CASE 7427: BELCO PETROLEUM CORPORATION
FOR A SPECIAL ALLOWABLE, EDDY COUNTY,
NEW MEXICO

CASE NO.

7427

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BLDG.
SANTA FE, NEW MEXICO
19 November 1981

EXAMINER HEARING

IN THE MATTER OF:

Application of Belco Petroleum Corporation for a special allowable, Eddy County, New Mexico. CASE 7427

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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I N D E X

E X H I B I T S

MR. STAMETS: We'll call now Case 7427.

MR. PEARCE: Application of Belco Petroleum Corporation for a special allowable, Eddy County, New Mexico.

MR. KELLAHIN: May it please the Examiner, I'm Tom Kellahin of Santa Fe, New Mexico, appearing on behalf of the applicant, and I have two witnesses.

(Witnesses sworn.)

MR. KELLAHIN: If the Examiner please, the applicant in this case has a problem with gas prorationing in the South Carlsbad-Morrow Pool.

There are some 76 wells that currently produce gas out of the South Carlsbad Morrow Pool, of which, I believe, Llano purchases gas from some 33.

Of the 76 wells there are only two wells that are not marginal wells. One of which is Belco's Douglas Com Well. The second well is a Cities Service well that recently was reclassified from marginal to nonmarginal. Gas prorationing in South Carlsbad Morrow was initiated back in the early 70ies at a point when gas prorationing was necessary in order to effectively and efficiently control production from the pool.

It is our contention that as justifications for gas prorationing for South Carlsbad Morrow Pool no longer exists, and that as a result of the gas prorationing the allowables as now set for wells in the pool are unrealistically too low.

There are two adverse consequences of the gas proration. First of all, Llano, as a gas purchaser, is ready, willing, and able to purchase all the gas that is currently being produced out of this pool. They are not able to fulfill that demand. As a result of prorationing, Llano has to look elsewhere to obtain the gas in order to meet its marketing.

Secondly, as a result of gas prorationing, if this Belco Douglas Com Well is required to be shut in or the production restricted in order for the production to become back in balance with the allowable, this is a deep gas well for which the current allowable is too low, and if it's restricted it tends to log off. We have various examples, as our witness will testify to, where production has ceased to run a test; that in restoring production, the pressure, restored pressure is substantially less than the pressure immediately prior to the shut-in.

We are very much concerned that if this well is restricted in such a fashion to cause it to come back

into balance with the allowable, that we will leave in the ground gas that would otherwise be recovered.

The application asks in the alternative, one, for some method, and we have no specific recommendation, but for some method that will accomplish the two goals: One, to allow this well to continue to produce at its most effective and efficient manner; and two, to fulfill the market demands of Llano. Whether that has the effect of having this pool removed from gas prorationing is certainly your decision.

If in your judgment that is not appropriate in this case at this time, we have requested that in restricting the well you do so only in terms of a 20 percent restriction. In other words, that it be allowed to produce 80 percent of its allowable.

And those are the high points of our testimony, and with that opening comment, I would like to qualify Mr. Carl Houser of Belco as the first witness.

CARL HOUSER

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Houser, let me ask you for purposes of the record your correct name and occupation?

A. I'm Carl M. Houser. I'm employed by Belco Petroleum Corporation as Production Superintendent.

Q. Mr. Houser, have you previously testified before the Oil Conservation Division?

A. Yes, I have.

Q. And you're a petroleum engineer by education?

A. That is correct.

Q. Have you made a study of the facts surrounding this application?

A. Yes, I have.

MR. KELLAHIN: We tender Mr. Houser as an expert petroleum engineer.

MR. STAMETS: He is considered qualified.

Q. Mr. Houser, let me turn your attention to the packet of exhibits and have you identify and explain for us what we've marked as Belco Exhibit Number One.

A. Exhibit Number One is a map of the South Carlsbad Morrow Pool. The red dots represent those wells which are currently producing from the Morrow Sand. The green dots represent those wells which have been temporarily abandoned or plugged -- permanently plugged and abandoned.

Q. Are these the wells in the South Carlsbad Morrow Pool?

A. These are the wells in the South Carlsbad Morrow Pool.

Q. The Douglas Com Well is identified by the arrow?

A. That is correct.

Q. We've made reference to a Cities Service well as the only nonmarginal well in the pool. Where is that well?

A. It's located in Section 18 and is shown there with the 901 producing capacity above it.

Q. It's the location immediately to the south of the subject well?

A. That is correct.

Q. All right, sir. How many wells are there in the South Carlsbad Morrow Pool?

A. As on the schedule, proration schedule, there are 76.56 wells in the South Carlsbad Morrow.

Q. And those wells, how many are currently classified as nonmarginal?

A. There's only two for this month.

(There followed a discussion

off the record.)

MR. PEARCE: Mr. Examiner, during the time that we have been off the record, the court reporter in this action, Sally Boyd, has indicated that she owns certain mineral right interests in the area presently under concern.

I would like the record to reflect that the fact of Ms. Boyd owning those property interests has been reflected in statements of interest filed with the State of New Mexico, and it is my opinion that in view of the filing with the State of New Mexico of those statements, that she may proceed to act as reporter in this matter.

MR. STAMETS: Good. Let us proceed then to do that.

Q. Mr. Houser, would you generally explain to the Examiner what our problem is with the Douglas Com Well?

A. Yes. The Douglas Com No. 1 is currently overproduced and we're trying to think of some way to keep the well producing, because we do have some additional exhibits that will show that the well logs off or loads up on reduced chokes.

Q. You'll have to speak up just a little bit so we can all hear you.

A. Okay.

Q. The -- in terms of gas prorationing for the South Carlsbad Pool at what date did this particular well come to be more than six times overproduced?

A. April of this year.

Q. April of '81 --

A. Right.

Q. -- the proration schedule showed it to be six times overproduced?

A. Overproduced.

Q. All right, let's go on to some other exhibits.

A. One thing, if I may, Tom, point out, there are currently ten wells in this field that are capable of producing over 500 Mcf per day, as shown by the August statistical data, and there are also currently 32 wells located in this pool that produce less than 100 Mcf per day.

Q. Mr. Houser, if you'll identify the cross section which is Exhibit Number Two.

A. Exhibit Number Two is a cross section as shown in the insert from, little insert there on the cross section, from A to A', and shows the well concerned and the offsetting wells around the Douglas Com.

Q. What's the purpose for this exhibit, Mr.

Houser?

A. The purpose of this exhibit is to show that the Morrow Sand in the Carlsbad Pool is stringers, that we have different producing capacities, that we produce from what can be termed the Lower Morrow, also the Upper Morrow, and what can determined over on the lefthand side on the Union Mead 2 and the Jarvis Mead from the Mead zones of the Morrow.

Q. What's the significance of this exhibit in terms of the application?

A. To merely show the stringered sands, that it's stringered and one well may produce one area and may not fully drain that reservoir.

Q. All right, sir, let's go the Exhibit Number Three.

A. Okay. Exhibit Number Three is a production decline curve of the Douglas Com No. 1. It shows the flowing tubing pressure, the monthly gas production, the condensate, monthly condensate production, and also the monthly water production.

Now we have experienced a slight increase in water production in '81, but not a drastic increase. The condensate production continues to average around 2-1/2 barrels per day. Gas production has been relatively constant

with a little decline for the last, oh, approximately the last two years. Flowing tubing pressure continues to have declined and we are currently -- have flowing tubing pressure of about 840 pounds in the well, surface flowing pressure.

MR. STAMETS: May I ask you at this point if that gas production shown there is the capacity of the well at the current line pressure?

A. It's the capacity as we have restricted it. It is choked back.

MR. STAMETS: I see, so the well could produce more than that if --

A. Yes, if we could --

MR. STAMETS: -- you had no allowable restrictions.

A. If we had a little bit -- there's a test we'll show on through the testimony that the gas rate does not come up terrifically in an increase of choke. There is some increase but very -- maybe a couple hundred Mcf.

MR. STAMETS: What is the line pressure out there?

A. It varies. We've got anywhere -- some of these exhibits will show that we vary anywhere from about 460 up to 540.

MR. STAMETS: Thank you.

Q. All right, sir, is there anything else about Exhibit Number Three?

A. No, Exhibit Number Three, no.

Q. Before we start all the charts which are Exhibits Four-A through Four-I, give us a little outline, Mr. Houser, what was the purpose for the test, what do the test results show you, before we go into specific reasons why you've reached that conclusion?

A. The tests results showed us that the flowing tubing pressure would decline when put on a smaller choke, and that instead of stabilizing and flowing at stabilized pressure, at a higher pressure, when reduced to a smaller choke, the tubing pressure continued to decline throughout the 72-hour period.

And this is borne out by some more exhibits, Exhibits Seven -- Six and Seven.

Q. What, what in your opinion is the optimum choke setting on this particular well?

A. We seem to be getting the better performance of the well on about 11/64th choke, and this will give us around 1750 Mcf per day.

Q. On a monthly allowable for this last month, and I guess for the last month we would be talking about November's allowable?

A. We would talk about October's allowable.

Q. All right, but the total --

A. Which is 33,000, approximately, per month.

Q. All right, October's allowable for this well for this pool was about 33,000 per month?

A. For the month.

Q. All right, at a choke setting at what you recommend, what would be the monthly production?

A. It would end up about 52 to -- no, about 52 to 54,000.

Q. Okay, so to most effectively and efficiently produce the well you're going to exceed the allowable that's been set recently for this well.

A. That is correct.

Q. What generally has happened to the allowables for this pool?

A. They have continuously declined.

Q. Do you have an explanation as to why that's happened?

A. Because of all the marginal wells in the field taking a nomination for the pools; taking into account the marginal wells and everything being allocated back, what is left being allocated back to the top allowable wells.

Q. In your opinion is it still necessary to prorate production from the South Carlsbad Morrow Pool?

A. I would like to see proration done away with.

Q. Why is that?

A. Because I think that in our case here in this particular well and also on the other top allowable wells, it would give them a chance to produce, hold the wells down, and not try to really hold them down and produce them at a reasonable rate for the most efficient -- or get the most efficient MER, most efficient rate out of it.

And we would not create waste at this producing rate.

Q. In your opinion is the current implementation of gas prorationing causing waste to occur?

A. In this particular case we are loading up a well and I'm afraid we are going to cause waste.

Q. Do you have a market for the gas that is produced if this well is produced at its most effective and efficient rate?

A. Yes, sir.

Q. And who is the gas purchaser?

A. Llano.

Q. Let's -- if you want to go through, I

don't see any reason to go through all these charts here, A through I, Mr. Houser. If you'll take a characteristic example of one of these charts and demonstrate to us what the effect is of the -- of the test, that might be sufficient.

A. Okay, if we could go through Exhibit Four-A, Four-B, and Four-C, I can show that the well will decline, flowing tubing pressure will decline as on a smaller choke.

Q. All right, let's do that.

A. Okay, now Exhibit Four-A shows the well was producing 1770 Mcf per day on 11/64th choke. We flowed the well approximately two hours at that rate and reduced the choke at 12:45 p. m. to a 9/64th choke. The flowing tubing pressure increased as would be expected to 150 pounds, approximately, during that period. The remaining period of the day the well continued to spoil and the tubing pressure continued to decline.

At 7:00 a.m. the flowing tubing pressure was 790 pounds with a line pressure of 500 pounds. The 24-hour fluid rate was zero barrels of condensate and one barrel of salt water.

Exhibit Four-B shows a continuation of the test on a 9/64th choke. The gas volume was 1400 Mcf a day. The flowing tubing pressure again at 7:00 a. m. had declined to 740 pounds. The line pressure was 460 pounds.

During this period a 24-hour flow rate, we produced one barrel of salt water and zero barrels of condensate.

MR. STAMETS: Let me ask you a question while we're on this one. It looks like a similar thing happened on the first chart.

Between 7:00 a.m. and 11:00 o'clock, when the chart was apparently pulled, looks like the tubing pressure went back up.

A. It would on a recorder because of the temperature. There'll be a small increase. I've observed this on many a chart on a small increase in temperature.

MR. STAMETS: And it looks like it's -- it's almost identical to the pressure that it has when it went on at noon the day before.

I'm wondering if that's not the only thing that's being read here, is a variation in readings because of temperature. On all of these, they all seem to be -- follow that same pattern.

A. Now on the chart Four-A, it does show it coming up, but on the Chart Four-B, it definitely shows the decline on Four-B.

MR. STAMETS: Well, it looks to me like it's going up between 7:00 o'clock in the morning and 11:00

o'clock.

A. Yes, sir, but we started off there approximately 800, almost on the 800 pounds, and we had spelled in there on the -- for the rate on that chart, when the chart was changed we were down to approximately, I would say, just looking at it, I would say approximately 740 pounds.

MR. STAMETS: Okay, all right. I was looking at the wrong line. I see what you're saying.

A. Okay, I have the original charts here. I think that might be a little better to look at, if you would care to look at them, while we're going through this.

MR. STAMETS: I agree with you now. I was looking at the wrong line. That's why I --

A. Would you care to look at these? These are the original charts.

MR. STAMETS: Yeah, that would help, I guess.

A. It stands out a little bit better on these charts.

MR. STAMETS: All right, that does make it more clear than the Xeroxed copies in the exhibit.

Q. All right, sir, let's look at C, Four-C.

A. Four-C is a continuation of the flow on a 9/64th choke. The gas volume, there's very little de-

cline in the gas volume, it's 1390. There's a -- the flowing tubing pressure had declined to -- at 7:00 a.m. had declined to 690 pounds; the line pressure was 460; the 24-hour fluid rate was 2 barrels of condensate and zero barrels of salt water.

Then prior to running a bottom hole pressure gauge we opened the well back up on a 15/64th choke to unload the wellbore and try to clean it out as best possible to get -- get data. During this time we flowed at the rate of 1950 Mcf with a flowing tubing pressure of only 700 pounds. Line pressure at 480. We only lifted 2-1/2 barrels of total fluid, one barrel of condensate and 1-1/2 barrels of salt water.

Chart Four-E shows the continuation of the flow on a 15/64th while we was running the bottom hole pressure gauge. We were on bottom with the bottom hole pressure gauge at 3:45 p.m.. We continued to flow the well for an additional two hours and then closed in for 72-hour build-up.

The chart Four-F just shows the build-up, continuation of build-up. Four-G is a continuation of the build-up. Four-H shows a continuation of the build-up until 12:30 p.m. At that time we opened the well on a 10/64th choke. For the 18 hour period we flowed at the rate

of 1610 Mcf per day with flowing tubing pressure of 750 pounds. The line pressure was 490. 18-hour fluid rate during this period was zero barrels of condensate and zero barrels of salt water.

Chart Four-I just shows the continuation of the flow for the 24-hour period. We increased the choke to a 13/64th. During that six hour period we flowed at the rate of 1750 Mcf per day. The flowing tubing pressure declined to 725 pounds. The line pressure was 490. The 6-hour fluid rate was 3 barrels of condensate and one barrel of salt water.

So instead of getting a build-up that we should when we closed -- reduced the choke on this well, we start losing flowing tubing pressure, surface pressure, and it will not stabilize. It continues to decline on us.

Q. What's the conclusion then from that?

A. Conclusion, my conclusion is that we will load the well up;if we do not keep the well unloaded and keep it blown down we're going to have trouble with the well.

Q. The next Exhibit Five-A is a chronology of pressure data.

A. Yes.

Q. What does this show us, Mr. Houser?

A. This is the first 72-hour build-up that we -- the first build-up that we took on the well. Actually

it shows that the well stabilized quite rapidly with the maximum pressure reaching -- being reached there in four hours of 1549.

Then we started getting some crossflows between some of the zones with a slight loss in pressure. This continued on down until the 57th hour and then we started getting a small increase again in the pressure. It came up to 1543. Then we opened the well up on a 10/64th choke. We had our drawdown, initial drawdown on the well and within 15 hours we had stabilized at 1037 pounds bottom hole flowing tubing pressure.

During this period again, referring back to the charts, we lifted no fluids from the well.

Then we opened the choke to 13/64th and the pressure continued to decline, and during this period we did lift fluid from the well. Our bottom hole flowing pressure at the conclusion of this test was 985 pounds.

Then we started the second build-up, which shows about the same cross flow but a little bit higher pressure and this can be attributed to the fact that the well hadn't been produced as much.

Exhibit Five-B just shows the gas gradients that we took from running in the well. We were just trying to see what we could prove by it, and it showed nothing but

gas gradients from surface to drilling depth of 10970.

Exhibit Five-C shows the plot of the pressure build-up. You can see the small amount of crossflow we're getting;at 22 hours we took a drop; then at approximately 38 hours we had an increase in pressure with another increase in pressure being observed at approximately 68 hours -- pardon me, 58 hours.

Exhibit Five-D just shows the second build-up and is very comparable to the first build-up.

Exhibit Five-E is just a (not understandable to the reporter) to see if we concluded the build-up, to see if we could prove anything. Again we have nothing but gas gradients.

Q. All right, let's look at Exhibit Number Six here.

A. Okay.

Q. All right, sir, what does this show?

A. Exhibit Number Six shows that we tried to cut the well back in March of '81. This is the monthly production report as prepared by our lease foreman, and also --

Q. The first red line?

A. The first red line is where we tried to cut back.

Q. All right.

A. Okay, we started trying to cut the well back and restrict the production from the well on the 13th of March. At that time the flowing tubing pressure was 950. The gas rate was 1650, and it was on a 12/64th choke.

We reduced the choke to 8/64th. The following day we had 980 pounds flowing tubing pressure and gas volume was 1300. To have been with our allowable we should have had about 1225.

During this period we produced one barrel of water and three barrels of condensate.

The second day of flow on the 8/64th, the 15th, the flowing tubing pressure declined to 960 pounds. The gas volume had declined to 1150 Mcf per day.

We produced one barrel of water and four barrels of condensate.

On the third day of flow on the 8/64th choke the tubing pressure had declined to 900 pounds. The gas volume to 1075 Mcf per day.

We produced one barrel of water and zero barrels of condensate.

At that time the choke was increased to a 10-1/2/64th. The following day the flowing tubing pressure was 850. We unloaded five barrels of water and three

barrels of condensate. The gas volume at 1050.

On the 18th the tubing pressure was still 850 but we unloaded seven barrels of water and four barrels of condensate. Gas rate had then come back up to 1925 on the 14th. Then the choke was reduced to a 12/64th and we -- then on the 22nd again we tried to restrict the rate.

Q. What happens each time you try to restrict the rate, Mr. Houser?

A. We get a decrease in flowing tubing pressure.

Q. And that's consistently demonstrated in both Exhibits Six and Seven?

A. Exhibits Six and Seven, right.

Q. All right, sir. Do you have a recommendation to the Examiner as to what you suggest we do with regards to this well?

A. I would like to just try to work out some new type of proration for the pool, but if we can get 80 percent of our allowable, we will restrict the production, try to make up -- and make up our over production that way.

Q. How many days a week are you going to have to produce the well in order to pull off these liquids that tend to accumulate?

A. Tests that we're running, current --

current data, we're going to have to produce the well at least two days a week to keep it.

Q. And even if you do that, there is a problem in that your tubing pressure decreases.

A. We have a decline in tubing pressure even that way.

Q. All right, sir.

A. If I may, I can give you some tests that were taken just recently on this three day closed in period for the gas and one day closed period that we were draining to test the well.

On the 8th, 11th and 8th, we flowed at 1860 Mcf per day, 4 barrels of condensate, and 1 barrel of salt water in 24 hours on a 16/64th choke. Flowing tubing pressure was 675. Line pressure 490.

On the 11th and 12th, '81, we flowed at 1860 Mcf per day, 5 barrels of condensate, and zero barrels of salt water in 24 hours on a 16/64th choke. Flowing tubing pressure was 670. Line pressure 490.

On the 11th and 16th we flowed at a rate of 1840 Mcf per day. We produced 2 barrels of condensate and 2 barrels of salt water on a 16/64th choke. Flowing tubing pressure was 650. Line pressure 500.

Q. Were Exhibits One through Six prepared

by you or compiled under your direction and supervision?

A. They were.

MR. KELLAHIN: That concludes my examination of Mr. Houser.

CROSS EXAMINATION

BY MR. STAMETS:

Q. Mr. Houser, on Exhibit Six it looks like as long as you flowed the well at 900 pounds or better you only make a barrel of water a day. Pressure drops below that and all of a sudden the well starts making water.

Is that a unique phenomenon or is that simply the pumper warehousing figures --

A. No, sir, it is not. On the day down there where we got the five barrels of water we increased our choke to 10-1/2/64ths from 8/64ths, and that -- and then on the day where we got the 7 barrels of water, the choke was on a -- the well was producing on a 14/64th choke. Our gas rate was considerably greater.

And on the second day we had reduced it back to a 12/64th choke and we had the 2 barrels of water.

Again, the -- there on the second reduction on the 25th the choke was increased to 11/64th because he will show his choke as it was flowing on the morning of

the -- so that is where I count, because he had 1850 Mcf of gas being brought to the surface. Flowing tubing pressure is increased to 900 pounds.

Q. All right.

A. Okay, really on Exhibit Seven, that shows the well being closed in for the 72-hour bottom hole pressure build-up, required by the State.

During this -- prior to being closed in the well was flowing on 900 pounds. After this well was closed in for the 72-hour period and the bottom hole pressure taken and the well was returned to production, we never did get back to the 900 pounds that we had prior to closing in the well.

The last data, we had 825 flowing tubing pressure with 1650 and the choke at that time was 11/64ths, and I have the additional date sheets for all of '81 that I can show you for the remainder of the month, but the pressure still had not come back to 900 pounds.

MR. STAMETS: Are there any other questions of this witness? He may be excused.

MR. KELLAHIN: One other witness.

AL KLAAR

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Klaar, would you please state your name and occupation?

A. My name is Al Klaar. I work for Llano, Incorporated, one of the intrastate gas purchasers of this state, and I'm Vice President of Engineering for Llano.

Q. Are you an engineer by education?

A. Yes, sir.

Q. Have you testified previously before the Oil Conservation Division at other hearings before this Commission?

A. Yes, sir.

Q. And have you made a study of and are you familiar with the gas prorationing in the South Carlsbad Morrow Gas Pool?

A. I'd like to separate that. I'll say yes, I have studied it; that I'm familiar, no, sir, I don't know that I'm all that familiar with it.

Q. All right, sir.

MR. KELLAHIN: We tender Mr. Klaar as an expert petroleum engineer.

MR. STAMETS: He is considered qualified.

Q. I'll show you what has been marked as Exhibit Number Eight and ask you to identify that.

A. Gentlemen, my company would like to read this statement by Llano here into the record and thereafter I'd be more than willing to answer any questions posed by either the Examiner or Mr. Kellahin here.

If you will give me the opportunity, I would like to read this.

MR. STAMETS: Please proceed.

Q. Llano, Incorporated, is a gas purchaser and intrastate transporter for 33 of the gas wells in the Carlsbad South Morrow Gas Pools, including Belco's Douglas Com No. 1.

On 12 of these total of 33 wells Llano is split connected with either El Paso Natural Gas or Trans-western Pipeline Company.

The following tabulation lists Llano's monthly gas nominations for the subject pool and corresponding actual monthly gas purchases as reported on the OCD's montly C-111's for the period of January '81 through October, 1981.

I do not see that we should put the

numbers into the record, but these are numbers available to everyone.

The foregoing tabulation indicates that Llano has overall purchased and taken their gas nominations for this period.

For the period of January through March, '81, Llano was willing to purchase all of its nominated volume but the wells were not capable of delivering this volume due to mechanical upsets brought on by weather conditions.

For the remaining months, April through December, '81, Llano continued to take one hundred percent of well capabilities, even to the extent of exceeding nominated quantities when the wells were capable of delivering same, or delivering more.

Llano has had the capacity and the capability to purchase in excess of full connected individual well deliverability in this gas pool for the past three years.

A curtailment of gas production to less than the full capability of each well would require an equivalent volume to be withdrawn from emergency underground storage until additional sources of gas are connected.

Therefor Llano respectfully recommends that the Belco Petroleum Corporation be permitted to continue to produce full well capability on its Douglas Com No. 1.

MR. STAMETS: Are there any questions of Mr. Klaar?

MR. KELLAHIN: I have none.

MR. STAMETS: He may be excused.

MR. KELLAHIN: We move the introduction of Exhibits One through Eight.

MR. STAMETS: These exhibits will be admitted.

Mr. Houser, I've got an additional question here. Maybe it just clarifies some of the things that you've already testified to.

I believe you said that the pool is in a relatively advanced stage at -- in its life.

And does this make it more difficult for the wells to lift produced liquids?

MR. HOUSER: In the marginal wells it would make them very difficult.

MR. STAMETS: And is it not uncommon for the Morrow wells to have difficulty once they're shut in for test purposes --

MR. HOUSER: To restore them to activity?

MR. STAMETS: -- to restore the productivity? Is that correct?

MR. HOUSER: That is correct.

MR. STAMETS: And so what you're concerned with here is because of the workings of gas prorationing your well may have to be restricted and once it is, you may not have as much of a well thereafter.

MR. HOUSER: This is quite possible in the Morrow because the Morrow can be damaged with its own fluids by closing in or restricting.

MR. STAMETS: And could that result in gas being left in the ground that would otherwise be produced?

MR. HOUSER: Yes, it could in my opinion, because the cross section showed we're very stringered and I think all the exhibits that was presented in the hearing in 1972 pointed out that the South Carlsbad Morrow was stringered.

Okay, there would be some of these stringers producing in this well may not produce in adjoining wells.

MR. STAMETS: Okay. Now some of the things that we could do to alleviate your situation there would be to discontinue prorationing, suspend prorationing, suspend shut-in for six months overproduction, assignment of a special allowable.

Mr. Klaar, are you --

MR. KLAAR: I just wanted to point out

one thing. One thing that Llano is disturbed about is basically on three years ago, when the top allowable of a well was 72,000 a month, to the latest, which is November, 30,000 a month, if the trend of continuous top allowable production getting smaller and smaller and smaller, we can visualize that even though we have practically nothing but marginal wells remaining, say six months down the road all of a sudden we have eight top allowable wells, even though they've been marginal practically throughout their whole history, their producing history, and we continue to have more and more wells that we're connected to being restricted, placing an additional economic burden on us getting less gas, is what I'm trying to point out.

We haven't been able to figure out how to hold the top allowable at a continuous reasonable high level. Instead the top allowable has just continued to be decreased, and now it does make from one month to the next, it might go up 2000 or 4000, but overall it has been on a decrease, and we don't know why that is, but we're just disturbed by the fact that it is decreasing continuously.

MR. STAMETS: Could we perhaps solve the problem by establishing a minimum top allowable for non-marginal wells of 2-million a day?

MR. KLAAR: That would be a step in the

right direction. There is not a single -- right now there is not a single well that's capable of producing that, but that does not preclude somebody coming in on an existing proration unit and finding a brand new stringer, you know, that is not productive anywhere else, and capable of making say 1600 Mcf a day with a lot of water production, but yet you can't produce 1600 Mcf a day because the allowable is only 1000 Mcf a day.

I mean, this is an inherent problem. You hear that probably more times than not. Morrow wells are problems.

MR. HOUSER: The wells -- if I may inject this, the wells to the north are watering out. We have lost one well completely over there because of excessive water. That's the Jarvis Mead No. 1. We get very little oil out of that. That well got to where it was making 225 barrels of water a day. We attempted to work it over and complete up in the upper zone, the Mead zone, and we were not successful in restoring the productivity of the well.

The Union Mead No. 3, another well in that particular area, we are now producing 100 to 135 barrels of water a day out of it. And this all seems to be coming from the Lower Morrow stringers.

I know it was on the Jarvis Mead because

of the production logs we ran.

MR. STAMETS: Well, if anyone thinks of any other way that we might resolve this problem and would like to relay that to the Examiner after the hearing, that's fine.

If there's nothing else at this point, the case will be taken under advisement, and the hearing is adjourned.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing 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.

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. 7427 heard by me on 11-19 1981.

Richard L. Stamets, Examiner
Oil Conservation Division

SALLY W. BOYD, C.S.R.
Rt. 1 Box 193-B
Santa Fe, New Mexico 87501
Phone (505) 455-7409

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

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

September 15, 1982

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

Re: CASE NO. 7427
ORDER NO. R-6905

Applicant:

Belco Petroleum Corporation

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. 7427
ORDER NO. R-6905

APPLICATION OF BELCO PETROLEUM
CORPORATION FOR A SPECIAL ALLOWABLE,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 19, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 15th day of February, 1982, 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, Belco Petroleum Corporation, seeks an adjustment to the manner in which allowables are calculated for wells in the South Carlsbad-Morrow Gas Pool in order to grant relief to the overproduced status of its Douglas Com. Well No. 1 located in Unit H of Section 7, Township 22 South, Range 27 East, said well being subject to shut-in being more than six times its allowable overproduced. In the alternative, applicant seeks to make up the overproduction at a rate less than complete shut-in by curtailing production from the well to 80 percent of its top allowable until it is back in balance.

(3) That said well has demonstrated extreme sensitivity to changes in flow rates by manipulation of choke size at the wellhead, and often fails to achieve the same rate of flow or bottom hole pressure after being severely curtailed, even on a temporary basis.

(4) That gas well allowables in the South Carlsbad-Morrow Gas Pool have been substantially lower during the past eleven months than the ability of the subject well to produce.

(5) That due to the sensitivity of the well to curtailment or shut-in, the operator permitted the well to accumulate overproduction against its allowable of some 414,822 MCF of gas through October, 1981.

(6) That since October, 1981, applicant has curtailed production from the well and this, combined with improved allowables for the pool, has brought the well's overproduction down to 398,102 MCF through November, 1981, and to 363,108 MCF through December, 1981.

(7) That due to the extreme sensitivity of the reservoir in the subject well to severe curtailment or shut-in, means should be provided whereby the well may be brought back into a less than six times over-produced status more rapidly than with the modest curtailment presently employed.

(8) That as of December 31, 1981, the subject well was 363,108 MCF overproduced, whereas six times its average allowable for the 12-month period ending December 31 equals 213,157 MCF.

(9) That assignment of a special allowable of the difference between 363,108 MCF and 213,157 MCF, or 149,951 MCF, plus one average month's allowable during 1981, or 35,526 MCF, for a total of 185,477 MCF, would reduce the well's overproduced status to 177,631 MCF as of December 31, 1981.

(10) That with said special allowable assignment, the subject well would be approximately five times overproduced as of December 31, 1981, and this amount of overproduction, less any accumulated underproduction since December 31, should permit the operator to maintain the well in a producing status and, with only minimal curtailment, further reduce its overproduction.

(11) That said Douglas Com. Well No. 1 is one of only two non-marginal wells in the South Carlsbad-Morrow Gas Pool at this time, and there is no likelihood of any violation of correlative rights as the result of the assignment of the above-described special allowable.

(12) That the assignment of said special allowable will not cause but may prevent waste and should be approved.

IT IS THEREFORE ORDERED:

(1) That the Belco Petroleum Corporation Douglas Com. Well No. 1 located in Unit H of Section 7, Township 22 South, Range 27 East, NMPM, South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico, is hereby assigned a special supplemental allowable of 185,477 MCF.

(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.

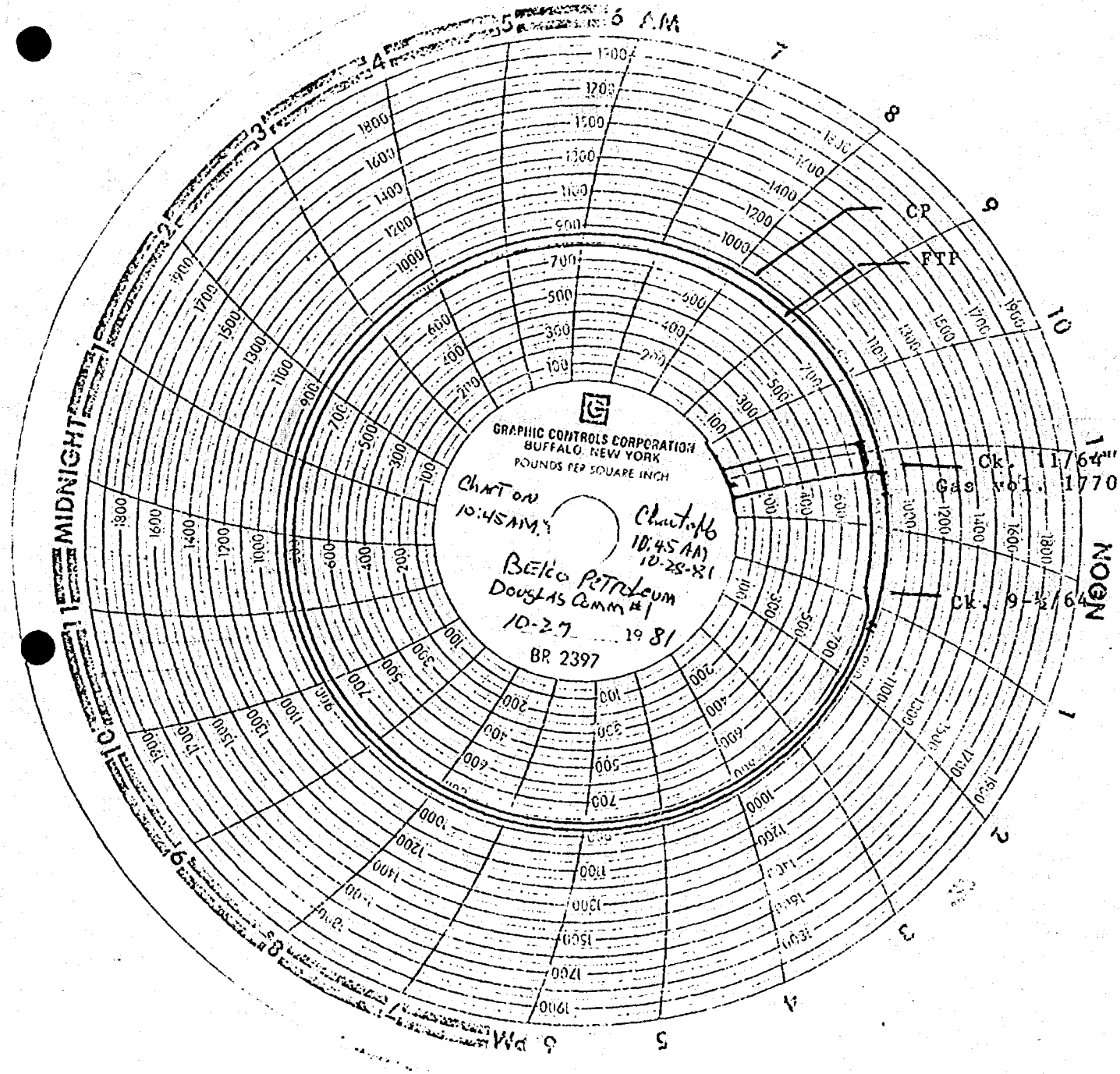
STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

JOE D. RAMEY
Director

BELCO PETROLEUM CORPORATION
DOUGLASS COM 1
Sec. 7, T-22-S, R-27-E
Eddy Co., New Mexico

Energy and Mineral Department
Oil Conservation Divison
Case No. 7427

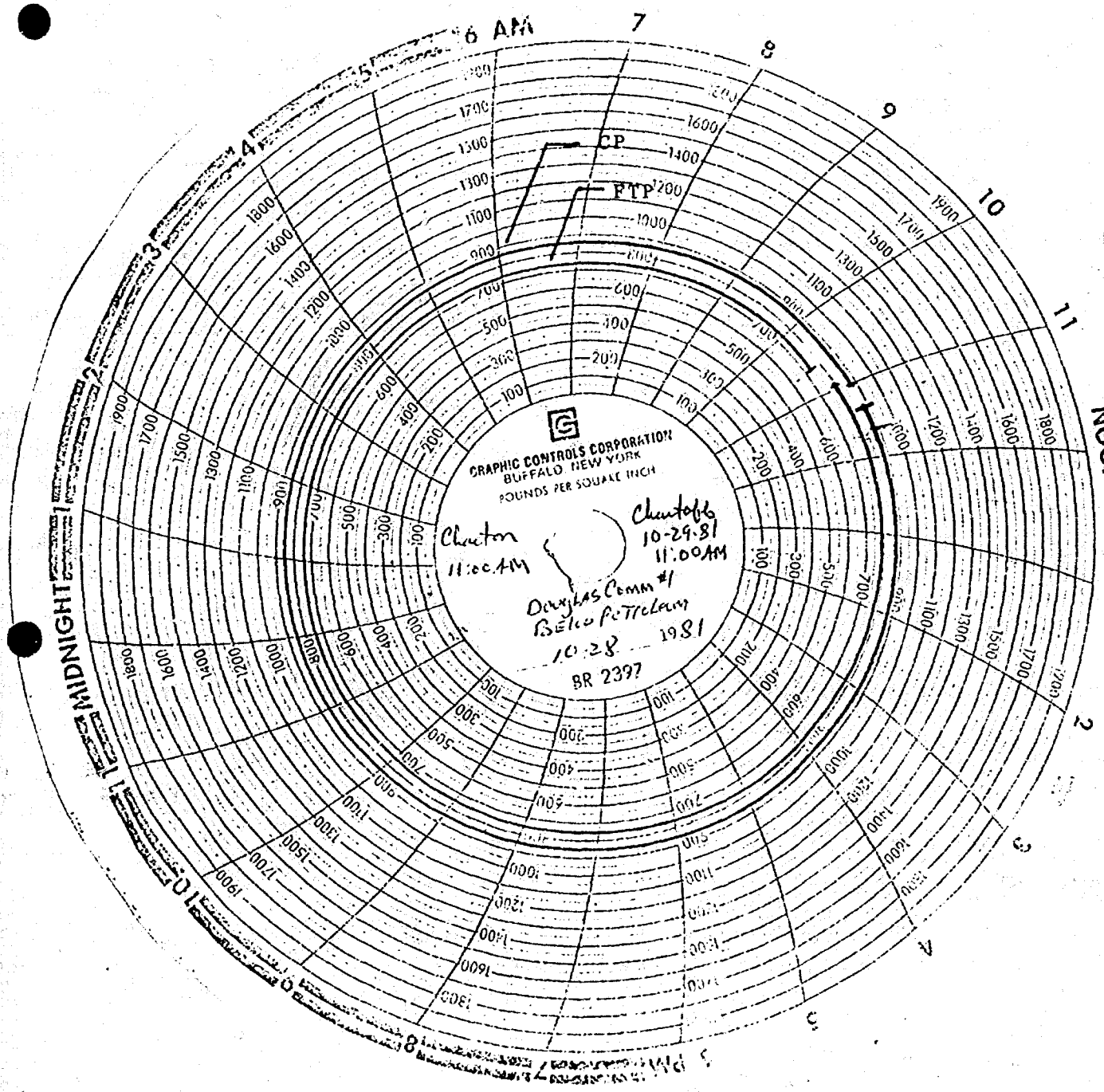
BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
Belco EXHIBIT NO. 1
CASE NO. 7427
Submitted by _____
Hearing Date _____



Belco Petroleum Corp.
Douglass Com #1
9-½/64" ck., gas vol. 1450 Mcf/D
FTP 790, LP 500
24 hr. Fluid rate 0 BC & 1 BSW

Exhibit No. 4-A

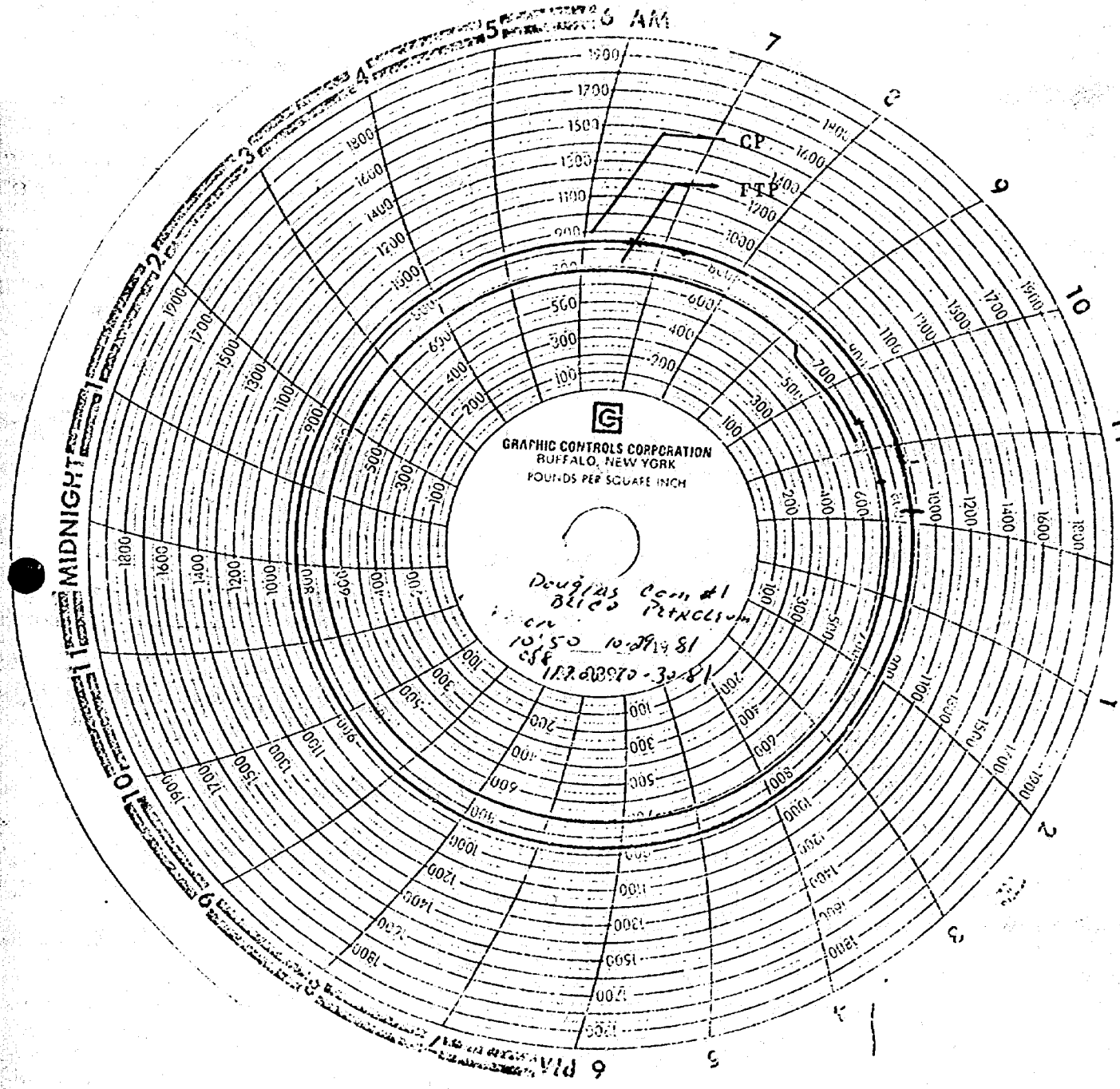
Case # 7427



Belco Petroleum Corp.
Douglass Com. 1
Carlsbad, S. (Morrow)
9½/64" ck., gas vol. 1400 Mcf/D
FTP 740#, LP 460#
24 hr. Fluid rate 0 BC & 1 BSW

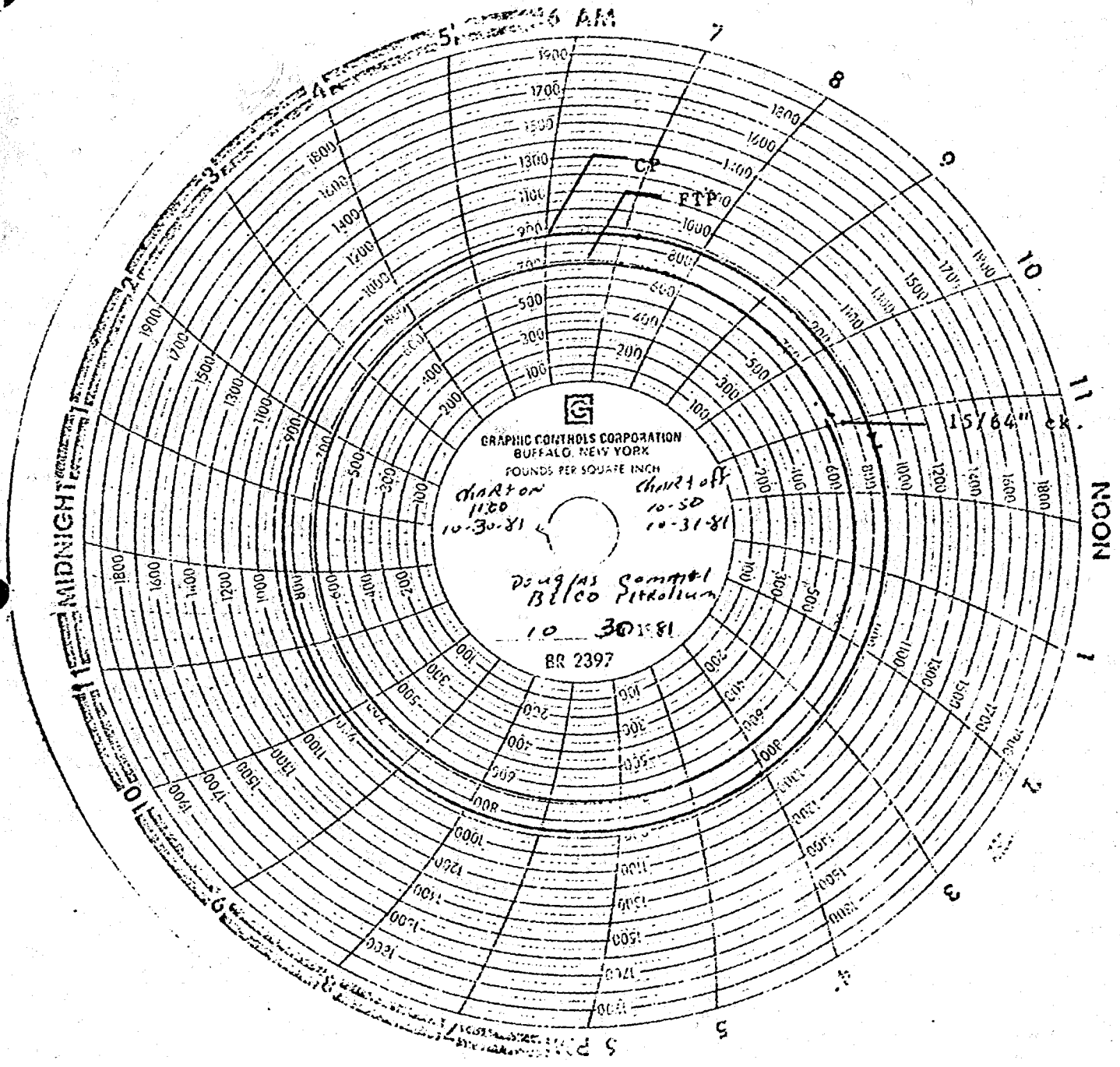
Exhibit # 4-B

Case # 7427



Belco Petroleum Corp.
Douglass Com 1
Carlsbad, S. (Morrow)
9-½/64" ck., gas vol. 1390 Mcf/D
FTP 690#, LP 460#
24 hr. fluid rate: 2 BC & 0 BSW

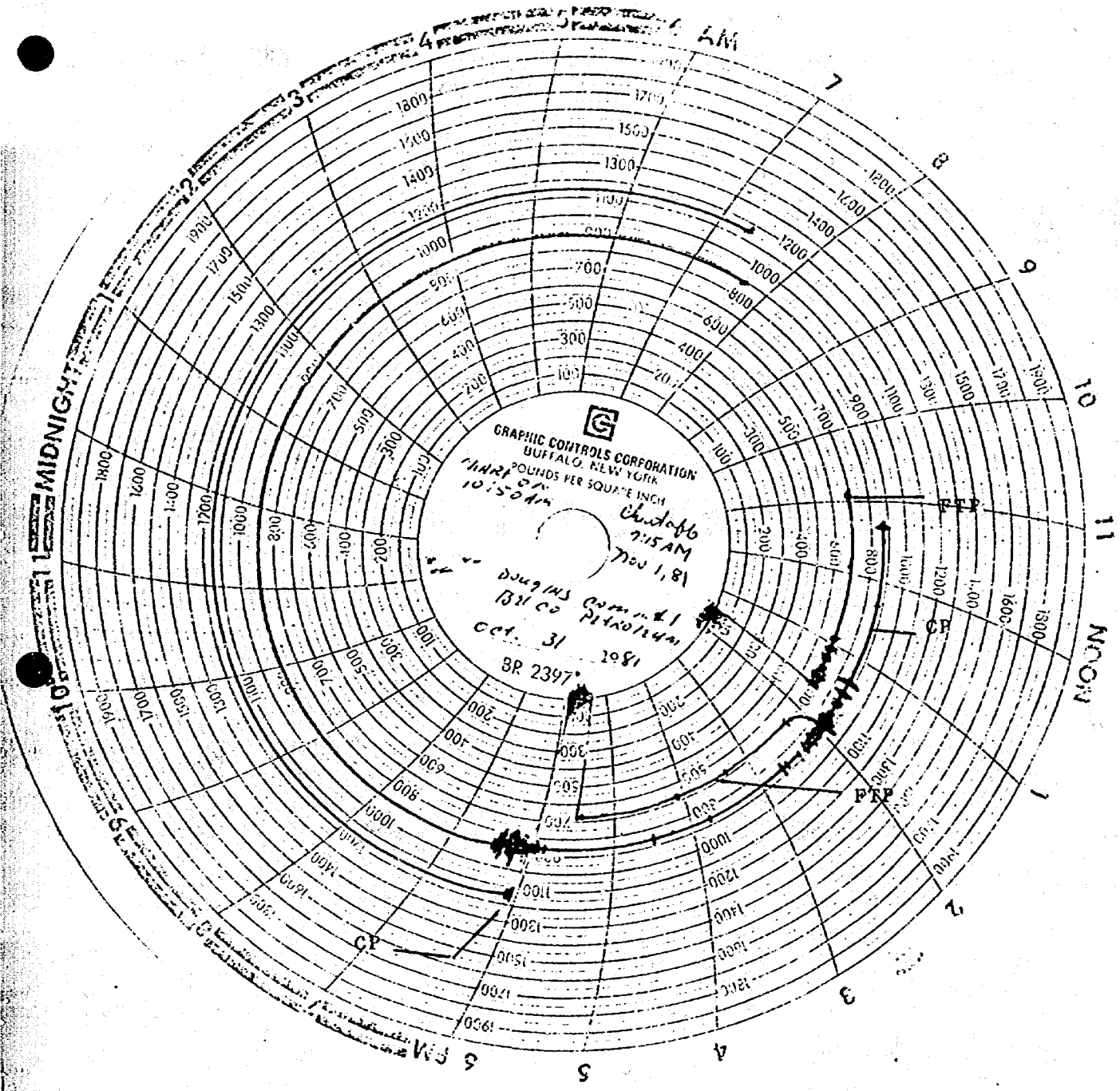
Exhibit # 4-C
Case #7427



Belco Petroleum Corp.
Douglass Com 1
Carlsbad, S. (Morrow)
15/64" ck., gas vol. 1950 Mcf/D
FTP 700#, LP 480#
24 hr. Fluid Rate: 1 BC & 1½ BSW

Exhibit # 4-D

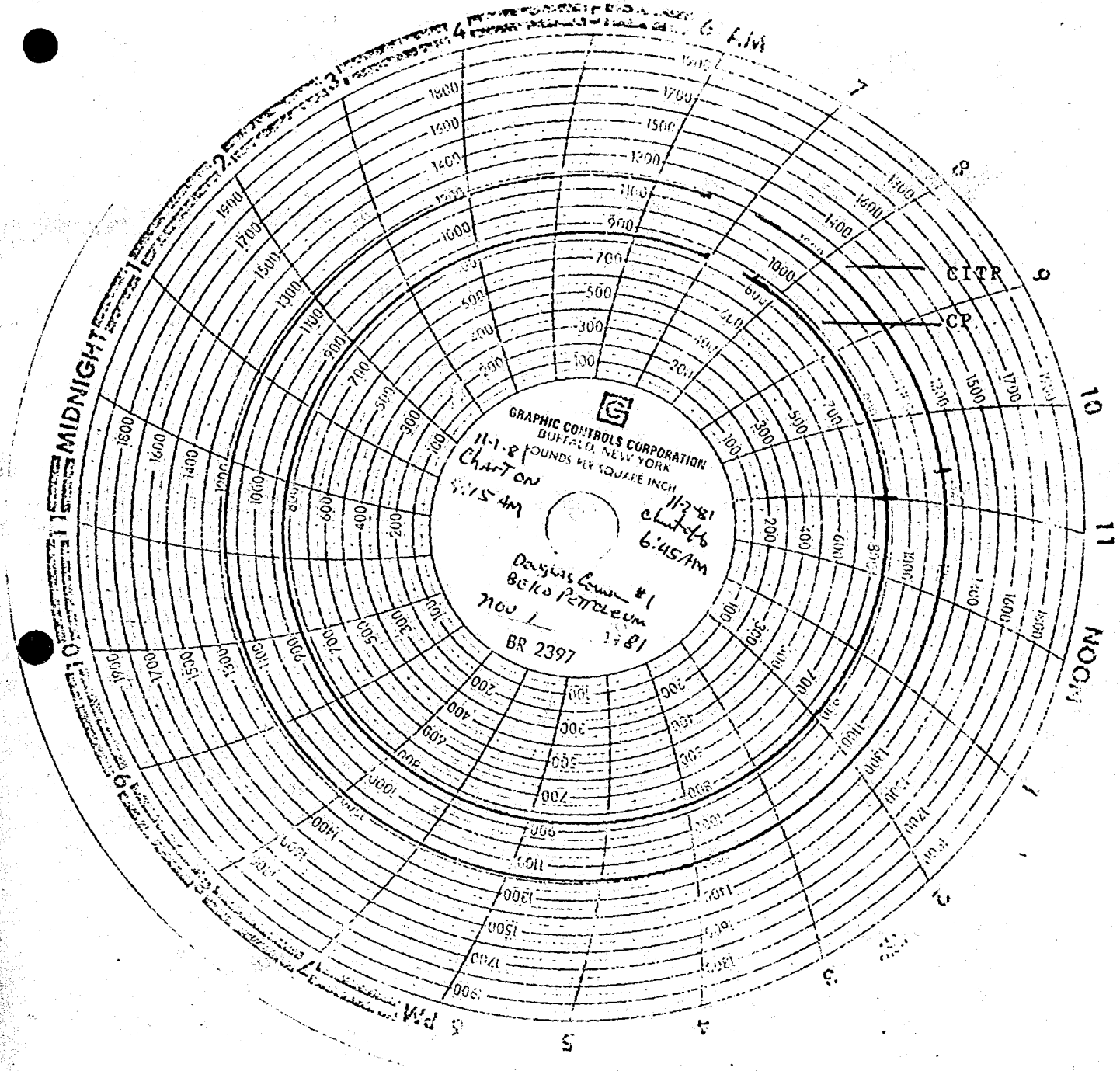
Case #7427



Belco Petroleum Corp.
Douglass Com 1
Carlsbad S. (Morrow)
On Btm. w/gauge @ 3:45 P.M.
Flwd. until 5:45 P.M. & CI.

Exhibit # A-5

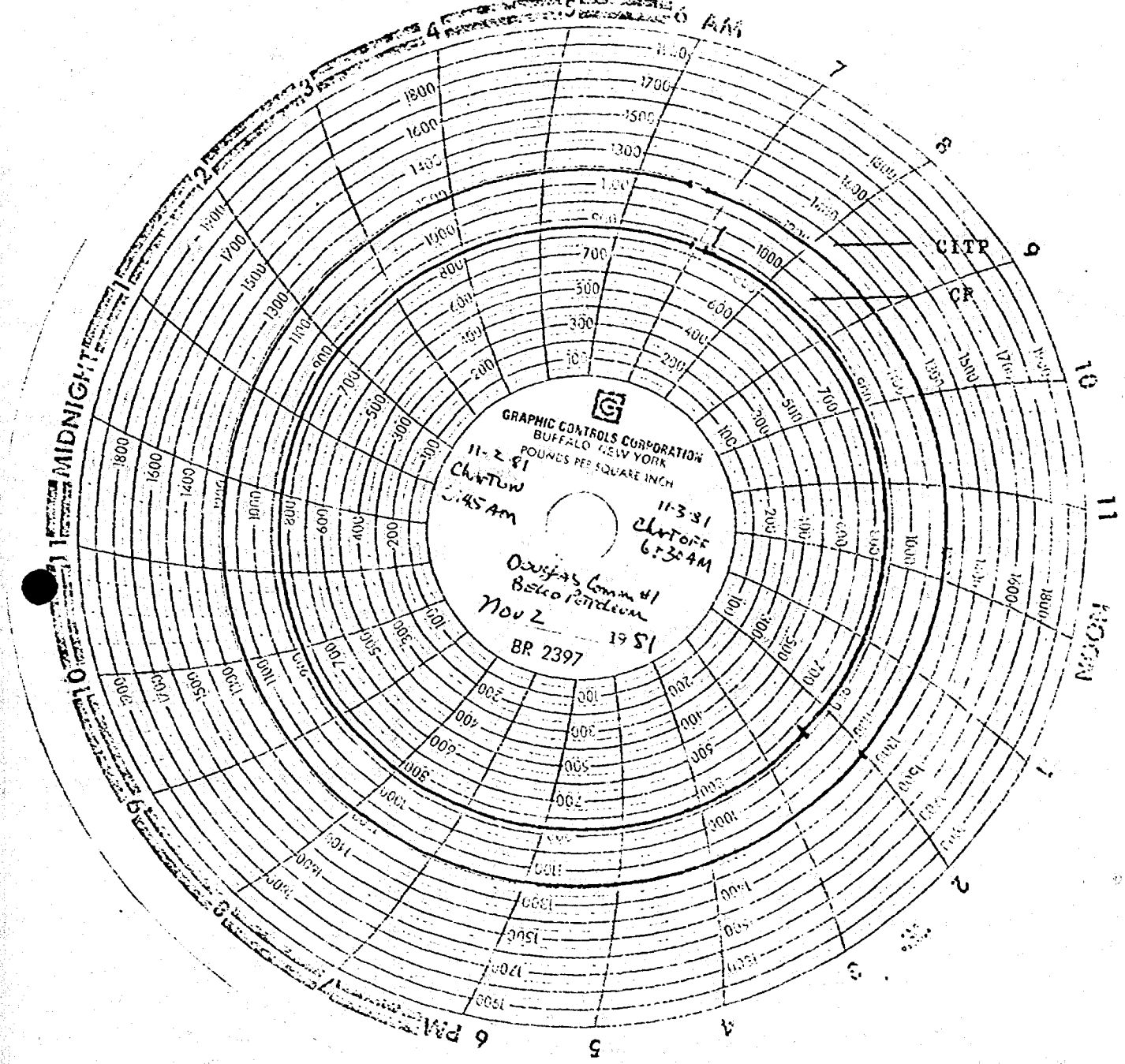
Case #7427



Belco Petroleum Corp.
Douglass Com 1
Carlsbad, S. (Morrow)
CI

Exhibit # 4-F

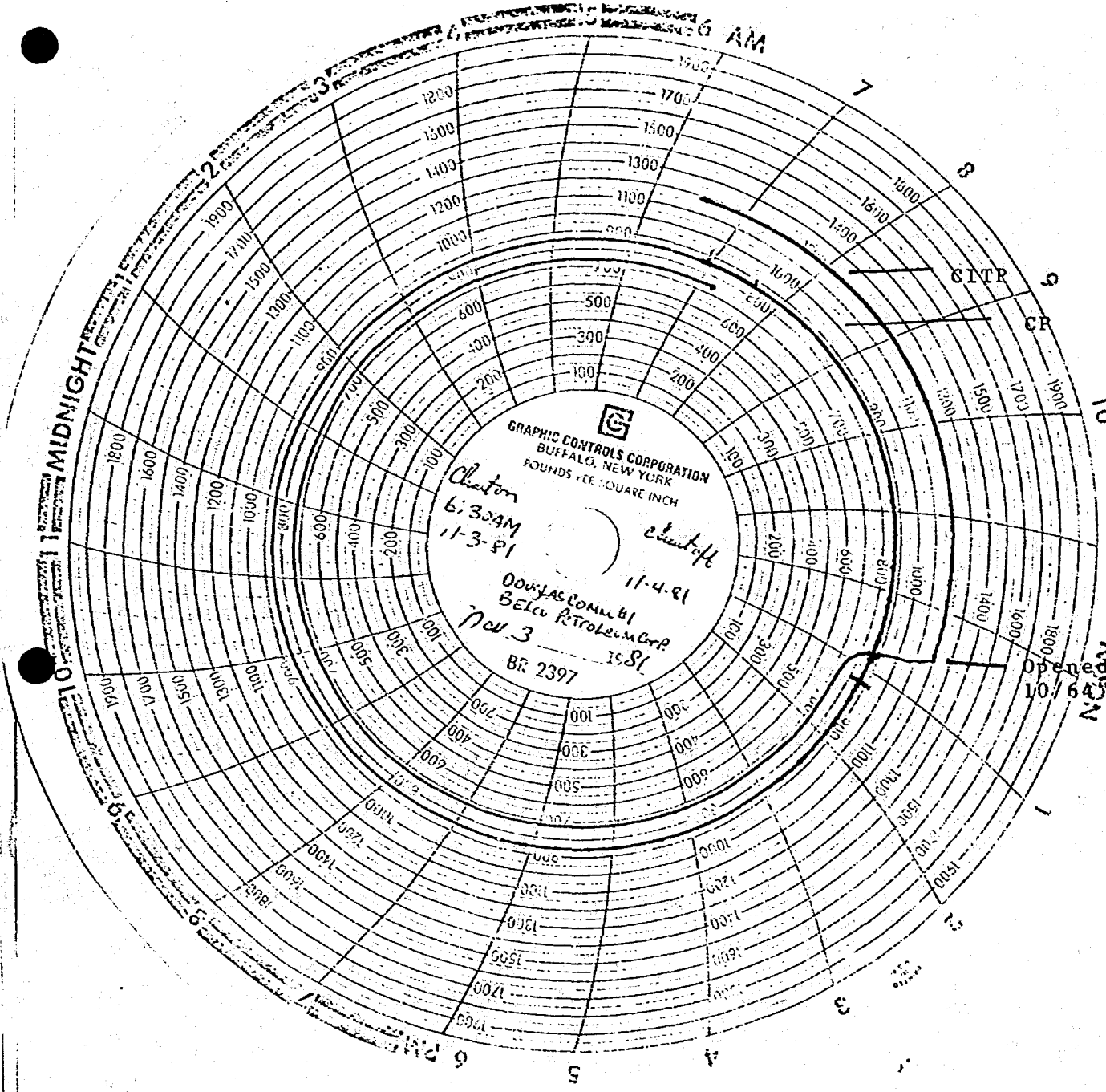
Case #7427



Belco Petroleum Corp.
Douglass Com 1
Carlsbad, S. (Morrow)
CI

Exhibit # 4-G

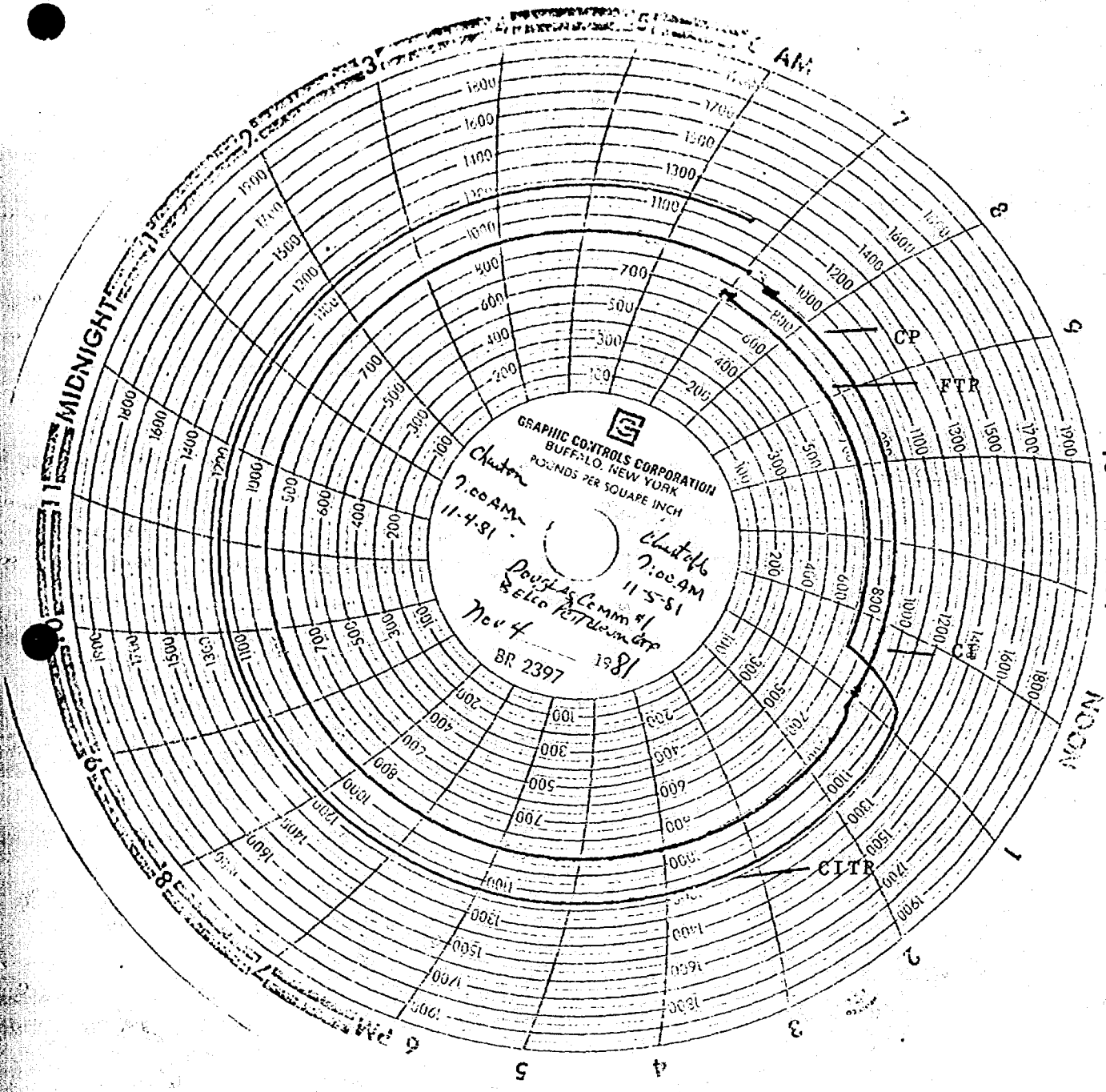
Case #7427



Belco Petroleum Corp.
Douglass Com 1
Carlsbad, S. (Morrow)
Opened on 10/64" ck, 18 hrs. FARO
1610 Mcf/D. FTP 750#, LP 490#,
18 hr fluid rate: 0 BC & 0 BSW.

Exhibit # 4-H

Case #7427



Belco Petroleum Corp.
Douglass Com 1
Carlsbad S. (Morrow)
Increased ck. to 13/64": 6 hrs.
FARO 1750 Mcf/D. FTP 725#, LP 490#,
6 hr. fluid rate: 3 BC & 1 BSW.

Exhibit # 4-I

Case #7427

JARREL SERVICES, INC.

POST OFFICE BOX 1654 PHONES 505 393-5396 — 393-8274

HOBBS, NEW MEXICO 88240

COMPANY: Belco Petroleum Corporation

WELL: Douglas Com. No. 1 FIELD: South Carlsbad-Morrow

CHRONOLOGICAL PRESSURE DATA

DATE	STATUS OF WELL	TIME	ELASPED TIME HRS.	ELASPED TIME MIN.	SURFACE PRESSURE TBG	SURFACE PRESSURE CSG	BHP @ (-8821) 11320'PSIG
1981							
10/31	Flowing. Run Flowing Gradient w/Tandem Bombs & set Bombs off @ 10370'	3:45	-	-	686	PKR	963
	Flowing	4:45	1	00	-	-	960
	Shut in	5:45	2	00	-	-	954
	"	6:00	0	15	-	-	1267
	"	6:15	0	30	-	-	1466
	"	6:30	0	45	-	-	1503
	"	6:45	1	00	-	-	1530
	"	7:15	1	30	-	-	1549
	"	7:45	2	00	-	-	1549
	"	8:45	3	00	-	-	1549
	"	9:45	4	00	-	-	1549
	"	10:45	5	00	-	-	1546
	"	11:45	6	00	-	-	1543
11/1/81	"	12:45 AM	7	00	-	-	1543
	"	1:45	8	00	-	-	1543
	"	2:45	9	00	-	-	1543
	"	3:45	10	00	-	-	1543
	"	4:45	11	00	-	-	1543
	"	5:45	12	00	-	-	1543
	"	6:45	13	00	-	-	1543
	"	7:45	14	00	-	-	1540
	"	8:45	15	00	-	-	1540
	"	9:45	16	00	-	-	1540
	"	10:45	17	00	-	-	1540
	"	11:45	18	00	-	-	1540
	"	12:45 PM	19	00	-	-	1540
	"	1:45	20	00	-	-	1540
	"	2:45	21	00	-	-	1540
	"	3:45	22	00	-	-	1537
	"	4:45	23	00	-	-	1537
	"	5:45	24	00	-	-	1537
	"	6:45	25	00	-	-	1537
	"	7:45	26	00	-	-	1537
	"	8:45	27	00	-	-	1537
	"	9:45	28	00	-	-	1537
	"	10:45	29	00	-	-	1537
	"	11:45	30	00	-	-	1537

EXHIBIT NO. 5-A
CASE NO. 7427

WELL: Douglas Com. No. 1
PAGE: 2

DATE	STATUS OF WELL	TIME	ELASPED TIME HRS.	ELASPED TIME MIN.	SURFACE PRESSURE TBG	SURFACE PRESSURE CSG	BHP @ ( )
	Shut In	12:45 AM	31	00	-	-	1537
	"	1:45	32	00	-	-	1537
	"	2:45	33	00	-	-	1537
	"	3:45	34	00	-	-	1537
	"	4:45	35	00	-	-	1537
	"	5:45	36	00	-	-	1537
	"	6:45	37	00	-	-	1537
	"	7:45	38	00	-	-	1537
	"	8:45	39	00	-	-	1540
	"	9:45	40	00	-	-	1540
	"	10:45	41	00	-	-	1540
	"	11:45	42	00	-	-	1540
	"	12:45 PM	43	00	-	-	1540
	"	1:45	44	00	-	-	1540
	"	2:45	45	00	-	-	1540
	"	3:45	46	00	-	-	1540
	"	4:45	47	00	-	-	1540
	"	5:45	48	00	-	-	1540
	"	6:45	49	00	-	-	1540
	"	7:45	50	00	-	-	1540
	"	8:45	51	00	-	-	1540
	"	9:45	52	00	-	-	1540
	"	10:45	53	00	-	-	1540
	"	11:45	54	00	-	-	1540
11/3	"	12:45 AM	55	00	-	-	1540
	"	1:45	56	00	-	-	1540
	"	2:45	57	00	-	-	1540
	"	3:45	58	00	-	-	1543
	"	4:45	59	00	-	-	1543
	"	5:45	60	00	-	-	1543
	"	6:45	61	00	-	-	1543
	"	7:45	62	00	-	-	1543
	"	8:45	63	00	-	-	1543
	"	9:45	64	00	-	-	1543
	"	10:45	65	00	-	-	1543
	"	11:45	66	00	-	-	1543
	Opened well 10/64"	12:45	67	00	-	-	1543
	choke Flowing	1:45	1	00	-	-	972
	"	2:45	2	00	-	-	982
	"	3:45	3	00	-	-	991
	"	4:45	4	00	-	-	1000
	"	5:45	5	00	-	-	1000
	"	6:45	6	00	-	-	1006
	"	7:45	7	00	-	-	1012
	"	8:45	8	00	-	-	1021
	"	9:45	9	00	-	-	1024
	"	10:45	10	00	-	-	1024
	"	11:45	11	00	-	-	1030
11/4	"	12:45 AM	12	00	-	-	1030

WELL: Douglas Com. No. 1

PAGE: 3

DATE	STATUS OF WELL	TIME	ELASPED TIME HRS.	ELASPED TIME MIN.	SURFACE PRESSURE TBG	SURFACE PRESSURE CSG	BHP @ ( )
	Flowing	1:45	13	00	-	-	1034
	"	2:45	14	00	-	-	1037
	"	3:45	15	00	-	-	1037
	"	4:45	16	00	-	-	1037
	"	5:45	17	00	-	-	1037
	"	6:45	18	00	-	-	1037
	Opened choke to 13/64"	7:45	19	00	-	-	1037
	Flowing	8:45	20	00	-	-	991
	"	9:45	21	00	-	-	991
	"	10:45	22	00	-	-	988
	"	11:45	23	00	-	-	985
	Shut In	12:45 PM	24	00	-	-	985
	"	12:50	0	05	-	-	1015
	"	12:55	0	10	-	-	1095
	"	1:00	0	15	-	-	1313
	"	1:05	0	20	-	-	1346
	"	1:10	0	25	-	-	1395
	"	1:15	0	30	-	-	1472
	"	1:30	0	45	-	-	1518
	"	1:45	1	00	-	-	1540
	"	2:15	1	30	-	-	1576
	"	2:45	2	00	-	-	1576
	"	3:45	3	00	-	-	1576
	"	4:45	4	00	-	-	1573
	"	5:45	5	00	-	-	1570
	"	6:45	6	00	-	-	1567
	"	7:45	7	00	-	-	1564
	"	8:45	8	00	-	-	1564
	"	9:45	9	00	-	-	1564
	"	10:45	10	00	-	-	1564
	"	11:45	11	00	-	-	1564
11/5/81	"	12:45 AM	12	00	-	-	1561
	"	1:45	13	00	-	-	1561
	"	2:45	14	00	-	-	1561
	"	3:45	15	00	-	-	1561
	"	4:45	16	00	-	-	1561
	"	5:45	17	00	-	-	1561
	"	6:45	18	00	-	-	1561
	"	7:45	19	00	-	-	1561
	"	8:45	20	00	-	-	1561
	"	9:45	21	00	-	-	1558
	"	10:45	22	00	-	-	1558
	"	11:45	23	00	-	-	1558
	"	12:45 PM	24	00	-	-	1558
	"	1:45	25	00	-	-	1558
	"	2:45	26	00	-	-	1558
	"	3:45	27	00	-	-	1555
	"	4:45	28	00	-	-	1555
	"	5:45	29	00	-	-	1555

WELL: Douglas Com. No. 1

PAGE: 1

DATE	STATUS OF WELL	TIME	ELASPED TIME HRS.	ELASPED TIME MIN.	SURFACE PRESSURE TBG	SURFACE PRESSURE CSG	BHP @ ( )
	Flowing	6:45	30	00	-	-	1555
	"	7:45	31	00	-	-	1555
	"	8:45	32	00	-	-	1555
	"	9:45	33	00	-	-	1555
	"	10:45	34	00	-	-	1555
	"	11:45	35	00	-	-	1555
11/6	"	12:45 AM	36	00	-	-	1558
	"	1:45	37	00	-	-	1558
	"	2:45	38	00	-	-	1558
	"	3:45	39	00	-	-	1558
	"	4:45	40	00	-	-	1558
	"	5:45	41	00	-	-	1558
	"	6:45	42	00	-	-	1558
	"	7:45	43	00	-	-	1558
	"	8:45	44	00	-	-	1558
	"	9:45	45	00	-	-	1558
	"	10:45	46	00	-	-	1558
	"	11:45	47	00	-	-	1558
	"	12:45 PM	48	00	-	-	1558
	"	1:45	49	00	-	-	1558
	"	2:45	50	00	-	-	1558
	"	3:45	51	00	-	-	1558
	"	4:45	52	00	-	-	1558
	"	5:45	53	00	-	-	1558
	"	6:45	54	00	-	-	1558
	"	7:45	55	00	-	-	1558
	"	8:45	56	00	-	-	1558
	"	9:45	57	00	-	-	1558
	"	10:45	58	00	-	-	1558
	"	11:45	59	00	-	-	1558
11/7	"	12:45 AM	60	00	-	-	1558
	"	1:45	61	00	-	-	1558
	"	2:45	62	00	-	-	1558
	"	3:45	63	00	-	-	1558
	"	4:45	64	00	-	-	1558
	"	5:45	65	00	-	-	1558
	"	6:45	66	00	-	-	1558
	"	7:45	67	00	-	-	1558
	"	8:45	68	00	-	-	1558
	Fished Bombs	9:45	69	00	-	-	1558
	Run Static Gradient	10:45	70	00	1193	-	1558

JARREL SERVICES, INC.

POST OFFICE BOX 1654 PHONES 505 393-5396 -- 393-8274

HOBBS, NEW MEXICO 88240

OPERATOR Belco Petroleum Corporation
FIELD South Carlsbad
FORMATION Morrow
LEASE Douglas Com WELL 1
COUNTY Eddy STATE New Mexico
DATE 10/31/81 TIME 3:45 PM
Status Flowing
Test Depth 10970'
Time S. I. - Last test date- -
Tub Pres. 686 BHP last test -
Cas. Pres. PKR BHP change -
Elev. 3099 GL Fluid top Flowing
Datum (-8221)** Water top -
Temp. @ 185° F Run by JSI #13
Cal. No. A36826N Chart No. 1

BOTTOM HOLE PRESSURE RECORD

Depth	Pressure	Gradient
0	686	-
3000	753	.022
6000	817	.021
9000	893	.025
10000	930	.037
10970	954	.025
11320 (-8221)	963 * **	(.025)

* EXTRAPOLATED PRESSURE

** MIDPOINT OF CASING PERFORATIONS

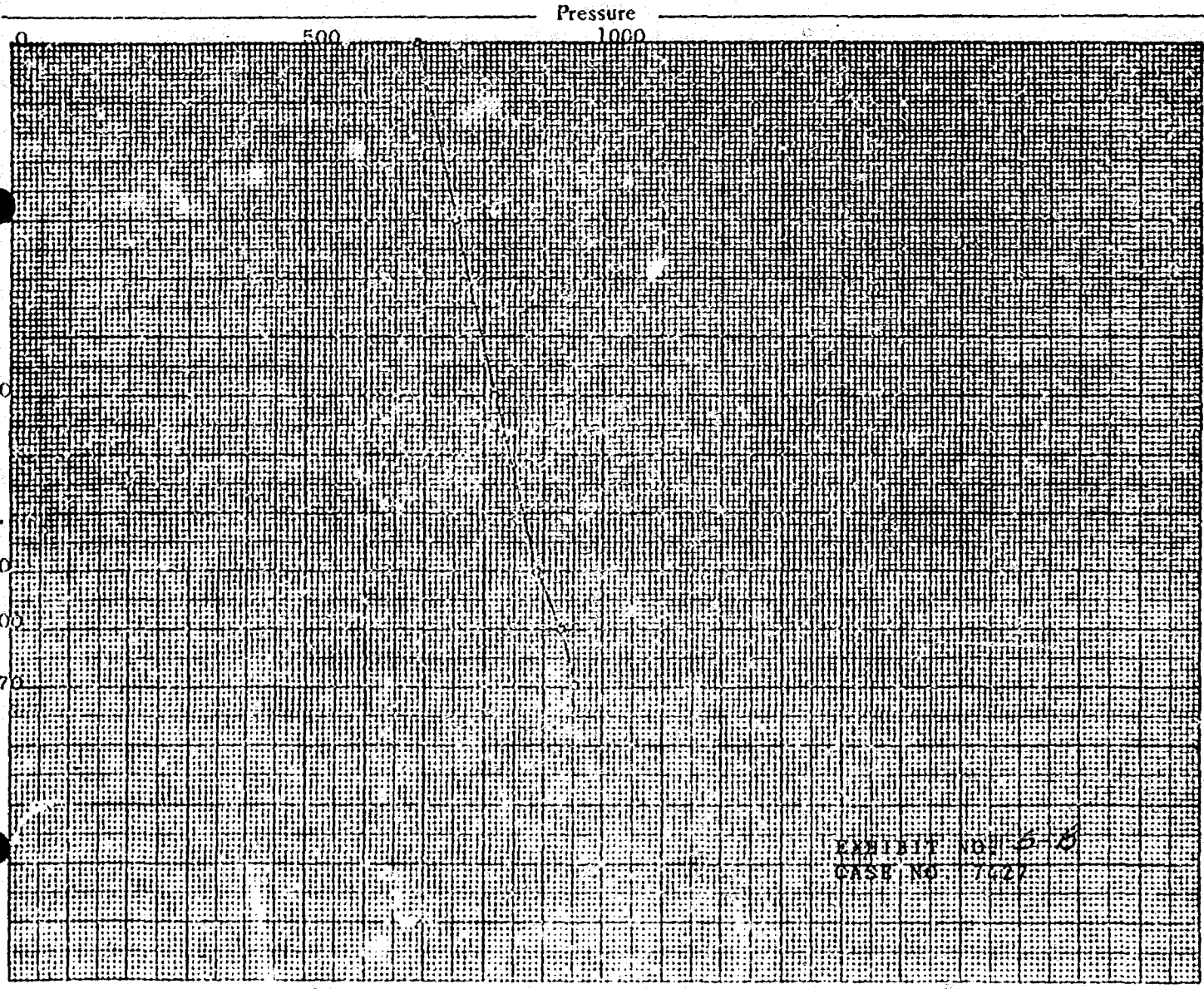


EXHIBIT NO. 6-A
CASE NO. 7427

DIETZGEN CORPORATION

SEMI-LOGARITHMIC

3 CYCLES X DIVISIONS PER INCH

JARREL SERVICES, INC.

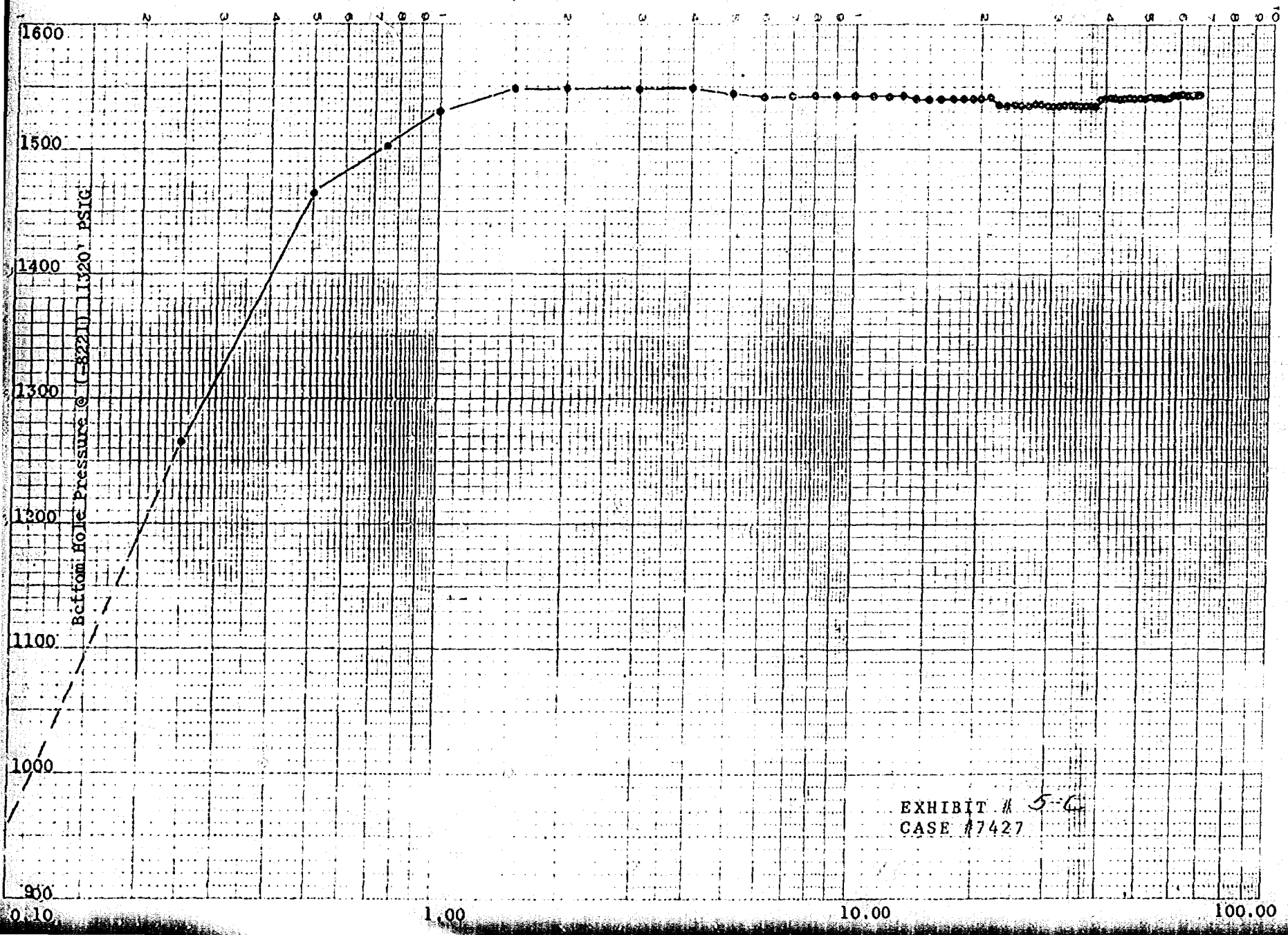


EXHIBIT # 5-C
CASE #7427

...OR-L310 DIETZ... GRAPH PAPER
SEMI-LOGARI...MIC
... CYCLES X 10 DIVISIONS PER INCH

DIETZGEN CORPORATION
MADE IN U.S.A.

...RATION

JARREL SERVICES, INC.

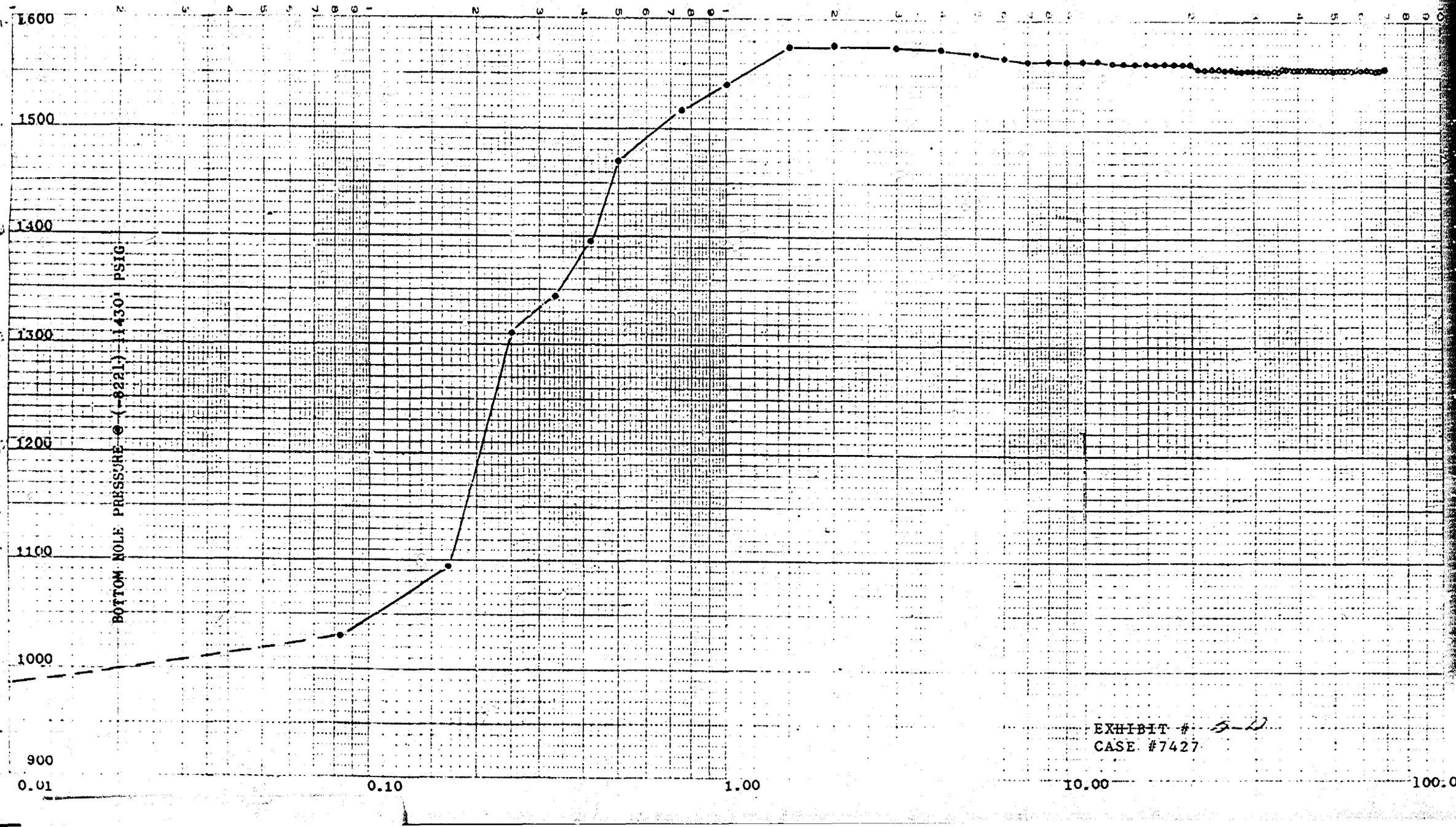


EXHIBIT # 5-4
CASE #7427

JARREL SERVICES, INC.

POST OFFICE BOX 1654 PHONES 505 393-5395 — 393-8274

HOBBS, NEW MEXICO 88240

OPERATOR Belco Petroleum Corporation
FIELD South Carlsbad
FORMATION Morrow
LEASE Douglas Com WELL 1
COUNTY Eddy STATE New Mexico
DATE 11/7/81 TIME 10:45 AM
Status Shut In
Test Depth 10370'
Time S. I. 70.0 Hrs. Last test date 11/3/81
Tub Pres. 1193 BHP last test 1543
Cas. Pres. PKR BHP change 15# Gain
Elev. 3099' GL Fluid top None
Datum (-8221) * * Water top None
Temp. @ 185°F Run by JSI #13
Cal. No. 36826N Chart No. 2

BOTTOM HOLE PRESSURE RECORD

Depth	Pressure	Gradient
0	1193	-
3000	1283	.030
6000	1373	.052
9000	1478	.035
10000	1512	.034
10970	1546	.035
11320 (-8221)	1558* **	(.035)

* EXTRAPOLATED PRESSURE

** MIDPOINT OF CASING PERFORATIONS

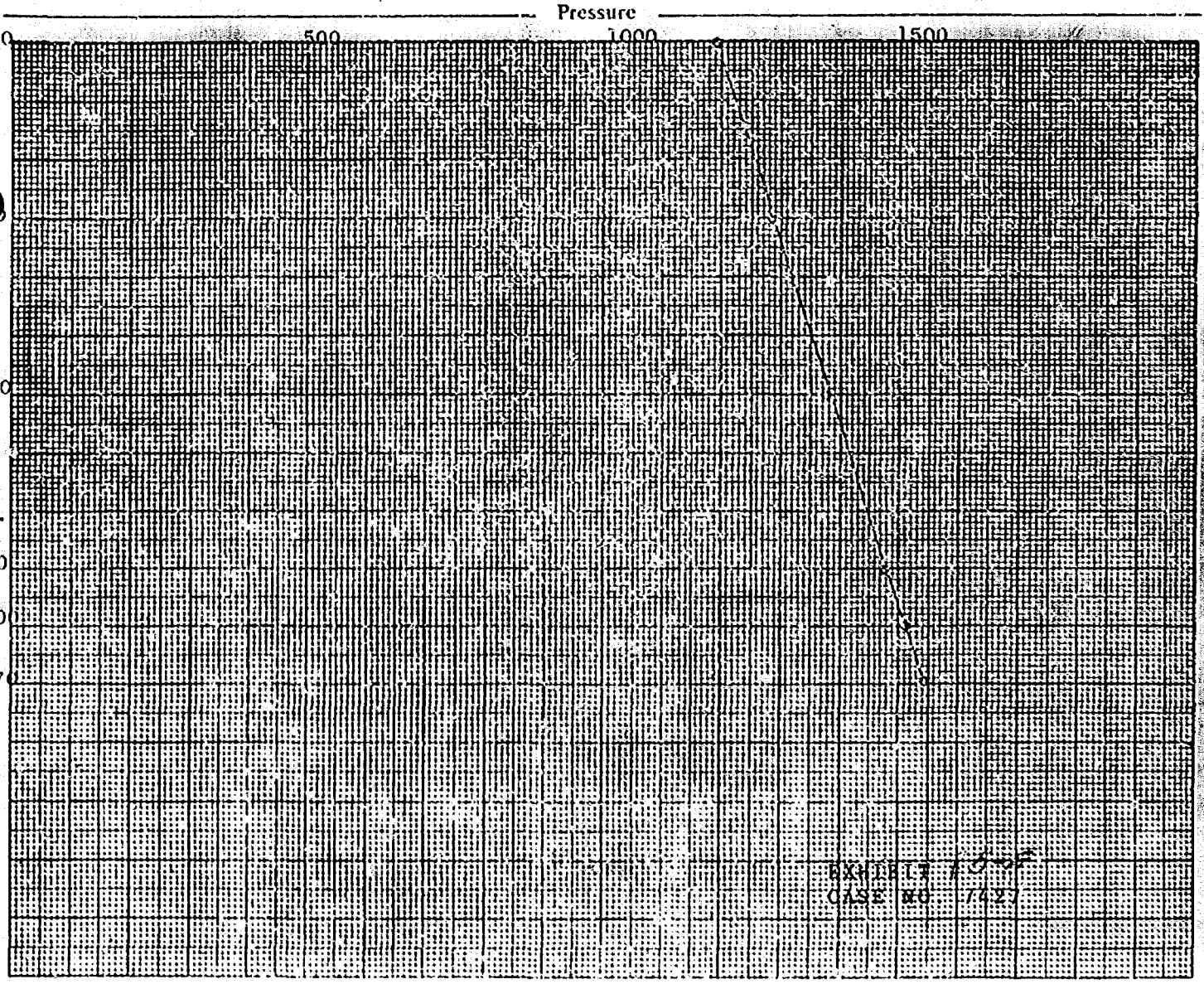


EXHIBIT # 3 of
CASE NO. 7427

DELCO PETROLEUM CORPORATION — Daily Record of Crude Production and Runs

LEASE: Douglas Comm #1 | COUNTY/PARISH: Eddy | STATE: NM | ALLOWABLE

MONTH 3 19 81

Gauge tanks to nearest one-quarter inch (¼")
Record volumes to nearest barrel

DATE	TANK OR METER NO.	SIZE OR COEFF.	7 AM GAUGE OR METER	GROSS BBLS.	TANK OR METER NO.	SIZE OR COEFF.	7 AM GAUGE OR METER	GROSS BBLS.	TANK OR METER NO.	SIZE OR COEFF.	7 AM GAUGE OR METER	GROSS BBLS.	ENDING STOCK	+ DAILY RUNS	OPENING STOCK	− DAILY PRODUCTION	CUMULATIVE PRODUCTION	WELLS OFF PRODUCTION (EXPLAIN "REMARKS")
1	TUB	DIFF	Line	12c	MCF	Chokes	66"	211	211					—	211	4	4	
2	950	20	590	1	1.650	12/64	67"	215	215					—	215	3	7	
3	950	24	520	1	1.600	12/64	68"	218	218					—	218	4	11	
4	950	24	520	1	1.700	13/64	69"	222	222					—	222	3	14	
5	950	24	520	1	1.700	13/64	70"	225	225					—	225	0	14	
6	950	22	540	1	1.650	12/64	19"	39	39					186	39	3	17	
7	960	22	560	1	1.700	13/64	20"	42	42					—	42	7	24	
8	950	22	560	1	1.700	13/64	22"	49	49					—	49	3	27	
9	950	21	560	1	1.650	12/64	23"	52	52					—	52	0	27	
10	960	21	560	1	1.640	12/64	23"	52	52					—	52	3	30	
11	960	22	550	1	1.650	12/64	24"	55	55					—	55	4	34	
12	950	20	580	1	1.600	12/64	25"	59	59					—	59	3	37	
13	950	21	590	1	1.650	12/64	26"	62	62					—	62	3	40	
14	980	13	570	1	1.300	8/64	27"	65	65					—	65	4	44	
15	960	10	560	1	1.150	6 5/64	28"	69	69					—	69	0	44	
16	900	9	560	1	1.015	8/64	28"	69	69					—	69	3	47	
17	850	9	550	5	1.050	10½/64	29"	72	72					—	72	4	51	
18	850	28	580	7	1.925	14/64	30"	76	76					—	76	3	54	
19	900	23	570	2	1.725	12/64	31"	79	79					—	79	4	58	
20	925	20	580	1	1.600	12/64	32"	83	83					—	83	4	62	
21	925	20	580	1	1.600	12/64	33"	87	87					—	87	3	65	
22	940	21	570	1	1.650	12/64	34"	90	90					—	90	0	65	
23	950	20	550	1	1.575	10/64	34"	90	90					—	90	4	69	
24	910	15	550	1	1.350	10/64	35"	94	94					—	94	0	69	
25	850	13	570	1	1.300	8/64	35"	94	94					—	94	4	73	
26	900	26	570	8	1.850	11/64	36"	98	98					—	98	3	76	
27	950	22	580	1	1.700	11/64	37"	101	101					—	101	4	80	
28	950	22	580	1	1.700	11/64	38"	105	105					—	105	4	84	
29	900	22	570	1	1.625	11/64	39"	109	109					—	109	4	88	
30	940	24	570	1	1.700	11/64	40"	113	113					—	113	4	92	
31	930	23	580	1	1.750	11/64	41"	117	117					—	117	3	95	
1	950	24	550	1	1.750	11/64	42"	120	120									

PIPE LINE RUNS

DATE	TKT. NO.	TK. NO.	BS & W	TEMP	ON	OFF	GROSS BBLS.
3/5	4502	—	0/0	54°	10"	18"	186

Cut Rate to 1.400

Open Choke TO 10/2/64"

EXHIBIT NO 6
CASE NO. 7427

(Office Use) Within (44) — 120.90 Closing Stock 120.91

Remarks

CHEMICAL RECORD

CHEMICAL	AMOUNT USED

CALCULATIONS

(Office Use)		(Pumper Use)
	Total Runs	186
	+Closing Stock	120
	Sub Total	306
	−Opening Stock	211
	=Lease Production	95

Signed John F Ellyson PUMPER

PETROLEUM CORPORATION – Daily Record of Crude Production and Runs

LEASE: Douglas Comm #1 | COUNTY/PARISH: Eddy | STATE: NM | ALLOWABLE

MONTH June 19 81

Gauge tanks to nearest one-quarter inch (¼")
Record volumes to nearest barrel

DATE	TANK OR METER NO.	SIZE OR COEFF.	7 AM GAUGE OR METER	GROSS BBLS.	TANK OR METER NO.	SIZE OR COEFF.	7 AM GAUGE OR METER	GROSS BBLS.	TANK OR METER NO.	SIZE OR COEFF.	7 AM GAUGE OR METER	GROSS BBLS.	ENDING STOCK	DAILY + RUNS	OPENING – STOCK	DAILY PRODUCTION	CUMULATIVE PRODUCTION	WELLS OFF PRODUCTION (EXPLAIN "REMARKS")
									99327	Hor 300								
1	TUB	DFF	Line	1120	MCF	Choke	43"	124	124					–	124	4	4	
2	925	24	550	02	1.725	11/64	44"	128	128					–	128	4	8	
3	900	24	540	2	1.700	✓	44"	128	128					–	128	0	4	
4	900	22	580	1	1.700	✓	45"	132	132					–	128	4	8	
5	900	27	540	1	1.700	✓	46"	136	136					–	132	4	12	
6	900	25	530	1	1.725	✓	46"	136	136					–	136	0	12	
7	925	24	580	1	1.725	✓	48"	143	143					–	136	7	19	
8	925	26	540	1	1.725	✓	48"	143	143					–	143	0	19	
9	900	23	570	1	1.725	✓	49"	147	147					–	143	4	23	
10	900	24	550	1	1.725	✓	50"	151	151					–	147	4	27	
11	900	25	540	1	1.740	✓	51"	155	155					–	151	4	31	
12	900	23	560	1	1.710	✓	51"	155	155					–	155	0	31	
13	900	25	540	1	1.700	✓	52"	159	159					–	155	4	35	
14	900	24	550	1	1.725	✓	53"	163	163					–	159	4	39	
15	900	23	560	1	1.725	✓	53"	163	163					–	163	0	39	
16	900	22	580	1	1.700	✓	54"	167	167					–	163	4	43	
17	900	23	550	1	1.700	✓	55"	170	170					–	167	3	46	
18	900	24	540	1	1.700	✓	56"	174	174					–	170	4	50	
19	900	27	480	1	1.710	✓	56"	174	174					–	174	0	50	
20	900	22	570	1	1.700	✓	58"	182	182					–	174	8	58	
21	900	27	480	1	1.725	✓	59"	185	185					–	182	3	61	
22	900	27	480	1	1.725	✓	59"	185	185					–	185	0	61	
23	1340	SI																
24	1340	SI																
25	1340	SI	ON	Line	1:30 PM													
26	800	20	540	01	1.550	✓	59"	185	185					–	185	0	61	
27	850	21	540	1	1.550	✓	60"	189	189					–	185	4	65	
28	825	22	540	1	1.625	✓	61"	193	193					–	189	4	69	
29	825	22	540	1	1.625	✓	61"	193	193					–	193	0	69	
30	825	21	560	1	1.650	✓	62"	197	197					–	193	4	73	
31																		
1	825	25	500	1	1.675	✓	63"	200	200					–	197	3	76	

SHUT IN 7:00 AM For 72 hrs

PIPE LINE RUNS

DATE	TKT. NO.	TK. NO.	BS & W	TEMP	ON	O/F	GROSS BBLS.

EXHIBIT NO. 7
CASE NO. 7427

(Office Use) _____ 20.70 _____ 20.70 Closing Stock 20.70

Remarks

CHEMICAL RECORD

CHEMICAL	AMOUNT USED

(Office Use)	CALCULATIONS	(Pumper Use)
	Total Runs	0
	+Closing Stock	200
	Sub Total	200
	–Opening Stock	124
	=Lease Production	76

Signed John T Ellison
PUMPER

LLANO, INC.

PHONE 393-2153 P. O. DRAWER 1320
HOBBS, NEW MEXICO 88240

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
Belco EXHIBIT NO. 8
CASE NO. 7427
Submitted by
Hearing Date

November 19, 1981

Llano, Inc.'s
Exhibit To
Case 7427
(Belco's Douglas Com No. 1)

Llano, Inc. is gas purchaser and intrastate transporter of 33 gas wells in the Carlsbad, South Morrow Gas Pool including Belco's Douglas Com No. 1. On 12 of the total of 33 wells Llano is split-connected with either El Paso Natural Gas or Transwestern Pipeline Company.

The following tabulation lists Llano's monthly gas nominations for the subject pool and corresponding actual monthly gas purchases as reported on the OCD's monthly C-111's for the period January 1981 through October 1981:

CARLSBAD SOUTH MORROW GAS POOL

LLANO'S NOMINATIONS AND PURCHASES

1981

MONTH	LLANO'S MONTHLY GAS NOMINATIONS	TOTAL LLANO GAS PURCHASES PER C-111'S
January	309,300	244,563
February	302,500	258,541
March	295,900	290,518
April	252,400	275,205
May	248,600	295,086
June	245,400	270,770
July	248,600	299,862
August	244,900	270,684
September	241,200	249,344
October	238,000	241,016

The foregoing tabulation indicates that Llano has overall purchased and taken their gas nominations for this period. For the period January through March 1981, Llano was willing to purchase all of its nominated volume but the wells were not capable of delivering this volume due to mechanical upsets brought on by weather conditions. For the remaining months, April through October 1981,

LLANO, INC.
PHONE 393-2153 P. O. DRAWER 1320
HOBBS, NEW MEXICO 88240

Llano continued to take 100% of well capabilities even to the extent of exceeding nominated quantities when the wells were capable of delivering more.

Llano has had the capacity and capability to purchase in excess of full connected individual well deliverability in this gas pool for the past three years. A curtailment of gas production to less than the full capability of each well would require an equivalent volume to be withdrawn from emergency underground storage until additional sources of gas are connected.

Llano, Inc. respectfully recommends that Belco Petroleum Corporation be permitted to continue to produce full well capability on its Douglas Com No. 1.

LLANO, INC.

AL KLAAR
Vice-President
of Engineering

TOTAL PROD/ ALLOW	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	HI-MO 100PCT	RE-CLASS AVE	STATUS O N	F L G	O/U CANCEL CREATE	NEW INTERIM ALLOW

DELTA DRILLING CO. 209150
LITTLE JEWEL COM 436660
192054 33511 32408 31385 30368 33347 31035 32231 — 32009 32009 M S 2523

EXXON CORPORATION 259500**********
SOUTH CARLSBAD GAS COM NO 1 689300
1N 23 23S 26E OOPM AF=1.00 SITE=192671 OPEN= O/U=
50085 8090 9176 7404 9626 7947 7842 — 9626 8347 M
197997 34548 33411 32356 31308 34379 31995 33227 — 32999 32999 M S 7947

PENNZOIL COMPANY 629400**********
O'NEILL B COM 561325
1J 10 24S 26E OOPM AF=1.00 SITE=194471 OPEN= O/U=
78566 13630 13593 11589 13894 13380 12480 — 13894 13094 M
197997 34548 33411 32356 31308 34379 31995 33227 — 32999 32999 M S 13380

PHILLIPS PETROLEUM COMPANY 640900**********
DRAG B COM 176070
2C 19 23S 27E OOPM AF=1.00 SITE=190661 OPEN= O/U=
14214 2459 2167 2562 2135 2664 2227 — 2664 2369 M
197997 34548 33411 32356 31308 34379 31995 33227 — 32999 32999 M S 2664

THE SUPERIOR OIL COMPANY 817700**********
RYAN COM 636390
10 5 23S 27E OOPM AF=1.00 SITE=194771 OPEN= O/U=
23762 2798 2369 2796 6868 6269 2662 — 6868 3960 M
197997 34548 33411 32356 31308 34379 31995 33227 — 32999 32999 M S 6269

GAS CO. OF NEW MEXICO **

MOBIL PRODUCING TEXAS AND NEW MEXICO 550000**********
MISSOURI NEW MEXICO LAND CO COMM 517750
1G 4 23S 27E OOPM AF=1.00 SITE= OPEN= O/U=
8276 1490 1230 1048 1239 1640 1629 — 1640 1379 M
197997 34549 33411 32356 31308 34379 31995 33227 — 32999 32999 M S 1640
MAUDE RICKMAN COM 618770
1L 3 23S 27E OOPM AF=1.00 SITE= OPEN= O/U=
36037 1677 6748 6129 6484 3094 6905 — 6905 6006 M
197997 34548 33411 32356 31308 34379 31995 33227 — 32999 32999 M S 3094

LLANO INCORPORATED **

PELCO PETROLEUM CORPORATION 65200********** *on at 3-31-81* *due at 9-30-81*
DOUGLASS COM 172875
1H 7 22S 27E OOPM AF=1.00 SITE= *13266* OPEN= 283984- O/U= 395326-
PROD 309339 51281- 52599 45036 53853 54179 52291 *51725* *73413* *DEC* *JAN* 54179 53441 N
ALLOW 197997 34548 33411 32356 31308 34379 31995 33227 *30135* *48260* *50765* 32560 32560 N P 33227
JARVIS MEAD COM 363355
1N 5 22S 27E OOPM AF=1.00 SITE= 123 OPEN= 364285 O/U= 561967
***
315 58 85 76 28 19 49 — 49 52 M
197997 34548 33411 32356 31308 34379 31995 33227 — 32999 32999 M S 19
UNION MEAD COM 850250
1H 8 22S 27E OOPM AF=1.00 SITE= OPEN= O/U=
162161 20872 30759 28439 25198 23695 23198 — 25198 27026 M
197997 34548 33411 32356 31308 34379 31995 33227 — 32999 32999 M S 23695

3J 5 22S 27E OOPM AF=1.00 SITE= OPEN= 79519 O/U= 117028
*** 40999 41581 40 123
160488 35255 28107 25191 29795 18325 23815 — 29795 23978 N
197997 34548 33411 32356 31308 34379 31995 33227 — 32560 32560 M R 117028 18325

EXXON CORPORATION 259500**********
SOUTH CARLSBAD GAS COM NO 2 689301
1J 27 23S 26E OOPM AF=1.00 SITE= OPEN= O/U= M

March sched Apr sched May J J A S O N D J F
*260972 *275021 *283987 *300717 *320005 *332685 355230 *375020 *395326 414822 398102 367108*
Jan Feb Mar Apr May June July Aug Sept Oct Nov Dec
PROD prod
ALLOW

213157 is 6X over limit incl Dec 81

218,484 is 6X over limit

209,856 6X limit at end of Nov 81 Prod

... Jan 82

TOTAL PROD/ ALLOC	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	HI-MO 100PCT	RE-CLASS AVL	STATUS O	STATUS N	F L G	O/U CANCEL CREATE	NEW INTERIM ALLOC
PHILLIPS PETROLEUM COMPANY						817700													
ORAG B COM						176070													
THE SUPERIOR OIL COMPANY						817700**********													
RYAN COM						636390													
10 5 23S 27E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
26241 2226 1190 2485 5010 3646 1877 1444 1101 2042 1181 1116 2123 2123 2186 M																			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 43833 43833																M	S		1116
GAS CO. OF NEW MEXICO						636390**********													
MOBIL PRODUCING TEXAS AND NEW MEXICO						550000**********													
MISSOURI NEW MEXICO LAND CO COM						517750													
16 4 23S 27E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
19851 2247 1932 1968 1914 1689 1511 1772 1232 1218 1501 1413 1454 1501 1654 M																			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 43833 43833																M	S		1413
MAUDE PICKMAN COM						618770													
16 3 23S 27E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
102414 11531 9457 10081 5572 9938 8383 9107 7257 7346 7220 5971 6541 7228 8534 M																			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 43833 43833																M	S		5971
LLANO INCORPORATED						618770**********													
DELCO PETROLEUM CORPORATION						065200**********													
DOUGLASS COM						172875													
14 7 22S 27E OOPN AF=1.00							SITE=[redacted]			OPEN=	170410-	O/U=	288721-						
*** 45086 61680 40																			
644338 54921 57748 50347 57688 57790 47993 48806 50920 56511 56849 50894 53441 56849 53728 M																			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 38899 38899																N	P		34548
JARVIS MEAD COM						363355													
14 5 22S 27E OOPN AF=1.00							SITE=194771			OPEN=	57134-	O/U=	359548						
109319 17036 13363 9635 8328 14763 21472 21294 2724																N			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 38899 38899																N	P		34548
UNION MEAD COM						850250													
10 3 22S 27E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
242750 37624 29548 19916 22108 24177 13534 10152 9292 8986 6517 27872 33624 33624 20229 M																			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 43833 43833																M	S		27872
34 5 22S 27E OOPN AF=1.00							SITE=194771			OPEN=	137741-	O/U=	84782						
303474 57078 37814 19604 12311								20204	41168	46004	38507	29984	46004	38165	N				
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 38899 38899																N	P		34548
EXXON CORPORATION						259500**********													
SOUTH CARLSBAD GAS COM NO 2						689301													
10 27 23S 26E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
4951 1274 1121 632 1270 572 14														825	M				
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 43833 43833																M	S		
SOUTH CARLSBAD GAS COM NO 3						689302													
16 26 23S 26E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
19181 1026 727 772 823 1152 272 1692 2251 2483 2404 3228 2351 3228 1598 M																			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 43833 43833																M	S		3228
SOUTH CARLSBAD GAS COM NO 4						689305													
16 27 23S 26E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
29018 3362 2079 2090 2709 2961 2866 1886 2569 1603 2645 2047 2201 2645 2418 M																			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 43833 43833																M	S		2047
J. M. HUBER CORPORATION						300800**********													
MOORE COM						526330													
16 35 23S 26E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
23729 2604 1516 1094 2466 2580 2325 2275 1123 1752 2205 1980 1721 2205 1977 M																			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 43833 43833																M	S		1980
ONEILL FEDERAL COM						561306													
16 23 23S 26E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
104045 8023 10611 8548 8536 8262 8469 8856 7832 7520 8979 7801 8808 8979 8670 M																			
525997 52844 51307 48460 46200 45843 39486 41781 41727 41652 40111 36845 39741 43833 43833																M	S		7801
TERRA-STATE						827175													
10 14 23S 26E OOPN AF=1.00							SITE=194771			OPEN=		O/U=							
208070 17616 13974 15933 17927 19353 17563 18365 18201 18898 17663 15817 16760 17663 17339 M																			

on 4-1-80

on mar 31 1981

* 215021

12/64 TB 1/8 [illegible] out
5 days [illegible] FP & vol dropped
1/63" ch. [illegible] to flow
[illegible] for [illegible] &
make up op
flowing 1725 @ 900 psi when SI
SI for 52 hrs
Came back on 1550 MCF @ 800 psi
1625 @ 825 may since

1625
30
48750

(actual prod July 53853 (1737/da)
Aug 54199 (1748/da)
Sept 52291 (1743/da)

Dockets Nos. 38-81 and 39-81 are tentatively set for December 2, and December 15, 1981. Application for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - THURSDAY - NOVEMBER 19, 1981

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:

ALLOWABLE: (1) Consideration of the allowable production of gas for December, 1981, from fifteen prorated pools in Lea, Eddy and Chaves Counties, New Mexico.

(2) Consideration of the allowable production of gas for December, 1981, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

CASE 7410: Application of B.O.A. Oil & Gas Company for two unorthodox oil well locations, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 2035 feet from the South line and 2455 feet from the East line and one to be drilled 2455 feet from the North line and 1944 feet from the East line, both in Section 31, Township 31 North, Range 15 West, Verde-Gallup Oil Pool, the NW/4 SE/4 and SW/4 NE/4, respectively, of said Section 31 to be dedicated to said wells.

CASE 7356: (Continued from October 21, 1981, Examiner Hearing)

Application of S & I Oil Company for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the W/2 SW/4 of Section 12, Township 29 North, Range 15 West, Cha Cha-Gallup Oil 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7411: Application of Viking Petroleum, Inc., for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a well to be drilled 330 feet from the North and East lines of Section 12, Township 11 South, Range 27 East, the NE/4 of said Section 12 to be dedicated to the well. (This case will be dismissed).

CASE 7412: Application of Gulf Oil Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Lower Yates, Queen, San Andres and Delaware formations in the open hole interval from 4375 feet to 7452 feet in its Lea "ZD" State Well No. 1 located in Unit M of Section 30, Township 18 South, Range 35 East, Air-Strip Field.

CASE 7413: Application of Gulf Oil Corporation for Directional Drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill its Arnott Ramsey Well No. 12, the surface location of which is 500 feet from the South line and 1400 feet from the East line of Section 32, Township 25 South, Range 37 East, to a bottomhole location within 150 feet of a point 500 feet from the South line and 800 feet from the East line of Section 32, Township 25 South, Range 37 East, Langlie Mattix Pool, the SE/4 SE/4 of said Section 32 to be dedicated to the well.

CASE 7414: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of the Drinkard and Wantz-Granite Wash production in the wellbore of its Hugh Well No. 10, located in Unit C of Section 14, Township 22 South, Range 37 East.

CASE 7415: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of the Tubb and Drinkard production in the wellbore of its T. R. Andrews Well No. 3, located in Unit J of Section 32, Township 22 South, Range 38 East.

CASE 7379: (Continued from October 21, 1981, Examiner Hearing)

Application of JEM Resources, Inc., for vertical pool extension and special GOR limit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the vertical extension of the Cave-Grayburg Pool to include the San Andres Formation, and the establishment of a special gas-oil ratio limit for said pool to 6000 to one or, in the alternative, the abolishment of the gas-oil ratio limit in said pool, all to be effective October 1, 1981.

CASE 7407: (Continued from November 4, 1981, Examiner Hearing)

Application of Mesa Petroleum Company for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Abo formation underlying the NE/4 of Section 23, Township 5 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7416: Application of El Paso Natural Gas Company for pool creation and redelineation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to contract the horizontal limits of the Jalmat Gas Pool by deleting therefrom all lands in Township 26 South, Range 37 East. Applicant also proposes to contract the horizontal limits of the Rhodes Yates - Seven Rivers Oil Pool by deleting therefrom all of the gas productive lands in the North end thereof and to create the Rhodes Yates-Seven Rivers Gas Pool comprising all such deleted lands. Applicant further proposes the deletion of certain oil productive lands from said Rhodes oil pool and the extension of the Scarborough Pool to include said lands. Applicant further proposes to contract the horizontal boundaries of the Rhodes Gas Storage Unit to delete certain lands and wells not participating in the Rhodes Gas Storage Project and to withdraw without restriction all gas remaining in the newly created Rhodes Gas Pool.

CASE 7417: (This case will be dismissed.)

Application of Northwest Pipeline Corporation for 13 non-standard gas proration units, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for 13 non-standard Pictured Cliffs gas proration units ranging in size from 142.39 acres to 176.77 acres and each comprised of various contiguous lots or tracts in Sections 4,5,6,7, and 18 of Township 31 North, Range 7 West. Said proration units result from corrections in the survey lines on the North and West sides of Township 31 North, Range 7 West and overlap seven non-standard Mesaverde proration units previously approved by Order No. R-1066.

CASE 7418: Application of Morris R. Antweil for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the West Nadine-Drinkard Pool including a special gas-oil ratio of 6,000 to one.

CASE 7419: Application of Morris R. Antweil for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the West Nadine-Blinebry pool including a special gas-oil ratio of 4,000 to one.

CASE 7420: Application of Southland Royalty Company for two unorthodox oil well locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of two previously drilled wells, the first being 760 feet from the South line and 660 feet from the East line of Section 5 the other being 660 feet from the North and West lines of Section 9, both in Township 19 South, Range 35 East, both to be plugged back to the Scharb-Bone Springs Pool, the S/2 SE/4 of Section 5 and the N/2 NW/4 of Section 9, respectively, to be dedicated to the wells.

CASE 7421: Application of Doyle Hartman for compulsory pooling, unorthodox well location and non-standard spacing unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Eumont Gas Pool underlying a 120-acre non-standard spacing unit consisting of the S/2 SW/4 and the NW/4 SW/4 of Section 3, Township 20 South, Range 37 East, to be dedicated to a well to be drilled at an unorthodox location 2,310 feet from the South line and 330 feet from the West line of Section 3. 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, designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 7422: Application of Conoco, Inc. for dual completion and an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Southeast Monument Unit Well No. 121, to produce oil from the Skaggs Grayburg and an undesignated Paddock pool through parallel strings of tubing. Applicant further seeks approval of the unorthodox location of said well 1310 feet from the North line and 1330 feet from the West line of Section 19, Township 20 South, Range 38 East, the NE/4 NW/4 of said Section 19 to be dedicated to the well.

CASE 7423: Application of Conoco, Inc., for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority for three companies to institute a cooperative waterflood project in the Blinebry oil and gas pool by the injection of water into the Blinebry formation through 13 injection wells located on leases operated by Conoco, Shell Oil Company, and Southland Royalty Company, in Sections 33 and 34, Township 20 South, Range 38 East, and Sections 2 and 3, Township 21 South, Range 37 East.

CASE 7424: Application of Rice Engineering and Operating, Inc., for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Lower San Andres formation in the perforated interval from 4300 feet to 4852 feet in its Eunice-Monument Eumont SWD "G" Well No. 8, located in Unit G of Section 8, Township 20 South, Range 37 East.

CASE 7425: Application of H. L. Brown, Jr. for compulsory pooling and an unorthodox location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the top of the San Andres formation to the base of the Pennsylvanian formation underlying the S/2 of Section 36, Township 16 South, Range 37 East, to be dedicated to a well to be drilled at an unorthodox location 554 feet from the South and West lines of said Section 26, provided that in the event the subject well encounters production in the Casey-Strawn Pool and/or the West Knowles-Drinkard Pool, the lands pooled would be the W/2 SW/4 of said Section 26. 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, designation of applicant as operator of the well, and a charge for risk involved in drilling said well.

CASE 7426: Application of Phillips Petroleum Company for Amendment of Division Order No. R-5897 and certification of a tertiary recovery project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the Amendment of Division Order No. R-5897, to include the injection of carbon dioxide in the previously authorized pressure maintenance project in the East Vacuum Grayburg-San Andres Unit, for conversion of existing injectors to water/carbon dioxide injection, and for certification to the Secretary of the IRS that the East Vacuum Grayburg-San Andres Unit Project is a qualified tertiary oil recovery project.

CASE 7427: Application of Belco Petroleum Corporation for a special allowable, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an adjustment to the manner in which allowables are calculated for wells in the South Carlsbad-Morrow Gas Pool in order to grant relief to the over-produced status of its Douglas Com. Well No. 1 located in Unit H of Section 7, Township 22 South, Range 27 East, said well being subject to shut-in being more than six times its allowable over-produced. In the alternative, applicant seeks to make up the over-production at a rate less than complete shut-in by curtailing production from the well to 80 percent of its top allowable until it is back in balance.

CASE 7428: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating; and extending certain pools in Chaves, Eddy, Lea, and Roosevelt Counties, New Mexico.

(a) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Wolfcamp production and designated as the North Antelope Ridge-Wolfcamp Gas Pool. The discovery well is J. C. Williamson Triple A Federal Well No. 1 located in Unit F of Section 10, Township 23 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM
Section 10: N/2 and N/2 SW/4

(b) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the Diamondtail-Wolfcamp Pool. The discovery well is the Superior Oil Company Triste Draw Federal Well No. 1 located in Unit J of Section 14, Township 23 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 23 SOUTH, RANGE 32 EAST, NMPM
Section 14: SE/4

(c) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Bone Spring production and designated as the North Grama Ridge-Bone Spring Pool. The discovery well is the Hunt Oil Company State 4 Well No. 1 located in Unit T of Section 4, Township 21 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM
Section 4: SW/4

(d) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the Grassland-Wolfcamp Pool. The discovery well is C. F. Qualia State 23 Well No. 1 located in Unit K of Section 23, Township 15 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 34 EAST, NMPM
Section 23: SW/4

(e) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Bone Spring production and designated as the North Lusk-Bone Spring Pool. The discovery well is Petroleum Development Corporation Shelly Federal Com. Well No. 1 located in Unit H of Section 5, Township 19 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM
Section 5: NE/4

(f) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Atoka production and designated as the McMillan-Atoka Gas Pool. The discovery well is Southland Royalty Company Pecos River 21 Federal Com Well No. 1 located in Unit K of Section 21, Township 19 South, Range 27 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 27 EAST, NMPM
Section 21: S/2

(g) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Springs-Morrow Gas Pool. The discovery well is Jake L. Hamon State 33 Com Well No. 1 located in Unit I of Section 33, Township 20 South, Range 26 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 26 EAST, NMPM
Section 32: E/2
Section 33: All

(h) EXTEND the Antelope Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM
Section 11: All
Section 15: N/2

(i) EXTEND the Baldridge Canyon-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 24 EAST, NMPM
Section 14: N/2

(j) EXTEND the Bear Draw-Queen-Grayburg-San Andres Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 29 EAST, NMPM
Section 28: N/2 SE/4

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

TOWNSHIP 8 SOUTH RANGE 37 EAST, NMPM
Section 10: SE/4

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

TOWNSHIP 15 SOUTH, RANGE 27 EAST, NMPM
Section 4: All

(m) EXTEND the Bunker Hill-Penrose Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 31 EAST, NMPM
Section 13: SE/4 SW/4

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

TOWNSHIP 20 SOUTH, RANGE 27 EAST, NMPM
Section 35: W/2

(o) EXTEND the Eagle Creek-Strawn Gas Pool in Eddy County,New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 25 EAST, NMPM
Section 27: N/2

TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM
Section 1: All

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

TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM
Section 8: S/2

(q) EXTEND the Kennedy Farms-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico to include therein:

TOWNSHIP 17 SOUTH, RANGE 26 EAST, NMPM
Section 34: N/2
Section 35: N/2

(r) EXTEND the North Mason-Delaware Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 26 SOUTH, RANGE 32 EAST, NMPM
Section 8: S/2 S/2

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

TOWNSHIP 20 SOUTH, RANGE 35 EAST, NMPM
Section 35: N/2

(t) EXTEND the West Parkway-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

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

(u) EXTEND the Peterson-Mississippian Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 4 SOUTH, RANGE 33 EAST, NMPM
Section 29: NE/4

(v) EXTEND the POW-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 26 EAST, NMPM
Section 4: S/2

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

TOWNSHIP 14 SOUTH, RANGE 33 EAST, NMPM
Section 32: NE/4

(x) EXTEND the Scharb-Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 35 EAST, NMPM
Section 8: NE/4

(y) EXTEND the East Siete-San Andres Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 31 EAST, NMPM
Section 10: NE/4

(z) EXTEND the Teague-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM
Section 27: NW/4

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

TOWNSHIP 7 SOUTH, RANGE 31 EAST, NMPM
Section 28: SE/4

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

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM
Section 21: All

(cc) EXTEND the North Young-Bone Spring Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 32 EAST, NMPM
Section 9: NE/4

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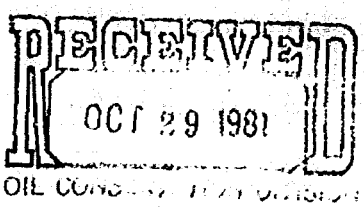
October 28, 1981



Mr. Joe D. Ramey
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501

RE: Belco Petroleum Corporation
Douglas Com #1
South Carlsbad Morrow Pool

Case 7427

Dear Mr. Ramey:

Please find enclosed our application on behalf of Belco Petroleum Corporation concerning the subject well.

Based upon my conversation with you today, I have informed Belco that they have your permission to continue to produce the subject well through Monday October 30, 1981 in order to complete certain tests that they are conducting on the well, and that thereafter it will be shut-in until the hearing on November 19, 1981, except that they may produce the well for one to two days each week in order to keep fluids from accumulating in the wellbore.

Very truly yours,

W. Thomas Kellahin

WTK:jm
Enclosure
cc: Mr. Pat Miller

STATE OF NEW MEXICO

DEPARTMENT OF ENERGY AND MINERALS

OIL CONSERVATION DIVISION

IN THE MATTER OF THE APPLICATION OF BELCO PETROLEUM CORPORATION FRO AN EXCEPTION TO DIVISION ORDER R-1670-L, OR AN INCREASE IN ALLOWABLE, OR AUTHCRITY TO PRODUCE ITS DOUGLAS COM #1 WELL AT A RATE THAT WILL ALLOW IT TO MAKE UP ITS OVER-PRODUCTION WITHOUT DAMAGE TO SAID WELL, SOUTH CARLSBAD MORROW GAS POOL, EDDY COUNTY, NEW MEXICO.

Case 7427

A P P L I C A T I O N

COMES NOW BELCO PETROLEUM CORPORATION, by and through its attorneys, Kellahin & Kellahin, and applies to the New Mexico Oil Conservation Division for an exception to Division Order R-1670-L, or in the alternative for an increase in allowable, or in the alternative for authority to produce its Douglas Com #1 well at a rate that will allow it to make up its overproduction without damages to said well and in support thereof would show:

1. Applicant is the operator of the Douglas Com #1 well, South Carlsbad Morrow Gas Pool, Eddy County, New Mexico.

2. That said pool is a prorated gas pool pursuant to Division Order R-1670-L.

3. That Belco's Douglas Com #1 well is the only well in the field that is capable of production in excess of the top allowable for well in said pool.

4. That the Belco Douglas Com 31 well currently produces at a rate of 1750 MCF per day which is its most effective and efficient rate of production.

5. That Llano Inc., is the gas purchaser for the subject well.

6. That production from all of the wells in the field that produce into the Llano system is not sufficient to meet Llano's market demand allocation.

7. That curtailment of production from the subject Belco well causes fluids to build up within the well and adversely affects recovery of production from said well.

8. That an adjustment should be made in the method of calculating the allowable for wells in the field or in the alternative an exception should be granted for the subject Belco well.

9. In the event that the Division determines not to change the method of calculating allowables or exempt the subject well, then and in that event, Belco seeks to have authority to produce the subject well at 80% of its top allowable until such time as its production is back in balance with its field allowable and thereafter to then produce at its top allowable rate.

WHEREFORE, applicant requests that this application be set for hearing on November 19, 1981 and that after notice and hearing the application be granted as requested.

KELLAHIN & KELLAHIN

By _____

W. Thomas Kellahin
P.O. Box 1769
Santa Fe, New Mexico 87501
982-4285

ATTORNEYS FOR BELCO PETROLEUM CORPORATION

HERBIE
DICK

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. 7427
ORDER NO. R-6905

APPLICATION OF BELCO PETROLEUM
CORPORATION FOR A SPECIAL ALLOWABLE,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on November 19, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this _____ day of February, 1982, 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, Belco Petroleum Corporation, seeks an adjustment to the manner in which allowables are calculated for wells in the South Carlsbad-Morrow Gas Pool in order to

No. 1 located in Unit H of Section 7, Township 22 South, Range 27 East, said well being subject to shut-in being more than six times its allowable overproduced. In the alternative, applicant seeks to make up the overproduction at a rate less than complete shut-in by curtailing production from the well to 80 percent of its top allowable until it is back in balance.

(3) That said well has demonstrated extreme sensitivity to changes in flow rates by manipulation of choke size at the ~~well~~ wellhead, and often fails to achieve the same rate of flow, after being severely curtailed, either on a temporary basis or bottomhole pressure basis

(4) That gas well allowables in the South Carlsbad-Morrow Gas Pool have been substantially lower during the past 11 months than the ability of the subject well to produce.

(5) That due to the sensitivity of the well to curtailment or shut-in, the operator ~~has~~ permitted the well to accumulate overproduction against its allowance of some 414,822 MCF of gas through October, 1981.

(6) That since October, 1981, applicant has curtailed production from the well and this, combined with improved allowances for the pool, has brought ~~it down~~ the well's overproduction down to 398,102 MCF ~~from now~~ through November, 1981, and to 363,108 MCF through December, 1981.

2. (7) That Due to the extreme sensitivity of the reservoir in the subject well to severe curtailment or shut-in, means should be provided whereby the well may be brought back into a less than six times overproduced status more rapidly than

(8) That as of December 31, 1981, the subject well was 363,108 MCF overproduced, whereas six times its average allowable for the ~~previous~~ 12-month period ending December 31 ~~is~~ equals 213,157 MCF

(9) That assignment of a special allowable of the difference between 363,108 MCF and 213,157 MCF, or 149,951 MCF, plus one average month's allowable during 1981, or 35,526 MCF, for a total of 185,477 MCF would reduce the well's overproduced status to 177,631 MCF as of December 31, 1981.

(10) That with said special allowable assignment, the subject well would be approximately ~~5~~ five times overproduced as of December 31, 1981, and this amount of overproduction, less any accumulated underproduction since December 31, should permit the operator to maintain the well in a producing status and, with only minimal curtailment, further reduce its overproduction.

(11) That said Douglas Com. Well No. 1 is one of only two non-marginal wells in the South Carlsbad-Morrow Gas Pool at this time, and there is no likelihood of any violation of correlative rights as the result of the assignment of the above-described special allowable.

(12) That the assignment of said special allowable will not cause waste but will prevent it and should be approved.

IT IS TH

(1) That ~~effective December 1, 1981,~~ the Belco Petroleum Corporation Douglas Com. Well No. 1 located in Unit H of Section 7, Township 22 South, Range 27 East, NMPM, South Carlsbad-Morrow Gas Pool, Eddy County, New Mexico, is hereby assigned a special supplemental allowable of ~~414,022~~ 185,477 MCF.

(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 E A L