STATE OF NEW MEXICO

OIL CONSERVATION DIV.

ENERGY, MINERALS AND NATURAL RESOURCE \$9 12 BARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE

CASE NO. 12,144

APPLICATION OF KCS MEDALLION RESOURCES, INC., FOR SIMULTANEOUS DEDICATION AND AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO

PURPOSE OF CONSIDERING:

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

April 1st, 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 1st, 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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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:

JAMES G. BRUCE, Attorney at Law 612 Old Santa Fe Trail, Suite B Santa Fe, New Mexico 87501 P.O. Box 1056 Santa Fe, New Mexico 87504

* * *

1	WHEREUPON, the following proceedings were had at
2	11:55 a.m.:
3	EXAMINER ASHLEY: At this time the Division calls
4	Case 12,144.
5	MR. CARROLL: Application of KCS Medallion
6	Resources, Inc., for simultaneous dedication and an
7	unorthodox gas well location, Eddy County, New Mexico.
8	EXAMINER ASHLEY: Call for appearances.
9	MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe,
10	representing the Applicant. I have two witnesses to be
11	sworn.
12	EXAMINER ASHLEY: Any additional appearances?
13	(Thereupon, the witnesses were sworn.)
14	WILLIAM A. SIRUTA,
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. BRUCE:
19	Q. Would you please state your name for the record?
20	A. William Siruta.
21	Q. Where do you reside?
22	A. Midland, Texas.
23	Q. Who do you work for and in what capacity?
24	A. KCS Medallion, I'm a geologist.
25	Q. Have you previously testified before the Division

as a geologist?

- A. Yes, I have.
- Q. And were your credentials as an expert geologist accepted as a matter of record?
 - A. Yes.
- Q. And are you familiar with the geology involved in this Application?
 - A. Yes.

MR. BRUCE: Mr. Examiner, I tender Mr. Siruta as an expert petroleum geologist.

EXAMINER ASHLEY: Mr. Siruta is so qualified.

- Q. (By Mr. Bruce) Mr. Siruta, could you identify Exhibit 1 for the Examiner and tell him about the well's location and the other wells in this area?
- A. Exhibit 1 is a production map. It has the proposed location indicated on the map by the Greenwood Federal 27-1 as a circle colored in red. The yellow outline is the unit outline. The wells that are shaded in green are Morrow producers, the wells shaded in red are Atoka producers.

MR. BRUCE: Okay. Mr. Examiner, before we go any further, for your reference, this well, the proposed well, is being drilled to the Shugart-Morrow Pool. And under Order Number R-5621 certain acreage, not all but certain acreage in this pool, is spaced on 160 acres. That acreage

is the south half of Section 26, the east half of Section 27 and the northeast quarter of Section 34. The remaining acreage in the pool is just spaced on statewide rules.

- Q. (By Mr. Bruce) Mr. Siruta, on this map, perhaps you said it and I spaced out here, but what was the well's footage location?
- 7 A. It's 1202 feet from the north and 660 from the 8 west.
 - Q. Okay. And the unit will be dedicated to the Greenwood Federal and to the existing Altura well, you note, in the southwest quarter of this section?
 - A. That's correct.
- Q. Okay. Do you have anything else on this map, Mr. 14 Siruta?
 - A. No.

- Q. Okay, let's discuss the Morrow geology. Could you identify -- maybe go through Exhibits 2 and 3 together, Mr. Siruta, and discuss the Morrow geology in the main zones of interest in this area?
- A. These two maps are a net isopach of the Morrow "A" sand and the Morrow "B". These are really the primary producers in this area. I have -- This is my own designation of "A" and "B".

The "A" sand produces -- On the map that I have you can see which wells produce from that sand; they're

shaded green. You can see that the well in 22 produces from that sand, the well in 28 produces from that sand. This is sort of an east-west-trending sand in this immediate area.

The "B" sand, again, it's the green-shaded wells that produce from that sand. The Ocean well in 28, the 1-28, produces from the "B", and also the Altura Greenwood Unit produces from the "B" sand. And again, this is an east-west-trending sand.

Q. What is Exhibit 4?

- A. A cross-section. This is a cross-section that's marked A-A', and it's indicated by a red line connecting the wells on the map. And what this cross-section illustrates are the sands that I have designated as the "A" sand and the sand that I have designated as the "B" sand. This clearly shows what the sands look like in the adjacent wells, what we anticipate finding in our well.
- Q. Okay. Now, looking at Exhibits 2, 3 and 4 together, Mr. Siruta, is an unorthodox location really necessary geologically?
- A. No, it's not.
- Q. This is a good location, but moving a few hundred feet south would also be a good location?
 - A. That's correct.
 - Q. What else influenced the well location for this

well?

- A. Topographic features, pipelines, powerlines, roads.
- Q. Could you identify -- I think it's Exhibit 5 and -- yeah, Exhibit 5, the topographic map, and tell about the problems involved in just even getting a well location in this area.
- A. If you look at this map, the line running on the left side is the west line of Section 27. The line running on the north side is the north line of Section 27. We've blown this section up. There are several wells out here. These are shallow San Andres-Grayburg wells. The legal location here would be 1650 from the north, 660 from the west. RSE Partners has an existing well there that is pumping. There is a pumpjack on it. They also have -- There's two wells off to the east, the SDX Resources, and then there's an old potash test. But the Resources well does produce.

What I've done in here is, I've taken and sketched with a dashed line what a 400-by-400 drilling pad would look like if we drilled at a legal location. And as you can see, we cannot drill at that location. We would have to move north at least 200 feet to get away from the pumpjack and the facilities. And if we did that, we would be almost right at the intersection of all of these gas

lines.

- Q. At the location you propose, is certain remedial work going to be required to drill the well?
- A. Yes, we're going to need to move this three-wire electric line that runs to the pumpjacks out here, and also we're going to have to move this Caliche Road.
- Q. Okay. Now, you could move further south, perhaps, but do you want to do that with the existing well there?
- A. No, geologically we really don't want to do that, and we feel like we'll suffer some significant drainage, possibly, from that well.
- Q. Also, geologically, would you prefer, because of the existing wells in this area, to stay on the west side of the proration unit?
 - A. Yes.
- Q. Okay. Identify Exhibit 6 for the Examiner and tell him who the offset operators are to this well.
- A. This is a land plat illustrating the operators. We've tried to outline the units around in a slashed tape here. The east half of 21 shows several partners, but Ocean Energy has those people under an operating agreement. So they are the operators, we've contacted them. Ocean Energy has the south half of 22, Ocean Energy also has the east half of 28. Marathon Oil has the east half of 33, and

RSE Partners-1 Limited, has the north half of 34 and all of 1 2 Section 27 3 Q. Okay. Now, regarding the east half of Section 4 27, under the pool rules RSE Partners -- well, there are --5 there had been two Morrow wells drilled on that east half? Α. That's correct. 6 7 And they had that right under the existing pool Q. rules at that time --8 9 Α. That's correct. 10 -- under 160-acre spacing? Q. 11 In the Marathon acreage in the east half of 12 Section 33, that -- Marathon had drilled a Morrow test well 1.3 also, had it not? 14 Α. That's correct. 15 0. So they ha also exercised their right to test 16 that reservoir? 17 Α. Yes. 18 Were all of these interest owners or operators 0. 19 notified of this Application? 20 Α. Yes. 21 And is the affidavit of notice submitted as Q. 22 Exhibit 7? 23 Α. Yes. 24 Q. Were Exhibits 1 through 7 prepared by you, under

your direction, or compiled from company business records?

1 A. Yes. And in your opinion is the granting of this 2 Application in the interests of conservation and the 3 prevention of waste? 4 5 Α. Yes, it is. MR. BRUCE: Mr. Examiner, I'd move the admission 6 7 of KCS Exhibits 1 through 7. 8 EXAMINER ASHLEY: Exhibits 1 through 7 will be 9 admitted as evidence. 10 **EXAMINATION** 11 BY EXAMINER ASHLEY: 12 0. Mr. Siruta, I'm looking at Exhibit Number 5, the 13 topographic map. 14 Α. Uh-huh. And I'm also looking at the land plat, Exhibit 6, 15 0. 16 just trying to get my bearings here. 17 Α. Okay. South of your proposed location there's RSE 18 Q. 19 Partners Number 1 PJ? 20 Α. Yes, that's a shallow well. 21 Okay. Okay, that's -- And then this land map Q. 22 under Exhibit 6 is just for --23 Α. Just deep testes. Okay, great. 24 Q. 25 A. There are a kazillion little shallow wells in

1	here
2	Q. Okay.
3	A so we just plotted the deep tests on that.
4	EXAMINER ASHLEY: Okay. I have nothing further.
5	Thank you, Mr. Siruta.
6	<u>WES VAN NATTA</u> ,
7	the witness herein, after having been first duly sworn upon
8	his oath, was examined and testified as follows:
9	DIRECT EXAMINATION
10	BY MR. BRUCE:
11	Q. Would you please state your name for the record?
12	A. Wes Van Natta.
13	Q. Spell your last name for the Examiner.
14	A. It's V, as in Victor, a-n A-t-t-a.
15	Q. Okay. Where do you reside?
16	A. Tulsa, Oklahoma.
17	Q. Who do you work for?
18	A. KCS Medallion Resources.
19	Q. What's your job with KCS?
20	A. I'm currently the director of reservoir
21	engineering for the mid-continent division. That area
22	includes the Permian Basin.
23	Q. Have you previously testified before the
24	Division?
25	A. No I have not

- Could you outline your education and employment 1 Q. history for the Examiner, please? 2 I received a bachelor of science in 3 Α. petroleum engineering from Louisiana Tech University in 4 5 I was then employed by Exxon mid-1981 as a reservoir 6 engineer. I worked for Exxon for 13 years. Then I worked 7 for two years as a reservoir engineering consultant, was 8 employed by KCS Medallion in early 1996 as a reservoir 9 engineer, and currently I am the director of reservoir 10 engineering for our division. 11 Are you familiar with engineering matters related Q. 12 to this Application? 13 Α. Yes, I am. 14 MR. BRUCE: Mr. Examiner, I'd tender Mr. Van 15 Natta as an expert petroleum engineer. 16 EXAMINER ASHLEY: Mr. Van Natta is so qualified. 17 Q. (By Mr. Bruce) Mr. Van Natta, maybe it will help to keep the Exhibit 1, the production plat, in front of us 18 19 while you're going through your exhibits and discussing 20 some of this. 21 Would you identify your Exhibit 8 and tell the 22
 - Examiner why KCS desires to drill this infill location.

23

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Exhibit 8 is a summary of reserves and drainage Α. areas of the existing wells in the area. We have focused on the reserves potential in the west half of Section 27.

on this Exhibit 8 you'll see that our original gas in place has the potential of being about 8.49 BCF in the 320 acres in concern. I'll go through the details on the next page of the volumetrics, but assuming an 87-percent recovery factor, which would be somewhat consistent with the pressure-depletion situation we're dealing with, we estimate as much as 7.39 BCF of gas could be recoverable in this 320.

The existing well has cum'd 1.67 BCF, which leaves about 5.7 BCF that potentially could be recovered. We have broken the 320 into two 160s, and we estimate approximately 3.7 BCF could be recovered if a second well is drilled in the northeast guarter of Section 27.

- Q. If the proposed Greenwood 27-1 well is not drilled, will these reserves be recovered by the existing well?
- A. We feel that they perhaps will not. And in fact -- I'm kind of getting ahead of myself, but on Exhibit 10 we show the production history of the existing well, and you'll note that there has been little to no production reported since 1992.
- Q. Okay. On this exhibit you also put the -- some calculations regarding the offset wells?
 - A. Correct.

Q. For the most part, are these wells draining 320

acres?

- A. The Shugart 22 Federal Number 1 did not. It looked like it was draining a much smaller area, for whatever reason. It looked like that's a limited reservoir that they've gotten into. It does appear that the Shugart 28 Federal Number 1 will be draining approximately 160 acres.
 - Q. Okay, but it will not be draining 320?
 - A. It does not appear that it will.
 - Q. Okay. What is Exhibit 9?
- 11 A. Exhibit 9 is the volumetric detail that supports
 12 Exhibit 8.

Just briefly going through, we've got a porosity of roughly 12 percent, water saturation of 30 percent, and initial bottomhole pressure in the area of about 4900 pounds. And again, we're assuming a recovery factor of about 87 percent.

The front page of that goes through and then estimates the recovery of approximately 7.39 BCF for the 320. It also shows the existing well, 1.67 BCF that's been recovered, with a remaining of possibly 5.72.

And then the second page is simply the same calculations, but using 160-acre drainage area, instead of the 320.

Q. Then why don't you move on to the exhibit you

mentioned, Exhibit 10, and discuss the existing well in the west half of Section 27?

- A. The existing well, I don't really have much to discuss other than this is the production history. And as you'll note, there was a little bit of work that was done in the early Nineties. But since 1992 there's been little to no production reported.
- Q. So with your new well you hope to capture additional reserves that may not be recovered by the existing well?
- A. That is our intent.
- Q. And because of the limited drainage in the offsets, there should be little or not effect on the correlative rights on the offsetting units?
 - A. That is our interpretation.
 - Q. Were Exhibits 8, 9 and 10 prepared by you?
 - A. Under my direction.
 - Q. Under your direction.
- And in your opinion, is the granting of this Application in the interests of conservation and the prevention of waste?
- A. Yes.

- MR. BRUCE: Mr. Examiner, I'd move the admission of KCS Exhibits 8, 9 and 10.
- EXAMINER ASHLEY: 8, 9 and 10 will be admitted as

evidence at this time. 1 EXAMINATION 2 BY EXAMINER ASHLEY: 3 Mr. Van Natta, if I see this right, then, the 4 0. 5 well in the southwest quarter of Section 27 is not producing right now, or it is? 6 7 We do not operate that well, but according to the Dwight's information that we have, there has been no 8 production reported since 1992. 9 ο. But that's the well that you want to 10 simultaneously dedicate to your well? 11 That is correct. 12 Α. 13 Okay. Can you tell me again about the well in Q. 14 the southeast quarter of Section 22, the Ocean Energy well? The limited data that we have on that well 15 Α. indicated that it came on fairly well. Pressure looked 16 fairly good, but it appears that it was in a limited-size 17 reservoir. And I don't know if that was from a perm 18 barrier or what, but it does appear that we do have a 19 fairly limited-size reservoir in that particular well. 20 21 Conversely, in the well in Section 28, it does 22 appear that it has a fairly significant areal extent. 23 Q. But not 320? 24 It does not appear that it will recover 320

acres' worth of reserves.

1	Q. What about the wells in the east half, or the
2	northeast quarter of Section 27? Do you have any
3	information on drainage for that well?
4	A. I do not. However, with the 2.4 BCF that it has
5	recovered, and as you can see if you'll go back, I
6	believe it was the Exhibit 1 that Bill had given that
7	well was currently making about 125 MCF a day, so I would
8	tend to believe that that one's on the lower end of its
9	reserve potential.
10	So the 2.4 would fall in line with approximately
11	160, or a little bit less, of drainage area.
12	EXAMINER ASHLEY: Okay. I have no further
13	questions. Thank you, Mr. Van Natta.
14	MR. BRUCE: I have nothing further in this case.
15	EXAMINER ASHLEY: There being nothing further in
16	this case, Case 12,144 will be taken under advisement.
17	(Thereupon, these proceedings were concluded at
18	12:15 p.m.)
19	* * *
20	
21	l de hereby county that the foregoing is
22	e consider acord of the proceedings in the Examiner hearing of Case Ro. 1214.
23	heard by me on 41 1999.
24	Off Conservation Division
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 April 5th, 1999.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 2002