CASE 6774: DOYLE HARTMAN FOR UNORTHODOX LOCATION, NON-STANDARD PRORATION UNIT AND APPROVAL OF INFILL DRILLING, LEA COUNTY, NEW MEXICO

CASE NO.

6774

APPLICATION,

TRANSCRIPTS,

SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
3 January 1980

EXAMINER HEARING

IN THE MATTER OF:

Application of Doyle Hartman for an unorthodox location, non-standard proration unit, and approval of in-fill drilling, Lea County, New Mexico. CASE 6774

BEFORE: Richard L. Stamets

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 to the Division State Land Office Bldg. Santa Fe, New Mexico 87501
For the Applicant:	William F. Carr, Esq. CAMPBELL & BLACK P. A. Jefferson Place Santa Fe, New Mexico 87501

I N D E X

WILLIAM P. AYCOCK

E X H I B I T S

MR. STAMETS: We'll call next Case 6774.

MR. PADILLA: Application of Doyle Hartman for an unorthodox location, non-standard proration unit, and approval of infill drilling, Lea County, New Mexico.

MR. CARR: May it please the Examiner, my name is William F. Carr, Campbell and Black, P. A., appearing on behalf of the applicant. I have one witness.

(Witness sworn.)

WILLIAM P. AYCOCK

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

DIRECT EXAMINATION

BY MR. CARR:

Q. Will you state your name and place of residence?

A. William P. Aycock, Midland, Texas.

Q. By whom are you employed and in what capacity?

A. By Doyle Hartman in connection with this application. Case 6774

Q. Have you previously testified before this Commission and had your credentials accepted and made a matter of record?

A. Yes, sir, I have.

Q. Are you familiar with the application?

A. Yes, sir, I am.

Q. Are you familiar with the subject area?

A. Yes, sir, I am.

MR. CARR: Are the witness' qualifications acceptable?

MR. STAMETS: They are.

Q. Will you briefly state what Mr. Hartman seeks with this application?

A. Mr. Hartman is seeking approval of a 120-acre non-standard proration unit, comprised of the northwest quarter northwest quarter of Section 6, Township 25 South, Range 37 East, and the west half southwest quarter of Section 31, Township 24 South, Range 37 East, to be dedicated to the proposed Federal Jalmat Communitized Well No. 1 at an unorthodox location 590 feet from the north line and 660 feet from the west line of Section 6.

Mr. Hartman further seeks a finding that the drilling of this proposed well is necessary to effectively and efficiently drain that portion of an existing proration unit which cannot be so drained by the existing

well.

Q. Mr. Aycock, will you please refer to what has been marked for identification as Doyle Hartman Exhibit Number One and explain the data contained thereon for the Examiner?

A. Exhibit One is a land map that includes both the proposed proration unit and the immediately surrounding area. It shows the traces of cross sections which will subsequently be presented as exhibits and shows the status of all of the Jalmat producing wells that are located in the sections immediately adjacent to those in which portions of the proposed proration unit are located.

Q. Will you now refer to Exhibit Number Two and review this for the Examiner?

A. Exhibit Number Two is a structure map on the top of the Yates formation which covers the identical area to that included in Exhibit Number One. It shows once again all of the critical wells, those that are Jalmat wells, and shows the traces of the cross sections which will be subsequently presented, and shows the status once again of the surrounding Jalmat wells. It shows that the proposed proration unit is located in an area which can be considered locally geologically anomalous in that there are small interpreted geologic highs which may be related -- which may be associated with reservoir development that would be better

than average.

The proration unit either has an anomaly associated with it or is located in an area of anomalous dip for the immediate vicinity, either way it is still anomalous.

Q. Will you now refer to your cross section A-A', which is marked as Mr. Hartman's Exhibit Number Three, and summarize this for Mr. Stamets?

A. A-A' is the west/east direction. It shows the well logs with pertinent information posted beneath them on the Yates formation and the entire Seven Rivers, both that that's included in the Jalmat Field designation and that that is not, where each of the wells is or has been completed; as I think you'll notice, the entire spectrum of zones has been completed, including the Seven Rivers, the Yates, and the Yates and Seven Rivers, for wells that are shown on this cross section. There was no attempt made in selecting the wells on this cross section to illustrate anything other than the general procedures and the general pay development in the immediate vicinity.

Q. Will you now refer to cross section B-B', Mr. Hartman's Exhibit Four, and review this for the Examiner?

A. B-B' is the north/south cross section that includes the same type of information for wells that

are located basically slightly to the east of the proposed proration unit and shows the same type of thing, in that virtually all of the zones that are productive of hydrocarbons in the vicinity of the proposed proration unit have been -- either are producing or have produced hydrocarbons in the past.

Q. Will you now refer to Hartman Exhibit Six and review this for Mr. Stamets?

A. Hartman Exhibit Six is a combination of the --

Q. This is Exhibit Number Five, which is the curves?

A. Right. The curves are -- includes a production tabulation by years, a gas production as a function of time on Similog paper, and where the information is available, a pressure curve where the ratio of calculated bottom hole pressure to consistent compressibility factor is plotted as a function of cumulative gas production. This is shown for all of the Jalmat wells that are in the vicinity of the proposed location in order to demonstrate what the general producing experience has been in conformance with the requirements of the Commission's 6013 infill findings prescription.

Q. Will you now refer to your letter, which is marked Exhibit Number Six and summarize the inform-

ation contained therein.

A. Exhibit Number Six is a letter that's written by me to Mr. Hartman in which I outlined the charge that I was given professionally by him, which were to, number one, assess the apparent physical and economic risks associated with the drilling of this proposed well; number two, to estimate the increased gas recovery attributable to the proposed well, in order that the gas from the proposed well may qualify under the Natural Gas Policy Act; and number three is to advise Mr. Hartman as to whether or not I felt from a technical standpoint that the drilling of the proposed well would serve to protect correlative rights and prevent waste.

I dwell at some length on the physical risks that are associated with the drilling of the well and as the Examiner will note, if he cares to delve into the letter, I segregate the various kinds of risks that are -- presumably will be associated with the drilling of a well, and I believe that the major risk associated with drilling the well is the reservoir fluid risk. In other words, I believe the reservoir quality will probably be potentially commercial. I doubt that the mechanical risk is substantial for a well of this depth, but the reservoir fluid risk can either be very substantial or it can be insignificant, depending upon what's found at the proposed location.

As I point out in a short paragraph here, if extraneous water is or has been occurring -- injection, pardon me, has been occurring, then the risk associated with drilling the proposed well could be considerable.

As the Commission is aware, there is a water injection well located on the proration unit that is proposed in another zone. We're not saying that anything is or has occurred, if it has occurred, that might not have been preventable by a prudent operator, but we all know that within the past there have been some cases where water has escaped from the zone for which it was intended. We can -- the well performance that has been exhibited in the area could be indicative that some water escape from the zone for which it is intended has occurred.

I further go ahead and make an attempt to estimate the reserves and the initial method that I used was an analogy study of volumetric parameters from the surrounding wells, which are detailed on the table, detail table, that's attached to my letter. All the parameters are subjected to a statistical analysis because it is my feeling that it is impossible for anyone to select a single value that would be adequately representative of all the experience otherwise.

In other words, I would give the Commission a single value for each one of them if I could. I

looked at the mean and the median and in some cases those are pretty close together and it would not make a tremendous difference what you would use statistically. In other cases they're quite divergent, indicating that we probably don't have normal probability distributions for the parameters that have been subjected to this qualitative statistical analysis. Therefore, my usual practice is to take the mean of the mean and the median for the value that was used in -- in estimating the gas to be recovered by the well, and as the Examiner will note, I've come up with an estimated 134-million cubic feet, based upon this type of approach.

If you take the approach that there may be a lack of depletion or that extraneous water has either been injected into or has escaped into the reservoir, in which case the pressure is not as depleted as the experience would indicate, then you could -- the other extreme would be to look at analogy of the surrounding wells, based on performance, since initial development, which would presumably include a portion of the life of the reservoir, in which the reservoir pressures were substantially above what they are now, and in that case you would come up with a much, much higher value for potential gas recovery, on the order of 5 to 8 billion, depending upon whether you used -- which gas recovery factor was used -- I've used two of them in the letter and explained where I got them, and if you made

just a straight statistical evaluation of experience, you'd come up with somewhere around 2-billion cubic feet of estimated incremental gas to be recovered by the well.

I suspect that the projected reserves are much nearer the 134-million than they are the 2-billion, but I can't prove to my satisfaction or to the Commission's what they actually will be, and this is the reason for quoting the entire spectrum of results.

All of the detailed engineering information that went into the results that are summarized in the letter are included on the attached letter. I mean the table that's attached to the letter, pardon me.

Q. Mr. Aycock, why is Mr. Hartman proposing to drill at this particular unorthodox location?

A. If I may be permitted to refer back to Exhibit Two, which is the structure map on top of the Yates formation, while the entire area is, as I've mentioned previously, locally structurally anomalous, and that could be indicative of favorable reservoir quality development, he wants to get as far away from potential problem sources as possible. In other words, on the north end of the proposed proration unit is an active water injection well, and the well south of that, which is intervening between Mr. Hartman's proposed location and the water injection well, appears that it might have gone to water prematurely, once water injection

was begun in the water injection well. We certainly can't prove it and no one is making any accusation of imprudent operation. It's simply an observation of fact.

So what Mr. Hartman desires to do is to stay in the same area of apparent pay development that could lead to an economical well if there are hydrocarbon reserves there, and if the -- and if water encroachment is -- does not prove to be a problem that will prevent him from making a well, and still get as far away from those potential problems as possible.

On the other hand, he has to get adjacent to another water injection well on that end of the proration unit. So really, I won't say it's a flip of coin, but you're going -- he could have problems anywhere. What he's basically saying is that he would rather have unknown problems than known problems, and that's why the well's been projected in the location that it has.

Q. Are there other unorthodox locations in the general area?

A. Yes, sir, there are.

Q. How did Mr. Hartman acquire his interest in the subject leases?

A. By farmout in all cases from two operators.

Q. Mr. Avcock, do you believe that the proposed

well is necessary to effectively and efficiently drain the proposed proration unit?

A. Yes, sir, I do, because as you will note from referring to either Exhibit One or Exhibit Two, there are no active Jalmat wells in the immediate vicinity of the proposed proration unit. They are either located to the north or to the south of it, but there are -- there are none within a reasonable distance. So therefore, whatever reserves are still there probably cannot be recovered; certainly not from this acreage they cannot be recovered, since there are no active Jalmat wells currently on any of the acreage.

Q. In your opinion will drilling the proposed well result in the production of hydrocarbons that would not otherwise be recovered?

A. Yes, sir, I believe they will.

Q. Will granting this application be in the interest of conservation, the prevention of waste, and the protection of correlative rights?

A. I would anticipate that it would, yes.

Q. How soon does Mr. Hartman plan to spud this well?

A. As soon as the Commission can take action on this application; prepare an order.

Q. Were Mr. Hartman's Exhibits One through Six prepared by you or can you testify from your own knowledge as to their accuracy?

A. No, sir, they were not prepared by me but I can testify as to their accuracy from my detailed examination of them.

MR. CARR: At this time, Mr. Examiner, we would offer into evidence Hartman's Exhibits One through Six.

MR. STAMETS: These exhibits will be admitted.

MR. CARR: I have nothing further on direct.

CROSS EXAMINATION

BY MR. STAMETS:

Q. Mr. Aycock, this is an application for infill findings, so I presume that there's already a well completed on the acreage which is to be dedicated, or on a proration unit which included the acreage which is to be dedicated.

A. There was -- there was formerly a well but I don't think there is at the present time.

Q. You don't think there is.

A. No, sir. I've got all these files here

and I can review them quickly, but as I recall, the last time I reviewed them there is no -- the former Jalmat well has been plugged and abandoned, and the -- of course, the water injection well does not have any bearing on the Jalmat zone.

Q. All right, which is the former Jalmat well?

A. It's the well that's located in the southwest of the southwest of 31.

Q. And when was it plugged and abandoned?

A. Okay, let me look for you.

Okay, Mr. Examiner, I have a USGS sundry notice and reports on wells for this well, which is the Texaco, Incorporated, C. C. Fristoe "B" Federal NCT No. 4, that's located 660 from the south and 660 from the west lines of Section 31, and it's dated March 13th, 1972, and in the procedure it is described where they set a cast iron bridge plug at 2710 feet, dumped a 32 cement plug on it, displaced the hole with 9.8 pound mud, spotted a 20-sack cement plug at 1000 to 1100 feet, spotted a 25-sack cement plug from the surface to 114 feet, installed a dry hole marker extending 4 feet above ground level, and cleaned the location.

As of 3-6-72 this form indicates the well had been plugged and abandoned.

Q. Okay. As a practical matter would you -- well, never mind. You wouldn't recommend going back in that well.

A. No, sir. No, sir, I would recommend getting away from those wellbores to the degree possible and where you drill it is, as I say, is a trade-off. You do have two Langlie Mattix water injection wells and that old Jalmat well on the location. This was picked as a -- as a synthesis of all available information and the least objectionable of all of them to drain the reserves.

Q. We really don't have an infill well here. We have a new well on --

A. Yes, sir, on an old proration unit, yes, sir. Yes, sir, that's correct.

MR. PADILLA: Mr. Aycock, I'd like to ask a question.

Does that sundry notice indicate -- is there any indication in that notice as to when that well ceased to produce in commercial quantities?

A. No, but I think the exhibit -- I think we have a curve for the well here which we can probably look at and see. As I recall, we do. Let me look and see right quick.

No, we don't have a curve for it. Let me look back on the form and see if it tells.

MR. STAMETS: You do have a curve for that.

A. Do I?

MR. STAMETS: Didn't you say that was the Fristoe No. 2, or is this --

A. Probably said it was the Fristoe 4.

MR. STAMETS: Well, there's one identified as the Fristoe No. 2 on your gas production history and the dates --

A. Okay, let me look back again to be sure. No, it's the Fristoe "B" Federal NCT 4, is the one that's 660 from the south and 660 from the west, which would be this location. And let's see, if it says anything about it. It does not say --

MR. STAMETS: Apparently there's a second well on that unit, too, from your Exhibit Number Five, because you identify C. C. Fristoe Well No. 2, also, in Unit N of 31, 24, 37, and your remarks say that plugging was approved in 1973 and the last production was February, 1972.

A. Well, this one's in L, is it not? L in 31?

MR. STAMETS: Not at 660 from the south and west.

A. Well, we've got a wrong number on the

curve because here's the -- here's the form and there's not -- there are not two well locations indicated.

Well, there are two. There's a dry hole that was never -- that was never productive in there.

MR. STAMETS: So we're really talking about the same well whether or not it's No. 2 or No. 4.

A. Yes.

MR. STAMETS: Okay.

A. And I can't tell you when the -- let's see, here's another form on this well. They did find water entering back in 1948, according to this form, and in the original sundry notice that was filed on the well.

So I can't tell you when between '48 right now and '72 it ceased to produce, but sometime during that period. The water was found at the time the well was originally drilled to be entering the hole at part of the interval that is in the Jalmat Field, Jalmat Pool designation.

MR. STAMETS: Any other questions of this witness? He may be excused.

Anything further in this case?

MR. CARR: Nothing further.

MR. STAMETS: The case will be taken 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 Examiner hearing of Case No. 6974 heard by me on 4-3 1980.

Richard L. Stamets Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
3 January 1980

EXAMINER HEARING

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CASE 6774

BEFORE: Richard L. Stamets

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(Witness sworn.)

WILLIAM P. AYCOCK

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Q Will you state your name and place of residence?

A William P. Aycock, Midland, Texas.

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than average.

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Q Will you now refer to your cross section A-A', which is marked as Mr. Hartman's Exhibit Number Three, and summarize this for Mr. Stamets?

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I dwell at some length on the physical risks that are associated with the drilling of the well and as the Examiner will note, if he cares to delve into the letter, I segregate the various kinds of risks that are -- presumably will be associated with the drilling of a well, and I believe that the major risk associated with drilling the well is the reservoir fluid risk. In other words, I believe the reservoir quality will probably be potentially commercial. I doubt that the mechanical risk is substantial for a well of this depth, but the reservoir fluid risk can either be very substantial or it can be insignificant, depending upon what's found at the proposed location.

As I point out in a short paragraph here, if extraneous water is or has been occurring -- injection, pardon me, has been occurring, then the risk associated with drilling the proposed well could be considerable.

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was begun in the water injection well. We certainly can't prove it and no one is making any accusation of imprudent operation. It's simply an observation of fact.

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well is necessary to effectively and efficiently drain the proposed proration unit?

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BY MR. STAMETS:

Q. Mr. Aycock, this is an application for infill findings, so I presume that there's already a well completed on the acreage which is to be dedicated, or on a proration unit which included the acreage which is to be dedicated.

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and I can review them quickly, but as I recall, the last time I reviewed them there is no -- the former Jalmat well has been plugged and abandoned, and the -- of course, the water injection well does not have any bearing on the Jalmat zone.

Q. All right, which is the former Jalmat well?

A. It's the well that's located in the southwest of the southwest of 31.

Q. And when was it plugged and abandoned?

A. Okay, let me look for you.

Okay, Mr. Examiner, I have a USGS sundry notice and reports on wells for this well, which is the Texaco, Incorporated, C. C. Fristoe "B" Federal NCT No. 4, that's located 660 from the south and 660 from the west lines of Section 31, and it's dated March 13th, 1972, and in the procedure it is described where they set a cast iron bridge plug at 2710 feet, dumped a 32 cement plug on it, displaced the hole with 9.8 pound mud, spotted a 20-sack cement plug at 1000 to 1100 feet, spotted a 25-sack cement plug from the surface to 114 feet, installed a dry hole marker extending 4 feet above ground level, and cleaned the location.

As of 3-6-72 this form indicates the well had been plugged and abandoned.

Q. Okay. As a practical matter would you -- well, never mind. You wouldn't recommend going back in that well.

A. No, sir. No, sir, I would recommend getting away from those wellbores to the degree possible and where you drill it is, as I say, is a trade-off. You do have two Langlie Mattix water injection wells and that old Jalmat well on the location. This was picked as a -- as a synthesis of all available information and the least objectionable of all of them to drain the reserves.

Q. We really don't have an infill well here. We have a new well on --

A. Yes, sir, on an old proration unit, yes, sir. Yes, sir, that's correct.

MR. PADILLA: Mr. Aycock, I'd like to ask a question.

Does that sundry notice indicate -- is there any indication in that notice as to when that well ceased to produce in commercial quantities?

A. No, but I think the exhibit -- I think we have a curve for the well here which we can probably look at and see. As I recall, we do. Let me look and see right quick.

No, we don't have a curve for it. Let me look back on the form and see if it tells.

MR. STAMETS: You do have a curve for that.

A. Do I?

MR. STAMETS: Didn't you say that was the Fristoe No. 2, or is this --

A. Probably said it was the Fristoe 4.

MR. STAMETS: Well, there's one identified as the Fristoe No. 2 on your gas production history and the dates --

A. Okay, let me look back again to be sure. No, it's the Fristoe "B" Federal NCT 4, is the one that's 660 from the south and 660 from the west, which would be this location. And let's see, if it says anything about it. It does not say --

MR. STAMETS: Apparently there's a second well on that unit, too, from your Exhibit Number Five, because you identify C. C. Fristoe Well No. 2, also, in Unit N of 31, 24, 37, and your remarks say that plugging was approved in 1973 and the last production was February, 1972.

A. Well, this one's in L, is it not? L in 31?

MR. STAMETS: Not at 660 from the south and west.

A. Well, we've got a wrong number on the

curve because here's the -- here's the form and there's not -- there are not two well locations indicated.

Well, there are two. There's a dry hole that was never -- that was never productive in there.

MR. STAMETS: So we're really talking about the same well whether or not it's No. 2 or No. 4.

A. Yes.

MR. STAMETS: Okay.

A. And I can't tell you when the -- let's see, here's another form on this well. They did find water entering back in 1948, according to this form, and in the original sundry notice that was filed on the well.

So I can't tell you when between '48 right now and '72 it ceased to produce, but sometime during that period. The water was found at the time the well was originally drilled to be entering the hole at part of the interval that is in the Jalmat Field, Jalmat Pool designation.

MR. STAMETS: Any other questions of this witness? He may be excused.

Anything further in this case?

MR. CARR: Nothing further.

MR. STAMETS: The case will be taken 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.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. _____, heard by me on _____ 19____.

_____, Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

January 18, 1980

POST OFFICE BOX 2088
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SANTA FE, NEW MEXICO 87501
(505) 827-2434

Mr. William F. Carr
Campbell and Black
Attorneys at Law
Post Office Box 2208
Santa Fe, New Mexico

Re: CASE NO. 6774
ORDER NO. R-6245

Applicant:

Doyle Hartman

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/fd

Copy of order also sent to:

Hobbs OCD x
Artesia OCD x
Aztec OCD

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. 6774
Order No. R-6245

APPLICATION OF DOYLE HARTMAN FOR AN
UNORTHODOX LOCATION, NON-STANDARD
PRORATION UNIT, AND APPROVAL OF INFILL
DRILLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on January 3, 1980, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 16th day of January, 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, Doyle Hartman, seeks approval of a 120-acre non-standard gas proration unit comprising the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, and the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, NMPM, to be dedicated to his Federal Jalmat Com Well No. 1 at an unorthodox location 590 feet from the North line and 660 feet from the West line of said Section 6.

(3) Applicant further seeks a finding that the drilling of said well is necessary to effectively and efficiently drain that portion of an existing proration unit which cannot be so drained by the existing well.

(4) That the entire non-standard proration unit may reasonably be presumed productive of gas from the Jalmat Gas Pool and that the entire non-standard gas proration unit can be efficiently and economically drained and developed by the aforesaid well.

(5) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

(6) That no offset operator objected to the proposed unorthodox location.

(7) That the evidence in this case indicates that the proposed well at the requested unorthodox location should recover at least 134 million cubic feet of gas from the Jalmat Gas Pool which cannot be produced by the existing well on the proration unit.

(8) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That a 120-acre non-standard gas proration unit in the Jalmat Gas Pool comprising the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, and the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby established and dedicated to the Doyle Hartman Federal Jalmat Com Well No. 1 to be drilled at an unorthodox location, hereby approved, 590 feet from the North line and 660 feet from the West line of said Section 6. The authorization for infill drilling in the Jalmat Gas Pool granted by this order is necessary to permit the drainage of a portion of the reservoir covered by the 120-acre proration unit which cannot efficiently and economically be drained by any existing well thereon.

(2) 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

S
fd/

GAS PRODUCTION HISTORY

Date 10-19-79 Page 1 of 1

Operator: Millard Deck

Well: Shell State No. 2

Location: F-36-24-36

Pool: Jalmat Gas

Spud Date: 1-4-68 Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas): 5-69

Remarks: 1970 Shut-in
Last Production 12-69

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1969	7	16907	2415	16.9	448.2	490	

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
EXHIBIT NO. 5
CASE NO. 6774
Submitted by HARMON
Hearing Date 1/3/80

19____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Production (Y-T-D) 16907 MCF

Days or Months (Y-T-D) 7 mos.

19 69 Detail Summary

Jan.		July	245
Feb.		Aug.	429
March		Sept.	776
April		Oct.	341
May	3870	Nov.	107
June	11139	Dec.	-0-

Avg. Rate (Y-T-D) 2415 MCF/mo.

12-69 Cum: 16.9 MMCF

Field:	Jalmat Gas
Operator:	Millard Deck
Well:	Shell State No. 2
Location:	F-36-24-36
County:	Lea State: New Mexico
Date Prod. Began:	5-69 Acres:

Gas Production : MCF/month

10000
1000
100

12-69 First Production
12-69 Last Production
Cum. = 16.9 MMCF

DEC. MAR. JUN. SEP. DEC.

1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982

GAS PRODUCTION HISTORY

Date 10-19-79

Operator: Petroleum Corporation of Texas

Well: Langlie "A" State No. 2

Location: H-36-24-36

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks: Recompleted Jalmat Gas 1970.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	7	6601	943	110.0	N/A	N/A	
1978	12	13259	1105	103.4	142.2	145	
1977	9	9405	1045	90.1	23.2	25	
1976	12	13407	1117	80.7	217.2	225	
1975	12	12114	1009	67.3	213.2	220	
1974	12	11534	961	55.2	222.2	230	
1973	12	14948	1246	43.7	217.2	225	
1972	12	15301	1275	28.8	214.2	220	
1971	12	5338	445	13.5	183.2	190	
1970	12	8190	683	8.2	N/A	N/A	

19 78 Detail Summary

Jan.	1456	July	1048
Feb.	1256	Aug.	1117
March	1266	Sept.	929
April	1102	Oct.	1036
May	1123	Nov.	999
June	827	Dec.	1100

19 79 Detail Summary

Jan.	1153	July	851
Feb.	1108	Aug.	
March	1065	Sept.	
April	871	Oct.	
May	838	Nov.	
June	715	Dec.	

Production (Y-T-D) 6601 MCF

Avg. Rate (Y-T-D) 943 MCF/mo.

Days or Months (Y-T-D) 7 mos.

8-1-79 Cum: 110.0 MMCF

Field:	Jalmat Gas
Operator:	Petroleum Corp. of Texas
Well:	Langlie "A" State No. 2
Location:	H-36-24-36
County:	Lea State: New Mexico
Date Prod. Began:	Jalmat 1970 Acres: 80

Gas Production - MCF/month

10000
1000
100

1970 Recompleted Jalmat Gas

8-1-79 Cum = 110.0 MMCF

6.48%/yr.

DEC. MAR. JUN. SEP.

19 70 | 19 71 | 19 72 | 19 73 | 19 74 | 19 75 | 19 76 | 19 77 | 19 78 | 19 79 | 19 80 | 19 81 | 19 82 | 19 83

8-1-79 CUM: 110.0 MMCF

Field:	Jalmat Gas
Operator:	Petroleum Corp. of Texas
Well:	Langlie "A" State No. 2
Location:	H-36-24-36 Acres: 80
County:	Lea State: New Mexico
Date Prod. Began:	Jalmat "70" Type Plot: P ☐ P/Z ☒

1970 Recompleted to Jalmat Gas

8-1-79 Cum = 110.0 MMCF

1971 1972 1973 1974 1975 1976 1977 1978

Pressure or P/Z - (psia)

550 500 450 400 350 300 250 200 150 100 50

0.006 0.016 0.026 0.036 0.046 0.056 0.066 0.076 0.086 0.096 0.106 0.116 0.126

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Gulf

Well: C. D. Woolworth No. 3

Location: K-30-24-37

Pool: Jalmat Gas

Spud Date: 5-9-49 Original Completion Date: 6-12-49

Completion Interval (Gas): OH 2930-3300

Completion Date (Gas): 6-12-49 First Production (Gas):

Remarks: Last production 11-78

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1978	11	64125	5829	5904.0	N/A	N/A	
1977	11	48328	4393	5840.0	N/A	N/A	
1976	12	155731	12978	5791.5	172.2	175	
1975	11	112350	10214	5636.0	168.2	170	
1974	12	99810	8318	5523.4	200.2	205	
1973	6	17798	2966	5423.6	76.2	80	
1972	12	117083	9757	5405.8	196.4	200	
1971	12	151594	12633	5288.7	207.2	210	
1970	12	152052	12671	5137.1	169.8	170	
1969	12	202769	16897	4985.1	227.0	230	
1968	11	191935	17449	4782.3	206.2	210	
1967	12	271492	22624	4590.4	197.0	200	
1966	12	251480	20957	4318.9	254.0	260	
1965	12	378061	31505	4067.4	232.9	240	
1964	12	159740	13312	3689.3	283.8	290	
1963	12	210089	17507	3529.6	379.2	395	
1962	12	244396	20366	3319.5	356.2	380	
1961	12	228190	19015	3075.1	411.1	430	
1960	12	338413	28201	2846.9	428.7	460	
1959	8	295686	36961	2508.5	454.6	490	

19 77 Detail Summary

Jan.	10845	July	8099
Feb.	9286	Aug.	3971
March	6133	Sept.	2014
April	1647	Oct.	835
May	3418	Nov.	-0-
June	2070	Dec.	10

19 78 Detail Summary

Jan.	14	July	5854
Feb.	illegible	Aug.	10599
March	9171	Sept.	6688
April	10351	Oct.	109
May	illegible	Nov.	811
June	10625	Dec.	-0-

Production (Y-T-D) 64125 MCF

Days or Months (Y-T-D) 11 mo.

Avg. Rate (Y-T-D) 5829 MCF/mo.

1-1-79 Cum: 5994.0 MMCF

Field:	Jalmat Gas
Operator:	Gulf
Well:	C. D. Woolworth No. 3
Location:	K-30-24-37
County:	Lea State: New Mexico
Date Prod. Began:	Acres:

Gas Production - MCF/month

10000
1000
100

Cum. = 5994.0 MMCF

15.42%/yr

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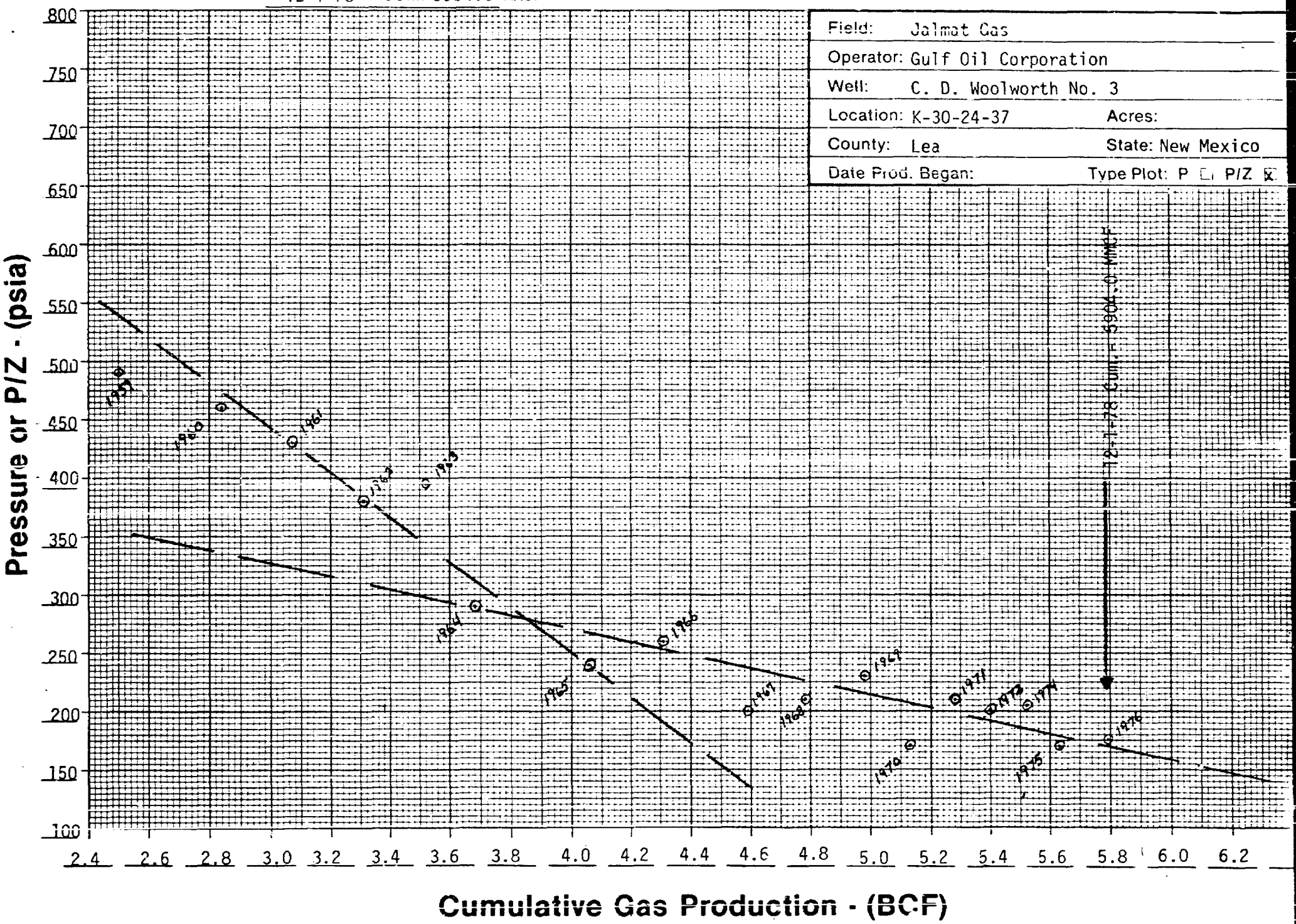
1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981

12-1-78 CUM: 5904.0 MMCF

Field:	Jalmat Gas
Operator:	Gulf Oil Corporation
Well:	C. D. Woolworth No. 3
Location:	K-30-24-37 Acres:
County:	Lea State: New Mexico
Date Prod. Began:	Type Plot: P ☐ P/Z ☒



GAS PRODUCTION HISTORY

Date 11-20-79 Page 1 of 1

Operator: Reserve Oil Co.

Well: Martin #2

Location: A-31-24-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	6378	797	4751.6	N/A	N/A	
1978	12	13870	1156	4745.2	136.2	140	
1977	12	17044	1420	4731.4	143.2	150	
1976	12	19401	1617	4714.3	354.2	325	
1975	12	23572	1964	4694.9	168.2	180	
1974	12	26964	2247	4671.3	133.2	140	
1973	12	28654	2388	4644.4	211.2	220	
1972	12	30086	2507	4615.7	203.2	210	
1971	12	31240	2603	4585.6	234.2	250	
1970	12	34661	2888	4554.4	236.2	250	
1969	12	34340	2862	4519.7	261.2	275	
1968	12	44884	3740	4485.4	261.2	275	
1967	12	53111	4426	4440.5	295.2	310	
1966	12	64951	5413	4387.4	305.2	320	
1965	12	83154	6930	4322.5	339.2	360	
1964	12	98395	8200	4239.3	378.2	410	
1963	12	117764	9814	4140.9	419.2	455	
1962	10	71148	7115	4023.1	N/A	N/A	
1961	10	50654	5065	3952.0	538.2	590	
1960	12	69586	5799	3901.3	493.2	540	

19____ Detail Summary

Jan.	1420	July	1284
Feb.	1092	Aug.	1367
March	1207	Sept.	1109
April	1186	Oct.	1017
May	1253	Nov.	898
June	1170	Dec.	867

19 79 Detail Summary

Jan.	862	July	826
Feb.	765	Aug.	758
March	835	Sept.	
April	808	Oct.	
May	780	Nov.	
June	744	Dec.	

Production (Y-T-D) 6378 MCF

Avg. Rate (Y-T-D) 797 MCF/mo.

Days or Months (Y-T-D) 8 mos.

9-1-79 Cum: 9,921.6 MMcf

Field:	Jalmat Gas
Operator:	Reserve Oil Co.
Well:	Martin #2
Location:	A-31-24-37
County:	Lea State: New Mexico
Date Prod. Began:	Acres: 160

9-1-79 Cum = 9,921.6 MMcf

16.03%/yr.

Gas Production - MCF/month

10000
1000
100

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1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981

9-1-79 CUM:4751.6 MMCF

Field:	Jalmat Gas		
Operator:	Reserve Oil Co.		
Well:	Martin #2		
Location:	A-31-24-37	Acres: 160	
County:	Lea	State: New Mexico	
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	

Pressure or P/Z - (psia)

700
650
600
550
500
450
400
350
300
250
200
150
100
50
0

3.8 3.9 4.0 4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.8 4.9 5.0 5.1 5.2 5.3 5.4 5.5 5.6 5.7

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 10-22-79

Operator: Reserve Oil Corp.

Well: Martin "B" No. 1

Location: F-31-24-37

Pool: Jalmat Gas

Spud Date: 8-18-47 Original Completion Date: 10-10-47

Completion Interval (Gas): OH 2862-3187

Completion Date (Gas): 10-10-47 First Production (Gas): 1947

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	7	759	108	3221.3	N/A	N/A	
1978	12	2593	216	3220.6	154.2	160	
1977	12	3669	306	3218.0	231.2	240	
1976	12	5843	487	3214.3	153.2	160	
1975	12	4110	343	3208.5	249.2	260	
1974	12	3667	306	3204.3	53.2	55	
1973	12	12881	1073	3200.7	152.2	160	
1972	12	24676	2056	3187.8	158.2	160	
1971	12	21592	1799	3163.1	168.2	175	
1970	12	30416	2535	3141.5	173.2	180	
1969	12	33647	2804	3111.1	196.2	200	
1968	12	43878	3657	3077.5	194.2	200	
1967	12	38118	3175	3033.6	204.2	210	
1966	12	39588	3299	2995.5	207.2	220	
1965	12	59738	4978	2955.9	230.2	240	
1964	12	65816	5485	2896.1	264.2	280	
1963	12	75805	6317	2830.3	296.2	310	
1962	12	59105	4925	2754.5	325.0	345	
1961	12	50748	4229	2695.4	371.2	400	
1960	7	27029	3861	2644.7	430.2	470	

19 78 Detail Summary

Jan.	249	July	170
Feb.	206	Aug.	149
March	214	Sept.	431
April	170	Oct.	367
May	116	Nov.	260
June	129	Dec.	132

19 79 Detail Summary

Jan.	64	July	103
Feb.	27	Aug.	
March	105	Sept.	
April	130	Oct.	
May	125	Nov.	
June	205	Dec.	

Production (Y-T-D) 759 MCF

Days or Months (Y-T-D) 7 mos.

Avg. Rate (Y-T-D) 108 MCF/mo.

GAS PRODUCTION HISTORY

Date 10-22-79

Operator: Reserve Oil Corp.

Well: Martin "B" No. 1

Location: F-31-24-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1959	10	50285	5029	2617.6	388.2	420	
1958	12	130962	10914	2567.4	403.0	430	
1957	12	161236	13436	2436.4	458.0	495	
1956	12	220233	18353	2275.2	510.0	560	
1955	12	208411	17368	2054.9	622.0	700	
1954	12	210718	17560	1846.5	681.0	780	
1953	12	173121	14427	1635.8	742.0	850	
1952	12	261846	21821	1462.7	860.0	1020	
1951	12	280930	23411	1200.8	815.0	955	
1950	12	142898	11908	818.2	993.0	1200	
1949	12	212971	17748	675.3	1010.0	1220	
1948	12	411705	34309	462.3	N/A	N/A	
1947	1	50623	50623	50.6	N/A	N/A	

19_____ Detail Summary

Jan. July

Feb. Aug.

March Sept.

April Oct.

May Nov.

June Dec.

Production (Y-T-D)

Days or Months (Y-T-D)

19_____ Detail Summary

Jan. July

Feb. Aug.

March Sept.

April Oct.

May Nov.

June Dec.

Avg. Rate (Y-T-D)

8-1-79 Cum: 3221.3 MMCF

Field:	Jalmat Gas
Operator:	Reserve Oil Corp.
Well:	Martin "B" No. 1
Location:	F-31-24-37
County:	Lea
State:	New Mexico
Date Prod. Began:	1947
Acres:	160

Gas Production - MCF/month

10000
1000
100

13.25%/yr.

8-1-79 Cum. = 3221.3 MMCF

DEC. MAR. JUN. SEP.

1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

8-1-79 CUM: 3221.3 MMCF

Field:	Jalmat Gas		
Operator:	Reserve Oil Corp.		
Well:	Martin "B" No. 1		
Location:	F-31-24-37	Acres: 160	
County:	Lea	State: New Mexico	
Date Prod. Began:	1947	Type Plot: P ☐ P/Z ☐	

8-1-79 Cum. = 3221.3 MMCF

Pressure or P/Z - (psia)

700 650 600 550 500 450 400 350 300 250 200 150 100 50 0

1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979

2.5 2.6 2.7 2.8 2.9 3.0 3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 4.0 4.1 4.2 4.3 4.4

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79

Operator: Getty Oil Company

Well: J. W. Sherrell #9

Location: J-31-24-37

Pool: Jalmat Gas

Spud Date: 9-2-78 Original Completion Date: 9-16-78

Completion Interval (Gas): Perf 2892-3103 W/20

Completion Date (Gas): 9-16-78 First Production (Gas): 4-79

Remarks: First Production April 1979

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	5	18467	3693	18.5	N/A	N/A	

19____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

1979 Detail Summary

Jan.	-0-	July	3350
Feb.	-0-	Aug.	3757
March	-0-	Sept.	
April	5421	Oct.	
May	3892	Nov.	
June	2047	Dec.	

Production (Y-T-D) 18467 MCF

Days or Months (Y-T-D) 5 mos.

Avg. Rate (Y-T-D) 3693 MCF/mo.

9-1-79 Cum: 18.5 MMCF

Field:	Jalmat Gas
Operator:	Getty Oil Company
Well:	J. W. Sherrell #9
Location:	J-31-24-37
County:	Lea — State: New Mexico
Date Prod. Began: 4-79	Acres: 160

9-1-79 Cum. = 18.5MMCF

4-79 First Production

Gas Production - MCF/month

10000

1000

100

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1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992

GAS PRODUCTION HISTORY

Date 10-22-79

Operator: Texaco

Well: C. C. Fristoe No. 2

Location: M-31-24-37

Pool: Jalmat Gas

Spud Date: 5-27-48 Original Completion Date: 11-21-48

Completion Interval (Gas): Perf 2760-2960 W/600

Completion Date (Gas): 11-21-48 First Production (Gas): 1949

Remarks: 1973 Plugging Approved
2-72 Last Production

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1972	2	676	328	2300.3	N/A	N/A	
1971	12	3725	310	2299.7	152.2	155	
1970	12	4443	370	2295.9	67.2	70	
1969	12	12517	1043	2291.5	151.2	155	
1968	12	13291	1108	2279.0	151.2	155	
1967	12	18167	1514	2265.7	131.2	135	
1966	8	35941	4493	2247.5	314.2	335	
1965	7	163584	23369	2211.6	310.2	330	
1964	7	153588	21941	2048.0	343.2	370	
1963	2	44839	22420	1894.4	385.2	415	
1962	1	6750	6750	1849.6	414.2	450	
1961	2	12277	6139	1842.8	440.2	475	
1960	2	14011	7006	1830.5	457.2	500	
1959	6	128866	21478	1816.5	615.2	695	
1958	12	393951	32829	1687.6	N/A	N/A	
1957	11	36804	3346	1292.6	N/A	N/A	
1956	12	130258	10854	1255.8	N/A	N/A	
1955	12	110414	9201	1125.5	N/A	N/A	
1954	12	109520	9127	1015.1	N/A	N/A	
1953	12	202666	16889	905.6	827.0	970	

19 71 Detail Summary

Jan.	347	July	292
Feb.	309	Aug.	289
March	350	Sept.	291
April	313	Oct.	299
May	326	Nov.	290
June	295	Dec.	324

Production (Y-T-D) 676 MCF

Days or Months (Y-T-D) 2 mos.

19 72 Detail Summary

Jan.	357	July	
Feb.	319	Aug.	
March		Sept	
April		Oct.	
May		Nov.	
June		Dec.	

Avg. Rate (Y-T-D) 328 MCF/mo.

GAS PRODUCTION HISTORY

Date 10-22-79 Page 2 of 2

Operator: Texaco

Well: C. C. Fristoe

Location: M-31-24-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1952	12	260788	21732	702.9	882	1050	
1951	12	238679	19890	442.2	937	1120	
1950	12	72482	6040	204.5	1008	1230	
1949	10	131982	13198	132.0	N/A	N/A	

19____ Detail Summary

Jan. July

Feb. Aug.

March Sept.

April Oct.

May Nov.

June Dec.

Production (Y-T-D)

Days or Months (Y-T-D)

19____ Detail Summary

Jan. July

Feb. Aug.

March Sept.

April Oct.

May Nov.

June Dec.

Avg. Rate (Y-T-D)

5-1-72 Cum. 2300.3 MMCF

Field: Jalmat Gas

Operator: Texaco

Well: C. C. Fristce No. 2

Location: M-31-24-37

County: Lea State: New Mexico

Date Prod. Began: 1949 Acres:

Gas Production - MCF/month

10000

1000

100

12-72 Last Production
2300.3 MMCF
1973 Plugging Approved

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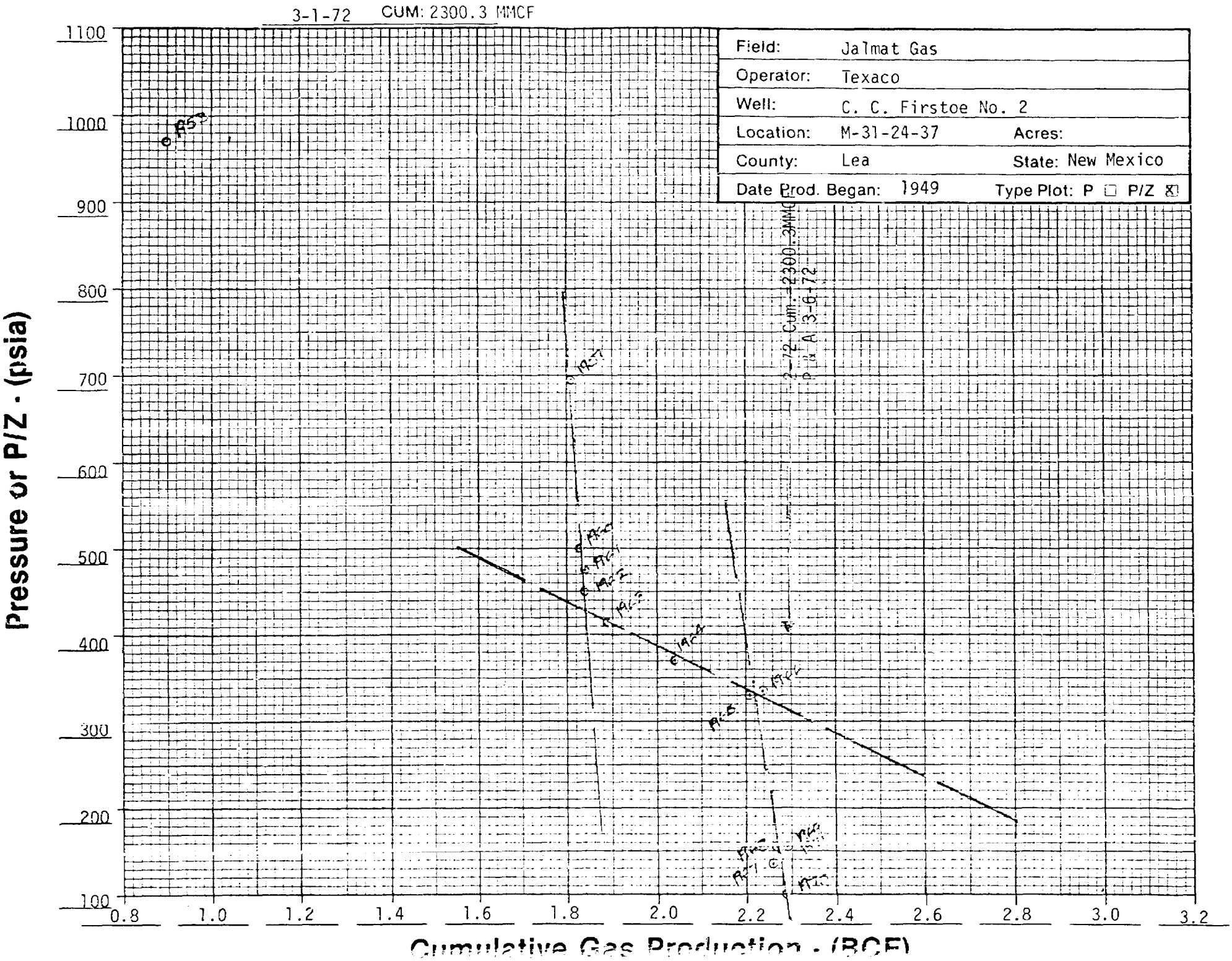
1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973


3-1-72 CUM: 2300.3 MMCF
Field: Jalmat Gas
Operator: Texaco
Well: C. C. Firstoe No. 2
Location: M-31-24-37 Acres:
County: Lea State: New Mexico
Date Prod. Began: 1949 Type Plot: P ☐ P/Z ☒
2-72 Cum.=2300.3MMCF
P/Z A 3-6-72
Pressure or P/Z - (psia)
1100
1000
900
800
700
600
500
400
300
200
100
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 10-22-79

Operator: Skelly

Well: Sherrell No. 5

Location: N-31-24-37

Pool: Jalmat Gas

Spud Date: 8-15-49 Original Completion Date: 9-9-49

Completion Interval (Gas): OH 2720-3350

Completion Date (Gas): 9-9-49 First Production (Gas): 1950

Remarks: 1977 P & A Approved.
3-73 Last Production.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1973	3	3256	1085	4040.1	N/A	N/A	
1972	12	24240	2020	4036.9	257.2	270	
1971	11	18156	1651	4012.7	181.2	185	
1970	12	62916	5243	3994.5	443.2	480	
1969	12	86309	7192	3931.6	475.2	515	
1968	12	97278	8107	3845.3	513.2	565	
1967	12	102410	8534	3748.0	492.2	540	
1966	12	112256	9355	3645.6	495.2	540	
1965	12	127705	10642	3533.3	505.2	550	
1964	12	138734	11561	3405.6	551.2	610	
1963	12	154419	12868	3266.8	525.2	575	
1962	10	124657	12465	3112.5	535.2	585	
1961	12	90953	7579	2987.8	580.2	650	
1960	12	94331	7861	2896.9	578.2	650	
1959	11	97705	8882	2802.5	617.2	695	
1958	12	208972	17414	2704.8	655.0	745	
1957	12	271938	22662	2495.8	720.0	830	
1956	12	323966	26997	2223.9	N/A	N/A	
1955	12	397588	33132	1900.0	798.0	930	
1954	12	292185	24349	1502.4	814.0	950	

19 72 Detail Summary

Jan.	2354	July	2075
Feb.	3751	Aug.	1497
March	2515	Sept.	1905
April	1757	Oct.	1198
May	2337	Nov.	1482
June	1589	Dec.	1780

Production (Y-T-D) 3256 MCF

Days or Months (Y-T-D) 3 mos.

19 73 Detail Summary

Jan.	1618	July	
Feb.	1447	Aug.	
March	191	Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Avg. Rate (Y-T-D) 1085 MCF/mo.

GAS PRODUCTION HISTORY

Date 10-22-79

Operator: Skelly

Well: Sherrell No. 5

Location: N-31-24-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1953	12	257321	21443	1210.2	855.0	1005	
1952	12	379614	31635	952.9	920.0	1100	
1951	12	427254	35605	573.2	941.0	1130	
1950	12	136476	11373	136.5	972.0	1180	

19____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Production (Y-T-D)

Days or Months (Y-T-D)

19____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Avg. Rate (Y-T-D)

4-1-73 Cum. 4040.1 MMCF

Field:	Jalmat Gas
Operator:	Skelly
Well:	Sherrell No. 5
Location:	N-31-24-37
County:	Lea State: New Mexico
Date Prod. Began:	Acres:

Gas Production - MCF/month

10000
1000
100

8.79%/yr.

Last production 3-73
Cum = 4040.1 MMCF

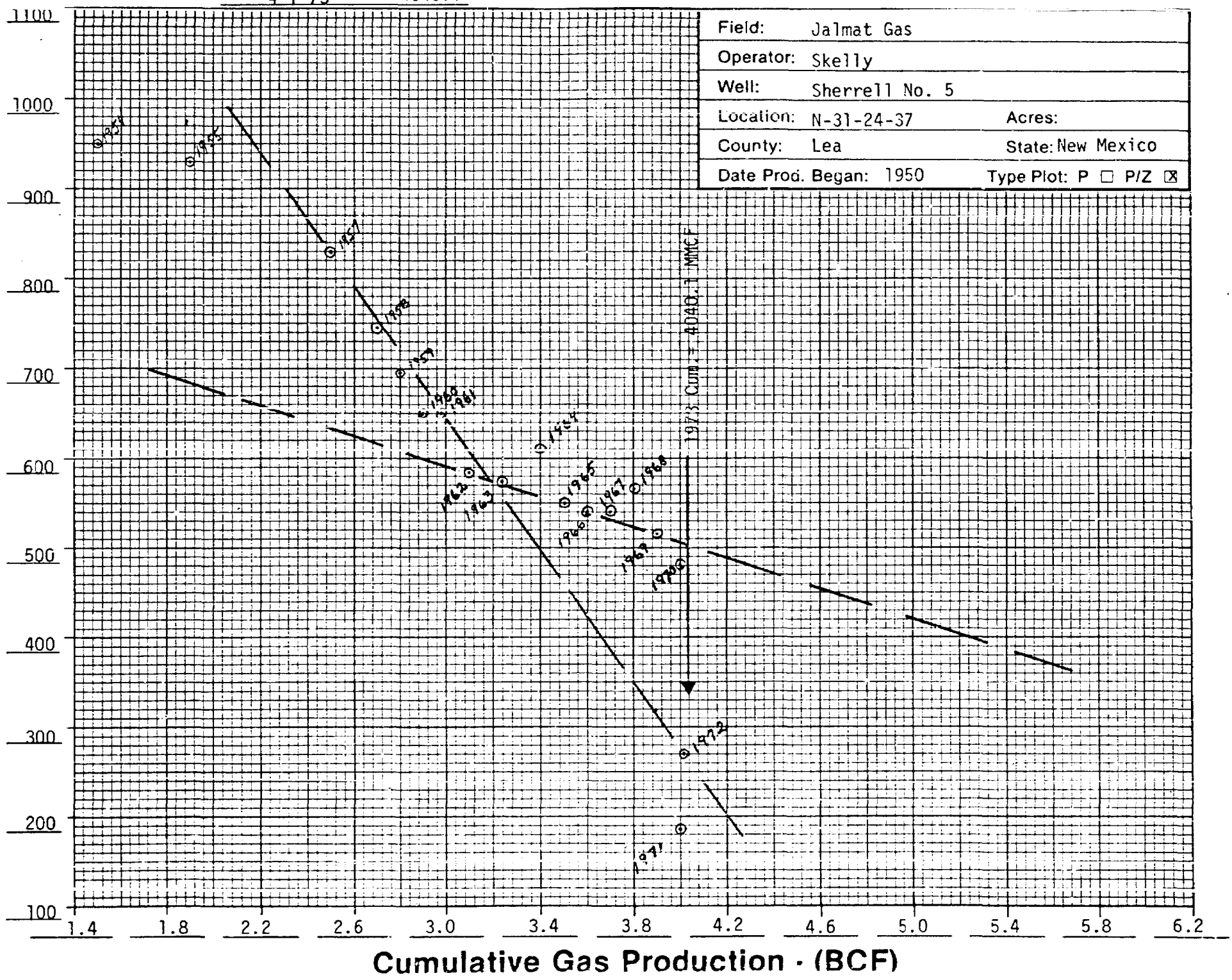
Plugged Back
Open Hole to
3000 Feet

DEC. MAR. JUN. SEP.

19 61 | 19 62 | 19 63 | 19 64 | 19 65 | 19 66 | 19 67 | 19 68 | 19 69 | 19 70 | 19 71 | 19 72 | 19 73 | 19 74

4-1-73 CUM: 4040.1

Field:	Jalmat Gas
Operator:	Skelly
Well:	Sherrell No. 5
Location:	N-31-24-37 Acres:
County:	Lea State: New Mexico
Date Prod. Began:	1950 Type Plot: P ☐ P/Z ☒



GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Union Texas Petroleum Corp.

Well: State "A-32" #4

Location: F-32-24-37

Pool: Jalmat Gas

Spud Date: 3-22-78 Original Completion Date: 4-9-78

Completion Interval (Gas): Perf 2913-3190 W/29

Completion Date (Gas): 4-9-78 First Production (Gas): 6-78

Remarks: First Production June 1978

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	80950	10119	163.2	N/A	N/A	
1978	7	82233	11748	82.2	N/A	N/A	

19 78 Detail Summary

Jan.		July	13572
Feb.		Aug.	13546
March		Sept.	11349
April		Oct.	11248
May		Nov.	9273
June	12455	Dec.	10790

19 79 Detail Summary

Jan.	12560	July	11486
Feb.	9201	Aug.	10190
March	9250	Sept.	
April	11783	Oct.	
May	7358	Nov.	
June	9122	Dec.	

Production (Y-T-D) 80950 MCF Avg. Rate (Y-T-D) 10119 MCF/mo.

Days or Months (Y-T-D) 8 mos.

9-1-79 Cum: 163.2 MMCF

Field:	Jalmat Gas
Operator:	Union Texas Petroleum Corp.
Well:	State "A-32" #4
Location:	F-32-24-37
County:	Lea State: New Mexico
Date Prod. Began:	6-78 Acres: 120

Gas Production - MCF/month

10000
1000
100

6-78: First Production

9-1-79 Cum. = 163.2 MMCF

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19 78 | 19 79 | 19 80 | 19 81 | 19 82 | 19 83 | 19 84 | 19 85 | 19 86 | 19 87 | 19 88 | 19 89 | 19 90 | 19 91

GAS PRODUCTION HISTORY

Date 11-13-79

Operator: Getty Oil Company

Well: Skelly "M" State #4

Location: L-32-24-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks: First Production Jan. 1979.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	7	23582	3369	23.6	N/A	N/A	

19____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Production (Y-T-D) 23582 MCF

Days or Months (Y-T-D) 7 mos.

19 79 Detail Summary

Jan.	3795	July	-0-
Feb.	5603	Aug.	22
March	3531	Sept.	
April	5848	Oct.	
May	3871	Nov.	
June	895	Dec.	

Avg. Rate (Y-T-D) 3369 MCF/mo.

9-1-79 Cum. 23.6 MMCF

Field:	Dalmat Gas
Operator:	Getty Oil Company
Well:	Skelly "M" State #4
Location:	L-32-24-37
County:	Lea State New Mexico
Date Prod. Began:	Jan. 1979 Acres: 120

Gas Production - MCF/month

10000
1000
100

1-79 First Production
9-1-79 Cum = 23.6 MMCF

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19 79 | 19 80 | 19 81 | 19 82 | 19 83 | 19 84 | 19 85 | 19 86 | 19 87 | 19 88 | 19 89 | 19 90 | 19 91 | 19 92

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Continental Oil Company

Well: Wells "B-1" #1

Location: A-1-25-36

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks: No Jalmat (Gas) production reported for years 1975 thru 1978.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	5	6331	1266	920.4	N/A	N/A	
1978	N/A	N/A	N/A	920.4	N/A	N/A	
1977	N/A	N/A	N/A	920.4	188.2	195	
1976	N/A	N/A	N/A	920.4	214.2	220	
1975	N/A	N/A	N/A	920.4	473.2	510	
1974	3	1372	457	914.1	43.2	45	
1973	12	3969	331	912.7	63.2	65	
1972	12	3313	276	908.7	558.2	620	
1971	12	1870	156	905.4	214.2	220	
1970	12	2334	195	903.5	421.2	450	
1969	11	1898	173	901.2	463.2	495	
1968	12	3553	296	899.3	506.2	550	
1967	11	9789	890	895.8	490.2	530	
1966	12	4479	373	886.0	447.2	480	
1965	12	18763	1564	881.4	428.2	460	
1964	12	19452	1621	862.7	441.2	480	
1963	12	24186	2016	843.3	447.2	485	
1962	12	43788	3649	819.1	N/A	N/A	
1961	12	75508	6292	775.3	491.2	530	
1960	12	60826	5069	699.8	533.2	580	

19 78 Detail Summary

Jan.	-0-	July	-0-
Feb.	-0-	Aug.	-0-
March	-0-	Sept.	-0-
April	-0-	Oct.	-0-
May	-0-	Nov.	-0-
June	-0	Dec	-0-

19 79 Detail Summary

Jan.	1453	July	1952
Feb.	-0-	Aug.	2542
March	42	Sept.	
April	342	Oct.	
May	-0-	Nov.	
June	-0-	Dec.	

Production (Y-T-D) 6331 MCF

Days or Months (Y-T-D) 5 mos.

Avg. Rate (Y-T-D) 1266 MCF/mo.

9-1-79 Cum: 920.4 MMCF

Field:	Jalmat Gas
Operator:	Continental Oil Company
Well:	Wells "B-1" #7
Location:	A-1-25-36
County:	Lea State: New Mexico
Date Prod. Began:	Acres:

Gas Production - MCF/month

10000
1000
100

9-1-79 920.4 MMCF

No Production Available
1975 thru 1978

DEC. MAR. JUN. SEP.

19 66 | 19 67 | 19 68 | 19 69 | 19 70 | 19 71 | 19 72 | 19 73 | 19 74 | 19 75 | 19 76 | 19 77 | 19 78 | 19 79

9-1-79 CUM:920.4 MMCF

Field:	Jalmat Gas		
Operator:	Continental Oil Company		
Well:	Wells "B-1" #1		
Location:	A-1-25-36	Acres:	
County:	Lea	State: New Mexico	
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	

Pressure or P/Z - (psia)

600
500
400
300
200
100

0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: El Paso Natural Gas

Well: E. J. Wells #13

Location: L-5-25-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	16657	2082	3014.7	N/A	N/A	
1978	12	23768	1981	2998.1	103.2	105	
1977	12	29350	2446	2974.3	114.2	115	
1976	12	59992	4999	2944.9	124.2	130	
1975	12	80506	6709	2884.9	123.2	125	
1974	12	83770	6981	2804.4	143.2	145	
1973	12	82850	6904	2720.7	148.2	150	
1972	12	99549	8296	2637.8	121.2	125	
1971	12	69851	5821	2538.3	189.2	195	
1970	12	92434	7703	2468.4	171.2	175	
1969	11	87814	7983	2376.0	189.2	195	
1968	9	85707	9523	2288.2	226.2	230	
1967	12	115946	9662	2202.5	215.2	220	
1966	12	103996	8666	2086.5	268.2	280	
1965	10	99284	9928	1982.5	289.2	305	
1964	11	142871	12988	1883.2	321.2	340	
1963	8	125397	15675	1740.4	377.2	410	
1962	9	77634	8626	1615.0	N/A	N/A	
1961	7	77386	11055	1537.3	455.2	490	
1960	3	30379	10126	1459.9	462.2	500	

1978 Detail Summary

Jan.	3528	July	1201
Feb.	2208	Aug.	1814
March	2186	Sept.	2223
April	1803	Oct.	2994
May	1531	Nov.	1693
June	1503	Dec	1084

1979 Detail Summary

Jan.	2015	July	2412
Feb.	1477	Aug.	2061
March	1598	Sept.	
April	831	Oct.	
May	3534	Nov.	
June	2729	Dec	

Production (Y-T-D) 16657 MCF

Avg. Rate (Y-T-D) 2082 MCF/mo.

Days or Months (Y-T-D) 8 mos.

9-1-79 Cum: 3014.7 MMCF

Field:	Jalmat Gas
Operator:	El Paso Natural Gas
Well:	E. J. Wells #13
Location:	L-5-25-37
County:	Lea State: New Mexico
Date Prod. Began:	Acres:

Gas Production - MCF/month

1000

100

33.1%/yr.

9-1-79 Cum. = 3014.7 MMCF

DEC. MAR. JUN. SEP.

1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

9-1-79 CUM: 3014.7 MMCF

Field:	Jalmat Gas
Operator:	El Paso Natural Gas
Well:	E. J. Wells #13
Location:	L-5-25-37 Acres: 120
County:	Lea State: New Mexico
Date Prod. Began:	Type Plot: P ☐ P/Z ☒

Pressure or P/Z - (psia)

600
550
500
450
400
350
300
250
200
150
100

1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6

Cumulative Gas Production - (BCF)

9-1-79 Cum = 3014.7 MMCF

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Oil Developement Company of Texas

Well: Wells "B-6" #1

Location: A-6-25-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	609	76	1741.3	N/A	N/A	
1978	12	1331	111	1741.2	128.2	130	
1977	12	3203	267	1739.9	131.2	135	
1976	12	5363	447	1736.6	213.2	215	
1975	12	5832	486	1731.3	224.2	230	
1974	12	3374	281	1725.4	191.2	200	
1973	12	7273	606	1722.1	212.2	220	
1972	12	3913	326	1714.8	234.2	240	
1971	12	2582	215	1710.9	253.2	260	
1970	12	11822	985	1708.3	269.2	280	
1969	12	11805	984	1696.5	271.2	280	
1968	11	17998	1636	1684.7	253.2	265	
1967	12	36210	3017	1666.7	309.2	325	
1966	11	34769	3161	1630.5	314.2	335	
1965	8	36898	4612	1595.7	312.2	330	
1964	10	60962	6096	1558.8	320.2	340	
1963	7	26094	3728	1497.2	383.2	405	
1962	7	13803	1972	1471.7	N/A	N/A	
1961	6	16577	2763	1457.9	461.2	500	
1960	8	21589	2699	1441.4	458.2	495	

19 78 Detail Summary

Jan.	164	July	140
Feb.	107	Aug.	149
March	144	Sept.	50
April	185	Oct.	17
May	22	Nov.	3
June	53	Dec.	227

19 79 Detail Summary

Jan.	313	July	19
Feb.	93	Aug.	16
March	90	Sept.	
April	30	Oct.	
May	26	Nov.	
June	22	Dec.	

Production (Y-T-D) 609 MCF

Days or Months (Y-T-D) 8 mos.

Avg. Rate (Y-T-D) 76 MCF/mo.

9-1-79 Cum: 1741.3 MMCF

Field:	Jalmat Gas
Operator:	Oil Developement Company of Texas
Well:	Wells "B-6" #1
Location:	A-6-25-37
County:	Lea State:New Mexico
Date Prod. Began:	Acres: 40

Gas Production - MCF/month

10000
1000
100

23.76%/yr.

9-1-79 Cum. = 1741.3 MMCF

DEC. MAR. JUN. SEP. DEC.

1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

9-1-79 CUM: 1741.3 MMCF

Field:	Jalmat Gas		
Operator:	Oil Developement Company of Texas		
Well:	Wells "B-6" #1		
Location:	A-6-25-37	Acres: 40	
County:	Lea	State: New Mexico	
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	

9-1-79 Cum.= 1741.3 MMCF

Pressure or P/Z - (psia)

600
500
400
300
200
100

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Skelly Oil

Well: J. W. Sherrell #3

Location: B-6-25-37

Pool: Jalmat Gas

Spud Date: 1-24-40 Original Completion Date: 3-6-40

Completion Interval (Gas): Perf 2830-3300 W/130

Completion Date (Gas): 7-19-47 First Production (Gas):

Remarks: Last Production 5-72. Converted to water injection 3100-3300 10-7-72.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)		
1972	5	15991	3198	1845.0	N/A		
1971	11	47244	4295	1829.0	288.2		
1970	12	23123	1927	1781.7	323.2		
1969	12	12337	1028	1758.6	340.2		
1968	12	13930	1161	1746.2	345.2		
1967	12	15931	1328	1732.3	356.2		
1966	12	15375	1281	1716.4	325.2		
1965	12	9503	792	1701.0	349.2		
1964	12	33129	2761	1691.5	366.2		
1963	12	90989	7582	1658.4	N/A		
1962	2	4472	2236	1567.4	448.2		
1961	9	70729	7859	1562.9	533.2		
1960	5	39661	7932	1492.2	563.2		
1959	4	10432	2608	1452.5	509.2		
1958	11	165001	15000	1442.1	549		
1957	3	50599	16866	1277.1	582		
1956	7	138423	19775	1226.5	719		
1955	4	52668	13167	1088.1	744		
1954	12	199384	16615	1035.4	847		
1953	12	126411	10534	836.0	859		

1971 Detail Summary

Jan.	6514	July	5256
Feb.	5362	Aug.	5108
March	5814	Sept.	3915
April	-0-	Oct.	3335
May	720	Nov.	1634
June	5047	Dec.	2939

1972 Detail Summary

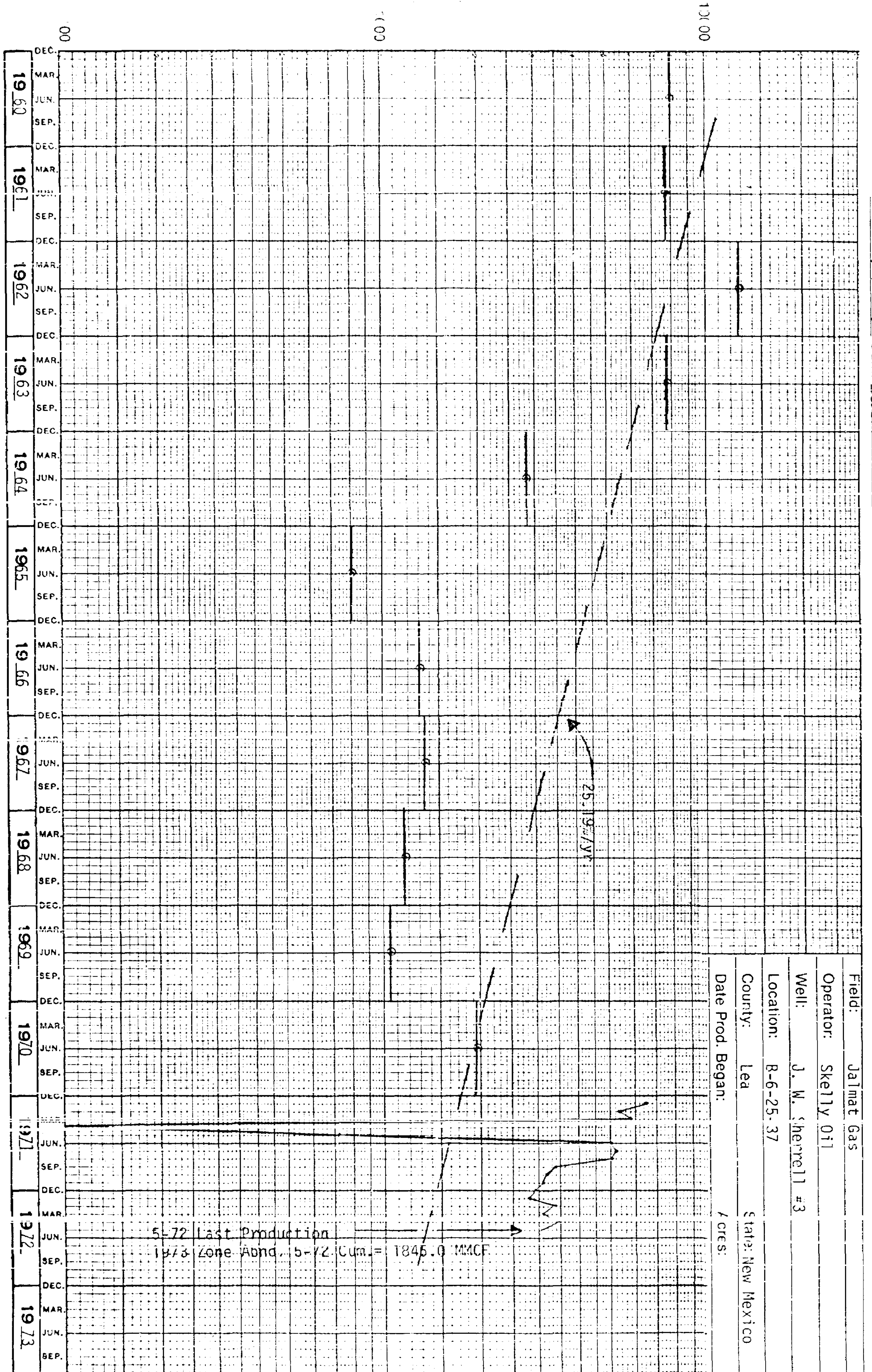
Jan.	2777	July	
Feb.	3345	Aug.	
March	3200	Sept.	
April	3524	Oct.	
May	3145	Nov	
June		Dec.	

Production (Y-T-D) 15991 MCF Avg. Rate (Y-T-D) 3198 MCF/mo.

Days or Months (Y-T-D) 5 mos.

B-6-25-37

Gas Production - MCF/month



6-1-72 CUM: 1845.0 MMCF

Field:	Jalmat Gas
Operator:	Skelly Oil
Well:	J. W. Sherrell #3
Location:	B-6-25-37 Acres:
County:	Lea State: New Mexico
Date Prod. Began:	Type Plot: P ☐ P/Z ☒

6-1-72 Cum = 1845.0 MMCF

Pressure or P/Z - (psia)

1100
1000
900
800
700
600
500
400
300
200
100

0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79

Operator: Atlantic Richfield Company

Well: Wells "WN" #1

Location: G-6-25-37

Pool: Jalmat Gas

Spud Date: 6-19-39 Original Completion Date: 10-19-39

Completion Interval (Gas): Perf 2830-3150 W/177

Completion Date (Gas): 10-19-39 First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	88385	11048	10275.5	N/A	N/A	
1978	12	136948	11412	10187.1	131.2	130	
1977	12	147336	12278	10050.2	136.2	140	
1976	12	175091	14591	9902.8	158.2	160	
1975	12	166033	13836	9727.7	160.2	160	
1974	12	105624	8802	9561.7	154.2	155	
1973	12	157622	13135	9456.1	162.2	165	
1972	12	134982	11249	9298.5	163.2	165	
1971	11	104175	9470	9163.5	174.2	180	
1970	11	81747	7432	9059.3	202.2	205	
1969	12	103583	8632	8977.5	212.2	215	
1968	12	92471	7706	8874.0	224.2	230	
1967	12	143554	11963	8781.5	248.2	255	
1966	11	120921	10993	8637.9	264.2	270	
1965	12	147053	12254	8517.0	280.2	290	
1964	12	183175	15265	8369.9	320.2	340	
1963	12	156141	13012	8186.8	364.2	390	
1962	10	111405	11141	8030.6	N/A	N/A	
1961	3	9491	3164	7919.2	444.2	475	
1960	11	31608	2873	7909.7	458.2	490	

1978 Detail Summary

Jan.	11950	July	10903
Feb.	10571	Aug.	11393
March	12238	Sept.	11220
April	11353	Oct.	11575
May	12377	Nov.	10997
June	9959	Dec.	12412

1979 Detail Summary

Jan.	11503	July	10889
Feb	10601	Aug.	10542
March	11803	Sept.	
April	11694	Oct.	
May	9995	Nov.	
June	11358	Dec.	

Production (Y-T-D) 88385 MCF

Days or Months (Y-T-D) 8 mos.

Avg. Rate (Y-T-D) 11048 MCF/mo.

9-1-79 Cum 10275.5 MMCF

Field:	Jalmat Gas
Operator:	Atlantic Richfield Company
Well:	Well: "WN" #1
Location:	G-6-25-37
County:	Lea State: New Mexico
Date Prod. Began:	Acres: 160

Gas Production - MCF/month

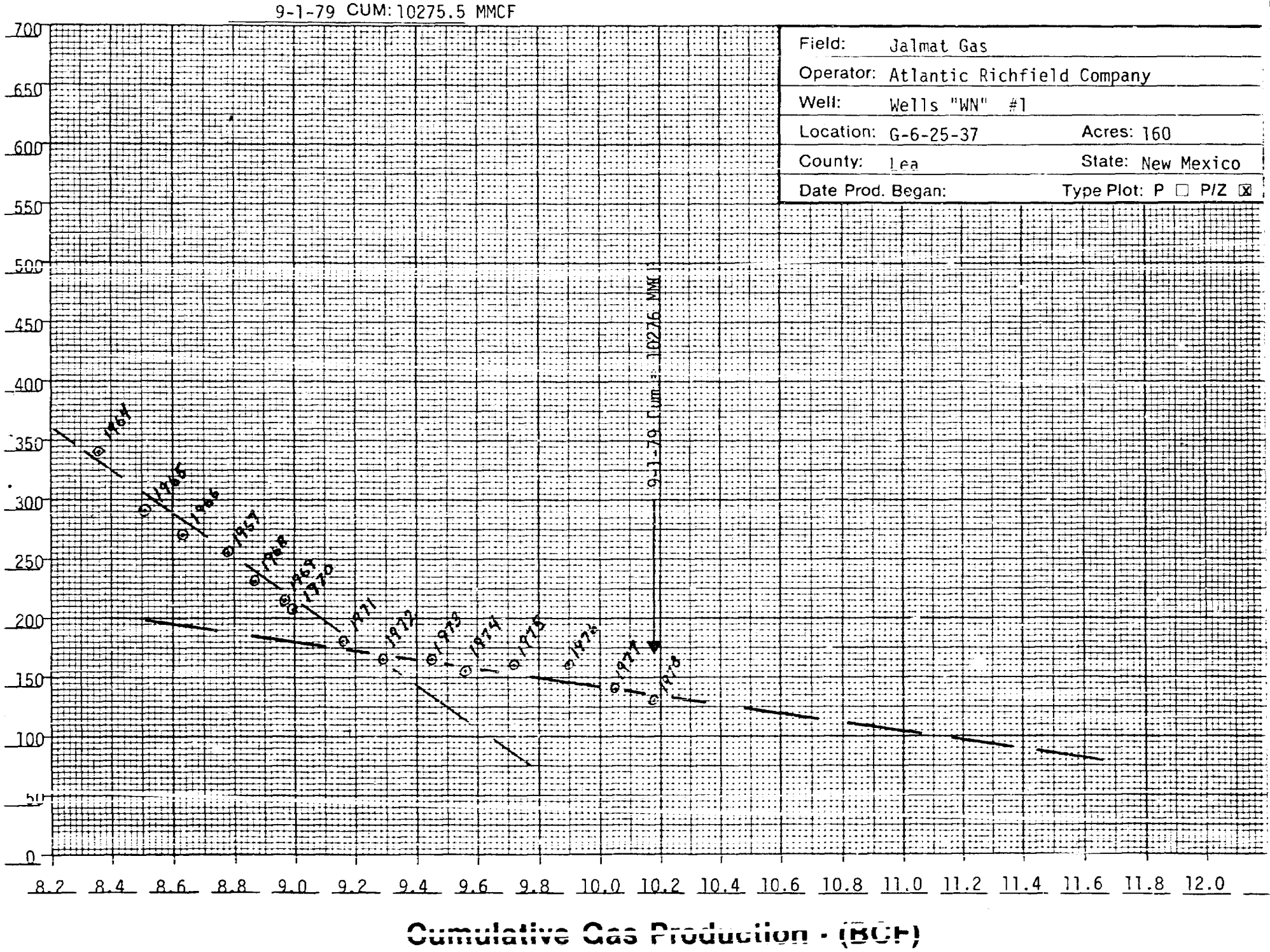
9-79 Cum = 10275.5 MMCF

6.72%/yr.

1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

9-1-79 CUM: 10275.5 MMCF

Field:	Jalmat Gas		
Operator:	Atlantic Richfield Company		
Well:	Wells "WN" #1		
Location:	G-6-25-37	Acres: 160	
County:	Lea	State: New Mexico	
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	



GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Phillips Petroleum Company

Well: C. D. Woolworth (Group 3) #2

Location: H-6-25-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	19683	2460	2464.8	N/A	N/A	
1978	12	35208	2934	2445.1	153.2	150	
1977	12	31980	2665	2409.9	136.2	140	
1976	12	28644	2387	2378.0	181.2	185	
1975	7	8149	1164	2349.3	89.2	90	
1974	12	17934	1495	2341.2	104.2	105	
1973	12	31762	2647	2323.2	N/A	N/A	
1972	11	68126	6193	2291.5	154.2	160	
1971	12	72714	6059	2223.3	168.2	170	
1970	12	91255	7605	2150.6	176.2	180	
1969	12	93728	7811	2059.4	197.2	200	
1968	12	86208	7184	1965.6	216.2	220	
1967	12	123712	10309	1879.4	240.2	250	
1966	12	132169	11014	1755.7	241.2	250	
1965	12	169403	14117	1623.6	267.2	275	
1964	12	176257	14688	1454.2	297.2	315	
1963	10	159602	15960	1277.9	340.2	360	
1962	9	86468	9608	1118.3	N/A	N/A	
1961	7	77835	11119	1031.8	440.2	470	
1960	1	7594	7594	954.0	442.2	480	

19 78 Detail Summary

Jan.	3605	July	2824
Feb.	3045	Aug.	3157
March	3867	Sept.	2365
April	2682	Oct.	2332
May	3021	Nov.	2280
June	2784	Dec.	2437

19 79 Detail Summary

Jan.	2423	July	2265
Feb.	2248	Aug.	2328
March	2670	Sept.	
April	2488	Oct.	
May	2352	Nov.	
June	2908	Dec.	

Production (Y-T-D) 19683 MCF Avg. Rate (Y-T-D) 2460 MCF/mo.

Days or Months (Y-T-D) 8 mos.

9-1-79 Cum. 2464.8 MMCF

Field:	Jalmat Gas
Operator:	Phillips Petroleum Company
Well:	C. D. Woolworth (Group 3) #2
Location:	H-6-25-37
County:	Lea — State: New Mexico
Date Prod. Began:	Acres: 160

13.58%/yr.

9-1-79 Cum. = 2464.8 MMCF

Gas Production - MCF/month

10000
1000
100

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1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

9-1-79 CUM: 2464.8 MMCF

Field:	Jalmat Gas		
Operator:	Phillips Petroleum Company		
Well:	C. D. Woolworth (Group 3) #2		
Location:	H-6-25-37	Acres: 160	
County:	Lea	State: New Mexico	
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	

9-1-70 CUM. = 2435 MMCF

Pressure or P/Z - (psia)

600
550
500
450
400
350
300
250
200
150
100

0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Phillips Petroleum

Well: C. D. Woolworth (Group 3) #1

Location: M-6-25-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	5	6719	1344	2701.2	N/A	N/A	
1978	12	31749	2646	2694.4	88.2	90	
1977	11	24640	2240	2662.7	N/A	N/A	
1976	11	25928	2357	2638.0	54.2	55	
1975	12	38209	3184	2612.1	140.2	145	
1974	12	45572	3798	2573.9	154.2	160	
1973	12	88112	7343	2528.3	137.2	140	
1972	12	128828	10736	2440.2	144.2	150	
1971	11	101174	9198	2311.4	118.2	120	
1970	12	139999	11667	2210.2	166.2	170	
1969	12	132647	11054	2070.2	168.2	170	
1968	11	92911	8446	1937.6	209.2	215	
1967	12	147213	12268	1844.6	207.2	215	
1966	12	139167	11597	1697.4	220.2	225	
1965	12	145286	12107	1558.3	246.2	250	
1964	11	173355	15759	1413.0	281.2	290	
1963	12	153902	12825	1239.6	291.2	295	
1962	11	152808	13892	1085.7	N/A	N/A	
1961	10	136579	13658	932.9	358.2	380	
1960	6	76031	12672	796.3	396.2	425	

1978 Detail Summary

Jan.	2396	July	2917
Feb.	2224	Aug.	3264
March	2231	Sept.	2250
April	1170	Oct.	3586
May	485	Nov.	3537
June	2619	Dec.	3870

1979 Detail Summary

Jan	1315	July	2080
Feb.	-0-	Aug.	2196
March	-0-	Sept.	
April	14	Oct.	
May	-0-	Nov.	
June	1114	Dec.	

Production (Y-T-D) 6719 MCF

Days or Months (Y-T-D) 5 mos.

Avg. Rate (Y-T-D) 1344 MCF/mo.

M-6-25-37

9-1-79 Cum: 2701.2

Field:	Jalmat Gas
Operator:	Phillips Petroleum
Well:	C. D. Woolworth (Group 3) #1
Location:	M-6-25-37
County:	Lea — State: New Mexico
Date Prod. Began:	Acres: 160

20.90%/yr.

9-1-79
Cum. = 2701.2 MMCF

Gas Production - MCF/month

10000
1000
100

DEC. MAR. JUN. SEP. DEC.

1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

9-1-79 CUM: 2701.2 MMCF

Field:	Jalmat Gas	
Operator:	Phillips Petroleum Company	
Well:	C. D. Woolworth (Group 3) #1	
Location:	M-6-25-37	Acres: 160
County:	Lea	State: New Mexico
Date Prod. Began:		Type Plot: P ☐ P/Z ☒

Pressure or P/Z - (psia)

500
400
300
200
100
0

0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Doyle Hartman

Well: Etz #1

Location: D-7-25-37

Pool: Jalmat Gas

Spud Date: 11-24-77 Original Completion Date: 12-15-77

Completion Interval (Gas): Perf 2852-3198 W/16

Completion Date (Gas): 12-15-77 First Production (Gas): 12-77

Remarks: First Production Dec. 1977.
Producing rate restricted from 6-78 thru 3-79 due to production overage.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	46235	5779	146.0	N/A	N/A	
1978	11	94380	8580	99.8	N/A	N/A	
1977	1	5444	5444	5.4	N/A	N/A	

1978 Detail Summary

Jan.	12535	July	-0-
Feb.	12829	Aug.	2725
March	14989	Sept.	3144
April	15906	Oct.	3006
May	17528	Nov.	3630
June	4248	Dec.	3842

1979 Detail Summary

Jan.	4138	July	6167
Feb.	3715	Aug.	6981
March	4115	Sept.	
April	8474	Oct	
May	6692	Nov.	
June	5953	Dec.	

Production (Y-T-D) 46235 MCF Avg. Rate (Y-T-D) 5779 MCF/mo.

Days or Months (Y-T-D) 8 mos.

9-1-79 Cum: 140.0 MMCF

Field:	Jalmat Gas
Operator:	Doyle Hartman
Well:	Etz #1
Location:	D-7-25-37
County:	Lea — State: New Mexico
Date Prod. Began:	12-77 — Acres: 77

Gas Production - MCF/month

10000

1000

100

First Production 12-77

9-1-79 Cum. = 146.0 MMCF

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1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990

RADTKE, AYCOCK, & ASSOCIATES, INC.
Petroleum Engineering Consultants
310 WALL TOWERS WEST
MIDLAND, TEXAS 79701
TELEPHONE 915/684-8044

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
Applicant's EXHIBIT NO. 6
CASE NO. 6774
Submitted by Hartman
Hearing Date 1/3/80

November 26, 1979

Mr. Doyle Hartman
508 C&K Petroleum Building
Midland, Texas 79701

Subject: Proposed Jalmat Pool Gas Infill
Development Well @
590' FNL & 660' FWL, Section 6
Township 25-S, Range 37-E
Lea County, New Mexico

Dear Mr. Hartman:

You have requested that we perform an engineering study of the existing and former Jalmat Pool gas wells in the vicinity of the proposed well location. The purposes of this effort were three-fold:

1. To assess the apparent physical and economic risks associated with drilling the proposed well.

2. To estimate the increased gas recovery attributable to the proposed well, in order that the gas from the proposed well qualify for the Natural Gas Policy Act infill price.

3. To advise you as to whether or not the drilling of the proposed well will serve to protect correlative rights and prevent waste.

The numerical results resulting from our study of 18 wells included in our study sample are detailed on the attached table.

The physical risks associated with drilling the proposed well can be classified as: reservoir quality risk, produced fluid risk and mechanical risk. In relation to the proposed well, the reservoir quality risk is apparently minimal, since the proposed location is surrounded by existing or former gas producing wells, completed in the Jalmat Pool reservoirs. The reservoir fluid risk may be either minimal or substantial, depending upon whether or not extraneous water is still being injected into the lower portion of the Jalmat geologic interval as it apparently formerly was immediately east of the proposed location. The mechanical risk associated with drilling the proposed well is minimal, since the depth is shallow and the time required to drill the well is short. The only exception to this opinion is the possibility of encountering gas at sufficient pressures to generate a "blowout" with circulating

fluid of appropriate density to control the Jalmat zones at a depth of about 750 feet. Since you have provided for a string of casing to be run in your projected costs should such gas be encountered while drilling the proposed well, this potential mechanical problem should prove economically surmountable.

In reference to the reservoir fluid risk, if extraneous water injection into a portion of the Jalmat geologic interval is and/or has been occurring, then the risk associated with drilling the proposed well could be considerable.

The economic risks associated with drilling the proposed well derive from the possibility of receiving too low a gas price to amortize the initial drilling and completion investment and/or experiencing water production with the gas at such rates and associated costs that gas production is, and/or gas reserves consequently become, uneconomical. Since you will doubtlessly not drill the proposed well without prior assurance of receiving a sufficient gas price that will provide you an economic incentive, the major economic risk is the possibility of experiencing water production with the gas at rates beyond your ability to remove it from the well and properly dispose of it. As you have included the investment for a pumping unit in your projected costs, you should be able to sustain gas production unless the experienced rate of water production is greater than expected.

The potential gas reserves attributable to the proposed well can be estimated by making a statistically derived volumetric estimate as follows:

Parameter	Value of Parameter			
	Mean	Median	Std. Dev.	Used
Porosity, % of bulk vol.	0.165	0.190	0.055	0.178
Con.Wtr.Stn.,% of pore space	0.308	0.250	0.105	0.279
Net Effective Pay, feet	83.0	62.5	50.3	72.8
Drainage Area, acres	60.0	64.0	17.4	62.0
Initial SIWHP, psia	131.4	136.7	20.0	134.1

These parameters yield an original gas-in-place of 228 MMCF; incorporating an estimated final BHP/Z of 60.8 psia with the above, the estimated ultimate gas recovery is 134 MMCF.

Alternately, the additional gas that would have been produced from four wells, had their depletion proceeded according to their originally established production rate trends, can be used as a measure of the additional gas potentially recoverable from the proposed well:

Operator, Lease and Well	Potential Additional Gas Recovery Based Upon Gas Rec. Factors As Indicated, MMCF Gas R.F.=0.768	Gas R.F.=0.945
Texaco, Inc. Fristoe No. 2	863.1	1592.2
Skelly Oil Co. Sherrell No. 5	529.5	1582.7
Conoco, Inc. Wells B-1 No. 1	2591.9	3432.6
Pet.Corp. of Texas St. "A" No. 2	748.6	966.4
Totals	4733.1	7573.9

This gas recovery factor of 0.768 was derived from the mean of all 11 values from the 18 well sample; the gas recovery factor of 0.945 was derived from the four highest recovery factors, representative of maximum.

These wells are located from 300 feet to 3100 feet from the proposed location, so it is not unreasonable to anticipate that some substantial portion of these gas volumes should be recovered by the proposed well.

Also, a qualitative statistical analysis of the per well estimated ultimate gas recovery for the 18 wells included in the study sample can be summarized as follows:

Basis for Statistical Comparison	Value
Mean Value	2182.3
Median Value	1506.5
Minimum Value	31.6
Maximum Value	11470.7
Standard Deviation	2843.2

The mean effective drainage area being much less than the development density also indicates the need for an additional well or wells to adequately drain the acreage in question.

In summary, the anticipated additional gas volumes potentially recoverable by the proposed well are as follows:

Method	Additional Gas Recovery, MMCF
Statistical Volumetric	134 minimum
Not Produced by Nearby Wells	4730 to 7570
Statistical EUR	1506 to 2180

Because there appears to be substantial additional gas that should be recovered by the proposed well that is probably not otherwise recoverable, the drilling of the proposed well should serve to prevent waste. For the same reasons, the correlative rights of the royalty and working interest owners should be protected by the drilling of the proposed well.

We believe that our study indicates that the risks associated with drilling the proposed well are acceptable to you, as evidenced by your current activities. We also believe that the evidence indicates that there are probably substantial gas reserves underlying the tracts proposed for communitization that are not recoverable unless the proposed (or another well) is drilled on this acreage. We also believe that the proposed well should serve to prevent waste and protect correlative rights.

Very truly yours,

Wm. P. Aycock, P.E.

WPA/bw

Attachment

SUMMARY OF INDIVIDUAL WELL INFORMATION FOR DOYLE HARTMAN
FOR WELLS IN THE VICINITY OF THE DOYLE HARTMAN FEDERAL JALMAT COM.
590 FNL & 660' FWL, SECTION 6, TOWNSHIP-25-S, RANGE-37-E
JALMAT (TANSILL-YATES-? RIVERS) POOL, LEA COUNTY, NEW MEXICO

	Texaco Inc. C.C.Fristoe 2	Skelly Oil Sherrell 5	Conoco,Inc. Wells "B-1 1	Getty Oil Sherrell 3	Reserve Oil Martin "B" 1	Pet.Corp.of TX St. "A" 2	Getty Oil J.W.Sherrell 9	Phillips Pet. Vernon 1	ARCO "WN" 1	Oil Dev. Co. TA,Wells "A" 6-1	Conoco, Inc. Wells B-2 4	Phillips Woolworth 2	Millard Deck Shell-State 2	Phillips Woolworth 1	Reserve Oil Martin 2	Union Langl Unit
Location of Well	31M-24S-37E	31N-24S-37E	1A-25S-36E	6B-25S-37E	31F-24S-37E	36H-24S-36E	31J-24S-37E	36J-24S-36E	6G-25S-37E	6A-25S-37E	11-25S-36E	6H-25S-37E	36F-24S-36E	6M-25S-37E	31A-24S-37E	32E-2
Distance & Direction from Proposed Location	1300' N	2400' NE	1300' W	3000' E	4300' NNE	4000' NNW	4000' NE	6250' NW	3000' SE	4200' E	2800' SW	4000' SE	5500' NW	4000' S	6500' NE	65.0
Completion Date	11-21-48	9-9-49	-	-	10-10-47	-	9-16-78	7-21-76	10-13-39	-	7-8-77	2-14-55	1-17-69	7-8-46	-	
Completion Interval	2760-2960	2720-3350	-	2830-3300	2862-3187	2813-2920	2892-3105	2808-3006	2830-3150	-	2850-3043	2900-3050	2701-2721	-	-	
Initial CAOFP, MCF/day	16,500	16,000	-	1,500	9240	-	375	*	15,000	-	712	5800	912	500	-	
Cum. Gas Prod., MMCF @ 8-1-79	2300.3	4040.1	926.7	1845.0	3221.3	110.0	14.7	25.3	10,265.0	1741.8	172.8	2962.5	16.9	2699.0	4750.9	12
Volumetric Analysis Results:																
Mean Eff. Por., % Bulk Vol.	-	19.3	-	-	20.1**	22.4	12.5	-	-	-	-	-	6.4	-	-	
Mean Con. Wtr. Stn., % NEPS	-	26.	-	-	23. **	21.	45.	-	-	-	-	-	46.	-	-	
Net Effective Pay, feet	-	177.	-	-	118. **	63.	62.	-	-	-	-	-	25.	-	-	
Original Gas-in-place, MMCF/acre	-	74.9	-	-	54.2	32.9	12.4	-	-	-	-	-	2.55	-	-	
Estimated OGIP, MMCF	4119	5950.	4750	2155	3445	1230	-	-	12,235.	2138	-	2770	-	3707	4963	
Est. Ult. Gas Recovery, MMCF	2300.3	4040.1	1056.1	1845.0	3220.9	196.0	239.1	31.6	11,470.7	1742.1	349.9	2528.0	16.9	3028.9	4794.6	12
Est. Gas Rec. Factor, % OGIP	55.9	67.9	22.2	85.6	93.5	16.0	-	-	93.8	81.4	-	94.9		81.7	96.6	
Est. Effect. Drainage Area, acres	-	79.	-	-	64.	37.	-	-	-	-	-	-	-	-	-	
1978 SIWHP, psia	-	-	-	-	154.2	142.2	-	-	131.2	128.2	118.2	153.2	-	88.2	156.2	

*Jalmat Pool (oil well)
**Log analysis from twin well: Union Texas Petroleum Corp. Langlie Jal Unit No. 13.

SUMMARY OF INDIVIDUAL WELL INFORMATION FOR DOYLE HARTMAN
FOR WELLS IN THE VICINITY OF THE DOYLE HARTMAN FEDERAL JALMAT COM.
590 FNL & 660' FWL, SECTION 6, TOWNSHIP-25-S, RANGE-37-E
JALMAT (TANSILL-YATES-7 RIVERS) POOL, LEA COUNTY, NEW MEXICO

...lly Oil ...errell 5	Conoco, Inc. Wells "B"-1 1	Getty Oil Sherrell 3	Reserve Oil Martin "B" 1	Pet. Corp. of TX St. "A" [illegible]	Getty Oil J.W. Sherrell 5	Phillips Pet. Vernon 1	ARCO "WN" 1	Oil Dev. Co. TX Wells "B" 6-1	Conoco, Inc. Wells B 1 4	Phillips Woolworth 2	Millard Deck Snell-State 2	Phillips Woolworth 1	Reserve Oil Martin 2	Union Texas Langlie Jal Unit 10	Conoco, Inc. Wells "A" 2	Union Texas St. "A"-32 4
...-24S-37E	1A-[illegible]-36E	6B-25S-37E	31F-24S-37E	36H-24S-36E	[illegible]	36J-24S-36E	6G-25S-37E	6A-25S-37E	1I-25S-36E	6H-25S-37E	36F-24S-36E	6M-25S-37E	31A-24S-37E	32E-24S-37E	1E-25S-36E	32F-24S-37E
...' NE	1300' W	3000' E	4300' NNE	4000' NNW	4000' NE	6250' NW	3000' SE	4200' E	2800' SW	4000' SE	5500' NW	4000' S	6500' NE	6500' ENE	5200' WSW	7000' NE
...-9-49	-	-	10-10-47	-	9-16-78	7-21-76	10-19-39	-	7-8-77	2-14-55	1-17-69	7-8-45	-	-	4-6-55	4-9-78
[illegible]	-	2830-3300	2862-3187	2813-2920	2892-3103	2808-3006	2830-3150	-	2850-3043	2900-3050	2701-2721	-	-	-	[illegible]	[illegible]
6,000	-	1,500	[illegible]		[illegible]	*	15,000	-	712	5800	912	500	-	-	409	300
...40.1	926.7	1845.0	[illegible]	110.0	14.7	25.3	10,265.0	1741.8	172.8	2962.5	16.9	2699.0	4750.9	1270.9	88.1	153.0
...9.3	-	-	20.1**	22.4	12.3	-	-	-	-	-	6.4	-	-	-	-	18.6
...6.	-	-	23. **	21.	45.	-	-	-	-	-	46.	-	-	-	-	24.
...7.	-	-	118. **	63.	62.	-	-	-	-	-	25.	-	-	-	-	53.
...4.9	-	-	54.2	32.9	12.4	-	-	-	-	-	2.55	-	-	-	-	22.3
...50.	4750	2155	3445	1230	-	-	12,235.	2138	-	2770	-	3707	[illegible]	-	-	-
...40.1	1056.1	1845.0	3220.9	196.0	239.1	31.6	11,470.7	1742.1	349.9	2628.0	16.9	3028.9	4794.6	1270.9	88.1	962.5
....9	22.2	85.6	93.5	15.0	-	-	93.8	81.4	-	94.9	-	81.7	96.6	-	-	-
...9.	-	-	64.	37.	-	-	-	-	-	-	-	-	-	-	-	-
...-	-	-	154.2	142.2	-	-	131.2	128.2	118.2	153.2	-	88.2	136.2	-	-	-

... Corp. Langlie Jal Unit No. 13.

GAS PRODUCTION HISTORY

Date 10-19-79 Page 1 of 1

Operator: Millard Deck

Well: Shell State No. 2

Location: F-36-24-36

Pool: Jalmat Gas

Spud Date: 1-4-68 Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas): 5-69

Remarks: 1970 Shut-in
Last Production 12-69

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1969	7	16907	2415	16.9	448.2	490	

Exhibit 5
Case 6774

19____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

19 69 Detail Summary

Jan.		July	245
Feb.		Aug.	429
March		Sept.	776
April		Oct.	341
May	3870	Nov.	107
June	11139	Dec.	-0-

Production (Y-T-D) 16907 MCF Avg. Rate (Y-T-D) 2415 MCF/mo.

Days or Months (Y-T-D) 7 mos.

12-69 Cum. 16.9 MMCF

Field:	Jalmat Gas
Operator:	Millard Deck
Well:	Shell State No. 2
Location:	F-36-24-36
County:	Lea State: New Mexico
Date Prod. Began:	5-69 Acres:

Gas Production - MCF/month

10000

1000

100

5-69 First Production

12-69 Last Production
Cum. = 16.9 MMCF

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1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982

GAS PRODUCTION HISTORY

Date 10-19-79 Page 1 of 1

Operator: Petroleum Corporation of Texas

Well: Langlie "A" State No. 2

Location: H-36-24-36

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks: Recompleted Jalmat Gas 1970.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	7	6601	943	110.0	N/A	N/A	
1978	12	13259	1105	103.4	142.2	145	
1977	9	9405	1045	90.1	23.2	25	
1976	12	13407	1117	80.7	217.2	225	
1975	12	12114	1009	67.3	213.2	220	
1974	12	11534	961	55.2	222.2	230	
1973	12	14948	1246	43.7	217.2	225	
1972	12	15301	1275	28.8	214.2	220	
1971	12	5338	445	13.5	183.2	190	
1970	12	8190	683	8.2	N/A	N/A	

19 78 Detail Summary

Jan.	1456	July	1048
Feb.	1256	Aug.	1117
March	1266	Sept.	929
April	1102	Oct.	1036
May	1123	Nov.	999
June	827	Dec.	1100

19 79 Detail Summary

Jan.	1153	July	851
Feb.	1108	Aug.	
March	1065	Sept.	
April	871	Oct.	
May	838	Nov.	
June	715	Dec.	

Production (Y-T-D) 6601 MCF

Days or Months (Y-T-D) 7 mos.

Avg. Rate (Y-T-D) 943 MCF/mo.

8-1-79 Cum. [illegible]

Field:	Jalmat Gas
Operator:	Petroleum Corp. of Texas
Well:	Langlie "A" State No. 2
Location:	H-36-24-36
County:	Lea State: New Mexico
Date Prod. Began:	Jalmat 1970 Acres: 80

Gas Production - MCF/month

10000
1000
100

1970 Recompleted Jalmat Gas

8-1-79 Cum. = 110.0 MMCF

6.48 %/yr.

DEC. MAR. JUN. SEP.

1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983

8-1-79 CUM: 110.0 MMCF

Field:	Jalmat Gas
Operator:	Petroleum Corp. of Texas
Well:	Langlie "A" State No. 2
Location:	H-36-24-36 Acres: 80
County:	Lea State: New Mexico
Date Prod. Began:	Jalmat "70" Type Plot: P ☐ P/Z ☒

Pressure or P/Z - (psia)

550
500
450
400
350
300
250
200
150
100
50

1970 Recompleted to Jalmat Gas

8-1-79 Cum = 110.0 MMCF

1971
1972
1973
1974
1975
1976
1977
1978

0.006 0.016 0.025 0.036 0.046 0.056 0.066 0.076 0.086 0.096 0.106 0.116 0.126

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79

Operator: Gulf

Well: C. D. Woolworth No. 3

Location: K-30-24-37

Pool: Jalmat Gas

Spud Date: 5-9-49 Original Completion Date: 6-12-49

Completion Interval (Gas): OH 2930-3300

Completion Date (Gas): 6-12-49 First Production (Gas):

Remarks: Last production 11-78

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1978	11	64125	5829	5904.0	N/A	N/A	
1977	11	48328	4393	5840.0	N/A	N/A	
1976	12	155731	12978	5791.5	172.2	175	
1975	11	112350	10214	5636.0	168.2	170	
1974	12	99810	8318	5523.6	200.2	205	
1973	6	17798	2966	5423.6	196.4	200	
1972	12	117083	9757	5405.8	207.2	210	
1971	12	151594	12633	5288.7	169.8	170	
1970	12	152052	12671	5137.1	227.0	230	
1969	12	202769	16897	4985.1	206.2	210	
1968	11	191935	17449	4782.3	197.0	200	
1967	12	271492	22624	4590.4	254.0	260	
1966	12	251480	20957	4318.9	232.9	240	
1965	12	378061	31505	4067.4	283.8	290	
1964	12	159740	13312	3689.3	379.2	395	
1963	12	210089	17507	3529.6	356.2	380	
1962	12	244396	20366	3319.5	411.1	430	
1961	12	228190	19015	3075.1	428.7	460	
1960	12	338413	28201	2846.9	454.6	490	
1959	8	295686	36961	2508.5			

19 77 Detail Summary

Jan.	10845	July	8099
Feb.	9286	Aug.	3971
March	6133	Sept.	2014
April	1647	Oct.	835
May	3418	Nov.	-0-
June	2070	Dec.	10

Production (Y-T-D) 64125 MCF

Days or Months (Y-T-D) 11 mo.

19 78 Detail Summary

Jan.	14	July	5854
Feb.	1952	Aug.	10599
March	9171	Sept.	6688
April	10351	Oct.	109
May	7951	Nov.	811
June	10625	Dec.	-0-

Avg. Rate (Y-T-D) 5829 MCF/mo.

1-1-79 Cum: 5904.0 MMCF

Gas Production - MCF/month

10000
1000
100

DEC. MAR. JUN. SEP.

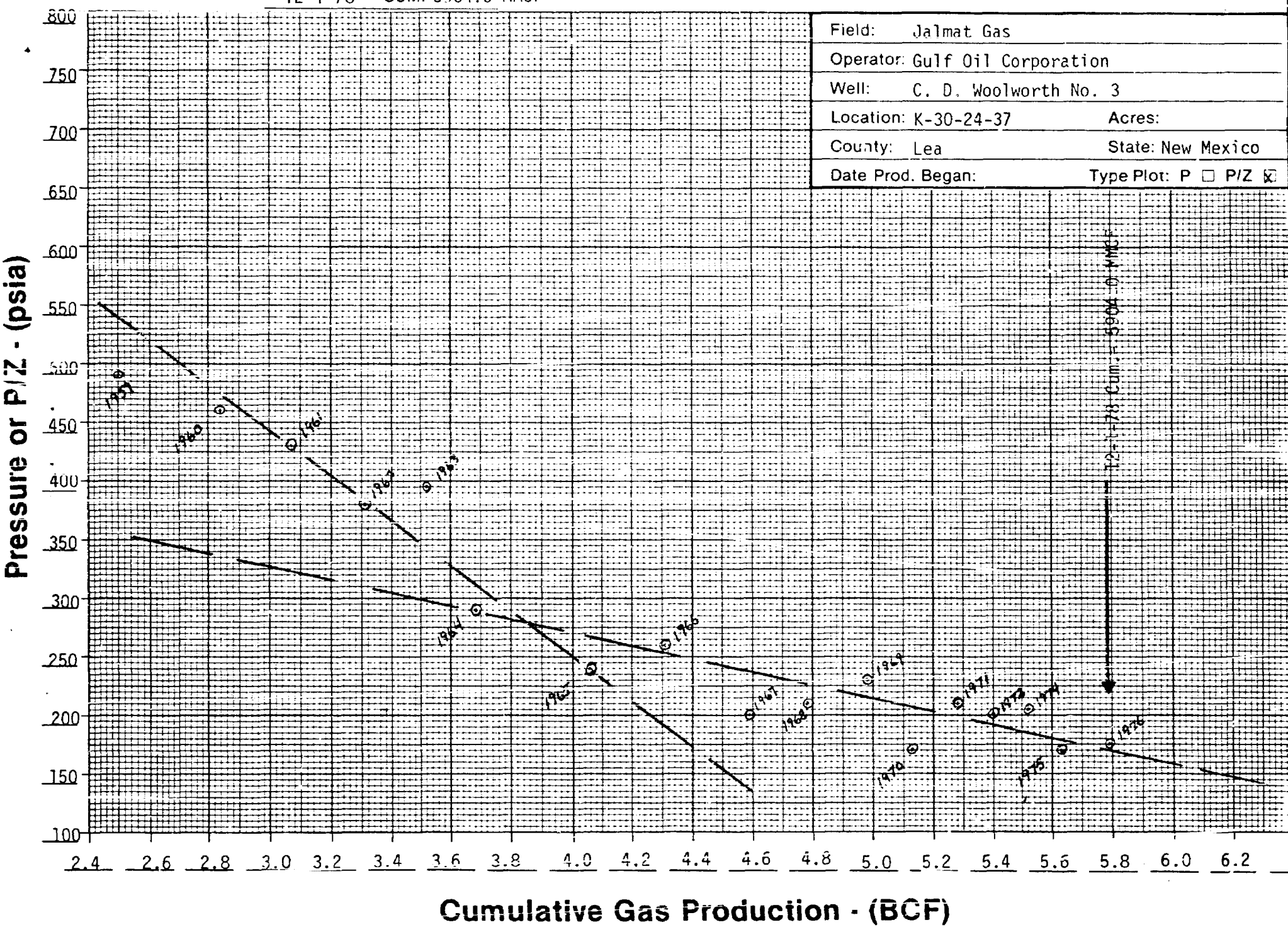
1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

Field: Jalmat Gas
Operator: Gulf
Well: C. D. Woolworth No. 3
Location: K-30-24-37
County: Lea State: New Mex
Date Prod. Began: Acres:

Cum. = 5904.0 MMCF
12-1-78

12-1-78 CUM: 5904.0 MMCF

Field:	Jalmat Gas
Operator:	Gulf Oil Corporation
Well:	C. D. Woolworth No. 3
Location:	K-30-24-37 Acres:
County:	Lea State: New Mexico
Date Prod. Began:	Type Plot: P ☐ P/Z ☒



GAS PRODUCTION HISTORY

Date 11-20-79 Page 1 of 1

Operator: Reserve Oil Co.

Well: Martin #2

Location: A-31-24-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	6378	797	4751.6	N/A	N/A	
1978	12	13870	1156	4745.2	136.2	140	
1977	12	17044	1420	4731.4	143.2	150	
1976	12	19401	1617	4714.3	354.2	325	
1975	12	23572	1964	4694.9	168.2	180	
1974	12	26964	2247	4671.3	133.2	140	
1973	12	28654	2388	4644.4	211.2	220	
1972	12	30086	2507	4615.7	203.2	210	
1971	12	31240	2603	4585.6	234.2	250	
1970	12	34661	2888	4554.4	236.2	250	
1969	12	34340	2862	4519.7	261.2	275	
1968	12	44884	3740	4485.4	261.2	275	
1967	12	53111	4426	4440.5	295.2	310	
1966	12	64951	5413	4387.4	305.2	320	
1965	12	83154	6930	4322.5	339.2	360	
1964	12	98395	8200	4239.3	378.2	410	
1963	12	117764	9814	4140.9	419.2	455	
1962	10	71148	7115	4023.1	N/A	N/A	
1961	10	50654	5065	3952.0	538.2	590	
1960	12	69586	5799	3901.3	493.2	540	

19____ Detail Summary

Jan.	1420	July	1284
Feb.	1092	Aug.	1367
March	1207	Sept.	1109
April	1186	Oct.	1017
May	1293	Nov.	898
June	1170	Dec.	867

19 79 Detail Summary

Jan.	862	July	826
Feb.	765	Aug.	758
March	835	Sept.	
April	808	Oct.	
May	780	Nov.	
June	744	Dec.	

Production (Y-T-D) 6378 MCF

Avg. Rate (Y-T-D) 797 MCF/mo.

Days or Months (Y-T-D) 8 mos.

Cum: 9/81 6.6 MMcf

Field:	Jalmat Gas
Operator:	Reserve Oil Co.
Well:	Martin #2
Location:	A-31-24-37
County:	Lea State New Mexico
Date Prod. Began:	Acres: 160

Gas Production - MCF/month

10000

1000

100

1e.03%/yr.

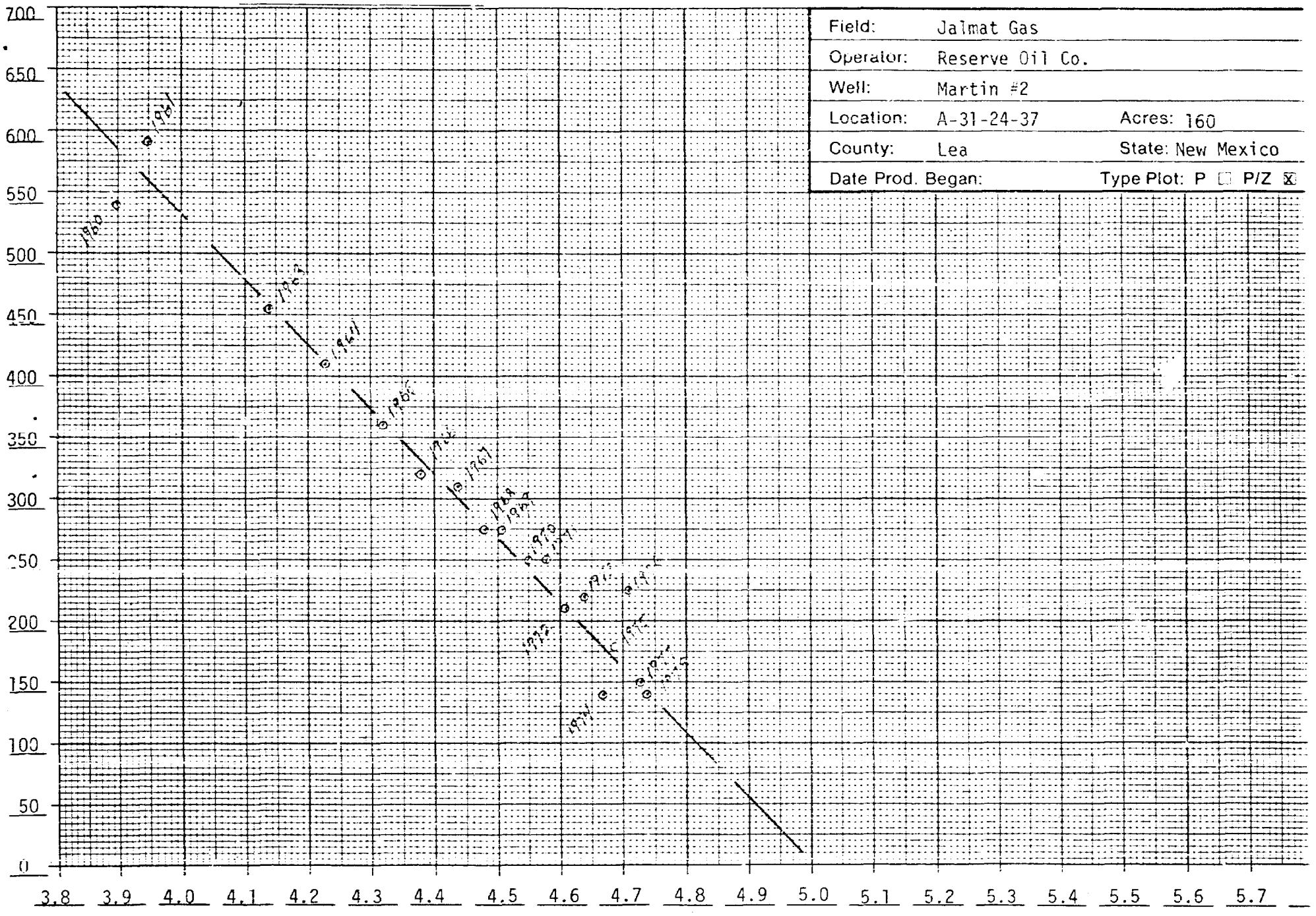
9-1-79 Cum = 4752 MMCF

DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC.

19 68 | 19 69 | 19 70 | 19 71 | 1972 | 1973 | 1974 | 19 75 | 19 76 | 1977 | 1978 | 1979 | 1980 | 19 81

9-1-79 CUM:4751.6 MMCF

Field:	Jalmat Gas		
Operator:	Reserve Oil Co.		
Well:	Martin #2		
Location:	A-31-24-37	Acres: 160	
County:	Lea	State: New Mexico	
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	



GAS PRODUCTION HISTORY

Date 10-22-79

Operator: Reserve Oil Corp.

Well: Martin "B" No. 1

Location: F-31-24-37

Pool: Jalmat Gas

Spud Date: 8-18-47 Original Completion Date: 10-10-47

Completion Interval (Gas): OH 2862-3187

Completion Date (Gas): 10-10-47 First Production (Gas): 1947

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	7	759	108	3221.3	N/A	N/A	
1978	12	2593	216	3220.6	154.2	160	
1977	12	3669	306	3218.0	231.2	240	
1976	12	5843	487	3214.3	153.2	160	
1975	12	4110	343	3208.5	249.2	260	
1974	12	3667	306	3204.3	53.2	55	
1973	12	12881	1073	3200.7	152.2	160	
1972	12	24676	2056	3187.8	158.2	160	
1971	12	21592	1799	3163.1	168.2	175	
1970	12	30416	2535	3141.5	173.2	180	
1969	12	33647	2804	3111.1	196.2	200	
1968	12	43878	3657	3077.5	194.2	200	
1967	12	38118	3175	3033.6	204.2	210	
1966	12	39588	3299	2995.5	207.2	220	
1965	12	59738	4978	2955.9	230.2	240	
1964	12	65816	5485	2896.1	264.2	280	
1963	12	75805	6317	2830.3	296.2	310	
1962	12	59105	4925	2754.5	325.0	345	
1961	12	50748	4229	2695.4	371.2	400	
1960	7	27029	3861	2644.7	430.2	470	

19 78 Detail Summary

Jan.	249	July	170
Feb.	206	Aug.	149
March	214	Sept	431
April	170	Oct.	367
May	116	Nov.	260
June	129	Dec.	132

19 79 Detail Summary

Jan.	64	July	103
Feb.	27	Aug.	
March	105	Sept	
April	130	Oct.	
May	125	Nov.	
June	205	Dec.	

Production (Y-T-D) 759 MCF Avg. Rate (Y-T-D) 108 MCF/mo.

Days or Months (Y-T-D) 7 mos.

GAS PRODUCTION HISTORY

Date 10-22-79

Operator: Reserve Oil Corp.

Well: Martin "B" No. 1

Location: F-31-24-37

Pool: Jalmat Gas

Spud Date: _____ Original Completion Date: _____

Completion Interval (Gas): _____

Completion Date (Gas): _____ First Production (Gas): _____

Remarks: _____

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1959	10	50285	5029	2617.6	388.2	420	
1958	12	130962	10914	2567.4	403.0	430	
1957	12	161236	13436	2436.4	458.0	495	
1956	12	220233	18353	2275.2	510.0	560	
1955	12	208411	17368	2054.9	622.0	700	
1954	12	210718	17560	1846.5	681.0	780	
1953	12	173121	14427	1635.8	742.0	850	
1952	12	261846	21821	1462.7	860.0	1020	
1951	12	280930	23411	1200.8	815.0	955	
1950	12	142898	11908	818.2	993.0	1200	
1949	12	212971	17748	675.3	1010.0	1220	
1948	12	411705	34309	462.3	N/A	N/A	
1947	1	50623	50623	50.6	N/A	N/A	

19_____ Detail Summary

Jan. _____ July _____

Feb. _____ Aug. _____

March _____ Sept. _____

April _____ Oct. _____

May _____ Nov. _____

June _____ Dec. _____

Production (Y-T-D) _____

Days or Months (Y-T-D) _____

19_____ Detail Summary

Jan. _____ July _____

Feb. _____ Aug. _____

March _____ Sept. _____

April _____ Oct. _____

May _____ Nov. _____

June _____ Dec. _____

Avg. Rate (Y-T-D) _____

8-1-79 Cum: 3221.3 MMCF

Field:	Jalmat Gas
Operator:	Reserve Oil Corp.
Well:	Martin "B" No. 1
Location:	F-31-24-37
County:	Lea — State: New Mexico
Date Prod. Began: 1947	Acres: 160

Gas Production - MCF/month

10000
1000
100

13.25%/yr.

8-1-79 Cum. = 3221.3 MMCF

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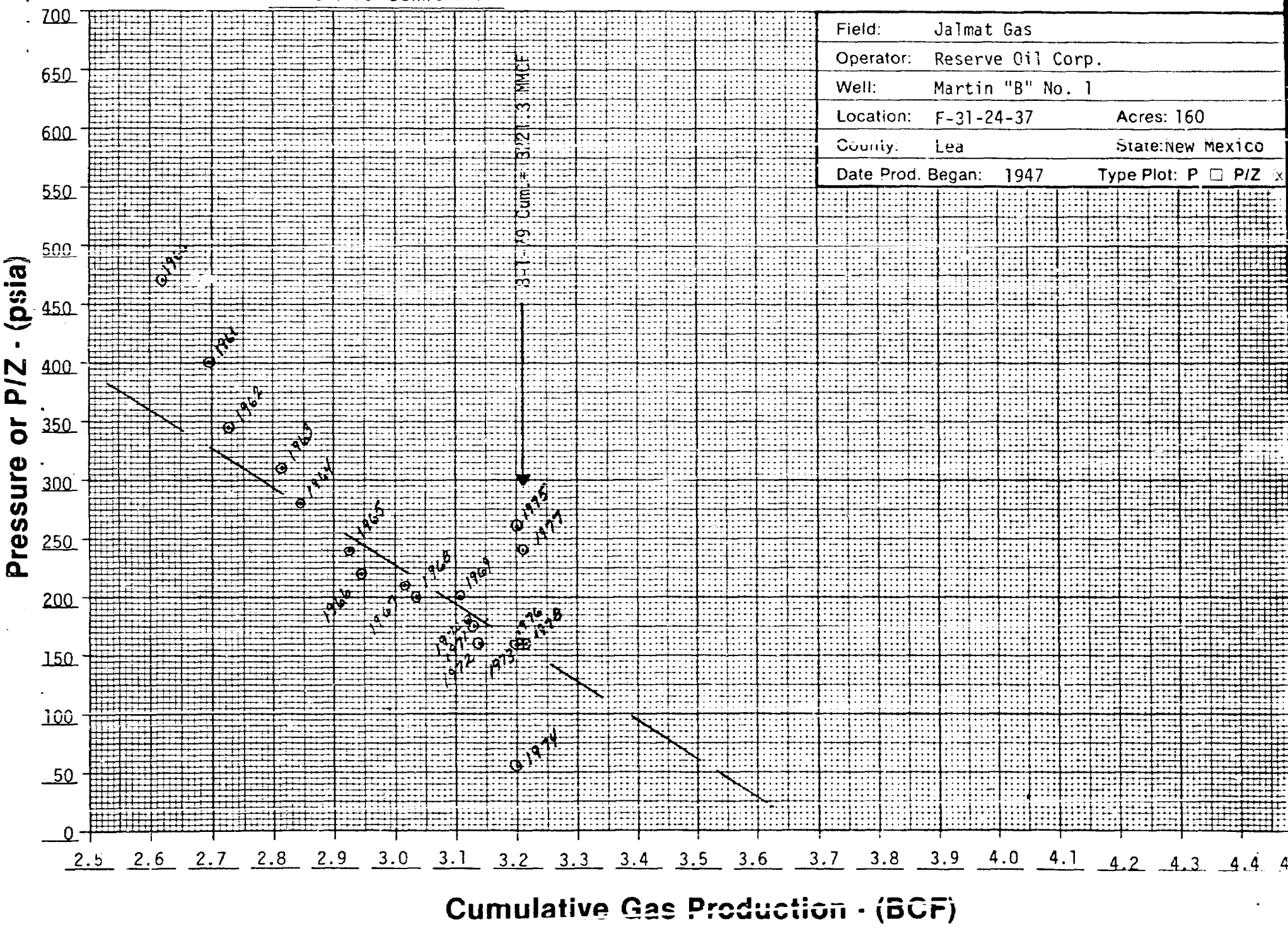
1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

8-1-79 CUM: 3221.3 MMCF

Field:	Jalmat Gas		
Operator:	Reserve Oil Corp.		
Well:	Martin "B" No. 1		
Location:	F-31-24-37	Acres: 160	
County:	Lea	State: New Mexico	
Date Prod. Began:	1947	Type Plot: P ☐ P/Z ☒	



GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Getty Oil Company

Well: J. W. Sherrell #9

Location: J-31-24-37

Pool: Jalmat Gas

Spud Date: 9-2-78 Original Completion Date: 9-16-78

Completion Interval (Gas): Perf 2892-3103 W/20

Completion Date (Gas): 9-16-78 First Production (Gas): 4-79

Remarks: First Production April 1979

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	5	18467	3693	18.5	N/A	N/A	

19____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

1979 Detail Summary

Jan.	-0-	July	3350
Feb.	-0-	Aug.	3757
March	-0-	Sept.	
April	5421	Oct.	
May	3803	Nov.	
June	2047	Dec.	

Production (Y-T-D) 18467 MCF Avg. Rate (Y-T-D) 3693 MCF/mo.

Days or Months (Y-T-D) 5 mos.

9-1-79 Cum: 18.5 MMCF

Field:	Jalmat Gas
Operator:	Getty Oil Company
Well:	J. W. Sherrell #9
Location:	J-31-24-37
County: Lea	State: New Mexico
Date Prod. Began: 4-79	Acres: 160

9-1-79 Cum. = 18 BMMCF

4-79 First production

Gas Production - MCF/month

10000
1000
100

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1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992

GAS PRODUCTION HISTORY

Date 10-22-79 Page 1 of 2

Operator: Texaco

Well: C. C. Tristoe No. 2

Location: M-31-24-37

Pool: Jalmat Gas

Spud Date: 5-27-48 Original Completion Date: 11-21-48

Completion Interval (Gas): Perf 2760-2960 W/600

Completion Date (Gas): 11-21-48 First Production (Gas): 1949

Remarks: 1973 Plugging Approved
2-72 Last Production

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1972	2	676	328	2300.3	N/A	N/A	
1971	12	3725	310	2299.7	152.2	155	
1970	12	4443	370	2295.9	67.2	70	
1969	12	12517	1043	2291.5	151.2	155	
1968	12	13291	1108	2279.0	151.2	155	
1967	12	18167	1514	2265.7	131.2	135	
1966	8	35941	4493	2247.5	314.2	335	
1965	7	163584	23369	2211.6	310.2	330	
1964	7	153588	21941	2048.0	343.2	370	
1963	2	44839	22420	1894.4	385.2	415	
1962	1	6750	6750	1849.6	414.2	450	
1961	2	12277	6139	1842.8	440.2	475	
1960	2	14011	7006	1830.5	457.2	500	
1959	6	128866	21478	1816.5	615.2	695	
1958	12	393951	32829	1687.6	N/A	N/A	
1957	11	36804	3346	1292.6	N/A	N/A	
1956	12	130258	10854	1255.8	N/A	N/A	
1955	12	110414	9201	1125.5	N/A	N/A	
1954	12	109520	9127	1015.1	N/A	N/A	
1953	12	202666	16889	905.6	827.0	970	

19 71 Detail Summary

Jan.	347	July	292
Feb.	309	Aug.	289
March	350	Sept.	291
April	313	Oct.	299
May	326	Nov.	290
June	295	Dec.	324

19 72 Detail Summary

Jan.	357	July	
Feb	319	Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Production (Y-T-D) 676 MCF

Days or Months (Y-T-D) 2 mos.

Avg. Rate (Y-T-D) 328 MCF/mo.

GAS PRODUCTION HISTORY

Date 10-22-79 Page 2 of 2

Operator: Texaco

Well: C. C. Fristoe

Location: M-31-24-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1952	12	260788	21732	702.9	882	1050	
1951	12	238679	19890	442.2	937	1120	
1950	12	72482	6040	204.5	1008	1230	
1949	10	131982	13198	132.0	N/A	N/A	

19_____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Production (Y-T-D)

Days or Months (Y-T-D)

19_____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Avg. Rate (Y-T-D)

5-1-72 Cum. 2310.3 MMCF

Field: Jalmat Gas

Operator: Texaco

Well: C. C. Friston No. 2

Location: M-31-24-37

County: Lea State: New Mexico

Date Prod. Began: 1949 Acres

Gas Production - MCF/month

10000

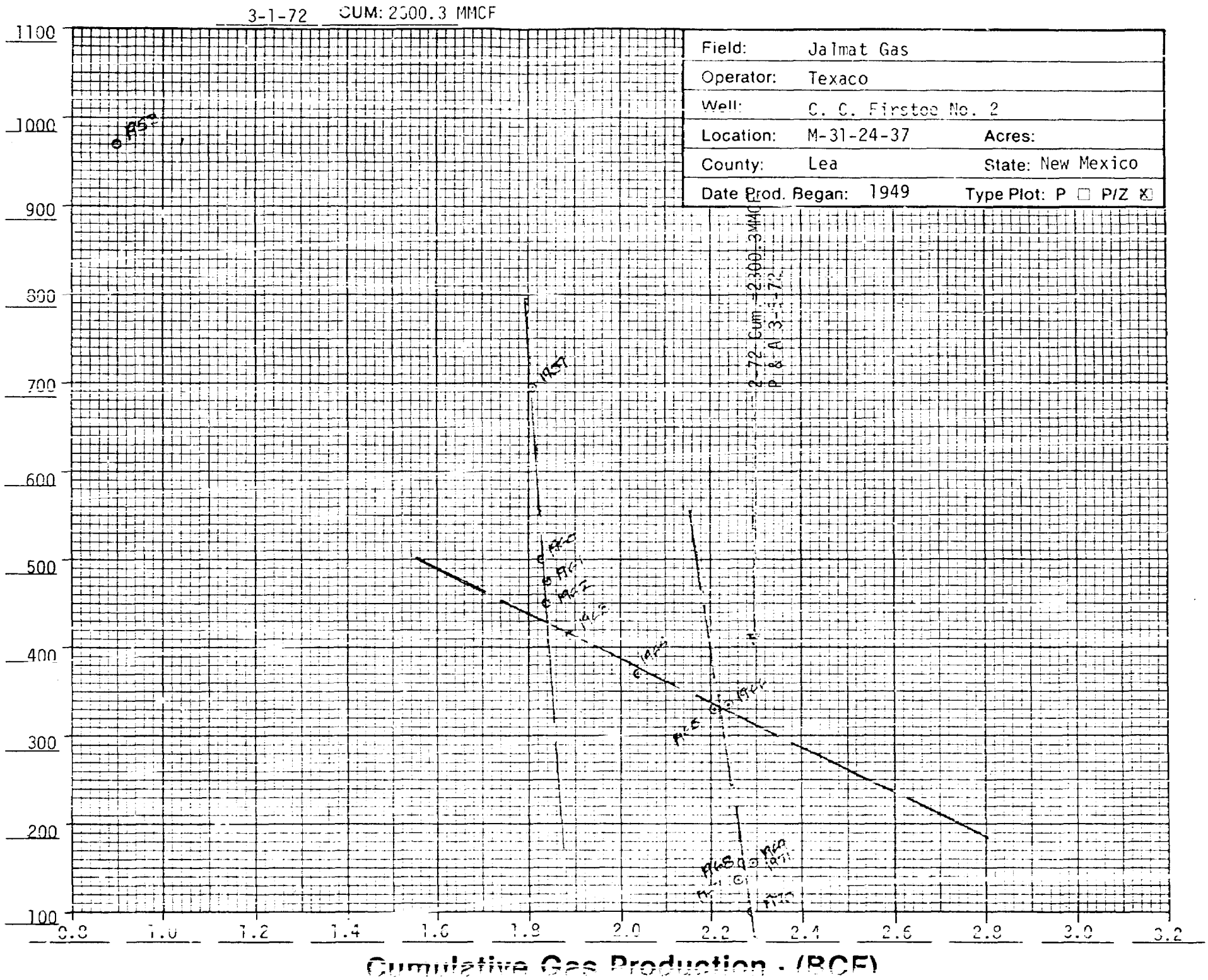
1000

100

2-72 Last Production
2300.3 MMCF
1973 Plugging Approved

DEC. MAR. JUN. SEP.

1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973


3-1-72 CUM: 2300.3 MMCF
Field: Jalmat Gas
Operator: Texaco
Well: C. C. Firstee No. 2
Location: M-31-24-37 Acres:
County: Lea State: New Mexico
Date Prod. Began: 1949 Type Plot: P ☐ P/Z ☒
Pressure or P/Z - (psia)
1100
1000
900
800
700
600
500
400
300
200
100
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 10-22-79 Page 1 of 2

Operator: Skelly
Well: Sherrell No. 5
Location: N-31-24-37

Pool: Jalmat Gas
Spud Date: 8-15-49 Original Completion Date: 9-9-49
Completion Interval (Gas): OH 2720-3350
Completion Date (Gas): 9-9-49 First Production (Gas): 1950
Remarks: 1977 P & A Approved.
3-73 Last Production.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1973	3	3256	1085	4040.1	N/A	N/A	
1972	12	24240	2020	4036.9	257.2	270	
1971	11	18156	1651	4012.7	181.2	185	
1970	12	62916	5243	3994.5	443.2	480	
1969	12	86309	7192	3931.6	475.2	515	
1968	12	97278	8107	3845.3	513.2	565	
1967	12	102410	8534	3748.0	492.2	540	
1966	12	112256	9355	3645.6	495.2	540	
1965	12	127705	10642	3533.3	505.2	550	
1964	12	138734	11561	3405.6	551.2	610	
1963	12	154419	12868	3266.8	525.2	575	
1962	10	124657	12465	3112.5	535.2	585	
1961	12	90953	7579	2987.8	580.2	650	
1960	12	94331	7861	2896.9	578.2	650	
1959	11	97705	8882	2802.5	617.2	695	
1958	12	208972	17414	2704.8	655.0	745	
1957	12	271938	22662	2495.8	720.0	830	
1956	12	323966	26997	2223.9	N/A	N/A	
1955	12	397588	33132	1900.0	798.0	930	
1954	12	292185	24349	1502.4	814.0	950	

19 72 Detail Summary

Jan.	2354	July	2075
Feb.	3751	Aug.	1497
March	2515	Sept.	1905
April	1757	Oct.	1198
May	2337	Nov.	1482
June	1589	Dec.	1780

Production (Y-T-D) 3256 MCF
Days or Months (Y-T-D) 3 mos.

19 73 Detail Summary

Jan.	1618	July	
Feb.	1447	Aug.	
March	191	Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Avg. Rate (Y-T-D) 1085 MCF/mo.

GAS PRODUCTION HISTORY

Date 10-22-79 Page 2 of 2

Operator: Skelly

Well: Sherrell No. 5

Location: N-31-24-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1953	12	257321	21443	1210.2	855.0	1005	
1952	12	379614	31635	952.9	920.0	1100	
1951	12	427254	35605	573.2	941.0	1130	
1950	12	136476	11373	136.5	972.0	1180	

19____ Detail Summary

Jan. July

Feb. Aug.

March Sept.

April Oct.

May Nov.

June Dec.

Production (Y-T-D)

Days or Months (Y-T-D)

19____ Detail Summary

Jan. July

Feb. Aug.

March Sept.

April Oct.

May Nov.

June Dec.

Avg. Rate (Y-T-D)

4-1-73 Cum: 4040.1 MMCF

Field: Jalmat Gas
Operator: Skelly
Well: Sherrell No. 5
Location: N-31-24-37
County: Lea State: New Mexico
Date Prod. Began: Acres

8.79%/yr.

Last production 3-73
Cum = 4040.1 MMCF

Plugged Back
Open Hole to
3010 Feet

Gas Production - MCF/month

10000
1000
100

DEC. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC. MAR. JUN. SEP. DEC.

1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973 1974

4-1-73 CUM: 4040.1

Field:	Jalmat Gas
Operator:	Skelly
Well:	Sherrell No. 5
Location:	N-31-24-37 Acres:
County:	Lea State: New Mexico
Date Prod. Began:	1950 Type Plot: P ☐ P/Z ☒

1973 Cum. = 4040.1 MMCF

Pressure or P/Z - (psia)

1100
1000
900
800
700
600
500
400
300
200
100

1.4 1.8 2.2 2.6 3.0 3.4 3.8 4.2 4.6 5.0 5.4 5.8 6.2

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Union Texas Petroleum Corp.
Well: State "A-32" #4
Location: F-32-24-37

Pool: Jalmat Gas
Spud Date: 3-22-78 Original Completion Date: 4-9-78
Completion Interval (Gas): Perf 2913-3190 W/29
Completion Date (Gas). 4-9-78 First Production (Gas): 6-78
Remarks: First Production June 1978

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	80950	10119	163.2	N/A	N/A	
1978	7	82233	11748	82.2	N/A	N/A	

19 78 Detail Summary

Jan.		July	13572
Feb.		Aug.	13546
March		Sept.	11349
April		Oct.	11248
May		Nov.	9273
June	12455	Dec.	10790

19 79 Detail Summary

Jan.	12560	July	11486
Feb.	9201	Aug.	10190
March	9250	Sept.	
April	11783	Oct.	
May	7358	Nov.	
June	9122	Dec	

Production (Y-T-D) 80950 MCF Avg. Rate (Y-T-D) 10119 MCF/mo.
Days or Months (Y-T-D) 8 mos.

9-1-79 Cum 163.2 MMCF

Field:	Jalmat Gas
Operator:	Union Texas Petroleum Corp.
Well:	State "A-32" #4
Location:	F-32-24-37
County:	Lea State: New Mexico
Date Prod. Began:	6-78 Acres: 120

Gas Production - MCF/month

10000
1000
100

6-78 First Production

9-1-79 Cum. = 163.2 MMCF

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19 78 | 19 79 | 19 80 | 19 81 | 19 82 | 19 83 | 19 84 | 19 85 | 19 86 | 19 87 | 19 88 | 19 89 | 19 90 | 19 91

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Getty Oil Company

Well: Skelly "M" State #4

Location: L-32-24-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks: First Production Jan. 1979.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	7	23582	3369	23.6	N/A	N/A	

19____ Detail Summary

Jan.		July	
Feb.		Aug.	
March		Sept.	
April		Oct.	
May		Nov.	
June		Dec.	

Production (Y-T-D) 23582 MCF

Days or Months (Y-T-D) 7 mos.

19 79 Detail Summary

Jan.	3795	July	-0-
Feb.	5603	Aug.	39
March	3531	Sept.	
April	5848	Oct.	
May	3871	Nov.	
June	895	Dec.	

Avg. Rate (Y-T-D) 3369 MCF/mo.

9-1-79 Cum: 23.6 MMCF

Field: Jalmat Gas
Operator: Getty Oil Company
Well: Skelly "M" State #4
Location: L-32-24-37
County: Lea State: New Mexico
Date Prod. Began: Jan. 1979 Acres: 120

Gas Production - MCF/month

10000
1000
100

9-1-79 First Production
9-1-79 Cum = 23.6 MMCF

DEC. MAR. JUN. SEP. DEC.

1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990 1991 1992

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Continental Oil Company

Well: Wells "B-1" #1

Location: A-1-25-36

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks: No Jalmat (Gas) production reported for years 1975 thru 1978.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	5	6331	1266	920.4	N/A	N/A	
1978	N/A	N/A	N/A	920.4	N/A	N/A	
1977	N/A	N/A	N/A	920.4	188.2	195	
1976	N/A	N/A	N/A	920.4	214.2	220	
1975	N/A	N/A	N/A	920.4	473.2	510	
1974	3	1372	457	914.1	43.2	45	
1973	12	3969	331	912.7	63.2	65	
1972	12	3313	276	908.7	558.2	620	
1971	12	1870	156	905.4	214.2	220	
1970	12	2334	195	903.5	421.2	450	
1969	11	1898	173	901.2	463.2	495	
1968	12	3553	296	899.3	506.2	550	
1967	11	9789	890	895.8	490.2	530	
1966	12	4479	373	886.0	447.2	480	
1965	12	18763	1564	881.4	428.2	460	
1964	12	19452	1621	862.7	441.2	480	
1963	12	24186	2016	843.3	447.2	485	
1962	12	43788	3649	819.1	N/A	N/A	
1961	12	75508	6292	775.3	491.2	530	
1960	12	60826	5069	699.8	533.2	580	

19 78 Detail Summary

Jan.	-0-	July	-0-
Feb.	-0-	Aug.	-0-
March	-0-	Sept.	-0-
April	-0-	Oct.	-0-
May	-0-	Nov	-0-
June	-0-	Dec.	-0-

Production (Y-T-D) 6331 MCF

Days or Months (Y-T-D) 5 mos.

19 79 Detail Summary

Jan.	1453	July	1952
Feb.	-0-	Aug.	2542
March	42	Sept.	
April	342	Oct.	
May	-0-	Nov.	
June	-0-	Dec.	

Avg. Rate (Y-T-D) 1266 MCF/mo.

9-1-79 Cum: 920.4 MMCF

Field:	Jalmat Gas
Operator:	Continental Oil Company
Well:	Wells "B-1" #1
Location:	A-1-25-36
County:	Lea State: New Mexico
Date Prod. Began:	Acres:

Gas Production - MCF/month

10000
1000
100

Cum-9-1-79: 920.4 MMCF

No Production Available
1975 thru 1978

DEC. MAR. JUN. SEP. DEC.

1966 1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979

9-1-79 CUM:920.4 MMCF

Field:	Jalmat Gas		
Operator:	Continental Oil Company		
Well:	Wells "B-1" #1		
Location:	A-1-25-36	Acres:	
County:	Lea	State: New Mexico	
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	

Pressure or P/Z - (psia)

600
500
400
300
200
100

0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: El Paso Natural Gas

Well: E. J. Wells #13

Location: L-5-25-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	16657	2082	3014.7	N/A	N/A	
1978	12	23768	1981	2998.1	103.2	105	
1977	12	29350	2446	2974.3	114.2	115	
1976	12	59992	4999	2944.9	124.2	130	
1975	12	80506	6709	2884.9	123.2	125	
1974	12	83770	6981	2804.4	143.2	145	
1973	12	82850	6904	2720.7	148.2	150	
1972	12	99549	8296	2637.8	121.2	125	
1971	12	69851	5821	2538.3	189.2	195	
1970	12	92434	7703	2468.4	171.2	175	
1969	11	87814	7983	2376.0	189.2	195	
1968	9	85707	9523	2288.2	226.2	230	
1967	12	115946	9662	2202.5	215.2	220	
1966	12	103996	8666	2086.5	268.2	280	
1965	10	99284	9928	1982.5	289.2	305	
1964	11	142871	12988	1883.2	321.2	340	
1963	8	125397	15675	1740.4	377.2	410	
1962	9	77634	8626	1615.0	N/A	N/A	
1961	7	77386	11055	1537.3	455.2	490	
1960	3	30379	10126	1459.9	462.2	500	

1978 Detail Summary

Jan.	3528	July	1201
Feb.	2208	Aug.	1814
March	2186	Sept.	2223
April	1803	Oct.	2994
May	1531	Nov.	1693
June	1503	Dec.	1084

1979 Detail Summary

Jan.	2015	July	2412
Feb.	1477	Aug.	2061
March	1598	Sept.	
April	831	Oct.	
May	3534	Nov.	
June	2729	Dec.	

Production (Y-T-D) 16657 MCF Avg. Rate (Y-T-D) 2082 MCF/mo.

Days or Months (Y-T-D) 8 mos.

9-1-79 Cum: 3014.7 MMCF

Field: Jalmat Gas
Operator: El Paso Natural Gas
Well: E. J. Wells #13
Location: L-5-23-37
County: Lea State: New Mexico
Date Prod. Began: Acres:

Gas Production - MCF/month

10000
1000
100

33.1%/yr.

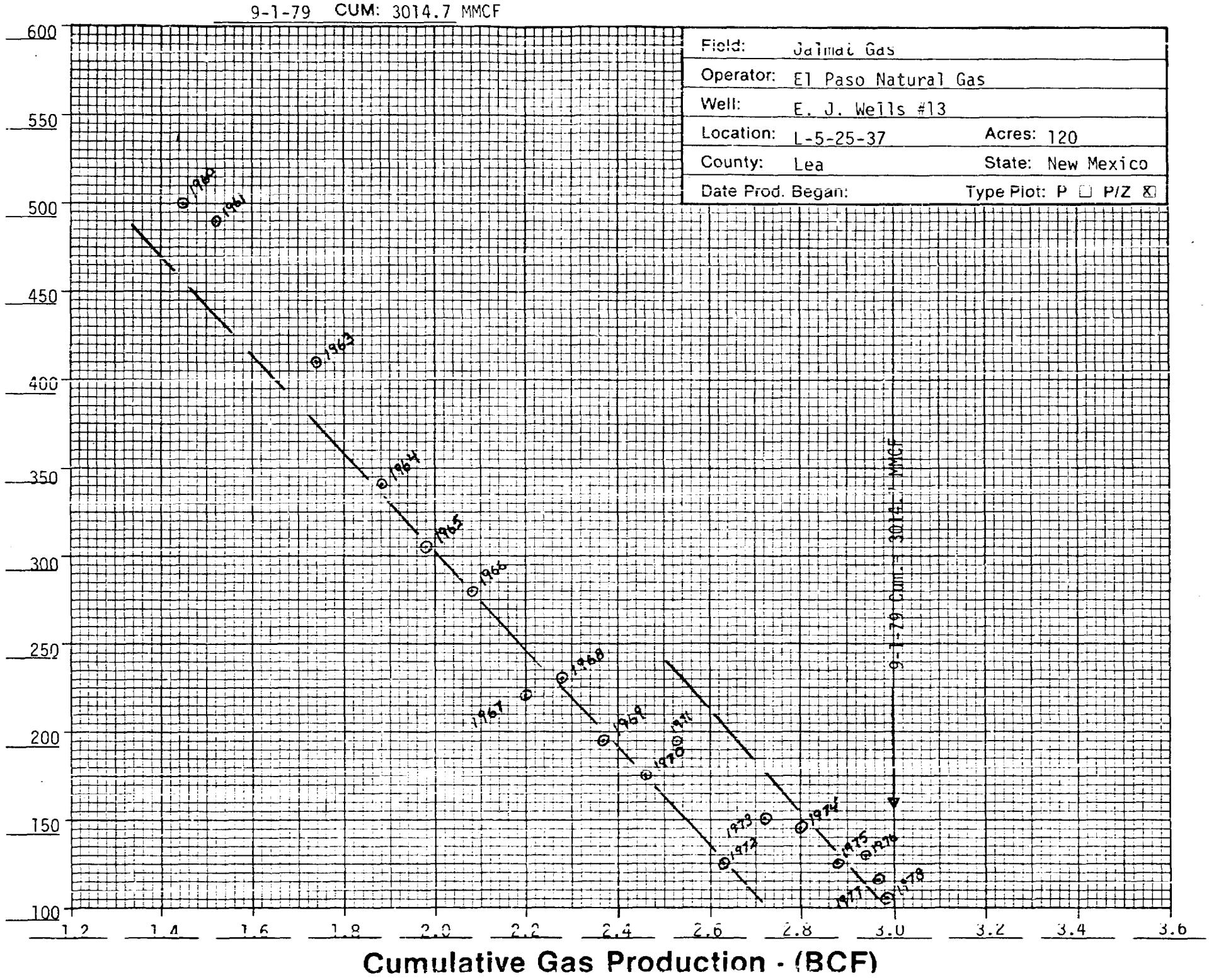
9-1-79 Cum.= 3014.7 MMCF

DEC. MAR. JUN. SEP.

19 67 | 19 68 | 19 69 | 19 70 | 19 71 | 19 72 | 19 73 | 19 74 | 19 75 | 19 76 | 19 77 | 19 78 | 19 79 | 19 80

9-1-79 CUM: 3014.7 MMCF

Field:	Jalmat Gas		
Operator:	El Paso Natural Gas		
Well:	E. J. Wells #13		
Location:	L-5-25-37	Acres:	120
County:	Lea	State:	New Mexico
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	



Pressure or P/Z - (psia)

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Oil Developement Company of Texas

Well: Wells "B-6" #1

Location: A-6-25-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	609	76	1741.3	N/A	N/A	
1978	12	1331	111	1741.2	128.2	130	
1977	12	3203	267	1739.9	131.2	135	
1976	12	5363	447	1736.6	213.2	215	
1975	12	5832	486	1731.3	224.2	230	
1974	12	3374	281	1725.4	191.2	200	
1973	12	7273	606	1722.1	212.2	220	
1972	12	3913	326	1714.8	234.2	240	
1971	12	2582	215	1710.9	253.2	260	
1970	12	11822	985	1708.3	269.2	280	
1969	12	11805	984	1696.5	271.2	280	
1968	11	17998	1636	1684.7	253.2	265	
1967	12	36210	3017	1666.7	309.2	325	
1966	11	34769	3161	1630.5	314.2	335	
1965	8	36898	4612	1595.7	312.2	330	
1964	10	60962	6096	1558.8	320.2	340	
1963	7	26094	3728	1497.2	383.2	405	
1962	7	13803	1972	1471.7	N/A	N/A	
1961	6	16577	2763	1457.9	461.2	500	
1960	8	21589	2699	1441.4	458.2	495	

1978 Detail Summary

Jan.	164	July	140
Feb.	107	Aug.	149
March	144	Sept.	50
April	185	Oct.	17
May	92	Nov.	3
June	53	Dec.	227

1979 Detail Summary

Jan.	313	July	19
Feb.	93	Aug.	16
March	90	Sept.	
April	30	Oct.	
May	26	Nov.	
June	22	Dec.	

Production (Y-T-D) 609 MCF

Avg. Rate (Y-T-D) 76 MCF/mo.

Days or Months (Y-T-D) 8 mos.

9-1-79 Cum: 1741.3 MMCF

Field:	Jalmat Gas
Operator:	Oil Developement Company of Texas
Well:	Wells "B-6" #1
Location:	A-6-25-37
County:	Lea State:New Mexico
Date Prod. Began:	Acres: 40

Gas Production - MCF/month

10000
1000
100

20.76%/yr.

9-1-79 Cum = 1741.3 MMCF

DEC. MAR. JUN. SEP.

1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

9-1-79 CUM: 1741.3 MMCF

Field:	Jalmat Gas		
Operator:	Oil Developement Company of Texas		
Well:	Wells "B-6" #1		
Location:	A-6-25-37	Acres: 40	
County:	Lea	State: New Mexico	
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	

9-1-79 Cum.= 1741.3 MMCF

Pressure or P/Z - (psia)

600
500
400
300
200
100

1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 2.0 2.1 2.2 2.3

Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79

Operator: Skelly Oil

Well: J. W. Sherrell #3

Location: B-6-25-37

Pool: Jalmat Gas

Spud Date: 1-24-40 Original Completion Date: 3-6-40

Completion Interval (Gas): Perf 2830-3300 W/130

Completion Date (Gas): 7-19-47 First Production (Gas):

Remarks: Last Production 5-72. Converted to water injection 3100-3300 10-7-72.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)
1972	5	15991	3198	1845.0	N/A
1971	11	47244	4295	1829.0	288.2
1970	12	23123	1927	1781.7	323.2
1969	12	12337	1028	1758.6	340.2
1968	12	13930	1161	1746.2	345.2
1967	12	15931	1328	1732.3	356.2
1966	12	15375	1281	1716.4	325.2
1965	12	9503	792	1701.0	349.2
1964	12	33129	2761	1691.5	366.2
1963	12	90989	7582	1658.4	N/A
1962	2	4472	2236	1567.4	448.2
1961	9	70729	7859	1562.9	533.2
1960	5	39661	7932	1492.2	563.2
1959	4	10432	2608	1452.5	509.2
1958	11	165001	15000	1442.1	549
1957	3	50599	16866	1277.1	582
1956	7	138423	19775	1226.5	719
1955	4	52668	13167	1088.1	744
1954	12	199384	16615	1035.4	847
1953	12	126411	10534	836.0	859

1971 Detail Summary

Jan.	6514	July	5256
Feb.	5362	Aug.	5108
March	5814	Sept.	3915
April	-0-	Oct.	3335
May	720	Nov.	3234
June	5047	Dec.	2939

Production (Y-T-D) 15991 MCF

Days or Months (Y-T-D) 5 mos.

1972 Detail Summary

Jan	2777	July	
Feb.	3345	Aug	
March	3200	Sept.	
April	3524	Oct.	
May	3145	Nov.	
June		Dec.	

Avg. Rate (Y-T-D) 3198 MCF/mo.

Gas Production - MCF/month

10000
1000
100

Field:	Jalmat Gas
Operator:	Skelly Oil
Well:	J. W. Sherrell #3
Location:	B-6-25-37
County:	Lea State: New Mexico
Date Prod. Began:	Acres:

25.19%/yr

5-72 Last Production
1973 Zone Abnd. 5-72 Cum.= 1846.0 MMCF

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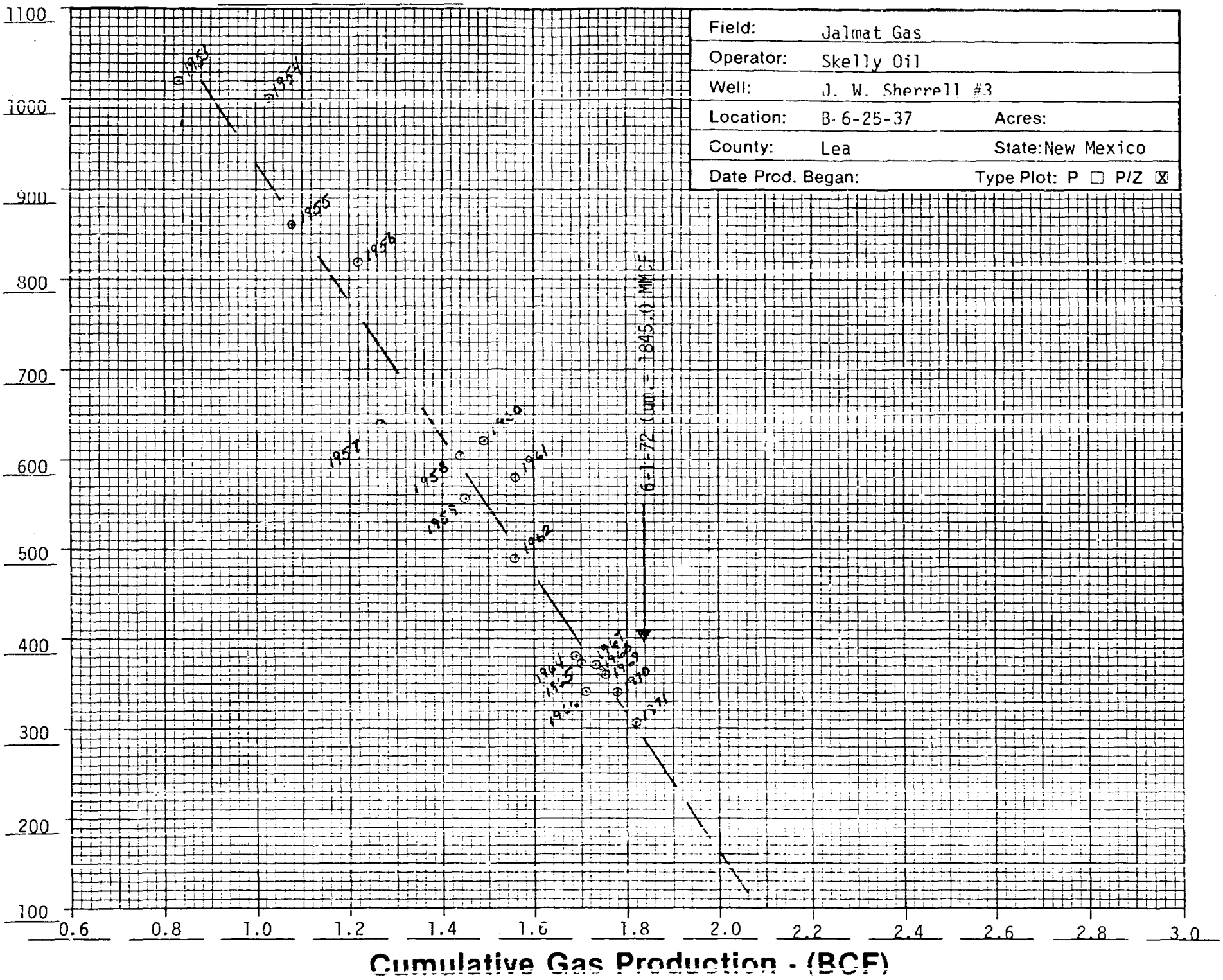
19 60 | 19 61 | 19 62 | 19 63 | 19 64 | 19 65 | 19 66 | 19 67 | 19 68 | 19 69 | 19 70 | 19 71 | 19 72 | 19 73

6-1-72 CUM: 1845.0 MMCF

Field:	Jalmat Gas		
Operator:	Skelly Oil		
Well:	J. W. Sherrell #3		
Location:	B-6-25-37	Acres:	
County:	Lea	State: New Mexico	
Date Prod. Began:		Type Plot: P ☐ P/Z ☒	



GAS PRODUCTION HISTORY

Date 11-13-79

Operator: Atlantic Richfield Company

Well: Wells "WN" #1

Location: G-6-25-37

Pool: Jalmat Gas

Spud Date: 6-19-39 Original Completion Date: 10-19-39

Completion Interval (Gas): Perf 2830-3150 W/177

Completion Date (Gas): 10-19-39 First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	88385	11048	10275.5	N/A	N/A	
1978	12	136948	11412	10187.1	131.2	130	
1977	12	147336	12278	10050.2	136.2	140	
1976	12	175091	14591	9902.8	158.2	160	
1975	12	166033	13836	9727.7	160.2	160	
1974	12	105624	8802	9561.7	154.2	155	
1973	12	157622	13135	9456.1	162.2	165	
1972	12	134982	11249	9298.5	163.2	165	
1971	11	104175	9470	9163.5	174.2	180	
1970	11	81747	7432	9059.3	202.2	205	
1969	12	103583	8632	8977.5	212.2	215	
1968	12	92471	7706	8874.0	224.2	230	
1967	12	143554	11963	8781.5	248.2	255	
1966	11	120921	10993	8637.9	264.2	270	
1965	12	147053	12254	8517.0	280.2	290	
1964	12	183175	15265	8369.9	320.2	340	
1963	12	156141	13012	8186.8	364.2	390	
1962	10	111405	11141	8030.6	N/A	N/A	
1961	3	9491	3164	7919.2	444.2	475	
1960	11	31608	2873	7909.7	458.2	490	

1978 Detail Summary

Jan.	11950	July	10903
Feb.	10571	Aug.	11393
March	12238	Sept	11220
April	11353	Oct.	11575
May	12377	Nov.	10997
June	9959	Dec.	12412

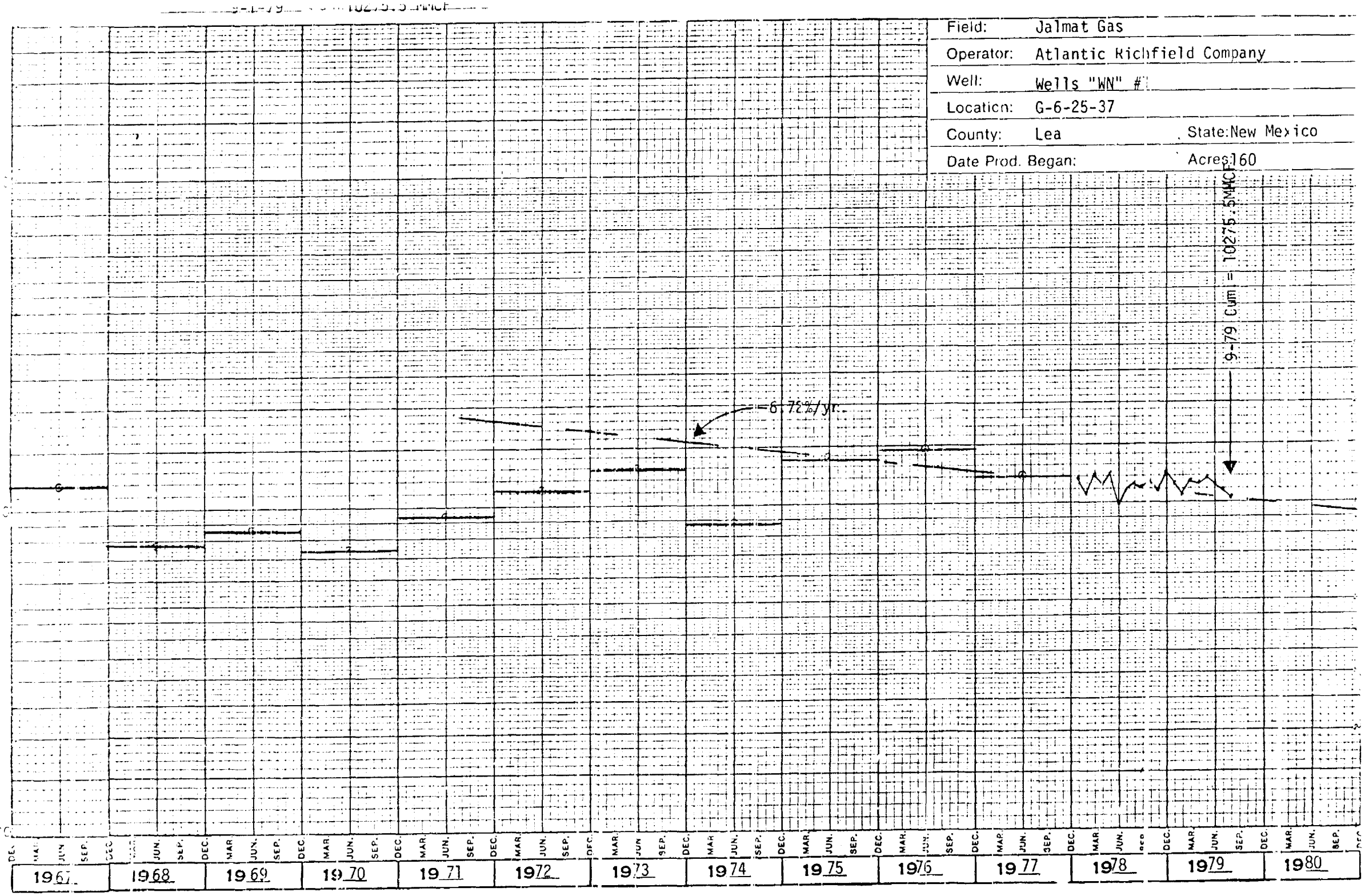
1979 Detail Summary

Jan.	11503	July	10889
Feb.	10601	Aug.	10542
March	11803	Sept.	
April	11694	Oct.	
May	9995	Nov.	
June	11358	Dec.	

Production (Y-T-D) 88385 MCF

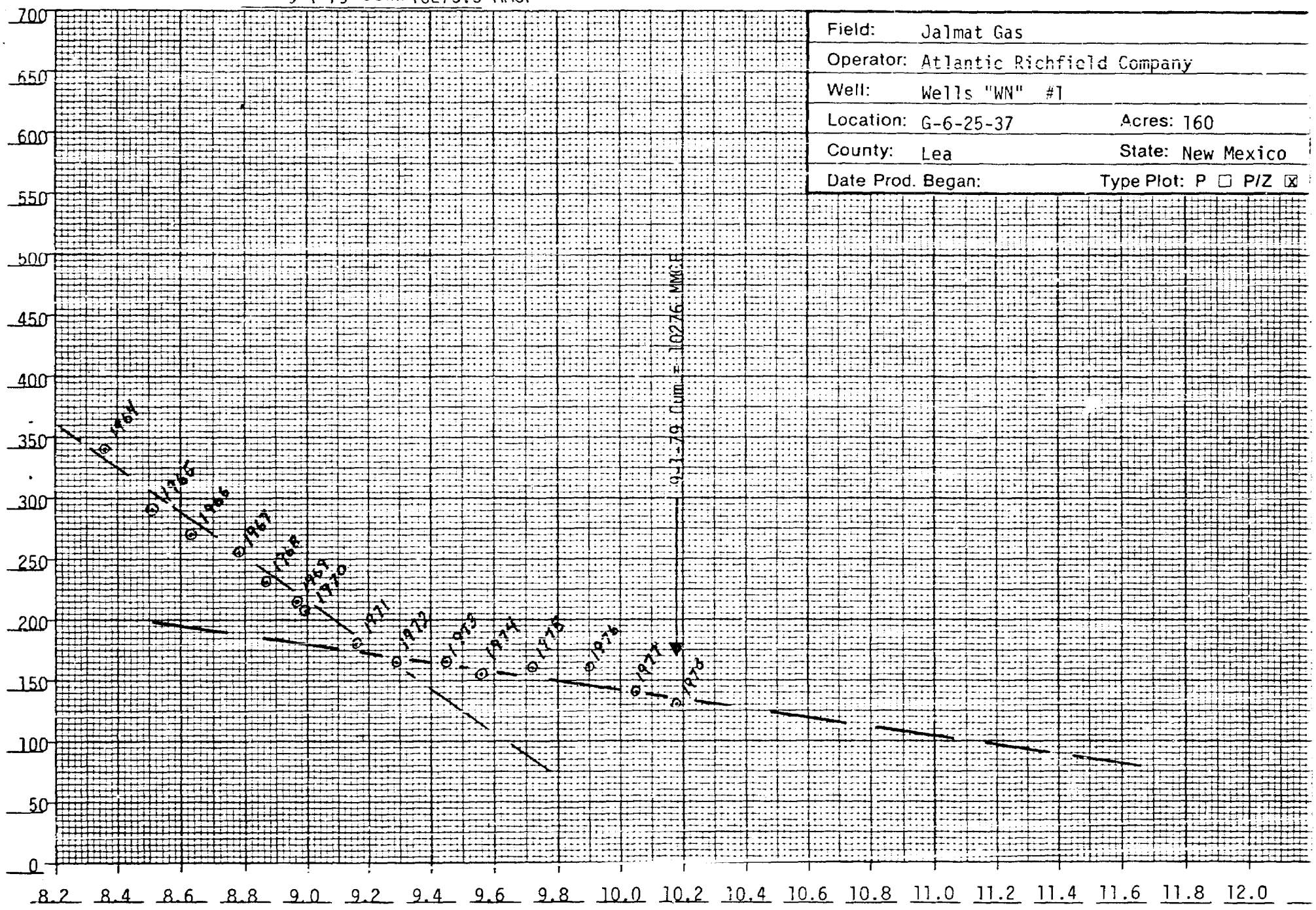
Avg. Rate (Y-T-D) 11048 MCF/mo.

Days or Months (Y-T-D) 8 mos.


Field: Jalmat Gas
Operator: Atlantic Richfield Company
Well: Wells "WN" #
Location: G-6-25-37
County: Lea
State: New Mexico
Date Prod. Began:
Acres: 160
9-79 Cum = 10275.5MMCF
-6.72%/yr.
Gas Production - MCF/month
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980

9-1-79 CUM: 10275.5 MMCF

Field:	Jalmat Gas
Operator:	Atlantic Richfield Company
Well:	Wells "WN" #1
Location:	G-6-25-37 Acres: 160
County:	Lea State: New Mexico
Date Prod. Began:	Type Plot: P ☐ P/Z ☒



GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Phillips Petroleum Company

Well: C. D. Woolworth (Group 3) #2

Location: H-6-25-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	19683	2460	2464.8	N/A	N/A	
1978	12	35208	2934	2445.1	153.2	150	
1977	12	31980	2665	2409.9	136.2	140	
1976	12	28644	2387	2378.0	181.2	185	
1975	7	8149	1164	2349.3	89.2	90	
1974	12	17934	1495	2341.2	104.2	105	
1973	12	31762	2647	2323.2	N/A	N/A	
1972	11	68126	6193	2291.5	154.2	160	
1971	12	72714	6059	2223.3	168.2	170	
1970	12	91255	7605	2150.6	176.2	180	
1969	12	93728	7811	2059.4	197.2	200	
1968	12	86208	7184	1965.6	216.2	220	
1967	12	123712	10309	1879.4	240.2	250	
1966	12	132169	11014	1755.7	241.2	250	
1965	12	169403	14117	1623.6	267.2	275	
1964	12	176257	14688	1454.2	297.2	315	
1963	10	159602	15960	1277.9	340.2	360	
1962	9	86468	9608	1118.3	N/A	N/A	
1961	7	77835	11119	1031.8	440.2	470	
1960	1	7594	7594	954.0	442.2	480	

19 78 Detail Summary

Jan.	3605	July	2824
Feb.	3045	Aug.	3157
March	3867	Sept.	2365
April	2682	Oct.	2332
May	3821	Nov.	2289
June	2784	Dec.	2437

19 79 Detail Summary

Jan.	2423	July	2265
Feb.	2248	Aug.	2328
March	2670	Sept.	
April	2488	Oct.	
May	2353	Nov.	
June	2908	Dec.	

Production (Y-T-D) 19683 MCF Avg. Rate (Y-T-D) 2460 MCF/mo.

Days or Months (Y-T-D) 8 mos.

9-1-79 Cum. 2464.8 MMCF

Field:	Jalmat Gas
Operator:	Phillips Petroleum Company
Well:	C. D. Woolworth (Group 3) #2
Location:	H-6-25-37
County: Lea	State: New Mexico
Date Prod. Began:	Acres: 160

13.58%/yr

9-1-79 Cum. = 2464.8 MMCF

Gas Production - MCF/month

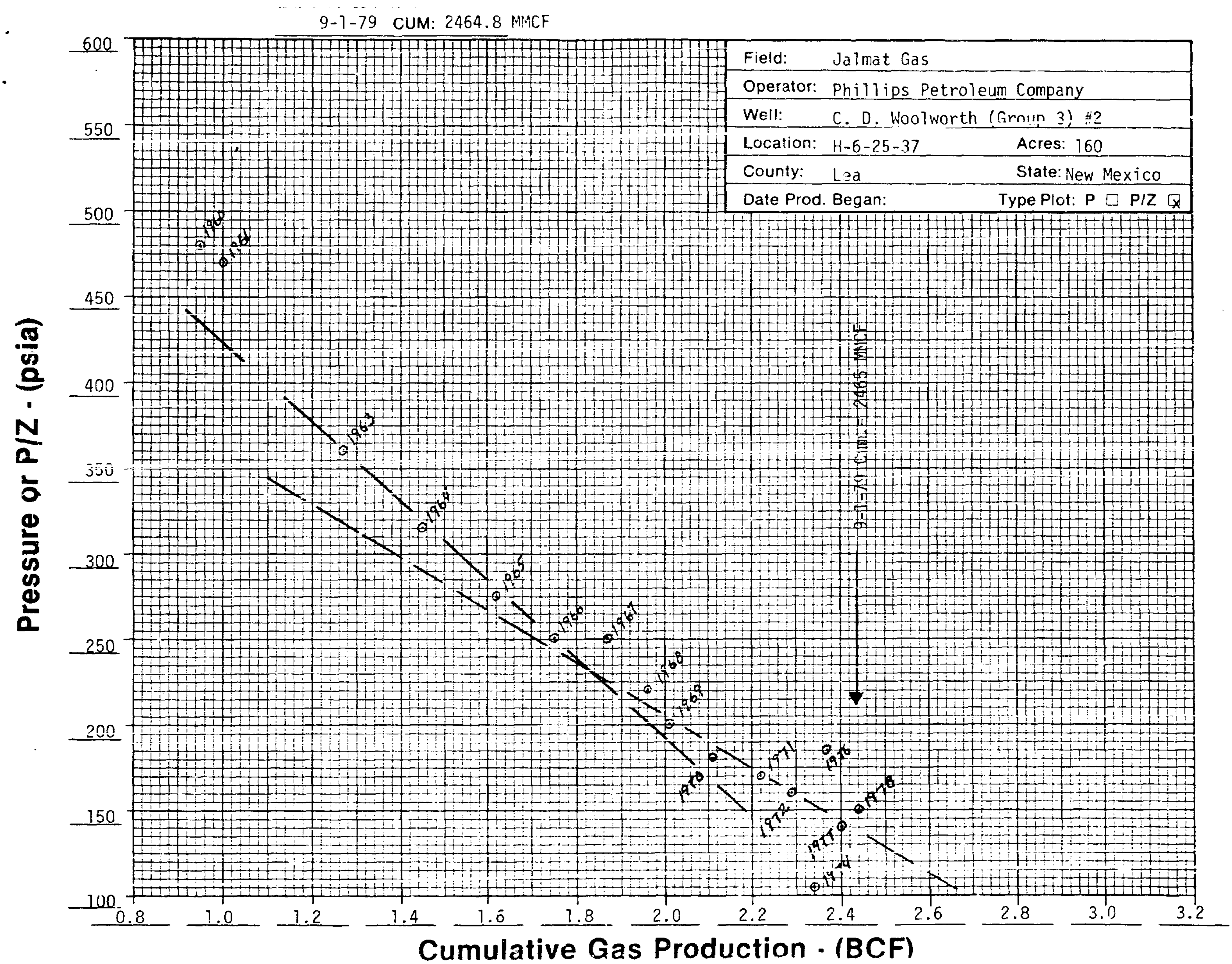
10000

1000

100

DEC. MAR. JUN. SEP. DEC.

1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980


9-1-79 CUM: 2464.8 MMCF
Field: Jalmat Gas
Operator: Phillips Petroleum Company
Well: C. D. Woolworth (Group 3) #2
Location: H-6-25-37
Acres: 160
County: Lea
State: New Mexico
Date Prod. Began:
Type Plot: P ☐ P/Z ☒
9-1-79 Cum. = 2465 MMCF
Pressure or P/Z - (psia)
600
550
500
450
400
350
300
250
200
150
100
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
Cumulative Gas Production - (BCF)

GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Phillips Petroleum

Well: C. D. Woolworth (Group 3) #1

Location: M-6-25-37

Pool: Jalmat Gas

Spud Date: Original Completion Date:

Completion Interval (Gas):

Completion Date (Gas): First Production (Gas):

Remarks:

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	5	6719	1344	2701.2	N/A	N/A	
1978	12	31749	2646	2694.4	88.2	90	
1977	11	24640	2240	2662.7	N/A	N/A	
1976	11	25928	2357	2638.0	54.2	55	
1975	12	38209	3184	2612.1	140.2	145	
1974	12	45572	3798	2573.9	154.2	160	
1973	12	88112	7343	2528.3	137.2	140	
1972	12	128828	10736	2440.2	144.2	150	
1971	11	101174	9198	2311.4	118.2	120	
1970	12	139999	11667	2210.2	166.2	170	
1969	12	132647	11054	2070.2	168.2	170	
1968	11	92911	8446	1937.6	209.2	215	
1967	12	147213	12268	1844.6	207.2	215	
1966	12	139167	11597	1697.4	220.2	225	
1965	12	145286	12107	1558.3	246.2	250	
1964	11	173355	15759	1413.0	281.2	290	
1963	12	153902	12825	1239.6	291.2	295	
1962	11	152808	13892	1085.7	N/A	N/A	
1961	10	136579	13658	932.9	358.2	380	
1960	6	76031	12672	796.3	396.2	425	

1978 Detail Summary

Jan.	2396	July	2917
Feb.	2224	Aug.	3264
March	2331	Sept.	3250
April	1170	Oct.	3586
May	485	Nov.	3637
June	2619	Dec.	3870

Production (Y-T-D) 6719 MCF

Days or Months (Y-T-D) 5 mos.

1979 Detail Summary

Jan.	1315	July	2080
Feb.	-0-	Aug.	2196
March	-0-	Sept.	
April	14	Oct.	
May	-0-	Nov.	
June	1114	Dec.	

Avg. Rate (Y-T-D) 1344 MCF/mo.

M-6-25-37

9-1-79 Cum: 2701.2

Field:	Jalmat Gas
Operator	Phillips Petroleum
Well:	C. D. Woolworth (Group 3) #1
Location:	M-6-25-37
County:	Lea State: New Mexico
Date Prod. Began:	Acres: 160

Gas Production - MCF/month

10000
1000
100

20.90%/yr.

9-1-79
Cum. = 2701.2 MMCF

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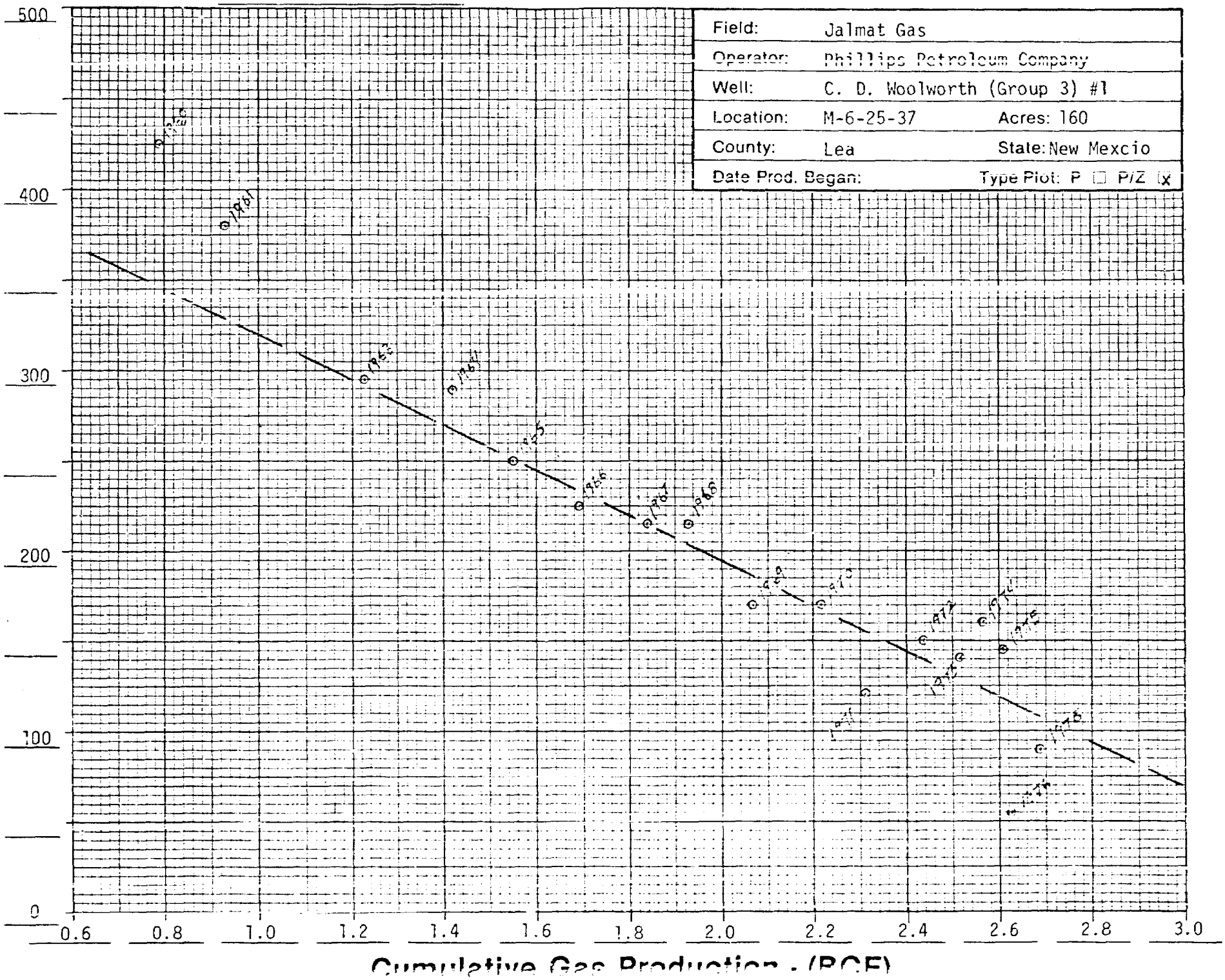
1967 1968 1969 1970 1971 1972 1973 1974 1975 1976 1977 1978 1979 1980

9-1-79 CUM: 2701.2 MMCF

Field:	Jalmat Gas
Operator:	Phillips Petroleum Company
Well:	C. D. Woolworth (Group 3) #1
Location:	M-6-25-37 Acres: 160
County:	Lea State: New Mexcio
Date Prod. Began:	Type Plot: P ☐ P/Z ☒



GAS PRODUCTION HISTORY

Date 11-13-79 Page 1 of 1

Operator: Doyle Hartman

Well: Fitz #1

Location: D-7-25-37

Pool: Jalmat Gas

Spud Date: 11-24-77 Original Completion Date: 12-15-77

Completion Interval (Gas): Perf 2852-3198 W/16

Completion Date (Gas): 12-15-77 First Production (Gas): 12-77

Remarks: First Production Dec. 1977.
Producing rate restricted from 6-78 thru 3-79 due to production overage.

Year	No. of Mos.	Annual Gas Production (MCF)	Avg. Gas Rate (MCF/mo.)	Cum. Gas Production (MMCF)	Annual SIP (psia)	P/Z	
1979	8	46235	5779	146.0	N/A	N/A	
1978	11	94380	8580	99.8	N/A	N/A	
1977	1	5444	5444	5.4	N/A	N/A	

1978 Detail Summary

Jan.	12535	July	-0-
Feb.	12829	Aug.	2725
March	14989	Sept.	3144
April	15906	Oct	3006
May	17528	Nov.	3630
June	4248	Dec.	3842

1979 Detail Summary

Jan.	4138	July	6167
Feb.	3715	Aug.	6981
March	4115	Sept.	
April	8474	Oct.	
May	6692	Nov.	
June	5953	Dec.	

Production (Y-T-D) 46235 MCF

Days or Months (Y-T-D) 8 mos.

Avg. Rate (Y-T-D) 5779 MCF/mo.

9-1-79 Cum: 146.0 MMCF

Field:	Jalmat Gas
Operator:	Doyle Hartman
Well:	Etz #1
Location:	D-7-25-37
County:	Lea State: New Mexico
Date Prod. Began:	12-77 Acres: 77

Gas Production : MCF/month

10000
1000
100

First Production 12-77

9-1-79 Cum. = 146.0 MMCF

DEC. MAR. JUN. SEP. DEC.

1977 1978 1979 1980 1981 1982 1983 1984 1985 1986 1987 1988 1989 1990

RADTKE, AYCOCK, & ASSOCIATES, INC.
Petroleum Engineering Consultants
310 WALL TOWERS WEST
MIDLAND, TEXAS 79701
TELEPHONE 915/684-8044

Exhibit 6
Case 6774

November 26, 1979

Mr. Doyle Hartman
508 C&K Petroleum Building
Midland, Texas 79701

Subject: Proposed Jalmat Pool Gas Infill
Development Well @
590' FNL & 660' FWL, Section 6
Township 25-S, Range 37-E
Lea County, New Mexico

Dear Mr. Hartman:

You have requested that we perform an engineering study of the existing and former Jalmat Pool gas wells in the vicinity of the proposed well location. The purposes of this effort were three-fold:

1. To assess the apparent physical and economic risks associated with drilling the proposed well.

2. To estimate the increased gas recovery attributable to the proposed well, in order that the gas from the proposed well qualify for the Natural Gas Policy Act infill price.

3. To advise you as to whether or not the drilling of the proposed well will serve to protect correlative rights and prevent waste.

The numerical results resulting from our study of 18 wells included in our study sample are detailed on the attached table.

The physical risks associated with drilling the proposed well can be classified as: reservoir quality risk, produced fluid risk and mechanical risk. In relation to the proposed well, the reservoir quality risk is apparently minimal, since the proposed location is surrounded by existing or former gas producing wells, completed in the Jalmat Pool reservoirs. The reservoir fluid risk may be either minimal or substantial, depending upon whether or not extraneous water is still being injected into the lower portion of the Jalmat geologic interval as it apparently formerly was immediately east of the proposed location. The mechanical risk associated with drilling the proposed well is minimal, since the depth is shallow and the time required to drill the well is short. The only exception to this opinion is the possibility of encountering gas at sufficient pressures to generate a "blowout" with circulating

fluid of appropriate density to control the Jalmat zones at a depth of about 750 feet. Since you have provided for a string of casing to be run in your projected costs should such gas be encountered while drilling the proposed well, this potential mechanical problem should prove economically surmountable.

In reference to the reservoir fluid risk, if extraneous water injection into a portion of the Jalmat geologic interval is and/or has been occurring, then the risk associated with drilling the proposed well could be considerable.

The economic risks associated with drilling the proposed well derive from the possibility of receiving too low a gas price to amortize the initial drilling and completion investment and/or experiencing water production with the gas at such rates and associated costs that gas production is, and/or gas reserves consequently become, uneconomical. Since you will doubtlessly not drill the proposed well without prior assurance of receiving a sufficient gas price that will provide you an economic incentive, the major economic risk is the possibility of experiencing water production with the gas at rates beyond your ability to remove it from the well and properly dispose of it. As you have included the investment for a pumping unit in your projected costs, you should be able to sustain gas production unless the experienced rate of water production is greater than expected.

The potential gas reserves attributable to the proposed well can be estimated by making a statistically derived volumetric estimate as follows:

Parameter	Value of Parameter			
	Mean	Median	Std. Dev.	Used
Porosity, & of bulk vol.	0.165	0.190	0.055	0.178
Con.Wtr.Stn.,% of pore space	0.308	0.250	0.105	0.279
Net Effective Pay, feet	83.0	62.5	50.3	72.8
Drainage Area, acres	60.0	64.0	17.4	62.0
Initial SIWHP, psia	131.4	136.7	20.0	134.1

These parameters yield an original gas-in-place of 228 MMCF; incorporating an estimated final BHP/Z of 60.8 psia with the above, the estimated ultimate gas recovery is 134 MMCF.

Alternately, the additional gas that would have been produced from four wells, had their depletion proceeded according to their originally established production rate trends, can be used as a measure of the additional gas potentially recoverable from the proposed well:

Operator, Lease and Well	Potential Additional Gas Recovery Based Upon Gas Rec. Factors As Indicated, MMCF Gas R.F.=0.768	Gas R.F.=0.945
Texaco, Inc. Fristoe No. 2	863.1	1592.2
Skelly Oil Co. Sherrell No. 5	529.5	1582.7
Conoco, Inc. Wells B-1 No. 1	2591.9	3432.6
Pet.Corp. of Texas St. "A" No. 2	748.6	966.4
Totals	4733.1	7573.9

This gas recovery factor of 0.768 was derived from the mean of all 11 values from the 18 well sample; the gas recovery factor of 0.945 was derived from the four highest recovery factors, representative of maximum.

These wells are located from 300 feet to 3100 feet from the proposed location, so it is not unreasonable to anticipate that some substantial portion of these gas volumes should be recovered by the proposed well.

Also, a qualitative statistical analysis of the per well estimated ultimate gas recovery for the 18 wells included in the study sample can be summarized as follows:

Basis for Statistical Comparison	Value
Mean Value	2182.3
Median Value	1506.5
Minimum Value	31.6
Maximum Value	11470.7
Standard Deviation	2843.2

The mean effective drainage area being much less than the development density also indicates the need for an additional well or wells to adequately drain the acreage in question.

In summary, the anticipated additional gas volumes potentially recoverable by the proposed well are as follows:

Method	Additional Gas Recovery, MMCF
Statistical Volumetric	134
Not Produced by Nearby Wells	4730 to 7570
Statistical EUR	1506 to 2180

Because there appears to be substantial additional gas that should be recovered by the proposed well that is probably not otherwise recoverable, the drilling of the proposed well should serve to prevent waste. For the same reasons, the correlative rights of the royalty and working interest owners should be protected by the drilling of the proposed well.

We believe that our study indicates that the risks associated with drilling the proposed well are acceptable to you, as evidenced by your current activities. We also believe that the evidence indicates that there are probably substantial gas reserves underlying the tracts proposed for communitization that are not recoverable unless the proposed (or another well) is drilled on this acreage. We also believe that the proposed well should serve to prevent waste and protect correlative rights.

Very truly yours,

Wm. P. Aycock, P.E.

WPA/bw

Attachment

SUMMARY OF INDIVIDUAL WELL INFORMATION FOR DOYLE HARTMAN
FOR WELLS IN THE VICINITY OF THE DOYLE HARTMAN FEDERAL JALMAT COM.
590 FNL & 660' FWL, SECTION 6, TOWNSHIP-25-S, RANGE-37-E
JALMAT (TANSILL-YATES-7 RIVERS) POOL, LEA COUNTY, NEW MEXICO

	Texaco Inc. C.C.Fristoe 2	Skelly Oil Sherrell 5	Conoco,Inc. Wells "B"-1 1	Getty Oil Sherrell 3	Reserve Oil Martin "B" 1	Pet.Corp.of TX St. "A" 2	Getty Oil W.W.Sherrell 9	Phillips Pet. Vernon 1	ARCO "KN" 1	Oil Dev. Co. TX,Wells"B" 6-1	Conoco, Inc. Wells B-1 4	Phillips Woolworth 3	Millard Deck Shell-State 2	Phillips Woolworth 1	**Reserve Oil Martin 2**
Location of Well	31M-24S-37E	31N-24S-37E	1A-25S-36E	6B-25S-37E	31F-24S-37E	36H-24S-36E	31J-24S-37E	36J-24S-36E	6G-25S-37E	6A-25S-37E	1I-25S-36E	6H-25S-37E	36F-24S-36E	6M-25S-37E	**31A-24S-37E**
Distance & Direction from Proposed Location	1300' N	2400' NE	1300' W	3000' E	4360' NNE	4000' NNE	4000' NE	6250' NW	3000' SE	4[illegible]' E	**2800' SW**	4000' SE	5500' NW	4000' S	**6500' NE**
Completion Date	11-21-48	9-9-49	-	-	10-10-47	-	9-16-78	7-21-76	[illegible]-19-[illegible]	-	7-8-77	2-14-55	1-17-69	7-8-46	-
Completion Interval	2760-2960	2720-3350	-	2830-3300	2862-3187	2813-2920	2892-3103	2808-3006	2850-3150	-	2850-3043	2900-3050	2701-2721	-	-
Initial CAOF, MCF/day	16,500	16,000	-	1,500	9240	-	375	*	15,000	-	712	5800	512	500	-
Cum. Gas Prod., MMCF @ 8-1-79	2300.3	4040.1	926.7	1845.0	3221.3	110.0	14.7	25.3	10,265.0	1741.8	172.8	2962.5	16.9	2699.0	4750.9
Volumetric Analysis Results:															
Mean Eff. Por., % Bulk Vol.	-	19.3	-	-	20.1**	22.4	12.3	-	-	-	-	-	6.4	-	-
Mean Con. Wtr. Stn., % NEPS	-	26.	-	-	23. **	21.	45.	-	-	-	-	-	46.	-	-
Net Effective Pay, feet	-	177.	-	-	118. **	63.	62.	-	-	-	-	-	25.	-	-
Original Gas-in-place, MMCF/acre	-	74.9	-	-	54.2	32.9	12.4	-	-	-	-	-	2.55	-	-
Estimated OGIP, MMCF	4119	5950.	4750	2155	3445	1230	-	-	12,235.	2138	-	2770	-	3707	4963
Est. Ult. Gas Recovery, MMCF	2300.3	4040.1	1056.1	1845.0	3220.9	196.0	239.1	31.6	11,470.7	1742.1	349.9	2628.0	16.9	3028.9	4794.6
Est. Gas Rec. Factor, % OGIP	55.9	67.9	22.2	85.6	93.5	16.0	-	-	93.8	81.4	-	94.9	-	81.7	96.6
Est. Effect. Drainage Area, acres	-	79.	-	-	64.	37.	-	-	-	-	-	-	-	-	-
1978 SIWHP, psia	-	-	-	-	154.2	142.2	-	-	131.2	128.2	118.2	153.2	-	88.2	136.2

*Jalmat Pool (oil well)
**Log analysis from twin well: Union Texas Petroleum Corp. Langlie Jal Unit No. 13.

SUMMARY OF INDIVIDUAL WELL INFORMATION FOR DOYLE HARTMAN
FOR WELLS IN THE VICINITY OF THE DOYLE HARTMAN FEDERAL JALMAT COM.
590 FNL & 660' FWL, SECTION 6, TOWNSHIP-25-S, RANGE-37-E
JALMAT (TANSILL-YATES-7 RIVERS) POOL, LEA COUNTY, NEW MEXICO

	Conoco,Inc. Wells "B"-1 1	Getty Oil Sherrell 3	Reserve Oil Martin "B" 1	Pet.Corp.of TX St. "A" 2	Getty Oil J.W.Sherrell 9	Phillips Pet. Vernon 1	ARCO "WN" 1	Oil Dev. Co. TX,Wells"B" 6-1	Conoco, Inc. Wells B-1 4	Phillips Woolworth 2	Millard Deck Shell-State 2	Phillips Woolworth 1	Reserve Oil Martin 2	Union Texas Langlie Jal Unit 10	Conoco,Inc. Wells "A" 2	Union Texas St."A"-32 4
[illegible]	1A-25S-36E	6B-25S-37E	31F-24S-37E	36H-24S-36E	31J-24S-37E	36J-24S-36E	6G-25S-37E	6A-25S-37E	1I-25S-36E	6H-25S-37E	36F-24S-36E	6M-25S-37E	31A-24S-37E	32E-24S-37E	1E-25S-36E	32F-24S-37E
E	1300' W	3000' E	4300' NNE	4000' NNW	4000' NE	6250' NW	3000' SE	4200' E	2800' SW	4000' SE	5500' NW	4000' S	6500' NE	6500' ENE	5200' WSW	7800' NE
	-	-	10-10-47	-	9-16-78	7-21-76	10-19-39	-	7-8-77	2-14-55	1-17-69	7-8-46	-	-	4-6-55	4-8-78
50	-	2830-3300	2862-3187	2813-2920	2892-3103	2808-3006	2830-3150	-	2850-3043	2900-3050	2701-2721	-	-	-	2970-3026	2913-3190
	-	1,500	9240	-	375	*	15,000	-	712	5800	912	500	-	-	409	300
	926.7	1845.0	3221.3	110.0	14.7	25.3	10,265.0	1741.8	172.8	2962.5	16.9	2699.0	4750.9	1270.9	88.1	155.0
	-	-	20.1**	22.4	12.3	-	-	-	-	-	6.4	-	-	-	-	18.6
	-	-	23. **	21.	45.	-	-	-	-	-	46.	-	-	-	-	24.
	-	-	118. **	63.	62.	-	-	-	-	-	25.	-	-	-	-	53.
			54.2	32.0	32.4	-	-	-	-	-	2.55	-	-	-	-	22.3
	4750	2155	3445	1230	-	-	12,235.	2138	-	2770	-	3707	4963	-	-	-
	1056.1	1845.0	3220.9	196.0	239.1	31.6	11,470.7	1742.1	349.9	2628.0	16.9	3028.9	4794.6	1270.9	88.1	962.5
	22.2	85.6	93.5	16.0	-	-	93.8	81.4	-	94.9	-	81.7	96.6	-	-	-
	-	-	64.	37.	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	154.2	142.2	-	-	131.2	128.2	118.2	153.2	-	88.2	136.2	-	-	-

orp. Langlie Jal Unit No. 13.

Docket No. 1-80

Dockets Nos. 2-80 and 3-80 are tentatively set for January 16 and 30, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - THURSDAY - JANUARY 3, 1980

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

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

CASE 6770: In the matter of the hearing called by the Oil Conservation Division on its own motion to permit National Petroleum Company and all other interested parties to appear and show cause why its Well No. 1 located 905 feet from the North line and 1155 feet from the West line of Section 22, Township 29 North, Range 11 West, San Juan County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6786: In the matter of the hearing called by the Oil Conservation Division on its own motion to consider the amendment of its administrative procedure for the approval of infill drilling on existing gas proration units as promulgated by Order No. R-6013 to permit the approval of infill wells as new onshore production wells pursuant to the Natural Gas Policy Act of 1978 without notice and hearing even though such wells have been spudded prior to receiving such approval.

CASE 6771: Application of Getty Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the E/2 SW/4 of Section 31, Township 24 South, Range 37 East, and the NW/4 NE/4 and NE/4 NW/4 of Section 6, Township 25 South, Range 37 East, Jalmat Gas Pool, to be dedicated to a well to be drilled at a standard location thereon.

CASE 6772: Application of Reading & Bates Petroleum Co. for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Dakota formation underlying the SE/4 of Section 17, Township 24 North, Range 3 West, Chacon-Dakota 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 6773: Application of Southland Royalty Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the E/2 of Section 20, Township 19 South, Range 27 East, 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 6774: Application of Doyle Hartman for an unorthodox location, non-standard proration unit, and approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 120-acre non-standard proration unit comprising the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, and the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, to be dedicated to his Federal Jalmat Com Well No. 1 at an unorthodox location 590 feet from the North line and 660 feet from the West line of said Section 6; applicant further seeks a finding that the drilling of said 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: (Continued and Readvertised)

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 SE/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 6767: (Continued from December 12, 1979, Examiner Hearing)

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 6487: (Continued from October 17, 1979, Examiner Hearing)

Application of El Paso Natural Gas Company for approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well-spacing requirements and a finding that the drilling of its Shell E State Com Well No. 2 located in Unit N of Section 6, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, is necessary to effectively and efficiently drain that portion of the proration unit which cannot be so drained by the existing well.

CASE 6732: (Continued from November 28, 1979, Examiner Hearing)

Application of Dorchester Exploration, Inc. for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Morton Solid State Unit Well No. 1 located 2156 feet from the North line and 990 feet from the West line of Section 4, Township 15 South, Range 34 East, Tres Papalotes-Pennsylvanian Pool.

CASE 6775: Application of Harvey E. Yates Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Young Deep Unit Area, comprising 2242 acres, more or less, of Federal lands in Township 18 South, Range 32 East.

CASE 6776: Application of Harvey E. Yates Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Young Deep Unit Well No. 1, a Morrow test to be drilled 660 feet from the North and West lines of Section 10, Township 18 South, Range 32 East, the W/2 of said Section 10 to be dedicated to the well.

CASE 6777: Application of Harvey E. Yates Company for an NGPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination for its Amoco 22 State Well No. 2 located in Unit G of Section 22, Township 23 South, Range 27 East.

CASE 6778: Application of Harvey E. Yates Company for an NGPA determination, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a new onshore reservoir determination for its Loco Hills Welch Well No. 2 located in Unit N of Section 4, Township 18 South, Range 29 East.

CASE 6745: (Continued from November 28, 1979, Examiner Hearing)

Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the W/2 of Section 26, Township 23 South, Range 24 East, 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 6779: Application of Yates Petroleum Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Pronghorn Unit Area, comprising 5,120 acres, more or less, of State and Federal lands in Townships 22 and 23 South, Range 33 East.

CASE 6780: Application of Yates Petroleum Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Serpentine Bends Unit Area, comprising 4,802 acres, more or less, of State and Federal lands in Township 24 South, Ranges 23 and 24 East.

CASE 6781: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Morrow test well to be drilled 660 feet from the South line and 1980 feet from the East line of Section 1, Township 20 South, Range 28 East, the E/2 of said Section 1 to be dedicated to the well.

CASE 6782: Application of Inexco Oil Company for an exception to Order No. R-3221, Lea 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 Unit H of Section 7, Township 19 South, Range 33 East.

CASE 6783: Application of McClellan Oil Corporation for an unorthodox oil well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Marlisue State Well No. 6 located 1155 feet from the North line and 2475 feet from the West line of Section 24, Township 14 South, Range 29 East, Double "L"-Queen Associated Pool, the NE/4 NW/4 of said Section 24 to be dedicated to the well.

CASE 6784: Application of Merrion & Bayless for a non-standard proration unit and an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 640-acre non-standard gas proration unit comprising the W/2 of Section 18 and the W/2 of Section 19, Township 32 North, Range 14 West, Barker Creek-Paradox Pool, to be dedicated to its Ute Well No. 7 at an unorthodox location 1685 feet from the South line and 3335 feet from the East line of said Section 19.

In the alternative, applicant seeks an order force pooling all of said Section 19 to form a standard 640-acre unit.

CASE 6785: Application of The Harlow Corporation for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the SW/4 SW/4 of Section 19, Township 8 South, Range 29 East, 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.

CAMPBELL AND BLACK, P.A.
LAWYERS

JACK M. CAMPBELL
BRUCE D. BLACK
MICHAEL D. CAMPBELL
WILLIAM F. CARR
PAUL R. CALDWELL

POST OFFICE BOX 2208
JEFFERSON PLACE
SANTA FE, NEW MEXICO 87501
TELEPHONE (505) 988-4421

December 13, 1979

Case 6774

Mr. Joe D. Ramey
Division Director
Oil Conservation Division
New Mexico Department of Energy & Minerals
Post Office Box 2088
Santa Fe, New Mexico 87501

Re: Application of Doyle Hartman for Approval of Infill Drilling and a Non-Standard Proration Unit, Lea County, New Mexico

Dear Mr. Ramey:

Enclosed in triplicate is the application of Doyle Hartman in the above-referenced matter.

The applicant requests that this matter be included on the docket for the examiner hearing scheduled to be held on January 3, 1980.

Very truly yours,

William F. Carr

WFC:lr

Enclosures

cc: Mr. Doyle Hartman

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF DOYLE HARTMAN FOR APPROVAL OF INFILL DRILLING AND A NON-STANDARD PRORATION UNIT, LEA COUNTY, NEW MEXICO.

CASE 6774

APPLICATION

Comes now DOYLE HARTMAN, by his undersigned attorneys, and applies to the New Mexico Oil Conservation Division for approval of infill drilling and a non-standard gas proration unit, Jalmat Gas Pool, Lea County, New Mexico, and in support of his application states:

1. Applicant has received a farmout from El Paso Natural Gas Company of the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

2. Applicant has also received a farmout from Texaco, Inc of the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

3. Applicant seeks the establishment of a non-standard gas proration unit in the Jalmat Gas Pool comprising the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, N.M.P.M., Lea County, New Mexico and the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, N.M.P.M., Lea County, New Mexico as a new 120 acre non-standard gas proration unit to be dedicated to applicant's proposed Federal Jalmat Com. #1 Well to be drilled at a point

590 feet from the North line and 660 feet from the West line of said Section 6.

4. The acreage involved in the proposed non-standard proration unit has been dedicated to a well which was completed in and produced from the Jalmat formation.

5. Applicant seeks determination pursuant to part 271.305 (b) of the Federal Energy Regulatory Commission Regulations Implementing the Natural Gas Policy Act of 1978 that the subject well is necessary to effectively and efficiently drain the portion of Jalmat Gas Pool covered by the proposed proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit and will offer evidence in support of that determination.

WHEREFORE, Applicant respectfully requests that this matter be set for hearing on January 3, 1980 and that after notice and hearing as required by law, the Division enter its Order granting the application for non-standard proration unit and infill drilling and making such other and further provisions as may be proper in the premises.

Respectfully submitted,

CAMPBELL AND BLACK, P.A.

By _____
William F. Carr
Post Office Box 2208
Santa Fe, New Mexico 87501
Attorneys for Applicant

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF DOYLE HARTMAN FOR APPROVAL OF INFILL DRILLING AND A NON-STANDARD PRORATION UNIT, LEA COUNTY, NEW MEXICO.

CASE 6774

APPLICATION

Comes now DOYLE HARTMAN, by his undersigned attorneys, and applies to the New Mexico Oil Conservation Division for approval of infill drilling and a non-standard gas proration unit, Jalmat Gas Pool, Lea County, New Mexico, and in support of his application states:

1. Applicant has received a farmout from El Paso Natural Gas Company of the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

2. Applicant has also received a farmout from Texaco, Inc of the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

3. Applicant seeks the establishment of a non-standard gas proration unit in the Jalmat Gas Pool comprising the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, N.M.P.M., Lea County, New Mexico and the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, N.M.P.M., Lea County, New Mexico as a new 120 acre non-standard gas proration unit to be dedicated to applicant's proposed Federal Jalmat Com. #1 Well to be drilled at a point

590 feet from the North line and 660 feet from the West line of said Section 6.

4. The acreage involved in the proposed non-standard proration unit has been dedicated to a well which was completed in and produced from the Jalmat formation.

5. Applicant seeks determination pursuant to part 271.305 (b) of the Federal Energy Regulatory Commission Regulations Implementing the Natural Gas Policy Act of 1978 that the subject well is necessary to effectively and efficiently drain the portion of Jalmat Gas Pool covered by the proposed proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit and will offer evidence in support of that determination.

WHEREFORE, Applicant respectfully requests that this matter be set for hearing on January 3, 1980 and that after notice and hearing as required by law, the Division enter its Order granting the application for non-standard proration unit and infill drilling and making such other and further provisions as may be proper in the premises.

Respectfully submitted,

CAMPBELL AND BLACK, P.A.

By s/ William F. Carr

William F. Carr
Post Office Box 2208
Santa Fe, New Mexico 87501
Attorneys for Applicant

BEFORE THE

OIL CONSERVATION DIVISION

NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF DOYLE HARTMAN FOR APPROVAL OF INFILL DRILLING AND A NON-STANDARD PRORATION UNIT, LEA COUNTY, NEW MEXICO.

CASE 6224

APPLICATION

Comes now DOYLE HARTMAN, by his undersigned attorneys, and applies to the New Mexico Oil Conservation Division for approval of infill drilling and a non-standard gas proration unit, Jalmat Gas Pool, Lea County, New Mexico, and in support of his application states:

1. Applicant has received a farmout from El Paso Natural Gas Company of the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

2. Applicant has also received a farmout from Texaco, Inc of the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

3. Applicant seeks the establishment of a non-standard gas proration unit in the Jalmat Gas Pool comprising the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, N.M.P.M., Lea County, New Mexico and the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, N.M.P.M., Lea County, New Mexico as a new 120 acre non-standard gas proration unit to be dedicated to applicant's proposed Federal Jalmat Com. #1 Well to be drilled at a point

590 feet from the North line and 660 feet from the West line of said Section 6.

4. The acreage involved in the proposed non-standard proration unit has been dedicated to a well which was completed in and produced from the Jalmat formation.

5. Applicant seeks determination pursuant to part 271.305 (b) of the Federal Energy Regulatory Commission Regulations Implementing the Natural Gas Policy Act of 1978 that the subject well is necessary to effectively and efficiently drain the portion of Jalmat Gas Pool covered by the proposed proration unit which cannot be effectively and efficiently drained by any existing well within the proration unit and will offer evidence in support of that determination.

WHEREFORE, Applicant respectfully requests that this matter be set for hearing on January 3, 1980 and that after notice and hearing as required by law, the Division enter its Order granting the application for non-standard proration unit and infill drilling and making such other and further provisions as may be proper in the premises.

Respectfully submitted,

CAMPBELL AND BLACK, P.A.

By /s/ William F. Carr

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Attorneys for Applicant

DRAFT

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. 6774

Order No. R- 6245

APPLICATION OF DOYLE HARTMAN FOR AN UNORTHODOX LOCATION, ~~FOR A~~ NON-STANDARD PRORATION UNIT, AND APPROVAL OF INFILL DRILLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on January 3, 19 80, at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this _____ day of January, 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, Doyle Hartman, seeks approval of a 120-acre non-standard gas proration unit comprising the NW/4 NW/4 of Section 6, Township 24 South, Range 37 East, and the W/2 SW/4 of Section 31, Township 25 South, Range 37 East /, NMPM, to be dedicated to his Federal Jalmat Com Well No. 1 at an unorthodox location 590 feet from the North line and 660 feet from the West line of said Section 6.

(3) Applicant further seeks a finding that the drilling of said well is necessary to effectively and efficiently drain that portion of an existing proration unit which cannot be so drained by the existing well.

(4) That the entire non-standard proration unit may reasonably be presumed productive of gas from the Jalmat Gas Pool and that the entire non-standard gas proration unit can be efficiently and economically drained and developed by the aforesaid well.

(5) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

(6) That no offset operator objected to the proposed unorthodox location.

(7) That the evidence in this case indicates that the proposed well at the requested unorthodox location ~~may~~ should recover ~~some 200~~ at least 134 million cubic feet of gas from the ~~Morrow formation~~ Jalmat Gas Pool which cannot be produced by the existing well on the proration unit.

(8) That approval of the subject application will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

IT IS THEREFORE ORDERED:

(1) That a 120 -acre non-standard gas proration unit in the Jalmat Gas Pool comprising the NW/4 NW/4 of Section 6, Township 25 South, Range 37 East, and the W/2 SW/4 of Section 31, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby established and dedicated to ~~its~~ The Doyle Hartman Federal Jalmat Com Well No. 1 to be drilled at an unorthodox location, hereby approved, 590 feet from the North line and 660 ~~located in Unit _____ of said~~ feet from the West line of said Section 6. ~~Further~~ ~~the~~ The authorization for infill drilling in the ~~Morrow formation~~ Jalmat Gas Pool granted by this order is necessary to permit the drainage of a portion of the reservoir covered by the ~~existing 320~~ the 120-acre proration unit which cannot efficiently and economically be drained by any existing well thereon.

~~(2) That the W/2 of said Section 2 shall be dedicated to the above-described well in each of the subject formations.~~

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

Called in by Bill Carr
December 13, 1979

Doyle Hartman
Non-Standard Proration Unit
and Approval of Infill Drilling

120-acre
Jalmat Gas Pool
NW/4 NW/4 6-25S-37E
W/2 SW/4 31-24S-37E

Federal Jalmat Com #1
590/N & 660/W of Section 6