

## NEW MEXICO OIL CONSERVATION COMMISSION

EXAMINER HEARINGSANTA FE, NEW MEXICO

Hearing Date

AUGUST 6, 1986

Time: 8:15 A.M.

NAME	REPRESENTING	LOCATION
Harvey Yates Jr	Cibola Energy Corp	Albuquerque
Steve Jensen	" " "	" "
Joel Carson	Lois Carson PIA	Albuquerque
J. T. Kellerman	Kellerman & Kellerman	Santa Fe
William L. Carr	Campbell & Carr, P.A.	Santa Fe
Paul Huker	Byrum	Santa Fe
Kathy Michael	Mesa Grande Resources	Tulsa
Alan Emmendorfer	Mesa Grande Resources	Tulsa
V. T. Lyon	OCD	Santa Fe
J A DAVIDSON	INDEPT.	MIDLAND
Gregory Phillips	MEGA GRANDE RESOURCES, INC	TULSA
Joe A. Ramsey	Osborn Heirs Co.	Hobbs
Lawrence D. Hammi	Marathon Oil Co.	Houston
Steve Daniels	Marathon Oil Co.	Midland
Walt Rubenstein	Marathon Oil Co.	Midland

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SANTA FE, NEW MEXICO

Hearing Date AUGUST 6, 1986 Time: 8:15 A.M.

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

6 August 1986

EXAMINER HEARING

IN THE MATTER OF:

Application of Osborn Heirs Company      CASE  
for salt water disposal, Lea County,      8954  
New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Oil Conservation      Jeff Taylor  
Division:      Attorney at Law  
Legal Counsel to the Division  
State Land Office Bldg.  
Santa Fe, New Mexico 87501

For the Applicant:      William F. Carr  
Attorney at Law  
CAMPBELL & BLACK P. A.  
P. O. Box 2208  
Santa Fe, New Mexico 87501

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I N D E X

JOE D. RAMEY

Direct Examination by Mr. Carr 3

Cross Examination by Mr. Stogner 12

E X H I B I T S

Osborn Exhibit One, Application 5

1  
2 MR. STOGNER: Call next Case  
3 8954.

4 MR. TAYLOR: The application of  
5 Osborn Heirs Company for salt water disposal, Lea County,  
6 New Mexico.

7 MR. CARR: May it please the  
8 Examiner, my name is William F. Carr, with the law firm  
9 Campbell & Black, P. A., of Santa Fe. We represent Osborn  
10 Heirs Company and I have one witness.

11 MR. STOGNER: Are there any  
12 other appearances?

13 There being none, will the wit-  
14 ness please stand and be sworn.

15  
16 (Witness sworn.)  
17

18 JOE D. RAMEY,  
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. TAYLOR:

24 Q Will you state your full name and place  
25 of residence?

1           A           Joe D. Ramey, and I reside in Hobbs, New  
2 Mexico.

3           Q           Mr. Ramey, by whom are you employed and  
4 in what capacity?

5           A           I'm a consultant to Osborn Heirs in this  
6 case.

7           Q           Have you previously testified before this  
8 Division and had your credentials accepted and made a matter  
9 of record?

10          A           Yes, I have.

11          Q           And how were you qualified at that time,  
12 as a petroleum engineer?

13          A           As a petroleum engineer.

14          Q           Are you familiar with the application  
15 filed in this case and the subject well?

16          A           Yes, I am.

17                      MR. CARR: Are the witness'  
18 qualifications acceptable?

19                      MR. STOGNER: Yes, they are.

20          Q           Mr. Ramey, would you briefly state what  
21 the Osborn Heirs Company seeks with this application?

22          A           Osborn Heirs Company seeks to convert  
23 their Mattie Price No. 6 to a salt water disposal well to  
24 handle up to about 4500 barrels of water per day, which is  
25 produced from their Mattie Price lease, three wells present-

1 ly producing and one temporarily abandoned well, and this  
2 well is located in Unit G of Section 6, Township 17 South,  
3 range 38 East.

4 Q And this request is for a well to dispose  
5 of water produced from this one lease?

6 A Yes, it is Devonian -- water produced  
7 from the Devonian to be disposed of back into the Devonian  
8 producing horizon.

9 Q Would you identify what -- for the exam-  
10 iner what has been marked as Osborn Exhibit Number One?

11 A Exhibit One is the complete application  
12 necessary for this case.

13 Q And this previously was filed with the  
14 Oil Conservation Division?

15 A Yes, it was.

16 Q Would you refer to page two of Exhibit  
17 Number One, identify this and review the information con-  
18 tained thereon?

19 A Page two is a plat of the area and it has  
20 three circles.

21 The first circle is around the injection  
22 well. The second circle is the half mile area of review,  
23 and the larger circle is the two-mile radius circle around  
24 the disposal well.

25 Q And this plat shows the lease ownership

1 within the area?

2 A Yes, it does.

3 Q Would you now go to page three of Exhibit  
4 Number One and identify this?

5 A This is the injection well data sheet.  
6 It has a schematic of the injection well and all the infor-  
7 mation on the well.

8 There are some corrections I would like  
9 to make at this time.

10 The schematic shows a perforated interval  
11 from 10,262 to 10,296, which was to be isolated with pack-  
12 ers. The applicant, or the Osborn Heirs Company has advised  
13 me that they are in the process of squeezing that interval  
14 off and so they will squeeze that with an adequate amount of  
15 cement and then the upper packer will not be placed in the  
16 well.

17 So if you would, Mr. Examiner, make that  
18 correction on your -- your copy.

19 MR. STOGNER: Please repeat  
20 that again, Mr. Ramey.

21 A The perforations that are shown open from  
22 10,262 to 10,296, those are Wolfcamp perforations. The well  
23 was tested in the San Andres and Wolfcamp. The San Andres  
24 was squeezed off. The Wolfcamp was left open and they ini-  
25 tially proposed to inject below, you know, the bottom pack-



1 er, but they were going to isolate the perforated interval  
2 with another packer.

3 They are now going to squeeze that inter-  
4 val and so the upper packer, the one that is located at  
5 around 10,000 feet will not be placed in the well. It will  
6 be a standard disposal well into the Devonian with -- with  
7 2-7/8ths plastic coated tubing below a packer to be set at  
8 about 12,800 feet.

9 So just scratch the upper packer on the  
10 schematic diagram and then make a notation that the open  
11 perforations will be squeezed prior to injection.

12 MR. STOGNER: Okay, thank you.  
13 So the packer which we're talking about now is the one being  
14 set at 12,800 foot.

15 A Yes. That packer will remain in the  
16 hole.

17 MR. STOGNER: Okay, thank you,  
18 Mr. Ramey.

19 Please continue, Mr. Carr.

20 Q Now, Mr. Ramey, you testified that the  
21 disposal would be through lined tubing.

22 A Yes.

23 Q Will the annular space be filled with an  
24 inert fluid?

25 A The annular space will be filled with an

1 inert fluid and the well will be pressure tested prior to  
2 injection and some kind of gauge will be installed at the  
3 surface to insure that the packer and tubing are holding.

4 Q And this will all be done in a fashion in  
5 conformance with the Federal Underground Injection Control  
6 Program.

7 A Yes.

8 Q Would you now refer to page four of  
9 Exhibit Number One, identify this, and review it, please?

10 A Page four are the -- is a listing of the  
11 wells within the area of review. There are four wells.  
12 They're all Osborn operated wells, and they're all on the  
13 Mattie Price lease.

14 The Wells Nos. 1, 2, and 3 are producing  
15 wells. Well No. 4 is temporarily abandoned at this time but  
16 they do intend to re-enter this well and install low volume  
17 pumping equipment and try to skim some oil off the top of  
18 the water.

19 Q All of the water is being produced from  
20 the Devonian?

21 A Yes, sir.

22 Q What is presently being done with this  
23 water?

24 A It is being disposed of into a disposal  
25 well in Section 32 of 16 South, 38 East. The well is in --

1 shows on the plat as a dry hole symbol in the southwest of  
2 the southwest of 32.

3 Q What is the current status of this well?

4 A That well recently had some mechanical  
5 problems and has -- is shut down as a disposal well, and the  
6 lease is shut down at this time.

7 Q Does the Osborn Heirs Company therefore  
8 request that an order in this case be expedited to the full-  
9 est extent possible?

10 A Yes, they would.

11 Q What is going to be the maximum daily in-  
12 jection rate?

13 A It will be a maximum of 4500 barrels.

14 Q And will you be -- will the system be an  
15 open or a closed system?

16 A It will be a closed system.

17 Q Do you anticipate injecting under pres-  
18 sure or by gravity?

19 A We think it will go in by gravity; how-  
20 ever, we do request the Division give us the maximum pres-  
21 sure allowed of 2577 psi, which is the 0.2 of a pound per  
22 foot from the surface to the top of the perforations, or the  
23 open hole.

24 Q Are there fresh water zones in this area?

25 A Yes, the Ogallala is present in this

1 area. The depth to the base of the Ogallala is about 300  
2 feet.

3 Q Are there any fresh water wells within  
4 the area of review?

5 A There are no fresh water wells within a  
6 mile of the disposal well.

7 Q Mr. Ramey, in preparing for this hearing  
8 have you examined the available geologic and engineering da-  
9 ta on this area?

10 A Yes, I have.

11 Q As a result of this examination have you  
12 found any evidence of open faults or other hydrologic con-  
13 nections between the disposal zone and any underground  
14 source of drinking water?

15 A No, there are -- there are none that I  
16 could find.

17 Q Is a log of the proposed injection well  
18 on file with the Oil Conservation Division?

19 A Yes, it's -- it's in the Hobbs Office.

20 Q Has notice of this application been pro-  
21 vided to the other interest owners within the area of review  
22 and the surface owner?

23 A Yes. There's a listing of those who were  
24 notified by certified mail and I see you do have the re-  
25 ceipts, Mr. Examiner, of the certified mailings.

I did get three of these back from Freeport Oil, Avance Oil, and Vernon E Falconer, if you --

MR. CARR: Mr. Stogner, we'll leave these with you to include in the file. Those are the only letters that were returned.

Q And the surface owner of this property, Mr. Ramey, is that Mattie Price?

A That is Mattie Price, yes.

Q So all interest owners in the area of review and Mattie Price have been notified in accordance with Division rules.

A Yes, that is correct.

Q In your opinion will granting this application be in the best interest of conservation, the prevention of waste, and the protection of correlative rights?

A Yes, it will.

Q Was Exhibit Number One prepared by you or compiled under your direction and supervision?

A It was prepared by me.

MR. CARR: At this time, Mr. Stogner, we would offer into evidence Osborn Heirs Company Exhibit Number One.

MR. STOGNER: Exhibit Number One will be admitted into evidence.

1 MR. CARR: And that concludes  
2 my direct examination of Mr. Ramey.

3  
4 CROSS EXAMINATION

5 BY MR. STOGNER:

6 Q Mr. Ramey, let's refer to page number  
7 three, which is your schematic, again. Let me see, you  
8 showed the top of the cement at 12,822, and that was deter-  
9 mined by a temperature survey?

10 A Yes, sir.

11 Q And you propose to set the packer at  
12 12,800 feet?

13 A Yes.

14 Q That's 22 foot, approximately 22 foot  
15 above the top of the cement on the outside of the casing, is  
16 that correct?

17 A Mr. Stogner, we can set that probably  
18 deeper than that, if necessary.

19 I would point out that, you know, prior  
20 to testing the Wolfcamp and the San Andres in this well,  
21 that the well was perforated at -- at 10,010 to 10,011 and  
22 10,050 to 10, -- 10,550 to 10,551, and then it was block  
23 squeezed with 115 sacks, so there is cement above this.

24 Evidently the Devonian took -- took  
25 cement when they attempted to cement the casing, so they

1 really didn't get a whole lot of cement back up on it.

2 But the casing is set at 12,887 and the  
3 top of the cement was at 12,008 to 22, so there was only 55  
4 feet of cement on the primary cementing job, but there was a  
5 secondary cementing job which should isolate some of the up-  
6 per zones.

7 But we'll be happy to set the packer down  
8 clear to the shoe if you would desire.

9 Q Okay, thank you, I'll keep that in mind.

10 I'm looking at page four, which is, I as-  
11 sume these are also the source wells of the water, is that  
12 correct?

13 A Yes, sir, that is correct.

14 Q And only two of these wells are producing  
15 from the same level as your injection, is that correct?

16 A Three. The Wells Nos. 1, 2, and 3 are  
17 presently producing and Well No. 4 is shut in. All of the  
18 wells are producing from the Upper Devonian, Mr. Stogner,  
19 and the disposal will be into the Upper Devonian.

20 Q In looking at the difference between the  
21 perforated interval on Well No. 2 and Well No. 3, I show to  
22 be about a, what, 200 foot difference. Is this due to topo-  
23 graphy or is there a different, totally different zone, or  
24 is the formation dipping or --

25 A I know that the formation is dipping.

1 It's kind of a small dome, sort of a pimple in there, and I  
2 wouldn't think the topography would be to that effect, so I  
3 assume that it has fallen off. I think -- I think your high  
4 is on, you know, the area of the Wells No. 1 and 2 and then  
5 it falls off to the south and to the east and to the west  
6 and to the north. All the way around.

7 MR. STOGNER: I have no further  
8 questions of this witness at this time.

9 Are there any other questions  
10 of Mr. Ramey?

11 MR. CARR: Nothing further.

12 MR. STOGNER: If not, he may be  
13 excused.

14 Is there anything further in  
15 Case Number 8954?

16 If not, this case will be taken  
17 under advisement.

18  
19 (Hearing concluded.)  
20  
21  
22  
23  
24  
25



## C E R T I F I C A T E

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.

Sally W. Boyd CSR

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 8954,  
heard by me on 6 August 1986.

William H. Hogue, Examiner  
Oil Conservation Division  
10/15/86