

CASE 7314: ELLIOTT OIL COMPANY FOR DOWN-
HOLE COMMINGLING, RIO ARriba COUNTY, NEW
MEXICO

Case No.

7314

Application

Transcripts

Small Exhibits

ETC

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

EXAMINER HEARING

IN THE MATTER OF:

Application of Elliott Oil Company
for downhole commingling, Rio
Arriba County, New Mexico.

CASE
7314

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation
Division:

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

For the Applicant:

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

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I N D E X

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FRANK O. ELLIOTT

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Direct Examination by Mr. Kellahin

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Cross Examination by Mr. Chavez

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Cross Examination by Mr. Stamets

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E X H I B I T S

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Applicant Exhibit One, Plat

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Applicant Exhibit Two, Schematic

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Applicant Exhibit Three, Document

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Applicant Exhibit Four, Letter

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MR. STAMETS: Call next Case 7314.

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MR. PADILLA: Application of Elliott Oil

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Company for downhole commingling, Rio Arriba County, New

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Mexico.

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MR. KELLAHIN: I'm Tom Kellahin of

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Kellahin and Kellahin, Santa Fe, New Mexico, appearing on

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behalf of the applicant, and I have one witness.

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(Witness sworn.)

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FRANK O. ELLIOTT

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being called as a witness and being duly sworn upon his oath,

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testified as follows, to-wit:

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DIRECT EXAMINATION

17

BY MR. KELLAHIN:

18

Q

Mr. Elliott, would you please state your

19

name and occupation?

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A.

Frank O. Elliott, an independent oil

21

operator out of Roswell.

22

Q

Mr. Elliott, you're the Elliott of

23

Elliott Oil Company?

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A.

That's correct.

25

Q

And that is your business, sir?

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A. That's correct.

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Q. How long have you been in the oil and gas business, Mr. Elliott?

5

A. 33 years.

6

7

Q. And do you operate oil and gas wells in the San Juan Basin in Rio Arriba County, New Mexico?

8

A. Yes, sir.

9

10

Q. Do you operate oil and gas wells anywhere else?

11

A. Throughout the Rockies, yes.

12

13

Q. What are you seeking to accomplish by this application, Mr. Elliott?

14

15

A. We're seeking permission to commingle the Mesaverde along with the Dakota-Gallup formations.

16

17

Q. Have you drilled other Gallup, Dakota, and Mesaverde wells in the San Juan Basin?

18

A. Not in this area, no, sir.

19

Q. Is this your first well?

20

A. First well in this area.

21

22

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

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A. No, sir, I have not.

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MR. KELLAHIN: Based upon Mr. Elliott's practical experience in the oil and gas industry in the San

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2 Juan Basin, we would tender him as an expert witness.

3 MR. STAMETS: The Division recognizes
4 the expertise of operators and the witness is qualified.

5 Q. Let's take a moment, Mr. Elliott, and
6 direct your attention to Exhibit Number One and have you
7 orient us. First of all, would you identify for us the section
8 and location for your proposed well which you want to downhole
9 commingle?

10 A. All right, sir. The proposed well is
11 located in a northwest quarter of Section 21 and is outlined
12 on the exhibit in red pencil.

13 Q. And this well has been drilled, has it
14 not?

15 A. That's correct. This well is a dually
16 completed well.

17 Q. All right, and it -- you've tested -- or
18 you've penetrated what potentially producing horizons?

19 A. Our deepest producing horizon is the
20 Dakota.

21 Q. And you anticipate you may also have
22 production in the Mesaverde?

23 A. We have already individually perforated,
24 acidized, and fraced each of the three zones, the Dakota, the
25 Gallup, and the Mesaverde.

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2 Q When you originally commenced this well,
3 Mr. Elliott, what was your primary objective?

4 A Well, we engineered the well and drilled
5 the well with complete confidence that we would come up with
6 a flowing Gallup-Dakota well in the area of 100 to 200 barrels
7 a day, and --

8 Q Did that happen?

9 A That did not happen. We, after fracing
10 all three zones to try and get around an exorbitant swabbing
11 bill, we temporarily threw all three zones together for
12 cleanup after the frac, and in the process of cleaning the
13 well up it became quite obvious that in place of a 100 barrel
14 plus in the Gallup-Dakota we probably got something more like
15 15 barrels-

16 Q After that occurred you then went back
17 and looked to see if you'd have production in the Mesaverde?

18 A Well, we had -- we had all three zones
19 open at that time.

20 Q Insofar as this proration unit is con-
21 cerned, is the ownership in common between the Gallup-Dakota
22 and Mesaverde?

23 A Yes, sir, it is.

24 Q Now I see on your exhibit that you've
25 identified other wells in the area. Would you identify gen-

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erally what the well symbols indicate for those wells?

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A. All right, sir. The -- just the simple stars are Mesaverde completions only. The stars with the dot in the middle are the -- and there's only two of them -- one being our well and the other Southland Royalty -- in the southeast quarter of 7, are both in the stages of completion in the Mesaverde, Gallup, and Dakota. Southland Royalty is still completing their well. And the just plain dot are wells that are at this moment singly completed in the -- in the commingled Gallup-Dakota.

12

13

I say singly completed, this area is already approved for the commingling.

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16

Q. Are there any other wells, Mr. Elliott, in this area that have been approved for Gallup-Dakota-Mesaverde downhole commingling?

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A. Frank Chavez advised me of one to the township to the north of here, and I understand there's presently one pending before the Commission as a result of a recent hearing about four or five miles to the west.

21

22

Q. You're referring to the Supron Energy application for downhole commingling?

23

24

25

A. Yes, sir.

Q. And that was in Case 7286.

MR. KELLAHIN: If the Examiner please,

1
2 the Supron case has some pressure information with regards to
3 the Mesaverde and the Dakota, which is not available to us
4 otherwise, in the transcript, and we'd like to direct your
5 attention to that portion of the transcript that identified
6 that pressure information. I've marked it in the transcript.

7 Q All right, sir, let's go to Exhibit
8 Number Two and have you identify for me your schematic.

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10 wellbore, starting at the top, showing the 7-inch casing run
11 through the Mesaverde, and we hung a 4-1/2 inch liner in the
12 7-inch down through the Dakota formation. It also depicts
13 the perforations in all three zones, the Mesaverde, Gallup,
14 and the Dakota, and it also shows the present setting of the
15 tubing with the bottom of it being set right in the top of
16 the Dakota perforations, with no packer on it.

17 Q The bottom of your tubing is at 8071
18 feet?

19 A That's correct.

20 Q And the top of the last series of Dakota
21 perforations is at 8180 feet?

22 A Yes, sir, uh-huh.

23 Q Okay. All right, sir, let me ask you
24 some questions with regards to Exhibit Number Three. You
25 prepared Exhibit Number Three?

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2

A. Yes, sir.

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Q. All right, sir, would you explain that exhibit for us with regards to what you anticipate will be produced out of each of these three formations?

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A. Well, after cleaning the well up the best we could without wasting a lot of gas, we felt we had the well stabilized and we took a 4-hour test on a 16/64ths choke and come up with a barrels of oil per day of 20 barrels, barrels of water per day, 40, and this is frac water. We put nitrates in our frac so that we could definitely determine if we were still getting frac water, and it definitely tests at the present time frac water.

The gas measured 500 Mcf. Tubing pressure was 275 psi and the casing pressure, 900.

And we then shut the well in on a 7-day shut-in.

Q. Let me see if I understand what the test is. This is a test with all three formations open, is it not?

A. That's correct, sir.

Q. All right, sir, go ahead.

A. We took a 7-day shut-in, tubing pressure, 576, casing pressure, 1571, and we ran the attached bottom hole pressure bomb, and again this is with all three zones

1
2 together.

3 Q Do you have any test information on each
4 of the zones conducted separately?

5 A No, sir, I do not. As I said earlier,
6 our intentions were to have a well that we would not be wishing
7 to do this with, and we didn't feel that it was something we
8 needed, and now we find ourself in a position of maybe wanting
9 that pressure information but in a position where it would be
10 extremely costly to get it in this well.

11 Q Do you have an estimate of the additional
12 cost that would be incurred if you were required to separately
13 test the formations in the subject well?

14 A I would say to move from where we're at
15 now, get our test, and back to where we're at now, it would
16 range somewhere between \$25,000 and \$30,000, plus the danger
17 of damaging the well.

18 Q All right. Have you made a study of any
19 other wells in the area which in your opinion could be used
20 to determine the quantities of production coming from any of
21 these formations?

22 A Yes, sir, on both the Mesaverde and the
23 Gallup-Dakota there are other wells that show, in my opinion,
24 very well what could be expected.

25 Q All right, sir, let me direct your at-

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2 tention to Exhibit Number Four and ask you if this is inform-
3 ation based upon one of those wells?

4 A. Yes, sir, this is a recently completed
5 well by an organization called Beartooth Oil and Gas out of
6 Billings, Montana. They are presently sitting there with --
7 with their Gallup-Dakota open and have not perforated their
8 Mesaverde. They find themselves in the dilemma of having an
9 uneconomical well to attempt to pump out of the Gallup-Dakota
10 and they are watching this hearing with -- with interest be-
11 cause they frankly are having a hard time making up their
12 mind what to do.

13 Q. Now where is the Beartooth well in rela-
14 tion to your well, using Exhibit Number One?

15 A. The Beartooth well is in the southwest
16 quarter northwest quarter of Section 7.

17 Q. Beartooth's letter, your Exhibit Number
18 Four, indicates that if they can't get commingling
19 for their well, they're going to have to plug and abandon
20 the Gallup-Dakota?

21 A. Yes, sir, I think that's right, and what --
22 what they're up against and we're up against, to set a packer
23 and attempt to pump the Gallup-Dakota underneath a packer
24 for 15 to 20 barrels a day with a fairly high gas/oil ratio
25 is completely impractical. You just won't get it done.

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Q In your opinion would you have to abandon the Gallup-Dakota production in your well if commingling is not approved?

A I think that will probably be the -- the end result, yes, sir.

Q Is there any advantage that you're aware of, Mr. Elliott, in having the Mesaverde gas used to lift the liquids out of the Gallup and Dakota as you propose?

A Well, it appears to me to be finding a bird's nest on the ground, so to speak. I can't see that it hurts anything and I think it makes it economical for both zones. It doesn't hurt the Mesaverde and it allows us to recover the 15 plus barrels a day out of the lower zone.

Q All right, sir, let's go back to Exhibit Number Three and ask you if you have a proposed method of allocation that the Examiner might use to divide up the production among the different formations.

A Well, yes, sir. To do that I'd like to refer to Exhibit Number One where I have shown opposite the various wells gas/oil ratios, and these gas/oil ratios that are shown, with one exception, are based on annual production, so they're, I would say, as accurate as you could get, as opposed to gas/oil ratio taken on a 24-hour flow.

That one exception is the Beartooth well.

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2 The strike of the field is northwest-
3 southeast and, if you'll refer to Exhibit One, you'll note
4 that the wells on strike with our well are pretty well settled
5 at about 137 Mcf to 1 on gas/oil ratio, and if you'll look
6 at the Dakota-Gallup wells that are only producing from the
7 Dakota-Gallup, the ratio appears to be 5000-to-1. So I think
8 those are very reasonable figures to use as a basis of allo-
9 cation.

10 And moving to our particular well, and
11 our IP test, that would figure out to be 84 percent Mesaverde
12 gas --

13 Q Just a minute, 84 percent --

14 A Yes, sir.

15 Q -- for the Mesaverde gas?

16 A That's correct.

17 Q All right, sir.

18 A 16 percent for the Dakota gas, or Gallup-
19 Dakota gas.

20 Q All right, sir, how about the oil pro-
21 duction?

22 A Oil production 18 percent on the Mesa-
23 verde and 82 percent on the Gallup-Dakota.

24 Q Would you have any objection to a re-
25 quirement in a downhole commingling order that would require

1
2 you to consult with the District Office in determining how
3 the production ought to be allocated?

4 A. Not at all, sir.

5 Q. In your opinion, Mr. Elliott, will appro-
6 val of this application be in the best interest of conserva-
7 tion, the prevention of waste, and the protection of correla-
8 tive rights?

9 A. Yes, sir.

10 Q. And except for the letter from Beartooth
11 were Exhibits One through Three prepared by you?

12 A. That's correct.

13 MR. KELLAHIN: We move the introduction
14 of Exhibits One, Two, Three.

15 MR. STAMETS: These exhibits will be
16 admitted.

17 Are there questions of the witness?

18 MR. CHAVEZ: Yes, I have some questions
19 for Mr. Elliott.

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21 CROSS EXAMINATION

22 BY MR. CHAVEZ:

23 Q. Is this well located in a standard
24 location for both oil and gas production?

25 A. Curtis Little took care of that end of

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2 it and I'd better not answer that. I think it is, yes.

3 Q Also, at this -- presently this part of
4 the Mesaverde production is not included in the Blanco-Mesaverde
5 Pool, but should an extension of the Blanco-Mesaverde Pool
6 include that acreage, would you be able to acquire the 320
7 acres necessary?

8 A Yes, sir, we own all of Section 21.

9 Q Okay.

10 MR. CHAVEZ: That's all the questions I
11 have.

12
13 CROSS EXAMINATION

14 BY MR. STAMETS:

15 Q Mr. Elliott, have you examined the re-
16 cords to see if there is any pressure data available like an
17 initial test pressure on the offset wells?

18 A I have not been able to come up with
19 any, sir. I -- I have visited with Beartooth and they are
20 in a position at very little cost to get pressures as they
21 proceed with the finishing of their well. In other words,
22 the way they're sitting right now all they've got to do is
23 run a bomb to get the Gallup-Dakota, and when they set their
24 bridge plug and work on their Mesaverde they'll then be in a
25 position to run another bomb at very little expense and get

1
2 the pressure there.

3 But as far as I know, Schalk, who offsets
4 us to the north, has not run any pressures, and I'm not aware
5 of any -- I talked with Southland, they haven't run any.

6 Q Under normal completion circumstances
7 I would assume that there would be some pressure tests as
8 part of a deliverability test, if nothing else, on this --

9 A Well, I'm sure there are some shut-in,
10 shut-in surface -- surface pressure tests.

11 Q Yes, right. That's what -- that's what
12 I'm talking about.

13 A Okay, I thought you were referring to
14 bottom hole pressure tests.

15 Q You can do calculations from those but --

16 A Right.

17 Q -- I was looking for any types of pres-
18 sure --

19 A No, I'm sure the Schalk wells have --
20 have probably 7-day shut-ins on them.

21 Q Okay. I wonder if you would have an
22 opportunity to check those out and submit that data --

23 A Certainly would.

24 Q -- subsequent to the hearing, plus any-
25 thing that you can find on the oil wells in the nearby sec-

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2 tions.

3 A. All right, sir. We'll sure do that.

4 MR. STAMETS: Any other questions of the
5 witness?

6 MR. KELLAHIN: No, sir.

7 MR. STAMETS: He may be excused.

8 Anything further in this case?

9 The case will be taken under advisement.

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11 (Hearing concluded.)
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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that
the foregoing Transcript of Hearing before the Oil Conserva-
tion Division was reported by me; that the said transcript
is a full, true, and correct record of the hearing, prepared
by me to the best of my ability.

Sally W. Boyd CSR

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

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 7314
heard by me on 7-29 1981
Richard H. Sturm, Examiner
Oil Conservation Division

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
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I N D E X

FRANK O. ELLIOTT

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E X H I B I T S

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MR. STAMETS: Call next Case 7314.

MR. PADILLA: Application of Elliott Oil Company for downhole commingling, Rio Arriba County, New Mexico.

MR. KELLAHIN: I'm Tom Kellahin of Kellahin and Kellahin, Santa Fe, New Mexico, appearing on behalf of the applicant, and I have one witness.

(Witness sworn.)

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

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

A Frank O. Elliott, an independent oil operator out of Roswell.

Q Mr. Elliott, you're the Elliott of Elliott Oil Company?

A That's correct.

Q And that is your business, sir?

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A. That's correct.

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Q. How long have you been in the oil and gas business, Mr. Elliott?

5

A. 33 years.

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Q. And do you operate oil and gas wells in the San Juan Basin in Rio Arriba County, New Mexico?

8

A. Yes, sir.

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Q. Do you operate oil and gas wells anywhere else?

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A. Throughout the Rockies, yes.

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Q. What are you seeking to accomplish by this application, Mr. Elliott?

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A. We're seeking permission to commingle the Mesaverde along with the Dakota-Gallup formations.

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Q. Have you drilled other Gallup, Dakota, and Mesaverde wells in the San Juan Basin?

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A. Not in this area, no, sir.

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Q. Is this your first well?

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20 Dakota.

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22 production in the Mesaverde?

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25 Gallup, and the Mesaverde.

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2 Q When you originally commenced this well,
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5 the well with complete confidence that we would come up with
6 a flowing Gallup-Dakota well in the area of 100 to 200 barrels
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8 Q Did that happen?

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10 all three zones to try and get around an exorbitant swabbing
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12 cleanup after the frac, and in the process of cleaning the
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17 and looked to see if you'd have production in the Mesaverde?

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14 Q Are there any other wells, Mr. Elliott,
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17 A Frank Chavez advised me of one to the
18 township to the north of here, and I understand there's
19 presently one pending before the Commission as a result of
20 a recent hearing about four or five miles to the west.

21 Q You're referring to the Supron Energy
22 application for downhole commingling?

23 A Yes, sir.

24 Q And that was in Case 7286.

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18 feet?

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21 perforations is at 8180 feet?

22 A Yes, sir, uh-huh.

23 Q Okay. All right, sir, let me ask you
24 some questions with regards to Exhibit Number Three. You
25 prepared Exhibit Number Three?

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A. Yes, sir.

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Q All right, sir, would you explain that exhibit for us with regards to what you anticipate will be produced out of each of these three formations?

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A. Well, after cleaning the well up the best we could without wasting a lot of gas, we felt we had the well stabilized and we took a 4-hour test on a 16/64ths choke and come up with a barrels of oil per day of 20 barrels, barrels of water per day, 40, and this is frac water. We put nitrates in our frac so that we could definitely determine if we were still getting frac water, and it definitely tests at the present time frac water.

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9 that pressure information but in a position where it would be
10 extremely costly to get it in this well.

11 Q Do you have an estimate of the additional
12 cost that would be incurred if you were required to separately
13 test the formations in the subject well?

14 A I would say to move from where we're at
15 now, get our test, and back to where we're at now, it would
16 range somewhere between \$25,000 and \$30,000, plus the danger
17 of damaging the well.

18 Q All right. Have you made a study of any
19 other wells in the area which in your opinion could be used
20 to determine the quantities of production coming from any of
21 these formations?

22 A Yes, sir, on both the Mesaverde and the
23 Gallup-Dakota there are other wells that show, in my opinion,
24 very well what could be expected.

25 Q All right, sir, let me direct your at-

1
2 tention to Exhibit Number Four and ask you if this is inform-
3 ation based upon one of those wells?

4 A. Yes, sir, this is a recently completed
5 well by an organization called Beartooth Oil and Gas out of
6 Billings, Montana. They are presently sitting there with --
7 with their Gallup-Dakota open and have not perforated their
8 Mesaverde. They find themselves in the dilemma of having an
9 uneconomical well to attempt to pump out of the Gallup-Dakota
10 and they are watching this hearing with -- with interest be-
11 cause they frankly are having a hard time making up their
12 mind what to do.

13 Q. Now where is the Beartooth well in rela-
14 tion to your well, using Exhibit Number One?

15 A. The Beartooth well is in the southwest
16 quarter northwest quarter of Section 7.

17 Q. Beartooth's letter, your Exhibit Number
18 Four, indicates that if they can't get commingling
19 for their well, they're going to have to plug and abandon
20 the Gallup-Dakota?

21 A. Yes, sir, I think that's right, and what --
22 what they're up against and we're up against, to set a packer
23 and attempt to pump the Gallup-Dakota underneath a packer
24 for 15 to 20 barrels a day with a fairly high gas/oil ratio
25 is completely impractical. You just won't get it done.

Q In your opinion would you have to abandon the Gallup-Dakota production in your well if commingling is not approved?

A I think that will probably be the -- the end result, yes, sir.

Q Is there any advantage that you're aware of, Mr. Elliott, in having the Mesaverde gas used to lift the liquids out of the Gallup and Dakota as you propose?

A Well, it appears to me to be finding a bird's nest on the ground, so to speak. I can't see that it hurts anything and I think it makes it economical for both zones. It doesn't hurt the Mesaverde and it allows us to recover the 15 plus barrels a day out of the lower zone.

Q All right, sir, let's go back to Exhibit Number Three and ask you if you have a proposed method of allocation that the Examiner might use to divide up the production among the different formations.

A Well, yes, sir. To do that I'd like to refer to Exhibit Number One where I have shown opposite the various wells gas/oil ratios, and these gas/oil ratios that are shown, with one exception, are based on annual production so they're, I would say, as accurate as you could get, as opposed to gas/oil ratio taken on a 24-hour flow.

That one exception is the Beartooth well.

1
2 The strike of the field is northwest-
3 southeast and, if you'll refer to Exhibit One, you'll note
4 that the wells on strike with our well are pretty well settled
5 at about 137 Mcf to 1 on gas/oil ratio, and if you'll look
6 at the Dakota-Gallup wells that are only producing from the
7 Dakota-Gallup, the ratio appears to be 5000-to-1. So I think
8 those are very reasonable figures to use as a basis of allo-
9 cation.

10 And moving to our particular well, and
11 our IP test, that would figure out to be 84 percent Mesaverde
12 gas --

13 Q Just a minute, 84 percent --

14 A Yes, sir.

15 Q -- for the Mesaverde gas?

16 A That's correct.

17 Q All right, sir.

18 A 16 percent for the Dakota gas, or Gallup-
19 Dakota gas.

20 Q All right, sir, how about the oil pro-
21 duction?

22 A Oil production 18 percent on the Mesa-
23 verde and 82 percent on the Gallup-Dakota.

24 Q Would you have any objection to a re-
25 quirement in a downhole commingling order that would require

1
2 you to consult with the District Office in determining how
3 the production ought to be allocated?

4 A. Not at all, sir.

5 Q. In your opinion, Mr. Elliott, will appro-
6 val of this application be in the best interest of conserva-
7 tion, the prevention of waste, and the protection of correla-
8 tive rights?

9 A. Yes, sir.

10 Q. And except for the letter from Beartooth
11 were Exhibits One through Three prepared by you?

12 A. That's correct.

13 MR. KELLAHIN: We move the introduction
14 of Exhibits One, Two, Three.

15 MR. STAMETS: These exhibits will be
16 admitted.

17 Are there questions of the witness?

18 MR. CHAVEZ: Yes, I have some questions
19 for Mr. Elliott.

20
21 CROSS EXAMINATION

22 BY MR. CHAVEZ:

23 Q. Is this well located in a standard
24 location for both oil and gas production?

25 A. Curtis Little took care of that end of

1
2 it and I'd better not answer that. I think it is, yes.

3 Q Also, at this -- presently this part of
4 the Mesaverde production is not included in the Blanco-Mesaverde
5 Pool, but should an extension of the Blanco-Mesaverde Pool
6 include that acreage, would you be able to acquire the 320
7 acres necessary?

8 A Yes, sir, we own all of Section 21.

9 Q Okay.

10 MR. CHAVEZ: That's all the questions I
11 have.

12
13 CROSS EXAMINATION

14 BY MR. STAMETS:

15 Q Mr. Elliott, have you examined the re-
16 cords to see if there is any pressure data available like an
17 initial test pressure on the offset wells?

18 A I have not been able to come up with
19 any, sir. I -- I have visited with Beartooth and they are
20 in a position at very little cost to get pressures as they
21 proceed with the finishing of their well. In other words,
22 the way they're sitting right now all they've got to do is
23 run a bomb to get the Gallup-Dakota, and when they set their
24 bridge plug and work on their Mesaverde they'll then be in a
25 position to run another bomb at very little expense and get

1
2 the pressure there.

3 But as far as I know, Schalk, who offsets
4 us to the north, has not run any pressures, and I'm not aware
5 of any -- I talked with Southland, they haven't run any.

6 Q Under normal completion circumstances
7 I would assume that there would be some pressure tests as
8 part of a deliverability test, if nothing else, on this --

9 A Well, I'm sure there are some shut-in,
10 shut-in surface -- surface pressure tests.

11 Q Yes, right. That's what -- that's what
12 I'm talking about.

13 A Okay, I thought you were referring to
14 bottom hole pressure tests.

15 Q You can do calculations from those but --

16 A Right.

17 Q -- I was looking for any types of pres-
18 sure --

19 A No, I'm sure the Schalk wells have --
20 have probably 7-day shut-ins on them.

21 Q Okay. I wonder if you would have an
22 opportunity to check those out and submit that data --

23 A Certainly would.

24 Q -- subsequent to the hearing, plus any-
25 thing that you can find on the oil wells in the nearby sec-

1
2 tions.

3 A. All right, sir. We'll sure do that.

4 MR. STAMETS: Any other questions of the
5 witness?

6 MR. KELLAHIN: No, sir.

7 MR. STAMETS: He may be excused.

8 Anything further in this case?

9 The case will be taken under advisement.

10
11 (Hearing concluded.)
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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREPY CERTIFY that
the foregoing Transcript of Hearing before the Oil Conserva-
tion Division was reported by me; that the said transcript
is a full, true, and correct record of the hearing, prepared
by me to the best of my ability.

Sally W. Boyd CSR

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

_____, Examiner
Oil Conservation Division

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

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 7314
Order No. R-6757

APPLICATION OF ELLIOTT OIL COMPANY
FOR DOWNHOLE COMMINGLING, RIO
ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 29, 1981,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 17th day of August, 1981, the Division
Director, having considered the testimony, the record, and the
recommendations of the Examiner, and being fully advised in the
premises,

FINDS:

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

(2) That the applicant, Elliott Oil Company, is the owner
and operator of the Ora Well No. 1, located in Unit E of Section
21, Township 25 North, Range 3 West, NMPM, Rio Arriba County,
New Mexico.

(3) That the applicant seeks authority to commingle Mesa-
verde, Gallup and Dakota production within the wellbore of the
above-described well.

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

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

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

-2-

Case No. 7314

Order No. R-6757

(7) 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.

(8) 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.

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

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

IT IS THEREFORE ORDERED:

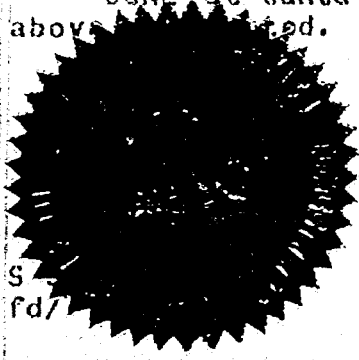
(1) That the applicant, Elliott Oil Company, is hereby authorized to commingle Mesaverde, Gallup, and Dakota production within the wellbore of the Ora Well No. 1, located in Unit E of Section 21, Township 25 North, Range 3 West, NMPM, Rio Arriba County, New Mexico.

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

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

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

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



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY
Director

S
fd/

KELLAHIN and KELLAHIN

Attorneys at Law

500 Don Gaspar Avenue

Post Office Box 1769

Santa Fe, New Mexico 87501

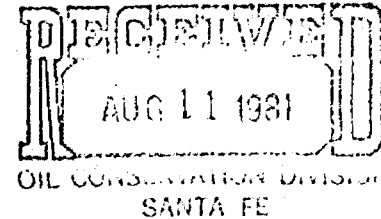
Jason Kellahin
W. Thomas Kellahin

Karen Aubrey

Telephone 982-4285
Area Code 505

August 10, 1981

Mr. Richard L. Stamets
Oil Conservation Division
P.O. Box 2088
Santa Fe, New Mexico 87501



RE: NMOCD Case 7314
July 29, 1981

Dear Dick:

At the hearing on July 29, 1981 of the Elliott Oil Company application for downhole commingling of production from the Gallup, Dakota and Mesaverde formations, you requested additional pressure information concerning offsetting wells.

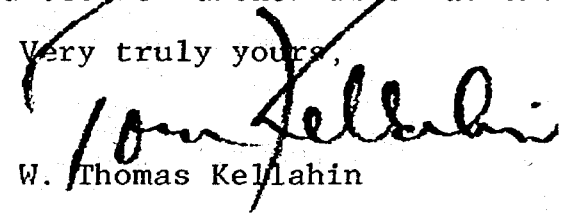
In accordance with that request, we have obtained the following additional information:

(a) John E. Schalk Well, SW/4SW/4 of Section 16, T25N, R3W, NMPM, had a 7 day shut-in casing pressure in the Mesaverde of 1,050 psi.

(b) That Getty Oil Company on August 9, 1977, in Division Case 5987, Order R-5500 obtained approval for the downhole commingling of the same three formations for three wells in Sections 17 and 18 immediately to the Northwest of the subject Elliott well. I have enclosed a copy of the exhibits and transcript from that Getty case for your information.

Please let me know if you desire further information.

Very truly yours,


W. Thomas Kellahin

WTK:jm
Enclosure
cc: (w/encl.) Frank O. Elliott

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
20 July 1977

EXAMINER HEARING

IN THE MATTER OF:

Application of Getty Oil Company
for downhole commingling, Rio
Arriba County, New Mexico.

CASE
5987

BEFORE: Richard L. Stamets

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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:

Chester A. Blodget, Esq.
P. O. Box 1650
Tulsa, Oklahoma 74102

For Minel and Jack Cos:

Melvin D. Rueckhaus, Esq.
319 - 7th Street
Albuquerque, New Mexico

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I N D E X

GERALD BROWN

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1 MR. STAMETS: We'll call the next case, 5987.

2 MS. TESCHENDORF: Case 5987. Application of
3 Getty Oil Company for downhole commingling, Rio Arriba County,
4 New Mexico.

5 MR. BLODGET: Mr. Examiner, I'm Chester Blodget,
6 representing Getty, and we'll present the evidence. I believe
7 Lewis White has entered an appearance as local counsel.

8 MR. STAMETS: Yes, that is correct.

9 MR. BLODGET: And we'll have one witness, Mr.
10 Gerald Brown.

11 MR. STAMETS: Stand and be sworn, please. Are
12 there any other appearances in this case?

13 MR. RUECKHAUS: Yes, Melvin Rueckhaus, Albuquerque,
14 New Mexico, representing Minel and Jack Cos, who are listed
15 as interested parties. I don't know whether we are opposed
16 or in favor.

17 MR. STAMETS: Okay, and what was your name, sir?

18 MR. RUECKHAUS: Rueckhaus, spelled R-U-E-C-K-H-A-U-S.

19 MR. STAMETS: One more time.

20 MR. RUECKHAUS: R-U-E-C-K-H-A-U-S.

21 MR. STAMETS: What was your first name, sir?

22 MR. RUECKHAUS: Melvin.

23 MR. STAMETS: And are you an interest owner in the
24 acreage?

25 MR. RUECKHAUS: No. I'm an attorney in Albuquerque.

MR. STAMETS: Oh, I see.

MR. RUECKHAUS: 319 - 7th.

MR. STAMETS: Thank you. I'd like to have the witness stand and be sworn, please.

(Witness sworn.)

GERALD D. BROWN

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

DIRECT EXAMINATION

BY MR. BLODGET:

Q Mr. Brown, would you state your name, your occupation, by whom you're employed?

A My name is Gerald Brown. I'm a Senior Petroleum Engineer with Getty Oil Company in the Denver office.

Q And have you previously testified before this Commission as a petroleum engineer and your qualifications been accepted?

A I have.

MR. BLODGET: We tender the qualifications of this witness.

MR. STAMETS: The witness is considered qualified.

Q (Mr. Blodget continuing.) Now, Mr. Brown, are you familiar with the application in Case Number 59877

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1 A. Yes.

2 Q. What, briefly, is the nature of the application?

3 A. This is an application for -- asking for an order
4 allowing Getty Oil Company to commingle the production from
5 the Dakota, Gallup, and Mesaverde formations within the well-
6 bore of its newly completed C. B. Roberts -- or rather, C. W.
7 Roberts Well Number Five, and also its abandoned Dakota
8 formation producers, the C. B. -- C. W. Roberts Number Three,
9 which was a former -- which is now a Mesaverde completion;
10 the C. W. Roberts Number Four, which is now a Gallup comple-
11 tion; and the Lydia Rentz Number Four, which is now a Mesa-
12 verde completion.

13 Q. Now, were copies of this application and a notice
14 of setting sent to all offsetting operators, including Coast-
15 line Petroleum and Continental Oil Company?

16 A. Yes.

17 Q. Now, is Getty Oil Company the sole owner and oper-
18 ator of the C. W. Roberts lease, which is in Sections 17 and
19 18, and their adjoining Lydia Rentz lease in Sections 19 and
20 20, all in Township 25 North, Range 3 West, Rio Arriba County,
21 New Mexico?

22 A. They are one hundred percent working owners in
23 both of these leases and the royalty is the same.

24 Q. I call your attention to what has been marked as
25 Exhibit Number One. Was that exhibit prepared by you or under

1 your direction?

2 A Yes.

3 Q Would you identify that exhibit and discuss same,
4 please?

5 A This is a plat of the area which shows the offset
6 operators and also shows the Getty acreage colored in green.
7 The C. W. Roberts Well Number Five is shown in red. It is
8 the primary well in this application. Also included in the
9 application are the C. W. Roberts Three, which is coded in
10 yellow, indicating former Dakota production; the C. W.
11 Roberts Number Four, which is coded in blue, indicating a
12 former Gallup producer; the Lydia Rentz Number Four coded in
13 yellow, indicating a former Dakota producer. All four of
14 these wells are included in this application for commingling.

15 Q All right. Now, do you have a log on, I believe,
16 it's the Roberts Number Five well?

17 A Yes, this is Exhibit Number Two. This is an in-
18 duction electric log on the well, a five-inch steel. Super-
19 imposed upon this log is the present Dakota completion in-
20 terval with the treatment indicated. Also shown is the present
21 Gallup completion with the treatment shown. Also shown is
22 the proposed Mesaverde completion. Also throughout the log
23 are the various formation tops and their sub-sea elevations.

24 Q Now, I call your attention to what has been marked
25 as Exhibit Number Three. Was that exhibit prepared by you

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1 or under your direction?

2 A Yes.

3 Q And if so, would you discuss the same and identify
4 it, please?

5 A Exhibit Number Three is a plot of the actual
6 well test on the C. W. Roberts Number Five, starting in -- on
7 the 21st of March of this year when the well was completed
8 in the Dakota formation. This test period was concluded on
9 the 16th of May, when the well was averaging -- or had de-
10 clined to 22 barrels of oil per day and was still declining
11 at that point.

12 The next date sequence shows the Gallup formation
13 test period, which goes from the 23rd of May to the present
14 date. The last recorded test was on the 15th of July, and
15 the well was making 8 barrels of oil per day.

16 Q Now, have these various formations been fraced and
17 tested and found capable of only low rates of production?

18 A Yes, the Dakota formation was sand fraced with
19 35,000 pounds of sand and the Gallup formation was sand fraced
20 with 63,000 pounds of sand, and even with these quite extensive
21 frac jobs they were -- the wells are still capable of only
22 low rates of production.

23 Q I call your attention to what has been marked as
24 Exhibit Number Four. Was that exhibit prepared by you or
25 under your supervision and direction?

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1 A Yes.

2 Q Would you explain that exhibit, please?

3 A Exhibit Number Four is a proposed -- on the left-
4 hand side of the exhibit, is a proposed commingled completion,
5 which would allow commingling of the three separate formations,
6 Mesaverde, Gallup and Dakota. This completion would consist
7 of a tubing anchor, a rod pump seated in a seating nipple
8 with tubing run to the surface. Such a completion would
9 allow all three formations to be commingled within the well-
10 bore but would allow the gas to be produced up the annular
11 space and the fluids produced through the tubing by means of
12 the rod pump.

13 The righthand portion of the exhibit shows what
14 we consider to be a very undesirable completion, and even
15 that completion would require a commingling of the Dakota
16 and Gallup oil. It would also require, in addition to the
17 tubing for the Dakota and Gallup oil, two separate tubing
18 strings, one to produce the Mesaverde total well stream, oil
19 and gas, and another tubing string to vent the Dakota and
20 Gallup gas. This would be a very expensive completion and
21 not as efficient as the proposed completion.

22 Q All right. In your opinion, then, to economically
23 complete and produce the C. W. Roberts Well Number Five, the
24 Dakota, Gallup, and Mesaverde formations would have to be
25 commingled in the same wellbore, is that correct?

1 A Yes.

2 Q Have you -- or the application asks for the com-
3 mingling of three other wells in the area. Would you name
4 them and discuss them as they're shown on, I guess it's Ex-
5 hibit Number One?

6 A Yes. These are Exhibit Five, which is for the
7 Lydia Rentz Number Four; Exhibit Six, which is for the C. W.
8 Roberts Number Three; Exhibit Seven, which is for the C. W.
9 Roberts Number Four. These are production plots of these
10 wells a year or so prior to their completions and renewed
11 intervals. Each one shows a production graph of the Dakota
12 formation prior to abandonment, and each one shows the sub-
13 sequent production graph of the new formation.

14 The Exhibit Five indicates that the Mesaverde
15 formation from the Lydia Rentz Number Four is currently
16 producing at the rate of 5.5 million cubic foot per month
17 with a oil production of approximately 50 barrels of oil per
18 month, or a 10 barrel per million, an approximate 10 barrel
19 per million, fluid to gas rate.

20 The Exhibit Number Six is a very similar graph of
21 the C. W. Roberts Number Three, also a Mesaverde completion.
22 It shows the Dakota formation interval of production and also
23 the Mesaverde. It indicates that the present rate is approx-
24 imately 8 million cubic foot of gas per month, 80 barrels of
25 oil per month, with a fluid to gas ratio of 10 barrels per

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1 million.

2 Exhibit Number Seven is for the C. W. Roberts
3 Number Four, which is the single and only Gallup formation
4 producer in this immediate area. It shows the Dakota formation
5 production and the Gallup formation production after a com-
6 pletion. This shows a very erratic oil rate of approximately
7 200 barrels of oil per month; a gas production of approxi-
8 mately two million cubic foot of gas per month; with a gas-
9 oil ration of approximately 10,000 to one.

10 All these wells are declining at the present time
11 at a rather well established rate.

12 These wells were abandoned in the Dakota due to
13 non-economic production and we feel that sometime in the very
14 near future economics may dictate that we can re-enter the
15 Dakota by removing the bridge plug and possibly doing some
16 drilling out, and open up the Dakota on a commingled basis
17 with the present formation.

18 Q Do you have an opinion as to the allocation of
19 production as between the zones in each of these wells?

20 A On the C. W. Roberts Number Five, our test period
21 is not completed, but we have an indication of what the oil
22 allocation might be. We're not proposing this as a firm
23 recommendation at this point. We feel that the Dakota should
24 be allocated sixty-seven percent of the production of oil;
25 the Gallup twenty-six percent; and the Mesaverde seven percent.

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1 We have no opinion at all right now on the gas
2 allocation. We'll have to have an extensive test period on
3 the Mesaverde formation before we can make that determination.

4 On the other wells we feel that the Dakota forma-
5 tion will probably add only a very small amount to the
6 production and we like to hold that at a constant rate of
7 3 barrels of oil per day once the completion is made, and
8 all the remaining production will be credited to the second
9 formation in the wellbore.

10 Q Now, in your opinion would the granting of this
11 application tend to avoid waste and allow the recovery of
12 oil that wouldn't otherwise be recovered, and would not
13 violate any correlative rights in the area?

14 A. Yes.

15 MR. BLODGET: We tender Exhibits One through
16 Seven.

17 MR. STAMETS: These exhibits will be admitted.

18 MR. BLODGET: We have no further direct questions.

19 MR. STAMETS: Are there questions of the witness?

20 MR. KENDRICK: Yes.

21
22 CROSS EXAMINATION

23 BY MR. KENDRICK:

24 Q Mr. Brown, when we get down toward depletion, do
25 you still want to claim 3 barrels a day production from the

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1 Dakota or should it be on a percentage basis of total pro-
2 duction?

3 A We would have no objection to a percentage allo-
4 cation. We really don't know what the Dakota would produce.
5 It could be less than 3 barrels a day, so we would have no
6 objection to a percentage allocation.

7 Q Okay. On Exhibits Five, Six, and Seven, you show
8 some production from the Ojito-Gallup -- excuse me, from the
9 Ojito-Dakota Pool prior to remedial action to these wells.
10 Were these wells flowing or being pumped at the time these
11 production values were obtained?

12 A On the Ojito-Dakota?

13 Q Yes.

14 A We had a plunger pumping these wells.

15 Q Okay.

16 A Plunger lift.

17

18 CROSS EXAMINATION

19 BY MR. STAMETS:

20 Q Mr. Brown, it would seem like perhaps what you
21 should do is consult with the District Supervisor as these
22 wells are being worked over to establish an appropriate for-
23 mula for the allocation of production to these --

24 A I think that would be an excellent idea.

25 Q On your -- referring back to Exhibit Number One,

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

1 you just indicate two Mesaverde wells inside the green area.
2 Is there other Mesaverde production in the vicinity of your
3 lease?

4 A No, it's our understanding that our Mesaverde was
5 a field discovery and that these are the only two wells that
6 have produced from the Mesaverde in the immediate area.

7 Q Okay.

8 A This is likewise true of the Gallup in the imme-
9 diate area.

10 Q Going back to Exhibits Number Five and Six, those
11 indicate the current potentials of the Mesaverde?

12 A Yes.

13 Q And the Gallup, is the Number Four well the only
14 Gallup producer in the area?

15 A Yes. Continental has some Gallup production, but
16 it is at least three miles east -- or west of this area.

17 Q And what about the Dakota?

18 A The Dakota, I think the same is true of the Dakota.
19 The Continental production has -- the wells in the Continental
20 area have Dakota and Gallup, and they're -- I'm not sure of
21 the exact distance, but it's at least three miles to the
22 west.

23 Q And then the main production area is all Pictured
24 Cliffs?

25 A Yes, all the wells indicated on the map, other

1 than the color coded wells are Pictured Cliffs wells.

2 Q So, basically, what you're asking for here is
3 authorization to downhole commingle otherwise non-commercial
4 zones to increase recovery in the area?

5 A Yes.

6 MR. STAMETS: Any other questions of the witness?
7 He may be excused. Anything further in this case?

8 MR. BLODGET: No.

9 MR. STAMETS: We'll take the case under advisement.
10 (Hearing concluded.)
11
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sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

REPORTER'S CERTIFICATE

I, Sally Walton Boyd, 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.

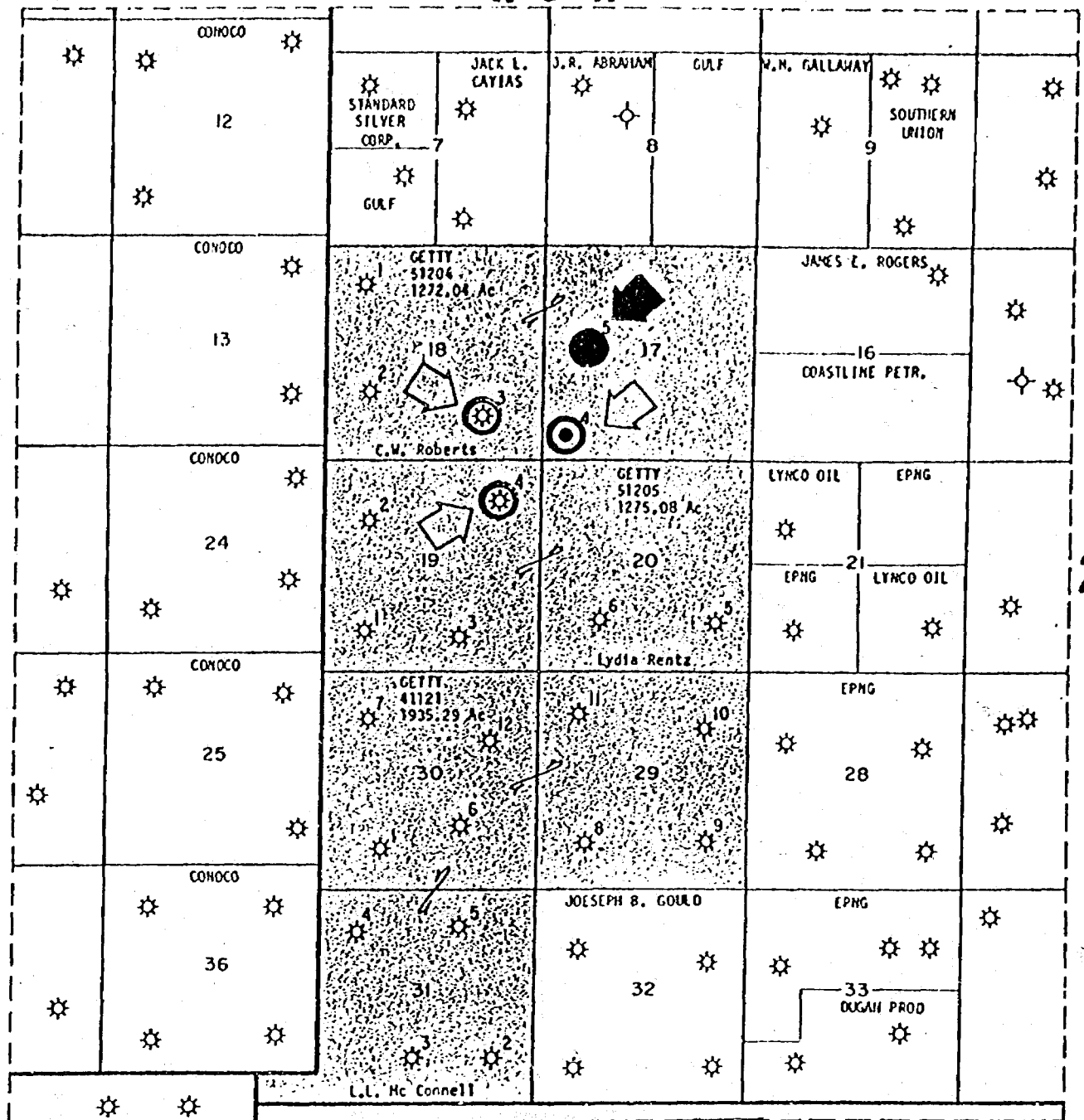
Sally Walton Boyd, C. S. R.

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No.
heard by me on, 19...
....., Examiner
New Mexico Oil Conservation Commission

R 3 W



T
25
N

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
GETTY OIL COMPANY
DENVER DISTRICT

EXHIBIT NO. 1

CASE NO. 5987

OJITO DAKOTA FIELD

Submitted by *Getty Oil Co.*

BIO ARriba COUNTY, NEW MEXICO

Hearing Date 7/20/77

4000 8000

FEET

DATE JULY 1977



PROP COMINGLED
MESAVERDE-GALLUP-DAKOTA



PICTURED CLIFFS PROD



GALLUP PROD-FORMER DAKOTA PROD



MESAVERDE PROD-FORMER DAKOTA PROD

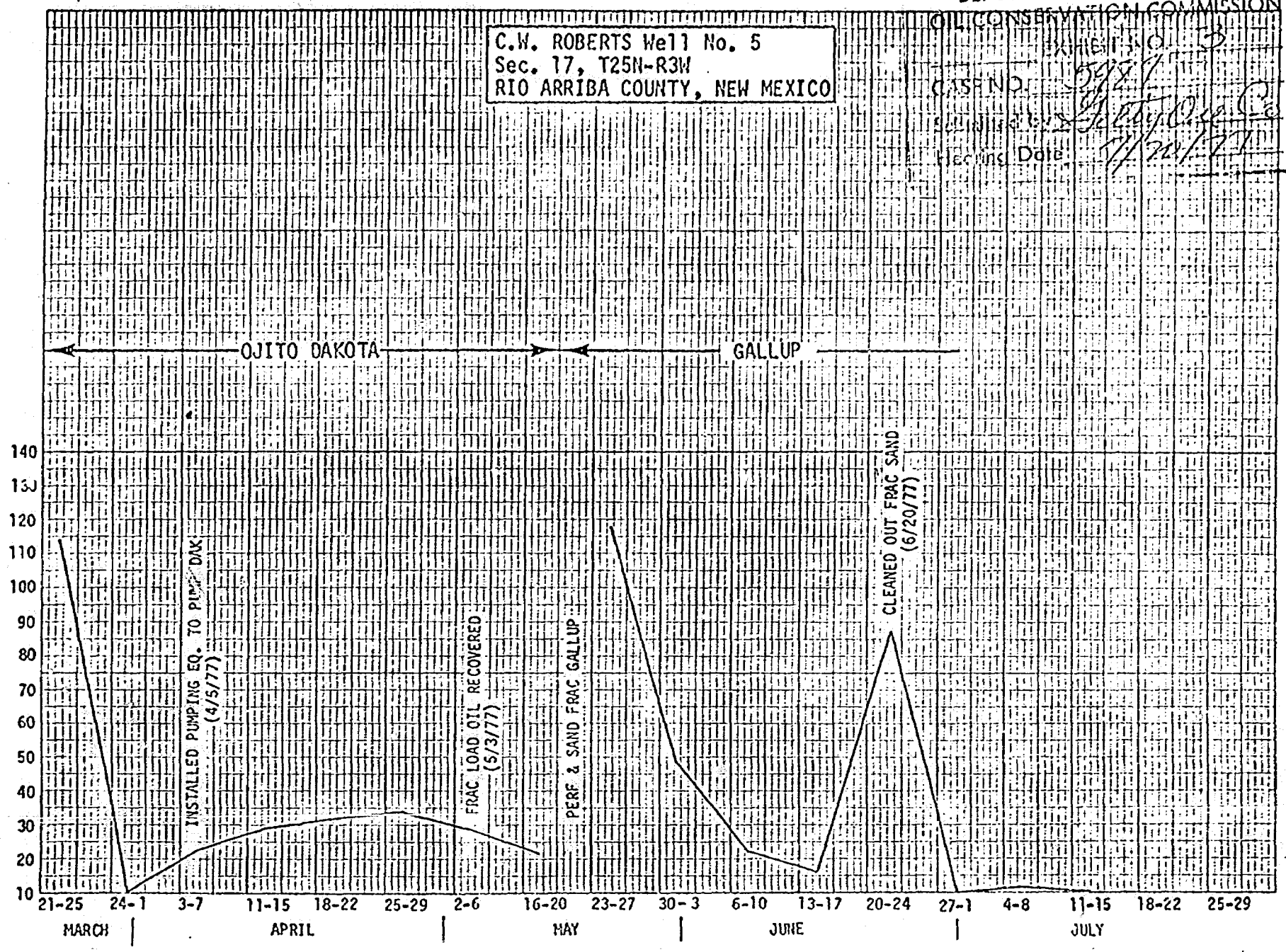


GETTY ACREAGE

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
CASE NO. 5987
Filed by: J. E. O'Connell
Filing Date: 7/20/77

C.W. ROBERTS Well No. 5
Sec. 17, T25N-R3W
RIO ARRIBA COUNTY, NEW MEXICO

DAILY AVERAGE BY WEEKS-BOPD



PROPOSED COMINGLED
COMPLETION

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

EXHIBIT NO. 4

CASE NO. 5987

Submitted by Delly Oil Co

Hearing Date 7/20/77

UNDESIRABLE
COMPLETION

MESAVERDE

DY @ 4161
300 SACKS CEMENT

PROPOSED
PERFORATIONS 5319-5890

DY @ 6165
240 SACKS CEMENT

TUBING
ANCHOR

ROD PUMP
SEATING
TIPPLE

GALLUP

DAKOTA

ROD PUMP

PRODUCTION
PACKER

PERFORATED 7010-7246
Sand Frac W/63,000#

PERFORATED 7881-8124
Sand Frac W/35,000#
Squeezed 8102-8124
Open Flow 7084-8102

MESAVERDE OIL & GAS

DAKOTA & GALLUP OIL

DAKOTA & GALLUP GAS

LYDIA RENTZ Well No. 4
Sec. 19, T25N-R3N
RIO ARRIBA COUNTY, NEW MEXICO

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

EXHIBIT NO. 5

CASE NO. 5987

Submitted by: *Phillips Co.*

7/20/77

OJITO DAKOTA

MESAVERDE

Heating Drive

OIL-BARRELS/MONTH

KLUFFEL & ESSER CO.

1000

100

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.																								
19 73												19 74												19 75												19 76												19 77											

C.W. ROBERTS Well No. 3
Sec. 18, T25N-R3W
RIO ARRIBA COUNTY, NEW MEXICO

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

OJITO DAKOTA

MESAVERDE

CASE NO. 5987
Submitted by Getty Oil Co.
Hearing Date 7/20/77

OIL-BARRELS/MONTH

KUUFFEL & ESSER CO.

1000

100

Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. 19 73
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. 19 74
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. 19 75
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. 19 76
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec. 19 77

GAS

OIL

C.W. ROBERTS Well No. 4
Sec. 17, T25N-R3W
RIO ARriba COUNTY, NEW MEXICO

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION

EXHIBIT NO. 7

CASE NO. 5987

Submitted by *Belly oil Co.*

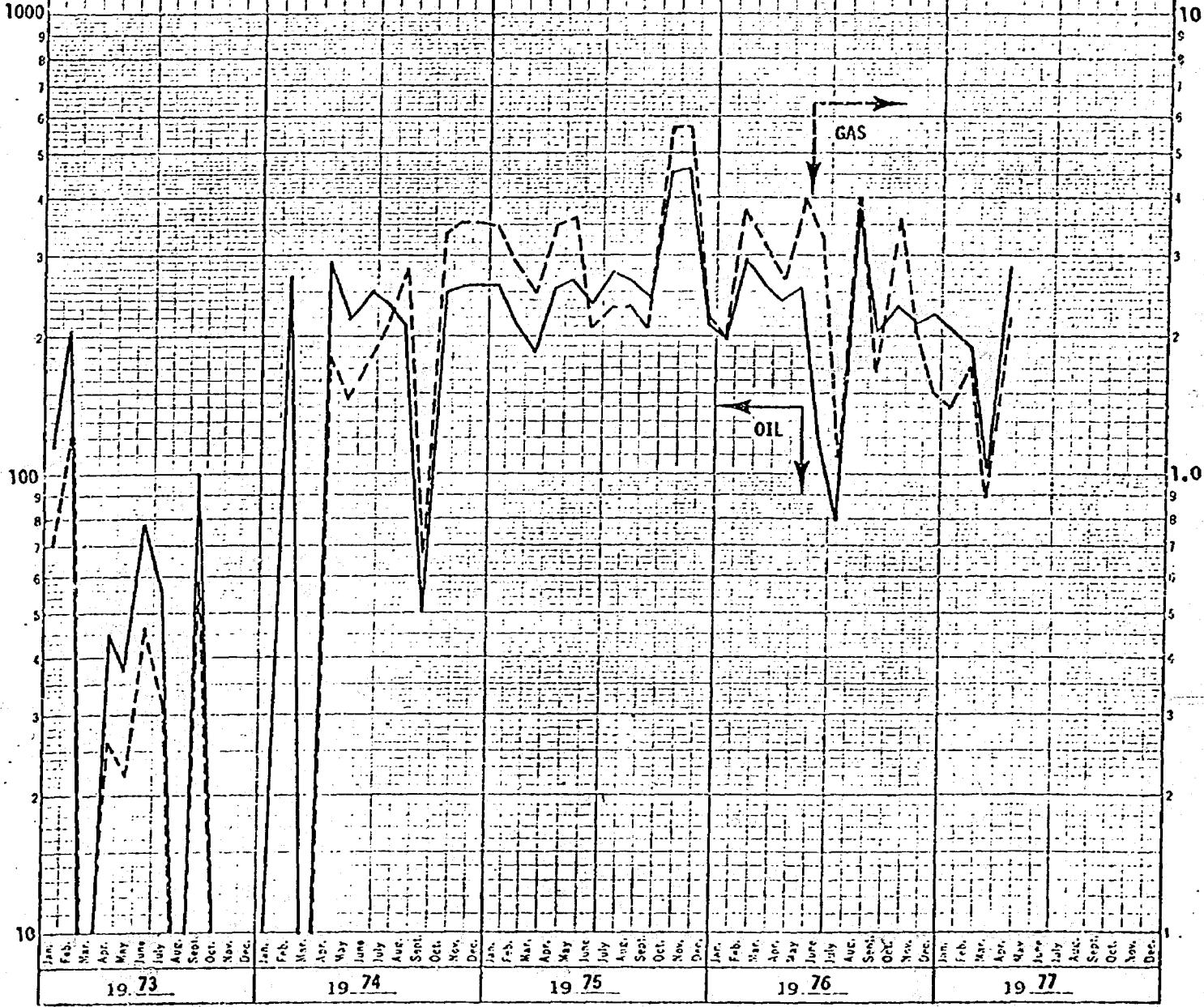
Hearing Date. *7/20/77*

← OJITO DAKOTA →

GALLUP

OIL-BARRELS/MONTH

GAS-MCF/MONTH



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. 5987
Order No. R-5500

APPLICATION OF GETTY OIL
COMPANY FOR 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 July 20, 1977,
at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 9th day of August, 1977, 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, Getty Oil Company, is the owner
and operator of the C. W. Roberts Well No. 5, located in
Unit F of Section 17, Township 25 North, Range 3 West, NMPM,
Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle
Mesaverde, Gallup, and Dakota production within the wellbore
of the above-described well.

(4) That from the Mesaverde zone, the subject well is
capable of low rates of production only.

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

(6) That from the Dakota zone, the subject well is
capable of low rates of production only.

-2-
Case No. 5987
Order No. R-5500

(7) That applicant further seeks approval for the reopening of its C. W. Roberts Wells Nos. 3 and 4 and its Lydia Rentz Well No. 4 to commingle Mesaverde, Gallup, and Dakota production within the wellbores of the above-described wells located in Units O, M, and A of Sections 18, 17, and 19, respectively, of the same township.

(8) That from each of said zones, the subject wells may reasonably be expected to be capable of low rates of production only.

(9) 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.

(10) 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 wells are not shut-in for an extended period.

(11) 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 any of the subject wells are shut-in for 7 consecutive days.

(12) That in order to allocate the commingled production to each of the commingled zones in the wells, applicant should consult with the supervisor of the Aztec District Office of the Commission and determine an allocation formula for each of the production zones.

IT IS THEREFORE ORDERED:

(1) That the applicant, Getty Oil Company, is hereby authorized to commingle Mesaverde, Gallup, and Dakota production within the wellbore of the C. W. Roberts Well No. 3 located in Unit O of Section 18, its C. W. Roberts Wells Nos. 4 and 5 located in Units M and F, respectively, of Section 17, and its Lydia Rentz Well No. 4 located in Unit A of Section 19, all in Township 25 North, Range 3 West, NMPN, Rio Arriba County, New Mexico.

(2) That the applicant shall consult with the Supervisor of the Aztec District Office of the Commission and determine an allocation formula for the allocation of production to each zone in each of the subject wells.

-3-

Case No. 5987
Order No. R-5500

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

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

Henry C. Arnold
HENRY C. ARNOLD, Member

Joe D. Ramey
JOE D. RAMEY, Member & Secretary

S E A L

dx/

☀ Mesa Verde Gas Completion

● Gallup-Dakota Oil Completion

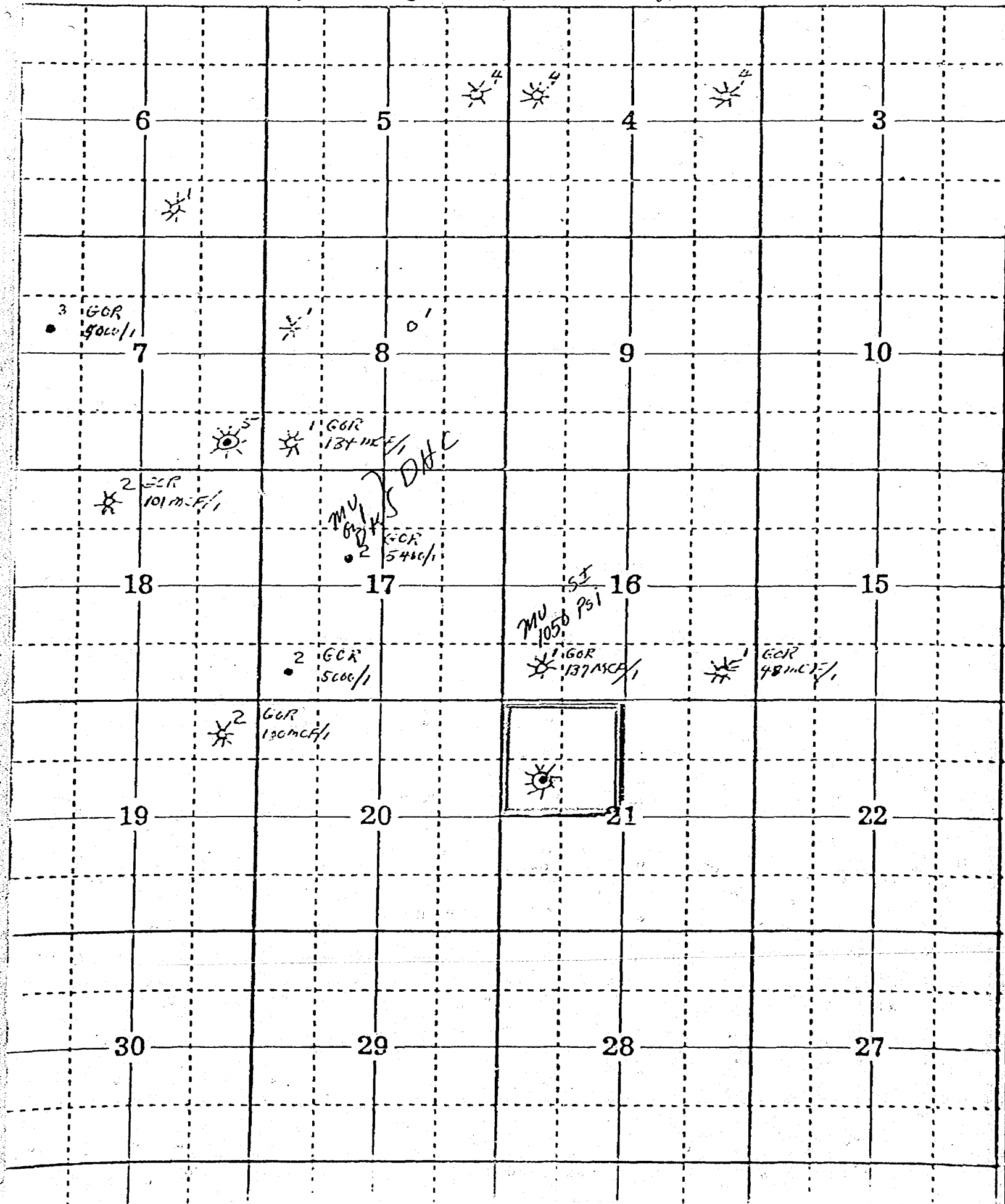
☀ Mesa Verde Gas and Gallup-Dakota Oil Completion

○ Location

1. Schalk
2. Getty
3. Beartooth
4. Petro-Lewis
5. Southland Royalty

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
EXHIBIT NO. 1
CASE NO. 9314
Submitted by _____
Hearing Date _____

Township 25N, Range 3W, Rio Arriba County, New Mexico



Elliott Oil Co.
Ore #1
SW¹/₄ NW¹/₄ Sec 21 Twp 25 N R 3 W
All Meas. H.E. 12' above G.L.

Top 4 1/2" Liner 6157'

7" Casing Shoe 6235'

Top KMV Perf 6008'
21 Perf.

Bottom KMV Perf 6142'

Top Gallup Perf 7183'

20 Perf.

Bottom Gallup Perf 7416'

BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION	
Elliott	EXHIBIT NO. <u>2</u>
CASE NO.	<u>7314</u>
Submitted by	_____
Hearing Date	_____

Setting Nipple 8040'

2 3/8" Tubing at 8071'

Top Dakota Perf 8064'
8084'

8180' 19 Perf

Bottom Dakota Perf 8235'
PBTD 8242

8286' 4 1/2" Liner Shoe
T.D. 8289'

Elliott Oil Company
Ora #1
SW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 21
T-25N R-3W
Rio Arriba County, New Mexico

BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION	
Elliott	EXHIBIT NO. 3
CASE NO. 7314	
Submitted by _____	
Hearing Date _____	

I. P. Test: June 19, 1981
Choke Setting 16/64"
Production - B. O. P. D. 20
B. W. P. D. 40 (Frac Water)
Gas MCF 500
F. T. P. 275 PSI
F. C. P. 900 PSI

June 28, 1981 7 day S. I.
T. P. 576 PSI
C. P. 1571 PSI

Bottom Hole Pressure Test: See Attached Report
B & R Service, Inc.

Proposed Allocation Method: Assume KMV GOR 137 MCF/bbl.
Assume G-D GOR 5 MCF/bbl.
Allocation Example: Based on I. P. Test

KMV Gas - 418.2 MCF
KMV Oil - 3.64 Bbls.
G-D Gas - 81.8 MCF
G-D Oil - 16.36 Bbls.

(See Well Location Plat for basis of assumed Gas - Oil Ratios)

B & R SERVICE, INC.

P. O. Box 1048
Farmington, New Mexico 87401
(505) 325-2393

Company ELLIOTT OIL CO Lease ORA Well 1
County Rio Arriba State New Mexico Date 6-3-81
Shut-In _____ Zero Point K.B. Tbg. Pressure _____
Casing Pressure _____ Tbg. Depth _____ Casing Perf. _____
Max. Temp. _____ Fluid Level 6150'

<u>DEPTH</u>	<u>PSIG</u>	<u>GRADIENT</u>
0	1436	---
5000	1698	.052
6000	1748	.050
7000	2011	.263
8000	2303	.292
8100	2334	.310
8200	2378	.440

BEARTOOTH OIL & GAS COMPANY

P.O. BOX ~~103~~ 2564

BILLINGS, MONTANA 59103

(406) 259-2451

June 29, 1981

Elliot Oil Company
P. O. box 1355
Roswell, New Mexico 88201

Attention: Mr. Frank Elliot

Dear Frank:

The Beartooth Oil & Gas Company Minel Federal No. 1 is located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 7-25N-3W, Rio Arriba County, New Mexico. The total depth of the well is 8360'; it has 5 $\frac{1}{2}$ ", 15.5# and 17# casing cemented with 3 stages. It was completed commingled in the Gallup and Dakota after two separate fracture treatments for 19 BO, 48 BW and 53 MCFPD. The oil is 42 gravity. After pumping for 45 days, production has leveled out at 13 BO, 10 BW and 50-60 MCFPD. The well cost, including the pumping unit and tank battery was \$930,000. We anticipate operations costs would be approximately \$1000/month. Net income after Government royalty, taxes and expenses will be approximately \$260/day, assuming no decline, for a 9.8 year payout. Enclosed is our daily production data for the first two months.

We intend to recomplete this well in the Mesaverde later this summer. If the State does not grant a commingling order for the Gallup-Dakota and Mesaverde, we will plug the current Gallup-Dakota production. It's too gassy to complete pumping under a packer and the zones now open will not flow.

I would be most happy to testify at your hearing as to the economics of a Gallup-Dakota completion, and we are in full support of a commingling order for all three zones in this area.

Yours very truly,

BEARTOOTH OIL & GAS COMPANY

Jim Routson

James G. Routson
Petroleum Engineer

JGR/gb

Enclosure

BEFORE EXAMINER STAMETS	
OIL CONSERVATION DIVISION	
<i>Elliot</i>	EXHIBIT NO. <u>4</u>
CASE NO.	<u>7314</u>
Submitted by	_____
Hearing Date	_____

Minel Federal #1

Production Reports - Went on production at 10:00 AM on 4/28/81

4/28/81	20 B0, 60 BW	TP & CP 50#	
4/29/81	23 B0, 60 BW	" "	
4/30/81	1 B0, 68 BW	" "	
5/1/81	51 B0, 50 BW	" "	70 MCFPD
5/2/81	30 B0, 60 BW	" "	20 MCFPD
5/3/81	28 B0, 50 BW	" "	15 MCFPD
5/4/81	11 B0, 50 BW	" "	Only enough gas to run unit
5/5/81	23 B0, 40 BW	" "	" " " " " "
5/6/81	-	-	Engine down due to rain
5/7/81	Well flowed out casing 30 B0, 10 BW, 50 psi tubing, 275 psi casing. Gas estimated 150 MCF while flowing. Started engine and running at 10 SPM.		
5/8/81	16 B0, 10 BW	Tbg. & csg. 40 psi	No gas
5/9/81	20 B0, 50 BW		Some gas vented
5/10/81	30 B0, 40 BW		No gas
5/11/81	31 B0, 45 BW		No gas (Pumping 9 SPM)
5/12/81	10 B0, 10 BW	Engine down, no compression. Well flowing 45 MCFPD	
5/13/81	15 B0, 30 BW	Back on pump at 2:00 P.M. - 7 SPM	
5/14/81	23 B0, 50 BW, 29 MCF vented,	20 MCF used on lease	
5/15/81	11 B0, 60 BW, 53 MCF		
5/16/81	15 B0, 50 BW, 53 MCF		
5/17/81	30 B0, 50 BW, 53 MCF, 7 SPM		
5 day average: 19 BOPD, 48 BWPB, 53 MCFD			

FINAL REPORT.

5/18/81	10 B0	60 BW	55 MCF
5/19/81	10 B0	60 BW	55 MCF
5/20/81	15 B0	50 BW	55 MCF

Minel Federal #1

5/21/81	11 BO	50 BW	55 MCF	
5/22/81	18 BO	40 BW	"	
5/23/81	28 BO	40 BW	"	
5/24/81	25 BO	40 BW	"	
5/25/81	26 BO	40 BW	"	Shot fluid level - 7200'

5/26/81	16 BO	50 BW	55 MCF	
5/27/81	16 BO	50 BW	"	
5/28/81	16 BO	50 BW	"	
5/29/81	16 BO	50 BW	"	
5/30/81	18 BO	40 BW	"	
5/31/81	15 BO	50 BW	"	Poor pump action.

6/5/81	5 BO	0 BW		Down
6/6/81	8 BO	30 BW	55 MCF	
6/7/81	8 BO	30 BW	"	
6/8/81	8 BO	30 BW	"	
6/9/81	23 BO	20 BW	"	Pumping
6/10/81	13 BO	10 BW	"	
6/11/81	15 BO	10 BW	"	
6/12/81	13 BO	10 BW	"	
6/13/81	13 BO	10 BW	"	
6/14/81	11 BO	10 BW	"	

☼ Mesa Verde Gas Completion

• Gallup-Dakota Oil Completion

☼ Mesa Verde Gas and Gallup-Dakota Oil Completion

○ Location

1. Schalk
2. Getty
3. Beartooth
4. Petro-Lewis
5. Southland Royalty

*to
OJG/DK*

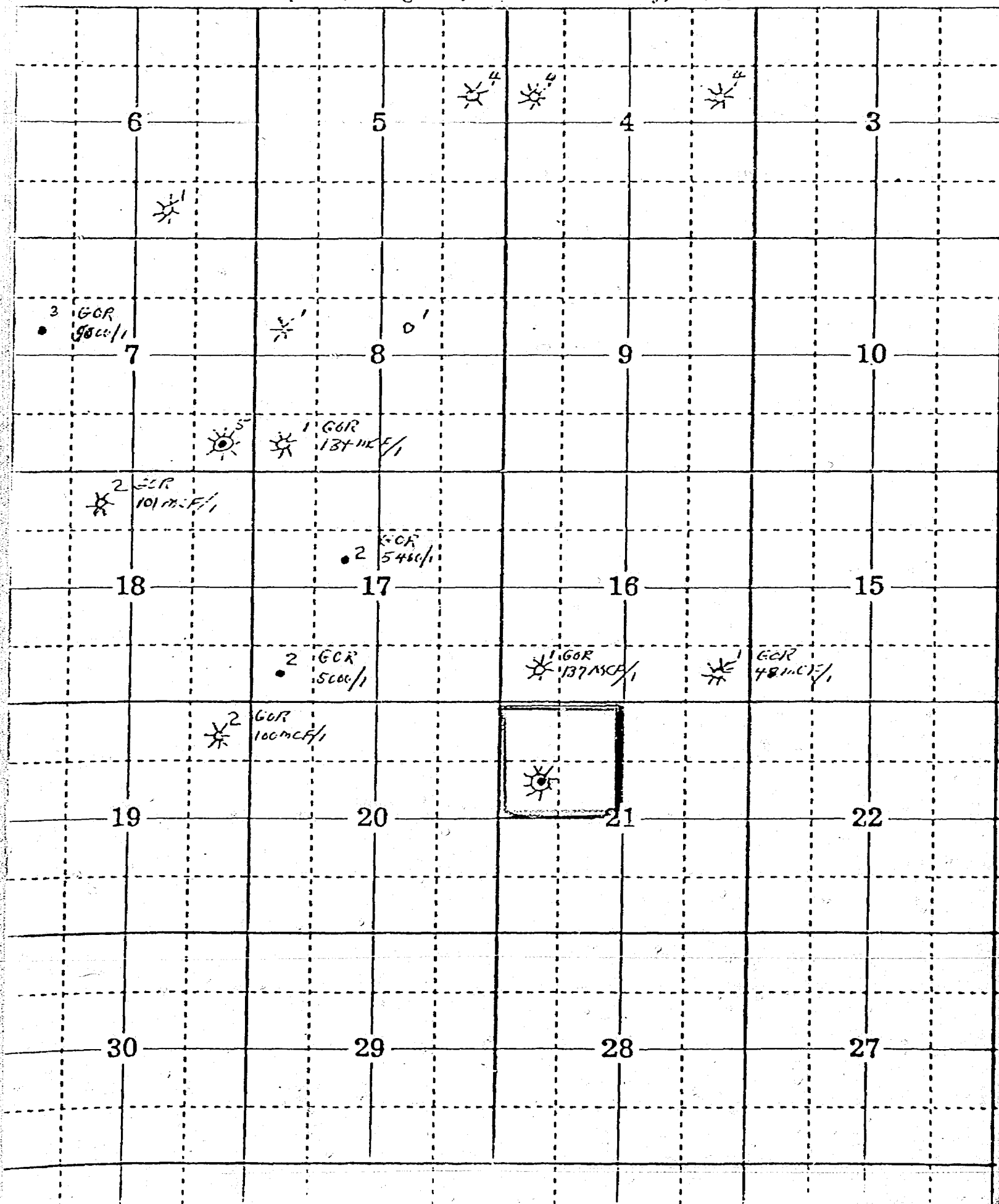
BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION
Elliott EXHIBIT NO. 1

CASE NO. 7314

Submitted by _____

Hearing Date _____

Township 25N, Range 3W, Rio Arriba County, New Mexico



ELLISTON OIL Co.
Ore #1
SW 1/4 Sec 21 Twp 25 N R 3 W
All Mea. K.B. 12' above G.L.

Top 4 1/2" Liner 6157'
7" Casing Shoe 6238'

Top KMV Perf 6008'
21 Perf.
Bottom KMV Perf 6142'

BEFORE EXAMINER STAMETS	
OIL CONSERVATION DIVISION	
ELLISTON	EXHIBIT NO. 2
CASE NO.	9314
Submitted by	
Hearing Date	

Top Gallup Perf 7183'
20 Perf.
Bottom Gallup Perf 7416'

Setting Nipple 8040' →
2 3/8" Tubing at 8071' →

Top Dakota Perf 8064'
8084'
8180' 19 Perf
Bottom Dakota Perf 8235'
PBTD 8242

8286' 4 1/2" Liner Shoe
T.D. 8289'

Elliott Oil Company
Ora #1
SW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 21
T-25N R-3W
Rio Arriba County, New Mexico

BEFORE EXAMINER STAMETS	
OIL CONSERVATION DIVISION	
Elliott	EXHIBIT NO. 3
CASE NO.	7364
Submitted by	
Hearing Date	

I. P. Test:

June 19, 1981

Choke Setting 16/64"

Production - B. O. P. D. 20
B. W. P. D. 40 (Frac Water)
Gas MCF 500
F. T. P. 275 PSI
F. C. P. 900 PSI

June 28, 1981

7 day S. I.

T. P. 576 PSI

C. P. 1571 PSI

Bottom Hole Pressure Test:

See Attached Report
B & R Service, Inc.

Proposed Allocation Method:

Assume KMV GOR 137 MCF/bbl.

Assume G-D GOR 5 MCF/bbl.

Allocation Example: Based on I. P. Test

KMV Gas	-	418.2 MCF
KMV Oil	-	3.64 Bbls.
G-D Gas	-	81.8 MCF
G-D Oil	-	16.36 Bbls.

(See Well Location Plat for basis of assumed Gas - Oil Ratios)

B & R SERVICE, INC.

P. O. Box 1048
Farmington, New Mexico 87401
(505) 325-2393

Company ELLIOTT OIL CO Lease ORA Well 1
County Rio Arriba State New Mexico Date 6-3-81
Shut-In _____ Zero Point K.B. Tbg. Pressure _____
Casing Pressure _____ Tbg. Depth _____ Casing Perf. _____
Max. Temp. _____ Fluid Level 6150'

<u>DEPTH</u>	<u>PSIG</u>	<u>GRADIENT</u>
0	1436	---
5000	1698	.052
6000	1748	.050
7000	2011	.263
8000	2303	.292
8100	2334	.310
8200	2378	.440

BEARTOOTH OIL & GAS COMPANY

P.O. BOX ~~1824~~ 2554

BILLINGS, MONTANA 59103

(406) 259-2451

June 29, 1981

Elliot Oil Company
P. O. box 1355
Roswell, New Mexico 88201

Attention: Mr. Frank Elliot

Dear Frank:

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Yours very truly,

BEARTOOTH OIL & GAS COMPANY

Jim Routson

James G. Routson
Petroleum Engineer

JGR/gb

Enclosure

BEFORE EXAMINER STAMETS OIL CONSERVATION DIVISION <i>Elliot</i> EXHIBIT NO. <u>4</u> CASE NO. <u>7314</u> Submitted by _____ Hearing Date _____
--

Kinel Federal #1

Production Reports - Went on production at 10:00 AM on 4/28/81

4/28/81	20 BO, 60 BW	TP & CP 50#	
4/29/81	23 BO, 60 BW	" "	
4/30/81	1 BO, 68 BW	" "	
5/1/81	51 BO, 50 BW	" "	70 MCFPD
5/2/81	30 BO, 60 BW	" "	20 MCFPD
5/3/81	28 BO, 50 BW	" "	15 MCFPD
5/4/81	11 BO, 50 BW	" "	Only enough gas to run unit
5/5/81	23 BO, 40 BW	" "	" " " " " " "
5/6/81	-	-	Engine down due to rain
5/7/81	Well flowed out casing 30 BO, 10 BW, 50 psi tubing, 275 psi casing. Gas estimated 150 MCF while flowing. Started engine and running at 10 SPM.		
5/8/81	16 BO, 10 BW	Tbg. & csg. 40 psi	No gas
5/9/81	20 BO, 50 BW		Some gas vented
5/10/81	30 BO, 40 BW		No gas
5/11/81	31 BO, 45 BW		No gas (Pumping 9 SPM)
5/12/81	10 BO, 10 BW	Engine down, no compression. Well flowing 45 MCFPD	
5/13/81	15 BO, 30 BW	Back on pump at 2:00 P.M. - 7 SPM	
5/14/81	23 BO, 50 BW,	29 MCF vented, 20 MCF used on lease	
5/15/81	11 BO, 60 BW,	53 MCF	
5/16/81	15 BO, 50 BW,	53 MCF	
5/17/81	30 BO, 50 BW,	53 MCF, 7 SPM	
5 day average: 19 BOPD, 48 BWP, 53 MCFD			

FINAL REPORT.

5/18/81	10 BO	60 BW	55 MCF
5/19/81	10 BO	60 BW	55 MCF
5/20/81	15 BO	50 BW	55 MCF

Minel Federal #1

5/21/81	11 BO	50 BW	55 MCF	
5/22/81	18 BO	40 BW	"	
5/23/81	28 BO	40 BW	"	
5/24/81	25 BO	40 BW	"	Shot fluid level - 7200'
5/25/81	26 BO	40 BW	"	

5/26/81	16 BO	50 BW	55 MCF	
5/27/81	16 BO	50 BW	"	
5/28/81	16 BO	50 BW	"	
5/29/81	16 BO	50 BW	"	
5/30/81	18 BO	40 BW	"	
5/31/81	15 BO	50 BW	"	Poor pump action.

6/5/81	5 BO	0 BW		Down
6/6/81	8 BO	30 BW	55 MCF	
6/7/81	8 BO	30 BW	"	
6/8/81	8 BO	30 BW	"	
6/9/81	23 BO	20 BW	"	Pumping
6/10/81	13 BO	10 BW	"	
6/11/81	15 BO	10 BW	"	
6/12/81	13 BO	10 BW	"	
6/13/81	13 BO	10 BW	"	
6/14/81	11 BO	10 BW	"	

☀ Mesa Verde Gas Completion

• Gallup-Dakota Oil Completion

☀ Mesa Verde Gas and Gallup-Dakota Oil Completion

○ Location

1. Schalk
2. Getty
3. Beartooth
4. Petro-Lewis
5. Southland Royalty

BEFORE EXAMINER STAMETS
OIL CONSERVATION DIVISION

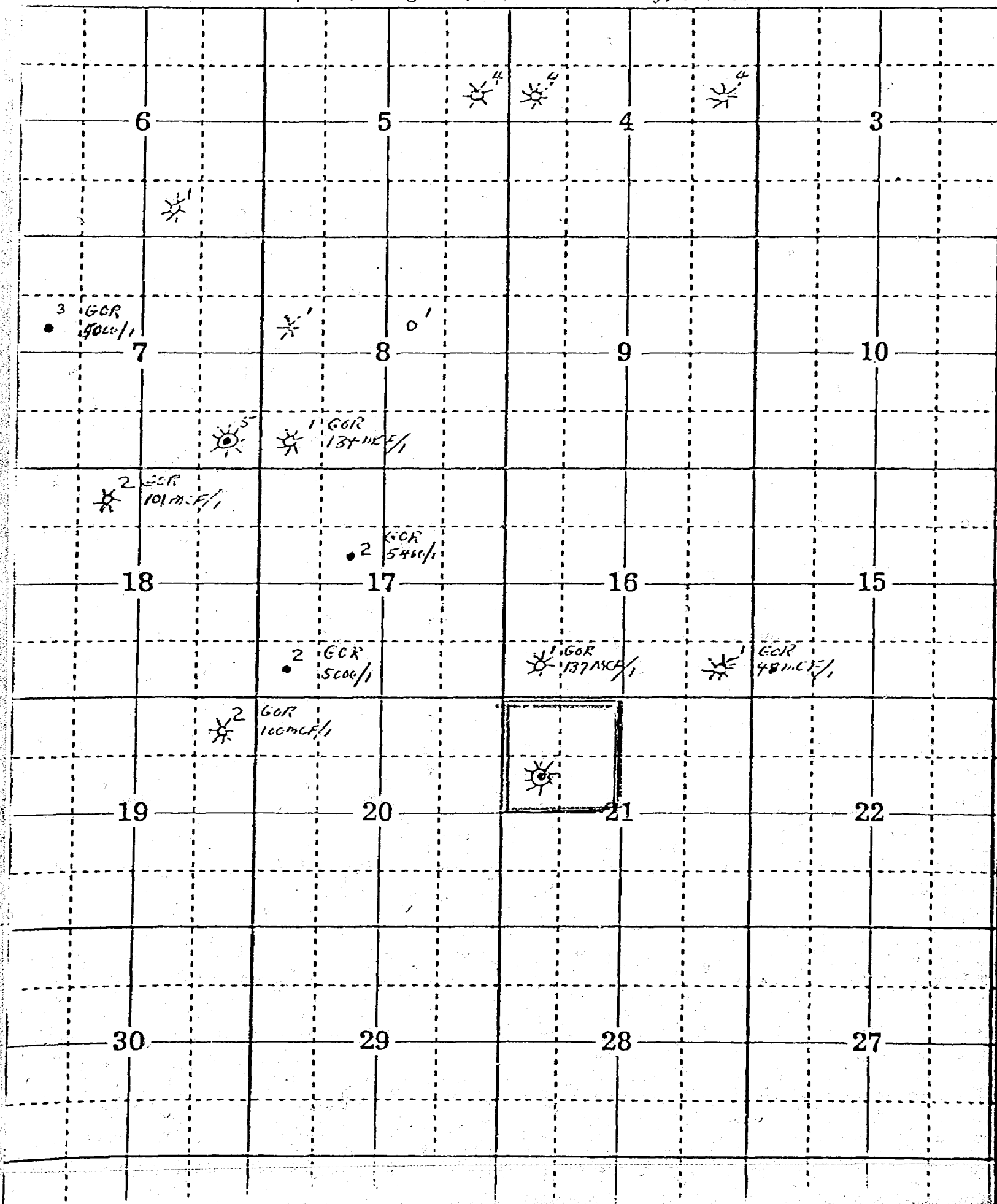
Elliott EXHIBIT NO. 1

CASE NO. _____

Submitted by _____

Hearing Date _____

Township 25N, Range 3W, Rio Arriba County, New Mexico



Elliott Oil Co.
Ore #1
SW 1/4 Sec 21 Twp 25 N R 3 W
All Mea. K.B. 12' above G.L.

Top 4 1/2" Liner 6157'

7" Casing Shoe 6238'

Top K.M.V. Perf 6008'
21 Perf.

Bottom K.M.V. Perf 6142'

Top Gallup Perf 7183'

20 Perf.

Bottom Gallup Perf 7416'

BEFORE EXAMINER STAMETS	
OIL CONSERVATION DIVISION	
Elliott	EXHIBIT NO. 2
CASE NO. 7314	
Submitted by _____	
Hearing Date _____	

Casing Nipple 8040'

2 3/8" Tubing at 8071'

Top Dakota Perf 8064'
8084'

8180' 19 Perf

Bottom Dakota Perf 8235'
PBTD 8242

8286' 4 1/2" Liner Shoe
T.D. 8289'

Elliott Oil Company
Ora #1
SW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 21
T-25N R-3W
Rio Arriba County, New Mexico

BEFORE EXAMINER STAMETS	
OIL CONSERVATION DIVISION	
Elliott	EXHIBIT NO. 3
CASE NO. 7314	
Submitted by _____	
Hearing Date _____	

I. P. Test:

June 19, 1981

Choke Setting 16/64"

Production - B. O. P. D. 20
B. W. P. D. 40 (Frac Water)
Gas MCF 500
F. T. P. 275 PSI
F. C. P. 900 PSI

June 28, 1981

7 day S. I.
T. P. 576 PSI
C. P. 1571 PSI

Bottom Hole Pressure Test:

See Attached Report
B & R Service, Inc.

Proposed Allocation Method:

Assume KMV GOR 137 MCF/bbl.
Assume G-D GOR 5 MCF/bbl.
Allocation Example: Based on I. P. Test

KMV Gas - 418.2 MCF
KMV Oil - 3.64 Bbls.
G-D Gas - 81.8 MCF
G-D Oil - 16.36 Bbls.

(See Well Location Plat for basis of assumed Gas - Oil Ratios)

B & R SERVICE, INC.

P. O. Box 1048

Farmington, New Mexico 87401

(505) 325-2393

Company ELLIOTT OIL CO Lease ORA Well 1
County Rio Arriba State New Mexico Date 6-3-81
Shut-In _____ Zero Point K.B. Tbg. Pressure _____
Casing Pressure _____ Tbg. Depth _____ Casing Perf. _____
Max. Temp. _____ Fluid Level 6150'

<u>DEPTH</u>	<u>PSIG</u>	<u>GRADIENT</u>
0	1436	---
5000	1698	.052
6000	1748	.050
7000	2011	.263
8000	2303	.292
8100	2334	.310
8200	2378	.440

BEARTOOTH OIL & GAS COMPANY

P.O. BOX ~~1355~~ 2564

BILLINGS, MONTANA 59103

(406) 259-2451

June 29, 1981

Elliot Oil Company
P. O. box 1355
Roswell, New Mexico 88201

Attention: Mr. Frank Elliot

Dear Frank:

The Beartooth Oil & Gas Company Minel Federal No. 1 is located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 7-25N-3W, Rio Arriba County, New Mexico. The total depth of the well is 8360'; it has 5 $\frac{1}{2}$ ", 15.5# and 17# casing cemented with 3 stages. It was completed commingled in the Gallup and Dakota after two separate fracture treatments for 19 BO, 48 BW and 53 MCFPD. The oil is 42 gravity. After pumping for 45 days, production has leveled out at 13 BO, 10 BW and 50-60 MCFPD. The well cost, including the pumping unit and tank battery was \$930,000. We anticipate operations costs would be approximately \$1000/month. Net income after Government royalty, taxes and expenses will be approximately \$260/day, assuming no decline, for a 9.8 year payout. Enclosed is our daily production data for the first two months.

We intend to recomplete this well in the Mesaverde later this summer. If the State does not grant a commingling order for the Gallup-Dakota and Mesaverde, we will plug the current Gallup-Dakota production. It's too gassy to complete pumping under a packer and the zones now open will not flow.

I would be most happy to testify at your hearing as to the economics of a Gallup-Dakota completion, and we are in full support of a commingling order for all three zones in this area.

Yours very truly,

BEARTOOTH OIL & GAS COMPANY

Jim Routson

James G. Routson
Petroleum Engineer

JGR/gb
Enclosure

BEFORE EXAMINER STAMETS	
OIL CONSERVATION DIVISION	
EXHIBIT NO.	4
CASE NO.	7314
Submitted by	
Hearing Date	

Minel Federal #1

Production Reports - Went on production at 10:00 AM on 4/28/81

4/28/81	20 B0, 60 BW	TP & CP 50#	
4/29/81	23 B0, 60 BW	" "	
4/30/81	1 B0, 68 BW	" "	
5/1/81	51 B0, 50 BW	" "	70 MCFPD
5/2/81	30 B0, 60 BW	" "	20 MCFPD
5/3/81	28 B0, 50 BW	" "	15 MCFPD
5/4/81	11 B0, 50 BW	" "	Only enough gas to run unit
5/5/81	23 B0, 40 BW	" "	" " " " " " " "
5/6/81	-	-	Engine down due to rain
5/7/81	Well flowed out casing 30 B0, 10 BW, 50 psi tubing, 275 psi casing. Gas estimated 150 MCF while flowing. Started engine and running at 10 SPM.		
5/8/81	16 B0, 10 BW	Tbg. & csq. 40 psi	No gas
5/9/81	20 B0, 50 BW		Some gas vented
5/10/81	30 B0, 40 BW		No gas
5/11/81	31 B0, 45 BW		No gas (Pumping 9 SPM)
5/12/81	10 B0, 10 BW	Engine down, no compression. Well flowing 45 MCFPD	
5/13/81	15 B0, 30 BW	Back on pump at 2:00 P.M. - 7 SPM	
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FINAL REPORT.

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Mine) Federal #1

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6/11/81	15 BO	10 BW	"	
6/12/81	13 BO	10 BW	"	
6/13/81	13 BO	10 BW	"	
6/14/81	11 BO	10 BW	"	

Dockets Nos. 25-81 and 26-81 are tentatively set for August 12 and 26, 1981. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - MONDAY - JULY 20, 1981

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 6892: (DE NOVO)

Application of Merrion & Bayless for compulsory pooling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the South Blanco-Pictured Cliffs Pool underlying the SW/4 of Section 27, Township 24 North, Range 2 West, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

Upon application of Merrion & Bayless, this case will be heard De Novo pursuant to the provisions of Rule 1220.

Docket No. 24-81

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 29, 1981

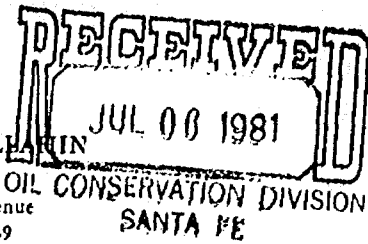
9 A.M. - OIL CONSERVATION DIVISION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

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

- CASE 7309: Application of Gulf Oil Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the South Shugart Deep Unit Area, comprising 3,806 acres, more or less, of State and Federal lands in Townships 18 and 19 South, Range 31 East.
- CASE 7310: Application of Amoco Production Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the El Alto Grande Unit Area, comprising 2,560 acres, more or less, of Federal lands in Township 22 South, Ranges 33 and 34 East.
- CASE 7311: Application of Amoco Production Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Big Sinks Federal Exploratory Unit Area, comprising 3,520 acres, more or less, of State and Federal lands in Townships 25 and 26 South, Range 31 East.
- CASE 7280: (Continued from July 15, 1981, Examiner Hearing)
- Application of Northwest Pipeline Corporation for a dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Rosa Unit Well No. 77 located in Unit L of Section 33, Township 31 North, Range 5 West, to produce gas from the Mesaverde formation and commingled Gallup and Dakota production through separate strings of tubing.
- CASE 7312: Application of Phillips Petroleum Company for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Atoka and Morrow production in the wellbore of its Malaga A Well No. 2 located in Unit D of Section 2, Township 24 South, Range 28 East, Malaga Field.
- CASE 7313: Application of Phillips Petroleum Company for downhole commingling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Atoka and Morrow production in the wellbore of its Drag A Well No. 1 located in Unit C of Section 18, Township 23 South, Range 27 East, South Carlsbad Field.
- CASE 7314: Application of Elliott Oil Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Gallup, Dakota, and Mesaverde production in the wellbore of its ORA Well No. 1 located in Unit E of Section 21, Township 25 North, Range 3 West.

Jason Kellahin
W. Thomas Kellahin
Karen Aubrey

KELLAHIN and KELLAHIN
Attorneys at Law
500 Don Gaspar Avenue
Post Office Box 1769
Santa Fe, New Mexico 87501



Telephone 982-4285
Area Code 505

July 2, 1981

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

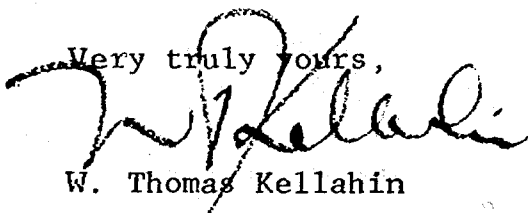
Case 7314

RE: Elliott Oil Company

Dear Joe:

Please set the enclosed application for the next
available examiner hearing on July 29, 1981.

Very truly yours,


W. Thomas Kellahin

WTK/jm
Enclosure
cc: Elliott Oil Company

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY AND MINERALS
OIL CONSERVATION DIVISION



IN THE MATTER OF THE APPLICATION
OF ELLIOTT OIL COMPANY FOR
DOWNHOLE COMMINGLING, RIO ARRIBA
COUNTY NEW MEXICO.

Case 7314

A P P L I C A T I O N

COMES NOW ELLIOTT OIL COMPANY by and through its attorneys, Kellahin & Kellahin, and applies to the Oil Conservation Division of New Mexico for approval to downhole commingle production from the Gallup, Dakota and Mesa formations in its ORA #1 well located in Unit E, Section 21, T25N, R3W, NMPM, Rio Arriba County New Mexico and in support thereof would show:

1. Applicant is the operator of the ORA #1 well located 1520 feet from the North line and 790 feet from the West line, Section 21, T25N, R3W, NMPM;
2. Applicant proposes to downhole commingle gas and oil production from the Gallup, Dakota and Mesa Verde formations in the subject well.
3. The commingling will result in the recovery of additional reserves that might not otherwise be recovered.
4. The ownership of said production is common;
5. That approval of the application will be in the best interests of conservation, the prevention of waste and the protection of correlative rights.

WHEREFORE applicant prays that this application be set for hearing and that after notice and hearing the Division enter its order approving this application as requested.

KELLAHIN & KELLAHIN

By

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

dr/

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

ORDER NO. 7314

Order No. R-6757

APPLICATION OF ELLIOTT OIL COMPANY
FOR DOWNHOLE COMINGLING, RIO ARRIBA
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on July 29
19 81, at Santa Fe, New Mexico, before Examiner Richard L.
Stamets.

NOW, on this day of , 19 81, the
Division Director, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully
advised in the premises,

FINDS:

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

(2) That the applicant, Elliott Oil Company, is
the owner and operator of the ^{Ora} ~~ORA~~ Well No. 1,
located in Unit E of Section 21, Township 25 North,
Range 3 West, NMPM, Rio Arriba County, New Mexico.

(3) That the applicant seeks authority to commingle
~~Collins, Dakota~~ ^{Mesa Verde}, ^{Gallup} and ^{Dakota} production
within the wellbore of the above-described well.

Mesaverde
(4) That from the ~~Gallup~~ zone, the subject well is capable of low marginal production only.

(5) That from the ~~Dakota~~ *Gallup* zone, the subject well is capable of low marginal production only.

(6) That from the ~~Mesaverde~~ *Dakota* zone, the subject well is capable of low marginal production only.

(7) 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.

(8) 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.

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

(10) That in order to allocate the commingled production to each of the commingled zones in the subject well, percent of the commingled _____ production should be allocated to the ~~Dakota~~ *Gallup* zone, ~~xxx~~ percent of the commingled _____ production to the *Dakota* zone and _____ percent of the commingled production to the ~~Mesaverde~~ zone.

(ALTERNATE)

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

IT IS HEREBY ORDERED:

(1) That the applicant, Elliott Oil Company, is
hereby authorized to commingle ~~Gasavada, Gallup,~~
~~Gasavada, Gallup,~~ and
~~Gasavada, Gallup,~~ production within the wellbore of
the ~~One~~ Well No. 1, located in Unit E of
Section 21, Township 25 North, Range 3 West,
NMPM, Rio Arriba County, New Mexico.

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

~~(ALTERNATE)~~

(2) That _____ percent of the commingled
production shall be allocated to the Gallup
zone, ~~xxx~~ _____ percent of the commingled
production shall be allocated to the Dakota zone and
_____ percent of the commingled _____
~~xxxxx~~ the Mesaverde zone. production shall be allocated to

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

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

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