakota Field  
San Juan County, New Mexico

Mr. A. L. Porter, Jr.  
New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Sir:

For purposes of reinjection and workover of Gallegos Canyon Unit Well No. 185, Pan American obtained from El Paso Natural Gas Company through their Meter No. 3770201 the following gas volumes:

July	3,111 MCF
August	7,239 MCF
September	8,961 MCF
Total	19,311 MCF

The above volume is considered to be the return of gas sold to El Paso Natural Gas Company purchased through their Meter No. 7576901 which serves the following Basin Dakota Field wells:

Gallegos Canyon Unit Com Well No. 94 (Unit portion only)  
Gallegos Canyon Unit Well No. 96  
No. 106  
No. 108  
No. 110  
No. 111  
No. 133  
No. 134  
No. 263

Taxes and royalty would have been paid on this 19,311 MCF of gas when originally produced and delivered to El Paso. Accordingly, Gallegos Canyon Unit Well No. 185 should be entitled to produce an equivalent "load gas" volume, after workover, tax and royalty free. Since the purchaser's Form G-111 would not identify the production as "load gas," we suggest Gallegos Canyon Unit Well No. 185 be given an additional net allowable of 19,311 MCF in order that the recovery of this "load gas" will not be applied against the well's current normal allowable.

TO: <i>Mr. A. L. Porter, Jr.</i>	ROOM
<b>Oil Conservation Commission</b>	NO.
TO: <b>BOX 2088</b>	BLDG.
	NO.
TO: <b>SANTA FE, NEW MEXICO 87501</b>	ROOM
	BLDG.
	NO.
LOCATION:	
PLEASE HANDLE	Remarks:
PLEASE APPROVE	
PLEASE NOTE AND RETURN FOR YOUR INFORMATION	
PLEASE SEE ME	
PLEASE ADVISE	
YOUR FILE	

FORM 9 4-68

From:

DATE

Page 2  
Mr. A. L. Porter, Jr.

October 16, 1970  
GLH-210-960.4 X 986.510

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

Yours very truly,

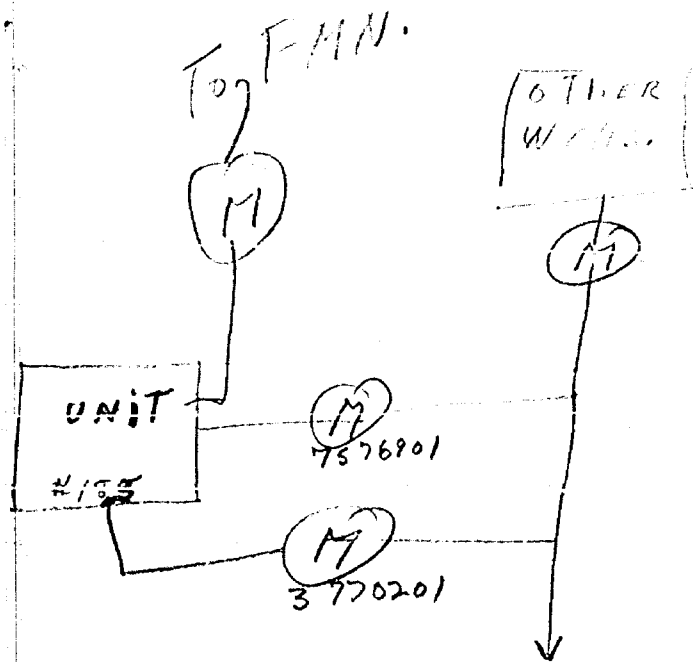
PAN AMERICAN PETROLEUM CORPORATION



L. O. Speer, Jr.  
Area Superintendent

GLH:eb

cc: Mr. E. C. Arnold  
New Mexico Oil Conservation Commission  
Aztec, New Mexico





DRAFT

GMH/esr  
11-30-70

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4464

Order No. R- 4069

APPLICATION OF PAN AMERICAN PETROLEUM  
CORPORATION FOR AUTHORITY TO OVER-PRODUCE  
A GAS WELL'S ALLOWABLE, SAN JUAN COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

9:30

This cause came on for hearing at 9 a.m. on November 18, 1970,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this \_\_\_\_\_ day of December, 1970, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

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

(2) That the applicant, Pan American Petroleum Corporation,  
recently injected into its Gallegos Canyon Unit Well No. 185,  
located in Unit D of Section 33, Township 28 North, Range 12 West,  
NMPM, Basin-Dakota Pool, San Juan County, New Mexico, 19,311 MCF  
of gas in order to pressure up the formation surrounding the  
well-bore of said well prior to commencing a water fracture on  
workover of the well.

(3) That the applicant seeks authority to produce that  
volume of injected gas from said Well No. 185 in addition to  
the regular allowable assigned to the well.

(4) That 18,111 MCF of said gas remained in the reservoir and that 1,200 MCF of said gas was flared.

(5) That said 19,311 MCF of gas was obtained during July, August, and September from El Paso Natural Gas Company, having been previously purchased by said company.

(6) That the applicant should be permitted to produce 18,111 MCF of gas from said Well No. 185 in addition to the regular allowable assigned to said well in order to allow the operator to recover gas previously purchased and injected into the reservoir surrounding the subject well.

IT IS THEREFORE ORDERED:

(1) That the applicant, Pan American Petroleum Corporation, is hereby authorized to produce 18,311 MCF of gas from its Gallegos Canyon Unit Well No. 185, located in Unit D of Section 33, Township 28 North, Range 12 West, NMPM, Basin-Dakota Pool, San Juan County, New Mexico, in addition to the allowable regularly assigned to said well.

(2) That the purchaser of gas from the above-described Gallegos Canyon Unit Well No. 185 shall indicate on its Gas Purchaser's Monthly Report of production from the subject well a credit for the amount of gas produced until such time as the 18,111 MCF of additional gas authorized to be produced by the above-described well has been produced.

(3) That the operator of the above-described well shall file, by the 15th day of each month, with the Santa Fe Office of the Commission a special report setting forth the production from the subject well for the previous month and the amount of the authorized 18,111 MCF of gas remaining to be produced.

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

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