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. 13,411

APPLICATION OF PRIMERO OPERATING, INC., FOR AN EXCEPTION TO DIVISION RULE 104.D (3), CHAVES COUNTY, NEW MEXICO

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, JR., Hearing Examiner

FEB 17

February 3rd, 2005

Santa Fe, New Mexico

A ...

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Thursday, February 3rd, 2005, at the New Mexico Energy, Minerals and Natural Resources

Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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APPLICANT'S WITNESS:

J. PHELPS WHITE, IV (Geologist)
 Direct Examination by Mr. Bruce
 Examination by Examiner Jones

5

* * *

EXHIBITS

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APPEARANCES

FOR THE DIVISION:

GAIL MacQUESTEN
Deputy General Counsel
Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

JAMES G. BRUCE Attorney at Law P.O. Box 1056 Santa Fe, New Mexico 87504

* * *

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1	WHEREUPON, the following proceedings were had at
2	9:14 a.m.:
3	EXAMINER JONES: And since the next case got
4	continued, we'll call Case 13,411, Application of Primero
5	Operating, Incorporated, for an exception to Division Rule
6	104.D.(3), Chaves County, New Mexico.
7	Call for appearances.
8	MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,
9	representing the Applicant, and I have one witness to be
10	sworn.
11	EXAMINER JONES: Will the witness please stand to
12	be sworn?
13	(Thereupon, the witness was sworn.)
14	MR. BRUCE: Mr. Examiner, before we do begin, I
15	would note, if you look at the advertisement in this matter
16	I just noticed this last night it's going to have to
17	be re-advertised. When you look at the ad, the first well
18	mentioned, it states it's the O'Brien Well Number 19, and
19	that should be the Well Number 1.
20	EXAMINER JONES: I thought it was Well Number
21	Oh, it is Well Number 19.
22	MR. BRUCE: And it should be Well Number 1.
23	EXAMINER JONES: Is the API number right?
24	MR. BRUCE: Yes, I did check that, and the API
25	number is correct.

1	And then there's one other error, which is, the
2	second well, the Number 2 well, states that it's 1980 from
3	the north and east lines, and it's 1980 from the north and
4	660 from the east.
5	EXAMINER JONES: Like the Application says.
6	MR. BRUCE: And actually, I can say that those
7	aren't my mistakes.
8	EXAMINER JONES: Okay.
9	MR. BRUCE: This case was originally applied for
10	administratively, and
11	EXAMINER JONES: I saw that.
12	MR. BRUCE: it was set for hearing by the
13	appropriate Division Engineer, so I
14	EXAMINER JONES: Okay, we can go ahead and hear
15	the case and re-advertise it after we hear it.
16	J. PHELPS WHITE, IV,
17	the witness herein, after having been first duly sworn upon
18	his oath, was examined and testified as follows:
19	DIRECT EXAMINATION
20	BY MR. BRUCE:
21	Q. Would you please state your name and city of
22	residence for the record?
23	A. My name is Phelps White. I live in Roswell, New
24	Mexico.
25	Q. Who do you work for?

gas et al. (1997)

1	Α.	Primero Operating.
2	Q.	What's your position with Primero?
3	Α.	Owner.
4	Q.	And the owner and president of the company?
5	Α.	That's correct.
6	Q.	Do you have a technical background?
7	Α.	I've got a degree in geology.
8	Q.	And have you previously testified before the
9	Division?	
10	А.	Yes, I have.
11	Q.	As a geologist?
12	Α.	Yes.
13	Q.	And were your credentials as an expert petroleum
14	geologist	accepted as a matter of record?
15	Α.	Yes, they were.
16	Q.	And are you familiar with the technical matters
17	involved	in this Application?
18	Α.	Yes.
19		MR. BRUCE: Mr. Examiner, I'd tender Mr. White as
20	an expert	petroleum geologist.
21		EXAMINER JONES: Mr. White is qualified as an
22	expert pe	troleum geologist.
23		MR. BRUCE: Mr. Examiner, Mr. White informed me
24	that he k	new you in college. I didn't know you were that
25	old.	

(Laughter) 1 EXAMINER JONES: Well, I wasn't going to tell 2 Gail that. 3 THE WITNESS: Too late. 4 EXAMINER JONES: Well, you can have me or you can 5 have Stogner next time, it's your choice. 6 7 THE WITNESS: You. (By Mr. Bruce) Mr. White, could you identify 8 Exhibit 1 and just briefly go through what wells -- the 9 well units and the outline, the boundaries of the pool and 10 11 the wells depicted on this particular exhibit? 12 Okay, well, Exhibit 1 is a land plat showing the wells that we're talking about today. What's noted in 13 yellow is acreage dedicated to the C.L. O'Brien Number 1 14 This is the West Cato-San Andres Gas field. 15 orange line shows the designation of that field. 16 17 The blue squares are around wells which are completed and have at one time or are now producing from 18 19 the same zone that we're talking about today, which would be the P2 and P3 of the San Andres. 20 21 0. Okay, and on this plat, looking at Section 5, the 22 southwest quarter, the well designated there, is that 23 operated by Primero? Yes, it is. 24 A.

And then in the southeast corner of Section 6, is

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Q.

that well operated by Primero? 1 2 A. Yes. When you go over into the northwest quarter of 3 Q. Section 8, who is the operator of that well? 4 5 A. Energen. And then to the east are two wells designated in 6 Q. blue. I don't know if you know who operates them, but 7 those wells are not in the West Cato-San Andres Gas Pool, 8 are they? 9 They are not; however, they are producing only Α. 10 They're gas wells, but they're over in the oil leg of 11 what was designated the oil field. 12 They are in the Cato-San Andres Pool? 13 Q. That's right. 14 Α. Which is spaced on 40 acres? 15 Q. 16 Α. That's correct. Okay. And today, what do you seek from the 17 0. Division in your Application today? 18 We are currently producing the C.L. O'Brien 19 20 Number 1, which is the northernmost well on the yellow The C.L. O'Brien Number 2 has been shut in since 21 22 2001 when we completed the Number 1, and we would like to 23 put it back on production, as opposed to T-and-A. 24 Q. Okay. One other thing on this map, it shows 25 Primero over in the southwest quarter of 8 as being the

1 operator of Section 8. Has Primero attempted to drill a 2 San Andres well on that acreage? Yes, we drilled a well there in the northwest 3 quarter of that quarter -- or northeast quarter of that 4 5 quarter --6 Q. Northeast quarter? 7 -- and we drilled a dryhole that came in way low A. and wet. 8 So that acreage is not productive in the San 9 Q. Andres? 10 Α. That's correct. 11 Let's move on to your Exhibits 2 and 3. Could 12 you just discuss briefly the history of the C.L. O'Brien 13 Well Number 1 and the Well Number 2? 14 Okay, the C.L. O'Brien Number 1 well was drilled 15 16 in the 1950s by Mobil Oil and produced from the Devonian formation up until the early 1990s. Then it was shut in, 17 and Stevens Oil bought this property and went in. 18 And the Number 2 well, was drilled by Mobil in 19 20 the early 1980s. And after several attempts, they could 21 never produce the Devonian. They abandoned it. Stevens 22 Oil came in, perforated the San Andres gas in the Number 2 23 and made a gas well there. 24 Okay, so the Number 2 well, the well we're here

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for today --

Right. 1 Α. 2 -- originally did produce from the San Andres? Q. 3 That's right, it has produced out of one of the Α. 4 zones that -- right. 5 Okay. And then the well was shut in, and the Q. Number 1 well was --6 The well was shut in. The OCD wanted the C.L. 7 O'Brien Number 1 to be plugged. The operator at that time 8 contacted me on a consulting basis to go plug the well for 9 him, and I recommended that maybe he try to test the San 10 Andres gas in there. 11 Eventually Primero ended up buying the whole 12 property. We tested -- In the process of plugging the 13 Number 1, we tested the San Andres, made a well, so we had 14 to shut in the Number 2 because of the 160-acre proration. 15 And so anyway that's the status now, is, the Number 1 is 16 17 producing and the Number 2 is sitting there. And you would like to produce both wells 18 0. 19 concurrently? That's correct. We'd like to add some 20 21 perforations in the P3 in the Number 2, and clean up the 22 existing perforations and put it on production. 23 Q. Okay. Could you identify Exhibit 4 and discuss

the basic geology in this area?

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Α.

Exhibit 4 is the structure map on the Cato-San

11 Andres field that's in the Roswell Geologic Society 1 Symposium. It shows the structure on top of the San Andres 2 and basically shows that the lease in question here today 3 is the highest structural position on the field and 4 5 presumed to be the gas cap for the field. 6 That field -- I'm not sure what the exact number 7 was, but it seems like it has produced about 15 million barrels of oil since the early 1960s. 8 And so it is depleted? 9 Q. Yes, what is producing is very marginal. 10 Α. Okay. 11 Q. And in fact, just east of us UHC and several 12 A. other operators have tried to put a waterflood in, and it's 13 14 never been very successful. So those wells -- you're looking at the wells 15

- like in the east half of 8, or the --
 - A. Right.

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- -- the west half of 9 are very marginal? Q.
- A. That's right.
 - So even though you mention a gas cap, those wells Q. have been depleted, so there's not much more you can get even though you might be producing the gas out of the top of the reservoir?
- Α. Right. Like we said when we were looking at Exhibit 1, two of those wells have been perforated up in

the gas section and are producing gas now, only. 1 Now, you're looking at producing from the P2 and 2 0. the P3 zones. Are there any other productive zones in the 3 4 San Andres? 5 Α. Well, out there the P4 also produces in the oil 6 leq. Okay. 7 Q. But for this gas so far, we've got the P2 and P3. Α. 8 P1 may be some day perforated, but not at this point. 9 And again, everything to the east of the 0. 10 northwest quarter of Section 8 has been developed on 40-11 acre spacing; is that correct? 12 That's right. Α. 13 Could you move on to your Exhibit 5 and discuss 14 15 that for the Examiner? This is a cross-section. Going basically 16 backwards from the way it looks, we've got the Energen 17 well, the Sanders well there to the east of where we are, 18 on the left; the C.L. O'Brien 2, the well we would like to 19 put back on production, in the middle; C.L. O'Brien 1, the 20 producing well in the north end of the acreage is on the 21 22 right side of the cross-section. 23 It shows the perforations that are marked in

black, solid black, are the existing perforations that are

now or have produced, and there's a dashed line of where we

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propose to add some perforations in the Number 2 if we get 1 permission. 2 What are the pressures in the reservoir? 3 ο. The last pressure that we have was July of 2001 4 5 when we re-entered the Jennings well. Pressure then was 280 pounds, and we've taken quite a bit of gas out of there 6 7 since then, and I expect it to be less than that now. Okay, so it's pretty low pressure at this point? 8 Q. 9 Α. Yes. Is this a low-permeability reservoir? 10 Q. Typically, the San Andres is a low-permeability 11 Α. reservoir. We don't have any measurements. 12 Now, because of the low permeability, is it your 13 Q. opinion that an additional well will be necessary to 14 produce reserves under your well unit? 15 Α. Yes. 16 Let's look at the production from the three wells 17 Q. in the pool. Can you identify Exhibit 6 and just go 18 through that a little bit? 19 Exhibit 6 is a well to the north and east of the 20 A. acreage. 21 Primero re-entered it. This well was plugged in the 1950s -- dry Devonian well -- and we re-entered it in 22 23 the summer of '01, and it's been producing. It looks like so far we've got a cum of almost .3 BCF of gas out of it. 24

The next curve shows the O'Brien lease, the lease

we're talking about now. The production from January, 1990, to the middle of January, 2000, was the C.L. O'Brien Number 2 well, the one we want to put back on line. You can see it pretty much had depleted out, it looks like, from that zone.

In January, '01, we put on the C.L. O'Brien

Number 1 well, the well that's now producing, and it has

produced very well.

- Q. Producing at a pretty flat rate?
- A. That's right. So far, looking at the cross-section, it's made 280,000 MCF, just a little bit more than what the C.L. O'Brien Number 1 did before it was shut in.
- Q. Okay, so the C.L. O'Brien Number 1, before it was shut in, made about 200,000?
 - A. That's right.

- Q. Okay. And what is the third well on the plat?
- A. Third curve is the Sanders well, which is the Energen well, there to the east of us. And you can see it has made about -- almost 1.5 BCF of gas.
 - Q. Is it still producing?
- A. Yes, it is.
- Q. Okay. One other well. We don't have a production plat for it, but the well in the southeast quarter of Section 6, which you said was fairly recently completed in the San Andres, has that produced much?

1	A. No, it didn't turn out too good. It's been
2	producing about 60 MCF a day since we completed it.
3	Q. So a very poor producer?
4	A. That's correct.
5	Q. Okay. Do these wells need to be on pump?
6	A. Yes, they make a minute amount of water, but with
7	the pressure that we've got they won't flow.
8	Q. If you could refer to your Exhibit 9, Mr. White,
9	what is the quality of the gas in this reservoir?
10	A. It's poor quality. We've got 16 percent CO ₂ , 10
11	percent nitrogen, BTU of 934. It's also got quite a bit of
12	$\mathrm{H}_2\mathrm{S}$ in it, and we get dinged pretty bad on the compression
13	charges, so it's pretty low-priced gas.
14	Q. So pricing is a key issue in this field
15	A. Yes, it is.
16	Q is it not?
17	What prices are you receiving now, as compared to
18	a year or a couple years ago?
19	A. Last price we got was right around three dollars.
20	Two years ago, when we put these wells on, we were getting
21	about 50 cents. The average price has been about \$1.50
22	over the last year.
23	Q. Which is substantially lower than other operators
24	have been getting in other
25	A. That's right.

-- pools in southeast New Mexico? 1 Q. At these prices, would you rather produce now, 2 rather than -- the alternative is to not produce the well 3 until the Number 1 well depletes; is that correct? 4 That's right. 5 Α. In your opinion, is it better to get the better 6 Q. prices now, while you can? 7 Yes, it is. 8 A. If you had to -- if you are allowed to put the 9 0. well back on production, what is the approximate cost? 10 I'm estimating \$50,000 of which about half of 11 Α. 12 that would be tangible equipment. Q. If you have to plug the well or come back later, 13 place it on production, would that cost an additional 14 amount? 15 Well, if we could temporarily abandon it, Α. 16 17 according to NMOCD Rules, it would be about \$20,000 by the time we set a plug and then drilled it back out when we 18 wanted to put it on production. Or, if we put a retrieval 19 20 plug in there, it would be approximately the same. 21 Q. In your opinion, is it better to place the well 22 on production than abandon it? 23 Α. Yes. 24 Are the wellbores in good shape? Is there any Q. 25 mechanical risk involved in putting it back on production?

1	A. The Number 2 well should be in very good shape.
2	It's a fairly recent wellbore.
3	Q. Okay. And was Energen, the offset operator,
4	notified of this Application?
5	A. Yes, they were.
6	Q. And that's shown on Exhibit 7?
7	A. Yes.
8	MR. BRUCE: Mr. Examiner, Exhibit 8 is simply a
9	copy of the notice published in the Roswell newspaper
10	regarding this Application.
11	Q. (By Mr. Bruce) Mr. White, were Exhibits 1
12	through 9 prepared by you, under your supervision, or
13	compiled from company business records?
14	A. Yes, they were.
15	Q. And in your opinion is the granting of this
16	Application in the interests of conservation and the
17	prevention of waste?
18	A. Yes, it is.
19	MR. BRUCE: Mr. Examiner, I'd move the admission
20	of Primero Exhibits 1 through 9.
21	EXAMINER JONES: Exhibits 1 through 9 will be
22	admitted into evidence.
23	EXAMINATION
24	BY EXAMINER JONES:
25	O. Phelps. can I ask you about the Devonian again?

1 Yes. Α. 2 That's -- Which well produced from the Devonian? Q. 3 The C.L. O'Brien Number 1 produced for -- since A. the 1950s, produced probably 150,000 barrels. The Number 4 2, the well in question, is -- they produced -- that well 5 came on real good, and they stimulated it and broke into 6 7 water, and I don't know what the production was, but it was 8 minimal. What year was that? 9 Q. That was probably 1982. 10 A. 11 Q. Okay. Mobil did that. And then they plugged back the 12 Α. 13 well up to the San Andres. 14 Q. So the oil prices in 1982 were --15 A. -- pretty good. 16 -- going down? Q. Well, they were coming down, but they were still 17 Α. 18 pretty good. 19 Q. Still pretty good, yeah. But now they're a lot better --20 21 A. Yeah. 22 -- so you still don't think there's any Q. 23 possibility in the Devonian? 24 Well, I just -- I think the Devonian, once they Α. 25 stimulate into water, it's pretty hard to get it back. And

1 then to re-enter that wellbore, I think, would be -they've got some cut-off casing down there --2 Oh. 3 Q. Α. -- and whatnot, so --4 Oh. 5 Q. -- I don't think I'd ever be interested in trying 6 7 to do that. Which wellbore? Number 1? 8 Q. The Number 2. 9 Α. Number 2. So the Number 1 --Q. 10 No, and the Number 1 is just -- that wellbore is 11 Α. trashed down there. 12 13 Q. Oh. I plugged it back to the San Andres, and we 14 A. pulled some casing out of it, and it's a mess. 15 There's nothing between the Devonian and the San 16 Q. Andres? 17 Yeah, there was a Wolfcamp gas pay in the -- that 18 A. 19 produced in the O'Brien 1, about a half a BCF, depleted 20 out. Stevens tried that in the light cap well, and it was unsuccessful. But it's all plugged back now. 21 22 Okay. And in the San Andres, this cross-section Q. 23 -- it shows -- would you say it's pretty continuous, then? 24 A. It seems to be, seems to be pretty continuous. Some of those porosity fingers, you know, change around a 25

1	little bit.
2	Q. But it's
3	A. Basically, it's pretty continuous pay through
4	there.
5	Q. And it's a lime, or
6	A. It's a dolomite.
7	Q. Dolomite. And it
8	A. And that Jennings well, we perforated some of
9	those lower pay of the P3, and we had a little bit too much
10	water there. We had to plug it back, so
11	Q. Okay. It looks like
12	MR. BRUCE: That's the southwest quarter of
13	Section 8.
14	THE WITNESS: Right.
15	Q. (By Examiner Jones) Okay. It actually looks all
16	right on the log. I guess
17	A. It looks what?
18	Q. Looks okay on the log. I guess it was wet. If
19	you already tried it, you already tried it.
20	And Energen did you have any conversations
21	with Energen about this?
22	A. No.
23	Q. But they didn't they were noticed and they
24	didn't
25	A That's correct

So when you go out to perforate the San Andres 1 0. out there, do you have to have a safety crew on hand? 2 in other words, you have to --3 No, we have a blowout preventer on there, and --4 well, we have an H2S safety package there, you know. 5 Q. Okay. 6 7 But we haven't had any troubles with it, it's so 8 low-pressure. Okay. But you're going to have to frac it? 9 Q. No, just about 5000-gallon acid job. 10 Α. 11 Q. Okay. Right now in that O'Brien 2 well there's a whole 12 bunch of iron sulfide in there, when we went in there and 13 cleaned it out. In fact, the tubing was completely ate up. 14 So we got a new string of tubing in there when we first 15 started working, and we circulated a lot of just gunk out 16 17 of there, so we would like to clean it up, acidize the new perfs and the old perfs, try to get it back on. 18 Do you have to use tubing and tubulars that don't 19 20 -- are not --21 Α. Well, no, we've been pretty lucky, but, you know, we've just got jag grade tubing in there. 22 23 0. But you just -- Do you have to treat for scale or corrosion? 24

We're not treating for anything. We've been real

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Α.

lucky so far. But like I said, the tubing we pulled out of
the Number 2 when we first got the lease was like Swiss
cheese.

Q. Okay. And their application to -- or they tried
to do a waterflood, you said, in the northeast of 8 and the

- to do a waterflood, you said, in the northeast of 8 and the northwest of 9. Was that in the exact same zone that you're in here?
 - A. It was in some of the lower, the P- --
 - Q. -- -3?

- A. Probably this P3 and the P4 and even the P5 there, I think, from what I've read, produced. They've been working on that project since the early 1980s and just never have had much luck.
- Q. What do you do with your water? Do you have to truck it?
- A. I've got a -- the whole lease, all those wells probably make a barrel and a half or two barrels a day.

 And we've got it all into a central water tank, and we haven't even had to haul a load off yet; it's -- evaporation is keeping up with it.
- Q. Are you worried about Number 2 affecting the Number 1 well much when you perforate it?
- A. Well, a little bit, could be. But I'm more worried about spending \$20,000 for nothing to put a plug there, you know, and then have to drill it back out.

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1	Q. Yeah. So if you could get a waiver from the
2	Division to put off your temporary abandonment, would that
3	change your mind about doing the work right now?
4	A. I'd rather just go ahead and get it on
5	production.
6	Q. Yeah.
7	A. I don't know if it would affect that well or not,
8	but I will take a little hit there, you know, to get them
9	both producing.
10	EXAMINER JONES: Gail, do you have any questions?
11	MS. MacQUESTEN: No questions.
12	EXAMINER JONES: Okay, well, thanks very much.
13	THE WITNESS: By the way, in answer to your
14	question on the order, we have not been ordered to T-and-A
15	it yet. However, about every fourth month we get notice
16	from the people we are reporting production to, and they
17	go, Well, how come that well isn't producing? Why isn't it
18	T-and-A'd?
19	EXAMINER JONES: Yeah.
20	THE WITNESS: So we expect one anytime now.
21	EXAMINER JONES: Yeah, okay.
22	THE WITNESS: But we'd really what we'd really
23	like to do is get
24	EXAMINER JONES: Okay, with that, we'll
25	continue Case 13,411 to I guess it's to the 17th of

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February.
 1
 2
                 MR. BRUCE: Yes.
                 EXAMINER JONES: Thanks very much.
 3
                 (Thereupon, these proceedings were concluded at
 4
 5
     9:40 a.m.)
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 7
 8
 9
10
                            I do he aby cortly that the foregoing in
11
                            a complete record of the proceedings in
                             the Examiner hearing of Case No. _____.
12
                             heard by me on
13
                                                    ___, Examiner
                               Oil Conservation Division
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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 February 4th, 2005.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 16th, 2006