CASE 6801: CAULKINS OIL COMPANY FOR A DUAL COMPLETION AND DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO

Case No.
6801

Application

Transcripts

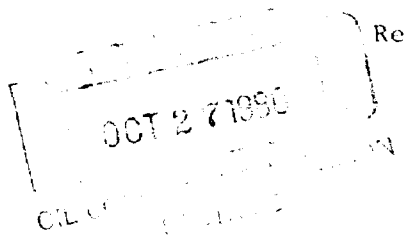
Small Exhibits

ETC.

CAULKINS OIL CO.

Post Office Box 780
Farmington, New Mexico 87401
October 13, 1980

Mr. Frank Chavez
Oil Conservation Division
1000 Rio Brazos Road
Aztec, New Mexico



Re: Downhole Commingled Production
Caulkins Oil Company
Breech D 248E
Unit D Section 13 26N 6W
Rio Arriba County, New Mexico

Dear Mr. Chavez:

Following are results of tests taken on Chacra and Mesa Verde zones before commingling well.

After all zones were fractured and cleaned up, 7" Packer and Retrievable Bridge Plug were run in hole with Bridge Plug set below Mesa Verde perforations and Packer set above Mesa Verde perforations. Well was then shut in for 48 hours.

Mesa Verde Shut In Pressure	1180#
Chacra Shut In Pressure	1022#

Opened Mesa Verde to atmosphere for 3 hours. Gas gauged 142 MCFPD with small show of oil.

Opened Chacra to atmosphere for 3 hours. Gas gauged 68 MCFPD with no show of oil.

From results of above tests we recommend following breakdown for future production:

Chacra zone	32% of all Gas
Mesa Verde zone	68% of all Gas and 100% of all Oil

Yours very truly,

Charles Verquer

Charles Verquer, Superintendent
Caulkins Oil Company

432

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

February 20, 1980

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

Re: CASE NO. 6801
ORDER NO. R-6267

Applicant:

Caulkins Oil Company

Dear Sir:

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

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD x
Artesia OCD x
Aztec OCD x

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. 6801
Order No. R-6267

APPLICATION OF CAULKINS OIL COMPANY
FOR A DUAL COMPLETION AND DOWNHOLE
COMMINGLING, RIO ARRIBA COUNTY, NEW
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on January 30, 1980, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 13th day of February, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Caulkins Oil Company, seeks authority to complete its Breech "C" Well No. 248-E, located in Unit D of Section 13, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, as a dual completion (conventional) to produce commingled Tapacito-Gallup and Dakota production and commingled Chacra and Mesaverde production through parallel strings of tubing.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That from each of said zones, the subject well is expected to be capable of marginal production only.

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

(6) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period and that a packer and check valve are installed above the Dakota zone to prevent Gallup formation liquids from coming in contact therewith.

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

(8) That in order to allocate the commingled production to each of the commingled zones in the well, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

(9) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, is hereby authorized to complete its Breech "C" Well No. 248-E, located in Unit D of Section 13, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, as a dual completion (conventional) to produce commingled Tapacito-Gallup and Dakota production through one string of tubing and to produce commingled Chacra and Mesaverde production through a parallel string of tubing, with separation of the commingled zones to be achieved by means of a packer set at approximately 5600 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Division Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer leakage tests upon completion and annually thereafter during the Deliverability Test Period for either the Blanco Mesaverde or Basin-Dakota Pool.

PROVIDED FURTHER, that the applicant shall install a packer and check valve between the Gallup and Dakota zones in such a manner as to prevent Gallup formation liquids from coming in contact with the Dakota zone.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in the subject well.

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

(4) 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

SEAL

fd/

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

EXAMINER HEARING

IN THE MATTER OF:

Application of Caulkins Oil Company for a dual completion and downhole commingling, Rio Arriba County, New Mexico. CASE 6801

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation Division: Ernest L. Padilla, Esq.
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

For the Applicant: W. Thomas Kellahin, Esq.
KELLAHIN & KELLAHIN
500 Don Gaspar
Santa Fe, New Mexico 87501

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

I N D E X

CHARLES VERQUER

E X H I B I T S

MR. STAMETS: We'll call next Case 6801.

MR. PADILLA: Application of Caulkins Oil Company for dual completion and downhole commingling, Rio Arriba County, New Mexico.

MR. KELLAHIN: I'd like the record to reflect the same appearances on behalf of Caulkins Oil Company, that Mr. Verquer is already under oath and has qualified as an expert witness.

MR. STAMETS: The record will so show.

CHARLES VERQUER

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Verquer, would you please identify Exhibit Number One for us?

A. Exhibit Number One is a map of our -- a section map of our property in northwest New Mexico, all the shaded area being Caulkins operated property.

Q. Would you identify what the red arrow indicates?

A. The red arrow indicates the well in question in this hearing. It is a new well to be drilled

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in the northwest quarter of Section 13, 26 North, 6 West.

Q. What is the footage location for that well?

A. 960 from the north and 850 from the west. It would be a standard gas well location.

Q. Would you tell us what you propose to do with regards to completion of this well?

A. We come before the Division to ask to commingle the Chacra-Mesaverde above a packer and would submit the same information that we have submitted on the hearing just previous to this one.

Then below the packer we are asking to commingle the Tapacito-Gallup associated with the Dakota.

Q. What would be the acreage dedication for each of those formations?

A. The Dakota would be the north half of the section, 320 acres. The Mesaverde would have the same acreage dedication. The Chacra would have the northwest quarter and the Tapacito associated would be the north half of the northwest quarter.

Q. Is the ownership in common for the entire north half of Section 13?

A. Yes. We are -- we are the operator of the complete section, in fact, of Section 13. The Adobe has the Pictured Cliffs rights on that but I'm not certain

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right now who our partner is in the 389 well, which is a Dakota, but we are the operator of the complete section. We are the owners and operators of the north half.

Q. What is indicated by the wells over which you have imposed a red square that has a cross hatch through it, an "X"?

A. Those are all Tocito-Dakota or Tapacito-Gallup associated dual, Tapacito-Gallup associated and a Dakota dual well. Four in the shaded area are our wells and the three outside, one is El Paso Exploration now and the other two are Tenneco wells.

Q. Will you explain very briefly the type or kind of production you obtain from the Dakota formation?

A. The Dakota formation is a dry gas with approximately 3 barrels of condensate. In the formation it would be in a gaseous state, but it does fall out as condensate at the surface, and about 3 barrels to the million is approximately what our field produces.

Q. Would you describe the kind of production you would anticipate from the Gallup formation in this area?

A. It would be classed as an oil well. I'm dedicating it as -- acreage as an oil well because the Tapacito-Gallup associated, if it has a gas/oil ratio of over 30,000 to 1 it would be classified as a gas well, or under 30,000 to 1 it would be an oil well, and I anticipate

that it would produce approximately 10 barrels of oil a day and to start with less than 2000 to 1 gas/oil ratio, so it would be classed as an oil well.

Q Why are you seeking approval from the Division for this type of completion prior to drilling the well to its total depth, as opposed to coming back after the well is drilled and seeking to commingle these zones?

A The economics is the biggest problem involved. If the well were completed as a triple completion, that would leave the oil producing zone in between the other two gas zones, and if you needed to work on that oil zone you may damage the upper zones to where they would be unrecoverable. So in view of the two wells that are closest to this well that we have permanent records on, our 689 Well in Section 12 and our 248 Well in Section -- it's in the northeast quarter of Section 13, both of those wells were low gas/oil ratio wells, but low producers, 100,000 a day, and well, 189 only potentialed at 10 barrels -- or 689 only potentialed at 10 barrels a day.

So we don't anticipate too much production and if our company has decided that we should open up every horizon we possibly can in a well, so we propose to run 7-inch casing and that looks favorable in that area, so we thought we might look at it while we were there and ask for permission to commingle.

Q. If the Division won't approve a commingling of the Gallup-Dakota in advance of drilling, how would you have to drill the well?

A. We would still drill a well to the Dakota and set casing in it, possibly test that Tapacito Associated, and if it is as poor as we anticipate, and knowing the production problems that are incurred by that, we would probably plug and abandon that zone and then go ahead and commingle the other two zones and complete it that way.

But we would more than likely test it to see if it happened to be a good well. Then we would ask, more than likely, to dually complete the oil zone above the Dakota and abandon the other two zones for the time being.

Q. In your opinion will approval of this application maximize the potential for obtaining the greatest ultimate recovery from both the Dakota and the Gallup zones?

A. It will.

Q. How do you propose to avoid any contamination of the Dakota formation by production from the Gallup?

A. In this well it would pose a problem because if you put any extra equipment below that packer you would actually have another packer in there and it would involve the same situation. The only way this one would work is to get the tests and see what it does and then de-

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cide whether to commingle the things, because if it -- if you run extra equipment down there, you would be doing the same thing as triple completing it.

Q. All right, now let me see if I understand you. What would you need from the Examiner by way of authority or an order to drill the well and then complete it so that we don't have contamination of the Dakota formation?

A. I would say that either here or the District Office, come back with the test results of the Tapacito Associated Gallup when that's completed.

Q. And what type of test results are you talking about in terms of approval for the commingling?

A. I would say if the well potentials at less than 20 barrels of oil per day and 200,000 Mcf from the Tapacito Associated, let's commingle it in with the Dakota.

Q. Would you refer to Exhibit Number Two and identify that for us?

A. This is the same information that we presented on the previous hearing for the four producing Chacra-Mesaverde Wells. This pertains to the Chacra-Mesaverde above the packer.

Q. All right, and Exhibit Number Three.

A. This is the production and pressure tabulations taken from the packer leakage test that is taken

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annually on the wells. That's where the pressures are from; and the annual production from both zones, I'll have to -- on the Dakota zone it's cumulative through 1973 and then 1974 forward is the production on this 140. And that shows the annual production, annual pressures for the four wells identified by the -- our four wells identified in Section 11, 12, and 13.

Q. All right, would you refer to Exhibit Number Three-A and identify that for us?

A. Three-A is the information on the three offset wells, the El Paso Exploration Well No. 3 in Unit D of Section 6. It's in the South Blanco-Tocito Pool. And the information from the Oil Commission office, cumulative 1978 oil production was 55 barrels for the year and a cumulative production through 1978 was 8,628 barrels.

The 1978 gas production was 10,790,000.

The Tenneco well in Section 18 is in the Tapacito-Gallup Pool and the 1978 oil production was 97 barrels; cumulative 19,290; 1978 gas production 60 Mcf, that's -- someone was measuring real close, and the Tapacito-Gallup Pool -- well in Section 19, the same information, 164 barrels for the year and 29,863 barrels cumulative. It was changed from an oil well to a gas well in 1967 and dedicated 320 acres to it.

The only well that has been commingled

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in the Tapacito-Gallup Pool is the Jeorme P. McHugh Well No. 5, located in Unit B of Section 29, 26 North, 4 West. It's a good well. 1978 oil production was 1800 barrels; accumulated 56,687. 1978 gas 144,248-million. And the order number is R-5665-A commingling.

Q. Would you refer to Exhibit Numbers Four and Five and summarize the information on those two exhibits?

A. This is -- on Exhibit Number Four is just a schematic drawing of our proposed well. We propose to drill the well and cement 7-inch casing from TD to surface and then our proposed perforating and setting a packer between the Mesaverde and the Tapacito-Gallup for the commingled production from below.

Q. Were Exhibits One through Five prepared by you?

A. Yes. Excuse me, on Exhibit Number Five, I missed it. That is just our proposed plan of how we would test and complete the well. I didn't add there -- put that on there, but I might add, should that Tapacito-Gallup be a high producing oil well, as I mentioned before, we would just dually complete the well and ask for permission to dually complete it in the Tocito -- or Tapacito-Gallup Pool.

Q. Were Exhibits One through Five prepared by you?

A. They were.

Q. And how would you propose to work out an allocation formula between the Chacra-Mesaverde and then the Gallup and --

A. Each one zone would be tested separately after cleaning them up, to obtain pressure and production capabilities for each zone.

Q. And you would confer with the Aztec District Engineer to determine what the allocation formula ought to be?

A. That's right.

Q. In your opinion, Mr. Verquer, will approval of this application be in the best interests of conservation, the prevention of waste, and the protection of correlative rights?

A. It will.

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

MR. STAMETS: These exhibits will be admitted.

CROSS EXAMINATION

BY MR. STAMETS:

Q. Mr. Verquer, looking at Exhibit Four, would you explain to me why you could not run a packer and

a check valve between the Tapacito and Dakota zones?

A. That's -- there would be no problem there, Mr. Stamets, but the problem, you would have a retrieveable packer or another packer above between the Mesaverde and Tapacito, and then if you needed to do any work on the Tapacito-Gallup you would have the other zones open above you, which -- while you're doing the work. In other words, if you wanted to go in and plug that thing, you're going to have those other zones open to contamination either from water or whatever you have in the well to keep it dead, and so forth. In other words, as poor as the Mesaverde-Chacra would be, we would hesitate to have two sets of packers in the well and complete it that way.

Q. Well, I'm not clear on why the situation would be different between the way I've suggested and the way you've proposed it. You're still going to have this packer set below the Mesaverde perforations.

A. Right.

Q. In either instance.

A. Right.

Q. Okay. Now if you have to work on the Tapacito-Gallup with the configuration that you've shown on Exhibit Four, how will you do that?

A. I see your point. In that case there would be no difference at all.

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Q. So it would appear, then, you could run a packer and check valve between the two zones, the Gallup and the Dakota.

A. Yes, run a retrieveable packer above and a sealed below, which could be done, and then the check valve assembly, and so forth, in the tubing to the --

Q. Okay, but in any event if you really got a prolific oil well, you would choose to dually complete.

A. Yes. Yes.

Q. Okay.

MR. STAMETS: Any other questions of the witness?

MR. CHAVEZ: I've got one.

MR. STAMETS: Mr. Chavez?

MR. CHAVEZ: Charlie, if that Tapacito-Gallup turns out to be marginal, would you expect to be producing more gas or liquid?

A. I would -- I anticipate from the well a well that will produce 10 barrels of oil and between 100 and 200,000 from the Tapacito-Gallup.

MR. CHAVEZ: That's what you're anticipating?

MR. STAMETS: Any other questions? The witness may be excused. Anything further in this case?

The case will be taken under advisement.

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REPORTER'S CERTIFICATE

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. 6801, heard by me on 1-30, 1980.

Richard L. Stamets, Examiner
Oil Conservation Division

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

EXAMINER HEARING

IN THE MATTER OF:

Application of Caulkins Oil Company for a dual completion and downhole commingling, Rio Arriba County, New Mexico. CASE 6801

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

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I N D E X

CHARLES VERQUER

E X H I B I T S

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in the northwest quarter of Section 13, 26 North, 6 West.

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A. 960 from the north and 950 from the west. It would be a standard gas well location.

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right now who our partner is in the 303 well, which is a Dakota, but we are the operator of the complete section. We are the owners and operators of the north half.

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A. Those are all Tocito-Dakota or Tapacito-Gallup associated dual, Tapacito-Gallup associated and a Dakota dual well. Four in the shaded area are our wells and the three outside, one is El Paso Exploration now and the other two are Tenneco wells.

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that it would produce approximately 10 barrels of oil a day and to start with less than 2000 to 1 gas/oil ratio, so it would be classed as an oil well.

Q. Why are you seeking approval from the Division for this type of completion prior to drilling the well to its total depth, as opposed to coming back after the well is drilled and seeking to commingle these zones?

A. The economics is the biggest problem involved. If the well were completed as a triple completion, that would leave the oil producing zone in between the other two gas zones, and if you needed to work on that oil zone you may damage the upper zones to where they would be unrecoverable. So in view of the two wells that are closest to this well that we have permanent records on, our 689 Well in Section 12 and our 248 Well in Section -- it's in the northeast quarter of Section 13, both of those wells were low gas/oil ratio wells, but low producers, 100,000 a day, and well, 189 only potentialed at 10 barrels -- or 689 only potentialed at 10 barrels a day.

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But we would more than likely test it to see if it happened to be a good well. Then we would ask, more than likely, to dually complete the oil zone above the Dakota and abandon the other two zones for the time being.

Q In your opinion will approval of this application maximize the potential for obtaining the greatest ultimate recovery from both the Dakota and the Gallup zones?

A It will.

Q How do you propose to avoid any contamination of the Dakota formation by production from the Gallup?

A In this well it would pose a problem because if you put any extra equipment below that packer you would actually have another packer in there and it would involve the same situation. The only way this one would work is to get the tests and see what it does and then de-

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Q. All right, now let me see if I understand you. What would you need from the Examiner by way of authority or an order to drill the well and then complete it so that we don't have contamination of the Dakota formation?

A. I would say that either here or the District Office, come back with the test results of the Tapacito Associated Gallup when that's completed.

Q. And what type of test results are you talking about in terms of approval for the commingling?

A. I would say if the well potentials at less than 20 barrels of oil per day and 200,000 Mcf from the Tapacito Associated, let's commingle it in with the Dakota.

Q. Would you refer to Exhibit Number Two and identify that for us?

A. This is the same information that we presented on the previous hearing for the four producing Chacra-Mesaverde Wells. This pertains to the Chacra-Mesaverde above the packer.

Q. All right, and Exhibit Number Three.

A. This is the production and pressure tabulations taken from the packer leakage test that is taken

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Q All right, would you refer to Exhibit Number Three-A and identify that for us?

A Three-A is the information on the three offset wells, the El Paso Exploration Well No. 3 in Unit D of Section 6. It's in the South Blanco-Tocito Pool. And the information from the Oil Commission office, cumulative 1978 oil production was 55 barrels for the year and a cumulative production through 1978 was 9,628 barrels.

The 1978 gas production was 10,790,000.

The Tenneco well in Section 18 is in the Tapacito-Gallup Pool and the 1978 oil production was 97 barrels; cumulative 19,290; 1978 gas production 60 Mcf, that's -- someone was measuring real close, and the Tapacito-Gallup Pool -- well in Section 19, the same information, 164 barrels for the year and 29,863 barrels cumulative. It was changed from an oil well to a gas well in 1967 and dedicated 320 acres to it.

The only well that has been commingled

in the Tapacito-Gallup Pool in the Jeorre P. McHugh Well No. 5, located in Unit D of Section 29, 26 North, 4 West. It's a good well. 1978 oil production was 1800 barrels; accumulated 36,687. 1978 gas 141,212-million. And the order number is R-5665-A commingling.

Q Would you refer to Exhibit Numbers Four and Five and summarize the information on those two exhibits?

A This is -- on Exhibit Number Four is just a schematic drawing of our proposed well. We propose to drill the well and cement 7-inch casing from TD to surface and then our proposed perforating and setting a packer between the Mesaverde and the Tapacito-Gallup for the commingled production from below.

Q Were Exhibits One through Five prepared by you?

A Yes. Excuse me, on Exhibit Number Five, I missed it. That is just our proposed plan of how we would test and complete the well. I didn't add there -- put that on there, but I might add, should that Tapacito-Gallup be a high producing oil well, as I mentioned before, we would just dually complete the well and ask for permission to dually complete it in the Tocito -- or Tapacito-Gallup Pool.

Q Were Exhibits One through Five prepared by you?

A. They were.

Q. And how would you propose to work out an allocation formula between the Chacra-Mesaverde and then the Gallup and --

A. Each one zone would be tested separately after cleaning them up, to obtain pressure and production capabilities for each zone.

Q. And you would confer with the Aztec District Engineer to determine what the allocation formula ought to be?

A. That's right.

Q. In your opinion, Mr. Verquer, will approval of this application be in the best interests of conservation, the prevention of waste, and the protection of correlative rights?

A. It will.

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

MR. STAMETS: These exhibits will be admitted.

CROSS EXAMINATION

BY MR. STAMETS:

Q. Mr. Verquer, looking at Exhibit Four, would you explain to me why you could not run a packer and

a check valve between the Tapacito and Dakota zones?

A. That's -- there would be no problem there, Mr. Stamets, but the problem, you would have a retrieveable packer or another packer above between the Mesaverde and Tapacito, and then if you needed to do any work on the Tapacito-Gallup you would have the other zones open above you, which -- while you're doing the work. In other words, if you wanted to go in and plug that thing, you're going to have those other zones open to contamination either from water or whatever you have in the well to keep it dead, and so forth. In other words, as poor as the Mesaverde-Chacra would be, we would hesitate to have two sets of packers in the well and complete it that way.

Q. Well, I'm not clear on why the situation would be different between the way I've suggested and the way you've proposed it. You're still going to have this packer set below the Mesaverde perforations.

A. Right.

Q. In either instance.

A. Right.

Q. Okay. Now if you have to work on the Tapacito-Gallup with the configuration that you've shown on Exhibit Four, how will you do that?

A. I see your point. In that case there would be no difference at all.

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Santa Fe, New Mexico 87501
Phone (505) 455-7409

Q So it would appear, then, you could run a packer and check valve between the two zones, the Gallup and the Dakota.

A. Yes, run a retrieveable packer above and a sealed below, which could be done, and then the check valve assembly, and so forth, in the tubing to the ---

Q Okay, but in any event if you really got a prolific oil well, you would choose to dually complete.

A Yes. Yes.

Q Okay.

MR. STAMETS: Any other questions of the witness?

MR. CHAVEZ: I've got one.

MR. STAMETS: Mr. Chavez?

MR. CHAVEZ: Charlie, if that Tapacito-Gallup turns out to be marginal, would you expect to be producing more gas or liquid?

A. I would -- I anticipate from the well a well that will produce 10 barrels of oil and between 100 and 200,000 from the Tapacito-Gallup.

MR. CHAVEZ: That's what you're anticipating?

MR. STAMETS: Any other questions? The witness may be excused. Anything further in this case?

The case will be taken under advisement.

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Santa Fe, New Mexico 87501
Phone (505) 455-7-09

REPORTER'S CERTIFICATE

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.

_____

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

_____, Examiner
Oil Conservation Division

CAULKINS OIL COMPANY

Case No. 6801

Proposal

Dual Complete and Downhole Commingle: A new well to be drilled 850' from West and 960' from North of Section 13, 26 North 6 West, Rio Arriba County, New Mexico.

Chacra and Mesa Verde Zones above permanent type packer and Tapacito-Gallup and Dakota Production below packer.

Production from below and above packer would flow to surface through parallel strings of tubing.

Caulkins Oil Company is owner and operator of this acreage.

Ownership and royalty interests common for this well in all zones.

Exhibit #1

Section map showing all Caulkins Oil Company wells and all offset wells.

Proposed well identified by red arrow.

Caulkins Wells now commingled in Chacra and Mesa Verde identified by red circle.

Caulkins wells now approved, but not completed and wells on which we are asking for approval by separate Hearing to commingle Chacra and Mesa Verde, identified by red square.

Caulkins wells and offset wells now completed and Dual Completed in Tocito or Tapacitp-Gallup and Dakota identified by red square with cross.

Exhibit #2

Pressure and Production information for Four Caulkins Oil Company Wells now completed and producing form Chacra-Mesa Verde.

Exhibit #3

Pressure and Production information for each of Four Caulkins Oil Company Wells now Dual completed in Tocito and Dakota.

Exhibit #3A

Offset wells, 1978 and Cumulative Tocito or Tapacito-Gallup Production information.

Exhibit #4

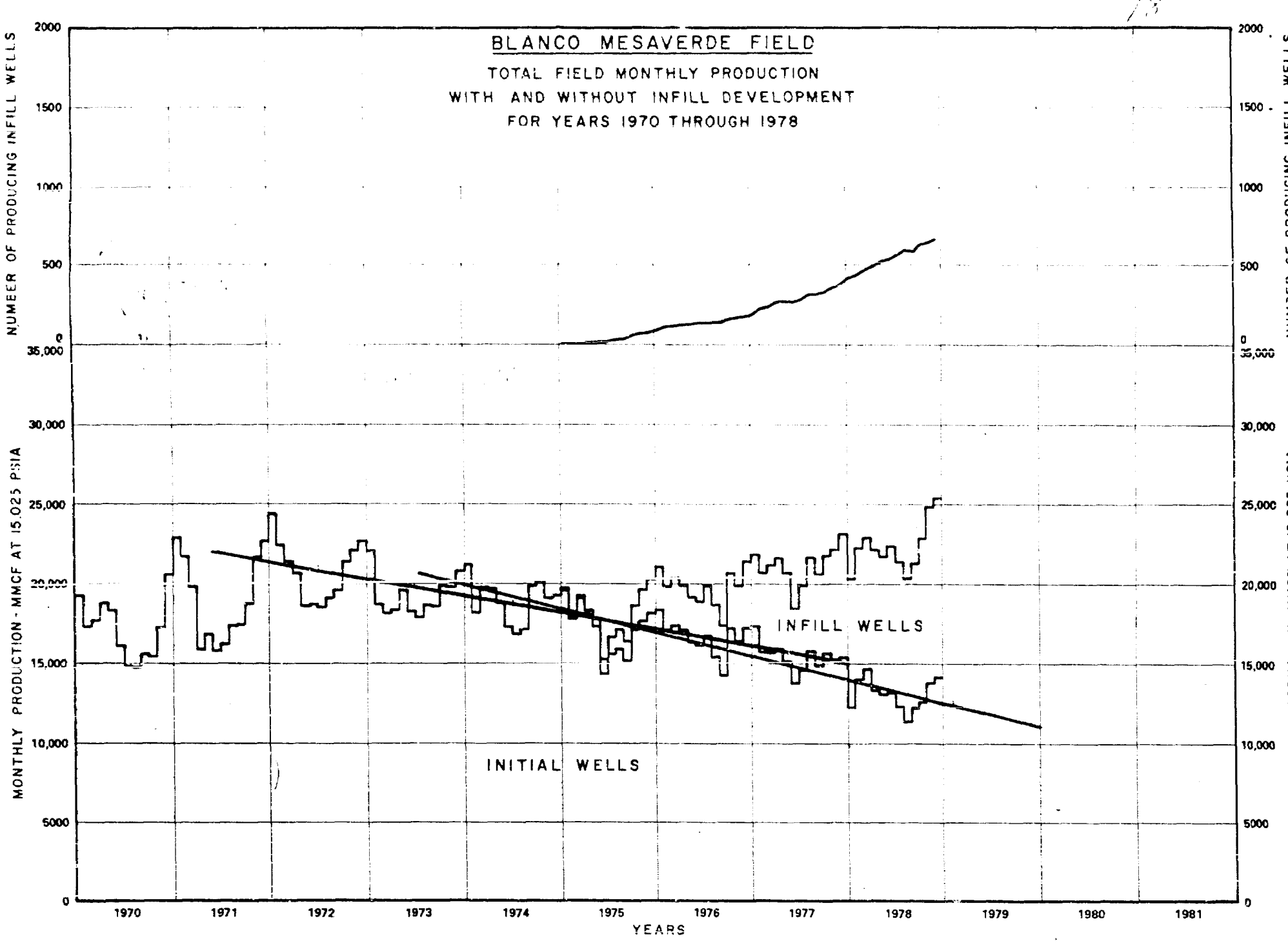
Schematic drawing of Proposed Dual Completion.

Exhibit #5

Statement of intentiions.

BLANCO MESAVERDE FIELD

TOTAL FIELD MONTHLY PRODUCTION
WITH AND WITHOUT INFILL DEVELOPMENT
FOR YEARS 1970 THROUGH 1978



CAULKINS OIL CO.

Post Office Box 780
Farmington, New Mexico 87401

Case No. 6801 Exhibit #2

Caulkins Oil Company wells now commingled and producing from Chacra-Mesa Verde.

Monthly Prod.

	104	224 A	679	812
Oct., 1978	2444			
Nov.	3493			
Dec.	5766			
Jan., 1979	4403			
Feb.	1607			
Mar.	4607			
Apr.	3087			
May	3257			
June	2745			
July	2176			
Aug.	1810			
Sept.	2237			
Oct.	1808		230	711
Nov.	1731	16,620	11,250	18,007
Dec.	1788	19,363	6,743	12,406

Pressure Information

224 A and 812 were tested before commingling. Following are results of those tests:

	Chacra Zone		Mesa Verde Zone	
Wells	SI Pressure	IP thru 3/4" Choke	SI Pressure	IP thru 3/4" Choke
224 A	960	890	1017	782
812	995	906	1060	863

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
Caulkins EXHIBIT NO. 2
CASE NO. 6801
Submitted by
Hearing Date 30 Jan 80

Exhibit #3

Breech D 140

Unit A Section 11 26N 6W

Pressure and Production Tabulations

	Tocito Zone				Dakota Zone			
Date	Pressure	Days SI	Gas Prod.	Oil Prod.	Pressure	Days SI	Gas Prod.	Oil Prod.
Initial 1960					2126	7		
1964	1213	7	20,819	1652	1997	7		
1965	1192	8	39,537	2428	1790	49		
1966	1216	7	17,208	3358	1897	42		
1967	1127	8	13,484	5489	1738	8		
1968	1056	8	16,463	3873	1146	8		
1969	986	3	9,538	2016	1205	3		
1970	883	3	4,341	1236	1008	3		
1971	857	3	59,614	4272	867	3		
1972	657	3	67,162	3247	708	3	Cum. Thru 1973	
1973	522	3	37,022	2927	673	3	(2,176,455)	(9656)
1974	620	3	16,278	2082	515	3	133,184	279
1975	425	3	8,244	1360	575	3	115,897	181
1976	435	3	7,932	600	535	3	105,683	267
1977	200	3	7,427	777	535	3	101,967	161
1978	475	3 Mo.	Last Prod.	7-77	520	3	87,173	162
1979	910	1 Yr.			409	3	81,829	45 Mo.
Cum. Productions			325,069	35,317			2,802,188	10,751

Breech C 144

Unit A Section 12 26N 6W

Pressure and Production Tabulations

Exhibit #3

Case No. 6801

		Tocito Zone				Dakota Zone			
Date		Pressure	Days SI	Gas Prod.	Oil Prod.	Pressure	Days SI	Gas Prod.	Oil Prod.
Initial	1964	1528	8	5,952	6,504	1700	8		
	1965	1208	8	192,066	44,164	1961	170	124,821	6,298
	1966	875	7	243,327	16,942	1830	73	115,694	1,677
	1967	722	8	115,341	10,664	1633	8	176,535	2,060
	1968	600	8	109,369	8,418	1486	53	181,853	1,770
	1969	NA		113,151	6,315	1222	8	158,435	2,394
	1970	450	5	77,264	5,032	920	3	154,194	1,893
	1971	500	3	46,364	3,864	927	3	146,652	1,176
	1972	497	4	54,193	3,831	792	4	133,255	931
	1973	489	3	35,415	2,927	730	3	130,707	717
	1974	505	3	15,497	2,143	560	3	124,299	596
	1975	544	3	15,386	1,985	590	3	113,849	545
	1976	520	3	25,683	1,720	542	3	95,591	262
	1977	520	(3)	25,875	2,660	535	3	101,122	451
	1978	505	(3)	29,506	2,696	563	(3)	84,878	389
	1979	489	(3)	33,341	1,412	461	(3)	83,797	286
	Cum. Productions			1,137,730	121,277			1,925,682	21,445

Breech C 248

Unit A Section 13 26N 6W

Pressure and Production Tabulations

Exhibit # 3

Case No. 6801

		Tocito Zone				Dakota Zone			
Date		Pressure	Days SI	Gas Prod.	Oil Prod.	Pressure	Days SI	Gas Prod.	Oil Prod.
Initial	1964	1354	8	402,402	36,697	1717	8	53,849	889
	1965	876	8	356,312	14,883	2221	8	133,767	4,284
	1966	727	8	201,580	4,611	1833	8	197,451	1,623
	1967	790	8	97,589	6,288	1685	8	134,994	1,535
	1968	820	8	105,380	5,310	1685	8	163,262	1,759
	1969	750	3	89,601	7,648	1406	3	112,222	2,150
	1970	715	3	80,663	10,375	1190	3	140,776	1,886
	1971	669	3	82,214	7,495	934	3	137,291	1,176
	1972	637	4	54,588	5,427	914	4	131,932	842
	1973	618	3	35,415	5,427	903	3	119,037	717
	1974	650	(3)	15,497	2,143	710	(3)	130,071	591
	1975	752	(3)	15,386	1,985	775	(3)	113,644	551
	1976	705	(3)	2,340	210	943	(3)	88,667	347
	1977	0		-----	-----	890	(3)	95,690	485
	1978	0		-----	-----	474	(3)	77,676	298
	1979	0		-----	-----	663	(3)	76,715	229
	Cum. Totals			1,538,967	105,999			1,793,973	19,362

Breech C 689

Unit L Section 12 26N 6W

Pressure and Production Tabulations

Exhibit # 3

Case No. 6801

Tocito Zone

Date		Pressure	Days SI	Gas Prod.	Oil Prod.	Pressure	Days SI	Gas Prod.	Oil Prod.
Initial	1964	1128	(7)	141,764	5,786	1850	(7)	53,849	441
	1965	1202	(8)	19,216	7,887	2303	(127)	133,767	1,280
	1966	1298	(7)	19,138	9,495	2107	(83)	197,451	1,880
	1967	1129	(8)	17,490	12,092	1923	8	175,129	1,758
	1968	1055	(8)	20,635	9,098	1710	84	193,238	1,998
	1969	850	(3)	40,964	7,770	1245	(9)	235,540	2,469
	1970	925	(3)	61,264	7,052	980	(3)	207,236	2,141
	1971	805	(3)	7,956	823	1080	(3)	175,591	1,566
	1972	790	(3)	Quit Flowing		827	(3)	191,795	1,193
	1973	295	(3)	Quit Flowing		710	(3)	161,123	706
	1974	30		Quit Flowing		625	3	153,401	853
	1975	600		Quit Flowing		645	(3)	132,569	575
	1976	248		Quit Flowing		580	(3)	106,382	150
	1977	215		Quit Flowing		647	(3)	110,717	390
	1978	335		Quit Flowing		749	(3)	74,783	184
	1979	546		Quit Flowing		743	(3)	72,597	405
	Cum. Prod.			328,447	60,003			2,375,168	17,989

CAULKINS OIL CO.

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Farmington, New Mexico 87401

Breech C 248 E

Case No. 6801

Exhibit # 3A

El Paso Exploration Well No. 3 located in Unit D of Section 6, 26 North 5 West.

South Blanco Tocito Pool

1978 Oil Production 55 Bbls. Accum. 8628 Bbls.

1978 Gas Production 10,790 MCF.

Tenneco Well No. 2, located in Unit B of Section 18, 26 North 5 West.

Tapacito-Gallup Pool

1978 Oil Production 97 Bbls. Accum. 19,290 Bbls.

1978 Gas Production 60 MCF.

Tenneco Well No. 3, located in Unit A of Section 19, 26 North 5 West.

Tapacito-Gallup Pool

1978 Oil Production 164 Bbls. Accum. 29,863 Bbls.

1978 Gas Production 8,761 MCF.

Change from Oil Well to Gas Well 1967.

Jerome P. McHugh Well No. 5, located in Unit D of Section 29, 26 North 4 West.

Tapacito-Gallup Pool

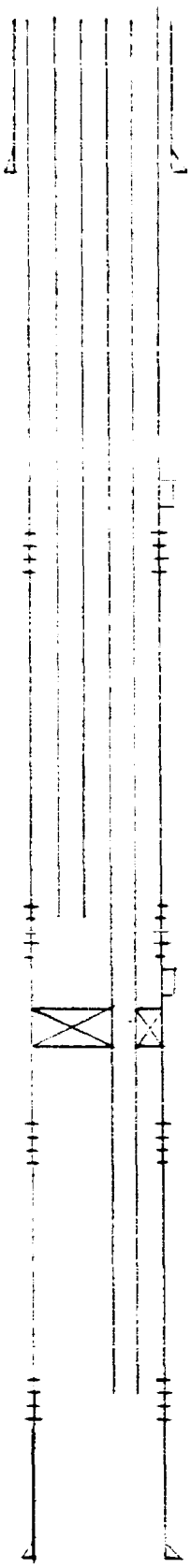
1978 Oil Production 1800 Bbls. Accum. 56,687 Bbls.

1978 Gas Production 144,248 MCF.

DHC 11-3-79 Order No. R-5665-A

R-5665-A

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
CAULKINS EXHIBIT NO. 3A
CASE NO. 6801
Submitted by
Hearing Date 30 Jan 80



10 3/4" 32.75# H-40 Casing cemented with sufficient cement to circulate to surface.

1 1/4" NU 10rd thd K-55 Smls tubing to approx. 5400'.

Stage Tool set at approx. 4100'.

Chacra Perforations approx. 3953' to 4065'.

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
CAULKINS EXHIBIT NO. 4
CASE NO. 680'
Submitted by
Hearing Date 30 Jan 80

Mesa Verde Perforations at approx. 4710' to 5460'.

Stage Tool set at approx. 5500'.

Baker Model "D" Production packer at approx. 5600'.

Tapacito-Gallup Perforations 6780' to 6802'.

2 3/8" OD EUE 8rd thd tubing through packer to Dakota Perforation at approx. 7450'.

7" 23# and 26# cemented at TD with sufficient cement to circulate to surface.

Dakota Perforations at approx. 7290' to 7530'.

TD--7550'.

CAULKINS OIL COMPANY

Breech E 248 E
Unit D Section 13, 26N 6W
Rio Arriba County, New Mexico

BY ____ DATE ____
CHKD. BY ____ DATE ____
SUBJECT ____
SHEET NO. ____ OF ____
JOB NO. ____

CAULKINS OIL CO.

Post Office Box 780
Farmington, New Mexico 87401

Breech E 248 E

Exhibit #5 Case No. 6801

It is our intention to drill well, then complete in Dakota Zone.

Dakota Zone would be cleaned up then shut in for test.

Test information would include / Days Pressure build up, Rate of Flow through orifice meter, Oil Production and Gas Oil Ratio.

After tests on Dakota completed, retrievable bridge plug would be set in casing on wireline, then Tapacito-Gallup Zone would be completed and cleaned up.

After cleaning up and producing all of load oil used treating well it would be shut in for same test as conducted on Dakota Zone.

With above we would have information to break down future production from Commingled Zones.

Chacra and Mesa Verde Zones will be tested separately so pressure and production capability will be available to split production after confering with Aztec District Engineer.

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
CAULKINS EXHIBIT NO. 5
CASE NO. 6801
Submitted by
Hearing Date 30 Jan 80

CAULKINS OIL COMPANY

Case No. 6801

Proposal

Dual Complete and Downhole Commingle: A new well to be drilled 850' from West and 960' from North of Section 13, 26 North 6 West, Rio Arriba County, New Mexico.

Chacra and Mesa Verde Zones above permanent type packer and Tapacito-Gallup and Dakota Production below packer.

Production from below and above packer would flow to surface through parallel strings of tubing.

Caulkins Oil Company is owner and operator of this acreage.

Ownership and royalty interests common for this well in all zones.

Exhibit #1

Section map showing all Caulkins Oil Company wells and all offset wells.

Proposed well identified by red arrow.

Caulkins Wells now commingled in Chacra and Mesa Verde identified by red circle.

Caulkins wells now approved, but not completed and wells on which we are asking for approval by separate Hearing to commingle Chacra and Mesa Verde, identified by red square.

Caulkins wells and offset wells now completed and Dual Completed in Tocito or Tapacitp-Gallup and Dakota identified by red square with cross.

Exhibit #2

Pressure and Production information for Four Caulkins Oil Company Wells now completed and producing form Chacra-Mesa Verde.

Exhibit #3

Pressure and Production information for each of Four Caulkins Oil Company Wells now Dual completed in Tocito and Dakota.

Exhibit #3A

Offset wells, 1978 and Cumulative Tocito or Tapacito-Gallup Production information.

Exhibit #4

Schematic drawing of Proposed Dual Completion.

Exhibit #5

Statement of intentiions.

CAULKINS OIL CO.

Post Office Box 780
Farmington, New Mexico 87401

Case No. 6801 Exhibit #2

Caulkins Oil Company wells now commingled and producing from Chacra-Mesa Verde.

Monthly Prod.

	104	224 A	679	812
Oct., 1978	2444			
Nov.	3493			
Dec.	5766			
Jan., 1979	4403			
Feb.	1607			
Mar.	4607			
Apr.	3087			
May	3257			
June	2745			
July	2176			
Aug.	1810			
Sept.	2237			
Oct.	1808		230	711
Nov.	1731	16,620	11,250	18,007
Dec.	1788	19,363	6,743	12,406

Pressure Information

224 A and 812 were tested before commingling. Following are results of those tests:

	Chacra Zone		Mesa Verde Zone	
Wells	SI Pressure	IP thru 3/4" Choke	SI Pressure	IP thru 3/4" Choke
224 A	960	890	1017	782
812	995	906	1060	863

Exhibit 2
Case 6801

Breech D 140

Unit A Section 11 26N 6W

Pressure and Production Tabulations

Exhibit #3

Case No. 6801

	Tocito Zone				Dakota Zone			
Date	Pressure	Days SI	Gas Prod.	Oil Prod.	Pressure	Days SI	Gas Prod.	Oil Prod.
Initial 1960					2126	7		
1964	1213	7	20,819	1652	1997	7		
1965	1192	8	39,537	2428	1790	49		
1966	1216	7	17,208	3358	1897	42		
1967	1127	8	13,484	5489	1738	8		
1968	1056	8	16,463	3873	1146	8		
1969	986	3	9,538	2016	1205	3		
1970	883	3	4,341	1236	1008	3		
1971	857	3	59,614	4272	867	3		
1972	657	3	67,162	3247	708	3	Cum. Thru 1973	
1973	522	3	37,022	2927	673	3	(2,176,455)	(9656)
1974	620	3	16,278	2082	515	3	133,184	279
1975	425	3	8,244	1360	575	3	115,897	181
1976	435	3	7,932	600	535	3	105,683	267
1977	200	3	7,427	777	535	3	101,967	161
1978	475	3 Mo.	Last Prod.	7-77	520	3	87,173	162
1979	910	1 Yr.			409	3	81,829	45 Mo.
	Cum. Productions		325,069	35,317			2,802,188	10,751

Exhibit 3
Case 6801

Breech C 144

Unit A Section 12 26N 6W

Pressure and Production Tabulations

Exhibit #3

Case No. 6801

		Tocito Zone				Dakota Zone			
Date		Pressure	Days SI	Gas Prod.	Oil Prod.	Pressure	Days SI	Gas Prod.	Oil Prod.
Initial	1964	1528	8	5,952	6,504	1700	8		
	1965	1208	8	192,066	44,164	1961	170	124,821	6,298
	1966	875	7	243,327	16,942	1830	73	115,694	1,677
	1967	722	8	115,341	10,664	1633	8	176,535	2,060
	1968	600	8	109,369	8,418	1486	53	181,853	1,770
	1969	NA		113,151	6,315	1222	8	158,435	2,394
	1970	450	5	77,264	5,032	920	3	154,194	1,893
	1971	500	3	46,364	3,864	927	3	146,652	1,176
	1972	497	4	54,193	3,831	792	4	133,255	931
	1973	489	3	35,415	2,927	730	3	130,707	717
	1974	505	3	15,497	2,143	560	3	124,299	596
	1975	544	3	15,386	1,985	590	3	113,849	545
	1976	520	3	25,683	1,720	542	3	95,591	262
	1977	520	(3)	25,875	2,660	535	3	101,122	451
	1978	505	(3)	29,506	2,696	563	(3)	84,878	389
	1979	489	(3)	33,341	1,412	461	(3)	83,797	286
	Cum. Productions			1,137,730	121,277			1,925,682	21,445

Breech C 248

Unit A Section 13 26N 6W

Pressure and Production Tabulations

Exhibit # 3

Case No. 6801

		Tocito Zone				Dakota Zone			
Date		Pressure	Days SI	Gas Prod.	Oil Prod.	Pressure	Days SI	Gas Prod.	Oil Prod.
Initial	1964	1354	8	402,402	36,697	1717	8	53,849	889
	1965	876	8	356,312	14,883	2221	8	133,767	4,284
	1966	727	8	201,580	4,611	1833	8	197,451	1,623
	1967	790	8	97,589	6,288	1685	8	134,994	1,535
	1968	820	8	105,380	5,310	1685	8	163,262	1,759
	1969	750	3	89,601	7,648	1406	3	112,222	2,150
	1970	715	3	80,663	10,375	1190	3	140,776	1,886
	1971	669	3	82,214	7,495	934	3	137,291	1,176
	1972	637	4	54,588	5,427	914	4	131,932	842
	1973	618	3	35,415	5,427	903	3	119,037	717
	1974	650	(3)	15,497	2,143	710	(3)	130,071	591
	1975	752	(3)	15,386	1,985	775	(3)	113,644	551
	1976	705	(3)	2,340	210	943	(3)	88,667	347
	1977	0		-----	-----	890	(3)	95,690	485
	1978	0		-----	-----	474	(3)	77,676	298
	1979	0		-----	-----	663	(3)	76,715	229
	Cum. Totals			1,538,967	105,999			1,793,973	19,362

Breech C 689

Unit L Section 12 26N 6W

Pressure and Production Tabulations

Exhibit # 3

Case No. 6801

		Tocito Zone						
Date	Pressure	Days SI	Gas Prod.	Oil Prod.	Pressure	Days SI	Gas Prod.	Oil Prod.
Initial 1964	1128	(7)	141,764	5,786	1850	(7)	53,849	441
1965	1202	(8)	19,216	7,887	2303	(127)	133,767	1,280
1966	1298	(7)	19,138	9,495	2107	(83)	197,451	1,880
1967	1129	(8)	17,490	12,092	1923	8	175,129	1,758
1968	1055	(8)	20,635	9,098	1710	84	193,238	1,998
1969	850	(3)	40,964	7,770	1245	(9)	235,540	2,469
1970	925	(3)	61,284	7,052	900	(3)	207,236	2,141
1971	805	(3)	7,956	823	1080	(3)	175,591	1,566
1972	790	(3)	Quit Flowing		827	(3)	191,795	1,193
1973	295	(3)	Quit Flowing		710	(3)	161,123	706
1974	30		Quit Flowing		625	3	153,401	853
1975	600		Quit Flowing		645	(3)	132,569	575
1976	248		Quit Flowing		580	(3)	106,382	150
1977	215		Quit Flowing		647	(3)	110,717	390
1978	335		Quit Flowing		749	(3)	74,783	184
1979	546		Quit Flowing		743	(3)	72,597	405
Cum. Prod.			328,447	60,003			2,375,168	17,989

CAULKINS OIL CO.

Post Office Box 780

Farmington, New Mexico 87401

Breech C 248 E

Case No. 6801

Exhibit # 3A

El Paso Exploration Well No. 3 located in Unit D of Section 6, 26 North 5 West.

South Blanco Tocito Pool

1978 Oil Production 55 Bbls. Accum. 8628 Bbls.

1978 Gas Production 10,790 MCF.

Tenneco Well No. 2, located in Unit B of Section 18, 26 North 5 West.

Tapacito-Gallup Pool

1978 Oil Production 97 Bbls. Accum. 19,290 Bbls.

1978 Gas Production 60 MCF.

Tenneco Well No. 3, located in Unit A of Section 19, 26 North 5 West.

Tapacito-Gallup Pool

1978 Oil Production 164 Bbls. Accum. 29,863 Bbls.

1978 Gas Production 8,761 MCF.

Change from Oil Well to Gas Well 1967.

Jerome P. McHugh Well No. 5, located in Unit D of Section 29, 26 North 4 West.

Tapacito-Gallup Pool

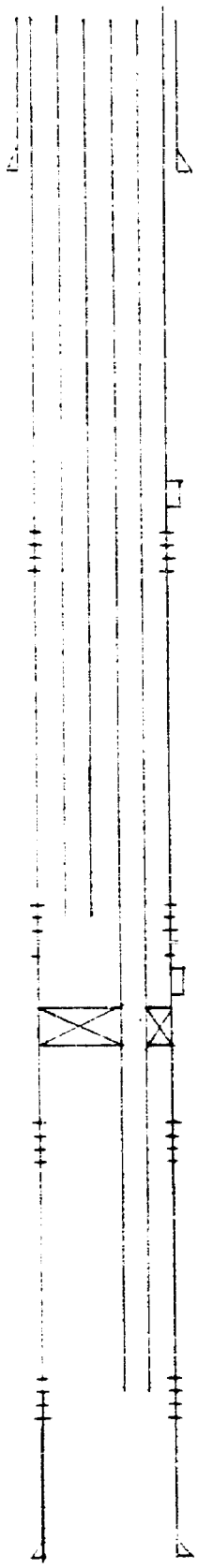
1978 Oil Production 1800 Bbls. Accum. 56,687 Bbls.

1978 Gas Production 144,248 MCF.

DHC 11-3-79 Order No. R-5665-A

Exhibit 3A
case 6801

BY ..... DATE ..... SUBJECT ..... SHEET NO. ..... OF .....
CHKD. BY ..... DATE ..... JOB NO. .....



10 3/4" 32.75# H-40 Casing cemented with sufficient cement to circulate to surface.

1 1/4" NU 10rd thd K-55 Smls tubing to approx. 5400'.

Stage Tool set at approx. 4100'.

Chacra Perforations approx. 3955' to 4065'.

Mesa Verde Perforations at approx. 4710' to 5460'.

Stage Tool set at approx. 5500'.

Baker Model "D" Production packer at approx. 5600'.

Tapacito-Gallup Perforations 6780' to 6802'.

2 3/8" OD EUE 8rd thd tubing through packer to Dakota Perforation at approx. 7430'.

7" 23# and 26# cemented at TD with sufficient cement to circulate to surface.

Dakota Perforations at approx. 7290' to 7530'.

TD--7550'.

CAULKINS OIL COMPANY

Breech E 248 E
Unit D Section 13, 26N 6W
Rio Arriba County, New Mexico

Exhibit 4
Case 6801

CAULKINS OIL CO.

Post Office Box 780
Farmington, New Mexico 87401

Breech E 248 E

Exhibit #5

Case No. 6801

It is our intention to drill well, then complete in Dakota Zone.

Dakota Zone would be cleaned up then shut in for test.

Test information would include 7 Days Pressure build up, Rate of Flow through orifice meter, Oil Production and Gas Oil Ratio.

After tests on Dakota completed, retrievable bridge plug would be set in casing on wireline, then Tapacito-Gallup Zone would be completed and cleaned up.

After cleaning up and producing all of load oil used treating well it would be shut in for same test as conducted on Dakota Zone.

With above we would have information to break down future production from Commingled Zones.

Chacra and Mesa Verde Zones will be tested separately so pressure and production capability will be available to split production after confering with Aztec District Engineer.

Exhibit 5
Case 6801

Dockets Nos. 4-80 and 5-80 are tentatively set for February 13 and 27, 1980. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 30, 1980

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

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

CASE 6787: (Continued from January 16, 1980, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to consider the approval of 12 non-standard proration units ranging in size from 261.51 acres to 334.24 acres for 320-acre spaced pools, and 19 non-standard proration units ranging in size from 162.65 acres to 207.57 acres for 160-acre spaced pools, all of the aforesaid units being in and resulting from the irregular size and shape of Sections 1 thru 7 and 18, 19, 30, and 31, along the North and West sides of Township 28 North, Range 3 West, Rio Arriba County.

CASE 6796: Application of Union Oil Company of California for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the SW/4 SW/4 of Section 1, Township 8 South, Range 26 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6797: Application of Yates Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Penn formations underlying the N/2 of Section 28, Township 18 South, Range 29 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 6798: Application of Estoril Producing Corporation for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Curry Federal Well No. 1, to be drilled 1980 feet from the South line and 660 feet from the East line of Section 22, Township 23 South, Range 34 East, Antelope Ridge-Morrow Gas Pool, the S/2 of said Section 22 to be dedicated to the well.

CASE 6799: Application of Caulkins Oil Company for a non-standard gas proration unit, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 320-acre non-standard gas proration unit comprising the SE/4, S/2 NE/4 and S/2 SW/4 of Section 16, Township 26 North, Range 6 West, Blanco Mesaverde Pool, to be dedicated to a well to be drilled at a standard location thereon.

CASE 6794: (Continued from January 16, 1980, Examiner Hearing)

Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Tocito Gallup and Dakota production in the wellbore of its Breech "D" Well No. 140 located in Unit A of Section 11, Township 26 North, Range 6 West.

CASE 6800: Application of Caulkins Oil Company for dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Breech "E" Wells Nos. 83-E located in Unit L of Section 5 and 54-E and 68-E located in Units P and L of Section 4; Breech "A" No. 268-E located in Unit P of Section 16; and Breech "D" No. 346 located in Unit D of Section 22, all in Township 26 North, Range 6 West, in such a manner as to produce gas from the Dakota formation and commingled Chacra and Mesaverde production through parallel strings of tubing.

CASE 6801: Application of Caulkins Oil Company for a dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Breech "C" Well No. 248-E located in Unit D of Section 13, Township 26 North, Range 6 West, in such a manner as to produce commingled Tapacito-Gallup and Dakota production and commingled Chacra and Mesaverde production through parallel strings of tubing.

CASE 6790: (Continued from January 16, 1980, Examiner Hearing)

Application of Merrion & Bayless for gas well commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks permission to temporarily commingle certain of its Pictured Cliffs gas wells in Sections 1, 2, 3, 9, 10, and 11, Township 26 North, Range 13 West, in a common gathering system and meter the entire lease output through the purchaser's sales meter located in Unit M of said Section 7.

BEFORE THE

OIL CONSERVATION DIVISION

DEPARTMENT OF ENERGY

STATE OF NEW MEXICO

RECEIVED

DEC 21 1979

Oil Conservation

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR APPROVAL OF DOWNHOLE COMMINGLING AND DUAL COMPLETION, RIO ARRIBA COUNTY, NEW MEXICO.

No. 6801

APPLICATION

COMES NOW CAULKINS OIL COMPANY and applies to the Oil Conservation Division of New Mexico for authority to commingle production from the Chacra and Mesa Verde formations and to then dually complete those two commingled zones with the Tapacito-Gallup Associated Pool, Rio Arriba County, New Mexico; and in support thereof, would show the Division:

1. Applicant is the operator of the following well:

   Breech "C" No. 248-E well located in Unit D., Sec. 13, T26N, R6W, NMPM.

2. Applicant seeks the following:

   (a) to downhole commingle production from the Chacra and Mesa Verde formations; and,

   (b) to downhole commingle production from the Tapacito-Gallup Associated Pool with the Dakota formation; and,

   (c) to dually complete the well so that the commingled Chacra-Mesa Verde gas is produced separately from the Tapacito Gallup-Dakota production.

3. The approval of this application will recover gas that would not otherwise be produced, would not impair the

correlative rights of others and will be in the best interest of conservation.

Respectfully submitted,

CAULKINS OIL COMPANY

By _____
W. Thomas Kellahin

Kellahin & Kellahin
P. O. Box 1769
Santa Fe, New Mexico 87501
Phone: (505) 982-4285

BEFORE THE

OIL CONSERVATION DIVISION

DEPARTMENT OF ENERGY

STATE OF NEW MEXICO

RECEIVED
DEC 21 1979
Oil Conservation

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR APPROVAL OF DOWNHOLE COMMINGLING AND DUAL COMPLETION, RIO ARRIBA COUNTY, NEW MEXICO.

No. 6801

APPLICATION

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1. Applicant is the operator of the following well:

   Breech "C" No. 248-E well located in Unit D., Sec. 13, T26N, R6W, NMPM.

2. Applicant seeks the following:

   (a) to downhole commingle production from the Chacra and Mesa Verde formations; and,

   (b) to downhole commingle production from the Tapacito-Gallup Associated Pool with the Dakota formation; and,

   (c) to dually complete the well so that the commingled Chacra-Mesa Verde gas is produced separately from the Tapacito Gallup-Dakota production.

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BEFORE THE

OIL CONSERVATION DIVISION

DEPARTMENT OF ENERGY

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR APPROVAL OF DOWNHOLE COMMINGLING AND DUAL COMPLETION, RIO ARRIBA COUNTY, NEW MEXICO.

No. 6801

APPLICATION

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1. Applicant is the operator of the following well:

   Breech "C" No. 248-E well located in Unit D., Sec. 13, T26N, R6W, NMPM.

2. Applicant seeks the following:

   (a) to downhole commingle production from the Chacra and Mesa Verde formations; and,

   (b) to downhole commingle production from the Tapacito-Gallup Associated Pool with the Dakota formation; and,

   (c) to dually complete the well so that the commingled Chacra-Mesa Verde gas is produced separately from the Tapacito Gallup-Dakota production.

3. The approval of this application will recover gas that would not otherwise be produced, would not impair the

correlative rights of others and will be in the best interest of conservation.

Respectfully submitted,

CAULKINS OIL COMPANY

By _____
W. Thomas Kellahin

Kellahin & Kellahin
P. O. Box 1769
Santa Fe, New Mexico 87501
Phone: (505) 982-4285

ROUGH

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 6801

Order No. R- 6260

APPLICATION OF Caulkins Oil Company
FOR A DUAL COMPLETION AND DOWNHOLE COMMINGLING, RIO ARRIBA
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 o'clock a.m. on January 30, 1980, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this _____ day of February, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

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

(2) That the applicant, Caulkins Oil Company, seeks authority to complete its Breech "C" Well No. 248-E ~~Well No. XXX~~, located in Unit D of Section 13, Township 26 North, Range 6 West, NMPM, _____ County, New Mexico, as a dual completion (conventional) ~~(combination)~~ ~~(tubingless)~~ to produce ~~oil~~ ~~gas~~ ~~from the~~ commingled Tapacito-Gallup and Dakota production and commingled Chacra and Mesaverde production through parallel strings of tubing.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That from each of said zones, the expected to be subject well is capable of ~~100~~ marginal production only.

(5) That from the _____ zone, the subject well is capable of low marginal production only.

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

(6) ~~(7)~~ That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period and that a packer and check valve are installed above the Dakota zone to prevent Gallup formation liquids from coming in contact with it.

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

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, _____ percent of the commingled _____ production should be allocated to the _____ zone, and _____ percent of the commingled _____ production to the _____ zone.

(ALTERNATE)

(8) ~~(9)~~ That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec district office of the Division and determine an allocation formula for each of the production zones.

(10) (~~5~~) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Caulkins Oil Company, is hereby authorized to complete its Breech "C" Well No. 248-E, located in Unit D of Section 13, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, as a dual completion (conventional) ~~(combination)~~ ~~(tubingless)~~ to produce ~~oil~~ ~~gas~~ ~~from the~~ commingled Tapacito-Gallup and Dakota production through one string of tubing and to produce ~~and~~ commingled Chacra and Mesaverde production through a parallel string of tubing, with separation of the commingled zones to be achieved by means of a packer set at approximately 5600 feet.

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Division Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer leakage tests upon completion and annually thereafter during the ~~Annual~~ Deliverability Test Period for either the Blanco-Mesaverde or Basin-Dakota Pool.

(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.

Provided Further, that the applicant shall install a packer and check valve between the ~~Dakota and~~ Gallup and Dakota zones in such a manner as to prevent Gallup formation liquids from coming in contact with the Dakota zone.

IT IS THEREFORE ORDERED:

(1) That the applicant, _____, is hereby authorized to commingle _____ and _____ production within the wellbore of the _____, located in Unit _____ of Section _____, Township _____, Range _____, NMPM, _____ County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec district office of the Division and determine an allocation formula for the allocation of production to each zone in ~~each of~~ the subject wells.

(ALTERNATE)

(2) That _____ percent of the commingled _____ production shall be allocated to the _____ zone and _____ percent of the commingled _____ production shall be allocated to the _____ zone.

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

(4) 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.