

CASE 6631: RESERVE OIL, INC. FOR DOWN-
HOLE COMMINGLING, LEA COUNTY, NEW MEXICO

Continue to

October 17

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CASE NO.

66.31

APPLICATION,
TRANSCRIPTS,
SMALL EXHIBITS,

ETC.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
State Land Office Building
Santa Fe, New Mexico
17 October, 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Reserve Oil, Inc. for
downhole commingling, Lea County,
New Mexico.

CASE
663I

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Applicant:

Joel Carson, Esq..
LOSEE, CARSON, AND DICKERSON
P.O. Drawer 239
Artesia, New Mexico 88210

For the Oil Conservation
Division:

Ernest L. Padilla, Esq.
Legal Counsel for the Division
State Land Office Building
Santa Fe, New Mexico 87503

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I N D E X

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CLARENCE CHANDLER

Direct Examination by Mr. Carson

3

Cross Examination by Mr. Nutter

12

E X H I B I T S

Applicant Exhibit One, Packet
(With attachments A
through F-3)

4

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1 MR. NUTTER: Call next Case Number 6631.

2 MR. PADILLA: Application of Reserve Oil,
3 Inc., for downhole commingling, Lea County, New Mexico.

4 MR. CARSON: Mr. Examiner, my name is Joel
5 Carson, Losee, Carson, and Dickerson, Artesia, New Mexico,
6 appearing on behalf of the applicant. I have one witness.

7
8 (Witness sworn.)

9
10 CLARENCE CHANDLER

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

13
14 DIRECT EXAMINATION

15 BY MR. CARSON:

16 Q Would you state your name, please?

17 A Clarence Chandler.

18 Q And, Mr. Chandler, by whom are you employed?

19 A Reserve Oil, Incorporated.

20 Q And in what capacity?

21 A District Engineer.

22 Q Have you previously testified before this
23 Commission?

24 A No, sir.

25 Q Would you explain to the Examiner, or give

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1 him some of your educational background?

2 A. Yes. I graduated from Texas A & M Univer-
3 sity in 1963 with a BS in geological engineering. Subsequent
4 to that I worked for Texaco for eight years as -- in pro-
5 duction and drilling operations; Tenneco for two years; and
6 have been employed by Reserve Oil for three and a half years
7 in my present capacity.

8 Q Okay, and you have been qualified to testify
9 before the Railroad Commission in Texas, is that correct?

10 A. That is correct.

11 MR. CARSON: Mr. Examiner, are the witness'
12 qualifications satisfactory as a petroleum engineer?

13 MR. NUTTER: Yes, they are.

14 MR. CARSON: I might say, Mr. Examiner,
15 that as you can see from the exhibits which I left all at-
16 tached, this was previously submitted for administrative
17 approval because it was an exception to the regulations; it
18 was set for a hearing and I didn't undo the packet that
19 originally come in but simply stamped it as Exhibit One with
20 attachments and had Mr. Chandler bring it up to date.

21 So with that I would like to ask the wit-
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23 MR. NUTTER: Now you have identified the
24 original correspondence which came in requesting the admini-
25 strative approval as an exhibit in this case, then.

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Page 5

1 MR. CARSON: Yes, sir.

2 MR. NUTTER: Okay.

3 MR. CARSON: That's the purpose.

4 MR. NUTTER: All right.

5 Q (Mr. Carson continuing.) Now, I'll refer
6 you to that Applicant's Exhibit Number One and in particular
7 your explanation, dated June 12th, 1979, Mr. Chandler, and
8 ask if you more or less will synopsise that for the Examiner?

9 A All right, sir. This exhibit is requesting
10 approval of an exception to Rule 303-A to permit downhole
11 commingling of Cooper Jal Unit Wells Nos. 149 and 306 so as
12 to, one, reduce hazards of recurring fishing jobs for stuck
13 tubing, which could result in premature well abandonment;
14 and number two, primarily to permit more economic and effi-
15 cient operation of this beam pump well for which both zones
16 will improve ultimate recovery and reduce waste.

17 Referring to attachment E, which is the
18 wellbore diagram, the present downhole installation of con-
19 sists of one string of 1-inch tubing which is a vent string
20 for the lower zone gas and 2-3/8ths tubing for pumping the
21 lower zone oil and water strung into a packer.

22 The Jalmat gas, which is the upper zone,
23 when flowing produces out the 1-inch 2-3/8ths tubing 5-1/2
24 casing annulus. The Jalmat gas pool completion has been
25 producing some water since 1975 and small amounts of sand

1 and scale cause the 2-3/8ths tubing seal assembly to seize
2 in the packer, resulting in costly fishing -- fishing jobs
3 jobs whenever the tubing has to be pulled for replacement of
4 tubing due to strong corrosion or to retrieve stuck pumps.

5 The lower zone, the Langlie Mattix zone,
6 produced water is quite corrosive, has caused calcum carbonate
7 scaling and is very difficult to inhibit with the present
8 mechanical configuration. Repeated downhole mechanical
9 failures and subsequent fishing jobs increase the risk of
10 junk in the wellbore.

11 Reserve Oil proposes that the Baker packer
12 be removed and a single string of 2-3/8ths tubing be used to
13 pump the downhole commingled fluids. As previously stated,
14 the Jalmat gas zone, which is the upper zone, is presently --
15 well, logs off with water. By being able to keep this slow
16 buildup of water pumped off the recovery of Jalmat gas will
17 be greatly improved.

18 An example of the potential for improving
19 Jalmat gas zone recovery is shown in attachment D, which is
20 a production decline curve from the Jalmat zone.

21 On January the 16th of '78 due to poor
22 performance of the gas zone, which is the Jalmat, and the
23 upper zone, during the last half of '77, the 1-inch vent
24 string for the lower zone was raised above the packer so as
25 to allow the Jalmat gas zone water to be pumped from the

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1 tubing-casing annulus. The results are self-explanatory.

2 On April the 13th, '78, the 1-inch vent
3 string was lowered back into the packer resulting in a total
4 loss of Jalmat gas production by December of '78. And this
5 is due to the fact that the well started logging up again
6 with water.

7 The Jalmat gas pool and the Langlie
8 Mattix oil pool are both unitized in the Cooper Jal Unit
9 and have common working interests and royalty interest
10 ownership.

11 Q Now, Mr. Chandler, are you presently
12 producing the Jalmat gas out of these wells at all?

13 A Out of this particular wellbore?

14 Q Yes.

15 A Yes. After the -- referring to, let's
16 see, it's attachment D -- the production decline curve for
17 Well No. 306, which is the Jalmat completion, the well died
18 back in December of '78 and would not produce up through
19 the annulus by itself.

20 In April the well started producing again
21 through the annulus. We're making about 7 Mcf a day, and
22 we feel that by keeping this well pumped off that we can
23 recover as much as 100 Mcf a day out of the Jalmat zone.

24 Q I'm going to refer you to the attachment
25 to your letter which gives the information as required by

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1 the rules and regulations of the Oil Conservation Commission.
2 Was that -- was that attachment prepared by you or under
3 your supervision?

4 A Yes.

5 Q Is it correct to the best of your knowledge
6 and belief?

7 A Yes.

8 Q Do you have -- I notice in item number
9 six on that exhibit, no -- there are no pressures given for
10 the two zones.

11 A No, sir, we don't have any available
12 bottom hole pressure data in this area.

13 One thing we do do since this is in a
14 waterflood, we continuously monitor all our wells with a
15 Sonilog well sounder, attempting to keep our wells pumped
16 off and also this helps us monitor our flood to see if we're
17 getting any response. So flood -- or the field-wide there,
18 we -- we usually have all wells pumped down.

19 Q And you are now -- this well is the sub-
20 ject of a waterflood at the present time, is it not?

21 A That is correct.

22 Q Okay, and you have -- are the fluids from
23 these two zones compatible?

24 A Yes, sir.

25 Q And you've attached as exhibits F-1, 2,

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1 and 3 the documentation on the compatibility of the water,
2 is that correct?

3 A. Right, that is correct.

4 Q. And also, Mr. Chandler, referring to that
5 same exhibit, it shows that as far as this Langlie Mattix
6 pool is concerned with -- at the present time you are pro-
7 ducing approximately 10 barrels a day of oil and the exhibit
8 shows no production of gas.

9 A. That was at the time the exhibit was pre-
10 pared. Now it's approximately 7 Mcf a day.

11 Q. For a total of about \$128, \$129, a day.

12 A. Right.

13 Q. And it's your belief that if this appli-
14 cation is granted, that you can perhaps produce 100 Mcf a
15 day that would otherwise be lost, is that correct?

16 A. That is what we hope to achieve.

17 Q. And you've notified your offset operators
18 in writing of your intention to file this application and
19 what you intend to do, is that correct?

20 A. Yes. We did this back in June.

21 Q. Have you had any objections?

22 A. No, sir.

23 Q. I refer you to attachment A. Would you
24 explain to the Examiner what that purports to show?

25 A. Okay, attachment A shows the location of

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1 the well in question in respect to the unit, waterflood
2 unit, Cooper Jal Unit, and also gives who the offset operators
3 are to the unit there.

4 Q What does exhibit -- I refer you to at-
5 tachment B and ask what that shows?

6 A Attachment B is -- well, at the time of the
7 writing of the application, was a current well test on the
8 Well No. 149, which is a Langlie Mattix completion, and this
9 was also required as part of the data for the downhole com-
10 mingling request.

11 Q Attachment C, was that prepared by you?

12 A That is correct. It's a production decline
13 curve for the Langlie Mattix zone, which is Well No. 149.

14 Q And attachment D.

15 A Attachment D is a production decline curve
16 for the upper zone, which is a Jalmat gas zone.

17 Q And, Mr. Chandler, you've retrieved this
18 application from the Commission and brought that decline
19 curve up to date, have you not?

20 A Yes.

21 Q And attachment E, would you explain what
22 that is?

23 A Yes. Attachment E is a wellbore diagram
24 which shows the mechanical configuration of the presently
25 being pumped well, and as previously stated, the Yates gas

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1 has to flow up the annulus under its own energy and what
2 happens, it begins to log off and just dies off, and what we
3 have to do is pull the 1-inch vent string out of the packer,
4 allow the water to gravity down so we can pump the water out
5 and try to get the gas back, but it doesn't -- it's not
6 hardly any time before the Jalmat zone begins to log up
7 again and then we lose it.

8 Q And again, it's your contention that if this
9 application is not granted, that you'll simply lose the gas
10 zone, is that correct?

11 A Yes, sir.

12 Q You've already referred to exhibits F-1
13 through F-3.

14 Were all these exhibits prepared by you or
15 under your direction and supervision?

16 A Yes.

17 MR. CARSON: I'd like to move the intro-
18 duction of Applicant's Exhibit Number One, Mr. Examiner,
19 with attachments.

20 MR. NUTTER: Applicant's Exhibit One, in-
21 cluding attachments A through F-3, will be admitted in evi-
22 dence.

23 Q (Mr. Carson continuing.) Mr. Chandler,
24 in your professional opinion will the granting of this ap-
25 plication prolong the economic life of these wells?

1 A. Yes, for both zones.

2 Q. Will it promote conservation --

3 A. Yes.

4 Q. -- and prevent waste?

5 A. Definitely.

6 Q. Will it protect correlative rights?

7 A. Yes.

8 Q. And is it also in accordance with sound
9 engineering practices?

10 A. I believe so.

11 MR. CARSON: Does the Examiner have any
12 questions?

13 MR. NUTTER: Yes, sir.

14 CROSS EXAMINATION

15
16 BY MR. NUTTER:

17 Q. Mr. Chandler, looking at your attachment
18 C, it would appear that the No. 149, which is the designation
19 of the well in the Langlie Mattix, is currently making from
20 220 to 240 barrels of oil per day.

21 A. No, sir, that's per month.

22 Q. I mean per month, yes, I mean per month.

23 A. That is correct.

24 Q. And your attachment B, which was the GOR
25 test report, taken in June of 1979, indicated about 10 barrels

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1 per day. So apparently the oil has fallen off some there.

2 A. Yes, sir, it has.

3 Q. Now how about gas? We have 33 Mcf of gas
4 produced on test in June and you don't show gas production
5 on this chart for the 149. How much gas does that thing
6 normally make in the Langlie Mattix?

7 A. This was, I thought, a representative ratio
8 here in June. I would have to dig this information up. I
9 don't have it with me, you know, the monthly gas, but I can
10 certainly provide it.

11 Q. Now it is in a waterflood project, isn't
12 it?

13 A. Yes, sir, that is correct.

14 Q. The Langlie Mattix is being flooded here.

15 A. Yes, sir, and so is the Jalmat.

16 Q. Now let's look at the plat that's in here
17 and see where the nearest water injection wells to the sub-
18 ject well are. Apparently the triangles --

19 A. Yes, sir, the triangles are injectors.

20 Q. -- to the north, south, east, and west
21 are all injection wells.

22 A. Yes, sir, I have injection wells, Langlie
23 Mattix injectors on four sides.

24 Q. Are they active?

25 A. Yes, sir.

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1 Q Okay. Now oil production is declining.
2 Is this decline after a response to waterflood or are we
3 still waiting for a response to waterflood and this is a
4 decline in primary?

5 A This is after -- after we've seen some
6 response.

7 Q I see, so this is secondary decline?

8 A Yes, sir.

9 Q Now on your attachment D you show gas
10 production from the 306 side of the well. What about oil
11 production from that zone.

12 A It doesn't make any; it's dry gas.

13 Q No oil -- no liquid hydrocarbons at all?

14 A We've only had in the field, in some of
15 these older -- the Jalmat gas wells, we've had response
16 from one well where we did get some gas but it's some dis-
17 tance from this, located in another part of the field.

18 We have not seen any oil in this well at
19 all, and it's a possibility, you know, down the line that
20 we could being that we're flooding the Jalmat zone.

21 Q Now, when you have pulled that 1-inch
22 vent string and pumped the Langlie Mattix, you were pumping
23 water from the Jalmat and the Langlie Mattix on that test.
24 Do you have any idea how much water the Jalmat makes with
25 this gas production? If it were kept pumped off, what would

1 the continuous rate of water production be?

2 A. Probably no more than between 5 and 10
3 barrels a day, a very small amount.

4 Q. So the bulk of the water that you would
5 be producing under commingled circumstances would be Langlie
6 Mattix water?

7 A. Yes, sir, that is correct, which is about
8 50 barrels a day now.

9 Q. And you expect that this well, if it were
10 kept pumped off, would produce in the range of the curve
11 that's shown here in the early months of 1978, up here at
12 around 4000 Mcf per month, is that it?

13 A. Yes, sir, that is correct.
14 We've had a dramatic increase when we -- we experimented with
15 it there. We were greatly surprised at what it was capable
16 of.

17 Q. Now I believe that the original commingling
18 authority that you mentioned here in your letter of June
19 12th, talks about downhole commingling being approved for
20 Jalmat oil wells and Langlie Mattix oil wells, approved by
21 Order Number R-5590. Was this well classified as an oil
22 well at one time?

23 A. This well here?

24 Q. Uh-huh?

25 A. No, sir. This has always been a Jalmat

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1 gas well.

2 Q It's always been a dry gas well?

3 A My purpose of including that was that we
4 had had some other commingling in the field, you know, in
5 the last couple of years, but I was also specific to state
6 it was for, you know, the Langlie Mattix oil and the Jalmat
7 oil.

8 Q Uh-huh, so this has always been a gas well,
9 then?

10 A Yes, sir, that is correct.

11 Q Now what is dedicated to it, as far as
12 acreage is concerned?

13 A I think it is 160 but I don't really know.

14 Q Now --

15 A It's all -- it's all unitized. The gas
16 zone, the gas well is unitized within the Cooper Jal Unit
17 Waterflood.

18 Q Okay, that was going to be my next question
19 as to the ownership of the two vertical sections.

20 A The working interest ownership and the
21 royalty interest ownership are identical.

22 Q And the Cooper Jal Unit is not restricted
23 to the Langlie Mattix.

24 A No, sir.

25 MR. NUTTER: Are there any further questions

1 of Mr. Chandler? He may be excused.

2 Do you have anything further, Mr. Carson?

3 MR. CARSON: Nothing further, Mr. Examiner.

4 MR. NUTTER: Does anyone have anything they
5 wish to offer in Case Number 6631?

6 We'll take the case under advisement.

7
8 (Hearing concluded.)

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REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of the Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, from my notes taken at the time of the hearing.

Sally W. Boyd C.S.R.
Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6631 heard by me on 10/17 1979.

[Signature] Examiner
Oil Conservation Division

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1 him some of your educational background?

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25 to allow the Jalmat gas zone water to be pumped from the

1 tubing-casing annulus. The results are self-explanatory.

2 On April the 13th, '78, the 1-inch vent
3 string was lowered back into the packer resulting in a total
4 loss of Jalmat gas production by December of '78. And this
5 is due to the fact that the well started logging up again
6 with water.

7 The Jalmat gas pool and the Langlie
8 Mattix oil pool are both unitized in the Cooper Jal Unit
9 and have common working interests and royalty interest
10 ownership.

11 Q Now, Mr. Chandler, are you presently
12 producing the Jalmat gas out of these wells at all?

13 A Out of this particular wellbore?

14 Q Yes.

15 A Yes. After the -- referring to, let's
16 see, it's attachment D -- the production decline curve for
17 Well No. 306, which is the Jalmat completion, the well died
18 back in December of '78 and would not produce up through
19 the annulus by itself.

20 In April the well started producing again
21 through the annulus. We're making about 7 Mcf a day, and
22 we feel that by keeping this well pumped off that we can
23 recover as much as 100 Mcf a day out of the Jalmat zone.

24 Q I'm going to refer you to the attachment
25 to your letter which gives the information as required by

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Page 8

1 the rules and regulations of the Oil Conservation Commission.
2 Was that -- was that attachment prepared by you or under
3 your supervision?

4 A. Yes.

5 Q. Is it correct to the best of your knowledge
6 and belief?

7 A. Yes.

8 Q. Do you have -- I notice in item number
9 six on that exhibit, no -- there are no pressures given for
10 the two zones.

11 A. No, sir, we don't have any available
12 bottom hole pressure data in this area.

13 One thing we do do since this is in a
14 waterflood, we continuously monitor all our wells with a
15 Sonilog well sounder, attempting to keep our wells pumped
16 off and also this helps us monitor our flood to see if we're
17 getting any response. So flood -- or the field-wide there,
18 we -- we usually have all wells pumped down.

19 Q. And you are now -- this well is the sub-
20 ject of a waterflood at the present time, is it not?

21 A. That is correct.

22 Q. Okay, and you have -- are the fluids from
23 these two zones compatible?

24 A. Yes, sir.

25 Q. And you've attached as exhibits F-1, 2,

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1 and 3 the documentation on the compatibility of the water,
2 is that correct?

3 A. Right, that is correct.

4 Q And also, Mr. Chandler, referring to that
5 same exhibit, it shows that as far as this Langlie Mattix
6 pool is concerned with -- at the present time you are pro-
7 ducing approximately 10 barrels a day of oil and the exhibit
8 shows no production of gas.

9 A That was at the time the exhibit was pre-
10 pared. Now it's approximately 7 Mcf a day.

11 Q For a total of about \$128, \$129, a day.

12 A Right.

13 Q And it's your belief that if this appli-
14 cation is granted, that you can perhaps produce 100 Mcf a
15 day that would otherwise be lost, is that correct?

16 A That is what we hope to achieve.

17 Q And you've notified your offset operators
18 in writing of your intention to file this application and
19 what you intend to do, is that correct?

20 A Yes. We did this back in June.

21 Q Have you had any objections?

22 A No, sir.

23 Q I refer you to attachment A. Would you
24 explain to the Examiner what that purports to show?

25 A Okay, attachment A shows the location of

1 the well in question in respect to the unit, waterflood
2 unit, Cooper Jal Unit, and also gives who the offset operators
3 are to the unit there.

4 Q What does exhibit --- I refer you to at-
5 tachment B and ask what that shows?

6 A Attachment B is --- well, at the time of the
7 writing of the application, was a current well test on the
8 Well No. 149, which is a Langlie Mattix completion, and this
9 was also required as part of the data for the downhole com-
10 mingling request.

11 Q Attachment C, was that prepared by you?

12 A That is correct. It's a production decline
13 curve for the Langlie Mattix zone, which is Well No. 149.

14 Q And attachment D.

15 A Attachment D is a production decline curve
16 for the upper zone, which is a Jalmat gas zone.

17 Q And, Mr. Chandler, you've retrieved this
18 application from the Commission and brought that decline
19 curve up to date, have you not?

20 A Yes.

21 Q And attachment E, would you explain what
22 that is?

23 A Yes. Attachment E is a wellbore diagram
24 which shows the mechanical configuration of the presently
25 being pumped well, and as previously stated, the Yates gas

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1 has to flow up the annulus under its own energy and what
2 happens, it begins to log off and just dies off, and what we
3 have to do is pull the 1-inch vent string out of the packer,
4 allow the water to gravity down so we can pump the water out
5 and try to get the gas back, but it doesn't --- it's not
6 hardly any time before the Jalmat zone begins to log up
7 again and then we lose it.

8 Q And again, it's your contention that if this
9 application is not granted, that you'll simply lose the gas
10 zone, is that correct?

11 A Yes, sir.

12 Q You've already referred to exhibits F-1
13 through F-3.

14 Were all these exhibits prepared by you or
15 under your direction and supervision?

16 A Yes.

17 MR. CARSON: I'd like to move the intro-
18 duction of Applicant's Exhibit Number One, Mr. Examiner,
19 with attachments.

20 MR. NUTTER: Applicant's Exhibit One, in-
21 cluding attachments A through F-3, will be admitted in evi-
22 dence.

23 Q (Mr. Carson continuing.) Mr. Chandler,
24 in your professional opinion will the granting of this ap-
25 plication prolong the economic life of these wells?

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1 A. Yes, for both zones.

2 Q. Will it promote conservation ---

3 A. Yes.

4 Q. --- and prevent waste?

5 A. Definitely.

6 Q. Will it protect correlative rights?

7 A. Yes.

8 Q. And is it also in accordance with sound

9 engineering practices?

10 A. I believe so.

11 MR. CARSON: Does the Examiner have any

12 questions?

13 MR. NUTTER: Yes, sir.

14 CROSS EXAMINATION

15 BY MR. NUTTER:

16 Q. Mr. Chandler, looking at your attachment

17 C, it would appear that the No. 149, which is the designation

18 of the well in the Langlie Mattix, is currently making from

19 220 to 240 barrels of oil per day.

20 A. No, sir, that's per month.

21 Q. I mean per month, yes, I mean per month.

22 A. That is correct.

23 Q. And your attachment B, which was the GOR

24 test report, taken in June of 1979, indicated about 10 barrels

25

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1 per day. So apparently the oil has fallen off some there.

2 A Yes, sir, it has.

3 Q Now how about gas? We have 33 Mcf of gas
4 produced on test in June and you don't show gas production
5 on this chart for the 149. How much gas does that thing
6 normally make in the Langlie Mattix?

7 A This was, I thought, a representative ratio
8 here in June. I would have to dig this information up. I
9 don't have it with me, you know, the monthly gas, but I can
10 certainly provide it.

11 Q Now it is in a waterflood project, isn't
12 it?

13 A Yes, sir, that is correct.

14 Q The Langlie Mattix is being flooded here.

15 A Yes, sir, and so is the Jalmat.

16 Q Now let's look at the plat that's in here
17 and see where the nearest water injection wells to the sub-
18 ject well are. Apparently the triangles --

19 A Yes, sir, the triangles are injectors.

20 Q -- to the north, south, east, and west
21 are all injection wells.

22 A Yes, sir, I have injection wells, Langlie
23 Mattix injectors on four sides.

24 Q Are they active?

25 A Yes, sir.

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1 Q Okay. Now oil production is declining.
2 Is this decline after a response to waterflood or are we
3 still waiting for a response to waterflood and this is a
4 decline in primary?

5 A This is after -- after we've seen some
6 response.

7 Q I see, so this is secondary decline?

8 A Yes, sir.

9 Q Now on your attachment D you show gas
10 production from the 306 side of the well. What about oil
11 production from that zone.

12 A It doesn't make any; it's dry gas.

13 Q No oil --- no liquid hydrocarbons at all?

14 A We've only had in the field, in some of
15 these older -- the Jalmat gas wells, we've had response
16 from one well where we did get some gas but it's some dis-
17 tance from this, located in another part of the field.

18 We have not seen any oil in this well at
19 all, and it's a possibility, you know, down the line that
20 we could being that we're flooding the Jalmat zone.

21 Q Now, when you have pulled that 1-inch
22 vent string and pumped the Langlie Mattix, you were pumping
23 water from the Jalmat and the Langlie Mattix on that test.
24 Do you have any idea how much water the Jalmat makes with
25 this gas production? If it were kept pumped off, what would

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Page 15

1 the continuous rate of water production be?

2 A. Probably no more than between 5 and 10
3 barrels a day, a very small amount.

4 Q. So the bulk of the water that you would
5 be producing under commingled circumstances would be Langlie
6 Mattix water?

7 A. Yes, sir, that is correct, which is about
8 50 barrels a day now.

9 Q. And you expect that this well, if it were
10 kept pumped off, would produce in the range of the curve
11 that's shown here in the early months of 1978, up here at
12 around 4000 Mcf per month, is that it?

13 A. Yes, sir, that is correct.
14 We've had a dramatic increase when we --- we experimented with
15 it there. We were greatly surprised at what it was capable
16 of.

17 Q. Now I believe that the original commingling
18 authority that you mentioned here in your letter of June
19 12th, talks about downhole commingling being approved for
20 Jalmat oil wells and Langlie Mattix oil wells, approved by
21 Order Number R-5590. Was this well classified as an oil
22 well at one time?

23 A. This well here?

24 Q. Uh-huh?

25 A. No, sir. This has always been a Jalmat

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1 gas well.

2 Q It's always been a dry gas well?

3 A My purpose of including that was that we
4 had had some other commingling in the field, you know, in
5 the last couple of years, but I was also specific to state
6 it was for, you know, the Langlie Mattix oil and the Jalmat
7 oil.

8 Q Uh-huh, so this has always been a gas well,
9 then?

10 A Yes, sir, that is correct.

11 Q Now what is dedicated to it, as far as
12 acreage is concerned?

13 A I think it is 160 but I don't really know.

14 Q Now --

15 A It's all -- it's all unitized. The gas
16 zone, the gas well is unitized within the Cooper Jal Unit
17 Waterflood.

18 Q Okay, that was going to be my next question
19 as to the ownership of the two vertical sections.

20 A The working interest ownership and the
21 royalty interest ownership are identical.

22 Q And the Cooper Jal Unit is not restricted
23 to the Langlie Mattix.

24 A No, sir.

25 MR. NUTTER: Are there any further questions

1 of Mr. Chandler? He may be excused.

2 Do you have anything further, Mr. Carson?

3 MR. CARSON: Nothing further, Mr. Examiner.

4 MR. NUTTER: Does anyone have anything they
5 wish to offer in Case Number 6631?

6 We'll take the case under advisement.

7
8 (Hearing concluded.)
9

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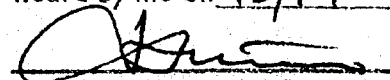
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REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a Court Reporter, DO HEREBY CERTIFY that the foregoing and attached Transcript of the Hearing before the Oil Conservation Division was reported by me; that said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability, from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 6636 heard by me on 10/17 1979.

 , Examiner
Oil Conservation Division

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

November 6, 1979

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SANTA FE, NEW MEXICO 87501
(505) 827-2434

Mr. Joel Carson
Losee, Carson & Dickerson
Attorneys at Law
Post Office Drawer 239
Artesia, New Mexico 88210

Re: CASE NO. 6631
ORDER NO. R-6173

Applicant:

Reserve Oil, Inc.

Dear Sir:

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

Yours very truly,

JOE D. RAMEY
Director

JDR/fd

Copy of order also sent to:

Hobbs OCD	<u>x</u>
Artesia OCD	<u>x</u>
Aztec OCD	

Other:

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 6631
Order No. R-6173

APPLICATION OF RESERVE OIL, INC.
FOR DOWNHOLE COMMINGLING, LEA
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 17, 1979, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 2nd day of November, 1979, 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, Reserve Oil, Inc., is the owner and operator of the Cooper Jal Unit Well No. 149-306, located in Unit J of Section 18, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks authority to commingle Jalmat and Langlie Mattix production within the wellbore of the above-described well.

(4) That the Jalmat zone of the subject well frequently loads up with water and dies.

(5) That with the tubing configuration in the wellbore, including a vent string for the Langlie Mattix zone, it is impracticable to pump the fluids off the Jalmat zone to maintain production.

-2-

Case No. 6631
Order No. R-6173

- (6) That from the Jalmat zone, the subject well, even when on production, is capable of low marginal production only.
- (7) That from the Langlie Mattix zone, the subject well is capable of low marginal production only.
- (8) 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.
- (9) 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.
- (10) 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 Hobbs district office of the Division any time the subject well is shut-in for 7 consecutive days.
- (11) That in order to allocate the commingled production to each of the commingled zones in the subject well, 75 percent of the commingled gas production should be allocated to the Jalmat zone, and 25 percent of the commingled gas production and all of the oil production to the Langlie Mattix zone.
- (12) That the number of the subject well should be changed, because to call the well the Cooper Jal Unit Well No. 149 in the Langlie Mattix Pool and the Cooper Jal Unit Well No. 306 in the Jalmat Gas Pool causes confusion.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Reserve Oil, Inc., is hereby authorized to commingle Jalmat and Langlie Mattix production within the wellbore of the Cooper Jal Unit Well No. 149-306, located in Unit J of Section 18, Township 24 South, Range 37 East, NMPM, Lea County, New Mexico.
- (2) That 75 percent of the commingled gas production shall be allocated to the Jalmat zone and 25 percent of the commingled gas production and all of the oil production shall be allocated to the Langlie Mattix zone.

-3-

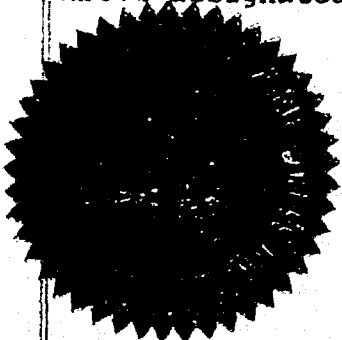
Case No. 6631
Order No. R-6173

(3) That the operator of the subject well shall immediately notify the Division's Hobbs 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 the operator shall renumber the subject well in accordance with Division regulations.

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

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



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Joe D. Ramey
JOE D. RAMEY
Director

S E A L

fa/



RESERVE OIL, INC.

THE SOUTHERN DIVISION

312 HBF BUILDING
MIDLAND, TEXAS 79701
(915) 682-4341

Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

RECEIVED
JUN 18 1979
OIL CONSERVATION DIVISION
SANTA FE

Joe Ramey

BEFORE EXAMINER MUTTER
OIL CONSERVATION DIVISION
EXHIBIT NO. ~~6631~~
CASE NO. 6631

Re: Request for Permission to Down-hole
Commingle - Exception to Rule 303-A
Cooper Jal Unit, Well No. 149
Langlie Mattix Pool and
Cooper Jal Unit, Well No. 306
Jalmat (Gas) Pool
Lea County, New Mexico

Case 6631

Attention: Mr. Joe Ramey

Gentlemen:

Reserve Oil, Inc. requests administrative approval of an exception to Rule 303-A to permit down-hole commingling of Cooper Jal Unit, Well Nos. 149 and 306 so as to:

- (1) Reduce hazards of recurring fishing jobs for stuck tubing which could result in premature well abandonment, and
- (2) Permit more economic and efficient operation of this beam pumped well, which for both zones will improve ultimate recovery and reduce waste. Cooper Jal Unit, Well No. 149 last tested 10 bopd - 56 bwpd, GOR = 3323 on June 6, 1979. Cooper Jal Unit, Well No. 306 is presently loaded up with water.

Reference Attachment "E" (Wellbore Diagram), the present down-hole installation consists of one string of 1" tubing (vent string for lower zone gas) and 2 3/8" tubing (for pumping lower zone oil and water) stung into a packer. The Jalmat gas (upper zone), when flowing, produces out the 1" and 2 3/8" tubing-5 1/2" casing annulus. The Jalmat (Gas) Pool completion has been producing some water since 1975 and small amounts of sand and scale cause the 2 3/8" tubing seal assembly to seize in the packer, resulting in costly fishing jobs whenever the tubing has to be pulled for replacement

June 12, 1979

of tubing due to strong corrosion or to retrieve stuck pumps. The lower zone (Langlie Mattix) produced water is quite corrosive, has caused calcium carbonate scaling and is very difficult to inhibit with the present mechanical configuration. Repeated down-hole mechanical failures and subsequent fishing jobs increase the risk of junking the wellbore.

Additional operating costs (3 major fishing jobs) attributable to the present down-hole equipment have averaged \$9322/year over the last three years (1977 = \$15,010, 1978 = \$4050 and first five months 1979 = \$8906). Down-hole commingling will permit simplification of the pumping system and will result in reduced lifting costs and more effective treating for corrosion and scale.

Reserve Oil, Inc. proposes that the Baker packer be removed and a single string of 2 3/8" tubing be used to pump the down-hole commingled fluids. As previously stated, the Jalmat gas zone (upper) is presently logged off with water. By being able to keep this slow buildup of water pumped off, the recovery of Jalmat gas will be greatly improved. An example of the potential for improving Jalmat gas zone recovery is shown in Attachment "D" (Production Decline Curve for Jalmat gas zone). On January 16, 1978, due to the poor performance of the gas zone (upper) during the last half-1977, the 1" vent string for the lower zone was raised above the packer so as to allow Jalmat gas zone water to be pumped from the tubing-casing annulus. The results are self-explanatory. On April 13, 1978, the 1" vent string was lowered back into the packer, resulting in the total loss of Jalmat gas production by December, 1978 (due to logging off with water).

The Jalmat (Gas) Pool and Langlie Mattix (Oil) Pool are both unitized in the Cooper Jal Unit and have common working interest and royalty interest ownership. Previous down-hole commingling for the Jalmat (Oil) and Langlie Mattix (Oil) Pools in the Cooper Jal Unit for selective wells was approved by Order No. R-5590 on November 22, 1977.

Additional data required by Rule 303-C, Section 2 is attached for your review.

That was for oil/gas
Very truly yours,

RESERVE OIL, INC.

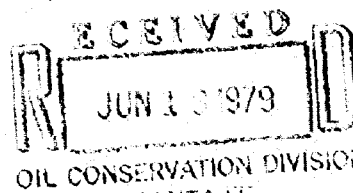
Clarence R. Chandler
Clarence R. Chandler

ck

Attachments

cc: Energy and Minerals Dept. - Hobbs

DOWN-HOLE COMMINGLING DATA



1. Name and Address of Operator
Reserve Oil, Inc.
312 HBF Building
Midland, Texas 79701

2. Lease Name, Well Number and Location
Cooper Jal Unit, Well Nos. 149 & 306 (Tbg-Csg. Dual)
Unit "J", 1980' FSL & FEL, Sec. 18, T24S, R37E,
Lea County, New Mexico

3. Name of Pools Completed in & Commission Order Number Authorizing Dual Completion

Well #149 produces from tubing and is the lower completion -
Langlie Mattix Pool.

Well #306 produces from casing and is the upper completion -
Jalmat (Gas) Pool.

NMOCC Order #MC-2055 dated 8-14-73

4. Current 24 hr. Productivity Test on Form C-116

Well #149 - shown as Attachment "B"

Well #306 - Gas well producing through casing -
Logged off with water.

5. Production Decline Curves

Well #149 - shown as Attachment "C"

Well #306 - shown as Attachment "D"

6. Estimated Bottom-hole Pressure - Each Zone

Not available

7. Description of Fluid Characteristics of Each Zone Showing that Fluids Will Not Be Incompatible in the Wellbore

Since the Jalmat (Gas) zone has to flow out the casing and does not flow water to the surface, it has not been possible to get a water sample from this zone; however, data obtained from an offset well (1800' Southwest), Cooper Jal Unit Well No. 117, indicates that water produced from the Jalmat and Langlie Mattix reservoirs is compatible. Copies of this information are shown as Attachments F-1, F-2, and F-3.

8. Computations Showing that Value of Commingled Production Will Not Be Less Than Sum of Values of Individual Streams

Value of Present Individual Streams

Langlie Mattix Pool = 10 bopd x \$12.89/bbl.	\$128.90/day
Jalmat (Gas) Pool = 0 Production	-0-
Total	\$128.90/day

Value of Future Down-hole Commingled Production

Langlie Mattix Pool = 10 bopd x \$12.89/bbl.	\$128.90/day
Jalmat (Gas) Pool = 100 MCF/D (est.) x \$0.60/MCF	60.00/day
Total	\$188.90/day

9. The Following Offset Operators Have Been Notified in Writing of this Proposed Commingling:

Cities Service Oil Company	- Midland, Texas
Continental Oil Company	- Hobbs, New Mexico
Getty Oil Company	- Hobbs, New Mexico
Doyle Hartman	- Midland, Texas
John Yuronka	- Midland, Texas

Commingled:
 100 MCF Jalmat
 33 MCF Langlie Mattix
 133 MCF total commingled production

**NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS**

C-116
Revised 1-1-65

Operator Reserve Oil, Inc.		Pool Langlie Mattix						County Lea								
Address 312 HBF Building, Midland, Texas 79701						TYPE OF TEST - (X) <input checked="" type="checkbox"/> Scheduled <input type="checkbox"/> Completion <input type="checkbox"/> Special <input checked="" type="checkbox"/>										
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	T.B.G. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT/BBL
		U	S	T	R							WATER BBLs.	GRAV. OIL	OIL BBLs.	GAS M.C.F.	
Cooper Jal Unit	<u>149</u>	J	18	24S	37E	<u>6-6-79</u>	P	-	42	28	24	<u>56</u>	37.2	<u>10</u>	33	3300

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

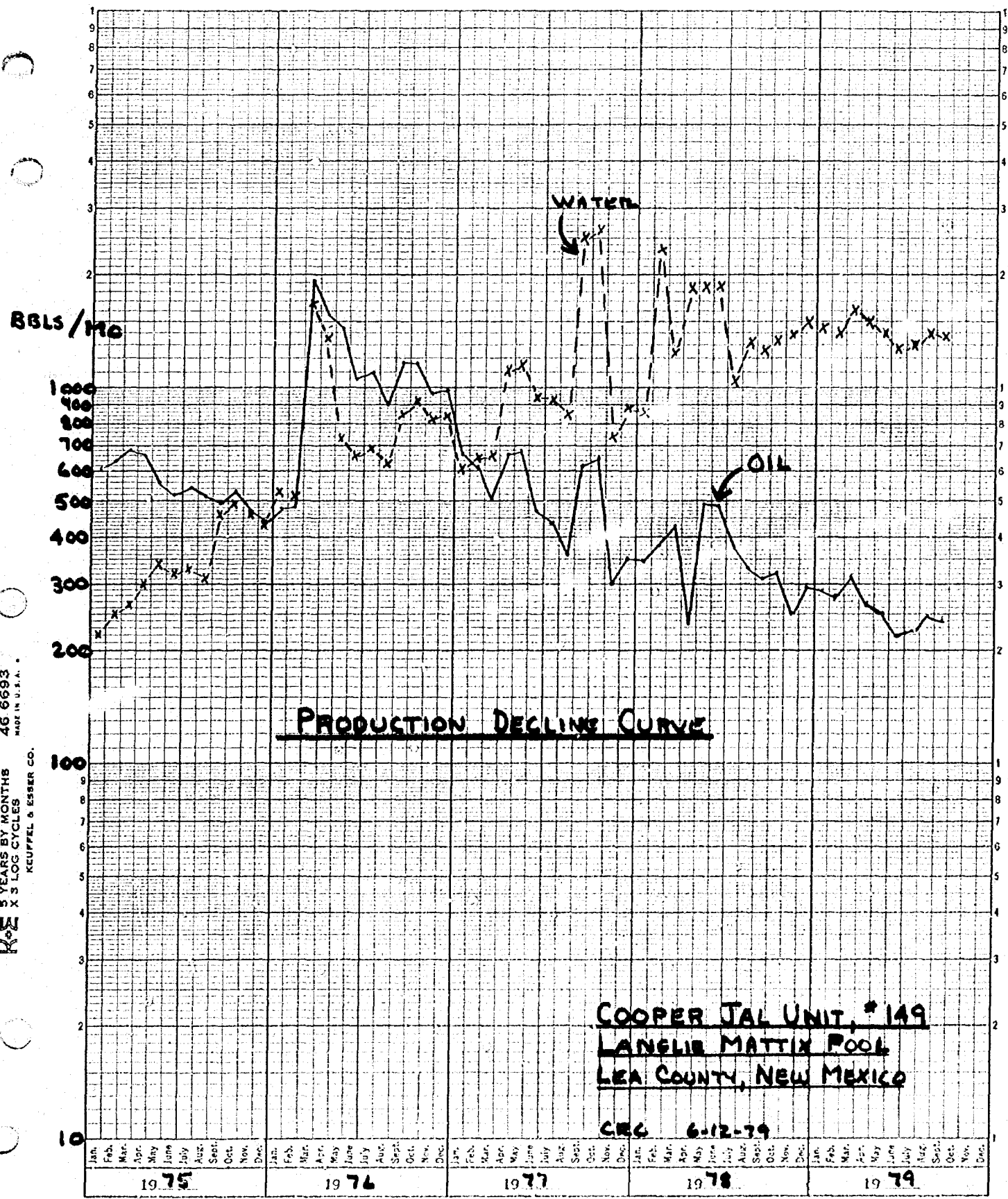
I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Lawrence R. Chandler
(Signature)

District Engineer

June 13, 1979
(Date)

K&E 5 YEARS BY MONTHS
X X 3 LOG CYCLES
46 6693
MADE IN U.S.A.
KEUFFEL & ESSER CO.



COOPER JAL UNIT, WELL #306
JALMOT (GAS) POOL
LEA CO., NEW MEXICO

CRC 6-12-79

PRODUCTION DECLINE CURVE

10,000

MCF/MO

B.P. REGULATOR CUT OUT
- ALLOWED GSG. PRESSURE TO
DROP BELOW SALES LINE
PRESSURE.

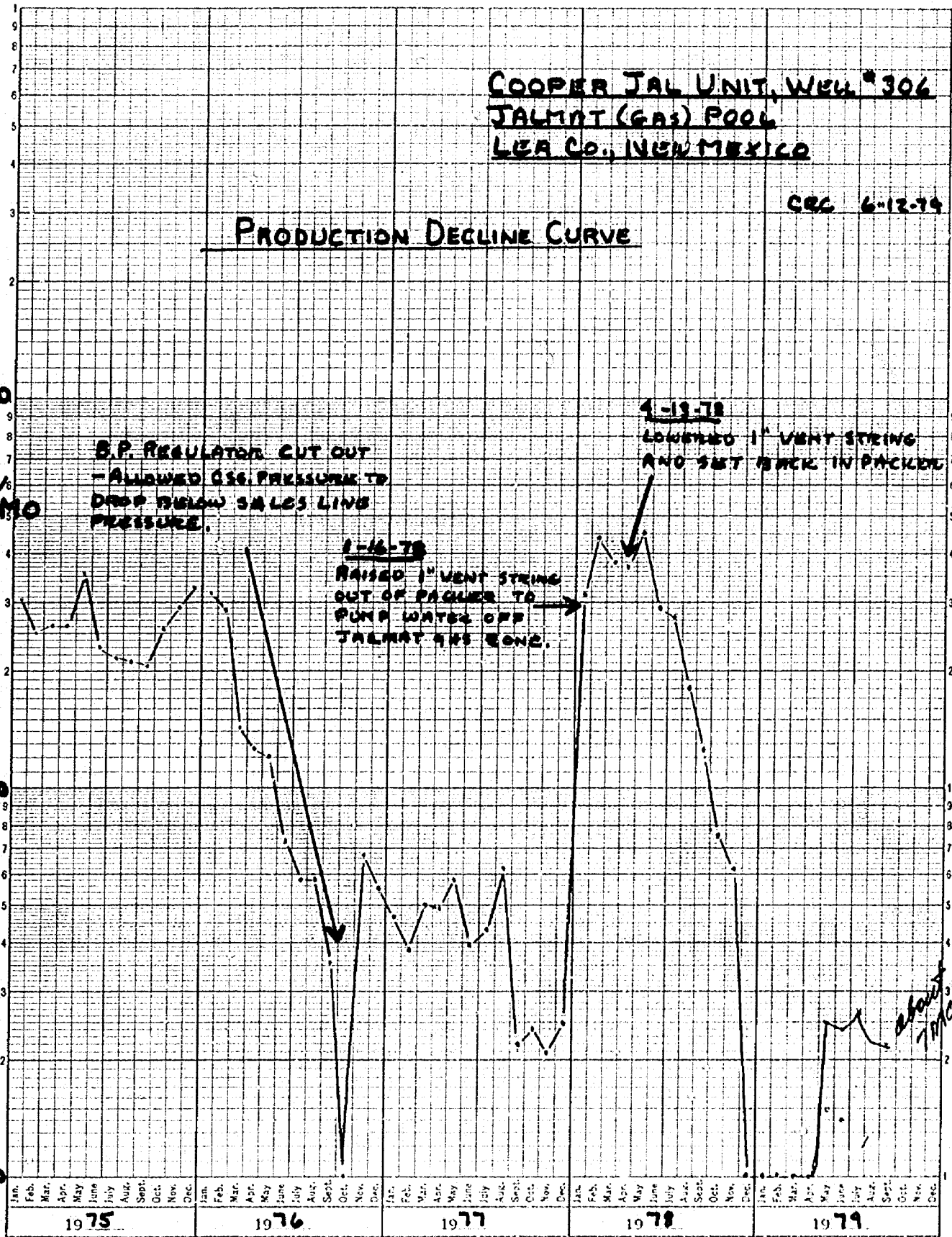
1-13-78
LOWERED 1" VENT STRING
AND SET BACK IN PACKING

1-16-78
RAISED 1" VENT STRING
OUT OF PACKING TO
PUMP WATER OFF
JALMOT GAS CONE.

K&E 5 YEARS BY MONTHS 46 6593
MADE IN U.S.A.
KEUFFEL & ESSER CO.

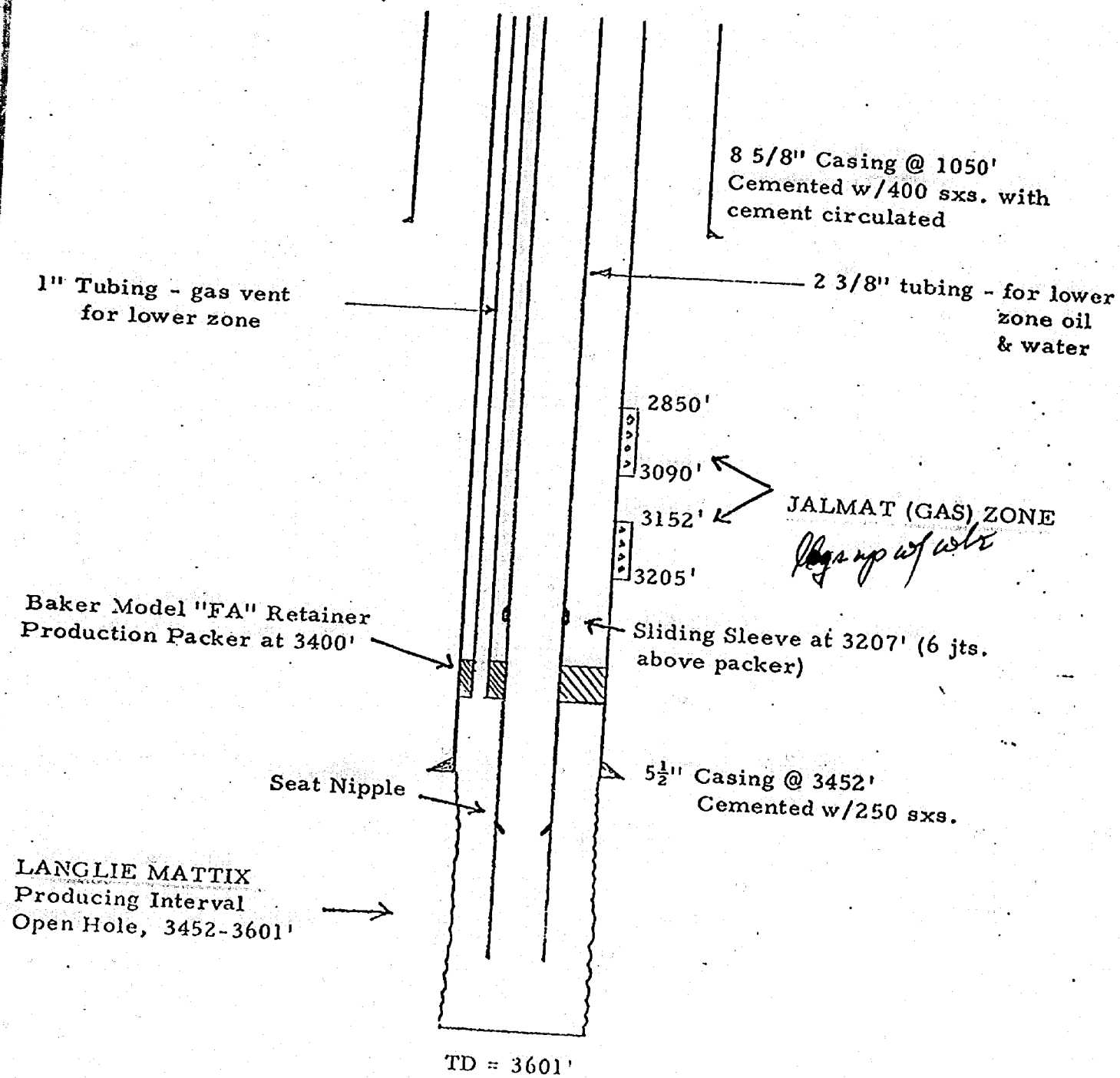
1000

100



ATTACHMENT "D"

Cooper Jal Unit, Well #306 - Produces Gas from Jalmat (Upper) Zone
Cooper Jal Unit, Well #149 - Produces Oil-Wtr. - Gas from Langlie Mattix (Lower) Zone



WELLBORE DIAGRAM

RECEIVED

Martin Water Laboratories, Inc. AUG 2 1977

P. O. BOX 1488
MONAHAN, TEXAS 79756
PHONE 943-3234 OR 563-1040

RESULT OF WATER ANALYSES

406 W. ILLINOIS
MIDLAND, TEXAS 79701
PHONE 683-4521

TO: Mr. Erd. Johnson LABORATORY NO. 777266
312 HBF Building, Midland, Texas SAMPLE RECEIVED 7-27-77
RESULTS REPORTED 1-1-77

COMPANY Reserve Oil, Inc. LEASE Cooper Jal Unit
FIELD OR POOL _____
SECTION _____ BLOCK _____ SURVEY _____ COUNTY Lea STATE New Mexico
SOURCE OF SAMPLE AND DATE TAKEN:

- NO. 1 Produced water - taken from Cooper Jal Unit #117.
NO. 2 Produced water - taken from Cooper Jal Unit #121..
NO. 3 Produced water - taken from Cooper Jal Unit #128.
NO. 4 _____

REMARKS: Langlie - Mattix (Lower)

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0328	1.0318	1.0199	
pH When Sampled				
pH When Received	8.1	8.2	7.85	
Bicarbonate as HCO ₃	1,232	1,165	1,104	
Supersaturation as CaCO ₃	180	185	150	
Undersaturation as CaCO ₃	--	--	--	
Total Hardness as CaCO ₃	10,400	10,000	6,000	
Calcium as Ca	900	580	448	
Magnesium as Mg	1,980	2,078	1,186	
Sodium and/or Potassium	13,257	12,147	8,310	
Sulfate as SO ₄	3,518	1,591	1,374	
Chloride as Cl.	24,502	23,969	15,411	
Iron as Fe	0.92	2.1	0.36	
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	45,389	41,530	27,833	
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	350	275	350	
Resistivity, ohms/m at 77° F.	0.174	0.193	0.270	
Suspended Oil				
Filterable Solids as mg/l				
Volume Filtered, ml				
Calcium Sulfate Scaling Tendency	None	None	None	
Calcium Carbonate Scaling Tendency	Marginal	Marginal	Marginal	
Results Reported As Milligrams Per Liter				
Additional Determinations And Remarks	Well No.	Oil Gravity, °API		
	#125	37.6		
	#132	37.8		

Form No. 3

By Waylan G. Martin
Waylan G. Martin, M. A.

ATTACHMENT F-1

RECEIVED

Martin Water Laboratories, Inc

AUG 2 1977

P. O. BOX 1468
MONAHAN, TEXAS 79756
PHONE 943-3234 OR 563-1040

RESULT OF WATER ANALYSES

MIDLAND DISTRICT 406 W. ILLINOIS
MIDLAND, TEXAS 79701
PHONE 683-4521

TO: Mr. Erd Johnson LABORATORY NO. 777266 (Page 2)
312 HBF Building, Midland, Texas SAMPLE RECEIVED 7-27-77
RESULTS REPORTED 1-1-77

COMPANY Reserve Oil, Inc. LEASE Cooper Jal Unit
FIELD OR POOL _____
SECTION _____ BLOCK _____ SURVEY _____ COUNTY Lea STATE New Mexico
SOURCE OF SAMPLE AND DATE TAKEN:

- NO. 1 Produced water - taken from Cooper Jal Unit #202.
NO. 2 Produced water - taken from Cooper Jal Unit #204.
NO. 3 Produced water - taken from Cooper Jal Unit #219.
NO. 4 _____

REMARKS: Jalmat (upper)

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0456	1.0512	1.0251	
pH When Sampled				
pH When Received	8.1	7.8	8.0	
Bicarbonate as HCO ₃	1,293	909	1,000	
Supersaturation as CaCO ₃	70	75	80	
Undersaturation as CaCO ₃	--	--	--	
Total Hardness as CaCO ₃	19,200	21,000	8,600	
Calcium as Ca	800	1,720	464	
Magnesium as Mg	4,180	4,058	1,808	
Sodium and/or Potassium	15,622	18,482	9,478	
Sulfate as SO ₄	2,915	4,188	1,776	
Chloride as Cl	34,799 ✓	39,771 ✓	18,820 ✓	
Iron as Fe	0.60	4.8	1.7	
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	59,609	69,128	33,346	
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	525	400	525	
Resistivity, ohms/m at 77° F.	0.139	0.122	0.234	
Suspended Oil				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Calcium Sulfate Scaling Tendency	None	None	None	
Calcium Carbonate Scaling Tendency	None	None	None	
Results Reported As Milligrams Per Liter				
Additional Determinations And Remarks	Well No.	Oil Gravity, °API		
	#206	37.1		
	#221	37.9		
Letter of recommendation attached.				

Form No. 3

By

Waylan C. Martin, M. A. ATTACH. F-2"

P. O. BOX 1468
MONAHANS, TEXAS 79736
PH. 943-3234 OR 563-1040

Martin Water Laboratories, Inc.
WATER CONSULTANTS SINCE 1953
BACTERIAL AND CHEMICAL ANALYSES

406 W. ILLINOIS
MIDLAND, TEXAS 79701
PHONE 683-4521

August 1, 1977

Mr. Erd Johnson
Reserve Oil, Inc.
312 HBF Building
Midland, TX 79701

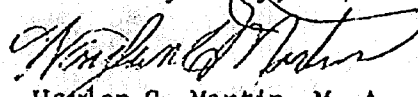
Subject: Recommendations relative to analysis
#777266.

Dear Mr. Johnson:

A careful examination of these analyses reveal no evidence of any incompatibility between the Langlie-Mattix (lower zone) water and the Jal-mat (upper zone) water. The results reveal a slight concern about the possibility of calcium carbonate scaling potential from the Langlie-Mattix water, but we consider this inconclusive as these are results that warrant confirmation.

It should be pointed out that the fluctuations between wells of water characteristics from both zones are not uncommon in this field and therefore is not considered to carry any significance at this time.

Yours very truly,


Waylan C. Martin, M. A.

WCM/md

ATTACH. F-3



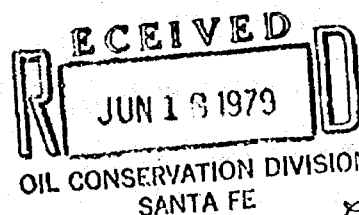
RESERVE OIL, INC.

THE SOUTHERN DIVISION

312 HBF BUILDING
MIDLAND, TEXAS 79701
(915) 682-4341

June 12, 1979

Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501



Case 6631

BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
EXHIBIT NO. 1
CASE NO. 6631

Request for Permission to Down-hole
Commingle - Exception to Rule 303-A
Cooper Jal Unit, Well No. 149
Langlie Mattix Pool and
Cooper Jal Unit, Well No. 306
Jalmat (Gas) Pool
Lea County, New Mexico

Attention: Mr. Joe Ramey

Gentlemen:

Reserve Oil, Inc. requests administrative approval of an exception to Rule 303-A to permit down-hole commingling of Cooper Jal Unit, Well Nos. 149 and 306 so as to:

- (1) Reduce hazards of recurring fishing jobs for stuck tubing which could result in premature well abandonment, and
- (2) Permit more economic and efficient operation of this beam pumped well, which for both zones will improve ultimate recovery and reduce waste. Cooper Jal Unit, Well No. 149 last tested 10 bopd - 56 bwpd, GOR = 3323 on June 6, 1979. Cooper Jal Unit, Well No. 306 is presently loaded up with water.

Reference Attachment "E" (Wellbore Diagram), the present down-hole installation consists of one string of 1" tubing (vent string for lower zone gas) and 2 3/8" tubing (for pumping lower zone oil and water) stung into a packer. The Jalmat gas (upper zone), when flowing, produces out the 1" and 2 3/8" tubing-5 1/2" casing annulus. The Jalmat (Gas) Pool completion has been producing some water since 1975 and small amounts of sand and scale cause the 2 3/8" tubing seal assembly to seize in the packer, resulting in costly fishing jobs whenever the tubing has to be pulled for replacement

June 12, 1979

of tubing due to strong corrosion or to retrieve stuck pumps. The lower zone (Langlie Mattix) produced water is quite corrosive, has caused calcium carbonate scaling and is very difficult to inhibit with the present mechanical configuration. Repeated down-hole mechanical failures and subsequent fishing jobs increase the risk of junking the wellbore.

Additional operating costs (3 major fishing jobs) attributable to the present down-hole equipment have averaged \$9322/year over the last three years (1977 = \$15,010, 1978 = \$4050 and first five months 1979 = \$8906). Down-hole commingling will permit simplification of the pumping system and will result in reduced lifting costs and more effective treating for corrosion and scale.

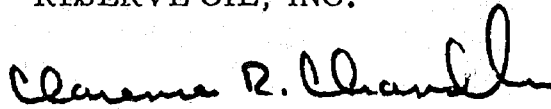
Reserve Oil, Inc. proposes that the Baker packer be removed and a single string of 2 3/8" tubing be used to pump the down-hole commingled fluids. As previously stated, the Jalmat gas zone (upper) is presently logged off with water. By being able to keep this slow buildup of water pumped off, the recovery of Jalmat gas will be greatly improved. An example of the potential for improving Jalmat gas zone recovery is shown in Attachment "D" (Production Decline Curve for Jalmat gas zone). On January 16, 1978, due to the poor performance of the gas zone (upper) during the last half-1977, the 1" vent string for the lower zone was raised above the packer so as to allow Jalmat gas zone water to be pumped from the tubing-casing annulus. The results are self-explanatory. On April 13, 1978, the 1" vent string was lowered back into the packer, resulting in the total loss of Jalmat gas production by December, 1978 (due to logging off with water).

The Jalmat (Gas) Pool and Langlie Mattix (Oil) Pool are both unitized in the Cooper Jal Unit and have common working interest and royalty interest ownership. Previous down-hole commingling for the Jalmat (Oil) and Langlie Mattix (Oil) Pools in the Cooper Jal Unit for selective wells was approved by Order No. R-5590 on November 22, 1977.

Additional data required by Rule 303-C, Section 2 is attached for your review.

Very truly yours,

RESERVE OIL, INC.



Clarence R. Chandler

ck

Attachments

cc: Energy and Minerals Dept. - Hobbs

DOWN-HOLE COMMINGLING DATA

1. Name and Address of Operator

Reserve Oil, Inc.
312 HBF Building
Midland, Texas 79701

2. Lease Name, Well Number and Location

Cooper Jal Unit, Well Nos. 149 & 306 (Tbg-Csg. Dual)
Unit "J", 1980' FSL & FEL, Sec. 18, T24S, R37E,
Lea County, New Mexico

3. Name of Pools Completed in & Commission Order Number Authorizing Dual Completion

Well #149 produces from tubing and is the lower completion -
Langlie Mattix Pool.

Well #306 produces from casing and is the upper completion -
Jalmat (Gas) Pool.

NMOCC Order #MC-2055 dated 8-14-73

4. Current 24 hr. Productivity Test on Form C-116

Well #149 - shown as Attachment "B"

Well #306 - Gas well producing through casing -
Logged off with water.

5. Production Decline Curves

Well #149 - shown as Attachment "C"
Well #306 - shown as Attachment "D"

6. Estimated Bottom-hole Pressure - Each Zone

Not available

7. Description of Fluid Characteristics of Each Zone Showing that Fluids Will Not Be Incompatible in the Wellbore

Since the Jalmat (Gas) zone has to flow out the casing and does not flow water to the surface, it has not been possible to get a water sample from this zone; however, data obtained from an offset well (1800' Southwest), Cooper Jal Unit Well No. 117, indicates that water produced from the Jalmat and Langlie Mattix reservoirs is compatible. Copies of this information are shown as Attachments F-1, F-2, and F-3.

8. Computations Showing that Value of Commingled Production Will Not Be Less Than Sum of Values of Individual Streams

Value of Present Individual Streams

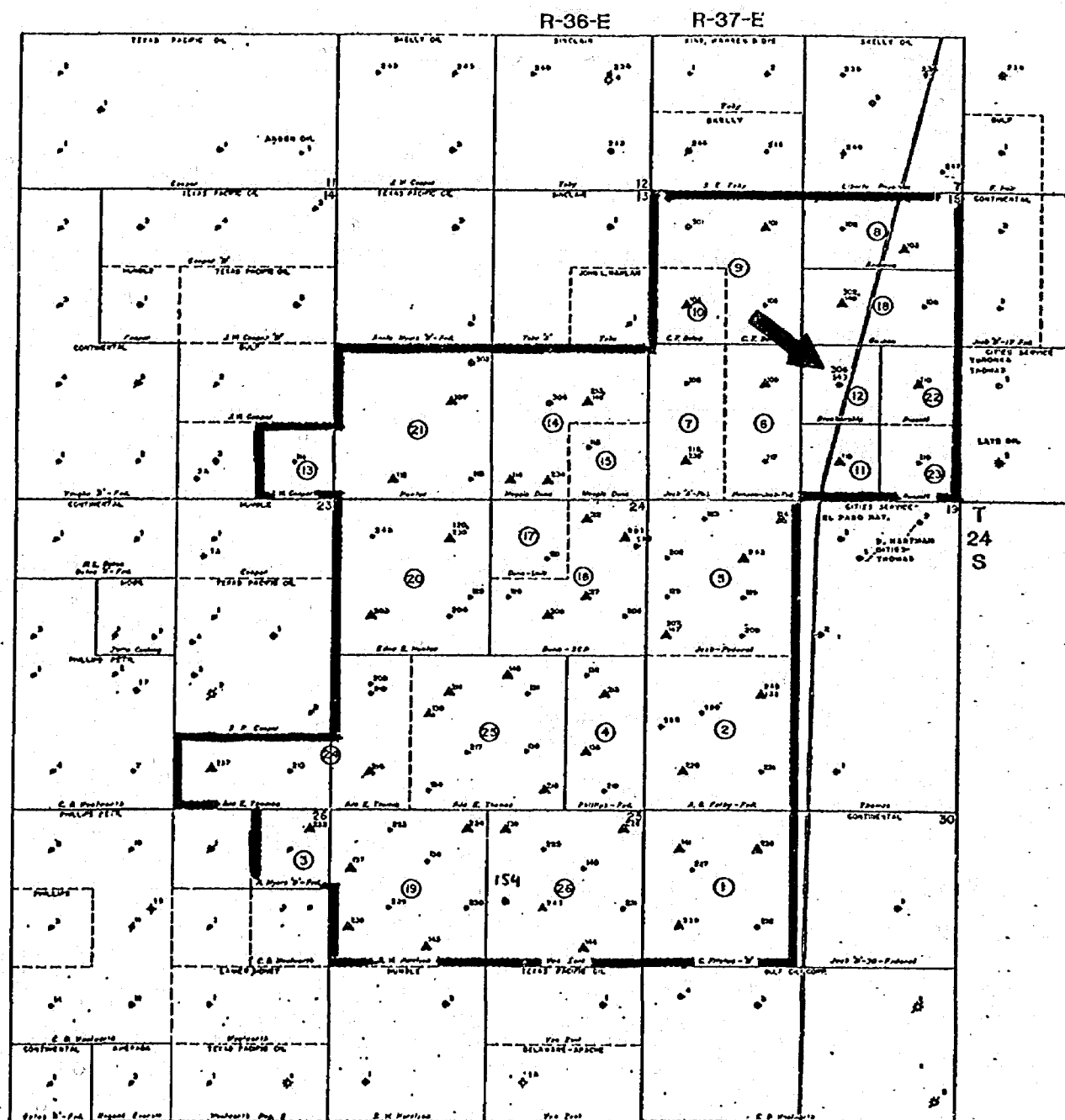
Langlie Mattix Pool = 10 bopd x \$12.89/bbl.	\$128.90/day
Jalmat (Gas) Pool = 0 Production	-0-
Total	<u>\$128.90/day</u>

Value of Future Down-hole Commingled Production

Langlie Mattix Pool = 10 bopd x \$12.89/bbl.	\$128.90/day
Jalmat (Gas) Pool = 100 MCF/D (est.) x \$0.60/MCF	60.00/day
Total	<u>\$188.90/day</u>

9. The Following Offset Operators Have Been Notified in Writing of this Proposed Commingling:

Cities Service Oil Company	- Midland, Texas
Continental Oil Company	- Hobbs, New Mexico
Getty Oil Company	- Hobbs, New Mexico
Doyle Hartman	- Midland, Texas
John Yuronka	- Midland, Texas



LEGEND

- UNIT BOUNDARY
- ① TRAIL NUMBER
- ▲ INJECTION WELL
- 100 LANGHE MATIX ZONE
- 200 JALMAT OIL ZONE
- 300 JALMAT GAS ZONE



PROPOSED DOWN-HOLE COMMINGLING
COOPER JAL UNIT, Well Nos. 149 & 306
(T-36-CSC. DUAL)

COOPER JAL UNIT

JALMAT AND LANGHE MATIX FIELDS
LEA COUNTY, NEW MEXICO

SCALE 1"=1000'

1000'	2000'	3000'
0	1000'	2000'
0	1000'	2000'

ATTACHMENT "A"

**NEW MEXICO OIL CONSERVATION COMMISSION
GAS-OIL RATIO TESTS**

C-116
Revised 1-1-65

Operator Reserve Oil, Inc.		Pool Langlie Mattix						County Lea								
Address 312 HBF Building, Midland, Texas 79701						TYPE OF TEST - (X)		Scheduled <input type="checkbox"/>		Completion <input type="checkbox"/>		Special <input checked="" type="checkbox"/>				
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	T&G. PRESS.	DAILY ALLOWABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT./BBL
		U	S	T	R							WATER BBLs.	GRAV. OIL	OIL BBLs.	GAS M.C.F.	
Cooper Jal Unit	149	J	18	24S	37E	6-6-79	P	-	42	28	24	56	37.2	10	33	3300

No well will be assigned an allowable greater than the amount of oil produced on the official test.

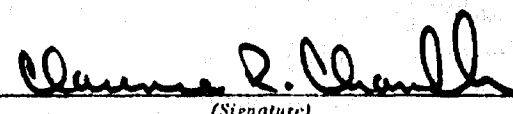
During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission in accordance with Rule 301 and appropriate pool rules.

I hereby certify that the above information is true and complete to the best of my knowledge and belief.



(Signature)
District Engineer

(Title)
June 13, 1979

(Date)

COOPER JAL UNIT, WELL #306
 TALMAT (GAS) POOL
 LEA CO., NEW MEXICO

PRODUCTION DECLINE CURVE

CRC 6-12-79

10,000

MCF/MO

B.P. REGULATOR CUT OUT
 - ALLOWED CSE. PRESSURE TO
 DROP BELOW SALES LINE
 PRESSURE.

4-13-78
 LOWERED 1" VENT STRING
 AND SET BACK IN PACKED

1-16-79
 RAISED 1" VENT STRING
 OUT OF PACKER TO
 PUMP WATER OFF
 TALMAT GAS CONE.

1000

100

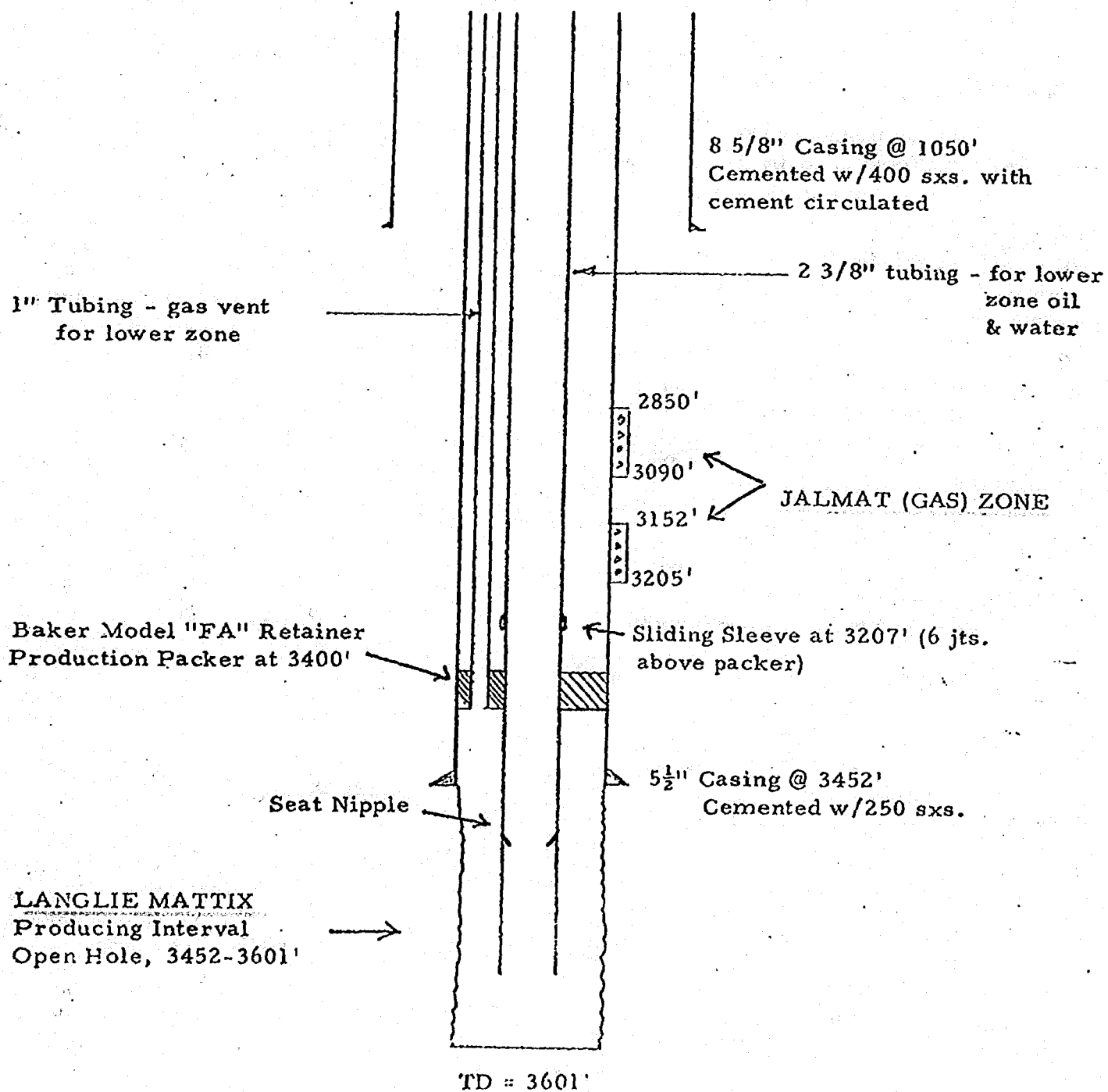
1975 1976 1977 1978 1979

5 YEARS BY MONTHS
 X 3 LOG CYCLES
 46 6693
 MADE IN U.S.A.
 KEUFFEL & ESSER CO.

ATTACHMENT "D"

Cooper Jal Unit, Well #306 - Produces Gas from Jalmat (Upper) Zone

Cooper Jal Unit, Well #149 - Produces Oil-Wtr. -Gas from Langlie Mattix (Lower) Zone



WELLBORE DIAGRAM

Martin Water Laboratories, Inc. 510 2 1377

P. O. BOX 1468
MONAHANS, TEXAS 79756
PHONE 943-3234 or 563-1040

RESULT OF WATER ANALYSES

408 W. ILLINOIS
MIDLAND, TEXAS 79701
PHONE 683-4521

to: Mr. Erd. Johnson
312 HBF Building, Midland, Texas

LABORATORY NO. 777266

SAMPLE RECEIVED 7-27-77

RESULTS REPORTED 1-1-77

COMPANY Reserve Oil, Inc. LEASE Cooper Jal Unit

FIELD OR POOL

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Lea STATE New Mexico

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Produced water - taken from Cooper Jal Unit #117.

NO. 2 Produced water - taken from Cooper Jal Unit #121...

Produced water - taken from Cooper Jal Unit #128.

NO. 4

REMARKS:

Langlie - Mattix (Lower)

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0328	1.0318	1.0199	
pH When Sampled				
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Resistivity, ohms/m at 77° F.	0.174	0.193	0.270	
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Filtrable Solids as mg/l				
Volume Filtered, ml				
Calcium Sulfate Scaling Tendency	None	None	None	
Calcium Carbonate Scaling Tendency	Marginal	Marginal	Marginal	
Results Reported As Milligrams Per Liter				
Additional Determinations And Remarks	Well No.	Oil Gravity, °API		
	#125	37.6		
	#132 -	37.8		

Form No. 3

By Waylan C. Martin, M. A.

F-1

RECEIVED

Martin Water Laboratories, Inc

AUG 2 1977

P. O. BOX 1468
MONAHAN, TEXAS 79756
PHONE 943-3234 OR 563-1040

RESULT OF WATER ANALYSES

MIDLAND DISTRICT
408 W. ILLINOIS
MIDLAND, TEXAS 79701
PHONE 683-4521

TO: Mr. Erd Johnson LABORATORY NO. 777266 (Page 2)
312 HBF Building, Midland, Texas SAMPLE RECEIVED 7-27-77
RESULTS REPORTED 1-1-77

COMPANY Reserve Oil, Inc. LEASE Cooper Jal Unit

FIELD OR POOL _____

SECTION _____ BLOCK _____ SURVEY _____ COUNTY Lea STATE New Mexico

SOURCE OF SAMPLE AND DATE TAKEN:

NO. 1 Produced water - taken from Cooper Jal Unit #202.

NO. 2 Produced water - taken from Cooper Jal Unit #204.

NO. 3 Produced water - taken from Cooper Jal Unit #219.

NO. 4 _____

REMARKS: Jalmat (upper)

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Filtrable Solids as mg/l				
Volume Filtered, ml				
Calcium Sulfate Scaling Tendency	None	None	None	
Calcium Carbonate Scaling Tendency	None	None	None	
Results Reported As Milligrams Per Liter				
Additional Determinations And Remarks	Well No.	Oil Gravity, °API		
	#206	37.1		
	#221	37.9		
Letter of recommendation attached.				

Form No. 3

By Waylan C. Martin

Waylan C. Martin, M. A.

F-2

P. O. BOX 1468
MONAHANS, TEXAS 79756
PH. 543-3234 OR 563-1040

Martin Water Laboratories, Inc.
WATER CONSULTANTS SINCE 1953
BACTERIAL AND CHEMICAL ANALYSES

406 W. ILLINOIS
MIDLAND, TEXAS 79701
PHONE 683-4321

August 1, 1977

Mr. Erd Johnson
Reserve Oil, Inc.
312 HBF Building
Midland, TX 79701

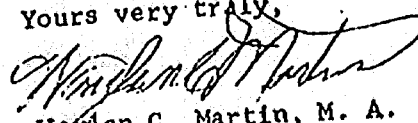
Subject: Recommendations relative to analysis
#777266.

Dear Mr. Johnson:

A careful examination of these analyses reveal
no evidence of any incompatibility between the
Langlie-Mattix (lower zone) water and the Jal-
mat (upper zone) water. The results reveal a
slight concern about the possibility of calcium
carbonate scaling potential from the Langlie-
Mattix water, but we consider this inconclusive
as these are results that warrant confirmation.

It should be pointed out that the fluctuations
between wells of water characteristics from
both zones are not uncommon in this field and
therefore is not considered to carry any signifi-
cance at this time.

Yours very truly,


Waylan C. Martin, M. A.

WCM/md

F-3

Docket No. 47-79

Pockets Nos. 41-79 and 42-79 are tentatively set for October 31 and November 14, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - OCTOBER 17, 1979

9 A.M. - OIL CONSERVATION DIVISION 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:

- ALLOWABLE: (1) Consideration of the allowable production of gas for November, 1979, from fifteen prorated pools in Lea, Eddy, and Chaves Counties, New Mexico.
- (2) Consideration of the allowable production of gas for November, 1979, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- CASE 6693: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Pennsylvanian test well to be located 1130 feet from the South line and 1300 feet from the East line of Section 30, Township 17 South, Range 26 East, the S/2 of said Section 30 to be dedicated to the well.
- CASE 6694: Application of Yates Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Pennsylvanian formations underlying the S/2 of Section 35, Township 18 South, Range 25 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6695: Application of Millard Deck Oil Company for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard gas proration unit comprising the NE/4 NW/4 and NW/4 NE/4 of Section 36, Township 24 South, Range 36 East, Jalmat Gas Pool, to be dedicated to a well to be drilled at a standard location thereon.
- CASE 6696: Application of R. Q. Silverthorne for an unorthodox oil well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of a Yates test well to be drilled 1310 feet from the South and West lines of Section 30, Township 18 South, Range 31 East, Shugart Pool.
- CASE 6697: Application of Conoco Inc. for an unorthodox location and dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Wells B-1 Well No. 5 at an unorthodox Devonian location 1650 feet from the North line and 660 feet from the East line of Section 1, Township 25 South, Range 36 East, to produce gas from the Devonian and Ellenburger formations, Custer Field, thru parallel strings of tubing, the E/2 of said Section 1 to be dedicated to the well.
- CASE 6671: (Continued from October 2, 1979, Examiner Hearing)
- Application of Chapman and Schneider for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Seven Rivers Reef formation in the open-hole interval from 3422 feet to 3504 feet in its I. B. Ogg "A" Well No. 3 located in Unit E of Section 35, Township 24 South, Range 36 East, Jalmat Pool.
- CASE 6698: Application of Stevens Oil Company for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the San Andres formation underlying the NE/4 SW/4 of Section 30, Township 8 South, Range 29 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6699: Application of Robert C. Anderson for two unorthodox gas well locations, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of his Ute Mountain Ute Well No. 1 located in the center of Unit L, and Well No. 3, located 2310 feet from the North and West lines, both in Section 14, Township 31 North, Range 16 West, the SW/4 of said Section 14 to be dedicated to Well No. 1 and the NW/4 to be dedicated to Well No. 3.

CASE 6680: (Continued from October 2, 1979, Examiner Hearing)

Application of Robert C. Anderson for surface commingling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the surface commingling of all production from his Ute Mountain Ute Lease, Wells Nos. 1, 3 and 4, located in Section 14, Township 31 North, Range 16 West.

CASE 6631: (Continued from August 22, 1979, Examiner Hearing)

Application of Reserve Oil, Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat gas and Langlie Mattix oil production in the wellbore of its Cooper Jal Unit Well No. 149-306 located in Unit J of Section 18, Township 24 South, Range 37 East.

CASE 6700: Application of Doyle Hartman for an unorthodox well location, a non-standard proration unit, and approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 120-acre non-standard proration unit comprising the NW/4 NW/4 and S/2 NW/4 of Section 29, Township 25 South, Range 37 East, Jalmat Gas Pool, to be dedicated to a well to be drilled at an unorthodox location 2310 feet from the North line and 330 feet from the West line of said Section 29; applicant further seeks a waiver of existing well spacing requirements and a finding that the drilling of said well is necessary to effectively and efficiently drain that portion of the existing proration unit which cannot be so drained by the existing well.

CASE 6701: Application of Doyle Hartman for compulsory pooling, non-standard gas proration unit, unorthodox well location, and approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Seven Rivers-Queen formations underlying the SE/4 of Section 30, Township 21 South, Range 36 East, Eumont Gas Pool, to form a 160-acre non-standard gas proration unit to be dedicated to his J. K. Rector Well No. 1 at an unorthodox location 2310 feet from the South line and 330 feet from the East line of said Section 30. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well. Applicant further seeks a waiver of existing well spacing requirements and a finding that the drilling of said well is necessary to effectively and efficiently drain that portion of the existing proration unit which cannot be so drained by the existing well.

CASE 6676: (Continued from October 2, 1979, Examiner Hearing)

Application of Doyle Hartman for an unorthodox well location and a non-standard proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard gas proration unit comprising the SW/4 NE/4 and SE/4 NW/4 of Section 36, Township 24 South, Range 36 East, Jalmat Gas Pool, to be dedicated to a well to be drilled at an unorthodox location 2310 feet from the North line and 1650 feet from the East line of said Section 36.

CASE 6664: (Continued from September 19, 1979, Examiner Hearing)

Application of Doyle Hartman for an unorthodox well location, two non-standard proration units and approval of infill drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 40-acre non-standard proration unit comprising the NW/4 SW/4 of Section 27, Township 25 South, Range 37 East, Jalmat Pool, to be dedicated to El Paso Natural Gas Company's Harrison Well No. 1, and also a 120-acre unit comprising the E/2 SW/4 and SW/4 SW/4 of said Section 27 to be dedicated to a well to be drilled at an unorthodox location 330 feet from the South and West lines of the section; applicant further seeks a waiver of existing well spacing requirements and a finding that the drilling of said well is necessary to effectively and efficiently drain that portion of an existing proration unit which cannot be so drained by the existing well.

CASE 6662: (Continued from September 19, 1979, Examiner Hearing)

Application of Supron Energy Corporation for a dual completion and downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Jicarilla "A" Well No. 22Y located in Unit K of Section 24, Township 26 North, Range 4 West, to produce gas from the Blanco Mesaverde Pool through tubing and to commingle and produce the Wildhorse Gallup and Basin-Dakota zones through a parallel tubing string.

CASE 6702: Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of South Blanco-Pictured Cliffs and Blanco Mesaverde production in the wellbore of its San Juan 27-5 Unit Well No. 67 located in Unit B of Section 31, Township 27 North, Range 5 West.

CASE 6487: (Continued from July 25, 1979, Examiner Hearing)

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

CASE 6679: (Continued from October 2, 1979, Examiner Hearing)

Application of El Paso Natural Gas Company for a gas storage unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Washington Ranch Morrow Unit Area comprising the Morrow formation and the first 100 feet immediately above and below said formation underlying all or parts of Sections 21 thru 23, 26 thru 29, and 32 thru 36, Township 25 South, Range 24 East; Sections 1 thru 5 and 9 thru 14, Township 26 South, Range 24 East; and Sections 6, 7, and 18, Township 26 South, Range 25 East, Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico. Said unit area would be for the purpose of conducting a gas storage project and would comprise 12,158 acres, more or less, of State, Federal and fee lands.

CASE 6703: Application of El Paso Natural Gas Company for underground gas storage, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a gas storage project in the Morrow formation underlying its Washington Ranch Morrow Unit Area in Townships 25 and 26 South, Ranges 24 and 25 East, Washington Ranch-Morrow Gas Pool. Applicant further seeks the promulgation of rules governing the drilling and completion of wells going thru the Morrow formation and the first 100 feet immediately above and below said formation underlying the unit area into deeper formations, and the establishment of an administrative procedure for the consideration of exceptions to the Division's well spacing and casing and tubing requirements for its injection and withdrawal wells.

CASE 6704: Application of ARCO Oil and Gas Company for the amendment of Order No. R-6044, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Division Order No. R-6044 which authorized the drilling of a horizontal drainhole in the Empire-Abo Pool. Applicant proposes to amend the target area prescribed by said order for the drainhole.

CASE 6705: In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating and extending certain pools in Chaves, Eddy, Lea, and Roosevelt Counties, New Mexico:

(a) CREATE a new pool in Eddy County, New Mexico, classified as a gas pool for Morrow production and designated as the Southwest Indian Flats-Morrow Gas Pool. The discovery well is Perry R. Bass Big Eddy Unit Well No. 68 located in Unit K of Section 10, Township 22 South, Range 28 East, NMPM. Said pool would comprise:

TOWNSHIP 22 SOUTH, RANGE 28 EAST, NMPM
Section 10: W/2

(b) CREATE a new pool in Lea County, New Mexico, classified as a gas pool for Atoka-Morrow production and designated as the South Kennitz Atoka-Morrow Gas Pool. The discovery well is Tenneco Oil Company Kennitz Deep Well No. 1 located in Unit G of Section 29, Township 16 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 34 EAST, NMPM
Section 29: E/2

(c) EXTEND the Anderson Ranch-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 32 EAST, NMPM
Section 3: S/2

(d) EXTEND the Angell Ranch-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 28 EAST, NMPM
Section 30: S/2

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

TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM
Section 23: S/2

- (f) EXTEND the East Atoka-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 27 EAST, NMPM
Section 22: S/2
Section 23: S/2
Section 28: E/2

- (g) EXTEND the Box Canyon-Permo Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 22 EAST, NMPM
Section 7: S/2
Section 18: N/2

- (h) EXTEND the Bluit-San Andres Associated Pool in Roosevelt County, New Mexico, to include therein:

TOWNSHIP 8 SOUTH, RANGE 37 EAST, NMPM
Section 22: NE/4

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

TOWNSHIP 19 SOUTH, RANGE 24 EAST, NMPM
Section 12: W/2

- (j) EXTEND the South Brunson-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 38 EAST, NMPM
Section 30: NE/4

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

TOWNSHIP 8 SOUTH, RANGE 30 EAST, NMPM
Section 4: NW/4

- (l) EXTEND the North Cemetery-Wolfcamp Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 25 EAST, NMPM
Section 18: All

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

TOWNSHIP 8 SOUTH, RANGE 32 EAST, NMPM
Section 3: NW/4

- (n) EXTEND the South Culebra Bluff-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM
Section 34: E/2

- (o) EXTEND the Diamond Mound-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 16 SOUTH, RANGE 27 EAST, NMPM
Section 11: All

- (p) EXTEND the Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM
Section 18: SW/4

- (q) EXTEND the Eagle Creek-Permo Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 25 EAST, NMPM
Section 36: N/2

- (r) EXTEND the South Empire-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM
Section 19: N/2

- (s) EXTEND the South Eunice-San Andres Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 12: SW/4
- (t) EXTEND the East Grama Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 21 SOUTH, RANGE 34 EAST, NMPM
Section 35: N/2
Section 36: N/2
TOWNSHIP 22 SOUTH, RANGE 34 EAST, NMPM
Section 2: SW/4
- (u) EXTEND the Imperial Tubb-Drinkard Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM
Section 22: SW/4
- (v) EXTEND the West Indian Basin-Morrow Gas Pool in Eddy County, New Mexico, to include therein:
TOWNSHIP 21 SOUTH, RANGE 22 EAST, NMPM
Section 14: W/2
- (w) EXTEND the Kemnitz-Cisco Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 16 SOUTH, RANGE 34 EAST, NMPM
Section 8: SE/4
Section 9: SW/4
- (x) EXTEND the Langlie-Ellenburger Gas Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 22 SOUTH, RANGE 36 EAST, NMPM
Section 20: E/2
- (y) EXTEND the Langlie Mattix Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM
Section 32: SW/4
- (z) EXTEND the North Loving-Morrow Gas Pool in Eddy County, New Mexico, to include therein:
TOWNSHIP 23 SOUTH, RANGE 28 EAST, NMPM
Section 8: S/2
Section 16: E/2
- (aa) EXTEND the Penasco Draw-Atoka Gas Pool in Eddy County, New Mexico, to include therein:
TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM
Section 21: W/2
- (bb) EXTEND the Penasco Draw-Morrow Gas Pool in Eddy County, New Mexico, to include therein:
TOWNSHIP 18 SOUTH, RANGE 24 EAST, NMPM
Section 25: S/2
Section 36: All
- (cc) EXTEND the Penasco Draw San Andres-Yeso Associated Pool in Eddy County, New Mexico, to include therein:
TOWNSHIP 18 SOUTH, RANGE 25 EAST, NMPM
Section 31: SE/4
- (dd) EXTEND the South Peterson-Fusselman Pool in Roosevelt County, New Mexico, to include therein:
TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM
Section 30: SE/4
- (ee) EXTEND the South Peterson-Pennsylvanian Pool in Roosevelt County, New Mexico, to include therein:
TOWNSHIP 5 SOUTH, RANGE 33 EAST, NMPM
Section 31: N/2 SE/4 and S/2 NE/4

- (ff) EXTEND the Red Lake-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:
TOWNSHIP 17 SOUTH, RANGE 27 EAST, NMPM
Section 31: W/2
- (gg) EXTEND the Shugart-Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:
TOWNSHIP 18 SOUTH, RANGE 31 EAST, NMPM
Section 27: W/2
Section 33: E/2
Section 34: W/2 and SE/4
Section 35: All
- (hh) EXTEND the North Teague-Devonian Pool in Lea County, New Mexico, to include therein:
TOWNSHIP 23 SOUTH, RANGE 37 EAST, NMPM
Section 21: NE/4
- (ii) EXTEND the Tomahawk-San Andres Pool in Roosevelt County, New Mexico, to include therein:
TOWNSHIP 7 SOUTH, RANGE 32 EAST, NMPM
Section 31: SW/4
- (jj) EXTEND the Travis-Upper Pennsylvanian Pool in Eddy County, New Mexico, to include therein:
TOWNSHIP 18 SOUTH, RANGE 28 EAST, NMPM
Section 13: N/2 S/2

Docket No. 32-79

Dockets Nos. 35-79 and 36-79 are tentatively set for September 5 and 19, 1979. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 22, 1979

9 A.M. - OIL CONSERVATION DIVISION 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 6545: (Continued from July 25, 1979, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Corinne Grace, Travelers Indemnity Company, and all other interested parties to appear and show cause why the Kuklah Baby Well No. 1 located in Unit G of Section 24, Township 22 South, Range 26 East, Eddy County, New Mexico, should not be plugged and abandoned in accordance with a Division-approved plugging program.

CASE 6626: Application of T. H. McElvain Oil & Gas Properties for pool commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the commingling of Gallup and Dakota production in its Miller B Well No. 6 located in Unit G of Section 12, Township 24 North, Range 7 West.

CASE 6627: Application of Caribou Four Corners, Inc. for compulsory pooling, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Gallup formation underlying a previously approved 64.32-acre non-standard unit comprising the NW/4 NW/4 and that portion of Lot 5 lying north of the San Juan River, all in Section 18, Township 29 North, Range 14 West, Cha Cha-Gallup Oil Pool, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. 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 6628: Application of Texaco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Skaggs-Glorieta, Skaggs-Drinkard and East Weir-Blinberry production in the wellbore of its M. B. Weir "B" Well No. 9 located in Unit O of Section 12, Township 20 South, Range 37 East.

CASE 6629: Application of Hilliard Oil & Gas, Inc. for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill its Hanson Bonds Well No. 1 located 1650 feet from the North line and 330 feet from the East line of Section 20, Township 9 South, Range 35 East, to a Devonian bottom hole location within 100 feet of a point 1325 feet from the North line and 430 feet from the East line of said Section 20.

CASE 6630: Application of El Paso Natural Gas Company for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Basin-Dakota and BS Mesa-Gallup production in the wellbore of its San Juan 27-4 Unit Well No. 37 located in Unit N of Section 33, Township 27 North, Range 4 West.

CASE 6631: Application of Reserve Oil, Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat gas and Leslie Mattix oil production in the wellbore of its Cooper Jal Unit Well No. 149-306 located in Unit J of Section 18, Township 24 South, Range 37 East.

CASE 6632: Application of Mesa Petroleum Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Frank State Well No. 1 located in Unit I of Section 7, Township 19 South, Range 23 East, to produce gas from the Abo and Morrow formations, Runyan Ranch Field, through the casing-tubing annulus and through tubing.

CASE 6633: Application of Mesa Petroleum Company for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion of its Yates Federal Com Well No. 1-Y located in Unit J of Section 20, Township 17 South, Range 27 East, to produce gas from the Logan Draw-Cisco Canyon Gas Pool and an undesignated Morrow pool through the casing-tubing annulus and through tubing.

CASE 6634: Application of Durham Inc. for special pool rules or a spacing exception, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Lake Arthur-Pennsylvanian Gas Pool 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 Pennsylvanian gas pools rather than the present 160-acre spacing. In the alternative applicant seeks to limit the application of the pool's rules to the horizontal limits of the pool, being the SW/4 of Section 31, Township 15 South, Range 27 East.

- CASE 6635:** Application of Exxon Corporation for an unorthodox well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of the W/2 of Section 31, Township 20 South, Range 37 East, Eumont Pool, to its Aggies State Well No. 4 located in Unit F, and to its Well No. 13, at an unorthodox location 660 feet from the South line and 1650 feet from the West line, both in said Section 31.
- CASE 6636:** Application of Exxon Corporation for an unorthodox well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of all of Section 23, Township 21 South, Range 36 East, Eumont Pool, to its New Mexico "G" State Well No. 5 located in Unit E, and to its Well No. 20, at an unorthodox location in Unit M, both in said Section 23.
- CASE 6637:** Application of Exxon Corporation for an unorthodox well location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the simultaneous dedication of the E/2 of Section 10, Township 21 South, Range 36 East, Eumont Pool, to its Knox Well No. 1 located in Unit J, and to its Well No. 13, at an unorthodox location 1650 feet from the North line and 990 feet from the East line, both in said Section 10.
- CASE 6638:** Application of Ladd Petroleum Corporation for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Largo-Gallup and Basin-Dakota production in the wellbore of its Lindrith Well No. 24 located in Unit F of Section 4, Township 26 North, Range 7 West.
- CASE 6610:** (Continued from July 25, 1979, Examiner Hearing)
Application of Koch Industries, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water in the Rustler formation through the perforated interval from 1190 feet to 1210 feet in its Wells "A" Well No. 7 located in Unit E of Section 35, Township 26 South, Range 37 East, Rhodes Field.
- CASE 6579:** (Continued from July 25, 1979, Examiner Hearing)
Application of R. N. Hillin for an unorthodox well location and approval of infill drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks a waiver of existing well spacing requirements and a finding that the drilling of a Morrow gas well at an unorthodox location 800 feet from the South line and 2000 feet from the East line of Section 34, Township 19 South, Range 28 East, is necessary to effectively and efficiently drain that portion of the E/2 of said Section 34 which cannot be so drained by the existing well.
- CASE 6580:** (Continued from July 25, 1979, Examiner Hearing)
Application of Continental Oil Company for a carbon dioxide injection project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to initiate a pilot carbon dioxide injection project in the Grayburg-San Andres formation in Units II and I of Section 20, Township 17 South, Range 32 East, Maljamar Pool, for tertiary recovery purposes.
- CASE 6622:** (Continued from August 8, 1979, Examiner Hearing)
Application of Adams Exploration Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp-Penn formations underlying the N/2 of Section 15, Township 24 South, Range 28 East, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6639:** In the matter of the hearing called by the Oil Conservation Division on its own motion for an order creating and extending certain pools in McKinley, Rio Arriba, Sandoval, and San Juan Counties, New Mexico:
(a) CREATE a new pool in McKinley County, New Mexico, classified as an oil pool for Mesaverde production and designated as the Star-Mesaverde Oil Pool. The discovery well is WTR Oil Company State Well No. 1 located in Unit D of Section 16, Township 19 North, Range 6 West, NMPM. Said pool would comprise:
TOWNSHIP 19 NORTH, RANGE 6 WEST, NMPM
Section 16: NW/4
(b) CREATE a new pool in San Juan County, New Mexico, classified as a gas pool for Farmington production and designated as the Bisti-Farmington Pool. The discovery well is Dome Petroleum Corporation Manlad Federal Well No. 1 located in Unit F of Section 31, Township 26 North, Range 12 West, NMPM. Said pool would comprise:

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM

Section 4: N/2 and SE/4
Section 5: N/2
Section 6: N/2
Section 9: NE/4
Section 10: NW/4

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM

Section 19: SW/4
Section 20: W/2
Section 31: W/2

(c) CREATE a new pool in San Juan County, New Mexico, classified as a gas pool for Fruitland production and designated as the Farmer-Fruitland Pool. The discovery well is Manana Gas, Incorporated Bobbie Herrera Well No. 1 located in Unit K of Section 4, Township 30 North, Range 11 West, NMPM. Said pool would comprise:

TOWNSHIP 30 NORTH, RANGE 11 WEST, NMPM

Section 4: SW/4

(d) CREATE a new pool in San Juan County, New Mexico, classified as an oil pool for Pennsylvanian production and designated as the Big Gap-Pennsylvanian Oil Pool. The discovery well is Bass Enterprises Production Company Navajo 20 Well No. 1 located in Unit O of Section 20, Township 27 North, Range 19 West, NMPM. Said pool would comprise:

TOWNSHIP 27 NORTH, RANGE 19 WEST, NMPM

Section 20: SE/4

(e) EXTEND the Aztec-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 10 WEST, NMPM

Section 29: NE/4

TOWNSHIP 29 NORTH, RANGE 11 WEST, NMPM

Section 25: SE/4

(f) EXTEND the Aztec-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 11 WEST, NMPM

Section 35: E/2

(g) EXTEND the Bisti-Lower Gallup Oil Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 14 WEST, NMPM

Section 9: E/2 SE/4
Section 10: SW/4
Section 15: N/2 NE/4

(h) EXTEND the Blanco Mesaverde Pool in Rio Arriba and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 25 NORTH, RANGE 3 WEST, NMPM

Section 4: N/2

TOWNSHIP 26 NORTH, RANGE 2 WEST, NMPM

Section 30: All (Partial Section)
Section 31: All (Partial Section)

TOWNSHIP 27 NORTH, RANGE 2 WEST, NMPM

Section 16: W/2
Section 20: E/2
Section 21: NW/4

(i) EXTEND the Blanco-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 8 WEST, NMPM

Section 4: NW/4
Section 5: NE/4

TOWNSHIP 31 NORTH, RANGE 9 WEST, NMPM
Section 28: SW/4
Section 33: NW/4

TOWNSHIP 32 NORTH, RANGE 11 WEST, NMPM
Section 7: All (Partial Section)
Section 8: E/2
Section 11: E/2
Section 12: All (Partial Section)
Section 13: NW/4
Section 14: N/2

(j) EXTEND the East Blanco-Pictured Cliffs Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 4 WEST, NMPM
Section 8: NE/4
Section 9: W/2

(k) EXTEND the South Blanco-Pictured Cliffs Pool in Rio Arriba, Sandoval, and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 2 WEST, NMPM
Section 18: E/2

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM
Section 36: SE/4

TOWNSHIP 25 NORTH, RANGE 5 WEST, NMPM
Section 19: SE/4
Section 30: All
Section 31: All
Section 32: All

(l) EXTEND the Bloomfield-Farmington Oil Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 11 WEST, NMPM
Section 25: N/2

(m) EXTEND the Chacon-Dakota Associated Pool in Rio Arriba and Sandoval Counties, New Mexico, to include therein:

TOWNSHIP 22 NORTH, RANGE 3 WEST, NMPM
Section 3: W/2
Section 10: W/2

TOWNSHIP 23 NORTH, RANGE 3 WEST, NMPM
Section 25: SW/4
Section 26: SE/4

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM
Section 31: S/2
Section 34: SW/4

(n) EXTEND the Choza Mesa-Pictured Cliffs Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 4 WEST, NMPM
Section 15: SE/4
Section 22: NE/4

(o) EXTEND the Escrito-Gallup Associated Pool in Rio Arriba and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 7 WEST, NMPM
Section 26: SW/4

(p) EXTEND the Harper Hill Fruitland-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 29 NORTH, RANGE 14 WEST, NMPM
Section 2: SE/4

TOWNSHIP 30 NORTH, RANGE 14 WEST, NMPM
Section 35: N/2 and SE/4

- (q) EXTEND the Harris Mesa-Chacra Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 27 NORTH, RANGE 9 WEST, NMPM
Section 5: NE/4

TOWNSHIP 28 NORTH, RANGE 9 WEST, NMPM
Section 32: E/2

- (r) EXTEND the Kutz-Fruitland Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NMPM
Section 32: NE/4

- (s) EXTEND the West Kutz-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 28 NORTH, RANGE 11 WEST, NMPM
Section 26: SW/4

- (t) EXTEND the La Plata-Gallup Oil Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 32 NORTH, RANGE 13 WEST, NMPM
Section 32: N/2 and SW/4

- (u) EXTEND the West Lindrith Gallup-Dakota Oil Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 24 NORTH, RANGE 3 WEST, NMPM
Section 6: S/2 (Partial Section)
Section 18: All (Partial Section)

TOWNSHIP 24 NORTH, RANGE 4 WEST, NMPM
Section 5: N/2
Section 6: N/2
Section 24: SE/4
Section 25: NE/4

- (v) EXTEND the Otero-Chacra Pool in Rio Arriba and San Juan Counties, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 7 WEST, NMPM
Section 3: All
Section 4: All
Section 10: N/2 and SE/4

- (w) EXTEND the Rusty-Chacra Pool in Sandoval County, New Mexico, to include therein:

TOWNSHIP 22 NORTH, RANGE 7 WEST, NMPM
Section 20: SE/4
Section 21: E/2 and SW/4

- (x) EXTEND the Straight Canyon-Dakota Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 31 NORTH, RANGE 16 WEST, NMPM
Section 14: SE/4

- (y) EXTEND the WAW Fruitland-Pictured Cliffs Pool in San Juan County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 12 WEST, NMPM
Section 29: S/2
Section 30: E/2
Section 32: N/2

TOWNSHIP 26 NORTH, RANGE 13 WEST, NMPM
Section 13: E/2 and SW/4
Section 14: SE/4

TOWNSHIP 27 NORTH, RANGE 13 WEST, NMPM
Section 18: E/2

(z) EXTEND the Wild Horse-Gallup Pool in Rio Arriba County, New Mexico, to include therein:

TOWNSHIP 26 NORTH, RANGE 4 WEST, NMCM
Section 16: S/2

Docket No. 33-79

DOCKET: COMMISSION HEARING - FRIDAY - AUGUST 24, 1979

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

CASE 6495: (DE NOVO) (Continued from June 6, 1979, Commission Hearing)

Application of Amax Chemical Corporation for the amendment of Order No. R-111-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-111-A to extend the boundaries of the Potash-Oil Area by the inclusion of certain lands in Sections 23 and 24, Township 19 South, Range 29 East, Sections 1, 4, 5, 6, 7, 11, 12, 13, 14, 19, 20, 23, 24, and 29, Township 19 South, Range 30 East, and Sections 7, 8, 17, 18, and 19, Township 19 South, Range 31 East, all in Eddy County, New Mexico.

Upon application of Amax Chemical Corporation this case will be heard De Novo pursuant to the provisions of Rule 1220.

Docket No. 34-79

DOCKET: COMMISSION HEARING - TUESDAY - AUGUST 28, 1979

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

CASE 6555: (DE NOVO) (Continued from August 7, 1979, Commission Hearing)

Application of Jake L. Hamon for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox location 660 feet from the North line and 560 feet from the East line of Section 30, Township 20 South, Range 36 East, North Osado-Morrow Gas Pool, all of said Section 30 to be dedicated to the well.

Upon application of Texas Oil & Gas Corp. this case will be heard De Novo pursuant to the provisions of Rule 1220.

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico
22 August 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Reserve Oil, Inc. for) CASE
downhole commingling, Lea County, New) 6631
Mexico.)

BEFORE: Daniel S. Nutter

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 for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3030 Plaza Blanca (SSE) 411-3463
Santa Fe, New Mexico 87501

1 MR. NUTTER: We'll call next Case Number
2 6631.

3 MR. PADILLA: Application of Reserve Oil,
4 Inc. for downhole commingling, Lea County, New Mexico.

5 MR. NUTTER: Applicant has requested con-
6 tinuance. Case Number 6631 will be continued to the Examiner
7 Hearing scheduled to be held at this same place at 9:00
8 o'clock a. m. October 17th, 1979.

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10 (Hearing continued.)
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SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3028 Plaza Blanca (608) 471-3482
Santa Fe, New Mexico 87501

REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a court reporter, DO HEREBY
 CERTIFY that the foregoing and attached Transcript of
 Hearing before the Oil Conservation Division, was reported
 by me; that the said transcript is a full, true, and correct
 record of the hearing, prepared by me to the best of my
 ability, from my notes taken at the time of the hearing.

Sally W. Boyd, C.S.R.

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 6631
 heard by me on 8/22 1979

[Signature] Examiner
 Oil Conservation Division

SALLY WALTON BOYD
 CERTIFIED SHORTHAND REPORTER
 3020 Plaza Blanca (SOS) 471-2462
 Santa Fe, New Mexico 87501

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RESERVE OIL, INC.

THE SOUTHERN DIVISION

312 HRF BUILDING
MIDLAND, TEXAS 79701
(915) 682-4341

August 16, 1979

Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Request for Continuance
Case #6631
Downhole Commingling
Lea County, New Mexico

Attention: Mr. Dan Nutter

Gentlemen:

Reserve Oil, Inc. requests your approval to reschedule Case #6631
(Downhole Commingling - Lea County, New Mexico) for October 17, 1979.
This will allow Reserve Oil, Inc. to arrange for its attorney,
Mr. A. J. Losee, to be present at the hearing.

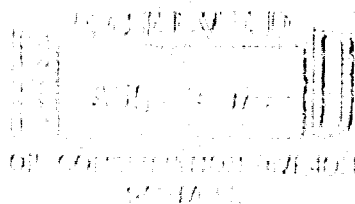
Very truly yours,

RESERVE OIL, INC.

Clarence R. Chandler
Clarence R. Chandler

ck

cc: Energy & Minerals Dept. - Hobbs



Don -
I think this needs a
hearing.

R-5590 is for
commingling Jalmat Oil and
Langlie-Mattix Oil

MC-2055 was for Gas/Oil
Dual - Jalmat Gas & LM oil.

By their own estimates, they
expect to get only gas from
Jalmat after workover.

Carl

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
Oil Conservation Division
State Land Office Building
Santa Fe, New Mexico
22 August 1979

EXAMINER HEARING

IN THE MATTER OF:

Application of Reserve Oil, Inc. for) CASE
downhole commingling, Lea County, New) 6631
Mexico.)

BEFORE: Daniel S. Nutter

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 for the Division
State Land Office Bldg.
Santa Fe, New Mexico 87503

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
303 Plaza Blanca (SOS) 471-2462
Santa Fe, New Mexico 87501

MR. NUTTER: We'll call next Case Number

6631.

MR. PADILLA: Application of Reserve Oil,
Inc. for downhole commingling, Lea County, New Mexico.

MR. NUTTER: Applicant has requested con-
tinuance. Case Number 6631 will be continued to the Examiner
Hearing scheduled to be held at this same place at 9:00
o'clock a. m. October 17th, 1979.

(Hearing continued.)

SALLY WALTON BOYD
CERTIFIED SHORTHAND REPORTER
3020 Plaza Blanca (505) 471-2442
Santa Fe, New Mexico 87501

REPORTER'S CERTIFICATE

I, SALLY W. BOYD, a court reporter, DO HEREBY
 CERTIFY that the foregoing and attached Transcript of
 Hearing before the Oil Conservation Division, was reported
 by me; that the said transcript is a full, true, and correct
 record of the hearing, prepared by me to the best of my
 ability, from my notes taken at the time of the hearing.

Sally W. Boyd C.S.R.
 Sally W. Boyd C.S.R.

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the Examiner hearing of Case No. 6631,
 heard by me on 8/22 1979.
[Signature] Examiner
 Oil Conservation Division

SALLY WALTON BOYD
 CERTIFIED SHORTHAND REPORTER
 3030 Plaza Blanca (895) 471-2462
 Santa Fe, New Mexico 87501

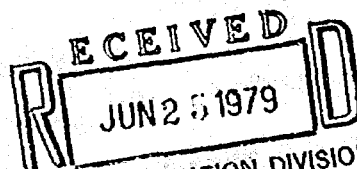
OIL CONSERVATION COMMISSION
Hobbs DISTRICT

Case 6631

OIL CONSERVATION COMMISSION
BOX 2088
SANTA FE, NEW MEXICO

DATE June 21, 1979

RE: Proposed MC _____
Proposed DHC X
Proposed NSL _____
Proposed SWD _____
Proposed WFX _____
Proposed PMX _____



Gentlemen:

I have examined the application dated _____
OIL CONSERVATION DIVISION
SANTA FE

for the Reserve Oil, Inc. Cooper Jal Unit #149 & 306-J 18-24-37
Operator Lease and Well No. Unit, S-T-R

and my recommendations are as follows:

I don't think this can be done administratively as the total fluid
is over 40 BOPD.---J.S.

Yours very truly,

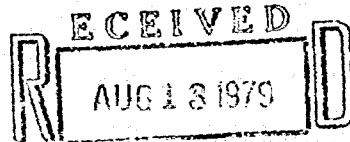


RESERVE OIL, INC.

THE SOUTHERN DIVISION

312 HBF BUILDING
MIDLAND, TEXAS 79701
(915) 682-4341

August 8, 1979



OIL CONSERVATION DIVISION
SANTA FE

Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Request for Permission to
Down-hole Commingle -
Exception to Rule 303-A
Cooper Jal Unit, Well No. 149 & 306
Lea County, New Mexico

Attention: Mr. Joe Ramey

Gentlemen:

On June 12, 1979, Reserve Oil, Inc. submitted a request (copy attached) for administrative approval of an exception to Rule 303-A to permit down-hole commingling its Cooper Jal Unit, Well Nos. 149 and 306.

All offset operators were advised of our request on June 13, 1979, and Reserve Oil, Inc. has not been advised of any objections by the offsets. The 20-day waiting period has been met and we request your approval of our initial request, subject as above.

Very truly yours,

RESERVE OIL, INC.

Clarence R. Chandler

ck

Attachment

cc: Energy & Minerals Dept. - Hobbs

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. 6651

Order No. R-6173

APPLICATION OF RESERVE OIL, INC.

FOR DOWNHOLE COMMINGLING, LEA

COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 17,
19 79, at Santa Fe, New Mexico, before Examiner DSN

NOW, on this October day of October, 19 79, 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, Reserve Oil, Inc., is
the owner and operator of the Cooper Jal Unit Well No. 149-396,
located in Unit J of Section 18, Township 24 South,
Range 27 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks authority to commingle
Jalmat and Ranglie Mattix production
within the wellbore of the above-described well.

(4) That the Jalmat zone of the subject well, ^{frequently} loads
up with water and dies.

(5) That with the tubing configuration in the well
bore, including a vent string for the Ranglie
mattix zone, it is impracticable to pump the
fluids off the Jalmat zone to maintain

(6) ~~That~~ That from the Jalmat zone, the subject well, ^{even when on production,} is capable of low marginal production only.

(7) ~~That~~ That from the Langlie Muttley zone, the subject well is capable of low marginal production only.

(8) ~~That~~ 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.

(9) ~~That~~ 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.

(10) ~~That~~ 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 Hobbs district office of the Division any time the subject well is shut-in for 7 consecutive days.

(11) ~~That~~ That in order to allocate the commingled production to each of the commingled zones in the subject well, 75 percent of the commingled gas production should be allocated to the Jalmat zone, and 25 percent of the commingled gas ^{and all of the oil production} production to the Langlie Muttley zone.

(~~ALTERNATE~~)

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

(12) That the number of the subject well should be changed, because to call the well the Cooper Jal Unit Well No. 149 in the Langlie Muttley Pool and the Cooper Jal Unit Well No 306 in the Jalmat gas Pool causes confusion

IT IS THEREFORE ORDERED:

(1) That the applicant, Beaver Oil, Inc., is hereby authorized to commingle Jelmat and Ranglie Mather production within the wellbore of the Cooper Jelmat well No. 149-386, located in Unit J of Section 18, Township 24 South, Range 37 East, NMPM, Rea County, New Mexico.

~~(2) That the applicant shall consult with the Supervisor of the Hobbs 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 75 percent of the commingled gas production shall be allocated to the Jelmat zone and 25 percent of the commingled gas production and all of the oil production shall be allocated to the Ranglie Mather zone.

(3) That the operator of the subject well shall immediately notify the Division's Hobbs 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.

(4) That the operator shall remember the subject well in accordance with Division regulations.