# STATE OF NEW MEXICOL CONSERVATION DW

# 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:

APPLICATION OF SAGA PETROLEUM, L.L.C.,
FOR APPROVAL OF A UNIT AGREEMENT,
LEA COUNTY, NEW MEXICO

#### REPORTER'S TRANSCRIPT OF PROCEEDINGS

#### **EXAMINER HEARING**

BEFORE: MARK ASHLEY, Hearing Examiner

April 29th, 1999 Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, April 29th, 1999, 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.

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# I N D E X

April 29th, 1999 Examiner Hearing CASE NO. 12,133

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JOE COMPTON (Geologist)	
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# EXHIBITS

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\* \* \*

# APPEARANCES

## FOR THE DIVISION:

RAND L. CARROLL Attorney at Law Legal Counsel to the Division 2040 South Pacheco Santa Fe, New Mexico 87505

## FOR THE APPLICANT:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A. Suite 1 - 110 N. Guadalupe P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

\* \* \*

1	WHEREUPON, the following proceedings were had at
2	10:45 a.m.:
3	EXAMINER ASHLEY: The Division calls Case 12,133.
4	MR. CARROLL: Application of Saga Petroleum,
5	L.L.C., for approval of a unit agreement, Lea County, New
6	Mexico.
7	MR. CARR: May it please the Examiner, my name is
8	William F. Carr with the Santa Fe law firm Campbell, Carr,
9	Berge and Sheridan. We represent Saga Petroleum, L.L.C.,
10	in this matter, and I have one witness.
11	EXAMINER ASHLEY: Any additional appearances?
12	Will the witness please stand to be sworn in?
13	(Thereupon, the witness was sworn.)
14	JOE COMPTON,
15	the witness herein, after having been first duly sworn upon
16	his oath, was examined and testified as follows:
17	DIRECT EXAMINATION
18	BY MR. CARR:
19	Q. Would you state your name for the record, please?
20	A. My name is Joe Compton.
21	Q. Mr. Compton, where do you reside?
22	A. Midland, Texas.
23	Q. By whom are you employed?
24	A. I am a partner in the firm of Avalon Energy.
25	Q. And could you explain the relationship of Avalon

Energy to Saga Petroleum? 1 We are partners in a number of properties, but 2 not in this one. I have no vested interest. I'm just 3 doing this, I guess, on a consulting basis, you might say. Have you previously testified before this 5 Division? 6 Α. Yes, I have. At the time of that testimony, were your 8 credentials as an expert witness in petroleum geology 9 accepted and made a matter of record? 10 A. Yes, they were. 11 Are you familiar with the Application filed in 12 this case? 13 14 Α. I am. Are you familiar with the proposed Crossroads 15 0. 16 Siluro-Devonian Unit? 17 Α. Yes, I am. Have you made a geological study of the area 18 Q. which is the subject of the proposed unit? 19 20 Α. I have. And are you prepared to share the results of that 21 Q. study with Mr. Ashley? 22 Yes. 23 Α. 24 MR. CARR: Are Mr. Compton's qualifications 25 acceptable?

EXAMINER ASHLEY: Yes, they are.

- Q. (By Mr. Carr) Would you briefly summarize what it is that Saga Petroleum seeks with this Application?
- A. Okay, Crossroads Devonian is a field that's located about 20 miles due north of Tatum, New Mexico, just south of the Roosevelt County line. It was originally discovered in 1948, and since then about 20 million barrels have been produced -- in excess of 20 million barrels have been produced from the field.

Saga is right now the operator of record on three leases that are sort of at the upper apex of the structure on the field, and the production at this point is reduced to the point that all of the leases combined here are only making between 40 and 50 barrels a day.

And what we would like to do by a unitization here is to combine the facilities so that we won't be doing redundant operations in three leases, and reduce the overhead, therefore extend the economic life of the remaining reserves.

- Q. And you're asking the Division to approve the proposed unit agreement?
  - A. Yes, we are.
  - Q. How many acres are in the unit?
- 24 A. More or less, 800.
  - Q. And what is the character of the land? State,

fee, federal? Α. They're all fee. 2 Have you prepared exhibits for presentation in 3 Q. this case? 4 5 A. Yes, I have. Would you identify what has been marked as Saga Q. 6 Exhibit Number 1 for Mr. Ashley? 7 Okay, Exhibit Number 1 is the unit agreement for 8 the development and operation of the Crossroads Siluro-9 Devonian Unit area. This is a form agreement for state and 10 fee land that we used. It's a New Mexico form agreement. 11 And you've modified that to include just --12 Q. For the appropriate -- for this appropriate 13 Α. situation. 14 And so it includes just provisions which will 0. 15 relate to the fee lands? 16 That's correct. 17 Α. Let's go to Exhibit Number 2. Would you identify 18 that? 19 20 A. Okay, is that Exhibit A? Exhibit Number 2 is --21 Q. Yes, Exhibit A. 22 Α. 23 -- on the back. Q. This is a map of the leases involved. If you'll 24 Α. look down on the lower left-hand corner of the exhibit, 25

you'll see a legend there that has a unit outline that identifies the outline that we're proposing. The numbers there identify the tracts within the unit area, and then below that are the legend of the -- just the well status.

There are three leases involved here. One is the Santa Fe Lease in the northwest corner of -- northwest quarter of 27, the U.D. Sawyer Lease in the east half of Section 27, and the Texaco Sawyer Lease in the east half of Section 34. All of the sections are located in Township 9 South, Range 36 East, of Lea County, New Mexico.

- Q. Let's go now to Exhibit Number 3. These are copies of Schedules B and C to the unit agreement. Would you explain to Mr. Ashley what these show?
- A. Okay, Exhibit B is -- and Exhibit Number 3 -- Exhibit Number 3 is Exhibit B to the unit operating agreement, and this shows the schedule of tract participation as it applies to the working interest participants within the unit.
- Q. And then behind that we have included in Exhibit 3 the Exhibit C to the unit agreement. What does this show?
- A. Okay, this is a breakdown of the various interests within each the leases within the proposed unit.

  These are broken down by royalty owners, overriding royalty owners and working interest owners.

Q. What percentage of these royalty and working interest owners have you been able to get voluntarily committed to the unit plan?

A. Before I came to Santa Fe yesterday, I spoke with Saga. We have 98 1/2 percent of the working interest owners ratifying the unit operating agreement and the unit agreement, and we've got back just about 50 percent of the royalty interest owners, just a little over 50 percent.

We anticipate that we will probably get a hundred percent, or very close to that, on both royalty interests and then the working interest side. We've already got it on the working interest.

- Q. What working interest owner has not voluntarily committed?
- A. Okay, we sent out -- We've sent out actually five different operating agreements. One of those is to Yellow Queen Uranium, and that's in the Santa Fe tract. Also Alfa Resources. And the U.D. Sawyer, the Gerald D. Mills and the Patricia Shaw. That's the only ones that we have not heard from.
- Q. Have you been able to get Meteor Petroleum to participate?
- A. We haven't been able to get anything back from them, but yes, they will participate.
  - Q. Will they be in the unit, or are they not

1	committing their interest?
2	A. They will be in the unit.
3	Q. And will they commit their interest?
4	A. Yes.
5	Q. And is that
6	A. We presume that they will.
7	Q. Is that an interest owner that has not yet
8	voluntarily joined?
9	A. Yes.
10	Q. Do they have the 1.5 percent of the working
11	interest that is not at this time committed?
12	A. They are I believe the Yellow Queen Uranium
13	interest there, and they Well, then, the total unit
14	interest there, you can see their interest is fairly small
15	at .006, less than one percent.
16	Q. Obviously with these percentages, you will have
17	effective control of unit operations?
18	A. Yes, we will.
19	Q. Does Saga seek to be designated as unit operator?
20	A. Yes. They're currently the operator of all the
21	leases right now.
22	Q. What horizons are being unitized?
23	A. Just the Bilard Bottoman
24	Q. And that is the primary objective in the unit?
25	A. Yes, it is.

Q. Is this portion of the Devonian -- this is within the Crossroads Siluro-Devonian Pool?

A. Yes, it is.

- Q. All right, let's go to Exhibit Number 4, your structure map. Would you review that for Mr. Ashley and explain the unit boundaries in relationship to your current interpretation of this geological feature?
- A. Okay, if you'll look at the structure map there, two things that are of interest and important here. One is the original oil-water for the Crossroads Devonian was at an estimated structural level there of a subsea of minus 8200 feet. And currently in the Section 27 leases there, it appears that the current oil-water is at a subsea of about 7960 feet. And in the acreage to the south in Section 34 it appears that it's around 8150 subsea.

What we're demonstrating by this is that essentially there's no productive area outside of these current leases that we are currently trying to unitize here.

Q. If you'll look at your structure map, there is a small strip of land -- it looks like at the crest of the structure -- that would appear in the west half of Sections 34 and 27, that, even though geologically it looks like it's in the reservoir, it's outside the unit boundary. Can you explain that?

- Yes, what occurs in Devonian here, those wells, 1 2 one of them was originally completed in the Devonian, very priefly, but in this area the reservoir is often capped --3 well, the reservoir is a dolomite. It varies locally. 4 Ιt also has a limestone cap that varies in thickness over 5 the -- varies locally in thickness over the extent of the reservoir. And within -- as luck would have it, right on 7 the very top of the structure there, there's a fairly thick 8 9 limestone development on top of the pay, which effectively depressed the effective pay below the oil-water. 10 were not very good wells. 11
  - Q. In your opinion, do the proposed unit boundaries encompass the remaining productive portion of this reservoir?
    - A. Yes.

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- Q. Let's go to what has been marked as Saga Exhibit
  Number 5. Would you identify that and review it for the
  Examiner?
- A. It's a stratigraphic cross-section that just shows a representation of the wells across the unit area, and it runs from A to A', which is from southwest to northeast. The only producer on the cross-section at this point is the fourth from the right, from A' there. It would be listed as Mid Continent Petroleum U.D. Sawyer Number C-1, which is -- believe, the Number 2 well in the

U.D. Sawyer lease right now.

- Q. If we look at the wells on the right-hand side of the exhibit toward A', those first three wells, they are below where you're showing the current oil-water contact to be in the reservoir?
  - A. Yes, yes. These are all inactive.
- Q. And if we go all the way to the well on the extreme left, the U.D. Sawyer Number B-1 --
  - A. Yes.
- Q. -- if we look at that log, can you tell from the log characteristics that you, in fact, have that limestone cap?
- A. Well, yes, you can see on that log that you've got quite a bit of limestone development on top of the Devonian reservoir, and you can also see the perforations that were attempted for a completion. That was unsuccessful, and that well was subsequently recompleted in the Mississippian and made some amount of production from the Mississippian.
- Q. Mr. Compton, what does your geologic study tell you about the Devonian formation in this area?
- A. Typically in this area, it's a dolomite tan medium -- medium to coarsely crystalline, locally vuggy.

  Porosity varies, and also you've got some stratigraphic complications within that reservoir itself.

1	Q. What benefits do you see accruing from
2	unitization?
3	A. As far as any extended development in here, there
4	probably won't be any more drilling planned. What we're
5	trying to do at this point is just to reduce the overhead
6	effectively to enable a longer economic life for the leases
7	involved.
8	Q. In your opinion, will approval of this
9	Application be in the best interest of conservation, the
10	prevention of waste and the protection of correlative
11	rights?
12	A. Yes, it will.
13	Q. Were Exhibits 1 through 5 prepared by you or
14	compiled under your direction?
15	A. Yes.
16	MR. CARR: At this time, Mr. Ashley, we would
17	move the admission into evidence of Saga Exhibits 1 through
18	5.
19	EXAMINER ASHLEY: Exhibits 1 through 5 will be
20	admitted as evidence.
21	MR. CARR: And that concludes my examination of
22	Mr. Compton.
23	EXAMINATION
24	BY MR. CARROLL:
25	Q. Mr. Compton, I might be mistaken. Did you

1 mention a company by the name of Meteor? Meteor development, yes. 2 Α. MR. CARR: That's the same one. 3 4 Q. (By Mr. Carroll) So you've been in contact with them? 5 We've tried to contact them. 6 A. 7 Tried to? Q. They're very difficult to get in contact with. 8 Yes, we're well aware of that. So the last 9 Q. 10 address you have is in Denver? That's right. I can give you what we have, I'd 11 Α. 12 be glad to. Would you, please? 13 Q. Sure. I don't know all of this story. I came in 14 Α. late on the -- but I've heard rumors. 15 16 EXAMINATION BY EXAMINER ASHLEY: 17 Mr. Compton, could we go over the -- Let's see, 18 Q. it's the one that's -- I guess it's Exhibit 3. If we could 19 go over by tract, and tell me which parties have agreed to 20 participate and which haven't. 21 22 A. Okay. 23 At the top it says Exhibit C. Q. 24 Α. Yes. 25 Q. That Tract 1, that Texaco Sawyer.

Okay, the Exhibit B, the only ones affected by 1 Α. Exhibit B will be the working interest owners. 2 3 Q. Yeah. Okay. Tract Number 1, Saga Petroleum, Force 4 5 Energy and Saga Petroleum Corp have all agreed. In Tract Number 2, Saga Petroleum, Force Energy 6 and Saga Petroleum Corp. have agreed. We have not heard 7 from Yellow Queen Uranium or Alfa Resources at this point. 8 Alfa Resources, I understand we've had phone -- Saga has 9 had a phone conversation with them, and they said that they 10 would very likely agree to it. That was just by phone. 11 Nothing -- We've gotten no paperwork back. 12 On Tract Number 3, Saga Petroleum L.L.C., Force 13 Energy, Saga Petroleum Corp., Saga Petroleum FF -- L.L.C. 14 for the account of, and the Marius Jensen Nygaard have all 15 agreed. At this point we have not heard back from Gerald 16 D. Mills, Yuma Exploration or Patricia Shaw. 17 I might mention here that in the past Patricia 18 Shaw and Gerald E. Mills have generally gone along with 19 whatever the operator of record wanted to do in there. 20 Now, tell me again what the designations are up 21 Q. here, like it says Tract 1, Texaco Sawyer --22 23 Α. Okay ---- Tract 2, Santa Fe --24 Q.

-- Tract 1, Texaco Sawyer, that would be the east

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Α.

half of Section 34. That would be the east half of Section 34, all of that 320 acres. On Exhibit C, if you'll look there right below the tract number, you'll see the legal description which identifies the legal for each of the tracts.

Tract Number 2 is the northwest quarter of Section 27, and Tract Number 3 is the east half of Section 27.

- Q. After each one of the tracts, like it says Tract
  Number 1, Texaco Sawyer, is that just the lease name,
  Texaco Sawyer?
  - A. That's just the lease name --
- 13 Q. Okay.

- 14 | A. -- right.
  - Q. Now, looking back at Exhibit Number 2 -- actually the structure map, Exhibit Number 4, the wells to the north and east of the unit, did you say that some of those were Siluro-Devonian producers that had been plugged that were a part of this pool?
    - A. In what section?
  - Q. I guess all the way around the perimeter of the unit, along the perimeter.
  - A. Yes, the bulk of those were -- in fact, all of those were at one point Siluro-Devonian producers, and they have since been plugged out. They were watered out at this

1 point. 2 Q. Uh-huh. Your drive mechanism in here is a water drive. 3 Α. And you mentioned that you won't be drilling any 4 0. 5 more wells out there, that you're just wanting this more to reduce overhead rates? 6 7 That's correct. Α. Can you explain kind of what you're going to be 8 doing out there, then? 9 What we'd like to do is to combine -- You know, Α. 10 it's just simply a matter of economics at this point, since 11 the production is so low, that when we buy something or put 12 in some additional facilities, we'll be able to just 13 14 centralize that, rather than to duplicate the effort on three different leases. 15 EXAMINER ASHLEY: 16 Okay. 17 FURTHER EXAMINATION BY MR. CARROLL: 18 Mr. Compton, what's Meteor's interest in this 19 Q. 20 unit? 21 They have a small working interest, is all I know. 22 23 Q. But they don't show up on these exhibits? 24 Well, that is Meteor by another name, I believe. Α. 25 What other name? Q.

1	A. The Yellow Queen Uranium, I believe. I can get
2	the specifics of that for you, because I'm not familiar
3	with all of the Like I said, I have a very passing
4	knowledge of the Meteor development problem off to the
5	east.
6	MR. CARROLL: CARR: Okay, yeah, if you could
7	supply us with that information, we'd appreciate it.
8	That's all I have.
9	EXAMINER ASHLEY: I have nothing further. Thank
10	you, Mr. Compton.
11	THE WITNESS: Okay.
12	MR. CARR: That concludes our presentation.
13	EXAMINER ASHLEY: There being nothing further in
14	Case 12,133, this case will be taken under advisement.
15	(Thereupon, these proceedings were concluded at
16	11:08 a.m.)
17	* * *
18	
19	
20	I do hereby certify that the foregring is
21	the Examiner hearing of Case No. 1213
22	heard by me on
23	Ott Conservation Division
24	
25	

#### 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 May 1st, 1999.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 14, 2002