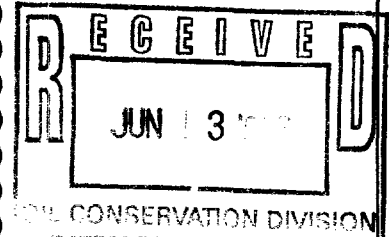


STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 11,543

APPLICATION OF PENROC OIL CORPORATION)
FOR APPROVAL OF A COOPERATIVE LEASEHOLD)
WATERFLOOD PROJECT AND TO QUALIFY SAID)
PROJECT FOR THE RECOVERED OIL TAX RATE)
PURSUANT TO THE ENHANCED OIL RECOVERY)
ACT, LEA COUNTY, NEW MEXICO)



REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

May 30th, 1996

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, May 30th, 1996, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

STEVEN T. BRENNER, CCR
(505) 989-9317

I N D E X

May 30th, 1996
 Examiner Hearing
 CASE NO. 11,543

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APPLICANT'S WITNESSES:	
<u>MOHAMMED YAMIN MERCHANT</u>	
(President, Penroc Oil Corporation; Engineer)	
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* * *

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* * *

A P P E A R A N C E S

FOR THE DIVISION:

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FOR THE APPLICANT:

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P.O. Box 2265
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By: W. THOMAS KELLAHIN

* * *

1 WHEREUPON, the following proceedings were had at
2 9:45 a.m.:

3 EXAMINER STOGNER: Hearing will come to order.
4 Call Case Number 11,543.

5 MR. CARROLL: Application of Penroc Oil
6 Corporation for approval of a cooperative leasehold
7 waterflood project and to qualify said project for the
8 recovered oil tax rate pursuant to the Enhanced Oil
9 Recovery Act, Lea County, New Mexico.

10 EXAMINER STOGNER: Call for appearances.

11 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of
12 the Santa Fe law firm of Kellahin and Kellahin, appearing
13 on behalf of the Applicant, and I have one witness to be
14 sworn.

15 EXAMINER STOGNER: No other appearances?
16 Will the witness please stand to be sworn?
17 (Thereupon, the witness was sworn.)

18 MOHAMMED YAMIN MERCHANT,
19 the witness herein, after having been first duly sworn upon
20 his oath, was examined and testified as follows:

21 DIRECT EXAMINATION

22 BY MR. KELLAHIN:

23 Q. Mr. Merchant, for the record would you please
24 state your name and occupation?

25 A. My name is Mohammed Yamin Merchant. I'm

1 President of Penroc Oil Corporation, petroleum engineer by
2 trade.

3 Q. On prior occasions have you qualified before the
4 Division as an expert in petroleum engineering?

5 A. Yes, sir, I have.

6 Q. And pursuant to your profession, as well as your
7 responsibilities as president of this company, have you
8 made a study of the opportunity to take a portion of your
9 project areas in this part of Lea County, New Mexico, and
10 subject them to water injection, into the San Andres
11 formation, with the possibility of increasing oil
12 production from that reservoir?

13 A. Yes, sir, I have.

14 MR. KELLAHIN: We tender Mr. Merchant as an
15 expert witness.

16 EXAMINER STOGNER: Mr. Merchant is so qualified.

17 Q. (By Mr. Kellahin) Let me have you take what
18 we've marked as Exhibit Number 1, Mr. Merchant, and let's
19 spend a few minutes orienting the Examiner as to your
20 properties, and then we'll specifically look at the project
21 area.

22 Let's start with the properties. They are
23 generally identified in the yellow shading; are they not?

24 A. Yes, they're all identified which are Penroc-
25 owned and operated in yellow.

1 Q. All right. The wells in this area are all wells
2 being produced out of what formation, sir?

3 A. They're all produced -- In the Penroc-operated
4 leases, they're all produced out of the San Andres.

5 Q. Have you currently enjoyed some success with
6 taking injection wells in this area and putting water in
7 this formation and showing a positive injection response by
8 the offsetting oil wells?

9 A. Yes, we have. Back up there in the southwest
10 quarter of Section 14, the well in the middle, Well Number
11 5, was converted to injection by OXY prior to Penroc
12 takeover, and we have curves to prove that, back that
13 particular statement, and that we have had response and
14 arrest in the decline of production, and in fact a
15 substantial increase.

16 Q. Let's identify for the Examiner the two injection
17 wells that you're seeking to have approved by the Division
18 as part of this case, and let's look at the injection well
19 that's in the southeast quarter of Section 22. It's in
20 Location I of that section. Do you see that?

21 A. Yeah, we have two -- We are asking for conversion
22 to injection in two wells. The first one, as you said, is
23 located in the northeast of the southeast of Section 22,
24 marked as Well Number 2.

25 Q. All right. Let's look at the second well. Where

1 is that?

2 A. The second well is located in the southwest
3 quarter of the southeast quarter in Section 23, marked with
4 an arrow, Well Number 4.

5 Q. Those are the two wells we're seeking approval
6 for today?

7 A. Yes, sir, we are.

8 Q. In order to have a response from producing oil
9 wells, you have blocked out a project area that you
10 anticipate to show some response by injection in those two
11 wells?

12 A. That is correct. Both these leases, the State
13 "AD" and the Harris lease, they are currently very
14 marginal, averaging three barrels a day in one case and
15 five to six barrels in the other case, and we plan to
16 inject water in both Well Number 2 and Well Number 4 to
17 help the production.

18 Q. Let's make sure the Examiner understands what you
19 mean when you identify these leases. Let's start with the
20 southeast quarter of 22, plus the southeast-northeast.
21 That block of acreage is in what you characterize to be a
22 portion of the State "AD" lease; is that not true?

23 A. That is correct.

24 Q. In addition, you propose to add a portion of what
25 is identified as the State "II-23" lease?

1 A. The State "II-23" is the east offset lease to the
2 "AD" lease, and that would become part, naturally part of
3 the injection.

4 Q. The part that we're proposing to include in the
5 project area for the EOR approval would be the east half of
6 the southwest quarter plus the southwest of the northwest
7 quarter?

8 A. That is correct.

9 Q. Those three 40-acre tracts are part of what you
10 characterize as the State "II-23" lease?

11 A. That is correct.

12 Q. The rest of the project area that you're seeking
13 approval is for what you have called the State Harris
14 lease?

15 A. Harris State lease.

16 Q. Harris State lease, which would be the east half
17 of the southwest quarter and the west half of the southeast
18 quarter?

19 A. That 160 acres.

20 Q. Taken together, then, you're seeking approval,
21 for a 480-acre tract --

22 A. That is correct.

23 Q. -- that consists of three separate State of New
24 Mexico leases?

25 A. They're all State of New Mexico leases, and they

1 all have common interest.

2 Q. And it's 100-percent operated by Penroc?

3 A. 100-percent Penroc-operated and 87.5 net.

4 Q. All right. Instead of putting these together as
5 a unit, for a unit waterflood project, have you obtained
6 approval from the Land Office to consolidate these on a
7 leasehold cooperative basis for injection and secondary
8 recovery?

9 A. Yes, I have discussed the matter as late as
10 Tuesday of this week with Pete Martinez of State Land
11 Office, and he said they do not have any objection, as long
12 as there is current production on the leases, and we do
13 have current production on the leases.

14 Q. All right, so you meet that requirement?

15 A. Yes, sir.

16 Q. Let's turn to a description of the geology so the
17 Examiner can see the relationship of these injection wells
18 within the geology of the reservoir. And to do that, let's
19 turn to what we've marked as Exhibit Number 2.

20 A. Exhibit 2 is a structure map, which came out of
21 the Roswell Geological Society book from 1966, showing all
22 the wells and the top of the San Andres on every well
23 drilled and completed or plugged in the Mescalero-San
24 Andres formation.

25 Q. All right, let's start with the second injector

1 you described. It's the Number 4 well on the Harris State
2 lease, and it's in Unit Letter O of Section 23. Why is
3 that well useful as a potential injection well in order to
4 obtain a positive injection response?

5 A. Well Number 4 is -- As you can tell looking at
6 the structure map, it is on the edge of the structure. It
7 has already cum'd -- and I'm going to jump to Exhibit 3 --
8 it has already cum'd 164,000 barrels of oil since
9 inception. And currently all it will make is water, with a
10 trace of oil. All water otherwise.

11 And we feel like by injecting water on the lowest
12 well in this structure, as well as the wells which have
13 cum'd 164,000 barrels of oil we can help the offsetting
14 producers, by recovering additional oil.

15 Q. Describe for us why you have selected the State
16 "AD" Number 2 well in Unit Letter I of Section 22 as the
17 second injection well for the project.

18 A. We have a similar situation there as on the
19 Harris State Well Number 2, is strictly a two- to five-
20 barrels-a-day water well. It has also cum'd -- It's cum'd
21 76,000 barrels of oil. It is on the western edge of the
22 field, as it is evident from the structure map and shown on
23 Exhibit 2, and it should help the north and the south
24 offsets as well as the east offsets.

25 Q. Let me have you go ahead, Mr. Merchant, and have

1 you identify Exhibit Number 4 and Exhibit 5 at this time.

2 A. Exhibit 4 and 5 are the -- Again, that's based on
3 the structure map which shows the gas and the water
4 production on each one of the wells, and you can see on the
5 top of the structure, the cums are much, much better.

6 Where the cums are better on the eastern edge, it
7 is being helped by the injection well, Well Number 5, which
8 is located in Section 23 in the north -- it would be --
9 Excuse me for a second here. It would be in the Unit
10 Letter I of Section 23.

11 Q. Within the project area, the 480 acres, you
12 currently have eight producing wells?

13 A. Yes, sir.

14 Q. And those eight producing wells produce on an
15 average daily basis what volume of oil?

16 A. All together, they average about 12, 13 barrels a
17 day.

18 Q. And how much water are they producing?

19 A. Anywhere from 10 to 15.

20 Q. As part of your project, have you identified a
21 source of water that you'll use for injection, then, back
22 into the San Andres?

23 A. Yes, we have a well located in Section 22. It's
24 marked as Well Number 11, and it's in Unit Letter N. It is
25 a Penroc well. It is currently temporarily abandoned.

1 Q. I'm sorry, I think you misspoke, Merch.

2 A. I'm sorry.

3 Q. I think it's in O?

4 A. O, yeah, I'm sorry. It is in Unit Letter O, Well
5 Number 11. And originally it was a Devonian well drilled
6 by Cities Service, and currently it's TA'd in the
7 Pennsylvanian formation depleted.

8 We have plans to drill that bridge plug out and
9 go back to the Devonian and recover additional oil,
10 hopefully, from the Devonian, but at the same time get the
11 water as makeup water for injection wells.

12 Q. Within the project area, then, as the Examiner
13 sees the black well dots, if you count those up, those
14 would be the eight producing wells that you propose to
15 continue to produce?

16 A. That is correct.

17 Q. Let's look at the interval for which you seek to
18 have approval for injection. If you'll turn to what we've
19 marked as Exhibit Number 6, let's look at the cross-section
20 and have you show us the interval.

21 A. We can look probably at Exhibit 6 and 7 together.

22 Q. All right, let's take a minute, then, and unfold
23 them both.

24 A. Okay.

25 Q. All right, sir, go ahead.

1 A. Okay, Exhibit 6 and Exhibit 7 -- Exhibit 6 is a
2 cross-section of the injection well -- proposed injection
3 well, "AD" Number 2 and offsets, and Exhibit 7 is the
4 proposed injection well, Harris State Number 4, and the
5 offsets. And you will see the top of the San Andres where
6 it's marked as Pi zone, and then you've got the P1, P2 and
7 P3. And basically, all wells are open in P1 and P2 zones,
8 and that's where the injection wells would be injecting in,
9 in the same zone.

10 Q. If the Examiner chooses to have a type well and a
11 specific footage then, to approve the entire San Andres
12 formation as an injection interval, give us the well and
13 give us the footages.

14 A. The footage will be from about 3990 down to 4300,
15 4500 feet.

16 Q. Let's pick a well so that he can look at it.

17 A. Okay, let's take the one -- the Harris Number 2,
18 for example, and -- It varies anywhere from 3950 down to
19 4500.

20 Q. Well, that's why it's helpful to have a specific
21 well.

22 A. Okay.

23 Q. Let's do that.

24 A. Let's just go to the "AD" Number 2.

25 Q. State "AD" Number 2 well is shown on Exhibit

1 Number 6, and if you display that so the log is running
2 vertical, it's the well in the top portion of the display
3 in the center?

4 A. That is correct.

5 Q. All right, give us the top and the base for the
6 injection interval.

7 A. The top will be from about 39- -- that's the top
8 of the Pi zone, 3950. And the bottom would be 4300 feet.

9 Q. All right.

10 A. Of course, they're selectively open, so you don't
11 have perforations spread out from top to bottom.

12 Q. Do you anticipate adding additional perforations
13 in your two injection wells, or are you going to utilize
14 current perforations?

15 A. I'm going to utilize current perforations. We
16 may have to add additional perforations, for example, in
17 the Harris State Number 3. It is not open where the
18 perforations are in the injection well, Harris State Number
19 4.

20 Q. The 3 would be a producer?

21 A. Yes, sir.

22 Q. All right. So in terms of the injection wells,
23 your current perforations are adequate?

24 A. In the injection wells, the current perforations
25 properly opened. In the producers, in some they are and in

1 some they're not.

2 Q. All right. So for the producing wells you're
3 going to add some additional perforation?

4 A. That is correct.

5 Q. Have you analyzed, Mr. Merchant, what is the
6 range of -- or estimated volume of additional secondary oil
7 that you might recover if this project is successful?

8 A. Yes, we have. We can move over to Exhibit 8.

9 Q. Okay, let's do that. Let's look at Exhibit 8.
10 Before we look at the detail, summarize for me generally
11 the range of potential incremental secondary oil that you
12 might achieve out of the project area.

13 A. Pessimistically speaking -- You shouldn't, but I
14 am. Pessimistically speaking, for every primary barrel
15 recovered, if you figure we'll recover 50 percent of every
16 primary barrel, we should recover roughly 400,000-plus
17 barrels of oil from this project.

18 Q. Okay. Do you have an estimate of the additional
19 capital costs that you'll have to expend in order to do
20 this project?

21 A. Yes, sir, our estimated cost is \$80,000, plus or
22 minus, which I can go into detail the work that would
23 include.

24 Q. I was just interested in --

25 A. -- total cost.

1 Q. -- the total cost.

2 A. Okay.

3 Q. Let's look at Exhibit 8, now, and have you go
4 through the pages with me and summarize for the Examiner
5 what he's seeing, starting with the first page.

6 A. Okay, the first page is a case based \$15.50-a-
7 barrel oil and \$1.50 gas, and based on some of the -- a
8 couple other injection wells we have seen in the north part
9 of the field, how this reservoir will perform. And we have
10 made an engineering run and see what kind of economics
11 there is to this project. And as you can see, based on the
12 number of wells and the total production, we should be
13 recovering 411,000 barrels of oil, of additional oil.

14 Q. You've also run this assessment using a \$12.50
15 price?

16 A. Right.

17 Q. And a different MCF price?

18 A. The second case is \$12.50 a barrel. This is 18-
19 gravity oil, 17- to 18-gravity oil. So when your posted
20 price for New Mexico sour is \$17, your price for the oil in
21 this particular field is \$15 to \$15.50 a barrel. So if
22 tomorrow price drops down \$3 a barrel, I have run cases
23 both ways, at \$15.50 and then at \$12.50.

24 Q. The second page, then, is the \$12.50 case, and
25 that shows you just short of 400,000?

1 A. That is correct.

2 The next page is a forecast -- is based on what
3 the production is currently from these two leases and what
4 the water injection will do to increase the production
5 within six months.

6 Q. Now, the wells shown on this plot are taken from
7 the State "AD" and the Harris lease?

8 A. The wells shown on this plot are strictly the
9 "AD" and the Harris State lease. It does not include the
10 "II-23" lease.

11 Q. For illustration purposes, you can see that these
12 wells are on an established decline?

13 A. That is correct.

14 Q. All right. Let's turn to the next page, which in
15 the upper right-hand corner it's captioned "State AD".
16 What are you plotting here, Mr. Merchant?

17 A. It's hard to read, but it's got oil, gas and
18 water production, and basically it's showing that we are
19 averaging about 30, 35, maybe 40 barrels a month out of the
20 State "AD" lease currently.

21 Q. All right. And the next page, you've summarized
22 your oil production out of the Harris State properties, and
23 it's shown on that plat?

24 A. And that particular curve shows between 300 to
25 350 barrels a month, which is about 11 barrels a day of oil

1 production. The curve in green is the oil production, the
2 curve in blue is the water production.

3 Q. Okay. If we turn to the next page, the top
4 corner is captioned "State BN". This is the analysis of
5 the wells by analogy up there in the southwest of Section
6 14, where you in fact have production, established
7 injection and showed a response?

8 A. Yeah, that well was drilled by OXY. It was
9 approved by the Commission back in 1991, and you can see
10 the lease was on a decline. And once it went on injection,
11 within four to five months it started responding. And it
12 continued to do that all the way up through 1995, and it's
13 pretty well stabilized the last 12, 14 months.

14 Q. And it's your hope and expectation that if you
15 are successful in the project area, you ought to see some
16 similar response?

17 A. That is exactly right.

18 Q. Let's turn now to the next page, which says
19 "Penroc Mescalero". This, in fact, is a plot of all
20 production within the yellow area shown on Exhibit 1?
21 These are all your wells?

22 A. These are all the wells, and if you look at the
23 green curve, which is the oil production, it is on a pretty
24 steep decline. And you come down here, 3-1-91, when OXY
25 converted the well to injection, Well Number 5 in the

1 southwest quarter of Section 14, the overall production
2 stabilized. That's where the stabilization is coming from.
3 Not that it is helping all the wells, but that one lease
4 went from 10, 12 barrels a day to 35 barrels a day.

5 MR. KELLAHIN: With your permission, Mr.
6 Examiner, after the hearing I would like to have Mr.
7 Merchant submit in the record for your consideration a
8 rate-versus-time plot of the eight wells within the project
9 area. We have overlooked doing that this morning, and you
10 do not have that in the exhibit pile, and we apologize for
11 our oversight --

12 EXAMINER STOGNER: Would you just propose to make
13 that a portion of Exhibit 8?

14 MR. KELLAHIN: Yes, sir, it would be an addendum
15 to Exhibit 8, and that would give you the baseline curve
16 for which later we could peg to see if we have any positive
17 injection response.

18 Q. (By Mr. Kellahin) Do you have an estimate of the
19 range of water injection you're going to put into these
20 wells?

21 A. We expect to put in an average of 300 barrels a
22 day per well, which would be a total of 600.

23 Q. Are you familiar with the fact the Division has
24 surface-pressure limitations on injection wells?

25 A. That is correct, and we don't expect for the

1 first six to eight months or a year, we do not expect any
2 pressures whatsoever to be on a vacuum, and after that, it
3 would probably be around 500, 600 pounds. And that's based
4 on what we are doing on the injection well in the southwest
5 quarter in Section 14, the State BN Number 5.

6 Q. Let's turn to the next topic, and that is the
7 requirements for approval of the injection well. The next
8 exhibit is simply the C-108 stapled together as Exhibit
9 Number 9. Let's talk about the half-mile-radius circles,
10 if you will, which are the area of review, Mr. Merchant.
11 Within that half-mile radius of investigation, did you find
12 any existing wellbores that constitute problem wellbores?

13 A. To my knowledge, there are none. There are a
14 couple of plugged wells, both in the half-mile radius in
15 the Harris State Section 4, which is properly plugged, and
16 there are sketches with all the details of how they were
17 plugged by previous operators, and a similar situation
18 exists in Section 22, where Well Number 8 was a dryhole San
19 Andres well and was plugged properly.

20 Q. All right. The C-108 was prepared by you
21 personally, was it not?

22 A. Yes, sir.

23 Q. All this information is information that you have
24 reviewed?

25 A. That is correct.

1 Q. Within the area of review, have you provided the
2 Division Examiner with information on all the plugged and
3 abandoned wells in terms of wellbore schematics?

4 A. They are all part of this Exhibit 9.

5 Q. As part of your study, do you see any opportunity
6 to have injection fluids move out of the San Andres
7 reservoir and contaminate freshwater sources or impair oil
8 production out of other reservoirs?

9 A. All of these wells offsetting -- within the area
10 of interest, have proper cement jobs behind the production
11 string and have proper surface casing set, so we don't
12 expect a problem, we don't have a problem in the area.
13 Going back to the southwest quarter of Section 14, again,
14 we've been injecting there for five years, and we haven't
15 seen no problems in that area at all.

16 Q. Did you submit as part of your package of
17 compliance with the C-108 requirements various water
18 analyses and water reports?

19 A. Yes, sir, they were done by Champion
20 Technologies, and they're part of the exhibit, on all the
21 producing wells -- on the injection water, as well as the
22 freshwater well, which exists in the north -- extreme north
23 corner of Section 14.

24 Q. Please identify for the record, then, Exhibit
25 Number 10.

1 A. Exhibit 10 is a letter to the Commissioner of
2 Public Lands informing them of our intent for a cooperative
3 waterflood.

4 Q. And as you've described, you've contacted Mr.
5 Pete Martinez, and we received his indication that the
6 Commissioner has no objection to our leasehold cooperative
7 project and has raised no objection as to the use of these
8 injection wells?

9 A. That is correct. He has been contacted, by the
10 way, more than once. A month ago, I mentioned it to him.
11 He said no problem. And then again, like I said, Tuesday
12 when I talked to him that was his comment, As long as you
13 have production we don't have a problem.

14 Q. Okay. And finally Exhibit Number 11, then, is
15 notification to the surface owner and the other offsetting
16 operators within the half-mile area of any injection well?

17 A. That is right, and I may say that I was contacted
18 only -- only party who contacted me on this thing was Yates
19 Petroleum, and they were just curious what I was up to.

20 Q. Okay. Did you receive any objection from anyone?

21 A. There was no objection. They thought it was a
22 good project and indicated that they would like to join us,
23 but I don't know how. They don't own any interest in it.

24 MR. KELLAHIN: That concludes my examination of
25 Mr. Merchant, Mr. Examiner.

1 We move the introduction of his Exhibits 1
2 through 11.

3 EXAMINER STOGNER: Exhibits 1 through 11 will be
4 admitted into evidence.

5 EXAMINATION

6 BY EXAMINER STOGNER:

7 Q. Mr. Merchant, as far as the project in Section
8 14, the southwest quarter, you said that was an old OXY
9 project originally?

10 A. Yes.

11 Q. And that was instituted as a waterflood project,
12 a one-well --

13 A. Yes.

14 Q. -- waterflood project?

15 A. That is correct.

16 Q. When was that initiated?

17 A. 1991. March of 1991.

18 Q. There again, the producing wells were similarly
19 completed and the existing perfs were also utilized for
20 that project?

21 A. That is correct.

22 Q. Now, you said you were going to inject within the
23 two wells a total of 600 barrels of water per day -- that's
24 300 per -- and you were going to remain at, if I remember
25 right, the proposed .2 p.s.i. per foot of injection?

1 A. That is correct. And that again is based on what
2 the well in Section -- southwest quarter of Section 14 is
3 doing, the pressures and the volumes.

4 Q. Do you know what present pressure that well is,
5 or that injection?

6 A. Oh, yeah, we inject roughly 350 barrels a day.
7 We've got a Halliburton meter on the pump, on the well and
8 the pump. And from time to time we have the injection pump
9 running. When it kicks on, it will have 400 to 500 pounds
10 on it. When it goes down on low water levels, it's on a
11 vacuum.

12 Q. So you really haven't seen any pressure buildup?

13 A. We need to put more water in the ground, because
14 this is a fractured reservoir, and it's going to take a lot
15 of water to fill it up.

16 And if you look at the cums on the cum curve,
17 there is a substantial withdrawal of oil. You know, we're
18 talking just that southwest quarter, just those four wells
19 alone, we're talking a million -- a little over half a
20 million barrels of oil. Actually 750,000 barrels of oil,
21 just oil alone.

22 Q. And what will be the source water for the
23 injection water?

24 A. The source water will be this well in Unit Letter
25 O, in Section 22, Well Number 11, which was drilled by

1 Cities Service as a Devonian well, later on was plugged
2 back with a cast-iron bridge plug to the Pennsylvanian, and
3 it was TA'd. Back in the Seventies it was averaging two
4 barrels a day, zero barrels of water. It was pretty well
5 depleted.

6 Our intent is to go drill the bridge plug out,
7 squeeze the Pennsylvanian and go back to the Devonian,
8 because the Devonian, as you know, is a water drive
9 reservoir. It will make all the water we want.

10 Q. That will be from the -- what formation?

11 A. Devonian.

12 Q. Devonian.

13 A. Which is approximately 10,000 feet. And the two
14 waters over there are compatible.

15 Q. And that's shown in your water-analysis report?

16 A. The Devonian water is not shown in the water-
17 analysis report. That's just the general knowledge in the
18 Lea County area where we're using Devonian water for San
19 Andres and Queen waterfloods. But we can get that.

20 Q. Yes, I'd like to have that supplemented also --

21 MR. KELLAHIN: Yes, sir.

22 Q. (By Examiner Stogner) -- if you would, Mr.
23 Merchant.

24 A. We can get that from the temporary operated
25 Devonian wells in Section 27.

1 Q. Yeah, if you would supplement that report along
2 with the rate-versus-time curve for the Exhibit 8, and
3 let's just make that part of Exhibit 9.

4 MR. KELLAHIN: All right, sir.

5 Q. (By Examiner Stogner) What's the source water
6 for the Number 5 injection well in 14?

7 A. Right now that's the produced water from all the
8 leases.

9 Q. And that's essentially reinjected San Andres
10 Water?

11 A. San Andres water, yes.

12 Q. Will there be any reinjected San Andres water in
13 this particular project that you're seeking today, later on
14 or --

15 A. Later on it could be, yes. Right now, no.

16 Q. And what has been the extent of your
17 conversations and proposals with the State Land Office on
18 this?

19 A. Just basically those two comments with Pete
20 Martinez about a month ago. I mentioned it to him that
21 this is what we're fixing to do. He said, Great.

22 And I called him up day before yesterday and told
23 him I'm coming up here, and do they have a problem with it?
24 And the comment again was, As long as you have production
25 on the lease where you're going to inject, we don't have a

1 problem with it.

2 Q. Okay. Is there going to be any kind of formal
3 agreement required by them?

4 A. He did not indicate any.

5 Q. As far as you know, is the interest or the
6 beneficiary the same on these three leases?

7 A. They're all the State of New Mexico, yes.

8 Q. As far as the separate beneficiary, you're not
9 aware of --

10 A. Not aware of any, no. I do plan to go see him
11 this afternoon, just out of courtesy, nothing in
12 particular.

13 EXAMINER STOGNER: Other than the two information
14 -- or, I'm sorry, the two sets of information that we have
15 talked about, Mr. Kellahin, I have no other questions of
16 this witness.

17 This witness may be excused, unless you have
18 anything further.

19 MR. KELLAHIN: No, sir, that's it.

20 EXAMINER STOGNER: Does anybody else have
21 anything further?

22 MR. KELLAHIN: No, sir.

23 EXAMINER STOGNER: Along with that two bits of
24 information, could you give me a rough draft order?

25 MR. KELLAHIN: Yes, sir, be happy to.

1 EXAMINER STOGNER: And again, let me make sure
2 that I understand what the boundaries are in Section 22.
3 That would take in the southeast quarter of the northeast
4 quarter and the southeast quarter?

5 MR. KELLAHIN: Yes, sir.

6 EXAMINER STOGNER: In Section 23 it would be the
7 southwest quarter of the northwest quarter --

8 MR. KELLAHIN: Yes.

9 EXAMINER STOGNER: -- all of the southwest
10 quarter, and then the west half of the southeast quarter?

11 MR. KELLAHIN: That's right.

12 EXAMINER STOGNER: All right. And the three
13 leases are identified appropriately.

14 Q. (By Examiner Stogner) What is the proposed name
15 of this project? Well, I guess you're still on the stand.
16 I --

17 A. Well, we can give it any kind of name. No, we'll
18 call it the Harris "AD" Co-op Waterflood.

19 Q. Harris "AD" Cooperative Waterflood.

20 A. Or we may want to use the word "State" in there
21 somehow, since they're all state leases.

22 EXAMINER STOGNER: Okay.

23 MR. KELLAHIN: Okay.

24 EXAMINER STOGNER: Mr. Kellahin, I'll leave that
25 up to you, to propose the name in the rough draft order.

1 MR. KELLAHIN: Very good. We'll take care of it.

2 EXAMINER STOGNER: Nothing further, then Case
3 Number 11,543 will be taken under advisement pending the
4 additional information.

5 And other than that, then, the hearing is
6 adjourned.

7 MR. KELLAHIN: Thank you.

8 (Thereupon, these proceedings were concluded at
9 10:22 a.m.)

10 * * *

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21 I do hereby certify that the foregoing is
22 a complete record of the proceedings in
23 the Examiner hearing of Case No. 11543,
heard by me on 30 May 196.

24  , Examiner
25 Oil Conservation Division

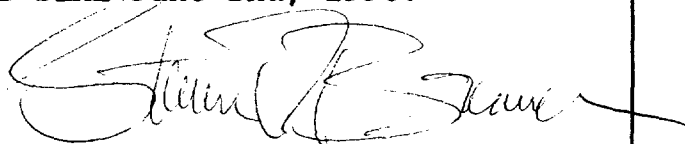
CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL June 2nd, 1996.



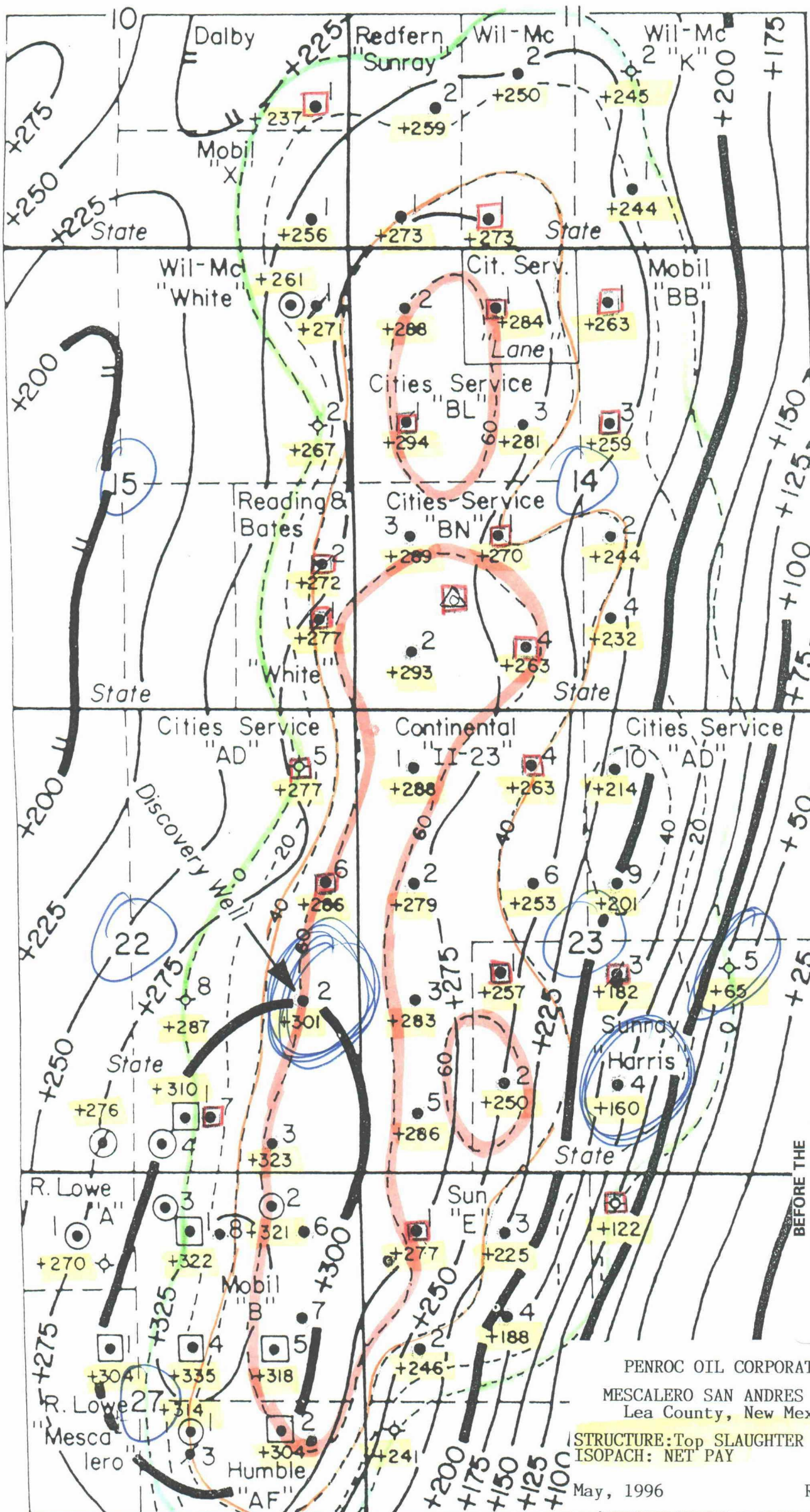
STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998

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BEFORE THE
OIL CONSERVATION DIVISION

Case No. 11543 Exhibit No. 2

Submitted By:

Penroc Oil Corporation

Hearing Date: May 30, 1996

PENROC OIL CORPORATION

MESCALERO SAN ANDRES FIELD
Lea County, New Mexico

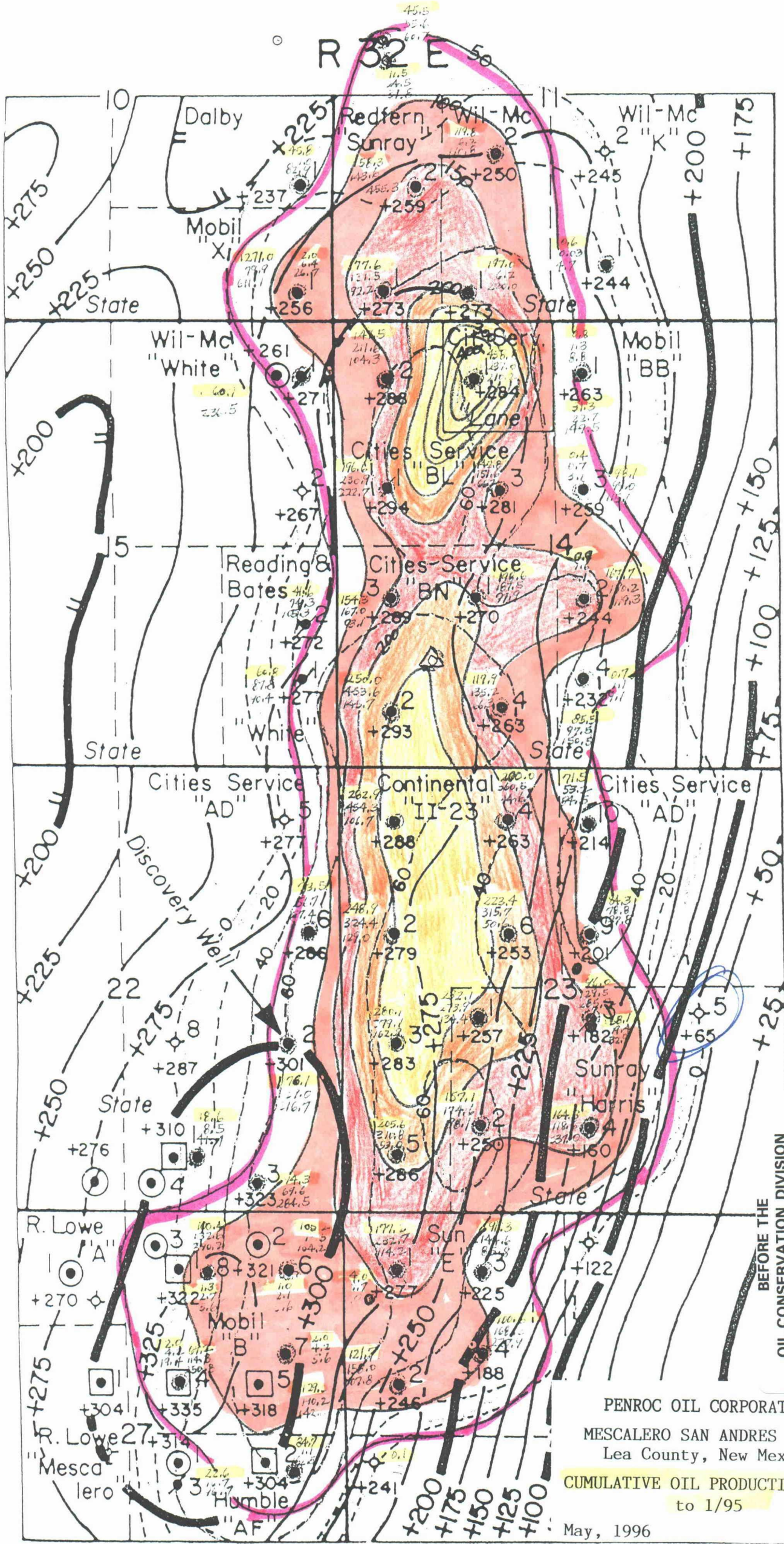
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May, 1996

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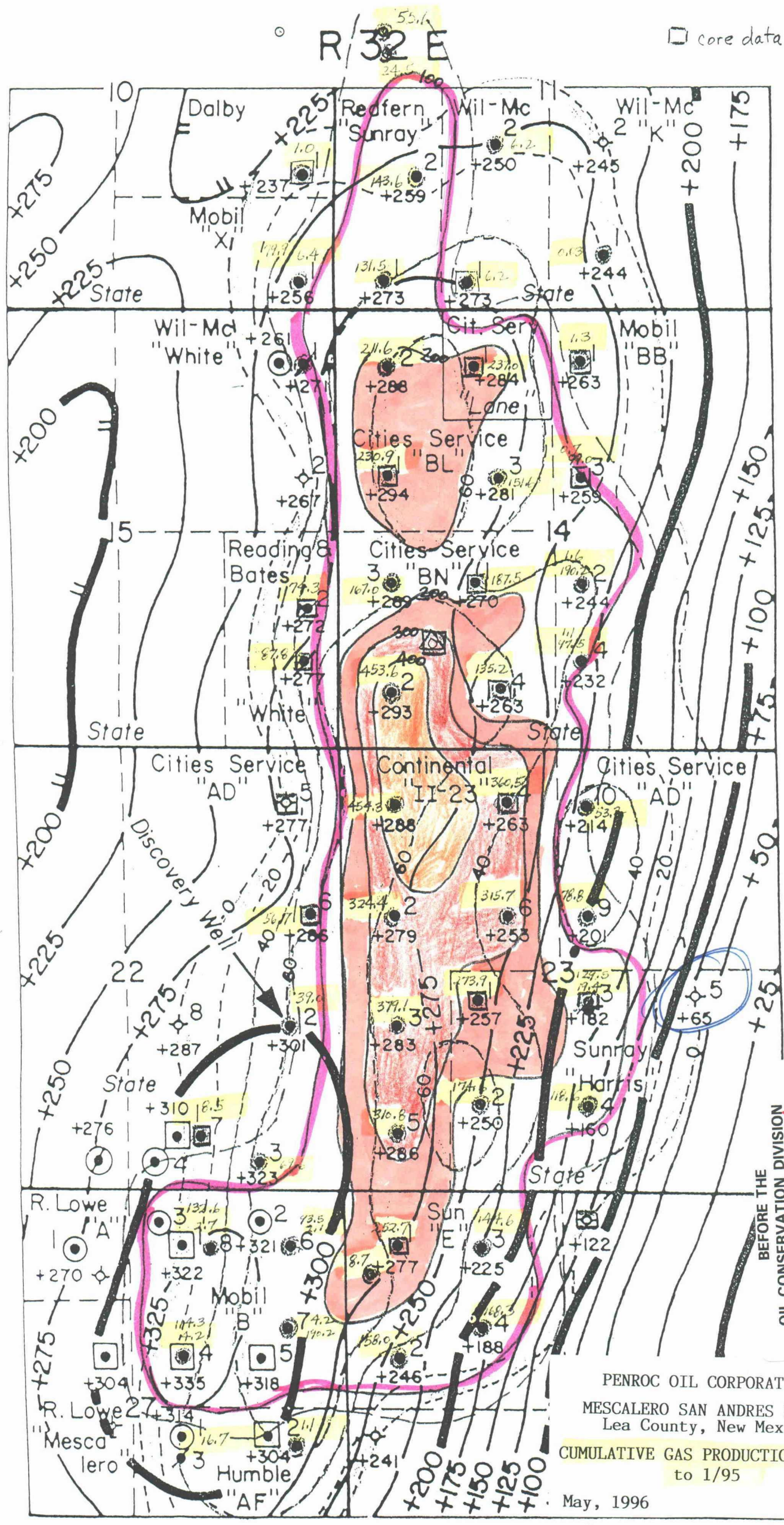
BEFORE THE
OIL CONSERVATION DIVISION
Case No. 11543 Exhibit No. 3
Submitted By:
Penroc Oil Corporation
Hearing Date: May 30, 1996

PENROC OIL CORPORATION
MESCALERO SAN ANDRES FIELD
Lea County, New Mexico
CUMULATIVE OIL PRODUCTION (MBO)
to 1/95
May, 1996

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BEFORE THE
OIL CONSERVATION DIVISION
Case No. 11543 Exhibit No. 4
Submitted By:
Penroc Oil Corporation
Hearing Date: May 30, 1996

PENROC OIL CORPORATION
MESCALERO SAN ANDRES FIELD
Lea County, New Mexico
CUMULATIVE GAS PRODUCTION(MMCF)
to 1/95
May, 1996

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