## 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:

APPLICATION OF KCS MEDALLION RESOURCES, INC., FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO CASE NO. 11,752

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## REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH Hearing Examiner

April 17th, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, April 17th, 1997, 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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## 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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FOR MYCO INDUSTRIES, INC.:

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

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WHEREUPON, the following proceedings were had at 1 9:12 a.m.: 2 EXAMINER CATANACH: At this time we'll call Case 3 4 11,752. 5 MR. CARROLL: Application of KCS Medallion Resources, Inc., for an unorthodox gas well location, Eddy 6 7 County, New Mexico. 8 EXAMINER CATANACH: Call for appearances in this 9 case. MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe 10 representing the Applicant. 11 I have one witness, Dave Shatzer. If we could 12 have the record reflect that he was previously sworn and 13 qualified as an expert petroleum geologist. 14 15 EXAMINER CATANACH: Okay, the record shall reflect that Mr. Shatzer has been previously qualified and 16 is still under oath. 17 MR. CARR: May it please the Examiner, my name is 18 William F. Carr with the Santa Fe law firm Campbell, Carr, 19 20 Berge and Sheridan. 21 We're entering our appearance in this case for MYCO Industries, Inc. We do not intend to call a witness. 22 23 EXAMINER CATANACH: Okay. Mr. Bruce? 24 MR. BRUCE: Mr. Examiner, this case, KCS 25 Medallion originally applied for a location 560 feet from

1	the north and east lines of the section. They have
2	subsequently moved the location to 990 feet from the north
3	and east lines of the section, and that is the location
4	that we request approval of today.
5	DAVID C. SHATZER,
6	the witness herein, after having been first duly sworn upon
7	his oath, was examined and testified as follows:
8	DIRECT EXAMINATION
9	BY MR. BRUCE:
10	Q. Mr. Shatzer, would you refer to your Exhibit 1
11	and identify the primary zone of interest in this well?
12	A. Okay. Exhibit 1 is the production map, again,
13	only the Morrow wells penetrating the Morrow are shown in
14	the large circles on this map. And this map is color-coded
15	for the four zones that produce deeper zones that
16	produce in this area. The Morrow is the primary target for
17	this prospect, and it is shown in green color. There's
18	also quite a bit of Atoka production; it's shown in purple.
19	And then some very insignificant minor production comes
20	from the Strawn, and then the upper Penn in this area, and
21	that's in red and blue respectively.
22	The Section 27 is where we're proposing to
23	drill. That location on all these plats is shown in the
24	open small circle, and the standard location that would be
25	660 from the north and 1650 from the east line is shown

1	with the circle with the X through it, so that the proposed
2	location 990/990 from the north and east is in the open
3	circle, and that Section 27 is producing presently with
4	north-half/south-half proration units dedicated to Atoka
5	formation production, and that we're proposing to drill a
6	well for the Morrow.
7	Q. Would you refer to your Exhibit 2 and discuss the
8	reason for your location?
9	A. Okay, Exhibit 2 is the middle Morrow pay sand,
10	net porosity isopach greater than 8 percent, and we feel
11	that this is a good cutoff necessary in this area for this
12	middle Morrow pay sand, and the producers that produce from
13	that particular middle Morrow sand are colored in green.
14	And So that wells that are not colored did not
15	have any production from that particular zone. It could
16	have been in another Morrow zone or the Atoka, but not
17	not from that middle Morrow zone that is the subject of our
18	request today, and that in this area we feel like that the
19	sand is necessary to necessary to you need around 15
20	feet of net sand to get good production from this sand, and
21	we have some examples of wells that didn't get 15 feet of -
22	- or didn't get a lot more than 15 feet, that didn't make
23	very good wells.
24	Section 23 has 16 feet of net-pay sand in this
25	zone, and that was uneconomic at around 69 68 million.

1	And then in Section 27, southwest of Section 27, that well
2	had 13 feet of net pay sand, and it only made 123 million
3	and was rather tight and poor appearance on the logs, so
4	that the target reservoir we're looking for seems to have
5	some minimum standards.
6	The two main pay sands in this reservoir are
7	located in the I unit of Section 22, and that well is
8	making over 7 million a day from this zone. And also the
9	well in the E unit of Section 26, which is making over 3.5
10	million a day from also from this zone.
11	Q. Mr. Shatzer, you said you'd like at least 15
12	feet. Would it be better to have more like 20 feet, based
13	on these two poor wells that you just mentioned?
14	A. Oh, yes, you know, the It just seems like that
15	the porosity and perm characteristics of having clean sand
16	along with a good net figure in the 15- to 20-foot range is
17	what we're looking for, and so therefore we've needed to
18	stay away from the northwest portion of 27 where that well
19	on the cross-section that will be shown, Exhibit 4, shows
20	only three feet of net, and that we need to stay away from
21	that.
22	But yet there's some portion of this reservoir
23	that appears to be on Section 27.
24	Q. Okay. What is Exhibit 3?
25	A. Exhibit 3 is the Morrow structure map, and it's

1	the top of the lower Morrow base of the Morrow massive
2	shale. And it shows a general southeast dip, and we have
3	not seen any water production in this middle Morrow sand,
4	so that the structure map and relative structure position
5	is not deemed important to this prospect.
6	Q. Okay. Why don't you move on to Exhibit 4 and
7	discuss some of these wells of interest in the area?
8	A. Okay, Exhibit 4 is a cross-section A-A', and this
9	cross-section A-A' really deals with all four of the
10	closest wells to our proposed location, it really brackets
11	our proposed location.
12	And starting from left to right at A, that old
13	Southland well has been productive in the lower Morrow
14	or in the middle Morrow green sand, but you can see that it
15	is very poor looking on the gamma ray, insofar as
16	radioactivity, and the sand is rather tight on the dual
17	lateral log that's shown. The log that's shown on the
18	left-hand side of each individual well is the resistivity
19	log, and that indicates a very tight well, and that's why
20	it only made 123 million.
21	And then as we move up to the next location in
22	the C unit of Section 27, that Southland well never had any
23	Morrow production, that the target zone is thin and, you
24	know, can be correlated to the other wells, but it's just
25	poor all the way around. And it also made an Atoka well

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1	right from the start, and it's still producing in the
2	Atoka.
3	The proposed location is shown, as I said,
4	990/990 from the north and east, and from that location we
5	can see the target sand in the Yates Reflex Federal Number
6	1 in Section 22, and it has got good pay characteristics.
7	It also has perforations in a sand that is below the middle
8	Morrow sand that I've colored green.
9	I think that this lower sand is probably a
10	relatively smaller contributor to the overall production,
11	that the majority of the production from this good Morrow
12	well is coming out of the interval colored in green. The
13	dual lateral log shows extremely good invasion profile,
14	indicating good permeability and that
15	Then we move down to the last well on the cross-
16	section at A', and that well was drilled in the west side
17	of Section 26, and it also has this same zone that's
18	productive in Section 22, and it has a little bit less
19	permeability but is a very good producer in its own right
20	and has no development of that lower sand outside of the
21	green middle Morrow sand. And so the only perforations are
22	isolated in the middle Morrow green sand, and so it's
23	producing over 3 million a day solely from the middle
24	Morrow green sand.
25	Q. And that first Yates well is producing over 7

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1	million a day?
2	A. Yes.
3	Q. Could you identify your Exhibit and name the
4	offsets?
5	A. Exhibit 5 is the offset tract ownership plat.
6	And this shows that our established north-half proration
7	unit is bounded on all other three sides that we're moving
8	toward by MYCO/Yates.
9	And as I said before, the Section 22 has good
10	the best well that they have in the area. Section 26 has a
11	very good well. Section 23 was perforated for a short time
12	in this zone but was a poor producer at only 65 million and
13	is now recompleted in the upper Penn, so that really
14	MYCO/Yates is the operator of the three tracts that
15	surround us.
16	Q. And was MYCO notified of this hearing?
17	A. Yes, they were.
18	Q. And is Exhibit 6 my affidavit of notice?
19	A. Yes, it is.
20	Q. Has KCS Medallion discussed its proposed location
21	990 feet from the north and east lines with MYCO?
22	A. Yes, we have.
23	Q. And does Exhibit 7 reflect an agreement between
24	Medallion and MYCO under which Medallion's proposed well
25	would be subject to a 25-percent penalty on production?

Α. Yes, it is. This is the agreement that we 1 reached with MYCO, and they signed a portion of it. 2 And what is Exhibit 8? 3 0. 4 Α. Exhibit 8 is a letter from Harvey E. Yates 5 Company, also agreeing to the penalty agreement that was 6 signed by Yates Petroleum. 7 Q. And Heyco is a nonoperating working interest 8 owner in MYCO's -- some of MYCO's well? Α. Yes. 9 In your opinion, is the granting of this 10 Q. 11 Application with the penalties agreed to by MYCO and Medallion in the interest of conservation and the 12 prevention of waste? 13 14 Α. Yes, it is. And were Exhibits 1 through 8 prepared by you or 15 Q. compiled from company business records? 16 17 Α. Yes, they were. 18 MR. BRUCE: Mr. Examiner, I would tender the admission of KCS Medallion Exhibits 1 through 8. 19 20 EXAMINER CATANACH: Exhibits 1 through 8 will be admitted as evidence. 21 22 EXAMINATION 23 BY EXAMINER CATANACH: 24 Mr. Shatzer, MYCO is the operator of the offset Q. 25 wells?

1	A. Yes, it's a Yates company.
2	Q. Your agreement with MYCO will be policed by
3	yourself and MYCO, and the Division really won't have
4	anything to do with it?
5	A. That's my understanding, that we would agree to
6	have the well flow-tested to establish the rate at which
7	the 25-percent penalty would be applied to.
8	MR. BRUCE: We would ask that that letter
9	agreement be reflected in the order issued in this case,
10	and that letter agreement does provide for Medallion to
11	submit production data to MYCO on a monthly basis, so that
12	it can be monitored by MYCO.
13	Q. (By Examiner Catanach) At your proposed
14	location, the new proposed location, 990/990, you're going
15	to encounter, according to your map, over 20 feet of net
16	pay in the middle Morrow; is that your interpretation?
17	A. Yes, that's our interpretation.
18	Q. Do you feel like moving to a standard location
19	you're going to encounter somewhere in the area of 15 feet?
20	A. Yes, I think I believe that the reservoir's
21	net effective pay characteristics are going to thin
22	rapidly. I mean, basically in Section 22 Yates has a very
23	good Morrow well in the I location, and then over in
24	Section 22, why, you have a well that's not shown on this
25	cross-section, but it looks equally as bad as the well that

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1	is shown, with three feet, that's just two locations away.
2	I mean, the I believe that the pay
3	characteristics change very rapidly in this reservoir.
4	Q. Who operates the Atoka well in the north half of
5	Section 27?
6	A. That's operated by Meridian, now Burlington
7	Resources, and it's in the process of being sold to Magnum-
8	Hunter.
9	And that would be the same for the south-half
10	Atoka well as well. Magnum-Hunter has made a large
11	purchase of properties from Burlington/Meridian.
12	Q. Where are those rights separated? Do you know?
13	A. Well, what is insofar insofar as the rights
14	are to the with the operator, they retain the Atoka
15	rights throughout the north half, so that we don't we do
16	not have Atoka rights in the north half from that.
17	Now, one of our or two of our agreements do
18	have other rights above the Atoka. But, you know, the
19	Atoka is communitized and dedicated to that north-half
20	proration unit, so we wouldn't have Atoka rights at our
21	proposed well site in any case.
22	Q. Is that the only thing that you're excluded from,
23	is the Atoka?
24	A. One of our agreements has all rights above the
25	Atoka excluded. That's 25-percent interest that we We

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1	hold nearly 100 percent of the rights for the Morrow to
2	drill this well. But the 25 percent of those rights, that
3	particular agreement excludes formations above the Atoka.
4	The other ones, I believe, do not. The Atoka is filled out
5	in any case, as a window to that north half.
6	Q. Okay, and you obtained this was all by
7	agreement with Burlington?
8	A. Burlington and three other parties.
9	Q. Okay. So you've got no potential for an Atoka
10	completion at your proposed location?
11	A. No. And it would be drained anyway. There's
12	over 8 Over 8 billion cubic feet have come out of
13	Section 27, between those two wells.
14	Q. Is there any upper Penn potential here?
15	A. Upper Penn, no, that I haven't seen any. The
16	well is not that good that Yates has recompleted in Section
17	23. It only makes It's inactive. It made 170 million
18	and is inactive. So I don't see the upper Penn as a
19	potential. Really, it's predominantly a Morrow prospect.
20	EXAMINER CATANACH: I have nothing further.
21	Mr. Carr, do you have anything of this witness?
22	Did you have any questions?
23	MR. CARR: I have no questions of this witness.
24	EXAMINER CATANACH: Okay.
25	MR. CARR: I have a brief statement.

1 EXAMINER CATANACH: Okay. MR. BRUCE: I have nothing further in this 2 matter. 3 EXAMINER CATANACH: Okay, let's let Mr. Carr give 4 5 his statement. MR. CARR: Mr. Catanach, MYCO Industries, Inc., 6 supports the Application of KCS Medallion Resources, Inc., 7 in this matter, subject to the provisions of the April 14, 8 1997, agreement. 9 EXAMINER CATANACH: Okay, anything further? 10 MR. BRUCE: No, sir. 11 12 EXAMINER CATANACH: There being nothing, further, 13 Case 11,752 will be taken under advisement. 14 (Thereupon, these proceedings were concluded at 15 9:34 a.m.) \* \* \* 16 17 18 19 20 21 22 23 24 25

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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 April 21st, 1997.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1/752 neard by me on April 17 1957 · lota , Examiner hud 1 Oil Conservation Division

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

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