CASE 6119: CANLEYES OIL COMPANY FOR A MY DUAL COMPLETION AND DOMENOLE COMMINGLING PIO ARRIVA COMMING. NEW MEXICO

e so

(ase Number 6119 Application Transcripts. man Exhibits

## **sid morrish reporting service**Casent Court Reporting Service Cable Mejis, No. 122, Seats Fe, New Maxico 87501 Phose (505) 982-9212

## BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico January 18, 1978

## EXAMINER HEARING

## IN THE MATTER OF:

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

CASE 6119

BEFORE: Richard L. Stamets, Examiner

## TRANSCRIPT OF HEARING

## APPEARANCES

For the New Mexico Oil Conservation Commission:

Lynn Teschendorf, Esq. Legal Counsel for the Commission

State Land Office Building

Santa Fe, New Mexico

For the Applicant:

Jason W. Kellahin, Esq.

KELLAHIN & FOX Attorneys at Law 500 Don Gaspar Santa Fe, New Mexico

19

5

10

11

12

13

14

15

16

17

18

20

21 22

23

24 25

## INDEX

| 2 |                                    | Page |
|---|------------------------------------|------|
| 3 | CHARLES VERQUER                    |      |
| 4 | Direct Examination by Mr. Kellahin | 3    |
| 5 | Cross Examination by Mr. Stamets   | 20   |

## EXHIBIT INDEX

|           |         | 9                      | Offered | Admitted |
|-----------|---------|------------------------|---------|----------|
| Applicant | Exhibit | One, Map               | 5       | 20       |
| Applicant | Exhibit | Two, Tabulation        | 6       | 20       |
| Applicant | Exhibit | Three, Tabulation      | 7       | 20       |
| Applicant | Exhibit | Four, Tabulation       | 8       | 20       |
| Applicant | Exhibit | Five, Tabulation       | 8       | 20       |
| Applicant | Exhibit | Six, Decline Curves    | 9       | 20       |
| Applicant | Exhibit | Seven, Plat            | 10      | 20       |
| Applicant | Exhibit | Eight, Tabulation      | 10      | 20       |
| Applicant | Exhibit | Nine, Well Record      | 11      | 20       |
| Applicant | Exhibit | Ten, Tabulation        | 12      | 20       |
| Applicant | Exhibit | Eleven, Tabulation     | 12      | 20       |
| Applicant | Exhibit | Twelve, Tabulation     | 13      | 20       |
| Applicant | Exhibit | Thirteen, Tabulation   | 13      | 20       |
| Applicant | Exhibit | Fourteen, Decline Curv | e 15    | 20       |
| Applicant | Exhibit | Fifteen, Prod. Records | 15      | 20       |
| Applicant | Exhibit | Sixteen, Diagram       | 17      | 20       |
| Applicant | Exhibit | Seventeen, Letter      | 19      | 20       |
|           |         |                        |         |          |

sid morrish reporting service
General Court Reporting Service
25 Calle Mejis, No. 122, Sants Fe, New Moxico 87501
Phone (505) 982-9212

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

MR. STAMETS: We will call next Case 6119.

MS. TESCHENDORF: Case 6119, application of Caulkins
Oil Company for a dual completion and downhole commingling,
Rio Arriba County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, Kellahin and Fox, Santa Fe, appearing for the applicant, Caulkins Oil Company, in Case 6119, 6120, 6121 and 6122. We will have one witness, we would like to make a separate record on each case, however.

MR. STAMETS: All right, let's have that witness stand and be sworn at this time for all four of those cases.

(THEREUPON, the witness was duly sworn.)

## CHARLES VERQUER

called as a witness, having been first duly sworn, was examined and testified as follows:

## DIRECT EXAMINATION

## BY MR. KELLAHIN:

- Q Would you state your name, please?
- A Charles Verquer.
- Q By whom are you employed and in what position, Mr. Verquer?
  - A I'm Superintendent for Caulkins Oil Company.
  - Q Will you spell that name for the record, please?
  - A V-e-r-q-u-e-r.

3

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

|  | Q | Where | are | you | located, | Mr. | Verquer? |
|--|---|-------|-----|-----|----------|-----|----------|
|--|---|-------|-----|-----|----------|-----|----------|

Our leases are in Rio Arriba County, New Mexico, 26 North, 6 West, most of them.

- Where do you live? Q
- I live in Bloomfield, New Mexico.
- Have you ever testified before the Oil Conservation Q Commission and made your qualifications a matter of record?

Α I have.

MR. KELLAHIN: If the Examiner please, we ask if Mr. Verquer's qualifications will be recognized?

MR. STAMETS: How did you qualify, Mr. Verquer? MR. KELLAHIN: Mr. Verquer qualified as an experienced oil man and operator of these properties.

MR. VERQUER: Since 1952 I have been associated with them.

> MR. STAMETS: Like a production superintendent? MR. KELLAHIN: Yes.

MR. STAMETS: The witness is considered qualified.

(Mr. Kellahin continuing.) Mr. Verquer, what does the applicant propose in Case Number 6119?

We propose to drill a well to the Dakota to test the Α Dakota formation. We wish to dual complete it as a Dakota and then we wish to commingle the three producing zones above, the Pictured Cliffs, Chacra and Mesaverde. The Pictured Cliff is the only zone in that area that is really considered comPhone (505) 982-9212

Ž4

mercial of the upper three and the other two would be exceptionally marginal unless there just happened to be a finger in there for the Mesaverde or Chacra. The offset Chacra well in Section 18 is a pretty decent Chacra well but the Pictured Cliffs in the upper three zones is the one so we would like to commingle the three to-well, you would recover more gas that would not otherwise be produced because we cannot afford to drill a straight out Mesaverde well in the area.

- Q The well has not been drilled, has it?
- A No.
- Q Is all of the ownership common as to all of the zones?
  - A All of them.
  - Q No difference in the working interest?
- A No difference in the working interest or royalty interest from the grass roots.
  - Q Or overriding royalties?
  - A Or overriding royalties.
- Q Now referring to what has been marked as your Exhibit Number One, would you identify that exhibit?
- A Exhibit Number One is a map showing the--the shaded part is all of the Caulkins' property in 26 North, 6 and 7 West and 27 North and parts of three sections. The red arrow identifies the well location which is eight thirty from the north and eight thirty from the east.

10

11

12

16

17

20

21

22

23

24

| $\sim$ | mr - r | 1 .3  | <b>1</b> | ·   | 77 A | -  |    | 44- | Section? |  |
|--------|--------|-------|----------|-----|------|----|----|-----|----------|--|
| 0      | IIIal  | WOUTG | De       | T11 | ULLL | 12 | OI | LHE | Sections |  |

- A Yes, Unit A of the Section.
- Q What is the significance of the shaded area?
- A That is all Caulkins' properties. We own all of the interest in the shaded area.
- Q And by letter the completion intervals of the various wells is shown, is that correct?
- A Right. The P or PC stands for Pictured Cliffs and so forth.
- Q Now referring to what has been marked as Exhibit Number Two, would you identify that exhibit, please?

A Exhibit Number Two, I started trying to figure out what the average pressures were for the field and this is the Pictured Cliffs tabulation. There are three pages of it, on the third page I have the averages, the initial pressure through twenty years of the pressure decline which on the one hundred and eighty-five wells makes a pretty graph but if you pick any well through there you will find the pressure jumping up and down, it is just unreal.

Q Now by way of explanation of this exhibit, your pressure tabulations go first, second, third and so forth through twenty?

- A Yes.
- Q So would the twentieth, for example, be 1977?
- A Yes, 1977 is the last pressures on each.

## sid morrish reporting service General Court Reporting Service 825 Calle Mejis, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212

| _ | _  | _    |     | _      |
|---|----|------|-----|--------|
| 0 | On | each | ins | tance? |

- A On each instance.
- Q So on the first two wells the third pressure would be your 1977 pressure?
  - A Yes.

3

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

- Q Now what kind of pressures are these?
- A These are the seven day deliverability shut in pressures.
  - Q Where did you obtain the information?
- A From the Oil Commission records in Aztec, New Mexico and our own records.
- Q For a comment, now your average pressures are shown on the third page, is that right?
  - A That's right.
- Q Referring now to Exhibit Number Three, would you identify that exhibit?
- A That is the Mesaverde, the same thing for the Mesaverde wells, all of our wells and all of the offset wells on the mile around on that map, the offset wells to the property.
- Q This exhibit is constructed on the same basis as your Exhibit Number Two?
  - A That is correct.
- Q And the average pressures are shown in the last line?

# SEG INOITISI PEPOTUNG SETVICE General Court Reporting Service 825 Calle Mejia, No. 122, Sasta Fe, New Moxico 87501 Phone (505) 982-9212

10

11

12

13

14

15

16

17

18

19

20

21

22

23

25

| A | Yes |
|---|-----|
|   |     |

Q Now referring to what has been marked as Exhibit
Number Four, would you identify that exhibit?

A That is the Chacra pressure tabulations for all of the same group of wells, for all our wells and all of the offset ones and the averages.

- Q Again it is based on the same type of tabulation as the other two exhibits?
  - A That's right.
- Q And you obtained all of this information from the Oil Conservation Commission or from your own records?
  - A That's right.
- Q Now referring to what has been marked as Exhibit
  Number Five, would you identify that exhibit, please?

A All this is is just a tabulation of all of the pressures taken from those three previous exhibits and run down which the last pressure here is, the 1977 pressure.

- Q The last pressure in each column?
- A In each column, yes, sir.
- Q So you have twenty years on the Pictured Cliffs and Mesaverde and something less than that on the Chacra?
- A Yes, sir. That first pressure is the initial pressure.
- Q So if you are comparing current pressures you would look at the final figure in each column?

## A That's right.

- Q So the Pictured Cliffs is three hundred and three, the Chacra three fifty-five and the Mesaverde four thirty?
  - A Correct.

3

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Q What are the relative depths of those different formations?

A On this proposed well the Pictured Cliffs will be at approximately twenty-nine hundred, the Chacra thirty-five and the Mesaverde, I believe, right at five thousand feet.

- Q So the differences in depths would account for the differences in pressures too, is that right?
  - A Yes, sir.
- Q Now referring to what has been marked as Exhibit
  Number Six, would you identify that exhibit, please?

A That is the decline curves from the average tabulations for each zone. The Pictured Cliffs is a solid line, the Mesaverde is a dotted line and the Chacra the dashed and using the average pressures it made a nice drop on them. I did extend it out for approximately another twenty years. I think our Pictured Cliffs will last that much longer.

- Q As I understand your graph, your twentieth year would be your current pressure, is that correct?
  - A Right.
  - Q Then the rest of it is a projected curve?
  - A That's right.

## sid mostrish reporting service General Court Reporting Service 825 Calle Mejis, No. 122, Sants Fe, New Moxico 8750 Phone (503) 982-9212

10

11

12

13

14

15

16

17

18

19

20

21

22

23

25

| Q      | Now    | referring | to what  | has bee | n marked | as | Exhibit |
|--------|--------|-----------|----------|---------|----------|----|---------|
| Number | Seven, | would you | identify | that,   | please?  |    |         |

A I just made a little plat of Section 18, 2, 28. This well is located in the northeast quarter and being a Mesaverde with three hundred and twenty acre dedication to it. I made a plat showing all of the wells that are direct offsets to this three hundred and twenty acres.

- Q Now this is Mesaverde offsets?
- A Mesaverde, Chacra and Pictured Cliffs.
- Q All formations. What unit will you dedicate to the well?
  - A The east half.
- Q That is to all three formations or the Pictured Cliffs--
- A Excuse me, the Pictured Cliffs and Chacra would be just the northeast quarter.
  - Q And the east half the Mesaverde?
  - A The east half the Mesaverde, yes.
- Q Now referring to Exhibit Number Eight would you identify that exhibit, please?
- A I compiled a tabulation of the average pressures of the Pictured Cliffs, Chacra and Mesaverde wells that are on this plat.
  - Q That's the one shown on Exhibit Seven?
  - A Yes, and the final pressures are there also.

## Sid inorrish reporting service General Court Reporting Service 825 Calle Mejia, No. 172, Seata Fe, New Mexico 8750. Phone (505) 962-9212

|      | Q    | Now | those | pressures | compare  | well  | with   | the | eighty- |
|------|------|-----|-------|-----------|----------|-------|--------|-----|---------|
| five | some | ođđ | wells | you had o | n the ot | her e | xhibit | s?  |         |

A They compare closely but the decline is not steady on these as it is on the hundred and eighty-five wells on the larger group of wells.

- Q But your final pressures are close to--
- A Close. The Pictured Cliffs is just a little lower than the three oh three I believe we had on the other one and this is two eighty-nine. The Mesaverde, we are only talking about one well and its pressure was four forty-two and on an average it was four thirty.
  - Q And the Chacra was about the same?
  - A Yes.
- Q Now referring to Exhibit Number Nine would you identify that exhibit, please?

A Exhibit Number Nine is an individual well record showing the pressure and production for each well in this same group of wells.

Q This is the same group of wells shown on Exhibits
Seven and eight?

A That's correct, cumulative production and some I show the yearly production. On the offset wells all I show is the cumulative 1976 production, through 1976 and the 1976 production.

Q You haven't had the 1977 production available on

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

Ž4

some of these, is that correct?

I don't have on any of these because, well, I started this in November, putting this together, so I just used the '76 figures on it.

- Well, the '77 figure would not materially change the picture would it?
  - No, they have not. A
- Now referring to what has been marked as Exhibit 0 Number Ten would you identify that, please?

This is a tabulation of the Pictured Cliffs production by the month for all of the Pictured Cliffs-Chacra dual wells owned by Caulkins Oil Company. I just used our own wells and it's monthly because they are only about three years old, in fact, it covers a thirty-one month period and I compiled the total production for each well that Caulkins owns, on the Pictured Cliffs.

- Q I understood you at first to say this was Pictured Cliffs-Chacra duals?
  - A Yes.
  - They are not commingled though?
  - No, they are not commingled at this time.
- Now referring to Exhibit Number Eleven, what does Q that show?
- This is the production for the Chacra zone for Α the same group of wells.

# Sid morrish reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Sante Fe, New Mexico 8750; Phone (AR) 983-421;

| Q | And | these | are | also | the | same | dually | completed | wells |
|---|-----|-------|-----|------|-----|------|--------|-----------|-------|
| ~ |     |       |     |      |     |      |        |           |       |

- A The same dually completed wells.
- Q And Exhibit Twelve?

A That's the yearly production for the Mesaverde, for all of Caulkins' Mesaverde wells. I just used our own wells to compile an average production and it's from their initial production through 1976.

- Q Which will be shown in column eighteen?
- A Yes.
- Q Now referring to Exhibit Number Thirteen, what does that show?

A This is the average production tabulations from these, the average production for each zone for each month.

Now the Pictured Cliffs total production and the average of it and the Chacra and the Mesaverde is also on there but on the Mesaverde I took the average for a year. In other words, I have twelve consecutive at thirty-eight forty-five, then the next year thirty-two twenty-five and twenty-eight fifty-seven and I compiled it that way to come up with a breakdown to recommend and also the way they actually were or as close as possible.

Q On the basis of this exhibit, what kind of allocation would you recommend the Commission make for production from the three different zones involved here?

A For a matter of record, I would like for it to be

## SIG INOTTISH reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico 8750 Phone (505) 982-9212

10

11

12

13

14

15

16

17

18

19

20

21

22

24

on an even nickel but this is the way it is and it is thirtyone percent of the gas and all of the oil to the Mesaverde
zone: twenty-one percent of the gas to the Chacra and fortyeight percent of the gas to the Pictured Cliffs.

- Q And that's based on these averages you show on this exhibit?
  - A Yes.
- Q Which in turn is based on your other exhibits, is it not?
- A Right. Due to the ownership being the same it wouldn't hurt it to be thirty, twenty, fifty for a matter of record keeping.
- Q Well, there could be that much variation in the production, could there not?
  - A Right.
- Q Do you anticipate that you might increase the production from the Chacra, for example, by commingling?
- A I anticipate increasing the production from both the Chacra and the Mesaverde by commingling, because we will have more gas to be able to carry that oil out from that Mesaverde zone and it does help the situation.
- Q If you are permitted to commingle in your opinion will you be producing gas that would not otherwise be recovered?
  - A That's right.

## Sid morrish reporting service General Court Reporting Service 825 Calle Mejis, No. 122, Sasta Fe, New Mexico 875 Phone (505) 982-9212

10

11

12

13

14

15

16

17

18

19

20

21

22

23

25

Q And what about the Mesaverde oil, would you anticipate an increase in the production of that oil by commingling?

A Our experience with the little Mesaverde wells that we have now, they will just sit there and bubble through and you won't make a barrel a month off of it, off the Mesaverde zone. We did commingle one last year and the Mesaverde zone now is producing about a barrel and a half a day.

Q Now which well is this?

A It will be the No. 307 Well. I have some figures on it further down in the exhibits.

Q Now referring to what has been marked as Exhibit
Number Fourteen, would you identify that exhibit?

A That's the production decline curves monthly for these three zones. As you will notice, the Mesaverde is pretty straight across there being as I used an average pressure, I mean average production for the months.

Q But the other is actual production figures?

A Yes.

Q Now referring to Exhibit Number Fifteen, would you identify that exhibit?

A That is an exhibit of production records for our 368 Well which was commingled in 1977, Order Number R-5479. At the top of the page, May, June and July, the three months previous to commingling, and the biggest production was four million for the month and the August, September and October

are after the commingling and on the October we were back up to the four million, but since then--I do have the November commingled and it was five million five which indicates that we have done some good. That's the biggest month that well has had since the first three months of production.

Q Does this indicate that the commingling will enable

you to produce more gas from the two formations than otherwise would be produced?

A Absolutely. It is enough gas to carry the fluid off the well and it keeps itself clean.

Q In connection with this exhibit, Mr. Verquer, have you had any problems with your gas line pressures up there?

A Yes, we have just recently, the Lybrook plant, Gas
Company of New Mexico's plant caught fire and it's only operating at sixty percent capacity. Now they just cut us back
because all of our gas goes through there and they cut us back
to where a lot of the wells are just producing against higher
line pressures, all of ours.

Q Would the normal line pressures, say for November of '77, show a higher figure?

A No, November was still a normal month. December will be the month that will really be affected by this.

- Q You don't have any figures on that?
- A I don't have the figures on December.
  - Q But you do anticipate that your production will be

3

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

cut back because of that?

A Yes, we anticipate that the production will probably be two five instead of five five.

Q Now referring to what has been marked as Exhibit
Number Sixteen, would you discuss that?

Number Sixteen is a diagram of my proposed triple completion. We propose to drill an eight and three-quarter hole and run seven inch twenty-three and twenty-six pound casing to TD, cement it in three stages and make every effort to get the cement to circulate to the surface. That is a company policy now to cover all of the pipe. After that part is done and normal drilling operations, we will perforate and frac then, the Dakota zone, set a Model D production packer above the perforations. My way of completing it is to do that with an expendable plug in that Model D packer so that when you run tubing in to complete it you just knock the plug loose and the plug falls to the bottom and you are completed in that one stage. Then it also acts as a bridge plug to do all of your completing above. After doing that complete perforate the Mesaverde and frac and set a bridge plug and get the Chacra and do the same and get the Pictured Cliffs and recover the bridge plugs and run tubing. I anticipate running two and three-eighths tubing to the Dakoca zone and an inch and a quarter or an inch and a half tubing to the Mesaverde zone for the three commingled zones.

Now will this type of completion adequately protect the Dakota formation from communication with the upper formations?

- A Yes, it will.
- Q And vice versa?
- A Yes, it will and annual tests will be run, packer tests.
  - Q You will run annual packer leakage tests?
  - A Yes, that's the regular scheduled tests.
- Q Now would you anticipate any communication of production between the Mesaverde, Chacra and Pictured Cliffs if it is completed in this manner?

I see it, is if the well were shut in for an extended length of time and as close as the pressures are I don't believe you would have very much anyway because the Chacra zone is awful tight and the Pictured Cliffs zone, being the bigger zone of the three, will pressure the quickest and I just don't anticipate too much of a migration from one to the other, especially if they are not shut in because you are going to be producing while the well is on two hundred and fifty pound line pressure or less and we are producing against two hundred and fifty now and calling that our high line pressure because normally it is about a hundred and eighty or a hundred and ninety.

11

13

14

15

16

17

18

19

20

21

22

23

24

|     | Q     | With   | that | kind | of | pressure | you | wouldn't | anticipate |
|-----|-------|--------|------|------|----|----------|-----|----------|------------|
| any | commu | nicati | ion? |      |    |          |     |          |            |

- I don't think it would hurt the well at all, no.
- Now referring to what has been marked as Exhibit Number Seventeen, would you identify that exhibit, please?

It is a letter from the Field Superintendent of the Gas Company of New Mexico saying that they will lay the line to the well. They say prior to February 1, 1978. They do have the line staked and are in the act of the paper work now with the Federal Government getting clearance for the pipe line right-of-way, but in any event, we will not complete the well until the line is laid up on there so that the well won't be shut in for ninety days or so waiting on the pipe line. The pipe line will be there before we complete the well.

- So that will avoid any shut in time after completion Q
- It will avoid any shut in time.
- Were Exhibits One through Sixteen prepared by you Q or under your supervision?
  - Α They were.
- And Exhibit Number Seventeen is a letter from your files, is that correct?
  - Α Yes.

MR. KELLAHIN: At this time we offer into evidence Exhibits One through Seventeen, inclusive.

11

12

13

14

15

16

17

18

19

20

22

23

24

MR. STAMETS: These exhibits will be admitted.

(THEREUPON, Applicant Exhibits One through
Seventeen were admitted into evidence.)

MR. KELLAHIN: That's all we have, Mr. Stamets.

## CROSS EXAMINATION

## BY MR. STAMETS:

Q Mr. Verquer, referring back to Exhibit Number Thirteen.

- A Okay.
- Q That is the average production tabulation, Pictured Cliffs, Mesaverde and Chacra.
  - A Yes, sir.
  - Q What were those figures derived from?
- A Those came from these Exhibits Ten, Eleven and Twelve.
- Q Okay, so that is the thirty-one month production record from the wells shown on Exhibit Number Seven, those in the immediate vicinity of the proposed well?
- A No, these figures are for all of the Pictured Cliffs
  zone and the Chacra zone for all of the completed Pictured
  Cliffs-Chacra wells that Caulkins owns throughout our property
  - Q I see.
- A The reason I did that, Mr. Stamets, the records for the wells that are that close, for instance the 314 well in Section 18 we drilled in '77. It was turned on the line just

recently. It was turned on the line I believe December 28th so I have no production records for that one. In Section 7 the Pictured Cliffs-Chacra dual, there is two of them in the west half. They were also turned on the same as this 314, so they were wells that we drilled in 1977. The only well that I had that I had any production records on that are close is the 258 Well which is in the northwest quarter of Section 18. And to come up with a relative figure that we could use, that to me would fit the whole program was to use the whole group of wells.

- Q Maybe I better go back to the beginning.
- A Okay.
- Q On Exhibit Number Two where can I find some wells that are in or close to Section 18, the section we are concerned with today?

MR. KELLAHIN: Mr. Stamets, our wells are underlined with red on this exhibit if you want to substitute it. There are two or three others two.

Q (Mr. Stamets continuing.) Mr. Verquer, I have reviewed the copies of Exhibits Two, Three and Four which Mr. Kellahin handed me in which these close wells were underlined in red and it would appear from an examination of those wells that the wells in the vicinity of your well are not characterized by pressures significantly different from the average pressures?

# SMG IDMITTISM REPORTING SERVICE General Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico 8750 Phone (505) 982-9212

2

3

10

11

13

14

15

16

17

18

19

20

21

22

23

24

25

## A That's right.

- Q To still get back to Exhibit Number Thirteen, is this the way you based your break down to the individual zones upon? Now you indicated that these are all of the dual completions?
  - A Yes, Caulkins Oil Company dual completions.
  - Q They would be located within this shaded area?
  - A Yes.
  - Q On Exhibit Number One?
- A Yes, sir. The tabulations that I have of the production, that's all that I have carried on these Exhibits

  Ten, Eleven and Twelve. That's where I came up with my average.
- Q Okay. Then going on the next page to Exhibit
  Number Fourteen, that's your production decline curve?
  - A Yes, sir.
- Q It would appear that with time all of those lines are beginning to level out to about the same decline rate?
- A Yes, and really are getting closer together from all indications. It looks like the Pictured Cliffs will run ahead, the Chacra has flattened out pretty well.
- Q Now would you anticipate that you will get a well here which will be more like the averages than say perhaps an extra good well in the upper zones?
  - A Yes, I think it will be more of the average. A

12

13

14

15

16

17

18

19

20

21

22

Pictured Cliffs well will end up a marginal well within the first year or so normally like the rest of them out there.

- Q Okay. You indicated that you just recently completed a well in the vicinity?
  - A Yes, in the Pictured Cliffs-Chacra.
    - Q What well was that?
    - A Number 314.
- Q And what was your experience on the completion of that well?
  - A Of the Pictured Cliffs and the Chacra?
  - Q Yes.

A The 314 Well surprisingly is a pretty fair well.

312, an old dog that has been there for years isn't any good at all but 314 sold approximately four hundred thousand a day or is selling that from the Chacra and three hundred thousand from the Pictured Cliffs which is a little bit different from what we normally find.

Up in the other section, 193 in the southwest quarter is selling four hundred thousand from the Pictured Cliffs and one hundred thousand from the Chacra.

- Q Well Number 193?
- A Yes, in the southwest quarter of 7. It was a new well that was just recently drilled and turned on. All I have is just some of the initial production figures on it.

  If it would stay at that four hundred thousand it would be

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

beautiful but it won't do it.

Q So you anticipate that the production will decline rapidly?

They have a history, in three months it will be Α half and then they are on a slow decline from there on, they will drop half in the first three months and it seems to follow with the Chacra and the Pictured Cliffs both.

The Well Number 314 you identify as a Pictured Cliff Chacra, is that downhole commingled or is that a dual?

It's a dual. Α

Are there any downhole commingled wells in the vicinity of this 228?

Α The only one in the area is in Section 23, 27. Excuse me, 26 North, 7 West in Section 23, that Number 368 Well and we brought it before the Commission last year and commingled it and from the information gathered from it we are encouraged.

I presume that if you were allowed to downhole commingle these zones from the very beginning rather than having to multiple complete that would be a much more economical operation?

Yes, sir, and the case coming up next is that one.

Is there any liquid production associated with the Pictured Cliffs and Chacra zones?

Right now the way it tests out the Chacra will Α

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

produce an average of two barrels a month of water.

- Is that on a per well average?
- Yes, on a per well average. Generally less than 3 half a barrel of water per month on the Pictured Cliffs. We report them on the forms as no water. We had to apply for permits for these open pits, you know, and that's what we came up with testing those things. The Mesaverde after the water is dissipated from the frac job you will have less than one percent water.
  - I gathered that it does make some oil? Q
  - Yes, it will make a paraffin based oil.
  - About how much?
  - Two barrels a day, if we make that we will feel Α real good.
  - Did you say you started preparing this data in November?
    - Yes, sir. Α
  - I would hope that you would give the Examiner at Q least that long to digest it.
    - Α Okay.
  - MR. STAMETS: Are there any other questions of this witness?
    - MR. KENDRICH: I have a question.
    - MR. STAMETS: Mr. Kendrich.
    - MR. KENDRICH: Just for clarification on your Exhibi

## Sid morrish reporting service General Court Reporting Service 125 Calle Meja, No. 122, Santa Fe, Now Mexico 879 Phone (505) 912-9212

2

3

10

11

12

13

16

17

18

19

20

21

22

23

24

25

Two, I missed it when you explained the numbering across the top, from one to twenty. Could you help me on that, please?

MR. VERQUER: The first one is the initial pressure and from there on that is the yearly deliverability pressures.

MR. KENDRICH: The first well listed shows three pressures, the latter one being 1977?

MR. VERQUER: That's right.

MR. KENDRICH: And '76 is the prior?

MR. VERQUER: Yes, sir.

MR. KENDRICH: Thank you.

MR. STAMETS: Ms. Teschendorf.

MS. TESCHENDORF: Mr. Verquer, I notice that
Caulkins Oil Company doesn't have that new fifty thousand
dollar plugging bond. I talked to Mr. Kellahin about it and
I understand that Caulkins has been experiencing some difficulty in obtaining one but I just thought that I would make
you aware of the fact that I'm not sure that the Commission
will be able to approve any further oil field activities
until we did have a bond on file.

MR. VERQUER: It may not have arrived yet but it is on its way. They have it cleared.

MR. STAMETS: That's good enough.

MR. VERQUER: It was a problem.

MR. STAMETS: Any other questions of the witness?

He may be excused.

(THEREUPON, the witness was excused.)

MR. STAMETS: Is there anything further in this

case?

MR. KELLAHIN: No, sir.

MR. STAMETS: The case will be taken under advise-

ment.

## REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

Sidney F. Morrish, C.S.R.

sid morrish reporting service General Court Reporting Service 15 Calle Mejla, No. 122, Santa Fe, New Mexico Phone (508) 983-921.1

I do nereby certify that the foregoing 1st a complete reduct of the proceedings in the Examiner hearing of Case No. 19.71.

heard by me on the Examiner hearing of Case No. 19.71.

New Mexico Oil Conservation Commission

|     | 1 |  |
|-----|---|--|
|     | 1 |  |
| 700 |   |  |

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 4, 1978

## EXAMINER HEARING

|  | · <b>-</b>                  |
|--|-----------------------------|
| IN THE MATTER OF:  | )<br>}                      |
| Application of Caulkins Oil Company for a dual completion and downhole commingling, Rio Arriba County, New Mexico. | ) CASE<br>) 6119            |
| Application of Caulkins Oil Company for downhole commingling, Rio Arriba County, New Mexico.                       | ) CASES<br>) 6120<br>) 6121 |

BEFORE: Daniel S. Nutter, Examiner

## TRANSCRIPT OF HEARING

## APPEARANCES

| Lynn Teschendorf, Esq. Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico |
|---|
|   |

sid morrish reporting service
General Court Reporting Service
5 Calle Mejis, No. 122, Seats Fe, New idexico 87501
Phone (505) 982-9212

sid morrish reporting service General Court Reporting Service 825 Calle Mejis, No. 122, Santa Fe, New Mexico 875 Phone (505) 962-9212

MR. NUTTER: We will call next Case Number 6119, 6120, 6121 and 6122, all of which have the same style.

MS. TESCHENDORF: These cases are the application of Caulkins Oil Company for dual completion and downhole commingling, Rio Arriba County, New Mexico.

The applicant has requested that all four cases, 6119, 6120, 6121 and 6122 be continued to the January 18th Examiner Hearing.

MR. NUTTER: I'll make a correction, they don't all have the same style, 6119 involves a dual completion and downhole commingling, the others are all downhole commingling.

Cases Number 6119, 6120, 6121 and 6122 will be continued to the hearing scheduled to be held at this same place at 9 o'clock A.M., January 18th, 1978.

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings to the best of my knowledge, skill and ability.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case to 6119

New Mexico Oil Conservation Commission ..., Examiner



DIRECTOR

JOE D. RAMEY

## **OIL CONSERVATION COMMISSION**

**STATE OF NEW MEXICO** P. O. BOX 2088 - SANTA FE

LAND COMMISSIONER PHIL R. LUCERO February 2, 1978



**EMERY C. ARNOLD** 

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

6119 Re: CASE NO. ORDER NO. R-5634

Applicant:

Caulkins Oil Company

Dear Sir:

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

Yours very truly, JOE D. RAMEY Director

JDR/fd

Copy of order also sent to:

Hobbs OCC Artesia OCC Aztec OCC

H. L. Kendrick

## BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE NO. 6119 Order No. R-5634

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

## ORDER OF THE COMMISSION

## BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 18, 1978, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this <u>31st</u> day of January, 1978, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

## FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Caulkins Oil Company, is the owner and operator of the Breech Well No. 228 to be located in Unit A of Section 18, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (3) That the applicant seeks authority to commingle Pictured Cliffs, Chacra, and Mesaverde production within the wellbore of the above-described well.
- (4) That from the Pictured Cliffs, Chacra, and Mesaverde zones, the subject well is expected to be capable of low rates of 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.

-2-Case No. 6119 Order No. R-5634

- (7) That to afford the Commission 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 Commission 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 subject well, 50 percent of the commingled gas production should be allocated to the Pictured Cliffs zone, 20 percent of the commingled gas production to the Chacra and 30 percent of the commingled gas and 100 percent of the commingled oil production to the Mesaverde zone.
- (9) That the applicant further seeks authority to complete said Breech Well No. 228 as a dual completion (conventional) to produce gas from the commingled Pictured Cliffs, Chacra, and Mesaverde zones and gas from the Dakota zone through parallel strings of tubing with separation of the commingled zones from the Dakota zone to be achieved by means of a packer.
- (10) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (11) 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 commingle Pictured Cliffs, Chacra and Mesaverde production within the wellbore of the Breech Well No. 228, located in Unit A of Section 18, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico.
- (2) That 50 percent of the commingled gas production shall be allocated to the Pictured Cliffs zone, 20 percent of the commingled gas production shall be allocated to the Chacra zone, and 30 percent of the commingled gas production and 100 percent of the commingled oil production shall be allocated to the Mesaverde zone.
- (3) That the operator of the subject well shall immediately notify the Commission's Aztec district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

-3-Case No. 6119 Order No. R-5634

#### IT IS FURTHER ORDERED:

(1) That the applicant is hereby authorized to complete said Breech Well No. 228 as a dual completion (conventional) to produce gas from the commingled Pictured Cliffs, Chacra, and Mesaverde zones through a string of 1 1/4-inch or larger tubing and gas from the Dakota zone through a string of 2 3/8-inch tubing set in a packer located at an approximate depth of 5100 feet.

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

PROVIDED FURTHER, that the applicant shall take packerleakage tests upon completion and annually thereafter during the Deliverability Test Period for the Basin Dakota Pool.

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

EMERY C. ARNOLD Member

DOE D. RAMEY, Member & Secretary

SEAL

CAULKING OIL COMPANY
Well No. Breech 228
Unit A Sec 18 26N 6W
Rio Arriba County, New Mex

Cace Pa. 6119

#### Proposal

Dual complete Dakota and Commingled Pictured Cliffs, Chacra and Merce Verde.

Ownership and all working intersts common for this well.

#### Exhibit # 1

Section map showing all Caulkins wells, proposed well and all offices wells.

#### Exhibit # 2

Pictured Cliffs pressure tabulations to show average Initial pressures and each year average decline.

#### • Exhibit # 3

Mesa Verde pressure tabulations to show average Initial pressure and each year average decline.

#### Exhibit # 4

Chacra pressure tabulations to show average initial pressure and each year average decline.

#### Exhibit # 5

Tabulation of yearly average pressures from tabulations on exhibit: 2-3-4.

#### Exhibit # 6

Pressure decline curves from tabulations exhibit # 5.

#### Exhibit # 7

Plat showing well location and direct offset wells in Sections 19, 7, 19 West half 8, 17 and 20, Twp. 26N 6W, Rio Arriba County, New Mexico.

#### Exhibit # 8

Tabulation of average pressures for Pictured Cliffs and Chacra wells, and for one Mesa Verde well shown on plat, exhibit # %.

#### Exhibit # 9

Individual well records, pressure and production for Pictures Cliffs, Chacra and Mesa Verde wells shown on plat exhibit # %.

#### Exhibit # 10

Tabulations of monthly Pictured Cliffs production from Caulkins Oil Co. Pictured Cliffs - Chacra dual wells.

#### Exhibit # 11

Tabulation of monthly Chacra production from Caulkins Oll Josephy ( deured Cliffs - Chacra dual wells.

#### Exhibit # 12

Tabulation of yearly Neca Verde production from all Daulkins will be. Nesa Verde wells.

#### Exhibit / 13

Tabulation of monthly Pictured Cliffs, Chacra and Mesa Verde production from exhibits 10, 11 & 12. Note: Mesa Verde production averaged from yearly tabulation.

Proposed production split on bottom of page.

#### Exhibit # 14

Froduction curves from tabulations exhibit # 13.

#### Exhibit # 15

Breech 368 production records.

Fictured Cliffs - Chacra commingled 7-26-77. Order No. R-5479.

#### Exhibit # 16

Diagram showing proposed commingling and dual completion.

## Exhibit # 17

Gas Company of New Mexico letter of intent.

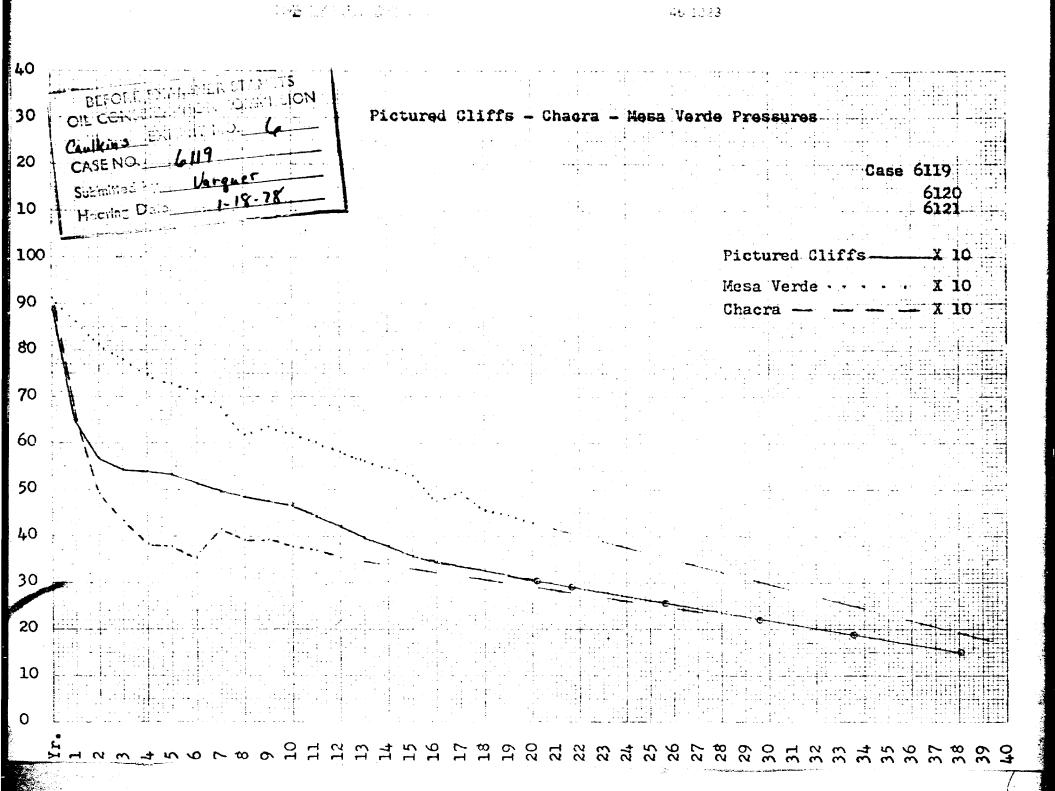
## CAULKINS OIL COMPANY Well No. 228

Case No. 6119

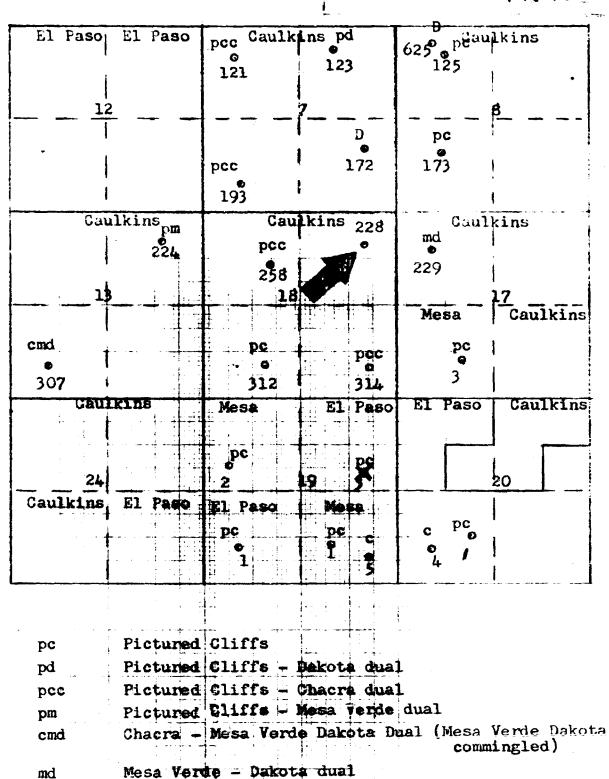
## Yearly Average Pressure Tabulation

| Pictured Cliffs   | Chacra   | Mesa Verde   |
|---|--|--|
| 892<br>645<br>568<br>542<br>540<br>534<br>512<br>497<br>485<br>474<br>462<br>442<br>421<br>397<br>379<br>358<br>347<br>338<br>324<br>318<br>303 | 912<br>646<br>494<br>433<br>382<br>379<br>351<br>416<br>395<br>379<br>371<br>355 | 1074<br>861<br>814<br>782<br>749<br>712<br>676<br>619<br>636<br>622<br>601<br>581<br>548<br>533<br>479<br>498<br>458<br>448<br>430 |

| The second secon |
|--|
| BEFORE EXAMINER STAMETS  |
| OIL CONSERVATION COMMILSION  |
| Coulkins DUMBET NO. 3  |
| CASE NO. 6119  |
| Submittee Verquet  |
| Hearing D 1-19-78  |
|  |



6119 Varquer 1-18-78



# CAULKINS OIL COMPANY

Avg. Fictured Cliffs - Chacra - Mesa Verde Pressures Section 7, 18, 19, W/H 8, 17 and 20 Twp. 26H 6W, Rio Arriba County, New Mex.

| Tear   | Pictured Cliffs   | Chacra                          | Mesa Verdo  |
|--|---|---------------------------------|---|
| Initial lst Ind Ind Ist Ind Ith Sth Sth Sth Ith Ith Ith Ith Ith Ith Ith Isth Ifth Ifth Ifth Ifth Ifth Ifth Ifth If | 811<br>616<br>548<br>487<br>486<br>462<br>413<br>428<br>413<br>403<br>403<br>403<br>410<br>386<br>374<br>372<br>346<br>328<br>313 | 936<br>567<br>464<br>392<br>328 | 1028<br>953<br>672<br>727<br>712<br>762<br>614<br>572<br>492<br>442 |
| 21st   | 289   |                                 |   |

white 303

430

| • "                           | MANUEL STAMSTS<br>NOR LEGGE CONTRACTOR |
|-------------------------------|--|
| Caulkins                      | 4 4 40. <b>7</b><br>(4) 9              |
| Submitted by<br>Hearing Date_ |  |

Well: Breech B 123 (PC)

NE 4 Sec. 7 26N 6W

First Delivered 1-5-65

#### Yearly Shut in Pressure and Cumulative Production

| DATE                  | PRESSURE  | PRODUCTION     |
|-----------------------|-----------|----------------|
| Initial               | 934       |                |
| 1965                  | 791       | 41,444         |
| 1966                  | 632       | <b>52,</b> 836 |
| 1 %7                  | 530       | 47,865         |
| 1968                  | 472       | 33,704         |
| 1969                  | 418       | 31,504         |
| 1970                  | 384       | 24,475         |
| 1971                  | 357       | 27,608         |
| 1972                  | 318       | 24,704         |
| 1973                  | 315       | 25,253         |
| 1974                  | 267       | 22,319         |
| 1975                  |           | 20,747         |
| 1976                  | 262       | 18,098         |
| Cumulative Production | thru 1976 | 370,557        |

|   | والمراجع والمراجع والمعتب ويستنها ويتو |                                       |            |
|---|--|---------------------------------------|------------|
|   |  |                                       | TO STAMETS |
|   | 25.                                    | · · · · · · · · · · · · · · · · · · · | MOISUM ADE |
|   | Caulkins                               |                                       | <u> 9</u>  |
|   |  | 6119                                  |            |
| 1 |  |                                       | larguer    |
|   |  |                                       | -18-78     |
| L |  |                                       |            |

Well: Breech A 125
NW4 Sec. 8 26N 6W
First delivered 9-23-54
Yearly shut in pressures and cumulative production

| Jate    | Pressure    |
|---------|-------------|
| Initial | 964         |
| 1955    | 682         |
| 1956    | <b>7</b> 27 |
| 1957    | 622         |
| 1958    | 489         |
| 1959    | 569         |
| 1960    | 614         |
| 1961    | 540         |
| 1962    | 510         |
| 1963    | 616         |
| 1964    | 584         |
| 1965    | 326         |
| 1966    | 538         |
| 1967    | 495         |
| 1968    | 466         |
| 1969 .  | 462         |
| 1970    | 445         |
| 1971    | 405         |
| 1972    | 379         |
| 1973    | 331         |
| 1974    | 330         |
| 1976    | 317         |
|         |             |

Cumulative production thru 1976 1,064 MMCF

Cumulative 1976 production 27 MMCF

Well: Breach A 173

SN1 Sec. 8 26N 6W

First delivered 7-31-52

Disconnected 11-6-58

Reconnected 12-7-74

Pictured Cliffs Formation

Yearly shut in pressures and cumulative production

| Date    | . • | Pressure |
|---------|-----|----------|
| Initial |     | 730      |
| 1954    |     | 644      |
| 1955    |     | 657      |
| 1956    |     | 397      |
| 1974    |     | 599      |
| 1975    |     | 470      |
| 1976    |     | 277      |

Cumulative production thru 1976 100 MMCF

Cumulative 1976 production 34 MMCF

Well: Breech A 229 (Mesa Verde Home)

HW] Sec. 17 26N 6W

First Delivered 12-28-65

Yearly Shut in Pressure and Cumulative Troduction

| lite    | Pressure    | Gas Production         | Oil Production |
|---------|-------------|------------------------|----------------|
| Initial | 1028        |                        |                |
| 1965    |             | 4,584                  |                |
| 1966    | 953         | 22,328                 | 1320           |
| 1967    | . 672       | 7,368                  | 454            |
| 1968    | 727         | 7,582                  | 159            |
| 1969    | 712         | 6,156                  | 63             |
| 1970    | <b>7</b> 62 | 6 <b>,</b> 82 <b>7</b> | 59             |
| 1971    | Exempt      | 10,675                 | 127            |
| 1972    | 614         | 15,772                 | 201            |
| 1973    | 572         | 16,365                 | 125            |
| . 1974  | 492         | 22,361                 | 115            |
| 1975    |             | 17,938                 | 133            |
| 1976    | 442         | 15,470                 | 160            |
|         | Cumulative  | 154,426 MCF            | 2921 bbls,     |

Well: Scott 3

SW  $\frac{1}{4}$  Sec. 17 26N 6W

First Delivered 12-17-53

Yearly Shut in Pressure and Cumulative Production

| DATE         | PRESSURE |
|--------------|----------|
| Initial      | 772 (21) |
| 1954         | 337      |
| 1955         | 669      |
| 1956         | 503      |
| 1957         | 479      |
| 1958         | 413      |
| 1959         | 406      |
| 1960         | 383      |
| 1961         | 360      |
| 1962         | 360      |
| <b>196</b> 3 | 374      |
| 1964         | 304      |
| 1965         | 309      |
| 1966         | 359      |
| 1967         | 364      |
| 1968         | 346      |
| 1970         | 364      |
| 1971         | 374      |
| 1972         | 344      |

Exempt Marginal Since 1972

Cumulative Production thru 1976

. 202 MMCF

1976 Cumulative Production

5 MMCF

Well: Breech 312

SW 4 Sec. 18 26N 6W

First Delivered 3-13-58

# Yearly Shut in Pressure and Cumulative Production

| DATE                  | PRESSURE    | PRODUCTION |
|-----------------------|-------------|------------|
| Initial               | 834         |            |
| 1958                  | 723         | 31,737     |
| 1959                  | 574         | 27,417     |
| 1960                  | 577         | 22,192     |
| 1961                  | 552         | 19,340     |
| 1962                  | 558         | 14,670     |
| 1963                  | 570         | 14,910     |
| 1964                  | 551         | 11,402     |
| 1965                  | 507         | 16,867     |
| 1966                  | 495         | 18,576     |
| 1967                  | 517         | 20,286     |
| 1968                  | 500         | 19,346     |
| 1969                  | 470         | 19,563     |
| 1970                  | 432         |            |
| 1971                  | 333         | 21,038     |
| 1972                  | 400         | 19,176     |
| 1973                  | 391         | 22,695     |
| 1974                  | 342         | 23,823     |
| 1975                  | , те        | 20,846     |
| 1976                  | 302         | 19,811     |
| - / ( -               | JUE         | 17,300     |
| Cumulative Production | n thru 1976 | 380,995    |

WELL: Breech 258

First Delivered October, 1976

Monthly Gas Production

| Date         | Pictured Cliffs | Chacra |
|--------------|-----------------|--------|
| Oct. 1976    | 2469            | 173    |
| Nov. 1976    | 5361            | 2209   |
| Dec. 1976    | 6292            | 3366   |
| Jan. 1977    | 5310            | 2751   |
| Feb. 1977    | 5800            | 3177   |
| March, 1977  | 5276            | 2879   |
| April, 1977  | 4423            | 3300   |
| May, 1977    | 4029            | 2798   |
| June, 1977   | 3943            | 2032   |
| July, 1977   | 4347            | 2380   |
| August, 1977 | 4238            | 1994   |
| Sept., 1977  | 3126            | 1950   |
| Oct., 1977   | 3963            | 1913   |
| Cumulative 5 | 8,577           | 30,922 |

Split 65% Pictured Cliffs and 35% Chacra.

Well: Buttram 2

NN  $\frac{1}{4}$  Sec. 19 26N 6W

First Delivered 9-23-53

Yearly Shut in Pressure and Cumulative Production

| DATE    | PRESSURE |
|---------|----------|
| initial | 899 (7)  |
| 1954    | 604      |
| 1955    | 548      |
| 1956    | 468      |
| 1957    | 467      |
| 1958    | 392      |
| 1960    | 390      |
| 1961    | 431      |
| 1962    | 387      |
| 1963    | 379      |
| 1964    | 392      |
| 1965    | 384      |
| 1966    | 359      |
| 1967    | 328      |
| 1969    | 334      |
| 1%9     | 292      |
| 1770    | 310      |
| 1971    | 270      |
| 1372    | 266      |
| 1973    | 290      |
| 1971,   | 255      |
| 1976    | 227      |

Cumulative Production thru 1976

802 MMCF

1976 Cumulative Production

28 MMCF

Well: Reams # 3

NE 1 Sec. 19 26N 6W

18 MMCF

Yearly Shut in Pressure and Cumulative Production

| DATE       |            |      |      | PRES: | SURE |     |
|------------|------------|------|------|-------|------|-----|
| Initial    |            |      |      | 865   | (8)  |     |
| 1 755      |            |      |      | 877   |      |     |
| 1956       |            |      |      | 516   |      |     |
| 1957       |            |      |      | 493   |      |     |
| 1758       |            |      |      | 444   |      |     |
| 1959       |            |      |      | 403   |      |     |
| 1960       |            |      |      | 405   |      |     |
| 1961       |            |      |      | 408   |      |     |
| 1962       |            |      |      | 415   |      |     |
| 1963       |            |      |      | 406   |      |     |
| 1964       |            |      |      | 399   |      |     |
| 1965       |            |      |      | 348   |      |     |
| 1966       |            |      |      | 374   |      |     |
| 1967       |            |      |      | 421   |      |     |
| 1968       |            |      |      | 397   |      |     |
| 1969       |            |      |      | 318   |      |     |
| 1970       |            |      |      | 303   |      |     |
| 1971       |            |      |      | 285   |      |     |
| 1972       |            |      |      | 229   |      |     |
| 1973       |            |      |      | 226   |      |     |
| 1 )74      |            |      |      | 222   |      |     |
| 1976       |            |      |      | 250   |      |     |
|            |            |      |      |       |      |     |
| Cumulative | Production | thru | 1976 |       | 552  | MCF |

1976 Cumulative Production

Well: Jesus 1

SW / Sec. 10 26N 6W

Yearly Shut in Pressure and Cumulative Production

| DATE  |               | PRESSURE    |
|-------|---------------|-------------|
|       | NONE REPORTED |             |
| 1954  |               | 621         |
| 1955  |               | 617         |
| 1956  |               | 638         |
| 1957  |               | <b>58</b> 9 |
| 1:)58 | •             | 565         |
| 1 759 |               | <b>29</b> 9 |
| 1960  |               | 455         |
| 1961  |               | 544         |
| 1962  |               | 541         |
| 1963  |               | 531         |
| 1964  |               | 528         |
| 1965  |               | 526         |
| 1966  |               | 497         |
| 1967  |               | 514         |
| 1968  |               | 469         |
| 1969  |               | 429         |
| 1970  |               | 394         |
| 1971  |               | 4.27        |
| 1972  |               | 456         |
| 1973  |               | 387         |
| 1974  |               | 363         |
| 1976  |               | 344         |
|       |               |             |
|       |               |             |

Cumulative Production thru 1976

464 MMCF

1976 Cumulative Production

14 MMCF

Well: Buttram # 1

 $SE_{\frac{1}{4}}^{-1} Sec. 19 26N 6W$ 

First Delivered 1-1-54

Yearly Shut in Pressure and Cumulative Production

| DATE    | PRESSURE    |
|---------|-------------|
| lnitila | 793 (11)    |
| 195%    | 591         |
| 1955    | 490         |
| 1956    | 438         |
| 1957    | 449         |
| 1958    | 368         |
| 1959    | 3 <b>58</b> |
| 1960    | 353         |
| 1961    | 387         |
| 1962    | 372         |
| 1963    | 372         |
| 1964    | 385         |
| 1965    | 333         |
| 1966    | 346         |
| 1967    | 316         |
| 1968    | 314         |
| 1969    | 280         |
| 1 970   | 290         |
| 1971    | 267         |
| 1972    | 226         |
| 1973    | 232         |
| 1974    | 242         |
| 1976    | 209         |

Cumulative Production thru 1976

624 MMCF

1976 Cumulative Production

18 MMCF

Tell: We ches A. A. (4) Ph. 10)

July Jec. 20 261 Au

First delivered 6-12-74

Chacro Yone

Yearly shut in pressures and summer a verse of a company

| Date    | Pressur. |
|---------|----------|
| initial | )03      |
| 1975    | 56.1     |
| 1976    | 496      |
| 1977    | 445      |

Cumulative production than 1976 37 .1308

1976 Cumulative production 25 AADF

Well: Buttram 5 (Neba)
UE, Dec. 19 26% ON
First deliverel 4-30-73
Chacra Sone
Yearly Shut in pressure and summification of the second of the s

| Date    | Precsure |   |
|---------|----------|---|
| Initial | 855      | - |
| 1973    | 499      |   |
| 1974    | 409      |   |
| 1975    | 333      |   |
| 1977    | 328      |   |

Cumulative production thru 1970 251 MMCF

1976 cumulative production 43 MACF

La translation of the first see

. C. 100 M. 200 C. C.

First Millvere: Ht-17-58 Pictured Cliffs Formation

Yearly that in precoured and contract and

| Jate    | Proposition |
|---------|-------------|
| Initial | £.3         |
| 1959    | 347         |
| 1760    | 387         |
| 1961    | 357         |
| 1962    | 354         |
| 1963    | 345         |
| 1964    | 323         |
| 1965    | 313         |
| 1966    | 367         |
| ો∂67    | 314         |
| 1963    | 310         |
| 1970    | 300         |
| 1971    | 266         |
| 1972    | 24.2        |
|         |             |

Exempt Since 1972

Commutative production thru 1976 15 12 CF

Cumulative 1976 production 6 . HMF

CAULKINS OIL COMPANY Pictured Clifs Prod. Monthly

|                       |               |               |                |                |         | MOH          | ura            |                |                         |        |         |        |   |
|-----------------------|---------------|---------------|----------------|----------------|---------|--------------|----------------|----------------|-------------------------|--------|---------|--------|---|
|                       |               |               | 1              | 2              | 3       | 4            | 5              | 6              | 7                       | 8      | 9       | 10     |   |
|                       | Sanche        | z - 5         | 5920           | 7258           | 3696    | 4021         | 3980           | 3254           | 3567                    | 2177   | 3139    | 2992   |   |
|                       | Breech        | E 51          | 200            | 16307          | 13849   | 10590        | 10098          | 9114           | 8416                    | 7268   | 6610    | 6827   |   |
|                       | Breech        | 217           | 9405           | 8983           | 8452    | 7227         | 6362           | 6284           | 5085                    | 6204   | 5080    | 3697   |   |
|                       | Breech        | 258           | 2469           | 5361           | 6292    | 5310         | 5800           | 5276           | 4423                    | 4029   | 3943    | 4347   |   |
|                       | Breech        | 330           | 12781          | 13635          | 11363   | 11289        | 10064          | 8602           | 7277                    | 8000   | .7365   | 5181   |   |
|                       | Breech        | 332           | 14427          | 13631          | 12358   | 12936        | 11841          | 10423          | 8682                    | 9982   | 9141    | 7473   | • |
| :                     | Breech        | D 342         | 617            | 7650           | 4917    | 5214         | 4621           | 4091           | 3725                    | 3579   | 3484    | 2969   |   |
| :                     | Breech        | 352           | 23438          | 18752          | 17631   | 15292        | 15330          | 14552          | 14500                   | 10673  | 13154   | 11557  |   |
|                       | Breech        | 354           | 13917          | 9237           | 8798    | 7698         | 7884           | 6895           | 5037                    | 6080   | 6717    | 5954   |   |
|                       | Breech        | 368           | 7447           | 7164           | 7464    | 3514         | 4431           | 4716           | 4 526                   | 5450   | 4424    | 4181   |   |
|                       | Breech        | 382           | 12532          | 13137          | 13102   | 5951         | 7414           | 84,00          | 7633                    | 8886   | 7176    | 7792   |   |
| •                     | Breech        | D 383         | 6995           | 4013           | 3368    | 2280         | -              | 2742           | 3654                    | 3518   | 3070    | 2988   |   |
|                       | Breech        | D 385         | 9901           | 6717           | 7126    | 4060         |                | 3782           | 6715                    | 6094   | 5329    | 51.57  |   |
| :                     | Breech        | D 387         | 18678          | 14652          | 19236   | 10411        |                | 7479;          | 17061                   | 15677  | 13434   | 13402  |   |
|                       |               |               | 138,727        | 146,497        | 137,652 | 105,793      | 87,825         | 95,610         | 100,301                 | 97,617 | 92,066  | 84,617 |   |
|                       |               | Avg.          | 9909           | 10464          | 9832    | 7557         | 6273           | 6829           | 7164                    | 6973   | 6576    | 6044   |   |
| •                     | 11            | 12            | 13             | 14             | 15      | 16           | 17             | 18             | 19                      | 20     | 21      | 22     |   |
| į                     | 2792          | 2628          | 1840           | 2377           | 2508    | 2187         | 2046           | 1597           | 1904                    | 1935   | 2045    | 1975   |   |
| 1                     | 6998          | 4680          | 6994           | ,              |         | -            |                | ,              |                         |        |         |        |   |
|                       | 1363          | 2798          | 3799           | 5151           | 1546    | 4278         | 5098           | 4748           | 4304                    | 5093   | 5008    | 3194   |   |
|                       | 4238          | 3126          | 3963           |                |         |              |                |                |                         |        |         |        |   |
|                       | 7733          |               |                |                |         |              |                |                |                         |        |         |        |   |
|                       | 9497          |               |                |                |         | .:           |                |                |                         |        |         |        |   |
|                       | 3233          | 2179          | 1249           | 1710           | 3275    | 3308         | 3160           | 2796           | 2827                    | 2608   | 2374    | 2716   |   |
|                       | 9003          | 4308          | 9529           | 11007          | 10687   | 10167        | 10165          | 10058          | 9801                    | 8262   | 9971    | 9245   |   |
|                       | 5927          | 4982          | 5950           | 53 <i>5</i> 8  | 5082    | 4410         | 5088           | 4033           | 1997                    | 1021   | 4235    | 4647   |   |
|                       | 3872          | 4484          | 4172           | 4200           | 3364    | 3947         | 3095           | 2067           | 531                     | 2455   | 3269    | 2750   |   |
|                       | 5648          | 7139          | 6475           | 6500           | 4610    | 5721         | 4214           | 2813           | 818                     | 3769   | 5335    | 4414   |   |
|                       | 2839          | 2583          | 2599           | 2341           | 2424    | 2114         | 2111           | 1776           | 1363                    | 2468   | 2541    | 2373   |   |
|                       | 4930          | 4510          | 4451           | 4132           | 4321    | 3596         | 3802           | 3090           | 1665                    | 2115   | 4058    | 3962   |   |
| * 1                   | 12855         | 11219         | 10746          | 10114          | 10405   | 8347         | 9599           | 7174           | 4207                    | 5724   | 9609    | 10038  |   |
| The second second sec | 80928         | 54636         | 61,767         | 52,890         | 48,222  | 48,075       | 48,378         | 40,152         | 29,416                  | 35,450 | 48,445  | 45,314 |   |
|                       | 58 <u>11</u>  | 4553          | 5147           | 5289           | 4822    | 4808         | 483 <b>8</b>   | 4015           | 2942                    | 3545   | 4845    | 4531   |   |
|                       | 23            | 24            | 25             | 26             | 27_     | 28           | 29             | 30             | 31_                     | Cum.   | . Total |        |   |
|                       | 1453          | 1817          | · · ·          |                |         | Could Carl   | Ι.,            | 61             |                         | 69     | ,108    |        |   |
|                       |               |               |                |                |         | n. Di        | Jun Z          | KIU            | ·                       | 107    | ,951    |        |   |
| 4                     | 5353          | ,a            |                |                | (       | July         | 1.119          | -              |                         | 118    | ,512    |        |   |
|                       |               |               |                |                |         | CA           | 611            |                |                         | . 58   | ,577    |        |   |
|                       |               |               |                |                |         | VA           | new            | <b>V</b>       |                         | 103    | ,290    |        |   |
|                       |               |               |                |                | Ł       | ry V"        | 7,-1           | 8-78           |                         | 120    | ,491    | •      |   |
|                       | 2814          | 1900          | 2789           |                | •       | 1            | 7'             |                |                         | 30     | ,443    |        |   |
|                       | 7358          | 9816          | - 4            |                |         |              |                |                |                         | 284    | ,256    |        |   |
|                       | 4601          | 4511          | 3653           | 3964           | 4220    | 3827         | 4340           | 4265           | 2222                    |        | ,804    |        |   |
|                       | 2208          | 3250          | 3228           | 3292           | 2908    | 1488         | 1500           | 2378           | 2997                    | _      | ,772    |        |   |
|                       | 3964          | 4707          | 4640           | 4298           | 3871    | 4171         | 3942           | 2405           | 5055                    |        | ,331    |        |   |
|                       | 2228          | 1793          | 1891           | 1784           | 1607    | 1925         | 1910           | 1599           | 1910                    |        | ,806    |        |   |
|                       | 3779          | 3293          | 3449           | 3219           | 2975    | 3390         | 3516           | 2572           | 34,98                   |        | ,204    | •      |   |
|                       | 8128          | 8105          | 8598           | 7659<br>21 216 | 6657    | 7953         | 8203           | 5550           | 8248                    | _      | ,218    |        |   |
|                       | 41886<br>4189 | 39192<br>4354 | 28,248<br>4035 | 4036           | 3706    | 3792<br>3792 | 23,411<br>3901 | 18,769<br>3128 | 23 <b>,</b> 730<br>3955 | 1,8    | 77,763  |        |   |
|                       |               |               |                |                |         |              |                |                |                         |        |         |        |   |

# CAULKINS OIL COMPANY Chacra Production Monthly

|                  |            |              |                       |                     | onthly                                |         |                     |              |              |               |               |
|------------------|------------|--------------|-----------------------|---------------------|---------------------------------------|---------|---------------------|--------------|--------------|---------------|---------------|
|                  | *****      | 1            | 2                     | 3                   | 4                                     | 5       | 6                   | 7            | 8            | 9             | . 10          |
| Sanchez          | 5          | 9617         | 8587                  | 5568                | 5216                                  | 5673    | 3254                | 4719         | 3600         | 4370          | 4156          |
| Breech B         | \$ 51      | 1120         | 785                   | 226                 | 430                                   | 371     | 465                 | 457          | 566          | 396           | 439           |
| Breech           | 217        | 14038        | 10172                 | 8828                | 7113                                  | 5698    | 5111                | 4629         | 5061         | 4586          | 3823          |
| Proceh           | 258        | 173          | 2209                  | 3366                | 2751                                  | 3177    | 2879                | 3300         | 2798         | 2032          | 2380          |
| Breech           |            |              | 2697                  | 6370                | ~                                     | 2211    | 2017                | 5)00         | 2/70         | 2052          | 2,500         |
| Breech           | 307        | 7144         | 6193                  | 4491                | 4341                                  | 3488    | 2869                | 17700        | 2022         | 2022          | 421           |
| Breech           | 330        | 5820<br>54   |                       |                     | 819                                   | 918     |                     | 1798         | 2923         | 2832          | 634           |
| Breech           | 332        | 56<br>206    | 640                   | 41 <u>1</u><br>2805 | 3079                                  | 2677    | 1721<br>2316        | 465          | 611          | 1255          | 313 ·<br>1661 |
| Breech I         |            | 376<br>3899  | 3985<br>2886          | 2409                | 2807                                  | 2813    | 2353                | 2210         | 1982<br>1812 | 1853          | 1614          |
| Breech           | 352        | 13376        | 9392                  | 87 <i>5</i> 8       | 76 <i>5</i> 5                         | 7158    | 6505                | 2500<br>5817 | 5881         | 1723<br>6251  | 5432          |
| Breech           | 354<br>368 | 3281         | 2646                  | 2326                | 2323                                  | 1132    | 1308                | 1825         | 2360         |               | 1215          |
| Breech<br>Breech | 382        | 4271         | 5011                  | 4351                | 3189                                  | 3089    | 2261                | 2687         | 3096         | 1355<br>2258  | 2477          |
| Breech I         | -          | 5243         | 3554                  | 3641                | 2022                                  | 2128    |                     | 1354         | 2259         | 2044          | 2381          |
| Breech I         | _          | 7824         | 4106                  | 3538                | 3402                                  | 2866    | 2699                | 2520         | 2475         | 2214          | 2053          |
| Breech l         |            | 9904         | 5046                  | 3803                | 2955                                  | 2357    | 2324                | 1879         | 1806         | 2039          | 1564          |
| Breech I         |            | 3271         | 2135                  | 1994                | 14.57                                 | 1150    | 912                 | 817          | 832          | 734           | 1,000         |
| preecu i         | 5 701      |              | _                     |                     |                                       |         | •                   |              | •            |               | •             |
|                  |            | 89,413       | 69,734                | 62,885              | 49,560                                | 44,695  | 39,003              | 36,077       | 38,062       | 35,942        | 30,142        |
| Arras            | rage       | 5888         | 4358                  | 3930                | 3304                                  | 2980    | 2602                | 2465         | 2537         | 2396          | 2153          |
| AVE.             | rage       | ,000         | 4))                   | 7770                | 7704                                  | 2,00    | 2002                | 240)         | ~))(         | 2)70          | ~             |
|                  |            |              |                       |                     | •                                     |         |                     |              |              |               | -             |
| 11               | 12         | 13           | 14                    | 15                  | 16                                    | 17      | 18                  | 19           | 20           | 21            | 22            |
|                  |            |              |                       |                     | · · · · · · · · · · · · · · · · · · · |         | <del></del>         |              |              |               |               |
| 3570             | 3508       | 2583         | 3454                  | 2832                | 3054                                  | 3036    | 2390                | 3050         | 2378         | 3014          | 2969          |
| 493              | 186        | 368          |                       |                     | ,                                     |         |                     |              |              |               | • •           |
| 1381             | 4245       | 3778         | 3621                  | 3602                | 2848                                  | 3099    | 2998                | 3151         | 3736         | 3182          | 3208          |
| 1994             | 1950       | 1913         | -                     | -                   |                                       |         |                     |              |              | -             |               |
| *                |            | , ,          |                       |                     |                                       |         | •                   |              |              |               |               |
| 2012             |            |              |                       |                     |                                       |         |                     |              |              |               |               |
|                  |            |              |                       |                     |                                       |         | •                   |              |              |               |               |
| 1243             |            |              |                       |                     |                                       |         |                     |              | •            |               |               |
| 1670             | 1572       | 1173         | 1570                  | 1514                | 1574                                  | 1323    | 1193                | 1221         | 1189         | 1195          | 1336          |
| 692              | 358        | 636          | 1398                  | 1665                | 1034                                  | 1356    | 1505                | 1582         | 977          | 1244          | 1509          |
| 4972             | 4379       | 3542         | 4619                  | 4214                | 3883                                  | 4322    | 3275                | 33 <b>59</b> | 1638         | 3377          | 4663          |
| 930              | 1267       | 1654         | 1600                  | 884                 | 663                                   | 759     | 843                 | 188          | 864          | 777           | 1051          |
| 2195             | 2528       | 2472         | 2500                  | 1893                | 2074                                  | 1776    | 574                 |              | 423          | 1971          | 1978          |
| 2294             | 2127       | 2249         | 2268                  | 2331                | 2022                                  | 2128    | 2026                | 1354         | 2259         | 2044          | 2021          |
| 2035             | 1829       | 1878         | 2190                  | 2069                | 1928                                  | 1863    | 1721                | 921          | 1938         | 1838          | 1660          |
| 1417             | 1772       | 1652         | 1577                  | 1806                | 1321                                  | 1495    | 1296                | 532          | 1078         | 1811          | 1340          |
| •                |            |              | •                     |                     |                                       |         |                     | •            |              |               |               |
|                  |            |              |                       |                     |                                       |         |                     |              |              |               |               |
| 26898 2          | 5,721      | 23,898       | 24,797                | 22,810              | 20,401                                | 21,157  | 17,821              | 15,358       | 16,470       | 20,453        | 21,735        |
|                  |            | 2 1112       |                       |                     |                                       |         |                     |              | <b></b>      |               |               |
| 1921             | 2143       | 1991         | 2480                  | 2281                | 2040                                  | 2116    | 1782                | 1539         | 1647         | 2043          | 2174          |
|                  | 21         | 25           | 26                    | Ott                 | 28                                    | 29      | 20                  | 23           |              | O             | _1            |
| 23               | 24         | 25           |                       | 27                  |                                       |         | 30                  | 31           |              | Cum. Tot      |               |
| 2097             | 2804       |              |                       |                     |                                       |         |                     | •            |              | 95,4          |               |
|                  |            |              |                       |                     |                                       |         | •                   |              |              | 7630          |               |
| 2910             |            |              |                       |                     |                                       |         |                     |              |              | 110,8         | 378           |
|                  |            |              |                       | •                   |                                       |         | •                   |              |              | 30,9          | 122           |
|                  | •          |              |                       |                     |                                       | -       |                     |              |              | 16,2          |               |
|                  |            |              |                       |                     |                                       |         | •                   |              |              | 37,4          |               |
| 1010             | 2200       | 3 000        |                       |                     |                                       |         |                     |              |              | 8,4           |               |
| 1213             | 1190       | 1233         |                       |                     |                                       |         |                     |              |              | 43,1          |               |
| 532              | 1932       | 2005         | 1232                  | 2403                | 3699                                  | 4185    | 2506                | 3122         | ,            | 41,2          |               |
| 4087             | 4174       | 3775         | 4312<br>874           | 3793<br>690         | 1071                                  | 840     | 3596<br>1781        | 1054         |              | 160,8<br>50,7 |               |
| 917              | 935        | 1331         |                       | 1463                | 1802                                  | 1980    | 946                 | 2089         |              | 67,6          |               |
| 1323<br>1911     | 1697       | 2045<br>1881 | 219 <b>7</b><br>1889. | 1816                | 1829                                  | 1765    | 1530                | 1616         |              | 67,7          |               |
|                  | 1735       |              | 1400                  | 1575                | 1529                                  | 1475    | 1380                | 1403         |              | 72,6          |               |
| 1544             | 1367       | 1472<br>1059 | 1020 .                | 1059                | 1162                                  | 1112    | 1051                | 1035         |              | 60,4          |               |
| 1117             | 982        | 1024         | 1020.                 | 1077                | عبال بد                               | ***     | 1001                | ررب          |              | 13,3          |               |
| _                |            | _            |                       |                     |                                       |         |                     |              |              | ·             |               |
| 17,651           | 16,81      | 6 12,79      | % 11,692              | 2 10,3%             | 5 11,09                               | B 11,35 | 57 ` 10 <b>,</b> 28 | 4 10,319     | !            | 873,4         | .03 MCF       |
| 3 <i>-1</i> -    |            |              | 40.0                  | 1000                | 1010                                  | 3444    |                     | 3~00         |              | •             |               |
| 1765             | 1868       | 1828         | 1949                  | 1732                | 1849                                  | 1893    | .1714               | 1720         |              | •             |               |
|                  |            |              |                       |                     |                                       |         |                     |              |              | ~ = "         | • 5           |

Caulkins

6119 Varquer 1-18-78

# Caulkins Oil Company Mesa Verde Production Yearly

|          |          | 1       | 2       | 3       | 4       | 5       | . 6     | 7       | 8       |
|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|
| Breech / | 229      | 4584    | 22,328  | 7368    | 7582    | 6156    | 6827    | 10,675  | 15,772  |
| Breech   | 224      | 49,150  | 64,495  | 50,988  | 42,456  | 60,477  | 45,833  | 76,686  | 79,289  |
| Breech   | 307      | 9,078   | 8,199   | 9,093   | 6,164   | 8,802   | 15,621  | 19,040  | 12,790  |
| Breech I | ? 4      | 11,557  | 20,231  | 10,055  | 9,573   | 20,240  | 11,788  | 9,229   | 6,119   |
| Breech I | 8        | 31,413  | 38,723  | 41,712  | 36,955  | 37,145  | 25,259  | 29,765  | 27,713  |
| Breech l | F 12     | 43,597  | 197,968 | 138,223 | 93,534  | 38,089  | 67,057  | 80,812  | 67,125  |
| Breech 1 | F 45     | 26,448  | 50,736  | 62,903  | 58,159  | 27,259  | 27,805  | 56,363  | 61,908  |
| Breech I | 58       | 67,478  | 84,431  | 30,711  | 65,966  | 65,796  | 45,291  | 66,919  | 53,514  |
| State A  | 62       | 24,664  | 64,071  | 70,256  | 42,386  | 64,691  | 47,043  | 40,733  | 24,001  |
| Breech I | s 64     | 28,025  | 52,282  | 67,442  | 50,238  | 26,541  | 17,396  | 10,153  | 27,748  |
| Breech I | 341      | 32,239  | 30,324  | 18,749  | 12,729  | 21,901  | 25,922  | 28,646  | 20,523  |
|          |          | 328,232 | 633,788 | 507,500 | 425,742 | 377,097 | 335,842 | 429,021 | 396,502 |
| Yearly / | Avg. Per |         | 57,610  | 46,140  | 38,700  | 34,280  | 30,530  | 39,000  | 36,050  |
| 9        | 10       | 11      | 12      | 13      | 14      | 15      | 16      | 17      | 18      |
| 16,365   | 22,361   | 17,938  | 15,470  |         |         |         | •       |         |         |
| 80,033   | 84,438   | 87,732  | 91,987  | 89,778  | 85,465  | 83,893  | 62,637  | 68,367  |         |
| 8,612    | 4,055    |         |         |         | •       |         |         |         |         |
| 6.032    | 5,196    | 3,690   | 5,552   | 6,659   | 8,379   | 9,424   | 11,780  | 7,853   | 9,470   |
| 22,573   | 23,160   | 14,542  | 21,051  | 22,501  | 22,074  | 23,695  | 21,103  | 23,563  | 23,827  |
| 58,398   | 39,505   | 40,510  | 16,353  | 15,633  | 27,451  | 92,437  | 85,622  | 98,781  | 79,917  |
| 58,242   | 59,724   | 49,291  | 45,650  |         |         |         |         |         |         |
| 47,342   | 23,108   | 32,633  | 60,678  | 70,990  | 65,409  | 69,404  | 52,906  | 46,305  |         |
| 26,159   | 49,532   | 50,932  | 46,352  | 49,452  | 44,094  | 36,796  |         |         |         |
| 51,658   | 45,287   | 47,541  | 35,374  | 26,053  |         | *       |         |         |         |
| 25,261   | 24,561   | 24,396  | •       | T.      |         |         |         |         |         |
| 400,670  | 380,917  | 369,205 | 338,717 | 281,166 | 252,872 | 315,649 | 234,048 | 244,869 | 113,214 |
| 36,420   | 34,630   | 36,920  | 37,640  | 40,160  | 42,150  | 52,110  | 46,810  | 48,975  | 37,738  |

Caulkins

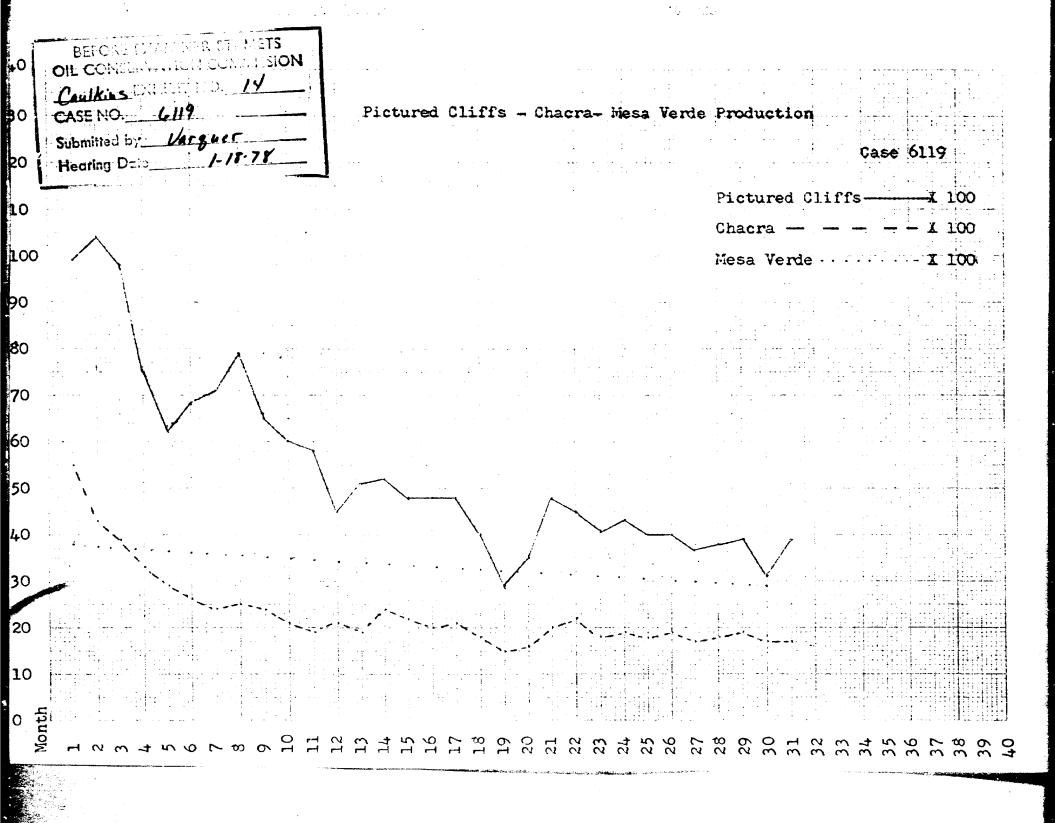
6119 Varquer 1-18-78

# AVERAGE PRODUCTION TABULATIONS Monthly

|                 | Mononity |            |              |    |    | 6119 |
|-----------------|----------|------------|--------------|----|----|------|
|                 |          |            |              | Bı | m  |      |
| Pictured Cliffs | Chacra   | Mesa Verde | Total        | PC | Ch | MV   |
| 9909            | 5588     | 3845       | 19642        | 50 | 30 | 20   |
| 10464           | 4358     | 3845       | 18667        | 56 | 23 | 21   |
| 9832            | 3930     | 3845       | 17607        | 56 | 23 | 22   |
| 7557            | 3304     | 384.5      | 14706        | 51 | 22 | 27   |
| 6273            | 2980     | 3845       | 13098        | 48 | 23 | 29   |
| 6829            | 2602     | 3845       | 13276        | 51 | 20 | 29   |
| 7164            | 2465     | 3845       | 13474        | 53 | 18 | 29   |
| 6973            | 2537     | 3845       | 13355        | 52 | 19 | 29   |
| 6576            | 2396     | 3845       | 12817        | 51 | 19 | 30   |
| 6044            | 2153     | 3845       | 12042        | 50 | 18 | 32   |
| 5811            | 1921     | 3845       | 11577        | 50 | 17 | 33   |
| 4553            | 2143     | 3845       | 10541        | 43 | 20 | 37   |
| 5147            | 1991     | 3225       | 10363        | 50 | 19 | 31   |
| 5289            | 2480     | 3225       | 10994        | 48 | 23 | 29   |
| 4822            | 2281     | 3225       | 10328        | 47 | 22 | 31   |
| 4808            | 2040     | 3225       | 10073        | 48 | 20 | 32   |
| 4838            | 2116     | 3225       | 10179        | 47 | 21 | 32   |
| 4015            | 1782     | 3225       | 9022         | 45 | 20 | 35   |
| 2942            | 1539     | 3225       | 7706         | 38 | 20 | 42   |
| 3545            | 1647     | 3225       | 8417         | 42 | 20 | 38   |
| 4845            | 2043     | 3225       | 10113        | 48 | 20 | 32   |
| 4531            | 2174     | 3225       | 9930         | 46 | 22 | 32   |
| 4189            | 1765     | 3225       | 9179         | 46 | 19 | 35   |
| 4354            | 1868     | 3225       | 9447         | 46 | 20 | 34   |
| 4035            | 1828     | 2857       | 8720         | 46 | 21 | 33   |
| 4036            | 1949     | 2857       | 8842         | 46 | 22 | 32   |
| 3706            | 1732     | 28 57      | 8295         | 45 | 21 | 34   |
| 3792            | 1849     | 28 57      | 8498         | 45 | 22 | 33   |
| 3901            | 1893     | 2857       | 8651         | 45 | 22 | 33   |
| 3128            | 1714     | 28 57      | <b>7</b> 699 | 41 | 22 | 37   |
| 3955            | 1720     | 2857       | 8532         | 46 | 20 | 34   |
|                 |          |            | Avg.         | 48 | 21 | 31   |
|                 | •        |            |              |    |    | ooi  |

Recommend production split all oil and 31% of gas to Mesa Verde Zone, 21% of gas to Chacra zone and 48% of gas to Pictured Cliffs zone.

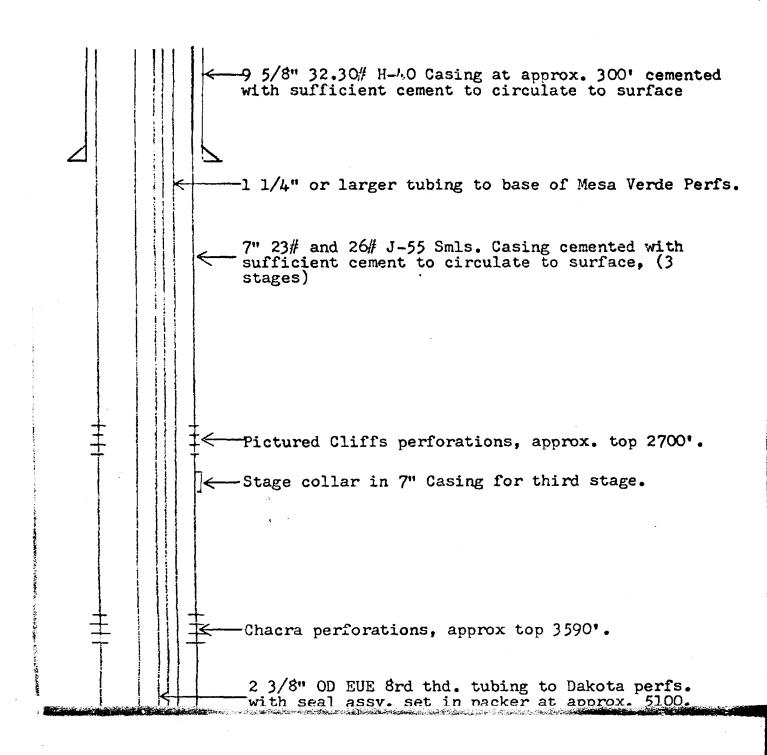
|                 | E EXAMINER STAMETS   |
|-----------------|----------------------|
| OIL CONS        | SERVATION COMMISSION |
| Caulkins        | DEPT NO. 13          |
| <b>-0</b> 00555 | 6119                 |
| No.             | 1-18-18              |
| *               | 1-18-18              |



Well: Breech 368
SE ½ Sec. 23 26N 7W

| DATE                  | PC PRODUCTION | CHACRA PRODUCTION | TOTAL      |
|-----------------------|---------------|-------------------|------------|
| May 1977              | 3,292         | 874               | 4,166      |
| June 1977             | 2,908         | 690               | 3,598      |
| July 1977             | 1,488         | 1,071             | 2,559      |
| Cumulative Production | on.           |                   | 10,323 MCF |
|                       |               |                   |            |
| Commingled            | ?-26-1977     |                   |            |
| August 1977           | Commingled    |                   | 3,231      |
| Sept. 1977            | Commingled    |                   | 1,781      |
| Oct. 1977             | Commingled    |                   | 4,051      |
| Cumulative Production |               |                   | 9,063 MCF  |
| November 1977         | Commingled    |                   | 5,538 MCF  |

|           | SWARMER STA<br>EAS SACH COAS |                                       |
|-----------|------------------------------|---------------------------------------|
| Caulkins. |                              | 15                                    |
| CALL      | 6119                         | · · · · · · · · · · · · · · · · · · · |
| Schaller  | <u>Varquer</u>               |                                       |
|           | is 1-18-                     | 78                                    |



Baker Model D production packer to be run on wire line. Set at approx 5100°.

Stage collar, second stage cement, set at base of Mesa Verde Zone at approx. 5150°.

Dakota perforations, top at approx. 6970°.

#### CAULKINS OIL COMPANY

Proposed Dual Completion
Well No. Breech 228
830 from North and East lines
Section 18 26 Hours & Word,

Caulkins 6119

Surguer

1-18-7

## **GAS** COMPANY OF NEW MEXICO

November 23, 1977

Mr. Charles E. Verquer Superintendent Caulkins Oil Company P.O. Box 780 Farmington, New Mexico 87401

Dear Mr. Verquer:

This letter is to advise you that we plan to lay a pipeline to the Breech #228 well location in Section 18, 26N, 6W, Rio Arriba County, New Mexico, prior to February 1, 1978.

Sincerely,

Burn Rectaning Int Bruno Giovanini Field Superintendent

BG/nt

cc: J. V. King, Farmington Bob Corliss, Dallas Howard Miller, Kutz Alvin Dean, Kutz

|                                       | of ever reperties |
|---------------------------------------|-------------------|
| Caulkins                              | 6119              |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | Varquer 1-19-78   |

CAMINERS OIL COMPANY
Well No. Breech 228
Unit A Sec 18 260 63
Nio Arriba County, New Mex

Cary 1 .. 1119

#### Proposal

Dual complete Dakota and Commingled Pictured Cliffs, Charter and David Words.

Ownership and all working intersts common for this well.

#### Exhibit # 1

Section map showing all Caulkins wells, proposed well and off office wells.

#### Exhibit # 2

Pictured Cliffs pressure tabulations to show average Initial encounter and each year average decline.

#### Exhibit # 3

Mesa Verde pressure tabulations to show average Initial readulations to show average Initial readulations to show average Initial readulations to show average Initial readulations.

#### Exhibit # 4

Chacra pressure tabulations to show average initial prospure and pack, year average decline.

#### Exhibit // 5

Tabulation of yearly average pressures from tabulations of addibits 2-3-4.

#### Exhibit # 6

Pressure decline curves from tabulations exhibit / /.

#### Exhibit # 7

Plat showing well location and direct offset wells in Sections 13, 7, 19 West half 8, 17 and 20, Twp. 26N 6W, Rio Arriba County, New Mexico.

#### Exhibit # 8

Tabulation of average pressures for Pictured Cliffs and Chacro wells, and for one Mesa Verde well shown on plat, exhibit # 7.

#### Exhibit # 9

Individual well records, pressure and production for Fietures Cliff., Chacra and Mesa Verde wells shown on plat exhibit # 7.

#### Exhibit # 10

Tabulations of monthly Pictured Cliffs production from Caulking Oil Co. Pictured Cliffs - Chacra dual wells.

#### Exhibit # 11

Tabulation of monthly Chacra production from Caulkins Oil Communa Fist-ured Cliffs - Chacra dual wells.

#### Exhibit # 12

Tabulation of yearly Mesa Verde production from all Gaulkins (41) dec. Mesa Verde wells.

#### Exhibit # 13

Tabulation of monthly Pictured Cliffs, Chacra and Mesa Verde production from exhibits 10, 11 & 12. Note: Mesa Verde production averaged from yearly tabulation.

'roposed production split on bottom of page.

#### Exhibit # 14

roduction curves from tabulations exhibit # 13.

#### Exhibit # 15

Breach 368 production records.

Pictured Cliffs - Chacra commingled 7-26-77. Order No. R-5479.

#### Exhibit # 16

Diagram showing proposed commingling and dual completion.

#### Exhibit # 17

Gas Company of New Mexico letter of intent.

# CAULKINS OIL COMPANY Well No. 228

Case No. 6119

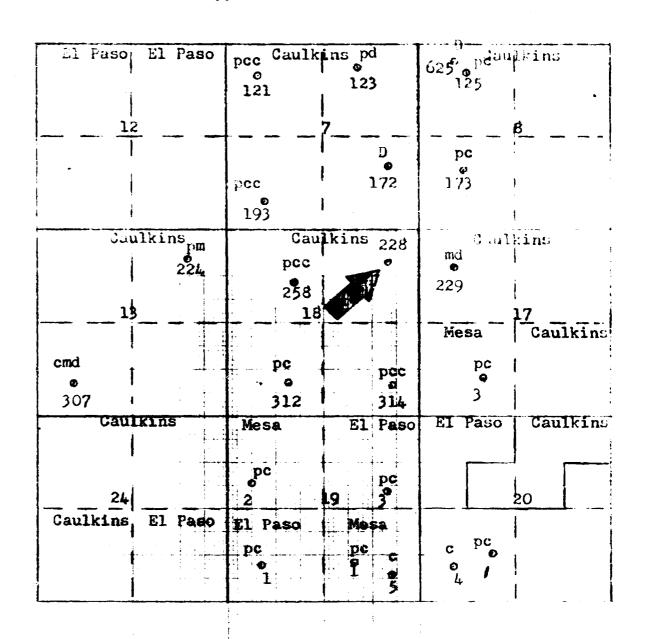
## Yearly Average Pressure Tabulation

| Pictured Cliffs   | Chacra  | Mesa Verde   |
|---|---|--|
| 892<br>645<br>568<br>542<br>540<br>534<br>512<br>497<br>485<br>474<br>462<br>442<br>421<br>397<br>379<br>358<br>347<br>338<br>324 | 912<br>646<br>494<br>433<br>382<br>379<br>351<br>416<br>395<br>395<br>379<br>371<br>355 | 1074<br>861<br>814<br>782<br>749<br>729<br>712<br>676<br>619<br>636<br>622<br>601<br>581<br>561<br>548<br>533<br>479<br>498<br>458 |
| 303   |   | 430  |

Case 6119 Exhibit 5

1.0

CAULKINS OIL COMPANY
Breech 228
Unit A Section 18 26N 6W
Rio Arriba County, New Mexico



| md   | Mesa <b>Verde -</b> Dakota dual  | caselo119                      |
|------|----------------------------------|--------------------------------|
| cmd  | Chacra - Mesa Verde Dakota Dual  | (Mesa Verde Dakota commingled) |
| pm . | Pictured Cliffs - Mesa Verde dua | , -                            |
| pcc  | Pictured Cliffs - Chacra dual    |                                |
| pd   | Pictured Cliffs - Dakota dual    |                                |
| pc   | Pictured Cliffs                  |                                |

Exhibit 7

# CAULKINS OIL COMPANY Avg. Pictured Cliffs - Chacra - Mesa Verde Pressures Section 7, 18, 19, W/H 8, 17 and 20

Twp. 26N 6W, Rio Arriba County, New Mex.

| Initial 811 936 1028 2nd 548 464 672 4th 487 392 727 5th 486 328 712 6th 462 762 7th 413 614 8th 423 9th 428 10th 413 12th 403 12th 403 13th 410 14th 386 15th 374 16th 372 17th 346 18th 328 | Year   | Pictured Cliffs   | Chacra            | Mesa Verde   |
|---|--|---|-------------------|--|
| 19th 313<br>20th 294<br>21st 289  | 1st<br>2nd<br>4th<br>5th<br>5th<br>5th<br>7th<br>3th<br>10th<br>11th<br>12th<br>13th<br>14th<br>15th<br>16th<br>17th<br>18th<br>19th<br>20th | 616<br>548<br>487<br>486<br>462<br>413<br>423<br>428<br>413<br>403<br>403<br>400<br>386<br>374<br>372<br>346<br>328<br>313<br>294 | 567<br>464<br>392 | 1028<br>953<br>672<br>727<br>712<br>762<br>614<br>572<br>492 |

Exhibit 8 case 6119

Well: Breech B 123 (PC)

NE 1 Sec. 7 26N 6W

First Delivered 1-5-65

Yearly Shut in Pressure and Cumulative Production

| DATE                            | PRESSURE | PRODUCTION     |
|---------------------------------|----------|----------------|
| Initial                         | 934      |                |
| 1965                            | 791      | 41,444         |
| 1966                            | 632      | <b>52,</b> 836 |
| 1767                            | 530      | 47.865         |
| 1968                            | 472      | 33,704         |
| 1969                            | 418      | 31,504         |
| 1970                            | 384      | 24,475         |
| 1971                            | 357      | 27,608         |
| 1972                            | 318      | 24,704         |
| 1973                            | 315      | 25,253         |
| 1974                            | 267      | 22,319         |
| 1975                            | •        | 20,747         |
| 1976                            | 262      | 18,098         |
| Cumulative Production thru 1976 |          | 370,557        |

Exhibit 9
Case 6119

Well: Breech A 125 NW4 Sec. 8 26N 6W First delivered 9-23-54 Yearly shut in pressures and cumulative production

| Date          | Pressure |
|---------------|----------|
| Initial       | 964      |
| 1955          | 682      |
| 1956          | 727      |
| 1957          | 622      |
| 1958          | 489      |
| 1959          | 569      |
| 1960          | 614      |
| 1961          | 540      |
| 1962          | 510      |
| 1963          | 616      |
| 1964          | 584      |
| 1965          | 326      |
| 1966          | 538      |
| 1967          | 495      |
| 1968          | 466      |
| 1969          | 462      |
| 19 <b>7</b> 0 | 445      |
| 1971          | 405      |
| 1972          | 379      |
| 1973          | 331      |
| 1974          | 330      |
| 1976          | 317      |
|               |          |

Cumulative production thru 1976 1,064 MMCF

Cumulative 1976 production 27 MMCF

Well: Breech A 173

 $SW_{4}^{1}$  Sec. 8 26N 6W

First delivered 7-31-52

Disconnected 11-6-58

Reconnected 12-7-74

Pictured Cliffs Formation

Yearly shut in pressures and cumulative production

| Date    | <ul> <li>Pressure</li> </ul> |
|---------|------------------------------|
| Initial | 730                          |
| 1954    | 644                          |
| 1955    | 657                          |
| 1956    | 397                          |
| 1974    | 599                          |
| 1975    | 470                          |
| 1976    | 277                          |
|         |                              |

Cumulative production thru 1976 100 MMCF

Cumulative 1976 production 34 MMCF

Well: Breech A 229 (Mesa Verde Lone)

HW. Bec. 17 26N 6W

First Delivered 12-28-65

Yearly Shut in Pressure and Cumulative Production

| Jate            | Pressure    | Gas Production | Oil Production |
|-----------------|-------------|----------------|----------------|
| Initial         | 1028        |                |                |
| 1965            |             | 4,584          | •              |
| 1966            | 953         | 22,328         | 1320           |
| 1967            | . 672       | 7,368          | 454            |
| 1963            | 727         | 7,582          | 159            |
| 1969            | 712         | 6,156          | 68             |
| 1970            | <b>7</b> 62 | 6,827          | <b>5</b> 9     |
| 1971            | Exempt      | 10,675         | 127            |
| 1972            | 614         | 15,772         | 201            |
| 1973            | 572         | 16,365         | 125            |
| . 1974          | 492         | 22,361         | 115            |
| 1975            |             | 17,938         | 133            |
| . 19 <b>7</b> 6 | 442         | 15,470         | 160            |
| •               | Cumulative  | 154,426 MCF    | 2921 bbls.     |

Well: Scott 3

SW  $\frac{1}{4}$  Sec. 17 26N 6W

First Delivered 12-17-53

Yearly Shut in Pressure and Cumulative Production

| DATE    | PRESSURE |
|---------|----------|
| Initial | 772 (21) |
| 1954    | 337      |
| 1955    | 669      |
| 1956    | 503      |
| 1957    | 479      |
| 1958    | 413      |
| 1959    | 406      |
| 1960    | 383      |
| 1961    | 360      |
| 1962    | 360      |
| 1963    | 374      |
| 1964    | 304      |
| 1965    | 309      |
| 1966    | 359      |
| 1967    | 364      |
| 1968    | 346      |
| 1770    | 364      |
| 1 371   | 374      |
| 1972    | 344      |
| •       | • • •    |

Exempt Marginal Since 1972

Cumulative Production thru 1976

202 MMCF

1976 Cumulative Production

5 MMCF

Well: Breech 312

SW 🖟 Sec. 18 26N 6W

First Delivered 3-13-58

Yearly Shut in Pressure and Cumulative Production

| DATE                  | PRESSURE  | PRODUCTION |
|-----------------------|-----------|------------|
| Initial               | 834       |            |
| 1958                  | 723       | 31,737     |
| 1959                  | 574       | 27,417     |
| 1960                  | 577       | 22,192     |
| 1961                  | 552       | 19,340     |
| 1962                  | 558       | 14,670     |
| 1963                  | 570       | 14,910     |
| 1964                  | 551       | 11,402     |
| 1965                  | 507       | 16,867     |
| 1966                  | 495       | 18,576     |
| 1967                  | 517       | 20,286     |
| 1968                  | 500       | 19,346     |
| 1969                  | 470       | 19,563     |
| 1970                  | 432       | 21,038     |
| 1971                  | 333       | 19,176     |
| 1972                  | 400       | 22,695     |
| 1973                  | 391       | 23,823     |
| 1974                  | 342       | 20,846     |
| 1975                  |           | 19,811     |
| 1976                  | 302       | 17,300     |
| Cumulative Production | thru 1976 | 380,995    |

WELL: Breech 258

First Delivered October, 1976

Monthly Gas Production

| Date         | Pictured Cliffs | Chacra |
|--------------|-----------------|--------|
| Oct. 1976    | 2469            | 173    |
| Nov. 1976    | 5361            | 2209   |
| Dec. 1976    | 6292            | 3366   |
| Jan. 1977    | 5310            | 2751   |
| Feb. 1977    | 5800            | 3177   |
| March, 1977  | 5276            | 2879   |
| April, 1977  | 4423            | 3300   |
| May, 1977    | 4029            | 2798   |
| June, 1977   | 3943            | 2032   |
| July, 1977   | 4347            | 2380   |
| August, 1977 | 4238            | 1994   |
| Sept., 1977  | 3126            | 1950   |
| Oct., 1977   | 3963            | 1913   |
| Cumulative   | 58,577          | 30,922 |

Split 65% Pictured Cliffs and 35% Chacra.

Well: Buttram 2

NN 1 Sec. 19 26N 6W

First Delivered 9-23-53

Yearly Shut in Pressure and Cumulative Production

| DATE         | PRESSURE    |
|--------------|-------------|
| Initial      | 899 (7)     |
| 1954         | 604         |
| <b>19</b> 55 | 548         |
| 1956         | 468         |
| 1957         | , 467       |
| 1758         | 392         |
| 1960         | 390         |
| 1961         | 431         |
| 1962         | 387         |
| 1963         | 379         |
| 1964         | 392         |
| 1965         | 384         |
| 1966         | 359         |
| 1967         | 3 <b>28</b> |
| 1968         | 334         |
| 1969         | 292         |
| 1770         | 310         |
| 1971         | 270         |
| 1772         | 266         |
| 1973         | 290         |
| 1974         | 255         |
| 1976         | 227         |
|              |             |

Cumulative Production thru 1976

802 MMCF

1976 Cumulative Production

28 MMCF

Well: Reams # 3

### NE 1 Sec. 19 26N 6W

#### Yearly Shut in Pressure and Cumulative Production

| DATE             | PRESSURE   |
|------------------|------------|
| Initial          | 865 (8)    |
| 1)55             | 877        |
| - 1956<br>- 1957 | 516<br>493 |
| 1 758            | 444        |
| 1959             | 403        |
| 1960             | 405        |
| 1961             | 408        |
| 1962             | 415        |
| 1963             | 406        |
| 1964             | 399        |
| 1965             | 348        |
| 1966             | 374        |
| 1967             | 421        |
| 1968             | 397<br>318 |
| 1969<br>1970     | 303        |
| 1971             | 285        |
| 1972             | 229        |
| 1973             | 226        |
| 1974             | 222        |
| 1976             | 250        |
|                  |            |

Cumulative Production thru 1976

552 MMCF

1976 Cumulative Production

18 MMCF

Well: Reams # 1

SW 1 Sec. 19 26N 6W

14 MMCP

Yearly Shut in Pressure and Cumulative Production

| DATE NONE                    | REPORTED       | PRESSURE     |
|------------------------------|----------------|--------------|
| 1954<br>1955                 |                | 621<br>617   |
| 19 <b>5</b> 6                |                | 638          |
| 195 <b>7</b><br>19 <b>58</b> |                | 589<br>565   |
| 1759                         |                | 299          |
| 1960                         |                | 455          |
| 1961<br>1962                 |                | 54.4<br>54.1 |
| 1963                         |                | 531          |
| 1964<br>1965                 |                | 528<br>526   |
| 1966                         |                | 497          |
| 1967                         |                | 514          |
| 1968<br>1969                 |                | 469<br>429   |
| 1970                         |                | 394          |
| 1971<br>1972                 |                | 427<br>456   |
| 1973                         |                | 387          |
| 1974<br>1976                 |                | 363<br>344   |
|                              |                |              |
| Cumulative Produc            | tion thru 1976 | 464 MMCF     |

1976 Cumulative Production

Well: Buttram # 1

SE 4 Sec. 19 26N 6W

First Delivered 1-1-54

Yearly Shut in Pressure and Cumulative Production

| DATE   | PRESSURE                                      |
|--|---|
| Initila                                      | 793 (11)                                      |
| 1954<br>1955<br>1956<br>1957<br>1958         | 591<br>490<br>438<br>449<br>368               |
| 1959<br>1960<br>1961<br>1962<br>1963         | 358<br>353<br>387<br>372<br>372               |
| 1964<br>1965<br>1966<br>1967<br>1968         | 385<br>333<br>346<br>316<br>314               |
| 1969<br>1970<br>1971<br>1972<br>1973<br>1974 | 280<br>290<br>267<br>226<br>232<br>242<br>209 |
| • •  | •   |

Cumulative Production thru 1976

624 MMCF

1976 Cumulative Production

18 MMCF

Tearly shut in processes and numbers of a

 Date
 Pressure

 Initial
 908

 1975
 562

 1976
 496

 1977
 445

Cumulative production thro 1976 87 MISP

1976 Cumulative production 25 AGE

Well: Buttram 5 (Mena)

SE2 Sec. 19 26% 6%

First delivered 4-30-73

Chacra Mone

Yearly shut in pressure and cumulative at superior

| Hate    | Pressure |
|---------|----------|
| Initial | 855      |
| 1973    | 499      |
| 1974    | 409      |
| 1975    | 338      |
| 1977    | 328      |

Cumulative production thru 1976 251 MMCF

1976 cumulative production 48 MMCF

Wall: Saches . I (Mr sel)

all me. 20 267 mg

First Dolivered 11-17-58
Fictures Sliffs Formation

Yearly Shut in the turned and cum Antique to the

| Jate    | Promiser |
|---------|----------|
| Initial | きょさ      |
| 1959    | 397      |
| 1960    | 357      |
| 1061    | 357      |
| 1962    | 354 '    |
| 1963    | 345      |
| 1964    | 3,2      |
| 1965    | 313      |
| 1966    | 307      |
| 1967    | 319      |
| 1963    | 310      |
| 1970    | 300      |
| 1971    | 266      |
| 1972    | 24,2     |

Exempt since 1972

Cumulative production thru 1976 153 MACF

Cumulative 1976 production 6 ARF

CAULKINS OIL COMPANY Pictured Clifs Prod. Monthly

|        |               |               |                |              |              | 11011                        | 01173        |                |                           |              |              |              |  |
|--------|---------------|---------------|----------------|--------------|--------------|------------------------------|--------------|----------------|---------------------------|--------------|--------------|--------------|--|
|        |               |               | 1              | 2            | 3_           | 4                            | 5            | 6              | 7                         | 8            | 9            | 10           |  |
|        | Sanche        | z : 5         | 5920           | 7258         | 36 <b>96</b> | 4021                         | 3980         | 3254           | 3567                      | 2177         | 3139         | 2992         |  |
|        | Breech        | B 51          | 200            | 16307        | 13849        | 10590                        | 10098        | 9114           | 8416                      | 7268         | 6610         | 6827         |  |
|        | Breech        | 217           | 9405           | 8983         | 8452         | 7227                         | 6362         | 6284           | 5085                      | 6204         | 5080         | 3697         |  |
|        | Breech        | 258           | 2469           | 5361         | 6292         | 5310                         | 5800         | 5276           | 4423                      | 4029         | 3943         | 4347         |  |
|        | Breech        | 330           | 12781          | 13635        | 11363        | 11289                        | 10064        | 8602           | 7277                      | 8000         | 7365         | 5181         |  |
|        | Breech        | 332           | 14427          | 13631        | 12358        | 12936                        | 11841        | 10423          | 8682                      | 9982         | 9141         | 7473         |  |
|        | Breech        | D 342         | 617            | 7650         | 4917         | 5214                         | 4621         | 1,091          | 3725                      | 3579         | 3484         | 2969         |  |
|        | Breech        | 352           | 23438          | 18752        | 17631        | 15292                        | 15330        | 14552          | 14500                     | 10673        | 13154        | 11557        |  |
|        | Breech        | 354           | 13917          | 9237         | 8798         | 7698                         | 7884         | 6895           | 5037                      | 6080         | 6717         | 5954         |  |
|        | Breech        | 368           | 7447           | 7164         | 7464         | 3514                         | 4431         | 4716           | 4526                      | 54 50        | 4424         | 4181         |  |
|        | Breech        | _             | 12532          | 13137        | 13102        | 5951                         | 7414         | 8400           | 7633                      | 8886         | 7176         | 7792         |  |
|        | Breech        |               | 6995           | 4013         | 3368         | 2280                         | <del></del>  | 2742           | 3654                      | 3518         | 3070         | 2988         |  |
|        | Breech        |               | 9901           | 6717         | 7126         | 4060                         |              | 3782           | 6715                      | 6094         | 5329         | 5157         |  |
|        | Breech        | D 387         | 18678          | 14652        | 19236        | 10411/                       | ****         | 7479           |                           | 15677        | 13434        | 13402        |  |
|        |               |               | -              | -            | 137,652      |                              | 87,825       |                | 100,301                   | 97,617       | 92,066       | 84,617       |  |
|        |               | Avg.          | 9909           | 10464        | 9832         | 7557                         | 6273         | 6829           | 7164                      | 6973         | 6576         | 6044         |  |
|        | 11            | 12            | 13             | 14           | 15           | 16                           | 17           | 18             | 19                        | 20           | 21           | 22           |  |
|        | 2792          | 2628          | 1840           | 2377         | 2508         | 2187                         | 2046         | 1597           | 1904                      | 1935         | 2045         | 1975         |  |
|        | 6998          | 4680          | 6994           |              |              |                              |              |                |                           | -            |              |              |  |
| :      | 1363          | 2798          | 3799           | 5151         | 1546         | 4278                         | 5098         | 4748           | 4304                      | 5093         | 5008         | 3194         |  |
| :      | 4238          | 3126          | 3963           |              | •            |                              |              |                |                           |              |              |              |  |
|        | 7733          |               |                |              |              |                              |              |                |                           |              |              |              |  |
|        | 9497          |               |                |              | 00           | 2224                         |              | 2-2/           |                           | 0/ 00        |              | 0==1         |  |
|        | 3233          | 2179          | 1249           | 1710         | 3275         | 3308                         | 3160         | 2796           | 2827                      | 2608         | 2374         | 2716         |  |
|        | 9003          | 4308          | 9529           | 11007        | 10687        | 10167                        | 10165        | 10058          | 9801                      | 8262         | 9971         | 9245         |  |
|        | 5927          | 4982          | 5950           | 5358         | 5082<br>3364 | 4410                         | 5088         | 4033           | 1997                      | 1021         | 4235<br>3269 | 4647         |  |
|        | 3872<br>5648  | 4484          | 4172<br>6475   | 4200<br>6500 | 4610         | 394 <b>7</b><br>572 <b>1</b> | 3095<br>4214 | 2067<br>2813   | 531<br>818                | 2455<br>3769 | 5335         | 2750<br>4414 |  |
| i<br>: | 2839          | 7139<br>2583  | 2599           | 2341         | 2424         | 2114                         | 2111         | 1776           | 1363                      | 2468         | 2541         | 2373         |  |
|        | 4930          | 4510          | 4451           | 4132         | 4321         | 3596                         | 3802         | 3090           | 1665                      | 2115         | 4058         | 3962         |  |
|        | 12855         |               | 10746          | 10114        | 10405        | 8347                         | 9599         | 7174           | 4207                      | 5724         | 9609         | 10038        |  |
|        | 30928         | 54636         | 61,767         | 52,890       | 48,222       | 48,075                       | 48,378       | 40,152         |                           | 35,450       | 48,445       | 45,314       |  |
|        | 58 <b>Í</b> 1 | 4553          | 514.7          | 5289         | 4822         | 4808                         | -<br>4838    | 40 <u>1</u> 5  | 2942                      | 3545         | 4845         | 4531         |  |
|        |               |               |                | _26          |              | 28_                          | 29           | 30             | 31                        |              | . Total      | 4774         |  |
|        | 23<br>14.53   | 24<br>1817    | 25             |              | 27           |                              | <u></u>      | <u></u>        |                           |              | ,108         |              |  |
|        |               | •             |                |              |              |                              |              |                |                           |              | ,951         |              |  |
|        | 5353          |               |                |              |              |                              |              |                |                           |              | ,512         | •            |  |
|        |               |               |                |              |              |                              | hibit        |                |                           |              | ,577         |              |  |
|        |               |               |                |              |              | CC                           | se b         | ,1/9           |                           |              | ,290         |              |  |
|        |               |               |                | *            |              |                              |              |                | •                         | 120          | ,491         |              |  |
|        | 2814          | 1900          | 2789           |              | •            |                              |              |                |                           | 30           | ,443         |              |  |
|        | 7358          | 9816          |                |              |              | _                            |              | •              |                           | 284          | ,256         |              |  |
|        | 4601          | 4511          | 3653           |              | 4220         | 3827                         | 4340         | 4265           |                           | 170          | ,804         |              |  |
|        | 2208          | 3250          | 3228           | •            |              | 1488                         | 1500         | 2378           |                           | 114          | ,772         |              |  |
| •      | 3964          | 4707          | 4640           |              |              | 4171                         | 3942         | 2405           |                           |              | ,331         |              |  |
| :      | 2228          | 1793          | 1891           |              | 1607         | 1925                         | 1910         | 1599           | •                         |              | ,806         |              |  |
|        | 3779          | 3293          | 3449           |              | 2975         | 3390                         | 3516         | 2572           |                           |              | ,204         | _            |  |
|        | 8128          | 8105          | 8598           |              |              | 7953                         | 8203         | 5550           | -                         |              | ,218         | •            |  |
|        | 41886<br>4189 | 39192<br>4354 | 28,248<br>4035 | 4036         |              |                              |              | 18,769<br>3128 | 9 23 <b>,</b> 730<br>3955 | 1,8          | 77,763       |              |  |

CAULKINS OIL COMPANY Chacra Production Monthly

|                |               |                 |                       |                  | onthly        |                 |  |                       |              |                       |              |
|----------------|---------------|-----------------|-----------------------|------------------|---------------|-----------------|--|-----------------------|--------------|-----------------------|--------------|
|                |               | 1               | 2                     | 3                | 4             | 5               | 6                                      | 7                     | 8            | 9                     | . 10         |
| Sanchez        | 5             | 9617            | 8587                  | 5568             | 5216          | 5673            | 3254                                   | 4719                  | 3600         | 4370                  | 4156         |
| Breech F       | S 51          | 1120            | 785                   | 226              | 430           | 371             | 465                                    | 457                   | 566          | 396                   | 439          |
| Breech         | 217           | 14038           | 10172                 | 8828             | 7113          | 5698            | 5111                                   | 4629                  | 5061         | 4586                  | 3823         |
| Dunnah         |               | 173             | 2209                  | 3366             | 2751          |                 | 2879                                   | 3300                  | 2798         |                       |              |
| Breech         | 258           |                 | •                     |                  | ~ { ) L       | 3177            | 2019                                   | 3300                  | 2/70         | 2032                  | 2380         |
| Breech         | 307           | 7144            | 2697                  | 6370             | 1213          | 21.00           | 2060                                   | 1000                  | 2022         | 2022                  | (0)          |
| Breech         | 330           | 5820            | 6193                  | 4491             | 4341          | 3488            | 2869                                   | 1798                  | 2923         | 2832                  | 634          |
| Breech         | 332           | 56<br>200       | 640                   | 411              | 819           | 918             | 1721                                   | 465                   | 611          | 1255                  | 313          |
| Breech I       | -             | 376             | 3985                  | 2805             | 3079          | 2677            | 2316                                   | 2210                  | 1982         | 1853                  | 1661         |
| Breech         | 352           | 3899            | 2886                  | 2409             | 2807          | 2813            | 2353                                   | 2500                  | 1812         | 1723                  | 1614         |
| Breech         | 354<br>260    | 13376           | 9392                  | 8758             | 76 <i>5</i> 6 | 7158            | 6505                                   | 5817                  | 5881         | 6251                  | 5432         |
| Breech         | 368           | 3281            | 2646                  | 2326             | 2323<br>3189  | 1132            | 1308                                   | 1825                  | 2360         | 1355                  | 1215         |
| Breech         | 382<br>383    | 4271            | 5011                  | 4351<br>3641     | 2022          | 3089<br>2128    | 2261<br>2026                           | 2687                  | 3096         | 2258                  | 2477         |
| Breech I       |               | 5243<br>7824    | 35 <b>5</b> 4<br>4106 |                  | 3402          | 2866            | 2699                                   | 13 <i>5</i> 4<br>2520 | 2259         | 2044                  | 2381         |
| Breech I       |               | 9904            | 5046                  | 3 538<br>3803    | 2955          |                 |  |                       | 2475<br>1806 | 2214                  | 2053         |
| Breech I       |               |                 |                       |                  |               | 2357            | 2324<br>912                            | 1879                  | 832          | 2039                  | 1564         |
| Breech I       | E 581         | 3271            | 2135                  | 1994             | 14.57         | 1150            | . 912                                  | 817                   | ۰ مرد        | 734                   | •            |
|                |               | 89,413          | 69,734                | 62,885           | 49,560        | 44,695          | 39,003                                 | 36,077                | 38,062       | 35,942                | 30,142       |
|                |               | 5888            | 4358                  | 3930             | 3304          | 2980            | 2602 -                                 | 2465                  | 2537         | 2396                  | 2153         |
| Ave            | rage          | 7000            | 4530                  | 7770             | J)\4          | 2700            | 2002                                   | 2409                  | 2))(         | 2)70                  | 2175         |
|                |               |                 |                       |                  | •             |                 |  |                       |              |                       |              |
| 11             | 12            | 13              | 14                    | 15               | 16            | 17              | 18                                     | 19                    | 20           | 21                    | 22           |
|                |               |                 |                       |                  |               |                 | •                                      |                       |              |                       |              |
| 3570           | 3508          | 2583            | 34 <i>5</i> 4         | 2832             | 3054          | 3036            | 2390                                   | 3050                  | 2378         | 3014                  | 296 <b>9</b> |
| 493            | 186           | . 368           |                       |                  |               |                 | -                                      |                       |              |                       |              |
| 1381           | 4245          | 3778            | 3621                  | 3602             | 2848          | 3099            | 2998                                   | 3151                  | 3736         | 3182                  | 3208         |
| 1994           | 1950          | 1913            |                       |                  |               |                 |  |                       |              |                       |              |
|                |               |                 |                       |                  | •             |                 | -                                      |                       | •            |                       |              |
| 2012           |               |                 |                       |                  |               |                 |  |                       |              |                       |              |
|                |               |                 |                       | •                |               |                 | •                                      |                       |              |                       |              |
| 1243           |               |                 |                       |                  |               |                 |  |                       |              |                       |              |
| 1670           | 1572          | 1173            | 1570                  | 1514             | 1574          | 1323            | 1193                                   | 1221                  | 1189         | 1195                  | 1336         |
| 692            | 358           | 636             | 1398                  | 1665             | 1034          | 1356            | 1505                                   | 1582                  | 977          | 1244                  | 1509         |
| 4972           | 4379          | 3542            | 4619                  | 4214             | 3883          | 4322            | 3275                                   | 3359                  | 1638         | 3377                  | 4663         |
| 930            | 1267          | 1654            | 1600                  | 884              | 663           | 759             | 843                                    | 188                   | 864          | 777                   | 1051         |
| 2195           | 2528          | 2472            | 2500                  | 1893             | 2074          | 1776            | 574                                    |                       | 423          | 1971                  | 1978         |
| 2294           | 2127          | 2249            | 2268                  | 2331             | 2022          | 2128            | 2026                                   | 1354                  | 2259         | 2044                  | 2021         |
| 2035           | 1829          | 1878            | 2190                  | 2069             | 1928          | 1863            | 1721                                   | 921                   | 1938         | 1838                  | 1660         |
| 1417           | 1772          | 1652            | 1577                  | 1806             | 1321          | 1495            | 1296                                   | 532                   | 1078         | 1811                  | 1340         |
| •              |               |                 | •                     |                  |               |                 |  | •                     |              |                       |              |
| 26898 2        | E 7727        | 23,898          | 24,797                | 22,810           | 20,401        | 21,157          | 17,821                                 | 15,358                | 16,470       | 20,453                | 21,735       |
| 20090 2        | 24121         | 25,070          | 24,171                | 22,010           | 20,401        | 2191)/          | 17,021                                 | 17,750                | 10,470       | 201477                | 219177       |
| 1921           | 2143          | 1991            | 2480                  | 2281             | 2040          | 2116            | 1782                                   | 1539                  | 1647         | 2043                  | 2174         |
| 1741           | ربسم          | ±//±            | 2400                  | ~~~1             | 2040          | ~110            | Tior                                   | ±227                  | TOTA I       | ربي                   | ~            |
| 23             | 24            | 25              | 26                    | 27               | 28            | 29              | 30                                     | 31                    |              | Cum. Tot              | al           |
|                |               |                 |                       |                  | <del></del>   | <del></del>     | ······································ |                       |              |                       |              |
| 2097           | 2804          |                 |                       |                  |               |                 |  | •                     |              | 95 <b>,</b> 4<br>7630 |              |
| 2910           |               |                 |                       |                  |               |                 |  |                       |              | 110,8                 |              |
| 2710           |               |                 |                       |                  |               |                 |  |                       |              | 30,9                  |              |
| •              |               |                 |                       | •                |               |                 | -                                      |                       |              | 16,2                  | 211          |
|                |               |                 |                       |                  |               | •               |  |                       | •            | 37,4                  |              |
|                |               |                 |                       |                  |               |                 |  | . •                   |              | 8,4                   |              |
| 1213           | 1190          | 1233            |                       |                  |               |                 |  | •                     |              | 43,1                  |              |
| 532            | 1932          |                 |                       |                  |               | • •             |  |                       |              | 41,2                  |              |
| 4087           | 4174          | 3775            | 4312                  | 3793             | 3699          | 4185            | 3596                                   | 3122                  |              | 160,8                 |              |
| 917            | 935           | 1331            | 874                   | 690              | 1071          | 840             | 1781                                   | 1054                  |              | 50,7                  |              |
| 1323           | 1697          | 2045            | 2197                  | 1463             | 1802          | 1980            | 946                                    | 2089                  |              | 67,6                  |              |
| 1911           | 1735          | 1881            | 1889.                 | 1816             | 1829          | 1765            | 1530                                   | 1616                  |              | 67,7                  | 47           |
| 1544           | 1367          | 1472            | 1400                  | 1575             | 1529          | 1475            | 1380                                   | 1403                  | -            | 72,6                  | 512          |
| 1117           | 982           | 1059            | 1020                  | 1059             | 1162          | 1112            | 1051                                   | 1035                  |              | 60,4                  |              |
| «              | ,             |                 |                       |                  |               |                 |  |                       | ••           | 13,3                  |              |
|                |               |                 | /                     |                  |               |                 |  |                       |              | -                     |              |
| 77 LET         | 76 OT         | ፈ ገን <i>ካ</i> ባ | ዜ 11 ኡቦ               | 7 10 204         |               | 4 !!            | פטיחריים:                              | /.   II               |              |                       |              |
| 17,651         | 16,81         | 6 12,79         | 6 11,692              | 2 10,396         | 11,09         | 3 11,35         | 7 10,28                                | 4 10,319              |              | 07314                 | .03 MCF      |
| 17,651<br>1765 | 16,81<br>1868 | 6 12,79<br>1828 | 6 11,692<br>1949      | 2 10,396<br>1732 | 1849          | 3 11,35<br>1893 | 7 10,28<br>1714                        | 4 10,319<br>1720      |              | 07314                 | O) MCF       |

Exhibit 11 Case 6117

Caulkins Oil Company
Mesa Verde Production
Yearly

|          |          | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       |
|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|
| Breech A | 229      | 4584    | 22,328  | 7368    | 7582    | 6156    | 6827    | 10,675  | 15,772  |
| Breech   | 224      | 49,150  | 64,495  | 50,988  | 42,456  | 60,477  | 45,833  | 76,686  | 79,289  |
| Breech   | . 307    | 9,078   | 8,199   | 9,093   | 6,164   | 8,802   | 15,621  | 19,040  | 12,790  |
| Breech F | 4        | 11,557  | 20,231  | 10,055  | 9,573   | 20,240  | 11,788  | 9,229   | 6,119   |
| Breech F | 8        | 31,413  | 38,723  | 41,712  | 36,955  | 37,145  | 25,259  | 29,765  | 27,713  |
| Breech F | 12       | 43,597  | 197,968 | 138,223 | 93,534  | 38,089  | 67,057  | 80,812  | 67,125  |
| Breech F | 45       | 26,448  | 50,736  | 62,903  | 58,159  | 27,259  | 27,805  | 56,363  | 61,908  |
| Breech E | 58       | 67,478  | 84,431  | 30,711  | 65,966  | 65,796  | 45,291  | 66,919  | 53,514  |
| State A  | 62       | 24,664  | 64,071  | 70,256  | 42,386  | 64,691  | 47,043  | 40,733  | 24,001  |
| Breech E | 64       | 28,025  | 52,282  | 67,442  | 50,238  | 26,541  | 17,396  | 10,153  | 27,748  |
| Breech I | 341      | 32,239  | 30,324  | 18,749  | 12,729  | 21,901  | 25,922  | 28,646  | 20,523  |
|          |          | 328,232 | 633,788 | 507,500 | 425,742 | 377,097 | 335,842 | 429,021 | 396,502 |
| Yearly / | lvg. Per | . • *   | 57,610  | 46,140  | 38,700  | 34,280  | 30,530  | 39,000  | 36,050  |
| 9        | 10       | 11      | 12      | 13      | 14      | 15      | 16      | 17      | 18      |
| 16,365   | 22,361   | 17,938  | 15,470  |         |         |         |         |         |         |
| 80,033   | 84,438   | 87,732  | 91,987  | 89,778  | 85,465  | 83,893  | 62,637  | 68,367  |         |
| 8,612    | 4,055    |         |         |         |         |         |         |         |         |
| 6.032    | 5,196    | 3,690   | 5,552   | 6,659   | 8,379   | 9,424   | 11,780  | 7,853   | 9,470   |
| 22,573   | 23,160   | 14,542  | 21,051  | 22,501  | 22,074  | 23,695  | 21,103  | 23,563  | 23,827  |
| 58,398   | 39,505   | 40,510  | 16,353  | 15,633  | 27,451  | 92,437  | 85,622  | 98,781  | 79,917  |
| 58,242   | 59,724   | 49,291  | 45,650  |         |         |         |         |         |         |
| 47,342   | 23,108   | 32,633  | 60,678  | 70,990  | 65,409  | 69,404  | 52,906  | 46,305  |         |
| 26,159   | 49,532   | 50,932  | 46,352  | 49,452  | 44,094  | 36,796  |         |         |         |
| 51,658   | 45,287   | 47,541  | 35,374  | 26,053  |         | ٠       | •       |         |         |
| 25,261   | 24,561   | 24,396  | •       |         |         |         |         |         |         |
| 400,670  | 380,917  | 369,205 | 338,717 | 281,166 | 252,872 | 315,649 | 234,048 | 244,869 | 113,214 |
| 36,420   | 34,630   | 36,920  | 37,640  | 40,160  | 42,150  | 52,110  | 46,810  | 48,975  | 37,738  |

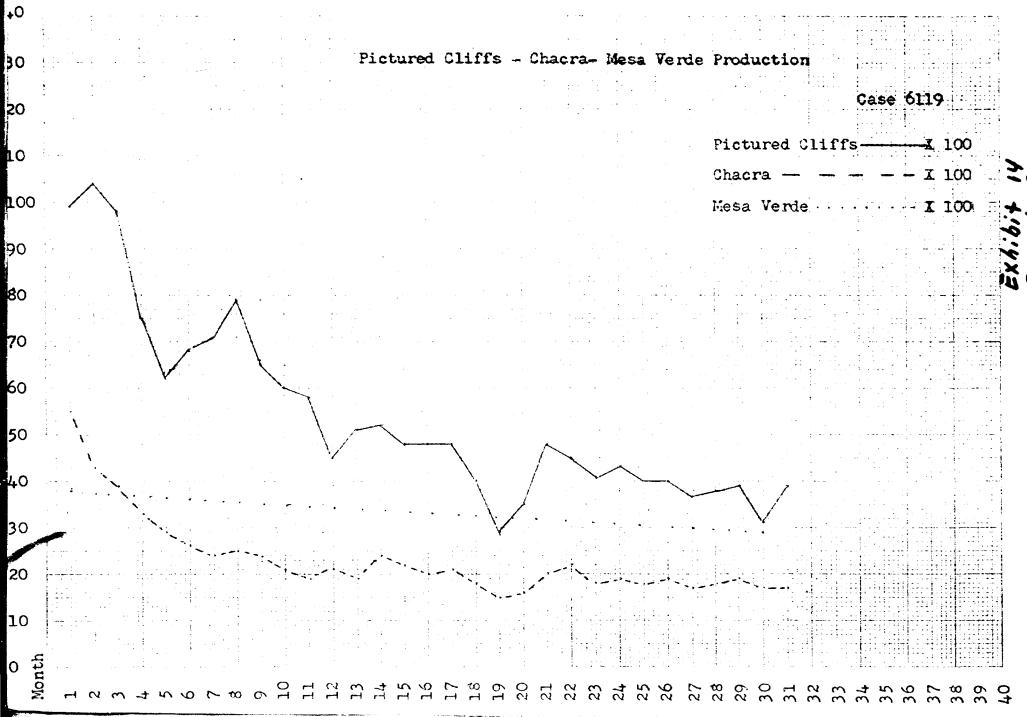
Case 6119 Exhibit 12

AVERAGE PRODUCTION TABULATIONS
Monthly

|                 | Mo     | onthly     |       | Cas | se No. | 6119 |
|-----------------|--------|------------|-------|-----|--------|------|
|                 |        |            |       | Br  | eakdow | n    |
| Pictured Cliffs | Chacra | Mesa Verde | Total | PC  | Ch     | MV   |
| 9909            | 5588   | 3845       | 19642 | 50  | 30     | 20   |
| 10464           | 4358   | 3845       | 18667 | 56  | 23     | 21   |
| 9832            | 3930   | 3845       | 17607 | 56  | 23     | 22   |
| 7557            | 3304   | 3845       | 14706 | 51  | 22     | 27   |
| 6273            | 2980   | 3845       | 13098 | 48  | 23     | - 29 |
| 6829            | 2602   | 3845       | 13276 | 51  | 20     | 29   |
| 7164            | 2465   | 3845       | 13474 | 53  | 18     | 29   |
| 6973            | 2537   | 3845       | 13355 | 52  | 19     | 29   |
| 6576            | 2396   | 3845       | 12817 | 51  | 19     | 30   |
| 6044            | 2153   | 3845       | 12042 | 50  | 18     | 32   |
| 5811            | 1921   | 3845       | 11577 | 50  | 17     | 33   |
| 4553            | 2143   | 3845       | 10541 | 43  | 20     | 37   |
| 5147            | 1991   | 3225       | 10363 | 50  | 19     | 31   |
| 5289            | 2480   | 3225       | 10994 | 48  | 23     | 29   |
| 4822            | 2281   | 3225       | 10328 | 47  | 22     | 31   |
| 4808            | 2040   | 3225       | 10073 | 48  | 20     | 32   |
| 4838            | 2116   | 3225       | 10179 | 47  | 21     | 32   |
| 4015            | 1782   | 3225       | 9022  | 45  | 20     | 35   |
| 2942            | 1539   | 3225       | 7706  | 38  | 20     | 42   |
| 3545            | 1647   | 3225       | 8417  | 42  | 20     | 38   |
| 4845            | 2043   | 3225       | 10113 | 48  | 20     | 32   |
| 4531            | 2174   | 3225       | 9930  | 46  | 22     | 32   |
| 4189            | 1765   | 3225       | 9179  | 46  | 7.0    | 35   |
| 4354            | 1868   | 3225       | 9447  | 46  | 20     | 34   |
| 4035            | 1828   | 2857       | 8720  | 46  | 21     | 33   |
| 4036            | 1949   | 2857       | 8842  | 46  | 22     | 32   |
| 3706            | 1732   | 2857       | 8295  | 45  | 21     | 34   |
| 3792            | 1849   | 2857       | 8498  | 45  | 22     | 33   |
| 3901            | 1893   | 2857       | 8651  | 45  | 22     | 33   |
| 3128            | 1714   | 2857       | 7699  | 41  | 22     | 37   |
| 3955            | 1720   | 2857       | 8532  | 46  | 20     | 34   |
|                 |        |            | Avg.  | 48  | 21     | 31   |

Recommend production split all oil and 31% of gas to Mesa Verde Zone, 21% of gas to Chacra zone and 48% of gas to Pictured Cliffs zone.

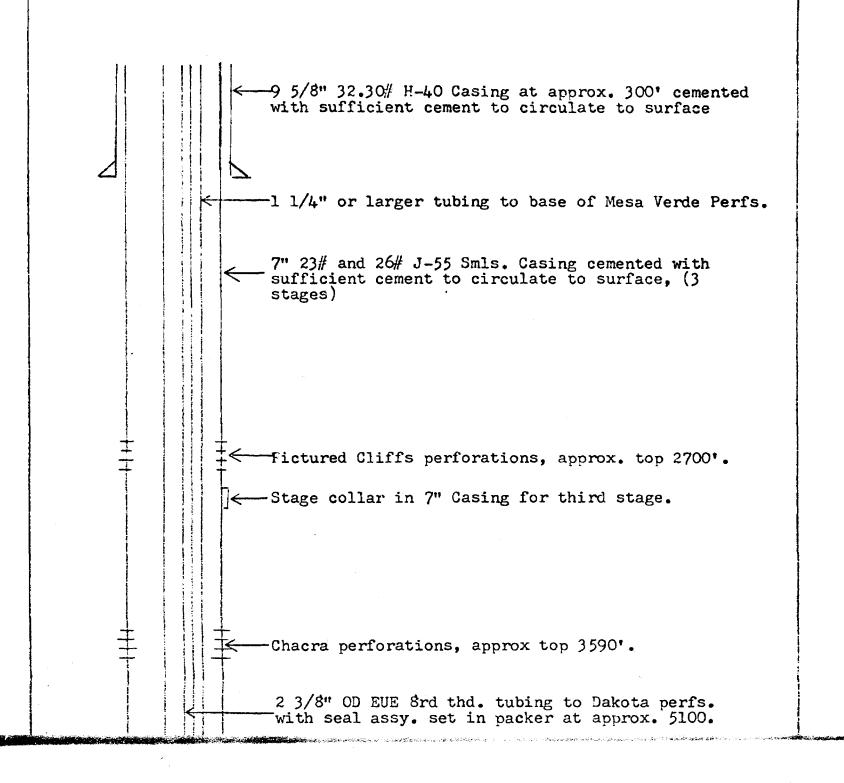
Case 6119 Exhibit 13



Well: Breech 368
SE ½ Sec. 23 26N 7W

| DATE                | PC PRODUCTION | CHACRA PRODUCTION | TOTAL      |
|---------------------|---------------|-------------------|------------|
| May 1977            | 3,292         | 874               | 4,166      |
| June 1977           | 2,908         | 690               | 3,598      |
| July 1977           | 1,488         | 1,071             | 2,559      |
| Cumulative Producti | on            |                   | 10,323 MCF |
|                     |               |                   |            |
| Commingled          | 7-26-1977     |                   |            |
| August 1977         | Commingled    |                   | 3,231      |
| Sept. 1977          | Commingled    |                   | 1,781      |
| Oct. 1977           | Commingled    |                   | 4,051      |
| Cumulative Producti | on            |                   | 9,063 MCF  |
| November 1977       | Commingled    |                   | 5,538 MCF  |

Exhibit 644 Case 6115



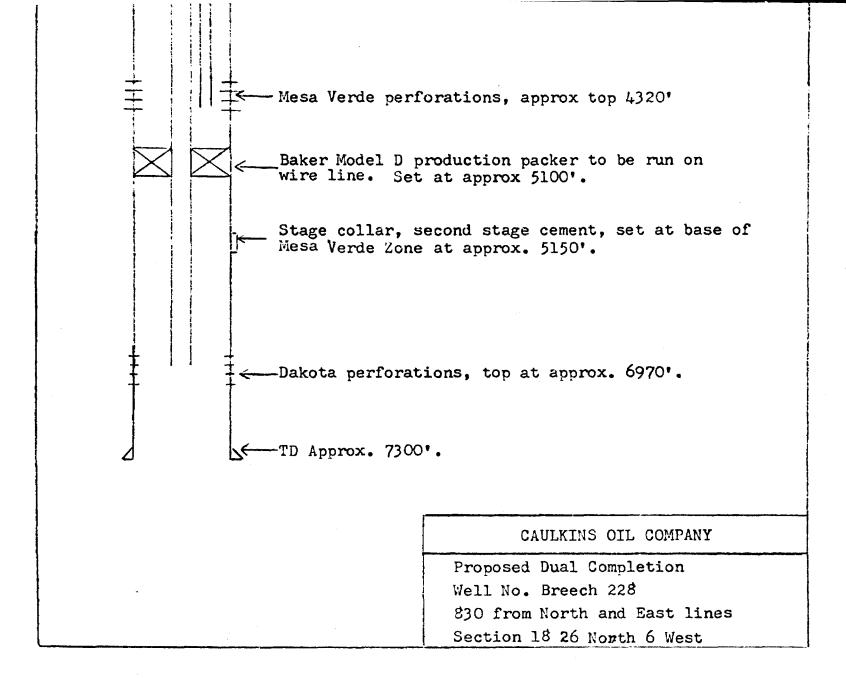


Exhibit 16 case 6119

### **GAS** COMPANY OF NEW MEXICO

November 23, 1977

Mr. Charles E. Verquer Superintendent Caulkins Oil Company P.O. Box 780 Farmington, New Mexico 87401

Dear Mr. Verquer:

This letter is to advise you that we plan to lay a pipeline to the Breech #228 well location in Section 18, 26N, 6W, Rio Arriba County, New Mexico, prior to February 1, 1978.

Sincerely,

Bure Rectaning Int Bruno Giovanini Field Superintendent

BG/nt

cc: J. V. King, Farmington Bob Corliss, Dallas Howard Miller, Kutz Alvin Dean, Kutz

> Exhibit 1> case 6/19

CASE 6119: (Continued from January 4, 1978, Examiner Hearing)

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 commingle Pictured Cliffs, Chacra and Mesaverde production in the wellbore of its Breech Well No. 228, to be located in Unit A of Section 18, Township 26 North, Range 6 West, Rio Arriba County, New Mexico, and to dually complete the commingled formations and the Dakota formation in said well.

CASE 6120: (Continued from January 4, 1978, Examiner Hearing)

Application of Caulkins Cil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Chacra and Mesaverde production in the wellbores of its Breech E Wells Nos. 109 in Unit M of Section 3 and 104 in Unit F of Section 5 and its Breech A Wells Nos. 627 in Unit B of Section 8, 677 and 679 in Units L and J, respectively, of Section 9, and 207 in Unit A of Section 10, all in Township 26 North, Range 6 West, Rio Arriba County, New Mexico.

CASE 6121: (Continued from January 4, 1978, 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 Pictured Cliffs and Chacra production in Sections 3, 4, 5, 7 thru 11, 13 thru 18, 21, 22, 24, and 25 in Township 26 North, Range 6 West, and Sections 13, 14, 23, and 24, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

CASE 6122: (Continued from January 4, 1978, 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 Mesaverde and Dakota production in the wellbores of its Breech E Wells Nos. 64 and 58 located in Unit A of Section 1 and Section 3, its State A Well No. 62 in Unit A of Section 2, and its Breech D Well No. 341 located in Unit B of Section 21, all in Township 26 North, Range 6 West; and its Breech F Wells Nos. 4 and 45 located in Unit A of Section 33, Unit M of Section 35, both in Township 27 North, Range 6 West, Rio Arriba County, New Mexico.

CASE 6096: Continued from January 4, 1978, Examiner Hearing

Application of Texas Oil & Gas Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the S/2 of Section 14, Township 21 South, Range 34 East, Lea County, New Mexico, to be dedicated to applicant's South Wilson State Weil No. 1 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 app?icant as operator of the well and a charge for risk involved in drilling said well.

CASE 6135: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the extension of the Wagon Mound Dakota-Morrison Gas Pool in Township 21 North, Range 21 East, Mora County, New Mexico.

CASE 6136: In the matter of the application of the Oil Conservation Commission of New Mexico upon its own motion for an order for the creation and extension of certain pools in Lea, Chaves, and Roosevelt Counties, New Mexico.

> (a) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for San Andres production and designated as the Caprock-San Andres Pool. The discovery well is the Elk Oil Company State D.J. Well No. 1 located in Unit H of Section 2, Township 12 South, Range 32 East, NMPM. Said pool would comprise:

> > TOWNSHIP 12 SOUTH, RANGE 32 EAST, NMPM Section 2: NE/4

(b) CREATE a new pool in Lea County, New Mexico, classified as an oil pool for Yates production and designated as the West Scarborough-Yates Pool. The discovery well is the Gifford, Mitchell and Wisenbaker Horse Back Well No. 2 located in Unit G of Section 33, Township 26 South, Range 36 East, NMPM. Said pool would comprise:

> TOWNSHIP 26 SOUTH, RANGE 36 EAST, NAPM Section 33: NE/4

JASON W- KELLAMIN ROSERT E. FOX W, THOMAS KELLAMIM

# KELLAHIN and FOX ATTORNEYS AT LAW 500 DON GASPAR AVERUE P. O. BOX 1769 SANTA FE, NEW MEXICO 87501

2 7 1977 EPHONE DOG - 4511

December 21, 1977

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

Re: Caulkins Oil Company

Dear Joe:

Please continue the four Caulkins cases on your January 4, 1978 docket to the hearing on January 18th.

Very truly yours,

W. Thomas Kellahin

CC: Mr. Charles Verquer

WTK:kfm

6130

Dockets Nos. 2-78 and 3-78 are tentatively set for hearing on January 18 and February 8, 1978. Applications for hearing must be filed at least 22 days in advance of hearing date.

#### DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 4, 1978

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

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

- CASE 6113: Application of Transocean Oil, Inc., for a unit agreement, Catron County, New Mexico. Applicant, in the above-styled cause, seeks approval for its Cibola Unit Area comprising 30,733 acres, more or less. of Federal, State, and fee lands in Townships 1 and 2 North, Ranges 14 and 15 West, Catron County. New Mexico.
- CASE 6114: Application of Texas Oil and Gas Company for special pool rules or a spacing exception, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Shugart-Pennsylvanian Gas Pool, Eddy County, New Mexico, to provide for 320-acre spacing rather than 160 acres. In the absence of objection, this pool will be placed on the standard 320-acre spacing for Wolfcamp and Pennsylvanian gas pools rather than the present 160-acre spacing. In the alternative applicant seeks the assignment of a 320-acre gas spacing and proration unit consisting of the E/2 of Section 33, Township 18 South, Range 31 East, Eddy County, New Mexico, to a well to be drilled to the Pennsylvanian formation at a standard location thereon.
- CASE 6096: (Continued from November 30, 1977, Examiner Hearing)

Application of Texas Oil & Gas Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the S/2 of Section 14, Township 21 South, Range 34 East, Lea County, New Mexico, to be dedicated to applicant's South Wilson State Well No. 1 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 6115: Application of Merrion and Bayless for downhole commingling, Sandoval County, New Mexico. Applicants, in the above-styled cause, seek approval for the downhole commingling of Pictured Cliffs and Chacra production in their Jicarilla 428 Wells Nos. 3, 4, and 5, located respectively, in Unit M of Section 29 and Unit D of Section 32 and Section 31, Township 23 North, Range 4 West. Applicant further seeks blanket approval for downhole commingling of said formations in Sections 29 thru 32, Township 23 North, Range 4 West, and Sections 22 thru 26 and 35 and 36, Township 23 North, Range 5 West, all in Sandoval County, New Mexico.
- Application of Merrion and Bayless for salt water disposal, San Juan County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the Mesaverde formation thru the perforated interval from 3374 feet to 3395 feet in applicants' Hudson Well No. 1, located in Unit D of Section 26, Township 30 North, Range 12 West, San Juan County, New Mexico.
- CASE 6117: Application of Amoco Production Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for its South Culebra Bluff Unit Area comprising 1280 acres, more or less, of Federal and fee lands in Township 23 South, Range 28 East, Eddy County, New Mexico.
- CASE 6118: Application of Inexco 0il Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for its Long Box Unit Area comprising 3,808 acres, more or less, of Federal and State lands in Townships 20 and 20 1/2 South, Ranges 23 and 24 East, Eddy County, New Mexico.
- CASE 6119: 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 commingle Pictured Cliffs, Chacra and Mesaverde production in the wellbore of its Breech Well No. 228, to be located in Unit A of Section 18, Township 26 North, Range 6 West, Rio Arriba County, New Mexico, and to dually complete the commingled formations and the Dakota formation in said well.
  - Application of Caulkins 011 Company for downhole commingling, Rio Arriba County, New Mexico.

    Applicant, in the above-styled cause, seeks approval for the downhole commingling of Chacra and

    Mesaverde production in the wellbores of its Breech E Wells Nos. 109 in Unit M of Section 3 and

    104 in Unit P of Section 5 and its Breech A Wells Nos. 627 in Unit B of Section 8. 677 and 679

    in Units L and J, respectively, of Section 9, and 207 in Unit A of Section 10, all in Township

    26 North, Range 6 West, Rio Arriba County, New Mexico.
  - CASE 6121: 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 Pictured

Jason W- Kellamin Rosert E. Pox W. Thomas Kellamin

# KELLAHIN and FOX ATTORNEYS AT LAW 900 DOM SASPAR AVENUE P. O. BOX 1769 SANTA FE, NEW MEXICO 87501

TELEPHONE 948-43

November 30, 1977

2-1 1977

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

Dear Mr. Ramey:

Enclosed are four applications filed on behalf of Caulkins Oil Company, three for commingling of production, and one for a dual completion and commingling, all in Rio Arriba County, New Mexico.

It is requested that these applications be set for hearing at the first examiner hearing in January, 1978.

Yours very truly,

Jason W. Kellahin

CC: Mr. Charles Verquer Mr. Arnold Raether

JWK:kfm

**Enclosure** 

#### BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR AN ORDER PERMITTING DUAL COMPLETION AND COMMINGLING IN THE WELL BORE, RIO ARRIBA COUNTY, NEW MEXICO

#### APPLICATION

Comes now Caulkins Oil Company and applies to the Oil Conservation Commission of New Mexico for an order permitting the dual completion and down-hole commingling of its Breech Well No. 228, to be located in Unit A, Section 18, Township 26 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico, and in support thereof would show the Commission:

Applicant proposes to drill its Breech Well No. 228 at a point 830 feet from the North line, and 830 feet from the East line of Section 18, in the above section, township and range.

Applicant proposes to drill the well to the Dakota formation, and to complete the well for production from the Pictured Cliffs, Chacra and the Mesaverde formations. The well is proposed to be dually completed to permit production from the Dakota as one zone, and the commingled production from the Pictured Cliffs, Chacra and the Mesaverde as the other zone.

Pressures in the area are such that there will be no reservoir damage as a result of the proposed completion. Only marginal production is available as to some of the zones, and the completion will permit production of oil and gas that would not otherwise be recovered, will prevent waste, and

correlative rights of all interest owners will be fully protected.

WHEREFORE Applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order authorizing commingling of production as requested.

> Respectfully submitted, CAULKINS OIL COMPANY

Kellahin & Fox
P. O. Box 1769
Santa Fe, New Mexico 87501

Attorneys for Applicant

#### BEFORE THE

#### OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR AN ORDER PERMITTING BUAL COMPLETION AND COMMINGLING IN THE WELL BORE, RIO ARRIBA COUNTY, NEW MEXICO

#### APPLICATION

Comes now Caulkins Oil Company and applies to the Oil Conservation Commission of New Mexico for an order permitting the dual completion and down-hole commingling of its Breech Well No. 228, to be located in Unit A, Section 18, Township 26 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico, and in support thereof would show the Commission:

Applicant proposes to drill its Breech Well No. 228 at a point 830 feet from the North line, and 830 feet from the East line of Section 18, in the above section, township and range.

Applicant proposes to drill the well to the Dakota formation, and to complete the well for production from the Pictured Cliffs, Chacra and the Mesaverde formations. The well is proposed to be dually completed to permit production from the Dakota as one zone, and the commingled production from the Pictured Cliffs, Chacra and the Mesaverde as the other zone.

Pressures in the area are such that there will be no reservoir damage as a result of the proposed completion. Only marginal production is available as to some of the zones, and the completion will permit production of oil and gas that would not otherwise be recovered, will prevent waste, and

correlative rights of all interest owners will be fully protected.

WHEREFORE Applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order authorizing commingling of production as requested.

Respectfully submitted,
CAULKINS OIL COMPANY

By Jason Kellah

P. 0. Box 1769 Santa Fe, New Mexico 87501

Attorneys for Applicant

#### BEFORE THE

#### OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF CAULKINS OIL COMPANY FOR AN ORDER PERMITTING DUAL COMPLETION AND COMMINGLING IN THE WELL BORE, RIO ARRIBA COUNTY, NEW MEXICO

#### APPLICATION

Comes now Caulkins Oil Company and applies to the Oil Conservation Commission of New Mexico for an order permitting the dual completion and down-hole commingling of its Breech Well No. 228, to be located in Unit A, Section 18, Township 26 North, Range 6 West, N.M.P.M., Rio Arriba County, New Mexico, and in support thereof would show the Commission:

Applicant proposes to drill its Breech Well No. 228 at a point 830 feet from the North line, and 830 feet from the East line of Section 18, in the above section, township and range.

Applicant proposes to drill the well to the Dakota formation, and to complete the well for production from the Pictured Cliffs, Chacra and the Mesaverde formations. The well is proposed to be dually completed to permit production from the Dakota as one zone, and the commingled production from the Pictured Cliffs, Chacra and the Mesaverde as the other zone.

Pressures in the area are such that there will be no reservoir damage as a result of the proposed completion. Only marginal production is available as to some of the zones, and the completion will permit production of oil and gas that would not otherwise be recovered, will prevent waste, and

correlative rights of all interest owners will be fully protected.

WHEREFORE Applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order authorizing commingling of production as requested.

> Respectfully submitted, CAULKINS OIL COMPANY

Rellahin & Fox
P. O. Box 1769
Santa Fe, New Mexico 87501

Attorneys for Applicant

n

## BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

JAK

2)

CASE NO. 6119

Order No. R- 5634

APPLICATION OF <u>CAULKINS OIL COMPANY FOR A DUAL COMPLETION</u>

AND DOWNHOLE COMMINGLING, RIO ARRIBA

COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

P

| BY | THE | COMMISSI | : NC |
|----|-----|----------|------|
|    |     |          |      |

| This cause came or                  | n for hearin | g at 9 a.m.  | on January  | 18           |
|-------------------------------------|--------------|--------------|-------------|--------------|
| 19, at Santa Fe, No                 | ew Mexico, b | efore Examin | ner Richard | L. Stamets - |
| NOW, on this a quorum being present | day of _ja   | nuary , 1    | 9 78 , the  | Commission   |
| and the recommendation              |              |              |             |              |
|                                     | s of the rxa | miner, and i | being rully | advised      |
| in the premises,                    |              |              |             | !            |

#### FINDS:

|       | (1)   | That    | due   | publi | c notice | hav  | ing | been | given | as  | requi | ired | by   |
|-------|-------|---------|-------|-------|----------|------|-----|------|-------|-----|-------|------|------|
| law,  | the   | Commis  | ssior | has   | jurisdic | tion | of  | this | cause | and | the   | sub  | ject |
| matte | er tl | hereof. | •     |       |          | •    |     |      |       |     |       |      |      |

|         | a de la constanta de la consta |               |
|---------|--|---------------|
| !!      | (2) That the applicant, Caulkins Oil Company   | , is the      |
| <br>  0 | wner and operator of the Breech Well No. 228   | to be located |
| i       | n Unit A of Section 18 , Township 26 Nor   | th , Range    |
| -       | 6 West , NMPM, Rio Arriba County, New Mex  | cico.         |
|         | (3) That the applicant seeks authority to com  | mingle        |
| 11      | Pictured CLiffs, Chacra and Mesaverde  | production    |

within the wellbore of the above-described well.and to dually complete

(4) That from the <u>Pictured Cliffs Chairs and Mesouries</u> zone, the subject well is/capable of low marginal production only.

subject well is capable of low marginal production only.

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

- 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.
- That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the <u>Aztec</u> district office of the Commission any time the subject well is shut-in for 7 consecutive days.
- That in order to allocate the commingled production

  to each of the commingled zones in the subject well, 50

  percent of the commingled 20 production should be allocated

  to the 20 percent of the

  commingled 20 percent of the

  commingled 20 production to the Measured come, and 30 percent

  percent of the commingled 0 production to the Picture Cliff's zone

  (2) That the applicant 20 production to the Picture Cliff's zone

  Nell No. 228, located in Unit of Section Township

and Mesouded zones and jus from the

Dy kota zone though parallel strings
of tubing with Separation of the No Kota

(10) That the mechanics of the proposed due completion

are feasible and in accord with good conservation practices.

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

| hereby authorized to commingle Pictured Cliffs Chacra and  |              |
|--|--------------|
|  | đ            |
| Mesaverde production within the wellb  | ore          |
| of the Breech Well No. 228 , located in Unit   | A            |
| of Section 18 , Township 26 North , Range 6  |              |
| West , NMPM, Rio Arriba County, New Mexico, and to di  |              |
| (2) That 50 percent of the commingled  | . 11         |
| production shall be allocated to thexthax Pictured Cliffs  |              |
| zone and 20 percent of the commingle   | d            |
| production shall be allocated to the Chacra  zone, and 30 percent percent commingled   |              |
| zone, and 30 percent experience commingled or/ production shall  | 11 ь         |
| allocated to the Mesaverde zone.  (3) That the operator of the subject well shall immedia  |              |
| notify the Commission's Aztec district office any time th  |              |
| has been shut-in for 7 consecutive days and shall concurrently   |              |
| present, to the Commission, a plan for remedial action.  |              |
|  | <b>ce</b> ni |
| The jurisdiction of this pause is retained for the of the retther orders as the Commission may deem necessary.   |              |
| one a Canta Fe, New Mexico, on the day and year herein   | abor         |
| TT IS FURTHER ORDERED.   |              |
|  |              |
|  |              |
| (1) That the applicant   |              |
| hereby authorized to complete its 50, id Breech 1  |              |
| 11 No. 228, located in Unit of Section, Township   | -            |
| South Range West NMPM, County, Nor   | <b></b>      |
| (conventional)   |              |
| completion (combination) to produce gas (tubingless)   |              |
| om the comminghed Fittend Cliffs, Chacre and Mesoverde zones through   | عـ           |
| of 1/4- inch or larger Tubing and gos from the Da Kota some Through  |              |
| tring of 2 % -inch tubing set in a packer located  |              |
| - Dogg on approximents to depth of 5/00 feet.  |              |
|  |              |
| PROVIDED HOWEVER, that the applicant shall complete, operate,  |              |
| produce said well in accordance with the provisions of Rule  |              |
| 2-A of the Commission Rules and Regulations insofar as said rule   |              |
|  | !            |
| not inconsistent with this order;  | !            |
| not inconsistent with this order;  PROVIDED FURTHER, that the applicant shall take packer-leakage  |              |
| PROVIDED FURTHER, that the applicant shall take packer-leakag  |              |
| PROVIDED FURTHER, that the applicant shall take packer-leakages upon completion and annually thereafter during the manual scale and the Basin De Kova  Pool  | e            |
| PROVIDED FURTHER, that the applicant shall take packer-leakages upon completion and annually thereafter during the manages of the state | e            |
| PROVIDED FURTHER, that the applicant shall take packer-leakages upon completion and annually thereafter during the manual state of the Basin Da lave and pool iverability  That jurisdiction of this cause is retained for the   | e            |
| PROVIDED FURTHER, that the applicant shall take packer-leakagests upon completion and annually thereafter during the Annual conference of the state  | e<br>•       |