STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BLDG. SANTA FE, NEW MEXICO

21 November 1985

EXAMINER HEARING

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IN THE MATTER OF:

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Application of Cibola Energy Corporation for salt water disposal, 8756 Chaves County, New Mexico.

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BEFORE: Michael E. Stogner, Examiner

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TRANSCRIPT OF HEARING

17 18

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APPEARANCES

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For the Division:

Jeff Taylor Attorney at Law

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Legal Counsel to the Division Energy and Minerals Dept. Santa Fe, New Mexico 87501

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24 For the Applicant:

Joel Carson

25

Attorney at Law LOSEE & CARSON P. A.

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Artesia, New Mexico 88210

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2	I N D E X		
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4	PHELPS WHITE		
5	Direct Examination by Mr. Carson	3	
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3 1 MR. STOGNER: Call next Case 2 3 Number 8756. MR. TAYLOR: Application of 5 Cibola Energy Corporation for salt water disposal, Chaves County, New Mexico. 7 MR. STOGNER: Call for appearances in this case. 8 MR. CARSON: Mr. Examiner, my name is Joel Carson, Losee and Carson, P. A., Artesia, New 10 11 Mexico, appearing on behalf of the applicant, and I expect to have only one witness. 12 13 MR. STOGNER: Are there any 14 other appearances? 15 16 (Witness sworn.) 17 18 PHELPS WHITE, 19 being called as a witness and being duly sworn upon his 20 oath, testified as follows, to-wit: 21 22 DIRECT EXAMINATION 23 BY MR. CARSON: 24 Would you state your name, please? Q

Phelps White, P-H-E-L-P-S.

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A

		4		
1	Q	Mr. White, by whom are you employed?		
2	A	Cibola Energy Corporation.		
3	Q	And how long have you been employed by		
4	Cibola?			
5	A	Six and a half years.		
6	Q	And in what capacity are you employed?		
7	A	Field supervisor		
8	Q	Would you tell the examiner a little bit		
9	about your educati	onal background?		
10	A	I received a degree in geology from New		
11	Mexico State University.			
12	Q	And would you tell him a little bit about		
13	your experience i	n the area of these two this applica-		
14	tion?			
15	A	That's the Aciete Negra Well. Well, I		
16	was I've been	working for the company while we drilled		
17	and completed both	wells in question.		
18	Q	So you're acquainted with the area.		
19	A	That's right.		
20		MR. CARSON; We would propose		
21	Mr. White as an ex	xpert, Mr. Examiner.		
22		MR. STOGNER: When did you re-		
23	ceive your BS degr	ree from New Mexico State?		
24	A	1979.		
25		MR. STOGNER: Mr. White is so		

qualified. MR. CARSON: Thank you. 2 Q White, would you please explain to 3 the examiner the purpose of application number 8756? It's an application for salt water dispo-5 sal in Chaves County, New Mexico. seek authority to dispose of produced 7 salt water into the San Andres formation in the perforated interval from approximately 2234 to 2298 feet in the Aciete Negra No. 2 Well, 1650 feet from the south line and 1200 10 feet from the east line in Section 12, 9 South, 27 East. 11 Okay. I'm going to refer you to Appli-12 cant's Exhibit Number One and ask if you would identify 13 that. Α is our application for salt water That 15 disposal. 16 Will you look at Exhibit Number 2 and ex-Q 17 plain that? 18 Oh, that's just our injection well data 19 tells what the state of the well is right sheet. Ιt 20 We're going to have to re-enter it and run casing before we can inject water. 22 And the back of that shows a sche-Okay. 23 matic drawing of -- of the well, is that right?

That's right.

It shows us where

the

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plugs are now.
            Q
                      And the injection interval you plan to
2
3
   inject at no more than 1000 pounds per square inch pressure.
   That's really not true, is it?
                      Well, we don't feel that we're going to
5
   have to inject at more than 100 or 200 pounds of pressure
7
   and we have no intention of going over 460 pounds.
            0
                       In other words you can inject your
8
   duced water at no greater pressure than that which is custo-
   marily permitted by the Commission?
10
11
            Α
                      That's correct.
            Q
                       Let me refer you on to Exhibit
12
                                                         Number
   Five.
13
14
                         might
                                ask one other thing before we
15
   leave Exhibit Number Four.
                                How far are you from any fresh
16
  water zone?
                By fresh water I mean drinking water, fresh.
                      Depthwise or areawise?
17
            Α
18
            Q
                      Depthwise or areawise.
19
            Α
                       Depthwise (not clearly understood)
   the closest water, stock water, is approximately a mile away
21
   in a pond.
22
                       Exhibit Number Five, could you explain
            0
23
  this?
24
            Α
                      This is our notice of application that we
25 ran in the Roswell Daily Record.
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Exhibit Number Six? 0 1 Exhibit Number Six is the completion re-2 port on the Aciete Negra No. 2 Well, which was abandoned Oc-3 tober 28, 1983. And number -- next exhibit? Q 5 This is a water analysis in the San Andres formation in some wells approximately five miles to the 7 south, showing the content of the water. This is the water in the zone we will be 9 injecting into. 10 Q go ahead. Exhibit Number Please And 11 Eight? 12 Α Exhibit Number Eight is a water analysis 13 on the Acieta Negra No. 4, which is the well we're going to 14 be taking Devonian produced water and injecting it into the 15 San Andres. This is an analysis of the water we will be in-16 jecting. 17 Q Is the water that you will be injecting a 18 better or worse quality than the -- than the zone into which 19 you are injecting? 20 It's better quality. Α 21 Q Mr. White, did you, or people working for 22 you notify surrounding landowners, in this case which 23 guess is the BLM? 24

Yes, we did.

A

		8
1	Q	You advised them of your application to
2	the BLM to convert	this to a salt water disposal well?
3	A	Yes, we did.
4	Q	With the BLM?
5	A	That's right.
6	Q	And what is the status of that applica-
7	tion?	
8	А	We've been working with them. As far as
9	we know they're go	ing to approve it. We're waiting on some
10	right-of-way.	
11	Q	And you're the only surrounding operator?
12	A	That's correct.
13	Q	Within the prescribed area so I take it
14	you will support t	his application?
15	A	Yes.
16	Q	Mr. White, were Applicant's Exhibits Num-
17	ber One through S	even through Eight prepared by you or
18	under your supervi	sion?
19	A	Yes, that's right.
20		MR. CARSON: I would like to
21	move the introduct	ion of these exhibits, Mr. Examiner, One
22	through Eight.	
23		MR. STOGNER: Exhibits One
24	through Eight will	be admitted into evidence.
25		MR. CARSON; Mr. Examiner, it

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looks as though you already have a log and we have another
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   log if you need it. It does not necessarily clog up the re-
2
   cord.
3
                                 MR.
                                      STOGNER:
                                                 Is this the same
5
   log you're referring to?
6
                                 MR.
                                      CARSON:
                                                Yes,
                                                       I guess it
7
   is. I don't know.
            Α
                       We have the electric logs.
8
                                 MR.
                                      CARSON:
                                               We have the elec-
   tric logs which have already been filed.
10
                                 MR. STOGNER: We'll take admin-
11
   istrative notice on those well logs that are on file with
12
   the District Office in Artesia on the well logs on this.
13
14
   assume that they are filed with --
15
                                 MR. CARSON: Yes, they are.
16
   They were filed with the 105.
17
                                 MR.
                                      STOGNER:
                                                 Mr. Carson, is
18
   this the only witness that you plan on having?
19
                                 MR.
                                                        the only
                                      CARSON:
                                                That's
   witness I plan on having.
20
21
22
                         CROSS EXAMINATION
23
   BY MR. STOGNER:
24
                       Mr. White, let's go to your Exhibit Num-
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ber Four and review this. I show that you plan to re-enter

1 the well and run 4-1/2 inch casing, is that correct? 2 That's correct. Α 3 And would you please elaborate a little 4 on the cementing program on the 4-1/2 inch casing? We are planning to run 125 sacks of ce-5 Α and we've got 1600 feet of 8-5/8ths casing which has 7 been set and circulated to cement around it, and 125 sacks 8 more than enough to bring the top of the cement up into 9 the 8-5/8ths inch casing. 10 What size hole do you plan to drill 11 from under the 8-5/8ths? 7-7/8ths. That's the size of the 12 A original hole. We've got to go through a couple of plugs is 13 14 all. 15 And you plan to drill the 7-7/8ths hole 0 16 down to what depth? 17 Well, we're going to go through the plug Α 18 in the Slaughter plug and we only want to clean the hole out 19 to 2320. 20 Q Where is this Slaughter plug that you 21 refer to? 22 You'll see Exhibit -- second page of 23 Exhibit Well, there's a diagram, let me find that Two. 24 depth. 25 it's not an exhibit number on Okay,

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but it's right behind Exhibit Six.

MR. CARSON: It's the second page of Exhibit Six.

The second page MR. STOGNER: of Exhibit Six.

What it is is the plugging report on Α Aciete Negra No. 2, and what we've got is a plug at 2250, 35 sacks of cement; we'll be drilling through that plug and running casing on through the depth where that plug then was.

> All right, and your next plug was at 1700 Q

Α That's correct.

-- I believe. What was below that first 0 plug at 2250?

Α We had originally drilled the well to the Devonian and had plugged back to test the San Andres when we originally drilled the well.

Is this Well No. 4, is it presently pro-Q ducing?

A We're making approxi-Yes, sir, it is. mately 175 barrels a day of water; approximately 40 barrels a day of oil.

What would happen if you'd have to Q shut this well down and go in and squeeze cement behind the pro-

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1	posed injection interval in this well?		
2	A Well, that's a good question. We, of		
3	course, would have to shut it in for several days. I don't		
4	think there would be any damage to the well.		
5	Q Okay. Would you also submit to me when		
6	you submit that diagram, a copy of the letter to the BLM of		
7	this proposed injection?		
8	A Yeah.		
9	Q Do you have that on file?		
10	A Yes. We have it here.		
11	Q Oh, do you?		
12	A In fact, we've got that application, if		
13	you'd like, that we submitted to them.		
14	Q May I have this copy?		
15	A Sure.		
16	MR. STOGNER: Let's stamp this		
17	Exhibit Number Nine.		
18	MR. CARSON: Yes, sir.		
19	Q So Exhibit Number Nine is essentially		
20	your application to the BLM who is the surface owner and the		
21	mineral owner in this area, is that correct?		
22	A That's correct.		
23	MR. STOGNER: Mr. Carson, we'll		
24	accept Number Nine as part of the evidence.		
25	Is there anything further of		

this witness? 1 MR. CARSON: I need to ask him 2 3 two more questions, Mr. Examiner. REDIRECT EXAMINATION 5 BY MR. CARSON: 7 The first one was, the Hearing Examiner, White, asked you about the necessity for comenting behind the pipe on your Cibola --Cibola Negra. 10 Well, it's the other -- the other -- the 11 0 12 producing well. What's the number of it? 13 The Aciete Negra No. 4. 14 The Aciete Negra No. 4. Have you actual-15 ly considered whether that's going to necessary? 16 I don't feel that it would be necessary Α 17 knowing the San Andres in that area. There is approximately 18 a third of a mile between the two wells. I don't feel that 19 any of that water will make it back over to the Aciete Negra 20 4. 21 I'm sure that's what you're worried about 22 on the no cement behind the casing. 23 0 Are you -- does the -- if you were to 24 required to put cement behind the casing on that Aciete Neg-

ra No. 4, whatever it is, would that have any effect on the

economics of this whole project?

A Well, of course it would be expensive and, as I said, I don't think it would do any actual damage to the well but to shut it down for several days and then the expense of drilling it out and there's always the chance when you go do a job like that that something's going to go wrong and you may not get it back, drilled out again. I don't know that the risk is worth taking to do such a job like that.

Q For the gain?

A That's right. We're looking at approximately a year and a half payout on this injection well on water hauling savings now. Anyway, it's a very long payout. If we had to do much more work it may not be economic.

Q The other question I had to ask you, Mr. White, is in your opinion the injection well proposal that you have made, is it in accordance with sound engineering practices?

19 A Yes, it is.

Q And will that, in your opinion, will it prevent economic waste and help you prolong the economic life of your other well?

A Yes, it will.

MR. CARSON: I don't have any further questions.

RECROSS EXAMINATION 1 BY MR. STOGNER: 2 White, in your opinion if water en-0 3 croachment did occur between your Well No. 2 and Well No. 4, how would the Well No. 4 detect this encroachment? Α Well, we could put a gauge and monitor 6 the back side. If there was encroachment the back 7 ought to pressure up. MR. STOGNER: Are there any 9 other questions of Mr. White? 10 Is there anything further 11 this case? 12 If not, Mr. White may step 13 down. 14 The record on Case Number 8756 15 will remain open pending the submittal of the diagram of 16 your proposed well. 17 Let's take a fifteen minute re-18 cess at this time. 19 20 (Hearing concluded.) 21 22 23 24

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CERTIFICATE

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record of the hearing, prepared by me to the best of my ability.

Sucyler Boyd CSR

do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 8756 heard by me on 2/ forenier 1985.

Muhail Sloguz, Examiner
Oll Conservation Division