1	STATE OF NEW MEXICO
2	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3	OIL CONSERVATION DIVISION
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6	EXAMINER HEARING
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8	IN THE MATTER OF:
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10	Application of Santa Fe Energy
11	Operating Partners, L.P. for
12	directional drilling, Eddy Case 10098
13	County, New Mexico.
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17	TRANSCRIPT OF PROCEEDINGS
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19	BEFORE: DAVID R. CATANACH, EXAMINER
20	
21	
22	STATE LAND OFFICE BUILDING
23	SANTA FE, NEW MEXICO
24	September 19, 1990
25	

1		APP	EARANCES
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1 PROCEEDINGS 2 HEARING EXAMINER: At this time we'll call Case 3 10098. 4 MR. STOVALL: Application of Santa Fe Energy 5 Operating Partners, L.P. for directional drilling, Eddy County, 6 New Mexico. 7 HEARING EXAMINER: Appearances in this case? 8 MR. BRUCE: Mr. Examiner, my name is Jim Bruce from 9 the Hinkle law firm in Albuquerque representing the applicant. 10 I have two witnesses to be sworn. 11 HEARING EXAMINER: Any other appearances? 12 Will the witnesses please stand to be sworn in. 13 GARY GREEN, 14 the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: 15 16 EXAMINATION 17 BY MR. BRUCE: 18 Q. Will you please state your name and the city of 19 residence. 20 Α. My name is Gary Green. I live in Midland, Texas. 21 Who are you employed by and in what occupation? Q. 22 Employed by Santa Fe Energy Company as a landman. Α. 23 And have you previously testified before the OCD as Q. 24 a landman? 25 Α. Yes, I have.

1 Q. And are you familiar with the land matters involving 2 Case 10098?

3 A. Yes, I am.

4 MR. BRUCE: Mr. Examiner, is the witness acceptable? 5 HEARING EXAMINER: He is.

Q. (BY MR. BRUCE) Mr. Green, briefly what does Santa
7 Fe Energy seek in this case?

8 A. Santa Fe seeks approval to directionally drill a 9 well from the north half of Section 9 to the south half of 10 Section 4 all in Township 23 South, Range 31 East, Eddy County, 11 New Mexico.

12 Q. Why does Santa Fe Energy need to directionally drill 13 the well?

A. South half of Section 4 is in the pot ash area and we're told by the BLM that we cannot have a surface location in the south half of Section 4. Both the BLM and AMC Pot Ash Company, the pot ash lessee, have approved our surface location in the north half of Section 9.

19 (Thereupon, Exhibit 1 was

20 marked for identification.)

Q. Would you refer to Exhibit No. 1 and describe thewell location.

A. Exhibit No. 1 is the land plat showing the acreage colored in yellow as acreage where Santa Fe is the operator and/or lease owner. It shows a surface location 990 feet from

the north line and 1.980 from the west line of Section 9 with 1 the bottomhole location being 990 -- or 900 feet from the --2 3 let me get my bearings right here. (Mr. Stovall is no longer present.) 4 Will the bottomhole location be a standard location 5 Q. for the south half of section --6 7 Yes, bottomhole location will be a standard Α. location. 8 And is this a Morrow test? 9 0. 10 Yes, it is. Α. Okay. Who are the operators or lessees in Sections 11 Q. 9 and 4? 12 Santa Fe and its partners out in Section 9. Santa 13 Α. Fe and Yates Petroleum on Section 4. 14 And was Yates notified of this case? 15 Ο. 16 Α. Yes, they were. (Thereupon, Exhibit 2 was 17 marked for identification.) 18 And is the notice letter and the certified return 19 0. receipt submitted as Exhibit No. 2? 20 21 Α. Yes, they are. In your opinion is this case in the interest of 22 Q. 23 conservation and prevention of waste? 24 Α. Yes, it is. And were Exhibits 1 and 2 prepared by you or under 25 Q.

1 your direction? 2 Α. Yes, they were. 3 MR. BRUCE: Mr. Examiner, I move the admission of 4 Exhibits 1 and 2. 5 HEARING EXAMINER: Exhibits 1 and 2 will be admitted 6 as evidence. 7 EXAMINATION 8 BY THE HEARING EXAMINER: Mr. Green, was this PG Federal 4 well No. 1 the 9 Q. 10 subject of a pooling case recently? 11 Α. Yes, sir, it was. 12 Q. Have you received an order in that case? 13 Α. I believe the order was signed this morning. 14 Now I believe your testimony was that the surface Q. location was 990, but the ad shows 900 feet from the north 15 16 line. Yes, it is 900. 17 Α. Correct, it is 900 feet? 18 Q. 19 Α. 900 from the north line. 20 And 1,980 feet from the west line? Ο. 21 Yes. Α. 22 0. That has been approved by the BLM? 23 Α. No, we have not got our drilling order approved. We 24 have been talking to the BLM and the AMC. They have told us that would be accepted. 25

1 Q. That will be acceptable? 2 Α. That will be acceptable, but we have not got our 3 approval. Okay. You said that Santa Fe and Yates together own 4 0. 5 the acreage colored in yellow on Exhibit 1. 6 Α. Santa Fe and Yates own the acreage in Section 3, 4, 7 and 5. Yates does not own acreage in Section 9 --8 Q. Okay. 9 Α. -- 10 or 8. 10 HEARING EXAMINER: I believe that's all I have. The 11 witness may be excused. 12 DARRELL ROBERTS, the witness herein, after having been first duly sworn upon his 13 14 oath, was examined and testified as follows: EXAMINATION 15 BY MR. BRUCE: 16 17 Would you please state your name for the record. Q. 18 My name is Darrell Roberts. Α. 19 Q. And where do you reside? 20 In Midland, Texas. Α. 21 0. And who are you employed by and in what capacity? 22 Α. Santa Fe Energy Resources as a senior drilling 23 engineer. 24 Have you previously testified before the OCD as an Q. 25 engineer?

1

A. Yes, I have.

Q. And are you familiar with the engineering mattersrelated to Case 10098?

4 A. Yes, I am.

5 MR. BRUCE: Mr. Examiner, is the witness acceptable? 6 HEARING EXAMINER: He is.

7 (Thereupon, Exhibit 3 was

8 marked for identification.)

9 Q. (BY MR. BRUCE) Would you please refer to Exhibit 10 No. 3 and briefly describe its contents for the Examiner.

A. Okay. This is a survey plat showing the surface location in Section 9, which is 990 from the north and 1,980 from the west. And the bottomhole location at 660 from the south line and 1,980 from the west line, which would give us a total displacement of 1,560 feet. And this is to avoid the pot ash.

Q. Okay. And would you please move on to Exhibit No. 4and outline the drilling procedure.

A. Okay. This is a generalized drilling procedure. It states that we would be setting surface at 600 feet, intermediate casing at 4,150. And at that point we would be drilling an eight and three-quarter hole to a depth of 6,000 feet. At that point we plan to deviate the wellbore to a north direction. And I'll go through the remaining of this procedure. It's covered in further documents. It's submitted

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1 as a matter of record.

2 (Thereupon, Exhibits 5 and 6 were marked for identification.) 3 Okay. Would you please refer -- why don't we refer 4 Q. 5 to Exhibits 5 and 6 together. 6 Α. Okay. And outline the remaining procedure of the well. 7 0. Exhibit 5 is just a tabulation of the wellbore and 8 Α. 9 the directional plan as we propose giving the true vertical depths and the vertical sections and inclinations of the 10 11 wellbore. 12 It is better depicted on Exhibit No. 6, which shows 13 that we'll be making a motor run around 6,000 feet and kicking the wellbore to the north, and inclination of five to six 14degrees. And then making a deflection assembly run to a point 15 16 of inclination of 20 degrees. At that point we will run another assembly that will hold the inclination at 20 degrees 17 and further deviate the wellbore to a point of around 10,000 18 feet, which the deviation, the vertical section would be around 19 20 1.200 feet. 21 At that point we will run a drop assembly, whether that will allow the wellbore to drop at one degree per hundred, 22 and bring the wellbore back to vertical at approximately 12,000 23 feet. And at that point we'll be running seven-inch casing, 24 seven-inch secondary intermediate casing. And from that point 25

1 we will drill the well vertically into the Morrow section at a 2 depth of 15,000 feet. And will Santa Fe Energy comply with all 3 Q. 4 requirements of Rule 111? Yes, we will. 5 Α. 6 In your opinion would the granting of this Q. application be in the interest of conservation and prevention 7 of waste? 8 9 Α. Right. 10 Q. And were Exhibits 3 through 6 prepared by you or 11 under your direction? 12 Α. Yes, they were. 13 MR. BRUCE: Mr. Examiner, I move the admission of 14 Exhibits 3 through 6. 15 HEARING EXAMINER: Exhibits 3 through 6 will be 16 admitted as evidence. 17 (Mr. Stovall is now present.) 18 EXAMINATION 19 BY THE HEARING EXAMINER: 20 Mr. Roberts, has Santa Fe drilled directional wells Q. in this area? 21 22 No, they haven't. This will be the first one. Α. 23 Ο. How confident are you that you can get to the 24proposed bottomhole location? 25 Α. Well, there is offset wells that have been drilled

1 this same manner. Santa Fe was not the operator, but we feel 2 real confident that we can. We can steer the wellbore, it's a 3 common practice, that will allow us to direct the wellbore 4 where we desire.

5 Q. What type of surveys or pools do you run while 6 drilling or after you finish drilling to ensure the -- to 7 determine the location?

A. Before we make our motor run we run a gyro surveys that will take surveys at hundred foot intervals. Then while we're directionally drilling we'll be running a steering tool that allows us to monitor the inclination out so the azimuth of the wellbore -- and if the wellbore is not going in the direction we desire then we can make motor runs to correct and direct the wellbore in a northerly direction.

Okay. I'd like to point out on, I guess this is Exhibit 1, there is Section 7 and then also in Section 6 to the west of our proposed location, Bass Enterprises has drilled two directional wells through the Morrow. And this, both of these were drilled to avoid the pot ash.

20 Q. I see. Do you run a directional survey prior to 21 kicking off?

A. Yes, we do. We do that to know where we are or where the wellbore is. And then we can direct the bit in a direction from that point. So we'll have the entire wellbore survey both, azimuth and inclination.

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The special casing provisions in this area, do ycu 1 Q. know if those have been fully complied with or been approved? 2 Yes. Santa Fe has drilled two vertical wells in 3 Α. this area, so we're in full compliance with all that. 4 5 EXAMINATION BY MR. MORROW: 6 7 0. Would that still be a regular location if you were 150 foot off in the south direction? 8 9 Α. I don't think so. No, I don't think so. You know, it's going to be a lay down, and the closest we can be to the 10 south line is 660 feet. 11 Q. I understood when you target you gave yourself that 12 13 much room. 14Α. Yeah. We were asking for a tolerance of 150-foot radius to allow us to hit that target. 15 The primary reason for that is just the fact that 16 it's not an exacting science and this allows us some tolerance 17 to be able to hit the target. 18 FURTHER EXAMINATION 19 2.0 BY THE HEARING EXAMINER: Now your target is 1,980 from the west, 660 from the 21 Q. 22 south? 23 Right. Α. That's the target. Now you want - - you are asking 24 Q. 25 for 150 tolerance?

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1	Α.	Right.
2	Q.	Which would put the well at an unorthodox bottomhole
3	location.	
4	Α.	(Witness nodding head.)
5	Q.	If you in fact go south of the 660.
6	Α.	That's true.
7		HEARING EXAMINER: It might be wise to point out at
8	this time	that if you in fact bottom at an unorthodox location
9	you may be	e required to come back in for approval.
10		MR. BRUCE: We understand that, Mr. Examiner.
11		HEARING EXAMINER: Okay.
12		I have no further questions. Any other questions?
13		The witness may be excused.
14		Anything further in this case?
15		MR. BRUCE: No, sir.
16		HEARING EXAMINER: If not, Case 10098 will be taken
17	under advi	sement.
18		
19		I do hereby certify that the foregoing is
20		a complete record of the proceedings in the Examiner hearing of Case No. 10098
21		neard by me on John 19 198.
22		Oil Conservation Division
23		
24		
25		

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1	CERTIFICATE OF REPORTER
2	
3	STATE OF NEW MEXICO )
4	) ss. County of Santa FE )
5	
6	I, Diane M. Winter, Certified Shorthand Reporter and
7	Notary Public, HEREBY CERTIFY that the foregoing transcript of
8	proceedings before the Oil Conservation Division was reported
9	by me; that I caused my notes to be transcribed under my
10	personal supervision; and that the foregoing is a true and
11	accurate record of the proceedings.
12	I FURTHER CERTIFY that I am not a relative or
13	employee of any of the parties or attorneys involved in this
14	matter and that I have no personal interest in the final
15	disposition of this matter.
16	WITNESS MY HAND AND SEAL September 28, 1990.
17	Deane Millerute
18	Khane M Writy
19	DIANE M. WINTER CSR No. 414
20	
21	My commission expires: December 21, 1993
22	
23	OFFICIAL SEAL
24	DIANE M. WINTER
25	MOTARY PUBLIC - STATE OF WEW MERICO
	1914 Conte Deston Expires 12-21-93

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